

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: P651844

Luminaire Tested: **GALN-SA4A-840-U-SLL-GRSBK**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P651844
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-23)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4A-840-U-SLL-GRSBK
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS WITH BLACK GLARE REDUCTION SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8410.8 lumens
Efficiency: N/A
Efficacy: 69.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G1

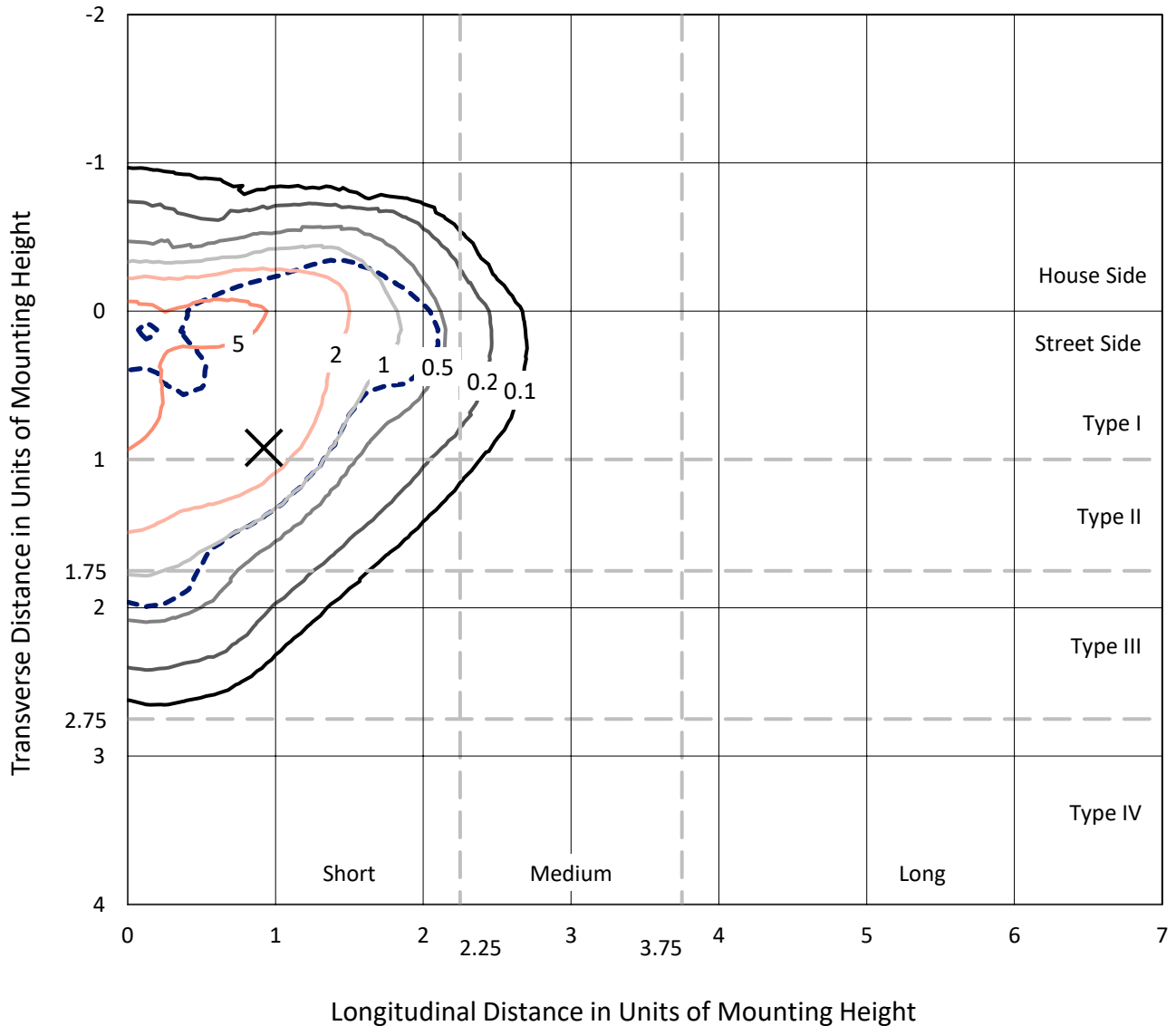
Input Watts (W): 121
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

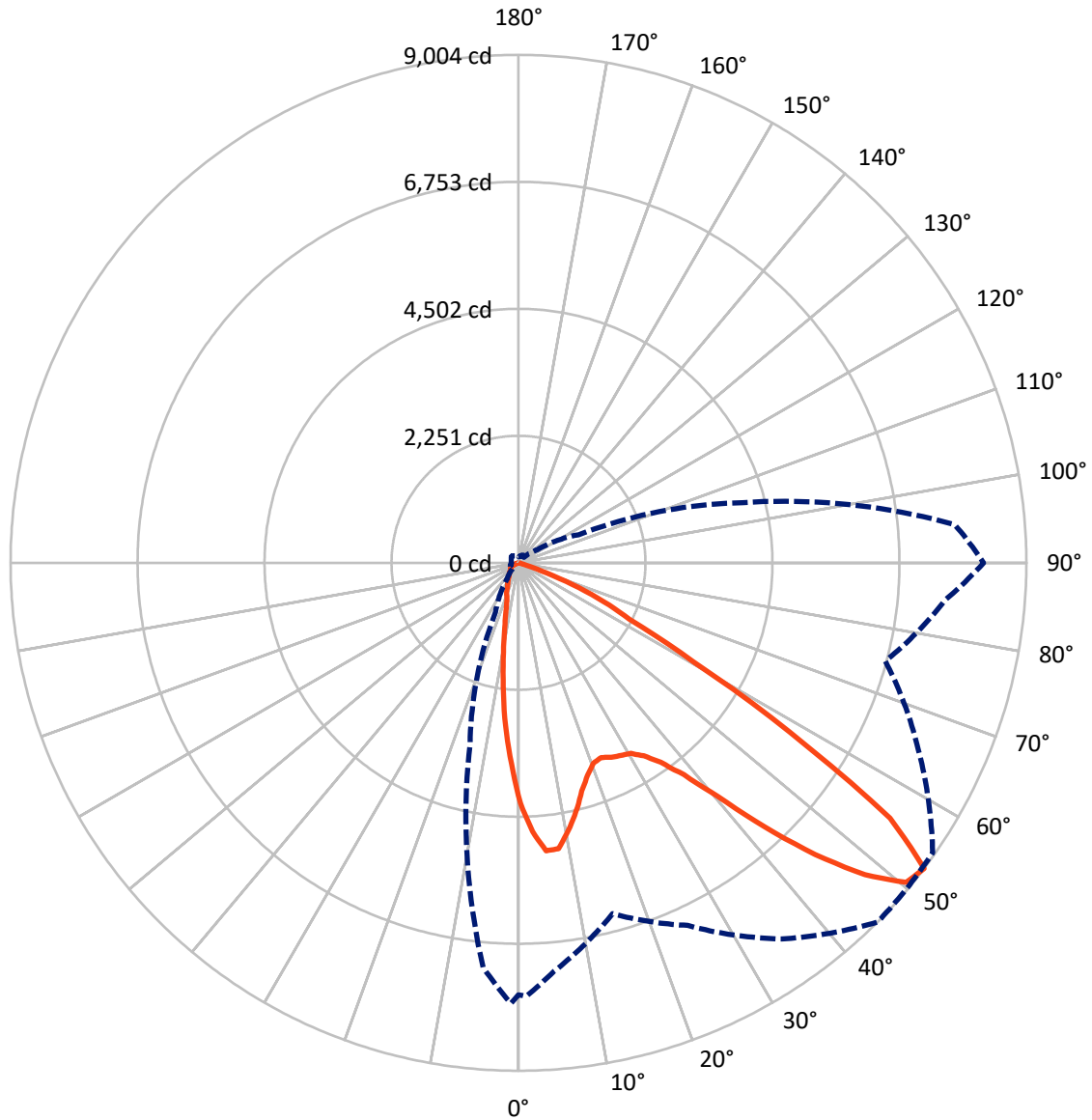
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 52.5-Deg Vertical

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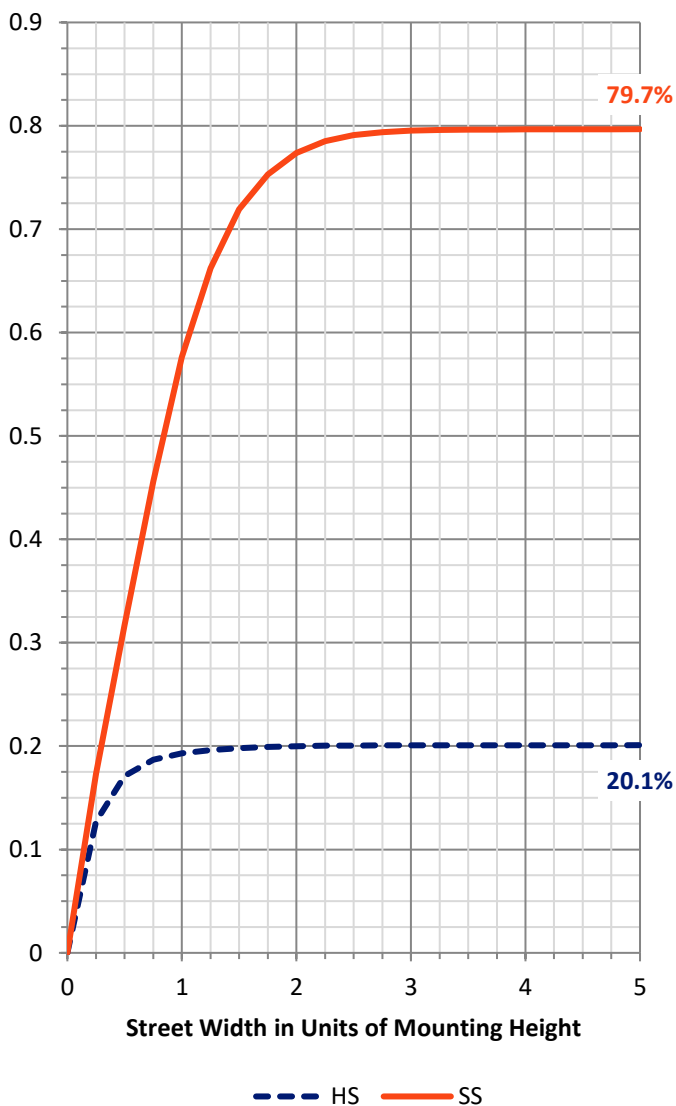
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1707.0	0.0	1707.0
	% Fixture	20.3	0.0	20.3
Street Side	Lumens	6703.9	0.0	6703.9
	% Fixture	79.7	0.0	79.7
Total	Lumens	8410.8	0.0	8410.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	311.0	3.7
10°-20°	613.6	7.3
20°-30°	933.8	11.1
30°-40°	1395.7	16.6
40°-50°	1987.6	23.6
50°-60°	2136.7	25.4
60°-70°	946.8	11.3
70°-80°	76.6	0.9
80°-90°	8.9	0.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	8410.8	100.0
0°-180°	8410.8	100.0

Coefficient of Utilization



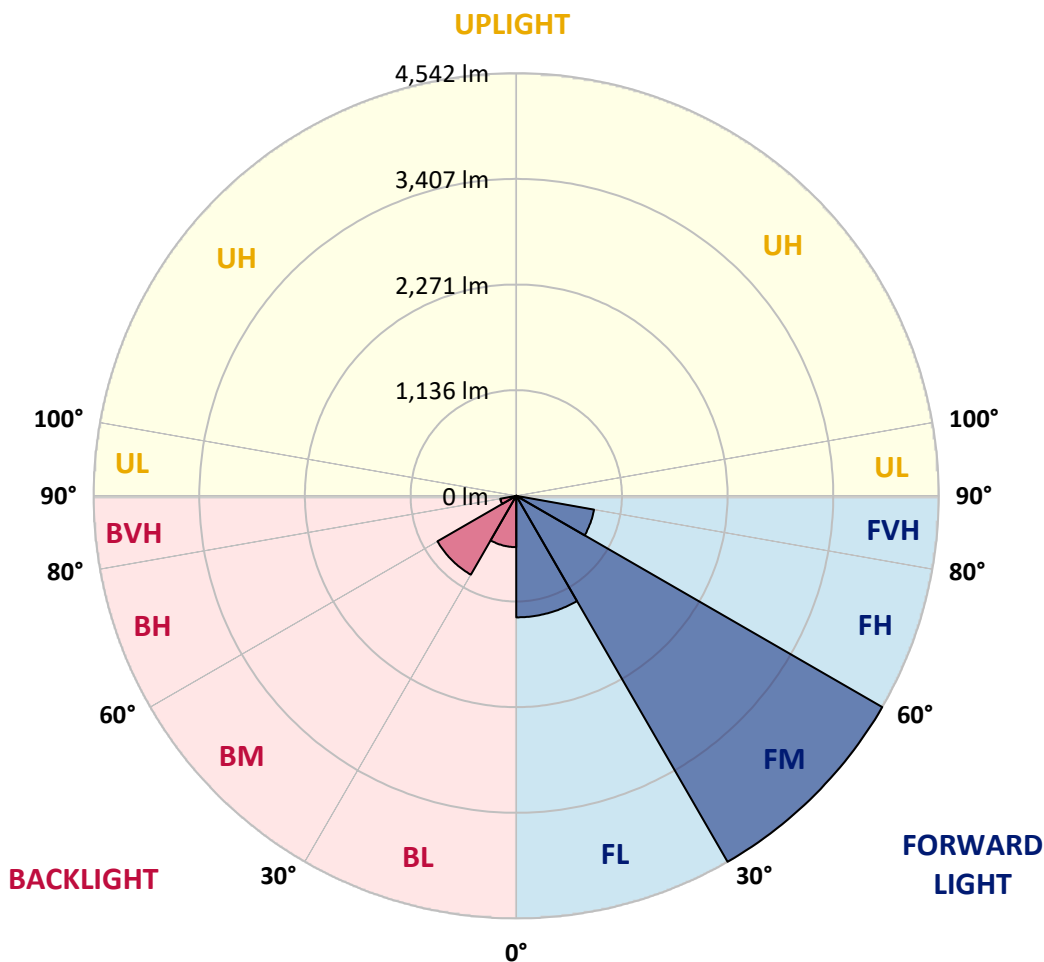
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1306.4	15.5			
