

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: P510159

Luminaire Tested: **VERD-M-CA4-220-722-U-T3**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510159
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-4)
Test Lab: INNOVATION CENTER
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-M-CA4-220-722-U-T3
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 2200K, 1000mA LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25483 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G4

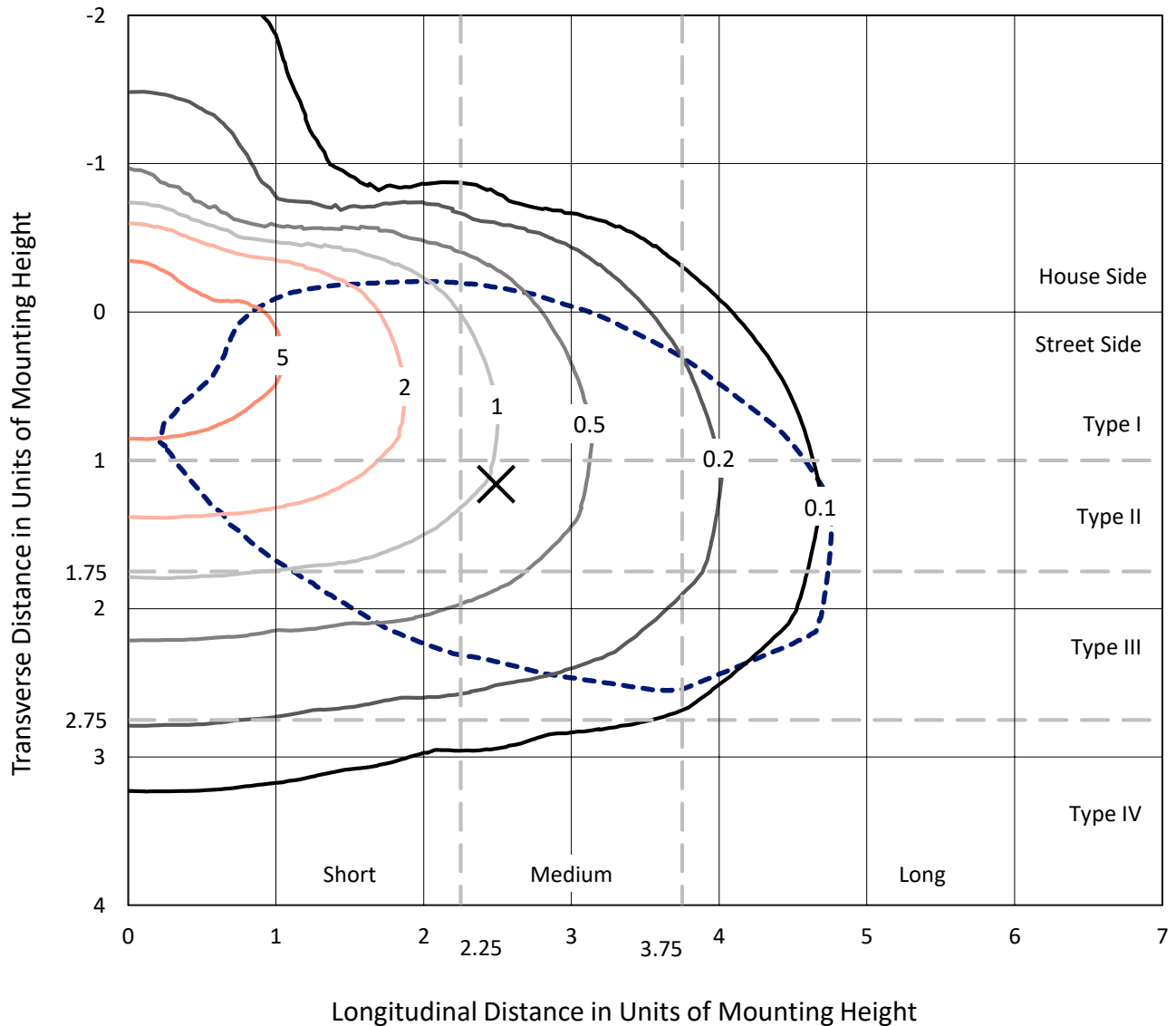
Input Watts (W): 222.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

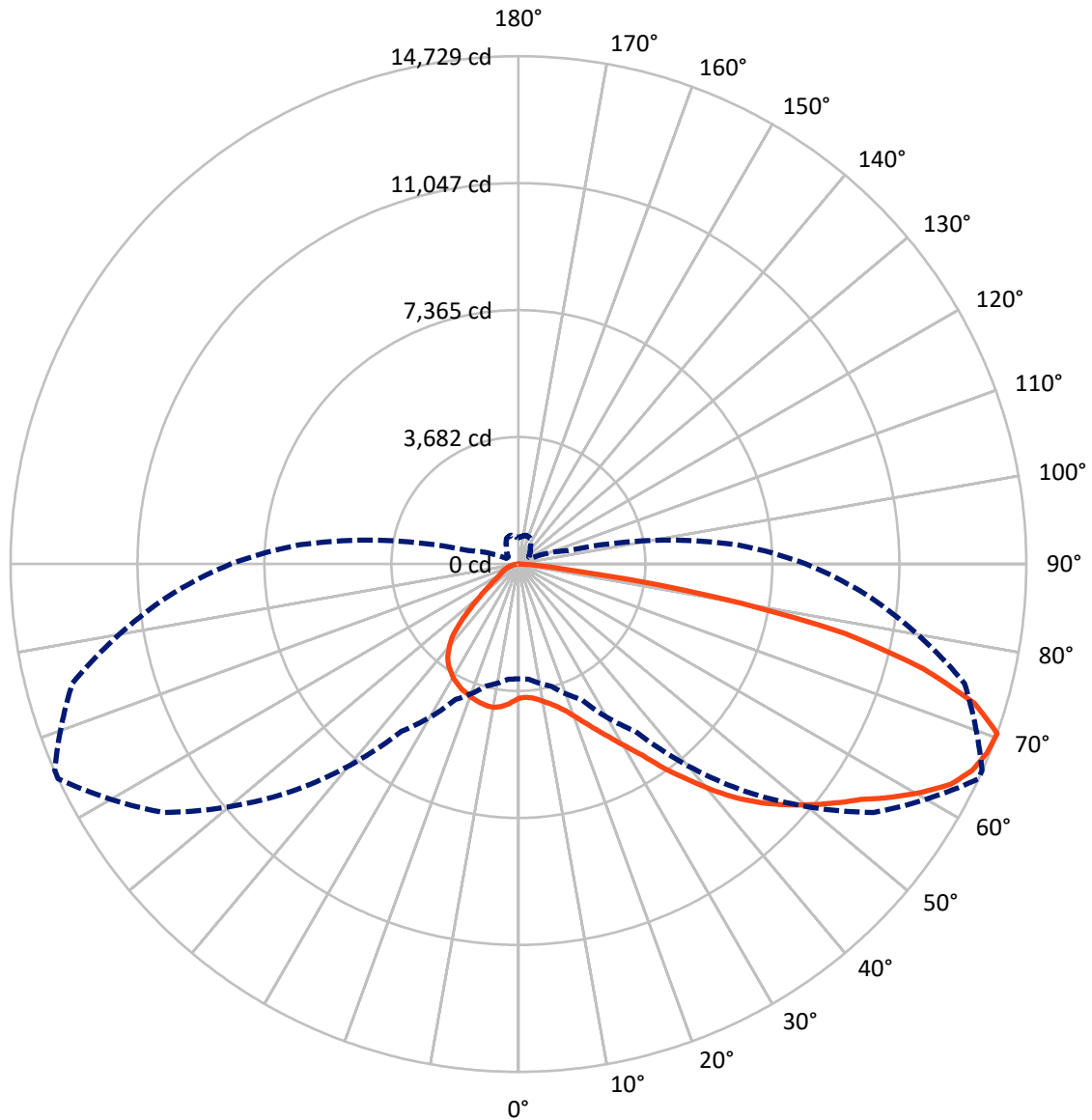
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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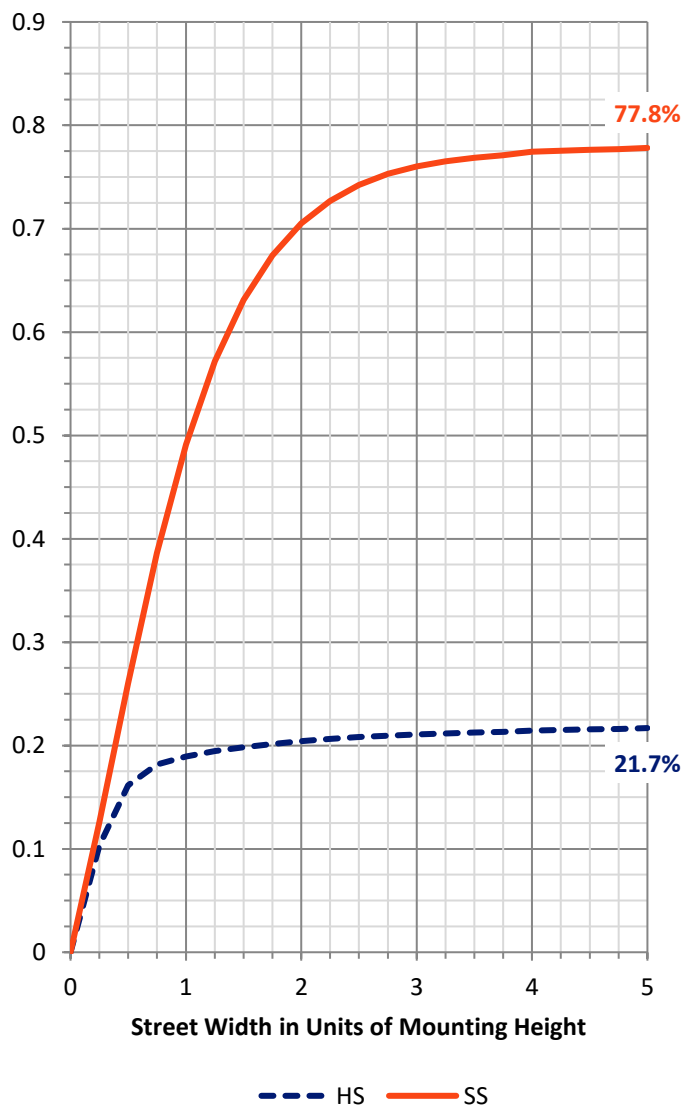
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5621.3	0.0	5621.3
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	19861.7	0.0	19861.7
	% Fixture	77.9	0.0	77.9
Total	Lumens	25483.0	0.0	25483.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	390.3	1.5
10°-20°	1233.5	4.8
20°-30°	2139.9	8.4
30°-40°	3111.4	12.2
40°-50°	4156.9	16.3
50°-60°	5063.4	19.9
60°-70°	5458.5	21.4
70°-80°	3538.9	13.9
80°-90°	390.3	1.5
