

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: P841300

Luminaire Tested: **ARCH4-160-727-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841300
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: ARCH4-160-727-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1305mA 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: 17555 lumens
Efficiency: N/A
Efficacy: 109.2 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 160.7
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



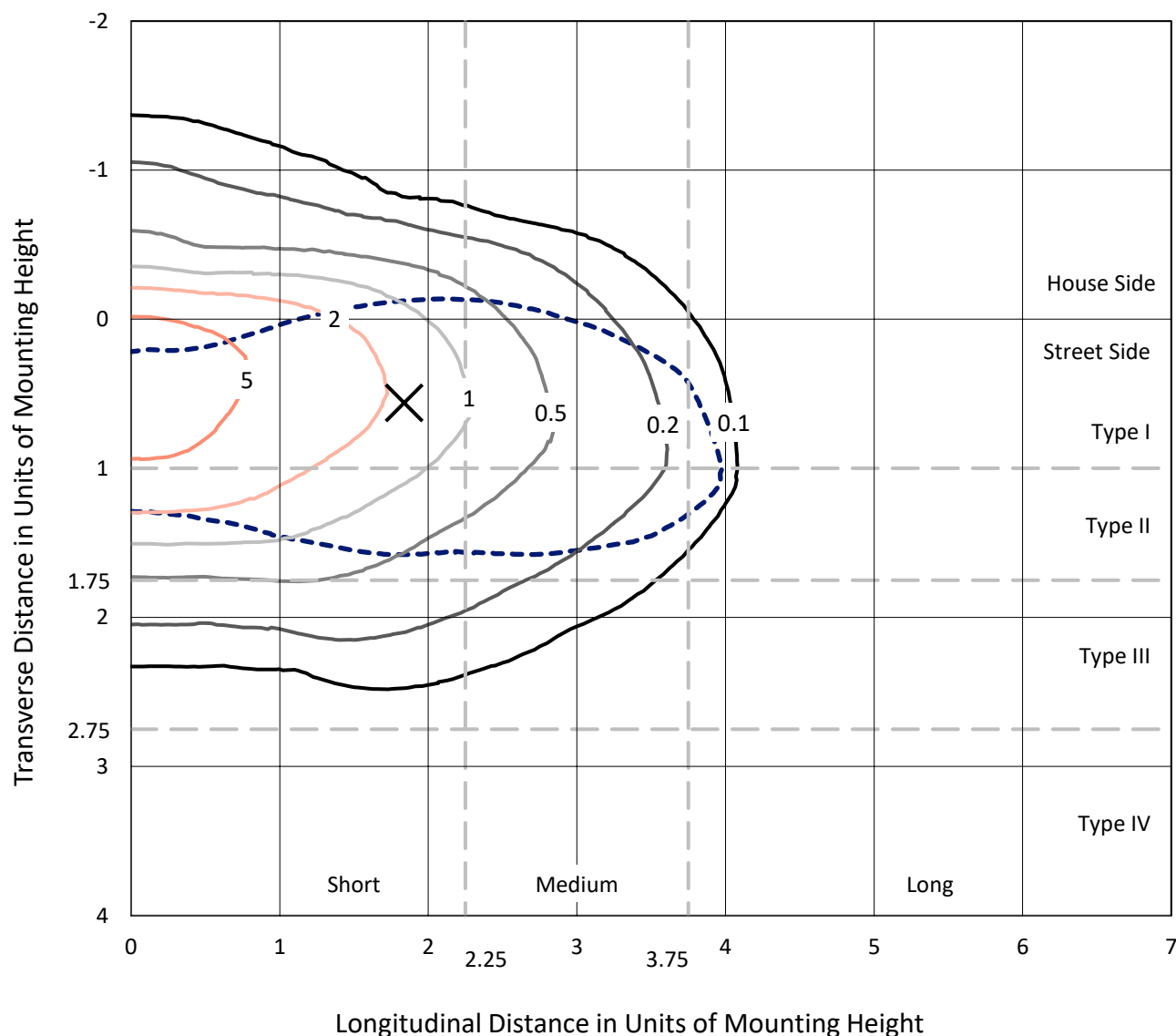
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

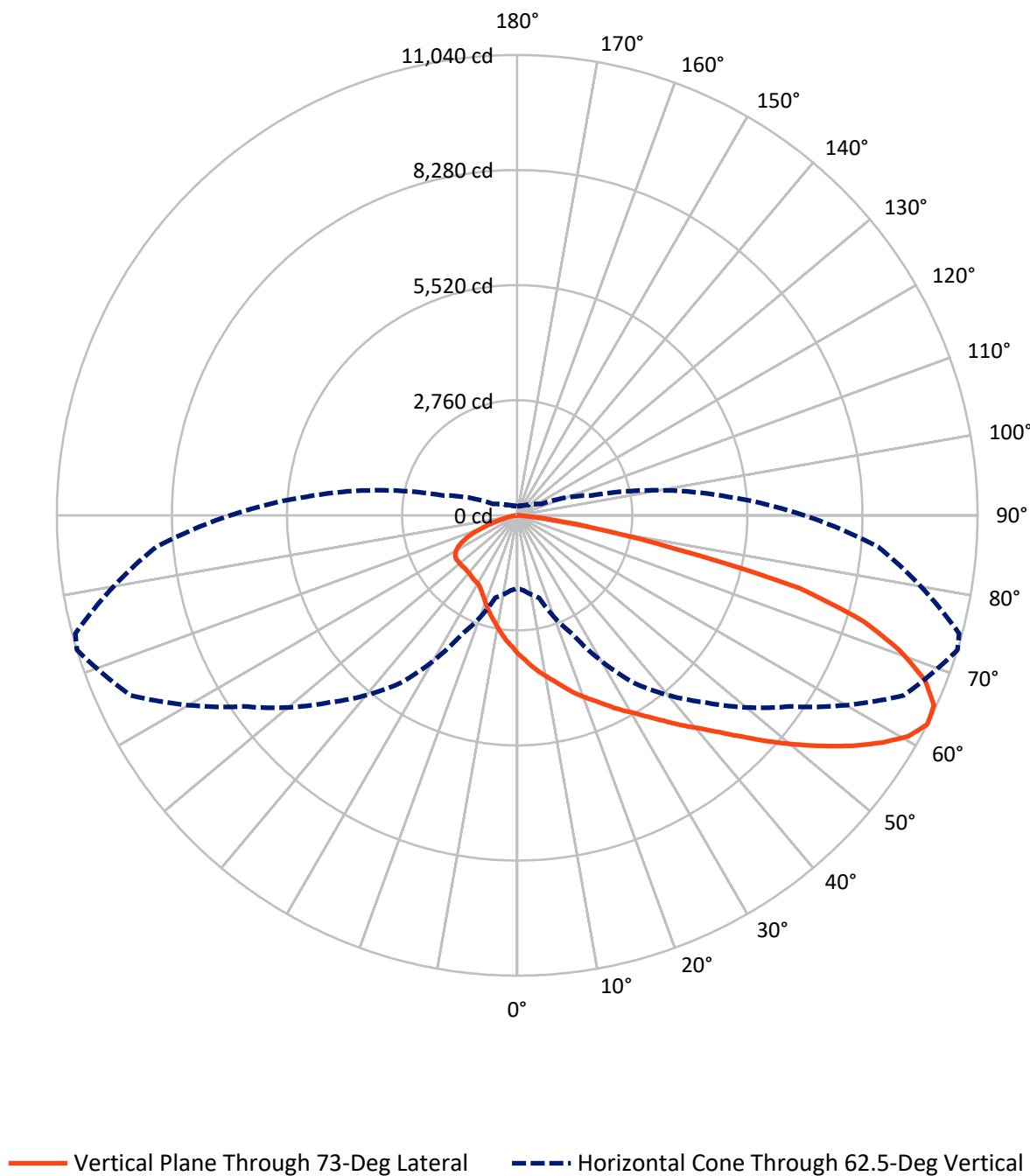


Based on 25 foot mounting height. Maximum calculated value = 8.4 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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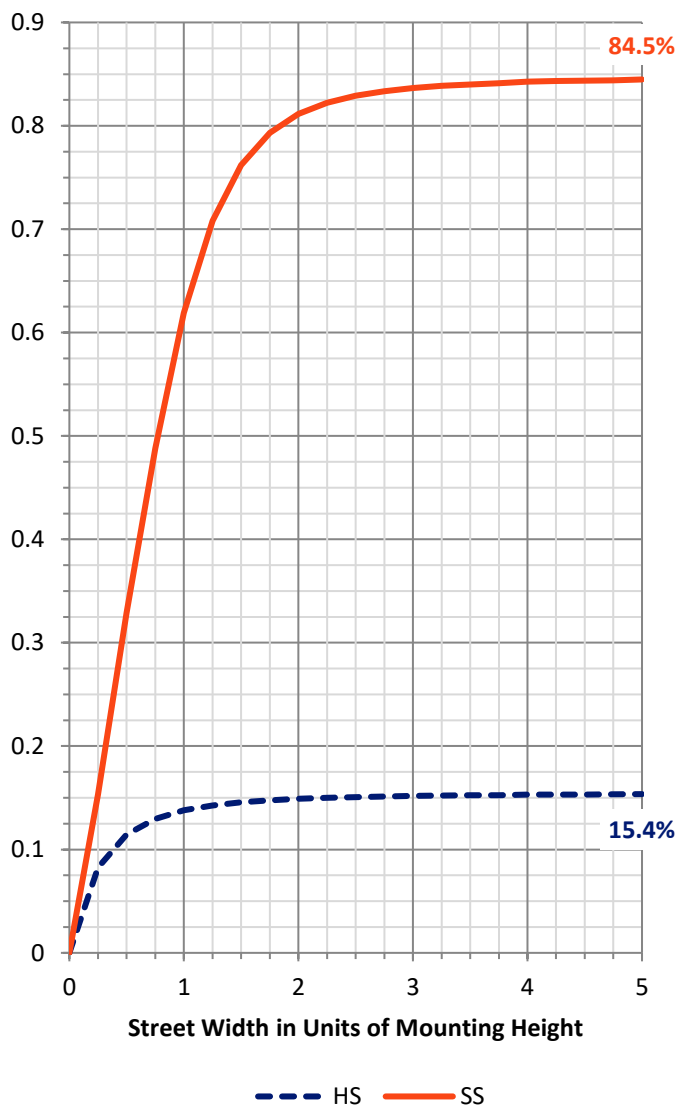
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2721.3	0.0	2721.3
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	14833.7	0.0	14833.7
	% Fixture	84.5	0.0	84.5
Total	Lumens	17555.0	0.0	17555.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	321.1	1.8
10°-20°	969.0	5.5
20°-30°	1612.9	9.2
30°-40°	2433.7	13.9
40°-50°	3401.7	19.4
50°-60°	3757.3	21.4
60°-70°	3273.1	18.6
70°-80°	1653.4	9.4
