

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: P237232

Luminaire Tested: **ARCH-L-AF72-190-D-U-T3-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237232
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-190-D-U-T3-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 810mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17008 lumens
Efficiency: N/A
Efficacy: 90.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G3

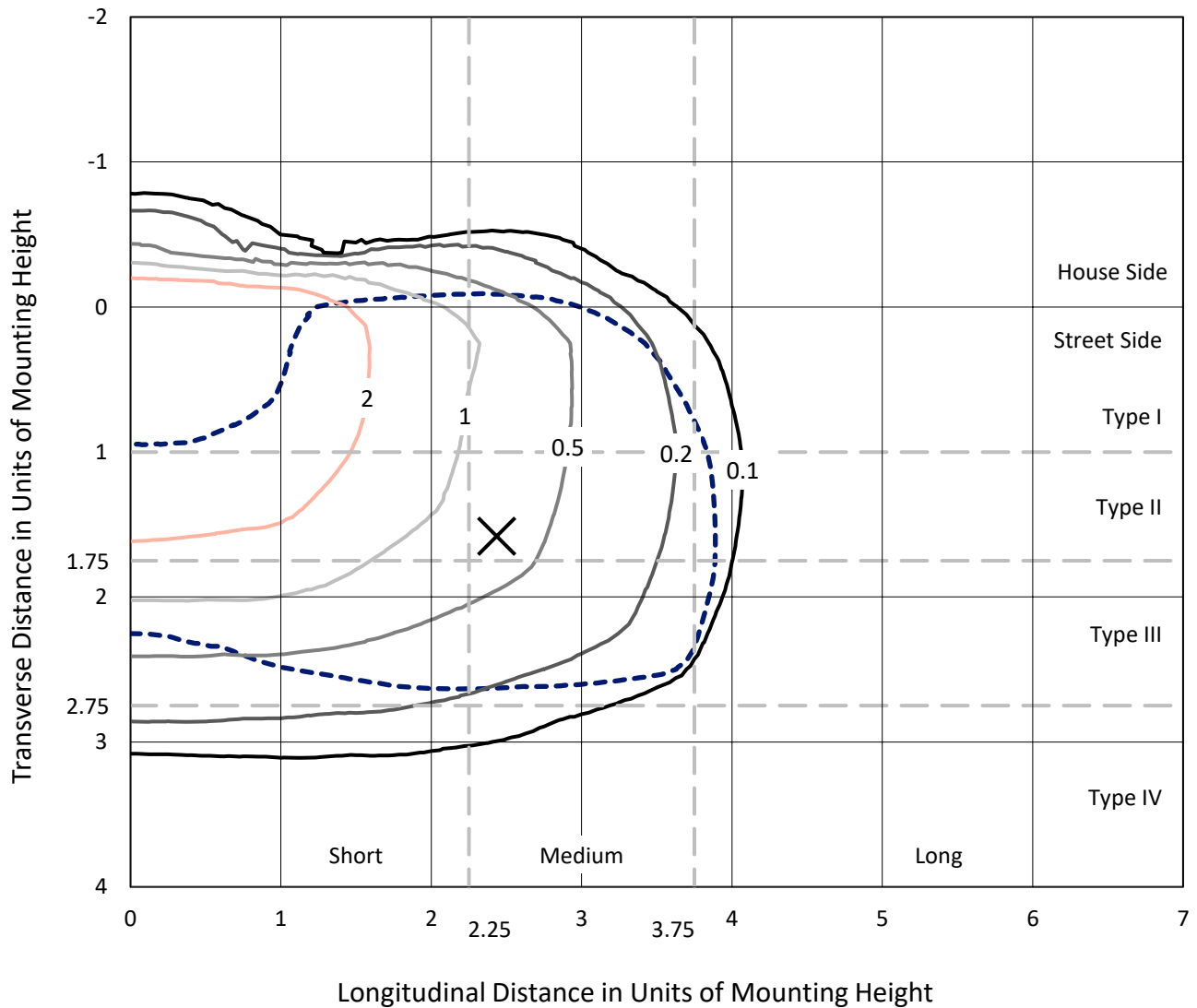
Input Watts (W): 189
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

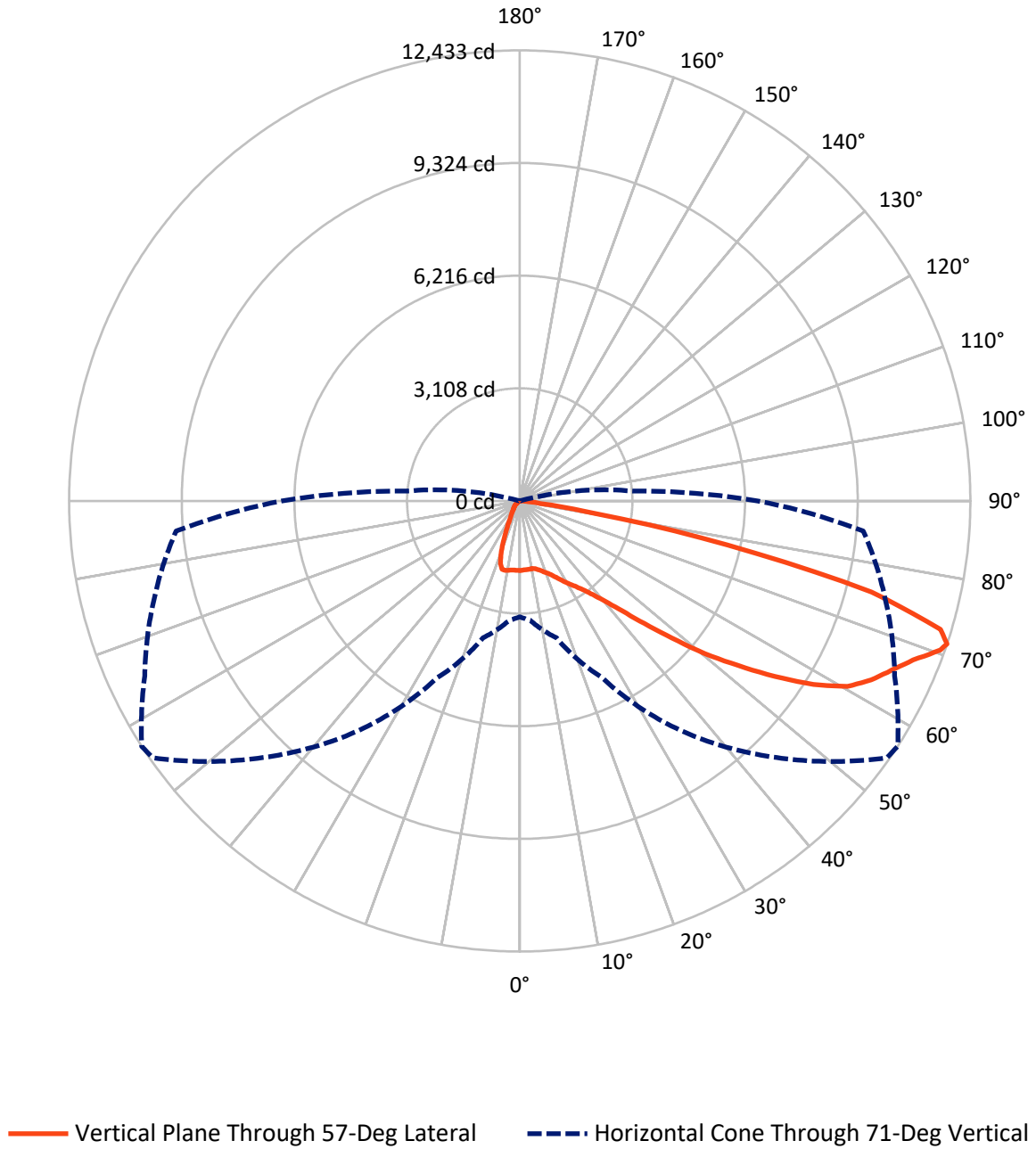
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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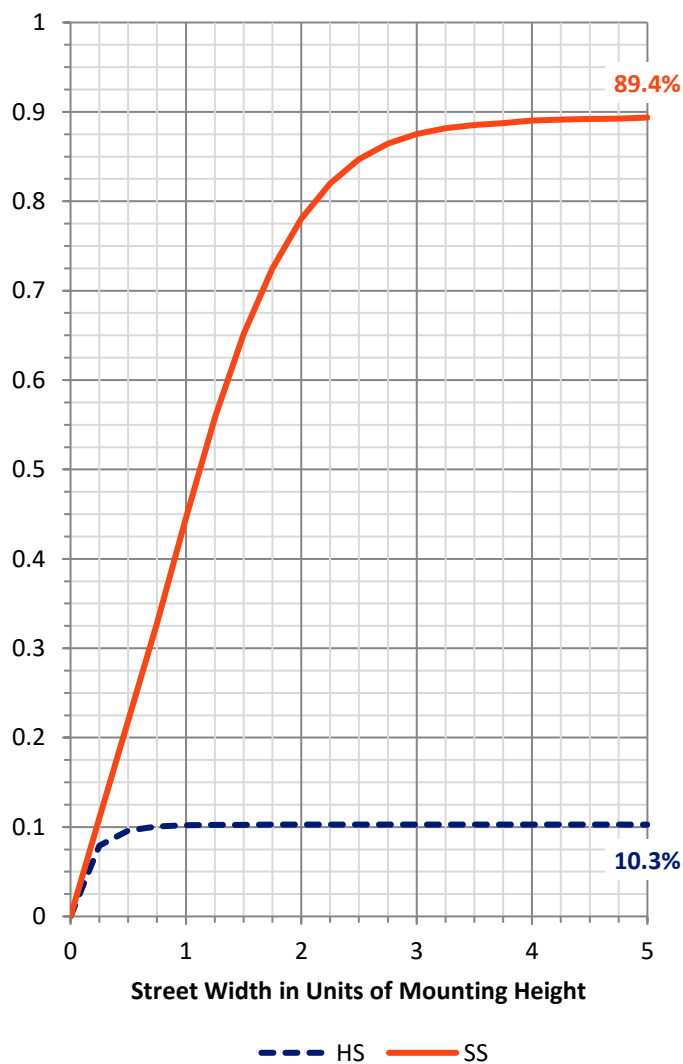
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1762.6	0.0	1762.6
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	15245.4	0.0	15245.4
	% Fixture	89.6	0.0	89.6
Total	Lumens	17008.0	0.0	17008.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.5	1.1
10°-20°	482.7	2.8
20°-30°	752.9	4.4
30°-40°	1272.6	7.5
40°-50°	2471.7	14.5
50°-60°	4150.8	24.4
60°-70°	4953.6	29.1
70°-80°	2610.6	15.3
80°-90°	132.7	0.8
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°	17008.0	100.0
