

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: P842749

Luminaire Tested: **ARCH4-90-730-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842749
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: ARCH4-90-730-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 765mA 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: 11199 lumens
Efficiency: N/A
Efficacy: 120.3 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

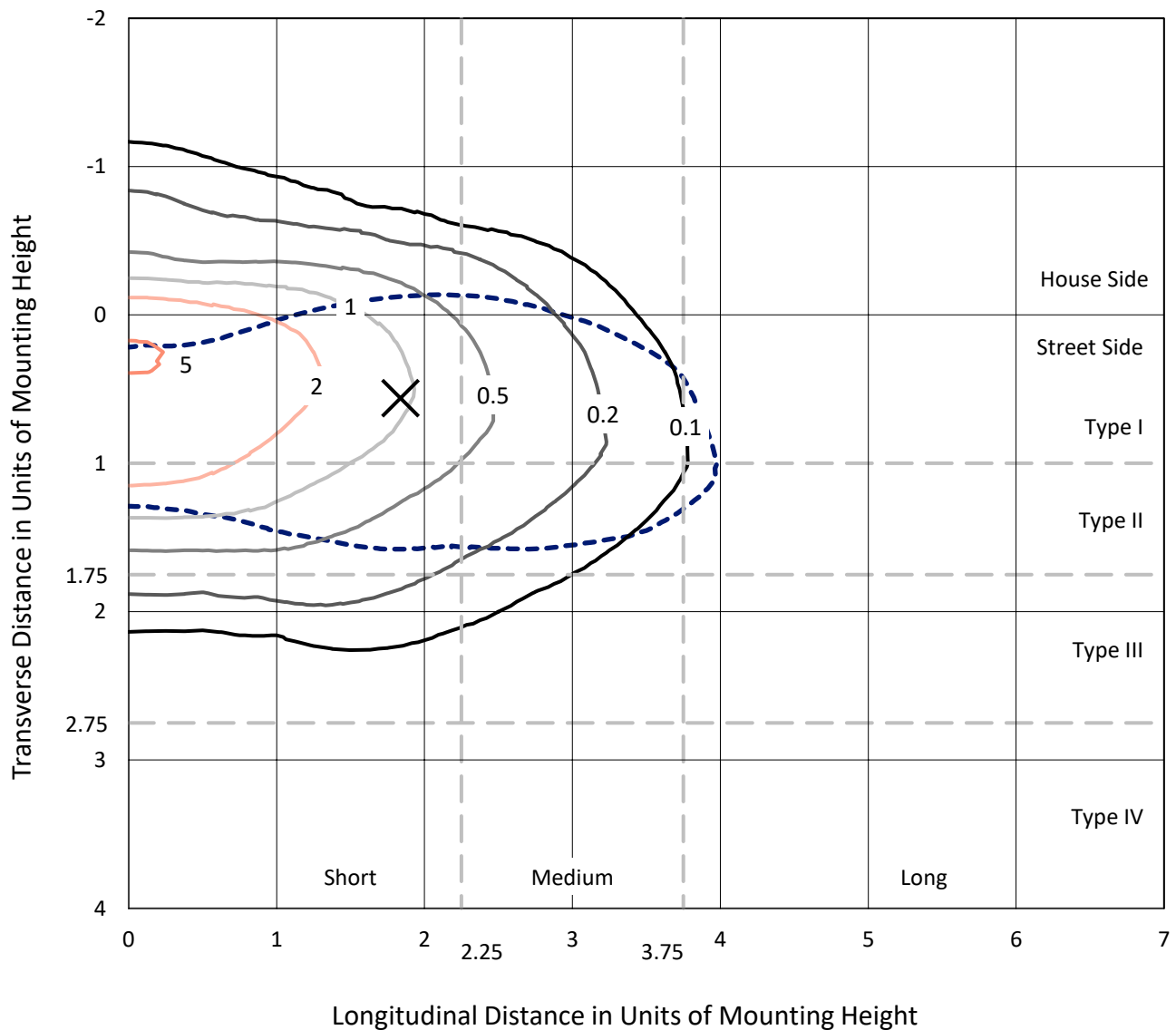
Input Watts (W): 93.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

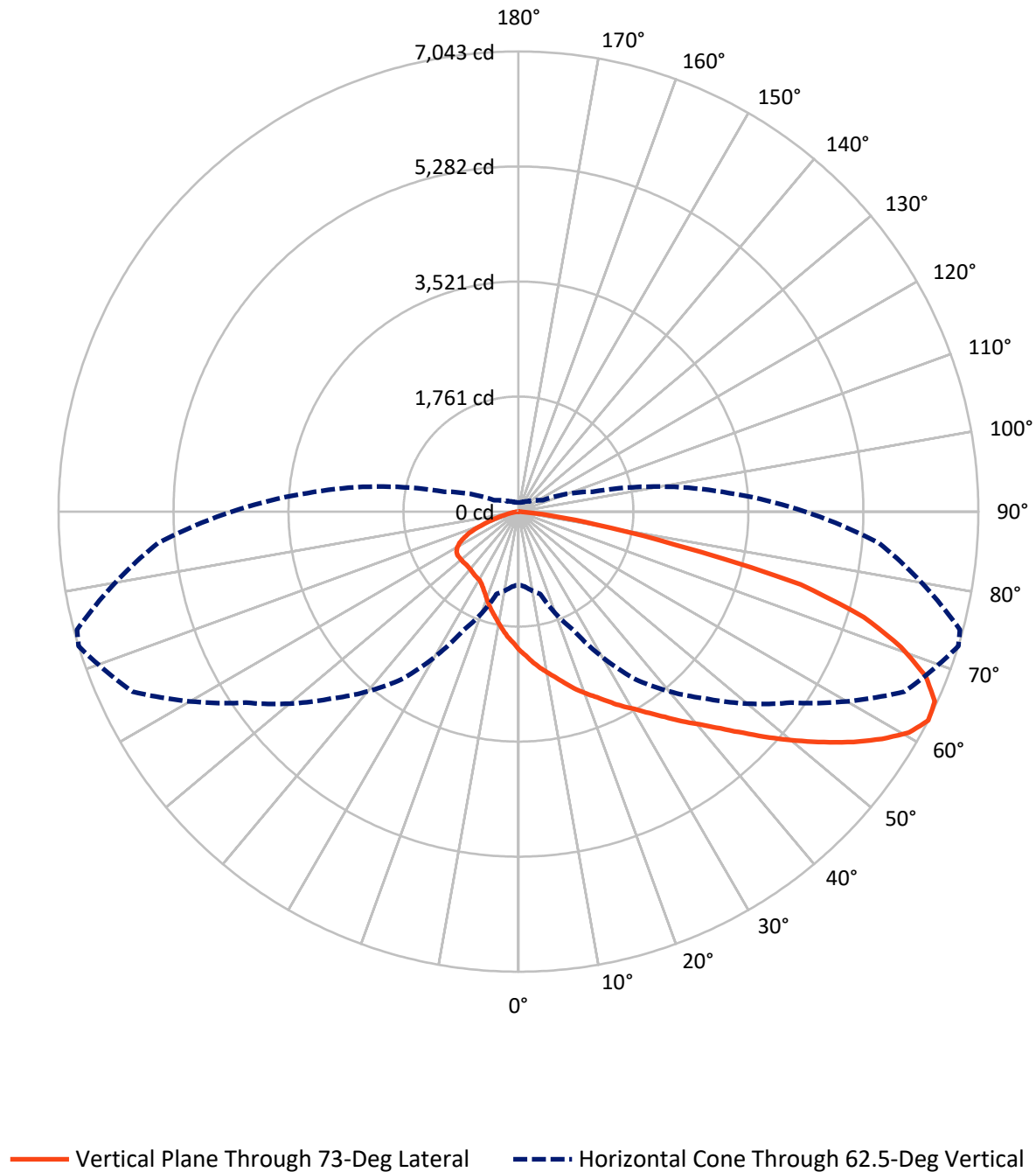
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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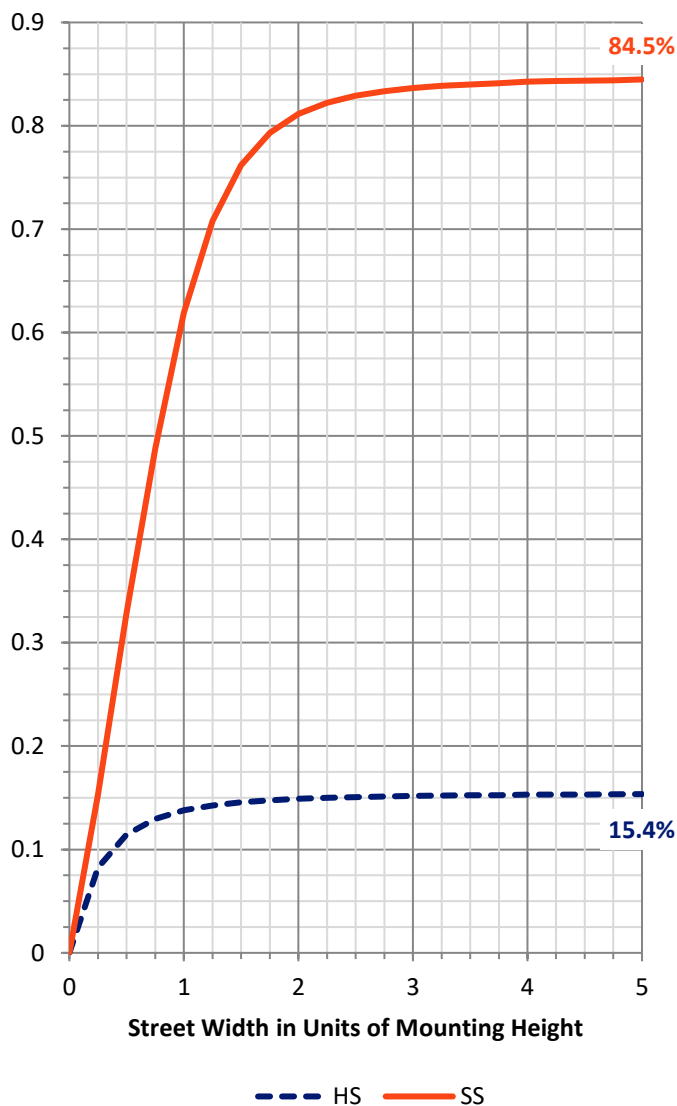
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1736.0	0.0	1736.0
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	9463.0	0.0	9463.0
	% Fixture	84.5	0.0	84.5
Total	Lumens	11199.0	0.0	11199.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.9	1.8
10°-20°	618.2	5.5
20°-30°	1029.0	9.2
30°-40°	1552.5	13.9
40°-50°	2170.0	19.4
50°-60°	2397.0	21.4
60°-70°	2088.1	18.6
70°-80°	1054.8	9.4
80°-90°	84.7	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°	11199.0	100.0
