

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: P836891

Luminaire Tested: **ARCH3-90-727-U-T2R-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836891
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-90-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 735mA LIGHTSQUARE WITH 40 LEDS AND TYPE II ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9917 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Luminous Opening: Rectangular (W 0.58' 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

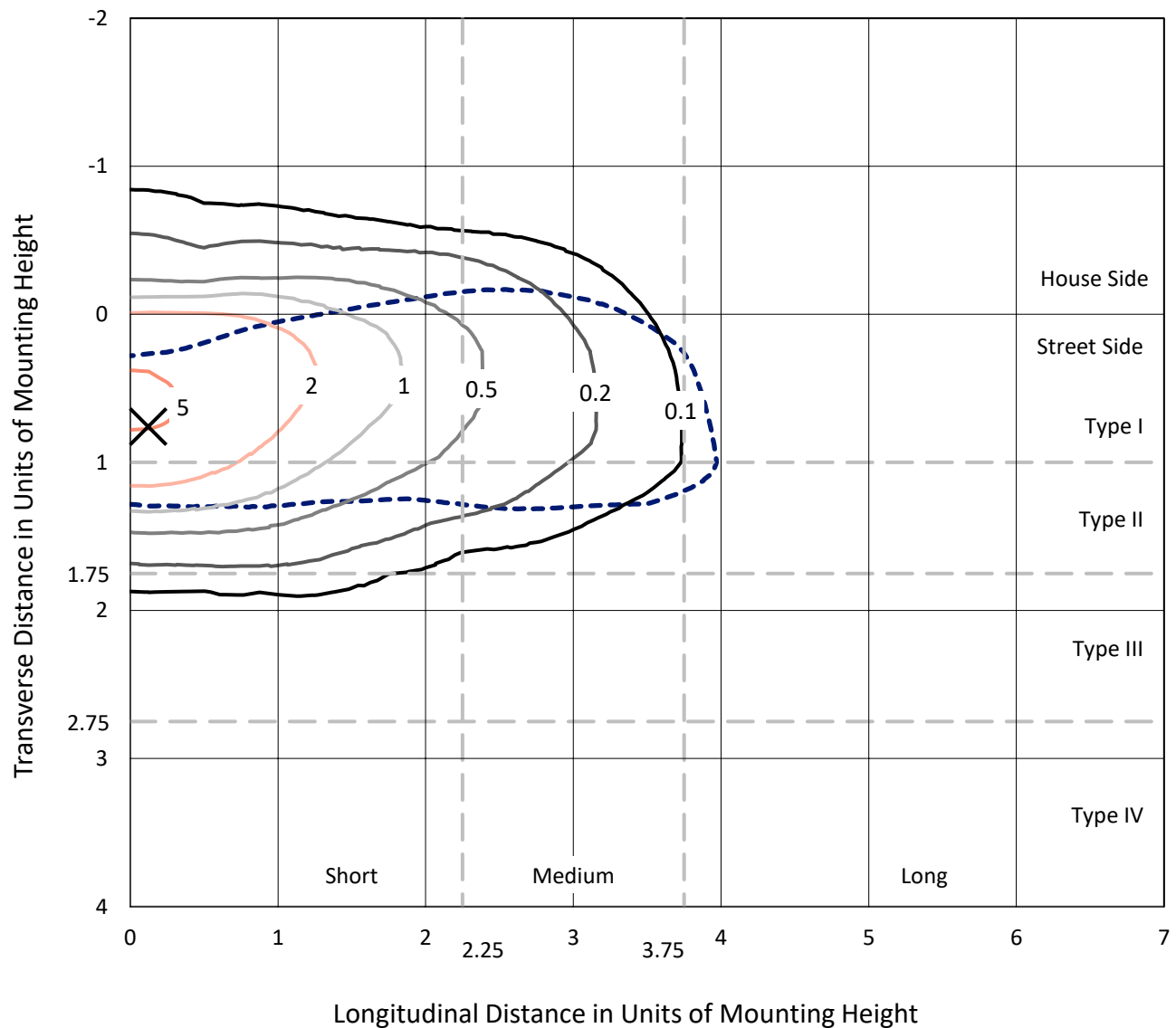


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

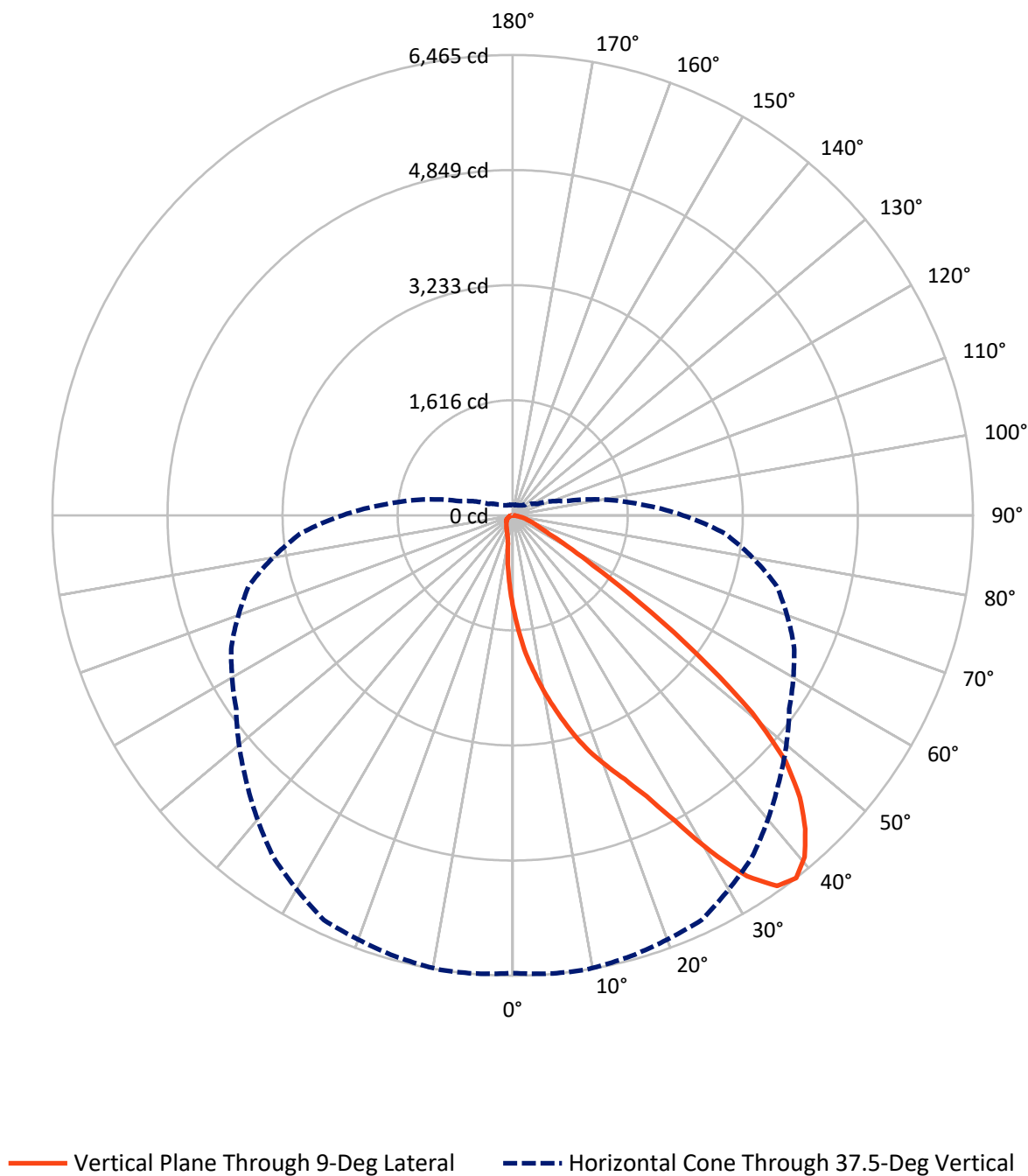


Based on 25 foot mounting height. Maximum calculated value = 5.8 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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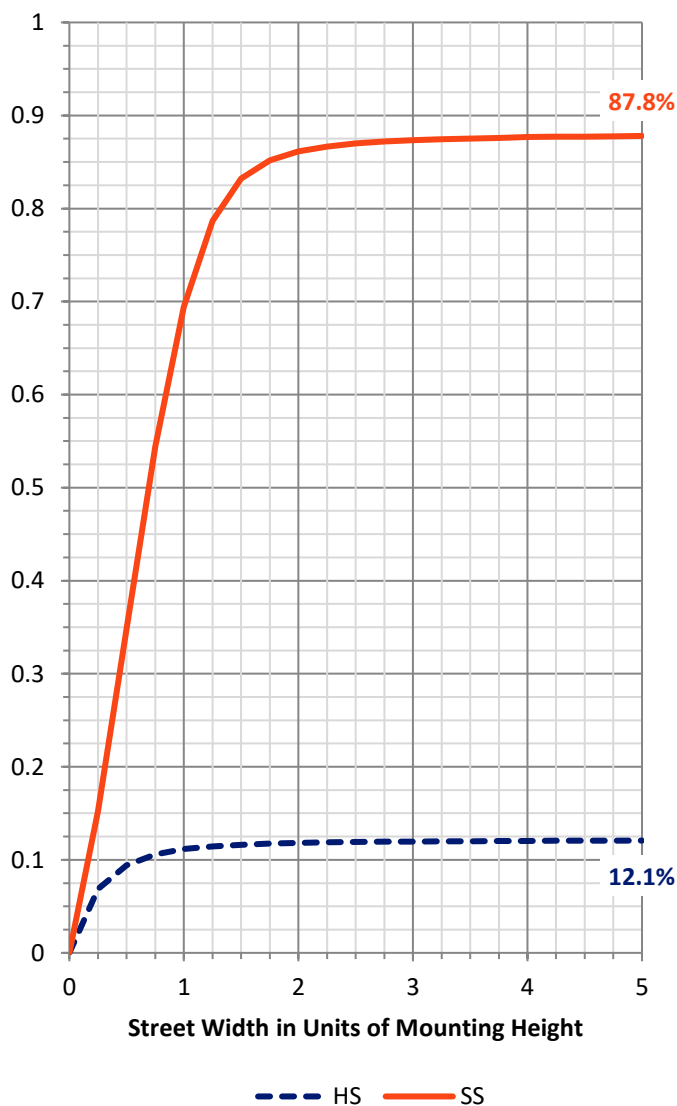
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1206.1	0.0	1206.1
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	8710.9	0.0	8710.9
	% Fixture	87.8	0.0	87.8
Total	Lumens	9917.0	0.0	9917.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.8	1.3
10°-20°	458.0	4.6
20°-30°	941.0	9.5
30°-40°	1663.4	16.8
40°-50°	2209.6	22.3
50°-60°	2095.7	21.1
