

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: P23466

Luminaire Tested: **MAQ-B120-7-LED-E1-SW**

Test Date: 03/27/13

Test Information

Test Method: LM-79-08
Report Number: P23466
Test Lab: INNOVATION CENTER P2
Test Date: 03/27/13
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: MAQ-B120-7-LED-E1-SW
Description: MCGRAW-EDISON SIGNLIGHTER FIXTURE STANDARD WIDE OPTIC DIST
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19302.2 lumens
Efficiency: N/A
Efficacy: 74.0 lumens/watt
Luminous Opening: Rectangular (W 1.62' x L: 2' x H: 0')
IES Classification: Type - Short - Non-Cutoff
BUG Rating: B0 - U5 - G1

Input Watts (W): 261
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

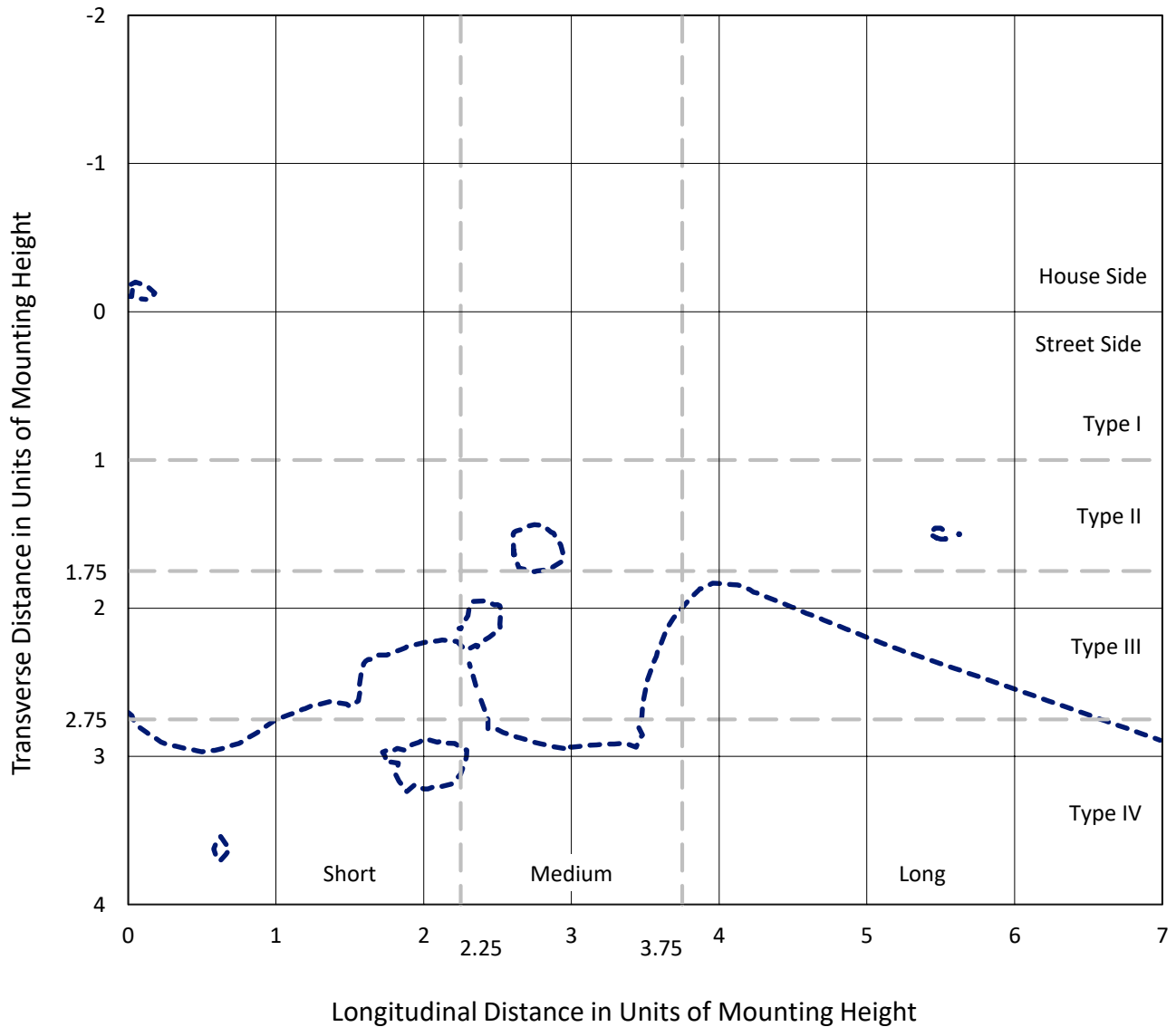


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

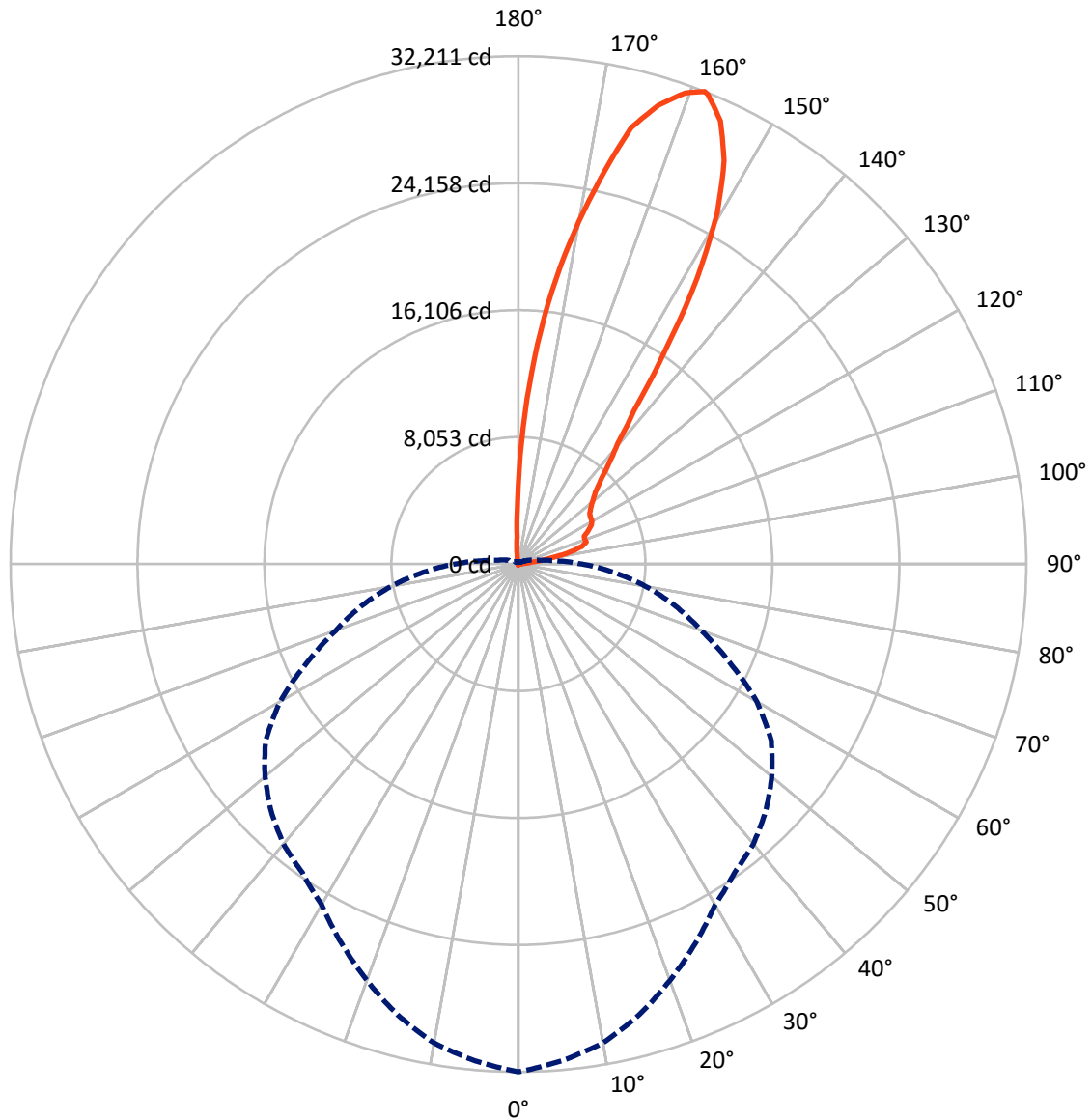


Based on 25 foot mounting height. Maximum calculated value = 0.1 fc
 Type - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 158-Deg Vertical

