

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: P141080

Luminaire Tested: **ECM-E03-LED-E1-SL3**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P141080
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33691)
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-SL3
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (63) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8681.6 lumens
Efficiency: N/A
Efficacy: 115.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

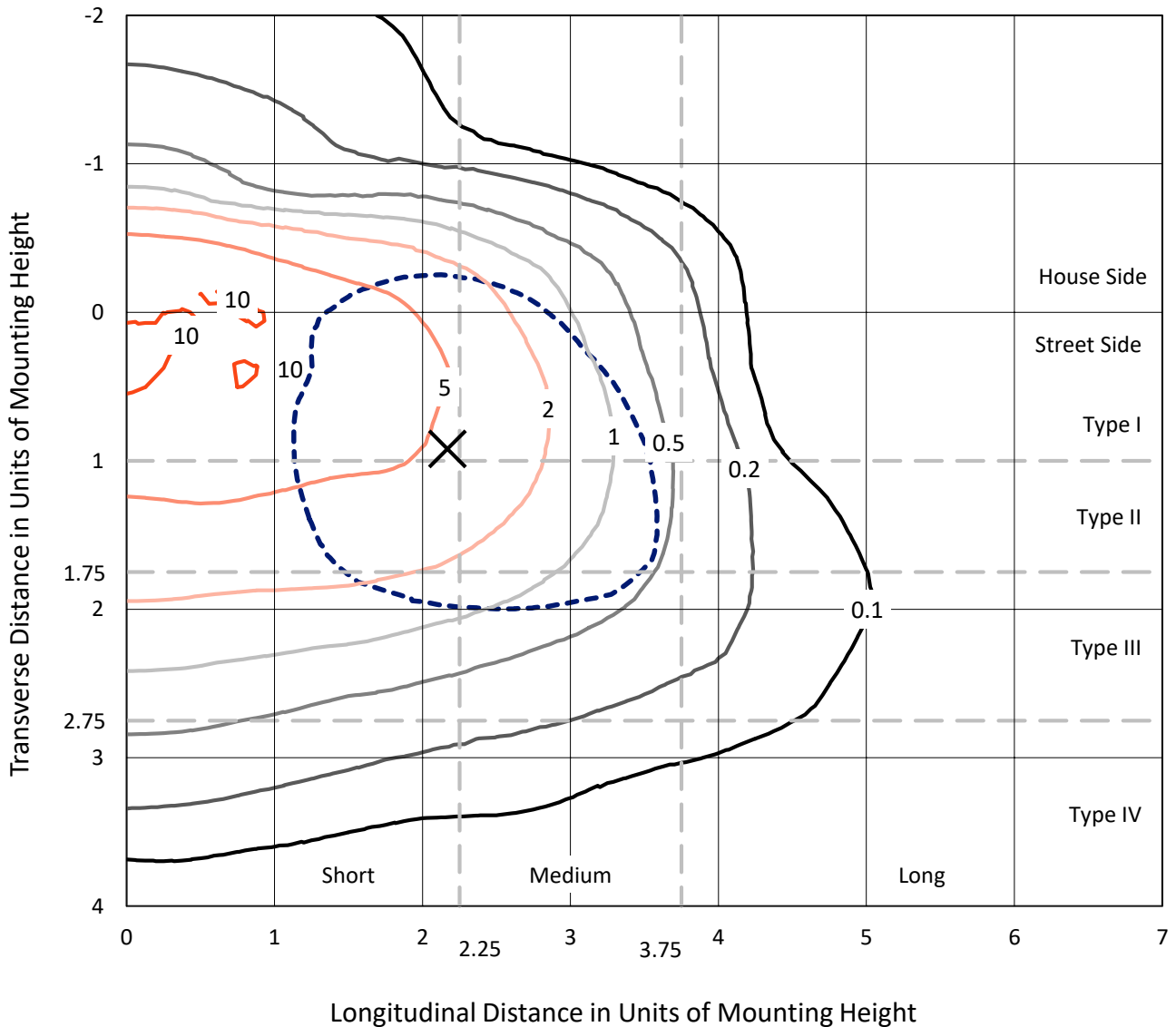
Input Watts (W): 75.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

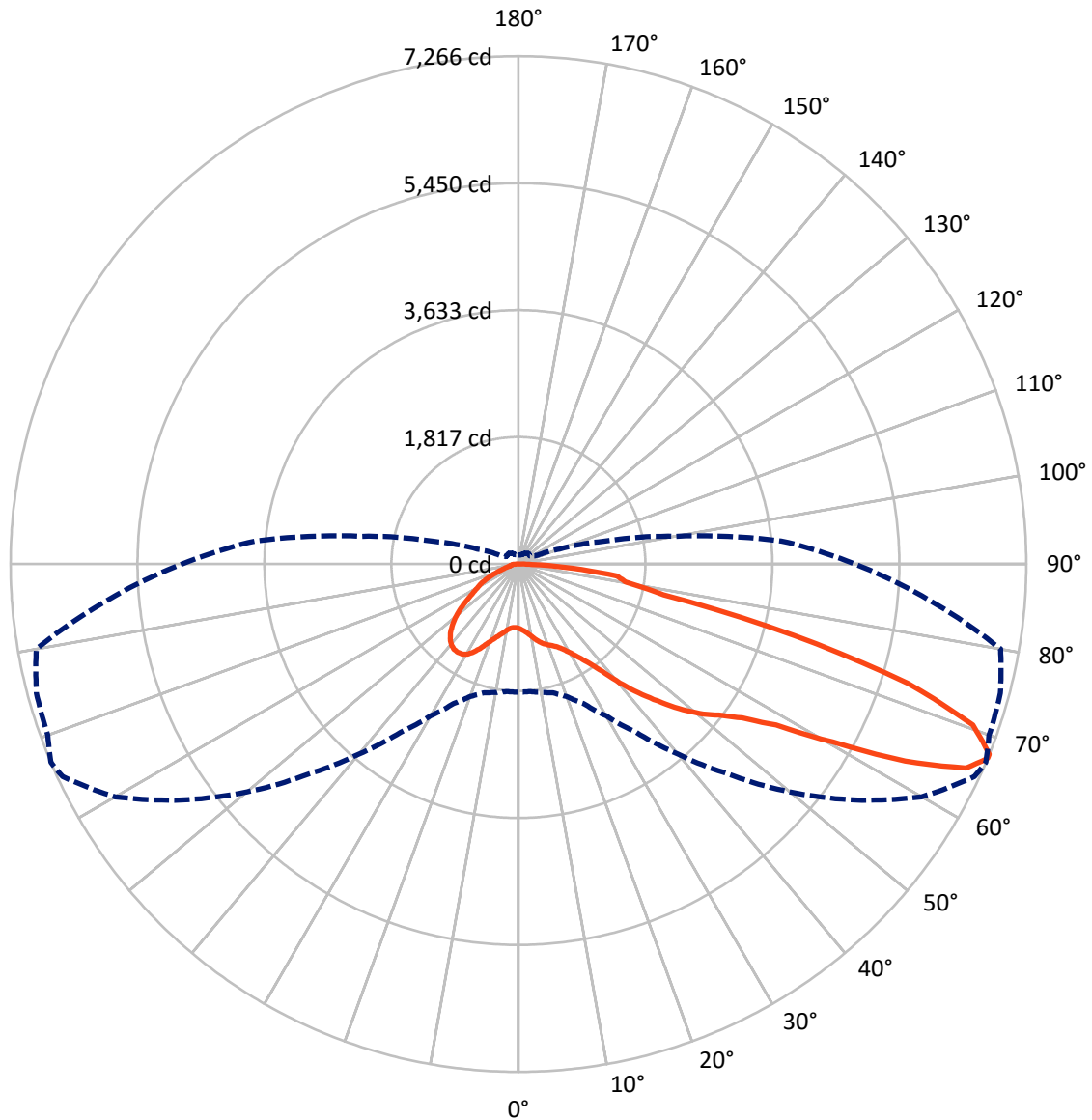
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.1 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1997.2	0.0	1997.2
	% Fixture	23.0	0.0	23.0
Street Side	Lumens	6684.4	0.0	6684.4
	% Fixture	77.0	0.0	77.0
Total	Lumens	8681.6	0.0	8681.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.3	1.1
10°-20°	319.2	3.7
20°-30°	568.2	6.5
30°-40°	817.0	9.4
40°-50°	1245.1	14.3
50°-60°	1818.7	20.9
60°-70°	2450.6	28.2
70°-80°	1203.2	13.9
80°-90°	167.3	1.9
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°	8681.6	100.0
0°-180°	8681.6	100.0



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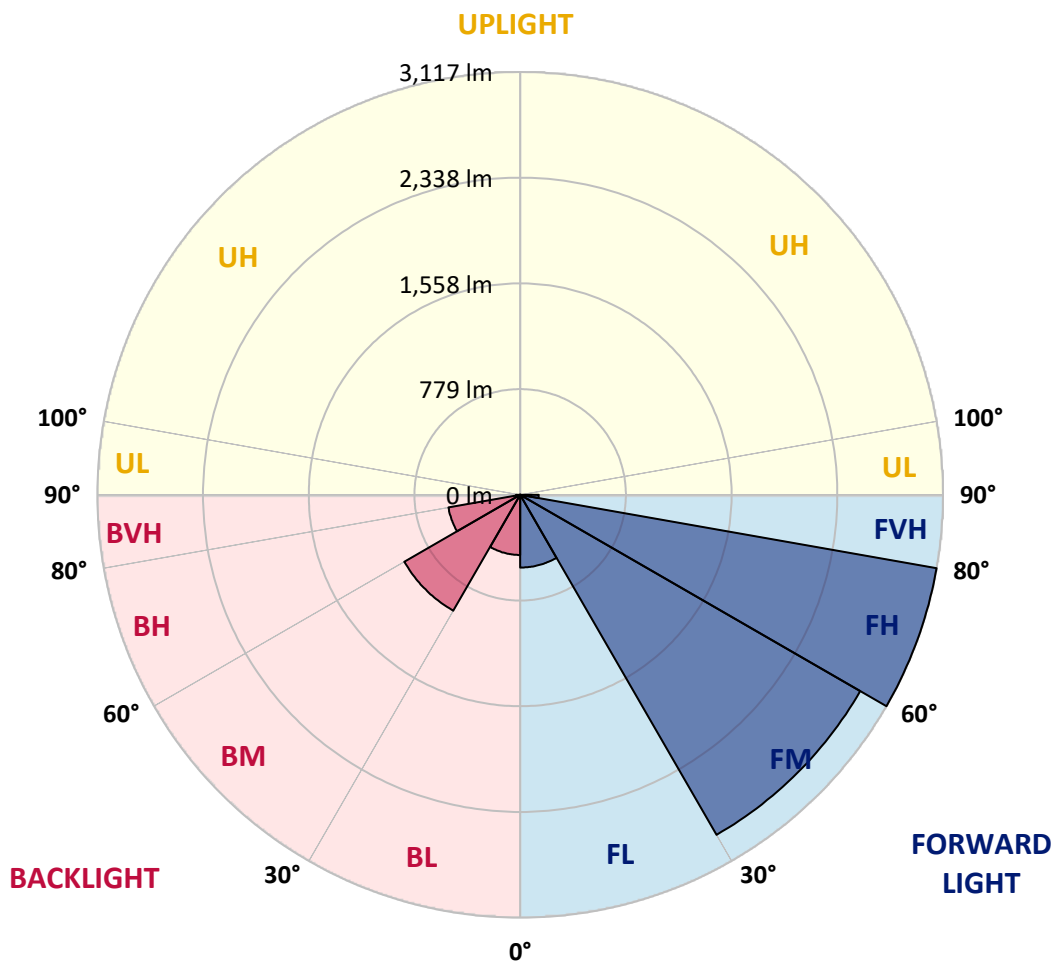
CATALOG NUMBER: ECM-E03-LED-E1-SL3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	536.3	6.2			
FM (30°-60°)	2894.3	33.3			
FH (60°-80°)	3116.7	35.9			G2/5000
FVH (80°-90°)	137.2	1.6			G2/225
BL (0°-30°)	443.5	5.1	B1/500		
BM (30°-60°)	986.5	11.4	B1/1000		
BH (60°-80°)	537.0	6.2	B2/1000		G2/1000
BVH (80°-90°)	30.1	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	921	921	921	921	921	921	921	921	921	921	921
2.5°	969	964	968	967	964	960	962	959	957	954	951
