

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: P842271

Luminaire Tested: **ARCH4-290-750-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842271
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-290-750-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1120mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43122 lumens
Efficiency: N/A
Efficacy: 148.9 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G4

Input Watts (W): 289.7
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



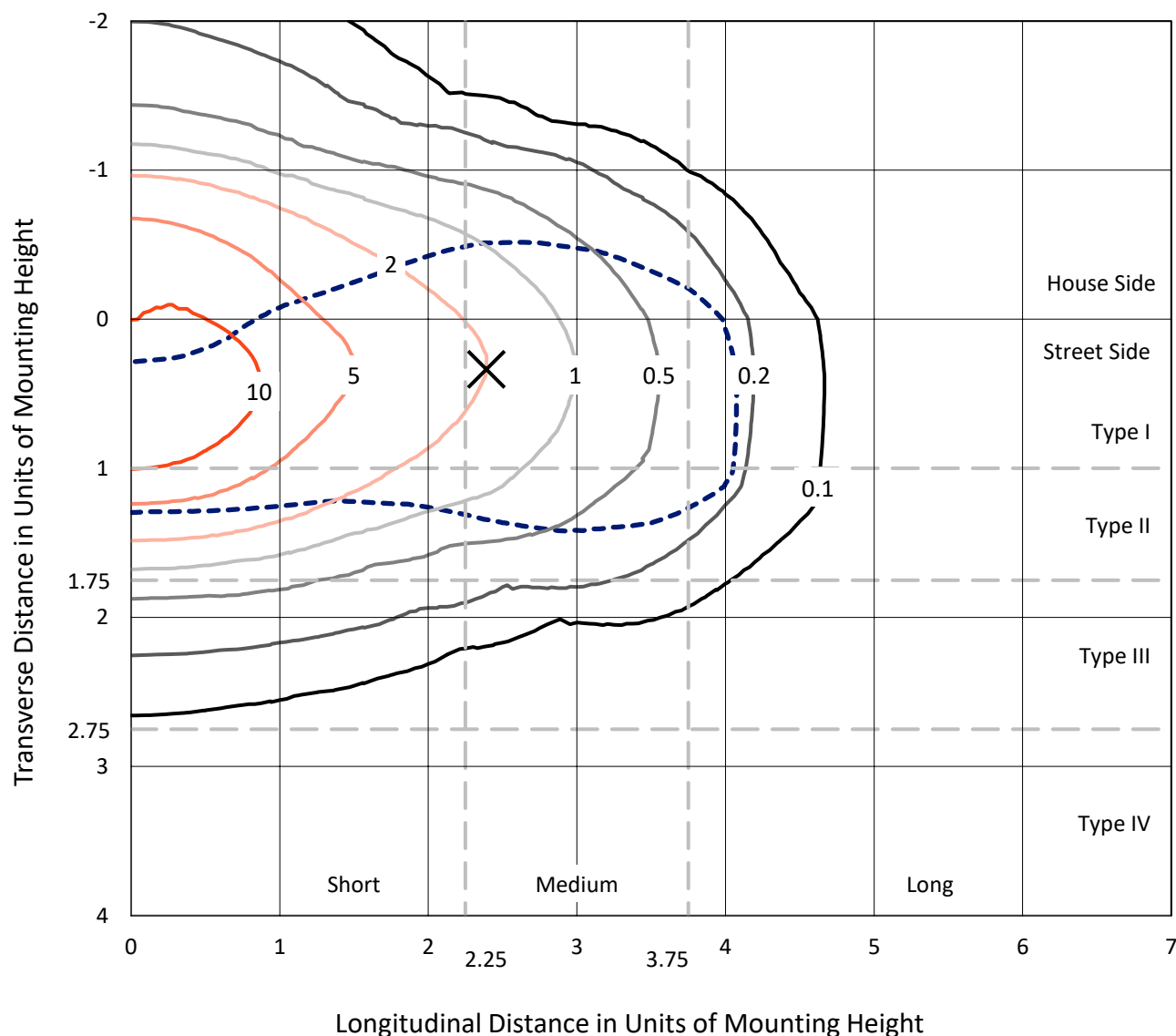
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

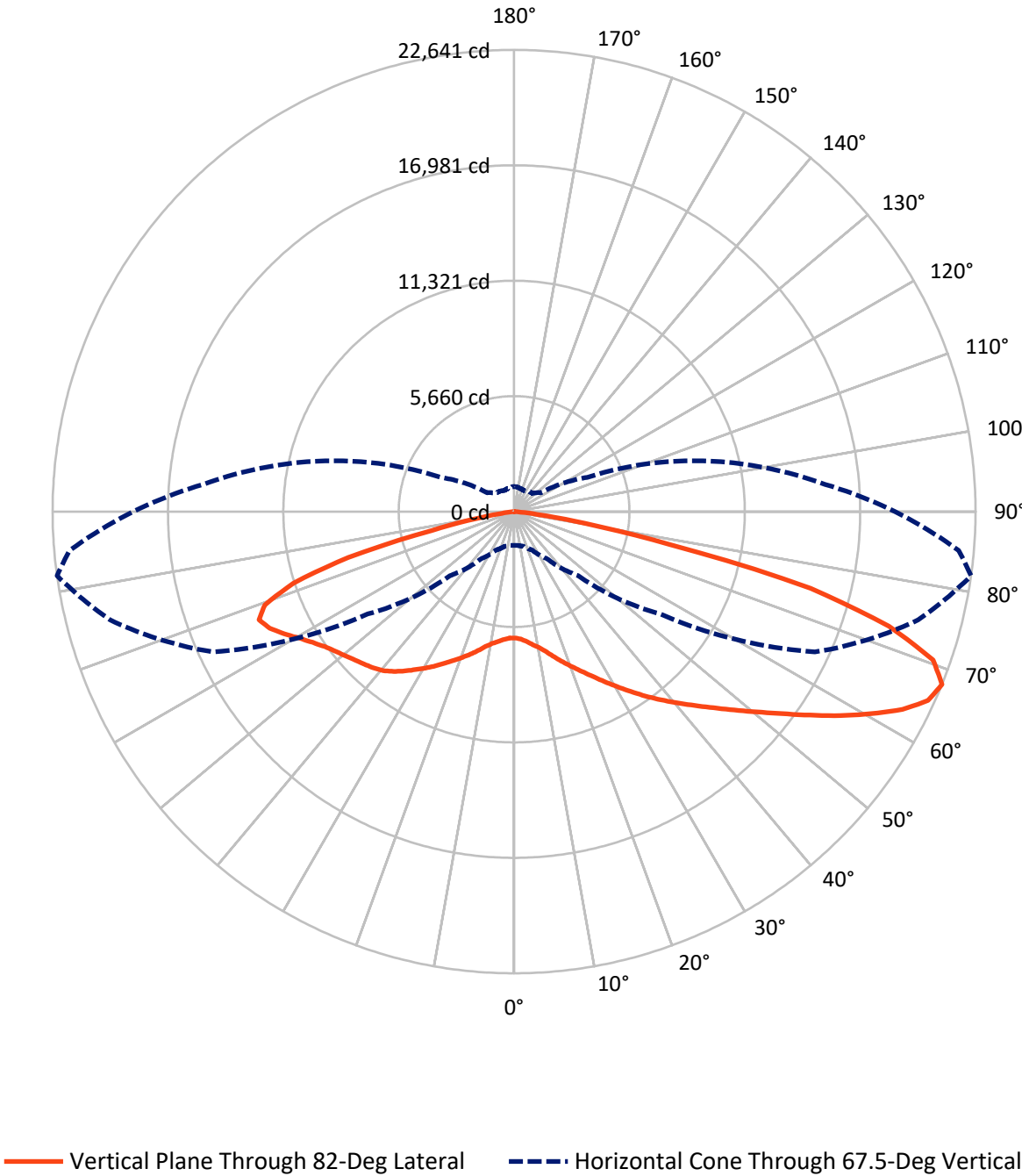
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 19 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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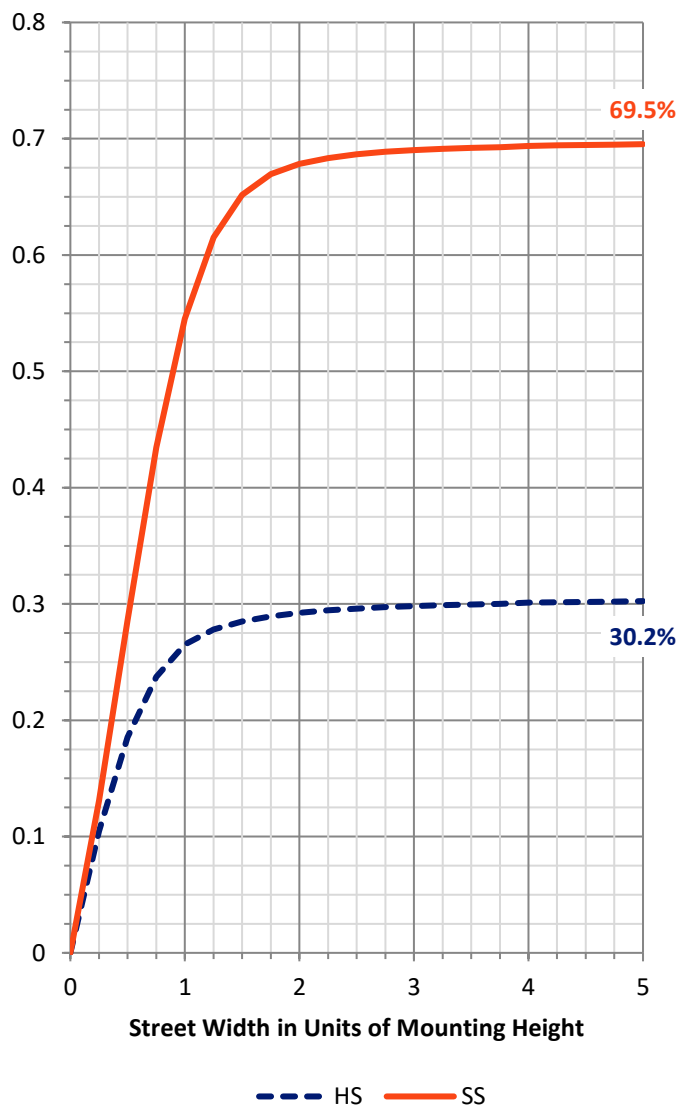
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13132.4	0.0	13132.4
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	29989.6	0.0	29989.6
	% Fixture	69.5	0.0	69.5
Total	Lumens	43122.0	0.0	43122.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	640.6	1.5
10°-20°	2307.5	5.4
20°-30°	4637.6	10.8
30°-40°	7285.0	16.9
40°-50°	8874.5	20.6
50°-60°	8385.3	19.4
60°-70°	6924.4	16.1
70°-80°	3770.6	8.7
80°-90°	296.5	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°	43122.0	100.0
