

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: P451304

Luminaire Tested: **GALN-SA2A-830-U-SLL-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451304
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-21)
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-SLL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5248 lumens
Efficiency: N/A
Efficacy: 83.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - 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



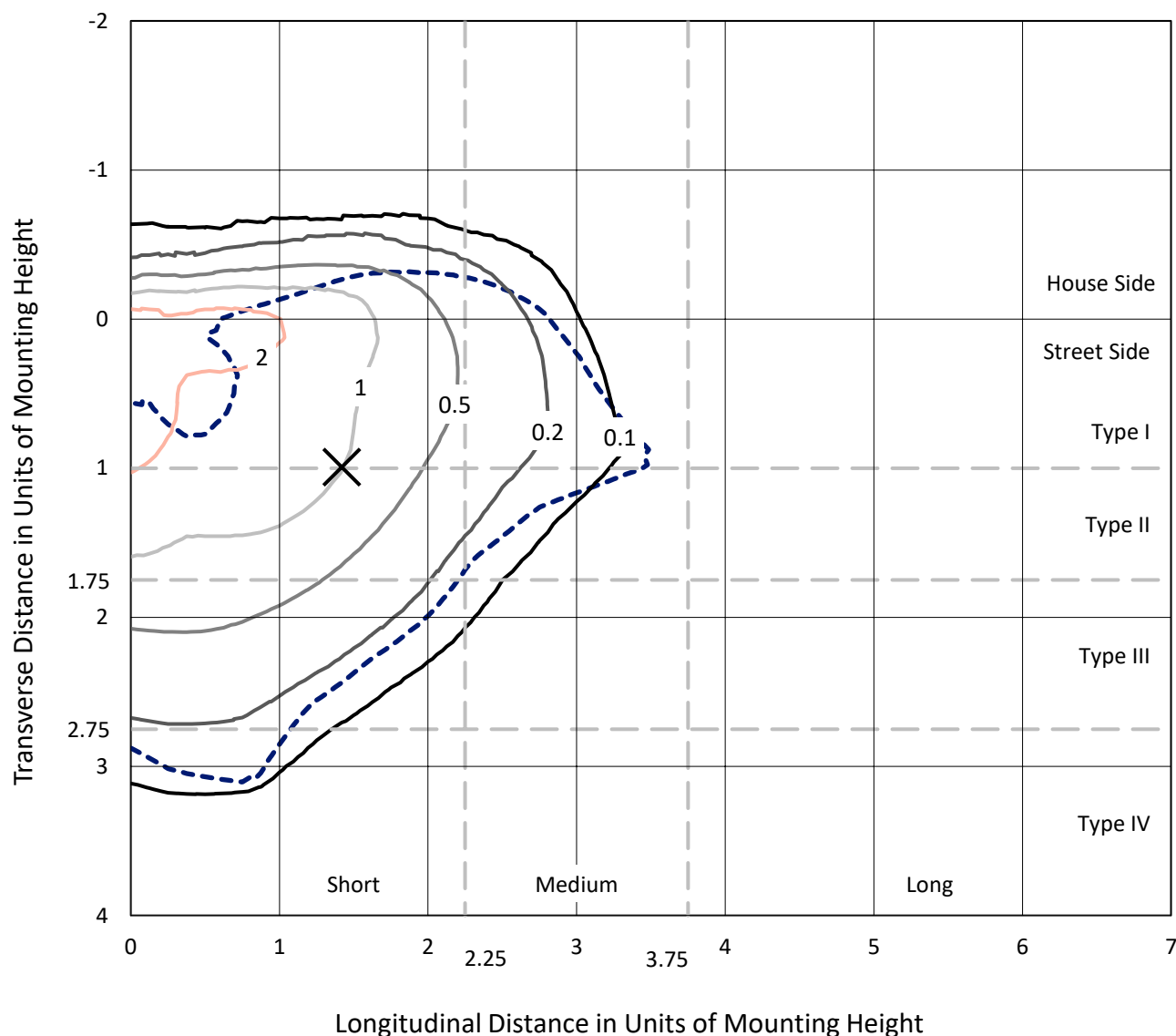
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd



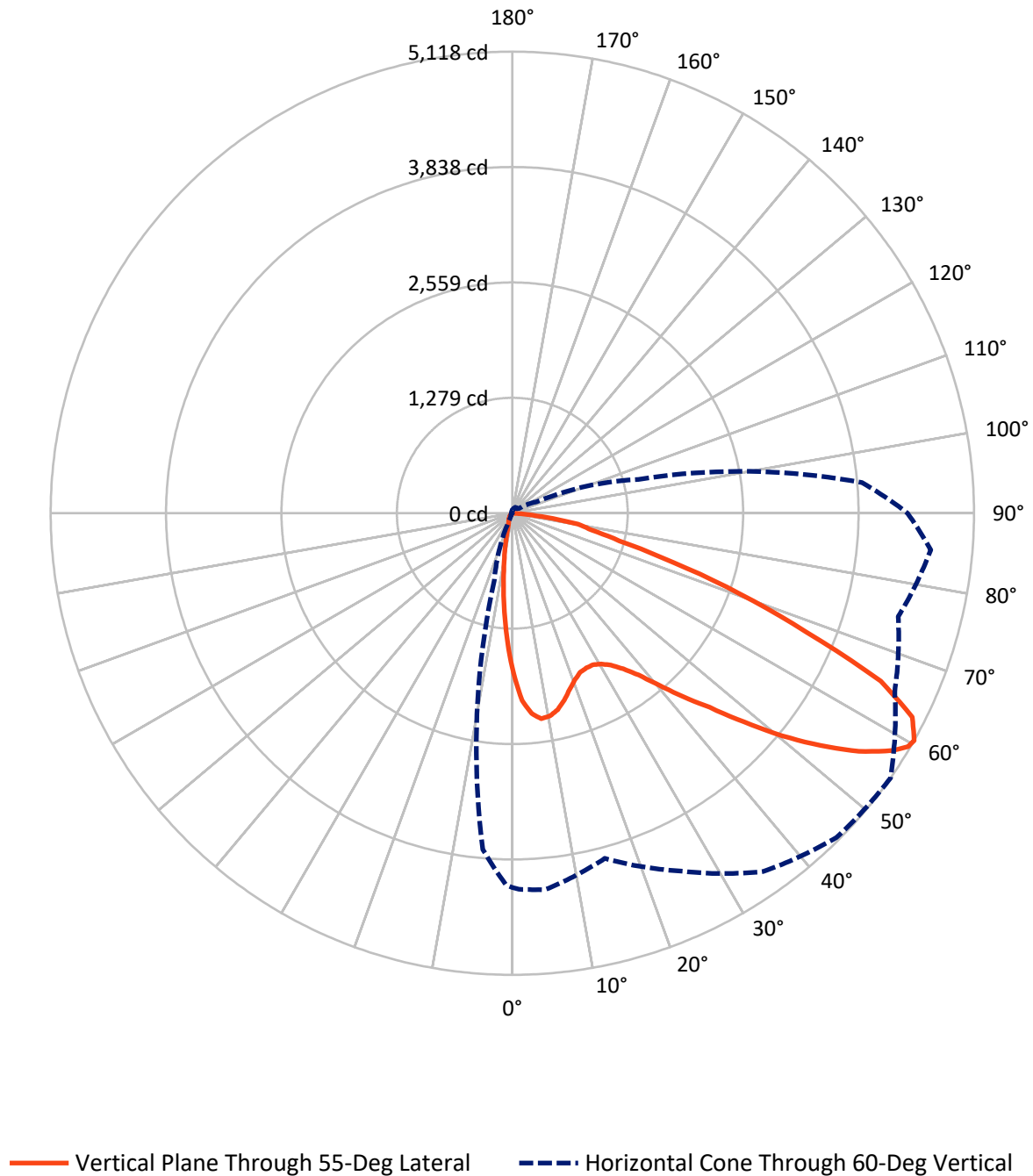
Based on 25 foot mounting height. Maximum calculated value = 3.7 fc

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	778.8	0.0	778.8
	% Fixture	14.8	0.0	14.8
Street Side	Lumens	4469.1	0.0	4469.1
	% Fixture	85.2	0.0	85.2
Total	Lumens	5248.0	0.0	5248.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.6	2.5
10°-20°	259.1	4.9
20°-30°	383.6	7.3
30°-40°	571.7	10.9
40°-50°	837.3	16.0
50°-60°	1208.8	23.0
60°-70°	1271.6	24.2
70°-80°	523.1	10.0
80°-90°	61.3	1.2
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°	5248.0	100.0
0°-180°	5248.0	100.0

Coefficient of Utilization



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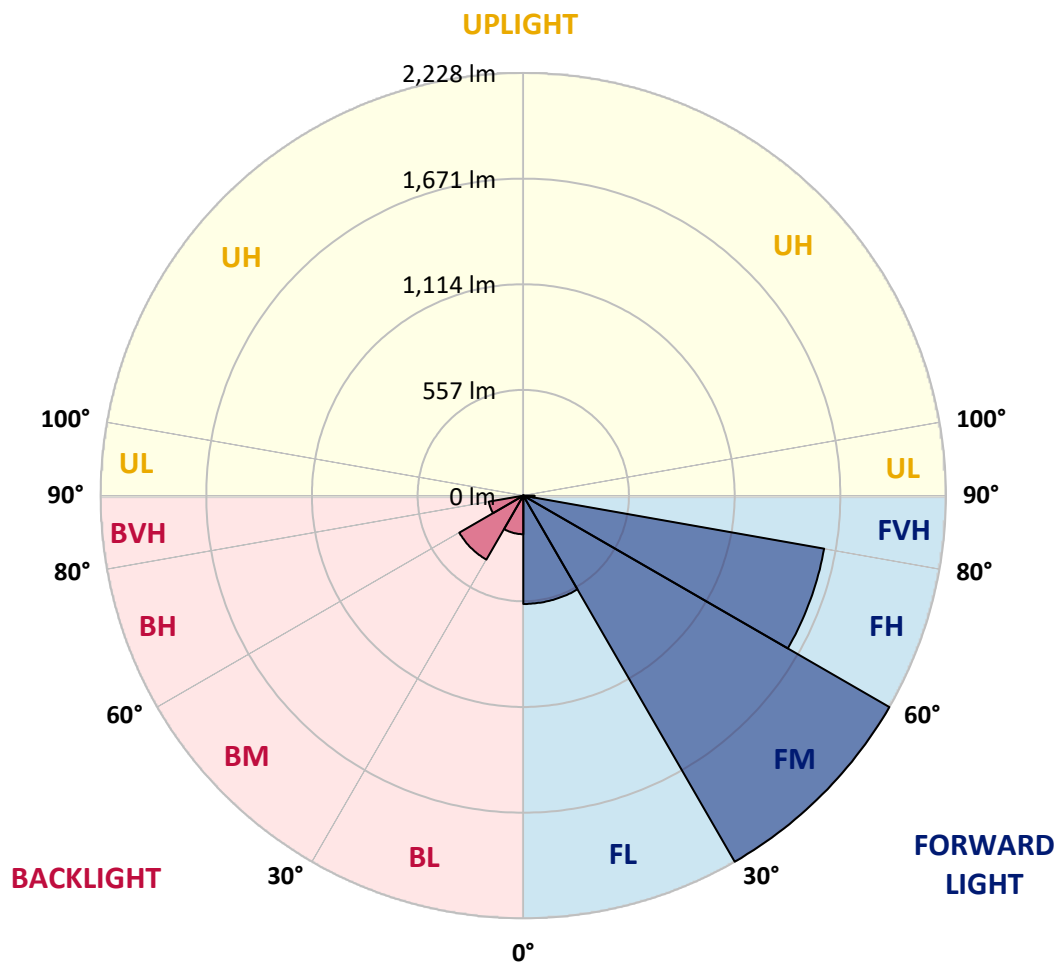
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	571.1	10.9			
FM	(30°-60°)	2228.3	42.5			
FH	(60°-80°)	1610.3	30.7			G1/1800
FVH	(80°-90°)	59.5	1.1			G1/100
BL	(0°-30°)	203.2	3.9	B1/500		
BM	(30°-60°)	389.5	7.4	B1/1000		
BH	(60°-80°)	184.3	3.5	B1/500		G1/500
BVH	(80°-90°)	1.8	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1777.0	1777.0	1777.0	1777.0	1777.0	1777.0	1777.0	1777.0	1777.0	1777.0	1777.0
