

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: P842668

Luminaire Tested: **ARCH4-80-727-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842668
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-80-727-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 685mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9741 lumens
Efficiency: N/A
Efficacy: 116.8 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 83.4
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

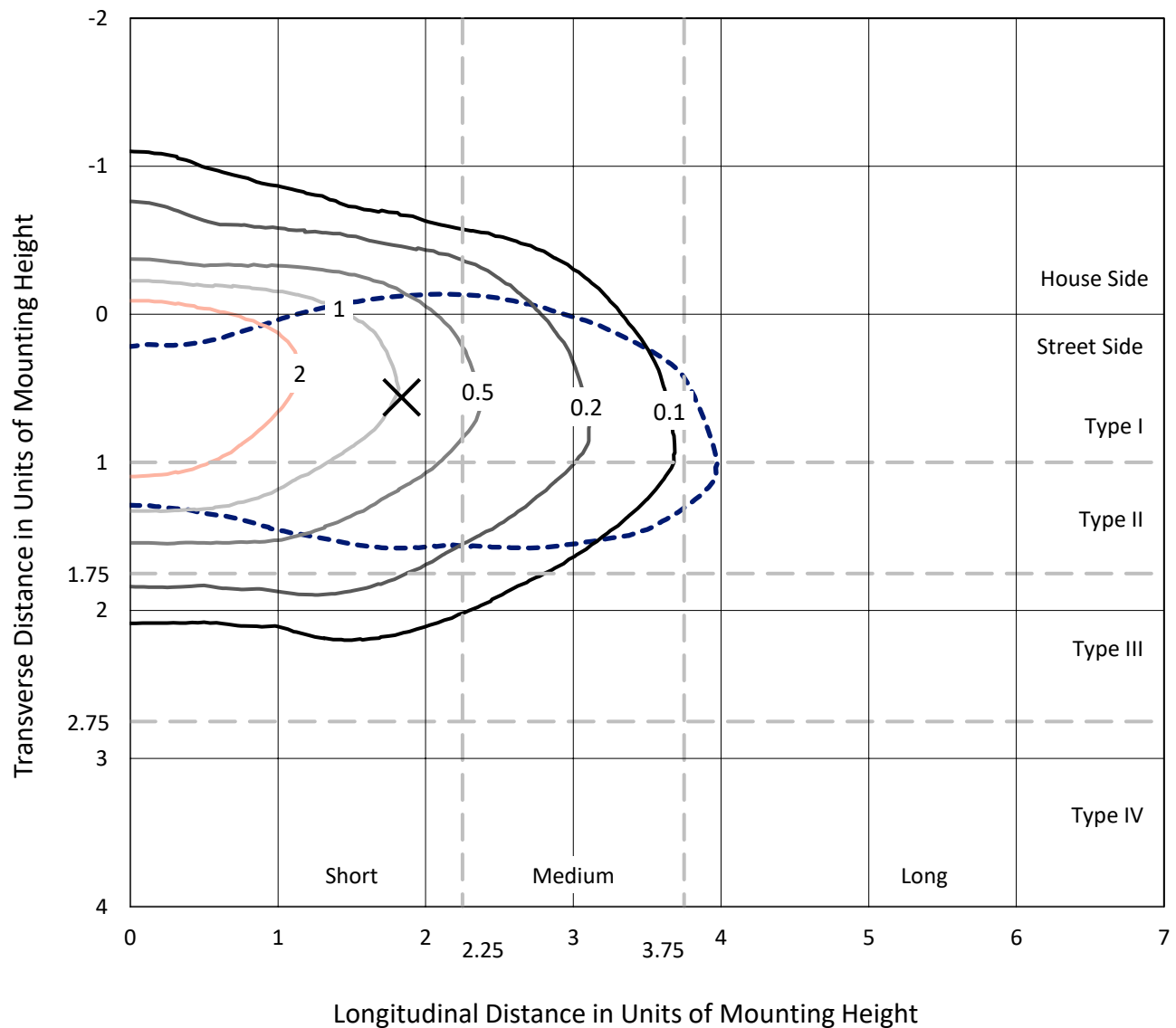


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Iso-Footcandle Lines of Horizontal Illumination

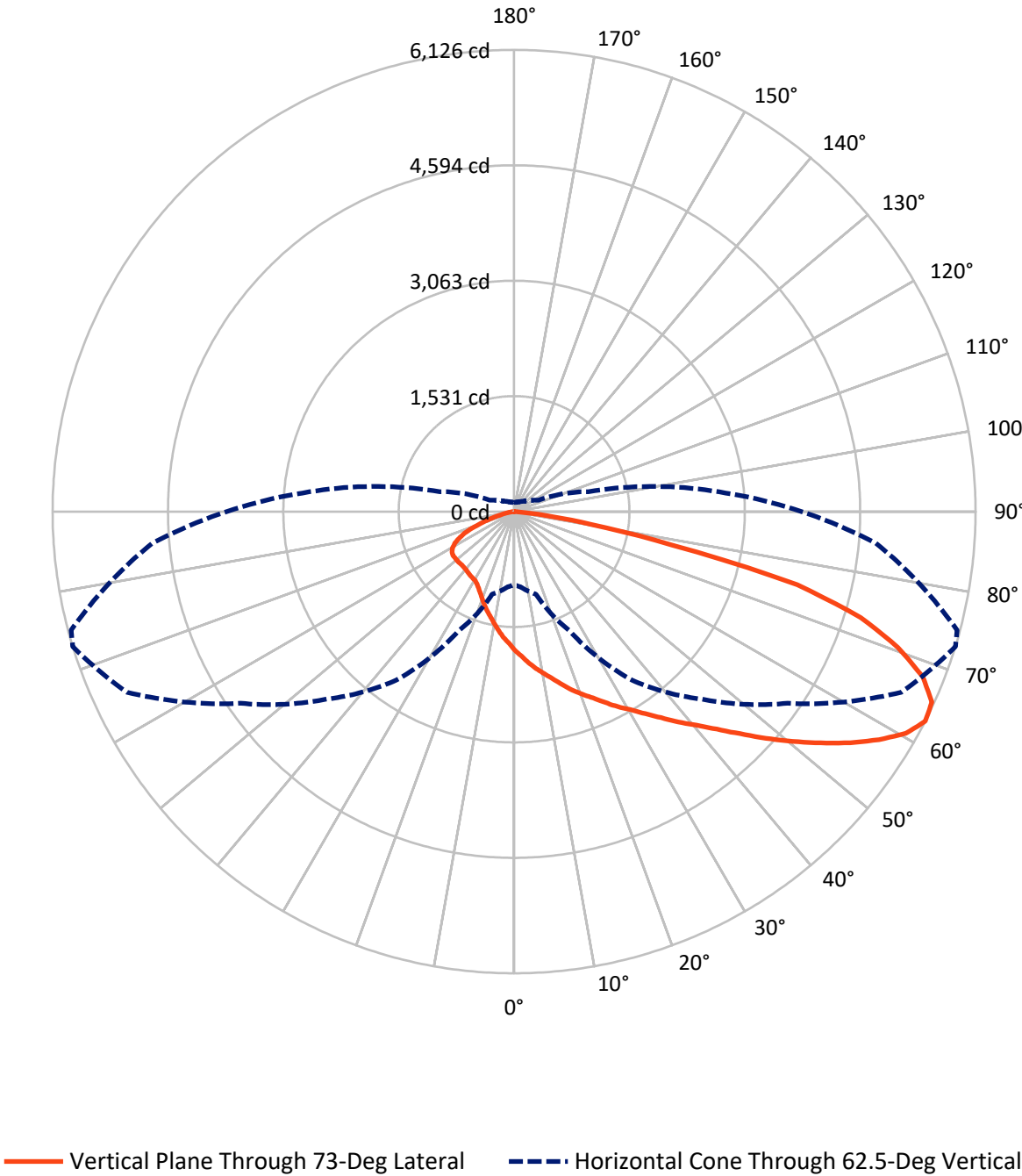
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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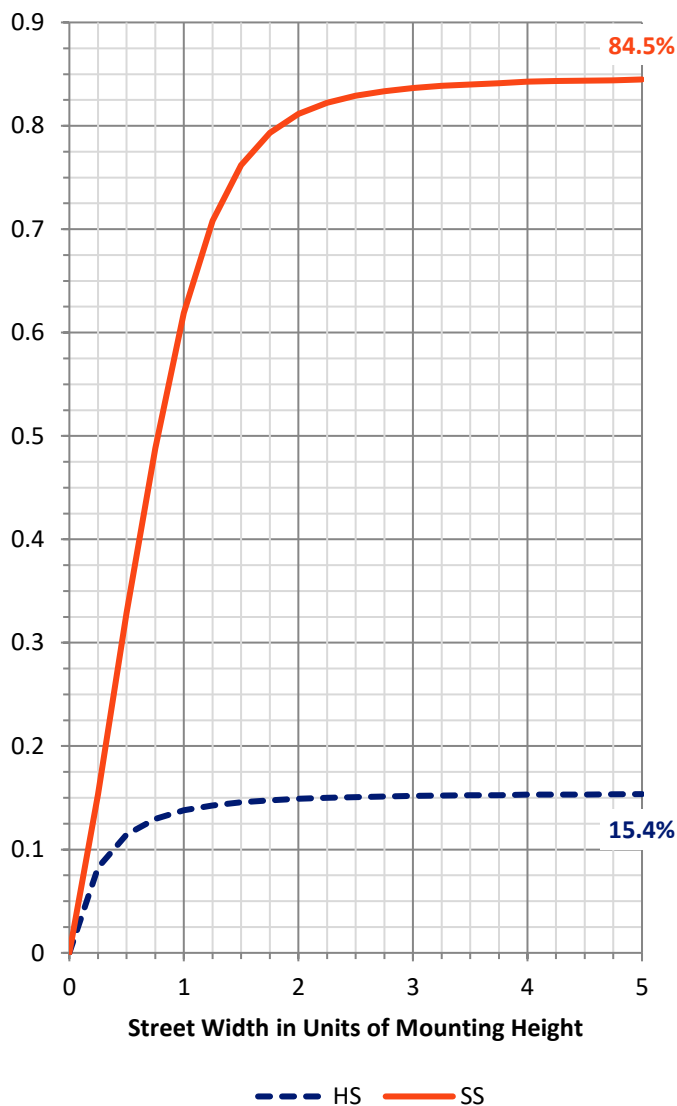
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1510.0	0.0	1510.0
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	8231.0	0.0	8231.0
	% Fixture	84.5	0.0	84.5
Total	Lumens	9741.0	0.0	9741.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.2	1.8
10°-20°	537.7	5.5
20°-30°	895.0	9.2
30°-40°	1350.4	13.9
40°-50°	1887.5	19.4
50°-60°	2084.9	21.4
60°-70°	1816.2	18.6
70°-80°	917.4	9.4
