

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: P141880

Luminaire Tested: **ECM-E03-LED-E1-T3**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P141880
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33683)
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-T3
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3
Light Source: (63) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8808.8 lumens
Efficiency: N/A
Efficacy: 117.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G3

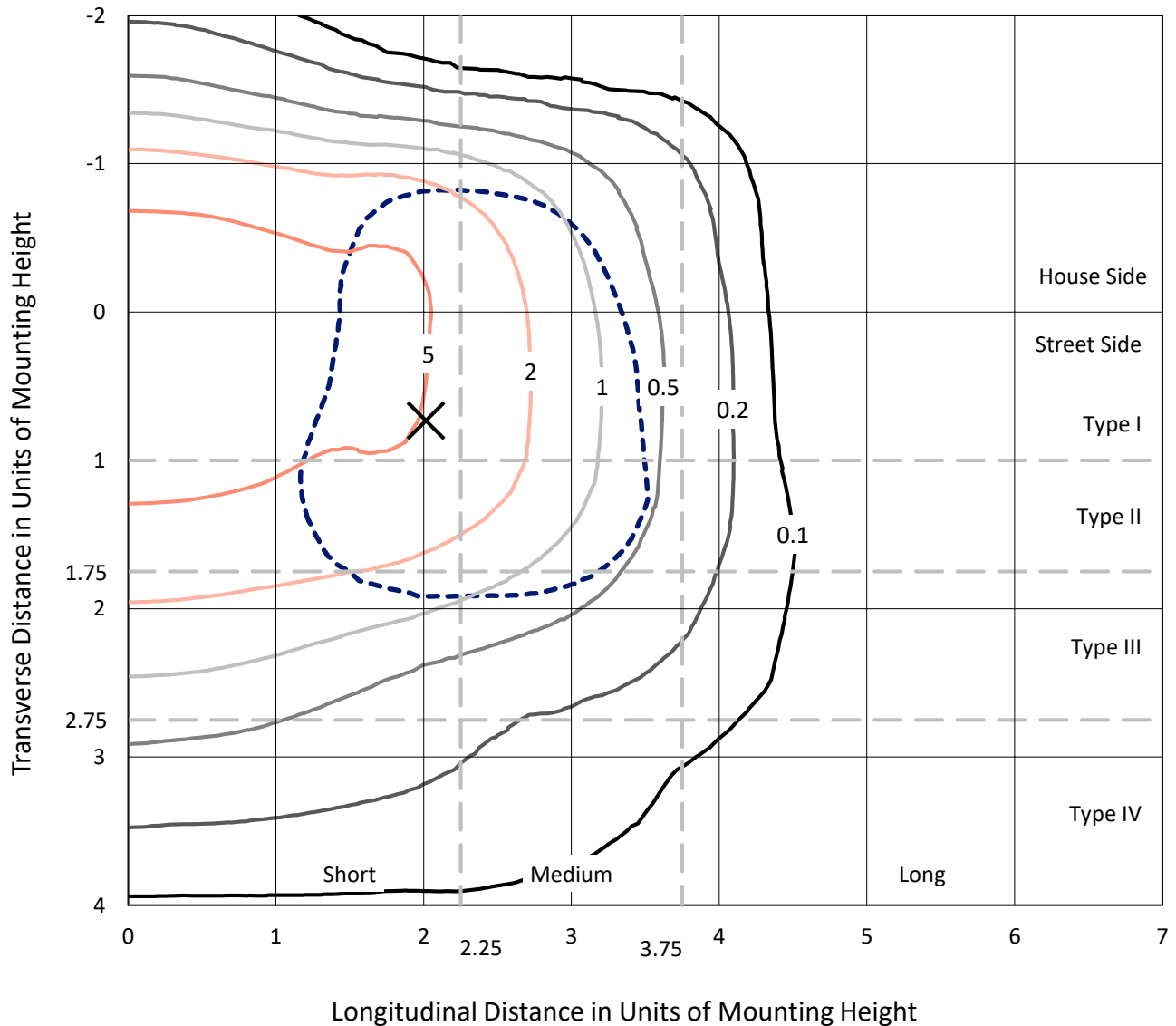
Input Watts (W): 75.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

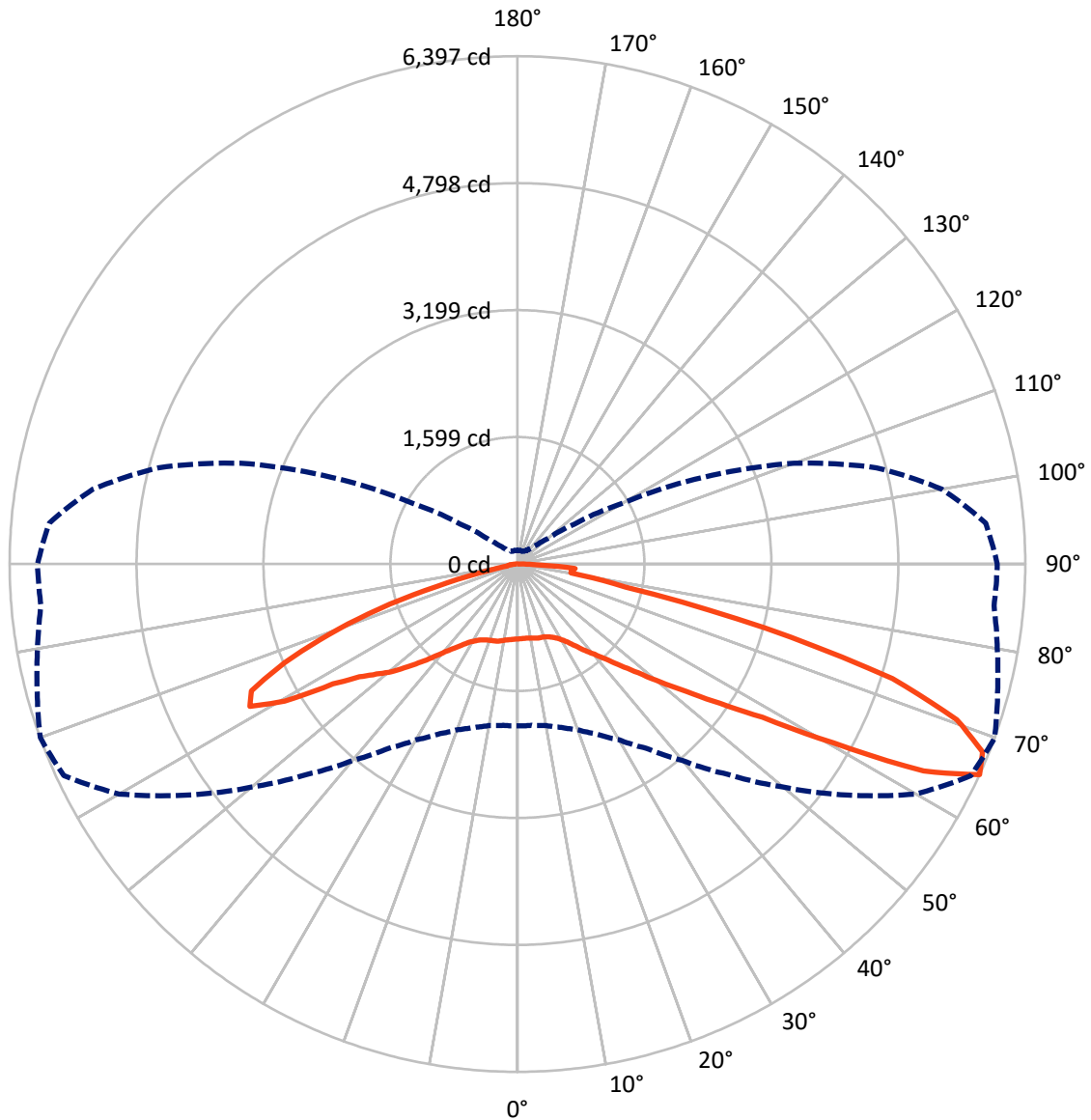
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.5 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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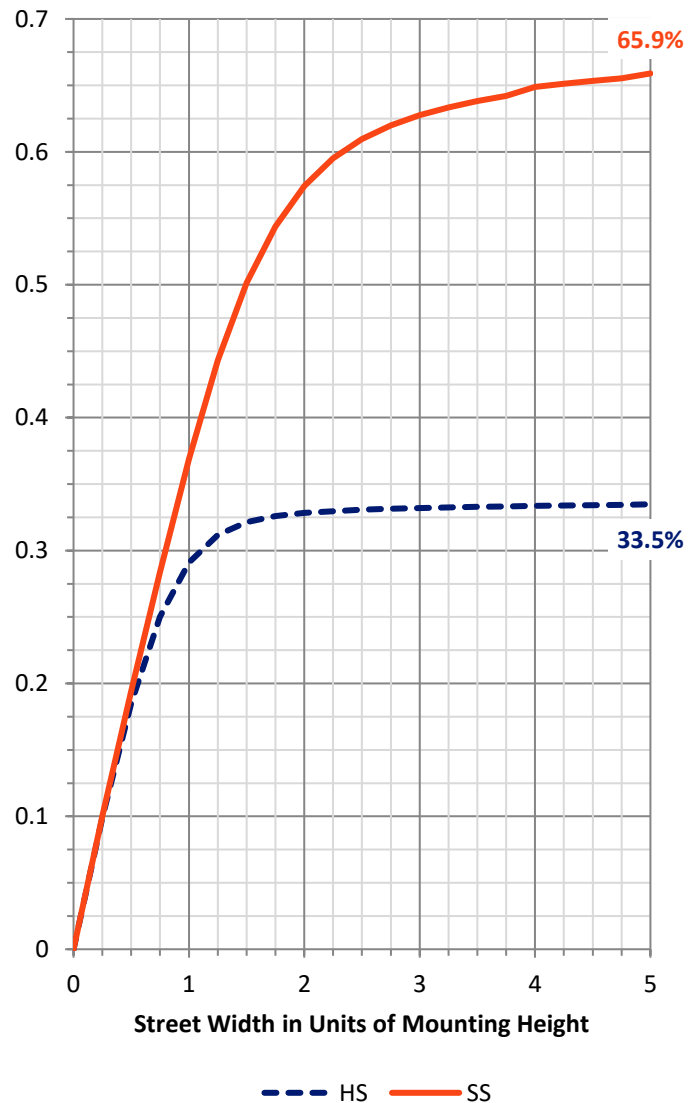
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2973.6	0.0	2973.6
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	5835.2	0.0	5835.2
	% Fixture	66.2	0.0	66.2
Total	Lumens	8808.8	0.0	8808.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.9	1.0
10°-20°	269.1	3.1
20°-30°	462.7	5.3
30°-40°	741.7	8.4
40°-50°	1214.3	13.8
50°-60°	1900.7	21.6
60°-70°	2671.1	30.3
70°-80°	1264.1	14.4
80°-90°	194.2	2.2
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°	8808.8	100.0
0°-180°	8808.8	100.0



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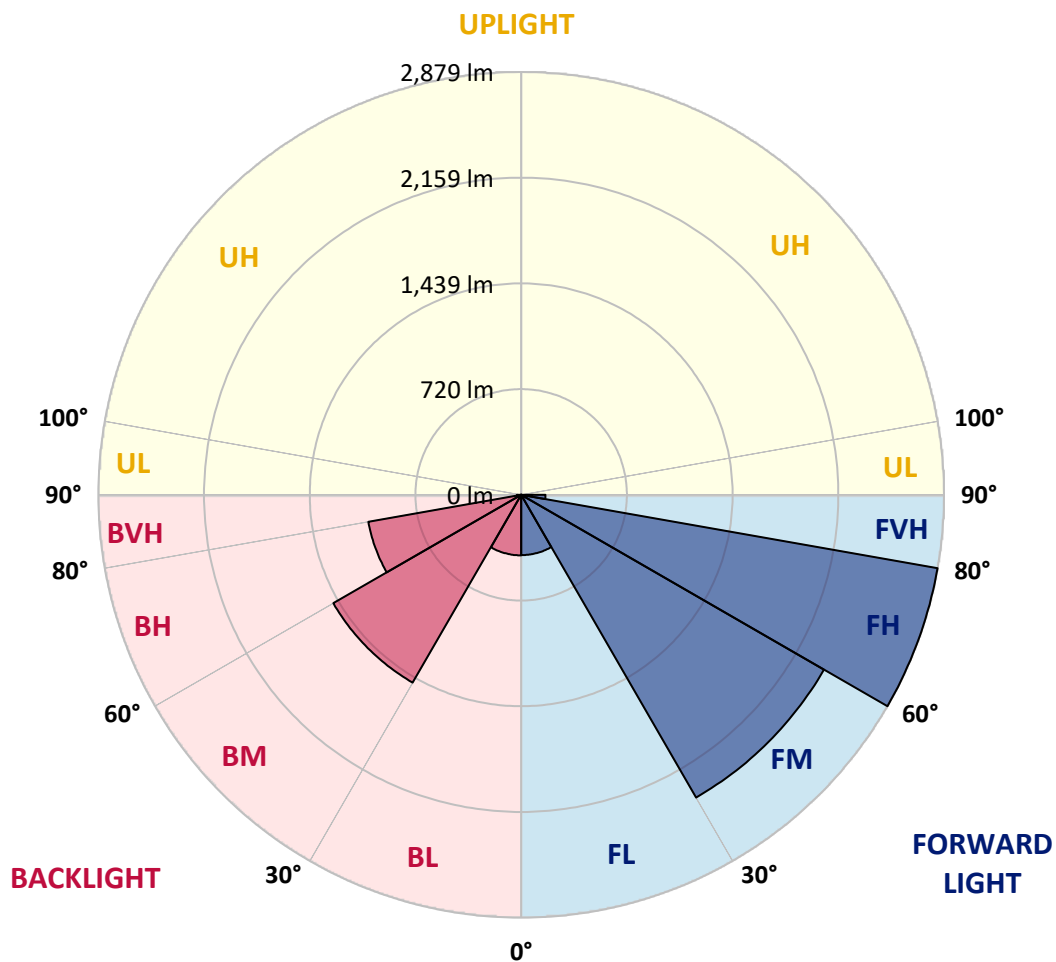
