

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: P510231

Luminaire Tested: **VERD-M-CA4-230-740-U-T3**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510231
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-CA4-230-740-U-T3
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 4000K, 1050mA LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32478 lumens
Efficiency: N/A
Efficacy: 139.2 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

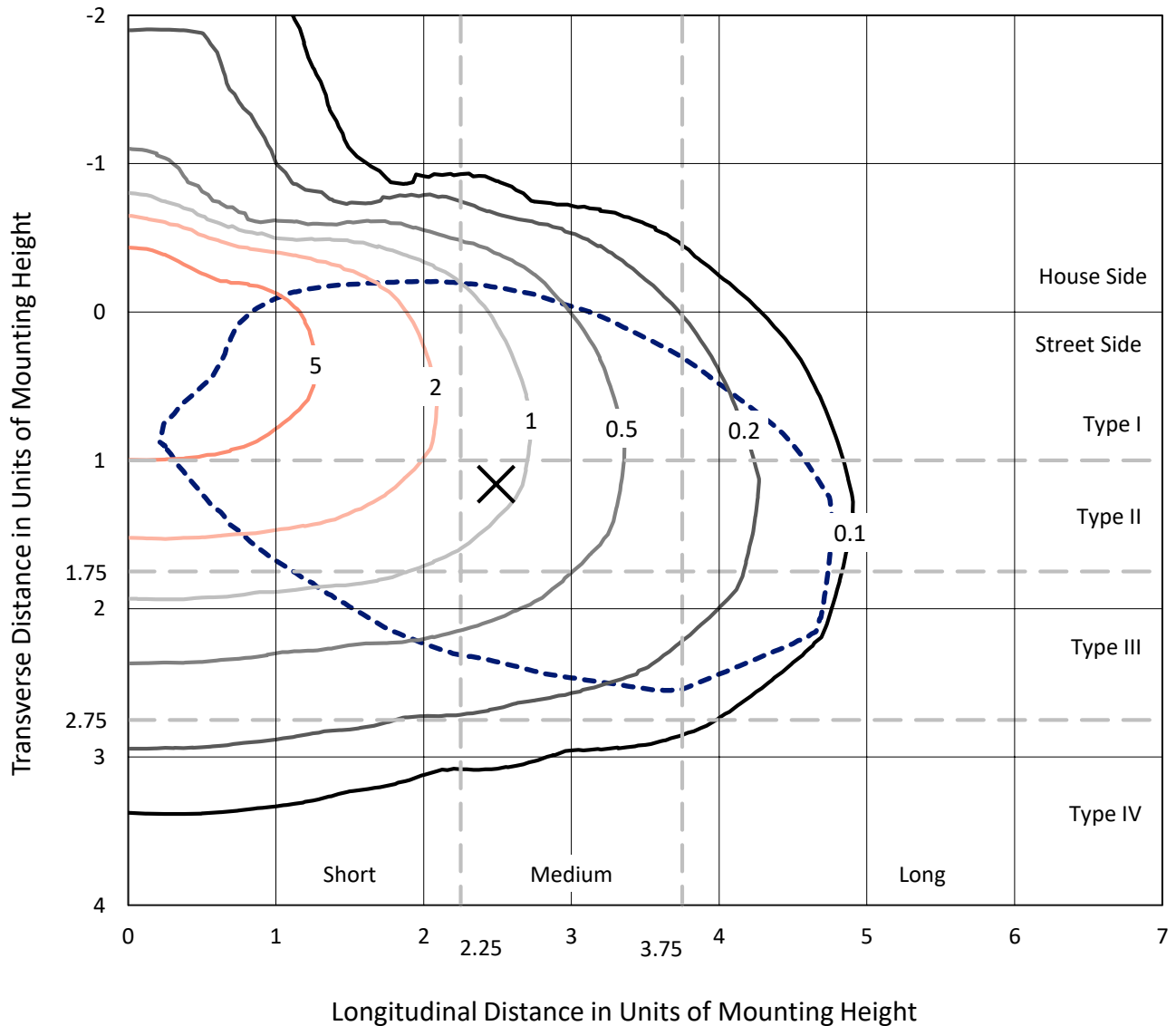
Input Watts (W): 233.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

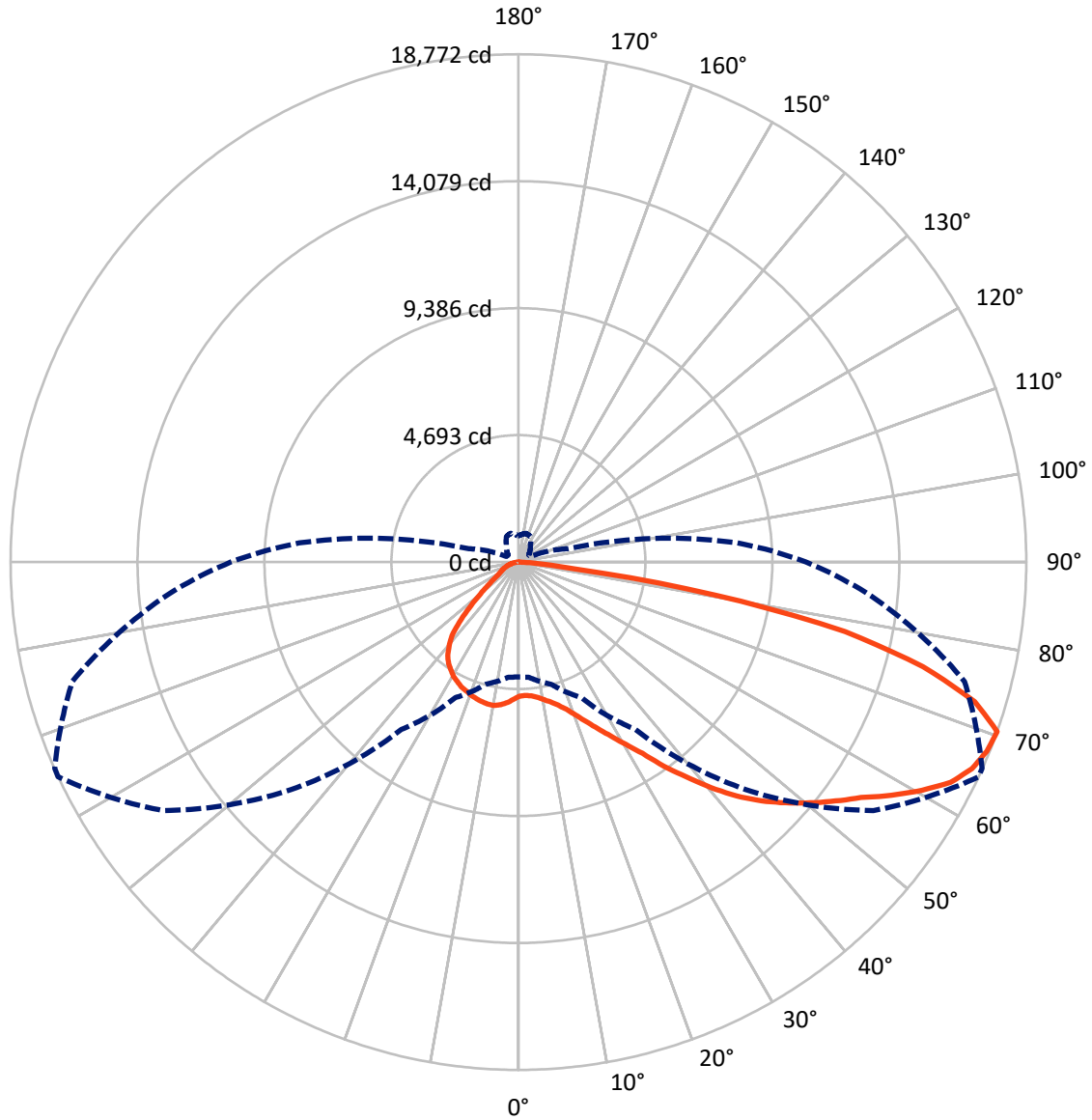
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9 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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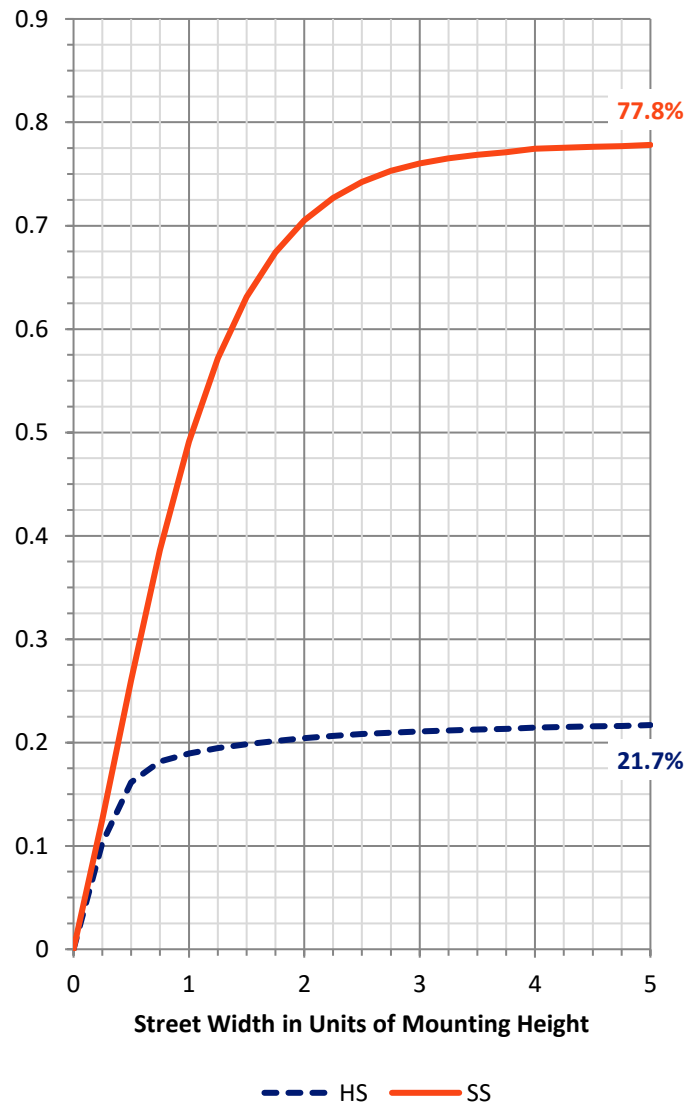
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7164.3	0.0	7164.3
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	25313.7	0.0	25313.7
	% Fixture	77.9	0.0	77.9
Total	Lumens	32478.0	0.0	32478.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	497.4	1.5
10°-20°	1572.1	4.8
20°-30°	2727.3	8.4
30°-40°	3965.4	12.2
40°-50°	5297.9	16.3
50°-60°	6453.3	19.9
60°-70°	6956.8	21.4
70°-80°	4510.3	13.9
80°-90°	497.5	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°	32478.0	100.0