80°-90°	132.7	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°	17555.0	100.0
0°-180°	17555.0	100.0

Coefficient of Utilization



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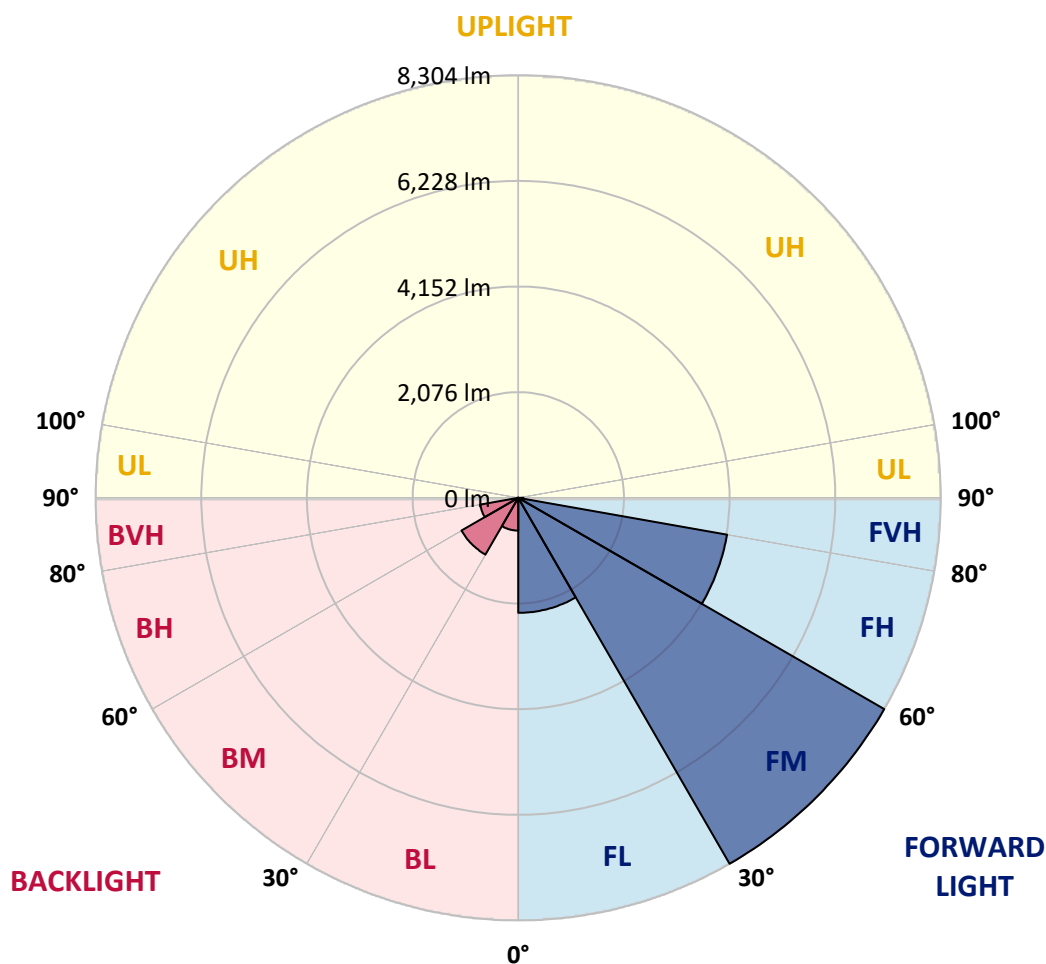
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2259.9	12.9			
FM	(30°-60°)	8304.2	47.3			
FH	(60°-80°)	4167.0	23.7			G2/5000
FVH	(80°-90°)	102.7	0.6			G2/225
BL	(0°-30°)	643.2	3.7	B2/1000		
BM	(30°-60°)	1288.5	7.3	B2/2500		
BH	(60°-80°)	759.5	4.3	B2/1000		G2/1000
BVH	(80°-90°)	30.0	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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	3324.1	3324.1	3324.1	3324.1	3324.1	3324.1	3324.1	3324.1	3324.1	3324.1	3324.1
2.5°	3783.1	3825.2	3802.2	3817.5	3741.0	3691.3	3633.9	3523.0	3461.8	3454.1	3381.5
5°	4337.7	4383.6	4345.4	4333.9	4200.0	4085.3	3955.2	3760.1	3630.1	3607.1	3446.5
7.5°	4892.4	4934.5	4888.6	4854.1	4674.4	4471.6	4280.4	3993.5	3790.7	3752.5	3500.0
10°	5282.6	5320.8	5286.4	5252.0	5064.5	4858.0	4586.4	4211.5	3936.1	3874.9	3534.5
12.5°	5577.1	5600.1	5584.8	5554.2	5378.2	5156.3	4896.2	4456.3	4100.6	4024.1	3588.0
15°	5818.1	5856.3	5837.2	5814.3	5646.0	5424.1	5175.5	4712.6	4291.8	4196.2	3668.3
17.5°	5978.7	6005.5	6009.3	6009.3	5860.2	5642.1	5401.1	4946.0	4483.1	4360.7	3744.8
