

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: P510108

Luminaire Tested: **VERD-M-CA4-210-722-U-T2-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510108  
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-CA4-210-722-U-T2-HSS  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(4) 70 CRI, 2200K, 960mA LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22454 lumens  
Efficiency: N/A  
Efficacy: 105.1 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

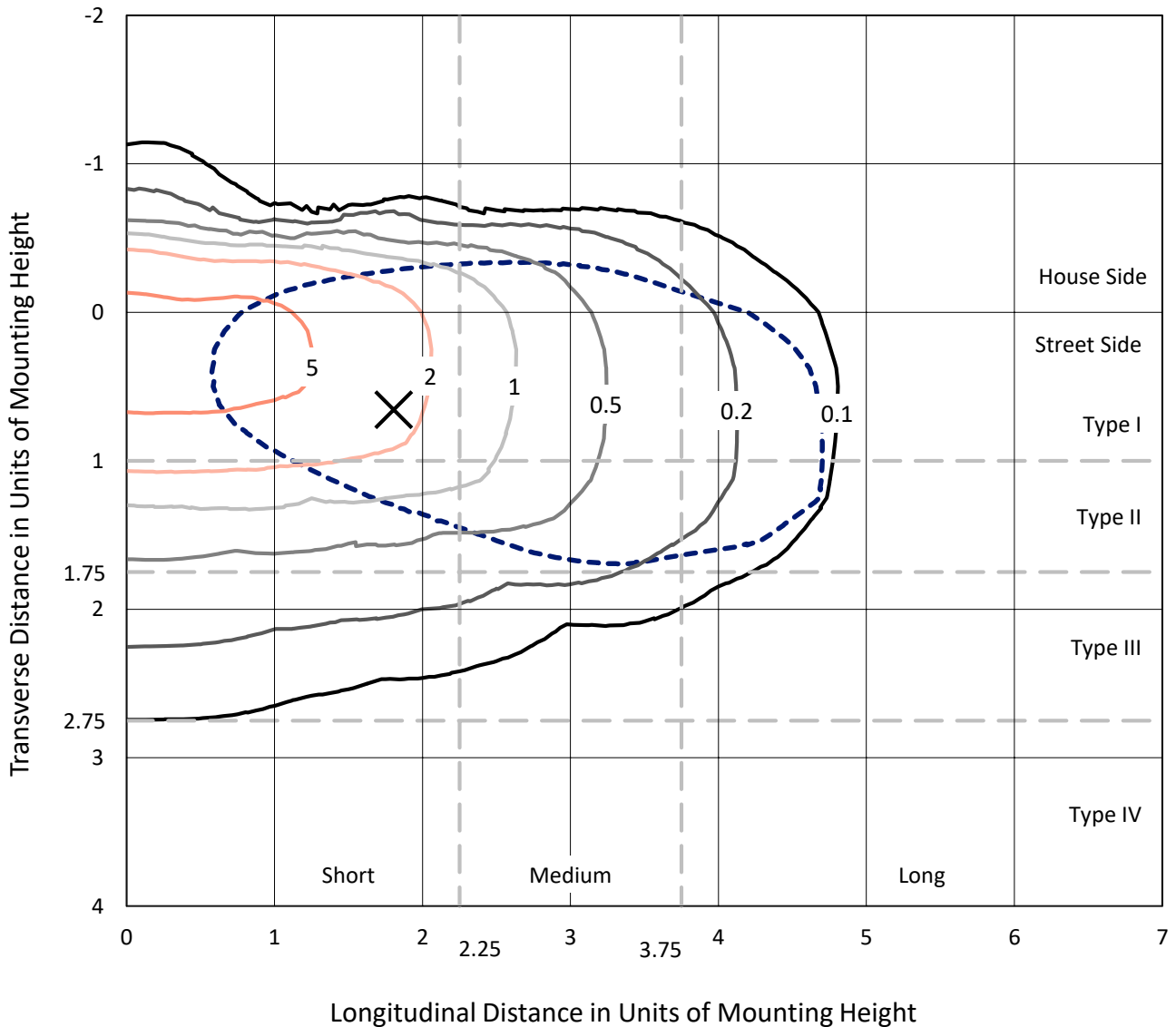
Input Watts (W): 213.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

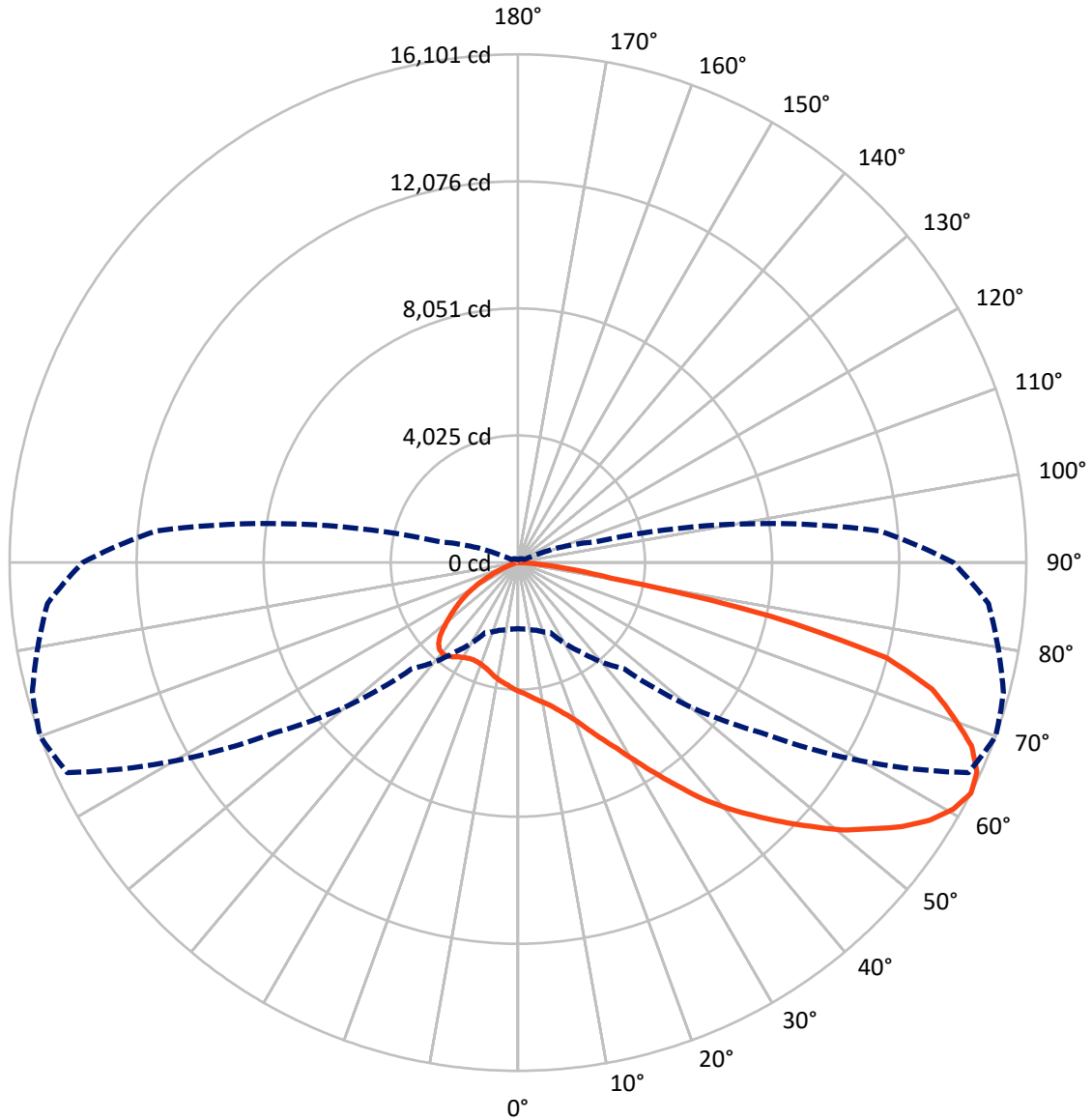
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 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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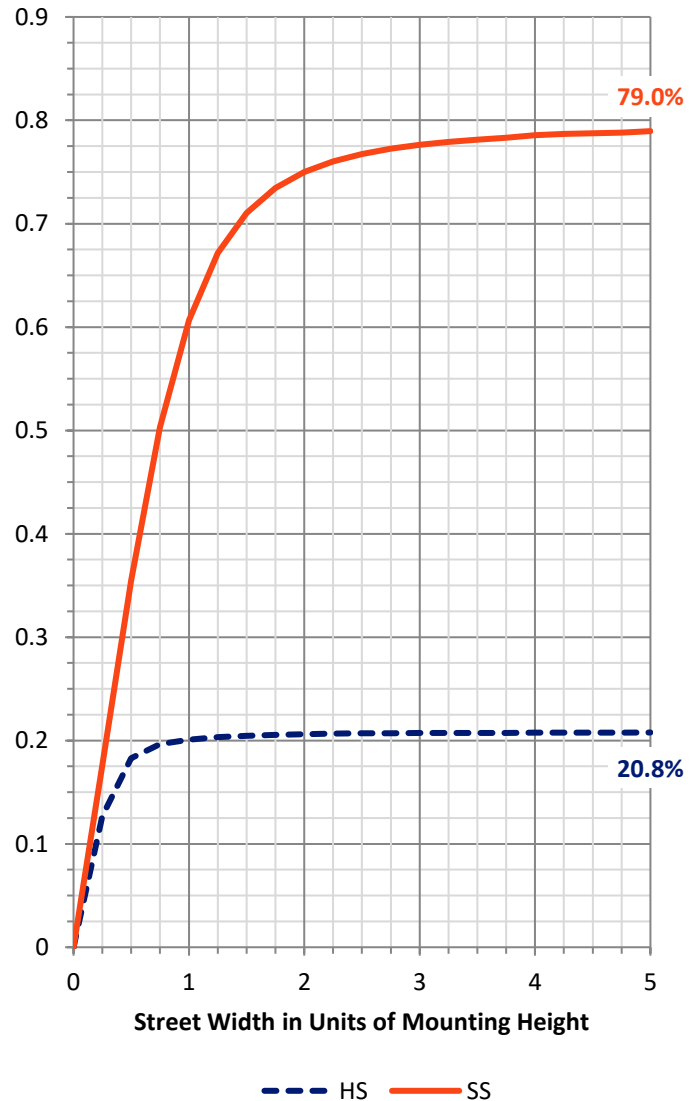
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4721.8	0.0	4721.8
	% Fixture	21.0	0.0	21.0
<b>Street Side</b>	Lumens	17732.2	0.0	17732.2
	% Fixture	79.0	0.0	79.0
<b>Total</b>	Lumens	22454.0	0.0	22454.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	387.6	1.7
10°-20°	1156.6	5.2
20°-30°	1960.8	8.7
30°-40°	2883.5	12.8
40°-50°	3839.9	17.1
50°-60°	4491.8	20.0
60°-70°	4517.7	20.1
70°-80°	2859.8	12.7