2.5°	1941.4	1938.1	1966.8	2013.7	2060.9	2085.6	2080.7	2078.7	2039.5	2010.8	1950.7
5°	1937.3	1953.9	2005.2	2132.0	2228.2	2274.6	2288.4	2230.6	2154.2	2043.6	1907.0
7.5°	1821.4	1842.0	1925.6	2123.9	2294.8	2395.8	2392.2	2299.7	2142.1	1970.9	1776.2
10°	1677.6	1701.8	1800.0	2040.7	2262.5	2395.8	2403.1	2285.9	2090.0	1870.3	1665.5
12.5°	1576.2	1604.9	1713.5	1963.2	2179.3	2310.6	2319.1	2234.2	2050.8	1831.5	1605.3
15°	1541.9	1568.9	1679.2	1924.0	2090.8	2161.5	2159.5	2150.6	2035.5	1840.8	1608.5
17.5°	1600.8	1623.1	1747.5	1941.8	2008.0	2000.7	2011.2	2054.1	2038.7	1918.7	1710.3
20°	1753.1	1775.7	1909.5	1996.3	1944.6	1898.5	1903.4	1974.9	2068.6	2065.4	1869.5
22.5°	1962.8	2001.1	2122.3	2102.1	1936.1	1835.1	1825.0	1917.9	2119.5	2234.2	2084.4
25°	2228.2	2266.9	2361.5	2271.0	1977.7	1820.2	1810.9	1900.6	2181.3	2399.0	2326.3
27.5°	2451.1	2480.6	2574.8	2435.4	2039.1	1826.6	1811.3	1903.0	2231.4	2539.2	2530.3
30°	2629.7	2651.5	2706.8	2512.1	2092.0	1854.9	1837.1	1938.5	2253.6	2607.5	2695.5
32.5°	2773.5	2810.3	2827.6	2594.1	2168.0	1908.2	1877.9	2006.8	2307.7	2691.9	2868.8
35°	2937.9	2980.3	2958.1	2672.5	2268.2	1991.5	1954.3	2117.5	2389.7	2769.9	3070.0
37.5°	3146.3	3195.2	3108.4	2754.9	2374.0	2116.7	2099.3	2273.0	2514.2	2881.3	3285.7
40°	3362.0	3390.3	3254.2	2855.1	2504.1	2298.9	2315.4	2504.1	2676.9	3015.1	3515.1
42.5°	3530.5	3557.1	3404.1	2939.1	2637.0	2515.0	2584.0	2782.8	2863.6	3152.0	3686.4
45°	3659.3	3682.0	3507.9	3030.8	2816.3	2828.0	2958.5	3070.0	3050.6	3235.6	3818.5
47.5°	3759.5	3778.9	3587.8	3129.4	3084.9	3211.0	3410.5	3457.8	3244.5	3326.1	3938.1
