

LED COMMERCIAL DOWNLIGHT



Lumens Depot Foam's Commercial-Grade Retrofit LED Downlights are a highly innovative and feature-rich lighting solution designed for both retrofit and new construction applications. This model offers selectable CCT options of 3000K, 4000K, and 5000K along with adjustable wattage, providing flexibility to suit various lighting needs. Delivering up to 3300 lumens, these downlights are ideal for spaces with ceiling heights of up to 16 feet, ensuring bright and efficient illumination. Designed for performance and versatility, they are a reliable choice for commercial environments requiring consistent, high-quality lighting.

Product Features

- Up to 100 lumens per watt
- CCT adjustable 3000K, 4000K, & 5000K
- Wattage adjustable
- Integral heat sink
- Tested in accordance with IESNA LM79 & LM80
- 0-10V Dimming capability
- Universal 100-277Vac
- ETL & ES Listed
- Energy Star Certified
- 5 Years Warranty

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Watt	Lumens	CCT	Size	Input Voltage	Dimming	Certifications
8W/12W/16W	1600Lm	3K/4K/5K	6"	100-277Vac	0-10V	ETL & ES
20W/26W/33W	3300Lm	3K/4K/5K	6"	100-277Vac	0-10V	ETL & ES
12W/16W/22W	2200Lm	3K/4K/5K	8"	100-277Vac	0-10V	ETL & ES

Specifications

Parameter	Description	Value
General Performance		
	Wattage Adjustable	8W/12W/16W
	Lumen	1600LM
	Lumen Efficacy	Up to 100LM/W
	Color Temperature	3K/4K/5K
	CRI (Ra)	>80
	Beam Angle	80 Degree
Electrical	Diffuser Type	PC Lens
	Input Voltage	100-277Vac
	Frequency	60Hz
	Dimming	0-10V Dimming
	Power Factor	≥0.9
	Driver Surge Protection	N/A
	Flicker Percent	<10%
Physical	Operating Temperature	25°C
	Operating Humidity	N/A
	Storage Temperature	-20°C To 65°C
	Storage Humidity	N/A
	LED Brand	SMD2835
	LED Type	PC Cover
	LED QTY	PCS
	Housing	Aluminum Material
	Housing Color	White
Qualification	IP Rating	IP54
	Warranty	5 Years Warranty

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Specifications

Parameter	Description	Value
General Performance	Wattage Adjustable	20W/26W/33W
	Lumen	3300LM
	Lumen Efficacy	Up to 100LM/W
	Color Temperature	3K/4K/5K
	CRI (Ra)	>80
	Beam Angle	80 Degree
	Diffuser Type	PC Lens
	Input Voltage	100-277Vac
Electrical	Frequency	60Hz
	Dimming	0-10V Dimming
	Power Factor	≥0.9
	Driver Surge Protection	N/A
	Flicker Percent	<10%
	Operating Temperature	25°C
Physical	Operating Humidity	N/A
	Storage Temperature	-20°C To 65°C
	Storage Humidity	N/A
	LED Brand	SMD2835
	LED Type	PC Cover
	LED QTY	PCS
	Housing	Aluminum Material
	Housing Color	White
	IP Rating	IP54
	Warranty	5 Years Warranty
Qualification		