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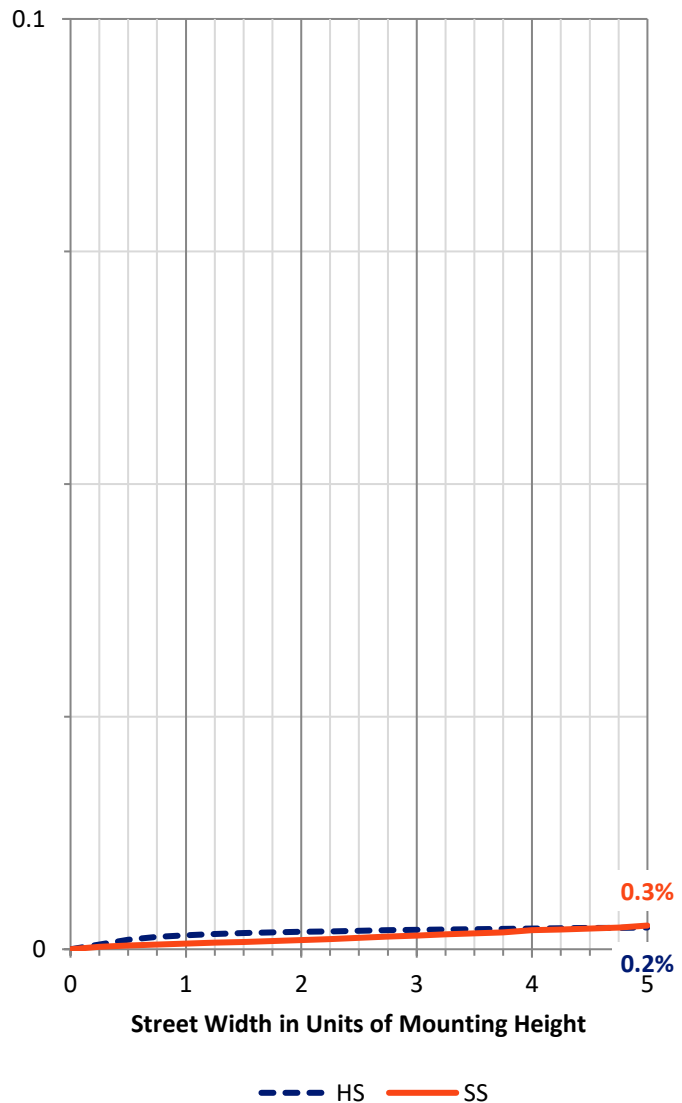
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	48.6	439.5	488.1
	% Fixture	0.3	2.3	2.5
Street Side	Lumens	119.3	18694.8	18814.1
	% Fixture	0.6	96.9	97.5
Total	Lumens	167.9	19134.3	19302.2
	% Fixture	0.9	99.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.2	0.0
10°-20°	5.1	0.0
20°-30°	8.1	0.0
30°-40°	6.8	0.0
40°-50°	5.8	0.0
50°-60°	7.6	0.0
60°-70°	11.0	0.1
70°-80°	32.3	0.2
80°-90°	89.0	0.5
90°-100°	475.6	2.5
100°-110°	1126.1	5.8
110°-120°	1465.2	7.6
120°-130°	1687.5	8.7
130°-140°	2319.7	12.0
140°-150°	4021.6	20.8
150°-160°	4589.7	23.8
160°-170°	2809.0	14.6
170°-180°	640.0	3.3
0°-90°	167.9	0.9
0°-180°	19302.2	100.0



