

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: P836348

Luminaire Tested: **ARCH3-170-740-U-T4W-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836348
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-170-740-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1310mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16538 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

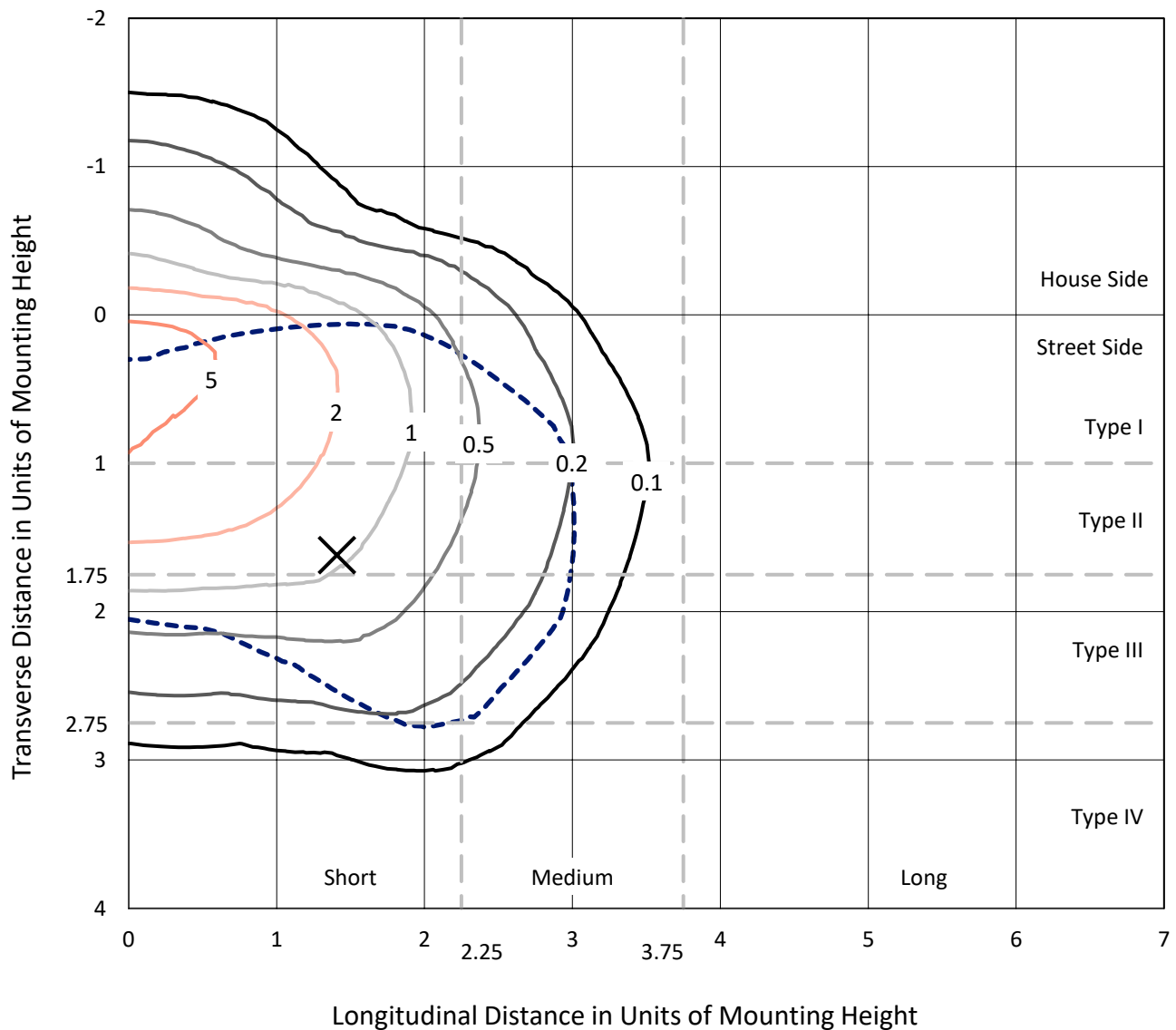
Input Watts (W): 170.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

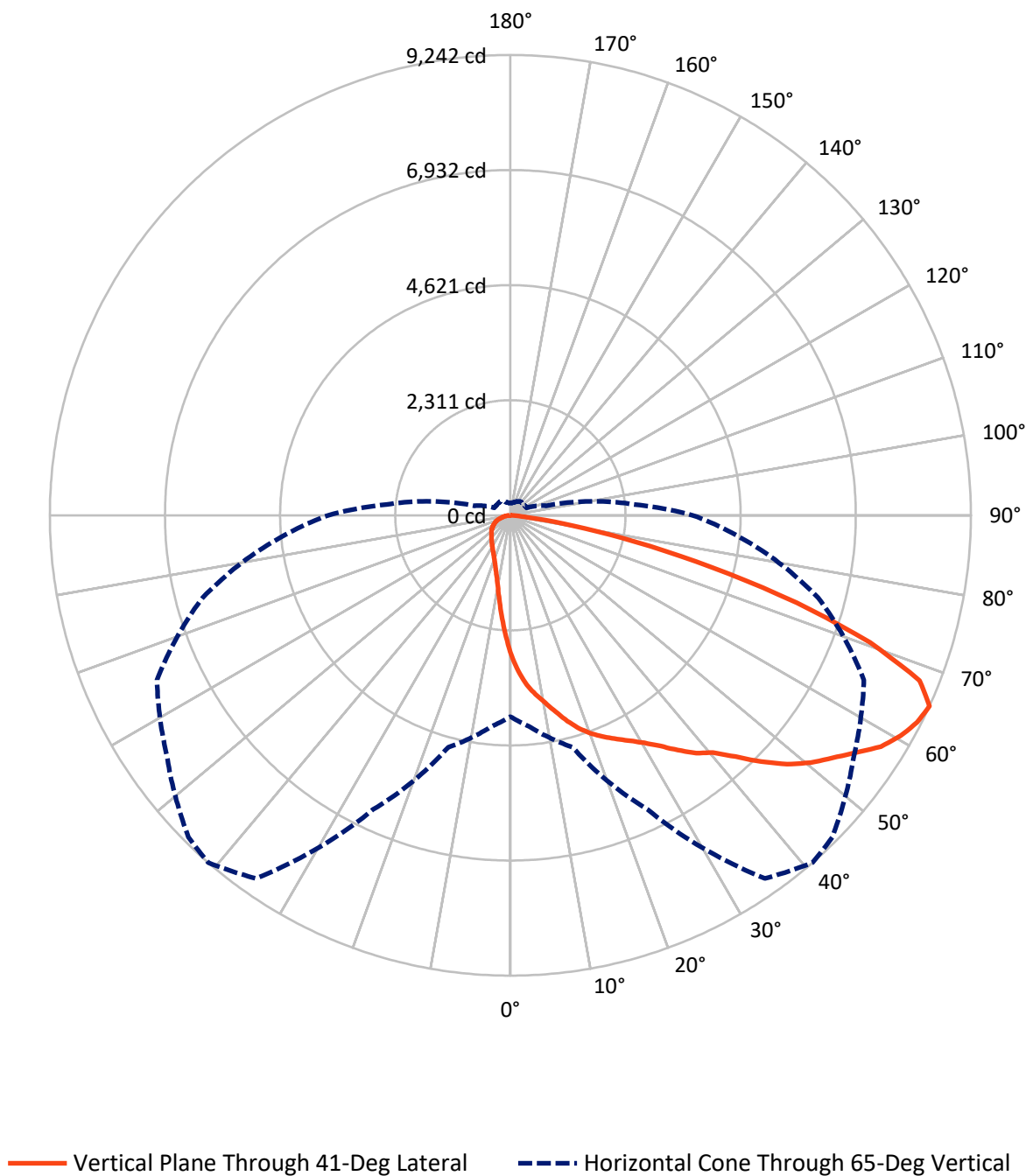
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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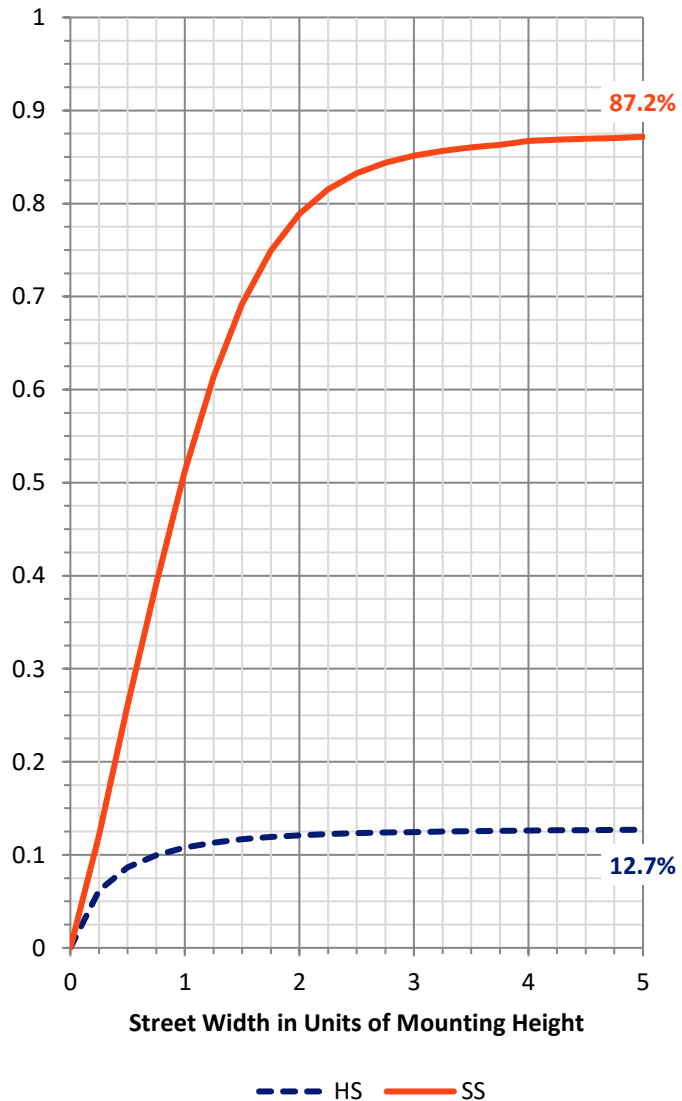
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2123.2	0.0	2123.2
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	14414.8	0.0	14414.8
	% Fixture	87.2	0.0	87.2
Total	Lumens	16538.0	0.0	16538.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	262.6	1.6
10°-20°	787.3	4.8
20°-30°	1354.5	8.2
30°-40°	2054.3	12.4
40°-50°	3009.5	18.2
50°-60°	3800.4	23.0
60°-70°	3563.6	21.5
70°-80°	1588.3	9.6
80°-90°	117.7	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°	16538.0	100.0
0°-180°	16538.0	100.0

