

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: P510184

Luminaire Tested: **VERD-M-CA4-220-740-U-T4-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510184  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VERD-M-CA4-220-740-U-T4-HSS  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(4) 70 CRI, 4000K, 1000mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28058 lumens  
Efficiency: N/A  
Efficacy: 126.1 lumens/watt  
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

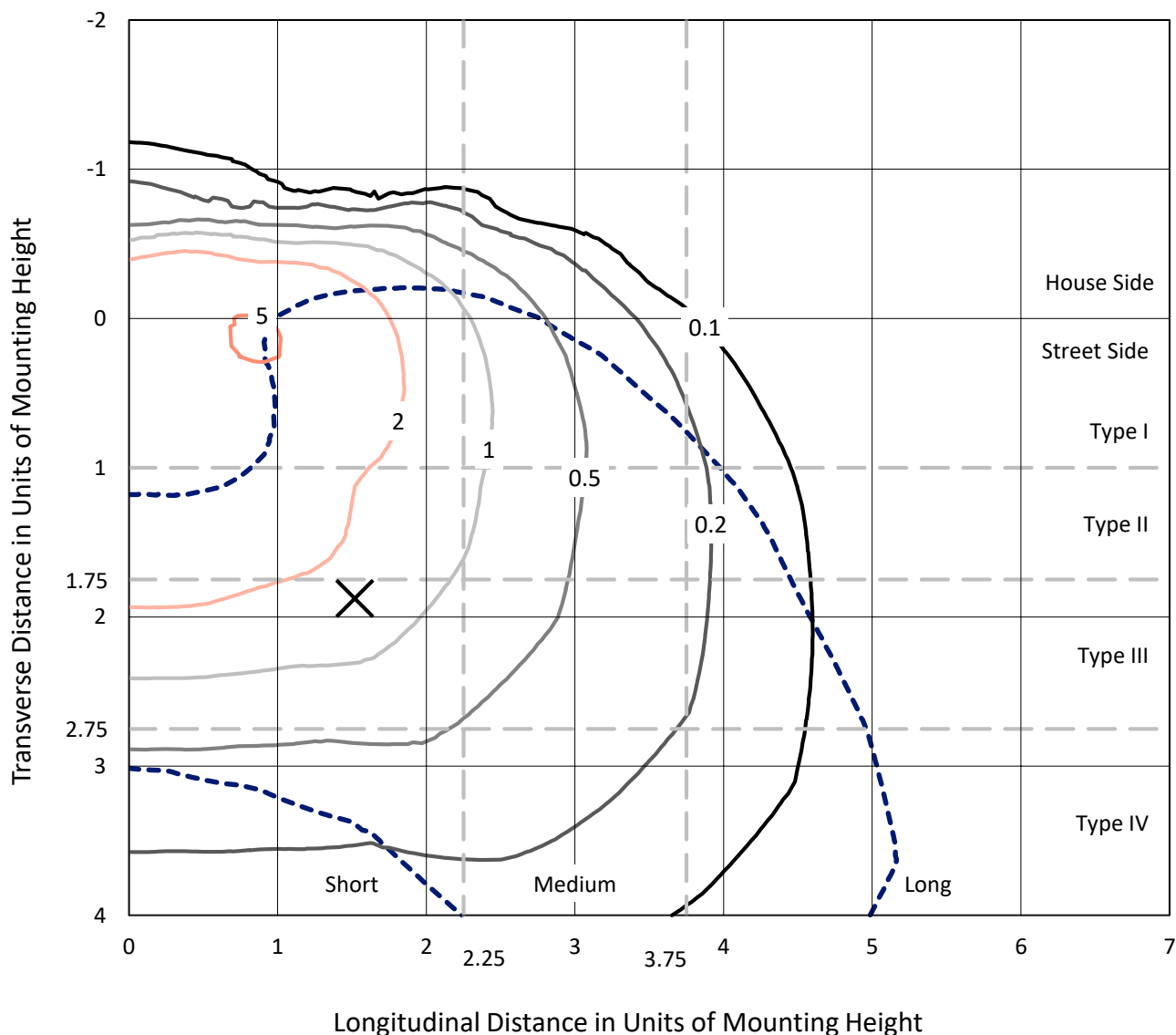
Input Watts (W): 222.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

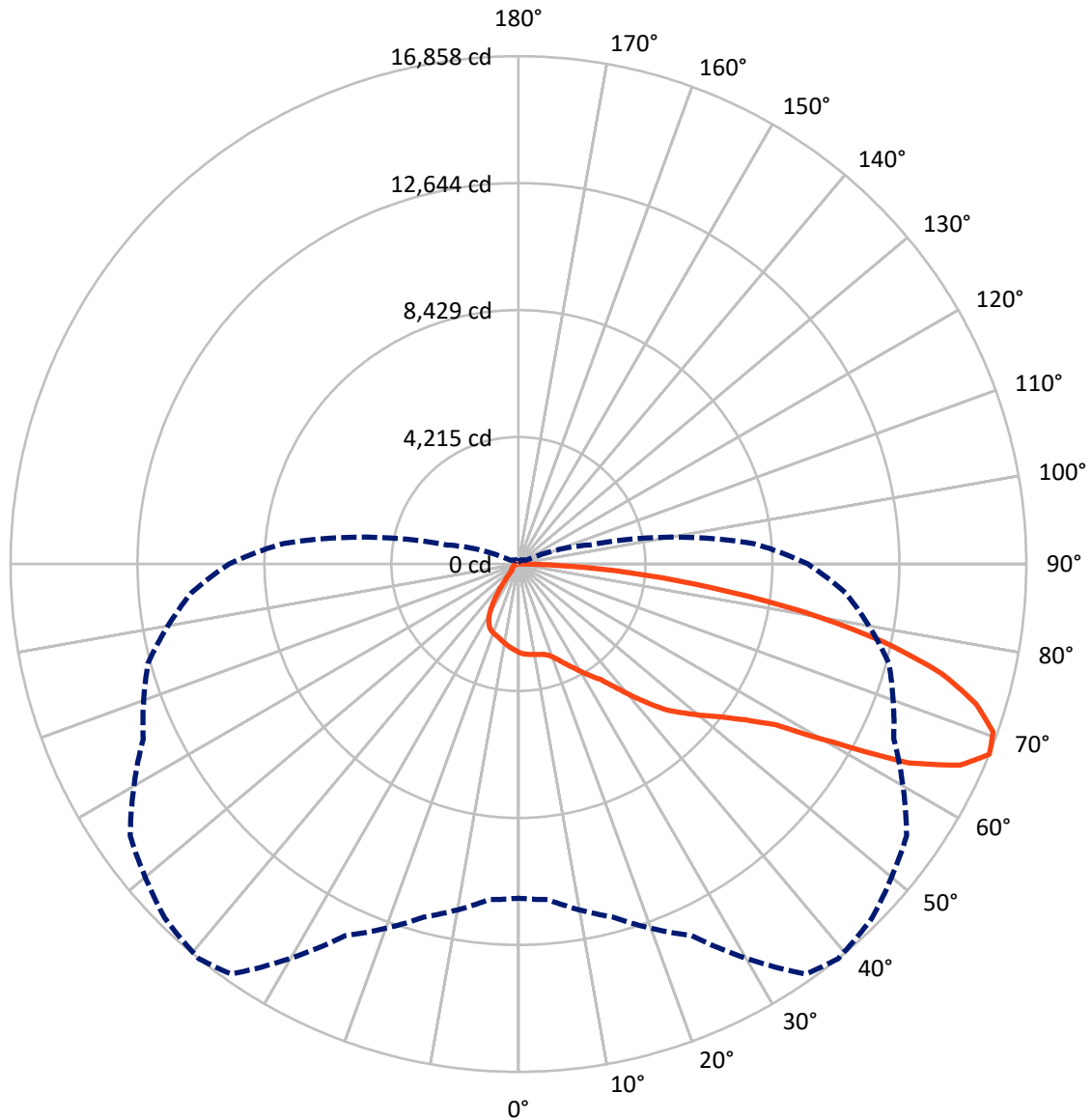
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4505.4	0.0	4505.4
	% Fixture	16.1	0.0	16.1
<b>Street Side</b>	Lumens	23552.6	0.0	23552.6
	% Fixture	83.9	0.0	83.9
<b>Total</b>	Lumens	28058.0	0.0	28058.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	277.4	1.0
10°-20°	825.5	2.9
20°-30°	1462.5	5.2
30°-40°	2342.5	8.3
40°-50°	3757.9	13.4
50°-60°	5493.0	19.6
60°-70°	7319.7	26.1
70°-80°	5492.8	19.6
80°-90°	1086.8	3.9
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°	28058.0	100.0
0°-180°	28058.0	100.0

**Coefficient of Utilization**



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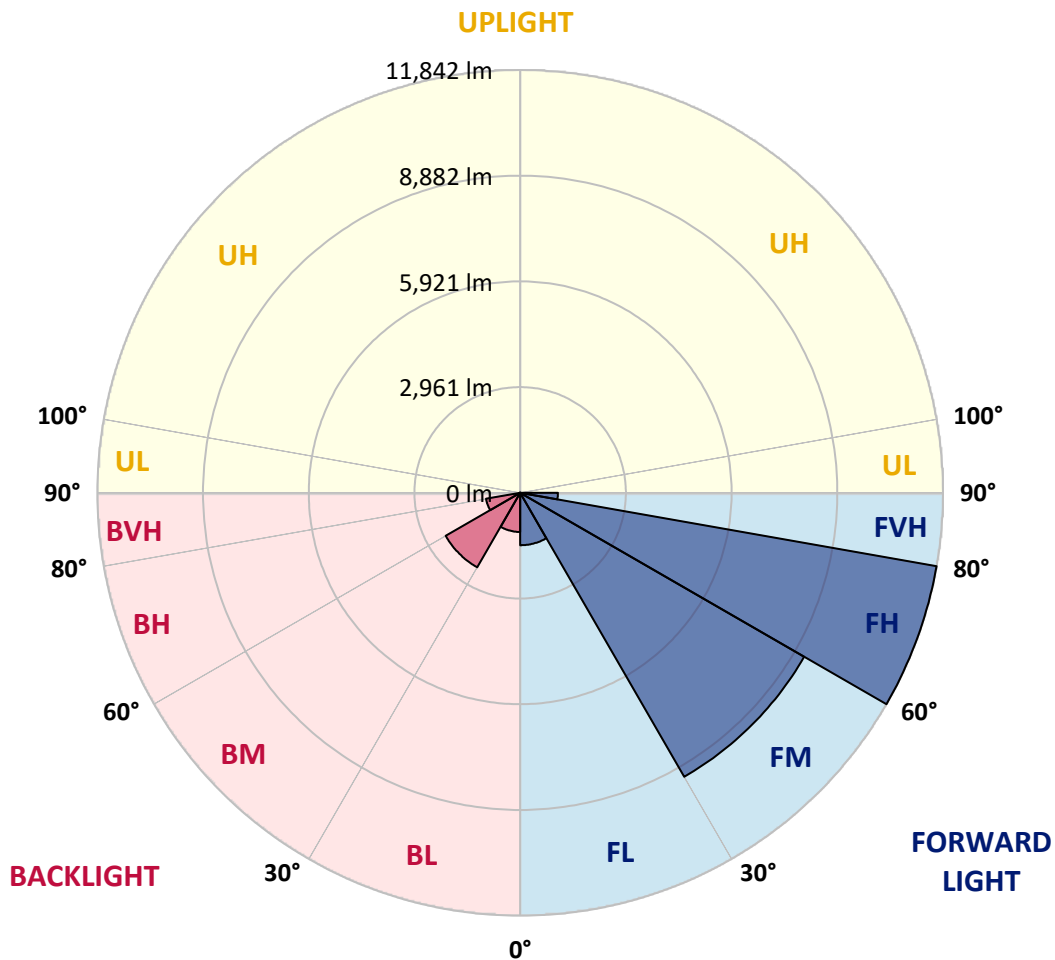
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1468.3	5.2			
FM (30°-60°)	9183.6	32.7			
FH (60°-80°)	11842.3	42.2			G4/12000
FVH (80°-90°)	1058.3	3.8			G5
