

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: P842123

Luminaire Tested: **ARCH4-270-740-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842123
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: ARCH4-270-740-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1045mA 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: 27901 lumens
Efficiency: N/A
Efficacy: 103.7 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G4

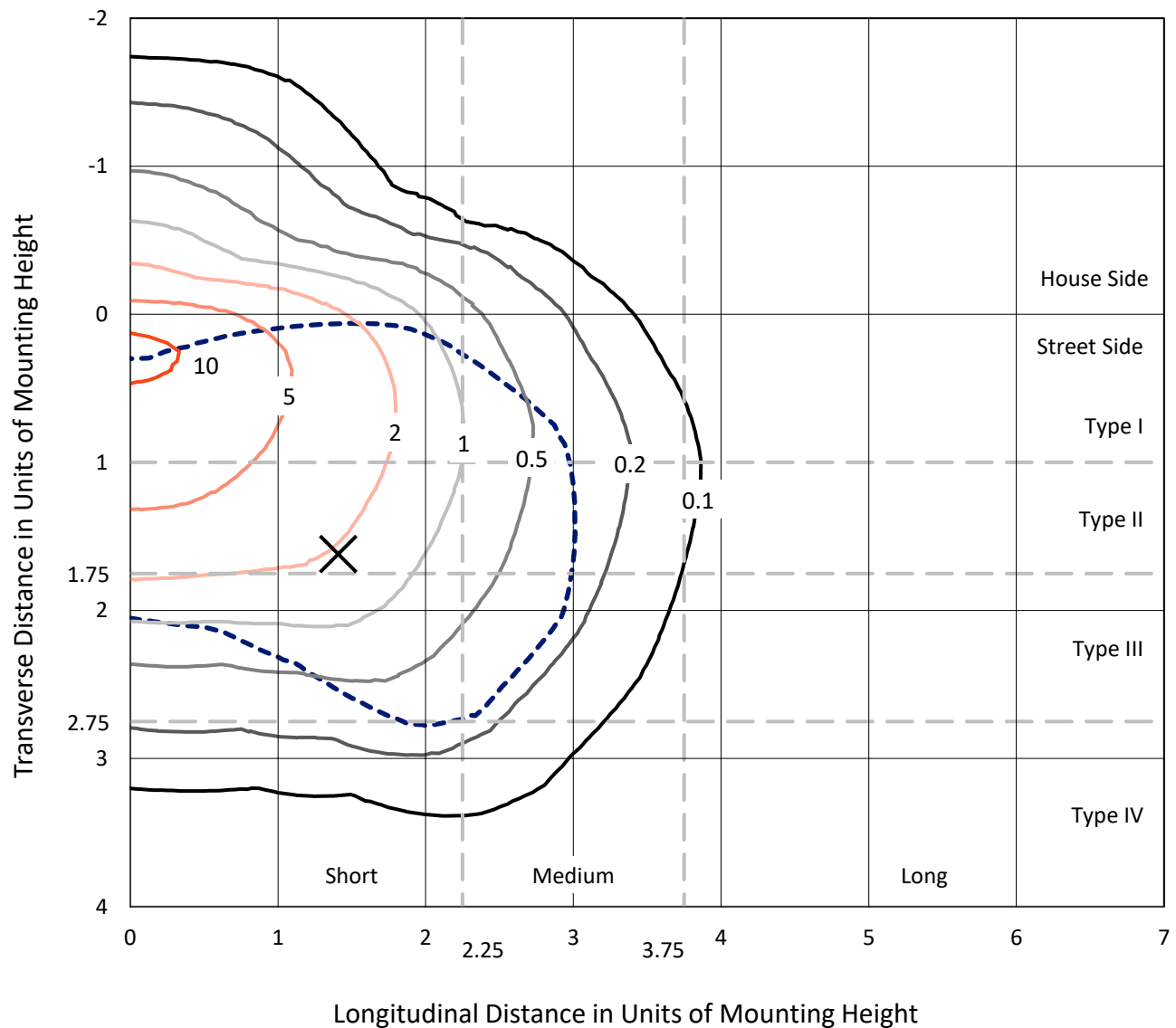
Input Watts (W): 269
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

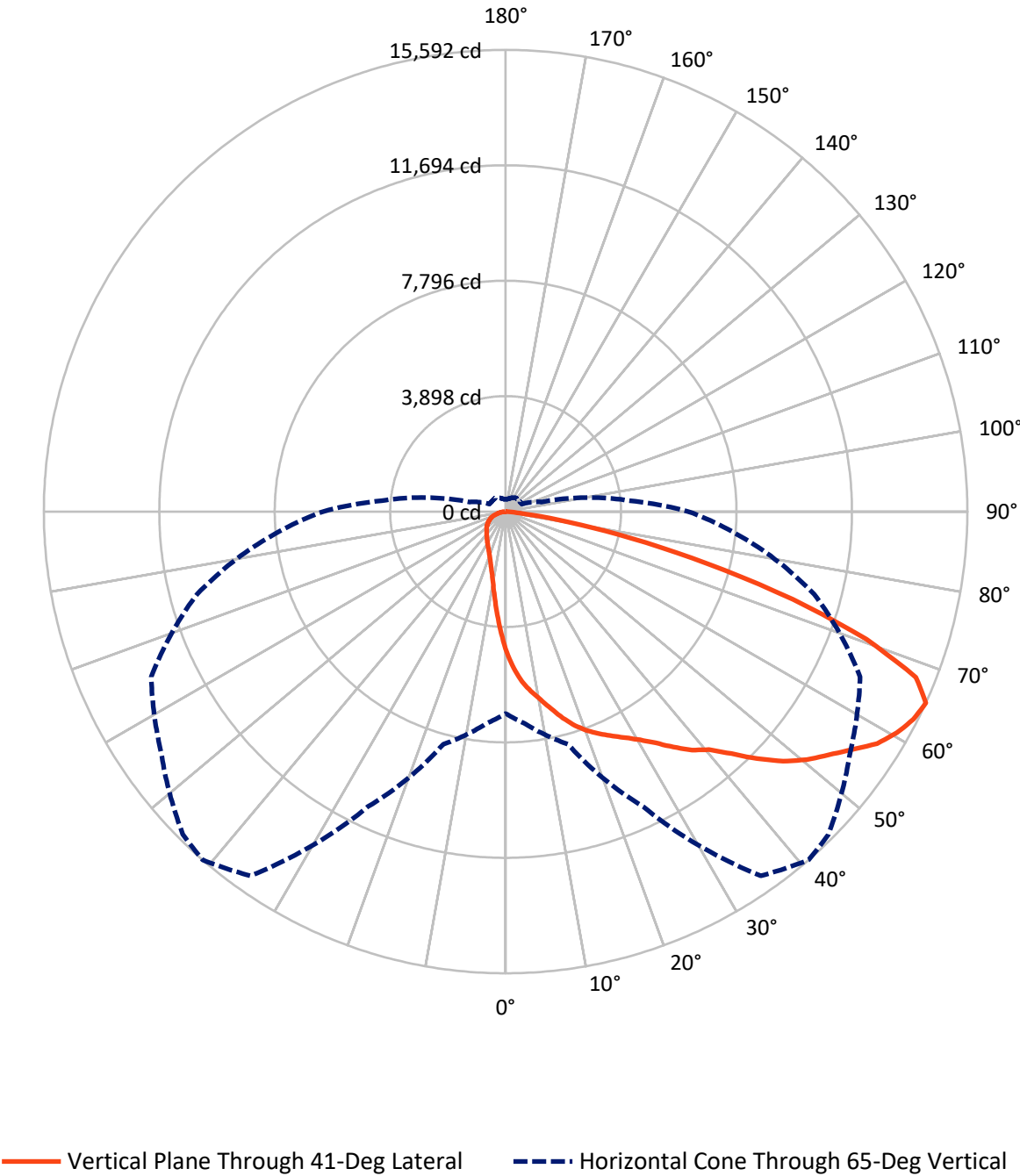
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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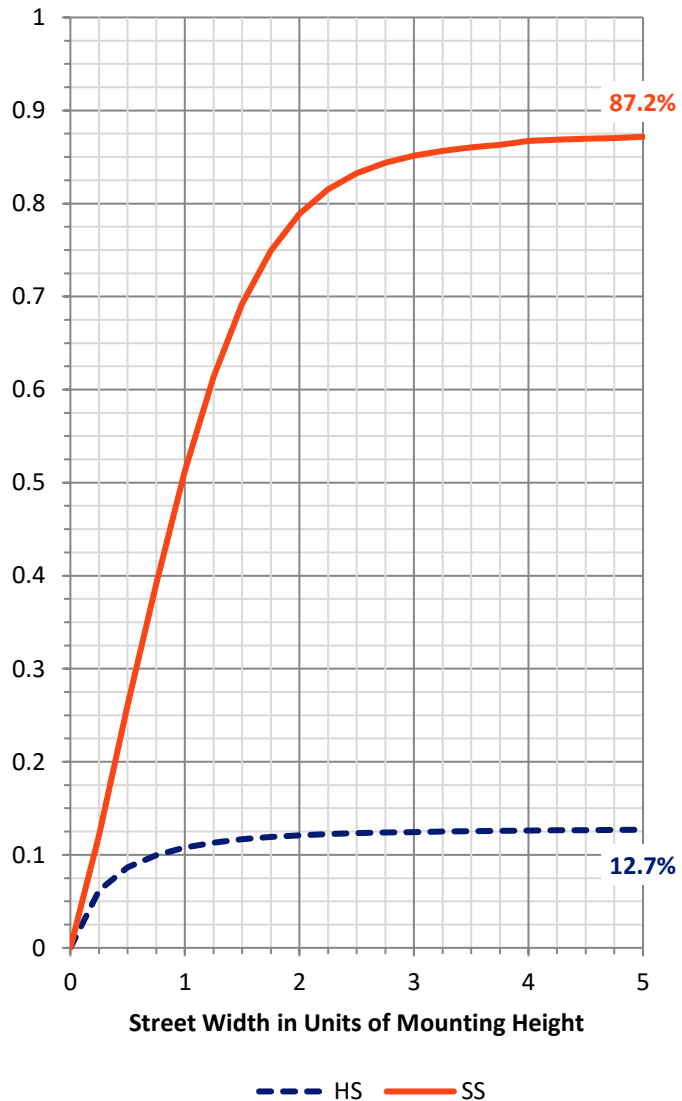
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3582.1	0.0	3582.1
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	24318.9	0.0	24318.9
	% Fixture	87.2	0.0	87.2
Total	Lumens	27901.0	0.0	27901.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	443.0	1.6
10°-20°	1328.3	4.8
20°-30°	2285.1	8.2
30°-40°	3465.7	12.4
40°-50°	5077.3	18.2
50°-60°	6411.6	23.0
60°-70°	6012.0	21.5
70°-80°	2679.5	9.6
80°-90°	198.5	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°	27901.0	100.0
0°-180°	27901.0	100.0

