

GTO LED FLOOD LIGHT 200W



MODEL: GTO-TGS13-200W

POWER: 200W

VOLTAGE: AC165-265V

FREQUENCY: 50/60Hz

CCT: 6000-6500k

IP66

MADE IN CHINA



RoHS
compliant



TECHNICAL DATA

Electrical data

Nominal wattage	200 W
Operating mode	Separated electronic LED Driver
Nominal voltage	165:265 V
Power factor λ	≥ 0.97
Mains frequency	50/60 Hz

Photometrical data

Color temperature	6000 : 6500 K
Luminous flux	26000 lm
Luminous efficacy	Up to 130 lm/W
Standard deviation of color matching	≤ 5
Light color (designation)	sdcm Daylight
Color rendering index Ra	≥ 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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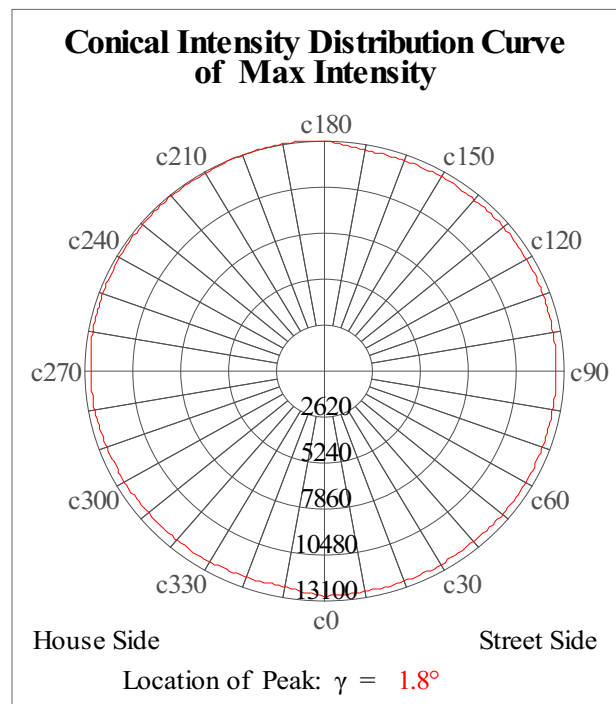
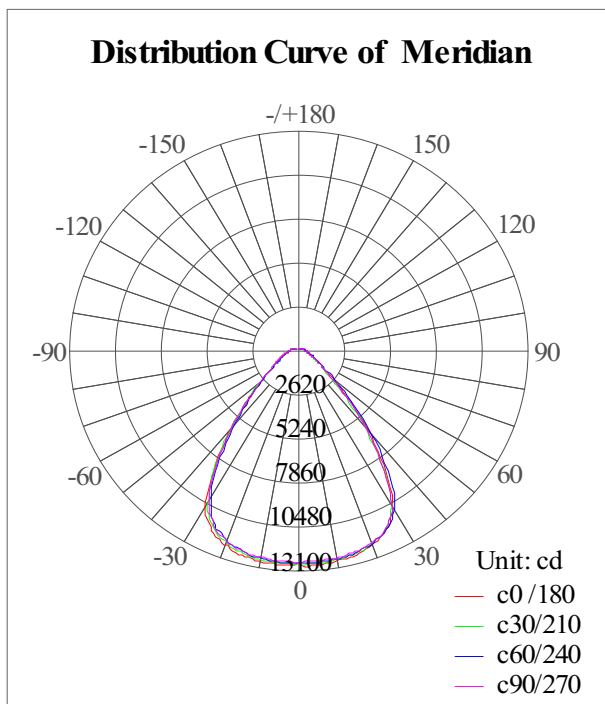
Lifespan

Number of switching cycles	50000
Lifespan L70/B50	50000 h

Photometric Data of Lamp

Lamp Description		
Lamp Name: GTO-TGS13-200W	Lamp Size:	Lamp Weight:
Lamp Type: Flood light	Rated Voltage: 165:265 V	Rated Power: 200W
Light Type: LED PHILIPS 2D	Light Number: 240Pcs	Rated Flux:
Light Standard:	Light Area:	Light Flux:

Measured Data of Lamp			
Voltage: 230.7 V	Current: 0.684 A	Power: 195.4 W	Power Factor: 0.982
Total Flux	25,366.8 lm	Central Intensity	26592.82 cd
Lamp Efficiency	0.00%	Light Efficiency	129.82 lm/W
Peak Intensity	13041.97 cd	Location of Peak(c, γ)	(0.0°, 1.8°)
Half-Intensity Angle	77.4°	BeamAngle	111.6°
Upward Light Ratio	0	Downward Light Ratio	100%
Upward Street Side	0	Downward Street Side	10279.14 lm
Upward House Side	0	Downward House Side	10141.40 lm
Flash Area(76°)	0 cm ²	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

