

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: P452008

Luminaire Tested: **GALN-SA2D-830-U-T2R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P452008
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA2D-830-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12599 lumens
Efficiency: N/A
Efficacy: 100.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 125
Input Voltage (V): NR
Input Current (A_{in}): 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



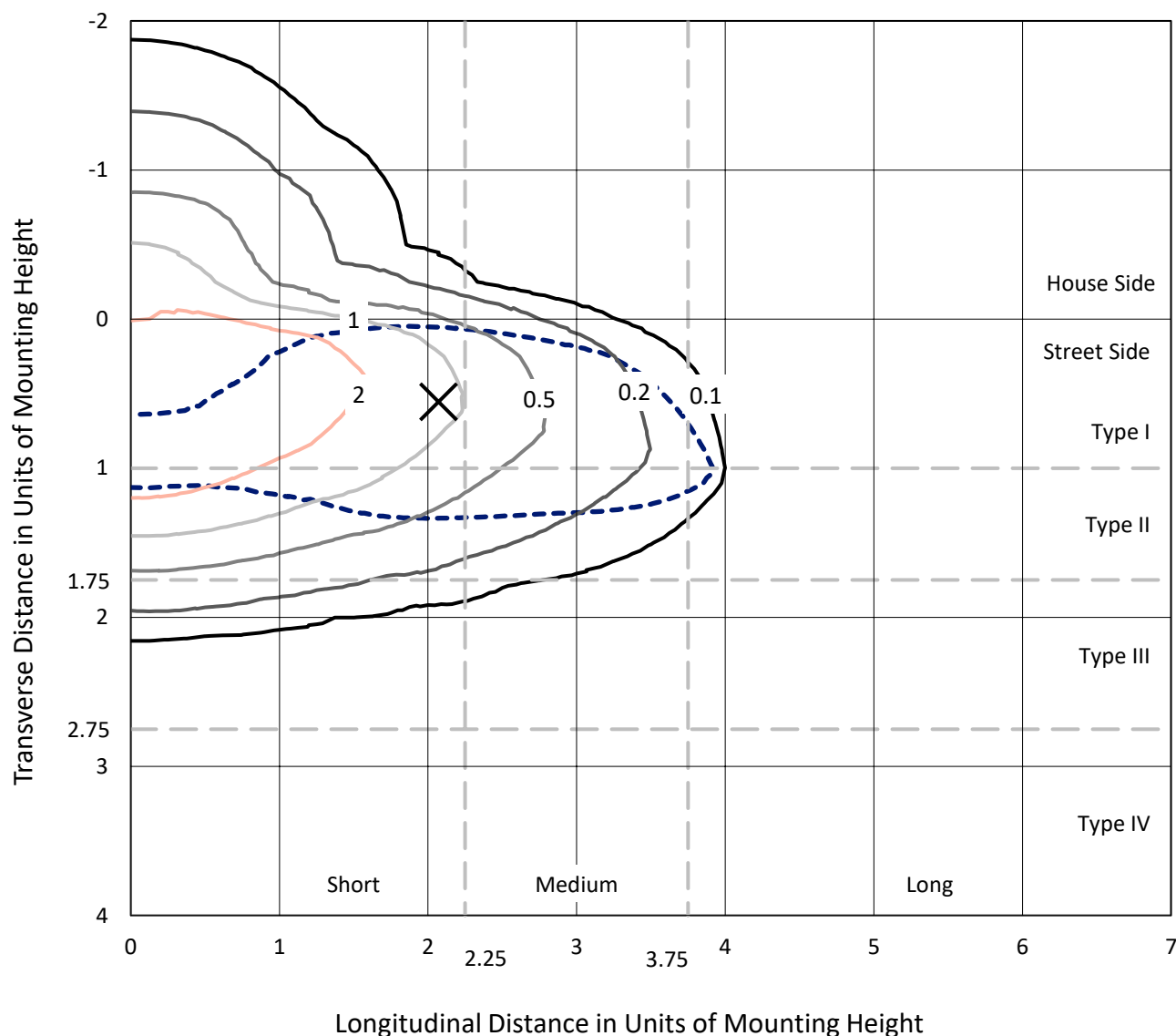
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

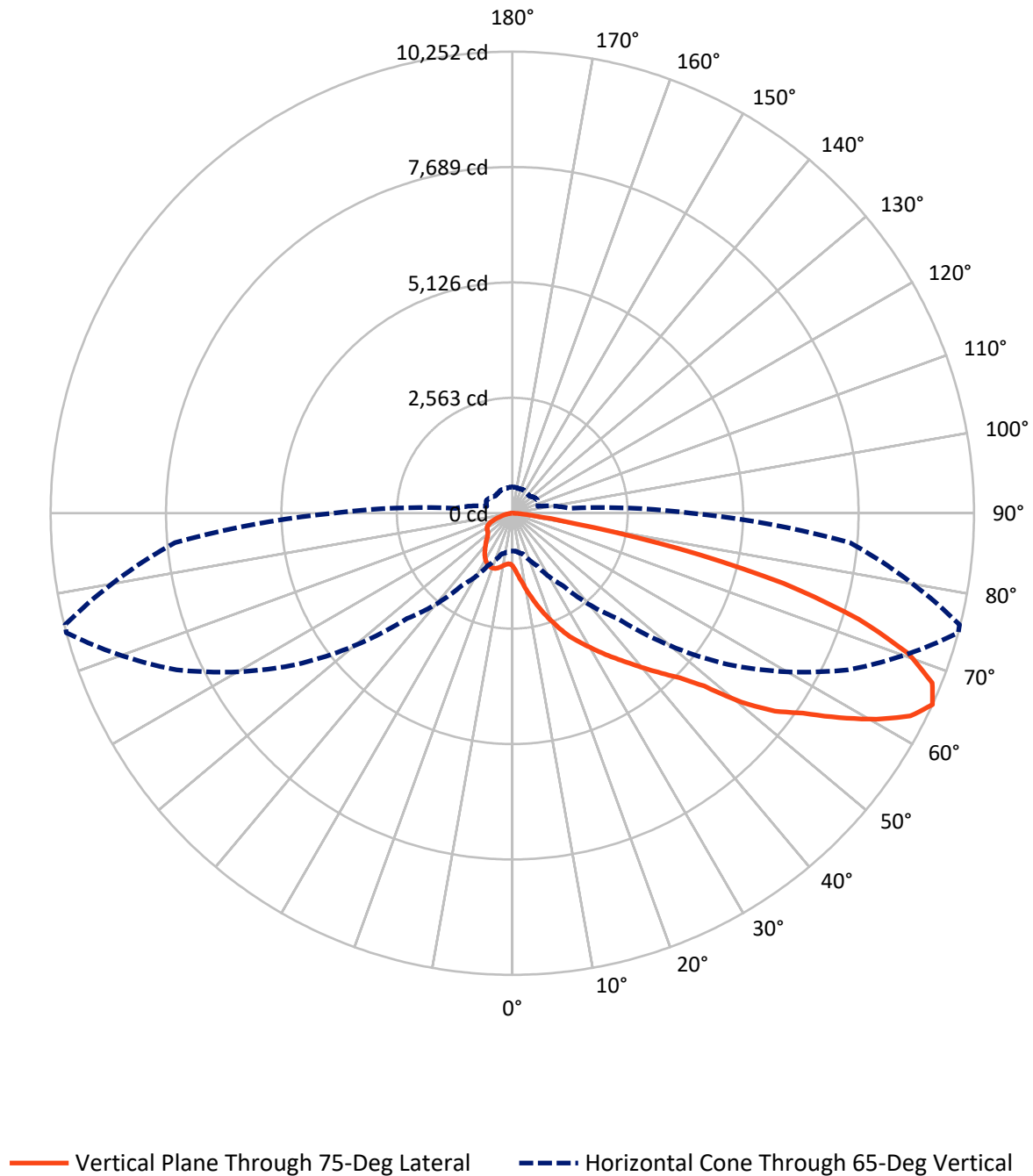


Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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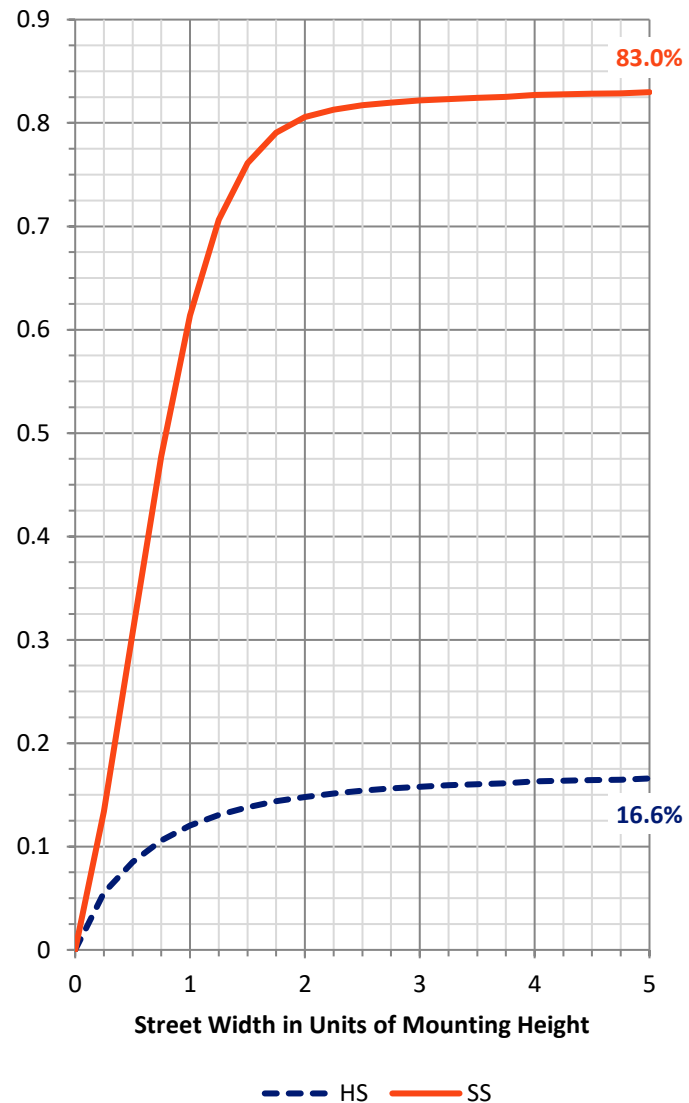
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2118.1	0.0	2118.1
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	10481.0	0.0	10481.0
	% Fixture	83.2	0.0	83.2
Total	Lumens	12599.0	0.0	12599.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.2	1.1
10°-20°	557.1	4.4
20°-30°	1076.1	8.5
30°-40°	1747.9	13.9
40°-50°	2404.4	19.1
50°-60°	2838.7	22.5
60°-70°	2487.2	19.7
70°-80°	1187.4	9.4
80°-90°	158.0	1.3
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°	12599.0	100.0