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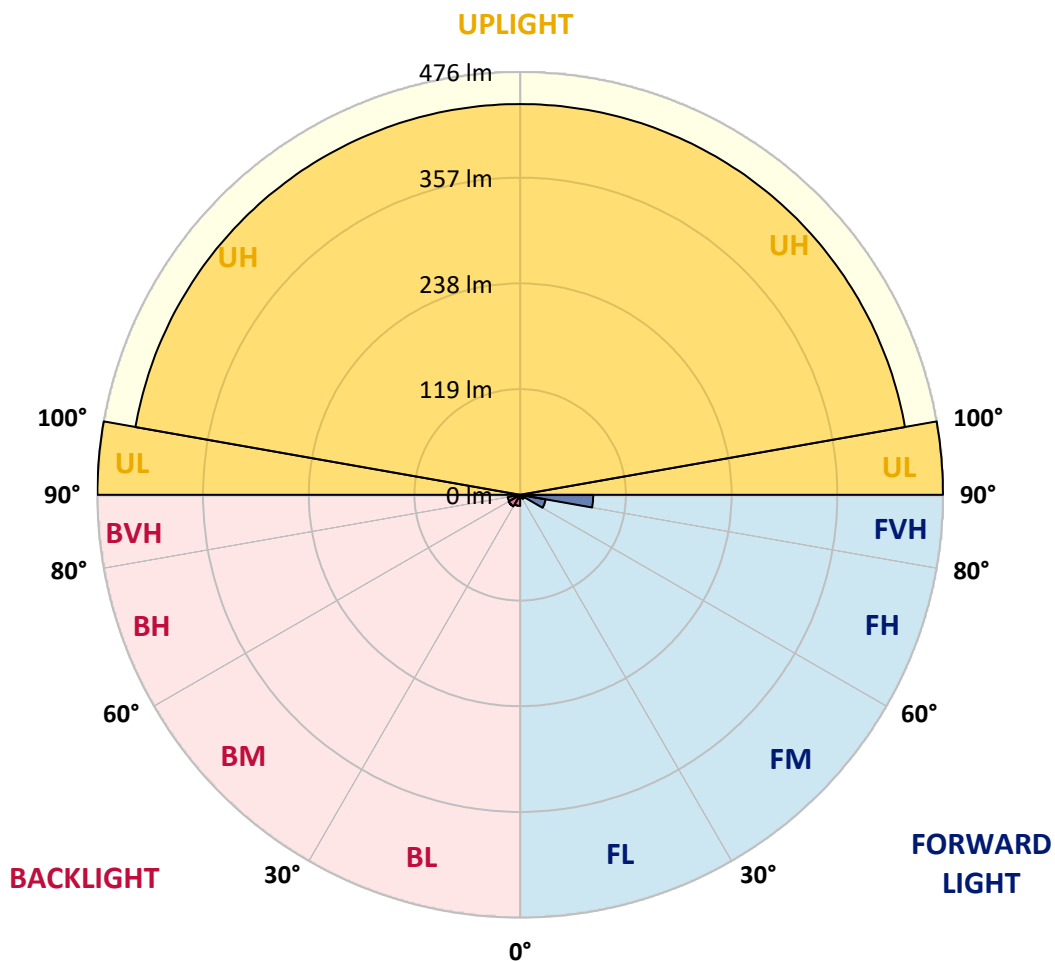
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2.8	0.0			
FM (30°-60°)	5.2	0.0			
FH (60°-80°)	29.1	0.2			G0/660
FVH (80°-90°)	82.2	0.4			G1/100
BL (0°-30°)	12.5	0.1	B0/110		
BM (30°-60°)	15.1	0.1	B0/220		
BH (60°-80°)	14.2	0.1	B0/110		G0/110
BVH (80°-90°)	6.8	0.0			G0/10
UL (90°-100°)	475.6	2.5		U3/500	
UH (100°-180°)	439.5	2.3		U3/500	

