

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: P509992

Luminaire Tested: **VERD-M-CA3-180-740-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P509992
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-CA3-180-740-U-T4-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1120mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22947 lumens
Efficiency: N/A
Efficacy: 125.3 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

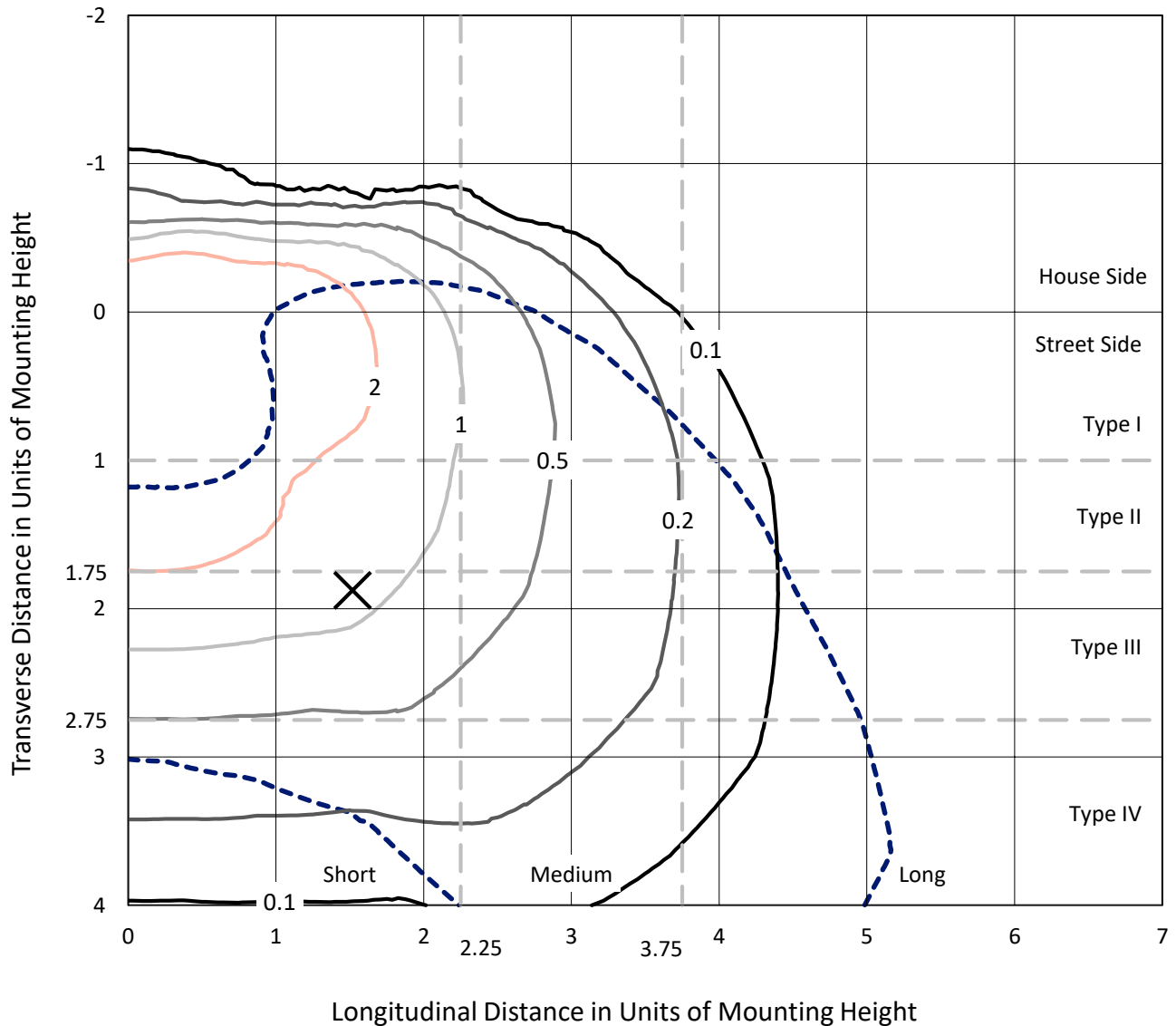
Input Watts (W): 183.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

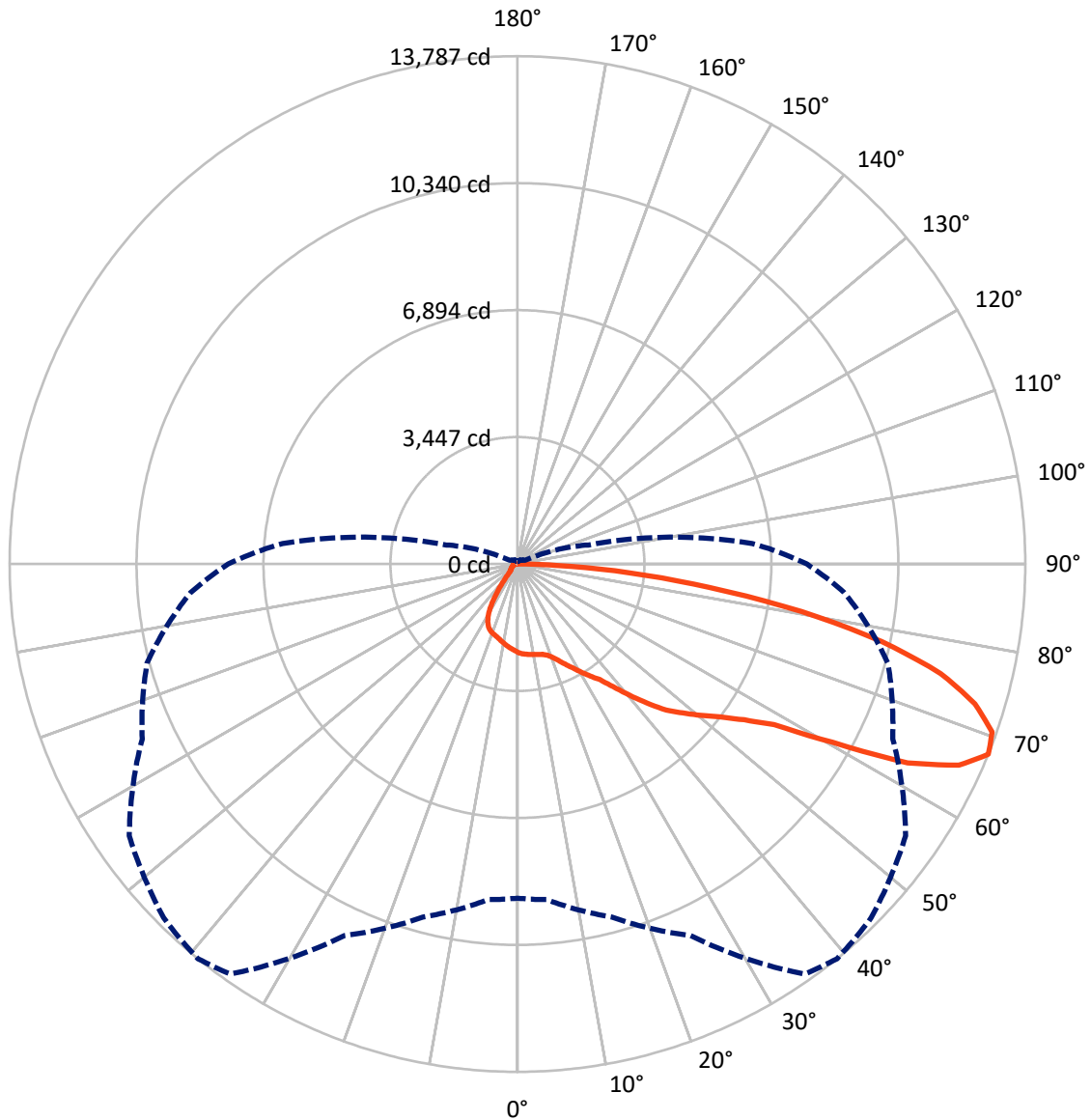
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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

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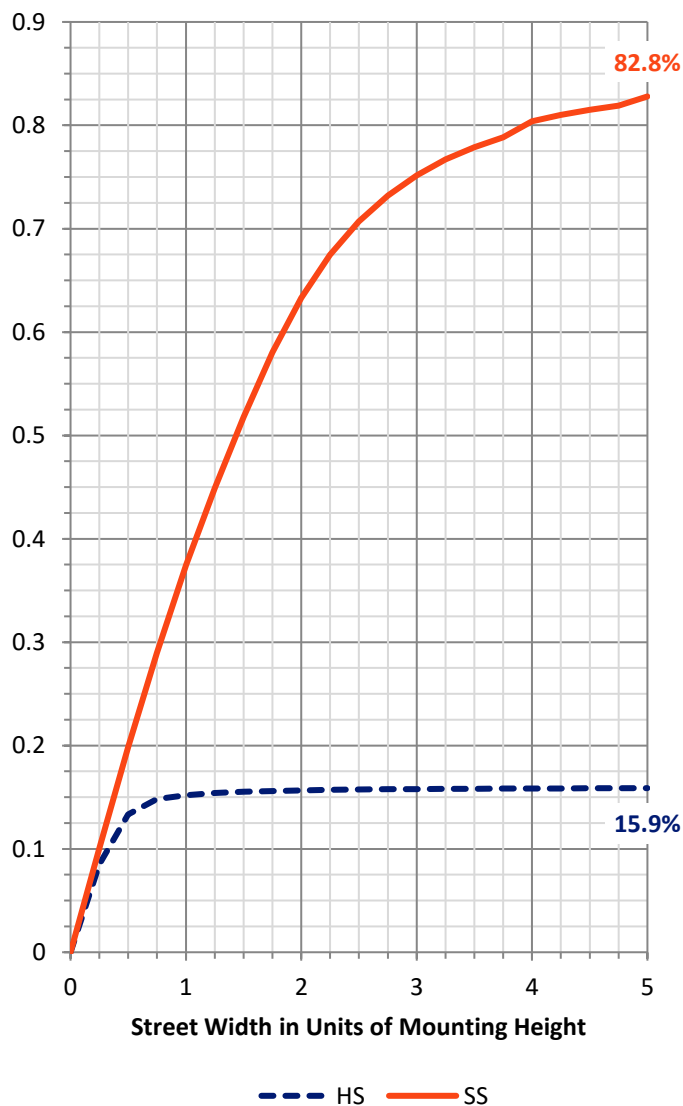
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3684.7	0.0	3684.7
	% Fixture	16.1	0.0	16.1
Street Side	Lumens	19262.3	0.0	19262.3
	% Fixture	83.9	0.0	83.9
Total	Lumens	22947.0	0.0	22947.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.8	1.0
10°-20°	675.1	2.9
20°-30°	1196.1	5.2
30°-40°	1915.8	8.3
40°-50°	3073.4	13.4
50°-60°	4492.4	19.6
60°-70°	5986.3	26.1
70°-80°	4492.2	19.6
80°-90°	888.8	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°	22947.0	100.0
