

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: P510230

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

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510230
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-CA4-230-740-U-T3-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 4000K, 1050mA LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30266 lumens
Efficiency: N/A
Efficacy: 129.7 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

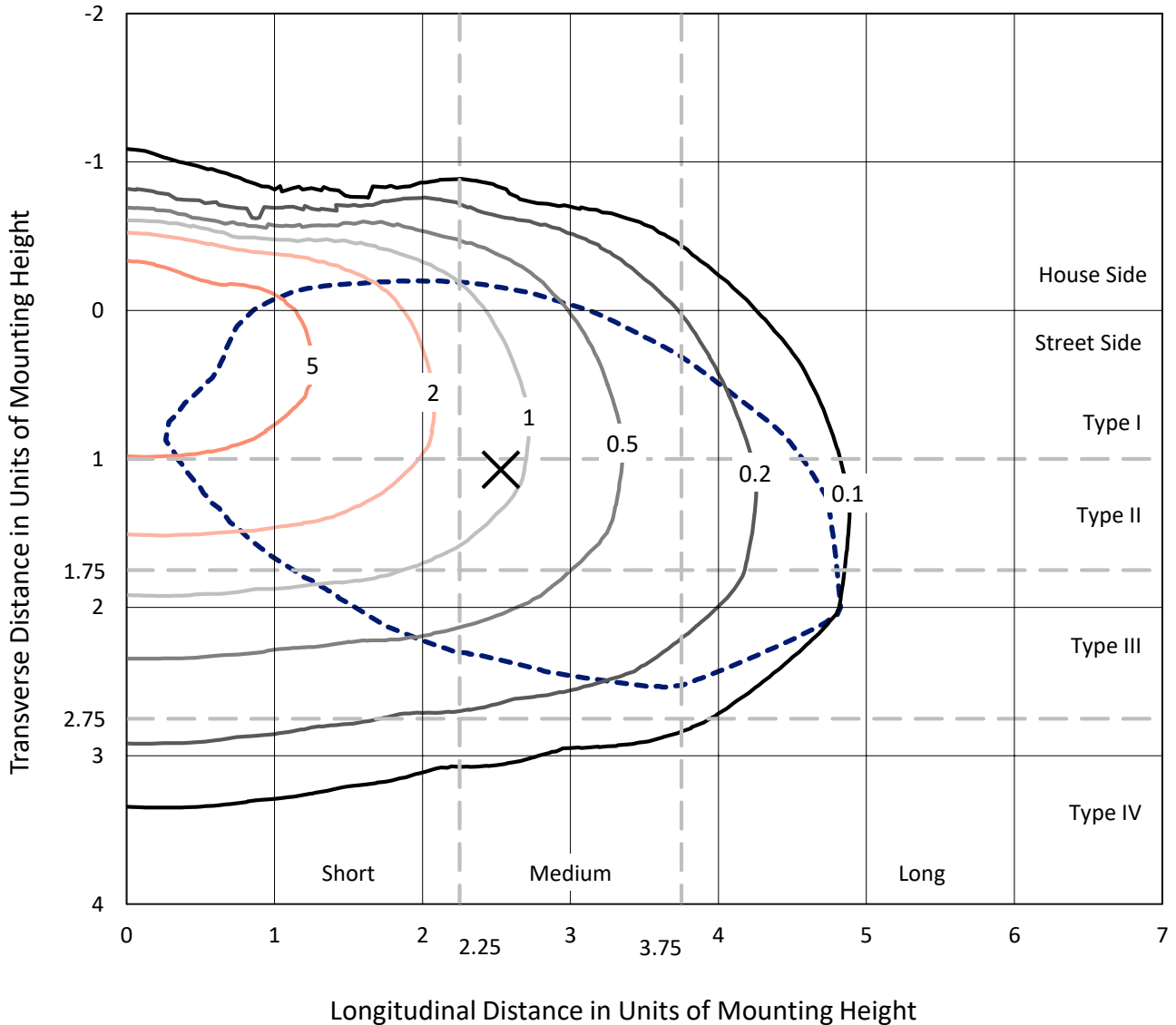
Input Watts (W): 233.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

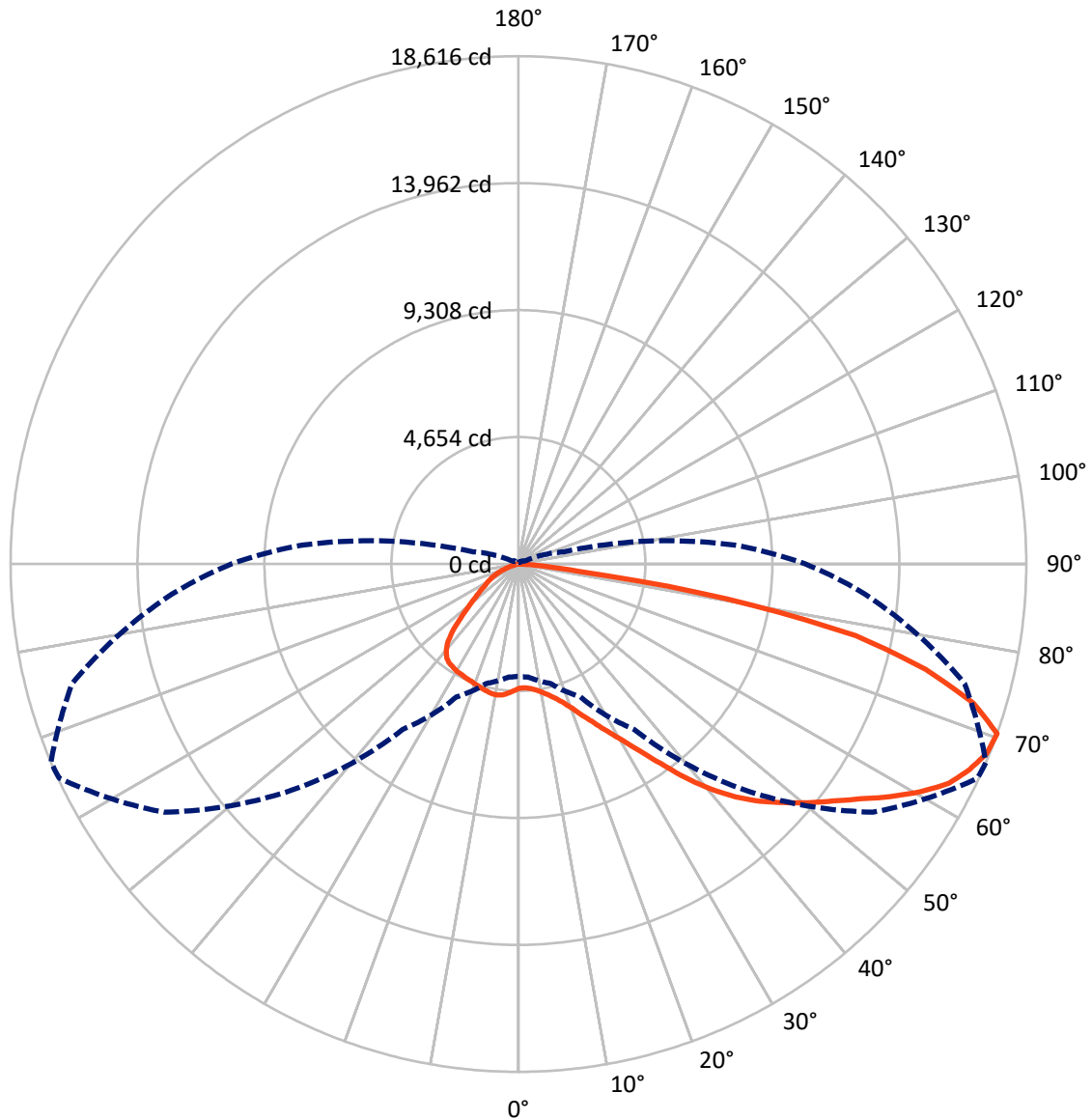
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.7 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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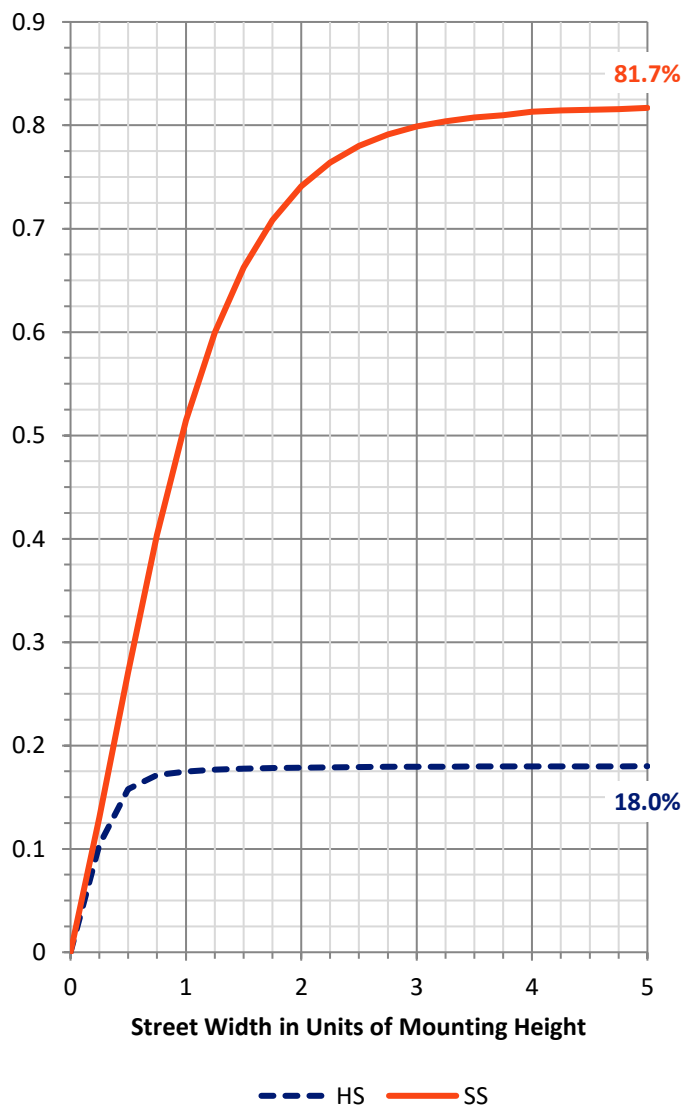
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5514.7	0.0	5514.7
	% Fixture	18.2	0.0	18.2
Street Side	Lumens	24751.3	0.0	24751.3
	% Fixture	81.8	0.0	81.8
Total	Lumens	30266.0	0.0	30266.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	453.6	1.5
10°-20°	1415.1	4.7
20°-30°	2455.3	8.1
30°-40°	3646.6	12.0
40°-50°	5002.9	16.5
50°-60°	6143.8	20.3
60°-70°	6586.8	21.8
70°-80°	4181.4	13.8