50°	3800.7	3806.4	3612.9	3255.0	3389.9	3698.9	3907.0	3878.3	3466.7	3426.7	4065.3
52.5°	3854.5	3853.2	3684.4	3374.6	3676.7	4135.2	4342.8	4277.8	3717.9	3577.3	4208.3
55°	3995.4	3997.0	3837.5	3544.2	3921.1	4487.4	4709.6	4662.3	3982.9	3831.8	4375.1
57.5°	4166.7	4172.8	4055.2	3742.6	4154.6	4742.7	4983.5	4965.3	4341.2	4115.0	4532.7
59°	4188.9	4201.0	4158.2	3882.3	4293.1	4821.1	5077.2	5095.0	4533.1	4301.6	4617.9
60°	4148.5	4168.7	4188.1	3961.5	4374.3	4849.4	5082.9	5117.6	4677.3	4428.5	4656.7
62.5°	3972.4	4004.3	4101.7	4205.1	4475.7	4761.3	4902.3	4975.0	4855.8	4761.7	4660.3
65°	3741.8	3758.3	3898.9	4248.3	4279.0	4350.1	4393.7	4487.0	4641.3	4890.2	4493.5
67.5°	3363.7	3412.5	3584.6	3997.4	3698.5	3614.5	3603.6	3510.7	3911.4	4584.0	4082.3
70°	2778.7	2800.6	3012.6	3277.2	2791.3	2662.0	2713.7	2679.0	3032.0	3946.1	3285.7
72.5°	2101.3	2150.6	2357.8	2612.3	1899.4	1731.7	1874.3	1861.4	2277.4	3171.4	2257.3
75°	1495.0	1526.9	1791.1	2044.4	1330.2	1127.0	1178.3	1226.4	1589.9	2504.1	1333.8
77.5°	1027.2	1054.7	1253.0	1352.0	970.3	929.5	850.3	896.8	1041.8	1485.7	725.9
80°	619.7	618.4	748.9	773.2	675.8	784.9	658.4	739.2	629.8	635.8	281.1
82.5°	402.3	398.3	458.1	499.3	376.1	395.5	265.4	382.5	410.4	177.3	88.9
85°	180.2	187.8	220.2	290.4	164.8	87.7	54.1	117.5	174.9	89.3	0.0
87.5°	18.6	14.5	38.8	70.7	22.6	2.4	8.1	4.0	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°	1777.0	1777.0	1777.0	1777.0	1777.0	1777.0	1777.0	1777.0	1777.0	1777.0	1777.0
2.5°	1922.8	1899.4	1829.5	1764.0	1707.9	1639.2	1594.8	1524.9	1482.5	1469.6	1471.6
5°	1845.6	1778.2	1645.3	1539.0	1420.7	1353.2	1250.6	1152.1	1098.7	1078.9	1070.1
7.5°	1684.1	1611.7	1451.4	1284.5	1157.7	1039.4	963.0	876.2	816.8	767.9	759.4
