

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: STREETWORKS

Report Number: P324656

Luminaire Tested: **GAN-SA2D-830-U-SLR-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P324656
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-28)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-SA2D-830-U-SLR-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9351 lumens
Efficiency: N/A
Efficacy: 72.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G2

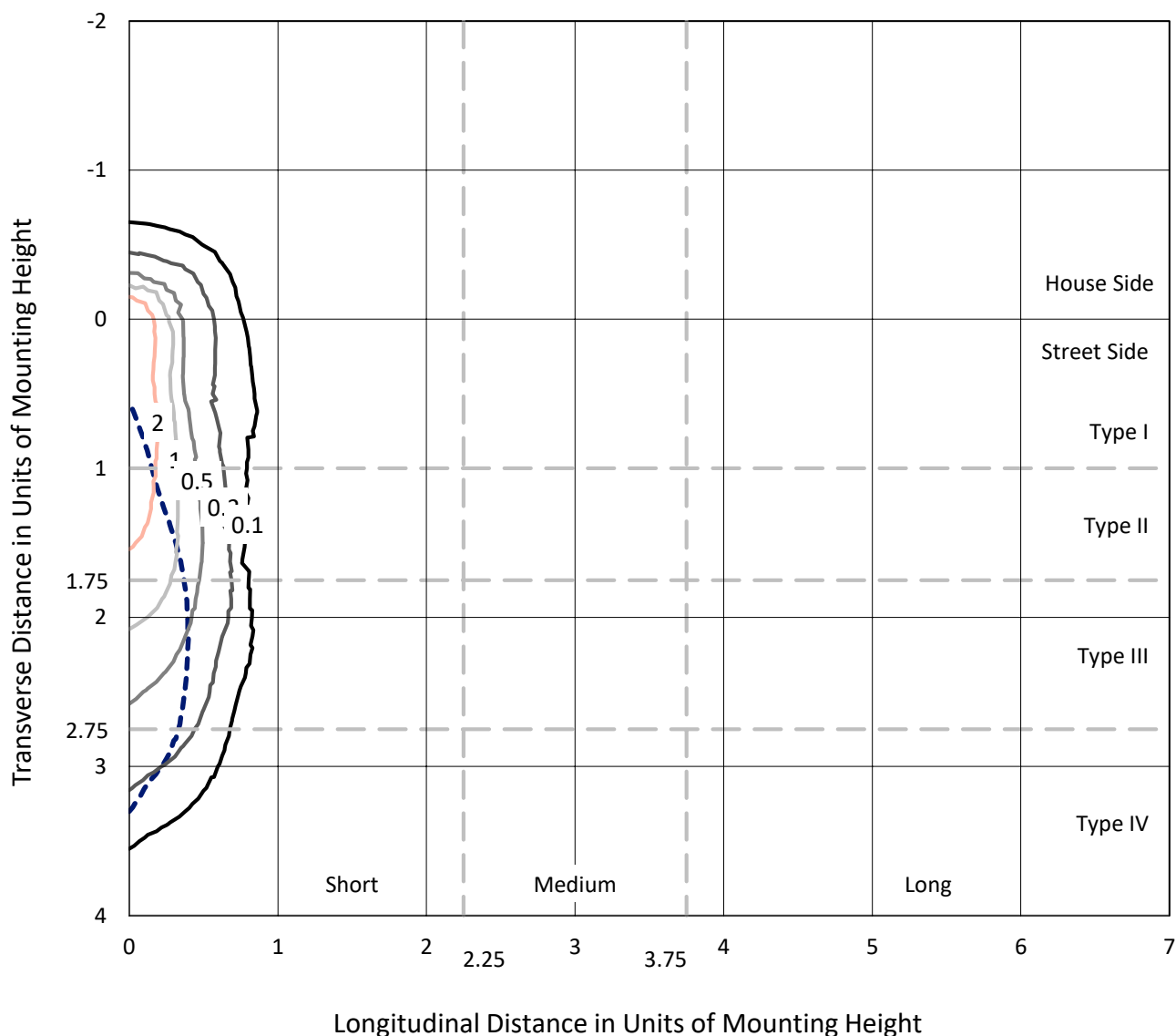
Input Watts (W): 129
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

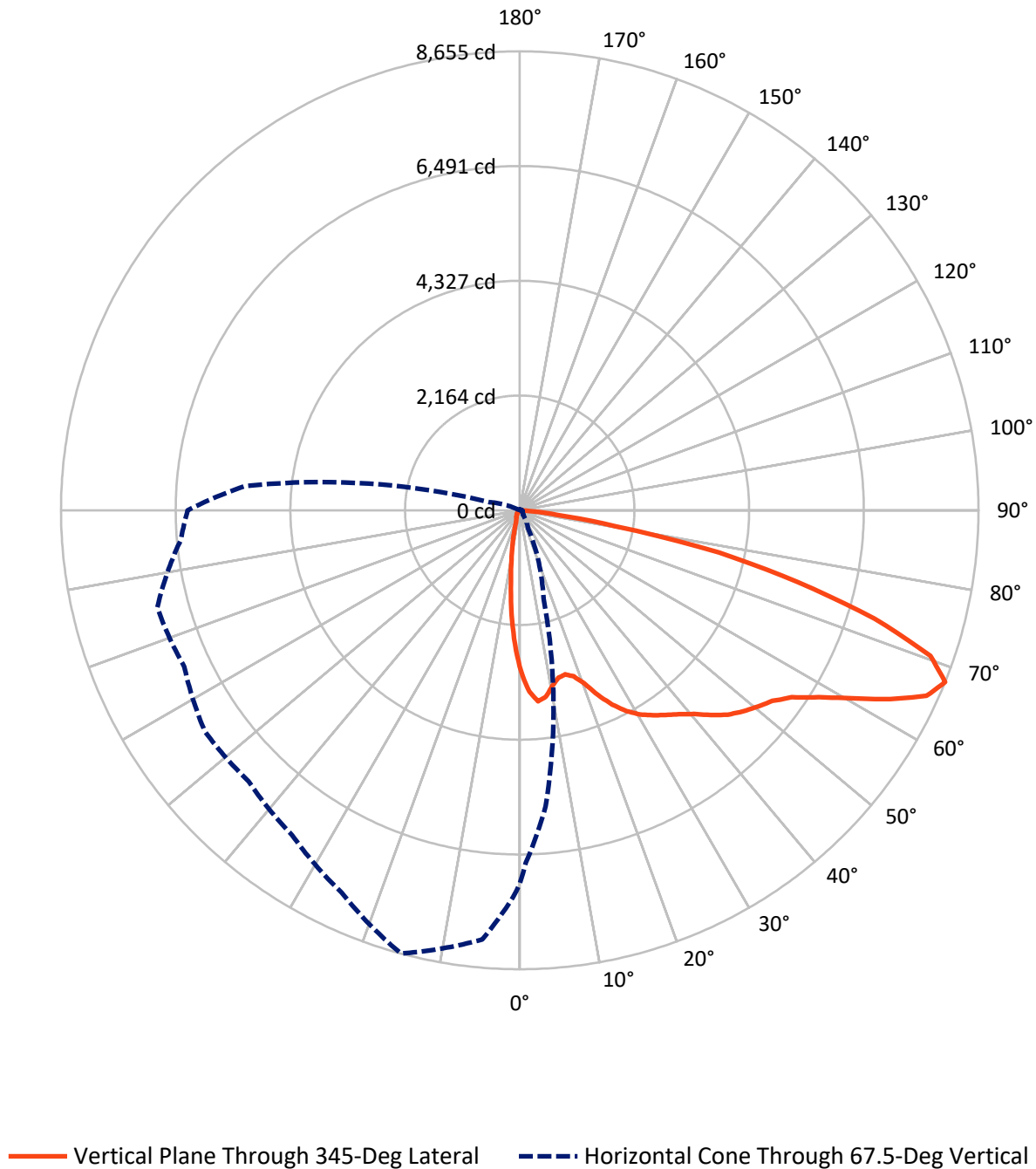
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1131.8	0.0	1131.8
	% Fixture	12.1	0.0	12.1
Street Side	Lumens	8219.2	0.0	8219.2
	% Fixture	87.9	0.0	87.9
Total	Lumens	9351.0	0.0	9351.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	233.8	2.5
10°-20°	465.3	5.0
20°-30°	660.8	7.1
30°-40°	976.0	10.4
40°-50°	1407.6	15.1
50°-60°	1976.0	21.1
60°-70°	2303.5	24.6
70°-80°	1177.6	12.6
80°-90°	150.4	1.6
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°	9351.0	100.0
0°-180°	9351.0	100.0

Coefficient of Utilization



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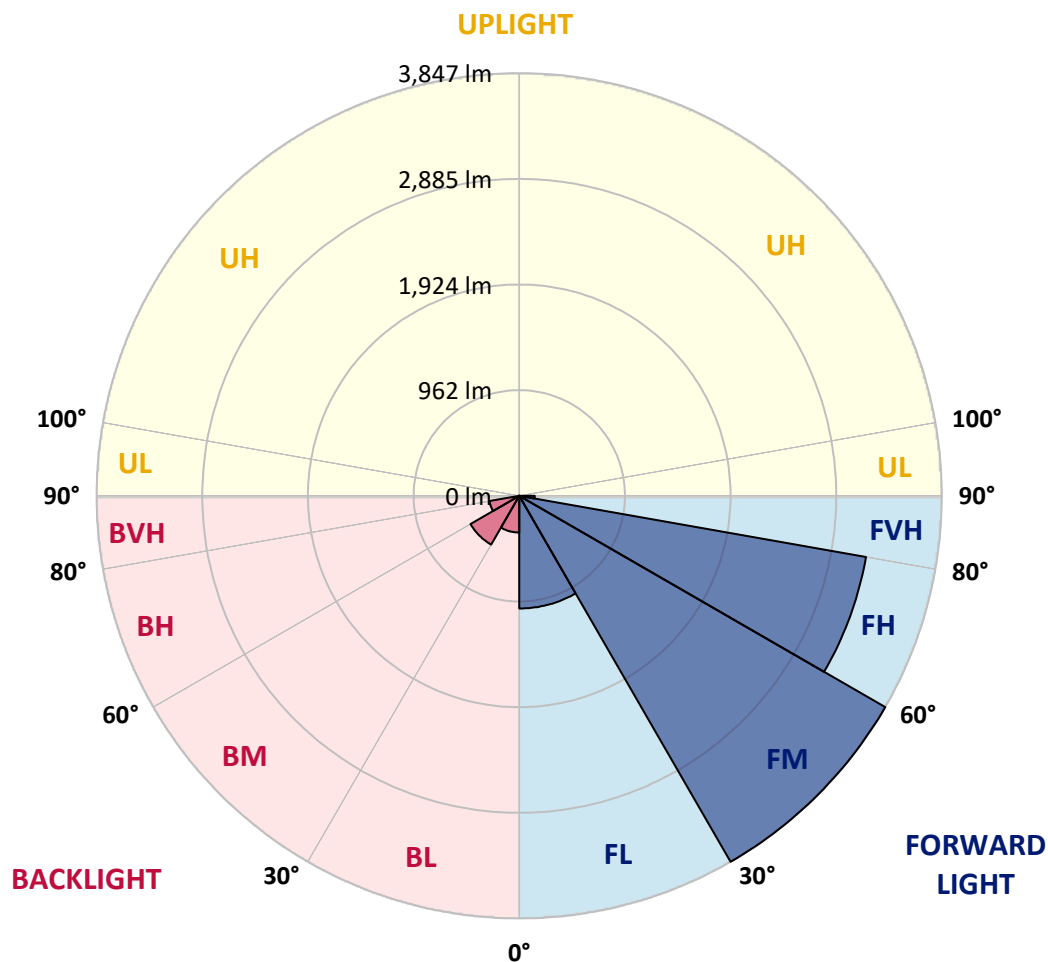
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1025.6	11.0			
FM	(30°-60°)	3847.2	41.1			
FH	(60°-80°)	3205.2	34.3			G2/5000
FVH	(80°-90°)	141.3	1.5			G2/225
BL	(0°-30°)	334.3	3.6	B1/500		
BM	(30°-60°)	512.5	5.5	B1/1000		
BH	(60°-80°)	275.8	2.9	B1/500		G1/500
