

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: P322103

Luminaire Tested: **GAN-SA9D-830-U-T2-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P322103
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-13)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-SA9D-830-U-T2-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39213 lumens
Efficiency: N/A
Efficacy: 68.2 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G5

Input Watts (W): 575
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

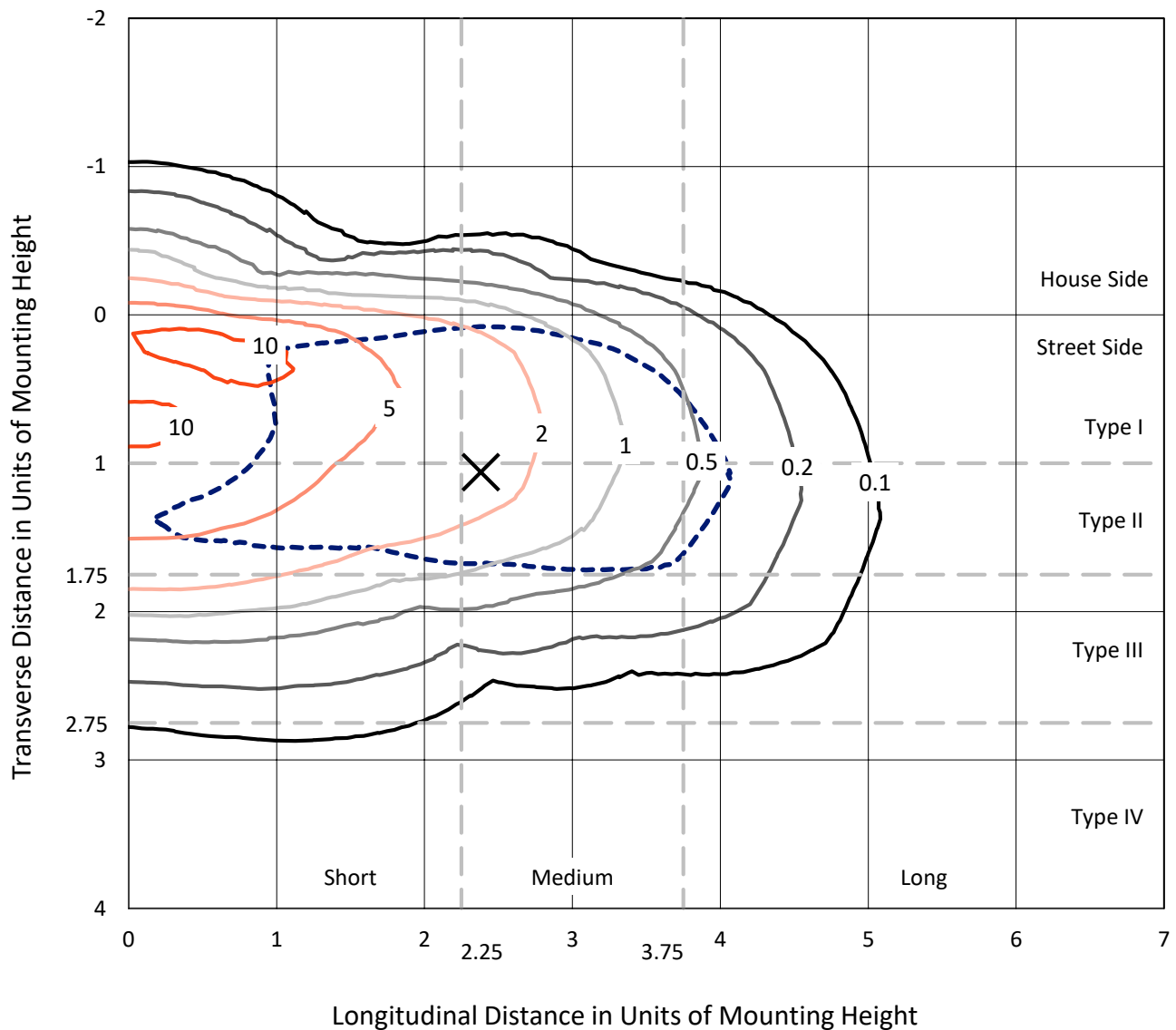


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Iso-Footcandle Lines of Horizontal Illumination

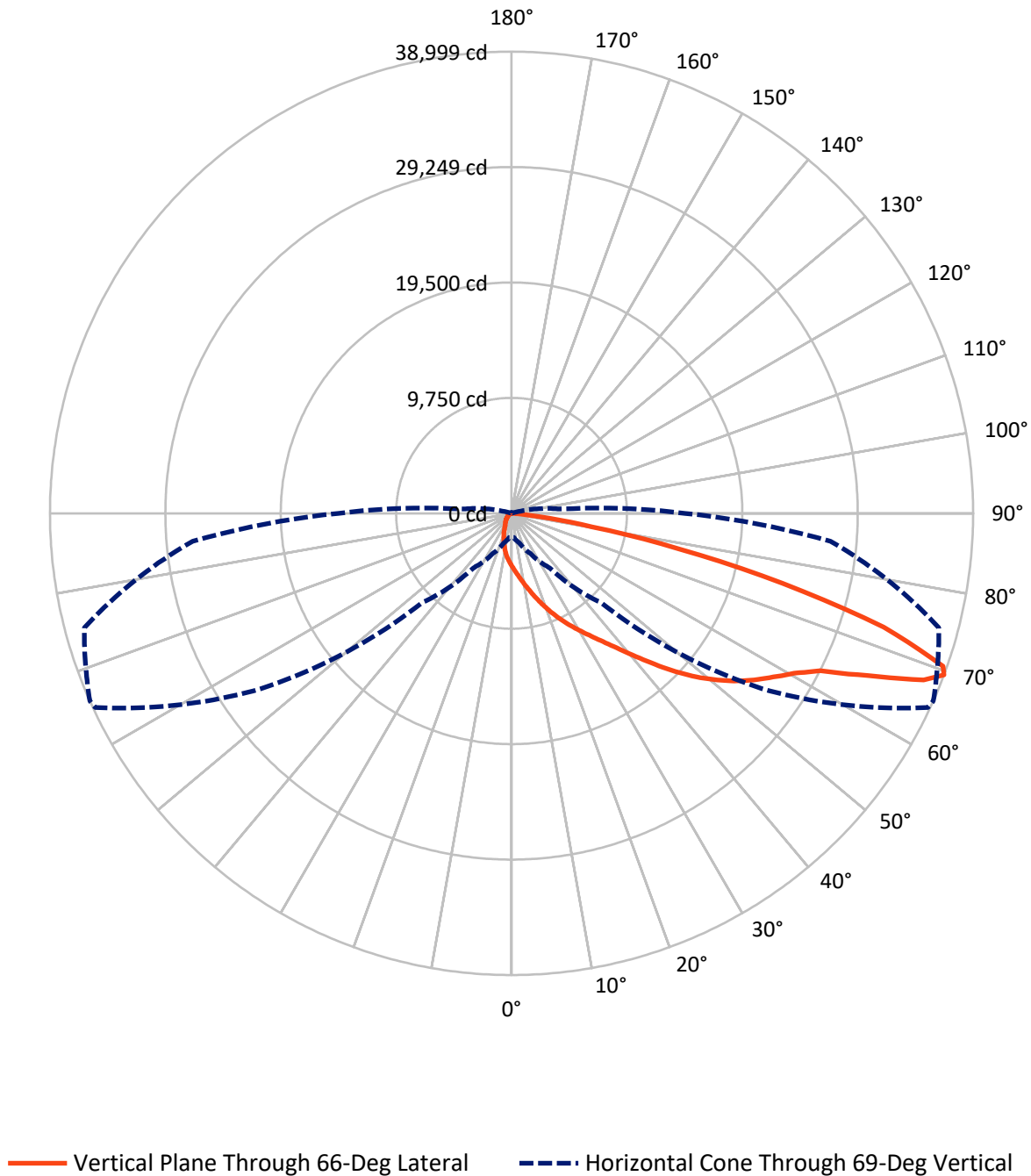
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.8 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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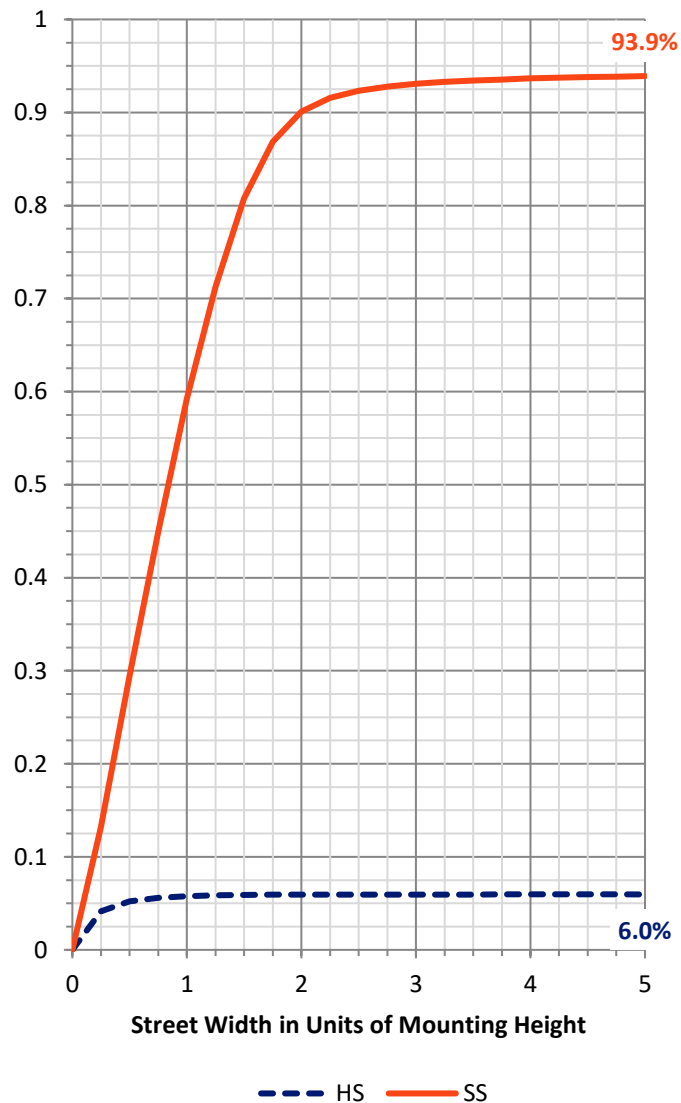
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2352.2	0.0	2352.2
	% Fixture	6.0	0.0	6.0
Street Side	Lumens	36860.8	0.0	36860.8
	% Fixture	94.0	0.0	94.0
Total	Lumens	39213.0	0.0	39213.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	431.4	1.1
10°-20°	1283.8	3.3
20°-30°	2235.6	5.7
30°-40°	3922.4	10.0
40°-50°	6565.4	16.7
50°-60°	9650.6	24.6
60°-70°	9908.7	25.3
70°-80°	4891.7	12.5
