

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: P509913

Luminaire Tested: **VERD-M-CA3-160-760-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P509913
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-6)
Test Lab: INNOVATION CENTER
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-M-CA3-160-760-U-T4
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5700K, 1000mA LEDS AND TYPE IV OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23207 lumens
Efficiency: N/A
Efficacy: 142.6 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

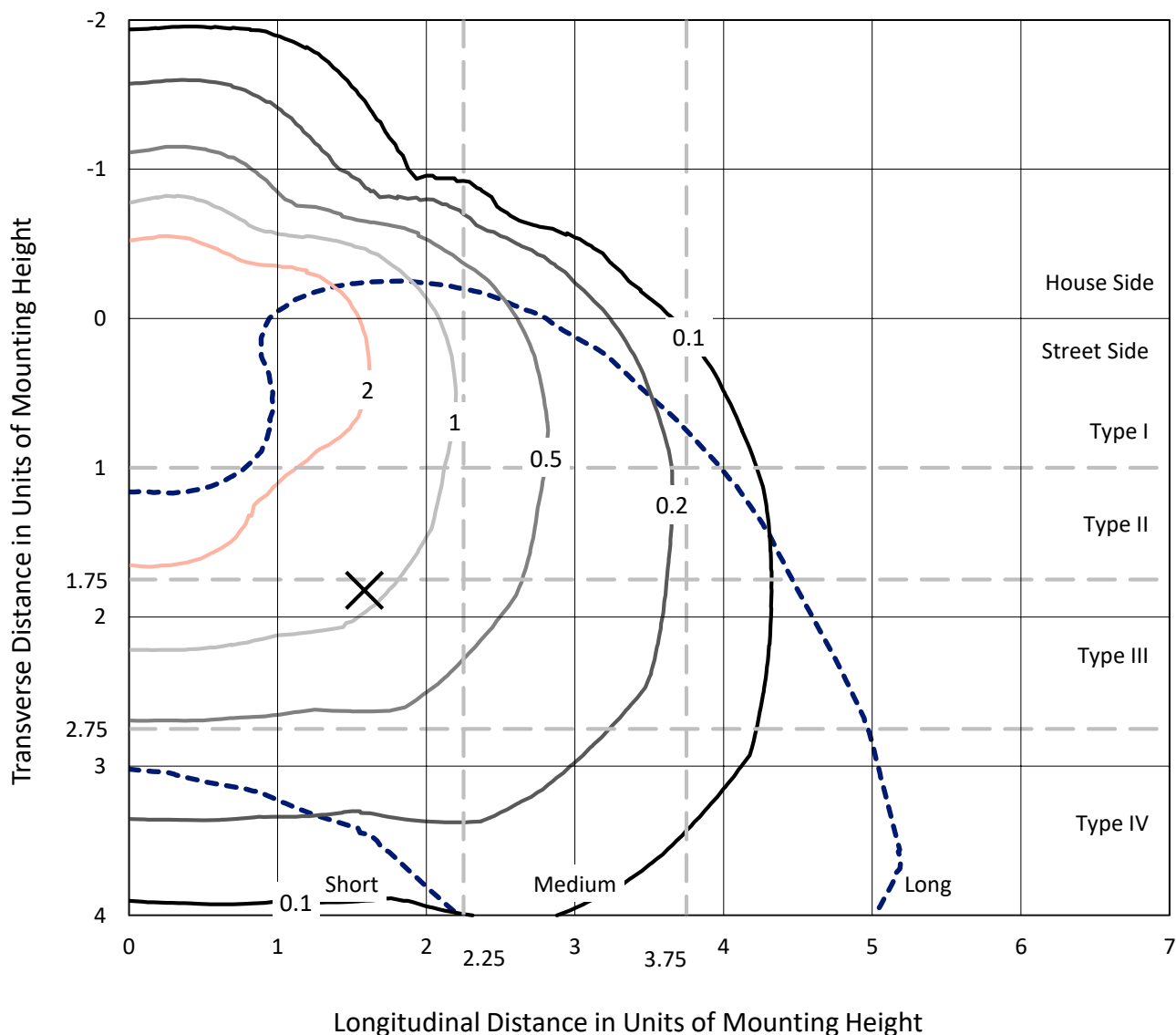
Input Watts (W): 162.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

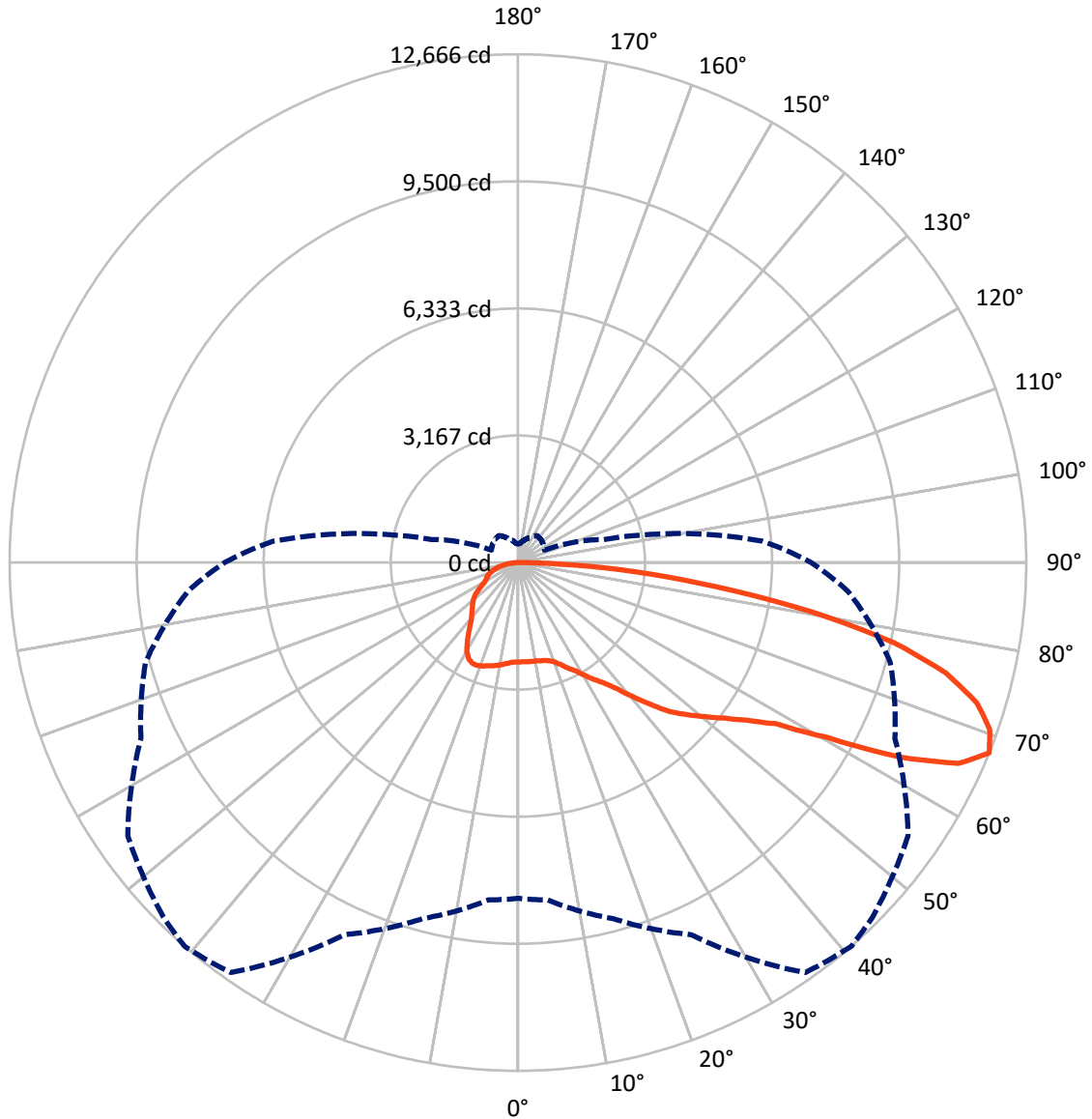
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 41-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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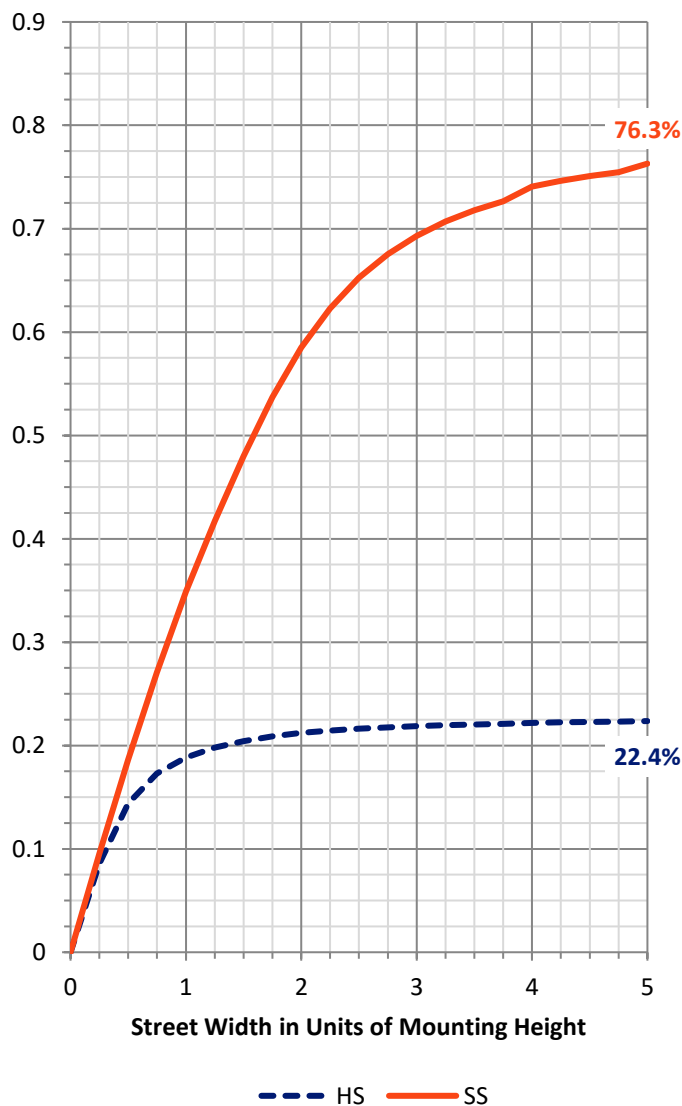
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5251.6	0.0	5251.6
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	17955.4	0.0	17955.4
	% Fixture	77.4	0.0	77.4
Total	Lumens	23207.0	0.0	23207.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	239.4	1.0
10°-20°	742.6	3.2
20°-30°	1327.9	5.7
30°-40°	2082.2	9.0
40°-50°	3228.9	13.9
50°-60°	4551.9	19.6
60°-70°	5802.6	25.0
