

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: P836414

Luminaire Tested: **ARCH3-180-740-U-T2R-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836414
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-180-740-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1375mA LIGHTSQUARE WITH 40 LEDS AND TYPE II ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17689 lumens
Efficiency: N/A
Efficacy: 98.0 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 180.5
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

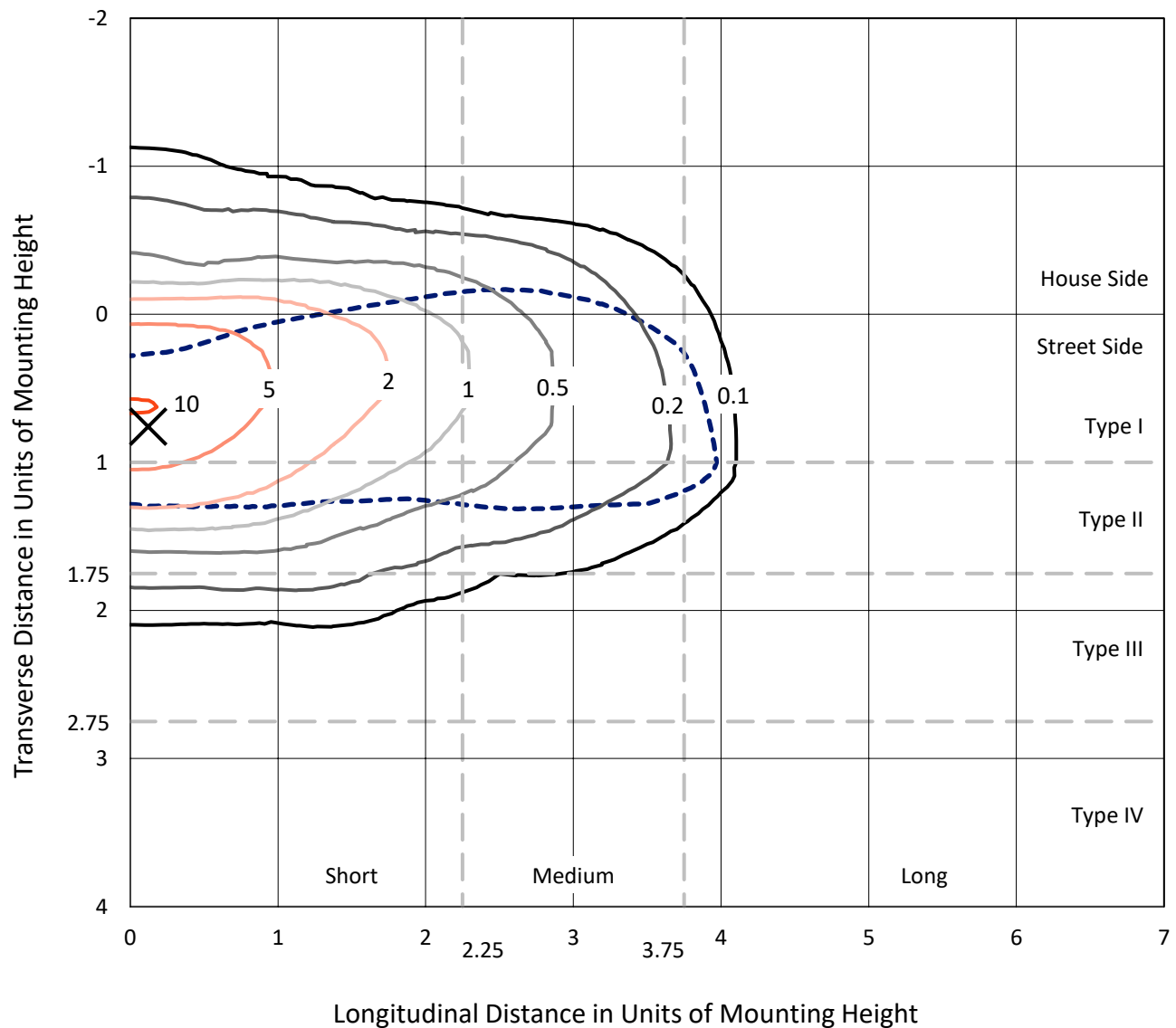


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Iso-Footcandle Lines of Horizontal Illumination

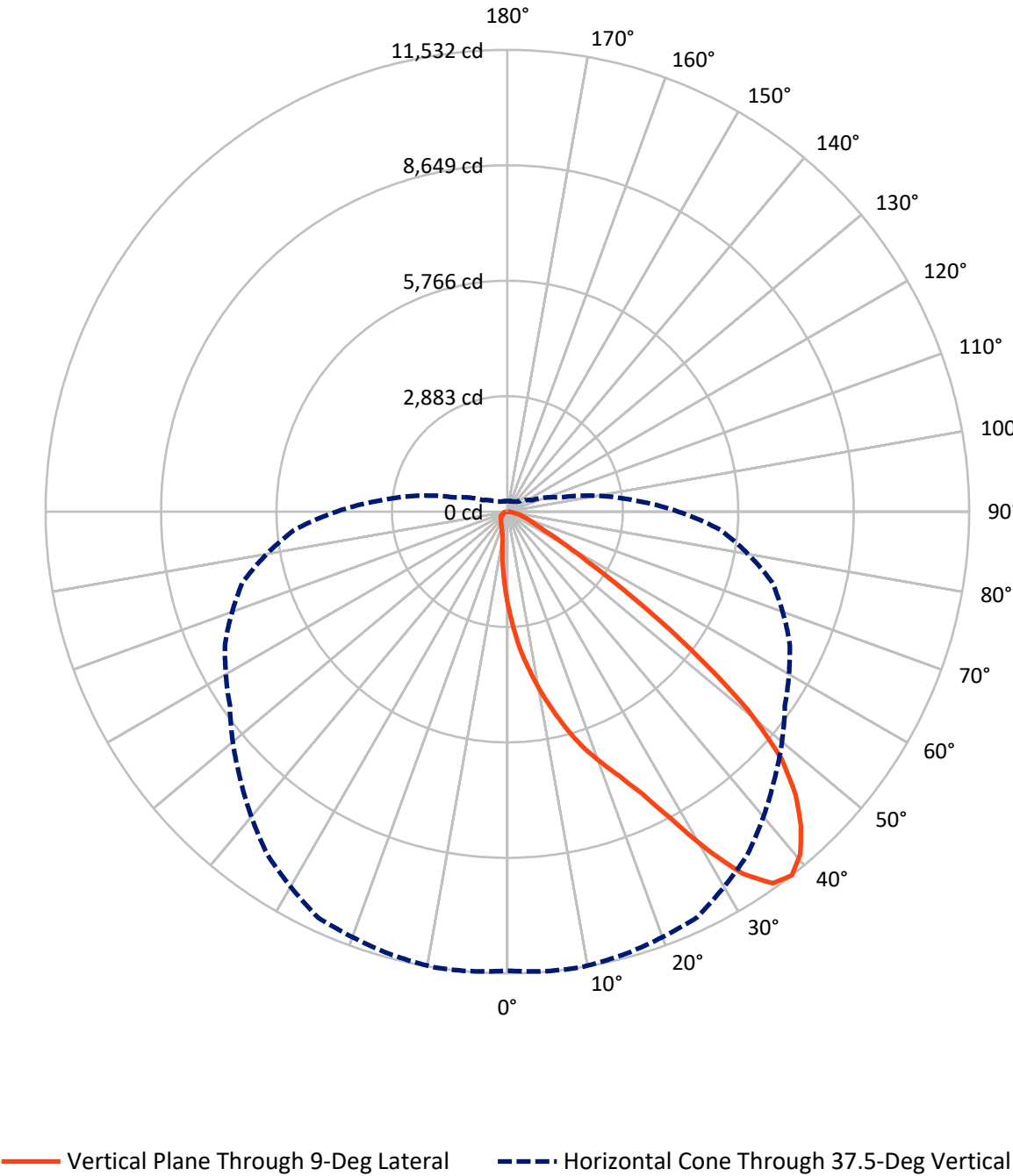
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.3 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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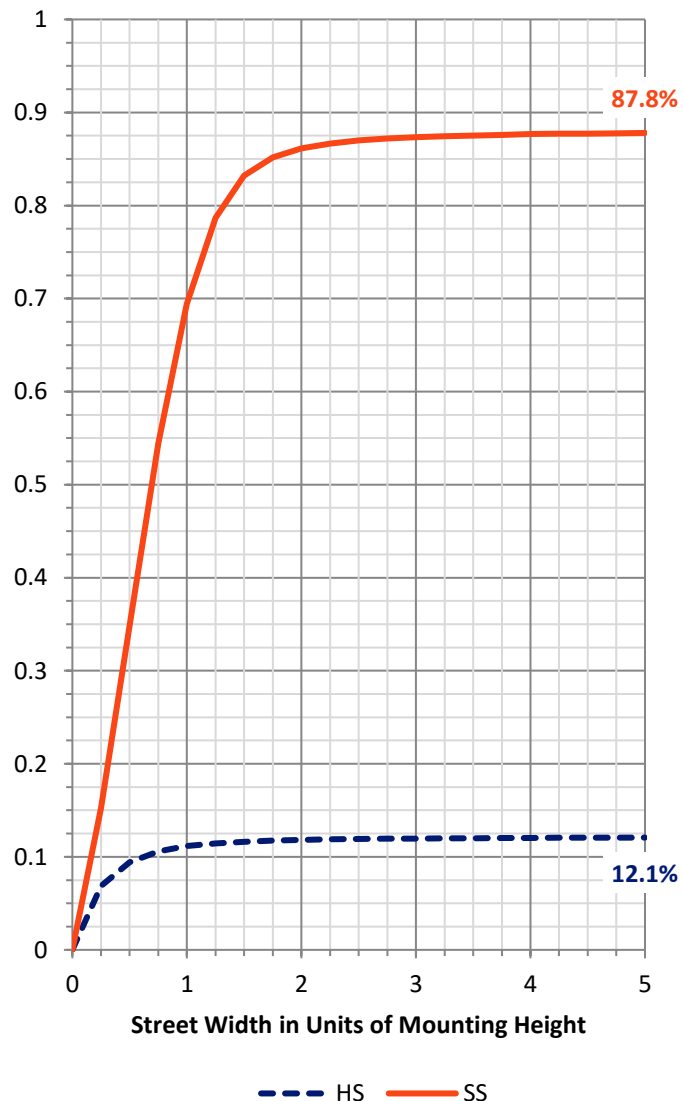
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2151.3	0.0	2151.3
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	15537.7	0.0	15537.7
	% Fixture	87.8	0.0	87.8
Total	Lumens	17689.0	0.0	17689.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.0	1.3
10°-20°	816.9	4.6
20°-30°	1678.5	9.5
30°-40°	2966.9	16.8