60°-70°	1598.8	16.1
70°-80°	775.1	7.8
80°-90°	43.6	0.4
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°	9917.0	100.0
0°-180°	9917.0	100.0

Coefficient of Utilization



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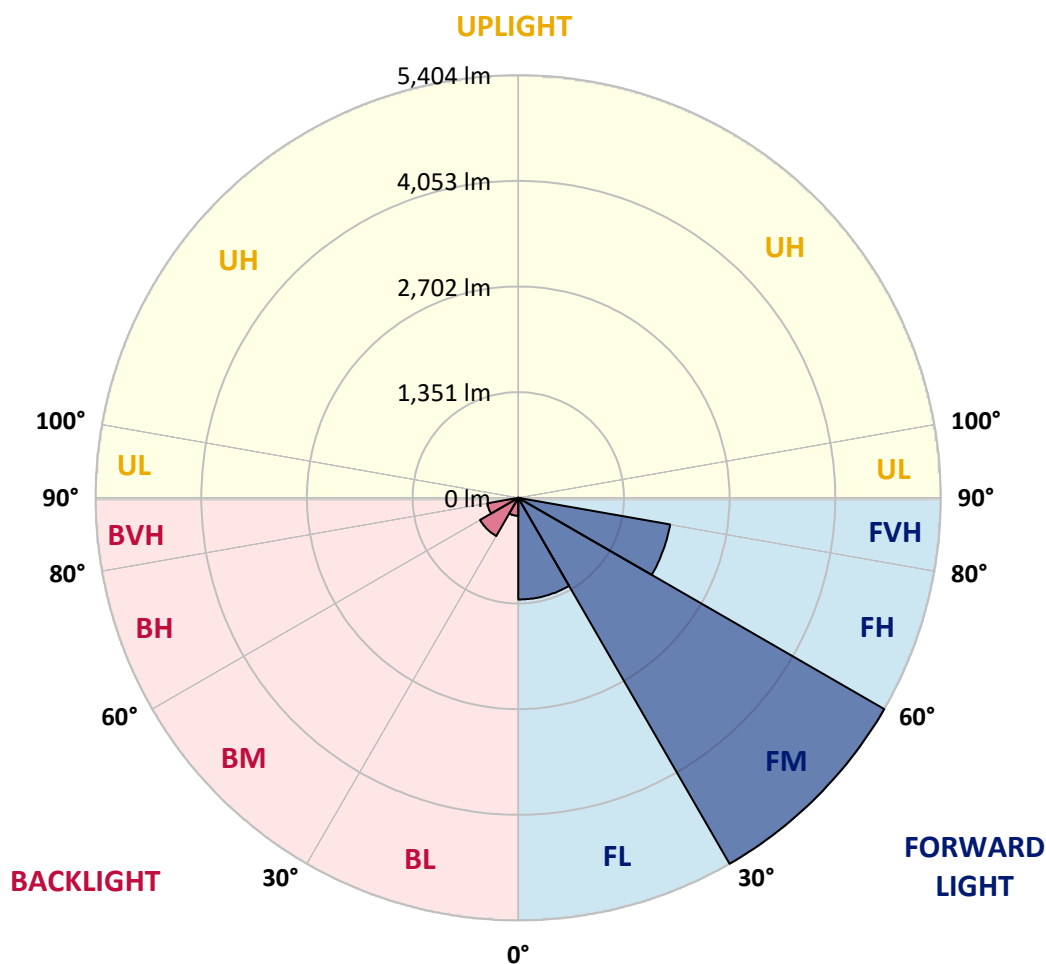
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1300.6	13.1			
FM	(30°-60°)	5404.3	54.5			
FH	(60°-80°)	1971.5	19.9			G2/5000
FVH	(80°-90°)	34.5	0.3			G1/100
BL	(0°-30°)	230.2	2.3	B1/500		
BM	(30°-60°)	564.4	5.7	B1/1000		
BH	(60°-80°)	402.5	4.1	B1/500		G1/500
BVH	(80°-90°)	9.1	0.1			G0/10
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°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1310.9	1310.9	1310.9	1310.9	1310.9	1310.9	1310.9	1310.9	1310.9	1310.9	1310.9
2.5°	1624.4	1595.9	1628.5	1624.4	1595.9	1577.6	1520.6	1502.3	1435.1	1386.2	1343.5
5°	1958.2	1929.7	1958.2	1950.1	1909.4	1864.6	1770.9	1709.9	1589.8	1483.9	1388.3
7.5°	2235.1	2235.1	2247.3	2249.3	2200.5	2131.2	2015.2	1923.6	1754.7	1591.8	1439.1
10°	2534.3	2536.3	2562.8	2544.5	2479.3	2385.7	2239.1	2123.1	1919.5	1705.8	1488.0
12.5°	2853.9	2855.9	2864.0	2855.9	2778.6	2658.5	2481.4	2328.7	2094.6	1836.1	1555.2
15°	3173.5	3175.5	3185.7	3171.4	3085.9	2945.5	2743.9	2556.7	2279.8	1982.6	1636.6
