

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: P842199

Luminaire Tested: **ARCH4-280-750-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842199
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: ARCH4-280-750-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1085mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42071 lumens
Efficiency: N/A
Efficacy: 150.4 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): 279.7
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



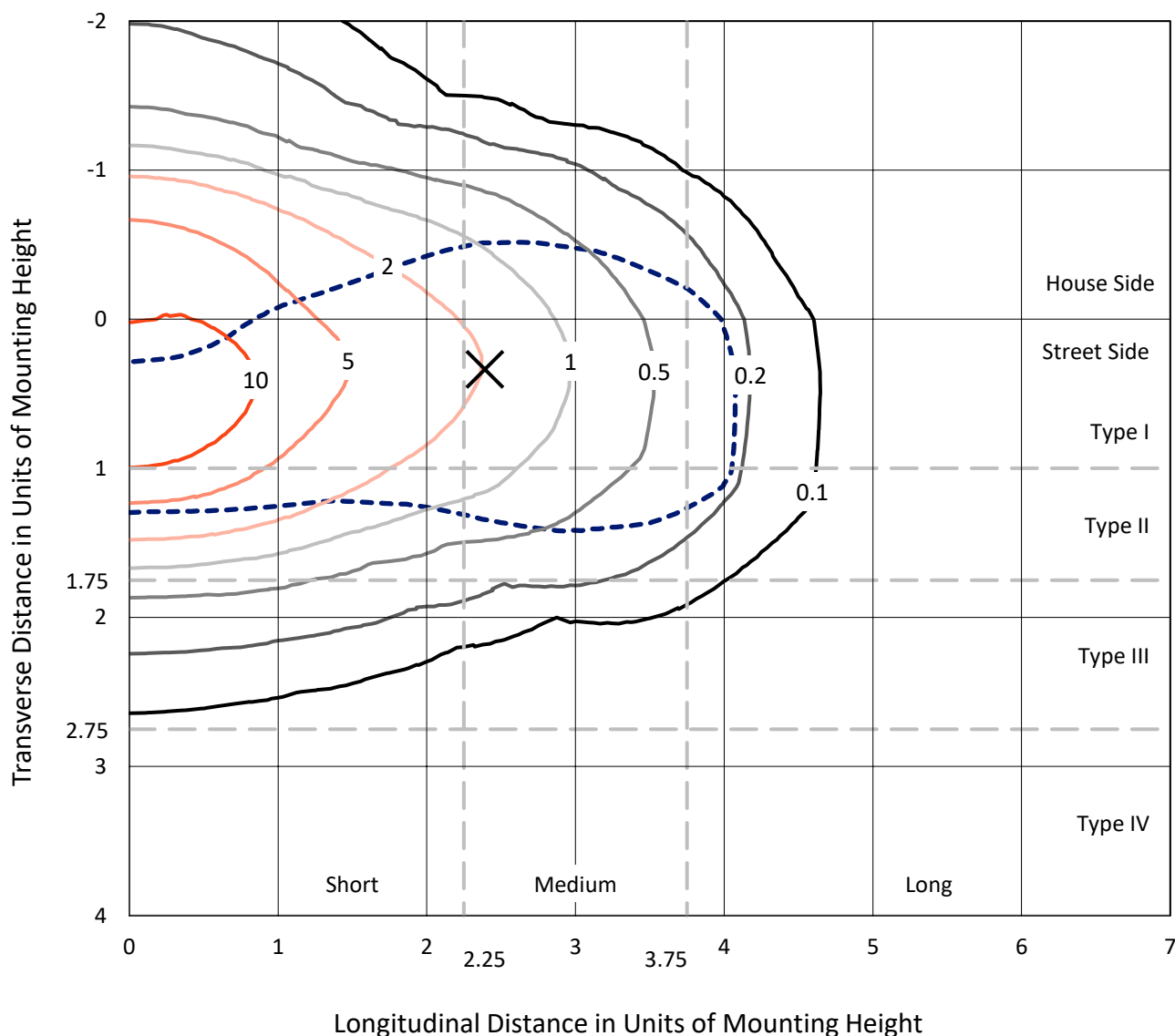
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

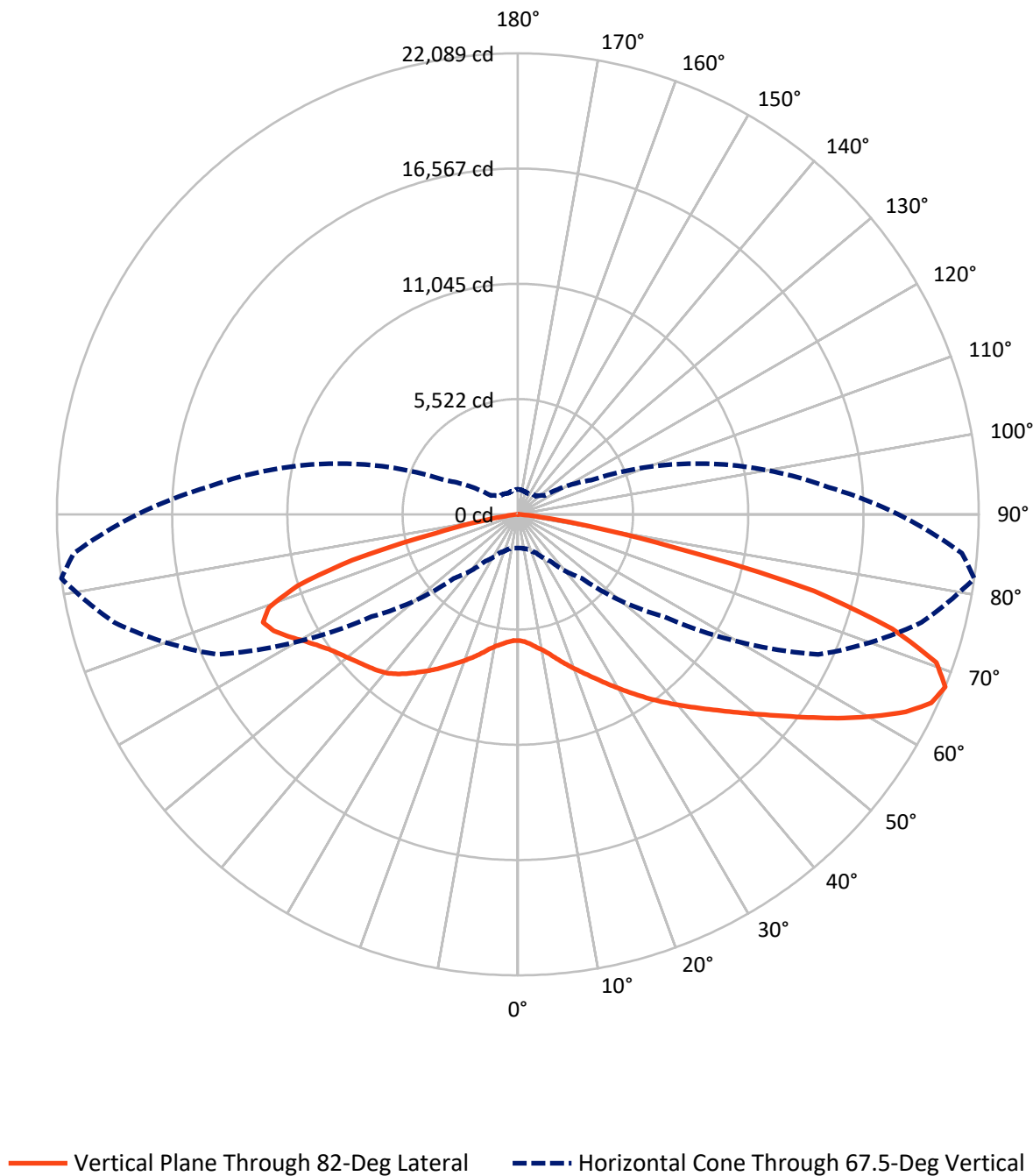
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 18.6 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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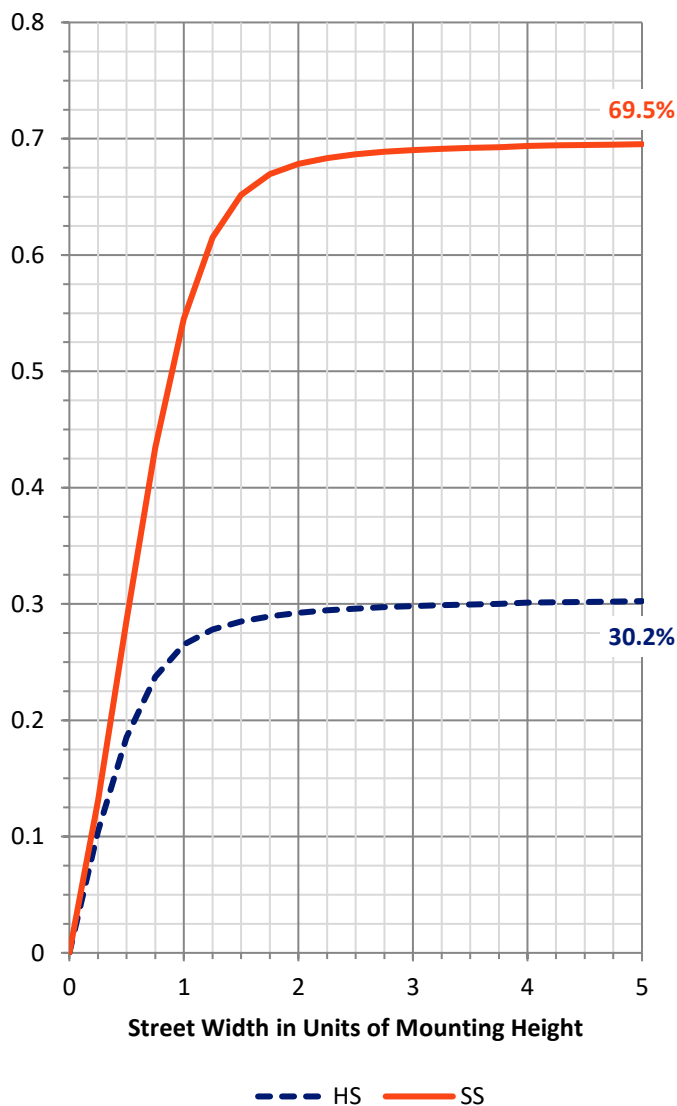
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12812.3	0.0	12812.3
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	29258.7	0.0	29258.7
	% Fixture	69.5	0.0	69.5
Total	Lumens	42071.0	0.0	42071.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	625.0	1.5
10°-20°	2251.3	5.4
20°-30°	4524.5	10.8
30°-40°	7107.4	16.9
40°-50°	8658.2	20.6
50°-60°	8181.0	19.4
60°-70°	6755.6	16.1
70°-80°	3678.7	8.7
80°-90°	289.2	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°	42071.0	100.0
