

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: P509996

Luminaire Tested: **VERD-M-CA3-180-750-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P509996
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-CA3-180-750-U-T2-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 1120mA LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23774 lumens
Efficiency: N/A
Efficacy: 129.8 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

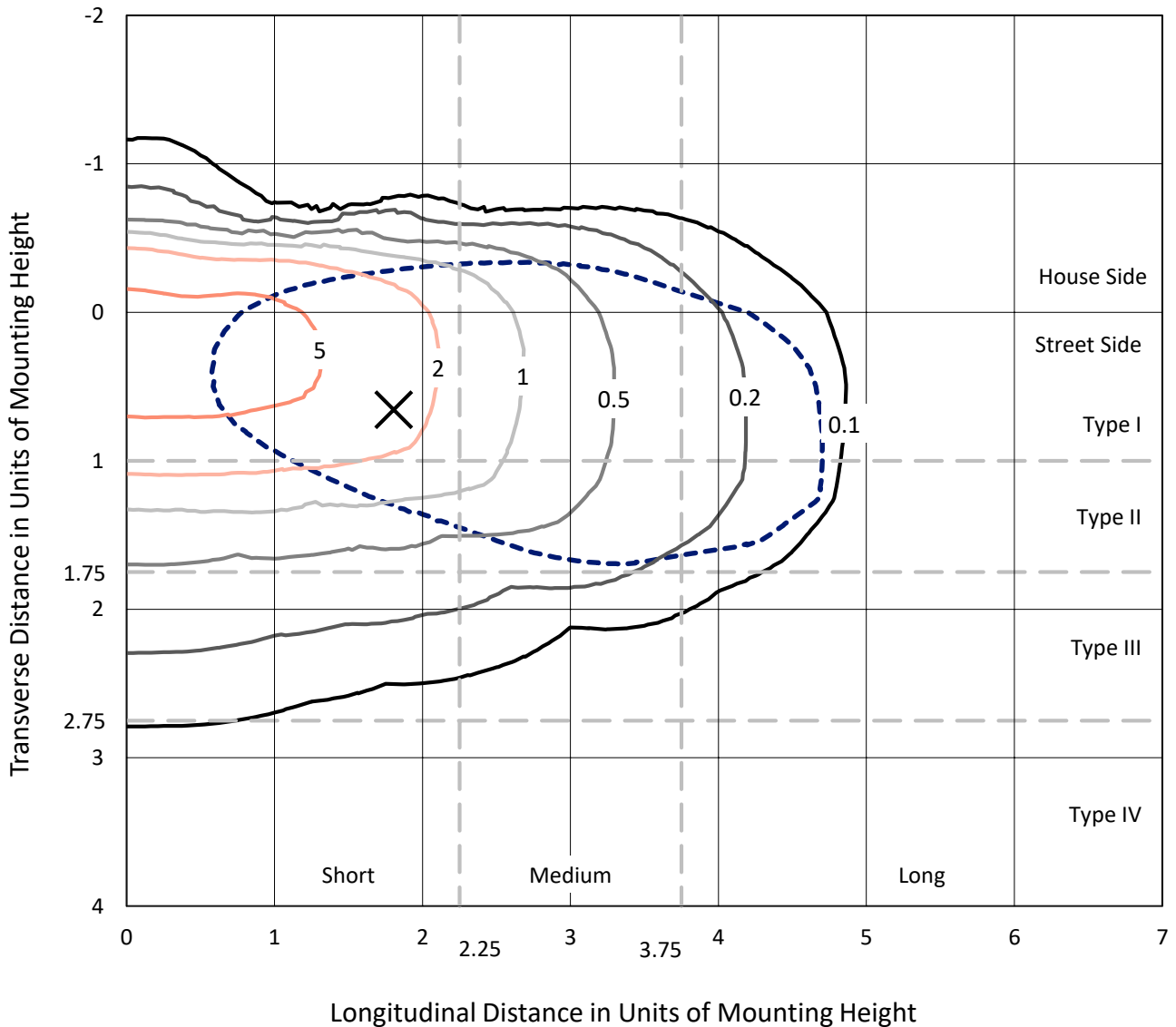
Input Watts (W): 183.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

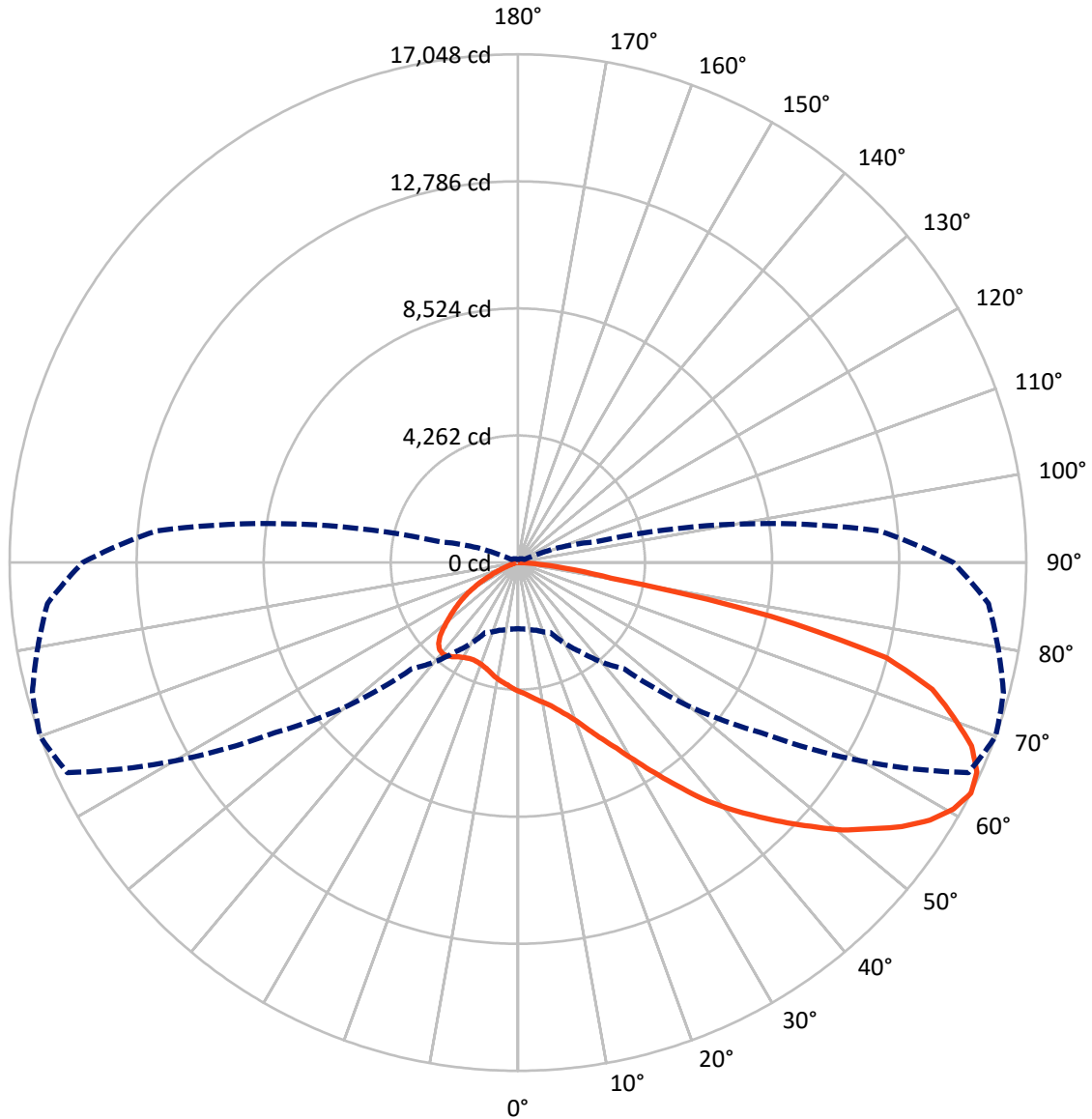
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.2 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	4999.4	0.0	4999.4
	% Fixture	21.0	0.0	21.0
Street Side	Lumens	18774.6	0.0	18774.6
	% Fixture	79.0	0.0	79.0
Total	Lumens	23774.0	0.0	23774.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	410.4	1.7
10°-20°	1224.6	5.2
20°-30°	2076.1	8.7
30°-40°	3053.0	12.8
40°-50°	4065.6	17.1
50°-60°	4755.9	20.0
60°-70°	4783.3	20.1
70°-80°	3027.9	12.7
80°-90°	377.3	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°	23774.0	100.0
0°-180°	23774.0	100.0

Coefficient of Utilization



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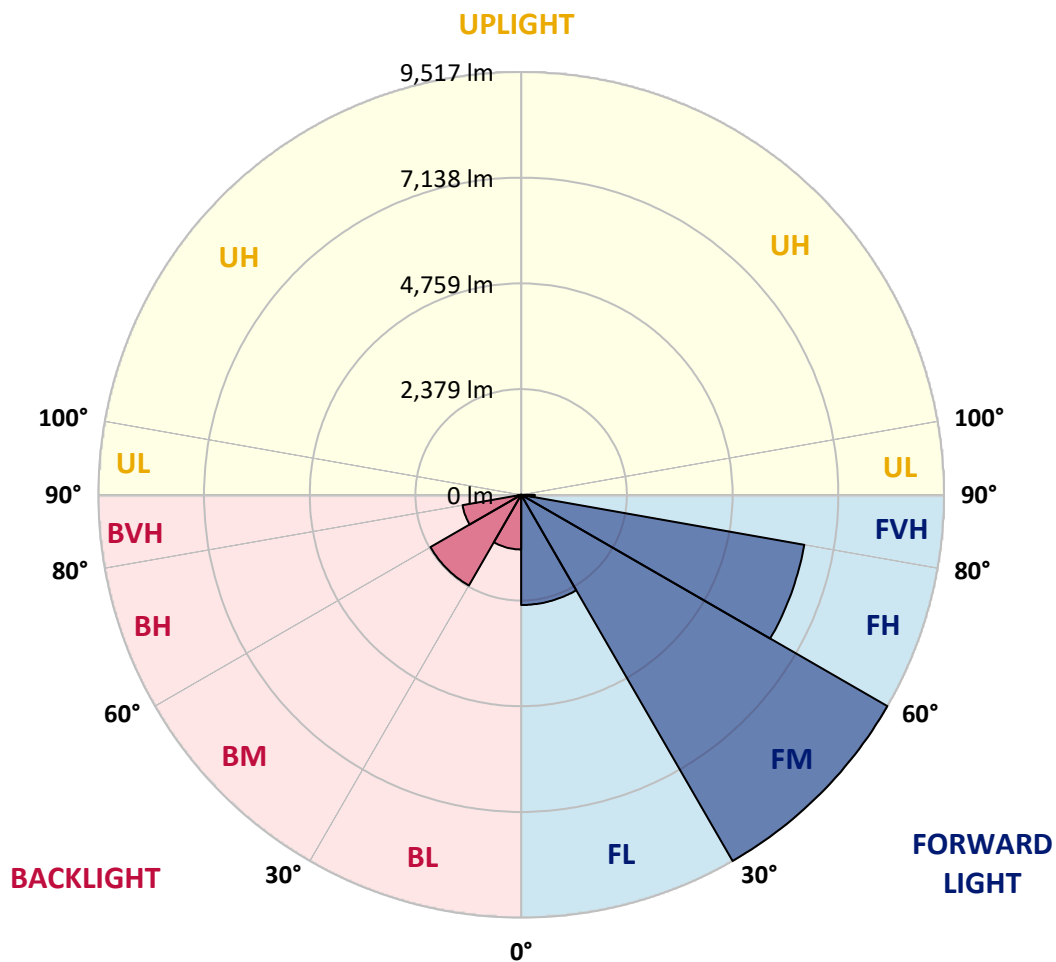
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2480.2	10.4			
FM (30°-60°)	9517.2	40.0			
FH (60°-80°)	6471.3	27.2			G3/7500
FVH (80°-90°)	306.0	1.3			G3/500
BL (0°-30°)	1230.9	5.2	B3/2500		
