

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: P841160

Luminaire Tested: **ARCH4-140-727-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841160
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-140-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1155mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15577 lumens
Efficiency: N/A
Efficacy: 110.2 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

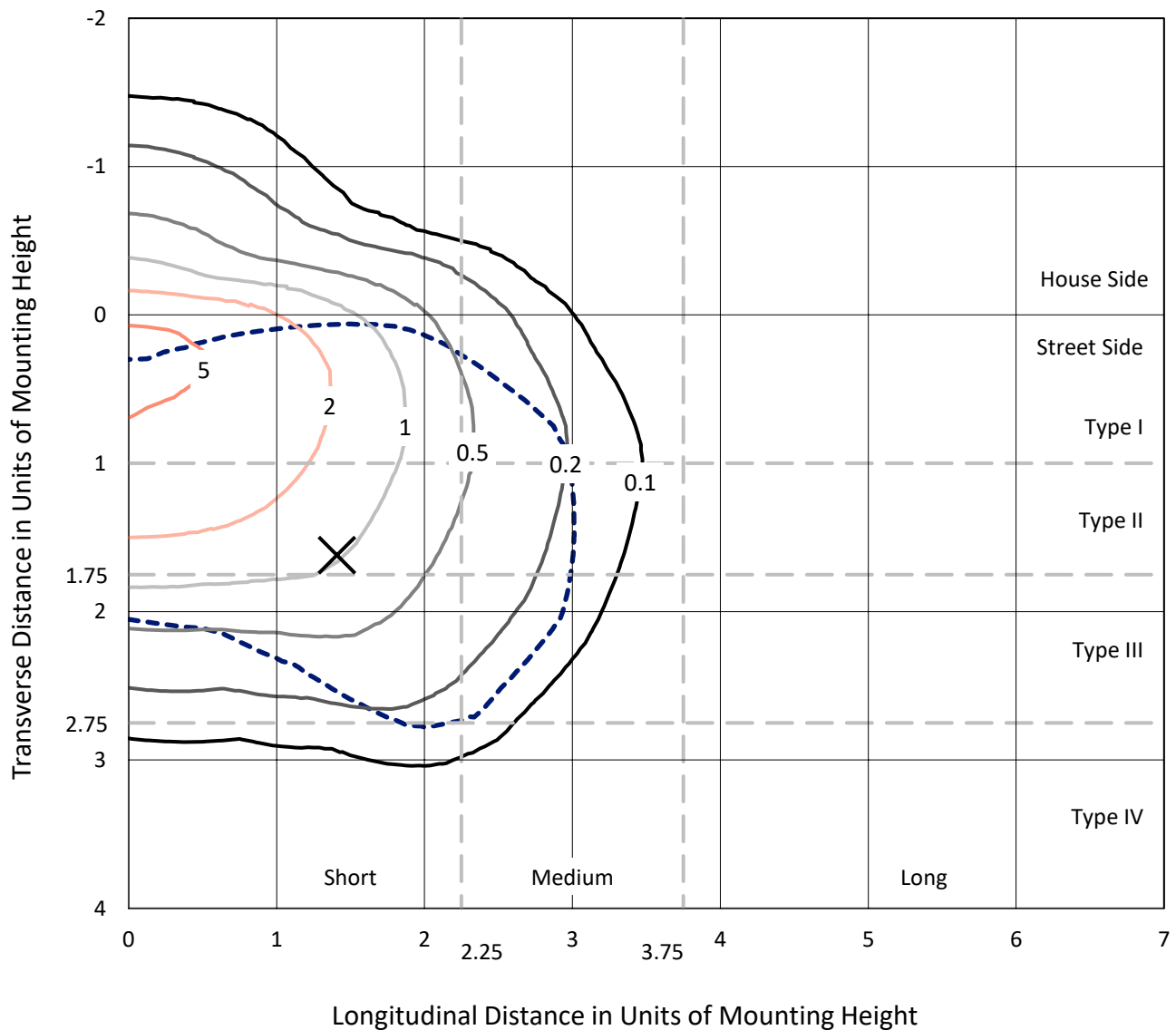
Input Watts (W): 141.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

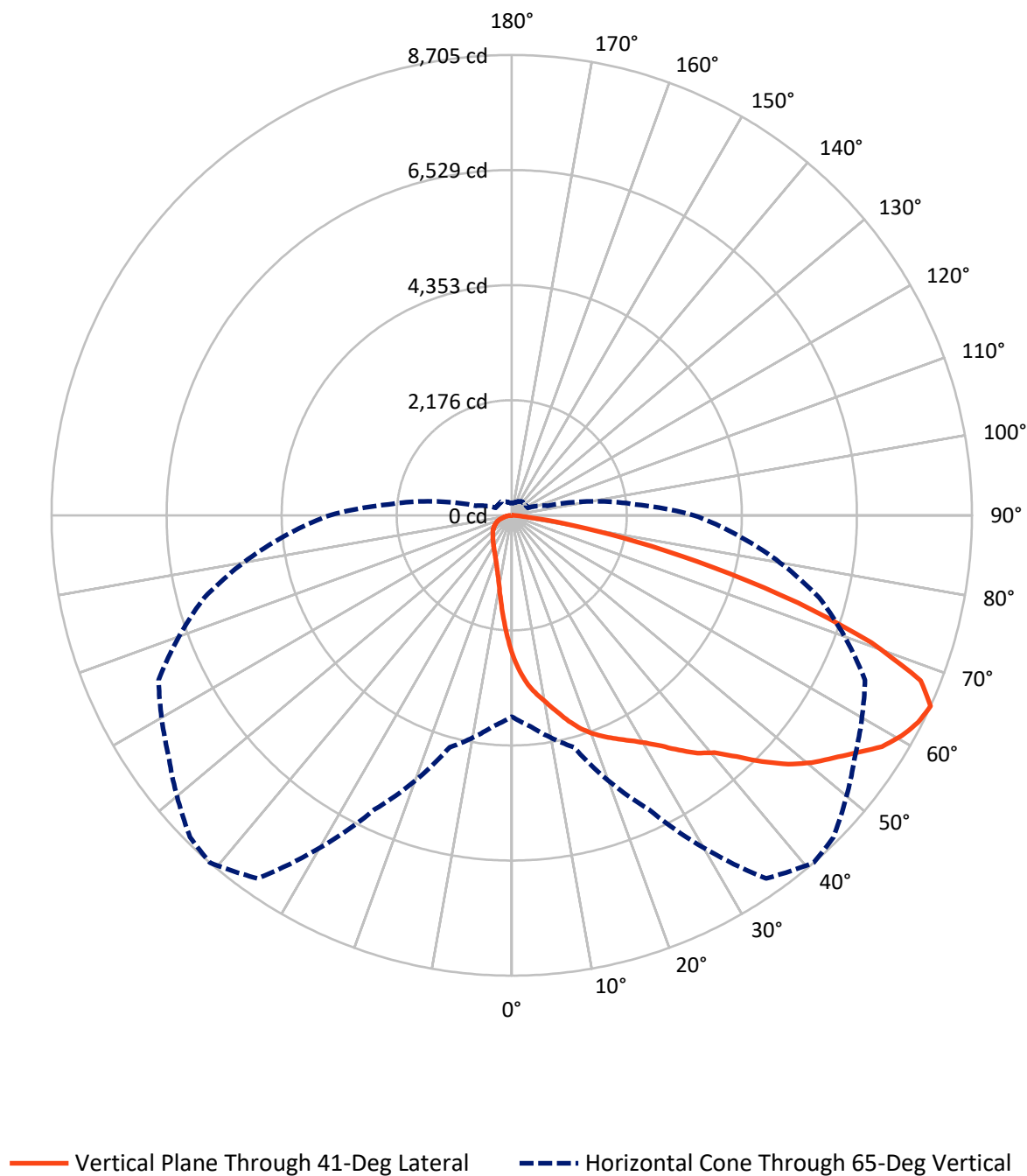
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.1 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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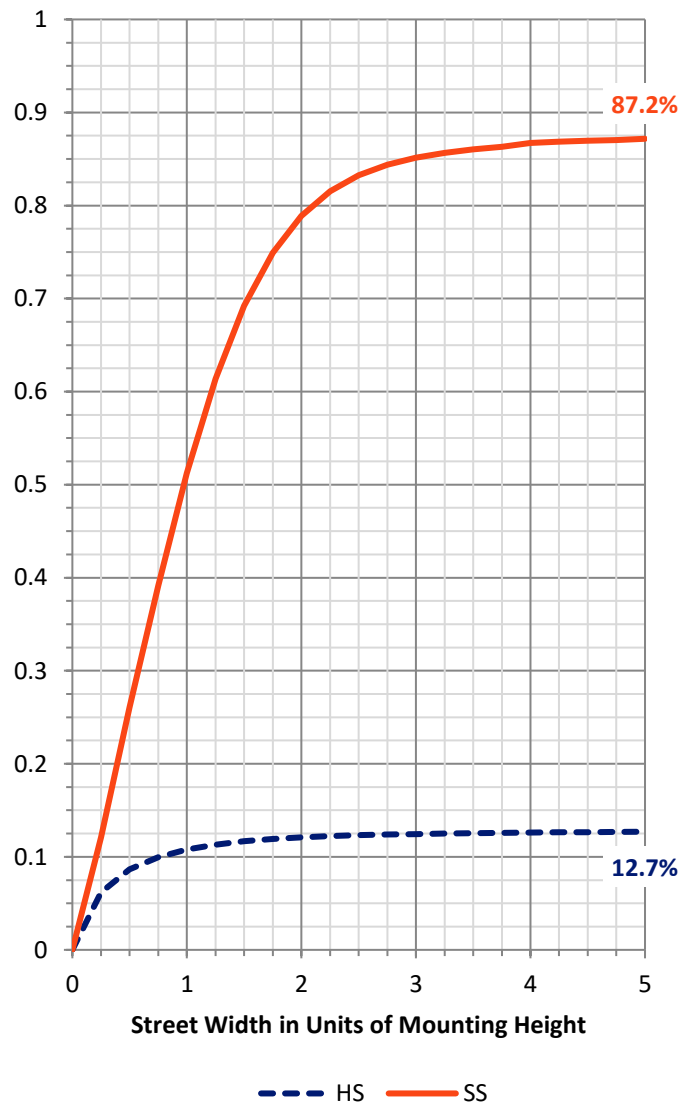
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1999.8	0.0	1999.8
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	13577.2	0.0	13577.2
	% Fixture	87.2	0.0	87.2
Total	Lumens	15577.0	0.0	15577.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	247.3	1.6
10°-20°	741.6	4.8
20°-30°	1275.8	8.2
30°-40°	1934.9	12.4
40°-50°	2834.7	18.2
50°-60°	3579.6	23.0
60°-70°	3356.5	21.5
70°-80°	1496.0	9.6
