

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: P836245

Luminaire Tested: **ARCH3-160-727-U-T2U-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836245
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-160-727-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1245mA LIGHTSQUARE WITH 40 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14790 lumens
Efficiency: N/A
Efficacy: 91.9 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 161
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



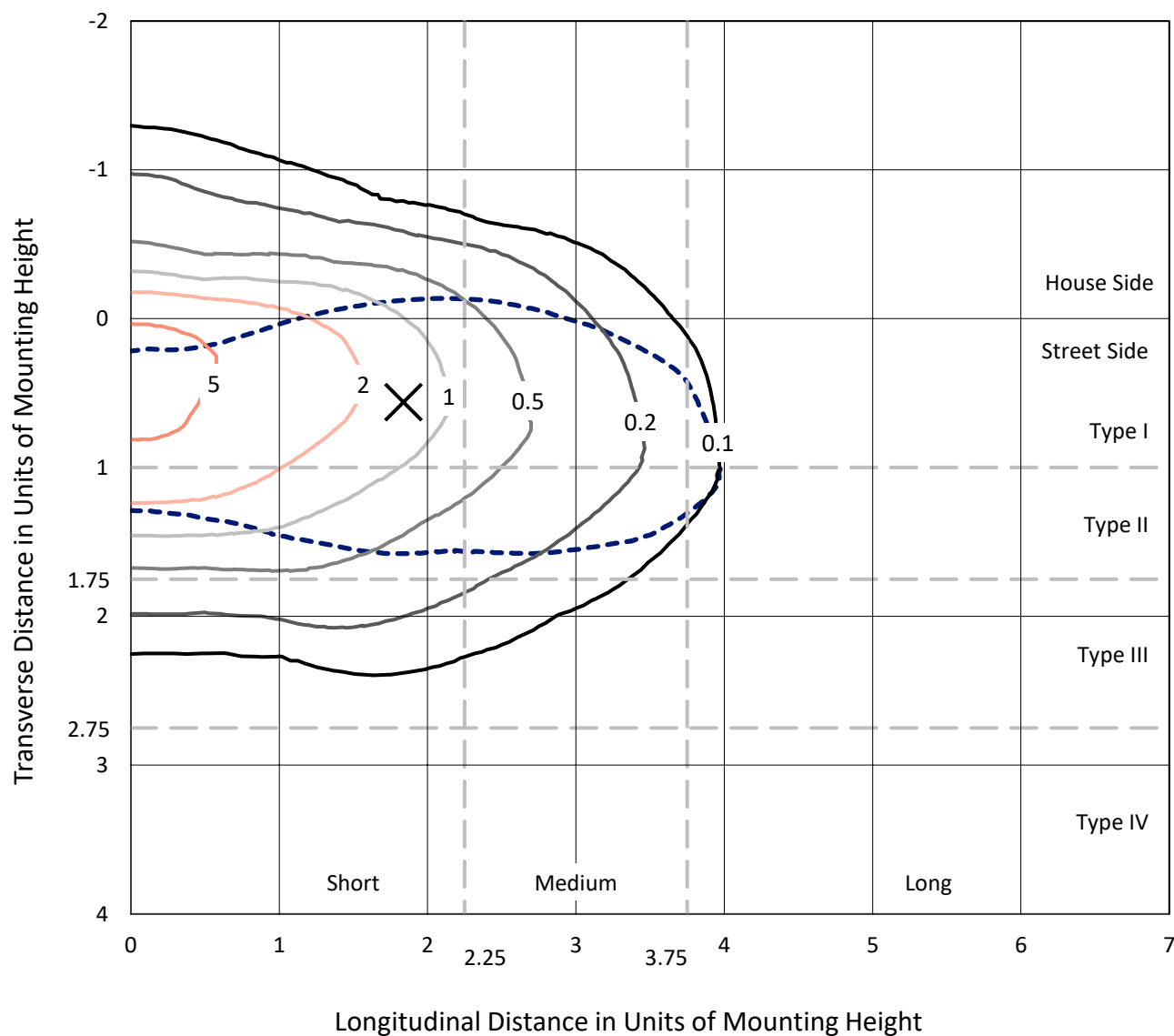
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Iso-Footcandle Lines of Horizontal Illumination

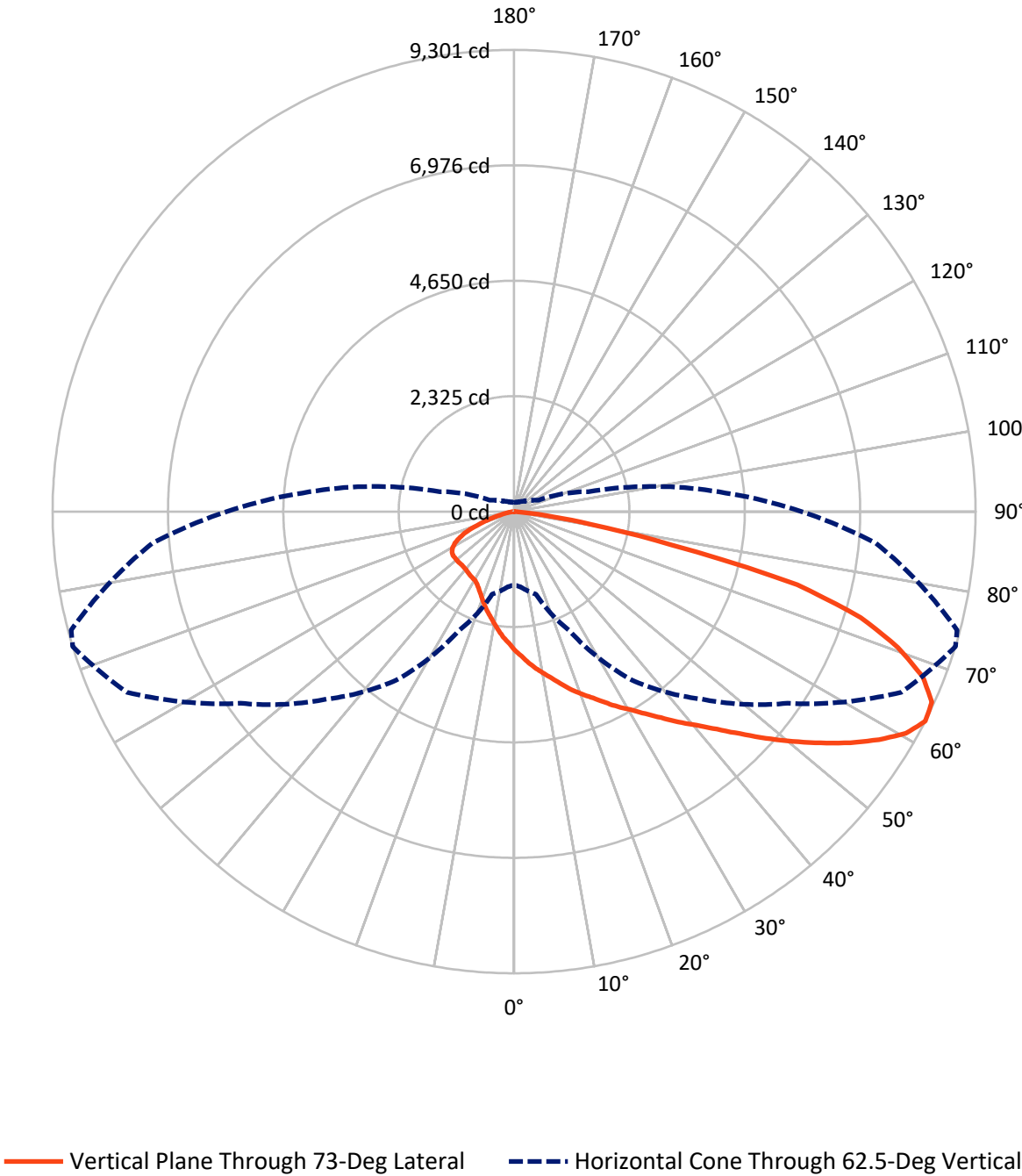
× Max cd

--- 1/2 Max cd



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Luminous Intensity Polar Plot



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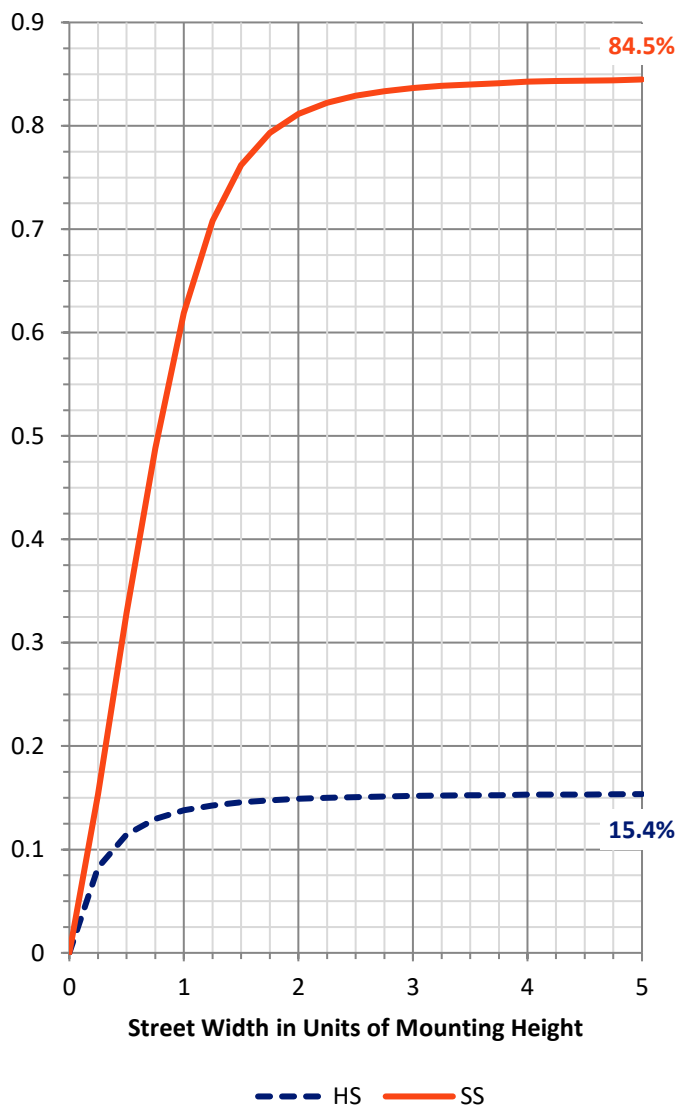
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2292.7	0.0	2292.7
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	12497.3	0.0	12497.3
	% Fixture	84.5	0.0	84.5
Total	Lumens	14790.0	0.0	14790.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	270.5	1.8
10°-20°	816.4	5.5
20°-30°	1358.9	9.2
30°-40°	2050.4	13.9
40°-50°	2865.9	19.4
