

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: P650857

Luminaire Tested: **GALN-SA4C-840-U-SLL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P650857
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-20)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4C-840-U-SLL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20161.3 lumens
Efficiency: N/A
Efficacy: 94.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G4

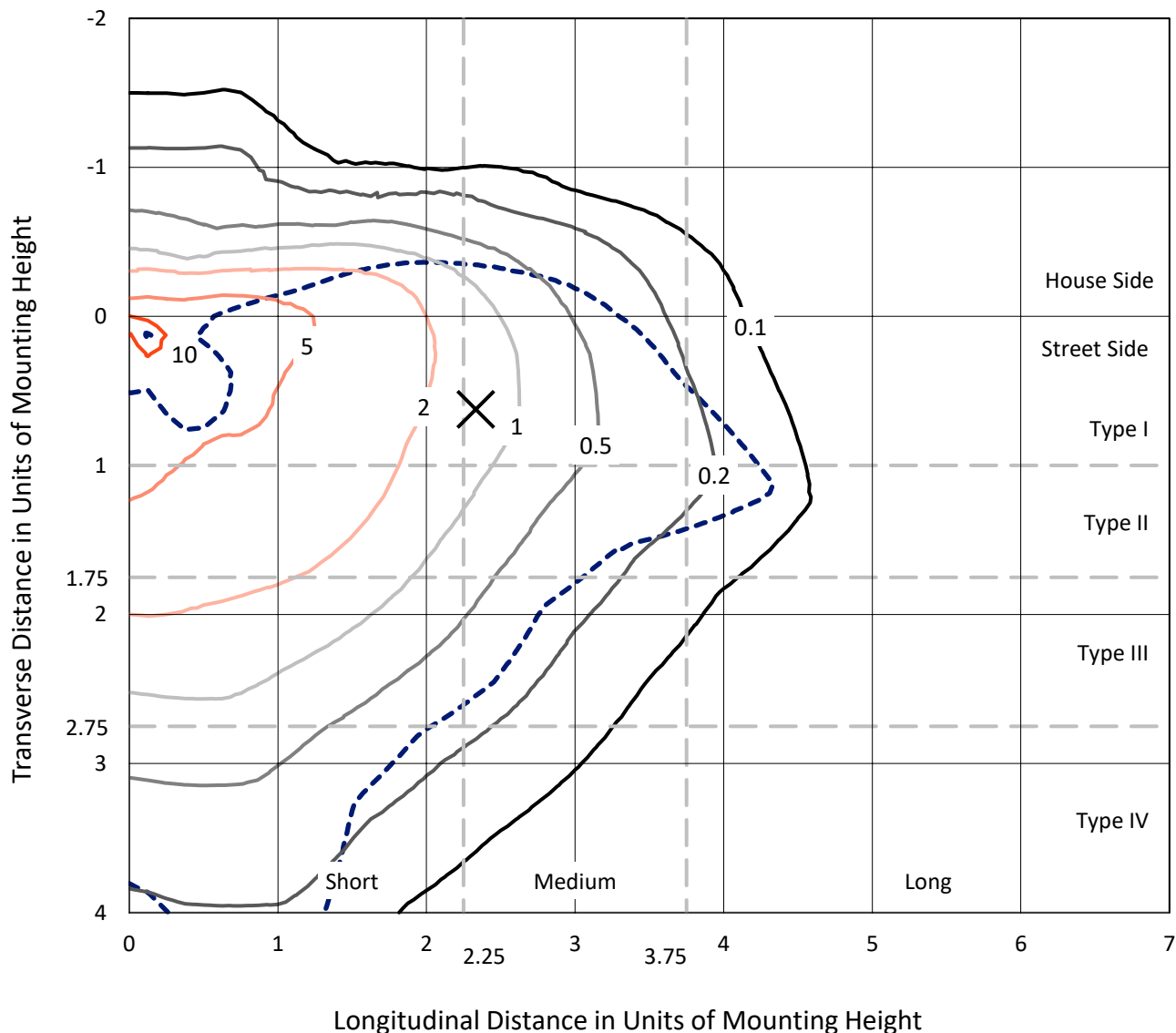
Input Watts (W): 213
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

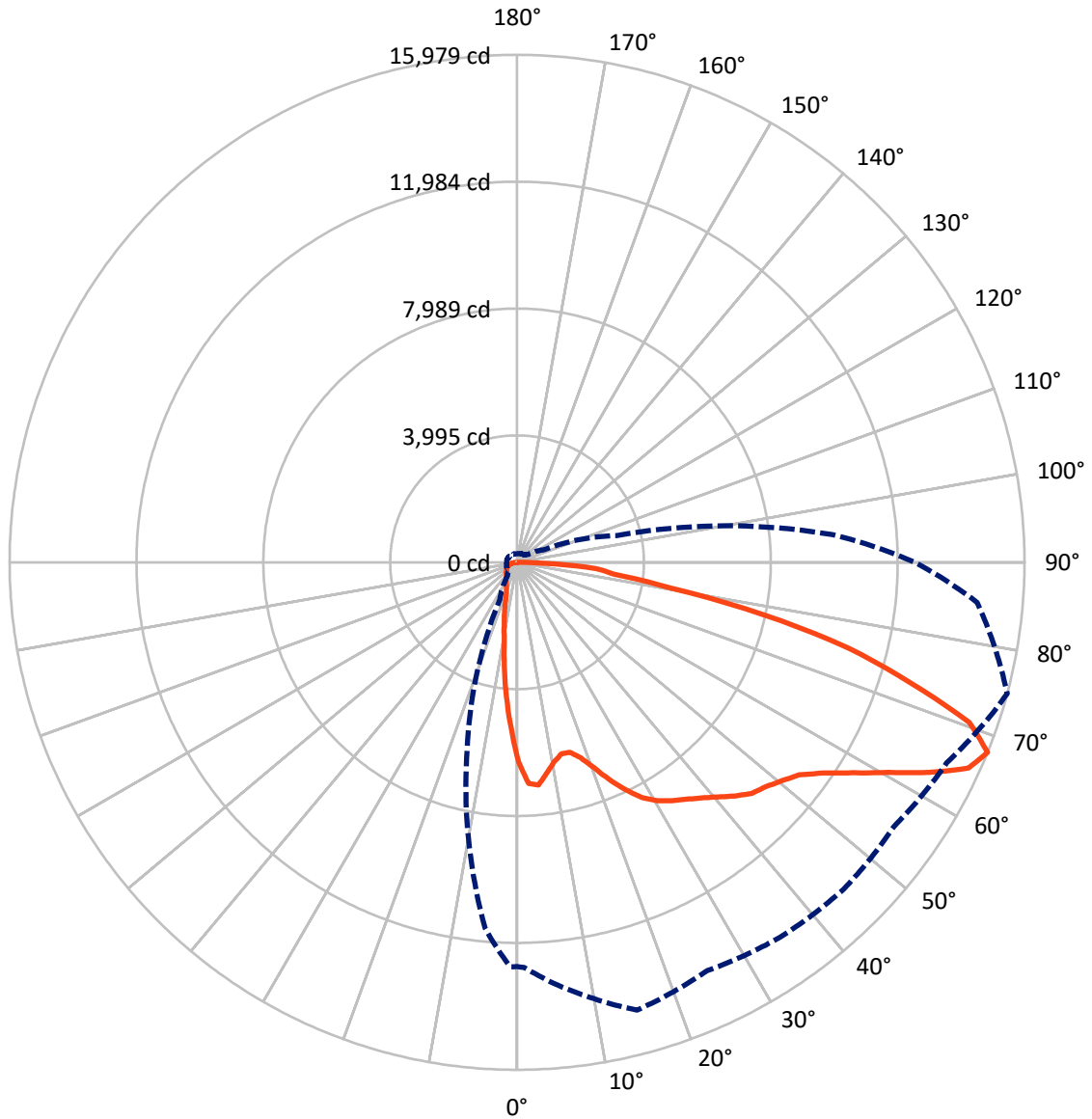
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.4 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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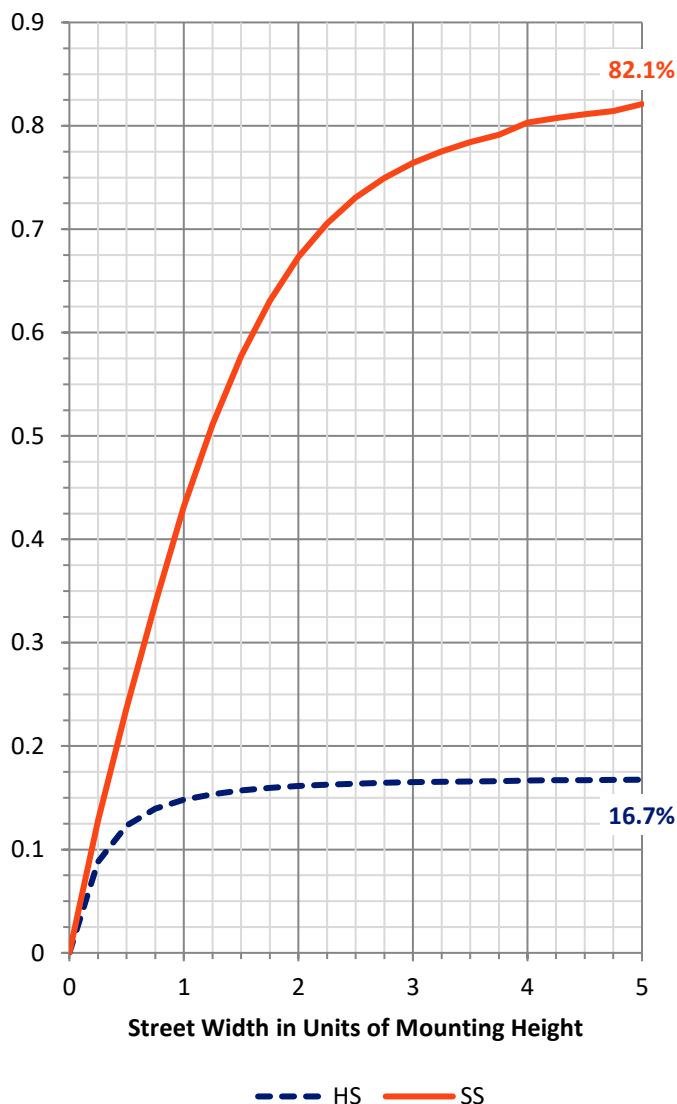
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3407.7	0.0	3407.7
	% Fixture	16.9	0.0	16.9
Street Side	Lumens	16753.6	0.0	16753.6
	% Fixture	83.1	0.0	83.1
Total	Lumens	20161.3	0.0	20161.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	477.8	2.4
10°-20°	996.4	4.9
20°-30°	1433.8	7.1
30°-40°	2065.0	10.2
40°-50°	2900.8	14.4
50°-60°	4045.6	20.1
60°-70°	4810.0	23.9
70°-80°	2832.8	14.1
80°-90°	599.0	3.0
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°	20161.3	100.0
0°-180°	20161.3	100.0

Coefficient of Utilization

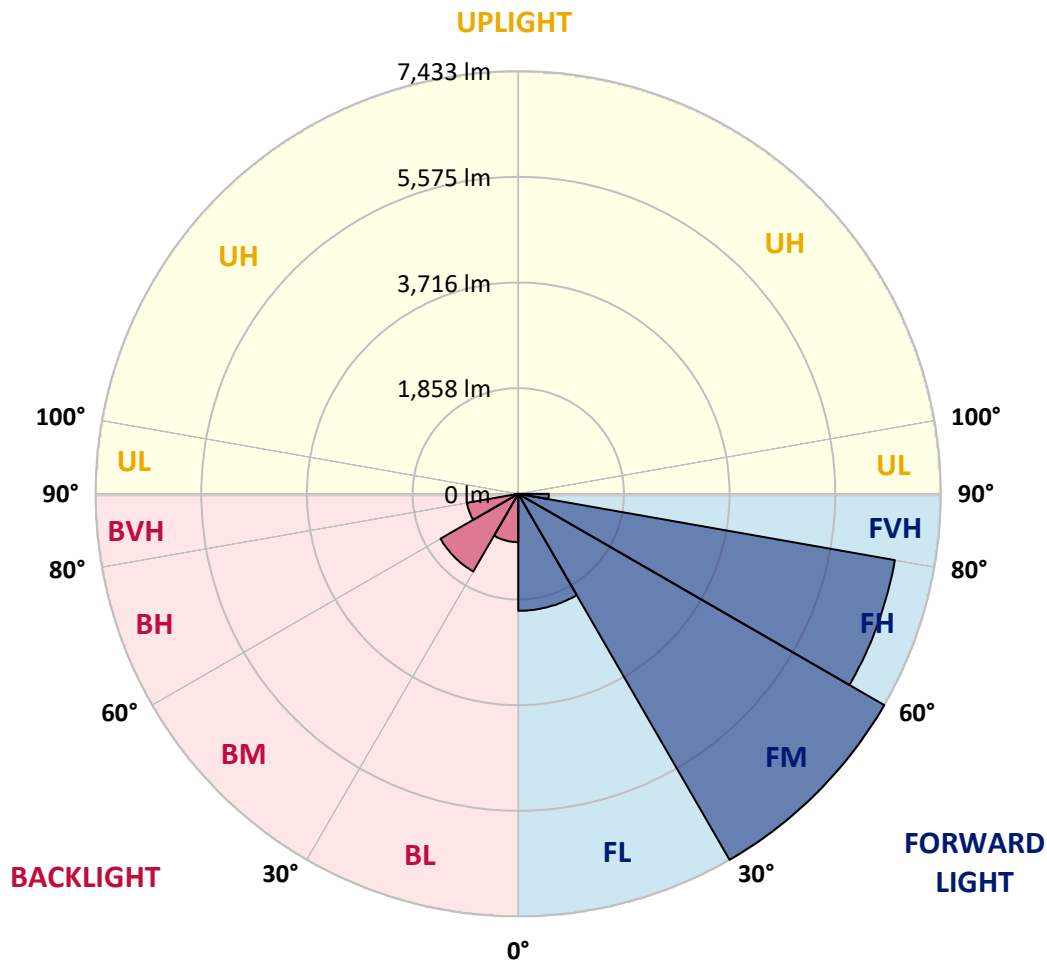


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2057.9	10.2			
FM (30°-60°)	7432.7	36.9			
FH (60°-80°)	6725.9	33.4			G3/7500
FVH (80°-90°)	537.1	2.7			G4/750
BL (0°-30°)	850.0	4.2	B2/1000		
BM (30°-60°)	1578.8	7.8	B2/2500		
