

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: P510120

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

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510120
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-CA4-210-727-U-T4-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 2700K, 960mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22931 lumens
Efficiency: N/A
Efficacy: 107.4 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

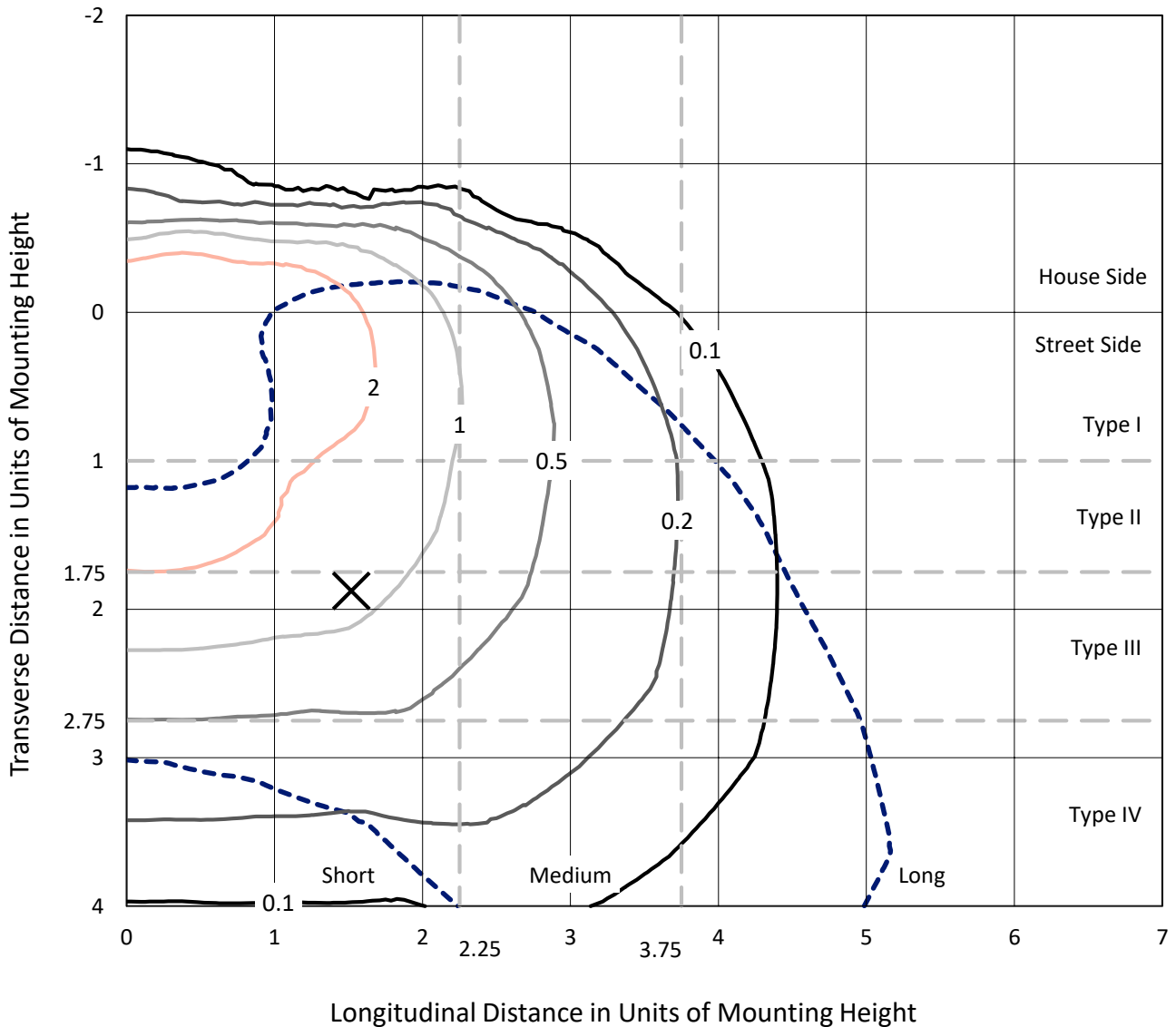
Input Watts (W): 213.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510120
 CATALOG NUMBER: VERD-M-CA4-210-727-U-T4-HSS