50°-60°	3165.5	21.4
60°-70°	2757.6	18.6
70°-80°	1393.0	9.4
80°-90°	111.8	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°	14790.0	100.0
0°-180°	14790.0	100.0

Coefficient of Utilization



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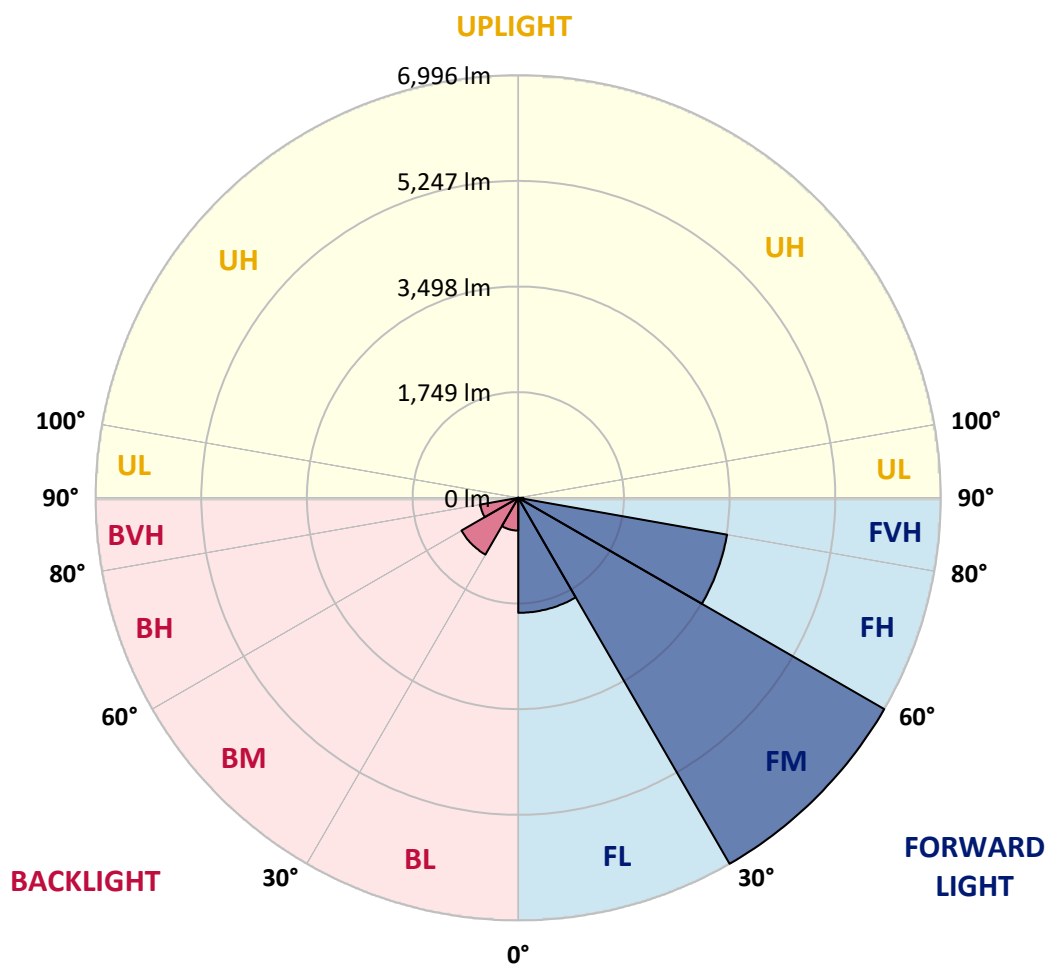
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1903.9	12.9			
FM	(30°-60°)	6996.2	47.3			
FH	(60°-80°)	3510.7	23.7			G2/5000
FVH	(80°-90°)	86.5	0.6			G1/100
BL	(0°-30°)	541.9	3.7	B2/1000		
BM	(30°-60°)	1085.6	7.3	B2/2500		
BH	(60°-80°)	639.9	4.3	B2/1000		G2/1000
BVH	(80°-90°)	25.3	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	2800.5	2800.5	2800.5	2800.5	2800.5	2800.5	2800.5	2800.5	2800.5	2800.5	2800.5
2.5°	3187.2	3222.7	3203.4	3216.2	3151.8	3109.9	3061.6	2968.1	2916.5	2910.1	2848.9
5°	3654.5	3693.2	3661.0	3651.3	3538.5	3441.8	3332.3	3167.9	3058.3	3039.0	2903.6
7.5°	4121.8	4157.3	4118.6	4089.6	3938.1	3767.3	3606.2	3364.5	3193.7	3161.5	2948.8
10°	4450.5	4482.8	4453.8	4424.8	4266.8	4092.8	3864.0	3548.2	3316.1	3264.6	2977.8
12.5°	4698.7	4718.0	4705.1	4679.3	4531.1	4344.2	4125.0	3754.4	3454.7	3390.3	3022.9
15°	4901.7	4933.9	4917.8	4898.5	4756.7	4569.8	4360.3	3970.4	3615.9	3535.3	3090.6
17.5°	5037.1	5059.6	5062.8	5062.8	4937.2	4753.5	4550.4	4166.9	3777.0	3673.9	3155.0
