

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: P509870

Luminaire Tested: **VERD-M-CA3-160-722-U-T3-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P509870  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VERD-M-CA3-160-722-U-T3-HSS  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2200K, 1000mA LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17749 lumens  
Efficiency: N/A  
Efficacy: 109.1 lumens/watt  
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G3

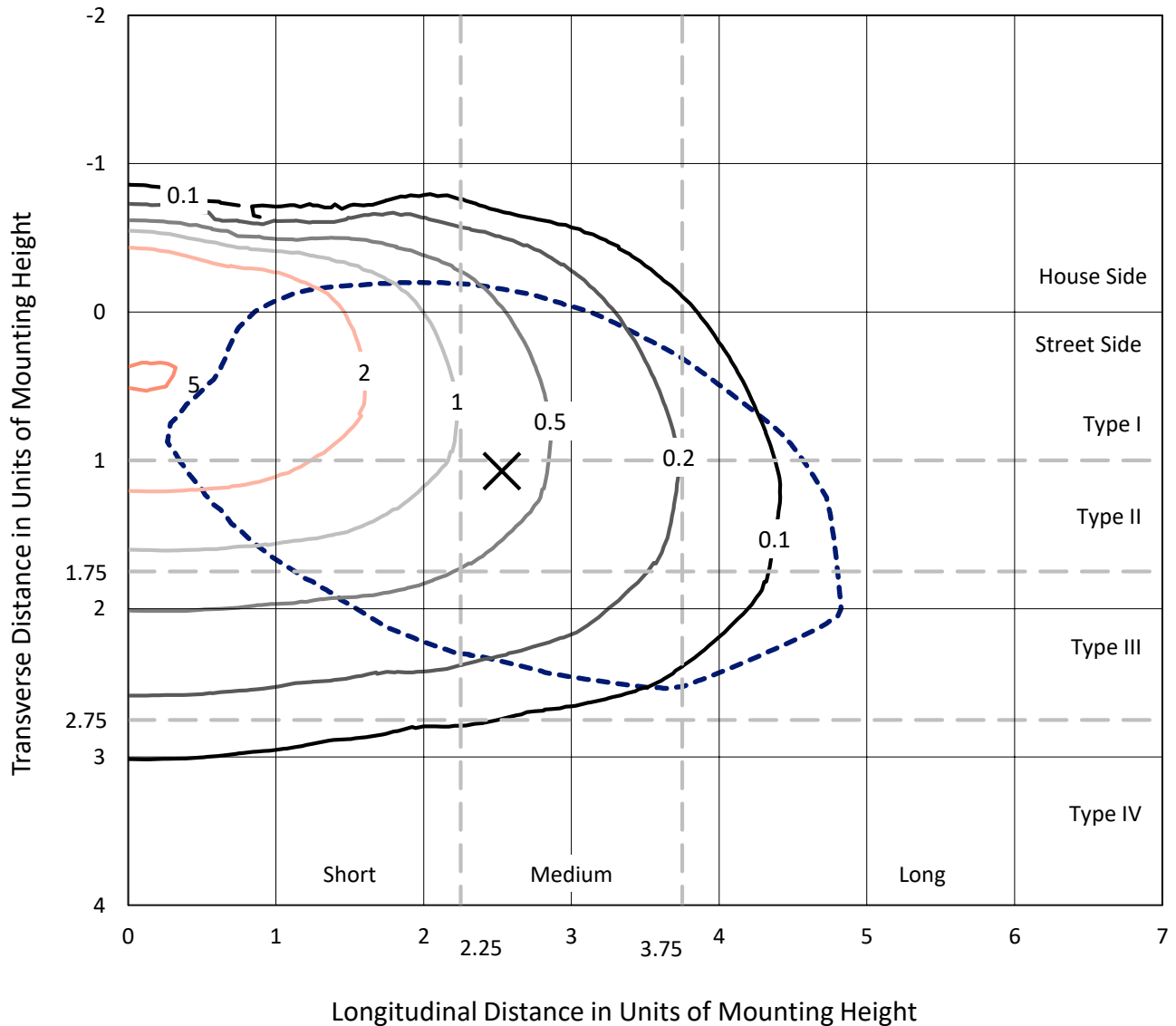
Input Watts (W): 162.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

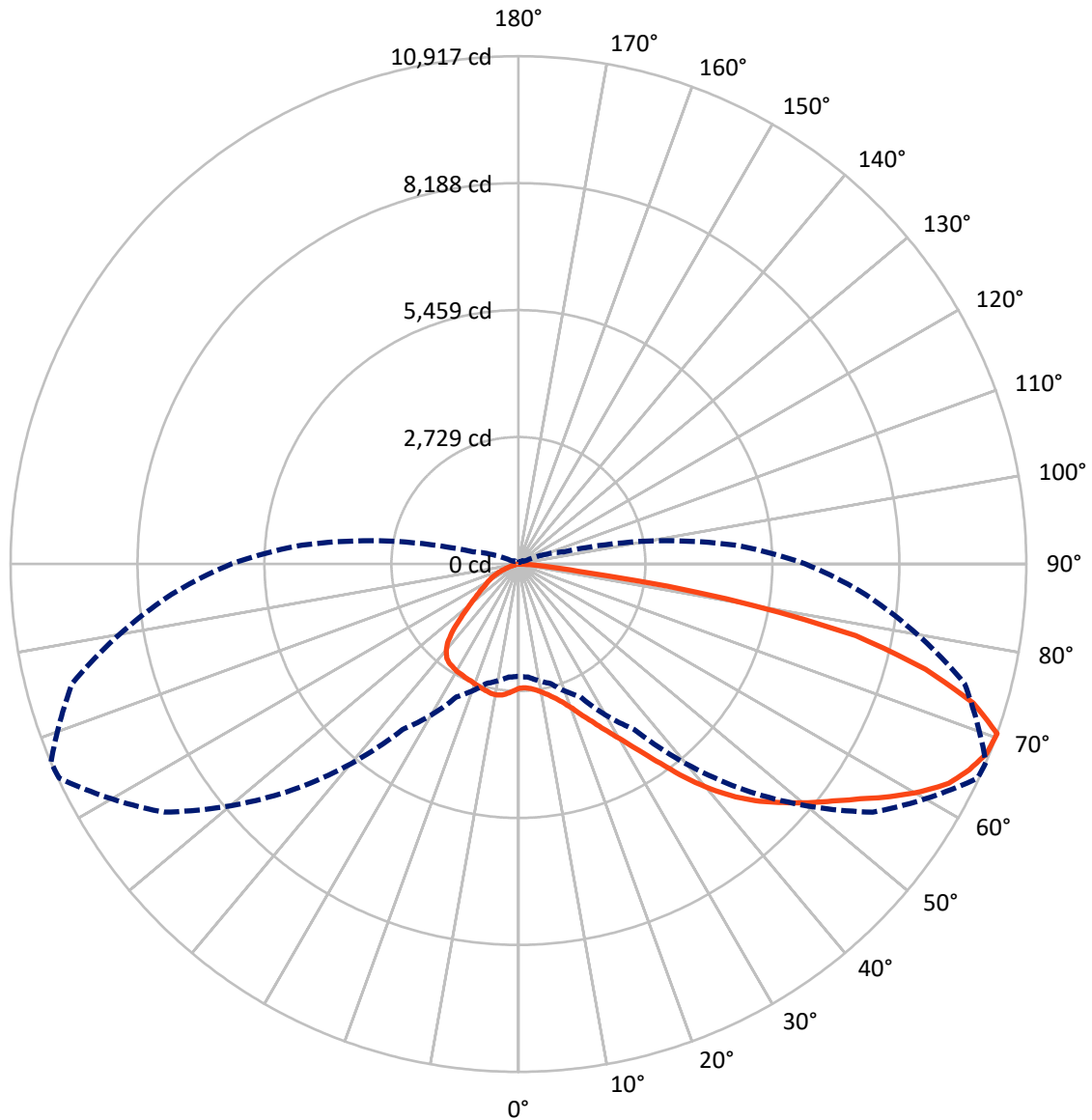
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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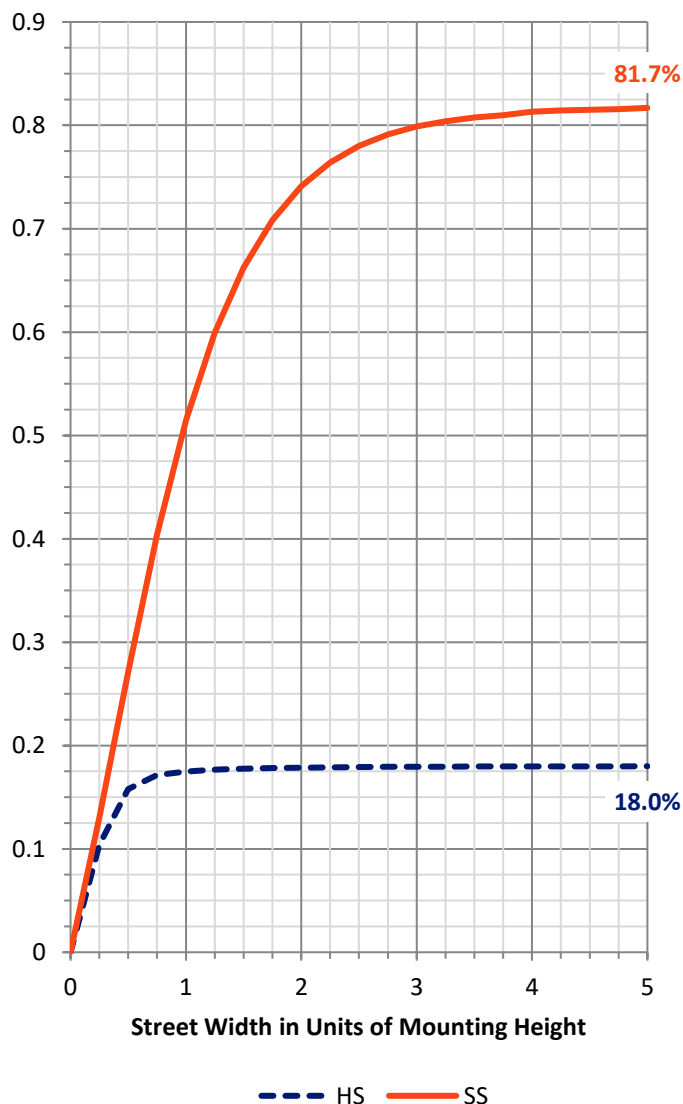
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3234.0	0.0	3234.0
	% Fixture	18.2	0.0	18.2
<b>Street Side</b>	Lumens	14515.0	0.0	14515.0
	% Fixture	81.8	0.0	81.8
<b>Total</b>	Lumens	17749.0	0.0	17749.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	266.0	1.5
10°-20°	829.9	4.7
20°-30°	1439.8	8.1
30°-40°	2138.5	12.0
40°-50°	2933.9	16.5
50°-60°	3602.9	20.3
60°-70°	3862.7	21.8
70°-80°	2452.1	13.8
80°-90°	223.2	1.3
