

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: P841335

Luminaire Tested: **ARCH4-160-750-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841335
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: ARCH4-160-750-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1305mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27404 lumens
Efficiency: N/A
Efficacy: 170.5 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 160.7
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



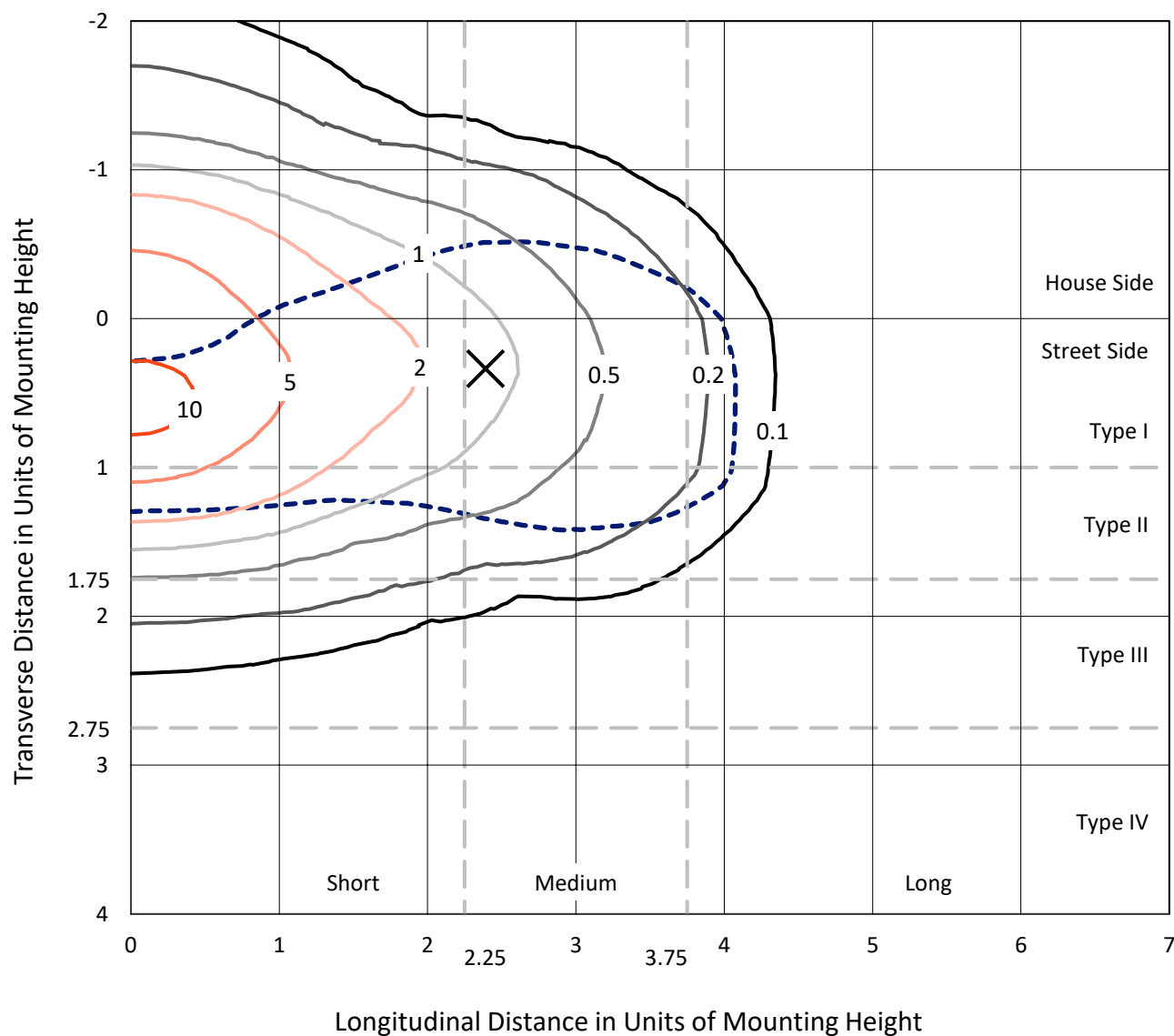
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

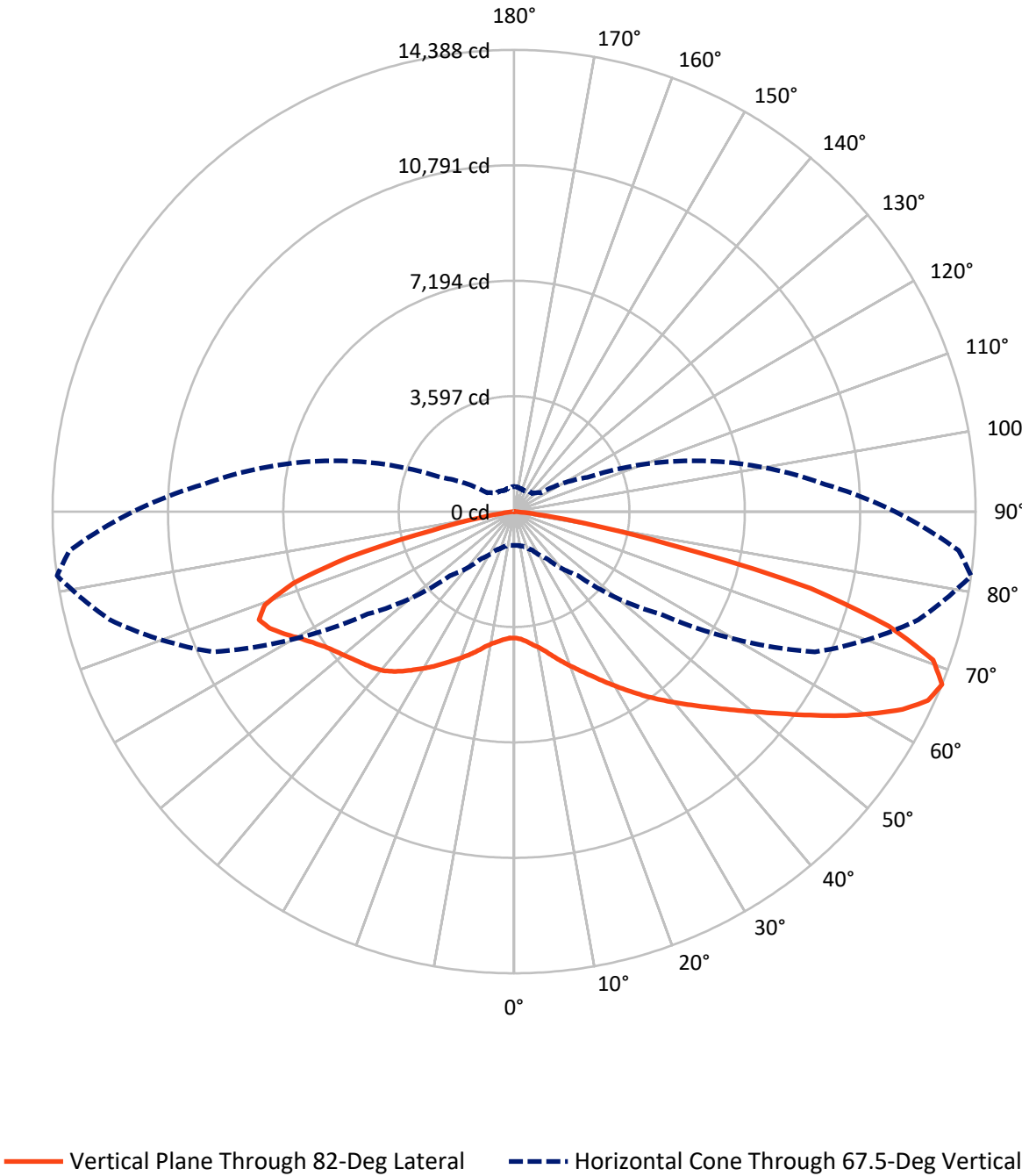
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.1 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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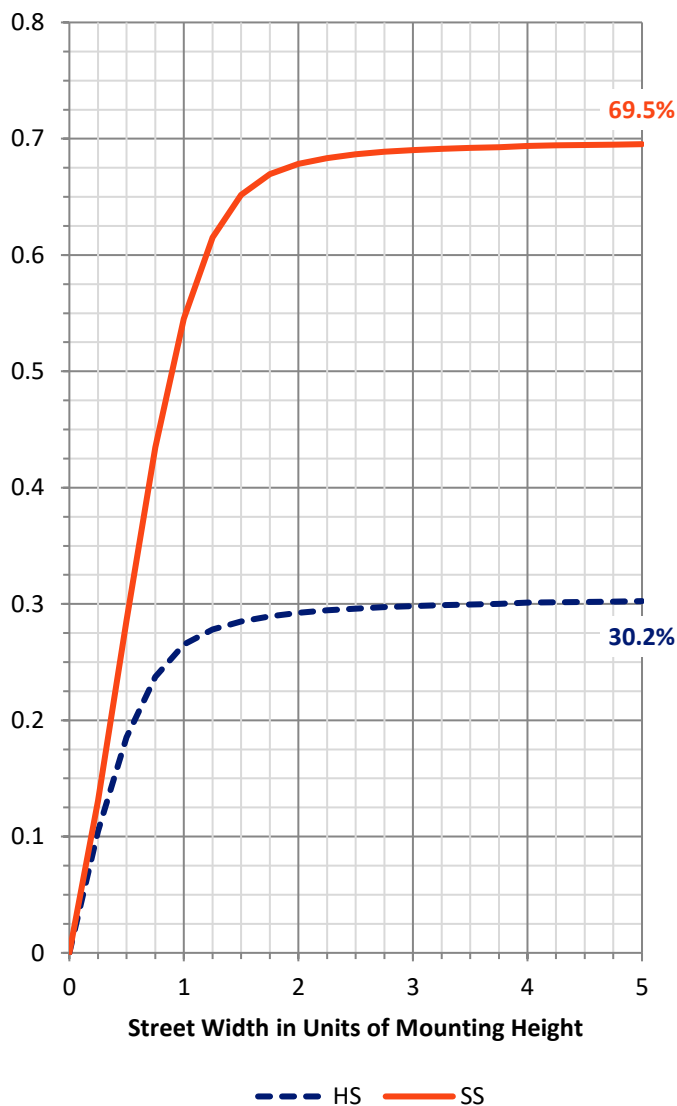
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8345.6	0.0	8345.6
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	19058.4	0.0	19058.4
	% Fixture	69.5	0.0	69.5
Total	Lumens	27404.0	0.0	27404.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	407.1	1.5
10°-20°	1466.4	5.4
20°-30°	2947.2	10.8
30°-40°	4629.6	16.9
40°-50°	5639.8	20.6
50°-60°	5328.9	19.4
60°-70°	4400.4	16.1
70°-80°	2396.2	8.7
