

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: P842309

Luminaire Tested: **ARCH4-300-727-U-T2U**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842309
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-300-727-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1155mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40527 lumens
Efficiency: N/A
Efficacy: 135.5 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

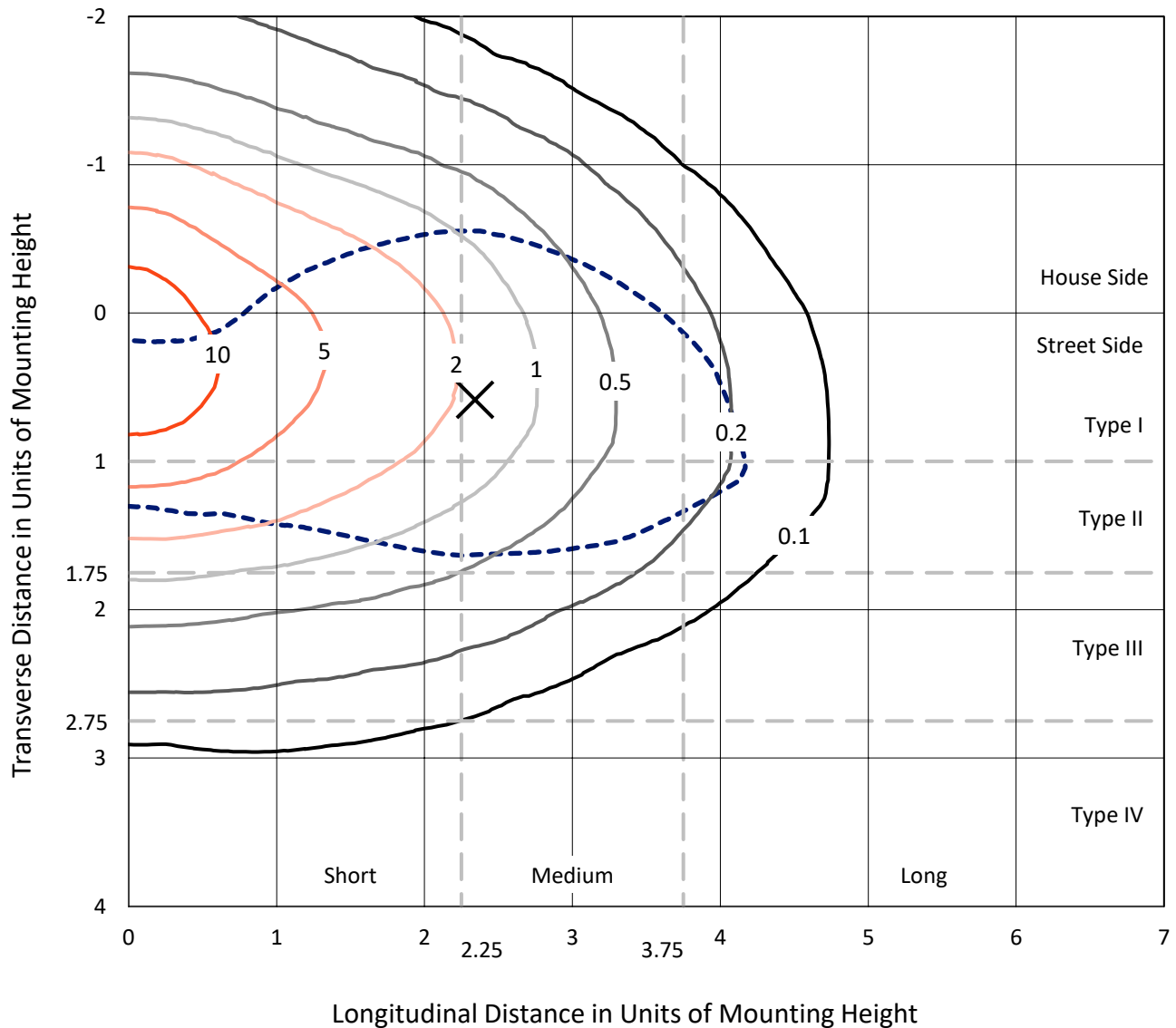
Input Watts (W): 299.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

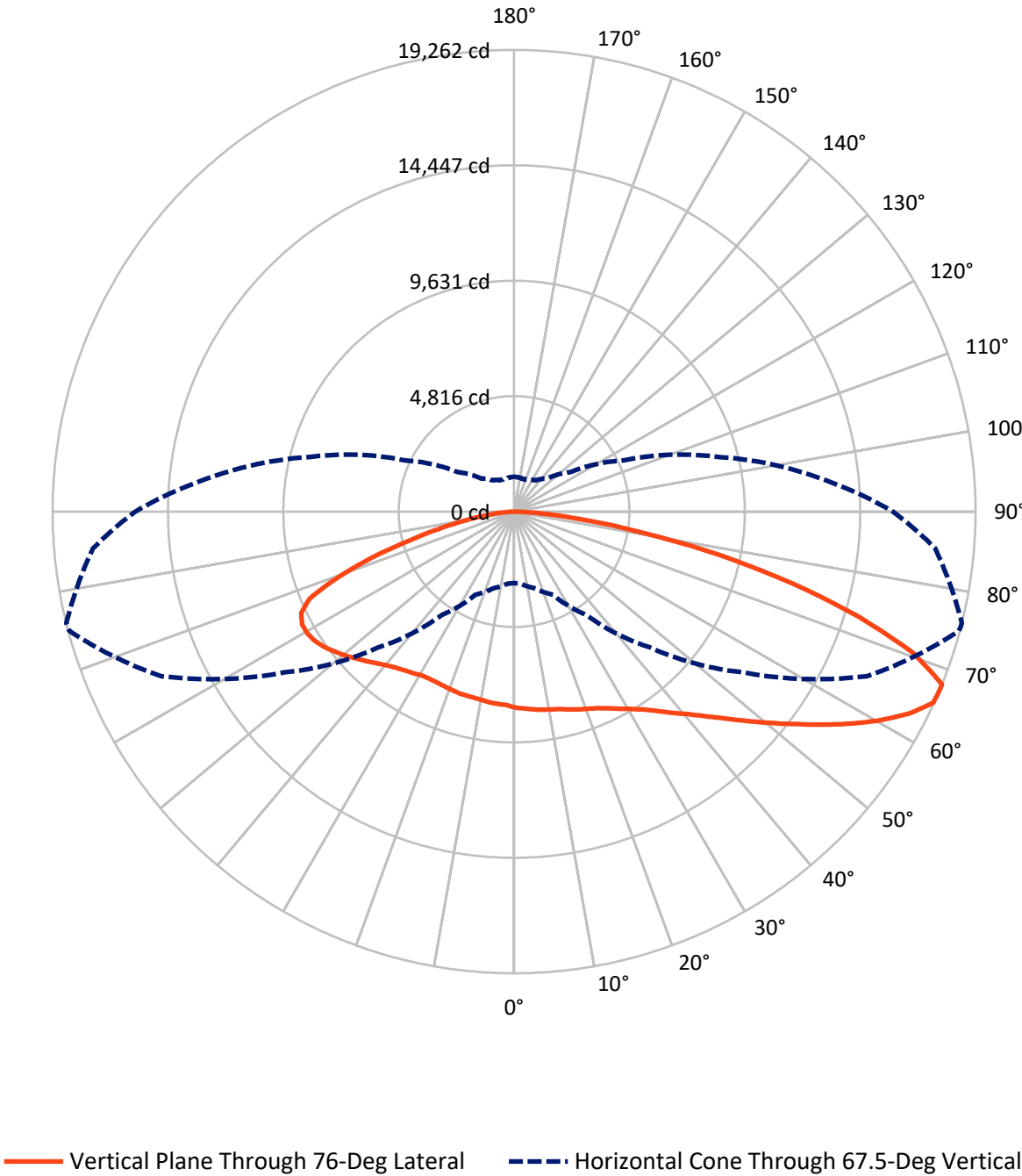
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.8 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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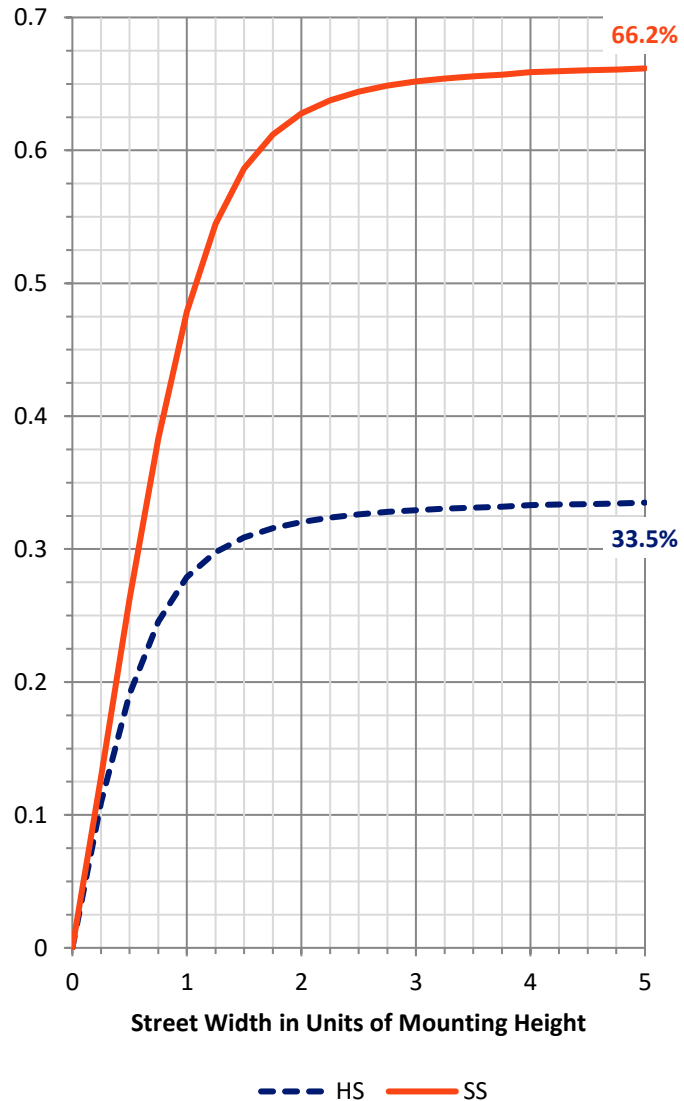
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13694.3	0.0	13694.3
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	26832.7	0.0	26832.7
	% Fixture	66.2	0.0	66.2
Total	Lumens	40527.0	0.0	40527.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	789.4	1.9
10°-20°	2413.3	6.0
20°-30°	4100.3	10.1
30°-40°	5834.2	14.4
40°-50°	7368.3	18.2
50°-60°	7977.6	19.7
60°-70°	7420.1	18.3
70°-80°	3985.2	9.8
80°-90°	638.6	1.6
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°	40527.0	100.0
0°-180°	40527.0	100.0

