

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: P231297

Luminaire Tested: **ARCH-M-AF48-50-D-U-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231297
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-AF48-50-D-U-T4W
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 305mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6862 lumens
Efficiency: N/A
Efficacy: 143.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 48
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: 28.75 FT

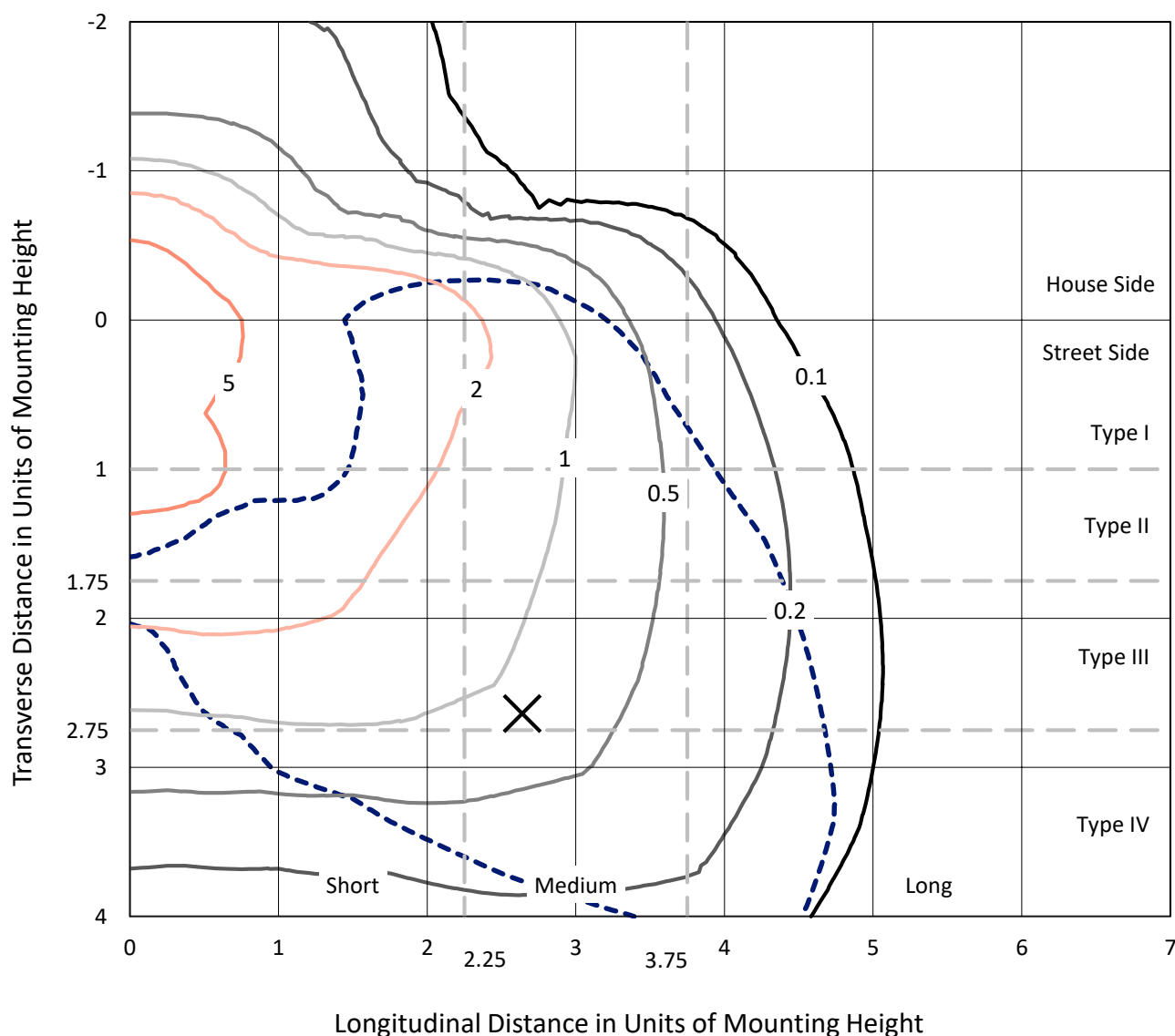


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

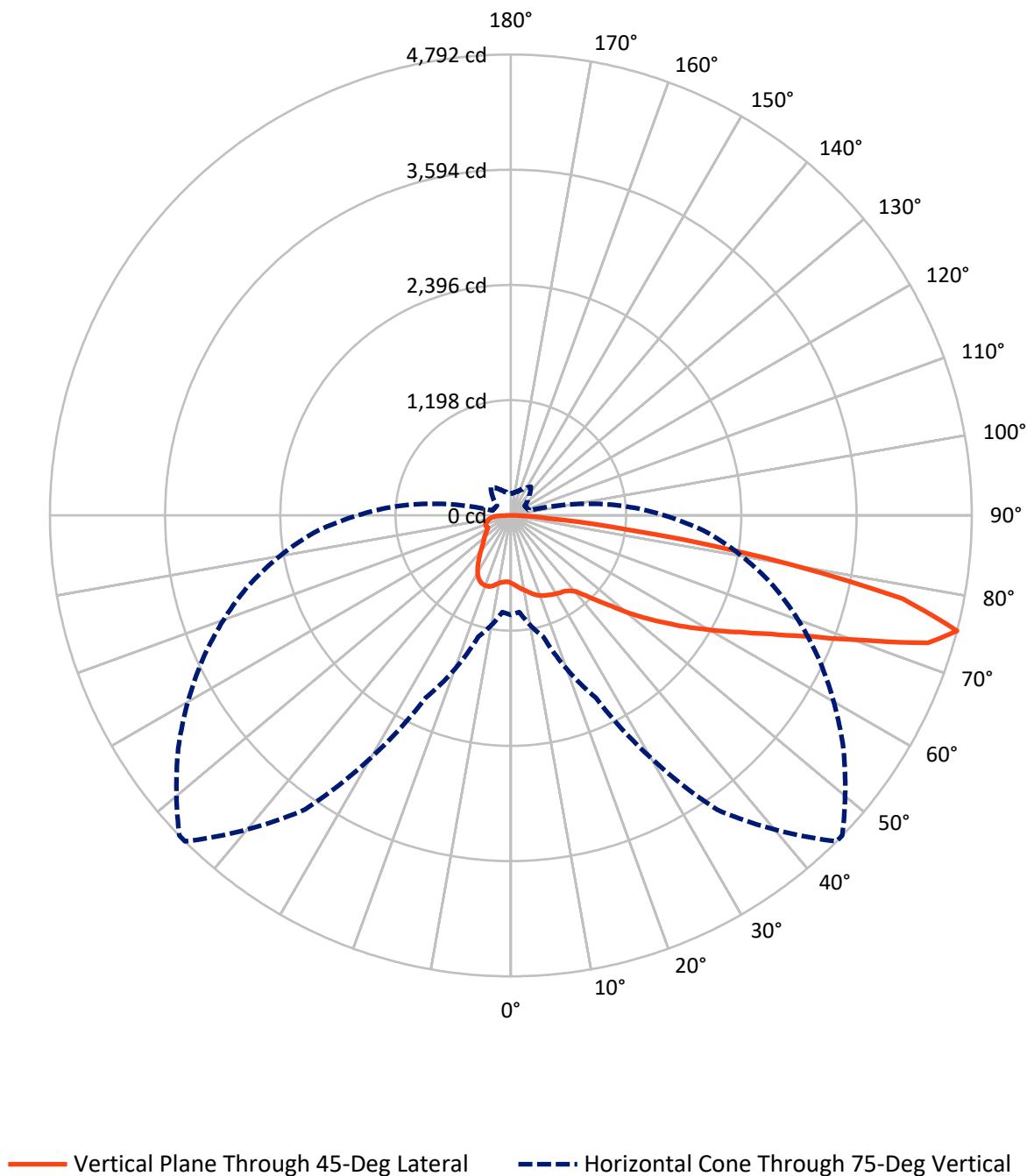


Based on 10 foot mounting height. Maximum calculated value = 8.2 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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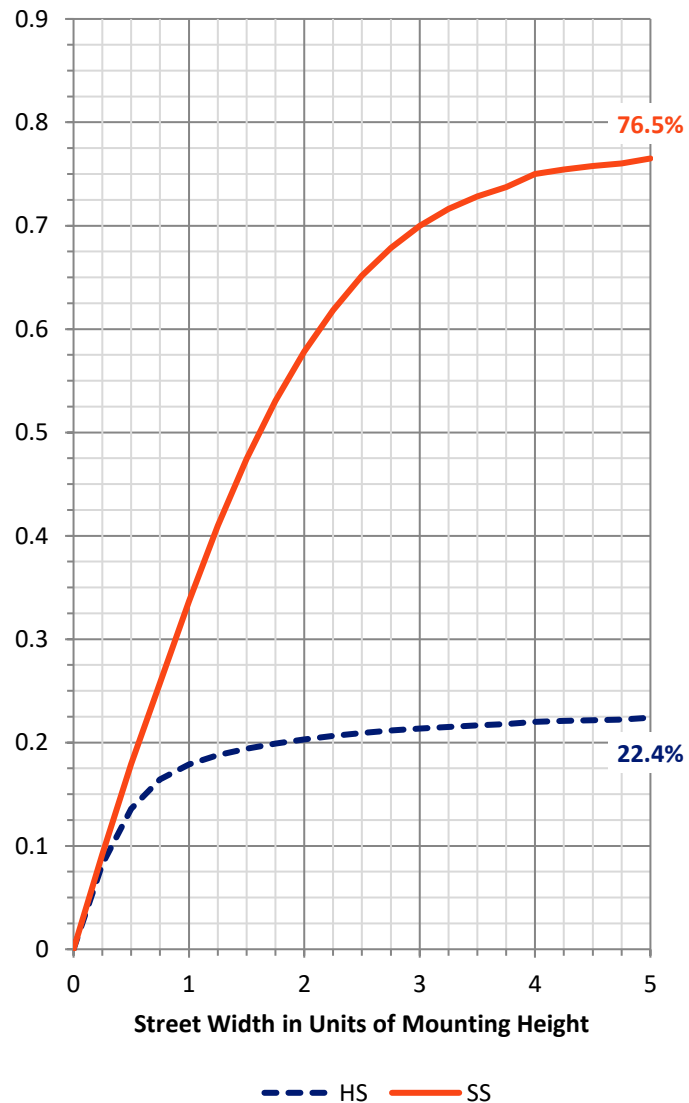
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1589.6	0.0	1589.6
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	5272.3	0.0	5272.3
	% Fixture	76.8	0.0	76.8
Total	Lumens	6862.0	0.0	6862.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.7	1.0
10°-20°	225.9	3.3
20°-30°	387.7	5.6
30°-40°	542.2	7.9
40°-50°	795.3	11.6
50°-60°	1238.9	18.1
