

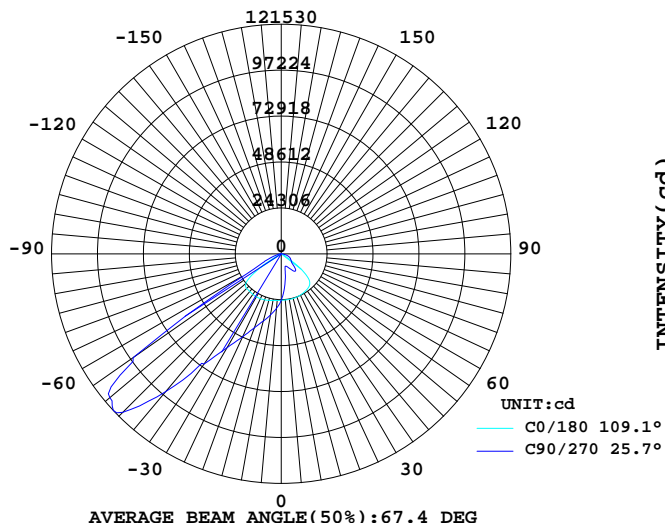
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

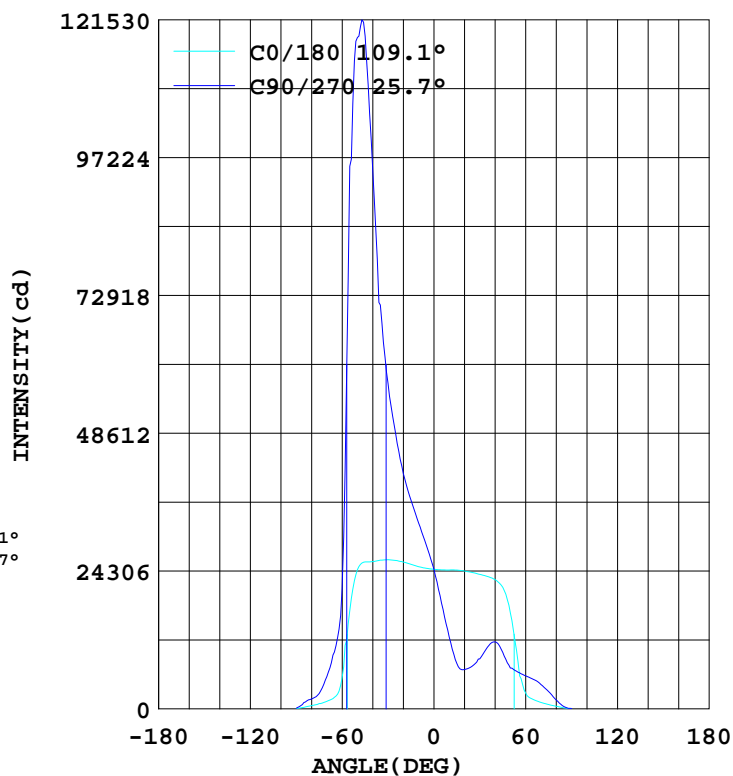
MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N80040-P50	WEIGHT:
SPECIFICATION:5050LED 4000K P50 30X110°	DIMENSION:	SERIAL No.:

DATA OF LAMP		Imax(cd)	133373	S/MH(C0/180)	1.61
MODEL		EFFICIENCY(%)	100.0	S/MH(C90/270)	2.27
NOMINAL POWER(W)	800	TOTAL FLUX(lm)	116000	Voltage(V)	230.1
RATED VOLTAGE(V)	230	EFFICIENCY(lm/W)	145.0	Current(A)	3.475
NOMINAL FLUX(lm)	116000.0	η up(%)	0.0	Power(W)	800.0
LAMPS QUANTITY	1	η down(%)	100.0	Power Factor(PF)	1.000
TEST VOLTAGE(V)	230.2	Effective Flux(lm)	115999.9	EEI	0.103