80°-90°	323.4	0.8
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°	39213.0	100.0
0°-180°	39213.0	100.0

Coefficient of Utilization



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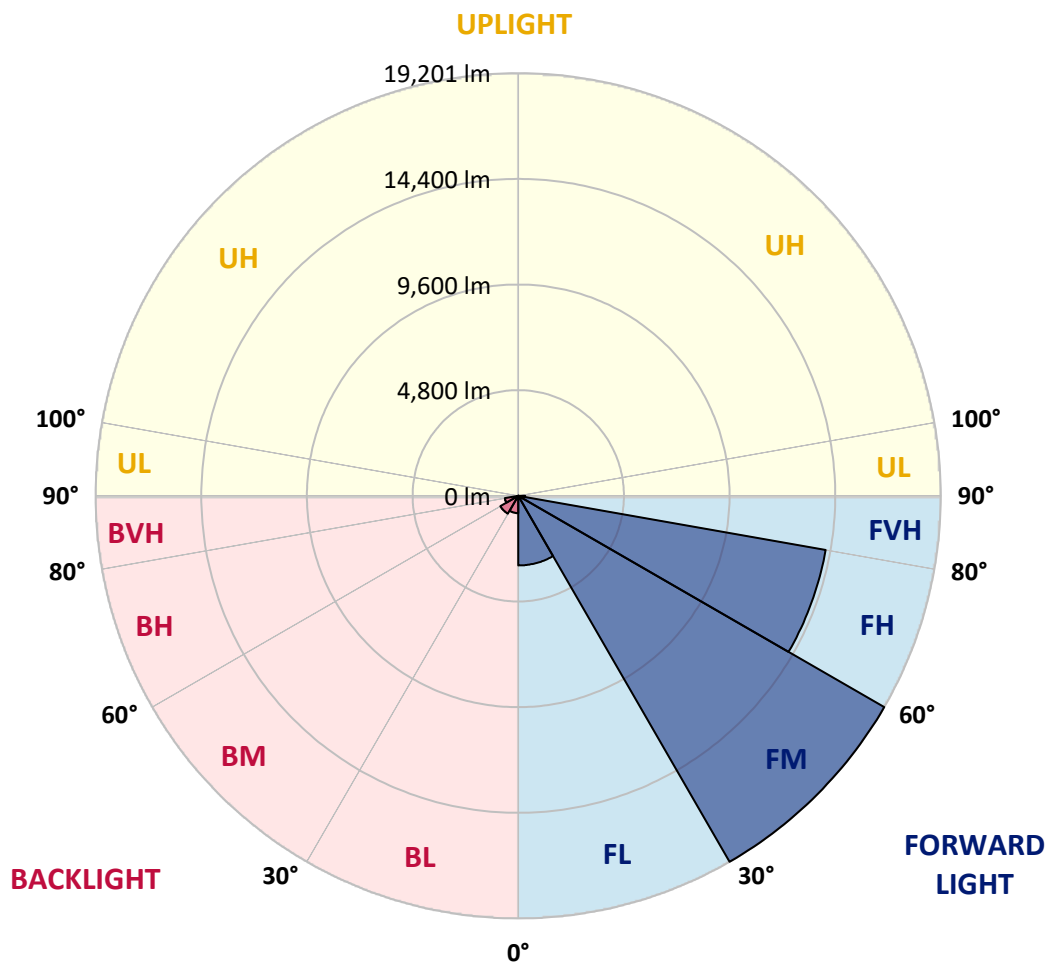
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3164.1	8.1			
FM	(30°-60°)	19200.6	49.0			
FH	(60°-80°)	14180.5	36.2			G5
FVH	(80°-90°)	315.6	0.8			G3/500
BL	(0°-30°)	786.7	2.0	B2/1000		
BM	(30°-60°)	937.8	2.4	B1/1000		
BH	(60°-80°)	619.9	1.6	B2/1000		G2/1000
BVH	(80°-90°)	7.8	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G5

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4462.6	4462.6	4462.6	4462.6	4462.6	4462.6	4462.6	4462.6	4462.6	4462.6	4462.6
2.5°	5252.3	5229.9	5220.6	5179.6	5108.9	5054.8	4950.5	4829.5	4807.1	4689.8	4546.4
5°	5933.9	5915.3	5902.3	5844.5	5771.9	5635.9	5446.0	5220.6	5177.8	4954.3	4667.4
7.5°	6408.9	6442.4	6442.4	6405.2	6313.9	6211.5	5978.6	5671.3	5617.3	5274.6	4829.5
10°	6686.4	6727.4	6759.0	6790.7	6777.7	6736.7	6516.9	6170.5	6105.3	5650.8	5017.6
12.5°	6712.5	6753.4	6842.8	6975.1	7103.6	7196.7	7058.9	6723.6	6649.1	6086.7	5241.1
15°	6567.2	6610.0	6747.9	7004.9	7315.9	7587.9	7632.6	7336.4	7260.0	6606.3	5520.5
17.5°	6313.9	6341.8	6539.3	6895.0	7383.0	7882.1	8152.2	7993.9	7923.1	7200.4	5831.5