60°-70°	1782.7	26.0
70°-80°	1552.9	22.6
80°-90°	266.7	3.9
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°	6862.0	100.0
0°-180°	6862.0	100.0

Coefficient of Utilization



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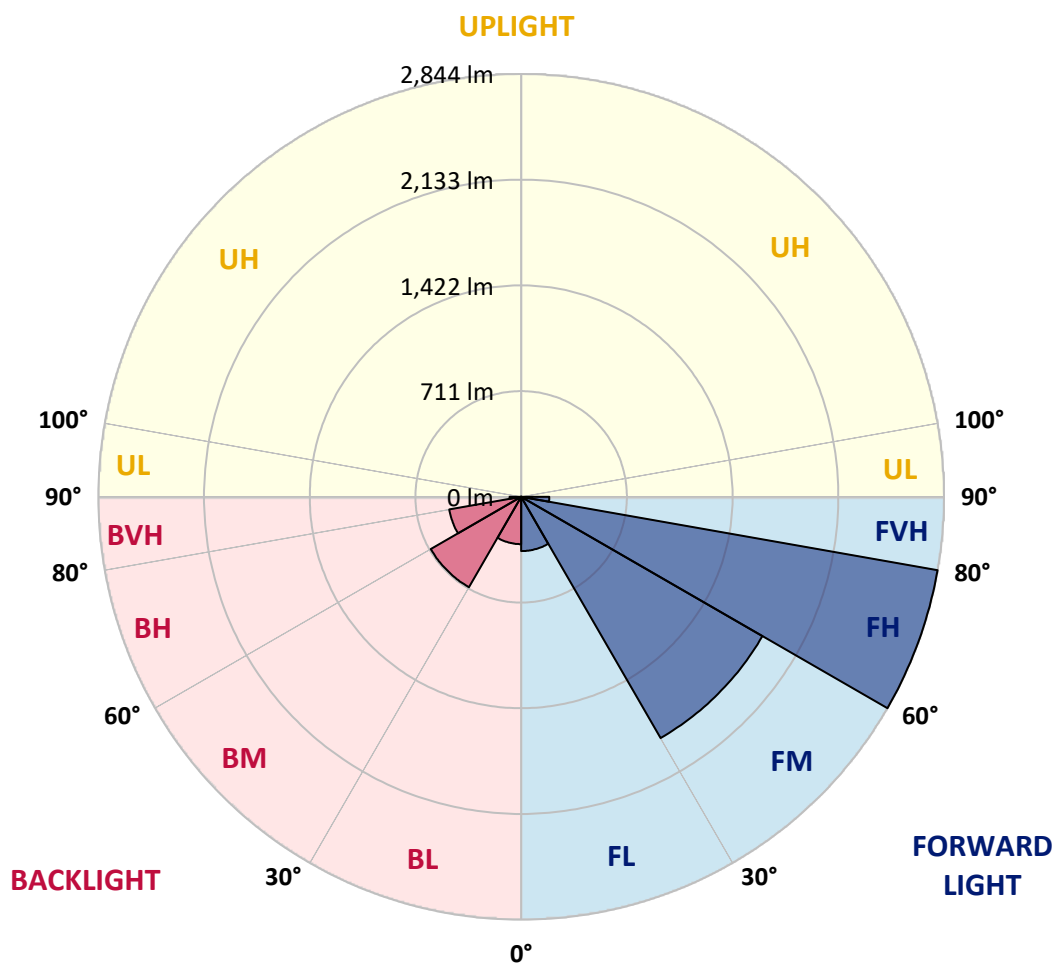
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	364.9	5.3			
FM	(30°-60°)	1873.9	27.3			
FH	(60°-80°)	2844.3	41.5			G2/5000
FVH	(80°-90°)	189.2	2.8			G2/225
BL	(0°-30°)	318.4	4.6	B1/500		
BM	(30°-60°)	702.5	10.2	B1/1000		
BH	(60°-80°)	491.2	7.2	B1/500		G1/500
BVH	(80°-90°)	77.5	1.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	703.5	703.5	703.5	703.5	703.5	703.5	703.5	703.5	703.5	703.5	703.5
2.5°	738.2	732.8	732.8	728.9	728.9	722.1	719.4	718.1	711.5	707.5	703.5
5°	780.8	774.2	772.8	763.5	759.5	744.8	743.5	734.2	722.1	710.1	700.8
7.5°	819.6	815.6	808.8	799.5	787.6	768.8	767.5	752.8	732.8	716.8	703.5
10°	847.6	845.0	835.5	823.6	810.3	791.6	790.2	774.2	750.1	731.5	712.8
12.5°	881.0	877.0	865.0	848.9	834.2	816.9	815.6	802.2	775.5	751.5	727.5
15°	913.0	907.7	893.0	877.0	860.9	846.3	846.3	831.6	803.5	775.5	747.5
17.5°	929.0	926.4	911.7	894.4	881.0	870.3	869.0	855.6	827.6	798.2	767.5
