

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: P510216

Luminaire Tested: **VERD-M-CA4-230-727-U-T4-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510216  
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-CA4-230-727-U-T4-HSS  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(4) 70 CRI, 2700K, 1050mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24680 lumens  
Efficiency: N/A  
Efficacy: 105.8 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

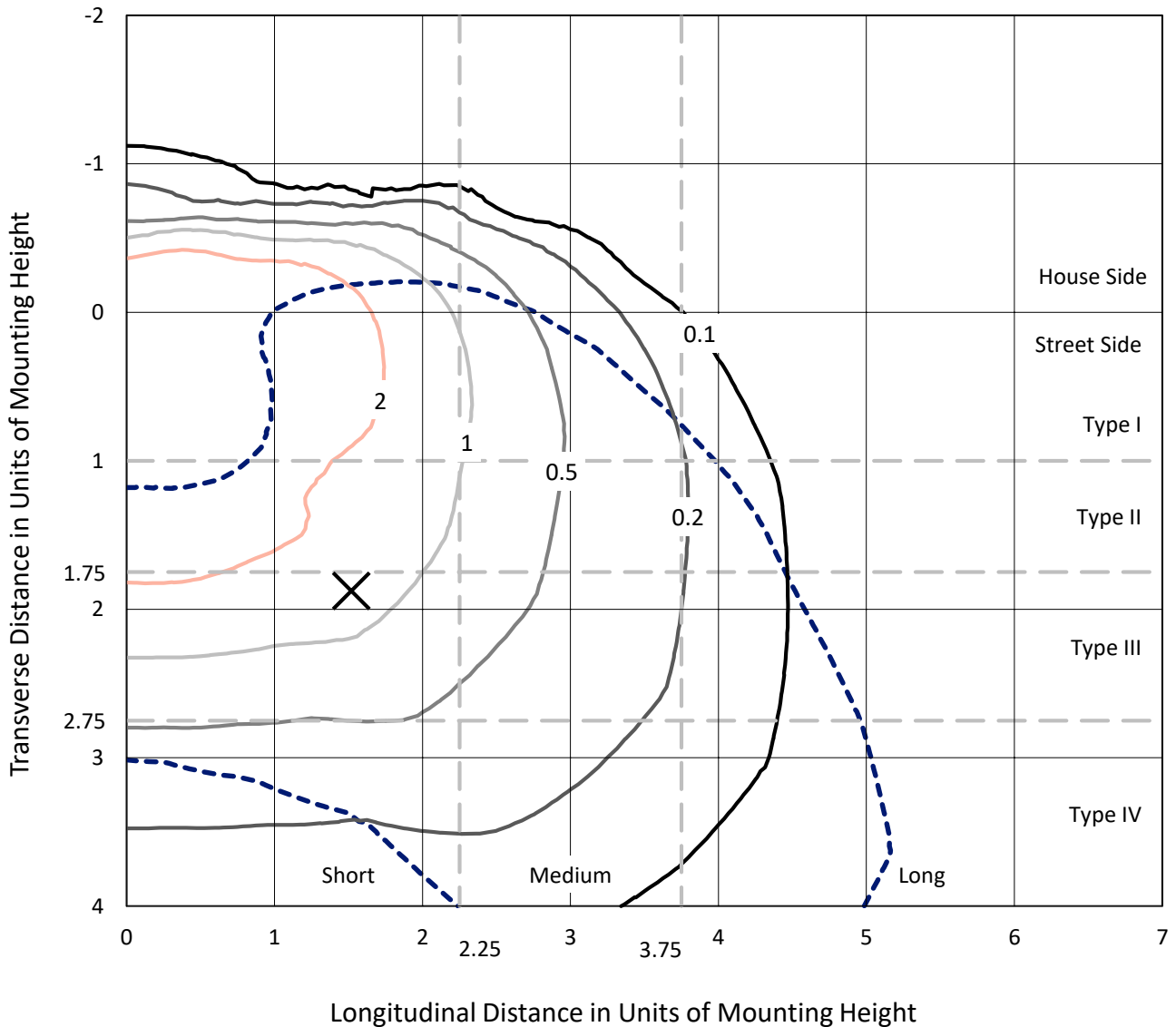
Input Watts (W): 233.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

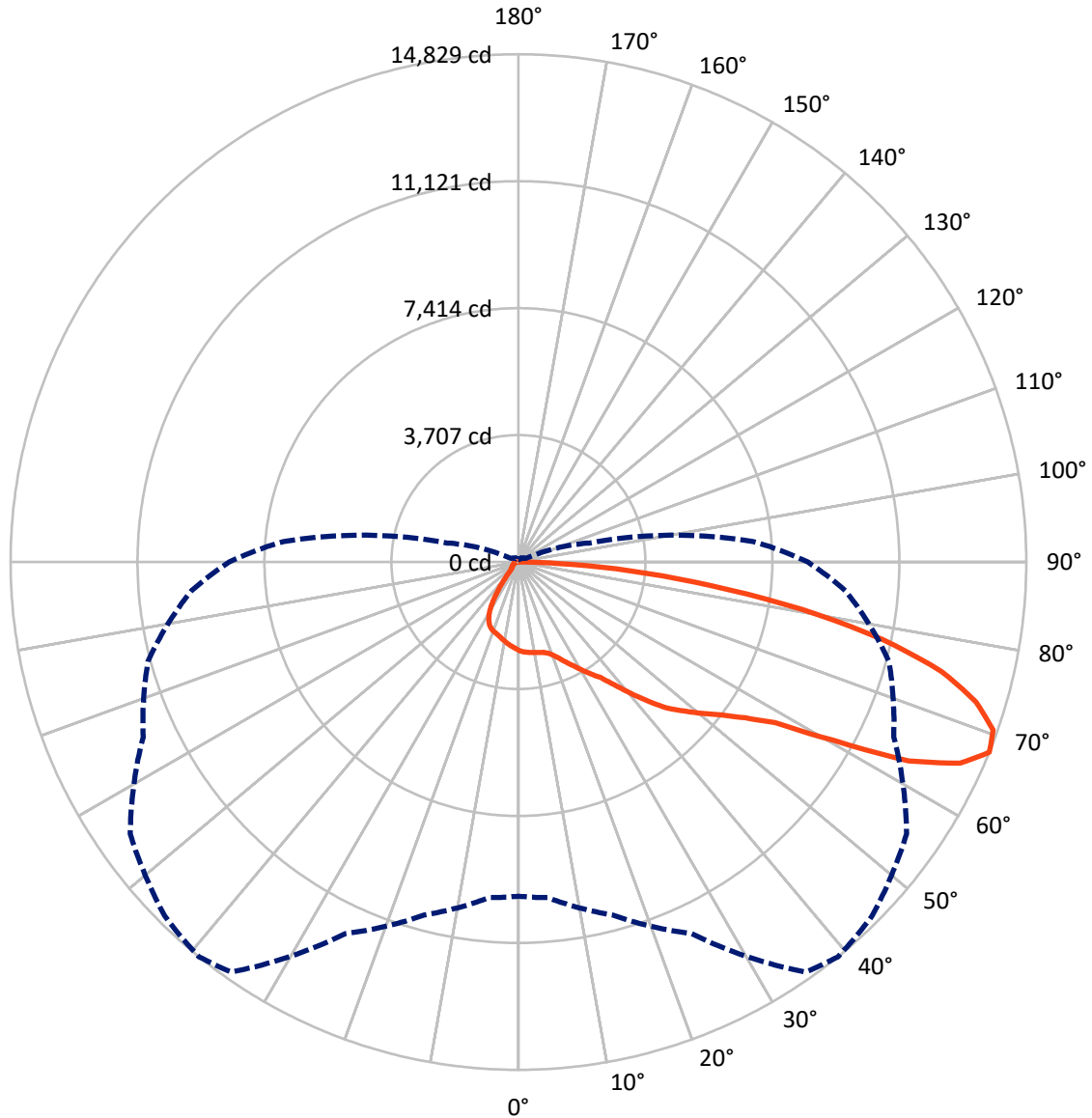
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 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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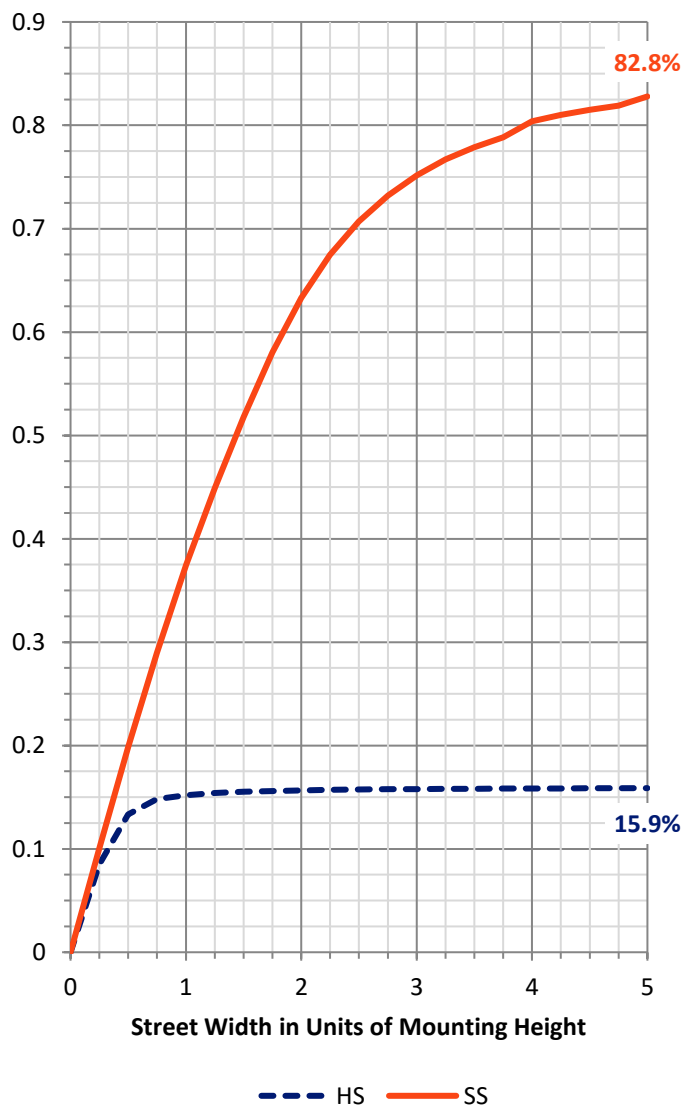
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3963.0	0.0	3963.0
	% Fixture	16.1	0.0	16.1
<b>Street Side</b>	Lumens	20717.0	0.0	20717.0
	% Fixture	83.9	0.0	83.9
<b>Total</b>	Lumens	24680.0	0.0	24680.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	244.0	1.0
10°-20°	726.1	2.9
20°-30°	1286.5	5.2
30°-40°	2060.5	8.3
40°-50°	3305.5	13.4
50°-60°	4831.6	19.6
60°-70°	6438.4	26.1
70°-80°	4831.5	19.6
