

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: P510169

Luminaire Tested: **VERD-M-CA4-220-727-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510169
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-CA4-220-727-U-T4
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 2700K, 1000mA LEDS AND TYPE IV OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26378 lumens
Efficiency: N/A
Efficacy: 118.6 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

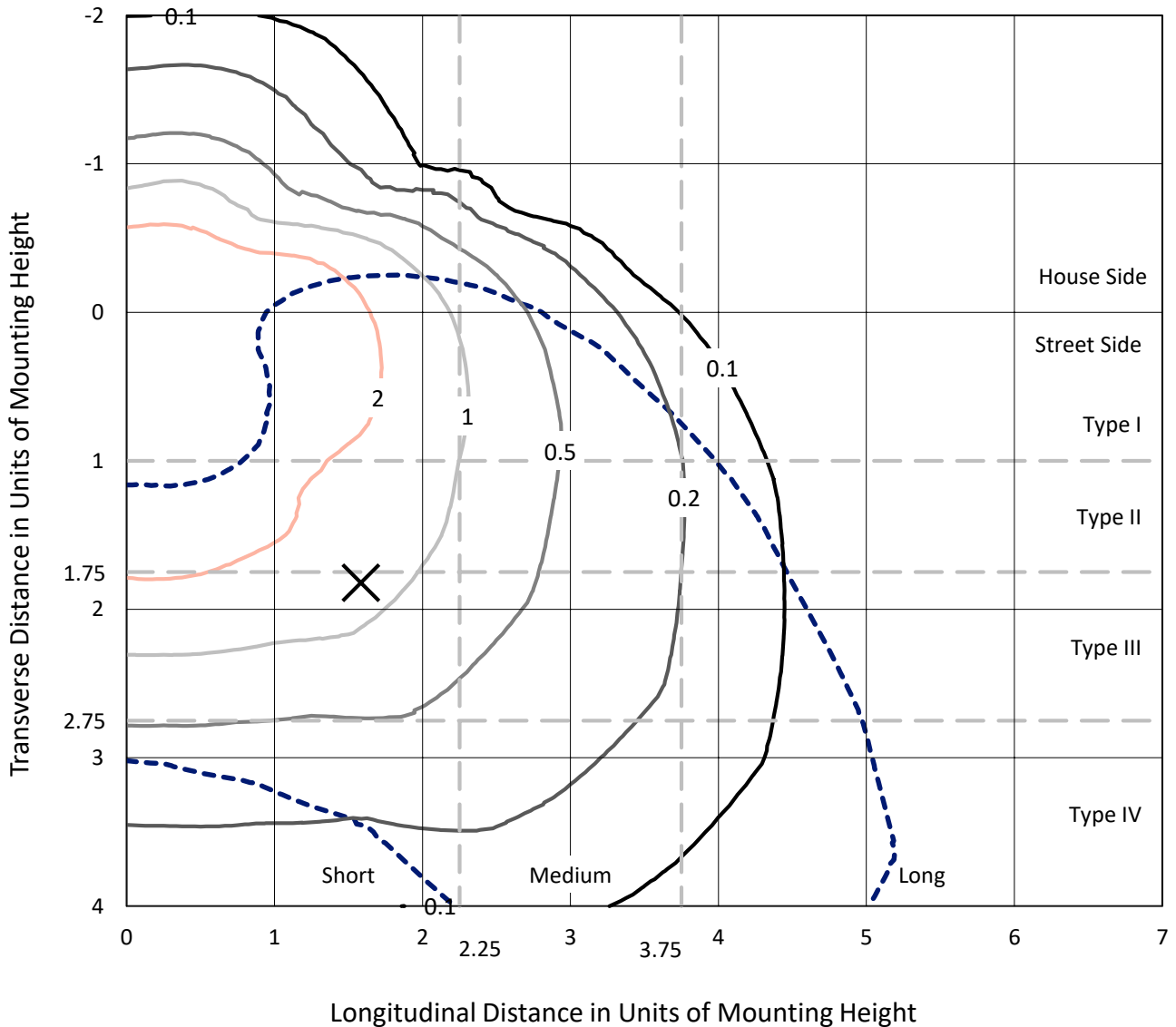
Input Watts (W): 222.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

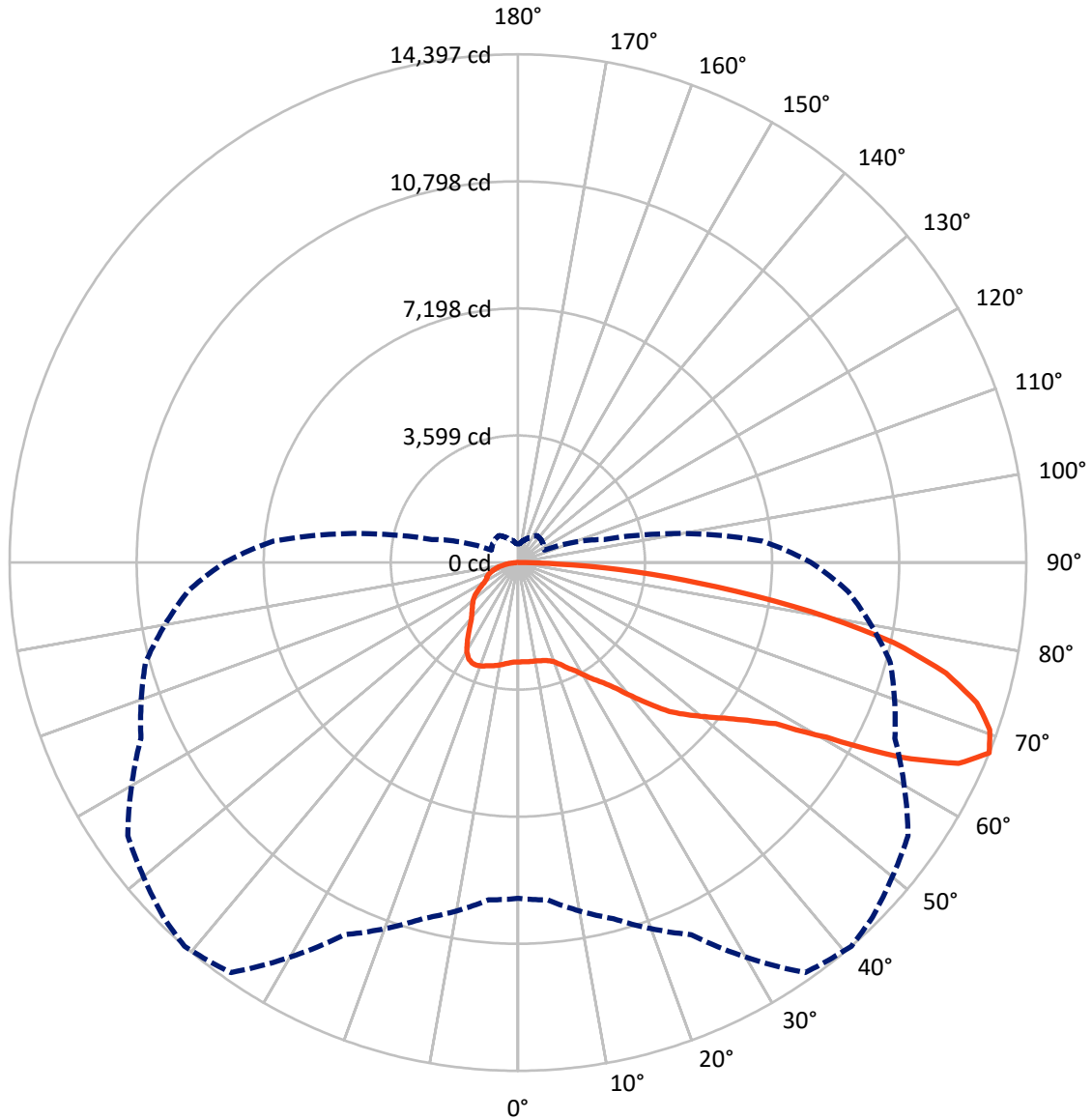
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 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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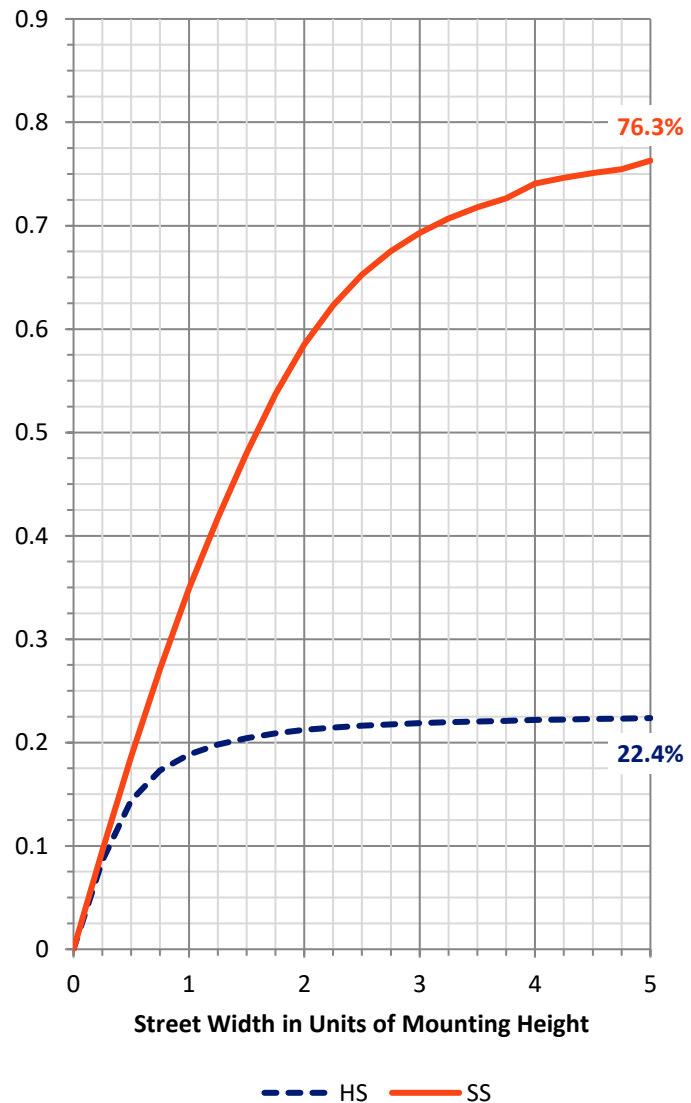
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5969.2	0.0	5969.2
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	20408.8	0.0	20408.8
	% Fixture	77.4	0.0	77.4
Total	Lumens	26378.0	0.0	26378.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.1	1.0
10°-20°	844.0	3.2
20°-30°	1509.4	5.7
30°-40°	2366.7	9.0
40°-50°	3670.0	13.9
50°-60°	5173.9	19.6
60°-70°	6595.4	25.0
70°-80°	4935.6	18.7
