

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: P454544

Luminaire Tested: **GALN-SA5C-830-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454544
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5C-830-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28251 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G2

Input Watts (W): 269
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



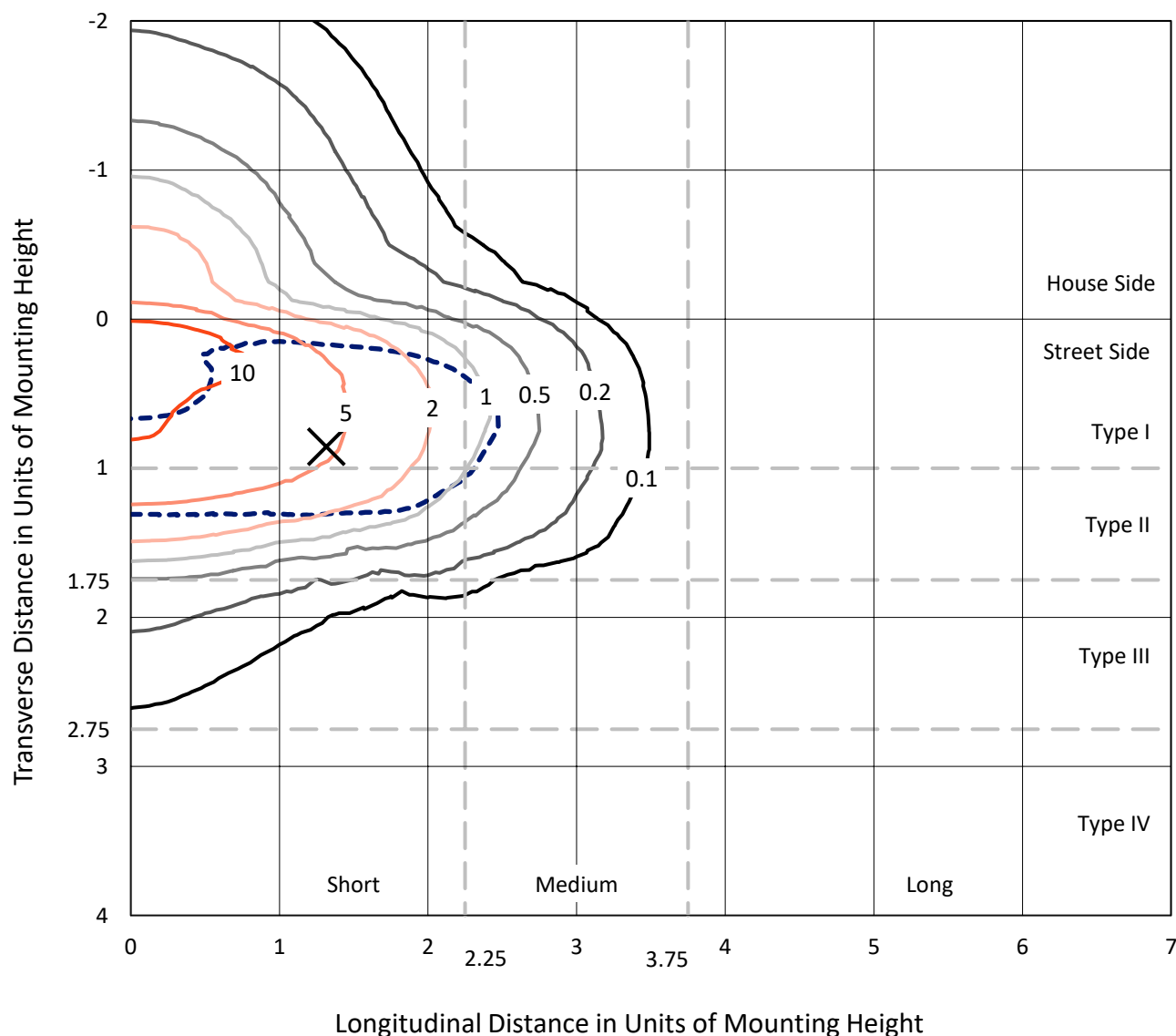
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd



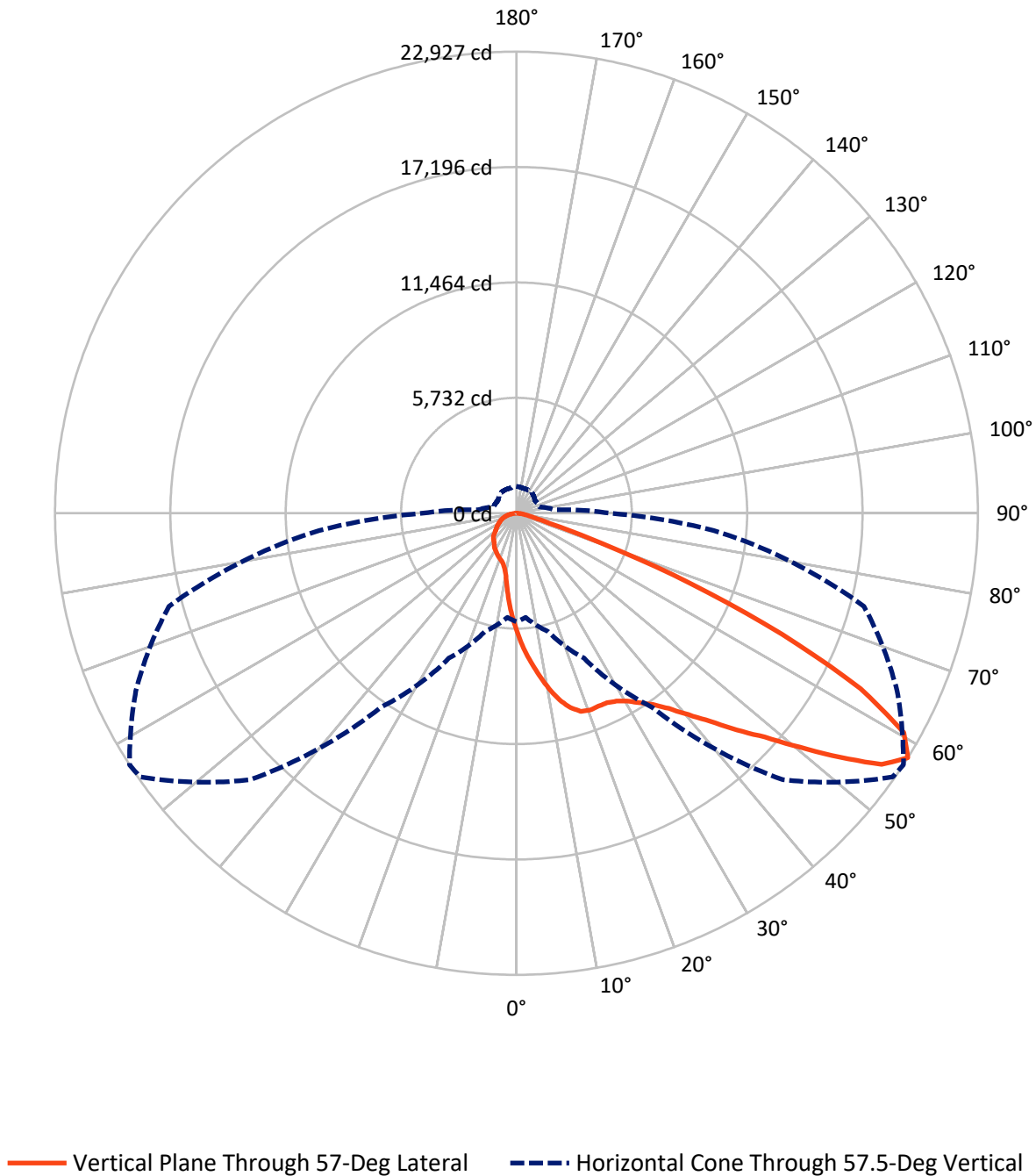
Based on 25 foot mounting height. Maximum calculated value = 14.4 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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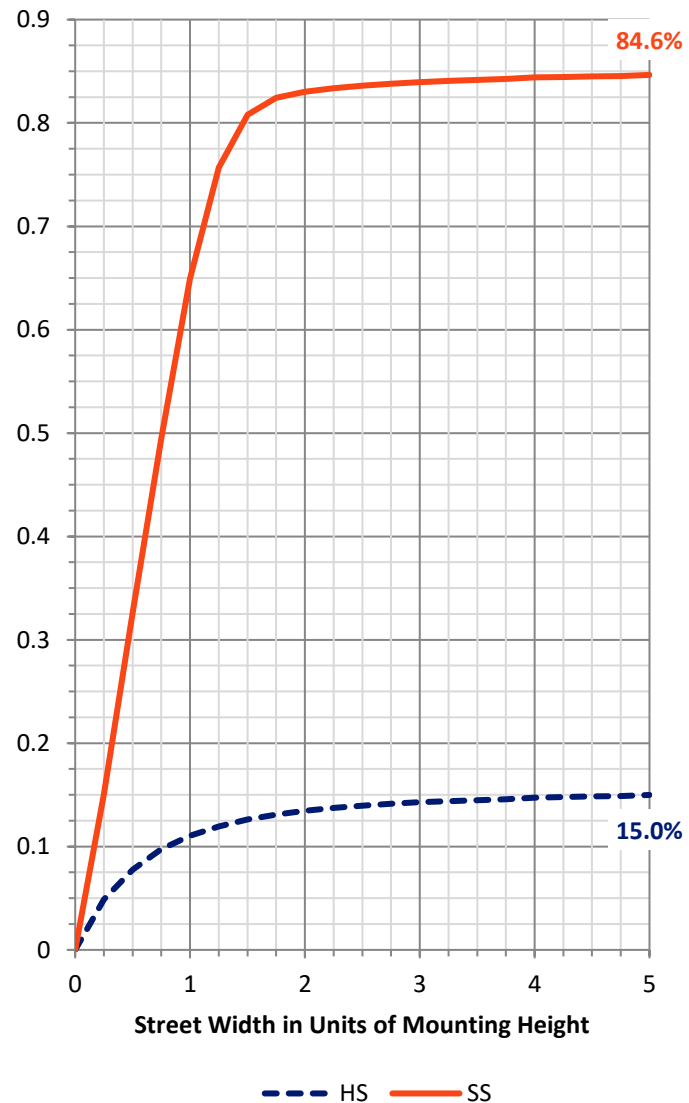
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4296.2	0.0	4296.2
	% Fixture	15.2	0.0	15.2
Street Side	Lumens	23954.8	0.0	23954.8
	% Fixture	84.8	0.0	84.8
Total	Lumens	28251.0	0.0	28251.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	570.4	2.0
10°-20°	1681.1	6.0
20°-30°	2791.5	9.9
30°-40°	4204.8	14.9
40°-50°	6313.1	22.3
50°-60°	7076.2	25.0
60°-70°	4141.3	14.7
70°-80°	1225.0	4.3
80°-90°	247.6	0.9
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°	28251.0	100.0
0°-180°	28251.0	100.0

Coefficient of Utilization