0°-180°	22947.0	100.0

Coefficient of Utilization



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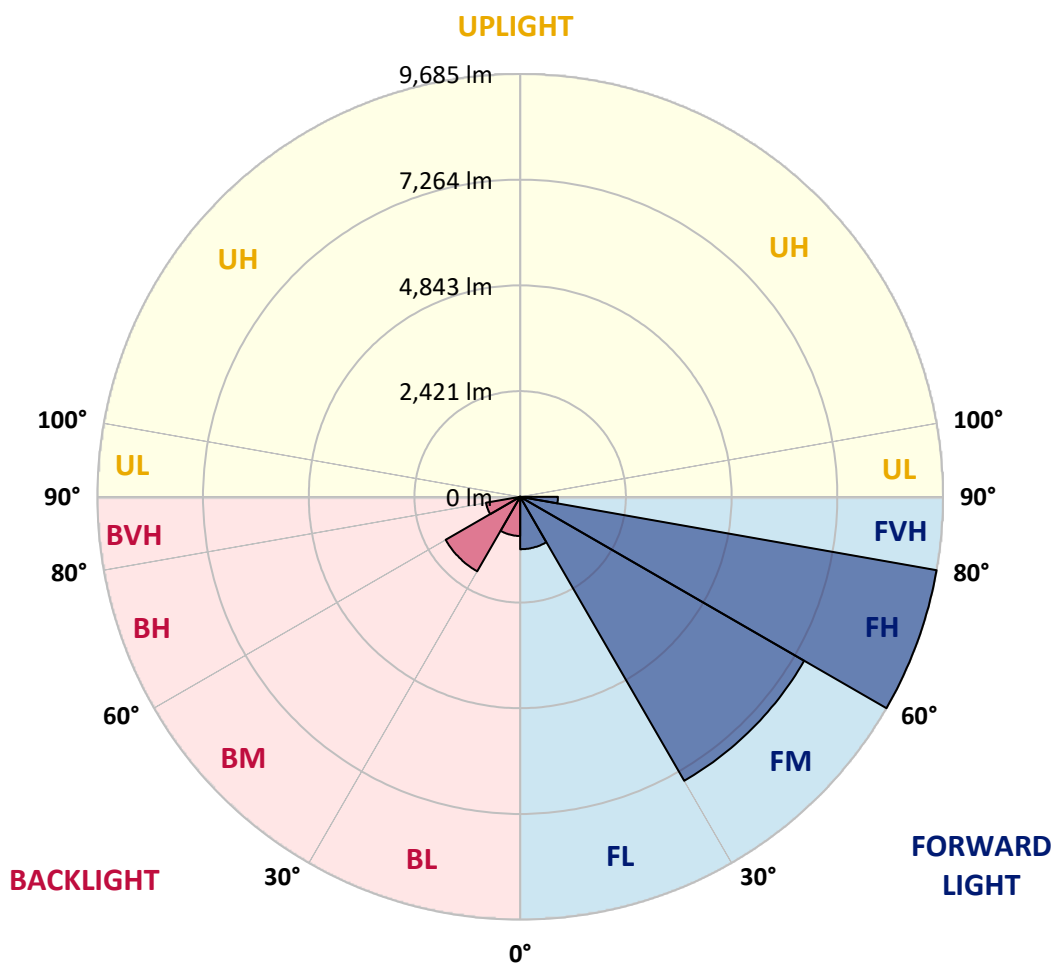
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1200.8	5.2			
FM (30°-60°)	7510.8	32.7			
FH (60°-80°)	9685.2	42.2			G4/12000
FVH (80°-90°)	865.5	3.8			G5
BL (0°-30°)	897.3	3.9	B2/1000		
BM (30°-60°)	1970.8	8.6	B2/2500		
BH (60°-80°)	793.4	3.5	B2/1000		G2/1000
BVH (80°-90°)	23.3	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	2402.8	2402.8	2402.8	2402.8	2402.8	2402.8	2402.8	2402.8	2402.8	2402.8	2402.8
2.5°	2405.1	2437.4	2437.4	2428.2	2433.9	2438.5	2403.9	2413.2	2409.7	2408.6	2415.5
5°	2423.5	2459.3	2457.0	2445.5	2450.1	2459.3	2427.0	2440.8	2436.2	2424.7	2427.0
7.5°	2423.5	2453.5	2460.4	2447.8	2469.7	2481.2	2446.6	2459.3	2465.1	2457.0	2448.9
10°	2414.3	2440.8	2450.1	2447.8	2476.6	2495.0	2461.6	2497.3	2502.0	2502.0	2489.3
12.5°	2410.9	2440.8	2453.5	2463.9	2497.3	2516.9	2497.3	2531.9	2555.0	2553.8	2545.8
15°	2413.2	2446.6	2466.2	2483.5	2519.2	2543.5	2535.4	2588.4	2616.1	2624.2	2624.2
17.5°	2470.8	2511.2	2520.4	2538.8	2563.1	2600.0	2589.6	2657.6	2701.4	2715.3	2734.9
20°	2632.2	2663.4	2674.9	2665.7	2676.1	2699.1	2678.4	2744.1	2809.8	2846.7	2879.0