10°	1564.1	1469.2	1270.4	1091.1	990.9	902.0	825.7	738.8	668.9	613.2	597.8
12.5°	1492.2	1385.9	1164.2	1013.9	919.0	827.7	728.3	627.7	556.2	496.0	468.2
15°	1479.3	1356.0	1134.3	958.6	841.4	731.1	599.1	490.4	416.9	359.9	342.5
17.5°	1557.2	1409.8	1129.8	900.8	740.0	583.7	446.4	356.3	273.5	241.6	229.0
20°	1696.2	1504.7	1129.4	833.7	635.8	449.6	313.5	232.3	198.7	183.4	176.1
22.5°	1885.6	1634.0	1150.8	776.0	527.6	331.6	223.8	185.0	165.6	153.1	150.3
25°	2117.1	1825.4	1203.4	736.8	444.7	260.1	184.6	158.3	142.2	136.5	134.1
27.5°	2322.7	2008.8	1261.1	696.4	385.4	230.2	171.3	145.0	132.1	127.6	124.0
30°	2500.0	2175.2	1289.0	643.1	337.7	210.9	173.7	155.1	138.1	124.8	118.8
32.5°	2647.9	2302.9	1307.2	594.6	297.3	172.5	137.3	120.0	112.3	107.4	103.4
35°	2832.9	2441.0	1296.3	567.1	276.7	157.1	125.2	103.4	90.5	80.8	76.7
37.5°	3026.8	2579.2	1277.3	544.5	267.4	145.8	119.2	98.2	84.0	73.9	68.7
40°	3227.5	2707.2	1255.1	523.5	258.9	138.6	115.5	93.7	79.6	68.7	63.0
42.5°	3411.3	2832.1	1246.2	509.8	245.2	139.8	112.7	91.7	75.1	63.8	59.0
45°	3560.0	2950.4	1258.3	502.5	230.2	137.7	113.5	89.3	71.5	60.6	55.7
47.5°	3718.7	3117.7	1297.5	495.2	215.7	128.1	119.6	88.9	69.9	58.6	53.3
50°	3903.3	3331.7	1387.2	477.5	197.9	117.5	127.2	88.5	67.9	56.1	50.9
52.5°	4149.3	3574.9	1479.7	446.4	172.1	107.4	121.6	87.3	63.8	53.3	48.1
55°	4370.3	3831.0	1558.0	409.6	139.4	92.9	109.5	82.0	57.0	48.5	43.6
57.5°	4461.6	3975.6	1555.6	358.7	111.5	81.6	90.1	75.1	49.7	42.8	38.8
59°	4428.1	3957.5	1503.5	321.1	101.8	75.5	74.7	74.3	46.5	38.8	35.5
60°	4380.8	3891.2	1447.3	302.6	95.7	71.5	68.7	73.5	43.6	36.4	33.1
62.5°	4199.8	3616.5	1261.1	271.0	87.7	60.6	54.9	62.2	38.8	31.5	28.7
