

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: P139590

Luminaire Tested: **ENT-E02-LED-E1-BL3**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P139590
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33645)
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-BL3
Description: ENTRI LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (42) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5404.8 lumens
Efficiency: N/A
Efficacy: 115.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.33' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

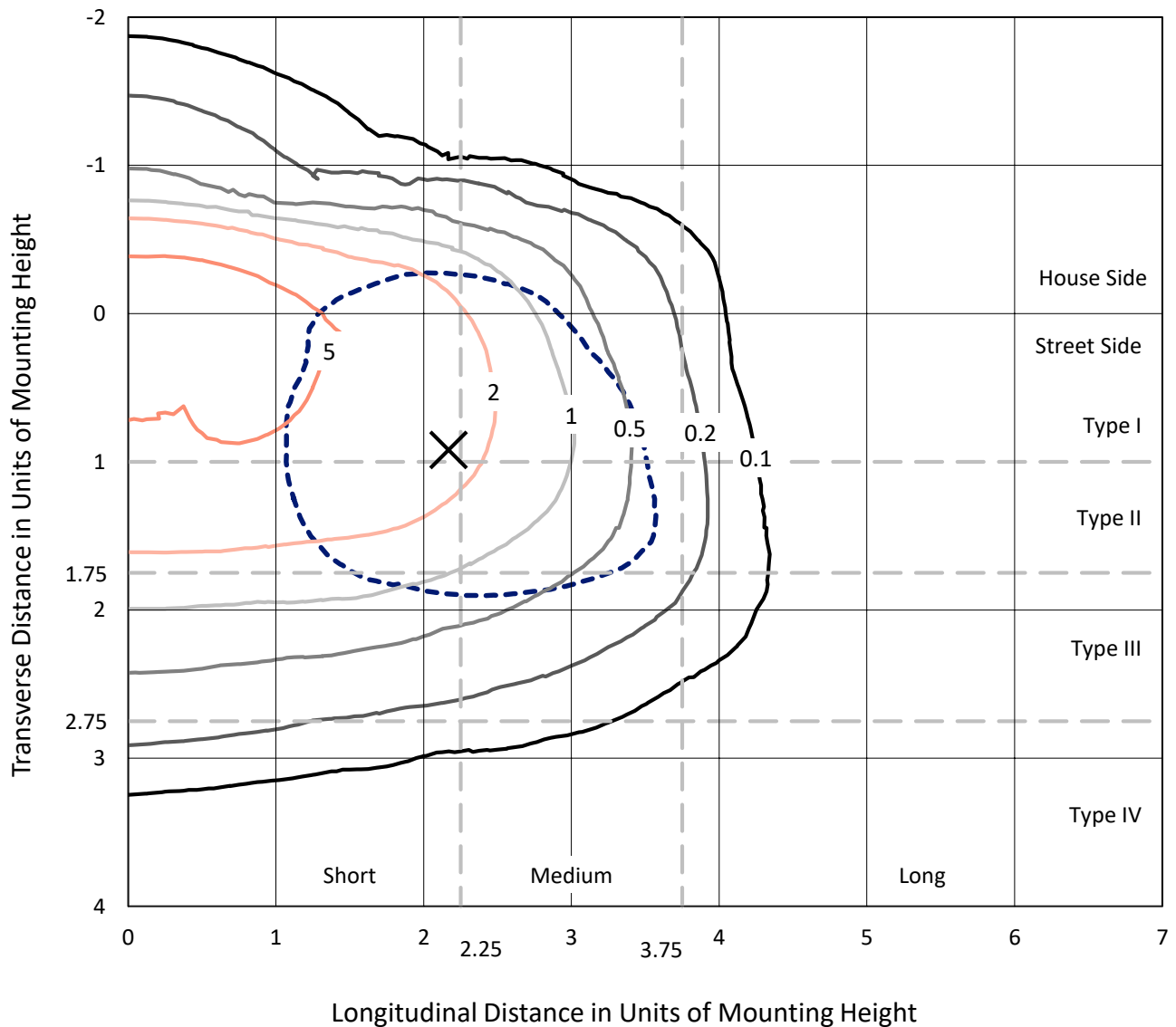
Input Watts (W): 46.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P139590
 CATALOG NUMBER: ENT-E02-LED-E1-BL3