80°-90°	356.3	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°	22454.0	100.0
0°-180°	22454.0	100.0

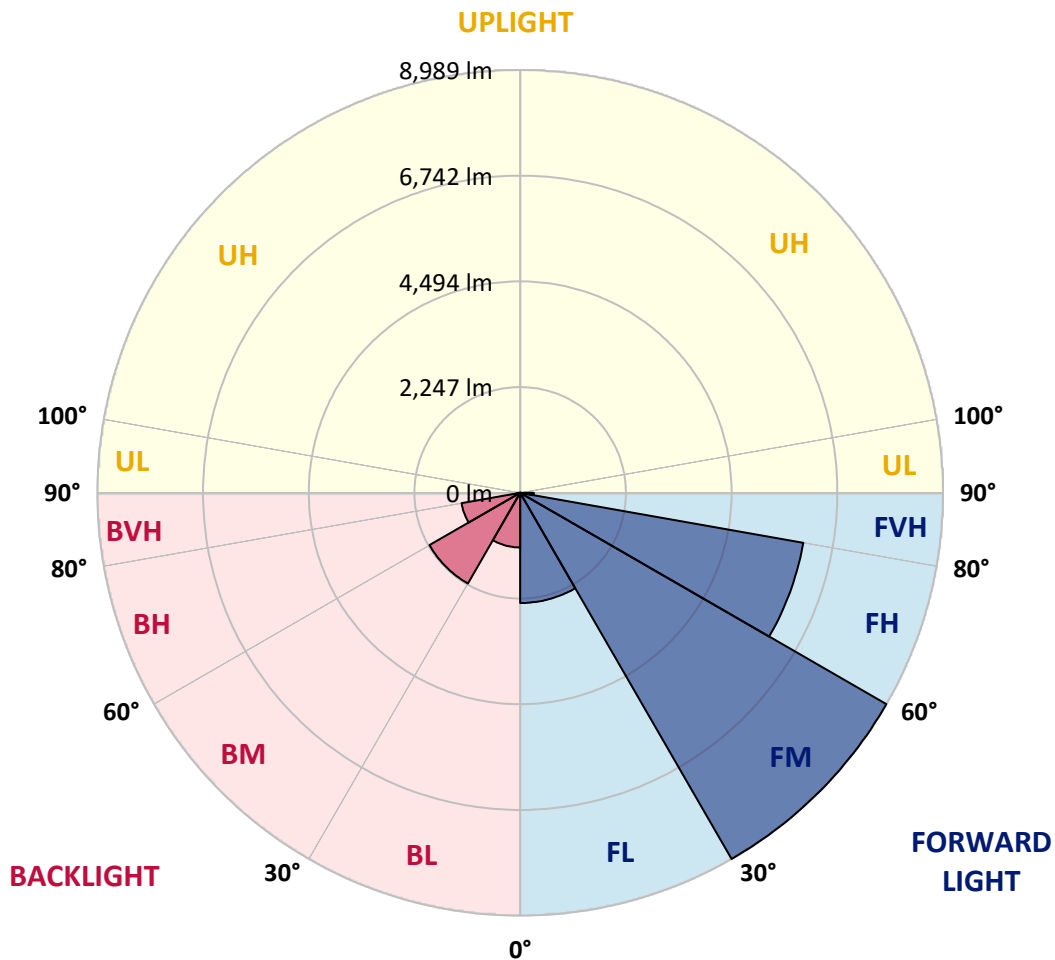


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2342.5	10.4			
FM (30°-60°)	8988.8	40.0			
FH (60°-80°)	6112.0	27.2			G3/7500
FVH (80°-90°)	289.0	1.3			G3/500
BL (0°-30°)	1162.5	5.2	B3/2500		
BM (30°-60°)	2226.4	9.9	B2/2500		
BH (60°-80°)	1265.5	5.6	B3/2500		G3/2500
BVH (80°-90°)	67.4	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°	4082.1	4082.1	4082.1	4082.1	4082.1	4082.1	4082.1	4082.1	4082.1	4082.1	4082.1
2.5°	4306.1	4343.8	4315.0	4303.9	4312.7	4268.4	4232.9	4181.9	4157.5	4139.8	4110.9
5°	4524.6	4586.7	4549.0	4525.7	4522.3	4441.4	4393.7	4323.8	4269.5	4221.8	4148.6
7.5°	4755.2	4791.8	4777.4	4750.8	4733.0	4634.3	4550.1	4451.4	4391.5	4328.3	4205.2
10°	4957.1	5001.4	4987.0	4939.3	4922.7	4821.8	4725.3	4591.1	4509.0	4430.3	4260.6
12.5°	5165.5	5215.4	5185.5	5137.8	5123.4	5021.4	4921.6	4758.6	4656.5	4567.8	4332.7
15°	5357.4	5402.9	5381.8	5327.4	5313.0	5226.5	5116.7	4964.8	4853.9	4736.4	4434.7
17.5°	5510.4	5555.9	5529.3	5503.8	5499.3	5413.9	5348.5	5193.3	5087.9	4928.2	4591.1
20°	5622.4	5669.0	5655.7	5667.9	5714.5	5651.3	5611.3	5480.5	5372.9	5199.9	4816.2