Coefficient of Utilization



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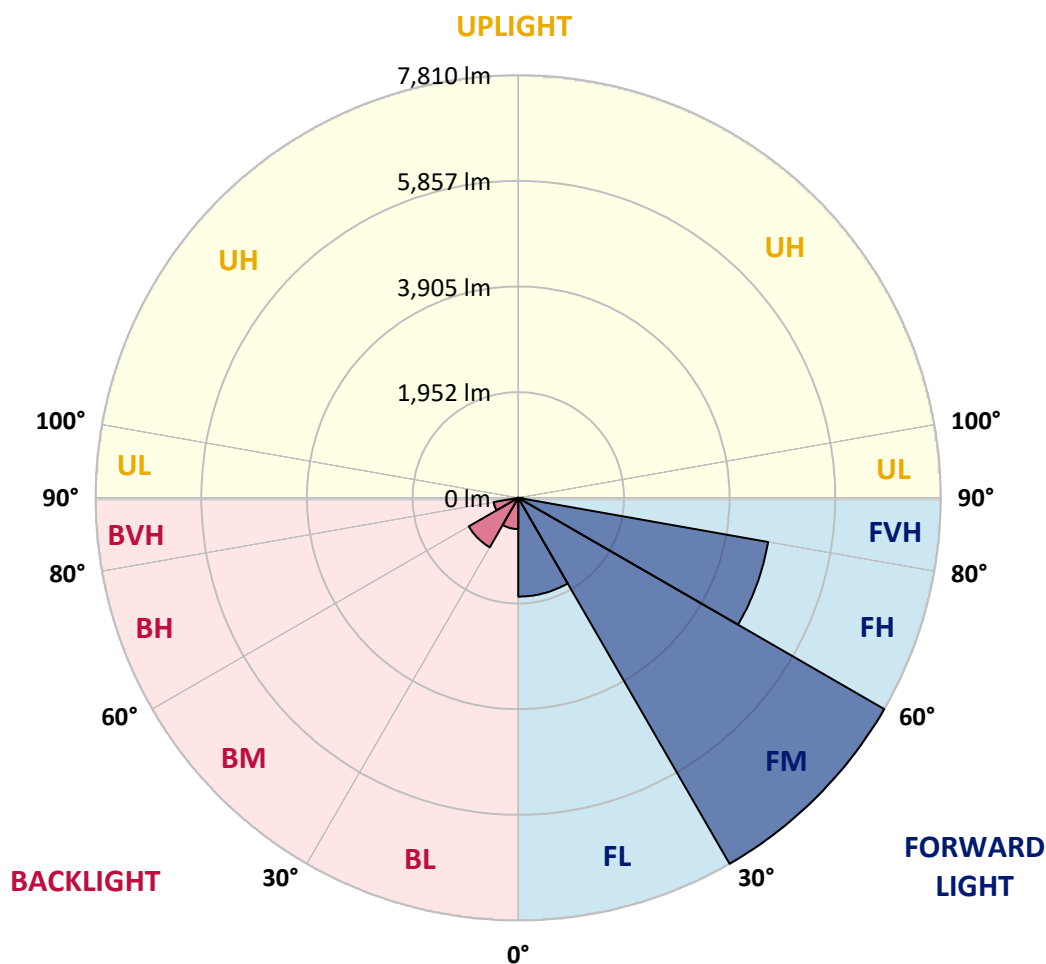
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1826.4	11.0			
FM	(30°-60°)	7809.9	47.2			
FH	(60°-80°)	4690.6	28.4			G2/5000
FVH	(80°-90°)	87.9	0.5			G1/100
BL	(0°-30°)	577.9	3.5	B2/1000		
BM	(30°-60°)	1054.3	6.4	B2/2500		
BH	(60°-80°)	461.2	2.8	B1/500		G1/500
BVH	(80°-90°)	29.8	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	2818.0	2818.0	2818.0	2818.0	2818.0	2818.0	2818.0	2818.0	2818.0	2818.0	2818.0
2.5°	3250.5	3240.0	3233.0	3194.7	3194.7	3142.3	3145.8	3097.0	3037.7	2943.5	2842.4
5°	3557.4	3543.4	3526.0	3487.6	3473.7	3421.3	3414.4	3344.6	3243.5	3079.6	2898.2
7.5°	3825.9	3812.0	3787.5	3731.7	3693.4	3630.6	3613.2	3522.5	3410.9	3208.6	2954.0
10°	4070.0	4059.6	4028.2	3958.4	3906.1	3829.4	3798.0	3675.9	3536.4	3313.2	2999.3
12.5°	4317.7	4303.7	4261.9	4202.6	4139.8	4049.1	4010.8	3853.8	3675.9	3428.3	3065.6
15°	4547.8	4526.9	4495.5	4432.8	4377.0	4289.8	4247.9	4063.1	3846.8	3557.4	3152.8
17.5°	4697.8	4680.4	4652.5	4617.6	4572.3	4506.0	4464.1	4282.8	4017.7	3682.9	3243.5
20°	4788.5	4781.5	4771.1	4750.1	4729.2	4683.9	4652.5	4481.6	4202.6	3805.0	3330.7
