

## Features

- Light source: 1 piece 10W LED
- Long LED life: More than 30,000 hours
- 111mm aluminum reflector bulb type
- Low heat, less than 65°C for 10W
- No UV or IR light radiation
- No mercury or other inorganics
- Highest optical efficiency: 40 lm/watt for white color
- Homogeneous flood illumination
- Machined aluminum heat fins with excellent thermal efficiencies
- The 10W CDM111 bulb is available in the following white color temperatures:
  - 2600K – 3000K (Warm White)
  - 4000K – 5000K (Natural White)
  - 5000K – 6000K (Cool White)
- 10W CDM111 LED bulb can achieve directional light output equal to 70W halogen CDM-R111
- 2 year limited warranty (see page 6)
- Works with worldwide lighting systems



Note: Picture for illustration only



## Typical Applications

- Energy Saving Programs
- Sustainable Energy
- Landscape Accent/Spot lighting
- Retail Store Lighting
- Display Case Accent
- Commercial Lighting
- Mood Lighting/General lighting

PRELIMINARY

## PRODUCT SPECIFICATIONS

<b>LIGHT SOURCE</b>	1X10W power LED
<b>OPTICS</b>	Aluminum reflector with metalized coating
<b>BULB TYPE</b>	CDM111
<b>BEAM ANGLE</b>	10° (Narrow Spot), 25° (Spot), 35° (Extra Spot), or 45° (Flood)
<b>RENDERING INDEX (Ra)</b>	>85 (warm white) >75 (natural white) >70 (cool white)
<b>TOTAL LENGTH</b>	See product dimension below
<b>WEIGHT</b>	125 ±2 g
<b>HEATSINK</b>	Machined pure aluminum with anodize finish
<b>BASE TYPE</b>	GX5.3, GX8.5, E27, E26 or GU10
<b>DIMMABILITY</b>	Not Dimmable

## ENVIRONMENTAL SPECIFICATIONS

<b>TEMPERATURE RANGE</b>	Ambient: -20°C to 40°C; Surface of Lamp: 60°C to 70°C
<b>HUMIDITY RANGE</b>	0 to 95% non-condensing humidity

