

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: P510016

Luminaire Tested: **VERD-M-CA4-190-722-U-T4-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510016  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VERD-M-CA4-190-722-U-T4-HSS  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(4) 70 CRI, 2200K, 870mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20265 lumens  
Efficiency: N/A  
Efficacy: 104.9 lumens/watt  
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G5

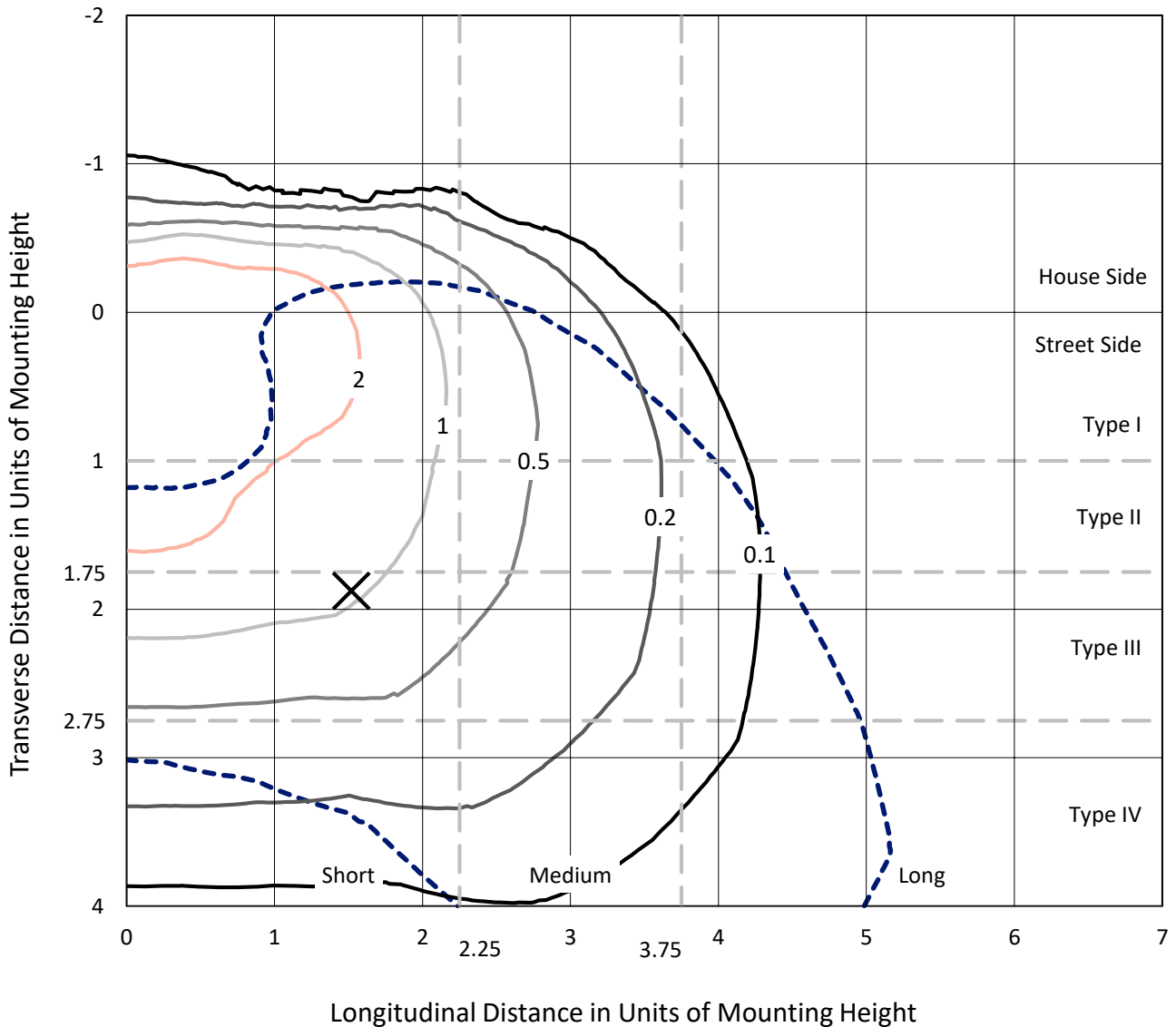
Input Watts (W): 193.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

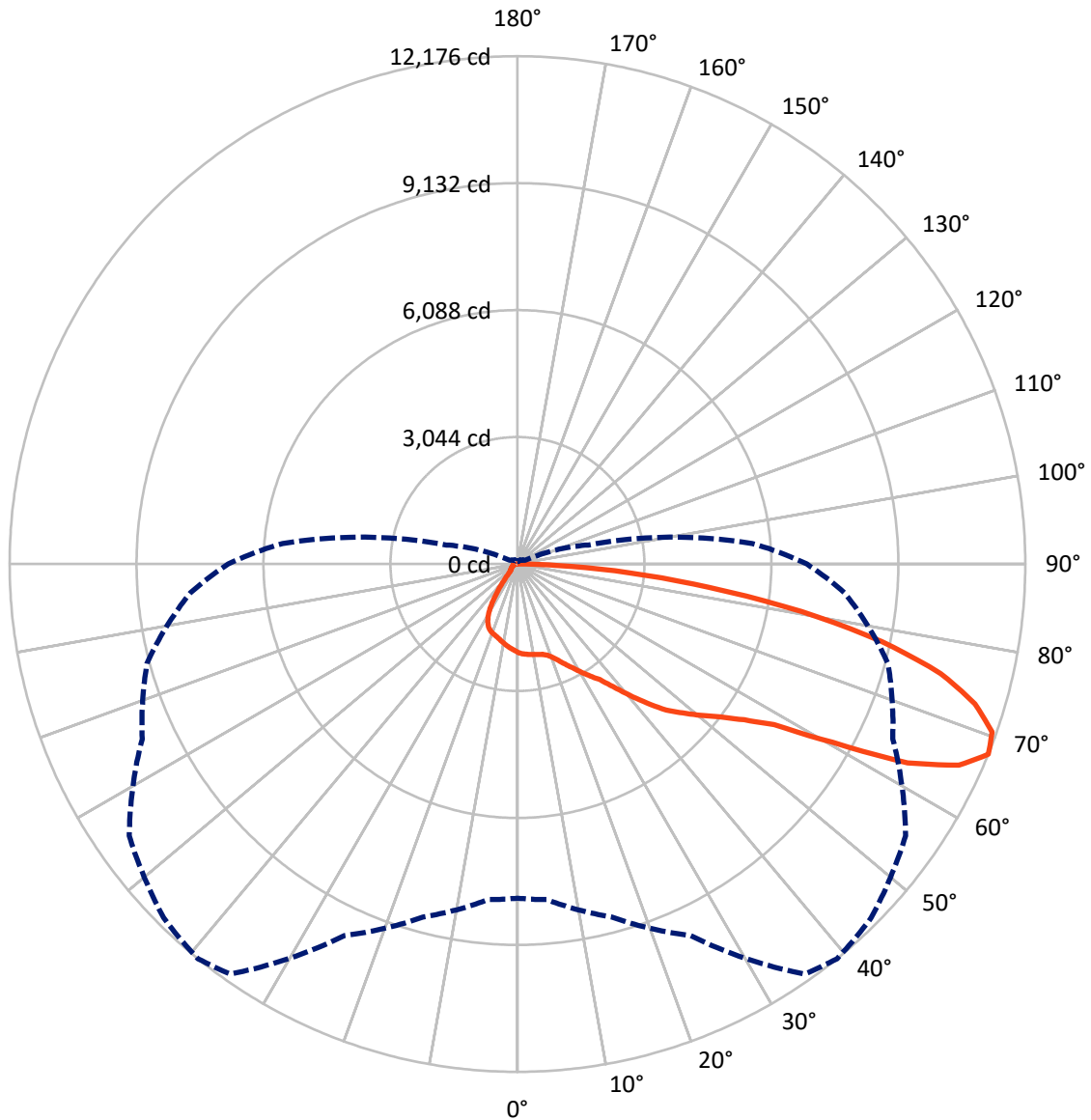
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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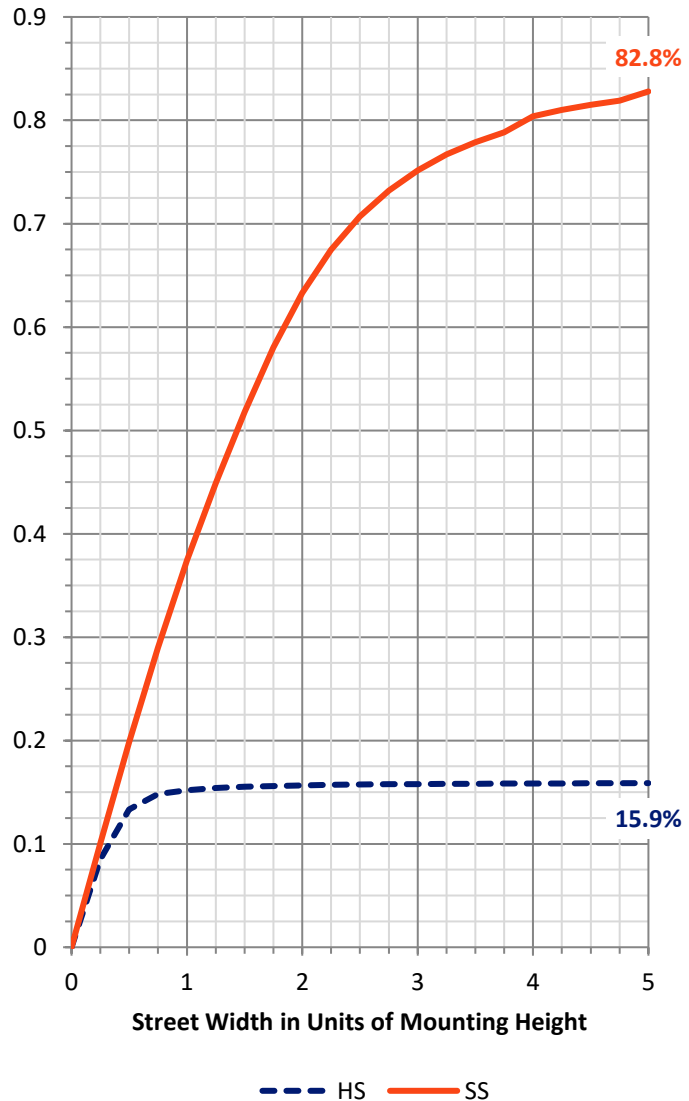
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3254.0	0.0	3254.0
	% Fixture	16.1	0.0	16.1
<b>Street Side</b>	Lumens	17010.9	0.0	17010.9
	% Fixture	83.9	0.0	83.9
<b>Total</b>	Lumens	20265.0	0.0	20265.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.3	1.0
10°-20°	596.2	2.9
20°-30°	1056.3	5.2
30°-40°	1691.9	8.3
40°-50°	2714.2	13.4
50°-60°	3967.3	19.6
60°-70°	5286.7	26.1
70°-80°	3967.2	19.6
80°-90°	784.9	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°	20265.0	100.0