70°-80°	4342.3	18.7
80°-90°	889.3	3.8
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°	23207.0	100.0
0°-180°	23207.0	100.0

Coefficient of Utilization



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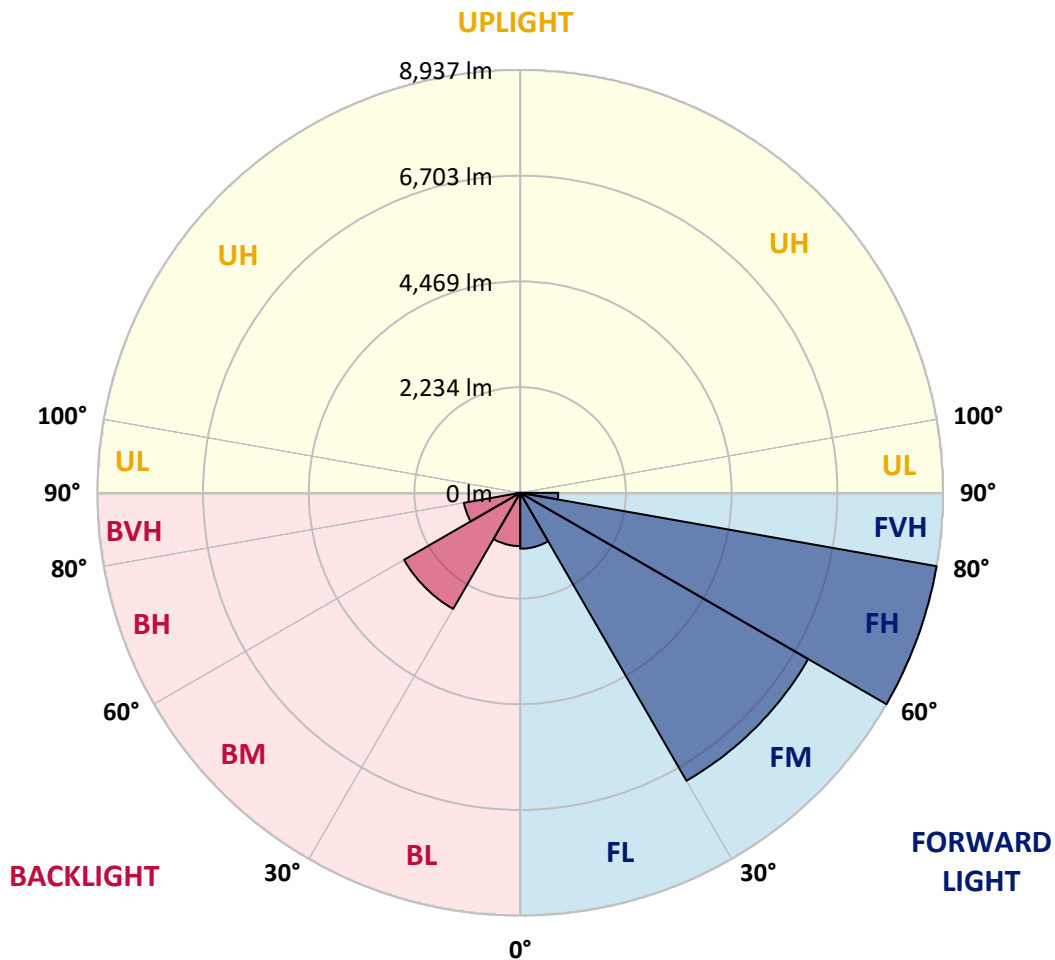
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1182.4	5.1			
FM (30°-60°)	7029.2	30.3			
FH (60°-80°)	8937.5	38.5			G4/12000
FVH (80°-90°)	806.3	3.5			G5
BL (0°-30°)	1127.5	4.9	B3/2500		
BM (30°-60°)	2833.7	12.2	B3/5000		
BH (60°-80°)	1207.4	5.2	B3/2500		G3/2500
BVH (80°-90°)	83.1	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	2477.7	2477.7	2477.7	2477.7	2477.7	2477.7	2477.7	2477.7	2477.7	2477.7	2477.7
2.5°	2447.3	2475.6	2471.4	2466.2	2474.6	2475.6	2451.5	2460.9	2466.2	2474.6	2488.3
5°	2453.6	2481.9	2479.8	2470.4	2476.7	2479.8	2457.8	2474.6	2474.6	2477.7	2493.5
7.5°	2439.9	2467.2	2467.2	2464.1	2477.7	2490.4	2470.4	2485.1	2493.5	2501.9	2512.4
10°	2427.3	2450.4	2458.8	2456.7	2488.3	2491.4	2477.7	2513.5	2527.1	2535.5	2548.1
12.5°	2413.7	2442.0	2453.6	2465.1	2498.8	2510.3	2503.0	2539.7	2568.1	2582.8	2596.4
15°	2407.4	2438.9	2457.8	2474.6	2511.4	2532.4	2532.4	2588.0	2621.6	2640.5	2664.7
17.5°	2451.5	2484.0	2498.8	2512.4	2546.0	2574.4	2572.3	2637.4	2686.8	2716.2	2760.3
20°	2560.7	2599.6	2608.0	2613.2	2634.2	2644.8	2641.6	2712.0	2780.2	2835.9	2885.3
