

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: P236868

Luminaire Tested: **ARCH-L-AF72-150-D-U-T2R-7050**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P236868  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 2/14/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-150-D-U-T2R-7050  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 665mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20178 lumens  
Efficiency: N/A  
Efficacy: 131.9 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G3

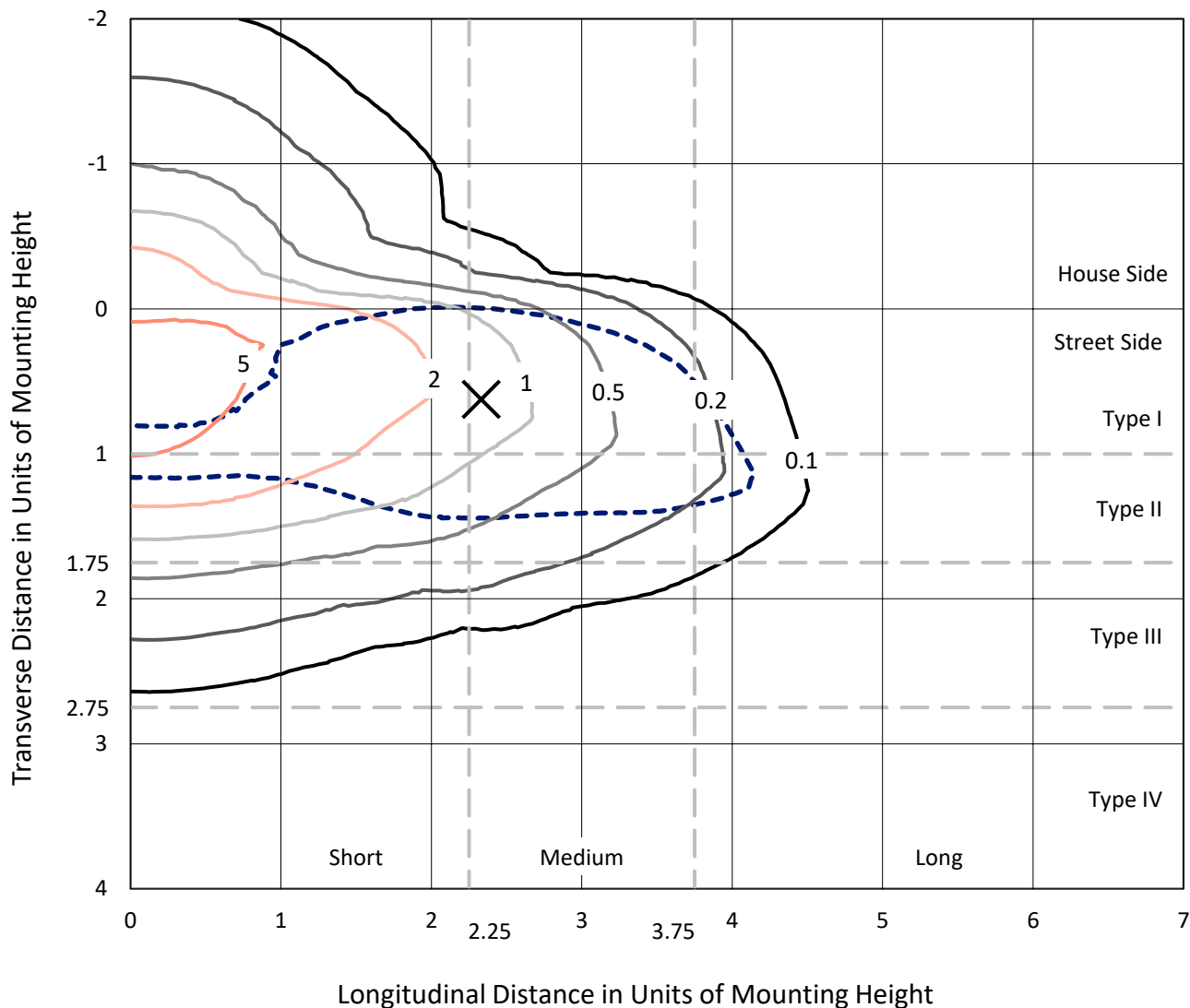
Input Watts (W): 153  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

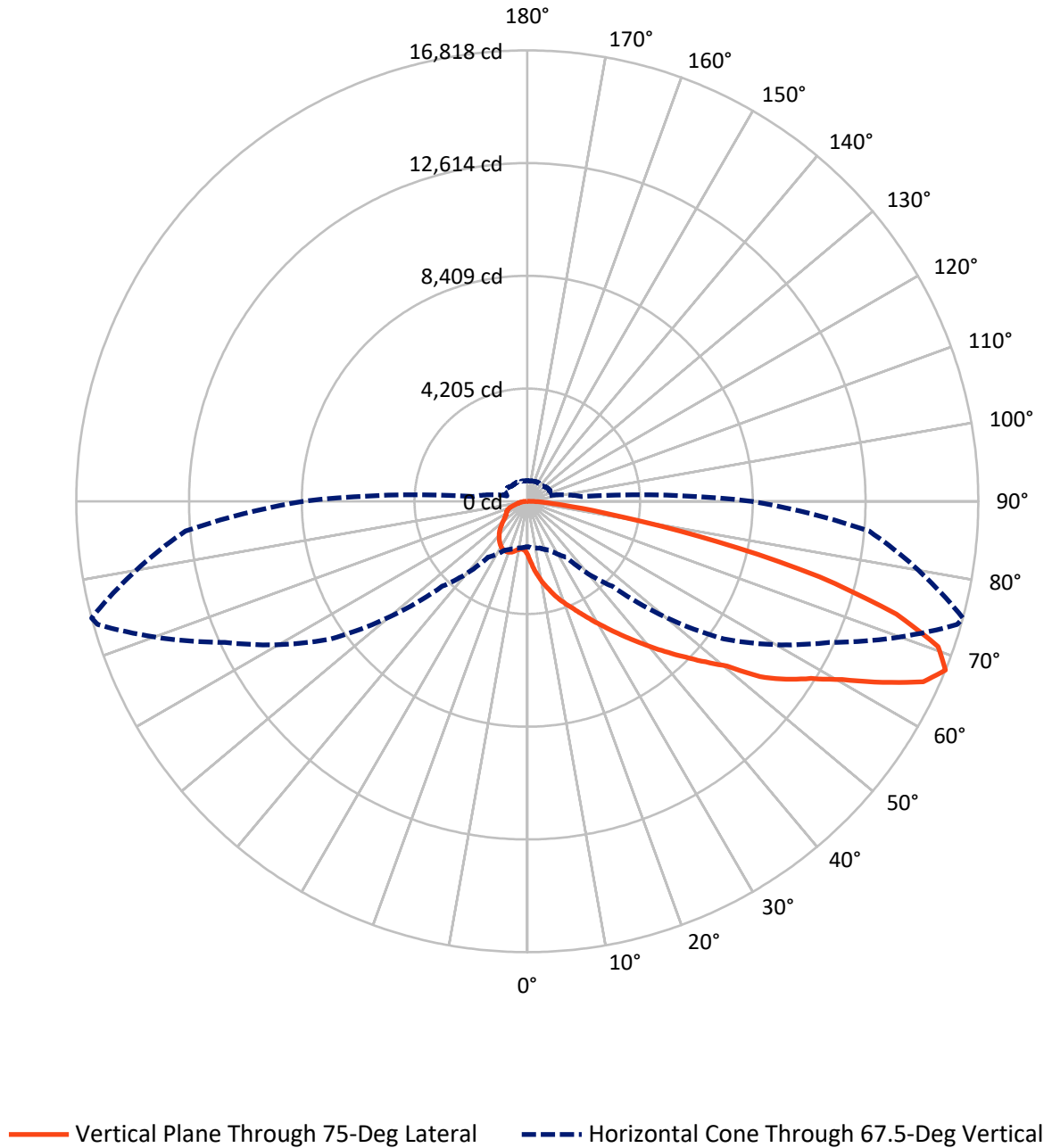
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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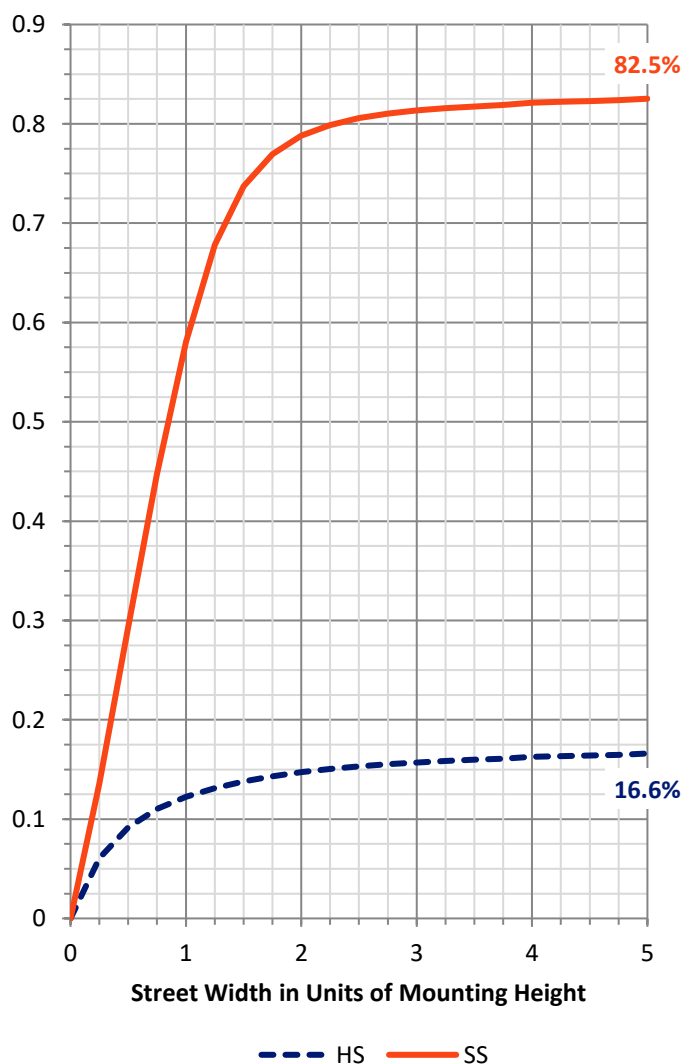
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3445.7	0.0	3445.7
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	16732.3	0.0	16732.3
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	20178.0	0.0	20178.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	234.9	1.2
10°-20°	848.9	4.2
20°-30°	1548.3	7.7
30°-40°	2541.4	12.6
40°-50°	3675.2	18.2
50°-60°	4331.2	21.5
60°-70°	4208.9	20.9
70°-80°	2339.5	11.6
80°-90°	449.9	2.2
