

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: P841181

Luminaire Tested: **ARCH4-140-740-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841181
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-140-740-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1155mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17050 lumens
Efficiency: N/A
Efficacy: 120.7 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

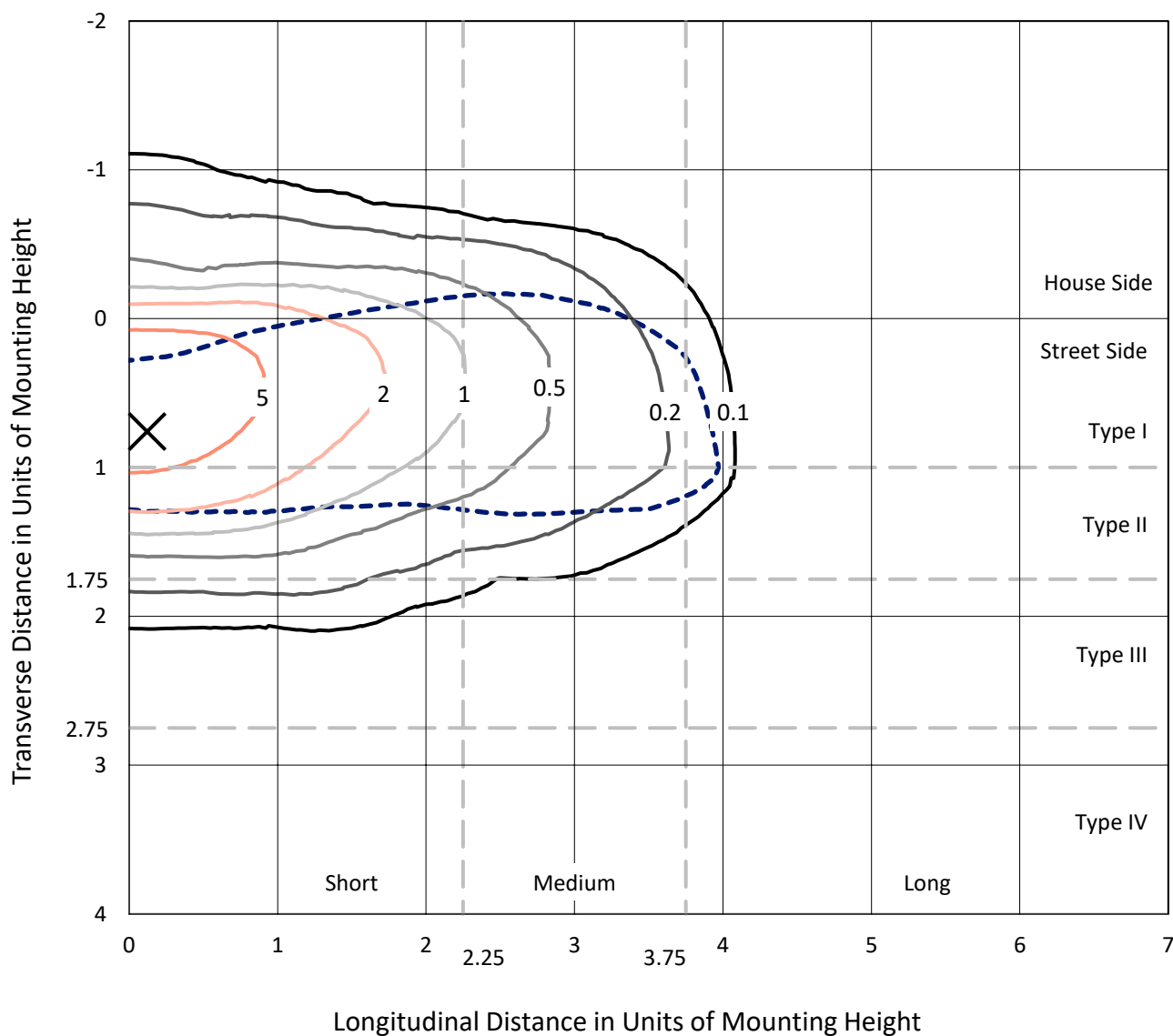
Input Watts (W): 141.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

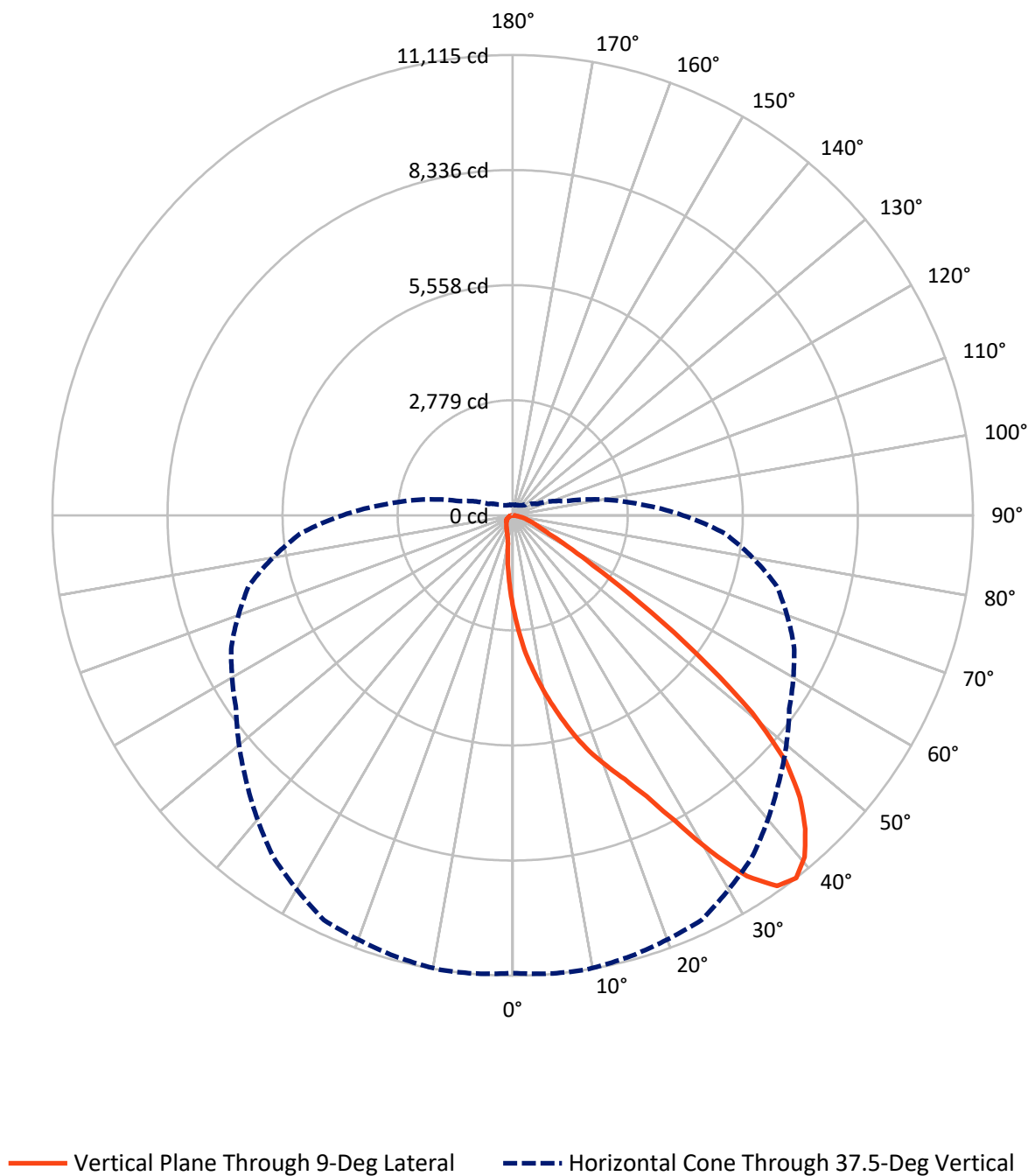
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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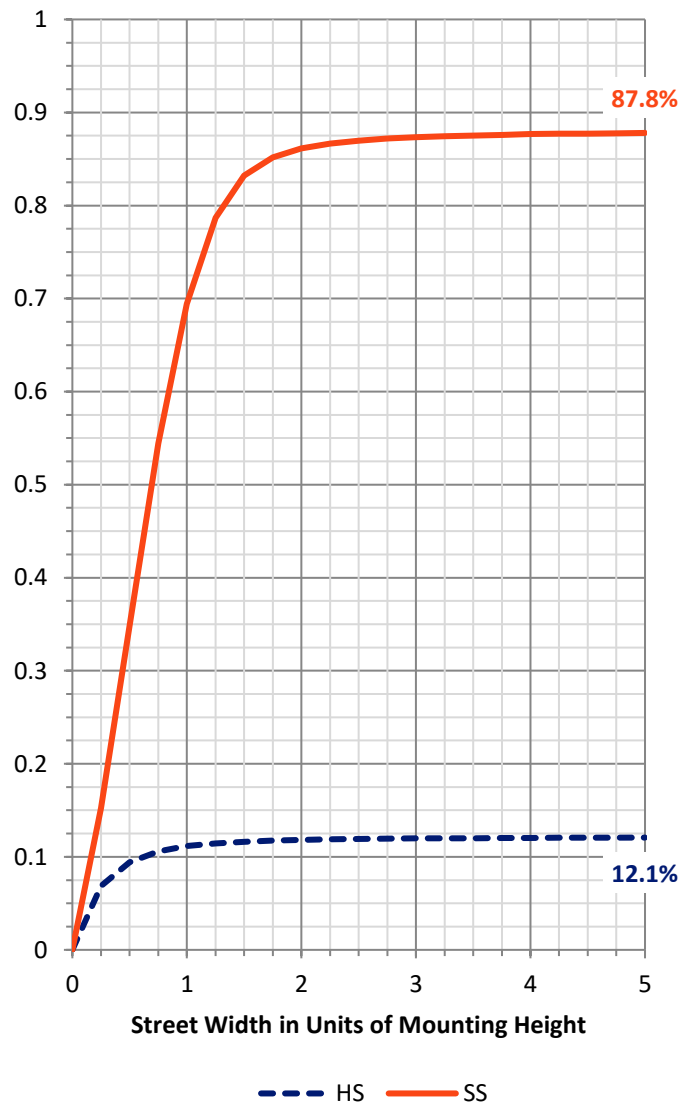
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2073.6	0.0	2073.6
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	14976.4	0.0	14976.4
	% Fixture	87.8	0.0	87.8
Total	Lumens	17050.0	0.0	17050.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.5	1.3
10°-20°	787.4	4.6
20°-30°	1617.9	9.5
30°-40°	2859.8	16.8
40°-50°	3798.9	22.3
50°-60°	3603.1	21.1
60°-70°	2748.8	16.1
70°-80°	1332.6	7.8
80°-90°	75.0	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°	17050.0	100.0
