

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: P510013

Luminaire Tested: **VERD-M-CA4-190-722-U-T2**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510013
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-2)
Test Lab: INNOVATION CENTER
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-M-CA4-190-722-U-T2
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 2200K, 870mA LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22532 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

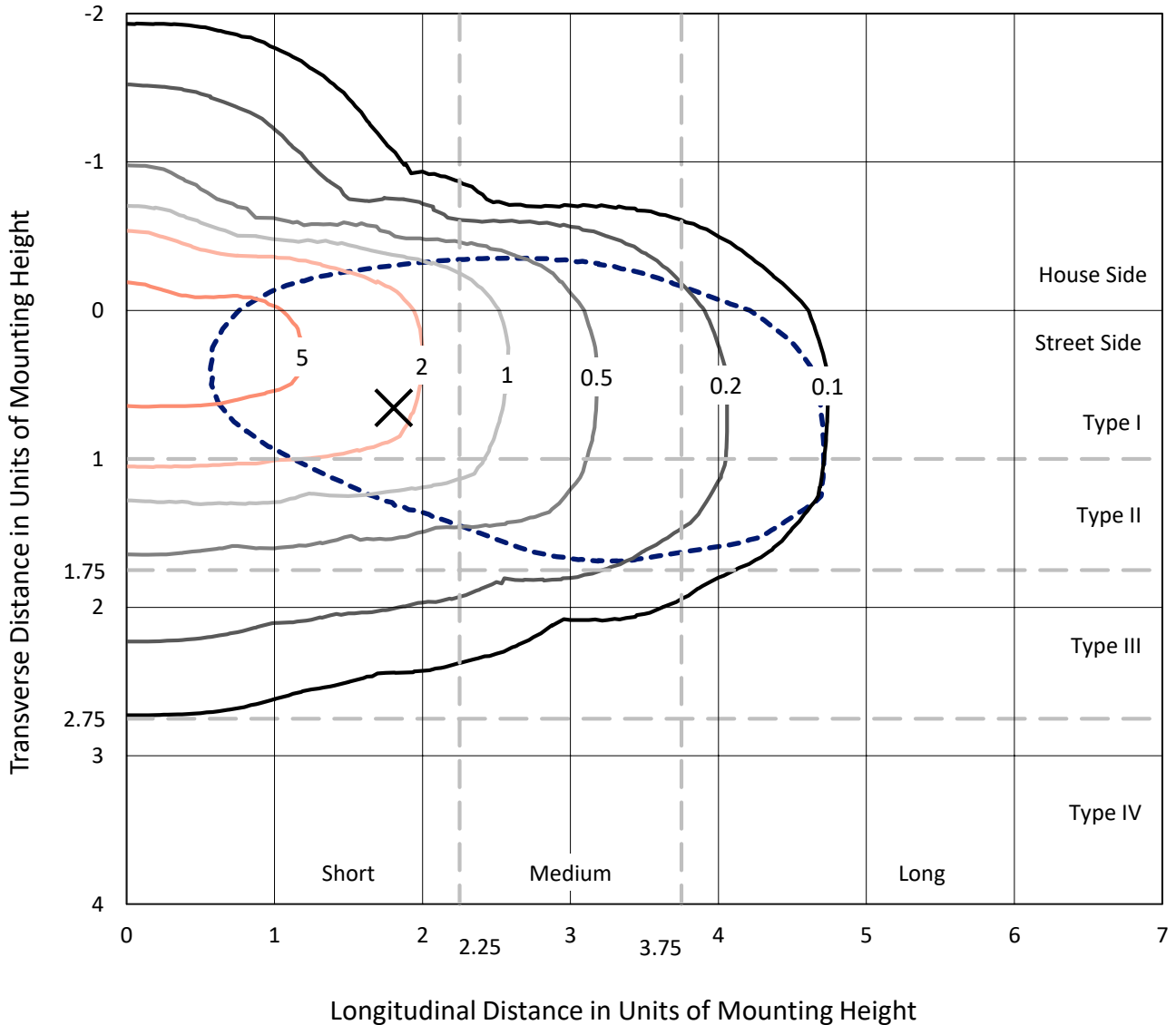
Input Watts (W): 193.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510013
 CATALOG NUMBER: VERD-M-CA4-190-722-U-T2