0°-180°	32478.0	100.0



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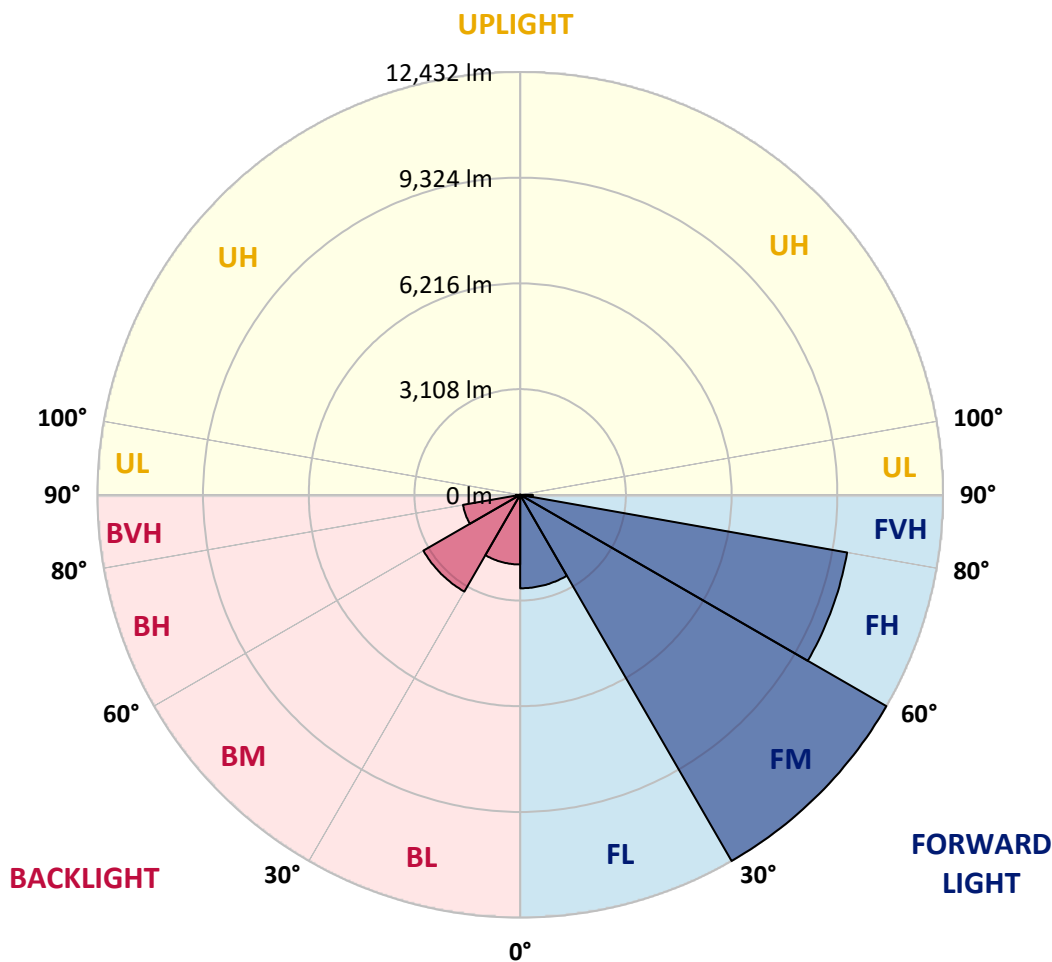
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2748.6	8.5			
FM	(30°-60°)	12432.0	38.3			
FH	(60°-80°)	9762.1	30.1			G4/12000
FVH	(80°-90°)	371.0	1.1			G3/500
BL	(0°-30°)	2048.3	6.3	B3/2500		
BM	(30°-60°)	3284.6	10.1	B3/5000		
BH	(60°-80°)	1705.0	5.2	B3/2500		G3/2500
BVH	(80°-90°)	126.4	0.4			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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4958.5	4958.5	4958.5	4958.5	4958.5	4958.5	4958.5	4958.5	4958.5	4958.5	4958.5
2.5°	4885.2	4929.2	4905.7	4907.2	4940.9	4913.1	4932.1	4932.1	4930.6	4940.9	4971.6
5°	5005.3	5052.2	5024.4	5006.8	5014.1	4979.0	4971.6	4965.8	4961.4	4973.1	5024.4
7.5°	5181.1	5235.2	5204.5	5188.4	5179.6	5099.0	5084.4	5044.9	5040.5	5050.7	5097.6
10°	5413.9	5487.1	5450.5	5405.1	5374.4	5280.6	5205.9	5170.8	5160.6	5154.7	5203.0
12.5°	5749.2	5813.7	5771.2	5686.3	5645.3	5494.4	5405.1	5305.5	5304.1	5283.6	5320.2
15°	6067.0	6134.4	6080.2	5996.7	5942.5	5739.0	5607.2	5484.2	5469.5	5446.1	5457.8
17.5°	6374.5	6456.5	6418.5	6342.3	6276.4	6049.4	5876.6	5718.5	5702.4	5665.8	5611.6
20°	6756.7	6831.4	6821.2	6752.4	6679.1	6421.4	6232.5	6028.9	6011.4	5945.5	5823.9
