

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: P510036

Luminaire Tested: **VERD-M-CA4-190-740-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510036
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-CA4-190-740-U-T2-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 4000K, 870mA LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25297 lumens
Efficiency: N/A
Efficacy: 131.0 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

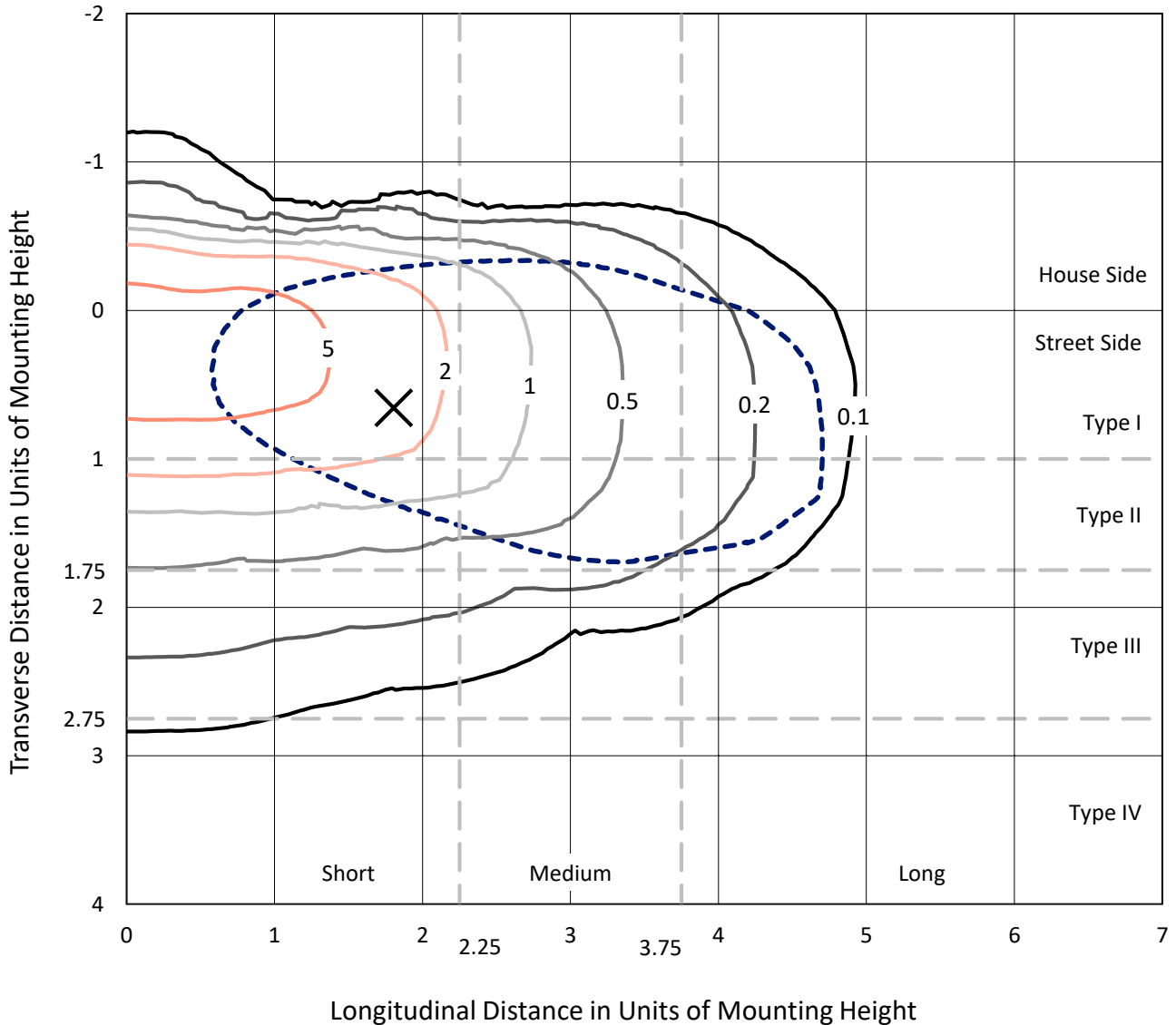
Input Watts (W): 193.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

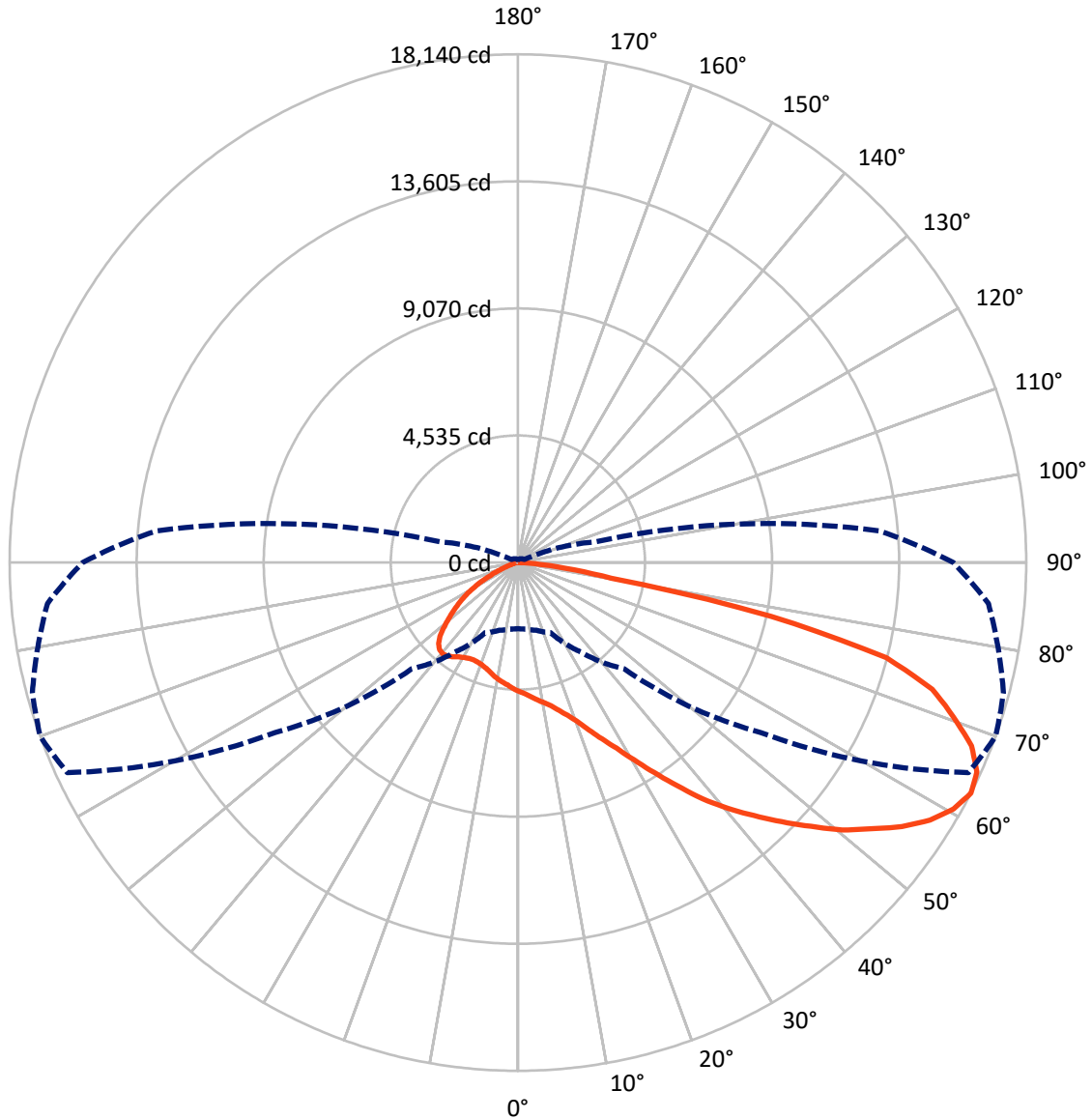
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.7 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	5319.7	0.0	5319.7
	% Fixture	21.0	0.0	21.0
Street Side	Lumens	19977.3	0.0	19977.3
	% Fixture	79.0	0.0	79.0
Total	Lumens	25297.0	0.0	25297.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	436.6	1.7
10°-20°	1303.1	5.2
20°-30°	2209.0	8.7
30°-40°	3248.6	12.8
40°-50°	4326.0	17.1
50°-60°	5060.6	20.0
60°-70°	5089.7	20.1
70°-80°	3221.9	12.7
80°-90°	401.5	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°	25297.0	100.0
0°-180°	25297.0	100.0

Coefficient of Utilization



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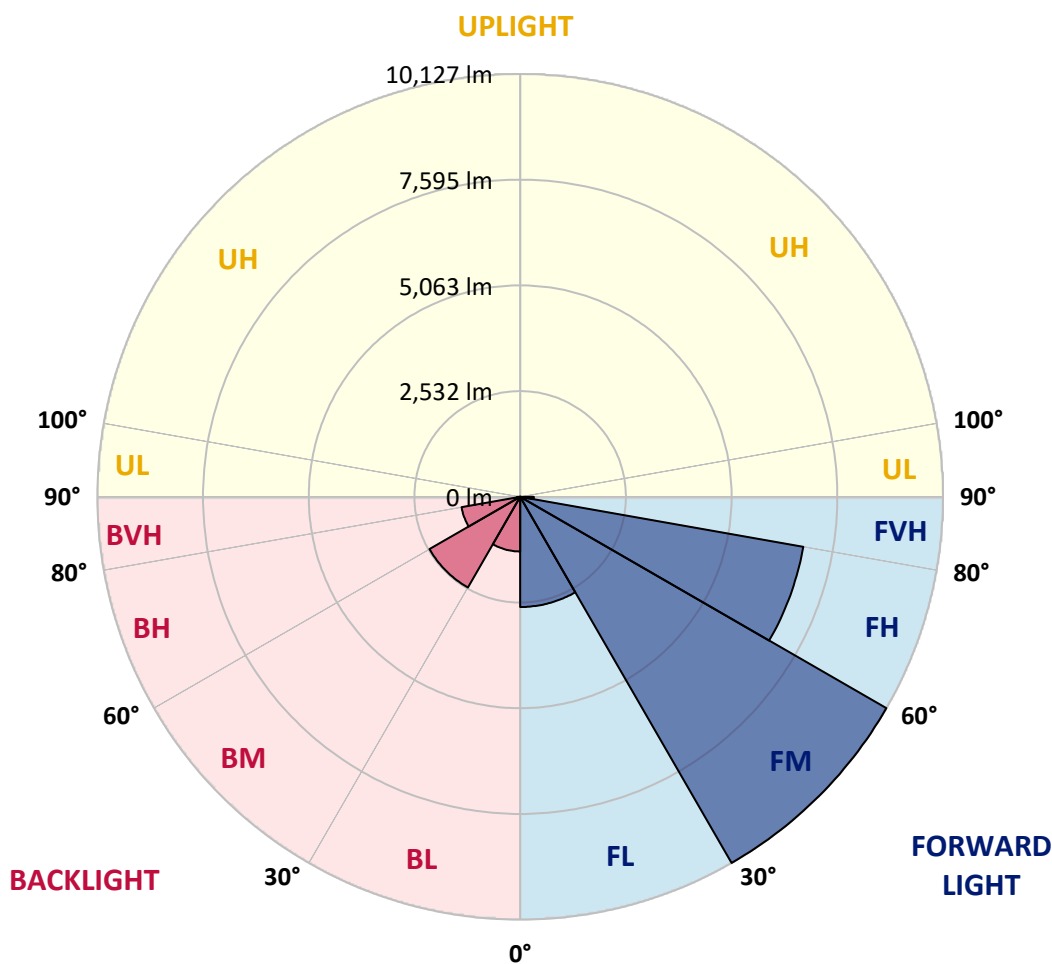
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2639.0	10.4			
FM (30°-60°)	10126.9	40.0			
FH (60°-80°)	6885.9	27.2			G3/7500
FVH (80°-90°)	325.6	1.3			G3/500
BL (0°-30°)	1309.7	5.2	B3/2500		
