

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: P836501

Luminaire Tested: **ARCH3-190-750-U-T4W-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836501
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-190-750-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1440mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17643 lumens
Efficiency: N/A
Efficacy: 93.2 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

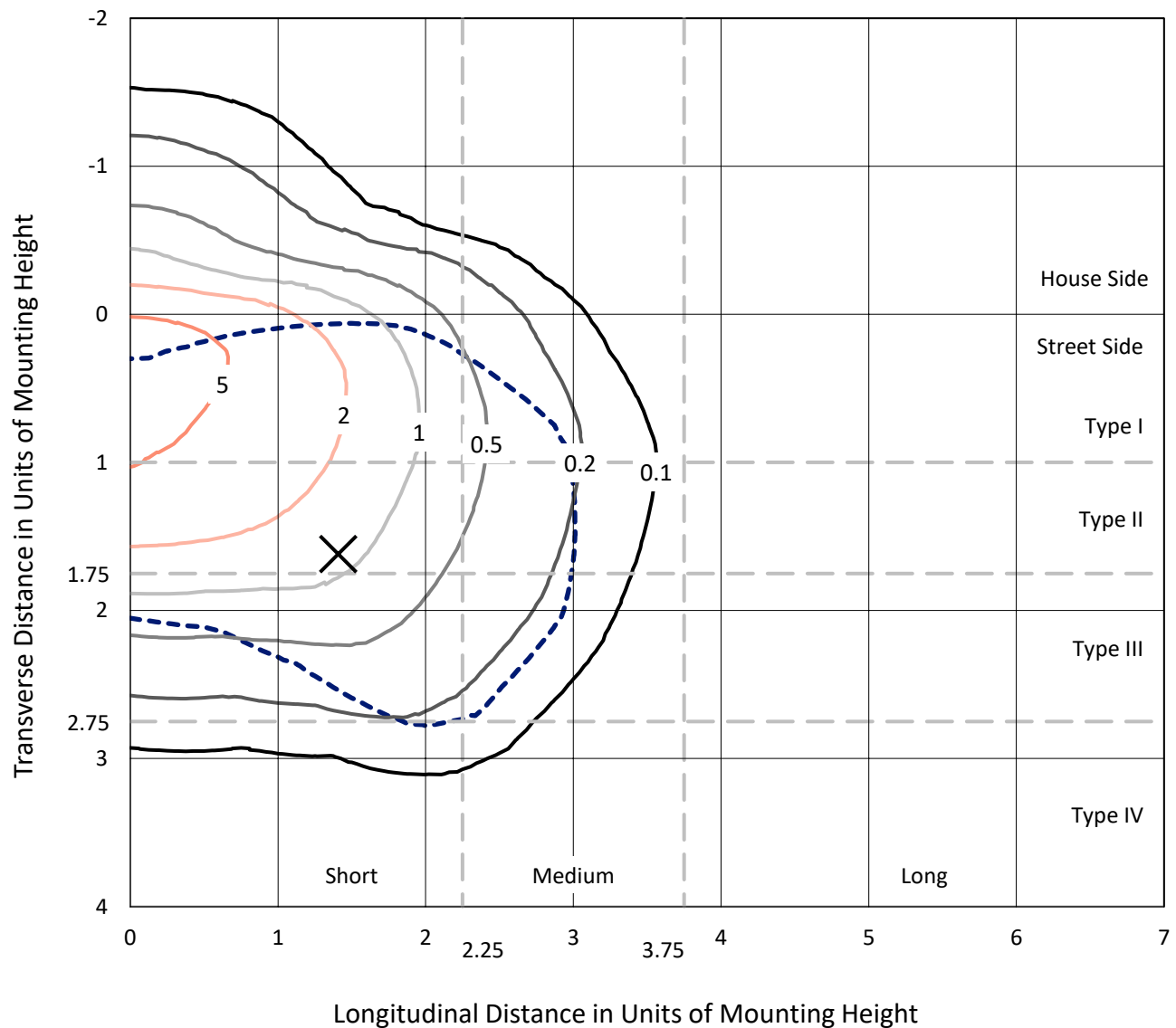
Input Watts (W): 189.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

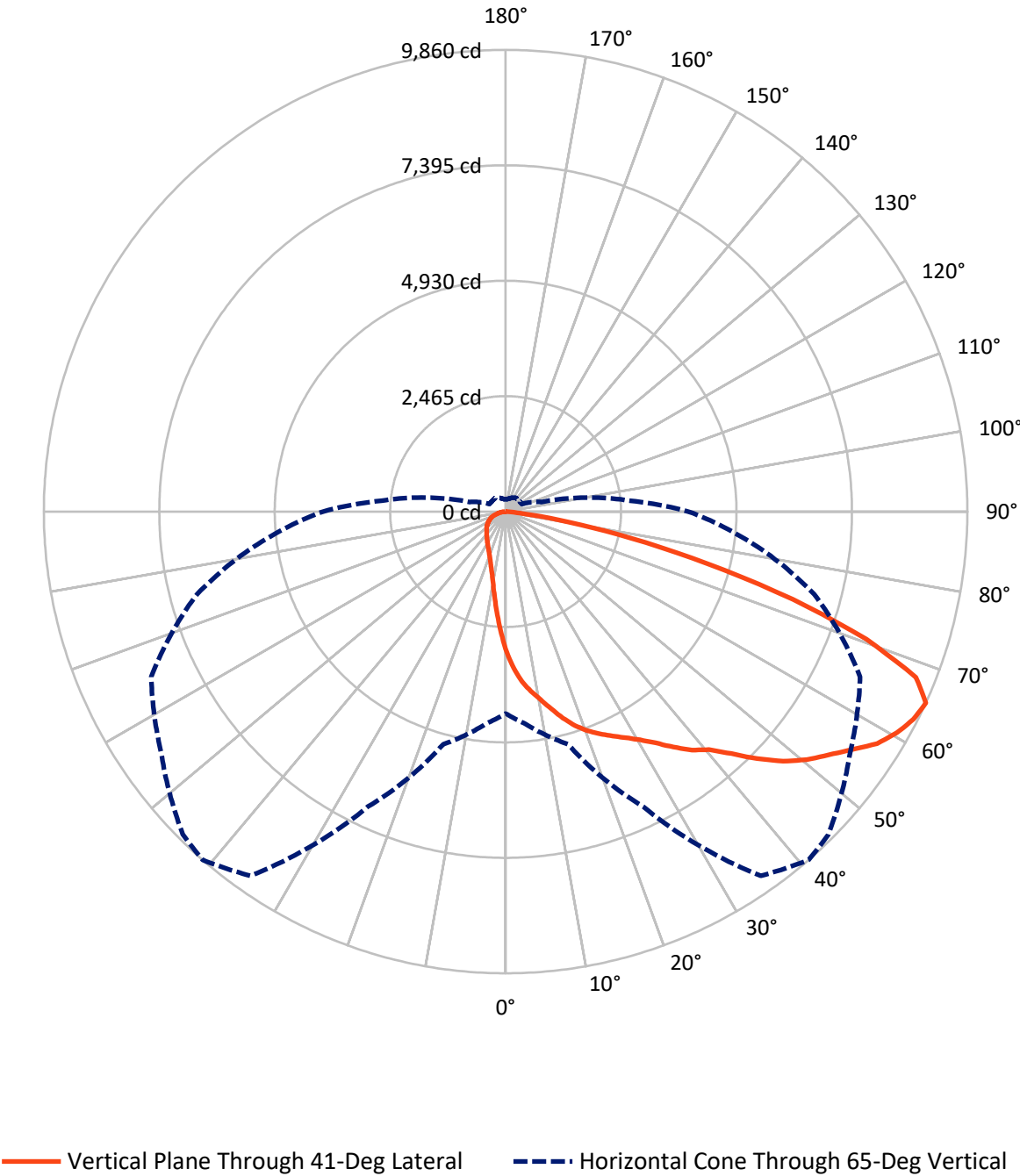
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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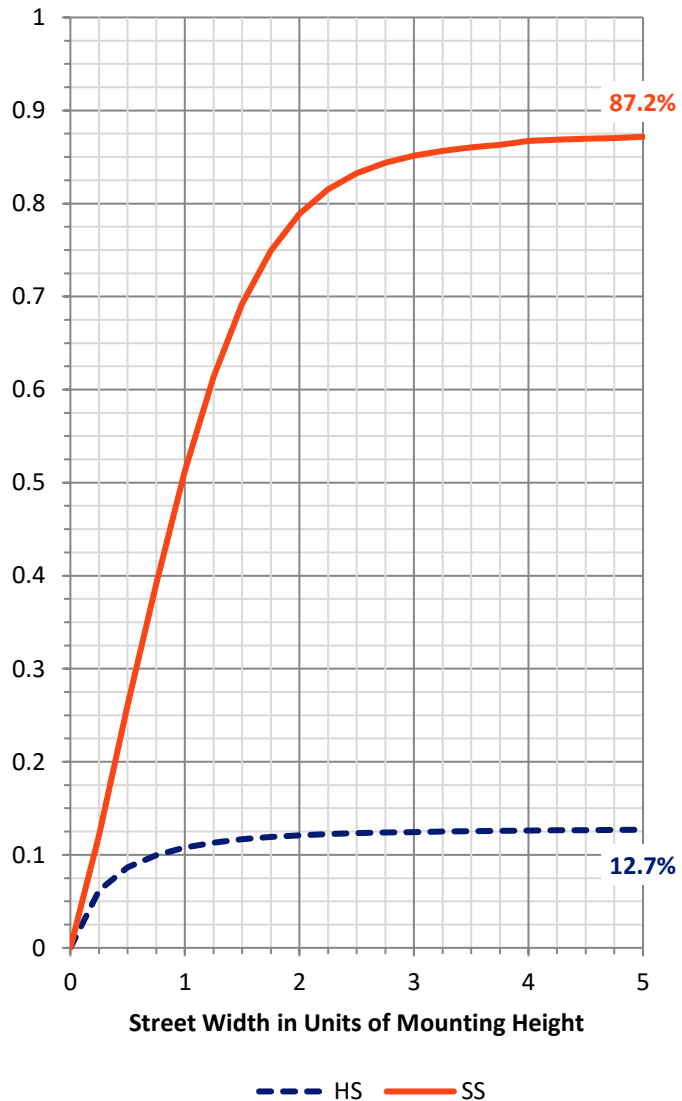
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2265.1	0.0	2265.1
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	15377.9	0.0	15377.9
	% Fixture	87.2	0.0	87.2
Total	Lumens	17643.0	0.0	17643.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	280.1	1.6
10°-20°	839.9	4.8
20°-30°	1445.0	8.2
30°-40°	2191.5	12.4
40°-50°	3210.6	18.2
50°-60°	4054.3	23.0
60°-70°	3801.7	21.5
70°-80°	1694.4	9.6
80°-90°	125.5	0.7
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°	17643.0	100.0
