

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: P836424

Luminaire Tested: **ARCH3-180-750-U-T2R**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836424
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-180-750-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1375mA LIGHTSQUARE WITH 40 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25289 lumens
Efficiency: N/A
Efficacy: 140.1 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

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

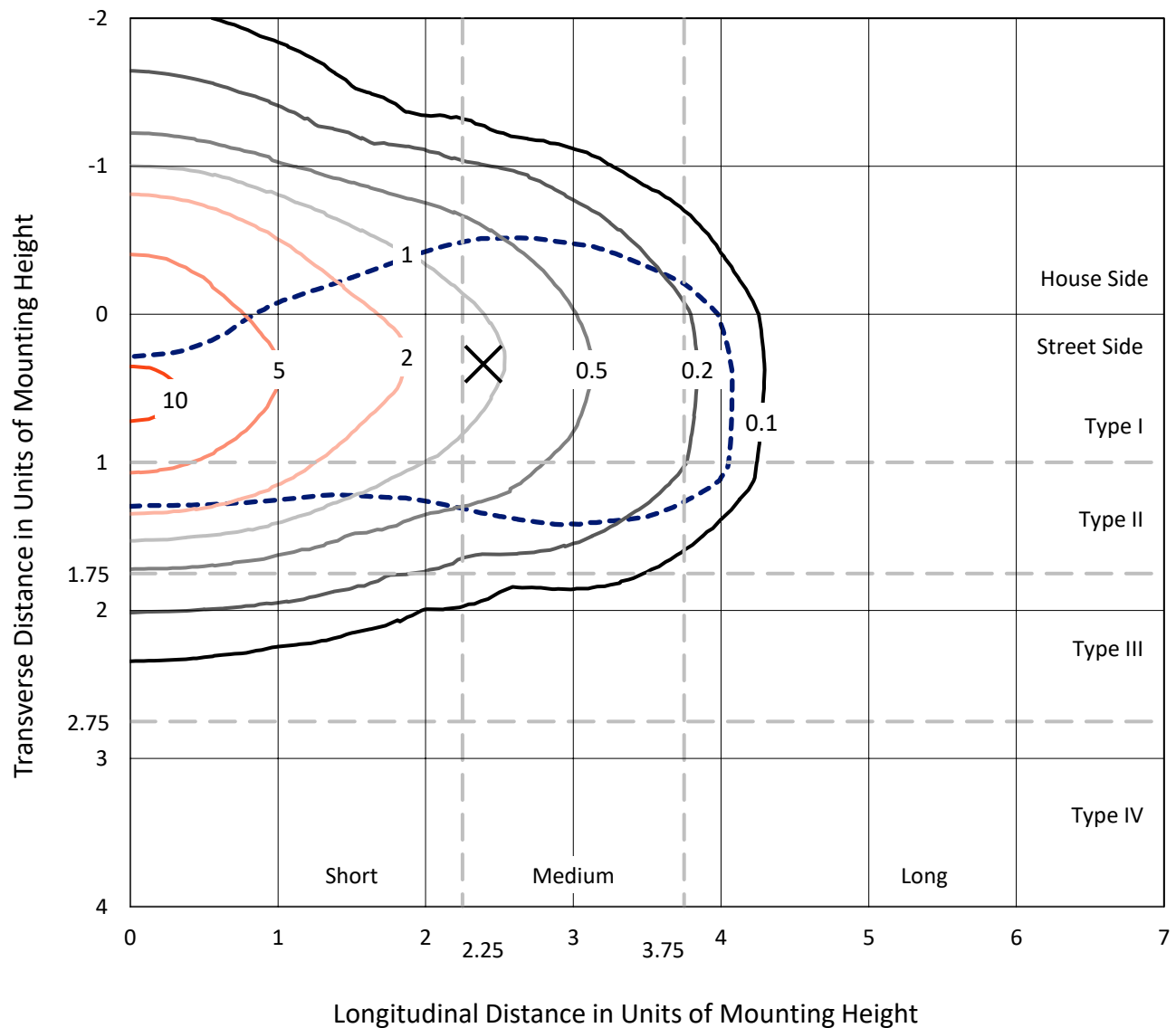


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Iso-Footcandle Lines of Horizontal Illumination

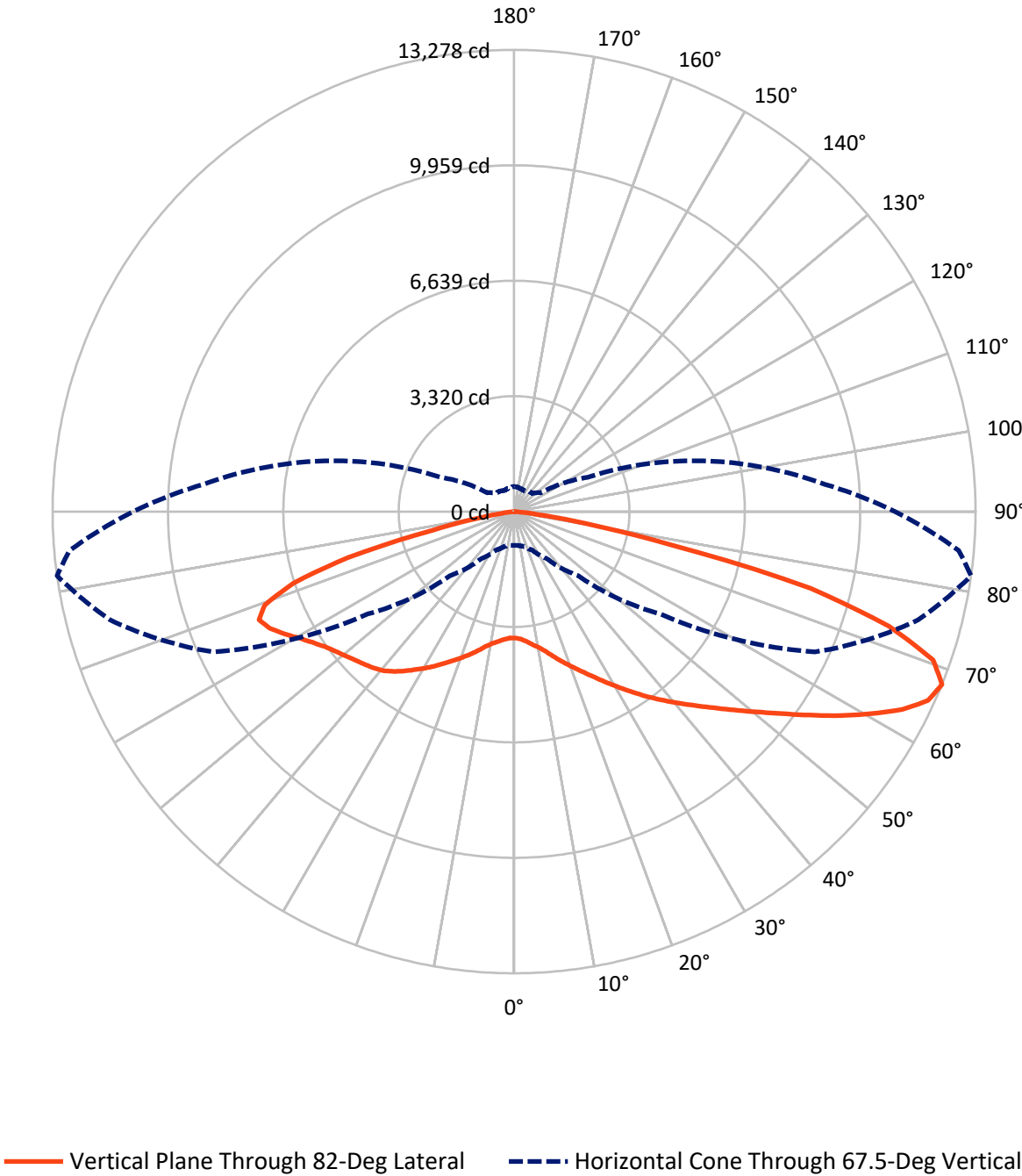
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.2 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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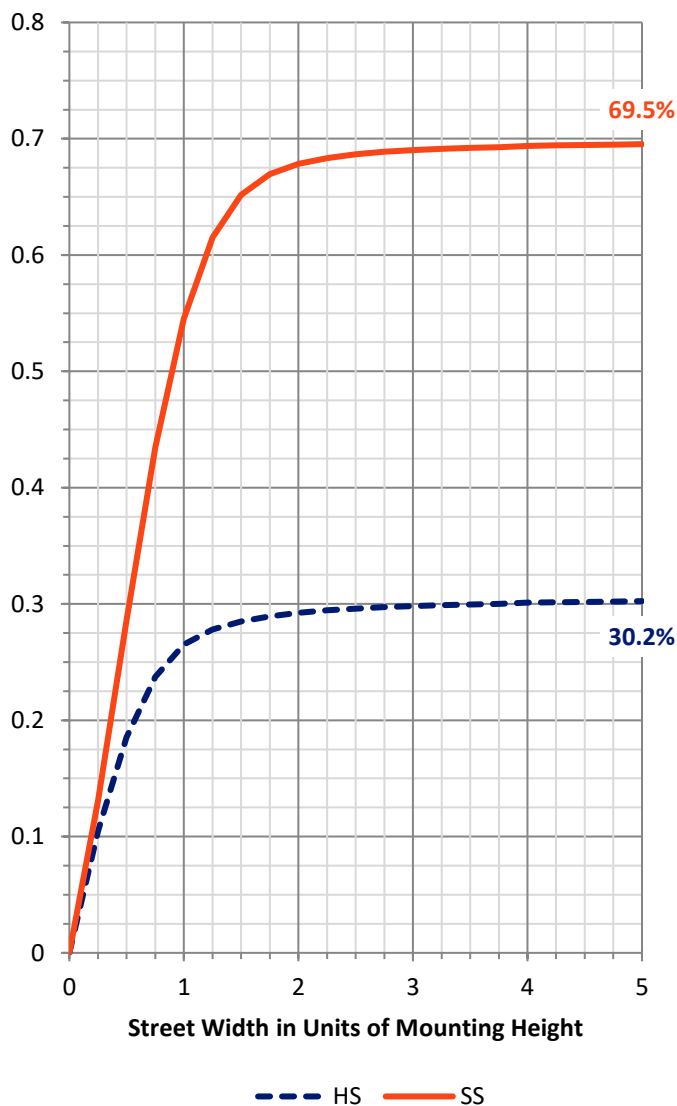
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7701.5	0.0	7701.5
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	17587.5	0.0	17587.5
	% Fixture	69.5	0.0	69.5
Total	Lumens	25289.0	0.0	25289.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	375.7	1.5
10°-20°	1353.2	5.4
20°-30°	2719.7	10.8
30°-40°	4272.3	16.9
40°-50°	5204.5	20.6
50°-60°	4917.6	19.4
60°-70°	4060.8	16.1
