

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: P510208

Luminaire Tested: **VERD-M-CA4-230-722-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510208
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-CA4-230-722-U-T4-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 2200K, 1050mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23753 lumens
Efficiency: N/A
Efficacy: 101.8 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

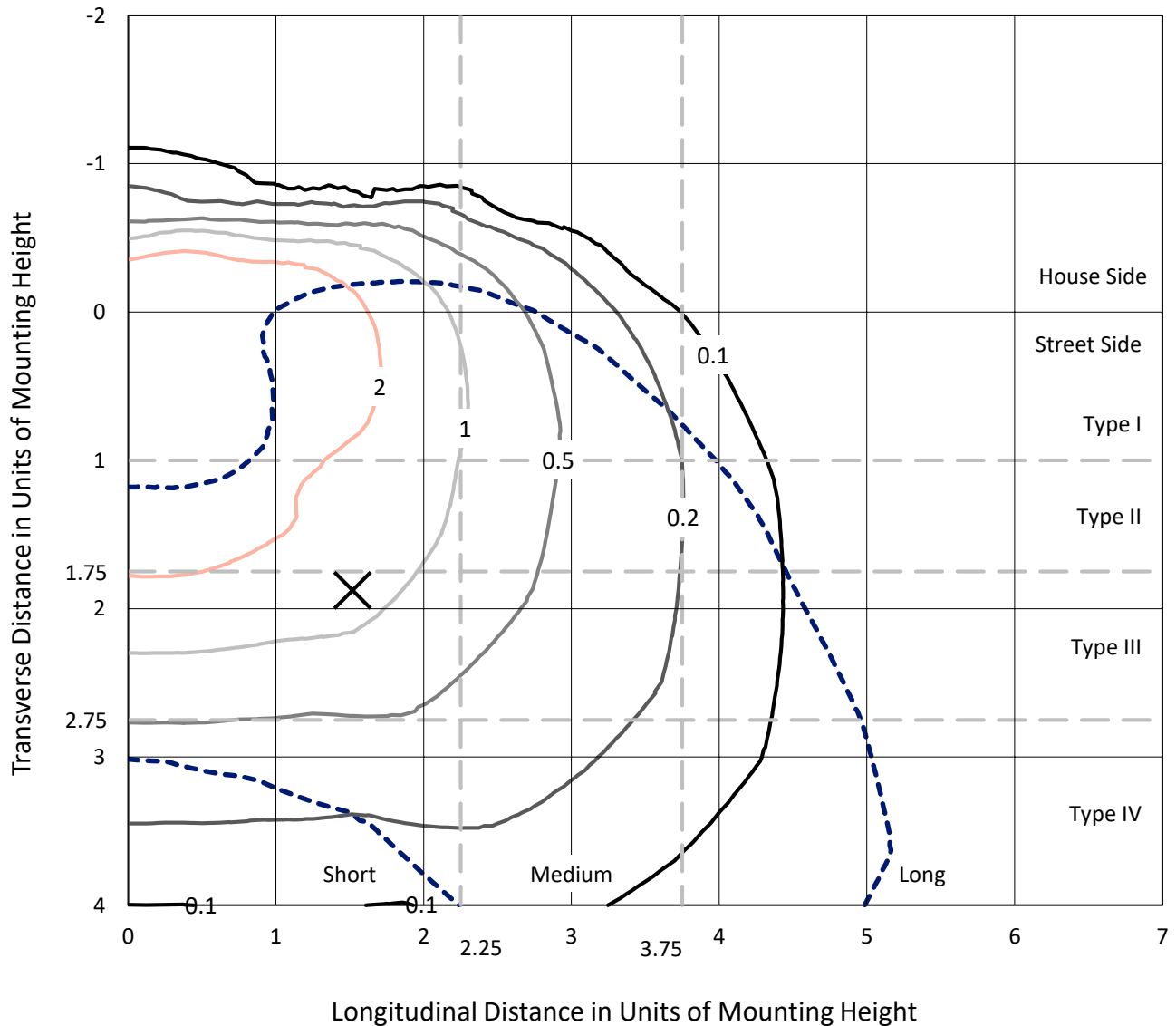
Input Watts (W): 233.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510208
 CATALOG NUMBER: VERD-M-CA4-230-722-U-T4-HSS

