

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: P510222

Luminaire Tested: **VERD-M-CA4-230-730-U-T3-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510222
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-5)
Test Lab: INNOVATION CENTER
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-M-CA4-230-730-U-T3-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 3000K, 1050mA LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29718 lumens
Efficiency: N/A
Efficacy: 127.4 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

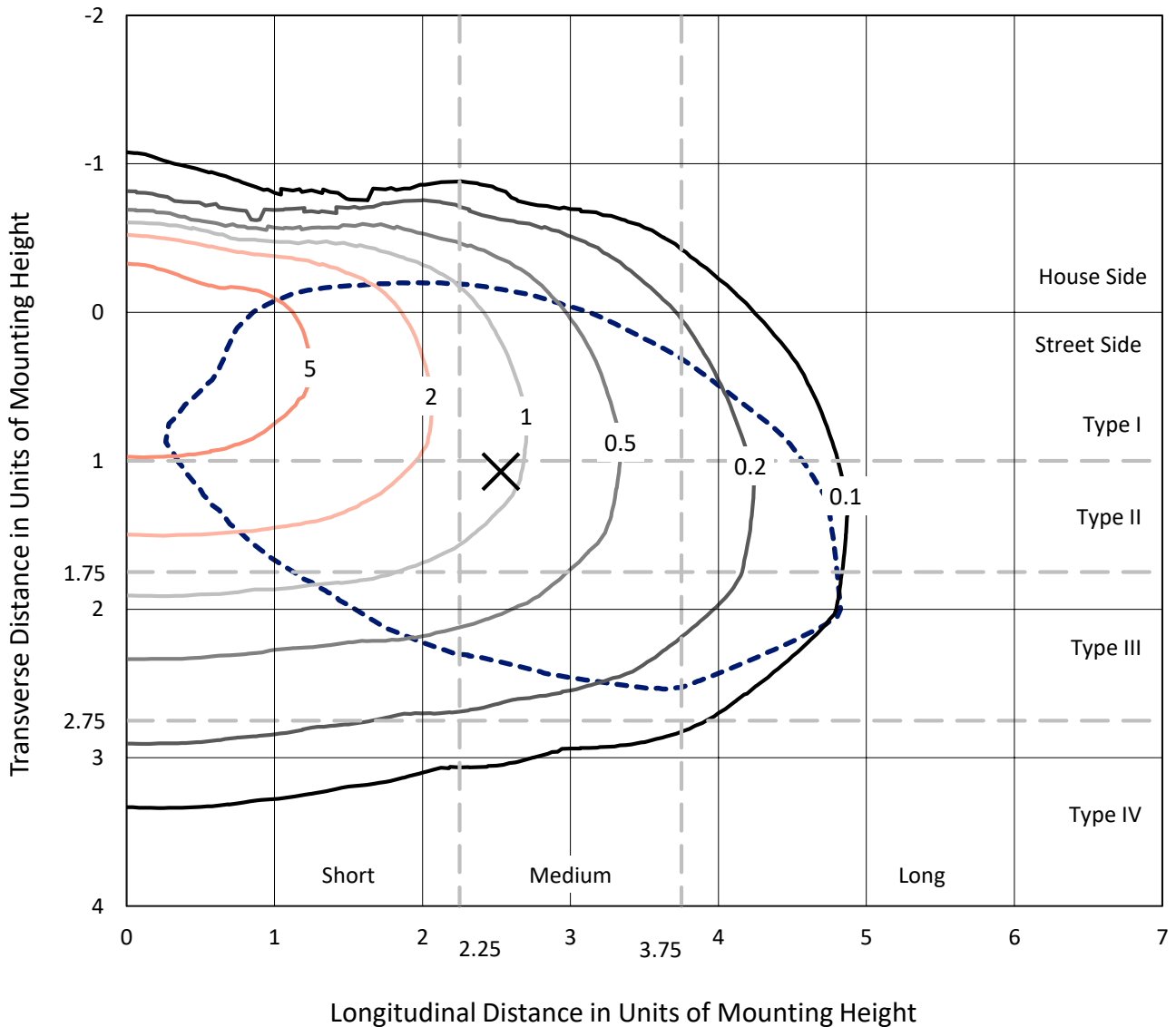
Input Watts (W): 233.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

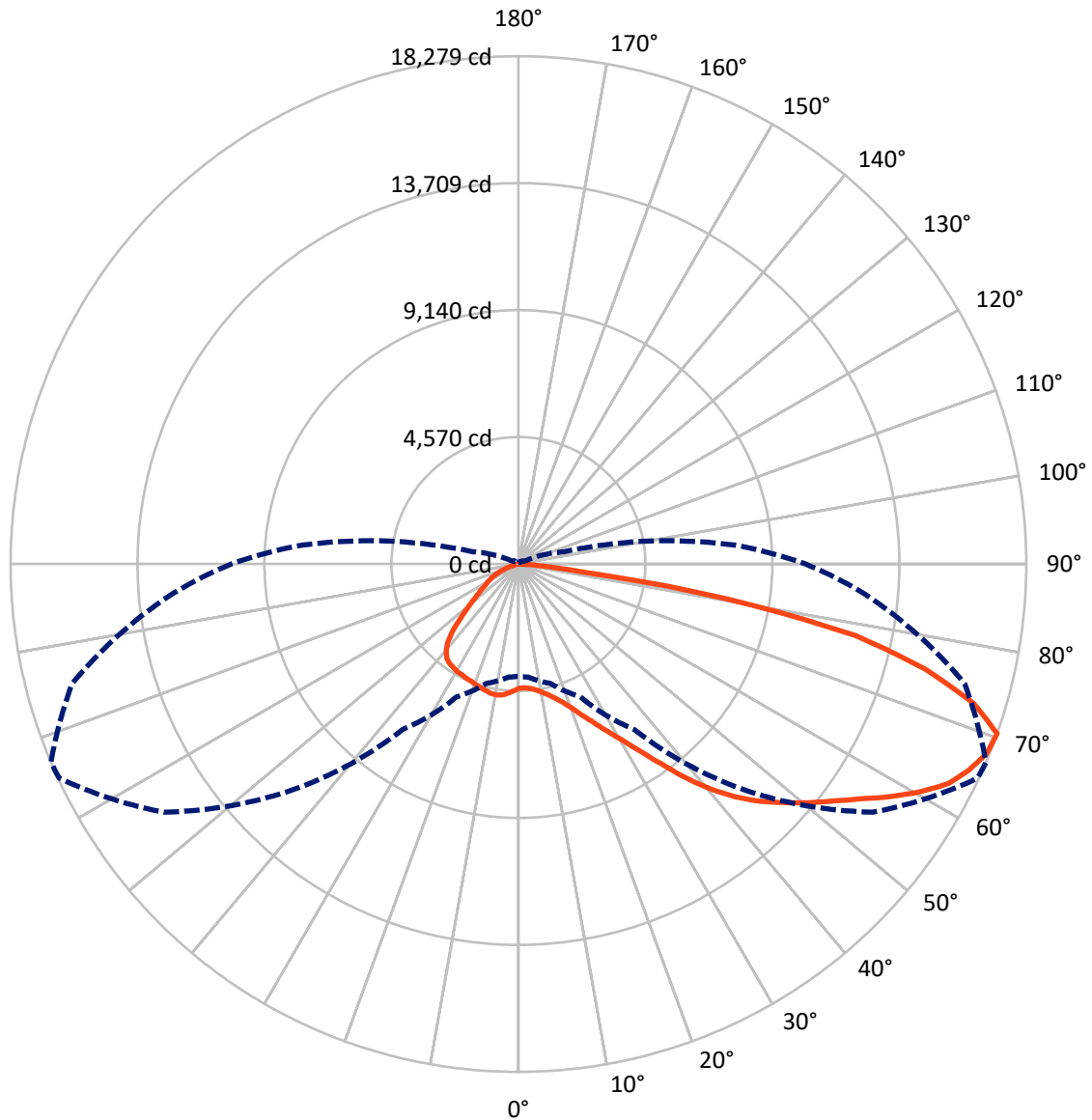
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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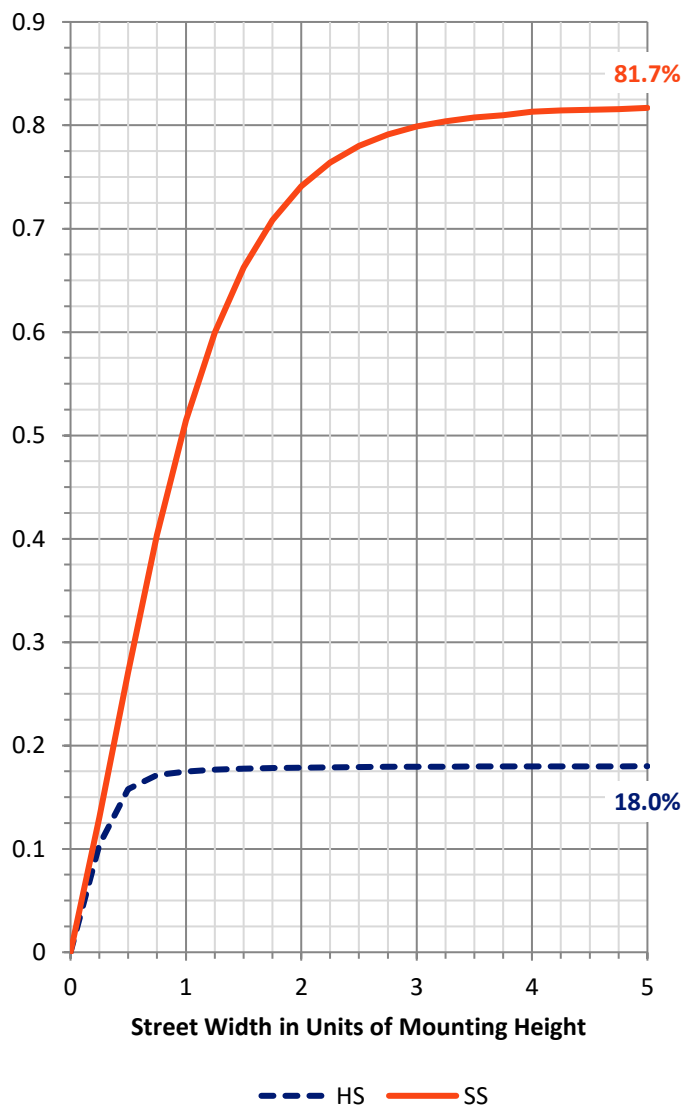
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5414.9	0.0	5414.9
	% Fixture	18.2	0.0	18.2
Street Side	Lumens	24303.1	0.0	24303.1
	% Fixture	81.8	0.0	81.8
Total	Lumens	29718.0	0.0	29718.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	445.4	1.5
10°-20°	1389.5	4.7
20°-30°	2410.8	8.1
30°-40°	3580.5	12.0
40°-50°	4912.3	16.5
50°-60°	6032.6	20.3
60°-70°	6467.6	21.8
70°-80°	4105.7	13.8
80°-90°	373.6	1.3