BH (60°-80°)	916.9	4.5	B2/1000		G2/1000
BVH (80°-90°)	62.0	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	6298.8	6298.8	6298.8	6298.8	6298.8	6298.8	6298.8	6298.8	6298.8	6298.8	6298.8
2.5°	6791.4	6800.5	6858.7	7028.1	7144.4	7187.1	7216.8	7161.2	7106.9	6975.0	6775.9
5°	6770.7	6823.8	6975.0	7355.1	7655.1	7784.4	7823.2	7656.4	7381.0	7042.3	6635.0
7.5°	6375.1	6446.3	6679.0	7316.4	7845.1	8147.7	8107.6	7806.3	7309.9	6706.1	6137.3
10°	5905.8	5984.7	6265.3	7035.8	7717.2	8133.5	8133.5	7766.3	7106.9	6389.3	5733.9
12.5°	5533.5	5616.2	5936.9	6747.5	7450.8	7845.1	7911.0	7595.6	6960.8	6189.0	5468.9
15°	5410.7	5490.8	5836.0	6572.9	7168.9	7409.5	7431.4	7328.0	6889.7	6203.2	5457.2
17.5°	5563.2	5666.7	6015.8	6624.6	6910.4	6924.6	6941.4	7022.9	6897.5	6463.1	5692.5
20°	6004.1	6115.2	6479.9	6791.4	6684.1	6536.8	6545.8	6755.2	6989.3	6892.3	6254.9
22.5°	6640.2	6737.2	7110.8	7084.9	6588.5	6284.6	6221.3	6513.5	7125.0	7427.5	6853.5
25°	7326.7	7440.5	7869.7	7520.6	6615.6	6134.7	6094.6	6371.2	7265.9	7927.9	7545.2
27.5°	8112.8	8224.0	8562.6	7960.2	6757.9	6123.1	6075.2	6358.3	7392.6	8390.7	8205.9
30°	8697.1	8799.3	9029.4	8329.9	6932.4	6200.6	6141.2	6460.5	7501.2	8707.5	8849.7
32.5°	9156.1	9262.1	9387.5	8560.1	7162.5	6341.6	6231.6	6646.7	7643.4	8949.2	9326.8
35°	9634.5	9759.9	9750.8	8764.4	7377.1	6504.5	6397.2	6915.5	7867.1	9160.0	9931.8
37.5°	10240.9	10291.2	10226.6	8948.0	7634.4	6797.9	6738.4	7315.1	8185.2	9414.7	10639.1
40°	10856.2	10957.1	10624.8	9170.3	7947.3	7350.0	7343.5	7905.9	8562.6	9713.3	11324.2
42.5°	11383.7	11469.1	10997.2	9364.3	8326.1	8023.6	8072.7	8698.5	9057.8	10059.8	11875.0
