

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: P510041

Luminaire Tested: **VERD-M-CA4-190-740-U-T4**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510041  
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-CA4-190-740-U-T4  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(4) 70 CRI, 4000K, 870mA LEDS AND TYPE IV OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27605 lumens  
Efficiency: N/A  
Efficacy: 143.0 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

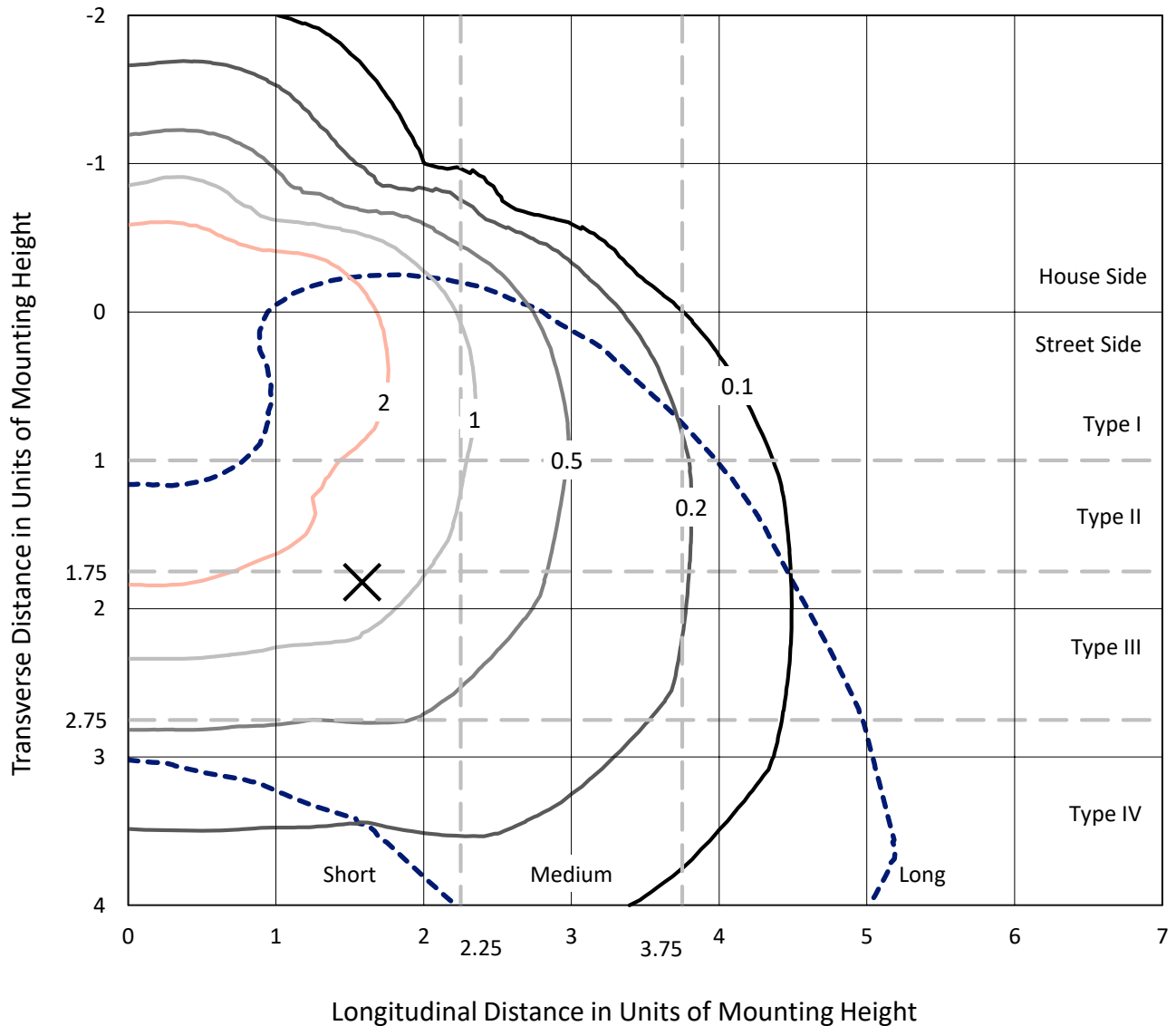
Input Watts (W): 193.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

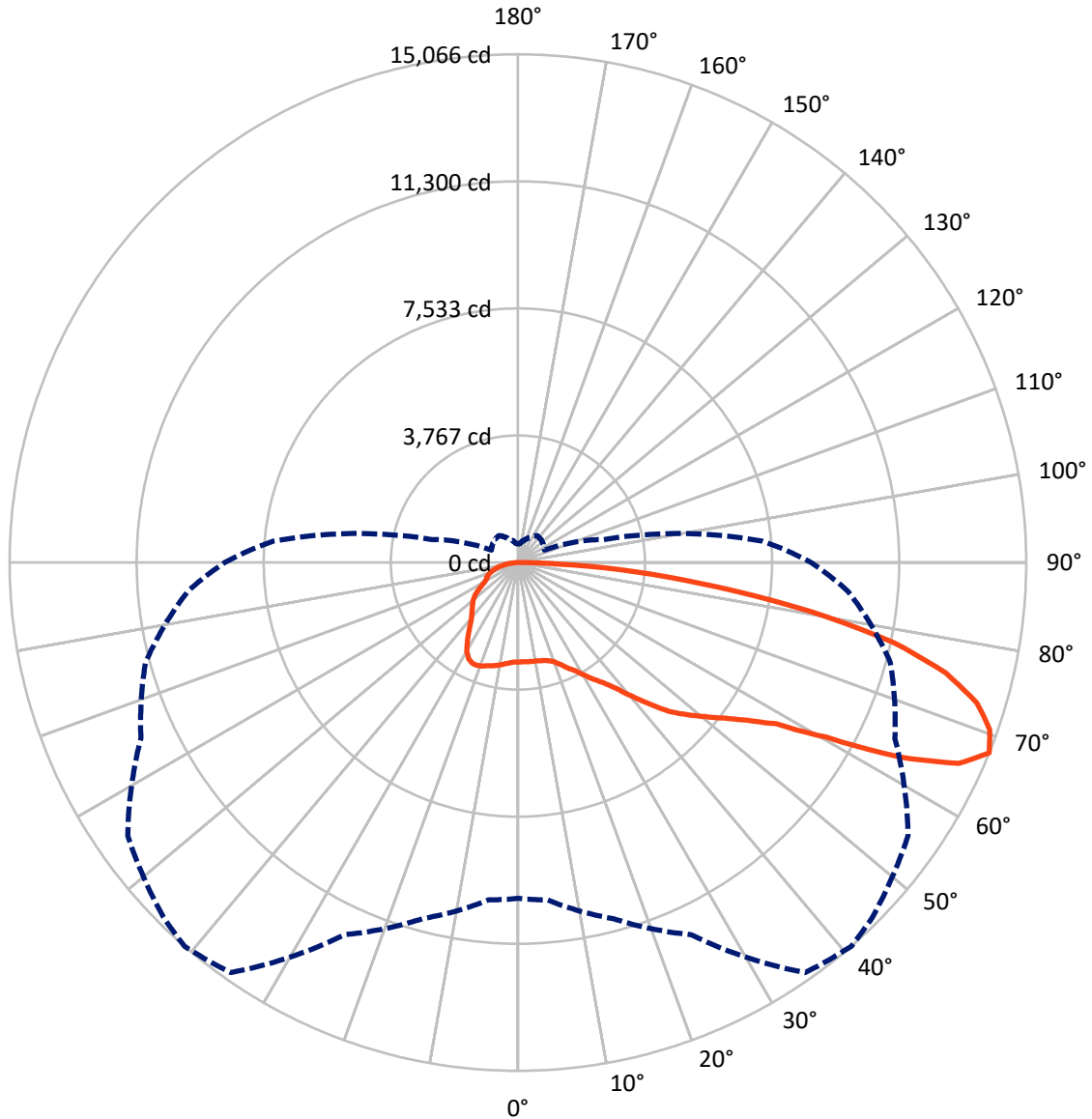
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 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	6246.9	0.0	6246.9
	% Fixture	22.6	0.0	22.6
<b>Street Side</b>	Lumens	21358.1	0.0	21358.1
	% Fixture	77.4	0.0	77.4
<b>Total</b>	Lumens	27605.0	0.0	27605.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	284.8	1.0
10°-20°	883.3	3.2
20°-30°	1579.6	5.7
30°-40°	2476.8	9.0
40°-50°	3840.8	13.9
50°-60°	5414.5	19.6
60°-70°	6902.2	25.0
70°-80°	5165.2	18.7
80°-90°	1057.9	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°	27605.0	100.0
0°-180°	27605.0	100.0



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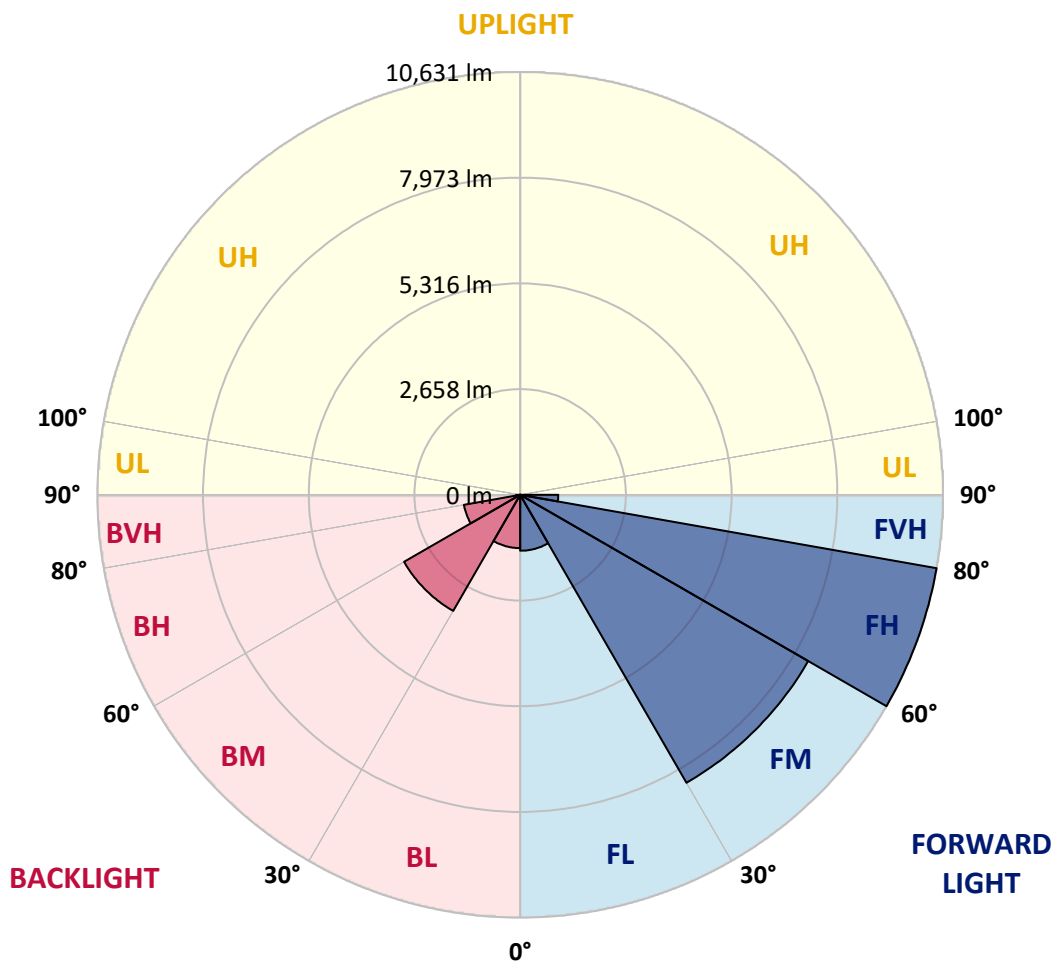
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1406.5	5.1			
FM	(30°-60°)	8361.3	30.3			
FH	(60°-80°)	10631.2	38.5			G4/12000
FVH	(80°-90°)	959.0	3.5			G5
BL	(0°-30°)	1341.2	4.9	B3/2500		