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°	20178.0	100.0
0°-180°	20178.0	100.0

**Coefficient of Utilization**



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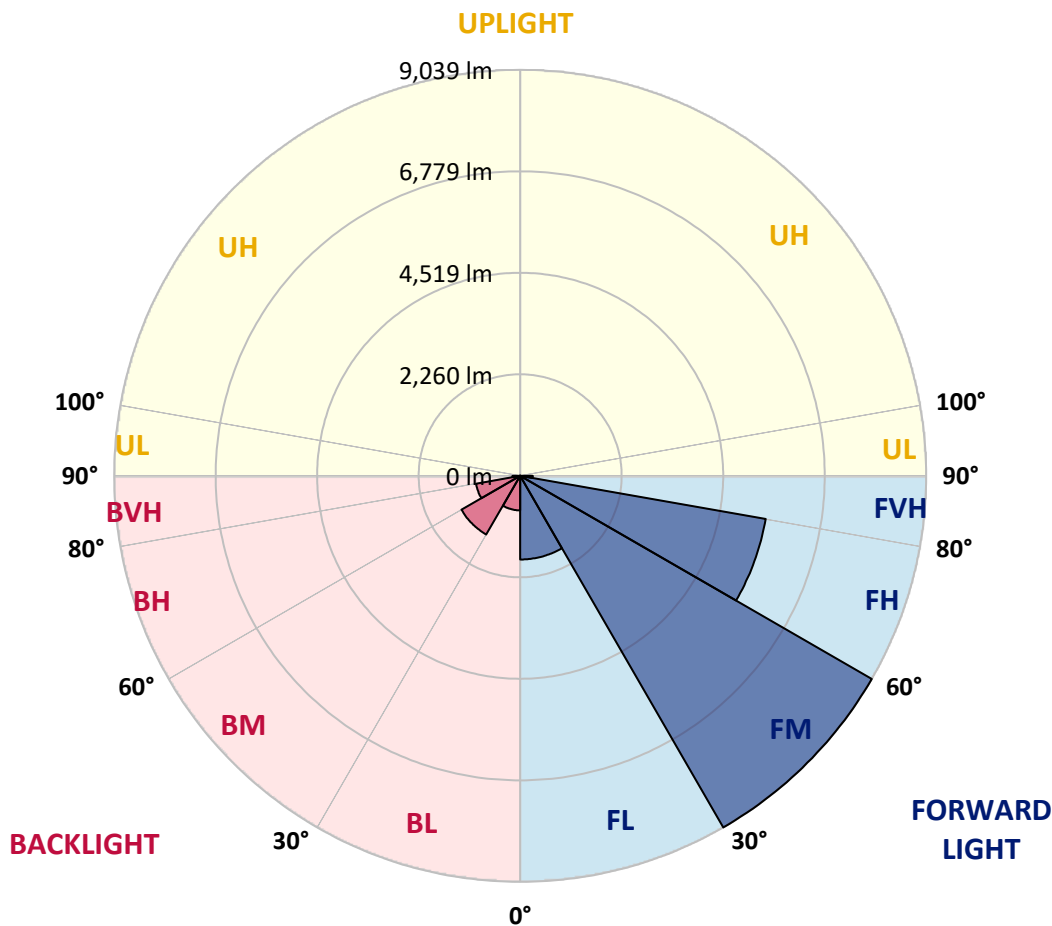
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1863.0	9.2			
FM (30°-60°)	9038.7	44.8			
FH (60°-80°)	5550.7	27.5			G3/7500
FVH (80°-90°)	280.0	1.4			G3/500
BL (0°-30°)	769.1	3.8	B2/1000		
BM (30°-60°)	1509.0	7.5	B2/2500		
BH (60°-80°)	997.7	4.9	B2/1000		G2/1000
BVH (80°-90°)	169.9	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1999.4	1999.4	1999.4	1999.4	1999.4	1999.4	1999.4	1999.4	1999.4	1999.4	1999.4
2.5°	2834.7	2843.1	2826.2	2788.3	2733.4	2632.2	2543.6	2387.5	2248.3	2231.4	2083.8
5°	3332.4	3340.8	3319.7	3273.3	3214.3	3104.6	2982.3	2779.8	2556.2	2514.1	2201.9
7.5°	3674.1	3678.3	3653.0	3606.6	3560.2	3450.5	3328.2	3100.4	2826.2	2792.5	2353.8
10°	3965.1	3973.6	3939.8	3910.3	3859.7	3750.0	3623.5	3383.0	3100.4	3054.0	2509.8
12.5°	4235.1	4243.5	4222.5	4197.1	4180.3	4079.0	3939.8	3653.0	3349.3	3298.7	2695.5
15°	4416.5	4424.9	4429.1	4462.9	4484.0	4412.3	4273.1	3960.9	3619.2	3572.8	2914.8
17.5°	4365.9	4387.0	4450.2	4572.6	4703.3	4707.5	4593.7	4264.6	3885.0	3834.4	3138.4
20°	4218.2	4235.1	4311.0	4496.6	4753.9	4901.6	4893.1	4572.6	4133.9	4079.0	3345.1
