

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: P324269

Luminaire Tested: **GLEON-SA5A-827-U-SLL-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P324269
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-27)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA5A-827-U-SLL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12695 lumens
Efficiency: N/A
Efficacy: 78.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

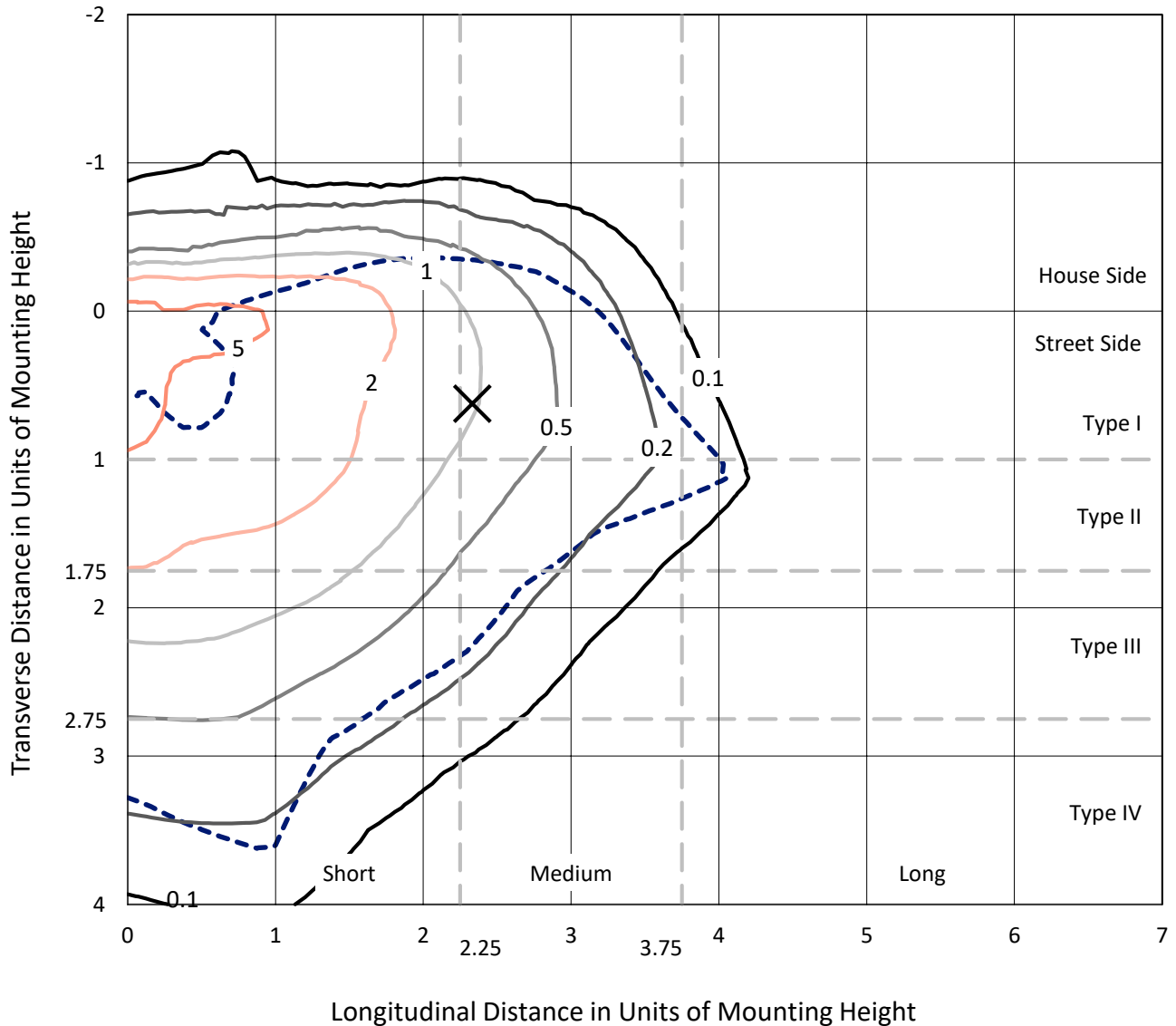
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

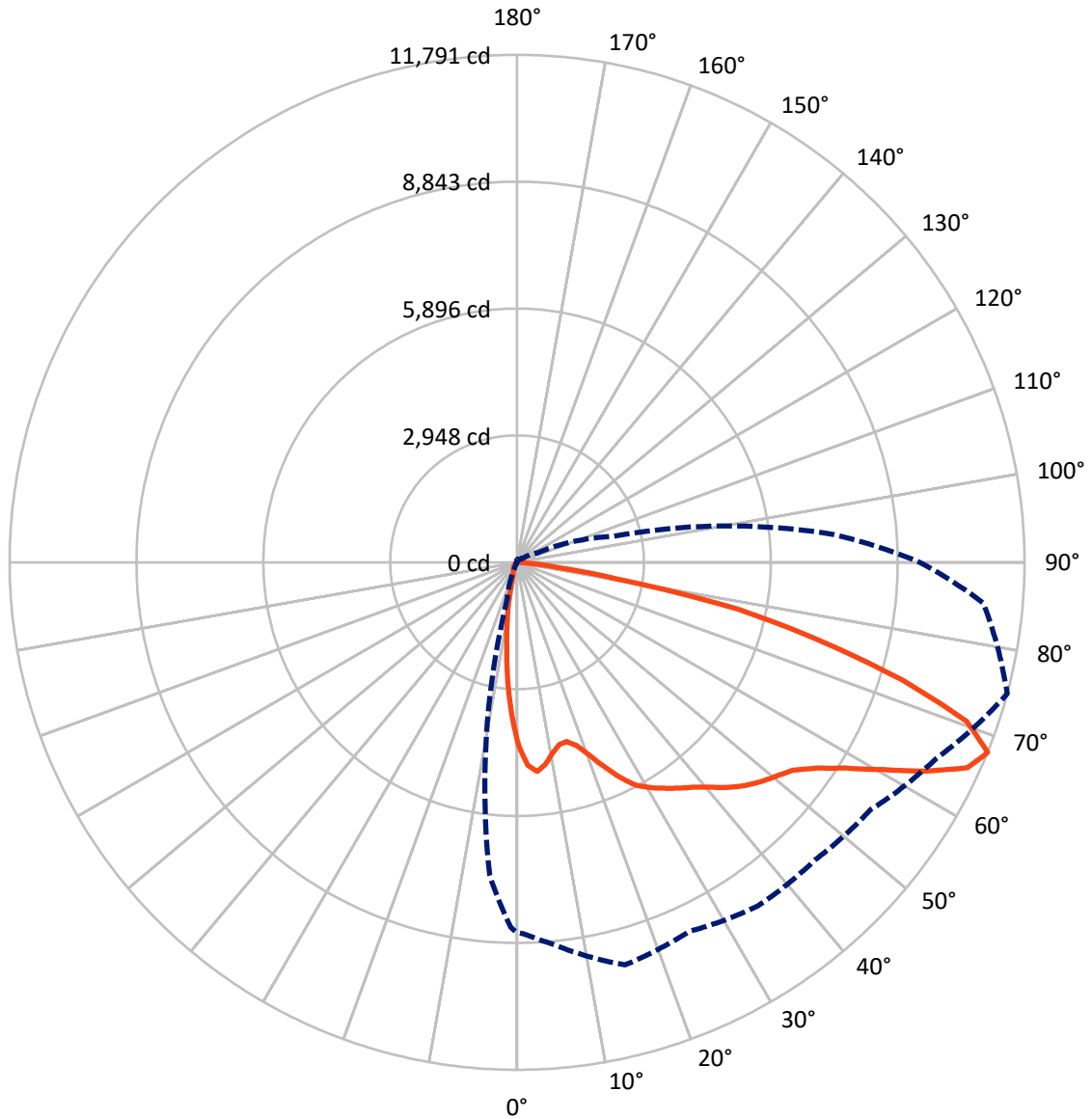
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.8 fc
 Type III - Medium - N/A

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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	1905.0	0.0	1905.0
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	10790.0	0.0	10790.0
	% Fixture	85.0	0.0	85.0
Total	Lumens	12695.0	0.0	12695.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	323.1	2.5
10°-20°	636.1	5.0
20°-30°	899.9	7.1
30°-40°	1323.1	10.4
40°-50°	1901.8	15.0
50°-60°	2677.2	21.1
60°-70°	3126.7	24.6
70°-80°	1595.2	12.6
80°-90°	211.9	1.7
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°	12695.0	100.0
0°-180°	12695.0	100.0

Coefficient of Utilization



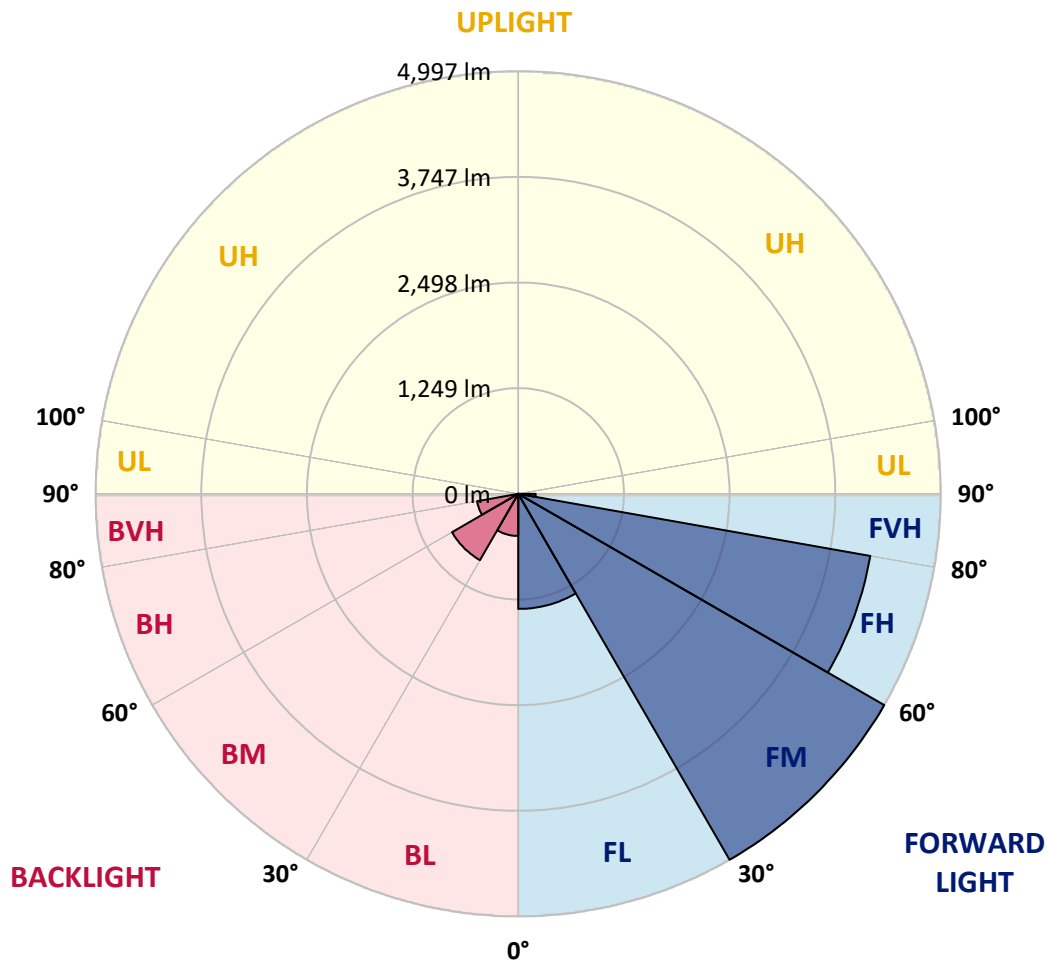
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1360.9	10.7			
FM (30°-60°)	4996.5	39.4			
FH (60°-80°)	4227.1	33.3			G2/5000
FVH (80°-90°)	205.5	1.6			G2/225
BL (0°-30°)	498.2	3.9	B1/500		
BM (30°-60°)	905.6	7.1	B1/1000		
BH (60°-80°)	494.8	3.9	B1/500		G1/500
BVH (80°-90°)	6.4	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	4259.0	4259.0	4259.0	4259.0	4259.0	4259.0	4259.0	4259.0	4259.0	4259.0	4259.0