0°-180°	17008.0	100.0

Coefficient of Utilization



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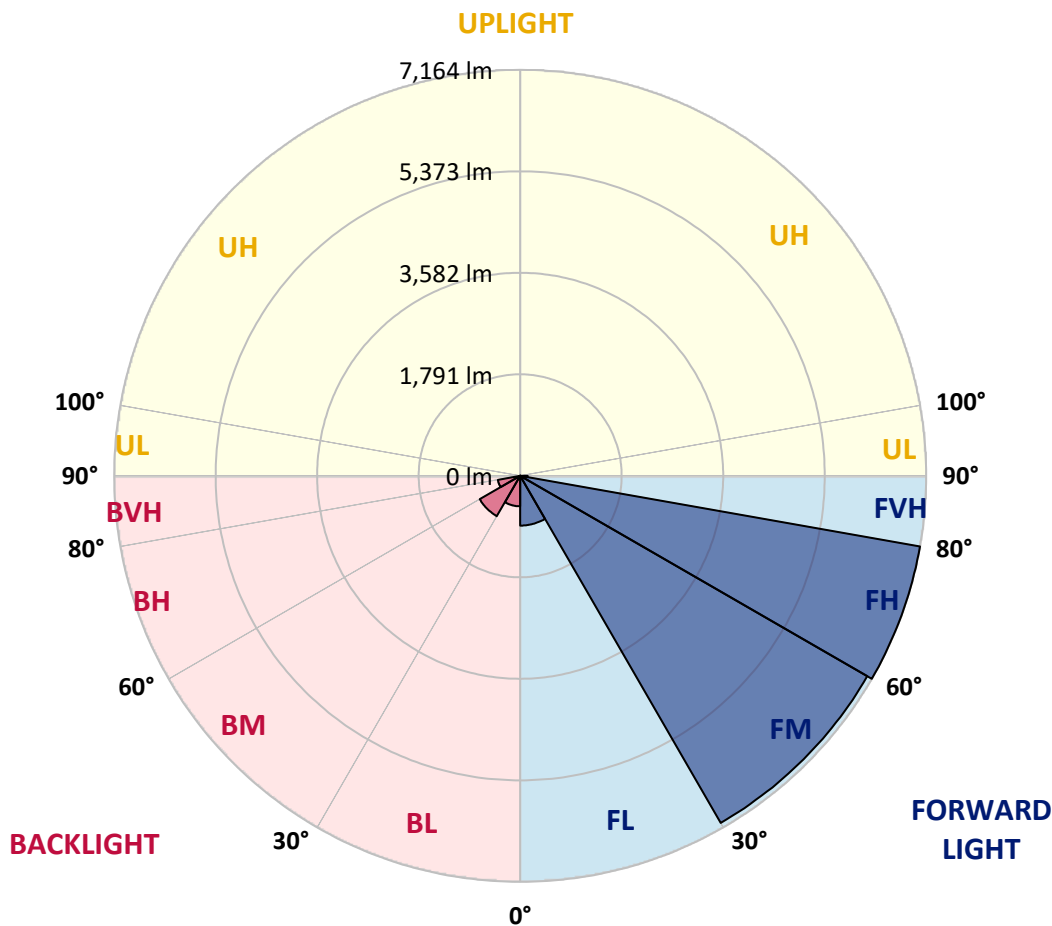
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	878.1	5.2			
FM (30°-60°)	7072.1	41.6			
FH (60°-80°)	7163.9	42.1			G3/7500
FVH (80°-90°)	131.4	0.8			G2/225
BL (0°-30°)	538.0	3.2	B2/1000		
BM (30°-60°)	823.0	4.8	B1/1000		
BH (60°-80°)	400.3	2.4	B1/500		G1/500
BVH (80°-90°)	1.3	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1922.2	1922.2	1922.2	1922.2	1922.2	1922.2	1922.2	1922.2	1922.2	1922.2	1922.2
2.5°	1894.4	1894.4	1894.4	1898.4	1902.3	1902.3	1910.3	1906.3	1906.3	1906.3	1914.2
5°	1842.9	1846.9	1850.8	1858.8	1874.6	1886.5	1906.3	1906.3	1910.3	1918.2	1922.2
7.5°	1771.6	1775.5	1787.4	1803.3	1835.0	1862.7	1894.4	1902.3	1914.2	1934.1	1942.0
10°	1728.0	1735.9	1751.7	1771.6	1807.2	1842.9	1882.5	1894.4	1930.1	1965.8	1985.6
12.5°	1716.1	1720.0	1735.9	1767.6	1811.2	1854.8	1906.3	1918.2	1969.7	2025.2	2056.9
15°	1735.9	1739.9	1747.8	1783.4	1835.0	1890.5	1957.8	1973.7	2037.1	2100.5	2140.1
17.5°	1771.6	1771.6	1779.5	1811.2	1866.7	1930.1	2017.3	2041.1	2112.4	2183.7	2227.3
20°	1795.3	1795.3	1807.2	1838.9	1902.3	1985.6	2088.6	2120.3	2199.6	2278.9	2318.5
