

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: P23471

Luminaire Tested: **MAQ-B80-3-LED-E1-SX**

Test Date: 03/26/13

Test Information

Test Method: LM-79-08
Report Number: P23471
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-B80-3-LED-E1-SX
Description: MCGRAW-EDISON SIGNLIGHTER FIXTURE EXTRA WIDE OPTIC DIST
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7332.1 lumens
Efficiency: N/A
Efficacy: 85.3 lumens/watt
Luminous Opening: Rectangular (W 1.62' x L: 2' x H: 0')
IES Classification: Type - Short - Non-Cutoff
BUG Rating: B0 - U5 - G3

Input Watts (W): 86
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

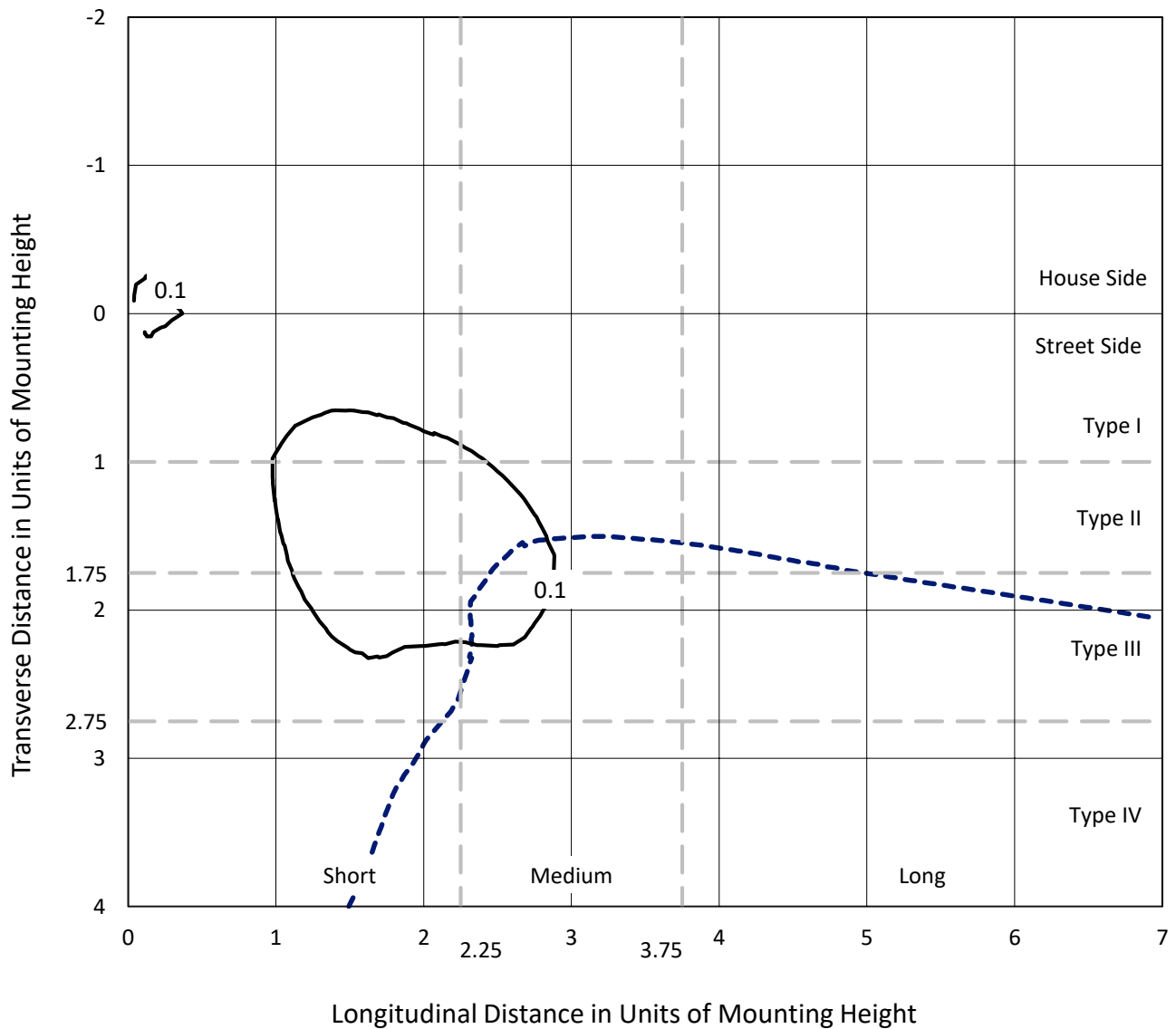


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Iso-Footcandle Lines of Horizontal Illumination