Iso-Footcandle Lines of Horizontal Illumination

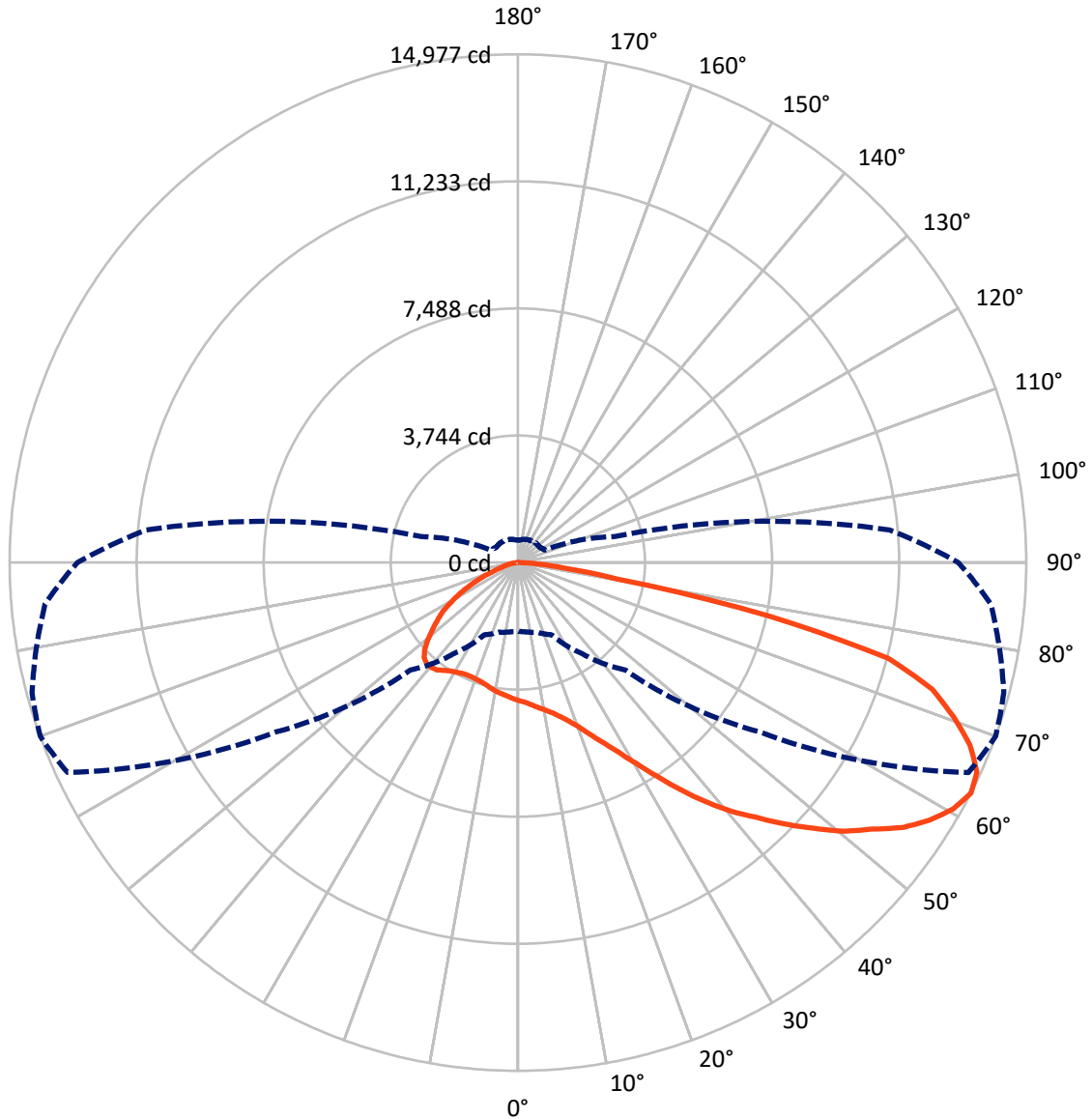
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 fc
 Type II - Short - N/A

