

# GTO LED FLOOD LIGHT 100W



**MODEL: GTO-TGS10-100W**  
**POWER: 100W**  
**VOLTAGE: AC165-265V**  
**FREQUENCY: 50/60Hz**  
**CCT: 6000-6500k**  
**IP66**  
**MADE IN CHINA**



## TECHNICAL DATA

### Electrical data

Nominal wattage	100 W
Operating mode	Separated electronic
Nominal voltage	LED Driver 165:265 V
Power factor $\lambda$	$\geq 0.97$
Mains frequency	50/60 Hz

### Photometrical data

Color temperature	6000 : 6500 K
Luminous flux	13000 lm
Luminous efficacy	Up to 130 lm/W
Standard deviation of color matching	$\leq 5$
Light color (designation)	sdcM Daylight
Color rendering index Ra	$\geq 80$

### Light technical data

Beam angle	90 °
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### Colors & materials

Body material	Aluminum
Product color	Black
Housing color	Black
Cover material	PMMA 3030 Led Optical Led Lens

### Temperatures & operating conditions

Ambient temperature range	-5 : +55 °C
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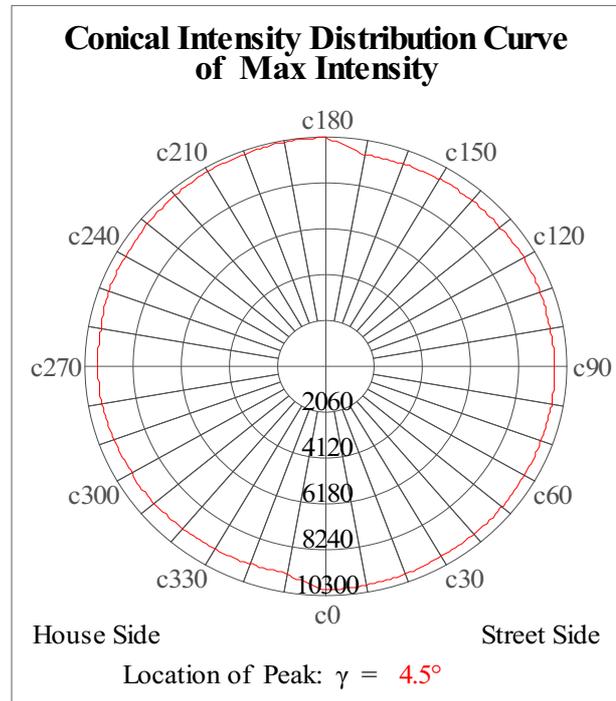
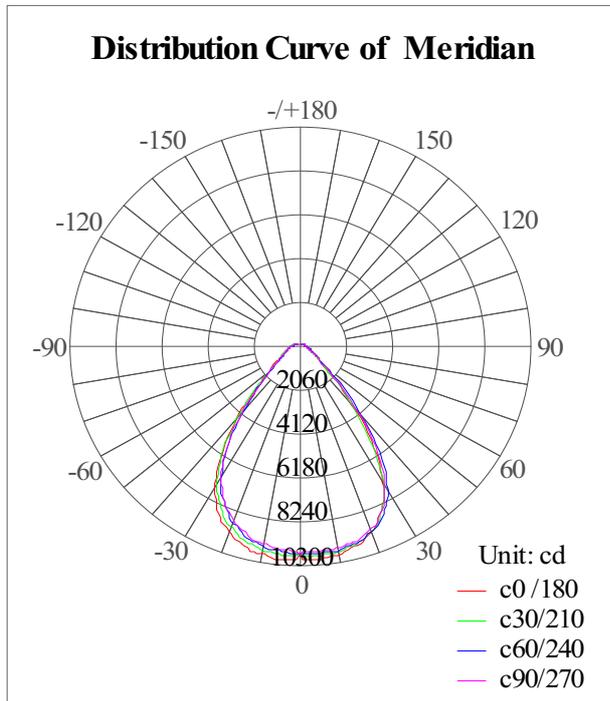
### Lifespan

Number of switching cycles	50000
Lifespan L70/B50	50000 h

## Photometric Data of Lamp

Lamp Description		
Lamp Name: GTO-TGS10-100W	Lamp Size:	Lamp Weight:
Lamp Type: Flood light	Rated Voltage: 165:265 V	Rated Power: 100 W
Light Type: LED	Light Number: 120Pcs	Rated Flux:
Light Standard:	Light Area:	Light Flux:

Measured Data of Lamp			
Voltage: 230.2 V	Current: 0.452 A	Power: 102.4 W	Power Factor: 0.983
Total Flux	13,246.5lm	Central Intensity	9917.43 cd
Lamp Efficiency	0.00%	Light Efficiency	129.36 lm/W
Peak Intensity	10277.60 cd	Location of Peak(c, $\gamma$ )	(0.0°, 4.5°)
Half-Intensity Angle	72.0°	BeamAngle	90.8°
Upward Light Ratio	0	Downward Light Ratio	100%
Upward Street Side	0	Downward Street Side	7100.98 lm
Upward House Side	0	Downward House Side	6862.60 lm
Flash Area(76°)	0 cm <sup>2</sup>	Discomfort Glare(SLI)	0

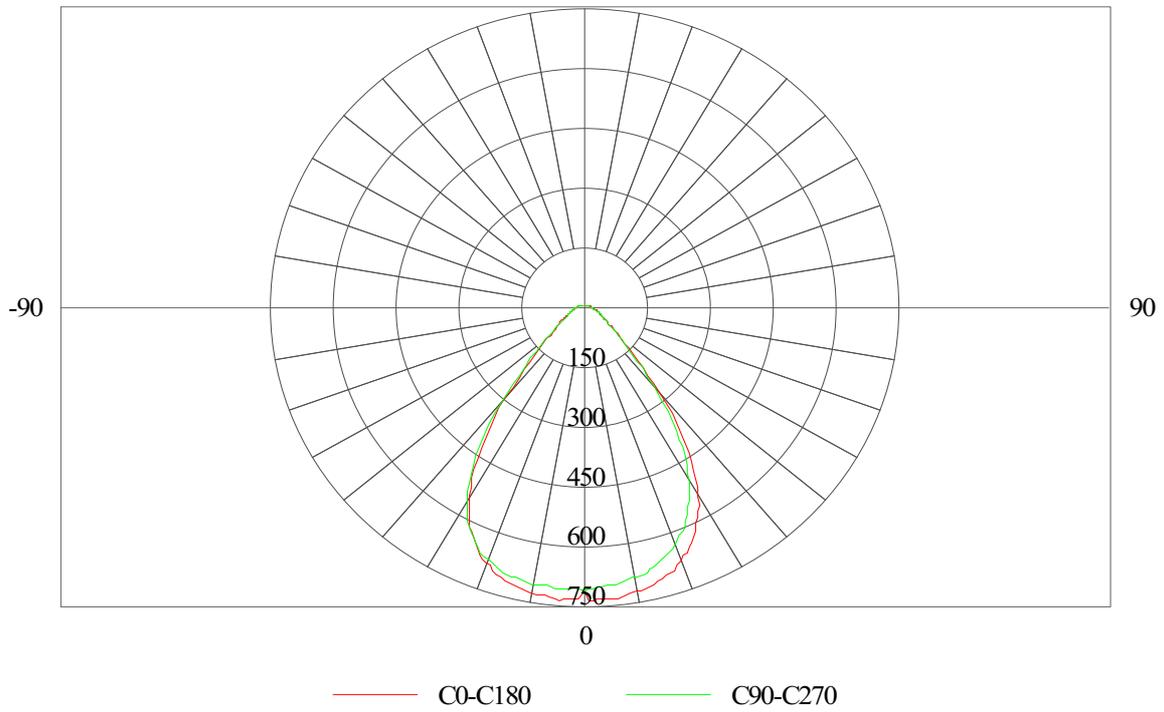


c Range: 0度-360度  
 c Interval: 10度  
 Test Speed: 快速  
 Test Distance: 7.5 m  
 Note: notes