5°	1032	1029	1027	1024	1022	1019	1017	1012	1005	1000	996
7.5°	1094	1093	1090	1086	1078	1076	1069	1064	1058	1048	1040
10°	1167	1166	1161	1155	1146	1137	1129	1117	1105	1096	1089
12.5°	1255	1250	1240	1232	1222	1208	1195	1181	1164	1150	1142
15°	1343	1337	1329	1318	1303	1284	1265	1244	1218	1200	1189
17.5°	1415	1411	1402	1387	1372	1349	1324	1295	1263	1236	1219
20°	1467	1463	1449	1431	1411	1385	1358	1326	1288	1255	1236
22.5°	1489	1483	1467	1443	1416	1384	1355	1328	1293	1268	1248
25°	1496	1489	1468	1438	1403	1362	1329	1308	1287	1278	1271
27.5°	1492	1486	1463	1426	1379	1331	1296	1281	1282	1299	1307
30°	1478	1471	1450	1409	1359	1307	1276	1271	1294	1337	1369
32.5°	1455	1450	1433	1398	1353	1308	1286	1297	1337	1404	1459
35°	1449	1448	1440	1421	1388	1359	1350	1381	1447	1539	1609
37.5°	1448	1453	1457	1457	1450	1448	1475	1518	1616	1731	1845
40°	1468	1477	1497	1523	1548	1584	1639	1720	1822	1962	2104
42.5°	1530	1550	1584	1629	1694	1761	1850	1951	2082	2223	2364
45°	1651	1680	1705	1776	1862	1941	2057	2190	2334	2511	2663
47.5°	1811	1832	1884	1959	2064	2177	2289	2405	2578	2763	2947
50°	1971	1987	2042	2130	2268	2392	2520	2635	2784	2980	3160
52.5°	2090	2112	2160	2246	2401	2542	2688	2815	2983	3159	3347
55°	2172	2186	2230	2314	2460	2621	2786	2942	3142	3341	3528
57.5°	2185	2199	2239	2313	2455	2624	2813	3004	3246	3509	3754
60°	2170	2181	2216	2277	2411	2596	2821	3061	3359	3698	4048
62.5°	2103	2114	2146	2196	2315	2515	2797	3145	3520	3946	4459
65°	1977	1984	2014	2054	2174	2377	2688	3128	3647	4227	4891
67°	1834	1831	1865	1905	2015	2202	2506	2939	3546	4249	5072
67.5°	1790	1798	1831	1859	1966	2147	2438	2866	3460	4199	5069
70°	1478	1493	1511	1529	1623	1756	1970	2384	2864	3564	4602
72.5°	1014	984	997	991	1020	1104	1253	1617	1998	2600	3416
75°	514	547	543	568	609	662	731	867	1166	1520	2114