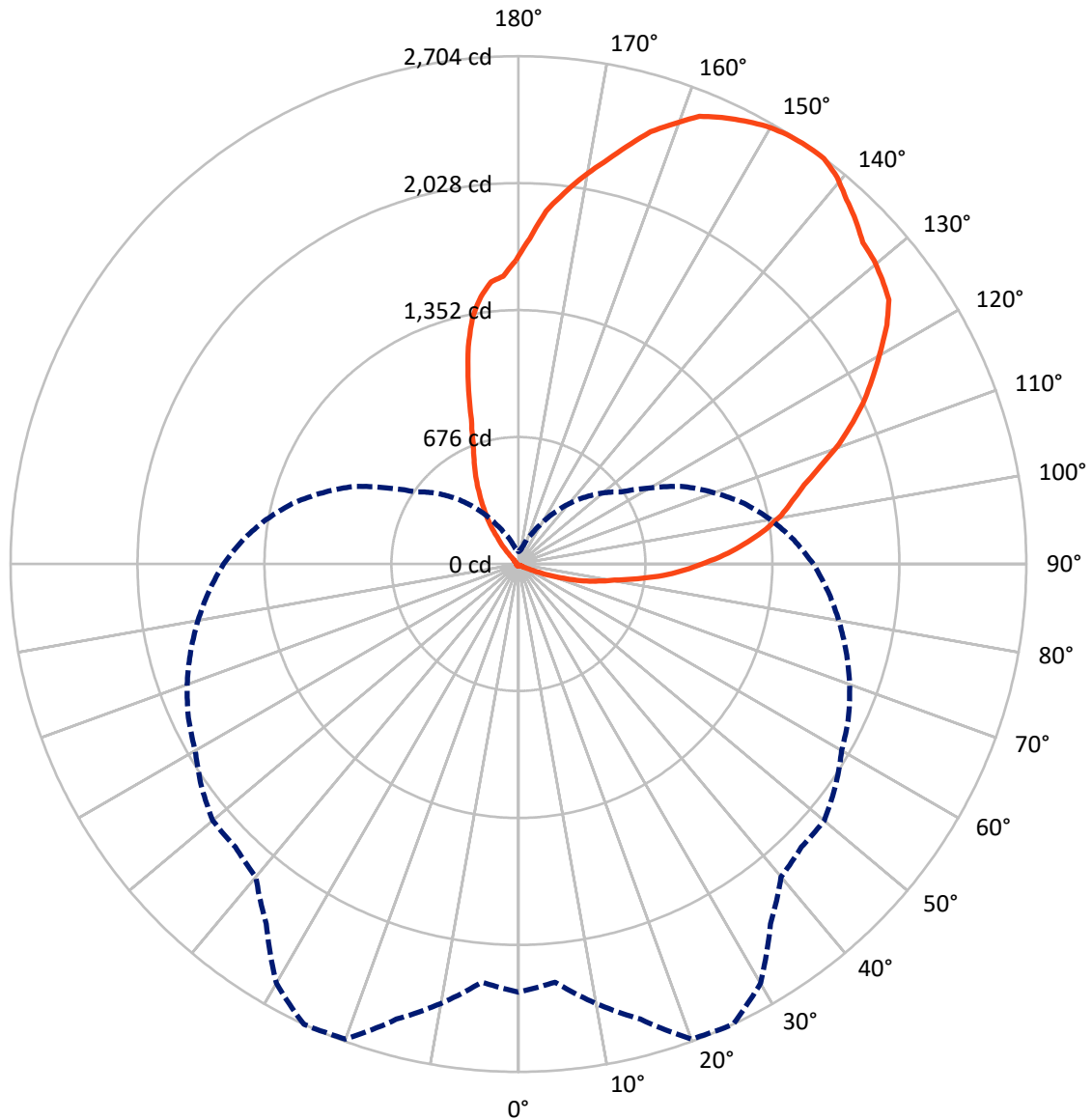
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 0.2 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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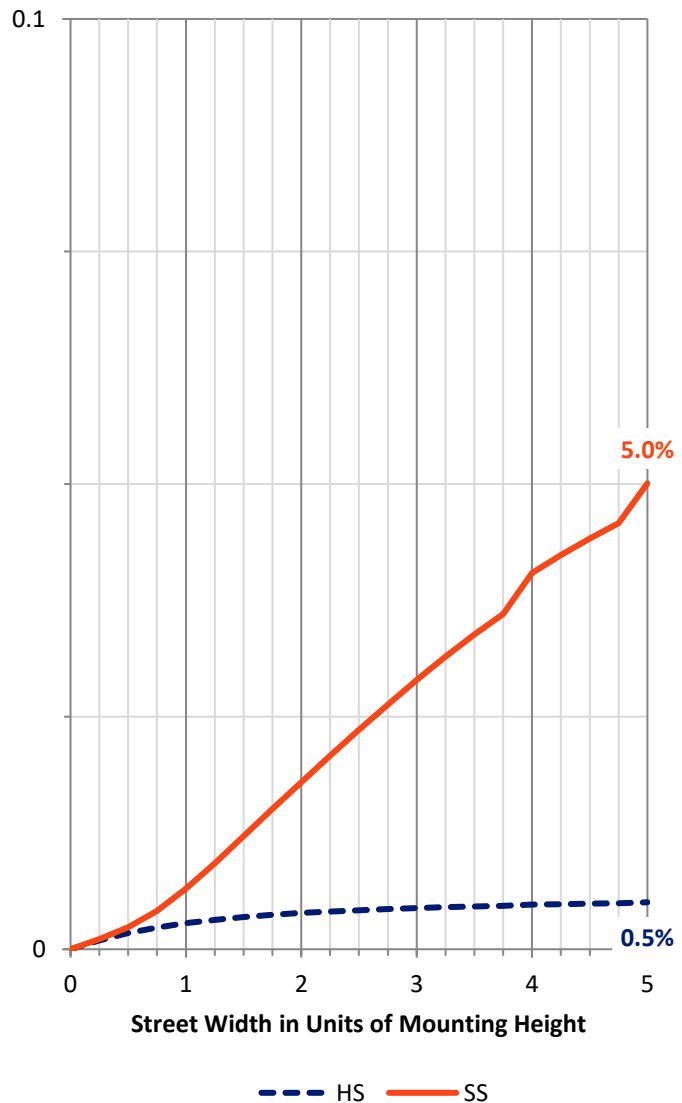
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	42.3	1276.7	1318.9
	% Fixture	0.6	17.4	18.0
Street Side	Lumens	629.2	5384.0	6013.2
	% Fixture	8.6	73.4	82.0
Total	Lumens	671.5	6660.7	7332.1
	% Fixture	9.2	90.8	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.0	0.0
10°-20°	2.9	0.0
20°-30°	4.3	0.1
30°-40°	5.5	0.1
40°-50°	7.2	0.1
50°-60°	18.0	0.2
60°-70°	62.8	0.9
70°-80°	188.3	2.6
80°-90°	381.4	5.2
90°-100°	599.8	8.2
100°-110°	797.6	10.9
110°-120°	971.9	13.3
120°-130°	1054.2	14.4
130°-140°	1001.9	13.7
140°-150°	894.1	12.2
150°-160°	714.2	9.7
160°-170°	464.2	6.3
170°-180°	162.9	2.2
0°-90°	671.5	9.2
0°-180°	7332.1	100.0



