

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: P451296

Luminaire Tested: **GALN-SA2A-830-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451296
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-SA2A-830-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7379 lumens
Efficiency: N/A
Efficacy: 117.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 63
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

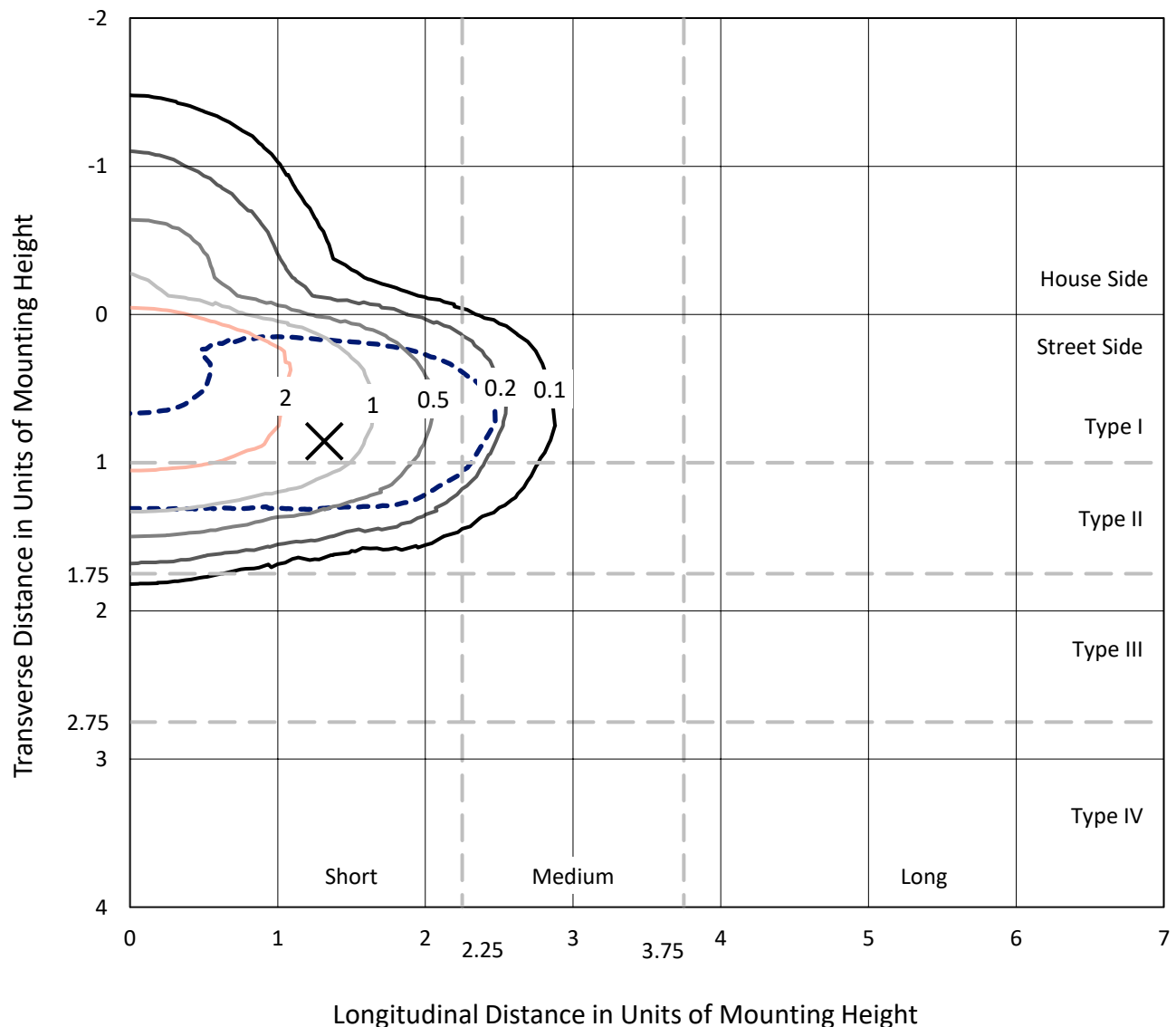


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Iso-Footcandle Lines of Horizontal Illumination

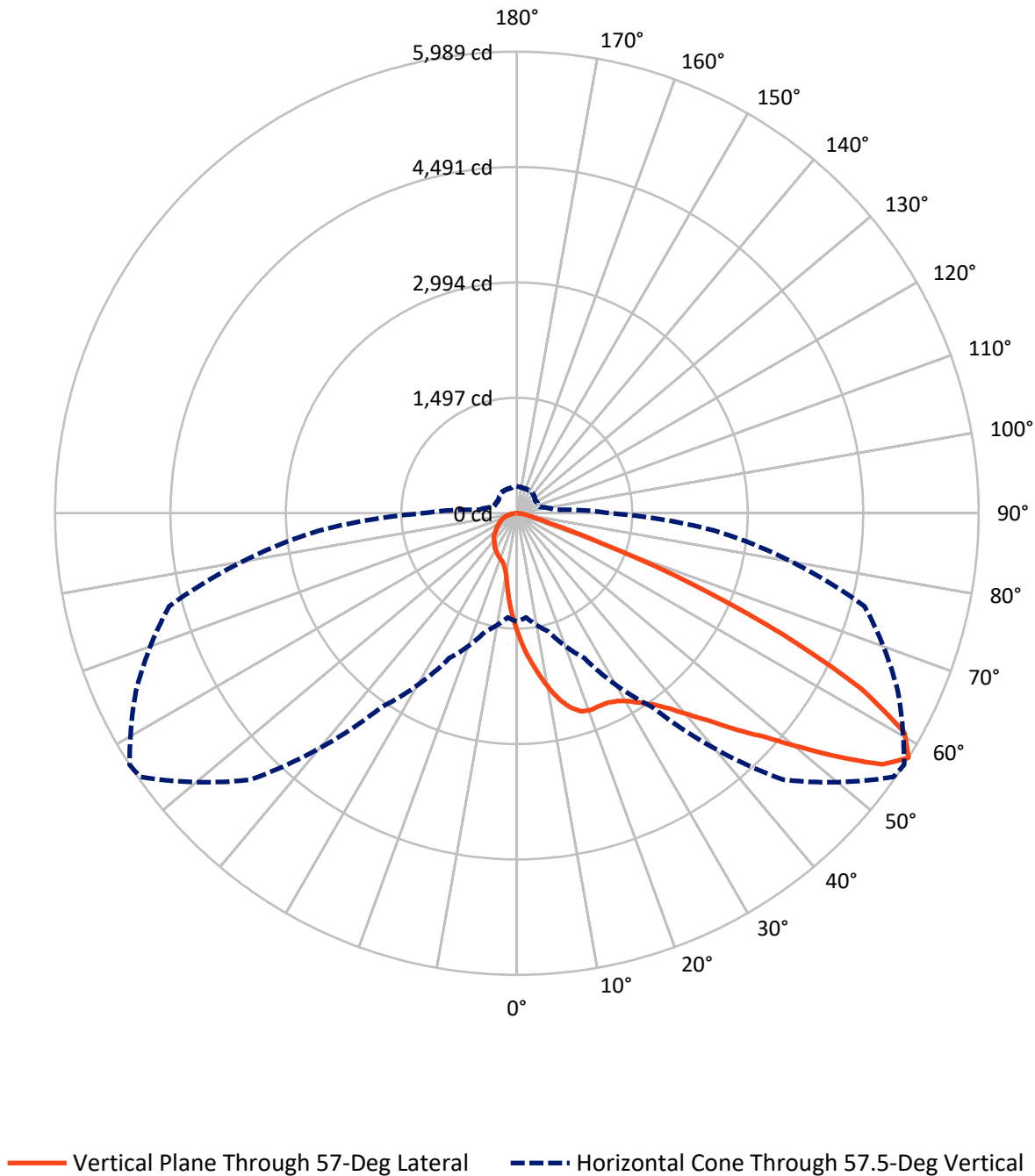
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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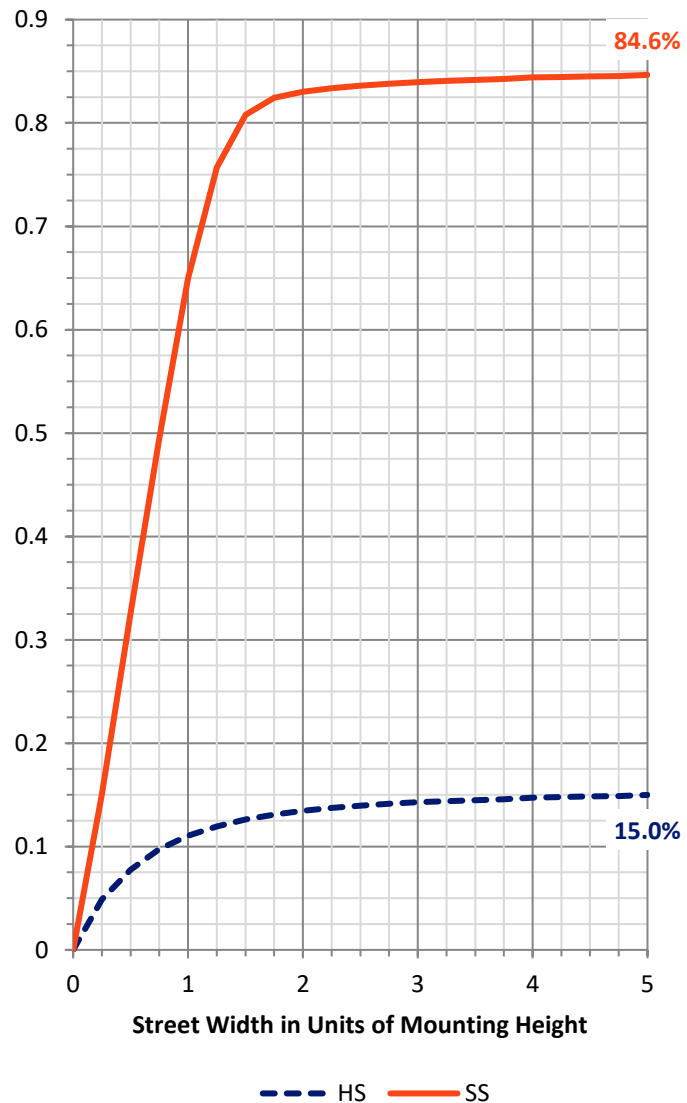
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1122.1	0.0	1122.1
	% Fixture	15.2	0.0	15.2
Street Side	Lumens	6256.9	0.0	6256.9
	% Fixture	84.8	0.0	84.8
Total	Lumens	7379.0	0.0	7379.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.0	2.0
10°-20°	439.1	6.0
20°-30°	729.1	9.9
30°-40°	1098.3	14.9
40°-50°	1648.9	22.3
50°-60°	1848.3	25.0
60°-70°	1081.7	14.7
70°-80°	320.0	4.3
80°-90°	64.7	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°	7379.0	100.0
