

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: P510209

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

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510209
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-CA4-230-722-U-T4
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 2200K, 1050mA LEDS AND TYPE IV OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26370 lumens
Efficiency: N/A
Efficacy: 113.0 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

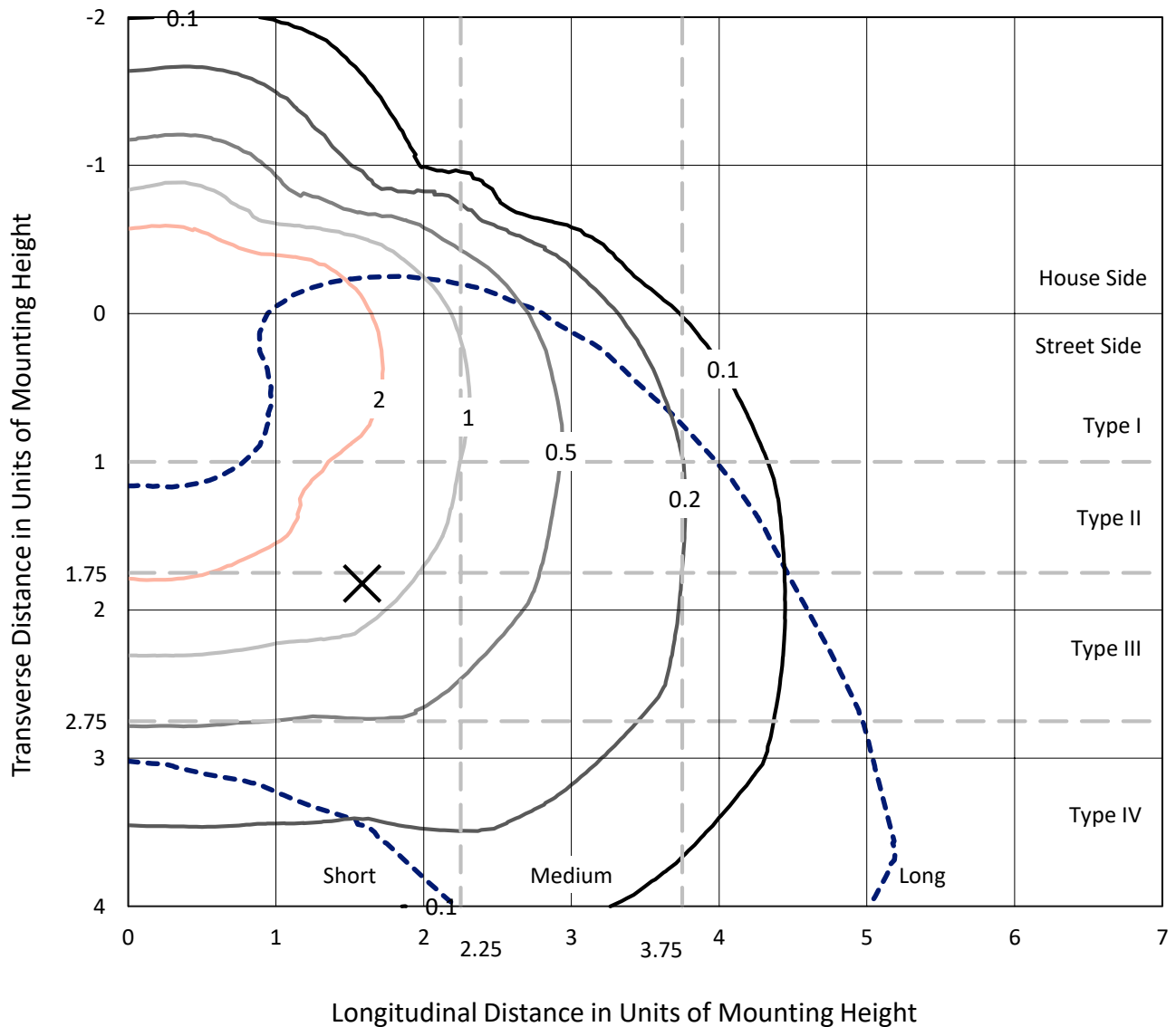
Input Watts (W): 233.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510209
 CATALOG NUMBER: VERD-M-CA4-230-722-U-T4

