

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: 767559

Luminaire Tested: **OVZ15SXX7EG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: 767559
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: OVZ15SXX7EG
Description: 150W HPS TYPE 4 WAY GLASS
Light Source: 150W HPS CL ED-23.5
Ballast/Driver: -

Summary

Lumens per Lamp: 16000 (1 lamp)
Luminaire Lumens: 12189.9 lumens
Efficiency: 76.2%
Efficacy: 81.3 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B3 - U3 - G3

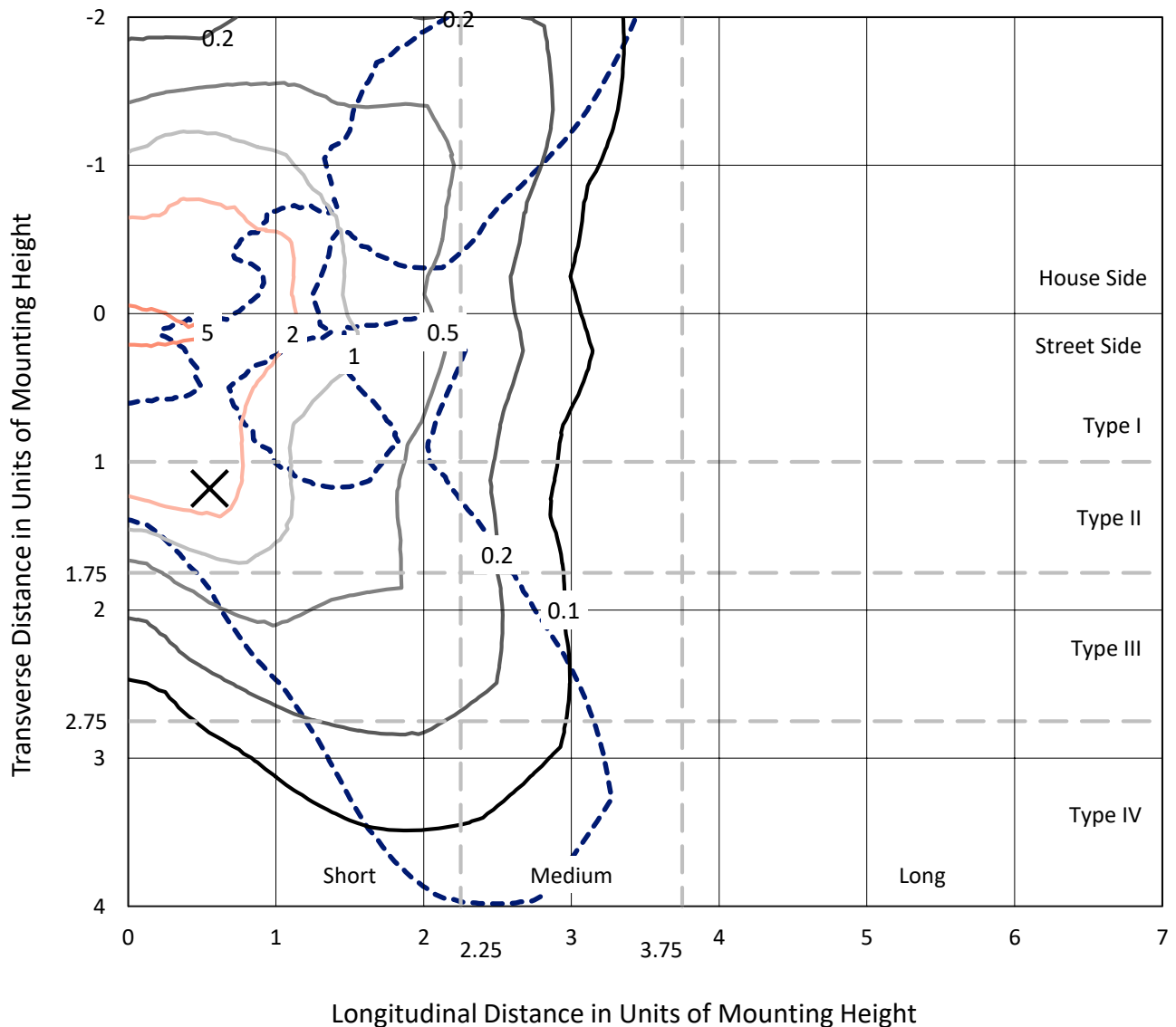
Input Watts (W): 150
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