BUG Rating: B0-U5-G1

Type Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	17	17	17	17	17	17	17	17	17	17	17
2.5°	12	12	2	0	12	6	2	6	10	12	2
5°	20	28	8	14	14	14	12	26	24	24	20
7.5°	4	10	6	16	12	8	8	12	26	28	16
10°	8	8	2	0	0	4	2	0	12	8	10
12.5°	0	0	0	0	0	0	0	0	0	0	0
15°	0	0	0	0	0	0	0	0	2	2	4
17.5°	4	8	0	6	14	4	2	2	8	14	12
20°	0	0	0	0	0	0	0	2	0	2	2
22.5°	0	0	4	6	6	0	0	10	8	0	10
25°	0	0	2	0	0	0	0	0	2	2	4
27.5°	0	0	0	0	0	0	0	2	0	0	4
30°	0	4	4	4	8	2	0	10	16	14	18
32.5°	8	0	0	0	0	0	0	0	0	2	0
35°	0	0	0	0	0	0	0	2	0	0	0
37.5°	0	0	0	0	0	0	0	0	4	6	2
40°	0	4	0	6	0	0	2	0	4	6	6
42.5°	0	2	0	0	0	0	2	0	0	0	0
45°	0	0	0	0	2	0	0	0	0	0	0
47.5°	0	0	0	0	0	0	0	0	0	6	0
50°	12	2	0	8	8	6	4	6	8	14	16
52.5°	12	0	0	4	0	2	0	4	8	8	6
55°	4	0	0	0	0	0	0	4	10	12	2
57.5°	0	0	0	0	0	4	0	2	8	6	10
60°	12	0	0	0	4	0	4	10	12	2	6
62.5°	0	0	0	0	8	2	0	12	2	6	10
65°	16	6	16	2	8	8	2	14	4	2	6
67.5°	32	36	28	20	14	20	20	20	28	20	24
70°	45	32	28	30	32	28	38	41	30	26	30
72.5°	61	57	51	51	57	61	43	53	57	45	49
75°	57	49	41	51	53	49	43	38	47	32	28
77.5°	89	75	63	67	65	65	65	63	61	51	43
80°	85	83	77	61	73	65	67	61	69	59	47
82.5°	89	79	71	65	59	59	67	57	79	91	101
85°	101	89	83	89	71	77	87	103	201	239	308
87.5°	118	91	87	87	85	89	101	229	480	521	632
90°	146	132	132	118	132	152	298	555	908	950	1039
92.5°	154	144	160	180	201	288	630	1013	1317	1313	1329
95°	316	371	470	506	539	703	1191	1511	1681	1586	1540
97.5°	1005	1007	1058	1112	1106	1363	1795	1959	1916	1756	1645
100°	2131	2046	1935	1910	1817	2141	2382	2291	2036	1829	1661
102.5°	3379	3150	2775	2597	2516	2804	2869	2532	2162	1957	1686
105°	4157	4011	3489	3114	3079	3276	3197	2743	2368	2206	1819
107.5°	4530	4437	3981	3497	3438	3614	3458	3073	2715	2512	2079
110°	4485	4570	4248	3784	3715	3886	3742	3440	2982	2727	2271



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	4526	4694	4451	4155	4072	4157	4044	3768	3217	2820	2389
115°	4911	5067	4757	4635	4471	4402	4311	4066	3507	2944	2488
117.5°	5239	5334	5065	5071	4862	4599	4546	4271	3772	3166	2674
120°	5413	5516	5279	5365	5196	4785	4745	4418	4027	3379	2907
122.5°	5446	5598	5454	5614	5569	5079	5016	4662	4323	3667	3146
125°	5555	5768	5614	5812	5950	5514	5387	5107	4737	4064	3414
127.5°	5830	6029	5895	6092	6361	6122	5871	5672	5330	4631	3790
130°	6199	6367	6333	6558	6896	6845	6570	6428	6017	5330	4378
132.5°	6677	6892	7010	7328	7725	7846	7627	7490	6910	6221	5180
135°	7419	7727	7945	8377	8725	8894	8829	8709	8047	7143	6120
137.5°	8578	8788	8995	9653	10435	10930	11187	11069	10269	8946	7548
140°	9878	10257	11146	12457	13440	13855	14199	14157	13484	12097	10328
142.5°	12167	12893	14147	15575	16497	16720	16904	16835	16278	15036	13201
145°	16434	16865	17392	18429	18993	19165	19288	19017	18271	17109	15395
147.5°	21393	21401	20899	21272	21869	22125	22317	21971	20790	19001	16839
150°	25611	25392	24991	24839	24442	24535	24544	24217	23077	21229	18772
152.5°	28735	28962	28559	27720	26415	25552	25368	24874	23747	22171	20212
155°	30891	31122	30696	29424	27728	26298	25429	24726	23719	22370	20802
157.5°	32102	31756	31028	29691	28137	26582	24995	24037	23322	22236	20974
158°	32211	31632	30848	29600	28105	26547	24955	23895	23180	22177	20976
160°	31689	31122	30005	29025	27834	26247	24758	23302	22499	21681	20664
162.5°	30433	30019	28996	28002	27023	25534	24179	22730	21452	20548	19611
165°	28581	28279	27793	26918	26016	24588	23093	21701	20293	19114	18172
167.5°	24967	25040	25165	24552	24061	22809	21604	20326	18954	17627	16501
170°	21292	21215	21174	20563	20186	19457	18683	17771	16600	15453	14305
172.5°	17467	17222	17025	16389	16008	15413	14833	14238	13363	12560	11766
175°	13148	12905	12716	12463	12261	11898	11545	11215	10622	10093	9586
177.5°	8727	8452	8343	8203	8357	8000	7816	7745	7358	7093	6916
180°	4203	4203	4203	4203	4203	4203	4203	4203	4203	4203	4203