0°-180°	20265.0	100.0

**Coefficient of Utilization**



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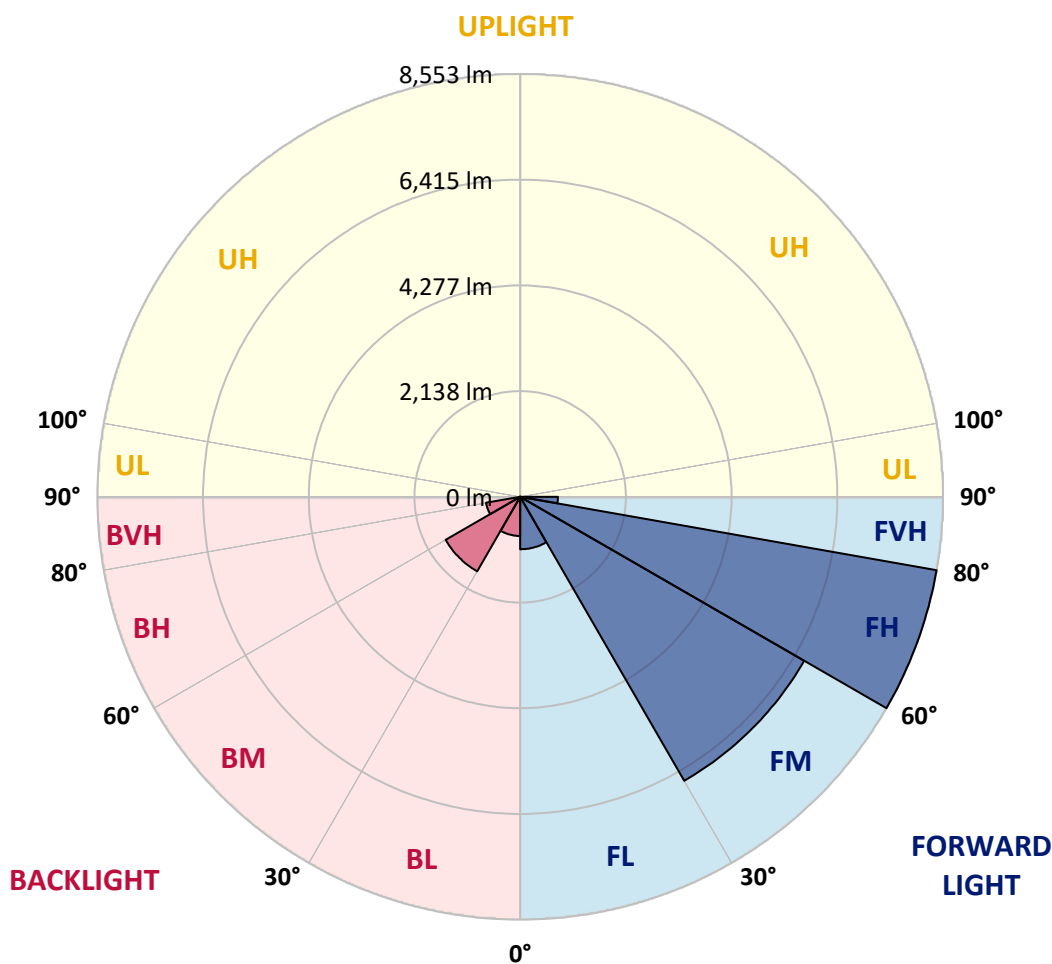
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1060.5	5.2			
FM	(30°-60°)	6632.9	32.7			
FH	(60°-80°)	8553.2	42.2			G4/12000
FVH	(80°-90°)	764.4	3.8			G5
BL	(0°-30°)	792.4	3.9	B2/1000		
BM	(30°-60°)	1740.4	8.6	B2/2500		
BH	(60°-80°)	700.6	3.5	B2/1000		G2/1000
BVH	(80°-90°)	20.6	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	2122.0	2122.0	2122.0	2122.0	2122.0	2122.0	2122.0	2122.0	2122.0	2122.0	2122.0
2.5°	2124.0	2152.5	2152.5	2144.4	2149.5	2153.5	2123.0	2131.1	2128.1	2127.1	2133.2
5°	2140.3	2171.9	2169.8	2159.6	2163.7	2171.9	2143.3	2155.6	2151.5	2141.3	2143.3
7.5°	2140.3	2166.8	2172.9	2161.7	2181.0	2191.2	2160.7	2171.9	2176.9	2169.8	2162.7
10°	2132.1	2155.6	2163.7	2161.7	2187.1	2203.4	2173.9	2205.5	2209.5	2209.5	2198.3
12.5°	2129.1	2155.6	2166.8	2175.9	2205.5	2222.8	2205.5	2236.0	2256.4	2255.3	2248.2
15°	2131.1	2160.7	2178.0	2193.2	2224.8	2246.2	2239.1	2285.9	2310.3	2317.5	2317.5
17.5°	2182.0	2217.7	2225.8	2242.1	2263.5	2296.1	2286.9	2347.0	2385.7	2397.9	2415.2
20°	2324.6	2352.1	2362.3	2354.1	2363.3	2383.6	2365.3	2423.4	2481.4	2514.0	2542.5
