

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: P510048

Luminaire Tested: **VERD-M-CA4-190-750-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510048
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-CA4-190-750-U-T4-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 5000K, 870mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25321 lumens
Efficiency: N/A
Efficacy: 131.1 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

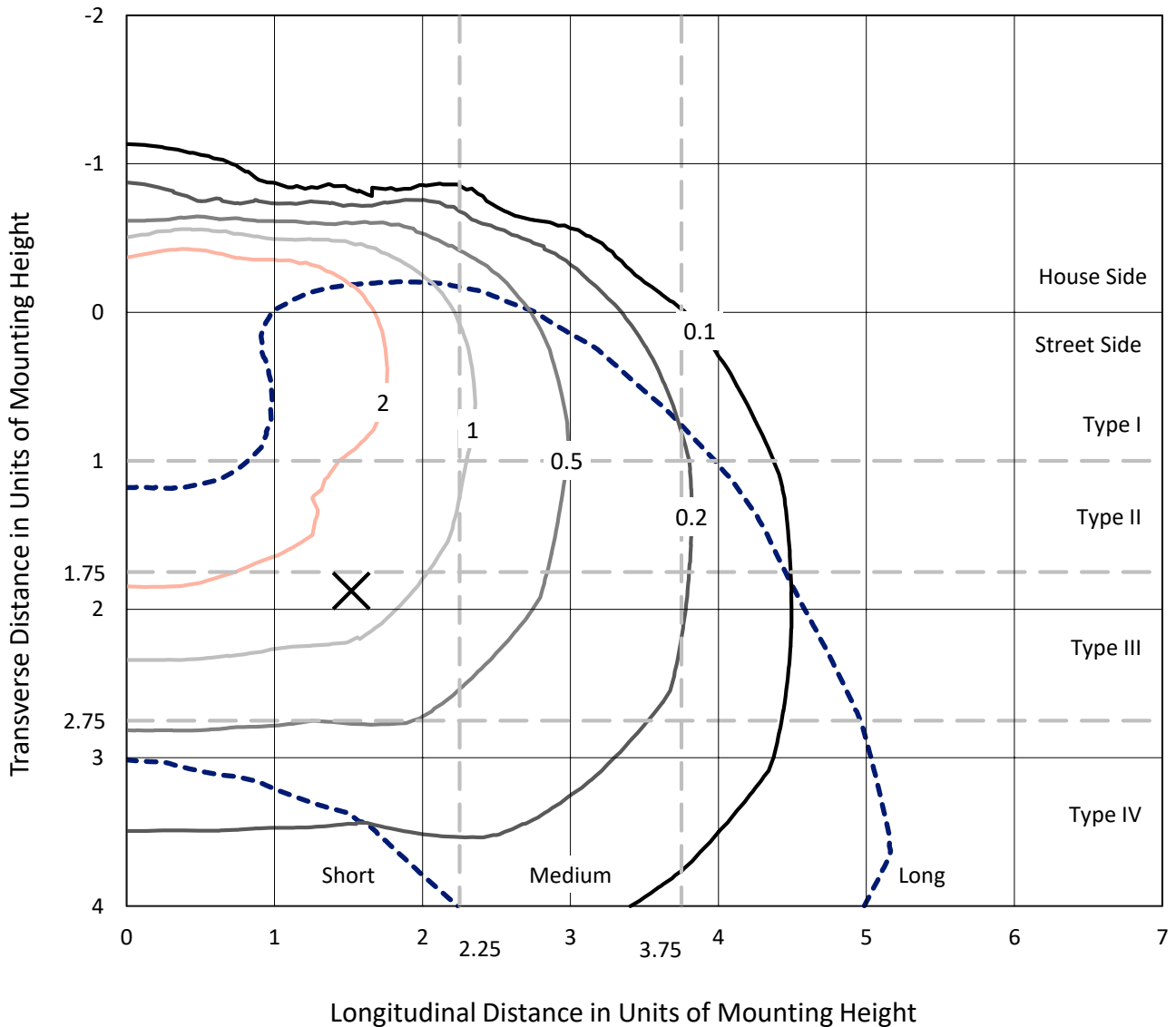
Input Watts (W): 193.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510048
 CATALOG NUMBER: VERD-M-CA4-190-750-U-T4-HSS