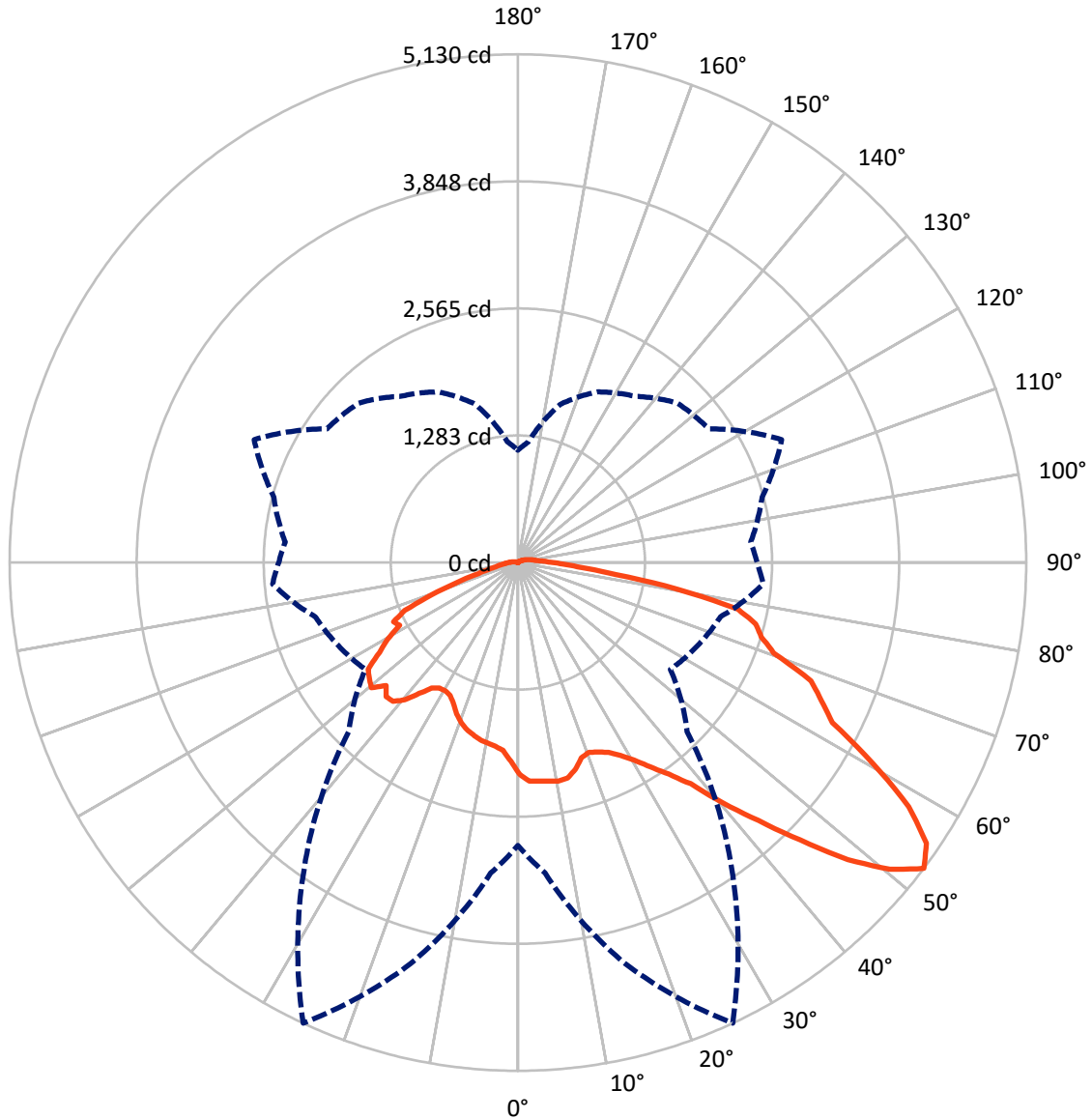
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.6 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 25-Deg Lateral - - - Horizontal Cone Through 52.5-Deg Vertical