20°	6125.8	6146.3	6319.5	6701.3	7342.0	8066.5	8643.9	8692.3	8617.8	7837.4	6168.6
22.5°	6448.0	6485.2	6490.8	6671.5	7230.2	8157.8	9076.0	9379.6	9323.7	8513.5	6500.1
25°	7329.0	7371.8	7230.2	7118.5	7325.2	8198.8	9446.6	10083.6	10038.9	9241.8	6833.5
27.5°	8493.0	8537.7	8355.2	8021.8	7822.5	8353.3	9776.3	10798.8	10796.9	10012.8	7193.0
30°	9636.6	9681.3	9495.1	9161.7	8703.5	8791.0	10061.3	11547.5	11558.7	10808.1	7574.8
32.5°	10836.1	10891.9	10700.1	10271.7	9793.1	9547.2	10461.7	12300.0	12363.3	11730.1	8005.1
35°	12199.4	12206.9	11936.8	11487.9	10936.6	10558.5	11104.3	13143.7	13294.6	12871.8	8550.8
37.5°	13536.7	13590.7	13369.1	12661.3	12154.7	11726.3	12059.7	14197.9	14412.1	14266.8	9264.1
40°	14527.5	14641.2	14609.5	13845.9	13365.3	13059.9	13246.1	15451.4	15723.3	15890.9	10163.7
42.5°	15149.6	15235.3	15380.6	14920.5	14484.7	14535.0	14646.8	16911.6	17246.8	17742.2	11197.4
45°	15863.0	15903.9	16025.0	15822.0	15527.7	16034.3	16133.0	18556.2	18908.2	19733.3	12344.7
47.5°	16734.6	16831.5	16865.0	16678.7	16544.6	17360.4	17565.3	20051.7	20545.3	21865.8	13559.0
50°	17844.7	17870.7	17928.5	17807.4	17673.3	18500.3	18850.4	21621.8	22070.7	24005.8	14756.6
52.5°	18930.5	19023.6	19224.8	19148.4	19094.4	19470.6	19995.9	23037.3	23538.4	25790.1	15952.4
55°	19243.4	19323.5	20018.2	20493.2	20932.7	20666.4	21091.0	24305.7	24847.7	27384.4	17103.4