17.5°	3472.7	3476.8	3484.9	3466.6	3377.0	3210.1	3004.5	2778.6	2477.3	2139.4	1728.2
20°	3741.4	3745.4	3751.6	3727.1	3637.6	3470.6	3248.8	3012.6	2678.8	2300.2	1827.9
22.5°	4012.1	4016.2	4026.4	3993.8	3894.0	3702.7	3484.9	3240.6	2892.5	2477.3	1944.0
25°	4358.2	4362.2	4370.4	4323.6	4187.2	3963.3	3733.2	3482.9	3124.6	2676.8	2086.5
27.5°	4865.0	4860.9	4860.9	4775.4	4541.4	4250.3	3983.6	3729.2	3375.0	2890.5	2243.2
30°	5492.0	5481.8	5475.7	5359.7	5025.8	4573.9	4240.1	3959.2	3615.2	3116.5	2412.2
32.5°	6053.8	6053.8	6041.6	5919.4	5565.2	5009.5	4512.9	4183.1	3847.2	3344.4	2587.2
35°	6385.6	6399.8	6393.7	6302.1	6043.6	5477.7	4881.3	4451.8	4091.5	3582.6	2796.9
37.5°	6430.4	6458.9	6465.0	6410.0	6273.6	5860.4	5290.4	4742.9	4360.2	3839.1	3000.4
40°	6249.2	6310.3	6310.3	6302.1	6253.3	6041.6	5634.5	5080.8	4637.0	4105.7	3206.0
42.5°	5970.3	6033.4	6025.3	6055.8	6043.6	5998.8	5827.8	5396.3	4913.9	4380.5	3393.3
45°	5606.0	5671.1	5654.8	5709.8	5734.2	5783.1	5807.5	5616.1	5186.6	4679.8	3603.0
47.5°	5021.8	5131.7	5156.1	5253.8	5355.6	5508.3	5624.3	5695.5	5441.1	5001.4	3830.9
50°	4158.7	4313.4	4362.2	4567.8	4846.7	5162.2	5349.5	5597.8	5620.2	5331.2	4077.2
52.5°	2978.0	3157.2	3232.5	3570.4	4144.4	4694.0	5031.9	5382.0	5689.4	5646.7	4343.9
