

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: 767521

Luminaire Tested: **GSL-XX-400-HPS-XX-3F-SG-XX-HS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 767521
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GSL-XX-400-HPS-XX-3F-SG-XX-HS
Description: LARGE ARCHITECTURAL AREA FIXTURE-HORIZONTAL LAMP-TYPE 3 DISTRIBUTION
Light Source: 400 WATT HPS CLEAR E18
Ballast/Driver: -

Summary

Lumens per Lamp: 50000 (1 lamp)
Luminaire Lumens: 30876.8 lumens
Efficiency: 61.8%
Efficacy: 77.2 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

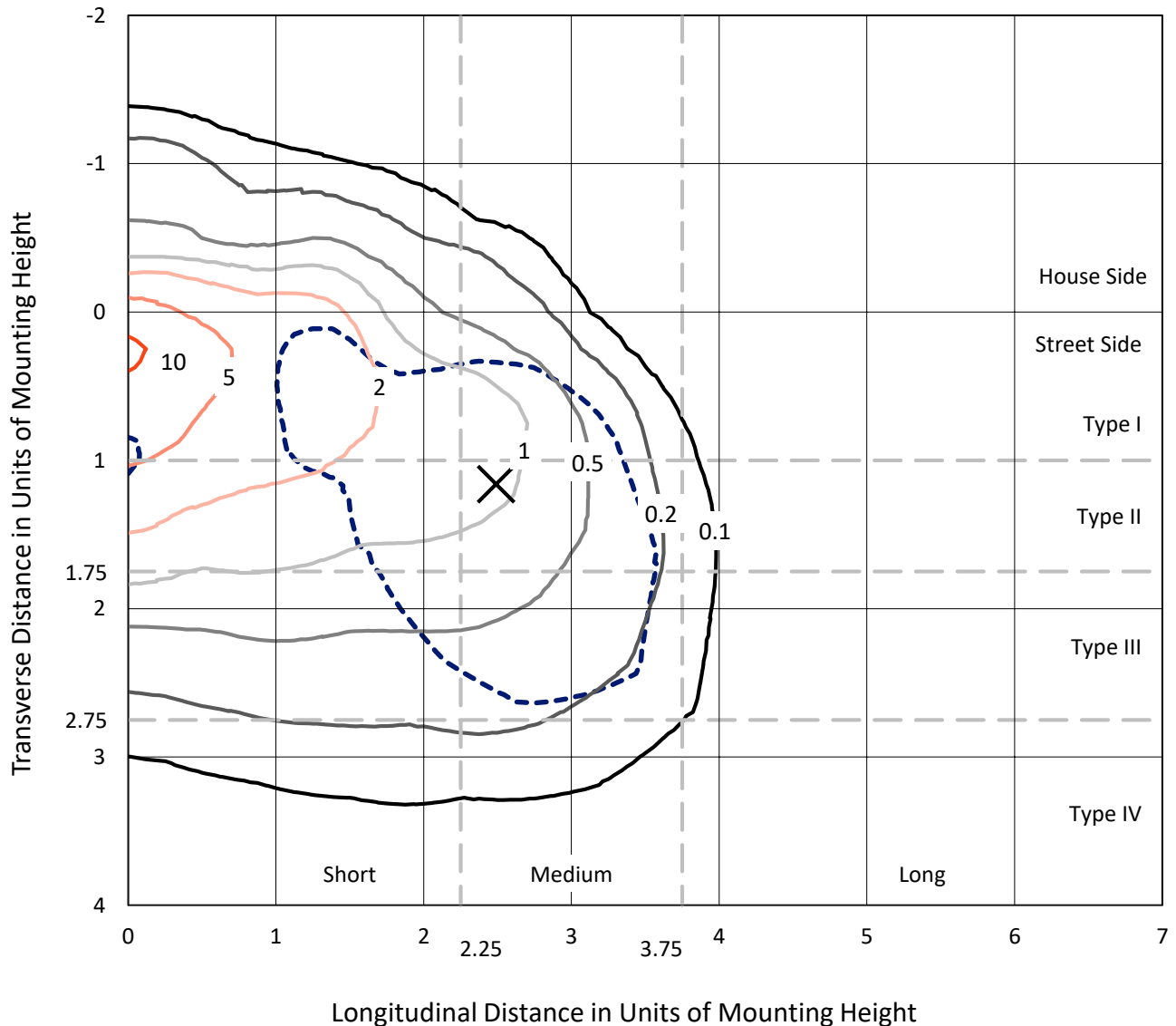


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

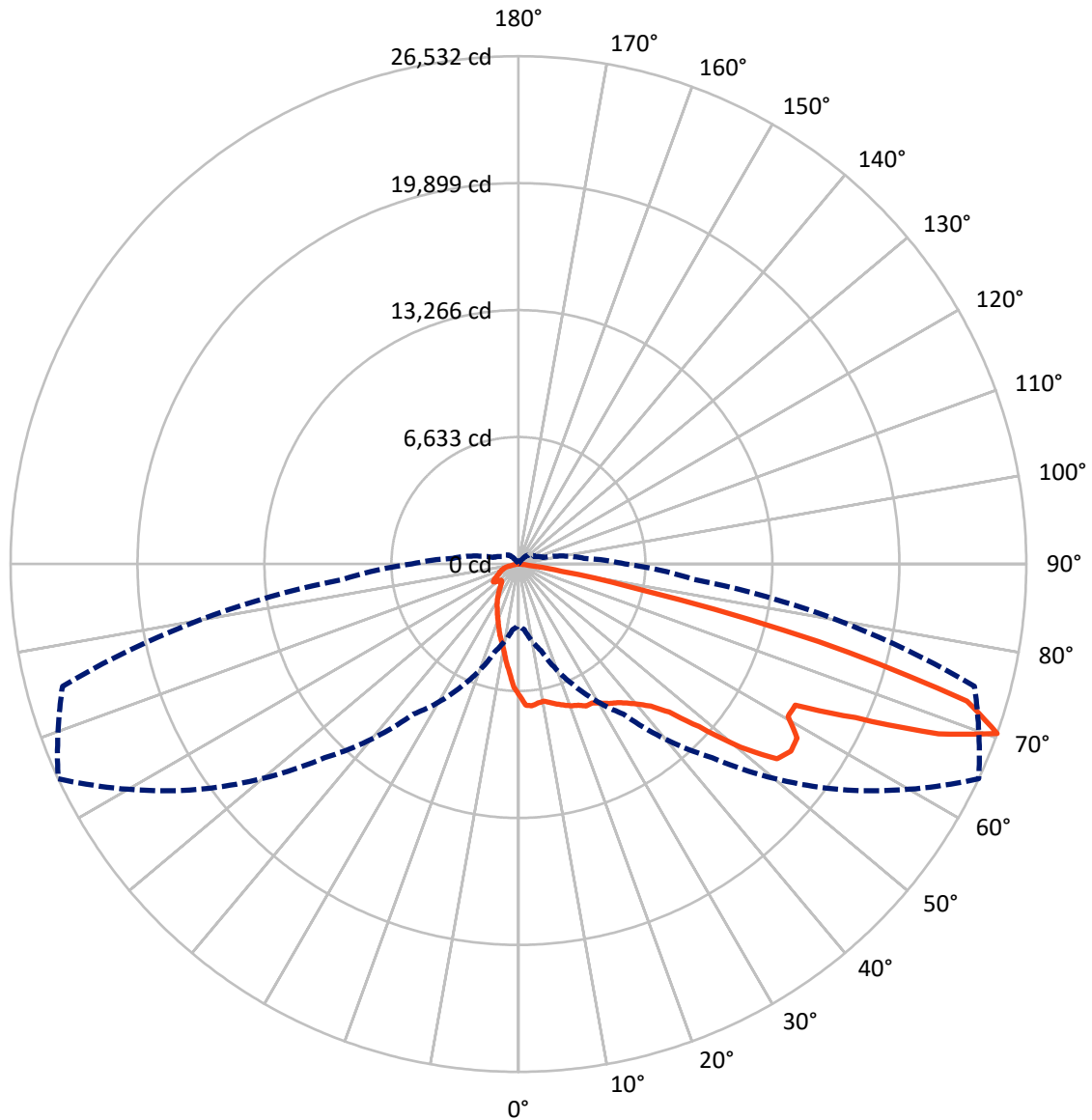


Based on 30 foot mounting height. Maximum calculated value = 10.8 fc
 Type III - Medium - Cutoff

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Luminous Intensity Polar Plot