22.5°	2506.8	2527.2	2518.0	2509.9	2504.8	2509.9	2487.5	2526.2	2591.4	2638.2	2687.1
25°	2645.3	2690.1	2683.0	2660.6	2653.5	2659.6	2631.1	2678.9	2739.0	2787.9	2861.2
27.5°	2813.3	2840.8	2821.5	2813.3	2818.4	2817.4	2800.1	2845.9	2900.9	2962.0	3069.9
30°	2995.6	3019.0	2999.7	2991.5	3000.7	3006.8	2987.4	3067.9	3125.9	3192.1	3331.6
32.5°	3294.9	3350.9	3298.0	3192.1	3194.1	3203.3	3205.3	3313.3	3419.2	3471.1	3655.4
35°	3721.6	3766.4	3696.1	3567.8	3408.0	3401.9	3418.2	3579.0	3791.8	4028.1	4243.9
37.5°	4119.7	4184.9	4121.7	3972.1	3777.6	3730.7	3646.2	3837.7	4172.6	4680.7	4949.5
40°	4597.2	4646.1	4520.9	4390.5	4196.1	4129.9	3994.5	4116.6	4575.9	5361.9	5547.2
42.5°	4981.1	5010.6	4906.8	4770.3	4601.3	4551.4	4411.9	4423.1	5006.6	5958.6	6077.7
45°	5336.5	5368.0	5282.5	5166.4	5059.5	4999.4	4897.6	4952.6	5511.6	6587.9	6515.6
47.5°	5606.3	5637.9	5569.6	5487.2	5376.2	5335.5	5337.5	5535.0	6129.7	7090.9	6908.6
50°	6048.2	6036.0	5857.8	5768.2	5681.6	5703.0	5725.4	6006.5	6752.8	7522.6	7272.1
52.5°	6819.0	6758.9	6391.3	6157.2	6050.2	6086.9	6123.6	6497.2	7460.5	7916.6	7551.1
55°	7690.6	7629.5	7316.9	6815.9	6532.9	6591.9	6560.4	6982.9	8055.1	8295.4	7781.2
57.5°	8338.2	8439.0	8319.8	8047.0	7338.3	7260.9	7190.6	7473.7	8535.7	8674.2	8002.2
