

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: P510197

Luminaire Tested: **VERD-M-CA4-220-760-U-T2**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510197  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VERD-M-CA4-220-760-U-T2  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(4) 70 CRI, 5700K, 1000mA LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 31097 lumens  
Efficiency: N/A  
Efficacy: 139.8 lumens/watt  
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G4

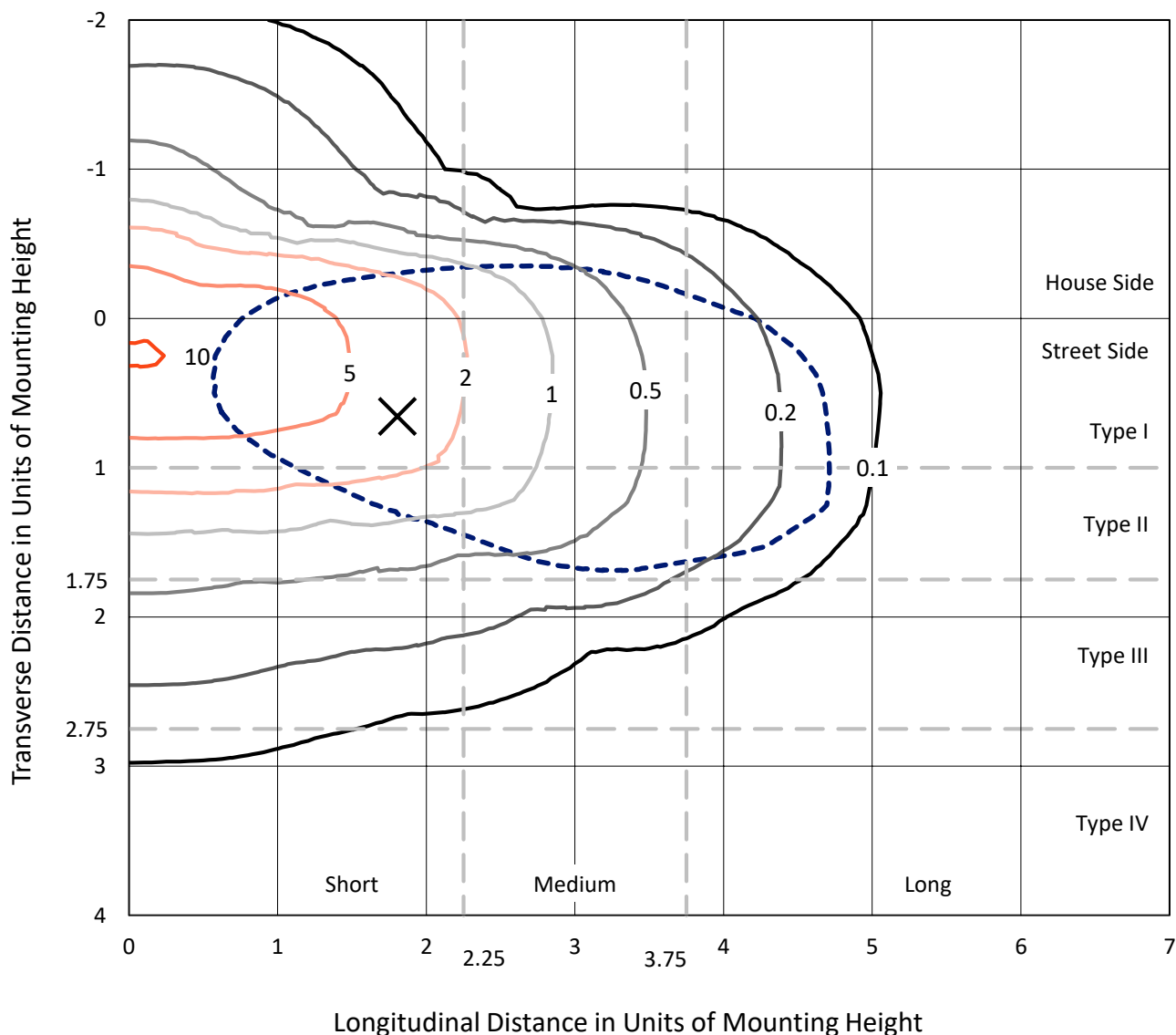
Input Watts (W): 222.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

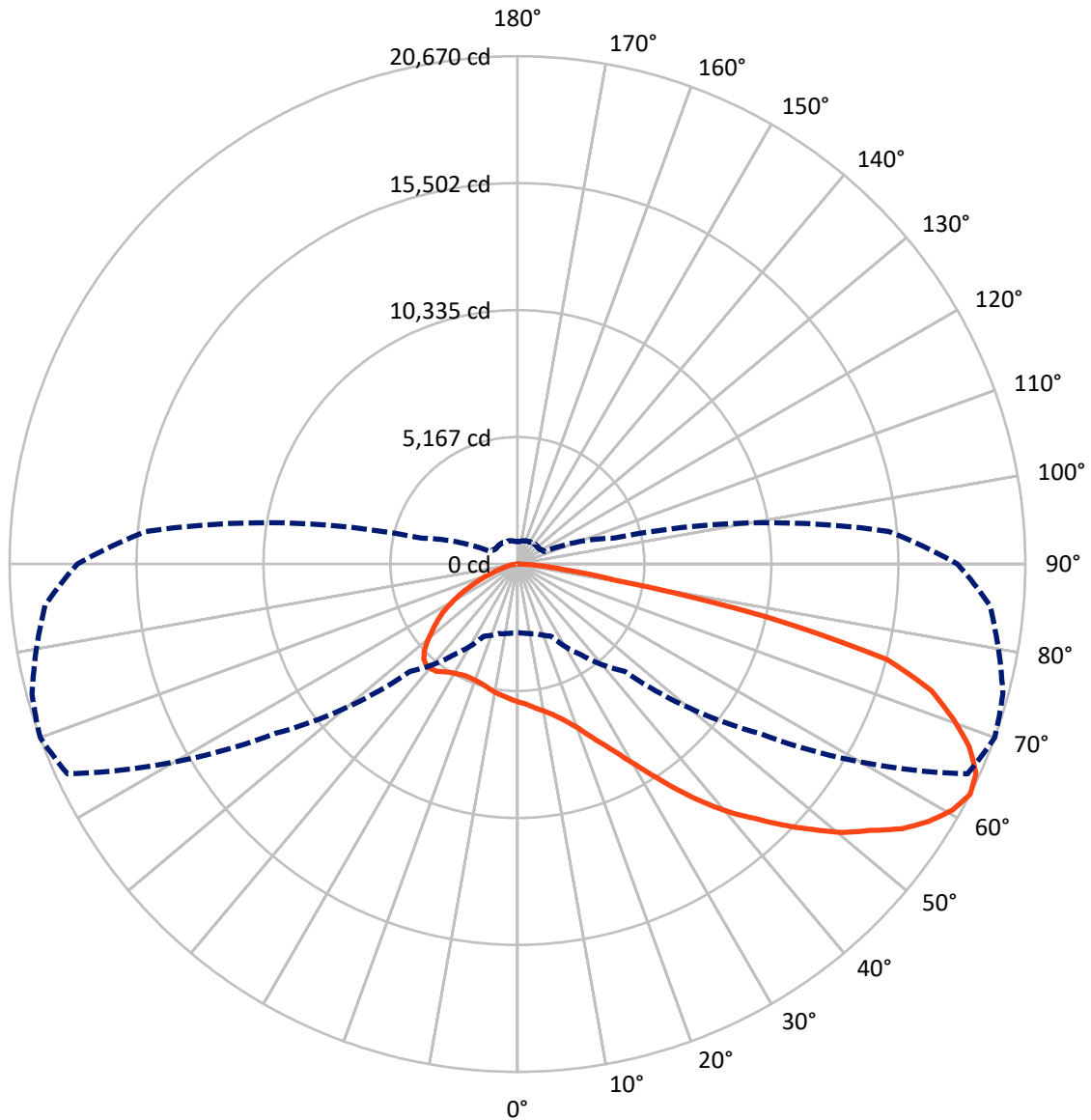
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.3 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	8051.2	0.0	8051.2
	% Fixture	25.9	0.0	25.9
<b>Street Side</b>	Lumens	23045.8	0.0	23045.8
	% Fixture	74.1	0.0	74.1
<b>Total</b>	Lumens	31097.0	0.0	31097.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	539.1	1.7
10°-20°	1637.1	5.3
20°-30°	2778.5	8.9
30°-40°	4020.3	12.9
40°-50°	5275.6	17.0
50°-60°	6164.4	19.8
60°-70°	6186.2	19.9
70°-80°	3941.9	12.7
80°-90°	554.0	1.8
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°	31097.0	100.0
0°-180°	31097.0	100.0

**Coefficient of Utilization**



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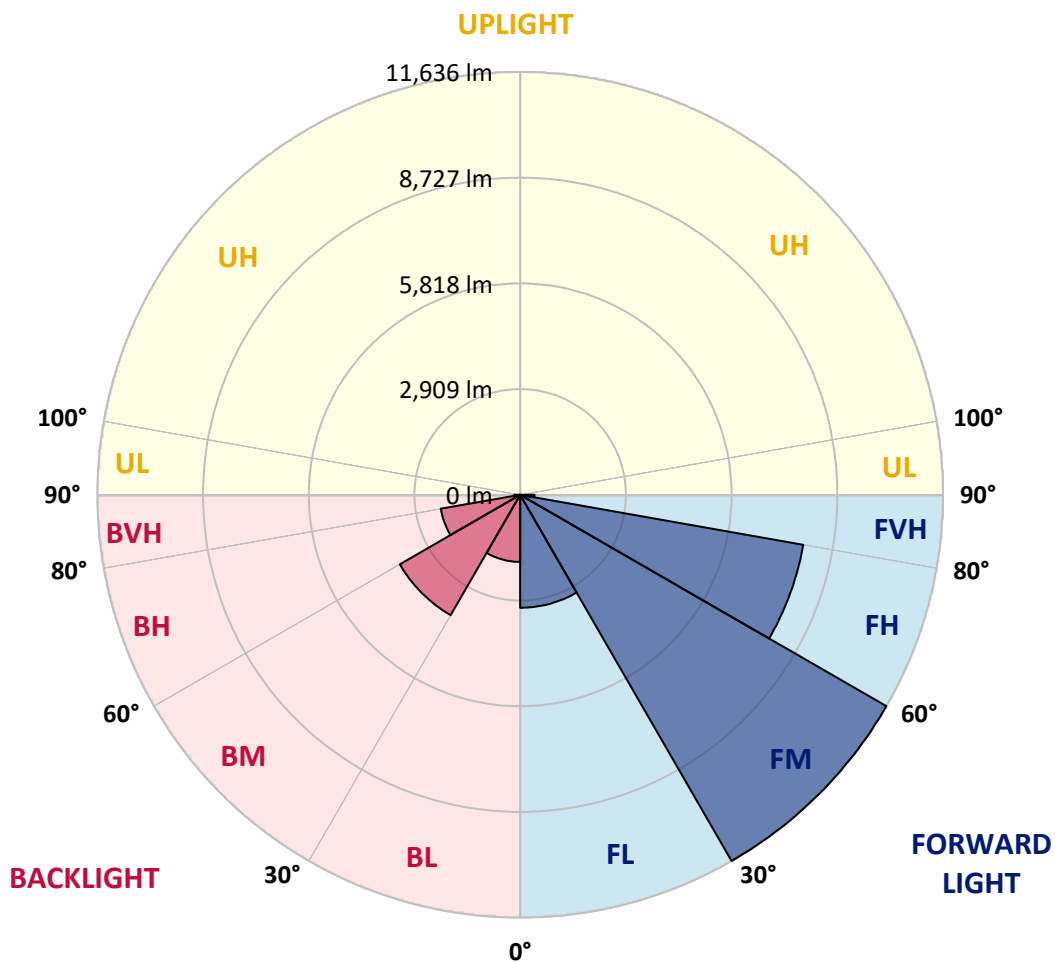
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3108.2	10.0			
FM (30°-60°)	11636.2	37.4			
FH (60°-80°)	7910.8	25.4			G4/12000
FVH (80°-90°)	390.8	1.3			G3/500