40°-50°	3941.3	22.3
50°-60°	3738.1	21.1
60°-70°	2851.8	16.1
70°-80°	1382.6	7.8
80°-90°	77.8	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°	17689.0	100.0
0°-180°	17689.0	100.0

Coefficient of Utilization



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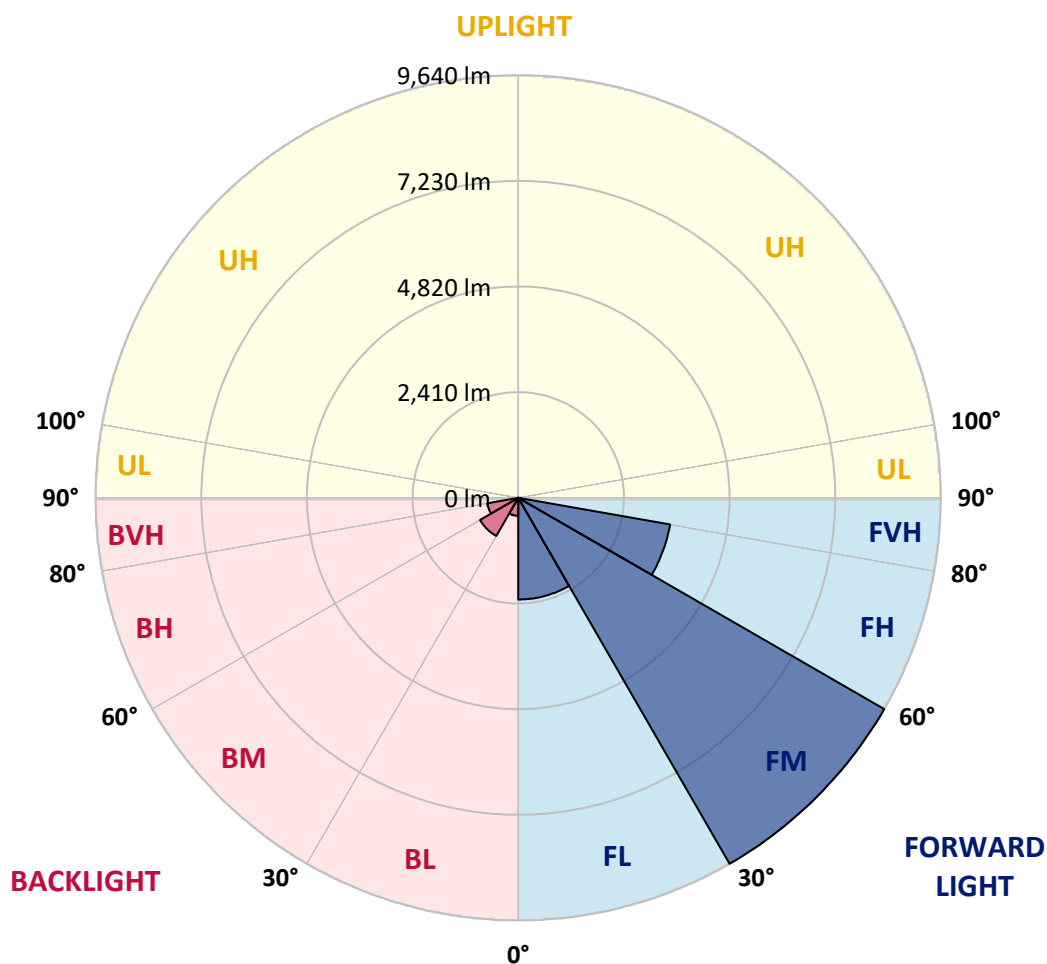
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2319.9	13.1			
FM	(30°-60°)	9639.7	54.5			
FH	(60°-80°)	3516.5	19.9			G2/5000
FVH	(80°-90°)	61.6	0.3			G1/100
BL	(0°-30°)	410.5	2.3	B1/500		
BM	(30°-60°)	1006.7	5.7	B2/2500		
BH	(60°-80°)	717.9	4.1	B2/1000		G2/1000
BVH	(80°-90°)	16.2	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°	2338.3	2338.3	2338.3	2338.3	2338.3	2338.3	2338.3	2338.3	2338.3	2338.3	2338.3
2.5°	2897.4	2846.6	2904.7	2897.4	2846.6	2813.9	2712.3	2679.6	2559.8	2472.6	2396.4
5°	3492.9	3442.1	3492.9	3478.4	3405.7	3325.9	3158.8	3049.9	2835.7	2646.9	2476.2
7.5°	3986.7	3986.7	4008.5	4012.1	3925.0	3801.5	3594.5	3431.2	3129.8	2839.3	2567.0
10°	4520.4	4524.0	4571.2	4538.6	4422.4	4255.4	3993.9	3787.0	3423.9	3042.7	2654.2
12.5°	5090.5	5094.1	5108.6	5094.1	4956.1	4741.9	4426.0	4153.7	3736.2	3275.0	2774.0
15°	5660.5	5664.1	5682.3	5656.9	5504.4	5253.8	4894.4	4560.4	4066.6	3536.5	2919.2