80°-90°	73.6	0.8
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°	9741.0	100.0
0°-180°	9741.0	100.0

Coefficient of Utilization



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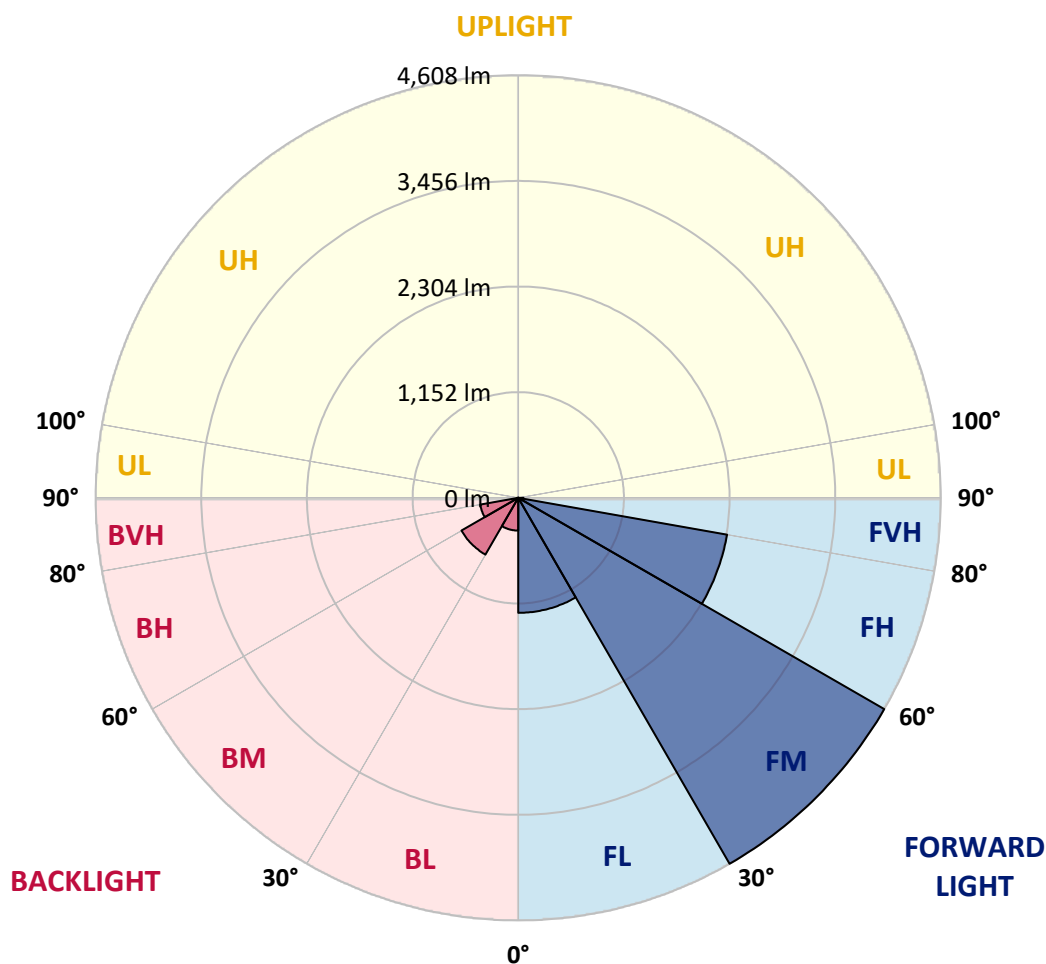
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1254.0	12.9			
FM	(30°-60°)	4607.8	47.3			
FH	(60°-80°)	2312.2	23.7			G2/5000
FVH	(80°-90°)	57.0	0.6			G1/100
BL	(0°-30°)	356.9	3.7	B1/500		
BM	(30°-60°)	715.0	7.3	B1/1000		
BH	(60°-80°)	421.5	4.3	B1/500		G1/500
BVH	(80°-90°)	16.6	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	1844.5	1844.5	1844.5	1844.5	1844.5	1844.5	1844.5	1844.5	1844.5	1844.5	1844.5
2.5°	2099.2	2122.5	2109.8	2118.3	2075.8	2048.2	2016.4	1954.9	1920.9	1916.6	1876.3
5°	2406.9	2432.4	2411.2	2404.8	2330.5	2266.9	2194.7	2086.4	2014.3	2001.5	1912.4
7.5°	2714.7	2738.1	2712.6	2693.5	2593.7	2481.2	2375.1	2215.9	2103.4	2082.2	1942.1
10°	2931.2	2952.4	2933.3	2914.2	2810.2	2695.6	2544.9	2336.9	2184.1	2150.1	1961.2
12.5°	3094.6	3107.4	3098.9	3081.9	2984.3	2861.2	2716.8	2472.7	2275.4	2232.9	1990.9
15°	3228.4	3249.6	3239.0	3226.2	3132.9	3009.7	2871.8	2615.0	2381.5	2328.4	2035.5
17.5°	3317.5	3332.4	3334.5	3334.5	3251.7	3130.7	2997.0	2744.4	2487.6	2419.7	2078.0