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	410.4	4.7			
FM (30°-60°)	2380.3	27.0			
FH (60°-80°)	2878.9	32.7			G2/5000
FVH (80°-90°)	165.5	1.9			G2/225
BL (0°-30°)	412.3	4.7	B1/500		
BM (30°-60°)	1476.3	16.8	B2/2500		
BH (60°-80°)	1056.3	12.0	B3/2500		G3/2500
BVH (80°-90°)	28.7	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	944	944	944	944	944	944	944	944	944	944	944
2.5°	939	940	940	938	938	939	939	940	940	940	941
5°	939	940	940	939	938	940	939	940	940	940	940
7.5°	937	938	938	937	938	939	939	941	942	942	943
10°	927	928	929	929	931	934	935	939	940	943	945
12.5°	909	909	911	913	916	922	925	931	936	940	947
15°	893	893	895	896	902	906	912	919	928	936	947
17.5°	901	901	900	899	900	900	905	912	920	931	945
20°	932	931	927	925	924	920	917	916	920	928	942
22.5°	959	957	956	954	957	955	951	946	940	937	945
25°	975	976	976	976	982	984	986	980	973	963	964
27.5°	997	998	996	1000	1007	1012	1017	1021	1017	1011	1004
30°	1044	1044	1041	1044	1050	1055	1062	1069	1069	1063	1056
32.5°	1093	1094	1094	1096	1105	1109	1119	1126	1131	1127	1131
35°	1152	1151	1154	1155	1169	1174	1194	1199	1207	1209	1212
37.5°	1250	1252	1246	1242	1254	1254	1280	1294	1292	1306	1316
40°	1408	1399	1396	1394	1401	1400	1399	1418	1427	1429	1434
42.5°	1583	1586	1583	1590	1590	1585	1581	1578	1595	1606	1608
45°	1788	1792	1786	1781	1794	1801	1801	1809	1823	1828	1825