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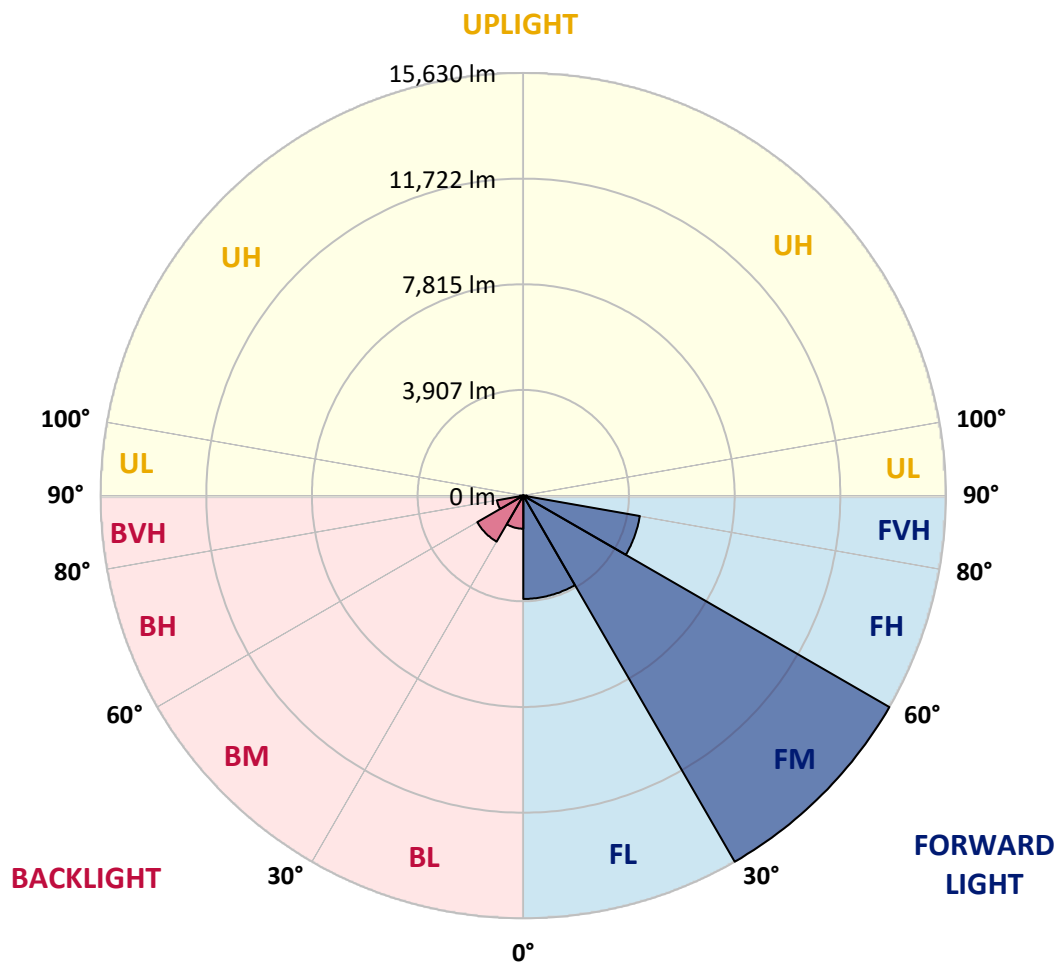
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3818.9	13.5			
FM	(30°-60°)	15629.7	55.3			
FH	(60°-80°)	4377.8	15.5			G2/5000
FVH	(80°-90°)	128.5	0.5			G2/225
BL	(0°-30°)	1224.1	4.3	B3/2500		
BM	(30°-60°)	1964.4	7.0	B2/2500		
BH	(60°-80°)	988.5	3.5	B2/1000		G2/1000
BVH	(80°-90°)	119.1	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	5935.2	5935.2	5935.2	5935.2	5935.2	5935.2	5935.2	5935.2	5935.2	5935.2	5935.2
2.5°	7374.9	7294.5	7231.1	7175.5	7102.8	6906.4	6710.0	6706.9	6550.7	6309.4	6062.0
5°	8576.5	8468.3	8482.2	8309.0	8135.8	7851.2	7435.3	7413.6	7081.1	6629.6	6170.3
7.5°	9359.0	9360.6	9317.3	9218.3	9031.2	8708.0	8236.3	8129.6	7667.2	6982.1	6294.0
10°	9318.8	9360.6	9433.2	9518.3	9575.5	9416.2	8986.3	8856.4	8254.9	7409.0	6431.6
12.5°	8783.7	8848.7	8952.3	9165.7	9510.6	9773.5	9626.5	9521.4	8935.3	7834.2	6583.2
15°	8449.7	8488.4	8545.6	8689.4	9060.6	9690.0	10070.4	10014.7	9577.1	8315.2	6753.3
17.5°	8347.6	8386.3	8404.9	8493.0	8757.5	9402.3	10245.1	10344.1	10146.2	8757.5	6924.9
20°	8449.7	8468.3	8468.3	8520.8	8728.1	9233.8	10237.4	10436.9	10613.2	9287.9	7085.8
22.5°	8717.2	8725.0	8714.2	8732.7	8887.4	9280.1	10164.7	10412.1	10990.5	9737.9	7211.0