22.5°	2750.8	2773.9	2778.1	2757.1	2762.4	2770.8	2765.5	2804.4	2882.1	2947.2	3035.5
25°	2906.3	2943.0	2932.5	2902.1	2906.3	2917.8	2902.1	2962.0	3017.6	3102.7	3192.0
27.5°	3070.1	3097.4	3085.9	3067.0	3062.8	3054.4	3051.2	3127.9	3209.8	3277.1	3409.4
30°	3269.7	3284.4	3250.8	3242.4	3249.7	3255.0	3235.0	3332.7	3407.3	3503.9	3682.5
32.5°	3605.8	3619.5	3571.1	3442.0	3445.1	3469.3	3452.5	3575.4	3716.1	3833.7	4015.4
35°	4034.3	4034.3	3996.5	3814.8	3677.2	3678.3	3682.5	3855.8	4117.3	4381.0	4567.9
37.5°	4468.1	4482.8	4411.4	4245.5	4071.1	3978.7	3901.0	4123.6	4466.0	5054.2	5332.6
40°	4919.8	4942.9	4835.8	4683.5	4482.8	4377.8	4287.5	4423.0	4885.1	5721.2	5941.8
42.5°	5314.7	5347.3	5237.0	5076.3	4936.6	4817.9	4681.4	4736.0	5346.2	6354.5	6479.5
45°	5682.3	5700.2	5606.7	5474.4	5358.8	5293.7	5198.1	5261.1	5873.5	6974.2	6951.1
47.5°	5953.3	5979.6	5894.5	5823.1	5704.4	5665.5	5664.5	5837.8	6466.9	7467.9	7360.8
50°	6393.4	6373.5	6182.3	6095.1	6022.6	6035.2	6065.7	6365.0	7164.4	7943.7	7705.3
52.5°	7131.8	7095.0	6670.7	6489.0	6399.7	6440.7	6456.4	6843.0	7868.1	8354.4	7989.9
55°	8086.6	7968.9	7660.1	7172.8	6892.3	6931.2	6913.3	7356.6	8431.1	8746.2	8201.0
57.5°	8717.8	8828.1	8680.0	8401.7	7705.3	7578.2	7536.2	7864.9	8952.0	9121.1	8419.5