BM	(30°-60°)	3370.7	12.2	B3/5000		
BH	(60°-80°)	1436.2	5.2	B3/2500		G3/2500
BVH	(80°-90°)	98.8	0.4			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°	41°	45°	55°	65°	75°	85°
0°	2947.3	2947.3	2947.3	2947.3	2947.3	2947.3	2947.3	2947.3	2947.3	2947.3	2947.3
2.5°	2911.1	2944.8	2939.8	2933.6	2943.6	2944.8	2916.1	2927.3	2933.6	2943.6	2959.8
5°	2918.6	2952.3	2949.8	2938.6	2946.1	2949.8	2923.6	2943.6	2943.6	2947.3	2966.1
7.5°	2902.3	2934.8	2934.8	2931.1	2947.3	2962.3	2938.6	2956.1	2966.1	2976.0	2988.5
10°	2887.3	2914.8	2924.8	2922.3	2959.8	2963.6	2947.3	2989.8	3006.0	3016.0	3031.0
12.5°	2871.1	2904.8	2918.6	2932.3	2972.3	2986.0	2977.3	3021.0	3054.8	3072.2	3088.5
15°	2863.6	2901.1	2923.6	2943.6	2987.3	3012.3	3012.3	3078.5	3118.5	3141.0	3169.7
17.5°	2916.1	2954.8	2972.3	2988.5	3028.5	3062.3	3059.8	3137.2	3195.9	3230.9	3283.4
20°	3046.0	3092.2	3102.2	3108.5	3133.5	3146.0	3142.2	3225.9	3307.1	3373.4	3432.1
22.5°	3272.2	3299.6	3304.6	3279.6	3285.9	3295.9	3289.6	3335.9	3428.3	3505.8	3610.7
25°	3457.1	3500.8	3488.3	3452.1	3457.1	3470.8	3452.1	3523.3	3589.5	3690.7	3796.9
27.5°	3652.0	3684.4	3670.7	3648.2	3643.2	3633.2	3629.5	3720.7	3818.1	3898.1	4055.5
30°	3889.3	3906.8	3866.9	3856.9	3865.6	3871.9	3848.1	3964.3	4053.0	4168.0	4380.4
32.5°	4289.2	4305.4	4247.9	4094.2	4098.0	4126.7	4106.7	4252.9	4420.3	4560.3	4776.4
35°	4798.9	4798.9	4753.9	4537.8	4374.1	4375.4	4380.4	4586.5	4897.6	5211.2	5433.6
37.5°	5314.9	5332.4	5247.4	5050.0	4842.6	4732.7	4640.2	4905.1	5312.4	6012.1	6343.2
40°	5852.1	5879.6	5752.2	5571.0	5332.4	5207.5	5100.0	5261.2	5810.9	6805.4	7067.8