Iso-Footcandle Lines of Horizontal Illumination

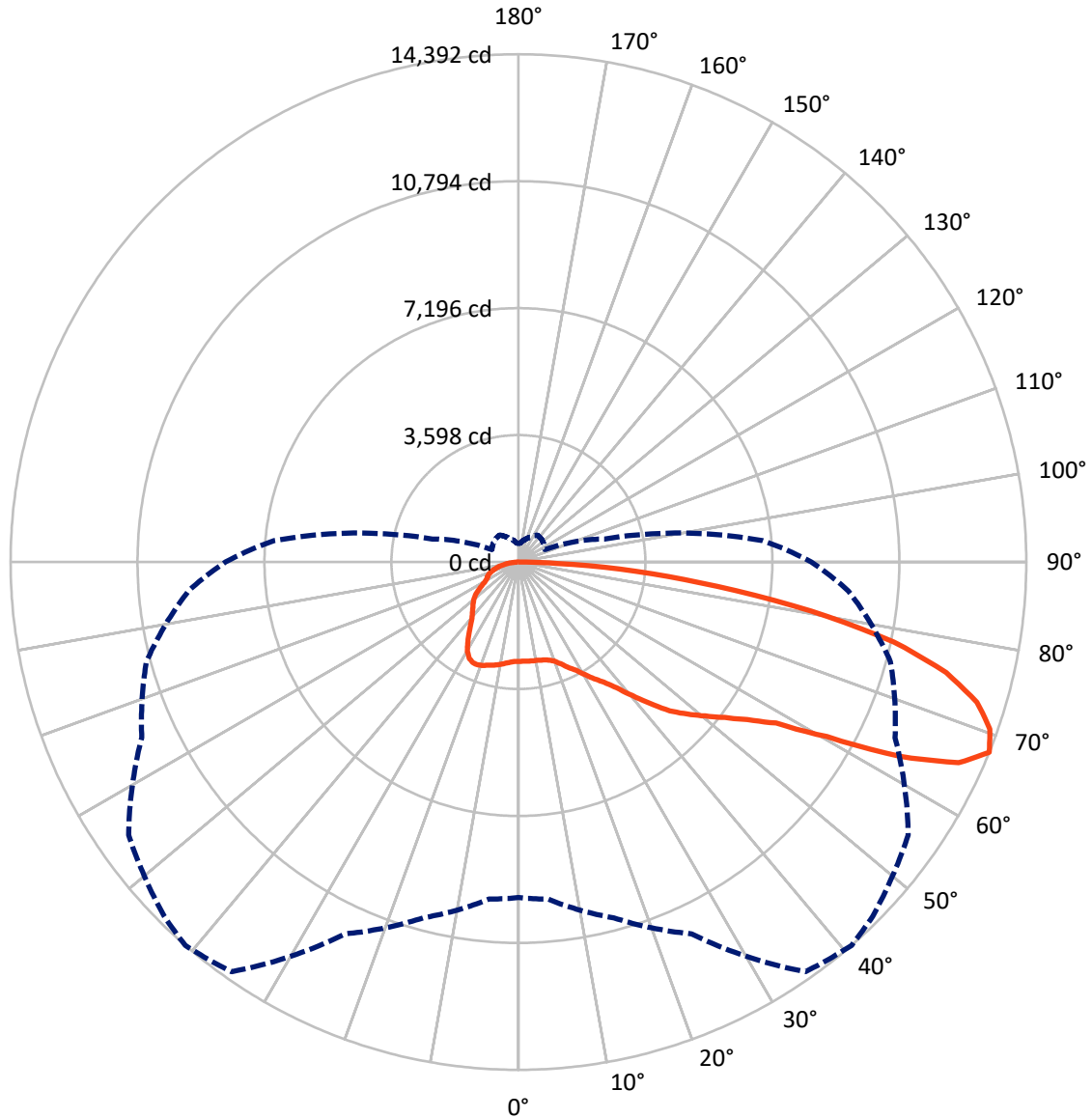
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc
 Type IV - Short - N/A