17.5°	6194.2	6201.5	6216.0	6183.3	6023.6	5725.9	5359.1	4956.1	4418.8	3816.0	3082.6
20°	6673.5	6680.8	6691.7	6648.1	6488.3	6190.6	5794.8	5373.7	4778.2	4102.9	3260.5
22.5°	7156.4	7163.7	7181.8	7123.7	6945.8	6604.5	6216.0	5780.3	5159.4	4418.8	3467.5
25°	7773.7	7780.9	7795.4	7711.9	7468.7	7069.3	6659.0	6212.4	5573.4	4774.6	3721.6
27.5°	8677.7	8670.5	8670.5	8518.0	8100.4	7581.2	7105.6	6651.7	6020.0	5155.8	4001.2
30°	9796.1	9777.9	9767.0	9560.0	8964.6	8158.5	7563.1	7062.0	6448.4	5558.8	4302.6
32.5°	10798.2	10798.2	10776.4	10558.5	9926.8	8935.5	8049.6	7461.4	6862.3	5965.5	4614.8
35°	11390.0	11415.4	11404.5	11241.1	10780.0	9770.6	8706.8	7940.7	7298.0	6390.3	4988.8
37.5°	11469.9	11520.7	11531.6	11433.6	11190.3	10453.2	9436.6	8459.9	7777.3	6847.8	5351.9
40°	11146.7	11255.7	11255.7	11241.1	11154.0	10776.4	10050.2	9062.6	8271.1	7323.4	5718.6
42.5°	10649.3	10761.9	10747.3	10801.8	10780.0	10700.1	10395.1	9625.4	8764.9	7813.6	6052.6
45°	9999.4	10115.6	10086.5	10184.6	10228.1	10315.3	10358.8	10017.5	9251.4	8347.3	6426.6
47.5°	8957.3	9153.4	9197.0	9371.2	9552.8	9825.1	10032.1	10159.1	9705.3	8921.0	6833.3
50°	7417.8	7693.8	7780.9	8147.6	8645.1	9207.9	9541.9	9984.9	10024.8	9509.2	7272.6
52.5°	5311.9	5631.5	5765.8	6368.5	7392.4	8372.8	8975.5	9600.0	10148.2	10072.0	7748.2
