

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: P453866

Luminaire Tested: **GALN-SA4D-830-U-T3**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453866
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4D-830-U-T3
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24115 lumens
Efficiency: N/A
Efficacy: 98.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 245
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

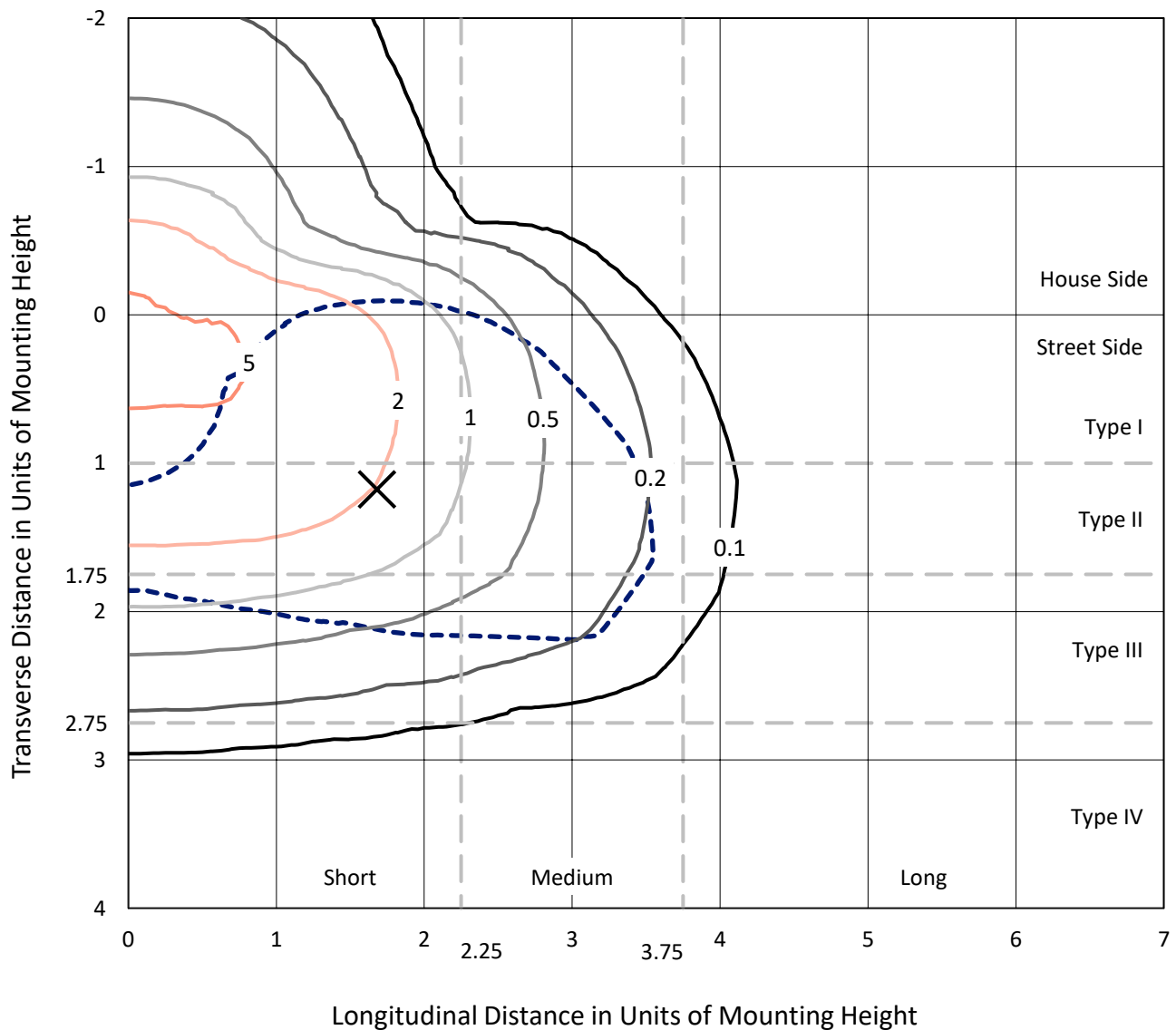


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

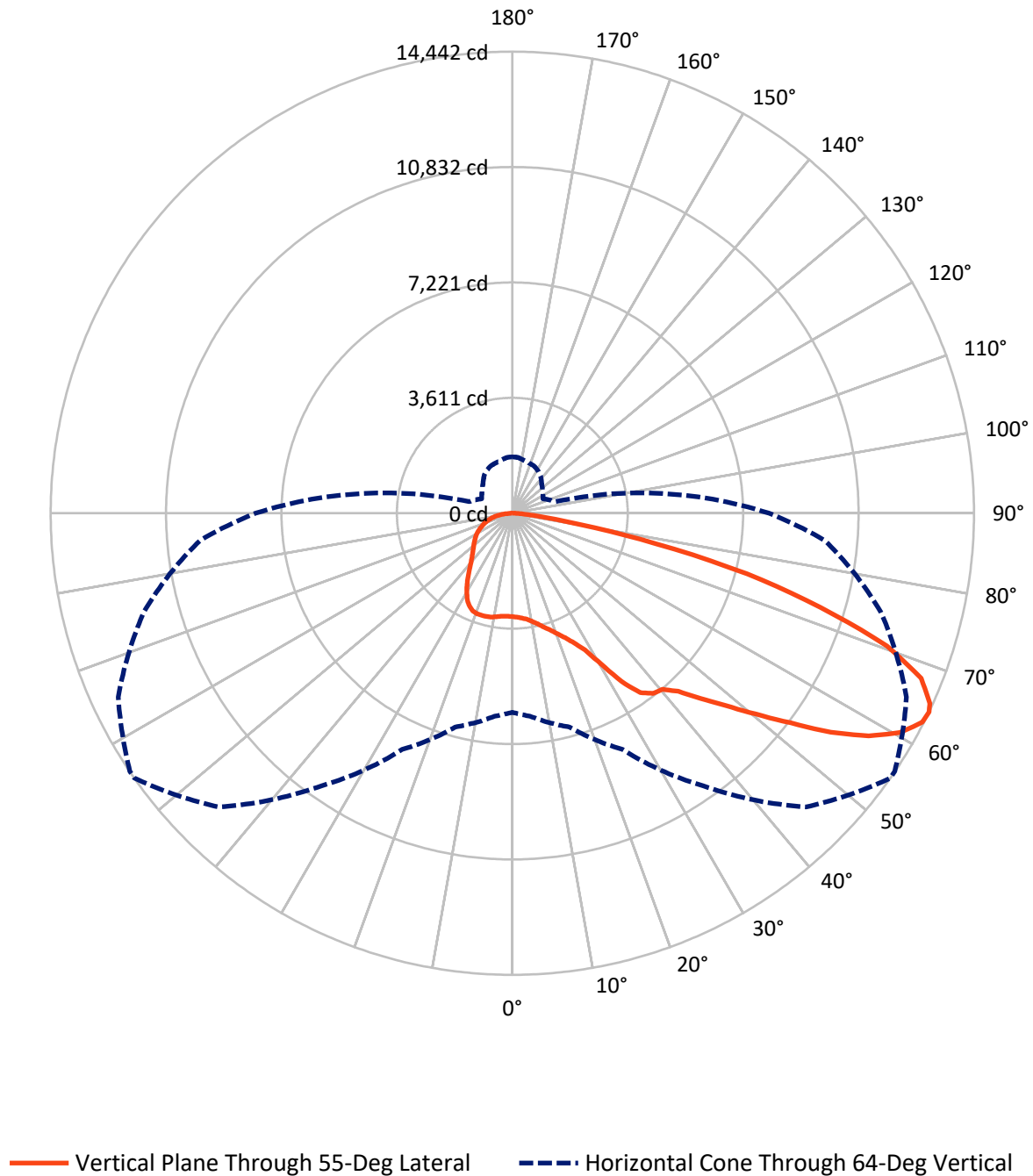


Based on 25 foot mounting height. Maximum calculated value = 5.9 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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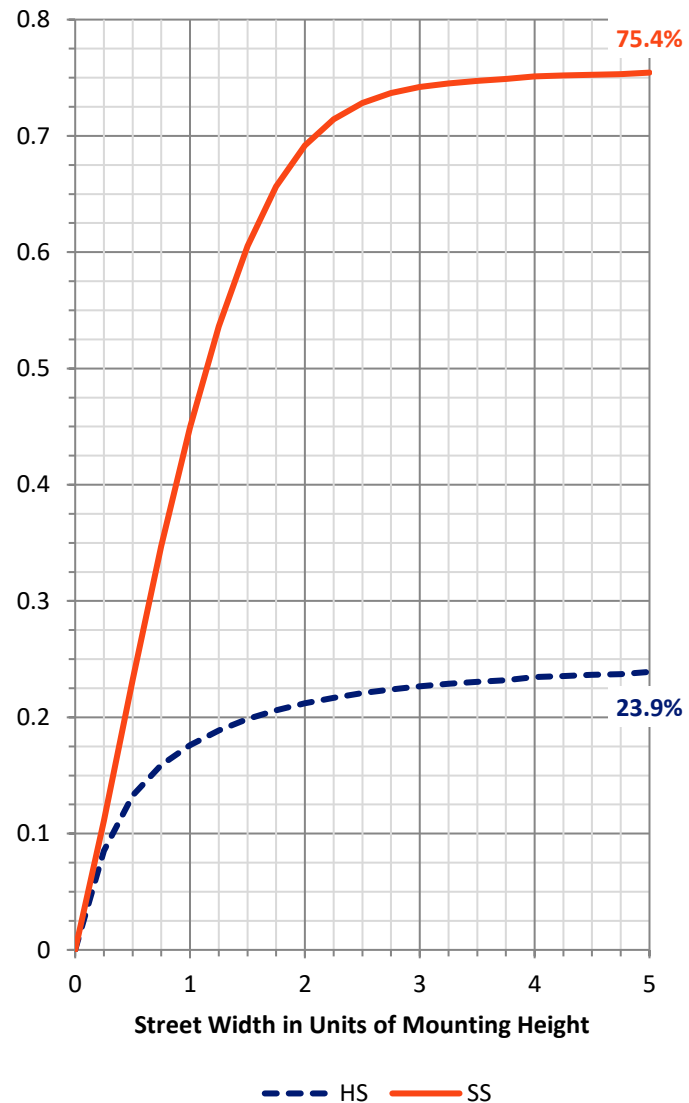
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5858.0	0.0	5858.0
	% Fixture	24.3	0.0	24.3
Street Side	Lumens	18257.0	0.0	18257.0
	% Fixture	75.7	0.0	75.7
Total	Lumens	24115.0	0.0	24115.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	314.7	1.3
10°-20°	993.1	4.1
20°-30°	1767.9	7.3
30°-40°	2720.1	11.3
40°-50°	3856.0	16.0
50°-60°	5581.5	23.1
60°-70°	5776.2	24.0
70°-80°	2705.0	11.2
80°-90°	400.4	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°	24115.0	100.0
0°-180°	24115.0	100.0

Coefficient of Utilization



