

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: P842104

Luminaire Tested: **ARCH4-270-730-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842104
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-270-730-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 1045mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38519 lumens
Efficiency: N/A
Efficacy: 143.2 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B4 - U0 - G4

Input Watts (W): 269
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

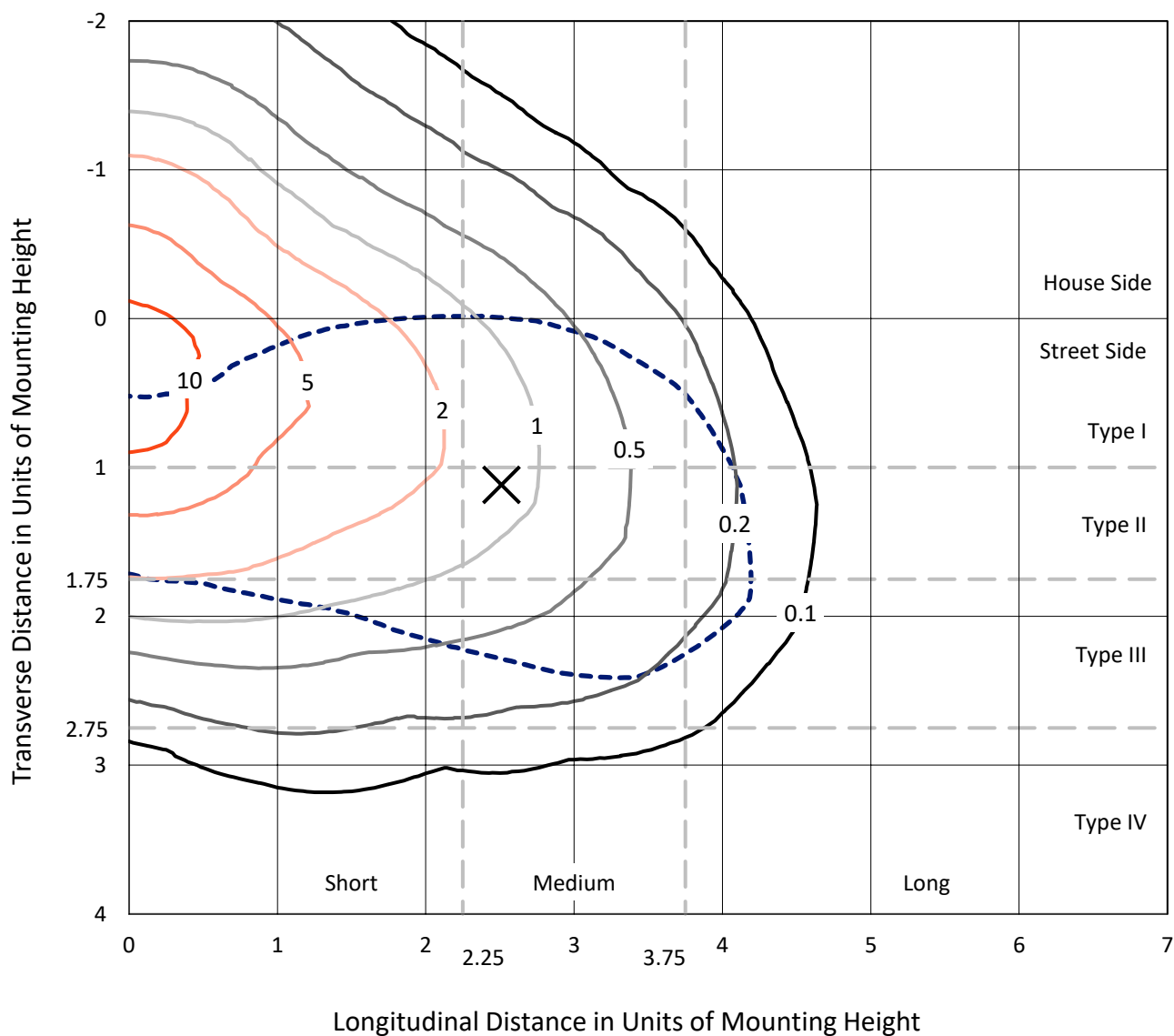


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Iso-Footcandle Lines of Horizontal Illumination

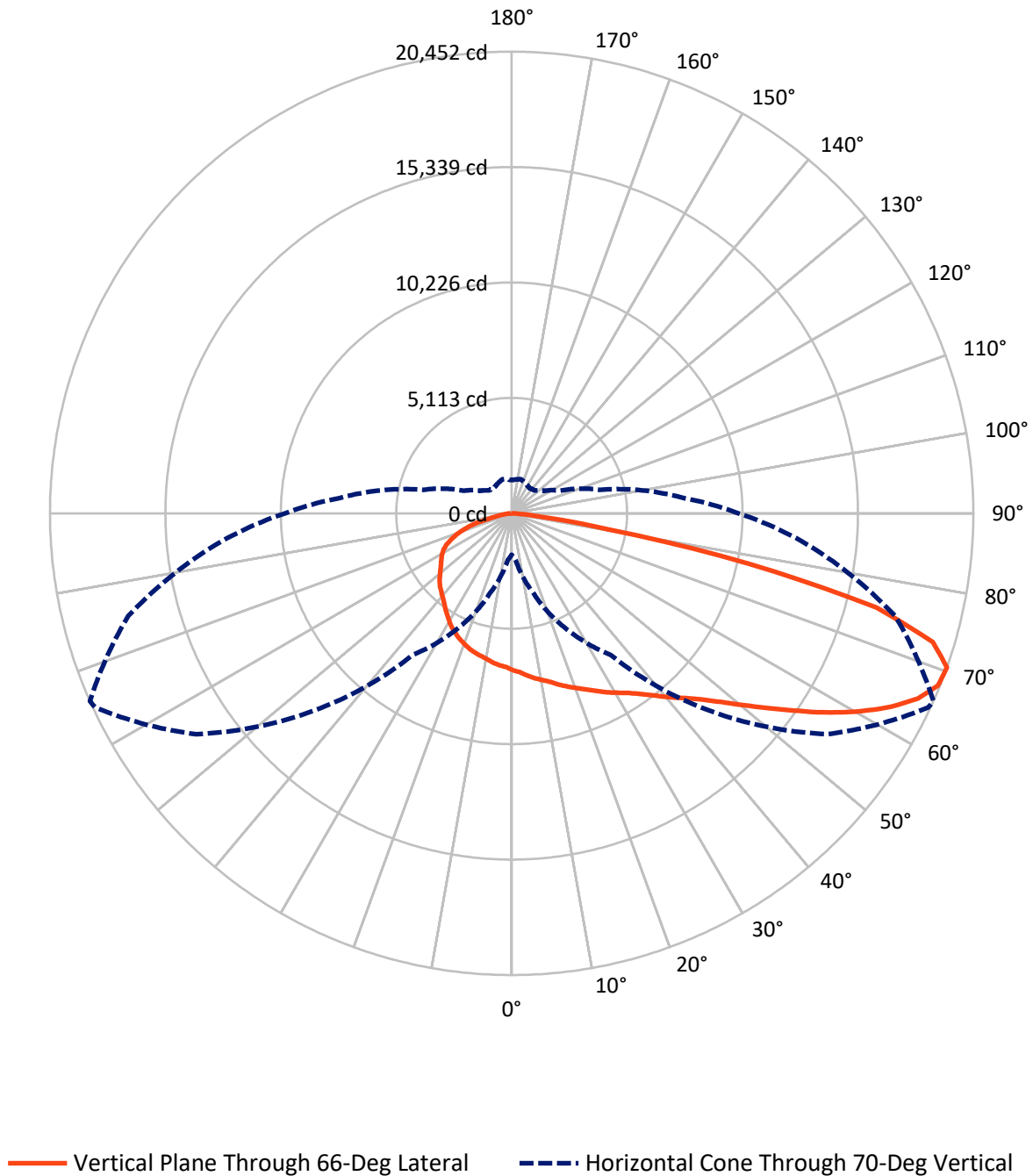
× Max cd
- - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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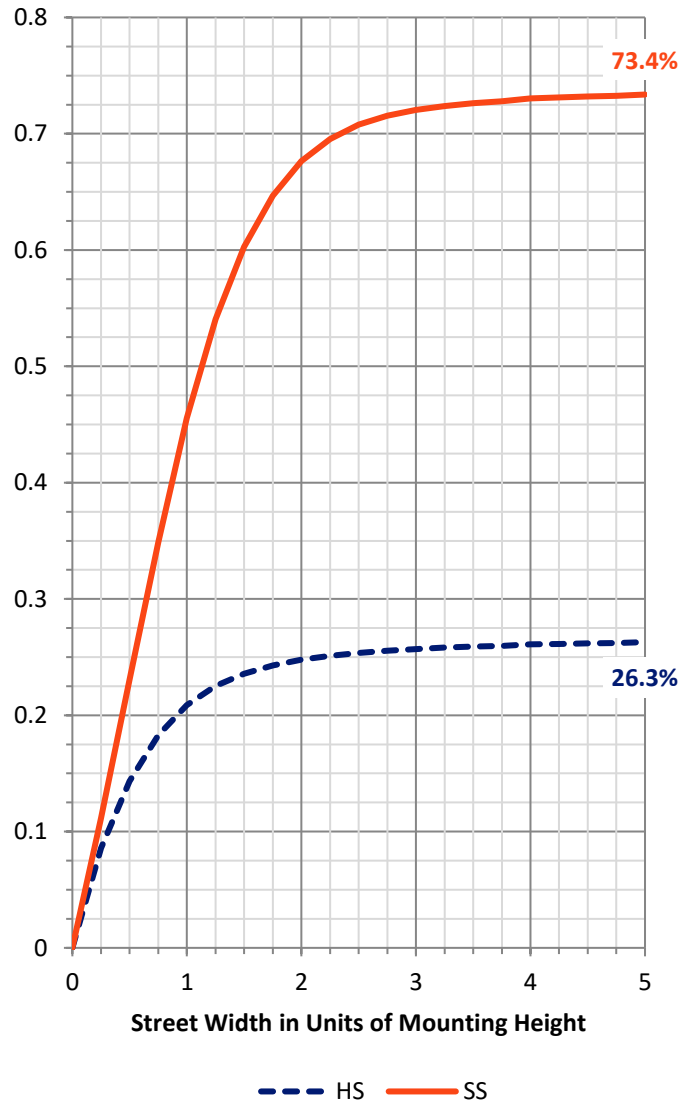
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10206.7	0.0	10206.7
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	28312.3	0.0	28312.3
	% Fixture	73.5	0.0	73.5
Total	Lumens	38519.0	0.0	38519.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	668.0	1.7
10°-20°	2003.7	5.2
20°-30°	3358.9	8.7
30°-40°	5029.4	13.1
40°-50°	6724.4	17.5
50°-60°	7850.9	20.4
60°-70°	7806.5	20.3
70°-80°	4621.6	12.0
80°-90°	455.5	1.2
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°	38519.0	100.0