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°	17749.0	100.0
0°-180°	17749.0	100.0



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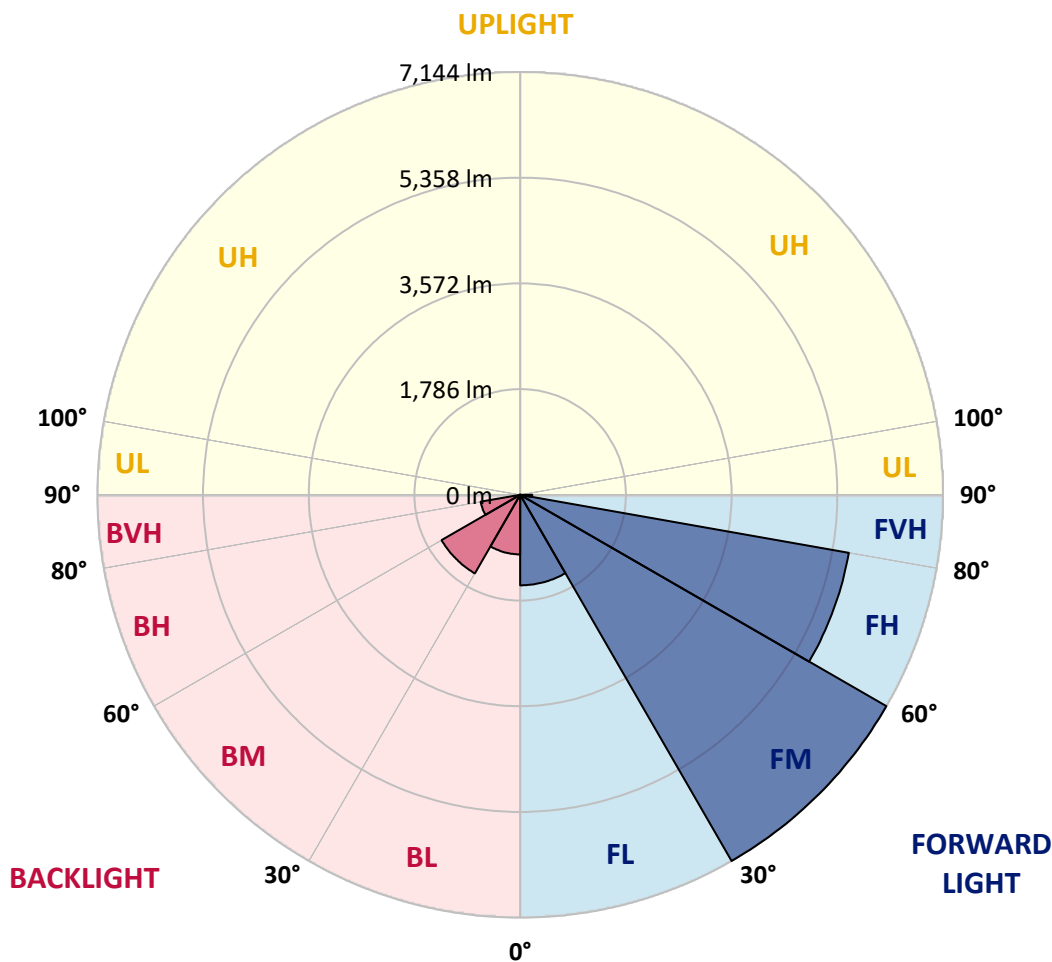
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1529.2	8.6			
FM (30°-60°)	7143.8	40.2			
FH (60°-80°)	5638.4	31.8			G3/7500
FVH (80°-90°)	203.5	1.1			G2/225
BL (0°-30°)	1006.5	5.7	B3/2500		
BM (30°-60°)	1531.5	8.6	B2/2500		
BH (60°-80°)	676.4	3.8	B2/1000		G2/1000
BVH (80°-90°)	19.6	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	2669.8	2669.8	2669.8	2669.8	2669.8	2669.8	2669.8	2669.8	2669.8	2669.8	2669.8
2.5°	2645.8	2670.7	2656.1	2654.4	2671.6	2655.3	2666.4	2663.8	2662.1	2664.7	2682.7
5°	2715.4	2744.6	2724.8	2718.8	2728.2	2699.0	2696.5	2690.5	2688.7	2689.6	2715.4
7.5°	2812.4	2846.8	2839.0	2823.6	2818.4	2770.3	2761.7	2740.3	2733.4	2735.1	2760.9
10°	2965.3	2999.6	2984.2	2949.8	2928.3	2873.4	2842.5	2815.0	2801.2	2803.0	2830.4
12.5°	3161.1	3193.7	3167.9	3105.2	3093.2	3004.8	2956.7	2898.3	2888.8	2875.1	2904.3
15°	3345.7	3374.0	3362.0	3303.6	3271.0	3166.2	3077.8	3005.6	2997.0	2984.2	2983.3
17.5°	3550.1	3578.4	3556.1	3513.1	3470.2	3345.7	3250.4	3157.6	3135.3	3124.1	3083.8
20°	3768.2	3812.8	3808.5	3773.3	3721.8	3575.8	3441.0	3336.2	3312.2	3291.6	3206.6