FM (30°-60°)	4542.1	54.0			
FH (60°-80°)	848.8	10.1			G1/1800
FVH (80°-90°)	6.6	0.1			G0/10
BL (0°-30°)	552.1	6.6	B2/1000		
BM (30°-60°)	977.9	11.6	B1/1000		
BH (60°-80°)	174.7	2.1	B1/500		G1/500
BVH (80°-90°)	2.3	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	4264.7	4264.7	4264.7	4264.7	4264.7	4264.7	4264.7	4264.7	4264.7	4264.7	4264.7
2.5°	4512.8	4526.1	4598.8	4689.8	4737.8	4847.0	4770.9	4790.8	4749.4	4603.8	4489.7
5°	4375.6	4373.9	4466.5	4691.5	4904.9	5121.6	5128.2	5012.4	4808.9	4585.6	4266.3
7.5°	3962.0	4026.5	4122.4	4481.4	4876.8	5038.9	5116.6	4981.0	4668.3	4349.1	4003.3
10°	3649.3	3682.4	3844.5	4277.9	4567.4	4784.1	4832.1	4754.3	4514.5	4115.8	3728.7
12.5°	3469.0	3485.5	3675.8	4039.7	4345.8	4506.2	4529.4	4565.8	4393.7	4019.9	3555.0
15°	3470.6	3483.8	3740.3	4044.7	4165.5	4122.4	4198.5	4196.8	4271.3	4001.6	3700.6
17.5°	3720.4	3735.3	3966.9	4117.5	4064.6	3963.6	3958.7	4034.8	4191.9	4228.3	3920.6
20°	4150.5	4185.3	4355.7	4347.4	4049.7	3846.1	3789.9	3847.8	4213.4	4420.2	4363.9
22.5°	4729.5	4777.5	4896.6	4668.3	4117.5	3766.8	3748.6	3861.0	4355.7	4848.6	4866.9
25°	5401.2	5482.2	5540.1	5247.3	4359.0	3904.1	3818.1	4011.6	4547.5	5313.5	5507.0
27.5°	5846.1	5930.6	5917.3	5498.8	4521.1	3940.4	3867.7	4048.0	4714.6	5424.4	5841.2
30°	6193.5	6244.8	6337.4	5634.4	4683.2	4043.0	3919.0	4201.8	4769.2	5616.2	6244.8
32.5°	6598.8	6633.6	6640.2	5874.3	4933.0	4172.0	4077.8	4393.7	5010.8	5799.9	6602.2
35°	7007.5	7058.8	6951.2	6170.4	5086.9	4411.9	4342.4	4726.3	5204.3	5990.1	6995.9