0°-180°	42071.0	100.0

Coefficient of Utilization



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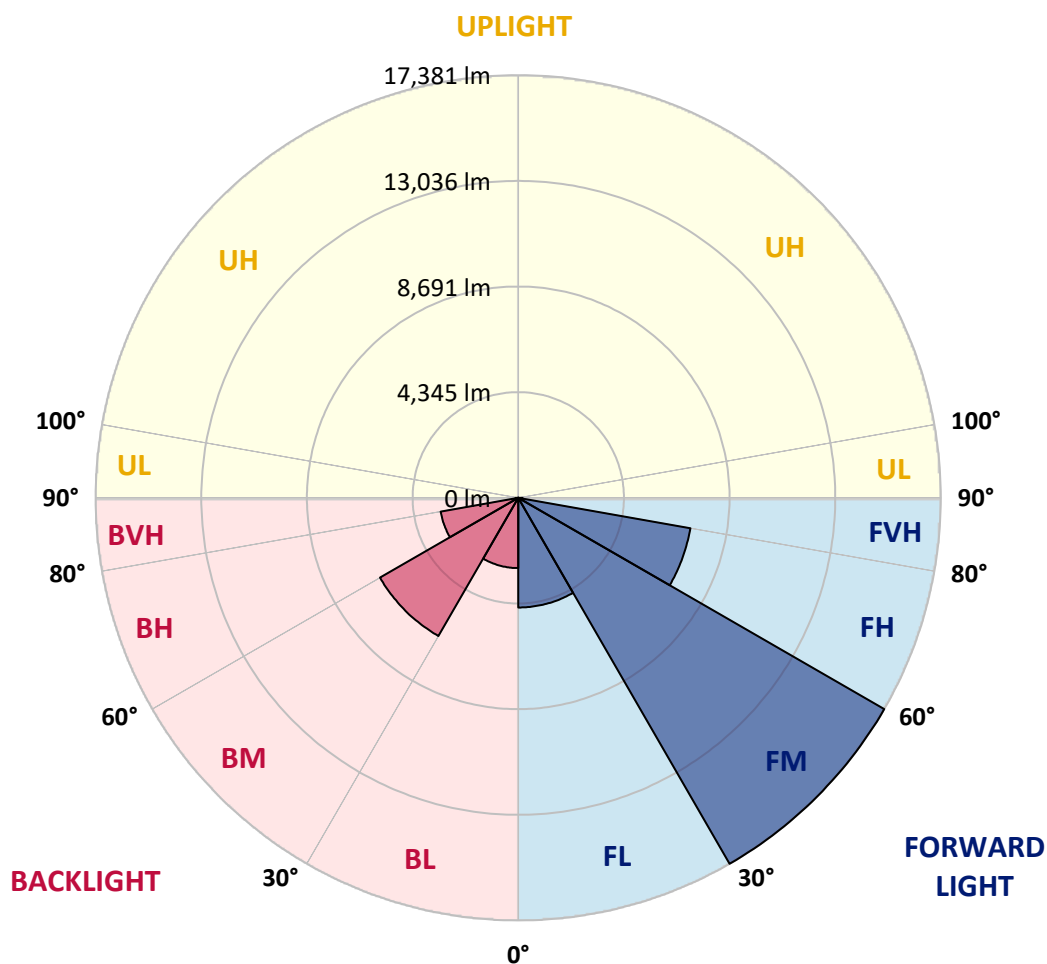
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4511.6	10.7			
FM	(30°-60°)	17381.3	41.3			
FH	(60°-80°)	7191.5	17.1			G3/7500
FVH	(80°-90°)	174.3	0.4			G2/225
BL	(0°-30°)	2889.3	6.9	B4/5000		
BM	(30°-60°)	6565.3	15.6	B4/8500		
BH	(60°-80°)	3242.9	7.7	B4/5000		G4/5000
BVH	(80°-90°)	114.9	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°	6047.7	6047.7	6047.7	6047.7	6047.7	6047.7	6047.7	6047.7	6047.7	6047.7	6047.7
2.5°	6322.6	6322.6	6371.4	6371.4	6328.7	6261.5	6243.2	6169.9	6102.7	6102.7	6108.8
5°	6927.3	6921.2	6957.9	6909.0	6805.2	6670.8	6579.1	6420.3	6285.9	6243.2	6237.1
7.5°	7666.5	7660.4	7678.7	7599.3	7403.8	7183.9	7000.7	6744.1	6524.2	6432.5	6408.1
10°	8491.2	8485.1	8466.8	8332.4	8069.7	7727.6	7452.7	7098.4	6768.5	6621.9	6591.4
12.5°	9438.1	9425.8	9383.1	9187.6	8827.2	8387.3	7990.3	7532.1	7092.3	6890.7	6823.5
15°	10494.9	10476.5	10397.1	10158.9	9676.3	9120.4	8607.3	8020.8	7483.2	7220.6	7128.9
17.5°	11606.7	11606.7	11484.5	11130.2	10592.6	9902.3	9267.0	8521.7	7892.5	7568.8	7458.8
20°	12736.8	12730.7	12578.0	12150.3	11515.0	10720.9	9914.5	9096.0	8314.0	7923.1	7788.7
22.5°	13928.0	13915.8	13726.4	13237.7	12480.2	11582.2	10641.5	9664.1	8778.3	8307.9	8136.9