55°	1925.6	2078.3	2151.6	2469.1	3232.5	4095.6	4657.4	5103.2	5650.7	5935.7	4649.2
57.5°	1186.7	1274.3	1323.1	1595.9	2298.2	3328.2	4166.8	4846.7	5532.7	6186.1	4966.8
60°	800.0	850.9	875.3	1003.5	1561.3	2487.5	3493.0	4578.0	5378.0	6355.1	5255.8
62.5°	531.3	547.6	572.0	651.4	1030.0	1746.5	2682.9	4097.6	5261.9	6365.2	5469.6
65°	411.2	419.3	429.5	464.1	635.1	1221.3	1887.0	3320.0	5088.9	6149.5	5536.8
67.5°	323.7	331.8	344.0	362.3	460.0	828.5	1284.4	2432.5	4734.7	5811.6	5426.8
70°	254.4	260.6	268.7	285.0	358.3	600.5	848.8	1616.2	4020.3	5489.9	5080.8
72.5°	201.5	207.6	215.8	232.1	291.1	439.7	582.2	1007.6	3100.2	5097.1	4415.2
75°	158.8	162.8	169.0	185.2	234.1	342.0	394.9	602.5	2106.8	4378.5	3440.1
77.5°	79.4	97.7	112.0	128.2	171.0	236.1	262.6	333.8	889.5	2247.3	1640.7
80°	46.8	57.0	61.1	71.2	112.0	142.5	142.5	134.3	280.9	863.1	669.7
82.5°	26.5	36.6	38.7	40.7	67.2	81.4	65.1	48.9	57.0	289.1	195.4
85°	8.1	12.2	14.2	16.3	22.4	24.4	22.4	20.4	16.3	28.5	18.3
87.5°	0.0	0.0	0.0	0.0	2.0	4.1	4.1	4.1	6.1	6.1	6.1
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°	1310.9	1310.9	1310.9	1310.9	1310.9	1310.9	1310.9	1310.9	1310.9	1310.9	1310.9
2.5°	1319.0	1292.6	1241.7	1194.9	1150.1	1117.5	1087.0	1058.5	1038.1	1021.9	1019.8