42.5°	6321.9	6360.6	6229.5	6038.3	5872.1	5730.9	5568.5	5633.5	6359.4	7558.8	7707.5
45°	6759.2	6780.4	6669.2	6511.8	6374.4	6296.9	6183.2	6258.2	6986.6	8295.9	8268.5
47.5°	7081.5	7112.8	7011.6	6926.6	6785.4	6739.2	6738.0	6944.1	7692.5	8883.2	8755.7
50°	7605.0	7581.3	7353.9	7250.2	7164.0	7179.0	7215.2	7571.3	8522.1	9449.1	9165.5
52.5°	8483.4	8439.6	7934.9	7718.7	7612.5	7661.3	7680.0	8139.8	9359.2	9937.6	9504.1
55°	9619.0	9479.1	9111.8	8532.1	8198.5	8244.7	8223.5	8750.7	10028.8	10403.7	9755.2
57.5°	10369.9	10501.1	10325.0	9993.9	9165.5	9014.3	8964.4	9355.4	10648.5	10849.7	10015.1
60°	11022.1	11239.5	11519.4	11307.0	11083.3	10517.4	10051.3	10042.6	11194.5	11147.1	10120.1
62.5°	11710.5	11825.5	12256.5	12387.7	12802.5	12698.8	12074.1	10912.2	11740.5	11364.4	10181.3
65°	11014.6	11168.3	11952.9	12668.8	14204.3	14354.2	14150.6	12528.9	12119.1	11475.6	10093.8
67.5°	9955.1	10040.1	10928.4	12170.3	14839.0	15066.4	14861.5	14115.6	12329.0	11426.9	9823.9
70°	8597.0	8697.0	9545.3	11239.5	14806.5	14836.5	14756.5	14261.8	12245.3	11198.3	9144.3
72.5°	6970.3	7096.5	7842.4	9601.6	14096.9	14226.8	14100.6	13971.9	12010.4	10558.6	7973.6
75°	5273.7	5441.1	6107.0	7655.0	12457.7	13112.3	13128.6	13525.9	11098.3	9051.8	5787.2
77.5°	3597.0	3756.9	4387.9	5832.1	10341.2	11386.9	11659.3	12094.1	9273.0	6689.2	3157.2
80°	2025.3	2010.3	2811.1	4166.7	7887.4	8805.7	9148.0	9130.5	6511.8	3434.6	643.4
82.5°	935.8	938.3	1438.0	2660.0	5339.9	5945.8	6084.5	5296.2	2285.1	582.2	204.9