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

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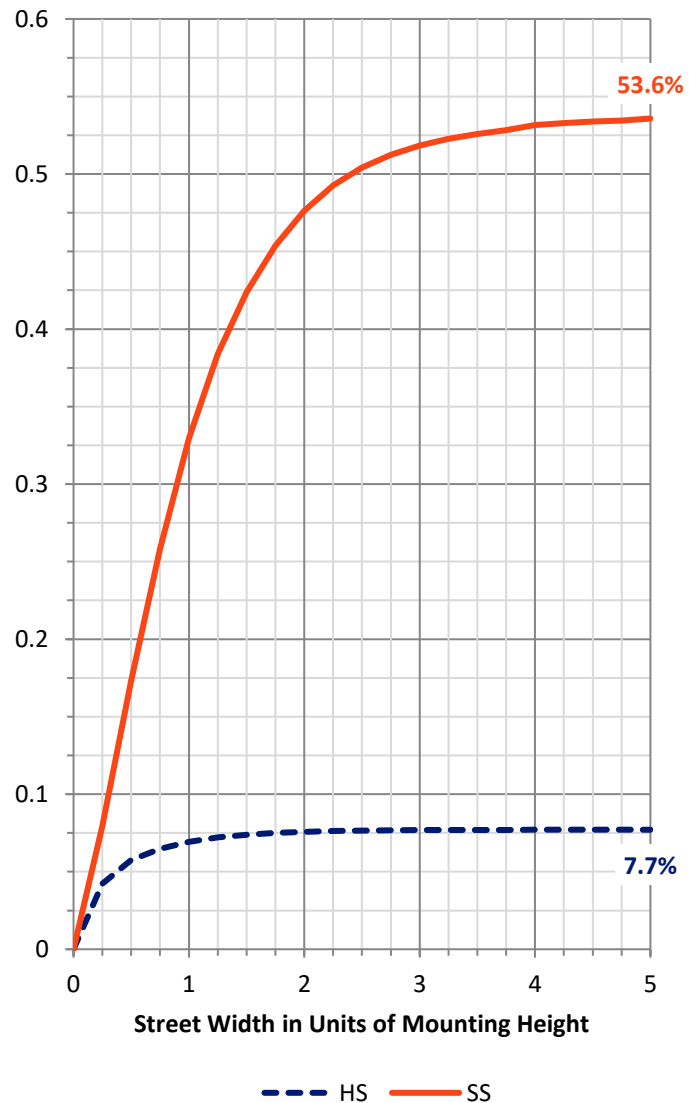
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3885.2	0.0	3885.2
	% Lamp	7.8	0.0	7.8
Street Side	Lumens	26859.3	132.3	26991.6
	% Lamp	53.7	0.3	54.0
Total	Lumens	30744.6	132.3	30876.8
	% Lamp	61.5	0.3	61.8

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	614.5	2.0	1.2
10°-20°	1685.9	5.5	3.4
20°-30°	2560.1	8.3	5.1
30°-40°	3467.6	11.2	6.9
40°-50°	4909.8	15.9	9.8
50°-60°	6201.6	20.1	12.4
60°-70°	6501.2	21.1	13.0
70°-80°	4488.6	14.5	9.0
80°-90°	315.2	1.0	0.6
90°-100°	115.3	0.4	0.2
100°-110°	31.1	0.1	0.1
110°-120°	0.5	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°	30744.6	99.6	61.5
0°-180°	30876.8	100.0	61.8