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°	25483.0	100.0
0°-180°	25483.0	100.0

Coefficient of Utilization



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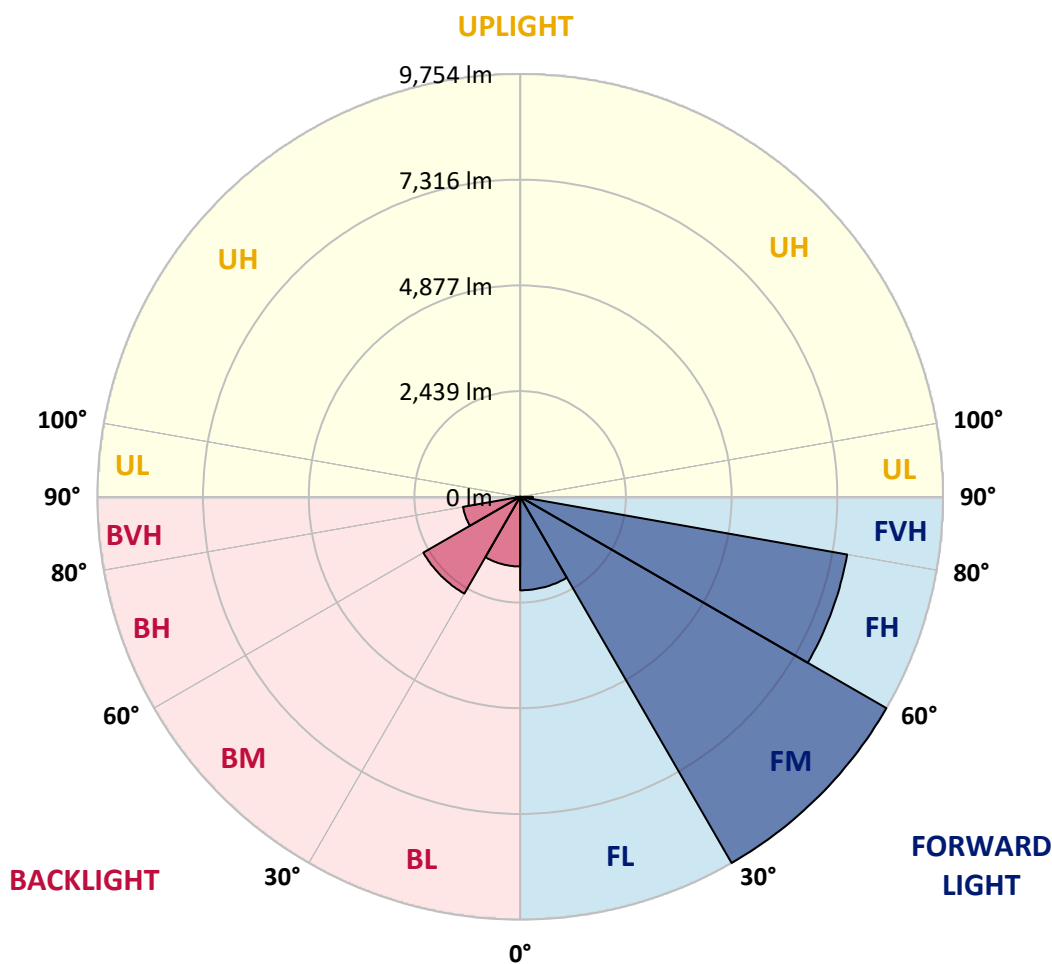
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2156.6	8.5			
FM	(30°-60°)	9754.4	38.3			
FH	(60°-80°)	7659.6	30.1			G4/12000
FVH	(80°-90°)	291.1	1.1			G3/500
BL	(0°-30°)	1607.1	6.3	B3/2500		
BM	(30°-60°)	2577.2	10.1	B3/5000		
BH	(60°-80°)	1337.8	5.2	B3/2500		G3/2500
BVH	(80°-90°)	99.2	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3890.5	3890.5	3890.5	3890.5	3890.5	3890.5	3890.5	3890.5	3890.5	3890.5	3890.5
2.5°	3833.1	3867.5	3849.2	3850.3	3876.7	3854.9	3869.8	3869.8	3868.7	3876.7	3900.9
5°	3927.3	3964.1	3942.2	3928.4	3934.2	3906.6	3900.9	3896.3	3892.8	3902.0	3942.2
7.5°	4065.2	4107.7	4083.6	4070.9	4064.0	4000.8	3989.3	3958.3	3954.9	3962.9	3999.7
10°	4247.9	4305.3	4276.6	4241.0	4216.8	4143.3	4084.7	4057.1	4049.1	4044.5	4082.4
12.5°	4511.0	4561.5	4528.2	4461.6	4429.4	4311.1	4241.0	4162.8	4161.7	4145.6	4174.3
15°	4760.3	4813.2	4770.7	4705.2	4662.7	4502.9	4399.5	4303.0	4291.5	4273.1	4282.3
17.5°	5001.6	5066.0	5036.1	4976.3	4924.6	4746.5	4611.0	4486.9	4474.2	4445.5	4403.0
20°	5301.5	5360.1	5352.1	5298.1	5240.6	5038.4	4890.2	4730.4	4716.7	4665.0	4569.6