BVH	(80°-90°)	9.1	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	3046.1	3046.1	3046.1	3046.1	3046.1	3046.1	3046.1	3046.1	3046.1	3046.1	3046.1
2.5°	3335.4	3309.7	3281.3	3188.7	3102.8	3004.4	2924.2	2868.4	2798.4	2707.6	2684.6
5°	3311.4	3284.0	3194.9	2988.9	2808.6	2633.2	2464.0	2364.7	2241.6	2116.7	2085.6
7.5°	3070.9	3042.1	2913.6	2631.4	2388.7	2135.3	1915.5	1779.5	1640.4	1526.1	1465.4
10°	2820.6	2789.1	2644.7	2302.3	2003.2	1774.2	1613.0	1483.2	1351.6	1229.3	1131.9
12.5°	2648.3	2607.1	2450.2	2062.2	1801.7	1646.2	1495.6	1340.1	1162.0	1030.9	923.7
15°	2576.0	2529.1	2363.4	1969.6	1730.4	1547.8	1351.6	1160.7	952.0	801.8	703.5
17.5°	2631.9	2570.7	2393.1	1963.4	1640.9	1392.4	1144.3	920.1	693.7	541.8	471.8
20°	2821.5	2741.3	2515.8	1961.6	1532.3	1207.6	893.1	639.7	457.2	367.7	330.9
22.5°	3120.1	3014.2	2692.1	1975.8	1420.3	1013.6	645.0	434.6	343.3	296.8	275.1
25°	3480.7	3357.9	2946.0	2025.8	1321.9	824.9	468.7	343.3	289.7	255.6	237.4
27.5°	3823.5	3723.9	3266.7	2098.1	1245.7	672.5	380.5	291.1	247.6	225.0	210.4
30°	4166.0	4040.6	3595.8	2184.0	1154.0	569.3	334.5	265.4	221.9	198.0	188.7
32.5°	4414.9	4310.8	3853.7	2246.0	1056.1	501.9	299.0	242.8	207.3	183.0	169.2
35°	4707.8	4589.9	4074.7	2259.7	993.2	459.4	268.9	218.4	179.9	158.2	143.5
37.5°	5024.1	4877.4	4329.9	2229.6	944.0	438.6	246.3	207.3	167.9	145.7	130.2
40°	5374.0	5208.4	4574.9	2186.2	895.7	431.5	229.0	198.9	158.6	136.0	120.1
42.5°	5742.6	5547.3	4787.1	2140.6	865.2	407.1	227.3	190.5	151.5	127.1	111.2