0°-180°	38519.0	100.0

Coefficient of Utilization



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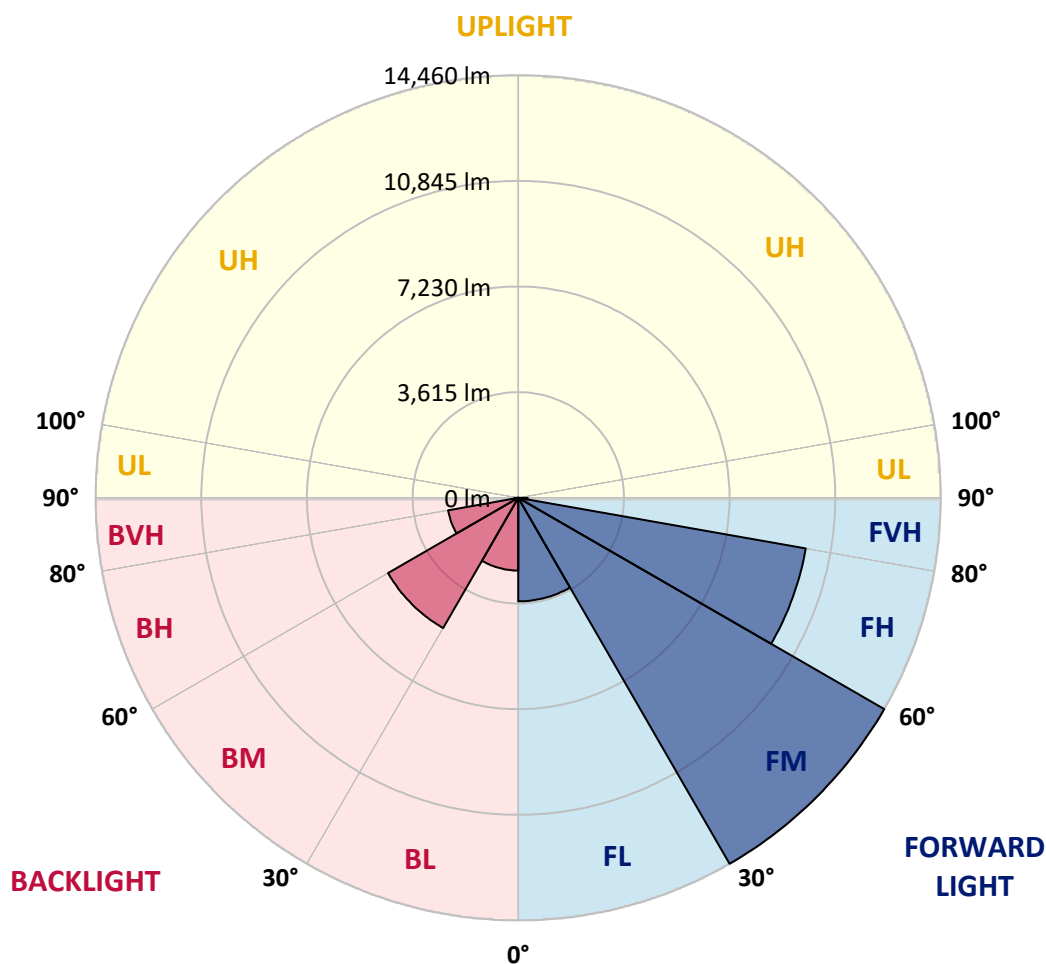
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3542.7	9.2			
FM	(30°-60°)	14459.5	37.5			
FH	(60°-80°)	9990.0	25.9			G4/12000
FVH	(80°-90°)	320.1	0.8			G3/500
BL	(0°-30°)	2487.9	6.5	B3/2500		
BM	(30°-60°)	5145.2	13.4	B4/8500		
BH	(60°-80°)	2438.1	6.3	B3/2500		G3/2500
BVH	(80°-90°)	135.4	0.4			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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	6951.8	6951.8	6951.8	6951.8	6951.8	6951.8	6951.8	6951.8	6951.8	6951.8	6951.8
2.5°	7207.4	7196.0	7190.3	7167.6	7116.5	7139.2	7088.1	7054.0	7048.4	6968.8	6923.4
5°	7502.7	7497.0	7485.7	7451.6	7372.1	7383.5	7298.3	7235.8	7218.7	7093.8	6997.2
7.5°	7752.6	7741.3	7735.6	7690.1	7605.0	7599.3	7497.0	7406.2	7377.8	7207.4	7059.7
10°	7945.7	7928.7	7940.0	7894.6	7803.7	7786.7	7656.1	7536.8	7508.4	7292.6	7088.1
12.5°	8110.4	8099.1	8116.1	8076.4	8002.5	7985.5	7854.9	7701.5	7667.4	7417.5	7150.6
15°	8292.2	8252.4	8286.5	8269.5	8218.3	8212.7	8093.4	7923.0	7877.6	7576.6	7247.1
17.5°	8388.7	8366.0	8405.8	8411.5	8388.7	8428.5	8314.9	8110.4	8070.7	7724.2	7332.3
20°	8456.9	8422.8	8468.2	8502.3	8519.4	8598.9	8508.0	8309.2	8263.8	7866.2	7411.8
