

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: P510238

Luminaire Tested: **VERD-M-CA4-230-750-U-T3-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510238
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-CA4-230-750-U-T3-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 5000K, 1050mA LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30822 lumens
Efficiency: N/A
Efficacy: 132.1 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

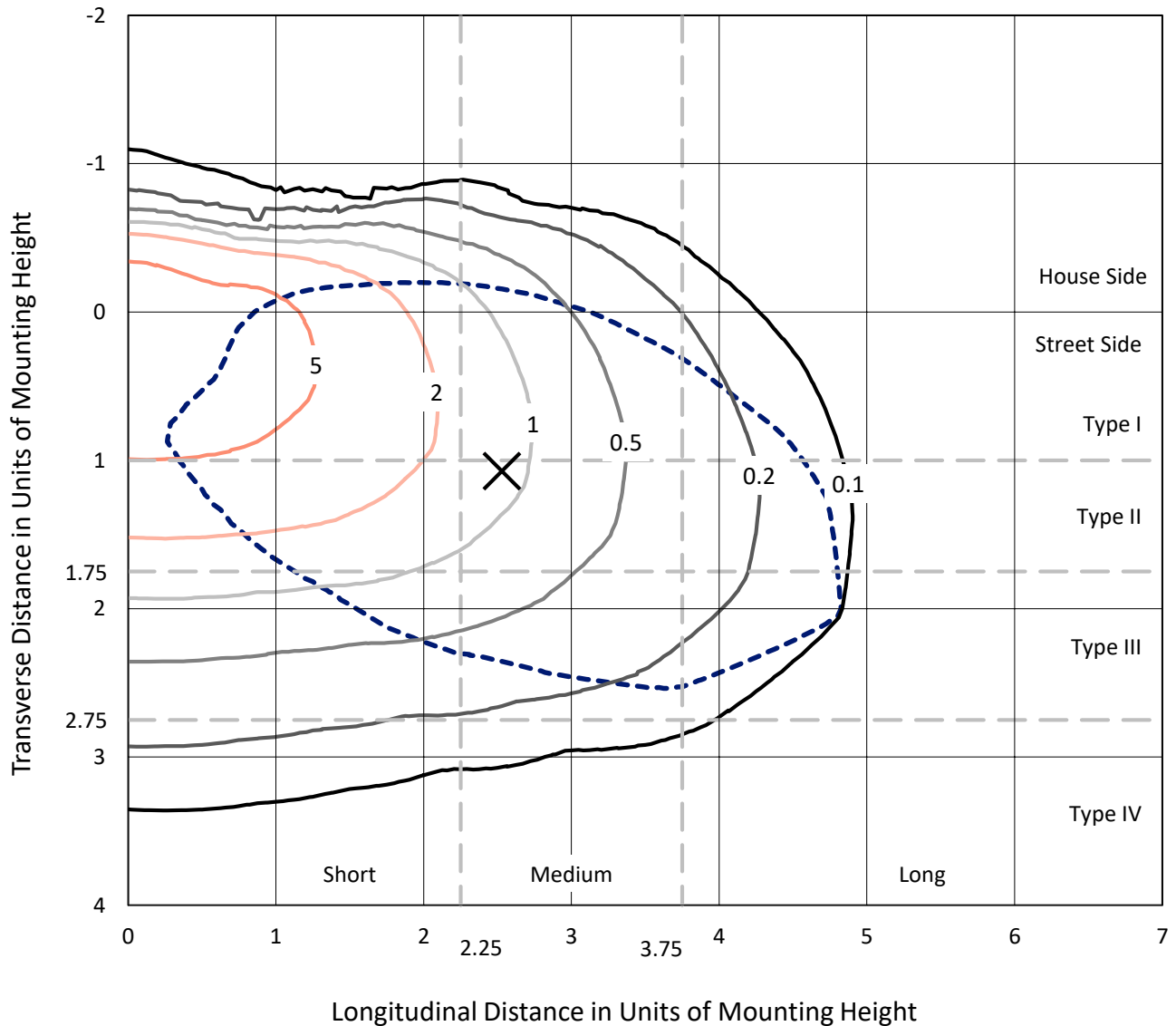
Input Watts (W): 233.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

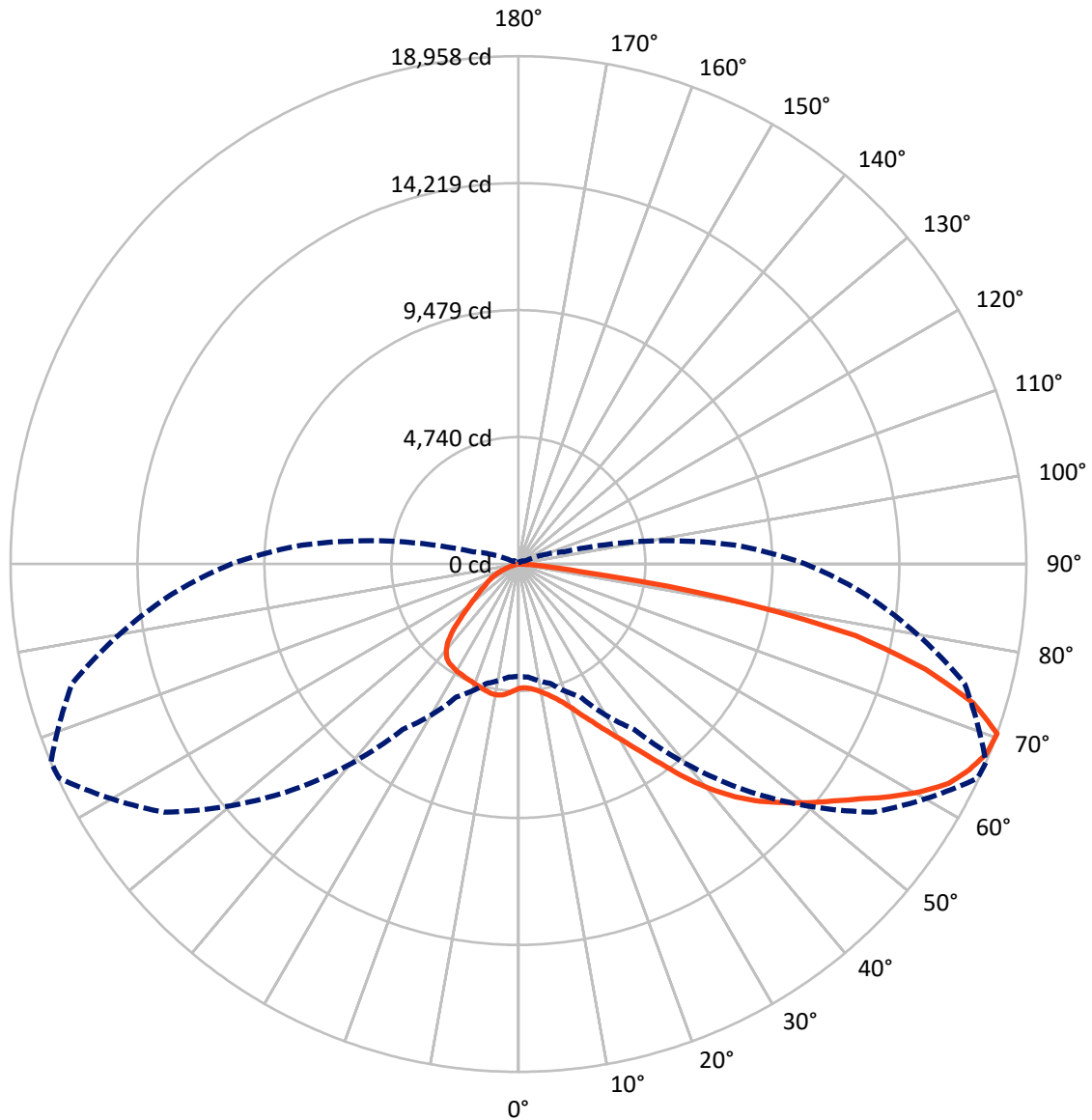
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.8 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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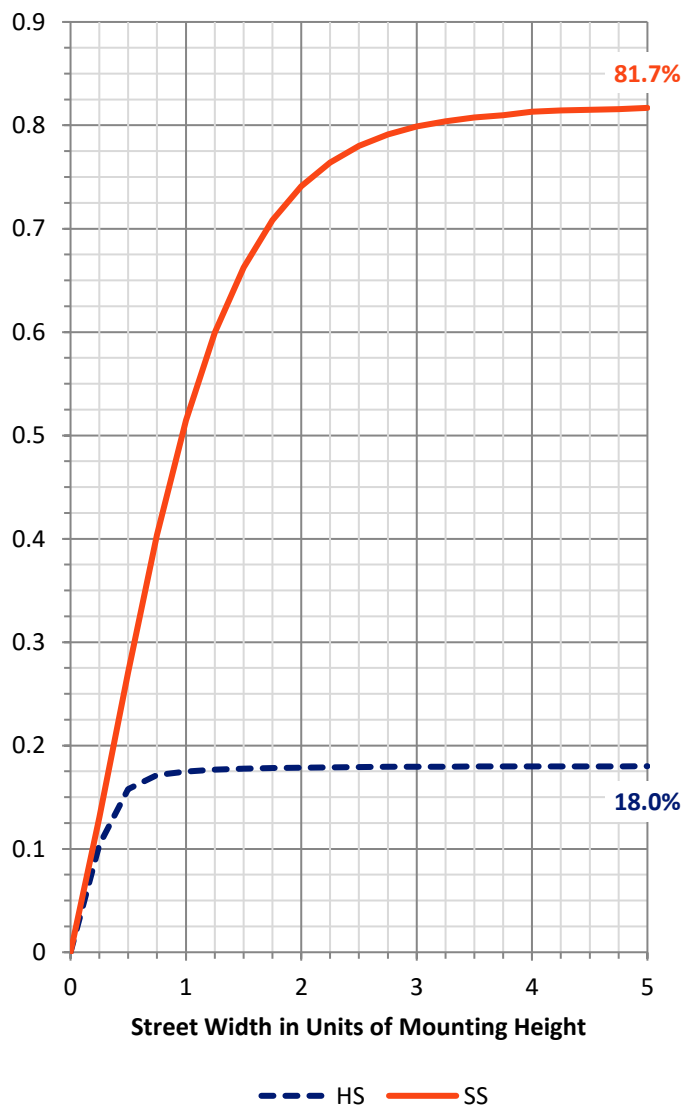
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5616.0	0.0	5616.0
	% Fixture	18.2	0.0	18.2
Street Side	Lumens	25206.0	0.0	25206.0
	% Fixture	81.8	0.0	81.8
Total	Lumens	30822.0	0.0	30822.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	461.9	1.5
10°-20°	1441.1	4.7
20°-30°	2500.4	8.1
30°-40°	3713.6	12.0
40°-50°	5094.8	16.5
50°-60°	6256.7	20.3
60°-70°	6707.8	21.8
70°-80°	4258.2	13.8
80°-90°	387.5	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°	30822.0	100.0