0°-180°	12599.0	100.0

Coefficient of Utilization



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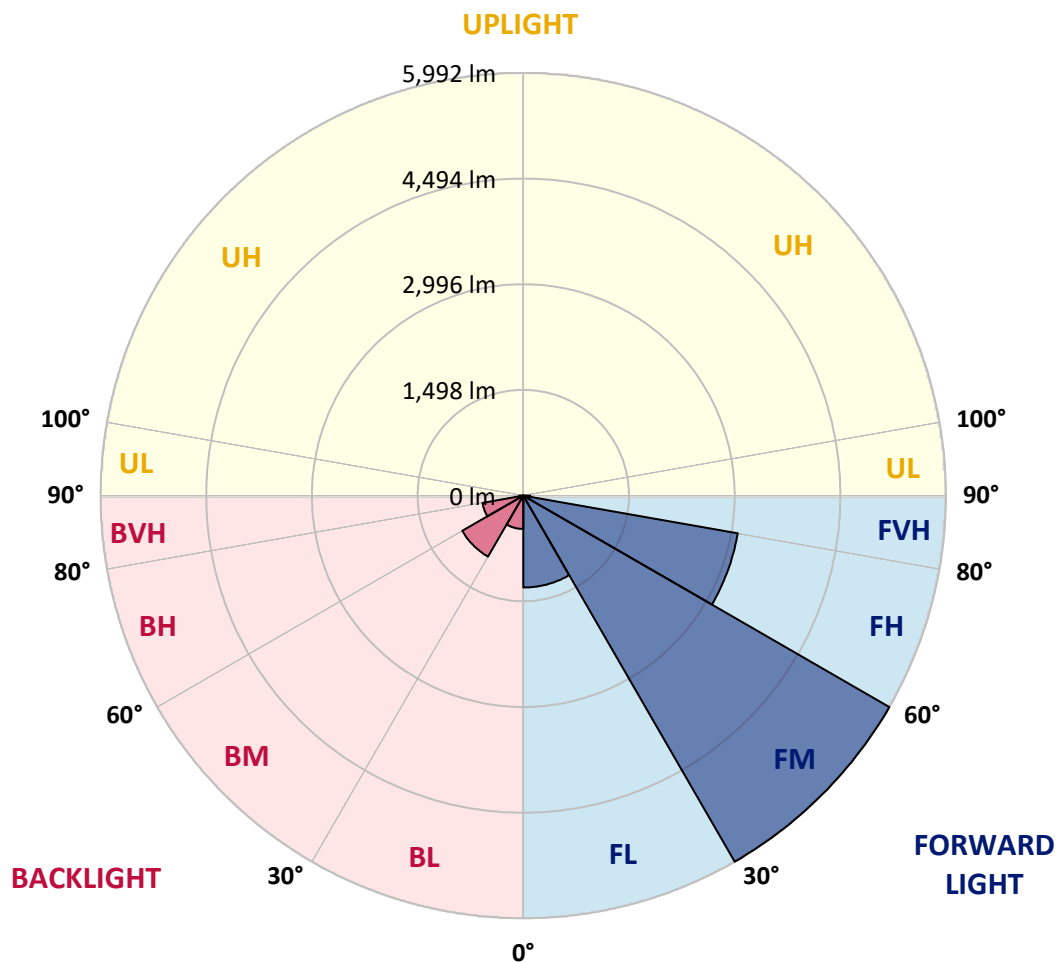
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1302.5	10.3			
FM	(30°-60°)	5992.4	47.6			
FH	(60°-80°)	3087.3	24.5			G2/5000
FVH	(80°-90°)	98.7	0.8			G1/100
BL	(0°-30°)	472.8	3.8	B1/500		
BM	(30°-60°)	998.6	7.9	B1/1000		
BH	(60°-80°)	587.3	4.7	B2/1000		G2/1000
BVH	(80°-90°)	59.3	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1170.6	1170.6	1170.6	1170.6	1170.6	1170.6	1170.6	1170.6	1170.6	1170.6	1170.6
2.5°	1555.3	1545.1	1534.2	1504.1	1472.0	1435.8	1383.8	1333.9	1267.6	1265.6	1216.4
5°	1986.5	1979.7	1931.2	1903.2	1828.7	1729.6	1645.5	1515.0	1394.1	1379.7	1284.0
7.5°	2382.9	2356.2	2337.8	2287.2	2213.4	2086.3	1923.7	1747.4	1545.1	1526.0	1367.4
10°	2681.5	2678.8	2669.2	2625.5	2570.1	2443.7	2263.3	2010.5	1736.4	1698.8	1468.6
12.5°	2905.0	2907.0	2905.7	2905.0	2865.4	2758.1	2562.6	2296.1	1929.8	1903.2	1585.4
15°	3051.9	3072.4	3080.6	3114.8	3118.2	3046.4	2878.3	2572.2	2147.8	2108.2	1711.1
17.5°	3149.0	3159.2	3197.5	3255.6	3302.7	3289.7	3140.1	2827.8	2370.6	2304.3	1841.7
20°	3241.9	3259.7	3289.0	3368.3	3451.7	3490.0	3384.7	3089.5	2591.3	2549.0	1985.9
