

PONTIFÍCIA UNIVERSIDADE CATÓLICA DO PARANÁ

MEMORIA DESCRIPTIVA

PROYECTO ELÉCTRICO

Instalación eléctrica de Auditorio,
Cafetería y Parque exterior

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1. OBJETIVO DEL PROYECTO

Este proyecto tiene como objetivo el diseño de la instalación eléctrica y calculo luminotécnico para la reforma del área exterior circúndate al Edificio de Administración del Campus Politécnico de la *Universidade Federal do Paraná*.

La parte arquitectónica de este proyecto consta de la construcción de un Auditorio, una Cafetería y de la reforma del área exterior circundante al Edificio de Administración de la UFP.

Este proyecto se está presentado acompañado los documentos que a continuación se enumeran:

- 1 Plano de Situación.
- 2.1 Plano Esquema Eléctrico Unifilar.
- 2.2 Cuadro de Distribución de Cafeteria
- 2.3 Cuadro de Distribucion de Exterior
- 2.4 Cuadro de distribución de Auditorio
- 3.1 Plano de Vistas Exterior
- 3.2 Plano Instalación Eléctrica Exterior
- 4.1 Plano de Planta Auditorio
- 4.2 Plano Instalación Eléctrica Auditorio
- 5.1 Plano de Planta Cafetería.
- 5.2 Plano Instalación Eléctrica Cafetería.

2. EDIFICACIÓN

Esta obra en cuestión está constituida por un Auditorio y una Cafetería con una superficie total de 1298.9m² y 198,79m² respectivamente, ambos emplazados en una superficie exterior de 21409.77m². Además de estos edificios esta superficie contiene un Edificio de Administración de 1393.73m², el cual es previo a la remodelación y quedará intacto después de ella.

3. ENTRADA DEL CUADRO DE DISTRIBUCIÓN DE ENERGÍA EN EL RECINTO

El abastecimiento de energía será hecho desde el propio poste distribuye al Edificio de Administración, situado dentro del propio campus de la UFP. La alimentación de los cuadros de distribución será hecha a partir del cuadro general, situado en este mismo poste, por medio de dos tubos de PVC rígido de 90mm de diámetro que de manera independiente abastecerán el Auditorio y la Cafetería. El cuadro de distribución del Parque Exterior estará situado en este mismo poste, y será conectado al cuadro general mediante cables al aire de 16mm².

4. INTERRUPTOR GENERAL DE LA INSTALACIÓN

El mando del cuadro general de alimentación será hecho mediante el Interruptor Automático General, disyuntor termomagnético cuadripolar de 250 A, será responsable del abastecimiento de energía en todo el recinto.

5. ILUMINACIÓN Y TOMADAS

El emplazamiento de las luminarias, tomas de corriente y elementos de fuerza seguirá la especificación indicadas en los planos de eléctricos y unifilares de la instalación que a este documento acompañan.

El cálculo luminotécnico fue realizado de acuerdo a la normativa NBR 5413, en la cual se detalla por tareas y por ambientes, las iluminancias medias máximas y mínimas recomendadas para cada trabajo a realizar y para cada tipo de ambiente que se pretende llegar a conseguir. En el Anexo I se recogen los datos sobre los tipos de luminarias utilizados en cada edificio y en cada ambiente individualmente, además de las hojas de catálogo de cada tipo de luminaria.

Las tomas de corriente monofásicas serán F+N+T, con una tensión entre bornes de 220V. Las tomas de corriente trifásicas serán R+S+T+N+T, con tensión entre bornes de 380V.

La distribución de los cables de la instalación exterior, será mediante cable soterrado en el interior de tubo rígido de PVC. En las instalaciones interiores, tanto del Auditorio como de la Cafetería, la distribución se hará según las especificaciones del plano Unifilar, en bandeja metálica perforada o en conductos de PVC empotrados en la pared.

6. DEMANDA DE POTENCIA

La potencia instalada en cada uno de las tres principales líneas de distribución y la potencia total instalada aparece en la siguiente tabla:

Línea Cafetería 75	35451 W
Línea Parque Exterior	12856 W
Línea Auditorio	79790 W
TOTAL....	128097 W

- Potencia Instalada Alumbrado (W): 52415
- Potencia Instalada Fuerza (W): 75682
- Potencia Máxima Admisible (W): 98460.73

7. DIMENSIONAMIENTO

CONDUCTORES Y CANALIZACIÓN

En el cálculo de los conductores de esta instalación, fue definidos que los conductores serían de cobre con aislamiento de PVC de 0.6/1 kV en la conexión del Cuadro General de Alimentación con los Cuadros de Distribución. En la distribución y en la conexión de los Cuadros de Distribución con los Cuadros Secundarios, se definió que los conductores tendrían un aislamiento de 450/750V de PVC.

Observando la tabla 28 de la normativa NBR-5410, se estableció la manera de instalación de las canalizaciones.

En el dimensionamiento de los cables se utilizaron los criterios de Caída de Tensión e Intensidad máxima admisible y se valoraron bajo los límites indicados en la norma NBR-5410. Para la utilización de estos criterios se obtuvo la Intensidad de Cálculo y la Caída de Tensión de acuerdo a los siguientes cálculos:

Sistema Trifásico

$$I = P_c / 1,732 \times U \times \cos\phi \times R = \text{amp (A)}$$

$$e = (L \times P_c / k \times U \times n \times S \times R) + (L \times P_c \times X_u \times \text{Sen}\phi / 1000 \times U \times n \times R \times \cos\phi) = \text{voltios (V)}$$

Sistema Monofásico:

$$I = P_c / U \times \cos\phi \times R = \text{amp (A)}$$

$$e = (2 \times L \times P_c / k \times U \times n \times S \times R) + (2 \times L \times P_c \times X_u \times \text{Sen}\phi / 1000 \times U \times n \times R \times \cos\phi) = \text{voltios (V)}$$

En donde:

P_c = Potencia de Cálculo en Watios.

L = Longitud de Cálculo en metros.

e = Caída de tensión en Voltios.

K = Conductividad.

I = Intensidad en Amperios.

U = Tensión de Servicio en Voltios (Trifásica ó Monofásica).

S = Sección del conductor en mm^2 .

$\cos\phi$ = Coseno de ϕ . Factor de potencia.

R = Rendimiento. (Para líneas motor).

n = Nº de conductores por fase.

X_u = Reactancia por unidad de longitud en $\text{m}\Omega/\text{m}$.

8. TABLAS DE CÁLCULO ELÉCTRICO

8.1. CUADRO GENERAL DE MANDO Y PROTECCIÓN

Denominación	P.Cálculo (W)	Dist.Cálc (m)	Sección (mm^2)	I.Cálculo (A)	I.Admi. (A)	C.T.Parc. (%)	C.T.Total (%)	Dimensiones (mm)
DERIVACIÓN INDIVIDUAL	91326.9	0.3	4x35+TTx16Cu	173.45	201.25	0.01	0.01	
75	18850.5	209	4x25+TTx16Cu	31.82	112	2.03	2.04	90
76	12856	0.3	4x10+TTx10Cu	19.53	65	0.01	0.02	
77	51139.2	89	4x25+TTx16Cu	81.79	112	2.53	2.54	90

8.2. CUADRO GENERAL CAFETERÍA -75-

Denominación	P.Cálculo (W)	Dist.Cálc (m)	Sección (mm ²)	I.Cálculo (A)	I.Admi. (A)	C.T.Parc. (%)	C.T.Total (%)	Dimensiones (mm)
R N ILUMINACIÓN	471	0.3	2x1.5Cu	2.68	16.5	0.01	2.05	
1 COZINHA	290	24	2x1.5+TTx1.5Cu	1.32	15	0.37	2.42	16
2 EXTERIOR	57	40	2x1.5+TTx1.5Cu	0.26	15	0.12	2.17	16
3 BANHEIROS	124	36	2x1.5+TTx1.5Cu	0.56	15	0.24	2.29	16
S N ILUMINACIÓN	770	0.3	2x1.5Cu	3.5	16.5	0.01	2.06	
4 REST.	578	76	2x1.5+TTx1.5Cu	2.63	15	2.36	4.41	16
5 BALCAO	192	28	2x1.5+TTx1.5Cu	0.87	15	0.29	2.34	16
R N MOTORES	5250	0.3	2x6Cu	29.83	40	0.02	2.07	
6 LAVA.	3750	11	2x4+TTx4Cu	21.31	27	0.88	2.95	20
7 JELADERA 1	1875	13	2x2.5+TTx2.5Cu	10.65	21	0.8	2.87	20
S N MOTORES	5250	0.3	2x6Cu	29.83	40	0.02	2.07	
8 LAVA.2	3750	11	2x4+TTx4Cu	21.31	27	0.88	2.95	20
9 JELADERA 2	1875	15	2x2.5+TTx2.5Cu	10.65	21	0.93	2.99	20
T N MOTORES	2255	0.3	2x6Cu	12.81	40	0.01	2.05	
10 MOEDOR 1 2	475	13	2x2.5+TTx2.5Cu	2.7	21	0.2	2.25	20
11 TERMO	1875	13	2x2.5+TTx2.5Cu	10.65	21	0.8	2.86	20
T N MOTORES	1537.5	0.3	2x6Cu	8.74	40	0.01	2.05	
12 DEPURADOR C.B	750	40	2x2.5+TTx2.5Cu	4.26	21	0.97	3.02	20
13 DEPURADOR B.	937.5	18	2x2.5+TTx2.5Cu	5.33	21	0.55	2.59	20
R N TOMAS	4400	0.3	2x6Cu	20	40	0.02	2.06	
14 COZ.	2200	19	2x2.5+TTx2.5Cu	12.5	17.5	1.42	3.48	20
15 COZ.	2200	18	2x2.5+TTx2.5Cu	12.5	17.5	1.34	3.4	20
S N TOMAS	4400	0.3	2x6Cu	20	40	0.02	2.06	
16 CAF.	2200	51	2x2.5+TTx2.5Cu	12.5	17.5	3.8	5.86	20
17 CAF.	2200	35	2x2.5+TTx2.5Cu	12.5	17.5	2.61	4.67	20
T N MOTORES	4400	0.3	2x6Cu	20	40	0.02	2.06	
18 CAF.	2200	32	2x2.5+TTx2.5Cu	12.5	17.5	2.38	4.45	20
19 BAN.	2200	19	2x2.5+TTx2.5Cu	12.5	17.5	1.42	3.48	20
20 CAFETERA	5625	13	4x2.5+TTx2.5Cu	10.68	18.5	0.41	2.45	20
21 DEPURADOR SAL	2812.5	38	4x2.5+TTx2.5Cu	5.34	18.5	0.58	2.62	20
22 AGUA QENTE	2537.5	15	4x25+TTx16Cu	4.82	95	0.02	2.06	75x60

8.3. CUADRO GENERAL DE ALUMBRADO EXTERIOR -76-

Denominación	P.Cálculo (W)	Dist.Cálc (m)	Sección (mm ²)	I.Cálculo (A)	I.Admi. (A)	C.T.Parc. (%)	C.T.Total (%)	Dimensiones (mm)
R N ILUMINACIÓN	4326	0.3	2x10Cu	24.58	77	0.01	0.03	
23 MASTIL 1 -3	630	180	2x6+TTx6Cu	2.86	61.74	1.43	1.46	50
24 FOCOS RMP	576	208	2x6+TTx6Cu	2.62	61.74	1.51	1.54	50
25 LT EXT	1280	219	2x6+TTx6Cu	5.82	61.74	3.55	3.58	50
26 LT INT ADM	1840	213	2x10+TTx10Cu	8.36	83.3	2.98	3.01	63
T N ILUMINACIÓN	4265	0.3	2x10Cu	24.23	77	0.01	0.03	
27 MASTIL 4-6	585	195	2x6+TTx6Cu	2.66	61.74	1.44	1.47	50
28 LT SUP.	2000	250	2x10+TTx10Cu	9.09	83.3	3.8	3.83	63
29 ENT PRI AUD	480	144	2x6+TTx6Cu	2.18	61.74	0.87	0.9	50
30 MEDIO JAR	1200	119	2x6+TTx6Cu	5.45	61.74	1.81	1.84	50
S N ILUMINACIÓN	4265	0.3	2x6Cu	24.23	57	0.02	0.03	
31a MASTIL 7 - 8	390	110	2x6+TTx6Cu	1.77	61.74	0.54	0.58	50
31b MASTIL 9 - 10	195	98	2x6+TTx6Cu	0.89	61.74	0.24	0.28	50
32 ENT AUD	880	88	2x6+TTx6Cu	4	61.74	0.98	1.01	50
33 RAMP 1	1360	84	2x6+TTx6Cu	6.18	61.74	1.45	1.48	50
34 REST RAMP 2	1440	191	2x6+TTx6Cu	6.55	61.74	3.48	3.52	50

8.4. CUADRO GENERAL AUDITORIO -77-

Denominación	P.Cálculo (W)	Dist.Cálc (m)	Sección (mm ²)	I.Cálculo (A)	I.Admi. (A)	C.T.Parc. (%)	C.T.Total (%)	Dimensiones (mm)
R N ILUMINACIÓN	792	0.3	2x1.5Cu	3.6	16.5	0.01	2.55	
34 CORREDOR 1	418	51	2x1.5+TTx1.5Cu	1.9	15	1.14	3.69	16
35 CORREDOR 2	374	58	2x1.5+TTx1.5Cu	1.7	15	1.16	3.71	16
R N ILUMINACIÓN	386	0.3	2x1.5Cu	1.75	16.5	0.01	2.55	
36 ESCRITORIO	76	18	2x1.5+TTx1.5Cu	0.35	15	0.07	2.62	16
37 VESTUARIOS	310	46	2x1.5+TTx1.5Cu	1.41	15	0.76	3.31	16
R N TOMAS	6600	0.3	2x10Cu	30	54	0.02	2.56	
38 CORREDOR 1	2200	72	2x4+TTx4Cu	12.5	23	3.28	5.83	20
39 CORREDOR 2	2200	68	2x4+TTx4Cu	12.5	23	3.1	5.65	20
40 GABINETE	2200	19	2x2.5+TTx2.5Cu	12.5	17.5	1.42	3.97	20
S N TOMAS	4400	0.3	2x6Cu	20	40	0.02	2.56	
41 VESTIARIO 1	2200	34	2x2.5+TTx2.5Cu	12.5	17.5	2.53	5.09	20
42 VESTIARIO 2	2200	25	2x2.5+TTx2.5Cu	12.5	17.5	1.86	4.42	20
43 ELEVADOR	1840	24	4x2.5+TTx2.5Cu	3.49	18.5	0.24	2.78	20
44 EXT. GRL.	8750	20	4x4+TTx4Cu	16.62	24	0.62	3.16	25
73 CUADRO SEC.	29510	43	4x16+TTx16Cu	44.84	59	1.13	3.67	40
74 CUADRO SEC.	29500	37	4x16+TTx16Cu	44.82	59	0.97	3.51	40

8.5. CUADRO SECUNDARIO AUDITORIO -74-

Denominación	P.Cálculo (W)	Dist.Cálc (m)	Sección (mm²)	I.Cálculo (A)	I.Admi. (A)	C.T.Parc. (%)	C.T.Total (%)	Dimensiones (mm)
R N ILUMINACIÓN	9750	0.3	4x4Cu	18.52	27	0.01	3.52	
65 F.1	3250	15	4x4+TTx4Cu	4.94	24	0.16	3.69	25
66 F.2	3250	15	4x4+TTx4Cu	4.94	24	0.16	3.69	25
67 F.3	3250	15	4x4+TTx4Cu	4.94	24	0.16	3.69	25
S N ILUMINACIÓN	9750	0.3	4x4Cu	18.52	27	0.01	3.52	
68 F.1	3250	10	4x4+TTx4Cu	4.94	24	0.11	3.63	25
69 F.2	3250	10	4x4+TTx4Cu	4.94	24	0.11	3.63	25
70 F.3	3250	10	4x4+TTx4Cu	4.94	24	0.11	3.63	25
T N ILUMINACIÓN	10000	0.3	4x4Cu	18.99	27	0.01	3.52	
71 F.1	5000	5	4x4+TTx4Cu	7.6	24	0.08	3.61	25
72 F.2	5000	5	4x4+TTx4Cu	7.6	24	0.08	3.61	25

8.6. CUADRO SECUNDARIO AUDITORIO -73-

Denominación	P.Cálculo (W)	Dist.Cálc (m)	Sección (mm²)	I.Cálculo (A)	I.Admi. (A)	C.T.Parc. (%)	C.T.Total (%)	Dimensiones (mm)
S N ILUMINACIÓN	2726	0.3	2x10Cu	12.39	54	0.01	3.68	
45 RECEPÇÃO	1790	40	2x10+TTx10Cu	8.14	50	0.58	4.26	25
46 DECO.	220	41	2x2.5+TTx2.5Cu	1	21	0.29	3.97	20
47 CENARIO SUP	716	82	2x6+TTx6Cu	3.25	36	0.79	4.46	25
R N ILUMINACIÓN	1702	0.3	2x6Cu	7.74	40	0.01	3.68	
48 BANHEIROS	314	48	2x1.5+TTx1.5Cu	1.43	15	0.81	4.49	16
49 EXPOSIÇÃO	184	57	2x1.5+TTx1.5Cu	0.84	15	0.56	4.24	16
50 DECO.	720	48	2x4+TTx4Cu	3.27	27	0.69	4.37	20
51 EXTERIOR	76	29	2x1.5+TTx1.5Cu	0.35	15	0.12	3.8	16
52 SALAS	408	48	2x2.5+TTx2.5Cu	1.85	21	0.63	4.31	20
T N ILUMINACIÓN	3082	0.3	2x6Cu	14.01	40	0.01	3.69	
53 TEATRO 1	1748	31	2x6+TTx6Cu	7.95	36	0.73	4.41	25
54 TEATRO 2	1334	37	2x6+TTx6Cu	6.06	36	0.66	4.35	25
T N TOMAS	4400	0.3	2x6Cu	20	40	0.02	3.69	
55 BANHEIROS	2200	40	2x4+TTx4Cu	12.5	23	1.82	5.51	20
56 EXPOSIÇÃO	2200	62	2x6+TTx6Cu	12.5	30	1.86	5.55	25
R N TOMAS	6600	0.3	2x10Cu	30	54	0.02	3.69	
57 RECEPÇÃO 1	2200	58	2x4+TTx4Cu	12.5	23	2.64	6.33	20
58 RECEPÇÃO 2	2200	44	2x4+TTx4Cu	12.5	23	2	5.69	20
59 RECEPÇÃO 3	2200	31	2x2.5+TTx2.5Cu	12.5	17.5	2.31	6	20
S N TOMAS	4400	0.3	2x6Cu	20	40	0.02	3.69	
60 CON ENT1 QUA	2200	29	2x2.5+TTx2.5Cu	12.5	17.5	2.16	5.85	20
61 ENT2 GUARDA	2200	30	2x2.5+TTx2.5Cu	12.5	17.5	2.24	5.93	20
T N TOMAS	6600	0.3	2x10Cu	30	54	0.02	3.69	
62 TEATRO 1	2200	72	2x6+TTx6Cu	12.5	30	2.16	5.85	25
63 TEATRO 2	2200	66	2x6+TTx6Cu	12.5	30	1.98	5.67	25
64 TEATRO 3	2200	68	2x6+TTx6Cu	12.5	30	2.04	5.73	25

9. CONCLUSIÓN

Hago constar que deposito esta Memoria Descriptiva con los planos de la instalación en la fecha indicada, para su corrección y evaluación en la *Pontificia Universidade Católica do Paraná*. Así estoy a disposición para exponer cualquier aclaración necesaria para la comprensión de estos documentos.

