

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: P510116

Luminaire Tested: **VERD-M-CA4-210-727-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510116
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-3)
Test Lab: INNOVATION CENTER
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-M-CA4-210-727-U-T2-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 2700K, 960mA LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23330 lumens
Efficiency: N/A
Efficacy: 109.2 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

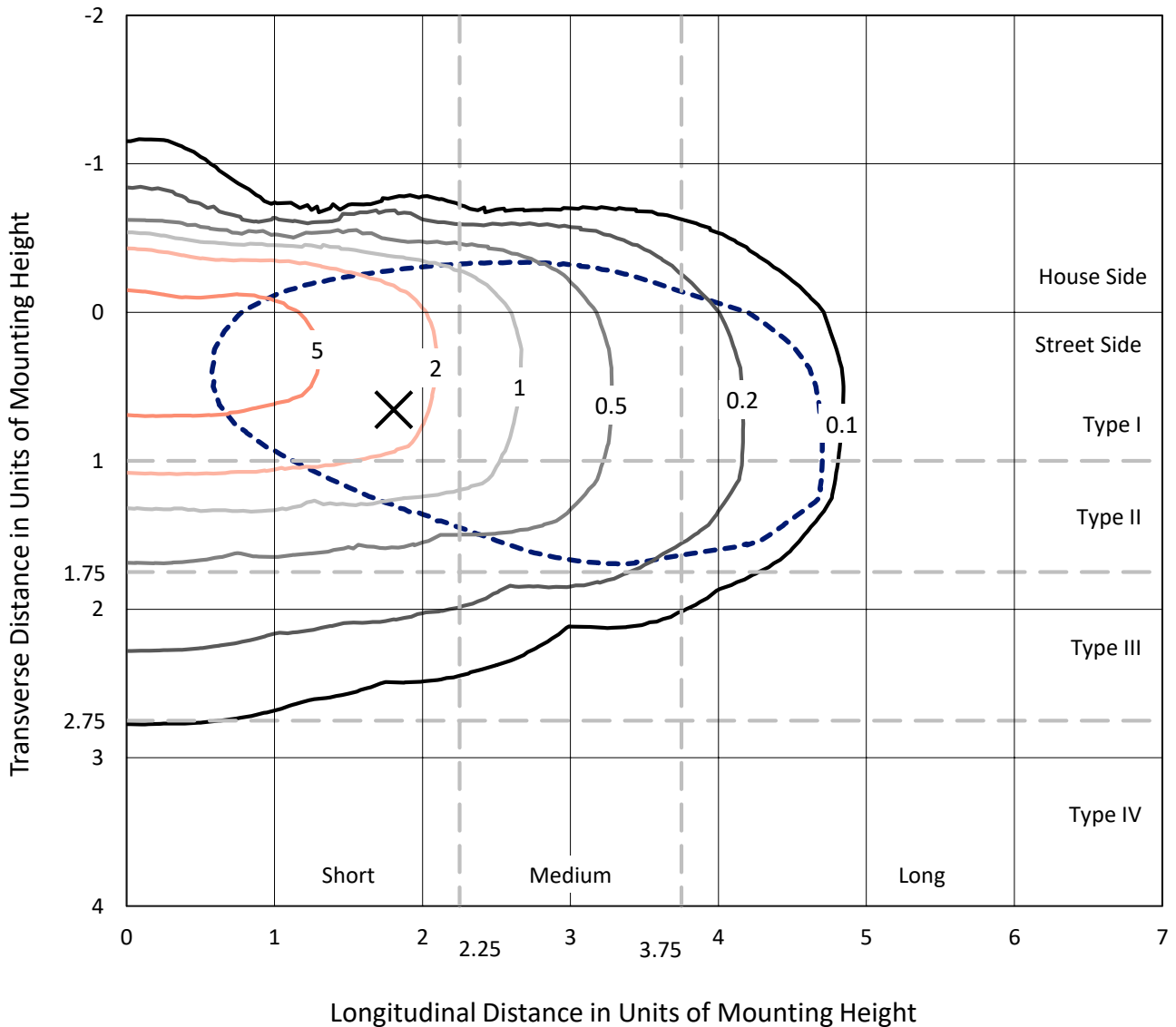
Input Watts (W): 213.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

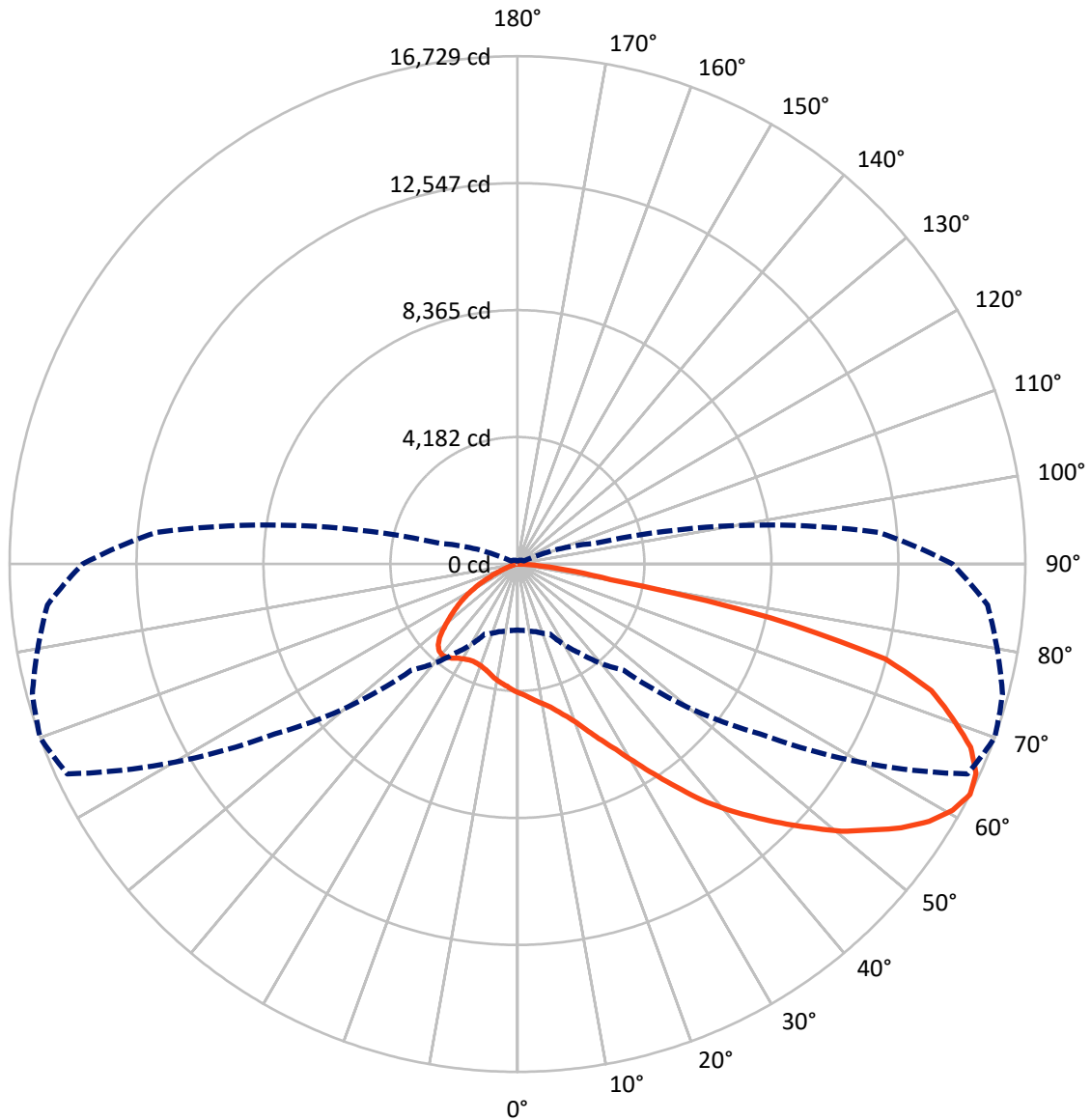
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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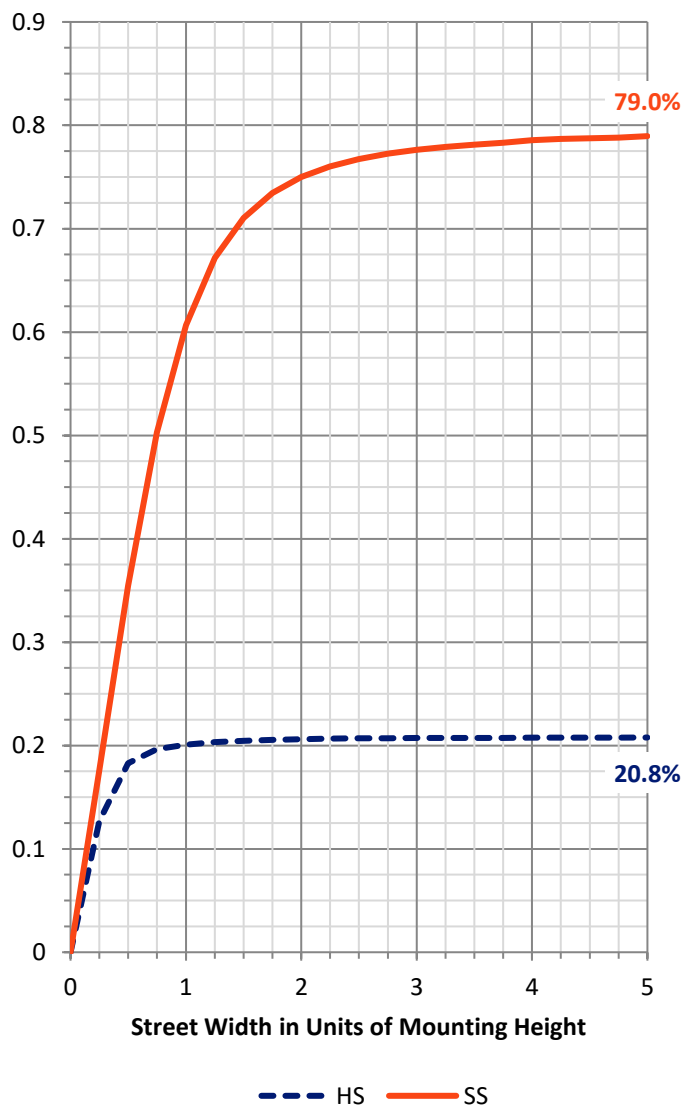
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4906.1	0.0	4906.1
	% Fixture	21.0	0.0	21.0
Street Side	Lumens	18423.9	0.0	18423.9
	% Fixture	79.0	0.0	79.0
Total	Lumens	23330.0	0.0	23330.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	402.7	1.7
10°-20°	1201.7	5.2
20°-30°	2037.3	8.7
30°-40°	2996.0	12.8
40°-50°	3989.7	17.1
50°-60°	4667.1	20.0
60°-70°	4694.0	20.1
70°-80°	2971.4	12.7
80°-90°	370.3	1.6