22.5°	5601.4	5673.8	5629.0	5619.8	5587.6	5386.5	5179.7	5017.7	5003.9	4936.1	4761.5
25°	5884.0	5948.4	5964.5	5949.5	5953.0	5754.2	5548.5	5345.2	5331.4	5239.5	4986.7
27.5°	6218.4	6279.3	6283.9	6287.3	6327.6	6162.1	5920.8	5711.7	5702.5	5599.1	5278.5
30°	6474.6	6575.7	6596.4	6616.0	6636.6	6548.2	6328.7	6133.4	6115.0	6002.4	5607.1
32.5°	6709.0	6784.9	6858.4	6898.6	6991.7	6912.4	6732.0	6611.4	6612.5	6559.7	6131.1
35°	6890.6	6974.5	7067.5	7214.6	7350.2	7316.9	7260.6	7267.4	7268.6	7291.6	6837.7
37.5°	7064.1	7139.9	7257.1	7432.9	7671.9	7715.6	7753.5	7897.1	7947.7	8055.7	7490.4
40°	7168.6	7249.1	7400.7	7644.3	7954.6	8112.0	8226.9	8595.7	8683.0	8684.2	7994.8
42.5°	7015.8	7104.3	7375.5	7808.6	8209.6	8503.8	8806.0	9271.3	9334.5	9193.2	8425.6
45°	6879.1	6960.7	7252.5	7833.9	8409.6	8922.0	9342.5	9881.4	9927.4	9642.4	8823.2
47.5°	6746.9	6811.3	7149.1	7781.1	8614.1	9341.4	9799.9	10433.0	10466.3	10134.2	9211.6
50°	6564.3	6641.2	6999.7	7719.0	8737.0	9701.0	10248.0	10977.6	10973.0	10576.6	9563.2
52.5°	6364.3	6440.2	6825.1	7605.3	8817.5	9980.2	10758.1	11510.7	11514.2	11084.4	9911.3
55°	6112.7	6205.8	6611.4	7451.3	8837.0	10199.7	11200.5	12057.6	12113.9	11602.6	10246.8
57.5°	5811.7	5904.7	6348.2	7226.1	8720.9	10383.5	11672.7	12756.2	12786.1	12132.3	10497.3
