

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: P510313

Luminaire Tested: **VERD-M-CA4-250-727-U-T4**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510313  
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-CA4-250-727-U-T4  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(4) 70 CRI, 2700K, 1130mA LEDS AND TYPE IV OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29223 lumens  
Efficiency: N/A  
Efficacy: 116.1 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

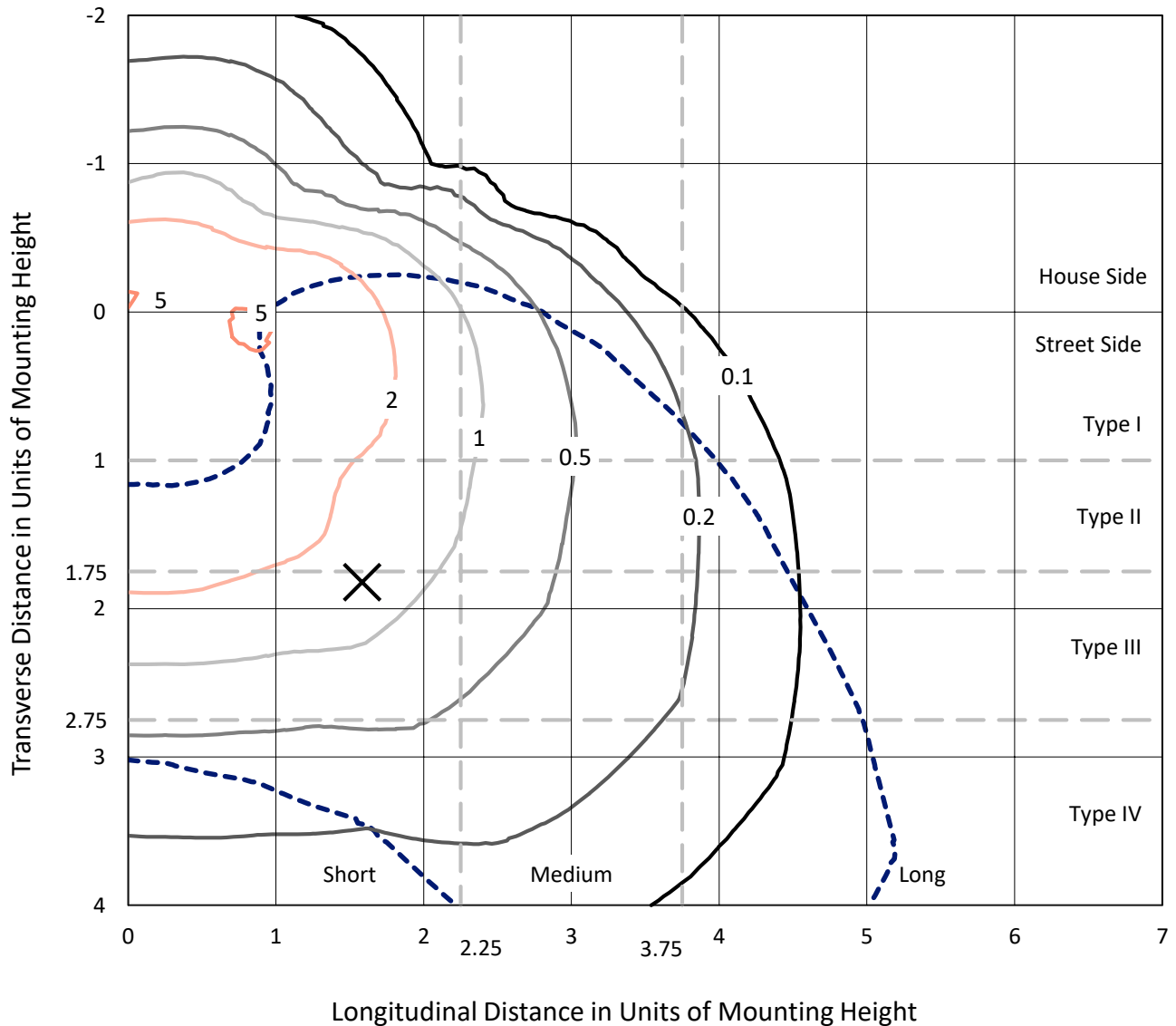
