

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: P836402

Luminaire Tested: **ARCH3-180-730-U-T4W-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836402
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-180-730-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1375mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16326 lumens
Efficiency: N/A
Efficacy: 90.4 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

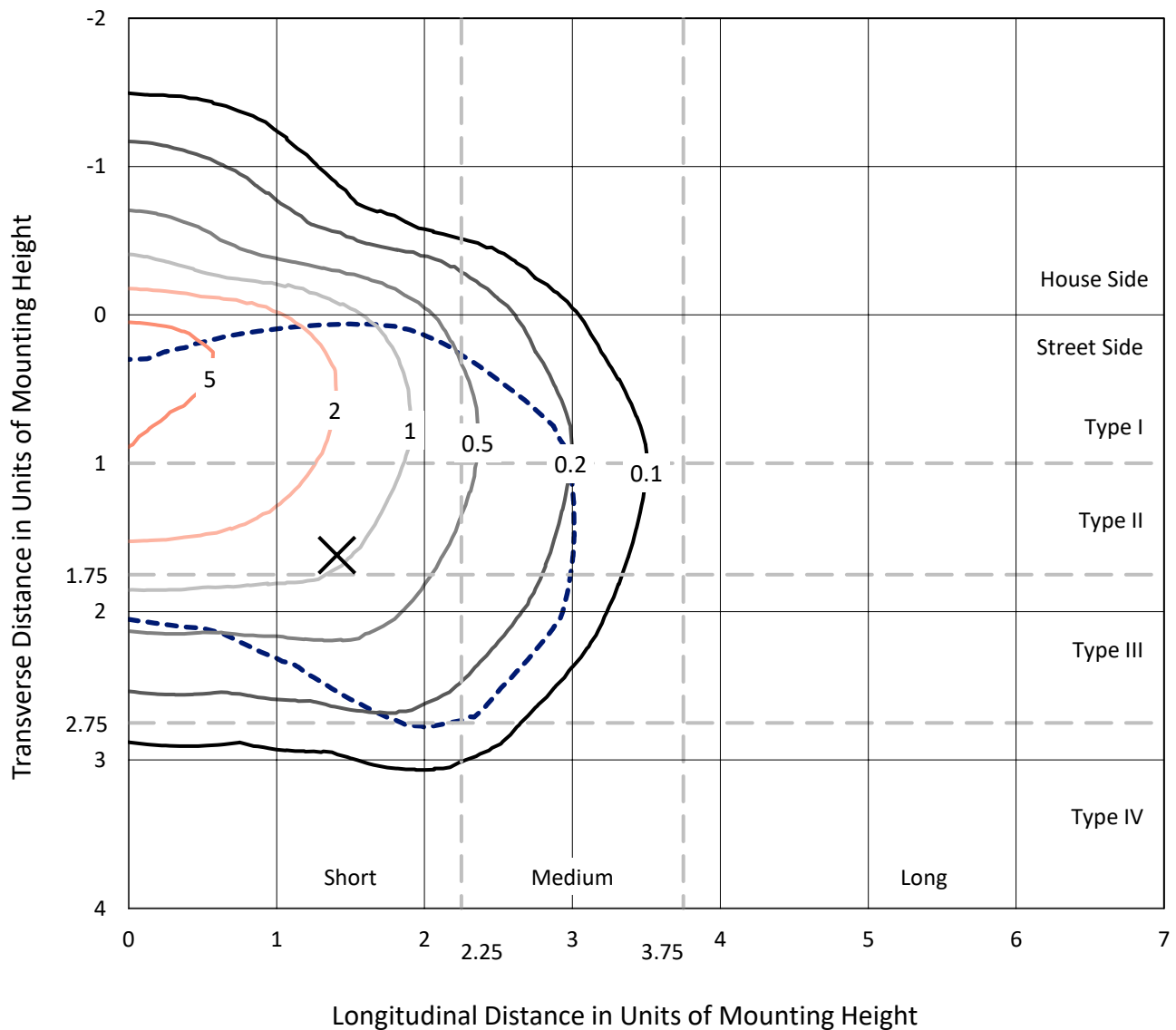
Input Watts (W): 180.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

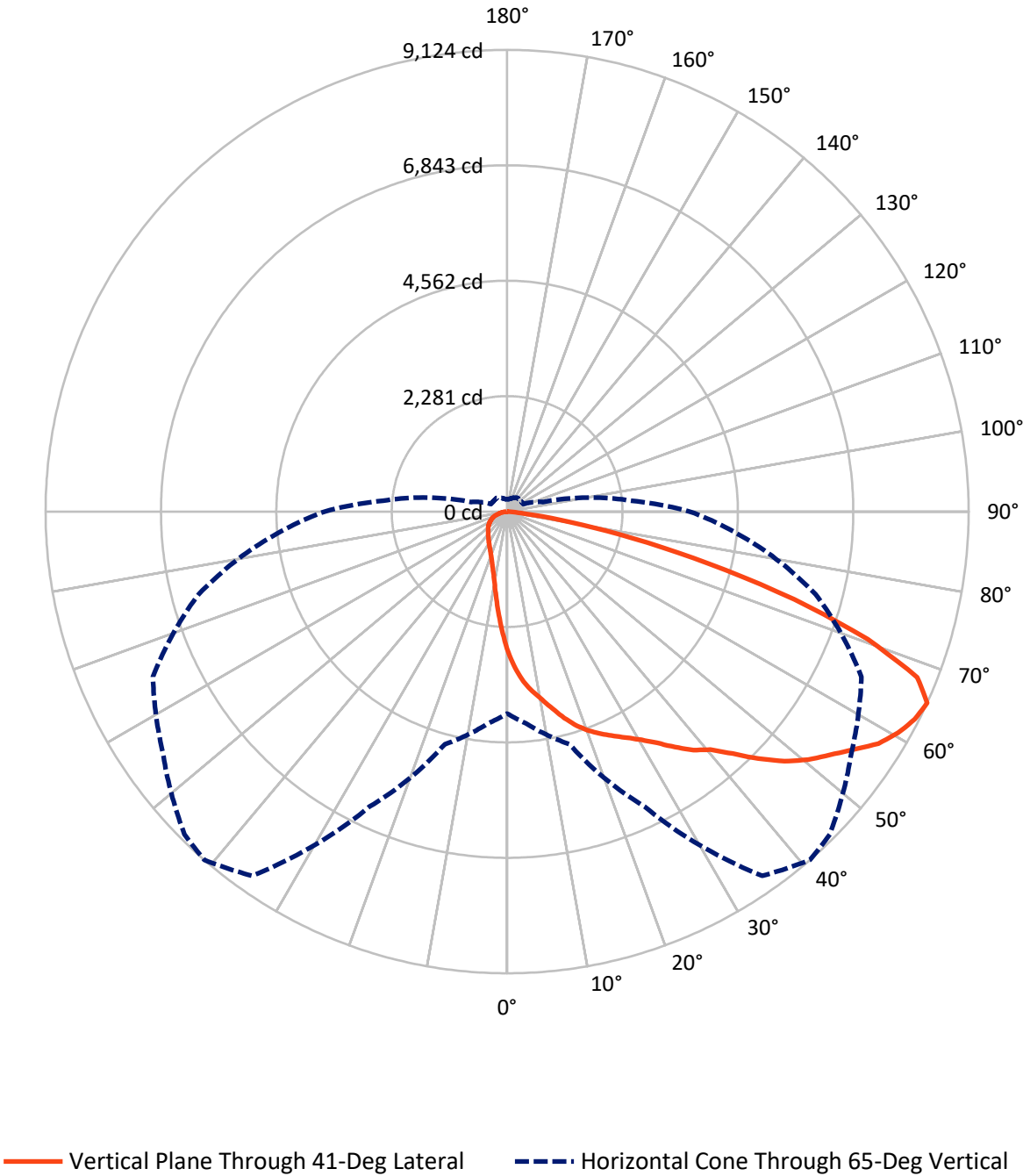
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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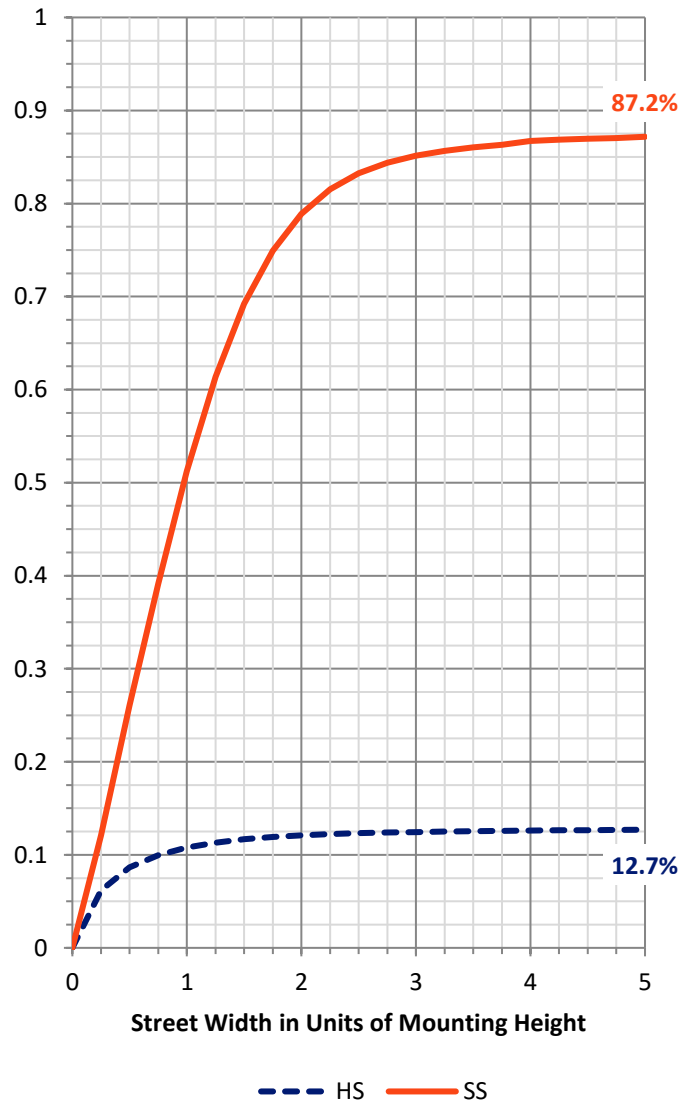
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2096.0	0.0	2096.0
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	14230.0	0.0	14230.0
	% Fixture	87.2	0.0	87.2
Total	Lumens	16326.0	0.0	16326.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	259.2	1.6
10°-20°	777.2	4.8
20°-30°	1337.1	8.2
30°-40°	2027.9	12.4
40°-50°	2971.0	18.2
50°-60°	3751.7	23.0
60°-70°	3517.9	21.5
70°-80°	1567.9	9.6
80°-90°	116.1	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°	16326.0	100.0
