

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P21000

Luminaire Tested: **TRR-50-LED-E1-5-XX**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P21000
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TRR-50-LED-E1-5-XX
Description: TRADITIONARE LED POST TOP FIXTURE - TYPE 5 DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3248.1 lumens
Efficiency: N/A
Efficacy: 56.6 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.83' x L: 0.83' x H: 1')
IES Classification: Type V - V Long - Non-Cutoff
BUG Rating: B2 - U3 - G3

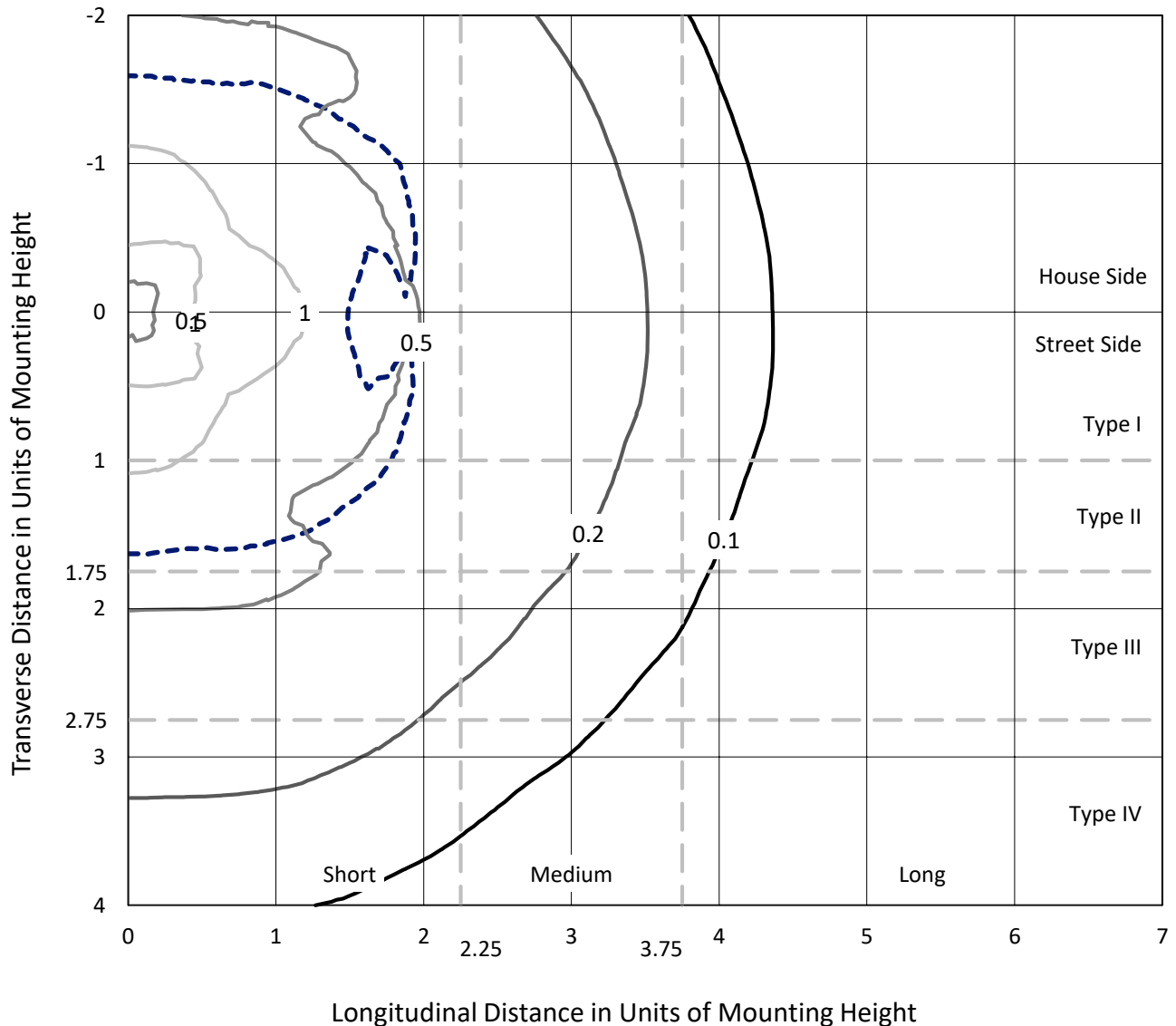
Input Watts (W): 57.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