0°-180°	7379.0	100.0

Coefficient of Utilization



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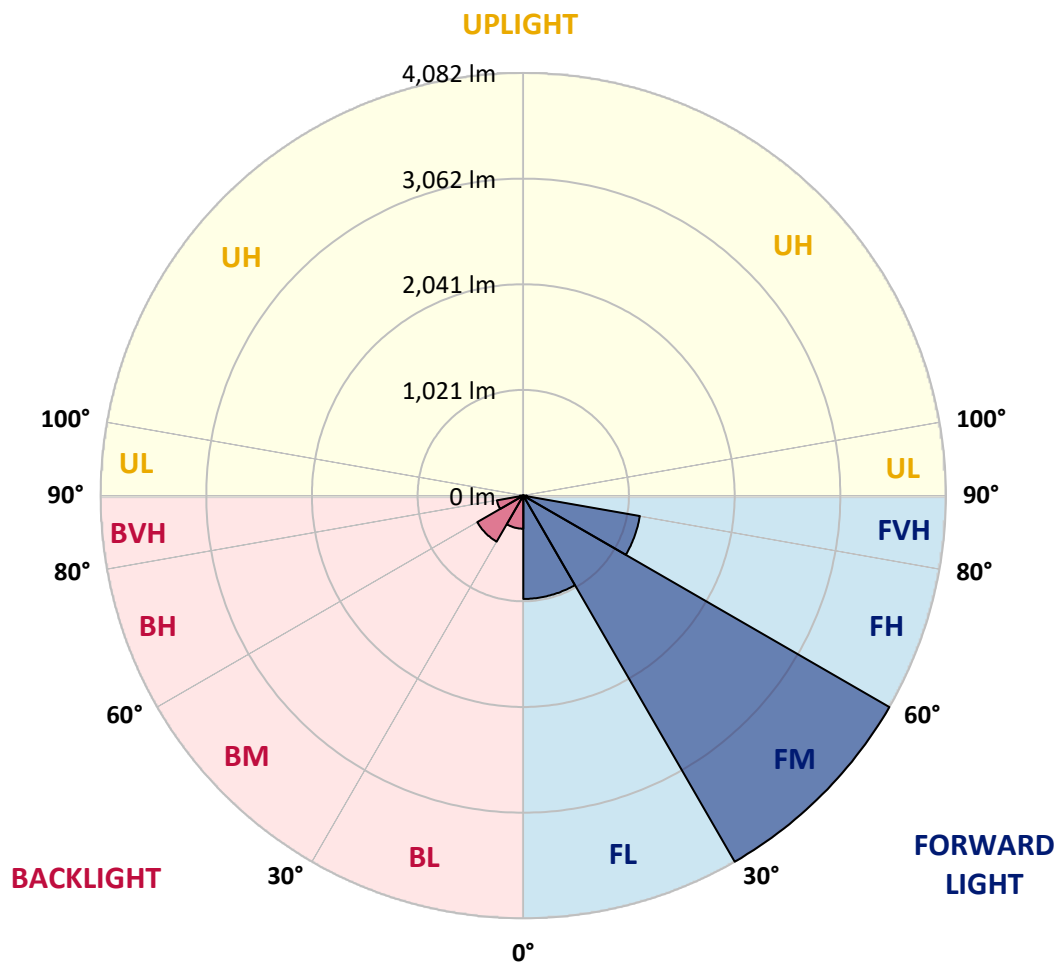
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	997.5	13.5			
FM	(30°-60°)	4082.4	55.3			
FH	(60°-80°)	1143.4	15.5			G1/1800
FVH	(80°-90°)	33.6	0.5			G1/100
BL	(0°-30°)	319.7	4.3	B1/500		
BM	(30°-60°)	513.1	7.0	B1/1000		
BH	(60°-80°)	258.2	3.5	B1/500		G1/500
BVH	(80°-90°)	31.1	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1550.2	1550.2	1550.2	1550.2	1550.2	1550.2	1550.2	1550.2	1550.2	1550.2	1550.2
2.5°	1926.3	1905.3	1888.7	1874.2	1855.2	1803.9	1752.6	1751.8	1711.0	1648.0	1583.4
5°	2240.1	2211.9	2215.5	2170.3	2125.0	2050.7	1942.0	1936.4	1849.5	1731.6	1611.6
7.5°	2444.5	2444.9	2433.6	2407.8	2358.9	2274.5	2151.3	2123.4	2002.6	1823.7	1644.0
10°	2434.0	2444.9	2463.9	2486.1	2501.1	2459.5	2347.2	2313.2	2156.1	1935.2	1679.9
12.5°	2294.3	2311.2	2338.3	2394.0	2484.1	2552.8	2514.4	2486.9	2333.8	2046.3	1719.5
15°	2207.0	2217.1	2232.1	2269.6	2366.6	2531.0	2630.3	2615.8	2501.5	2171.9	1763.9
17.5°	2180.4	2190.5	2195.3	2218.3	2287.4	2455.8	2676.0	2701.8	2650.1	2287.4	1808.8
20°	2207.0	2211.9	2211.9	2225.6	2279.7	2411.8	2673.9	2726.1	2772.1	2425.9	1850.8
