

LUMINAIRE PHOTOMETRIC TEST REPORT

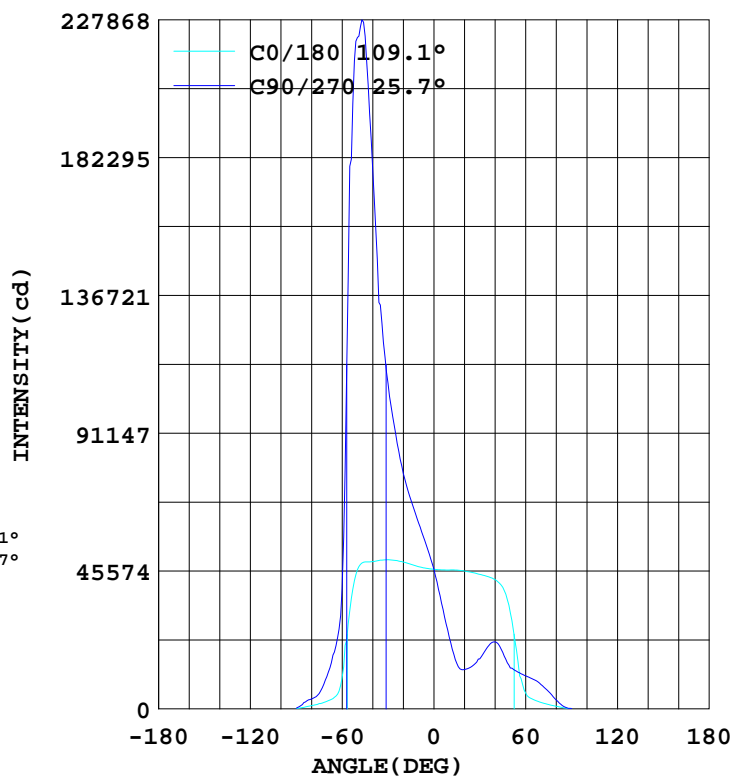
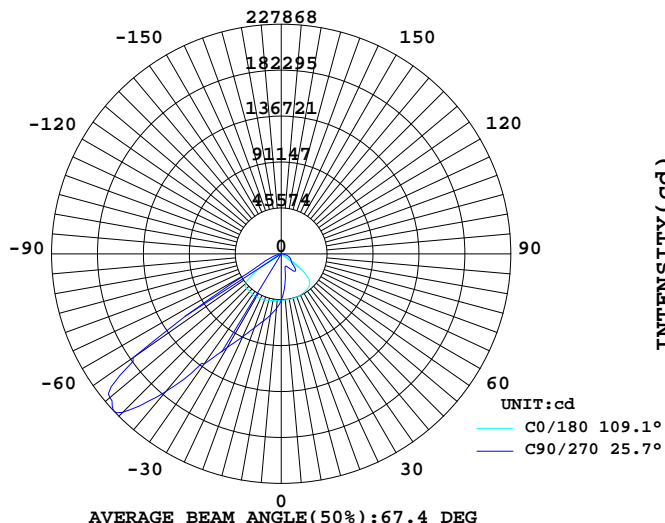
Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N150040-P50	WEIGHT:
SPECIFICATION:5050LED 4000K P50 30X110°	DIMENSION:	SERIAL No.:

DATA OF LAMP		Imax(cd)	250073	S/MH(C0/180)	1.61
MODEL		EFFICIENCY(%)	100.0	S/MH(C90/270)	2.27
NOMINAL POWER(W)	1500	TOTAL FLUX(lm)	217500	Voltage(V)	230.1
RATED VOLTAGE(V)	230	EFFICIENCY(lm/W)	145.0	Current(A)	6.516
NOMINAL FLUX(lm)	217500.0	η up(%)	0.0	Power(W)	1500
LAMPS QUANTITY	1	η down(%)	100.0	Power Factor(PF)	1.000
TEST VOLTAGE(V)	230.2	Effective Flux(lm)	217499.7	EEI	0.103

