

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: P509956

Luminaire Tested: **VERD-M-CA3-170-760-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P509956
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-CA3-170-760-U-T2-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5700K, 1060mA LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22283 lumens
Efficiency: N/A
Efficacy: 129.0 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

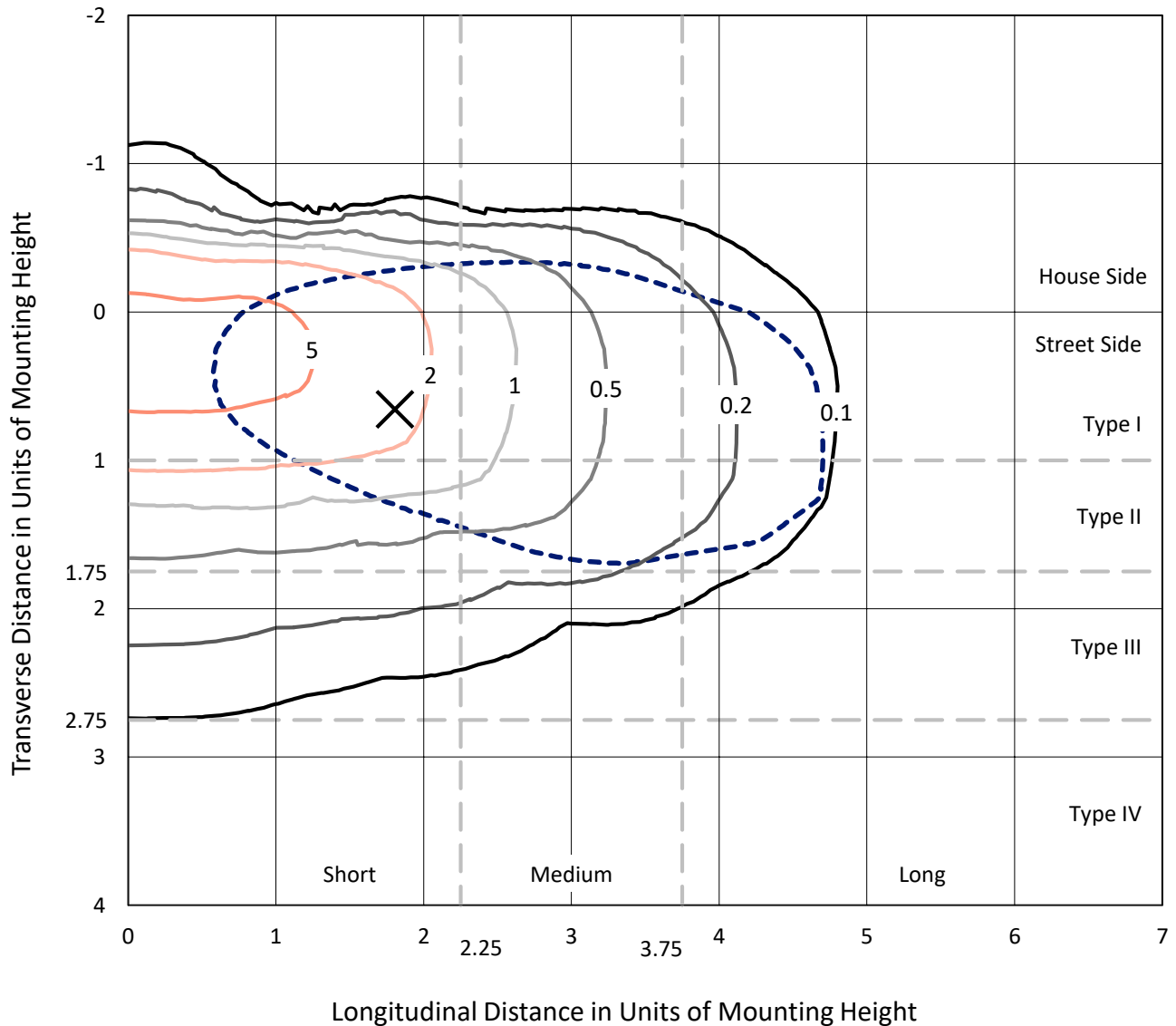
Input Watts (W): 172.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

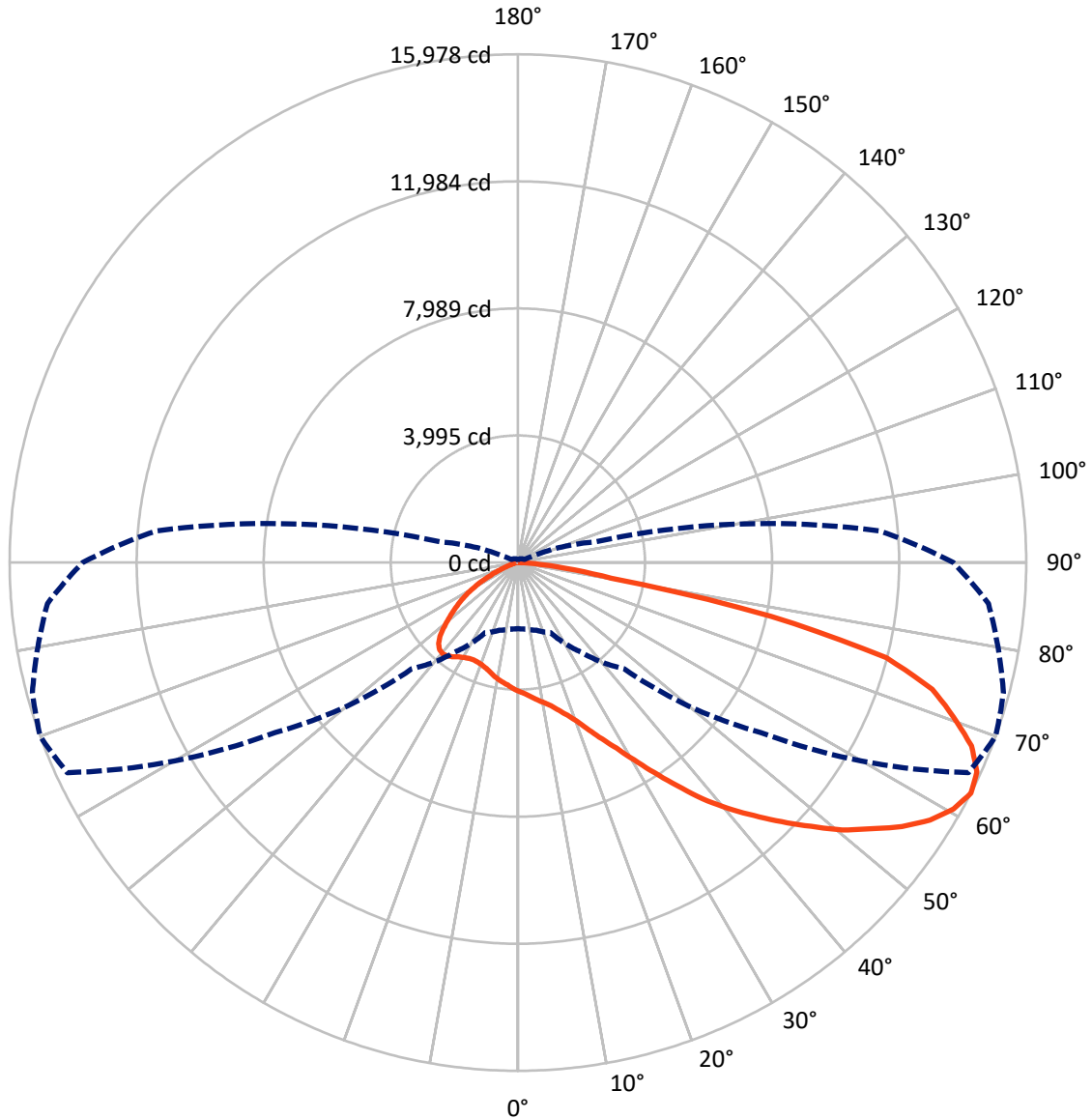
× Max cd
 - - - 1/2 Max cd



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
House Side	Lumens	4685.9	0.0	4685.9
	% Fixture	21.0	0.0	21.0
Street Side	Lumens	17597.1	0.0	17597.1
	% Fixture	79.0	0.0	79.0
Total	Lumens	22283.0	0.0	22283.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	384.6	1.7
10°-20°	1147.8	5.2
20°-30°	1945.9	8.7
30°-40°	2861.5	12.8
40°-50°	3810.6	17.1
50°-60°	4457.6	20.0
60°-70°	4483.3	20.1
70°-80°	2838.0	12.7
80°-90°	353.6	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°	22283.0	100.0
0°-180°	22283.0	100.0

Coefficient of Utilization



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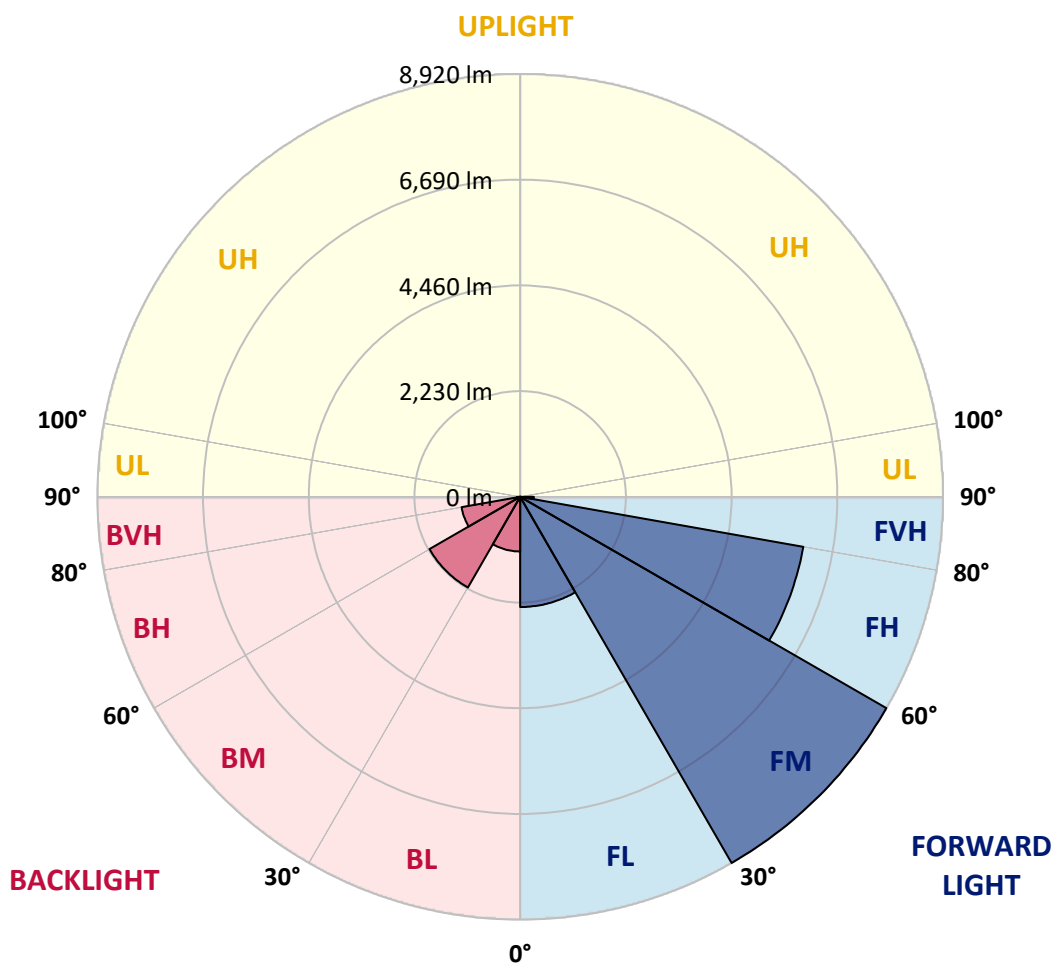
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2324.6	10.4			
FM (30°-60°)	8920.3	40.0			
FH (60°-80°)	6065.4	27.2			G3/7500
FVH (80°-90°)	286.8	1.3			G3/500
BL (0°-30°)	1153.7	5.2	B3/2500		