80°-90°	110.8	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°	15577.0	100.0
0°-180°	15577.0	100.0

Coefficient of Utilization



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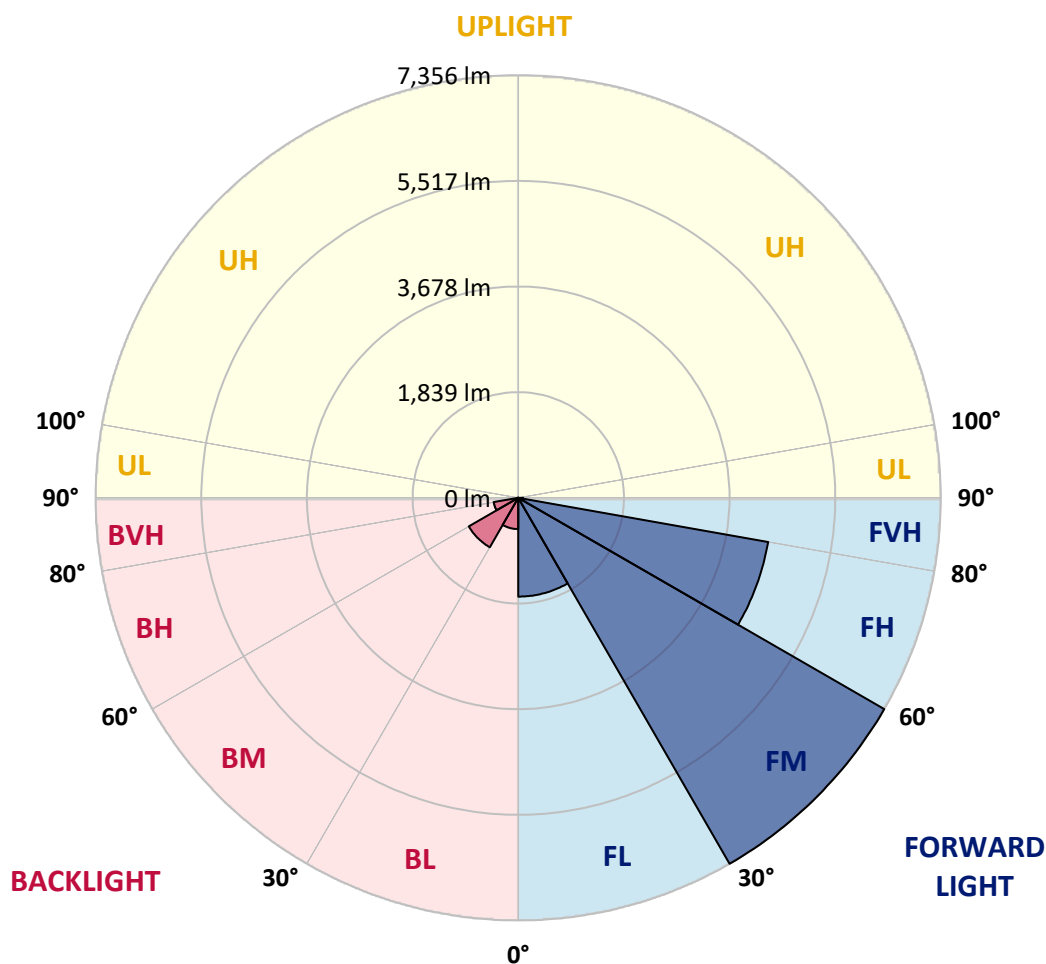
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1720.3	11.0			
FM	(30°-60°)	7356.1	47.2			
FH	(60°-80°)	4418.0	28.4			G2/5000
FVH	(80°-90°)	82.8	0.5			G1/100
BL	(0°-30°)	544.3	3.5	B2/1000		
BM	(30°-60°)	993.0	6.4	B1/1000		
BH	(60°-80°)	434.4	2.8	B1/500		G1/500
BVH	(80°-90°)	28.1	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	2654.2	2654.2	2654.2	2654.2	2654.2	2654.2	2654.2	2654.2	2654.2	2654.2	2654.2
2.5°	3061.6	3051.7	3045.1	3009.0	3009.0	2959.7	2963.0	2917.0	2861.2	2772.5	2677.2
5°	3350.6	3337.5	3321.1	3284.9	3271.8	3222.5	3216.0	3150.3	3055.0	2900.6	2729.8
7.5°	3603.6	3590.5	3567.5	3514.9	3478.8	3419.6	3403.2	3317.8	3212.7	3022.2	2782.4
10°	3833.5	3823.7	3794.1	3728.4	3679.1	3606.9	3577.3	3462.3	3330.9	3120.7	2825.1
12.5°	4066.8	4053.6	4014.2	3958.4	3899.2	3813.8	3777.7	3629.9	3462.3	3229.1	2887.5
15°	4283.6	4263.9	4234.3	4175.2	4122.6	4040.5	4001.1	3827.0	3623.3	3350.6	2969.6
17.5°	4424.8	4408.4	4382.1	4349.3	4306.6	4244.2	4204.7	4033.9	3784.3	3468.9	3055.0
20°	4510.2	4503.7	4493.8	4474.1	4454.4	4411.7	4382.1	4221.2	3958.4	3583.9	3137.1