Iso-Footcandle Lines of Horizontal Illumination

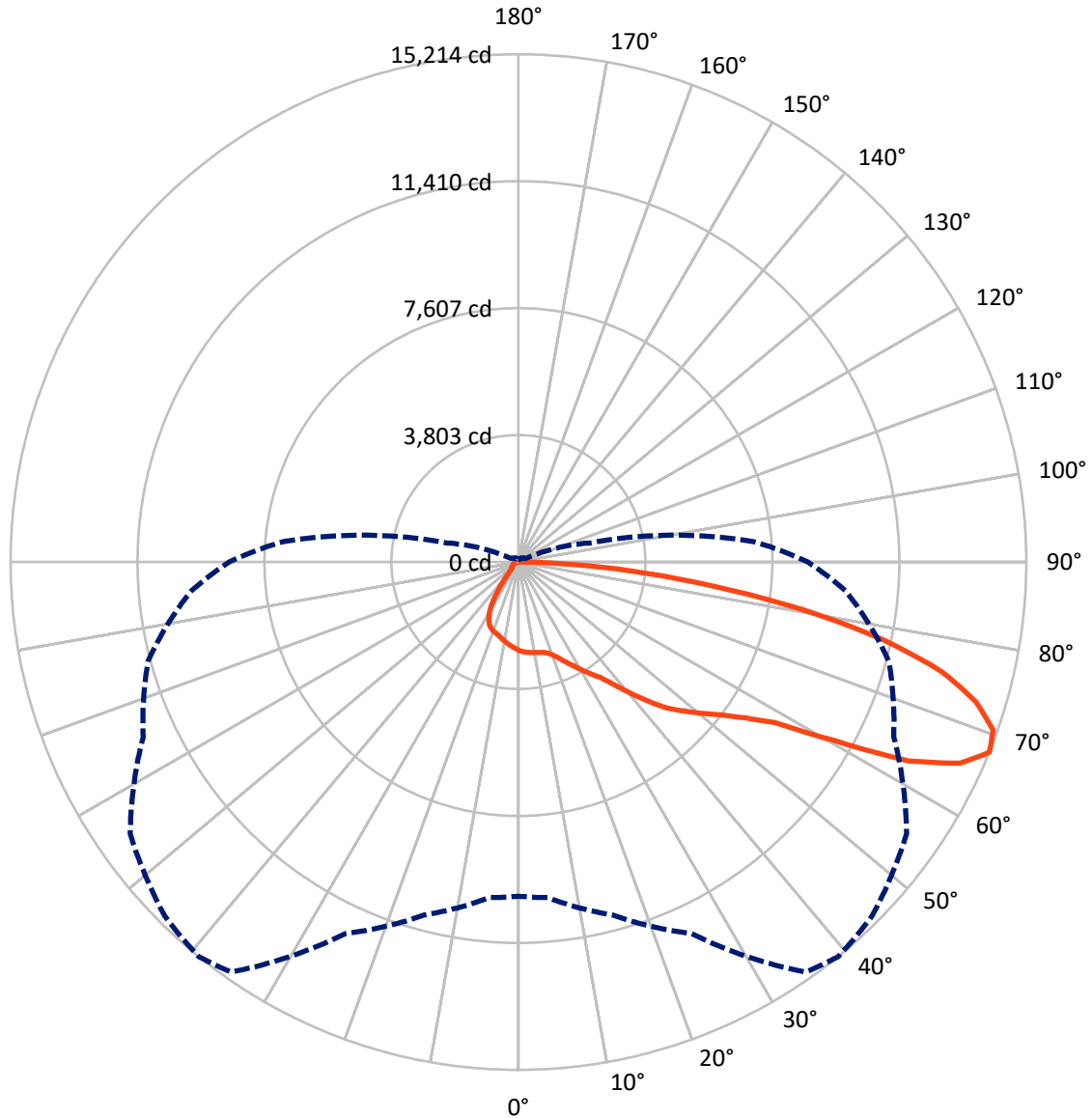
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
 Type IV - Short - N/A

REPORT NUMBER: P510048
CATALOG NUMBER: VERD-M-CA4-190-750-U-T4-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P510048