0°-180°	16326.0	100.0

Coefficient of Utilization



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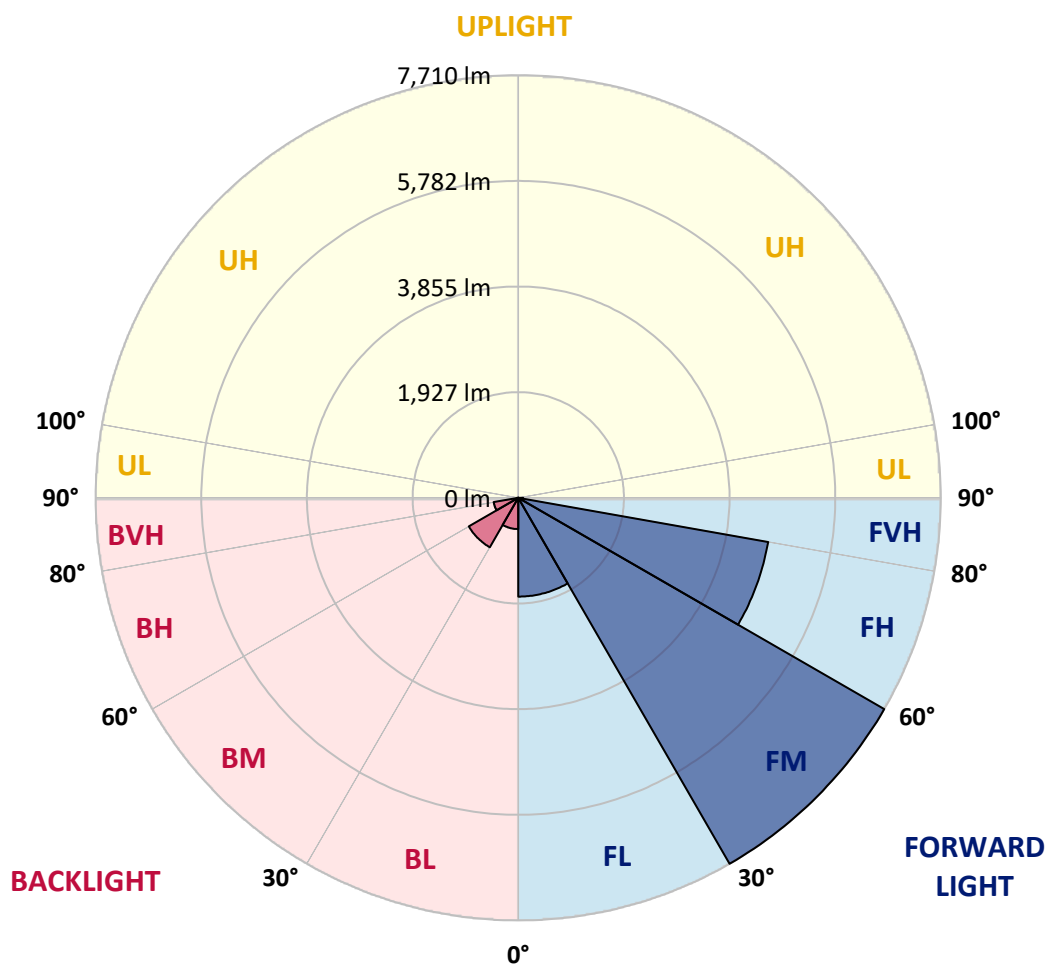
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1803.0	11.0			
FM	(30°-60°)	7709.8	47.2			
FH	(60°-80°)	4630.5	28.4			G2/5000
FVH	(80°-90°)	86.7	0.5			G1/100
BL	(0°-30°)	570.5	3.5	B2/1000		
BM	(30°-60°)	1040.8	6.4	B2/2500		
BH	(60°-80°)	455.3	2.8	B1/500		G1/500
BVH	(80°-90°)	29.4	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-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	2781.9	2781.9	2781.9	2781.9	2781.9	2781.9	2781.9	2781.9	2781.9	2781.9	2781.9
2.5°	3208.8	3198.5	3191.6	3153.7	3153.7	3102.1	3105.5	3057.3	2998.8	2905.8	2806.0
5°	3511.8	3498.0	3480.8	3442.9	3429.1	3377.5	3370.6	3301.7	3201.9	3040.1	2861.1
7.5°	3776.9	3763.1	3739.0	3683.9	3646.0	3584.1	3566.8	3477.3	3367.2	3167.5	2916.1
10°	4017.9	4007.5	3976.6	3907.7	3856.1	3780.3	3749.3	3628.8	3491.1	3270.8	2960.9
12.5°	4262.3	4248.5	4207.2	4148.7	4086.7	3997.2	3959.3	3804.4	3628.8	3384.4	3026.3
15°	4489.5	4468.9	4437.9	4375.9	4320.8	4234.8	4193.5	4011.0	3797.5	3511.8	3112.4
17.5°	4637.6	4620.4	4592.8	4558.4	4513.6	4448.2	4406.9	4227.9	3966.2	3635.7	3201.9
20°	4727.1	4720.2	4709.9	4689.2	4668.6	4623.8	4592.8	4424.1	4148.7	3756.2	3288.0