## ELECTRICAL SPECIFICATIONS

<b>VOLTAGE REQUIREMENT</b>	120V AC or 230VAC
<b>POWER CONSUMPTION</b>	≦ 11W
<b>POWER FACTOR</b>	≧ 0.7

## PRODUCT DIMENSIONS (mm)

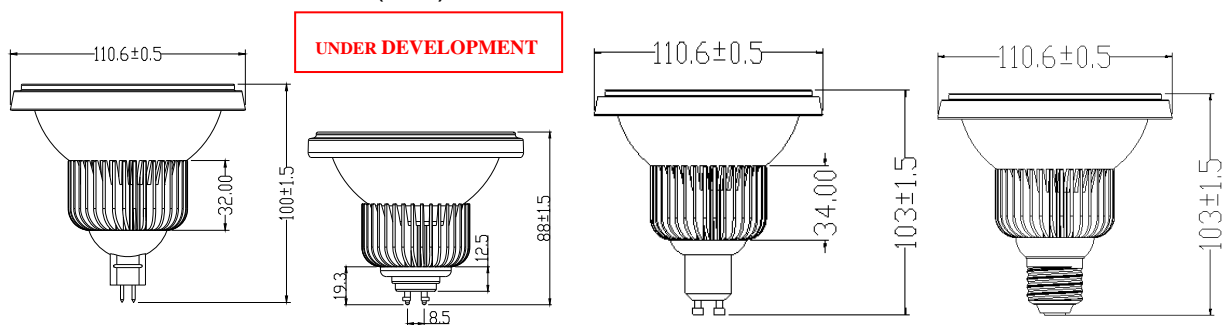


Fig 1. GX5.3 Side View

Fig 2. GX8.5 Side View

Fig 3. GU10 Side View

Fig 4. E27/E26 Side View

PRELIMINARY

**CDM111 PRODUCT ORDERING CODE**

ORDER CODE	Color	CCT (°K)	BEAM ANGLE	Base Type	Operating Voltage	LED Power (W)	Typical Luminous Flux (lm)	Typical Illuminance @ 2m (Lux)	
CDM111VN-10-GX5.3/S	Warm White	2600K~3000K	10° ±2°	GX5.3	12V AC/DC	1X10W optics	300	800	
CDM111NN-10-GX5.3/S	Natural White	4000K~5000K							
CDM111WN-10-GX5.3/S	Cool White	5000K~6000K							
CDM111VS-10-GX5.3/S	Warm White	2600K~3000K	15° ±2°				1X10W PC cover	390	360
CDM111NS-10-GX5.3/S	Natural White	4000K~5000K							
CDM111WS-10-GX5.3/S	Cool White	5000K~6000K							
CDM111VE-10-GX5.3/S	Warm White	2600K~3000K	35° ±2°				1X10W optics	320	160
CDM111NE-10-GX5.3/S	Natural White	4000K~5000K							
CDM111WE-10-GX5.3/S	Cool White	5000K~6000K							
CDM111VF-10-GX5.3/S	Warm White	2600K~3000K	45° ±2°				1X10W PC cover	370	110
CDM111NF-10-GX5.3/S	Natural White	4000K~5000K							
CDM111WF-10-GX5.3/S	Cool White	5000K~6000K							
CDM111VN-10-GX8.5/S	Warm White	2600K~3000K	10° ±2°	GX8.5	100V~ 240V	1X10W optics	N/A	N/A	
CDM111NN-10-GX8.5/S	Natural White	4000K~5000K							
CDM111WN-10-GX8.5/S	Cool White	5000K~6000K							
CDM111VS-10-GX8.5/S	Warm White	2600K~3000K	15° ±2°				1X10W PC cover	N/A	N/A
CDM111NS-10-GX8.5/S	Natural White	4000K~5000K							
CDM111WS-10-GX8.5/S	Cool White	5000K~6000K							
CDM111VE-10-GX8.5/S	Warm White	2600K~3000K	35° ±2°				1X10W optics	N/A	N/A
CDM111NE-10-GX8.5/S	Natural White	4000K~5000K							
CDM111WE-10-GX8.5/S	Cool White	5000K~6000K							
CDM111VF-10-GX8.5/S	Warm White	2600K~3000K	45° ±2°				1X10W PC cover	N/A	N/A
CDM111NF-10-GX8.5/S	Natural White	4000K~5000K							
CDM111WF-10-GX8.5/S	Cool White	5000K~6000K							

PRELIMINARY

**CDM111 PRODUCT ORDERING CODE**

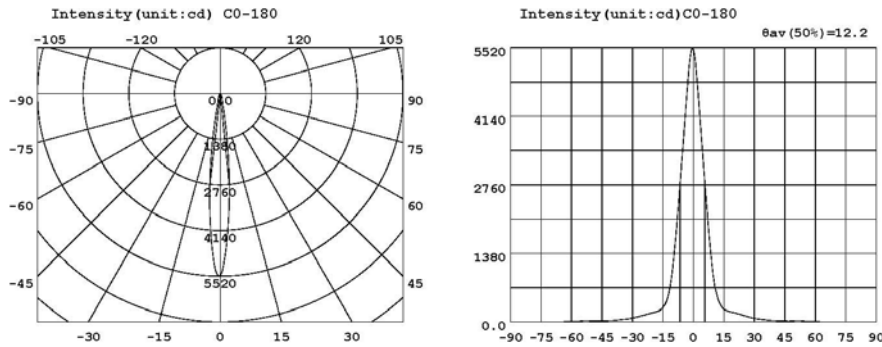
ORDER CODE	Color	CCT (°K)	BEAM ANGLE	Base Type	Operating Voltage	LED Power (W)	Typical Luminous Flux (lm)	Typical Illuminance @ 2m (Lux)	
CDM111VN-10-GU10/S	Warm White	2600K~3000K	10° ±2°	GU10	100V~ 240V	1X10W optics	400	1000	
CDM111NN-10-GU10/S	Natural White	4000K~5000K							
CDM111WN-10-GU10/S	Cool White	5000K~6000K							
CDM111VS-10-GU10/S	Warm White	2600K~3000K	15° ±2°				1X10W PC cover	450	270
CDM111NS-10-GU10/S	Natural White	4000K~5000K							
CDM111WS-10-GU10/S	Cool White	5000K~6000K							
CDM111VE-10-GU10/S	Warm White	2600K~3000K	35° ±2°				1X10W optics	400	200
CDM111NE-10-GU10/S	Natural White	4000K~5000K							
CDM111WE-10-GU10/S	Cool White	5000K~6000K							
CDM111VF-10-GU10/S	Warm White	2600K~3000K	45° ±2°				1X10W PC cover	460	130
CDM111NF-10-GU10/S	Natural White	4000K~5000K							
CDM111WF-10-GU10/S	Cool White	5000K~6000K							
CDM111VN-10-E27/S	Warm White	2600K~3000K	10° ±2°	E27	100V~ 240V	1X10W optics	400	1000	
CDM111NN-10-E27/S	Natural White	4000K~5000K							
CDM111WN-10-E27/S	Cool White	5000K~6000K							
CDM111VS-10-E27/S	Warm White	2600K~3000K	15° ±2°				1X10W PC cover	450	270
CDM111NS-10-E27/S	Natural White	4000K~5000K							
CDM111WS-10-E27/S	Cool White	5000K~6000K							
CDM111VE-10-E27/S	Warm White	2600K~3000K	35° ±2°				1X10W optics	400	200
CDM111NE-10-E27/S	Natural White	4000K~5000K							
CDM111WE-10-E27/S	Cool White	5000K~6000K							
CDM111VF-10-E27/S	Warm White	2600K~3000K	45° ±2°				1X10W PC cover	460	130
CDM111NF-10-E27/S	Natural White	4000K~5000K							
CDM111WF-10-E27/S	Cool White	5000K~6000K							