22.5°	3993.2	4051.6	4038.7	4019.8	3998.3	3834.3	3677.2	3556.1	3538.0	3494.2	3360.3
25°	4242.2	4282.6	4273.1	4282.6	4268.0	4122.9	3951.1	3803.4	3779.4	3738.1	3532.9
27.5°	4483.5	4525.6	4541.9	4522.2	4531.6	4427.7	4224.2	4091.9	4068.7	3993.2	3740.7
30°	4701.6	4754.0	4777.2	4785.8	4817.6	4710.2	4560.0	4399.4	4391.6	4314.4	4014.6
32.5°	4876.0	4934.4	4991.0	5028.0	5078.6	5031.4	4882.0	4784.9	4785.8	4716.2	4426.0
35°	5002.2	5069.2	5151.6	5249.5	5356.0	5336.3	5247.8	5249.5	5263.3	5286.5	4950.7
37.5°	5142.2	5196.3	5293.3	5429.9	5592.2	5633.4	5621.4	5757.9	5824.9	5866.1	5411.8
40°	5225.5	5280.4	5401.5	5585.3	5821.5	5920.2	6031.0	6270.6	6358.2	6315.2	5806.0
42.5°	5133.6	5182.5	5392.9	5710.7	6009.5	6233.7	6432.0	6782.4	6845.9	6706.0	6138.3
45°	5014.2	5077.8	5299.3	5745.0	6176.1	6541.1	6849.4	7228.1	7275.3	7076.9	6432.0
47.5°	4916.3	4972.2	5230.6	5708.1	6329.8	6856.2	7216.1	7648.9	7660.9	7416.2	6736.0
50°	4791.0	4858.8	5128.4	5662.6	6422.6	7135.3	7551.8	8041.3	8067.9	7767.4	6993.6
52.5°	4659.6	4725.7	5004.8	5587.9	6489.6	7367.2	7900.5	8458.7	8461.2	8139.2	7268.4
55°	4465.5	4535.9	4845.1	5479.7	6510.2	7520.9	8250.9	8884.6	8911.2	8516.2	7517.5
57.5°	4260.3	4320.4	4652.7	5311.4	6433.7	7666.0	8610.7	9357.8	9430.8	8941.3	7731.3