Iso-Footcandle Lines of Horizontal Illumination

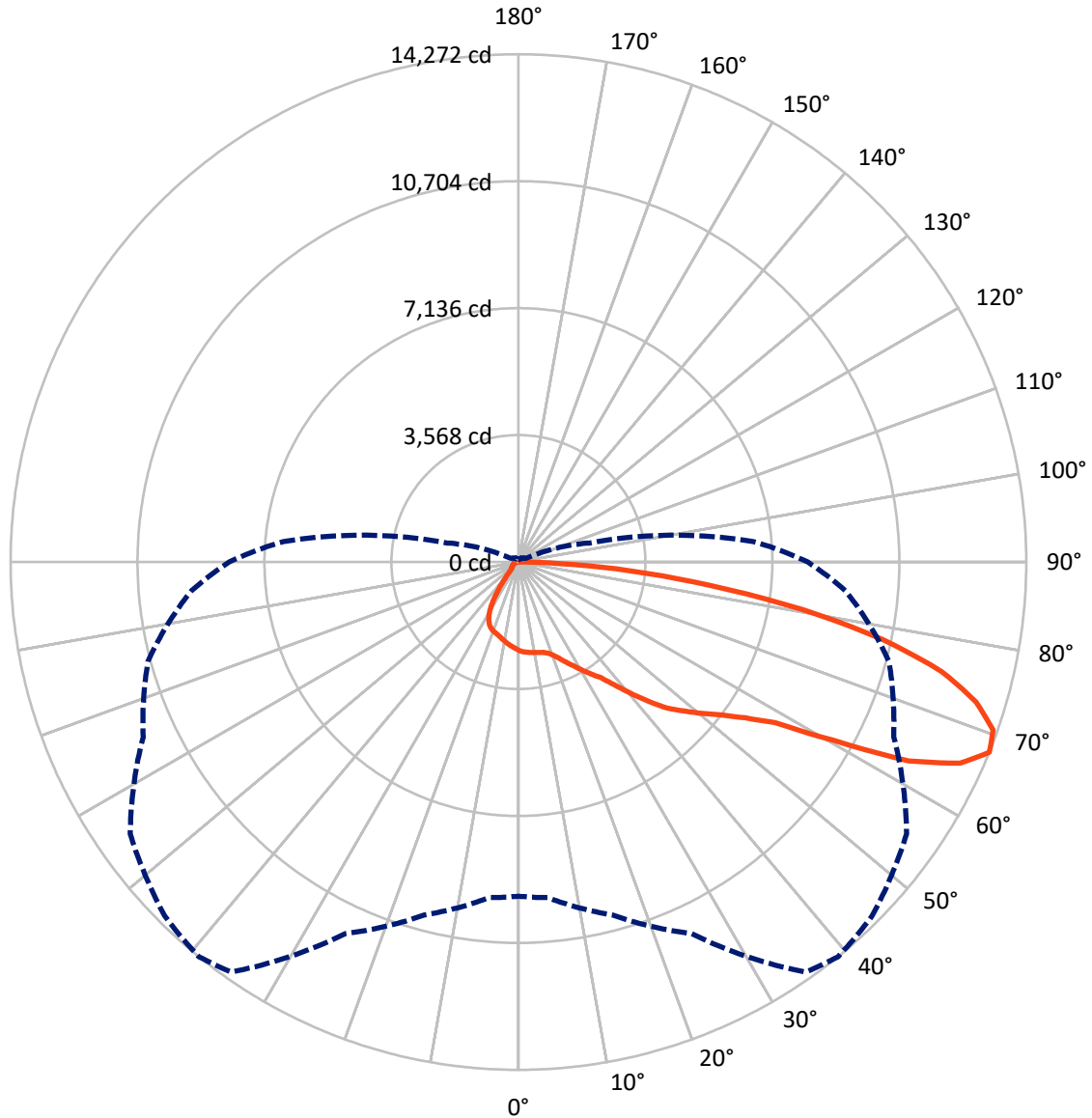
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type IV - Short - N/A

REPORT NUMBER: P510208
CATALOG NUMBER: VERD-M-CA4-230-722-U-T4-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P510208
 CATALOG NUMBER: VERD-M-CA4-230-722-U-T4-HSS

