

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: P841412

Luminaire Tested: **ARCH4-170-750-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841412
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: ARCH4-170-750-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1380mA 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: 19793 lumens
Efficiency: N/A
Efficacy: 116.6 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

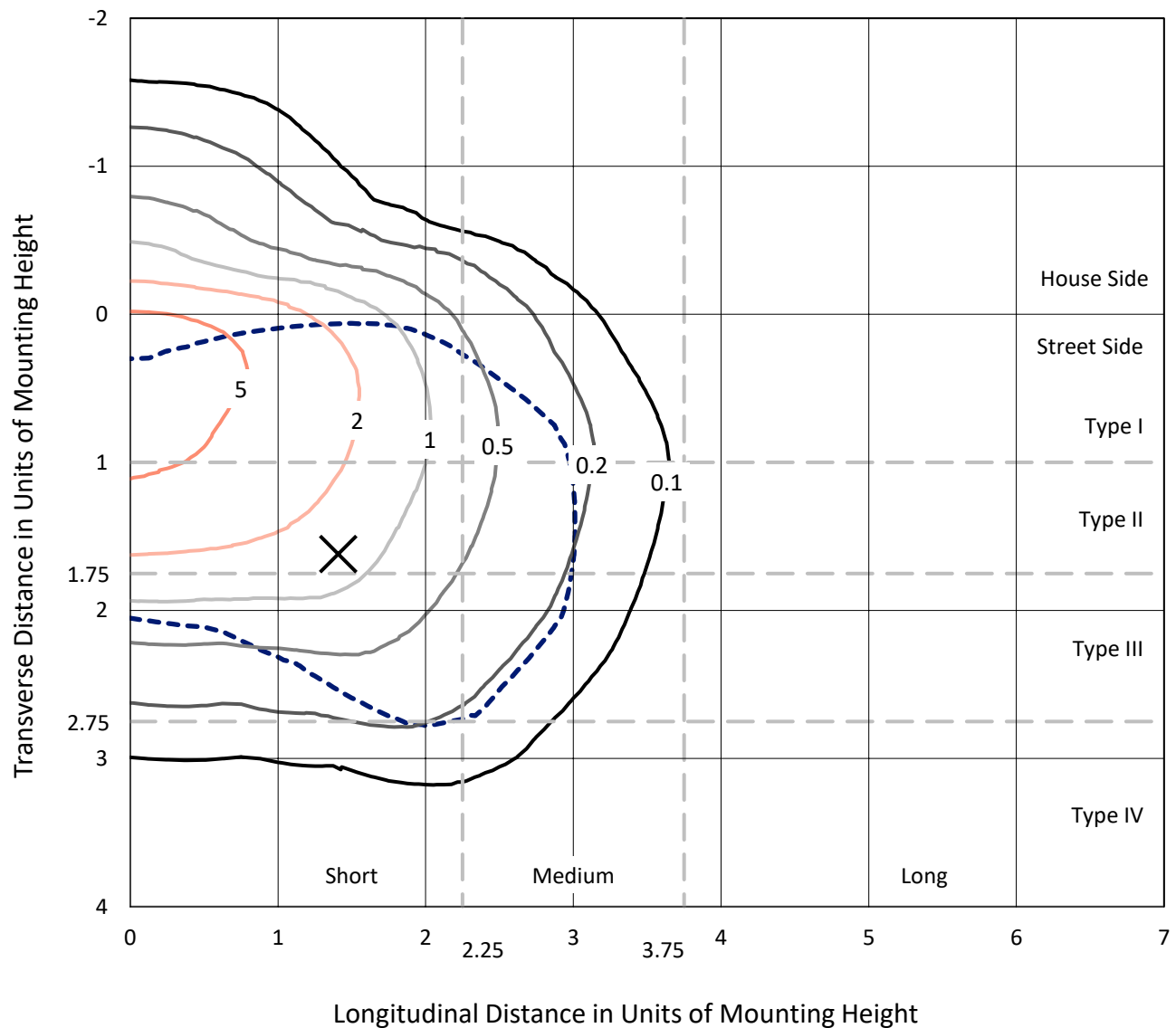
Input Watts (W): 169.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

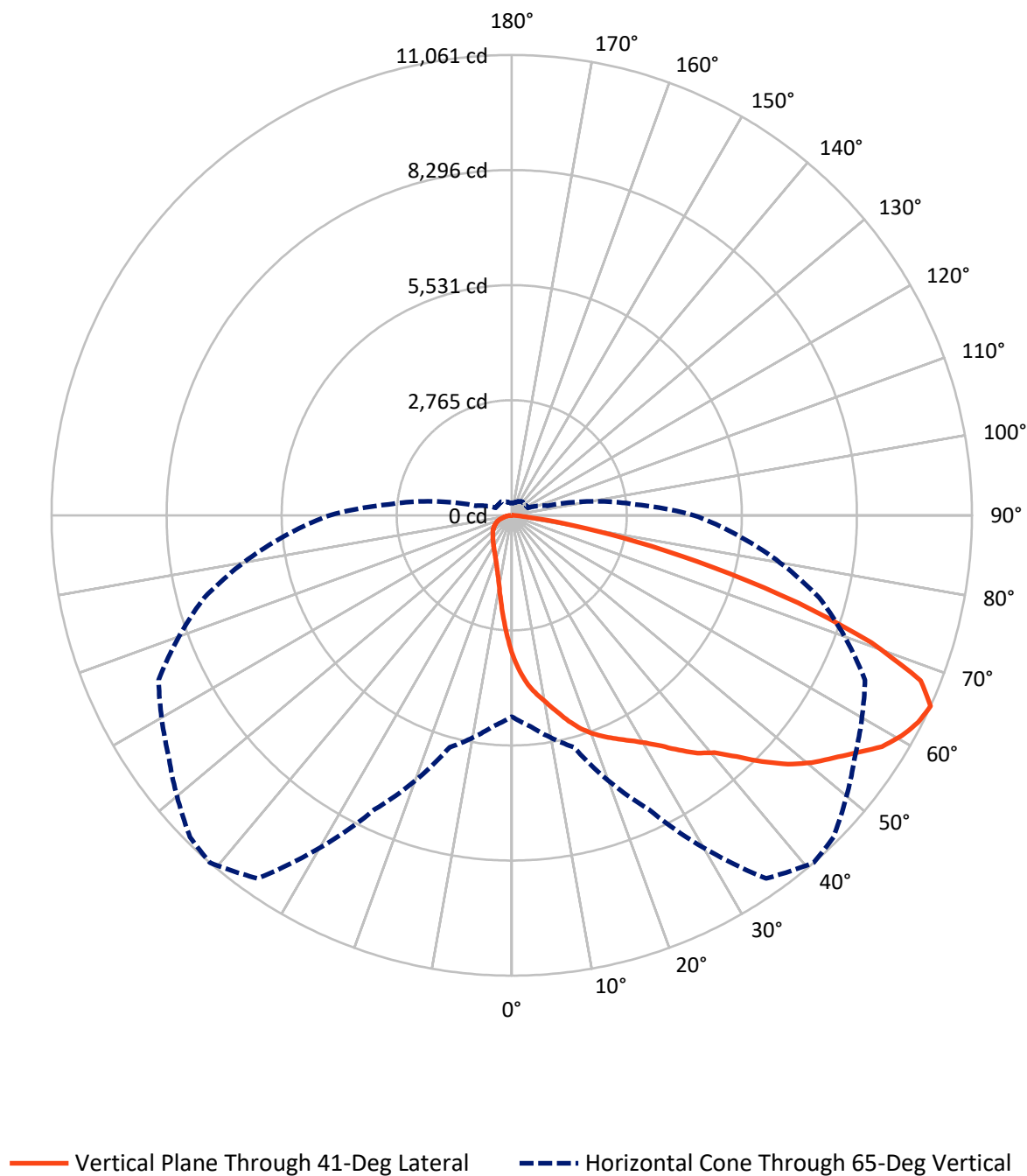
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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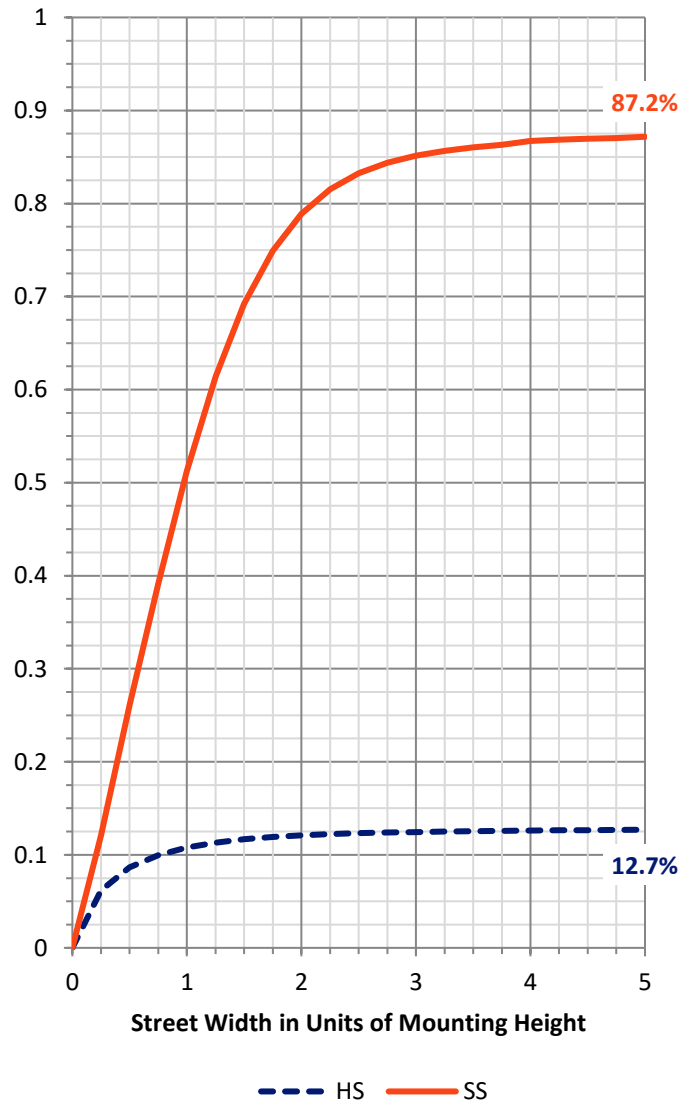
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2541.1	0.0	2541.1
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	17251.9	0.0	17251.9
	% Fixture	87.2	0.0	87.2
Total	Lumens	19793.0	0.0	19793.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	314.2	1.6
10°-20°	942.3	4.8
20°-30°	1621.0	8.2
30°-40°	2458.6	12.4
40°-50°	3601.9	18.2
50°-60°	4548.4	23.0
60°-70°	4264.9	21.5
70°-80°	1900.9	9.6
80°-90°	140.8	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°	19793.0	100.0
