

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: P510245

Luminaire Tested: **VERD-M-CA4-230-760-U-T2**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510245
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-CA4-230-760-U-T2
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 5700K, 1050mA LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32301 lumens
Efficiency: N/A
Efficacy: 138.5 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

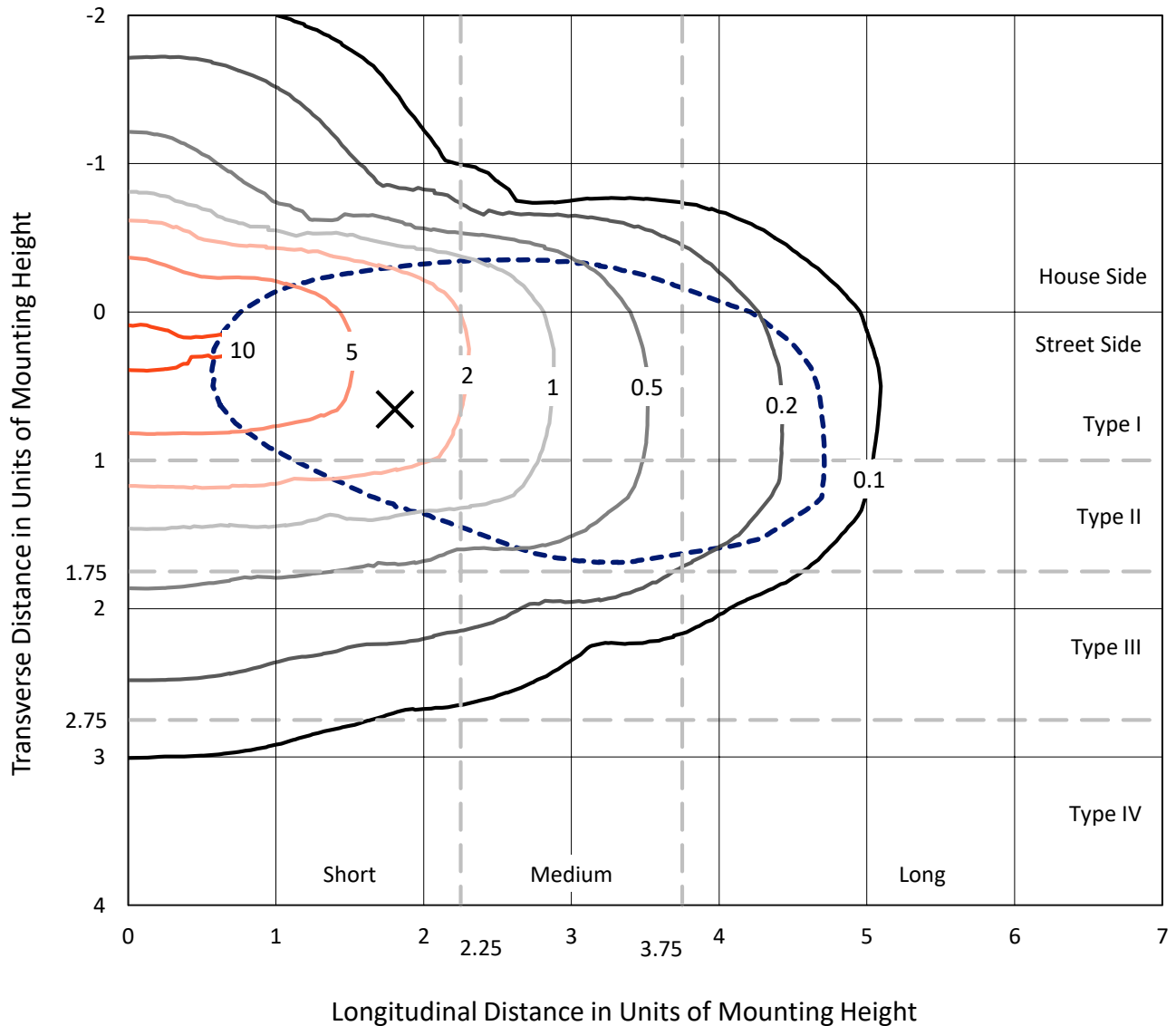
Input Watts (W): 233.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

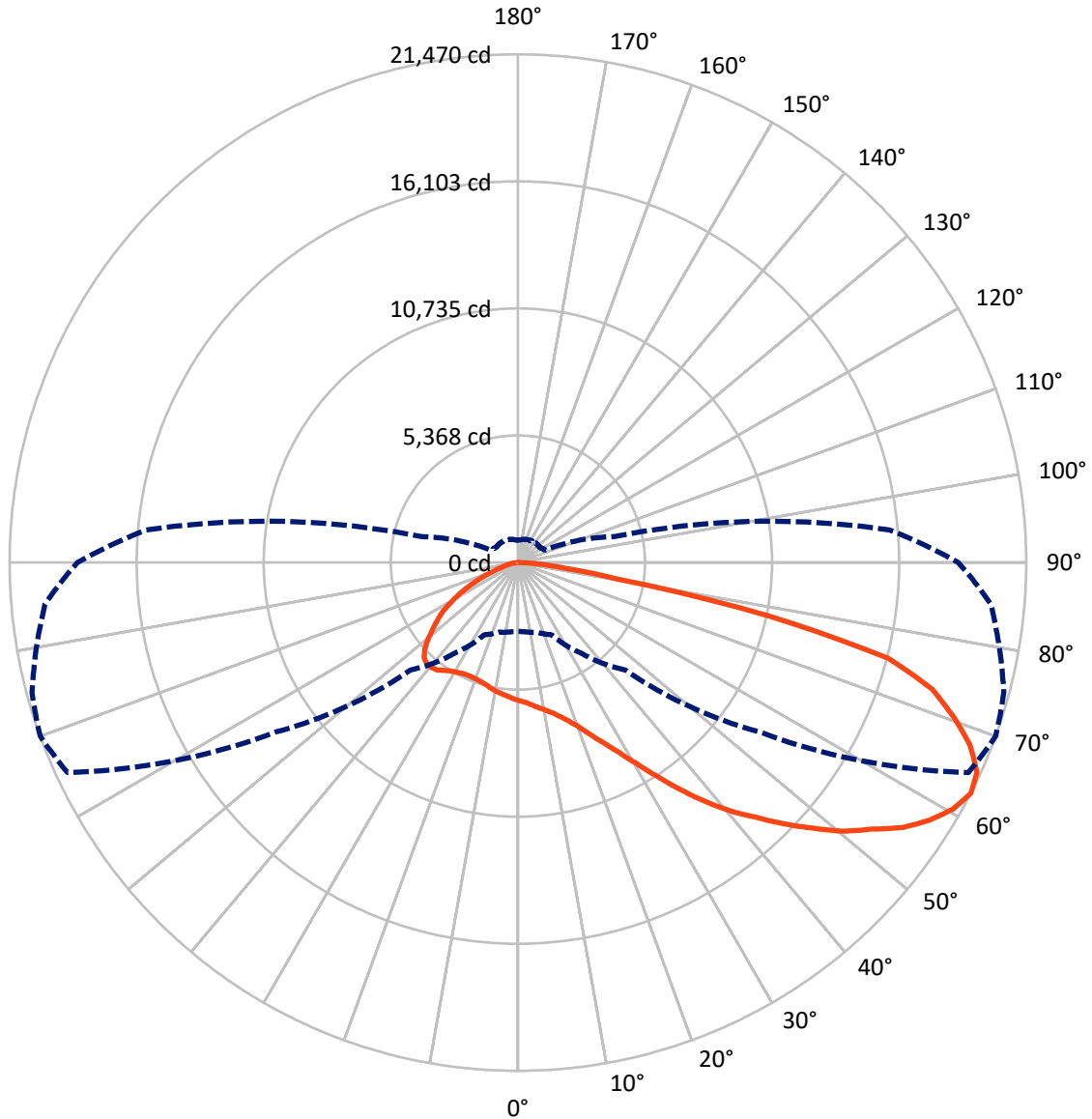
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.7 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
House Side	Lumens	8362.9	0.0	8362.9
	% Fixture	25.9	0.0	25.9
Street Side	Lumens	23938.1	0.0	23938.1
	% Fixture	74.1	0.0	74.1
Total	Lumens	32301.0	0.0	32301.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	560.0	1.7
10°-20°	1700.5	5.3
20°-30°	2886.0	8.9
30°-40°	4176.0	12.9
40°-50°	5479.8	17.0
50°-60°	6403.0	19.8
60°-70°	6425.7	19.9
70°-80°	4094.5	12.7
80°-90°	575.4	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°	32301.0	100.0
0°-180°	32301.0	100.0

Coefficient of Utilization



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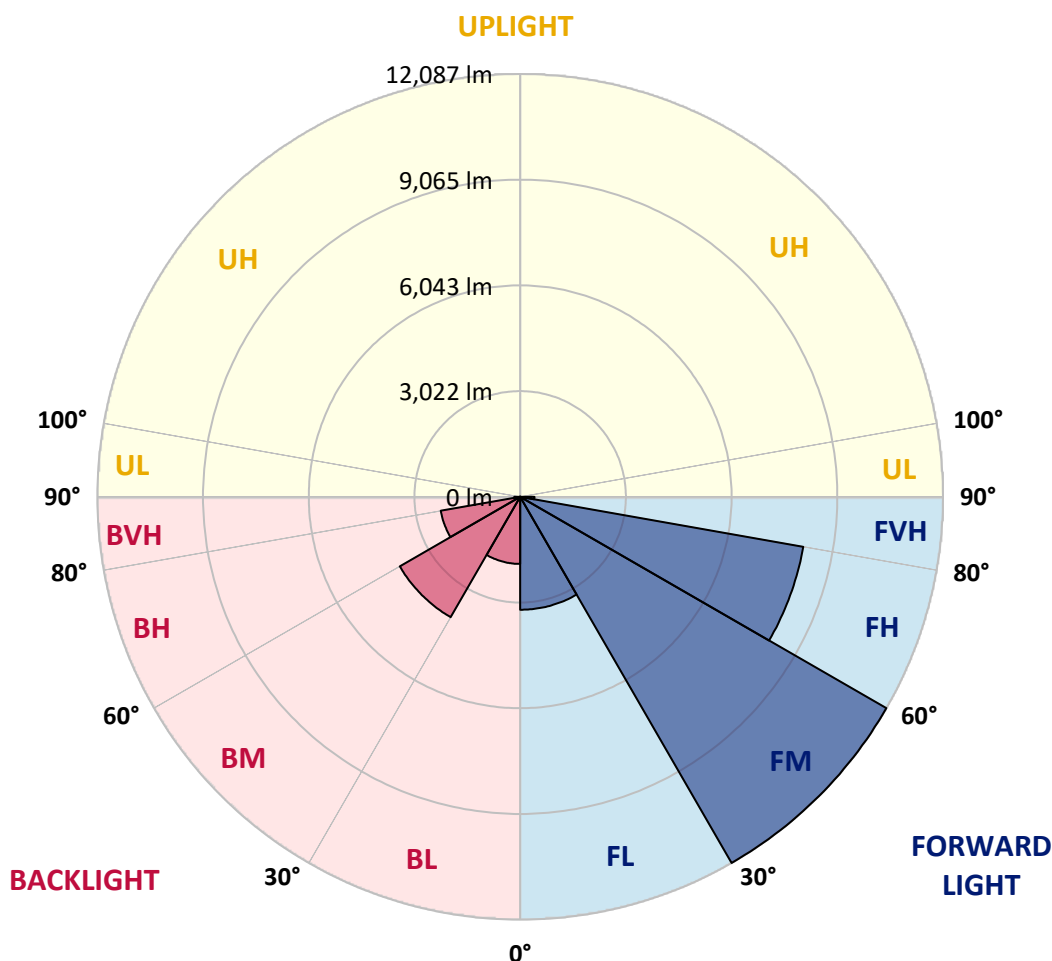
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3228.5	10.0			
FM (30°-60°)	12086.7	37.4			
FH (60°-80°)	8217.0	25.4			G4/12000
FVH (80°-90°)	405.9	1.3			G3/500
BL (0°-30°)	1918.0	5.9	B3/2500		