REPORT NUMBER: P510209
CATALOG NUMBER: VERD-M-CA4-230-722-U-T4

Luminous Intensity Polar Plot



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

REPORT NUMBER: P510209

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

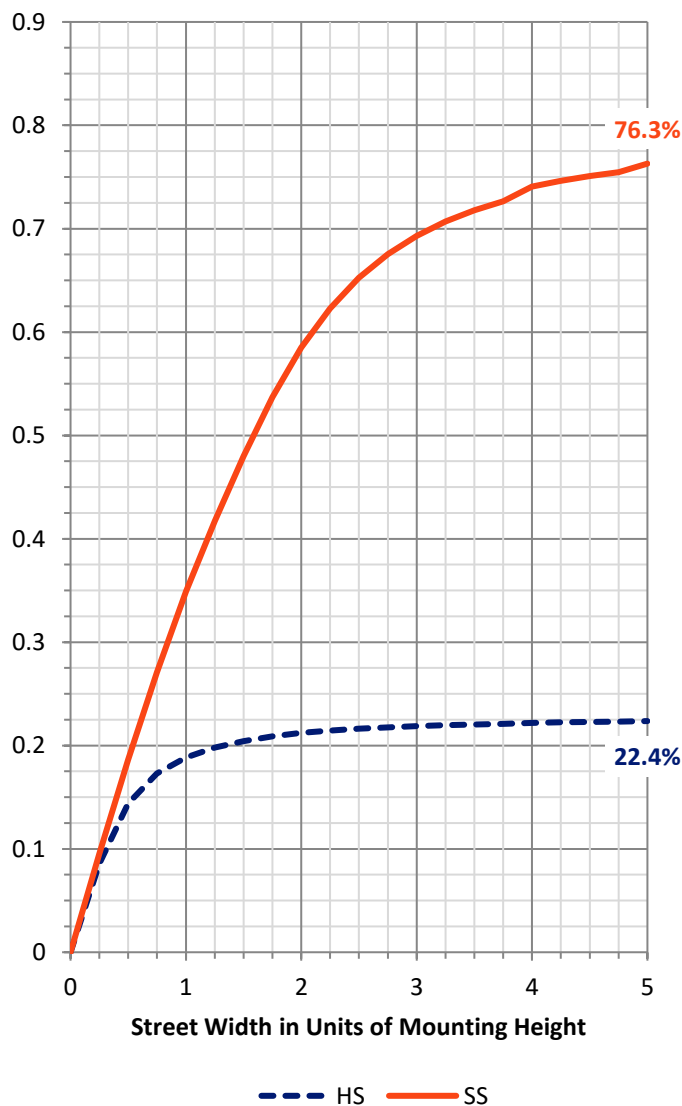
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5967.4	0.0	5967.4
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	20402.6	0.0	20402.6
	% Fixture	77.4	0.0	77.4
Total	Lumens	26370.0	0.0	26370.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.1	1.0
10°-20°	843.8	3.2
20°-30°	1508.9	5.7
30°-40°	2366.0	9.0
40°-50°	3668.9	13.9
50°-60°	5172.3	19.6
60°-70°	6593.4	25.0
70°-80°	4934.1	18.7
80°-90°	1010.5	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°	26370.0	100.0
0°-180°	26370.0	100.0