45°	6052.3	5854.3	5005.0	2125.5	843.5	380.5	234.8	184.7	146.6	120.1	104.5
47.5°	6299.0	6111.6	5228.3	2159.2	831.1	356.2	214.0	192.3	144.0	113.9	98.8
50°	6593.6	6381.4	5542.8	2259.7	812.9	331.8	193.6	220.2	144.0	109.9	93.9
52.5°	6963.1	6753.1	5893.7	2415.7	776.6	298.1	174.1	220.6	145.3	104.5	87.7
55°	7427.8	7275.4	6394.7	2586.7	718.5	248.5	150.6	189.6	140.0	94.8	82.0
57.5°	7873.4	7749.0	6851.4	2703.6	641.0	194.0	131.1	152.8	128.0	83.3	73.1
59°	7995.3	7859.3	7018.9	2708.9	583.0	169.2	121.4	126.3	125.4	78.0	67.8
60°	7995.3	7850.9	7067.2	2680.6	540.9	155.5	115.2	112.5	130.7	74.4	64.7
62.5°	7850.4	7647.5	6910.4	2488.8	441.2	132.5	100.6	93.0	117.4	66.9	57.1
65°	7549.2	7253.7	6376.1	2141.9	393.4	121.4	86.8	76.2	81.5	58.9	50.1
67.5°	7046.8	6646.3	5605.7	1730.4	374.3	118.3	74.9	64.7	61.6	50.5	43.9
70°	6162.1	5717.8	4670.6	1360.5	357.9	117.0	62.9	54.5	49.6	42.5	37.2
72.5°	4484.9	4021.6	3315.9	1063.6	348.2	119.6	50.5	45.6	40.8	33.2	28.8
75°	2565.4	2262.0	1863.7	702.6	296.8	114.3	39.0	38.1	29.2	23.9	19.9
77.5°	1325.5	1285.1	1116.8	269.8	142.2	50.1	25.7	22.2	17.3	14.6	12.0
80°	571.9	565.7	489.5	78.0	37.7	27.9	14.6	9.3	8.0	6.2	4.9
82.5°	197.6	197.6	174.1	26.1	16.8	13.7	1.8	0.0	0.0	0.0	0.0
85°	39.9	44.7	31.5	0.0	5.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3046.1	3046.1	3046.1	3046.1	3046.1	3046.1	3046.1	3046.1	3046.1	3046.1	3046.1
2.5°	2656.7	2603.1	2599.5	2565.9	2523.8	2504.7	2493.6	2513.1	2537.1	2539.7	2575.6
5°	2062.2	2005.9	2029.4	1969.6	1981.5	1969.6	1950.1	1953.6	1964.3	1931.0	1972.2