37.5°	7450.8	7477.2	7229.2	6292.8	5306.9	4802.4	4764.3	5085.2	5540.1	6334.2	7432.6
40°	7823.0	7847.8	7525.3	6443.3	5538.5	5348.3	5445.8	5770.1	5996.7	6557.5	7651.0
42.5°	8029.8	8087.6	7624.5	6360.7	6003.3	5966.9	6400.3	6514.5	6526.1	6620.4	7846.2
45°	8086.0	8059.6	7460.8	6428.4	6410.3	6984.3	7378.0	7528.5	7052.1	6736.2	7895.8
47.5°	7826.3	7861.1	7219.2	6368.9	6944.6	7755.2	8264.7	8544.2	7444.2	6635.2	7773.4
50°	7616.2	7571.5	7141.4	6325.9	7088.5	8119.1	8904.9	8967.8	7804.8	6759.3	7639.4
52.5°	7657.6	7685.7	7265.5	6440.0	7091.8	8140.6	9004.2	8961.1	7816.4	6731.2	7591.4
55°	7745.3	7621.2	7212.6	6188.6	6617.1	7540.2	7991.8	7925.6	7214.3	6431.8	7474.0
57.5°	6683.3	6875.1	6632.0	5525.2	5430.9	5680.7	5672.5	5875.9	5381.3	5535.1	6803.9
60°	5424.4	5457.4	5548.4	4726.3	3758.5	3672.5	3553.4	3424.3	3621.2	4732.8	6188.6
62.5°	4770.9	4731.2	5055.4	4299.4	2653.4	2221.7	2201.8	2281.2	2794.1	4514.5	5804.8
65°	3467.4	3517.0	3751.9	3336.7	1991.7	1695.6	1665.9	1900.7	2261.4	3617.9	4430.1
67.5°	2117.5	2213.4	2234.9	2057.9	1351.6	1073.6	1030.6	1244.0	1632.7	2340.8	2597.2
70°	977.7	1093.5	1202.6	1123.2	782.5	441.7	416.9	522.8	823.8	1346.6	1378.0
72.5°	296.1	297.8	416.9	435.0	253.1	99.2	87.7	115.8	279.5	445.0	468.2
75°	21.5	23.1	56.3	64.5	47.9	24.8	26.5	31.5	59.5	99.2	74.4
77.5°	1.7	1.7	1.7	8.2	14.9	16.6	21.5	24.8	31.5	36.4	33.1
80°	1.7	0.0	1.7	6.6	11.6	16.6	19.8	23.1	24.8	28.1	24.8
82.5°	0.0	0.0	0.0	5.0	11.6	16.6	18.2	24.8	28.1	33.1	28.1
