

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: P510229

Luminaire Tested: **VERD-M-CA4-230-740-U-T2**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510229
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-CA4-230-740-U-T2
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 4000K, 1050mA LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32406 lumens
Efficiency: N/A
Efficacy: 138.9 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

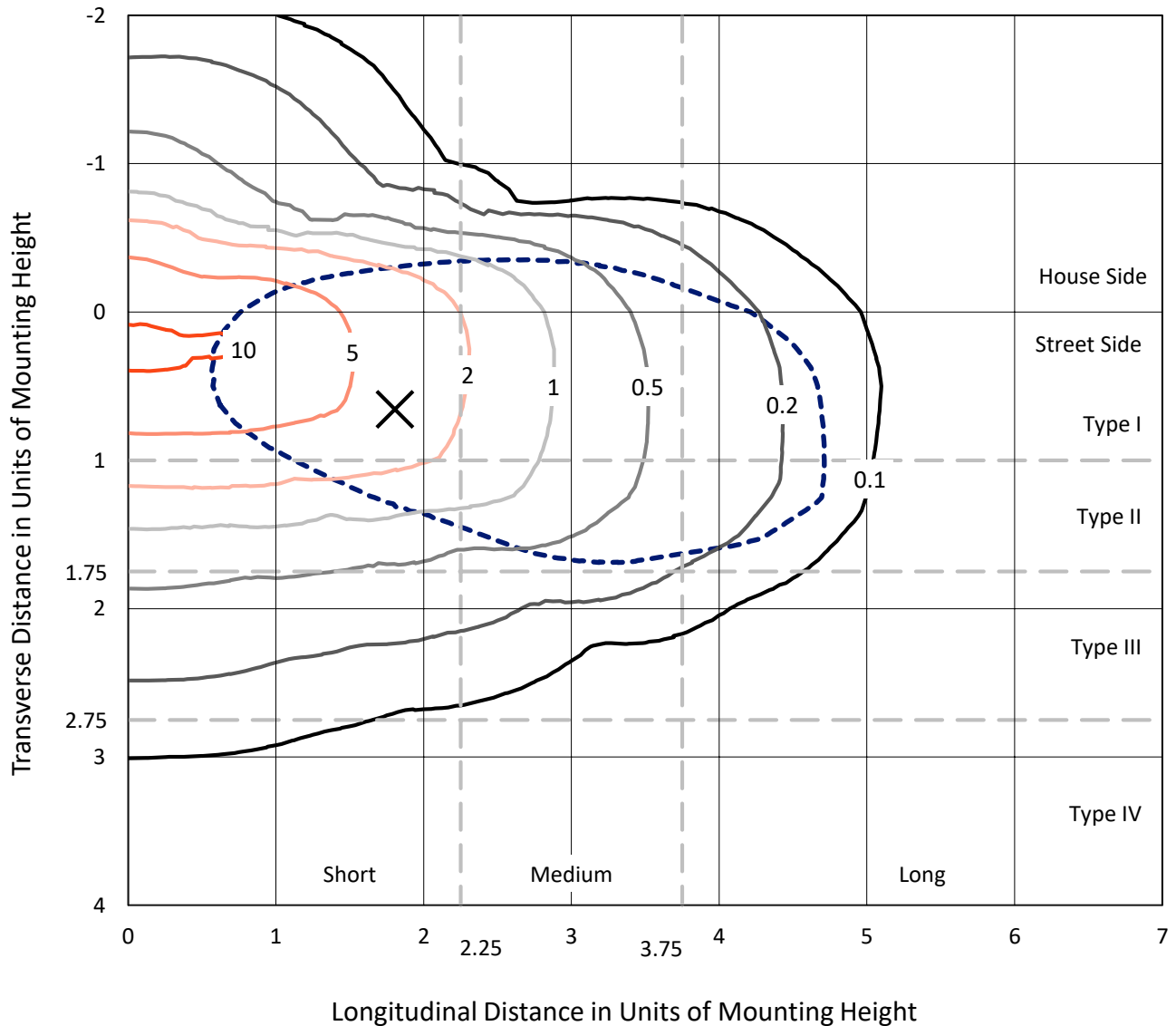
Input Watts (W): 233.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

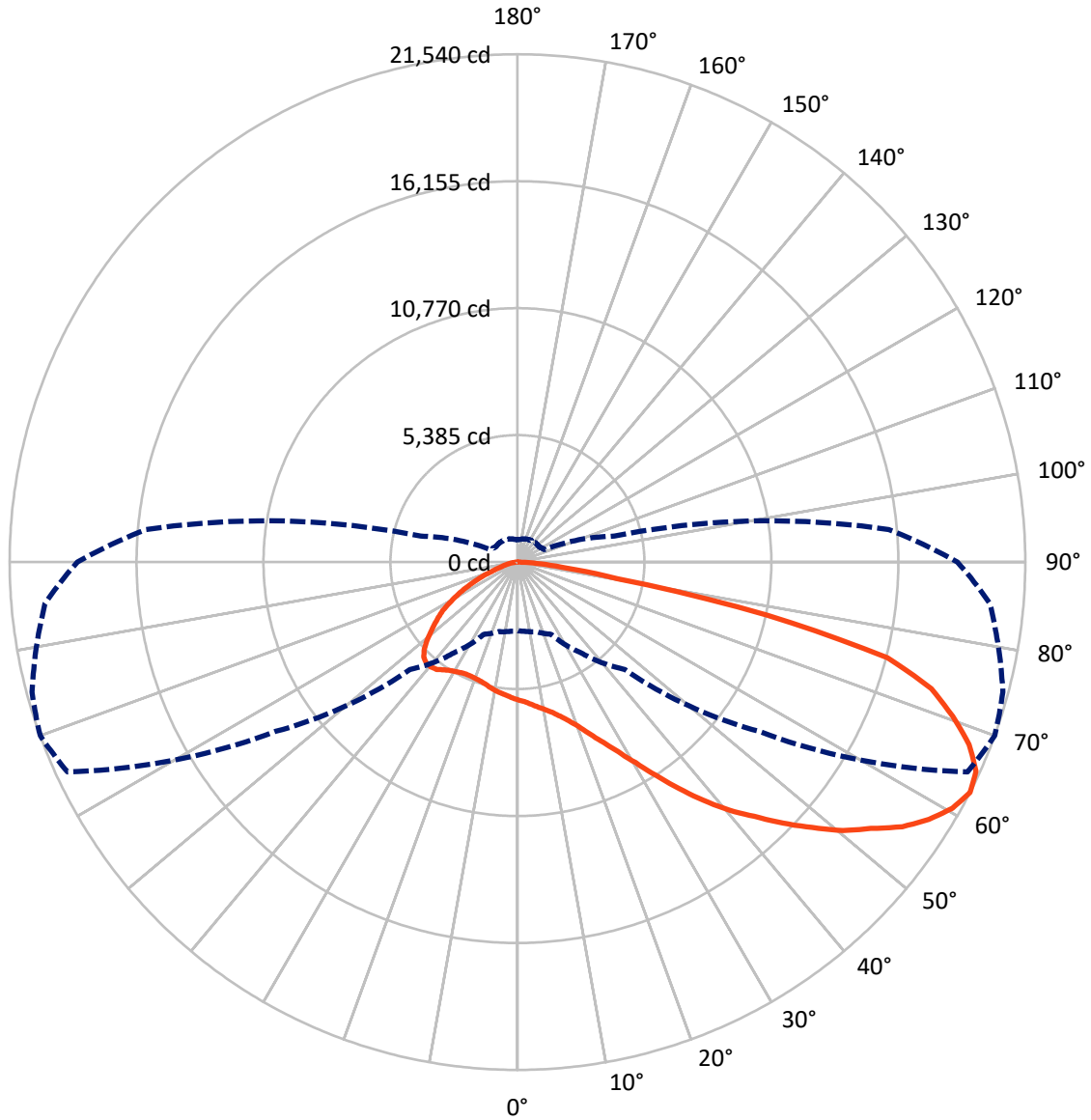
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.7 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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

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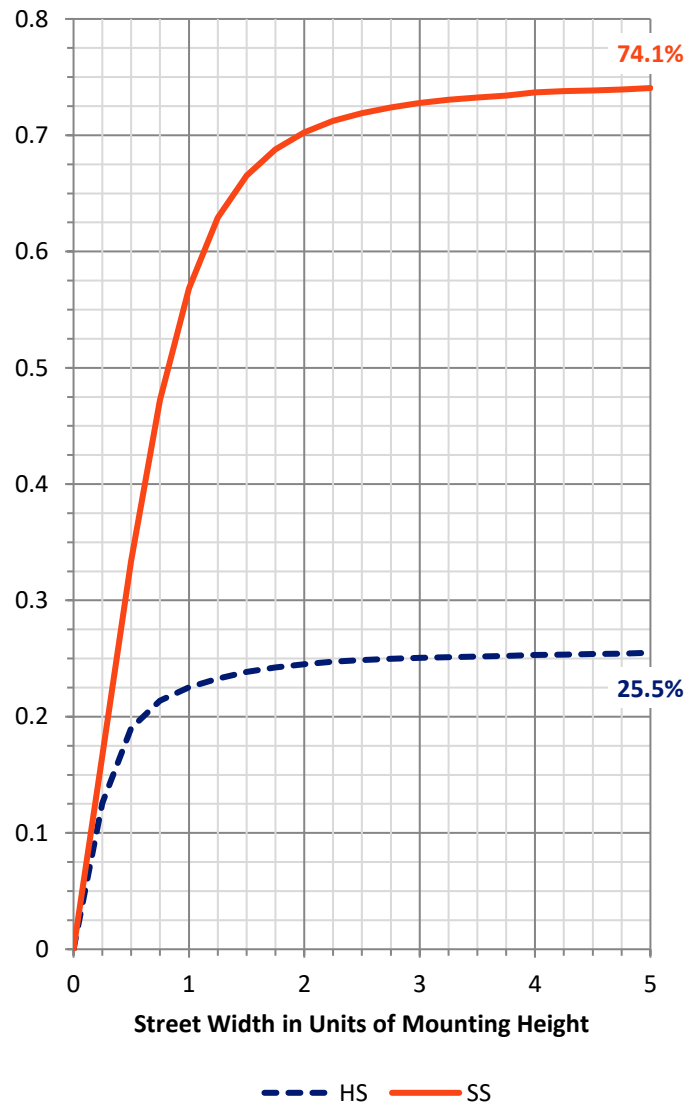
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8390.1	0.0	8390.1
	% Fixture	25.9	0.0	25.9
Street Side	Lumens	24015.9	0.0	24015.9
	% Fixture	74.1	0.0	74.1
Total	Lumens	32406.0	0.0	32406.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	561.8	1.7
10°-20°	1706.0	5.3
20°-30°	2895.4	8.9
30°-40°	4189.5	12.9
40°-50°	5497.6	17.0
50°-60°	6423.8	19.8
60°-70°	6446.6	19.9
70°-80°	4107.9	12.7
