

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: P510021

Luminaire Tested: **VERD-M-CA4-190-727-U-T2**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510021
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-CA4-190-727-U-T2
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 2700K, 870mA LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23411 lumens
Efficiency: N/A
Efficacy: 121.2 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

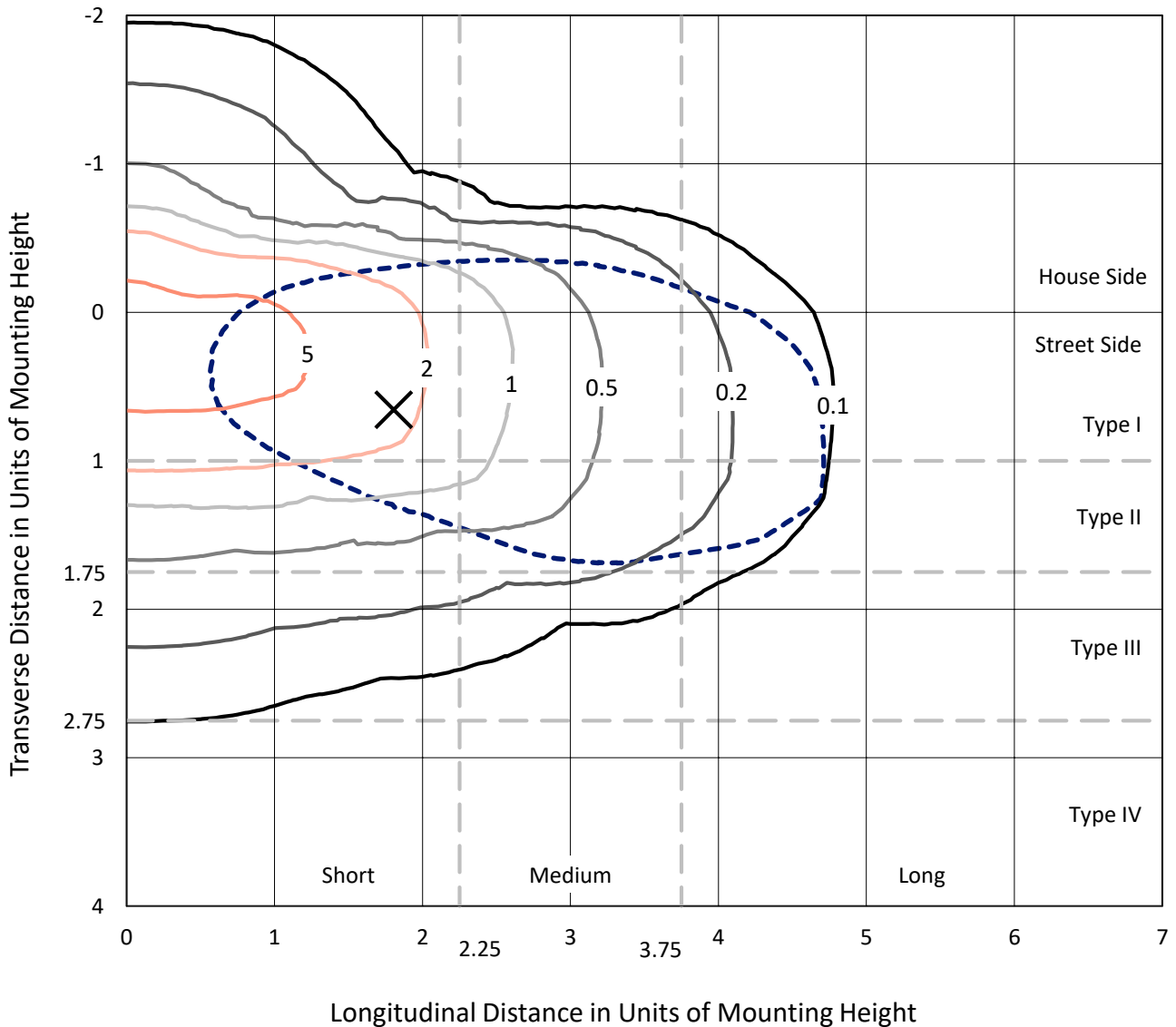
Input Watts (W): 193.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

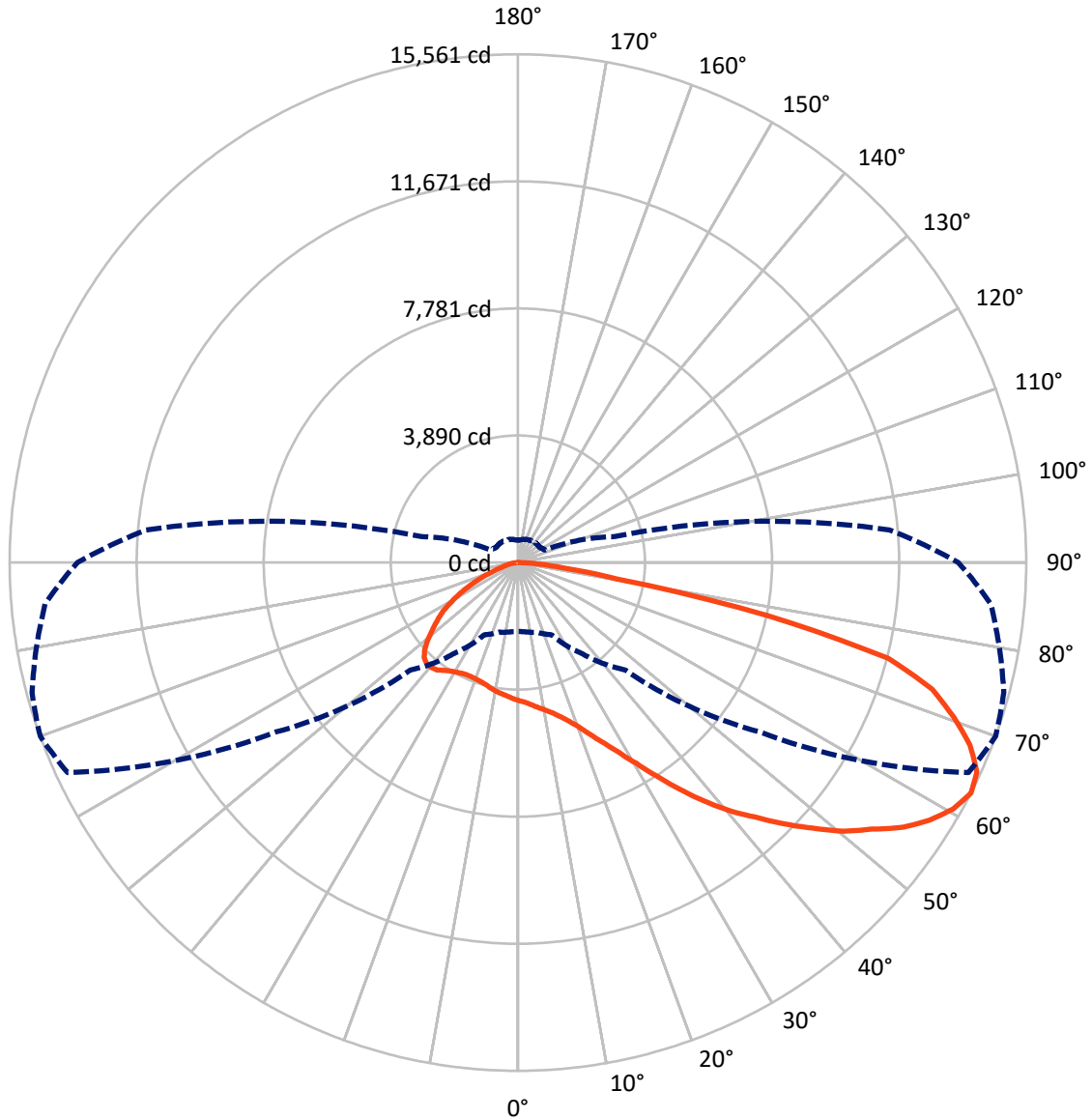
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 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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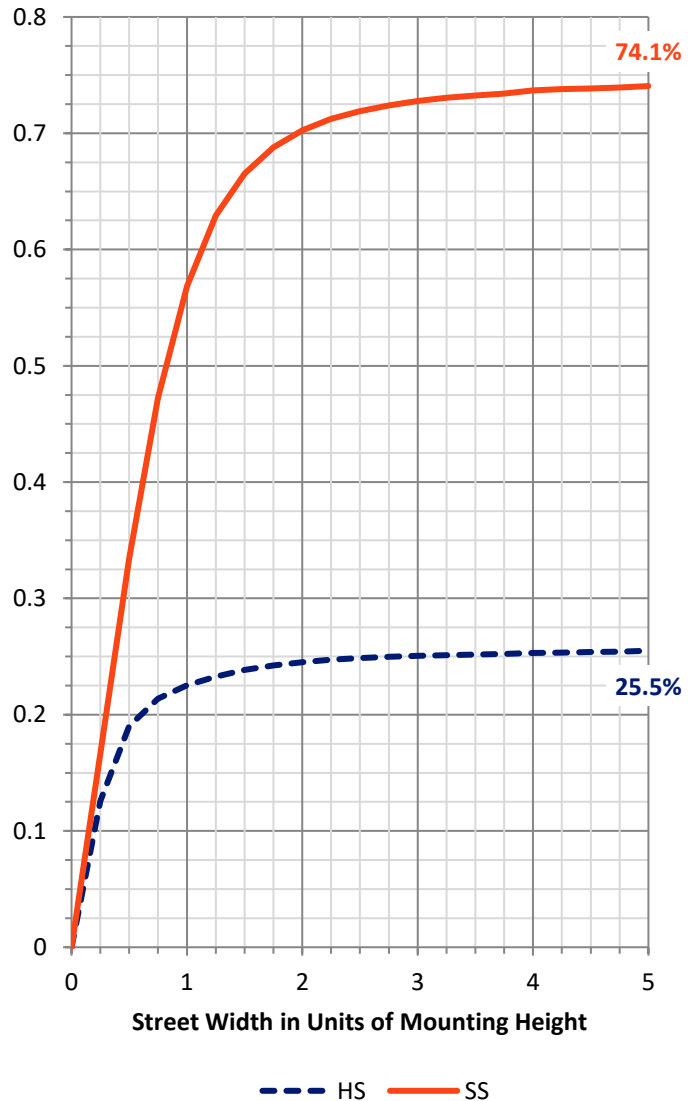
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6061.2	0.0	6061.2
	% Fixture	25.9	0.0	25.9
Street Side	Lumens	17349.8	0.0	17349.8
	% Fixture	74.1	0.0	74.1
Total	Lumens	23411.0	0.0	23411.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	405.8	1.7
10°-20°	1232.5	5.3
20°-30°	2091.7	8.9
30°-40°	3026.6	12.9
40°-50°	3971.7	17.0
50°-60°	4640.8	19.8
60°-70°	4657.2	19.9
70°-80°	2967.6	12.7
80°-90°	417.1	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°	23411.0	100.0