70°-80°	2211.3	8.7
80°-90°	173.9	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°	25289.0	100.0
0°-180°	25289.0	100.0

Coefficient of Utilization



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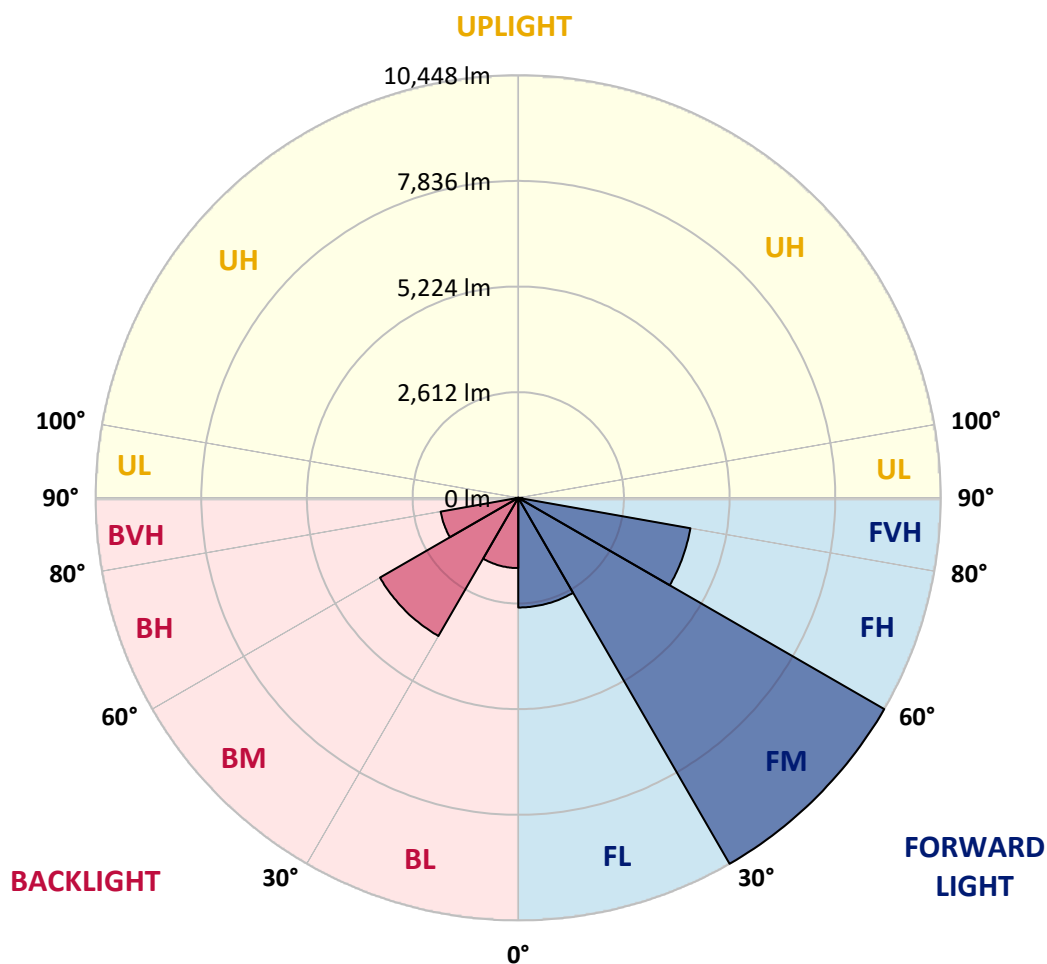
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2711.9	10.7			
FM	(30°-60°)	10448.0	41.3			
FH	(60°-80°)	4322.8	17.1			G2/5000
FVH	(80°-90°)	104.8	0.4			G2/225
BL	(0°-30°)	1736.8	6.9	B3/2500		
BM	(30°-60°)	3946.4	15.6	B3/5000		
BH	(60°-80°)	1949.3	7.7	B3/2500		G3/2500
BVH	(80°-90°)	69.1	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3635.3	3635.3	3635.3	3635.3	3635.3	3635.3	3635.3	3635.3	3635.3	3635.3	3635.3
2.5°	3800.5	3800.5	3829.9	3829.9	3804.2	3763.8	3752.8	3708.7	3668.3	3668.3	3672.0
5°	4164.0	4160.4	4182.4	4153.0	4090.6	4009.8	3954.7	3859.3	3778.5	3752.8	3749.1
7.5°	4608.4	4604.7	4615.7	4568.0	4450.5	4318.3	4208.1	4053.9	3921.7	3866.6	3851.9
10°	5104.1	5100.4	5089.4	5008.6	4850.7	4645.1	4479.8	4266.9	4068.6	3980.4	3962.1
12.5°	5673.2	5665.9	5640.2	5522.7	5306.0	5041.7	4803.0	4527.6	4263.2	4142.0	4101.6
15°	6308.5	6297.5	6249.7	6106.5	5816.4	5482.3	5173.8	4821.3	4498.2	4340.3	4285.2
17.5°	6976.8	6976.8	6903.4	6690.4	6367.2	5952.3	5570.4	5122.4	4744.2	4549.6	4483.5
20°	7656.1	7652.4	7560.6	7303.6	6921.7	6444.4	5959.7	5467.6	4997.6	4762.6	4681.8