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°	23330.0	100.0
0°-180°	23330.0	100.0

Coefficient of Utilization



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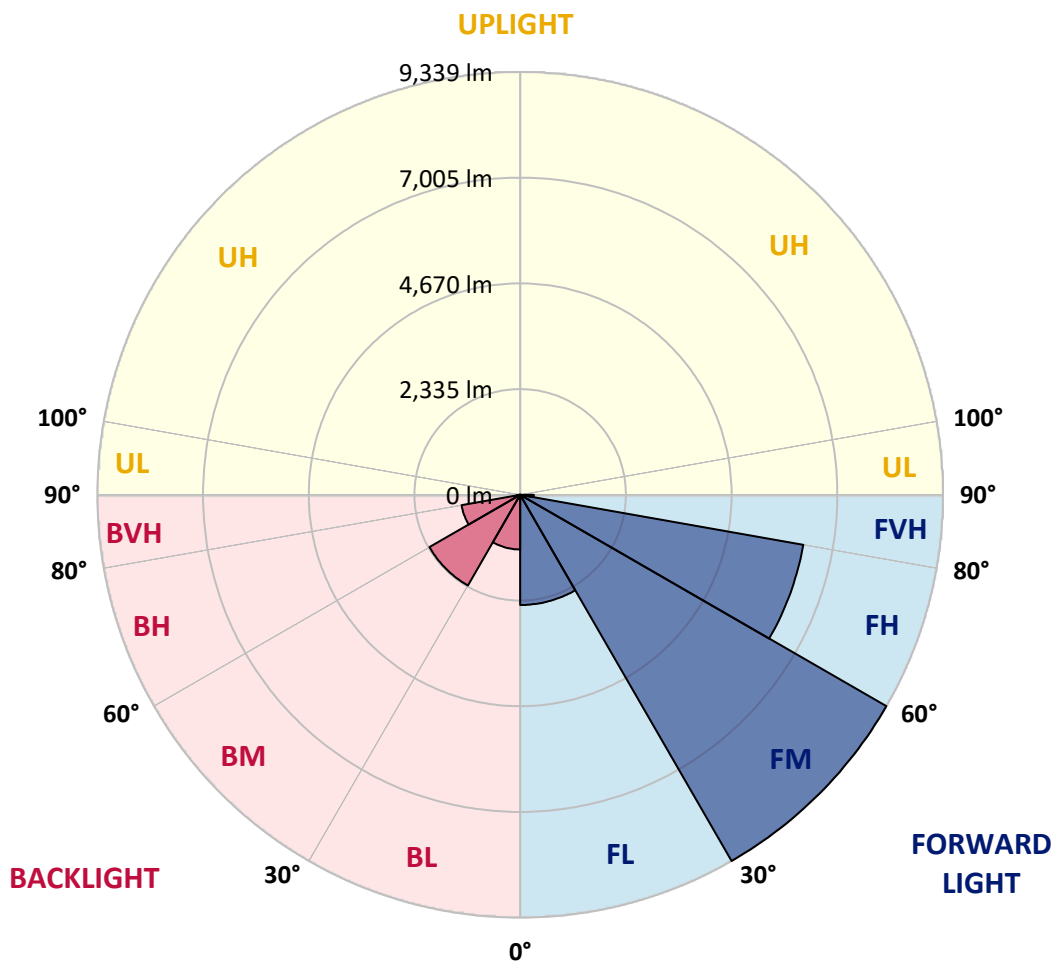
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2433.8	10.4			
FM (30°-60°)	9339.4	40.0			
FH (60°-80°)	6350.4	27.2			G3/7500
FVH (80°-90°)	300.2	1.3			G3/500
BL (0°-30°)	1207.9	5.2	B3/2500		
BM (30°-60°)	2313.3	9.9	B2/2500		
BH (60°-80°)	1314.9	5.6	B3/2500		G3/2500
BVH (80°-90°)	70.0	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	4241.3	4241.3	4241.3	4241.3	4241.3	4241.3	4241.3	4241.3	4241.3	4241.3	4241.3
2.5°	4474.1	4513.3	4483.3	4471.8	4481.0	4434.9	4398.0	4345.0	4319.7	4301.3	4271.3
5°	4701.1	4765.6	4726.4	4702.2	4698.8	4614.7	4565.1	4492.5	4436.1	4386.5	4310.5
7.5°	4940.7	4978.8	4963.8	4936.1	4917.7	4815.1	4727.6	4625.0	4562.8	4497.1	4369.2
10°	5150.4	5196.5	5181.6	5132.0	5114.7	5009.9	4909.6	4770.2	4684.9	4603.1	4426.8
12.5°	5367.1	5418.9	5387.8	5338.3	5323.3	5217.3	5113.6	4944.2	4838.2	4746.0	4501.7
15°	5566.4	5613.6	5591.7	5535.3	5520.3	5430.4	5316.4	5158.5	5043.3	4921.2	4607.7
17.5°	5725.4	5772.6	5745.0	5718.5	5713.9	5625.2	5557.2	5395.9	5286.4	5120.5	4770.2
20°	5841.8	5890.2	5876.3	5889.0	5937.4	5871.7	5830.3	5694.3	5582.5	5402.8	5004.1