PRELIMINARY

**CDM111 PRODUCT ORDERING CODE**

ORDER CODE	Color	CCT (°K)	BEAM ANGLE	Base Type	Operating Voltage	LED Power (W)	Typical Luminous Flux (lm)	Typical Illuminance @ 2m (Lux)						
CDM111VN-10-E26/S	Warm White	2600K~3000K	10° ±2°	E26	100V~ 240V	1X10W optics	400	1000						
CDM111NN-10-E26/S	Natural White	4000K~5000K												
CDM111WN-10-E26/S	Cool White	5000K~6000K												
CDM111VS-10-E26/S	Warm White	2600K~3000K	15° ±2°			E26	100V~ 240V	1X10W PC cover	450	270				
CDM111NS-10-E26/S	Natural White	4000K~5000K												
CDM111WS-10-E26/S	Cool White	5000K~6000K												
CDM111VE-10-E26/S	Warm White	2600K~3000K	35° ±2°					E26	100V~ 240V	1X10W optics	400	200		
CDM111NE-10-E26/S	Natural White	4000K~5000K												
CDM111WE-10-E26/S	Cool White	5000K~6000K												
CDM111VF-10-E26/S	Warm White	2600K~3000K	45° ±2°							E26	100V~ 240V	1X10W PC cover	460	130
CDM111NF-10-E26/S	Natural White	4000K~5000K												
CDM111WF-10-E26/S	Cool White	5000K~6000K												

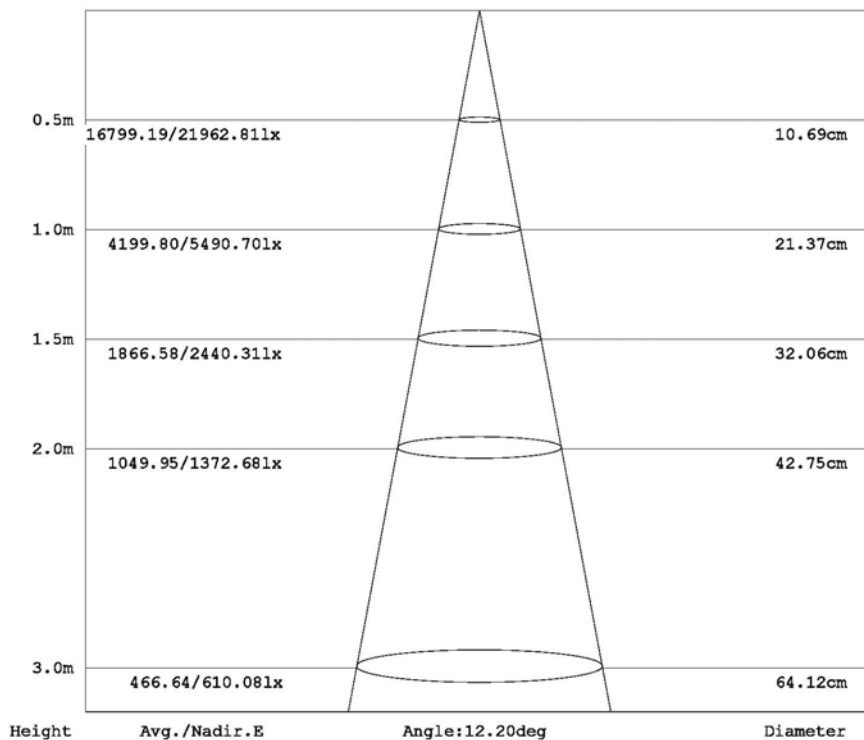
## 10° CDM111 Intensity (C0-180 plane) Measurement



