

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: P510121

Luminaire Tested: **VERD-M-CA4-210-727-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510121
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-CA4-210-727-U-T4
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 2700K, 960mA LEDS AND TYPE IV OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25458 lumens
Efficiency: N/A
Efficacy: 119.2 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

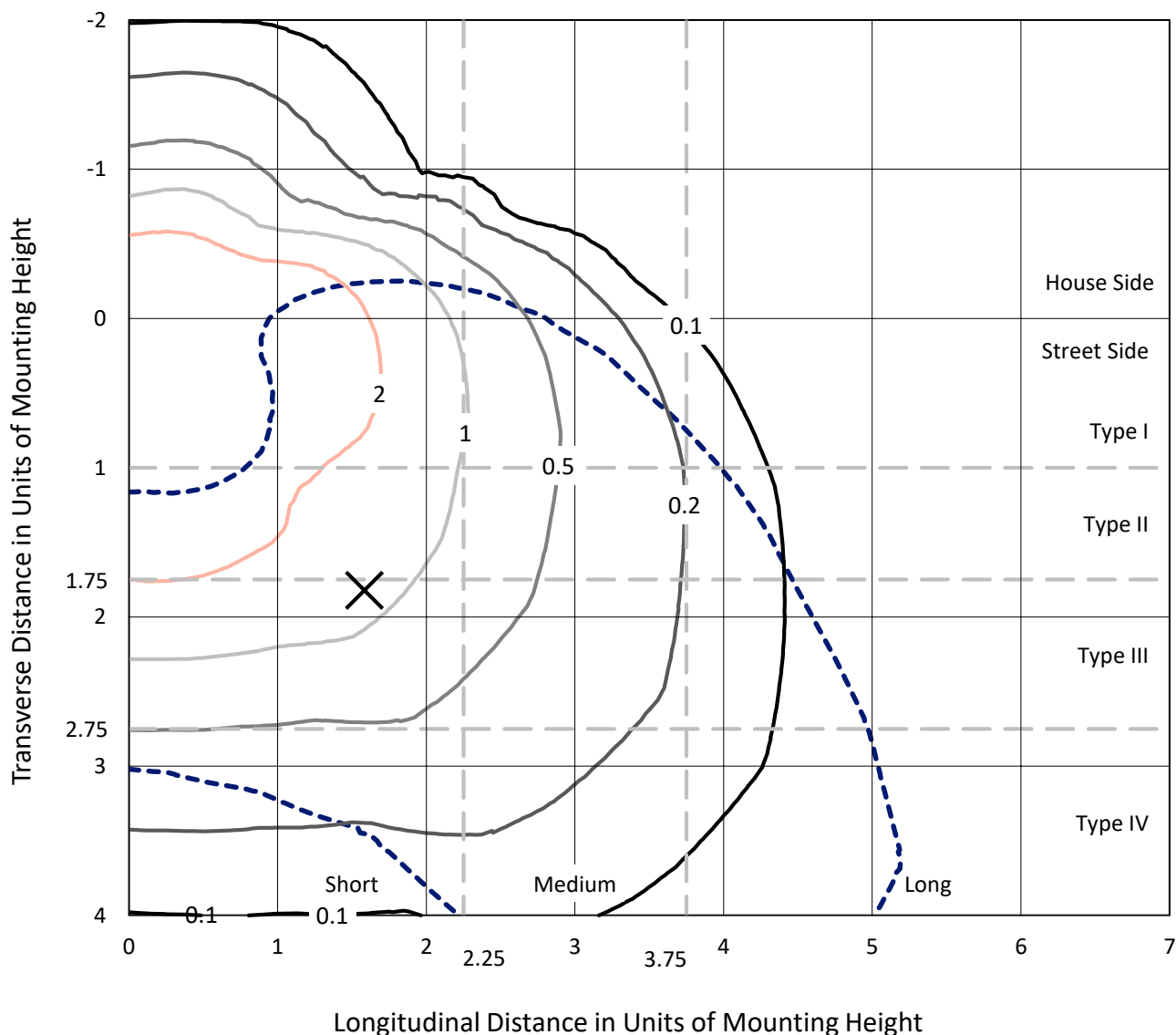
Input Watts (W): 213.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

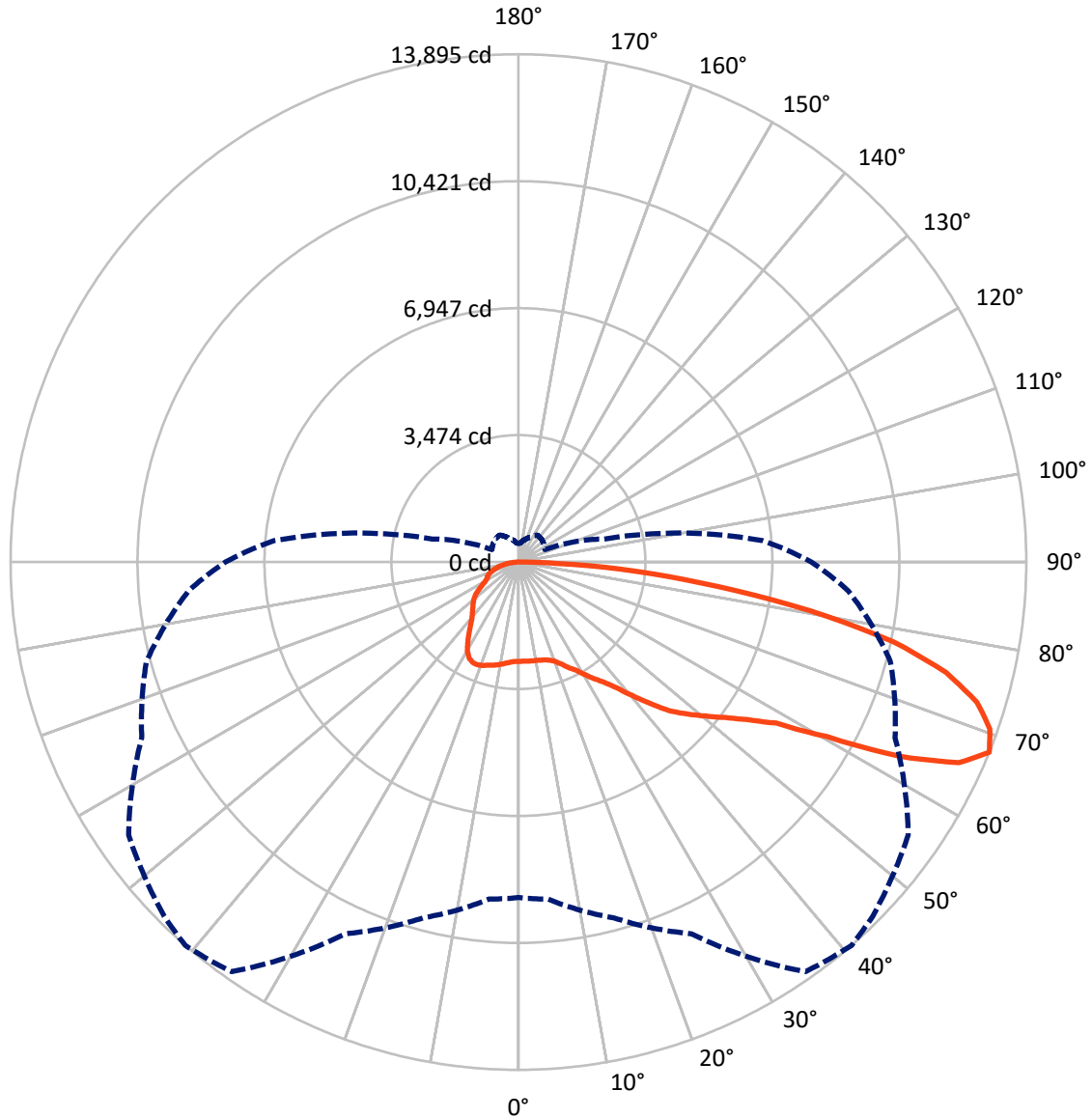
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 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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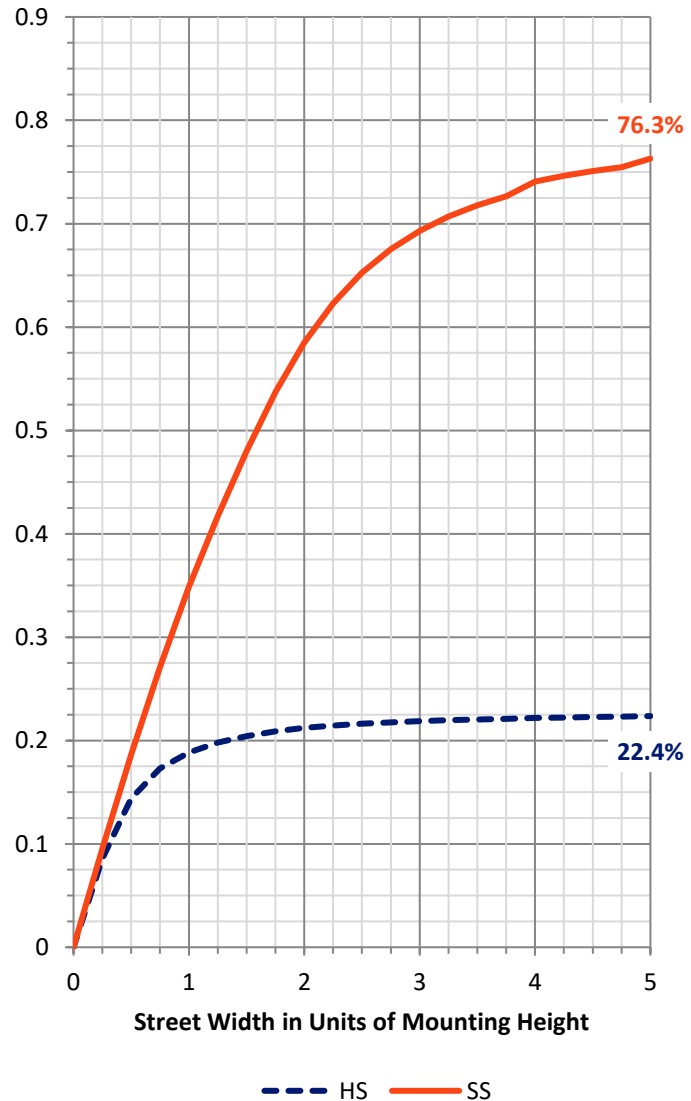
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5761.0	0.0	5761.0
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	19697.0	0.0	19697.0
	% Fixture	77.4	0.0	77.4
Total	Lumens	25458.0	0.0	25458.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	262.7	1.0
10°-20°	814.6	3.2
20°-30°	1456.7	5.7
30°-40°	2284.1	9.0
40°-50°	3542.0	13.9
50°-60°	4993.4	19.6
60°-70°	6365.4	25.0
70°-80°	4763.4	18.7
80°-90°	975.6	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°	25458.0	100.0
