

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: P841878

Luminaire Tested: **ARCH4-240-727-U-T3-HSS**

Issue Date: 5/27/2024

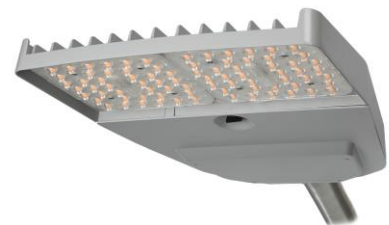
Test Information

Test Method: LM-79-08
Report Number: P841878
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-240-727-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 940mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23367 lumens
Efficiency: N/A
Efficacy: 97.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

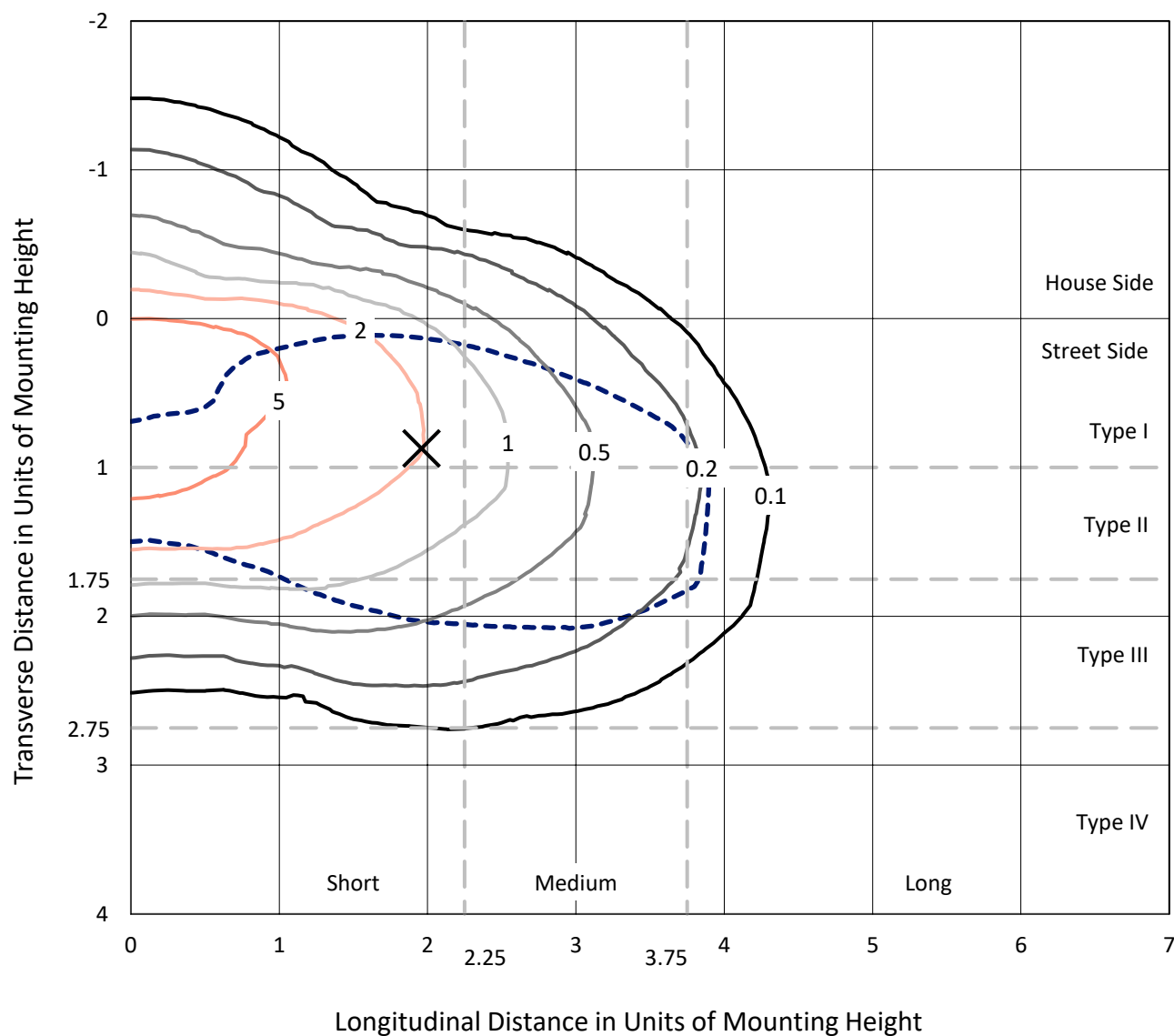
Input Watts (W): 240.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

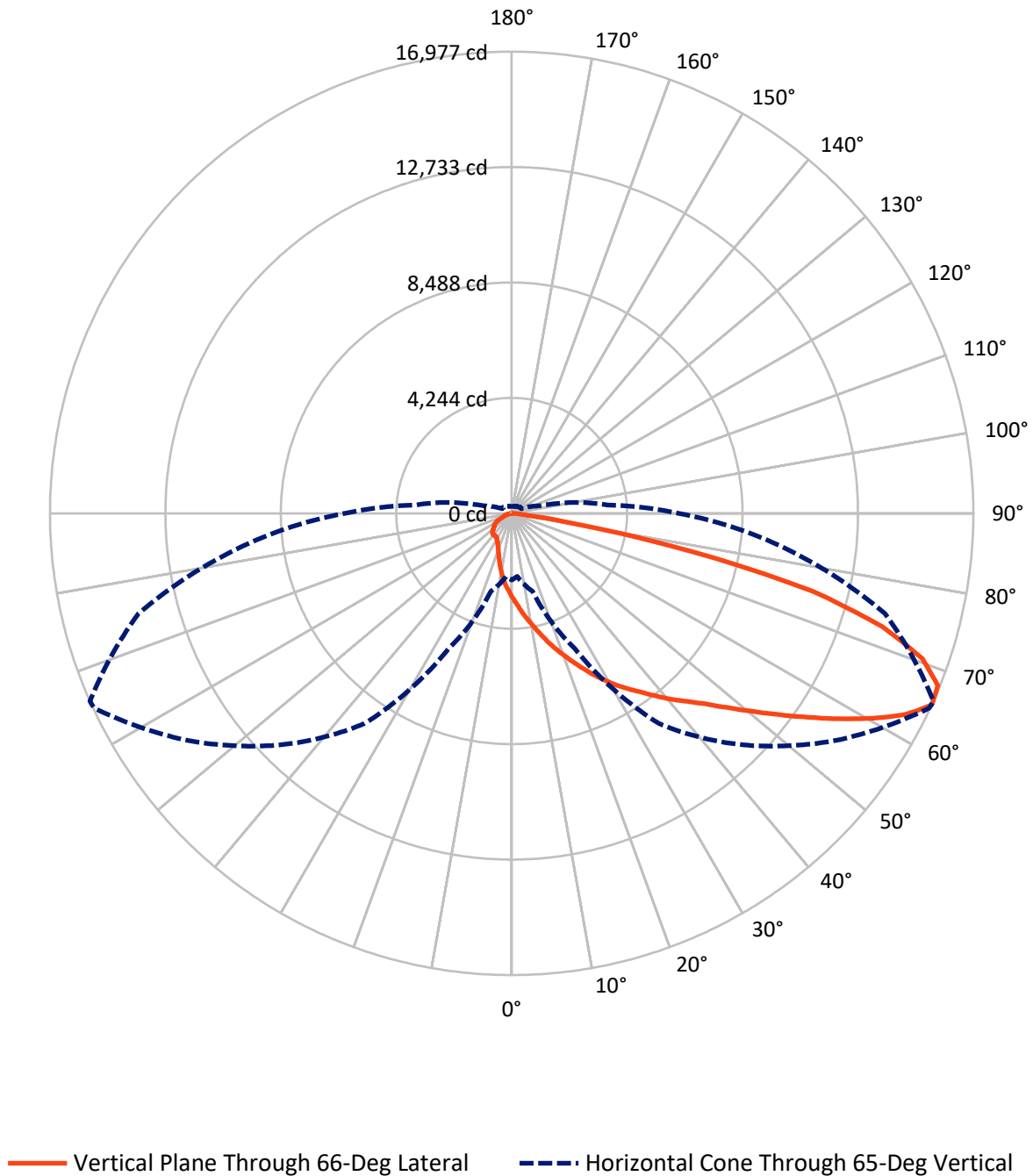
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.9 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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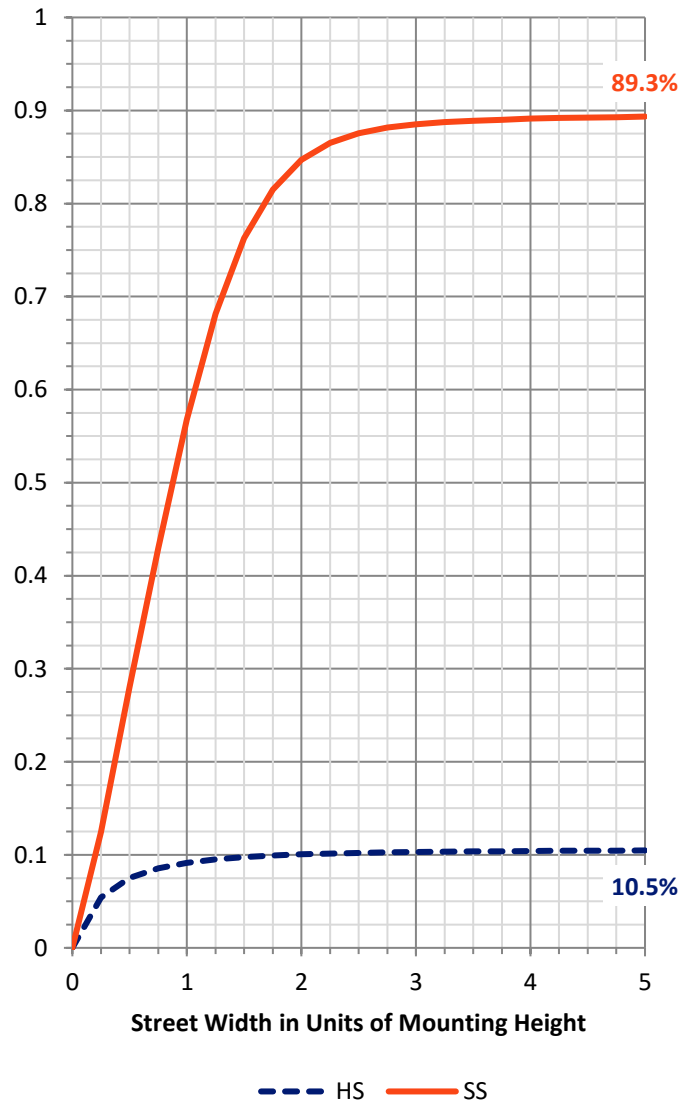
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2471.6	0.0	2471.6
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	20895.4	0.0	20895.4
	% Fixture	89.4	0.0	89.4
Total	Lumens	23367.0	0.0	23367.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	305.2	1.3
10°-20°	994.8	4.3
20°-30°	1800.0	7.7
30°-40°	2814.7	12.0
40°-50°	4269.8	18.3
50°-60°	5424.9	23.2
60°-70°	5069.1	21.7
70°-80°	2519.3	10.8