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°	29718.0	100.0
0°-180°	29718.0	100.0

Coefficient of Utilization



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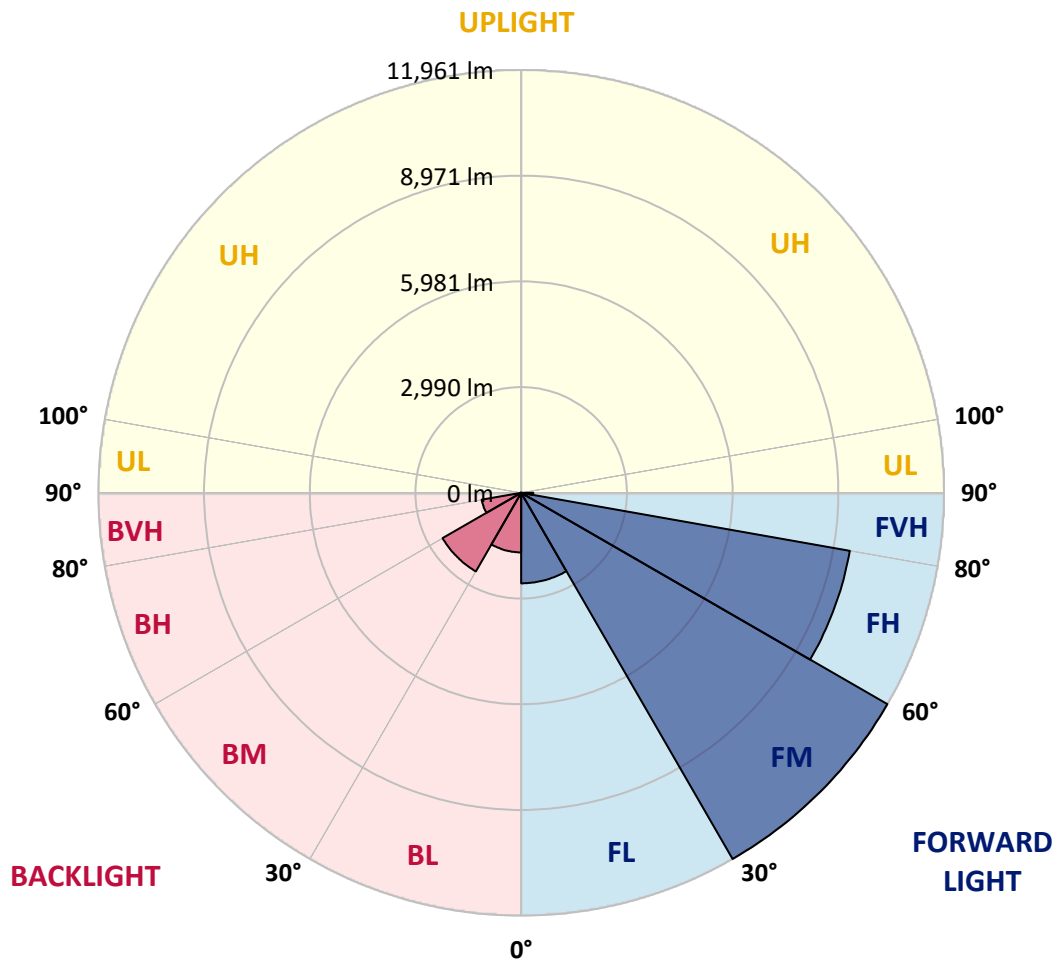
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2560.5	8.6			
FM	(30°-60°)	11961.2	40.2			
FH	(60°-80°)	9440.7	31.8			G4/12000
FVH	(80°-90°)	340.8	1.1			G3/500
BL	(0°-30°)	1685.2	5.7	B3/2500		
BM	(30°-60°)	2564.2	8.6	B3/5000		
BH	(60°-80°)	1132.6	3.8	B3/2500		G3/2500
BVH	(80°-90°)	32.8	0.1			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°	67°	75°	85°
0°	4470.3	4470.3	4470.3	4470.3	4470.3	4470.3	4470.3	4470.3	4470.3	4470.3	4470.3
2.5°	4430.0	4471.7	4447.3	4444.4	4473.1	4445.8	4464.5	4460.2	4457.3	4461.6	4491.8
5°	4546.5	4595.3	4562.3	4552.2	4568.0	4519.1	4514.8	4504.8	4501.9	4503.3	4546.5
7.5°	4708.9	4766.5	4753.5	4727.6	4719.0	4638.5	4624.1	4588.2	4576.7	4579.5	4622.7
10°	4964.9	5022.4	4996.5	4939.0	4903.0	4811.0	4759.3	4713.3	4690.2	4693.1	4739.1
12.5°	5292.7	5347.3	5304.2	5199.2	5179.1	5031.0	4950.5	4852.7	4836.9	4813.9	4862.8
15°	5601.8	5649.3	5629.2	5531.4	5476.7	5301.3	5153.2	5032.5	5018.1	4996.5	4995.1
17.5°	5944.0	5991.5	5954.1	5882.2	5810.3	5601.8	5442.2	5287.0	5249.6	5230.9	5163.3
20°	6309.3	6384.0	6376.8	6317.9	6231.6	5987.2	5761.4	5586.0	5545.8	5511.3	5368.9
