

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: P510767

Luminaire Tested: **CST-CA8-330-727-U-T2**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510767
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-10)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-330-727-U-T2
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 41144 lumens
Efficiency: N/A
Efficacy: 124.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

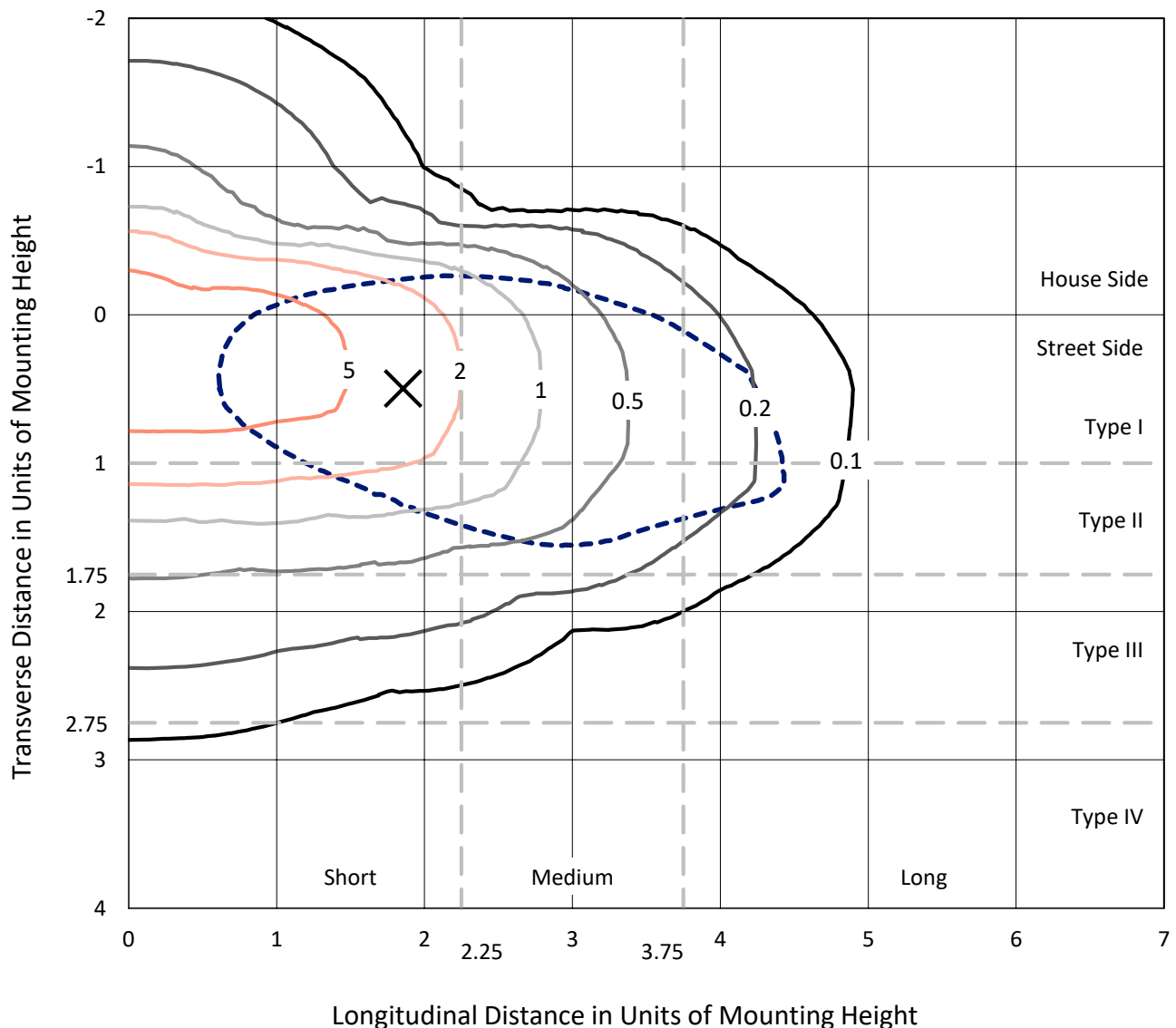
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

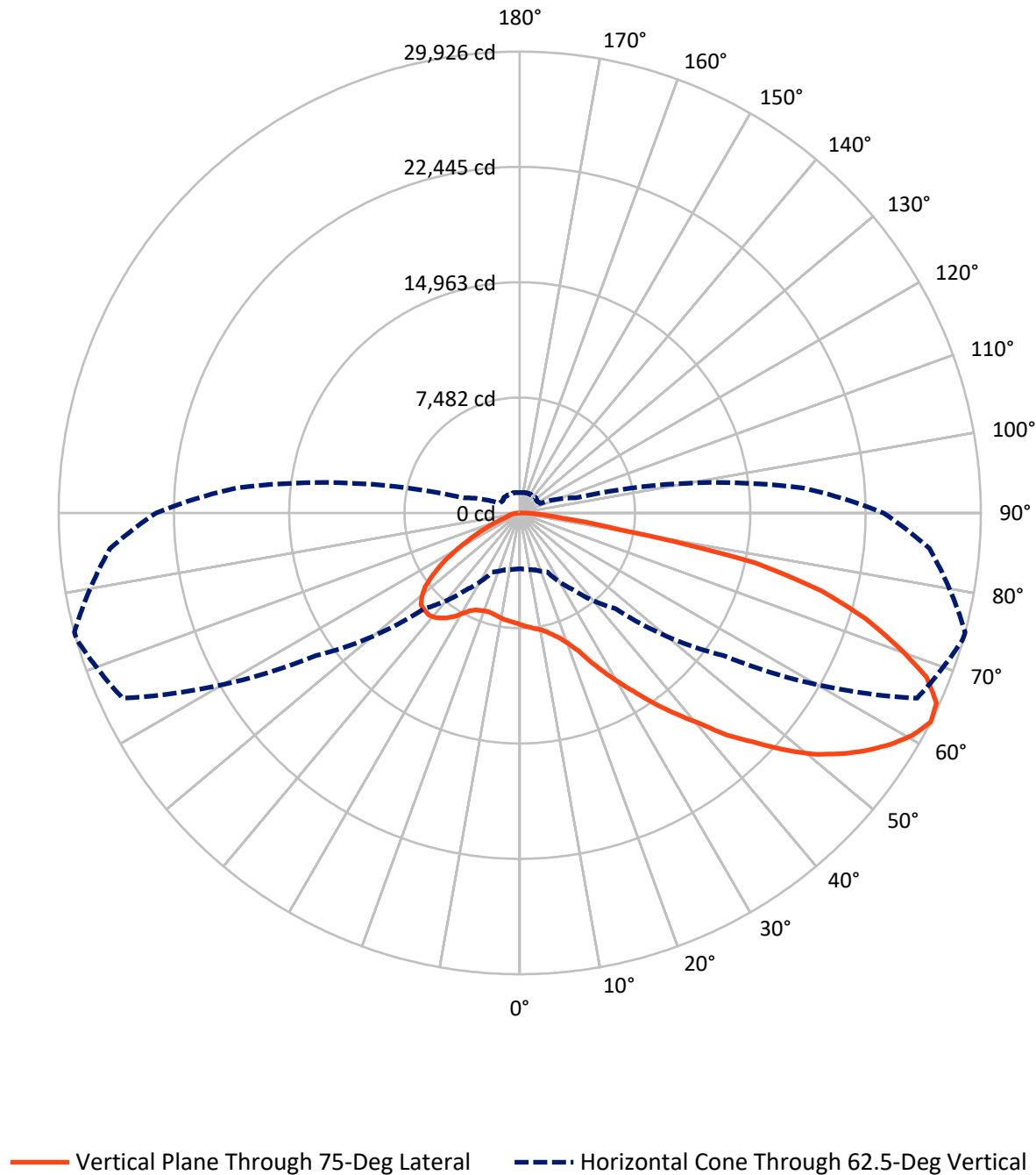
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.5 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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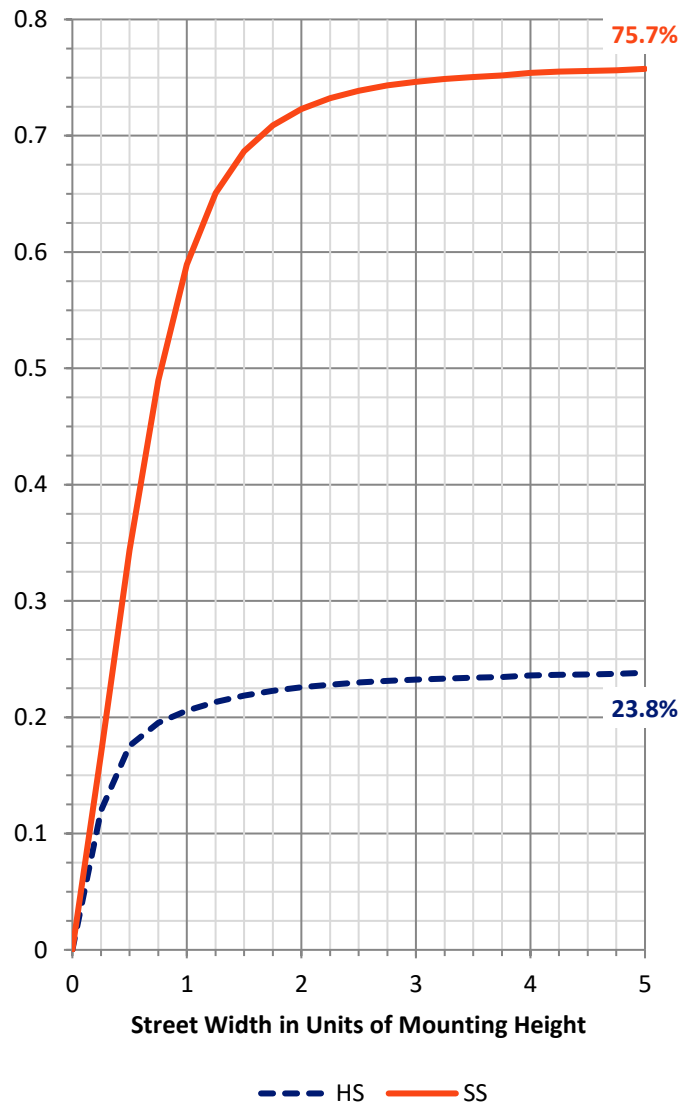
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9968.5	0.0	9968.5
	% Fixture	24.2	0.0	24.2
Street Side	Lumens	31175.5	0.0	31175.5
	% Fixture	75.8	0.0	75.8
Total	Lumens	41144.0	0.0	41144.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	697.7	1.7
10°-20°	2117.6	5.1
20°-30°	3652.3	8.9
30°-40°	5385.4	13.1
40°-50°	7099.1	17.3
50°-60°	8355.0	20.3
60°-70°	8312.4	20.2
70°-80°	4847.6	11.8
80°-90°	676.9	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°	41144.0	100.0
0°-180°	41144.0	100.0

Coefficient of Utilization