20°	3357.8	3374.8	3385.4	3402.4	3334.5	3230.5	3094.6	2854.8	2587.4	2511.0	2118.3
22.5°	3376.9	3391.8	3419.4	3457.6	3402.4	3315.4	3190.2	2956.7	2687.1	2606.5	2165.0
25°	3391.8	3410.9	3451.2	3523.4	3485.2	3410.9	3302.7	3073.4	2806.0	2723.2	2232.9
27.5°	3432.1	3455.5	3493.7	3580.7	3534.0	3497.9	3421.5	3198.7	2931.2	2846.3	2315.7
30°	3572.2	3591.3	3589.2	3644.4	3587.1	3576.5	3523.4	3319.6	3052.2	2967.3	2413.3
32.5°	3826.9	3846.0	3799.3	3778.1	3652.9	3655.0	3633.8	3449.1	3196.5	3109.5	2525.8
35°	4100.7	4122.0	4060.4	4024.3	3814.2	3752.6	3763.2	3610.4	3357.8	3270.8	2665.9
37.5°	4344.8	4370.3	4317.2	4264.2	4051.9	3909.7	3907.6	3790.8	3542.5	3453.4	2820.8
40°	4478.5	4508.3	4540.1	4510.4	4287.5	4130.4	4062.5	3975.5	3725.0	3633.8	2988.5
42.5°	4542.2	4625.0	4682.3	4663.2	4480.7	4321.5	4240.8	4168.6	3947.9	3858.8	3188.0
45°	4363.9	4366.0	4487.0	4591.0	4557.1	4450.9	4436.1	4385.1	4202.6	4117.7	3413.0
47.5°	4141.1	4124.1	4209.0	4393.6	4489.2	4516.7	4603.8	4625.0	4493.4	4408.5	3642.3
50°	3606.2	3616.8	3892.7	4158.0	4344.8	4523.1	4722.6	4871.2	4792.7	4712.0	3884.2
52.5°	2933.3	2958.8	3275.1	3858.8	4153.8	4459.4	4792.7	5117.4	5098.3	5021.9	4126.2
55°	2351.8	2392.1	2727.5	3360.0	3909.7	4317.2	4822.4	5342.4	5414.6	5344.5	4363.9
