

Scaled data based on original data using
LM-31-95 IESNA Approved Method for Photometric Testing of Roadway Luminaires
Using Incandescent Filament and High Intensity Discharge Lamps

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: STREETWORKS

Report Number: 763658

Luminaire Tested: **OVX15SXX2DF**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: 763658
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: OVX15SXX2DF
Description: 150 WATT HPS TYPE II ROADWAY
Light Source: 150W HPS CL ED 23.5
Ballast/Driver: -

Summary

Lumens per Lamp: 16500 (1 lamp)
Luminaire Lumens: 12436.7 lumens
Efficiency: 75.4%
Efficacy: 82.9 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.1' x L: 2.35' x H: 0.94')
IES Classification: Type II - Medium - Cutoff
BUG Rating: B3 - U1 - G2

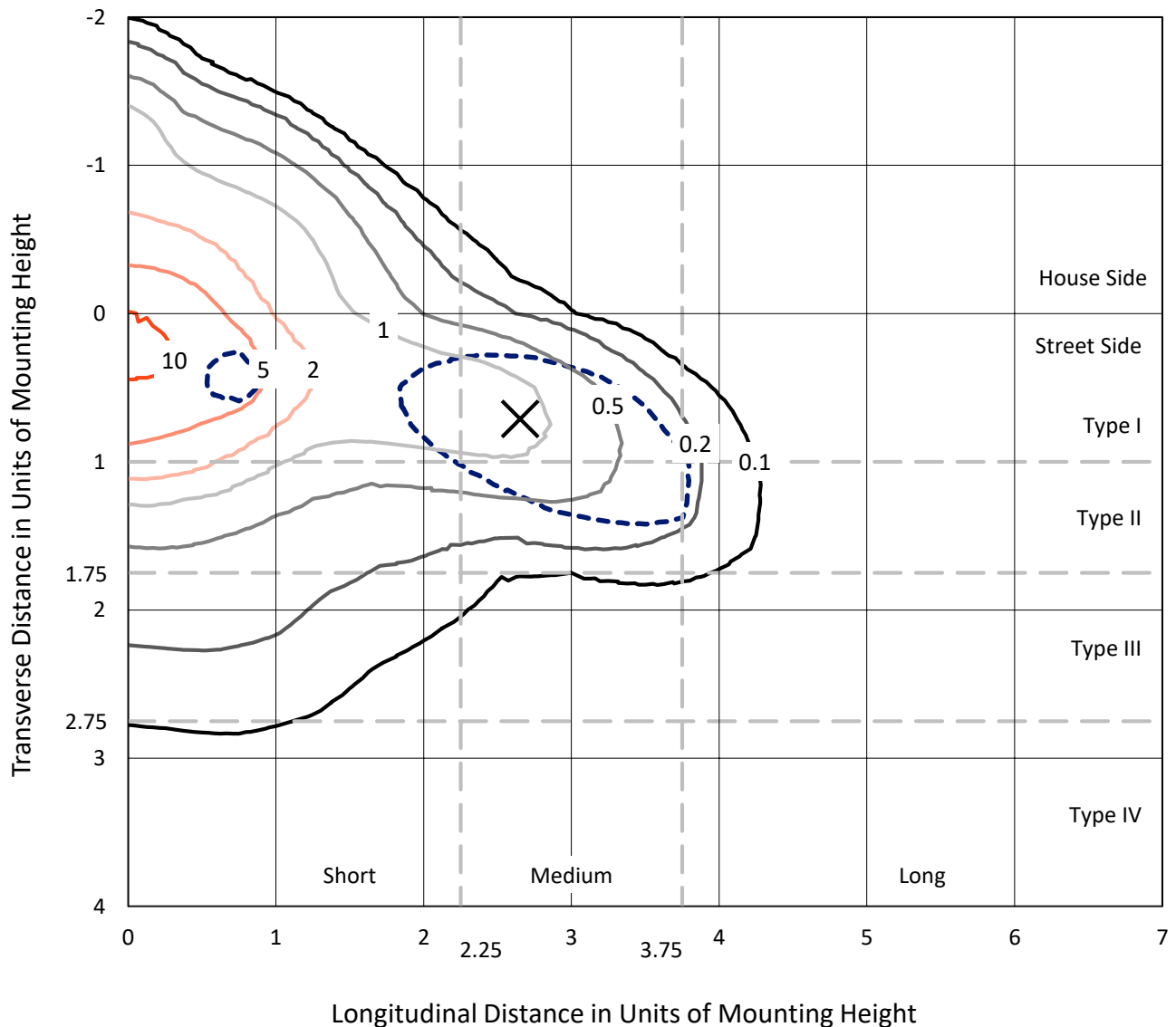
Input Watts (W): 150
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