60°	8901.2	9041.8	9254.6	9180.2	8878.8	8677.2	8032.7	8047.0	8998.0	8936.9	8089.7
62.5°	9451.1	9533.6	9898.1	9978.5	10352.2	10496.8	9842.1	8788.2	9445.0	9119.1	8148.8
65°	8901.2	9007.1	9641.5	10227.0	11434.6	11628.0	11397.9	10130.2	9773.9	9227.1	8080.6
67.5°	8012.3	8076.5	8761.7	9826.8	12000.7	12175.8	11996.6	11362.3	9927.6	9194.5	7868.8
70°	6850.6	6951.4	7624.4	9051.9	11980.3	12074.0	11918.2	11510.9	9869.6	9007.1	7334.2
72.5°	5665.4	5722.4	6292.6	7717.1	11394.9	11473.3	11390.8	11282.8	9674.1	8484.8	6306.8
75°	4258.2	4270.4	4854.9	6094.0	10075.2	10484.6	10585.4	10889.8	8925.7	7273.1	4664.4
77.5°	2855.1	2976.2	3537.3	4657.3	8271.0	8925.7	9403.2	9625.2	7457.4	5428.1	2480.4
80°	1532.4	1563.0	2167.8	3305.1	6285.4	6911.6	7364.8	7368.8	5215.3	2689.1	553.9
82.5°	709.7	680.2	1091.5	2091.4	4353.9	4632.9	4936.3	4135.0	2088.4	459.2	141.5
85°	314.6	331.9	493.8	1019.2	2416.2	2696.2	2657.5	1830.8	366.6	124.2	86.5
87.5°	117.1	123.2	191.4	411.4	862.4	940.8	846.1	352.3	47.9	43.8	26.5
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°	2122.0	2122.0	2122.0	2122.0	2122.0	2122.0	2122.0	2122.0	2122.0	2122.0	2122.0
2.5°	2126.0	2126.0	2124.0	2096.5	2090.4	2077.2	2066.0	2074.1	2064.9	2071.1	2064.9
5°	2135.2	2130.1	2117.9	2085.3	2070.0	2040.5	2018.1	2023.2	2011.0	2011.0	2010.0
