

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: P23470

Luminaire Tested: **MAQ-B80-7-LED-E1-SX**

Test Date: 03/26/13

Test Information

Test Method: LM-79-08
Report Number: P23470
Test Lab: INNOVATION CENTER P2
Test Date: 03/26/13
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: MAQ-B80-7-LED-E1-SX
Description: MCGRAW-EDISON SIGNLIGHTER FIXTURE EXTRA WIDE OPTIC DIST
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12595.8 lumens
Efficiency: N/A
Efficacy: 71.2 lumens/watt
Luminous Opening: Rectangular (W 1.62' x L: 2' x H: 0')
IES Classification: Type - Short - Non-Cutoff
BUG Rating: B0 - U5 - G4

Input Watts (W): 177
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

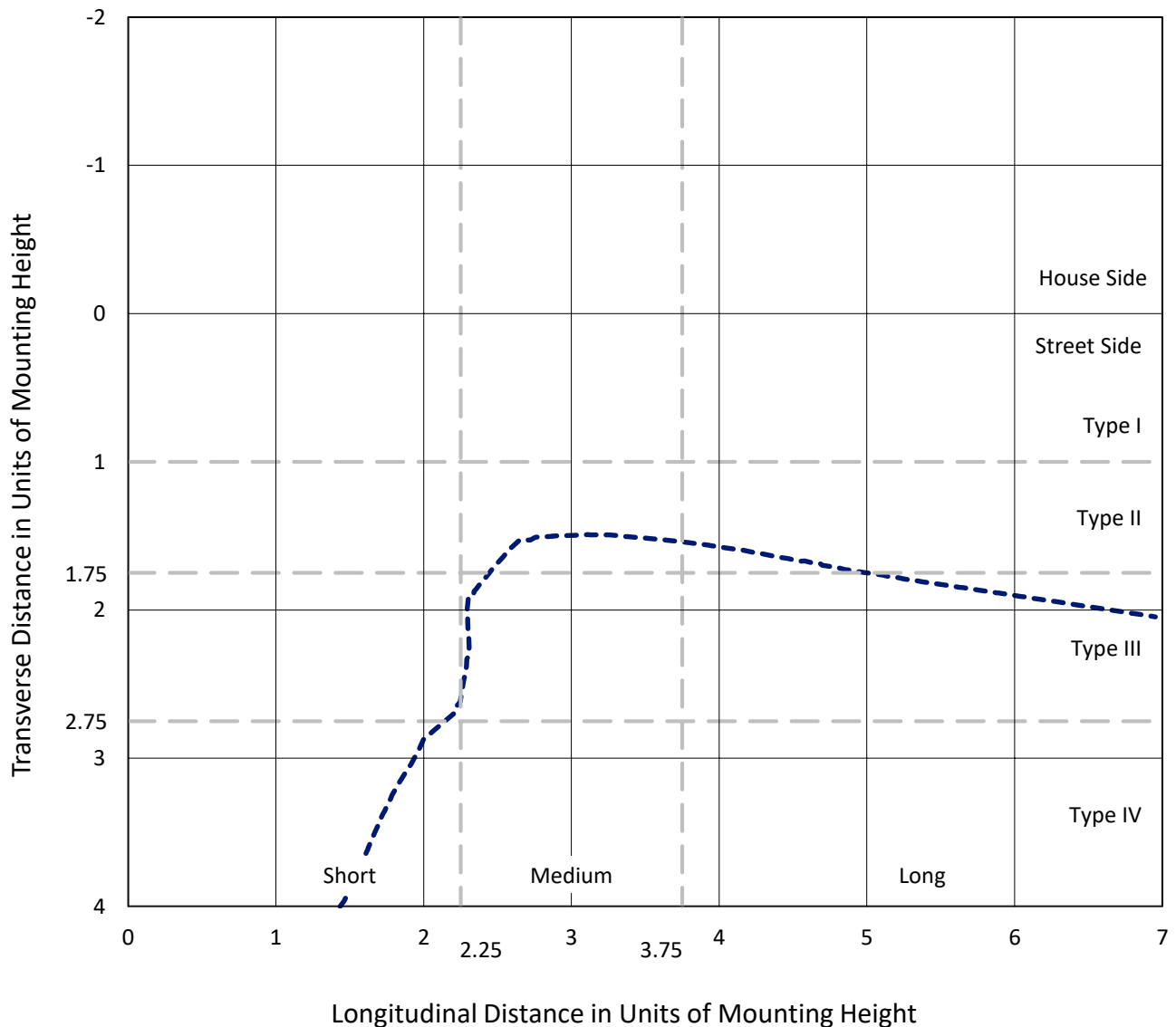


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

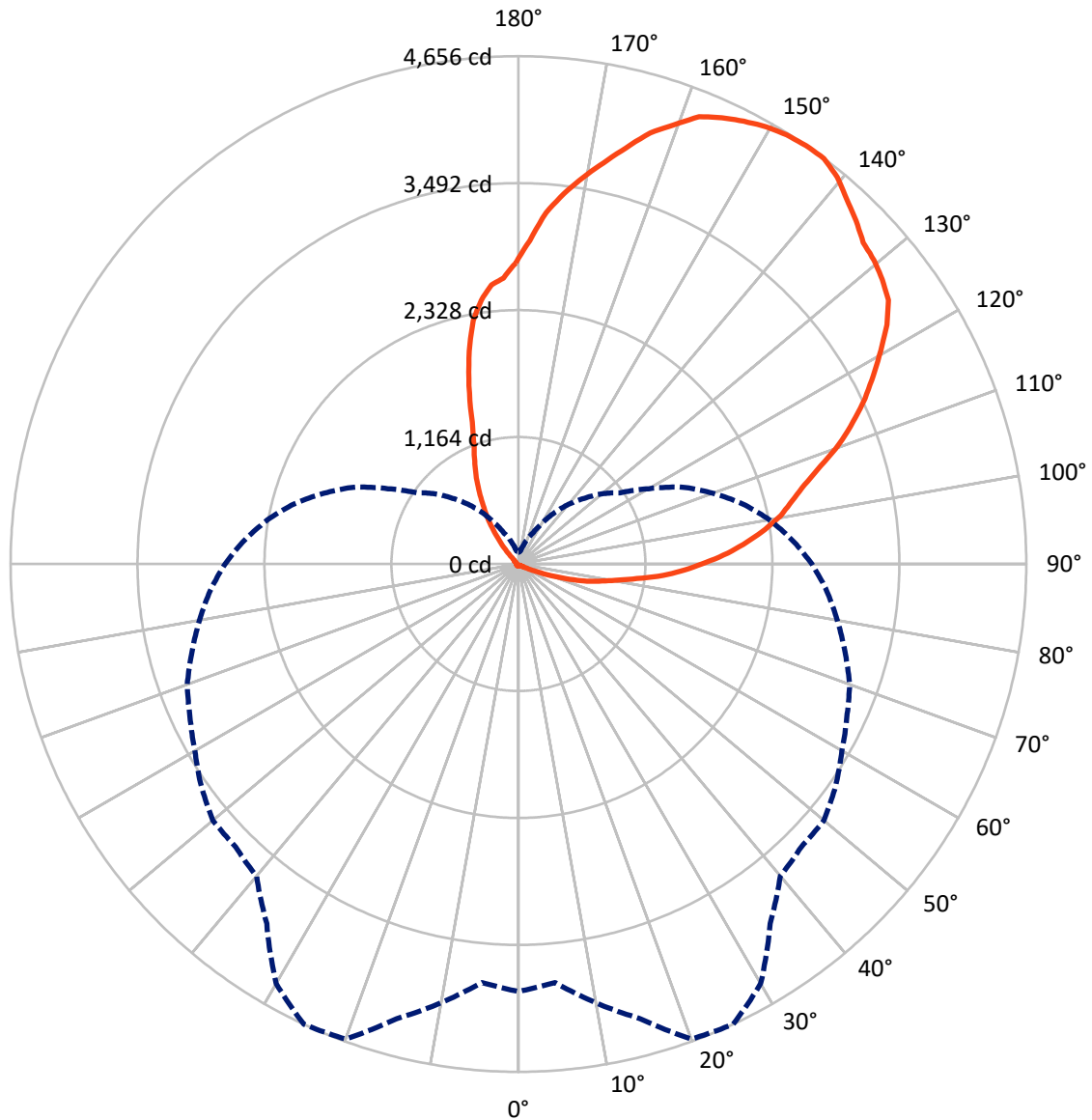


Based on 20 foot mounting height. Maximum calculated value = 0.1 fc
 Type - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 25-Deg Lateral - - - Horizontal Cone Through 142.5-Deg Vertical