BM (30°-60°)	2508.3	9.9	B3/5000		
BH (60°-80°)	1425.8	5.6	B3/2500		G3/2500
BVH (80°-90°)	75.9	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°	4598.9	4598.9	4598.9	4598.9	4598.9	4598.9	4598.9	4598.9	4598.9	4598.9	4598.9
2.5°	4851.3	4893.8	4861.3	4848.8	4858.8	4808.8	4768.9	4711.4	4683.9	4663.9	4631.4
5°	5097.4	5167.4	5124.9	5098.7	5094.9	5003.7	4950.0	4871.3	4810.1	4756.4	4673.9
7.5°	5357.3	5398.5	5382.3	5352.3	5332.3	5221.1	5126.2	5015.0	4947.5	4876.3	4737.6
10°	5584.7	5634.7	5618.4	5564.7	5546.0	5432.3	5323.6	5172.4	5079.9	4991.2	4800.1
12.5°	5819.6	5875.8	5842.1	5788.3	5772.1	5657.2	5544.7	5361.1	5246.1	5146.2	4881.3
15°	6035.7	6086.9	6063.2	6002.0	5985.7	5888.3	5764.6	5593.4	5468.5	5336.1	4996.2
17.5°	6208.1	6259.4	6229.4	6200.6	6195.6	6099.4	6025.7	5850.8	5732.1	5552.2	5172.4
20°	6334.3	6386.8	6371.8	6385.5	6438.0	6366.8	6321.8	6174.4	6053.2	5858.3	5426.0
22.5°	6434.3	6501.7	6561.7	6589.2	6686.6	6681.6	6671.6	6584.2	6489.2	6286.8	5728.4
25°	6444.3	6521.7	6640.4	6769.1	6946.5	7031.5	7093.9	7080.2	6969.0	6769.1	6146.9
27.5°	6459.3	6539.2	6661.6	6882.8	7200.1	7398.8	7502.5	7566.2	7501.2	7367.5	6622.9
30°	6426.8	6509.2	6662.9	6945.3	7373.8	7742.4	7927.3	8163.4	8170.9	8058.4	7341.3
32.5°	6279.3	6388.0	6574.2	6952.8	7542.5	8100.9	8385.8	8839.3	8938.0	8854.3	8082.2
35°	6033.2	6131.9	6398.0	6886.5	7644.9	8399.5	8920.5	9627.7	9773.8	9768.8	8954.2
37.5°	5760.9	5860.8	6160.7	6730.4	7711.1	8665.6	9391.5	10409.8	10700.9	10639.6	9777.6