BL (0°-30°)	1097.1	3.9	B3/2500		
BM (30°-60°)	2409.7	8.6	B2/2500		
BH (60°-80°)	970.1	3.5	B2/1000		G2/1000
BVH (80°-90°)	28.5	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0
2.5°	2940.8	2980.3	2980.3	2969.0	2976.0	2981.7	2939.4	2950.7	2946.4	2945.0	2953.5
5°	2963.3	3007.1	3004.2	2990.1	2995.8	3007.1	2967.6	2984.5	2978.9	2964.8	2967.6
7.5°	2963.3	3000.0	3008.5	2993.0	3019.7	3033.8	2991.5	3007.1	3014.1	3004.2	2994.4
10°	2952.1	2984.5	2995.8	2993.0	3028.2	3050.8	3009.9	3053.6	3059.2	3059.2	3043.7
12.5°	2947.8	2984.5	3000.0	3012.7	3053.6	3077.5	3053.6	3095.9	3124.1	3122.7	3112.8
15°	2950.7	2991.5	3015.5	3036.7	3080.4	3110.0	3100.1	3164.9	3198.8	3208.6	3208.6
17.5°	3021.1	3070.5	3081.8	3104.3	3133.9	3179.0	3166.4	3249.5	3303.1	3320.0	3344.0
20°	3218.5	3256.6	3270.7	3259.4	3272.1	3300.3	3274.9	3355.3	3435.6	3480.7	3520.2
22.5°	3470.9	3499.1	3486.4	3475.1	3468.0	3475.1	3444.1	3497.7	3587.9	3652.7	3720.4
25°	3662.6	3724.6	3714.8	3683.7	3673.9	3682.3	3642.9	3709.1	3792.3	3860.0	3961.5
27.5°	3895.2	3933.3	3906.5	3895.2	3902.3	3900.8	3876.9	3940.3	4016.5	4101.0	4250.5
30°	4147.6	4180.0	4153.2	4141.9	4154.6	4163.1	4136.3	4247.7	4328.0	4419.6	4612.8
32.5°	4562.0	4639.6	4566.3	4419.6	4422.5	4435.2	4438.0	4587.4	4734.0	4805.9	5061.1
35°	5152.7	5214.8	5117.5	4939.9	4718.5	4710.1	4732.6	4955.4	5250.0	5577.1	5875.9
37.5°	5704.0	5794.2	5706.8	5499.5	5230.3	5165.4	5048.4	5313.4	5777.3	6480.7	6852.9
40°	6365.1	6432.8	6259.4	6079.0	5809.7	5718.0	5530.5	5699.7	6335.5	7423.9	7680.5
