

Scaled data based on original data using
LM-46-04 Photometric Testing of Indoor Luminaires Using High Intensity Discharge
or Incandescent Filament Lamps (Reaffirmed 2012)

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: STREETWORKS

Report Number: 768943

Luminaire Tested: **ARC15SXX3C16X**

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: 768943
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARC15SXX3C16X
Description: CUTOFF GENERATIONS POST TOP TYPE 3 W/CAGE
Light Source: 150 WATT HPS CLEAR ED-23.5
Ballast/Driver: -

Summary

Lumens per Lamp: 16000 (1 lamp)
Luminaire Lumens: 9019.2 lumens
Efficiency: 56.4%
Efficacy: 60.1 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type III - Short - 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

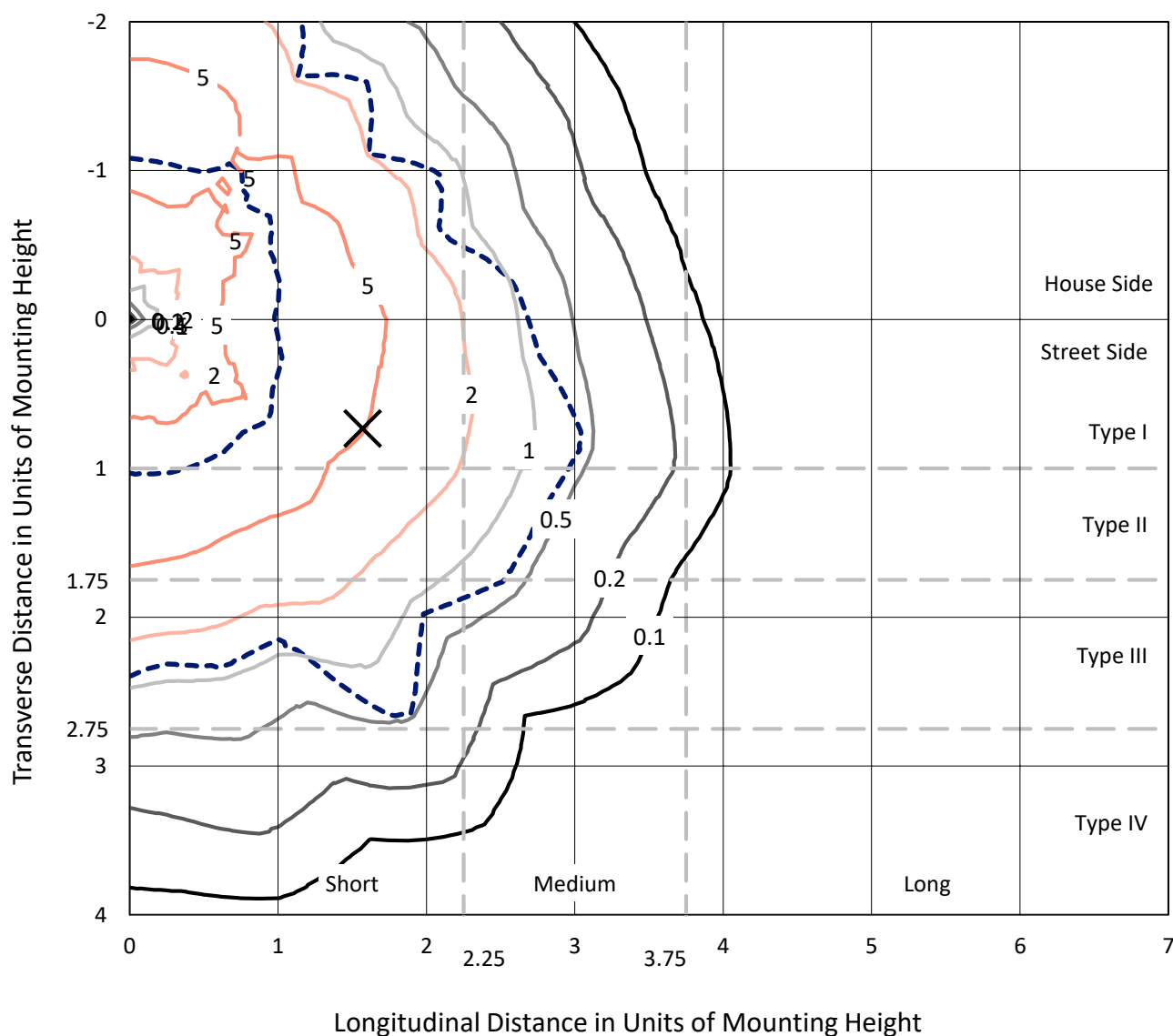


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

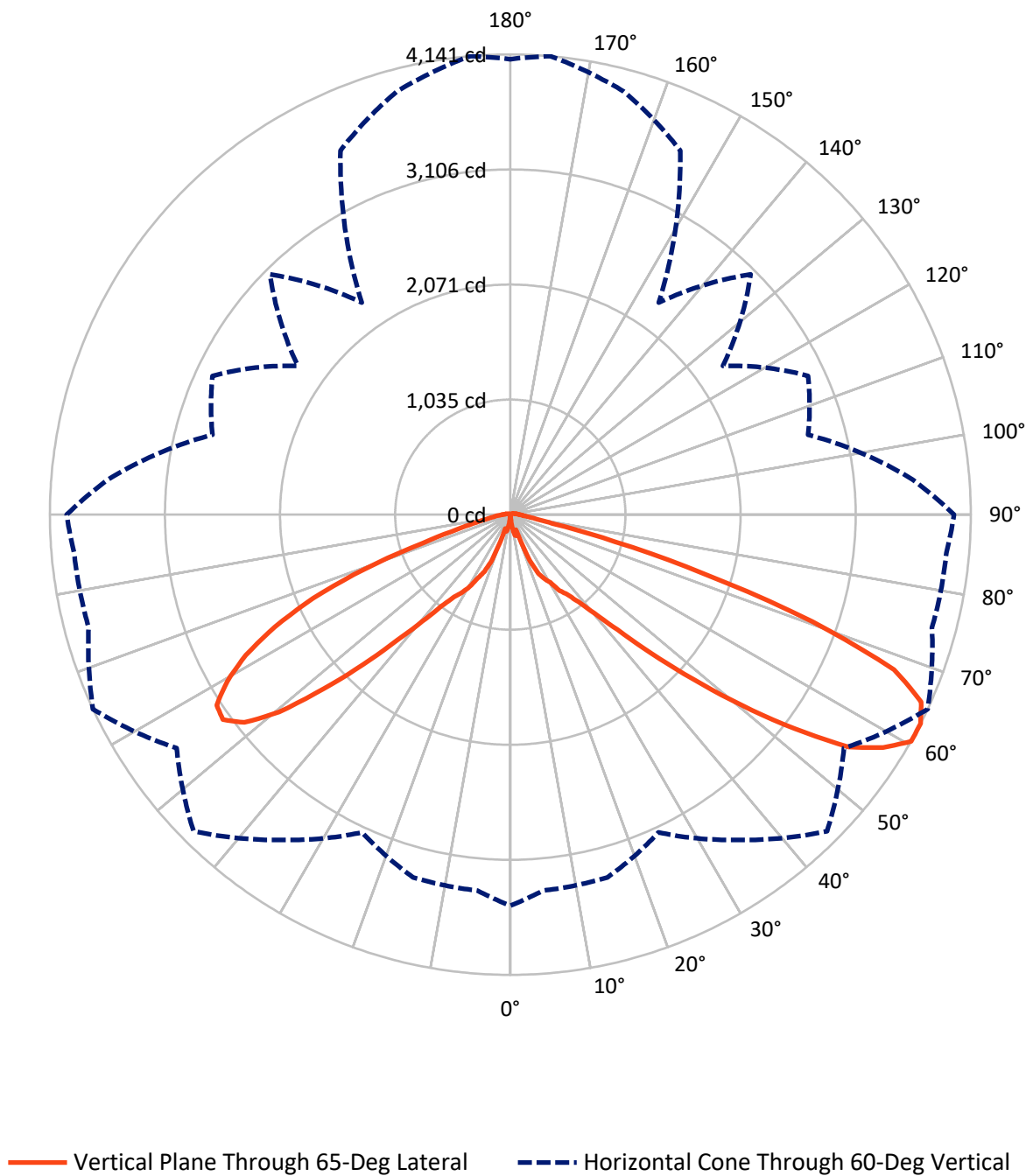


Based on 10 foot mounting height. Maximum calculated value = 8.6 fc
 Type III - Short - Cutoff

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Luminous Intensity Polar Plot