0°-180°	30822.0	100.0

Coefficient of Utilization



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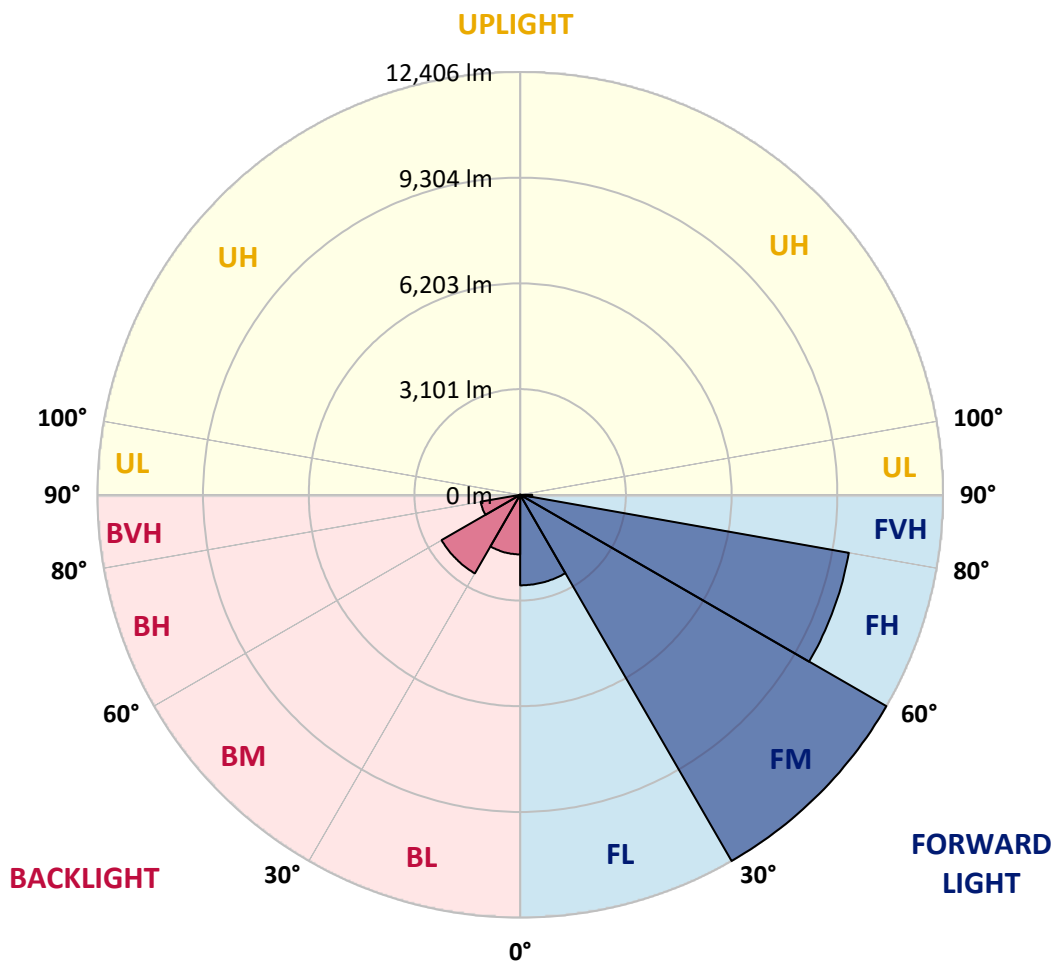
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2655.6	8.6			
FM (30°-60°)	12405.5	40.2			
FH (60°-80°)	9791.4	31.8			G4/12000
FVH (80°-90°)	353.5	1.1			G3/500
BL (0°-30°)	1747.8	5.7	B3/2500		
BM (30°-60°)	2659.5	8.6	B3/5000		
BH (60°-80°)	1174.7	3.8	B3/2500		G3/2500
BVH (80°-90°)	34.1	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°	4636.3	4636.3	4636.3	4636.3	4636.3	4636.3	4636.3	4636.3	4636.3	4636.3	4636.3
2.5°	4594.6	4637.8	4612.5	4609.5	4639.3	4611.0	4630.4	4625.9	4622.9	4627.4	4658.7
5°	4715.4	4766.1	4731.8	4721.3	4737.7	4687.0	4682.6	4672.1	4669.1	4670.6	4715.4
7.5°	4883.9	4943.5	4930.1	4903.3	4894.3	4810.8	4795.9	4758.6	4746.7	4749.7	4794.4
10°	5149.3	5209.0	5182.1	5122.5	5085.2	4989.8	4936.1	4888.3	4864.5	4867.5	4915.2
12.5°	5489.3	5546.0	5501.3	5392.4	5371.5	5217.9	5134.4	5033.0	5016.6	4992.7	5043.4
15°	5809.9	5859.2	5838.3	5736.9	5680.2	5498.3	5344.7	5219.4	5204.5	5182.1	5180.6
17.5°	6164.9	6214.1	6175.3	6100.7	6026.2	5809.9	5644.4	5483.4	5444.6	5425.2	5355.1
20°	6543.6	6621.2	6613.7	6552.6	6463.1	6209.6	5975.5	5793.5	5751.8	5716.0	5568.4
