

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: P841187

Luminaire Tested: **ARCH4-140-740-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841187
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-140-740-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1155mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16949 lumens
Efficiency: N/A
Efficacy: 120.0 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

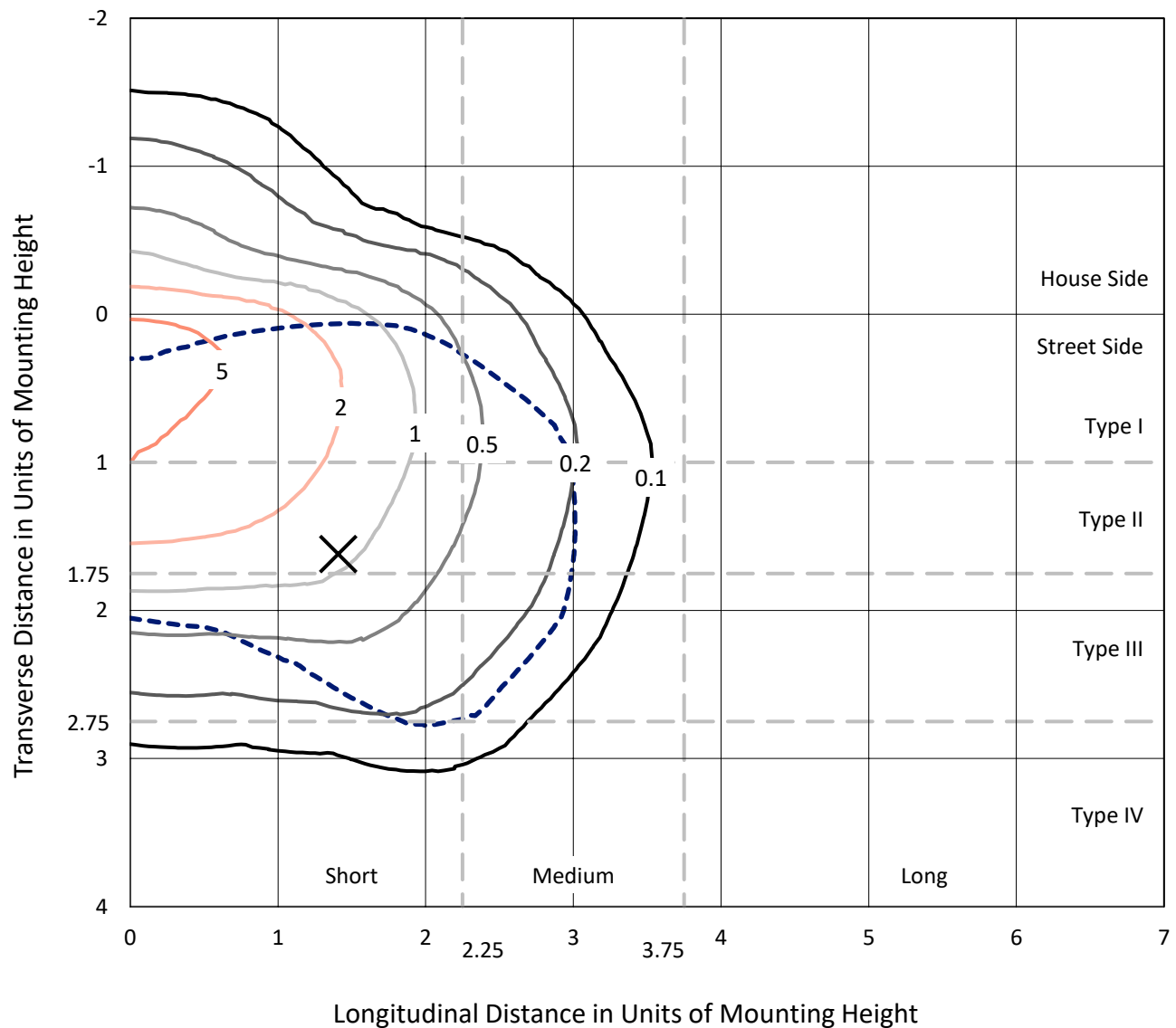
Input Watts (W): 141.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

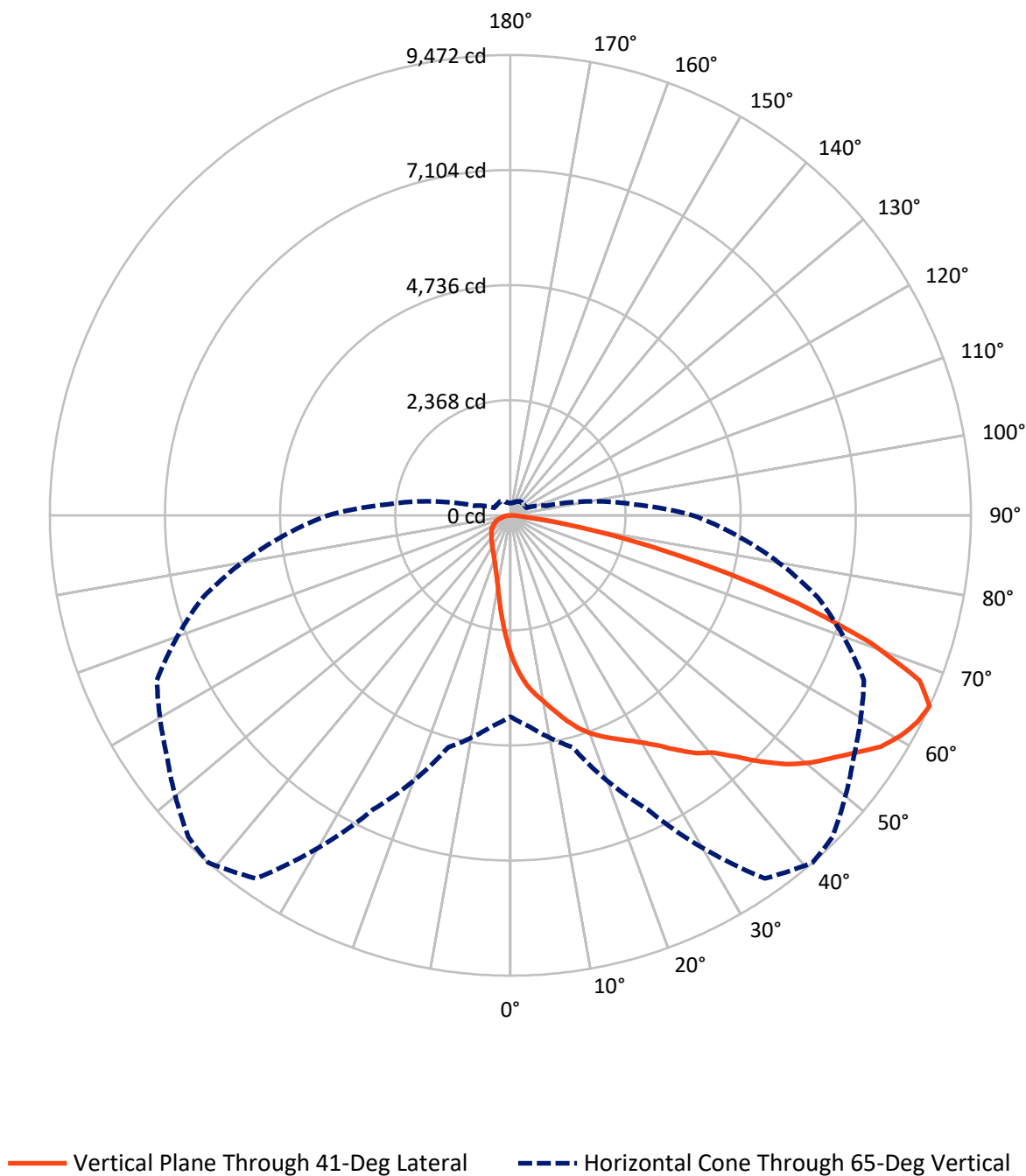
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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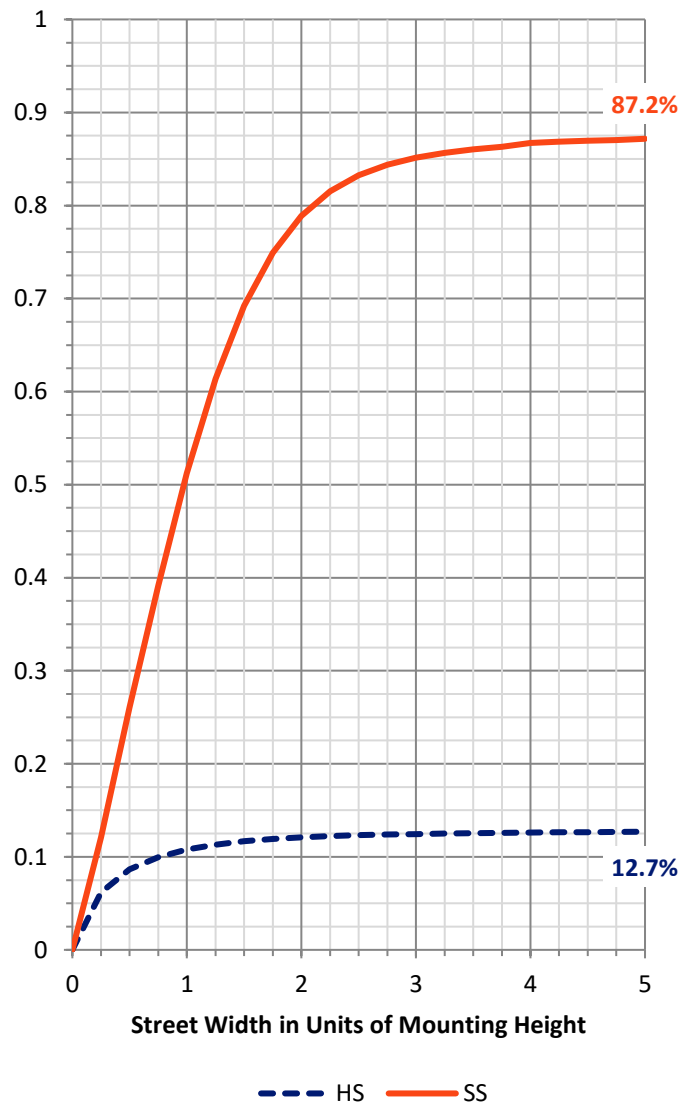
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2176.0	0.0	2176.0
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	14773.0	0.0	14773.0
	% Fixture	87.2	0.0	87.2
Total	Lumens	16949.0	0.0	16949.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.1	1.6
10°-20°	806.9	4.8
20°-30°	1388.1	8.2
30°-40°	2105.3	12.4
40°-50°	3084.3	18.2
50°-60°	3894.8	23.0
60°-70°	3652.1	21.5
70°-80°	1627.7	9.6
80°-90°	120.6	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°	16949.0	100.0
