

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: P453625

Luminaire Tested: **GALN-SA4C-830-U-SLL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453625
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-830-U-SLL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 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: 19050 lumens
Efficiency: N/A
Efficacy: 89.4 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

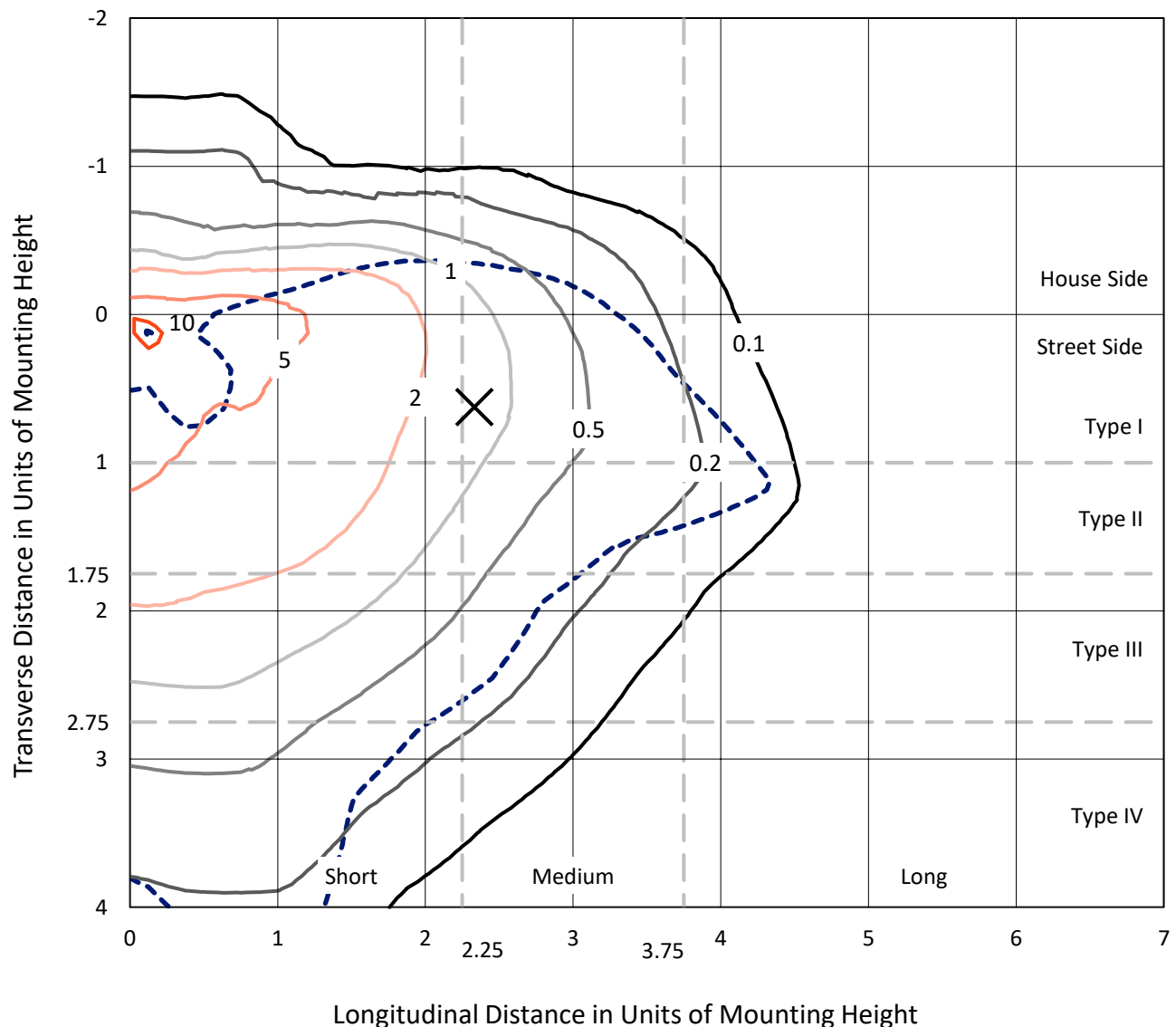


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

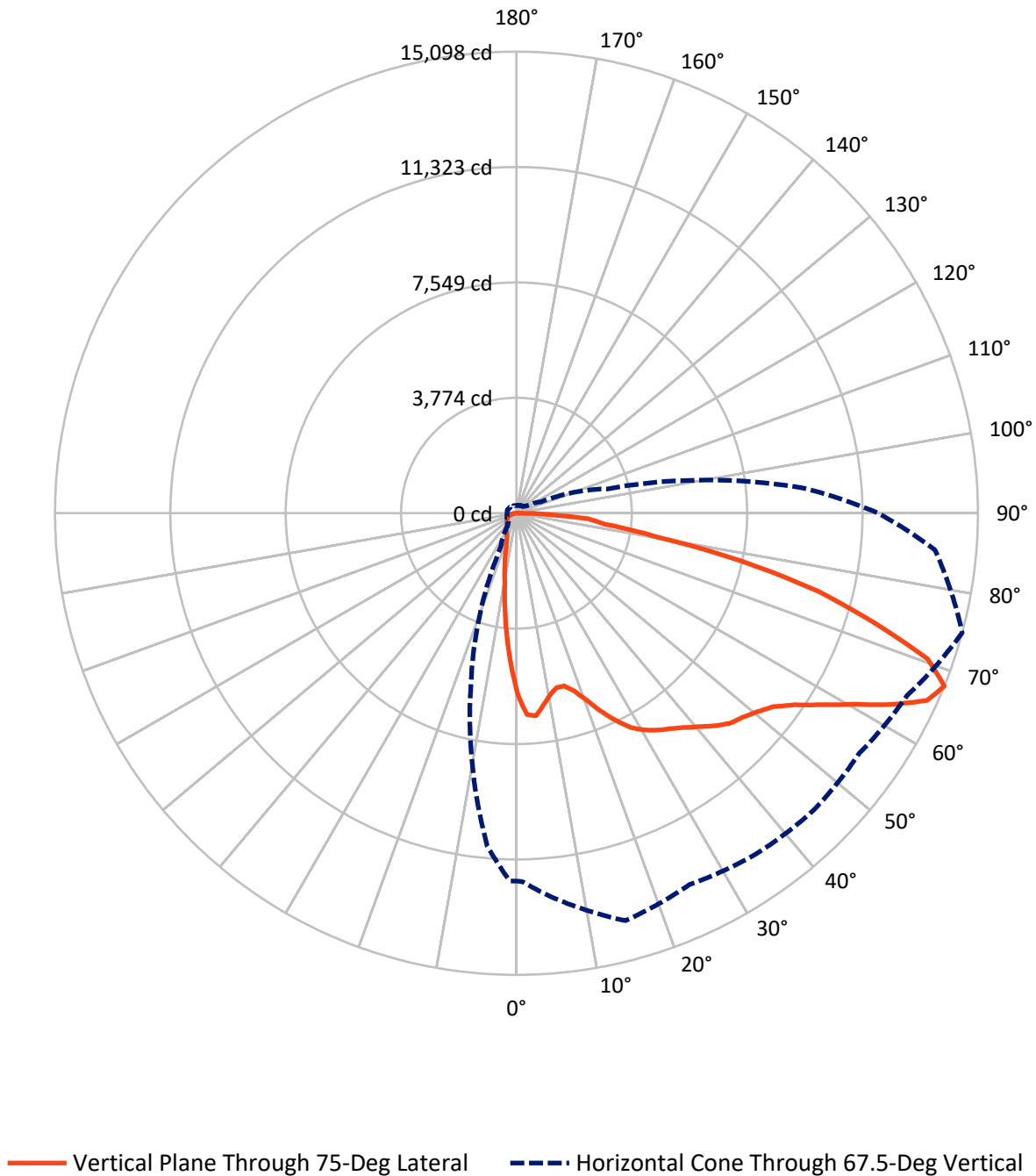


Based on 25 foot mounting height. Maximum calculated value = 11.7 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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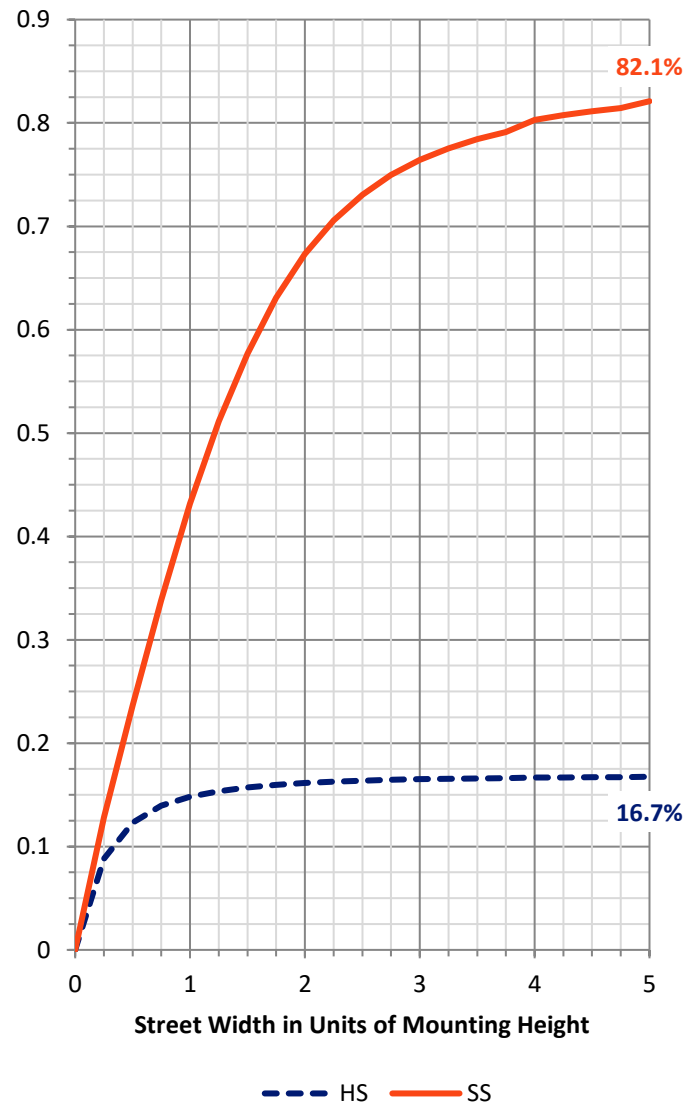
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3219.9	0.0	3219.9
	% Fixture	16.9	0.0	16.9
Street Side	Lumens	15830.1	0.0	15830.1
	% Fixture	83.1	0.0	83.1
Total	Lumens	19050.0	0.0	19050.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	451.4	2.4
10°-20°	941.4	4.9
20°-30°	1354.8	7.1
30°-40°	1951.2	10.2
40°-50°	2740.9	14.4
50°-60°	3822.6	20.1
60°-70°	4544.9	23.9
70°-80°	2676.7	14.1
80°-90°	566.0	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°	19050.0	100.0
0°-180°	19050.0	100.0

Coefficient of Utilization



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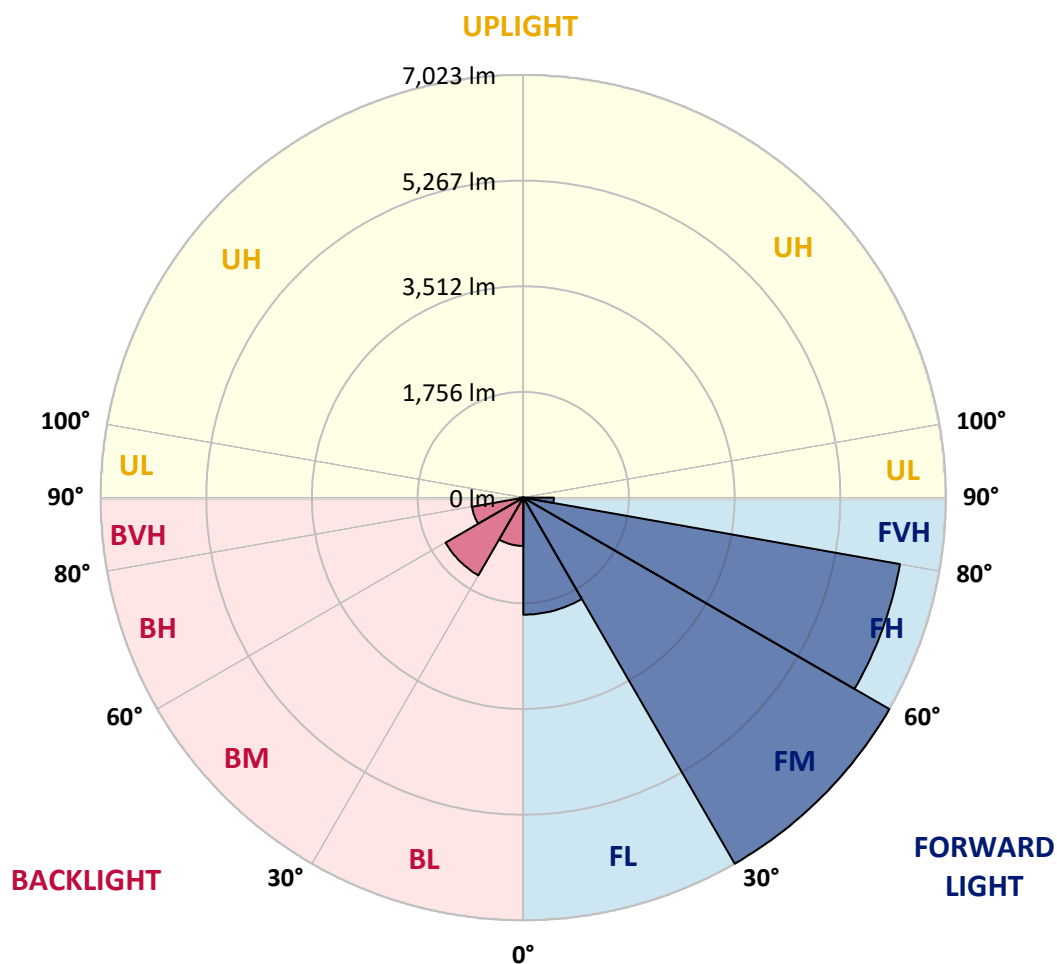
CATALOG NUMBER: GALN-SA4C-830-U-SLL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1944.5	10.2			
FM	(30°-60°)	7023.0	36.9			
FH	(60°-80°)	6355.2	33.4			G3/7500
FVH	(80°-90°)	507.5	2.7			G4/750