80°-90°	380.5	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°	30266.0	100.0
0°-180°	30266.0	100.0

Coefficient of Utilization



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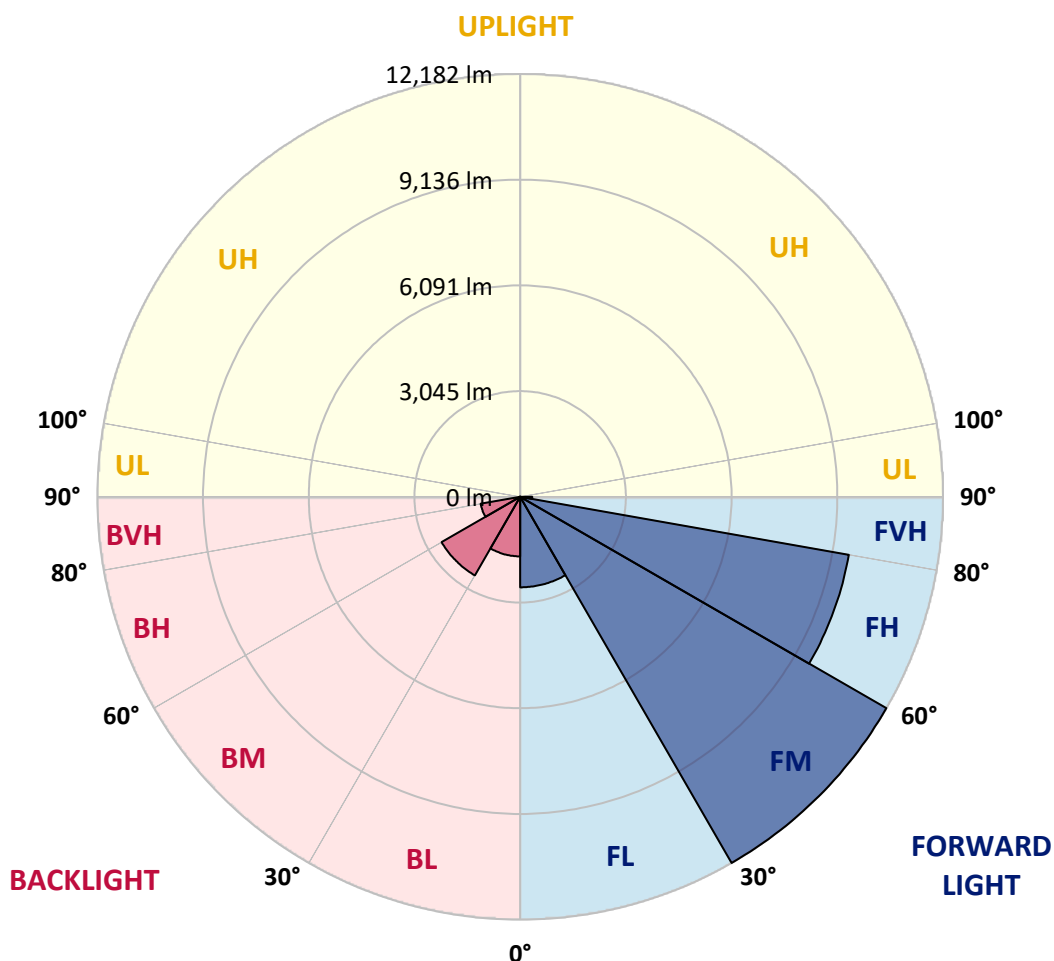
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2607.7	8.6			
FM	(30°-60°)	12181.8	40.2			
FH	(60°-80°)	9614.8	31.8			G4/12000
FVH	(80°-90°)	347.1	1.1			G3/500
BL	(0°-30°)	1716.3	5.7	B3/2500		
BM	(30°-60°)	2611.5	8.6	B3/5000		
BH	(60°-80°)	1153.5	3.8	B3/2500		G3/2500
BVH	(80°-90°)	33.4	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°	4552.7	4552.7	4552.7	4552.7	4552.7	4552.7	4552.7	4552.7	4552.7	4552.7	4552.7
2.5°	4511.7	4554.2	4529.3	4526.3	4555.6	4527.8	4546.8	4542.4	4539.5	4543.9	4574.7
5°	4630.3	4680.1	4646.4	4636.2	4652.3	4602.5	4598.1	4587.8	4584.9	4586.4	4630.3
7.5°	4795.8	4854.3	4841.2	4814.8	4806.0	4724.0	4709.4	4672.8	4661.0	4664.0	4707.9
10°	5056.4	5115.0	5088.6	5030.1	4993.5	4899.7	4847.0	4800.2	4776.7	4779.7	4826.5
12.5°	5390.3	5445.9	5402.0	5295.1	5274.6	5123.8	5041.8	4942.2	4926.1	4902.7	4952.5
15°	5705.1	5753.5	5733.0	5633.4	5577.7	5399.1	5248.3	5125.3	5110.6	5088.6	5087.2
17.5°	6053.7	6102.0	6063.9	5990.7	5917.5	5705.1	5542.6	5384.4	5346.4	5327.3	5258.5
20°	6425.6	6501.7	6494.4	6434.4	6346.5	6097.6	5867.7	5689.0	5648.0	5612.9	5467.9