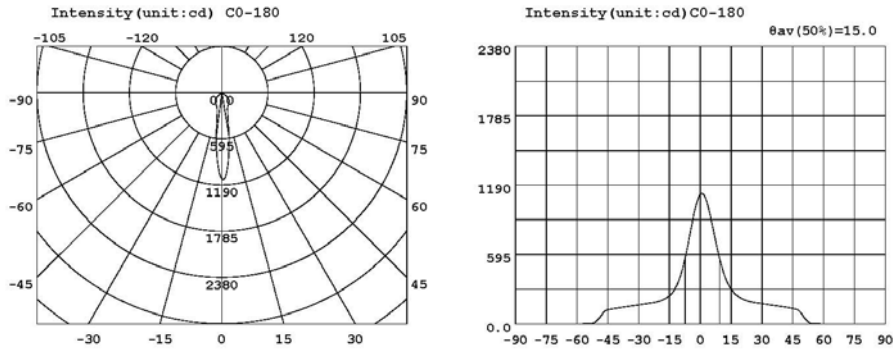
Intensity data: (deg , cd) C0-180

A	I	A	I	A	I	A	I	A	I	A	I
-90.0	0.0017	-58.5	14.04	-27.0	109.2	4.5	3421	36.0	40.82	67.5	1.491
-88.5	0.0050	-57.0	14.56	-25.5	125.1	6.0	2617	37.5	34.74	69.0	1.185
-87.0	0.0101	-55.5	20.47	-24.0	141.9	7.5	1861	39.0	29.90	70.5	0.8036
-85.5	0.0234	-54.0	27.66	-22.5	159.3	9.0	1212	40.5	26.06	72.0	0.4135
-84.0	0.0370	-52.5	30.97	-21.0	176.0	10.5	738.5	42.0	23.03	73.5	0.3218
-82.5	0.0572	-51.0	24.64	-19.5	191.4	12.0	482.1	43.5	20.82	75.0	0.2638
-81.0	0.0858	-49.5	19.42	-18.0	210.0	13.5	333.1	45.0	19.44	76.5	0.2050
-79.5	0.1181	-48.0	18.94	-16.5	236.6	15.0	259.9	46.5	18.60	78.0	0.1638
-78.0	0.1636	-46.5	19.81	-15.0	291.5	16.5	227.6	48.0	19.66	79.5	0.1274
-76.5	0.2143	-45.0	21.12	-13.5	389.3	18.0	206.8	49.5	24.55	81.0	0.0878
-75.0	0.2699	-43.5	23.14	-12.0	596.9	19.5	193.1	51.0	31.38	82.5	0.0609
-73.5	0.3424	-42.0	25.91	-10.5	982.8	21.0	177.9	52.5	29.49	84.0	0.0451
-72.0	0.6386	-40.5	29.42	-9.0	1566	22.5	159.8	54.0	21.71	85.5	0.0267
-70.5	1.041	-39.0	33.87	-7.5	2276	24.0	141.7	55.5	14.37	87.0	0.0249
-69.0	1.340	-37.5	39.51	-6.0	3068	25.5	122.9	57.0	12.98	88.5	0.0207
-67.5	1.711	-36.0	46.06	-4.5	3875	27.0	104.5	58.5	12.74	90.0	0.0146
-66.0	2.579	-34.5	53.20	-3.0	4684	28.5	88.07	60.0	11.87		
-64.5	5.064	-33.0	60.79	-1.5	5348	30.0	75.10	61.5	8.801		
-63.0	9.128	-31.5	69.52	0.0	5491	31.5	64.86	63.0	5.156		
-61.5	12.72	-30.0	80.14	1.5	5004	33.0	56.37	64.5	2.803		
-60.0	13.91	-28.5	93.54	3.0	4247	34.5	47.93	66.0	1.907		