22.5°	7139.0	7231.2	7174.1	7162.4	7121.4	6865.1	6601.5	6395.0	6377.5	6291.1	6068.5
25°	7499.2	7581.2	7601.7	7582.7	7587.1	7333.7	7071.6	6812.4	6794.8	6677.7	6355.5
27.5°	7925.3	8003.0	8008.8	8013.2	8064.5	7853.6	7546.1	7279.5	7267.8	7136.0	6727.5
30°	8251.9	8380.8	8407.1	8432.0	8458.4	8345.6	8065.9	7817.0	7793.5	7650.0	7146.3
32.5°	8550.6	8647.3	8741.0	8792.3	8910.9	8809.8	8579.9	8426.2	8427.6	8360.3	7814.0
35°	8782.0	8888.9	9007.5	9195.0	9367.8	9325.3	9253.6	9262.3	9263.8	9293.1	8714.7
37.5°	9003.1	9099.8	9249.2	9473.2	9777.8	9833.5	9881.8	10064.8	10129.3	10266.9	9546.4
40°	9136.4	9238.9	9432.2	9742.7	10138.1	10338.7	10485.1	10955.2	11066.5	11067.9	10189.3
42.5°	8941.6	9054.4	9400.0	9952.1	10463.1	10838.0	11223.2	11816.3	11896.8	11716.7	10738.5
45°	8767.4	8871.3	9243.3	9984.3	10718.0	11371.1	11907.0	12593.9	12652.4	12289.3	11245.1
47.5°	8599.0	8681.0	9111.5	9916.9	10978.6	11905.6	12489.9	13296.8	13339.2	12916.0	11740.1
50°	8366.1	8464.2	8921.1	9837.8	11135.3	12363.9	13061.0	13990.9	13985.0	13479.8	12188.2
52.5°	8111.3	8208.0	8698.5	9692.9	11237.8	12719.8	13711.2	14670.4	14674.8	14127.1	12631.9
55°	7790.6	7909.2	8426.2	9496.6	11262.7	12999.5	14275.0	15367.4	15439.2	14787.5	13059.5
57.5°	7406.9	7525.6	8090.8	9209.6	11114.8	13233.8	14876.9	16257.8	16295.9	15462.6	13378.8