22.5°	3435.3	3460.6	3470.8	3511.1	3582.2	3649.9	3602.0	3340.3	2833.2	2775.8	2138.9
25°	3762.6	3789.3	3760.6	3751.0	3774.2	3807.7	3797.5	3576.7	3061.5	2979.5	2283.8
27.5°	4189.0	4192.5	4136.4	4083.1	4025.7	4008.6	3977.2	3786.5	3259.7	3191.3	2429.4
30°	4646.9	4630.5	4537.6	4441.2	4344.2	4248.5	4158.3	3988.8	3480.4	3401.8	2572.2
32.5°	5071.9	5063.1	4959.9	4810.2	4646.2	4556.0	4373.5	4193.1	3716.8	3641.0	2719.1
35°	5390.4	5403.4	5289.9	5126.6	4947.6	4867.6	4637.3	4407.7	3961.5	3878.8	2879.0
37.5°	5616.6	5609.8	5509.3	5367.8	5210.7	5141.0	4945.5	4642.1	4224.6	4145.3	3054.0
40°	5697.2	5693.1	5618.6	5515.4	5415.7	5391.1	5268.1	4895.0	4525.9	4433.0	3264.4
42.5°	5646.0	5654.9	5605.7	5577.6	5559.2	5577.0	5588.6	5226.4	4854.6	4769.2	3492.7
45°	5488.8	5484.0	5477.2	5523.0	5626.8	5743.7	5905.7	5539.4	5212.0	5143.7	3798.8
47.5°	5207.9	5242.1	5259.2	5385.6	5612.5	5889.2	6270.6	5959.0	5730.7	5671.3	4265.6
50°	4815.0	4842.3	4943.5	5168.3	5506.6	5943.9	6627.3	6645.1	6595.9	6484.5	4772.6
52.5°	4201.3	4243.7	4452.1	4864.2	5289.3	5921.4	6843.2	7233.4	7298.4	7215.0	5272.2
55°	3514.6	3574.0	3794.0	4334.6	4989.9	5798.4	6992.2	7574.4	7833.4	7756.2	5753.3
57.5°	2842.1	2905.0	3131.2	3654.6	4467.8	5526.4	7089.9	7954.4	8561.9	8461.4	6351.9