BL (0°-30°)	1846.5	5.9	B3/2500		
BM (30°-60°)	3824.1	12.3	B3/5000		
BH (60°-80°)	2217.4	7.1	B3/2500		G3/2500
BVH (80°-90°)	163.2	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	5612.6	5612.6	5612.6	5612.6	5612.6	5612.6	5612.6	5612.6	5612.6	5612.6	5612.6
2.5°	5827.6	5889.4	5881.0	5843.0	5869.7	5796.7	5770.0	5729.2	5687.1	5673.0	5649.1
5°	6103.0	6184.5	6169.1	6118.5	6117.1	6013.1	5954.1	5876.8	5812.1	5761.5	5687.1
7.5°	6360.2	6454.3	6440.3	6391.1	6388.3	6268.8	6146.6	6025.7	5951.2	5886.6	5750.3
10°	6632.8	6704.5	6691.8	6628.6	6615.9	6499.3	6356.0	6204.2	6094.6	6004.6	5810.7
12.5°	6884.3	6960.2	6965.8	6887.1	6867.5	6742.4	6617.3	6416.4	6274.5	6171.9	5886.6
15°	7119.0	7208.9	7192.1	7113.4	7092.3	6965.8	6843.6	6658.1	6510.5	6367.2	6010.3
17.5°	7307.3	7393.0	7372.0	7336.8	7325.6	7227.2	7126.0	6925.1	6794.4	6610.3	6201.4
20°	7436.6	7516.7	7525.1	7515.3	7579.9	7487.2	7431.0	7289.0	7145.7	6979.9	6462.8
22.5°	7487.2	7582.7	7664.2	7727.5	7861.0	7846.9	7837.1	7755.6	7615.1	7373.4	6808.4
25°	7502.6	7598.2	7724.7	7880.7	8119.5	8205.3	8267.1	8286.8	8133.6	7942.5	7238.5
27.5°	7505.5	7608.0	7737.3	7988.9	8352.8	8611.4	8758.9	8827.8	8742.1	8590.3	7823.0
30°	7446.4	7551.8	7717.6	8053.5	8535.5	8959.9	9204.4	9509.3	9472.8	9344.9	8555.2
32.5°	7276.4	7372.0	7601.0	8042.3	8716.8	9316.8	9697.6	10226.0	10349.7	10266.8	9399.7
35°	6971.5	7088.1	7384.6	7949.5	8815.2	9663.9	10278.0	11100.1	11323.5	11329.1	10435.4
37.5°	6663.7	6752.2	7100.7	7775.3	8870.0	9971.7	10828.9	11975.6	12300.2	12307.2	11296.8
40°	6336.3	6417.8	6801.4	7542.0	8813.7	10213.4	11341.8	12817.3	13282.4	13238.9	12142.8