0°-180°	17643.0	100.0

Coefficient of Utilization



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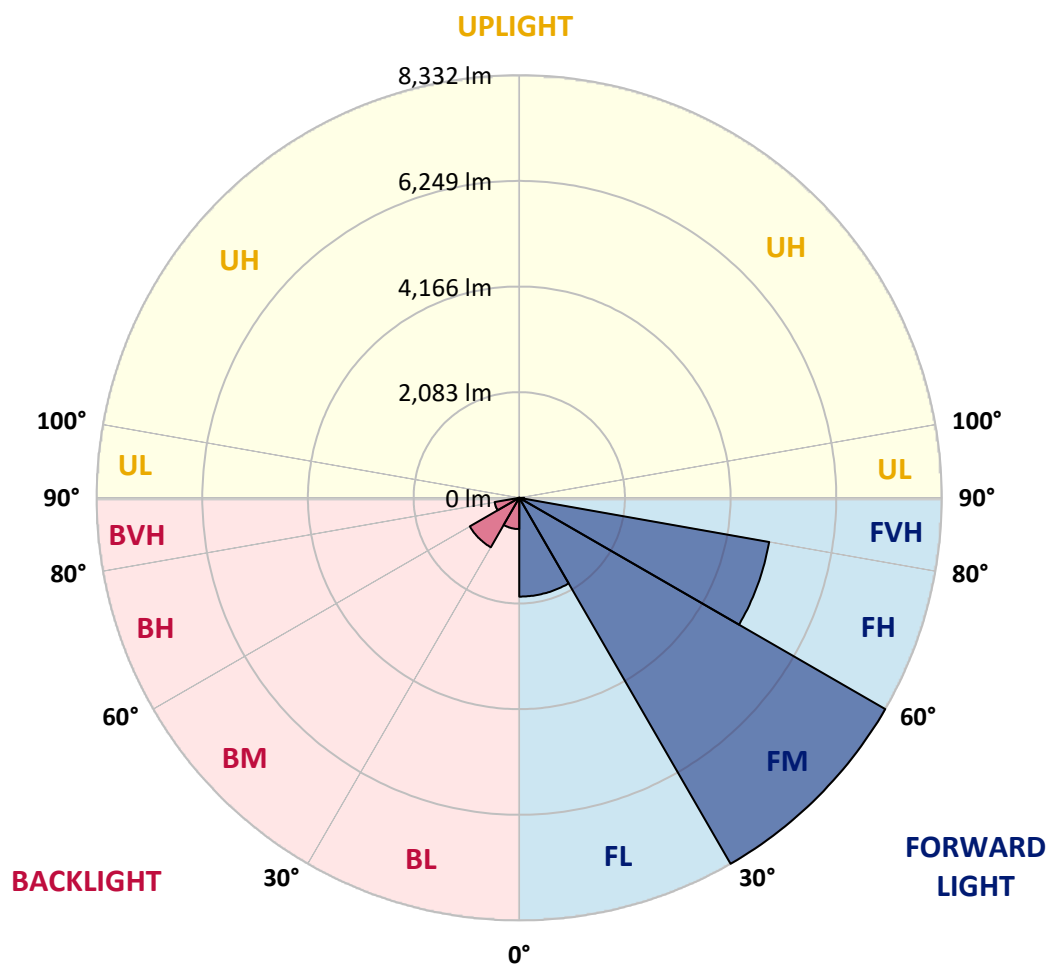
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1948.4	11.0			
FM	(30°-60°)	8331.7	47.2			
FH	(60°-80°)	5004.0	28.4			G3/7500
FVH	(80°-90°)	93.7	0.5			G1/100
BL	(0°-30°)	616.5	3.5	B2/1000		
BM	(30°-60°)	1124.7	6.4	B2/2500		
BH	(60°-80°)	492.0	2.8	B1/500		G1/500
BVH	(80°-90°)	31.8	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-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	3006.3	3006.3	3006.3	3006.3	3006.3	3006.3	3006.3	3006.3	3006.3	3006.3	3006.3
2.5°	3467.6	3456.5	3449.0	3408.1	3408.1	3352.3	3356.0	3303.9	3240.7	3140.2	3032.3
5°	3795.1	3780.2	3761.6	3720.6	3705.8	3649.9	3642.5	3568.1	3460.2	3285.3	3091.8
7.5°	4081.5	4066.7	4040.6	3981.1	3940.2	3873.2	3854.6	3757.8	3638.8	3423.0	3151.4
10°	4342.0	4330.8	4297.3	4222.9	4167.1	4085.3	4051.8	3921.6	3772.7	3534.6	3199.7
12.5°	4606.1	4591.3	4546.6	4483.4	4416.4	4319.7	4278.7	4111.3	3921.6	3657.4	3270.4
15°	4851.7	4829.4	4795.9	4728.9	4669.4	4576.4	4531.7	4334.5	4103.9	3795.1	3363.5
17.5°	5011.7	4993.1	4963.3	4926.1	4877.8	4807.1	4762.4	4568.9	4286.2	3929.0	3460.2
20°	5108.4	5101.0	5089.8	5067.5	5045.2	4996.8	4963.3	4781.0	4483.4	4059.2	3553.2