LUMINOUS INTENSITY DISTRIBUTION

LUMINOUS INTENSITY DISTRIBUTION



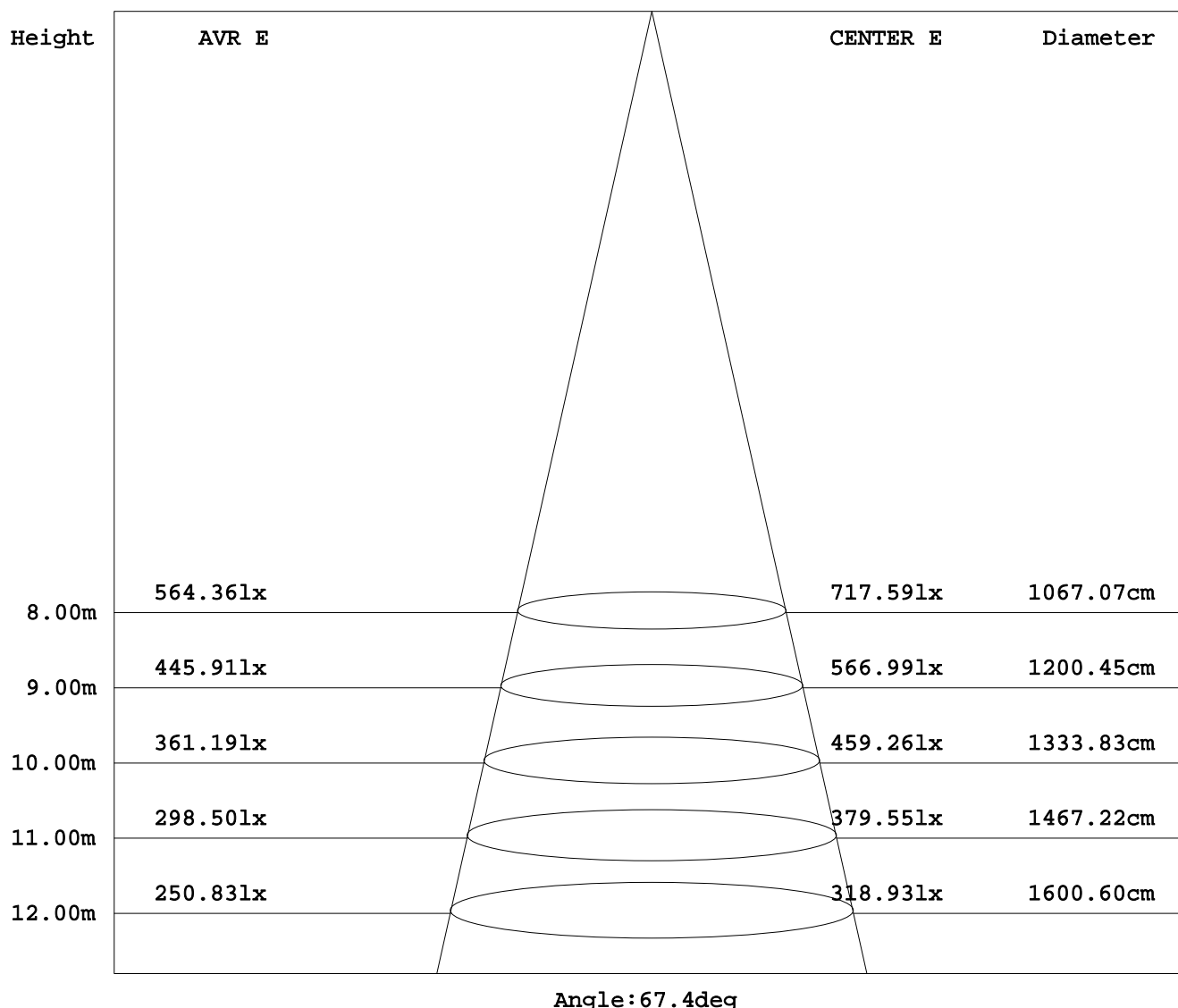
Test System:
 Temperature:25.3DEG
 Operators:
 Test Date:2025.02.20