BM (30°-60°)	2209.5	9.9	B2/2500		
BH (60°-80°)	1255.9	5.6	B3/2500		G3/2500
BVH (80°-90°)	66.9	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°	4051.0	4051.0	4051.0	4051.0	4051.0	4051.0	4051.0	4051.0	4051.0	4051.0	4051.0
2.5°	4273.3	4310.7	4282.1	4271.1	4279.9	4235.9	4200.7	4150.0	4125.8	4108.2	4079.6
5°	4490.1	4551.7	4514.3	4491.2	4487.9	4407.6	4360.2	4290.9	4237.0	4189.7	4117.0
7.5°	4719.0	4755.3	4741.0	4714.6	4697.0	4599.1	4515.4	4417.5	4358.0	4295.3	4173.2
10°	4919.3	4963.3	4949.0	4901.7	4885.2	4785.0	4689.3	4556.1	4474.7	4396.6	4228.2
12.5°	5126.2	5175.7	5146.0	5098.7	5084.4	4983.1	4884.1	4722.3	4621.1	4533.0	4299.7
15°	5316.6	5361.7	5340.8	5286.9	5272.6	5186.7	5077.8	4927.0	4817.0	4700.3	4401.0
17.5°	5468.5	5513.6	5487.2	5461.9	5457.5	5372.7	5307.8	5153.7	5049.2	4890.7	4556.1
20°	5579.6	5625.8	5612.6	5624.7	5671.0	5608.2	5568.6	5438.7	5332.0	5160.3	4779.5
22.5°	5667.7	5727.1	5779.9	5804.1	5890.0	5885.6	5876.8	5799.7	5716.1	5537.8	5045.9
25°	5676.5	5744.7	5849.2	5962.6	6118.9	6193.7	6248.7	6236.6	6138.7	5962.6	5414.5
27.5°	5689.7	5760.1	5868.0	6062.7	6342.3	6517.3	6608.6	6664.7	6607.5	6489.7	5833.8
30°	5661.1	5733.7	5869.1	6117.8	6495.2	6819.9	6982.8	7190.8	7197.4	7098.3	6466.6
32.5°	5531.2	5626.9	5790.9	6124.4	6643.8	7135.7	7386.7	7786.1	7873.1	7799.4	7119.2
35°	5314.4	5401.3	5635.7	6066.0	6734.1	7398.8	7857.7	8480.6	8609.3	8604.9	7887.4
37.5°	5074.5	5162.5	5426.6	5928.5	6792.4	7633.2	8272.6	9169.5	9425.9	9372.0	8612.6