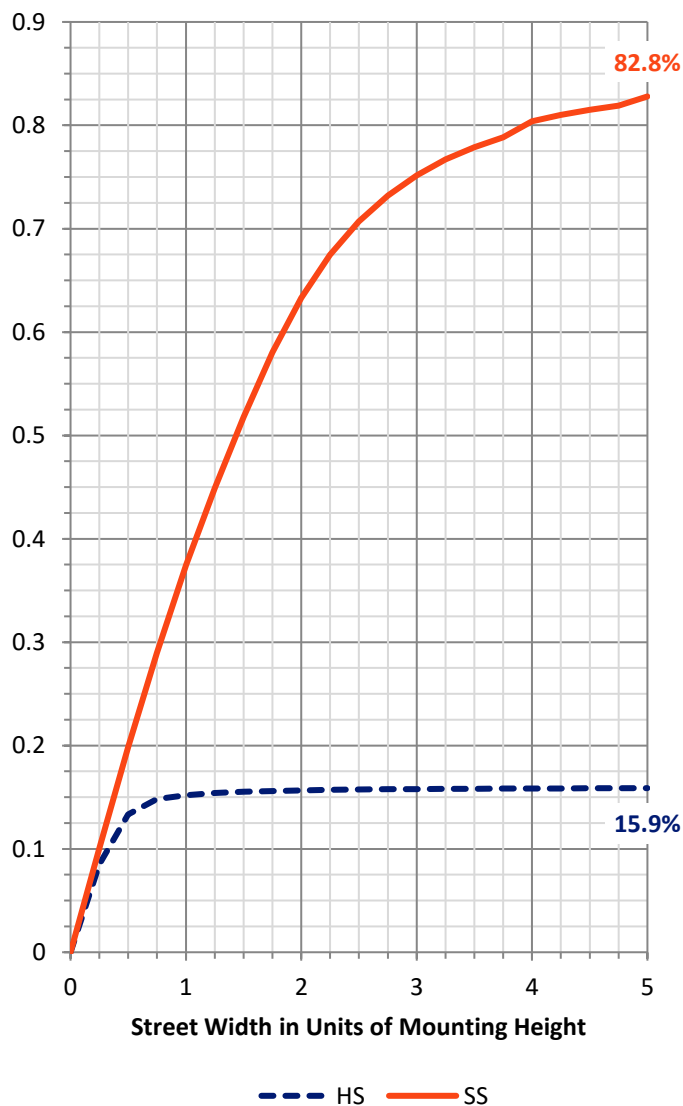
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3814.1	0.0	3814.1
	% Fixture	16.1	0.0	16.1
Street Side	Lumens	19938.9	0.0	19938.9
	% Fixture	83.9	0.0	83.9
Total	Lumens	23753.0	0.0	23753.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.8	1.0
10°-20°	698.8	2.9
20°-30°	1238.1	5.2
30°-40°	1983.1	8.3
40°-50°	3181.3	13.4
50°-60°	4650.2	19.6
60°-70°	6196.6	26.1
70°-80°	4650.0	19.6
80°-90°	920.0	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°	23753.0	100.0
0°-180°	23753.0	100.0