Coefficient of Utilization



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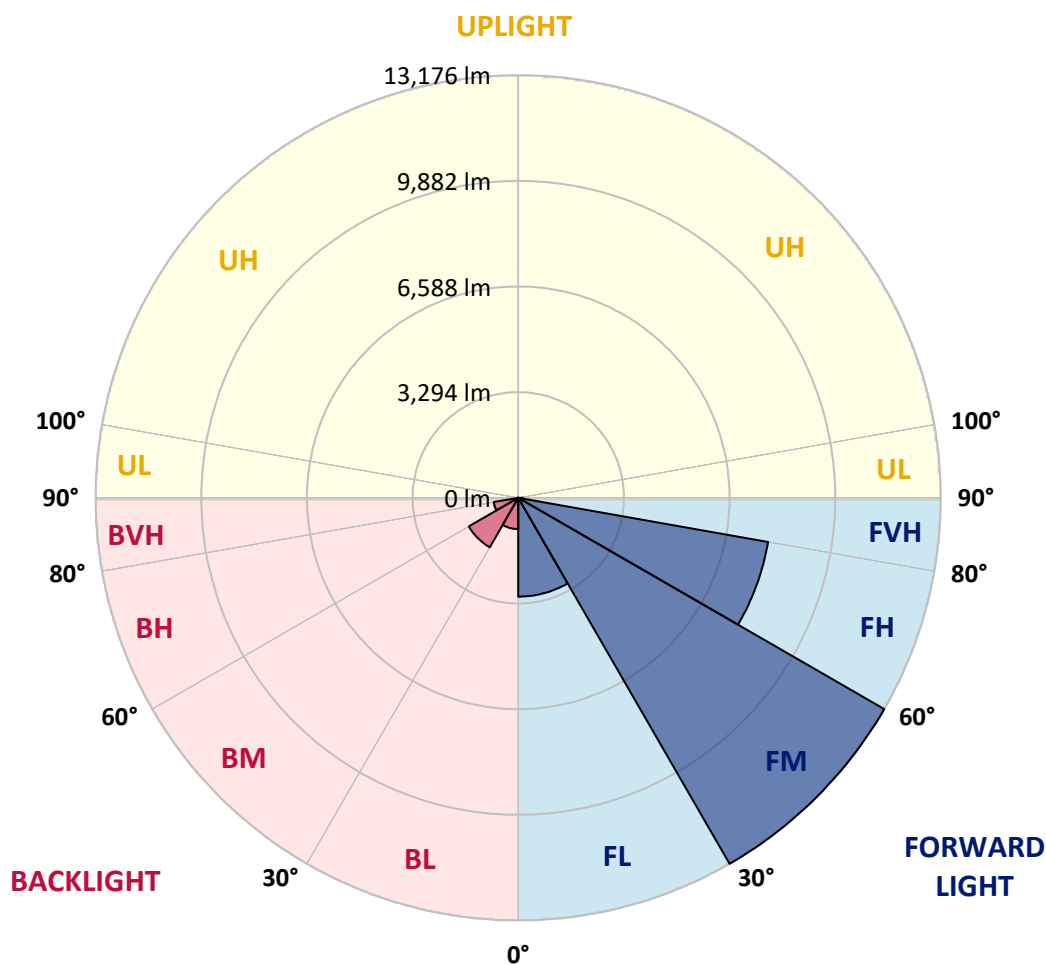
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3081.3	11.0			
FM	(30°-60°)	13175.9	47.2			
FH	(60°-80°)	7913.4	28.4			G4/12000
FVH	(80°-90°)	148.3	0.5			G2/225
BL	(0°-30°)	975.0	3.5	B2/1000		
BM	(30°-60°)	1778.7	6.4	B2/2500		
BH	(60°-80°)	778.1	2.8	B2/1000		G2/1000
BVH	(80°-90°)	50.3	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-G4

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	4754.2	4754.2	4754.2	4754.2	4754.2	4754.2	4754.2	4754.2	4754.2	4754.2	4754.2
2.5°	5483.8	5466.1	5454.4	5389.6	5389.6	5301.4	5307.3	5224.9	5124.9	4966.0	4795.4
5°	6001.6	5978.0	5948.6	5883.9	5860.4	5772.1	5760.3	5642.7	5472.0	5195.5	4889.5
7.5°	6454.6	6431.1	6389.9	6295.8	6231.0	6125.1	6095.7	5942.7	5754.4	5413.2	4983.7
10°	6866.5	6848.8	6795.9	6678.2	6590.0	6460.5	6407.6	6201.6	5966.3	5589.7	5060.1
12.5°	7284.3	7260.7	7190.1	7090.1	6984.2	6831.2	6766.5	6501.7	6201.6	5783.9	5171.9
15°	7672.6	7637.3	7584.3	7478.4	7384.3	7237.2	7166.6	6854.7	6489.9	6001.6	5319.0
17.5°	7925.6	7896.2	7849.1	7790.3	7713.8	7602.0	7531.4	7225.4	6778.2	6213.4	5472.0
20°	8078.6	8066.8	8049.2	8013.9	7978.6	7902.1	7849.1	7560.8	7090.1	6419.3	5619.1