0°-180°	19793.0	100.0

Coefficient of Utilization



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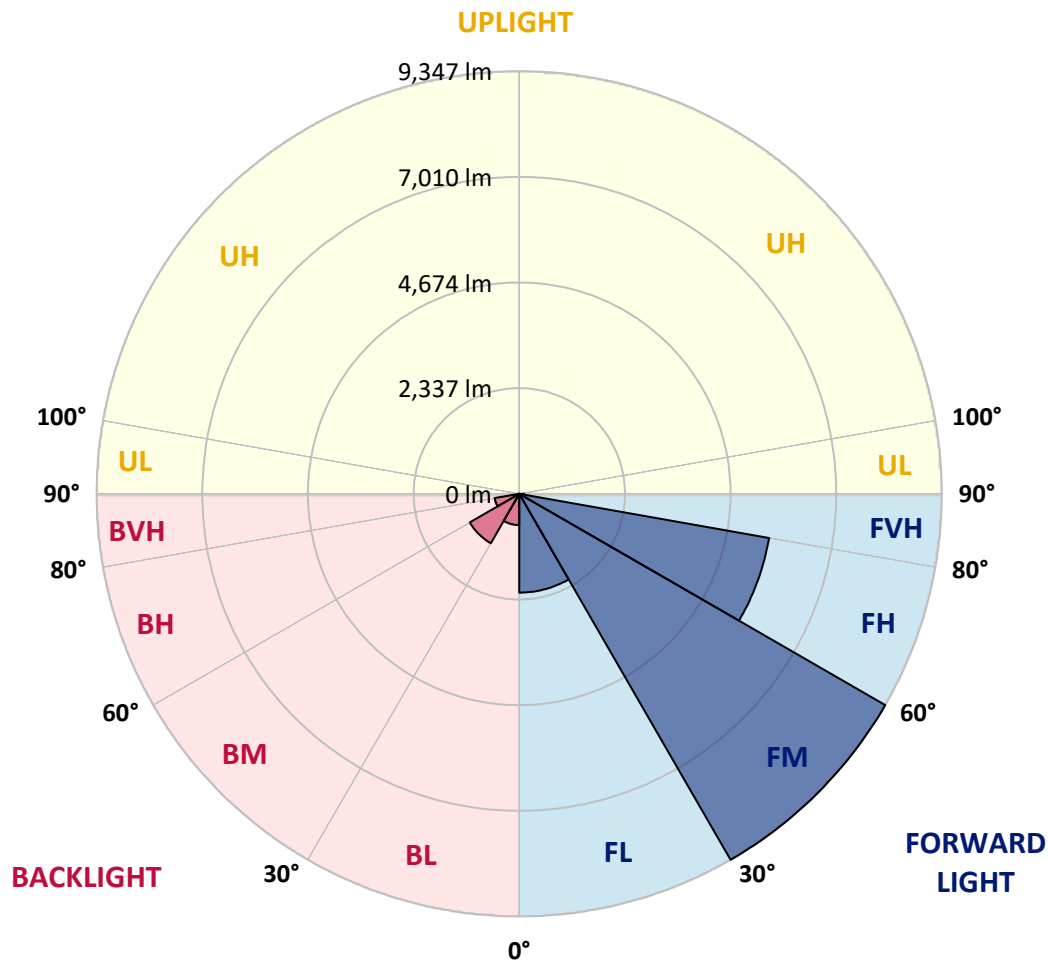
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2185.9	11.0			
FM	(30°-60°)	9347.0	47.2			
FH	(60°-80°)	5613.8	28.4			G3/7500
FVH	(80°-90°)	105.2	0.5			G2/225
BL	(0°-30°)	691.7	3.5	B2/1000		
BM	(30°-60°)	1261.8	6.4	B2/2500		
BH	(60°-80°)	552.0	2.8	B2/1000		G2/1000
BVH	(80°-90°)	35.6	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°	3372.6	3372.6	3372.6	3372.6	3372.6	3372.6	3372.6	3372.6	3372.6	3372.6	3372.6
2.5°	3890.2	3877.7	3869.3	3823.4	3823.4	3760.8	3765.0	3706.5	3635.6	3522.9	3401.8
5°	4257.5	4240.8	4220.0	4174.0	4157.3	4094.7	4086.4	4002.9	3881.9	3685.7	3468.6
7.5°	4578.9	4562.2	4533.0	4466.2	4420.3	4345.2	4324.3	4215.8	4082.2	3840.1	3535.4
10°	4871.1	4858.6	4821.0	4737.5	4674.9	4583.1	4545.5	4399.4	4232.5	3965.3	3589.7
12.5°	5167.5	5150.8	5100.7	5029.7	4954.6	4846.1	4800.1	4612.3	4399.4	4103.1	3669.0
15°	5442.9	5417.9	5380.3	5305.2	5238.4	5134.1	5084.0	4862.8	4604.0	4257.5	3773.3
17.5°	5622.4	5601.6	5568.2	5526.4	5472.2	5392.9	5342.8	5125.7	4808.5	4407.8	3881.9
20°	5731.0	5722.6	5710.1	5685.0	5660.0	5605.7	5568.2	5363.6	5029.7	4553.9	3986.2