Coefficient of Utilization



REPORT NUMBER: P510209

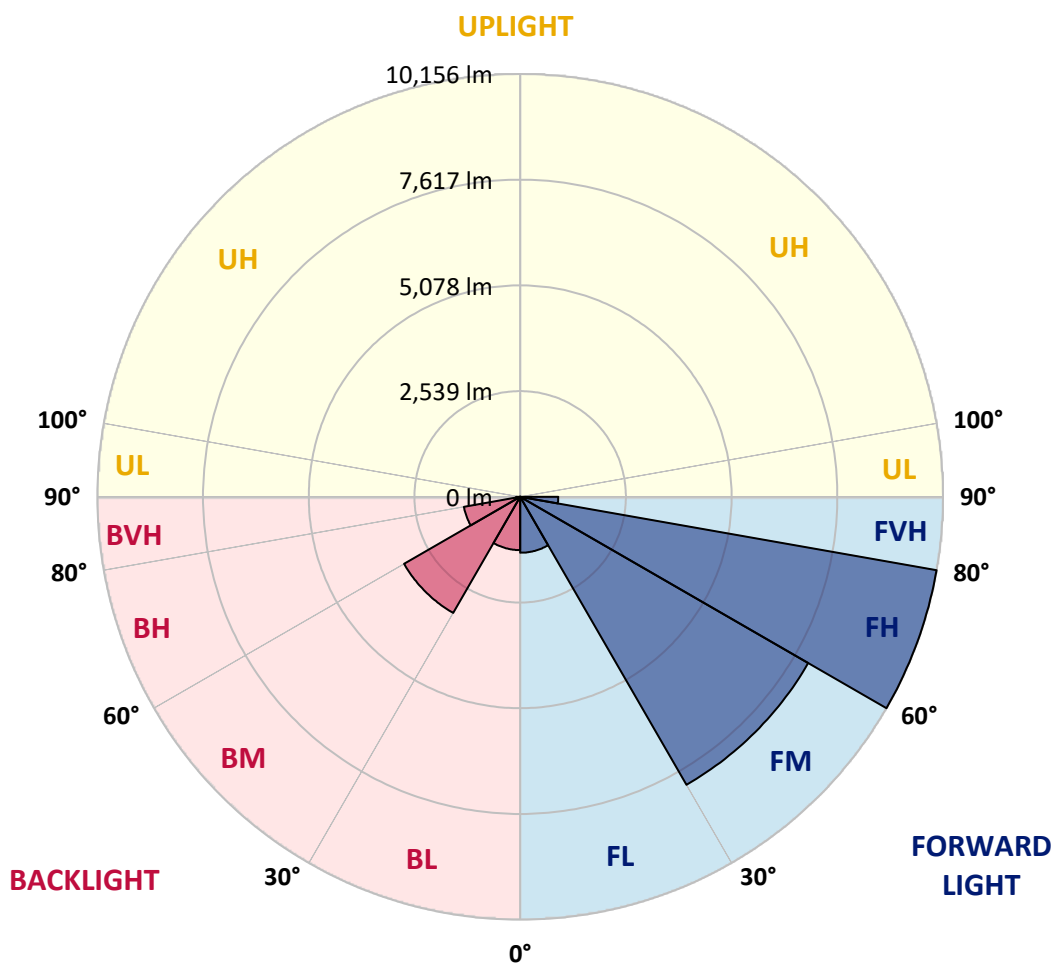
CATALOG NUMBER: VERD-M-CA4-230-722-U-T4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1343.6	5.1			
FM (30°-60°)	7987.3	30.3			
FH (60°-80°)	10155.6	38.5			G4/12000
FVH (80°-90°)	916.1	3.5			G5
BL (0°-30°)	1281.2	4.9	B3/2500		
BM (30°-60°)	3219.9	12.2	B3/5000		
BH (60°-80°)	1371.9	5.2	B3/2500		G3/2500
BVH (80°-90°)	94.4	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