25°	15296.4	15278.0	15045.9	14447.2	13549.3	12535.2	11460.1	10329.9	9309.8	8735.5	8534.0
27.5°	16750.3	16725.8	16450.9	15754.5	14771.0	13549.3	12364.2	11099.6	9896.2	9212.0	8986.0
30°	18045.3	18027.0	17727.7	17012.9	15882.8	14557.2	13225.5	11869.3	10513.2	9719.1	9438.1
32.5°	19022.7	19022.7	18753.9	18051.4	16878.5	15522.4	14092.9	12596.3	11154.6	10262.7	9932.9
35°	19615.3	19633.6	19401.5	18839.5	17733.8	16432.6	14990.9	13451.5	11838.8	10843.1	10488.8
37.5°	19700.8	19761.9	19627.5	19248.7	18326.3	17190.1	15870.6	14276.2	12547.4	11429.5	11032.4
40°	19303.7	19346.5	19352.6	19206.0	18570.7	17733.8	16646.4	15149.8	13298.8	12046.5	11588.3
42.5°	18509.6	18540.1	18595.1	18637.9	18393.5	17972.0	17239.0	15962.2	14099.0	12675.7	12138.1
45°	17483.3	17477.2	17568.8	17752.1	17739.9	17837.6	17568.8	16701.4	14929.8	13390.4	12749.0
47.5°	15950.0	15919.5	16243.2	16658.6	16866.3	17324.5	17574.9	17281.7	15833.9	14178.5	13445.4
50°	13549.3	13518.7	14227.3	15204.7	15815.6	16512.0	17239.0	17629.9	16780.8	15064.2	14202.9
52.5°	10629.3	10598.7	11496.7	13207.2	14538.9	15552.9	16560.9	17709.3	17678.8	16053.9	15058.1
55°	7904.8	7880.3	8753.9	10604.8	12761.2	14441.1	15730.1	17501.6	18521.8	17190.1	16096.6
57.5°	5571.2	5559.0	6316.5	7849.8	10476.5	13085.0	14929.8	17098.5	19297.6	18424.1	17269.5