80°-90°	577.3	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°	32406.0	100.0
0°-180°	32406.0	100.0



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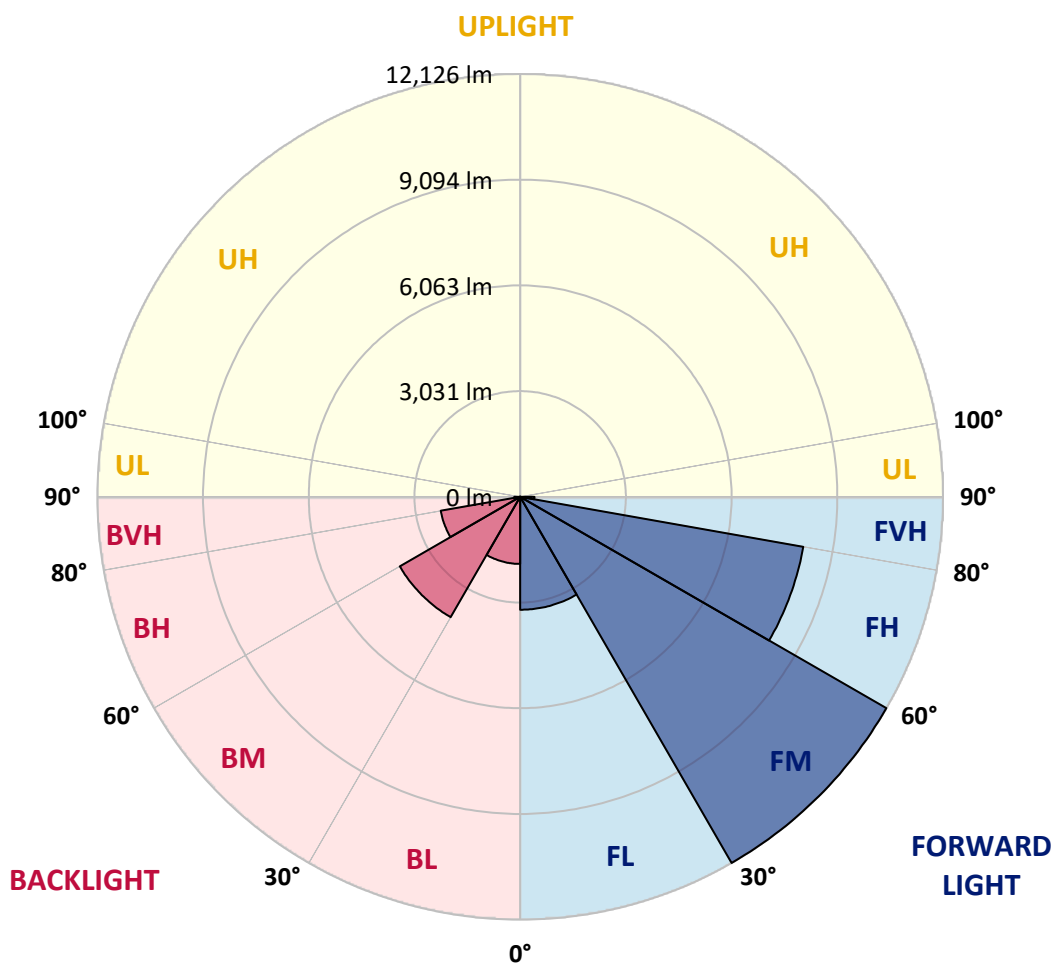
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3239.0	10.0			
FM (30°-60°)	12126.0	37.4			
FH (60°-80°)	8243.8	25.4			G4/12000
FVH (80°-90°)	407.2	1.3			G3/500
BL (0°-30°)	1924.2	5.9	B3/2500		
BM (30°-60°)	3985.0	12.3	B3/5000		
BH (60°-80°)	2310.7	7.1	B3/2500		G3/2500
BVH (80°-90°)	170.1	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-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	5848.8	5848.8	5848.8	5848.8	5848.8	5848.8	5848.8	5848.8	5848.8	5848.8	5848.8
2.5°	6072.9	6137.3	6128.5	6089.0	6116.8	6040.7	6012.8	5970.4	5926.4	5911.8	5886.9
5°	6359.9	6444.8	6428.7	6376.0	6374.6	6266.2	6204.7	6124.1	6056.8	6004.1	5926.4
7.5°	6627.9	6726.0	6711.4	6660.1	6657.2	6532.7	6405.3	6279.4	6201.8	6134.4	5992.3
10°	6912.0	6986.7	6973.5	6907.6	6894.4	6772.9	6623.5	6465.4	6351.1	6257.4	6055.3
12.5°	7174.1	7253.2	7259.1	7177.1	7156.5	7026.2	6895.9	6686.5	6538.6	6431.7	6134.4
15°	7418.7	7512.4	7494.8	7412.8	7390.9	7259.1	7131.7	6938.4	6784.6	6635.2	6263.3
17.5°	7614.9	7704.2	7682.3	7645.7	7633.9	7531.4	7426.0	7216.6	7080.4	6888.6	6462.4
20°	7749.6	7833.1	7841.9	7831.6	7899.0	7802.4	7743.8	7595.9	7446.5	7273.7	6734.8