57.5°	17993.7	18155.7	19358.9	20595.6	22419.0	22525.2	22595.9	25607.6	26093.7	28606.2	18301.0
60°	14834.9	14866.5	16840.8	18962.2	22173.1	24147.4	24793.7	27006.3	27414.2	29744.2	19735.1
62.5°	9435.5	9757.7	11923.8	14918.7	19573.1	23912.7	27451.5	29122.1	29271.2	31109.4	21791.3
65°	4494.2	4702.8	6263.6	9217.5	14177.4	20908.5	29286.1	32949.6	33016.7	33815.7	24538.5
67.5°	2488.3	2588.9	3332.0	4961.7	8288.2	14786.4	28544.8	37482.9	37546.3	36579.6	26948.6
69°	1946.3	2032.0	2616.8	3739.9	5619.2	10627.5	25831.1	38810.9	38999.0	37371.2	27034.3
70°	1652.0	1735.9	2253.6	3158.8	4518.4	8211.8	22992.6	38481.2	38680.5	37296.7	26395.4
72.5°	1011.3	1059.8	1501.2	2223.8	3028.4	4131.0	14179.3	32543.6	32880.7	34212.4	22685.3
75°	681.7	707.8	938.7	1534.7	2166.1	2127.0	7366.2	22938.6	23668.7	26613.4	16755.1
77.5°	488.0	512.2	629.5	992.7	1517.9	1404.3	3335.7	14255.6	14412.1	15961.7	9137.5
80°	277.5	299.9	445.1	590.4	1030.0	936.8	1326.1	6809.3	6887.5	6844.7	3050.8
82.5°	145.3	163.9	244.0	389.3	661.2	612.8	551.3	2279.7	2290.9	1905.3	668.6
85°	27.9	33.5	121.1	266.3	340.8	266.3	225.4	534.5	545.7	482.4	165.8
87.5°	0.0	1.9	48.4	59.6	67.1	68.9	72.6	104.3	111.8	150.9	44.7
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°	4462.6	4462.6	4462.6	4462.6	4462.6	4462.6	4462.6	4462.6	4462.6	4462.6	4462.6