80°-90°	169.3	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°	23367.0	100.0
0°-180°	23367.0	100.0

Coefficient of Utilization



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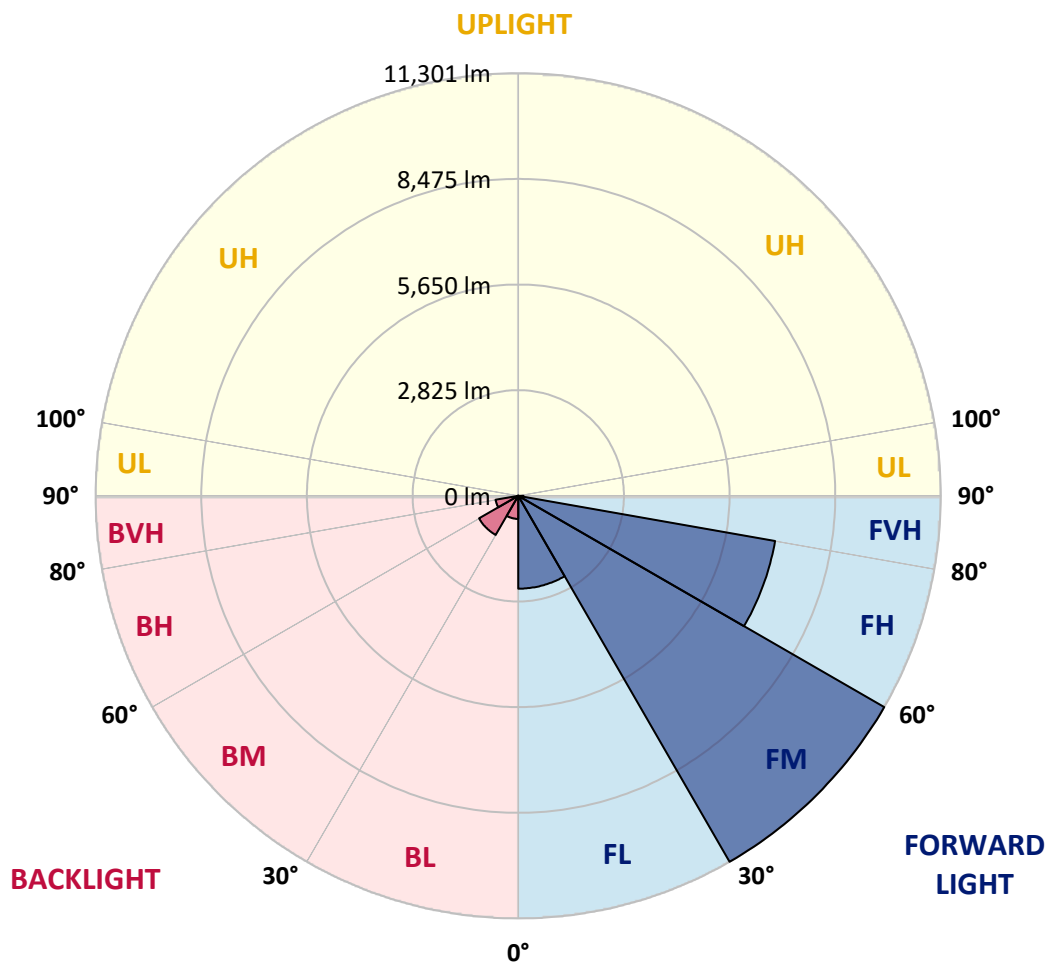
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2482.7	10.6			
FM	(30°-60°)	11300.5	48.4			
FH	(60°-80°)	6972.8	29.8			G3/7500
FVH	(80°-90°)	139.3	0.6			G2/225
BL	(0°-30°)	617.3	2.6	B2/1000		
BM	(30°-60°)	1208.9	5.2	B2/2500		
BH	(60°-80°)	615.5	2.6	B2/1000		G2/1000
BVH	(80°-90°)	30.0	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-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3092.5	3092.5	3092.5	3092.5	3092.5	3092.5	3092.5	3092.5	3092.5	3092.5	3092.5
2.5°	3612.0	3641.4	3656.1	3661.0	3548.3	3499.3	3450.3	3337.5	3313.0	3249.3	3166.0
5°	4249.1	4288.3	4278.5	4258.9	4121.7	3964.9	3837.4	3626.7	3592.4	3440.5	3254.2
7.5°	4876.4	4910.7	4900.9	4827.4	4675.5	4455.0	4244.2	3935.5	3886.4	3641.4	3342.4
10°	5400.8	5430.2	5425.3	5351.8	5170.5	4900.9	4646.1	4234.4	4175.6	3827.6	3416.0
12.5°	5832.1	5871.3	5866.4	5817.4	5655.7	5361.6	5072.5	4577.5	4504.0	4053.1	3518.9
15°	6170.3	6219.3	6219.3	6199.7	6087.0	5841.9	5513.6	4954.9	4866.6	4312.8	3646.3
17.5°	6376.1	6415.3	6449.6	6483.9	6405.5	6219.3	5920.3	5332.2	5239.1	4567.7	3778.6