57.5°	1797.8	1840.2	2122.5	2772.0	3597.7	4085.9	4801.2	5539.8	5709.6	5665.0	4582.5
60°	1354.2	1396.6	1577.0	2247.8	3207.1	3826.9	4695.0	5669.3	5974.9	5928.2	4741.7
62.5°	970.0	1004.0	1137.7	1749.0	2731.7	3519.2	4434.0	5671.4	6125.6	6087.4	4818.1
65°	698.3	698.3	806.6	1248.0	2286.0	3149.8	4039.2	5410.3	6093.8	6083.2	4765.1
67.5°	503.0	507.3	594.3	872.4	1823.3	2702.0	3527.6	4945.5	5847.6	5900.6	4574.1
70°	356.6	367.2	407.5	609.2	1377.5	2133.1	2980.0	4336.3	5404.0	5497.4	4204.7
72.5°	275.9	282.3	309.9	424.5	1006.1	1585.5	2375.1	3657.1	4811.8	4917.9	3701.7
75°	212.3	218.6	239.8	312.0	721.7	1112.2	1687.4	2837.8	3880.0	4068.9	2973.7
77.5°	154.9	163.4	178.3	227.1	420.3	706.8	1023.1	1596.1	2141.6	2230.8	1557.9
80°	72.2	82.8	104.0	146.5	227.1	333.2	363.0	615.5	1029.4	1076.1	844.8
82.5°	40.3	50.9	59.4	89.1	114.6	118.9	123.1	154.9	388.4	428.8	354.5
85°	19.1	25.5	27.6	38.2	38.2	34.0	40.3	29.7	63.7	76.4	74.3
87.5°	0.0	2.1	4.2	10.6	8.5	6.4	6.4	6.4	6.4	8.5	6.4
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°	1844.5	1844.5	1844.5	1844.5	1844.5	1844.5	1844.5	1844.5	1844.5	1844.5	1844.5
2.5°	1857.2	1829.6	1765.9	1710.8	1674.7	1642.8	1600.4	1581.3	1547.3	1553.7	1534.6
5°	1867.8	1816.9	1704.4	1600.4	1524.0	1456.1	1381.8	1339.3	1292.6	1288.4	1273.5