2.5°	4616.8	4624.0	4661.3	4747.9	4842.3	4849.5	4913.3	4847.7	4825.5	4719.6	4610.2
5°	4651.7	4679.3	4807.4	5061.8	5282.5	5353.5	5404.0	5275.3	5140.0	4881.4	4605.3
7.5°	4370.8	4417.1	4618.6	5096.1	5490.6	5665.0	5698.1	5496.6	5165.2	4739.5	4324.5
10°	4011.2	4064.1	4307.1	4894.0	5435.9	5734.7	5780.4	5516.4	5040.1	4509.7	4020.8
12.5°	3720.1	3782.1	4030.4	4666.7	5247.6	5578.4	5668.6	5449.7	4931.9	4346.8	3813.3
15°	3586.0	3657.0	3918.0	4520.0	5038.9	5299.3	5373.9	5279.5	4871.8	4320.9	3765.2
17.5°	3663.0	3740.0	4009.4	4532.6	4842.9	4954.1	5014.3	5052.8	4871.8	4476.7	3905.9
20°	3978.7	4061.7	4346.8	4660.7	4680.5	4639.0	4703.4	4838.7	4928.3	4772.5	4243.9
22.5°	4415.3	4512.7	4834.5	4880.2	4601.1	4444.2	4452.6	4664.9	5031.1	5147.8	4713.0
25°	4947.5	5066.6	5393.8	5207.3	4634.2	4328.1	4325.1	4521.8	5131.6	5523.7	5235.6
27.5°	5476.1	5607.2	5894.7	5606.6	4770.7	4307.1	4301.1	4478.5	5229.6	5858.0	5806.3
30°	5919.4	6046.9	6294.6	5895.9	4918.1	4356.4	4327.5	4524.8	5287.9	6075.1	6222.5
32.5°	6280.2	6382.4	6582.7	6095.0	5075.6	4452.0	4389.5	4648.6	5387.1	6258.5	6604.9
35°	6677.1	6784.7	6864.7	6284.4	5252.4	4589.7	4500.1	4845.3	5539.9	6445.0	7024.1
37.5°	7129.9	7237.0	7227.4	6457.6	5476.7	4817.6	4760.5	5156.8	5777.4	6629.6	7492.0
40°	7573.1	7682.6	7604.4	6647.0	5740.1	5193.5	5151.4	5624.7	6095.6	6865.9	8040.4
42.5°	7988.1	8106.6	7939.4	6826.2	6054.1	5667.4	5739.5	6227.3	6493.7	7157.0	8513.1
45°	8322.5	8443.3	8220.2	7000.6	6384.8	6242.3	6459.4	6894.8	6972.4	7403.0	8832.4
47.5°	8565.4	8679.7	8415.1	7175.0	6808.2	6945.3	7323.6	7594.8	7404.8	7616.4	9059.2
50°	8720.6	8809.6	8472.2	7393.3	7363.9	7765.6	8223.8	8356.1	7811.9	7808.9	9334.6
