

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: INVUE

Report Number: P141720

Luminaire Tested: **ECM-E03-LED-E1-T2**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P141720
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33682)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ECM-E03-LED-E1-T2
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 2
Light Source: (63) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8844.3 lumens
Efficiency: N/A
Efficacy: 117.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G3

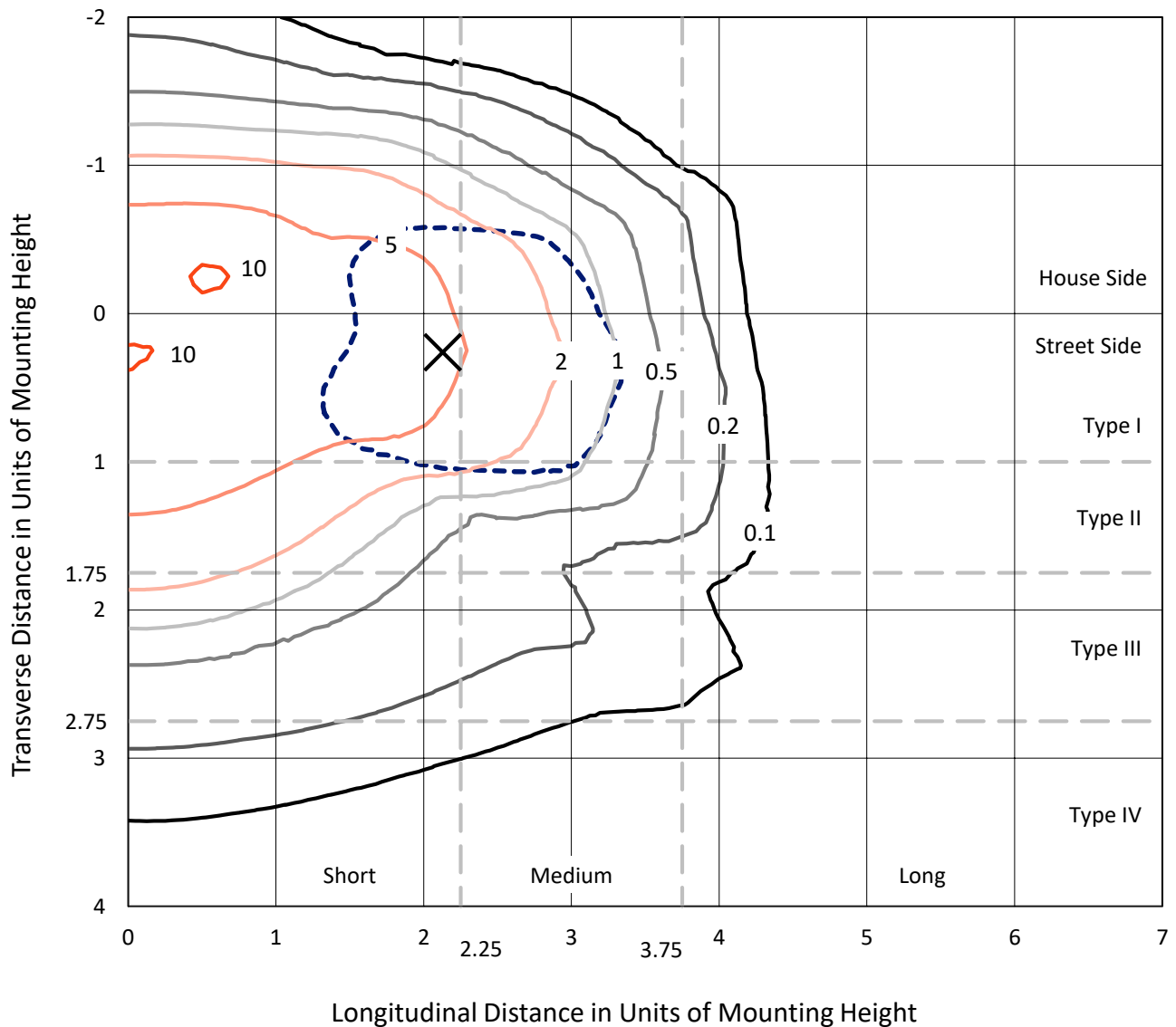
Input Watts (W): 75.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P141720
 CATALOG NUMBER: ECM-E03-LED-E1-T2