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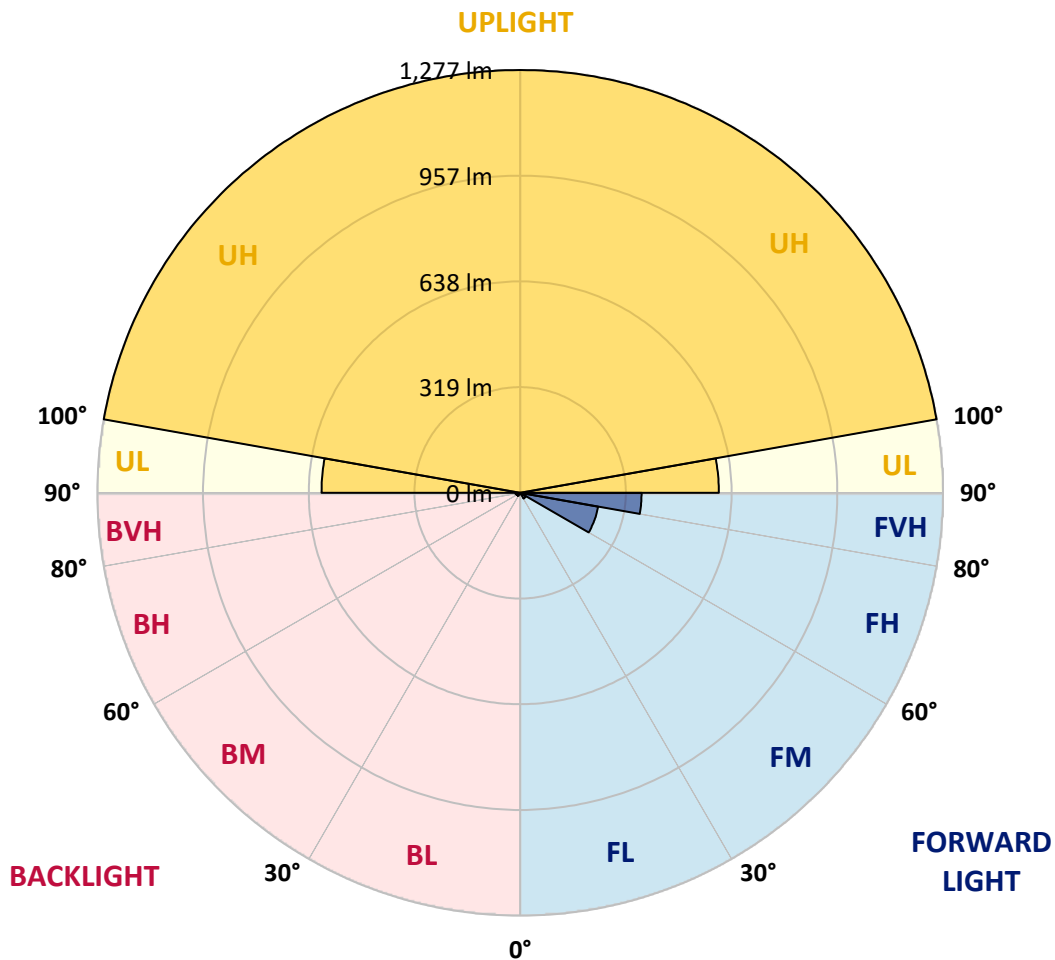
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3.7	0.1			
FM (30°-60°)	19.9	0.3			
FH (60°-80°)	239.0	3.3			G0/660
FVH (80°-90°)	366.6	5.0			G3/500
BL (0°-30°)	4.5	0.1	B0/110		
BM (30°-60°)	10.9	0.1	B0/220		
BH (60°-80°)	12.2	0.2	B0/110		G0/110
BVH (80°-90°)	14.8	0.2			G1/100
UL (90°-100°)	599.8	8.2		U4/1000	
UH (100°-180°)	1276.7	17.4		U5	

