

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: P453857

Luminaire Tested: **GLAN-SA4D-830-U-SLL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453857
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-20)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GLAN-SA4D-830-U-SLL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20962 lumens
Efficiency: N/A
Efficacy: 85.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G4

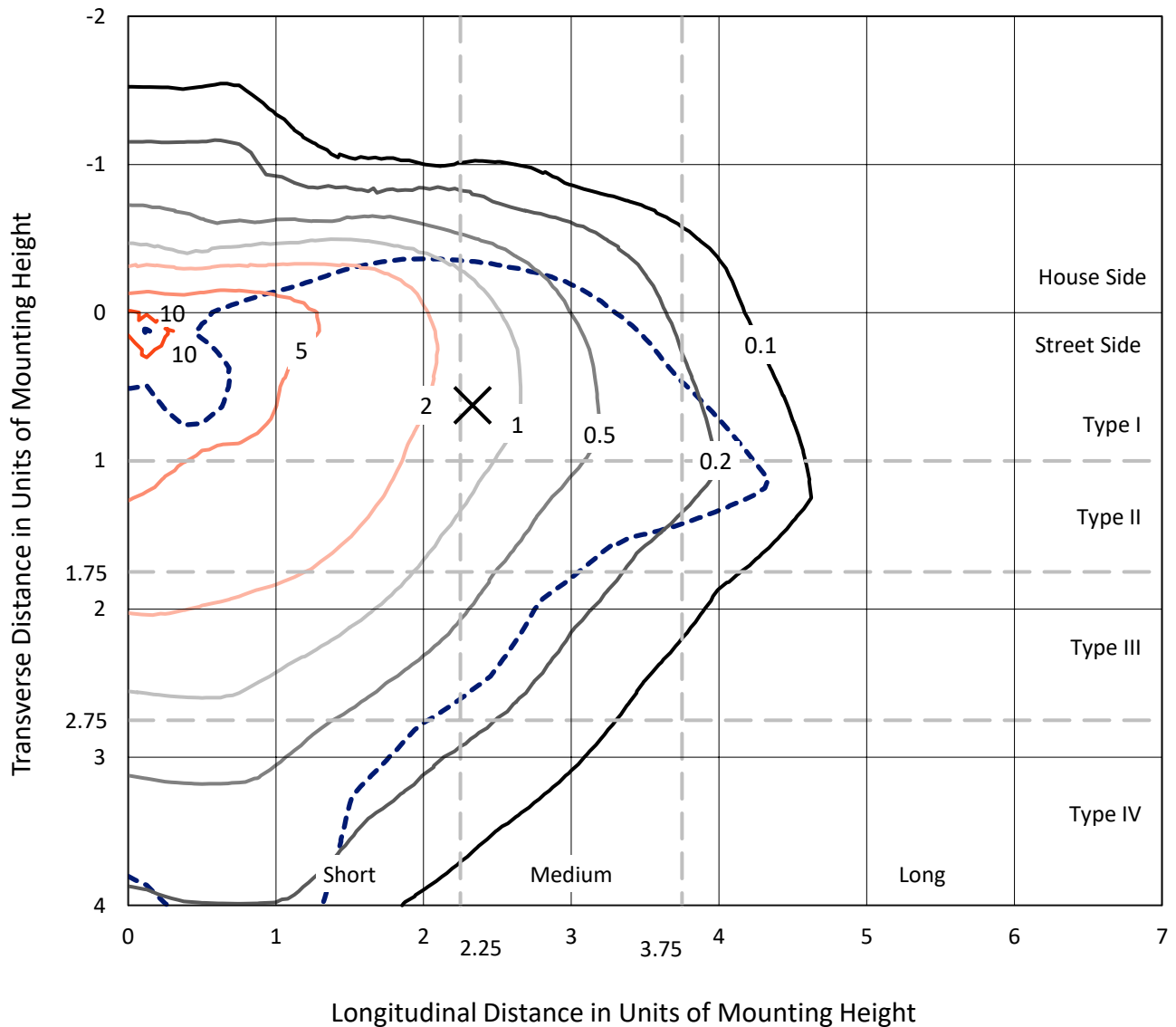
Input Watts (W): 245
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

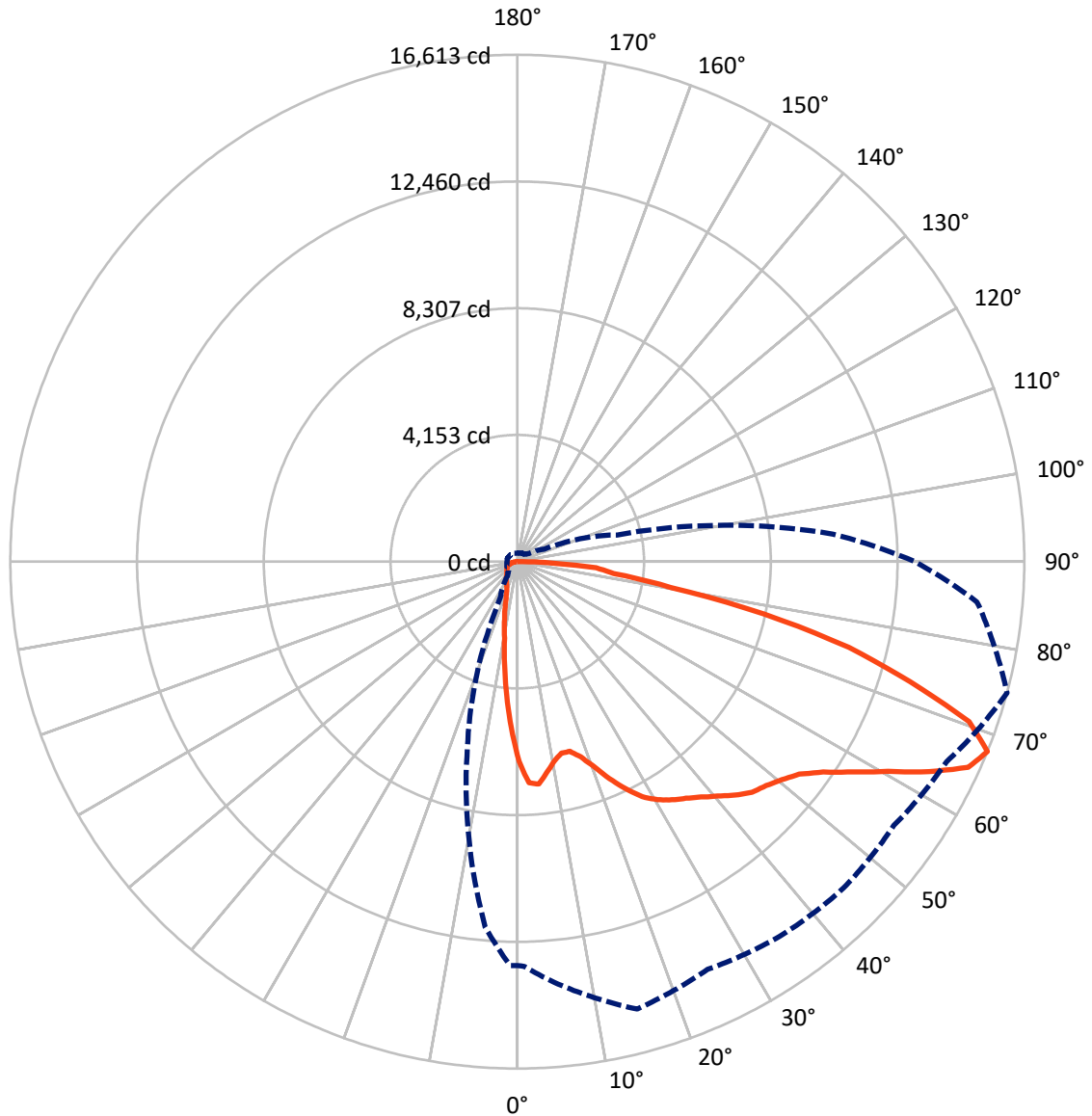
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.9 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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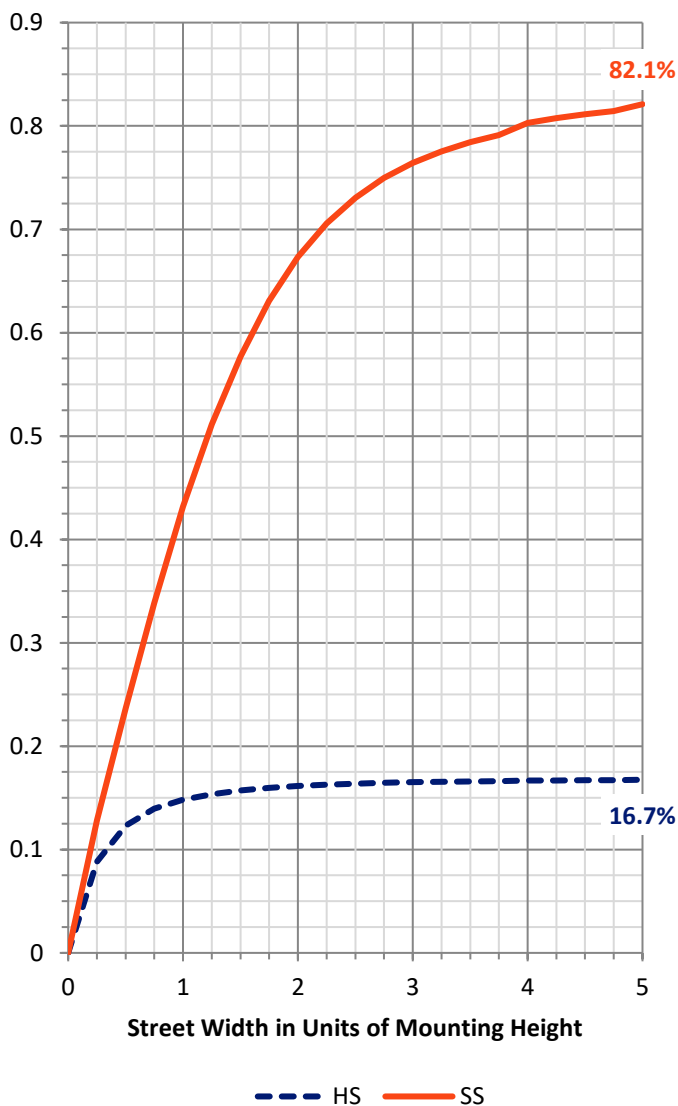
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3543.0	0.0	3543.0
	% Fixture	16.9	0.0	16.9
Street Side	Lumens	17419.0	0.0	17419.0
	% Fixture	83.1	0.0	83.1
Total	Lumens	20962.0	0.0	20962.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	496.7	2.4
10°-20°	1035.9	4.9
20°-30°	1490.7	7.1
30°-40°	2147.1	10.2
40°-50°	3016.0	14.4
50°-60°	4206.3	20.1
60°-70°	5001.0	23.9
70°-80°	2945.3	14.1
80°-90°	622.8	3.0
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°	20962.0	100.0
0°-180°	20962.0	100.0

Coefficient of Utilization



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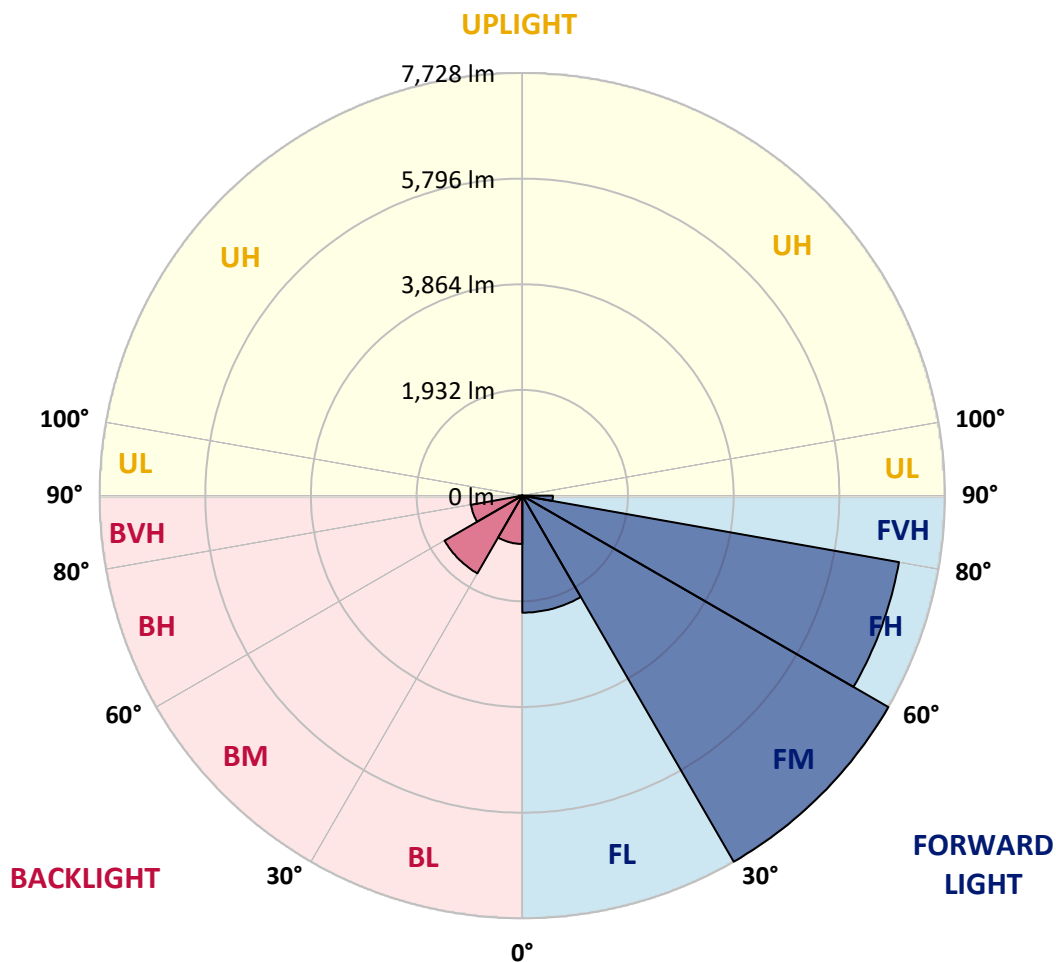
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2139.6	10.2			
FM	(30°-60°)	7727.9	36.9			
FH	(60°-80°)	6993.0	33.4			G3/7500
FVH	(80°-90°)	558.4	2.7			G4/750
BL	(0°-30°)	883.7	4.2	B2/1000		