20°	6483.9	6523.2	6547.7	6621.2	6635.9	6542.8	6307.5	5704.7	5606.7	4856.8	3930.6
22.5°	6660.4	6694.7	6699.6	6763.3	6792.7	6817.2	6670.2	6072.3	5993.9	5175.4	4102.1
25°	6954.4	6993.6	6978.9	7008.3	7013.2	7042.7	7028.0	6493.7	6415.3	5538.1	4307.9
27.5°	7331.8	7380.8	7371.0	7341.6	7297.5	7273.0	7336.7	6920.1	6846.6	5900.7	4518.7
30°	7738.6	7797.4	7782.7	7723.9	7606.3	7503.3	7591.6	7322.0	7253.4	6273.2	4753.9
32.5°	8150.3	8218.9	8214.0	8116.0	7915.0	7738.6	7870.9	7699.4	7650.4	6675.1	5008.8
35°	8419.8	8508.0	8498.2	8439.4	8179.7	8027.7	8189.5	8086.6	8052.2	7165.2	5376.3
37.5°	8856.0	8949.1	8865.8	8718.8	8419.8	8341.4	8537.4	8522.7	8498.2	7684.7	5763.5
40°	9914.6	10051.8	9831.3	9228.5	8738.4	8669.8	8949.1	9007.9	8983.4	8199.3	6111.5
42.5°	11022.2	11228.1	10885.0	10051.8	9316.7	9066.7	9400.0	9483.3	9453.9	8640.4	6425.1
45°	11693.6	11781.9	11438.8	10791.9	10341.0	9547.0	9880.3	10017.5	9993.0	9169.7	6827.0
47.5°	12242.6	12208.2	11816.2	11380.0	11463.3	10223.4	10424.3	10693.9	10674.3	9752.9	7268.1
50°	12360.2	12281.8	12124.9	11850.5	12071.0	10909.5	10997.7	11463.3	11443.7	10399.8	7714.1
52.5°	11531.9	11429.0	11855.4	12085.7	12012.2	11409.4	11629.9	12306.3	12296.5	11100.6	8140.5
55°	9463.7	9380.4	10527.2	11718.2	11948.5	11762.3	12330.8	13183.5	13237.4	11845.6	8527.6