45°	11780.6	11856.9	11341.1	9551.7	8825.1	8801.8	9091.5	9547.9	9682.3	10371.4	12198.2
47.5°	12118.1	12191.8	11580.2	9836.2	9441.8	9731.5	10235.6	10433.4	10216.3	10549.8	12560.3
50°	12402.5	12424.5	11744.4	10174.9	10207.2	10870.4	11359.1	11487.1	10743.8	10805.8	12874.4
52.5°	12698.6	12670.2	12027.6	10601.6	11034.7	11951.3	12306.9	12440.0	11249.3	11121.3	13332.1
55°	13361.8	13389.0	12662.3	11139.4	11871.1	13012.7	13480.7	13352.7	11809.1	11701.8	13913.8
57.5°	14163.4	14140.2	13555.7	11981.1	12723.2	14000.5	14349.6	14144.0	12556.4	12499.4	14503.4
60°	14475.0	14506.0	14303.1	12886.1	13563.5	14865.4	15222.3	14902.9	13452.3	13426.5	14948.2
62.5°	14162.1	14336.6	14473.7	13691.5	14279.8	15501.5	15855.8	15491.1	14387.1	14574.5	15259.8
65°	13538.9	13576.4	14043.2	14374.1	14625.0	15606.3	15791.1	15597.2	15167.9	15620.5	15245.6
67.5°	12729.6	12761.9	13308.8	14597.8	14180.2	14416.8	14546.1	14489.2	14926.2	15978.6	14543.5
70°	11959.0	11933.2	12511.1	14027.6	12344.4	11984.9	12092.2	11913.8	12879.6	15103.4	13166.6
72.5°	10459.3	10552.4	11173.0	12442.6	9774.1	9189.7	9423.7	8962.2	9906.0	12935.2	10686.8
75°	8192.9	8214.9	9250.5	10442.5	7373.2	6451.4	6768.2	6575.5	7587.8	10790.3	7379.7
77.5°	5673.1	5624.0	6737.2	7975.7	5258.1	4722.9	4728.0	4636.3	5298.2	7944.7	5013.8
80°	3603.3	3528.2	4217.4	4927.2	3613.6	3865.7	3739.0	3735.1	3449.4	4901.3	3031.8
82.5°	1947.1	2029.8	2664.6	3088.7	2592.2	2987.8	2738.3	2658.1	2367.2	3068.0	1939.3
85°	886.9	964.5	1420.9	2100.9	1969.0	1991.0	1330.4	1569.6	1958.7	2491.4	1035.6
87.5°	86.6	111.2	293.5	991.6	672.3	530.1	197.8	381.4	492.6	885.7	82.8
