

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: McGRAW-EDISON

Report Number: 767519

Luminaire Tested: **GSL-XX-400-HPS-XX-2F-SG-XX-HS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 767519
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GSL-XX-400-HPS-XX-2F-SG-XX-HS
Description: LARGE ARCHITECTURAL AREA FIXTURE-HORIZONTAL LAMP-TYPE 2 DISTRIBUTION
Light Source: 400 WATT HPS CLEAR E18
Ballast/Driver: -

Summary

Lumens per Lamp: 50000 (1 lamp)
Luminaire Lumens: 31938.6 lumens
Efficiency: 63.9%
Efficacy: 79.8 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type III - Medium - Cutoff
BUG Rating: B3 - U3 - G4

Input Watts (W): 400
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

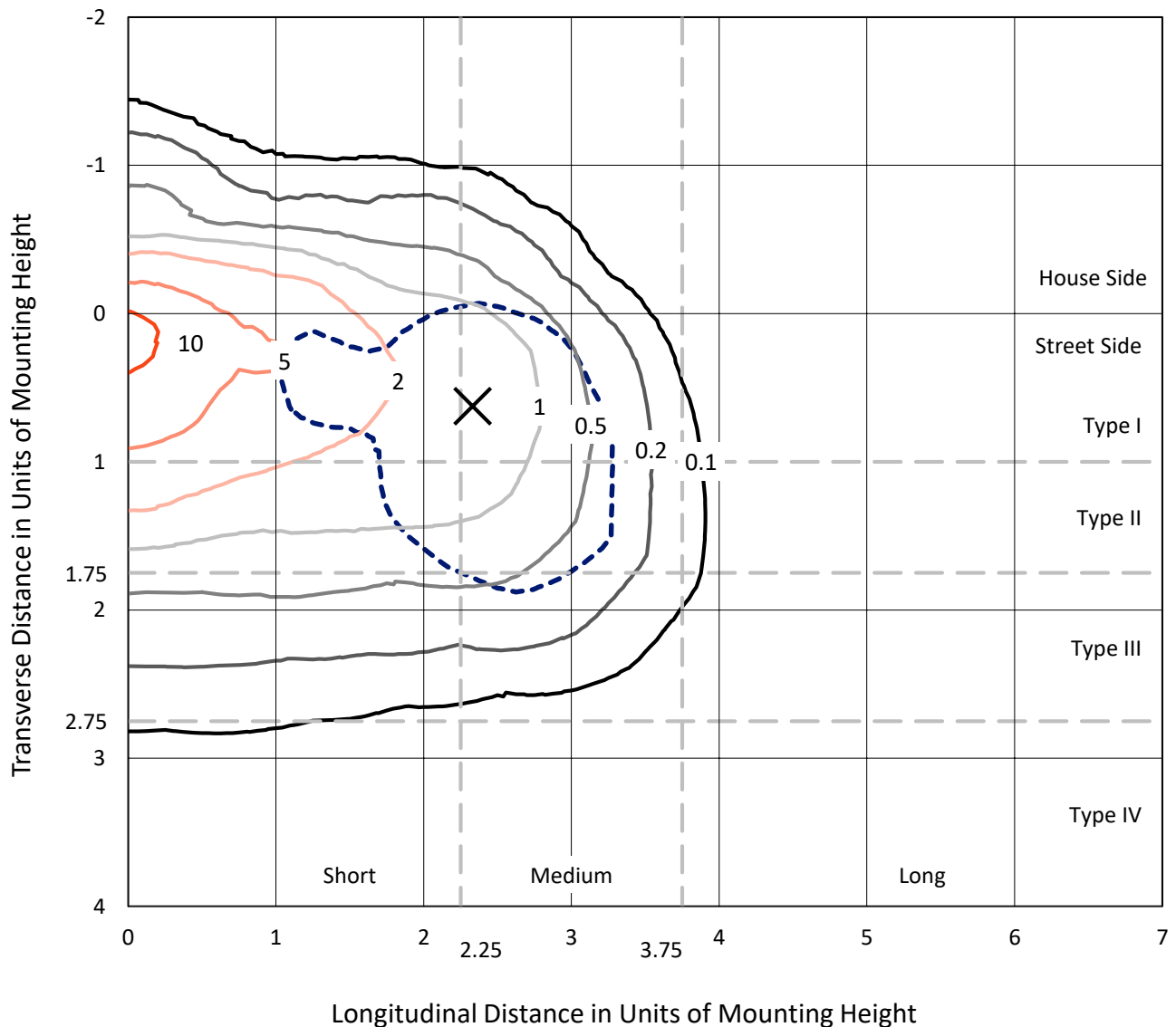


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Iso-Footcandle Lines of Horizontal Illumination