0°-180°	17050.0	100.0

Coefficient of Utilization



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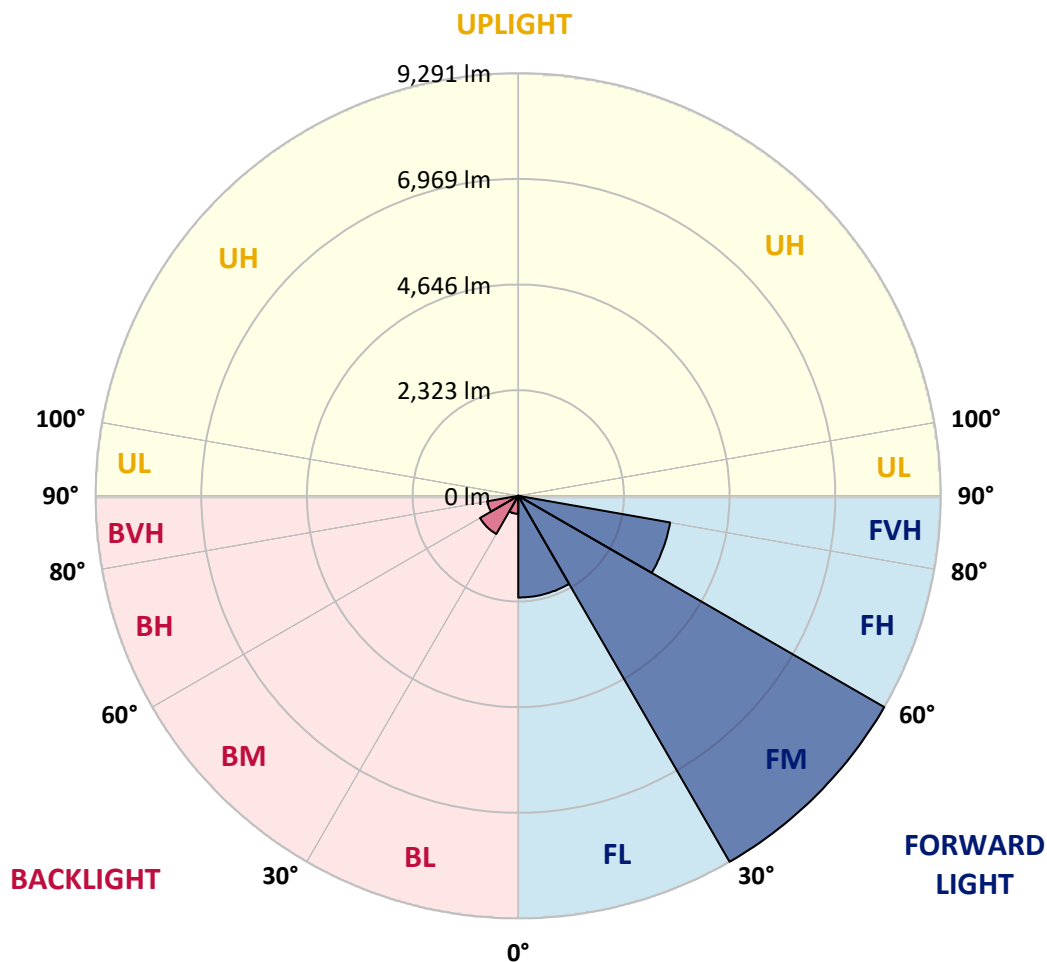
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2236.1	13.1			
FM	(30°-60°)	9291.4	54.5			
FH	(60°-80°)	3389.5	19.9			G2/5000
FVH	(80°-90°)	59.4	0.3			G1/100
BL	(0°-30°)	395.7	2.3	B1/500		
BM	(30°-60°)	970.3	5.7	B1/1000		
BH	(60°-80°)	692.0	4.1	B2/1000		G2/1000
BVH	(80°-90°)	15.6	0.1			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°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	2253.8	2253.8	2253.8	2253.8	2253.8	2253.8	2253.8	2253.8	2253.8	2253.8	2253.8
2.5°	2792.8	2743.8	2799.8	2792.8	2743.8	2712.3	2614.3	2582.8	2467.3	2383.3	2309.8
5°	3366.7	3317.7	3366.7	3352.7	3282.7	3205.7	3044.7	2939.7	2733.3	2551.3	2386.8
7.5°	3842.7	3842.7	3863.7	3867.2	3783.2	3664.2	3464.7	3307.2	3016.7	2736.8	2474.3
10°	4357.1	4360.6	4406.1	4374.6	4262.6	4101.6	3849.7	3650.2	3300.2	2932.7	2558.3
12.5°	4906.6	4910.1	4924.1	4910.1	4777.1	4570.6	4266.1	4003.7	3601.2	3156.7	2673.8
15°	5456.0	5459.5	5477.0	5452.5	5305.5	5064.1	4717.6	4395.6	3919.7	3408.7	2813.8
17.5°	5970.5	5977.5	5991.5	5960.0	5806.0	5519.0	5165.6	4777.1	4259.1	3678.2	2971.2