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°	6298.8	6298.8	6298.8	6298.8	6298.8	6298.8	6298.8	6298.8	6298.8	6298.8	6298.8
2.5°	6694.4	6627.2	6398.4	6209.7	6009.3	5856.7	5657.6	5524.4	5432.6	5294.3	5277.5
5°	6386.8	6222.6	5824.3	5418.4	5068.0	4804.3	4536.7	4291.0	4146.2	4101.0	4042.8
7.5°	5868.3	5591.6	5079.7	4614.2	4212.1	3819.1	3516.6	3302.0	3158.5	3074.4	2973.6
10°	5441.7	5121.1	4497.9	3927.7	3596.8	3352.4	3086.0	2856.0	2678.8	2527.5	2444.8
12.5°	5154.7	4792.7	4092.0	3629.1	3373.1	3113.2	2801.6	2543.1	2281.9	2110.0	2036.2
15°	5068.0	4685.4	3966.5	3480.4	3113.2	2773.2	2424.1	2086.7	1828.1	1665.2	1610.9
17.5°	5280.1	4817.2	3965.2	3282.6	2808.1	2402.1	1954.8	1638.1	1373.0	1251.5	1212.7
20°	5675.7	5070.6	3976.8	3087.4	2477.2	1905.7	1422.1	1162.3	1035.6	983.9	964.5
22.5°	6227.8	5457.2	4011.7	2894.7	2115.1	1463.5	1065.3	933.4	888.2	879.2	875.3
25°	6907.8	5935.6	4129.4	2721.5	1810.0	1117.0	890.8	831.3	805.4	796.4	795.1
27.5°	7533.6	6553.6	4271.6	2572.8	1515.2	963.2	805.4	755.0	729.1	727.9	730.5
30°	8098.6	7070.7	4390.6	2406.0	1291.6	855.9	749.8	699.5	674.9	673.6	681.4
32.5°	8587.3	7496.1	4478.5	2241.9	1167.5	790.0	699.5	645.1	624.4	620.6	624.4
35°	9109.5	7920.1	4438.5	2113.9	1096.3	735.6	662.0	609.0	584.4	572.7	572.7
37.5°	9705.6	8357.1	4369.9	2007.8	1064.0	690.4	629.7	577.9	553.4	541.7	540.4
40°	10355.9	8794.1	4275.6	1913.4	1031.7	663.2	607.6	553.4	523.6	512.0	509.4
42.5°	10929.9	9167.7	4197.9	1851.4	978.7	668.4	588.3	535.2	497.8	482.2	481.0
45°	11428.9	9544.0	4183.7	1815.2	934.8	660.7	583.1	521.0	477.1	460.3	457.7
47.5°	11819.4	9935.7	4265.2	1794.5	886.9	619.3	616.7	512.0	458.9	440.9	438.2
50°	12295.2	10491.6	4451.3	1751.8	842.9	580.5	651.6	510.7	444.7	421.5	415.0