0°-180°	16949.0	100.0

Coefficient of Utilization



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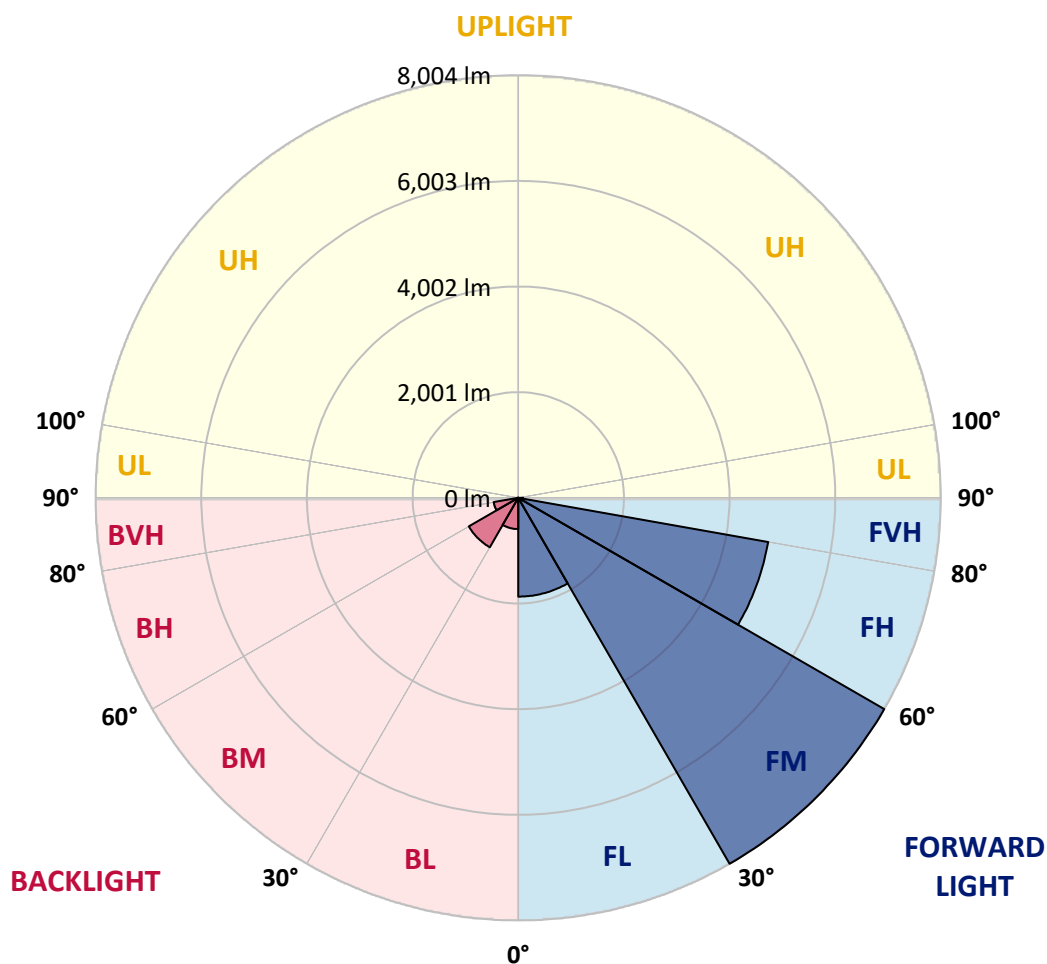
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1871.8	11.0			
FM	(30°-60°)	8004.0	47.2			
FH	(60°-80°)	4807.2	28.4			G2/5000
FVH	(80°-90°)	90.1	0.5			G1/100
BL	(0°-30°)	592.3	3.5	B2/1000		
BM	(30°-60°)	1080.5	6.4	B2/2500		
BH	(60°-80°)	472.7	2.8	B1/500		G1/500
BVH	(80°-90°)	30.5	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°	2888.0	2888.0	2888.0	2888.0	2888.0	2888.0	2888.0	2888.0	2888.0	2888.0	2888.0
2.5°	3331.2	3320.5	3313.4	3274.0	3274.0	3220.4	3224.0	3174.0	3113.2	3016.7	2913.0
5°	3645.8	3631.5	3613.6	3574.3	3560.0	3506.4	3499.2	3427.7	3324.1	3156.1	2970.2
7.5°	3921.0	3906.7	3881.7	3824.5	3785.2	3720.8	3703.0	3610.0	3495.6	3288.3	3027.4
10°	4171.2	4160.5	4128.3	4056.8	4003.2	3924.6	3892.4	3767.3	3624.3	3395.6	3073.9
12.5°	4425.0	4410.7	4367.8	4307.0	4242.7	4149.7	4110.4	3949.6	3767.3	3513.5	3141.8
15°	4660.9	4639.4	4607.3	4542.9	4485.7	4396.4	4353.5	4164.0	3942.4	3645.8	3231.2
17.5°	4814.6	4796.7	4768.1	4732.4	4685.9	4618.0	4575.1	4389.2	4117.6	3774.4	3324.1
20°	4907.5	4900.3	4889.6	4868.2	4846.7	4800.3	4768.1	4593.0	4307.0	3899.5	3413.4