REPORT NUMBER: P510013
CATALOG NUMBER: VERD-M-CA4-190-722-U-T2

Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P510013

CATALOG NUMBER: VERD-M-CA4-190-722-U-T2

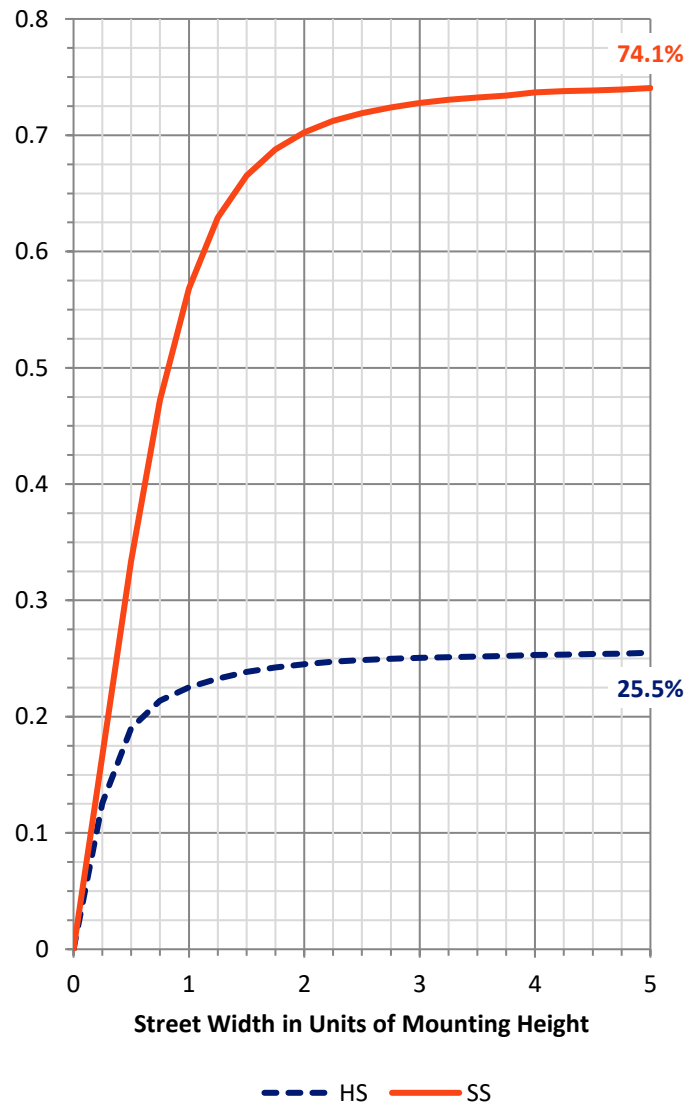
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5833.6	0.0	5833.6
	% Fixture	25.9	0.0	25.9
Street Side	Lumens	16698.4	0.0	16698.4
	% Fixture	74.1	0.0	74.1
Total	Lumens	22532.0	0.0	22532.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	390.6	1.7
10°-20°	1186.2	5.3
20°-30°	2013.2	8.9
30°-40°	2913.0	12.9
40°-50°	3822.5	17.0
50°-60°	4466.5	19.8
60°-70°	4482.4	19.9
70°-80°	2856.2	12.7
80°-90°	401.4	1.8
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°	22532.0	100.0
0°-180°	22532.0	100.0