60°	5461.2	5573.8	5997.8	6925.0	8499.2	10597.3	12244.9	13441.0	13451.4	12605.7	10706.4
62.5°	5055.6	5136.0	5581.9	6488.4	8145.3	10682.3	12718.3	14069.6	14071.8	12963.1	10800.6
65°	4616.7	4647.7	5021.1	5894.4	7629.4	10543.3	12899.9	14452.2	14441.8	13276.7	10753.5
67.5°	4093.9	4079.0	4477.7	5160.2	6976.8	10080.2	12811.4	14648.6	14679.7	13518.0	10601.9
70°	3328.7	3350.5	3667.6	4338.6	5923.1	9336.8	12567.8	14729.1	14721.0	13397.4	10113.5
72.5°	2526.7	2565.7	2795.5	3298.8	4597.2	7852.3	11524.5	13839.7	13855.8	12547.1	9234.5
75°	1562.6	1675.2	1869.4	2176.2	2880.6	5625.5	9809.0	12123.1	12204.7	11070.7	7604.1
77.5°	684.8	711.2	808.9	1049.0	1506.3	2824.3	7251.4	9681.5	9922.8	8953.0	5485.3
80°	424.0	424.0	451.6	526.2	672.2	1050.2	2905.8	5780.6	5535.9	5121.1	2419.8
82.5°	352.7	352.7	366.5	379.2	344.7	444.7	972.1	1620.1	1736.1	1405.2	743.4
85°	191.9	196.5	197.6	201.1	197.6	240.1	382.6	479.1	484.9	438.9	264.3
87.5°	70.1	74.7	72.4	67.8	60.9	57.5	73.5	74.7	77.0	71.2	39.1
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°	3890.5	3890.5	3890.5	3890.5	3890.5	3890.5	3890.5	3890.5	3890.5	3890.5	3890.5
2.5°	3917.0	3933.0	3975.6	3979.0	3995.1	4000.8	4014.6	4034.2	4068.6	4051.4	4031.9
5°	3961.8	3982.4	4050.2	4084.7	4129.5	4155.9	4199.6	4221.4	4274.3	4257.1	4254.8