22.5°	6809.3	6908.8	6886.9	6854.7	6818.0	6538.4	6270.4	6063.9	6033.2	5958.5	5730.0
25°	7233.9	7302.8	7286.6	7302.8	7277.9	7030.4	6737.5	6485.6	6444.6	6374.3	6024.4
27.5°	7645.4	7717.2	7745.0	7711.3	7727.4	7550.2	7203.2	6977.7	6938.1	6809.3	6378.7
30°	8017.4	8106.7	8146.2	8160.9	8215.0	8032.0	7775.7	7501.9	7488.7	7356.9	6845.9
32.5°	8314.6	8414.2	8510.8	8573.8	8660.2	8579.7	8324.9	8159.4	8160.9	8042.3	7547.3
35°	8529.9	8644.1	8784.7	8951.6	9133.2	9099.5	8948.7	8951.6	8975.0	9014.6	8442.0
37.5°	8768.6	8860.8	9026.3	9259.1	9535.9	9606.2	9585.7	9818.5	9932.7	10003.0	9228.4
40°	8910.6	9004.3	9210.8	9524.2	9926.9	10095.3	10284.2	10692.7	10842.1	10768.9	9900.5
42.5°	8753.9	8837.4	9196.2	9738.0	10247.6	10629.8	10968.0	11565.5	11673.9	11435.2	10467.2
45°	8550.4	8658.7	9036.5	9796.6	10531.7	11154.0	11679.7	12325.5	12406.0	12067.8	10968.0
47.5°	8383.4	8478.6	8919.4	9733.6	10793.8	11691.4	12305.0	13043.0	13063.5	12646.2	11486.4
50°	8169.6	8285.3	8745.1	9656.0	10951.9	12167.3	12877.6	13712.2	13757.6	13245.1	11925.7
52.5°	7945.6	8058.4	8534.3	9528.6	11066.1	12562.7	13472.1	14423.9	14428.3	13879.2	12394.3
55°	7614.7	7734.7	8261.9	9344.1	11101.3	12824.8	14069.5	15150.2	15195.6	14522.0	12819.0
57.5°	7264.7	7367.2	7933.9	9057.1	10971.0	13072.3	14683.1	15957.1	16081.6	15246.9	13183.6