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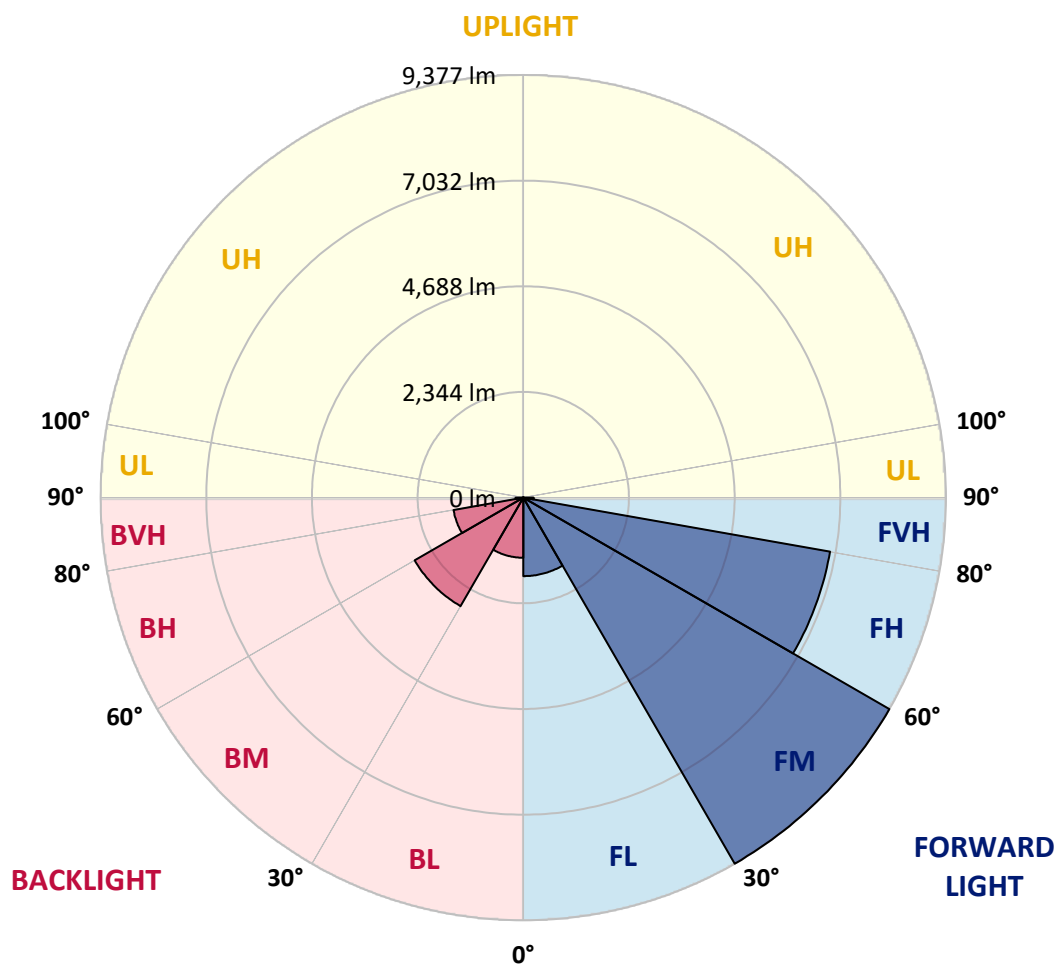
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1741.5	7.2			
FM	(30°-60°)	9376.6	38.9			
FH	(60°-80°)	6909.7	28.7			G3/7500
FVH	(80°-90°)	229.3	1.0			G3/500
BL	(0°-30°)	1334.2	5.5	B3/2500		
BM	(30°-60°)	2781.0	11.5	B3/5000		
BH	(60°-80°)	1571.6	6.5	B3/2500		G3/2500
BVH	(80°-90°)	171.2	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	3235.5	3235.5	3235.5	3235.5	3235.5	3235.5	3235.5	3235.5	3235.5	3235.5	3235.5
2.5°	3271.8	3270.5	3274.5	3270.5	3273.1	3263.7	3259.7	3262.4	3258.4	3251.6	3239.5
5°	3312.1	3310.8	3312.1	3306.7	3309.4	3304.1	3294.7	3297.3	3290.6	3275.8	3258.4
7.5°	3380.7	3375.3	3375.3	3374.0	3368.6	3360.5	3353.8	3351.1	3344.4	3325.6	3298.7
10°	3469.4	3469.4	3470.7	3460.0	3466.7	3451.9	3445.2	3443.9	3421.0	3396.8	3359.2
12.5°	3586.3	3593.1	3589.0	3583.7	3581.0	3575.6	3552.7	3558.1	3532.6	3490.9	3445.2
15°	3731.5	3742.3	3735.5	3732.9	3726.1	3706.0	3696.6	3692.5	3658.9	3598.4	3538.0
17.5°	3923.7	3910.3	3904.9	3898.2	3870.0	3855.2	3839.1	3836.4	3806.8	3735.5	3641.5
20°	4091.8	4110.6	4099.8	4093.1	4064.9	4036.7	4024.6	4020.5	3995.0	3917.0	3766.5
22.5°	4292.1	4296.1	4300.1	4284.0	4270.5	4249.0	4227.5	4220.8	4211.4	4130.7	3946.6
25°	4505.8	4521.9	4508.5	4492.3	4476.2	4474.9	4495.0	4492.3	4488.3	4410.3	4185.9