22.5°	2276.9	2278.9	2276.1	2280.9	2321.3	2423.9	2655.0	2719.6	2870.7	2543.5	1883.5
25°	2390.4	2393.6	2375.0	2363.7	2393.2	2477.2	2665.5	2724.8	2947.8	2655.8	1905.3
27.5°	2519.2	2523.3	2500.7	2474.4	2488.1	2543.1	2706.7	2760.0	3005.6	2766.4	1919.0
30°	2677.2	2678.8	2640.8	2609.3	2600.4	2641.2	2776.9	2826.6	3077.5	2896.9	1939.6
32.5°	2838.7	2850.9	2802.0	2757.6	2742.6	2755.1	2880.8	2928.8	3163.1	3037.1	1972.7
35°	3058.5	3060.5	3001.9	2947.8	2898.5	2914.7	3013.6	3048.4	3281.4	3199.0	2019.6
37.5°	3332.7	3351.3	3270.5	3169.6	3109.0	3085.5	3174.4	3212.4	3447.5	3397.8	2090.3
40°	3637.3	3644.2	3575.1	3512.1	3401.4	3333.5	3394.9	3436.1	3652.2	3634.9	2172.3
42.5°	3828.8	3843.7	3848.9	3842.5	3759.3	3645.4	3668.8	3688.2	3894.6	3857.4	2256.3
45°	3893.4	3915.6	3990.7	4149.9	4158.8	4046.5	3991.9	4010.5	4158.8	4082.0	2336.7
47.5°	3786.3	3824.3	3962.9	4289.2	4533.6	4542.1	4377.7	4336.9	4399.5	4268.2	2394.8
50°	3509.7	3517.7	3729.8	4202.4	4709.3	5015.9	4845.8	4769.9	4628.1	4406.0	2434.8
52.5°	3081.5	3090.8	3268.5	3798.9	4601.0	5347.1	5393.5	5257.8	4860.4	4513.0	2461.1
55°	2287.4	2341.1	2536.6	3049.2	4088.1	5316.0	5829.0	5751.8	5141.1	4597.8	2502.3