Iso-Footcandle Lines of Horizontal Illumination

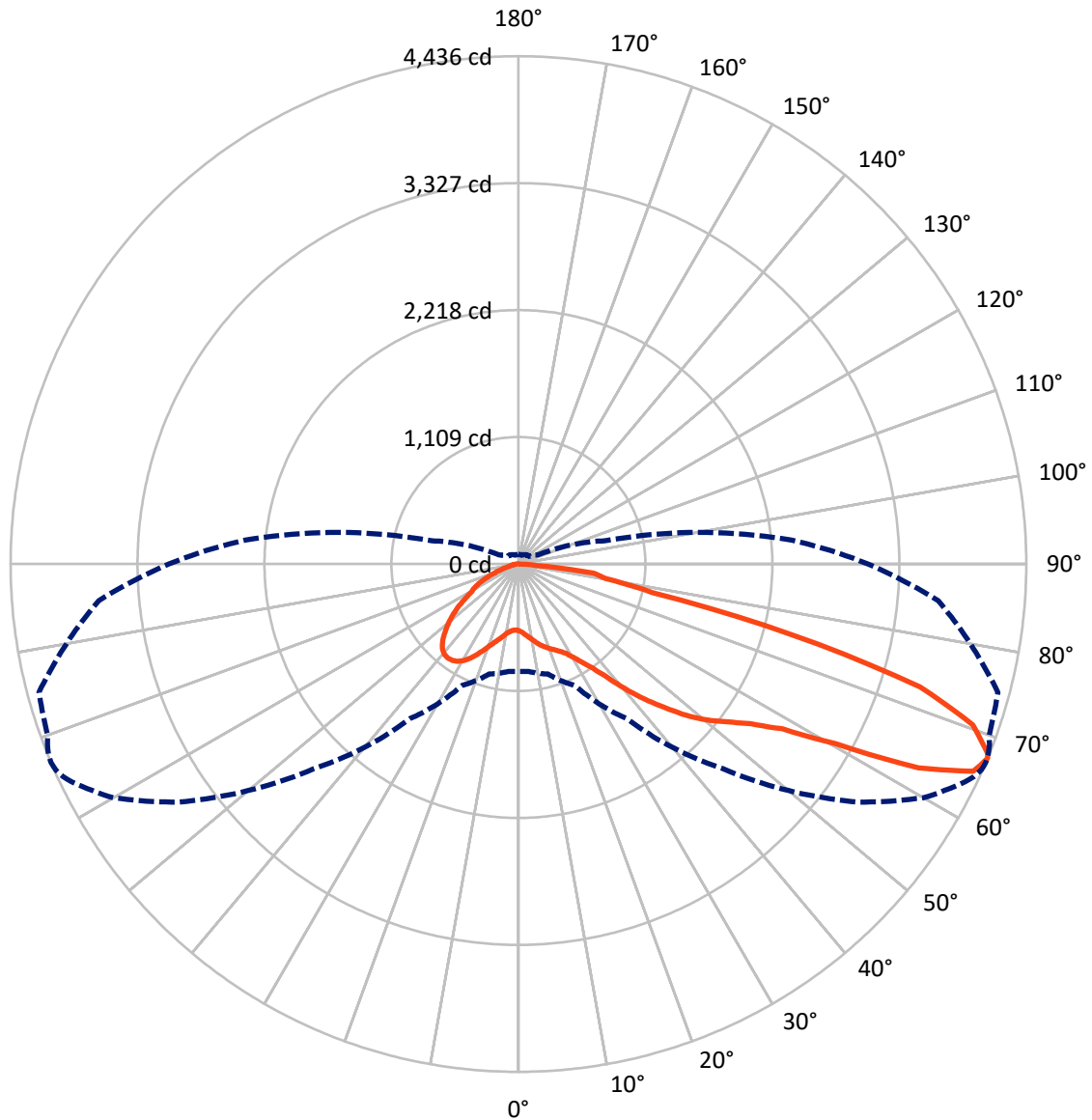
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.4 fc
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P139590
CATALOG NUMBER: ENT-E02-LED-E1-BL3

Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

REPORT NUMBER: P139590

CATALOG NUMBER: ENT-E02-LED-E1-BL3

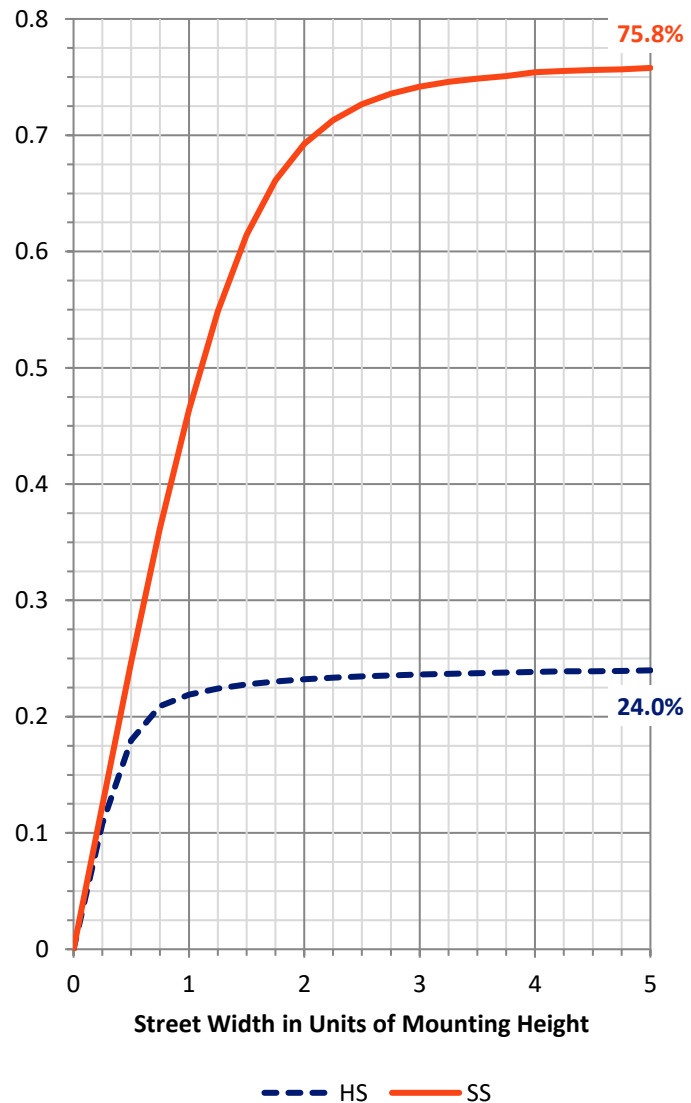
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1312.3	0.0	1312.3
	% Fixture	24.3	0.0	24.3
Street Side	Lumens	4092.5	0.0	4092.5
	% Fixture	75.7	0.0	75.7
Total	Lumens	5404.8	0.0	5404.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.7	1.1
10°-20°	202.9	3.8
20°-30°	367.8	6.8
30°-40°	537.7	9.9
40°-50°	814.5	15.1
50°-60°	1168.2	21.6
60°-70°	1492.8	27.6
70°-80°	696.9	12.9
80°-90°	65.3	1.2
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°	5404.8	100.0
0°-180°	5404.8	100.0



