

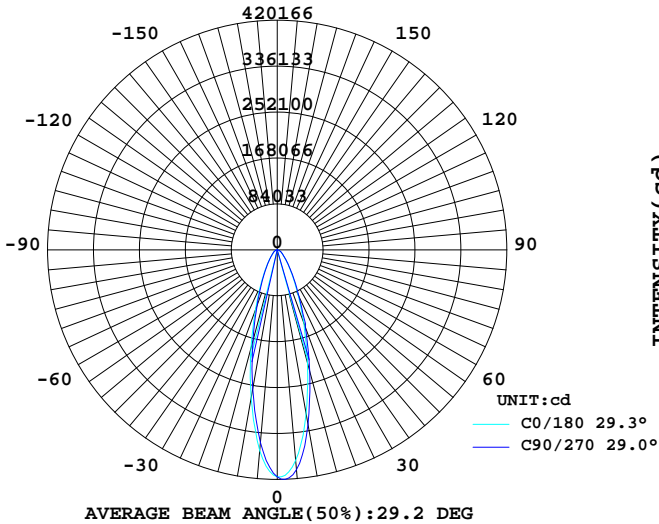
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

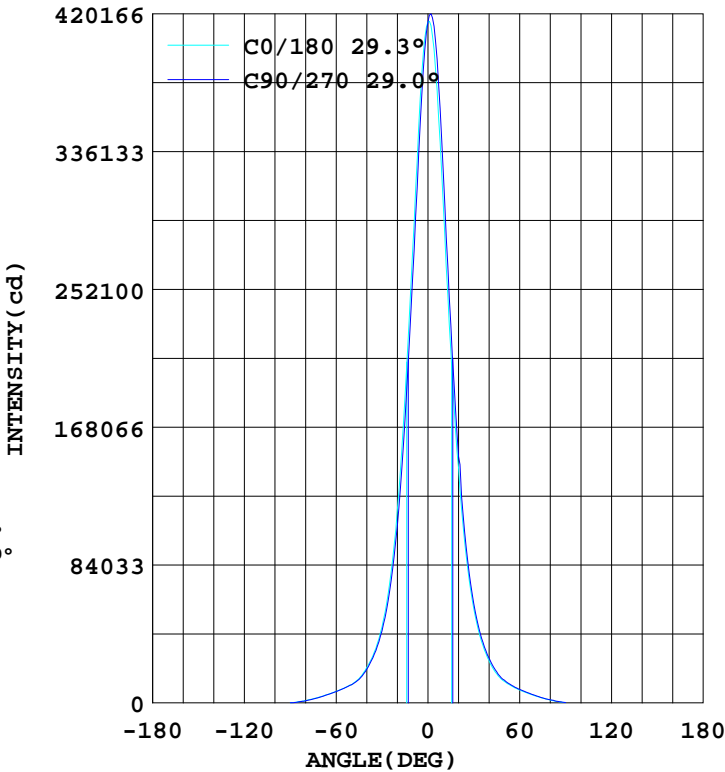
MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N80040-030	WEIGHT:
SPECIFICATION:5050LED 4000K 30°	DIMENSION:	SERIAL No.:

DATA OF LAMP		Imax(cd)	420546	S/MH(C0/180)	0.45
MODEL		EFFICIENCY(%)	100.0	S/MH(C90/270)	0.43
NOMINAL POWER(W)	1200	TOTAL FLUX(lm)	180000	Voltage(V)	231.1
RATED VOLTAGE(V)	230	EFFICIENCY(lm/W)	150.0	Current(A)	5.193
NOMINAL FLUX(lm)	180000.0	η up(%)	0.0	Power(W)	1200
LAMPS QUANTITY	1	η down(%)	100.0	Power Factor(PF)	0.999
TEST VOLTAGE(V)	231.1	Effective Flux(lm)	180000.3	EEI	0.100