22.5°	4858.2	4851.3	4847.8	4847.8	4851.3	4833.8	4812.9	4666.4	4380.4	3934.0	3410.9
25°	4966.4	4962.9	4955.9	4948.9	4973.3	4976.8	4969.8	4868.7	4603.6	4104.9	3512.0
27.5°	5116.3	5105.9	5091.9	5084.9	5109.3	5126.8	5140.7	5071.0	4840.8	4279.3	3627.1
30°	5346.5	5315.1	5280.2	5255.8	5273.3	5301.2	5332.6	5290.7	5084.9	4495.5	3745.7
32.5°	5618.5	5580.2	5500.0	5454.6	5500.0	5520.9	5545.3	5524.4	5339.5	4729.2	3864.3
35°	5949.9	5904.5	5820.8	5754.6	5834.8	5789.4	5779.0	5758.0	5580.2	4959.4	3996.8
37.5°	6500.9	6434.6	6302.1	6155.6	6155.6	6058.0	6019.6	5956.8	5796.4	5165.2	4125.8
40°	7139.1	7051.9	6881.1	6664.8	6466.0	6263.7	6239.3	6194.0	6051.0	5402.3	4272.3
42.5°	7840.1	7672.7	7435.6	7174.0	6853.2	6623.0	6567.2	6438.1	6298.6	5643.0	4418.8
45°	8617.9	8269.1	7923.8	7791.3	7261.2	7051.9	6947.3	6713.6	6556.7	5894.1	4572.3
47.5°	8743.4	8471.4	8241.2	8220.3	7641.4	7467.0	7348.4	7013.6	6835.7	6162.6	4732.7
50°	8673.7	8509.8	8534.2	8450.5	7920.4	7805.3	7714.6	7334.4	7111.2	6420.7	4879.2
52.5°	8380.7	8471.4	8610.9	8457.5	8185.4	8091.3	8045.9	7679.7	7369.3	6657.8	5011.7
55°	8032.0	8094.7	8394.7	8583.0	8492.3	8408.6	8366.8	8080.8	7623.9	6856.6	5133.8
57.5°	7522.8	7494.9	7826.2	8562.1	8813.2	8764.4	8719.0	8474.9	7861.1	6999.6	5210.5