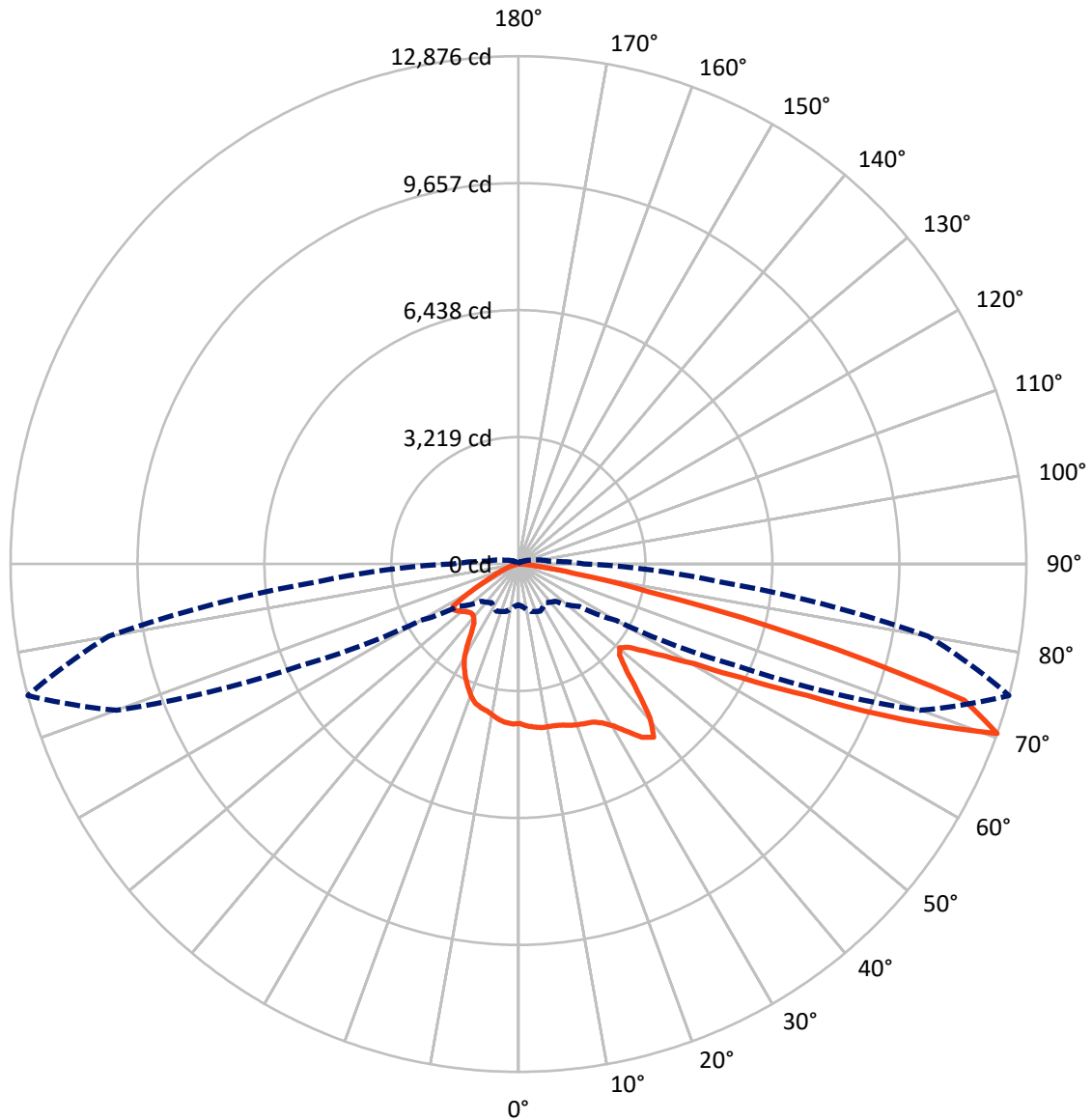
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 11.2 fc
 Type II - Medium - Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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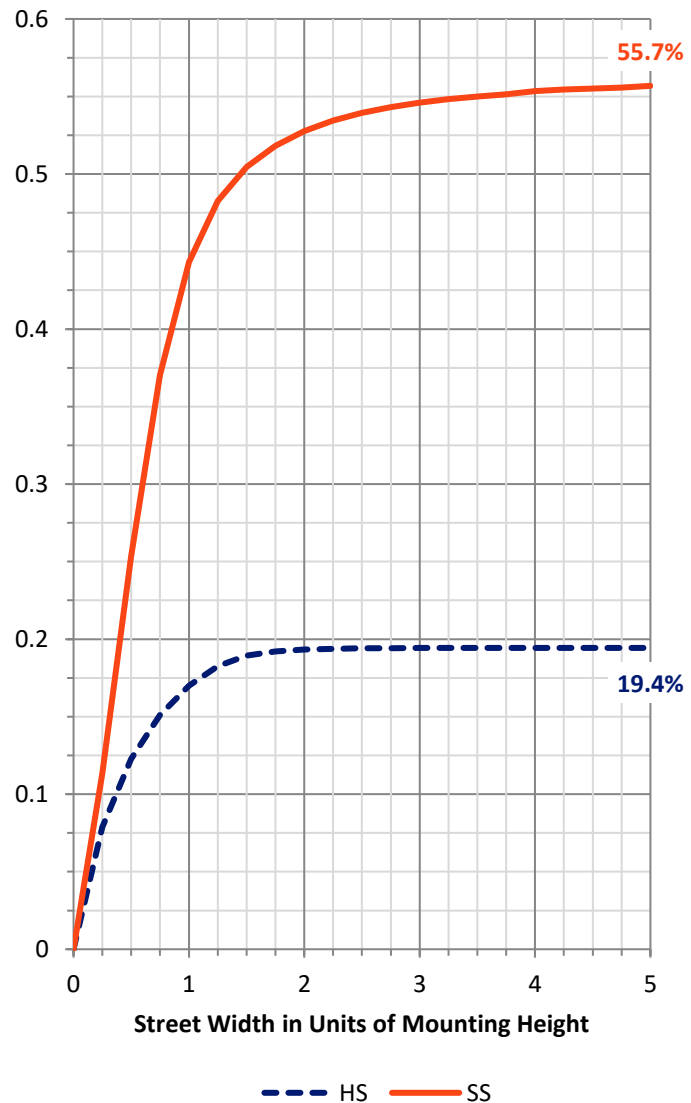
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3229.6	0.0	3229.6
	% Lamp	19.6	0.0	19.6
Street Side	Lumens	9197.6	9.5	9207.1
	% Lamp	55.7	0.1	55.8
Total	Lumens	12427.2	9.5	12436.7
	% Lamp	75.3	0.1	75.4