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



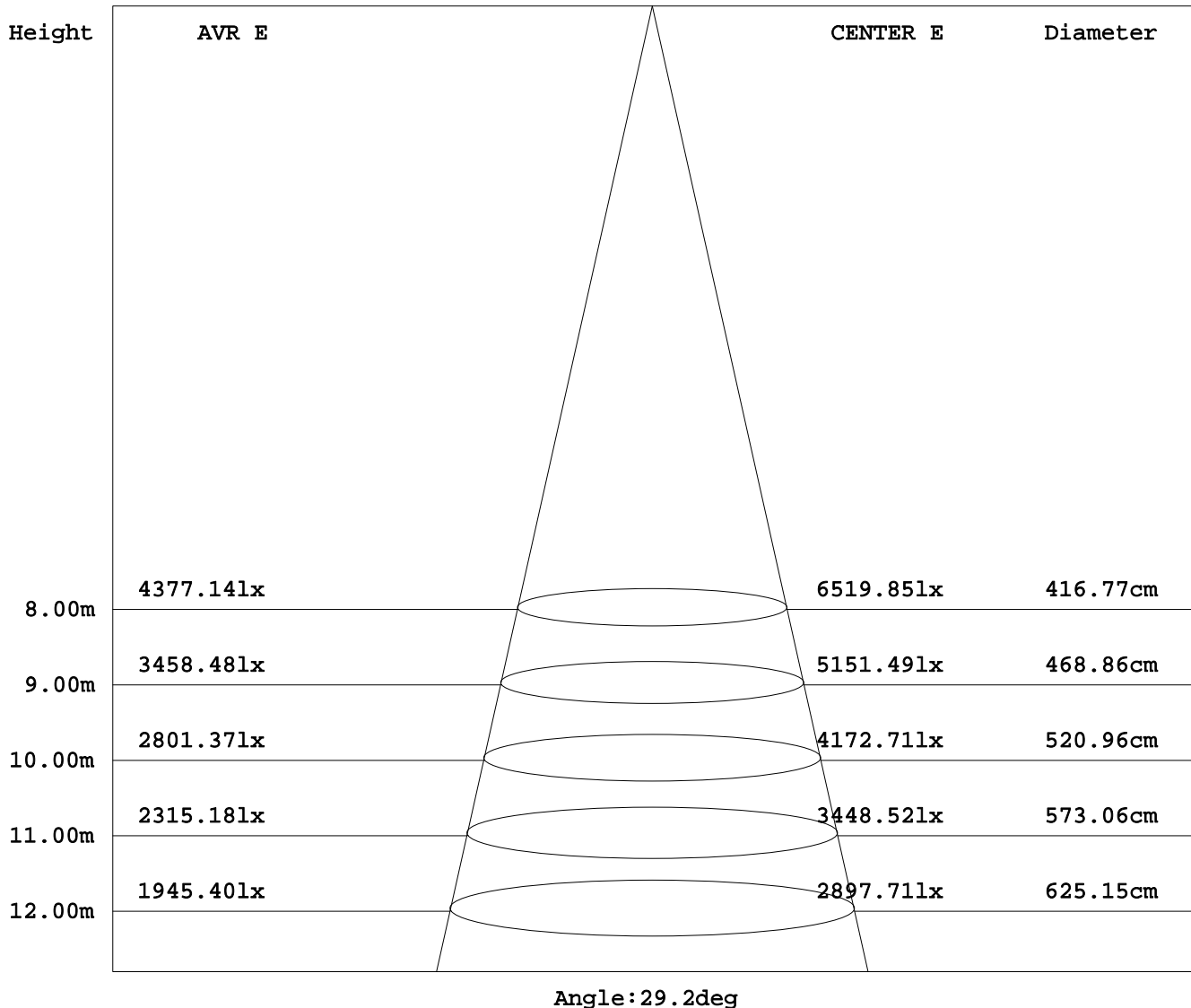
Test System:  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2025.02.20