Iso-Footcandle Lines of Horizontal Illumination

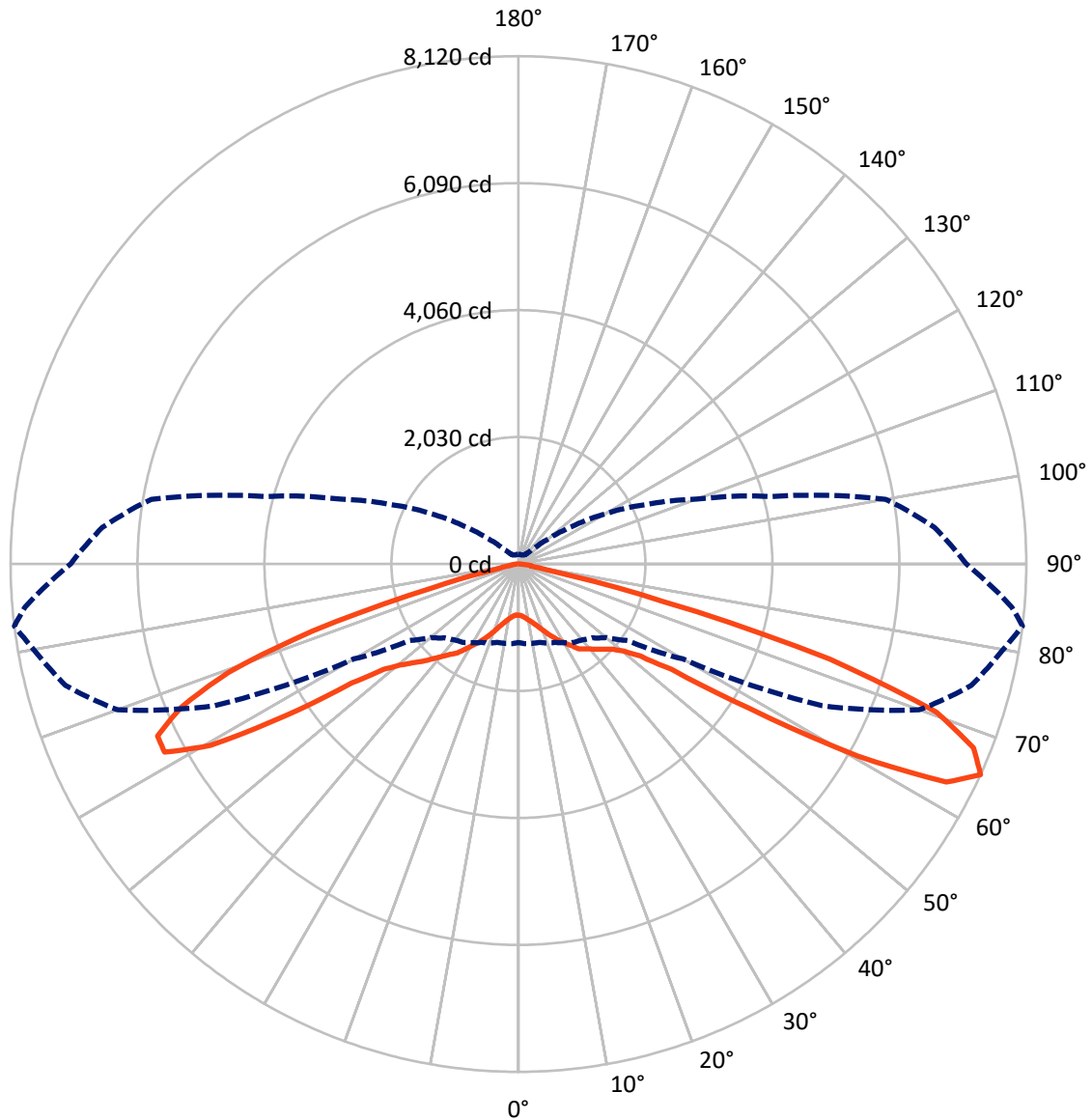
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.3 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P141720
CATALOG NUMBER: ECM-E03-LED-E1-T2

Luminous Intensity Polar Plot



— Vertical Plane Through 83-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P141720