22.5°	6934.4	7035.8	7013.4	6980.6	6943.3	6658.5	6385.6	6175.3	6144.0	6067.9	5835.3
25°	7366.8	7436.9	7420.5	7436.9	7411.6	7159.5	6861.3	6604.8	6563.0	6491.4	6135.0
27.5°	7785.9	7858.9	7887.3	7853.0	7869.4	7688.9	7335.5	7105.8	7065.6	6934.4	6495.9
30°	8164.6	8255.6	8295.9	8310.8	8366.0	8179.6	7918.6	7639.7	7626.3	7492.1	6971.6
32.5°	8467.4	8568.8	8667.2	8731.3	8819.3	8737.3	8477.8	8309.3	8310.8	8190.0	7685.9
35°	8686.6	8802.9	8946.1	9116.1	9301.0	9266.7	9113.1	9116.1	9139.9	9180.2	8597.1
37.5°	8929.7	9023.6	9192.1	9429.2	9711.1	9782.7	9761.8	9998.9	10115.2	10186.8	9397.9
40°	9074.3	9169.7	9380.0	9699.1	10109.2	10280.7	10473.1	10889.2	11041.3	10966.7	10082.4
42.5°	8914.7	8999.7	9365.1	9916.9	10435.8	10825.0	11169.5	11778.0	11888.3	11645.2	10659.5
45°	8707.5	8817.8	9202.6	9976.5	10725.1	11358.9	11894.3	12551.9	12633.9	12289.5	11169.5
47.5°	8537.5	8634.4	9083.3	9912.4	10992.1	11906.2	12531.0	13282.6	13303.5	12878.5	11697.4
50°	8319.7	8437.5	8905.8	9833.4	11153.1	12390.9	13114.1	13964.1	14010.4	13488.4	12144.8
52.5°	8091.6	8206.4	8691.1	9703.6	11269.4	12793.5	13719.6	14688.9	14693.4	14134.1	12622.0
55°	7754.5	7876.8	8413.7	9515.7	11305.2	13060.4	14328.0	15428.6	15474.8	14788.8	13054.5
57.5°	7398.1	7502.5	8079.6	9223.4	11172.5	13312.5	14952.8	16250.2	16377.0	15527.0	13425.8