0°-180°	23411.0	100.0



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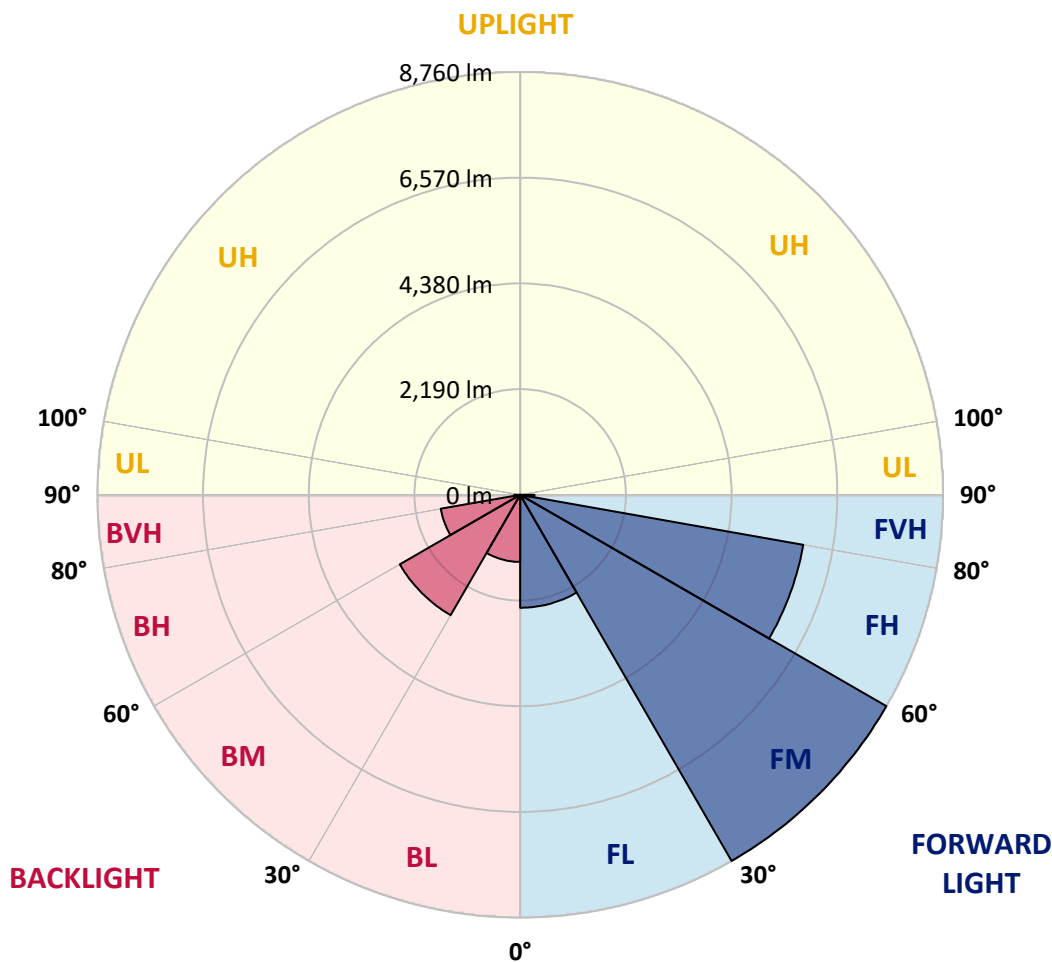
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2339.9	10.0			
FM	(30°-60°)	8760.1	37.4			
FH	(60°-80°)	5955.5	25.4			G3/7500
FVH	(80°-90°)	294.2	1.3			G3/500
BL	(0°-30°)	1390.1	5.9	B3/2500		
BM	(30°-60°)	2878.9	12.3	B3/5000		
BH	(60°-80°)	1669.3	7.1	B3/2500		G3/2500
BVH	(80°-90°)	122.9	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	4225.4	4225.4	4225.4	4225.4	4225.4	4225.4	4225.4	4225.4	4225.4	4225.4	4225.4
2.5°	4387.2	4433.8	4427.4	4398.9	4419.0	4364.0	4343.9	4313.2	4281.4	4270.9	4252.9
5°	4594.6	4655.9	4644.3	4606.2	4605.2	4526.9	4482.4	4424.3	4375.6	4337.5	4281.4
7.5°	4788.2	4859.1	4848.5	4811.5	4809.3	4719.4	4627.4	4536.4	4480.3	4431.7	4329.0
10°	4993.4	5047.4	5037.9	4990.2	4980.7	4892.9	4785.0	4670.7	4588.2	4520.5	4374.5
12.5°	5182.8	5239.9	5244.1	5184.9	5170.1	5075.9	4981.8	4830.5	4723.6	4646.4	4431.7
15°	5359.5	5427.2	5414.5	5355.2	5339.4	5244.1	5152.1	5012.5	4901.4	4793.5	4524.8
17.5°	5501.2	5565.8	5549.9	5523.4	5515.0	5440.9	5364.8	5213.5	5115.1	4976.5	4668.6
20°	5598.6	5658.9	5665.2	5657.8	5706.5	5636.6	5594.3	5487.5	5379.6	5254.7	4865.4
22.5°	5636.6	5708.6	5769.9	5817.5	5918.0	5907.5	5900.1	5838.7	5732.9	5550.9	5125.7