60°	6800.5	6903.0	7501.9	8680.7	10694.2	13350.5	15386.0	16929.4	16942.6	15834.1	13448.7
62.5°	6301.1	6390.5	6941.1	8090.6	10265.1	13457.4	15989.3	17707.0	17705.5	16356.9	13580.5
65°	5708.1	5744.7	6305.5	7365.7	9598.9	13300.8	16255.8	18219.5	18169.7	16733.2	13536.5
67.5°	5005.2	5044.7	5469.4	6465.1	8632.4	12688.7	16137.2	18467.0	18516.8	17068.5	13346.2
70°	4114.8	4161.7	4532.2	5372.7	7400.9	11711.9	15859.0	18573.9	18616.4	16933.8	12758.9
72.5°	3037.1	3100.0	3327.0	3999.2	5617.3	9840.5	14570.4	17403.9	17427.3	15809.2	11536.2
75°	1886.1	2001.8	2215.6	2657.8	3644.8	6901.5	12454.4	15558.8	15412.4	14101.8	9546.1
77.5°	754.1	773.2	880.1	1244.7	1777.7	3593.5	9027.8	12368.0	12647.7	11282.9	6828.3
80°	439.3	436.4	461.3	579.9	762.9	1228.6	3511.5	6938.1	7733.3	6197.2	3072.2
82.5°	354.4	341.2	341.2	371.9	366.1	516.9	1151.0	2026.7	2222.9	1972.5	874.2
85°	186.0	181.6	147.9	183.0	183.0	257.7	442.2	574.0	606.2	528.6	328.0
87.5°	46.9	46.9	46.9	57.1	45.4	54.2	74.7	90.8	93.7	76.1	48.3
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°	4552.7	4552.7	4552.7	4552.7	4552.7	4552.7	4552.7	4552.7	4552.7	4552.7	4552.7
2.5°	4586.4	4599.5	4650.8	4643.5	4652.3	4652.3	4666.9	4683.0	4731.3	4703.5	4691.8
5°	4639.1	4665.4	4729.9	4753.3	4788.4	4792.8	4822.1	4832.4	4885.1	4855.8	4855.8