80°-90°	955.9	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°	24680.0	100.0
0°-180°	24680.0	100.0

**Coefficient of Utilization**



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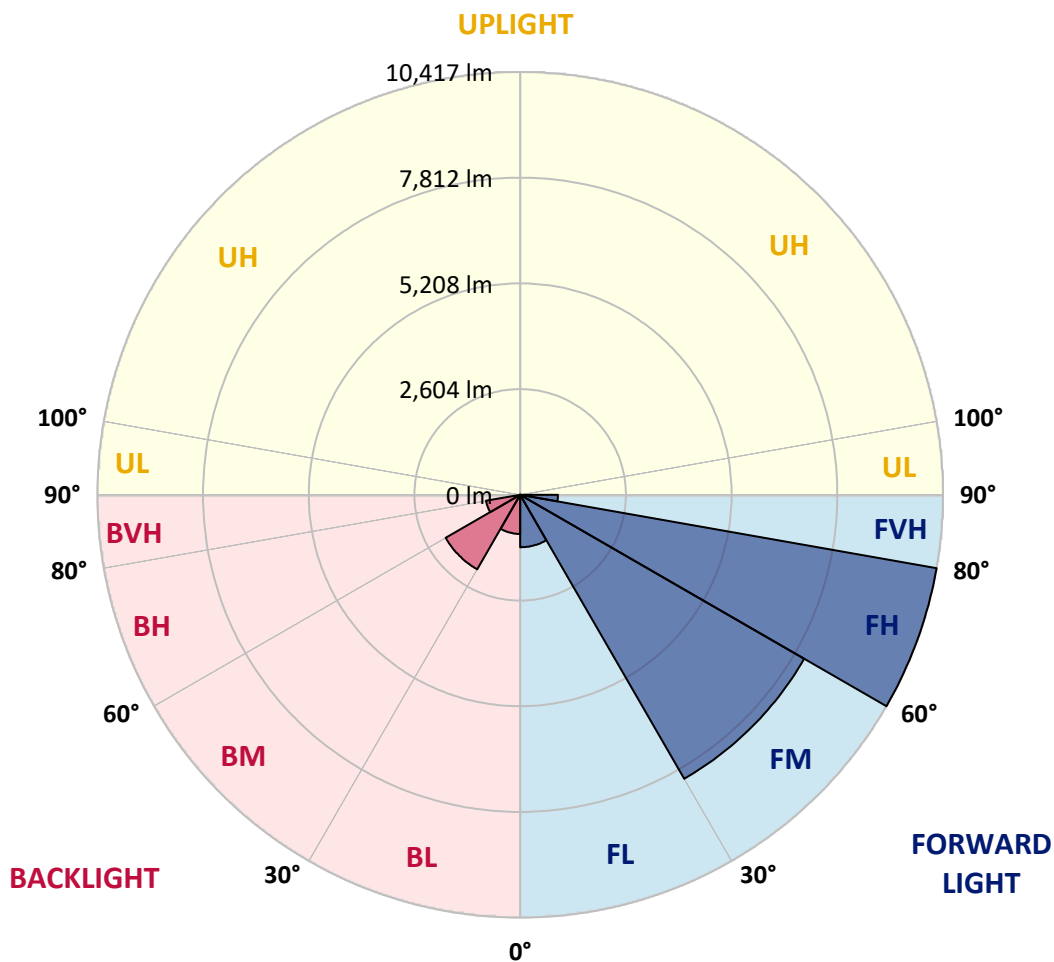
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1291.5	5.2			
FM (30°-60°)	8078.0	32.7			
FH (60°-80°)	10416.6	42.2			G4/12000
FVH (80°-90°)	930.9	3.8			G5
BL (0°-30°)	965.0	3.9	B2/1000		
BM (30°-60°)	2119.6	8.6	B2/2500		
BH (60°-80°)	853.3	3.5	B2/1000		G2/1000
BVH (80°-90°)	25.0	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°	2584.3	2584.3	2584.3	2584.3	2584.3	2584.3	2584.3	2584.3	2584.3	2584.3	2584.3
2.5°	2586.7	2621.5	2621.5	2611.5	2617.7	2622.7	2585.5	2595.4	2591.7	2590.5	2597.9
5°	2606.6	2645.0	2642.5	2630.1	2635.1	2645.0	2610.3	2625.2	2620.2	2607.8	2610.3
7.5°	2606.6	2638.8	2646.3	2632.6	2656.2	2668.6	2631.4	2645.0	2651.2	2642.5	2633.9
10°	2596.7	2625.2	2635.1	2632.6	2663.6	2683.5	2647.5	2685.9	2690.9	2690.9	2677.3
12.5°	2592.9	2625.2	2638.8	2650.0	2685.9	2707.0	2685.9	2723.1	2747.9	2746.7	2738.0
15°	2595.4	2631.4	2652.5	2671.1	2709.5	2735.5	2726.9	2783.9	2813.7	2822.3	2822.3
17.5°	2657.4	2700.8	2710.7	2730.6	2756.6	2796.3	2785.1	2858.3	2905.4	2920.3	2941.4
20°	2831.0	2864.5	2876.9	2867.0	2878.2	2903.0	2880.6	2951.3	3022.0	3061.7	3096.4