22.5°	4796.0	4789.1	4785.6	4785.6	4789.1	4771.9	4751.2	4606.6	4324.3	3883.6	3367.2
25°	4902.7	4899.2	4892.4	4885.5	4909.6	4913.0	4906.1	4806.3	4544.6	4052.3	3467.0
27.5°	5050.7	5040.4	5026.6	5019.8	5043.9	5061.1	5074.8	5006.0	4778.7	4224.4	3580.6
30°	5278.0	5247.0	5212.6	5188.5	5205.7	5233.2	5264.2	5222.9	5019.8	4437.9	3697.7
32.5°	5546.5	5508.6	5429.5	5384.7	5429.5	5450.1	5474.2	5453.6	5271.1	4668.6	3814.7
35°	5873.6	5828.8	5746.2	5680.8	5760.0	5715.2	5704.9	5684.2	5508.6	4895.8	3945.6
37.5°	6417.6	6352.2	6221.3	6076.7	6076.7	5980.3	5942.4	5880.5	5722.1	5098.9	4073.0
40°	7047.6	6961.5	6792.8	6579.4	6383.1	6183.5	6159.4	6114.6	5973.4	5333.1	4217.6
42.5°	7739.6	7574.4	7340.3	7082.1	6765.3	6538.1	6483.0	6355.6	6217.9	5570.6	4362.2
45°	8507.4	8163.1	7822.3	7691.4	7168.1	6961.5	6858.3	6627.6	6472.7	5818.5	4513.6
47.5°	8631.4	8362.8	8135.6	8114.9	7543.4	7371.3	7254.2	6923.7	6748.1	6083.6	4672.0
50°	8562.5	8400.7	8424.8	8342.2	7818.8	7705.2	7615.7	7240.4	7020.1	6338.4	4816.6
52.5°	8273.3	8362.8	8500.5	8349.0	8080.5	7987.5	7942.8	7581.3	7274.9	6572.5	4947.5
55°	7929.0	7991.0	8287.1	8473.0	8383.5	8300.8	8259.5	7977.2	7526.2	6768.7	5068.0
57.5°	7426.3	7398.8	7725.9	8452.3	8700.2	8652.0	8607.3	8366.3	7760.3	6909.9	5143.7