0°-180°	43122.0	100.0

Coefficient of Utilization



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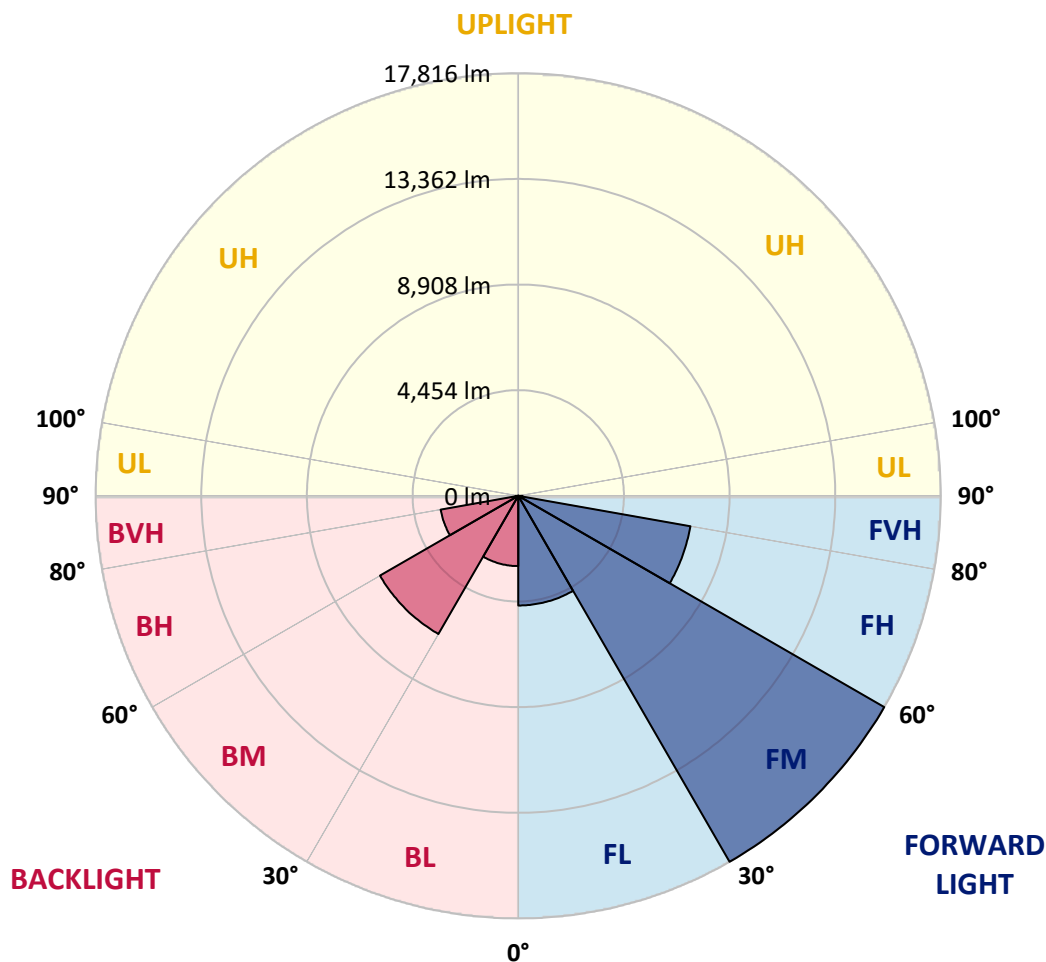
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4624.3	10.7			
FM	(30°-60°)	17815.5	41.3			
FH	(60°-80°)	7371.1	17.1			G3/7500
FVH	(80°-90°)	178.7	0.4			G2/225
BL	(0°-30°)	2961.5	6.9	B4/5000		
BM	(30°-60°)	6729.3	15.6	B4/8500		
BH	(60°-80°)	3323.9	7.7	B4/5000		G4/5000
BVH	(80°-90°)	117.8	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	6198.8	6198.8	6198.8	6198.8	6198.8	6198.8	6198.8	6198.8	6198.8	6198.8	6198.8
2.5°	6480.5	6480.5	6530.6	6530.6	6486.8	6417.9	6399.1	6324.0	6255.1	6255.1	6261.4
5°	7100.4	7094.1	7131.7	7081.6	6975.2	6837.4	6743.5	6580.7	6443.0	6399.1	6392.9
7.5°	7858.0	7851.8	7870.6	7789.2	7588.8	7363.4	7175.5	6912.6	6687.2	6593.2	6568.2
10°	8703.3	8697.1	8678.3	8540.5	8271.3	7920.6	7638.9	7275.7	6937.6	6787.3	6756.0
12.5°	9673.8	9661.3	9617.5	9417.1	9047.7	8596.9	8189.9	7720.3	7269.5	7062.8	6994.0
15°	10757.0	10738.3	10656.9	10412.7	9918.0	9348.2	8822.3	8221.2	7670.2	7400.9	7307.0
17.5°	11896.6	11896.6	11771.4	11408.2	10857.2	10149.7	9498.5	8734.6	8089.7	7757.8	7645.1
20°	13055.0	13048.7	12892.2	12453.9	11802.7	10988.7	10162.2	9323.2	8521.7	8121.0	7983.3
22.5°	14275.9	14263.4	14069.3	13568.4	12792.0	11871.6	10907.3	9905.5	8997.6	8515.5	8340.2