BM	(30°-60°)	1641.5	7.8	B2/2500		
BH	(60°-80°)	953.4	4.5	B2/1000		G2/1000
BVH	(80°-90°)	64.4	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	6549.0	6549.0	6549.0	6549.0	6549.0	6549.0	6549.0	6549.0	6549.0	6549.0	6549.0
2.5°	7061.2	7070.6	7131.1	7307.2	7428.1	7472.5	7503.4	7445.6	7389.2	7252.1	7045.0
5°	7039.7	7094.8	7252.1	7647.3	7959.1	8093.5	8133.9	7960.5	7674.1	7321.9	6898.5
7.5°	6628.3	6702.3	6944.2	7606.9	8156.7	8471.3	8429.6	8116.4	7600.2	6972.5	6381.0
10°	6140.4	6222.4	6514.1	7315.2	8023.6	8456.5	8456.5	8074.7	7389.2	6643.1	5961.6
12.5°	5753.2	5839.3	6172.6	7015.5	7746.7	8156.7	8225.3	7897.3	7237.3	6434.8	5686.0
15°	5625.5	5708.9	6067.8	6834.0	7453.7	7703.7	7726.6	7619.0	7163.3	6449.6	5673.9
17.5°	5784.2	5891.7	6254.6	6887.8	7184.8	7199.6	7217.1	7301.8	7171.4	6719.7	5918.6
20°	6242.5	6358.1	6737.2	7061.2	6949.6	6796.4	6805.8	7023.5	7266.8	7166.0	6503.3
22.5°	6903.9	7004.7	7393.2	7366.3	6850.1	6534.2	6468.4	6772.2	7408.0	7722.5	7125.7
25°	7617.7	7736.0	8182.2	7819.3	6878.4	6378.3	6336.6	6624.3	7554.5	8242.7	7844.8
27.5°	8435.0	8550.6	8902.7	8276.3	7026.2	6366.2	6316.5	6610.9	7686.2	8724.0	8531.7
30°	9042.5	9148.7	9388.0	8660.8	7207.7	6446.9	6385.0	6717.1	7799.1	9053.3	9201.2
32.5°	9519.7	9630.0	9760.4	8900.1	7447.0	6593.4	6479.1	6910.6	7947.0	9304.7	9697.2
35°	10017.1	10147.5	10138.1	9112.4	7670.1	6762.8	6651.2	7190.2	8179.6	9523.8	10326.3
37.5°	10647.5	10700.0	10632.8	9303.3	7937.6	7067.9	7006.1	7605.6	8510.2	9788.6	11061.6
40°	11287.4	11392.2	11046.8	9534.5	8262.9	7641.9	7635.2	8219.9	8902.7	10099.1	11774.0
42.5°	11835.8	11924.5	11433.9	9736.2	8656.8	8342.2	8393.3	9043.9	9417.6	10459.4	12346.6