BM (30°-60°)	3972.1	12.3	B3/5000		
BH (60°-80°)	2303.2	7.1	B3/2500		G3/2500
BVH (80°-90°)	169.5	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°	5829.9	5829.9	5829.9	5829.9	5829.9	5829.9	5829.9	5829.9	5829.9	5829.9	5829.9
2.5°	6053.2	6117.4	6108.7	6069.3	6097.0	6021.1	5993.4	5951.0	5907.2	5892.6	5867.8
5°	6339.3	6424.0	6407.9	6355.4	6353.9	6245.9	6184.6	6104.3	6037.2	5984.6	5907.2
7.5°	6606.4	6704.2	6689.6	6638.5	6635.6	6511.5	6384.6	6259.0	6181.7	6114.5	5972.9
10°	6889.6	6964.0	6950.9	6885.2	6872.1	6750.9	6602.0	6444.4	6330.5	6237.1	6035.7
12.5°	7150.9	7229.7	7235.5	7153.8	7133.4	7003.5	6873.5	6664.8	6517.4	6410.8	6114.5
15°	7394.6	7488.1	7470.5	7388.8	7366.9	7235.5	7108.5	6915.9	6762.6	6613.7	6243.0
17.5°	7590.2	7679.3	7657.4	7620.9	7609.2	7507.0	7401.9	7193.2	7057.5	6866.2	6441.5
20°	7724.5	7807.7	7816.5	7806.3	7873.4	7777.1	7718.7	7571.3	7422.4	7250.1	6713.0
22.5°	7777.1	7876.3	7961.0	8026.7	8165.3	8150.7	8140.5	8055.9	7909.9	7658.8	7072.1
25°	7793.1	7892.4	8023.8	8185.8	8433.9	8523.0	8587.2	8607.6	8448.5	8250.0	7518.7
27.5°	7796.0	7902.6	8036.9	8298.2	8676.2	8944.8	9098.1	9169.6	9080.5	8922.9	8125.9
30°	7734.7	7844.2	8016.5	8365.3	8866.0	9306.8	9560.8	9877.5	9839.6	9706.7	8886.4
32.5°	7558.1	7657.4	7895.3	8353.6	9054.3	9677.5	10073.1	10622.0	10750.4	10664.3	9763.7
35°	7241.4	7362.5	7670.5	8257.3	9156.5	10038.1	10676.0	11529.9	11761.9	11767.8	10839.4
37.5°	6921.7	7013.7	7375.7	8076.3	9213.4	10357.8	11248.1	12439.2	12776.4	12783.7	11734.2
40°	6581.6	6666.3	7064.8	7834.0	9155.0	10608.8	11780.9	13313.6	13796.7	13751.5	12612.9