47.5°	1952	1963	1958	1965	1986	2010	2042	2063	2078	2092	2114
50°	2100	2105	2117	2140	2171	2209	2261	2313	2343	2378	2404
52.5°	2190	2205	2223	2261	2313	2366	2446	2531	2607	2646	2677
55°	2244	2255	2279	2331	2404	2483	2583	2700	2801	2887	2954
57.5°	2242	2251	2284	2341	2428	2527	2652	2798	2947	3090	3216
60°	2199	2207	2240	2301	2396	2514	2664	2843	3045	3260	3481
62.5°	2133	2139	2168	2229	2325	2451	2627	2862	3149	3488	3917
65°	2040	2040	2067	2130	2222	2363	2557	2833	3230	3746	4370
67.5°	1903	1903	1925	1977	2049	2147	2341	2628	3047	3665	4395
70°	1644	1648	1648	1680	1712	1756	1848	2068	2461	3065	3783
72.5°	1205	1132	1189	1241	1277	1301	1354	1423	1621	2074	2724
75°	759	778	821	880	969	1061	1162	1205	1187	1241	1678
77.5°	460	444	486	574	674	799	988	1152	1246	1240	1188
80°	199	194	222	264	313	426	599	824	1074	1219	1197
82.5°	71	72	91	108	130	167	237	379	601	856	1058
85°	21	23	32	45	51	58	80	119	203	324	576
87.5°	6	7	9	16	15	14	16	25	19	16	80
90°	0	0	0	0	0	0	0	0	0	0	0

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	944	944	944	944	944	944	944	944	944	944	944
2.5°	940	940	940	941	940	940	941	941	942	943	945
5°	939	939	940	940	940	941	942	943	945	948	951
7.5°	942	942	941	942	942	943	945	946	950	953	958
10°	945	945	946	947	947	949	952	953	957	963	968
12.5°	949	952	956	958	960	962	965	967	972	980	986
15°	952	959	963	968	971	972	975	979	984	992	999
17.5°	952	961	967	972	977	980	983	987	994	1002	1009
20°	951	964	972	980	989	992	997	1001	1009	1019	1024