## 10° CDM111 Illuminance Measurement



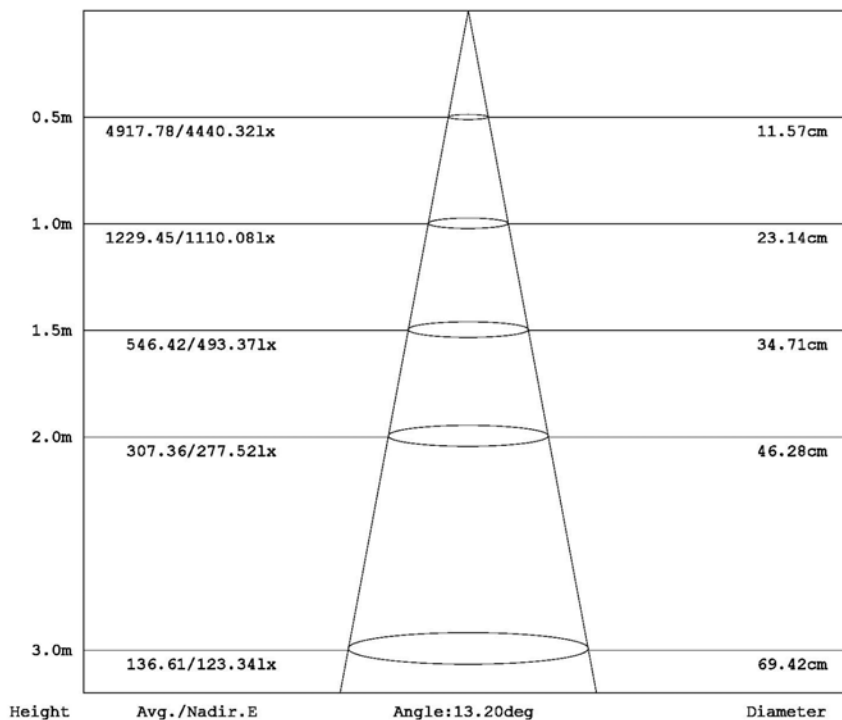
## 15° CDM111 Intensity (C0-180 plane) Measurement



Intensity data:(deg , cd) C0-180

A	I	A	I	A	I	A	I	A	I	A	I
-90.0	0.0084	-58.5	0.7553	-27.0	169.9	4.5	957.2	36.0	157.0	67.5	0.3058
-88.5	0.0068	-57.0	1.062	-25.5	173.8	6.0	835.6	37.5	153.4	69.0	0.2688
-87.0	0.0083	-55.5	1.461	-24.0	178.0	7.5	708.2	39.0	149.5	70.5	0.2345
-85.5	0.0053	-54.0	2.234	-22.5	182.9	9.0	590.2	40.5	145.2	72.0	0.2030
-84.0	0.0220	-52.5	5.196	-21.0	188.9	10.5	490.4	42.0	140.6	73.5	0.1741
-82.5	0.0388	-51.0	17.79	-19.5	196.4	12.0	404.0	43.5	136.0	75.0	0.1520
-81.0	0.0570	-49.5	42.11	-18.0	206.9	13.5	341.5	45.0	131.1	76.5	0.1290
-79.5	0.0740	-48.0	76.19	-16.5	221.8	15.0	297.4	46.5	125.3	78.0	0.1102
-78.0	0.0878	-46.5	107.4	-15.0	242.1	16.5	265.6	48.0	112.3	79.5	0.0896
-76.5	0.1093	-45.0	120.3	-13.5	269.7	18.0	241.3	49.5	81.70	81.0	0.0744
-75.0	0.1342	-43.5	125.2	-12.0	311.5	19.5	222.5	51.0	44.64	82.5	0.0577
-73.5	0.1579	-42.0	129.5	-10.5	368.5	21.0	208.8	52.5	17.59	84.0	0.0390
-72.0	0.1712	-40.5	133.7	-9.0	450.3	22.5	198.7	54.0	4.681	85.5	0.0239
-70.5	0.2113	-39.0	137.8	-7.5	555.2	24.0	191.1	55.5	2.044	87.0	0.0089
-69.0	0.2395	-37.5	142.2	-6.0	679.7	25.5	185.3	57.0	1.357	88.5	0.0049
-67.5	0.2787	-36.0	146.4	-4.5	817.1	27.0	180.5	58.5	0.9883	90.0	0.0034
-66.0	0.3185	-34.5	150.3	-3.0	949.7	28.5	176.5	60.0	0.7115		
-64.5	0.3639	-33.0	153.9	-1.5	1051	30.0	172.4	61.5	0.5093		
-63.0	0.4123	-31.5	157.7	0.0	1110	31.5	168.3	63.0	0.4358		
-61.5	0.4625	-30.0	161.7	1.5	1112	33.0	164.3	64.5	0.3918		
-60.0	0.5318	-28.5	165.7	3.0	1057	34.5	160.5	66.0	0.3457		