55°	3434.8	3707.1	3837.8	4404.2	5765.8	7305.3	8307.4	9102.6	10079.3	10587.6	8292.9
57.5°	2116.8	2272.9	2360.1	2846.6	4099.2	5936.5	7432.4	8645.1	9868.7	11034.2	8859.3
60°	1426.9	1517.7	1561.3	1790.0	2784.9	4436.9	6230.6	8165.8	9592.7	11335.5	9374.9
62.5°	947.7	976.7	1020.3	1161.9	1837.2	3115.3	4785.5	7308.9	9385.8	11353.7	9756.1
65°	733.4	748.0	766.1	827.8	1132.8	2178.5	3365.8	5921.9	9077.1	10968.8	9875.9
67.5°	577.3	591.8	613.6	646.3	820.6	1477.8	2291.1	4338.9	8445.4	10366.1	9679.9
70°	453.9	464.7	479.3	508.3	639.0	1071.1	1514.1	2882.9	7170.9	9792.4	9062.6
72.5°	359.5	370.3	384.9	413.9	519.2	784.3	1038.4	1797.3	5529.8	9091.7	7875.3
75°	283.2	290.5	301.4	330.4	417.5	610.0	704.4	1074.7	3757.9	7810.0	6136.1
77.5°	141.6	174.3	199.7	228.7	305.0	421.2	468.4	595.5	1586.7	4008.5	2926.5
80°	83.5	101.7	108.9	127.1	199.7	254.2	254.2	239.6	501.1	1539.5	1194.6
82.5°	47.2	65.4	69.0	72.6	119.8	145.2	116.2	87.1	101.7	515.6	348.6
85°	14.5	21.8	25.4	29.0	39.9	43.6	39.9	36.3	29.0	50.8	32.7
87.5°	0.0	0.0	0.0	0.0	3.6	7.3	7.3	7.3	10.9	10.9	10.9
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°	2338.3	2338.3	2338.3	2338.3	2338.3	2338.3	2338.3	2338.3	2338.3	2338.3	2338.3
2.5°	2352.8	2305.6	2214.8	2131.3	2051.4	1993.3	1938.9	1888.0	1851.7	1822.7	1819.1