85°	0.0	0.0	0.0	5.0	11.6	18.2	16.6	8.2	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4264.7	4264.7	4264.7	4264.7	4264.7	4264.7	4264.7	4264.7	4264.7	4264.7	4264.7
2.5°	4509.5	4445.0	4297.8	4223.3	4048.0	4023.2	3851.1	3823.0	3765.1	3733.7	3657.6
5°	4125.7	4048.0	3808.1	3606.3	3371.4	3207.6	3081.9	2967.7	2901.5	2840.4	2868.5
7.5°	3813.1	3586.4	3320.1	2982.6	2711.3	2536.0	2344.1	2186.9	2094.3	2031.4	2046.3
10°	3485.5	3338.3	2967.7	2588.9	2261.4	2137.3	1986.8	1866.0	1735.3	1622.8	1569.9
12.5°	3383.0	3164.6	2699.8	2314.3	2066.2	1945.4	1773.3	1634.4	1467.3	1330.0	1282.0
15°	3401.2	3191.1	2626.9	2215.0	1922.3	1713.8	1508.7	1336.7	1153.0	1057.1	1007.4
17.5°	3697.3	3333.3	2675.0	2110.8	1722.1	1432.6	1179.5	961.1	823.8	724.6	703.1
20°	4061.2	3641.0	2777.5	2034.7	1558.3	1139.8	861.9	673.3	559.2	542.6	537.7
22.5°	4593.9	4143.9	2997.5	1983.5	1358.1	888.3	590.6	489.6	458.3	454.9	456.6
25°	5338.3	4774.2	3237.4	1940.4	1207.6	684.8	483.1	415.2	405.3	400.3	408.6
27.5°	5660.9	5154.7	3364.8	1847.8	1070.3	617.0	476.4	411.9	383.7	375.5	380.5
30°	6059.6	5407.8	3564.9	1689.0	868.5	507.9	445.0	448.3	435.0	393.8	380.5
32.5°	6588.9	5723.8	3665.8	1576.5	775.8	420.2	325.9	299.4	334.1	340.8	352.4
35°	6928.1	6044.7	3717.1	1510.4	727.9	358.9	276.3	251.5	243.2	244.8	251.5
37.5°	7558.3	6478.1	3781.6	1440.9	691.5	312.7	249.8	226.6	215.0	215.0	221.7
40°	7935.5	6822.2	3869.4	1402.8	655.1	284.5	226.6	206.8	196.9	196.9	200.2
42.5°	8029.8	6992.6	3839.5	1389.6	613.8	278.0	206.8	191.9	180.3	178.6	177.0
45°	8198.5	7252.3	3844.5	1374.7	570.7	253.1	195.2	178.6	162.1	160.5	158.8