22.5°	4575.9	4569.4	4566.1	4566.1	4569.4	4552.9	4533.2	4395.3	4125.9	3705.4	3212.7
25°	4677.8	4674.5	4667.9	4661.3	4684.3	4687.6	4681.1	4585.8	4336.1	3866.4	3307.9
27.5°	4819.0	4809.2	4796.0	4789.5	4812.5	4828.9	4842.0	4776.3	4559.5	4030.6	3416.3
30°	5035.8	5006.3	4973.4	4950.4	4966.8	4993.1	5022.7	4983.3	4789.5	4234.3	3528.0
32.5°	5292.1	5255.9	5180.4	5137.7	5180.4	5200.1	5223.1	5203.4	5029.3	4454.4	3639.7
35°	5604.1	5561.4	5482.6	5420.2	5495.7	5453.0	5443.2	5423.5	5255.9	4671.2	3764.6
37.5°	6123.1	6060.7	5935.9	5797.9	5797.9	5706.0	5669.8	5610.7	5459.6	4865.0	3886.1
40°	6724.3	6642.2	6481.2	6277.5	6090.3	5899.8	5876.8	5834.1	5699.4	5088.4	4024.1
42.5°	7384.6	7226.9	7003.5	6757.1	6454.9	6238.1	6185.6	6064.0	5932.6	5315.0	4162.0
45°	8117.1	7788.6	7463.4	7338.6	6839.3	6642.2	6543.6	6323.5	6175.7	5551.6	4306.6
47.5°	8235.4	7979.1	7762.3	7742.6	7197.3	7033.1	6921.4	6606.0	6438.5	5804.5	4457.7
50°	8169.7	8015.3	8038.3	7959.4	7460.1	7351.7	7266.3	6908.2	6698.0	6047.6	4595.6
52.5°	7893.7	7979.1	8110.5	7966.0	7709.8	7621.1	7578.4	7233.5	6941.1	6271.0	4720.5
55°	7565.2	7624.4	7906.9	8084.3	7998.9	7920.0	7880.6	7611.2	7180.9	6458.2	4835.4
57.5°	7085.6	7059.4	7371.4	8064.6	8301.1	8255.1	8212.4	7982.4	7404.3	6592.9	4907.7