22.5°	5711.1	5771.0	5824.3	5848.7	5935.2	5930.7	5921.9	5844.2	5759.9	5580.3	5084.6
25°	5720.0	5788.8	5894.1	6008.4	6165.8	6241.2	6296.7	6284.5	6185.8	6008.4	5456.1
27.5°	5733.3	5804.3	5913.0	6109.3	6390.9	6567.3	6659.3	6715.9	6658.2	6539.5	5878.6
30°	5704.5	5777.7	5914.1	6164.7	6545.1	6872.2	7036.4	7246.0	7252.6	7152.8	6516.3
32.5°	5573.6	5670.1	5835.4	6171.4	6694.8	7190.5	7443.3	7845.9	7933.5	7859.2	7173.9
35°	5355.2	5442.8	5679.0	6112.6	6785.7	7455.5	7918.0	8545.7	8675.4	8671.0	7947.9
37.5°	5113.4	5202.1	5468.3	5974.0	6844.5	7691.8	8336.1	9239.9	9498.3	9443.9	8678.7
40°	4846.2	4939.3	5246.5	5799.9	6815.7	7902.5	8778.5	9913.0	10233.5	10240.1	9377.4
42.5°	4535.7	4612.2	4920.5	5559.2	6720.3	8057.7	9190.0	10621.6	10958.8	10939.9	10036.1
45°	4238.4	4318.3	4587.8	5186.6	6499.6	8144.2	9593.6	11339.1	11708.4	11648.5	10768.0
47.5°	3879.1	3993.4	4300.6	4873.9	6159.2	8137.6	9946.3	12073.3	12488.0	12439.2	11400.1
50°	2985.3	3053.0	3748.3	4551.2	5697.8	7982.3	10291.2	12794.1	13318.6	13223.3	12074.4
52.5°	2689.2	2750.2	2974.2	4164.1	5278.7	7646.3	10578.4	13619.2	14011.7	13937.4	12763.0
55°	2541.7	2575.0	2711.4	3434.5	4869.4	7100.7	10770.2	14352.2	14760.3	14596.1	13407.3
57.5°	2356.5	2397.6	2556.2	2933.2	4366.0	6263.4	10725.9	15013.1	15390.2	15138.4	13975.1