Iso-Footcandle Lines of Horizontal Illumination

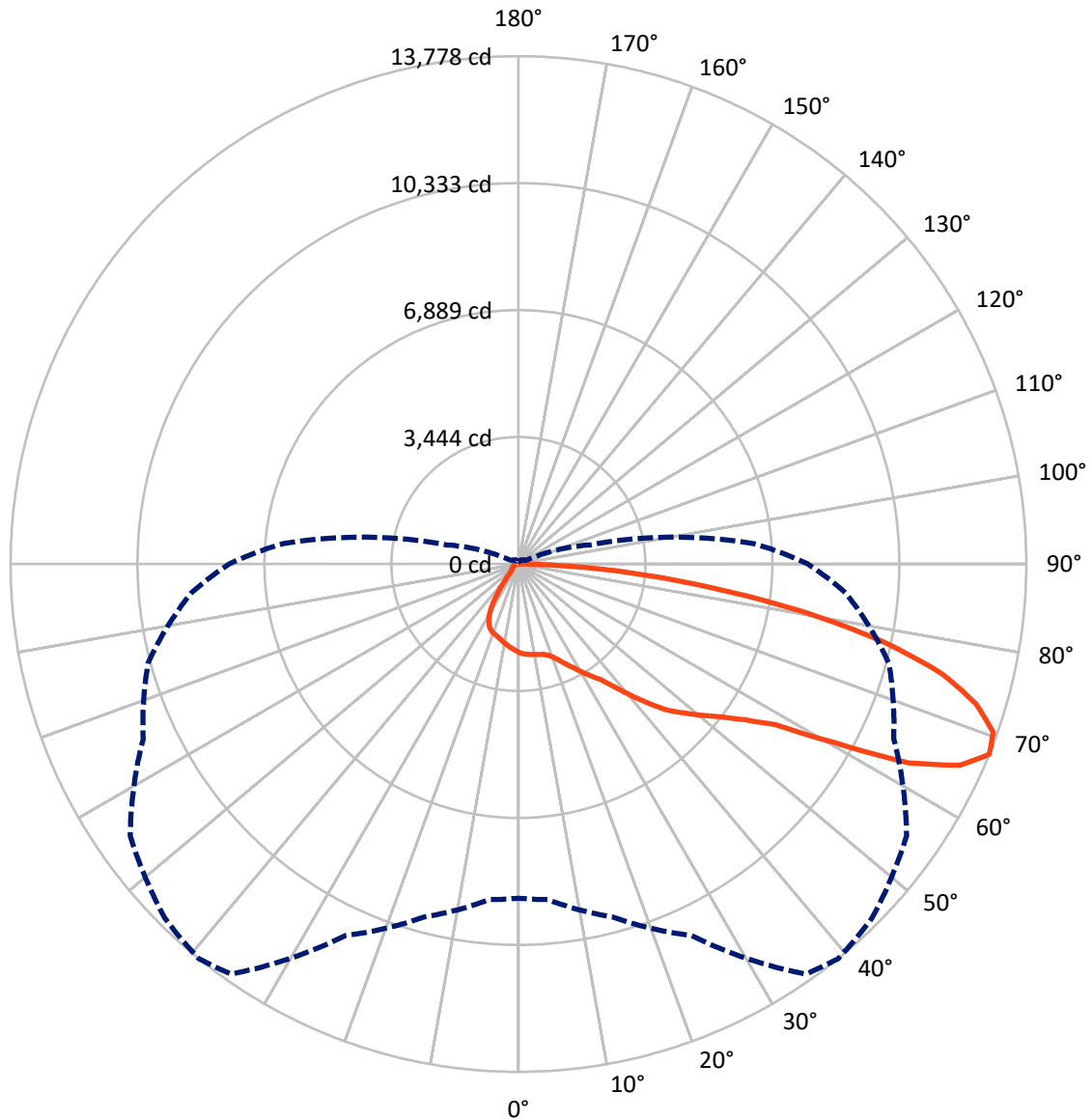
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P510120
CATALOG NUMBER: VERD-M-CA4-210-727-U-T4-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P510120
 CATALOG NUMBER: VERD-M-CA4-210-727-U-T4-HSS