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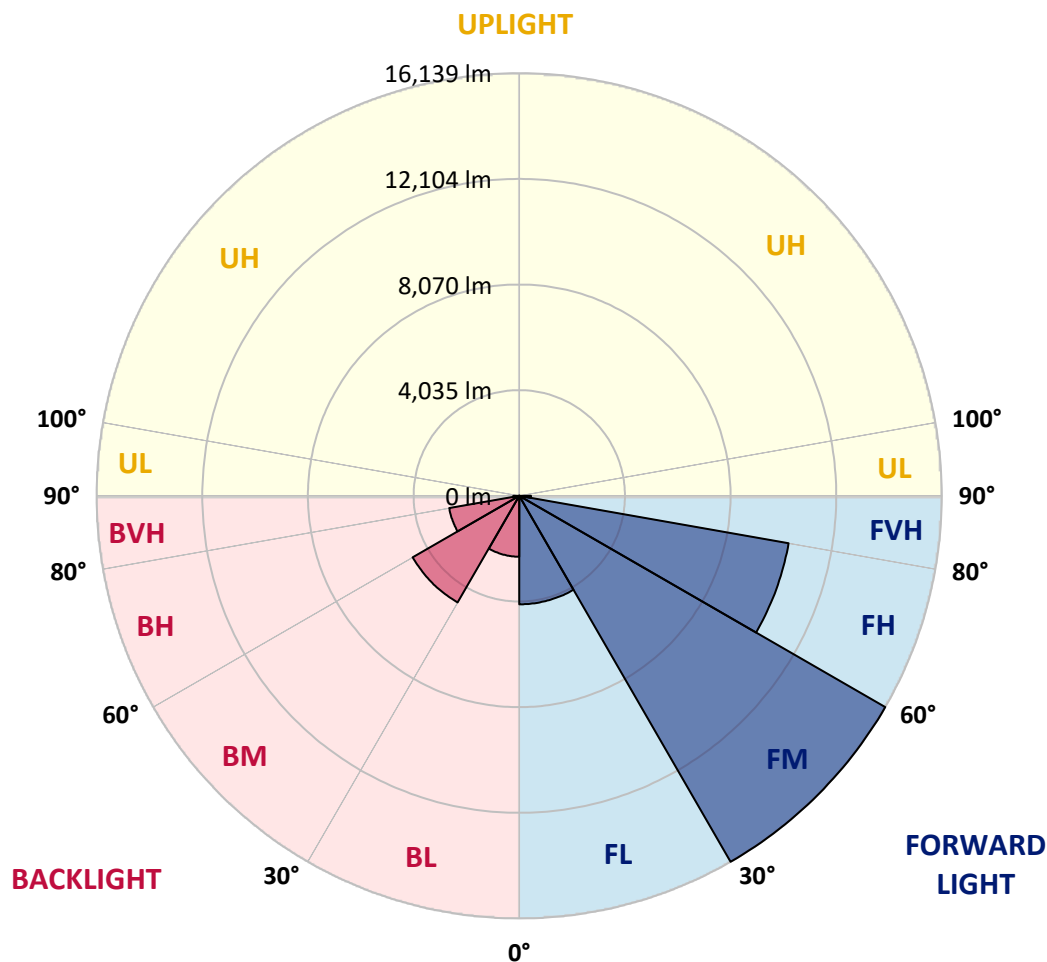
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4143.0	10.1			
FM	(30°-60°)	16139.1	39.2			
FH	(60°-80°)	10444.3	25.4			G4/12000
FVH	(80°-90°)	449.2	1.1			G3/500
BL	(0°-30°)	2324.6	5.6	B3/2500		
BM	(30°-60°)	4700.4	11.4	B3/5000		
BH	(60°-80°)	2715.7	6.6	B4/5000		G4/5000
BVH	(80°-90°)	227.7	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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	7252.7	7252.7	7252.7	7252.7	7252.7	7252.7	7252.7	7252.7	7252.7	7252.7	7252.7
2.5°	7649.9	7618.6	7622.8	7600.8	7567.8	7543.2	7478.8	7409.4	7367.9	7364.5	7305.2
5°	8034.3	8044.5	8047.0	7976.8	7907.3	7828.6	7730.3	7596.5	7487.3	7470.4	7355.2
7.5°	8384.9	8384.1	8379.0	8340.0	8307.8	8191.0	7994.5	7784.5	7606.7	7590.6	7403.5
10°	8743.9	8741.4	8690.6	8625.4	8552.6	8445.0	8276.5	8025.0	7737.1	7715.9	7448.4
12.5°	9135.2	9107.2	9075.0	8996.3	8909.9	8723.6	8546.6	8273.1	7972.5	7934.4	7528.0
15°	9457.8	9429.0	9384.1	9330.8	9240.2	9097.9	8909.9	8585.6	8263.0	8225.7	7706.6
17.5°	9777.0	9763.5	9731.3	9674.6	9605.1	9482.3	9309.6	9034.4	8611.8	8566.1	8003.8
20°	10038.7	10006.5	9982.8	10009.0	10015.0	9924.4	9829.5	9598.4	9132.6	9062.3	8368.8
22.5°	10187.7	10180.9	10310.5	10407.0	10446.0	10466.3	10436.7	10250.4	9828.7	9705.9	8876.9