60°	3988.0	4048.1	4399.4	5090.7	6271.4	7829.2	9022.9	9928.0	9935.7	9285.6	7886.7
62.5°	3695.2	3747.6	4070.5	4744.6	6019.8	7891.9	9376.7	10384.0	10383.1	9592.2	7964.0
65°	3347.4	3368.9	3697.8	4319.5	5629.1	7800.0	9533.0	10684.5	10655.4	9812.9	7938.3
67.5°	2935.2	2958.4	3207.4	3791.4	5062.3	7441.1	9463.4	10829.7	10858.9	10009.6	7826.6
70°	2413.1	2440.6	2657.8	3150.7	4340.1	6868.3	9300.2	10892.4	10917.3	9930.6	7482.3
72.5°	1781.0	1818.0	1951.1	2345.2	3294.2	5770.8	8544.5	10206.2	10220.0	9271.0	6765.2
75°	1106.1	1173.9	1299.3	1558.6	2137.4	4047.3	7303.7	9124.2	9038.3	8269.7	5598.2
77.5°	442.3	453.4	516.1	729.9	1042.5	2107.4	5294.2	7253.0	7417.0	6616.7	4004.3
80°	257.6	255.9	270.5	340.1	447.4	720.5	2059.3	4068.7	4535.1	3634.2	1801.7
82.5°	207.8	200.1	200.1	218.1	214.7	303.1	675.0	1188.5	1303.6	1156.7	512.7
85°	109.1	106.5	86.7	107.3	107.3	151.1	259.3	336.6	355.5	310.0	192.4
87.5°	27.5	27.5	27.5	33.5	26.6	31.8	43.8	53.2	55.0	44.7	28.3
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°	2669.8	2669.8	2669.8	2669.8	2669.8	2669.8	2669.8	2669.8	2669.8	2669.8	2669.8
2.5°	2689.6	2697.3	2727.4	2723.1	2728.2	2728.2	2736.8	2746.3	2774.6	2758.3	2751.4
5°	2720.5	2736.0	2773.8	2787.5	2808.1	2810.7	2827.9	2833.9	2864.8	2847.6	2847.6
