

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: P139870

Luminaire Tested: **ENT-E02-LED-E1-GZW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P139870  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33649)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-E02-LED-E1-GZW  
Description: ENTRI LED LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - WALL GRAZER WIDE  
Light Source: (42) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5569.6 lumens  
Efficiency: N/A  
Efficacy: 118.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.33' x H: 0')  
IES Classification: Type I - Short - Full Cutoff  
BUG Rating: B3 - U0 - G3

Input Watts (W): 46.9  
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

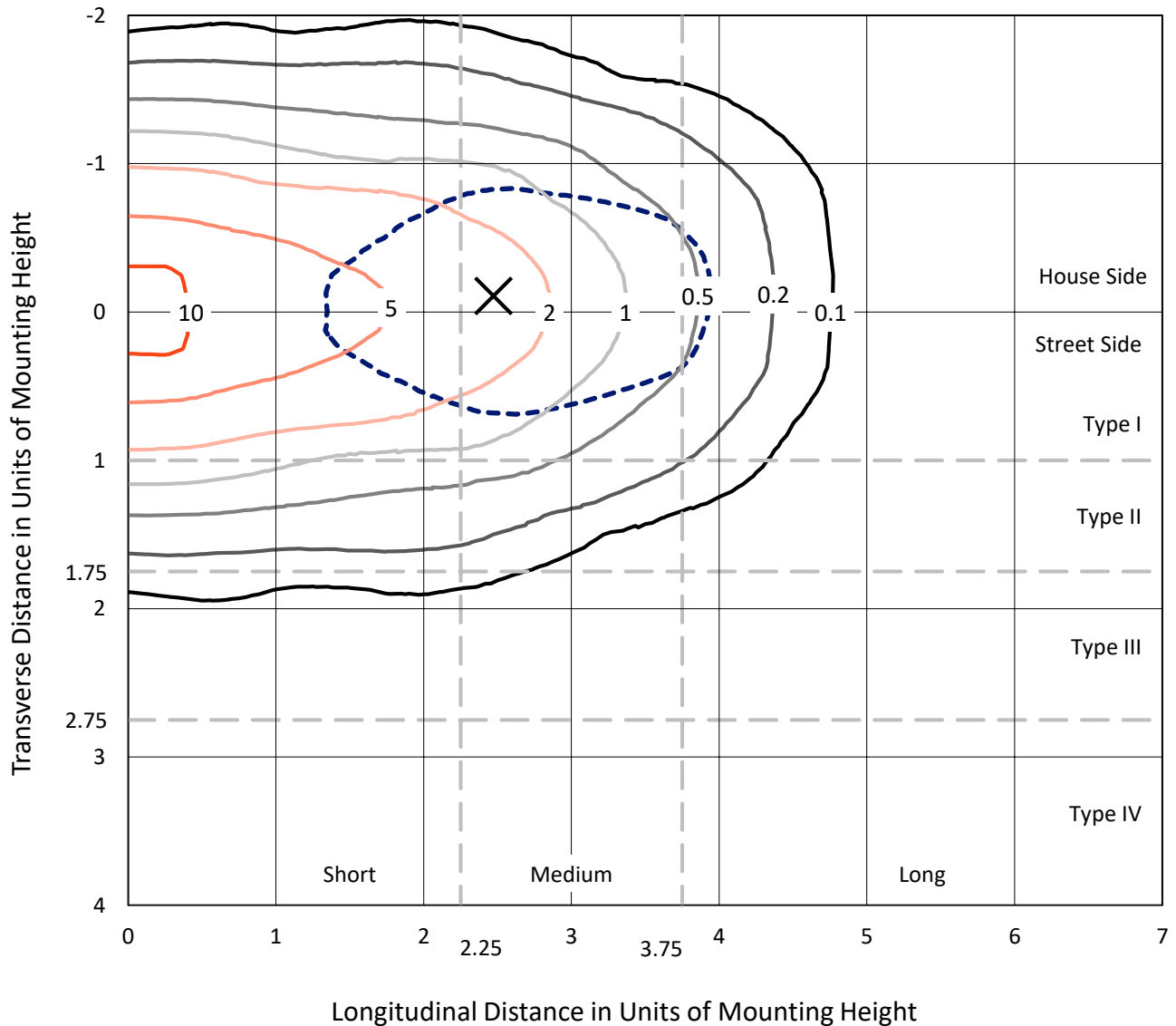


REPORT NUMBER: P139870

CATALOG NUMBER: ENT-E02-LED-E1-GZW

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

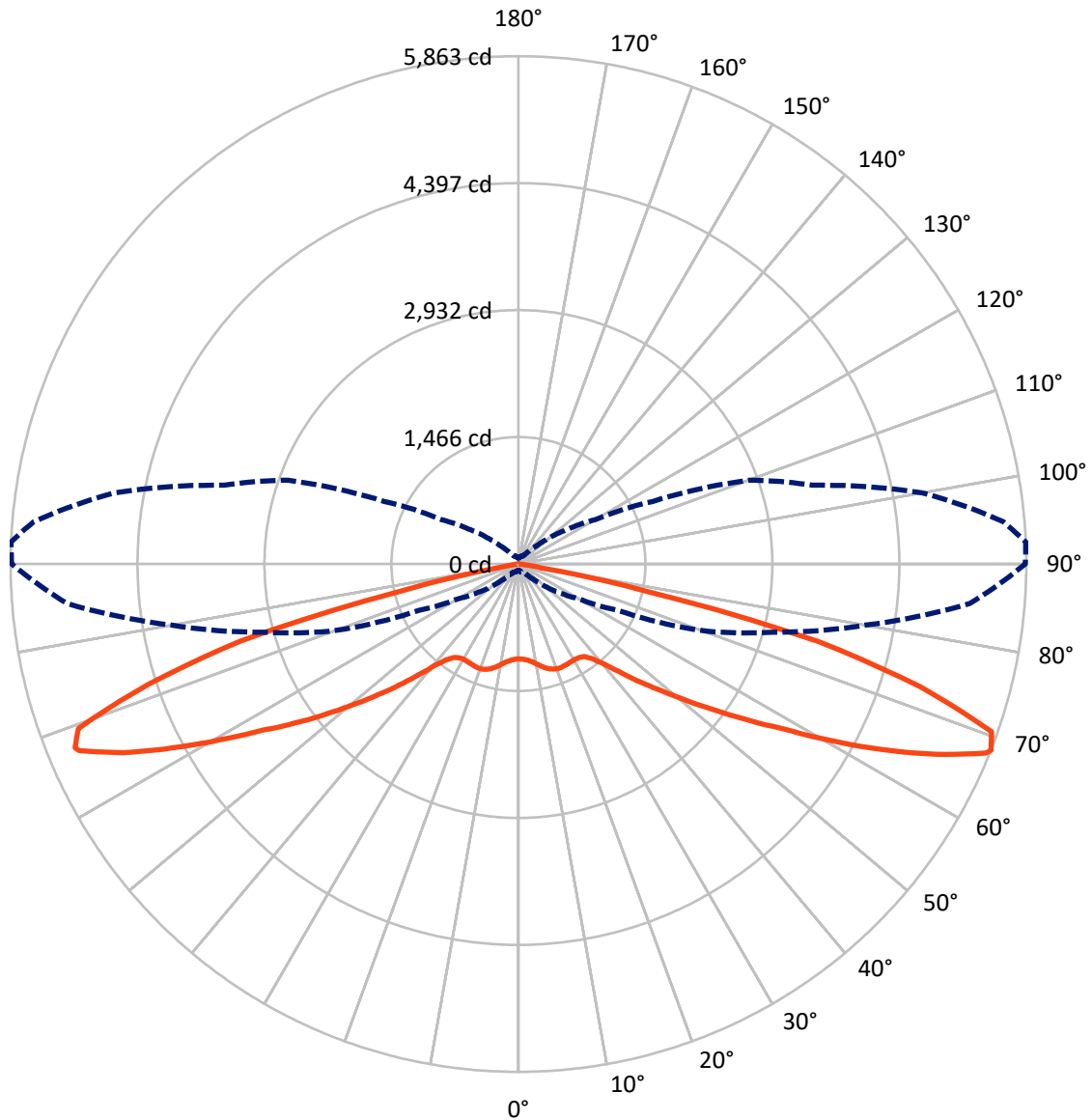


Based on 10 foot mounting height. Maximum calculated value = 11.3 fc  
 Type I - Short - Full Cutoff

REPORT NUMBER: P139870

CATALOG NUMBER: ENT-E02-LED-E1-GZW

### Luminous Intensity Polar Plot



— Vertical Plane Through 92.5-Deg Lateral    - - - Horizontal Cone Through 68-Deg Vertical

