

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: P841451

Luminaire Tested: **ARCH4-180-730-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841451
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-180-730-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 1455mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19845 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 II - Short
BUG Rating: B2 - U0 - G2

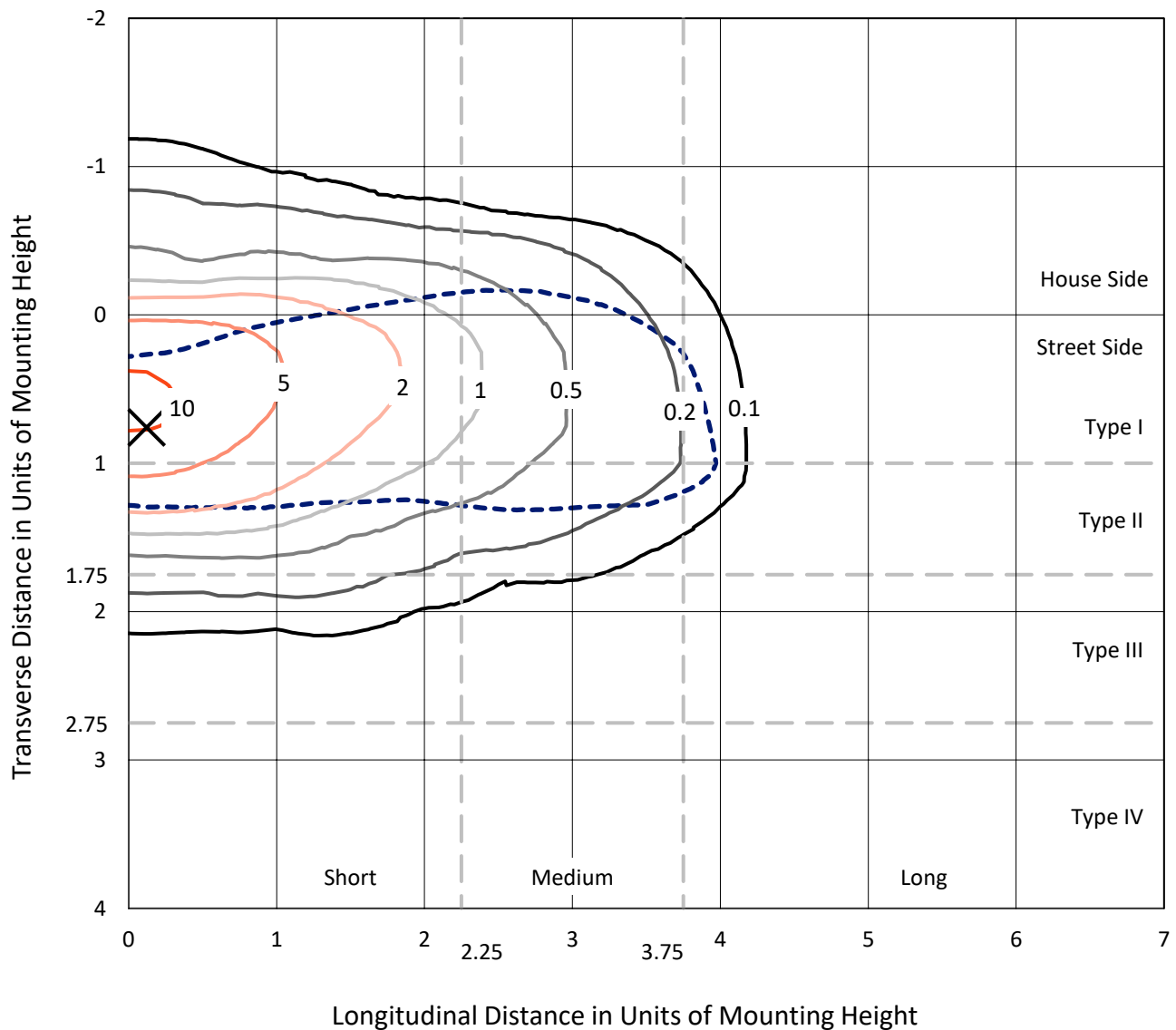
Input Watts (W): 180
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

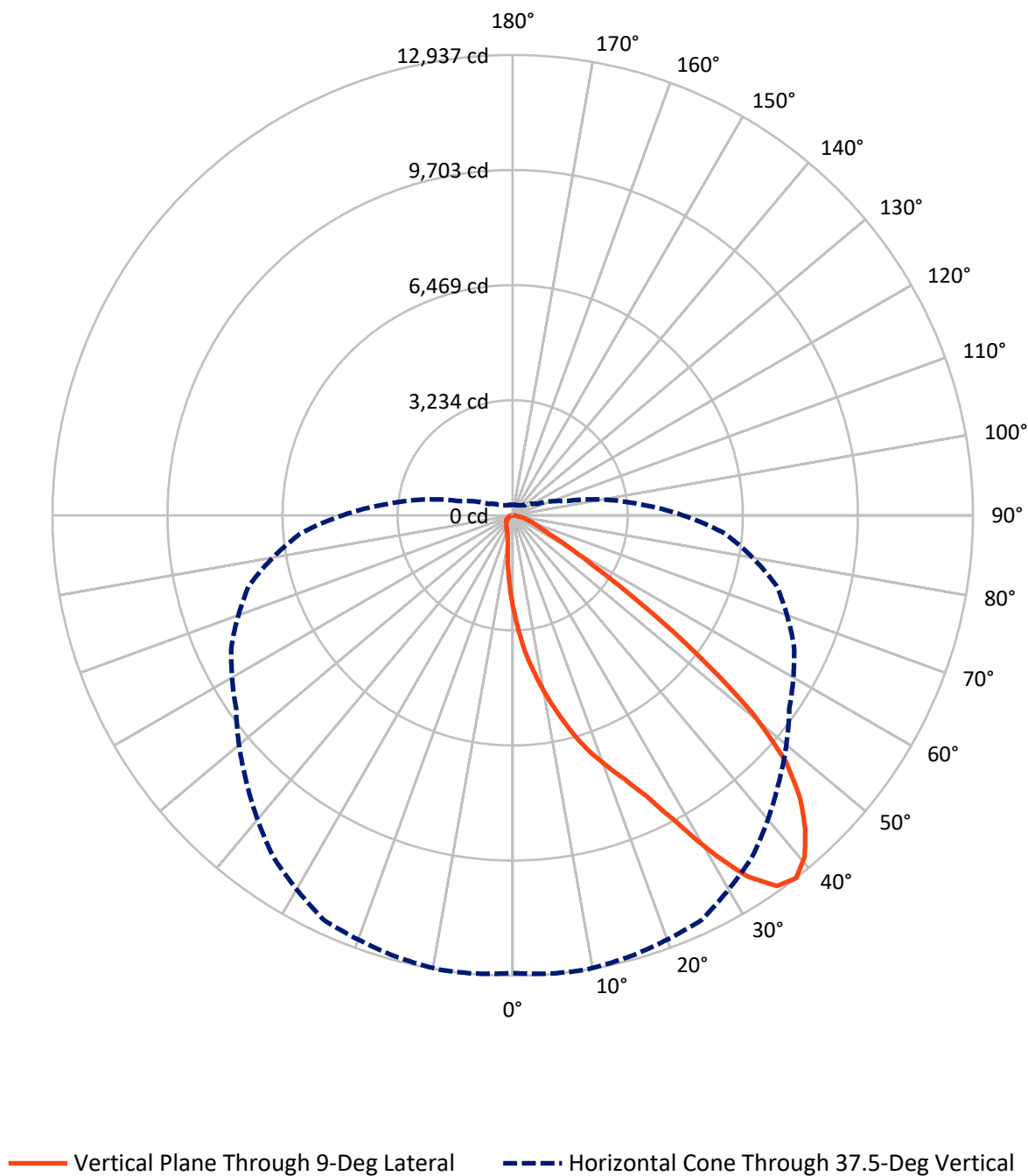
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.6 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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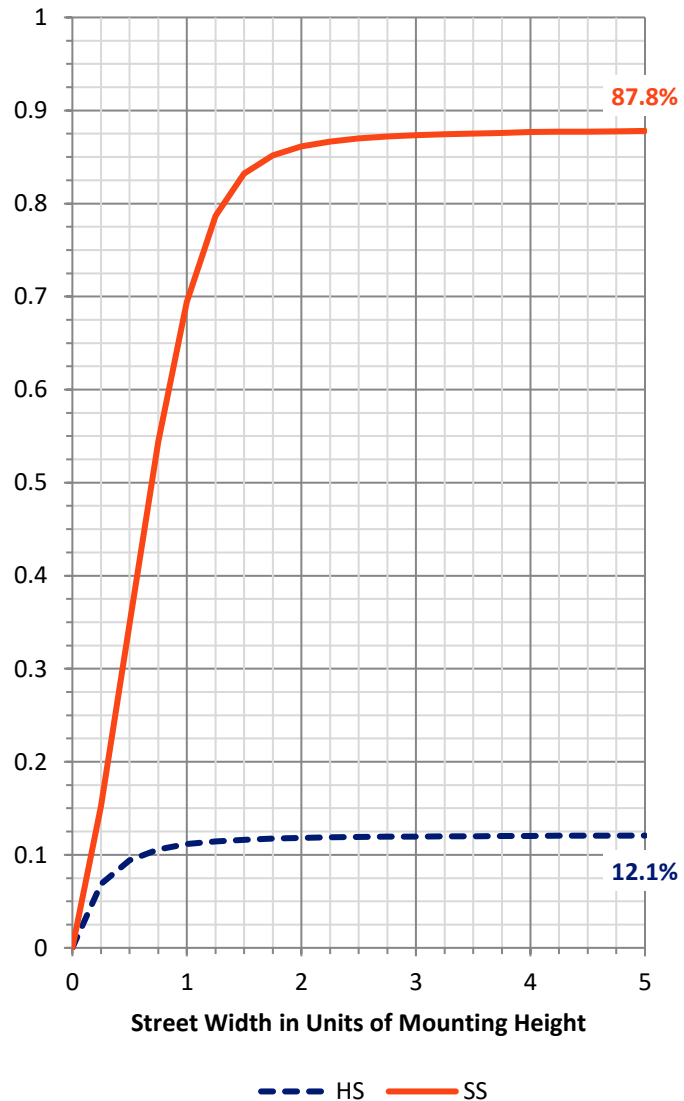
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2413.5	0.0	2413.5
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	17431.5	0.0	17431.5
	% Fixture	87.8	0.0	87.8
Total	Lumens	19845.0	0.0	19845.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.7	1.3
10°-20°	916.5	4.6
20°-30°	1883.1	9.5
30°-40°	3328.5	16.8
40°-50°	4421.7	22.3
50°-60°	4193.7	21.1
60°-70°	3199.4	16.1
70°-80°	1551.1	7.8
80°-90°	87.3	0.4
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°	19845.0	100.0