40°	5459.8	5564.7	5910.8	6534.2	7678.6	8903.0	9890.0	11168.1	11529.2	11536.7	10564.7
42.5°	5109.9	5196.1	5543.5	6263.1	7571.2	9077.9	10353.5	11966.5	12346.3	12325.1	11306.8
45°	4775.1	4865.1	5168.7	5843.3	7322.6	9175.4	10808.3	12774.8	13190.9	13123.4	12131.4
47.5°	4370.3	4499.0	4845.1	5491.0	6939.0	9167.9	11205.6	13601.9	14069.2	14014.2	12843.5
50°	3363.3	3439.5	4222.9	5127.4	6419.3	8993.0	11594.2	14414.0	15005.0	14897.5	13603.2
52.5°	3029.7	3098.4	3350.8	4691.4	5947.0	8614.4	11917.8	15343.5	15785.8	15702.1	14379.0
55°	2863.6	2901.0	3054.7	3869.3	5486.0	7999.7	12133.9	16169.4	16629.1	16444.2	15104.9
57.5°	2654.9	2701.1	2879.8	3304.6	4918.8	7056.5	12083.9	16914.0	17338.8	17055.2	15744.6
60°	2495.0	2530.0	2697.4	2974.8	4332.8	6079.4	11572.9	17644.9	17858.5	17578.7	16381.8
62.5°	2360.1	2380.1	2497.5	2761.1	3886.8	5366.1	10575.9	17742.3	18139.6	17937.2	16856.5
65°	2192.6	2197.6	2336.3	2542.5	3474.5	4937.5	9720.1	17242.6	17999.7	17932.2	17027.7
67.5°	1996.5	2006.5	2146.4	2303.8	2978.5	4481.5	8387.0	16974.0	17456.2	17413.7	16689.1
70°	1750.4	1770.4	1899.0	2019.0	2522.5	3934.3	6675.4	15912.0	16484.2	16421.7	15573.4
72.5°	1513.0	1501.7	1621.7	1740.4	2101.4	3284.6	5060.0	14084.2	15462.2	15402.3	14124.1
75°	1243.1	1235.6	1359.3	1471.8	1722.9	2653.7	3559.5	10416.0	13585.7	13770.6	12178.9
77.5°	765.9	772.1	843.3	918.3	1166.9	1982.8	2271.4	5794.6	9229.1	10944.5	9557.7
80°	554.7	554.7	607.2	652.2	772.1	1208.1	1130.7	2416.3	3373.3	5282.3	5960.8
82.5°	359.8	344.8	377.3	416.0	429.8	523.5	517.2	1211.9	1719.1	2069.0	2482.5