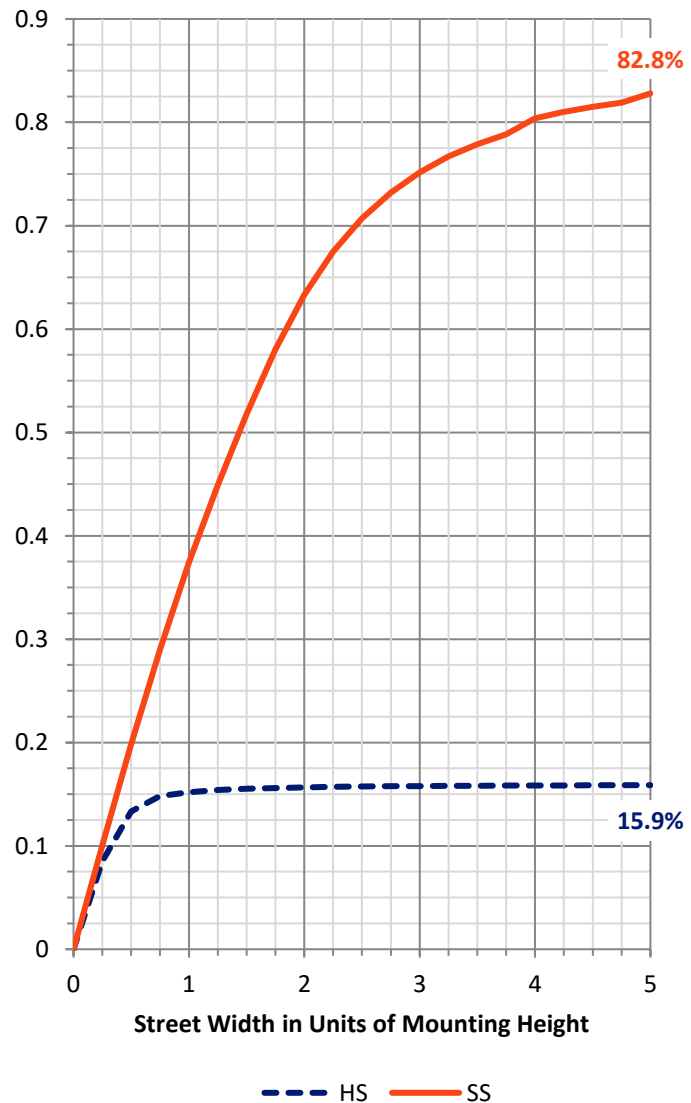
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3682.1	0.0	3682.1
	% Fixture	16.1	0.0	16.1
Street Side	Lumens	19248.9	0.0	19248.9
	% Fixture	83.9	0.0	83.9
Total	Lumens	22931.0	0.0	22931.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.7	1.0
10°-20°	674.7	2.9
20°-30°	1195.3	5.2
30°-40°	1914.5	8.3
40°-50°	3071.2	13.4
50°-60°	4489.2	19.6
60°-70°	5982.2	26.1
70°-80°	4489.1	19.6
80°-90°	888.2	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°	22931.0	100.0
0°-180°	22931.0	100.0