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



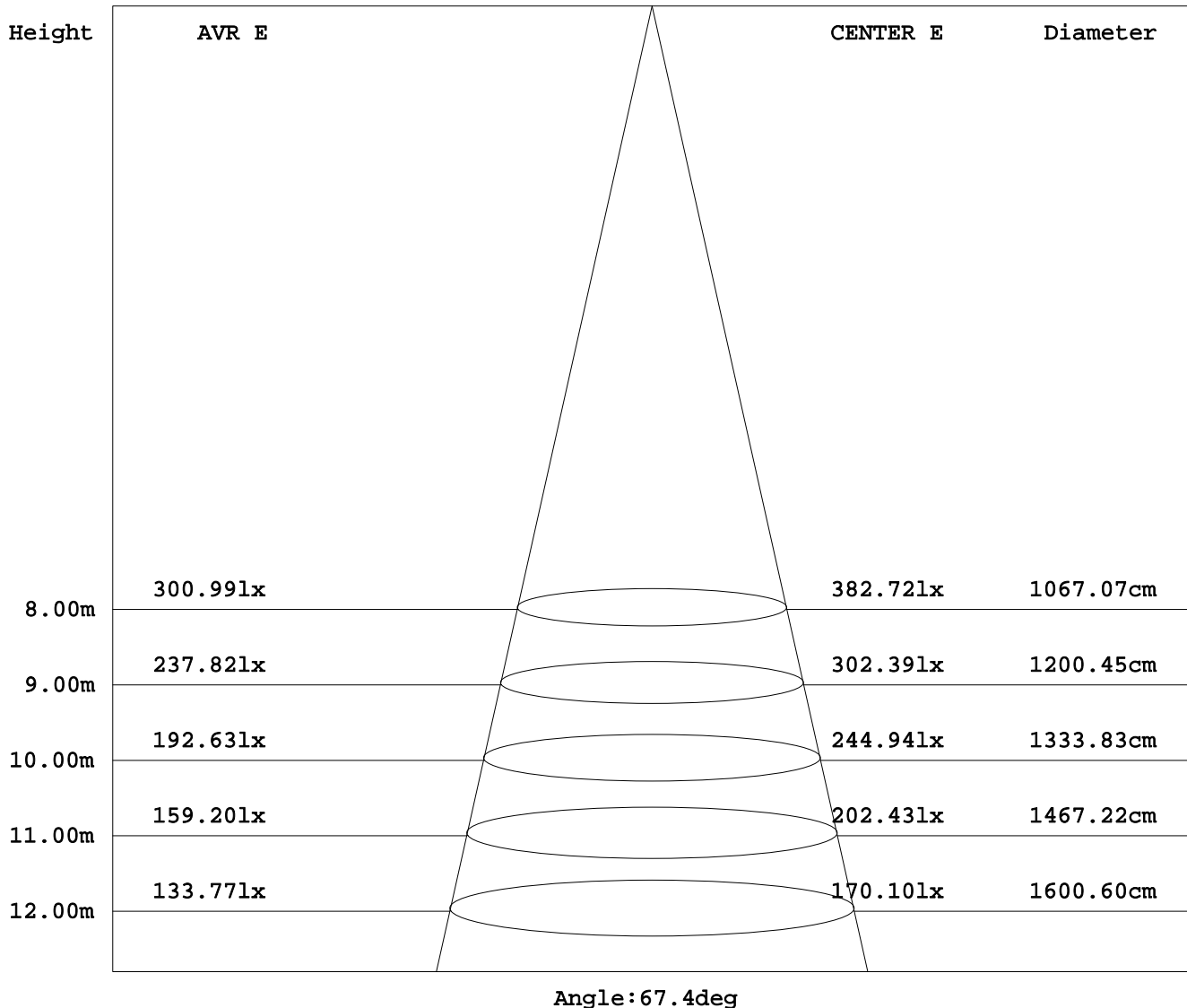
Test System:
 Temperature:25.3DEG
 Operators:
 Test Date:2025.02.20

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-P50	WEIGHT:
SPECIFICATION:5050LED 4000K P50 30X110°	DIMENSION:	SERIAL No.:



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 Test Date:2025.02.20

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ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE: IL-SL13-N80040-P50	WEIGHT:
SPECIFICATION: 5050LED 4000K P50 30X110°	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total
5.0	247.9	280.0	288.8	275.1	245.1	202.1	186.5	208.8	0- 5	582.8	582.8
10.0	250.7	311.6	327.9	304.3	244.9	157.5	126.9	167.9	5- 10	1709	2292
15.0	255.0	345.1	368.5	335.8	244.8	116.6	80.05	130.3	10- 15	2789	5081
20.0	258.9	382.9	415.5	370.9	243.2	85.56	69.43	94.12	15- 20	3895	8976
25.0	261.8	421.2	484.7	408.4	240.6	69.02	75.34	71.17	20- 25	5163	14139
30.0	263.0	462.8	573.8	447.8	237.2	66.92	88.22	61.82	25- 30	6672	20811
35.0	262.2	516.6	712.2	497.7	233.5	71.26	108.8	63.01	30- 35	8552	29363
40.0	259.6	599.7	952.7	574.8	227.9	77.77	118.0	66.71	35- 40	11125	40488
45.0	259.2	770.4	1186	722.8	214.3	84.69	99.57	71.96	40- 45	14797	55285
50.0	245.5	988.1	1184	874.7	169.6	82.88	72.18	70.30	45- 50	18493	73778
55.0	173.1	1021	956.8	822.3	83.25	57.24	64.86	54.99	50- 55	19398	93175
60.0	54.83	624.3	212.0	327.2	27.66	42.75	58.36	37.41	55- 60	13655	106830
65.0	20.35	78.96	100.2	44.35	16.59	34.74	52.08	30.62	60- 65	4831	111661
70.0	13.34	21.55	57.05	17.81	11.39	26.42	43.06	22.45	65- 70	1988	113650
75.0	9.359	11.51	27.22	9.677	7.759	15.21	30.70	12.74	70- 75	1207	114856
80.0	5.754	6.508	17.66	5.492	4.648	5.896	15.68	5.391	75- 80	704.8	115561
85.0	2.775	3.172	11.04	2.643	1.909	1.505	4.178	1.643	80- 85	336.7	115898
90.0	0.634	0.953	1.266	0.789	0.572	0.540	0.802	0.498	85- 90	102.2	116000
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

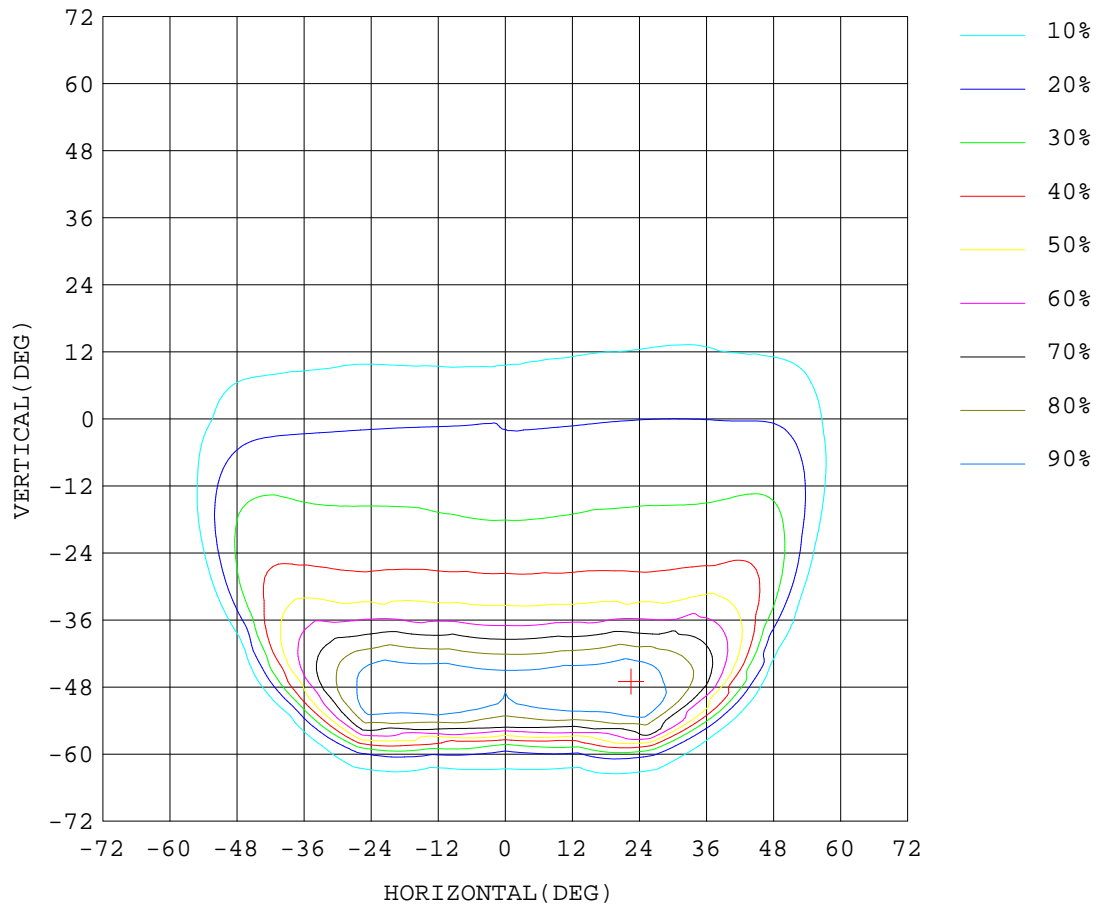
Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity: 65.0%
 Test Distance: 10.000 m
 Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N80040-P50	WEIGHT:
SPECIFICATION:5050LED 4000K P50 30X110°	DIMENSION:	SERIAL No.:

UNIT: cd



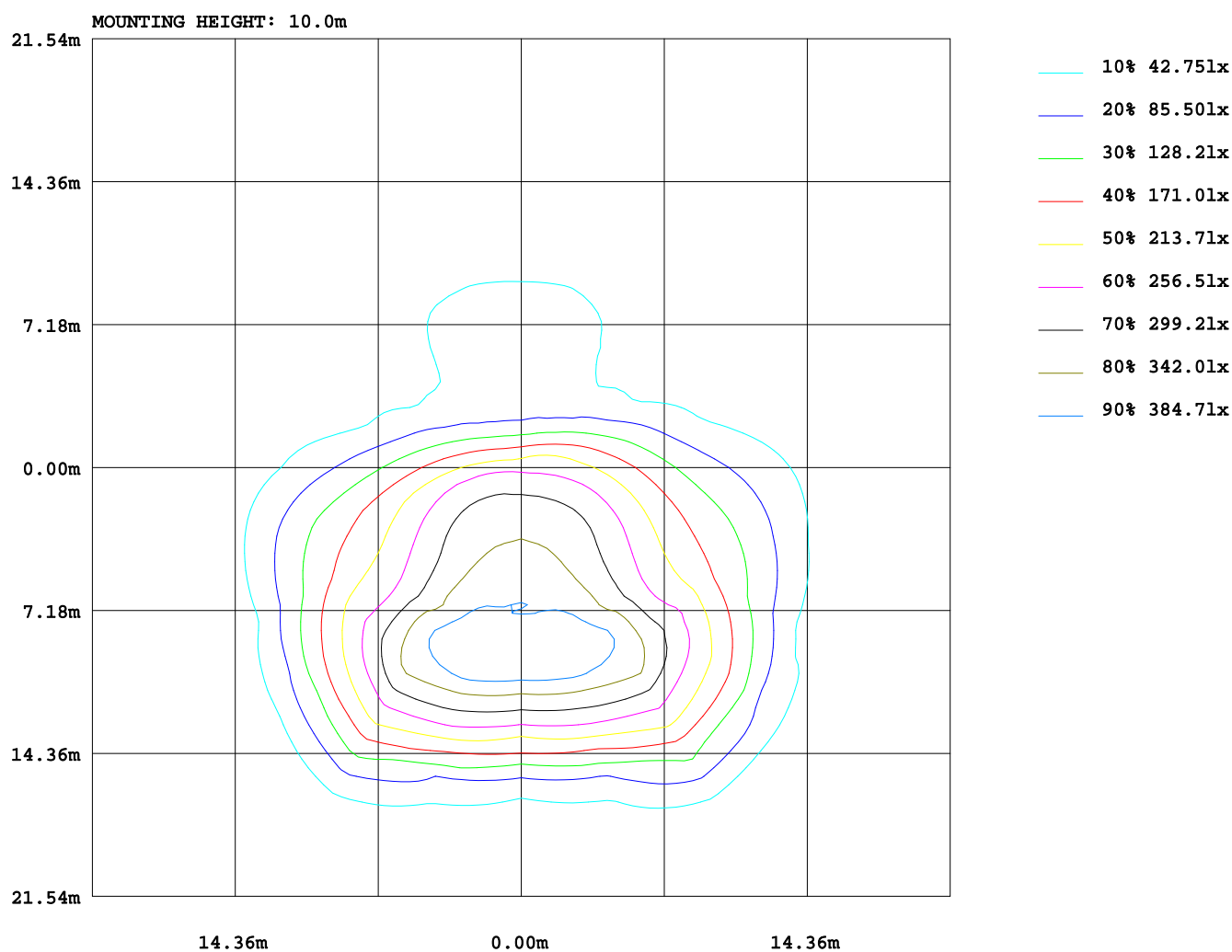
Test System:
Temperature:25.3DEG
Operators:
Test Date:2025.02.20