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	387.4	3.1	2.3
10°-20°	1113.3	9.0	6.7
20°-30°	1697.7	13.7	10.3
30°-40°	2240.5	18.0	13.6
40°-50°	2240.2	18.0	13.6
50°-60°	1757.9	14.1	10.7
60°-70°	1702.8	13.7	10.3
70°-80°	1188.2	9.6	7.2
80°-90°	99.2	0.8	0.6
90°-100°	3.7	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	12427.2	99.9	75.3
0°-180°	12436.7	100.0	75.4

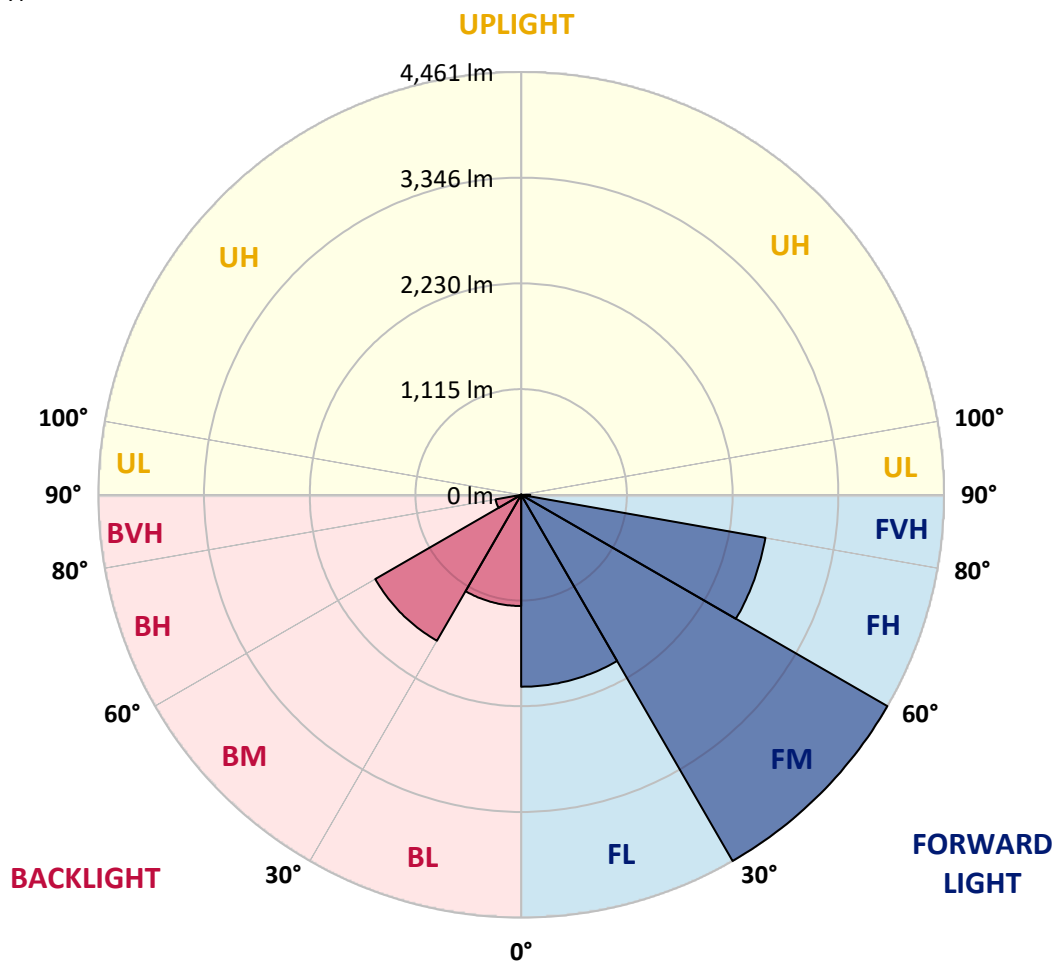


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2025.1	12.3			
FM (30°-60°)	4460.7	27.0			
FH (60°-80°)	2616.5	15.9			G2/5000
FVH (80°-90°)	95.3	0.6			G1/100
BL (0°-30°)	1173.4	7.1	B3/2500		
BM (30°-60°)	1777.8	10.8	B2/2500		
BH (60°-80°)	274.5	1.7	B1/500		G1/500
BVH (80°-90°)	3.9	0.0			G0/10
UL (90°-100°)	3.7	0.0		U1/10	
UH (100°-180°)	0.0	0.0		U1/10	
Trapped Light	4063.3	24.6			