5°	1337.4	1284.4	1186.7	1095.1	1011.7	942.5	883.4	836.6	802.0	777.6	775.6
7.5°	1361.8	1280.4	1131.8	995.4	871.2	771.5	686.0	622.9	578.1	559.8	545.5
10°	1382.2	1276.3	1076.8	895.7	732.8	606.6	504.8	441.7	409.1	396.9	390.8
12.5°	1416.8	1280.4	1030.0	804.1	612.7	464.1	386.8	352.2	337.9	327.7	325.7
15°	1467.6	1298.7	985.2	714.5	490.6	374.5	329.8	307.4	293.1	291.1	289.1
17.5°	1518.5	1315.0	944.5	622.9	407.1	325.7	295.2	276.8	266.7	264.6	264.6
20°	1577.6	1335.3	899.7	535.4	348.1	293.1	268.7	254.4	242.2	240.2	240.2
22.5°	1646.8	1363.8	857.0	458.0	309.4	268.7	248.3	232.1	221.9	219.8	219.8
25°	1740.4	1406.6	822.4	401.0	282.9	248.3	230.0	215.8	207.6	203.6	203.6
27.5°	1844.2	1465.6	797.9	366.4	264.6	232.1	213.7	201.5	193.4	189.3	189.3
30°	1960.3	1530.7	781.7	352.2	254.4	217.8	201.5	189.3	179.1	177.1	177.1
32.5°	2088.5	1606.1	771.5	354.2	252.4	207.6	189.3	177.1	169.0	164.9	164.9
35°	2231.0	1689.5	765.4	366.4	256.5	199.5	179.1	166.9	158.8	154.7	154.7
37.5°	2389.8	1787.2	765.4	378.6	266.7	197.5	169.0	156.7	150.6	146.6	146.6
40°	2538.4	1891.0	773.5	392.9	276.8	197.5	160.8	150.6	142.5	138.4	138.4
42.5°	2654.4	1950.1	779.6	407.1	282.9	195.4	152.7	142.5	136.4	132.3	132.3