57.5°	1406.4	1357.2	1589.0	2074.5	3074.6	4888.6	5963.5	5988.5	5450.1	4668.9	2571.4
60°	647.1	656.8	752.5	1070.0	1874.2	3824.3	5616.9	5775.2	5620.9	4666.5	2588.7
62.5°	445.9	437.0	412.8	469.8	854.7	2418.7	4744.4	5012.6	5278.4	4521.5	2519.7
65°	398.7	389.8	342.9	327.2	392.6	1054.2	3449.1	3787.6	4444.3	4155.5	2347.6
67.5°	372.4	360.3	311.8	281.1	280.3	419.7	2033.7	2441.3	3296.4	3513.3	2034.1
70°	344.9	335.3	287.2	253.3	238.7	263.8	893.9	1170.2	2140.4	2531.8	1584.6
72.5°	317.5	306.2	263.0	226.6	207.6	197.5	342.5	445.5	1209.3	1517.9	971.4
75°	277.5	271.8	235.1	205.2	184.6	159.5	217.3	248.0	578.4	697.2	487.5
77.5°	242.8	236.7	208.8	179.3	164.4	129.7	154.3	168.4	244.0	282.7	220.1
80°	177.7	183.8	176.1	158.3	146.6	101.8	103.8	115.5	145.0	160.4	134.5
82.5°	112.7	124.0	135.7	122.0	111.1	80.4	71.9	76.3	99.0	105.0	59.8
85°	47.3	48.1	78.8	74.3	63.4	47.7	43.2	45.6	52.9	55.3	27.9
87.5°	18.2	17.8	27.9	25.9	19.8	13.7	13.7	15.3	21.0	19.4	8.9
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°	1550.2	1550.2	1550.2	1550.2	1550.2	1550.2	1550.2	1550.2	1550.2	1550.2	1550.2
2.5°	1555.5	1526.8	1469.9	1399.2	1347.5	1289.3	1238.0	1201.3	1187.5	1181.1	1168.9
5°	1554.3	1497.7	1379.8	1256.2	1156.8	1055.0	969.0	913.3	908.4	871.3	867.6