25°	5648.3	5720.2	5815.4	5932.9	6112.7	6177.2	6223.8	6238.6	6123.3	5979.4	5449.4
27.5°	5650.4	5727.6	5824.9	6014.3	6288.3	6483.0	6594.1	6645.9	6581.4	6467.1	5889.5
30°	5606.0	5685.3	5810.1	6063.0	6425.9	6745.3	6929.4	7159.0	7131.5	7035.2	6440.7
32.5°	5477.9	5549.9	5722.3	6054.5	6562.3	7014.1	7300.8	7698.5	7791.6	7729.2	7076.5
35°	5248.4	5336.2	5559.4	5984.7	6636.4	7275.4	7737.7	8356.6	8524.8	8529.0	7856.2
37.5°	5016.7	5083.3	5345.7	5853.5	6677.6	7507.1	8152.4	9015.7	9260.0	9265.3	8504.7
40°	4770.2	4831.6	5120.4	5677.9	6635.3	7689.0	8538.5	9649.4	9999.5	9966.7	9141.6
42.5°	4450.7	4518.4	4805.1	5438.8	6529.5	7829.7	8931.0	10314.8	10651.2	10688.2	9805.9
45°	4177.8	4231.7	4482.4	5065.4	6335.9	7905.9	9299.2	11024.7	11409.7	11370.6	10514.7
47.5°	3841.3	3921.7	4189.4	4761.7	5987.9	7886.8	9651.5	11727.1	12155.6	12119.6	11129.4
50°	2963.3	3056.4	3678.4	4443.3	5543.5	7737.7	9971.0	12398.9	12931.0	12836.9	11780.0
52.5°	2691.4	2717.8	2965.4	4077.3	5105.6	7399.1	10205.8	13247.4	13562.6	13525.6	12439.1
55°	2525.3	2576.1	2689.3	3358.9	4712.0	6849.0	10368.7	13956.2	14311.6	14138.1	13035.8
57.5°	2379.3	2415.2	2549.6	2875.4	4259.2	6091.5	10321.1	14553.9	14871.3	14629.0	13618.7
60°	2223.8	2247.0	2381.4	2624.7	3770.5	5254.7	9837.7	15170.7	15311.4	15089.2	14111.7