REPORT NUMBER: P139870

CATALOG NUMBER: ENT-E02-LED-E1-GZW

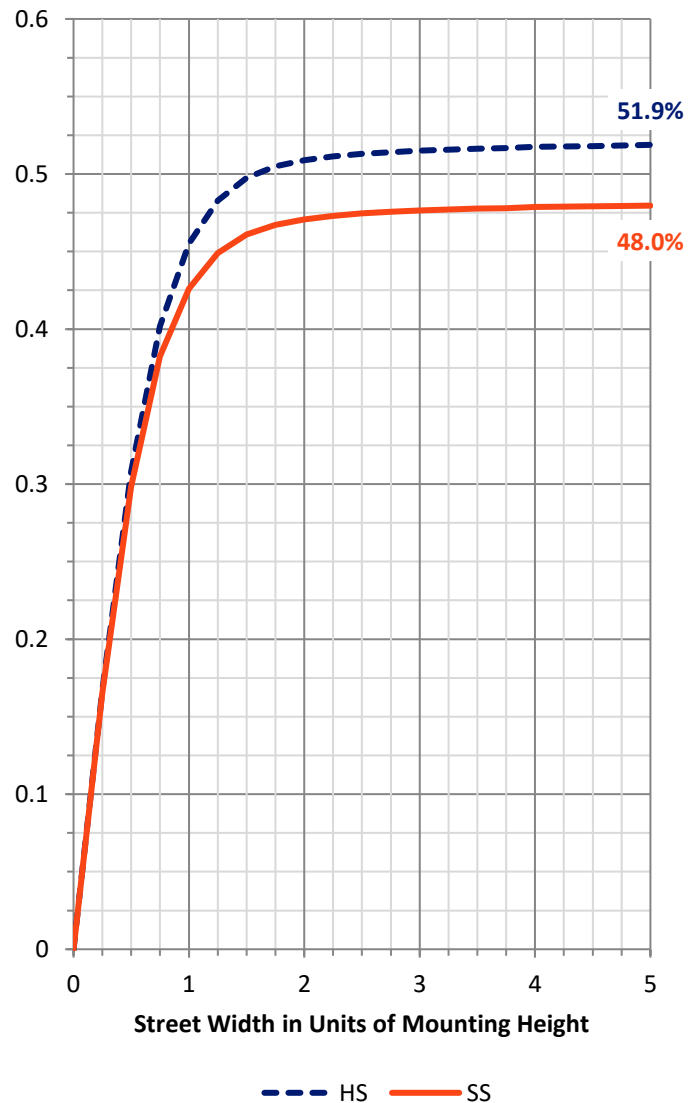
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2909.6	0.0	2909.6
	% Fixture	52.2	0.0	52.2
<b>Street Side</b>	Lumens	2660.0	0.0	2660.0
	% Fixture	47.8	0.0	47.8
<b>Total</b>	Lumens	5569.6	0.0	5569.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.6	1.9
10°-20°	340.5	6.1
20°-30°	552.3	9.9
30°-40°	686.6	12.3
40°-50°	853.6	15.3
50°-60°	1050.1	18.9
60°-70°	1241.5	22.3
70°-80°	695.2	12.5
80°-90°	42.2	0.8
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°	5569.6	100.0
0°-180°	5569.6	100.0



