

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: P510049

Luminaire Tested: **VERD-M-CA4-190-750-U-T4**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510049  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VERD-M-CA4-190-750-U-T4  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(4) 70 CRI, 5000K, 870mA LEDS AND TYPE IV OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28111 lumens  
Efficiency: N/A  
Efficacy: 145.6 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

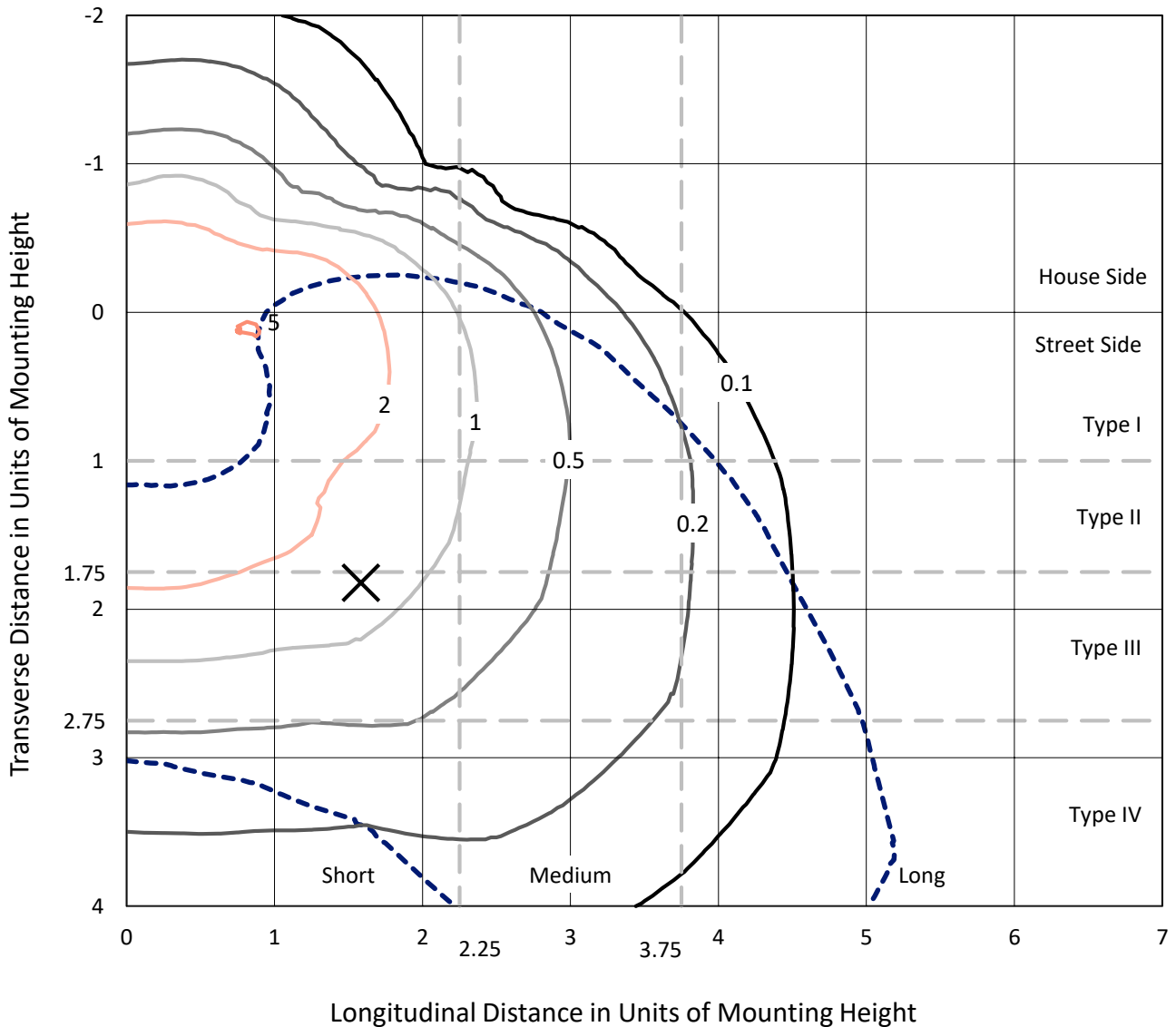
Input Watts (W): 193.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

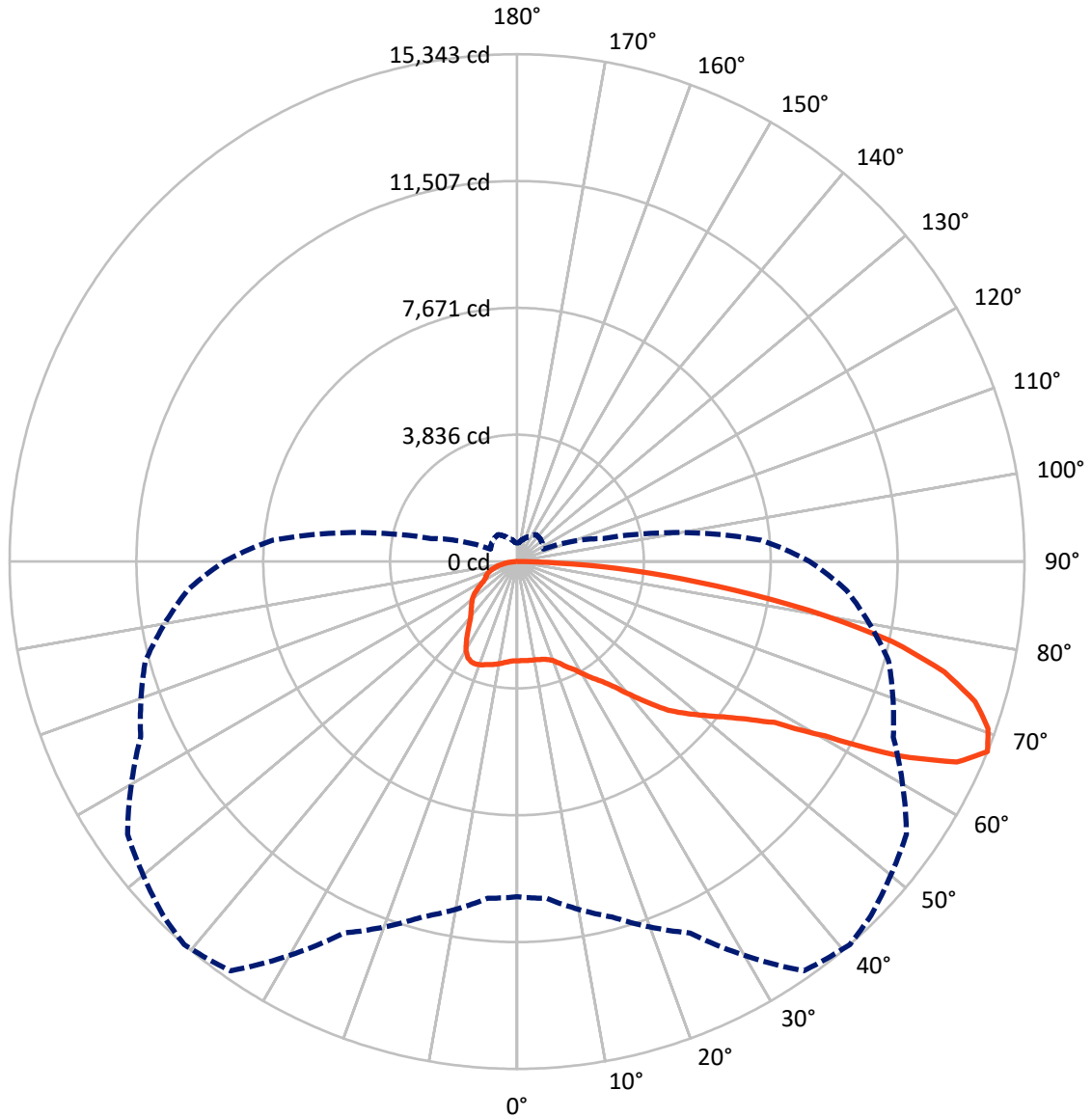
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 41-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6361.4	0.0	6361.4
	% Fixture	22.6	0.0	22.6
<b>Street Side</b>	Lumens	21749.6	0.0	21749.6
	% Fixture	77.4	0.0	77.4
<b>Total</b>	Lumens	28111.0	0.0	28111.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	290.0	1.0
10°-20°	899.5	3.2
20°-30°	1608.5	5.7
30°-40°	2522.2	9.0
40°-50°	3911.2	13.9
50°-60°	5513.8	19.6
60°-70°	7028.7	25.0
70°-80°	5259.8	18.7
80°-90°	1077.3	3.8
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°	28111.0	100.0
0°-180°	28111.0	100.0