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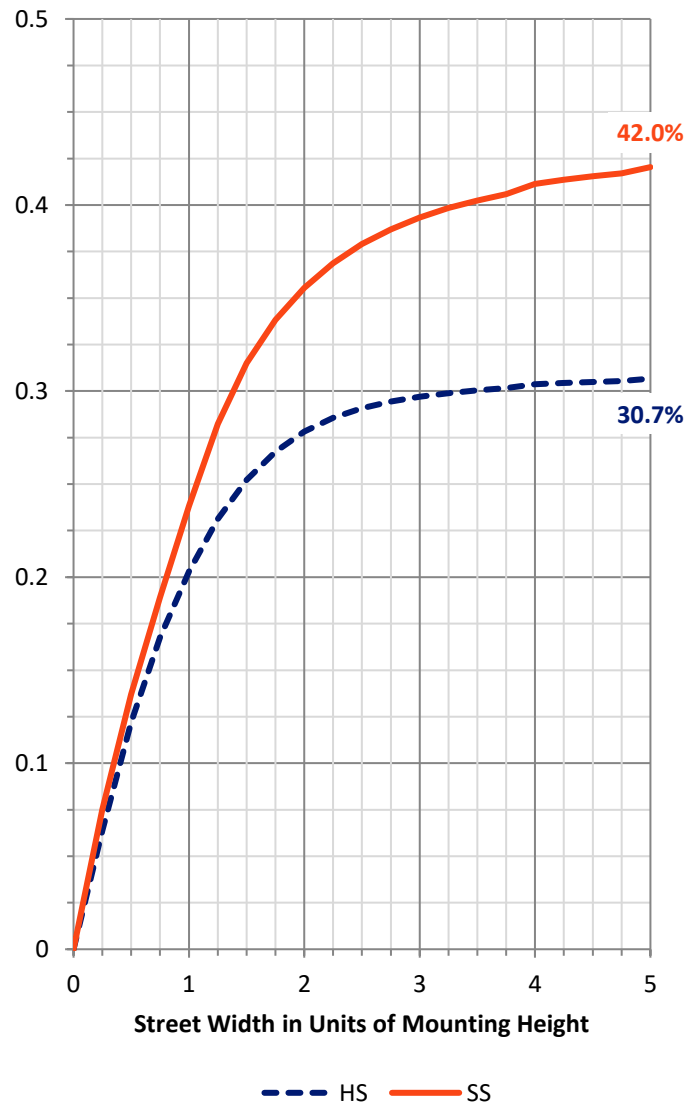
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4969.1	122.0	5091.1
	% Lamp	31.1	0.8	31.8
Street Side	Lumens	6865.8	232.9	7098.8
	% Lamp	42.9	1.5	44.4
Total	Lumens	11835.0	354.9	12189.9
	% Lamp	74.0	2.2	76.2

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	199.1	1.6	1.2
10°-20°	599.2	4.9	3.7
20°-30°	988.8	8.1	6.2
30°-40°	1469.0	12.1	9.2
40°-50°	2044.7	16.8	12.8
50°-60°	2207.2	18.1	13.8
60°-70°	2260.0	18.5	14.1
70°-80°	1570.8	12.9	9.8
80°-90°	496.1	4.1	3.1
90°-100°	182.2	1.5	1.1
100°-110°	102.2	0.8	0.6
110°-120°	50.2	0.4	0.3
120°-130°	17.8	0.1	0.1
130°-140°	4.3	0.0	0.0
140°-150°	1.8	0.0	0.0
150°-160°	2.2	0.0	0.0
160°-170°	1.5	0.0	0.0
170°-180°	0.2	0.0	0.0
0°-90°	11835.0	97.1	74.0
0°-180°	12189.9	100.0	76.2