20°	6432.4	6439.4	6449.9	6407.9	6254.0	5967.0	5585.5	5179.5	4605.6	3954.7	3142.7
22.5°	6897.9	6904.9	6922.4	6866.4	6694.9	6365.9	5991.5	5571.5	4973.1	4259.1	3342.2
25°	7492.8	7499.8	7513.8	7433.4	7198.9	6813.9	6418.4	5988.0	5372.0	4602.1	3587.2
27.5°	8364.3	8357.3	8357.3	8210.3	7807.8	7307.4	6848.9	6411.4	5802.5	4969.6	3856.7
30°	9442.2	9424.7	9414.2	9214.7	8640.7	7863.8	7289.9	6806.9	6215.5	5358.0	4147.1
32.5°	10408.1	10408.1	10387.1	10177.1	9568.2	8612.7	7758.8	7191.9	6614.4	5750.0	4448.1
35°	10978.5	11003.0	10992.5	10835.1	10390.6	9417.7	8392.3	7653.8	7034.4	6159.5	4808.6
37.5°	11055.5	11104.5	11115.0	11020.5	10786.1	10075.6	9095.7	8154.3	7496.3	6600.4	5158.6
40°	10744.1	10849.1	10849.1	10835.1	10751.1	10387.1	9687.2	8735.2	7972.3	7058.9	5512.0
42.5°	10264.6	10373.1	10359.1	10411.6	10390.6	10313.6	10019.6	9277.7	8448.3	7531.3	5834.0
45°	9638.2	9750.2	9722.2	9816.6	9858.6	9942.6	9984.6	9655.7	8917.2	8045.8	6194.5
47.5°	8633.7	8822.7	8864.7	9032.7	9207.7	9470.2	9669.7	9792.1	9354.7	8598.8	6586.4
50°	7149.9	7415.9	7499.8	7853.3	8332.8	8875.2	9197.2	9624.2	9662.7	9165.7	7009.9
52.5°	5120.1	5428.0	5557.5	6138.5	7125.4	8070.3	8651.2	9253.2	9781.6	9708.2	7468.3
55°	3310.7	3573.2	3699.2	4245.1	5557.5	7041.4	8007.3	8773.7	9715.2	10205.1	7993.3