22.5°	6686.0	6783.7	6762.2	6730.5	6694.6	6420.0	6156.8	5954.1	5923.9	5850.6	5626.3
25°	7102.9	7170.5	7154.7	7170.5	7146.1	6903.1	6615.5	6368.2	6327.9	6258.9	5915.3
27.5°	7507.0	7577.4	7604.8	7571.7	7587.5	7413.5	7072.8	6851.3	6812.5	6686.0	6263.2
30°	7872.2	7959.9	7998.7	8013.1	8066.3	7886.6	7634.9	7366.1	7353.1	7223.7	6721.9
32.5°	8164.1	8261.8	8356.7	8418.6	8503.4	8424.3	8174.1	8011.7	8013.1	7896.6	7410.6
35°	8375.4	8487.6	8625.6	8789.5	8967.8	8934.8	8786.7	8789.5	8812.5	8851.4	8289.2
37.5°	8609.8	8700.4	8862.9	9091.5	9363.2	9432.3	9412.1	9640.7	9752.9	9821.9	9061.3
40°	8749.3	8841.3	9044.0	9351.7	9747.1	9912.5	10098.0	10499.1	10645.8	10573.9	9721.3
42.5°	8595.4	8677.4	9029.7	9561.7	10062.0	10437.3	10769.4	11356.1	11462.5	11228.1	10277.7
45°	8395.6	8502.0	8872.9	9619.2	10341.0	10952.1	11468.2	12102.3	12181.4	11849.3	10769.4
47.5°	8231.7	8325.1	8757.9	9557.3	10598.3	11479.7	12082.2	12806.9	12827.0	12417.2	11278.4
50°	8021.7	8135.3	8586.8	9481.1	10753.6	11947.0	12644.4	13464.0	13508.5	13005.3	11709.8
52.5°	7801.7	7912.5	8379.8	9356.0	10865.8	12335.3	13228.2	14162.8	14167.1	13627.9	12169.9
55°	7476.8	7594.7	8112.3	9174.9	10900.3	12592.6	13814.8	14875.9	14920.5	14259.1	12586.9
57.5°	7133.1	7233.8	7790.2	8893.1	10772.3	12835.6	14417.3	15668.2	15790.4	14970.8	12944.9