22.5°	3053.0	3077.8	3066.6	3056.7	3050.5	3056.7	3029.4	3076.6	3155.9	3213.0	3272.5
25°	3221.6	3276.2	3267.5	3240.2	3231.6	3239.0	3204.3	3262.6	3335.7	3395.3	3484.5
27.5°	3426.3	3459.7	3436.2	3426.3	3432.5	3431.2	3410.1	3465.9	3532.9	3607.3	3738.7
30°	3648.2	3676.7	3653.2	3643.3	3654.4	3661.9	3638.3	3736.3	3806.9	3887.5	4057.4
32.5°	4012.8	4081.0	4016.5	3887.5	3890.0	3901.2	3903.7	4035.1	4164.1	4227.3	4451.8
35°	4532.4	4586.9	4501.4	4345.1	4150.4	4143.0	4162.8	4358.8	4617.9	4905.6	5168.5
37.5°	5017.2	5096.6	5019.7	4837.4	4600.6	4543.5	4440.6	4673.7	5081.7	5700.5	6027.9
40°	5598.8	5658.3	5505.8	5347.1	5110.2	5029.6	4864.7	5013.5	5572.8	6530.1	6755.8
42.5°	6066.3	6102.3	5975.8	5809.6	5603.8	5543.0	5373.1	5386.8	6097.3	7256.8	7401.8
45°	6499.1	6537.5	6433.4	6292.0	6161.8	6088.6	5964.6	6031.6	6712.4	8023.1	7935.1
47.5°	6827.7	6866.1	6783.1	6682.6	6547.5	6497.8	6500.3	6740.9	7465.1	8635.7	8413.7
50°	7365.9	7351.0	7134.0	7024.9	6919.5	6945.5	6972.8	7315.0	8224.0	9161.5	8856.4
52.5°	8304.6	8231.4	7783.8	7498.6	7368.4	7413.0	7457.6	7912.7	9085.8	9641.4	9196.2
55°	9366.1	9291.7	8911.0	8300.9	7956.1	8028.1	7989.6	8504.2	9810.0	10102.7	9476.4
57.5°	10154.8	10277.5	10132.4	9800.1	8937.0	8842.8	8757.2	9102.0	10395.3	10564.0	9745.5