CATALOG NUMBER: VERD-M-CA4-190-750-U-T4-HSS

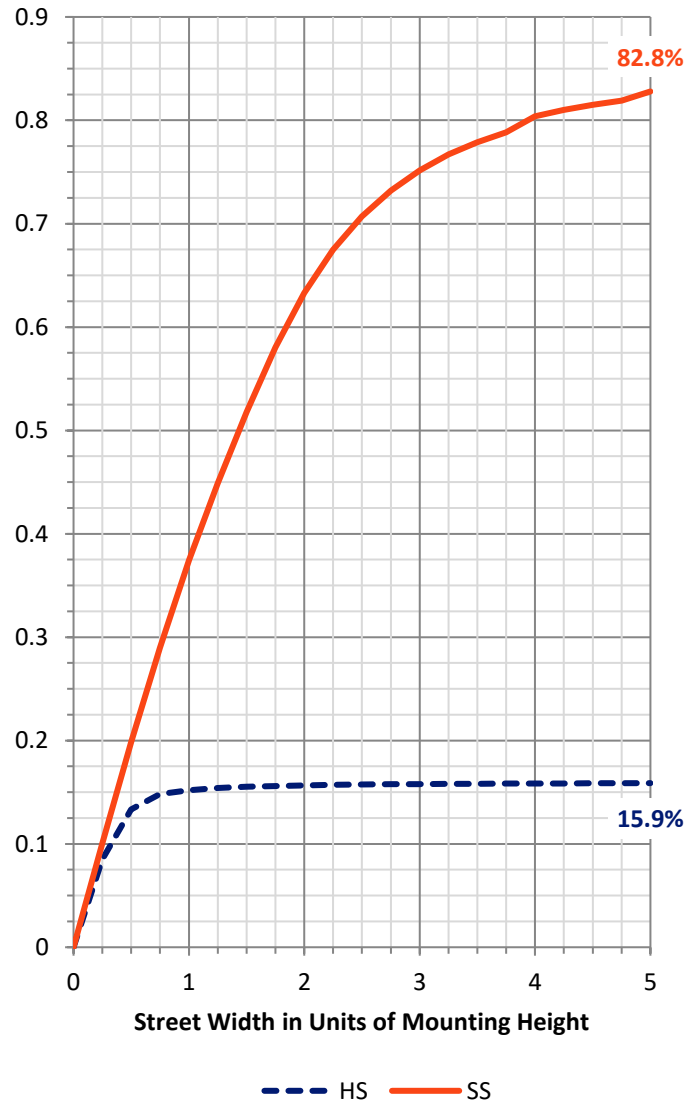
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4065.9	0.0	4065.9
	% Fixture	16.1	0.0	16.1
Street Side	Lumens	21255.1	0.0	21255.1
	% Fixture	83.9	0.0	83.9
Total	Lumens	25321.0	0.0	25321.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.3	1.0
10°-20°	745.0	2.9
20°-30°	1319.9	5.2
30°-40°	2114.0	8.3
40°-50°	3391.3	13.4
50°-60°	4957.1	19.6
60°-70°	6605.6	26.1
70°-80°	4957.0	19.6
80°-90°	980.8	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°	25321.0	100.0
0°-180°	25321.0	100.0