25°	15678.5	15659.7	15421.8	14808.2	13887.7	12848.3	11746.3	10588.0	9542.3	8953.8	8747.1
27.5°	17168.7	17143.7	16861.9	16148.1	15140.0	13887.7	12673.0	11376.9	10143.4	9442.2	9210.5
30°	18496.1	18477.3	18170.5	17437.9	16279.6	14920.9	13555.9	12165.9	10775.8	9961.9	9673.8
32.5°	19497.9	19497.9	19222.4	18502.4	17300.2	15910.2	14445.0	12911.0	11433.3	10519.1	10181.0
35°	20105.3	20124.1	19886.1	19310.1	18176.8	16843.1	15365.4	13787.6	12134.6	11113.9	10750.8
37.5°	20192.9	20255.6	20117.8	19729.6	18784.1	17619.5	16267.1	14632.8	12860.9	11715.0	11308.1
40°	19786.0	19829.8	19836.0	19685.8	19034.6	18176.8	17062.3	15528.2	13631.0	12347.4	11877.8
42.5°	18972.0	19003.3	19059.6	19103.5	18853.0	18421.0	17669.6	16361.0	14451.3	12992.4	12441.4
45°	17920.1	17913.8	18007.7	18195.6	18183.0	18283.2	18007.7	17118.6	15302.8	13724.9	13067.5
47.5°	16348.5	16317.2	16649.0	17074.8	17287.7	17757.3	18014.0	17713.4	16229.5	14532.7	13781.3
50°	13887.7	13856.4	14582.8	15584.6	16210.7	16924.5	17669.6	18070.3	17200.0	15440.6	14557.7
52.5°	10894.8	10863.5	11783.9	13537.1	14902.1	15941.5	16974.6	18151.7	18120.4	16454.9	15434.3
55°	8102.2	8077.2	8972.6	10869.8	13080.0	14801.9	16123.1	17938.9	18984.5	17619.5	16498.7
57.5°	5710.4	5697.9	6474.3	8045.9	10738.3	13411.9	15302.8	17525.6	19779.7	18884.3	17700.9