0°-180°	11199.0	100.0

Coefficient of Utilization



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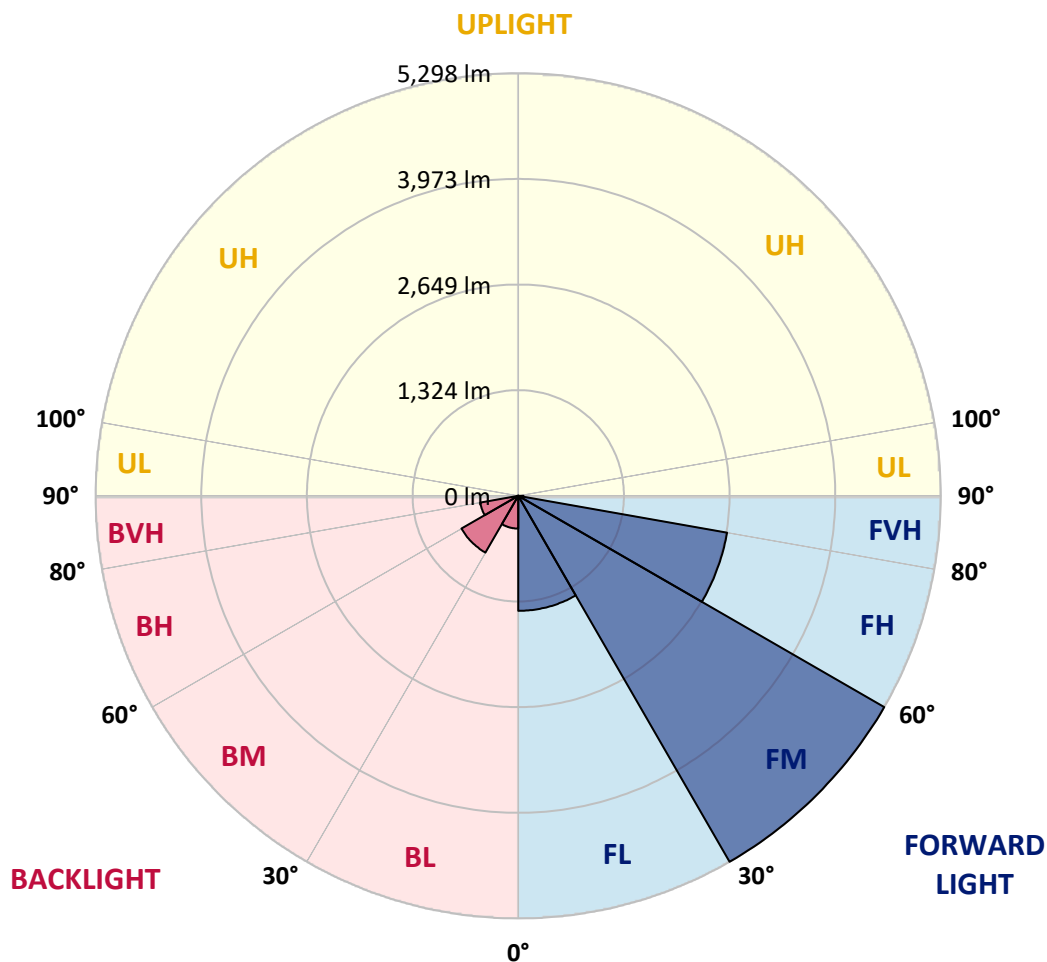
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1441.7	12.9			
FM	(30°-60°)	5297.5	47.3			
FH	(60°-80°)	2658.3	23.7			G2/5000
FVH	(80°-90°)	65.5	0.6			G1/100
BL	(0°-30°)	410.3	3.7	B1/500		
BM	(30°-60°)	822.0	7.3	B1/1000		
BH	(60°-80°)	484.6	4.3	B1/500		G1/500
BVH	(80°-90°)	19.1	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°	2120.6	2120.6	2120.6	2120.6	2120.6	2120.6	2120.6	2120.6	2120.6	2120.6	2120.6
2.5°	2413.4	2440.2	2425.6	2435.3	2386.5	2354.8	2318.2	2247.4	2208.4	2203.5	2157.2
5°	2767.2	2796.5	2772.1	2764.8	2679.4	2606.2	2523.2	2398.7	2315.8	2301.1	2198.6
7.5°	3121.0	3147.9	3118.6	3096.6	2982.0	2852.6	2730.6	2547.6	2418.3	2393.9	2232.8
10°	3369.9	3394.4	3372.4	3350.4	3230.9	3099.1	2925.8	2686.7	2511.0	2471.9	2254.8
12.5°	3557.8	3572.5	3562.7	3543.2	3431.0	3289.4	3123.5	2842.9	2615.9	2567.1	2288.9
15°	3711.6	3736.0	3723.8	3709.1	3601.8	3460.2	3301.6	3006.4	2737.9	2676.9	2340.2
17.5°	3814.1	3831.2	3833.6	3833.6	3738.4	3599.3	3445.6	3155.2	2859.9	2781.9	2389.0
20°	3860.4	3880.0	3892.2	3911.7	3833.6	3714.0	3557.8	3282.1	2974.6	2886.8	2435.3