7.5°	1448.2	1405.6	1432.7	1416.7	1438.0	1446.4	1434.4	1416.7	1364.4	1358.2	1394.1
10°	1091.6	1043.3	1014.5	984.3	991.0	1004.7	1000.3	987.4	954.2	956.0	990.5
12.5°	877.1	823.1	765.9	692.0	673.8	684.0	673.8	666.3	634.4	637.0	667.6
15°	665.4	621.1	561.3	501.9	469.6	472.7	444.3	424.4	404.5	380.5	399.1
17.5°	449.2	422.2	404.5	386.7	348.2	339.3	303.5	264.9	249.9	238.8	246.8
20°	318.1	303.5	296.4	295.5	273.3	262.3	227.3	203.3	195.8	193.6	198.5
22.5°	265.8	255.2	245.0	239.2	228.1	215.3	188.7	176.8	171.4	168.8	172.3
25°	231.2	223.3	212.6	202.9	198.5	184.7	165.7	156.8	153.3	150.6	152.4
27.5°	205.6	198.5	186.1	179.9	176.3	164.4	148.0	140.9	137.8	136.9	136.4
30°	185.2	178.5	167.0	159.9	153.7	143.1	133.3	126.3	123.2	122.3	121.4
32.5°	164.8	159.5	151.9	144.9	138.2	128.5	120.1	114.3	109.4	108.5	108.1
35°	139.1	133.8	129.8	129.4	123.2	113.9	107.6	100.1	96.1	94.8	95.2
37.5°	123.6	116.5	107.6	110.8	109.0	102.3	93.9	86.4	82.4	81.5	81.5
40°	113.9	106.3	96.1	90.8	96.1	94.8	81.5	74.0	70.0	69.6	68.7
42.5°	104.5	97.0	85.5	76.6	79.3	83.3	70.4	63.3	59.4	58.5	57.1
45°	97.9	89.9	77.1	66.9	61.6	70.0	60.2	51.4	49.2	47.4	46.5
47.5°	91.7	84.2	69.6	58.0	49.2	50.5	48.3	42.1	39.4	37.7	37.2
50°	86.4	78.4	62.9	49.6	40.8	37.2	39.0	33.2	31.0	29.2	28.4
52.5°	80.2	72.7	55.8	43.0	34.1	29.2	29.7	26.1	23.9	22.6	22.2
55°	75.3	67.8	50.1	37.7	30.1	23.9	21.3	20.4	19.0	18.2	17.7
57.5°	68.7	61.6	44.3	31.9	25.7	19.5	16.4	16.4	15.9	15.1	14.6
59°	64.7	58.5	40.8	28.8	23.5	16.8	14.6	15.1	14.6	13.7	13.3
60°	61.6	55.8	38.1	26.6	22.2	15.5	13.3	14.2	13.7	12.8	12.4