60°	6759.0	6699.7	7118.2	8143.6	8917.8	8994.5	8973.6	8736.5	8042.4	6996.1	5179.1
62.5°	5437.2	5583.7	6162.6	7460.0	8963.2	9158.5	9120.1	8757.4	8101.7	6793.9	4980.3
65°	4042.1	4251.4	4819.9	6518.3	8900.4	9242.2	9137.5	8415.6	7826.2	6392.8	4544.4
67.5°	2912.2	3097.0	3512.0	5363.9	8297.0	8858.5	8736.5	7857.6	7191.5	5824.3	3941.0
70°	1991.4	2124.0	2406.5	3906.1	7083.3	7658.8	7582.1	7024.0	6190.5	5147.7	3201.6
72.5°	1405.5	1461.3	1642.7	2577.3	5381.4	6009.2	5918.5	5779.0	4973.3	4279.3	2490.2
75°	1053.3	1088.1	1185.8	1667.1	3630.6	4164.2	4080.5	4160.7	3714.3	3240.0	1813.6
77.5°	397.6	432.5	673.1	1063.7	2148.4	2556.4	2472.7	2521.5	2064.7	1635.7	903.3
80°	108.1	115.1	223.2	505.7	976.5	1273.0	1157.9	994.0	767.3	753.3	477.8
82.5°	45.3	52.3	101.1	272.0	348.8	348.8	293.0	362.7	293.0	352.2	230.2
85°	17.4	20.9	24.4	69.8	45.3	48.8	52.3	69.8	59.3	73.2	52.3
87.5°	0.0	0.0	0.0	3.5	3.5	7.0	3.5	7.0	10.5	10.5	10.5
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°	2818.0	2818.0	2818.0	2818.0	2818.0	2818.0	2818.0	2818.0	2818.0	2818.0	2818.0
2.5°	2800.6	2762.2	2706.4	2615.7	2521.5	2469.2	2403.0	2392.5	2322.7	2315.8	2287.9
5°	2818.0	2737.8	2594.8	2420.4	2249.5	2117.0	2019.3	1967.0	1865.9	1865.9	1838.0
