

# LUMINAIRE PHOTOMETRIC TEST REPORT

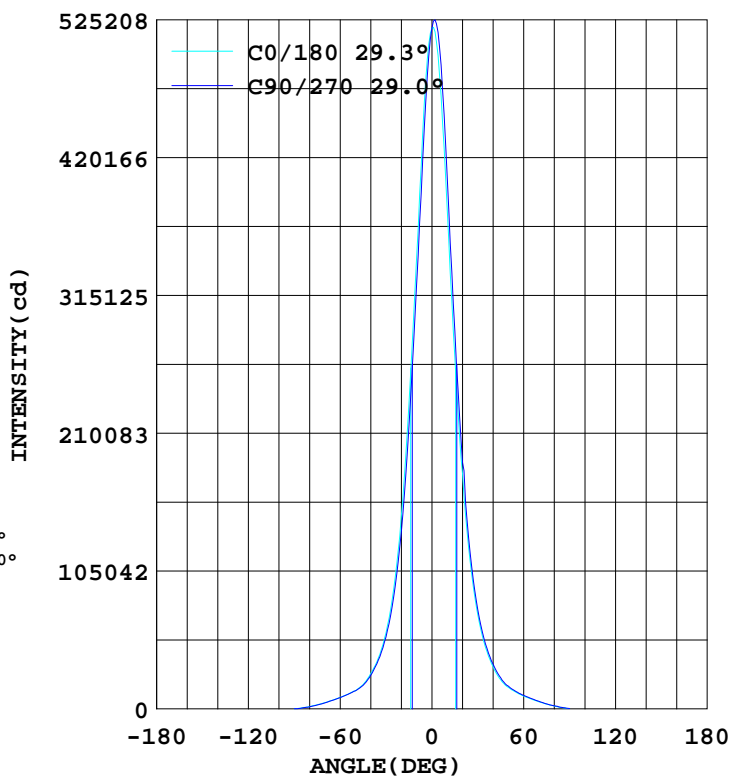
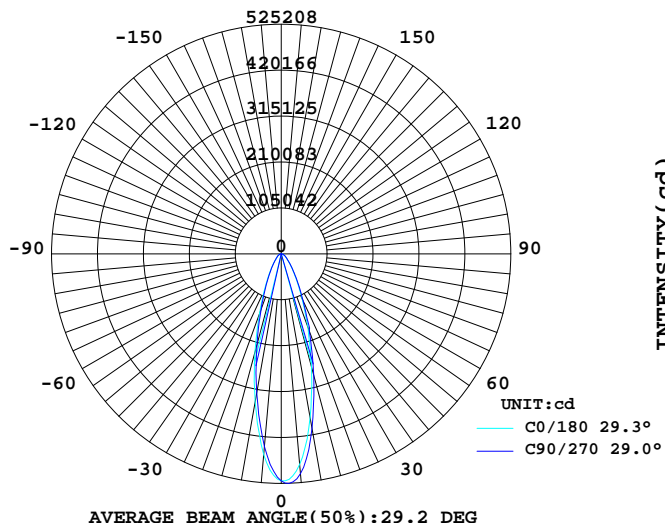
Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N150040-030	WEIGHT:
SPECIFICATION:5050LED 4000K 30°	DIMENSION:	SERIAL No.:

DATA OF LAMP		Imax(cd)	525682	S/MH(C0/180)	0.45
MODEL		EFFICIENCY(%)	100.0	S/MH(C90/270)	0.43
NOMINAL POWER(W)	1500	TOTAL FLUX(lm)	225000	Voltage(V)	231.1
RATED VOLTAGE(V)	230	EFFICIENCY(lm/W)	150.0	Current(A)	6.490
NOMINAL FLUX(lm)	225000.0	$\eta$ up(%)	0.0	Power(W)	1500
LAMPS QUANTITY	1	$\eta$ down(%)	100.0	Power Factor(PF)	1.000
TEST VOLTAGE(V)	231.1	Effective Flux(lm)	225000.2	EEI	0.100