22.5°	5182.8	5175.4	5171.7	5171.7	5175.4	5156.8	5134.5	4978.2	4673.1	4196.9	3638.8
25°	5298.2	5294.5	5287.0	5279.6	5305.6	5309.3	5301.9	5194.0	4911.2	4379.2	3746.7
27.5°	5458.2	5447.0	5432.1	5424.7	5450.7	5469.3	5484.2	5409.8	5164.2	4565.2	3869.5
30°	5703.7	5670.3	5633.0	5607.0	5625.6	5655.4	5688.9	5644.2	5424.7	4795.9	3996.0
32.5°	5993.9	5953.0	5867.4	5819.1	5867.4	5889.8	5915.8	5893.5	5696.3	5045.2	4122.5
35°	6347.4	6299.0	6209.7	6139.1	6224.6	6176.3	6165.1	6142.8	5953.0	5290.7	4263.9
37.5°	6935.3	6864.6	6723.2	6566.9	6566.9	6462.7	6421.8	6354.8	6183.7	5510.3	4401.5
40°	7616.1	7523.1	7340.8	7110.1	6898.1	6682.3	6656.2	6607.9	6455.3	5763.3	4557.8
42.5°	8364.0	8185.4	7932.4	7653.4	7311.1	7065.5	7006.0	6868.3	6719.5	6020.0	4714.0
45°	9193.7	8821.6	8453.3	8311.9	7746.4	7523.1	7411.5	7162.2	6994.8	6287.9	4877.8
47.5°	9327.6	9037.4	8791.9	8769.5	8151.9	7965.9	7839.4	7482.2	7292.4	6574.4	5048.9
50°	9253.2	9078.4	9104.4	9015.1	8449.6	8326.8	8230.0	7824.5	7586.4	6849.7	5205.2
52.5°	8940.7	9037.4	9186.3	9022.5	8732.3	8631.9	8583.5	8192.8	7861.7	7102.7	5346.6
55°	8568.6	8635.6	8955.6	9156.5	9059.8	8970.5	8925.8	8620.7	8133.3	7314.8	5476.8
57.5°	8025.4	7995.6	8349.1	9134.2	9402.1	9350.0	9301.6	9041.1	8386.3	7467.3	5558.6