BM (30°-60°)	2357.3	9.9	B2/2500		
BH (60°-80°)	1339.9	5.6	B3/2500		G3/2500
BVH (80°-90°)	71.3	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°	4322.1	4322.1	4322.1	4322.1	4322.1	4322.1	4322.1	4322.1	4322.1	4322.1	4322.1
2.5°	4559.2	4599.2	4568.6	4556.9	4566.3	4519.3	4481.7	4427.7	4401.9	4383.1	4352.6
5°	4790.5	4856.3	4816.4	4791.7	4788.2	4702.5	4652.0	4578.0	4520.5	4470.0	4392.5
7.5°	5034.8	5073.5	5058.3	5030.1	5011.3	4906.8	4817.6	4713.1	4649.6	4582.7	4452.4
10°	5248.5	5295.4	5280.2	5229.7	5212.1	5105.2	5003.1	4861.0	4774.1	4690.7	4511.1
12.5°	5469.2	5522.0	5490.3	5439.9	5424.6	5316.6	5210.9	5038.3	4930.3	4836.3	4587.4
15°	5672.3	5720.5	5698.2	5640.6	5625.4	5533.8	5417.5	5256.7	5139.3	5014.8	4695.4
17.5°	5834.4	5882.5	5854.3	5827.3	5822.6	5732.2	5662.9	5498.6	5387.0	5217.9	4861.0
20°	5953.0	6002.3	5988.2	6001.1	6050.4	5983.5	5941.2	5802.7	5688.8	5505.6	5099.3
22.5°	6046.9	6110.3	6166.7	6192.5	6284.1	6279.4	6270.0	6187.8	6098.6	5908.3	5383.5
25°	6056.3	6129.1	6240.6	6361.6	6528.3	6608.1	6666.8	6653.9	6549.4	6361.6	5776.8
27.5°	6070.4	6145.5	6260.6	6468.4	6766.6	6953.3	7050.8	7110.7	7049.6	6924.0	6224.2
30°	6039.8	6117.3	6261.8	6527.1	6929.9	7276.2	7450.0	7671.9	7679.0	7573.3	6899.3
32.5°	5901.3	6003.4	6178.4	6534.2	7088.4	7613.2	7880.9	8307.1	8399.9	8321.2	7595.6
35°	5670.0	5762.7	6012.8	6471.9	7184.6	7893.8	8383.5	9048.0	9185.4	9180.7	8415.2
37.5°	5414.0	5508.0	5789.8	6325.2	7246.9	8143.9	8826.1	9783.0	10056.6	9999.1	9188.9