20°	5098.3	5124.1	5140.2	5166.0	5062.8	4904.9	4698.7	4334.5	3928.5	3812.4	3216.2
22.5°	5127.3	5149.9	5191.8	5249.8	5166.0	5033.8	4843.7	4489.2	4079.9	3957.5	3287.1
25°	5149.9	5178.9	5240.1	5349.7	5291.7	5178.9	5014.5	4666.5	4260.4	4134.7	3390.3
27.5°	5211.1	5246.5	5304.5	5436.7	5365.8	5311.0	5195.0	4856.6	4450.5	4321.6	3516.0
30°	5423.8	5452.8	5449.6	5533.4	5446.3	5430.2	5349.7	5040.3	4634.2	4505.3	3664.2
32.5°	5810.5	5839.5	5768.6	5736.4	5546.2	5549.5	5517.2	5236.9	4853.4	4721.2	3835.0
35°	6226.2	6258.5	6165.0	6110.2	5791.2	5697.7	5713.8	5481.8	5098.3	4966.2	4047.7
37.5°	6596.8	6635.5	6555.0	6474.4	6152.1	5936.2	5933.0	5755.7	5378.7	5243.3	4283.0
40°	6799.9	6845.0	6893.3	6848.2	6509.8	6271.4	6168.2	6036.1	5655.8	5517.2	4537.5
42.5°	6896.6	7022.2	7109.3	7080.3	6803.1	6561.4	6438.9	6329.4	5994.2	5858.9	4840.5
45°	6625.9	6629.1	6812.8	6970.7	6919.1	6758.0	6735.4	6658.1	6380.9	6252.0	5182.1
47.5°	6287.5	6261.7	6390.6	6671.0	6816.0	6857.9	6990.0	7022.2	6822.4	6693.5	5530.1
50°	5475.4	5491.5	5910.4	6313.3	6596.8	6867.6	7170.5	7396.1	7276.8	7154.4	5897.5
52.5°	4453.8	4492.4	4972.6	5858.9	6306.8	6770.9	7276.8	7769.9	7740.9	7624.9	6264.9
55°	3570.7	3632.0	4141.2	5101.5	5936.2	6555.0	7322.0	8111.5	8221.1	8114.7	6625.9