52.5°	8819.2	8859.5	8514.3	7621.3	7943.6	8658.6	9105.5	9147.0	8231.1	8020.6	9705.6
55°	9159.0	9191.5	8812.6	7897.3	8422.9	9441.0	9902.9	9864.4	8705.5	8434.9	10143.4
57.5°	9738.7	9773.0	9429.0	8294.2	8810.8	9924.5	10480.8	10550.0	9261.8	9017.1	10612.5
60°	10029.8	10093.5	9970.8	8796.9	9186.6	10233.6	10874.7	11095.4	9957.0	9784.4	11067.1
62.5°	9765.8	9858.4	10036.4	9354.4	9560.1	10403.8	10997.4	11290.9	10669.0	10678.7	11347.4
65°	9239.0	9312.9	9614.8	9659.9	9776.6	10382.8	10694.3	11017.8	11105.0	11500.1	11332.4
67.5°	8602.7	8630.4	8886.6	9684.0	9462.7	9750.1	9783.8	10023.2	10760.4	11791.2	10877.1
70°	7686.8	7701.8	7925.6	8878.7	8131.8	8195.0	8145.1	8193.8	9251.0	11082.2	9727.9
72.5°	6186.4	6224.3	6542.4	7373.5	5924.2	5742.0	6134.1	6112.4	7124.5	9362.8	7224.9
75°	4554.8	4620.4	5100.9	5939.2	4157.9	3761.0	4047.3	4123.6	5064.8	7242.4	4518.1
77.5°	3189.1	3237.8	3703.3	4366.0	3009.3	2689.4	2585.9	2676.7	3343.1	5239.2	2276.2
80°	1837.2	1855.2	2152.3	2521.0	2027.8	2320.1	2101.8	2164.4	2003.2	2330.9	979.0
82.5°	1202.2	1205.2	1321.2	1500.4	1262.9	1467.4	1086.1	1388.6	1232.2	936.3	318.7
85°	649.5	653.1	766.2	1065.0	715.0	404.1	237.5	487.7	761.9	214.7	87.2
87.5°	71.6	65.6	230.9	387.3	198.5	36.7	12.6	54.7	122.1	13.8	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°	4259.0	4259.0	4259.0	4259.0	4259.0	4259.0	4259.0	4259.0	4259.0	4259.0	4259.0
2.5°	4554.2	4504.3	4379.8	4248.1	4142.3	4043.1	3943.2	3821.2	3726.7	3707.5	3676.2
5°	4456.8	4298.6	4037.6	3775.4	3564.4	3298.0	3129.0	2997.3	2868.6	2860.8	2834.9
7.5°	4116.4	3908.4	3540.9	3178.3	2881.2	2627.4	2371.2	2199.8	2065.1	2017.6	1989.4
10°	3789.3	3555.3	3096.5	2682.7	2417.5	2193.2	2012.8	1833.6	1671.2	1559.4	1508.9
12.5°	3560.8	3302.2	2796.4	2439.8	2249.8	2036.9	1816.8	1593.0	1406.0	1271.3	1188.9