9 de Diciembre del 2011

Guillermo Terrén Serrano

ANEXO

LUMINARIAS

LUMINARIAS

El cálculo luminotécnico en la cafetería y en el auditorio fue realizado de acuerdo a la normativa NBR 5413, en la cual se detalla por tareas y por ambientes, las iluminancias medias máximas y mínimas recomendadas en cada trabajo a realizar y para cada tipo de ambiente que se pretende llegara conseguir. A continuación se detallan el número de luminarias usadas por cada ambiente, en las diferentes construcciones, y se añaden los catálogos de Philips utilizados:

CAFETERÍA

CANTIDAD	LUMINARIA
4	Philips BBS480
9	Philips BRS541
7	Philips BPK541
17	Philips FBS296
5	Philips BBS415

AUDITORIO

CANTIDAD	LUMINARIA
11	Philips MWG541
4	Philips BBS541
6	Philips BBS560
6	Philips BRS541
18	Philips LCS533
48	Philips BBS480
4	Philips BBS560
133	Philips BBS495

EXTERIOR

CANTIDAD	LAMINARA
131	Philips HCP171
40	Philips CGP705 FG
8	Philips BVP506

LUMINARIAS CAFETERIA



UnicOne Pendant Micro – balancing lighting and design

UnicOne, pendant micro LED

UnicOne Pendant Micro is a small, decorative suspended luminaire designed for use above reception desks, restaurant tables, cashier and hospitality areas. Designed around the MASTERColour CDM-Tm Mini 20/35 W lamp and state-of-the-art LED sources, the Micro versions feature a subtle conical lamp housing and a distinctive square ceiling base, connected by translucent cables. It is available in aluminum and glass models. The UnicOne Pendant range also includes Compact and Micro Twin versions.

Benefits

- Part of an unique fully configurable collection for complete lighting designs
- Subtle Micro version for excellent decorative applications
- State-of-the-art gear as well as High Brightness LED and MASTERColour Mini lamps help save energy

Features

- Well-balanced integration of conical and box elements
- Choice of high-brightness LED or Mini MASTER Colour 20/35 W light sources
- State-of-the-art gear
- Available in aluminum and glass models

Application

- Retail
- Museums
- Public spaces
- Offices

Specifications

• Type	BPK541 (LED version)	• Color	Grey (GR) or White (WH), RAL9010 Other RAL colors available on request
• Light source	BPK541 LED:	• Installation	Direct on ceiling: base plate with connection point (BA) On 3-circuit track (3C) LPK541: also on EXPRESS' connector (EXPRESS) Cable length: 600 (C600) or 1200 (C1200) mm
• Light source beam angle	LED: 10, 25°	• Maintenance	BPK541: no maintenance required
• Light source included	BPK541: yes (WW or CW)	• Lifetime	BPK541: 50,000 hours (70% lumen maintenance at $T_a = 25^\circ\text{C}$)
• Light color	BPK541: - Warm white, 3150 K - Cool white, 6000 K	• Main applications	Retail, museums, public spaces, offices
• Lamp position	Vertical		
• Power supply	BPK541: 220-240 V / 50-60 Hz		
• Power consumption	BPK541: 12 W / 800 mA		
• Material	Housing: aluminum Optic: aluminum		

Related products

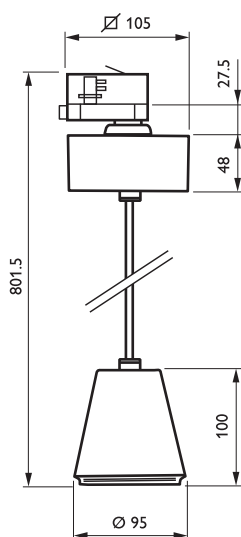


UnicOne Pendant Micro BPK541, LED version



UnicOne Pendant Micro BPK541, LED version

Dimensional drawing



LPK/MPK/BPK541 3C L600

General information (1/2)

Order code	Product family code	Lamp family code	Lamp color code	Color	IP code	Safety class	Extension rod length	Flammability mark	Cap-base	Glow-wire test	European Community mark
910503487815	BPK541	LED-HB	WW	GR	IP20	CL I	L600	F	GY6.35	850/5	CE
910503487915	BPK541	LED-HB	WW	WH	IP20	CL I	L600	F	GY6.35	850/5	CE

General information (2/2)

Order code	Product family code	ENEC mark
910503487815	BPK541	ENEC
910503487915	BPK541	ENEC

Electrical

Order code	Product family code	Supply voltage
910503487815	BPK541	220-240
910503487915	BPK541	220-240



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2011, November 3
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LuxSpace mini

BBS480 DLED-4000 PSD-E CLII WH

BBS480 - DLED Module - Power supply unit with DALI interface external

The highly energy-efficient LuxSpace family makes it possible to achieve extremely low power consumption without sacrificing light quality in general lighting applications. This results in significant energy savings compared with traditional CFL downlights. LuxSpace features the latest LED technology and delivers reliable light output, stable color performance and high color rendering. It is available in three sizes and four outputs – LuxSpace Micro for 125 mm cut-outs, LuxSpace Mini (round and square versions) for 150 mm cut-outs and LuxSpace Compact (round and square versions) and Compact Power for 200 mm cut-outs – covering all downlight applications. The Compact and Mini are also available in High Efficacy versions. All three sizes offer a compact look and feel, and a perfect fit. They are very easy to install, and their long lifetime means an end to the hassle of relamping. There is also a choice of accessories, ensuring maximum performance in all applications. In addition to LuxSpace for general lighting applications, LuxSpace Accent is also available (in fixed, adjustable and elbow versions) for high-flux accent lighting applications.

Product data

• General information

Product family code	BBS480 [BBS480]
Number of lamps	1 [1 pc]
Lamp family code	DLED [DLED Module]
Lamp color code	NW [Neutral white]
Lamp color temperature	4000 [4000 K]
Light source replaceable	false
Transformer/ power supply unit	PSD-E [Power supply unit with DALI interface external]
Driver included	true
Optics	C [High-gloss mirror]
Emergency lighting	No [-]
Dimmable	true
Cable	No [-]
Safety class	CLII [Safety class II]
IP code	IP20 [Finger-protected]
Ambient temperature	+25°C [+25 °C]
Color	WH [White]
Glow-wire test	850/5 [Temperature 850 °C, duration 5 s]
Flammability mark	F [For mounting on normally flammable surfaces]
European Community mark	CE [CE mark]
ENEC mark	ENEC [ENEC mark]
Green Flagship mark	GNFL [Green Flagship]

Lifetime to 70% luminous flux	50000 hr
-------------------------------	----------

• Light technical

Color rendering index	80 [80]
Total luminous flux	1000 Lm
Luminous efficacy	40 Lm/W

• Electrical

System power	25 W [25 W]
Supply voltage	220-240 V [220 to 240 V]
Line frequency	50-60 Hz [50 to 60 Hz]
Control signal voltage	0-16 V [0-16 V DC DALI]

• Product Data

Order code	910503483815
Full product code	910503483815
Full product name	BBS480 DLED-4000 PSD-E CLII WH
Order product name	BBS480 DLED-4000 PSD-E C CLII WH
Pieces per pack	0
Packs per outerbox	1
Bar code on outerbox - EAN3	8717943936564



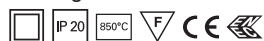
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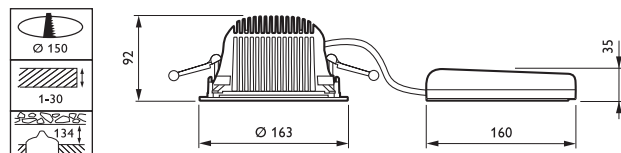
Logistic code(s) - 910503483815

12NC

Net weight per piece 0.960 kg



Dimensional drawing



BBS480/481



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2011, November 25
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Smartform LED BBS415

BBS415 LED48/840 PSD W15L120 LIN-PC PI

BBS415 - LED Module 4800 lm - Power supply unit with DALI interface - Linear-lens array in polycarbonate cover

Reflecting Philips' drive for simple, sustainable solutions, SmartForm recessed is now available with LED technology inside. Designed to fit in a wide range of ceiling types, this family of highly versatile modular and semi-modular luminaires can fulfill the majority of project requirements in most applications. SmartForm LED offers higher luminaire efficiency than conventional MLO (micro-lens optic) solutions, enabling significant energy savings. At the same time, its choice of optics ensures a range of inspiring light effects to bring office environments to life.

Product data

• General information

Product family code	BBS415 [BBS415]
Lamp family code	LED48 [LED Module 4800 lm]
Lamp color code	840 [840 cool white]
Lamp color temperature	4000 [4000 K]
Light source replaceable	false
Transformer/ power supply unit	PSD [Power supply unit with DALI interface]
Driver included	true
Optical cover	LIN-PC [Linear-lens array in polycarbonate cover]
Emergency lighting	No [-]
Dimmable	true
Feed-through wiring	No [-]
Connection	PI [Push-in connector 3-pole]
Safety class	CLI [Safety class I]
IP code	IP40 [Wire-protected]
IK code	IK07 [2 J reinforced]
Ambient temperature	-20 to +35 °C [-20 to +35 °C]
Air-handling	No [-]
Color	WH [White]
Glow-wire test	850/5 [Temperature 850 °C, duration 5 s]
Flammability mark	F [For mounting on normally flammable surfaces]
Safety device	No [-]
European	CE [CE mark]
Community mark	
ENEC mark	ENEC [ENEC mark]
Lifetime to 70% luminous flux	50000 hr
Lifetime to 90% luminous flux	30000 hr

Failure rate at 5000 hrs 1 %

• Light technical

Color rendering index	>80 [>80]
Total luminous flux	3570 Lm
Luminous efficacy	62 Lm/W

• Electrical

System power	58 W [58 W]
Supply voltage	220-240 V [220 to 240 V]
Line frequency	50-60 Hz [50 to 60 Hz]
Control signal voltage	0-16 V [0-16 V DC DALI]

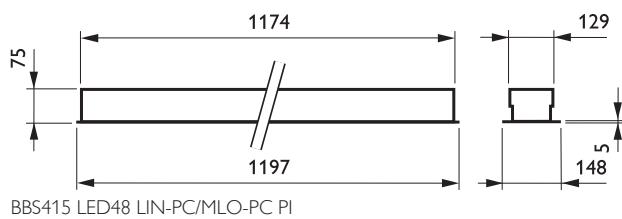
• Product Data

Order code	910501975903
Full product code	910501975903
Full product name	BBS415 LED48/840 PSD W15L120 LIN-PC PI
Order product name	BBS415 LED48/840 W15L120 LIN-PC PI SC
Pieces per pack	0
Packs per outerbox	1
Bar code on outerbox - EAN3	8717943918119
Logistic code(s) - 12NC	910501975903
Net weight per piece	4.900 kg



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Dimensional drawing



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2011, November 26
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UnicOne Gridlight Micro – balancing discretion and beauty

UnicOne, gridlights micro

UnicOne Gridlight Micro is a semi-recessed projector for accent lighting in shop and hospitality applications. The gear is hidden behind a false ceiling, making the light cone the focal element of the projector design. The luminaire blends into the ceiling by means of a simple square interface. It is available in aluminum and glass models. UnicOne Gridlight Micro is an extractable projector for accent lighting in shop and hospitality applications. The complete projector can be fully or partially concealed, while still enabling maximum tilt of the light beam. It is extracted by means of a refined push-and-pull system that does not require the removal of ceiling tiles. A stylish square rim completes the overall architectural impression. UnicOne Gridlight Micro is available in aluminum. The UnicOne Gridlight range also includes Mini, Compact, Micro Twin, Mini Twin and Compact Twin versions.

Benefits

- Small-size projectors with a big impact, offering powerful lighting accents in a small, appealing package - ideal for retail and hospitality areas
- The Projector adds a sophisticated adjustment rod and hinge to the unique UnicOne design concept
- Designed around the most efficient and compact HID and MASTER halogen lamps

Features

- Small-size projectors with a big impact, offering powerful lighting accents in a small, appealing package - ideal for retail and hospitality areas
- The Projector adds a sophisticated adjustment rod and hinge to the unique UnicOne design concept
- Designed around the most efficient and compact HID and MASTER halogen lamps

Application

- Retail
- Hospitality
- Museums

Specifications

• Type	MGS541 (semi-recessed, HID lamp version) LGS541 (semi-recessed, halogen lamp version) MBS541 (extractable, HID lamp version) LBS541 (extractable, halogen lamp version)	• Transformer	LGS/LBS541: Electronic (ET)
• Light source	MGS/MBS541 HID: - 1 x MASTERColour CDM-Tm Mini / PGJ5 / 20, 35 W LGS/LBS541 Halogen: - 1 x MASTERLine ES / GU5.3 / 45 W - 1 x MASTERCapsule / GY6.35 / 45 W	• Optic	MGS/MBS/LGS/LBS541: - Narrow beam (12°) - Medium beam (24 and 36°) - Not for MASTERLine ES version
• Light source beam angle	MASTERLine ES: 8, 24, 36°	• Material	Housing: aluminum Optic: aluminium
• Light source included	MGS/MBS541: yes (lamp color 830 for MASTERColour 20 W and 930 for 35 W) LGS/LBS541: yes (K)	• Color	Grey (GR) or White (WH), RAL9010 Other RAL colors available on request
• Lamp position	Vertical	• Installation	Fixation in false ceilings: - 1-30 mm (semi-recessed), - 1-24 mm (extractable) Ceiling cut out 126 x 126 mm Mains connection by push-in connectors on gear
• Ballast	MGS/MBS541: Electronic, 220-240 V / 50-60 Hz: - Electronic Ballast (EB)	• Maintenance	MGS/MBS/LGS/LBS541: direct lamp access or after removing the front glass/accessory
		• Accessories	Barndoors, honeycomb, dichroic color, UV and anti-glare filters, protection glass, sculptural lens Not for MASTERLine ES versions
		• Main applications	Retail, hospitality, museums

• Type	MGS542 (semi-recessed, HID lamp version) LGS542 (semi-recessed, halogen lamp version)	• Optic	Narrow beam (12°) Medium beam (24 and 36°) Not for MASTERLine ES version
• Light source	MGS542 HID: - 1 x MASTERColour CDM-Tm Mini / PGJ5 / 20, 35 W LGS542 Halogen: - 1 x MASTERLine ES / GU5.3 / 45 W - 1 x MASTERCapsule / GY6.35 / 45 W	• Material	Housing: pressed glass and aluminum Optic: aluminum
• Lamp beam angle	MASTERLine ES: 8, 24, 36°	• Color	Grey (GR) or White (WH), RAL9010 Other RAL colors available on request
• Light source included	MGS542: yes (lamp color 830 for MASTERColour 20 W and 930 for 35 W) LGS542: yes (K)	• Installation	Fixation in false ceilings, 1-30 mm Ceiling cut out 126 x 126 mm Mains connection by push-in connectors on gear
• Lamp position	Vertical	• Maintenance	Direct lamp access or after removing the front glass/accessory
• Ballast	Electronic, 220-240 V / 50-60 Hz: - Electronic Ballast (EB)	• Accessories	Barndoors, honeycomb, dichroic color, UV and anti-glare filters, protection glass, sculptural lens
		• Main applications	Retail, hospitality, museums

Related products



UnicOne Gridlight Micro LBS/MBS541
extractable version, partly concealed for
small tilt angles



UnicOne Gridlight Micro LBS/MBS541
extractable version, partly concealed for
small tilt angles

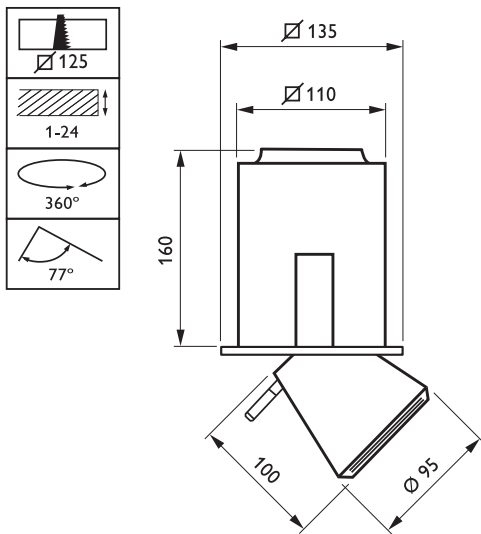


UnicOne Gridlight Micro LGS/MGS541,
Semi-recessed version

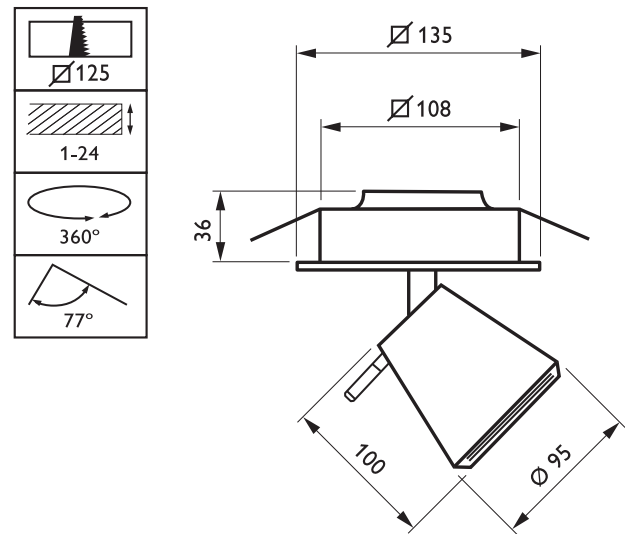


UnicOne Gridlight Micro LGS/MGS541,
Semi-recessed version

Dimensional drawing



MBS/LBS/BBS541



MGS/LGS/BGS541

Product details



UnicOne Gridlight Micro MBS541, partly concealed for small tilt angles



UnicOne Gridlight Micro MBS541, fully concealed for vertical lighting

General information (1/2)

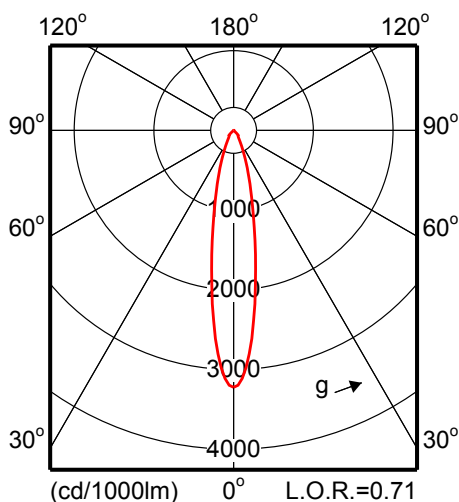
Order code	Product family code	Number of lamps	Optics	Lamp family code	Lamp power	Lamp color code	Color	IP code	Gear	Kombipack	Safety class
910503471315	MBS541	1	24	CDM-Tm	20	830	CR	IP20	EB	K	CLI
910503471515	MGS541	1	24	CDM-Tm	20	830	CR	IP20	EB	K	CLI
910503442915	MBS541	1	24	CDM-Tm	35	930	GR	IP20	EB	K	CLI
910503442315	LBS541	1	12	HAL-C	45	-	WH	IP20	No	K	CLI
910503442415	LBS541	1	24	HAL-C	45	-	WH	IP20	No	K	CLI
910503442515	LBS541	1	36	HAL-C	45	-	WH	IP20	No	K	CLI
910503442815	MBS541	1	24	CDM-Tm	20	830	WH	IP20	EB	K	CLI
910503443015	MBS541	1	24	CDM-Tm	35	930	WH	IP20	EB	K	CLI
910503443115	MBS541	1	36	CDM-Tm	35	930	WH	IP20	EB	K	CLI
910503471415	MBS541	1	24	CDM-Tm	35	930	WH	IP20	EB	K	CLI
910503443215	MGS541	1	12	CDM-Tm	20	830	GR	IP20	EB	K	CLI
910503443515	MGS541	1	24	CDM-Tm	35	930	GR	IP20	EB	K	CLI
910503442615	LGS541	1	24	HAL-C	50	-	WH	IP20	No	K	CLI
910503442715	LGS541	1	24	HAL-C	45	-	WH	IP20	No	K	CLI
910503443315	MGS541	1	12	CDM-Tm	20	830	WH	IP20	EB	K	CLI