57.5°	2729.6	2794.1	3222.7	4208.8	5462.5	6203.7	7289.7	8411.2	8669.0	8601.4	6957.8
60°	2056.1	2120.5	2394.5	3412.8	4869.5	5810.5	7128.6	8607.8	9071.9	9001.0	7199.5
62.5°	1472.8	1524.3	1727.4	2655.5	4147.6	5343.2	6732.2	8611.0	9300.7	9242.7	7315.5
65°	1060.3	1060.3	1224.6	1894.9	3470.8	4782.5	6132.8	8214.6	9252.3	9236.2	7234.9
67.5°	763.8	770.2	902.4	1324.5	2768.3	4102.5	5356.1	7508.9	8878.5	8959.1	6944.9
70°	541.4	557.5	618.8	924.9	2091.5	3238.8	4524.7	6584.0	8205.0	8346.8	6384.1
72.5°	418.9	428.6	470.5	644.5	1527.6	2407.3	3606.2	5552.7	7305.8	7467.0	5620.4
75°	322.3	331.9	364.2	473.7	1095.7	1688.7	2562.0	4308.7	5891.1	6177.9	4515.0
77.5°	235.3	248.1	270.7	344.8	638.1	1073.2	1553.3	2423.5	3251.7	3387.0	2365.5
80°	109.6	125.7	157.9	222.4	344.8	506.0	551.1	934.6	1563.0	1633.9	1282.6
82.5°	61.2	77.3	90.2	135.4	174.0	180.5	186.9	235.3	589.8	651.0	538.2
85°	29.0	38.7	41.9	58.0	58.0	51.6	61.2	45.1	96.7	116.0	112.8
87.5°	0.0	3.2	6.4	16.1	12.9	9.7	9.7	9.7	9.7	12.9	9.7
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°	2800.5	2800.5	2800.5	2800.5	2800.5	2800.5	2800.5	2800.5	2800.5	2800.5	2800.5
2.5°	2819.9	2778.0	2681.3	2597.5	2542.7	2494.4	2429.9	2400.9	2349.3	2359.0	2330.0