15°	3472.4	3196.3	2696.0	2343.6	2109.0	1839.6	1558.2	1302.6	1095.1	973.0	899.1
17.5°	3577.6	3256.5	2688.2	2226.3	1898.5	1563.6	1252.7	950.8	755.3	662.7	615.2
20°	3844.6	3447.7	2685.2	2082.6	1648.4	1236.4	848.5	625.4	507.0	455.2	433.0
22.5°	4222.3	3691.9	2709.2	1940.6	1388.0	883.4	585.7	459.5	398.7	371.0	358.4
25°	4708.2	4034.6	2777.2	1812.0	1143.2	659.1	456.4	384.9	342.2	320.5	311.5
27.5°	5226.0	4429.1	2883.0	1700.1	944.2	525.6	390.9	329.6	298.9	283.9	275.4
30°	5652.9	4886.2	2990.0	1575.6	799.8	458.2	357.8	300.7	265.2	255.6	247.8
32.5°	6026.4	5232.0	3065.8	1463.2	705.4	407.1	323.5	268.8	244.8	226.1	217.7
35°	6413.1	5520.0	3063.4	1384.4	640.5	368.6	294.7	240.6	211.7	190.0	183.4
37.5°	6831.6	5845.4	3011.1	1317.0	612.2	338.0	278.4	225.5	196.7	175.0	166.6
40°	7321.8	6187.0	2957.6	1253.9	604.4	313.3	267.0	213.5	182.8	161.8	153.4
42.5°	7799.3	6494.9	2910.7	1207.0	570.7	312.7	256.8	204.5	172.0	151.5	141.9
45°	8181.1	6781.7	2901.6	1178.7	535.2	323.5	251.4	198.5	163.6	143.1	134.1
47.5°	8498.7	7093.2	2959.4	1158.9	501.5	295.3	264.6	194.2	155.8	135.9	125.7
50°	8876.3	7475.7	3095.3	1126.4	466.1	265.8	303.1	195.4	149.1	128.7	117.9
52.5°	9403.1	8004.9	3294.9	1071.7	417.4	238.7	298.3	196.7	141.9	120.9	110.1
55°	9993.7	8665.8	3509.6	980.8	349.4	203.3	255.6	188.2	128.1	112.5	102.2
57.5°	10614.3	9265.4	3637.1	872.6	277.8	175.6	204.5	171.4	113.1	101.0	94.4
60°	10711.7	9493.3	3578.8	739.7	220.7	152.7	151.5	174.4	101.0	89.0	84.2
62.5°	10469.4	9207.1	3296.8	621.2	184.6	134.1	124.5	152.1	91.4	79.4	74.6
65°	10003.3	8433.1	2839.7	559.9	171.4	114.9	103.4	107.0	80.0	69.2	64.9
67.5°	9355.0	7400.0	2331.5	525.0	169.6	98.6	88.4	81.2	69.2	60.1	56.5