22.5°	2838.6	2861.7	2851.3	2842.1	2836.3	2842.1	2816.7	2860.5	2934.3	2987.4	3042.7
25°	2995.4	3046.2	3038.1	3012.7	3004.6	3011.6	2979.3	3033.5	3101.5	3156.8	3239.9
27.5°	3185.7	3216.8	3194.9	3185.7	3191.4	3190.3	3170.7	3222.6	3284.8	3354.0	3476.2
30°	3392.0	3418.6	3396.7	3387.4	3397.8	3404.7	3382.8	3473.9	3539.6	3614.6	3772.5
32.5°	3731.0	3794.4	3734.5	3614.6	3616.9	3627.3	3629.6	3751.8	3871.7	3930.5	4139.2
35°	4214.1	4264.8	4185.3	4040.0	3859.0	3852.1	3870.5	4052.7	4293.7	4561.2	4805.6
37.5°	4664.9	4738.7	4667.2	4497.7	4277.5	4224.5	4128.8	4345.6	4724.9	5300.2	5604.6
40°	5205.7	5261.0	5119.2	4971.6	4751.4	4676.5	4523.1	4661.5	5181.5	6071.6	6281.4
42.5°	5640.3	5673.8	5556.2	5401.7	5210.3	5153.8	4995.8	5008.5	5669.2	6747.2	6882.1
45°	6042.7	6078.5	5981.6	5850.2	5729.1	5661.1	5545.8	5608.1	6241.0	7459.7	7377.9
47.5°	6348.3	6384.0	6306.8	6213.4	6087.7	6041.6	6043.9	6267.6	6940.9	8029.3	7822.9
50°	6848.7	6834.8	6633.1	6531.6	6433.6	6457.8	6483.2	6801.4	7646.5	8518.2	8234.5
52.5°	7721.5	7653.4	7237.2	6972.0	6851.0	6892.5	6934.0	7357.1	8447.8	8964.4	8550.4
55°	8708.4	8639.2	8285.3	7718.0	7397.5	7464.3	7428.6	7907.1	9121.2	9393.3	8811.0
57.5°	9441.7	9555.8	9420.9	9111.9	8309.5	8221.9	8142.3	8462.8	9665.4	9822.2	9061.2