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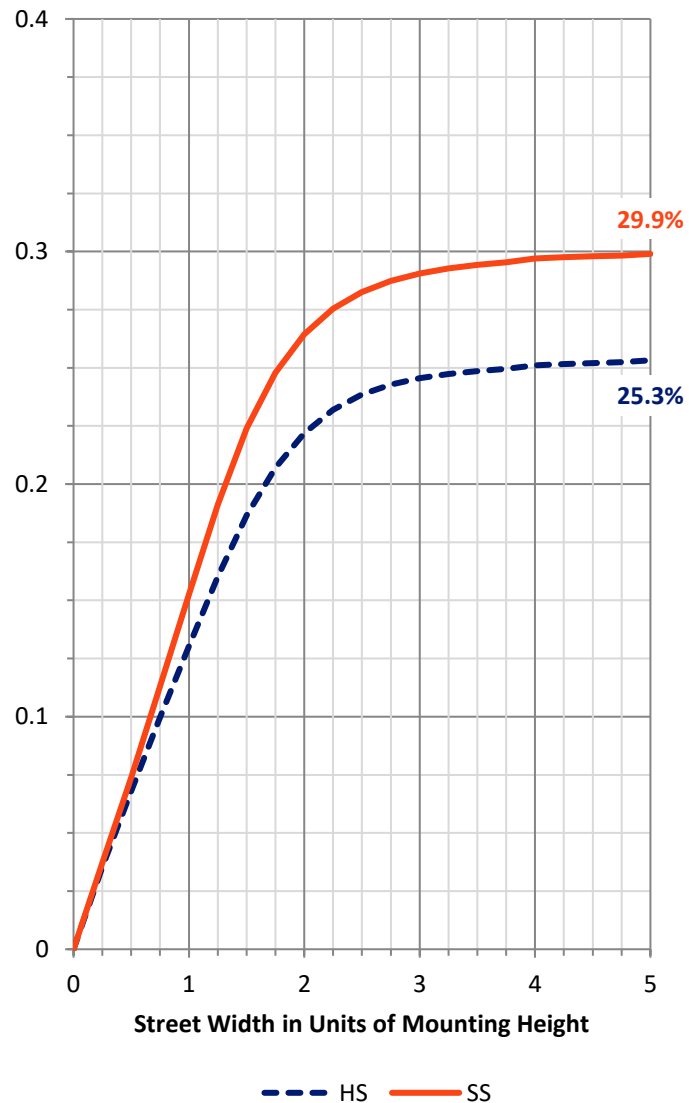
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4079.1	56.8	4135.9
	% Lamp	25.5	0.4	25.8
Street Side	Lumens	4815.1	68.2	4883.3
	% Lamp	30.1	0.4	30.5
Total	Lumens	8894.1	125.0	9019.2
	% Lamp	55.6	0.8	56.4

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	6.5	0.1	0.0
10°-20°	44.0	0.5	0.3
20°-30°	213.4	2.4	1.3
30°-40°	556.9	6.2	3.5
40°-50°	1393.2	15.4	8.7
50°-60°	2878.8	31.9	18.0
60°-70°	2780.7	30.8	17.4
70°-80°	882.6	9.8	5.5
80°-90°	137.9	1.5	0.9
90°-100°	58.4	0.6	0.4
100°-110°	35.7	0.4	0.2
110°-120°	20.9	0.2	0.1
120°-130°	9.7	0.1	0.1
130°-140°	2.3	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.1	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	8894.1	98.6	55.6
0°-180°	9019.2	100.0	56.4