20°	6051.4	6082.0	6101.2	6131.8	6009.3	5821.9	5577.1	5144.9	4662.9	4525.2	3817.5
22.5°	6085.9	6112.6	6162.4	6231.2	6131.8	5974.9	5749.2	5328.5	4842.7	4697.3	3901.7
25°	6112.6	6147.1	6219.7	6349.8	6280.9	6147.1	5952.0	5538.9	5056.9	4907.7	4024.1
27.5°	6185.3	6227.4	6296.2	6453.1	6368.9	6303.9	6166.2	5764.5	5282.6	5129.6	4173.3
30°	6437.8	6472.2	6468.4	6567.8	6464.5	6445.4	6349.8	5982.6	5500.6	5347.6	4349.2
32.5°	6896.8	6931.2	6847.1	6808.8	6583.1	6587.0	6548.7	6215.9	5760.7	5603.9	4552.0
35°	7390.2	7428.5	7317.6	7252.5	6873.8	6762.9	6782.0	6506.6	6051.4	5894.6	4804.4
37.5°	7830.1	7876.0	7780.4	7684.8	7302.3	7046.0	7042.1	6831.8	6384.2	6223.6	5083.7
40°	8071.1	8124.7	8182.0	8128.5	7726.9	7443.8	7321.4	7164.6	6713.2	6548.7	5385.8
42.5°	8185.9	8335.1	8438.3	8403.9	8074.9	7788.1	7642.7	7512.6	7114.8	6954.2	5745.4
45°	7864.6	7868.4	8086.4	8273.9	8212.6	8021.4	7994.6	7902.8	7573.8	7420.8	6150.9
47.5°	7462.9	7432.3	7585.3	7918.1	8090.2	8140.0	8296.8	8335.1	8097.9	7944.9	6564.0
50°	6499.0	6518.1	7015.4	7493.5	7830.1	8151.4	8511.0	8778.8	8637.2	8491.9	7000.1
52.5°	5286.4	5332.3	5902.2	6954.2	7485.9	8036.7	8637.2	9222.5	9188.1	9050.4	7436.1
55°	4238.3	4311.0	4915.3	6055.3	7046.0	7780.4	8690.8	9628.0	9758.0	9631.8	7864.6