BL	(0°-30°)	803.1	4.2	B2/1000		
BM	(30°-60°)	1491.8	7.8	B2/2500		
BH	(60°-80°)	866.4	4.5	B2/1000		G2/1000
BVH	(80°-90°)	58.5	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°	5951.7	5951.7	5951.7	5951.7	5951.7	5951.7	5951.7	5951.7	5951.7	5951.7	5951.7
2.5°	6417.1	6425.7	6480.6	6640.7	6750.6	6790.9	6819.0	6766.5	6715.2	6590.6	6402.4
5°	6397.6	6447.6	6590.6	6949.7	7233.1	7355.3	7391.9	7234.4	6974.2	6654.1	6269.3
7.5°	6023.7	6090.9	6310.8	6913.1	7412.7	7698.6	7660.7	7376.1	6907.0	6336.5	5799.0
10°	5580.3	5654.8	5919.9	6648.0	7291.8	7685.1	7685.1	7338.2	6715.2	6037.2	5417.8
12.5°	5228.5	5306.7	5609.6	6375.6	7040.1	7412.7	7475.0	7176.9	6577.1	5847.8	5167.4
15°	5112.4	5188.2	5514.3	6210.7	6773.8	7001.0	7021.8	6924.1	6509.9	5861.3	5156.4
17.5°	5256.6	5354.3	5684.1	6259.5	6529.5	6542.9	6558.8	6635.8	6517.3	6106.8	5378.7
20°	5673.1	5778.2	6122.7	6417.1	6315.7	6176.4	6185.0	6382.9	6604.0	6512.4	5910.1
22.5°	6274.2	6365.8	6718.8	6694.4	6225.3	5938.2	5878.4	6154.5	6732.3	7018.1	6475.7
25°	6922.8	7030.4	7435.9	7106.1	6251.0	5796.5	5758.7	6020.1	6865.4	7490.9	7129.3
27.5°	7665.6	7770.6	8090.7	7521.4	6385.3	5785.5	5740.3	6007.9	6985.2	7928.2	7753.5
30°	8217.8	8314.3	8531.7	7870.8	6550.3	5858.8	5802.6	6104.4	7087.8	8227.5	8361.9
32.5°	8651.4	8751.6	8870.1	8088.3	6767.7	5992.0	5888.1	6280.3	7222.1	8456.0	8812.7
35°	9103.4	9221.9	9213.4	8281.3	6970.5	6145.9	6044.5	6534.4	7433.5	8655.1	9384.4
37.5°	9676.4	9724.0	9662.9	8454.7	7213.6	6423.2	6367.0	6911.9	7734.0	8895.7	10052.6
40°	10257.8	10353.1	10039.2	8664.9	7509.2	6944.8	6938.7	7470.1	8090.7	9177.9	10700.1
42.5°	10756.3	10836.9	10391.0	8848.1	7867.2	7581.3	7627.7	8219.0	8558.6	9505.3	11220.5