REPORT NUMBER: P139870

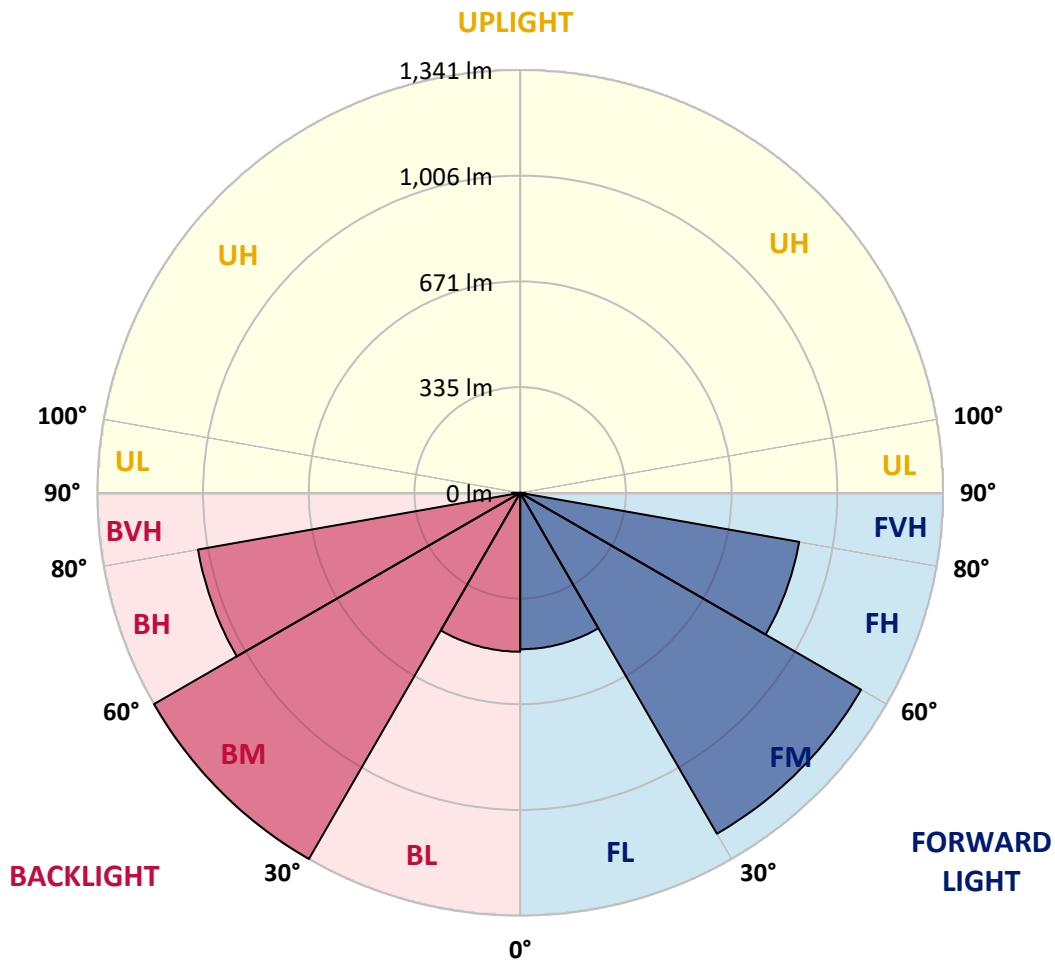
CATALOG NUMBER: ENT-E02-LED-E1-GZW

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	496.3	8.9			
FM	(30°-60°)	1248.8	22.4			
FH	(60°-80°)	898.9	16.1			G1/1800
FVH	(80°-90°)	16.1	0.3			G1/100
BL	(0°-30°)	504.1	9.1	B2/1000		
BM	(30°-60°)	1341.4	24.1	B2/2500		
BH	(60°-80°)	1037.9	18.6	B3/2500		G3/2500
BVH	(80°-90°)	26.1	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 I Short