## LUMINOUS INTENSITY DISTRIBUTION

## LUMINOUS INTENSITY DISTRIBUTION



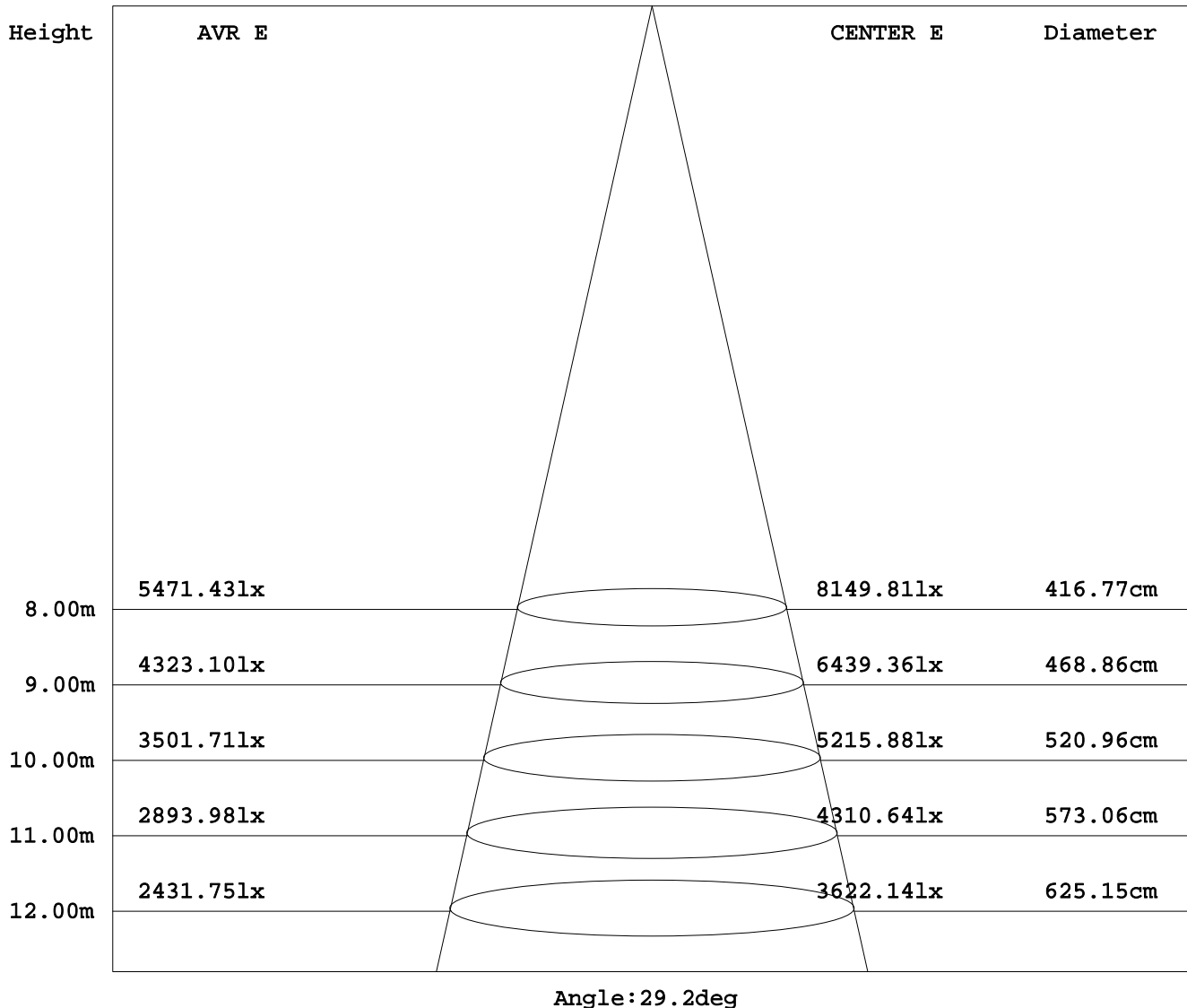
Test System:  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2025.02.20