BUG Rating: B0-U5-G3

Type Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	10	10	10	10	10	10	10	10	10	10	10
2.5°	6	6	6	7	8	10	11	12	11	11	11
5°	6	6	6	7	8	10	11	12	11	11	11
7.5°	6	6	6	7	8	10	11	12	11	12	11
10°	6	6	6	7	8	10	10	12	11	11	11
12.5°	5	5	6	6	7	9	10	11	11	11	10
15°	5	5	5	6	7	9	10	11	11	11	10
17.5°	5	5	5	5	7	9	9	11	10	10	10
20°	4	4	4	5	6	8	9	10	10	10	10
22.5°	4	4	4	5	6	8	9	10	10	10	9
25°	4	4	4	5	6	8	9	10	10	10	9
27.5°	4	4	4	5	6	8	9	10	9	10	9
30°	4	4	4	5	6	8	9	10	9	10	9
32.5°	4	4	4	5	6	8	9	10	9	9	9
35°	4	4	4	4	6	8	8	10	9	9	9
37.5°	4	4	4	4	6	8	8	10	9	9	9
40°	4	4	4	5	6	8	9	10	10	10	9
42.5°	4	4	4	5	6	8	9	11	10	10	10
45°	4	4	4	5	6	9	10	11	11	12	11
47.5°	4	3	4	5	7	10	11	13	13	15	16
50°	4	4	4	5	8	11	13	15	17	22	25
52.5°	4	4	4	6	9	13	16	20	26	36	39
55°	4	4	5	8	12	17	21	29	42	58	60
57.5°	3	4	6	10	16	23	30	47	68	90	88
60°	4	5	9	15	22	32	48	75	102	119	117
62.5°	13	15	18	23	32	49	75	111	135	150	151
65°	36	37	35	40	53	77	115	156	172	188	195
67.5°	76	77	75	75	85	119	162	201	213	237	247
70°	120	134	146	151	157	192	226	256	266	293	322
72.5°	187	204	229	239	238	268	296	333	332	360	414
75°	279	285	299	308	320	359	396	412	429	464	511
77.5°	384	376	373	379	403	437	475	511	536	569	600
80°	510	483	449	440	478	519	573	623	638	670	689
82.5°	637	592	531	506	567	639	689	734	727	765	777
85°	777	718	655	625	689	775	806	845	849	868	878
87.5°	959	886	790	730	791	889	912	950	931	972	978
90°	1110	1022	910	842	879	1000	1024	1056	1023	1076	1065
92.5°	1201	1123	1030	972	991	1119	1132	1168	1115	1185	1143
95°	1245	1210	1154	1128	1106	1226	1226	1265	1207	1285	1220
97.5°	1277	1309	1290	1290	1227	1331	1311	1352	1280	1369	1302
100°	1315	1415	1429	1437	1346	1423	1383	1458	1355	1456	1383
102.5°	1366	1506	1534	1566	1456	1498	1457	1546	1437	1528	1438
105°	1445	1583	1615	1678	1558	1579	1551	1622	1543	1592	1519
107.5°	1537	1642	1672	1761	1672	1691	1653	1686	1631	1601	1588
110°	1638	1696	1720	1865	1804	1822	1760	1742	1722	1614	1674



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1772	1781	1804	1979	1945	1935	1842	1792	1822	1645	1740
115°	1975	1925	1917	2082	2051	2045	1930	1844	1889	1695	1749
117.5°	2183	2067	2021	2152	2135	2140	2029	1921	1933	1771	1718
120°	2312	2173	2125	2218	2195	2239	2111	1998	1946	1863	1700
122.5°	2379	2260	2237	2309	2283	2339	2190	2052	1956	1940	1721
125°	2434	2356	2332	2419	2374	2423	2239	2093	1970	1963	1806
127.5°	2451	2410	2399	2493	2464	2458	2270	2118	1978	1970	1898
130°	2460	2425	2439	2560	2547	2490	2295	2131	2020	1957	1964
132.5°	2439	2416	2443	2581	2602	2508	2322	2156	2061	1952	1972
135°	2402	2367	2424	2587	2637	2563	2355	2182	2093	2000	1955
137.5°	2375	2315	2417	2568	2664	2611	2415	2219	2104	2056	1968
140°	2331	2266	2397	2530	2697	2668	2492	2274	2119	2103	2063
142.5°	2279	2235	2376	2509	2692	2704	2578	2340	2175	2131	2125
145°	2248	2218	2354	2493	2659	2704	2655	2436	2259	2168	2152
147.5°	2265	2240	2351	2499	2611	2697	2678	2560	2341	2230	2167
150°	2296	2278	2362	2515	2601	2679	2688	2622	2451	2289	2191
152.5°	2342	2331	2377	2529	2623	2648	2651	2606	2497	2344	2222
155°	2378	2367	2380	2517	2617	2613	2580	2533	2455	2362	2237
157.5°	2401	2377	2357	2468	2564	2571	2519	2432	2348	2307	2250
160°	2391	2364	2325	2388	2486	2487	2451	2377	2277	2208	2187
162.5°	2354	2327	2279	2302	2366	2407	2375	2326	2249	2181	2139
165°	2304	2285	2254	2241	2265	2294	2300	2254	2199	2148	2124
167.5°	2250	2237	2205	2176	2174	2187	2198	2175	2130	2079	2059
170°	2183	2172	2135	2095	2084	2091	2092	2079	2049	2022	1992
172.5°	2046	2053	2041	2014	2000	1989	1983	1972	1946	1929	1910
175°	1885	1894	1892	1881	1886	1885	1883	1877	1862	1852	1839
177.5°	1733	1740	1736	1734	1733	1733	1736	1733	1728	1727	1726
180°	1616	1616	1616	1616	1616	1616	1616	1616	1616	1616	1616