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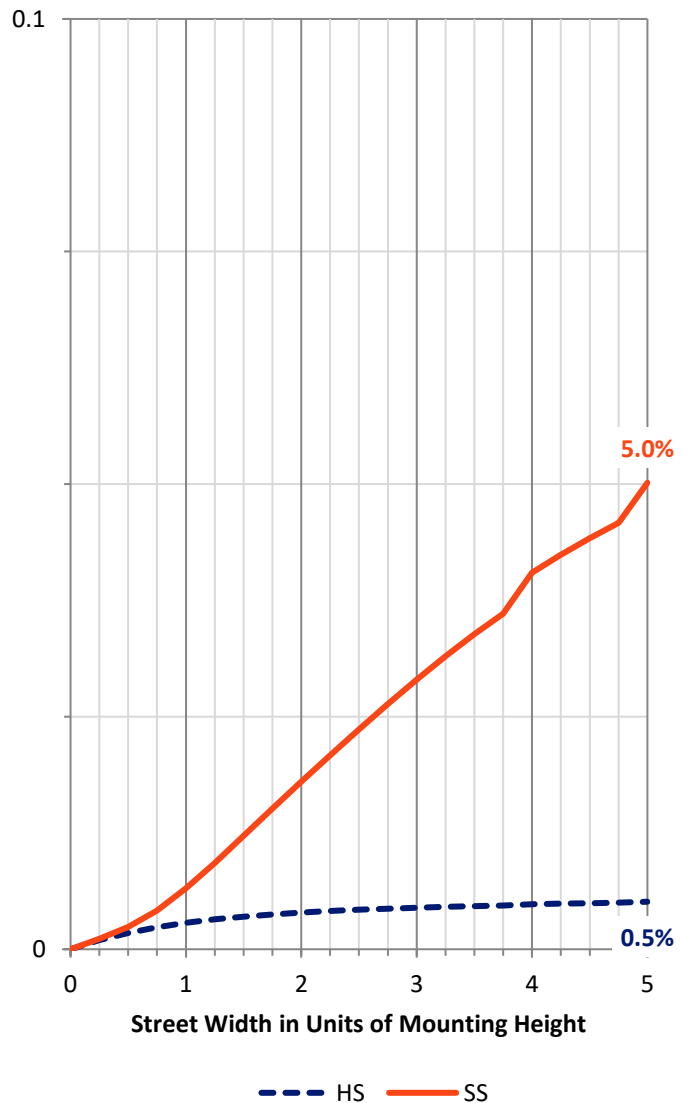
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	73.4	2180.6	2254.0
	% Fixture	0.6	17.3	17.9
Street Side	Lumens	1082.9	9258.8	10341.7
	% Fixture	8.6	73.5	82.1
Total	Lumens	1156.3	11439.4	12595.8
	% Fixture	9.2	90.8	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.8	0.0
10°-20°	5.0	0.0
20°-30°	7.5	0.1
30°-40°	9.7	0.1
40°-50°	12.6	0.1
50°-60°	31.0	0.2
60°-70°	108.0	0.9
70°-80°	323.8	2.6
80°-90°	657.1	5.2
90°-100°	1033.3	8.2
100°-110°	1372.2	10.9
110°-120°	1670.4	13.3
120°-130°	1810.6	14.4
130°-140°	1721.2	13.7
140°-150°	1534.3	12.2
150°-160°	1224.3	9.7
160°-170°	794.6	6.3
170°-180°	278.4	2.2
0°-90°	1156.3	9.2
0°-180°	12595.8	100.0