0°-180°	25458.0	100.0



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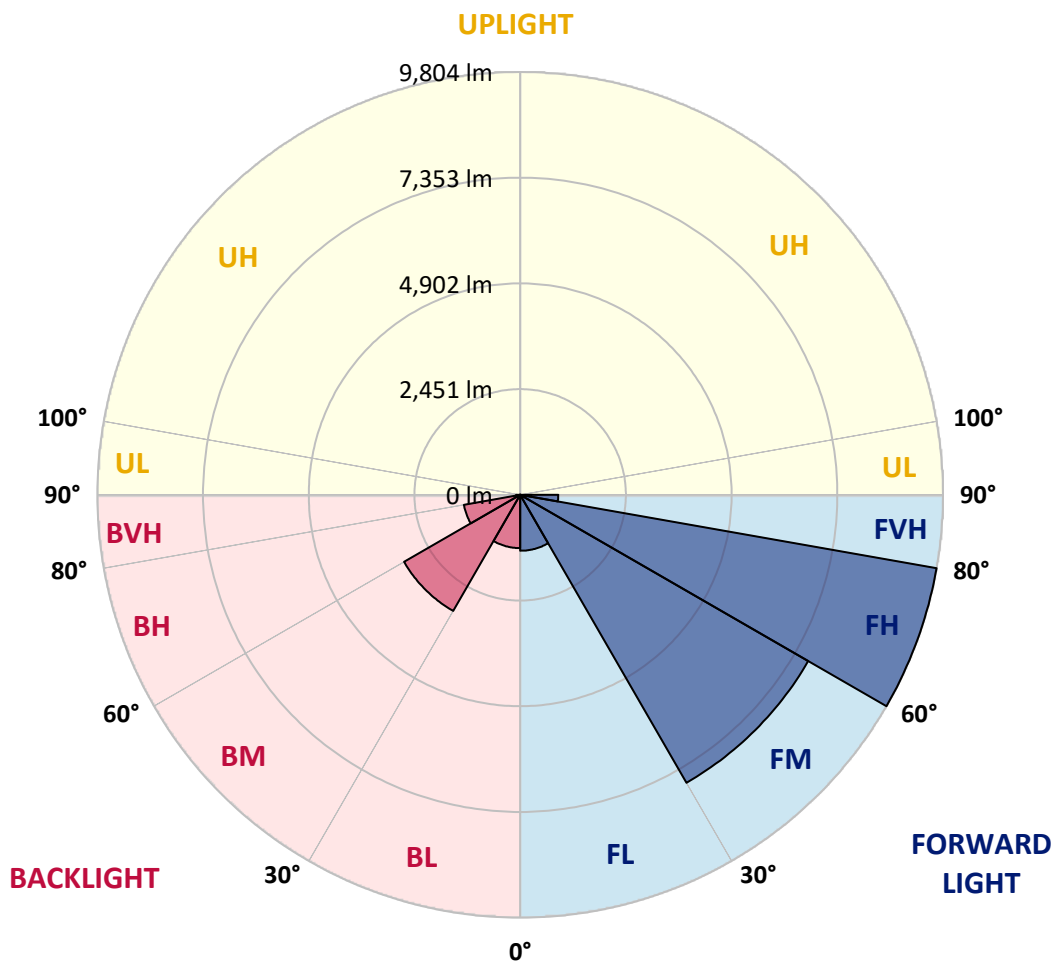
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1297.1	5.1			
FM	(30°-60°)	7711.0	30.3			
FH	(60°-80°)	9804.4	38.5			G4/12000
FVH	(80°-90°)	884.5	3.5			G5
BL	(0°-30°)	1236.9	4.9	B3/2500		
BM	(30°-60°)	3108.6	12.2	B3/5000		
BH	(60°-80°)	1324.5	5.2	B3/2500		G3/2500
BVH	(80°-90°)	91.1	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°	2718.1	2718.1	2718.1	2718.1	2718.1	2718.1	2718.1	2718.1	2718.1	2718.1	2718.1
2.5°	2684.7	2715.8	2711.2	2705.4	2714.6	2715.8	2689.3	2699.6	2705.4	2714.6	2729.6
5°	2691.6	2722.7	2720.4	2710.0	2716.9	2720.4	2696.2	2714.6	2714.6	2718.1	2735.4
7.5°	2676.6	2706.6	2706.6	2703.1	2718.1	2731.9	2710.0	2726.1	2735.4	2744.6	2756.1
10°	2662.8	2688.1	2697.3	2695.0	2729.6	2733.1	2718.1	2757.3	2772.2	2781.5	2795.3
12.5°	2647.8	2678.9	2691.6	2704.3	2741.1	2753.8	2745.7	2786.1	2817.2	2833.3	2848.3
15°	2640.9	2675.4	2696.2	2714.6	2755.0	2778.0	2778.0	2839.1	2875.9	2896.7	2923.2
17.5°	2689.3	2725.0	2741.1	2756.1	2793.0	2824.1	2821.8	2893.2	2947.4	2979.6	3028.0
20°	2809.1	2851.7	2861.0	2866.7	2889.8	2901.3	2897.8	2975.0	3049.9	3111.0	3165.1
22.5°	3017.7	3043.0	3047.6	3024.6	3030.3	3039.5	3033.8	3076.4	3161.7	3233.1	3329.9
