

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: P509945

Luminaire Tested: **VERD-M-CA3-170-740-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P509945
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-CA3-170-740-U-T4
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1060mA LEDS AND TYPE IV OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24394 lumens
Efficiency: N/A
Efficacy: 141.2 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

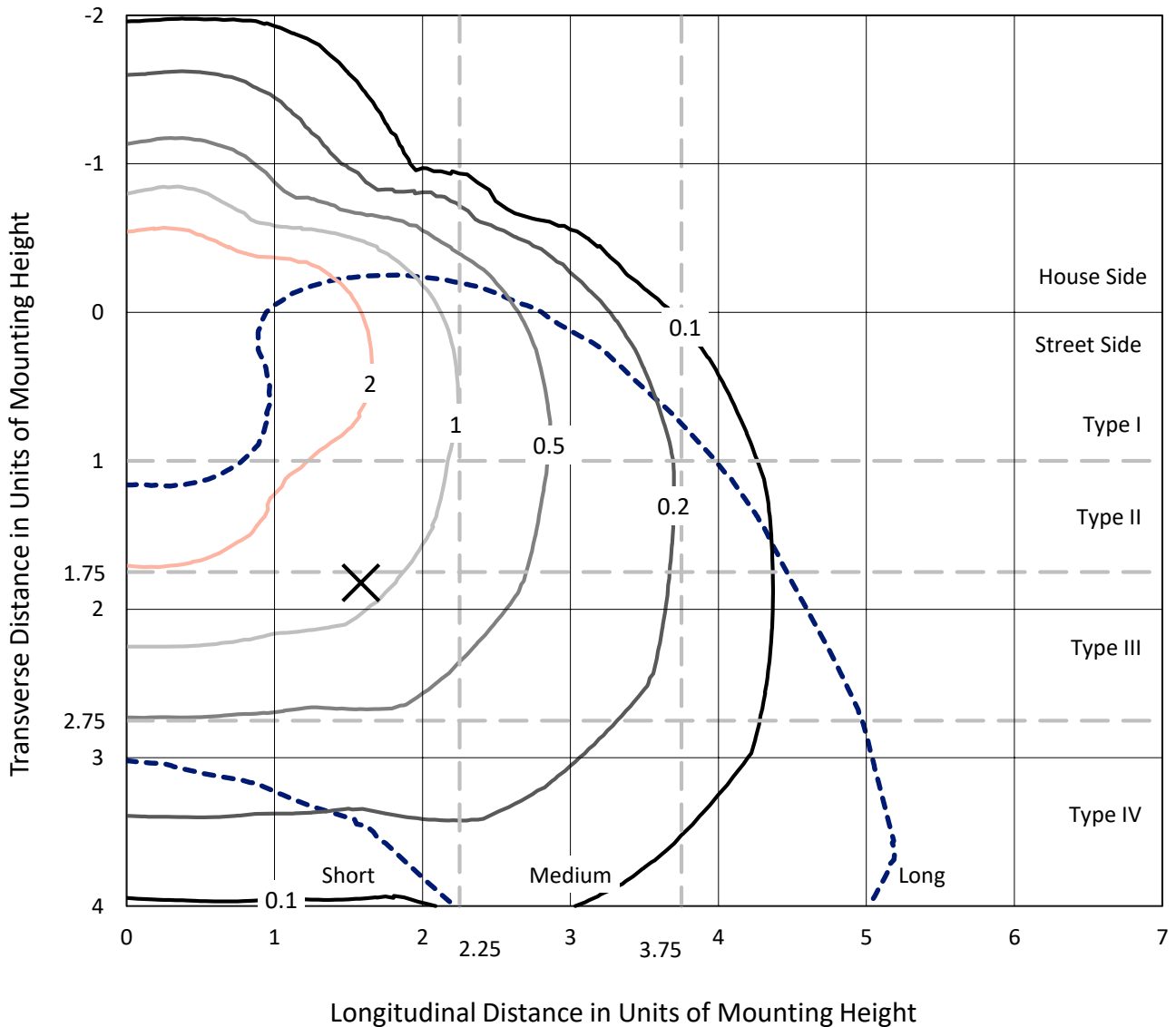
Input Watts (W): 172.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P509945
 CATALOG NUMBER: VERD-M-CA3-170-740-U-T4