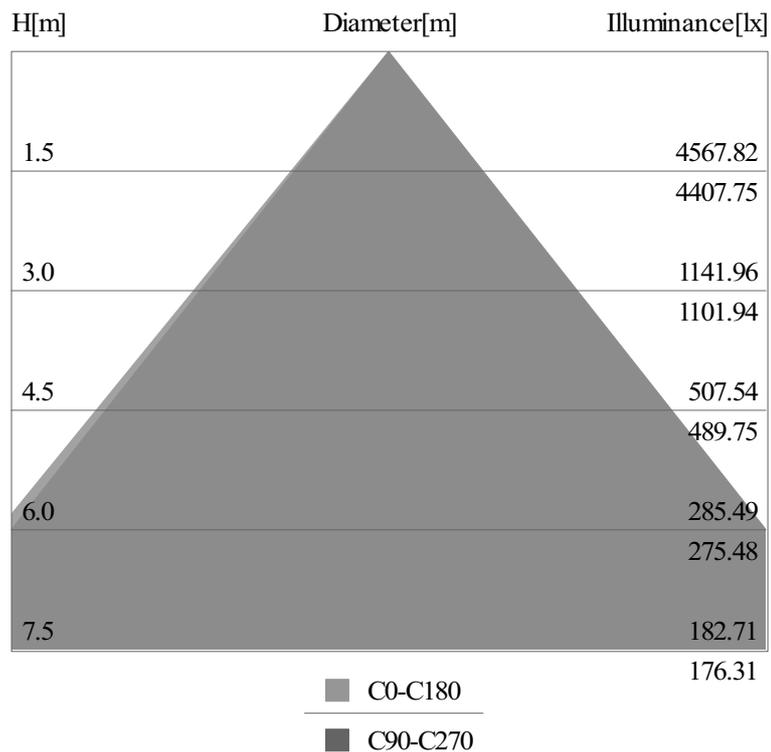
$\gamma$  Range: 0度-90度  
 $\gamma$  Interval: 0.9度  
 Test Date: 2019-11-01  
 Test Time: 19-52-27

Temperature: 30°C  
 Humidity: 60%  
 Test No.: 01  
 Tester: 01

### cd/1000 lm Curve

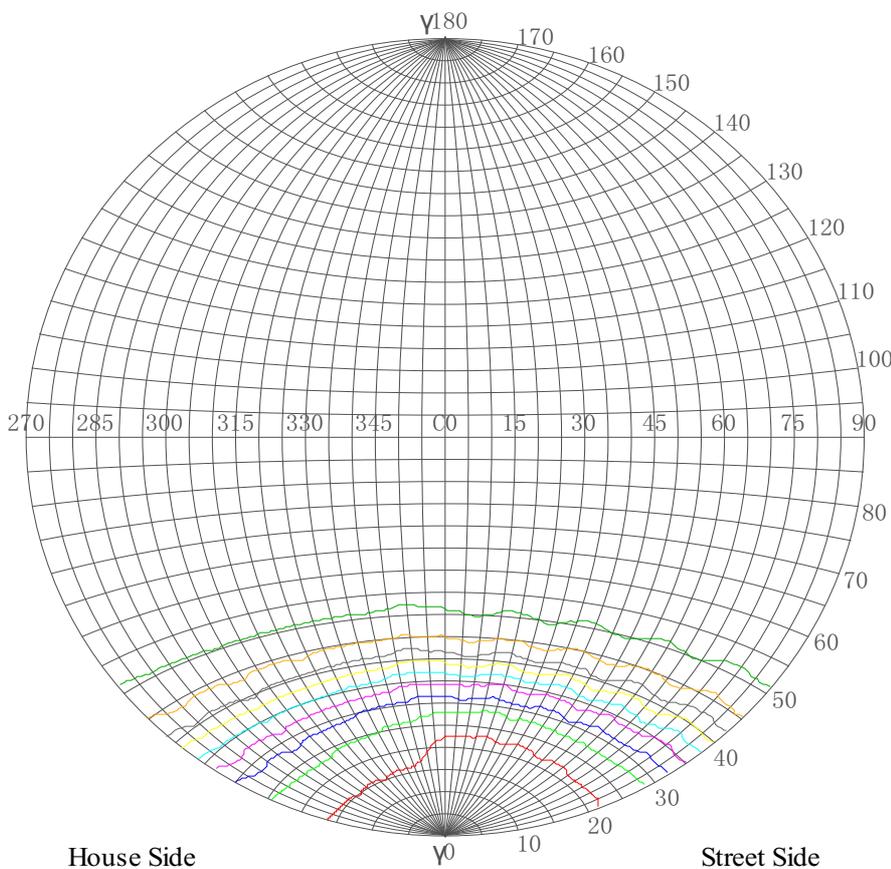


### Illumination Cone Curve



## Isocandela Curve of Road Lamp (Round Net Curve)

Lamp Description		
Lamp Name: GTO-TGS10-100W	Lamp Size:	Lamp Weight:
Lamp Type: Flood light	Rated Voltage: 165:265 V	Rated Power: 100 W
Light Type: LED	Light Number: 120Pcs	Rated Flux:
Light Standard:	Light Area:	Light Flux:



### Road Lamp Type

CIE: 截光型  
 CIE: 短投射-窄扩展  
 IES: 截光型  
 IES: V类-极短投射  
 Max. At80: 8.93cd/klm  
 Max. At90: 3.5215cd/klm

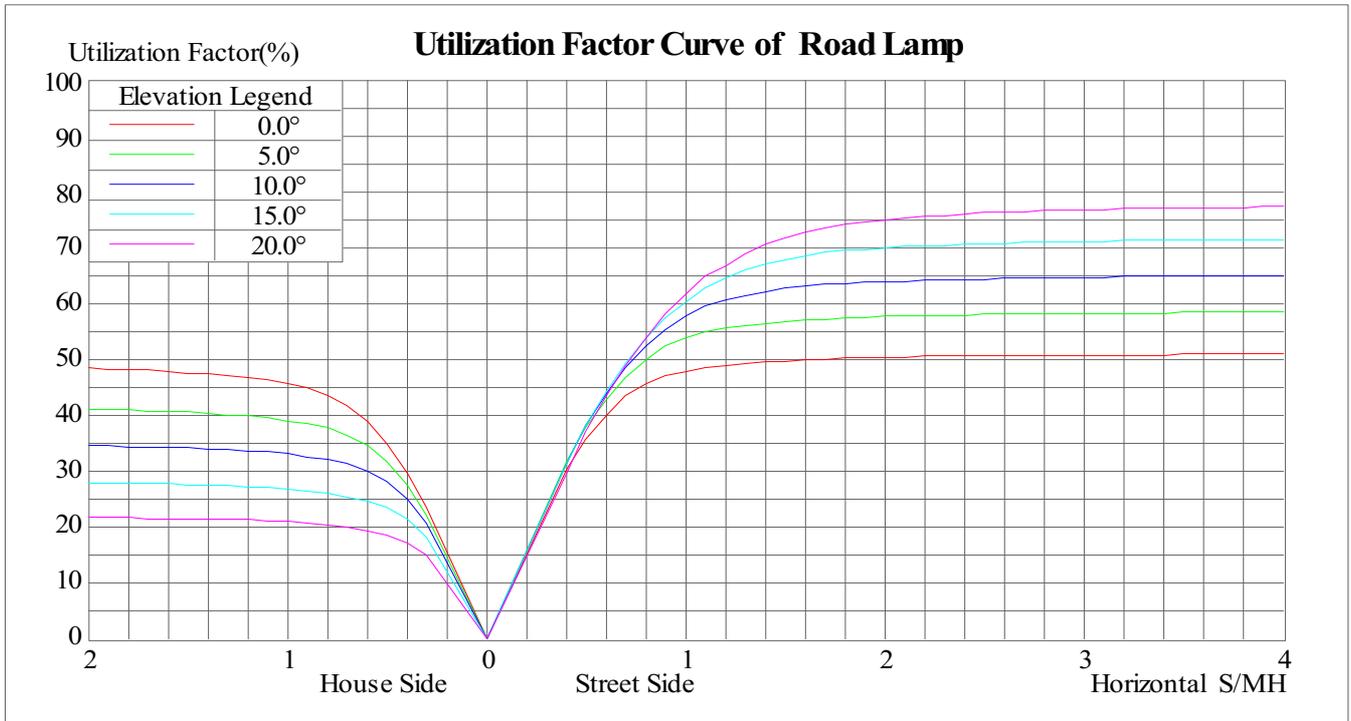
Isocandela Curve(Round Net)		
Intensity Unit	cd	
Imax = 100%	10278	
— 90%	9250	
— 80%	8223	
— 70%	7195	
— 60%	6167	
— 50%	5139	
— 40%	4112	
— 30%	3084	
— 20%	2056	
— 10%	1028	

c Range: 0度-360度  
 c Interval: 10度  
 Test Speed: 快速  
 Test Distance: 7.5 m  
 Note: notes