47.5°	8383.8	7439.2	3854.5	1316.8	529.3	211.8	203.4	165.4	145.6	142.3	142.3
50°	8225.0	7588.1	3940.4	1258.9	476.4	172.1	200.2	155.5	129.0	124.0	125.7
52.5°	8244.8	7763.4	4122.4	1177.8	410.2	137.3	162.1	147.3	117.5	109.2	110.8
55°	7927.2	7578.2	4147.2	1091.8	320.9	105.9	124.0	129.0	99.2	96.0	96.0
57.5°	6823.8	6416.9	3659.2	885.1	211.8	87.7	89.3	112.5	86.0	82.8	84.4
60°	5839.6	5151.4	2944.6	584.0	132.4	69.5	64.5	114.1	76.1	74.4	79.4
62.5°	5323.4	4233.3	2233.3	362.3	91.0	52.9	44.7	92.7	66.2	66.2	72.7
65°	3846.1	2843.7	1298.6	190.2	64.5	41.4	33.1	52.9	54.6	56.3	59.5
67.5°	2382.1	1435.9	547.6	92.7	43.0	28.1	21.5	33.1	36.4	36.4	39.7
70°	1176.1	572.4	182.0	52.9	33.1	23.1	14.9	18.2	18.2	16.6	18.2
72.5°	363.9	172.1	46.3	33.1	23.1	14.9	8.2	6.6	3.3	0.0	1.7
75°	41.4	33.1	29.8	23.1	14.9	6.6	1.7	0.0	0.0	0.0	0.0
77.5°	24.8	28.1	28.1	23.1	14.9	5.0	0.0	0.0	0.0	0.0	0.0
80°	19.8	21.5	23.1	21.5	13.2	6.6	0.0	0.0	0.0	0.0	0.0
82.5°	24.8	28.1	31.5	28.1	18.2	8.2	3.3	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	5.0	1.7	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	4264.7	4264.7	4264.7	4264.7	4264.7	4264.7	4264.7	4264.7	4264.7	4264.7	4264.7
2.5°	3626.1	3589.7	3641.0	3564.9	3563.3	3564.9	3543.5	3523.5	3555.0	3639.3	3647.7
5°	2767.6	2845.4	2870.2	2951.2	2906.6	2840.4	2853.6	2808.9	2918.1	2966.1	2928.0
7.5°	2014.9	2009.9	2177.0	2186.9	2208.5	2210.1	2206.8	2119.1	2029.8	2049.6	2109.1
10°	1563.3	1478.9	1560.0	1551.7	1604.6	1589.7	1611.3	1517.0	1548.4	1548.4	1586.5