65°	3937.7	3194.4	1067.6	262.2	85.2	50.1	45.6	44.4	33.1	26.7	24.2
67.5°	3426.3	2703.2	864.8	256.1	86.0	42.0	40.0	33.5	27.5	22.2	20.6
70°	2743.2	2107.8	708.1	249.2	86.8	34.3	33.5	26.7	22.2	18.6	17.0
72.5°	1666.7	1249.4	557.4	216.5	84.4	27.5	29.9	20.2	16.2	13.3	12.5
75°	1030.5	855.2	345.8	168.4	55.7	20.2	21.0	12.5	10.9	8.5	8.5
77.5°	597.0	540.1	123.6	60.6	24.6	12.1	9.3	6.5	6.1	3.6	3.6
80°	247.6	198.3	42.8	20.6	13.3	5.7	2.0	0.4	0.0	0.0	0.0
82.5°	72.3	64.2	11.7	9.3	4.0	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°	1777.0	1777.0	1777.0	1777.0	1777.0	1777.0	1777.0	1777.0	1777.0	1777.0	1777.0
2.5°	1437.2	1423.9	1417.9	1438.5	1419.5	1443.7	1425.1	1433.2	1457.0	1467.5	1494.6
5°	1075.7	1062.0	1055.5	1086.6	1085.0	1100.3	1098.7	1112.9	1125.0	1097.9	1125.8
7.5°	749.3	740.0	755.4	779.6	805.5	797.0	797.0	778.0	784.5	780.4	779.2
10°	570.0	538.1	530.0	529.2	538.9	540.9	530.0	503.7	513.4	516.2	533.2
12.5°	448.4	423.7	386.2	369.2	364.8	368.4	332.4	309.4	320.3	313.9	330.4
15°	321.5	301.3	279.1	260.1	254.9	247.6	208.4	181.0	177.7	178.9	181.8
17.5°	229.4	215.7	215.7	195.5	184.6	162.8	143.0	130.9	129.7	130.9	132.9
20°	169.3	162.0	161.2	155.9	143.8	129.3	115.5	113.1	112.3	114.3	115.1
22.5°	145.8	138.1	131.7	131.3	120.0	107.9	101.4	98.2	98.6	99.4	101.4
25°	130.5	122.4	115.5	111.5	103.4	94.9	88.9	87.3	87.3	88.5	88.9
27.5°	119.6	109.5	103.4	97.8	90.5	83.2	78.0	76.7	75.9	76.7	78.8
30°	111.9	101.8	94.1	85.6	80.0	73.1	68.7	67.1	66.7	67.1	68.7
32.5°	95.7	89.7	83.6	75.9	69.1	64.6	59.8	57.0	57.0	57.8	59.4
35°	72.3	69.1	68.7	66.7	61.0	56.1	50.5	47.7	47.7	49.3	50.1
37.5°	63.8	57.8	57.0	56.1	53.7	47.3	42.0	39.6	39.2	40.4	42.0