Iso-Footcandle Lines of Horizontal Illumination

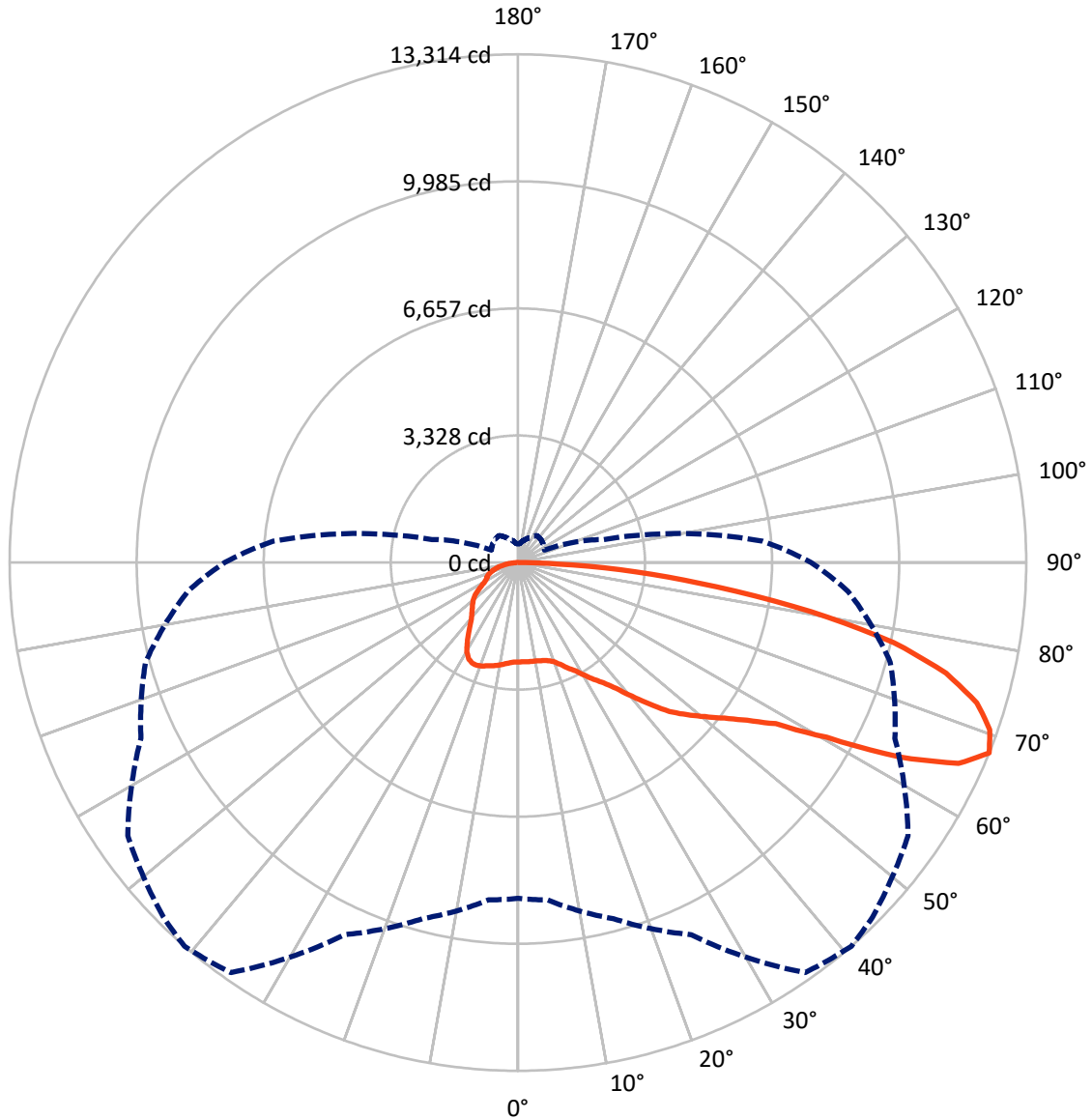
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc
 Type IV - Short - N/A