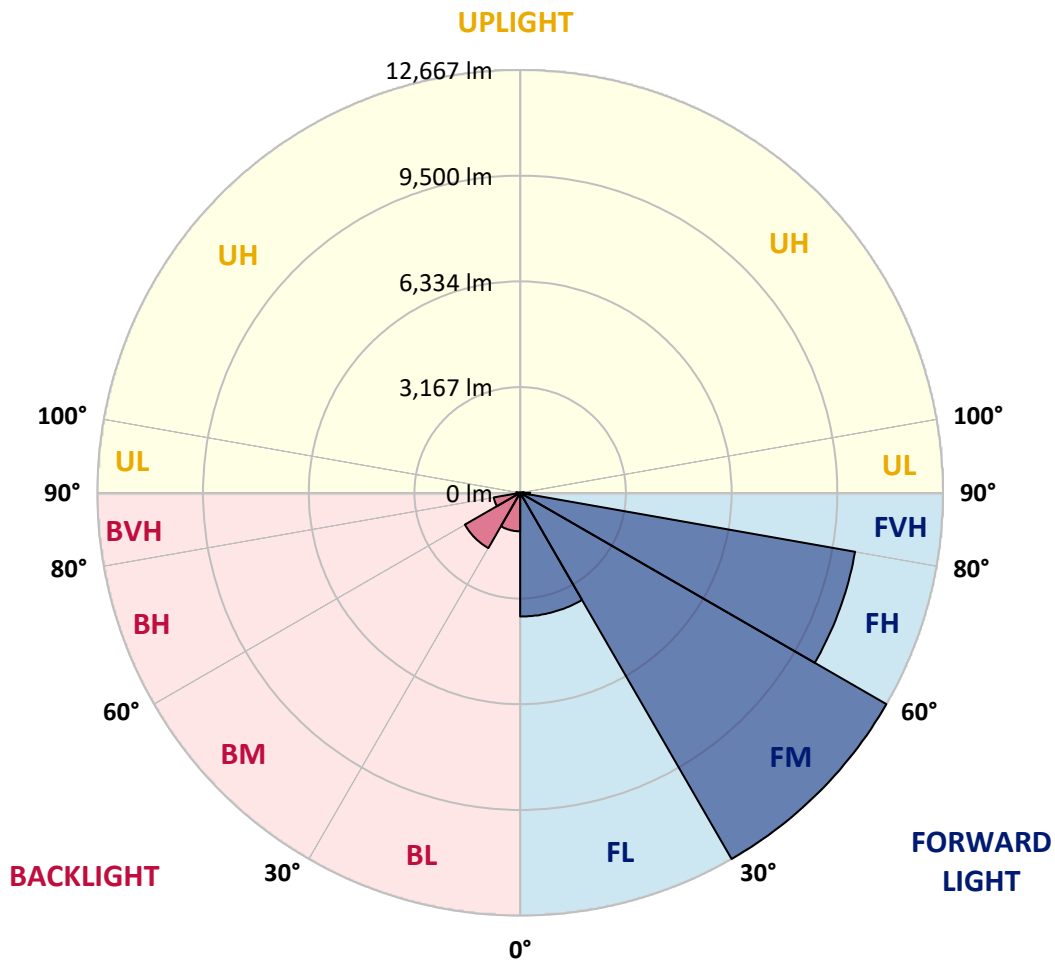
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3706.0	7.4			
FM	(30°-60°)	12667.1	25.3			
FH	(60°-80°)	10187.7	20.4			G4/12000
FVH	(80°-90°)	298.5	0.6			G3/500
BL	(0°-30°)	1154.5	2.3	B3/2500		
BM	(30°-60°)	1911.9	3.8	B2/2500		
BH	(60°-80°)	802.1	1.6	B2/1000		G2/1000
BVH	(80°-90°)	16.7	0.0			G1/100
UL	(90°-100°)	115.3	0.2		U3/500	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		19123.2	38.2			