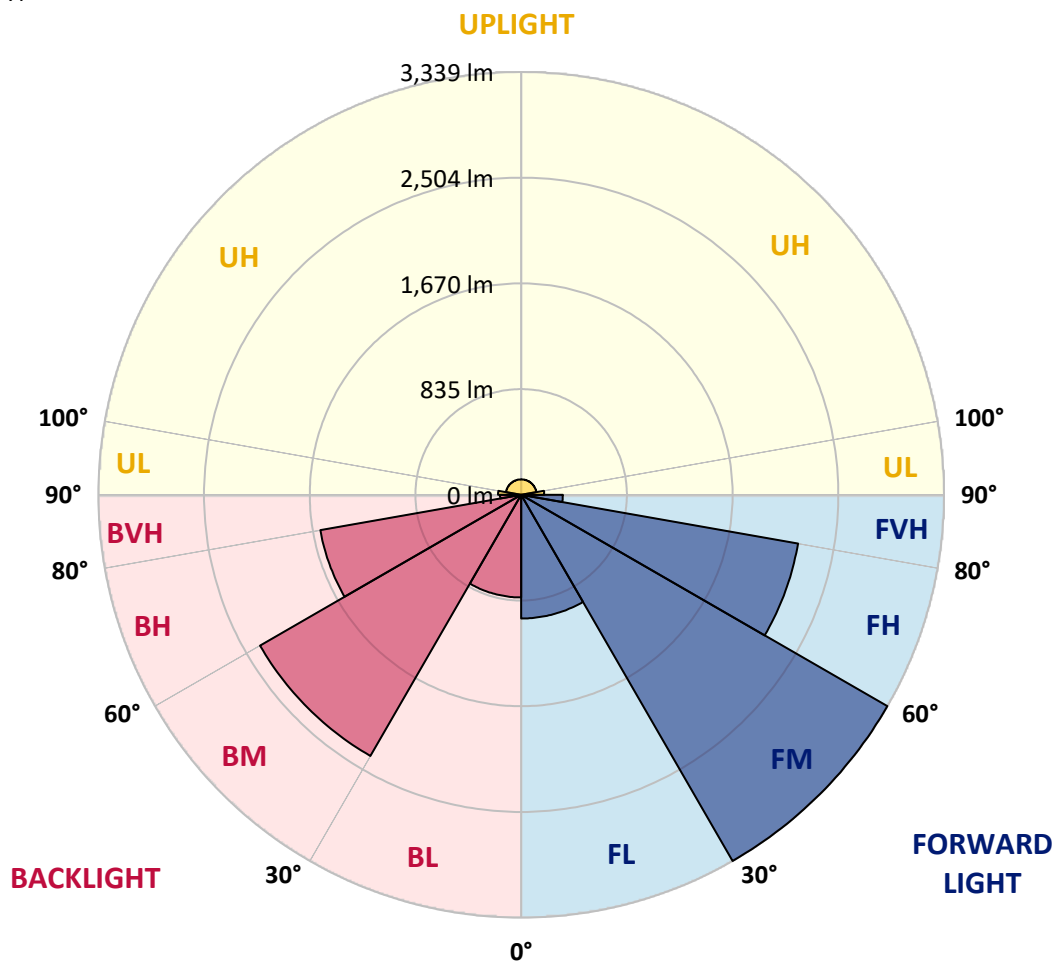


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	976.8	6.1			
FM	(30°-60°)	3339.3	20.9			
FH	(60°-80°)	2220.6	13.9			G2/5000
FVH	(80°-90°)	329.2	2.1			G3/500
BL	(0°-30°)	810.4	5.1	B2/1000		
BM	(30°-60°)	2381.5	14.9	B2/2500		
BH	(60°-80°)	1610.3	10.1	B3/2500		G3/2500
BVH	(80°-90°)	167.0	1.0			G2/225
UL	(90°-100°)	182.2	1.1		U3/500	
UH	(100°-180°)	122.0	0.8		U3/500	
Trapped Light		3810.1	23.8			