7.5°	2831.9	2706.4	2476.2	2218.1	1984.4	1806.6	1674.1	1618.3	1527.6	1520.6	1499.7
10°	2835.4	2668.0	2347.2	2012.4	1726.4	1545.0	1416.0	1353.2	1273.0	1266.0	1252.1
12.5°	2863.3	2647.1	2232.1	1834.5	1541.5	1346.2	1220.7	1168.3	1105.6	1098.6	1084.6
15°	2908.7	2647.1	2134.4	1684.5	1377.6	1196.3	1088.1	1039.3	994.0	987.0	980.0
17.5°	2954.0	2640.1	2036.8	1545.0	1241.6	1077.7	983.5	945.1	910.3	906.8	899.8
20°	2995.9	2636.6	1939.1	1426.4	1137.0	980.0	906.8	871.9	844.0	844.0	840.5
22.5°	3037.7	2629.7	1844.9	1314.8	1046.3	906.8	844.0	805.6	784.7	784.7	781.2
25°	3100.5	2629.7	1757.8	1220.7	973.0	851.0	788.2	760.3	742.9	739.4	739.4
27.5°	3173.7	2650.6	1681.0	1137.0	910.3	795.2	746.3	718.4	697.5	690.5	694.0
30°	3253.9	2668.0	1611.3	1063.7	851.0	753.3	701.0	673.1	652.2	645.2	648.7
32.5°	3334.2	2688.9	1548.5	997.5	791.7	715.0	662.6	631.3	610.3	606.8	606.8
35°	3421.3	2709.9	1485.7	941.7	742.9	676.6	627.8	592.9	578.9	572.0	575.5
37.5°	3508.5	2744.7	1426.4	889.3	708.0	641.7	596.4	561.5	551.0	547.6	547.6
40°	3613.2	2797.1	1402.0	854.5	676.6	610.3	572.0	537.1	526.6	526.6	526.6
42.5°	3700.4	2838.9	1381.1	816.1	652.2	582.4	547.6	519.7	512.7	509.2	512.7
45°	3787.5	2877.3	1353.2	781.2	620.8	554.5	526.6	498.7	491.8	491.8	491.8