25°	9151.8	9164.2	9093.0	9049.7	9162.6	9484.3	10204.9	10432.2	11285.9	10167.8	7294.5
27.5°	9645.1	9660.6	9574.0	9473.5	9526.0	9736.3	10362.7	10566.8	11507.0	10591.5	7347.1
30°	10249.8	10255.9	10110.6	9990.0	9955.9	10112.1	10631.7	10821.9	11782.3	11091.0	7426.0
32.5°	10868.3	10914.7	10727.6	10557.5	10500.3	10548.2	11029.2	11213.2	12110.1	11627.6	7552.8
35°	11709.6	11717.3	11493.1	11285.9	11097.2	11159.1	11537.9	11670.9	12563.2	12247.8	7732.2
37.5°	12759.6	12830.8	12521.5	12134.9	11902.9	11813.2	12153.4	12298.8	13198.8	13008.6	8002.8
40°	13925.6	13951.9	13687.5	13446.2	13022.5	12762.7	12997.8	13155.5	13982.9	13916.4	8316.7
42.5°	14658.6	14715.9	14736.0	14711.2	14392.7	13956.6	14046.3	14120.5	14910.7	14768.4	8638.4
45°	14906.1	14991.1	15278.8	15888.1	15922.1	15492.2	15283.4	15354.5	15922.1	15628.3	8946.1
47.5°	14496.3	14641.6	15172.1	16421.6	17357.2	17389.6	16760.2	16604.1	16843.8	16341.2	9168.8
50°	13437.0	13467.9	14279.8	16089.1	18029.9	19203.6	18552.6	18261.8	17719.0	16868.5	9321.9
52.5°	11797.7	11833.3	12513.7	14544.2	17615.4	20471.7	20649.5	20129.9	18608.2	17278.3	9422.4
55°	8757.5	8963.1	9711.6	11674.0	15651.5	20352.6	22316.6	22021.2	19683.0	17603.1	9580.2
57.5°	5384.7	5196.0	6083.7	7942.5	11771.5	18716.5	22831.5	22927.4	20866.0	17875.2	9844.6