40°	4809.3	4901.7	5206.5	5755.7	6763.8	7842.3	8711.7	9837.5	10155.6	10162.2	9306.0
42.5°	4501.1	4577.0	4883.0	5516.9	6669.1	7996.3	9120.0	10540.7	10875.3	10856.6	9959.7
45°	4206.2	4285.4	4552.8	5147.1	6450.1	8082.2	9520.6	11252.8	11619.2	11559.8	10686.0
47.5°	3849.6	3963.0	4267.8	4836.8	6112.3	8075.6	9870.5	11981.3	12392.9	12344.5	11313.3
50°	2962.6	3029.7	3719.7	4516.5	5654.4	7921.5	10212.8	12696.7	13217.2	13122.5	11982.4
52.5°	2668.8	2729.3	2951.6	4132.4	5238.5	7588.1	10497.8	13515.4	13905.0	13831.3	12665.8
55°	2522.4	2555.4	2690.8	3408.3	4832.4	7046.6	10688.2	14242.9	14647.9	14485.0	13305.2
57.5°	2338.6	2379.3	2536.7	2910.9	4332.7	6215.7	10644.2	14898.8	15273.0	15023.1	13868.7
60°	2197.7	2228.5	2376.0	2620.3	3816.6	5355.1	10194.1	15542.6	15730.8	15484.3	14430.0
62.5°	2078.9	2096.5	2199.9	2432.1	3423.7	4726.7	9315.9	15628.4	15978.4	15800.1	14848.2
65°	1931.4	1935.8	2058.0	2239.5	3060.5	4349.2	8562.0	15188.2	15855.1	15795.7	14998.9
67.5°	1758.6	1767.4	1890.7	2029.4	2623.6	3947.6	7387.8	14951.6	15376.4	15339.0	14700.7
70°	1541.8	1559.4	1672.8	1778.4	2221.9	3465.5	5880.1	14016.2	14520.2	14465.2	13717.9
72.5°	1332.7	1322.8	1428.5	1533.0	1851.1	2893.3	4457.1	12406.1	13620.0	13567.2	12441.3
75°	1095.0	1088.4	1197.4	1296.4	1517.6	2337.5	3135.4	9175.0	11967.0	12129.9	10727.8
77.5°	674.6	680.1	742.8	808.9	1027.9	1746.5	2000.7	5104.2	8129.5	9640.5	8418.9
80°	488.6	488.6	534.9	574.5	680.1	1064.2	996.0	2128.4	2971.4	4653.0	5250.6
82.5°	316.9	303.7	332.4	366.5	378.6	461.1	455.6	1067.5	1514.3	1822.5	2186.7