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-N80040-030	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-N80040-030	WEIGHT:
SPECIFICATION:5050LED 4000K 30°	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total
5.0	3692	3591	3541	3542	3866	3977	4036	4042	0- 5	9483	9483
10.0	2752	2642	2590	2601	3050	3158	3247	3225	5- 10	23740	33223
15.0	1857	1770	1719	1744	2145	2251	2302	2290	10- 15	28700	61923
20.0	1171	1128	1071	1120	1431	1474	1501	1477	15- 20	26759	88681
25.0	732.0	703.2	684.4	699.8	902.7	939.7	955.1	919.4	20- 25	21598	110279
30.0	464.1	450.0	439.8	447.5	575.5	605.8	605.8	583.4	25- 30	16517	126796
35.0	310.7	303.1	298.0	300.2	376.0	396.8	396.8	378.7	30- 35	12496	139292
40.0	215.2	206.5	204.8	206.0	256.6	272.0	272.7	258.0	35- 40	9542	148834
45.0	148.7	143.1	144.0	145.3	176.9	187.3	188.7	180.5	40- 45	7300	156134
50.0	109.8	110.9	110.6	112.7	131.3	135.6	139.2	129.8	45- 50	5711	161845
55.0	89.75	87.46	88.69	88.30	101.7	106.7	106.2	103.2	50- 55	4725	166570
60.0	70.06	68.28	69.17	68.53	78.79	83.36	82.45	81.55	55- 60	3946	170517
65.0	53.44	51.95	52.47	51.82	59.86	63.91	63.03	63.23	60- 65	3215	173731
70.0	38.31	37.25	36.59	36.67	43.78	47.19	45.87	47.33	65- 70	2498	176229
75.0	25.19	23.72	23.50	23.38	28.88	32.15	30.26	32.62	70- 75	1794	178023
80.0	14.52	12.67	13.26	12.38	17.56	18.99	18.65	19.51	75- 80	1153	179176
85.0	6.256	4.674	5.295	4.458	8.057	9.573	8.802	9.916	80- 85	611.7	179788
90.0	1.076	0.625	1.104	0.613	1.358	2.101	1.982	2.580	85- 90	212.3	180000
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

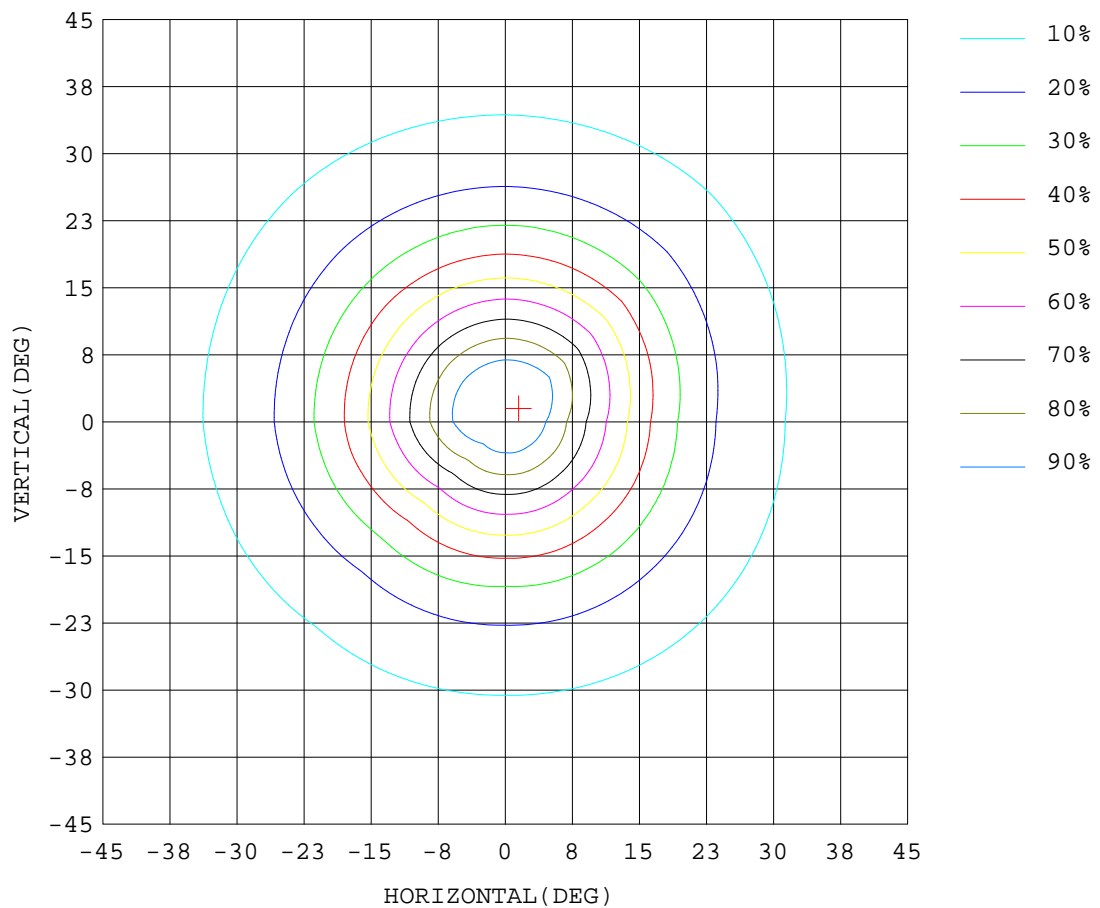
Test Set: 5.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:10.000 m  
Remarks:

## ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N80040-030	WEIGHT:
SPECIFICATION:5050LED 4000K 30°	DIMENSION:	SERIAL No.:

UNIT: cd



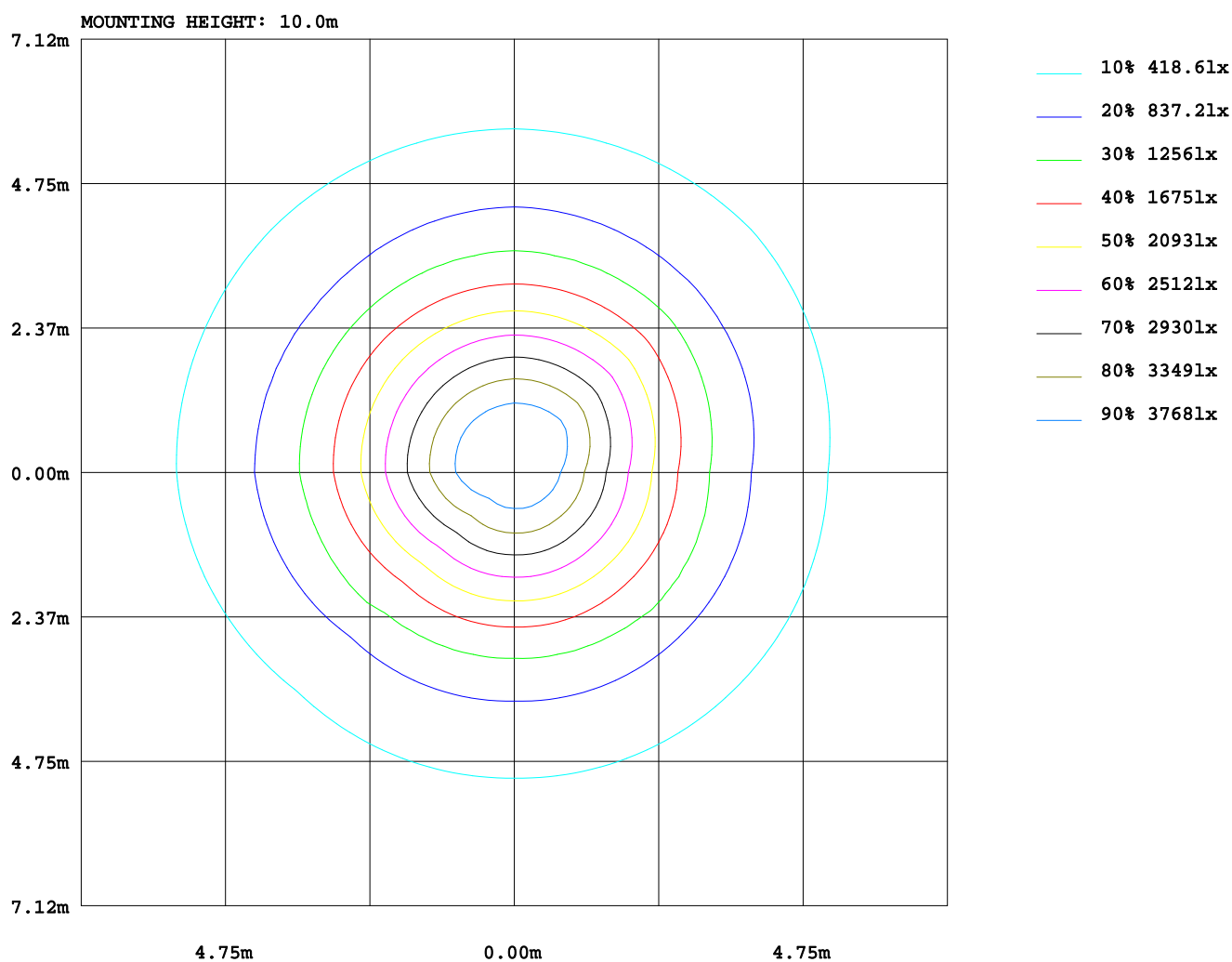
Test System:  
Temperature:25.3DEG  
Operators:  
Test Date:2025.02.20