60°	2477.4	2514.5	2881.0	4096.5	7175.5	14641.6	21504.7	22110.9	21520.2	17865.9	9911.1
62.5°	1707.3	1673.2	1580.5	1798.5	3272.3	9260.0	18164.4	19191.2	20208.8	17310.8	9646.7
65°	1526.3	1492.3	1312.9	1252.6	1503.1	4036.2	13205.0	14500.9	17015.4	15909.7	8987.9
67.5°	1425.8	1379.4	1193.8	1076.3	1073.2	1606.7	7786.3	9346.6	12620.4	13450.9	7787.8
70°	1320.7	1283.5	1099.5	969.6	913.9	1009.8	3422.3	4480.0	8194.6	9693.0	6066.7
72.5°	1215.5	1172.2	1006.7	867.5	794.9	756.2	1311.4	1705.7	4630.0	5811.5	3719.2
75°	1062.4	1040.7	900.0	785.6	706.7	610.8	832.0	949.5	2214.5	2669.1	1866.5
77.5°	929.4	906.2	799.5	686.6	629.4	496.4	590.7	644.9	934.0	1082.5	842.8
80°	680.4	703.6	674.2	606.2	561.4	389.7	397.4	442.3	555.2	613.9	515.0
82.5°	431.5	474.8	519.6	467.0	425.3	307.7	275.3	292.3	378.9	402.1	228.9
85°	180.9	184.0	301.6	284.5	242.8	182.5	165.5	174.7	202.6	211.9	106.7
87.5°	69.6	68.0	106.7	99.0	75.8	52.6	52.6	58.8	80.4	74.2	34.0
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°	5935.2	5935.2	5935.2	5935.2	5935.2	5935.2	5935.2	5935.2	5935.2	5935.2	5935.2
2.5°	5955.3	5845.5	5627.5	5356.8	5158.9	4936.2	4739.8	4599.1	4546.5	4521.8	4475.4
5°	5950.7	5734.2	5282.6	4809.4	4429.0	4039.3	3709.9	3496.5	3477.9	3335.7	3321.7
7.5°	5952.2	5621.3	4902.2	4206.3	3626.4	3227.4	2955.2	2884.1	2799.0	2777.4	2788.2