REPORT NUMBER: P139870

CATALOG NUMBER: ENT-E02-LED-E1-GZW

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1095	1095	1095	1095	1095	1095	1095	1095	1095	1095	1095
2.5°	1100	1100	1100	1101	1102	1104	1103	1105	1102	1106	1106
5°	1113	1114	1115	1115	1117	1118	1117	1120	1117	1121	1122
7.5°	1125	1125	1126	1127	1129	1131	1132	1135	1134	1138	1142
10°	1134	1133	1134	1136	1141	1144	1148	1152	1154	1158	1164
12.5°	1138	1137	1140	1145	1150	1156	1162	1171	1177	1183	1192
15°	1136	1136	1140	1146	1156	1167	1178	1190	1201	1214	1223
17.5°	1117	1119	1125	1135	1150	1167	1185	1205	1223	1241	1253
20°	1083	1085	1096	1108	1128	1153	1181	1210	1238	1262	1279
22.5°	1041	1039	1049	1065	1092	1122	1158	1201	1239	1273	1297
25°	976	976	987	1007	1036	1073	1117	1172	1223	1267	1301
27.5°	907	908	922	939	972	1007	1058	1122	1184	1242	1292
30°	838	841	853	870	905	942	994	1057	1124	1196	1264
32.5°	767	771	781	801	839	880	933	989	1053	1132	1220
35°	700	703	711	735	774	818	877	931	996	1069	1166
37.5°	637	640	649	674	713	757	815	876	943	1015	1111
40°	569	576	588	612	648	698	757	821	892	974	1072
42.5°	507	513	524	545	581	634	696	762	839	932	1043
45°	450	455	466	485	523	565	621	690	770	877	1012
47.5°	395	400	412	435	466	507	557	618	692	801	953
50°	340	345	357	380	410	450	496	551	624	718	867
52.5°	280	285	297	320	349	387	434	491	559	648	771
55°	215	222	233	252	283	321	368	430	499	586	700
57.5°	155	160	173	188	214	254	296	360	437	526	639
60°	113	118	127	139	157	186	223	283	368	468	584
62.5°	94	98	107	119	129	143	165	211	294	405	527
65°	83	86	94	106	114	120	129	160	228	337	471
67.5°	74	77	83	93	102	105	110	131	179	274	412
68°	73	76	81	90	99	102	107	128	174	261	396
70°	68	70	75	82	89	91	97	118	163	228	321
72.5°	62	63	66	72	79	80	86	103	128	168	239
75°	52	53	57	62	66	68	70	78	87	104	141
77.5°	40	42	45	48	54	56	54	60	64	71	86
80°	24	24	27	30	33	38	36	42	45	49	58
82.5°	4	5	5	7	9	11	12	15	19	23	31
85°	0	0	0	0	0	0	0	0	1	1	3
87.5°	0	0	0	0	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P139870