REPORT NUMBER: P510209

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	2815.5	2815.5	2815.5	2815.5	2815.5	2815.5	2815.5	2815.5	2815.5	2815.5	2815.5
2.5°	2780.8	2813.1	2808.3	2802.3	2811.9	2813.1	2785.6	2796.4	2802.3	2811.9	2827.4
5°	2788.0	2820.2	2817.8	2807.1	2814.3	2817.8	2792.8	2811.9	2811.9	2815.5	2833.4
7.5°	2772.5	2803.5	2803.5	2799.9	2815.5	2829.8	2807.1	2823.8	2833.4	2842.9	2854.8
10°	2758.2	2784.4	2794.0	2791.6	2827.4	2831.0	2815.5	2856.0	2871.5	2881.1	2895.4
12.5°	2742.6	2774.9	2788.0	2801.1	2839.3	2852.5	2844.1	2885.9	2918.1	2934.8	2950.3
15°	2735.5	2771.3	2792.8	2811.9	2853.6	2877.5	2877.5	2940.8	2979.0	3000.4	3027.9
17.5°	2785.6	2822.6	2839.3	2854.8	2893.0	2925.3	2922.9	2996.9	3053.0	3086.4	3136.5
20°	2909.7	2953.9	2963.4	2969.4	2993.3	3005.2	3001.6	3081.6	3159.2	3222.4	3278.5
22.5°	3125.8	3152.0	3156.8	3132.9	3138.9	3148.4	3142.5	3186.6	3274.9	3348.9	3449.2
25°	3302.4	3344.2	3332.2	3297.6	3302.4	3315.5	3297.6	3365.7	3428.9	3525.6	3627.0
27.5°	3488.6	3519.6	3506.5	3485.0	3480.2	3470.7	3467.1	3554.2	3647.3	3723.7	3874.1
30°	3715.3	3732.1	3693.9	3684.3	3692.7	3698.6	3676.0	3787.0	3871.7	3981.5	4184.4
32.5°	4097.3	4112.8	4057.9	3911.1	3914.7	3942.1	3923.0	4062.7	4222.6	4356.3	4562.7
35°	4584.2	4584.2	4541.2	4334.8	4178.4	4179.6	4184.4	4381.3	4678.5	4978.1	5190.5
37.5°	5077.1	5093.8	5012.7	4824.1	4626.0	4521.0	4432.6	4685.7	5074.7	5743.1	6059.4
40°	5590.3	5616.6	5494.8	5321.8	5093.8	4974.5	4871.8	5025.8	5550.9	6501.0	6751.6
42.5°	6039.1	6076.1	5950.8	5768.2	5609.4	5474.6	5319.4	5381.5	6074.9	7220.6	7362.7
45°	6456.8	6477.1	6370.9	6220.5	6089.2	6015.2	5906.6	5978.2	6674.0	7924.8	7898.5
47.5°	6764.7	6794.6	6697.9	6616.7	6481.9	6437.7	6436.5	6633.4	7348.3	8485.7	8364.0
50°	7264.8	7242.1	7024.9	6925.8	6843.5	6857.8	6892.4	7232.6	8140.8	9026.4	8755.5
52.5°	8103.8	8062.1	7579.9	7373.4	7272.0	7318.5	7336.4	7775.6	8940.5	9493.1	9078.9
55°	9188.7	9055.0	8704.2	8150.4	7831.7	7875.9	7855.6	8359.2	9580.2	9938.2	9318.8
57.5°	9906.0	10031.3	9863.0	9546.8	8755.5	8611.1	8563.3	8936.9	10172.1	10364.3	9567.0
60°	10529.0	10736.7	11004.0	10801.1	10587.5	10046.8	9601.7	9593.3	10693.7	10648.4	9667.3
62.5°	11186.6	11296.4	11708.2	11833.5	12229.7	12130.7	11533.9	10424.0	11215.3	10856.0	9725.8
65°	10521.8	10668.6	11418.2	12102.0	13568.8	13712.1	13517.5	11968.4	11576.9	10962.2	9642.2
67.5°	9509.8	9590.9	10439.5	11625.8	14175.1	14392.3	14196.6	13484.1	11777.4	10915.7	9384.4
70°	8212.4	8307.9	9118.3	10736.7	14144.1	14172.7	14096.4	13623.7	11697.4	10697.3	8735.2
72.5°	6658.5	6779.0	7491.6	9172.0	13466.2	13590.3	13469.8	13346.8	11473.1	10086.2	7616.9
75°	5037.7	5197.7	5833.8	7312.5	11900.3	12525.7	12541.2	12920.8	10601.8	8646.9	5528.3
77.5°	3436.1	3588.8	4191.6	5571.2	9878.5	10877.5	11137.7	11553.0	8858.1	6390.0	3016.0
80°	1934.7	1920.3	2685.4	3980.3	7534.5	8411.7	8738.8	8722.1	6220.5	3280.9	614.6
82.5°	893.9	896.3	1373.7	2540.9	5101.0	5679.8	5812.3	5059.2	2182.9	556.2	195.7
85°	445.2	449.9	661.2	1274.7	2879.9	3327.5	3162.8	2105.3	467.8	162.3	117.0
87.5°	176.6	169.5	261.4	523.9	1039.5	1101.6	962.0	421.3	84.7	57.3	39.4