60°	6677.3	6778.0	7366.1	8523.5	10500.6	13108.8	15107.4	16622.9	16635.8	15547.4	13205.2
62.5°	6187.0	6274.7	6815.4	7944.1	10079.3	13213.8	15699.8	17386.4	17385.0	16060.7	13334.6
65°	5604.7	5640.7	6191.4	7232.4	9425.1	13059.9	15961.5	17889.6	17840.8	16430.2	13291.4
67.5°	4914.5	4953.4	5370.3	6348.1	8476.1	12458.9	15845.0	18132.6	18181.5	16759.5	13104.5
70°	4040.3	4086.4	4450.1	5275.4	7266.9	11499.9	15571.8	18237.6	18279.3	16627.2	12527.9
72.5°	2982.1	3043.9	3266.8	3926.8	5515.6	9662.3	14306.5	17088.8	17111.8	15523.0	11327.3
75°	1851.9	1965.5	2175.5	2609.7	3578.8	6776.6	12228.9	15277.1	15133.3	13846.4	9373.3
77.5°	740.5	759.2	864.1	1222.2	1745.5	3528.5	8864.3	12144.0	12418.7	11078.6	6704.7
80°	431.4	428.5	452.9	569.4	749.1	1206.4	3447.9	6812.5	7593.3	6085.0	3016.6
82.5°	348.0	335.0	335.0	365.2	359.5	507.6	1130.1	1990.0	2182.6	1936.8	858.4
85°	182.6	178.3	145.2	179.7	179.7	253.1	434.2	563.6	595.3	519.1	322.1
87.5°	46.0	46.0	46.0	56.1	44.6	53.2	73.3	89.1	92.0	74.8	47.4
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°	4470.3	4470.3	4470.3	4470.3	4470.3	4470.3	4470.3	4470.3	4470.3	4470.3	4470.3
2.5°	4503.3	4516.3	4566.6	4559.4	4568.0	4568.0	4582.4	4598.2	4645.7	4618.4	4606.9
5°	4555.1	4581.0	4644.2	4667.2	4701.7	4706.1	4734.8	4744.9	4796.6	4767.9	4767.9