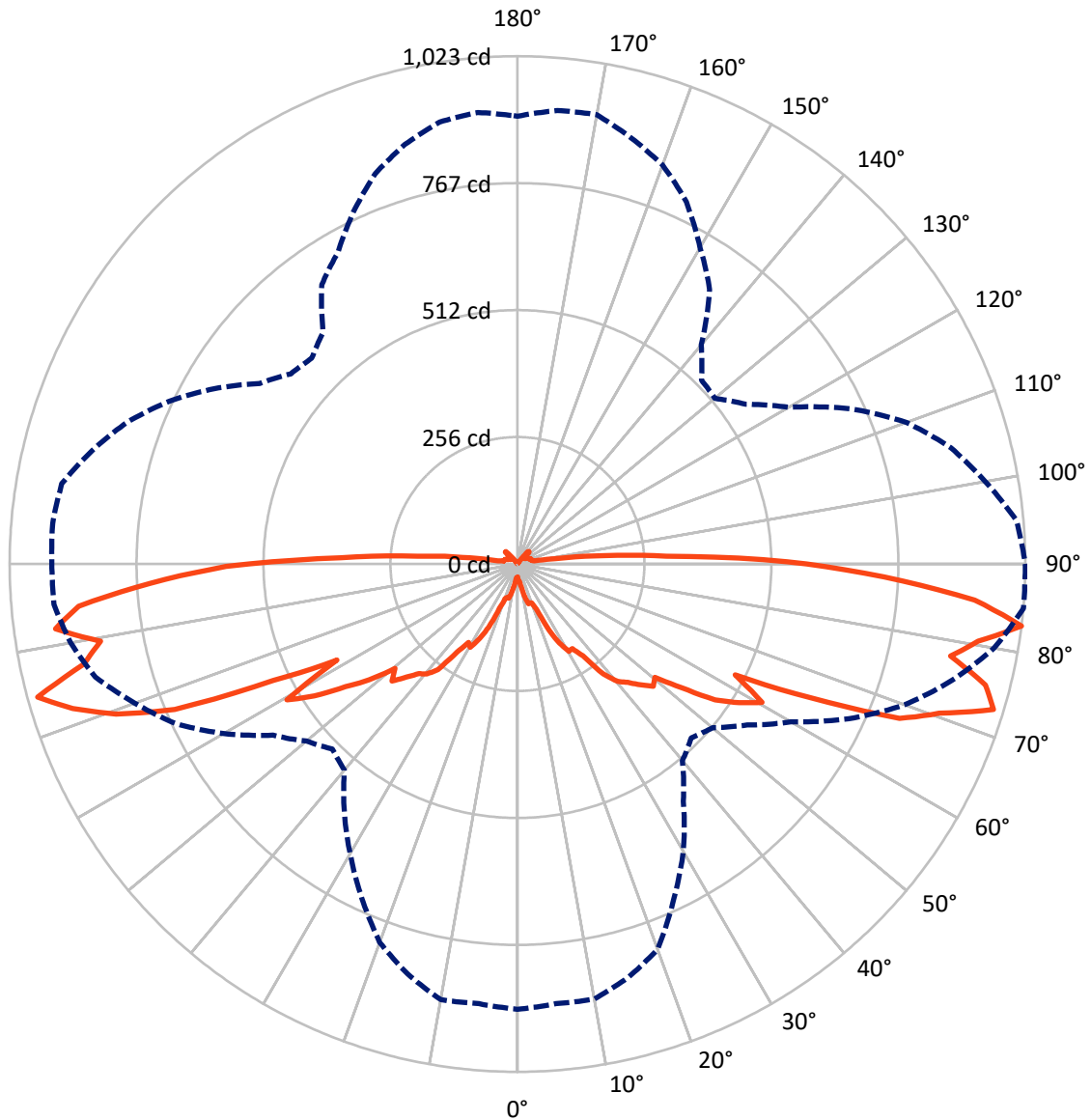
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.5 fc
 Type V - V Long - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 85-Deg Lateral - - - Horizontal Cone Through 82.5-Deg Vertical

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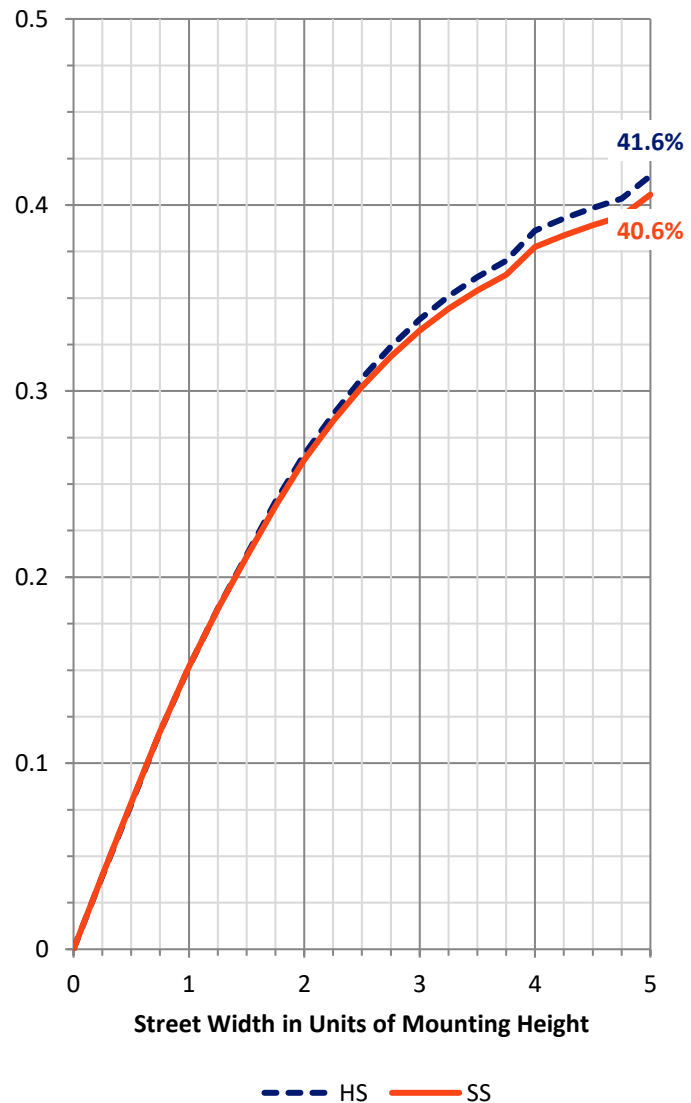
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1525.6	118.2	1643.9
	% Fixture	47.0	3.6	50.6
Street Side	Lumens	1491.4	112.8	1604.2
	% Fixture	45.9	3.5	49.4
Total	Lumens	3017.0	231.0	3248.1
	% Fixture	92.9	7.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.3	0.1
10°-20°	19.7	0.6
20°-30°	57.3	1.8
30°-40°	137.7	4.2
40°-50°	225.4	6.9
50°-60°	342.4	10.5
60°-70°	624.7	19.2
70°-80°	917.5	28.2
80°-90°	689.1	21.2
90°-100°	152.9	4.7
100°-110°	30.2	0.9
110°-120°	20.2	0.6
120°-130°	12.2	0.4
130°-140°	12.6	0.4
140°-150°	2.9	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	3017.0	92.9
0°-180°	3248.1	100.0