45°	12248.5	12327.8	11791.5	9931.1	9175.6	9151.4	9452.5	9927.0	10066.8	10783.3	12682.7
47.5°	12599.3	12676.0	12040.2	10226.8	9816.8	10117.9	10642.2	10847.8	10622.0	10968.8	13059.1
50°	12895.1	12917.9	12210.9	10579.0	10612.6	11302.2	11810.3	11943.4	11170.4	11235.0	13385.7
52.5°	13202.9	13173.3	12505.3	11022.6	11472.9	12425.9	12795.6	12934.1	11696.0	11563.0	13861.6
55°	13892.5	13920.7	13165.3	11581.8	12342.6	13529.5	14016.1	13883.1	12278.1	12166.5	14466.5
57.5°	14725.9	14701.7	14094.1	12456.9	13228.4	14556.5	14919.5	14705.7	13055.0	12995.9	15079.4
60°	15049.9	15082.1	14871.1	13397.8	14102.2	15455.8	15826.8	15494.8	13986.6	13959.7	15541.8
62.5°	14724.6	14906.0	15048.5	14235.3	14846.9	16117.2	16485.5	16106.4	14958.4	15153.4	15865.8
65°	14076.6	14115.6	14600.9	14945.0	15205.8	16226.0	16418.3	16216.6	15770.4	16240.8	15851.0
67.5°	13235.2	13268.8	13837.4	15177.6	14743.4	14989.4	15123.8	15064.6	15519.0	16613.2	15121.1
70°	12434.0	12407.1	13008.0	14584.8	12834.6	12460.9	12572.5	12387.0	13391.1	15703.1	13689.5
72.5°	10874.7	10971.5	11616.7	12936.7	10162.3	9554.7	9798.0	9318.1	10299.4	13448.9	11111.3
75°	8518.3	8541.2	9617.9	10857.2	7666.1	6707.6	7037.0	6836.7	7889.2	11218.8	7672.8
77.5°	5898.4	5847.3	7004.7	8292.5	5466.9	4910.4	4915.8	4820.4	5508.6	8260.2	5212.9
80°	3746.3	3668.4	4384.8	5122.8	3757.1	4019.2	3887.5	3883.4	3586.4	5095.9	3152.2
82.5°	2024.4	2110.4	2770.4	3211.3	2695.2	3106.5	2847.1	2763.7	2461.3	3189.8	2016.3
85°	922.1	1002.8	1477.3	2184.4	2047.2	2070.1	1383.2	1631.9	2036.5	2590.3	1076.7
87.5°	90.1	115.6	305.1	1031.0	699.0	551.1	205.7	396.5	512.1	920.8	86.0