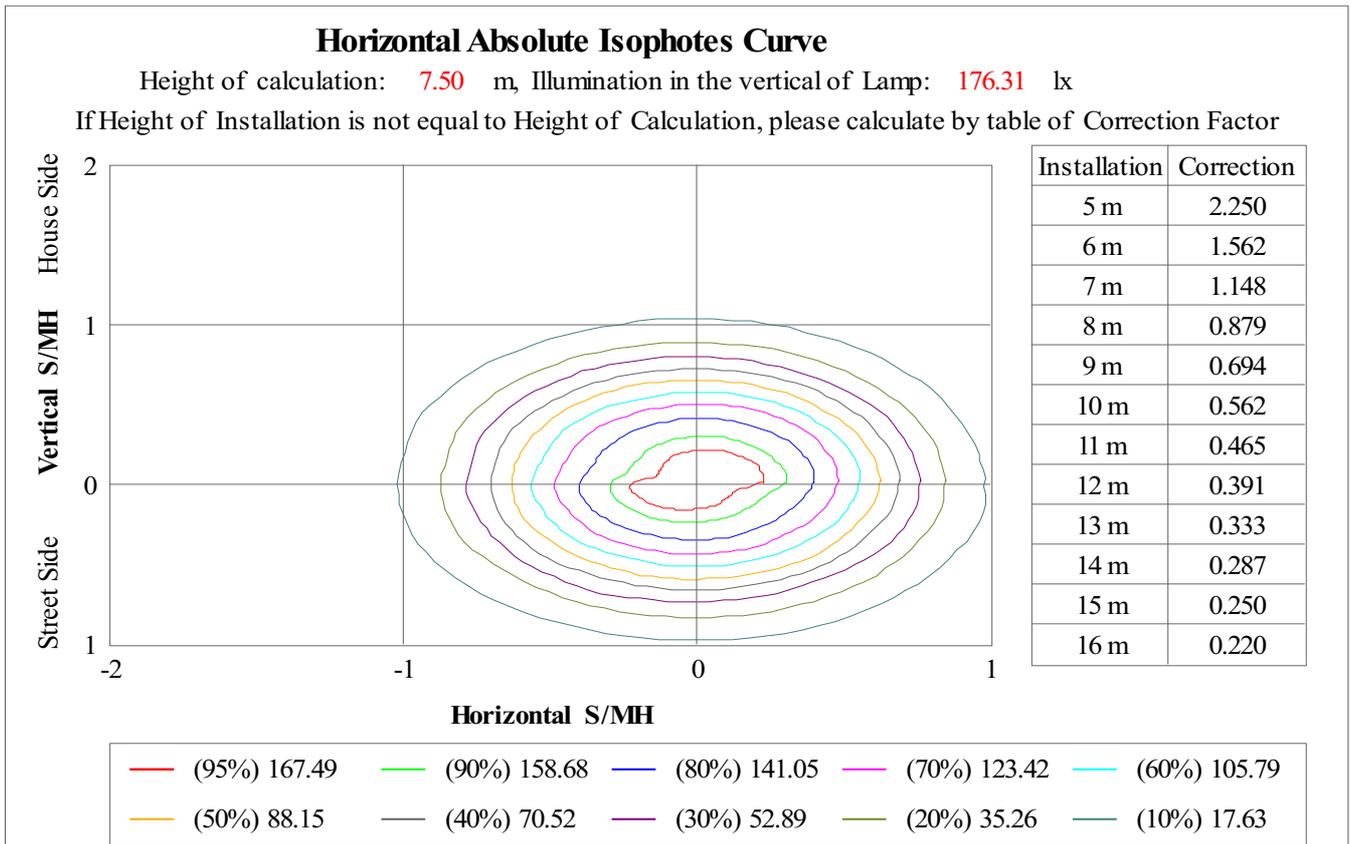
γ Range: 0度-90度  
 γ Interval: 0.9度  
 Test Date: 2019-11-01  
 Test Time: 19-52-27