Coefficient of Utilization



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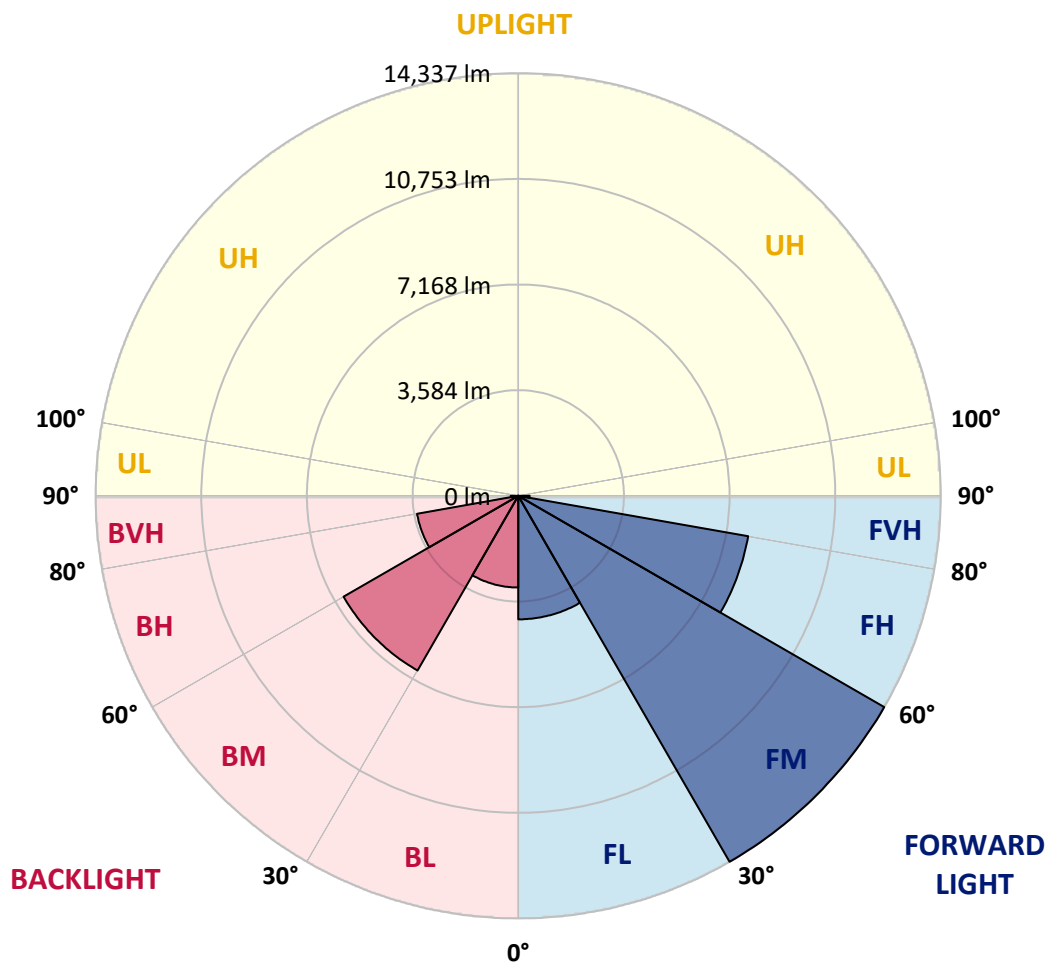
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4190.9	10.3			
FM	(30°-60°)	14336.9	35.4			
FH	(60°-80°)	7918.6	19.5			G4/12000
FVH	(80°-90°)	386.3	1.0			G3/500
BL	(0°-30°)	3112.1	7.7	B4/5000		
BM	(30°-60°)	6843.2	16.9	B4/8500		
BH	(60°-80°)	3486.7	8.6	B4/5000		G4/5000
BVH	(80°-90°)	252.3	0.6			G3/500
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°	76°	85°
0°	8186.4	8186.4	8186.4	8186.4	8186.4	8186.4	8186.4	8186.4	8186.4	8186.4	8186.4
2.5°	8434.7	8419.6	8359.4	8366.9	8366.9	8359.4	8269.1	8231.5	8231.5	8224.0	8141.2
5°	8735.6	8713.1	8645.3	8630.3	8600.2	8562.6	8419.6	8336.8	8299.2	8291.7	8178.8
7.5°	9089.3	9059.2	8976.4	8931.3	8856.0	8758.2	8577.6	8449.7	8359.4	8351.9	8193.9
10°	9442.9	9412.8	9315.0	9232.2	9126.9	8968.9	8735.6	8547.5	8404.6	8389.5	8201.4
12.5°	9864.3	9834.2	9713.8	9608.4	9450.4	9239.8	8931.3	8675.4	8479.8	8457.2	8224.0
15°	10308.2	10263.1	10142.7	10022.3	9826.6	9555.8	9187.1	8848.5	8600.2	8562.6	8291.7
17.5°	10676.9	10616.7	10518.9	10398.5	10180.3	9864.3	9442.9	9021.6	8713.1	8683.0	8359.4
20°	10992.9	10947.8	10842.4	10729.6	10496.3	10150.2	9683.7	9194.6	8818.4	8780.8	8412.1
22.5°	11293.9	11233.7	11173.5	11090.7	10834.9	10451.2	9962.1	9405.3	8953.8	8908.7	8479.8