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: P510209
 CATALOG NUMBER: VERD-M-CA4-230-722-U-T4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2815.5	2815.5	2815.5	2815.5	2815.5	2815.5	2815.5	2815.5	2815.5	2815.5	2815.5
2.5°	2823.8	2826.2	2836.9	2815.5	2821.4	2816.6	2813.1	2832.2	2831.0	2834.5	2828.6
5°	2832.2	2838.1	2848.9	2839.3	2848.9	2844.1	2847.7	2873.9	2877.5	2876.3	2876.3
7.5°	2854.8	2860.8	2881.1	2869.2	2890.6	2884.7	2885.9	2910.9	2915.7	2908.5	2906.2
10°	2902.6	2907.4	2936.0	2933.6	2942.0	2937.2	2932.4	2943.2	2940.8	2930.0	2925.3
12.5°	2957.5	2970.6	3002.8	3004.0	3014.8	2990.9	2965.8	2962.3	2955.1	2938.4	2934.8
15°	3039.8	3055.3	3104.3	3092.3	3085.2	3033.9	2992.1	2958.7	2930.0	2915.7	2902.6
17.5°	3158.0	3184.2	3252.3	3215.3	3162.8	3087.6	3014.8	2942.0	2881.1	2829.8	2809.5
20°	3308.4	3338.2	3395.5	3346.6	3266.6	3154.4	3036.2	2905.0	2772.5	2659.1	2642.4
22.5°	3487.4	3535.1	3576.9	3464.7	3346.6	3204.5	3036.2	2847.7	2628.1	2458.6	2416.8
25°	3696.3	3733.2	3720.1	3562.6	3391.9	3212.9	3002.8	2746.2	2435.9	2239.0	2205.6
27.5°	3923.0	3939.7	3838.3	3609.1	3396.7	3164.0	2908.5	2566.0	2211.5	2056.4	2024.2
30°	4202.3	4152.2	3958.8	3637.8	3348.9	3055.3	2740.3	2302.2	2028.9	1892.9	1855.9
32.5°	4503.1	4411.2	4044.8	3617.5	3243.9	2873.9	2480.1	2116.1	1907.2	1741.3	1710.3
35°	5075.9	4814.6	4170.1	3556.6	3061.3	2631.7	2228.3	1972.8	1778.3	1600.5	1571.8
37.5°	5849.3	5394.6	4345.5	3471.9	2845.3	2396.5	2040.9	1820.1	1651.8	1468.0	1422.6
40°	6450.8	5980.6	4627.2	3381.2	2646.0	2173.4	1904.8	1740.1	1568.3	1372.5	1333.1
42.5°	7023.7	6516.5	4973.3	3279.7	2440.7	2018.2	1845.1	1722.2	1545.6	1346.3	1309.3
45°	7529.8	6949.7	5271.7	3178.3	2209.2	1875.0	1801.0	1687.6	1513.4	1312.8	1277.0
47.5°	7939.1	7322.1	5530.7	3068.5	1999.1	1766.4	1743.7	1624.3	1451.3	1244.8	1201.8
50°	8309.1	7637.2	5709.7	2951.5	1793.8	1678.1	1649.4	1508.6	1328.4	1145.8	1118.3
52.5°	8537.1	7850.8	5817.1	2970.6	1599.3	1579.0	1532.4	1388.0	1220.9	1064.6	1028.8
55°	8775.8	8052.5	5815.9	2863.2	1437.0	1429.8	1385.6	1274.7	1143.4	1012.1	990.6
57.5°	8873.6	8070.4	5707.3	2358.3	1293.7	1248.4	1238.8	1180.4	1065.8	941.7	917.8
60°	8939.3	7991.6	5502.0	1610.0	1113.5	1081.3	1127.9	1088.5	984.6	854.5	830.7
62.5°	8874.8	7905.7	4963.7	1162.5	976.3	994.2	1038.3	995.4	886.8	768.6	748.3
65°	8720.9	7577.5	3919.4	905.9	915.4	954.8	989.4	917.8	718.5	601.5	589.6
67.5°	8300.8	6953.3	2521.9	830.7	880.8	921.4	933.3	777.0	650.5	538.3	525.1
70°	7416.4	5582.0	971.5	782.9	846.2	864.1	815.2	712.5	597.9	501.3	489.3
72.5°	5801.6	3665.2	560.9	716.1	772.2	755.5	756.7	639.7	539.5	447.6	438.0
75°	3605.5	1327.2	498.9	637.3	654.0	685.1	645.7	555.0	464.3	409.4	397.4
77.5°	1192.3	377.1	461.9	549.0	586.0	563.3	540.7	473.8	397.4	354.5	348.5
80°	288.8	282.9	414.1	429.7	459.5	421.3	418.9	393.9	335.4	310.3	304.3
82.5°	177.8	202.9	329.4	267.3	306.7	310.3	353.3	324.6	244.7	254.2	245.9
85°	109.8	156.3	173.1	128.9	130.1	174.3	211.2	195.7	146.8	138.4	137.3
87.5°	37.0	32.2	37.0	27.5	37.0	63.3	95.5	90.7	60.9	41.8	39.4
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)