52.5°	12928.7	11215.7	4703.5	1675.5	779.6	544.3	621.8	510.7	427.9	404.7	397.0
55°	13886.8	12138.7	4950.4	1568.2	690.4	496.4	561.1	495.2	403.3	382.7	377.5
57.5°	14521.5	12813.6	5108.1	1419.6	579.2	461.5	483.6	470.6	378.8	356.8	356.8
60°	14553.8	12994.6	5033.1	1232.1	509.4	429.2	420.2	474.5	356.8	333.5	330.9
62.5°	14181.5	12551.2	4642.7	1064.0	471.9	394.3	380.1	416.3	334.9	311.6	307.7
65°	13599.7	11419.9	3965.2	983.9	451.2	363.3	342.6	341.3	311.6	289.6	284.4
67.5°	12530.5	9979.6	3258.0	937.3	440.9	328.4	309.0	302.5	284.4	266.3	263.7
70°	10954.5	8358.4	2612.9	918.0	435.7	292.2	276.7	269.0	253.4	239.2	237.9
72.5°	8522.6	6779.8	2156.5	905.0	433.1	258.6	241.8	231.4	222.4	209.4	209.4
75°	6121.7	4987.9	1645.8	815.8	400.8	222.4	204.3	197.8	184.9	174.5	177.1
77.5°	3859.2	3358.9	1083.5	599.9	310.3	178.4	162.9	159.0	148.7	134.5	143.5
80°	2606.4	2362.0	632.2	377.5	195.2	130.6	125.4	124.1	112.4	97.0	98.2
82.5°	1773.8	1740.2	328.4	214.6	112.4	76.3	73.7	76.3	63.3	51.7	51.7
85°	693.0	946.4	155.2	84.0	36.2	11.6	16.8	18.1	10.3	5.1	6.5
87.5°	13.0	97.0	3.9	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°	6298.8	6298.8	6298.8	6298.8	6298.8	6298.8	6298.8	6298.8	6298.8	6298.8	6298.8
2.5°	5251.6	5240.0	5259.4	5176.7	5193.4	5224.5	5240.0	5249.0	5377.0	5347.3	5428.7
5°	4097.1	4085.5	4160.4	4170.8	4209.6	4201.8	4239.3	4248.4	4294.9	4311.7	4425.5
7.5°	2980.1	3030.5	3115.8	3159.8	3225.7	3246.4	3227.0	3274.9	3177.9	3247.7	3268.4
10°	2394.4	2333.6	2297.4	2398.3	2411.2	2506.9	2468.1	2437.0	2494.0	2496.5	2550.8
12.5°	1993.6	1863.1	1776.4	1804.9	1835.9	1877.3	1883.7	1945.7	1987.1	2026.0	2058.3