77.5°	288	280	308	314	338	394	516	695	832	977	1195
80°	131	145	154	140	145	157	204	320	538	819	942
82.5°	73	78	91	92	96	99	107	124	167	338	665
85°	46	48	61	67	70	70	70	74	85	100	172
87.5°	17	18	28	37	38	36	34	39	36	37	56
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67°	70°	75°	80°	85°	90°	95°	100°
0°	921	921	921	921	921	921	921	921	921	921	921
2.5°	949	945	941	940	937	935	930	926	922	919	916
5°	987	979	972	969	965	960	950	943	937	931	925
7.5°	1030	1020	1010	1006	1000	991	980	972	962	953	945
10°	1078	1067	1059	1055	1050	1037	1030	1016	1005	993	983
12.5°	1130	1125	1114	1110	1105	1096	1086	1074	1060	1047	1035
15°	1177	1169	1162	1161	1158	1153	1140	1127	1115	1098	1088
17.5°	1206	1203	1202	1201	1199	1196	1190	1176	1165	1151	1137
20°	1224	1227	1232	1236	1238	1240	1237	1223	1212	1200	1188
22.5°	1243	1251	1264	1270	1277	1287	1285	1276	1270	1256	1247
25°	1270	1286	1308	1316	1329	1342	1345	1340	1334	1324	1324
27.5°	1316	1339	1368	1385	1398	1416	1422	1419	1420	1414	1428
30°	1388	1420	1459	1477	1493	1514	1518	1524	1520	1531	1548
32.5°	1497	1537	1577	1594	1608	1630	1643	1639	1653	1660	1684
35°	1665	1705	1736	1739	1755	1767	1779	1775	1813	1828	1841
37.5°	1897	1931	1950	1943	1924	1947	1963	1987	2011	2038	1990
40°	2198	2252	2244	2234	2198	2203	2210	2223	2263	2254	2117
42.5°	2484	2539	2530	2519	2471	2446	2465	2488	2510	2425	2221
45°	2773	2823	2780	2795	2752	2741	2778	2791	2766	2610	2309
47.5°	3073	3127	3106	3091	3060	3057	3078	3098	2999	2744	2375
50°	3303	3383	3372	3363	3329	3325	3375	3389	3211	2886	2441
52.5°	3480	3584	3604	3592	3584	3586	3730	3709	3463	3058	2518
55°	3689	3797	3870	3885	3905	3934	4219	4188	3811	3306	2599
57.5°	3966	4166	4276	4344	4399	4587	4949	4830	4293	3626	2695
60°	4374	4771	4999	5172	5281	5609	6048	5610	4853	4010	2821