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	10	10	10	10	10	10	10	10	10	10	10
2.5°	11	11	10	9	10	12	13	13	12	10	10
5°	12	11	11	10	10	12	13	13	12	10	11
7.5°	12	12	11	10	10	12	13	13	12	10	11
10°	11	11	11	10	10	12	13	13	12	10	11
12.5°	11	11	10	9	9	12	12	13	12	10	10
15°	11	11	10	9	9	11	12	13	12	10	10
17.5°	11	10	10	9	9	11	12	12	11	10	10
20°	10	10	9	8	9	11	12	12	11	10	10
22.5°	10	10	9	8	9	11	12	12	11	9	10
25°	10	10	9	8	9	11	11	12	11	9	10
27.5°	10	10	9	8	8	11	11	12	11	9	10
30°	10	10	9	8	8	11	11	12	11	9	9
32.5°	10	9	9	8	8	10	11	12	10	9	9
35°	9	9	9	8	8	10	11	11	10	9	9
37.5°	9	9	9	8	8	10	11	11	10	9	9
40°	9	9	9	8	8	10	11	11	10	9	9
42.5°	10	9	9	8	8	10	11	11	10	9	9
45°	11	10	9	8	8	10	11	11	10	9	9
47.5°	14	13	10	8	8	10	11	11	10	9	9
50°	23	20	14	9	8	10	11	11	10	9	9
52.5°	38	33	24	15	10	11	11	11	10	9	9
55°	64	53	43	27	15	11	12	12	10	9	9
57.5°	96	83	68	43	26	14	12	12	10	9	9
60°	126	113	95	65	43	23	13	12	11	9	9
62.5°	161	149	127	88	61	33	17	13	11	9	9
65°	201	189	162	118	83	49	25	14	11	9	9
67.5°	248	245	211	165	118	74	39	18	12	10	10
70°	325	326	271	210	146	94	57	28	13	10	10
72.5°	416	399	335	255	177	115	75	41	18	11	10
75°	505	478	404	307	216	141	95	55	24	12	11
77.5°	597	554	482	360	265	178	123	76	37	16	12
80°	693	637	558	411	312	226	158	104	54	21	14
82.5°	796	712	633	464	361	276	201	140	81	35	16
85°	898	785	708	521	411	324	244	185	118	59	26
87.5°	999	851	781	585	465	375	293	232	160	89	43
90°	1094	925	861	660	523	425	341	279	203	130	74
92.5°	1168	1014	928	743	590	478	390	321	247	172	108
95°	1240	1105	997	828	663	537	446	367	289	211	145
97.5°	1302	1183	1062	913	725	614	505	415	327	254	188
100°	1365	1232	1130	996	787	683	585	476	378	299	236
102.5°	1418	1285	1180	1086	875	745	663	553	444	357	291
105°	1463	1356	1203	1174	1011	826	720	622	516	430	350
107.5°	1495	1443	1243	1226	1140	946	802	688	592	499	416
110°	1508	1535	1334	1221	1232	1092	915	787	685	594	508