12.5°	1273.8	1184.5	1169.6	1148.0	1169.6	1177.8	1186.1	1167.9	1220.9	1245.7	1272.1
15°	972.7	923.1	909.9	868.5	875.1	898.3	918.1	926.4	909.9	947.9	951.2
17.5°	706.4	704.7	713.0	711.3	704.7	699.7	698.1	676.6	669.9	673.3	686.5
20°	536.0	549.2	577.3	605.4	620.3	602.2	577.3	540.9	526.0	529.3	531.0
22.5°	458.3	478.1	516.1	547.6	562.5	529.3	484.7	453.3	446.7	445.0	443.4
25°	415.2	438.4	466.5	476.4	474.7	454.9	421.8	408.6	405.3	402.0	387.1
27.5°	392.1	400.3	405.3	416.9	421.8	408.6	400.3	380.5	377.2	377.2	367.3
30°	378.8	373.8	380.5	372.2	378.8	368.9	370.5	370.5	362.3	365.6	365.6
32.5°	352.4	354.0	354.0	337.5	342.5	330.8	342.5	352.4	354.0	355.7	368.9
35°	258.1	287.9	302.8	302.8	307.7	299.4	297.8	286.2	271.3	256.4	249.8
37.5°	226.6	238.3	258.1	269.6	278.0	271.3	256.4	238.3	229.9	223.3	216.7
40°	201.8	211.8	225.0	238.3	254.7	246.5	223.3	215.0	205.1	205.1	198.5
42.5°	182.0	187.0	195.2	215.0	233.2	216.7	200.2	193.5	188.6	187.0	185.3
45°	163.7	165.4	173.7	190.2	211.8	195.2	178.6	170.4	172.1	173.7	172.1
47.5°	147.3	150.5	155.5	175.3	188.6	180.3	162.1	157.2	157.2	157.2	158.8
50°	127.4	135.7	145.6	162.1	172.1	167.1	152.2	145.6	142.3	142.3	143.9
52.5°	114.1	120.8	134.0	153.8	167.1	158.8	143.9	134.0	127.4	125.7	129.0
55°	99.2	110.8	132.4	147.3	165.4	157.2	140.6	129.0	117.5	115.8	115.8
57.5°	89.3	107.6	127.4	145.6	160.5	153.8	140.6	125.7	110.8	109.2	109.2
60°	84.4	104.2	124.0	140.6	160.5	150.5	138.9	122.4	105.9	105.9	104.2
62.5°	79.4	97.6	117.5	134.0	153.8	145.6	134.0	117.5	100.9	100.9	97.6