22.5°	3882.4	3899.5	3931.2	3975.1	3911.7	3811.6	3667.7	3399.2	3089.3	2996.6	2489.0
25°	3899.5	3921.4	3967.8	4050.8	4006.8	3921.4	3797.0	3533.4	3226.0	3130.8	2567.1
27.5°	3945.8	3972.7	4016.6	4116.7	4063.0	4021.5	3933.6	3677.4	3369.9	3272.3	2662.3
30°	4106.9	4128.9	4126.4	4189.9	4124.0	4111.8	4050.8	3816.5	3509.0	3411.4	2774.5
32.5°	4399.7	4421.7	4368.0	4343.6	4199.6	4202.1	4177.7	3965.4	3675.0	3574.9	2903.9
35°	4714.5	4738.9	4668.1	4626.7	4385.1	4314.3	4326.5	4150.8	3860.4	3760.4	3064.9
37.5°	4995.1	5024.4	4963.4	4902.4	4658.4	4494.9	4492.5	4358.2	4072.7	3970.2	3243.1
40°	5148.9	5183.0	5219.6	5185.5	4929.3	4748.7	4670.6	4570.5	4282.6	4177.7	3435.8
42.5°	5222.1	5317.2	5383.1	5361.2	5151.3	4968.3	4875.6	4792.6	4538.8	4436.3	3665.2
45°	5017.1	5019.5	5158.6	5278.2	5239.2	5117.1	5100.1	5041.5	4831.6	4734.0	3923.9
47.5°	4760.9	4741.4	4839.0	5051.3	5161.1	5192.8	5292.8	5317.2	5166.0	5068.3	4187.4
50°	4145.9	4158.1	4475.4	4780.4	4995.1	5200.1	5429.5	5600.3	5510.0	5417.3	4465.6
52.5°	3372.4	3401.7	3765.3	4436.3	4775.5	5126.9	5510.0	5883.4	5861.4	5773.6	4743.8
55°	2703.8	2750.1	3135.7	3862.9	4494.9	4963.4	5544.2	6142.0	6225.0	6144.5	5017.1
57.5°	2066.9	2115.7	2440.2	3186.9	4136.2	4697.4	5519.8	6369.0	6564.2	6513.0	5268.4