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

AVERAGE AND CENTER E Figure

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ZONAL FLUX DIAGRAM

Report number:

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NAME: Kroos	TYPE:IL-SL13-N150040-P50	WEIGHT:
SPECIFICATION:5050LED 4000K P50 30X110°	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total
5.0	464.9	525.1	541.5	515.9	459.5	378.9	349.8	391.5	0- 5	1093	1093
10.0	470.2	584.4	614.8	570.6	459.3	295.4	237.9	314.9	5- 10	3205	4297
15.0	478.2	647.0	691.0	629.6	459.0	218.7	150.0	244.4	10- 15	5229	9526
20.0	485.6	718.1	779.0	695.5	456.0	160.4	130.1	176.4	15- 20	7303	16830
25.0	490.9	789.8	908.8	765.8	451.1	129.4	141.2	133.4	20- 25	9681	26511
30.0	493.2	867.8	1076	839.7	444.9	125.4	165.4	115.9	25- 30	12510	39021
35.0	491.6	968.7	1335	933.2	437.8	133.6	204.0	118.1	30- 35	16034	55055
40.0	486.8	1125	1786	1078	427.3	145.8	221.4	125.0	35- 40	20860	75915
45.0	486.1	1445	2224	1355	401.8	158.8	186.7	134.9	40- 45	27743	103659
50.0	460.4	1853	2220	1640	318.0	155.4	135.3	131.8	45- 50	34674	138333
55.0	324.5	1915	1794	1542	156.0	107.3	121.6	103.1	50- 55	36371	174704
60.0	102.8	1171	397.5	613.6	51.87	80.17	109.4	70.14	55- 60	25603	200307
65.0	38.17	148.0	188.0	83.16	31.11	65.15	97.66	57.42	60- 65	9058	209365
70.0	25.02	40.41	106.9	33.39	21.37	49.54	80.74	42.11	65- 70	3728	213093
75.0	17.54	21.58	51.04	18.14	14.54	28.51	57.57	23.89	70- 75	2262	215355
80.0	10.79	12.20	33.12	10.29	8.715	11.05	29.41	10.10	75- 80	1322	216677
85.0	5.204	5.947	20.71	4.955	3.581	2.823	7.835	3.081	80- 85	631.3	217308
90.0	1.188	1.787	2.375	1.479	1.072	1.012	1.503	0.933	85- 90	191.6	217500
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