**Coefficient of Utilization**



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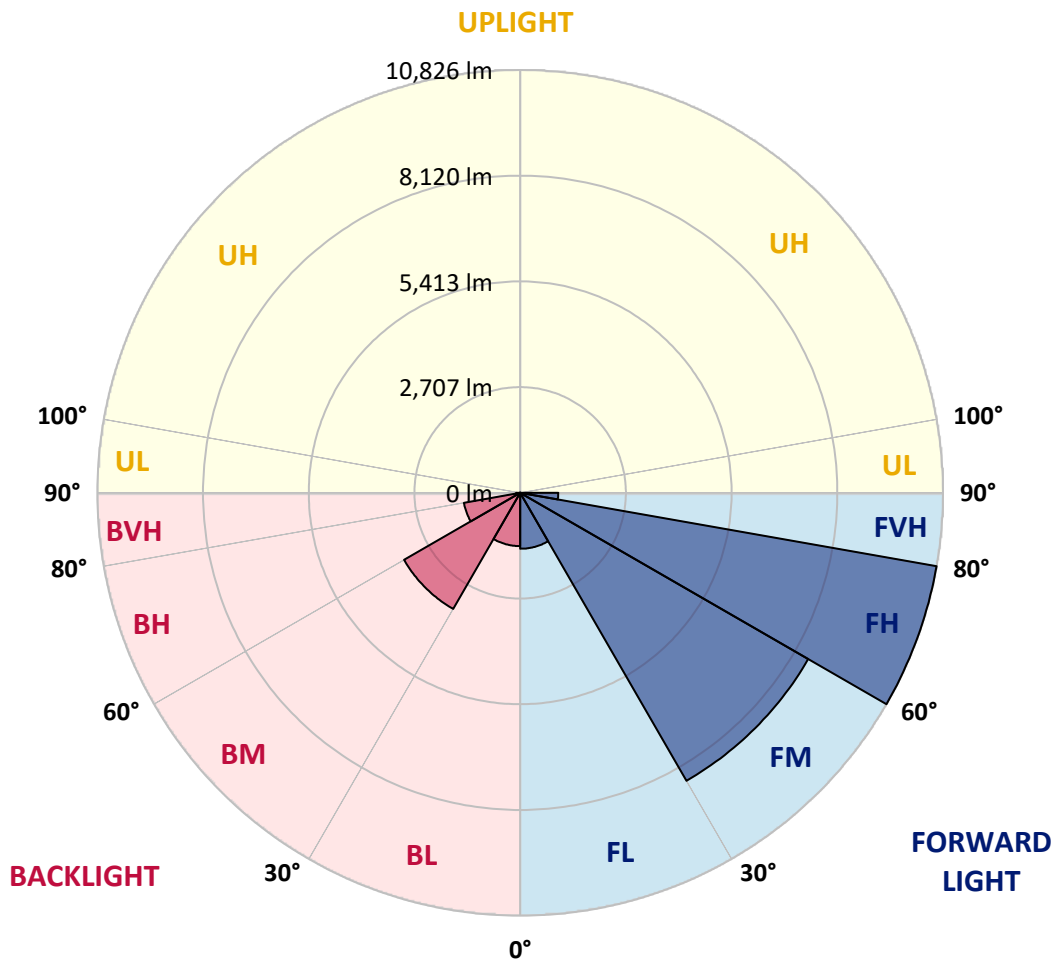
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1432.3	5.1			
FM	(30°-60°)	8514.6	30.3			
FH	(60°-80°)	10826.1	38.5			G4/12000
FVH	(80°-90°)	976.6	3.5			G5
BL	(0°-30°)	1365.8	4.9	B3/2500		
BM	(30°-60°)	3432.5	12.2	B3/5000		
BH	(60°-80°)	1462.5	5.2	B3/2500		G3/2500
BVH	(80°-90°)	100.6	0.4			G2/225
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°	41°	45°	55°	65°	75°	85°
0°	3001.3	3001.3	3001.3	3001.3	3001.3	3001.3	3001.3	3001.3	3001.3	3001.3	3001.3
2.5°	2964.4	2998.8	2993.7	2987.3	2997.5	2998.8	2969.5	2981.0	2987.3	2997.5	3014.1
5°	2972.1	3006.4	3003.9	2992.4	3000.1	3003.9	2977.2	2997.5	2997.5	3001.3	3020.4
7.5°	2955.5	2988.6	2988.6	2984.8	3001.3	3016.6	2992.4	3010.2	3020.4	3030.6	3043.3
10°	2940.3	2968.3	2978.4	2975.9	3014.1	3017.9	3001.3	3044.6	3061.1	3071.3	3086.6
12.5°	2923.7	2958.1	2972.1	2986.1	3026.8	3040.8	3031.9	3076.4	3110.8	3128.6	3145.1
15°	2916.1	2954.3	2977.2	2997.5	3042.0	3067.5	3067.5	3134.9	3175.6	3198.5	3227.8
17.5°	2969.5	3009.0	3026.8	3043.3	3084.0	3118.4	3115.8	3194.7	3254.5	3290.1	3343.6
20°	3101.8	3148.9	3159.1	3165.5	3190.9	3203.6	3199.8	3285.1	3367.8	3435.2	3495.0
22.5°	3332.1	3360.1	3365.2	3339.8	3346.1	3356.3	3349.9	3397.0	3491.2	3570.0	3676.9