42.5°	6140.8	6234.2	6629.8	7504.1	9009.0	10802.9	12322.5	14231.7	14695.9	14747.0	13529.6
45°	5764.2	5838.6	6184.6	6988.9	8741.9	10908.0	12830.4	15211.1	15742.4	15688.4	14507.6
47.5°	5300.0	5411.0	5780.3	6569.9	8261.7	10881.8	13316.5	16180.3	16771.5	16721.9	15355.6
50°	4088.5	4217.0	5075.2	6130.6	7648.6	10676.0	13757.3	17107.2	17841.4	17711.5	16253.3
52.5°	3713.4	3749.9	4091.4	5625.5	7044.3	10208.9	14081.3	18277.9	18712.8	18661.8	17162.7
55°	3484.2	3554.3	3710.5	4634.4	6501.3	9449.8	14306.1	19255.8	19746.3	19506.9	17985.9
57.5°	3282.8	3332.4	3517.8	3967.4	5876.6	8404.7	14240.4	20080.6	20518.4	20184.2	18790.2
60°	3068.2	3100.3	3285.7	3621.4	5202.2	7250.1	13573.4	20931.5	21125.7	20819.1	19470.4
62.5°	2901.8	2932.5	3043.4	3366.0	4676.8	6424.0	12481.6	20991.4	21470.1	21246.8	20048.4
65°	2688.7	2709.1	2847.8	3101.8	4189.2	5932.1	11519.6	20429.4	21303.7	21248.3	20270.3
67.5°	2453.7	2478.5	2609.9	2789.4	3566.0	5352.6	9911.1	20125.8	20600.2	20654.2	19854.3
70°	2177.8	2195.3	2331.1	2461.0	3050.7	4698.6	7879.2	18962.5	19515.7	19514.2	18569.8
72.5°	1880.0	1878.6	2012.9	2150.1	2555.9	3946.9	6168.5	16835.7	18299.8	18190.3	16742.3
75°	1550.2	1572.1	1702.0	1810.0	2126.7	3199.6	4295.8	12195.5	16155.5	16305.9	14449.2
77.5°	991.1	1005.7	1078.7	1189.6	1487.4	2444.9	2802.5	6777.2	10786.9	13011.4	11373.7
80°	724.0	731.3	795.5	859.7	989.6	1488.9	1424.6	2945.6	4275.3	6387.5	6977.2
82.5°	493.4	494.8	545.9	560.5	567.8	671.4	675.8	1433.4	2036.2	2398.2	3081.3
85°	327.0	271.5	211.7	280.3	287.6	246.7	240.8	646.6	1010.1	1211.5	1141.5