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°	6549.0	6549.0	6549.0	6549.0	6549.0	6549.0	6549.0	6549.0	6549.0	6549.0	6549.0
2.5°	6960.4	6890.5	6652.5	6456.3	6247.9	6089.3	5882.3	5743.8	5648.4	5504.6	5487.1
5°	6640.4	6469.7	6055.7	5633.6	5269.3	4995.1	4716.9	4461.5	4310.9	4263.9	4203.4
7.5°	6101.4	5813.7	5281.4	4797.5	4379.5	3970.8	3656.3	3433.1	3283.9	3196.5	3091.7
10°	5657.8	5324.4	4676.5	4083.7	3739.6	3485.6	3208.6	2969.4	2785.2	2627.9	2541.9
12.5°	5359.4	4983.0	4254.4	3773.2	3507.1	3236.9	2912.9	2644.1	2372.5	2193.8	2117.1
15°	5269.3	4871.4	4124.1	3618.6	3236.9	2883.3	2520.4	2169.6	1900.7	1731.4	1674.9
17.5°	5489.8	5008.6	4122.7	3413.0	2919.6	2497.6	2032.5	1703.1	1427.6	1301.2	1260.9
20°	5901.1	5272.0	4134.8	3210.0	2575.5	1981.4	1478.6	1208.5	1076.7	1022.9	1002.8
22.5°	6475.1	5673.9	4171.1	3009.7	2199.1	1521.7	1107.6	970.5	923.5	914.1	910.0
25°	7182.2	6171.3	4293.4	2829.6	1881.9	1161.4	926.2	864.3	837.4	828.0	826.7
27.5°	7832.8	6813.8	4441.3	2675.0	1575.4	1001.4	837.4	785.0	758.1	756.8	759.5
30°	8420.2	7351.5	4565.0	2501.6	1342.9	889.9	779.6	727.2	701.7	700.3	708.4
32.5°	8928.3	7793.8	4656.4	2330.9	1213.8	821.3	727.2	670.8	649.3	645.2	649.3
35°	9471.4	8234.7	4614.7	2197.8	1139.9	764.9	688.2	633.1	607.6	595.5	595.5
37.5°	10091.0	8689.0	4543.5	2087.6	1106.3	717.8	654.6	600.9	575.3	563.2	561.9
40°	10767.2	9143.4	4445.3	1989.4	1072.7	689.6	631.8	575.3	544.4	532.3	529.6
42.5°	11364.0	9531.8	4364.7	1924.9	1017.6	695.0	611.6	556.5	517.5	501.4	500.0
45°	11882.9	9923.0	4349.9	1887.3	971.9	686.9	606.2	541.7	496.0	478.5	475.9
47.5°	12288.8	10330.3	4434.6	1865.8	922.1	643.9	641.2	532.3	477.2	458.4	455.7