22.5°	5934.0	5996.2	6051.5	6076.8	6166.7	6162.1	6152.9	6072.2	5984.7	5798.0	5283.0
25°	5943.2	6014.6	6124.1	6242.8	6406.4	6484.7	6542.3	6529.7	6427.1	6242.8	5668.9
27.5°	5957.0	6030.7	6143.7	6347.6	6640.3	6823.5	6919.1	6977.9	6918.0	6794.7	6107.9
30°	5927.0	6003.1	6144.8	6405.2	6800.4	7140.3	7310.9	7528.6	7535.6	7431.9	6770.5
32.5°	5791.1	5891.3	6063.0	6412.1	6956.0	7471.0	7733.7	8152.0	8243.0	8165.8	7453.7
35°	5564.1	5655.1	5900.5	6351.1	7050.5	7746.4	8226.9	8879.0	9013.9	9009.2	8258.0
37.5°	5312.9	5405.1	5681.6	6207.0	7111.5	7991.8	8661.3	9600.3	9868.8	9812.3	9017.3
40°	5035.2	5132.0	5451.2	6026.1	7081.6	8210.8	9121.0	10299.7	10632.7	10639.6	9743.2
42.5°	4712.6	4792.1	5112.4	5776.1	6982.5	8372.1	9548.5	11036.0	11386.3	11366.7	10427.6
45°	4403.8	4486.8	4766.8	5389.0	6753.2	8461.9	9967.9	11781.5	12165.2	12103.0	11188.1
47.5°	4030.5	4149.2	4468.3	5064.0	6399.5	8455.0	10334.3	12544.3	12975.2	12924.5	11844.9
50°	3101.8	3172.1	3894.5	4728.7	5920.1	8293.7	10692.6	13293.2	13838.2	13739.1	12545.4
52.5°	2794.1	2857.5	3090.3	4326.6	5484.6	7944.6	10991.1	14150.5	14558.4	14481.2	13261.0
55°	2640.9	2675.5	2817.2	3568.4	5059.4	7377.7	11190.4	14912.1	15336.1	15165.6	13930.4
57.5°	2448.5	2491.1	2655.9	3047.6	4536.3	6507.8	11144.3	15598.8	15990.6	15729.0	14520.3