65°	66.2	84.4	97.6	112.5	134.0	125.7	114.1	102.6	89.3	86.0	87.7
67.5°	46.3	57.9	71.1	86.0	99.2	96.0	91.0	82.8	71.1	69.5	67.8
70°	23.1	31.5	43.0	57.9	69.5	66.2	62.8	56.3	49.6	47.9	47.9
72.5°	3.3	9.9	18.2	26.5	36.4	38.0	36.4	34.7	33.1	31.5	33.1
75°	0.0	0.0	0.0	6.6	14.9	18.2	21.5	24.8	24.8	21.5	26.5
77.5°	0.0	0.0	0.0	0.0	1.7	8.2	16.6	21.5	26.5	23.1	31.5
80°	0.0	0.0	0.0	0.0	1.7	9.9	16.6	23.1	26.5	23.1	33.1
82.5°	0.0	0.0	0.0	0.0	1.7	11.6	16.6	21.5	24.8	23.1	29.8
85°	0.0	0.0	0.0	0.0	5.0	9.9	6.6	3.3	1.7	1.7	5.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	4264.7	4264.7	4264.7	4264.7	4264.7	4264.7	4264.7	4264.7	4264.7	4264.7
2.5°	3694.0	3811.4	3937.1	3985.1	4134.0	4246.5	4322.6	4486.4	4511.2	4512.8
5°	2967.7	3027.3	3242.4	3343.2	3564.9	3737.0	3920.6	4185.3	4362.3	4375.6
7.5°	2109.1	2274.6	2365.6	2628.6	2901.5	3171.2	3444.1	3751.9	3957.0	3962.0
10°	1697.3	1804.8	1966.9	2163.8	2393.7	2668.3	3032.2	3389.6	3598.1	3649.3
12.5°	1366.5	1555.0	1740.3	1943.7	2119.1	2325.9	2717.9	3194.4	3366.4	3469.0
15°	1052.1	1224.2	1442.5	1680.7	1879.2	2155.5	2602.1	3146.4	3435.9	3470.6
17.5°	775.8	929.7	1131.5	1356.5	1654.2	2046.3	2622.0	3389.6	3662.6	3720.4
20°	557.5	646.8	805.6	1067.0	1445.8	1918.9	2641.8	3636.1	4051.3	4150.5
22.5°	441.7	478.1	582.3	813.9	1212.6	1784.9	2782.4	4107.5	4585.6	4729.5
25°	383.7	403.7	453.3	641.9	1065.4	1771.7	3007.4	4673.3	5297.0	5401.2
27.5°	370.5	373.8	416.9	589.0	985.9	1684.0	3093.5	5075.3	5740.3	5846.1
30°	390.4	443.4	446.7	498.0	838.7	1510.4	3138.1	5464.1	6115.8	6193.5