Temperature: 30°C  
 Humidity: 60%  
 Test No.: 01  
 Tester: 01

## Lamp Utilization Factor Curve

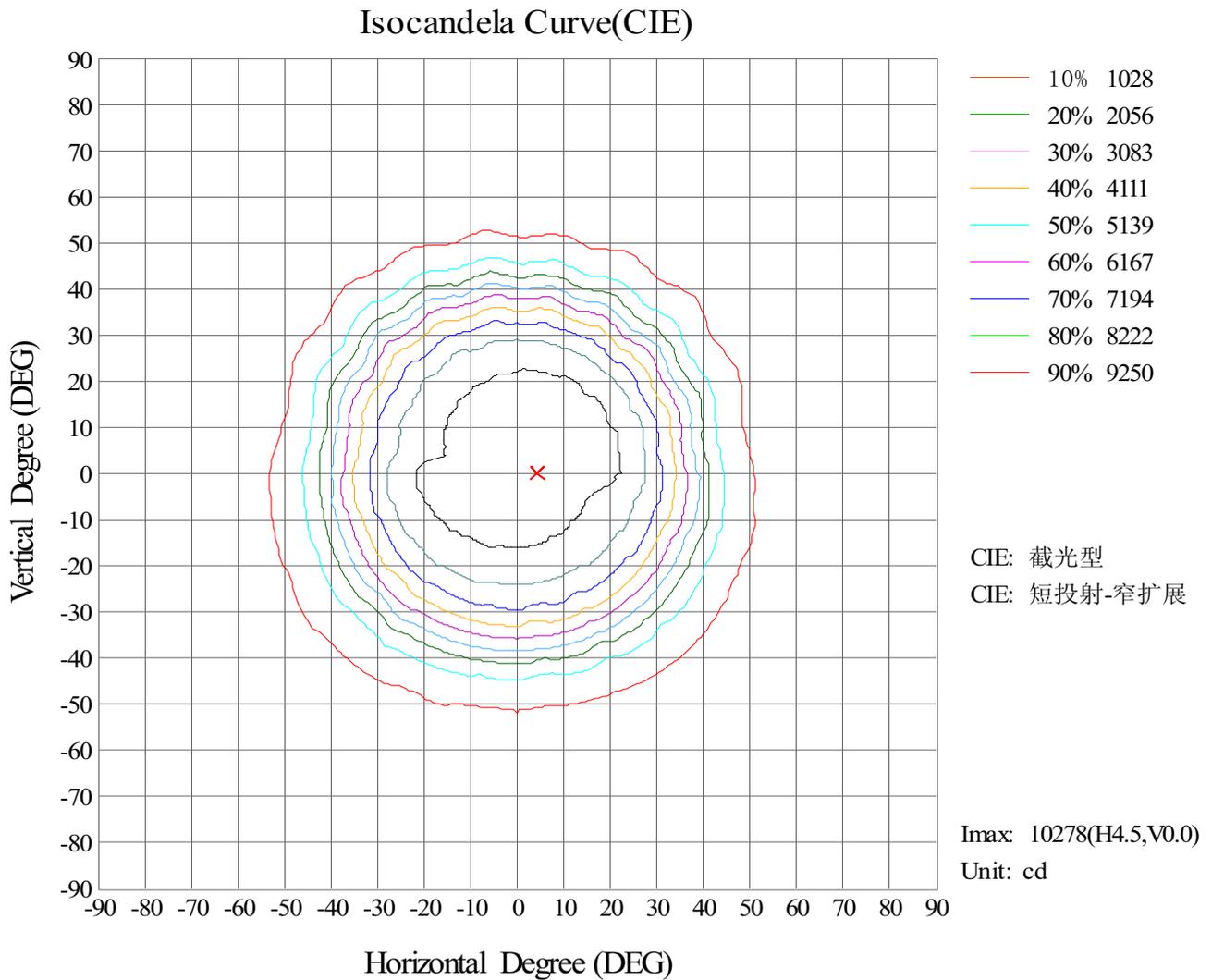


## Horizontal Isophotes Curve



## Isocandela Curve of Lamp

Lamp Description		
Lamp Name: GTO-TGS10-100W	Lamp Size:	Lamp Weight:
Lamp Type: Flood light	Rated Voltage: 165:265 V	Rated Power: 100 W
Light Type: LED	Light Number: 120Pcs	Rated Flux:
Light Standard:	Light Area:	Light Flux:



c Range: 0度-360度  
 c Interval: 10度  
 Test Speed: 快速  
 Test Distance: 7.5 m  
 Note: notes