Coefficient of Utilization



REPORT NUMBER: P510048

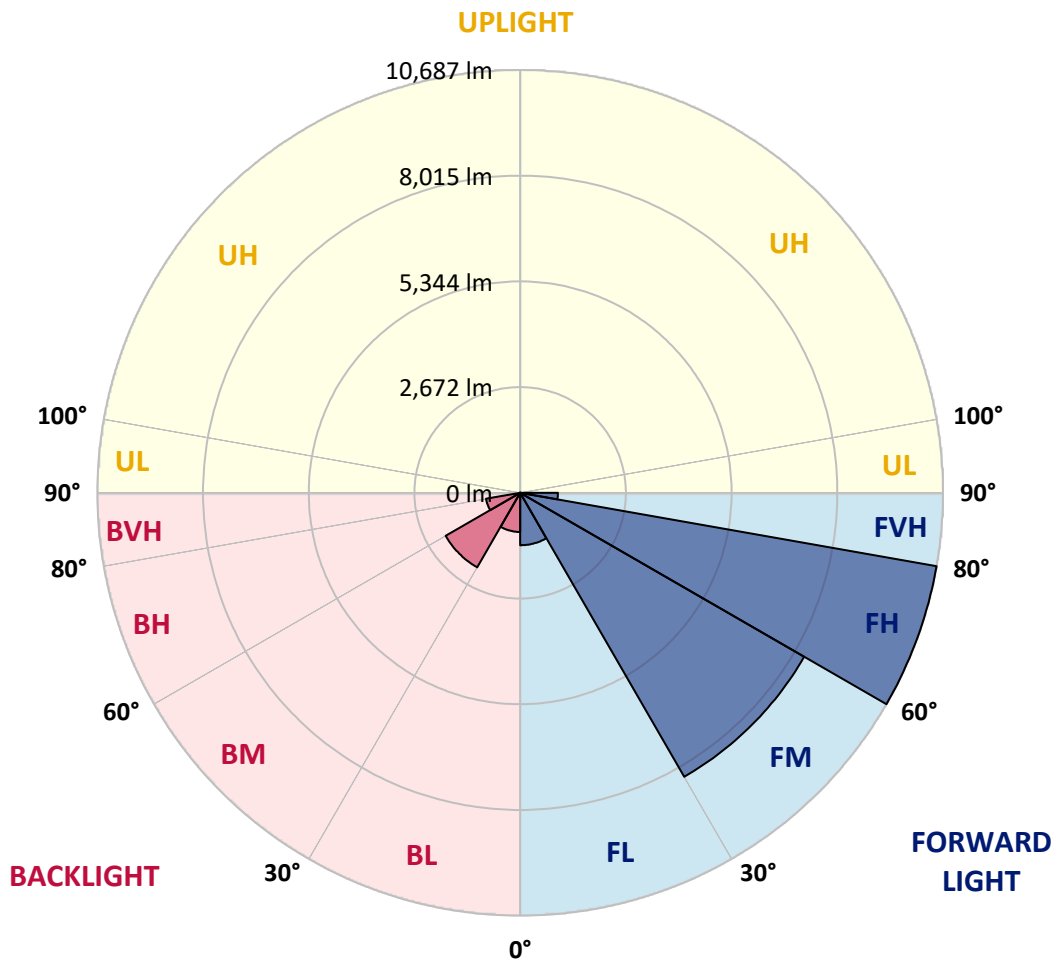
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1325.1	5.2			
FM	(30°-60°)	8287.8	32.7			
FH	(60°-80°)	10687.1	42.2			G4/12000
FVH	(80°-90°)	955.1	3.8			G5
BL	(0°-30°)	990.1	3.9	B2/1000		
BM	(30°-60°)	2174.7	8.6	B2/2500		
BH	(60°-80°)	875.5	3.5	B2/1000		G2/1000
BVH	(80°-90°)	25.7	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: P510048