27.5°	4853.9	4868.7	4872.7	4855.3	4793.4	4798.8	4844.5	4859.3	4921.1	4792.1	4493.7
30°	5050.2	5065.0	5098.6	5164.4	5262.6	5348.6	5458.8	5492.4	5551.6	5308.3	4859.3
32.5°	5171.2	5176.5	5237.0	5359.4	5653.7	5975.0	6274.8	6286.9	6324.5	5983.1	5194.0
35°	5362.0	5366.1	5414.5	5548.9	5894.3	6429.3	6893.1	6907.9	6877.0	6192.8	5349.9
37.5°	5597.3	5608.0	5638.9	5750.5	6163.2	6809.8	7149.8	7139.1	6864.9	6359.4	5625.5
40°	5940.0	5940.0	5903.8	6054.3	6446.8	7027.5	7239.9	7221.1	7148.5	6842.0	6044.9
42.5°	6242.5	6237.1	6323.1	6425.3	6801.7	7363.6	7617.6	7648.5	7768.2	7448.2	6522.1
45°	6636.3	6660.5	6708.9	6894.4	7405.2	7937.5	8265.5	8295.1	8464.5	8162.0	7079.9
47.5°	7034.2	7042.3	7194.2	7441.5	8152.6	8715.8	8984.7	9033.1	9187.7	8996.8	7680.8
50°	7316.5	7393.1	7636.4	8026.3	8922.8	9664.8	9874.5	9932.3	10205.2	9905.5	8381.1
52.5°	7614.9	7690.2	7987.3	8581.4	9807.3	10635.4	10893.4	10932.4	11216.1	10824.9	9097.6
55°	7870.3	7940.2	8277.6	9073.4	10511.7	11626.0	12093.8	12048.1	12183.9	11533.3	9650.1
57.5°	7912.0	7968.5	8393.2	9387.9	11041.3	12475.6	13146.3	13173.2	13016.0	12062.9	10105.7
60°	7589.4	7705.0	8192.9	9354.3	11279.2	13067.0	13931.4	13950.2	13503.9	12334.4	10287.2
62.5°	7018.1	7006.0	7596.1	8814.0	10945.9	13201.5	14393.8	14373.6	13694.8	12204.1	10111.1