60°	7210.6	7147.3	7593.8	8687.7	9513.7	9595.5	9573.2	9320.2	8579.8	7463.6	5525.1
62.5°	5800.5	5956.7	6574.4	7958.4	9562.0	9770.4	9729.5	9342.5	8643.0	7247.8	5313.1
65°	4312.2	4535.5	5141.9	6953.9	9495.1	9859.7	9748.1	8977.9	8349.1	6819.9	4848.0
67.5°	3106.7	3303.9	3746.7	5722.3	8851.4	9450.4	9320.2	8382.6	7672.0	6213.5	4204.3
70°	2124.5	2265.9	2567.2	4167.1	7556.6	8170.5	8088.7	7493.4	6604.1	5491.7	3415.5
72.5°	1499.4	1558.9	1752.4	2749.6	5740.9	6410.7	6313.9	6165.1	5305.6	4565.2	2656.5
75°	1123.6	1160.8	1265.0	1778.5	3873.2	4442.4	4353.1	4438.7	3962.5	3456.5	1934.7
77.5°	424.2	461.4	718.1	1134.8	2291.9	2727.2	2637.9	2690.0	2202.6	1745.0	963.6
80°	115.3	122.8	238.1	539.5	1041.8	1358.0	1235.3	1060.4	818.5	803.7	509.7
82.5°	48.4	55.8	107.9	290.2	372.1	372.1	312.5	386.9	312.5	375.8	245.6
85°	18.6	22.3	26.0	74.4	48.4	52.1	55.8	74.4	63.3	78.1	55.8
87.5°	0.0	0.0	0.0	3.7	3.7	7.4	3.7	7.4	11.2	11.2	11.2
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°	3006.3	3006.3	3006.3	3006.3	3006.3	3006.3	3006.3	3006.3	3006.3	3006.3	3006.3
2.5°	2987.7	2946.7	2887.2	2790.5	2690.0	2634.2	2563.5	2552.4	2477.9	2470.5	2440.7
5°	3006.3	2920.7	2768.2	2582.1	2399.8	2258.4	2154.2	2098.4	1990.5	1990.5	1960.8