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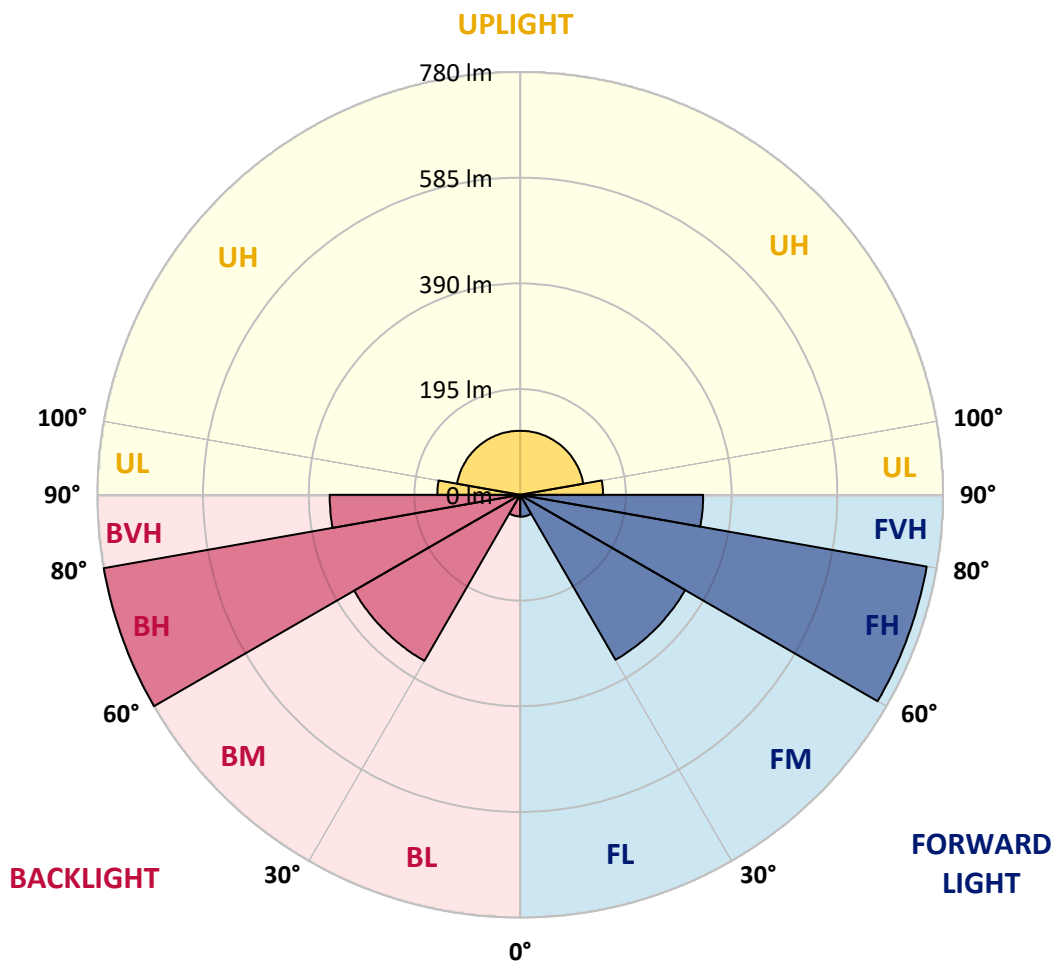
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	40.4	1.2			
FM	(30°-60°)	351.6	10.8			
FH	(60°-80°)	761.8	23.5			G1/1800
FVH	(80°-90°)	337.6	10.4			G3/500
BL	(0°-30°)	39.8	1.2	B0/110		
BM	(30°-60°)	353.9	10.9	B1/1000		
BH	(60°-80°)	780.3	24.0	B2/1000		G1/1800
BVH	(80°-90°)	351.5	10.8			G3/500
UL	(90°-100°)	152.9	4.7		U3/500	
UH	(100°-180°)	118.2	3.6		U3/500	

BUG Rating: B2-U3-G3

Type V V Long





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	26	26	26	26	26	26	26	26	26	26	26
2.5°	38	37	36	34	31	29	27	26	26	25	25
5°	43	43	42	40	39	38	36	34	32	30	30
7.5°	48	47	47	46	45	44	43	41	40	39	37
10°	45	45	44	44	43	42	42	42	42	43	45
12.5°	46	45	45	44	43	43	44	44	46	48	50
15°	72	70	70	68	67	64	62	61	59	58	60
17.5°	95	94	94	93	92	90	88	86	83	80	80
20°	111	111	111	111	108	106	104	100	96	92	88
22.5°	101	103	104	105	106	106	106	105	104	101	97
25°	115	114	110	107	105	100	98	98	100	102	108
27.5°	156	154	150	144	135	126	120	114	115	121	127
30°	206	203	198	191	180	169	159	150	144	141	144
32.5°	238	234	228	223	215	206	196	187	176	171	168
35°	250	248	244	241	237	230	222	216	208	200	192
37.5°	265	262	257	254	249	243	239	233	224	217	210
40°	278	276	273	272	268	263	258	246	237	235	232
42.5°	290	289	286	286	282	277	272	258	252	248	247
45°	309	309	306	305	297	293	286	271	266	259	257
47.5°	321	320	318	317	313	310	304	288	277	270	268
50°	341	341	343	341	335	329	316	301	288	282	279
52.5°	379	376	376	366	354	344	333	318	304	297	293
55°	373	368	370	365	365	364	356	338	319	311	312
57.5°	430	425	431	428	420	399	377	356	341	340	345
60°	617	605	598	570	520	473	439	412	386	387	403
62.5°	608	602	616	628	624	612	582	535	494	479	468
65°	512	518	551	602	646	669	677	676	662	625	580
67.5°	657	655	665	683	700	722	758	783	794	771	736
70°	796	797	814	842	869	886	906	885	860	862	868
72.5°	817	821	847	880	912	916	924	911	878	884	901
75°	751	755	782	811	834	830	837	823	820	849	857
77.5°	721	729	756	781	801	787	787	771	763	799	813
80°	786	790	812	811	810	770	731	700	657	673	699
82.5°	897	889	890	862	826	745	668	583	517	495	513
85°	954	930	902	838	760	645	534	418	361	326	340
87.5°	833	799	758	674	576	465	354	265	212	190	211
90°	538	522	490	421	353	273	211	159	123	109	126
92.5°	321	313	289	246	198	155	116	88	71	68	80
95°	134	130	122	105	91	74	61	53	51	49	51
97.5°	43	42	42	43	43	43	42	41	40	39	39
100°	32	31	32	32	33	34	35	35	35	33	33
102.5°	28	28	28	28	29	30	31	31	31	30	30
105°	26	25	25	26	26	27	28	28	27	26	27
107.5°	25	24	23	24	24	24	25	25	24	24	24
110°	25	24	24	24	24	23	24	24	22	22	23