60°	6960.3	7103.8	7644.2	8825.9	10832.2	13506.2	15606.1	17130.6	17143.7	16065.9	13645.3
62.5°	6443.4	6545.9	7114.1	8269.5	10381.1	13614.5	16209.5	17931.6	17934.5	16521.4	13765.4
65°	5884.0	5923.5	6399.4	7512.4	9723.6	13437.3	16440.8	18419.2	18406.1	16921.2	13705.3
67.5°	5217.7	5198.6	5706.8	6576.6	8891.8	12847.2	16328.1	18669.7	18709.2	17228.7	13512.0
70°	4242.4	4270.2	4674.4	5529.6	7549.0	11899.7	16017.6	18772.2	18761.9	17074.9	12889.7
72.5°	3220.2	3270.0	3562.9	4204.3	5859.1	10007.7	14687.9	17638.7	17659.2	15991.3	11769.4
75°	1991.6	2135.1	2382.6	2773.6	3671.3	7169.7	12501.6	15450.9	15554.9	14109.5	9691.4
77.5°	872.8	906.5	1030.9	1337.0	1919.8	3599.5	9241.8	12339.0	12646.6	11410.6	6991.1
80°	540.4	540.4	575.5	670.7	856.7	1338.5	3703.5	7367.4	7055.5	6526.8	3084.0
82.5°	449.6	449.6	467.1	483.3	439.3	566.7	1238.9	2064.8	2212.7	1791.0	947.5
85°	244.6	250.4	251.9	256.3	251.9	306.1	487.6	610.7	618.0	559.4	336.8
87.5°	89.3	95.2	92.3	86.4	77.6	73.2	93.7	95.2	98.1	90.8	49.8
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°	4958.5	4958.5	4958.5	4958.5	4958.5	4958.5	4958.5	4958.5	4958.5	4958.5	4958.5
2.5°	4992.1	5012.6	5066.8	5071.2	5091.7	5099.0	5116.6	5141.5	5185.4	5163.5	5138.6
5°	5049.3	5075.6	5162.0	5205.9	5263.1	5296.7	5352.4	5380.2	5447.6	5425.6	5422.7
7.5°	5135.7	5191.3	5268.9	5311.4	5386.1	5408.0	5449.0	5449.0	5504.7	5476.9	5469.5