85°	466.0	471.0	692.2	1334.3	3014.8	3483.3	3310.9	2203.9	489.8	169.9	122.4
87.5°	184.9	177.4	273.6	548.5	1088.2	1153.2	1007.0	441.0	88.7	60.0	41.2
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°	2947.3	2947.3	2947.3	2947.3	2947.3	2947.3	2947.3	2947.3	2947.3	2947.3	2947.3
2.5°	2956.1	2958.6	2969.8	2947.3	2953.6	2948.6	2944.8	2964.8	2963.6	2967.3	2961.1
5°	2964.8	2971.0	2982.3	2972.3	2982.3	2977.3	2981.0	3008.5	3012.3	3011.0	3011.0
7.5°	2988.5	2994.8	3016.0	3003.5	3026.0	3019.8	3021.0	3047.3	3052.3	3044.8	3042.3
10°	3038.5	3043.5	3073.5	3071.0	3079.7	3074.7	3069.7	3081.0	3078.5	3067.3	3062.3
12.5°	3096.0	3109.7	3143.5	3144.7	3156.0	3131.0	3104.7	3101.0	3093.5	3076.0	3072.2
15°	3182.2	3198.4	3249.7	3237.2	3229.7	3175.9	3132.2	3097.2	3067.3	3052.3	3038.5
17.5°	3305.9	3333.4	3404.6	3365.9	3310.9	3232.2	3156.0	3079.7	3016.0	2962.3	2941.1
20°	3463.3	3494.5	3554.5	3503.3	3419.6	3302.1	3178.4	3041.0	2902.3	2783.6	2766.1
22.5°	3650.7	3700.7	3744.4	3627.0	3503.3	3354.6	3178.4	2981.0	2751.2	2573.7	2530.0
25°	3869.4	3908.1	3894.3	3729.4	3550.8	3363.4	3143.5	2874.8	2550.0	2343.9	2308.9
27.5°	4106.7	4124.2	4018.0	3778.2	3555.8	3312.1	3044.8	2686.2	2315.1	2152.7	2119.0
30°	4399.1	4346.6	4144.2	3808.1	3505.8	3198.4	2868.6	2410.1	2124.0	1981.5	1942.8
32.5°	4713.9	4617.7	4234.2	3786.9	3395.8	3008.5	2596.2	2215.2	1996.5	1822.9	1790.4
35°	5313.7	5040.0	4365.4	3723.2	3204.7	2754.9	2332.6	2065.2	1861.6	1675.4	1645.4
37.5°	6123.3	5647.2	4549.0	3634.5	2978.5	2508.8	2136.5	1905.3	1729.2	1536.7	1489.3
40°	6752.9	6260.7	4843.9	3539.5	2769.9	2275.1	1994.0	1821.6	1641.7	1436.8	1395.6