22.5°	1819.1	1823.1	1835.0	1870.6	1942.0	2056.9	2175.8	2207.5	2298.7	2381.9	2421.5
25°	1886.5	1882.5	1886.5	1918.2	2001.4	2144.1	2294.7	2334.3	2429.5	2520.6	2540.4
27.5°	2072.8	2064.8	2013.3	1993.5	2056.9	2235.3	2445.3	2484.9	2595.9	2687.1	2687.1
30°	2500.8	2484.9	2358.1	2195.6	2144.1	2318.5	2588.0	2643.5	2786.1	2865.4	2841.6
32.5°	3043.8	3008.1	2845.6	2568.2	2362.1	2429.5	2738.6	2802.0	2984.3	3051.7	3000.2
35°	3638.2	3634.3	3432.1	3075.5	2782.2	2659.3	2932.8	3008.1	3238.0	3297.4	3214.2
37.5°	4268.4	4284.2	4149.5	3658.1	3313.3	3035.8	3190.4	3277.6	3559.0	3630.3	3551.0
40°	4969.9	4965.9	4914.4	4331.8	3951.3	3570.9	3562.9	3642.2	3983.0	4094.0	3983.0
42.5°	5857.6	5849.7	5663.4	5140.3	4724.2	4268.4	4105.9	4133.6	4514.1	4696.4	4533.9
45°	6761.3	6705.8	6491.8	6039.9	5671.4	5132.4	4823.2	4823.2	5148.2	5397.9	5144.3
47.5°	7264.6	7209.1	7121.9	6872.2	6761.3	6158.8	5703.1	5647.6	5901.2	6154.9	5798.2
50°	7926.4	7926.4	7708.5	7613.3	7803.6	7379.5	6674.1	6618.6	6741.4	6943.6	6475.9
52.5°	8449.6	8354.5	8199.9	8283.1	8826.1	8631.9	7645.1	7538.0	7633.2	7684.7	7066.4
55°	8667.6	8576.4	8564.5	8869.7	9709.9	9440.4	8639.8	8544.7	8536.8	8283.1	7581.6
57.5°	8711.2	8631.9	8782.5	9317.5	10569.9	10102.2	9630.6	9559.3	9337.3	8703.2	8108.7