20°	934.4	935.7	922.4	903.7	894.4	888.9	887.6	878.3	847.6	819.6	790.2
22.5°	933.0	937.0	926.4	906.3	903.7	903.7	903.7	893.0	869.0	841.0	811.6
25°	938.4	943.7	935.7	911.7	911.7	917.0	917.0	911.7	890.3	866.3	837.0
27.5°	957.1	961.1	954.4	921.1	922.4	930.4	929.0	930.4	917.0	894.4	865.0
30°	979.8	985.1	977.1	935.7	934.4	942.3	942.3	949.1	939.7	915.6	891.7
32.5°	1041.2	1039.8	1014.5	951.8	947.8	955.7	955.7	962.4	957.1	938.4	915.6
35°	1224.1	1204.0	1148.0	1003.8	963.7	967.7	967.7	979.8	982.4	967.7	947.8
37.5°	1410.9	1404.2	1361.5	1142.6	1022.4	993.1	991.8	1009.1	1021.1	1009.1	995.7
40°	1599.1	1593.8	1584.4	1328.1	1145.3	1038.5	1034.5	1049.1	1070.5	1062.5	1054.5
42.5°	1774.0	1771.3	1780.7	1511.0	1301.4	1135.9	1123.9	1106.5	1137.2	1134.6	1134.6
45°	1911.5	1918.1	1923.5	1681.8	1471.0	1261.4	1246.7	1188.0	1229.4	1240.0	1248.1
47.5°	1988.9	1994.2	2012.9	1848.7	1640.5	1406.9	1396.2	1300.1	1354.8	1386.9	1409.5
50°	2099.7	2085.0	2101.0	2011.5	1844.7	1596.4	1567.1	1451.0	1520.3	1576.4	1629.8
52.5°	2206.4	2182.5	2195.8	2199.8	2077.0	1782.0	1751.3	1628.4	1715.3	1803.4	1898.1
55°	2302.6	2301.2	2314.5	2382.7	2301.2	1980.8	1946.2	1824.7	1950.2	2045.0	2205.1
57.5°	2380.0	2393.3	2452.0	2594.9	2560.1	2197.1	2158.4	2053.0	2201.1	2295.9	2561.5