7.5°	3021.2	2887.2	2641.7	2366.3	2117.0	1927.3	1785.9	1726.4	1629.6	1622.2	1599.9
10°	3024.9	2846.3	2504.0	2146.8	1841.7	1648.2	1510.6	1443.6	1358.0	1350.6	1335.7
12.5°	3054.6	2824.0	2381.2	1957.1	1644.5	1436.2	1302.2	1246.4	1179.4	1172.0	1157.1
15°	3103.0	2824.0	2277.0	1797.1	1469.7	1276.2	1160.8	1108.7	1060.4	1052.9	1045.5
17.5°	3151.4	2816.5	2172.9	1648.2	1324.5	1149.7	1049.2	1008.3	971.1	967.4	959.9
20°	3196.0	2812.8	2068.7	1521.7	1212.9	1045.5	967.4	930.2	900.4	900.4	896.7
22.5°	3240.7	2805.4	1968.2	1402.7	1116.2	967.4	900.4	859.5	837.1	837.1	833.4
25°	3307.6	2805.4	1875.2	1302.2	1038.1	907.8	840.9	811.1	792.5	788.8	788.8
27.5°	3385.8	2827.7	1793.3	1212.9	971.1	848.3	796.2	766.5	744.1	736.7	740.4
30°	3471.4	2846.3	1718.9	1134.8	907.8	803.7	747.8	718.1	695.8	688.3	692.0
32.5°	3556.9	2868.6	1652.0	1064.1	844.6	762.7	706.9	673.4	651.1	647.4	647.4
35°	3649.9	2890.9	1585.0	1004.6	792.5	721.8	669.7	632.5	617.6	610.2	613.9
37.5°	3743.0	2928.1	1521.7	948.8	755.3	684.6	636.2	599.0	587.9	584.1	584.1
40°	3854.6	2984.0	1495.7	911.6	721.8	651.1	610.2	573.0	561.8	561.8	561.8
42.5°	3947.6	3028.6	1473.4	870.6	695.8	621.3	584.1	554.4	546.9	543.2	546.9
45°	4040.6	3069.5	1443.6	833.4	662.3	591.6	561.8	532.1	524.6	524.6	524.6