 γ Range: 0度-90度 γ Interval: 0.9度

Test Date: 2019-11-01

Test Time: 20-13-25

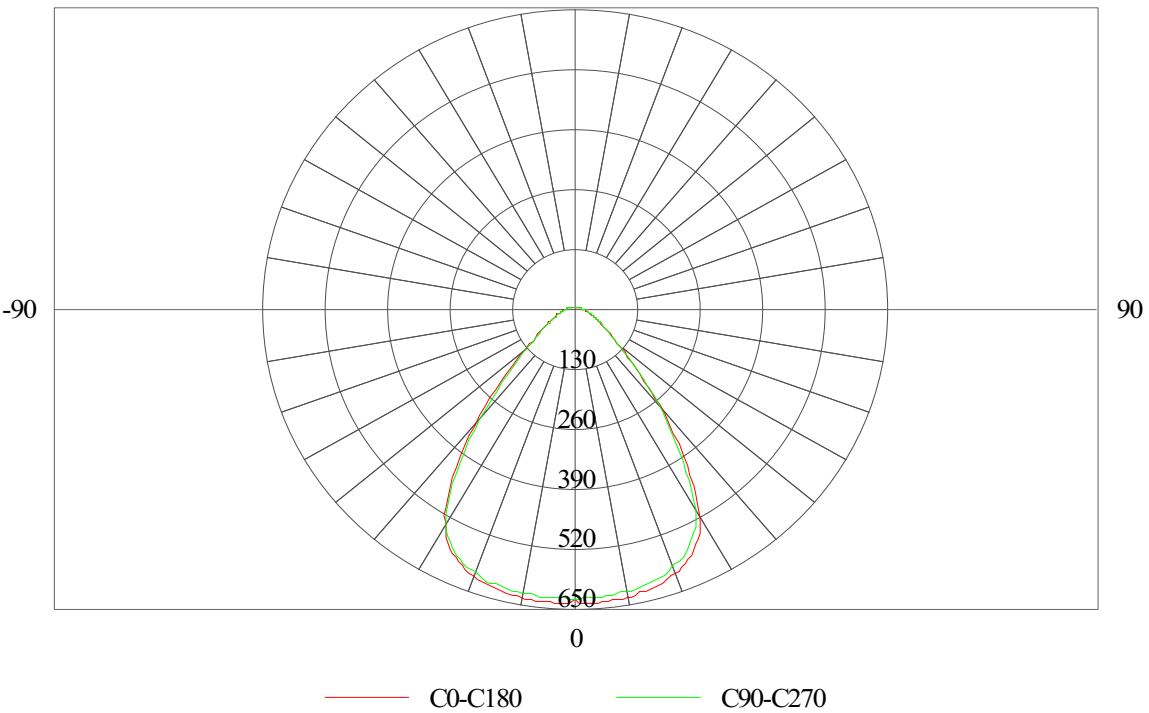
Temperature: 30℃

Humidity: 60%

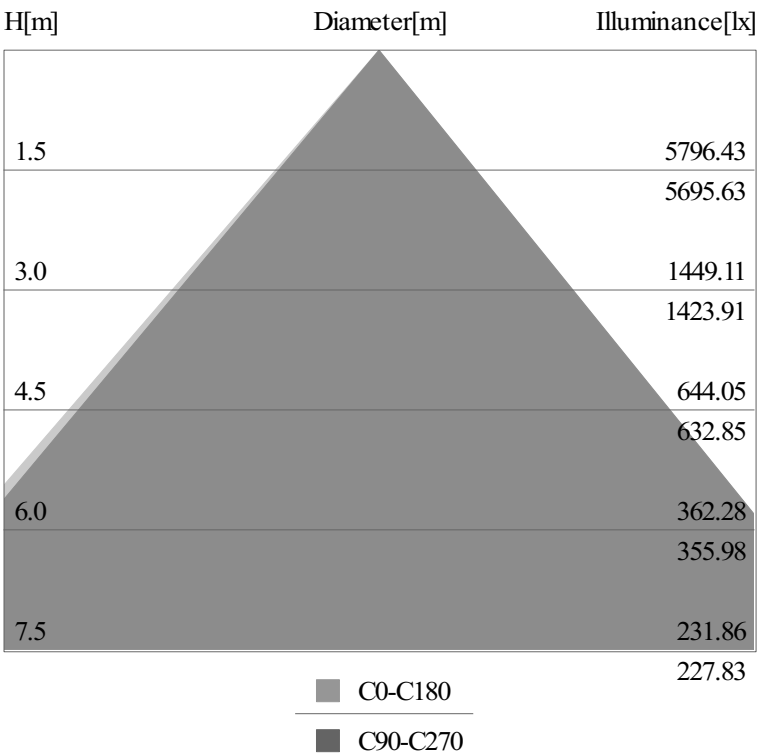
Test No.: 01

Tester: 01

cd/1000 lm Curve



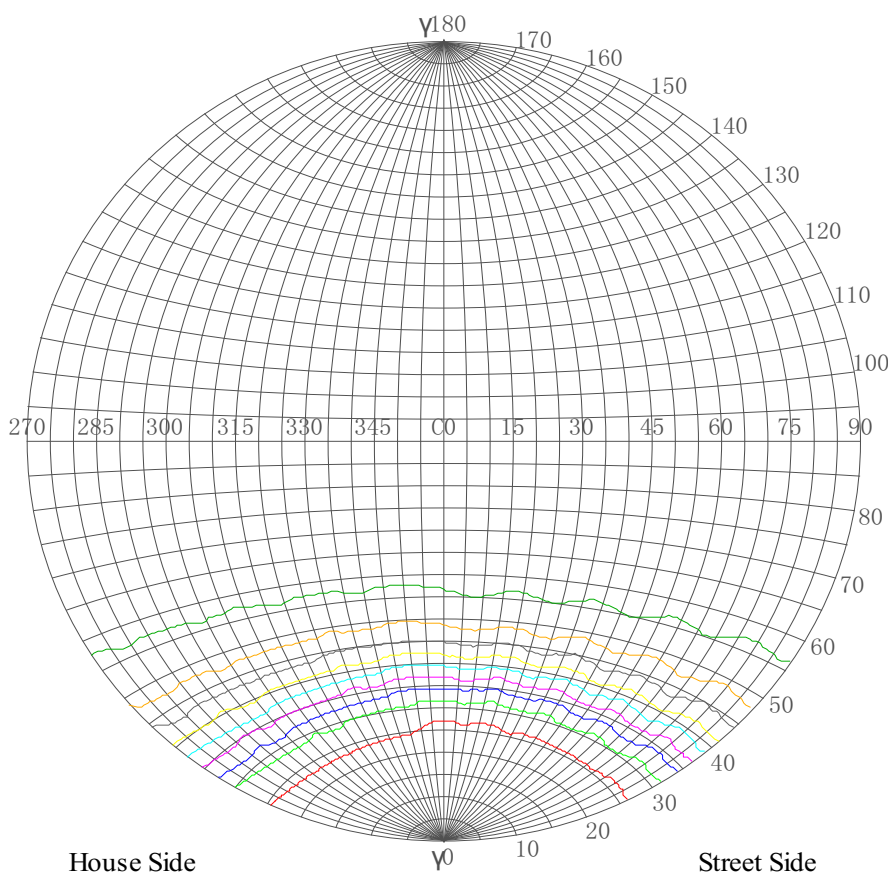
Illumination Cone Curve



Isocandela Curve of Road Lamp (Round Net Curve)

Lamp Description

Lamp Name: GTO-TGS13-200W	Lamp Size:	Lamp Weight:
Lamp Type: Flood light	Rated Voltage: 165:265 V	Rated Power: 200W
Light Type: LED PHILIPS 2D	Light Number: 240Pcs	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: 11.00cd/klm
 Max. At90: 3.8419cd/klm

Isocandela Curve(Round Net)	
Intensity Unit	cd
Imax = 100%	13042
90%	11738
80%	10434
70%	9130
60%	7826
50%	6521
40%	5217
30%	3913
20%	2609
10%	1305