80°-90°	1010.8	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°	26378.0	100.0
0°-180°	26378.0	100.0



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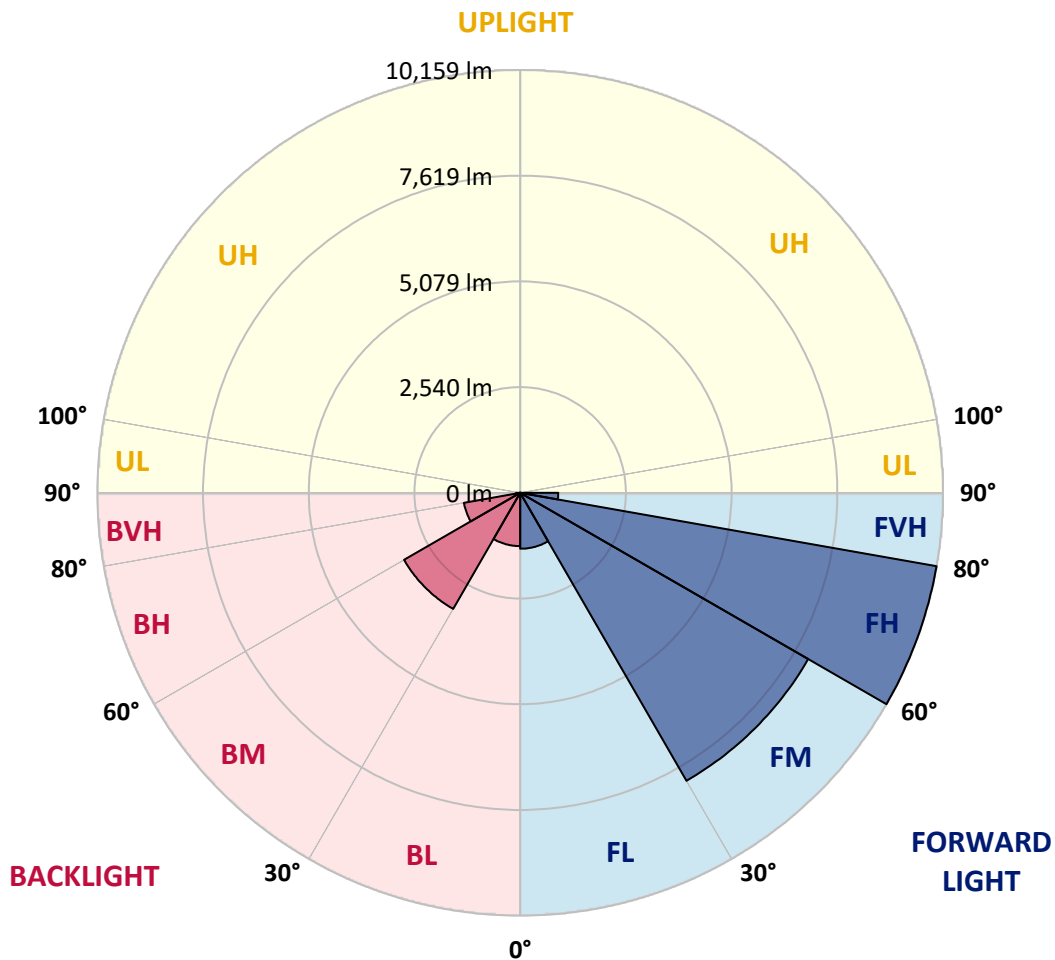
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1344.0	5.1			
FM (30°-60°)	7989.7	30.3			
FH (60°-80°)	10158.7	38.5			G4/12000
FVH (80°-90°)	916.4	3.5			G5
BL (0°-30°)	1281.6	4.9	B3/2500		
BM (30°-60°)	3220.9	12.2	B3/5000		
BH (60°-80°)	1372.3	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	2816.3	2816.3	2816.3	2816.3	2816.3	2816.3	2816.3	2816.3	2816.3	2816.3	2816.3
2.5°	2781.7	2813.9	2809.1	2803.2	2812.7	2813.9	2786.5	2797.2	2803.2	2812.7	2828.2
5°	2788.8	2821.1	2818.7	2807.9	2815.1	2818.7	2793.6	2812.7	2812.7	2816.3	2834.2
7.5°	2773.3	2804.4	2804.4	2800.8	2816.3	2830.6	2807.9	2824.7	2834.2	2843.8	2855.7
10°	2759.0	2785.3	2794.8	2792.4	2828.2	2831.8	2816.3	2856.9	2872.4	2882.0	2896.3
12.5°	2743.5	2775.7	2788.8	2802.0	2840.2	2853.3	2845.0	2886.7	2919.0	2935.7	2951.2
15°	2736.3	2772.1	2793.6	2812.7	2854.5	2878.4	2878.4	2941.7	2979.9	3001.4	3028.8
17.5°	2786.5	2823.5	2840.2	2855.7	2893.9	2926.1	2923.8	2997.8	3053.9	3087.3	3137.5
20°	2910.6	2954.8	2964.3	2970.3	2994.2	3006.1	3002.5	3082.5	3160.1	3223.4	3279.5
22.5°	3126.7	3153.0	3157.7	3133.9	3139.8	3149.4	3143.4	3187.6	3275.9	3350.0	3450.2