62.5°	54.5	50.5	32.8	22.2	19.5	12.4	11.1	12.0	12.0	11.5	11.1
65°	47.8	43.4	27.9	18.6	18.2	10.6	8.9	10.6	11.1	10.2	9.3
67.5°	41.6	37.2	24.4	15.1	16.8	8.4	6.6	8.9	12.0	9.3	8.4
70°	35.4	31.0	19.0	12.0	17.7	5.8	5.3	8.0	14.2	10.2	8.0
72.5°	27.5	23.9	13.3	8.9	19.0	4.0	4.0	6.6	15.9	11.1	7.5
75°	19.0	15.5	8.0	5.3	15.5	2.7	2.7	6.2	15.1	10.2	7.1
77.5°	11.1	8.4	2.7	0.4	8.0	0.0	0.4	4.4	10.6	6.2	3.1
80°	4.0	1.8	0.0	0.0	4.9	0.0	0.0	0.0	0.9	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	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°	3046.1	3046.1	3046.1	3046.1	3046.1	3046.1	3046.1	3046.1	3046.1	3046.1	3046.1
2.5°	2584.9	2644.7	2698.3	2779.4	2875.5	2986.3	3081.5	3183.8	3280.0	3319.8	3347.3
5°	1980.7	2054.6	2141.0	2260.2	2418.8	2614.1	2797.1	3004.0	3226.4	3337.6	3442.1
7.5°	1400.3	1475.6	1582.8	1709.5	1901.4	2133.9	2373.2	2658.9	2960.1	3136.0	3309.2
10°	1006.9	1099.5	1199.6	1372.9	1567.8	1788.4	2034.7	2353.7	2689.5	2884.4	3093.0
12.5°	685.3	790.8	942.3	1136.3	1365.3	1581.5	1795.5	2099.8	2489.7	2682.8	2906.5
15°	411.1	469.6	629.9	854.5	1135.4	1404.8	1639.1	1944.3	2359.9	2596.4	2829.0
17.5°	253.4	280.4	367.7	552.0	847.0	1187.7	1508.9	1891.6	2378.5	2666.4	2915.4
20°	202.0	212.6	240.5	326.0	561.3	948.5	1362.2	1881.0	2530.4	2884.8	3151.9
22.5°	175.4	185.6	204.2	237.0	353.1	710.1	1223.1	1890.7	2748.4	3212.2	3524.1
25°	154.6	163.5	181.2	208.2	258.7	500.1	1074.3	1934.1	3032.3	3618.4	3949.8
27.5°	138.2	145.7	162.1	186.9	221.9	349.1	905.5	1986.9	3369.0	4034.0	4360.9