45°	11131.3	11203.4	10715.9	9025.2	8338.7	8316.7	8590.3	9021.6	9148.6	9799.7	11525.9
47.5°	11450.1	11519.8	10941.9	9294.0	8921.4	9195.0	9671.5	9858.4	9653.1	9968.3	11867.9
50°	11718.9	11739.6	11097.1	9614.0	9644.6	10271.3	10733.0	10854.0	10151.6	10210.2	12164.8
52.5°	11998.6	11971.8	11364.6	10017.2	10426.4	11292.5	11628.5	11754.3	10629.2	10508.3	12597.2
55°	12625.3	12651.0	11964.4	10525.4	11216.8	12295.5	12737.7	12616.8	11158.2	11056.8	13146.9
57.5°	13382.7	13360.7	12808.6	11320.6	12021.8	13228.8	13558.6	13364.4	11864.3	11810.5	13704.0
60°	13677.1	13706.4	13514.6	12175.8	12815.9	14046.0	14383.2	14081.5	12710.8	12686.4	14124.2
62.5°	13381.5	13546.4	13675.9	12936.8	13492.7	14647.1	14981.8	14637.3	13594.0	13771.2	14418.6
65°	12792.7	12828.1	13269.1	13581.8	13818.8	14746.0	14920.7	14737.5	14331.9	14759.5	14405.2
67.5°	12027.9	12058.5	12575.2	13793.2	13398.6	13622.1	13744.3	13690.6	14103.5	15097.8	13741.9
70°	11299.9	11275.4	11821.5	13254.4	11663.9	11324.3	11425.7	11257.1	12169.7	14270.8	12440.8
72.5°	9882.8	9970.8	10557.1	11756.7	9235.4	8683.2	8904.3	8468.2	9360.0	12222.2	10097.8
75°	7741.3	7762.1	8740.6	9866.9	6966.8	6095.8	6395.1	6213.1	7169.6	10195.5	6972.9
77.5°	5360.4	5314.0	6365.8	7536.1	4968.3	4462.5	4467.4	4380.7	5006.1	7506.8	4737.4
80°	3404.6	3333.8	3984.9	4655.5	3414.4	3652.6	3532.9	3529.2	3259.2	4631.1	2864.7
82.5°	1839.7	1917.9	2517.7	2918.4	2449.3	2823.1	2587.4	2511.6	2236.8	2898.9	1832.4
85°	838.0	911.3	1342.5	1985.1	1860.5	1881.3	1257.0	1483.0	1850.7	2354.0	978.5
87.5°	81.8	105.1	277.3	937.0	635.2	500.9	186.9	360.4	465.4	836.8	78.2