60°	6672.3	6613.8	7027.0	8039.2	8803.5	8879.2	8858.6	8624.5	7939.3	6906.5	5112.7
62.5°	5367.5	5512.1	6083.6	7364.4	8848.3	9041.1	9003.2	8645.1	7997.9	6706.8	4916.5
65°	3990.3	4196.9	4758.1	6434.8	8786.3	9123.7	9020.4	8307.7	7725.9	6310.8	4486.1
67.5°	2874.8	3057.3	3467.0	5295.2	8190.7	8745.0	8624.5	7756.9	7099.3	5749.6	3890.5
70°	1965.9	2096.7	2375.6	3856.1	6992.5	7560.6	7484.9	6934.0	6111.2	5081.7	3160.6
72.5°	1387.5	1442.6	1621.6	2544.3	5312.4	5932.1	5842.6	5704.9	4909.6	4224.4	2458.2
75°	1039.8	1074.2	1170.6	1645.7	3584.1	4110.8	4028.2	4107.4	3666.7	3198.5	1790.3
77.5°	392.5	426.9	664.5	1050.1	2120.8	2523.6	2441.0	2489.2	2038.2	1614.7	891.7
80°	106.7	113.6	220.3	499.2	964.0	1256.7	1143.0	981.2	757.4	743.7	471.7
82.5°	44.8	51.6	99.8	268.5	344.3	344.3	289.2	358.1	289.2	347.7	227.2
85°	17.2	20.7	24.1	68.9	44.8	48.2	51.6	68.9	58.5	72.3	51.6
87.5°	0.0	0.0	0.0	3.4	3.4	6.9	3.4	6.9	10.3	10.3	10.3
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°	2781.9	2781.9	2781.9	2781.9	2781.9	2781.9	2781.9	2781.9	2781.9	2781.9	2781.9
2.5°	2764.7	2726.8	2671.7	2582.2	2489.2	2437.6	2372.2	2361.8	2293.0	2286.1	2258.5
5°	2781.9	2702.7	2561.5	2389.4	2220.7	2089.8	1993.4	1941.8	1842.0	1842.0	1814.4