60°	6366.2	6310.4	6704.6	7670.4	8399.6	8471.9	8452.2	8228.8	7575.1	6589.6	4878.2
62.5°	5121.2	5259.2	5804.5	7026.5	8442.3	8626.3	8590.1	8248.5	7630.9	6399.1	4690.9
65°	3807.3	4004.4	4539.8	6139.6	8383.2	8705.1	8606.6	7926.6	7371.4	6021.3	4280.3
67.5°	2742.9	2917.0	3307.9	5052.3	7814.9	8343.8	8228.8	7401.0	6773.6	5485.9	3712.0
70°	1875.7	2000.5	2266.6	3679.1	6671.7	7213.7	7141.5	6615.9	5830.8	4848.6	3015.6
72.5°	1323.8	1376.4	1547.2	2427.6	5068.7	5660.0	5574.6	5443.2	4684.3	4030.6	2345.5
75°	992.1	1024.9	1116.9	1570.2	3419.6	3922.2	3843.4	3918.9	3498.5	3051.7	1708.2
77.5°	374.5	407.3	634.0	1001.9	2023.5	2407.9	2329.0	2375.0	1944.7	1540.6	850.8
80°	101.8	108.4	210.2	476.3	919.8	1199.0	1090.6	936.2	722.7	709.5	450.0
82.5°	42.7	49.3	95.3	256.2	328.5	328.5	275.9	341.6	275.9	331.8	216.8
85°	16.4	19.7	23.0	65.7	42.7	46.0	49.3	65.7	55.8	69.0	49.3
87.5°	0.0	0.0	0.0	3.3	3.3	6.6	3.3	6.6	9.9	9.9	9.9
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°	2654.2	2654.2	2654.2	2654.2	2654.2	2654.2	2654.2	2654.2	2654.2	2654.2	2654.2
2.5°	2637.8	2601.7	2549.1	2463.7	2375.0	2325.7	2263.3	2253.5	2187.8	2181.2	2154.9
5°	2654.2	2578.7	2444.0	2279.8	2118.8	1994.0	1902.0	1852.7	1757.4	1757.4	1731.2