25°	11640.0	11572.3	11549.7	11504.6	11203.6	10812.3	10300.7	9668.6	9141.9	9089.3	8600.2
27.5°	12068.9	11993.6	11948.5	11948.5	11587.3	11181.0	10661.8	9977.1	9360.1	9315.0	8750.7
30°	12520.3	12430.0	12362.3	12362.3	11956.0	11549.7	11015.5	10285.6	9608.4	9555.8	8946.3
32.5°	12919.1	12828.8	12753.6	12746.0	12324.7	11918.4	11384.2	10624.2	9909.4	9841.7	9187.1
35°	13227.6	13144.8	13077.1	13092.2	12693.4	12294.6	11798.0	11075.7	10285.6	10210.4	9503.1
37.5°	13415.7	13385.6	13348.0	13400.7	13032.0	12655.8	12226.9	11512.1	10714.5	10646.8	9894.4
40°	13513.5	13490.9	13641.4	13709.2	13317.9	12979.3	12655.8	11963.5	11181.0	11105.8	10345.8
42.5°	13656.5	13844.6	13904.8	13889.7	13528.6	13227.6	13047.0	12452.6	11730.3	11662.6	10887.6
45°	13144.8	13099.7	13430.8	13611.3	13543.6	13385.6	13415.7	13039.5	12369.8	12302.1	11512.1
47.5°	12460.1	12399.9	12588.0	13032.0	13295.3	13445.8	13746.8	13649.0	13107.2	13047.0	12241.9
50°	11015.5	11098.2	11798.0	12392.4	12911.6	13430.8	14025.2	14303.6	13919.8	13859.6	13024.4
52.5°	9412.8	9495.6	10225.4	11594.8	12445.1	13317.9	14228.3	14958.2	14800.2	14732.4	13859.6
55°	8246.6	8427.1	9254.8	10248.0	11782.9	12964.3	14348.7	15627.8	15748.2	15688.0	14770.1
57.5°	7087.8	7223.3	7847.8	8728.1	10880.0	12347.3	14341.2	16252.3	16741.4	16681.2	15695.5