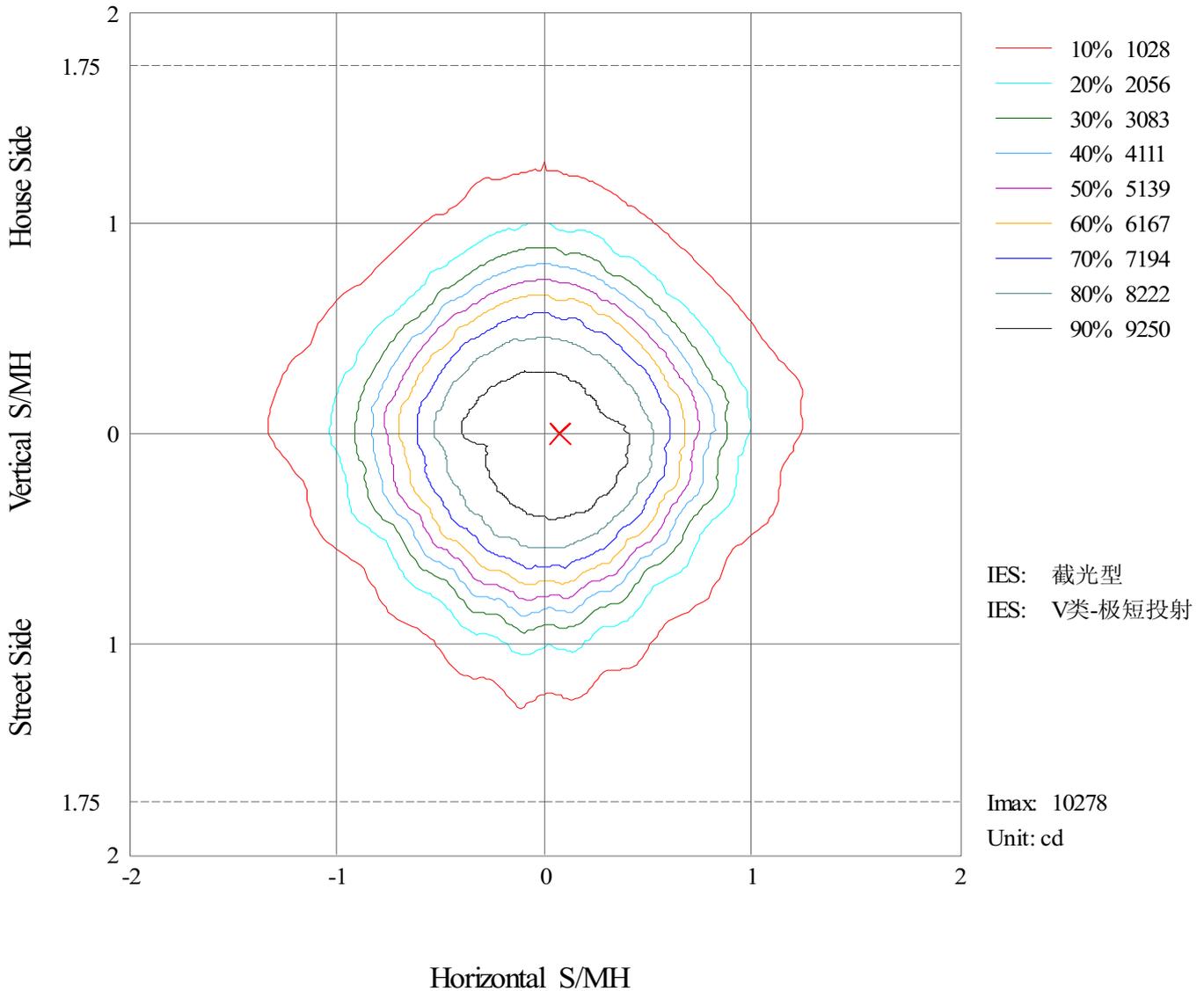
γ Range: 0度-90度  
 γ Interval: 0.9度  
 Test Date: 2019-11-01  
 Test Time: 19-52-27

Temperature: 30°C  
 Humidity: 60%  
 Test No.: 01  
 Tester: 01

## Isocandela Curve of Lamp

Lamp Description		
Lamp Name: GTO-TGS10-100W	Lamp Size:	Lamp Weight:
Lamp Type: Flood light	Rated Voltage: 165:265 V	Rated Power: 100 W
Light Type: LED	Light Number: 120Pcs	Rated Flux:
Light Standard:	Light Area:	Light Flux:

Isocandela Curve(IES)



c Range: 0度-360度  
c Interval: 10度  
Test Speed: 快速  
Test Distance: 7.5 m  
Note: notes

$\gamma$  Range: 0度-90度  
 $\gamma$  Interval: 0.9度  
Test Date: 2019-11-01  
Test Time: 19-52-27