25°	3303.4	3345.2	3333.2	3298.6	3303.4	3316.5	3298.6	3366.7	3429.9	3526.7	3628.1
27.5°	3489.6	3520.7	3507.5	3486.1	3481.3	3471.7	3468.2	3555.3	3648.4	3724.8	3875.3
30°	3716.5	3733.2	3695.0	3685.4	3693.8	3699.8	3677.1	3788.1	3872.9	3982.7	4185.7
32.5°	4098.5	4114.0	4059.1	3912.3	3915.8	3943.3	3924.2	4063.9	4223.9	4357.6	4564.1
35°	4585.6	4585.6	4542.6	4336.1	4179.7	4180.9	4185.7	4382.6	4679.9	4979.6	5192.1
37.5°	5078.7	5095.4	5014.2	4825.6	4627.4	4522.3	4434.0	4687.1	5076.3	5744.8	6061.2
40°	5592.0	5618.3	5496.5	5323.4	5095.4	4976.0	4873.3	5027.3	5552.6	6502.9	6753.6
42.5°	6040.9	6077.9	5952.6	5769.9	5611.1	5476.2	5321.0	5383.1	6076.7	7222.8	7364.9
45°	6458.8	6479.1	6372.8	6222.4	6091.1	6017.0	5908.4	5980.0	6676.0	7927.2	7900.9
47.5°	6766.8	6796.6	6699.9	6618.7	6483.8	6439.7	6438.5	6635.5	7350.6	8488.3	8366.5
50°	7267.0	7244.3	7027.0	6927.9	6845.6	6859.9	6894.5	7234.8	8143.3	9029.1	8758.1
52.5°	8106.3	8064.5	7582.2	7375.6	7274.2	7320.7	7338.6	7778.0	8943.2	9495.9	9081.7
55°	9191.5	9057.8	8706.8	8152.8	7834.1	7878.3	7858.0	8361.8	9583.1	9941.2	9321.6
57.5°	9909.0	10034.4	9866.0	9549.7	8758.1	8613.7	8565.9	8939.6	10175.2	10367.4	9569.9
60°	10532.2	10739.9	11007.4	10804.4	10590.7	10049.9	9604.6	9596.2	10696.9	10651.6	9670.2