60°	5725.9	5899.0	6395.6	7343.7	9676.2	11609.9	14130.5	16741.4	17697.0	17651.8	16590.9
62.5°	4792.9	4845.6	5199.2	6019.4	8126.2	10676.9	13656.5	17004.8	18562.3	18532.2	17396.0
65°	3859.9	3867.5	4191.0	4875.7	6628.8	9518.2	12851.4	16906.9	19216.9	19231.9	17975.4
67.5°	2979.6	3017.2	3310.7	3829.8	5267.0	8013.3	11700.2	16244.8	19224.4	19262.0	17644.3
70°	2061.6	2091.7	2535.7	3039.8	4070.6	6388.1	10142.7	14491.7	17644.3	17674.4	15815.9
72.5°	1452.2	1467.2	1941.3	2430.3	3182.8	4815.5	7652.1	11986.1	15040.9	15063.5	13302.8
75°	1083.5	1098.5	1369.4	1843.4	2437.9	3333.2	5229.3	9179.6	12016.2	12016.2	10503.8
77.5°	767.5	775.0	887.9	1271.6	1625.2	2249.7	3145.1	6011.9	8818.4	8833.4	7652.1
80°	519.2	526.7	579.4	857.8	1015.8	1218.9	1708.0	3152.7	5560.4	5583.0	4860.7
82.5°	270.9	285.9	323.5	436.4	511.6	677.2	880.3	1602.7	3077.4	3137.6	2919.4
85°	105.3	105.3	120.4	143.0	188.1	263.3	406.3	609.5	1392.0	1437.1	1286.6
87.5°	37.6	37.6	45.1	45.1	52.7	60.2	67.7	90.3	158.0	158.0	150.5
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°	8186.4	8186.4	8186.4	8186.4	8186.4	8186.4	8186.4	8186.4	8186.4	8186.4	8186.4
2.5°	8111.1	8111.1	8073.5	8088.5	8081.0	8066.0	8050.9	8073.5	8050.9	7998.3	7990.7
5°	8126.2	8111.1	8050.9	8043.4	8020.8	7990.7	7953.1	7968.2	7930.5	7885.4	7877.9
7.5°	8133.7	8103.6	8020.8	7990.7	7945.6	7885.4	7825.2	7825.2	7772.5	7727.4	7719.9