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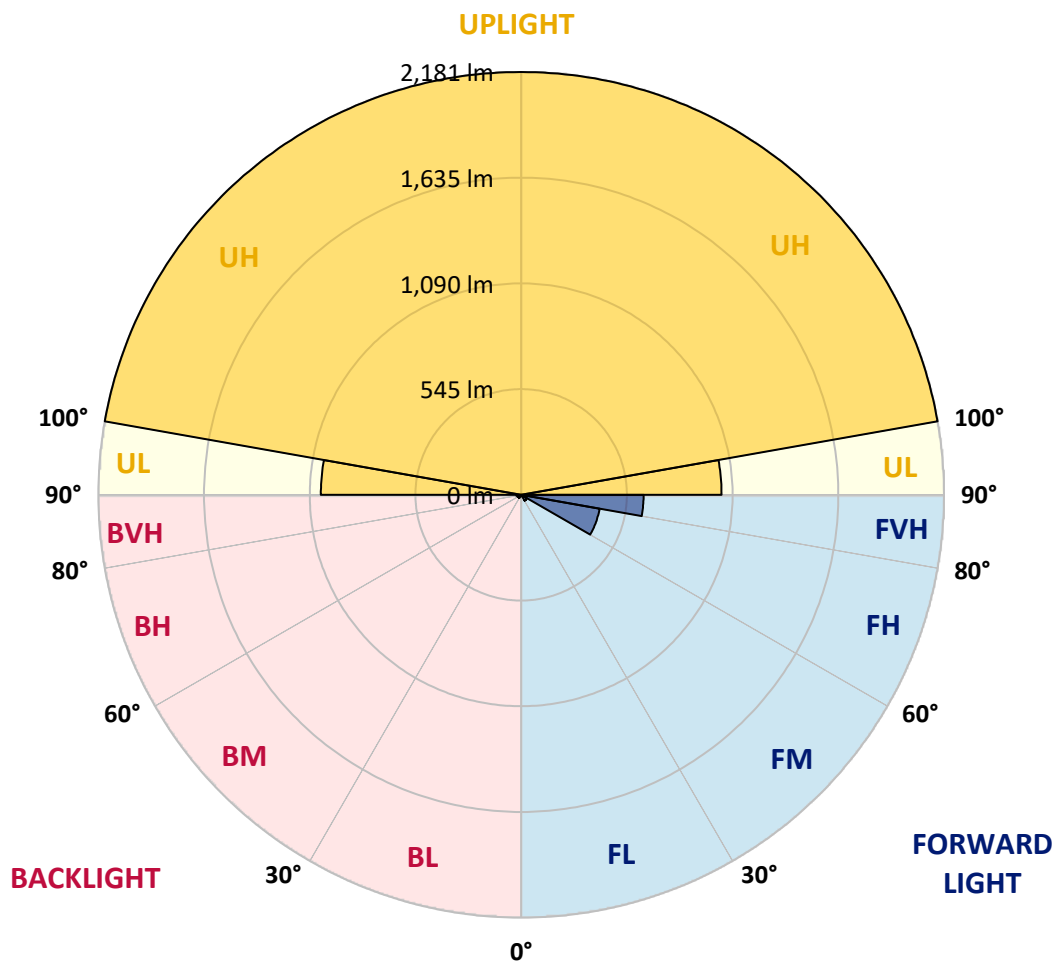
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6.5	0.1			
FM (30°-60°)	34.3	0.3			
FH (60°-80°)	410.6	3.3			G0/660
FVH (80°-90°)	631.5	5.0			G4/750
BL (0°-30°)	7.8	0.1	B0/110		
BM (30°-60°)	18.9	0.2	B0/220		
BH (60°-80°)	21.1	0.2	B0/110		G0/110
BVH (80°-90°)	25.6	0.2			G1/100
UL (90°-100°)	1033.3	8.2		U5	
UH (100°-180°)	2180.6	17.3		U5	