22.5°	8196.3	8184.5	8178.6	8178.6	8184.5	8155.1	8119.8	7872.6	7390.2	6637.0	5754.4
25°	8378.7	8372.8	8361.0	8349.2	8390.4	8396.3	8384.5	8213.9	7766.7	6925.3	5925.1
27.5°	8631.7	8614.0	8590.5	8578.7	8619.9	8649.3	8672.9	8555.2	8166.8	7219.5	6119.2
30°	9020.0	8967.1	8908.2	8867.0	8896.4	8943.5	8996.5	8925.9	8578.7	7584.3	6319.3
32.5°	9478.9	9414.2	9278.9	9202.4	9278.9	9314.2	9355.4	9320.1	9008.2	7978.6	6519.4
35°	10037.9	9961.4	9820.2	9708.4	9843.8	9767.3	9749.6	9714.3	9414.2	8366.9	6742.9
37.5°	10967.6	10855.8	10632.2	10385.1	10385.1	10220.3	10155.6	10049.7	9779.0	8714.0	6960.6
40°	12044.3	11897.2	11608.9	11244.1	10908.7	10567.5	10526.3	10449.8	10208.6	9114.1	7207.8
42.5°	13227.0	12944.6	12544.5	12103.2	11561.8	11173.5	11079.4	10861.7	10626.3	9520.1	7454.9
45°	14539.1	13950.7	13368.2	13144.6	12250.3	11897.2	11720.7	11326.5	11061.7	9943.8	7713.8
47.5°	14750.9	14292.0	13903.6	13868.3	12891.6	12597.4	12397.4	11832.5	11532.4	10396.8	7984.4
50°	14633.2	14356.7	14397.9	14256.7	13362.3	13168.1	13015.2	12373.8	11997.3	10832.2	8231.6
52.5°	14139.0	14292.0	14527.3	14268.4	13809.5	13650.6	13574.1	12956.3	12432.7	11232.3	8455.2
55°	13550.6	13656.5	14162.5	14480.3	14327.3	14186.1	14115.5	13633.0	12862.2	11567.7	8661.1
57.5°	12691.6	12644.5	13203.5	14445.0	14868.6	14786.2	14709.7	14297.9	13262.3	11809.0	8790.5