7.5°	4029.6	4073.2	4134.1	4167.4	4226.0	4243.3	4275.4	4275.4	4319.1	4297.3	4291.5
10°	4121.5	4150.2	4214.5	4216.8	4250.2	4250.2	4288.1	4264.0	4306.5	4281.2	4280.0
12.5°	4195.0	4211.1	4235.2	4215.7	4232.9	4213.4	4232.9	4204.2	4230.6	4198.5	4191.6
15°	4277.7	4255.9	4231.8	4185.8	4170.9	4139.9	4123.8	4093.9	4096.2	4059.4	4053.7
17.5°	4370.8	4314.5	4244.4	4144.5	4089.3	4010.0	3976.7	3934.2	3910.1	3876.7	3891.7
20°	4483.4	4399.5	4253.6	4098.5	3981.3	3860.7	3782.5	3713.6	3707.8	3678.0	3661.9
22.5°	4629.3	4494.9	4293.8	4033.0	3844.6	3672.2	3556.2	3441.3	3429.8	3368.9	3345.9
25°	4809.7	4621.3	4314.5	3982.4	3684.9	3448.2	3265.5	3105.8	3028.8	2964.4	2949.5
27.5°	5052.2	4807.4	4355.9	3891.7	3496.4	3170.1	2908.1	2696.7	2604.8	2572.6	2539.3
30°	5336.0	5034.9	4432.9	3815.8	3273.5	2815.1	2495.6	2244.0	2144.0	2093.5	2077.4
32.5°	5754.2	5322.2	4504.1	3690.6	3003.5	2424.4	2008.5	1730.4	1669.5	1660.3	1682.1
35°	6363.2	5862.2	4607.5	3574.6	2686.4	1990.1	1530.5	1348.9	1336.3	1338.6	1338.6
37.5°	6997.4	6377.0	4914.3	3403.3	2298.0	1498.3	1165.1	1066.3	1070.9	1070.9	1069.7
40°	7411.1	6790.6	5137.2	3160.9	1815.4	1074.3	864.1	789.4	821.5	865.2	888.2
42.5°	7867.2	7166.3	5291.2	2881.7	1262.8	759.5	628.5	654.9	749.2	815.8	825.0
45°	8255.6	7485.8	5308.4	2447.4	813.5	576.8	573.4	649.2	758.3	830.7	836.5