62.5°	11190.0	11299.8	11711.7	11837.1	12233.4	12134.4	11537.4	10427.1	11218.7	10859.3	9728.7
65°	10525.0	10671.9	11421.6	12105.7	13572.9	13716.2	13521.6	11972.0	11580.4	10965.6	9645.2
67.5°	9512.6	9593.8	10442.7	11629.4	14179.4	14396.7	14200.9	13488.2	11781.0	10919.0	9387.3
70°	8214.9	8310.4	9121.1	10739.9	14148.4	14177.0	14100.6	13627.9	11701.0	10700.5	8737.8
72.5°	6660.5	6781.1	7493.8	9174.8	13470.3	13594.4	13473.9	13350.9	11476.5	10089.3	7619.2
75°	5039.3	5199.2	5835.6	7314.8	11903.9	12529.5	12545.0	12924.7	10605.0	8649.5	5529.9
77.5°	3437.1	3589.9	4192.8	5572.9	9881.5	10880.8	11141.1	11556.5	8860.8	6391.9	3016.9
80°	1935.2	1920.9	2686.2	3981.5	7536.8	8414.3	8741.4	8724.7	6222.4	3281.9	614.8
82.5°	894.2	896.6	1374.1	2541.7	5102.5	5681.6	5814.1	5060.8	2183.6	556.3	195.8
85°	445.3	450.1	661.4	1275.0	2880.8	3328.5	3163.7	2106.0	468.0	162.4	117.0
87.5°	176.7	169.5	261.5	524.1	1039.8	1101.9	962.2	421.4	84.8	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2816.3	2816.3	2816.3	2816.3	2816.3	2816.3	2816.3	2816.3	2816.3	2816.3	2816.3
2.5°	2824.7	2827.1	2837.8	2816.3	2822.3	2817.5	2813.9	2833.0	2831.8	2835.4	2829.4
5°	2833.0	2839.0	2849.7	2840.2	2849.7	2845.0	2848.5	2874.8	2878.4	2877.2	2877.2
7.5°	2855.7	2861.7	2882.0	2870.0	2891.5	2885.5	2886.7	2911.8	2916.6	2909.4	2907.0