22.5°	4340.6	4361.7	4361.7	4475.5	4728.6	5002.8	5112.5	4876.3	4382.7	4332.1	3551.8
25°	4863.6	4876.3	4787.7	4741.3	4834.1	5087.2	5293.9	5205.3	4686.5	4627.4	3775.3
27.5°	5593.4	5572.3	5462.6	5277.0	5175.8	5243.3	5454.2	5517.4	5036.6	4964.9	4007.3
30°	6318.9	6306.3	6179.7	5930.8	5703.0	5559.6	5631.3	5795.9	5416.2	5331.8	4230.9
32.5°	6998.0	6977.0	6837.8	6546.7	6289.4	6023.6	5884.4	6048.9	5821.2	5724.1	4479.8
35°	7622.3	7567.5	7428.3	7124.6	6858.8	6605.8	6264.1	6289.4	6259.9	6158.6	4753.9
37.5°	8128.5	8086.4	7934.5	7651.9	7369.3	7128.8	6770.3	6563.6	6732.3	6635.3	5070.3
40°	8575.7	8529.3	8373.2	8090.6	7829.0	7601.3	7318.6	6896.8	7263.8	7154.1	5424.6
42.5°	8913.1	8879.4	8752.8	8474.4	8221.3	8014.6	7875.4	7318.6	7816.4	7710.9	5812.7
45°	9094.5	9060.8	8993.3	8769.7	8537.7	8377.4	8390.1	7820.6	8394.3	8305.7	6272.5
47.5°	8870.9	8896.3	8955.3	8913.1	8769.7	8693.8	8849.9	8339.4	9039.7	8955.3	6770.3
50°	8272.0	8297.3	8533.5	8824.5	8875.2	8968.0	9263.2	8938.4	9723.0	9655.5	7386.1
52.5°	6799.8	6939.0	7592.8	8288.8	8765.5	9149.3	9723.0	9828.5	10874.6	10874.6	8474.4
55°	5137.8	5260.1	6006.8	7221.6	8339.4	9166.2	10060.5	10431.7	11705.6	11722.5	9043.9
57.5°	4163.4	4239.3	4606.3	5850.7	7445.2	8955.3	10461.2	10950.5	12397.4	12473.3	9777.9