22.5°	7802.4	7901.9	7986.9	8052.8	8191.9	8177.2	8167.0	8082.1	7935.6	7683.7	7095.0
25°	7818.5	7918.0	8049.8	8212.4	8461.3	8550.7	8615.1	8635.6	8476.0	8276.8	7543.2
27.5°	7821.4	7928.3	8063.0	8325.1	8704.4	8973.9	9127.6	9199.4	9110.1	8951.9	8152.3
30°	7759.9	7869.7	8042.5	8392.5	8894.8	9337.0	9591.9	9909.6	9871.6	9738.3	8915.3
32.5°	7582.7	7682.3	7921.0	8380.8	9083.7	9709.0	10105.9	10656.5	10785.3	10698.9	9795.4
35°	7264.9	7386.5	7695.5	8284.1	9186.2	10070.7	10710.7	11567.3	11800.2	11806.0	10874.7
37.5°	6944.2	7036.5	7399.6	8102.6	9243.3	10391.4	11284.7	12479.7	12817.9	12825.3	11772.4
40°	6603.0	6687.9	7087.7	7859.5	9184.8	10643.3	11819.2	13356.8	13841.6	13796.2	12653.9
42.5°	6160.8	6254.5	6651.3	7528.5	9038.3	10838.1	12362.5	14278.0	14743.6	14794.9	13573.6
45°	5782.9	5857.6	6204.7	7011.6	8770.3	10943.5	12872.1	15260.6	15793.6	15739.4	14554.7
47.5°	5317.3	5428.6	5799.0	6591.3	8288.5	10917.1	13359.8	16232.9	16826.0	16776.2	15405.5
50°	4101.8	4230.7	5091.7	6150.5	7673.5	10710.7	13802.0	17162.8	17899.4	17769.1	16306.2
52.5°	3725.4	3762.1	4104.7	5643.8	7067.2	10242.1	14127.1	18337.3	18773.7	18722.4	17218.5
55°	3495.5	3565.8	3722.5	4649.5	6522.5	9480.6	14352.6	19318.4	19810.5	19570.3	18044.4
57.5°	3293.4	3343.2	3529.2	3980.3	5895.7	8432.0	14286.7	20145.8	20585.1	20249.8	18851.3