Coefficient of Utilization



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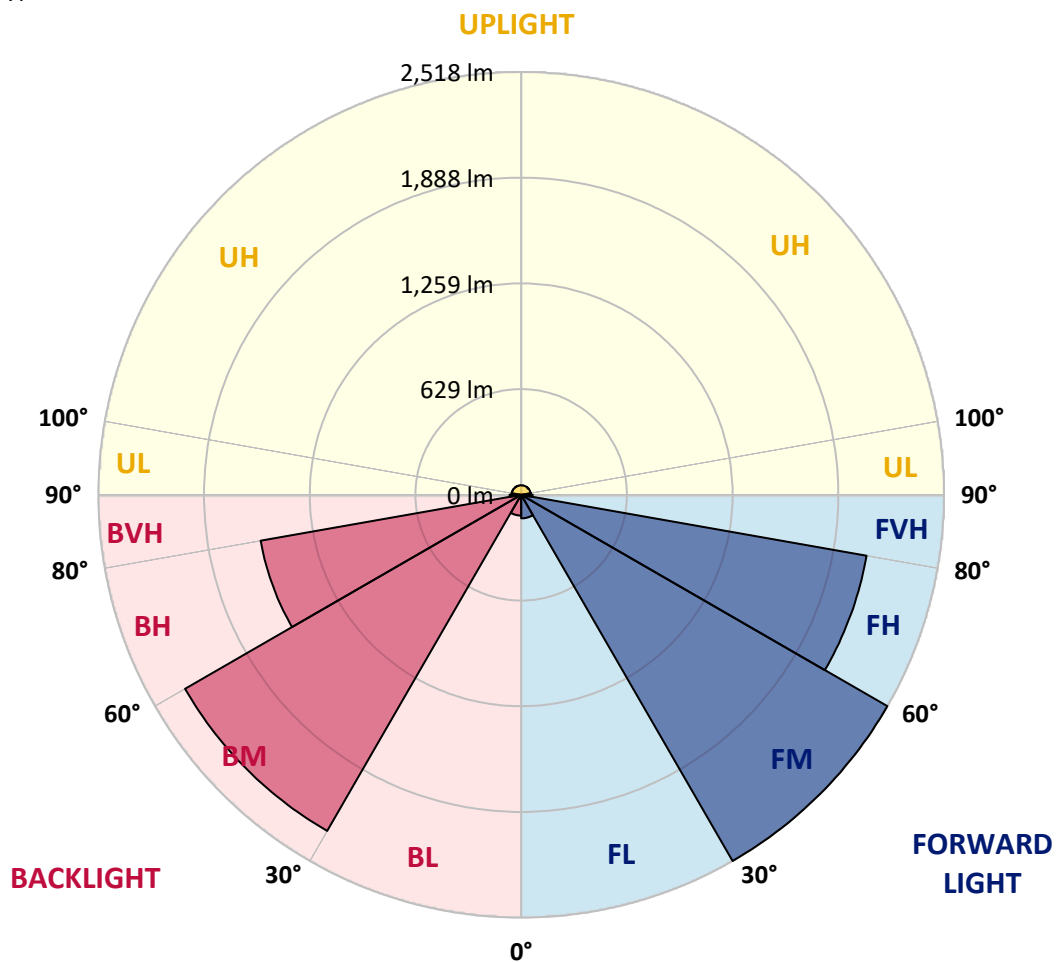
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	140.2	0.9			
FM	(30°-60°)	2517.8	15.7			
FH	(60°-80°)	2088.4	13.1			G2/5000
FVH	(80°-90°)	68.8	0.4			G1/100
BL	(0°-30°)	123.7	0.8	B1/500		
BM	(30°-60°)	2311.2	14.4	B2/2500		
BH	(60°-80°)	1574.9	9.8	B3/2500		G3/2500
BVH	(80°-90°)	69.2	0.4			G1/100
UL	(90°-100°)	58.4	0.4		U3/500	
UH	(100°-180°)	56.8	0.4		U3/500	
Trapped Light		6980.8	43.6			