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: 20-13-25

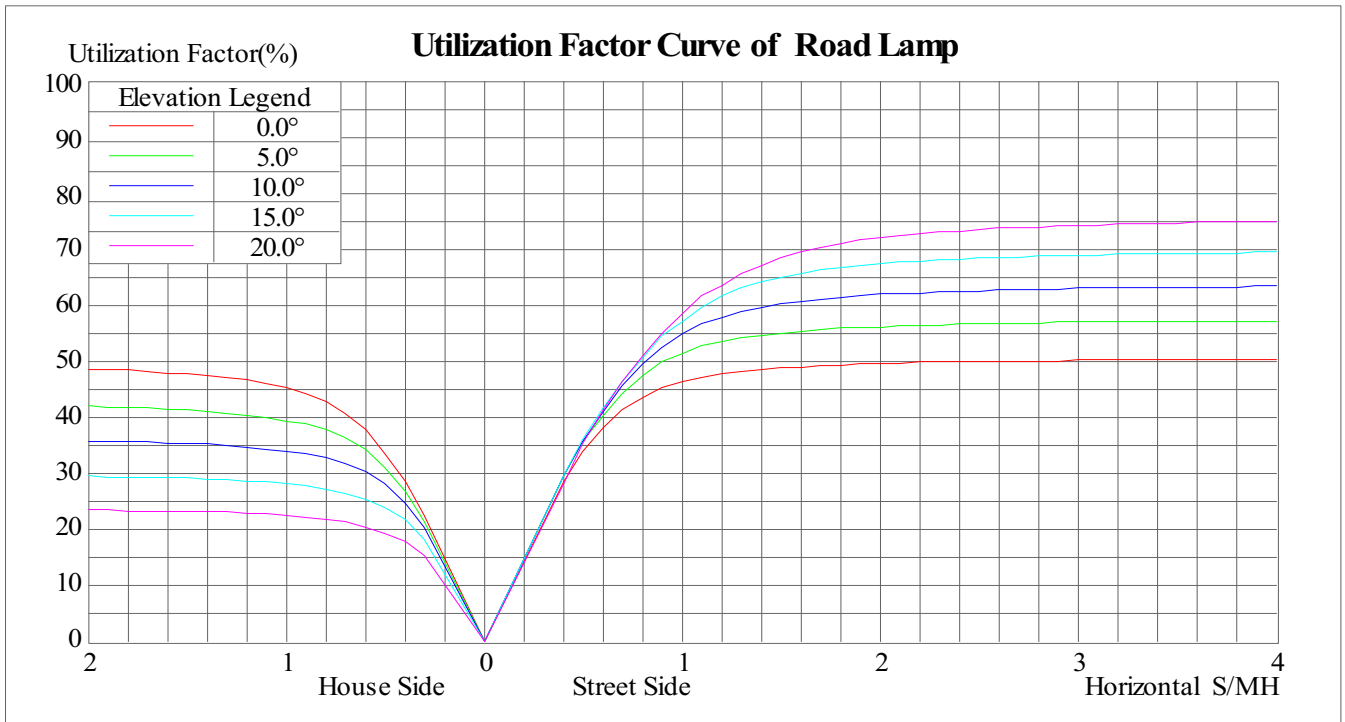
Temperature: 30℃

Humidity: 60%

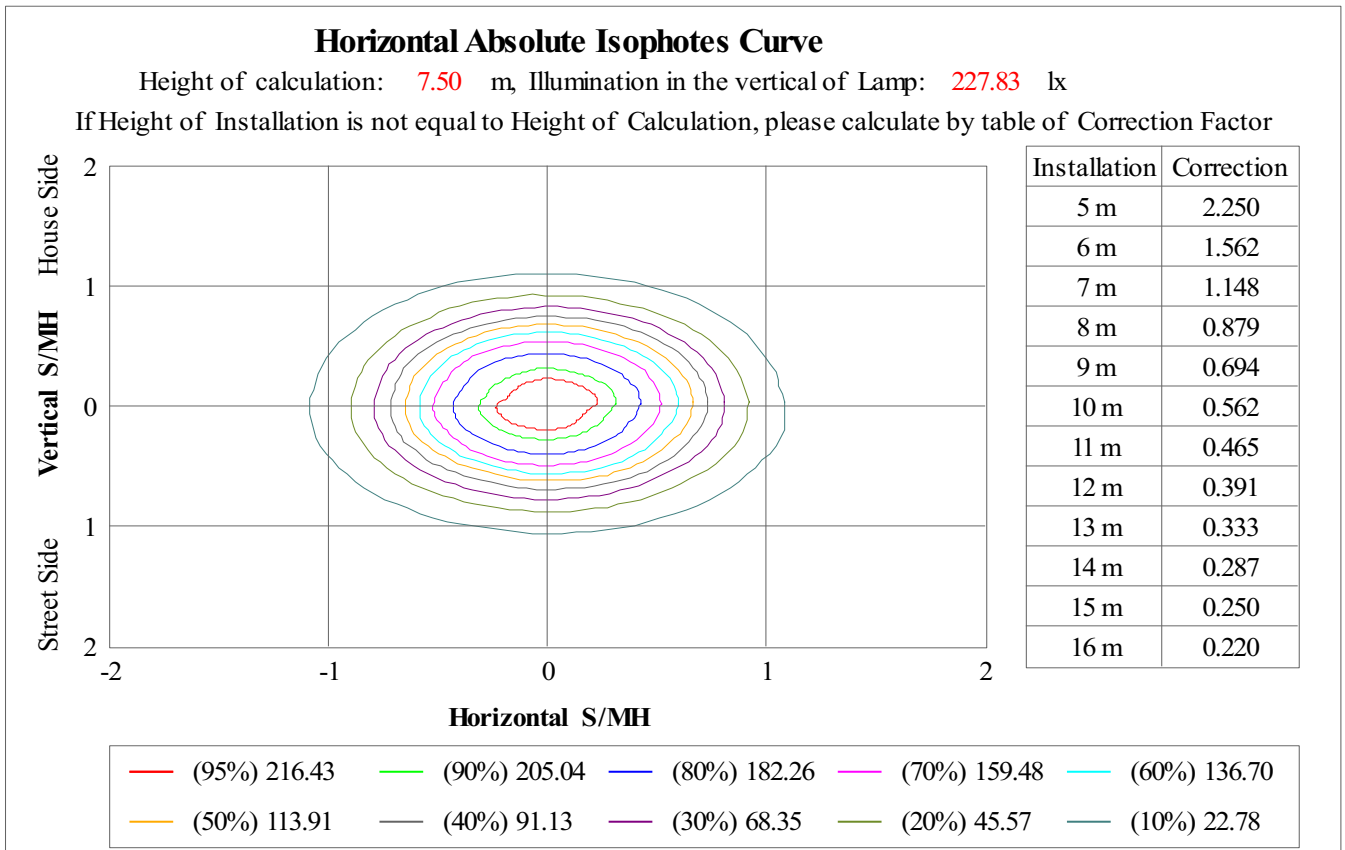
Test No.: 01

Tester: 01

Lamp Utilization Factor Curve



Horizontal Isophotes Curve

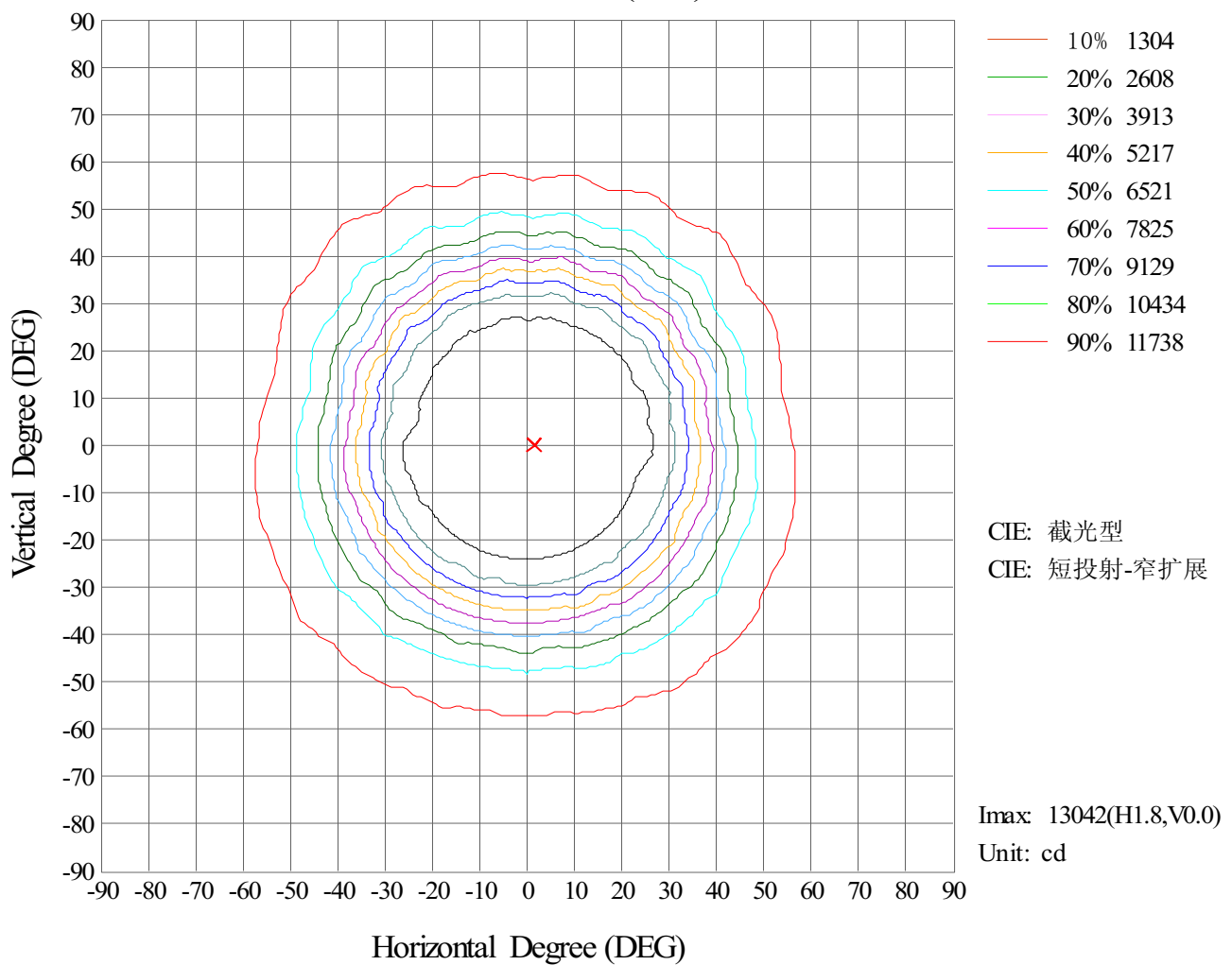


Isocandela Curve of Lamp

Lamp Description

Lamp Name: GTO-TGS13-200W	Lamp Size:	Lamp Weight:
Lamp Type: Flood light	Rated Voltage: 165:265 V	Rated Power: 200W
Light Type: LED PHILIPS 2D	Light Number: 240Pcs	Rated Flux:
Light Standard:	Light Area:	Light Flux:

Isocandela Curve(CIE)