15°	1563.1	1517.8	1439.0	1400.2	1444.2	1461.0	1501.0	1552.7	1596.7	1608.3	1652.3
17.5°	1199.8	1207.5	1194.6	1171.3	1198.5	1211.5	1214.0	1215.3	1226.9	1219.2	1283.8
20°	965.8	992.9	1025.3	1030.4	1039.5	1046.0	1034.3	990.4	991.6	1018.8	1039.5
22.5°	874.0	879.2	915.3	927.0	955.5	943.8	910.2	889.5	886.9	893.4	903.7
25°	801.6	809.4	835.2	853.3	875.3	854.6	830.0	810.6	808.0	814.5	824.9
27.5°	737.0	748.6	771.9	790.0	810.6	791.2	768.0	751.2	749.8	748.6	755.0
30°	685.2	698.1	714.9	735.6	749.8	733.0	711.1	702.1	700.7	698.1	700.7
32.5°	633.5	654.2	671.0	681.4	695.6	682.6	665.8	660.7	651.6	643.9	640.0
35°	575.3	597.3	623.2	636.1	650.3	637.4	625.8	603.8	588.3	586.9	589.5
37.5°	541.7	550.8	571.5	593.4	607.6	601.1	579.2	557.2	553.4	553.4	555.9
40°	512.0	515.9	524.9	553.4	579.2	559.9	532.7	526.2	526.2	524.9	526.2
42.5°	482.2	486.1	486.1	508.1	549.5	518.5	497.8	497.8	497.8	499.0	502.9
45°	455.1	456.4	455.1	470.6	509.4	483.6	469.3	473.2	475.8	478.4	481.0
47.5°	431.9	433.1	431.9	444.7	464.1	453.8	446.1	451.2	456.4	460.3	462.9
50°	411.2	409.8	412.4	420.2	429.2	431.9	426.6	434.4	437.0	442.2	448.6
52.5°	393.0	391.7	394.3	398.2	411.2	411.2	411.2	417.6	422.8	427.9	437.0
55°	372.3	373.7	377.5	382.7	399.5	397.0	398.2	403.3	408.6	416.3	421.5
57.5°	353.0	355.6	360.7	368.4	385.3	384.0	385.3	387.9	394.3	398.2	403.3
60°	330.9	336.1	342.6	347.8	364.6	363.3	369.8	374.9	378.8	378.8	381.4
62.5°	309.0	316.7	323.2	327.1	345.2	346.5	355.6	359.4	362.0	359.4	363.3
65°	287.0	298.6	301.2	306.4	324.5	325.8	336.1	345.2	342.6	340.0	346.5
67.5°	265.0	279.3	278.0	284.4	302.5	305.1	314.2	329.7	324.5	321.9	327.1