0°-180°	19845.0	100.0

Coefficient of Utilization



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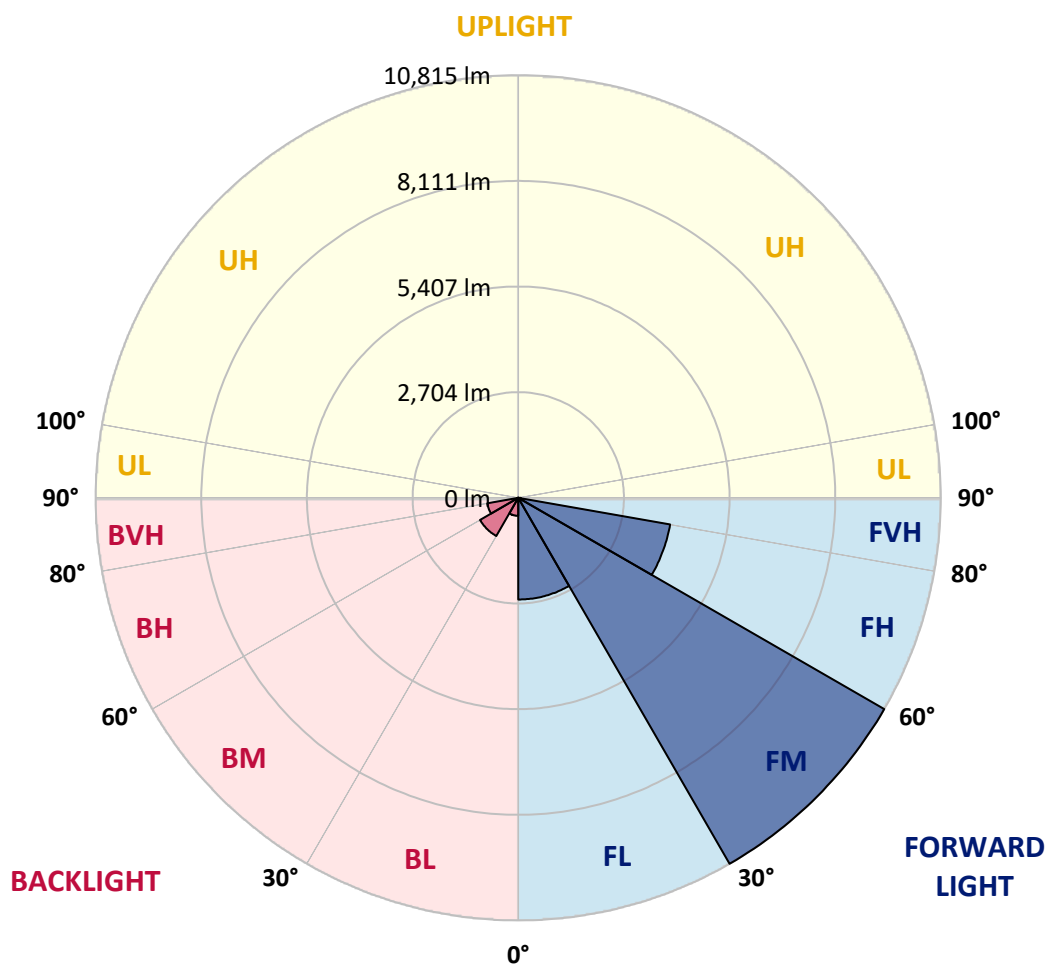
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2602.7	13.1			
FM	(30°-60°)	10814.6	54.5			
FH	(60°-80°)	3945.1	19.9			G2/5000
FVH	(80°-90°)	69.1	0.3			G1/100
BL	(0°-30°)	460.6	2.3	B1/500		
BM	(30°-60°)	1129.4	5.7	B2/2500		
BH	(60°-80°)	805.4	4.1	B2/1000		G2/1000
BVH	(80°-90°)	18.2	0.1			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°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	2623.3	2623.3	2623.3	2623.3	2623.3	2623.3	2623.3	2623.3	2623.3	2623.3	2623.3
2.5°	3250.6	3193.5	3258.7	3250.6	3193.5	3156.9	3042.8	3006.2	2871.7	2774.0	2688.4
5°	3918.6	3861.6	3918.6	3902.3	3820.8	3731.2	3543.9	3421.7	3181.3	2969.5	2778.1
7.5°	4472.6	4472.6	4497.0	4501.1	4403.3	4264.8	4032.7	3849.4	3511.3	3185.4	2879.9
10°	5071.4	5075.5	5128.4	5091.7	4961.4	4774.0	4480.7	4248.6	3841.2	3413.5	2977.7
12.5°	5710.9	5715.0	5731.3	5715.0	5560.2	5319.9	4965.5	4660.0	4191.5	3674.2	3112.1
15°	6350.4	6354.5	6374.9	6346.4	6175.3	5894.2	5490.9	5116.2	4562.2	3967.5	3275.0
17.5°	6949.2	6957.4	6973.7	6937.0	6757.8	6423.8	6012.3	5560.2	4957.3	4281.1	3458.3