60°	2214.6	2245.6	2394.2	2640.4	3845.9	5396.2	10272.3	15661.9	15851.5	15603.1	14540.7
62.5°	2094.8	2112.6	2216.8	2450.8	3450.0	4763.0	9387.4	15748.4	16101.0	15921.4	14962.1
65°	1946.2	1950.7	2073.8	2256.7	3084.0	4382.6	8627.7	15304.8	15976.8	15916.9	15114.0
67.5°	1772.1	1781.0	1905.2	2044.9	2643.8	3977.8	7444.5	15066.3	15494.4	15456.7	14813.5
70°	1553.7	1571.4	1685.6	1792.1	2239.0	3492.1	5925.2	14123.7	14631.6	14576.2	13823.2
72.5°	1343.0	1333.0	1439.4	1544.8	1865.3	2915.5	4491.3	12501.3	13724.5	13671.3	12536.8
75°	1103.4	1096.8	1206.5	1306.4	1529.3	2355.4	3159.4	9245.4	12058.8	12223.0	10810.2
77.5°	679.8	685.3	748.5	815.1	1035.8	1759.9	2016.1	5143.4	8191.9	9714.5	8483.6
80°	492.4	492.4	539.0	578.9	685.3	1072.4	1003.6	2144.7	2994.2	4688.7	5290.9
82.5°	319.4	306.1	334.9	369.3	381.5	464.7	459.1	1075.7	1525.9	1836.4	2203.5
85°	166.3	184.1	110.9	156.4	165.2	154.1	158.6	504.6	677.6	868.3	955.9
87.5°	25.5	20.0	26.6	36.6	42.1	35.5	31.1	58.8	90.9	120.9	143.1
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°	4082.1	4082.1	4082.1	4082.1	4082.1	4082.1	4082.1	4082.1	4082.1	4082.1	4082.1
2.5°	4092.1	4086.5	4035.5	3961.2	3900.2	3849.2	3815.9	3793.8	3818.2	3773.8	3768.2
5°	4103.2	4065.5	3954.6	3848.1	3766.0	3656.2	3581.9	3532.0	3552.0	3513.2	3497.7