60°	2301.0	2333.3	2487.7	2743.4	3995.9	5606.7	10673.1	16272.9	16469.9	16211.8	15108.0
62.5°	2176.6	2195.0	2303.3	2546.4	3584.6	4948.8	9753.6	16362.7	16729.2	16542.5	15545.8
65°	2022.2	2026.8	2154.7	2344.8	3204.3	4553.6	8964.3	15901.9	16600.1	16537.9	15703.7
67.5°	1841.3	1850.5	1979.5	2124.7	2746.9	4133.0	7734.9	15654.1	16098.9	16059.7	15391.4
70°	1614.3	1632.7	1751.4	1862.0	2326.3	3628.4	6156.3	14674.7	15202.5	15144.8	14362.5
72.5°	1395.3	1385.0	1495.6	1605.0	1938.0	3029.2	4666.5	12989.0	14259.9	14204.6	13025.9
75°	1146.5	1139.6	1253.6	1357.3	1588.9	2447.3	3282.7	9606.1	12529.3	12699.8	11231.9
77.5°	706.3	712.1	777.8	846.9	1076.2	1828.6	2094.7	5344.0	8511.5	10093.5	8814.5
80°	511.6	511.6	560.0	601.5	712.1	1114.2	1042.8	2228.4	3111.0	4871.6	5497.3
82.5°	331.8	318.0	348.0	383.7	396.4	482.8	477.0	1117.7	1585.5	1908.1	2289.5
85°	172.8	191.3	115.2	162.5	171.7	160.2	164.8	524.3	704.0	902.2	993.2
87.5°	26.5	20.7	27.7	38.0	43.8	36.9	32.3	61.1	94.5	125.6	148.6
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°	4241.3	4241.3	4241.3	4241.3	4241.3	4241.3	4241.3	4241.3	4241.3	4241.3	4241.3
2.5°	4251.7	4245.9	4192.9	4115.7	4052.4	3999.4	3964.8	3941.8	3967.1	3921.0	3915.3
5°	4263.2	4224.1	4108.8	3998.2	3913.0	3798.9	3721.7	3669.8	3690.6	3650.2	3634.1