62.5°	2103.2	2125.4	2205.8	2439.6	3389.6	4655.9	9046.3	15214.1	15561.1	15399.2	14530.6
65°	1948.7	1963.5	2064.0	2248.1	3036.3	4299.4	8349.2	14806.8	15440.5	15400.3	14691.4
67.5°	1778.4	1796.4	1891.6	2021.7	2584.5	3879.4	7183.3	14586.7	14930.5	14969.7	14389.9
70°	1578.4	1591.1	1689.5	1783.7	2211.1	3405.5	5710.7	13743.5	14144.5	14143.4	13459.0
72.5°	1362.6	1361.6	1458.9	1558.3	1852.4	2860.6	4470.8	12202.1	13263.2	13183.9	12134.4
75°	1123.5	1139.4	1233.5	1311.8	1541.4	2319.0	3113.5	8839.0	11709.1	11818.1	10472.4
77.5°	718.3	728.9	781.8	862.2	1078.0	1772.0	2031.2	4912.0	7818.1	9430.4	8243.4
80°	524.7	530.0	576.6	623.1	717.3	1079.1	1032.5	2134.9	3098.7	4629.5	5056.9
82.5°	357.6	358.6	395.7	406.2	411.5	486.6	489.8	1038.9	1475.8	1738.2	2233.3
85°	237.0	196.8	153.4	203.1	208.4	178.8	174.6	468.7	732.1	878.1	827.3
87.5°	52.9	51.8	60.3	61.4	59.2	50.8	42.3	71.9	110.0	109.0	139.6
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°	4225.4	4225.4	4225.4	4225.4	4225.4	4225.4	4225.4	4225.4	4225.4	4225.4	4225.4
2.5°	4235.9	4230.7	4201.0	4138.6	4096.3	4052.9	4028.6	4013.8	4019.1	3994.7	3984.2
5°	4246.5	4220.1	4136.5	4062.4	3995.8	3920.7	3858.3	3849.8	3862.5	3840.3	3827.6
7.5°	4274.0	4218.0	4111.1	3984.2	3873.1	3802.2	3712.3	3666.8	3663.6	3641.4	3645.6