10°	2903.5	2908.2	2936.9	2934.5	2942.9	2938.1	2933.3	2944.0	2941.7	2930.9	2926.1
12.5°	2958.4	2971.5	3003.7	3004.9	3015.7	2991.8	2966.7	2963.2	2956.0	2939.3	2935.7
15°	3040.8	3056.3	3105.2	3093.3	3086.1	3034.8	2993.0	2959.6	2930.9	2916.6	2903.5
17.5°	3158.9	3185.2	3253.3	3216.2	3163.7	3088.5	3015.7	2942.9	2882.0	2830.6	2810.3
20°	3309.4	3339.2	3396.5	3347.6	3267.6	3155.4	3037.2	2905.8	2773.3	2659.9	2643.2
22.5°	3488.4	3536.2	3578.0	3465.8	3347.6	3205.5	3037.2	2848.5	2628.9	2459.3	2417.6
25°	3697.4	3734.4	3721.2	3563.7	3392.9	3213.9	3003.7	2747.1	2436.7	2239.7	2206.2
27.5°	3924.2	3940.9	3839.4	3610.2	3397.7	3164.9	2909.4	2566.8	2212.2	2057.0	2024.8
30°	4203.6	4153.4	3960.0	3638.9	3350.0	3056.3	2741.1	2302.9	2029.6	1893.5	1856.4
32.5°	4504.4	4412.5	4046.0	3618.6	3244.9	2874.8	2480.8	2116.7	1907.8	1741.8	1710.8
35°	5077.5	4816.0	4171.3	3557.7	3062.2	2632.5	2228.9	1973.4	1778.8	1601.0	1572.3
37.5°	5851.1	5396.2	4346.8	3472.9	2846.2	2397.3	2041.5	1820.6	1652.3	1468.4	1423.1
40°	6452.8	5982.4	4628.6	3382.2	2646.8	2174.0	1905.4	1740.6	1568.7	1372.9	1333.5
42.5°	7025.8	6518.5	4974.8	3280.7	2441.4	2018.8	1845.7	1722.7	1546.0	1346.7	1309.7
45°	7532.0	6951.8	5273.3	3179.2	2209.8	1875.5	1801.5	1688.1	1513.8	1313.2	1277.4