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: 20-13-25

Temperature: 30℃

Humidity: 60%

Test No.: 01

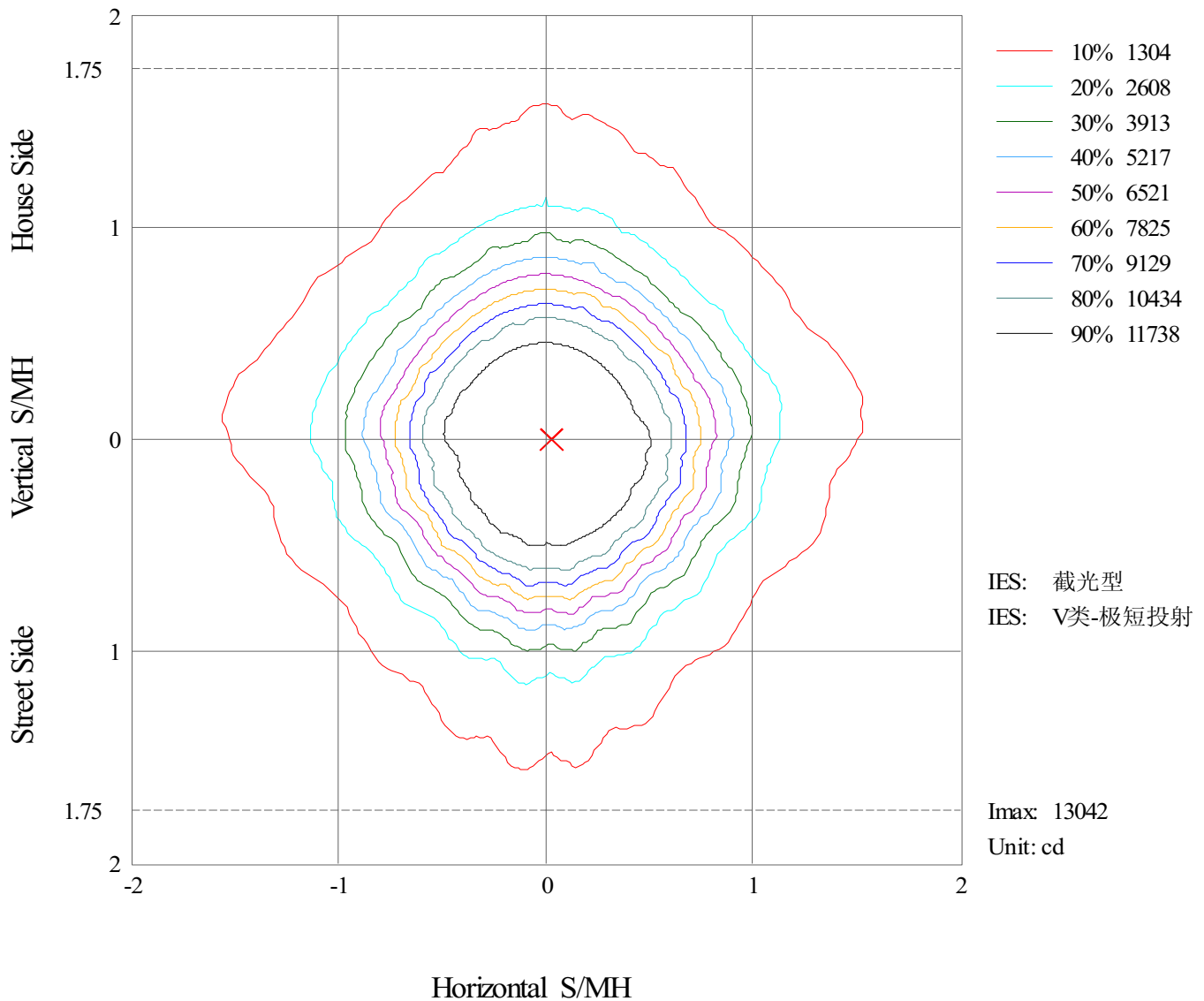
Tester: 01

Isocandela Curve of Lamp

Lamp Description

Lamp Name: GTO-TGS13-200W	Lamp Size:	Lamp Weight:
Lamp Type: Flood light	Rated Voltage: 165:265 V	Rated Power: 200W
Light Type: LED PHILIPS 2D	Light Number: 240Pcs	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

 γ Range: 0度-90度 γ Interval: 0.9度

Test Date: 2019-11-01

Test Time: 20-13-25

Temperature: 30℃

Humidity: 60%

Test No.: 01

Tester: 01

Lamp Ring with Flux

Lamp Description

Lamp Name: GTO-TGS13-200W	Lamp Size:	Lamp Weight:
Lamp Type: Flood light	Rated Voltage: 165:265 V	Rated Power: 200W
Light Type: LED PHILIPS 2D	Light Number: 240Pcs	Rated Flux:
Light Standard:	Light Area:	Light Flux:

γ	C0	C90	C180	C270	$\gamma(^{\circ})$	$\Phi(\text{Ring})$	$\Phi(\text{Total})$	%
3.6	13012	12770	13036	12747	0.0-3.6	158.8	158.8	0.78
7.2	12999	12758	12948	12730	3.6-7.2	474.9	633.7	3.10
10.8	12885	12739	12940	12670	7.2-10.8	786.5	1420	6.95
14.4	12840	12600	12805	12496	10.8-14.4	1089	2510	12.29
18.0	12645	12502	12604	12346	14.4-18.0	1378	3888	19.04