25°	3520.4	3565.0	3552.2	3515.3	3520.4	3534.4	3515.3	3587.9	3655.3	3758.3	3866.5
27.5°	3718.9	3752.0	3738.0	3715.1	3710.0	3699.8	3696.0	3788.9	3888.1	3969.5	4129.9
30°	3960.6	3978.5	3937.7	3927.6	3936.5	3942.8	3918.7	4037.0	4127.3	4244.4	4460.7
32.5°	4367.8	4384.3	4325.8	4169.3	4173.1	4202.4	4182.0	4330.9	4501.4	4643.9	4864.0
35°	4886.9	4886.9	4841.1	4621.0	4454.3	4455.6	4460.7	4670.6	4987.4	5306.7	5533.2
37.5°	5412.3	5430.1	5343.6	5142.6	4931.4	4819.4	4725.3	4995.0	5409.8	6122.3	6459.4
40°	5959.4	5987.4	5857.6	5673.1	5430.1	5302.9	5193.5	5357.6	5917.4	6930.2	7197.3
42.5°	6437.8	6477.2	6343.6	6149.0	5979.8	5836.0	5670.6	5736.8	6476.0	7697.4	7848.8
45°	6883.1	6904.7	6791.5	6631.2	6491.2	6412.3	6296.6	6372.9	7114.6	8448.0	8420.0
47.5°	7211.3	7243.2	7140.1	7053.6	6909.8	6862.7	6861.5	7071.4	7833.5	9046.0	8916.2
50°	7744.4	7720.3	7488.7	7383.1	7295.3	7310.6	7347.5	7710.1	8678.3	9622.3	9333.5
52.5°	8638.9	8594.3	8080.3	7860.2	7752.1	7801.7	7820.8	8289.0	9530.7	10119.8	9678.3
55°	9795.4	9652.9	9278.8	8688.5	8348.8	8395.8	8374.2	8911.1	10212.7	10594.4	9934.0
57.5°	10560.0	10693.6	10514.2	10177.1	9333.5	9179.6	9128.7	9526.9	10843.7	11048.6	10198.7
60°	11224.1	11445.5	11730.5	11514.2	11286.5	10710.1	10235.6	10226.7	11399.7	11351.4	10305.6