60°	1556.9	1605.7	1813.1	2584.2	3687.2	4399.7	5397.8	6517.8	6869.2	6815.5	5451.5
62.5°	1115.2	1154.2	1308.0	2010.7	3140.6	4045.9	5097.6	6520.3	7042.5	6998.6	5539.3
65°	802.8	802.8	927.3	1434.9	2628.1	3621.3	4643.7	6220.1	7005.9	6993.7	5478.3
67.5°	578.3	583.2	683.3	1002.9	2096.2	3106.4	4055.7	5685.7	6722.8	6783.8	5258.7
70°	410.0	422.2	468.5	700.3	1583.7	2452.4	3426.1	4985.4	6212.8	6320.2	4834.1
72.5°	317.2	324.5	356.3	488.0	1156.7	1822.8	2730.6	4204.5	5532.0	5654.0	4255.8
75°	244.0	251.3	275.7	358.7	829.7	1278.7	1940.0	3262.6	4460.7	4677.9	3418.8
77.5°	178.1	187.9	205.0	261.1	483.2	812.6	1176.2	1835.0	2462.2	2564.7	1791.1
80°	83.0	95.2	119.6	168.4	261.1	383.1	417.3	707.7	1183.5	1237.2	971.2
82.5°	46.4	58.6	68.3	102.5	131.8	136.7	141.5	178.1	446.6	492.9	407.5
85°	22.0	29.3	31.7	43.9	43.9	39.0	46.4	34.2	73.2	87.8	85.4
87.5°	0.0	2.4	4.9	12.2	9.8	7.3	7.3	7.3	7.3	9.8	7.3
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°	2120.6	2120.6	2120.6	2120.6	2120.6	2120.6	2120.6	2120.6	2120.6	2120.6	2120.6
2.5°	2135.2	2103.5	2030.3	1966.8	1925.3	1888.7	1839.9	1818.0	1778.9	1786.2	1764.3
5°	2147.4	2088.8	1959.5	1839.9	1752.1	1674.0	1588.6	1539.8	1486.1	1481.2	1464.1