22.5°	8689.8	8615.9	8621.6	8644.3	8655.7	8769.3	8712.5	8519.4	8473.9	8042.3	7508.4
25°	9274.7	9127.1	9030.5	8962.4	8882.9	8979.4	8945.3	8757.9	8718.2	8252.4	7627.7
27.5°	10183.5	9996.1	9802.9	9604.2	9291.8	9252.0	9195.2	9024.8	8979.4	8462.6	7746.9
30°	11217.2	11029.7	10802.6	10484.5	9899.5	9592.8	9462.2	9274.7	9223.6	8650.0	7860.5
32.5°	12245.2	12080.5	11853.3	11467.1	10632.2	10007.4	9729.1	9536.0	9484.9	8854.5	7996.8
35°	13046.0	12943.8	12796.1	12313.3	11359.2	10495.9	10115.3	9882.5	9825.7	9178.2	8246.7
37.5°	13693.5	13619.6	13494.7	12989.2	11887.4	10984.3	10558.3	10291.4	10228.9	9530.3	8513.7
40°	14647.6	14454.5	14352.3	13619.6	12347.4	11427.3	11058.1	10779.8	10711.7	9905.2	8729.5
42.5°	15459.8	15317.8	15192.9	14181.9	12784.7	11807.8	11529.5	11274.0	11183.1	10274.4	8962.4
45°	15596.1	15652.9	15590.4	14460.2	13477.6	12182.7	12006.6	11841.9	11756.7	10774.2	9314.5
47.5°	15601.8	15601.8	15232.6	14619.2	14335.3	12603.0	12517.8	12574.6	12483.7	11410.3	9734.8
50°	15192.9	15266.7	15073.6	14659.0	14562.4	13023.3	13142.5	13449.2	13358.4	12086.1	10189.2
52.5°	14346.6	14590.8	14585.2	14596.5	14233.0	13381.1	13801.4	14500.0	14346.6	12847.2	10671.9
55°	12852.9	13341.3	13778.7	14153.5	13949.0	13596.9	14607.9	15618.8	15459.8	13699.1	11160.4
57.5°	11575.0	11887.4	12432.6	13494.7	13613.9	13784.3	15363.3	16788.8	16646.8	14641.9	11671.5