60°	4007.3	3988.5	4552.0	5766.7	8121.0	11314.3	14488.8	16974.6	20374.5	20130.3	18978.2
62.5°	2698.7	2686.1	3086.9	4101.2	5766.7	8709.6	13255.3	16605.2	20712.6	21382.6	20268.1
65°	2047.5	2041.2	2222.8	2780.1	4082.4	6255.1	11295.5	16561.3	20756.5	22321.8	21363.8
67.5°	1653.0	1659.3	1759.4	2078.8	2823.9	4445.6	8759.7	16285.8	20524.8	22641.1	21896.0
70°	1352.5	1352.5	1396.3	1609.2	2085.0	2999.2	6117.4	15033.6	19879.9	21808.4	21263.6
72.5°	1033.1	1039.4	1177.1	1302.4	1571.6	2103.8	3919.6	12441.4	18358.4	19228.7	18815.4
75°	820.2	814.0	895.4	1070.7	1221.0	1502.7	2404.4	8922.5	15622.1	15027.3	14764.3
77.5°	588.6	582.3	644.9	795.2	926.7	1064.4	1433.9	4501.9	8496.7	7807.9	7613.8
80°	400.7	388.2	444.6	551.0	613.6	626.1	701.3	1728.1	3706.7	3493.8	3450.0
82.5°	206.6	206.6	237.9	313.1	319.3	325.6	313.1	557.3	1227.2	1145.8	1095.7
85°	81.4	81.4	87.7	106.4	106.4	112.7	112.7	144.0	131.5	125.2	119.0
87.5°	6.3	6.3	12.5	12.5	18.8	18.8	18.8	25.0	31.3	31.3	31.3
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°	6198.8	6198.8	6198.8	6198.8	6198.8	6198.8	6198.8	6198.8	6198.8	6198.8	6198.8
2.5°	6248.9	6223.8	6142.4	6123.6	6111.1	6092.3	6098.6	6054.8	6036.0	6042.2	6017.2
5°	6361.6	6317.7	6217.5	6173.7	6161.2	6142.4	6161.2	6129.9	6098.6	6111.1	6098.6
7.5°	6518.1	6455.5	6330.3	6286.4	6280.2	6261.4	6286.4	6261.4	6236.3	6248.9	6223.8