22.5°	8372.2	8364.8	8251.0	7957.2	7501.9	6962.1	6396.6	5809.1	5276.7	4993.9	4891.1
25°	9194.7	9183.7	9044.1	8684.3	8144.5	7534.9	6888.7	6209.4	5596.1	5251.0	5129.8
27.5°	10068.6	10053.9	9888.7	9470.1	8878.9	8144.5	7432.1	6672.0	5948.6	5537.4	5401.5
30°	10847.1	10836.1	10656.1	10226.5	9547.2	8750.4	7949.9	7134.7	6319.5	5842.2	5673.2
32.5°	11434.6	11434.6	11273.0	10850.8	10145.7	9330.6	8471.3	7571.7	6705.1	6169.0	5970.7
35°	11790.8	11801.8	11662.3	11324.5	10659.8	9877.7	9011.1	8085.7	7116.3	6517.8	6304.8
37.5°	11842.2	11878.9	11798.1	11570.5	11016.0	10333.0	9539.9	8581.5	7542.3	6870.3	6631.6
40°	11603.5	11629.2	11632.9	11544.8	11162.9	10659.8	10006.2	9106.6	7993.9	7241.2	6965.8
42.5°	11126.2	11144.5	11177.6	11203.3	11056.4	10803.0	10362.4	9594.9	8475.0	7619.4	7296.3
45°	10509.3	10505.6	10560.7	10670.8	10663.5	10722.2	10560.7	10039.2	8974.4	8049.0	7663.5
47.5°	9587.6	9569.2	9763.8	10013.5	10138.4	10413.8	10564.3	10388.1	9517.8	8522.7	8082.1
50°	8144.5	8126.1	8552.1	9139.6	9506.8	9925.4	10362.4	10597.4	10087.0	9055.2	8537.4
52.5°	6389.3	6370.9	6910.7	7938.9	8739.4	9348.9	9954.8	10645.1	10626.8	9650.0	9051.5
55°	4751.6	4736.9	5262.0	6374.6	7670.8	8680.6	9455.4	10520.3	11133.5	10333.0	9675.7
57.5°	3348.9	3341.5	3796.8	4718.5	6297.5	7865.4	8974.4	10277.9	11599.9	11074.8	10380.7