60°	10115.3	10547.0	11092.2	12603.0	13205.0	14028.6	16192.5	17930.4	17794.1	15596.1	12165.7
62.5°	7871.9	8428.5	9519.0	11234.2	12608.7	14181.9	16845.6	18935.7	18873.2	16499.2	12608.7
65°	5486.5	5980.6	7508.4	9553.0	11660.2	14113.7	17368.1	19833.1	19776.3	17237.5	12921.0
67.5°	3203.3	3776.9	5503.5	7690.1	9984.7	13642.3	17538.5	20361.3	20361.3	17686.2	13006.2
70°	1828.8	2095.8	3629.2	5605.7	7656.1	12341.7	17061.4	20355.6	20452.2	17584.0	12654.1
72.5°	1277.9	1397.2	2442.2	3771.2	5191.1	9984.7	15811.9	19373.0	19503.7	16618.4	11450.0
75°	993.9	1079.1	1720.9	2572.8	3271.4	6781.4	13080.1	16334.5	16680.9	14164.9	9257.7
77.5°	755.4	817.9	1005.3	1607.3	2095.8	3896.2	8633.0	10711.7	10734.4	8672.7	4964.0
80°	550.9	613.4	670.2	982.6	1113.2	1823.1	3260.1	4475.5	4350.6	4197.2	2686.4
82.5°	329.4	391.9	408.9	533.9	545.2	778.1	1141.6	1442.6	1385.8	1845.9	1260.9
85°	142.0	198.8	210.1	244.2	232.9	318.1	454.4	380.5	340.8	391.9	272.6
87.5°	34.1	56.8	56.8	62.5	51.1	79.5	85.2	62.5	56.8	68.2	68.2
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°	6951.8	6951.8	6951.8	6951.8	6951.8	6951.8	6951.8	6951.8	6951.8	6951.8	6951.8
2.5°	6912.0	6895.0	6900.7	6804.1	6775.7	6747.3	6730.3	6718.9	6707.6	6724.6	6741.7
5°	6963.2	6923.4	6878.0	6736.0	6679.2	6616.7	6571.3	6531.5	6514.5	6514.5	6531.5
7.5°	7002.9	6934.8	6838.2	6650.8	6548.6	6463.4	6389.5	6338.4	6310.0	6310.0	6327.0