60°	10840.5	11011.6	11270.8	11180.3	10813.2	10567.7	9782.7	9800.1	10958.3	10883.9	9852.2
62.5°	11510.1	11610.6	12054.5	12152.5	12607.6	12783.7	11986.3	10702.9	11502.7	11105.9	9924.1
65°	10840.5	10969.5	11742.0	12455.0	13925.7	14161.3	13881.1	12337.2	11903.2	11237.3	9841.0
67.5°	9757.9	9836.1	10670.6	11967.7	14615.2	14828.5	14610.2	13837.7	12090.5	11197.6	9583.1
70°	8343.0	8465.8	9285.5	11024.0	14590.4	14704.5	14514.8	14018.7	12019.8	10969.5	8932.1
72.5°	6899.6	6969.1	7663.5	9398.3	13877.4	13972.9	13872.4	13741.0	11781.7	10333.3	7680.9
75°	5185.9	5200.8	5912.5	7421.7	12270.3	12768.8	12891.5	13262.3	10870.3	8857.7	5680.7
77.5°	3477.1	3624.7	4307.9	5672.0	10072.9	10870.3	11451.8	11722.2	9082.1	6610.7	3020.8
80°	1866.3	1903.5	2640.1	4025.2	7654.8	8417.4	8969.3	8974.2	6351.5	3275.0	674.6
82.5°	864.3	828.4	1329.3	2547.1	5302.4	5642.2	6011.8	5035.8	2543.3	559.3	172.4
85°	383.2	404.3	601.4	1241.3	2942.6	3283.6	3236.5	2229.6	446.4	151.3	105.4
87.5°	142.6	150.0	233.1	501.0	1050.3	1145.8	1030.5	429.1	58.3	53.3	32.2
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°	2584.3	2584.3	2584.3	2584.3	2584.3	2584.3	2584.3	2584.3	2584.3	2584.3	2584.3
2.5°	2589.2	2589.2	2586.7	2553.3	2545.8	2529.7	2516.1	2526.0	2514.8	2522.3	2514.8
5°	2600.4	2594.2	2579.3	2539.6	2521.0	2485.1	2457.8	2464.0	2449.1	2449.1	2447.9