45°	2786.7	2013.2	767.4	413.2	282.9	191.3	146.6	136.4	130.3	126.2	126.2
47.5°	2933.3	2090.5	765.4	417.3	276.8	183.2	140.5	130.3	126.2	122.1	122.1
50°	3081.9	2176.0	769.4	415.3	268.7	171.0	132.3	126.2	120.1	116.0	116.0
52.5°	3250.8	2265.6	777.6	411.2	250.4	156.7	126.2	120.1	114.0	109.9	107.9
55°	3438.1	2363.3	793.9	403.0	225.9	142.5	120.1	114.0	105.8	101.8	99.7
57.5°	3653.8	2483.4	812.2	386.8	199.5	130.3	114.0	105.8	93.6	87.5	85.5
60°	3859.4	2619.8	832.5	348.1	173.0	118.1	107.9	95.7	83.5	79.4	77.4
62.5°	4052.8	2754.1	842.7	278.9	146.6	107.9	101.8	87.5	75.3	71.2	69.2
65°	4177.0	2900.7	820.3	189.3	120.1	99.7	93.6	81.4	69.2	63.1	63.1
67.5°	4185.1	2969.9	743.0	124.2	97.7	89.6	85.5	73.3	61.1	57.0	55.0
70°	3979.5	2866.1	567.9	97.7	81.4	77.4	77.4	65.1	52.9	48.9	46.8
72.5°	3507.3	2538.4	362.3	79.4	69.2	65.1	65.1	55.0	46.8	40.7	38.7
75°	2768.4	1958.2	193.4	65.1	57.0	55.0	50.9	44.8	38.7	34.6	32.6
77.5°	1272.2	863.1	89.6	46.8	42.7	42.7	38.7	32.6	30.5	26.5	26.5
80°	502.8	293.1	44.8	30.5	28.5	28.5	28.5	22.4	22.4	18.3	16.3
82.5°	138.4	61.1	22.4	18.3	18.3	18.3	16.3	14.2	14.2	12.2	12.2
85°	14.2	10.2	10.2	10.2	10.2	8.1	8.1	6.1	4.1	4.1	4.1
87.5°	6.1	6.1	6.1	6.1	6.1	4.1	2.0	0.0	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)