60°	10079.3	10238.4	10479.4	10395.2	10053.9	9825.6	9095.8	9111.9	10188.8	10119.6	9160.4
62.5°	10701.9	10795.3	11208.1	11299.1	11722.3	11886.0	11144.6	9951.3	10695.0	10326.0	9227.2
65°	10079.3	10199.2	10917.5	11580.5	12947.9	13167.0	12906.4	11470.9	11067.4	10448.2	9150.0
67.5°	9072.7	9145.4	9921.3	11127.3	13588.9	13787.3	13584.3	12866.0	11241.5	10411.3	8910.2
70°	7757.2	7871.3	8633.5	10249.9	13565.9	13672.0	13495.5	13034.4	11175.8	10199.2	8304.9
72.5°	6415.1	6479.7	7125.4	8738.4	12902.9	12991.7	12898.3	12776.1	10954.4	9607.7	7141.5
75°	4821.7	4835.6	5497.4	6900.5	11408.7	11872.2	11986.3	12331.0	10107.0	8235.7	5281.8
77.5°	3232.9	3370.1	4005.4	5273.7	9365.6	10107.0	10647.7	10899.1	8444.4	6146.5	2808.6
80°	1735.2	1769.8	2454.7	3742.6	7117.3	7826.4	8339.5	8344.1	5905.5	3045.0	627.2
82.5°	803.6	770.2	1236.0	2368.2	4930.1	5246.0	5589.6	4682.2	2364.7	520.0	160.3
85°	356.3	375.9	559.2	1154.1	2736.0	3053.1	3009.3	2073.0	415.1	140.7	98.0
87.5°	132.6	139.5	216.8	465.8	976.6	1065.3	958.1	398.9	54.2	49.6	30.0
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°	2402.8	2402.8	2402.8	2402.8	2402.8	2402.8	2402.8	2402.8	2402.8	2402.8	2402.8
2.5°	2407.4	2407.4	2405.1	2374.0	2367.1	2352.1	2339.4	2348.6	2338.2	2345.1	2338.2
5°	2417.8	2412.0	2398.2	2361.3	2344.0	2310.6	2285.2	2291.0	2277.1	2277.1	2276.0