70°	8029.6	6164.7	1860.1	505.8	164.8	83.0	74.6	66.2	57.7	51.1	48.1
72.5°	5909.7	4368.4	1446.9	484.7	166.0	66.2	64.9	54.7	46.3	39.7	38.5
75°	3414.6	2495.7	949.0	392.7	158.2	51.1	54.1	38.5	32.5	27.7	27.7
77.5°	1819.8	1522.1	361.4	163.6	57.7	32.5	30.7	22.9	20.4	16.8	16.2
80°	793.2	669.9	108.8	45.7	31.9	17.4	11.4	10.2	9.0	7.2	6.6
82.5°	280.8	242.4	35.5	22.3	13.8	0.0	0.0	0.0	0.0	0.0	0.0
85°	63.7	45.7	0.0	5.4	0.0	0.0	0.0	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°	4259.0	4259.0	4259.0	4259.0	4259.0	4259.0	4259.0	4259.0	4259.0	4259.0	4259.0
2.5°	3612.5	3599.2	3521.1	3524.1	3537.9	3557.7	3510.8	3532.5	3590.8	3646.8	3667.8
5°	2793.4	2796.4	2748.9	2778.4	2804.8	2822.9	2747.1	2748.3	2794.6	2857.7	2890.8
7.5°	1968.3	1963.5	1965.9	2036.3	2086.2	2050.1	2078.4	1980.3	1986.3	2031.5	1997.8
10°	1463.2	1397.0	1359.7	1412.6	1467.4	1447.5	1398.8	1366.9	1389.2	1439.1	1435.5
12.5°	1149.8	1054.8	998.9	961.0	1006.1	968.8	967.6	940.0	909.9	915.3	995.3
15°	864.8	795.6	729.5	668.7	667.5	654.9	590.6	518.4	512.4	516.0	557.5
17.5°	594.8	571.3	544.2	491.9	478.1	425.2	362.6	333.8	319.3	325.9	339.8
20°	418.0	408.9	411.9	383.7	363.8	313.3	276.6	265.2	262.8	269.4	276.0
22.5°	346.4	330.2	328.4	315.7	295.9	259.2	239.3	232.7	229.7	235.7	240.6
25°	303.1	286.9	280.2	272.4	251.4	226.1	214.1	208.1	205.1	208.7	211.7
27.5°	267.0	252.0	246.0	240.6	220.1	202.1	192.4	187.0	184.6	185.8	188.8
30°	239.9	226.7	218.9	212.3	194.8	182.2	173.8	168.4	166.0	166.0	169.0
32.5°	211.7	204.5	197.3	188.8	172.6	164.2	155.8	149.7	147.3	147.9	150.3
35°	176.2	173.8	175.6	167.8	154.0	146.7	138.3	131.7	129.9	130.5	132.9
37.5°	156.4	145.5	152.1	147.9	140.1	130.5	119.7	113.7	110.7	112.5	113.7
40°	143.7	130.5	125.7	129.9	128.7	113.1	103.4	97.4	95.0	95.6	96.8