60°	6925.4	7029.8	7639.7	8840.2	10890.7	13595.8	15668.7	17240.4	17253.9	16125.0	13695.7
62.5°	6416.9	6507.9	7068.6	8239.2	10453.7	13704.7	16283.0	18032.3	18030.8	16657.4	13829.9
65°	5812.9	5850.2	6421.4	7501.0	9775.2	13545.1	16554.5	18554.2	18503.5	17040.6	13785.2
67.5°	5097.1	5137.4	5569.8	6583.9	8791.0	12921.8	16433.7	18806.3	18857.0	17382.1	13591.3
70°	4190.4	4238.2	4615.4	5471.4	7536.8	11927.1	16150.3	18915.1	18958.4	17244.9	12993.3
72.5°	3092.9	3157.0	3388.1	4072.6	5720.5	10021.3	14838.0	17723.6	17747.5	16099.6	11748.1
75°	1920.7	2038.6	2256.3	2706.6	3711.7	7028.3	12683.2	15844.6	15695.5	14360.8	9721.5
77.5°	768.0	787.4	896.2	1267.6	1810.4	3659.5	9193.6	12595.2	12880.0	11490.1	6953.7
80°	447.4	444.4	469.7	590.5	776.9	1251.2	3576.0	7065.6	7875.3	6311.0	3128.7
82.5°	360.9	347.5	347.5	378.8	372.8	526.4	1172.1	2063.9	2263.7	2008.7	890.3
85°	189.4	184.9	150.6	186.4	186.4	262.5	450.4	584.6	617.4	538.3	334.0
87.5°	47.7	47.7	47.7	58.2	46.2	55.2	76.1	92.5	95.4	77.5	49.2
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°	4636.3	4636.3	4636.3	4636.3	4636.3	4636.3	4636.3	4636.3	4636.3	4636.3	4636.3
2.5°	4670.6	4684.0	4736.2	4728.8	4737.7	4737.7	4752.6	4769.0	4818.3	4789.9	4778.0
5°	4724.3	4751.1	4816.8	4840.6	4876.4	4880.9	4910.7	4921.2	4974.8	4945.0	4945.0