62.5°	11925.2	12042.2	12481.2	12614.8	13037.2	12931.6	12295.4	11112.2	11955.7	11572.8	10367.9
65°	11216.5	11373.0	12172.0	12901.0	14464.7	14617.3	14410.0	12758.5	12341.2	11686.0	10278.8
67.5°	10137.6	10224.1	11128.7	12393.4	15111.0	15342.6	15133.9	14374.3	12555.0	11636.4	10004.0
70°	8754.6	8856.4	9720.3	11445.5	15077.9	15108.5	15027.0	14523.2	12469.7	11403.5	9311.9
72.5°	7098.1	7226.6	7986.2	9777.6	14355.3	14487.6	14359.1	14228.0	12230.5	10752.1	8119.8
75°	5370.3	5540.8	6219.0	7795.3	12686.0	13352.7	13369.2	13773.8	11301.8	9217.7	5893.3
77.5°	3662.9	3825.8	4468.3	5939.1	10530.8	11595.7	11873.0	12315.8	9442.9	6811.8	3215.1
80°	2062.4	2047.1	2862.7	4243.1	8032.0	8967.1	9315.7	9297.9	6631.2	3497.5	655.2
82.5°	952.9	955.5	1464.4	2708.7	5437.8	6054.8	6196.1	5393.2	2327.0	592.9	208.7
85°	474.6	479.7	704.8	1358.8	3070.0	3547.1	3371.6	2244.3	498.7	173.0	124.7
87.5°	188.3	180.7	278.6	558.5	1108.2	1174.3	1025.5	449.1	90.3	61.1	42.0
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°	3001.3	3001.3	3001.3	3001.3	3001.3	3001.3	3001.3	3001.3	3001.3	3001.3	3001.3
2.5°	3010.2	3012.8	3024.2	3001.3	3007.7	3002.6	2998.8	3019.1	3017.9	3021.7	3015.3
5°	3019.1	3025.5	3037.0	3026.8	3037.0	3031.9	3035.7	3063.7	3067.5	3066.2	3066.2
7.5°	3043.3	3049.7	3071.3	3058.6	3081.5	3075.1	3076.4	3103.1	3108.2	3100.6	3098.0