22.5°	956	971	982	996	1006	1014	1020	1027	1033	1040	1042
25°	971	986	1004	1021	1035	1047	1055	1061	1068	1071	1067
27.5°	996	1007	1032	1057	1079	1094	1103	1111	1113	1119	1104
30°	1041	1046	1072	1108	1133	1158	1170	1178	1179	1175	1149
32.5°	1115	1106	1129	1177	1215	1236	1255	1260	1257	1244	1202
35°	1205	1191	1202	1272	1314	1345	1363	1368	1361	1338	1280
37.5°	1316	1311	1316	1383	1456	1485	1493	1499	1482	1440	1364
40°	1439	1440	1434	1495	1587	1629	1648	1635	1614	1554	1470
42.5°	1609	1603	1582	1637	1755	1798	1815	1805	1784	1708	1610
45°	1834	1814	1794	1823	1937	1993	2018	2011	1974	1882	1790
47.5°	2109	2088	2051	2046	2161	2227	2236	2225	2197	2105	1992
50°	2398	2392	2375	2335	2438	2504	2498	2490	2459	2342	2226
52.5°	2697	2709	2698	2670	2780	2807	2809	2785	2749	2641	2483
55°	3011	3056	3073	3095	3182	3178	3155	3098	3107	2984	2765
57.5°	3344	3482	3591	3640	3723	3747	3689	3708	3700	3573	3228
60°	3783	4113	4397	4572	4684	4641	4722	4726	4863	4584	4046
62.5°	4483	5089	5593	5744	5773	5763	5667	5763	5737	5397	4700
65°	5072	5793	6305	6397	6262	6138	6026	6045	5921	5429	4681
67.5°	5152	5870	6345	6319	6024	5794	5608	5462	5209	4764	4112
70°	4519	5280	5892	5872	5462	5155	4853	4633	4375	4031	3414
72.5°	3515	4193	4786	4940	4536	4197	3920	3640	3374	3047	2658
75°	2393	2903	3179	3221	2851	2597	2490	2261	1979	1909	1621
77.5°	1390	1586	1502	1390	1119	822	628	537	539	619	593
80°	1130	1076	849	681	463	236	158	136	137	159	154