60°	3078.2	3110.4	3296.4	3633.2	5219.1	7273.7	13617.5	20999.6	21194.3	20886.8	19533.7
62.5°	2911.2	2942.0	3053.3	3376.9	4692.0	6444.8	12522.1	21059.6	21539.9	21315.9	20113.6
65°	2697.4	2717.9	2857.1	3111.9	4202.8	5951.3	11557.1	20495.8	21373.0	21317.4	20336.2
67.5°	2461.7	2486.6	2618.4	2798.5	3577.5	5370.0	9943.3	20191.2	20667.2	20721.3	19918.8
70°	2184.9	2202.5	2338.7	2469.0	3060.6	4713.9	7904.9	19024.1	19579.1	19577.6	18630.2
72.5°	1886.2	1884.7	2019.4	2157.1	2564.2	3959.8	6188.6	16890.5	18359.3	18249.4	16796.7
75°	1555.2	1577.2	1707.5	1815.9	2133.6	3210.0	4309.7	12235.1	16208.0	16358.9	14496.2
77.5°	994.3	1009.0	1082.2	1193.5	1492.2	2452.9	2811.7	6799.2	10822.0	13053.7	11410.6
80°	726.3	733.7	798.1	862.5	992.9	1493.7	1429.3	2955.2	4289.2	6408.2	6999.9
82.5°	495.0	496.4	547.7	562.3	569.7	673.6	678.0	1438.0	2042.8	2406.0	3091.4
85°	328.0	272.4	212.3	281.2	288.5	247.5	241.6	648.7	1013.4	1215.5	1145.2
87.5°	73.2	71.8	83.5	84.9	82.0	70.3	58.6	99.6	152.3	150.8	193.3
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°	5848.8	5848.8	5848.8	5848.8	5848.8	5848.8	5848.8	5848.8	5848.8	5848.8	5848.8
2.5°	5863.5	5856.2	5815.2	5728.8	5670.2	5610.1	5576.5	5556.0	5563.3	5529.6	5515.0
5°	5878.1	5841.5	5725.8	5623.3	5531.1	5427.1	5340.7	5329.0	5346.5	5315.8	5298.2
7.5°	5916.2	5838.6	5690.7	5515.0	5361.2	5263.1	5138.6	5075.6	5071.2	5040.5	5046.3