7.5°	2667.4	2549.1	2332.3	2089.2	1869.1	1701.6	1576.8	1524.2	1438.8	1432.2	1412.5
10°	2670.7	2513.0	2210.8	1895.4	1626.1	1455.2	1333.7	1274.6	1199.0	1192.4	1179.3
12.5°	2696.9	2493.3	2102.4	1727.9	1451.9	1268.0	1149.7	1100.5	1041.3	1034.8	1021.6
15°	2739.6	2493.3	2010.4	1586.6	1297.6	1126.7	1024.9	978.9	936.2	929.6	923.1
17.5°	2782.4	2486.7	1918.4	1455.2	1169.4	1015.0	926.4	890.2	857.4	854.1	847.5
20°	2821.8	2483.4	1826.4	1343.5	1070.9	923.1	854.1	821.2	795.0	795.0	791.7
22.5°	2861.2	2476.9	1737.7	1238.4	985.5	854.1	795.0	758.8	739.1	739.1	735.8
25°	2920.3	2476.9	1655.6	1149.7	916.5	801.5	742.4	716.1	699.7	696.4	696.4
27.5°	2989.3	2496.6	1583.3	1070.9	857.4	749.0	703.0	676.7	657.0	650.4	653.7
30°	3064.9	2513.0	1517.6	1001.9	801.5	709.5	660.3	634.0	614.3	607.7	611.0
32.5°	3140.4	2532.7	1458.5	939.5	745.7	673.4	624.1	594.6	574.9	571.6	571.6
35°	3222.5	2552.4	1399.4	886.9	699.7	637.3	591.3	558.4	545.3	538.7	542.0
37.5°	3304.7	2585.3	1343.5	837.7	666.8	604.4	561.7	528.9	519.0	515.7	515.7
40°	3403.2	2634.5	1320.5	804.8	637.3	574.9	538.7	505.9	496.0	496.0	496.0
42.5°	3485.3	2673.9	1300.8	768.7	614.3	548.6	515.7	489.5	482.9	479.6	482.9
45°	3567.5	2710.1	1274.6	735.8	584.7	522.3	496.0	469.7	463.2	463.2	463.2