20°	7486.9	7495.1	7507.3	7458.4	7279.2	6945.1	6501.1	6028.6	5360.6	4602.9	3657.9
22.5°	8028.7	8036.8	8057.2	7992.0	7792.4	7409.5	6973.7	6484.9	5788.3	4957.3	3890.1
25°	8721.1	8729.3	8745.6	8651.9	8379.0	7930.9	7470.6	6969.6	6252.7	5356.5	4175.2
27.5°	9735.4	9727.3	9727.3	9556.2	9087.8	8505.3	7971.6	7462.5	6753.7	5784.2	4488.9
30°	10990.0	10969.7	10957.4	10725.3	10057.2	9152.9	8484.9	7922.8	7234.4	6236.4	4827.0
32.5°	12114.3	12114.3	12089.8	11845.4	11136.7	10024.6	9030.7	8370.8	7698.7	6692.6	5177.3
35°	12778.3	12806.8	12794.5	12611.2	12093.9	10961.5	9768.0	8908.5	8187.5	7169.2	5596.9
37.5°	12867.9	12924.9	12937.1	12827.1	12554.2	11727.3	10586.8	9491.0	8725.2	7682.4	6004.2
40°	12505.3	12627.5	12627.5	12611.2	12513.5	12089.8	11275.2	10167.2	9279.2	8216.0	6415.6
42.5°	11947.3	12073.6	12057.3	12118.4	12093.9	12004.3	11662.1	10798.6	9833.2	8766.0	6790.4
45°	11218.1	11348.5	11315.9	11425.9	11474.8	11572.5	11621.4	11238.5	10379.0	9364.7	7209.9
47.5°	10049.1	10269.0	10317.9	10513.4	10717.1	11022.6	11254.8	11397.4	10888.2	10008.3	7666.1
50°	8322.0	8631.5	8729.3	9140.7	9698.8	10330.1	10704.9	11201.8	11246.7	10668.2	8159.0
52.5°	5959.4	6317.8	6468.6	7144.7	8293.4	9393.3	10069.4	10770.1	11385.1	11299.6	8692.6