42.5°	6896.6	6937.5	6793.7	6604.8	6370.8	6301.7	6108.6	6124.1	6931.9	8250.0	8414.9
45°	7388.6	7432.3	7313.9	7153.2	7005.2	6922.0	6781.0	6857.1	7631.1	9121.2	9021.2
47.5°	7762.2	7805.9	7711.5	7597.3	7443.6	7387.2	7390.0	7663.5	8486.8	9817.7	9565.3
50°	8374.1	8357.1	8110.4	7986.4	7866.5	7896.2	7927.2	8316.3	9349.6	10415.4	10068.6
52.5°	9441.3	9358.1	8849.2	8524.9	8376.9	8427.6	8478.4	8995.8	10329.4	10961.0	10454.9
55°	10648.0	10563.4	10130.6	9437.0	9045.1	9126.9	9083.2	9668.2	11152.7	11485.4	10773.5
57.5°	11544.7	11684.2	11519.3	11141.5	10160.3	10053.1	9955.8	10347.8	11818.1	12009.9	11079.4
60°	12324.3	12518.8	12813.4	12710.5	12293.2	12014.1	11121.7	11141.5	12458.2	12373.6	11200.7
62.5°	13085.5	13199.7	13704.4	13815.8	14333.2	14533.4	13626.9	12167.8	13077.1	12625.9	11282.4
65°	12324.3	12470.9	13349.2	14159.8	15831.8	16099.6	15781.0	14025.9	13532.4	12775.4	11188.0
67.5°	11093.5	11182.3	12131.1	13605.7	16615.6	16858.1	16610.0	15731.7	13745.3	12730.3	10894.7
70°	9485.0	9624.5	10556.4	12532.9	16587.4	16717.1	16501.4	15937.5	13665.0	12470.9	10154.6
72.5°	7844.0	7922.9	8712.4	10684.7	15776.8	15885.4	15771.2	15621.7	13394.3	11747.7	8732.1
75°	5895.7	5912.6	6721.8	8437.5	13949.7	14516.5	14656.0	15077.5	12358.1	10070.0	6458.2
77.5°	3953.0	4120.8	4897.6	6448.3	11451.6	12358.1	13019.3	13326.6	10325.2	7515.5	3434.2
80°	2121.7	2164.0	3001.4	4576.1	8702.5	9569.6	10196.9	10202.5	7220.9	3723.2	766.9
82.5°	982.6	941.7	1511.3	2895.7	6028.2	6414.5	6834.6	5725.1	2891.4	635.8	196.0
