

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: P840866

Luminaire Tested: **ARCH4-100-727-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840866
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: ARCH4-100-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 845mA 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: 11788 lumens
Efficiency: N/A
Efficacy: 114.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

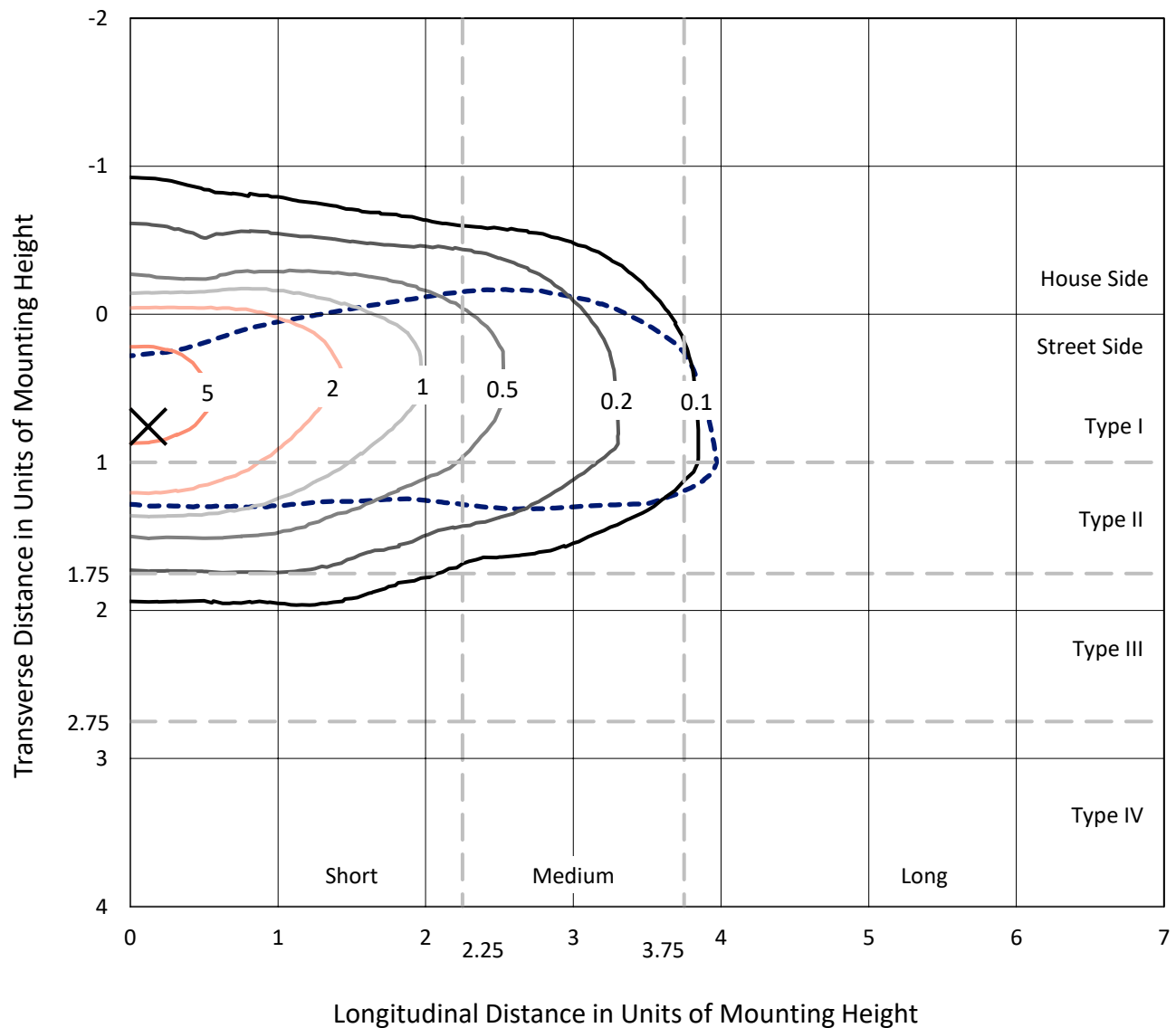
Input Watts (W): 103.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

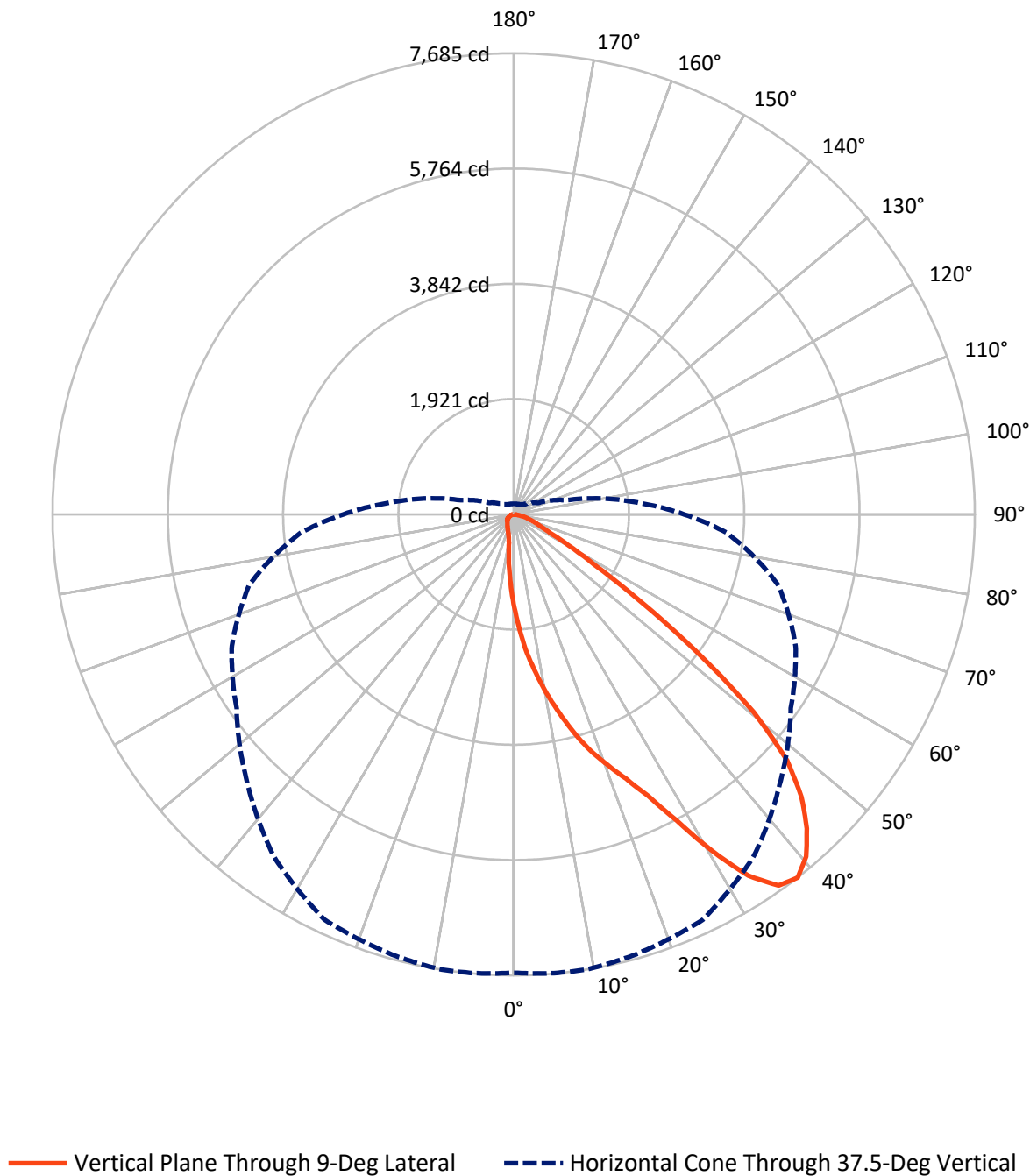
× Max cd
- - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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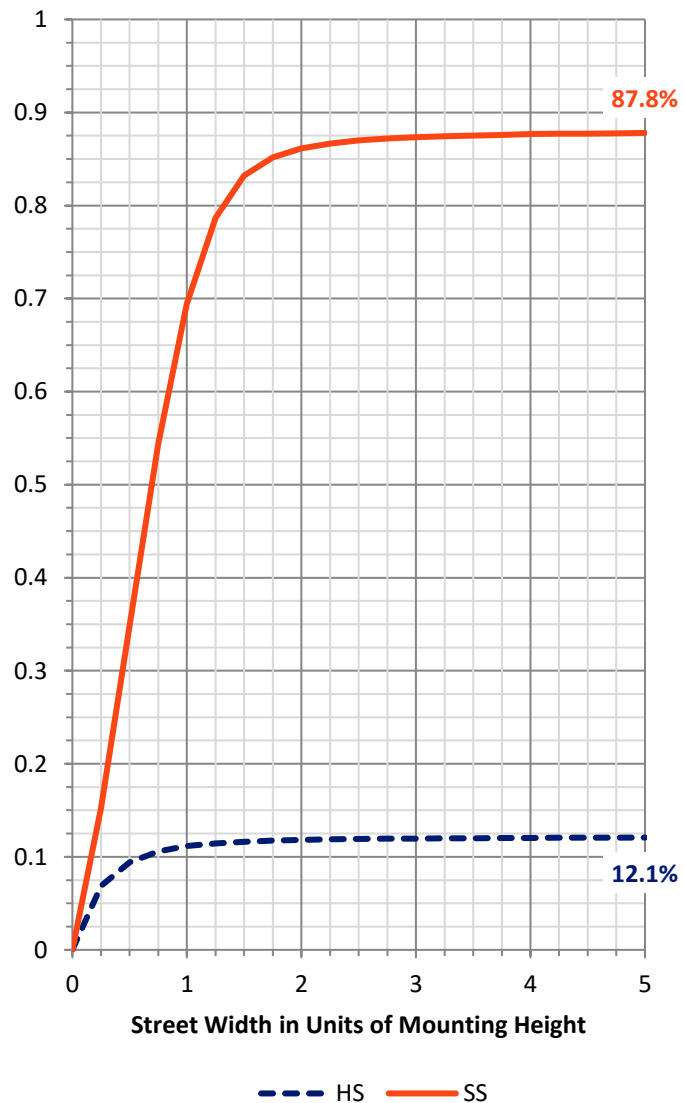
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1433.6	0.0	1433.6
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	10354.4	0.0	10354.4
	% Fixture	87.8	0.0	87.8
Total	Lumens	11788.0	0.0	11788.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.6	1.3
10°-20°	544.4	4.6
20°-30°	1118.6	9.5
30°-40°	1977.2	16.8
40°-50°	2626.5	22.3
50°-60°	2491.1	21.1
60°-70°	1900.5	16.1
70°-80°	921.3	7.8
80°-90°	51.9	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°	11788.0	100.0