57.5°	7444.5	7356.3	8483.5	10796.8	11713.3	12085.7	13149.2	14188.2	14256.8	12654.2	8895.2
60°	5935.0	5802.7	6665.3	9346.1	11272.2	12335.7	13938.3	15290.9	15300.7	13394.3	9120.7
62.5°	4033.5	3886.4	4842.1	7508.2	10532.1	12374.9	14546.0	16241.7	16280.9	13948.1	9159.9
65°	2450.5	2327.9	2974.9	5484.2	9439.2	12041.6	14555.8	16942.6	16976.9	14202.9	8924.6
67.5°	1421.3	1372.3	1700.6	3416.0	7625.9	11144.7	13943.2	16834.7	16898.4	14095.1	8390.4
70°	828.3	823.4	945.9	1690.8	5381.2	9365.7	12575.8	15928.1	16021.2	13531.5	7572.0
72.5°	607.7	617.5	666.5	906.7	3117.0	6743.7	10649.7	14104.9	14247.0	12428.8	6405.5
75°	480.3	485.2	529.3	617.5	1636.9	3812.9	7978.7	11321.2	11433.9	10463.5	5003.9
77.5°	357.8	367.6	401.9	436.2	759.6	1749.6	4489.3	6974.0	6787.8	5743.9	2416.2
80°	259.7	284.3	299.0	313.7	401.9	676.3	1347.8	2430.9	2411.3	2509.3	1141.9
82.5°	166.6	186.2	200.9	210.7	240.1	323.5	401.9	544.0	588.1	975.3	455.8
85°	73.5	83.3	93.1	112.7	102.9	112.7	166.6	107.8	93.1	147.0	83.3
87.5°	0.0	0.0	14.7	24.5	19.6	9.8	29.4	19.6	14.7	14.7	14.7
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°	3092.5	3092.5	3092.5	3092.5	3092.5	3092.5	3092.5	3092.5	3092.5	3092.5	3092.5
2.5°	3121.9	3068.0	2955.3	2847.4	2783.7	2700.4	2626.9	2558.3	2553.4	2533.8	2499.5