60°	11403.0	11303.0	12009.0	13738.9	15045.1	15174.6	15139.3	14739.1	13568.3	11803.1	8737.6
62.5°	9173.0	9420.1	10396.8	12585.6	15121.6	15451.1	15386.4	14774.5	13668.3	11461.8	8402.2
65°	6819.4	7172.5	8131.5	10997.0	15015.7	15592.3	15415.8	14197.8	13203.5	10785.2	7666.7
67.5°	4913.0	5224.9	5925.1	9049.4	13997.8	14945.1	14739.1	13256.4	12132.6	9826.1	6648.8
70°	3359.7	3583.3	4059.9	6590.0	11950.2	12921.0	12791.6	11850.2	10443.9	8684.6	5401.4
72.5°	2371.2	2465.4	2771.3	4348.2	9078.8	10137.9	9985.0	9749.6	8390.4	7219.5	4201.1
75°	1776.9	1835.8	2000.5	2812.5	6125.1	7025.4	6884.2	7019.5	6266.3	5466.1	3059.6
77.5°	670.8	729.6	1135.6	1794.6	3624.5	4312.9	4171.7	4254.1	3483.3	2759.5	1523.9
80°	182.4	194.2	376.6	853.2	1647.5	2147.6	1953.5	1676.9	1294.5	1270.9	806.1
82.5°	76.5	88.3	170.6	458.9	588.4	588.4	494.2	611.9	494.2	594.3	388.3
85°	29.4	35.3	41.2	117.7	76.5	82.4	88.3	117.7	100.0	123.6	88.3
87.5°	0.0	0.0	0.0	5.9	5.9	11.8	5.9	11.8	17.7	17.7	17.7
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°	4754.2	4754.2	4754.2	4754.2	4754.2	4754.2	4754.2	4754.2	4754.2	4754.2	4754.2
2.5°	4724.8	4660.0	4565.9	4412.9	4254.1	4165.8	4054.0	4036.3	3918.7	3906.9	3859.8
5°	4754.2	4618.9	4377.6	4083.4	3795.1	3571.5	3406.8	3318.5	3147.9	3147.9	3100.8