50°	12783.5	10908.3	4628.1	1821.4	876.4	603.6	677.5	531.0	462.4	438.2	431.5
52.5°	13442.2	11661.1	4890.3	1742.1	810.6	565.9	646.6	531.0	444.9	420.7	412.7
55°	14438.2	12620.9	5147.0	1630.5	717.8	516.2	583.4	514.8	419.4	397.9	392.5
57.5°	15098.2	13322.5	5311.0	1476.0	602.2	479.9	502.7	489.3	393.9	371.0	371.0
60°	15131.8	13510.7	5233.0	1281.0	529.6	446.3	436.9	493.3	371.0	346.8	344.1
62.5°	14744.7	13049.7	4827.1	1106.3	490.6	410.0	395.2	432.8	348.2	324.0	319.9
65°	14139.8	11873.5	4122.7	1022.9	469.1	377.7	356.2	354.9	324.0	301.1	295.7
67.5°	13028.2	10376.0	3387.4	974.6	458.4	341.4	321.3	314.5	295.7	276.9	274.2
70°	11389.5	8690.4	2716.7	954.4	453.0	303.8	287.7	279.6	263.5	248.7	247.3
72.5°	8861.1	7049.1	2242.2	941.0	450.3	268.8	251.4	240.6	231.2	217.8	217.8
75°	6364.9	5186.0	1711.2	848.2	416.7	231.2	212.4	205.7	192.2	181.5	184.2
77.5°	4012.5	3492.3	1126.5	623.7	322.6	185.5	169.4	165.3	154.6	139.8	149.2
80°	2709.9	2455.9	657.3	392.5	203.0	135.8	130.4	129.0	116.9	100.8	102.2
82.5°	1844.3	1809.3	341.4	223.1	116.9	79.3	76.6	79.3	65.9	53.8	53.8
85°	720.5	984.0	161.3	87.4	37.6	12.1	17.5	18.8	10.8	5.4	6.7
87.5°	13.4	100.8	4.0	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°	6549.0	6549.0	6549.0	6549.0	6549.0	6549.0	6549.0	6549.0	6549.0	6549.0	6549.0
2.5°	5460.2	5448.1	5468.3	5382.2	5399.7	5432.0	5448.1	5457.5	5590.6	5559.7	5644.4
5°	4259.8	4247.7	4325.7	4336.4	4376.8	4368.7	4407.7	4417.1	4465.5	4483.0	4601.3
7.5°	3098.4	3150.8	3239.6	3285.3	3353.8	3375.3	3355.2	3404.9	3304.1	3376.7	3398.2
10°	2489.5	2426.3	2388.7	2493.5	2507.0	2606.4	2566.1	2533.8	2593.0	2595.7	2652.1
12.5°	2072.8	1937.0	1847.0	1876.5	1908.8	1951.8	1958.5	2023.0	2066.1	2106.4	2140.0