85°	165.1	182.7	110.1	155.2	164.0	153.0	157.4	500.7	672.4	861.7	948.6
87.5°	25.3	19.8	26.4	36.3	41.8	35.2	30.8	58.3	90.2	120.0	142.0
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°	4051.0	4051.0	4051.0	4051.0	4051.0	4051.0	4051.0	4051.0	4051.0	4051.0	4051.0
2.5°	4060.9	4055.4	4004.8	3931.0	3870.5	3819.9	3786.9	3764.9	3789.1	3745.1	3739.6
5°	4071.9	4034.5	3924.4	3818.8	3737.4	3628.4	3554.7	3505.1	3525.0	3486.4	3471.0
7.5°	4101.6	4033.4	3881.5	3713.1	3559.1	3442.4	3329.1	3220.1	3203.6	3179.4	3180.5
10°	4128.0	4030.1	3832.0	3611.9	3432.5	3226.7	3090.2	2978.0	2952.7	2924.1	2909.8
12.5°	4169.9	4037.8	3770.4	3504.0	3264.1	3026.4	2878.9	2746.9	2721.6	2665.4	2653.3
15°	4253.5	4065.3	3709.8	3370.9	3074.8	2834.9	2644.5	2529.0	2482.8	2420.0	2418.9
17.5°	4362.4	4145.6	3679.0	3245.4	2914.2	2645.6	2444.2	2327.6	2249.5	2212.0	2202.1
20°	4517.6	4250.2	3677.9	3132.1	2746.9	2443.1	2212.0	2080.0	2013.9	1983.1	1964.4
22.5°	4756.4	4404.3	3697.7	3052.8	2578.5	2247.3	2017.2	1835.7	1726.7	1642.0	1654.1
25°	5053.6	4635.4	3742.9	2980.2	2432.1	2060.2	1771.8	1519.8	1325.0	1240.3	1246.9
27.5°	5431.0	4911.6	3859.5	2906.5	2266.0	1858.8	1451.6	1131.3	983.9	884.8	892.5
30°	5914.2	5255.0	4012.5	2849.2	2111.9	1577.0	1092.8	834.2	704.3	622.9	615.2
32.5°	6491.9	5752.4	4179.8	2810.7	1943.5	1224.9	788.0	611.9	485.3	439.1	445.7
35°	7207.3	6311.5	4435.1	2754.6	1655.2	871.6	562.4	413.8	348.9	340.1	341.2
37.5°	7859.9	6883.7	4688.2	2659.9	1306.3	619.6	381.9	314.7	300.4	297.1	301.5