22.5°	5814.4	5806.1	5801.9	5801.9	5806.1	5785.2	5760.2	5584.9	5242.6	4708.3	4082.2
25°	5943.8	5939.7	5931.3	5923.0	5952.2	5956.4	5948.0	5827.0	5509.7	4912.8	4203.3
27.5°	6123.3	6110.8	6094.1	6085.7	6115.0	6135.8	6152.5	6069.1	5793.6	5121.5	4341.0
30°	6398.8	6361.2	6319.5	6290.3	6311.1	6344.5	6382.1	6332.0	6085.7	5380.3	4482.9
32.5°	6724.4	6678.5	6582.5	6528.2	6582.5	6607.5	6636.7	6611.7	6390.5	5660.0	4624.8
35°	7120.9	7066.6	6966.5	6887.2	6983.2	6928.9	6916.4	6891.3	6678.5	5935.5	4783.4
37.5°	7780.4	7701.1	7542.5	7367.2	7367.2	7250.3	7204.4	7129.3	6937.3	6181.8	4937.9
40°	8544.3	8439.9	8235.4	7976.6	7738.7	7496.6	7467.4	7413.1	7242.0	6465.6	5113.2
42.5°	9383.2	9182.9	8899.1	8586.0	8202.0	7926.5	7859.7	7705.3	7538.3	6753.6	5288.5
45°	10314.1	9896.6	9483.4	9324.8	8690.3	8439.9	8314.7	8035.0	7847.2	7054.1	5472.2
47.5°	10464.3	10138.7	9863.3	9838.2	9145.3	8936.6	8794.7	8394.0	8181.1	7375.5	5664.2
50°	10380.8	10184.7	10213.9	10113.7	9479.2	9341.5	9233.0	8778.0	8510.9	7684.4	5839.5
52.5°	10030.2	10138.7	10305.7	10122.0	9796.5	9683.8	9629.5	9191.2	8819.7	7968.2	5998.1
55°	9612.8	9687.9	10046.9	10272.3	10163.8	10063.6	10013.5	9671.2	9124.4	8206.2	6144.2
57.5°	9003.4	8970.0	9366.5	10247.3	10547.8	10489.4	10435.1	10142.9	9408.3	8377.3	6236.0