7.5°	1554.7	1468.2	1280.4	1098.7	947.2	843.0	771.9	753.3	731.1	725.4	728.3
10°	1555.9	1430.7	1173.8	942.7	796.1	727.9	701.2	693.9	694.7	697.2	697.6
12.5°	1557.5	1394.3	1063.1	824.4	711.3	683.0	680.2	686.7	693.5	698.8	700.0
15°	1559.5	1352.7	955.3	729.1	668.9	666.5	675.8	686.7	696.4	704.0	705.2
17.5°	1557.1	1304.3	864.8	670.5	645.5	657.2	672.5	686.3	695.1	702.4	703.2
20°	1551.5	1250.1	777.5	629.3	630.9	649.9	666.5	679.4	689.1	692.7	695.5
22.5°	1529.6	1185.5	701.6	597.4	613.6	639.8	659.6	667.3	656.4	648.7	650.7
25°	1492.5	1101.5	630.9	571.5	597.8	625.7	645.9	627.3	618.4	615.2	616.8
27.5°	1446.0	1009.4	577.6	544.5	577.6	609.9	604.3	601.0	597.0	591.7	593.0
30°	1395.9	919.3	532.4	523.5	555.8	574.4	576.8	582.0	577.6	569.5	572.8
32.5°	1349.5	834.5	498.0	505.7	540.4	537.6	555.8	561.9	541.3	514.2	515.4
35°	1309.9	755.7	472.2	488.3	514.2	515.4	533.6	512.6	490.4	477.4	478.2
37.5°	1280.0	694.3	455.2	473.4	480.7	496.0	486.3	475.4	472.6	463.7	464.1
40°	1262.2	640.6	444.3	461.7	460.5	471.0	439.9	450.8	454.8	452.0	452.4
42.5°	1244.5	602.6	433.0	445.5	445.1	424.5	417.7	426.9	437.4	438.7	437.8
45°	1230.3	573.2	421.3	420.9	429.0	396.6	394.6	400.3	415.2	422.5	422.1