42.5°	5911.9	6001.8	6382.7	7224.4	8673.2	10400.3	11863.1	13701.2	14148.1	14197.3	13025.3
45°	5549.3	5621.0	5954.1	6728.3	8416.1	10501.5	12352.2	14644.1	15155.7	15103.7	13966.8
47.5°	5102.5	5209.3	5564.8	6325.0	7953.7	10476.2	12820.1	15577.2	16146.4	16098.6	14783.3
50°	3936.1	4059.8	4886.1	5902.1	7363.5	10278.0	13244.5	16469.6	17176.4	17051.3	15647.5
52.5°	3575.0	3610.1	3938.9	5415.8	6781.7	9828.3	13556.5	17596.6	18015.3	17966.2	16523.0
55°	3354.3	3421.8	3572.2	4461.7	6259.0	9097.6	13772.9	18538.1	19010.3	18779.8	17315.5
57.5°	3160.4	3208.2	3386.7	3819.5	5657.5	8091.4	13709.6	19332.1	19753.6	19431.8	18089.8
60°	2953.8	2984.8	3163.2	3486.4	5008.3	6979.9	13067.4	20151.3	20338.2	20043.1	18744.7
62.5°	2793.6	2823.2	2930.0	3240.5	4502.4	6184.5	12016.3	20208.9	20669.9	20454.9	19301.1
65°	2588.5	2608.1	2741.6	2986.2	4033.1	5710.9	11090.3	19667.9	20509.7	20456.3	19514.7
67.5°	2362.2	2386.1	2512.6	2685.4	3433.0	5153.1	9541.7	19375.6	19832.3	19884.3	19114.2
70°	2096.6	2113.5	2244.2	2369.3	2937.0	4523.5	7585.6	18255.6	18788.2	18786.8	17877.6
72.5°	1810.0	1808.6	1937.8	2069.9	2460.6	3799.8	5938.6	16208.2	17617.7	17512.3	16118.2
75°	1492.4	1513.5	1638.5	1742.5	2047.5	3080.3	4135.7	11740.9	15553.3	15698.1	13910.6
77.5°	954.2	968.2	1038.5	1145.3	1432.0	2353.8	2698.1	6524.6	10384.8	12526.4	10949.7
80°	697.0	704.0	765.9	827.7	952.8	1433.4	1371.5	2835.8	4116.0	6149.4	6717.1
82.5°	475.0	476.4	525.6	539.6	546.6	646.4	650.6	1380.0	1960.3	2308.8	2966.5
85°	314.8	261.4	203.8	269.8	276.8	237.5	231.9	622.5	972.4	1166.4	1098.9