80°-90°	188.4	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°	27404.0	100.0
0°-180°	27404.0	100.0

Coefficient of Utilization



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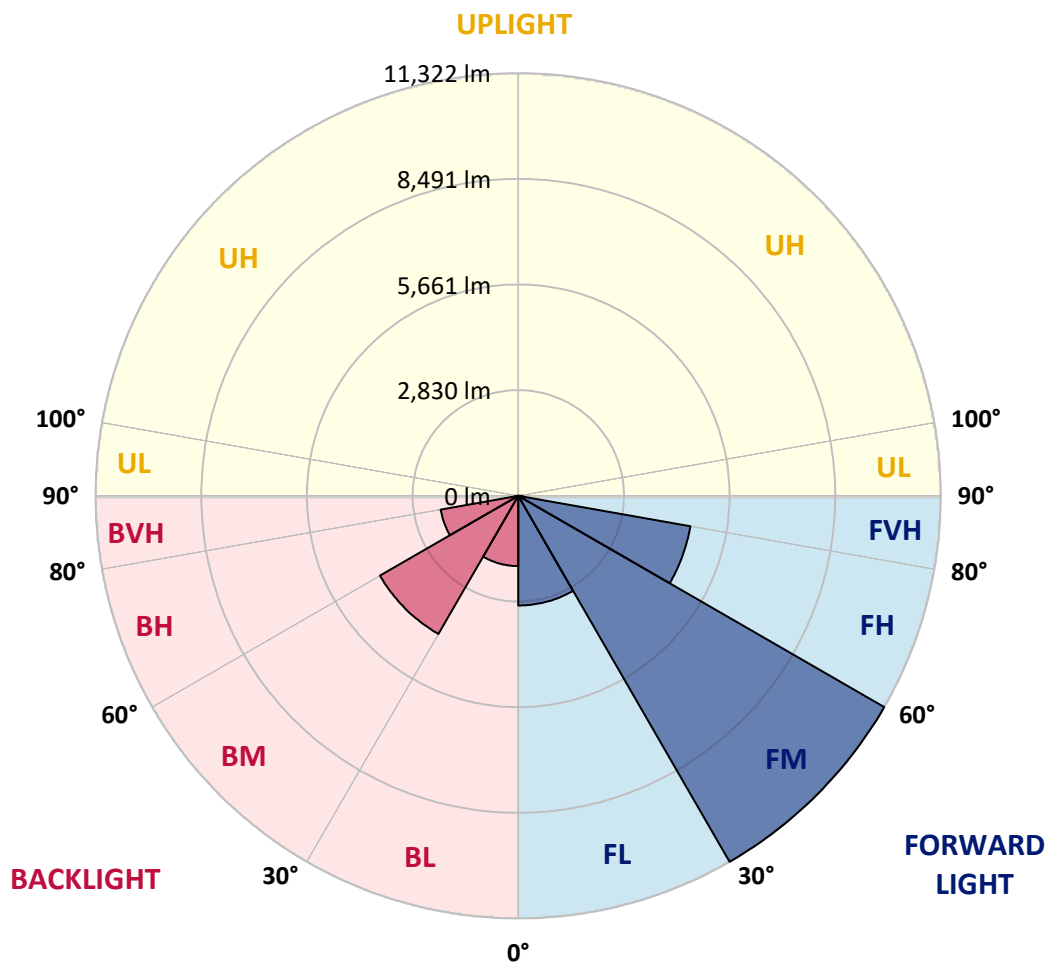
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2938.7	10.7			
FM	(30°-60°)	11321.8	41.3			
FH	(60°-80°)	4684.3	17.1			G2/5000
FVH	(80°-90°)	113.6	0.4			G2/225
BL	(0°-30°)	1882.0	6.9	B3/2500		
BM	(30°-60°)	4276.5	15.6	B3/5000		
BH	(60°-80°)	2112.3	7.7	B3/2500		G3/2500
BVH	(80°-90°)	74.8	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3939.3	3939.3	3939.3	3939.3	3939.3	3939.3	3939.3	3939.3	3939.3	3939.3	3939.3
2.5°	4118.4	4118.4	4150.2	4150.2	4122.3	4078.6	4066.6	4018.9	3975.1	3975.1	3979.1
5°	4512.3	4508.3	4532.2	4500.4	4432.7	4345.2	4285.5	4182.0	4094.5	4066.6	4062.7
7.5°	4993.8	4989.8	5001.7	4950.0	4822.7	4679.4	4560.1	4392.9	4249.7	4190.0	4174.1
10°	5531.0	5527.0	5515.0	5427.5	5256.4	5033.6	4854.5	4623.7	4408.8	4313.3	4293.5
12.5°	6147.7	6139.8	6111.9	5984.6	5749.8	5463.3	5204.7	4906.2	4619.7	4488.4	4444.7
15°	6836.1	6824.2	6772.4	6617.2	6302.9	5940.8	5606.6	5224.6	4874.4	4703.3	4643.6
17.5°	7560.3	7560.3	7480.7	7249.9	6899.8	6450.1	6036.3	5550.8	5141.0	4930.1	4858.5
20°	8296.4	8292.4	8193.0	7914.4	7500.6	6983.3	6458.1	5924.9	5415.6	5160.9	5073.4