7.5°	4133.1	4064.3	3911.3	3741.6	3586.4	3468.8	3354.6	3244.8	3228.2	3203.8	3204.9
10°	4159.7	4061.0	3861.4	3639.6	3458.8	3251.5	3114.0	3000.8	2975.3	2946.5	2932.1
12.5°	4201.9	4068.8	3799.3	3530.9	3289.2	3049.6	2901.0	2768.0	2742.5	2685.9	2673.7
15°	4286.1	4096.5	3738.3	3396.7	3098.4	2856.7	2664.8	2548.4	2501.8	2438.6	2437.5
17.5°	4395.9	4177.5	3707.3	3270.3	2936.5	2665.9	2463.0	2345.5	2266.7	2229.0	2219.0
20°	4552.3	4282.8	3706.1	3156.1	2768.0	2461.9	2229.0	2095.9	2029.4	1998.3	1979.5
22.5°	4792.9	4438.1	3726.1	3076.3	2598.3	2264.5	2032.7	1849.7	1740.0	1654.6	1666.8
25°	5092.3	4670.9	3771.6	3003.1	2450.8	2076.0	1785.4	1531.5	1335.2	1249.8	1256.5
27.5°	5472.7	4949.3	3889.1	2928.8	2283.4	1873.0	1462.7	1140.0	991.4	891.6	899.4
30°	5959.6	5295.3	4043.3	2871.1	2128.1	1589.1	1101.2	840.6	709.7	627.7	619.9
32.5°	6541.8	5796.5	4211.8	2832.3	1958.4	1234.3	794.0	616.6	489.1	442.5	449.1
35°	7262.6	6359.9	4469.1	2775.7	1667.9	878.3	566.7	417.0	351.5	342.7	343.8
37.5°	7920.2	6936.6	4724.2	2680.4	1316.3	624.3	384.8	317.2	302.7	299.4	303.9
40°	8564.5	7462.2	4954.8	2541.7	904.9	428.1	282.8	286.1	273.9	265.0	260.6
42.5°	9167.8	7969.0	5135.6	2286.7	618.8	282.8	250.6	260.6	258.4	240.6	232.9
45°	9818.7	8504.6	5235.4	1929.6	389.2	240.6	225.1	242.9	254.0	234.0	225.1