7.5°	4777.7	4565.9	4177.6	3742.2	3347.9	3047.9	2824.3	2730.1	2577.1	2565.4	2530.1
10°	4783.6	4501.2	3959.9	3395.0	2912.5	2606.6	2388.9	2282.9	2147.6	2135.9	2112.3
12.5°	4830.7	4465.9	3765.7	3094.9	2600.7	2271.2	2059.4	1971.1	1865.2	1853.4	1829.9
15°	4907.2	4465.9	3600.9	2841.9	2324.1	2018.2	1835.8	1753.4	1676.9	1665.1	1653.4
17.5°	4983.7	4454.1	3436.2	2606.6	2094.7	1818.1	1659.3	1594.5	1535.7	1529.8	1518.0
20°	5054.3	4448.2	3271.4	2406.5	1918.1	1653.4	1529.8	1471.0	1423.9	1423.9	1418.0
22.5°	5124.9	4436.5	3112.6	2218.2	1765.2	1529.8	1423.9	1359.2	1323.9	1323.9	1318.0
25°	5230.8	4436.5	2965.5	2059.4	1641.6	1435.7	1329.8	1282.7	1253.3	1247.4	1247.4
27.5°	5354.3	4471.8	2836.0	1918.1	1535.7	1341.5	1259.2	1212.1	1176.8	1165.0	1170.9
30°	5489.7	4501.2	2718.4	1794.6	1435.7	1270.9	1182.7	1135.6	1100.3	1088.5	1094.4
32.5°	5625.0	4536.5	2612.4	1682.8	1335.6	1206.2	1117.9	1065.0	1029.7	1023.8	1023.8
35°	5772.1	4571.8	2506.5	1588.7	1253.3	1141.5	1059.1	1000.3	976.7	965.0	970.8
37.5°	5919.2	4630.6	2406.5	1500.4	1194.4	1082.6	1006.1	947.3	929.7	923.8	923.8
40°	6095.7	4718.9	2365.3	1441.6	1141.5	1029.7	965.0	906.1	888.5	888.5	888.5
42.5°	6242.8	4789.5	2330.0	1376.8	1100.3	982.6	923.8	876.7	864.9	859.0	864.9
45°	6389.9	4854.2	2282.9	1318.0	1047.3	935.5	888.5	841.4	829.6	829.6	829.6