10°	8118.6	8081.0	7968.2	7908.0	7825.2	7734.9	7652.1	7629.6	7569.4	7516.7	7516.7
12.5°	8126.2	8073.5	7930.5	7832.7	7719.9	7607.0	7501.7	7471.6	7418.9	7366.2	7358.7
15°	8171.3	8096.1	7915.5	7787.6	7622.0	7494.1	7381.3	7358.7	7313.6	7275.9	7275.9
17.5°	8216.5	8118.6	7892.9	7712.3	7509.2	7366.2	7260.9	7260.9	7230.8	7208.2	7208.2
20°	8239.0	8126.2	7847.8	7607.0	7373.7	7223.3	7125.4	7140.5	7133.0	7125.4	7125.4
22.5°	8291.7	8141.2	7810.2	7509.2	7230.8	7072.8	6982.5	7005.1	6997.5	6997.5	7005.1
25°	8374.5	8178.8	7780.1	7418.9	7095.4	6922.3	6824.5	6839.5	6839.5	6839.5	6839.5
27.5°	8487.3	8254.1	7772.5	7336.1	6959.9	6764.3	6643.9	6643.9	6613.8	6621.3	6628.8
30°	8660.4	8397.0	7787.6	7260.9	6817.0	6568.7	6425.7	6403.1	6395.6	6410.6	6418.2
32.5°	8871.1	8592.7	7877.9	7208.2	6666.5	6350.5	6169.9	6162.3	6139.8	6139.8	6139.8
35°	9134.4	8780.8	7960.6	7200.7	6516.0	6117.2	5921.6	5899.0	5846.3	5823.8	5823.8
37.5°	9473.0	9074.2	8058.5	7148.0	6388.1	5891.5	5658.2	5583.0	5522.8	5515.3	5515.3
40°	9886.8	9405.3	8201.4	7087.8	6252.6	5658.2	5349.7	5221.8	5229.3	5259.4	5259.4
42.5°	10375.9	9811.6	8382.0	7057.7	6057.0	5417.4	4988.6	4838.1	4890.8	4920.8	4928.4
45°	10947.8	10293.1	8585.1	7020.1	5876.4	5146.6	4604.8	4416.7	4439.3	4446.8	4454.3
47.5°	11609.9	10827.4	8795.8	6990.0	5673.3	4808.0	4183.5	3935.2	3927.6	3882.5	3897.6