40°	58.2	51.3	47.7	46.9	47.3	40.0	34.3	31.9	31.9	32.3	33.9
42.5°	53.7	45.6	39.2	38.4	40.0	33.5	27.9	25.4	25.4	25.4	27.5
45°	50.1	40.8	33.1	29.1	31.5	27.5	22.6	20.2	19.4	20.2	21.0
47.5°	47.7	37.2	29.1	23.4	23.4	21.8	18.2	15.3	14.5	14.9	16.2
50°	45.6	33.9	24.6	19.0	17.0	17.4	13.7	11.7	10.9	10.9	12.1
52.5°	42.4	30.7	21.4	16.2	12.9	11.7	10.1	8.5	8.1	8.5	9.3
55°	38.4	27.9	18.6	13.3	10.1	8.1	7.3	6.1	5.7	6.1	7.3
57.5°	33.9	23.4	14.9	10.5	6.9	5.3	4.8	4.0	3.2	3.6	4.4
59°	31.1	21.0	12.9	8.5	5.3	3.6	3.6	2.8	2.0	2.4	3.6
60°	29.9	19.4	10.9	7.3	4.4	2.8	2.8	2.0	1.2	1.6	2.8
62.5°	25.4	16.2	8.5	4.4	2.0	0.4	1.2	0.4	0.0	0.4	1.2
65°	21.4	12.9	5.7	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
67.5°	17.8	9.7	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	14.1	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	9.7	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	6.1	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1777.0	1777.0	1777.0	1777.0	1777.0	1777.0	1777.0	1777.0	1777.0	1777.0
2.5°	1496.2	1554.0	1589.5	1656.6	1725.3	1778.2	1844.4	1903.8	1928.4	1941.4
5°	1154.1	1234.5	1302.7	1404.9	1499.9	1615.4	1732.5	1870.7	1923.6	1937.3
7.5°	809.9	891.9	963.4	1081.8	1217.1	1371.8	1547.1	1722.4	1799.6	1821.4
10°	584.9	672.6	759.8	878.2	1004.6	1172.3	1354.8	1571.8	1660.6	1677.6
12.5°	369.2	463.3	605.1	751.3	885.0	1020.0	1211.0	1446.9	1545.1	1576.2
15°	214.1	284.4	391.4	582.1	752.1	930.7	1139.1	1400.1	1510.0	1541.9
17.5°	143.4	167.6	241.2	387.0	611.6	848.3	1121.0	1438.5	1560.0	1600.8
20°	120.8	131.7	157.5	235.9	471.0	774.8	1125.8	1542.7	1702.2	1753.1
22.5°	106.2	116.3	132.9	169.7	328.8	683.5	1148.8	1691.7	1897.7	1962.8