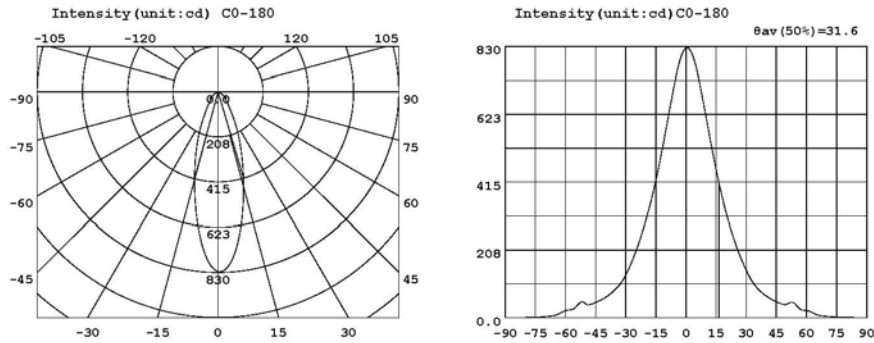
## 15° CDM111 Illuminance Measurement



3<sup>rd</sup> Floor, Building 36, Xin Mu Industrial Park, Ping Hu Town, Longgang, Shenzhen, China PRC  
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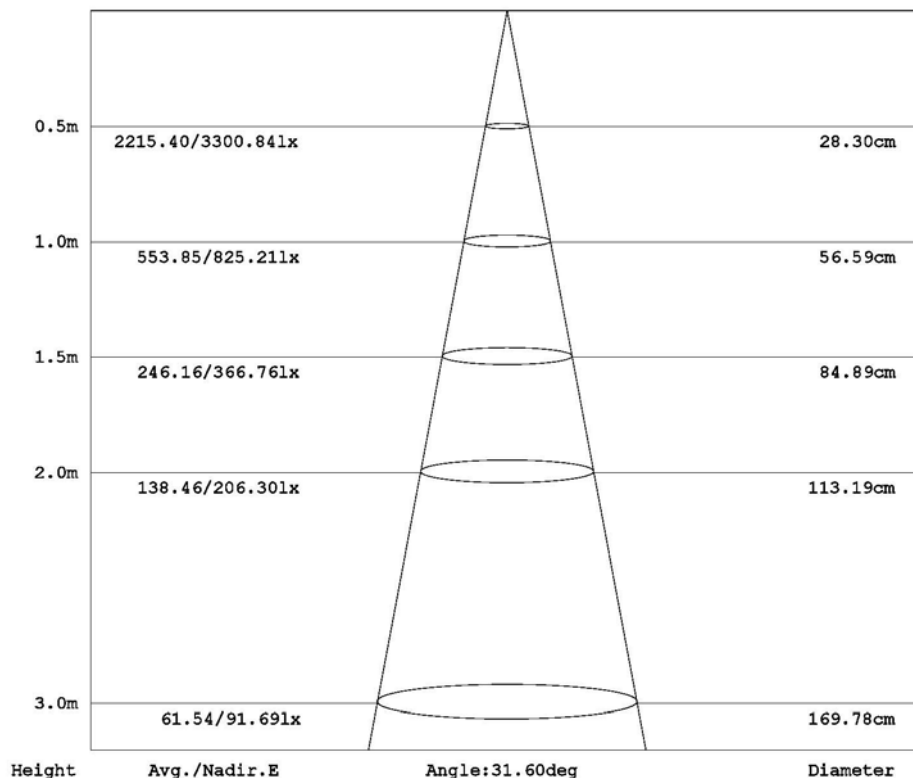
## 35° CDM111 Intensity (C0-180 plane) Measurement