7.5°	2156.6	2146.4	2125.0	2073.1	2044.6	2001.8	1967.2	1956.0	1943.8	1929.5	1927.5
10°	2191.2	2176.9	2148.4	2077.2	2022.2	1965.2	1905.1	1881.7	1851.1	1828.7	1824.6
12.5°	2239.1	2217.7	2179.0	2092.4	2020.1	1929.5	1849.1	1803.3	1766.6	1734.0	1726.9
15°	2308.3	2286.9	2241.1	2123.0	2021.2	1895.9	1790.0	1713.7	1650.5	1620.0	1621.0
17.5°	2409.1	2393.8	2323.6	2187.1	2040.5	1878.6	1741.1	1620.0	1522.2	1471.3	1464.2
20°	2538.4	2528.2	2442.7	2271.6	2085.3	1881.7	1688.2	1520.2	1376.6	1265.6	1241.2
22.5°	2689.1	2673.8	2569.0	2345.0	2119.9	1873.5	1630.2	1410.2	1194.4	1049.8	1021.3
25°	2857.1	2849.0	2685.0	2409.1	2124.0	1838.9	1546.7	1267.7	996.8	842.1	817.6
27.5°	3072.0	3024.1	2789.9	2443.7	2114.8	1770.7	1427.5	1072.2	792.2	685.3	658.8
30°	3307.2	3210.4	2891.7	2470.2	2070.0	1661.7	1257.5	846.1	589.5	494.9	481.6
32.5°	3567.8	3423.2	2987.4	2468.2	1990.6	1493.7	1036.5	587.5	398.1	359.4	346.2
35°	4039.3	3793.9	3102.5	2434.6	1857.2	1294.2	732.1	382.8	295.3	271.9	268.8
37.5°	4694.0	4277.5	3257.3	2370.4	1685.1	1062.0	477.5	261.7	252.5	253.5	252.5
40°	5230.6	4817.2	3472.1	2273.7	1468.3	758.6	286.1	233.2	238.3	241.3	242.3
42.5°	5756.0	5257.0	3737.9	2152.5	1241.2	492.8	232.2	223.0	218.9	224.0	226.0
45°	6178.5	5640.9	3988.4	2011.0	975.5	291.2	225.0	206.7	199.6	201.6	204.7