25°	3188.2	3228.5	3217.0	3183.6	3188.2	3200.9	3183.6	3249.3	3310.3	3403.6	3501.6
27.5°	3367.9	3397.9	3385.2	3364.5	3359.9	3350.6	3347.2	3431.3	3521.2	3594.9	3740.1
30°	3586.9	3603.0	3566.1	3556.9	3565.0	3570.7	3548.8	3656.0	3737.8	3843.8	4039.7
32.5°	3955.6	3970.5	3917.5	3775.8	3779.3	3805.8	3787.3	3922.1	4076.5	4205.6	4404.9
35°	4425.7	4425.7	4384.2	4184.9	4033.9	4035.1	4039.7	4229.8	4516.7	4805.9	5011.0
37.5°	4901.5	4917.7	4839.3	4657.3	4466.0	4364.6	4279.3	4523.6	4899.2	5544.5	5849.8
40°	5397.0	5422.3	5304.8	5137.7	4917.7	4802.4	4703.4	4852.0	5359.0	6276.1	6518.1
42.5°	5830.2	5865.9	5745.0	5568.7	5415.4	5285.2	5135.4	5195.3	5864.8	6970.9	7108.0
45°	6233.5	6253.1	6150.5	6005.4	5878.6	5807.2	5702.3	5771.5	6443.2	7650.7	7625.4
47.5°	6530.8	6559.6	6466.2	6387.9	6257.7	6215.1	6213.9	6404.0	7094.2	8192.3	8074.7
50°	7013.5	6991.7	6782.0	6686.3	6606.8	6620.6	6654.1	6982.4	7859.3	8714.2	8452.7
52.5°	7823.6	7783.2	7317.7	7118.4	7020.5	7065.4	7082.7	7506.7	8631.3	9164.7	8764.9
55°	8870.9	8741.9	8403.1	7868.5	7560.8	7603.5	7583.9	8070.1	9248.8	9594.5	8996.5
57.5°	9563.4	9684.4	9521.9	9216.6	8452.7	8313.2	8267.2	8627.8	9820.3	10005.9	9236.2
60°	10164.9	10365.3	10623.4	10427.6	10221.3	9699.4	9269.6	9261.5	10323.9	10280.1	9333.0