5°	3161.1	3058.2	2847.4	2646.5	2494.6	2332.8	2195.6	2087.8	2048.6	2019.2	1980.0
7.5°	3200.3	3038.6	2724.9	2430.9	2190.7	1965.3	1803.5	1656.5	1612.4	1573.2	1548.7
10°	3215.0	3004.3	2582.8	2190.7	1877.1	1636.9	1465.4	1357.6	1318.4	1298.7	1284.0
12.5°	3259.1	2984.7	2450.5	1965.3	1602.6	1382.1	1259.5	1195.8	1181.1	1166.4	1151.7
15°	3317.9	2984.7	2318.1	1744.7	1387.0	1210.5	1137.0	1092.9	1083.1	1078.2	1068.4
17.5°	3381.6	2984.7	2190.7	1558.5	1230.1	1097.8	1043.9	1019.4	1014.5	1009.6	1004.7
20°	3469.9	2989.6	2053.5	1396.8	1117.4	1014.5	970.4	941.0	936.1	931.2	931.2
22.5°	3558.1	2999.4	1921.2	1274.2	1043.9	950.8	896.9	867.5	857.7	857.7	857.7
25°	3670.8	3028.8	1798.6	1171.3	980.2	892.0	823.4	798.9	794.0	794.0	789.1
27.5°	3803.1	3063.1	1690.8	1092.9	916.5	823.4	754.7	730.2	720.4	720.4	715.5
30°	3945.3	3097.4	1602.6	1034.1	852.8	754.7	691.0	661.6	651.8	656.7	651.8
32.5°	4102.1	3146.4	1534.0	994.9	794.0	695.9	637.1	602.8	597.9	597.9	593.0
35°	4366.7	3283.6	1524.2	975.3	744.9	651.8	593.0	558.7	553.8	553.8	548.9
37.5°	4651.0	3440.5	1568.3	965.5	705.7	612.6	558.7	524.4	519.5	519.5	519.5
40°	4891.1	3558.1	1617.3	965.5	681.2	578.3	529.3	499.9	499.9	499.9	499.9
42.5°	5052.9	3567.9	1607.5	965.5	661.6	553.8	509.7	480.3	480.3	485.2	480.3
45°	5293.0	3616.9	1568.3	950.8	646.9	534.2	490.1	465.6	460.7	465.6	465.6