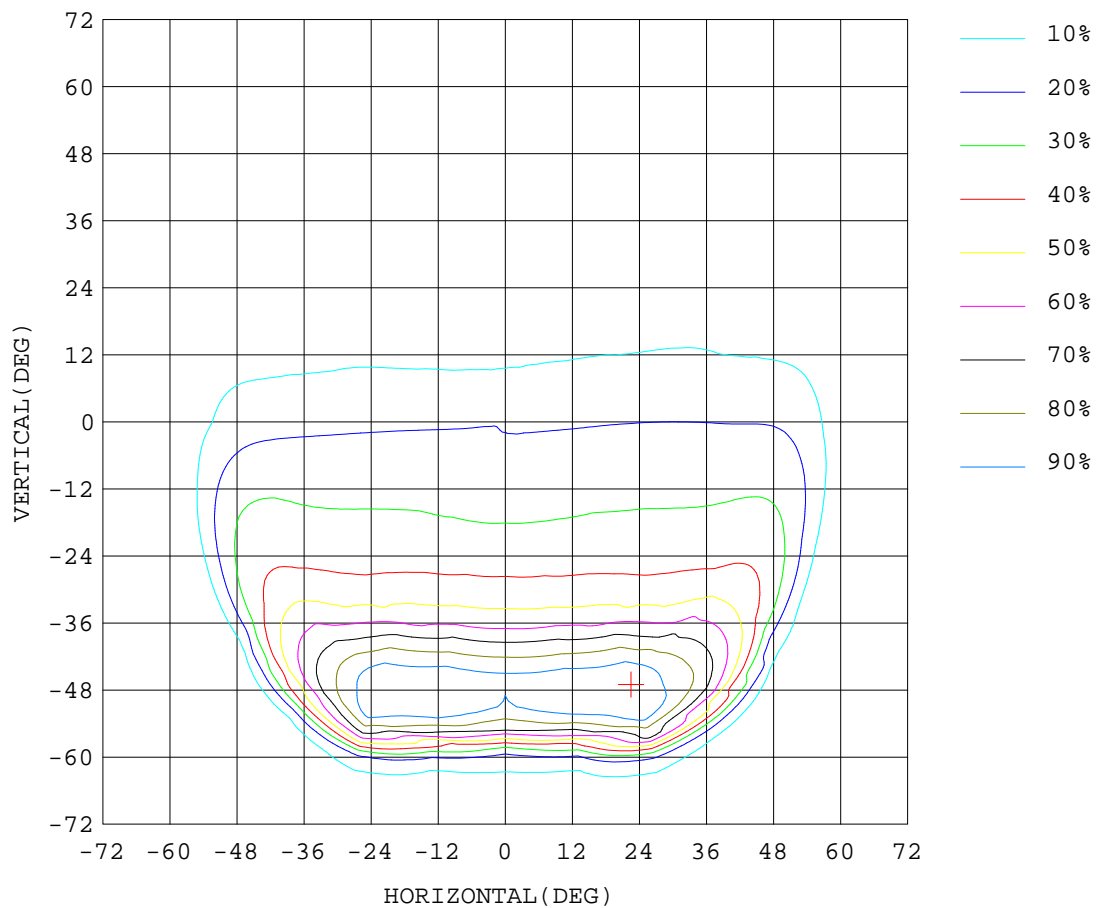
Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:10.000 m
 Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N150040-P50	WEIGHT:
SPECIFICATION:5050LED 4000K P50 30X110°	DIMENSION:	SERIAL No.:

UNIT: cd



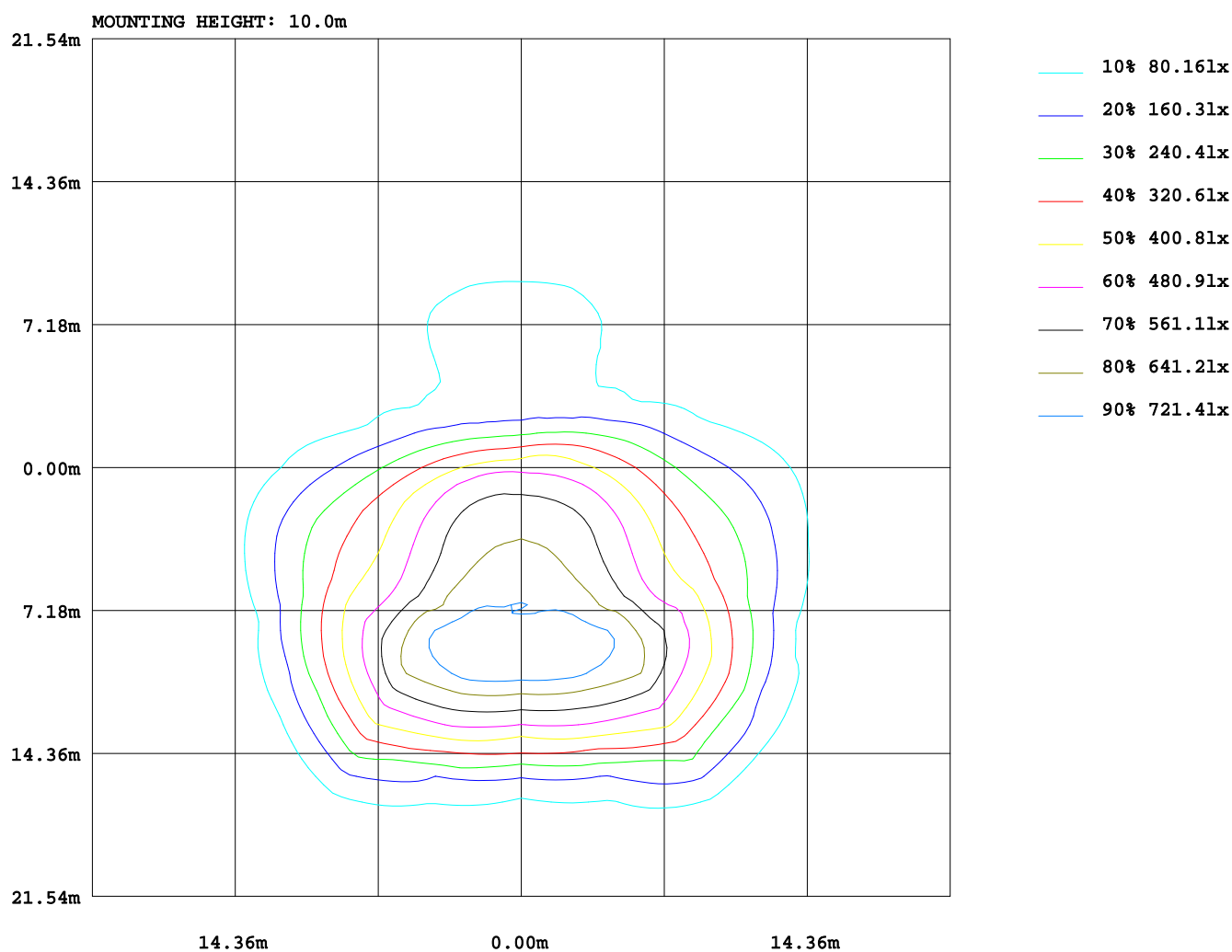
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Temperature:25.3DEG
Operators:
Test Date:2025.02.20

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



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

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Remarks:

Uncorrected UGR Table

Report number:

MANUFACTURER: ILUMEN GMBH	Address:			
NAME: Kroos	TYPE:IL-SL13-N150040-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	33.8	35.4	34.1	35.6	35.8	40.0	41.6	40.3	41.8	42.0
3H	33.6	35.0	33.9	35.3	35.5	39.9	41.3	40.2	41.5	41.8
4H	33.5	34.9	33.8	35.1	35.4	39.8	41.1	40.1	41.4	41.6
6H	33.4	34.7	33.7	34.9	35.2	39.7	40.9	40.0	41.2	41.5
8H	33.4	34.6	33.7	34.9	35.1	39.6	40.8	40.0	41.1	41.4
12H	33.3	34.5	33.7	34.8	35.1	39.6	40.7	39.9	41.0	41.3
4H 2H	35.4	36.8	35.8	37.0	37.3	40.0	41.3	40.3	41.6	41.8
3H	35.2	36.4	35.6	36.7	37.0	39.8	41.0	40.2	41.3	41.6
4H	35.2	36.2	35.5	36.5	36.8	39.8	40.8	40.1	41.1	41.4
6H	35.1	36.0	35.5	36.3	36.7	39.7	40.6	40.1	40.9	41.3
8H	35.0	35.9	35.4	36.2	36.6	39.6	40.5	40.1	40.9	41.2
12H	35.0	35.8	35.4	36.1	36.5	39.6	40.4	40.0	40.8	41.2
8H 4H	35.0	35.9	35.4	36.2	36.6	39.6	40.5	40.0	40.8	41.2
6H	35.0	35.7	35.4	36.1	36.5	39.6	40.2	40.0	40.6	41.1
8H	34.9	35.5	35.4	36.0	36.4	39.5	40.1	40.0	40.6	41.0
12H	34.9	35.4	35.4	35.9	36.3	39.5	40.0	40.0	40.5	40.9
12H 4H	35.0	35.8	35.4	36.1	36.6	39.6	40.3	40.0	40.7	41.1
6H	34.9	35.5	35.4	36.0	36.4	39.5	40.1	40.0	40.5	41.0
8H	34.9	35.4	35.4	35.9	36.3	39.5	40.0	40.0	40.5	40.9