62.5°	5029	5677	6113	6211	6257	6569	6883	6207	5257	4264	2841
65°	5664	6474	6983	7040	7006	7090	7178	6225	5163	4144	2607
67°	5888	6662	7197	7266	7166	7139	7005	5897	4812	3776	2281
67.5°	5876	6640	7195	7265	7166	7123	6926	5765	4674	3686	2218
70°	5416	6150	6768	6899	6844	6730	6206	4883	3873	3024	1710
72.5°	4397	5190	5680	5825	5864	5571	4622	3418	2792	2161	1240
75°	2952	3740	4141	4068	3831	3332	2440	1803	1530	1257	767
77.5°	1674	2282	2251	2125	1925	1425	692	375	358	418	325
80°	1118	1407	1503	1552	1541	1054	286	145	125	125	123
82.5°	933	1216	1377	1420	1323	801	171	95	76	85	95
85°	393	613	811	780	620	312	87	50	50	66	83
87.5°	95	141	199	193	155	72	44	31	31	51	72
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	921	921	921	921	921	921	921	921	921	921	921
2.5°	915	911	911	907	905	903	902	903	900	897	898
5°	920	914	911	904	900	896	893	892	887	884	884
7.5°	937	929	923	915	907	901	896	893	886	881	880
10°	972	961	952	940	929	921	912	907	899	894	892
12.5°	1024	1008	994	976	963	951	946	938	935	932	933
15°	1073	1054	1041	1027	1012	1005	995	994	995	990	990
17.5°	1123	1108	1093	1088	1074	1069	1062	1058	1049	1040	1029
20°	1175	1167	1161	1155	1152	1140	1122	1101	1072	1046	1024
22.5°	1242	1237	1238	1233	1217	1187	1146	1102	1055	1013	980
25°	1327	1332	1326	1301	1255	1194	1131	1069	1007	957	912
27.5°	1435	1431	1403	1339	1260	1173	1092	1018	944	886	830
30°	1553	1524	1451	1351	1240	1135	1035	949	863	795	732
32.5°	1672	1589	1471	1337	1205	1081	969	868	769	693	620
35°	1762	1629	1468	1307	1152	1010	880	755	640	549	475
37.5°	1845	1651	1448	1261	1079	916	754	619	503	412	348
40°	1896	1649	1409	1185	978	778	602	463	361	294	259
42.5°	1926	1628	1342	1084	839	623	444	319	257	228	212
45°	1941	1583	1259	949	671	445	306	230	205	197	193
47.5°	1932	1520	1140	797	500	305	219	194	186	182	181