0°-180°	11788.0	100.0

Coefficient of Utilization



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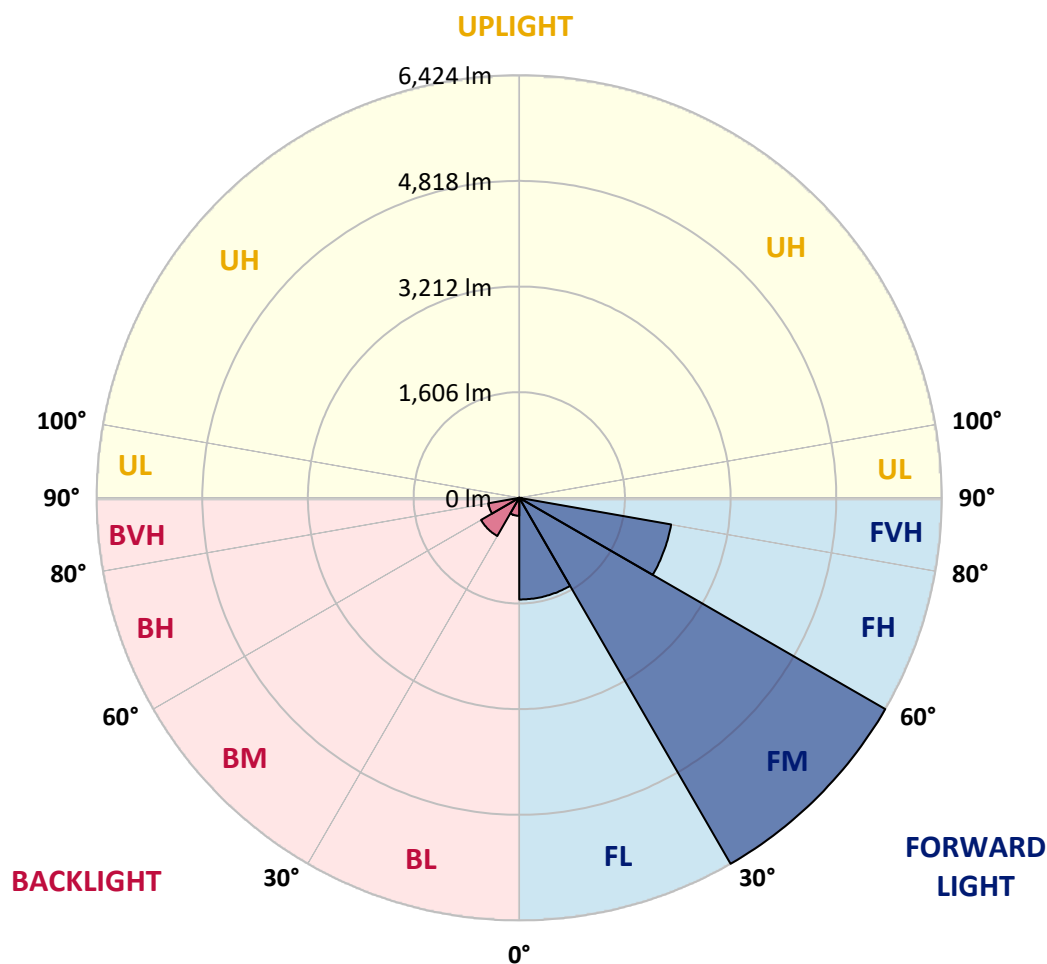
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1546.0	13.1			
FM	(30°-60°)	6423.9	54.5			
FH	(60°-80°)	2343.4	19.9			G2/5000
FVH	(80°-90°)	41.1	0.3			G1/100
BL	(0°-30°)	273.6	2.3	B1/500		
BM	(30°-60°)	670.8	5.7	B1/1000		
BH	(60°-80°)	478.4	4.1	B1/500		G1/500
BVH	(80°-90°)	10.8	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1558.2	1558.2	1558.2	1558.2	1558.2	1558.2	1558.2	1558.2	1558.2	1558.2	1558.2
2.5°	1930.9	1897.0	1935.7	1930.9	1897.0	1875.2	1807.5	1785.7	1705.8	1647.8	1596.9
5°	2327.7	2293.8	2327.7	2318.0	2269.6	2216.4	2105.1	2032.5	1889.7	1763.9	1650.2
7.5°	2656.7	2656.7	2671.3	2673.7	2615.6	2533.3	2395.4	2286.5	2085.7	1892.1	1710.7
10°	3012.4	3014.8	3046.3	3024.5	2947.1	2835.8	2661.6	2523.7	2281.7	2027.6	1768.7
12.5°	3392.3	3394.7	3404.4	3394.7	3302.8	3160.0	2949.5	2768.0	2489.8	2182.5	1848.6
15°	3772.2	3774.6	3786.7	3769.8	3668.1	3501.2	3261.6	3039.0	2710.0	2356.7	1945.4
17.5°	4127.9	4132.7	4142.4	4120.6	4014.1	3815.7	3571.3	3302.8	2944.7	2543.0	2054.3