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Specifications

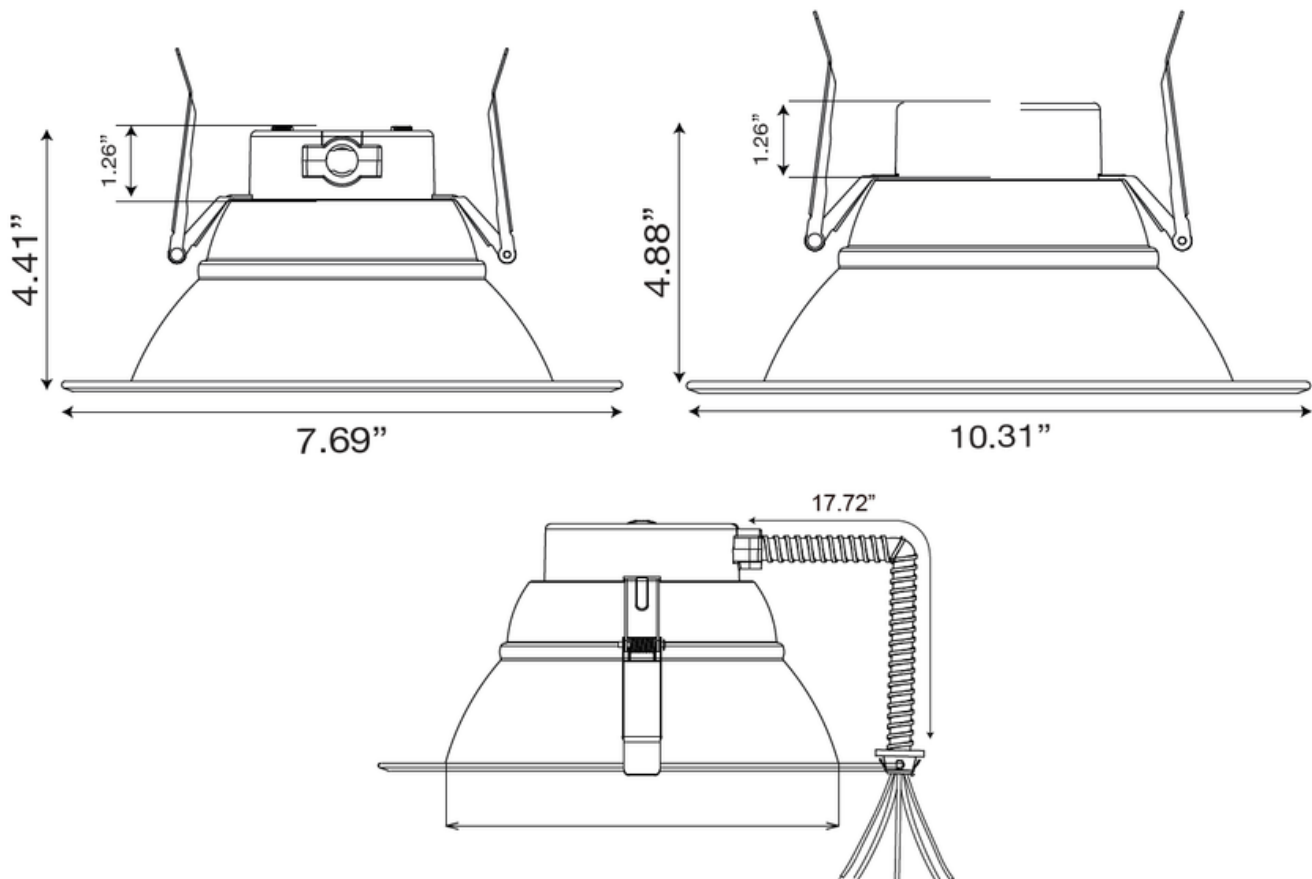
Parameter	Description	Value
General Performance	Wattage	12W/16W/22W
	Adjustable Lumen	2200LM
	Lumen Efficacy	Up to 100LM/W
	Color Temperature	3K/4K/5K
	CRI (Ra)	>80
	Beam Angle	90 Degree
	Diffuser Type	PC Lens
	Input Voltage	100-277Vac
Electrical	Frequency	60Hz
	Dimming	0-10V Dimming
	Power Factor	≥0.9
	Driver Surge Protection	N/A
	Flicker Percent	<10%
	Operating Temperature	25°C
Physical	Operating Humidity	N/A
	Storage Temperature	-20°C To 65°C
	Storage Humidity	N/A
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**Wattage & CCT
Adjustable**

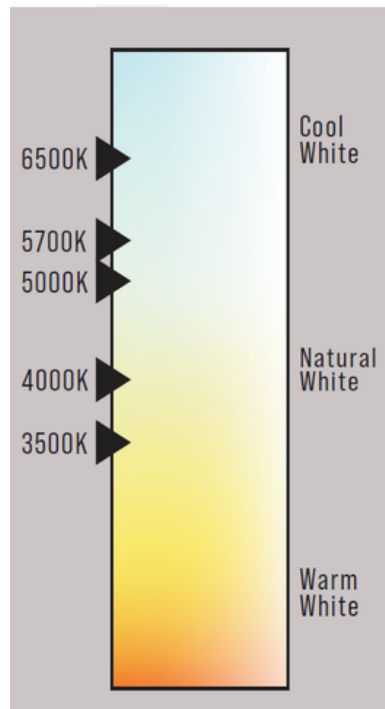


Dimensions



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Correlated Color Temperature (CCT)



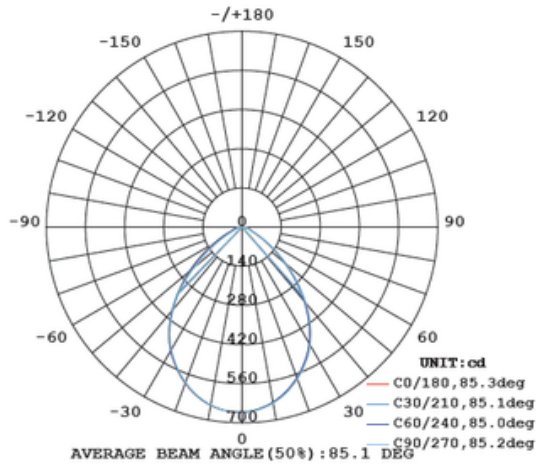
Luminaire Photometric Test Report

Lamp Flux: 1183.34x1 lm		
	TYPE: 12W	WEIGHT:
DIM.:	SPEC.: 4000K	SERIAL No.: 1
MFR.:	SUR.: 0.05	PROTECTION ANGLE:

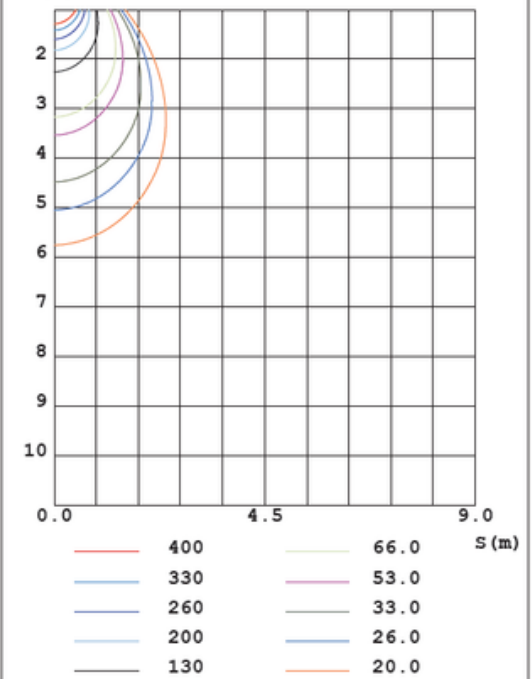
DATA OF LAMP		PHOTOMETRIC DATA				Eff: 99.44 lm/W
MODEL	POWER (W)	Imax (cd)	669.1	S/MH (C0/180)	1.11	
RATED VOLTAGE (V)	12	LOR (%)	100.0	S/MH (C90/270)	1.12	
NOMINAL FLUX (lm)	120	TOTAL FLUX (lm)	1183.3	η UP, DN (C0-180)	0.0, 50.7	
LAMPS INSIDE	1183.34	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 49.3	
TEST VOLTAGE (V)	1	ηup (%)	0.0	CIBSE SHR NOM	1.00	
	120.3	ηdown (%)	100.0	CIBSE SHR MAX	1.15	

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LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



Zonal Flux Diagram

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	636.3	636.2	639.5	647.9	646.8	646.7	645.8	645.8	0- 10	62.39	62.39	5.27,5.27
20	575.0	573.9	578.6	591.4	594.0	593.8	590.7	583.0	10- 20	174.1	236.5	20,20
30	483.6	481.3	488.1	505.0	510.7	510.0	505.7	462.0	20- 30	249.4	485.9	41.1,41.1
40	350.4	347.2	355.8	378.4	389.4	389.0	382.6	269.0	30- 40	265.7	751.6	63.5,63.5
50	204.4	201.3	209.9	231.9	243.2	243.2	219.2	122.3	40- 50	214.3	965.9	81.6,81.6
60	85.13	84.24	90.52	105.8	111.9	111.7	80.98	50.15	50- 60	128.0	1094	92.4,92.4
70	33.59	33.98	37.13	45.08	39.23	39.36	23.66	16.71	60- 70	54.91	1149	97.1,97.1
80	14.35	13.65	17.57	24.54	19.28	18.37	10.78	6.697	70- 80	25.97	1175	99.3,99.3
90	0	0.4637	2.483	8.449	0.2992	0.4466	0.5086	1.053	80- 90	8.616	1183	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