REPORT NUMBER: P509945
CATALOG NUMBER: VERD-M-CA3-170-740-U-T4

Luminous Intensity Polar Plot



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

REPORT NUMBER: P509945

CATALOG NUMBER: VERD-M-CA3-170-740-U-T4

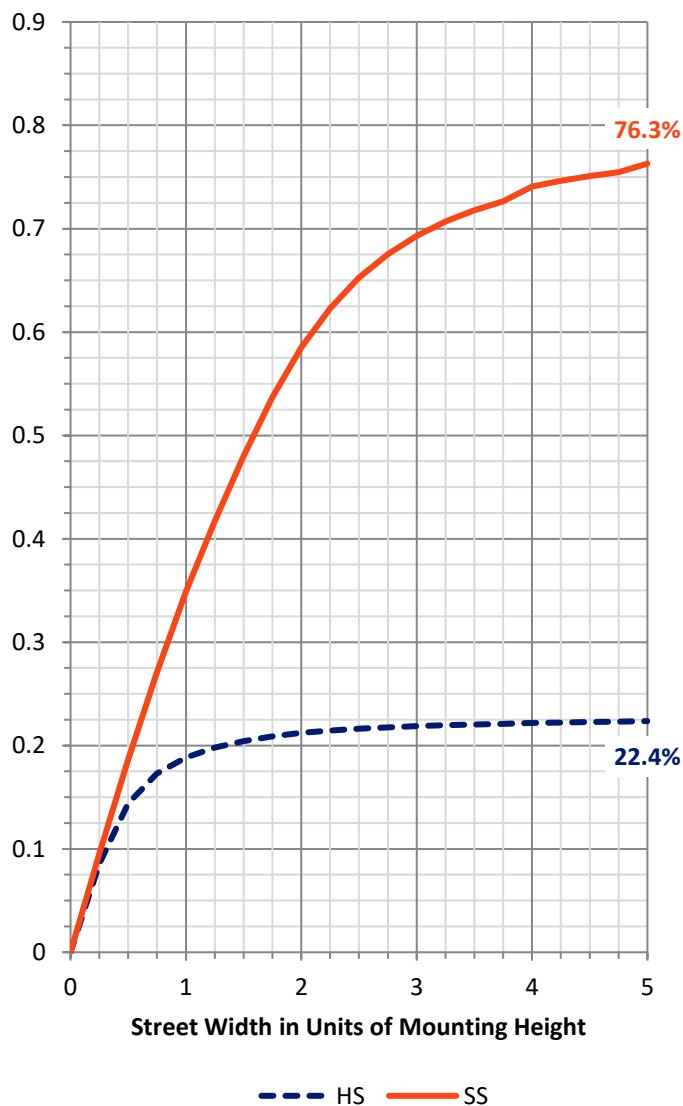
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5520.2	0.0	5520.2
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	18873.7	0.0	18873.7
	% Fixture	77.4	0.0	77.4
Total	Lumens	24394.0	0.0	24394.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.7	1.0
10°-20°	780.6	3.2
20°-30°	1395.8	5.7
30°-40°	2188.7	9.0
40°-50°	3394.0	13.9
50°-60°	4784.7	19.6
60°-70°	6099.4	25.0
70°-80°	4564.4	18.7
80°-90°	934.8	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°	24394.0	100.0
0°-180°	24394.0	100.0