60°	3909.6	3891.3	4441.1	5626.2	7923.1	11038.6	14135.7	16560.9	19877.9	19639.7	18515.7
62.5°	2632.9	2620.7	3011.6	4001.2	5626.2	8497.3	12932.3	16200.5	20207.8	20861.5	19774.1
65°	1997.6	1991.5	2168.6	2712.3	3982.9	6102.7	11020.2	16157.7	20250.6	21777.8	20843.1
67.5°	1612.7	1618.8	1716.6	2028.1	2755.1	4337.2	8546.2	15888.9	20024.6	22089.3	21362.4
70°	1319.5	1319.5	1362.3	1570.0	2034.2	2926.1	5968.3	14667.2	19395.4	21276.9	20745.4
72.5°	1007.9	1014.1	1148.4	1270.6	1533.3	2052.5	3824.1	12138.1	17910.9	18760.0	18356.9
75°	800.2	794.1	873.6	1044.6	1191.2	1466.1	2345.8	8705.0	15241.4	14661.1	14404.5
77.5°	574.2	568.1	629.2	775.8	904.1	1038.5	1398.9	4392.2	8289.6	7617.6	7428.3
80°	391.0	378.7	433.7	537.6	598.7	610.9	684.2	1686.0	3616.4	3408.7	3365.9
82.5°	201.6	201.6	232.1	305.4	311.5	317.7	305.4	543.7	1197.3	1117.9	1069.0
85°	79.4	79.4	85.5	103.8	103.8	110.0	110.0	140.5	128.3	122.2	116.1
87.5°	6.1	6.1	12.2	12.2	18.3	18.3	18.3	24.4	30.5	30.5	30.5
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°	6047.7	6047.7	6047.7	6047.7	6047.7	6047.7	6047.7	6047.7	6047.7	6047.7	6047.7
2.5°	6096.6	6072.1	5992.7	5974.4	5962.2	5943.8	5949.9	5907.2	5888.9	5895.0	5870.5
5°	6206.5	6163.8	6066.0	6023.2	6011.0	5992.7	6011.0	5980.5	5949.9	5962.2	5949.9
7.5°	6359.2	6298.1	6176.0	6133.2	6127.1	6108.8	6133.2	6108.8	6084.3	6096.6	6072.1