CATALOG NUMBER: ECM-E03-LED-E1-T2

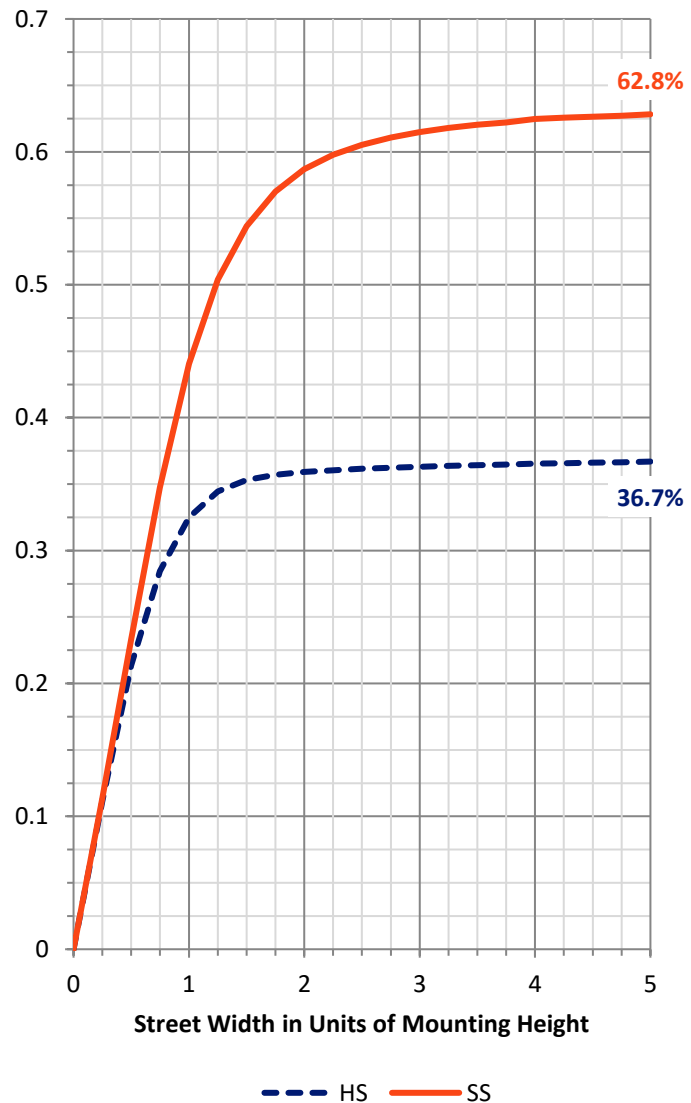
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3280.6	0.0	3280.6
	% Fixture	37.1	0.0	37.1
Street Side	Lumens	5563.7	0.0	5563.7
	% Fixture	62.9	0.0	62.9
Total	Lumens	8844.3	0.0	8844.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.4	0.9
10°-20°	288.7	3.3
20°-30°	570.3	6.4
30°-40°	981.5	11.1
40°-50°	1480.8	16.7
50°-60°	2060.6	23.3
60°-70°	2378.4	26.9
70°-80°	864.4	9.8
80°-90°	137.2	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	8844.3	100.0
0°-180°	8844.3	100.0