20°	4447.2	4452.1	4459.3	4430.3	4323.8	4125.4	3861.7	3581.0	3184.2	2734.2	2172.8
22.5°	4769.1	4773.9	4786.0	4747.3	4628.7	4401.3	4142.4	3852.0	3438.3	2944.7	2310.7
25°	5180.4	5185.2	5194.9	5139.3	4977.1	4711.0	4437.6	4140.0	3714.1	3181.8	2480.1
27.5°	5782.9	5778.0	5778.0	5676.4	5398.2	5052.2	4735.2	4432.7	4011.7	3435.9	2666.4
30°	6528.1	6516.0	6508.8	6370.8	5974.0	5436.9	5040.1	4706.1	4297.2	3704.4	2867.2
32.5°	7195.9	7195.9	7181.4	7036.2	6615.2	5954.7	5364.3	4972.3	4573.1	3975.4	3075.3
35°	7590.3	7607.3	7600.0	7491.1	7183.8	6511.2	5802.2	5291.7	4863.4	4258.5	3324.5
37.5°	7643.6	7677.4	7684.7	7619.4	7457.2	6966.1	6288.6	5637.7	5182.8	4563.4	3566.5
40°	7428.2	7500.8	7500.8	7491.1	7433.1	7181.4	6697.5	6039.4	5511.9	4880.4	3810.9
42.5°	7096.7	7171.7	7162.1	7198.3	7183.8	7130.6	6927.4	6414.4	5840.9	5207.0	4033.5
45°	6663.6	6741.0	6721.7	6787.0	6816.1	6874.1	6903.2	6675.7	6165.2	5562.7	4282.7
47.5°	5969.2	6099.8	6128.9	6245.0	6366.0	6547.5	6685.4	6770.1	6467.6	5945.0	4553.7
50°	4943.3	5127.2	5185.2	5429.6	5761.1	6136.1	6358.7	6653.9	6680.6	6337.0	4846.5
52.5°	3539.9	3752.8	3842.3	4244.0	4926.3	5579.6	5981.3	6397.5	6762.8	6712.0	5163.5
55°	2289.0	2470.4	2557.5	2935.0	3842.3	4868.3	5536.1	6066.0	6716.8	7055.6	5526.4