7.5°	2442.0	2430.5	2406.3	2347.5	2315.2	2266.7	2227.5	2214.9	2201.0	2184.9	2182.6
10°	2481.2	2465.1	2432.8	2352.1	2289.8	2225.2	2157.2	2130.7	2096.1	2070.7	2066.1
12.5°	2535.4	2511.2	2467.4	2369.4	2287.5	2184.9	2093.8	2041.9	2000.4	1963.5	1955.4
15°	2613.8	2589.6	2537.7	2403.9	2288.7	2146.8	2026.9	1940.5	1869.0	1834.4	1835.5
17.5°	2727.9	2710.6	2631.1	2476.6	2310.6	2127.2	1971.6	1834.4	1723.7	1666.0	1658.0
20°	2874.4	2862.8	2766.0	2572.3	2361.3	2130.7	1911.6	1721.4	1558.8	1433.1	1405.5
22.5°	3045.0	3027.7	2909.0	2655.3	2400.5	2121.5	1845.9	1596.9	1352.4	1188.7	1156.4
25°	3235.2	3226.0	3040.4	2727.9	2405.1	2082.3	1751.4	1435.5	1128.8	953.5	925.8
27.5°	3478.5	3424.3	3159.1	2767.1	2394.7	2005.0	1616.5	1214.1	897.0	776.0	746.0
30°	3744.9	3635.3	3274.4	2797.1	2344.0	1881.7	1423.9	958.1	667.6	560.3	545.4
32.5°	4040.0	3876.3	3382.8	2794.8	2254.1	1691.4	1173.7	665.3	450.8	407.0	392.0
35°	4573.8	4296.0	3513.1	2756.8	2103.0	1465.4	829.0	433.5	334.4	307.8	304.4
37.5°	5315.2	4843.6	3688.4	2684.1	1908.2	1202.6	540.7	296.3	285.9	287.1	285.9
40°	5922.8	5454.7	3931.6	2574.6	1662.6	859.0	324.0	264.0	269.8	273.3	274.4
42.5°	6517.8	5952.8	4232.6	2437.4	1405.5	558.0	262.9	252.5	247.9	253.7	256.0
45°	6996.2	6387.5	4516.2	2277.1	1104.5	329.8	254.8	234.1	226.0	228.3	231.7