10°	7008.6	6912.0	6758.7	6531.5	6395.2	6270.3	6185.1	6128.3	6088.5	6088.5	6099.9
12.5°	7042.7	6912.0	6713.3	6440.6	6270.3	6116.9	6014.7	5929.5	5912.4	5912.4	5923.8
15°	7099.5	6940.4	6684.9	6361.1	6156.7	5980.6	5867.0	5776.1	5742.1	5764.8	5770.5
17.5°	7150.6	6957.5	6633.7	6258.9	6014.7	5821.6	5696.6	5617.1	5571.7	5622.8	5622.8
20°	7184.7	6957.5	6559.9	6128.3	5861.3	5645.5	5526.2	5429.7	5395.6	5458.1	5463.8
22.5°	7235.8	6951.8	6480.4	5997.6	5696.6	5469.4	5350.2	5276.3	5259.3	5327.4	5350.2
25°	7292.6	6963.2	6395.2	5850.0	5514.9	5293.4	5202.5	5168.4	5179.8	5265.0	5293.4
27.5°	7355.1	6985.9	6310.0	5685.3	5316.1	5117.3	5066.2	5083.2	5128.7	5236.6	5270.6
30°	7411.8	6991.6	6190.7	5492.2	5088.9	4901.5	4924.2	4998.0	5066.2	5174.1	5213.9
32.5°	7485.7	6997.2	6065.8	5282.0	4844.7	4708.4	4810.6	4929.9	4998.0	5100.3	5145.7
35°	7667.4	7093.8	5969.2	5077.5	4617.5	4543.7	4714.0	4867.4	4907.2	4998.0	5037.8
37.5°	7877.6	7252.8	5918.1	4867.4	4396.0	4379.0	4594.8	4748.1	4759.5	4816.3	4856.0
40°	8008.2	7321.0	5861.3	4691.3	4197.2	4208.6	4430.1	4549.3	4526.6	4566.4	4594.8
42.5°	8138.8	7343.7	5742.1	4543.7	4009.8	4021.1	4191.5	4276.7	4288.1	4373.3	4413.0
45°	8360.3	7406.2	5611.4	4407.4	3839.4	3799.6	3901.9	4015.5	4163.1	4327.8	4373.3
47.5°	8655.7	7536.8	5475.1	4242.6	3674.7	3544.1	3583.8	3782.6	3935.9	4089.3	4117.7