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	24	23	22	22	21	21	21	21	20	20	20
115°	21	20	19	19	18	18	19	19	17	17	18
117.5°	20	19	18	17	16	16	17	17	15	15	16
120°	19	18	17	16	15	15	16	15	14	14	14
122.5°	18	17	16	15	14	14	14	13	13	13	13
125°	17	16	15	13	12	11	11	11	11	11	11
127.5°	16	15	14	12	11	10	9	9	10	10	10
130°	15	15	14	12	11	9	8	8	8	9	9
132.5°	17	17	16	14	12	10	8	8	8	8	8
135°	33	32	30	27	23	20	16	11	5	4	6
137.5°	31	30	27	25	21	17	12	7	3	1	3
140°	27	26	24	22	18	14	9	4	0	0	0
142.5°	15	14	13	11	8	5	1	0	0	0	0
145°	8	7	6	4	2	0	0	0	0	0	0
147.5°	4	3	2	1	0	0	0	0	0	0	0
150°	2	1	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	26	26	26	26	26	26	26	26	26	26	26
2.5°	26	27	28	29	29	31	33	33	33	32	31
5°	30	30	31	32	33	34	35	36	35	35	34
7.5°	36	36	36	37	38	39	40	41	41	40	38
10°	46	48	48	49	50	51	52	52	52	50	48
12.5°	53	57	61	65	68	71	71	70	69	66	63
15°	63	67	70	74	78	81	83	82	81	78	75
17.5°	78	76	76	77	80	82	82	82	82	81	80
20°	85	83	82	83	82	83	84	85	86	86	86
22.5°	94	92	92	93	93	96	99	99	99	97	94
25°	112	117	124	132	138	144	148	148	146	144	139
27.5°	131	138	148	161	168	175	180	179	177	173	166
30°	148	154	167	182	192	200	204	204	202	197	189
32.5°	169	173	178	187	195	199	203	202	199	194	187
35°	186	183	185	194	210	219	227	226	223	217	205
37.5°	209	214	225	239	259	273	281	281	278	271	255
40°	238	244	255	269	286	302	311	309	306	298	281
42.5°	250	258	268	283	300	316	326	324	320	311	295
45°	262	272	283	300	315	335	347	347	339	330	310
47.5°	270	280	295	316	334	355	368	369	362	348	329
50°	283	298	319	331	336	349	359	360	351	340	332
52.5°	297	313	337	363	384	405	413	413	407	394	373
55°	323	344	368	392	424	457	483	485	472	441	409
57.5°	361	400	445	471	490	511	527	525	515	494	479
60°	422	448	472	493	520	552	566	563	556	535	509
62.5°	466	472	467	459	456	475	492	491	483	462	448
65°	537	522	534	562	585	620	649	651	635	605	574
67.5°	700	696	709	743	769	811	830	824	812	798	772
70°	853	867	878	884	882	902	901	893	890	885	877
72.5°	890	932	943	959	964	1001	1003	995	989	971	951
75°	864	916	921	930	930	968	974	964	958	932	910
77.5°	823	854	841	852	859	888	892	882	878	862	847
80°	726	764	807	856	895	927	941	932	929	910	889
82.5°	565	636	737	830	906	975	1023	1023	1009	957	904
85°	399	487	585	689	776	860	924	931	901	842	779
87.5°	269	350	431	517	601	679	739	757	721	667	605
90°	168	220	283	356	421	496	543	564	532	485	423
92.5°	102	132	166	207	239	279	300	312	297	273	237
95°	61	78	99	123	142	166	178	187	177	161	136
97.5°	41	44	51	59	65	72	77	78	75	70	64
100°	34	34	36	35	35	35	35	35	34	34	34
102.5°	30	31	32	31	31	31	31	32	31	31	30
105°	27	28	30	29	29	29	30	30	30	29	29
107.5°	25	26	27	27	27	28	28	28	28	27	27
110°	23	24	25	26	26	27	27	28	28	27	26