85°	187.4	207.4	124.9	176.2	186.2	173.7	178.7	568.5	763.4	978.3	1077.0
87.5°	28.7	22.5	30.0	41.2	47.5	40.0	35.0	66.2	102.4	136.2	161.2
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°	4598.9	4598.9	4598.9	4598.9	4598.9	4598.9	4598.9	4598.9	4598.9	4598.9	4598.9
2.5°	4610.2	4603.9	4546.5	4462.8	4394.0	4336.6	4299.1	4274.1	4301.6	4251.6	4245.4
5°	4622.7	4580.2	4455.3	4335.3	4242.9	4119.2	4035.5	3979.2	4001.7	3958.0	3940.5
7.5°	4656.4	4578.9	4406.5	4215.4	4040.5	3908.0	3779.3	3655.7	3636.9	3609.4	3610.7
10°	4686.4	4575.2	4350.3	4100.4	3896.8	3663.2	3508.2	3380.8	3352.1	3319.6	3303.3
12.5°	4733.9	4583.9	4280.3	3978.0	3705.6	3435.8	3268.4	3118.4	3089.7	3026.0	3012.2
15°	4828.8	4615.2	4211.6	3826.8	3490.7	3218.4	3002.2	2871.1	2818.6	2747.4	2746.1
17.5°	4952.5	4706.4	4176.6	3684.4	3308.3	3003.5	2774.9	2642.4	2553.7	2511.2	2500.0
20°	5128.7	4825.1	4175.4	3555.7	3118.4	2773.6	2511.2	2361.3	2286.4	2251.4	2230.1
22.5°	5399.8	5000.0	4197.9	3465.8	2927.3	2551.2	2290.1	2084.0	1960.3	1864.1	1877.8
25°	5737.1	5262.4	4249.1	3383.3	2761.1	2338.8	2011.5	1725.4	1504.2	1408.0	1415.5
27.5°	6165.6	5575.9	4381.5	3299.6	2572.5	2110.2	1647.9	1284.4	1116.9	1004.5	1013.2
30°	6714.1	5965.7	4555.2	3234.6	2397.5	1790.3	1240.6	947.0	799.6	707.1	698.4
32.5°	7370.0	6530.5	4745.1	3190.9	2206.4	1390.6	894.6	694.7	551.0	498.5	506.0
35°	8182.1	7165.1	5035.0	3127.2	1879.1	989.5	638.4	469.8	396.1	386.1	387.3
37.5°	8923.0	7814.8	5322.3	3019.7	1483.0	703.4	433.5	357.3	341.1	337.3	342.3