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°	5951.7	5951.7	5951.7	5951.7	5951.7	5951.7	5951.7	5951.7	5951.7	5951.7	5951.7
2.5°	6325.5	6262.0	6045.7	5867.4	5678.0	5533.9	5345.8	5219.9	5133.2	5002.5	4986.6
5°	6034.7	5879.6	5503.3	5119.8	4788.7	4539.5	4286.6	4054.5	3917.7	3874.9	3820.0
7.5°	5544.9	5283.5	4799.7	4359.9	3980.0	3608.6	3322.8	3120.0	2984.4	2905.0	2809.7
10°	5141.7	4838.8	4250.0	3711.2	3398.5	3167.6	2916.0	2698.5	2531.2	2388.2	2310.1
12.5°	4870.5	4528.5	3866.4	3429.1	3187.2	2941.6	2647.2	2402.9	2156.1	1993.7	1924.0
15°	4788.7	4427.1	3747.9	3288.6	2941.6	2620.3	2290.5	1971.7	1727.4	1573.4	1522.1
17.5°	4989.0	4551.7	3746.7	3101.7	2653.3	2269.7	1847.1	1547.8	1297.3	1182.5	1145.9
20°	5362.9	4791.1	3757.7	2917.2	2340.6	1800.6	1343.8	1098.2	978.5	929.6	911.3
22.5°	5884.5	5156.4	3790.6	2735.2	1998.5	1382.9	1006.6	882.0	839.2	830.7	827.0
25°	6527.0	5608.4	3901.8	2571.5	1710.3	1055.5	841.7	785.5	761.1	752.5	751.3
27.5°	7118.3	6192.3	4036.2	2431.0	1431.7	910.1	761.1	713.4	689.0	687.8	690.2
30°	7652.1	6681.0	4148.6	2273.4	1220.4	808.7	708.5	660.9	637.7	636.5	643.8
32.5°	8113.9	7082.9	4231.6	2118.3	1103.1	746.4	660.9	609.6	590.0	586.4	590.0
35°	8607.4	7483.6	4193.8	1997.3	1035.9	695.1	625.5	575.4	552.2	541.2	541.2
37.5°	9170.6	7896.5	4129.0	1897.2	1005.4	652.3	594.9	546.1	522.8	511.9	510.6
40°	9785.1	8309.4	4039.9	1808.0	974.8	626.7	574.2	522.8	494.8	483.8	481.3
42.5°	10327.5	8662.4	3966.6	1749.3	924.8	631.6	555.8	505.7	470.3	455.7	454.4
45°	10799.0	9017.9	3953.1	1715.1	883.2	624.2	550.9	492.3	450.8	434.9	432.4
47.5°	11167.9	9388.1	4030.1	1695.6	838.0	585.1	582.7	483.8	433.7	416.6	414.1