82.5°	1165	1196	983	688	474	250	120	89	104	113	111
85°	863	1131	1014	730	509	266	78	49	69	84	90
87.5°	242	380	295	195	142	48	31	26	32	44	44
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	944	944	944	944	944	944	944	944	944	944	944
2.5°	946	950	949	951	952	955	957	956	956	958	960
5°	954	959	959	962	965	969	972	970	971	973	975
7.5°	962	968	969	972	974	976	978	975	974	974	973
10°	972	978	977	977	976	974	970	963	958	955	953
12.5°	989	993	987	981	971	964	955	947	941	936	934
15°	1004	1002	995	984	970	959	950	939	932	926	923
17.5°	1012	1005	995	985	973	963	952	939	928	920	916
20°	1020	1009	996	986	977	969	961	945	931	919	913
22.5°	1032	1017	1004	995	986	978	970	955	940	924	915
25°	1049	1029	1020	1011	1001	993	982	968	952	933	920
27.5°	1076	1058	1048	1039	1027	1014	1002	983	968	946	929
30°	1115	1096	1087	1078	1064	1047	1030	1006	985	960	938
32.5°	1164	1154	1143	1128	1109	1088	1063	1031	1001	970	942
35°	1240	1223	1205	1190	1162	1133	1095	1048	1008	970	936
37.5°	1327	1309	1285	1258	1216	1170	1117	1058	1005	959	921
40°	1432	1409	1377	1326	1264	1195	1124	1050	988	935	891
42.5°	1571	1524	1462	1387	1299	1205	1115	1029	959	901	857
45°	1728	1653	1553	1441	1319	1201	1095	995	916	852	806
47.5°	1897	1780	1633	1475	1321	1179	1056	944	855	787	730
50°	2088	1895	1689	1492	1308	1140	1000	871	779	698	646
52.5°	2252	1996	1728	1485	1262	1072	908	783	675	603	552
55°	2446	2094	1749	1450	1188	966	809	670	568	504	460