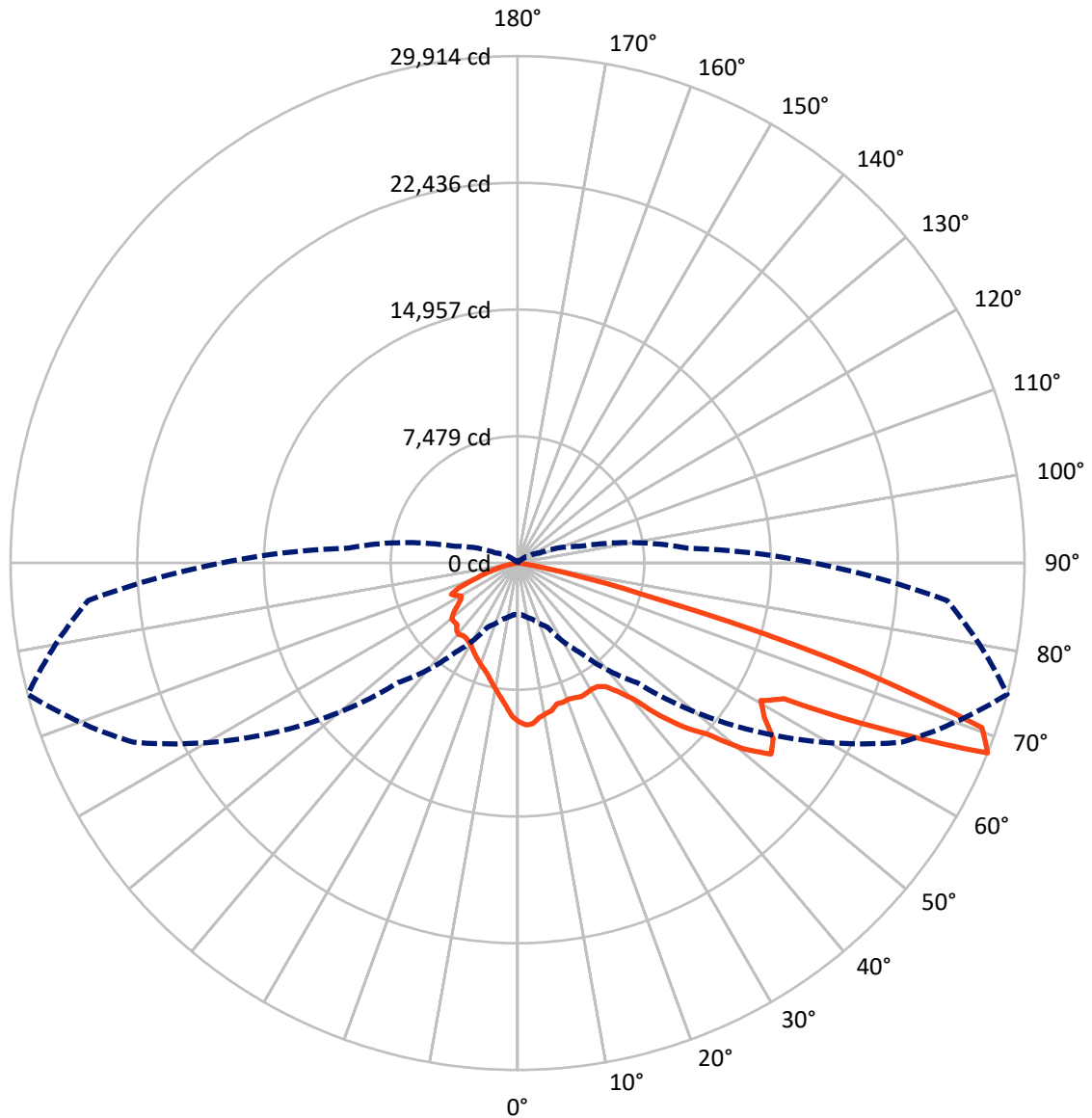
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12.7 fc
 Type III - Medium - Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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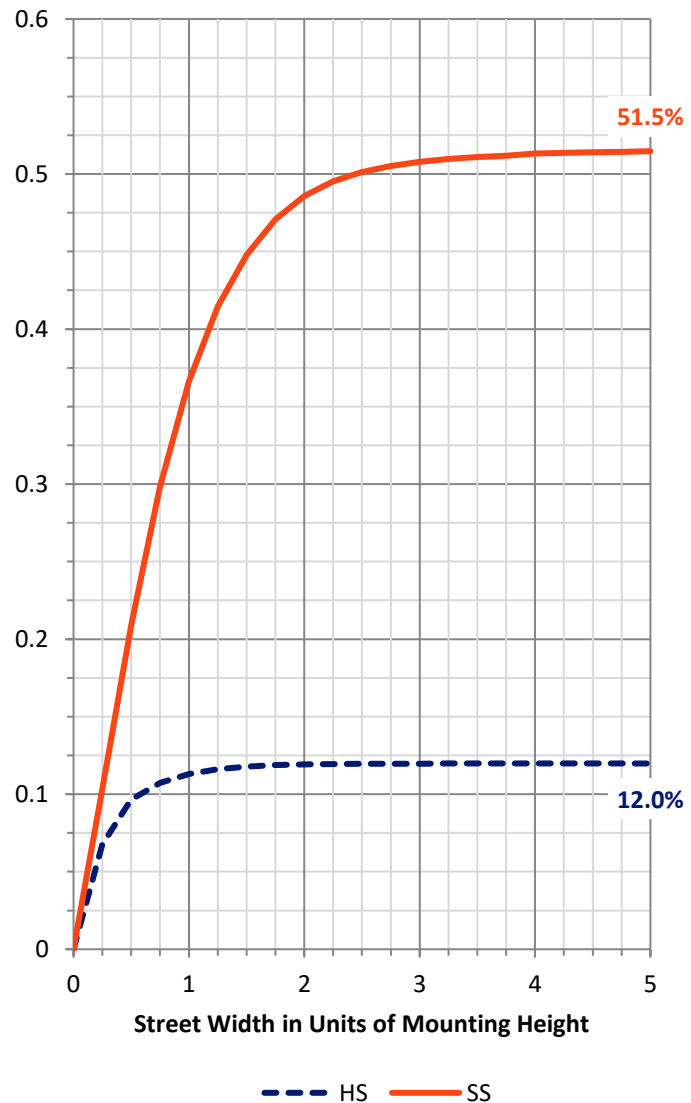
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6046.8	0.0	6046.8
	% Lamp	12.1	0.0	12.1
Street Side	Lumens	25783.8	108.0	25891.8
	% Lamp	51.6	0.2	51.8
Total	Lumens	31830.6	108.0	31938.6
	% Lamp	63.7	0.2	63.9