10°	3094.2	3099.3	3129.8	3127.3	3136.2	3131.1	3126.0	3137.5	3134.9	3123.5	3118.4
12.5°	3152.7	3166.7	3201.1	3202.4	3213.8	3188.4	3161.6	3157.8	3150.2	3132.4	3128.6
15°	3240.5	3257.1	3309.2	3296.5	3288.9	3234.2	3189.6	3154.0	3123.5	3108.2	3094.2
17.5°	3366.5	3394.5	3467.0	3427.6	3371.6	3291.4	3213.8	3136.2	3071.3	3016.6	2995.0
20°	3526.8	3558.6	3619.7	3567.5	3482.3	3362.7	3236.7	3096.8	2955.5	2834.7	2816.9
22.5°	3717.6	3768.5	3813.1	3693.5	3567.5	3416.1	3236.7	3035.7	2801.6	2620.9	2576.4
25°	3940.3	3979.7	3965.7	3797.8	3615.9	3425.0	3201.1	2927.5	2596.7	2386.8	2351.2
27.5°	4182.0	4199.8	4091.7	3847.4	3620.9	3372.8	3100.6	2735.4	2357.6	2192.2	2157.8
30°	4479.7	4426.3	4220.2	3877.9	3570.0	3257.1	2921.2	2454.2	2162.9	2017.9	1978.4
32.5°	4800.4	4702.4	4311.8	3856.3	3458.1	3063.7	2643.8	2255.8	2033.1	1856.3	1823.2
35°	5411.1	5132.4	4445.4	3791.4	3263.4	2805.4	2375.4	2103.1	1895.7	1706.1	1675.6
37.5°	6235.5	5750.8	4632.4	3701.1	3033.1	2554.8	2175.6	1940.2	1760.9	1564.9	1516.6
40°	6876.7	6375.4	4932.7	3604.4	2820.7	2316.8	2030.6	1855.0	1671.8	1463.1	1421.1
42.5°	7487.4	6946.7	5301.6	3496.3	2601.8	2151.4	1967.0	1835.9	1647.6	1435.1	1395.7
45°	8026.9	7408.5	5619.7	3388.1	2355.0	1998.8	1919.9	1799.0	1613.3	1399.5	1361.4
47.5°	8463.3	7805.5	5895.8	3271.1	2131.1	1883.0	1858.8	1731.6	1547.1	1327.0	1281.2