REPORT NUMBER: P139590

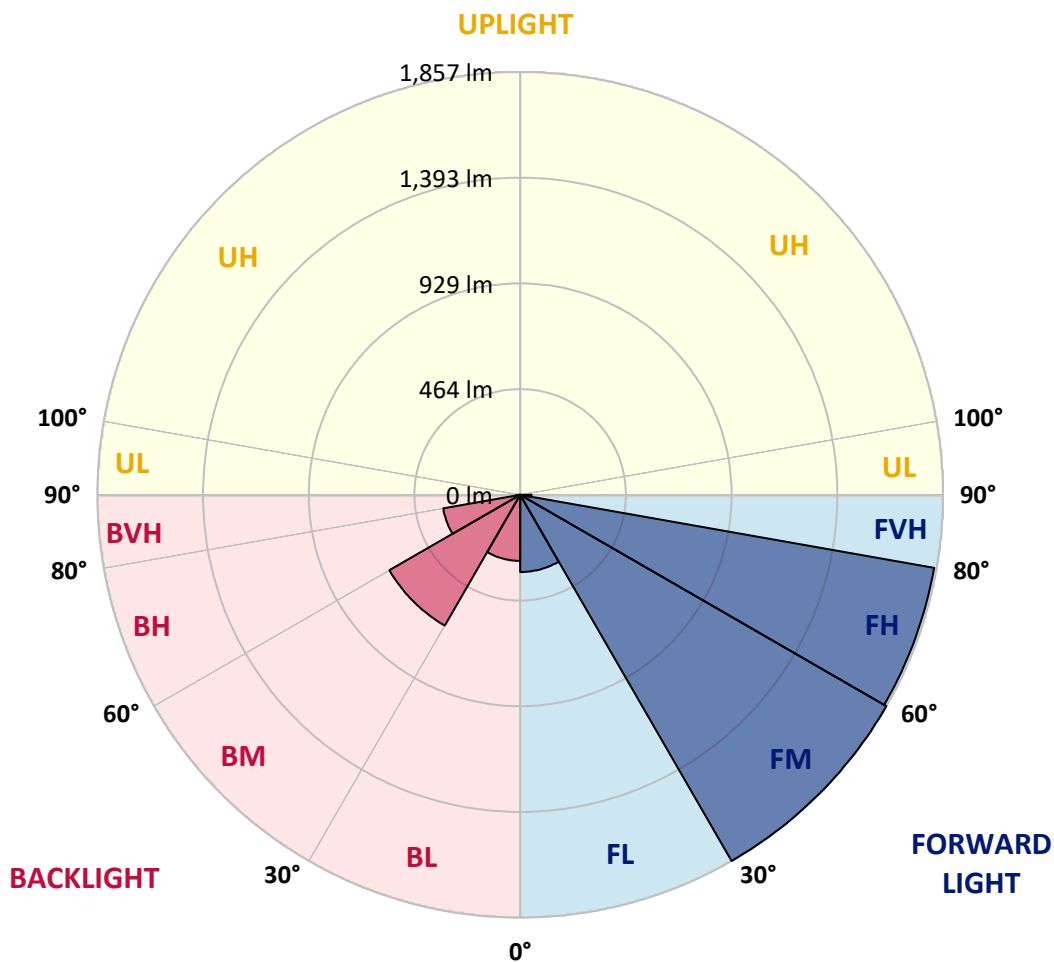
CATALOG NUMBER: ENT-E02-LED-E1-BL3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	339.0	6.3			
FM	(30°-60°)	1857.5	34.4			
FH	(60°-80°)	1846.4	34.2			G2/5000
FVH	(80°-90°)	49.5	0.9			G1/100
BL	(0°-30°)	290.4	5.4	B1/500		
BM	(30°-60°)	662.9	12.3	B1/1000		
BH	(60°-80°)	343.3	6.4	B1/500		G1/500
BVH	(80°-90°)	15.7	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short