47.5°	6516.6	5946.4	4139.0	1846.0	712.8	219.9	218.9	192.4	182.3	180.2	179.2
50°	6835.3	6208.1	4235.8	1646.5	454.1	211.8	202.6	176.2	163.9	161.9	161.9
52.5°	7052.2	6379.1	4268.4	1410.2	270.8	206.7	191.4	162.9	146.6	149.7	151.7
55°	7264.0	6552.2	4201.2	1102.7	207.7	193.5	179.2	146.6	133.4	145.6	149.7
57.5°	7364.8	6577.7	4049.4	766.7	201.6	175.1	161.9	131.3	121.2	128.3	128.3
60°	7446.2	6560.4	3837.7	485.7	196.5	162.9	147.6	119.1	106.9	102.8	99.8
62.5°	7392.2	6491.1	3412.0	316.7	182.3	148.7	134.4	110.0	92.7	81.5	80.4
65°	7277.2	6246.8	2723.7	249.5	169.0	141.5	122.2	98.8	81.5	68.2	67.2
67.5°	6938.1	5652.1	1762.5	206.7	161.9	136.4	113.0	91.6	72.3	59.1	58.0
70°	6125.6	4565.7	540.7	185.3	168.0	131.3	111.0	83.5	64.1	51.9	49.9
72.5°	4843.7	3050.6	200.6	153.8	144.6	126.3	107.9	75.3	55.0	43.8	41.7
75°	3119.8	996.8	170.0	119.1	123.2	120.1	99.8	69.2	46.8	35.6	34.6
77.5°	883.8	208.7	154.8	87.6	108.9	116.1	87.6	58.0	41.7	30.5	29.5
80°	185.3	148.7	141.5	62.1	81.5	75.3	59.1	44.8	39.7	26.5	26.5
82.5°	121.2	118.1	121.2	42.8	54.0	55.0	46.8	38.7	34.6	24.4	24.4
85°	85.5	107.9	58.0	30.5	25.5	23.4	27.5	33.6	30.5	20.4	20.4
87.5°	29.5	17.3	12.2	12.2	11.2	11.2	13.2	15.3	16.3	16.3	15.3
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)