REPORT NUMBER: P510120

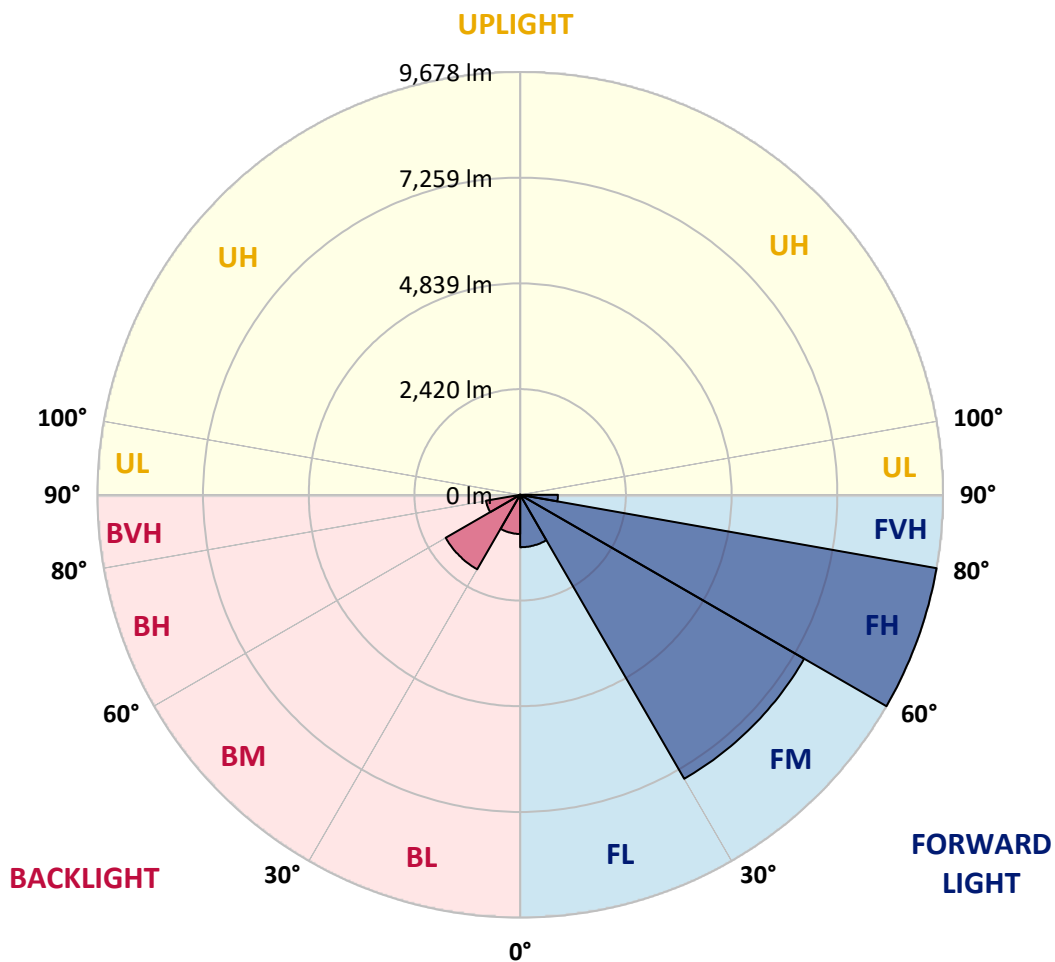
CATALOG NUMBER: VERD-M-CA4-210-727-U-T4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1200.0	5.2			
FM	(30°-60°)	7505.5	32.7			
FH	(60°-80°)	9678.4	42.2			G4/12000
FVH	(80°-90°)	864.9	3.8			G5
BL	(0°-30°)	896.6	3.9	B2/1000		
BM	(30°-60°)	1969.4	8.6	B2/2500		
BH	(60°-80°)	792.8	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