50°	1911	1438	1015	632	355	219	184	177	174	173	171
52.5°	1881	1341	872	490	252	182	172	169	167	164	163
55°	1831	1221	726	361	202	172	167	166	162	159	157
57.5°	1771	1093	588	283	186	168	165	164	160	156	152
60°	1741	1003	484	245	183	170	168	166	161	155	150
62.5°	1667	906	417	233	187	177	176	172	165	159	151
65°	1476	769	355	221	193	188	190	185	177	167	154
67°	1247	625	300	212	200	203	206	203	190	175	158
67.5°	1185	582	285	209	202	206	211	208	194	177	160
70°	891	417	226	198	209	220	230	229	215	194	167
72.5°	616	285	183	185	203	223	236	242	228	203	171
75°	371	182	154	167	185	205	226	228	212	187	160
77.5°	182	131	127	132	149	166	175	164	154	137	127
80°	110	103	101	112	122	119	112	103	98	94	90
82.5°	92	93	95	97	95	84	72	66	62	62	63
85°	94	96	88	81	72	60	49	42	43	44	44
87.5°	73	70	62	51	41	30	24	20	22	21	23
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	921	921	921	921	921
2.5°	898	897	898	898	899
5°	882	880	880	881	881
7.5°	878	876	876	877	876
10°	892	891	893	892	892
12.5°	934	934	938	940	938
15°	991	989	992	993	994
17.5°	1023	1014	1011	1013	1009
20°	1005	990	984	983	976
22.5°	954	932	923	919	911
25°	882	856	844	834	829
27.5°	796	764	747	739	736
30°	688	657	632	619	615
32.5°	568	523	497	481	470
35°	424	381	362	350	336
37.5°	308	282	266	258	255
40°	238	225	217	216	215
42.5°	206	200	199	197	195
45°	190	188	189	186	184
47.5°	179	178	178	176	175
50°	170	170	169	168	168
52.5°	162	163	163	161	161
55°	155	155	156	155	155
57.5°	150	149	150	150	150
60°	147	145	144	145	145
62.5°	144	141	140	140	141
65°	144	139	137	137	136
67°	145	137	133	131	130
67.5°	145	136	131	130	129
70°	145	132	125	120	120
72.5°	144	128	117	112	110
75°	137	121	111	105	103
77.5°	115	105	100	95	94
80°	87	82	78	67	62
82.5°	62	59	52	48	45
85°	44	41	38	34	34
87.5°	24	23	22	20	18
90°	0	0	0	0	0

(END OF REPORT)