60°	2350.1	2339.1	2669.5	3381.9	4762.6	6635.3	8497.0	9954.8	11948.7	11805.5	11129.8
62.5°	1582.6	1575.3	1810.3	2405.2	3381.9	5107.8	7773.6	9738.1	12147.0	12539.9	11886.3
65°	1200.7	1197.1	1303.6	1630.4	2394.1	3668.3	6624.3	9712.4	12172.7	13090.7	12528.9
67.5°	969.4	973.1	1031.8	1219.1	1656.1	2607.1	5137.1	9550.9	12036.8	13278.0	12841.0
70°	793.2	793.2	818.9	943.7	1222.8	1758.9	3587.5	8816.5	11658.6	12789.6	12470.1
72.5°	605.9	609.6	690.3	763.8	921.7	1233.8	2298.7	7296.3	10766.3	11276.7	11034.4
75°	481.0	477.4	525.1	627.9	716.0	881.3	1410.0	5232.6	9161.6	8812.8	8658.6
77.5°	345.2	341.5	378.2	466.3	543.5	624.2	840.9	2640.2	4982.9	4579.0	4465.2
80°	235.0	227.7	260.7	323.1	359.9	367.2	411.3	1013.5	2173.8	2049.0	2023.3
82.5°	121.2	121.2	139.5	183.6	187.3	190.9	183.6	326.8	719.7	672.0	642.6
85°	47.7	47.7	51.4	62.4	62.4	66.1	66.1	84.5	77.1	73.4	69.8
87.5°	3.7	3.7	7.3	7.3	11.0	11.0	11.0	14.7	18.4	18.4	18.4
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°	3635.3	3635.3	3635.3	3635.3	3635.3	3635.3	3635.3	3635.3	3635.3	3635.3	3635.3
2.5°	3664.7	3650.0	3602.2	3591.2	3583.9	3572.9	3576.5	3550.8	3539.8	3543.5	3528.8
5°	3730.8	3705.0	3646.3	3620.6	3613.2	3602.2	3613.2	3594.9	3576.5	3583.9	3576.5
7.5°	3822.6	3785.8	3712.4	3686.7	3683.0	3672.0	3686.7	3672.0	3657.3	3664.7	3650.0