Test Set: 5.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:10.000 m  
 Remarks:

## AVERAGE AND CENTER E Figure

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N150040-030	WEIGHT:
SPECIFICATION:5050LED 4000K 30°	DIMENSION:	SERIAL No.:



Test System:  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2025.02.20

Test Set: 5.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:10.000 m  
 Remarks:

## ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N150040-030	WEIGHT:
SPECIFICATION:5050LED 4000K 30°	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total
5.0	4616	4488	4426	4427	4833	4971	5045	5053	0- 5	11854	11854
10.0	3440	3303	3237	3252	3813	3948	4059	4031	5- 10	29674	41529
15.0	2321	2213	2149	2180	2681	2814	2878	2862	10- 15	35875	77403
20.0	1464	1410	1339	1400	1789	1842	1876	1846	15- 20	33448	110851
25.0	915.1	879.0	855.6	874.8	1128	1175	1194	1149	20- 25	26998	137849
30.0	580.2	562.5	549.7	559.4	719.4	757.3	757.2	729.3	25- 30	20646	158495
35.0	388.4	378.9	372.5	375.2	470.0	496.0	496.0	473.4	30- 35	15621	174115
40.0	269.1	258.2	256.0	257.5	320.8	340.0	340.9	322.5	35- 40	11927	186043
45.0	185.9	178.9	180.0	181.6	221.1	234.1	235.8	225.6	40- 45	9125	195167
50.0	137.2	138.7	138.3	140.9	164.2	169.5	174.0	162.2	45- 50	7139	202306
55.0	112.1	109.3	110.8	110.3	127.2	133.4	132.8	129.0	50- 55	5907	208213
60.0	87.57	85.35	86.46	85.67	98.49	104.2	103.0	101.9	55- 60	4933	213146
65.0	66.80	64.94	65.59	64.78	74.83	79.89	78.79	79.04	60- 65	4018	217164
70.0	47.89	46.56	45.74	45.84	54.72	58.99	57.34	59.17	65- 70	3122	220286
75.0	31.48	29.65	29.38	29.22	36.11	40.19	37.83	40.78	70- 75	2242	222528
80.0	18.15	15.84	16.58	15.48	21.96	23.74	23.31	24.39	75- 80	1442	223970
85.0	7.820	5.842	6.619	5.572	10.07	11.96	11.00	12.39	80- 85	764.7	224735
90.0	1.346	0.782	1.380	0.766	1.698	2.627	2.478	3.225	85- 90	265.4	225000
95.0									90- 95		
100.0									95-100		
105.0									100-105		
110.0									105-110		
115.0									110-115		
120.0									115-120		
125.0									120-125		
130.0									125-130		
135.0									130-135		
140.0									135-140		
145.0									140-145		
150.0									145-150		
155.0									150-155		
160.0									155-160		
165.0									160-165		
170.0									165-170		
175.0									170-175		
180.0									175-180		
DEG	LUMINOUS INTENSITY:×100cd									UNIT:lm	