Coefficient of Utilization



REPORT NUMBER: P510208

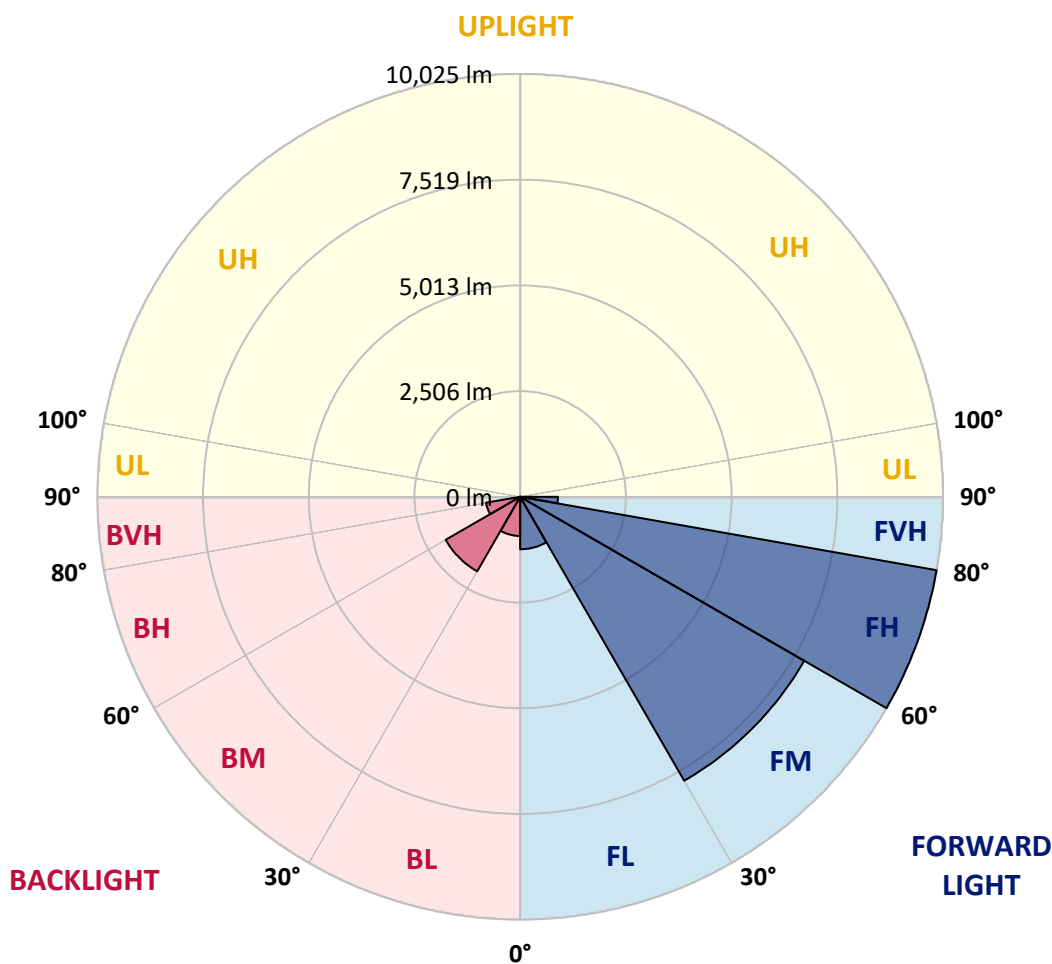
CATALOG NUMBER: VERD-M-CA4-230-722-U-T4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1243.0	5.2			
FM (30°-60°)	7774.6	32.7			
FH (60°-80°)	10025.3	42.2			G4/12000
FVH (80°-90°)	895.9	3.8			G5
BL (0°-30°)	928.8	3.9	B2/1000		
BM (30°-60°)	2040.0	8.6	B2/2500		
BH (60°-80°)	821.2	3.5	B2/1000		G2/1000
BVH (80°-90°)	24.1	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