50°	11617.5	9913.3	4206.0	1655.3	796.5	548.5	615.7	482.5	420.2	398.2	392.1
52.5°	12216.1	10597.4	4444.2	1583.2	736.6	514.3	587.6	482.5	404.4	382.4	375.0
55°	13121.3	11469.7	4677.5	1481.8	652.3	469.1	530.2	467.9	381.1	361.6	356.7
57.5°	13721.1	12107.4	4826.6	1341.3	547.3	436.1	456.9	444.7	357.9	337.2	337.2
60°	13751.6	12278.4	4755.7	1164.2	481.3	405.6	397.0	448.3	337.2	315.2	312.7
62.5°	13399.8	11859.4	4386.8	1005.4	445.9	372.6	359.2	393.4	316.4	294.4	290.7
65°	12850.1	10790.5	3746.7	929.6	426.3	343.3	323.7	322.5	294.4	273.6	268.8
67.5°	11839.8	9429.6	3078.5	885.7	416.6	310.3	292.0	285.9	268.8	251.7	249.2
70°	10350.7	7897.7	2468.9	867.3	411.7	276.1	261.4	254.1	239.4	226.0	224.8
72.5°	8052.8	6406.1	2037.6	855.1	409.2	244.3	228.4	218.7	210.1	197.9	197.9
75°	5784.3	4713.0	1555.1	770.8	378.7	210.1	193.0	186.9	174.7	164.9	167.4
77.5°	3646.5	3173.7	1023.7	566.8	293.2	168.6	153.9	150.3	140.5	127.0	135.6
80°	2462.8	2231.9	597.4	356.7	184.5	123.4	118.5	117.3	106.3	91.6	92.8
82.5°	1676.0	1644.3	310.3	202.8	106.3	72.1	69.6	72.1	59.9	48.9	48.9
85°	654.8	894.2	146.6	79.4	34.2	11.0	15.9	17.1	9.8	4.9	6.1
87.5°	12.2	91.6	3.7	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°	5951.7	5951.7	5951.7	5951.7	5951.7	5951.7	5951.7	5951.7	5951.7	5951.7	5951.7
2.5°	4962.2	4951.2	4969.5	4891.3	4907.2	4936.5	4951.2	4959.7	5080.7	5052.6	5129.5
5°	3871.3	3860.3	3931.1	3940.9	3977.6	3970.2	4005.7	4014.2	4058.2	4074.1	4181.6
7.5°	2815.8	2863.4	2944.1	2985.6	3047.9	3067.5	3049.1	3094.3	3002.7	3068.7	3088.2
10°	2262.4	2205.0	2170.8	2266.1	2278.3	2368.7	2332.0	2302.7	2356.5	2358.9	2410.2