Coefficient of Utilization



REPORT NUMBER: P509945

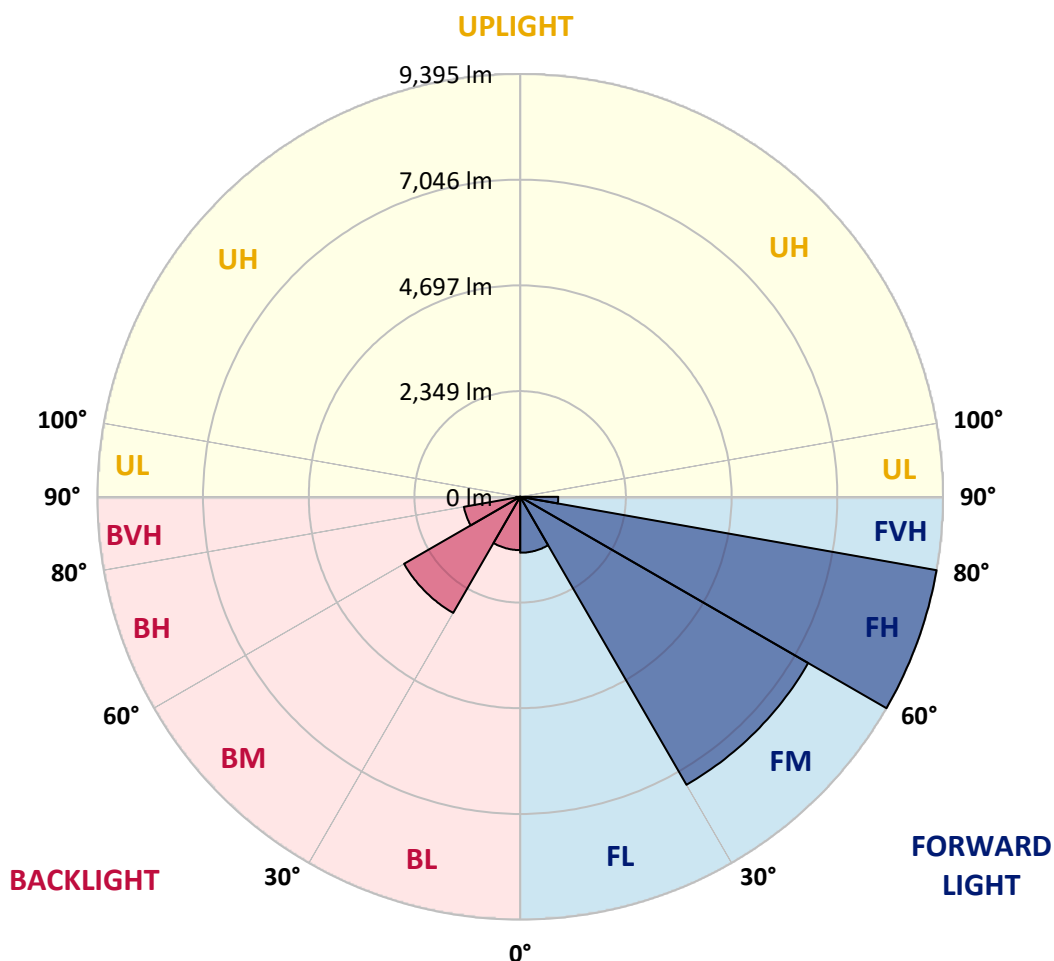
CATALOG NUMBER: VERD-M-CA3-170-740-U-T4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1242.9	5.1			
FM	(30°-60°)	7388.7	30.3			
FH	(60°-80°)	9394.6	38.5			G4/12000
FVH	(80°-90°)	847.5	3.5			G5
BL	(0°-30°)	1185.2	4.9	B3/2500		
BM	(30°-60°)	2978.6	12.2	B3/5000		
BH	(60°-80°)	1269.1	5.2	B3/2500		G3/2500
BVH	(80°-90°)	87.3	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: P509945
 CATALOG NUMBER: VERD-M-CA3-170-740-U-T4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	2604.5	2604.5	2604.5	2604.5	2604.5	2604.5	2604.5	2604.5	2604.5	2604.5	2604.5
2.5°	2572.5	2602.3	2597.9	2592.3	2601.2	2602.3	2576.9	2586.8	2592.3	2601.2	2615.5
5°	2579.1	2608.9	2606.7	2596.8	2603.4	2606.7	2583.5	2601.2	2601.2	2604.5	2621.0
7.5°	2564.7	2593.4	2593.4	2590.1	2604.5	2617.7	2596.8	2612.2	2621.0	2629.9	2640.9
10°	2551.5	2575.8	2584.6	2582.4	2615.5	2618.8	2604.5	2642.0	2656.4	2665.2	2678.5
12.5°	2537.1	2566.9	2579.1	2591.2	2626.6	2638.7	2631.0	2669.6	2699.4	2714.9	2729.2
15°	2530.5	2563.6	2583.5	2601.2	2639.8	2661.9	2661.9	2720.4	2755.7	2775.6	2801.0
17.5°	2576.9	2611.1	2626.6	2640.9	2676.2	2706.1	2703.8	2772.3	2824.2	2855.1	2901.5
20°	2691.7	2732.6	2741.4	2746.9	2769.0	2780.0	2776.7	2850.7	2922.4	2981.0	3032.9
22.5°	2891.5	2915.8	2920.2	2898.2	2903.7	2912.5	2907.0	2947.8	3029.5	3098.0	3190.7
25°	3054.9	3093.6	3082.5	3050.5	3054.9	3067.1	3050.5	3113.5	3172.0	3261.4	3355.2
27.5°	3227.2	3255.9	3243.7	3223.9	3219.4	3210.6	3207.3	3287.9	3374.0	3444.7	3583.8
30°	3436.9	3452.4	3417.1	3408.2	3416.0	3421.5	3400.5	3503.2	3581.6	3683.1	3870.8
32.5°	3790.2	3804.6	3753.8	3618.0	3621.3	3646.7	3629.0	3758.2	3906.2	4029.8	4220.8
35°	4240.7	4240.7	4201.0	4009.9	3865.3	3866.4	3870.8	4053.0	4327.9	4605.0	4801.6