Order code	Product family code	Number of lamps	Optics	Lamp family code	Lamp power	Lamp color code	Color	IP code	Gear	Kombipack	Safety class
910503443415	MG5541	1	24	CDM-Tm	20	830	WH	IP20	EB	K	CLI
910503443615	MG5541	1	24	CDM-Tm	35	930	WH	IP20	EB	K	CLI
910503443715	MG5541	1	36	CDM-Tm	35	930	WH	IP20	EB	K	CLI

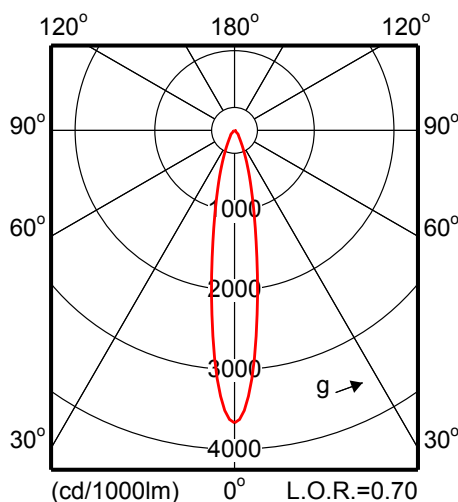
General information (2/2)

Order code	Product family code	Extension rod length	Flammability mark	Glow-wire test	Lamp version	European Community mark	ENEC mark	Finishing	Lifetime to 70% luminous flux
910503471315	MBS541	No	F	850/5	-	CE	ENEC	-	50000
910503471515	MG5541	No	F	850/5	-	CE	ENEC	-	50000
910503442915	MBS541	No	F	850/5	-	CE	ENEC	-	50000
910503442315	LBS541	No	F	850/5	MS	CE	ENEC	-	50000
910503442415	LBS541	No	F	850/5	MS	CE	ENEC	-	50000
910503442515	LBS541	No	F	850/5	MS	CE	ENEC	-	50000
910503442815	MBS541	No	F	850/5	-	CE	ENEC	-	50000
910503443015	MBS541	No	F	850/5	-	CE	ENEC	-	50000
910503443115	MBS541	No	F	850/5	-	CE	ENEC	-	50000
910503471415	MBS541	No	F	850/5	-	CE	ENEC	GL	50000
910503443215	MG5541	No	F	850/5	-	CE	ENEC	-	50000
910503443515	MG5541	No	F	850/5	-	CE	ENEC	-	50000
910503442615	LGS541	No	F	850/5	-	CE	ENEC	-	50000
910503442715	LGS541	No	F	850/5	MS	CE	ENEC	-	50000
910503443315	MG5541	No	F	850/5	-	CE	ENEC	-	50000
910503443415	MG5541	No	F	850/5	-	CE	ENEC	-	50000
910503443615	MG5541	No	F	850/5	-	CE	ENEC	-	50000
910503443715	MG5541	No	F	850/5	-	CE	ENEC	-	50000

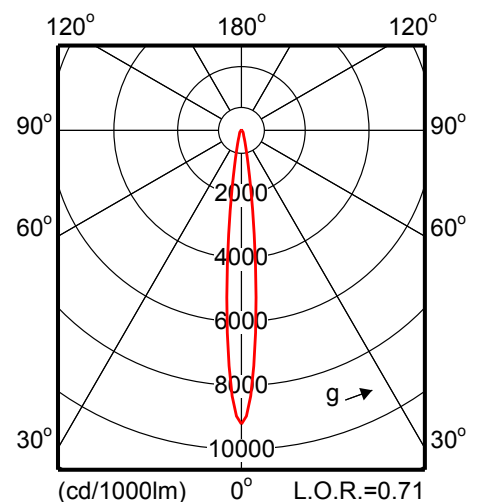
Photometric data



LGS541 1xHAL-C-SU50W/12V-GY6.35 24

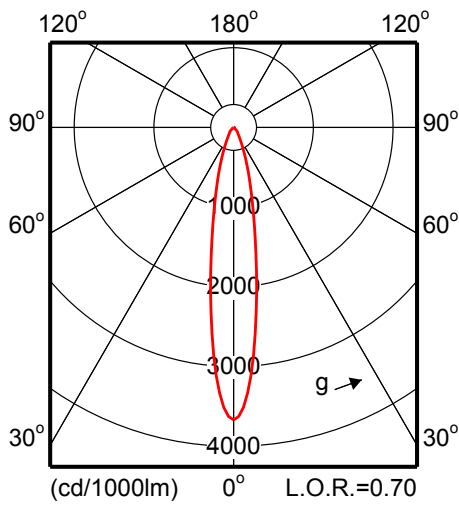


MBS541 1xCDM-Tm20W EB 24

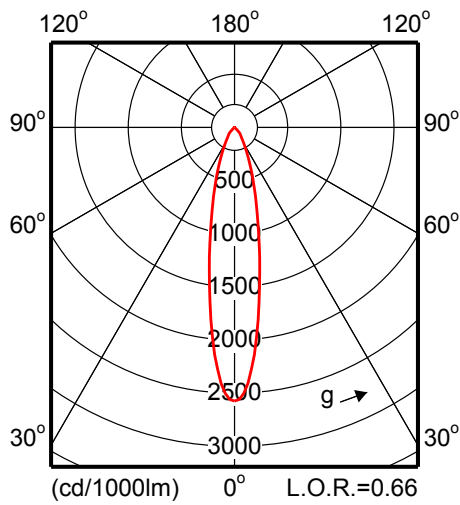


MG5541 1xCDM-Tm20W EB 12

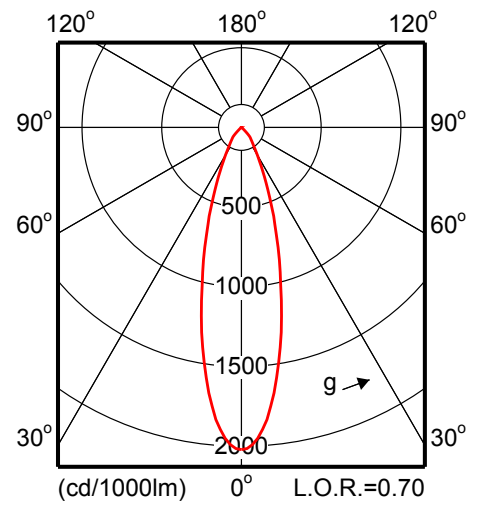
Photometric data



MGS541 1xCDM-Tm20W EB 24



MGS541 1xCDM-Tm35W EB 24



MGS541 1xCDM-Tm35W EB 36

Electrical

Order code	Product family code	Supply voltage
910503471315	MBS541	220-240
910503471515	MGS541	220-240
910503442915	MBS541	220-240
910503442315	LB5541	220-240
910503442415	LB5541	220-240
910503442515	LB5541	220-240
910503442815	MBS541	220-240
910503443015	MBS541	220-240
910503443115	MBS541	220-240

Order code	Product family code	Supply voltage
910503471415	MBS541	220-240
910503443215	MGS541	220-240
910503443515	MGS541	220-240
910503442615	LGS541	220-240
910503442715	LGS541	220-240
910503443315	MGS541	220-240
910503443415	MGS541	220-240
910503443615	MGS541	220-240
910503443715	MGS541	220-240



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2011, November 23
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Fugato Full Metal, general lighting

FBS296 2xPL-R/4P14W/840 HFP C PI ALU

FBS296 - 2 pcs - PL-R Eco 4 Pin - 14 W - HF Performer - High-gloss mirror

The Fugato range of fixed downlights for general lighting consists of Fugato Compact (cut-out 175 mm), Fugato Performance (cut-out 225 mm), Fugato Power (cut-out 275 mm) and Fugato Full Metal (both 175 and 225 mm), which have all been designed for optimum performance – both optical and thermal – with compact fluorescent lamps. Optical variation is provided by Fugato's 'dual optic' concept. The top optic is made of high-gloss aluminum. The lower polymer optic can be ordered in a high-gloss, matt-satin or white finish. The high-gloss (C) version complies with the UGR_r19 norm (in accordance with EN12464-1, $L_m < 1000 \text{ cd/m}^2$ at $\gamma > 65^\circ$) when used with the innovative round louver. A wide range of accessories is available for the CFL versions of both Fugato and Fugato Full Metal. The Fugato range further comprises the Fugato LED downlight (cut-out 175 mm), which enables up to 50% energy saving compared with traditional CFL downlights without sacrificing light quality. Its long lifetime of 50,000 hours also makes it a true 'fit and forget' solution.

Product data

• General information

Product family code	FBS296 [FBS296]
Number of lamps	2 [2 pcs]
Lamp family code	PL-R/4P [PL-R Eco 4 Pin]
Lamp power	14 W [14 W]
Lamp color code	840 [840 cool white]
Kombipack	K [Lamp(s) included]
Compensation circuit	No [-]
Gear	HFP [HF Performer]
Optics	C [High-gloss mirror]
Optical cover	No [-]
Emergency lighting	No [-]
Connection	PI [Push-in connector 3-pole]
Cable	No [-]
Safety class	CLI [Safety class I]
IP code	IP20 [Finger-protected]
Color	ALU [Aluminum]
Protection foil	No [-]
Glow-wire test	960/5 [Temperature 960 °C, duration 5 s]
Flammability mark	F [For mounting on normally flammable surfaces]
Accessories (multi-value)	No [-]
European Community mark	CE [CE mark]

ENEC mark ENEC [ENEC mark]

• Electrical

Supply voltage 220-240 V [220 to 240 V]

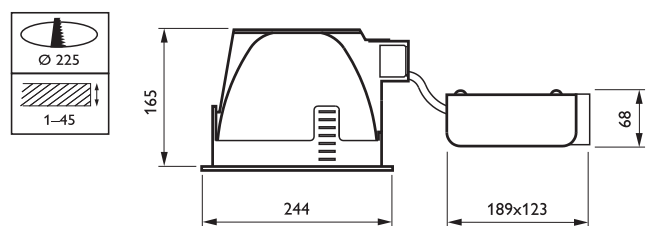
• Product Data

Order code	910813570202
Full product code	910813570202
Full product name	FBS296 2xPL-R/4P14W/840 HFP C PI ALU
Order product name	FBS296 2xPL-R/4P14W/840 HFP C PI ALU
Pieces per pack	0
Packs per outerbox	1
Bar code on outerbox - EAN3	6418147060070
Logistic code(s) - 12NC	910813570202
Net weight per piece	1.590 kg



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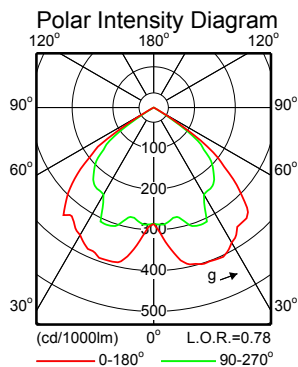
Dimensional drawing



FBS296

Fugato Metal FBS290 FBS296 2xPL-R/4P14W HFP C

2 x 1050 lm

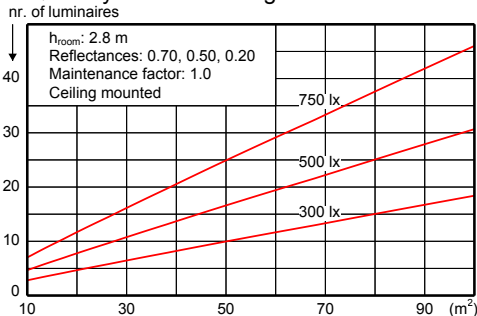


Light output ratio 0.78
Service upward 0.00
Service downward 0.78

CIE flux code 65 100 100 100 78

EN12464-1 65 deg, 200 cd/m²
CIBSE: LG3 65 deg, 200 cd/m²

Quantity estimation diagram



Utilisation factor table

Room Index k	Reflectances (%) for ceiling, walls and working plane (CIE)											
	0.80	0.80	0.70	0.70	0.70	0.70	0.50	0.50	0.30	0.30	0.00	0.00
0.60	0.80	0.80	0.70	0.70	0.70	0.70	0.50	0.50	0.30	0.30	0.00	0.00
0.80	0.50	0.50	0.50	0.50	0.50	0.30	0.30	0.10	0.10	0.10	0.00	0.00
1.00	0.62	0.58	0.61	0.59	0.57	0.53	0.52	0.49	0.52	0.49	0.47	0.47
1.25	0.69	0.63	0.68	0.65	0.63	0.59	0.58	0.55	0.57	0.55	0.53	0.53
1.50	0.74	0.67	0.72	0.69	0.66	0.63	0.62	0.59	0.61	0.59	0.57	0.57
2.00	0.81	0.72	0.79	0.75	0.71	0.68	0.68	0.66	0.67	0.65	0.63	0.63
2.50	0.85	0.75	0.83	0.78	0.74	0.72	0.71	0.69	0.70	0.68	0.67	0.67
3.00	0.87	0.77	0.85	0.80	0.76	0.74	0.73	0.71	0.72	0.70	0.69	0.69
4.00	0.91	0.78	0.88	0.82	0.78	0.76	0.75	0.73	0.73	0.72	0.71	0.71
5.00	0.92	0.79	0.90	0.84	0.79	0.77	0.76	0.75	0.74	0.73	0.72	0.72

Ceiling mounted

Luminance Table

Plane	0.0	45.0	90.0
Cone			
45.0	22871	19796	15292
50.0	18549	16436	13156
55.0	12909	11149	9307
60.0	1734	1078	814
65.0	25	13	25
70.0	15	15	15
75.0	20	20	0
80.0	0	0	0
85.0	0	0	0
90.0	-	-	-

(cd/m²)

LVE16529

2010-03-06

FBS296 2xPL-R/4P14W HFP C



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2011, October 6
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LUMINARIAS PARQUE EXTERIOR

VivaraZON

HCP171 HPL-N80W 230-240V LO PCP



HCP171 - HPL-N - 80 W - Internal louver - Polycarbonate bowl/cover prismatic

VivaraZON is a vandal-resistant, aluminum bollard range for ground-mounted applications. It offers a choice of two distinctive designs suitable for discharge, incandescent and fluorescent lamps: round top with clear cover (HCP170) and flat top with innovative ZON diffuser (HCP171). A highly reflective aluminum internal louver ensures glare-free light distribution.

Product data

• General information

Product family code	HCP171 [HCP171]
Number of lamps	1 [1 pc]
Lamp family code	HPL-N [HPL-N]
Lamp power	80 W [80 W]
Gear	CONV [Conventional]
Safety class	I [Safety class I]
IP code	IP54 [Dust accumulation-protected, splash-proof]
Optical element	LO [Internal louver]
Optical cover	PCP [Polycarbonate bowl/cover prismatic]

• Electrical

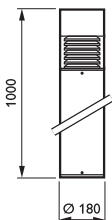
Supply voltage	230-240 V [230 to 240 V]
----------------	--------------------------

• Product Data

Order code	910502582518
Full product code	910502582518
Full product name	HCP171 HPL-N80W 230-240V LO PCP
Order product name	HCP171 HPL-N80W 230/240V LO PCP
Pieces per pack	0
Packs per outerbox	1
Bar code on outerbox - EAN3	8711559140384
Logistic code(s) - 12NC	910502582518
Net weight per piece	8.200 kg



Dimensional drawing

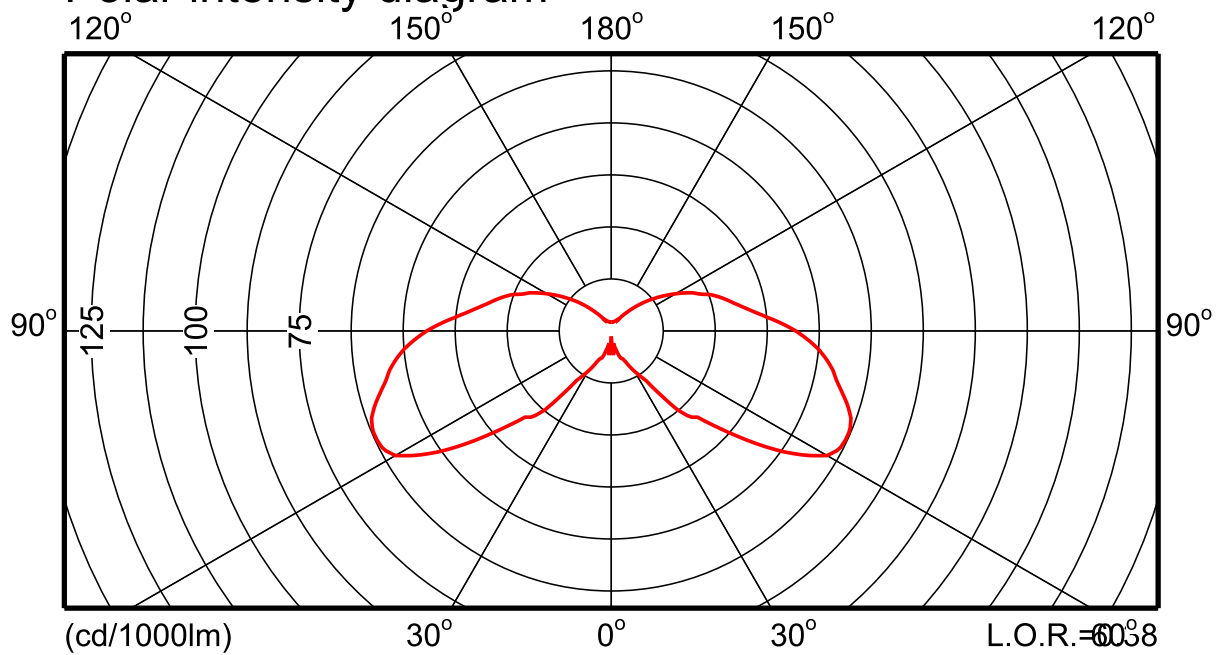


VivaraZON HCP170 HCP171 1xHPL-N80W CONV LO PCP

L.O.R.=0.38

1 x 3700 lm

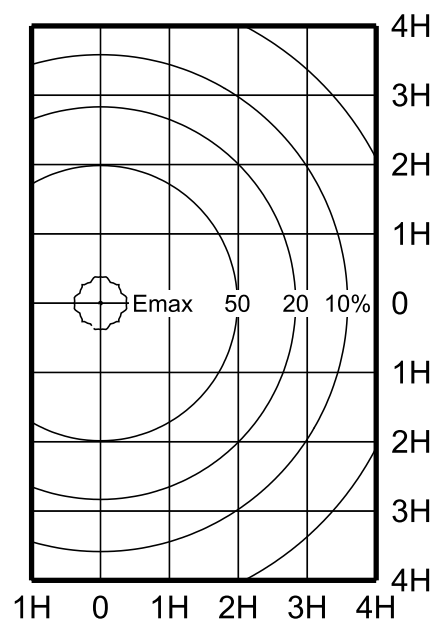
Polar intensity diagram



Horizontal Illuminance $\angle 0^\circ$

H	E _{max}
(m)	(lux)
3.0	5
3.5	3
4.0	3

M.F.=1.0



LVM0383600

2010-03-31

2011, October 6
data subject to change



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2011, October 6
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OptiFlood LED

BVP506 GRN84-1S/740 II S GR



BVP506 - LED GreenLine 8400 lm - Symmetrical

OptiFlood LED is a range of stylish, extremely efficient asymmetric floodlights that can be used to illuminate large areas. Designed around the latest LED technology, it offers significant energy and maintenance savings compared with conventional HID systems. Thanks to its highly efficient LEDGine area optics, it can be used for area lighting applications that have traditionally required HID-equivalent power levels. Integrated controls are available as an option, enabling additional energy savings. And LED upgrades can be easily incorporated, making this a truly future-proof solution. With its compact shape and aesthetically pleasing design, OptiFlood LED can be used in applications where design and appearance are just important as technical performance.