55°	3853.4	4158.9	4305.6	4941.0	6468.6	8195.7	9319.9	10212.0	11307.8	11878.0	9303.6
57.5°	2374.8	2549.9	2647.7	3193.5	4598.9	6660.0	8338.2	9698.8	11071.5	12379.1	9939.1
60°	1600.8	1702.7	1751.6	2008.2	3124.3	4977.7	6990.0	9161.1	10761.9	12717.2	10517.5
62.5°	1063.2	1095.7	1144.6	1303.5	2061.1	3495.0	5368.7	8199.8	10529.7	12737.5	10945.2
65°	822.8	839.1	859.5	928.7	1270.9	2444.0	3776.0	6643.7	10183.5	12305.7	11079.6
67.5°	647.7	664.0	688.4	725.1	920.6	1657.9	2570.3	4867.7	9474.7	11629.6	10859.7
70°	509.2	521.4	537.7	570.3	716.9	1201.7	1698.6	3234.3	8045.0	10986.0	10167.2
72.5°	403.3	415.5	431.8	464.4	582.5	879.9	1165.0	2016.3	6203.8	10199.8	8835.2
75°	317.7	325.9	338.1	370.7	468.4	684.3	790.2	1205.7	4216.0	8761.9	6884.0
77.5°	158.9	195.5	224.0	256.6	342.2	472.5	525.5	668.0	1780.1	4497.0	3283.2
80°	93.7	114.1	122.2	142.6	224.0	285.1	285.1	268.8	562.1	1727.1	1340.1
82.5°	53.0	73.3	77.4	81.5	134.4	162.9	130.3	97.8	114.1	578.4	391.0
85°	16.3	24.4	28.5	32.6	44.8	48.9	44.8	40.7	32.6	57.0	36.7
87.5°	0.0	0.0	0.0	0.0	4.1	8.1	8.1	8.1	12.2	12.2	12.2
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°	2623.3	2623.3	2623.3	2623.3	2623.3	2623.3	2623.3	2623.3	2623.3	2623.3	2623.3
2.5°	2639.6	2586.6	2484.8	2391.1	2301.5	2236.3	2175.2	2118.2	2077.4	2044.8	2040.8