30°	123.2	129.8	144.4	167.5	192.7	268.5	720.3	2022.7	3706.1	4360.9	4654.6
32.5°	110.3	115.2	128.5	148.0	167.5	214.0	547.5	2017.0	3956.4	4632.9	4865.9
35°	97.0	101.9	113.4	130.2	145.7	176.8	430.6	1909.3	4174.4	4915.1	5107.8
37.5°	82.4	88.6	99.7	114.7	125.4	155.5	348.2	1779.5	4395.5	5237.6	5377.6
40°	70.0	76.2	85.9	102.3	109.0	147.5	267.6	1621.4	4644.0	5598.2	5673.5
42.5°	58.0	63.8	74.0	88.2	102.8	127.1	198.0	1440.6	4882.8	5906.5	5943.3
45°	47.0	52.7	63.3	77.5	109.9	105.4	153.3	1247.0	5075.5	6163.0	6175.0
47.5°	37.2	42.5	53.6	73.1	102.3	84.2	109.4	1095.1	5237.2	6363.3	6331.8
50°	28.8	33.2	44.7	83.7	89.5	69.6	82.8	1044.6	5382.0	6487.3	6405.8
52.5°	22.6	26.6	36.8	78.4	69.6	57.6	69.6	1092.0	5580.5	6590.1	6447.4
55°	18.2	22.2	28.8	44.7	47.4	48.7	59.4	1136.3	5922.9	6831.1	6693.3
57.5°	15.1	19.0	23.5	31.5	35.9	41.2	52.7	1141.2	6326.5	7231.5	7101.3
59°	13.7	17.3	21.3	27.9	31.5	37.7	49.6	1114.6	6468.7	7377.3	7312.2
60°	12.8	16.4	19.9	25.7	29.2	35.4	47.8	1089.3	6474.9	7372.0	7402.1
62.5°	11.1	14.6	17.7	21.7	24.8	30.1	43.0	995.9	6212.6	7130.5	7348.0
65°	9.7	12.8	15.9	18.6	21.3	27.0	39.0	825.3	5764.8	6741.1	6978.1
67.5°	8.9	11.1	14.6	16.4	19.0	23.9	34.6	588.3	5205.3	6264.9	6418.6
70°	8.0	10.6	13.3	15.1	17.3	20.8	29.7	338.0	4395.5	5567.6	5677.1
72.5°	7.5	10.2	12.0	14.2	15.5	18.6	27.0	159.0	3218.4	4460.1	4745.9
75°	6.6	9.3	11.1	13.3	14.6	16.8	23.0	76.2	2140.6	3227.7	3552.4
77.5°	4.0	7.5	10.2	12.0	12.8	14.6	19.0	43.9	1366.2	2234.1	2631.4
80°	0.0	2.7	7.5	10.2	11.1	12.4	14.6	34.6	731.0	1276.3	1531.9