50°	12302.1	11391.7	9014.0	6937.3	5425.0	4409.2	3739.5	3446.1	3385.9	3318.2	3325.7
52.5°	13039.5	11971.1	9217.2	6854.6	5116.5	4002.9	3318.2	3002.2	2881.8	2806.5	2821.6
55°	13852.1	12565.5	9412.8	6726.7	4792.9	3596.6	2942.0	2618.4	2467.9	2407.8	2415.3
57.5°	14597.0	13137.3	9555.8	6568.7	4439.3	3227.9	2610.9	2294.9	2197.1	2189.6	2197.1
60°	15319.3	13618.9	9616.0	6350.5	4078.1	2889.3	2302.4	2061.6	1993.9	2031.5	2039.1
62.5°	15928.8	13927.4	9585.9	6057.0	3709.4	2565.8	2054.1	1881.1	1835.9	1911.2	1918.7
65°	16282.4	14025.2	9375.2	5635.6	3310.7	2249.7	1820.9	1632.8	1610.2	1655.3	1677.9
67.5°	15815.9	13415.7	8803.4	5056.3	2866.7	1956.3	1595.1	1444.7	1407.0	1444.7	1444.7
70°	14017.6	11624.9	7449.0	4138.3	2377.7	1670.4	1384.5	1279.1	1249.0	1279.1	1271.6
72.5°	11677.6	9668.6	5868.9	3227.9	1873.5	1407.0	1203.9	1106.1	1076.0	1045.9	1030.8
75°	9059.2	7343.7	4258.7	2370.1	1414.6	1128.6	1008.2	918.0	842.7	872.8	857.8
77.5°	6636.4	5154.1	3017.2	1640.3	1015.8	872.8	790.0	722.3	669.7	729.9	722.3
80°	4273.8	3333.2	2016.5	1098.5	699.8	609.5	579.4	541.7	594.4	775.0	790.0
82.5°	2610.9	2114.3	1203.9	714.8	459.0	406.3	376.2	376.2	609.5	669.7	677.2
85°	1166.3	1121.1	654.6	368.7	255.8	233.3	210.7	270.9	248.3	180.6	188.1
87.5°	188.1	195.6	143.0	127.9	97.8	97.8	75.2	52.7	37.6	22.6	22.6
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)