60°	8089.3	8018.3	8519.2	9746.4	10673.0	10764.8	10739.8	10456.0	9625.3	8373.1	6198.4
62.5°	6507.3	6682.6	7375.5	8928.3	10727.3	10961.0	10915.1	10481.0	9696.3	8131.0	5960.5
65°	4837.7	5088.2	5768.5	7801.3	10652.1	11061.2	10936.0	10072.0	9366.5	7651.0	5438.8
67.5°	3485.3	3706.5	4203.3	6419.7	9930.0	10602.1	10456.0	9404.1	8606.9	6970.6	4716.7
70°	2383.4	2542.0	2880.1	4674.9	8477.5	9166.2	9074.4	8406.5	7408.9	6160.9	3831.8
72.5°	1682.1	1748.9	1966.0	3084.6	6440.5	7191.9	7083.3	6916.4	5952.2	5121.5	2980.3
75°	1260.6	1302.3	1419.2	1995.2	4345.2	4983.8	4883.6	4979.6	4445.4	3877.7	2170.5
77.5°	475.8	517.6	805.6	1273.1	2571.2	3059.6	2959.4	3017.8	2471.0	1957.6	1081.1
80°	129.4	137.7	267.1	605.2	1168.7	1523.5	1385.8	1189.6	918.3	901.6	571.8
82.5°	54.3	62.6	121.0	325.6	417.4	417.4	350.6	434.1	350.6	421.6	275.5
85°	20.9	25.0	29.2	83.5	54.3	58.4	62.6	83.5	71.0	87.7	62.6
87.5°	0.0	0.0	0.0	4.2	4.2	8.3	4.2	8.3	12.5	12.5	12.5
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3372.6	3372.6	3372.6	3372.6	3372.6	3372.6	3372.6	3372.6	3372.6	3372.6	3372.6
2.5°	3351.8	3305.8	3239.1	3130.5	3017.8	2955.2	2875.9	2863.4	2779.9	2771.6	2738.2
5°	3372.6	3276.6	3105.5	2896.8	2692.3	2533.6	2416.8	2354.2	2233.1	2233.1	2199.7