40°	9648.9	8407.0	5582.2	2863.6	1019.5	482.3	318.6	322.3	308.6	298.6	293.6
42.5°	10328.6	8978.0	5785.8	2576.2	697.1	318.6	282.4	293.6	291.1	271.1	262.4
45°	11061.9	9581.4	5898.3	2173.9	438.5	271.1	253.6	273.6	286.1	263.6	253.6
47.5°	11687.9	10169.9	5893.3	1665.4	297.4	256.1	238.6	256.1	271.1	254.9	246.1
50°	12410.0	10657.1	5733.4	1057.0	263.6	237.4	228.6	234.9	254.9	243.6	234.9
52.5°	13212.1	11324.3	5491.0	589.7	249.9	224.9	212.4	219.9	237.4	223.6	228.6
55°	13876.8	11877.8	4921.3	402.3	243.6	209.9	202.4	207.4	214.9	201.1	208.6
57.5°	14470.2	12335.0	4345.3	329.8	234.9	199.9	198.7	188.7	187.4	178.7	171.2
60°	15071.2	12696.1	3568.2	298.6	226.1	201.1	179.9	166.2	154.9	146.2	142.4
62.5°	15532.2	12946.0	2822.3	269.9	213.6	188.7	164.9	142.4	123.7	112.4	112.4
65°	15667.1	12834.8	1986.5	244.9	199.9	177.4	147.4	116.2	93.7	86.2	82.5
67.5°	15234.8	12196.4	1383.1	226.1	186.2	164.9	129.9	95.0	75.0	65.0	62.5
70°	14134.1	11128.2	815.8	199.9	168.7	143.7	118.7	77.5	61.2	51.2	48.7
72.5°	12507.5	9526.5	508.5	169.9	144.9	117.4	88.7	63.7	48.7	40.0	38.7
75°	10331.1	7426.3	332.3	131.2	114.9	92.5	67.5	51.2	42.5	33.7	31.2
77.5°	8284.6	5253.6	297.4	99.9	85.0	66.2	51.2	42.5	35.0	30.0	30.0
80°	4767.6	2998.5	243.6	68.7	52.5	50.0	40.0	35.0	32.5	28.7	27.5
82.5°	2342.6	1440.5	157.4	42.5	30.0	32.5	33.7	31.2	27.5	25.0	25.0
85°	807.1	479.8	63.7	27.5	20.0	20.0	21.2	22.5	21.2	20.0	20.0
87.5°	124.9	91.2	17.5	16.2	12.5	11.2	12.5	13.7	13.7	12.5	12.5
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)