Coefficient of Utilization



REPORT NUMBER: P141720

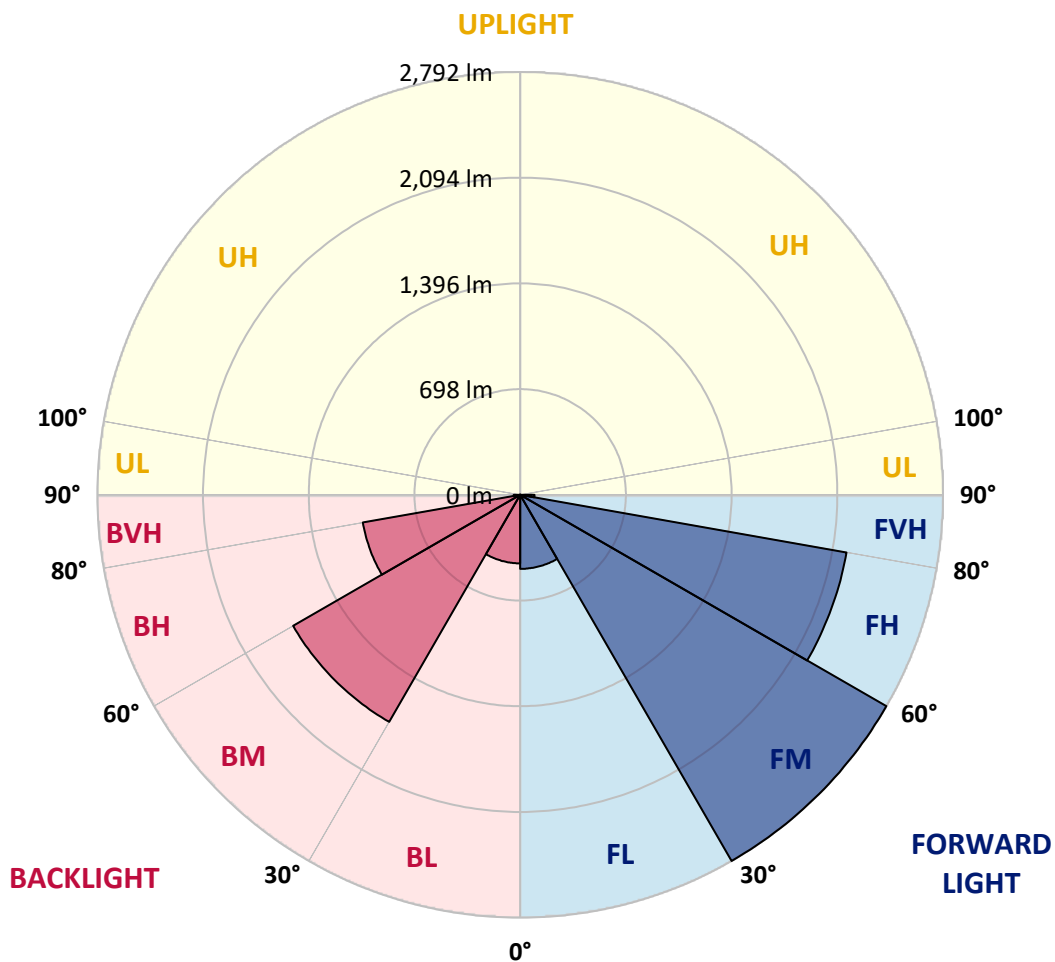
CATALOG NUMBER: ECM-E03-LED-E1-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	488.9	5.5			
FM (30°-60°)	2791.9	31.6			
FH (60°-80°)	2188.0	24.7			G2/5000
FVH (80°-90°)	94.8	1.1			G1/100
BL (0°-30°)	452.4	5.1	B1/500		
BM (30°-60°)	1730.9	19.6	B2/2500		
BH (60°-80°)	1054.8	11.9	B3/2500		G3/2500
BVH (80°-90°)	42.4	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





REPORT NUMBER: P141720

CATALOG NUMBER: ECM-E03-LED-E1-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	819	819	819	819	819	819	819	819	819	819	819
2.5°	859	861	859	859	858	857	857	856	854	852	851
5°	906	907	904	904	905	904	901	902	894	891	889
7.5°	958	961	957	955	954	952	949	944	938	933	930
10°	1017	1020	1018	1014	1008	1005	1002	994	987	979	973
12.5°	1087	1088	1086	1078	1074	1065	1055	1046	1036	1024	1014
15°	1156	1157	1154	1146	1141	1130	1116	1104	1087	1073	1060
17.5°	1209	1211	1205	1199	1192	1178	1165	1151	1133	1118	1105
20°	1227	1230	1226	1223	1219	1212	1199	1187	1171	1160	1150
22.5°	1219	1222	1220	1220	1220	1219	1213	1210	1200	1195	1193
25°	1207	1210	1208	1210	1214	1219	1219	1225	1224	1232	1237
27.5°	1238	1240	1235	1235	1239	1247	1245	1257	1259	1275	1290
30°	1346	1346	1338	1330	1333	1331	1329	1337	1337	1352	1359
32.5°	1507	1496	1495	1494	1487	1492	1476	1477	1470	1472	1469
35°	1684	1683	1679	1677	1674	1689	1677	1687	1662	1653	1636
37.5°	1839	1843	1846	1861	1868	1898	1905	1910	1884	1885	1847
40°	1995	2000	2011	2038	2058	2086	2099	2120	2122	2126	2098
42.5°	2165	2157	2172	2206	2231	2259	2276	2315	2337	2348	2352
45°	2302	2293	2300	2320	2343	2379	2416	2474	2521	2572	2600
47.5°	2373	2375	2380	2392	2408	2443	2495	2569	2645	2727	2800
50°	2396	2397	2404	2416	2431	2468	2522	2606	2698	2813	2925
52.5°	2403	2399	2406	2412	2422	2453	2504	2592	2696	2835	3001
55°	2377	2372	2384	2392	2400	2425	2464	2545	2653	2811	3028
57.5°	2277	2278	2295	2316	2337	2371	2422	2499	2606	2762	3005
60°	2108	2105	2126	2152	2188	2242	2305	2383	2472	2602	2841
62.5°	1801	1813	1820	1859	1861	1938	1979	2057	2133	2233	2448
65°	1254	1280	1287	1297	1344	1384	1450	1532	1582	1670	1830
67.5°	781	800	801	827	868	914	965	1048	1124	1138	1218
70°	648	649	663	682	714	761	811	869	938	982	974
72.5°	537	543	553	572	607	649	713	787	873	961	1039
75°	360	370	373	382	399	437	485	555	666	797	963
77.5°	191	193	200	207	216	239	270	306	379	492	687
80°	97	101	106	111	110	116	125	141	166	216	311
82.5°	35	45	59	66	66	68	71	74	72	80	100
85°	16	18	23	36	37	37	37	39	37	33	39
87.5°	0	3	3	9	10	9	10	13	10	8	7
90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P141720