22.5°	9072.4	9064.4	8941.0	8622.7	8129.3	7544.4	6931.6	6294.9	5718.0	5411.6	5300.2
25°	9963.7	9951.7	9800.5	9410.6	8825.6	8165.1	7464.8	6728.7	6064.2	5690.1	5558.8
27.5°	10910.7	10894.8	10715.7	10262.1	9621.5	8825.6	8053.7	7230.0	6446.1	6000.5	5853.3
30°	11754.3	11742.3	11547.4	11081.8	10345.7	9482.2	8614.8	7731.4	6848.0	6330.8	6147.7
32.5°	12390.9	12390.9	12215.8	11758.2	10994.3	10110.9	9179.8	8204.9	7265.8	6684.9	6470.0
35°	12776.9	12788.8	12637.6	12271.6	11551.3	10703.8	9764.7	8762.0	7711.5	7062.9	6832.1
37.5°	12832.6	12872.4	12784.9	12538.1	11937.3	11197.2	10337.7	9299.2	8173.1	7444.9	7186.3
40°	12574.0	12601.8	12605.8	12510.3	12096.5	11551.3	10843.1	9868.2	8662.5	7846.8	7548.4
42.5°	12056.7	12076.6	12112.4	12140.2	11981.1	11706.5	11229.0	10397.4	9183.8	8256.6	7906.5
45°	11388.2	11384.2	11443.9	11563.3	11555.3	11619.0	11443.9	10878.9	9724.9	8722.2	8304.4
47.5°	10389.4	10369.5	10580.4	10851.0	10986.3	11284.7	11447.9	11256.9	10313.8	9235.5	8758.0
50°	8825.6	8805.8	9267.3	9904.0	10301.9	10755.5	11229.0	11483.7	10930.6	9812.5	9251.4
52.5°	6923.6	6903.7	7488.7	8602.8	9470.3	10130.8	10787.3	11535.4	11515.5	10457.1	9808.5
55°	5149.0	5133.0	5702.1	6907.7	8312.3	9406.6	10246.2	11400.1	12064.6	11197.2	10484.9
57.5°	3628.9	3621.0	4114.4	5113.1	6824.2	8523.2	9724.9	11137.5	12570.0	12001.0	11248.9