60°	2130.1	2195.7	2389.7	2928.9	3724.3	4994.7	7023.6	8283.8	9289.7	9246.6	6951.2
62.5°	1374.2	1446.7	1615.5	2061.7	2862.6	4268.3	6669.0	8465.5	9919.7	9867.8	7388.6
65°	837.1	845.3	938.3	1279.9	1959.2	3304.8	5857.8	8224.3	10251.9	10236.1	7521.8
67.5°	541.2	554.2	596.6	766.7	1174.7	2295.4	4683.8	7428.2	10057.8	10052.3	7246.4
70°	457.2	461.3	480.4	517.3	682.7	1392.0	3289.0	6159.2	9320.4	9320.4	6584.2
72.5°	408.7	414.1	421.0	432.6	487.2	788.6	1962.6	4794.5	8047.3	8100.6	5604.3
75°	371.1	369.7	373.8	375.9	415.5	515.3	1014.8	3546.0	6225.5	6118.9	4058.5
77.5°	317.8	319.8	317.8	326.6	367.0	392.3	515.3	2379.5	3772.9	3634.8	2037.1
80°	261.0	264.5	267.9	273.3	313.7	297.9	309.6	1084.5	1395.4	1366.0	629.4
82.5°	196.1	200.9	206.4	219.4	246.7	196.8	195.4	463.3	503.6	461.3	231.7
85°	79.3	93.6	141.5	154.4	155.1	108.0	120.3	193.4	205.7	200.9	90.9
87.5°	18.5	21.9	45.8	69.0	63.6	40.3	44.4	62.9	71.8	66.3	30.8
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°	1170.6	1170.6	1170.6	1170.6	1170.6	1170.6	1170.6	1170.6	1170.6	1170.6	1170.6
2.5°	1193.8	1169.9	1128.9	1097.5	1074.9	1055.1	1042.8	1035.3	1032.6	1031.9	1032.6
5°	1234.2	1191.8	1126.9	1085.9	1063.3	1050.3	1042.8	1042.1	1042.8	1043.5	1041.5