10°	5956.9	5477.5	4493.9	3609.4	3048.0	2786.7	2684.6	2656.8	2659.9	2669.1	2670.7
12.5°	5963.0	5338.3	4070.2	3156.3	2723.3	2615.0	2604.2	2628.9	2655.2	2675.3	2680.0
15°	5970.8	5179.0	3657.3	2791.3	2560.9	2551.6	2587.2	2628.9	2666.1	2695.4	2700.1
17.5°	5961.5	4993.4	3310.9	2567.1	2471.2	2516.0	2574.8	2627.4	2661.4	2689.2	2692.3
20°	5939.9	4786.2	2976.9	2409.3	2415.5	2488.2	2551.6	2601.1	2638.2	2652.1	2663.0
22.5°	5856.3	4538.8	2686.2	2287.2	2349.0	2449.6	2525.3	2554.7	2513.0	2483.6	2491.3
25°	5714.1	4217.1	2415.5	2188.2	2288.7	2395.4	2472.7	2401.6	2367.6	2355.2	2361.4
27.5°	5536.2	3864.5	2211.4	2084.6	2211.4	2335.1	2313.5	2301.1	2285.6	2265.5	2270.2
30°	5344.5	3519.7	2038.2	2004.2	2127.9	2199.0	2208.3	2228.4	2211.4	2180.5	2192.8
32.5°	5166.6	3194.9	1906.8	1936.1	2069.1	2058.3	2127.9	2151.1	2072.2	1968.6	1973.2
35°	5015.1	2893.4	1807.8	1869.6	1968.6	1973.2	2042.8	1962.4	1877.4	1827.9	1831.0
37.5°	4900.6	2658.3	1742.8	1812.4	1840.3	1899.0	1861.9	1820.2	1809.3	1775.3	1776.9
40°	4832.6	2452.6	1701.1	1767.6	1762.9	1803.1	1684.1	1725.8	1741.3	1730.5	1732.0
42.5°	4764.6	2307.3	1657.8	1705.7	1704.2	1625.3	1599.0	1634.6	1674.8	1679.4	1676.3
45°	4710.4	2194.4	1612.9	1611.4	1642.3	1518.6	1510.9	1532.5	1589.7	1617.6	1616.0
47.5°	4650.1	2100.1	1544.9	1501.6	1510.9	1452.1	1439.7	1449.0	1518.6	1563.4	1575.8