57.5°	2040.3	2190.8	2274.8	2743.8	3951.2	5722.0	7163.9	8332.8	9512.2	10635.6	8539.3
60°	1375.4	1462.9	1504.9	1725.3	2684.3	4276.6	6005.5	7870.8	9246.2	10926.0	9036.2
62.5°	913.4	941.4	983.4	1119.9	1770.8	3002.7	4612.6	7044.9	9046.7	10943.5	9403.7
65°	706.9	720.9	738.4	797.9	1091.9	2099.8	3244.2	5708.0	8749.2	10572.6	9519.2
67.5°	556.5	570.5	591.4	622.9	790.9	1424.4	2208.3	4182.1	8140.3	9991.6	9330.2
70°	437.5	448.0	462.0	490.0	615.9	1032.4	1459.4	2778.8	6911.9	9438.7	8735.2
72.5°	346.5	357.0	371.0	399.0	500.5	755.9	1000.9	1732.3	5330.0	8763.2	7590.8
75°	273.0	280.0	290.5	318.5	402.5	587.9	678.9	1035.9	3622.2	7527.8	5914.5
77.5°	136.5	168.0	192.5	220.5	294.0	406.0	451.5	574.0	1529.4	3863.7	2820.8
80°	80.5	98.0	105.0	122.5	192.5	245.0	245.0	231.0	483.0	1483.9	1151.4
82.5°	45.5	63.0	66.5	70.0	115.5	140.0	112.0	84.0	98.0	497.0	336.0
85°	14.0	21.0	24.5	28.0	38.5	42.0	38.5	35.0	28.0	49.0	31.5
87.5°	0.0	0.0	0.0	0.0	3.5	7.0	7.0	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°	2253.8	2253.8	2253.8	2253.8	2253.8	2253.8	2253.8	2253.8	2253.8	2253.8	2253.8
2.5°	2267.8	2222.3	2134.8	2054.3	1977.3	1921.3	1868.8	1819.8	1784.8	1756.8	1753.3
5°	2299.3	2208.3	2040.3	1882.8	1739.3	1620.4	1518.9	1438.4	1378.9	1336.9	1333.4