Input Watts (W): 251.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

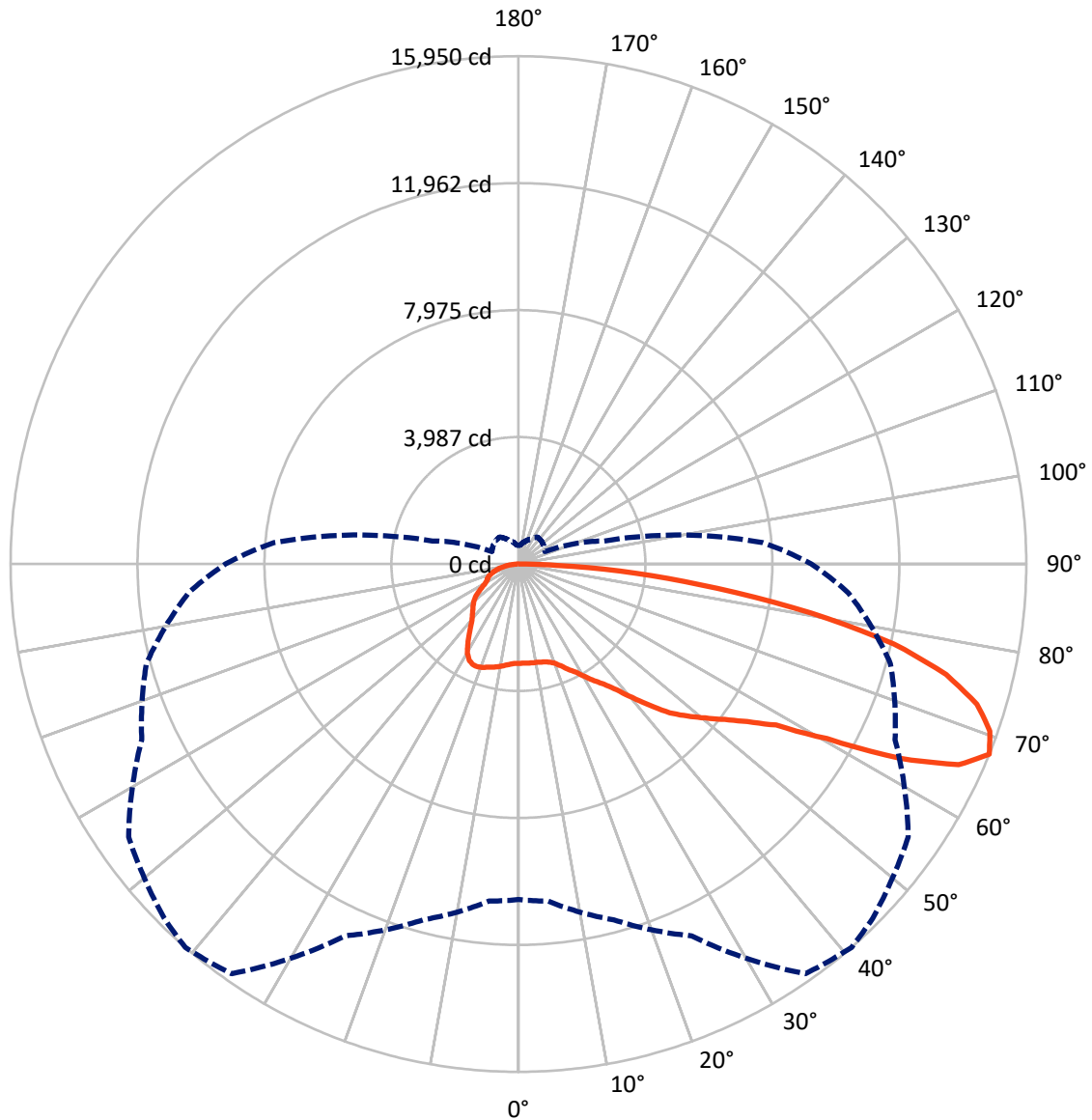
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 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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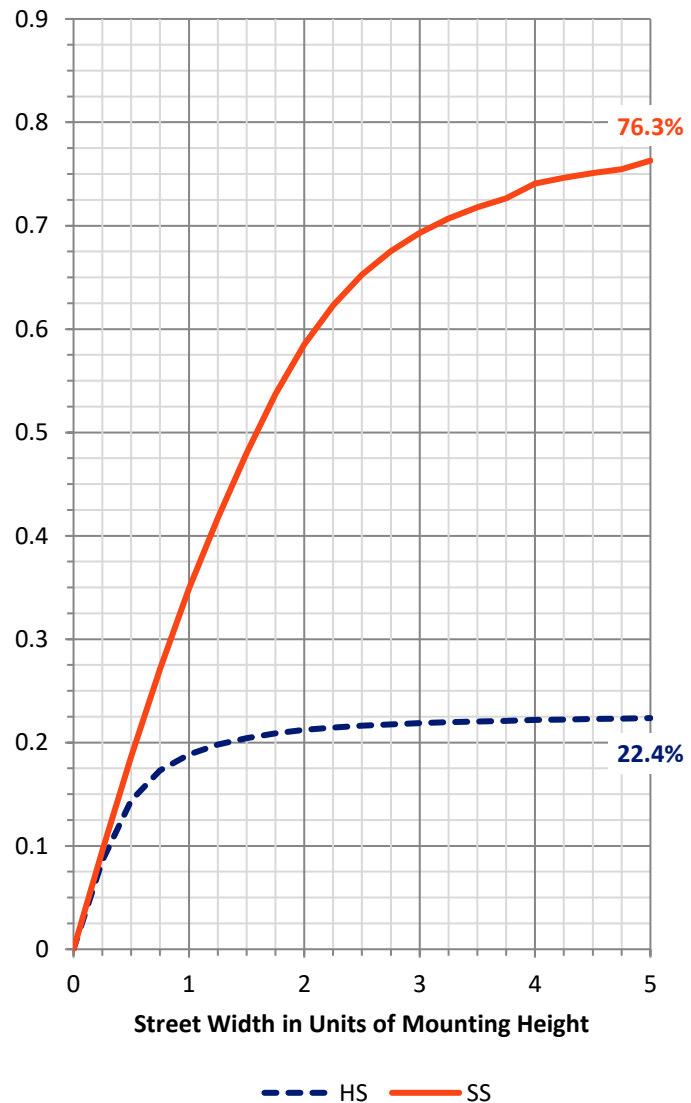
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6613.0	0.0	6613.0
	% Fixture	22.6	0.0	22.6
<b>Street Side</b>	Lumens	22610.0	0.0	22610.0
	% Fixture	77.4	0.0	77.4
<b>Total</b>	Lumens	29223.0	0.0	29223.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	301.5	1.0