47.5°	5577.3	3705.1	1529.1	892.0	642.0	514.6	475.4	446.0	441.1	446.0	441.1
50°	5846.8	3783.5	1509.5	813.6	632.2	495.0	455.8	426.4	421.5	426.4	421.5
52.5°	6072.3	3817.8	1475.2	759.6	607.7	475.4	436.2	406.8	397.0	401.9	401.9
55°	6253.6	3808.0	1426.2	715.5	563.6	455.8	411.7	387.2	372.5	372.5	367.6
57.5°	6420.2	3812.9	1382.1	671.4	514.6	426.4	392.1	362.7	343.1	338.2	333.3
60°	6483.9	3788.4	1303.7	612.6	465.6	401.9	367.6	333.3	313.7	308.8	303.9
62.5°	6395.7	3700.2	1200.7	509.7	421.5	372.5	343.1	308.8	289.2	284.3	279.4
65°	6145.8	3533.6	1043.9	401.9	382.3	338.2	313.7	289.2	264.7	254.8	249.9
67.5°	5719.4	3293.4	847.9	323.5	338.2	308.8	294.1	264.7	235.2	225.4	220.5
70°	5111.7	2974.9	637.1	274.5	299.0	274.5	264.7	235.2	210.7	200.9	196.0
72.5°	4258.9	2460.3	446.0	235.2	259.7	240.1	230.3	210.7	186.2	171.5	171.5
75°	3219.9	1764.3	294.1	200.9	215.6	205.8	191.1	176.4	161.7	151.9	147.0
77.5°	1387.0	686.1	181.3	151.9	176.4	171.5	151.9	142.1	137.2	127.4	127.4
80°	597.9	279.4	112.7	112.7	127.4	122.5	117.6	107.8	107.8	102.9	98.0
82.5°	220.5	112.7	68.6	83.3	93.1	83.3	83.3	83.3	83.3	78.4	78.4
85°	53.9	34.3	34.3	49.0	53.9	49.0	53.9	49.0	49.0	49.0	44.1
87.5°	14.7	14.7	19.6	19.6	19.6	19.6	19.6	14.7	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)