21.6	12397	12274	12326	12025	18.0-21.6	2091	5979	29.28
25.2	11992	11843	11757	11475	21.6-25.2	1917	7896	38.66
28.8	11217	11169	10961	10612	25.2-28.8	2049	9945	48.70
32.4	9943	9754	9327	9035	28.8-32.4	2026	11971	58.62
36.0	8105	7800	7462	7303	32.4-36.0	1841	13812	67.64
39.6	6212	5852	5636	5531	36.0-39.6	1547	15359	75.21
43.2	4425	4078	4049	4005	39.6-43.2	1215	16574	81.16
46.8	3053	2775	2898	2836	43.2-46.8	909.3	17483	85.61
50.4	2108	1975	2073	2105	46.8-50.4	680.3	18163	88.95
54.0	1534	1432	1551	1611	50.4-54.0	524.9	18688	91.52
57.6	1183	1111	1203	1285	54.0-57.6	420.6	19109	93.58
61.2	933.5	856.0	955.5	1026	57.6-61.2	342.2	19451	95.25
64.8	746.3	664.0	768.5	823.1	61.2-64.8	280.6	19732	96.63
68.4	582.6	503.9	603.5	657.2	64.8-68.4	226.1	19958	97.73
72.0	441.2	358.6	454.6	499.6	68.4-72.0	175.4	20133	98.59
75.6	302.1	235.3	318.5	357.2	72.0-75.6	99.15	20232	99.08
79.2	179.6	123.5	200.7	234.9	75.6-79.2	92.25	20324	99.53
82.8	75.03	37.44	105.3	133.6	79.2-82.8	51.48	20376	99.78
86.4	22.44	19.92	83.21	85.88	82.8-86.4	25.29	20401	99.91
90.0	18.63	17.99	77.34	76.40	86.4-90.0	19.36	20421	100.00
Unit: $^{\circ}$	Intensity Unit: cd					Unit: lm		