15°	1625.2	1578.1	1496.1	1455.8	1501.5	1519.0	1560.6	1614.4	1660.1	1672.2	1717.9
17.5°	1247.4	1255.5	1242.1	1217.9	1246.1	1259.5	1262.2	1263.6	1275.7	1267.6	1334.8
20°	1004.1	1032.4	1066.0	1071.3	1080.8	1087.5	1075.4	1029.7	1031.0	1059.2	1080.8
22.5°	908.7	914.1	951.7	963.8	993.4	981.3	946.3	924.8	922.1	928.9	939.6
25°	833.4	841.5	868.4	887.2	910.0	888.5	863.0	842.8	840.1	846.9	857.6
27.5°	766.2	778.3	802.5	821.3	842.8	822.7	798.5	781.0	779.6	778.3	785.0
30°	712.4	725.9	743.4	764.9	779.6	762.2	739.3	729.9	728.6	725.9	728.6
32.5°	658.7	680.2	697.6	708.4	723.2	709.7	692.3	686.9	677.5	669.4	665.4
35°	598.2	621.0	647.9	661.4	676.1	662.7	650.6	627.7	611.6	610.3	613.0
37.5°	563.2	572.6	594.1	617.0	631.8	625.1	602.2	579.4	575.3	575.3	578.0
40°	532.3	536.3	545.8	575.3	602.2	582.0	553.8	547.1	547.1	545.8	547.1
42.5°	501.4	505.4	505.4	528.3	571.3	539.0	517.5	517.5	517.5	518.9	522.9
45°	473.2	474.5	473.2	489.3	529.6	502.7	488.0	492.0	494.7	497.4	500.0
47.5°	449.0	450.3	449.0	462.4	482.6	471.8	463.8	469.1	474.5	478.5	481.2
50°	427.5	426.1	428.8	436.9	446.3	449.0	443.6	451.7	454.3	459.7	466.4
52.5°	408.6	407.3	410.0	414.0	427.5	427.5	427.5	434.2	439.6	444.9	454.3
55°	387.1	388.5	392.5	397.9	415.4	412.7	414.0	419.4	424.8	432.8	438.2
57.5°	367.0	369.7	375.0	383.1	400.6	399.2	400.6	403.3	410.0	414.0	419.4
60°	344.1	349.5	356.2	361.6	379.1	377.7	384.4	389.8	393.9	393.9	396.5
62.5°	321.3	329.3	336.1	340.1	358.9	360.3	369.7	373.7	376.4	373.7	377.7
65°	298.4	310.5	313.2	318.6	337.4	338.7	349.5	358.9	356.2	353.5	360.3
67.5°	275.6	290.4	289.0	295.7	314.5	317.2	326.6	342.8	337.4	334.7	340.1