Product data

• General information

Product family code	BVP506 [BVP506]
Lamp family code	GRN84 [LED GreenLine 8400 lm]
Lamp version	1S [1st generation, screw fixation]
Lamp color code	740 [740 cool white]
Lamp color temperature	4000 [4000 K]
Light source replaceable	true
Driver included	true
Safety class	II [Safety class II]
Optic	S [Symmetrical]
Color	GR [Grey]
Coating	No [-]
Lighting control unit	No [-]
Light regulation	No [-]
Photocell	No [-]
Fuse	No [-]
Ambient temperature	-30 to +40 °C [-30 to +40 °C]
European	CE [CE mark]
Community mark	
ENEC mark	ENEC [ENEC mark]
Lifetime to 50% luminous flux	100000 hr
Lifetime to 70% luminous flux	100000 hr
Lifetime to 90% luminous flux	35000 hr

• Light technical

Color rendering index	70 [70]
Luminous efficacy	90 Lm/W

• Electrical

Supply voltage	220-240 V [220 to 240 V]
Line frequency	50-60 Hz [50 to 60 Hz]

• Mechanical

Mounting device	No [-]
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• Product Data

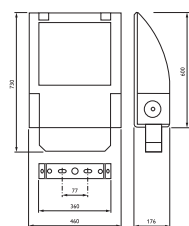
Order code	910403881912
Full product code	910403881912
Full product name	BVP506 GRN84-1S/740 II S GR
Order product name	BVP506 GRN84-1S/740 II S GR
Pieces per pack	0
Packs per outerbox	1
Bar code on outerbox - EAN3	8718291301479
Logistic code(s) - 12NC	910403881912
Net weight per piece	19.500 kg



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Dimensional drawing



BVP506



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2011, November 2
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UrbanScene

CGP705 CPO-TW45W K EB I OOC FG CO GR

UrbanScene is a range of complete lighting solutions comprising five highly distinctive urban lighting luminaires, plus dedicated masts and brackets. Their flexibility, coherent design and outstanding optical performance allow them to fulfil all main applications – street lighting, area lighting, illumination and image projection. UrbanScene's energy saving features (high efficiency lamps, electronic gear) enable local authorities to adopt a sustainable approach to urban lighting. Designed to be unobtrusive, night-preserving and fully recyclable, UrbanScene has an elegant daytime appearance. Smart brackets allow total flexibility in aiming, while preserving the overall appearance of the light point. The UrbanScene range consists of small and medium-sized luminaires, as well as gobo projector, LED and indirect versions.

Product data

• General information

Product family code	CGP705 [CGP705]
Lamp family code	CPO-TW [MASTER CosmoPolis White]
Lamp power	45 W [45 W]
Kombipack	K [Lamp(s) included]
Gear	EB [Electronic]
Safety class	I [Safety class I]
Optic	OOC [Open optic for CosmoPolis lamp]
Optical cover	FG [Glass flat]
Parts color	CO [Cover painted]
Color	GR [Grey]
Lighting control unit	No [-]
Photocell	No [-]
Cable	No [-]
Accessoires (multi-value)	No [-]

• Electrical

Supply voltage	220-240 V [220 to 240 V]
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• Product Data

Order code	953110 00
Full product code	871794395311000
Full product name	CGP705 CPO-TW45W K EB I OOC FG CO GR
Order product name	CGP705 CPO-TW45W K EB I OOC FG CO GR
Pieces per pack	0
Packs per outerbox	1
Bar code on outerbox - EAN3	8717943953110
Logistic code(s) - 12NC	910502294218
Net weight per piece	13.562 kg





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2011, May 4
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LUMINARIAS AUDITORIO

BBS560 - LED Module, system flux 2000 lm - Power supply unit with DALI interface - Acrylate micro-lens optic circular

Pensando all'illuminazione generale per gli uffici oggi è possibile affidarsi ai vantaggi offerti dalla tecnologia LED: sostenibilità unita a un design innovativo e accattivante, senza rinunciare al comfort visivo fanno di DayZone la soluzione ideale. Gli apparecchi di illuminazione LED a incasso DayZone garantiscono un'illuminazione funzionale di buona qualità con un'efficienza energetica paragonabile o addirittura superiore ai sistemi fluorescenti tradizionali. La famiglia DayZone stravolge le regole del design del passato per dare origine a un prodotto completamente nuovo sia in termini di stile che di dinamicità delle sorgenti luminose. Il controllo dell'abbagliamento e l'uniformità degli illuminamenti sono conformi alle normative sull'illuminazione per uffici oltre che in linea con le migliori soluzioni dotate di tecnologia fluorescente.

Dati del prodotto

• Informazioni generali

Codice famiglia di prodotto	BBS560 [BBS560]
Numero di lampade	1 [1 pc]
Codice famiglia lampade	LED20S [LED Module, system flux 2000 lm]
Codice colore lampada	840 [840 cool white]
Lamp color temperature	4000 [4000 K]
Light source replaceable	false
Unità elettrica Trasform./unità alimentazione	No [-]
Driver included	PSD [Power supply unit with DALI interface]
Optical cover	true
AC-MLO-C [Acrylate micro-lens optic circular]	No [-]
Illuminazione di emergenza	No [-]
Lighting control unit	No [-]
Dimmable	true
Accensioni separate	No [-]
Fusibile	No [-]
Connezione	PI [Connettore push-in PI]
Classe di isolamento	CL1 [Classe 1]
Grado IP	IP40 [Wire-protected]
IK code	IK02 [0.2 J standard]
Temperatura ambiente	+10 to +40°C [+10 to +40 °C]
Colore	WH [Bianco WH]
Con pellicola	FL [Con pellicola protettiva]
Test filo incandescente	650/5 [Temperature 650 °C, duration 5 s]
Marchi di sicurezza	F [For mounting on normally flammable surfaces]

Dispositivo di sicurezza	No [-]
European Community mark	CE [CE mark]
ENEC mark	ENEC [ENEC mark]
Durata funzionam. (70% flusso)	50000 hr
Lifetime to 90% luminous flux	30000 hr
Failure rate at 5000 hrs	1 %

• Dati illuminotecnici

Color rendering index	80 [80]
Total luminous flux	2000 Lm
Luminous efficacy	69 Lm/W

• Corrente

System power	29 W [29 W]
Tensione di alimentazione	220-240 V [220 to 240 V]
Frequenza di alimentazione	50-60 Hz [50 to 60 Hz]
Control signal voltage	0-16 V [0-16 V DC DALI]

• Dati prodotto

Codice ordine	917310 00
Codice prodotto	871794391731000
Nome prodotto	BBS560 LED20S/840 PSD AC-MLO-C PI

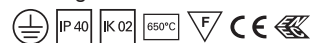
Ordine nome
prodotto
Pezzi per scatola
Scatola per imballo
Codice a barre
sull'imballo

BBS560 LED20S/840 PSD AC-MLO-C
PI
0
1
8717943917310

Codice logistico -
12NC
Peso netto per pezzo

910501961003

6.900 kg



Disegno tecnico



BBS560



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2011, Novembre 26
Dati soggetti a modifiche

ArcTone MRS531

LCS533 HAL-MR111-24-60W K ET BA BK-WH



LCS533 - MASTER Line ML 111 - 60 W - Electronic transformer - Baseplate

ArcTone is a range of projectors that create powerful lighting accents – ideal for retail applications such as fashion stores. They have a refined, compact form with curved edges. The combination of black and white, grey or other finishings like chrome, makes the fixture look even smaller and offers maximum variety in fixture appearance. Thanks to ArcTone's 'mix & match' feature (you can combine the various options, e.g. finishings, colors, lamp types, optics and accessories), the projectors can be customized to the specific application. With its choice of powerful LED sources and CDM lamps and gear, ArcTone enables you to create amazing light effects, while its compact, duo-color form ensures a perfect match with a host of interior styles. ArcTone projectors come in three sizes. The Micro version incorporates innovative 3 x LUXEON® K2 LEDs in warm white and cool white or MASTERColour CDM-Tm Mini 20/35 W lamps. The Mini version (with MASTERColour CDM-TC Mini 35/70 W lamps) and Mini R111 version (with MASTERColour CDM-R111 20/35/70 W) offer higher lumen packages.

Product data

• General information

Product family code	LCS533 [LCS533]
Number of lamps	1 [1 pc]
Lamp family code	HAL-MR111 [MASTER Line ML 111]
Lamp version	No [-]
Beam angle of light source	24 D [24°]
Lamp power	60 W [60 W]
Kombipack	K [Lamp(s) included]
Gear	No [-]
Transformer/ power supply unit	ET [Electronic transformer]
Optics	No [-]
Optical cover	No [-]
Safety class	CLI [Safety class I]
IP code	IP20 [Finger-protected]
Suspension/ mounting	BA [Baseplate]
Color	BK-WH [Black and white]
Finishing	MAT [Matt]
Glow-wire test	850/5 [Temperature 850 °C, duration 5 s]
Flammability mark	F [For mounting on normally flammable surfaces]
Accessories (multi-value)	No [-]

European Community mark	CE [CE mark]
ENEC mark	ENEC [ENEC mark]

• Electrical

Supply voltage	220-240 V [220 to 240 V]
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• Product Data

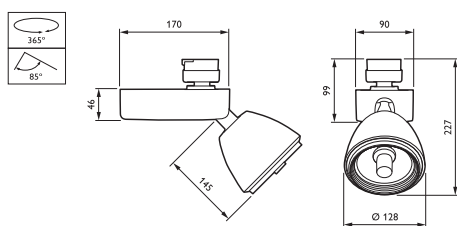
Order code	910503459015
Full product code	910503459015
Full product name	LCS533 HAL-MR111-24-60W K ET BA BK-WH
Order product name	LCS533 HAL-MR111-24-60W K ET BA BK-WH
Pieces per pack	0
Packs per outerbox	1
Bar code on outerbox - EAN3	8727900687774
Logistic code(s) - 12NC	910503459015
Net weight per piece	1.012 kg



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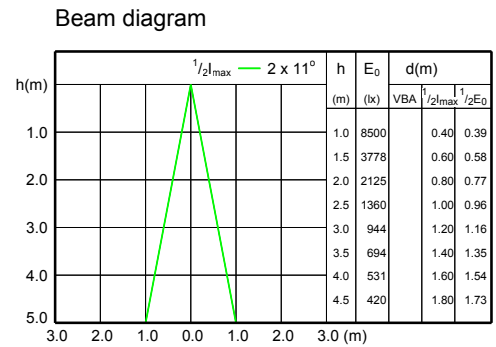
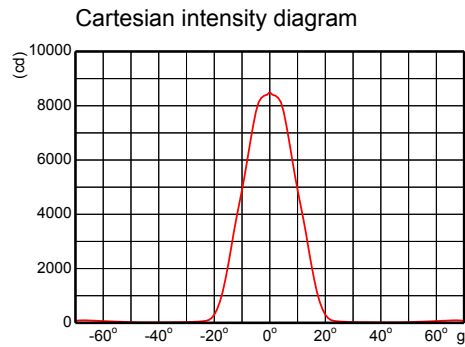
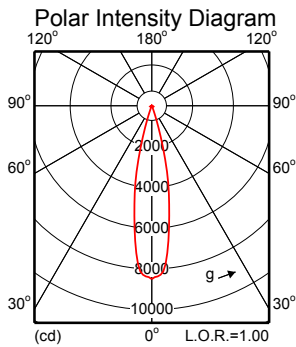
Dimensional drawing



LCS/MCS533

MRS531 ArcTone LCS533 1xHAL-MR111-24-60W No 24D

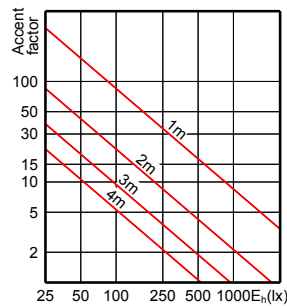
1 x 1420 lm



Light output ratio 1.00
Service upward 0.00
Service downward 1.00

Imax 8500 cd
BS (1/2 lmax) 2 x 11°
BS (1/2 E₀) 2 x 11°

Visual impact diagram



LVE0321000

2010-03-06

LCS533 1xHAL-MR111-24-60W 24D



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UnicOne Uplight Micro MWG541 C

MWG541 C 1xCDM-Tm20W EB 24 WH



MWG541 - 1 pc - MASTERColour CDM-Tm Mini - 20 W
- Electronic - Beam angle 24°

With the UnicOne Uplight range you can enhance your interior decor without compromising on light levels. Accordingly, these products are ideal for application in, for example, office corridors, shops, hotels and other public areas. Featuring the typical UnicOne family design characteristics, the Uplight range integrates the conical and box elements into a well-balanced form. The UnicOne Uplight Micro versions have been designed around the MASTERColour CDM-Tm Mini 20/35 W lamp and are available with a choice of optics and attractive accessories.

Product data

• General information

Product family code	MWG541 [MWG541]
Duplication code	C [China]
Number of lamps	1 [1 pc]
Lamp family code	CDM-Tm [MASTERColour CDM-Tm Mini]
Lamp power	20 W [20 W]
Gear	EB [Electronic]
Optics	24 [Beam angle 24°]
IP code	IP20 [Finger-protected]
Color	WH [White]

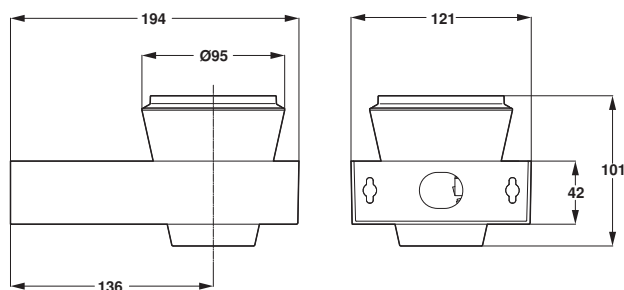
• Product Data

Order code	911401086880
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Full product code	911401086880
Full product name	MWG541 C 1xCDM-Tm20W EB 24 WH
Order product name	MWG541 C 1xCDM-TM20W EB 24 WH
Packs per outerbox	1
Bar code on pack - EAN1	0000000000000
Bar code on outerbox - EAN3	0000000000000
Logistic code(s) - 12NC	911401086880
Net weight per piece	0.950 kg



Dimensional drawing



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UnicOne Projector Micro – small size, big impact

UnicOne, projector micro

UnicOne Projector Micro is a rotation-symmetrical design projector that offers powerful lighting accents in a small, appealing package, creating the ideal ambience in shops and hospitality areas. It provides a choice of optics and incorporates the MASTERColour CDM-Tm Mini 20/35 W lamp sources and electronic gear for the very best color rendering, lumen maintenance and energy savings. It is available in aluminum and glass models, as well as with state-of-the-art LED sources. The UnicOne Projector range also includes Compact, Mini, Micro Twin and Mini Twin versions.

Benefits

- Small-size projectors with a big impact, offering powerful lighting accents in a small, appealing package - ideal for retail and hospitality areas
- The Projector adds a sophisticated adjustment rod and hinge to the unique UnicOne design concept
- Designed around the most efficient and compact HID and MASTER halogen lamps

Features

- Choice of LED sources or HID or MASTER halogen lamp
- Choice of optics
- Electronic gear
- Available in aluminum and glass
- Sophisticated adjustment rod and hinge

Application

- Retail
- Hospitality

- Museums

Specifications

• Type	MRS541 (3-circuit track, HID lamp version) LRS541 (3-circuit track, halogen lamp version) MCS541 (baseplate, HID lamp version) LCS541 (baseplate, halogen lamp version)	• Material and finish	Material: die-casted aluminum housing, anodized aluminium reflector
• Light source	HID: - 1 x MASTERColour CDM-Tm Mini / PGJ5 / 20, 35 W LRS/LCS541 Halogen: - 1 x MASTERLine ES / GU5.3 / 50 W - 1 x MASTERCapsule / GY6.35 / 50 W	• Color	
• Light source beam angle	MASTERLine: 12, 24, 36°	• White (WH), RAL9010	
• Light source included	MCS/MRS541: yes (lamp color 830 for MASTERColour 20 W and 930 for 35 W) LRS/LCS541 : yes (K)	• Installation	Direct on ceiling: baseplate with connection point (BA) On 3-circuit track (3C)
• Lamp position	Vertical	• Maintenance	MRS/LRS/MCS/LCS541: remove front cover for lamp replacement
• Gear	MRS/MCS541 - Electronic, 220-240 V / 50-60 Hz: - Electronic Ballast (EB) for high intensity discharge lamps - Electronic transformer (ET) for Masterline halogen lamps	• Accessories	From China: UV filter: ZZS541 UV FILTER Black barndoor: ZZS541 HC HoneycombFrom From Europe: Protection glass (PG,ZZS541) Sculptural lens(LS,ZZS541) Red filter (DF-RD,ZZS541) Blue filter (DF-BL,ZZS541) Yellow filter(DF-YE,ZZS541) Green filter (DF-GN,ZZS541) Glare filter (GCG,ZZS541) White barndoors (BD--WH,ZZS541) Grey barndoors (BD-GR,ZZS541) Black barndoors (BD-BK,ZZS541) Honeycomb (HC,ZZS541) UV filter (UV, ZZS541)
• Transformer	LRS/LCS541: Electronic (ET)	• Remarks	Also available with extension rod of 600 mm (vertical adjustment of 90°)
• Optic	MRS/LRS/MCS/LCS541: - Narrow beam (12°) - Medium beam (24 and 36°)	• Main applications	Retail fasion shops, departmental stores,car showrooms
• Type	MRS542 (3-circuit track, HID lamp version) LRS542 (3-circuit track, halogen lamp version) MCS542 (baseplate, HID lamp version) LCS542 (baseplate, halogen lamp version)	• Transformer	LRS/LCS542: Electronic (ET)
• Light source	MRS/MCS542 HID: - 1 x MASTERColour CDM-Tm Mini / PGJ5 / 20, 35 W LRS/LCS542 Halogen: - 1 x MASTERLine ES / GU5.3 / 45 W - 1 x MASTERCapsule / GY6.35 / 45 W	• Optic	Narrow beam (12°) Medium beam (24 and 36°)
• Lamp beam angle	MASTERLine ES: 8, 24, 36°	• Material	Housing: pressed glass and aluminum Optic: aluminum
• Light source included	Yes (K or lamp color 830 for MASTERColour 20 W and 930 for 35 W)	• Color	Grey (GR) or White (WH), RAL9010 Other RAL colors available on request
• Lamp position	Vertical	• Installation	Direct on ceiling: baseplate with connection point (BA) On 3-circuit track (3C)
• Ballast	MRS/MCS542 Electronic, 220-240 V / 50-60 Hz: - Electronic Ballast (EB)	• Maintenance	Direct lamp access or after removing the front glass
		• Accessories	MRS/LRS/MCS/LCS542: barndoors, dichroic color, UV and anti-glare filters, protection glass, sculptural lens honeycomb
		• Remarks	Also available with extension rod of 600 mm (vertical adjustment of 90°)
		• Main applications	Retail, hospitality, museums