Temperature: 30°C  
Humidity: 60%  
Test No.: 01  
Tester: 01



## Data Form of Intensity Distribution Curve

Unit: cd

$\gamma$ C	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0.0	9917	9917	9917	9917	9917	9917	9917	9917	9917	9917	9917	9917	9917	9917	9917	9917	9917	9917	9917
3.6	10259	10168	10164	10111	10016	10032	9998	9917	9915	9889	9820	9837	9804	9712	9697	9669	9665	9597	10216
7.2	10179	10121	10073	10033	10031	9961	9927	9921	9883	9832	9870	9760	9730	9725	9670	9603	9606	9543	10228
10.8	10139	10086	10063	10000	10000	9973	9943	9913	9887	9840	9769	9752	9728	9658	9630	9585	9485	9476	10103
14.4	9930	9867	9891	9885	9835	9814	9831	9747	9733	9718	9692	9627	9577	9488	9449	9387	9401	9277	9888
18.0	9677	9643	9686	9625	9716	9649	9647	9611	9620	9492	9540	9410	9406	9349	9319	9190	9163	9088	9679
21.6	9325	9267	9373	9339	9392	9314	9398	9292	9311	9245	9201	9147	9152	9007	9001	8891	8835	8701	9228
25.2	8691	8615	8798	8705	8886	8773	8885	8772	8871	8719	8823	8621	8679	8518	8548	8339	8445	8215	8665
28.8	7856	7781	8092	7924	8194	7997	8235	8042	8240	7996	8177	7946	8098	7849	7973	7698	7750	7504	7902
32.4	6738	6459	6948	6649	7117	6751	7240	6906	7257	6963	7271	6929	7197	6831	7064	6694	6936	6502	6809
36.0	5235	4886	5579	5109	5765	5313	5931	5445	6096	5580	6109	5576	6085	5511	6000	5404	5830	5248	5498
39.6	3687	3251	3962	3437	4217	3603	4425	3873	4550	3988	4683	4042	4658	4045	4602	3917	4449	3720	4008
43.2	2396	2002	2580	2112	2722	2284	2923	2417	3065	2542	3151	2594	3208	2563	3144	2532	3043	2387	2618
46.8	1518	1297	1639	1354	1755	1422	1846	1519	1942	1570	2021	1577	2018	1576	2005	1526	1917	1462	1695
50.4	1065	903.3	1100	918.0	1152	948.1	1206	992.2	1236	1010	1273	1018	1271	1007	1248	992.0	1233	968.2	1193
54.0	786.6	680.1	810.6	690.0	820.3	694.7	835.6	697.3	858.5	718.4	861.2	710.0	867.4	704.2	865.8	709.6	855.8	703.4	899.6
57.6	618.5	534.6	619.1	536.6	628.5	533.8	632.6	546.8	631.5	543.3	643.5	549.5	640.6	552.2	642.2	546.9	643.4	540.8	723.8
61.2	490.9	415.8	490.3	417.9	490.0	424.7	492.7	425.6	495.9	428.2	494.0	427.4	502.2	433.0	502.0	436.1	498.9	424.7	581.0
64.8	377.3	315.8	378.2	321.9	388.2	326.4	388.6	331.0	385.1	327.4	388.5	330.3	394.9	337.0	396.9	333.0	395.3	325.1	458.8
68.4	286.2	230.0	283.4	231.5	292.8	244.9	297.1	246.2	292.8	244.1	296.2	246.9	303.2	254.3	304.3	252.8	300.9	243.2	358.0
72.0	200.1	152.4	199.1	154.7	207.8	164.4	214.3	166.4	213.0	169.7	213.6	169.3	221.0	178.5	225.1	176.6	220.0	168.6	261.1
75.6	122.7	91.01	121.9	92.24	129.2	98.50	135.2	102.6	135.9	105.8	139.0	108.1	143.9	113.3	147.2	112.1	143.5	109.2	182.0
79.2	59.12	37.10	60.81	38.20	63.93	41.13	68.58	45.48	73.65	51.53	77.45	53.36	80.63	57.94	84.05	58.50	82.07	58.05	119.6
82.8	18.78	15.05	19.30	15.36	19.85	15.82	21.59	16.53	24.20	17.25	27.78	17.98	30.19	18.68	32.50	19.79	33.66	19.68	69.11
86.4	11.76	10.04	11.83	9.95	12.14	10.33	12.72	10.68	13.12	11.11	13.49	11.65	13.91	11.78	14.04	11.97	13.98	12.06	54.72
90.0	9.56	10.22	9.99	10.41	10.13	10.43	9.99	9.99	9.77	9.99	9.54	9.96	9.40	9.35	9.91	9.35	9.54	9.99	47.88