64°	6229.1	6374.2	6925.4	8149.9	10408.2	12994.4	14442.2	14431.4	13603.4	11932.5	9811.4
65°	5747.8	5739.8	6284.2	7606.9	9873.2	12682.6	14356.1	14341.3	13412.5	11689.2	9578.8
67.5°	4149.6	4168.4	4706.1	5870.1	8026.3	11463.4	13795.6	13740.5	12659.7	10882.7	8694.3
70°	2513.7	2524.4	2946.5	3894.2	5761.3	9267.0	12435.3	12437.9	11507.8	9678.3	7399.9
72.5°	1324.0	1352.3	1521.6	2211.2	3499.0	6501.9	10088.3	10327.5	9879.9	8260.1	5846.0
75°	736.6	740.7	860.3	1090.2	1785.1	3638.8	7582.7	7651.2	7821.9	6648.4	4323.0
77.5°	561.9	569.9	607.6	704.4	971.9	1687.0	4589.1	4933.2	5512.6	4687.2	2466.6
80°	455.7	463.8	496.0	553.8	646.6	799.8	2131.9	2317.4	2950.5	2080.8	962.5
82.5°	354.9	349.5	391.2	428.8	470.5	473.2	875.1	967.8	1201.7	895.2	416.7
85°	263.5	263.5	297.1	289.0	303.8	276.9	385.8	426.1	481.2	380.4	193.6
87.5°	104.8	115.6	194.9	174.7	135.8	108.9	142.5	150.6	166.7	149.2	80.7
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3235.5	3235.5	3235.5	3235.5	3235.5	3235.5	3235.5	3235.5	3235.5	3235.5	3235.5
2.5°	3240.9	3244.9	3235.5	3228.8	3226.1	3222.1	3218.0	3219.4	3224.8	3230.1	3228.8
5°	3257.0	3258.4	3242.2	3234.2	3228.8	3223.4	3223.4	3227.4	3238.2	3246.3	3246.3
7.5°	3297.3	3297.3	3274.5	3259.7	3251.6	3242.2	3239.5	3240.9	3248.9	3259.7	3261.0
10°	3360.5	3355.1	3325.6	3302.7	3287.9	3265.1	3244.9	3234.2	3238.2	3244.9	3244.9