7.5°	3389.3	3239.1	2963.6	2654.7	2375.0	2162.2	2003.5	1936.8	1828.2	1819.9	1794.8
10°	3393.5	3193.1	2809.1	2408.4	2066.1	1849.1	1694.7	1619.5	1523.5	1515.2	1498.5
12.5°	3426.9	3168.1	2671.4	2195.5	1844.9	1611.2	1460.9	1398.3	1323.2	1314.8	1298.1
15°	3481.1	3168.1	2554.5	2016.1	1648.7	1431.7	1302.3	1243.9	1189.6	1181.3	1172.9
17.5°	3535.4	3159.7	2437.6	1849.1	1486.0	1289.8	1177.1	1131.2	1089.4	1085.3	1076.9
20°	3585.5	3155.6	2320.8	1707.2	1360.7	1172.9	1085.3	1043.5	1010.1	1010.1	1005.9
22.5°	3635.6	3147.2	2208.1	1573.6	1252.2	1085.3	1010.1	964.2	939.2	939.2	935.0
25°	3710.7	3147.2	2103.7	1460.9	1164.6	1018.5	943.3	909.9	889.1	884.9	884.9
27.5°	3798.4	3172.3	2011.9	1360.7	1089.4	951.7	893.2	859.9	834.8	826.5	830.6
30°	3894.4	3193.1	1928.4	1273.1	1018.5	901.6	839.0	805.6	780.5	772.2	776.4
32.5°	3990.4	3218.2	1853.3	1193.8	947.5	855.7	793.1	755.5	730.5	726.3	726.3
35°	4094.7	3243.2	1778.1	1127.0	889.1	809.8	751.3	709.6	692.9	684.5	688.7
37.5°	4199.1	3285.0	1707.2	1064.4	847.3	768.0	713.8	672.0	659.5	655.3	655.3
40°	4324.3	3347.6	1678.0	1022.6	809.8	730.5	684.5	642.8	630.3	630.3	630.3
42.5°	4428.7	3397.7	1652.9	976.7	780.5	697.1	655.3	621.9	613.6	609.4	613.6
45°	4533.0	3443.6	1619.5	935.0	743.0	663.7	630.3	596.9	588.5	588.5	588.5