7.5°	2626.4	2614.0	2588.0	2524.7	2490.0	2437.9	2395.8	2382.1	2367.3	2349.9	2347.4
10°	2668.6	2651.2	2616.5	2529.7	2462.7	2393.3	2320.1	2291.6	2254.4	2227.1	2222.2
12.5°	2726.9	2700.8	2653.7	2548.3	2460.3	2349.9	2251.9	2196.1	2151.5	2111.8	2103.1
15°	2811.2	2785.1	2729.3	2585.5	2461.5	2309.0	2180.0	2087.0	2010.1	1972.9	1974.2
17.5°	2934.0	2915.4	2829.8	2663.6	2485.1	2287.9	2120.5	1972.9	1853.9	1791.9	1783.2
20°	3091.4	3079.0	2974.9	2766.5	2539.6	2291.6	2056.0	1851.4	1676.5	1541.4	1511.6
22.5°	3275.0	3256.4	3128.6	2855.8	2581.8	2281.7	1985.3	1717.5	1454.6	1278.5	1243.8
25°	3479.6	3469.7	3270.0	2934.0	2586.7	2239.5	1883.6	1543.9	1214.0	1025.5	995.8
27.5°	3741.2	3682.9	3397.7	2976.1	2575.6	2156.4	1738.5	1305.8	964.8	834.6	802.3
30°	4027.7	3909.9	3521.7	3008.4	2521.0	2023.8	1531.5	1030.5	718.0	602.7	586.5
32.5°	4345.1	4169.0	3638.3	3005.9	2424.3	1819.1	1262.4	715.5	484.9	437.7	421.6
35°	4919.3	4620.4	3778.4	2965.0	2261.8	1576.1	891.6	466.3	359.6	331.1	327.4
37.5°	5716.6	5209.4	3966.9	2886.8	2052.3	1293.4	581.6	318.7	307.5	308.8	307.5
40°	6370.1	5866.7	4228.6	2769.0	1788.1	923.8	348.5	284.0	290.2	293.9	295.1
42.5°	7010.0	6402.4	4552.2	2621.5	1511.6	600.2	282.7	271.6	266.6	272.8	275.3
45°	7524.6	6869.9	4857.3	2449.1	1188.0	354.7	274.1	251.7	243.0	245.5	249.2