82.5°	0.0	0.0	5.3	8.0	7.5	8.4	11.1	21.7	329.6	834.2	940.0
85°	0.0	0.0	1.8	6.2	5.3	4.0	7.5	7.5	72.2	422.2	526.7
87.5°	0.0	0.0	0.0	0.4	2.7	1.8	3.1	0.9	0.4	31.5	127.6
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°	3046.1	3046.1	3046.1	3046.1	3046.1	3046.1	3046.1	3046.1	3046.1	3046.1
2.5°	3443.4	3476.2	3531.6	3557.7	3544.9	3490.4	3425.3	3358.8	3319.8	3335.4
5°	3655.2	3824.0	3921.4	3953.8	3899.7	3777.5	3617.5	3406.7	3331.8	3311.4
7.5°	3655.2	3972.8	4173.9	4209.4	4088.9	3849.2	3549.3	3220.2	3110.7	3070.9
10°	3526.7	3959.1	4239.5	4295.8	4127.4	3769.0	3367.2	2991.6	2861.8	2820.6
12.5°	3381.9	3847.5	4142.9	4220.5	4082.2	3689.3	3241.0	2837.0	2684.1	2648.3
15°	3292.8	3710.1	3954.7	4010.9	3952.4	3642.8	3210.9	2790.5	2610.6	2576.0
17.5°	3324.7	3603.8	3692.0	3724.7	3764.2	3626.4	3292.8	2892.3	2664.6	2631.9
20°	3444.8	3491.7	3446.1	3487.3	3593.6	3642.3	3488.2	3138.7	2865.3	2821.5
22.5°	3648.6	3433.7	3305.7	3322.1	3451.4	3695.1	3786.8	3490.4	3175.0	3120.1
25°	3886.0	3480.7	3227.7	3213.1	3346.0	3764.6	4059.7	3873.2	3541.3	3480.7
27.5°	4184.6	3586.1	3211.8	3197.1	3309.2	3829.7	4286.5	4251.5	3927.2	3823.5
30°	4414.9	3689.8	3259.2	3225.5	3346.0	3874.9	4468.5	4572.7	4234.6	4166.0
32.5°	4580.2	3812.0	3336.2	3287.5	3449.6	3952.9	4609.0	4866.8	4519.0	4414.9
35°	4706.0	3944.9	3460.7	3380.5	3592.3	4071.2	4740.5	5180.0	4821.6	4707.8
37.5°	4823.8	4131.4	3655.2	3559.5	3816.0	4261.7	4879.6	5535.3	5160.1	5024.1
40°	4988.2	4342.7	3955.1	3870.1	4192.1	4521.3	5053.3	5905.6	5545.0	5374.0
42.5°	5152.5	4569.5	4262.1	4285.1	4661.3	4836.7	5277.5	6297.3	5925.1	5742.6