87.5°	73.0	71.5	83.2	84.7	81.7	70.1	58.4	99.3	151.8	150.3	192.7
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°	5829.9	5829.9	5829.9	5829.9	5829.9	5829.9	5829.9	5829.9	5829.9	5829.9	5829.9
2.5°	5844.5	5837.2	5796.3	5710.2	5651.8	5592.0	5558.4	5538.0	5545.3	5511.7	5497.1
5°	5859.1	5822.6	5707.3	5605.1	5513.1	5409.5	5323.4	5311.7	5329.2	5298.6	5281.1
7.5°	5897.0	5819.7	5672.2	5497.1	5343.8	5246.0	5121.9	5059.2	5054.8	5024.2	5030.0
10°	5918.9	5818.2	5621.2	5409.5	5230.0	5056.3	4923.4	4853.4	4849.0	4805.2	4795.0
12.5°	5978.8	5834.3	5561.3	5302.9	5103.0	4870.9	4730.8	4666.5	4659.2	4597.9	4574.6
15°	6070.7	5870.8	5498.5	5178.9	4920.5	4703.0	4535.2	4449.0	4435.9	4364.4	4339.6
17.5°	6216.7	5974.4	5479.6	5066.5	4761.4	4523.5	4326.4	4233.0	4157.1	4117.7	4084.1
20°	6413.7	6102.8	5501.5	4961.4	4561.4	4287.0	4041.8	3919.2	3866.6	3802.4	3806.8
22.5°	6694.0	6304.3	5539.4	4879.6	4380.4	4034.5	3758.6	3621.4	3526.5	3472.5	3475.5
25°	7088.1	6607.9	5613.9	4802.3	4183.4	3758.6	3433.1	3241.9	3145.6	3110.5	3074.0
27.5°	7585.9	6971.3	5790.5	4707.4	3949.8	3446.3	3085.7	2862.4	2764.6	2712.0	2704.8
30°	8225.2	7448.6	5997.7	4637.3	3704.6	3056.5	2655.1	2478.5	2392.4	2317.9	2282.9
32.5°	9004.6	8123.0	6228.4	4567.3	3401.0	2620.1	2256.6	2120.9	1983.7	1888.8	1893.2
35°	9909.6	8857.2	6571.4	4478.2	3044.9	2212.8	1961.8	1786.6	1658.2	1595.4	1566.2
37.5°	10763.5	9610.4	6974.3	4387.7	2646.4	1948.6	1671.3	1509.3	1410.0	1361.9	1372.1
40°	11627.7	10386.9	7321.7	4165.9	2199.7	1709.3	1383.8	1291.8	1252.4	1214.4	1218.8