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	17	17	17	17	17	17	17	17	17	17	17
2.5°	4	14	14	16	8	10	10	10	24	18	18
5°	8	20	14	22	22	28	30	20	45	34	26
7.5°	8	26	18	18	18	20	30	22	32	34	20
10°	0	8	10	16	20	10	28	22	20	22	12
12.5°	0	8	10	14	8	12	12	14	20	14	12
15°	0	6	2	8	14	10	16	8	22	16	14
17.5°	10	12	18	6	16	20	16	26	30	22	22
20°	0	2	10	8	10	14	10	12	18	18	16
22.5°	2	18	12	12	12	18	14	24	22	26	18
25°	4	6	8	4	8	10	12	10	18	22	22
27.5°	0	6	10	12	14	6	10	12	24	18	14
30°	4	14	12	6	18	20	12	22	32	26	20
32.5°	0	6	0	6	4	6	8	12	20	16	14
35°	0	2	8	6	4	10	10	4	22	14	10
37.5°	0	0	8	2	4	2	6	14	16	20	8
40°	0	8	8	6	6	6	8	22	16	14	14
42.5°	4	4	4	4	4	6	12	16	10	8	12
45°	2	0	6	2	4	6	6	12	10	10	8
47.5°	0	6	8	4	6	4	12	10	14	12	14
50°	8	18	10	12	12	16	12	16	20	12	16
52.5°	8	12	18	6	12	14	8	16	20	10	14
55°	2	6	12	4	12	8	6	12	16	10	14
57.5°	4	6	14	12	6	6	6	6	14	12	10
60°	8	8	6	6	6	4	8	8	12	10	6
62.5°	6	8	8	8	8	10	12	6	12	16	8
65°	8	10	14	4	10	8	6	6	14	16	10
67.5°	16	20	14	18	20	22	14	22	18	12	14
70°	18	18	24	12	20	24	14	16	16	10	14
72.5°	36	59	34	30	24	24	18	24	28	20	24
75°	26	24	30	20	22	16	14	16	20	20	14
77.5°	49	53	47	28	32	22	24	26	22	16	22
80°	59	61	47	34	45	28	24	22	20	24	18
82.5°	97	71	51	36	32	22	18	26	20	6	10
85°	235	166	122	61	45	32	24	22	22	22	8
87.5°	456	348	227	91	51	32	18	28	24	14	8
90°	808	630	442	197	105	63	59	47	43	34	22
92.5°	1070	893	667	312	128	63	43	32	28	20	18
95°	1337	1151	926	513	237	89	38	32	32	26	14
97.5°	1497	1309	1147	727	357	130	61	32	24	24	18
100°	1596	1392	1331	944	519	221	81	45	30	36	16
102.5°	1657	1465	1422	1149	687	316	107	59	38	36	20
105°	1714	1517	1446	1307	831	417	146	63	36	38	22
107.5°	1831	1609	1451	1414	1023	547	211	89	59	59	36
110°	1939	1704	1479	1455	1171	673	257	93	57	49	32