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	21	22	23	25	25	26	28	28	28	26	25
115°	18	19	21	22	22	24	25	26	25	24	23
117.5°	16	17	18	20	21	22	24	25	24	23	21
120°	14	15	16	18	19	20	22	22	22	20	19
122.5°	13	14	15	17	18	20	21	21	21	20	18
125°	12	12	13	15	16	18	19	20	19	18	16
127.5°	10	11	12	13	15	17	19	19	18	17	15
130°	9	10	11	13	15	17	18	19	18	17	15
132.5°	9	10	12	14	17	19	20	20	19	18	16
135°	12	17	22	26	29	33	34	35	34	32	29
137.5°	8	14	19	24	28	32	34	35	34	32	28
140°	4	10	16	20	24	28	30	31	30	28	24
142.5°	0	2	5	9	12	15	16	17	17	15	12
145°	0	0	0	3	5	7	8	9	9	7	6
147.5°	0	0	0	0	2	3	4	5	5	4	2
150°	0	0	0	0	0	1	2	3	3	2	0
152.5°	0	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	26	26	26	26	26	26	26	26	26	26	26
2.5°	30	29	28	26	24	23	23	23	23	25	27
5°	34	33	32	32	30	29	29	29	30	31	32
7.5°	37	36	34	33	33	32	32	31	32	33	33
10°	45	43	41	37	34	32	32	32	33	33	34
12.5°	59	54	49	45	43	42	40	40	42	43	45
15°	70	67	64	62	62	62	65	67	67	69	71
17.5°	80	79	79	80	82	83	82	85	87	89	91
20°	86	84	83	86	88	89	92	96	99	98	98
22.5°	92	91	90	90	89	89	89	88	88	89	90
25°	131	121	111	104	97	93	90	93	96	101	107
27.5°	156	143	133	127	123	117	114	119	126	136	148
30°	177	163	152	150	147	146	150	158	167	177	187
32.5°	180	175	171	172	177	179	183	193	201	211	222
35°	195	186	184	187	194	206	213	221	228	231	238
37.5°	241	225	215	212	215	222	230	235	240	243	250
40°	263	247	239	234	235	239	244	250	259	265	273
42.5°	278	267	252	248	246	253	258	266	275	284	290
45°	293	281	263	257	257	267	271	281	289	298	308
47.5°	309	291	275	268	272	281	282	296	303	311	321
50°	327	314	290	280	284	290	293	310	321	330	335
52.5°	353	327	301	293	299	306	309	323	332	347	363
55°	384	358	326	314	313	317	325	342	346	348	360
57.5°	468	434	374	351	341	340	341	356	380	406	423
60°	488	463	427	413	395	386	401	427	461	527	598
62.5°	451	462	455	459	473	495	534	579	616	639	644
65°	544	523	510	546	609	675	711	697	683	660	599
67.5°	746	716	699	718	771	822	839	796	764	743	732
70°	881	874	861	872	902	911	932	953	967	941	919
72.5°	940	932	916	910	932	938	972	984	991	976	956
75°	904	906	893	877	893	900	892	889	896	888	875
77.5°	836	839	839	827	833	842	820	825	826	819	818
80°	852	810	751	721	719	717	733	775	782	798	820
82.5°	834	740	631	561	519	524	576	675	736	805	855
85°	702	588	490	396	333	335	384	489	602	724	814
87.5°	528	428	344	262	206	190	217	289	399	518	628
90°	357	280	215	163	127	112	126	167	233	314	392
92.5°	203	159	129	99	79	67	72	95	133	181	232
95°	115	94	76	60	50	48	50	56	73	99	130
97.5°	58	49	42	38	38	38	39	40	42	46	51
100°	33	33	33	32	32	32	33	33	33	33	33
102.5°	30	30	30	29	29	30	30	30	30	30	29
105°	29	28	28	27	27	28	28	29	29	29	28
107.5°	27	26	26	26	25	25	26	27	27	27	28
110°	26	25	24	24	23	23	23	24	25	25	25



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REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°	
112.5°	25	23	22	21	20	20	20	21	21	21	21	0°
115°	22	21	20	19	18	17	17	18	18	18	18	2.5°
117.5°	20	19	17	16	16	15	15	16	16	16	16	5°
120°	18	16	16	15	14	14	14	14	15	15	15	7.5°
122.5°	17	15	14	13	13	12	12	13	14	13	14	10°
125°	15	13	12	12	11	10	10	10	10	11	12	12.5°
127.5°	14	12	11	10	10	9	9	8	8	9	10	15°
130°	13	11	10	9	8	8	7	7	7	8	10	17.5°
132.5°	14	12	10	9	8	7	7	6	7	9	11	20°
135°	25	21	17	12	6	4	7	12	16	20	24	22.5°
137.5°	24	19	13	7	3	1	4	8	12	17	22	25°
140°	20	16	10	4	0	0	1	4	8	12	16	27.5°
142.5°	9	6	2	0	0	0	0	0	1	4	7	30°
145°	3	1	0	0	0	0	0	0	0	0	2	32.5°
147.5°	1	0	0	0	0	0	0	0	0	0	0	35°
150°	0	0	0	0	0	0	0	0	0	0	0	37.5°
152.5°	0	0	0	0	0	0	0	0	0	0	0	40°
155°	0	0	0	0	0	0	0	0	0	0	0	42.5°
157.5°	0	0	0	0	0	0	0	0	0	0	0	45°
160°	0	0	0	0	0	0	0	0	0	0	0	47.5°
162.5°	0	0	0	0	0	0	0	0	0	0	0	50°
165°	0	0	0	0	0	0	0	0	0	0	0	52.5°
167.5°	0	0	0	0	0	0	0	0	0	0	0	55°
170°	0	0	0	0	0	0	0	0	0	0	0	57.5°
172.5°	0	0	0	0	0	0	0	0	0	0	0	60°
175°	0	0	0	0	0	0	0	0	0	0	0	62.5°
177.5°	0	0	0	0	0	0	0	0	0	0	0	65°
180°	0	0	0	0	0	0	0	0	0	0	0	67.5°
												70°
												72.5°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°
												110°

NUMBER: P21000
 NUMBER: TRR-50-LED-E1-5-XX

REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):