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 217500 lm Total Lamp Luminous Flux.(8log(F/F0) = 18.7)

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Operators:
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Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N150040-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	462	462	462	462	462	462	462	462	462	462	462	462	462	462	462
5.0	465	488	508	525	535	542	542	538	528	516	499	481	460	431	404
10.0	470	516	554	584	603	615	615	609	592	571	539	502	459	400	344
15.0	478	546	602	647	676	692	691	686	663	630	583	526	459	370	288
20.0	486	577	652	718	751	776	779	767	735	696	628	550	456	337	231
25.0	491	606	705	790	844	895	909	889	826	766	674	574	451	305	178
30.0	493	634	759	868	978	1058	1076	1055	960	840	720	599	445	266	134
35.0	492	665	816	969	1167	1300	1335	1303	1146	933	773	629	438	215	111
40.0	487	706	891	1125	1505	1757	1786	1766	1469	1078	847	673	427	156	103
45.0	486	767	1009	1445	2053	2240	2224	2247	1989	1355	961	725	402	96.5	96.2
50.0	460	791	1123	1853	2479	2333	2220	2357	2383	1640	1008	707	318	69.4	88.5
55.0	325	577	954	1915	2479	1948	1794	2020	2336	1542	714	430	156	55.5	76.6
60.0	103	90.9	317	1171	1863	623	398	688	1538	614	68.5	73.4	51.8	44.1	60.2
65.0	38.1	42.1	45.8	148	312	209	188	201	279	83.1	36.2	34.6	31.1	32.2	45.4
70.0	25.0	26.3	27.8	40.4	88.7	124	107	123	63.8	33.3	23.4	22.3	21.3	21.4	30.5
75.0	17.5	16.7	18.8	21.5	37.9	74.3	51.0	65.7	28.4	18.1	14.1	14.4	14.5	13.9	17.7
80.0	10.7	11.0	10.1	12.2	19.5	28.8	33.1	26.7	14.1	10.2	8.79	9.30	8.71	7.88	8.87
85.0	5.20	5.76	4.78	5.94	6.45	20.3	20.7	14.7	5.50	4.95	3.95	4.66	3.58	2.50	3.22
90.0	1.18	1.60	1.23	1.78	1.53	3.40	2.37	2.58	1.26	1.47	0.90	1.19	1.07	0.71	1.15

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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	462	462	462	462	462	462	462	462	462
5.0	379	362	351	350	355	371	392	417	442
10.0	295	262	241	238	248	276	315	367	421
15.0	219	177	157	150	174	190	244	317	399
20.0	160	134	131	130	128	131	176	268	374
25.0	129	132	139	141	136	126	133	215	349
30.0	125	146	161	165	153	135	116	166	325
35.0	134	169	199	204	186	153	118	120	288
40.0	146	196	222	221	209	174	125	92.8	233
45.0	159	204	203	187	201	182	135	84.3	173
50.0	155	174	150	135	153	167	132	74.8	108
55.0	107	119	121	122	116	108	103	63.3	64.9
60.0	80.1	100	108	109	104	92.6	70.1	52.0	44.9
65.0	65.1	86.1	94.6	97.6	93.4	81.0	57.4	39.9	30.8
70.0	49.5	73.3	81.5	80.7	81.8	68.0	42.1	26.9	21.2
75.0	28.5	56.2	62.9	57.5	65.6	48.3	23.8	17.2	14.4
80.0	11.0	29.9	36.0	29.4	39.1	23.3	10.1	9.63	8.60
85.0	2.82	6.33	7.52	7.83	7.77	5.43	3.08	3.86	3.24
90.0	1.01	1.67	1.03	1.50	1.08	1.60	0.93	1.07	0.71

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