10°	3918.0	3870.3	3789.5	3763.8	3763.8	3760.1	3774.8	3752.8	3738.1	3741.8	3734.4
12.5°	4057.6	3995.1	3907.0	3885.0	3874.0	3885.0	3888.6	3859.3	3833.6	3837.2	3826.2
15°	4226.5	4156.7	4061.2	4028.2	4020.8	4017.2	4002.5	3965.8	3932.7	3929.0	3918.0
17.5°	4410.1	4321.9	4208.1	4175.1	4142.0	4131.0	4094.3	4046.5	3995.1	3995.1	3980.4
20°	4586.3	4487.2	4351.3	4303.6	4255.8	4211.8	4149.4	4072.2	4006.2	3995.1	3980.4
22.5°	4777.3	4659.8	4501.9	4432.1	4347.6	4259.5	4153.0	4050.2	3965.8	3947.4	3936.4
25°	4990.2	4843.4	4656.1	4553.3	4417.4	4281.6	4123.7	3991.5	3892.3	3862.9	3855.6
27.5°	5225.3	5049.0	4821.3	4670.8	4472.5	4259.5	4057.6	3899.7	3778.5	3741.8	3730.8
30°	5463.9	5254.6	4971.9	4751.6	4472.5	4189.8	3936.4	3752.8	3613.2	3561.8	3554.5
32.5°	5702.6	5467.6	5107.8	4795.6	4428.4	4072.2	3778.5	3561.8	3403.9	3341.5	3356.2
35°	5989.0	5702.6	5232.6	4814.0	4355.0	3929.0	3598.6	3345.2	3183.6	3128.5	3139.6
37.5°	6286.5	5937.6	5331.7	4799.3	4252.2	3767.5	3396.6	3150.6	2948.6	2853.1	2864.2
40°	6543.5	6150.6	5401.5	4747.9	4120.0	3583.9	3198.3	2875.2	2596.1	2504.3	2493.3
42.5°	6785.9	6308.5	5438.2	4670.8	3969.4	3370.9	2915.6	2500.6	2221.6	2107.7	2111.4
45°	7039.2	6462.7	5423.5	4568.0	3782.2	3121.2	2552.0	2133.4	1887.4	1784.6	1788.3