10°	6680.9	6599.5	6461.7	6417.9	6417.9	6411.7	6436.7	6399.1	6374.1	6380.3	6367.8
12.5°	6918.8	6812.4	6662.1	6624.5	6605.8	6624.5	6630.8	6580.7	6536.9	6543.1	6524.4
15°	7206.8	7087.9	6925.1	6868.7	6856.2	6849.9	6824.9	6762.3	6705.9	6699.7	6680.9
17.5°	7519.9	7369.6	7175.5	7119.2	7062.8	7044.1	6981.4	6900.0	6812.4	6812.4	6787.3
20°	7820.5	7651.4	7419.7	7338.3	7256.9	7181.8	7075.4	6943.9	6831.2	6812.4	6787.3
22.5°	8146.1	7945.7	7676.5	7557.5	7413.5	7263.2	7081.6	6906.3	6762.3	6731.0	6712.2
25°	8509.2	8258.8	7939.4	7764.1	7532.4	7300.8	7031.5	6806.1	6637.1	6587.0	6574.4
27.5°	8909.9	8609.4	8221.2	7964.5	7626.4	7263.2	6918.8	6649.6	6443.0	6380.3	6361.6
30°	9316.9	8960.0	8477.9	8102.2	7626.4	7144.2	6712.2	6399.1	6161.2	6073.5	6061.0
32.5°	9723.9	9323.2	8709.6	8177.4	7551.2	6943.9	6443.0	6073.5	5804.3	5697.9	5722.9
35°	10212.3	9723.9	8922.5	8208.7	7426.0	6699.7	6136.2	5704.1	5428.6	5334.7	5353.5
37.5°	10719.5	10124.6	9091.5	8183.6	7250.7	6424.2	5791.8	5372.3	5027.9	4865.1	4883.9
40°	11157.8	10487.8	9210.5	8096.0	7025.3	6111.1	5453.7	4902.7	4426.8	4270.3	4251.5
42.5°	11571.0	10757.0	9273.1	7964.5	6768.6	5747.9	4971.5	4264.0	3788.1	3594.0	3600.3
45°	12003.1	11020.0	9248.1	7789.2	6449.2	5322.2	4351.7	3637.9	3218.3	3043.0	3049.3
47.5°	12497.7	11301.8	9223.0	7601.3	6061.0	4771.2	3756.8	3086.9	2723.7	2598.5	2585.9