Related products



UnicOne Projector Micro LRS/MRS541
for track mounting, with MASTERColour
lamp and narrow or medium-beam optic



UnicOne Projector Micro LCS/MCS541
for baseplate mounting, with
MASTERLine or MASTERCapsule lamp
and narrow or medium-beam optic



UnicOne Pendant Micro LRS/MRS541 for
track mounting, with MASTERColour
lamp and narrow or medium-beam optic
and 600 mm extension rod (L600)



UnicOne Projector Micro LRS/MRS541
for track mounting, with MASTERLine or
MASTERCapsule lamp and narrow or
medium-beam optic



UnicOne Projector Micro LCS/MCS541
for baseplate mounting, with
MASTERColour lamp and narrow or
medium-beam optic



UnicOne Projector Micro LRS/MRS541
for track mounting, with MASTERColour
lamp and narrow or medium-beam optic



UnicOne Projector Micro LCS/MCS541
for baseplate mounting, with
MASTERLine or MASTERCapsule lamp
and narrow or medium-beam optic



UnicOne Pendant Micro LRS/MRS541 for
track mounting, with MASTERColour
lamp and narrow or medium-beam optic
and 600 mm extension rod (L600)



UnicOne Projector Micro LRS/MRS541
for track mounting, with MASTERLine or
MASTERCapsule lamp and narrow or
medium-beam optic



UnicOne Projector Micro LCS/MCS541
for baseplate mounting, with
MASTERColour lamp and narrow or
medium-beam optic

Related products



UnicOne Projector Micro LCS/MCS542 for baseplate mounting, with MASTERColour lamp and narrow or medium-beam optic, glass version



UnicOne Projector Micro LCS/MCS542 for baseplate mounting, with MASTERColour lamp and narrow or medium-beam optic, glass version



UnicOne Projector Micro LRS/MRS542 for track mounting, with MASTERColour lamp and narrow or medium-beam optic, glass version



UnicOne Projector Micro LRS/MRS542 for track mounting, with MASTERColour lamp and narrow or medium-beam optic, glass version

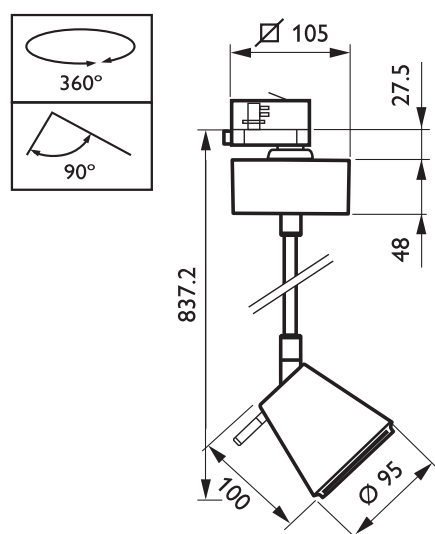


UnicOne Projector Micro LRS542 for track mounting, with MASTERLine or MASTERCapsule lamp and narrow or medium-beam optic, glass version

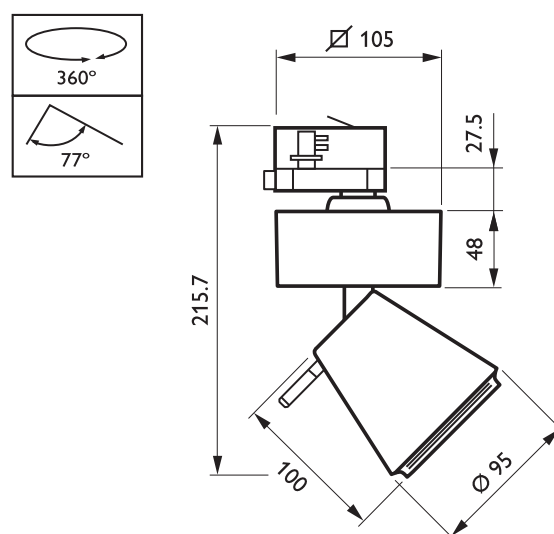


UnicOne Projector Micro LRS542 for track mounting, with MASTERLine or MASTERCapsule lamp and narrow or medium-beam optic, glass version

Dimensional drawing

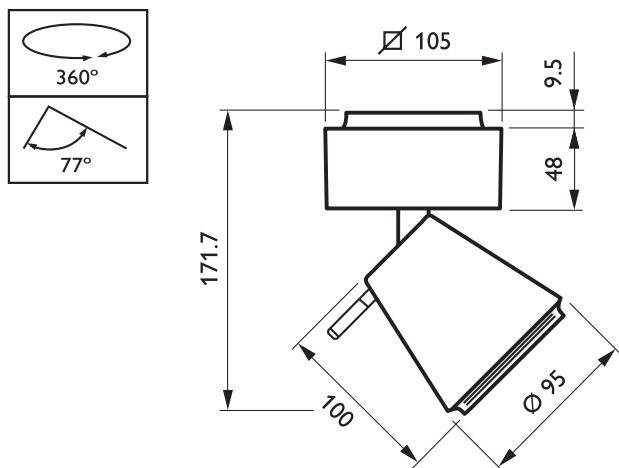


MRS/LRS541 L600

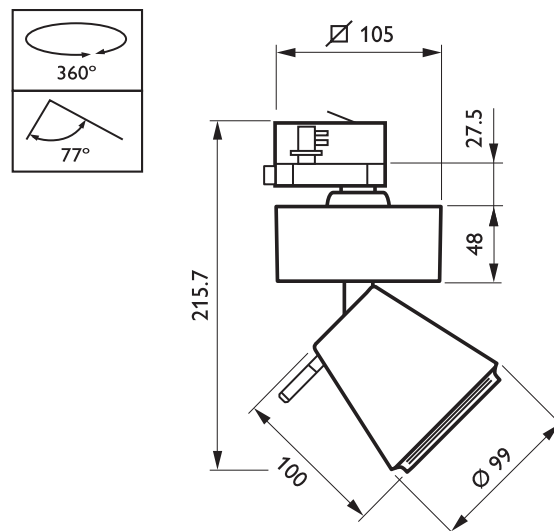


MRS/LRS/BR541

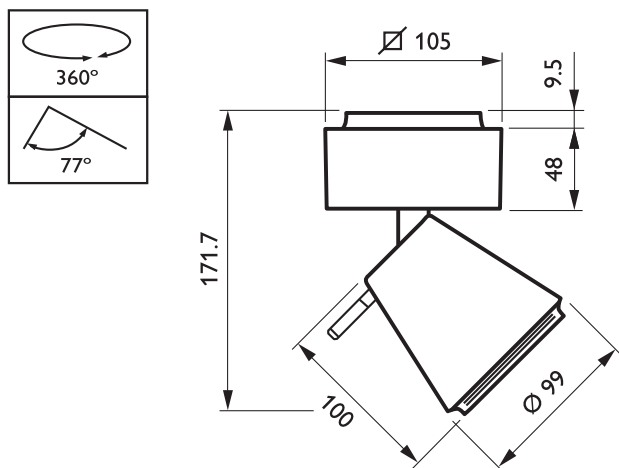
Dimensional drawing



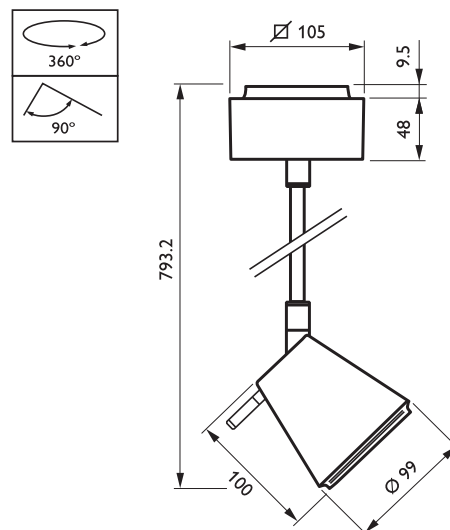
MCS/LCS/BCS541



MRS/LRS542 3C



MCS/LCS542 BA



MCS/LCS542 BA L600

Product details



UnicOne Projector Micro MRS/LRS542
for track mounting, glass version

General information (1/2)

Order code	Product family code	Number of lamps	Optics	Lamp family code	Lamp power	Lamp color code	Color	IP code	Gear	Kombipack	Safety class
910503470315	MRS541	1	24	CDM-Tm	20	830	BK	IP20	EB	K	CLi
910503470415	MRS541	1	24	CDM-Tm	20	830	CR	IP20	EB	K	CLi
910503052915	MRS541	1	12	CDM-Tm	20	830	GR	IP20	EB	K	CLi
910503053015	MRS541	1	24	CDM-Tm	20	830	GR	IP20	EB	K	CLi
910503053615	MRS541	1	24	CDM-Tm	35	930	GR	IP20	EB	K	CLi
910503053715	MRS541	1	36	CDM-Tm	35	930	GR	IP20	EB	K	CLi
910503054215	LRS541	1	12	HAL-C	50	-	GR	IP20	No	K	CLi
910503054315	LRS541	1	24	HAL-C	50	-	GR	IP20	No	K	CLi
910503054415	LRS541	1	36	HAL-C	50	-	GR	IP20	No	K	CLi
910503421415	MRS541	1	36	CDM-Tm	20	830	GR	IP20	EB	K	CLi
910503421715	MRS541	1	12	CDM-Tm	35	930	GR	IP20	EB	K	CLi
910503440515	LRS541	1	24	HAL-C	45	-	GR	IP20	No	K	CLi
910503070415	LCS541	1	No	HAL-MR50	45	-	WH	IP20	No	K	CLi
910503055315	MRS541	1	12	CDM-Tm	20	830	GR	IP20	EB	K	CLi
910503055415	MRS541	1	24	CDM-Tm	20	830	GR	IP20	EB	K	CLi
910503055515	MRS541	1	36	CDM-Tm	20	830	GR	IP20	EB	K	CLi
910503073715	MRS541	1	12	CDM-Tm	35	930	GR	IP20	EB	K	CLi
910503073815	MRS541	1	24	CDM-Tm	35	930	GR	IP20	EB	K	CLi
910503073915	MRS541	1	36	CDM-Tm	35	930	GR	IP20	EB	K	CLi
910503055115	LRS541	1	No	HAL-MR50	45	-	WH	IP20	No	K	CLi
910503070615	LRS541	1	No	HAL-MR50	45	-	WH	IP20	No	K	CLi
910503053315	MCS541	1	12	CDM-Tm	20	830	GR	IP20	EB	K	CLi
910503053415	MCS541	1	24	CDM-Tm	20	830	GR	IP20	EB	K	CLi
910503054015	MCS541	1	24	CDM-Tm	35	930	GR	IP20	EB	K	CLi
910503054815	LCS541	1	24	HAL-C	50	-	GR	IP20	No	K	CLi
910503070215	MCS541	1	36	CDM-Tm	35	930	GR	IP20	EB	K	CLi
910503421615	MCS541	1	36	CDM-Tm	20	830	GR	IP20	EB	K	CLi
910503053115	MRS541	1	12	CDM-Tm	20	830	WH	IP20	EB	K	CLi
910503053215	MRS541	1	24	CDM-Tm	20	830	WH	IP20	EB	K	CLi
910503053815	MRS541	1	24	CDM-Tm	35	930	WH	IP20	EB	K	CLi
910503053915	MRS541	1	36	CDM-Tm	35	930	WH	IP20	EB	K	CLi
910503054515	LRS541	1	12	HAL-C	50	-	WH	IP20	No	K	CLi
910503054615	LRS541	1	24	HAL-C	50	-	WH	IP20	No	K	CLi
910503054715	LRS541	1	36	HAL-C	50	-	WH	IP20	No	K	CLi
910503070115	MRS541	1	12	CDM-Tm	35	930	WH	IP20	EB	K	CLi
910503421515	MRS541	1	36	CDM-Tm	20	830	WH	IP20	EB	K	CLi
910503440615	LRS541	1	24	HAL-C	45	-	WH	IP20	No	K	CLi
910503470515	MRS541	1	36	CDM-Tm	35	930	WH	IP20	EB	K	CLi
910503055215	LCS541	1	No	HAL-MR50	45	-	GR	IP20	No	K	CLi
910503055615	MRS541	1	12	CDM-Tm	20	830	WH	IP20	EB	K	CLi
910503055715	MRS541	1	24	CDM-Tm	20	830	WH	IP20	EB	K	CLi
910503055815	MRS541	1	36	CDM-Tm	20	830	WH	IP20	EB	K	CLi
910503074015	MRS541	1	12	CDM-Tm	35	930	WH	IP20	EB	K	CLi
910503074115	MRS541	1	24	CDM-Tm	35	930	WH	IP20	EB	K	CLi
910503074215	MRS541	1	36	CDM-Tm	35	930	WH	IP20	EB	K	CLi
910503055015	LRS541	1	No	HAL-MR50	45	-	GR	IP20	No	K	CLi
910503053515	MCS541	1	24	CDM-Tm	20	830	WH	IP20	EB	K	CLi
910503054115	MCS541	1	24	CDM-Tm	35	930	WH	IP20	EB	K	CLi

Order code	Product family code	Number of lamps	Optics	Lamp family code	Lamp power	Lamp color code	Color	IP code	Gear	Kombipack	Safety class
910503054915	LCS541	1	24	HAL-C	50	-	WH	IP20	No	K	CLI
910503070315	MCS541	1	36	CDM-Tm	35	930	WH	IP20	EB	K	CLI
910503072115	MCS542	1	36	CDM-Tm	35	930	GR	IP20	EB	K	CLI
910503075515	MCS542	1	12	CDM-Tm	20	830	GR	IP20	EB	K	CLI
910503071415	MCS542	1	24	CDM-Tm	20	830	WH	IP20	EB	K	CLI
910503072215	MCS542	1	36	CDM-Tm	35	930	WH	IP20	EB	K	CLI
910503073015	LCS542	1	24	HAL-C	50	-	WH	IP20	No	K	CLI
910503075415	MCS542	1	12	CDM-Tm	20	830	WH	IP20	EB	K	CLI
910503071015	MRS542	1	12	CDM-Tm	20	830	WH	IP20	EB	K	CLI
910503071115	MRS542	1	24	CDM-Tm	20	830	WH	IP20	EB	K	CLI
910503071915	MRS542	1	24	CDM-Tm	35	930	WH	IP20	EB	K	CLI
910503072015	MRS542	1	36	CDM-Tm	35	930	WH	IP20	EB	K	CLI
910503072615	LRS542	1	12	HAL-C	50	-	WH	IP20	No	K	CLI
910503072715	LRS542	1	24	HAL-C	50	-	WH	IP20	No	K	CLI
910503070715	MRS542	1	12	CDM-Tm	20	830	GR	IP20	EB	K	CLI
910503070815	MRS542	1	24	CDM-Tm	20	830	GR	IP20	EB	K	CLI
910503071515	MRS542	1	12	CDM-Tm	35	930	GR	IP20	EB	K	CLI
910503071615	MRS542	1	24	CDM-Tm	35	930	GR	IP20	EB	K	CLI
910503071715	MRS542	1	36	CDM-Tm	35	930	GR	IP20	EB	K	CLI
910503072415	LRS542	1	24	HAL-C	50	-	GR	IP20	No	K	CLI
910503073115	LRS542	1	No	HAL-MR50	45	-	GR	IP20	No	K	CLI
910503073215	LRS542	1	No	HAL-MR50	45	-	WH	IP20	No	K	CLI

General information (2/2)

Order code	Product family code	Extension rod length	Flammability mark	Glow-wire test	Lamp version	European Community mark	ENEC mark	Finishing	Lifetime to 70% luminous flux
910503470315	MRS541	No	F	850/5	-	CE	ENEC	GL	50000
910503470415	MRS541	No	F	850/5	-	CE	ENEC	-	50000
910503052915	MRS541	No	F	850/5	-	CE	ENEC	-	50000
910503053015	MRS541	No	F	850/5	-	CE	ENEC	-	50000
910503053615	MRS541	No	F	850/5	-	CE	ENEC	-	50000
910503053715	MRS541	No	F	850/5	-	CE	ENEC	-	50000
910503054215	LRS541	No	F	850/5	-	CE	ENEC	-	50000
910503054315	LRS541	No	F	850/5	-	CE	ENEC	-	50000
910503054415	LRS541	No	F	850/5	-	CE	ENEC	-	50000
910503421415	MRS541	No	F	850/5	-	CE	ENEC	-	50000
910503421715	MRS541	No	F	850/5	-	CE	ENEC	-	50000
910503440515	LRS541	No	F	850/5	MS	CE	ENEC	-	50000
910503070415	LCS541	No	F	850/5	-	CE	ENEC	-	50000
910503055315	MRS541	L600	F	850/5	-	CE	ENEC	-	50000
910503055415	MRS541	L600	F	850/5	-	CE	ENEC	-	50000
910503055515	MRS541	L600	F	850/5	-	CE	ENEC	-	50000
910503073715	MRS541	L600	F	850/5	-	CE	ENEC	-	50000
910503073815	MRS541	L600	F	850/5	-	CE	ENEC	-	50000
910503073915	MRS541	L600	F	850/5	-	CE	ENEC	-	50000
910503055115	LRS541	No	F	850/5	-	CE	ENEC	-	50000

Order code	Product family code	Extension rod length	Flammability mark	Glow-wire test	Lamp version	European Community mark	ENEC mark	Finishing	Lifetime to 70% luminous flux
910503070615	LRS541	No	F	850/5	-	CE	ENEC	-	50000
910503053315	MCS541	No	F	850/5	-	CE	ENEC	-	50000
910503053415	MCS541	No	F	850/5	-	CE	ENEC	-	50000
910503054015	MCS541	No	F	850/5	-	CE	ENEC	-	50000
910503054815	LCS541	No	F	850/5	-	CE	ENEC	-	50000
910503070215	MCS541	No	F	850/5	-	CE	ENEC	-	50000
910503421615	MCS541	No	F	850/5	-	CE	ENEC	-	50000
910503053115	MRS541	No	F	850/5	-	CE	ENEC	-	50000
910503053215	MRS541	No	F	850/5	-	CE	ENEC	-	50000
910503053815	MRS541	No	F	850/5	-	CE	ENEC	-	50000
910503053915	MRS541	No	F	850/5	-	CE	ENEC	-	50000
910503054515	LRS541	No	F	850/5	-	CE	ENEC	-	50000
910503054615	LRS541	No	F	850/5	-	CE	ENEC	-	50000
910503054715	LRS541	No	F	850/5	-	CE	ENEC	-	50000
910503070115	MRS541	No	F	850/5	-	CE	ENEC	-	50000
910503421515	MRS541	No	F	850/5	-	CE	ENEC	-	50000
910503440615	LRS541	No	F	850/5	MS	CE	ENEC	-	50000
910503470515	MRS541	No	F	850/5	-	CE	ENEC	GL	50000
910503055215	LCS541	No	F	850/5	-	CE	ENEC	-	50000
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910503055815	MRS541	L600	F	850/5	-	CE	ENEC	-	50000
910503074015	MRS541	L600	F	850/5	-	CE	ENEC	-	50000
910503074115	MRS541	L600	F	850/5	-	CE	ENEC	-	50000
910503074215	MRS541	L600	F	850/5	-	CE	ENEC	-	50000
910503055015	LRS541	No	F	850/5	-	CE	ENEC	-	50000
910503053515	MCS541	No	F	850/5	-	CE	ENEC	-	50000
910503054115	MCS541	No	F	850/5	-	CE	ENEC	-	50000
910503054915	LCS541	No	F	850/5	-	CE	ENEC	-	50000
910503070315	MCS541	No	F	850/5	-	CE	ENEC	-	50000
910503072115	MCS542	No	F	850/5	-	CE	ENEC	-	50000
910503075515	MCS542	L600	F	850/5	-	CE	ENEC	-	50000
910503071415	MCS542	No	F	850/5	-	CE	ENEC	-	50000
910503072215	MCS542	No	F	850/5	-	CE	ENEC	-	50000
910503073015	LCS542	No	F	850/5	-	CE	ENEC	-	50000
910503075415	MCS542	L600	F	850/5	-	CE	ENEC	-	50000
910503071015	MRS542	No	F	850/5	-	CE	ENEC	-	50000
910503071115	MRS542	No	F	850/5	-	CE	ENEC	-	50000
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910503072015	MRS542	No	F	850/5	-	CE	ENEC	-	50000
910503072615	LRS542	No	F	850/5	-	CE	ENEC	-	50000
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910503070715	MRS542	No	F	850/5	-	CE	ENEC	-	50000
910503070815	MRS542	No	F	850/5	-	CE	ENEC	-	50000
910503071515	MRS542	No	F	850/5	-	CE	ENEC	-	50000
910503071615	MRS542	No	F	850/5	-	CE	ENEC	-	50000
910503071715	MRS542	No	F	850/5	-	CE	ENEC	-	50000
910503072415	LRS542	No	F	850/5	-	CE	ENEC	-	50000

Photometric data





LuxSpace compact power

BBS495 DLED-4000 PSU-E C WH

BBS495 - DLED Module - Power supply unit external - High-gloss mirror

The highly energy-efficient LuxSpace family makes it possible to achieve extremely low power consumption without sacrificing light quality in general lighting applications. This results in significant energy savings compared with traditional CFL downlights. LuxSpace features the latest LED technology and delivers reliable light output, stable color performance and high color rendering. It is available in three sizes and four outputs – LuxSpace Micro for 125 mm cut-outs, LuxSpace Mini (round and square versions) for 150 mm cut-outs and LuxSpace Compact (round and square versions) and Compact Power for 200 mm cut-outs – covering all downlight applications. The Compact and Mini are also available in High Efficacy versions. All three sizes offer a compact look and feel, and a perfect fit. They are very easy to install, and their long lifetime means an end to the hassle of relamping. There is also a choice of accessories, ensuring maximum performance in all applications. In addition to LuxSpace for general lighting applications, LuxSpace Accent is also available (in fixed, adjustable and elbow versions) for high-flux accent lighting applications.