42.5°	132.9	117.3	106.4	105.8	113.1	98.6	88.4	83.0	80.0	80.0	81.2
45°	122.7	105.8	92.6	82.4	95.0	83.6	74.0	69.2	65.6	65.6	66.2
47.5°	114.9	96.2	80.6	67.4	71.6	68.6	60.7	55.9	52.3	52.3	52.9
50°	107.6	86.6	69.8	56.5	53.5	56.5	49.3	43.9	41.5	40.9	42.1
52.5°	99.8	77.0	59.5	48.1	42.1	42.7	38.5	34.9	31.9	31.9	33.1
55°	92.0	69.2	51.7	40.9	34.9	31.9	30.7	28.3	25.9	25.9	27.1
57.5°	84.2	60.7	43.9	33.7	27.7	25.3	25.3	23.5	21.6	21.6	22.9
60°	77.0	52.3	36.1	27.7	21.6	21.0	21.6	19.8	18.6	18.6	19.8
62.5°	68.6	44.5	29.5	22.9	17.4	16.8	18.6	17.4	16.2	16.2	17.4
65°	58.3	37.9	23.5	17.4	13.2	13.2	15.6	14.4	13.2	13.2	14.4
67.5°	49.3	31.9	18.0	12.6	9.6	10.2	13.2	12.0	11.4	11.4	12.6
70°	40.9	24.7	12.6	7.8	5.4	7.8	10.2	10.2	10.2	10.2	11.4
72.5°	30.7	16.8	7.2	3.0	2.4	5.4	8.4	9.6	9.0	9.0	10.8
75°	19.8	9.6	2.4	0.0	0.0	3.0	6.6	7.8	7.8	7.2	9.0
77.5°	11.4	3.0	0.0	0.0	0.0	0.0	4.2	3.6	3.0	2.4	4.2
80°	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	4259.0	4259.0	4259.0	4259.0	4259.0	4259.0	4259.0	4259.0	4259.0	4259.0
2.5°	3752.6	3823.6	3923.4	4029.2	4192.2	4321.5	4448.4	4557.2	4599.3	4616.8
5°	2970.2	3074.2	3220.4	3408.0	3702.1	3966.7	4234.9	4504.9	4622.2	4651.7
7.5°	2131.3	2264.2	2450.0	2685.2	3029.7	3372.5	3747.2	4143.5	4325.1	4370.8
10°	1577.4	1739.8	1952.7	2200.4	2529.4	2881.8	3290.1	3743.0	3950.4	4011.2
12.5°	1119.2	1338.7	1623.7	1925.0	2210.1	2524.6	2937.7	3436.9	3654.6	3720.1
15°	657.3	869.6	1207.0	1610.5	1975.5	2294.3	2714.0	3279.9	3519.9	3586.0
17.5°	377.1	482.9	737.9	1187.7	1683.3	2124.7	2643.7	3319.0	3601.6	3663.0
20°	288.1	321.7	425.2	765.0	1341.7	1958.1	2643.7	3540.3	3888.5	3978.7
22.5°	252.0	276.6	318.7	456.4	987.5	1779.5	2674.3	3860.2	4315.5	4415.3