7.5°	2779.8	2797.8	2833.0	2838.2	2847.6	2831.3	2835.6	2816.7	2837.3	2816.7	2817.6
10°	2846.8	2858.8	2882.8	2848.5	2833.9	2795.2	2786.6	2740.3	2756.6	2730.0	2723.1
12.5°	2911.2	2906.9	2888.8	2827.9	2787.5	2723.9	2697.3	2634.6	2631.2	2596.0	2589.1
15°	2972.1	2942.1	2883.7	2789.2	2720.5	2632.1	2568.5	2499.8	2475.8	2435.4	2432.0
17.5°	3046.8	2995.3	2891.4	2752.3	2639.8	2511.0	2420.8	2343.5	2293.7	2256.8	2255.9
20°	3137.9	3058.9	2894.8	2710.2	2556.5	2391.6	2265.4	2167.5	2096.2	2049.8	2049.0
22.5°	3252.1	3144.7	2926.6	2662.1	2450.0	2247.3	2090.2	1921.0	1823.1	1728.7	1711.5
25°	3386.0	3231.5	2954.1	2637.2	2345.2	2097.1	1863.5	1616.2	1464.2	1388.6	1360.3
27.5°	3574.1	3375.7	2994.5	2590.0	2246.5	1911.6	1571.5	1301.9	1118.9	1054.5	1054.5
30°	3791.4	3557.8	3070.0	2561.6	2109.1	1651.4	1251.2	961.8	791.8	694.7	692.2
32.5°	4122.9	3775.1	3138.7	2500.7	1942.5	1368.0	905.1	620.0	483.5	423.4	419.9
35°	4599.5	4189.0	3249.5	2439.7	1701.2	1018.5	574.5	355.5	275.7	241.3	239.6
37.5°	5058.0	4583.1	3488.2	2318.6	1358.5	639.8	318.6	205.2	168.3	164.0	162.3
40°	5380.9	4923.2	3656.6	2134.0	965.2	339.2	184.6	148.6	146.0	144.3	143.4
42.5°	5733.0	5175.7	3775.9	1898.7	572.8	196.7	150.3	134.0	129.7	128.0	128.0