7.5°	4740.1	4770.9	4830.9	4839.7	4855.8	4828.0	4835.3	4803.1	4838.2	4803.1	4804.6
10°	4854.3	4874.8	4915.8	4857.3	4832.4	4766.5	4751.8	4672.8	4700.6	4655.2	4643.5
12.5°	4964.2	4956.8	4926.1	4822.1	4753.3	4644.9	4599.5	4492.6	4486.8	4426.8	4415.0
15°	5068.1	5016.9	4917.3	4756.2	4639.1	4488.3	4379.9	4262.7	4221.7	4152.9	4147.1
17.5°	5195.5	5107.7	4930.5	4693.3	4501.4	4281.8	4128.0	3996.2	3911.3	3848.3	3846.9
20°	5350.8	5216.0	4936.3	4621.5	4359.4	4078.2	3863.0	3696.0	3574.5	3495.4	3494.0
22.5°	5545.5	5362.5	4990.5	4539.5	4177.8	3832.2	3564.2	3275.8	3108.8	2947.8	2918.5
25°	5774.0	5510.4	5037.4	4497.0	3999.2	3576.0	3177.7	2755.9	2496.7	2367.9	2319.5
27.5°	6094.7	5756.4	5106.2	4416.5	3830.8	3259.7	2679.8	2220.0	1908.1	1798.2	1798.2
30°	6465.1	6066.8	5235.1	4368.2	3596.5	2816.0	2133.6	1640.1	1350.1	1184.7	1180.3
32.5°	7030.4	6437.3	5352.2	4264.2	3312.4	2332.7	1543.4	1057.3	824.4	721.9	716.1
35°	7843.1	7143.1	5541.1	4160.2	2900.9	1736.7	979.7	606.2	470.1	411.5	408.6
37.5°	8625.1	7815.3	5948.2	3953.8	2316.6	1090.9	543.3	350.0	287.0	279.7	276.8
40°	9175.7	8395.2	6235.2	3638.9	1645.9	578.4	314.8	253.3	248.9	246.0	244.5
42.5°	9776.0	8825.7	6438.8	3237.7	976.7	335.3	256.3	228.4	221.1	218.2	218.2
45°	10263.7	9240.1	6476.9	2663.7	492.0	276.8	234.3	207.9	199.2	205.0	206.5