42.5°	12401.3	11005.8	7575.6	3919.2	1887.3	1434.8	1179.4	1199.8	1223.2	1201.3	1195.5
45°	13207.0	11729.8	7799.0	3498.8	1626.1	1218.8	1128.3	1185.2	1236.3	1233.4	1226.1
47.5°	14015.7	12401.3	7820.9	2941.2	1388.1	1145.8	1126.9	1169.2	1236.3	1248.0	1239.3
50°	14849.1	13104.8	7692.4	2284.4	1287.4	1154.6	1128.3	1135.6	1210.1	1223.2	1218.8
52.5°	15773.1	13865.3	7375.7	1737.0	1248.0	1169.2	1132.7	1122.5	1164.8	1188.2	1192.5
55°	16622.6	14469.6	6781.6	1534.1	1218.8	1170.6	1164.8	1131.2	1132.7	1121.0	1150.2
57.5°	17336.4	15046.2	6107.2	1423.2	1192.5	1157.5	1179.4	1116.6	1099.1	1051.0	1039.3
60°	18075.0	15514.7	5158.4	1347.3	1161.9	1141.5	1142.9	1091.8	1048.0	978.0	957.5
62.5°	18599.0	15762.9	4237.4	1258.2	1119.6	1116.6	1094.7	1056.8	1017.4	956.1	947.3
65°	18750.8	15631.5	3255.0	1164.8	1064.1	1075.8	1036.4	983.8	820.3	744.4	744.4
67.5°	18248.7	14822.9	2409.9	1056.8	996.9	1020.3	942.9	775.1	690.4	645.2	652.5
70°	16872.2	13516.5	1569.1	899.2	900.6	919.6	778.0	697.7	617.4	589.7	604.3
72.5°	15033.0	11579.5	1034.9	716.7	759.0	726.9	710.9	642.3	570.7	538.6	548.8
75°	12388.1	9143.3	718.2	563.4	491.9	620.4	632.0	540.1	484.6	588.2	611.6
77.5°	9787.0	6355.4	592.6	394.1	363.5	458.3	506.5	500.7	801.4	941.5	931.3
80°	5819.7	3659.4	483.1	273.0	256.9	294.9	398.5	575.1	897.7	674.4	642.3
82.5°	2639.1	1664.0	256.9	143.0	167.9	195.6	297.8	715.2	588.2	432.1	407.2
85°	1030.5	543.0	102.2	62.8	58.4	73.0	135.7	344.5	236.5	191.2	191.2
87.5°	132.8	97.8	29.2	21.9	19.0	23.4	43.8	191.2	110.9	93.4	90.5
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)