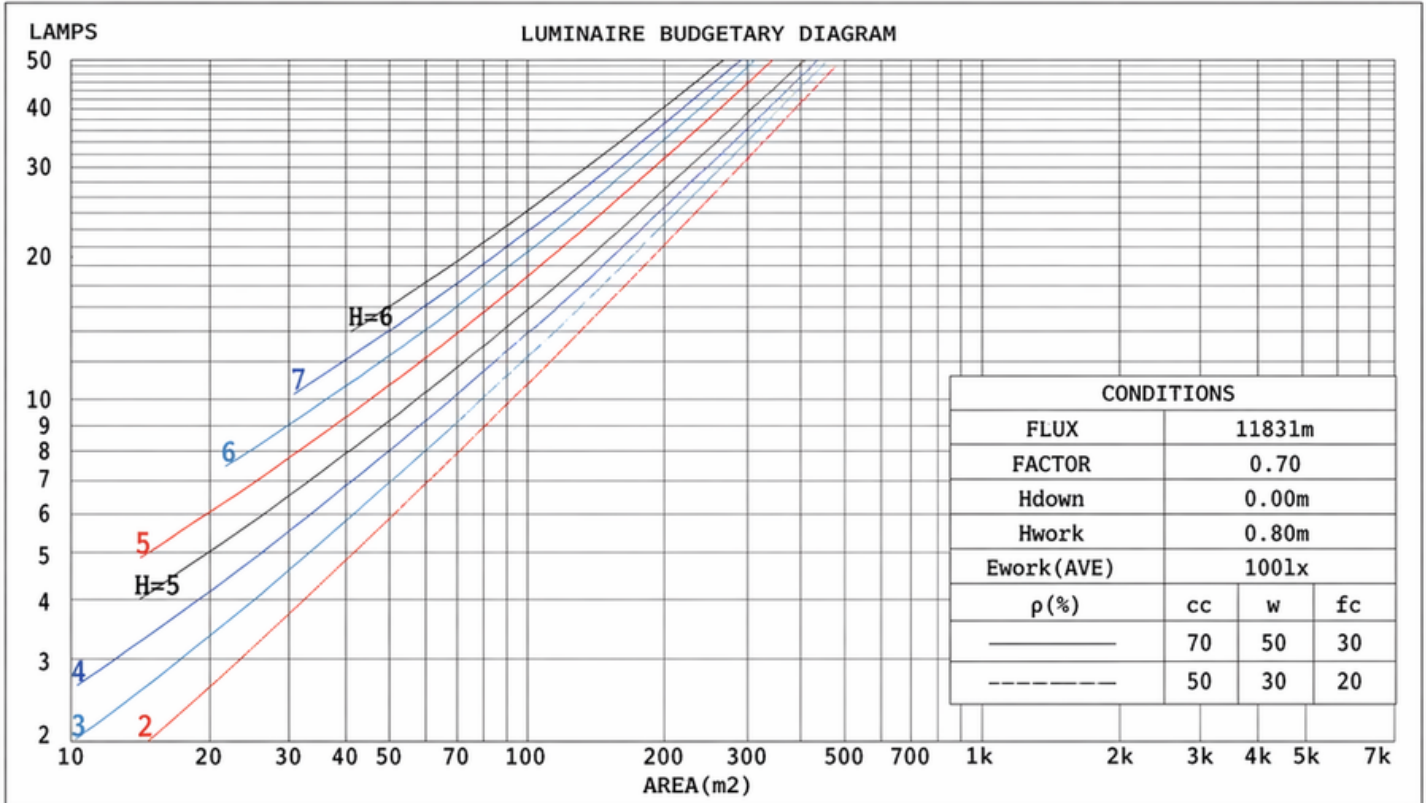
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Cu And Luminaire Budgetary Estimate Diagram

Test:U:120.3Y I:0.0990A P:11.90W PF:0.9930 Lamp Flux:1183.34x1 lm

NAME:	TYPE: 12W	WEIGHT:
DIM.:	SPEC.: 4000K	SERIAL No.: 1
MFR.:	SUR.: 0.05	PROTECTION ANGLE:

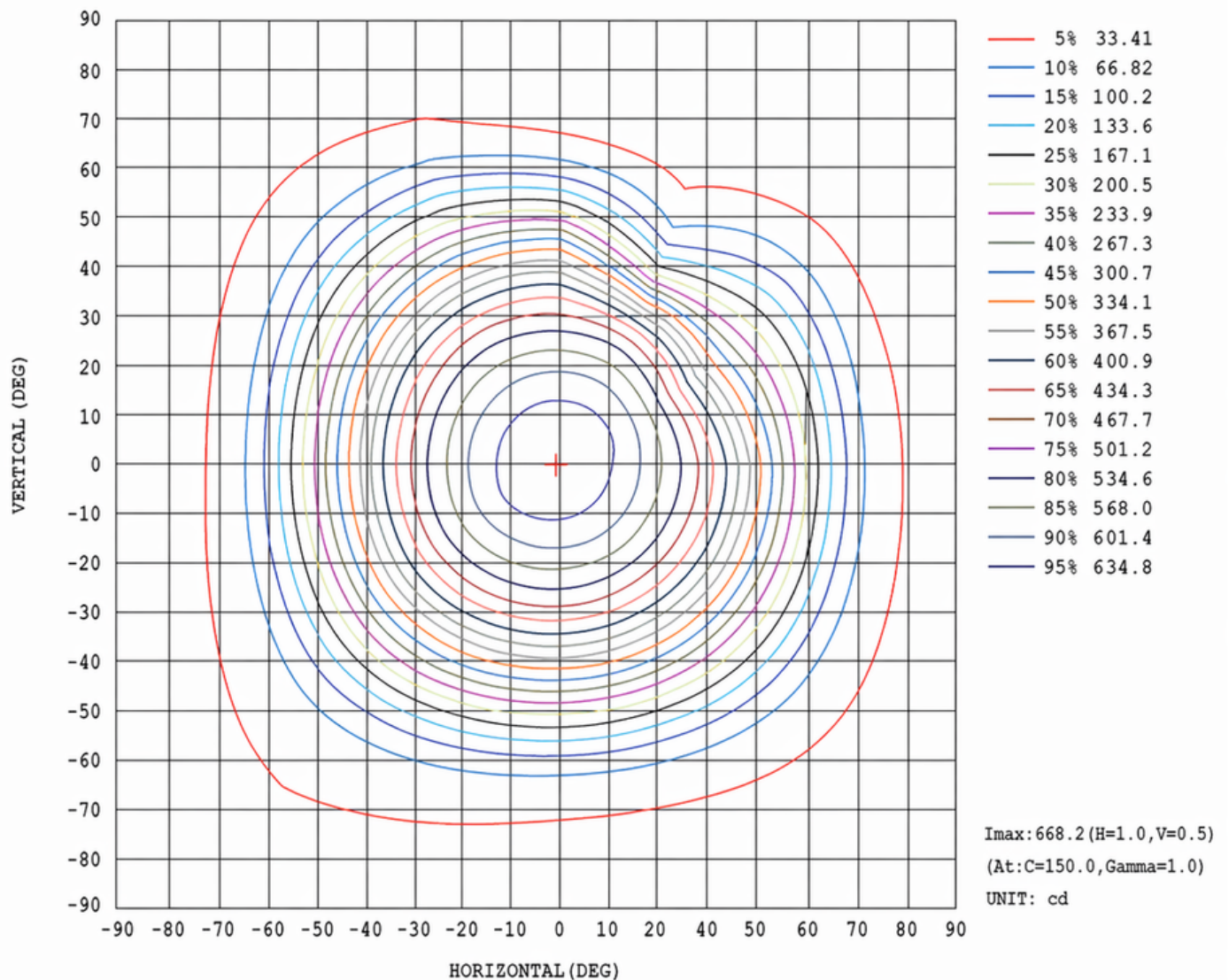
pcc	80%			70%			50%			30%			10%			0
pW	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															



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Isocandela Diagram

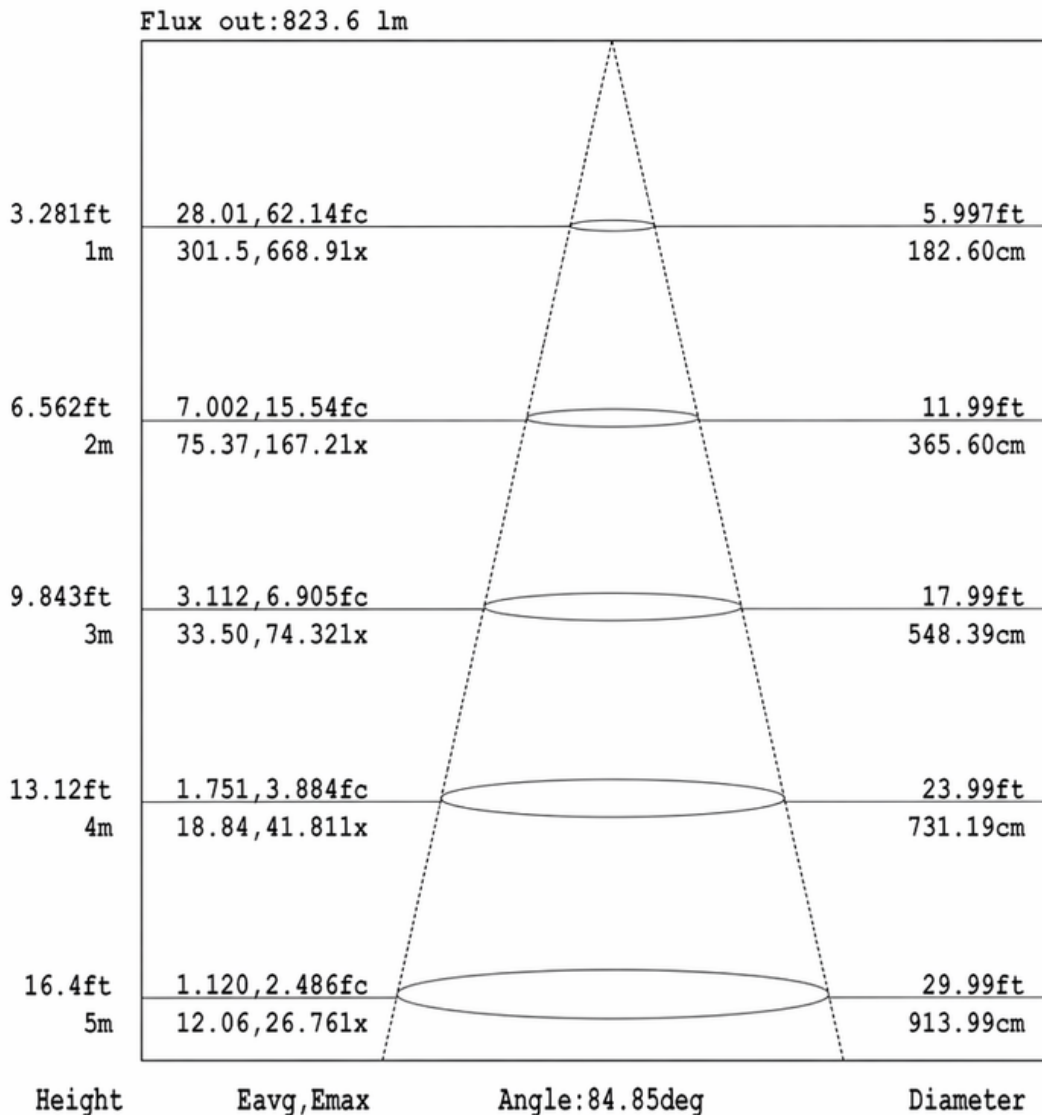
Test:U:120.3V I:0.0990A P:11.90W PF:0.9930 Lamp Flux:1183.34x1 lm		
NAME:	TYPE:12W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:1
MFR.:	SUR.:0.05	PROTECTION ANGLE:



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AAI Figure

Test:U:120.3V I:0.0990A P:11.90W PF:0.9930 Lamp Flux:1183.34x1 lm		
NAME:	TYPE:12W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:1
MFR.:	SUR.:0.05	PROTECTION ANGLE:

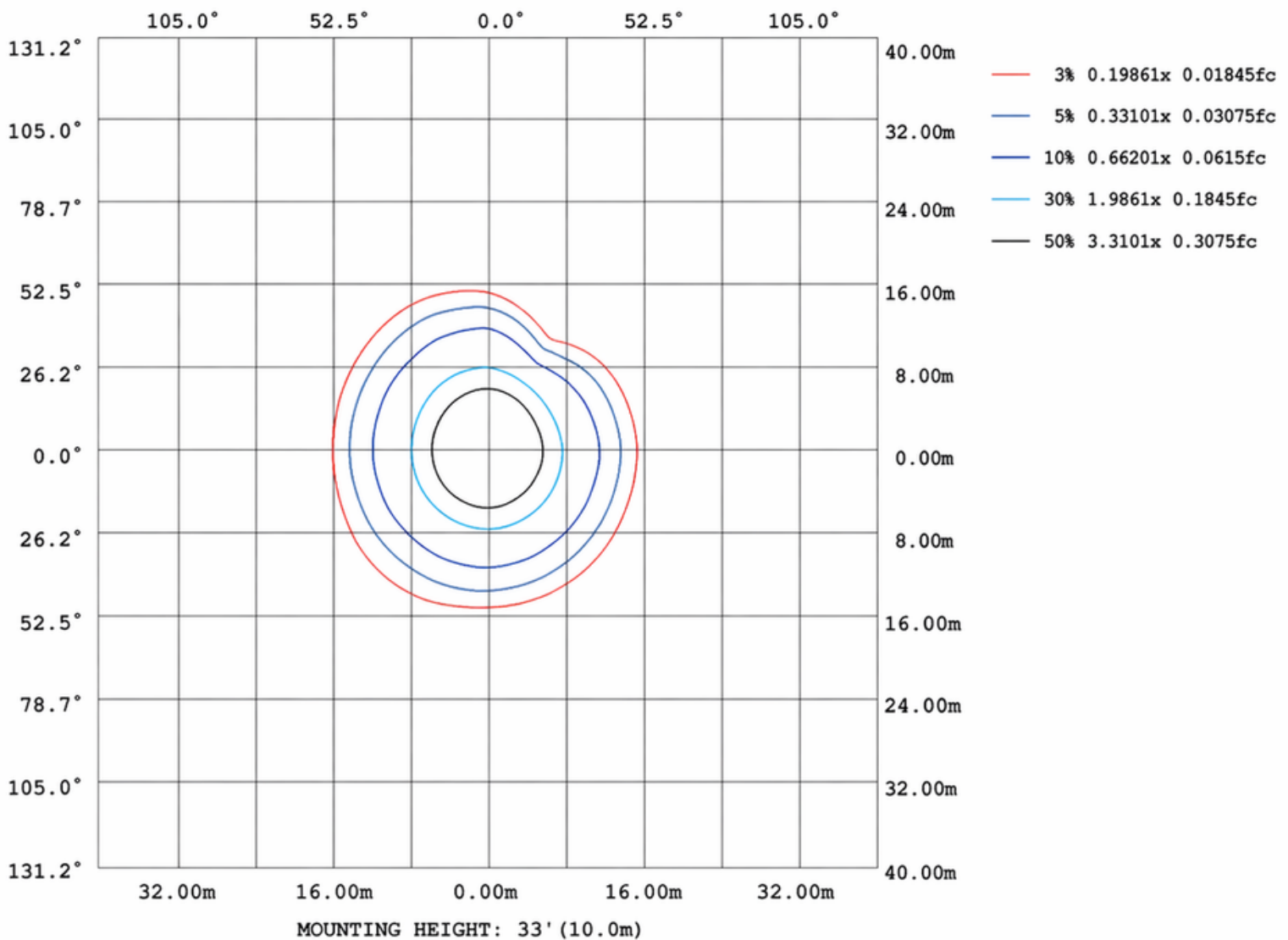


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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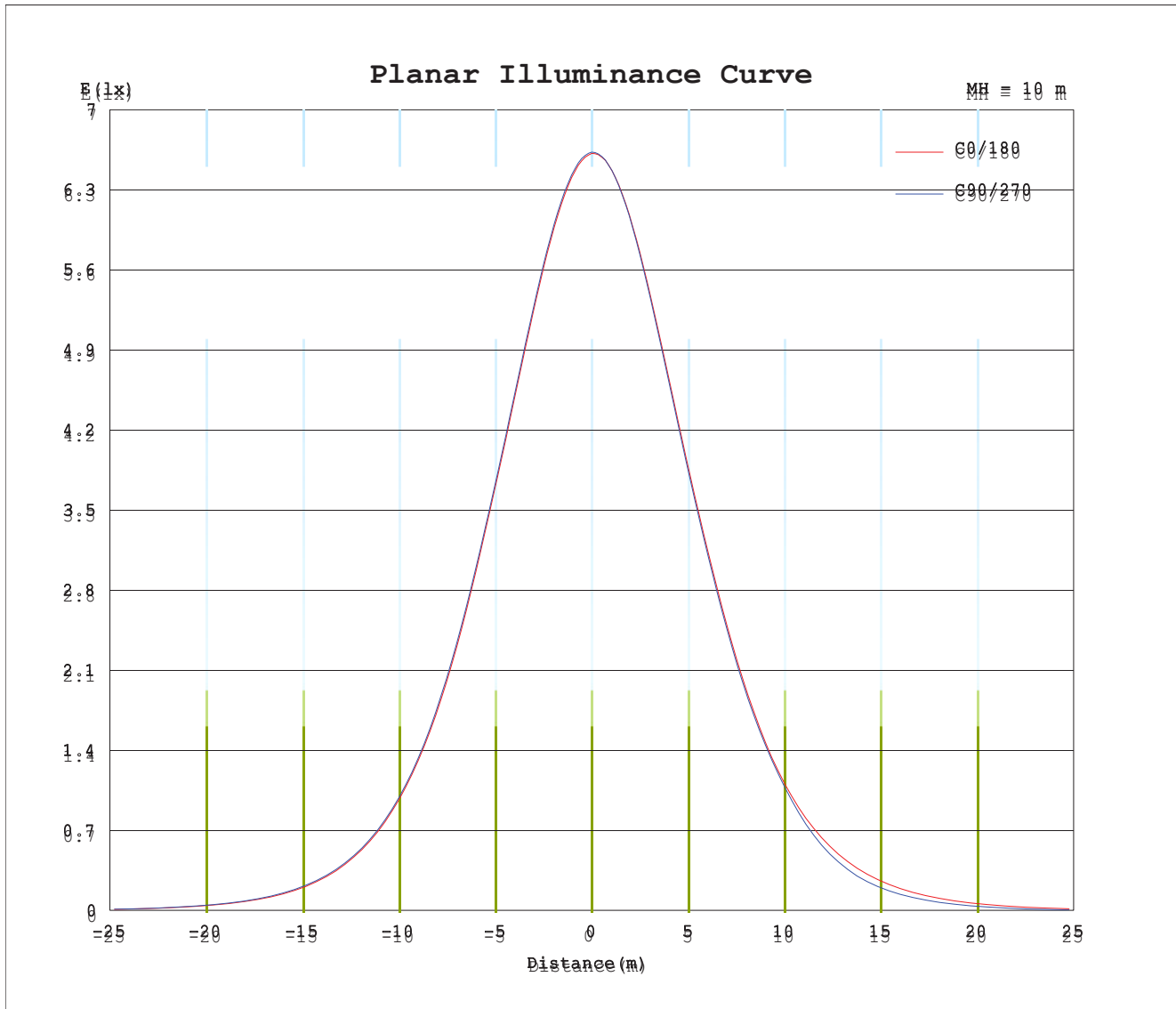
Isolux Diagram