7.5°	4827.2	4858.5	4919.7	4928.6	4945.0	4916.7	4924.1	4891.3	4927.1	4891.3	4892.8
10°	4943.5	4964.4	5006.2	4946.5	4921.2	4854.0	4839.1	4758.6	4786.9	4740.7	4728.8
12.5°	5055.4	5047.9	5016.6	4910.7	4840.6	4730.3	4684.0	4575.2	4569.2	4508.1	4496.1
15°	5161.2	5109.1	5007.6	4843.6	4724.3	4570.7	4460.4	4341.1	4299.3	4229.2	4223.2
17.5°	5291.0	5201.5	5021.1	4779.5	4584.1	4360.4	4203.9	4069.6	3983.2	3919.0	3917.5
20°	5449.1	5311.9	5027.0	4706.4	4439.5	4153.2	3933.9	3763.9	3640.2	3559.6	3558.1
22.5°	5647.4	5461.0	5082.2	4622.9	4254.6	3902.6	3629.7	3335.9	3165.9	3001.9	2972.1
25°	5880.0	5611.6	5129.9	4579.7	4072.6	3641.7	3236.0	2806.5	2542.6	2411.4	2362.2
27.5°	6206.6	5862.1	5200.0	4497.6	3901.1	3319.5	2729.0	2260.7	1943.1	1831.3	1831.3
30°	6583.9	6178.3	5331.2	4448.4	3662.5	2867.7	2172.8	1670.2	1374.9	1206.4	1202.0
32.5°	7159.5	6555.6	5450.5	4342.5	3373.2	2375.6	1571.8	1076.7	839.6	735.2	729.2
35°	7987.2	7274.4	5642.9	4236.7	2954.2	1768.6	997.7	617.4	478.7	419.0	416.1
37.5°	8783.5	7958.8	6057.5	4026.4	2359.2	1111.0	553.3	356.4	292.3	284.8	281.8
40°	9344.2	8549.4	6349.8	3705.8	1676.2	589.0	320.6	258.0	253.5	250.5	249.0
42.5°	9955.6	8987.8	6557.1	3297.2	994.7	341.5	261.0	232.6	225.2	222.2	222.2
45°	10452.2	9409.8	6595.8	2712.6	501.1	281.8	238.6	211.8	202.8	208.8	210.3