37.5°	4696.7	4712.1	4637.1	4462.6	4279.3	4182.2	4100.5	4334.5	4694.5	5312.7	5605.3
40°	5171.4	5195.7	5083.1	4923.0	4712.1	4601.7	4506.8	4649.2	5135.0	6013.8	6245.7
42.5°	5586.5	5620.8	5504.8	5335.9	5189.1	5064.3	4920.8	4978.2	5619.7	6679.6	6811.0
45°	5973.0	5991.7	5893.5	5754.4	5632.9	5564.5	5464.0	5530.2	6173.9	7331.0	7306.7
47.5°	6257.8	6285.4	6196.0	6120.9	5996.2	5955.3	5954.2	6136.4	6797.7	7849.9	7737.3
50°	6720.4	6699.4	6498.5	6406.9	6330.7	6343.9	6376.0	6690.6	7530.8	8350.0	8099.4
52.5°	7496.6	7457.9	7011.9	6820.9	6727.0	6770.1	6786.7	7193.0	8270.5	8781.7	8398.6
55°	8500.2	8376.5	8051.9	7539.6	7244.8	7285.7	7266.9	7732.8	8862.3	9193.5	8620.5
57.5°	9163.7	9279.6	9124.0	8831.4	8099.4	7965.8	7921.6	8267.2	9409.9	9587.7	8850.2
60°	9740.0	9932.1	10179.4	9991.8	9794.1	9294.0	8882.2	8874.4	9892.4	9850.4	8942.9
62.5°	10348.4	10449.9	10830.8	10946.8	11313.3	11221.7	10669.6	9642.9	10374.9	10042.5	8997.0
65°	9733.4	9869.2	10562.6	11195.2	12552.1	12684.6	12504.6	11071.5	10709.4	10140.8	8919.7
67.5°	8797.2	8872.2	9657.2	10754.7	13112.9	13313.9	13132.8	12473.7	10894.9	10097.7	8681.2
70°	7597.0	7685.4	8435.0	9932.1	13084.2	13110.7	13040.1	12602.9	10820.9	9895.7	8080.6
72.5°	6159.6	6271.1	6930.2	8484.7	12457.1	12571.9	12460.4	12346.7	10613.3	9330.4	7046.1
75°	4660.2	4808.2	5396.7	6764.6	11008.6	11587.1	11601.5	11952.6	9807.4	7998.9	5114.0
77.5°	3178.6	3319.9	3877.5	5153.8	9138.3	10062.4	10303.1	10687.3	8194.3	5911.1	2790.0
80°	1789.7	1776.4	2484.1	3682.0	6969.9	7781.4	8083.9	8068.5	5754.4	3035.1	568.6
82.5°	826.9	829.1	1270.8	2350.5	4718.8	5254.2	5376.8	4680.1	2019.3	514.5	181.1
85°	411.8	416.2	611.6	1179.1	2664.1	3078.1	2925.8	1947.6	432.8	150.2	108.2
87.5°	163.4	156.8	241.8	484.7	961.6	1019.0	889.9	389.7	78.4	53.0	36.4
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: P509945