10°	5938.2	5837.1	5639.4	5427.1	5247.0	5072.7	4939.4	4869.1	4864.8	4820.8	4810.6
12.5°	5998.2	5853.2	5579.4	5320.2	5119.6	4886.7	4746.1	4681.7	4674.4	4612.9	4589.4
15°	6090.5	5889.8	5516.4	5195.7	4936.5	4718.3	4549.9	4463.5	4450.3	4378.6	4353.7
17.5°	6236.9	5993.8	5497.4	5083.0	4776.9	4538.2	4340.5	4246.8	4170.6	4131.1	4097.4
20°	6434.6	6122.7	5519.3	4977.5	4576.3	4301.0	4054.9	3931.9	3879.2	3814.8	3819.2
22.5°	6715.8	6324.8	5557.4	4895.5	4394.7	4047.6	3770.8	3633.2	3538.0	3483.8	3486.7
25°	7111.2	6629.4	5632.1	4817.9	4197.0	3770.8	3444.3	3252.4	3155.8	3120.6	3084.0
27.5°	7610.5	6994.0	5809.3	4722.7	3962.7	3457.5	3095.8	2871.7	2773.6	2720.9	2713.5
30°	8251.9	7472.9	6017.2	4652.4	3716.7	3066.5	2663.8	2486.6	2400.2	2325.5	2290.3
32.5°	9033.9	8149.4	6248.6	4582.1	3412.1	2628.6	2264.0	2127.8	1990.1	1894.9	1899.3
35°	9941.8	8886.0	6592.8	4492.8	3054.7	2220.0	1968.2	1792.4	1663.6	1600.6	1571.3
37.5°	10798.5	9641.6	6996.9	4402.0	2655.0	1955.0	1676.7	1514.2	1414.6	1366.3	1376.5
40°	11665.5	10420.7	7345.5	4179.4	2206.9	1714.8	1388.3	1296.0	1256.5	1218.4	1222.8
42.5°	12441.6	11041.6	7600.3	3931.9	1893.5	1439.5	1183.2	1203.7	1227.2	1205.2	1199.3
45°	13249.9	11768.0	7824.3	3510.2	1631.3	1222.8	1132.0	1189.1	1240.4	1237.4	1230.1
47.5°	14061.2	12441.6	7846.3	2950.8	1392.6	1149.6	1130.5	1173.0	1240.4	1252.1	1243.3