60°	2546.6	2534.7	2892.8	3664.8	5160.9	7190.2	9207.6	10787.3	12948.0	12792.8	12060.7
62.5°	1715.0	1707.0	1961.7	2606.3	3664.8	5534.9	8423.8	10552.6	13162.9	13588.6	12880.4
65°	1301.2	1297.2	1412.6	1766.7	2594.4	3975.1	7178.3	10524.7	13190.7	14185.5	13576.7
67.5°	1050.5	1054.5	1118.1	1321.1	1794.6	2825.2	5566.8	10349.6	13043.5	14388.4	13914.9
70°	859.5	859.5	887.3	1022.6	1325.0	1906.0	3887.6	9553.8	12633.6	13859.2	13513.0
72.5°	656.6	660.5	748.1	827.7	998.8	1337.0	2490.9	7906.5	11666.7	12219.8	11957.2
75°	521.3	517.3	569.0	680.4	775.9	955.0	1528.0	5670.2	9927.9	9549.8	9382.7
77.5°	374.0	370.1	409.8	505.3	588.9	676.4	911.2	2861.0	5399.6	4961.9	4838.6
80°	254.7	246.7	282.5	350.2	390.0	397.9	445.7	1098.2	2355.6	2220.3	2192.5
82.5°	131.3	131.3	151.2	199.0	202.9	206.9	199.0	354.1	779.9	728.2	696.3
85°	51.7	51.7	55.7	67.6	67.6	71.6	71.6	91.5	83.6	79.6	75.6
87.5°	4.0	4.0	8.0	8.0	11.9	11.9	11.9	15.9	19.9	19.9	19.9
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°	3939.3	3939.3	3939.3	3939.3	3939.3	3939.3	3939.3	3939.3	3939.3	3939.3	3939.3
2.5°	3971.1	3955.2	3903.5	3891.6	3883.6	3871.7	3875.6	3847.8	3835.9	3839.8	3823.9
5°	4042.8	4014.9	3951.2	3923.4	3915.4	3903.5	3915.4	3895.5	3875.6	3883.6	3875.6
7.5°	4142.2	4102.5	4022.9	3995.0	3991.0	3979.1	3995.0	3979.1	3963.2	3971.1	3955.2