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°	0	0	0	0	0	0	0	0	0	0	0
2.5°	0	0	0	0	5	0	5	5	0	11	0
5°	32	38	38	43	38	32	32	27	27	16	16
7.5°	118	113	113	107	107	91	91	91	91	86	75
10°	150	166	161	177	172	161	150	156	145	134	129
12.5°	182	204	204	204	198	198	188	193	188	161	156
15°	215	215	215	215	198	204	177	193	177	177	161
17.5°	193	193	198	193	182	177	172	166	145	150	150
20°	172	182	172	172	161	156	145	145	139	134	139
22.5°	526	418	515	515	284	177	349	451	413	247	429
25°	633	579	628	617	354	166	381	585	601	590	606
27.5°	676	665	660	654	434	182	413	654	676	665	697
30°	751	746	729	719	692	590	531	708	740	724	767
32.5°	826	837	815	778	794	799	687	815	826	826	858
35°	912	933	906	858	906	917	783	880	933	944	971
37.5°	1030	1051	1030	992	1035	1019	885	992	1057	1094	1137
40°	1201	1207	1175	1159	1185	1159	1008	1164	1218	1309	1384
42.5°	1448	1464	1384	1432	1427	1389	1196	1416	1437	1641	1743
45°	1845	1840	1743	1775	1743	1732	1427	1781	1754	2092	2188
47.5°	2467	2322	2188	2113	2054	2135	1732	2204	2178	2607	2682
50°	3132	2918	2709	2575	2414	2575	2226	2698	2617	3202	3282
52.5°	3626	3427	3181	3020	2800	3020	2693	3197	3046	3712	3733
55°	3872	3679	3476	3347	3095	3508	3084	3690	3390	4023	4071
57.5°	3733	3636	3556	3352	3433	3856	3476	3953	3679	4135	4135
60°	3518	3395	3379	3154	3572	4028	3663	4141	3926	3937	3990
62.5°	3218	3063	3138	2939	3497	3781	3620	4141	4044	3653	3658
65°	2703	2510	2660	2521	3299	3443	3486	4060	3867	3240	3186
67.5°	2027	1845	2054	1963	3181	2928	3175	3722	3459	2752	2607
70°	1395	1325	1631	1395	2950	2183	2634	2880	2880	2103	1958
72.5°	847	923	1260	998	2296	1346	1915	1818	2065	1454	1277
75°	654	703	949	692	1239	590	1142	971	1309	896	713
77.5°	322	279	381	311	451	322	477	386	493	338	322
80°	182	182	279	220	204	209	338	236	290	231	215
82.5°	139	123	129	134	118	134	139	161	161	166	156
85°	107	102	113	113	91	102	102	118	129	129	123
87.5°	86	97	97	97	86	86	91	102	102	97	91
90°	75	75	75	75	70	70	70	80	80	80	70
95°	64	59	59	59	54	48	48	59	59	59	48
105°	32	43	38	38	32	32	27	38	38	38	27
115°	21	27	27	27	27	16	21	21	16	21	16
125°	11	11	11	16	11	11	16	16	11	11	11
135°	0	0	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
175°	0	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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	0	0	0	0	0	0	0	0	0	0
2.5°	0	0	0	0	5	0	0	0	5	0
5°	16	21	16	21	16	16	16	11	11	11
7.5°	75	75	75	70	70	70	70	59	54	64
10°	118	113	113	123	118	118	123	113	118	107
12.5°	150	139	150	150	139	129	134	139	150	150
15°	166	145	156	156	150	134	129	123	139	150
17.5°	139	134	134	134	129	123	113	107	107	97
20°	139	123	134	118	123	107	107	97	80	75
22.5°	343	440	440	257	134	354	461	424	257	365
25°	472	590	563	359	150	349	574	536	483	461
27.5°	638	670	638	402	284	381	638	590	531	526
30°	729	729	746	510	703	418	697	654	601	590
32.5°	847	821	831	606	788	488	767	740	697	676
35°	965	917	901	703	874	563	874	842	794	772
37.5°	1121	1057	1030	772	998	649	998	944	917	880
40°	1368	1244	1244	880	1159	729	1164	1137	1078	1041
42.5°	1684	1545	1518	1083	1405	880	1405	1427	1346	1341
45°	2060	1883	1893	1368	1732	1110	1749	1722	1706	1673
47.5°	2516	2237	2296	1738	2038	1454	2092	2097	2113	2092
50°	2993	2655	2735	2167	2462	1781	2558	2585	2660	2585
52.5°	3358	3009	3036	2446	2810	2011	3030	2982	3207	2971
55°	3631	3122	3175	2542	3036	2221	3374	3406	3653	3347
57.5°	3738	3036	3148	2499	3127	2349	3604	3787	3990	3787
60°	3631	2773	2955	2333	3057	2328	3615	3942	4141	4098
62.5°	3379	2424	2693	2108	2837	2135	3384	3717	3948	4033
65°	2966	2070	2344	1765	2328	1818	2966	3272	3481	3626
67.5°	2451	1700	1926	1443	1738	1443	2403	2703	2837	3046
70°	1824	1260	1400	1121	1282	1030	1604	1861	1990	2210
72.5°	1110	756	826	756	805	660	890	1067	1196	1330
75°	595	472	483	456	434	392	526	644	735	783
77.5°	327	316	311	290	247	252	333	402	440	461
80°	209	209	215	198	172	177	236	263	279	279
82.5°	150	161	156	145	129	134	177	182	182	193
85°	123	129	129	113	97	107	129	123	139	139
87.5°	91	97	91	80	75	75	86	91	86	86
90°	75	80	75	64	59	59	75	70	64	64
95°	54	54	48	43	38	38	48	43	43	43
105°	32	32	32	27	27	32	27	27	21	21
115°	21	16	21	21	21	16	21	21	11	21
125°	11	16	11	11	11	11	11	5	0	0
135°	0	0	0	0	0	0	5	0	0	0
145°	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	5	0	0	0



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
175°	0	0	0	0	0	0	5	0	0	0
180°	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)