60°	3378.8	3421.0	3661.4	4526.2	6209.2	8385.8	10748.1	11692.9	13384.5	13489.9	10714.3
62.5°	2716.5	2758.7	2919.0	3437.9	4872.1	7318.6	10697.4	12464.9	14700.5	14873.5	11941.8
65°	2168.2	2214.6	2320.0	2640.6	3610.8	5994.1	10178.6	12861.4	16063.0	16231.8	12755.9
67.5°	1691.5	1733.7	1805.4	2016.3	2543.6	4484.0	8951.1	12443.8	16674.7	16818.1	12798.1
70°	1278.1	1299.2	1358.3	1493.3	1818.1	2978.1	7006.5	11043.3	16126.3	16257.1	11954.5
72.5°	991.3	987.1	1020.8	1088.3	1269.7	2050.1	4644.3	8980.6	14257.6	14392.6	10199.7
75°	809.9	805.7	826.8	847.9	919.6	1375.1	2741.9	6761.8	11507.3	11250.0	7651.9
77.5°	683.4	679.1	700.2	704.4	734.0	949.1	1560.7	4450.2	7677.2	7234.3	4311.0
80°	577.9	573.7	599.0	607.4	628.5	696.0	898.5	2408.6	3855.5	3653.0	2058.5
82.5°	434.5	451.4	497.8	518.8	544.2	514.6	556.8	1063.0	1788.5	1708.4	894.3
85°	210.9	248.9	375.4	417.6	447.1	324.8	379.6	502.0	805.7	767.7	362.8
87.5°	71.7	63.3	223.6	265.7	291.1	147.6	210.9	278.4	333.2	303.7	113.9
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°	1999.4	1999.4	1999.4	1999.4	1999.4	1999.4	1999.4	1999.4	1999.4	1999.4	1999.4
2.5°	2020.5	1957.3	1864.5	1792.7	1746.3	1708.4	1691.5	1687.3	1678.9	1674.6	1674.6
5°	2062.7	1948.8	1805.4	1729.5	1708.4	1691.5	1699.9	1704.2	1704.2	1704.2	1704.2