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°	6867	6867	6867	6867	6867	6867	6867	6867	6867	6867	6867
2.5°	7908	7908	7856	7804	7752	7647	7543	7387	7231	7023	6919
5°	8428	8428	8480	8376	8220	8064	7804	7439	7023	6659	6503
7.5°	8948	9000	8948	8844	8584	8220	7752	7335	6815	6399	6087
10°	9676	9624	9572	9364	8948	8480	7908	7283	6659	6139	5827
12.5°	10301	10353	10197	9780	9260	8740	8064	7439	6763	6035	5723
15°	10925	10925	10665	10041	9624	9000	8376	7595	6763	6035	5567
17.5°	11237	11237	10873	10353	9728	9208	8584	7752	6867	5983	5515
20°	11237	11237	10873	10457	9937	9312	8688	7908	6919	5879	5358
22.5°	11237	11237	10769	10457	9885	9312	8740	8012	6919	5775	5202
25°	11341	11289	10717	10405	9832	9312	8792	8220	6919	5723	5150
27.5°	11341	11237	10561	10353	9832	9260	8948	8220	7075	5879	5254
30°	11445	11237	10665	10353	9832	9312	8896	8428	7439	5983	5254
32.5°	11237	11133	10561	10301	9885	9468	9104	8688	7700	6139	5358
35°	11237	11185	10405	10197	9937	9572	9312	8896	8064	6399	5515
37.5°	12070	11913	10873	10353	9937	9624	9520	9208	8428	6659	5671
40°	13318	13006	11653	10821	9937	9624	9676	9624	8844	6971	5879
42.5°	13838	13526	12122	11393	10041	9572	9937	10145	9520	7700	6451
45°	13526	13214	12017	11341	10145	9728	10353	11029	11237	9885	8064
47.5°	13214	12850	11497	10769	9885	9937	11029	12694	14359	12070	9416
50°	12694	12278	10769	9937	9728	10457	12017	15035	16387	12798	10145
52.5°	11757	11341	9468	9468	9780	11081	13422	16908	17012	13526	10769
55°	10717	10249	8636	8948	9780	11861	15139	17272	17636	13318	10405
57.5°	9989	9572	7960	8584	9468	11913	15659	17168	16804	11445	8844
60°	9052	8740	7752	8792	9624	11601	14202	16179	14827	8948	6971
62.5°	7491	7387	7543	9416	10613	12017	13890	16231	14827	7752	5827
65°	5619	5775	6763	9468	11289	12902	16023	19353	17532	7960	5827
67.5°	4162	4370	5723	8480	10717	13318	19093	23671	22786	9312	6347
70°	3225	3434	4734	7075	9572	14307	20549	26532	24659	9208	5567
72.5°	2601	2757	3798	5671	8428	14983	20809	24503	17896	5462	2913
75°	2081	2237	2913	4526	7231	13162	17688	16179	8324	2601	1821
77.5°	1561	1613	2029	3173	4630	8844	10977	6763	3173	1353	1092
80°	1040	1040	1197	1405	1457	3642	4474	2289	1145	728	624
82.5°	520	520	520	520	468	832	936	572	416	260	156
85°	520	520	520	416	312	260	104	156	104	52	0
87.5°	624	624	520	416	312	208	104	104	104	0	0
90°	624	676	572	416	364	208	104	104	52	0	0
95°	624	572	468	364	260	208	104	52	0	0	0
105°	0	52	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°	6867	6867	6867	6867	6867	6867	6867	6867	6867	6867
2.5°	6815	6607	6451	6243	6087	5931	5827	5723	5723	5619
5°	6295	6035	5723	5567	5306	5098	4942	4838	4734	4682
7.5°	5879	5462	5150	4838	4526	4266	4110	3902	3798	3850
10°	5567	5046	4578	4214	3850	3590	3330	3121	3017	3017
12.5°	5410	4786	4162	3746	3330	3017	2757	2549	2445	2393
15°	5254	4474	3850	3330	2965	2601	2237	2029	1925	1873
17.5°	5098	4214	3486	2965	2549	2185	1873	1613	1509	1457
20°	4890	3954	3173	2653	2237	1821	1405	1197	1145	1145
22.5°	4734	3694	2913	2341	1821	1405	1092	936	832	832
25°	4630	3486	2653	2029	1509	1092	884	832	780	832
27.5°	4578	3382	2445	1717	1197	936	884	780	780	832
30°	4578	3225	2237	1509	988	884	832	780	728	728
32.5°	4578	3069	2029	1197	884	884	780	728	728	728
35°	4630	3017	1821	988	832	832	728	728	728	728
37.5°	4630	2861	1613	832	728	728	676	728	728	728
40°	4682	2757	1457	780	728	676	676	832	780	728
42.5°	4994	2653	1301	780	676	624	676	884	832	832
45°	5827	2653	1249	780	624	624	676	832	832	832
47.5°	6503	2809	1249	832	624	624	676	728	780	728
50°	7075	3121	1353	884	624	624	624	676	624	624
52.5°	7647	3330	1509	884	624	572	520	520	520	520
55°	7439	3382	1613	936	624	468	416	416	416	416
57.5°	6451	3069	1509	832	572	416	364	312	312	312
60°	5254	2497	1353	780	468	364	312	260	208	208
62.5°	4526	2133	1197	676	416	260	260	208	104	208
65°	4422	1821	1092	676	364	260	208	156	104	104
67.5°	4526	1613	1040	728	468	260	156	104	0	0
70°	3434	1353	936	832	624	208	156	0	0	0
72.5°	1977	1249	832	832	572	208	52	0	0	0
75°	1457	1092	728	572	416	104	0	0	0	0
77.5°	1040	832	520	312	208	52	0	0	0	0
80°	572	520	260	104	104	0	0	0	0	0
82.5°	104	104	104	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)