60°	2470.7	2492.1	2589.5	2775.1	2796.4	2424.0	2384.0	2307.9	2458.8	2554.8	2973.9
62.5°	2501.4	2532.1	2732.4	2964.6	3043.4	2672.3	2636.2	2585.5	2729.7	2816.5	3385.0
65°	2297.2	2356.0	2811.2	3062.1	3309.0	2971.3	2940.6	2896.6	2999.3	3056.7	3664.1
67.5°	2241.2	2267.9	2657.6	3202.2	3558.6	3355.7	3325.0	3248.9	3251.7	3227.6	3754.8
70°	2162.4	2191.8	2500.1	3307.7	3916.4	3881.7	3844.2	3620.0	3482.5	3337.1	3575.9
72.5°	1842.0	1832.7	2154.4	3023.3	4088.5	4533.0	4489.0	4019.2	3653.4	3242.2	3018.0
75°	1034.5	1007.8	1306.8	2091.6	3733.5	4792.0	4790.7	4220.7	3533.3	2824.5	2054.3
77.5°	300.3	292.4	431.2	877.0	2513.5	4163.3	4214.0	3806.9	2948.7	2028.9	1127.9
80°	141.5	144.1	185.6	289.7	1073.2	2687.0	2832.4	2506.7	1761.9	935.7	465.9
82.5°	89.4	90.7	126.8	186.9	453.9	1220.0	1340.2	1127.9	698.1	404.5	205.5
85°	56.1	56.1	84.1	122.8	271.0	389.7	423.1	384.4	299.0	220.2	112.1
87.5°	30.7	30.7	50.7	70.8	148.1	125.5	129.5	153.5	186.9	134.8	56.1
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°	703.5	703.5	703.5	703.5	703.5	703.5	703.5	703.5	703.5	703.5	703.5
2.5°	702.2	699.5	695.4	694.1	692.7	691.4	692.7	695.4	692.7	692.7	694.1
5°	698.1	695.4	690.1	690.1	691.4	692.7	699.5	703.5	704.8	704.8	704.8