REPORT NUMBER: P510120

CATALOG NUMBER: VERD-M-CA4-210-727-U-T4-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	2401.1	2401.1	2401.1	2401.1	2401.1	2401.1	2401.1	2401.1	2401.1	2401.1	2401.1
2.5°	2403.4	2435.7	2435.7	2426.5	2432.2	2436.8	2402.3	2411.5	2408.0	2406.9	2413.8
5°	2421.9	2457.6	2455.3	2443.8	2448.4	2457.6	2425.3	2439.1	2434.5	2423.0	2425.3
7.5°	2421.9	2451.8	2458.7	2446.1	2467.9	2479.5	2444.9	2457.6	2463.3	2455.3	2447.2
10°	2412.6	2439.1	2448.4	2446.1	2474.9	2493.3	2459.9	2495.6	2500.2	2500.2	2487.5
12.5°	2409.2	2439.1	2451.8	2462.2	2495.6	2515.2	2495.6	2530.2	2553.2	2552.1	2544.0
15°	2411.5	2444.9	2464.5	2481.8	2517.5	2541.7	2533.6	2586.6	2614.3	2622.3	2622.3
17.5°	2469.1	2509.4	2518.6	2537.1	2561.3	2598.1	2587.8	2655.7	2699.5	2713.4	2732.9
20°	2630.4	2661.5	2673.0	2663.8	2674.2	2697.2	2676.5	2742.2	2807.8	2844.7	2877.0
22.5°	2836.6	2859.7	2849.3	2840.1	2834.3	2840.1	2814.7	2858.5	2932.3	2985.3	3040.6
25°	2993.3	3044.0	3036.0	3010.6	3002.6	3009.5	2977.2	3031.4	3099.3	3154.6	3237.6
27.5°	3183.4	3214.6	3192.7	3183.4	3189.2	3188.1	3168.5	3220.3	3282.5	3351.7	3473.8
30°	3389.7	3416.2	3394.3	3385.1	3395.4	3402.4	3380.5	3471.5	3537.2	3612.1	3769.9
32.5°	3728.4	3791.8	3731.9	3612.1	3614.4	3624.7	3627.0	3749.2	3869.0	3927.7	4136.3
35°	4211.2	4261.9	4182.4	4037.2	3856.3	3849.4	3867.8	4049.9	4290.7	4558.0	4802.2
37.5°	4661.7	4735.4	4664.0	4494.6	4274.5	4221.5	4125.9	4342.5	4721.6	5296.5	5600.7
40°	5202.0	5257.3	5115.6	4968.2	4748.1	4673.2	4520.0	4658.2	5177.8	6067.3	6277.0
42.5°	5636.4	5669.8	5552.3	5397.9	5206.7	5150.2	4992.3	5005.0	5665.2	6742.5	6877.3
45°	6038.5	6074.2	5977.5	5846.1	5725.1	5657.2	5541.9	5604.2	6236.7	7454.5	7372.7
47.5°	6343.8	6379.6	6302.4	6209.0	6083.5	6037.4	6039.7	6263.2	6936.1	8023.7	7817.5
50°	6843.9	6830.1	6628.4	6527.0	6429.1	6453.3	6478.6	6796.6	7641.2	8512.2	8228.8
52.5°	7716.1	7648.1	7232.2	6967.2	6846.2	6887.7	6929.1	7352.0	8441.9	8958.1	8544.5
55°	8702.3	8633.2	8279.5	7712.6	7392.3	7459.1	7423.4	7901.6	9114.8	9386.7	8804.9
57.5°	9435.1	9549.2	9414.4	9105.6	8303.7	8216.1	8136.6	8456.9	9658.6	9815.3	9054.9
60°	10072.3	10231.3	10472.1	10388.0	10046.9	9818.8	9089.5	9105.6	10181.7	10112.6	9154.0
62.5°	10694.4	10787.8	11200.2	11291.3	11714.1	11877.7	11136.9	9944.4	10687.5	10318.8	9220.8
65°	10072.3	10192.1	10909.9	11572.4	12938.9	13157.8	12897.4	11462.9	11059.7	10441.0	9143.6
67.5°	9066.4	9139.0	9914.4	11119.6	13579.5	13777.6	13574.9	12857.1	11233.6	10404.1	8904.0
70°	7751.8	7865.9	8627.4	10242.8	13556.4	13662.4	13486.1	13025.3	11168.0	10192.1	8299.1
72.5°	6410.7	6475.2	7120.4	8732.3	12893.9	12982.6	12889.3	12767.2	10946.8	9601.0	7136.5
75°	4818.4	4832.2	5493.5	6895.7	11400.7	11863.9	11978.0	12322.4	10099.9	8229.9	5278.1
77.5°	3230.7	3367.8	4002.6	5270.0	9359.1	10099.9	10640.3	10891.5	8438.5	6142.2	2806.7
80°	1734.0	1768.6	2453.0	3739.9	7112.3	7820.9	8333.6	8338.2	5901.4	3042.9	626.8
82.5°	803.1	769.6	1235.1	2366.6	4926.7	5242.4	5585.7	4679.0	2363.1	519.6	160.2
85°	356.0	375.6	558.8	1153.3	2734.1	3050.9	3007.2	2071.6	414.8	140.6	97.9
87.5°	132.5	139.4	216.6	465.5	975.9	1064.6	957.5	398.7	54.2	49.5	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