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-P50	WEIGHT:
SPECIFICATION:5050LED 4000K P50 30X110°	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-P50			WEIGHT:
SPECIFICATION:5050LED 4000K P50 30X110°	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	34.1	35.7	34.4	35.9	36.1	40.3	41.9	40.6	42.1	42.3
3H	33.9	35.4	34.2	35.6	35.8	40.2	41.6	40.5	41.8	42.1
4H	33.8	35.2	34.2	35.4	35.7	40.1	41.4	40.4	41.7	41.9
6H	33.7	35.0	34.1	35.3	35.5	40.0	41.2	40.3	41.5	41.8
8H	33.7	34.9	34.0	35.2	35.5	39.9	41.2	40.3	41.4	41.7
12H	33.6	34.8	34.0	35.1	35.4	39.9	41.1	40.3	41.4	41.7
4H 2H	35.8	37.1	36.1	37.4	37.6	40.3	41.6	40.6	41.9	42.1
3H	35.6	36.7	35.9	37.0	37.3	40.1	41.3	40.5	41.6	41.9
4H	35.5	36.5	35.8	36.8	37.2	40.1	41.1	40.4	41.4	41.8
6H	35.4	36.3	35.8	36.7	37.0	40.0	40.9	40.4	41.3	41.6
8H	35.4	36.2	35.8	36.6	36.9	40.0	40.8	40.4	41.2	41.6
12H	35.3	36.1	35.7	36.5	36.9	39.9	40.7	40.4	41.1	41.5
8H 4H	35.4	36.2	35.8	36.6	36.9	39.9	40.8	40.4	41.2	41.5
6H	35.3	36.0	35.7	36.4	36.8	39.9	40.6	40.3	41.0	41.4
8H	35.3	35.9	35.7	36.3	36.7	39.9	40.5	40.3	40.9	41.3
12H	35.2	35.7	35.7	36.2	36.7	39.8	40.3	40.3	40.8	41.3
12H 4H	35.3	36.1	35.7	36.5	36.9	39.9	40.7	40.3	41.1	41.5
6H	35.3	35.9	35.7	36.3	36.7	39.8	40.4	40.3	40.9	41.3
8H	35.2	35.7	35.7	36.2	36.7	39.8	40.3	40.3	40.8	41.3

Variations with the observer position at spacings:

S = 1.0H	+ 2.1 / - 4.9	+ 1.9 / - 2.5
1.5H	+ 1.9 / - 4.4	+ 3.3 / - 6.2
2.0H	+ 5.8 / -13.2	+ 2.3 / - 9.2

CIE Pub.117 Corrected 116000 lm Total Lamp Luminous Flux.(8log(F/F0) = 16.5)

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:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE: IL-SL13-N80040-P50	WEIGHT:
SPECIFICATION: 5050LED 4000K P50 30X110°	DIMENSION:	SERIAL No.:

UNIT: ×100cd

C (DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210
0.0	246	246	246	246	246	246	246	246	246	246	246	246	246	246	246
5.0	248	260	271	280	285	289	289	287	282	275	266	256	245	230	216
10.0	251	275	295	312	321	328	328	325	316	304	288	268	245	213	184
15.0	255	291	321	345	360	369	369	366	353	336	311	281	245	197	153
20.0	259	308	348	383	400	414	416	409	392	371	335	293	243	180	123
25.0	262	323	376	421	450	478	485	474	441	408	359	306	241	163	95.0
30.0	263	338	405	463	521	564	574	563	512	448	384	320	237	142	71.6
35.0	262	355	435	517	622	693	712	695	611	498	412	336	234	114	59.2
40.0	260	377	475	600	803	937	953	942	783	575	452	359	228	83.2	54.8
45.0	259	409	538	770	1095	1195	1186	1199	1061	723	513	387	214	51.5	51.3
50.0	246	422	599	988	1322	1244	1184	1257	1271	875	537	377	170	37.0	47.2
55.0	173	308	509	1021	1322	1039	957	1078	1246	822	381	229	83.2	29.6	40.8
60.0	54.8	48.5	169	624	994	332	212	367	820	327	36.5	39.1	27.6	23.5	32.1
65.0	20.3	22.4	24.4	78.9	166	112	100	107	149	44.3	19.3	18.5	16.5	17.1	24.2
70.0	13.3	14.0	14.8	21.5	47.3	66.3	57.0	65.4	34.0	17.8	12.5	11.9	11.3	11.4	16.2
75.0	9.35	8.95	10.0	11.5	20.2	39.6	27.2	35.0	15.1	9.67	7.52	7.72	7.75	7.43	9.47
80.0	5.75	5.87	5.42	6.50	10.4	15.3	17.6	14.2	7.56	5.49	4.69	4.96	4.64	4.20	4.73
85.0	2.77	3.07	2.55	3.17	3.44	10.8	11.0	7.84	2.93	2.64	2.10	2.49	1.90	1.33	1.71
90.0	0.63	0.86	0.66	0.95	0.82	1.81	1.26	1.38	0.67	0.79	0.48	0.64	0.57	0.38	0.62

Test System:
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Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE: IL-SL13-N80040-P50	WEIGHT:
SPECIFICATION: 5050LED 4000K P50 30X110°	DIMENSION:	SERIAL No.:

UNIT: ×100cd

C (DEG) γ (DEG)	225	240	255	270	285	300	315	330	345
0.0	246	246	246	246	246	246	246	246	246
5.0	202	193	187	187	189	198	209	222	236
10.0	158	140	129	127	132	147	168	195	225
15.0	117	94.4	83.8	80.0	92.8	101	130	169	213
20.0	85.5	71.3	69.7	69.4	68.3	70.1	94.1	143	199
25.0	69.0	70.3	74.0	75.3	72.7	67.3	71.1	115	186
30.0	66.9	77.6	85.8	88.2	81.6	72.1	61.8	88.5	173
35.0	71.2	90.0	106	109	99.2	81.4	63.0	64.1	153
40.0	77.7	104	118	118	112	92.6	66.7	49.5	124
45.0	84.6	109	108	99.5	107	96.8	71.9	45.0	92.2
50.0	82.8	92.9	80.0	72.1	81.5	88.8	70.3	39.9	57.7
55.0	57.2	63.5	64.3	64.8	62.0	57.6	54.9	33.7	34.6
60.0	42.7	53.3	57.5	58.3	55.5	49.4	37.4	27.7	23.9
65.0	34.7	45.9	50.4	52.0	49.8	43.2	30.6	21.3	16.4
70.0	26.4	39.0	43.4	43.0	43.6	36.2	22.4	14.3	11.3
75.0	15.2	30.0	33.5	30.7	35.0	25.7	12.7	9.18	7.69
80.0	5.89	15.9	19.2	15.6	20.8	12.4	5.39	5.13	4.58
85.0	1.50	3.37	4.01	4.17	4.14	2.89	1.64	2.06	1.73
90.0	0.54	0.89	0.55	0.80	0.58	0.86	0.50	0.57	0.38

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