CATALOG NUMBER: ENT-E02-LED-E1-GZW

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	92.5°	95°	100°
0°	1095	1095	1095	1095	1095	1095	1095	1095	1095	1095	1095
2.5°	1100	1103	1103	1102	1102	1102	1099	1100	1101	1104	1100
5°	1116	1119	1118	1117	1117	1117	1113	1114	1115	1117	1113
7.5°	1137	1140	1141	1141	1141	1143	1137	1137	1139	1141	1135
10°	1168	1168	1171	1173	1175	1177	1173	1171	1175	1175	1168
12.5°	1197	1199	1204	1208	1209	1213	1213	1212	1215	1214	1206
15°	1230	1232	1236	1241	1242	1246	1246	1247	1250	1252	1240
17.5°	1261	1264	1264	1265	1267	1270	1272	1273	1276	1278	1266
20°	1287	1290	1285	1281	1277	1279	1283	1287	1289	1290	1275
22.5°	1307	1308	1300	1289	1278	1277	1282	1289	1291	1290	1269
25°	1318	1321	1313	1296	1276	1269	1274	1283	1287	1283	1258
27.5°	1318	1329	1325	1307	1280	1261	1264	1278	1281	1276	1247
30°	1308	1331	1336	1325	1297	1264	1260	1276	1280	1271	1242
32.5°	1288	1330	1350	1351	1329	1288	1268	1284	1287	1276	1252
35°	1260	1329	1368	1387	1380	1339	1304	1314	1312	1300	1291
37.5°	1229	1329	1394	1438	1454	1433	1387	1382	1387	1369	1364
40°	1195	1332	1431	1509	1557	1564	1523	1509	1515	1498	1505
42.5°	1175	1336	1480	1592	1685	1756	1738	1696	1693	1695	1710
45°	1165	1346	1529	1686	1816	1974	1991	1916	1920	1931	1954
47.5°	1154	1365	1586	1784	1959	2181	2264	2163	2155	2196	2203
50°	1114	1388	1651	1894	2109	2414	2545	2442	2444	2482	2468
52.5°	1022	1389	1720	2004	2259	2644	2843	2775	2770	2807	2733
55°	895	1326	1776	2112	2401	2858	3151	3166	3156	3162	3002
57.5°	793	1171	1782	2203	2521	3061	3467	3575	3576	3550	3266
60°	727	997	1704	2278	2661	3320	3879	4121	4135	4029	3619
62.5°	672	909	1543	2355	2822	3582	4323	4721	4722	4545	4008
65°	629	861	1366	2326	2946	3836	4793	5325	5299	5104	4377
67.5°	581	818	1284	2281	3052	4071	5207	5818	5825	5585	4719
68°	571	802	1263	2243	3040	4063	5229	5851	5863	5616	4734
70°	492	700	1099	1959	2824	3846	5089	5758	5795	5519	4567
72.5°	328	484	734	1384	2176	3056	4166	4823	4854	4668	3793
75°	208	294	390	798	1462	2193	3141	3524	3575	3514	2840
77.5°	126	206	240	387	770	1026	1419	1444	1502	1466	1472
80°	83	143	175	263	267	221	251	253	268	285	297
82.5°	47	87	122	180	159	82	70	73	75	77	91
85°	7	16	34	56	57	27	25	23	24	26	33
87.5°	0	0	0	0	1	2	3	3	3	6	6
90°	0	0	0	0	0	0	0	0	0	0	0