BUG Rating: B3-U1-G2
 Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	70°	75°
0°	4043	4043	4043	4043	4043	4043	4043	4043	4043	4043	4043
2.5°	3813	3922	3920	3993	4024	3993	4049	4051	4055	4099	4108
5°	4016	4099	4110	4154	4172	4114	4141	4133	4128	4156	4152
7.5°	4189	4304	4317	4333	4319	4246	4237	4223	4197	4204	4189
10°	4423	4536	4549	4555	4507	4394	4335	4298	4250	4237	4191
12.5°	4703	4791	4801	4764	4684	4544	4421	4365	4298	4264	4202
15°	4906	5035	5039	4975	4870	4688	4538	4456	4367	4316	4237
17.5°	5090	5198	5192	5129	5029	4847	4676	4578	4459	4392	4296
20°	5194	5294	5286	5228	5173	5023	4839	4705	4567	4473	4348
22.5°	5232	5332	5321	5303	5338	5221	5012	4856	4668	4546	4385
25°	5255	5344	5305	5340	5470	5397	5198	5019	4782	4622	4438
27.5°	5305	5367	5244	5344	5545	5526	5443	5267	4998	4791	4567
30°	5386	5403	5186	5324	5526	5677	5794	5643	5319	5075	4764
32.5°	5474	5451	5148	5301	5455	5863	6186	6093	5810	5505	5064
35°	5482	5426	5119	5276	5359	6046	6579	6569	6389	6042	5393
37.5°	5336	5225	4989	5152	5242	6101	6968	7141	7006	6571	5570
40°	4979	4866	4709	4885	5058	5969	7290	7567	7377	6592	5142
42.5°	4515	4390	4275	4444	4724	5622	7193	7386	6903	5812	4432
45°	3732	3765	3667	3901	4181	4939	6306	6354	5785	4885	3826
47.5°	2858	2967	2950	3268	3462	3989	5012	5096	4686	4110	3447
50°	2056	2190	2284	2564	2722	3126	3905	4091	3980	3711	3332
52.5°	1619	1686	1768	1981	2196	2513	3121	3477	3654	3686	3506
55°	1385	1435	1504	1655	1839	2152	2701	3201	3671	3955	3903
57.5°	1270	1312	1381	1450	1600	1878	2467	3126	3880	4442	4419
60°	1235	1266	1352	1371	1450	1697	2334	3144	4185	5029	5142
62.5°	1220	1252	1362	1368	1366	1569	2238	3193	4628	5883	6347
65°	1197	1231	1362	1396	1308	1479	2152	3238	5207	7237	8027
67.5°	1139	1178	1323	1392	1258	1408	2052	3264	5771	8909	10537
70°	1036	1076	1245	1316	1195	1333	1874	2865	6090	10839	12876
72.5°	890	944	1126	1191	1109	1233	1245	2286	6034	10867	11817
75°	687	804	978	1036	1005	786	765	1684	4582	7777	7459
77.5°	399	627	804	840	702	349	468	1030	2687	3978	3404
80°	199	384	556	474	318	190	259	539	1141	1613	1439
82.5°	127	207	292	224	150	98	138	234	453	602	514
85°	81	111	142	98	73	50	73	109	182	219	198
87.5°	42	54	59	44	35	27	36	50	69	82	75
90°	19	25	27	19	13	10	15	19	27	33	27
92.5°	8	10	10	6	4	2	2	4	8	8	6
180°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	80°	85°	90°	95°	105°	115°	125°	135°	145°	155°	165°
0°	4043	4043	4043	4043	4043	4043	4043	4043	4043	4043	4043
2.5°	4045	4045	4047	4051	4058	4080	4093	4108	4112	4128	4135