7.5°	2341.3	2201.3	1945.8	1711.4	1497.9	1326.4	1179.4	1070.9	993.9	962.4	937.9
10°	2376.3	2194.3	1851.3	1539.9	1259.9	1042.9	867.9	759.4	703.4	682.4	671.9
12.5°	2435.8	2201.3	1770.8	1382.4	1053.4	797.9	664.9	605.4	580.9	563.5	560.0
15°	2523.3	2232.8	1693.9	1228.4	843.4	643.9	567.0	528.5	504.0	500.5	497.0
17.5°	2610.8	2260.8	1623.9	1070.9	699.9	560.0	507.5	476.0	458.5	455.0	455.0
20°	2712.3	2295.8	1546.9	920.4	598.4	504.0	462.0	437.5	416.5	413.0	413.0
22.5°	2831.3	2344.8	1473.4	787.4	532.0	462.0	427.0	399.0	381.5	378.0	378.0
25°	2992.2	2418.3	1413.9	689.4	486.5	427.0	395.5	371.0	357.0	350.0	350.0
27.5°	3170.7	2519.8	1371.9	629.9	455.0	399.0	367.5	346.5	332.5	325.5	325.5
30°	3370.2	2631.8	1343.9	605.4	437.5	374.5	346.5	325.5	308.0	304.5	304.5
32.5°	3590.7	2761.3	1326.4	608.9	434.0	357.0	325.5	304.5	290.5	283.5	283.5
35°	3835.7	2904.7	1315.9	629.9	441.0	343.0	308.0	287.0	273.0	266.0	266.0
37.5°	4108.6	3072.7	1315.9	650.9	458.5	339.5	290.5	269.5	259.0	252.0	252.0
40°	4364.1	3251.2	1329.9	675.4	476.0	339.5	276.5	259.0	245.0	238.0	238.0
42.5°	4563.6	3352.7	1340.4	699.9	486.5	336.0	262.5	245.0	234.5	227.5	227.5
45°	4791.1	3461.2	1319.4	710.4	486.5	329.0	252.0	234.5	224.0	217.0	217.0