22.5°	4979.0	4971.8	4968.3	4968.3	4971.8	4954.0	4932.5	4782.4	4489.3	4031.8	3495.6
25°	5089.8	5086.2	5079.1	5071.9	5096.9	5100.5	5093.4	4989.7	4718.1	4206.9	3599.3
27.5°	5243.5	5232.8	5218.5	5211.3	5236.3	5254.2	5268.5	5197.0	4961.1	4385.6	3717.3
30°	5479.4	5447.2	5411.5	5386.4	5404.3	5432.9	5465.1	5422.2	5211.3	4607.3	3838.8
32.5°	5758.2	5718.9	5636.6	5590.2	5636.6	5658.1	5683.1	5661.7	5472.2	4846.7	3960.3
35°	6097.7	6051.3	5965.5	5897.6	5979.8	5933.3	5922.6	5901.1	5718.9	5082.6	4096.1
37.5°	6662.5	6594.6	6458.7	6308.6	6308.6	6208.5	6169.2	6104.9	5940.5	5293.5	4228.4
40°	7316.6	7227.2	7052.1	6830.5	6626.7	6419.4	6394.4	6347.9	6201.4	5536.6	4378.5
42.5°	8035.0	7863.4	7620.4	7352.3	7023.5	6787.6	6730.4	6598.1	6455.2	5783.2	4528.6
45°	8832.1	8474.6	8120.8	7984.9	7441.7	7227.2	7120.0	6880.5	6719.7	6040.5	4685.9
47.5°	8960.7	8681.9	8446.0	8424.6	7831.3	7652.5	7531.0	7187.9	7005.6	6315.8	4850.3
50°	8889.2	8721.3	8746.3	8660.5	8117.2	7999.2	7906.3	7516.7	7288.0	6580.3	5000.4
52.5°	8589.0	8681.9	8824.9	8667.6	8388.8	8292.3	8245.9	7870.6	7552.5	6823.3	5136.2
55°	8231.6	8295.9	8603.3	8796.3	8703.4	8617.6	8574.7	8281.6	7813.4	7027.0	5261.3
57.5°	7709.7	7681.1	8020.7	8774.9	9032.2	8982.2	8935.7	8685.5	8056.4	7173.6	5340.0