12.5°	1883.7	1760.3	1678.5	1705.4	1734.7	1773.8	1779.9	1838.5	1877.6	1914.3	1944.8
15°	1476.9	1434.2	1359.6	1323.0	1364.5	1380.4	1418.3	1467.2	1508.7	1519.7	1561.2
17.5°	1133.7	1141.0	1128.8	1106.8	1132.4	1144.6	1147.1	1148.3	1159.3	1152.0	1213.1
20°	912.5	938.2	968.7	973.6	982.2	988.3	977.3	935.8	937.0	962.6	982.2
22.5°	825.8	830.7	864.9	875.9	902.8	891.8	860.0	840.5	838.0	844.1	853.9
25°	757.4	764.7	789.2	806.3	827.0	807.5	784.3	765.9	763.5	769.6	779.4
27.5°	696.3	707.3	729.3	746.4	765.9	747.6	725.6	709.8	708.5	707.3	713.4
30°	647.5	659.7	675.5	695.1	708.5	692.7	671.9	663.3	662.1	659.7	662.1
32.5°	598.6	618.1	634.0	643.8	657.2	645.0	629.1	624.2	615.7	608.4	604.7
35°	543.6	564.4	588.8	601.0	614.5	602.3	591.3	570.5	555.8	554.6	557.1
37.5°	511.9	520.4	540.0	560.7	574.2	568.0	547.3	526.5	522.8	522.8	525.3
40°	483.8	487.4	496.0	522.8	547.3	529.0	503.3	497.2	497.2	496.0	497.2
42.5°	455.7	459.3	459.3	480.1	519.2	489.9	470.3	470.3	470.3	471.5	475.2
45°	430.0	431.2	430.0	444.7	481.3	456.9	443.4	447.1	449.6	452.0	454.4
47.5°	408.0	409.2	408.0	420.2	438.6	428.8	421.5	426.3	431.2	434.9	437.3
50°	388.5	387.2	389.7	397.0	405.6	408.0	403.1	410.5	412.9	417.8	423.9
52.5°	371.4	370.1	372.6	376.3	388.5	388.5	388.5	394.6	399.5	404.4	412.9
55°	351.8	353.0	356.7	361.6	377.5	375.0	376.3	381.1	386.0	393.4	398.2
57.5°	333.5	335.9	340.8	348.2	364.0	362.8	364.0	366.5	372.6	376.3	381.1
60°	312.7	317.6	323.7	328.6	344.5	343.3	349.4	354.3	357.9	357.9	360.4
62.5°	292.0	299.3	305.4	309.1	326.2	327.4	335.9	339.6	342.1	339.6	343.3
65°	271.2	282.2	284.6	289.5	306.6	307.8	317.6	326.2	323.7	321.3	327.4
67.5°	250.4	263.9	262.6	268.8	285.9	288.3	296.9	311.5	306.6	304.2	309.1