10°	5252.8	5289.4	5371.4	5374.4	5416.8	5416.8	5465.1	5434.4	5488.6	5456.4	5454.9
12.5°	5346.5	5367.0	5397.8	5372.9	5394.9	5370.0	5394.9	5358.2	5391.9	5350.9	5342.1
15°	5452.0	5424.1	5393.4	5334.8	5315.8	5276.2	5255.7	5217.7	5220.6	5173.7	5166.4
17.5°	5570.6	5498.8	5409.5	5282.1	5211.8	5110.8	5068.3	5014.1	4983.4	4940.9	4959.9
20°	5714.1	5607.2	5421.2	5223.5	5074.2	4920.4	4820.8	4732.9	4725.6	4687.5	4667.0
22.5°	5900.1	5728.7	5472.5	5140.0	4899.9	4680.2	4532.3	4385.9	4371.2	4293.6	4264.3
25°	6130.0	5889.8	5498.8	5075.6	4696.3	4394.7	4161.8	3958.3	3860.2	3778.2	3759.1
27.5°	6439.0	6127.1	5551.5	4959.9	4456.2	4040.3	3706.4	3437.0	3319.8	3278.8	3236.3
30°	6800.7	6417.0	5649.7	4863.3	4172.1	3587.8	3180.7	2860.0	2732.6	2668.1	2647.6
32.5°	7333.7	6783.1	5740.5	4703.7	3827.9	3089.9	2559.8	2205.4	2127.8	2116.1	2143.9
35°	8109.9	7471.4	5872.2	4555.8	3423.8	2536.3	1950.6	1719.2	1703.1	1706.0	1706.0
37.5°	8918.2	8127.4	6263.2	4337.6	2928.8	1909.6	1484.9	1359.0	1364.8	1364.8	1363.4
40°	9445.4	8654.6	6547.3	4028.6	2313.8	1369.2	1101.2	1006.0	1047.0	1102.7	1132.0
42.5°	10026.8	9133.5	6743.6	3672.7	1609.4	968.0	801.0	834.7	954.8	1039.7	1051.4
45°	10521.7	9540.6	6765.5	3119.2	1036.8	735.1	730.7	827.4	966.5	1058.8	1066.1
47.5°	10946.4	9911.1	6627.9	2486.6	755.6	686.8	730.7	852.3	978.2	1035.3	1041.2