7.5°	4654.3	4684.5	4743.4	4752.1	4767.9	4740.6	4747.8	4716.1	4750.6	4716.1	4717.6
10°	4766.5	4786.6	4826.8	4769.3	4744.9	4680.2	4665.8	4588.2	4615.5	4570.9	4559.4
12.5°	4874.3	4867.1	4836.9	4734.8	4667.2	4560.8	4516.3	4411.3	4405.6	4346.6	4335.1
15°	4976.4	4926.1	4828.3	4670.1	4555.1	4407.0	4300.6	4185.6	4145.3	4077.7	4072.0
17.5°	5101.5	5015.2	4841.2	4608.3	4419.9	4204.3	4053.3	3923.9	3840.5	3778.7	3777.2
20°	5253.9	5121.6	4847.0	4537.8	4280.5	4004.4	3793.0	3629.1	3509.8	3432.1	3430.7
22.5°	5445.1	5265.4	4900.2	4457.3	4102.2	3762.8	3499.7	3216.5	3052.5	2894.4	2865.6
25°	5669.4	5410.6	4946.2	4415.6	3926.8	3511.2	3120.1	2706.0	2451.5	2325.0	2277.5
27.5°	5984.3	5652.2	5013.8	4336.5	3761.4	3200.6	2631.3	2179.8	1873.5	1765.7	1765.7
30°	6348.1	5957.0	5140.3	4289.1	3531.3	2765.0	2094.9	1610.4	1325.7	1163.2	1158.9
32.5°	6903.1	6320.8	5255.3	4187.0	3252.4	2290.5	1515.5	1038.1	809.5	708.9	703.1
35°	7701.1	7013.8	5440.8	4084.9	2848.4	1705.3	961.9	595.3	461.5	404.0	401.2
37.5°	8468.9	7673.8	5840.5	3882.2	2274.7	1071.2	533.4	343.6	281.8	274.6	271.8
40°	9009.5	8243.2	6122.3	3573.0	1616.1	567.9	309.1	248.7	244.4	241.6	240.1
42.5°	9599.0	8665.9	6322.2	3179.1	959.0	329.3	251.6	224.3	217.1	214.2	214.2
45°	10077.8	9072.8	6359.6	2615.4	483.1	271.8	230.1	204.2	195.5	201.3	202.7