2.5°	4483.1	4416.0	4287.5	4138.5	4023.0	3909.4	3820.0	3726.9	3693.4	3676.6	3674.7
5°	4527.8	4386.2	4114.3	3834.9	3605.8	3389.8	3235.2	3088.0	3019.1	2987.5	2974.4
7.5°	4602.3	4375.0	3937.3	3510.8	3181.2	2911.1	2696.9	2536.7	2456.6	2423.1	2410.1
10°	4689.8	4360.1	3730.6	3168.1	2747.2	2467.8	2255.5	2097.2	2009.6	1972.4	1953.8
12.5°	4792.2	4334.1	3492.2	2821.7	2376.6	2097.2	1840.2	1644.6	1544.0	1501.2	1480.7
15°	4918.9	4308.0	3242.6	2495.8	2050.6	1709.8	1428.5	1296.3	1275.8	1268.4	1270.2
17.5°	5043.7	4267.0	2970.7	2173.5	1707.9	1335.4	1192.0	1184.6	1188.3	1188.3	1188.3
20°	5155.4	4173.9	2674.6	1897.9	1382.0	1126.8	1097.0	1084.0	1074.7	1067.2	1057.9
22.5°	5243.0	4049.1	2389.6	1624.1	1128.7	1031.8	985.3	944.3	910.8	888.4	877.2
25°	5302.6	3883.3	2128.8	1361.5	1015.1	938.7	854.9	786.0	733.8	702.2	689.1
27.5°	5347.3	3704.5	1896.0	1139.9	936.8	830.7	720.8	638.8	584.8	556.9	545.7
30°	5378.9	3501.5	1691.2	1002.0	849.3	717.1	599.7	519.6	480.5	465.6	458.2
32.5°	5408.7	3276.1	1497.5	936.8	767.4	612.8	502.9	441.4	417.2	398.6	393.0
35°	5483.2	3067.5	1313.1	867.9	683.5	523.4	432.1	387.4	363.2	352.0	348.3
37.5°	5660.2	2913.0	1136.1	797.2	599.7	452.6	378.1	346.4	324.1	312.9	309.2
40°	5945.1	2834.7	987.1	720.8	517.8	398.6	342.7	312.9	288.7	271.9	268.2
42.5°	6364.2	2845.9	882.8	644.4	452.6	355.7	309.2	273.8	247.7	232.8	229.1