62.5°	10799.7	10905.7	11303.3	11424.2	11806.8	11711.1	11135.0	10063.5	10827.4	10480.6	9389.4
65°	10157.9	10299.7	11023.3	11683.5	13099.6	13237.8	13050.0	11554.4	11176.5	10583.1	9308.8
67.5°	9180.9	9259.2	10078.4	11223.7	13684.9	13894.6	13705.6	13017.8	11370.1	10538.2	9059.9
70°	7928.4	8020.6	8802.9	10365.3	13654.9	13682.6	13608.8	13152.6	11292.9	10327.3	8433.1
72.5°	6428.2	6544.6	7232.5	8854.8	13000.5	13120.3	13003.9	12885.2	11076.3	9737.4	7353.5
75°	4863.5	5017.9	5632.0	7059.6	11488.8	12092.5	12107.5	12473.9	10235.1	8347.8	5337.1
77.5°	3317.2	3464.7	4046.6	5378.5	9536.9	10501.3	10752.5	11153.5	8551.8	6169.0	2911.7
80°	1867.7	1853.9	2592.5	3842.6	7273.9	8120.8	8436.5	8420.4	6005.4	3167.4	593.4
82.5°	863.0	865.3	1326.2	2453.1	4924.6	5483.4	5611.3	4884.2	2107.4	536.9	189.0
85°	429.8	434.4	638.3	1230.6	2780.3	3212.4	3053.4	2032.5	451.7	156.7	112.9
87.5°	170.5	163.6	252.3	505.8	1003.6	1063.5	928.7	406.7	81.8	55.3	38.0
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°	2718.1	2718.1	2718.1	2718.1	2718.1	2718.1	2718.1	2718.1	2718.1	2718.1	2718.1
2.5°	2726.1	2728.5	2738.8	2718.1	2723.8	2719.2	2715.8	2734.2	2733.1	2736.5	2730.8
5°	2734.2	2740.0	2750.3	2741.1	2750.3	2745.7	2749.2	2774.5	2778.0	2776.8	2776.8
7.5°	2756.1	2761.9	2781.5	2769.9	2790.7	2784.9	2786.1	2810.3	2814.9	2808.0	2805.6