57.5°	3239.9	3316.4	3825.2	4995.7	6483.7	7363.5	8652.5	9983.7	10289.7	10209.4	8258.6
60°	2440.5	2517.0	2842.1	4050.9	5779.8	6896.8	8461.3	10217.0	10767.9	10683.7	8545.4
62.5°	1748.1	1809.3	2050.3	3151.9	4923.0	6342.1	7990.8	10220.9	11039.5	10970.6	8683.1
65°	1258.5	1258.5	1453.6	2249.2	4119.7	5676.6	7279.3	9750.4	10982.1	10962.9	8587.5
67.5°	906.6	914.2	1071.0	1572.1	3285.8	4869.4	6357.4	8912.7	10538.4	10634.0	8243.3
70°	642.6	661.8	734.4	1097.8	2482.5	3844.3	5370.5	7814.8	9738.9	9907.2	7577.7
72.5°	497.3	508.7	558.5	765.0	1813.1	2857.4	4280.4	6590.8	8671.7	8862.9	6671.1
75°	382.5	394.0	432.2	562.3	1300.6	2004.4	3041.0	5114.3	6992.4	7332.9	5359.1
77.5°	279.2	294.5	321.3	409.3	757.4	1273.8	1843.7	2876.5	3859.6	4020.3	2807.7
80°	130.1	149.2	187.4	263.9	409.3	600.6	654.1	1109.3	1855.2	1939.4	1522.4
82.5°	72.7	91.8	107.1	160.7	206.6	214.2	221.9	279.2	700.0	772.7	638.8
85°	34.4	45.9	49.7	68.9	68.9	61.2	72.7	53.6	114.8	137.7	133.9
87.5°	0.0	3.8	7.7	19.1	15.3	11.5	11.5	11.5	11.5	15.3	11.5
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°	3324.1	3324.1	3324.1	3324.1	3324.1	3324.1	3324.1	3324.1	3324.1	3324.1	3324.1
2.5°	3347.0	3297.3	3182.5	3083.1	3018.1	2960.7	2884.2	2849.8	2788.6	2800.0	2765.6
5°	3366.2	3274.3	3071.6	2884.2	2746.5	2624.1	2490.2	2413.7	2329.5	2321.9	2295.1