7.5°	2154.7	2064.4	1879.0	1710.6	1576.4	1456.8	1342.1	1278.7	1212.8	1198.1	1183.5
10°	2147.4	2027.8	1796.0	1576.4	1398.2	1249.4	1120.1	1039.5	971.2	954.1	939.5
12.5°	2154.7	2008.3	1717.9	1451.9	1239.6	1071.3	924.8	841.9	778.4	761.3	751.6
15°	2171.8	1996.1	1652.0	1339.7	1098.1	910.2	766.2	695.5	644.2	627.1	622.3
17.5°	2186.4	1983.9	1581.3	1229.9	956.6	768.7	644.2	585.7	541.7	524.6	519.8
20°	2206.0	1966.8	1510.5	1124.9	832.1	656.4	546.6	495.4	461.2	449.0	446.6
22.5°	2223.0	1954.6	1444.6	1020.0	717.4	566.1	473.4	431.9	407.5	395.3	395.3
25°	2267.0	1959.5	1388.5	922.4	632.0	495.4	417.3	385.6	366.0	358.7	358.7
27.5°	2318.2	1979.0	1344.6	839.4	558.8	441.7	378.2	351.4	341.6	331.9	334.3
30°	2391.4	2018.1	1315.3	771.1	505.1	400.2	346.5	327.0	317.2	314.8	314.8
32.5°	2484.1	2081.5	1312.8	727.2	466.1	368.5	324.5	307.5	302.6	300.1	300.1
35°	2594.0	2137.6	1298.2	707.7	441.7	346.5	307.5	295.3	292.8	292.8	292.8
37.5°	2725.7	2230.4	1288.4	680.8	429.5	334.3	295.3	285.5	285.5	285.5	285.5
40°	2862.4	2306.0	1273.8	656.4	424.6	327.0	287.9	275.7	275.7	275.7	275.7
42.5°	3025.9	2415.8	1268.9	644.2	417.3	322.1	278.2	263.5	266.0	266.0	268.4
45°	3223.5	2540.3	1266.5	632.0	414.8	317.2	268.4	251.3	253.8	251.3	251.3