BUG Rating: B3-U3-G3
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2138	2138	2138	2138	2138	2138	2138	2138	2138	2138	2138
2.5°	2193	2204	2188	2210	2193	2166	2177	2166	2144	2133	2116
5°	2248	2210	2215	2215	2204	2221	2193	2193	2193	2122	2105
7.5°	2248	2232	2243	2226	2243	2270	2270	2270	2237	2138	2099
10°	2182	2215	2226	2243	2281	2292	2336	2314	2237	2171	2105
12.5°	2127	2144	2160	2232	2276	2287	2364	2386	2336	2232	2160
15°	2072	2055	2088	2166	2215	2320	2392	2518	2507	2303	2221
17.5°	2039	2022	2055	2072	2149	2298	2458	2612	2590	2353	2243
20°	2061	2072	2055	2044	2094	2232	2485	2673	2617	2380	2248
22.5°	2105	2133	2088	2077	2055	2144	2436	2706	2684	2419	2248
25°	2193	2188	2160	2122	2017	2072	2342	2722	2860	2474	2226
27.5°	2314	2298	2298	2204	2061	2061	2364	2887	3069	2562	2243
30°	2392	2403	2397	2314	2171	2099	2513	3152	3135	2584	2265
32.5°	2513	2557	2513	2458	2314	2237	2678	3356	3130	2562	2303
35°	2744	2783	2678	2623	2474	2458	2617	3268	3075	2562	2403
37.5°	3053	3108	3003	2832	2700	2606	2518	2943	2959	2623	2535
40°	3361	3516	3455	3191	3003	2689	2463	2617	2876	2788	2744
42.5°	3626	3890	3890	3560	3284	2634	2287	2364	2805	2948	3003
45°	3813	4045	4271	3995	3427	2557	2160	2177	2557	2987	3009
47.5°	3714	3929	4568	4480	3466	2529	2077	2077	2331	2909	2871
50°	3383	3664	4563	4866	3615	2441	2017	1995	2127	2684	2634
52.5°	2854	3146	4193	5130	3758	2414	1879	1995	2116	2485	2414
55°	2303	2408	3560	5003	3813	2408	1829	1989	2254	2441	2270
57.5°	1686	1824	3047	4651	3708	2502	1846	2050	2524	2584	2265
60°	1289	1416	2628	4116	3725	2628	2011	2177	2673	2662	2237
62.5°	1036	1108	2254	3560	3565	2854	2314	2386	2728	2816	2386
65°	893	959	2116	3367	3345	3306	2794	2518	2584	2750	2397
67.5°	771	832	1774	3191	3383	4061	3075	2276	2105	2276	2033
70°	672	722	1477	2739	3328	4590	2954	1829	1548	1791	1598
72.5°	595	639	1289	2568	3824	4392	2540	1389	1179	1449	1251
75°	573	595	1185	2480	3675	3703	1940	1080	1019	1185	1025
77.5°	518	523	997	2270	2772	2579	1372	898	964	1003	865
80°	430	424	771	1626	1796	1554	970	805	909	832	700
82.5°	364	364	612	992	1152	920	711	716	771	650	557
85°	331	325	463	639	738	606	540	579	601	490	430
87.5°	298	287	358	452	496	446	413	441	435	375	336
90°	253	248	276	325	347	336	331	331	314	292	276
95°	165	176	176	193	215	215	231	215	187	198	204
105°	99	99	99	105	121	127	132	132	127	127	132
115°	55	61	50	55	61	66	72	77	83	83	83
125°	11	11	11	11	17	11	22	22	28	28	28
135°	11	0	6	6	6	6	6	11	6	11	11
145°	0	0	0	0	0	0	0	0	0	0	0
155°	0	0	11	6	11	6	0	0	6	11	6
165°	11	11	6	0	6	6	6	6	11	6	6