CATALOG NUMBER: ECM-E03-LED-E1-T2

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	83°	85°	90°	95°	100°
0°	819	819	819	819	819	819	819	819	819	819	819
2.5°	846	844	839	837	831	827	825	823	820	816	813
5°	883	877	870	866	858	850	847	843	836	830	823
7.5°	922	915	907	898	890	881	877	873	863	855	845
10°	964	954	945	937	930	920	913	910	901	889	879
12.5°	1004	993	984	974	967	959	952	949	942	931	923
15°	1046	1035	1025	1018	1010	1005	1001	996	993	984	980
17.5°	1091	1081	1072	1066	1063	1062	1061	1059	1056	1050	1047
20°	1142	1133	1130	1129	1130	1131	1133	1133	1134	1130	1129
22.5°	1191	1191	1196	1202	1208	1212	1215	1211	1212	1218	1223
25°	1245	1254	1267	1277	1286	1293	1297	1299	1301	1310	1319
27.5°	1303	1317	1336	1349	1366	1377	1385	1384	1387	1399	1415
30°	1375	1389	1409	1427	1450	1466	1469	1467	1471	1482	1514
32.5°	1476	1479	1492	1510	1535	1551	1554	1559	1568	1588	1627
35°	1618	1605	1604	1612	1636	1667	1670	1673	1677	1703	1755
37.5°	1810	1757	1725	1700	1703	1714	1720	1722	1732	1772	1860
40°	2051	1952	1881	1810	1784	1786	1788	1786	1806	1868	1983
42.5°	2315	2228	2104	1957	1883	1859	1862	1864	1895	1985	2113
45°	2595	2539	2395	2165	2006	1945	1943	1947	1998	2125	2260
47.5°	2841	2855	2749	2479	2206	2051	2038	2045	2128	2264	2401
50°	3036	3128	3120	2906	2530	2234	2188	2198	2296	2437	2560
52.5°	3183	3370	3490	3405	3078	2566	2447	2430	2553	2702	2778
55°	3281	3584	3899	4046	3913	3283	2972	2935	3068	3258	3291
57.5°	3346	3844	4522	5090	5271	4731	4341	4186	4283	4484	4441
60°	3238	3947	5274	6292	6807	6673	6239	6005	5824	5809	5570
62.5°	2824	3702	5579	6864	7588	7755	7678	7401	6900	6622	6082
65°	2130	3033	5362	6820	7499	7869	8120	7921	7161	6680	5962
67.5°	1361	1958	4460	6291	6929	7345	7847	7756	6785	6171	5390
70°	994	1085	3026	5325	6027	6393	7083	7043	5950	5260	4486
72.5°	1145	809	1659	3978	4521	4809	5204	5107	4157	3678	3130
75°	1291	905	935	2360	2526	2324	2378	2065	1611	1428	1407
77.5°	1087	1135	848	1014	934	673	504	395	309	332	369
80°	632	1276	1122	528	592	471	210	174	144	146	148
82.5°	195	797	1579	645	586	664	193	118	95	107	121
85°	65	334	1266	677	379	354	85	58	48	67	95
87.5°	16	81	235	89	56	34	29	21	23	42	59
90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P141720