87.5°	70.3	68.9	80.1	81.5	78.7	67.5	56.2	95.6	146.1	144.7	185.5
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°	5612.6	5612.6	5612.6	5612.6	5612.6	5612.6	5612.6	5612.6	5612.6	5612.6	5612.6
2.5°	5626.6	5619.6	5580.3	5497.3	5441.1	5383.5	5351.2	5331.5	5338.6	5306.2	5292.2
5°	5640.7	5605.6	5494.5	5396.2	5307.6	5207.9	5125.0	5113.7	5130.6	5101.1	5084.2
7.5°	5677.2	5602.7	5460.8	5292.2	5144.6	5050.5	4931.0	4870.6	4866.4	4836.9	4842.5
10°	5698.3	5601.3	5411.6	5207.9	5035.0	4867.8	4739.9	4672.5	4668.2	4626.1	4616.3
12.5°	5755.9	5616.8	5354.0	5105.3	4912.8	4689.3	4554.4	4492.6	4485.6	4426.5	4404.1
15°	5844.4	5651.9	5293.6	4985.8	4737.1	4527.7	4366.1	4283.2	4270.6	4201.7	4177.8
17.5°	5985.0	5751.7	5275.3	4877.6	4583.9	4354.9	4165.2	4075.2	4002.2	3964.2	3931.9
20°	6174.7	5875.4	5296.4	4776.5	4391.4	4127.2	3891.1	3773.1	3722.5	3660.7	3664.9
22.5°	6444.5	6069.3	5332.9	4697.8	4217.2	3884.1	3618.5	3486.4	3395.1	3343.1	3345.9
25°	6823.9	6361.6	5404.6	4623.3	4027.5	3618.5	3305.2	3121.1	3028.3	2994.6	2959.5
27.5°	7303.1	6711.5	5574.6	4531.9	3802.6	3317.8	2970.7	2755.7	2661.5	2611.0	2603.9
30°	7918.6	7171.0	5774.2	4464.5	3566.5	2942.6	2556.2	2386.1	2303.2	2231.5	2197.8
32.5°	8669.0	7820.2	5996.2	4397.0	3274.2	2522.4	2172.5	2041.8	1909.7	1818.4	1822.6
35°	9540.3	8527.1	6326.4	4311.3	2931.4	2130.4	1888.7	1720.0	1596.4	1535.9	1507.8
37.5°	10362.3	9252.2	6714.3	4224.2	2547.7	1876.0	1609.0	1453.0	1357.5	1311.1	1320.9
40°	11194.2	9999.8	7048.7	4010.6	2117.7	1645.6	1332.2	1243.6	1205.7	1169.2	1173.4