Test:U:120.3V I:0.0990A P:11.90W PF:0.9930 Lamp Flux:1183.34x1 lm		
NAME:	TYPE:12W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:1
MFR.:	SUR.:0.05	PROTECTION ANGLE:



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Planar Illuminance Curve



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Luminous Distribution Intensity Data

Test:U:120.3V I:0.0990A P:11.90W PF:0.9930 Lamp Flux:1183.34x1 lm		
NAME:	TYPE:12W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:1
MFR.:	SUR.:0.05	PROTECTION ANGLE:

Table--1													UNIT: cd				
C (DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330					
0	662	662	662	663	666	669	662	662	662	663	666	669					
5	654	654	654	656	660	665	659	659	659	659	661	663					
10	636	636	636	639	645	651	647	647	647	646	647	645					
15	610	609	609	613	620	628	625	624	624	623	623	616					
20	575	574	574	579	586	597	594	594	594	591	590	576					
25	533	532	531	537	546	557	556	555	555	551	550	515					
30	484	482	481	488	498	512	511	510	510	506	484	440					
35	421	419	418	427	438	455	455	455	455	449	378	358					
40	350	347	347	356	369	387	389	389	389	383	253	285					
45	277	273	273	282	296	313	316	317	316	308	147	221					
50	204	201	201	210	224	240	243	244	243	219	81.1	164					
55	138	136	136	144	156	171	173	174	172	139	48.7	112					
60	85.1	84.2	84.3	90.5	99.8	112	112	112	111	81.0	31.6	68.7					
65	49.8	49.6	50.0	54.4	61.7	69.5	65.6	66.2	66.0	42.6	18.5						
70	38.6	33.6	33.7	34.3	37.1	43.0	47.2	39.2	39.4	39.4	23.7						
75	9.34	24.1	24.0	23.9	24.2	27.5	32.8	37.3	29.2	29.2	28.5						
80	16.7	4.15	18.0	14.4	13.8	13.5	17.6	22.3	26.8	19.3	18.9						
85	17.8	10.8	2.25	11.1	4.47	4.44	5.03	7.86	13.5	17.4	9.44						
90	9.53	8.64	5.19	1.27	4.71	0.00	0.19	0.74	2.48	7.16	9.74						
0.30 0.47 0.42 0.51 0.76 1.35																	

Packaging

Carton Size	Qty/Box
18.50 x 17.87 x 17.71	12
18.50 x 17.87 x 17.71	12
22.83 x 21.73 x 19.29	12

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Important Safety Instructions

Basic safety precautions should always be followed when installing, including the following:

1. Read all instructions.
2. Licensed electrician for installation only.
3. Always ensure the power is OFF and the fitting has cooled down before performing any maintenance, cleaning, or adjustment to the fitting.
4. Do not install any luminaire near the heat source.
5. Do not exceed the nominal supply voltage or amperage ratings.
6. To avoid injury or damage to the fitting, please ensure that power leads and screws are secure before connecting the power.

Installation Instruction

WARNING ⚡

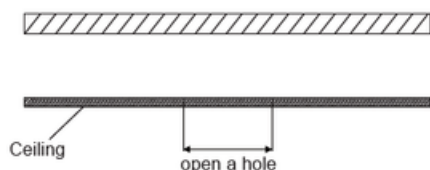
1. Switch off before installation.
2. Switch on only after complete installation and examination of the circuit.
3. Professional electrician for installation and maintenance only.



Turn Off
Power Supply

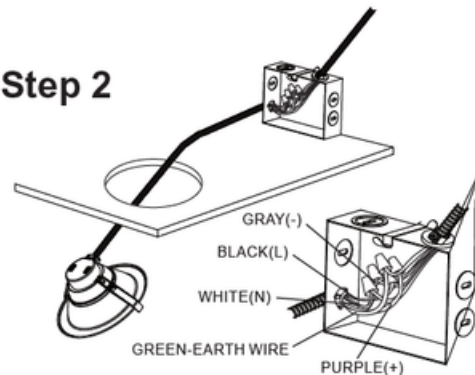
Turn Off power supply before starting any installation. Read instructions & check you have all the tools & accessories to complete the installation correctly.

Step 1



The height of the fixture should be no less than 100mm
Opening a hole in ceiling according to cutout size of the lamp

Step 2



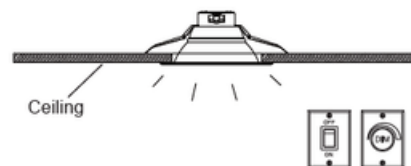
Connect AC and Dimming wire correspondingly
as shown in picture

Step 3



Bend back the spring clips then push the lamp
into the hole.

Step 4



Installation completed. Switch on.

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Application Picture