Intensity data:(deg , cd) C0-180

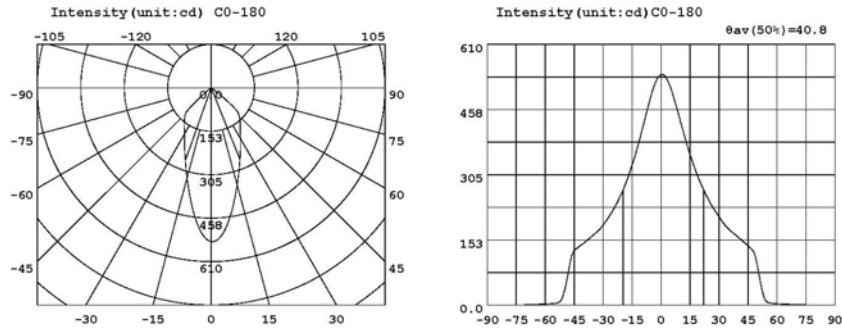
A	I A	I A	I A	I A	I A	I A	I A
-90.0	0.0	-58.5	23.31	-27.0	170.7	4.5	780.2
-88.5	0.0034	-57.0	24.72	-25.5	194.1	6.0	742.0
-87.0	0.0001	-55.5	28.67	-24.0	219.4	7.5	697.5
-85.5	0.0252	-54.0	37.79	-22.5	246.8	9.0	649.1
-84.0	0.0643	-52.5	46.95	-21.0	276.1	10.5	599.1
-82.5	0.1484	-51.0	47.98	-19.5	307.7	12.0	548.5
-81.0	0.2412	-49.5	40.77	-18.0	342.0	13.5	500.4
-79.5	0.3682	-48.0	39.89	-16.5	378.9	15.0	453.9
-78.0	0.5496	-46.5	42.92	-15.0	418.7	16.5	410.9
-76.5	0.8185	-45.0	46.56	-13.5	462.7	18.0	370.6
-75.0	1.180	-43.5	50.52	-12.0	509.0	19.5	332.9
-73.5	1.609	-42.0	55.24	-10.5	557.8	21.0	299.0
-72.0	2.185	-40.5	60.69	-9.0	607.3	22.5	268.2
-70.5	3.071	-39.0	66.87	-7.5	657.8	24.0	239.5
-69.0	4.019	-37.5	73.73	-6.0	706.3	25.5	213.1
-67.5	5.016	-36.0	81.74	-4.5	750.4	27.0	188.9
-66.0	6.287	-34.5	90.88	-3.0	786.8	28.5	166.9
-64.5	8.358	-33.0	101.3	-1.5	812.4	30.0	146.2
-63.0	12.44	-31.5	114.2	0.0	825.2	31.5	127.4
-61.5	17.51	-30.0	130.5	1.5	822.9	33.0	111.3
-60.0	21.57	-28.5	149.6	3.0	807.8	34.5	98.18