7.5°	2795.6	2671.7	2444.5	2189.7	1959.0	1783.4	1652.6	1597.5	1508.0	1501.1	1480.4
10°	2799.1	2633.8	2317.1	1986.6	1704.2	1525.2	1397.8	1335.8	1256.7	1249.8	1236.0
12.5°	2826.6	2613.2	2203.5	1811.0	1521.8	1329.0	1205.0	1153.4	1091.4	1084.5	1070.7
15°	2871.4	2613.2	2107.1	1662.9	1359.9	1180.9	1074.2	1026.0	981.2	974.3	967.5
17.5°	2916.1	2606.3	2010.7	1525.2	1225.7	1063.9	970.9	933.0	898.6	895.2	888.3
20°	2957.5	2602.8	1914.3	1408.1	1122.4	967.5	895.2	860.7	833.2	833.2	829.7
22.5°	2998.8	2595.9	1821.3	1298.0	1032.9	895.2	833.2	795.3	774.7	774.7	771.2
25°	3060.7	2595.9	1735.2	1205.0	960.6	840.1	778.1	750.6	733.3	729.9	729.9
27.5°	3133.0	2616.6	1659.5	1122.4	898.6	785.0	736.8	709.2	688.6	681.7	685.1
30°	3212.2	2633.8	1590.6	1050.1	840.1	743.7	692.0	664.5	643.8	636.9	640.4
32.5°	3291.4	2654.5	1528.6	984.7	781.5	705.8	654.2	623.2	602.5	599.1	599.1
35°	3377.5	2675.1	1466.7	929.6	733.3	667.9	619.7	585.3	571.5	564.6	568.1
37.5°	3463.6	2709.6	1408.1	877.9	698.9	633.5	588.7	554.3	544.0	540.5	540.5
40°	3566.8	2761.2	1384.0	843.5	667.9	602.5	564.6	530.2	519.9	519.9	519.9
42.5°	3652.9	2802.5	1363.4	805.6	643.8	575.0	540.5	513.0	506.1	502.7	506.1
45°	3739.0	2840.4	1335.8	771.2	612.8	547.4	519.9	492.3	485.4	485.4	485.4