Product data

• General information

Product family code	BBS495 [BBS495]
Number of lamps	1 [1 pc]
Lamp family code	DLED [DLED Module]
Lamp color code	NW [Neutral white]
Lamp color temperature	4000 [4000 K]
Light source replaceable	false
Transformer/ power supply unit	PSU-E [Power supply unit external]
Driver included	true
Optics	C [High-gloss mirror]
Emergency lighting	No [-]
Dimmable	false
Cable	No [-]
Safety class	CLI [Safety class I]
IP code	IP20 [Finger-protected]
Ambient temperature	+25°C [+25 °C]
Color	WH [White]
Glow-wire test	850/5 [Temperature 850 °C, duration 5 s]
Flammability mark	F [For mounting on normally flammable surfaces]
European Community mark	CE [CE mark]
ENEC mark	ENEC [ENEC mark]
Green Flagship mark	GNFL [Green Flagship]

Lifetime to 70% luminous flux	50000 hr
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• Light technical

Color rendering index	80 [80]
Total luminous flux	2770 Lm
Luminous efficacy	60 Lm/W

• Electrical

System power	46 W [46 W]
Supply voltage	220-240 V [220 to 240 V]
Line frequency	50-60 Hz [50 to 60 Hz]

• Product Data

Order code	937547 00
Full product code	871794393754700
Full product name	BBS495 DLED-4000 PSU-E C WH
Order product name	BBS495 DLED-4000 PSU-E C WH
Pieces per pack	0
Packs per outerbox	1
Bar code on outerbox - EAN3	8717943937547
Logistic code(s) - 12NC	910503485915

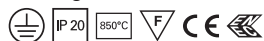


asimpleswitch.com

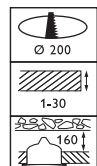
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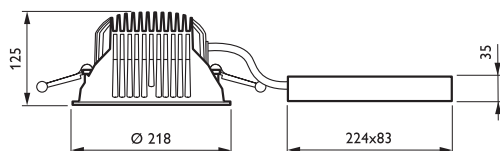
Net weight per piece 1.830 kg



Dimensional drawing



BBS494/495



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www.philips.com/lighting

2011, November 26
data subject to change



UnicOne, gridlights micro LED

BBS541 LED-HB-25-/WW WH

BBS541 - LED High Brightness

UnicOne Gridlight Micro is a semi-recessed projector for accent lighting in shop and hospitality applications. The gear is hidden behind a false ceiling, making the light cone the focal element of the projector design. The luminaire blends into the ceiling by means of a simple square interface. It is available in aluminum and glass models. UnicOne Gridlight Micro is an extractable projector for accent lighting in shop and hospitality applications. The complete projector can be fully or partially concealed, while still enabling maximum tilt of the light beam. It is extracted by means of a refined push-and-pull system that does not require the removal of ceiling tiles. A stylish square rim completes the overall architectural impression. UnicOne Gridlight Micro is available in aluminum. The UnicOne Gridlight range also includes Mini, Compact, Micro Twin, Mini Twin and Compact Twin versions.

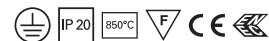
Product data

• General information

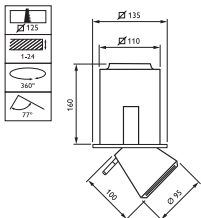
Product family code	BBS541 [BBS541]
Lamp family code	LED-HB [LED High Brightness]
Beam angle of light source	25 D [25°]
Lamp color code	WW [Warm white]
Cap-base	GY6.35 [GY6.35]
Safety class	CL I [Safety class I]
IP code	IP20 [Finger-protected]
Color	WH [White]
Glow-wire test	850/5 [Temperature 850 °C, duration 5 s]
Flammability mark	F [For mounting on normally flammable surfaces]
European Community mark	CE [CE mark]
ENEC mark	ENEC [ENEC mark]

• Product Data

Order code	910503487415
Full product code	910503487415
Full product name	BBS541 LED-HB-25-/WW WH
Order product name	BBS541 LED-HB25-/WW WH
Pieces per pack	0
Packs per outerbox	1
Bar code on outerbox - EAN3	8717943939275
Logistic code(s) - 12NC	910503487415
Net weight per piece	1.458 kg

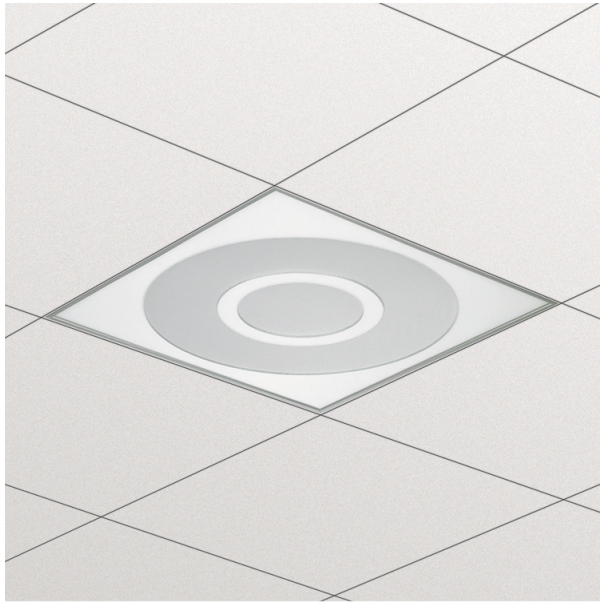


Dimensional drawing



MBS/LBS/BBS541

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DayZone

BBS560 LED35S/830 PSD AC-MLO-C PI

BBS560 - LED Module, system flux 3500 lm - Power supply unit with DALI interface - Acrylate micro-lens optic circular

For general office lighting, customers want to capture the benefits LED technology has to offer – sustainability and fresh, high-impact design, without compromising visual comfort. Our DayZone recessed LED luminaire delivers high-quality functional lighting with an energy efficiency that matches or even outperforms traditional fluorescent systems. But what makes DayZone really shine is its impressive visual comfort. Our innovative use of LED technology has created a luminaire that breaks away from fluorescent lighting designs of the past to offer a striking appearance and light effect. Glare control and color consistency are compliant with future office norms. DayZone is available in square versions and, to ensure a better fit in plaster ceiling applications, in a round housing.

Product data

• General information

Product family code	BBS560 [BBS560]
Number of lamps	1 [1 pc]
Lamp family code	LED35S [LED Module, system flux 3500 lm]
Lamp color code	830 [830 warm white]
Lamp color temperature	3000 [3000 K]
Light source replaceable	false
Gear	No [-]
Transformer/ power supply unit	PSD [Power supply unit with DALI interface]
Driver included	true
Optical cover	AC-MLO-C [Acrylate micro-lens optic circular]
Emergency lighting	No [-]
Lighting control unit	No [-]
Dimmable	true
Separate switching	No [-]
Fuse	No [-]
Connection	PI [Push-in connector 3-pole]
Safety class	CLI [Safety class I]
IP code	IP40 [Wire-protected]
IK code	IK02 [0.2 J standard]
Ambient temperature	+10 to +40 °C [+10 to +40 °C]
Color	WH [White]
Protection foil	FL [Protection foil included]
Glow-wire test	650/5 [Temperature 650 °C, duration 5 s]
Flammability mark	F [For mounting on normally flammable surfaces]
Safety device	No [-]
European Community mark	CE [CE mark]
ENEC mark	ENEC [ENEC mark]

Lifetime to 70% luminous flux	50000 hr
Lifetime to 90% luminous flux	30000 hr
Failure rate at 5000 hrs	1 %

• Light technical

Color rendering index	80 [80]
Total luminous flux	3500 Lm
Luminous efficacy	57 Lm/W

• Electrical

System power	61 W [61 W]
Supply voltage	220-240 V [220 to 240 V]
Line frequency	50-60 Hz [50 to 60 Hz]
Control signal voltage	0-16 V [0-16 V DC DALI]

• Product Data

Order code	910501961203
Full product code	910501961203
Full product name	BBS560 LED35S/830 PSD AC-MLO-C PI
Order product name	BBS560 LED35S/830 PSD AC-MLO-C PI
Pieces per pack	0
Packs per outerbox	1
Bar code on outerbox - EAN3	8717943917334
Logistic code(s) - 12NC	910501961203

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Net weight per piece 7.200 kg



Dimensional drawing



BBS560



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2011, November 26
data subject to change

PONTIFÍCIA UNIVERSIDADE CATÓLICA DO PARANÁ

PLANOS

PROYECTO ELÉCTRICO

Instalación eléctrica de Auditorio,
Cafetería y Parque exterior

Autor: Guillermo Terrén Serrano

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Esquema unifilar

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- 2.4 Cuadro de distribución de Auditorio

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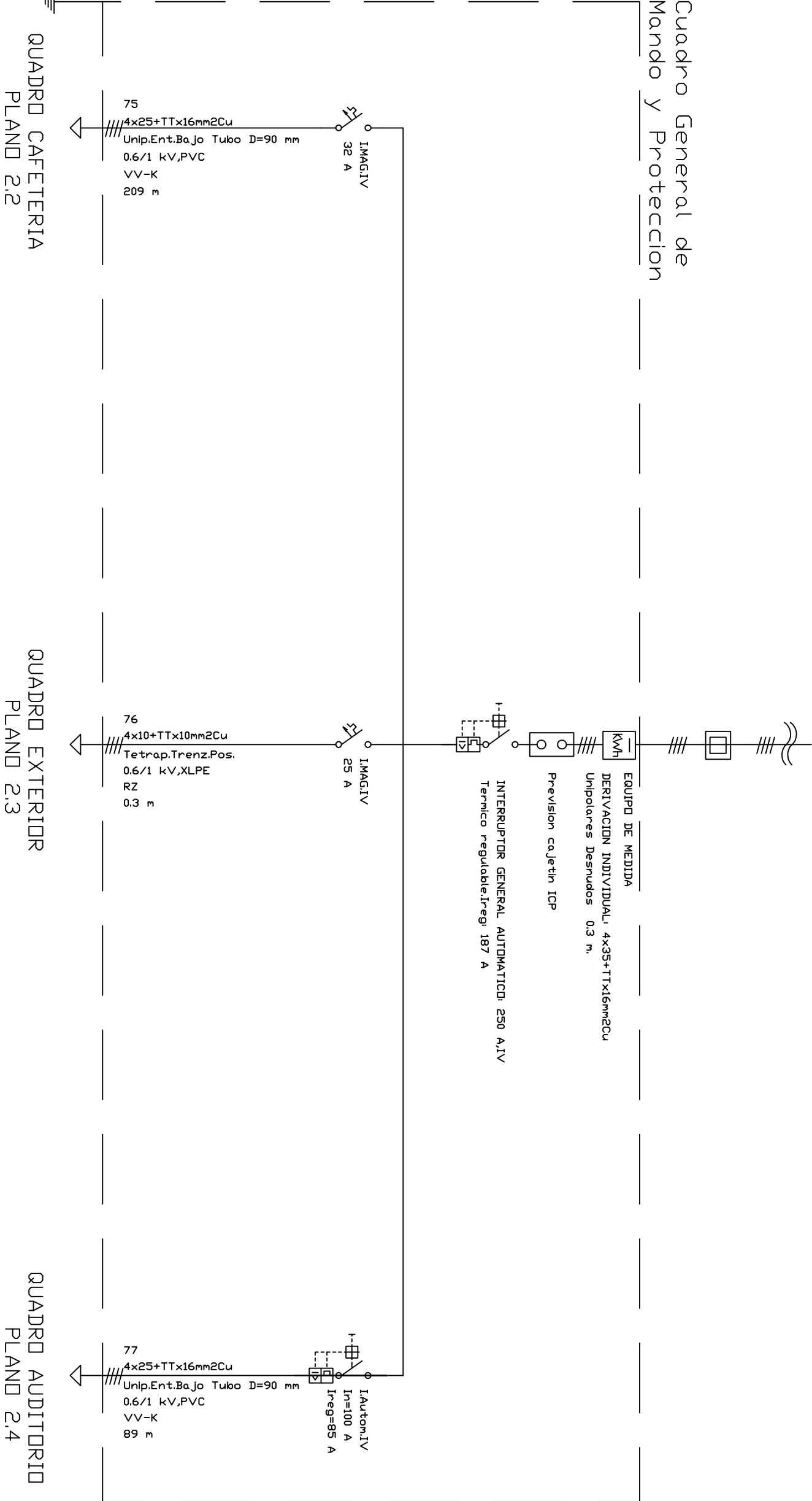
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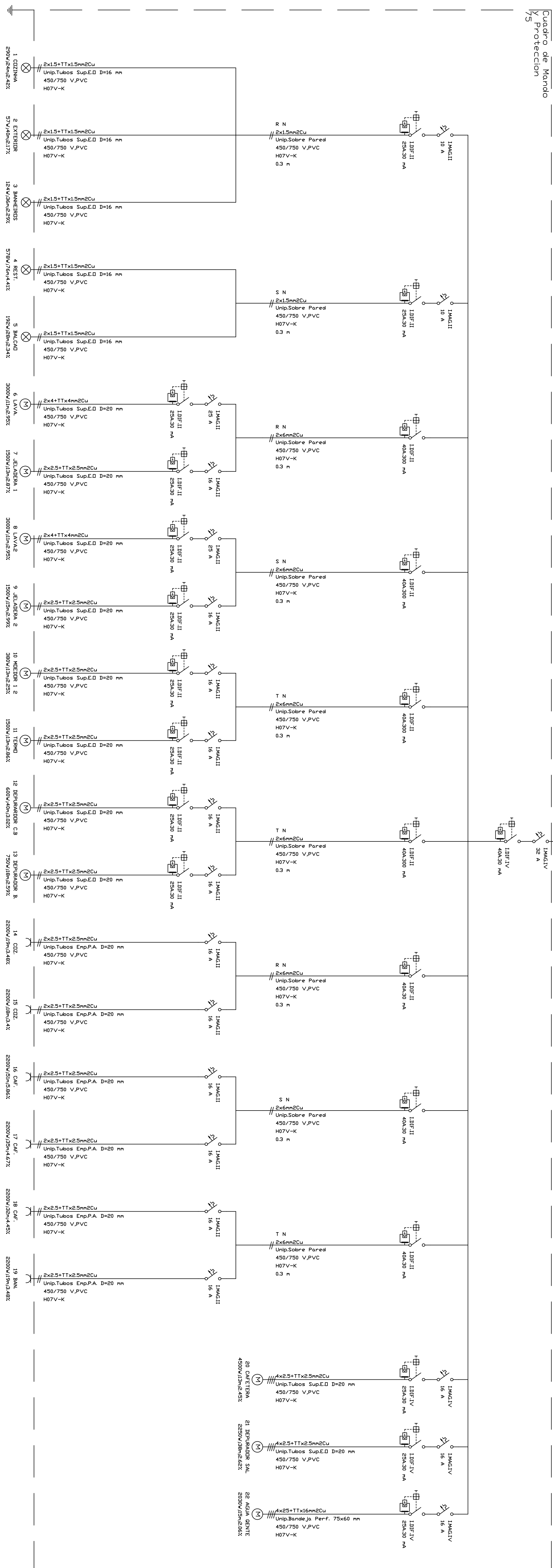
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- 5.2 Plano Instalación Eléctrica Cafetería.