57.5°	1410.6	1514.7	1572.7	1897.0	2731.7	3956.1	4952.9	5761.1	6576.5	7353.2	5903.9
60°	950.9	1011.4	1040.4	1192.9	1855.8	2956.8	4152.1	5441.7	6392.6	7554.0	6247.4
62.5°	631.5	650.9	679.9	774.3	1224.3	2076.0	3189.1	4870.7	6254.7	7566.1	6501.5
65°	488.8	498.4	510.5	551.7	754.9	1451.8	2243.0	3946.4	6049.0	7309.7	6581.3
67.5°	384.7	394.4	408.9	430.7	546.8	984.8	1526.8	2891.4	5628.0	6908.0	6450.7
70°	302.5	309.7	319.4	338.7	425.9	713.8	1009.0	1921.2	4778.7	6525.7	6039.4
72.5°	239.5	246.8	256.5	275.8	346.0	522.6	692.0	1197.7	3685.1	6058.7	5248.1
75°	188.7	193.6	200.8	220.2	278.3	406.5	469.4	716.2	2504.3	5204.6	4089.1
77.5°	94.4	116.1	133.1	152.4	203.2	280.7	312.1	396.8	1057.4	2671.3	1950.2
80°	55.7	67.7	72.6	84.7	133.1	169.4	169.4	159.7	333.9	1025.9	796.1
82.5°	31.5	43.6	46.0	48.4	79.8	96.8	77.4	58.1	67.7	343.6	232.3
85°	9.7	14.5	16.9	19.4	26.6	29.0	26.6	24.2	19.4	33.9	21.8
87.5°	0.0	0.0	0.0	0.0	2.4	4.8	4.8	4.8	7.3	7.3	7.3
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°	1558.2	1558.2	1558.2	1558.2	1558.2	1558.2	1558.2	1558.2	1558.2	1558.2	1558.2
2.5°	1567.9	1536.5	1476.0	1420.3	1367.1	1328.4	1292.1	1258.2	1234.0	1214.6	1212.2