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	1565	1540	1460	1254	1248	1217	1065	921	801	709	618
115°	1661	1534	1552	1369	1243	1257	1187	1061	934	826	717
117.5°	1750	1541	1553	1512	1328	1255	1235	1161	1047	923	793
120°	1752	1632	1530	1564	1493	1338	1268	1219	1120	1001	861
122.5°	1722	1719	1581	1567	1574	1484	1377	1299	1214	1104	964
125°	1705	1739	1679	1588	1583	1559	1473	1397	1308	1191	1059
127.5°	1727	1711	1727	1674	1614	1562	1521	1458	1370	1260	1114
130°	1804	1718	1729	1721	1671	1620	1556	1469	1384	1281	1142
132.5°	1897	1779	1737	1735	1692	1634	1582	1525	1440	1315	1154
135°	1981	1874	1795	1733	1699	1621	1573	1513	1444	1334	1195
137.5°	1984	1966	1876	1793	1709	1639	1562	1503	1407	1307	1182
140°	1983	1984	1940	1866	1769	1692	1602	1516	1432	1324	1204
142.5°	2061	1987	1939	1877	1807	1732	1654	1570	1472	1363	1245
145°	2121	2046	1955	1864	1804	1752	1686	1608	1508	1382	1276
147.5°	2132	2082	2002	1917	1822	1740	1681	1613	1529	1436	1330
150°	2112	2058	2007	1937	1878	1809	1733	1657	1573	1471	1370
152.5°	2103	2023	1962	1913	1869	1826	1755	1677	1579	1476	1380
155°	2132	2020	1942	1883	1831	1791	1726	1651	1555	1449	1366
157.5°	2157	2055	1977	1904	1846	1766	1705	1614	1524	1436	1375
160°	2152	2087	1990	1897	1821	1759	1667	1585	1504	1434	1377
162.5°	2098	2057	2005	1933	1847	1775	1703	1620	1538	1469	1400
165°	2089	2039	1984	1937	1882	1822	1745	1660	1583	1511	1459
167.5°	2039	2016	1976	1939	1888	1833	1778	1721	1670	1614	1571
170°	1970	1962	1934	1908	1870	1830	1787	1746	1709	1669	1630
172.5°	1882	1864	1830	1802	1772	1752	1731	1711	1687	1665	1645
175°	1820	1814	1791	1772	1756	1743	1732	1721	1706	1691	1681
177.5°	1722	1731	1721	1716	1709	1710	1704	1702	1697	1686	1675
180°	1616	1616	1616	1616	1616	1616	1616	1616	1616	1616	1616



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	10	10	10	10	10	10	10	10	10	10	10
2.5°	11	12	12	12	12	13	13	13	11	11	9
5°	11	12	12	12	12	13	13	13	12	11	10
7.5°	11	12	12	12	13	13	13	14	12	11	10
10°	11	12	12	12	12	13	13	14	12	11	10
12.5°	11	12	12	12	12	13	13	13	12	11	10
15°	11	12	12	12	12	13	13	13	12	11	10
17.5°	11	12	11	12	12	13	13	13	12	11	9
20°	10	11	11	12	12	12	12	13	11	11	9
22.5°	10	11	11	12	12	12	12	13	11	10	9
25°	10	11	11	11	11	12	12	12	11	10	9
27.5°	10	11	11	11	11	12	12	12	11	10	9
30°	10	11	11	11	11	12	12	12	10	10	8
32.5°	10	11	10	11	11	12	12	12	10	10	8
35°	9	10	10	11	11	12	11	12	10	9	8
37.5°	10	10	10	11	11	11	11	12	10	9	8
40°	9	10	10	11	11	11	11	12	10	9	8
42.5°	9	10	10	10	11	11	11	12	10	9	8
45°	9	10	10	10	10	11	11	11	10	9	8
47.5°	9	10	10	10	10	11	11	12	10	9	8
50°	9	10	10	10	10	11	11	11	10	9	8
52.5°	9	10	10	10	11	11	11	12	10	9	8
55°	9	10	10	11	11	11	11	12	10	9	8
57.5°	9	10	10	11	11	11	11	12	10	9	8
60°	10	11	10	11	11	12	12	12	10	10	8
62.5°	10	11	11	11	11	12	12	12	11	10	8
65°	10	11	11	11	11	12	12	12	11	10	9
67.5°	10	11	11	12	12	13	12	13	11	10	9
70°	10	11	11	12	12	13	13	13	11	11	9
72.5°	10	12	11	12	12	13	13	13	11	11	9
75°	11	12	12	12	12	13	13	13	12	11	9
77.5°	11	12	12	12	12	13	13	13	12	11	10
80°	13	12	12	12	12	13	13	13	12	11	10
82.5°	14	13	12	12	13	13	13	14	12	11	10
85°	16	14	13	13	13	14	13	14	12	11	10
87.5°	23	16	13	13	13	14	13	14	12	11	10
90°	37	21	15	14	13	14	13	14	12	11	10
92.5°	62	36	20	15	13	14	13	14	12	11	10
95°	90	57	33	20	14	14	13	13	12	11	10
97.5°	129	82	52	34	19	14	13	13	12	11	9
100°	175	116	74	52	31	18	14	13	12	11	9
102.5°	225	156	100	74	45	27	16	14	12	11	9
105°	281	202	134	98	63	38	21	15	12	11	9
107.5°	346	257	177	123	85	50	28	17	12	11	9
110°	431	326	215	150	107	69	41	22	13	11	9