50°	13023.7	11614.9	9191.7	7369.6	5629.0	4157.6	3168.3	2573.4	2266.6	2185.2	2166.4
52.5°	13618.5	11953.0	9172.9	7094.1	5109.3	3506.4	2642.3	2122.6	1916.0	1859.6	1853.4
55°	14332.3	12347.4	9198.0	6762.3	4483.1	2892.8	2197.7	1828.3	1690.6	1659.3	1653.0
57.5°	15202.6	12854.6	9273.1	6374.1	3825.7	2360.5	1872.2	1646.7	1559.1	1534.0	1534.0
60°	16148.1	13430.7	9410.9	5935.8	3168.3	1947.3	1659.3	1502.7	1465.2	1496.5	1496.5
62.5°	17168.7	14106.9	9655.0	5403.6	2554.6	1646.7	1490.2	1383.8	1358.7	1421.3	1427.6
65°	18114.2	14764.3	9811.6	4764.9	2028.7	1427.6	1358.7	1264.8	1277.3	1339.9	1333.7
67.5°	18696.5	15309.1	9592.4	3963.5	1609.2	1264.8	1221.0	1139.6	1170.9	1221.0	1227.2
70°	18339.6	15002.3	8509.2	2992.9	1258.5	1102.0	1070.7	1020.6	1045.7	1108.3	1133.3
72.5°	16592.7	13436.9	6618.3	2022.4	1014.3	926.7	939.2	914.2	945.5	1001.8	1058.2
75°	13468.2	10156.0	4439.3	1296.1	801.5	788.9	807.7	788.9	801.5	857.8	889.1
77.5°	7031.5	4952.8	2210.3	807.7	594.8	613.6	644.9	651.2	688.8	701.3	713.8
80°	3281.0	2229.1	920.4	450.8	394.5	432.0	494.6	500.9	513.4	532.2	538.5
82.5°	1070.7	670.0	425.8	244.2	225.4	244.2	319.3	381.9	388.2	425.8	425.8
85°	112.7	68.9	93.9	100.2	87.7	106.4	144.0	137.8	62.6	37.6	37.6
87.5°	31.3	25.0	31.3	31.3	25.0	25.0	18.8	6.3	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)