7.5°	4294.3	4222.9	4063.9	3887.6	3726.3	3604.2	3485.5	3371.4	3354.1	3328.8	3329.9
10°	4322.0	4219.4	4012.0	3781.6	3593.8	3378.3	3235.4	3117.9	3091.4	3061.5	3046.5
12.5°	4365.8	4227.5	3947.5	3668.7	3417.5	3168.6	3014.2	2876.0	2849.5	2790.7	2778.0
15°	4453.4	4256.3	3884.2	3529.3	3219.3	2968.1	2768.8	2647.8	2599.4	2533.7	2532.6
17.5°	4567.4	4340.4	3851.9	3397.9	3051.1	2769.9	2559.1	2437.0	2355.1	2316.0	2305.6
20°	4729.9	4449.9	3850.7	3279.2	2876.0	2557.9	2316.0	2177.7	2108.6	2076.3	2056.7
22.5°	4979.9	4611.2	3871.5	3196.3	2699.7	2352.8	2112.0	1921.9	1807.8	1719.1	1731.8
25°	5291.0	4853.2	3918.7	3120.2	2546.4	2157.0	1855.1	1591.2	1387.3	1298.6	1305.5
27.5°	5686.2	5142.4	4040.9	3043.0	2372.4	1946.1	1519.8	1184.5	1030.1	926.4	934.5
30°	6192.1	5501.9	4201.0	2983.1	2211.1	1651.1	1144.2	873.4	737.4	652.2	644.1
32.5°	6797.0	6022.7	4376.2	2942.8	2034.8	1282.4	825.0	640.6	508.1	459.7	466.7
35°	7545.9	6608.0	4643.5	2884.0	1732.9	912.6	588.8	433.2	365.3	356.0	357.2
37.5°	8229.2	7207.2	4908.5	2784.9	1367.7	648.7	399.8	329.5	314.6	311.1	315.7
40°	8898.6	7753.3	5148.1	2640.9	940.2	444.8	293.8	297.3	284.6	275.4	270.8
42.5°	9525.4	8279.9	5336.0	2375.9	642.9	293.8	260.4	270.8	268.5	250.0	242.0
45°	10201.8	8836.4	5439.7	2004.9	404.4	250.0	233.9	252.3	263.9	243.1	233.9