10°	6518.1	6438.6	6304.3	6261.5	6261.5	6255.4	6279.8	6243.2	6218.7	6224.8	6212.6
12.5°	6750.2	6646.3	6499.7	6463.1	6444.8	6463.1	6469.2	6420.3	6377.6	6383.7	6365.3
15°	7031.2	6915.1	6756.3	6701.3	6689.1	6683.0	6658.6	6597.5	6542.5	6536.4	6518.1
17.5°	7336.6	7190.0	7000.7	6945.7	6890.7	6872.4	6811.3	6731.9	6646.3	6646.3	6621.9
20°	7629.9	7464.9	7238.9	7159.5	7080.1	7006.8	6902.9	6774.6	6664.7	6646.3	6621.9
22.5°	7947.5	7752.0	7489.4	7373.3	7232.8	7086.2	6909.0	6738.0	6597.5	6566.9	6548.6
25°	8301.8	8057.5	7745.9	7574.9	7348.9	7122.8	6860.2	6640.2	6475.3	6426.4	6414.2
27.5°	8692.8	8399.6	8020.8	7770.4	7440.5	7086.2	6750.2	6487.5	6285.9	6224.8	6206.5
30°	9089.9	8741.7	8271.3	7904.8	7440.5	6970.1	6548.6	6243.2	6011.0	5925.5	5913.3
32.5°	9486.9	9096.0	8497.3	7978.1	7367.2	6774.6	6285.9	5925.5	5662.8	5559.0	5583.4
35°	9963.4	9486.9	8705.0	8008.6	7245.0	6536.4	5986.6	5565.1	5296.3	5204.7	5223.0
37.5°	10458.2	9877.9	8869.9	7984.2	7074.0	6267.6	5650.6	5241.3	4905.3	4746.5	4764.8
40°	10885.8	10232.2	8986.0	7898.6	6854.0	5962.2	5320.7	4783.2	4318.9	4166.2	4147.9
42.5°	11289.0	10494.9	9047.1	7770.4	6603.6	5607.9	4850.4	4160.1	3695.8	3506.4	3512.5
45°	11710.5	10751.4	9022.7	7599.3	6292.0	5192.5	4245.6	3549.2	3139.9	2968.9	2975.0
47.5°	12193.1	11026.3	8998.2	7416.0	5913.3	4654.9	3665.3	3011.6	2657.3	2535.1	2522.9