Data Form of Intensity Distribution Curve

Unit: cd

γC	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0.0	12815	12815	12815	12815	12815	12815	12815	12815	12815	12815	12815	12815	12815	12815	12815	12815	12815	12815	12815
3.6	13012	12996	12959	12894	12913	12882	12823	12804	12824	12770	12753	12722	12712	12677	12701	12674	12663	12635	13036
7.2	12999	12924	12946	12905	12851	12844	12850	12810	12762	12758	12746	12744	12729	12705	12644	12632	12605	12583	12948
10.8	12885	12906	12839	12853	12847	12775	12771	12769	12770	12739	12729	12658	12639	12619	12606	12545	12525	12481	12940
14.4	12840	12754	12782	12708	12727	12718	12707	12651	12678	12600	12596	12604	12594	12546	12532	12493	12467	12418	12805
18.0	12645	12576	12631	12593	12574	12503	12562	12545	12516	12502	12506	12458	12457	12409	12353	12274	12252	12174	12604
21.6	12397	12330	12321	12291	12366	12305	12312	12243	12351	12274	12304	12191	12206	12102	12155	12053	12014	11901	12326
25.2	11992	11807	11992	11856	11933	11842	11990	11901	11952	11843	11886	11840	11886	11739	11699	11555	11598	11376	11757
28.8	11217	11081	11314	11153	11364	11149	11325	11155	11355	11169	11354	11060	11188	10894	11040	10644	10777	10365	10961
32.4	9943	9514	10114	9699	10245	9776	10262	9728	10280	9754	10145	9585	9988	9337	9692	9132	9425	8794	9327
36.0	8105	7594	8400	7804	8497	7829	8499	7885	8459	7800	8414	7670	8223	7481	7981	7161	7727	6943	7462
39.6	6212	5616	6500	5834	6652	5934	6673	5814	6607	5852	6519	5673	6350	5478	6121	5373	5911	5147	5636
43.2	4425	3880	4693	4029	4850	4078	4821	4113	4789	4078	4747	3977	4609	3902	4464	3756	4332	3631	4049
46.8	3053	2571	3195	2669	3304	2781	3344	2771	3293	2775	3287	2735	3237	2681	3150	2623	3069	2525	2898
50.4	2108	1772	2185	1840	2280	1891	2328	1938	2335	1975	2333	1937	2302	1939	2265	1879	2187	1779	2073
54.0	1534	1311	1564	1344	1621	1397	1674	1423	1677	1432	1694	1456	1704	1445	1671	1374	1617	1301	1551
57.6	1183	1029	1212	1057	1237	1076	1264	1078	1277	1111	1296	1111	1306	1100	1277	1050	1198	969.1	1203
61.2	933.5	821.9	949.6	837.2	978.5	844.0	979.6	850.4	986.1	856.0	1005	863.5	1004	848.7	967.7	797.6	909.6	750.5	955.5
64.8	746.3	642.2	765.6	657.1	767.7	665.6	772.2	654.0	764.2	664.0	777.6	664.2	779.2	645.9	746.4	609.7	698.0	572.7	768.5
68.4	582.6	496.9	592.5	507.6	603.6	505.5	599.5	505.0	593.4	503.9	605.6	502.1	592.8	489.4	566.1	459.2	535.9	441.5	603.5
72.0	441.2	356.2	443.3	366.2	452.1	374.2	451.1	366.2	440.3	358.6	446.5	362.5	439.6	349.1	419.1	325.1	396.8	316.2	454.6
75.6	302.1	234.3	300.7	241.9	312.8	253.0	313.6	246.5	301.0	235.3	301.5	239.7	299.3	232.7	284.9	214.2	265.7	207.9	318.5
79.2	179.6	125.9	172.9	131.4	189.4	143.1	190.3	134.2	177.1	123.5	176.0	128.6	179.0	126.6	166.6	111.3	154.1	109.2	200.7
82.8	75.03	40.01	71.43	40.92	80.76	44.48	81.36	41.44	69.34	37.44	70.80	40.02	75.14	38.81	68.06	33.87	60.30	32.40	105.3
86.4	22.44	19.83	22.30	19.83	22.47	20.17	22.23	19.56	22.29	19.92	22.07	19.55	22.17	19.39	21.87	19.19	21.44	19.18	83.21
90.0	18.63	19.00	18.31	18.21	18.03	18.40	17.80	18.36	18.17	17.99	17.94	18.59	18.17	18.58	17.94	18.17	17.20	18.17	77.34