50°	11357.9	10205.4	6304.2	1911.0	688.3	669.2	739.5	856.7	935.8	975.3	969.4
52.5°	11724.0	10473.4	5835.6	1490.8	661.9	657.5	746.8	852.3	902.1	899.1	894.7
55°	12002.2	10552.5	5469.5	1162.7	639.9	650.2	751.2	856.7	893.3	866.9	861.1
57.5°	12145.7	10454.4	5162.0	924.0	616.5	642.9	763.0	855.2	919.6	969.4	966.5
60°	12142.8	10343.1	4782.7	796.6	593.1	637.0	782.0	928.4	1161.3	1208.1	1209.6
62.5°	12096.0	10152.7	4262.9	720.5	566.7	639.9	795.2	1054.4	1322.4	1284.3	1253.5
65°	11940.7	9795.4	3565.8	638.5	533.0	642.9	789.3	1140.8	1212.5	1076.3	1057.3
67.5°	11508.7	9104.2	2799.9	571.1	502.3	626.8	799.6	1060.2	1114.4	1028.0	1000.2
70°	10631.6	8130.4	1897.9	492.0	467.1	603.3	776.1	1042.7	1099.8	1011.9	970.9
72.5°	9241.8	6525.4	1110.0	423.2	415.9	555.0	764.4	1054.4	1117.3	1019.2	966.5
75°	7193.1	4574.8	641.4	342.7	347.1	512.5	701.4	994.3	1107.1	1030.9	962.1
77.5°	4643.6	2221.5	452.5	273.8	270.9	404.2	569.7	869.9	1066.1	1041.2	984.1
80°	1662.1	811.3	317.8	203.6	197.7	273.8	437.9	700.0	902.1	934.3	934.3
82.5°	597.5	407.1	203.6	124.5	123.0	174.3	326.6	531.6	654.6	738.1	758.6
85°	250.4	177.2	99.6	63.0	51.3	67.4	168.4	329.5	443.7	477.4	519.9
87.5°	36.6	32.2	26.4	20.5	17.6	17.6	22.0	95.2	158.2	227.0	281.2
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)