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-N80040-030	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-N80040-030		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	23.0	24.0	23.2	24.1	24.3	22.9	23.8	23.1	24.0	24.2
3H	23.9	24.8	24.2	25.0	25.2	23.7	24.6	24.0	24.8	25.0
4H	24.2	25.1	24.5	25.3	25.5	24.1	24.9	24.3	25.1	25.3
6H	24.5	25.3	24.8	25.5	25.8	24.2	25.0	24.5	25.3	25.5
8H	24.5	25.3	24.8	25.5	25.8	24.3	25.1	24.6	25.3	25.6
12H	24.5	25.3	24.9	25.6	25.8	24.3	25.0	24.6	25.3	25.6
4H 2H	23.3	24.2	23.6	24.4	24.6	23.2	24.1	23.5	24.3	24.5
3H	24.4	25.2	24.7	25.4	25.7	24.3	25.0	24.6	25.3	25.6
4H	24.8	25.5	25.2	25.8	26.1	24.7	25.4	25.0	25.7	26.0
6H	25.2	25.8	25.5	26.1	26.4	25.0	25.6	25.3	25.9	26.2
8H	25.3	25.8	25.6	26.2	26.5	25.0	25.6	25.4	25.9	26.3
12H	25.3	25.8	25.7	26.2	26.6	25.1	25.6	25.5	26.0	26.4
8H 4H	25.0	25.5	25.4	25.9	26.2	24.8	25.4	25.2	25.7	26.1
6H	25.4	25.8	25.8	26.2	26.6	25.2	25.6	25.6	26.0	26.4
8H	25.5	25.9	25.9	26.3	26.8	25.3	25.7	25.7	26.1	26.6
12H	25.6	26.0	26.1	26.4	26.9	25.4	25.7	25.8	26.2	26.6
12H 4H	24.9	25.4	25.3	25.8	26.2	24.8	25.3	25.2	25.7	26.1
6H	25.4	25.8	25.8	26.2	26.6	25.2	25.6	25.6	26.0	26.4
8H	25.5	25.9	26.0	26.3	26.8	25.3	25.7	25.8	26.1	26.6

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 180000 lm Total Lamp Luminous Flux.(8log(F/F0) = 18.0)

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Operators:  
Test Date:2025.02.20

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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-N80040-030	<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	4152	4152	4152	4152	4152	4152	4152	4152
5.0	3692	3591	3541	3542	3866	3977	4036	4042
10.0	2752	2642	2590	2601	3050	3158	3247	3225
15.0	1857	1770	1719	1744	2145	2251	2302	2290
20.0	1171	1128	1071	1120	1431	1474	1501	1477
25.0	732	703	684	700	903	940	955	919
30.0	464	450	440	448	576	606	606	583
35.0	311	303	298	300	376	397	397	379
40.0	215	207	205	206	257	272	273	258
45.0	149	143	144	145	177	187	189	181
50.0	110	111	111	113	131	136	139	130
55.0	89.7	87.4	88.6	88.3	102	107	106	103
60.0	70.0	68.2	69.1	68.5	78.7	83.3	82.4	81.5
65.0	53.4	51.9	52.4	51.8	59.8	63.9	63.0	63.2
70.0	38.3	37.2	36.5	36.6	43.7	47.1	45.8	47.3
75.0	25.1	23.7	23.5	23.3	28.8	32.1	30.2	32.6
80.0	14.5	12.6	13.2	12.3	17.5	18.9	18.6	19.5
85.0	6.25	4.67	5.29	4.45	8.05	9.57	8.80	9.91
90.0	1.07	0.63	1.10	0.61	1.35	2.10	1.98	2.58

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