5°	2385.5	2291.1	2116.8	1953.4	1804.5	1681.1	1575.8	1492.3	1430.6	1387.0	1383.4
7.5°	2429.0	2283.8	2018.8	1775.5	1554.0	1376.1	1223.6	1111.0	1031.2	998.5	973.1
10°	2465.4	2276.5	1920.7	1597.6	1307.1	1082.0	900.5	787.9	729.8	708.0	697.1
12.5°	2527.1	2283.8	1837.2	1434.2	1092.9	827.8	689.9	628.1	602.7	584.6	580.9
15°	2617.8	2316.5	1757.3	1274.4	875.0	668.1	588.2	548.3	522.8	519.2	515.6
17.5°	2708.6	2345.5	1684.7	1111.0	726.2	580.9	526.5	493.8	475.6	472.0	472.0
20°	2813.9	2381.8	1604.8	954.9	620.9	522.8	479.3	453.9	432.1	428.4	428.4
22.5°	2937.4	2432.7	1528.6	816.9	551.9	479.3	443.0	413.9	395.8	392.1	392.1
25°	3104.4	2508.9	1466.9	715.3	504.7	443.0	410.3	384.9	370.3	363.1	363.1
27.5°	3289.6	2614.2	1423.3	653.6	472.0	413.9	381.2	359.5	344.9	337.7	337.7
30°	3496.5	2730.4	1394.2	628.1	453.9	388.5	359.5	337.7	319.5	315.9	315.9
32.5°	3725.3	2864.7	1376.1	631.8	450.2	370.3	337.7	315.9	301.4	294.1	294.1
35°	3979.4	3013.6	1365.2	653.6	457.5	355.8	319.5	297.7	283.2	275.9	275.9
37.5°	4262.6	3187.9	1365.2	675.3	475.6	352.2	301.4	279.6	268.7	261.4	261.4
40°	4527.7	3373.1	1379.7	700.8	493.8	352.2	286.8	268.7	254.2	246.9	246.9
42.5°	4734.6	3478.4	1390.6	726.2	504.7	348.6	272.3	254.2	243.3	236.0	236.0
45°	4970.6	3590.9	1368.8	737.1	504.7	341.3	261.4	243.3	232.4	225.1	225.1