25°	10329.1	10318.1	10494.3	10735.6	10965.1	11081.9	11160.7	11185.2	10798.3	10687.3	9694.0
27.5°	10333.4	10363.9	10619.6	11024.3	11374.1	11730.6	12108.2	12151.4	11811.9	11723.8	10623.8
30°	10356.2	10369.8	10623.0	11087.9	11816.1	12387.7	12879.7	13122.7	12829.7	12789.1	11647.6
32.5°	10065.8	10083.6	10477.3	11198.8	12149.7	13067.6	13720.5	14081.3	14008.4	13956.8	12739.9
35°	9763.5	9778.7	10236.0	11041.3	12397.8	13685.0	14480.1	15188.9	15321.8	15282.8	13958.5
37.5°	9289.3	9340.1	9819.4	10853.3	12441.0	14138.8	15204.9	16292.2	16693.6	16576.7	15247.3
40°	8774.4	8811.7	9369.7	10459.5	12392.8	14436.9	15917.1	17513.3	17999.3	17936.7	16526.8
42.5°	8124.1	8224.0	8782.9	9956.5	12144.6	14622.4	16575.9	18897.8	19604.0	19687.8	17702.1
45°	7576.2	7573.7	8092.8	9228.3	11695.0	14666.4	17182.2	20297.5	21330.6	21173.1	19256.0
47.5°	6931.8	6958.1	7500.0	8503.5	11032.0	14526.7	17654.7	21952.2	22997.9	22912.4	20530.4
50°	5440.6	5629.5	6655.8	7880.2	10135.2	14137.1	18048.5	23563.6	24562.0	24600.9	21688.8
52.5°	4690.4	4763.2	5329.7	7252.7	9339.2	13483.4	18480.3	25376.6	26073.5	25974.4	23003.9
55°	4389.8	4428.7	4700.5	6125.7	8569.5	12471.5	18687.8	27032.0	27252.2	27236.1	24086.1
57.5°	4172.1	4201.8	4394.8	5112.1	7724.4	11172.5	18512.5	28109.2	28451.3	28346.3	25107.3
60°	3858.0	3881.7	4169.6	4606.5	6854.8	9860.9	17434.5	28597.8	29320.9	29282.0	26010.0