10°	4245.7	4194.0	4106.4	4078.6	4078.6	4074.6	4090.5	4066.6	4050.7	4054.7	4046.7
12.5°	4396.9	4329.3	4233.8	4209.9	4198.0	4209.9	4213.9	4182.0	4154.2	4158.2	4146.2
15°	4579.9	4504.3	4400.9	4365.1	4357.1	4353.1	4337.2	4297.4	4261.6	4257.6	4245.7
17.5°	4778.9	4683.4	4560.1	4524.2	4488.4	4476.5	4436.7	4385.0	4329.3	4329.3	4313.3
20°	4969.9	4862.5	4715.2	4663.5	4611.8	4564.0	4496.4	4412.8	4341.2	4329.3	4313.3
22.5°	5176.8	5049.5	4878.4	4802.8	4711.3	4615.8	4500.4	4388.9	4297.4	4277.5	4265.6
25°	5407.6	5248.4	5045.5	4934.1	4786.9	4639.6	4468.5	4325.3	4217.8	4186.0	4178.1
27.5°	5662.3	5471.3	5224.6	5061.4	4846.5	4615.8	4396.9	4225.8	4094.5	4054.7	4042.8
30°	5920.9	5694.1	5387.7	5149.0	4846.5	4540.2	4265.6	4066.6	3915.4	3859.7	3851.8
32.5°	6179.5	5924.9	5534.9	5196.7	4798.8	4412.8	4094.5	3859.7	3688.6	3621.0	3636.9
35°	6489.9	6179.5	5670.2	5216.6	4719.2	4257.6	3899.5	3625.0	3449.9	3390.2	3402.1
37.5°	6812.2	6434.2	5777.7	5200.7	4607.8	4082.6	3680.7	3414.1	3195.2	3091.8	3103.7
40°	7090.8	6665.0	5853.3	5145.0	4464.6	3883.6	3465.8	3115.6	2813.2	2713.7	2701.8
42.5°	7353.4	6836.1	5893.0	5061.4	4301.4	3652.8	3159.4	2709.8	2407.4	2284.0	2288.0
45°	7627.9	7003.2	5877.1	4950.0	4098.5	3382.2	2765.5	2311.9	2045.3	1933.8	1937.8