BUG Rating: B0-U5-G4

Type Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	18	18	18	18	18	18	18	18	18	18	18
2.5°	11	11	11	12	14	17	18	21	20	20	19
5°	11	11	11	12	14	18	18	21	20	20	19
7.5°	11	11	11	12	14	18	19	21	20	20	19
10°	10	10	10	11	14	17	18	20	19	20	19
12.5°	10	10	10	11	13	16	17	20	19	19	18
15°	9	9	9	10	12	16	17	19	19	19	18
17.5°	8	8	8	10	12	15	16	19	18	18	17
20°	8	8	8	9	11	15	16	18	17	18	17
22.5°	7	7	8	9	11	14	15	18	17	17	16
25°	7	7	7	8	10	14	15	17	17	17	16
27.5°	7	7	7	8	10	14	15	17	17	17	16
30°	7	7	7	8	10	14	15	17	16	16	16
32.5°	7	7	7	8	10	14	15	17	16	16	16
35°	7	6	7	8	10	14	15	17	16	16	15
37.5°	7	6	7	8	10	14	15	17	16	16	15
40°	7	6	7	8	10	14	15	18	17	17	16
42.5°	6	6	7	8	11	14	16	18	18	18	17
45°	6	6	7	8	11	15	17	20	19	20	19
47.5°	6	6	7	9	12	17	19	22	23	25	27
50°	6	6	7	9	13	19	22	26	30	38	43
52.5°	6	6	8	11	16	23	27	34	46	60	67
55°	6	7	9	14	20	29	36	50	74	98	104
57.5°	6	7	11	18	28	39	51	81	119	152	153
60°	7	10	17	27	38	54	84	128	174	203	203
62.5°	23	25	30	40	55	81	130	191	232	257	262
65°	61	62	62	68	89	127	197	268	293	322	339
67.5°	128	129	127	132	149	201	279	348	369	404	428
70°	202	220	249	266	266	317	391	443	460	501	556
72.5°	318	347	385	407	414	463	512	569	560	625	718
75°	473	485	508	533	558	622	675	711	723	802	886
77.5°	656	644	631	654	699	755	819	883	906	983	1039
80°	875	827	765	755	831	898	991	1078	1091	1156	1191
82.5°	1093	1017	905	875	985	1096	1192	1268	1254	1318	1345
85°	1331	1236	1119	1083	1196	1332	1393	1461	1457	1504	1517
87.5°	1645	1529	1355	1254	1371	1529	1571	1641	1606	1683	1694
90°	1910	1768	1565	1458	1523	1720	1764	1832	1761	1857	1841
92.5°	2074	1945	1774	1682	1715	1923	1951	2015	1920	2046	1983
95°	2154	2092	1985	1936	1901	2105	2111	2183	2079	2214	2116
97.5°	2211	2258	2217	2213	2106	2285	2257	2331	2204	2360	2261
100°	2276	2441	2456	2477	2321	2447	2375	2496	2345	2508	2387
102.5°	2366	2598	2635	2707	2499	2575	2504	2664	2476	2632	2479
105°	2495	2728	2777	2892	2685	2721	2667	2793	2664	2735	2613
107.5°	2652	2830	2871	3042	2883	2914	2842	2906	2813	2752	2736
110°	2822	2927	2956	3219	3109	3140	3029	2999	2963	2780	2883



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	3049	3071	3096	3420	3350	3333	3169	3084	3114	2835	2985
115°	3394	3315	3289	3593	3533	3520	3317	3173	3243	2923	2997
117.5°	3746	3558	3468	3714	3679	3684	3487	3299	3317	3055	2951
120°	3965	3737	3646	3832	3780	3855	3631	3430	3341	3203	2927
122.5°	4082	3884	3832	3988	3931	4028	3764	3522	3361	3335	2969
125°	4174	4045	4006	4175	4084	4167	3849	3593	3387	3370	3106
127.5°	4203	4144	4118	4290	4241	4233	3901	3637	3398	3385	3243
130°	4216	4164	4184	4405	4385	4288	3948	3662	3475	3368	3372
132.5°	4186	4152	4194	4440	4483	4322	3996	3706	3539	3365	3390
135°	4129	4071	4163	4447	4542	4415	4054	3751	3594	3452	3365
137.5°	4081	3985	4152	4414	4588	4499	4162	3813	3618	3545	3387
140°	4009	3902	4117	4349	4644	4596	4296	3905	3646	3622	3548
142.5°	3919	3851	4084	4315	4635	4656	4442	4023	3735	3667	3656
145°	3870	3825	4050	4289	4579	4654	4566	4182	3880	3735	3700
147.5°	3906	3864	4047	4301	4495	4640	4603	4388	4026	3838	3723
150°	3957	3930	4067	4328	4480	4607	4618	4499	4202	3950	3766
152.5°	4040	4018	4094	4353	4514	4555	4557	4475	4286	4042	3818
155°	4101	4081	4097	4331	4502	4497	4437	4343	4215	4050	3846
157.5°	4134	4101	4057	4251	4406	4423	4331	4175	4037	3960	3853
160°	4114	4074	4007	4117	4269	4271	4210	4074	3914	3787	3739
162.5°	4047	4006	3930	3974	4067	4134	4082	3988	3870	3752	3669
165°	3956	3932	3883	3867	3894	3940	3954	3865	3774	3685	3639
167.5°	3863	3844	3793	3753	3738	3760	3774	3729	3655	3567	3516
170°	3749	3726	3666	3605	3579	3595	3591	3560	3522	3455	3404
172.5°	3510	3513	3500	3463	3432	3419	3408	3382	3342	3307	3262
175°	3235	3236	3242	3229	3228	3232	3231	3217	3208	3171	3145
177.5°	2970	2968	2974	2963	2958	2966	2971	2967	2965	2948	2945
180°	2761	2761	2761	2761	2761	2761	2761	2761	2761	2761	2761