CATALOG NUMBER: VERD-M-CA4-190-750-U-T4-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	2651.4	2651.4	2651.4	2651.4	2651.4	2651.4	2651.4	2651.4	2651.4	2651.4	2651.4
2.5°	2653.9	2689.5	2689.5	2679.4	2685.7	2690.8	2652.7	2662.8	2659.0	2657.7	2665.4
5°	2674.3	2713.7	2711.2	2698.5	2703.5	2713.7	2678.1	2693.4	2688.3	2675.6	2678.1
7.5°	2674.3	2707.4	2715.0	2701.0	2725.2	2737.9	2699.7	2713.7	2720.1	2711.2	2702.3
10°	2664.1	2693.4	2703.5	2701.0	2732.8	2753.2	2716.3	2755.7	2760.8	2760.8	2746.8
12.5°	2660.3	2693.4	2707.4	2718.8	2755.7	2777.3	2755.7	2793.9	2819.3	2818.0	2809.1
15°	2662.8	2699.7	2721.4	2740.4	2779.9	2806.6	2797.7	2856.2	2886.7	2895.7	2895.7
17.5°	2726.4	2771.0	2781.1	2801.5	2828.2	2868.9	2857.5	2932.5	2980.9	2996.2	3017.8
20°	2904.6	2938.9	2951.6	2941.5	2952.9	2978.3	2955.4	3028.0	3100.5	3141.2	3176.8
22.5°	3132.3	3157.7	3146.3	3136.1	3129.7	3136.1	3108.1	3156.5	3237.9	3296.4	3357.5
25°	3305.3	3361.3	3352.4	3324.4	3315.5	3323.1	3287.5	3347.3	3422.4	3483.4	3575.0
27.5°	3515.2	3549.6	3525.4	3515.2	3521.6	3520.3	3498.7	3556.0	3624.7	3701.0	3835.8
30°	3743.0	3772.2	3748.1	3737.9	3749.3	3757.0	3732.8	3833.3	3905.8	3988.5	4162.8
32.5°	4117.0	4187.0	4120.8	3988.5	3991.1	4002.5	4005.1	4139.9	4272.2	4337.1	4567.4
35°	4650.1	4706.1	4618.3	4458.0	4258.2	4250.6	4271.0	4472.0	4737.9	5033.0	5302.8
37.5°	5147.5	5229.0	5150.1	4963.1	4720.1	4661.5	4555.9	4795.1	5213.7	5848.6	6184.4
40°	5744.2	5805.3	5648.8	5486.0	5243.0	5160.3	4991.1	5143.7	5717.5	6699.7	6931.2
42.5°	6223.9	6260.8	6131.0	5960.5	5749.3	5687.0	5512.7	5526.7	6255.7	7445.2	7594.1
45°	6667.9	6707.3	6600.5	6455.4	6321.8	6246.8	6119.5	6188.2	6886.7	8231.5	8141.2
47.5°	7005.0	7044.5	6959.2	6856.2	6717.5	6666.6	6669.2	6916.0	7659.0	8860.0	8632.2
50°	7557.2	7541.9	7319.3	7207.3	7099.2	7125.9	7153.9	7505.0	8437.6	9399.4	9086.4
52.5°	8520.3	8445.2	7985.9	7693.3	7559.7	7605.5	7651.3	8118.3	9321.8	9891.8	9435.0
55°	9609.3	9533.0	9142.4	8516.5	8162.8	8236.6	8197.1	8725.1	10064.8	10365.1	9722.6
57.5°	10418.5	10544.4	10395.6	10054.6	9169.1	9072.4	8984.7	9338.4	10665.3	10838.3	9998.7
60°	11122.1	11297.6	11563.5	11470.6	11094.1	10842.2	10036.8	10054.6	11242.9	11166.6	10108.1
62.5°	11809.1	11912.1	12367.6	12468.1	12935.0	13115.7	12297.6	10980.8	11801.4	11394.3	10181.9
65°	11122.1	11254.4	12047.0	12778.5	14287.4	14529.1	14241.6	12657.7	12212.4	11529.2	10096.6
67.5°	10011.4	10091.5	10947.8	12278.5	14994.8	15213.6	14989.7	14197.1	12404.5	11488.5	9832.0
70°	8559.7	8685.7	9526.6	11310.3	14969.3	15086.4	14891.7	14382.8	12332.0	11254.4	9164.1
72.5°	7078.8	7150.1	7862.5	9642.4	14237.8	14335.8	14232.7	14097.9	12087.7	10601.7	7880.3
75°	5320.6	5335.8	6066.1	7614.4	12589.0	13100.4	13226.4	13606.8	11152.6	9087.7	5828.2
77.5°	3567.4	3718.8	4419.8	5819.3	10334.5	11152.6	11749.3	12026.6	9318.0	6782.4	3099.2
80°	1914.7	1952.9	2708.6	4129.7	7853.6	8636.1	9202.2	9207.3	6516.5	3360.0	692.1
82.5°	886.8	849.9	1363.9	2613.2	5440.2	5788.8	6167.9	5166.6	2609.4	573.8	176.8
85°	393.1	414.8	617.0	1273.5	3019.1	3368.9	3320.6	2287.5	458.0	155.2	108.1
87.5°	146.3	153.9	239.2	514.0	1077.6	1175.6	1057.2	440.2	59.8	54.7	33.1
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: P510048