CATALOG NUMBER: ECM-E03-LED-E1-T2

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	819	819	819	819	819	819	819	819	819	819	819
2.5°	811	808	805	803	800	800	797	797	793	791	791
5°	817	811	806	801	796	794	790	788	784	781	779
7.5°	837	829	823	817	811	808	804	800	799	797	795
10°	871	860	855	851	843	841	837	834	831	828	829
12.5°	915	907	905	897	895	892	886	884	876	870	867
15°	971	968	968	964	958	953	944	939	925	916	906
17.5°	1045	1042	1043	1039	1032	1023	1013	998	977	961	941
20°	1131	1130	1132	1129	1120	1108	1084	1062	1033	1004	982
22.5°	1227	1232	1234	1226	1216	1191	1165	1133	1094	1056	1025
25°	1329	1341	1348	1337	1325	1293	1254	1211	1156	1110	1069
27.5°	1429	1454	1464	1458	1439	1394	1342	1285	1218	1157	1104
30°	1548	1581	1599	1590	1553	1494	1431	1354	1269	1196	1132
32.5°	1673	1714	1727	1708	1654	1580	1498	1404	1308	1224	1152
35°	1812	1850	1853	1816	1745	1651	1549	1436	1326	1232	1153
37.5°	1933	1971	1968	1913	1827	1710	1580	1443	1315	1208	1122
40°	2060	2102	2079	2008	1897	1748	1584	1419	1273	1156	1062
42.5°	2194	2212	2171	2082	1939	1747	1550	1362	1207	1077	978
45°	2317	2303	2244	2125	1936	1704	1483	1291	1119	989	892
47.5°	2427	2383	2292	2125	1889	1628	1397	1199	1028	897	801
50°	2546	2454	2312	2088	1804	1536	1306	1107	931	797	692
52.5°	2704	2539	2312	2021	1716	1443	1210	1000	818	678	574
55°	3074	2717	2352	1984	1638	1345	1096	862	685	551	465
57.5°	3801	3107	2553	2052	1609	1239	949	709	541	429	357
60°	4406	3422	2716	2104	1562	1102	769	543	402	317	270
62.5°	4562	3426	2649	1969	1372	897	567	374	276	230	205
65°	4172	3030	2253	1606	1045	623	355	227	184	168	158
67.5°	3507	2414	1670	1120	659	343	199	156	140	135	130
70°	2690	1696	1087	656	345	178	142	128	121	118	114
72.5°	1658	1002	591	315	172	136	127	122	113	109	105
75°	704	430	245	160	138	130	123	117	110	104	100
77.5°	237	164	145	140	138	130	121	113	106	99	95
80°	144	131	134	133	138	129	117	108	100	93	88
82.5°	125	124	127	130	137	124	110	97	87	80	75
85°	108	110	112	114	118	105	89	77	69	60	56
87.5°	72	78	82	83	80	50	29	34	35	30	27
90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P141720

CATALOG NUMBER: ECM-E03-LED-E1-T2

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	819	819	819	819	819
2.5°	788	787	790	787	787
5°	778	777	777	777	775
7.5°	794	793	792	792	791
10°	825	824	824	823	823
12.5°	862	858	857	855	856
15°	898	887	884	881	878
17.5°	926	913	906	900	900
20°	961	944	935	926	926
22.5°	1001	978	966	956	952
25°	1034	1005	988	976	973
27.5°	1059	1022	1000	986	982
30°	1079	1037	1011	996	990
32.5°	1092	1046	1018	1003	997
35°	1085	1036	1002	984	980
37.5°	1050	998	958	939	932
40°	986	930	888	865	861
42.5°	902	846	806	782	771
45°	812	754	716	694	681
47.5°	715	658	619	597	588
50°	613	558	525	501	492
52.5°	507	458	425	405	395
55°	406	366	338	325	318
57.5°	317	291	275	267	262
60°	246	233	227	221	222
62.5°	192	189	187	184	185
65°	155	153	154	153	154
67.5°	127	128	130	130	131
70°	112	113	115	115	115
72.5°	104	106	108	107	107
75°	98	103	107	103	99
77.5°	92	104	115	106	95
80°	84	110	123	107	91
82.5°	80	106	108	93	80
85°	74	120	125	85	61
87.5°	38	72	83	57	31
90°	0	0	0	0	0

(END OF REPORT)