7.5°	1874.2	1795.7	1634.3	1487.9	1371.2	1267.2	1167.4	1112.2	1054.9	1042.2	1029.4
10°	1867.8	1763.8	1562.2	1371.2	1216.2	1086.7	974.2	904.2	844.8	829.9	817.2
12.5°	1874.2	1746.8	1494.3	1262.9	1078.2	931.8	804.4	732.3	677.1	662.2	653.7
15°	1889.1	1736.2	1437.0	1165.3	955.1	791.7	666.5	604.9	560.3	545.5	541.2
17.5°	1901.8	1725.6	1375.4	1069.8	832.0	668.6	560.3	509.4	471.2	456.3	452.1
20°	1918.8	1710.8	1313.8	978.5	723.8	571.0	475.4	430.9	401.2	390.5	388.4
22.5°	1933.6	1700.1	1256.5	887.2	624.0	492.4	411.8	375.7	354.5	343.8	343.8
25°	1971.8	1704.4	1207.7	802.3	549.7	430.9	363.0	335.4	318.4	312.0	312.0
27.5°	2016.4	1721.4	1169.5	730.2	486.1	384.2	329.0	305.6	297.2	288.7	290.8
30°	2080.1	1755.3	1144.0	670.7	439.4	348.1	301.4	284.4	275.9	273.8	273.8
32.5°	2160.7	1810.5	1141.9	632.5	405.4	320.5	282.3	267.4	263.2	261.1	261.1
35°	2256.2	1859.3	1129.2	615.5	384.2	301.4	267.4	256.8	254.7	254.7	254.7
37.5°	2370.9	1940.0	1120.7	592.2	373.6	290.8	256.8	248.3	248.3	248.3	248.3
40°	2489.7	2005.8	1108.0	571.0	369.3	284.4	250.5	239.8	239.8	239.8	239.8
42.5°	2631.9	2101.3	1103.7	560.3	363.0	280.2	242.0	229.2	231.4	231.4	233.5
45°	2803.9	2209.6	1101.6	549.7	360.8	275.9	233.5	218.6	220.7	218.6	218.6