## 35° CDM111 Illuminance Measurement





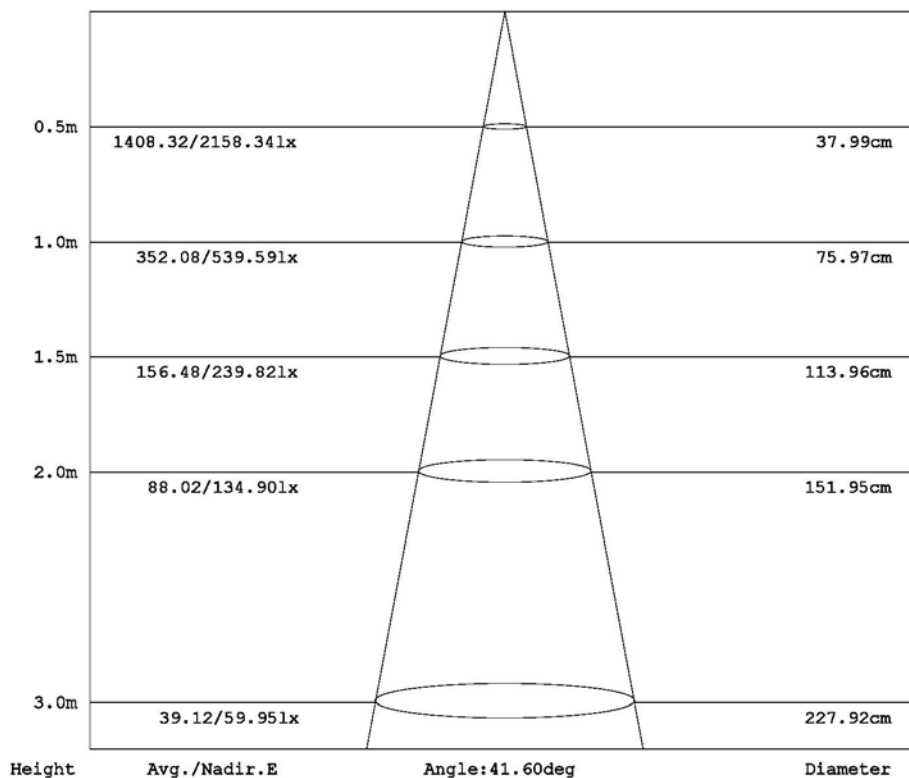
## 45° CDM111 Intensity (C0-180 plane) Measurement



Intensity data:(deg , cd) C0-180

A	I	A	I	A	I	A	I	A	I	A	I
-90.0	0.0134	-58.5	3.095	-27.0	207.1	4.5	514.2	36.0	173.7	67.5	1.829
-88.5	0.0051	-57.0	3.648	-25.5	217.7	6.0	494.1	37.5	168.0	69.0	1.566
-87.0	0.0034	-55.5	4.322	-24.0	229.4	7.5	471.2	39.0	162.6	70.5	1.310
-85.5	0.0053	-54.0	5.355	-22.5	242.2	9.0	447.3	40.5	156.8	72.0	1.092
-84.0	0.0340	-52.5	8.005	-21.0	256.0	10.5	422.3	42.0	150.9	73.5	0.9293
-82.5	0.0793	-51.0	19.11	-19.5	271.2	12.0	397.7	43.5	145.1	75.0	0.7839
-81.0	0.1264	-49.5	42.78	-18.0	288.4	13.5	374.4	45.0	138.9	76.5	0.6707
-79.5	0.1753	-48.0	77.14	-16.5	307.3	15.0	352.6	46.5	132.6	78.0	0.5688
-78.0	0.2360	-46.5	110.6	-15.0	327.8	16.5	332.5	48.0	123.6	79.5	0.4787
-76.5	0.3034	-45.0	127.6	-13.5	348.6	18.0	313.6	49.5	99.92	81.0	0.3971
-75.0	0.3945	-43.5	133.5	-12.0	373.0	19.5	296.1	51.0	64.96	82.5	0.3173
-73.5	0.5045	-42.0	138.6	-10.5	398.4	21.0	280.1	52.5	31.18	84.0	0.2390
-72.0	0.6458	-40.5	143.7	-9.0	424.7	22.5	265.3	54.0	12.05	85.5	0.1477
-70.5	0.7902	-39.0	149.1	-7.5	451.2	24.0	251.7	55.5	6.276	87.0	0.0665
-69.0	0.9878	-37.5	154.6	-6.0	476.7	25.5	239.0	57.0	4.862	88.5	0.0094
-67.5	1.223	-36.0	160.6	-4.5	500.6	27.0	227.6	58.5	4.087	90.0	0.0096
-66.0	1.505	-34.5	166.4	-3.0	519.8	28.5	217.0	60.0	3.497		
-64.5	1.799	-33.0	172.5	-1.5	533.3	30.0	206.8	61.5	3.019		
-63.0	2.083	-31.5	179.3	0.0	539.5	31.5	197.0	63.0	2.674		
-61.5	2.373	-30.0	187.5	1.5	538.1	33.0	187.9	64.5	2.391		
-60.0	2.686	-28.5	196.9	3.0	529.1	34.5	180.1	66.0	2.114		

## 45° AR111 Illuminance Measurement



## LIMITED WARRANTY

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PRELIMINARY

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