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	855.0	2.7	1.7
10°-20°	2176.9	6.8	4.4
20°-30°	3082.5	9.7	6.2
30°-40°	3939.6	12.3	7.9
40°-50°	5303.8	16.6	10.6
50°-60°	5896.4	18.5	11.8
60°-70°	6905.6	21.6	13.8
70°-80°	3492.0	10.9	7.0
80°-90°	178.7	0.6	0.4
90°-100°	86.3	0.3	0.2
100°-110°	28.3	0.1	0.1
110°-120°	2.9	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°	31830.6	99.7	63.7
0°-180°	31938.6	100.0	63.9



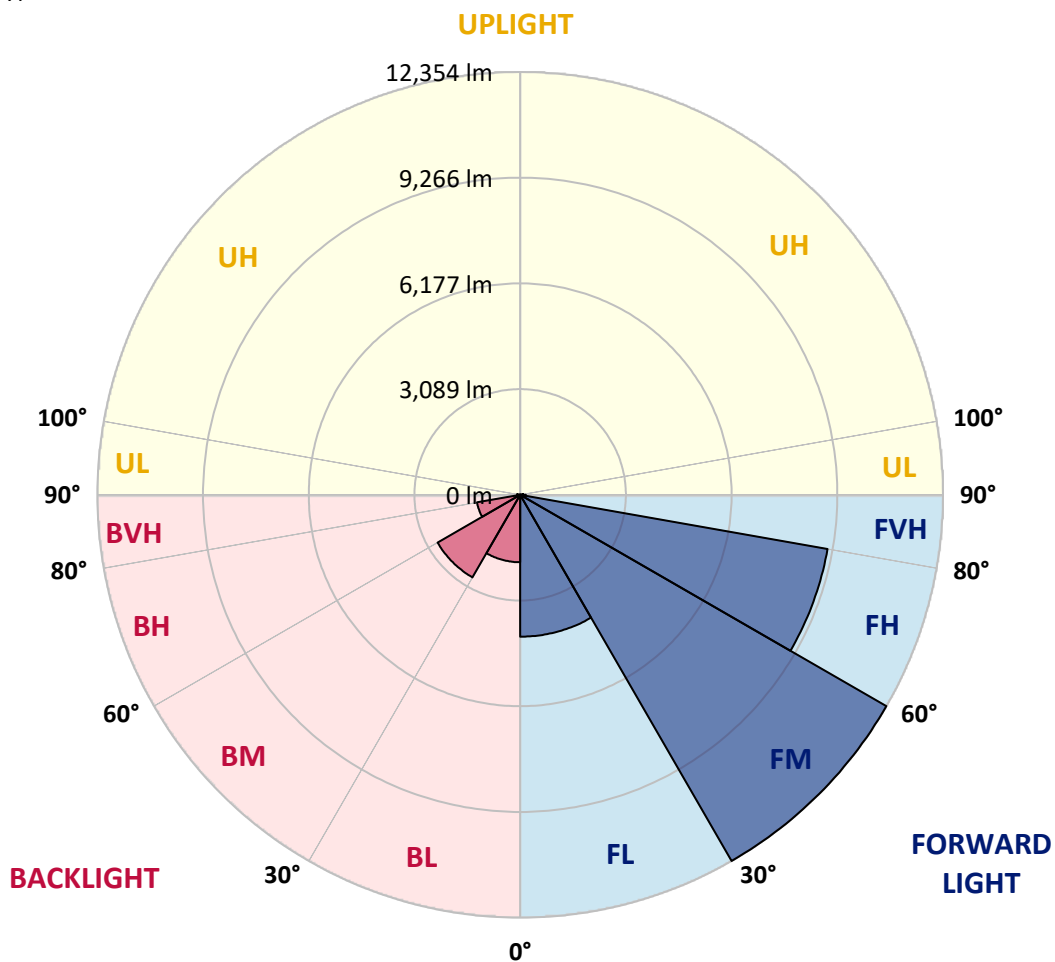
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4145.2	8.3			
FM (30°-60°)	12354.1	24.7			
FH (60°-80°)	9118.1	18.2			G4/12000
FVH (80°-90°)	166.3	0.3			G2/225
BL (0°-30°)	1969.1	3.9	B3/2500		
BM (30°-60°)	2785.8	5.6	B3/5000		
BH (60°-80°)	1279.5	2.6	B3/2500		G3/2500
BVH (80°-90°)	12.3	0.0			G1/100
UL (90°-100°)	86.3	0.2		U3/500	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	18061.4	36.1			