47.5°	10713.2	9631.1	6348.0	2003.2	332.4	257.7	219.7	193.3	187.4	202.1	202.1
50°	11096.9	9962.0	6052.2	1495.1	311.9	243.1	205.0	178.7	177.2	190.4	191.8
52.5°	11479.1	10228.5	5586.5	1129.0	295.8	227.0	190.4	165.5	161.1	169.9	171.3
55°	11782.2	10323.7	5240.9	840.5	284.1	212.3	177.2	152.3	142.0	140.6	143.5
57.5°	11949.2	10240.3	4902.7	618.0	270.9	199.2	164.0	134.7	118.6	118.6	118.6
60°	11952.1	10139.2	4541.0	489.1	256.3	184.5	149.4	115.7	99.6	96.6	96.6
62.5°	11919.9	9959.1	4015.3	424.7	240.2	172.8	130.3	98.1	86.4	82.0	82.0
65°	11777.8	9619.4	3378.3	363.2	221.1	164.0	111.3	87.9	77.6	71.8	71.8
67.5°	11335.6	8982.4	2600.7	316.3	203.5	145.0	101.0	79.1	68.8	63.0	61.5
70°	10524.3	7952.9	1716.2	269.4	186.0	128.9	92.3	71.8	61.5	55.6	54.2
72.5°	9163.9	6472.5	862.5	228.4	159.6	118.6	83.5	63.0	52.7	46.9	46.9
75°	7181.2	4492.6	470.1	181.6	125.9	104.0	73.2	52.7	45.4	41.0	41.0
77.5°	4403.3	2227.3	320.7	140.6	95.2	84.9	58.6	43.9	39.5	38.1	38.1
80°	1606.4	729.2	215.3	99.6	71.8	65.9	46.9	38.1	36.6	36.6	36.6
82.5°	579.9	370.5	145.0	67.4	45.4	49.8	38.1	32.2	30.8	32.2	33.7
85°	238.7	162.5	52.7	38.1	24.9	26.4	23.4	22.0	23.4	24.9	24.9
87.5°	36.6	32.2	19.0	19.0	14.6	13.2	10.3	11.7	14.6	17.6	17.6
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)