7.5°	2126.0	1965.7	1792.7	1742.1	1737.9	1737.9	1763.2	1775.9	1784.3	1784.3	1784.3
10°	2210.4	1995.2	1813.8	1771.7	1784.3	1792.7	1822.3	1839.1	1847.6	1851.8	1856.0
12.5°	2324.2	2058.5	1856.0	1822.3	1839.1	1843.4	1864.5	1872.9	1881.3	1885.5	1885.5
15°	2476.1	2151.3	1923.5	1881.3	1885.5	1881.3	1881.3	1872.9	1868.7	1868.7	1877.1
17.5°	2632.2	2239.9	1982.6	1923.5	1906.6	1872.9	1847.6	1826.5	1813.8	1805.4	1809.6
20°	2788.3	2320.0	2016.3	1932.0	1885.5	1830.7	1784.3	1754.8	1737.9	1721.0	1729.5
22.5°	2944.3	2396.0	2029.0	1906.6	1839.1	1759.0	1708.4	1662.0	1624.0	1598.7	1602.9
25°	3117.3	2480.3	2029.0	1877.1	1775.9	1691.5	1628.2	1552.3	1497.5	1476.4	1484.8
27.5°	3290.2	2552.0	2007.9	1822.3	1704.2	1619.8	1527.0	1438.4	1404.7	1392.0	1396.2
30°	3463.2	2606.9	1961.5	1754.8	1628.2	1535.4	1413.1	1354.1	1311.9	1278.1	1282.3
32.5°	3636.1	2644.8	1898.2	1670.4	1548.1	1430.0	1328.7	1261.3	1185.3	1143.1	1147.4
35°	3834.4	2674.4	1822.3	1586.1	1459.5	1337.2	1261.3	1151.6	1071.4	1037.7	1029.2
37.5°	4041.1	2695.5	1742.1	1493.3	1370.9	1269.7	1193.8	1058.8	982.8	936.4	932.2
40°	4264.6	2703.9	1645.1	1396.2	1286.6	1227.5	1105.2	1003.9	873.2	843.6	843.6
42.5°	4530.4	2699.7	1548.1	1299.2	1193.8	1130.5	1041.9	995.5	881.6	852.1	835.2
45°	4834.1	2699.7	1442.6	1185.3	1101.0	1008.2	970.2	940.7	864.7	877.4	885.8