47.5°	10779.1	9379.1	5435.0	1535.9	274.2	236.2	220.1	236.2	250.0	235.1	227.0
50°	11445.1	9828.5	5287.6	974.8	243.1	218.9	210.9	216.6	235.1	224.7	216.6
52.5°	12184.8	10443.8	5064.0	543.9	230.4	207.4	195.9	202.8	218.9	206.2	210.9
55°	12797.8	10954.2	4538.6	371.0	224.7	193.6	186.7	191.3	198.2	185.5	192.4
57.5°	13345.1	11375.9	4007.4	304.2	216.6	184.4	183.2	174.0	172.8	164.8	157.9
60°	13899.3	11708.9	3290.8	275.4	208.6	185.5	165.9	153.2	142.9	134.8	131.4
62.5°	14324.5	11939.4	2602.9	248.9	197.0	174.0	152.1	131.4	114.1	103.7	103.7
65°	14448.9	11836.8	1832.0	225.8	184.4	163.6	136.0	107.2	86.4	79.5	76.0
67.5°	14050.2	11248.0	1275.5	208.6	171.7	152.1	119.8	87.6	69.1	59.9	57.6
70°	13035.1	10262.9	752.4	184.4	155.6	132.5	109.5	71.4	56.5	47.2	44.9
72.5°	11534.9	8785.7	469.0	156.7	133.7	108.3	81.8	58.8	44.9	36.9	35.7
75°	9527.7	6848.8	306.5	121.0	106.0	85.3	62.2	47.2	39.2	31.1	28.8
77.5°	7640.4	4845.1	274.2	92.2	78.4	61.1	47.2	39.2	32.3	27.7	27.7
80°	4396.9	2765.3	224.7	63.4	48.4	46.1	36.9	32.3	30.0	26.5	25.3
82.5°	2160.4	1328.5	145.2	39.2	27.7	30.0	31.1	28.8	25.3	23.0	23.0
85°	744.3	442.5	58.8	25.3	18.4	18.4	19.6	20.7	19.6	18.4	18.4
87.5°	115.2	84.1	16.1	15.0	11.5	10.4	11.5	12.7	12.7	11.5	11.5
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)