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	18	18	18	18	18	18	18	18	18	18	18
2.5°	20	20	18	17	17	21	22	22	20	18	18
5°	20	20	19	17	17	21	22	23	21	18	18
7.5°	20	20	19	17	17	21	22	23	21	18	19
10°	20	20	18	17	17	21	22	22	21	18	18
12.5°	19	19	18	16	17	20	22	22	20	18	18
15°	19	19	17	16	16	20	22	22	20	17	18
17.5°	18	18	17	15	16	19	21	21	20	17	18
20°	18	18	17	15	15	19	21	21	19	17	17
22.5°	18	17	16	15	15	19	20	21	19	16	17
25°	17	17	16	14	15	18	20	20	19	16	17
27.5°	17	17	16	14	15	18	20	20	18	16	16
30°	17	17	16	14	14	18	20	20	18	16	16
32.5°	17	17	15	14	14	18	19	20	18	16	16
35°	17	16	15	14	14	18	19	20	18	15	16
37.5°	17	16	15	14	14	18	19	20	18	15	16
40°	16	16	15	14	14	18	19	20	18	15	16
42.5°	17	17	15	14	14	18	19	20	18	15	16
45°	20	18	15	14	14	18	19	20	18	15	15
47.5°	25	23	18	14	14	18	19	20	18	15	15
50°	40	33	24	16	15	18	19	20	18	15	15
52.5°	66	56	42	27	17	18	20	20	18	15	15
55°	110	90	73	48	26	20	20	20	18	15	16
57.5°	166	141	117	77	43	25	21	20	18	15	16
60°	217	192	163	113	73	39	23	21	18	15	16
62.5°	278	253	219	153	105	57	30	22	19	16	16
65°	346	321	281	208	141	85	44	25	20	16	16
67.5°	428	417	365	289	202	125	69	32	20	17	17
70°	562	555	466	366	249	161	99	49	23	17	17
72.5°	709	694	578	436	303	197	130	72	31	19	18
75°	862	822	696	524	370	242	164	95	42	22	19
77.5°	1021	959	830	619	452	305	213	132	64	27	21
80°	1185	1103	959	703	534	387	272	182	94	37	23
82.5°	1360	1231	1088	795	619	472	345	244	139	62	27
85°	1538	1350	1214	897	705	555	423	321	204	102	43
87.5°	1710	1464	1347	1008	798	643	504	401	275	158	71
90°	1874	1593	1477	1137	897	729	588	482	353	227	124
92.5°	2000	1745	1599	1279	1012	823	673	554	429	300	183
95°	2123	1903	1718	1424	1138	921	768	635	496	368	246
97.5°	2233	2033	1829	1570	1247	1053	871	717	563	442	321
100°	2341	2121	1946	1708	1351	1173	1007	823	654	521	402
102.5°	2440	2213	2030	1862	1498	1279	1139	953	767	619	497
105°	2517	2334	2066	2017	1727	1419	1237	1071	892	743	598
107.5°	2572	2489	2135	2107	1950	1623	1376	1182	1020	858	711
110°	2599	2639	2293	2099	2112	1872	1568	1351	1178	1028	869