47.5°	4637.4	3468.6	1573.6	893.2	709.6	634.5	605.2	576.0	567.7	567.7	567.7
50°	4720.8	3489.5	1506.8	847.3	672.0	609.4	580.2	551.0	542.6	542.6	542.6
52.5°	4804.3	3493.7	1435.9	793.1	634.5	580.2	555.1	525.9	517.6	513.4	513.4
55°	4879.5	3489.5	1352.4	730.5	592.7	546.8	525.9	500.9	484.2	467.5	475.8
57.5°	4933.7	3485.3	1256.4	667.8	551.0	513.4	505.1	471.7	438.3	396.5	404.9
60°	4912.8	3439.4	1152.0	588.5	505.1	480.0	480.0	434.1	375.7	354.8	359.0
62.5°	4779.3	3310.0	1043.5	505.1	459.1	446.6	442.4	392.4	346.4	325.6	329.7
65°	4378.6	2984.4	884.9	429.9	413.2	409.1	409.1	363.1	321.4	296.4	300.5
67.5°	3769.2	2504.4	722.1	363.1	367.3	375.7	375.7	333.9	292.2	267.1	271.3
70°	3022.0	1957.6	576.0	313.1	317.2	329.7	338.1	300.5	263.0	237.9	237.9
72.5°	2274.9	1486.0	463.3	263.0	283.8	283.8	296.4	267.1	229.6	204.5	208.7
75°	1648.7	1064.4	367.3	221.2	246.3	242.1	242.1	225.4	196.2	179.5	179.5
77.5°	780.5	559.3	292.2	158.6	192.0	187.8	192.0	179.5	167.0	150.3	154.4
80°	384.0	275.5	187.8	112.7	133.6	137.7	150.3	141.9	137.7	125.2	125.2
82.5°	183.7	108.5	87.7	79.3	91.8	96.0	104.4	104.4	108.5	100.2	100.2
85°	50.1	29.2	37.6	50.1	58.4	62.6	71.0	75.1	75.1	71.0	75.1
87.5°	12.5	12.5	16.7	25.0	29.2	33.4	37.6	37.6	16.7	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)