47.5°	7329.3	6628.0	5408.9	4457.8	3554.5	2798.1	2203.2	1810.3	1597.3	1523.9	1516.5
50°	7637.8	6811.6	5390.5	4321.9	3301.1	2438.2	1858.0	1509.2	1329.3	1281.5	1270.5
52.5°	7986.6	7009.8	5379.5	4160.4	2996.4	2056.3	1549.6	1244.8	1123.6	1090.6	1086.9
55°	8405.2	7241.2	5394.2	3965.8	2629.2	1696.5	1288.9	1072.2	991.4	973.1	969.4
57.5°	8915.6	7538.6	5438.2	3738.1	2243.6	1384.3	1097.9	965.7	914.3	899.6	899.6
60°	9470.1	7876.4	5519.0	3481.1	1858.0	1142.0	973.1	881.3	859.2	877.6	877.6
62.5°	10068.6	8273.0	5662.2	3168.9	1498.2	965.7	873.9	811.5	796.8	833.5	837.2
65°	10623.1	8658.6	5754.0	2794.4	1189.7	837.2	796.8	741.7	749.1	785.8	782.1
67.5°	10964.6	8978.0	5625.5	2324.4	943.7	741.7	716.0	668.3	686.7	716.0	719.7
70°	10755.3	8798.1	4990.2	1755.2	738.1	646.3	627.9	598.5	613.2	649.9	664.6
72.5°	9730.8	7880.1	3881.3	1186.1	594.9	543.5	550.8	536.1	554.5	587.5	620.6
75°	7898.5	5956.0	2603.4	760.1	470.0	462.7	473.7	462.7	470.0	503.1	521.4
77.5°	4123.7	2904.6	1296.2	473.7	348.8	359.9	378.2	381.9	403.9	411.3	418.6
80°	1924.1	1307.2	539.8	264.4	231.3	253.4	290.1	293.8	301.1	312.1	315.8
82.5°	627.9	392.9	249.7	143.2	132.2	143.2	187.3	224.0	227.7	249.7	249.7
85°	66.1	40.4	55.1	58.8	51.4	62.4	84.5	80.8	36.7	22.0	22.0
87.5°	18.4	14.7	18.4	18.4	14.7	14.7	11.0	3.7	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)