7.5°	1289.5	1228.7	1144.0	1105.7	1088.6	1079.0	1075.6	1074.3	1074.9	1074.3	1074.3
10°	1363.3	1279.9	1177.4	1137.8	1123.5	1112.5	1107.1	1103.6	1100.9	1098.2	1096.8
12.5°	1444.6	1336.7	1213.7	1175.4	1154.9	1137.8	1125.5	1116.6	1110.5	1104.3	1103.0
15°	1535.5	1396.8	1254.0	1200.7	1171.3	1146.0	1124.8	1110.5	1099.5	1090.7	1090.0
17.5°	1622.3	1453.5	1281.3	1212.3	1169.2	1133.7	1105.7	1085.9	1072.2	1060.6	1059.2
20°	1715.2	1507.5	1293.6	1204.8	1148.7	1105.7	1068.8	1044.9	1029.1	1016.2	1014.1
22.5°	1808.9	1553.3	1292.2	1180.9	1113.2	1062.6	1023.7	998.4	979.9	967.0	962.2
25°	1898.4	1590.2	1275.2	1142.6	1064.0	1011.4	971.7	948.5	932.1	916.4	916.4
27.5°	1979.0	1612.1	1243.0	1096.1	1013.4	958.1	926.6	905.5	890.4	880.2	874.0
30°	2058.3	1622.3	1199.3	1037.3	960.1	913.0	887.7	875.4	861.7	850.1	848.7
32.5°	2129.4	1620.3	1144.6	979.9	909.6	876.1	865.8	856.3	841.9	825.5	821.4
35°	2198.4	1606.6	1079.7	917.1	867.2	854.2	856.9	843.3	817.3	796.8	793.4
37.5°	2273.6	1582.0	1008.6	865.8	831.7	844.0	850.8	820.7	778.4	746.2	738.7
40°	2360.3	1554.0	934.8	814.6	803.6	834.4	834.4	779.0	721.0	701.1	695.7
42.5°	2462.2	1530.7	873.3	771.5	780.4	811.2	807.7	723.7	699.8	689.5	686.8
45°	2623.4	1522.5	809.8	733.9	761.3	783.8	755.8	704.6	690.9	682.7	679.9