CANDELA DISTRIBUTION

165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°	165°			
26	26	26	26	26	26	26	26	26	26	26	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°	165°	22		
29	30	31	31	31	30	29	27	25	23	21	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°	165°	19			
33	33	33	34	33	32	31	30	29	27	26	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°	165°	17				
34	35	35	35	33	32	32	31	29	28	27	120°	122.5°	125°	127.5°	130°	132.5°	135°	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°	165°	16					
35	36	36	36	35	34	33	32	31	31	31	122.5°	125°	127.5°	130°	132.5°	135°	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°	165°	15						
48	50	51	51	51	50	50	48	45	43	41	125°	127.5°	130°	132.5°	135°	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°	165°	13							
74	74	74	75	74	75	75	73	72	69	67	127.5°	130°	132.5°	135°	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°	165°	11								
92	94	93	94	93	94	93	93	91	87	85	130°	132.5°	135°	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°	165°	10									
99	100	99	99	100	101	100	101	100	96	91	132.5°	135°	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°	165°	9										
92	93	95	96	95	93	91	88	85	83	82	135°	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°	165°	4											
113	119	123	125	122	118	112	105	98	92	87	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°	165°	2												
158	168	173	176	174	169	160	148	135	123	117	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°	165°	0													
199	209	214	219	216	211	200	187	175	165	158	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°	165°	0														
233	242	247	249	249	243	232	221	211	198	192	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°	165°	0															
246	251	255	257	258	253	245	237	230	223	217	147.5°	150°	152.5°	155°	157.5°	160°	162.5°	165°	0																
261	270	273	275	275	268	259	249	240	236	232	150°	152.5°	155°	157.5°	160°	162.5°	165°	0																	
284	291	293	294	295	287	281	271	262	252	244	152.5°	155°	157.5°	160°	162.5°	165°	0																		
298	302	303	302	305	297	293	288	283	272	259	155°	157.5°	160°	162.5°	165°	0																			
318	322	322	321	322	316	312	303	294	283	272	157.5°	160°	162.5°	165°	0																				
333	341	342	343	343	334	328	318	309	296	285	160°	162.5°	165°	0																					
340	337	334	334	334	331	333	333	328	314	300	162.5°	165°	0																						
372	368	362	360	361	365	367	362	343	323	314	165°	0																							
386	403	413	418	414	399	379	358	347	342	332	167.5°	0																							
440	452	458	463	458	447	433	422	402	376	345	170°	0																							
639	643	631	630	632	638	629	590	506	447	411	172.5°	0																							
650	643	635	634	636	641	642	645	618	596	547	175°	0																							
553	524	508	503	507	518	544	605	644	668	671	177.5°	0																							
732	732	727	718	721	722	714	715	715	745	779	180°	0																							
907	887	867	855	865	880	893	921	925	941	923																									
934	912	888	875	892	912	934	981	980	1002	993																									
855	836	813	798	823	845	869	924	915	933	933																									
797	781	756	735	763	785	808	850	850	859	854																									
822	824	806	786	807	813	816	821	800	789	780																									
888	919	917	902	913	904	875	837	782	724	687																									
889	958	989	993	991	951	880	806	711	616	522																									
728	815	870	892	878	818	730	636	527	421	315																									
471	538	587	613	600	550	481	411	329	251	179																									
284	326	353	372	362	334	288	244	192	145	100																									
165	197	215	222	217	202	170	137	105	78	58																									
57	62	67	70	70	69	63	57	50	44	41																									
33	33	33	34	34	35	35	35	35	34	33																									
29	28	28	29	29	29	30	30	30	30	30																									
28	27	28	28	28	28	28	29	30	29	29																									
28	28	28	29	28	28	28	28	28	28	28																									
25	26	26	27	27	26	26	26	26	26	25																									

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REPORT NUMBER: P21000
 CATALOG NUMBER: TRR-50-LE

TION (continued):

CANDELA DISTRIBUTION (con

170°	175°	180°	185°	190°	195°	200°	205°	210°	215°		220°	225°
23	24	25	25	24	23	23	22	22	21	0°	26	26
20	21	22	21	20	20	19	19	19	18	2.5°	21	20
19	20	20	20	19	18	17	17	17	16	5°	24	22
17	18	19	19	18	17	16	16	16	14	7.5°	27	26
17	18	18	18	17	16	15	15	15	13	10°	31	32
14	15	16	16	15	14	13	12	12	11	12.5°	40	40
13	14	15	14	14	13	11	10	9	9	15°	65	62
13	14	15	14	13	12	11	9	8	8	17.5°	82	79
14	16	16	16	15	14	12	11	9	8	20°	87	84
30	31	32	31	29	26	23	20	16	13	22.5°	83	85
29	31	32	31	30	26	22	18	12	7	25°	86	90
22	24	25	24	23	21	17	14	9	5	27.5°	116	115
11	12	13	13	12	10	8	5	2	0	30°	151	144
6	7	7	7	6	5	3	1	0	0	32.5°	184	177
3	4	4	4	3	2	1	0	0	0	35°	211	203
2	2	3	2	2	1	0	0	0	0	37.5°	224	218
0	0	0	0	0	0	0	0	0	0	40°	233	235
0	0	0	0	0	0	0	0	0	0	42.5°	247	246
0	0	0	0	0	0	0	0	0	0	45°	263	259
0	0	0	0	0	0	0	0	0	0	47.5°	274	271
0	0	0	0	0	0	0	0	0	0	50°	286	281
0	0	0	0	0	0	0	0	0	0	52.5°	298	291
0	0	0	0	0	0	0	0	0	0	55°	313	300
0	0	0	0	0	0	0	0	0	0	57.5°	327	322
0	0	0	0	0	0	0	0	0	0	60°	381	363
0	0	0	0	0	0	0	0	0	0	62.5°	500	474
0	0	0	0	0	0	0	0	0	0	65°	669	620
0	0	0	0	0	0	0	0	0	0	67.5°	793	748
										70°	879	862
										72.5°	950	915
										75°	898	884
										77.5°	825	827
										80°	751	754
										82.5°	609	586
										85°	425	391
										87.5°	242	220
										90°	131	121
										92.5°	75	70
										95°	50	48
										97.5°	38	37
										100°	32	31
										102.5°	29	28
										105°	28	28
										107.5°	27	26
										110°	24	24

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CATALOG NUMBER: TRR-50-LED-E1-5-XX