47.5°	5180.0	2691.2	1316.1	1092.5	1025.0	944.9	923.8	860.5	831.0	839.4	847.9
50°	5656.6	2703.9	1202.2	1016.6	970.2	902.7	877.4	843.6	831.0	835.2	831.0
52.5°	6318.9	2661.7	1092.5	970.2	928.0	839.4	839.4	835.2	839.4	835.2	835.2
55°	6681.7	2568.9	1012.4	944.9	898.5	809.9	826.8	835.2	843.6	839.4	839.4
57.5°	7196.3	2505.6	949.1	928.0	881.6	801.5	818.3	835.2	839.4	835.2	835.2
60°	7803.7	2463.4	906.9	932.2	869.0	801.5	822.6	835.2	831.0	826.8	826.8
62.5°	8508.2	2446.6	877.4	944.9	856.3	805.7	822.6	835.2	818.3	814.1	814.1
65°	8773.9	2294.7	839.4	953.3	864.7	805.7	818.3	822.6	801.5	797.2	793.0
67.5°	8364.8	2033.2	784.6	936.4	890.0	805.7	805.7	801.5	776.2	771.9	763.5
70°	7449.4	1687.3	700.2	881.6	906.9	809.9	788.8	767.7	742.4	742.4	725.5
72.5°	6099.6	1328.7	590.6	784.6	894.3	822.6	755.1	725.5	696.0	696.0	679.1
75°	4395.4	991.3	472.4	653.8	839.4	818.3	712.9	674.9	641.2	637.0	615.9
77.5°	2505.6	696.0	383.9	510.4	746.6	797.2	674.9	615.9	577.9	565.2	552.6
80°	1286.6	468.2	312.1	400.7	620.1	738.2	645.4	548.4	506.2	485.1	464.0
82.5°	611.6	312.1	240.4	295.3	468.2	645.4	607.4	472.4	426.0	400.7	375.4
85°	274.2	185.6	160.3	189.8	333.2	502.0	535.7	388.1	333.2	417.6	307.9
87.5°	88.6	84.4	84.4	88.6	160.3	219.3	392.3	286.8	265.7	219.3	185.6
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)