47.5°	3825.1	2861.1	1298.0	736.8	585.3	523.3	499.2	475.1	468.2	468.2	468.2
50°	3893.9	2878.3	1242.9	698.9	554.3	502.7	478.6	454.5	447.6	447.6	447.6
52.5°	3962.8	2881.7	1184.4	654.2	523.3	478.6	457.9	433.8	426.9	423.5	423.5
55°	4024.8	2878.3	1115.5	602.5	488.9	451.0	433.8	413.1	399.4	385.6	392.5
57.5°	4069.5	2874.8	1036.3	550.9	454.5	423.5	416.6	389.0	361.5	327.1	334.0
60°	4052.3	2837.0	950.2	485.4	416.6	395.9	395.9	358.1	309.9	292.6	296.1
62.5°	3942.1	2730.2	860.7	416.6	378.7	368.4	364.9	323.6	285.8	268.5	272.0
65°	3611.6	2461.7	729.9	354.6	340.8	337.4	337.4	299.5	265.1	244.4	247.9
67.5°	3108.9	2065.7	595.6	299.5	303.0	309.9	309.9	275.4	241.0	220.3	223.8
70°	2492.7	1614.7	475.1	258.2	261.7	272.0	278.9	247.9	216.9	196.2	196.2
72.5°	1876.4	1225.7	382.2	216.9	234.1	234.1	244.4	220.3	189.4	168.7	172.1
75°	1359.9	877.9	303.0	182.5	203.1	199.7	199.7	185.9	161.8	148.0	148.0
77.5°	643.8	461.3	241.0	130.8	158.4	154.9	158.4	148.0	137.7	123.9	127.4
80°	316.7	227.2	154.9	93.0	110.2	113.6	123.9	117.1	113.6	103.3	103.3
82.5°	151.5	89.5	72.3	65.4	75.7	79.2	86.1	86.1	89.5	82.6	82.6
85°	41.3	24.1	31.0	41.3	48.2	51.6	58.5	62.0	62.0	58.5	62.0
87.5°	10.3	10.3	13.8	20.7	24.1	27.5	31.0	31.0	13.8	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)