60°	9266.1	9448.8	9684.1	9505.6	9317.5	8841.7	8450.0	8442.6	9411.0	9371.1	8507.7
62.5°	9844.8	9941.4	10303.8	10414.1	10762.8	10675.6	10150.5	9173.7	9870.0	9553.9	8559.2
65°	9259.8	9389.0	10048.6	10650.4	11941.3	12067.3	11896.1	10532.8	10188.3	9647.4	8485.7
67.5°	8369.1	8440.5	9187.3	10231.3	12474.9	12666.0	12493.8	11866.7	10364.7	9606.4	8258.8
70°	7227.4	7311.4	8024.6	9448.8	12447.6	12472.8	12405.5	11989.6	10294.4	9414.2	7687.4
72.5°	5859.8	5965.9	6593.0	8071.8	11851.0	11960.2	11854.1	11745.9	10096.9	8876.4	6703.3
75°	4433.5	4574.2	5134.1	6435.4	10472.9	11023.3	11037.0	11371.0	9330.2	7609.7	4865.2
77.5°	3023.9	3158.4	3688.8	4903.0	8693.6	9572.8	9801.8	10167.3	7795.6	5623.5	2654.2
80°	1702.6	1690.0	2363.3	3502.9	6630.8	7402.8	7690.6	7675.9	5474.4	2887.4	540.9
82.5°	786.7	788.8	1208.9	2236.2	4489.1	4998.6	5115.1	4452.4	1921.1	489.5	172.3
85°	391.8	396.0	581.9	1121.8	2534.5	2928.3	2783.4	1852.8	411.7	142.8	102.9
87.5°	155.5	149.1	230.0	461.1	914.8	969.5	846.6	370.8	74.6	50.4	34.7
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°	2477.7	2477.7	2477.7	2477.7	2477.7	2477.7	2477.7	2477.7	2477.7	2477.7	2477.7
2.5°	2485.1	2487.2	2496.7	2477.7	2483.0	2478.8	2475.6	2492.5	2491.4	2494.6	2489.3
5°	2492.5	2497.7	2507.2	2498.8	2507.2	2503.0	2506.1	2529.2	2532.4	2531.3	2531.3