47.5°	10910.0	9808.0	6464.6	2040.0	338.5	262.5	223.7	196.8	190.9	205.8	205.8
50°	11300.8	10145.0	6163.4	1522.6	317.6	247.5	208.8	181.9	180.4	193.9	195.4
52.5°	11690.0	10416.4	5689.2	1149.8	301.2	231.1	193.9	168.5	164.0	173.0	174.5
55°	11998.7	10513.4	5337.2	856.0	289.3	216.2	180.4	155.1	144.7	143.2	146.1
57.5°	12168.7	10428.4	4992.7	629.3	275.9	202.8	167.0	137.2	120.8	120.8	120.8
60°	12171.6	10325.5	4624.4	498.1	261.0	187.9	152.1	117.8	101.4	98.4	98.4
62.5°	12138.8	10142.0	4089.0	432.5	244.6	176.0	132.7	99.9	88.0	83.5	83.5
65°	11994.2	9796.1	3440.3	369.8	225.2	167.0	113.3	89.5	79.0	73.1	73.1
67.5°	11543.8	9147.4	2648.5	322.1	207.3	147.6	102.9	80.5	70.1	64.1	62.6
70°	10717.7	8099.0	1747.8	274.4	189.4	131.2	93.9	73.1	62.6	56.7	55.2
72.5°	9332.3	6591.4	878.4	232.6	162.5	120.8	85.0	64.1	53.7	47.7	47.7
75°	7313.1	4575.2	478.7	184.9	128.2	105.9	74.6	53.7	46.2	41.8	41.8
77.5°	4484.2	2268.2	326.6	143.2	96.9	86.5	59.7	44.7	40.3	38.8	38.8
80°	1635.9	742.6	219.2	101.4	73.1	67.1	47.7	38.8	37.3	37.3	37.3
82.5°	590.5	377.3	147.6	68.6	46.2	50.7	38.8	32.8	31.3	32.8	34.3
85°	243.1	165.5	53.7	38.8	25.4	26.8	23.9	22.4	23.9	25.4	25.4
87.5°	37.3	32.8	19.4	19.4	14.9	13.4	10.4	11.9	14.9	17.9	17.9
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)