60°	6927.0	6866.2	7295.1	8346.0	9139.4	9218.1	9196.6	8953.6	8242.3	7170.0	5307.8
62.5°	5572.3	5722.4	6315.8	7645.4	9185.9	9386.1	9346.8	8975.0	8303.1	6962.7	5104.1
65°	4142.6	4357.1	4939.7	6680.3	9121.6	9471.9	9364.6	8624.7	8020.7	6551.7	4657.3
67.5°	2984.5	3174.0	3599.3	5497.2	8503.2	9078.7	8953.6	8052.9	7370.2	5969.1	4038.9
70°	2040.9	2176.7	2466.3	4003.2	7259.4	7849.1	7770.5	7198.6	6344.4	5275.6	3281.2
72.5°	1440.4	1497.6	1683.5	2641.4	5515.1	6158.5	6065.6	5922.6	5096.9	4385.6	2552.0
75°	1079.4	1115.2	1215.3	1708.5	3720.8	4267.7	4181.9	4264.1	3806.6	3320.5	1858.6
77.5°	407.5	443.2	689.8	1090.2	2201.8	2619.9	2534.2	2584.2	2116.0	1676.3	925.7
80°	110.8	118.0	228.8	518.3	1000.8	1304.6	1186.7	1018.7	786.3	772.0	489.7
82.5°	46.5	53.6	103.7	278.8	357.4	357.4	300.2	371.7	300.2	361.0	235.9
85°	17.9	21.4	25.0	71.5	46.5	50.0	53.6	71.5	60.8	75.1	53.6
87.5°	0.0	0.0	0.0	3.6	3.6	7.1	3.6	7.1	10.7	10.7	10.7
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°	2888.0	2888.0	2888.0	2888.0	2888.0	2888.0	2888.0	2888.0	2888.0	2888.0	2888.0
2.5°	2870.1	2830.8	2773.6	2680.7	2584.2	2530.6	2462.7	2452.0	2380.5	2373.3	2344.7
5°	2888.0	2805.8	2659.3	2480.6	2305.4	2169.6	2069.5	2015.9	1912.2	1912.2	1883.6