47.5°	7942.3	7182.3	5861.2	4830.6	3851.8	3032.1	2387.5	1961.7	1730.9	1651.3	1643.4
50°	8276.5	7381.2	5841.3	4683.4	3577.2	2642.1	2013.4	1635.4	1440.4	1388.7	1376.8
52.5°	8654.5	7596.1	5829.4	4508.3	3246.9	2228.3	1679.2	1348.9	1217.6	1181.8	1177.8
55°	9108.2	7846.8	5845.3	4297.4	2849.0	1838.3	1396.7	1161.9	1074.4	1054.5	1050.5
57.5°	9661.3	8169.1	5893.0	4050.7	2431.2	1500.1	1189.8	1046.5	990.8	974.9	974.9
60°	10262.1	8535.2	5980.6	3772.2	2013.4	1237.5	1054.5	955.0	931.1	951.0	951.0
62.5°	10910.7	8964.9	6135.8	3434.0	1623.5	1046.5	947.0	879.4	863.5	903.3	907.2
65°	11511.5	9382.7	6235.3	3028.1	1289.2	907.2	863.5	803.8	811.7	851.5	847.5
67.5°	11881.6	9728.9	6096.0	2518.8	1022.6	803.8	775.9	724.2	744.1	775.9	779.9
70°	11654.8	9533.9	5407.6	1902.0	799.8	700.3	680.4	648.6	664.5	704.3	720.2
72.5°	10544.6	8539.2	4205.9	1285.2	644.6	588.9	596.9	580.9	600.8	636.7	672.5
75°	8559.0	6454.1	2821.2	823.7	509.3	501.4	513.3	501.4	509.3	545.1	565.0
77.5°	4468.5	3147.5	1404.6	513.3	378.0	390.0	409.8	413.8	437.7	445.7	453.6
80°	2085.0	1416.6	584.9	286.5	250.7	274.6	314.3	318.3	326.3	338.2	342.2
82.5°	680.4	425.8	270.6	155.2	143.2	155.2	202.9	242.7	246.7	270.6	270.6
85°	71.6	43.8	59.7	63.7	55.7	67.6	91.5	87.5	39.8	23.9	23.9
87.5°	19.9	15.9	19.9	19.9	15.9	15.9	11.9	4.0	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)