REPORT NUMBER: P510208

CATALOG NUMBER: VERD-M-CA4-230-722-U-T4-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	2487.2	2487.2	2487.2	2487.2	2487.2	2487.2	2487.2	2487.2	2487.2	2487.2	2487.2
2.5°	2489.6	2523.0	2523.0	2513.4	2519.4	2524.2	2488.4	2497.9	2494.4	2493.2	2500.3
5°	2508.7	2545.7	2543.3	2531.4	2536.1	2545.7	2512.3	2526.6	2521.8	2509.9	2512.3
7.5°	2508.7	2539.7	2546.9	2533.7	2556.4	2568.3	2532.5	2545.7	2551.6	2543.3	2534.9
10°	2499.1	2526.6	2536.1	2533.7	2563.6	2582.7	2548.1	2585.1	2589.8	2589.8	2576.7
12.5°	2495.5	2526.6	2539.7	2550.4	2585.1	2605.3	2585.1	2620.9	2644.7	2643.5	2635.2
15°	2497.9	2532.5	2552.8	2570.7	2607.7	2632.8	2624.4	2679.3	2708.0	2716.3	2716.3
17.5°	2557.6	2599.4	2608.9	2628.0	2653.1	2691.3	2680.5	2750.9	2796.3	2810.6	2830.9
20°	2724.7	2756.9	2768.9	2759.3	2770.0	2793.9	2772.4	2840.5	2908.5	2946.7	2980.1
22.5°	2938.3	2962.2	2951.5	2941.9	2935.9	2941.9	2915.6	2961.0	3037.4	3092.3	3149.6
25°	3100.6	3153.1	3144.8	3118.5	3110.2	3117.3	3083.9	3140.0	3210.4	3267.7	3353.7
27.5°	3297.6	3329.8	3307.1	3297.6	3303.5	3302.3	3282.0	3335.8	3400.2	3471.8	3598.3
30°	3511.2	3538.6	3516.0	3506.4	3517.2	3524.3	3501.6	3595.9	3664.0	3741.5	3905.0
32.5°	3862.1	3927.7	3865.7	3741.5	3743.9	3754.7	3757.0	3883.6	4007.7	4068.5	4284.6
35°	4362.1	4414.6	4332.3	4181.9	3994.5	3987.4	4006.5	4195.0	4444.5	4721.4	4974.4
37.5°	4828.8	4905.2	4831.2	4655.7	4427.8	4372.9	4273.8	4498.2	4890.8	5486.4	5801.5
40°	5388.5	5445.8	5299.0	5146.2	4918.3	4840.7	4682.0	4825.2	5363.5	6284.8	6502.0
42.5°	5838.5	5873.1	5751.3	5591.4	5393.3	5334.8	5171.3	5184.4	5868.3	6984.2	7123.8
45°	6255.0	6292.0	6191.7	6055.7	5930.4	5859.9	5740.6	5805.0	6460.3	7721.8	7637.0
47.5°	6571.2	6608.2	6528.3	6431.6	6301.5	6253.8	6256.2	6487.7	7184.7	8311.3	8097.7
50°	7089.2	7074.9	6866.0	6761.0	6659.6	6684.6	6710.9	7040.3	7915.1	8817.4	8523.8
52.5°	7992.7	7922.3	7491.4	7216.9	7091.6	7134.6	7177.5	7615.5	8744.6	9279.2	8850.8
55°	9014.3	8942.7	8576.3	7989.1	7657.3	7726.5	7689.5	8184.8	9441.5	9723.2	9120.5
57.5°	9773.3	9891.5	9751.8	9432.0	8601.3	8510.6	8428.3	8760.1	10004.9	10167.2	9379.5
60°	10433.3	10598.0	10847.5	10760.3	10407.1	10170.8	9415.3	9432.0	10546.7	10475.1	9482.1
62.5°	11077.8	11174.5	11601.7	11696.0	12134.0	12303.5	11536.1	10300.8	11070.6	10688.7	9551.3
65°	10433.3	10557.4	11301.0	11987.2	13402.7	13629.4	13359.7	11873.8	11456.1	10815.2	9471.4
67.5°	9391.4	9466.6	10269.8	11518.2	14066.2	14271.5	14061.5	13317.9	11636.3	10777.0	9223.1
70°	8029.7	8147.8	8936.7	10610.0	14042.4	14152.2	13969.6	13492.2	11568.3	10557.4	8596.6
72.5°	6640.5	6707.3	7375.6	9045.3	13356.1	13448.0	13351.4	13224.8	11339.2	9945.2	7392.4
75°	4991.1	5005.4	5690.5	7142.9	11809.4	12289.2	12407.3	12764.2	10462.0	8525.0	5467.3
77.5°	3346.5	3488.5	4146.1	5458.9	9694.6	10462.0	11021.7	11281.9	8741.0	6362.4	2907.3
80°	1796.2	1832.0	2540.9	3874.0	7367.3	8101.3	8632.4	8637.1	6113.0	3152.0	649.2
82.5°	831.8	797.2	1279.4	2451.4	5103.3	5430.3	5785.9	4846.7	2447.8	538.3	165.9
85°	368.8	389.1	578.8	1194.7	2832.1	3160.3	3115.0	2145.9	429.6	145.6	101.4
87.5°	137.2	144.4	224.4	482.2	1010.9	1102.8	991.8	412.9	56.1	51.3	31.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P510208