10°	4289.9	4216.9	4074.1	3920.7	3790.6	3664.7	3568.4	3517.6	3514.4	3482.7	3475.3
12.5°	4333.3	4228.5	4030.7	3843.5	3698.5	3530.3	3428.7	3382.2	3376.9	3332.5	3315.5
15°	4399.9	4255.0	3985.2	3753.5	3566.3	3408.6	3287.0	3224.6	3215.0	3163.2	3145.2
17.5°	4505.7	4330.1	3971.5	3672.1	3451.0	3278.5	3135.7	3068.0	3013.0	2984.4	2960.1
20°	4648.5	4423.2	3987.3	3595.9	3306.0	3107.1	2929.4	2840.5	2802.4	2755.9	2759.1
22.5°	4851.7	4569.2	4014.8	3536.7	3174.8	2924.1	2724.2	2624.7	2556.0	2516.8	2518.9
25°	5137.3	4789.2	4068.8	3480.6	3032.0	2724.2	2488.2	2349.7	2279.8	2254.4	2228.0
27.5°	5498.0	5052.7	4196.8	3411.8	2862.8	2497.8	2236.5	2074.6	2003.7	1965.6	1960.3
30°	5961.4	5398.6	4347.0	3361.0	2685.0	2215.3	1924.4	1796.4	1733.9	1680.0	1654.6
32.5°	6526.4	5887.4	4514.2	3310.3	2465.0	1899.0	1635.6	1537.2	1437.7	1369.0	1372.1
35°	7182.3	6419.5	4762.8	3245.7	2206.8	1603.8	1421.9	1294.9	1201.8	1156.3	1135.2
37.5°	7801.2	6965.4	5054.8	3180.1	1918.0	1412.3	1211.3	1093.9	1022.0	987.0	994.5
40°	8427.5	7528.2	5306.6	3019.3	1594.3	1238.8	1002.9	936.3	907.7	880.2	883.4
42.5°	8988.2	7976.8	5490.6	2840.5	1367.9	1039.9	854.8	869.6	886.5	870.7	866.4
45°	9572.1	8501.5	5652.5	2535.9	1178.5	883.4	817.8	859.0	896.1	893.9	888.7
47.5°	10158.2	8988.2	5668.4	2131.7	1006.1	830.5	816.7	847.4	896.1	904.5	898.2