50°	4574.4	2005.7	1459.8	1401.1	1362.4	1390.2	1393.3	1394.9	1464.5	1515.5	1526.3
52.5°	4514.0	1934.6	1362.4	1319.1	1272.7	1334.6	1357.8	1360.9	1402.6	1444.4	1452.1
55°	4549.6	1894.4	1266.5	1235.6	1193.8	1277.4	1322.2	1328.4	1337.7	1368.6	1373.2
57.5°	4656.3	1903.7	1189.2	1149.0	1118.1	1209.3	1285.1	1289.7	1283.5	1320.7	1326.8
60°	4688.8	1899.0	1132.0	1053.1	1034.6	1136.6	1231.0	1240.2	1238.7	1292.8	1303.6
62.5°	4552.7	1840.3	1074.8	972.7	960.3	1062.4	1155.2	1192.3	1200.0	1277.4	1291.3
65°	4232.6	1719.6	999.0	887.7	887.7	983.5	1082.5	1133.5	1155.2	1258.8	1274.3
67.5°	3810.4	1577.4	921.7	815.0	811.9	907.8	1005.2	1057.8	1091.8	1232.5	1241.8
70°	3162.5	1385.6	825.8	736.1	736.1	822.7	910.8	974.3	1023.7	1183.0	1183.0
72.5°	2166.6	1152.1	709.8	646.4	648.0	728.4	818.1	889.2	948.0	1084.0	1087.1
75°	1370.1	900.0	583.0	550.5	556.7	632.5	725.3	799.5	917.0	1071.7	1076.3
77.5°	728.4	632.5	463.9	456.2	463.9	533.5	637.1	739.2	920.1	929.4	913.9
80°	471.7	448.5	366.5	351.0	354.1	429.9	567.5	702.1	739.2	748.5	714.5
82.5°	256.7	284.5	259.8	244.3	244.3	335.6	484.0	558.3	530.4	440.7	420.6
85°	109.8	133.0	134.5	117.5	112.9	207.2	324.8	304.6	283.0	270.6	267.5
87.5°	30.9	43.3	43.3	32.5	24.7	57.2	65.0	18.6	0.0	1.5	3.1
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)