47.5°	5232.1	3728.9	1365.2	744.3	493.8	326.8	250.5	232.4	225.1	217.9	217.9
50°	5497.1	3881.4	1372.5	740.7	479.3	305.0	236.0	225.1	214.2	207.0	207.0
52.5°	5798.5	4041.1	1387.0	733.4	446.6	279.6	225.1	214.2	203.3	196.1	192.4
55°	6132.5	4215.4	1416.0	718.9	403.0	254.2	214.2	203.3	188.8	181.5	177.9
57.5°	6517.4	4429.6	1448.7	689.9	355.8	232.4	203.3	188.8	167.0	156.1	152.5
60°	6884.1	4672.9	1485.0	620.9	308.6	210.6	192.4	170.7	148.9	141.6	138.0
62.5°	7229.0	4912.5	1503.2	497.4	261.4	192.4	181.5	156.1	134.3	127.1	123.4
65°	7450.5	5174.0	1463.2	337.7	214.2	177.9	167.0	145.2	123.4	112.6	112.6
67.5°	7465.0	5297.4	1325.3	221.5	174.3	159.8	152.5	130.7	108.9	101.7	98.0
70°	7098.3	5112.2	1013.0	174.3	145.2	138.0	138.0	116.2	94.4	87.1	83.5
72.5°	6256.0	4527.7	646.3	141.6	123.4	116.2	116.2	98.0	83.5	72.6	69.0
75°	4938.0	3492.9	344.9	116.2	101.7	98.0	90.8	79.9	69.0	61.7	58.1
77.5°	2269.3	1539.5	159.8	83.5	76.2	76.2	69.0	58.1	54.5	47.2	47.2
80°	896.8	522.8	79.9	54.5	50.8	50.8	50.8	39.9	39.9	32.7	29.0
82.5°	246.9	108.9	39.9	32.7	32.7	32.7	29.0	25.4	25.4	21.8	21.8
85°	25.4	18.2	18.2	18.2	18.2	14.5	14.5	10.9	7.3	7.3	7.3
87.5°	10.9	10.9	10.9	10.9	10.9	7.3	3.6	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)