47.5°	8588.8	7776.5	5200.4	1951.0	592.9	538.9	573.4	668.7	767.5	812.3	816.9
50°	8911.7	8007.4	4946.5	1499.4	540.0	525.1	580.2	672.2	734.2	765.2	760.6
52.5°	9198.9	8217.7	4578.8	1169.7	519.3	515.9	586.0	668.7	707.8	705.5	702.0
55°	9417.2	8279.7	4291.5	912.3	502.1	510.2	589.4	672.2	700.9	680.2	675.6
57.5°	9529.8	8202.7	4050.2	725.0	483.7	504.4	598.6	671.0	721.6	760.6	758.3
60°	9527.5	8115.4	3752.6	625.1	465.3	499.8	613.6	728.5	911.2	947.9	949.1
62.5°	9490.8	7966.0	3344.7	565.3	444.7	502.1	623.9	827.3	1037.6	1007.7	983.5
65°	9369.0	7685.7	2797.8	501.0	418.2	504.4	619.3	895.1	951.4	844.5	829.6
67.5°	9030.0	7143.4	2196.9	448.1	394.1	491.8	627.4	831.9	874.4	806.6	784.8
70°	8341.8	6379.3	1489.1	386.1	366.5	473.4	609.0	818.1	862.9	794.0	761.8
72.5°	7251.4	5120.0	870.9	332.1	326.3	435.5	599.8	827.3	876.7	799.7	758.3
75°	5643.9	3589.5	503.3	268.9	272.3	402.2	550.4	780.2	868.6	808.9	754.9
77.5°	3643.5	1743.0	355.0	214.9	212.6	317.1	447.0	682.5	836.5	816.9	772.1
80°	1304.1	636.5	249.3	159.7	155.1	214.9	343.6	549.2	707.8	733.1	733.1
82.5°	468.8	319.4	159.7	97.7	96.5	136.7	256.2	417.1	513.6	579.1	595.2
85°	196.5	139.0	78.1	49.4	40.2	52.9	132.1	258.5	348.1	374.6	407.9
87.5°	28.7	25.3	20.7	16.1	13.8	13.8	17.2	74.7	124.1	178.1	220.6
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)