85°	435.6	459.6	683.7	1411.2	3345.4	3733.1	3679.5	2534.8	507.5	172.0	119.8
87.5°	162.1	170.6	265.0	569.5	1194.1	1302.6	1171.5	487.8	66.3	60.6	36.7
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°	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0	2938.0
2.5°	2943.6	2943.6	2940.8	2902.7	2894.3	2875.9	2860.4	2871.7	2859.0	2867.5	2859.0
5°	2956.3	2949.3	2932.3	2887.2	2866.1	2825.2	2794.2	2801.2	2784.3	2784.3	2782.9
7.5°	2985.9	2971.8	2942.2	2870.3	2830.8	2771.6	2723.7	2708.2	2691.3	2671.5	2668.7
10°	3033.8	3014.1	2974.6	2875.9	2799.8	2720.9	2637.7	2605.3	2563.0	2532.0	2526.3
12.5°	3100.1	3070.5	3016.9	2897.1	2797.0	2671.5	2560.2	2496.7	2446.0	2400.8	2391.0
15°	3196.0	3166.4	3102.9	2939.4	2798.4	2625.0	2478.4	2372.7	2285.2	2243.0	2244.4
17.5°	3335.5	3314.4	3217.1	3028.2	2825.2	2601.0	2410.7	2243.0	2107.6	2037.1	2027.3
20°	3514.6	3500.5	3382.1	3145.2	2887.2	2605.3	2337.4	2104.8	1906.0	1752.4	1718.5
22.5°	3723.2	3702.1	3556.9	3246.7	2935.2	2594.0	2257.1	1952.5	1653.7	1453.5	1414.0
25°	3955.8	3944.6	3717.6	3335.5	2940.8	2546.1	2141.4	1755.2	1380.2	1165.9	1132.0
27.5°	4253.3	4187.0	3862.8	3383.5	2928.1	2451.6	1976.5	1484.5	1096.8	948.8	912.1
30°	4579.0	4445.0	4003.8	3420.1	2866.1	2300.8	1741.1	1171.5	816.3	685.2	666.8
32.5°	4939.9	4739.7	4136.3	3417.3	2756.1	2068.1	1435.2	813.4	551.2	497.7	479.3
35°	5592.6	5252.8	4295.6	3370.8	2571.4	1791.8	1013.6	530.1	408.8	376.4	372.2
37.5°	6499.1	5922.5	4509.9	3282.0	2333.2	1470.4	661.2	362.3	349.6	351.0	349.6