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	1991	1793	1530	1449	1280	786	320	107	55	38	28
115°	2083	1910	1623	1467	1335	908	393	142	71	49	41
117.5°	2226	1961	1726	1509	1347	974	486	172	87	71	41
120°	2425	2008	1777	1572	1341	987	533	207	85	67	43
122.5°	2672	2135	1829	1653	1388	1009	565	221	95	73	49
125°	2944	2338	1892	1738	1473	1055	565	209	99	73	59
127.5°	3245	2587	2034	1799	1568	1088	545	197	99	73	59
130°	3574	2859	2283	1902	1588	1082	519	182	93	69	47
132.5°	4052	3274	2713	2172	1675	1070	523	211	105	87	71
135°	4864	3833	3187	2478	1797	1082	511	233	140	115	93
137.5°	6011	4741	3738	2808	1927	1088	506	261	164	122	91
140°	8170	5980	4425	3183	2062	1147	612	344	223	144	107
142.5°	10796	8215	5593	3507	2273	1323	780	480	290	205	132
145°	13144	10368	7498	4617	2642	1671	1064	673	434	286	186
147.5°	14505	12080	9435	6436	3944	2222	1473	950	598	405	259
150°	16019	13346	11122	8424	5835	3568	1971	1288	861	553	363
152.5°	17730	14949	12457	10105	7631	5243	3061	1720	1159	770	500
155°	18946	16377	13683	11349	9084	6762	4489	2555	1481	1031	711
157.5°	19525	17339	14643	12182	10150	7968	5826	3740	2115	1297	934
158°	19578	17461	14785	12336	10300	8195	6053	3987	2314	1361	987
160°	19341	17489	15081	12723	10719	8861	6854	4866	3116	1722	1141
162.5°	18397	16906	14880	12895	10974	9325	7654	5792	4090	2542	1481
165°	17104	15844	14155	12516	10834	9491	8020	6388	4828	3401	2182
167.5°	15413	14289	12866	11598	10235	9129	7984	6621	5235	3955	2899
170°	13164	12200	11106	10255	9414	8586	7601	6461	5330	4295	3371
172.5°	10956	10287	9540	9009	8351	7640	6845	6017	5198	4412	3669
175°	8983	8527	7828	7405	6839	6303	5774	5261	4745	4234	3748
177.5°	6564	6382	5944	5743	5423	5123	4868	4536	4256	3981	3711
180°	4203	4203	4203	4203	4203	4203	4203	4203	4203	4203	4203



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	17	17	17	17	17	17	17	17	17	17	17
2.5°	10	22	24	20	26	22	26	16	6	6	16
5°	26	26	51	43	43	47	36	43	26	32	34
7.5°	20	32	38	34	36	55	47	45	38	24	28
10°	10	24	30	28	38	55	32	32	16	18	30
12.5°	12	22	24	20	32	28	26	26	16	26	32
15°	16	22	34	22	38	43	30	30	22	26	28
17.5°	18	38	41	30	53	59	59	32	32	32	45
20°	16	24	26	26	34	32	28	43	26	34	24
22.5°	16	28	36	30	36	43	41	34	38	41	20
25°	10	24	28	30	28	38	28	32	18	32	34
27.5°	14	16	26	30	36	36	41	24	32	28	22
30°	14	26	36	34	38	43	49	38	28	43	32
32.5°	12	16	18	8	30	28	30	18	24	18	12
35°	12	8	24	8	22	18	12	16	10	14	10
37.5°	10	10	14	8	18	20	6	20	12	8	12
40°	10	18	10	16	22	22	18	14	14	6	12
42.5°	12	10	10	14	14	12	18	8	2	6	12
45°	2	6	2	2	6	10	8	8	2	4	4
47.5°	10	14	6	10	12	16	6	10	2	12	2
50°	16	14	26	10	22	26	20	22	18	18	10
52.5°	12	8	14	22	14	22	22	10	8	8	8
55°	12	2	6	10	10	4	22	10	0	4	4
57.5°	8	16	12	6	10	14	20	6	0	2	4
60°	8	10	12	2	14	4	4	8	0	0	2
62.5°	8	8	8	4	4	10	2	10	0	2	0
65°	8	10	10	6	10	10	6	4	0	0	0
67.5°	14	14	18	16	24	22	26	14	2	4	0
70°	12	16	16	18	20	24	18	16	4	10	14
72.5°	18	18	30	24	38	30	36	24	26	18	24
75°	0	10	20	8	10	16	16	10	10	4	4
77.5°	18	14	22	20	26	26	36	24	16	20	14
80°	16	20	20	20	22	16	26	18	8	10	10
82.5°	10	10	14	10	14	12	8	6	4	8	6
85°	6	4	12	10	22	14	10	14	2	4	2
87.5°	12	8	12	8	16	10	8	0	0	8	4
90°	18	24	24	20	24	32	36	20	22	16	16
92.5°	12	12	14	10	6	12	16	8	0	4	12
95°	16	10	14	16	14	14	10	10	4	8	4
97.5°	16	10	12	6	6	10	14	4	0	2	4
100°	16	14	12	14	12	18	4	6	4	6	6
102.5°	22	12	14	8	10	20	6	10	0	10	6
105°	10	18	14	10	12	10	2	0	0	4	0
107.5°	24	32	24	18	22	30	16	14	10	16	8
110°	20	12	22	6	12	10	14	2	4	8	4

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 CATALOG NUMBER: MAQ-B120-7-LED-E1-SW