REPORT NUMBER: P139870

CATALOG NUMBER: ENT-E02-LED-E1-GZW

**CANDELA DISTRIBUTION (continued):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1095	1095	1095	1095	1095	1095	1095	1095	1095	1095	1095
2.5°	1099	1098	1099	1096	1099	1098	1098	1098	1097	1098	1098
5°	1111	1111	1111	1109	1111	1111	1111	1111	1110	1111	1112
7.5°	1134	1134	1133	1130	1132	1132	1131	1129	1127	1128	1127
10°	1165	1167	1161	1161	1158	1154	1151	1148	1147	1145	1141
12.5°	1203	1202	1194	1191	1189	1181	1175	1172	1168	1163	1157
15°	1237	1233	1227	1224	1221	1212	1204	1197	1192	1185	1176
17.5°	1260	1256	1253	1252	1252	1244	1237	1228	1217	1204	1189
20°	1265	1265	1266	1272	1278	1275	1267	1256	1240	1219	1196
22.5°	1258	1262	1271	1286	1299	1300	1292	1276	1249	1219	1185
25°	1246	1257	1276	1297	1315	1315	1301	1278	1241	1198	1153
27.5°	1240	1262	1289	1311	1323	1316	1291	1258	1207	1152	1100
30°	1247	1281	1310	1325	1327	1304	1261	1212	1152	1086	1033
32.5°	1273	1314	1336	1339	1325	1282	1215	1147	1080	1019	965
35°	1326	1361	1369	1357	1322	1250	1154	1074	1014	956	900
37.5°	1412	1428	1413	1378	1312	1211	1098	1020	956	899	837
40°	1534	1516	1473	1404	1301	1168	1054	976	905	842	780
42.5°	1686	1623	1534	1434	1289	1140	1022	932	854	784	719
45°	1856	1739	1618	1468	1285	1123	984	878	787	717	653
47.5°	2029	1862	1703	1505	1290	1093	926	807	712	644	584
50°	2204	2000	1802	1553	1287	1032	847	726	638	577	523
52.5°	2380	2147	1904	1596	1247	936	760	657	572	513	460
55°	2553	2290	2004	1609	1131	835	687	588	504	444	386
57.5°	2717	2419	2074	1533	988	756	622	525	436	367	310
60°	2921	2542	2094	1349	874	690	563	452	352	279	227
62.5°	3144	2709	2063	1173	807	632	490	366	269	198	159
65°	3308	2778	1906	1079	765	575	412	284	186	136	121
67.5°	3526	2846	1744	1033	719	501	318	205	144	113	104
68°	3511	2827	1710	1021	705	475	300	201	140	110	101
70°	3308	2594	1485	905	584	370	258	183	129	100	92
72.5°	2714	2012	1065	596	380	271	191	138	107	88	82
75°	1921	1258	534	343	239	157	108	89	79	70	70
77.5°	1080	658	282	235	135	91	72	67	62	57	63
80°	352	343	208	161	94	67	56	53	50	45	56
82.5°	190	235	150	115	69	48	42	43	39	35	42
85°	85	112	100	80	43	27	22	26	23	21	20
87.5°	33	55	40	23	10	6	6	5	4	4	3
90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P139870

CATALOG NUMBER: ENT-E02-LED-E1-GZW

**CANDELA DISTRIBUTION (continued):**

	160°	165°	170°	175°	180°
0°	1095	1095	1095	1095	1095
2.5°	1095	1095	1094	1093	1091
5°	1109	1109	1108	1107	1105
7.5°	1124	1123	1122	1121	1119
10°	1140	1138	1138	1139	1138
12.5°	1156	1153	1150	1149	1152
15°	1172	1166	1161	1160	1160
17.5°	1181	1171	1162	1159	1159
20°	1179	1161	1149	1143	1144
22.5°	1160	1135	1119	1111	1108
25°	1120	1090	1070	1059	1060
27.5°	1060	1028	1006	1000	994
30°	989	957	935	922	923
32.5°	919	884	864	849	847
35°	852	814	790	779	777
37.5°	786	746	724	714	707
40°	725	689	663	648	645
42.5°	665	624	598	587	584
45°	597	558	535	526	524
47.5°	536	499	480	468	464
50°	477	442	420	409	407
52.5°	415	380	357	348	340
55°	347	310	287	271	265
57.5°	268	235	211	200	189
60°	192	163	144	135	127
62.5°	136	117	105	96	91
65°	112	103	90	82	78
67.5°	99	90	80	73	70
68°	97	88	78	71	69
70°	89	80	71	66	64
72.5°	79	72	64	59	57
75°	68	61	56	52	49
77.5°	60	50	48	44	42
80°	50	45	41	38	36
82.5°	41	34	29	26	25
85°	23	21	17	13	12
87.5°	2	1	1	0	0
90°	0	0	0	0	0

(END OF REPORT)