40°	7242.0	6669.6	4807.3	3148.0	2032.9	1050.3	396.1	322.8	329.9	334.1	335.5
42.5°	7969.5	7278.7	5175.3	2980.3	1718.5	682.3	321.4	308.7	303.1	310.2	313.0
45°	8554.5	7810.2	5522.1	2784.3	1350.6	403.2	311.6	286.2	276.3	279.1	283.4
47.5°	9022.6	8233.1	5730.7	2555.9	986.8	304.5	303.1	266.4	252.3	249.5	248.1
50°	9463.8	8595.4	5864.7	2279.6	628.8	293.2	280.5	243.9	227.0	224.2	224.2
52.5°	9764.1	8832.2	5909.8	1952.5	375.0	286.2	265.0	225.6	203.0	207.2	210.1
55°	10057.3	9071.9	5816.7	1526.8	287.6	267.9	248.1	203.0	184.7	201.6	207.2
57.5°	10196.9	9107.1	5606.7	1061.6	279.1	242.5	224.2	181.9	167.8	177.6	177.6
60°	10309.7	9083.2	5313.4	672.5	272.1	225.6	204.4	164.9	148.0	142.4	138.2
62.5°	10235.0	8987.3	4724.2	438.4	252.3	205.8	186.1	152.3	128.3	112.8	111.4
65°	10075.7	8649.0	3771.1	345.4	234.0	196.0	169.2	136.7	112.8	94.5	93.0
67.5°	9606.2	7825.7	2440.3	286.2	224.2	188.9	156.5	126.9	100.1	81.8	80.4
70°	8481.2	6321.4	748.6	256.6	232.6	181.9	153.7	115.6	88.8	71.9	69.1
72.5°	6706.3	4223.7	277.7	212.9	200.2	174.8	149.4	104.3	76.1	60.6	57.8
75°	4319.6	1380.2	235.4	164.9	170.6	166.4	138.2	95.9	64.8	49.3	47.9
77.5°	1223.7	289.0	214.3	121.2	150.8	160.7	121.2	80.4	57.8	42.3	40.9
80°	256.6	205.8	196.0	86.0	112.8	104.3	81.8	62.0	55.0	36.7	36.7
82.5°	167.8	163.5	167.8	59.2	74.7	76.1	64.8	53.6	47.9	33.8	33.8
85°	118.4	149.4	80.4	42.3	35.2	32.4	38.1	46.5	42.3	28.2	28.2
87.5°	40.9	24.0	16.9	16.9	15.5	15.5	18.3	21.1	22.6	22.6	21.1
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)