7.5°	698.1	694.1	690.1	691.4	694.1	699.5	710.1	716.8	722.1	723.4	723.4
10°	704.8	699.5	696.7	699.5	707.5	711.5	722.1	732.8	739.5	742.2	742.2
12.5°	716.8	711.5	711.5	716.8	727.5	732.8	742.2	750.1	758.2	762.2	762.2
15°	736.8	730.2	731.5	740.8	752.8	758.2	764.9	767.5	774.2	779.5	779.5
17.5°	755.6	748.8	751.5	762.2	770.2	772.8	776.8	775.5	778.2	782.3	783.6
20°	776.8	770.2	771.5	778.2	779.5	776.8	776.8	772.8	771.5	778.2	780.8
22.5°	798.2	791.6	790.2	786.2	779.5	772.8	768.8	764.9	762.2	768.8	771.5
25°	823.6	814.3	807.5	790.2	772.8	760.9	755.6	752.8	751.5	758.2	760.9
27.5°	851.6	842.3	822.2	784.9	756.9	736.8	732.8	732.8	735.5	739.5	742.2
30°	878.3	869.0	832.9	772.8	728.9	699.5	695.4	699.5	706.1	710.1	714.1
32.5°	905.0	895.7	839.6	754.2	687.4	650.1	647.4	654.1	664.7	667.4	670.0
35°	941.0	931.7	847.6	727.5	635.4	595.4	592.7	596.7	606.0	610.0	614.0
37.5°	991.8	986.4	859.6	698.1	587.3	543.3	535.3	532.5	538.0	536.6	542.0
40°	1058.5	1062.5	881.0	659.4	540.6	495.2	477.8	469.8	464.5	453.9	459.2
42.5°	1155.9	1158.6	905.0	615.3	500.5	449.8	427.2	412.5	401.8	384.4	387.1
45°	1298.7	1276.1	933.0	568.7	464.5	413.8	387.1	369.7	355.1	340.3	341.7
47.5°	1488.3	1418.9	963.7	529.9	428.5	384.4	360.4	340.3	323.0	311.0	312.3