REPORT NUMBER: P510013

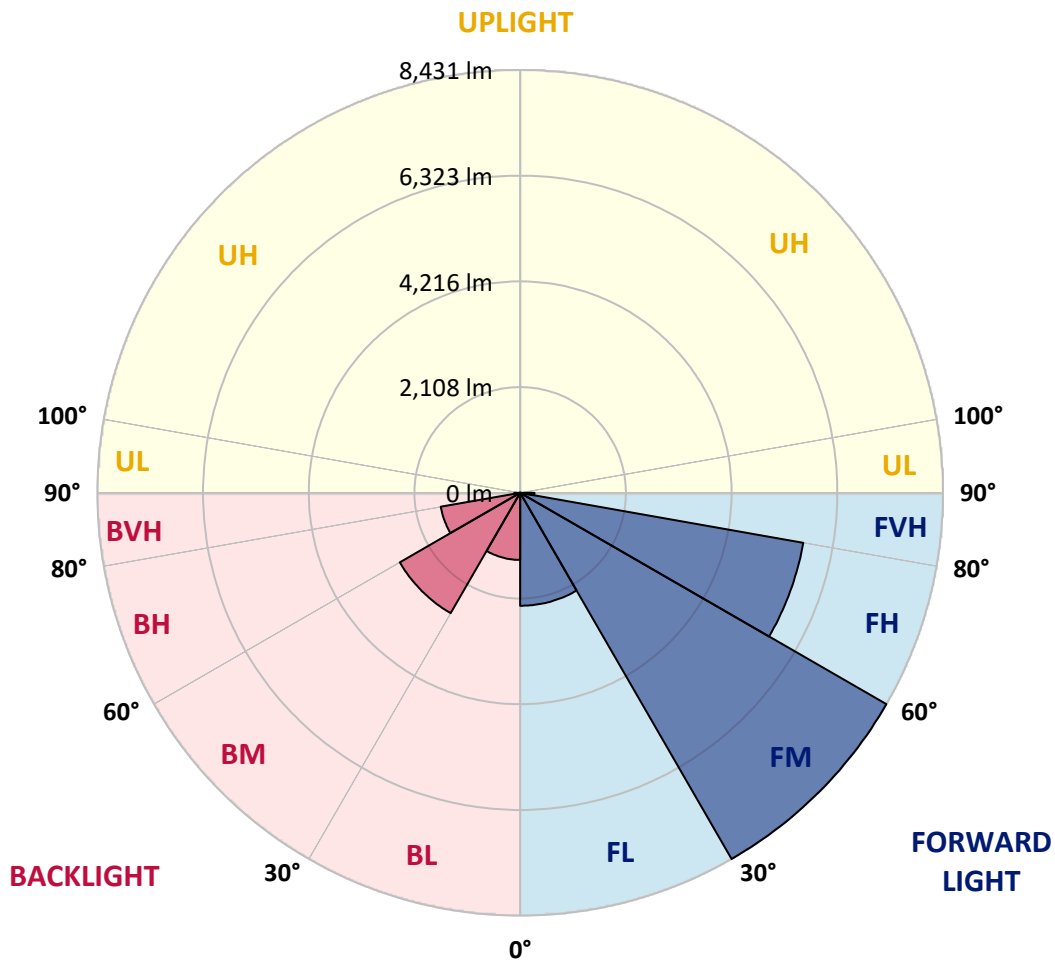
CATALOG NUMBER: VERD-M-CA4-190-722-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2252.1	10.0			
FM (30°-60°)	8431.2	37.4			
FH (60°-80°)	5731.9	25.4			G3/7500
FVH (80°-90°)	283.1	1.3			G3/500
BL (0°-30°)	1337.9	5.9	B3/2500		
BM (30°-60°)	2770.8	12.3	B3/5000		
BH (60°-80°)	1606.6	7.1	B3/2500		G3/2500
BVH (80°-90°)	118.3	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