45°	5302.7	4803.5	4699.3	4805.7	5096.7	5182.7	5500.3	6523.6	6228.6	6052.3
47.5°	5436.5	5095.8	5133.9	5417.0	5592.0	5495.9	5666.9	6719.0	6454.5	6299.0
50°	5592.0	5474.2	5706.7	6107.2	6162.1	5779.4	5818.4	6950.2	6718.5	6593.6
52.5°	5762.1	5872.9	6341.1	6694.2	6676.5	6087.3	5970.8	7209.4	7080.5	6963.1
55°	5955.3	6194.9	6899.7	7243.5	7228.4	6431.0	6223.3	7529.7	7534.1	7427.8
57.5°	6241.9	6472.2	7278.9	7687.8	7713.1	6828.0	6651.2	7888.5	7944.3	7873.4
59°	6447.4	6652.1	7429.1	7873.4	7976.2	7135.0	6964.0	8096.7	8059.9	7995.3
60°	6599.8	6766.4	7503.5	7970.5	8129.1	7343.2	7194.8	8219.0	8073.7	7995.3
62.5°	6976.8	7015.4	7637.8	8080.3	8304.9	7805.7	7844.2	8427.2	7978.4	7850.4
65°	7152.7	7172.6	7636.0	7883.6	8134.8	8165.8	8433.4	8433.4	7745.9	7549.2
67.5°	7079.1	6983.0	7257.2	7231.5	7482.3	7951.9	8654.9	8124.2	7301.1	7046.8
70°	6481.1	6111.2	5989.4	6000.4	6192.3	6916.6	8216.3	7214.3	6459.4	6162.1
72.5°	5392.6	4505.3	4204.5	4547.8	4597.9	5315.6	7002.1	5433.0	4763.6	4484.9
75°	4337.4	3175.9	2686.8	3049.2	3134.2	3890.0	5416.6	3383.6	2782.5	2565.4
77.5°	3116.1	2279.7	1927.9	1902.7	2012.6	2467.1	3843.5	1702.9	1420.3	1325.5
80°	1770.2	1500.4	1615.6	1524.4	1579.7	1542.5	1826.0	746.9	611.8	571.9
82.5°	1068.5	886.9	960.4	799.6	1011.8	881.1	703.5	239.2	207.8	197.6
85°	695.1	484.6	252.5	169.2	348.6	563.1	157.3	65.1	50.1	39.9
87.5°	239.7	123.6	12.4	5.3	37.2	105.0	5.8	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

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