25°	93.7	103.8	118.4	140.6	221.0	578.0	1199.3	1909.9	2156.7	2228.2
27.5°	83.2	92.5	105.0	124.0	170.1	460.5	1244.2	2122.3	2393.0	2451.1
30°	73.5	81.2	93.3	107.9	141.4	355.1	1266.8	2308.1	2565.1	2629.7
32.5°	63.8	71.1	82.8	94.5	116.3	270.6	1251.0	2444.7	2732.3	2773.5
35°	54.5	62.2	71.9	82.8	100.6	218.5	1172.3	2598.2	2905.6	2937.9
37.5°	46.9	53.3	63.4	71.9	90.9	174.9	1076.9	2736.3	3099.9	3146.3
40°	39.6	46.0	56.1	63.8	83.6	137.7	990.9	2889.8	3304.7	3362.0
42.5°	32.3	40.0	48.9	61.4	71.9	105.0	886.7	3014.2	3458.6	3530.5
45°	25.9	34.3	44.0	61.0	62.6	80.0	786.1	3111.2	3594.7	3659.3
47.5°	20.6	29.1	42.4	57.0	51.3	63.4	728.7	3212.6	3707.8	3759.5
50°	16.6	24.2	44.4	50.1	42.8	53.7	727.1	3325.7	3766.4	3800.7
52.5°	13.3	19.8	37.6	38.4	36.4	47.3	770.7	3452.9	3826.2	3854.5
55°	11.3	16.6	24.6	28.3	32.7	42.8	803.4	3648.8	3968.8	3995.4
57.5°	8.9	14.1	19.0	22.6	29.1	39.2	807.9	3799.9	4149.3	4166.7
59°	7.7	12.1	17.0	20.2	26.7	36.8	789.7	3809.2	4161.0	4188.9
60°	6.5	10.9	14.9	19.0	24.6	34.7	769.9	3741.8	4117.4	4148.5
62.5°	4.8	8.5	10.9	15.3	20.2	29.9	676.2	3506.3	3950.6	3972.4
65°	3.2	6.1	8.1	11.3	15.8	25.9	551.0	3200.9	3692.9	3741.8
67.5°	2.0	4.4	6.5	8.5	12.9	21.8	392.6	2744.8	3332.2	3363.7
70°	1.2	2.8	4.8	6.9	10.1	17.4	233.1	2169.6	2772.3	2778.7
72.5°	0.8	2.0	3.2	4.8	8.1	15.8	113.1	1414.2	2024.2	2101.3
75°	0.4	1.2	2.0	3.6	6.5	12.9	54.1	944.8	1472.8	1495.0
77.5°	0.0	0.4	1.2	2.4	4.8	10.1	31.5	620.5	1004.2	1027.2
80°	0.0	0.0	0.8	2.0	3.6	6.5	19.0	366.0	608.3	619.7
82.5°	0.0	0.0	0.4	1.6	2.4	4.8	9.7	160.8	398.3	402.3
85°	0.0	0.0	0.4	1.6	2.0	3.2	3.6	21.8	176.9	180.2
87.5°	0.0	0.0	0.4	2.0	2.0	2.0	2.0	1.2	14.9	18.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)