40°	5131.1	5229.7	5554.9	6140.8	7216.3	8367.0	9294.6	10495.8	10835.1	10842.1	9928.6
42.5°	4802.3	4883.3	5209.7	5886.0	7115.4	8531.4	9730.2	11246.0	11603.0	11583.0	10626.1
45°	4487.6	4572.2	4857.5	5491.5	6881.7	8623.0	10157.6	12005.7	12396.7	12333.3	11401.0
47.5°	4107.2	4228.1	4553.4	5160.4	6521.2	8615.9	10531.0	12783.0	13222.1	13170.5	12070.3
50°	3160.8	3232.4	3968.6	4818.7	6032.8	8451.6	10896.1	13546.2	14101.6	14000.6	12784.2
52.5°	2847.3	2911.9	3149.1	4408.9	5589.0	8095.8	11200.2	14419.8	14835.4	14756.8	13513.3
55°	2691.2	2726.4	2870.8	3636.4	5155.7	7518.1	11403.4	15195.9	15628.0	15454.2	14195.5
57.5°	2495.1	2538.5	2706.4	3105.6	4622.6	6631.6	11356.4	15895.7	16294.9	16028.4	14796.7
60°	2344.8	2377.7	2535.0	2795.7	4072.0	5713.4	10876.2	16582.6	16783.3	16520.3	15395.5
62.5°	2218.0	2236.8	2347.1	2594.9	3652.8	5043.0	9939.2	16674.2	17047.5	16857.3	15841.7
65°	2060.6	2065.3	2195.7	2389.4	3265.3	4640.3	9134.9	16204.5	16916.0	16852.6	16002.5
67.5°	1876.3	1885.7	2017.2	2165.1	2799.2	4211.7	7882.1	15952.0	16405.3	16365.4	15684.3
70°	1645.0	1663.8	1784.7	1897.4	2370.6	3697.4	6273.5	14954.0	15491.8	15433.1	14635.8
72.5°	1421.9	1411.3	1524.1	1635.6	1974.9	3086.8	4755.3	13236.2	14531.3	14475.0	13273.8
75°	1168.3	1161.2	1277.5	1383.2	1619.2	2493.9	3345.2	9788.9	12767.7	12941.5	11445.6
77.5°	719.8	725.6	792.6	863.0	1096.7	1863.4	2134.6	5445.7	8673.5	10285.6	8982.3
80°	521.3	521.3	570.6	612.9	725.6	1135.4	1062.6	2270.8	3170.2	4964.3	5601.9
82.5°	338.2	324.1	354.6	391.0	403.9	492.0	486.1	1138.9	1615.6	1944.4	2333.0