12.5°	3437.1	3422.3	3384.7	3353.8	3317.5	3274.5	3232.8	3211.3	3210.0	3216.7	3214.0
15°	3519.1	3503.0	3450.6	3394.1	3330.9	3267.8	3218.0	3187.1	3162.9	3156.2	3171.0
17.5°	3614.6	3581.0	3508.4	3430.4	3336.3	3254.3	3176.4	3113.2	3070.2	3058.1	3062.1
20°	3730.2	3685.8	3587.7	3465.4	3332.3	3205.9	3085.0	3000.3	2930.4	2908.9	2911.6
22.5°	3890.1	3813.5	3669.7	3482.8	3298.7	3114.5	2946.5	2836.3	2751.6	2718.0	2738.1
25°	4071.6	3988.3	3747.6	3478.8	3211.3	2968.0	2782.5	2638.7	2562.1	2512.3	2523.1
27.5°	4321.6	4173.8	3831.0	3442.5	3086.3	2789.2	2574.2	2438.4	2368.5	2343.0	2355.0
30°	4641.5	4414.4	3921.1	3344.4	2888.7	2563.4	2364.5	2275.7	2234.1	2201.8	2212.6
32.5°	4872.7	4583.7	3941.2	3179.0	2675.0	2357.7	2222.0	2156.1	2110.4	2079.5	2086.2
35°	5038.1	4727.6	3931.8	2976.1	2451.8	2188.4	2109.1	2055.3	1981.4	1914.2	1902.1
37.5°	5259.9	4907.7	3863.2	2754.3	2231.4	2074.1	2017.7	1918.2	1812.0	1721.9	1717.9
40°	5600.0	5118.7	3716.7	2493.5	2043.2	1989.4	1920.9	1791.8	1677.6	1605.0	1599.6
42.5°	5950.8	5313.6	3517.8	2219.3	1888.6	1900.7	1817.4	1689.7	1619.8	1572.7	1567.3
45°	6379.6	5524.7	3302.7	1981.4	1774.4	1817.4	1727.3	1653.4	1611.7	1580.8	1572.7
47.5°	6843.4	5741.1	3060.8	1767.6	1677.6	1740.7	1689.7	1656.1	1633.2	1611.7	1602.3
50°	7343.4	5983.1	2833.6	1595.6	1590.2	1661.4	1685.6	1673.5	1660.1	1653.4	1645.3