50°	8857.7	8141.4	6086.6	3146.4	1912.3	1788.8	1758.3	1608.2	1416.1	1221.4	1192.1
52.5°	9100.7	8369.1	6201.1	3166.7	1704.9	1683.2	1633.6	1479.7	1301.6	1134.9	1096.7
55°	9355.2	8584.1	6199.9	3052.2	1531.8	1524.2	1477.1	1358.8	1218.9	1078.9	1056.0
57.5°	9459.5	8603.2	6084.1	2514.0	1379.2	1330.8	1320.6	1258.3	1136.2	1003.8	978.4
60°	9529.5	8519.3	5865.3	1716.3	1187.0	1152.7	1202.3	1160.3	1049.6	911.0	885.5
62.5°	9460.8	8427.7	5291.5	1239.2	1040.7	1059.8	1106.9	1061.1	945.3	819.4	797.7
65°	9296.6	8077.8	4178.2	965.7	975.8	1017.8	1054.7	978.4	765.9	641.2	628.5
67.5°	8848.8	7412.4	2688.4	885.5	939.0	982.2	994.9	828.3	693.4	573.8	559.8
70°	7906.0	5950.5	1035.6	834.6	902.1	921.1	869.0	759.6	637.4	534.4	521.6
72.5°	6184.6	3907.2	598.0	763.4	823.2	805.4	806.6	681.9	575.1	477.1	466.9
75°	3843.6	1414.8	531.8	679.4	697.2	730.3	688.3	591.6	494.9	436.4	423.7
77.5°	1271.0	402.0	492.4	585.3	624.7	600.5	576.3	505.1	423.7	377.9	371.5
80°	307.9	301.5	441.5	458.0	489.8	449.1	446.6	419.9	357.5	330.8	324.4
82.5°	189.6	216.3	351.2	285.0	327.0	330.8	376.6	346.1	260.8	271.0	262.1
85°	117.1	166.7	184.5	137.4	138.7	185.8	225.2	208.7	156.5	147.6	146.3
87.5°	39.4	34.4	39.4	29.3	39.4	67.4	101.8	96.7	64.9	44.5	42.0
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)