5°	2676.2	2570.3	2374.8	2191.5	2024.5	1886.0	1767.9	1674.2	1604.9	1556.0	1552.0
7.5°	2725.1	2562.2	2264.8	1991.9	1743.4	1543.8	1372.7	1246.5	1156.8	1120.2	1091.7
10°	2765.8	2554.0	2154.8	1792.3	1466.4	1213.9	1010.2	883.9	818.8	794.3	782.1
12.5°	2835.1	2562.2	2061.1	1609.0	1226.1	928.7	773.9	704.7	676.2	655.8	651.7
15°	2936.9	2598.8	1971.5	1429.8	981.7	749.5	659.9	615.1	586.6	582.5	578.4
17.5°	3038.8	2631.4	1890.1	1246.5	814.7	651.7	590.6	554.0	533.6	529.5	529.5
20°	3156.9	2672.1	1800.4	1071.3	696.6	586.6	537.7	509.2	484.7	480.7	480.7
22.5°	3295.4	2729.2	1714.9	916.5	619.2	537.7	497.0	464.4	444.0	439.9	439.9
25°	3482.8	2814.7	1645.7	802.5	566.2	497.0	460.3	431.8	415.5	407.3	407.3
27.5°	3690.5	2932.8	1596.8	733.2	529.5	464.4	427.7	403.3	387.0	378.8	378.8
30°	3922.7	3063.2	1564.2	704.7	509.2	435.9	403.3	378.8	358.5	354.4	354.4
32.5°	4179.3	3213.9	1543.8	708.8	505.1	415.5	378.8	354.4	338.1	329.9	329.9
35°	4464.4	3380.9	1531.6	733.2	513.2	399.2	358.5	334.0	317.7	309.6	309.6
37.5°	4782.2	3576.4	1531.6	757.7	533.6	395.1	338.1	313.7	301.4	293.3	293.3
40°	5079.5	3784.2	1547.9	786.2	554.0	395.1	321.8	301.4	285.1	277.0	277.0
42.5°	5311.7	3902.3	1560.1	814.7	566.2	391.0	305.5	285.1	272.9	264.8	264.8
45°	5576.5	4028.6	1535.7	826.9	566.2	382.9	293.3	272.9	260.7	252.6	252.6