70°	240.4	250.8	252.1	256.0	280.6	276.7	290.9	305.1	301.2	302.5	302.5
72.5°	213.4	222.4	222.4	230.1	256.0	249.5	261.1	276.7	276.7	275.3	275.3
75°	181.0	186.2	191.3	203.0	230.1	222.4	230.1	244.3	246.9	244.3	244.3
77.5°	146.1	153.8	156.4	172.0	191.3	190.1	197.8	204.3	209.4	206.9	206.9
80°	103.4	111.2	121.5	138.3	150.0	153.8	157.8	162.9	165.5	165.5	168.0
82.5°	58.2	69.8	78.9	95.7	100.8	120.3	118.9	122.8	118.9	104.7	116.4
85°	13.0	24.6	34.9	44.0	50.5	69.8	73.7	82.8	68.5	63.3	63.3
87.5°	0.0	0.0	0.0	0.0	0.0	10.3	20.7	28.4	24.6	20.7	20.7
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°	6298.8	6298.8	6298.8	6298.8	6298.8	6298.8	6298.8	6298.8	6298.8	6298.8
2.5°	5497.3	5609.8	5745.5	5979.5	6143.8	6320.9	6499.2	6689.3	6739.8	6791.4
5°	4456.5	4677.6	4797.8	5112.0	5441.7	5860.6	6203.2	6578.1	6734.6	6770.7
7.5°	3375.7	3525.6	3841.1	4159.2	4567.7	5007.3	5532.2	6116.6	6298.8	6375.1
10°	2676.2	2880.5	3157.2	3498.5	3856.7	4329.8	4922.0	5604.6	5863.2	5905.8
12.5°	2278.0	2505.6	2806.8	3167.5	3506.3	3863.1	4460.4	5165.0	5441.7	5533.5
15°	1821.7	2097.0	2444.8	2824.9	3193.4	3583.8	4188.9	4984.0	5303.3	5410.7
17.5°	1431.2	1653.6	2029.8	2442.3	2879.2	3373.1	4132.0	5070.6	5463.6	5563.2
20°	1095.1	1254.1	1570.8	2006.5	2518.5	3164.9	4146.2	5397.7	5868.3	6004.1
22.5°	946.4	1027.9	1220.5	1635.5	2208.2	2984.0	4204.4	5846.4	6414.0	6640.2
25°	857.1	899.9	1008.4	1279.9	1912.2	2808.1	4337.5	6450.1	7176.8	7326.7
27.5°	780.9	811.9	879.2	1074.4	1643.2	2645.2	4492.7	7119.8	7889.1	8112.8
30°	708.5	749.8	813.2	954.1	1471.2	2496.5	4688.0	7662.9	8489.0	8697.1
32.5°	652.9	694.2	752.4	870.1	1325.2	2340.1	4804.3	8139.9	8979.0	9156.1