Cuadro General de
Mando y Proteccion



	Data	Nome	Assinatura	Pontifícia Universidade Católica do Paraná Engenharia Elétrica
Desenhado	07/12/11	G.TERREN		
Verificado			Plano: 2	Folha: 1
Escala:				
S/E	ESQUEMA UNIFILAR QUADRO GENERAL			Especialidade: ELETRICIDADE



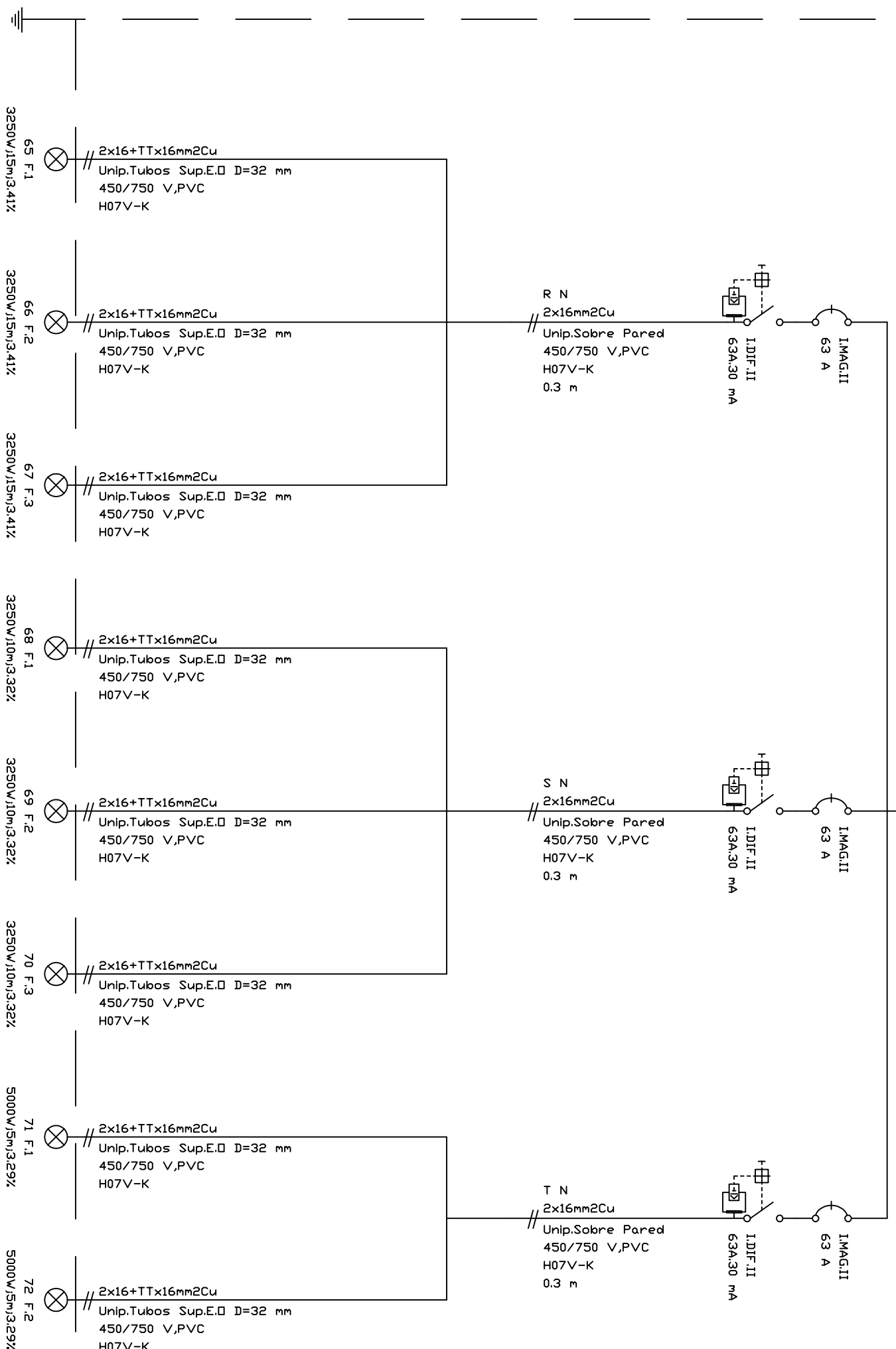
QUADRO GENERAL
PLANO 2.1

	Data	Nome	Assinatura	Política Universidade
	07/12/11	G. TERREN		Crédito do Parâmetro
	Verificado			Engenharia Elétrica
Escrito:				Plano: 2
S/E				Folha: 2
				Especialidade: ELÉTRICIDADE

QUADRO GENERAL
PLANO 2.1

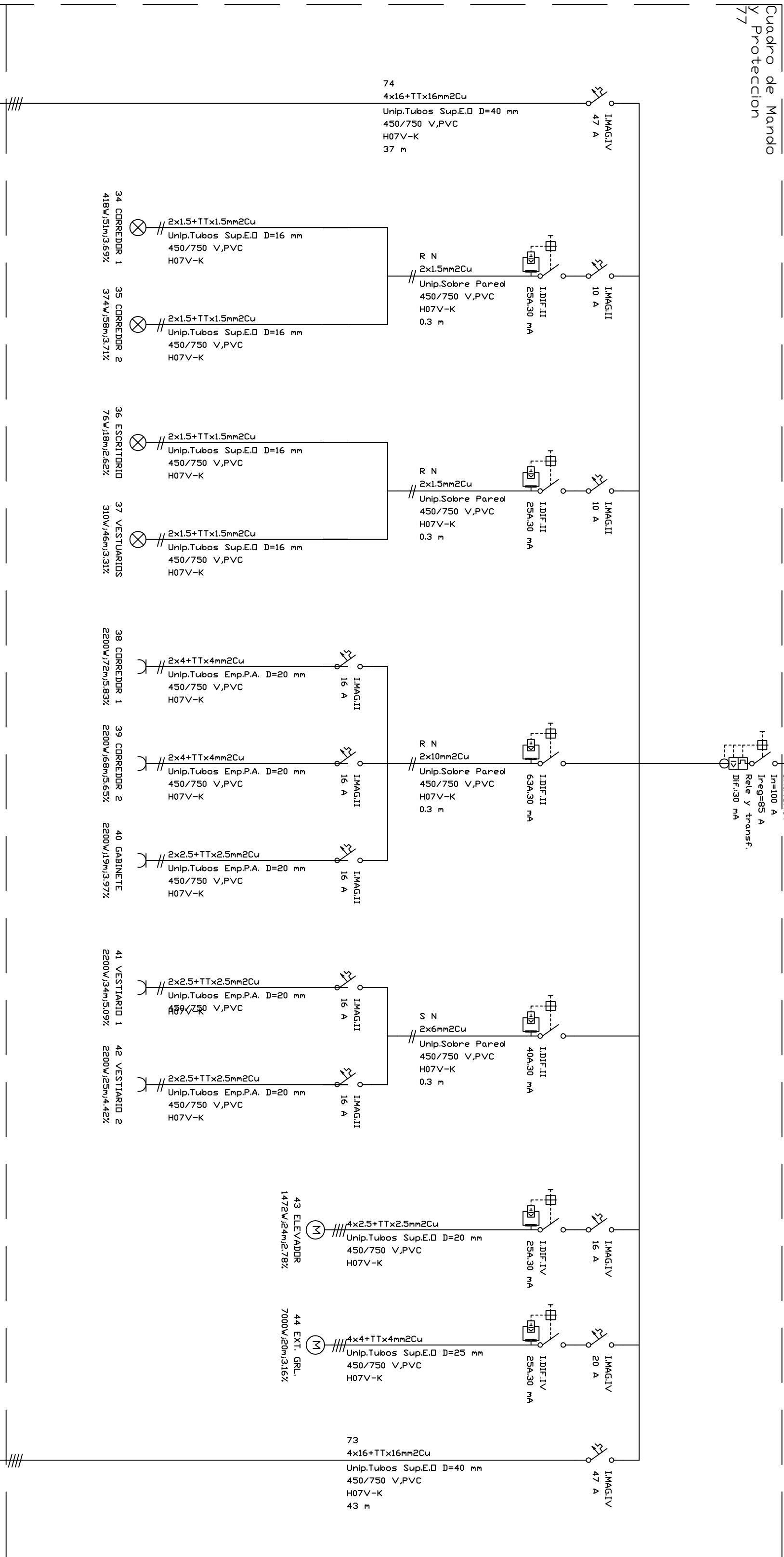
Cuadro de Mando
y Proteccion ALUMBRADO EXTERIOR

76



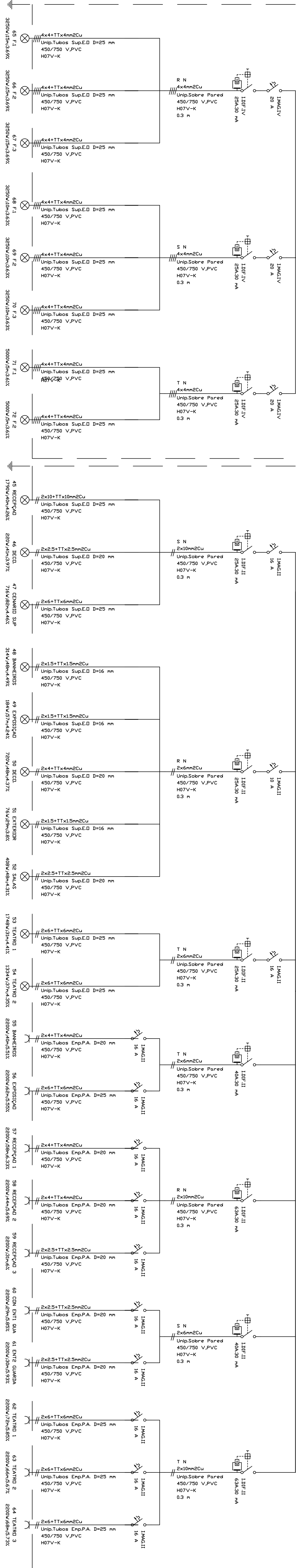
	Data	Nome	Assinatura	Pontifícia Universidade Católica do Paraná Engenharia Elétrica
Desenhado	07/12/11	G.TERREN		
Verificado				
Escala:				Plano: 1
S/E	ESQUEMA UNIFILAR QUADRO EXTERIOR			Folha: 4
				Especialidade: ELETRICIDADE

QUADRO GENERAL
PLANO 2.1

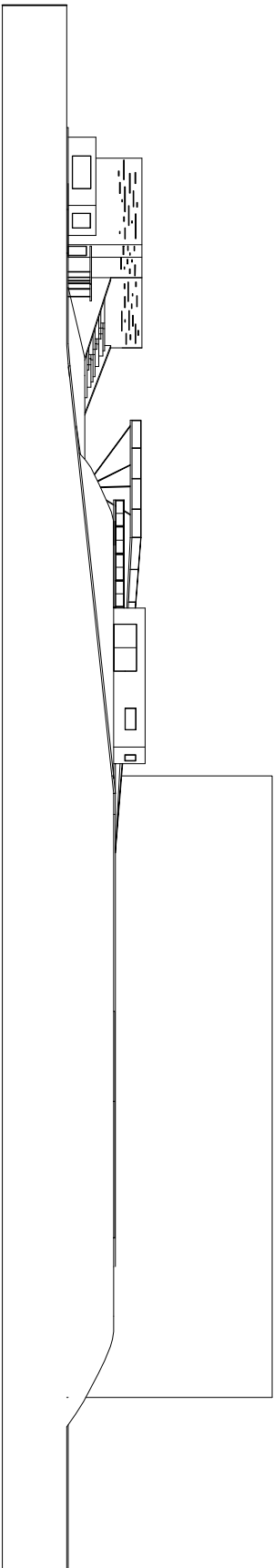


Quadro de Mando
Y Proteccion

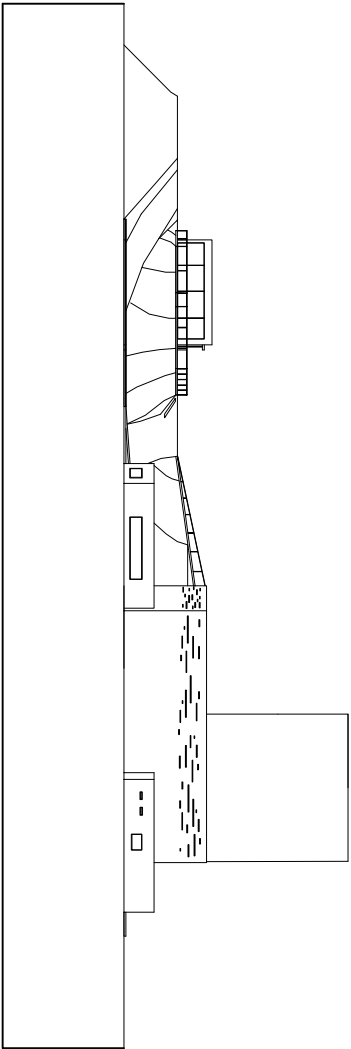
Quadro de Mando
Y Proteccion



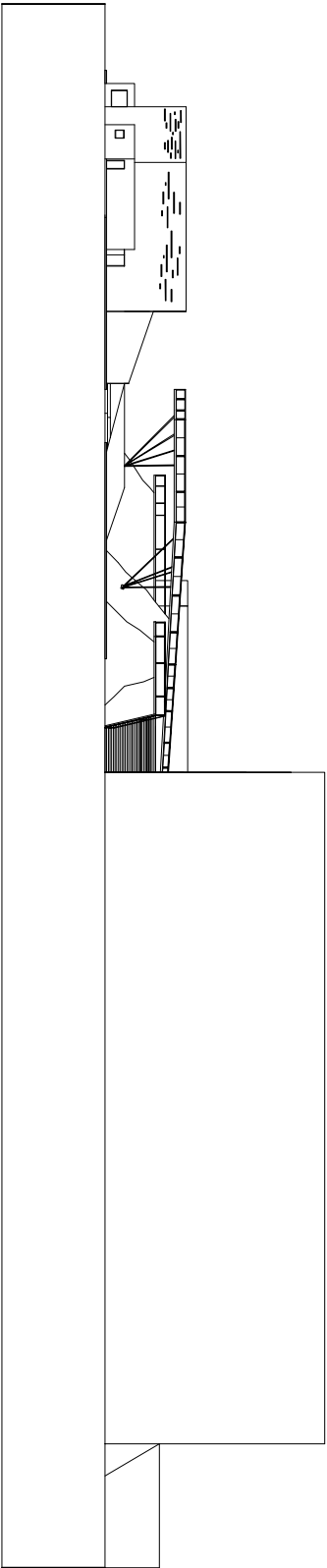
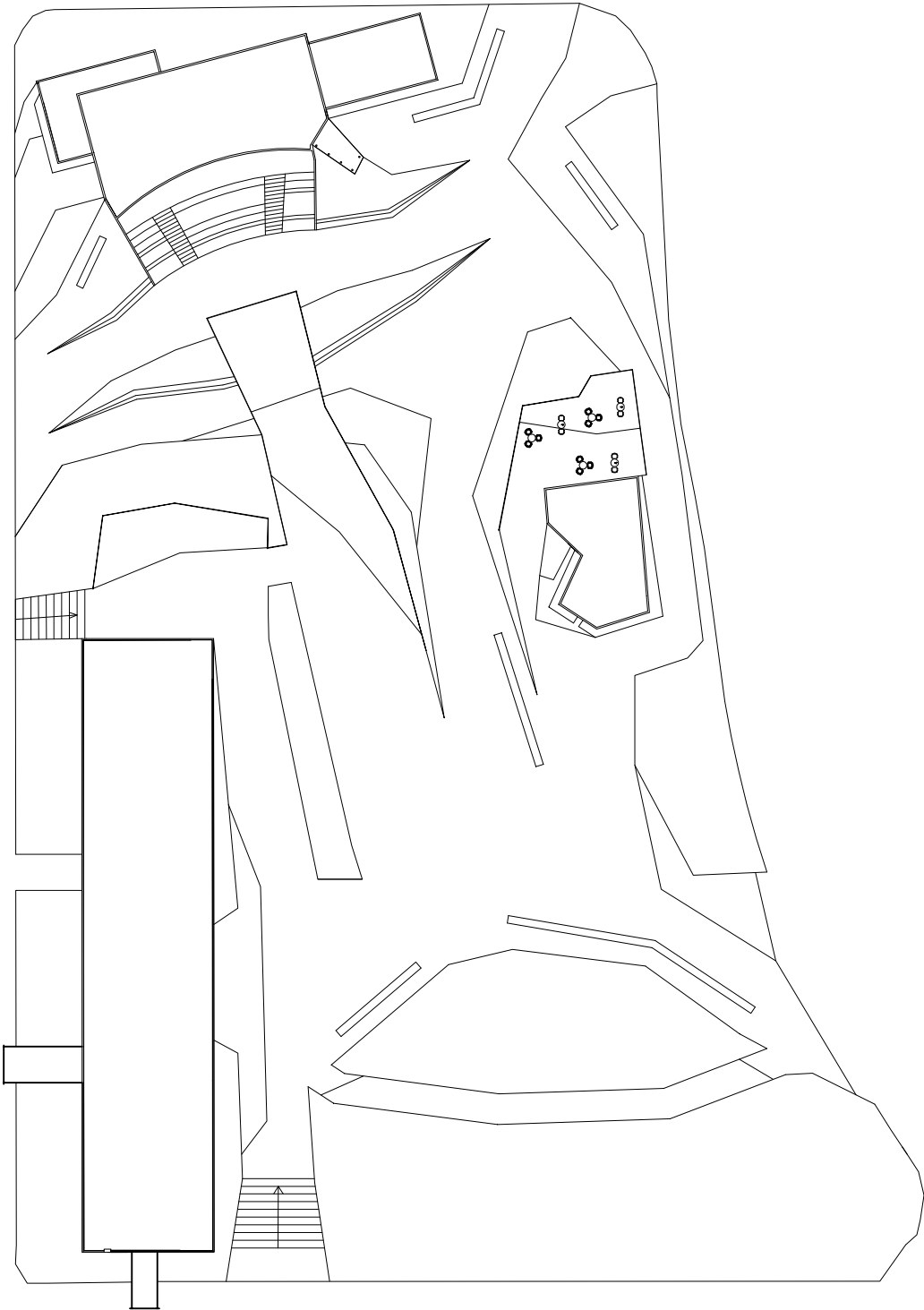
Disciplina	Dado	Nome	Instituição
Verificado	07/12/11	G. IERREN	Faculdade Universidade
Elaborado			Centro de Ensino
Projeto			Engenharia Elétrica
Folha	2		
4			
Especialidade:			
ELÉTRICIDADE			