7.5°	2512.4	2517.7	2535.5	2525.0	2543.9	2538.7	2539.7	2561.8	2566.0	2559.7	2557.6
10°	2554.4	2558.6	2583.8	2581.7	2589.1	2584.9	2580.7	2590.1	2588.0	2578.6	2574.4
12.5°	2602.7	2614.3	2642.7	2643.7	2653.2	2632.1	2610.1	2606.9	2600.6	2585.9	2582.8
15°	2675.2	2688.9	2731.9	2721.4	2715.1	2670.0	2633.2	2603.8	2578.6	2566.0	2554.4
17.5°	2779.2	2802.3	2862.2	2829.6	2783.4	2717.2	2653.2	2589.1	2535.5	2490.4	2472.5
20°	2911.5	2937.8	2988.2	2945.1	2874.8	2776.0	2672.1	2556.5	2439.9	2340.2	2325.4
22.5°	3069.1	3111.1	3147.9	3049.1	2945.1	2820.2	2672.1	2506.1	2312.8	2163.7	2126.9
25°	3252.9	3285.5	3273.9	3135.3	2985.1	2827.5	2642.7	2416.8	2143.7	1970.4	1941.0
27.5°	3452.5	3467.2	3377.9	3176.2	2989.3	2784.4	2559.7	2258.2	1946.3	1809.7	1781.4
30°	3698.2	3654.1	3484.0	3201.4	2947.2	2688.9	2411.6	2026.1	1785.6	1665.8	1633.3
32.5°	3962.9	3882.0	3559.6	3183.6	2854.8	2529.2	2182.6	1862.2	1678.4	1532.4	1505.1
35°	4467.1	4237.1	3669.9	3130.0	2694.1	2316.0	1961.0	1736.2	1565.0	1408.5	1383.3
37.5°	5147.7	4747.5	3824.3	3055.4	2504.0	2109.1	1796.1	1601.8	1453.7	1291.9	1252.0
40°	5677.1	5263.2	4072.2	2975.6	2328.6	1912.7	1676.3	1531.4	1380.1	1207.9	1173.2
42.5°	6181.2	5734.8	4376.8	2886.3	2147.9	1776.1	1623.8	1515.6	1360.2	1184.8	1152.2
45°	6626.6	6116.1	4639.3	2797.1	1944.2	1650.1	1585.0	1485.2	1331.8	1155.4	1123.9