47.5°	5869.8	4183.4	1531.6	835.0	554.0	366.6	281.1	260.7	252.6	244.4	244.4
50°	6167.1	4354.5	1539.7	831.0	537.7	342.2	264.8	252.6	240.3	232.2	232.2
52.5°	6505.2	4533.7	1556.0	822.8	501.0	313.7	252.6	240.3	228.1	220.0	215.9
55°	6880.0	4729.2	1588.6	806.5	452.1	285.1	240.3	228.1	211.8	203.7	199.6
57.5°	7311.8	4969.5	1625.3	773.9	399.2	260.7	228.1	211.8	187.4	175.2	171.1
60°	7723.2	5242.5	1666.0	696.6	346.2	236.3	215.9	191.4	167.0	158.9	154.8
62.5°	8110.1	5511.3	1686.4	558.1	293.3	215.9	203.7	175.2	150.7	142.6	138.5
65°	8358.6	5804.6	1641.6	378.8	240.3	199.6	187.4	162.9	138.5	126.3	126.3
67.5°	8374.9	5943.1	1486.8	248.5	195.5	179.2	171.1	146.6	122.2	114.1	110.0
70°	7963.5	5735.3	1136.5	195.5	162.9	154.8	154.8	130.3	105.9	97.8	93.7
72.5°	7018.5	5079.5	725.1	158.9	138.5	130.3	130.3	110.0	93.7	81.5	77.4
75°	5539.8	3918.6	387.0	130.3	114.1	110.0	101.8	89.6	77.4	69.2	65.2
77.5°	2545.9	1727.1	179.2	93.7	85.5	85.5	77.4	65.2	61.1	53.0	53.0
80°	1006.1	586.6	89.6	61.1	57.0	57.0	57.0	44.8	44.8	36.7	32.6
82.5°	277.0	122.2	44.8	36.7	36.7	36.7	32.6	28.5	28.5	24.4	24.4
85°	28.5	20.4	20.4	20.4	20.4	16.3	16.3	12.2	8.1	8.1	8.1
87.5°	12.2	12.2	12.2	12.2	12.2	8.1	4.1	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)