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
175°	11	0	0	0	0	6	0	0	6	0	6
180°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2138	2138	2138	2138	2138	2138	2138	2138	2138	2138
2.5°	2088	2083	2077	2028	2017	2017	2006	1995	2000	1984
5°	2083	2033	2000	1951	1940	1923	1901	1907	1901	1885
7.5°	2088	2000	1956	1934	1885	1879	1868	1857	1846	1863
10°	2061	2006	1973	1962	1863	1863	1846	1824	1813	1829
12.5°	2083	2044	2017	1978	1929	1868	1829	1813	1824	1807
15°	2155	2099	2072	2000	1973	1907	1796	1796	1796	1785
17.5°	2199	2110	2083	2061	1989	1890	1763	1763	1774	1796
20°	2166	2110	2105	2166	1978	1824	1714	1736	1758	1785
22.5°	2094	2061	2166	2221	2017	1780	1648	1703	1736	1730
25°	2050	2000	2199	2254	2055	1730	1565	1631	1631	1620
27.5°	2066	1956	2160	2292	2122	1747	1504	1515	1482	1499
30°	2061	1907	2088	2331	2265	1829	1488	1416	1383	1400
32.5°	2055	1835	2055	2441	2425	1995	1493	1383	1356	1345
35°	2138	1840	2105	2430	2452	2105	1537	1416	1350	1334
37.5°	2276	1879	2276	2392	2342	2077	1653	1438	1322	1311
40°	2419	2039	2507	2441	2292	2039	1796	1532	1306	1289
42.5°	2639	2292	2639	2408	2314	2017	1885	1626	1311	1256
45°	2728	2717	2711	2303	2292	1934	1896	1774	1361	1289
47.5°	2695	2970	3014	2325	2314	1951	1818	1879	1345	1300
50°	2540	2843	3229	2331	2276	1989	1945	1769	1289	1245
52.5°	2358	2551	2937	2353	2276	2050	1901	1653	1223	1135
55°	2193	2408	2524	2336	2386	1995	1857	1460	1124	1047
57.5°	2127	2380	2463	2342	2358	2083	1664	1267	1036	915
60°	2144	2485	2706	2535	2369	1951	1526	1025	898	771
62.5°	2199	2777	3003	2573	2210	1989	1350	799	705	716
65°	2221	2948	3378	3097	2281	1934	1389	678	562	628
67.5°	1956	2645	3703	3703	2436	1659	1240	584	452	430
70°	1499	2088	3560	4028	2199	1223	926	496	325	320
72.5°	1124	1515	2948	3962	1829	876	634	430	253	231
75°	887	1069	2166	3306	1554	634	413	375	204	176
77.5°	716	744	1433	2309	1185	452	292	298	165	154
80°	573	535	904	1422	760	331	220	176	143	121
82.5°	452	402	595	860	468	253	182	132	110	99
85°	358	325	408	501	314	193	143	110	88	88
87.5°	303	264	292	314	220	154	121	88	72	66
90°	253	220	220	220	165	121	99	77	61	55
95°	187	160	143	138	110	77	66	50	44	44
105°	127	116	99	77	55	44	22	17	11	11
115°	77	72	55	39	22	11	6	0	0	0
125°	28	22	11	0	0	0	0	0	0	0
135°	6	6	0	0	6	0	0	6	6	0
145°	0	0	0	0	0	0	0	0	0	0
155°	6	6	6	11	6	6	6	11	6	11
165°	0	0	0	6	6	11	6	11	6	11



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
175°	0	0	0	6	6	11	0	6	0	0
180°	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)