47.5°	3423.6	2684.2	1273.8	624.7	412.4	312.3	261.1	239.1	239.1	236.7	236.7
50°	3633.5	2816.0	1278.7	617.4	407.5	302.6	248.9	229.4	224.5	219.6	222.1
52.5°	3831.2	2938.0	1281.1	605.2	392.9	287.9	239.1	217.2	209.9	202.5	205.0
55°	4028.8	3055.2	1286.0	590.5	373.4	273.3	226.9	205.0	195.2	185.5	185.5
57.5°	4206.9	3157.6	1273.8	553.9	351.4	258.7	214.7	190.3	175.7	165.9	165.9
60°	4329.0	3230.9	1237.2	500.2	322.1	241.6	202.5	175.7	158.6	151.3	151.3
62.5°	4387.5	3243.1	1171.3	412.4	285.5	224.5	187.9	161.1	146.4	141.5	141.5
65°	4331.4	3189.4	1068.8	309.9	246.5	205.0	173.3	148.9	134.2	122.0	122.0
67.5°	4136.2	3038.1	927.3	234.3	209.9	185.5	158.6	136.7	119.6	109.8	109.8
70°	3743.3	2723.3	717.4	187.9	178.1	161.1	144.0	122.0	107.4	95.2	95.2
72.5°	3228.4	2308.5	505.1	151.3	151.3	136.7	122.0	107.4	92.7	83.0	83.0
75°	2476.8	1708.2	339.2	122.0	124.5	114.7	100.0	87.8	78.1	70.8	70.8
77.5°	1351.9	844.3	207.4	90.3	92.7	87.8	78.1	70.8	65.9	58.6	58.6
80°	656.4	370.9	119.6	63.4	65.9	63.4	58.6	51.2	51.2	46.4	46.4
82.5°	275.7	139.1	63.4	43.9	43.9	39.0	36.6	36.6	36.6	34.2	34.2
85°	68.3	26.8	26.8	24.4	24.4	24.4	22.0	22.0	22.0	17.1	19.5
87.5°	9.8	9.8	9.8	9.8	9.8	9.8	7.3	2.4	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)