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°	
112.5°	22	16	12	16	14	12	12	2	2	6	0	0°
115°	28	28	24	24	20	22	18	12	8	12	2	2.5°
117.5°	36	34	32	26	34	28	32	16	22	12	2	5°
120°	26	26	28	20	26	24	18	8	10	8	6	7.5°
122.5°	45	45	36	28	28	24	26	16	8	8	10	10°
125°	45	53	47	43	32	38	26	20	22	12	2	12.5°
127.5°	53	55	49	36	30	38	30	20	8	10	10	15°
130°	26	34	32	36	12	14	16	2	6	2	2	17.5°
132.5°	61	51	47	57	43	34	24	28	12	6	10	20°
135°	63	67	65	61	45	51	34	28	22	8	18	22.5°
137.5°	67	71	61	53	49	41	32	16	22	12	10	25°
140°	77	77	69	67	53	55	51	22	30	22	18	27.5°
142.5°	89	81	75	63	57	55	43	41	32	24	16	30°
145°	122	109	91	89	69	67	61	49	41	26	24	32.5°
147.5°	184	144	120	103	87	75	63	65	55	43	32	35°
150°	245	184	142	113	103	95	83	69	67	59	55	37.5°
152.5°	350	251	184	150	130	109	109	93	77	73	71	40°
155°	454	314	229	188	146	122	120	103	85	85	75	42.5°
157.5°	638	450	312	237	201	156	150	122	103	101	93	45°
158°	701	480	340	257	207	180	154	142	117	111	105	47.5°
160°	847	616	425	314	241	207	174	152	132	113	115	50°
162.5°	1039	808	600	442	326	267	219	192	158	150	138	52.5°
165°	1315	985	802	646	490	369	302	257	221	199	188	55°
167.5°	1842	1216	970	825	709	547	446	365	324	288	257	57.5°
170°	2542	1694	1214	1011	871	772	667	567	480	419	389	60°
172.5°	3015	2334	1716	1327	1122	989	897	835	768	705	660	62.5°
175°	3296	2842	2380	2012	1708	1463	1327	1242	1167	1116	1094	65°
177.5°	3438	3179	2921	2713	2530	2297	2131	2006	1894	1771	1732	67.5°
180°	4203	4203	4203	4203	4203	4203	4203	4203	4203	4203	4203	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: P23466
 NUMBER: MAQ-B120-7-LED-E1-SW

REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):

165°	170°	175°	180°
17	17	17	17
20	10	24	12
26	36	43	45
38	32	38	49
43	38	26	41
28	22	41	28
34	32	36	41
57	47	49	53
36	38	36	36
45	45	43	53
43	28	30	32
28	24	30	28
47	41	30	53
30	20	26	20
26	18	28	20
24	10	12	32
22	18	14	16
10	16	16	24
10	6	6	20
10	18	6	20
12	24	22	12
14	20	14	24
10	14	2	16
4	4	0	24
2	6	4	8
6	4	2	4
10	2	0	12
6	16	8	32
10	6	18	20
14	22	18	28
8	8	8	20
18	20	14	20
12	16	12	24
6	4	6	4
6	8	8	12
0	6	6	4
20	16	24	28
2	6	8	8
8	8	8	12
8	8	6	8
6	10	6	12
4	12	6	16
4	0	6	0
8	10	16	28
4	6	2	0

CANDELA DISTRIBUTION:

	165°
112.5°	2
115°	4
117.5°	14
120°	8
122.5°	14
125°	12
127.5°	8
130°	4
132.5°	14
135°	26
137.5°	16
140°	20
142.5°	14
145°	30
147.5°	49
150°	47
152.5°	79
155°	75
157.5°	99
158°	111
160°	109
162.5°	134
165°	172
167.5°	245
170°	359
172.5°	602
175°	1047
177.5°	1659
180°	4203

'23466

MAQ-B120-7-LED-E1-SW

TION (continued):

170°	175°	180°
0	0	0
4	8	32
12	14	20
4	8	12
10	20	8
12	6	16
6	10	16
0	0	0
6	8	8
24	24	32
14	14	28
16	24	41
8	18	32
18	24	32
30	43	41
49	61	65
71	79	81
69	65	89
91	97	113
99	105	113
107	107	126
122	138	138
162	172	190
233	235	243
344	342	353
588	583	571
1053	1051	1049
1655	1647	1673
4203	4203	4203

(END OF REPORT)