5°	1589.7	1526.8	1410.6	1301.8	1202.5	1120.3	1050.1	994.5	953.3	924.3	921.9
7.5°	1618.7	1521.9	1345.3	1183.2	1035.6	917.0	815.4	740.4	687.2	665.4	648.5
10°	1642.9	1517.1	1280.0	1064.6	871.1	721.0	600.1	525.1	486.3	471.8	464.6
12.5°	1684.1	1521.9	1224.3	955.7	728.3	551.7	459.7	418.6	401.7	389.6	387.1
15°	1744.5	1543.7	1171.1	849.3	583.1	445.2	392.0	365.4	348.4	346.0	343.6
17.5°	1805.0	1563.1	1122.7	740.4	483.9	387.1	350.8	329.1	317.0	314.5	314.5
20°	1875.2	1587.3	1069.5	636.4	413.8	348.4	319.4	302.5	287.9	285.5	285.5
22.5°	1957.5	1621.1	1018.7	544.4	367.8	319.4	295.2	275.8	263.7	261.3	261.3
25°	2068.8	1672.0	977.5	476.7	336.3	295.2	273.4	256.5	246.8	242.0	242.0
27.5°	2192.2	1742.1	948.5	435.5	314.5	275.8	254.1	239.5	229.9	225.0	225.0
30°	2330.1	1819.5	929.1	418.6	302.5	258.9	239.5	225.0	212.9	210.5	210.5
32.5°	2482.5	1909.1	917.0	421.0	300.0	246.8	225.0	210.5	200.8	196.0	196.0
35°	2651.9	2008.3	909.8	435.5	304.9	237.1	212.9	198.4	188.7	183.9	183.9
37.5°	2840.6	2124.4	909.8	450.0	317.0	234.7	200.8	186.3	179.1	174.2	174.2
40°	3017.3	2247.8	919.5	467.0	329.1	234.7	191.1	179.1	169.4	164.5	164.5
42.5°	3155.2	2318.0	926.7	483.9	336.3	232.3	181.5	169.4	162.1	157.3	157.3
45°	3312.5	2393.0	912.2	491.2	336.3	227.4	174.2	162.1	154.9	150.0	150.0