5°	2836.0	2758.6	2587.8	2429.9	2313.9	2210.8	2098.0	2033.5	1962.6	1956.2	1933.6
7.5°	2845.6	2726.4	2481.5	2259.1	2081.9	1923.9	1772.5	1688.7	1601.7	1582.3	1563.0
10°	2836.0	2678.1	2371.9	2081.9	1846.6	1650.0	1479.2	1372.9	1282.6	1260.1	1240.7
12.5°	2845.6	2652.3	2268.8	1917.5	1637.1	1414.8	1221.4	1111.8	1028.0	1005.5	992.6
15°	2868.2	2636.2	2181.8	1769.3	1450.2	1202.1	1011.9	918.5	850.8	828.2	821.8
17.5°	2887.5	2620.0	2088.3	1624.2	1263.3	1015.1	850.8	773.4	715.4	692.9	686.4
20°	2913.3	2597.5	1994.8	1485.7	1098.9	866.9	721.9	654.2	609.1	593.0	589.8
22.5°	2935.9	2581.4	1907.8	1347.1	947.5	747.7	625.2	570.4	538.2	522.1	522.1
25°	2993.9	2587.8	1833.7	1218.2	834.7	654.2	551.1	509.2	483.4	473.7	473.7
27.5°	3061.6	2613.6	1775.7	1108.6	738.0	583.3	499.5	464.1	451.2	438.3	441.5
30°	3158.2	2665.2	1737.0	1018.4	667.1	528.5	457.6	431.8	418.9	415.7	415.7
32.5°	3280.7	2749.0	1733.8	960.4	615.5	486.6	428.6	406.1	399.6	396.4	396.4
35°	3425.7	2823.1	1714.5	934.6	583.3	457.6	406.1	389.9	386.7	386.7	386.7
37.5°	3599.7	2945.5	1701.6	899.1	567.2	441.5	389.9	377.1	377.1	377.1	377.1
40°	3780.2	3045.4	1682.2	866.9	560.7	431.8	380.3	364.2	364.2	364.2	364.2
42.5°	3996.1	3190.5	1675.8	850.8	551.1	425.4	367.4	348.1	351.3	351.3	354.5
45°	4257.2	3354.8	1672.6	834.7	547.9	418.9	354.5	331.9	335.2	331.9	331.9