10°	2802.2	2806.8	2834.5	2832.1	2840.2	2835.6	2831.0	2841.4	2839.1	2828.7	2824.1
12.5°	2855.2	2867.9	2899.0	2900.1	2910.5	2887.5	2863.3	2859.8	2852.9	2836.8	2833.3
15°	2934.7	2949.7	2996.9	2985.4	2978.5	2928.9	2888.6	2856.3	2828.7	2814.9	2802.2
17.5°	3048.8	3074.1	3139.8	3104.1	3053.4	2980.8	2910.5	2840.2	2781.5	2731.9	2712.3
20°	3193.9	3222.8	3278.1	3230.8	3153.6	3045.3	2931.2	2804.5	2676.6	2567.1	2551.0
22.5°	3366.8	3412.9	3453.2	3344.9	3230.8	3093.7	2931.2	2749.2	2537.2	2373.6	2333.2
25°	3568.4	3604.1	3591.5	3439.4	3274.6	3101.8	2899.0	2651.3	2351.7	2161.6	2129.3
27.5°	3787.3	3803.5	3705.5	3484.3	3279.2	3054.5	2808.0	2477.3	2135.1	1985.3	1954.2
30°	4057.0	4008.6	3821.9	3512.0	3233.1	2949.7	2645.5	2222.6	1958.8	1827.4	1791.7
32.5°	4347.3	4258.6	3904.9	3492.4	3131.7	2774.5	2394.3	2042.9	1841.2	1681.1	1651.1
35°	4900.4	4648.0	4025.8	3433.6	2955.4	2540.6	2151.2	1904.6	1716.8	1545.1	1517.5
37.5°	5647.0	5208.0	4195.2	3351.8	2746.9	2313.7	1970.3	1757.1	1594.7	1417.2	1373.4
40°	6227.7	5773.8	4467.1	3264.2	2554.5	2098.2	1838.9	1679.9	1514.0	1325.0	1287.0
42.5°	6780.8	6291.1	4801.3	3166.3	2356.3	1948.4	1781.3	1662.6	1492.1	1299.7	1264.0
45°	7269.3	6709.4	5089.3	3068.4	2132.8	1810.1	1738.7	1629.2	1461.0	1267.4	1232.9
47.5°	7664.5	7068.9	5339.4	2962.4	1930.0	1705.3	1683.4	1568.2	1401.1	1201.8	1160.3