70°	227.2	237.0	238.2	241.9	265.1	261.4	274.9	288.3	284.6	285.9	285.9
72.5°	201.6	210.1	210.1	217.4	241.9	235.8	246.8	261.4	261.4	260.2	260.2
75°	171.0	175.9	180.8	191.8	217.4	210.1	217.4	230.9	233.3	230.9	230.9
77.5°	138.0	145.4	147.8	162.5	180.8	179.6	186.9	193.0	197.9	195.5	195.5
80°	97.7	105.1	114.8	130.7	141.7	145.4	149.0	153.9	156.4	156.4	158.8
82.5°	55.0	66.0	74.5	90.4	95.3	113.6	112.4	116.1	112.4	99.0	109.9
85°	12.2	23.2	33.0	41.5	47.6	66.0	69.6	78.2	64.7	59.9	59.9
87.5°	0.0	0.0	0.0	0.0	0.0	9.8	19.5	26.9	23.2	19.5	19.5
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°	5951.7	5951.7	5951.7	5951.7	5951.7	5951.7	5951.7	5951.7	5951.7	5951.7
2.5°	5194.3	5300.6	5428.8	5649.9	5805.1	5972.4	6141.0	6320.6	6368.2	6417.1
5°	4210.9	4419.8	4533.4	4830.2	5141.7	5537.5	5861.3	6215.5	6363.4	6397.6
7.5°	3189.6	3331.3	3629.4	3929.9	4315.9	4731.3	5227.3	5779.4	5951.7	6023.7
10°	2528.7	2721.7	2983.2	3305.7	3644.1	4091.2	4650.7	5295.7	5540.0	5580.3
12.5°	2152.5	2367.5	2652.1	2992.9	3313.0	3650.2	4214.5	4880.3	5141.7	5228.5
15°	1721.2	1981.4	2310.1	2669.2	3017.4	3386.3	3958.0	4709.3	5011.0	5112.4
17.5°	1352.3	1562.4	1917.9	2307.6	2720.5	3187.2	3904.3	4791.1	5162.5	5256.6
20°	1034.7	1185.0	1484.3	1895.9	2379.7	2990.5	3917.7	5100.2	5544.9	5673.1
22.5°	894.2	971.2	1153.2	1545.3	2086.5	2819.5	3972.7	5524.1	6060.4	6274.2
25°	809.9	850.2	952.9	1209.4	1806.8	2653.3	4098.5	6094.6	6781.1	6922.8
27.5°	737.9	767.2	830.7	1015.2	1552.7	2499.4	4245.1	6727.4	7454.2	7665.6
30°	669.4	708.5	768.4	901.5	1390.2	2358.9	4429.5	7240.5	8021.1	8217.8
32.5°	616.9	656.0	711.0	822.1	1252.1	2211.1	4539.5	7691.2	8484.1	8651.4