47.5°	3874.7	2898.2	1314.8	746.3	592.9	530.1	505.7	481.3	474.3	474.3	474.3
50°	3944.5	2915.6	1259.0	708.0	561.5	509.2	484.8	460.4	453.4	453.4	453.4
52.5°	4014.2	2919.1	1199.7	662.6	530.1	484.8	463.9	439.4	432.5	429.0	429.0
55°	4077.0	2915.6	1130.0	610.3	495.2	456.9	439.4	418.5	404.6	390.6	397.6
57.5°	4122.4	2912.2	1049.8	558.0	460.4	429.0	422.0	394.1	366.2	331.3	338.3
60°	4104.9	2873.8	962.6	491.8	422.0	401.1	401.1	362.7	313.9	296.4	299.9
62.5°	3993.3	2765.7	871.9	422.0	383.6	373.2	369.7	327.8	289.5	272.0	275.5
65°	3658.5	2493.6	739.4	359.2	345.3	341.8	341.8	303.4	268.5	247.6	251.1
67.5°	3149.3	2092.6	603.4	303.4	306.9	313.9	313.9	279.0	244.1	223.2	226.7
70°	2525.0	1635.7	481.3	261.6	265.1	275.5	282.5	251.1	219.7	198.8	198.8
72.5°	1900.7	1241.6	387.1	219.7	237.2	237.2	247.6	223.2	191.8	170.9	174.4
75°	1377.6	889.3	306.9	184.8	205.8	202.3	202.3	188.3	163.9	150.0	150.0
77.5°	652.2	467.3	244.1	132.5	160.4	156.9	160.4	150.0	139.5	125.6	129.0
80°	320.9	230.2	156.9	94.2	111.6	115.1	125.6	118.6	115.1	104.6	104.6
82.5°	153.5	90.7	73.2	66.3	76.7	80.2	87.2	87.2	90.7	83.7	83.7
85°	41.9	24.4	31.4	41.9	48.8	52.3	59.3	62.8	62.8	59.3	62.8
87.5°	10.5	10.5	14.0	20.9	24.4	27.9	31.4	31.4	14.0	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)