7.5°	3377.6	3236.1	2945.4	2681.4	2471.1	2283.6	2103.8	2004.4	1901.1	1878.2	1855.2
10°	3366.2	3178.7	2815.3	2471.1	2191.8	1958.5	1755.8	1629.5	1522.4	1495.6	1472.7
12.5°	3377.6	3148.1	2692.9	2276.0	1943.2	1679.3	1449.7	1319.7	1220.2	1193.5	1178.2
15°	3404.4	3129.0	2589.6	2100.0	1721.3	1426.8	1201.1	1090.2	1009.8	983.1	975.4
17.5°	3427.4	3109.9	2478.7	1927.9	1499.5	1204.9	1009.8	918.0	849.2	822.4	814.8
20°	3458.0	3083.1	2367.8	1763.4	1304.4	1029.0	856.8	776.5	723.0	703.8	700.0
22.5°	3484.7	3064.0	2264.5	1598.9	1124.6	887.4	742.1	677.1	638.8	619.7	619.7
25°	3553.6	3071.6	2176.5	1445.9	990.7	776.5	654.1	604.4	573.8	562.3	562.3
27.5°	3633.9	3102.2	2107.7	1315.9	876.0	692.4	592.9	550.8	535.5	520.2	524.0
30°	3748.7	3163.4	2061.8	1208.8	791.8	627.3	543.2	512.6	497.3	493.4	493.4
32.5°	3894.0	3262.9	2057.9	1139.9	730.6	577.6	508.7	482.0	474.3	470.5	470.5
35°	4066.2	3350.9	2035.0	1109.3	692.4	543.2	482.0	462.8	459.0	459.0	459.0
37.5°	4272.7	3496.2	2019.7	1067.2	673.2	524.0	462.8	447.5	447.5	447.5	447.5
40°	4486.9	3614.8	1996.7	1029.0	665.6	512.6	451.4	432.2	432.2	432.2	432.2
42.5°	4743.2	3786.9	1989.1	1009.8	654.1	504.9	436.1	413.1	416.9	416.9	420.8
45°	5053.1	3982.0	1985.3	990.7	650.3	497.3	420.8	394.0	397.8	394.0	394.0