47.5°	7936.3	7241.9	5040.8	2248.2	868.0	267.9	266.6	234.4	222.0	219.5	218.2
50°	8324.4	7560.6	5158.6	2005.2	553.1	257.9	246.8	214.5	199.6	197.2	197.2
52.5°	8588.6	7768.9	5198.3	1717.5	329.9	251.7	233.1	198.4	178.6	182.3	184.8
55°	8846.5	7979.7	5116.4	1343.0	253.0	235.6	218.2	178.6	162.4	177.3	182.3
57.5°	8969.3	8010.7	4931.7	933.8	245.5	213.3	197.2	160.0	147.6	156.2	156.2
60°	9068.5	7989.6	4673.7	591.5	239.3	198.4	179.8	145.1	130.2	125.2	121.5
62.5°	9002.7	7905.3	4155.4	385.7	222.0	181.0	163.7	133.9	112.8	99.2	98.0
65°	8862.6	7607.7	3317.1	303.8	205.8	172.4	148.8	120.3	99.2	83.1	81.8
67.5°	8449.7	6883.5	2146.5	251.7	197.2	166.2	137.6	111.6	88.0	71.9	70.7
70°	7460.1	5560.4	658.5	225.7	204.6	160.0	135.2	101.7	78.1	63.2	60.8
72.5°	5898.9	3715.2	244.3	187.2	176.1	153.8	131.4	91.8	67.0	53.3	50.8
75°	3799.5	1214.0	207.1	145.1	150.0	146.3	121.5	84.3	57.0	43.4	42.2
77.5°	1076.4	254.2	188.5	106.6	132.7	141.4	106.6	70.7	50.8	37.2	36.0
80°	225.7	181.0	172.4	75.6	99.2	91.8	71.9	54.6	48.4	32.2	32.2
82.5°	147.6	143.8	147.6	52.1	65.7	67.0	57.0	47.1	42.2	29.8	29.8
85°	104.2	131.4	70.7	37.2	31.0	28.5	33.5	40.9	37.2	24.8	24.8
87.5°	36.0	21.1	14.9	14.9	13.6	13.6	16.1	18.6	19.8	19.8	18.6
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)