Test System:  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2025.02.20

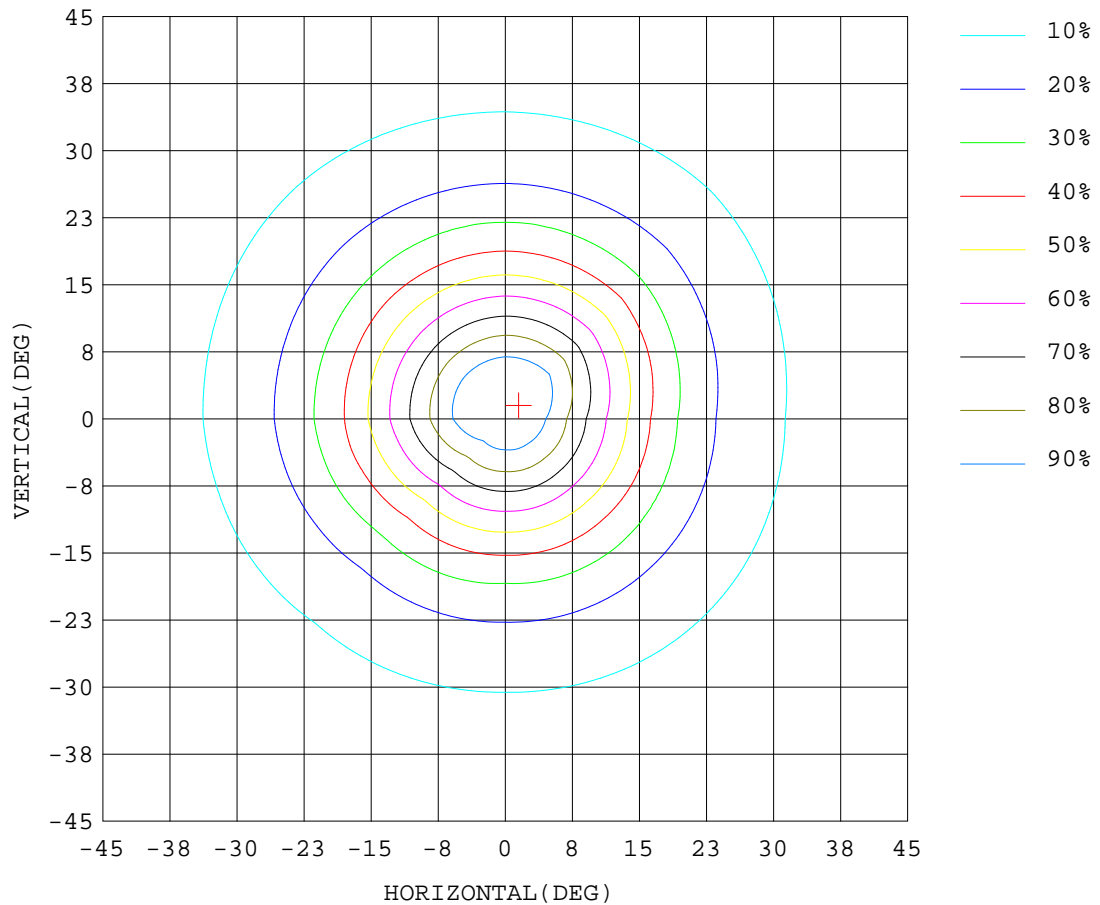
Test Set: 5.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:10.000 m  
 Remarks:

## ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N150040-030	WEIGHT:
SPECIFICATION:5050LED 4000K 30°	DIMENSION:	SERIAL No.:

UNIT: cd



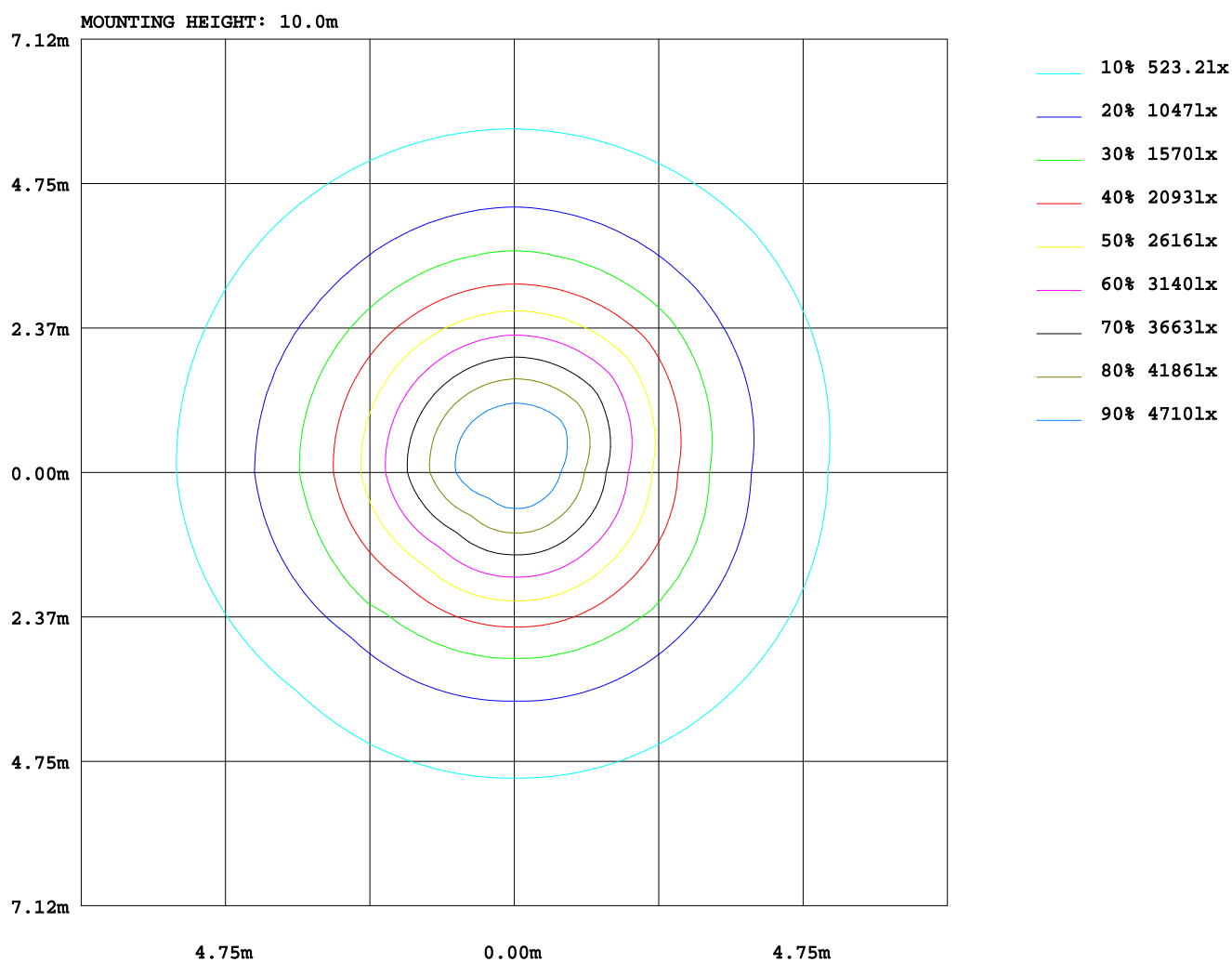
Test System:  
Temperature:25.3DEG  
Operators:  
Test Date:2025.02.20

Test Set: 5.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:10.000 m  
Remarks:

## ISOLUX DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N150040-030	WEIGHT:
SPECIFICATION:5050LED 4000K 30°	DIMENSION:	SERIAL No.:



Test System:  
Temperature:25.3DEG  
Operators:  
Test Date:2025.02.20

Test Set: 5.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:10.000 m  
Remarks:

## Uncorrected UGR Table

Report number:

MANUFACTURER: ILUMEN GMBH	Address:			
NAME: Kroos	TYPE:IL-SL13-N150040-030		WEIGHT:	
SPECIFICATION:5050LED 4000K 30°	DIMENSION:		SERIAL No.:	

ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	23.8	24.7	24.0	24.9	25.1	23.7	24.6	23.9	24.8	25.0
3H	24.7	25.6	24.9	25.8	26.0	24.5	25.4	24.8	25.6	25.8
4H	25.0	25.9	25.3	26.1	26.3	24.8	25.7	25.1	25.9	26.1
6H	25.2	26.0	25.5	26.3	26.5	25.0	25.8	25.3	26.1	26.3
8H	25.3	26.1	25.6	26.3	26.6	25.1	25.8	25.4	26.1	26.4
12H	25.3	26.1	25.6	26.3	26.6	25.1	25.8	25.4	26.1	26.4
4H 2H	24.1	25.0	24.4	25.2	25.4	24.0	24.9	24.3	25.1	25.3
3H	25.2	25.9	25.5	26.2	26.5	25.1	25.8	25.4	26.1	26.3
4H	25.6	26.3	26.0	26.6	26.9	25.5	26.1	25.8	26.4	26.7
6H	25.9	26.5	26.3	26.9	27.2	25.7	26.3	26.1	26.7	27.0
8H	26.0	26.6	26.4	26.9	27.3	25.8	26.4	26.2	26.7	27.1
12H	26.1	26.6	26.5	27.0	27.4	25.9	26.4	26.3	26.7	27.1
8H 4H	25.7	26.3	26.1	26.6	27.0	25.6	26.1	26.0	26.5	26.9
6H	26.1	26.6	26.6	27.0	27.4	25.9	26.4	26.4	26.8	27.2
8H	26.3	26.7	26.7	27.1	27.5	26.1	26.5	26.5	26.9	27.3
12H	26.4	26.7	26.9	27.2	27.6	26.2	26.5	26.6	26.9	27.4
12H 4H	25.7	26.2	26.1	26.6	27.0	25.6	26.1	26.0	26.4	26.8
6H	26.1	26.5	26.6	27.0	27.4	25.9	26.4	26.4	26.8	27.2
8H	26.3	26.6	26.8	27.1	27.6	26.1	26.4	26.6	26.9	27.4

Variations with the observer position at spacings:

S = 1.0H	+ 0.5 / - 0.6	+ 0.5 / - 0.6
1.5H	+ 0.6 / - 0.4	+ 0.6 / - 0.4
2.0H	+ 0.7 / - 0.4	+ 0.6 / - 0.5

CIE Pub.117 Corrected 225000 lm Total Lamp Luminous Flux.(8log(F/F0) = 18.8)

Test System:  
Temperature:25.3DEG  
Operators:  
Test Date:2025.02.20

Test Set: 5.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:10.000 m  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

<b>MANUFACTURER:</b> ILUMEN GMBH	<b>Address:</b>	
<b>NAME:</b> Kroos	<b>TYPE:</b> IL-SL13-N150040-030	<b>WEIGHT:</b>
<b>SPECIFICATION:</b> 5050LED 4000K 30°	<b>DIMENSION:</b>	<b>SERIAL No.:</b>

UNIT: ×100cd

C (DEG)								
γ (DEG)	0	45	90	135	180	225	270	315
0.0	5190	5190	5190	5190	5190	5190	5190	5190
5.0	4616	4488	4426	4427	4833	4971	5045	5053
10.0	3440	3303	3237	3252	3813	3948	4059	4031
15.0	2321	2213	2149	2180	2681	2814	2878	2862
20.0	1464	1410	1339	1400	1789	1842	1876	1846
25.0	915	879	856	875	1128	1175	1194	1149
30.0	580	563	550	559	719	757	757	729
35.0	388	379	373	375	470	496	496	473
40.0	269	258	256	258	321	340	341	323
45.0	186	179	180	182	221	234	236	226
50.0	137	139	138	141	164	170	174	162
55.0	112	109	111	110	127	133	133	129
60.0	87.5	85.3	86.4	85.6	98.4	104	103	102
65.0	66.8	64.9	65.5	64.7	74.8	79.8	78.7	79.0
70.0	47.8	46.5	45.7	45.8	54.7	58.9	57.3	59.1
75.0	31.4	29.6	29.3	29.2	36.1	40.1	37.8	40.7
80.0	18.1	15.8	16.5	15.4	21.9	23.7	23.3	24.3
85.0	7.82	5.84	6.61	5.57	10.0	11.9	11.0	12.3
90.0	1.34	0.78	1.38	0.77	1.69	2.62	2.47	3.22

**Test System:**  
**Temperature:**25.3DEG  
**Operators:**  
**Test Date:**2025.02.20

**Test Set:** 5.0deg/s C-Gamma (TYPE C)  
**Humidity:**65.0%  
**Test Distance:**10.000 m  
**Remarks:**