47.5°	10374.3	9026.9	5231.0	1478.2	263.9	227.3	211.8	227.3	240.6	226.2	218.5
50°	11015.3	9459.4	5089.0	938.2	234.0	210.7	202.9	208.5	226.2	216.2	208.5
52.5°	11727.3	10051.6	4873.9	523.4	221.8	199.6	188.5	195.2	210.7	198.5	202.9
55°	12317.2	10542.9	4368.2	357.1	216.2	186.3	179.7	184.1	190.7	178.5	185.2
57.5°	12844.0	10948.8	3857.0	292.8	208.5	177.4	176.3	167.5	166.3	158.6	151.9
60°	13377.4	11269.3	3167.2	265.0	200.7	178.5	159.7	147.5	137.5	129.7	126.4
62.5°	13786.6	11491.1	2505.1	239.5	189.6	167.5	146.4	126.4	109.8	99.8	99.8
65°	13906.4	11392.4	1763.2	217.4	177.4	157.5	130.9	103.1	83.2	76.5	73.2
67.5°	13522.7	10825.7	1227.6	200.7	165.2	146.4	115.3	84.3	66.5	57.7	55.4
70°	12545.7	9877.5	724.2	177.4	149.7	127.5	105.4	68.8	54.3	45.5	43.2
72.5°	11101.8	8455.8	451.3	150.8	128.6	104.2	78.7	56.6	43.2	35.5	34.4
75°	9170.0	6591.7	295.0	116.4	102.0	82.1	59.9	45.5	37.7	29.9	27.7
77.5°	7353.5	4663.2	263.9	88.7	75.4	58.8	45.5	37.7	31.1	26.6	26.6
80°	4231.8	2661.5	216.2	61.0	46.6	44.4	35.5	31.1	28.8	25.5	24.4
82.5°	2079.3	1278.6	139.7	37.7	26.6	28.8	29.9	27.7	24.4	22.2	22.2
85°	716.4	425.8	56.6	24.4	17.7	17.7	18.9	20.0	18.9	17.7	17.7
87.5°	110.9	81.0	15.5	14.4	11.1	10.0	11.1	12.2	12.2	11.1	11.1
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)