32.5°	337.5	320.9	332.5	385.4	737.8	1409.4	3222.5	5803.2	6544.2	6598.8
35°	234.9	246.5	273.0	334.1	645.1	1303.6	3244.0	6177.0	6951.2	7007.5
37.5°	216.7	223.3	244.8	284.5	567.4	1244.0	3214.2	6450.0	7373.0	7450.8
40°	201.8	210.1	221.7	258.1	509.5	1177.8	3172.8	6696.5	7631.1	7823.0
42.5°	190.2	196.9	206.8	246.5	459.9	1111.6	3115.0	7043.9	7862.7	8029.8
45°	177.0	187.0	198.5	239.9	431.8	1067.0	3072.0	7022.4	7996.7	8086.0
47.5°	163.7	180.3	193.5	223.3	423.5	1045.5	3090.2	6941.3	7887.5	7826.3
50°	150.5	172.1	195.2	185.3	403.7	1002.5	3111.7	7052.1	7627.8	7616.2
52.5°	138.9	163.7	182.0	152.2	358.9	961.1	3320.1	7197.7	7811.5	7657.6
55°	122.4	147.3	145.6	122.4	291.2	929.7	3483.8	7201.0	7687.3	7745.3
57.5°	110.8	130.7	114.1	102.6	215.0	777.5	3217.5	6038.0	6580.7	6683.3
60°	102.6	127.4	86.0	81.1	140.6	560.8	2808.9	4676.6	5230.8	5424.4
62.5°	94.3	120.8	67.8	66.2	97.6	398.7	2309.4	3914.0	4507.8	4770.9
65°	82.8	86.0	54.6	51.3	69.5	215.0	1406.2	2694.8	3369.7	3467.4
67.5°	67.8	66.2	44.7	41.4	46.3	104.2	620.3	1349.9	1953.6	2117.5
70°	54.6	54.6	38.0	33.1	33.1	47.9	162.1	537.7	883.4	977.7
72.5°	39.7	41.4	29.8	26.5	24.8	23.1	26.5	107.6	231.6	296.1
75°	34.7	36.4	29.8	23.1	18.2	14.9	11.6	9.9	13.2	21.5
77.5°	38.0	38.0	31.5	21.5	16.6	11.6	6.6	3.3	3.3	1.7
80°	47.9	49.6	41.4	28.1	19.8	13.2	8.2	3.3	1.7	1.7
82.5°	51.3	56.3	46.3	34.7	24.8	14.9	8.2	1.7	0.0	0.0
85°	13.2	21.5	36.4	31.5	24.8	14.9	8.2	1.7	0.0	0.0
87.5°	0.0	1.7	5.0	5.0	6.6	6.6	5.0	1.7	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)