REPORT NUMBER: P139590

CATALOG NUMBER: ENT-E02-LED-E1-BL3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	582	582	582	582	582	582	582	582	582	582	582
2.5°	605	605	606	606	605	605	599	599	599	598	598
5°	638	639	639	638	636	632	624	624	624	623	621
7.5°	676	675	676	673	669	664	653	652	650	650	648
10°	718	715	718	714	706	697	684	680	680	680	676
12.5°	761	760	762	755	741	731	718	713	712	712	710
15°	808	807	801	790	772	763	748	742	741	741	738
17.5°	857	857	842	819	794	781	770	766	765	765	764
20°	899	899	879	841	805	791	787	787	787	787	788
22.5°	930	927	900	853	809	797	807	808	808	810	811
25°	944	943	911	855	808	806	828	831	833	835	838
27.5°	945	945	913	854	807	822	854	863	865	869	874
30°	935	936	909	853	814	852	895	912	916	922	930
32.5°	923	925	909	863	845	904	961	985	989	997	1005
35°	925	928	931	903	914	993	1075	1089	1088	1101	1105
37.5°	938	945	967	972	1014	1124	1210	1240	1240	1252	1248
40°	940	951	1006	1064	1147	1282	1400	1435	1435	1440	1438
42.5°	987	997	1076	1179	1297	1456	1586	1617	1624	1619	1623
45°	1072	1079	1176	1306	1442	1623	1768	1798	1805	1800	1794
47.5°	1180	1190	1293	1447	1587	1777	1954	1989	1996	1988	1991
50°	1270	1289	1399	1581	1727	1909	2098	2146	2152	2152	2154
52.5°	1352	1369	1475	1678	1840	2028	2205	2267	2274	2279	2283
55°	1386	1403	1509	1720	1909	2139	2329	2412	2416	2429	2446
57.5°	1387	1401	1505	1719	1945	2239	2498	2627	2643	2660	2689
60°	1293	1310	1414	1669	1975	2351	2754	2991	3014	3063	3127
62.5°	1151	1163	1253	1504	1975	2506	3166	3558	3635	3715	3833
65°	1019	1028	1085	1302	1835	2632	3597	4048	4131	4191	4291
67°	937	941	995	1172	1647	2531	3626	4082	4153	4215	4341
67.5°	909	912	963	1139	1589	2470	3582	4054	4131	4194	4322
70°	699	690	734	896	1284	1971	3145	3689	3777	3861	4016
72.5°	417	404	432	520	832	1385	2385	3027	3139	3244	3447
75°	251	252	273	334	454	871	1541	1970	2075	2174	2334
77.5°	125	124	143	194	331	541	895	1136	1171	1218	1199
80°	40	39	42	53	119	363	563	713	729	738	749
82.5°	6	7	8	13	22	87	350	496	518	544	594
85°	0	0	1	1	3	7	33	85	89	108	127
87.5°	0	0	0	1	2	3	5	5	5	5	5
90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P139590

CATALOG NUMBER: ENT-E02-LED-E1-BL3

CANDELA DISTRIBUTION (continued):