42.5°	7352.7	6821.7	5206.2	3433.3	2555.0	2112.7	1931.6	1802.9	1618.0	1409.3	1370.6
45°	7882.4	7275.2	5518.6	3327.1	2312.6	1962.8	1885.3	1766.6	1584.2	1374.3	1336.8
47.5°	8310.9	7665.0	5789.7	3212.2	2092.7	1849.1	1825.4	1700.4	1519.3	1303.1	1258.1
50°	8698.2	7994.8	5977.1	3089.7	1877.8	1756.6	1726.7	1579.2	1390.6	1199.4	1170.7
52.5°	8936.9	8218.5	6089.5	3109.7	1674.2	1652.9	1604.2	1453.0	1278.1	1114.5	1077.0
55°	9186.8	8429.6	6088.3	2997.3	1504.3	1496.8	1450.5	1334.3	1196.9	1059.5	1037.0
57.5°	9289.2	8448.4	5974.6	2468.8	1354.3	1306.9	1296.9	1235.6	1115.7	985.8	960.8
60°	9357.9	8365.9	5759.7	1685.4	1165.7	1131.9	1180.7	1139.4	1030.7	894.6	869.6
62.5°	9290.5	8276.0	5196.2	1216.9	1022.0	1040.7	1087.0	1042.0	928.3	804.6	783.4
65°	9129.3	7932.4	4103.0	948.3	958.3	999.5	1035.7	960.8	752.1	629.7	617.2
67.5°	8689.5	7278.9	2640.0	869.6	922.0	964.5	977.0	813.4	680.9	563.5	549.7
70°	7763.7	5843.4	1017.0	819.6	885.8	904.6	853.3	745.9	625.9	524.7	512.2
72.5°	6073.3	3836.9	587.2	749.6	808.4	790.9	792.1	669.7	564.7	468.5	458.5
75°	3774.4	1389.3	522.2	667.2	684.7	717.1	675.9	581.0	486.0	428.5	416.0
77.5°	1248.1	394.8	483.5	574.7	613.5	589.7	566.0	496.0	416.0	371.1	364.8
80°	302.4	296.1	433.5	449.8	481.0	441.0	438.5	412.3	351.1	324.8	318.6
82.5°	186.2	212.4	344.8	279.9	321.1	324.8	369.8	339.8	256.1	266.1	257.4
85°	114.9	163.7	181.2	134.9	136.2	182.4	221.1	204.9	153.7	144.9	143.7
87.5°	38.7	33.7	38.7	28.7	38.7	66.2	100.0	95.0	63.7	43.7	41.2
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)