70°	250.0	260.8	262.1	266.2	291.7	287.7	302.4	317.2	313.2	314.5	314.5
72.5°	221.8	231.2	231.2	239.3	266.2	259.4	271.5	287.7	287.7	286.3	286.3
75°	188.2	193.6	198.9	211.0	239.3	231.2	239.3	254.1	256.7	254.1	254.1
77.5°	151.9	160.0	162.7	178.8	198.9	197.6	205.7	212.4	217.8	215.1	215.1
80°	107.5	115.6	126.4	143.8	155.9	160.0	164.0	169.4	172.1	172.1	174.7
82.5°	60.5	72.6	82.0	99.5	104.8	125.0	123.7	127.7	123.7	108.9	121.0
85°	13.4	25.5	36.3	45.7	52.4	72.6	76.6	86.0	71.2	65.9	65.9
87.5°	0.0	0.0	0.0	0.0	0.0	10.8	21.5	29.6	25.5	21.5	21.5
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°	6549.0	6549.0	6549.0	6549.0	6549.0	6549.0	6549.0	6549.0	6549.0	6549.0
2.5°	5715.6	5832.6	5973.7	6217.0	6387.7	6571.9	6757.4	6955.0	7007.4	7061.2
5°	4633.5	4863.4	4988.4	5315.0	5657.8	6093.3	6449.6	6839.4	7002.0	7039.7
7.5°	3509.8	3665.7	3993.7	4324.3	4749.1	5206.2	5751.9	6359.5	6549.0	6628.3
10°	2782.5	2994.9	3282.6	3637.5	4009.8	4501.8	5117.4	5827.2	6096.0	6140.4
12.5°	2368.5	2605.1	2918.3	3293.3	3645.5	4016.5	4637.5	5370.1	5657.8	5753.2
15°	1894.0	2180.3	2541.9	2937.1	3320.2	3726.2	4355.3	5182.0	5514.0	5625.5
17.5°	1488.0	1719.3	2110.4	2539.2	2993.6	3507.1	4296.1	5272.0	5680.7	5784.2
20°	1138.6	1303.9	1633.2	2086.2	2618.5	3290.6	4310.9	5612.1	6101.4	6242.5
22.5°	984.0	1068.7	1268.9	1700.4	2295.9	3102.5	4371.4	6078.5	6668.7	6903.9
25°	891.2	935.6	1048.5	1330.8	1988.1	2919.6	4509.8	6706.3	7461.7	7617.7
27.5°	811.9	844.2	914.1	1117.0	1708.5	2750.3	4671.2	7402.6	8202.4	8435.0
30°	736.6	779.6	845.5	992.0	1529.7	2595.7	4874.1	7967.2	8826.1	9042.5
32.5°	678.8	721.8	782.3	904.7	1377.8	2433.0	4995.1	8463.2	9335.6	9519.7