CATALOG NUMBER: VERD-M-CA4-190-750-U-T4-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2651.4	2651.4	2651.4	2651.4	2651.4	2651.4	2651.4	2651.4	2651.4	2651.4	2651.4
2.5°	2656.5	2656.5	2653.9	2619.6	2611.9	2595.4	2581.4	2591.6	2580.1	2587.8	2580.1
5°	2667.9	2661.6	2646.3	2605.6	2586.5	2549.6	2521.6	2528.0	2512.7	2512.7	2511.4
7.5°	2694.6	2681.9	2655.2	2590.3	2554.7	2501.3	2458.0	2444.0	2428.7	2410.9	2408.4
10°	2737.9	2720.1	2684.5	2595.4	2526.7	2455.5	2380.4	2351.1	2313.0	2285.0	2279.9
12.5°	2797.7	2771.0	2722.6	2614.5	2524.2	2410.9	2310.4	2253.2	2207.4	2166.6	2157.7
15°	2884.2	2857.5	2800.2	2652.7	2525.4	2368.9	2236.6	2141.2	2062.3	2024.2	2025.4
17.5°	3010.2	2991.1	2903.3	2732.8	2549.6	2347.3	2175.6	2024.2	1902.0	1838.4	1829.5
20°	3171.7	3159.0	3052.1	2838.4	2605.6	2351.1	2109.4	1899.5	1720.1	1581.4	1550.9
22.5°	3360.0	3340.9	3209.9	2930.0	2648.8	2340.9	2036.9	1762.1	1492.4	1311.7	1276.1
25°	3569.9	3559.8	3354.9	3010.2	2653.9	2297.7	1932.6	1584.0	1245.5	1052.2	1021.6
27.5°	3838.4	3778.6	3486.0	3053.4	2642.5	2212.5	1783.7	1339.7	989.8	856.2	823.1
30°	4132.3	4011.4	3613.2	3086.5	2586.5	2076.3	1571.2	1057.2	736.6	618.3	601.8
32.5°	4458.0	4277.3	3732.8	3083.9	2487.3	1866.4	1295.2	734.1	497.5	449.1	432.6
35°	5047.0	4740.4	3876.6	3042.0	2320.6	1617.0	914.8	478.4	369.0	339.7	335.9
37.5°	5865.1	5344.7	4069.9	2961.8	2105.6	1327.0	596.7	327.0	315.5	316.8	315.5
40°	6535.6	6019.0	4338.4	2840.9	1834.6	947.8	357.5	291.3	297.7	301.5	302.8
42.5°	7192.1	6568.7	4670.4	2689.5	1550.9	615.8	290.1	278.6	273.5	279.9	282.4
45°	7720.0	7048.3	4983.4	2512.7	1218.8	363.9	281.2	258.3	249.4	251.9	255.7
47.5°	8142.4	7430.0	5171.7	2306.6	890.6	274.8	273.5	240.5	227.7	225.2	223.9
50°	8540.6	7756.9	5292.6	2057.2	567.4	264.6	253.2	220.1	204.8	202.3	202.3
52.5°	8811.6	7970.7	5333.3	1762.1	338.4	258.3	239.2	203.6	183.2	187.0	189.6
55°	9076.3	8187.0	5249.3	1377.9	259.5	241.7	223.9	183.2	166.7	181.9	187.0
57.5°	9202.2	8218.8	5059.8	958.0	251.9	218.8	202.3	164.1	151.4	160.3	160.3
60°	9304.0	8197.1	4795.1	606.9	245.5	203.6	184.5	148.9	133.6	128.5	124.7
62.5°	9236.6	8110.6	4263.3	395.7	227.7	185.7	167.9	137.4	115.8	101.8	100.5
65°	9092.8	7805.3	3403.3	311.7	211.2	176.8	152.7	123.4	101.8	85.2	84.0
67.5°	8669.1	7062.3	2202.3	258.3	202.3	170.5	141.2	114.5	90.3	73.8	72.5
70°	7653.9	5704.8	675.6	231.6	209.9	164.1	138.7	104.3	80.2	64.9	62.3
72.5°	6052.1	3811.7	250.6	192.1	180.7	157.8	134.9	94.1	68.7	54.7	52.2
75°	3898.2	1245.5	212.5	148.9	153.9	150.1	124.7	86.5	58.5	44.5	43.3
77.5°	1104.3	260.8	193.4	109.4	136.1	145.0	109.4	72.5	52.2	38.2	36.9
80°	231.6	185.7	176.8	77.6	101.8	94.1	73.8	56.0	49.6	33.1	33.1
82.5°	151.4	147.6	151.4	53.4	67.4	68.7	58.5	48.3	43.3	30.5	30.5
85°	106.9	134.9	72.5	38.2	31.8	29.3	34.4	42.0	38.2	25.4	25.4
87.5°	36.9	21.6	15.3	15.3	14.0	14.0	16.5	19.1	20.4	20.4	19.1
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)