47.5°	7941.5	7324.3	5532.3	3069.4	1999.7	1766.9	1744.2	1624.8	1451.7	1245.2	1202.2
50°	8311.6	7639.5	5711.4	2952.4	1794.4	1678.6	1649.9	1509.0	1328.8	1146.1	1118.6
52.5°	8539.7	7853.2	5818.9	2971.5	1599.8	1579.5	1532.9	1388.5	1221.3	1064.9	1029.1
55°	8778.4	8054.9	5817.7	2864.1	1437.4	1430.2	1386.1	1275.0	1143.7	1012.4	990.9
57.5°	8876.3	8072.9	5709.0	2359.1	1294.1	1248.8	1239.2	1180.7	1066.1	942.0	918.1
60°	8942.0	7994.1	5503.7	1610.5	1113.9	1081.6	1128.2	1088.8	984.9	854.8	830.9
62.5°	8877.5	7908.1	4965.2	1162.8	976.6	994.5	1038.7	995.7	887.0	768.8	748.5
65°	8723.5	7579.8	3920.6	906.1	915.7	955.1	989.7	918.1	718.7	601.7	589.8
67.5°	8303.3	6955.4	2522.6	830.9	881.1	921.7	933.6	777.2	650.7	538.4	525.3
70°	7418.6	5583.7	971.8	783.2	846.4	864.4	815.4	712.7	598.1	501.4	489.5
72.5°	5803.3	3666.3	561.1	716.3	772.4	755.7	756.9	639.9	539.6	447.7	438.1
75°	3606.6	1327.6	499.0	637.5	654.2	685.3	645.9	555.1	464.4	409.5	397.6
77.5°	1192.7	377.3	462.0	549.2	586.2	563.5	540.8	474.0	397.6	354.6	348.6
80°	288.9	282.9	414.3	429.8	459.6	421.4	419.0	394.0	335.5	310.4	304.4
82.5°	177.9	203.0	329.5	267.4	306.8	310.4	353.4	324.7	244.7	254.3	245.9
85°	109.8	156.4	173.1	128.9	130.1	174.3	211.3	195.8	146.8	138.5	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)