60°	8342.6	8382.2	8746.8	9563.3	11077.2	10676.9	10466.9	10391.6	9880.3	9059.9	8695.3
62.5°	7585.6	7680.7	8362.4	9587.0	10890.9	10910.7	10930.6	10879.0	10300.4	9384.9	9285.8
65°	6689.9	6717.7	7538.0	9258.1	10565.9	10839.4	11271.4	11267.4	10621.4	9749.5	9951.6
67.5°	5512.8	5560.4	6269.8	8148.4	9916.0	10807.7	11719.2	11707.4	10986.0	10165.7	10348.0
70°	4101.9	4161.4	4736.0	6337.2	8465.4	10411.4	12305.8	12313.7	11370.5	10482.7	10074.5
71°	3198.3	3305.3	3907.7	5382.1	7724.3	10011.1	12361.3	12432.6	11414.1	10439.1	9511.7
72.5°	1569.4	1696.3	2453.2	3788.8	6357.0	9115.4	11996.7	12135.4	11140.6	9896.2	8132.5
75°	408.2	432.0	733.2	1549.6	3408.4	6039.9	9674.2	10026.9	9107.5	7534.1	4969.9
77.5°	257.6	265.5	344.8	602.4	1276.2	2294.7	5683.3	5857.6	5203.7	3816.6	1751.7
80°	182.3	186.3	218.0	388.4	745.1	669.8	2045.0	2120.3	1882.5	1010.6	313.1
82.5°	111.0	111.0	158.5	249.7	459.7	364.6	539.0	574.7	507.3	281.4	103.0
85°	63.4	67.4	99.1	170.4	218.0	178.3	202.1	214.0	218.0	186.3	43.6
87.5°	51.5	55.5	87.2	142.7	118.9	87.2	87.2	91.2	95.1	111.0	19.8
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°	1922.2	1922.2	1922.2	1922.2	1922.2	1922.2	1922.2	1922.2	1922.2	1922.2	1922.2
2.5°	1914.2	1914.2	1918.2	1914.2	1914.2	1914.2	1918.2	1918.2	1918.2	1926.1	1930.1