50°	14897.4	13147.4	7717.4	2291.8	1291.6	1158.3	1132.0	1139.3	1214.0	1227.2	1222.8
52.5°	15824.4	13910.4	7399.6	1742.6	1252.1	1173.0	1136.4	1126.1	1168.6	1192.0	1196.4
55°	16676.6	14516.7	6803.6	1539.1	1222.8	1174.5	1168.6	1134.9	1136.4	1124.7	1154.0
57.5°	17392.7	15095.1	6127.1	1427.8	1196.4	1161.3	1183.2	1120.3	1102.7	1054.4	1042.7
60°	18133.7	15565.2	5175.2	1351.6	1165.7	1145.2	1146.6	1095.4	1051.4	981.2	960.7
62.5°	18659.5	15814.1	4251.2	1262.3	1123.2	1120.3	1098.3	1060.2	1020.7	959.2	950.4
65°	18811.8	15682.3	3265.6	1168.6	1067.6	1079.3	1039.7	987.0	823.0	746.8	746.8
67.5°	18308.0	14871.0	2417.7	1060.2	1000.2	1023.6	946.0	777.6	692.7	647.3	654.6
70°	16927.1	13560.4	1574.2	902.1	903.5	922.6	780.5	700.0	619.4	591.6	606.3
72.5°	15081.9	11617.1	1038.3	719.0	761.5	729.3	713.2	644.3	572.6	540.4	550.6
75°	12428.4	9173.0	720.5	565.3	493.5	622.4	634.1	541.8	486.2	590.2	613.6
77.5°	9818.8	6376.0	594.5	395.4	364.6	459.8	508.1	502.3	804.0	944.5	934.3
80°	5838.6	3671.3	484.7	273.8	257.7	295.8	399.8	577.0	900.6	676.6	644.3
82.5°	2647.6	1669.4	257.7	143.5	168.4	196.2	298.7	717.6	590.2	433.5	408.6
85°	1033.9	544.8	102.5	63.0	58.6	73.2	136.2	345.6	237.2	191.8	191.8
87.5°	133.3	98.1	29.3	22.0	19.0	23.4	43.9	191.8	111.3	93.7	90.8
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)