	65°	66°	67°	68°	69°	70°	75°	85°	90°	95°	105°
0°	582	582	582	582	582	582	582	582	582	582	582
2.5°	597	597	596	595	595	595	593	592	586	584	580
5°	621	621	619	618	617	617	614	608	600	595	587
7.5°	647	646	644	644	640	640	636	625	617	610	600
10°	677	676	673	672	670	668	664	651	643	634	622
12.5°	710	708	706	705	703	701	697	685	677	668	654
15°	739	738	736	735	735	733	730	719	711	701	690
17.5°	765	764	763	763	762	762	761	751	746	738	727
20°	787	788	788	788	789	790	792	787	782	775	769
22.5°	811	812	815	815	817	818	825	824	822	817	812
25°	840	842	844	847	848	851	863	868	864	861	866
27.5°	878	882	884	888	890	894	912	923	920	921	932
30°	935	939	945	947	954	956	977	994	994	992	1012
32.5°	1011	1014	1021	1026	1030	1034	1054	1072	1074	1080	1088
35°	1111	1113	1117	1125	1124	1126	1137	1155	1165	1179	1155
37.5°	1243	1250	1248	1249	1241	1246	1250	1269	1290	1304	1211
40°	1431	1436	1431	1424	1418	1415	1409	1430	1448	1438	1255
42.5°	1614	1616	1612	1600	1595	1585	1569	1595	1605	1558	1278
45°	1795	1792	1785	1783	1773	1763	1754	1771	1767	1675	1288
47.5°	1985	1982	1977	1969	1958	1956	1948	1946	1917	1775	1283
50°	2151	2153	2142	2146	2141	2131	2124	2128	2059	1863	1273
52.5°	2294	2294	2289	2294	2292	2287	2293	2358	2215	1987	1258
55°	2460	2466	2462	2467	2470	2481	2506	2658	2448	2139	1224
57.5°	2703	2718	2714	2734	2752	2781	2872	3032	2737	2306	1157
60°	3139	3188	3186	3221	3257	3290	3449	3480	3064	2524	1107
62.5°	3865	3905	3922	3960	3983	3989	4117	3890	3356	2722	1079
65°	4335	4351	4366	4361	4347	4324	4332	3852	3259	2595	926
67°	4391	4424	4436	4428	4407	4375	4336	3680	3053	2397	783
67.5°	4375	4409	4420	4413	4395	4371	4325	3615	2983	2333	746
70°	4118	4167	4212	4227	4228	4224	4178	3156	2539	1959	566
72.5°	3511	3574	3668	3638	3686	3655	3550	2157	1740	1400	397
75°	2369	2397	2473	2386	2394	2339	1931	1253	1079	911	239
77.5°	1192	1210	1198	1146	1126	1081	836	272	272	324	125
80°	756	763	771	783	798	800	580	80	72	75	68
82.5°	620	639	664	669	675	680	400	44	36	40	48
85°	144	156	149	132	141	109	56	18	16	20	33
87.5°	5	5	5	5	5	5	5	5	4	7	17
90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P139590

CATALOG NUMBER: ENT-E02-LED-E1-BL3

CANDELA DISTRIBUTION (continued):

	115°	125°	135°	145°	155°	165°	175°	180°
0°	582	582	582	582	582	582	582	582
2.5°	576	573	569	568	567	565	564	563
5°	579	573	567	563	561	559	557	557
7.5°	591	584	575	571	567	564	562	562
10°	611	603	592	587	582	579	577	575
12.5°	641	631	618	610	605	604	602	601
15°	678	667	653	645	637	635	633	632
17.5°	715	706	695	681	665	652	646	645
20°	757	753	736	705	670	643	632	632
22.5°	810	799	758	703	651	613	598	598
25°	868	831	755	681	617	570	550	550
27.5°	919	840	737	644	566	515	492	491
30°	959	835	705	592	506	448	422	422
32.5°	981	818	661	531	433	367	335	336
35°	987	789	603	450	345	280	251	251
37.5°	981	743	531	361	258	212	190	188
40°	961	674	435	264	192	165	156	154
42.5°	921	591	327	189	154	143	141	140
45°	858	479	227	148	138	135	135	134
47.5°	779	366	162	131	130	130	130	130
50°	691	259	132	124	123	125	126	126
52.5°	600	181	121	119	117	120	121	121
55°	501	142	116	114	111	112	114	114
57.5°	399	126	114	111	105	105	107	107
60°	317	121	113	106	98	98	100	101
62.5°	265	120	113	101	95	92	94	94
65°	221	120	110	101	90	86	88	88
67°	185	118	108	101	88	83	83	83
67.5°	175	117	109	101	87	82	81	81
70°	131	106	109	102	85	75	73	73
72.5°	102	97	106	105	83	69	65	64
75°	83	88	107	102	78	63	57	56
77.5°	71	75	90	82	65	56	50	49
80°	56	64	64	56	48	45	42	42
82.5°	45	49	42	38	36	35	33	33
85°	37	40	31	28	27	26	24	24
87.5°	29	25	16	15	15	14	14	15
90°	0	0	0	0	0	0	0	0

(END OF REPORT)