52.5°	7891.8	6230.4	2642.7	1474.6	1513.6	1605.0	1687.0	1696.4	1696.4	1692.4	1687.0
55°	8262.8	6402.5	2449.1	1376.5	1435.6	1559.3	1684.3	1720.6	1734.0	1728.6	1723.3
57.5°	8537.1	6496.6	2205.8	1291.8	1369.7	1514.9	1669.5	1723.3	1736.7	1743.4	1740.7
60°	8593.5	6409.2	1887.3	1203.1	1298.5	1450.4	1615.7	1682.9	1700.4	1742.1	1746.1
62.5°	8339.5	6140.3	1570.0	1115.7	1211.1	1352.3	1543.1	1637.2	1672.2	1736.7	1743.4
64°	8027.6	5839.2	1393.9	1060.6	1154.7	1297.2	1506.9	1625.1	1670.8	1756.9	1762.3
65°	7799.1	5620.1	1283.7	1025.6	1118.4	1260.9	1486.7	1629.2	1682.9	1787.8	1795.9
67.5°	6957.6	4866.0	1061.9	943.6	1032.4	1199.0	1490.7	1662.8	1680.3	1799.9	1798.5
70°	5757.2	3874.0	889.9	868.4	949.0	1149.3	1474.6	1609.0	1610.4	1689.7	1670.8
72.5°	4310.9	2863.2	771.6	790.4	856.3	1031.0	1392.6	1536.4	1513.6	1524.3	1505.5
75°	2961.3	1894.0	664.0	707.1	759.5	911.4	1277.0	1395.3	1359.0	1345.6	1332.1
77.5°	1580.8	1047.1	552.5	625.1	660.0	787.7	1114.3	1228.6	1191.0	1138.5	1121.1
80°	639.8	493.3	444.9	517.5	537.7	634.5	927.5	998.7	970.5	879.1	849.5
82.5°	321.3	295.7	349.5	407.3	408.6	453.0	689.6	756.8	693.6	582.0	556.5
85°	168.0	173.4	240.6	286.3	252.7	244.6	414.0	458.4	420.7	365.6	329.3
87.5°	60.5	69.9	126.4	125.0	88.7	47.0	91.4	44.4	24.2	14.8	18.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)