50°	8956.7	7667.4	5350.2	4043.9	3510.0	3271.4	3288.5	3470.2	3595.2	3714.4	3731.5
52.5°	9252.0	7781.0	5242.2	3856.4	3322.6	2947.7	3015.9	3203.3	3288.5	3345.3	3362.3
55°	9547.4	7877.6	5145.7	3697.4	3106.7	2692.1	2754.6	2930.7	3015.9	3044.3	3055.6
57.5°	9854.1	7991.2	5071.9	3561.1	2862.5	2464.9	2504.7	2629.6	2709.2	2743.2	2731.9
60°	10109.6	8087.7	5032.1	3419.1	2618.3	2254.8	2243.4	2357.0	2470.6	2504.7	2493.3
62.5°	10308.4	8150.2	4969.6	3237.4	2402.5	2044.6	1987.9	2135.5	2254.8	2277.5	2294.5
65°	10416.3	8155.9	4816.3	3004.5	2181.0	1817.5	1777.7	1925.4	1999.2	2021.9	2021.9
67.5°	10399.3	8065.0	4515.3	2692.1	1976.5	1613.0	1578.9	1669.8	1777.7	1794.7	1777.7
70°	10047.2	7690.1	4032.5	2362.7	1732.3	1431.3	1368.8	1459.7	1561.9	1499.4	1471.0
72.5°	9047.6	6718.9	3322.6	1999.2	1459.7	1204.1	1175.7	1266.5	1272.2	1283.6	1255.2
75°	7139.2	5003.7	2487.7	1556.2	1181.4	1011.0	1005.3	988.2	1011.0	1056.4	1022.3
77.5°	3748.5	2499.0	1346.1	954.2	857.6	812.2	772.4	766.7	834.9	863.3	829.2
80°	2033.3	1402.9	772.4	573.6	522.5	528.2	579.3	568.0	641.8	658.8	630.4
82.5°	886.0	664.5	380.5	346.5	346.5	340.8	357.8	397.6	477.1	477.1	380.5
85°	193.1	164.7	147.7	170.4	193.1	193.1	193.1	193.1	136.3	73.8	51.1
87.5°	62.5	62.5	62.5	68.2	73.8	73.8	62.5	45.4	28.4	5.7	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)