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 CATALOG NUMBER: MAQ-B80-3-LED-E1-SX

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°	
112.5°	517	389	263	191	126	92	51	26	14	11	9	0°
115°	597	458	318	228	151	107	65	31	16	12	9	2.5°
117.5°	670	517	365	256	183	117	79	39	19	13	10	5°
120°	733	569	407	300	205	138	90	47	22	15	10	7.5°
122.5°	820	637	463	338	218	164	105	54	26	17	11	10°
125°	906	707	512	352	255	178	124	65	31	20	13	12.5°
127.5°	951	744	531	391	293	200	139	76	37	25	17	15°
130°	965	752	573	450	315	241	159	90	44	29	22	17.5°
132.5°	984	796	625	475	367	278	192	109	56	34	26	20°
135°	1029	853	661	529	433	323	231	146	81	49	35	22.5°
137.5°	1032	862	706	597	477	379	291	207	135	84	55	25°
140°	1063	913	772	623	525	451	362	264	189	139	97	27.5°
142.5°	1109	975	810	668	590	504	419	334	253	188	145	30°
145°	1155	1017	868	731	628	556	468	380	316	261	214	32.5°
147.5°	1213	1086	930	767	671	596	518	429	367	320	283	35°
150°	1265	1134	967	815	718	638	568	485	432	386	357	37.5°
152.5°	1271	1137	1015	878	761	680	608	542	499	458	433	40°
155°	1274	1188	1068	933	812	718	645	593	563	533	514	42.5°
157.5°	1302	1211	1098	975	857	764	693	639	618	603	594	45°
160°	1306	1217	1119	1013	917	832	757	706	689	687	697	47.5°
162.5°	1322	1249	1163	1084	994	928	859	829	821	811	827	50°
165°	1397	1336	1256	1188	1120	1063	1018	1005	1007	997	988	52.5°
167.5°	1510	1463	1403	1347	1281	1242	1205	1194	1188	1187	1165	55°
170°	1585	1549	1494	1459	1421	1407	1382	1368	1356	1337	1321	57.5°
172.5°	1617	1589	1557	1545	1523	1513	1487	1470	1451	1438	1422	60°
175°	1664	1651	1635	1627	1615	1604	1578	1555	1530	1510	1486	62.5°
177.5°	1668	1658	1641	1631	1617	1604	1585	1567	1548	1534	1520	65°
180°	1616	1616	1616	1616	1616	1616	1616	1616	1616	1616	1616	67.5°
												70°
												72.5°
												75°
												77.5°
												80°
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												102.5°
												105°
												107.5°
												110°

NUMBER: P23471
 NUMBER: MAQ-B80-3-LED-E1-SX

REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):

165°	170°	175°	180°
10	10	10	10
8	8	8	8
9	8	8	9
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CANDELA DISTRIBUTION:

165°	
112.5°	8
115°	8
117.5°	8
120°	8
122.5°	8
125°	9
127.5°	11
130°	15
132.5°	21
135°	29
137.5°	42
140°	65
142.5°	104
145°	165
147.5°	243
150°	326
152.5°	403
155°	489
157.5°	593
160°	722
162.5°	849
165°	993
167.5°	1167
170°	1313
172.5°	1417
175°	1466
177.5°	1510
180°	1616

'23471
MAQ-B80-3-LED-E1-SX

TION (continued):

170°	175°	180°
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7	7	7
7	7	7
7	6	6
7	6	6
8	6	6
11	9	8
18	16	16
28	27	27
39	38	38
53	49	48
80	69	67
130	111	108
200	170	164
289	255	243
380	351	346
475	471	472
602	613	623
738	757	765
868	885	885
1002	1005	1017
1173	1182	1190
1318	1338	1353
1409	1412	1411
1448	1442	1433
1501	1500	1499
1616	1616	1616

(END OF REPORT)