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Continued):									CANDELA DISTRIBUTION (continued):			
230°	235°	240°	245°	250°	255°	260°	265°	270°		220°	225°	230°
26	26	26	26	26	26	26	26	26	112.5°	20	20	20
20	21	22	23	24	25	26	28	29	115°	17	16	17
22	22	23	25	26	27	27	28	29	117.5°	15	15	14
25	26	28	30	32	34	36	37	39	120°	14	13	13
33	36	37	40	42	45	47	48	50	122.5°	12	12	12
42	44	46	50	54	58	61	62	64	125°	11	10	10
59	57	57	61	65	68	70	71	71	127.5°	9	9	8
75	71	68	67	68	68	70	70	71	130°	7	7	7
82	81	79	77	76	75	75	74	73	132.5°	7	7	7
87	87	87	88	90	93	96	96	95	135°	8	4	7
97	107	115	124	130	135	140	140	140	137.5°	4	2	4
119	124	132	142	152	160	165	168	169	140°	1	0	0
141	144	152	163	174	181	189	193	193	142.5°	0	0	0
172	168	167	171	175	177	182	186	188	145°	0	0	0
191	183	180	183	191	198	206	215	219	147.5°	0	0	0
213	207	211	220	234	247	256	266	267	150°	0	0	0
233	229	232	241	258	270	279	287	291	152.5°	0	0	0
243	241	245	256	268	278	285	297	303	155°	0	0	0
253	250	256	272	288	300	306	319	327	157.5°	0	0	0
266	261	263	276	293	309	324	346	355	160°	0	0	0
275	269	278	296	306	307	311	324	332	162.5°	0	0	0
286	277	281	305	340	365	372	379	380	165°	0	0	0
293	295	308	332	358	376	398	425	435	167.5°	0	0	0
319	323	352	422	471	469	476	488	488	170°	0	0	0
373	400	420	457	474	485	517	539	541	172.5°	0	0	0
455	440	445	467	448	420	410	412	408	175°	0	0	0
559	488	437	459	487	507	529	545	543	177.5°	0	0	0
689	629	603	635	667	698	730	750	745	180°	0	0	0
855	815	802	823	827	836	863	863	853				
920	900	911	934	918	910	944	942	938				
894	886	921	945	950	958	999	1003	992				
831	833	867	863	857	870	896	896	877				
744	753	785	798	815	838	862	854	843				
596	634	706	775	836	886	932	940	938				
410	477	571	663	744	806	866	888	904				
247	319	409	497	584	651	716	741	767				
148	195	266	342	420	493	559	587	610				
84	108	148	193	242	294	332	356	362				
53	65	84	106	133	164	187	202	198				
36	39	47	58	72	92	105	111	107				
30	30	30	31	33	36	38	40	40				
28	27	27	27	27	28	29	29	30				
27	27	27	27	27	28	28	28	29				
26	25	25	25	26	27	27	27	27				
23	23	23	24	25	26	26	27	27				



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CATALOG NUMBER: TRR-50-LED-E1-5-XX

CANDELA DISTRIBUTION (continued):

235°	240°	245°	250°	255°	260°	265°	270°		275°	280°	285°	290°
20	20	21	22	23	24	25	25	0°	26	26	26	26
17	17	17	18	19	20	22	23	2.5°	29	29	28	28
14	15	15	16	17	19	20	21	5°	30	30	30	30
13	13	13	14	16	17	19	19	7.5°	39	39	38	38
12	12	12	13	15	17	18	18	10°	50	50	50	49
10	10	11	12	14	15	16	17	12.5°	65	65	63	61
8	9	10	11	13	14	16	16	15°	71	71	70	69
7	8	9	10	12	14	15	16	17.5°	71	70	69	67
7	8	10	12	15	17	18	18	20°	73	72	71	73
15	19	23	27	30	32	34	35	22.5°	94	93	91	90
9	13	19	24	29	32	34	35	25°	140	138	137	134
4	10	14	17	21	23	25	26	27.5°	169	164	161	158
0	0	3	6	8	10	12	12	30°	192	190	183	178
0	0	0	1	3	5	6	6	32.5°	187	185	177	175
0	0	0	0	1	2	3	3	35°	215	210	199	190
0	0	0	0	0	1	1	2	37.5°	265	260	246	237
0	0	0	0	0	0	0	0	40°	289	282	269	261
0	0	0	0	0	0	0	0	42.5°	298	288	278	274
0	0	0	0	0	0	0	0	45°	320	311	302	295
0	0	0	0	0	0	0	0	47.5°	349	329	311	299
0	0	0	0	0	0	0	0	50°	328	316	311	311
0	0	0	0	0	0	0	0	52.5°	380	372	367	349
0	0	0	0	0	0	0	0	55°	428	403	385	368
0	0	0	0	0	0	0	0	57.5°	488	474	477	472
0	0	0	0	0	0	0	0	60°	535	513	496	476
0	0	0	0	0	0	0	0	62.5°	410	415	433	450
0	0	0	0	0	0	0	0	65°	546	540	533	505
0	0	0	0	0	0	0	0	67.5°	748	737	722	682
								70°	862	864	861	836
								72.5°	942	942	938	921
								75°	993	988	972	948
								77.5°	884	884	875	857
								80°	850	853	847	820
								82.5°	937	914	880	820
								85°	890	847	805	723
								87.5°	741	697	656	566
								90°	585	541	494	412
								92.5°	348	322	295	251
								95°	198	181	171	155
								97.5°	106	101	96	93
								100°	41	41	45	54
								102.5°	30	32	39	42
								105°	29	31	40	35
								107.5°	27	30	42	30
								110°	27	31	42	28



REPORT NUMBER: P21000
 CATALOG NUMBER: TRR-50-LED-E1-5-XX

CANDELA DISTRIBUTION (continued):