50°	10762.3	9498.1	5575.3	1655.7	933.1	836.8	817.8	823.1	877.0	886.5	883.4
52.5°	11432.0	10049.3	5345.7	1258.9	904.5	847.4	821.0	813.5	844.2	861.2	864.3
55°	12047.7	10487.2	4915.1	1111.9	883.4	848.5	844.2	819.9	821.0	812.5	833.6
57.5°	12565.0	10905.1	4426.4	1031.5	864.3	838.9	854.8	809.3	796.6	761.7	753.2
60°	13100.3	11244.7	3738.7	976.5	842.1	827.3	828.4	791.3	759.6	708.8	694.0
62.5°	13480.1	11424.6	3071.2	911.9	811.4	809.3	793.4	765.9	737.4	692.9	686.6
65°	13590.1	11329.3	2359.2	844.2	771.2	779.7	751.1	713.0	594.6	539.5	539.5
67.5°	13226.2	10743.3	1746.6	765.9	722.6	739.5	683.4	561.8	500.4	467.6	472.9
70°	12228.6	9796.4	1137.3	651.7	652.7	666.5	563.9	505.7	447.5	427.4	438.0
72.5°	10895.6	8392.5	750.1	519.4	550.1	526.8	515.2	465.5	413.6	390.4	397.8
75°	8978.6	6626.9	520.5	408.4	356.5	449.6	458.1	391.4	351.2	426.3	443.3
77.5°	7093.4	4606.2	429.5	285.6	263.4	332.2	367.1	362.9	580.8	682.4	675.0
80°	4218.0	2652.2	350.2	197.8	186.2	213.7	288.8	416.8	650.6	488.8	465.5
82.5°	1912.7	1206.0	186.2	103.7	121.7	141.8	215.8	518.4	426.3	313.1	295.2
85°	746.9	393.5	74.1	45.5	42.3	52.9	98.4	249.7	171.4	138.6	138.6
87.5°	96.3	70.9	21.2	15.9	13.8	16.9	31.7	138.6	80.4	67.7	65.6
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)