7.5°	2902.3	2773.6	2537.7	2273.2	2033.8	1851.5	1715.7	1658.5	1565.5	1558.4	1536.9
10°	2905.9	2734.3	2405.5	2062.4	1769.3	1583.4	1451.2	1386.8	1304.6	1297.5	1283.2
12.5°	2934.5	2712.9	2287.5	1880.1	1579.8	1379.7	1251.0	1197.4	1133.0	1125.9	1111.6
15°	2981.0	2712.9	2187.5	1726.4	1411.8	1226.0	1115.2	1065.1	1018.7	1011.5	1004.4
17.5°	3027.4	2705.7	2087.4	1583.4	1272.4	1104.5	1007.9	968.6	932.9	929.3	922.2
20°	3070.3	2702.2	1987.3	1461.9	1165.2	1004.4	929.3	893.6	865.0	865.0	861.4
22.5°	3113.2	2695.0	1890.8	1347.5	1072.3	929.3	865.0	825.7	804.2	804.2	800.6
25°	3177.5	2695.0	1801.4	1251.0	997.2	872.1	807.8	779.2	761.3	757.7	757.7
27.5°	3252.6	2716.5	1722.8	1165.2	932.9	814.9	764.9	736.3	714.9	707.7	711.3
30°	3334.8	2734.3	1651.3	1090.2	872.1	772.0	718.4	689.8	668.4	661.2	664.8
32.5°	3417.0	2755.8	1587.0	1022.2	811.4	732.7	679.1	646.9	625.5	621.9	621.9
35°	3506.4	2777.2	1522.6	965.1	761.3	693.4	643.4	607.6	593.3	586.2	589.8
37.5°	3595.7	2813.0	1461.9	911.4	725.6	657.7	611.2	575.5	564.7	561.2	561.2
40°	3703.0	2866.6	1436.9	875.7	693.4	625.5	586.2	550.4	539.7	539.7	539.7
42.5°	3792.3	2909.5	1415.4	836.4	668.4	596.9	561.2	532.6	525.4	521.8	525.4
45°	3881.7	2948.8	1386.8	800.6	636.2	568.3	539.7	511.1	504.0	504.0	504.0