REPORT NUMBER: P510013

CATALOG NUMBER: VERD-M-CA4-190-722-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7
2.5°	4222.5	4267.3	4261.2	4233.7	4253.0	4200.1	4180.8	4151.2	4120.7	4110.5	4093.2
5°	4422.1	4481.1	4469.9	4433.3	4432.3	4356.9	4314.1	4258.1	4211.3	4174.6	4120.7
7.5°	4608.4	4676.6	4666.4	4630.8	4628.8	4542.2	4453.6	4366.1	4312.1	4265.3	4166.5
10°	4805.9	4857.9	4848.7	4802.9	4793.7	4709.2	4605.3	4495.4	4416.0	4350.8	4210.3
12.5°	4988.2	5043.2	5047.2	4990.2	4976.0	4885.4	4794.7	4649.1	4546.3	4472.0	4265.3
15°	5158.2	5223.4	5211.2	5154.2	5138.9	5047.2	4958.7	4824.3	4717.3	4613.5	4354.9
17.5°	5294.7	5356.8	5341.5	5316.1	5307.9	5236.6	5163.3	5017.7	4923.0	4789.6	4493.3
20°	5388.3	5446.4	5452.5	5445.4	5492.2	5425.0	5384.3	5281.4	5177.6	5057.4	4682.7
22.5°	5425.0	5494.2	5553.3	5599.1	5695.8	5685.7	5678.5	5619.5	5517.7	5342.5	4933.2
25°	5436.2	5505.4	5597.1	5710.1	5883.2	5945.3	5990.1	6004.4	5893.4	5754.9	5244.8
27.5°	5438.2	5512.6	5606.2	5788.5	6052.2	6239.6	6346.5	6396.4	6334.3	6224.3	5668.4
30°	5395.5	5471.8	5592.0	5835.3	6184.6	6492.1	6669.2	6890.2	6863.7	6771.1	6198.8
32.5°	5272.3	5341.5	5507.5	5827.2	6315.9	6750.7	7026.6	7409.5	7499.1	7439.0	6810.8
35°	5051.3	5135.8	5350.7	5760.0	6387.2	7002.2	7447.2	8042.8	8204.7	8208.8	7561.2
37.5°	4828.3	4892.5	5145.0	5633.7	6426.9	7225.2	7846.3	8677.2	8912.4	8917.4	8185.4
40°	4591.1	4650.1	4928.1	5464.7	6386.2	7400.3	8217.9	9287.1	9624.1	9592.5	8798.3
42.5°	4283.6	4348.8	4624.7	5234.6	6284.4	7535.7	8595.7	9927.5	10251.3	10286.9	9437.8
45°	4020.9	4072.8	4314.1	4875.2	6098.0	7609.1	8950.0	10610.7	10981.4	10943.7	10119.9
47.5°	3697.1	3774.5	4032.1	4582.9	5763.0	7590.7	9289.1	11286.8	11699.2	11664.6	10711.5
50°	2852.0	2941.6	3540.3	4276.5	5335.4	7447.2	9596.6	11933.4	12445.5	12354.9	11337.7
52.5°	2590.3	2615.8	2854.0	3924.2	4913.9	7121.3	9822.6	12750.0	13053.4	13017.8	11972.1
55°	2430.5	2479.3	2588.3	3232.8	4535.1	6591.9	9979.4	13432.2	13774.3	13607.3	12546.3
57.5°	2289.9	2324.6	2453.9	2767.5	4099.3	5862.8	9933.6	14007.5	14312.9	14079.8	13107.4
60°	2140.3	2162.7	2292.0	2526.2	3628.9	5057.4	9468.3	14601.1	14736.5	14522.7	13581.9
62.5°	2024.2	2045.6	2123.0	2348.0	3262.3	4481.1	8706.7	14642.8	14976.8	14821.0	13985.1
65°	1875.5	1889.8	1986.5	2163.7	2922.3	4138.0	8035.7	14250.8	14860.7	14822.0	14139.8
67.5°	1711.6	1728.9	1820.6	1945.8	2487.5	3733.8	6913.6	14039.0	14369.9	14407.6	13849.6
70°	1519.2	1531.4	1626.1	1716.7	2128.1	3277.6	5496.3	13227.5	13613.4	13612.4	12953.6
72.5°	1311.4	1310.4	1404.1	1499.8	1782.9	2753.2	4302.9	11744.0	12765.2	12688.9	11678.8
75°	1081.3	1096.6	1187.2	1262.6	1483.5	2231.9	2996.6	8507.1	11269.5	11374.4	10079.2
77.5°	691.4	701.5	752.5	829.8	1037.6	1705.5	1955.0	4727.5	7524.5	9076.3	7933.9
80°	505.0	510.1	554.9	599.7	690.3	1038.6	993.8	2054.7	2982.3	4455.7	4867.0
82.5°	344.2	345.2	380.8	391.0	396.1	468.4	471.4	999.9	1420.4	1672.9	2149.4
85°	228.1	189.4	147.6	195.5	200.6	172.1	168.0	451.1	704.6	845.1	796.2
87.5°	50.9	49.9	58.0	59.1	57.0	48.9	40.7	69.2	105.9	104.9	134.4
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: P510013