47.5°	10519.3	9456.7	6233.1	1967.0	326.4	253.1	215.7	189.8	184.0	198.4	198.4
50°	10896.0	9781.6	5942.6	1468.0	306.3	238.7	201.3	175.4	174.0	186.9	188.4
52.5°	11271.3	10043.3	5485.4	1108.6	290.4	222.9	186.9	162.5	158.2	166.8	168.2
55°	11568.9	10136.8	5146.0	825.3	278.9	208.5	174.0	149.5	139.5	138.0	140.9
57.5°	11732.8	10054.8	4813.9	606.8	266.0	195.5	161.0	132.3	116.5	116.5	116.5
60°	11735.7	9955.6	4458.8	480.2	251.6	181.2	146.7	113.6	97.8	94.9	94.9
62.5°	11704.0	9778.8	3942.6	417.0	235.8	169.7	128.0	96.3	84.8	80.5	80.5
65°	11564.6	9445.2	3317.1	356.6	217.1	161.0	109.3	86.3	76.2	70.5	70.5
67.5°	11130.3	8819.7	2553.6	310.6	199.9	142.3	99.2	77.6	67.6	61.8	60.4
70°	10333.8	7808.9	1685.2	264.6	182.6	126.5	90.6	70.5	60.4	54.6	53.2
72.5°	8998.0	6355.3	846.9	224.3	156.7	116.5	82.0	61.8	51.8	46.0	46.0
75°	7051.2	4411.3	461.5	178.3	123.7	102.1	71.9	51.8	44.6	40.3	40.3
77.5°	4323.6	2187.0	314.9	138.0	93.5	83.4	57.5	43.1	38.8	37.4	37.4
80°	1577.3	716.0	211.4	97.8	70.5	64.7	46.0	37.4	35.9	35.9	35.9
82.5°	569.4	363.8	142.3	66.1	44.6	48.9	37.4	31.6	30.2	31.6	33.1
85°	234.4	159.6	51.8	37.4	24.4	25.9	23.0	21.6	23.0	24.4	24.4
87.5°	35.9	31.6	18.7	18.7	14.4	12.9	10.1	11.5	14.4	17.3	17.3
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)