47.5°	3649.6	2729.8	1238.4	703.0	558.4	499.3	476.3	453.3	446.8	446.8	446.8
50°	3715.3	2746.2	1185.9	666.8	528.9	479.6	456.6	433.6	427.0	427.0	427.0
52.5°	3781.0	2749.5	1130.0	624.1	499.3	456.6	436.9	413.9	407.3	404.0	404.0
55°	3840.1	2746.2	1064.3	574.9	466.5	430.3	413.9	394.2	381.1	367.9	374.5
57.5°	3882.8	2742.9	988.8	525.6	433.6	404.0	397.5	371.2	344.9	312.1	318.6
60°	3866.4	2706.8	906.6	463.2	397.5	377.8	377.8	341.6	295.6	279.2	282.5
62.5°	3761.3	2605.0	821.2	397.5	361.3	351.5	348.2	308.8	272.7	256.2	259.5
65°	3445.9	2348.7	696.4	338.3	325.2	321.9	321.9	285.8	252.9	233.2	236.5
67.5°	2966.3	1971.0	568.3	285.8	289.1	295.6	295.6	262.8	229.9	210.2	213.5
70°	2378.3	1540.6	453.3	246.4	249.7	259.5	266.1	236.5	207.0	187.2	187.2
72.5°	1790.3	1169.4	364.6	207.0	223.4	223.4	233.2	210.2	180.7	161.0	164.2
75°	1297.6	837.7	289.1	174.1	193.8	190.5	190.5	177.4	154.4	141.3	141.3
77.5°	614.3	440.2	229.9	124.8	151.1	147.8	151.1	141.3	131.4	118.3	121.5
80°	302.2	216.8	147.8	88.7	105.1	108.4	118.3	111.7	108.4	98.5	98.5
82.5°	144.5	85.4	69.0	62.4	72.3	75.6	82.1	82.1	85.4	78.8	78.8
85°	39.4	23.0	29.6	39.4	46.0	49.3	55.8	59.1	59.1	55.8	59.1
87.5°	9.9	9.9	13.1	19.7	23.0	26.3	29.6	29.6	13.1	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)