47.5°	6537.0	4889.5	2218.2	1259.2	1000.3	894.4	853.2	812.0	800.2	800.2	800.2
50°	6654.7	4918.9	2124.1	1194.4	947.3	859.0	817.9	776.7	764.9	764.9	764.9
52.5°	6772.4	4924.8	2024.1	1117.9	894.4	817.9	782.6	741.4	729.6	723.7	723.7
55°	6878.3	4918.9	1906.4	1029.7	835.5	770.8	741.4	706.1	682.5	659.0	670.8
57.5°	6954.8	4913.0	1771.1	941.4	776.7	723.7	712.0	664.9	617.8	559.0	570.7
60°	6925.3	4848.3	1624.0	829.6	712.0	676.6	676.6	611.9	529.6	500.1	506.0
62.5°	6737.1	4665.9	1471.0	712.0	647.2	629.6	623.7	553.1	488.4	458.9	464.8
65°	6172.2	4207.0	1247.4	606.0	582.5	576.6	576.6	511.9	453.1	417.8	423.6
67.5°	5313.2	3530.3	1017.9	511.9	517.8	529.6	529.6	470.7	411.9	376.6	382.5
70°	4259.9	2759.5	812.0	441.3	447.2	464.8	476.6	423.6	370.7	335.4	335.4
72.5°	3206.7	2094.7	653.1	370.7	400.1	400.1	417.8	376.6	323.6	288.3	294.2
75°	2324.1	1500.4	517.8	311.8	347.1	341.3	341.3	317.7	276.5	253.0	253.0
77.5°	1100.3	788.4	411.9	223.6	270.7	264.8	270.7	253.0	235.4	211.8	217.7
80°	541.3	388.3	264.8	158.9	188.3	194.2	211.8	200.1	194.2	176.5	176.5
82.5°	258.9	153.0	123.6	111.8	129.4	135.3	147.1	147.1	153.0	141.2	141.2
85°	70.6	41.2	53.0	70.6	82.4	88.3	100.0	105.9	105.9	100.0	105.9
87.5°	17.7	17.7	23.5	35.3	41.2	47.1	53.0	53.0	23.5	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)