62.5°	3621.7	3662.4	3823.3	4233.1	6112.1	8780.4	16150.0	28445.3	29891.7	29926.4	26699.3
65°	3371.9	3408.3	3544.7	3902.9	5438.9	8069.9	14764.6	27681.5	29629.1	29721.4	26811.0
67.5°	3063.7	3091.6	3253.4	3563.3	4652.3	7359.4	13202.3	26330.9	28172.7	28469.9	25698.4
70°	2675.9	2686.0	2884.2	3095.0	3863.1	6288.3	10497.6	24119.9	26065.0	26070.9	23597.5
72.5°	2129.7	2138.1	2190.6	2350.7	2901.9	4976.6	7715.9	20153.6	23502.6	23459.4	20972.4
75°	1448.0	1522.5	1704.6	1857.0	2093.3	3494.7	4798.8	13578.3	19912.2	20251.0	17227.1
77.5°	1144.0	1150.8	1226.2	1365.9	1569.9	2610.7	2689.4	7512.7	14845.1	15650.4	13541.0
80°	797.7	809.5	768.9	802.8	1094.9	1786.7	1571.6	3269.5	6190.9	6610.0	8130.0
82.5°	380.2	393.8	452.2	420.0	544.5	759.6	829.9	1689.3	2674.2	2744.4	3165.3
85°	250.6	250.6	251.5	237.9	317.5	331.1	376.8	720.6	1305.7	1349.8	1342.2
87.5°	80.4	88.9	86.4	100.8	121.9	110.1	115.2	226.1	448.0	443.7	370.9
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°	7252.7	7252.7	7252.7	7252.7	7252.7	7252.7	7252.7	7252.7	7252.7	7252.7	7252.7
2.5°	7262.9	7228.2	7146.9	7075.8	7005.5	6952.1	6906.4	6845.4	6816.7	6790.4	6845.4
5°	7284.1	7222.3	7076.6	6931.0	6797.2	6698.9	6638.8	6594.8	6555.0	6555.0	6573.6
7.5°	7308.6	7224.8	7016.5	6809.9	6609.2	6497.4	6411.9	6356.0	6323.8	6325.5	6365.3