40°	8499.3	7405.4	4917.1	2522.4	898.0	424.8	280.6	283.9	271.8	263.0	258.6
42.5°	9098.0	7908.3	5096.5	2269.3	614.1	280.6	248.7	258.6	256.4	238.8	231.1
45°	9744.0	8439.9	5195.5	1914.9	386.3	238.8	223.4	241.0	252.0	232.2	223.4
47.5°	10295.3	8958.2	5191.1	1467.0	261.9	225.6	210.2	225.6	238.8	224.5	216.8
50°	10931.4	9387.4	5050.3	931.0	232.2	209.1	201.4	206.9	224.5	214.6	206.9
52.5°	11638.0	9975.1	4836.8	519.4	220.1	198.1	187.1	193.7	209.1	197.0	201.4
55°	12223.4	10462.6	4334.9	354.4	214.6	184.9	178.3	182.7	189.3	177.2	183.8
57.5°	12746.2	10865.4	3827.6	290.5	206.9	176.1	175.0	166.2	165.1	157.4	150.8
60°	13275.5	11183.4	3143.1	263.0	199.2	177.2	158.5	146.4	136.5	128.8	125.5
62.5°	13681.6	11403.5	2486.1	237.7	188.2	166.2	145.3	125.5	109.0	99.0	99.0
65°	13800.5	11305.6	1749.8	215.7	176.1	156.3	129.9	102.3	82.5	75.9	72.6
67.5°	13419.7	10743.2	1218.3	199.2	164.0	145.3	114.5	83.6	66.0	57.2	55.0
70°	12450.1	9802.3	718.6	176.1	148.6	126.6	104.5	68.2	53.9	45.1	42.9
72.5°	11017.3	8391.4	447.9	149.7	127.7	103.4	78.1	56.1	42.9	35.2	34.1
75°	9100.2	6541.5	292.7	115.6	101.2	81.4	59.4	45.1	37.4	29.7	27.5
77.5°	7297.5	4627.7	261.9	88.0	74.8	58.3	45.1	37.4	30.8	26.4	26.4
80°	4199.6	2641.2	214.6	60.5	46.2	44.0	35.2	30.8	28.6	25.3	24.2
82.5°	2063.5	1268.9	138.7	37.4	26.4	28.6	29.7	27.5	24.2	22.0	22.0
85°	710.9	422.6	56.1	24.2	17.6	17.6	18.7	19.8	18.7	17.6	17.6
87.5°	110.1	80.3	15.4	14.3	11.0	9.9	11.0	12.1	12.1	11.0	11.0
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)