47.5°	2878.3	1532.1	753.8	705.9	739.4	756.5	697.7	691.6	682.0	670.4	669.0
50°	3114.8	1523.2	714.1	690.2	720.3	723.7	673.8	675.8	670.4	657.4	654.7
52.5°	3308.2	1495.2	688.8	682.0	703.9	666.3	651.2	658.8	656.7	640.3	637.6
55°	3520.7	1478.1	676.5	682.0	692.9	616.4	630.1	641.0	638.3	626.6	626.0
57.5°	3778.3	1481.5	667.6	684.0	682.0	591.1	608.9	621.9	621.2	617.8	617.8
60°	4042.1	1482.9	654.0	683.4	669.0	571.3	587.0	605.5	606.8	608.9	608.9
62.5°	4129.6	1423.5	627.3	671.1	640.3	552.2	566.5	591.8	590.4	595.9	596.6
65°	3966.3	1258.8	587.7	643.0	603.4	538.5	550.8	574.0	566.5	580.9	583.6
67.5°	3610.2	1041.5	526.2	592.5	562.4	524.1	540.5	549.4	535.8	563.8	564.5
70°	3120.2	813.2	448.3	520.7	515.9	509.1	532.3	518.7	499.5	533.7	526.9
72.5°	2609.1	621.2	358.1	425.7	453.8	486.6	518.0	479.0	452.4	462.6	450.3
75°	1959.9	459.2	287.7	333.5	377.9	454.4	505.0	431.2	390.2	380.6	377.9
77.5°	999.1	300.0	215.3	249.4	283.6	410.7	487.2	375.2	323.2	308.2	301.4
80°	356.7	186.6	151.7	172.2	191.3	353.3	425.7	310.2	250.8	248.1	250.8
82.5°	165.4	120.3	101.8	112.8	113.4	235.8	324.6	231.7	190.7	289.7	244.6
85°	71.1	60.1	57.4	56.0	51.9	105.2	182.5	124.4	194.1	86.8	80.0
87.5°	21.2	23.9	21.2	15.7	11.6	11.6	18.5	6.8	4.8	3.4	3.4
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)