10°	7324.7	7196.0	6947.9	6669.3	6450.8	6271.3	6187.5	6107.0	6046.1	6009.7	6050.3
12.5°	7343.4	7186.7	6855.6	6541.4	6275.6	6072.3	5897.9	5837.8	5778.5	5732.8	5754.8
15°	7458.5	7222.3	6778.5	6378.9	6070.6	5817.4	5588.8	5478.7	5461.8	5430.5	5438.1
17.5°	7646.5	7318.0	6728.6	6179.9	5824.2	5525.3	5235.7	5093.4	5059.6	5043.5	5051.9
20°	7926.8	7500.0	6743.8	6040.1	5546.5	5212.0	4837.7	4670.9	4558.3	4565.0	4598.1
22.5°	8355.3	7793.8	6826.8	5886.9	5245.9	4807.2	4429.6	4202.6	4089.1	4064.6	4101.8
25°	9037.8	8267.2	6918.3	5740.4	4955.4	4370.3	3952.0	3706.4	3560.7	3551.4	3592.9
27.5°	9912.5	8992.9	7117.3	5613.4	4594.7	3845.3	3429.5	3219.5	3064.5	3045.9	3032.4
30°	10807.6	9799.0	7477.1	5420.3	4173.8	3303.3	2941.7	2777.5	2603.9	2533.6	2548.8
32.5°	11756.0	10550.1	7898.8	5284.8	3703.0	2826.6	2512.4	2355.8	2196.6	2095.0	2071.2
35°	12711.1	11297.0	8253.7	5082.4	3256.8	2448.1	2147.5	1985.7	1846.8	1763.9	1757.9
37.5°	13828.9	12074.4	8538.2	4867.3	2793.6	2151.7	1790.1	1697.0	1630.1	1557.2	1564.9
40°	14948.4	12980.4	8766.0	4511.7	2409.1	1833.3	1523.4	1542.0	1556.4	1495.4	1490.3
42.5°	15878.1	13741.7	8870.1	4051.0	2068.7	1556.4	1405.7	1490.3	1553.0	1513.2	1508.1
45°	16822.3	14382.7	8829.5	3479.5	1785.9	1424.3	1396.4	1482.7	1563.2	1553.9	1549.6
47.5°	17848.6	15222.7	8759.2	2828.3	1583.5	1411.6	1416.7	1457.3	1558.9	1575.9	1569.1