5°	4076	4060	4051	4037	4032	4012	3999	3995	3993	3980	3974
7.5°	4095	4064	4034	4012	3978	3943	3909	3871	3848	3815	3805
10°	4076	4032	3984	3951	3888	3824	3769	3719	3679	3625	3612
12.5°	4068	4003	3947	3895	3813	3690	3602	3498	3426	3343	3266
15°	4089	4009	3945	3882	3765	3612	3441	3249	3038	2902	2781
17.5°	4126	4028	3945	3863	3700	3485	3240	2946	2658	2457	2334
20°	4149	4016	3903	3794	3571	3295	2971	2603	2259	2066	1991
22.5°	4151	3988	3838	3696	3389	3059	2676	2271	1964	1801	1788
25°	4175	3974	3778	3579	3207	2818	2388	1968	1757	1649	1630
27.5°	4239	3968	3711	3462	3009	2570	2108	1774	1615	1536	1521
30°	4325	3959	3619	3310	2791	2277	1874	1636	1527	1458	1439
32.5°	4442	3922	3491	3121	2455	1976	1705	1555	1458	1398	1381
35°	4511	3815	3251	2739	2089	1776	1611	1494	1412	1360	1345
37.5°	4354	3403	2727	2305	1870	1672	1555	1456	1375	1333	1325
40°	3755	2900	2409	2091	1772	1623	1529	1437	1346	1310	1329
42.5°	3303	2631	2225	1970	1728	1615	1531	1427	1325	1289	1341
45°	2990	2468	2125	1912	1732	1646	1554	1423	1308	1266	1356
47.5°	2835	2405	2094	1910	1778	1709	1592	1421	1285	1237	1364
50°	2864	2442	2123	1954	1853	1791	1626	1412	1252	1193	1343
52.5°	3067	2584	2215	2031	1933	1851	1630	1373	1195	1118	1233
55°	3414	2814	2340	2127	2004	1843	1559	1277	1070	940	997
57.5°	3867	3113	2507	2227	1981	1634	1249	980	781	625	658
60°	4519	3493	2618	2079	1479	1026	694	531	432	349	397
62.5°	5484	3755	2277	1575	1005	639	393	276	224	194	234
65°	6786	4143	2058	1266	715	418	244	157	125	111	134
67.5°	9045	4922	1951	1036	522	284	155	96	73	67	77
70°	10545	5044	1657	794	374	192	100	59	40	38	40
72.5°	8942	3878	1135	552	259	127	61	33	21	19	21
75°	5073	2190	669	343	167	77	35	15	8	8	2
77.5°	2139	988	364	192	105	40	15	4	2	0	0
80°	877	410	186	115	58	19	4	0	0	0	0
82.5°	345	182	92	63	25	6	0	0	0	0	0
85°	134	77	44	29	8	0	0	0	0	0	0
87.5°	54	31	15	8	2	0	0	0	0	0	0
90°	17	8	4	0	0	0	0	0	0	0	0
92.5°	2	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	175°	180°
0°	4043	4043
2.5°	4124	4131
5°	3959	3966
7.5°	3801	3790
10°	3577	3583
12.5°	3228	3211
15°	2727	2708
17.5°	2296	2282
20°	1989	1976
22.5°	1786	1788
25°	1646	1642
27.5°	1546	1542
30°	1465	1465
32.5°	1414	1419
35°	1387	1396
37.5°	1389	1412
40°	1437	1473
42.5°	1542	1619
45°	1701	1834
47.5°	1891	2098
50°	2039	2328
52.5°	1995	2290
55°	1690	1995
57.5°	1243	1462
60°	767	947
62.5°	430	541
65°	228	276
67.5°	119	146
70°	59	73
72.5°	29	35
75°	8	12
77.5°	0	0
80°	0	0
82.5°	0	0
85°	0	0
87.5°	0	0
90°	0	0
92.5°	0	0
180°	0	0

(END OF REPORT)