85°	176.1	194.9	117.4	165.6	174.9	163.2	167.9	534.2	717.4	919.4	1012.1
87.5°	27.0	21.1	28.2	38.7	44.6	37.6	32.9	62.2	96.3	128.0	151.5
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°	4322.1	4322.1	4322.1	4322.1	4322.1	4322.1	4322.1	4322.1	4322.1	4322.1	4322.1
2.5°	4332.6	4326.8	4272.7	4194.1	4129.5	4075.5	4040.3	4016.8	4042.6	3995.6	3989.8
5°	4344.4	4304.4	4187.0	4074.3	3987.4	3871.2	3792.5	3739.7	3760.8	3719.7	3703.3
7.5°	4376.1	4303.3	4141.2	3961.6	3797.2	3672.8	3551.8	3435.6	3418.0	3392.1	3393.3
10°	4404.2	4299.7	4088.4	3853.6	3662.2	3442.6	3297.0	3177.3	3150.3	3119.7	3104.5
12.5°	4448.9	4308.0	4022.6	3738.5	3482.5	3228.9	3071.6	2930.7	2903.7	2843.8	2830.9
15°	4538.1	4337.3	3958.1	3596.4	3280.6	3024.6	2821.5	2698.2	2648.9	2582.0	2580.8
17.5°	4654.3	4423.0	3925.2	3462.6	3109.2	2822.7	2607.8	2483.3	2400.0	2360.0	2349.5
20°	4819.9	4534.6	3924.0	3341.6	2930.7	2606.6	2360.0	2219.2	2148.7	2115.8	2095.9
22.5°	5074.7	4699.0	3945.2	3257.1	2751.0	2397.6	2152.2	1958.5	1842.2	1751.8	1764.8
25°	5391.7	4945.5	3993.3	3179.6	2594.9	2198.0	1890.4	1621.5	1413.7	1323.3	1330.3
27.5°	5794.4	5240.2	4117.8	3100.9	2417.6	1983.1	1548.7	1207.0	1049.7	944.0	952.2
30°	6309.9	5606.6	4281.0	3039.9	2253.2	1682.6	1165.9	890.0	751.5	664.6	656.4
32.5°	6926.3	6137.3	4459.4	2998.8	2073.6	1306.8	840.7	652.8	517.8	468.5	475.5
35°	7689.5	6733.8	4731.8	2938.9	1765.9	929.9	600.0	441.5	372.2	362.8	364.0
37.5°	8385.8	7344.3	5001.9	2837.9	1393.7	661.0	407.4	335.8	320.5	317.0	321.7