50°	19103.6	15995.8	8343.4	2202.5	1485.3	1431.9	1462.4	1441.2	1527.6	1562.3	1568.3
52.5°	20352.6	16591.1	7787.1	1908.7	1446.3	1451.4	1525.9	1453.9	1492.0	1522.5	1550.5
55°	21316.2	17197.4	6886.9	1731.7	1433.6	1460.7	1543.7	1481.0	1480.2	1480.2	1489.5
57.5°	22302.7	18009.5	5986.8	1617.4	1411.6	1470.9	1522.5	1486.1	1474.3	1457.3	1446.3
60°	22989.5	18310.1	4830.1	1542.0	1388.7	1456.5	1463.3	1458.2	1421.8	1405.7	1393.0
62.5°	23599.2	18473.5	3760.6	1455.6	1357.4	1422.6	1387.0	1376.0	1354.9	1315.9	1322.7
65°	23435.7	18123.0	2865.5	1358.2	1335.4	1382.0	1320.1	1293.9	1295.6	1254.9	1268.5
67.5°	22384.0	16550.5	2057.7	1209.2	1275.3	1301.5	1243.9	1224.5	1195.7	1175.3	1194.0
70°	20259.4	14671.5	1387.9	1003.4	1138.1	1194.8	1156.7	1122.8	1078.0	1064.4	1084.7
72.5°	17051.8	12247.1	957.7	807.0	982.3	1055.9	1041.6	1006.8	974.7	1007.7	1047.5
75°	14008.4	9060.6	781.6	661.3	755.3	879.8	922.2	932.3	1028.8	1350.6	1383.7
77.5°	10083.6	5616.8	702.8	537.7	602.9	703.7	788.4	823.1	1256.6	1203.3	1200.7
80°	5879.3	3273.7	536.0	424.2	487.8	515.7	616.5	966.2	1083.9	929.8	906.9
82.5°	2682.6	1444.6	373.4	339.6	338.7	341.3	420.0	929.8	831.5	732.5	705.4
85°	986.5	508.1	226.9	196.5	225.2	195.6	275.2	681.7	481.8	474.2	395.5
87.5°	243.0	104.2	77.1	64.4	52.5	50.0	83.8	224.4	117.7	107.5	103.3
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)