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	2684	2652	2509	2158	2147	2088	1819	1578	1378	1223	1054
115°	2855	2650	2662	2359	2135	2160	2034	1821	1608	1421	1223
117.5°	3004	2664	2669	2589	2270	2157	2122	1992	1801	1588	1357
120°	3005	2820	2639	2686	2552	2294	2170	2091	1922	1721	1471
122.5°	2960	2962	2721	2696	2697	2541	2351	2222	2080	1888	1644
125°	2936	2986	2890	2745	2725	2672	2519	2391	2239	2037	1808
127.5°	2978	2949	2971	2896	2777	2690	2616	2498	2343	2157	1908
130°	3108	2965	2974	2963	2873	2784	2667	2521	2373	2194	1954
132.5°	3258	3072	2990	2984	2907	2811	2718	2616	2463	2247	1973
135°	3393	3223	3090	2983	2922	2789	2709	2602	2473	2290	2051
137.5°	3411	3382	3226	3087	2934	2815	2687	2584	2420	2248	2033
140°	3410	3408	3339	3201	3034	2903	2750	2601	2454	2266	2056
142.5°	3550	3425	3322	3231	3098	2969	2838	2690	2520	2335	2129
145°	3648	3529	3361	3208	3100	3007	2895	2753	2582	2369	2183
147.5°	3664	3580	3440	3300	3133	2991	2884	2760	2615	2458	2272
150°	3627	3537	3448	3321	3222	3106	2969	2841	2691	2520	2340
152.5°	3613	3475	3370	3283	3204	3126	3010	2877	2706	2524	2363
155°	3674	3479	3333	3228	3141	3071	2957	2822	2650	2474	2336
157.5°	3699	3537	3395	3274	3167	3033	2926	2762	2606	2461	2352
160°	3690	3571	3410	3250	3120	3011	2858	2714	2566	2450	2353
162.5°	3605	3528	3434	3308	3158	3031	2916	2773	2629	2516	2391
165°	3593	3505	3397	3322	3223	3120	2988	2839	2709	2598	2485
167.5°	3503	3455	3384	3318	3235	3138	3047	2945	2858	2773	2678
170°	3388	3356	3310	3263	3204	3130	3055	2983	2913	2853	2779
172.5°	3228	3183	3127	3082	3035	2999	2961	2918	2873	2842	2806
175°	3135	3106	3065	3031	3001	2979	2963	2940	2915	2898	2874
177.5°	2958	2957	2945	2936	2934	2927	2921	2910	2891	2875	2876
180°	2761	2761	2761	2761	2761	2761	2761	2761	2761	2761	2761



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	18	18	18	18	18	18	18	18	18	18	18
2.5°	19	21	20	21	21	22	22	23	20	19	16
5°	19	21	21	21	21	23	23	23	20	19	17
7.5°	20	21	21	22	22	23	23	24	21	20	17
10°	19	21	21	22	22	23	23	24	21	20	17
12.5°	19	21	21	21	21	23	23	24	21	20	17
15°	19	21	21	21	21	23	23	23	21	19	17
17.5°	19	20	20	21	21	22	22	23	20	19	17
20°	18	20	20	20	20	22	22	22	19	18	16
22.5°	18	20	19	20	20	21	21	22	19	18	16
25°	18	19	19	20	20	21	21	21	19	18	15
27.5°	17	19	19	20	20	21	21	21	19	17	15
30°	17	19	19	19	19	20	20	21	18	17	15
32.5°	17	19	18	19	19	20	20	21	18	17	15
35°	17	18	18	19	19	20	20	20	18	16	14
37.5°	17	18	18	19	19	20	20	20	18	16	14
40°	17	18	18	18	18	20	20	20	17	16	14
42.5°	16	18	18	18	18	20	20	20	17	16	14
45°	16	18	17	18	18	20	19	20	17	16	14
47.5°	16	18	17	18	18	19	19	20	17	16	14
50°	16	18	17	18	18	19	19	20	17	16	14
52.5°	16	18	18	18	18	20	20	20	17	16	14
55°	16	18	18	18	18	20	20	20	17	16	14
57.5°	17	18	18	18	19	20	20	20	18	16	14
60°	17	18	18	19	19	20	20	21	18	17	14
62.5°	17	19	18	19	19	21	21	21	18	17	15
65°	17	19	19	19	20	21	21	22	19	17	15
67.5°	18	19	19	20	20	22	21	22	19	18	15
70°	18	20	19	20	20	22	22	22	19	18	16
72.5°	18	20	20	21	21	22	22	23	20	19	16
75°	19	20	20	21	21	22	22	23	20	19	16
77.5°	20	21	20	21	21	23	23	23	20	19	16
80°	22	22	21	22	22	23	23	23	20	19	17
82.5°	25	23	21	22	22	23	23	23	20	19	17
85°	28	25	22	22	22	23	23	24	21	19	17
87.5°	40	28	23	23	22	23	23	24	21	19	17
90°	65	37	25	23	22	23	23	24	21	19	17
92.5°	107	61	35	26	23	23	23	24	21	19	17
95°	157	98	57	35	25	24	23	24	21	19	17
97.5°	220	140	89	58	33	25	23	23	20	19	17
100°	297	196	127	89	53	31	24	23	20	19	17
102.5°	381	264	171	125	77	46	28	24	20	19	16
105°	482	343	228	166	108	65	37	26	20	18	16
107.5°	588	439	300	210	146	86	49	31	21	19	16
110°	730	555	364	255	183	118	70	38	23	19	16