50°	8021.7	7373.0	5512.2	2849.4	1731.8	1620.0	1592.4	1456.4	1282.4	1106.1	1079.6
52.5°	8241.8	7579.3	5615.9	2867.9	1544.0	1524.4	1479.4	1340.0	1178.7	1027.8	993.2
55°	8472.3	7774.0	5614.8	2764.2	1387.3	1380.4	1337.7	1230.6	1103.8	977.1	956.3
57.5°	8566.7	7791.3	5509.9	2276.8	1249.0	1205.2	1196.0	1139.5	1028.9	909.1	886.1
60°	8630.1	7715.2	5311.7	1554.3	1075.0	1043.9	1088.8	1050.8	950.6	825.0	801.9
62.5°	8567.9	7632.3	4792.1	1122.3	942.5	959.8	1002.4	960.9	856.1	742.0	722.4
65°	8419.3	7315.4	3783.9	874.5	883.8	921.8	955.2	886.1	693.6	580.7	569.2
67.5°	8013.7	6712.8	2434.6	801.9	850.3	889.5	901.0	750.1	628.0	519.6	507.0
70°	7159.9	5388.9	937.9	755.9	816.9	834.2	787.0	687.9	577.3	483.9	472.4
72.5°	5600.9	3538.5	541.5	691.3	745.5	729.4	730.5	617.6	520.8	432.1	422.9
75°	3480.8	1281.3	481.6	615.3	631.4	661.4	623.3	535.8	448.2	395.2	383.7
77.5°	1151.1	364.1	445.9	530.0	565.7	543.8	522.0	457.4	383.7	342.2	336.4
80°	278.8	273.1	399.8	414.8	443.6	406.7	404.4	380.2	323.8	299.6	293.8
82.5°	171.7	195.9	318.0	258.1	296.1	299.6	341.1	313.4	236.2	245.4	237.4
85°	106.0	150.9	167.1	124.4	125.6	168.2	203.9	189.0	141.7	133.7	132.5
87.5°	35.7	31.1	35.7	26.5	35.7	61.1	92.2	87.6	58.8	40.3	38.0
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)