CATALOG NUMBER: VERD-M-CA4-230-722-U-T4-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2487.2	2487.2	2487.2	2487.2	2487.2	2487.2	2487.2	2487.2	2487.2	2487.2	2487.2
2.5°	2492.0	2492.0	2489.6	2457.4	2450.2	2434.7	2421.6	2431.1	2420.4	2427.5	2420.4
5°	2502.7	2496.7	2482.4	2444.2	2426.3	2391.7	2365.5	2371.4	2357.1	2357.1	2355.9
7.5°	2527.8	2515.8	2490.8	2429.9	2396.5	2346.4	2305.8	2292.7	2278.3	2261.6	2259.2
10°	2568.3	2551.6	2518.2	2434.7	2370.2	2303.4	2233.0	2205.5	2169.7	2143.5	2138.7
12.5°	2624.4	2599.4	2554.0	2452.6	2367.8	2261.6	2167.3	2113.6	2070.7	2032.5	2024.1
15°	2705.6	2680.5	2626.8	2488.4	2369.0	2222.2	2098.1	2008.6	1934.6	1898.8	1900.0
17.5°	2823.8	2805.8	2723.5	2563.6	2391.7	2202.0	2040.8	1898.8	1784.2	1724.6	1716.2
20°	2975.3	2963.4	2863.1	2662.6	2444.2	2205.5	1978.8	1781.9	1613.6	1483.5	1454.8
22.5°	3152.0	3134.1	3011.1	2748.6	2484.8	2196.0	1910.7	1653.0	1399.9	1230.5	1197.1
25°	3348.9	3339.3	3147.2	2823.8	2489.6	2155.4	1812.9	1485.9	1168.4	987.0	958.4
27.5°	3600.7	3544.6	3270.1	2864.3	2478.8	2075.4	1673.2	1256.7	928.5	803.2	772.2
30°	3876.4	3763.0	3389.5	2895.4	2426.3	1947.7	1473.9	991.8	691.0	580.0	564.5
32.5°	4181.9	4012.4	3501.6	2893.0	2333.2	1750.8	1215.0	688.6	466.6	421.3	405.8
35°	4734.5	4446.9	3636.5	2853.6	2176.9	1516.9	858.1	448.7	346.1	318.7	315.1
37.5°	5501.9	5013.8	3817.9	2778.4	1975.2	1244.8	559.7	306.7	296.0	297.2	296.0
40°	6130.9	5646.3	4069.7	2665.0	1721.0	889.1	335.4	273.3	279.3	282.9	284.0
42.5°	6746.7	6161.9	4381.2	2523.0	1454.8	577.6	272.1	261.4	256.6	262.6	265.0
45°	7242.0	6611.8	4674.8	2357.1	1143.3	341.3	263.8	242.3	233.9	236.3	239.9
47.5°	7638.2	6969.9	4851.5	2163.8	835.4	257.8	256.6	225.6	213.6	211.2	210.1
50°	8011.8	7276.6	4964.8	1929.8	532.3	248.2	237.5	206.5	192.1	189.8	189.8
52.5°	8266.0	7477.1	5003.0	1653.0	317.5	242.3	224.4	191.0	171.9	175.4	177.8
55°	8514.2	7680.0	4924.3	1292.5	243.5	226.8	210.1	171.9	156.3	170.7	175.4
57.5°	8632.4	7709.8	4746.4	898.7	236.3	205.3	189.8	154.0	142.0	150.4	150.4
60°	8727.9	7689.5	4498.2	569.3	230.3	191.0	173.1	139.6	125.3	120.5	117.0
62.5°	8664.6	7608.4	3999.3	371.2	213.6	174.2	157.5	128.9	108.6	95.5	94.3
65°	8529.7	7321.9	3192.5	292.4	198.1	165.9	143.2	115.8	95.5	80.0	78.8
67.5°	8132.3	6625.0	2065.9	242.3	189.8	159.9	132.5	107.4	84.7	69.2	68.0
70°	7179.9	5351.5	633.7	217.2	196.9	154.0	130.1	97.9	75.2	60.9	58.5
72.5°	5677.3	3575.6	235.1	180.2	169.5	148.0	126.5	88.3	64.4	51.3	48.9
75°	3656.8	1168.4	199.3	139.6	144.4	140.8	117.0	81.2	54.9	41.8	40.6
77.5°	1035.9	244.7	181.4	102.6	127.7	136.1	102.6	68.0	48.9	35.8	34.6
80°	217.2	174.2	165.9	72.8	95.5	88.3	69.2	52.5	46.5	31.0	31.0
82.5°	142.0	138.4	142.0	50.1	63.3	64.4	54.9	45.4	40.6	28.6	28.6
85°	100.3	126.5	68.0	35.8	29.8	27.4	32.2	39.4	35.8	23.9	23.9
87.5°	34.6	20.3	14.3	14.3	13.1	13.1	15.5	17.9	19.1	19.1	17.9
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)