REPORT NUMBER: P510120

CATALOG NUMBER: VERD-M-CA4-210-727-U-T4-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2401.1	2401.1	2401.1	2401.1	2401.1	2401.1	2401.1	2401.1	2401.1	2401.1	2401.1
2.5°	2405.7	2405.7	2403.4	2372.3	2365.4	2350.4	2337.8	2347.0	2336.6	2343.5	2336.6
5°	2416.1	2410.3	2396.5	2359.6	2342.4	2308.9	2283.6	2289.4	2275.5	2275.5	2274.4
7.5°	2440.3	2428.8	2404.6	2345.8	2313.6	2265.2	2226.0	2213.3	2199.5	2183.4	2181.1
10°	2479.5	2463.3	2431.1	2350.4	2288.2	2223.7	2155.7	2129.2	2094.6	2069.3	2064.7
12.5°	2533.6	2509.4	2465.6	2367.7	2285.9	2183.4	2092.3	2040.5	1999.0	1962.1	1954.1
15°	2612.0	2587.8	2535.9	2402.3	2287.1	2145.3	2025.5	1939.1	1867.7	1833.1	1834.3
17.5°	2726.0	2708.7	2629.2	2474.9	2308.9	2125.8	1970.2	1833.1	1722.5	1664.9	1656.8
20°	2872.4	2860.8	2764.1	2570.5	2359.6	2129.2	1910.3	1720.2	1557.7	1432.1	1404.5
22.5°	3042.9	3025.6	2906.9	2653.4	2398.8	2120.0	1844.6	1595.8	1351.5	1187.9	1155.6
25°	3233.0	3223.8	3038.3	2726.0	2403.4	2080.8	1750.1	1434.5	1128.0	952.8	925.2
27.5°	3476.1	3421.9	3156.9	2765.2	2393.1	2003.6	1615.3	1213.2	896.4	775.4	745.5
30°	3742.2	3632.8	3272.2	2795.2	2342.4	1880.3	1422.9	957.5	667.1	560.0	545.0
32.5°	4037.2	3873.6	3380.5	2792.9	2252.5	1690.2	1172.9	664.8	450.5	406.7	391.7
35°	4570.7	4293.0	3510.7	2754.8	2101.6	1464.4	828.4	433.2	334.1	307.6	304.2
37.5°	5311.5	4840.3	3685.8	2682.2	1906.8	1201.7	540.4	296.1	285.7	286.9	285.7
40°	5918.7	5450.9	3928.9	2572.8	1661.4	858.4	323.8	263.8	269.6	273.1	274.2
42.5°	6513.2	5948.6	4229.6	2435.7	1404.5	557.6	262.7	252.3	247.7	253.5	255.8
45°	6991.4	6383.0	4513.0	2275.5	1103.8	329.5	254.6	233.9	225.8	228.1	231.6
47.5°	7373.9	6728.7	4683.6	2088.9	806.5	248.9	247.7	217.8	206.2	203.9	202.8
50°	7734.5	7024.8	4793.0	1863.1	513.9	239.7	229.3	199.3	185.5	183.2	183.2
52.5°	7979.9	7218.3	4829.9	1595.8	306.5	233.9	216.6	184.3	165.9	169.4	171.7
55°	8219.6	7414.2	4753.8	1247.8	235.0	218.9	202.8	165.9	150.9	164.8	169.4
57.5°	8333.6	7443.0	4582.2	867.6	228.1	198.2	183.2	148.6	137.1	145.2	145.2
60°	8425.8	7423.4	4342.5	549.6	222.4	184.3	167.1	134.8	121.0	116.4	112.9
62.5°	8364.7	7345.1	3860.9	358.3	206.2	168.2	152.1	124.4	104.8	92.2	91.0
65°	8234.6	7068.6	3082.1	282.3	191.3	160.2	138.3	111.8	92.2	77.2	76.0
67.5°	7850.9	6395.7	1994.4	233.9	183.2	154.4	127.9	103.7	81.8	66.8	65.7
70°	6931.4	5166.3	611.8	209.7	190.1	148.6	125.6	94.5	72.6	58.8	56.5
72.5°	5480.9	3451.9	227.0	174.0	163.6	142.9	122.1	85.3	62.2	49.5	47.2
75°	3530.2	1128.0	192.4	134.8	139.4	136.0	112.9	78.3	53.0	40.3	39.2
77.5°	1000.1	236.2	175.1	99.1	123.3	131.3	99.1	65.7	47.2	34.6	33.4
80°	209.7	168.2	160.2	70.3	92.2	85.3	66.8	50.7	44.9	30.0	30.0
82.5°	137.1	133.7	137.1	48.4	61.1	62.2	53.0	43.8	39.2	27.7	27.7
85°	96.8	122.1	65.7	34.6	28.8	26.5	31.1	38.0	34.6	23.0	23.0
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)