5°	1922.2	1922.2	1922.2	1918.2	1914.2	1914.2	1922.2	1926.1	1926.1	1938.0	1938.0
7.5°	1942.0	1942.0	1934.1	1926.1	1918.2	1906.3	1910.3	1914.2	1910.3	1914.2	1914.2
10°	1985.6	1985.6	1973.7	1957.8	1934.1	1898.4	1850.8	1791.4	1735.9	1716.1	1708.1
12.5°	2056.9	2052.9	2029.2	2001.4	1949.9	1827.0	1648.7	1438.6	1264.3	1216.7	1200.9
15°	2136.2	2128.2	2100.5	2052.9	1914.2	1589.3	1216.7	947.2	780.8	741.1	733.2
17.5°	2219.4	2207.5	2167.9	2072.8	1751.7	1181.0	784.7	594.5	503.3	495.4	499.4
20°	2306.6	2290.7	2235.3	2033.1	1414.9	788.7	507.3	459.7	451.8	451.8	455.8
22.5°	2405.7	2385.9	2310.6	1890.5	1030.4	523.1	436.0	432.0	428.0	424.1	424.1
25°	2520.6	2496.8	2381.9	1632.8	709.4	428.0	416.1	404.2	396.3	388.4	384.4
27.5°	2659.3	2627.6	2437.4	1315.8	487.5	400.3	392.4	372.5	356.7	340.8	340.8
30°	2798.0	2758.4	2421.5	990.8	396.3	372.5	356.7	332.9	309.1	293.3	289.3
32.5°	2944.7	2905.0	2318.5	665.8	360.7	340.8	321.0	285.4	257.6	237.8	233.8
35°	3162.6	3130.9	2116.4	439.9	325.0	301.2	273.5	237.8	202.1	182.3	178.3
37.5°	3487.6	3448.0	1866.7	336.9	285.4	249.7	225.9	186.3	150.6	130.8	126.8
40°	3923.6	3804.7	1569.4	297.2	249.7	206.1	174.4	134.7	107.0	95.1	95.1
42.5°	4430.9	4149.5	1248.4	269.5	221.9	170.4	126.8	91.2	75.3	71.3	71.3