47.5°	4133.6	3091.8	1402.7	796.2	632.5	565.5	539.5	513.4	506.0	506.0	506.0
50°	4208.0	3110.5	1343.2	755.3	599.0	543.2	517.2	491.1	483.7	483.7	483.7
52.5°	4282.5	3114.2	1279.9	706.9	565.5	517.2	494.8	468.8	461.4	457.6	457.6
55°	4349.4	3110.5	1205.5	651.1	528.3	487.4	468.8	446.5	431.6	416.7	424.2
57.5°	4397.8	3106.7	1119.9	595.3	491.1	457.6	450.2	420.4	390.7	353.5	360.9
60°	4379.2	3065.8	1026.9	524.6	450.2	427.9	427.9	386.9	334.9	316.3	320.0
62.5°	4260.1	2950.5	930.2	450.2	409.3	398.1	394.4	349.7	308.8	290.2	293.9
65°	3902.9	2660.3	788.8	383.2	368.3	364.6	364.6	323.7	286.5	264.2	267.9
67.5°	3359.7	2232.4	643.7	323.7	327.4	334.9	334.9	297.7	260.4	238.1	241.8
70°	2693.7	1745.0	513.4	279.0	282.8	293.9	301.4	267.9	234.4	212.1	212.1
72.5°	2027.7	1324.5	413.0	234.4	253.0	253.0	264.2	238.1	204.6	182.3	186.0
75°	1469.7	948.8	327.4	197.2	219.5	215.8	215.8	200.9	174.9	160.0	160.0
77.5°	695.8	498.6	260.4	141.4	171.1	167.4	171.1	160.0	148.8	133.9	137.7
80°	342.3	245.6	167.4	100.5	119.1	122.8	133.9	126.5	122.8	111.6	111.6
82.5°	163.7	96.7	78.1	70.7	81.9	85.6	93.0	93.0	96.7	89.3	89.3
85°	44.6	26.0	33.5	44.6	52.1	55.8	63.3	67.0	67.0	63.3	67.0
87.5°	11.2	11.2	14.9	22.3	26.0	29.8	33.5	33.5	14.9	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)