BUG Rating: B3-U3-G4
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	9364	9364	9364	9364	9364	9364	9364	9364	9364	9364	9364
2.5°	10509	10457	10405	10353	10197	10093	9937	9780	9572	9416	9312
5°	11341	11341	11237	11237	11029	10769	10405	9937	9520	9156	8948
7.5°	11757	11809	11757	11653	11393	10977	10405	9780	9208	8740	8532
10°	11861	11861	11861	11653	11341	10717	10197	9572	9052	8532	8324
12.5°	11757	11705	11653	11445	10925	10405	9937	9468	8948	8376	8116
15°	11549	11497	11393	10977	10561	10093	9780	9208	8636	8168	7856
17.5°	11341	11341	11185	10665	10301	9885	9416	9000	8636	8064	7856
20°	11237	11237	10873	10509	10145	9624	9260	8948	8584	8012	7752
22.5°	11341	11185	10717	10405	10041	9520	9208	9000	8636	8116	7700
25°	11445	11237	10561	10405	9937	9520	9208	9052	8740	8012	7647
27.5°	11341	11237	10509	10353	9885	9468	9260	9104	8688	7960	7647
30°	11133	11029	10301	10353	9780	9468	9312	9104	8636	7960	7595
32.5°	11341	11133	10249	10145	9780	9572	9364	9104	8688	8116	7647
35°	11445	11237	10509	10301	9676	9624	9312	9156	8948	8584	8116
37.5°	11133	11029	10457	10405	9989	9572	9416	9416	9624	9104	8532
40°	11029	10925	10457	10613	10301	9572	9676	10093	10561	10093	9260
42.5°	11133	11185	10769	10873	10405	9624	10301	11133	12278	10873	9624
45°	11133	11133	10665	10613	9989	9780	11133	12694	13838	11497	9937
47.5°	10821	10821	9989	9676	9208	10145	12278	14098	15087	12902	11393
50°	9885	10041	8792	8532	8948	10353	13214	15139	17220	14827	13006
52.5°	8428	8636	7752	7908	8636	10457	13526	16700	18729	14671	12278
55°	7075	7179	6867	7127	7960	9989	13162	17272	18312	13578	11185
57.5°	6035	6035	6087	6451	7283	9052	12278	16648	17168	13266	10977
60°	4994	4994	5358	6295	7491	8740	11601	15399	16492	13838	11133
62.5°	4266	4214	4786	6191	8376	10145	12434	15659	17636	16439	12798
65°	3642	3642	4110	5410	8116	11289	15347	19925	23567	21226	15659
67.5°	3017	3069	3434	4162	6451	9989	17376	25023	29914	25440	17480
70°	2497	2497	2913	3225	4838	8272	18208	26584	29081	22058	13682
72.5°	1977	1977	2341	2757	3590	6503	16023	21954	19509	11861	6971
75°	1353	1353	1665	2133	2393	4318	10353	13058	8636	4838	3225
77.5°	832	884	1040	1301	1197	1821	4630	5515	3173	1873	1457
80°	416	416	468	468	364	572	1457	1717	1092	728	624
82.5°	416	416	312	312	312	260	364	416	312	156	156
85°	416	416	364	312	208	208	156	104	52	0	0
87.5°	520	468	416	312	208	208	104	52	0	0	0
90°	520	520	468	312	208	156	104	52	0	0	0
95°	416	416	364	312	208	104	104	0	0	0	0
105°	208	208	0	0	0	0	0	0	0	0	0
115°	0	0	0	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0	0	0	0
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°	9364	9364	9364	9364	9364	9364	9364	9364	9364	9364
2.5°	9260	9052	8896	8688	8636	8480	8376	8324	8272	8220
5°	8792	8480	8272	8012	7856	7700	7491	7387	7283	7283
7.5°	8324	8012	7543	7283	6971	6815	6607	6399	6347	6243
10°	8064	7595	7075	6711	6295	5931	5671	5462	5358	5306
12.5°	7856	7231	6659	6139	5723	5358	4994	4734	4526	4474
15°	7543	6867	6191	5723	5254	4734	4370	4058	3746	3746
17.5°	7439	6607	5827	5150	4682	4214	3746	3486	3173	3121
20°	7335	6399	5462	4734	4110	3642	3330	2965	2653	2601
22.5°	7283	6191	5202	4266	3642	3121	2757	2341	2081	2081
25°	7179	5983	4890	3902	3173	2653	2133	1769	1613	1561
27.5°	7075	5775	4526	3538	2757	2185	1717	1353	1249	1249
30°	6971	5567	4214	3173	2393	1769	1353	1040	936	936
32.5°	6971	5462	3954	2809	2029	1353	988	884	884	832
35°	7335	5358	3694	2549	1665	1040	936	936	884	936
37.5°	7543	5358	3486	2237	1301	884	936	1092	1040	936
40°	8064	5462	3277	2029	988	884	988	1092	1092	1040
42.5°	8272	5358	3017	1665	832	780	988	1040	1040	1040
45°	8324	5098	2861	1353	728	676	884	988	988	936
47.5°	9260	5098	2549	1092	676	624	728	832	884	832
50°	10353	5098	2289	832	624	572	624	676	728	728
52.5°	9676	4786	1977	780	624	520	468	572	572	624
55°	8740	4370	1769	780	520	416	364	364	468	520
57.5°	8064	4006	1561	780	520	416	312	260	364	312
60°	7700	3850	1457	780	468	312	208	208	208	208
62.5°	8324	4058	1561	780	364	208	156	208	104	104
65°	9676	4318	1509	728	260	156	156	156	52	0
67.5°	10041	3798	1405	676	156	104	156	52	0	0
70°	6815	2601	1249	624	104	52	156	0	0	0
72.5°	3590	1977	1145	520	104	52	0	0	0	0
75°	2133	1405	780	312	52	0	0	0	0	0
77.5°	1092	884	520	156	0	0	0	0	0	0
80°	520	416	156	52	0	0	0	0	0	0
82.5°	52	104	52	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0	0	0	0
95°	0	0	0	0	0	0	0	0	0	0
105°	0	0	0	0	0	0	0	0	0	0
115°	0	0	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	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	0	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	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)