45°	6872.6	2927.9	810.2	569.9	398.6	322.2	271.9	234.7	210.5	197.4	193.7
47.5°	7424.0	3060.1	750.6	502.9	355.7	290.6	234.7	195.6	175.1	163.9	162.0
50°	8005.1	3188.6	689.1	437.7	318.5	258.9	197.4	162.0	145.3	136.0	132.2
52.5°	8593.6	3337.6	633.3	378.1	286.8	221.6	163.9	132.2	119.2	111.8	108.0
55°	9226.9	3449.4	579.2	331.5	255.2	188.1	136.0	109.9	98.7	89.4	87.5
57.5°	9971.9	3622.6	523.4	286.8	217.9	156.5	111.8	87.5	78.2	68.9	67.1
60°	10977.6	3825.6	463.8	253.3	178.8	128.5	91.3	70.8	59.6	52.2	50.3
62.5°	12303.7	4051.0	389.3	221.6	145.3	104.3	72.6	55.9	42.8	33.5	33.5
65°	13985.6	4417.9	318.5	186.3	119.2	85.7	55.9	41.0	24.2	14.9	14.9
67.5°	14967.1	4481.2	257.0	152.7	96.9	72.6	46.6	27.9	7.5	1.9	0.0
69°	14652.3	4114.3	217.9	130.4	83.8	68.9	42.8	20.5	3.7	0.0	0.0
70°	14060.1	3762.3	191.8	115.5	76.4	65.2	41.0	14.9	3.7	0.0	0.0
72.5°	11618.3	2678.3	145.3	85.7	55.9	57.7	37.3	9.3	3.7	0.0	0.0
75°	8463.2	1627.8	104.3	59.6	35.4	42.8	26.1	3.7	1.9	0.0	0.0
77.5°	4708.4	767.4	65.2	33.5	22.4	26.1	13.0	0.0	0.0	0.0	0.0
80°	1529.1	208.6	29.8	18.6	13.0	14.9	5.6	0.0	0.0	0.0	0.0
82.5°	283.1	59.6	16.8	9.3	3.7	3.7	0.0	0.0	0.0	0.0	0.0
85°	61.5	24.2	9.3	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	20.5	7.5	1.9	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

(END OF REPORT)