42.5°	11939.0	10595.6	7293.3	3773.1	1817.0	1381.4	1135.4	1155.1	1177.6	1156.5	1150.9
45°	12714.7	11292.6	7508.3	3368.4	1565.5	1173.4	1086.3	1141.1	1190.2	1187.4	1180.4
47.5°	13493.2	11939.0	7529.3	2831.6	1336.4	1103.1	1084.9	1125.6	1190.2	1201.5	1193.1
50°	14295.6	12616.4	7405.7	2199.2	1239.4	1111.6	1086.3	1093.3	1165.0	1177.6	1173.4
52.5°	15185.2	13348.5	7100.7	1672.3	1201.5	1125.6	1090.5	1080.6	1121.4	1143.9	1148.1
55°	16003.0	13930.3	6528.8	1476.9	1173.4	1127.0	1121.4	1089.1	1090.5	1079.2	1107.3
57.5°	16690.2	14485.3	5879.6	1370.1	1148.1	1114.4	1135.4	1075.0	1058.2	1011.8	1000.5
60°	17401.2	14936.4	4966.2	1297.0	1118.6	1098.9	1100.3	1051.1	1009.0	941.5	921.8
62.5°	17905.7	15175.3	4079.4	1211.3	1077.8	1075.0	1053.9	1017.4	979.5	920.4	912.0
65°	18051.9	15048.9	3133.7	1121.4	1024.4	1035.7	997.7	947.1	789.8	716.7	716.7
67.5°	17568.5	14270.3	2320.1	1017.4	959.8	982.3	907.8	746.2	664.7	621.1	628.1
70°	16243.3	13012.6	1510.6	865.6	867.0	885.3	749.0	671.7	594.4	567.7	581.8
72.5°	14472.7	11147.9	996.3	690.0	730.7	699.8	684.4	618.3	549.5	518.5	528.4
75°	11926.4	8802.5	691.4	542.4	473.6	597.2	608.5	519.9	466.5	566.3	588.8
77.5°	9422.2	6118.5	570.5	379.4	349.9	441.2	487.6	482.0	771.5	906.4	896.6
80°	5602.7	3523.0	465.1	262.8	247.3	283.9	383.6	553.7	864.2	649.2	618.3
82.5°	2540.7	1602.0	247.3	137.7	161.6	188.3	286.7	688.6	566.3	416.0	392.1
85°	992.1	522.8	98.4	60.4	56.2	70.3	130.7	331.6	227.7	184.1	184.1
87.5°	127.9	94.2	28.1	21.1	18.3	22.5	42.2	184.1	106.8	89.9	87.1
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)