47.5°	7379.0	6733.4	4686.8	2090.3	807.1	249.0	247.9	217.9	206.4	204.1	202.9
50°	7739.9	7029.7	4796.4	1864.4	514.2	239.8	229.4	199.5	185.6	183.3	183.3
52.5°	7985.5	7223.4	4833.3	1596.9	306.7	234.1	216.8	184.5	166.0	169.5	171.8
55°	8225.3	7419.4	4757.2	1248.7	235.2	219.1	202.9	166.0	151.0	164.9	169.5
57.5°	8339.5	7448.2	4585.4	868.2	228.3	198.3	183.3	148.7	137.2	145.3	145.3
60°	8431.7	7428.6	4345.6	550.0	222.5	184.5	167.2	134.9	121.1	116.5	113.0
62.5°	8370.6	7350.2	3863.6	358.6	206.4	168.3	152.2	124.5	104.9	92.2	91.1
65°	8240.3	7073.5	3084.2	282.5	191.4	160.3	138.4	111.8	92.2	77.2	76.1
67.5°	7856.4	6400.2	1995.8	234.1	183.3	154.5	128.0	103.8	81.9	66.9	65.7
70°	6936.3	5169.9	612.2	209.8	190.2	148.7	125.7	94.5	72.6	58.8	56.5
72.5°	5484.7	3454.3	227.1	174.1	163.7	143.0	122.2	85.3	62.3	49.6	47.3
75°	3532.7	1128.8	192.5	134.9	139.5	136.1	113.0	78.4	53.0	40.4	39.2
77.5°	1000.8	236.4	175.3	99.2	123.4	131.4	99.2	65.7	47.3	34.6	33.4
80°	209.8	168.3	160.3	70.3	92.2	85.3	66.9	50.7	45.0	30.0	30.0
82.5°	137.2	133.7	137.2	48.4	61.1	62.3	53.0	43.8	39.2	27.7	27.7
85°	96.8	122.2	65.7	34.6	28.8	26.5	31.1	38.0	34.6	23.1	23.1
87.5°	33.4	19.6	13.8	13.8	12.7	12.7	15.0	17.3	18.4	18.4	17.3
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)