50°	12706.2	11331.8	8967.7	7190.0	5491.8	4056.2	3091.0	2510.7	2211.4	2132.0	2113.6
52.5°	13286.6	11661.6	8949.4	6921.2	4984.8	3420.9	2577.9	2070.9	1869.3	1814.3	1808.2
55°	13983.0	12046.5	8973.8	6597.5	4373.9	2822.3	2144.2	1783.8	1649.4	1618.8	1612.7
57.5°	14832.1	12541.3	9047.1	6218.7	3732.5	2303.0	1826.5	1606.6	1521.1	1496.6	1496.6
60°	15754.5	13103.3	9181.5	5791.1	3091.0	1899.8	1618.8	1466.1	1429.5	1460.0	1460.0
62.5°	16750.3	13763.1	9419.7	5271.9	2492.4	1606.6	1453.9	1350.0	1325.6	1386.7	1392.8
65°	17672.7	14404.5	9572.4	4648.8	1979.2	1392.8	1325.6	1234.0	1246.2	1307.3	1301.2
67.5°	18240.8	14935.9	9358.6	3866.9	1570.0	1234.0	1191.2	1111.8	1142.3	1191.2	1197.3
70°	17892.6	14636.6	8301.8	2920.0	1227.9	1075.1	1044.6	995.7	1020.2	1081.3	1105.7
72.5°	16188.2	13109.4	6457.0	1973.1	989.6	904.1	916.3	891.9	922.4	977.4	1032.4
75°	13140.0	9908.4	4331.1	1264.5	781.9	769.7	788.0	769.7	781.9	836.9	867.4
77.5°	6860.2	4832.0	2156.4	788.0	580.3	598.7	629.2	635.3	672.0	684.2	696.4
80°	3201.0	2174.7	898.0	439.8	384.9	421.5	482.6	488.7	500.9	519.2	525.4
82.5°	1044.6	653.6	415.4	238.2	219.9	238.2	311.5	372.6	378.7	415.4	415.4
85°	110.0	67.2	91.6	97.7	85.5	103.8	140.5	134.4	61.1	36.7	36.7
87.5°	30.5	24.4	30.5	30.5	24.4	24.4	18.3	6.1	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)