40°	9068.0	7900.9	5246.1	2691.2	958.1	453.2	299.4	302.9	290.0	280.6	275.9
42.5°	9706.7	8437.5	5437.5	2421.1	655.2	299.4	265.4	275.9	273.6	254.8	246.6
45°	10396.0	9004.6	5543.2	2043.0	412.1	254.8	238.4	257.1	268.9	247.7	238.4
47.5°	10984.2	9557.6	5538.5	1565.1	279.4	240.7	224.3	240.7	254.8	239.5	231.3
50°	11662.9	10015.5	5388.2	993.3	247.7	223.1	214.9	220.7	239.5	229.0	220.7
52.5°	12416.7	10642.5	5160.4	554.2	234.8	211.3	199.6	206.7	223.1	210.2	214.9
55°	13041.3	11162.7	4625.0	378.1	229.0	197.3	190.2	194.9	202.0	189.0	196.1
57.5°	13599.0	11592.4	4083.7	310.0	220.7	187.9	186.7	177.3	176.1	167.9	160.9
60°	14163.8	11931.7	3353.4	280.6	212.5	189.0	169.1	156.2	145.6	137.4	133.9
62.5°	14597.1	12166.6	2652.4	253.6	200.8	177.3	155.0	133.9	116.2	105.7	105.7
65°	14723.9	12062.1	1866.9	230.1	187.9	166.7	138.6	109.2	88.1	81.0	77.5
67.5°	14317.6	11462.1	1299.8	212.5	174.9	155.0	122.1	89.2	70.4	61.1	58.7
70°	13283.2	10458.2	766.7	187.9	158.5	135.0	111.5	72.8	57.5	48.1	45.8
72.5°	11754.5	8952.9	477.9	159.7	136.2	110.4	83.4	59.9	45.8	37.6	36.4
75°	9709.1	6979.2	312.3	123.3	108.0	86.9	63.4	48.1	39.9	31.7	29.4
77.5°	7785.8	4937.3	279.4	93.9	79.8	62.2	48.1	39.9	32.9	28.2	28.2
80°	4480.6	2818.0	229.0	64.6	49.3	47.0	37.6	32.9	30.5	27.0	25.8
82.5°	2201.5	1353.8	147.9	39.9	28.2	30.5	31.7	29.4	25.8	23.5	23.5
85°	758.5	450.9	59.9	25.8	18.8	18.8	20.0	21.1	20.0	18.8	18.8
87.5°	117.4	85.7	16.4	15.3	11.7	10.6	11.7	12.9	12.9	11.7	11.7
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)