47.5°	6986.8	6443.8	4867.3	2700.4	1759.3	1554.5	1534.5	1429.5	1277.2	1095.5	1057.7
50°	7312.5	6721.1	5024.8	2597.5	1578.7	1476.8	1451.6	1327.6	1169.0	1008.3	984.2
52.5°	7513.1	6909.1	5119.3	2614.3	1407.5	1389.6	1348.6	1221.5	1074.5	936.9	905.4
55°	7723.1	7086.6	5118.3	2519.8	1264.6	1258.3	1219.4	1121.8	1006.2	890.7	871.8
57.5°	7809.3	7102.4	5022.7	2075.5	1138.6	1098.7	1090.3	1038.8	938.0	828.7	807.7
60°	7867.0	7033.1	4842.1	1416.9	980.0	951.6	992.6	957.9	866.5	752.0	731.0
62.5°	7810.3	6957.4	4368.4	1023.0	859.2	874.9	913.8	876.0	780.4	676.4	658.6
65°	7674.8	6668.6	3449.3	797.2	805.6	840.3	870.7	807.7	632.3	529.4	518.9
67.5°	7305.1	6119.3	2219.4	731.0	775.1	810.9	821.4	683.8	572.4	473.7	462.1
70°	6526.8	4912.4	855.0	689.0	744.7	760.4	717.4	627.1	526.2	441.1	430.6
72.5°	5105.7	3225.6	493.7	630.2	679.6	664.9	665.9	563.0	474.8	393.9	385.5
75°	3173.1	1168.0	439.0	560.9	575.6	602.9	568.2	488.4	408.6	360.3	349.8
77.5°	1049.3	331.9	406.5	483.2	515.7	495.8	475.8	417.0	349.8	312.0	306.7
80°	254.2	248.9	364.5	378.1	404.4	370.8	368.7	346.6	295.1	273.1	267.8
82.5°	156.5	178.6	289.9	235.3	269.9	273.1	310.9	285.7	215.3	223.7	216.4
85°	96.6	137.6	152.3	113.4	114.5	153.3	185.9	172.3	129.2	121.8	120.8
87.5°	32.6	28.4	32.6	24.2	32.6	55.7	84.0	79.8	53.6	36.8	34.7
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)