57.5°	2773	2260	1767	1379	1066	833	672	542	462	406	375
60°	3404	2582	1841	1273	911	673	519	424	355	318	296
62.5°	3817	2801	1808	1110	712	504	380	306	266	239	229
65°	3712	2580	1534	880	496	335	255	210	192	178	172
67.5°	3188	2081	1112	569	314	204	167	149	141	135	134
70°	2540	1467	661	302	174	135	119	112	109	109	109
72.5°	1843	845	325	163	117	103	96	94	93	93	94
75°	1053	366	167	112	96	89	85	85	85	85	86
77.5°	367	167	118	94	83	79	77	79	80	80	80
80°	134	118	101	82	74	70	70	73	75	73	72
82.5°	106	93	82	71	65	63	64	66	65	64	61
85°	81	61	57	53	52	52	56	57	53	51	48
87.5°	40	32	29	34	33	30	31	31	26	24	25
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	944	944	944	944
2.5°	960	961	964	963
5°	974	975	977	977
7.5°	971	972	972	972
10°	948	948	950	950
12.5°	930	929	929	927
15°	919	917	918	915
17.5°	911	910	910	908
20°	908	906	905	903
22.5°	906	905	903	901
25°	911	906	905	903
27.5°	916	911	907	906
30°	921	912	907	905
32.5°	920	908	901	898
35°	909	894	885	882
37.5°	888	871	857	852
40°	858	836	823	816
42.5°	822	797	786	780
45°	763	743	730	725
47.5°	697	670	658	653
50°	612	590	580	573
52.5°	522	502	493	489
55°	435	425	411	408
57.5°	353	350	340	339
60°	287	282	275	275
62.5°	226	221	218	218
65°	174	173	171	170
67.5°	134	137	138	136
70°	112	113	113	113
72.5°	97	97	97	96
75°	88	88	86	85
77.5°	81	80	81	80
80°	71	70	68	66
82.5°	59	58	53	53
85°	46	43	39	35
87.5°	26	23	17	12
90°	0	0	0	0

(END OF REPORT)