35°	631.8	668.1	731.3	834.8	1262.2	2309.4	4970.9	8857.0	9828.9	10017.1
37.5°	598.2	629.1	692.3	768.9	1174.8	2180.3	4958.8	9377.3	10429.8	10647.5
40°	567.3	599.5	657.3	725.9	1087.5	2028.4	4965.5	9893.4	11069.6	11287.4
42.5°	543.1	579.4	626.4	713.8	997.4	1906.1	4965.5	10342.4	11626.1	11835.8
45°	522.9	561.9	607.6	712.4	926.2	1813.3	4931.9	10728.2	12069.7	12248.5
47.5°	505.4	548.4	614.3	688.2	908.7	1746.1	4902.4	11037.4	12431.3	12599.3
50°	493.3	544.4	653.3	660.0	914.1	1726.0	5044.8	11427.2	12749.9	12895.1
52.5°	483.9	545.8	651.9	618.3	904.7	1739.4	5341.9	12036.1	13192.1	13202.9
55°	465.1	544.4	618.3	571.3	865.7	1762.3	5723.7	12920.6	13884.4	13892.5
57.5°	446.3	529.6	574.0	531.0	786.4	1762.3	6183.4	13758.1	14719.2	14725.9
60°	427.5	551.1	504.1	496.0	682.9	1730.0	6668.7	14126.4	14981.3	15049.9
62.5°	408.6	555.2	450.3	465.1	607.6	1652.0	7030.3	13719.1	14626.4	14724.6
65°	387.1	447.6	415.4	432.8	568.6	1521.7	6916.0	12973.0	13959.7	14076.6
67.5°	361.6	379.1	377.7	399.2	555.2	1329.4	6313.8	12029.4	13241.9	13235.2
70°	330.7	340.1	344.1	367.0	529.6	1180.2	5261.3	10804.8	12283.5	12434.0
72.5°	298.4	306.5	310.5	330.7	504.1	1095.5	4083.7	9117.8	10639.5	10874.7
75°	263.5	268.8	274.2	291.7	477.2	970.5	2908.9	6960.4	8148.6	8518.3
77.5°	227.2	227.2	233.9	251.4	401.9	801.2	1951.8	4882.2	5520.7	5898.4
80°	184.2	185.5	182.8	201.6	295.7	548.4	1109.0	3261.1	3673.7	3746.3
82.5°	141.1	137.1	138.5	147.9	220.5	373.7	591.5	2025.7	2064.7	2024.4
85°	88.7	88.7	86.0	96.8	141.1	194.9	322.6	1240.7	969.2	922.1
87.5°	36.3	29.6	33.6	39.0	67.2	79.3	126.4	255.4	98.1	90.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)