47.5°	2977.9	2334.8	1108.0	543.4	358.7	271.7	227.1	208.0	208.0	205.9	205.9
50°	3160.4	2449.4	1112.2	537.0	354.5	263.2	216.5	199.5	195.3	191.0	193.2
52.5°	3332.4	2555.5	1114.3	526.4	341.7	250.5	208.0	188.9	182.5	176.2	178.3
55°	3504.3	2657.4	1118.6	513.7	324.7	237.7	197.4	178.3	169.8	161.3	161.3
57.5°	3659.2	2746.6	1108.0	481.8	305.6	225.0	186.8	165.6	152.8	144.3	144.3
60°	3765.4	2810.2	1076.1	435.1	280.2	210.1	176.2	152.8	138.0	131.6	131.6
62.5°	3816.3	2820.8	1018.8	358.7	248.3	195.3	163.4	140.1	127.4	123.1	123.1
65°	3767.5	2774.1	929.7	269.6	214.4	178.3	150.7	129.5	116.7	106.1	106.1
67.5°	3597.7	2642.6	806.6	203.8	182.5	161.3	138.0	118.9	104.0	95.5	95.5
70°	3256.0	2368.7	624.0	163.4	154.9	140.1	125.2	106.1	93.4	82.8	82.8
72.5°	2808.1	2007.9	439.4	131.6	131.6	118.9	106.1	93.4	80.7	72.2	72.2
75°	2154.4	1485.8	295.0	106.1	108.2	99.8	87.0	76.4	67.9	61.6	61.6
77.5°	1175.9	734.4	180.4	78.5	80.7	76.4	67.9	61.6	57.3	50.9	50.9
80°	571.0	322.6	104.0	55.2	57.3	55.2	50.9	44.6	44.6	40.3	40.3
82.5°	239.8	121.0	55.2	38.2	38.2	34.0	31.8	31.8	31.8	29.7	29.7
85°	59.4	23.3	23.3	21.2	21.2	21.2	19.1	19.1	19.1	14.9	17.0
87.5°	8.5	8.5	8.5	8.5	8.5	8.5	6.4	2.1	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)