47.5°	1214.6	548.5	403.5	392.2	394.6	379.3	376.0	378.5	396.6	408.4	411.6
50°	1194.8	523.9	381.3	366.0	355.9	363.1	363.9	364.3	382.5	395.8	398.7
52.5°	1179.0	505.3	355.9	344.5	332.4	348.6	354.6	355.4	366.4	377.3	379.3
55°	1188.3	494.8	330.8	322.7	311.8	333.6	345.4	347.0	349.4	357.5	358.7
57.5°	1216.2	497.2	310.6	300.1	292.0	315.9	335.7	336.9	335.3	344.9	346.6
60°	1224.7	496.0	295.7	275.1	270.2	296.9	321.5	323.9	323.5	337.7	340.5
62.5°	1189.1	480.7	280.7	254.1	250.8	277.5	301.7	311.4	313.4	333.6	337.3
65°	1105.5	449.2	260.9	231.8	231.8	256.9	282.7	296.1	301.7	328.8	332.8
67.5°	995.3	412.0	240.7	212.9	212.1	237.1	262.5	276.3	285.2	321.9	324.3
70°	826.0	361.9	215.7	192.3	192.3	214.9	237.9	254.5	267.4	309.0	309.0
72.5°	565.9	300.9	185.4	168.8	169.2	190.2	213.7	232.3	247.6	283.1	284.0
75°	357.9	235.1	152.3	143.8	145.4	165.2	189.4	208.8	239.5	279.9	281.1
77.5°	190.2	165.2	121.2	119.2	121.2	139.4	166.4	193.1	240.3	242.8	238.7
80°	123.2	117.1	95.7	91.7	92.5	112.3	148.2	183.4	193.1	195.5	186.6
82.5°	67.1	74.3	67.9	63.8	63.8	87.7	126.4	145.8	138.5	115.1	109.9
85°	28.7	34.7	35.1	30.7	29.5	54.1	84.8	79.6	73.9	70.7	69.9
87.5°	8.1	11.3	11.3	8.5	6.5	14.9	17.0	4.8	0.0	0.4	0.8
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)