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 CATALOG NUMBER: MAQ-B80-7-LED-E1-SX

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°	
112.5°	890	671	448	325	215	155	86	46	25	20	16	0°
115°	1017	789	542	384	258	182	111	54	28	21	16	2.5°
117.5°	1146	890	622	432	314	197	135	68	32	22	17	5°
120°	1259	977	691	510	350	236	153	81	37	25	18	7.5°
122.5°	1398	1097	785	574	374	276	178	94	44	29	20	10°
125°	1543	1212	875	596	437	302	209	112	54	35	23	12.5°
127.5°	1631	1273	904	661	502	337	236	130	64	43	29	15°
130°	1647	1290	974	766	538	405	269	155	75	50	37	17.5°
132.5°	1681	1370	1073	809	625	468	325	189	95	58	45	20°
135°	1761	1458	1126	899	736	546	393	252	137	82	60	22.5°
137.5°	1764	1473	1199	1016	812	637	494	355	228	140	94	25°
140°	1811	1565	1317	1058	892	761	616	454	318	231	164	27.5°
142.5°	1897	1666	1380	1136	1003	852	714	571	429	314	244	30°
145°	1976	1745	1474	1242	1069	943	796	651	534	437	360	32.5°
147.5°	2070	1840	1579	1304	1140	1009	884	729	627	536	477	35°
150°	2153	1931	1645	1386	1221	1080	969	825	732	650	603	37.5°
152.5°	2164	1933	1729	1492	1292	1151	1037	921	842	772	734	40°
155°	2172	2020	1817	1586	1381	1222	1102	1012	957	904	871	42.5°
157.5°	2220	2064	1865	1657	1460	1300	1184	1089	1051	1025	1007	45°
160°	2224	2073	1907	1726	1560	1407	1292	1208	1182	1160	1170	47.5°
162.5°	2254	2123	1987	1840	1689	1568	1474	1420	1383	1368	1389	50°
165°	2384	2264	2142	2006	1900	1790	1752	1722	1715	1696	1677	52.5°
167.5°	2576	2472	2392	2281	2172	2092	2074	2041	2022	2003	1980	55°
170°	2699	2634	2543	2472	2415	2379	2370	2337	2310	2272	2234	57.5°
172.5°	2762	2702	2661	2632	2592	2566	2540	2505	2472	2442	2409	60°
175°	2837	2812	2783	2765	2749	2719	2690	2649	2607	2571	2534	62.5°
177.5°	2850	2833	2801	2787	2763	2737	2706	2677	2644	2624	2596	65°
180°	2761	2761	2761	2761	2761	2761	2761	2761	2761	2761	2761	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°

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REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):

165°	170°	175°	180°
18	18	18	18
15	14	14	14
15	15	15	15
16	15	15	16
16	15	15	15
16	15	15	16
15	15	15	15
15	15	15	15
15	14	14	14
14	14	14	14
14	13	13	14
13	13	13	13
13	13	13	13
13	12	12	13
13	12	12	12
12	12	12	12
12	12	12	12
12	12	12	12
12	11	11	12
12	11	11	12
12	11	11	11
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15	14	14	14
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15	14	14	15
15	14	14	14
15	15	14	15
15	15	14	15
15	14	14	15
15	14	14	14
15	14	14	14
14	14	14	14
14	14	14	14
14	13	14	14
14	13	13	13

CANDELA DISTRIBUTION:

	165°
112.5°	13
115°	13
117.5°	13
120°	14
122.5°	14
125°	16
127.5°	20
130°	27
132.5°	37
135°	51
137.5°	73
140°	113
142.5°	180
145°	285
147.5°	410
150°	553
152.5°	685
155°	834
157.5°	1014
160°	1233
162.5°	1452
165°	1697
167.5°	1983
170°	2243
172.5°	2413
175°	2507
177.5°	2582
180°	2761

'23470
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TION (continued):

170°	175°	180°
13	13	13
12	12	12
12	12	12
12	11	12
12	11	11
12	11	11
13	11	11
19	15	13
30	27	26
47	46	45
66	65	65
89	83	80
132	116	109
221	187	176
333	290	270
484	428	400
641	600	573
804	807	782
1021	1047	1043
1262	1293	1284
1476	1511	1496
1708	1718	1714
1997	2019	2002
2256	2285	2293
2404	2412	2405
2474	2463	2449
2565	2568	2548
2761	2761	2761

(END OF REPORT)