35°	574.2	607.1	664.6	758.6	1147.1	2098.7	4517.5	8049.2	8932.4	9103.4
37.5°	543.6	571.7	629.1	698.8	1067.7	1981.4	4506.5	8521.9	9478.5	9676.4
40°	515.5	544.8	597.4	659.7	988.3	1843.4	4512.6	8991.0	10059.9	10257.8
42.5°	493.5	526.5	569.3	648.7	906.4	1732.2	4512.6	9399.0	10565.7	10756.3
45°	475.2	510.6	552.2	647.5	841.7	1647.9	4482.1	9749.6	10968.8	11131.3
47.5°	459.3	498.4	558.3	625.5	825.8	1586.9	4455.2	10030.6	11297.4	11450.1
50°	448.3	494.8	593.7	599.8	830.7	1568.5	4584.7	10384.9	11586.9	11718.9
52.5°	439.8	496.0	592.5	561.9	822.1	1580.8	4854.7	10938.3	11988.9	11998.6
55°	422.7	494.8	561.9	519.2	786.7	1601.5	5201.6	11742.1	12618.0	12625.3
57.5°	405.6	481.3	521.6	482.5	714.6	1601.5	5619.4	12503.2	13376.6	13382.7
60°	388.5	500.9	458.1	450.8	620.6	1572.2	6060.4	12837.9	13614.8	13677.1
62.5°	371.4	504.5	409.2	422.7	552.2	1501.4	6389.0	12467.7	13292.3	13381.5
65°	351.8	406.8	377.5	393.4	516.7	1382.9	6285.2	11789.7	12686.4	12792.7
67.5°	328.6	344.5	343.3	362.8	504.5	1208.2	5737.9	10932.2	12034.1	12027.9
70°	300.5	309.1	312.7	333.5	481.3	1072.6	4781.4	9819.3	11163.0	11299.9
72.5°	271.2	278.5	282.2	300.5	458.1	995.6	3711.2	8286.2	9669.0	9882.8
75°	239.4	244.3	249.2	265.1	433.7	882.0	2643.6	6325.5	7405.4	7741.3
77.5°	206.5	206.5	212.6	228.4	365.3	728.1	1773.8	4436.9	5017.1	5360.4
80°	167.4	168.6	166.1	183.2	268.8	498.4	1007.8	2963.6	3338.7	3404.6
82.5°	128.3	124.6	125.8	134.4	200.3	339.6	537.5	1841.0	1876.4	1839.7
85°	80.6	80.6	78.2	88.0	128.3	177.1	293.2	1127.5	880.8	838.0
87.5°	33.0	26.9	30.5	35.4	61.1	72.1	114.8	232.1	89.2	81.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)