45°	6019.0	5418.7	3798.2	1562.1	288.5	162.3	137.4	121.9	116.8	120.2	121.1
47.5°	6282.6	5648.0	3722.7	1174.8	194.9	151.1	128.8	113.4	109.9	118.5	118.5
50°	6507.6	5842.1	3549.2	876.8	182.9	142.6	120.2	104.8	103.9	111.6	112.5
52.5°	6731.7	5998.4	3276.1	662.1	173.5	133.1	111.6	97.0	94.5	99.6	100.5
55°	6909.5	6054.2	3073.5	492.9	166.6	124.5	103.9	89.3	83.3	82.4	84.2
57.5°	7007.4	6005.2	2875.1	362.4	158.9	116.8	96.2	79.0	69.6	69.6	69.6
60°	7009.1	5946.0	2663.0	286.8	150.3	108.2	87.6	67.8	58.4	56.7	56.7
62.5°	6990.2	5840.3	2354.7	249.0	140.8	101.3	76.4	57.5	50.7	48.1	48.1
65°	6906.9	5641.1	1981.1	213.0	129.7	96.2	65.3	51.5	45.5	42.1	42.1
67.5°	6647.6	5267.6	1525.1	185.5	119.4	85.0	59.3	46.4	40.4	36.9	36.1
70°	6171.8	4663.9	1006.5	158.0	109.1	75.6	54.1	42.1	36.1	32.6	31.8
72.5°	5374.0	3795.7	505.8	134.0	93.6	69.6	48.9	36.9	30.9	27.5	27.5
75°	4211.3	2634.6	275.7	106.5	73.9	61.0	42.9	30.9	26.6	24.0	24.0
77.5°	2582.3	1306.2	188.1	82.4	55.8	49.8	34.3	25.8	23.2	22.3	22.3
80°	942.0	427.7	126.2	58.4	42.1	38.6	27.5	22.3	21.5	21.5	21.5
82.5°	340.1	217.3	85.0	39.5	26.6	29.2	22.3	18.9	18.0	18.9	19.8
85°	140.0	95.3	30.9	22.3	14.6	15.5	13.7	12.9	13.7	14.6	14.6
87.5°	21.5	18.9	11.2	11.2	8.6	7.7	6.0	6.9	8.6	10.3	10.3
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)