CATALOG NUMBER: VERD-M-CA4-190-722-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7
2.5°	4076.9	4071.8	4043.3	3983.2	3942.5	3900.7	3877.3	3863.1	3868.2	3844.7	3834.6
5°	4087.1	4061.6	3981.2	3909.9	3845.8	3773.5	3713.4	3705.3	3717.5	3696.1	3683.9
7.5°	4113.6	4059.6	3956.7	3834.6	3727.7	3659.4	3572.9	3529.1	3526.0	3504.7	3508.7
10°	4128.8	4058.6	3921.1	3773.5	3648.2	3527.1	3434.4	3385.5	3382.5	3351.9	3344.8
12.5°	4170.6	4069.8	3879.4	3699.1	3559.6	3397.8	3300.0	3255.2	3250.1	3207.3	3191.1
15°	4234.7	4095.2	3835.6	3612.6	3432.4	3280.7	3163.6	3103.5	3094.3	3044.4	3027.1
17.5°	4336.5	4167.5	3822.3	3534.2	3321.4	3155.4	3018.0	2952.8	2899.9	2872.4	2848.9
20°	4474.0	4257.1	3837.6	3460.9	3181.9	2990.5	2819.4	2733.9	2697.2	2652.4	2655.5
22.5°	4669.5	4397.6	3864.1	3403.9	3055.6	2814.3	2621.9	2526.2	2460.0	2422.3	2424.3
25°	4944.4	4609.4	3916.0	3349.9	2918.2	2621.9	2394.8	2261.4	2194.2	2169.8	2144.3
27.5°	5291.6	4863.0	4039.2	3283.7	2755.3	2404.0	2152.5	1996.7	1928.5	1891.8	1886.7
30°	5737.6	5195.9	4183.8	3234.8	2584.2	2132.1	1852.1	1728.9	1668.8	1616.9	1592.5
32.5°	6281.3	5666.3	4344.7	3186.0	2372.4	1827.7	1574.1	1479.5	1383.7	1317.6	1320.6
35°	6912.6	6178.5	4584.0	3123.9	2124.0	1543.6	1368.5	1246.3	1156.7	1112.9	1092.5
37.5°	7508.3	6703.9	4865.0	3060.7	1846.0	1359.3	1165.8	1052.8	983.6	950.0	957.1
40°	8111.0	7245.6	5107.3	2906.0	1534.4	1192.3	965.3	901.1	873.6	847.1	850.2
42.5°	8650.7	7677.3	5284.5	2733.9	1316.5	1000.9	822.7	837.0	853.3	838.0	833.9
45°	9212.7	8182.3	5440.3	2440.6	1134.3	850.2	787.1	826.8	862.4	860.4	855.3
47.5°	9776.8	8650.7	5455.5	2051.7	968.3	799.3	786.1	815.6	862.4	870.6	864.5
50°	10358.2	9141.5	5365.9	1593.5	898.1	805.4	787.1	792.2	844.1	853.3	850.2
52.5°	11002.7	9671.9	5145.0	1211.7	870.6	815.6	790.1	783.0	812.5	828.8	831.9
55°	11595.3	10093.5	4730.6	1070.1	850.2	816.6	812.5	789.1	790.1	782.0	802.3
57.5°	12093.2	10495.7	4260.2	992.8	831.9	807.4	822.7	778.9	766.7	733.1	725.0
60°	12608.4	10822.5	3598.3	939.8	810.5	796.2	797.3	761.6	731.1	682.2	667.9
62.5°	12974.0	10995.6	2955.9	877.7	781.0	778.9	763.7	737.2	709.7	666.9	660.8
65°	13079.9	10904.0	2270.6	812.5	742.3	750.4	722.9	686.3	572.2	519.3	519.3
67.5°	12729.6	10339.9	1681.1	737.2	695.4	711.7	657.8	540.7	481.6	450.0	455.1
70°	11769.4	9428.6	1094.6	627.2	628.2	641.5	542.7	486.7	430.7	411.4	421.5
72.5°	10486.5	8077.4	721.9	499.9	529.5	507.1	495.9	448.0	398.1	375.7	382.8
75°	8641.5	6378.0	501.0	393.0	343.1	432.7	440.9	376.7	338.0	410.3	426.6
77.5°	6827.1	4433.3	413.4	274.9	253.5	319.7	353.3	349.2	559.0	656.7	649.6
80°	4059.6	2552.6	337.0	190.4	179.2	205.7	278.0	401.2	626.2	470.4	448.0
82.5°	1840.9	1160.8	179.2	99.8	117.1	136.4	207.7	498.9	410.3	301.4	284.1
85°	718.9	378.8	71.3	43.8	40.7	50.9	94.7	240.3	164.9	133.4	133.4
87.5°	92.7	68.2	20.4	15.3	13.2	16.3	30.5	133.4	77.4	65.2	63.1
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)