CATALOG NUMBER: VERD-M-CA3-170-740-U-T4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2604.5	2604.5	2604.5	2604.5	2604.5	2604.5	2604.5	2604.5	2604.5	2604.5	2604.5
2.5°	2612.2	2614.4	2624.4	2604.5	2610.0	2605.6	2602.3	2619.9	2618.8	2622.1	2616.6
5°	2619.9	2625.5	2635.4	2626.6	2635.4	2631.0	2634.3	2658.6	2661.9	2660.8	2660.8
7.5°	2640.9	2646.4	2665.2	2654.2	2674.0	2668.5	2669.6	2692.8	2697.2	2690.6	2688.4
10°	2685.1	2689.5	2716.0	2713.8	2721.5	2717.1	2712.7	2722.6	2720.4	2710.5	2706.1
12.5°	2735.9	2748.0	2777.8	2778.9	2788.9	2766.8	2743.6	2740.3	2733.7	2718.2	2714.9
15°	2812.0	2826.4	2871.7	2860.6	2854.0	2806.5	2767.9	2737.0	2710.5	2697.2	2685.1
17.5°	2921.3	2945.6	3008.6	2974.3	2925.8	2856.2	2788.9	2721.5	2665.2	2617.7	2599.0
20°	3060.5	3088.1	3141.1	3095.8	3021.8	2918.0	2808.7	2687.3	2564.7	2459.8	2444.4
22.5°	3226.1	3270.2	3308.9	3205.1	3095.8	2964.4	2808.7	2634.3	2431.1	2274.4	2235.7
25°	3419.3	3453.5	3441.4	3295.6	3137.7	2972.1	2777.8	2540.4	2253.4	2071.2	2040.3
27.5°	3629.0	3644.5	3550.7	3338.7	3142.2	2926.9	2690.6	2373.7	2045.8	1902.3	1872.5
30°	3887.4	3841.0	3662.2	3365.2	3098.0	2826.4	2534.9	2129.7	1876.9	1751.0	1716.8
32.5°	4165.6	4080.6	3741.7	3346.4	3000.8	2658.6	2294.2	1957.5	1764.3	1610.8	1582.1
35°	4695.6	4453.8	3857.6	3290.1	2831.9	2434.5	2061.3	1825.0	1645.1	1480.5	1454.0
37.5°	5411.0	4990.4	4019.9	3211.7	2632.1	2217.0	1887.9	1683.7	1528.0	1358.0	1316.0
40°	5967.5	5532.5	4280.4	3127.8	2447.7	2010.5	1762.1	1609.7	1450.7	1269.7	1233.2
42.5°	6497.4	6028.2	4600.6	3034.0	2257.8	1867.0	1706.9	1593.2	1429.8	1245.4	1211.2
45°	6965.5	6428.9	4876.6	2940.1	2043.6	1734.5	1666.0	1561.1	1399.9	1214.5	1181.3
47.5°	7344.2	6773.4	5116.2	2838.5	1849.3	1634.0	1613.0	1502.6	1342.5	1151.5	1111.8
50°	7686.5	7064.9	5281.8	2730.3	1659.4	1552.3	1525.8	1395.5	1228.8	1059.9	1034.5
52.5°	7897.3	7262.5	5381.2	2748.0	1479.4	1460.7	1417.6	1284.0	1129.5	984.8	951.7
55°	8118.2	7449.1	5380.1	2648.6	1329.3	1322.7	1281.8	1179.1	1057.7	936.2	916.4
57.5°	8208.7	7465.7	5279.6	2181.6	1196.8	1154.8	1146.0	1091.9	985.9	871.1	849.0
60°	8269.4	7392.8	5089.7	1489.4	1030.1	1000.3	1043.3	1006.9	910.9	790.5	768.4
62.5°	8209.8	7313.3	4591.8	1075.4	903.1	919.7	960.5	920.8	820.3	711.0	692.2
65°	8067.4	7009.7	3625.7	838.0	846.8	883.2	915.3	849.0	664.6	556.4	545.4
67.5°	7678.7	6432.3	2332.9	768.4	814.8	852.3	863.4	718.7	601.7	497.9	485.8
70°	6860.6	5163.7	898.7	724.3	782.8	799.3	754.1	659.1	553.1	463.7	452.7
72.5°	5366.8	3390.6	518.9	662.4	714.3	698.9	700.0	591.8	499.0	414.0	405.2
75°	3335.4	1227.7	461.5	589.6	605.0	633.7	597.3	513.4	429.5	378.7	367.7
77.5°	1103.0	348.9	427.3	507.9	542.1	521.1	500.1	438.3	367.7	327.9	322.4
80°	267.2	261.7	383.1	397.5	425.1	389.7	387.5	364.3	310.2	287.1	281.5
82.5°	164.5	187.7	304.7	247.3	283.7	287.1	326.8	300.3	226.3	235.2	227.4
85°	101.6	144.6	160.1	119.2	120.3	161.2	195.4	181.1	135.8	128.1	127.0
87.5°	34.2	29.8	34.2	25.4	34.2	58.5	88.3	83.9	56.3	38.6	36.4
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)