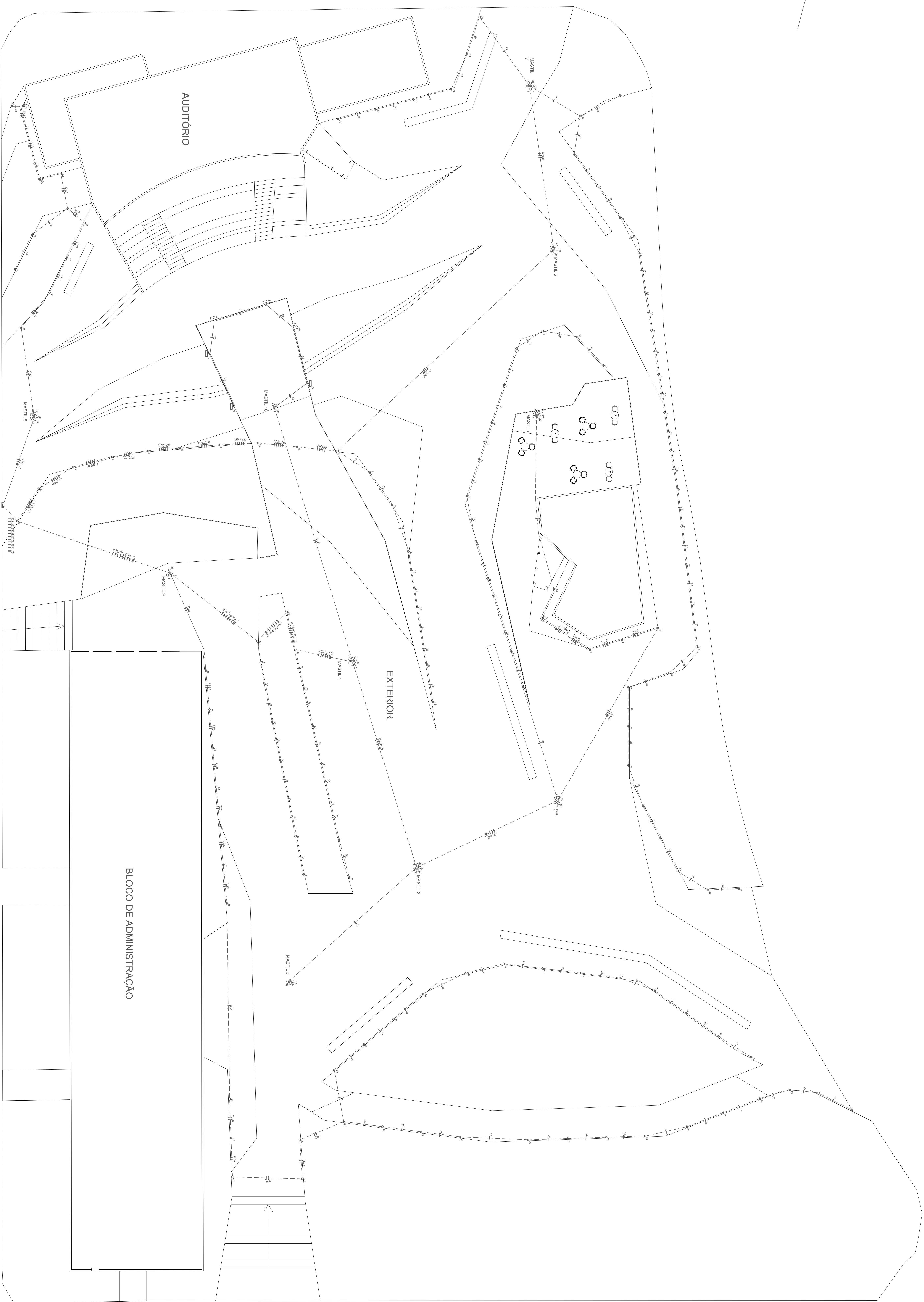
VISTA A



A



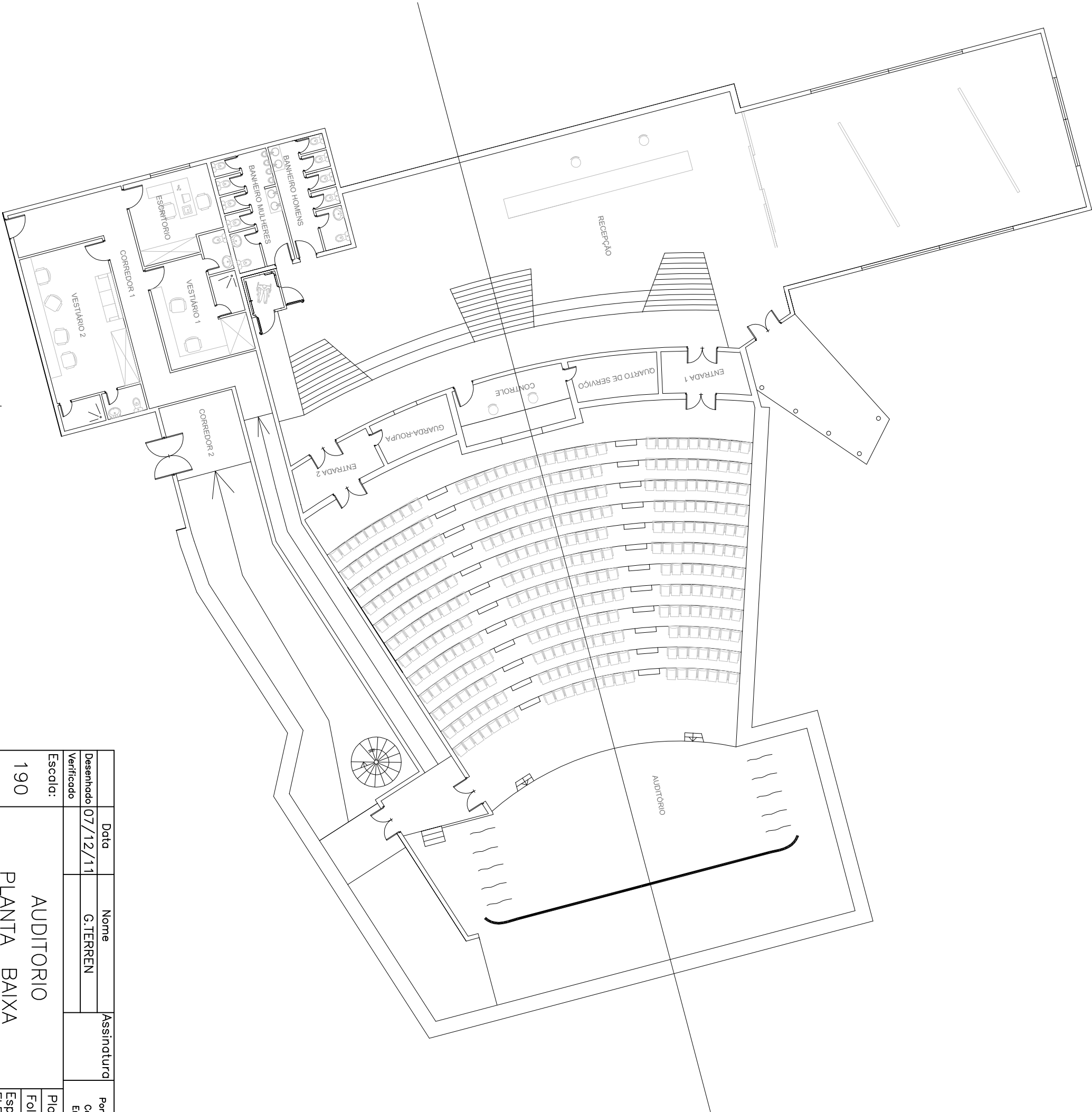
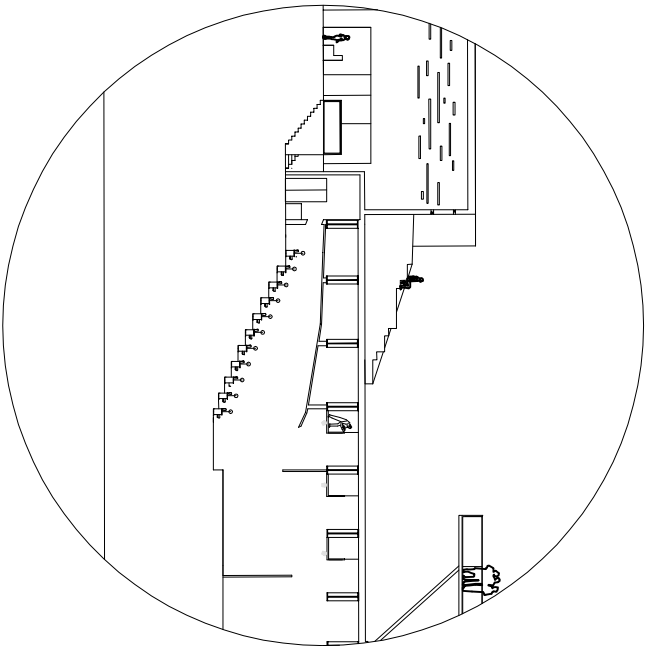
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Desenhado	07/12/11	G.TERREN		
Verificado				
Escala:				
900	VISTAS EXTERIOR			Piano: 3
				Folha: 1
				Especialidade: ELETRICIDADE



DISTRIBUIÇÃO DOS ESPAÇOS	
CAFETERIA	198,79 m2
AUDITÓRIO	1298,9 m2
BLOCO DE ADMINISTRAÇÃO	1393,73 m2
EXTERIOR	21409,77 m2

LINEA	DESCRIPCION
23	LAMPARAS MISTIL 1 - 5
24	FOCOS EMBAIXO DO MIRANTE
25	LAMPADAS LADO DEREITO EXTERIOR
26	LAMPADAS LADO DEREITO INTERNO E BLOCO DE ADMINISTRAÇÃO
31	LAMPADAS MISTIL 7 - 10
32	LAMPADA ENTRADA DOS EMPREGADOS DO AUDITORIO
33	LAMPADAS ENTRADA DO AUDITORIO
34	LAMPADAS CEFERETIA E SIBROIA NO SUPERIOR
35	LAMPADAS MISTIL 1 - 6
27	LAMPADAS MISTIL 1 - 5
28	LAMPADAS ENTRADA DO AUDITORIO
29	LAMPADAS DO JARDIM DO MEIO

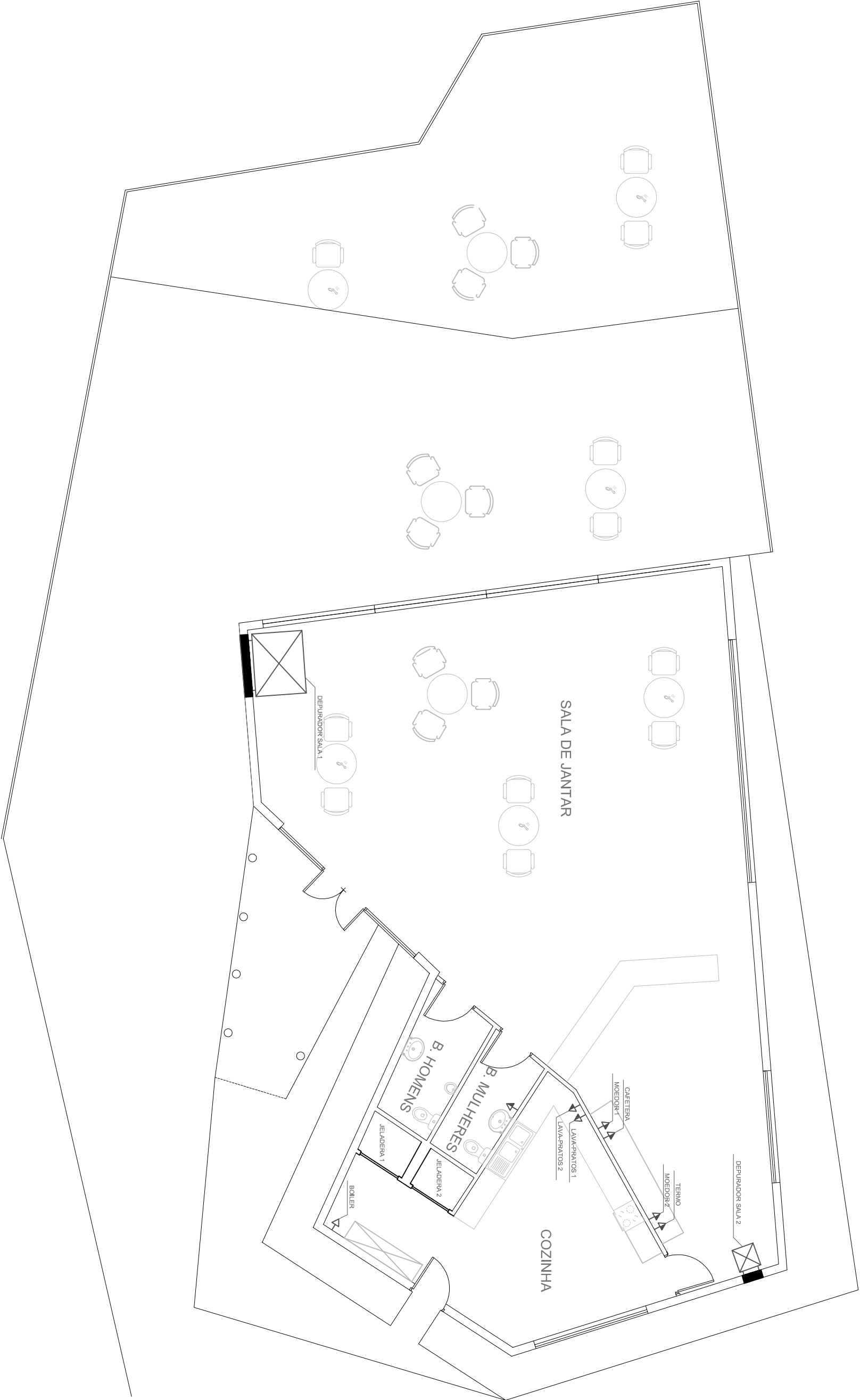
CORTE



DISTRIBUIÇÃO DOS ESPAÇOS

	AREA (m2)	PERIMETRO (m)
CORREDOR 1	70,75	22,45
CORREDOR 2	120,72	74,91
ESCRITORIO	15,48	16,33
VESTIÁRIO 1	16,45	18,34
VESTIÁRIO 2	29,16	22,45
RECEPÇÃO	385,68	103,46
CONTROLE	15,02	16,24
QUARTO DE SERVIÇO	8,13	12,18
BILHETERIA	7,53	11,57
ENTRADA 1	8,11	12,17
ENTRADA 2	8,56	14,65
AUDITÓRIO	462,35	101,73
BANHEIRO HOMENS	14,98	16,44
BANHEIRO MULHERES	14,68	16,45

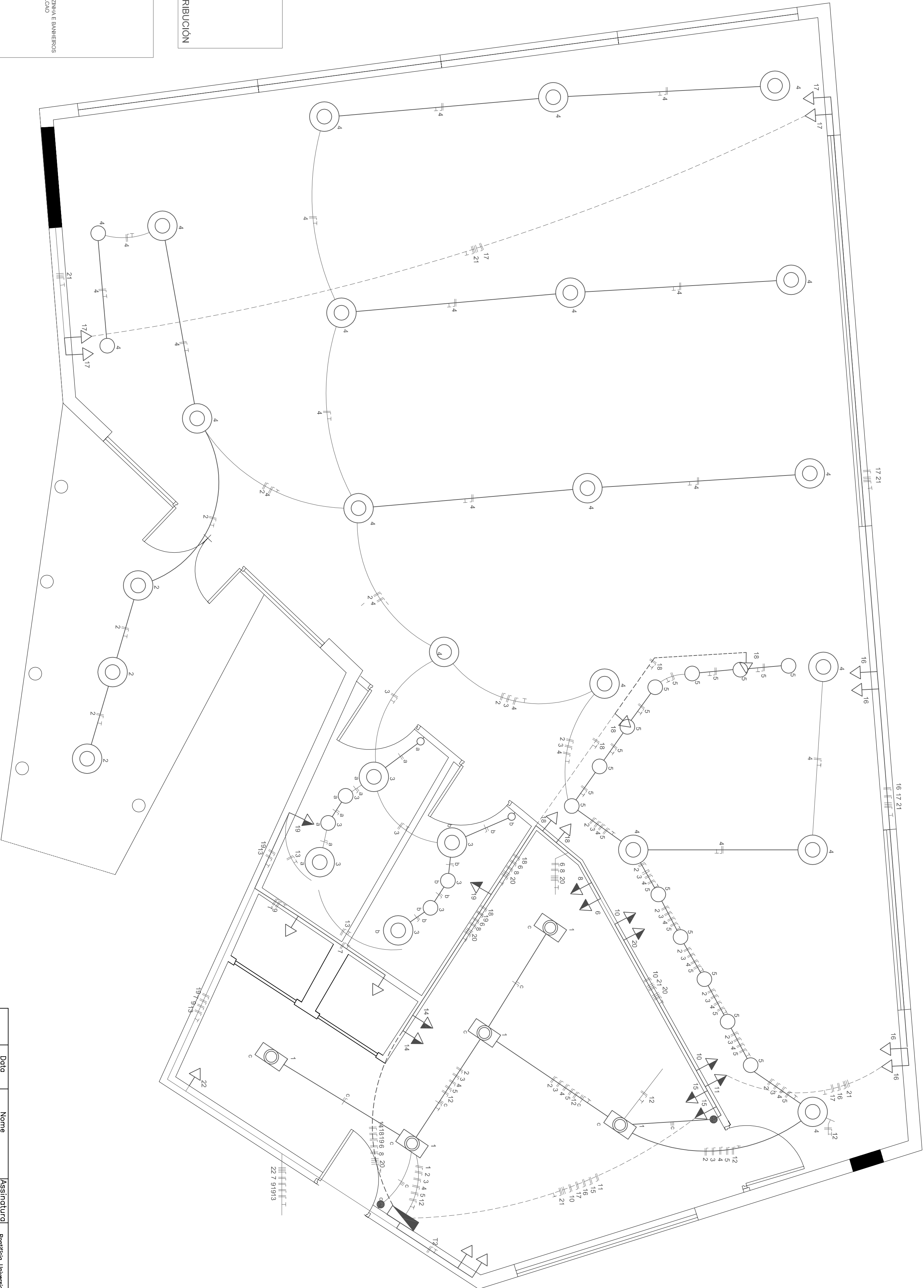
	Data	Nome	Assinatura	Pontifícia Universidade Católica do Paraná Engenharia Elétrica
Desenhado	07/12/11	G.TERREN		
Verificado				
Escala:	AUDITORIO			Piano: 4
190	PLANTA BAIXA			Folha: 1
				Especialidade: ELETRICIDADE



DISTRIBUIÇÃO DOS ESPAÇOS

	AREA (m2)	PERIMETRO (m)
SALA DE JANTAR	137,6	52,55
COZINHA	32,73	10,13
BANHEIRO HOMENS	5,56	10,13
BANHEIRO MULHERES	4,68	9,34

	Data	Nome	Assinatura	Pontifícia Universidade Católica do Paraná Engenharia Elétrica	
Desenhado	07/12/11	G.TERREN			
Verificado					
Escala:	100			Piano: 5	
				CAFETERIA	Folha: 1
				PLANTA BAIXA	Especialidade: ELETRICIDADE



LENDIA	
1	ILUMINAÇÃO DA COZINHA
2	ILUMINAÇÃO DO EXTERIOR
3	ILUMINAÇÃO DOS BANHEIROS
4	ILUMINAÇÃO DA SALA
5	ILUMINAÇÃO DO BALCOO
6	ALIMENTAÇÃO DO LAVA-PRATOS 1
7	ALIMENTAÇÃO DA ELABORA 1
8	ALIMENTAÇÃO DO LAVA-PRATOS 2
9	ALIMENTAÇÃO DO LAVA-PRATOS 3
10	ALIMENTAÇÃO DOS MOEDORES 1 E 2
11	ALIMENTAÇÃO DO TERNIO
12	ALIMENTAÇÃO DO DEPURADOR DO AR DA COZINHA E BANHEIROS
13	TOMADAS DE CORRENTE DA COZINHA 1
14	TOMADAS DE CORRENTE DA COZINHA 2
15	TOMADAS DE CORRENTE DA SALA 1
16	TOMADAS DE CORRENTE DA SALA 2
17	TOMADAS DE CORRENTE DA SALA 3
18	TOMADAS DE CORRENTE DOS BANHEIROS
19	TOMADAS DE CORRENTE DOS BANHEIROS
20	ALIMENTAÇÃO DA CAETERIA
21	ALIMENTAÇÃO DO DEPURADOR DO AR DA SALA
22	ALIMENTAÇÃO DO BOLEM DA SALA SUENTE

LENDIA	
1	ILUMINAÇÃO DA COZINHA
2	ILUMINAÇÃO DO EXTERIOR
3	ILUMINAÇÃO DOS BANHEIROS
4	ILUMINAÇÃO DA SALA
5	ILUMINAÇÃO DO BALCOO
6	ALIMENTAÇÃO DO LAVA-PRATOS 1
7	ALIMENTAÇÃO DA ELABORA 1
8	ALIMENTAÇÃO DO LAVA-PRATOS 2
9	ALIMENTAÇÃO DO LAVA-PRATOS 3
10	ALIMENTAÇÃO DOS MOEDORES 1 E 2
11	ALIMENTAÇÃO DO TERNIO
12	ALIMENTAÇÃO DO DEPURADOR DO AR DA COZINHA E BANHEIROS
13	TOMADAS DE CORRENTE DA COZINHA 1
14	TOMADAS DE CORRENTE DA COZINHA 2
15	TOMADAS DE CORRENTE DA SALA 1
16	TOMADAS DE CORRENTE DA SALA 2
17	TOMADAS DE CORRENTE DA SALA 3
18	TOMADAS DE CORRENTE DOS BANHEIROS
19	TOMADAS DE CORRENTE DOS BANHEIROS
20	ALIMENTAÇÃO DA CAETERIA
21	ALIMENTAÇÃO DO DEPURADOR DO AR DA SALA
22	ALIMENTAÇÃO DO BOLEM DA SALA SUENTE

	Data	Nome	Assinatura	Portifolio Universidade		
Desenhado	07/12/11	G.TERREN		Cadêcia de Porcã		
Verificado				Engenharia Elétrica		
Escala:	CAFETERIA			Piano: 5		
40				INSTALAÇÃO ELETRICA		
				Folha: 2		
				Especialidade: ELETRICIDADE		