47.5°	3486.7	2484.9	909.8	496.0	329.1	217.8	167.0	154.9	150.0	145.2	145.2
50°	3663.3	2586.6	914.6	493.6	319.4	203.2	157.3	150.0	142.8	137.9	137.9
52.5°	3864.1	2693.0	924.3	488.8	297.6	186.3	150.0	142.8	135.5	130.7	128.2
55°	4086.7	2809.2	943.6	479.1	268.6	169.4	142.8	135.5	125.8	121.0	118.6
57.5°	4343.2	2951.9	965.4	459.7	237.1	154.9	135.5	125.8	111.3	104.0	101.6
60°	4587.6	3114.0	989.6	413.8	205.7	140.3	128.2	113.7	99.2	94.4	91.9
62.5°	4817.5	3273.7	1001.7	331.5	174.2	128.2	121.0	104.0	89.5	84.7	82.3
65°	4965.0	3447.9	975.1	225.0	142.8	118.6	111.3	96.8	82.3	75.0	75.0
67.5°	4974.7	3530.2	883.2	147.6	116.1	106.5	101.6	87.1	72.6	67.7	65.3
70°	4730.3	3406.8	675.1	116.1	96.8	91.9	91.9	77.4	62.9	58.1	55.7
72.5°	4169.0	3017.3	430.7	94.4	82.3	77.4	77.4	65.3	55.7	48.4	46.0
75°	3290.7	2327.7	229.9	77.4	67.7	65.3	60.5	53.2	46.0	41.1	38.7
77.5°	1512.3	1025.9	106.5	55.7	50.8	50.8	46.0	38.7	36.3	31.5	31.5
80°	597.6	348.4	53.2	36.3	33.9	33.9	33.9	26.6	26.6	21.8	19.4
82.5°	164.5	72.6	26.6	21.8	21.8	21.8	19.4	16.9	16.9	14.5	14.5
85°	16.9	12.1	12.1	12.1	12.1	9.7	9.7	7.3	4.8	4.8	4.8
87.5°	7.3	7.3	7.3	7.3	7.3	4.8	2.4	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)