35°	607.6	642.5	703.3	802.9	1214.0	2221.2	4781.0	8518.7	9453.4	9634.5
37.5°	575.3	605.1	665.8	739.5	1130.0	2097.0	4769.4	9019.1	10031.4	10240.9
40°	545.6	576.6	632.2	698.1	1046.0	1951.0	4775.9	9515.5	10646.8	10856.2
42.5°	522.3	557.2	602.5	686.5	959.3	1833.3	4775.9	9947.3	11182.0	11383.7
45°	502.9	540.4	584.4	685.2	890.8	1744.1	4743.6	10318.4	11608.7	11780.6
47.5°	486.1	527.5	590.8	662.0	874.0	1679.5	4715.1	10615.8	11956.5	12118.1
50°	474.5	523.6	628.3	634.8	879.2	1660.0	4852.1	10990.7	12262.9	12402.5
52.5°	465.4	524.9	627.0	594.8	870.1	1673.0	5137.8	11576.4	12688.3	12698.6
55°	447.3	523.6	594.8	549.5	832.6	1695.0	5505.0	12427.0	13354.1	13361.8
57.5°	429.2	509.4	552.0	510.7	756.3	1695.0	5947.2	13232.5	14157.0	14163.4
60°	411.2	530.1	484.8	477.1	656.7	1663.9	6414.0	13586.8	14409.0	14475.0
62.5°	393.0	534.0	433.1	447.3	584.4	1588.9	6761.7	13195.0	14067.7	14162.1
65°	372.3	430.5	399.5	416.3	546.9	1463.5	6651.8	12477.5	13426.5	13538.9
67.5°	347.8	364.6	363.3	384.0	534.0	1278.7	6072.6	11569.9	12736.1	12729.6
70°	318.1	327.1	330.9	353.0	509.4	1135.2	5060.3	10392.1	11814.3	11959.0
72.5°	287.0	294.8	298.6	318.1	484.8	1053.7	3927.7	8769.5	10233.0	10459.3
75°	253.4	258.6	263.7	280.6	458.9	933.4	2797.8	6694.4	7837.4	8192.9
77.5°	218.5	218.5	225.0	241.8	386.6	770.5	1877.3	4695.7	5309.8	5673.1
80°	177.1	178.4	175.9	193.9	284.4	527.5	1066.6	3136.5	3533.4	3603.3
82.5°	135.7	131.9	133.1	142.2	212.0	359.4	568.9	1948.3	1985.9	1947.1
85°	85.4	85.4	82.8	93.1	135.7	187.5	310.3	1193.3	932.2	886.9
87.5°	34.9	28.4	32.3	37.5	64.7	76.3	121.5	245.7	94.4	86.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)