47.5°	5043.1	3594.2	1315.9	717.4	476.0	315.0	241.5	224.0	217.0	210.0	210.0
50°	5298.5	3741.2	1322.9	713.9	462.0	294.0	227.5	217.0	206.5	199.5	199.5
52.5°	5589.0	3895.2	1336.9	706.9	430.5	269.5	217.0	206.5	196.0	189.0	185.5
55°	5911.0	4063.1	1364.9	692.9	388.5	245.0	206.5	196.0	182.0	175.0	171.5
57.5°	6282.0	4269.6	1396.4	664.9	343.0	224.0	196.0	182.0	161.0	150.5	147.0
60°	6635.4	4504.1	1431.4	598.4	297.5	203.0	185.5	164.5	143.5	136.5	133.0
62.5°	6967.9	4735.1	1448.9	479.5	252.0	185.5	175.0	150.5	129.5	122.5	119.0
65°	7181.4	4987.1	1410.4	325.5	206.5	171.5	161.0	140.0	119.0	108.5	108.5
67.5°	7195.4	5106.1	1277.4	213.5	168.0	154.0	147.0	126.0	105.0	98.0	94.5
70°	6841.9	4927.6	976.4	168.0	140.0	133.0	133.0	112.0	91.0	84.0	80.5
72.5°	6030.0	4364.1	622.9	136.5	119.0	112.0	112.0	94.5	80.5	70.0	66.5
75°	4759.6	3366.7	332.5	112.0	98.0	94.5	87.5	77.0	66.5	59.5	56.0
77.5°	2187.3	1483.9	154.0	80.5	73.5	73.5	66.5	56.0	52.5	45.5	45.5
80°	864.4	504.0	77.0	52.5	49.0	49.0	49.0	38.5	38.5	31.5	28.0
82.5°	238.0	105.0	38.5	31.5	31.5	31.5	28.0	24.5	24.5	21.0	21.0
85°	24.5	17.5	17.5	17.5	17.5	14.0	14.0	10.5	7.0	7.0	7.0
87.5°	10.5	10.5	10.5	10.5	10.5	7.0	3.5	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)