295°	300°	305°	310°	315°	320°	325°		275°	280°	285°	290°	295°
26	26	26	26	26	26	26	112.5°	25	30	37	24	22
27	26	26	25	25	25	26	115°	24	30	27	20	19
30	30	30	31	31	32	33	117.5°	23	30	22	18	16
37	37	37	36	36	37	38	120°	22	27	19	16	15
48	47	46	45	43	42	42	122.5°	21	23	17	15	14
58	55	52	50	48	46	45	125°	17	18	15	13	12
66	63	59	55	56	57	59	127.5°	16	15	14	12	10
66	64	65	69	73	79	83	130°	15	15	13	12	10
75	76	78	81	86	89	93	132.5°	18	17	16	14	12
89	88	89	91	93	97	99	135°	34	32	29	26	23
128	121	116	110	103	97	93	137.5°	35	33	29	25	20
150	141	133	128	122	115	111	140°	26	24	21	18	14
170	158	150	143	139	142	148	142.5°	12	11	9	7	4
175	170	168	165	169	178	186	145°	6	5	3	2	0
185	182	180	184	194	205	213	147.5°	3	2	1	0	0
230	217	204	205	212	222	228	150°	1	1	0	0	0
258	242	227	224	229	234	241	152.5°	0	0	0	0	0
269	255	242	236	242	248	256	155°	0	0	0	0	0
284	263	251	247	250	262	269	157.5°	0	0	0	0	0
287	270	264	262	263	273	286	160°	0	0	0	0	0
307	286	274	272	275	282	299	162.5°	0	0	0	0	0
316	291	289	286	290	295	314	165°	0	0	0	0	0
343	323	309	296	300	309	332	167.5°	0	0	0	0	0
428	370	340	330	323	327	346	170°	0	0	0	0	0
460	434	414	390	364	369	396	172.5°	0	0	0	0	0
470	464	450	460	456	469	505	175°	0	0	0	0	0
476	462	498	553	590	631	648	177.5°	0	0	0	0	0
653	641	652	681	727	766	764	180°	0	0	0	0	0
834	842	840	841	852	847	866						
934	950	913	904	902	885	924						
936	949	895	873	870	843	857						
852	892	852	824	817	778	780						
794	796	747	733	712	683	710						
760	683	601	555	527	542	608						
650	537	442	365	344	377	445						
491	388	295	226	200	216	280						
342	247	181	135	112	119	161						
196	141	105	80	69	72	90						
110	81	64	53	50	51	55						
60	47	40	38	38	40	42						
36	33	32	32	32	34	35						
31	30	29	29	29	30	31						
29	28	28	28	27	28	28						
26	26	25	25	25	25	26						
25	24	23	23	23	23	24						



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CANDELA DISTRIBUTION (continued):

300°	305°	310°	315°	320°	325°		330°	335°	340°	345°	350°	355°
21	21	21	20	20	20	0°	26	26	26	26	26	26
18	18	18	17	17	18	2.5°	27	29	32	35	37	38
16	16	16	16	15	16	5°	35	37	39	40	42	43
14	14	15	15	14	14	7.5°	39	41	43	44	46	47
13	13	14	13	13	13	10°	41	41	41	42	44	44
11	11	12	11	11	11	12.5°	44	44	44	45	46	46
10	9	10	10	10	9	15°	61	65	68	69	71	72
9	8	8	8	8	8	17.5°	86	89	91	92	94	95
10	9	9	8	8	8	20°	97	102	106	108	110	110
18	14	8	5	6	12	22.5°	100	102	103	101	102	102
13	8	4	2	3	7	25°	93	96	101	104	109	113
9	4	0	0	0	4	27.5°	114	121	130	140	148	154
1	0	0	0	0	0	30°	155	165	177	187	198	204
0	0	0	0	0	0	32.5°	192	200	210	219	228	234
0	0	0	0	0	0	35°	218	225	231	239	244	249
0	0	0	0	0	0	37.5°	235	239	241	250	258	263
0	0	0	0	0	0	40°	251	259	262	268	274	278
0	0	0	0	0	0	42.5°	266	275	278	283	289	291
0	0	0	0	0	0	45°	278	289	295	302	308	310
0	0	0	0	0	0	47.5°	295	307	311	319	321	321
0	0	0	0	0	0	50°	312	326	334	345	342	341
0	0	0	0	0	0	52.5°	329	340	353	370	373	375
0	0	0	0	0	0	55°	351	361	365	370	367	367
0	0	0	0	0	0	57.5°	368	392	415	429	428	427
0	0	0	0	0	0	60°	428	460	510	562	592	606
0	0	0	0	0	0	62.5°	560	590	609	619	612	604
0	0	0	0	0	0	65°	655	645	631	590	547	516
0	0	0	0	0	0	67.5°	749	705	688	671	656	647
						70°	900	878	863	838	810	790
						72.5°	949	925	911	879	846	815
						75°	868	854	842	818	789	754
						77.5°	793	792	790	778	761	728
						80°	734	760	784	799	807	785
						82.5°	674	742	811	855	891	889
						85°	542	655	757	840	906	937
						87.5°	362	479	579	682	760	808
						90°	215	284	358	435	487	526
						92.5°	121	160	208	256	287	311
						95°	63	77	95	112	125	133
						97.5°	43	44	44	44	43	43
						100°	35	35	34	33	33	32
						102.5°	30	30	29	29	29	28
						105°	28	27	26	26	26	26
						107.5°	26	25	25	25	25	25
						110°	24	24	24	24	24	25



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CANDELA DISTRIBUTION (continued):

360°		330°	335°	340°	345°	350°	355°	360°
26	112.5°	21	21	21	22	22	23	24
38	115°	18	18	18	19	20	21	21
43	117.5°	16	16	16	17	18	20	20
48	120°	15	15	15	16	17	18	19
45	122.5°	13	14	14	15	16	17	18
46	125°	11	11	12	13	15	16	17
72	127.5°	9	10	11	12	14	15	16
95	130°	8	9	10	12	14	15	15
111	132.5°	8	10	12	14	16	17	17
101	135°	15	20	23	27	30	32	33
115	137.5°	12	17	21	25	28	30	31
156	140°	9	14	18	22	25	27	27
206	142.5°	2	5	8	11	13	15	15
238	145°	0	0	2	4	6	7	8
250	147.5°	0	0	0	1	2	3	4
265	150°	0	0	0	0	1	1	2
278	152.5°	0	0	0	0	0	0	0
290	155°	0	0	0	0	0	0	0
309	157.5°	0	0	0	0	0	0	0
321	160°	0	0	0	0	0	0	0
341	162.5°	0	0	0	0	0	0	0
379	165°	0	0	0	0	0	0	0
373	167.5°	0	0	0	0	0	0	0
430	170°	0	0	0	0	0	0	0
617	172.5°	0	0	0	0	0	0	0
608	175°	0	0	0	0	0	0	0
512	177.5°	0	0	0	0	0	0	0
657	180°	0	0	0	0	0	0	0
796								
817								
751								
721								
786								
897								
954								
833								
538								
321								
134								
43								
32								
28								
26								
25								
25								

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Cooper Lighting Solutions Photometric Lab
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Peachtree City, GA 30269

Scaled Data Report



(REPORT)