45°	4969.9	4470.5	927.4	249.7	194.2	134.7	91.2	63.4	55.5	51.5	51.5
47.5°	5524.7	4732.1	646.0	225.9	162.5	103.0	63.4	47.6	39.6	35.7	35.7
50°	6043.9	4902.5	455.8	202.1	138.7	75.3	47.6	35.7	27.7	27.7	27.7
52.5°	6404.6	4886.7	328.9	174.4	107.0	51.5	31.7	23.8	23.8	23.8	23.8
55°	6721.6	4827.2	257.6	150.6	83.2	35.7	23.8	19.8	19.8	15.9	15.9
57.5°	6991.1	4732.1	218.0	122.9	59.4	27.7	15.9	15.9	11.9	11.9	11.9
60°	7221.0	4613.2	182.3	103.0	39.6	19.8	11.9	7.9	7.9	4.0	7.9
62.5°	7534.1	4537.9	158.5	79.3	27.7	11.9	7.9	4.0	4.0	0.0	0.0
65°	7763.9	4395.2	134.7	55.5	15.9	7.9	4.0	4.0	0.0	0.0	0.0
67.5°	7771.9	4137.6	99.1	31.7	11.9	7.9	4.0	0.0	0.0	0.0	0.0
70°	7145.7	3527.3	63.4	15.9	7.9	4.0	4.0	0.0	0.0	0.0	0.0
71°	6571.0	3123.0	51.5	11.9	7.9	4.0	0.0	0.0	0.0	0.0	0.0
72.5°	5413.8	2294.7	39.6	11.9	4.0	4.0	0.0	0.0	0.0	0.0	0.0
75°	2984.3	832.3	19.8	7.9	4.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	955.1	253.6	11.9	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	162.5	39.6	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	55.5	15.9	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.9	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.9	4.0	0.0	0.0	0.0	0.0	0.0	0.0	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)