47.5°	4521.4	3545.0	1682.2	825.0	544.6	412.5	344.8	315.8	315.8	312.6	312.6
50°	4798.6	3719.0	1688.7	815.3	538.2	399.6	328.7	302.9	296.5	290.0	293.3
52.5°	5059.6	3880.1	1691.9	799.2	518.9	380.3	315.8	286.8	277.2	267.5	270.7
55°	5320.7	4034.8	1698.4	779.9	493.1	360.9	299.7	270.7	257.8	244.9	244.9
57.5°	5555.9	4170.2	1682.2	731.6	464.1	341.6	283.6	251.4	232.0	219.1	219.1
60°	5717.1	4266.8	1633.9	660.7	425.4	319.0	267.5	232.0	209.5	199.8	199.8
62.5°	5794.4	4283.0	1546.9	544.6	377.1	296.5	248.1	212.7	193.4	186.9	186.9
65°	5720.3	4212.1	1411.5	409.3	325.5	270.7	228.8	196.6	177.2	161.1	161.1
67.5°	5462.5	4012.2	1224.6	309.4	277.2	244.9	209.5	180.5	157.9	145.0	145.0
70°	4943.6	3596.5	947.5	248.1	235.3	212.7	190.1	161.1	141.8	125.7	125.7
72.5°	4263.6	3048.7	667.1	199.8	199.8	180.5	161.1	141.8	122.5	109.6	109.6
75°	3271.0	2255.9	448.0	161.1	164.4	151.5	132.1	116.0	103.1	93.5	93.5
77.5°	1785.4	1115.1	273.9	119.2	122.5	116.0	103.1	93.5	87.0	77.3	77.3
80°	866.9	489.8	157.9	83.8	87.0	83.8	77.3	67.7	67.7	61.2	61.2
82.5°	364.2	183.7	83.8	58.0	58.0	51.6	48.3	48.3	48.3	45.1	45.1
85°	90.2	35.4	35.4	32.2	32.2	32.2	29.0	29.0	29.0	22.6	25.8
87.5°	12.9	12.9	12.9	12.9	12.9	12.9	9.7	3.2	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)