47.5°	3971.0	2970.2	1347.5	764.9	607.6	543.3	518.3	493.3	486.1	486.1	486.1
50°	4042.5	2988.1	1290.3	725.6	575.5	521.8	496.8	471.8	464.7	464.7	464.7
52.5°	4114.0	2991.7	1229.6	679.1	543.3	496.8	475.4	450.4	443.2	439.6	439.6
55°	4178.3	2988.1	1158.1	625.5	507.5	468.2	450.4	428.9	414.6	400.3	407.5
57.5°	4224.8	2984.5	1075.9	571.9	471.8	439.6	432.5	403.9	375.3	339.6	346.7
60°	4206.9	2945.2	986.5	504.0	432.5	411.0	411.0	371.7	321.7	303.8	307.4
62.5°	4092.6	2834.4	893.6	432.5	393.2	382.4	378.9	336.0	296.7	278.8	282.4
65°	3749.4	2555.6	757.7	368.2	353.9	350.3	350.3	311.0	275.2	253.8	257.3
67.5°	3227.6	2144.6	618.4	311.0	314.5	321.7	321.7	285.9	250.2	228.8	232.3
70°	2587.8	1676.3	493.3	268.1	271.6	282.4	289.5	257.3	225.2	203.7	203.7
72.5°	1948.0	1272.4	396.7	225.2	243.1	243.1	253.8	228.8	196.6	175.1	178.7
75°	1411.8	911.4	314.5	189.4	210.9	207.3	207.3	193.0	168.0	153.7	153.7
77.5°	668.4	479.0	250.2	135.8	164.4	160.8	164.4	153.7	143.0	128.7	132.2
80°	328.8	235.9	160.8	96.5	114.4	118.0	128.7	121.5	118.0	107.2	107.2
82.5°	157.3	92.9	75.1	67.9	78.6	82.2	89.4	89.4	92.9	85.8	85.8
85°	42.9	25.0	32.2	42.9	50.0	53.6	60.8	64.3	64.3	60.8	64.3
87.5°	10.7	10.7	14.3	21.4	25.0	28.6	32.2	32.2	14.3	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)