50°	1721.9	1596.4	994.4	493.9	392.4	361.7	340.3	319.1	301.7	289.7	288.4
52.5°	2030.3	1810.0	1014.5	453.9	356.4	341.7	323.0	303.0	281.6	267.0	265.7
55°	2350.6	2058.3	1031.9	405.8	321.7	319.1	309.6	286.9	261.7	243.0	240.3
57.5°	2703.0	2323.9	1045.1	359.1	295.0	300.3	297.7	271.0	243.0	225.6	224.2
60°	3023.3	2598.9	1002.5	317.7	271.0	281.6	284.3	261.7	246.9	250.9	252.3
62.5°	3346.4	2811.2	839.6	286.9	254.9	269.6	292.4	291.0	284.3	291.0	292.4
65°	3462.5	2855.2	595.4	261.7	239.0	275.0	317.7	315.0	284.3	272.3	269.6
67.5°	3397.1	2724.3	400.5	241.6	226.9	281.6	344.4	315.0	273.6	257.6	252.3
70°	3086.1	2402.7	293.7	221.6	216.3	280.3	359.1	313.6	268.3	250.9	244.3
72.5°	2461.4	1854.1	236.3	202.9	200.2	273.6	367.0	311.0	263.0	244.3	236.3
75°	1593.8	1153.3	198.9	184.2	176.2	263.0	363.0	303.0	256.2	232.2	226.9
77.5°	739.5	496.5	169.5	162.9	153.5	246.9	351.1	286.9	241.6	218.9	212.3
80°	344.4	235.0	142.8	141.5	137.5	233.6	335.0	268.3	224.2	205.5	194.9
82.5°	184.2	141.5	116.1	116.1	120.1	217.6	315.0	245.6	201.5	192.2	164.2
85°	97.5	81.4	84.1	90.7	102.8	192.2	288.4	221.6	176.2	146.8	142.8
87.5°	49.4	52.1	52.1	61.4	78.8	156.2	237.6	182.9	149.5	120.1	117.4
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)