25°	223.7	246.0	282.0	343.4	673.5	1567.2	2747.1	4252.9	4818.2	4947.5
27.5°	200.3	221.3	253.8	300.7	460.7	1311.0	2845.1	4713.6	5372.7	5476.1
30°	179.2	199.1	228.5	261.6	355.4	1020.5	2928.7	5147.8	5808.1	5919.4
32.5°	159.4	177.4	203.9	228.5	291.1	754.7	2937.7	5491.8	6169.5	6280.2
35°	140.7	157.0	181.0	200.3	241.2	596.0	2797.6	5790.1	6531.0	6677.1
37.5°	122.7	138.3	159.4	173.8	212.3	485.9	2583.5	6122.6	6994.6	7129.9
40°	105.8	119.7	141.3	150.9	200.9	373.5	2350.8	6471.4	7449.3	7573.1
42.5°	90.2	103.4	124.5	143.1	176.2	279.0	2099.4	6798.6	7858.2	7988.1
45°	75.2	89.0	110.1	151.5	146.1	208.7	1830.6	7015.7	8181.1	8322.5
47.5°	60.7	76.4	105.2	144.3	116.7	153.4	1617.7	7221.3	8425.9	8565.4
50°	48.7	64.3	118.5	128.7	95.6	117.3	1528.7	7405.4	8586.5	8720.6
52.5°	39.7	54.1	111.9	98.6	80.0	96.8	1576.8	7703.6	8735.0	8819.2
55°	33.1	42.7	67.4	68.6	68.0	82.4	1636.3	8131.8	9119.3	9159.0
57.5°	28.9	34.3	46.9	52.9	57.1	73.4	1637.6	8746.4	9714.1	9738.7
60°	24.7	30.1	39.1	42.7	49.3	65.6	1578.0	8961.1	9948.0	10029.8
62.5°	21.6	26.5	32.5	35.5	41.5	58.9	1438.5	8650.2	9626.9	9765.8
65°	19.2	24.1	27.1	30.1	36.7	52.9	1208.8	8028.4	9094.0	9239.0
67.5°	16.8	21.0	24.1	27.1	33.1	46.9	890.0	7306.1	8482.4	8602.7
70°	15.0	18.6	21.6	24.1	28.9	39.7	540.0	6199.6	7636.9	7686.8
72.5°	14.4	16.8	19.8	21.6	25.3	34.9	273.6	4556.0	6105.2	6186.4
75°	12.6	15.0	18.0	19.2	22.3	30.1	111.3	2992.5	4424.3	4554.8
77.5°	10.2	13.8	16.2	17.4	19.2	24.7	56.5	1912.4	3104.9	3189.1
80°	3.6	10.2	13.8	14.4	16.2	18.0	37.3	1047.0	1801.1	1837.2
82.5°	0.0	6.6	10.8	10.2	11.4	13.8	24.1	497.9	1188.9	1202.2
85°	0.0	3.0	8.4	6.6	4.8	9.6	8.4	108.8	623.6	649.5
87.5°	0.0	0.0	0.6	3.0	2.4	3.6	1.2	0.6	56.5	71.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)