47.5°	5366.7	4207.7	1996.7	979.2	646.5	489.6	409.3	374.9	374.9	371.0	371.0
50°	5695.7	4414.3	2004.4	967.8	638.8	474.3	390.2	359.6	351.9	344.3	348.1
52.5°	6005.5	4605.5	2008.2	948.6	615.9	451.4	374.9	340.4	329.0	317.5	321.3
55°	6315.4	4789.1	2015.9	925.7	585.3	428.4	355.7	321.3	306.0	290.7	290.7
57.5°	6594.6	4949.8	1996.7	868.3	550.8	405.5	336.6	298.4	275.4	260.1	260.1
60°	6785.9	5064.5	1939.4	784.2	504.9	378.7	317.5	275.4	248.6	237.2	237.2
62.5°	6877.7	5083.7	1836.1	646.5	447.5	351.9	294.5	252.5	229.5	221.9	221.9
65°	6789.7	4999.5	1675.4	485.8	386.3	321.3	271.6	233.3	210.4	191.3	191.3
67.5°	6483.7	4762.3	1453.6	367.2	329.0	290.7	248.6	214.2	187.4	172.1	172.1
70°	5867.8	4268.9	1124.6	294.5	279.2	252.5	225.7	191.3	168.3	149.2	149.2
72.5°	5060.7	3618.6	791.8	237.2	237.2	214.2	191.3	168.3	145.4	130.1	130.1
75°	3882.6	2677.6	531.7	191.3	195.1	179.8	156.8	137.7	122.4	110.9	110.9
77.5°	2119.1	1323.5	325.1	141.5	145.4	137.7	122.4	110.9	103.3	91.8	91.8
80°	1029.0	581.4	187.4	99.5	103.3	99.5	91.8	80.3	80.3	72.7	72.7
82.5°	432.2	218.0	99.5	68.9	68.9	61.2	57.4	57.4	57.4	53.6	53.6
85°	107.1	42.1	42.1	38.3	38.3	38.3	34.4	34.4	34.4	26.8	30.6
87.5°	15.3	15.3	15.3	15.3	15.3	15.3	11.5	3.8	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)