10°-20°	935.1	3.2
20°-30°	1672.2	5.7
30°-40°	2621.9	9.0
40°-50°	4065.9	13.9
50°-60°	5731.9	19.6
60°-70°	7306.8	25.0
70°-80°	5467.9	18.7
80°-90°	1119.9	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°	29223.0	100.0
0°-180°	29223.0	100.0



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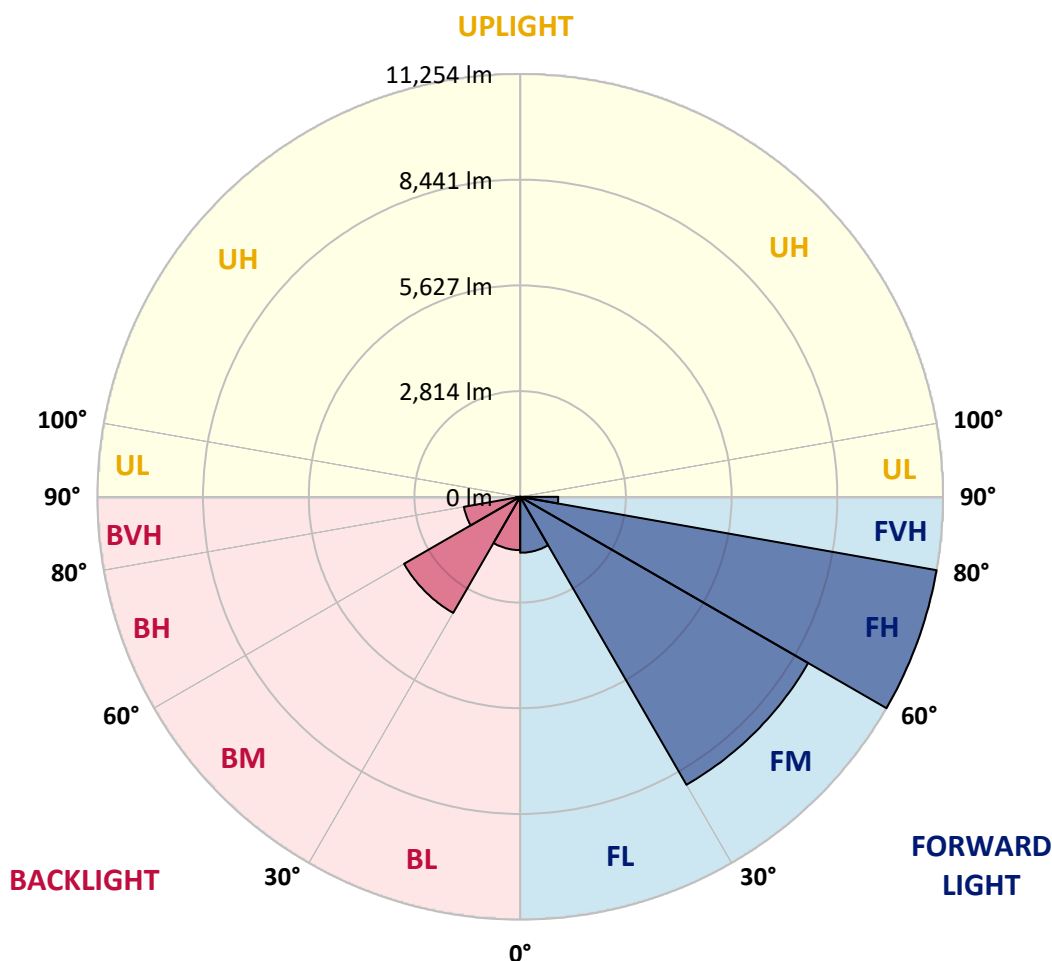
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1488.9	5.1			
FM (30°-60°)	8851.4	30.3			
FH (60°-80°)	11254.4	38.5			G4/12000
FVH (80°-90°)	1015.3	3.5			G5
BL (0°-30°)	1419.8	4.9	B3/2500		
BM (30°-60°)	3568.3	12.2	B3/5000		
BH (60°-80°)	1520.3	5.2	B3/2500		G3/2500
BVH (80°-90°)	104.6	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°	3120.1	3120.1	3120.1	3120.1	3120.1	3120.1	3120.1	3120.1	3120.1	3120.1	3120.1
2.5°	3081.7	3117.4	3112.1	3105.5	3116.1	3117.4	3087.0	3098.9	3105.5	3116.1	3133.3
5°	3089.6	3125.3	3122.7	3110.8	3118.7	3122.7	3094.9	3116.1	3116.1	3120.1	3139.9
7.5°	3072.4	3106.8	3106.8	3102.9	3120.1	3135.9	3110.8	3129.3	3139.9	3150.5	3163.7
10°	3056.6	3085.7	3096.3	3093.6	3133.3	3137.3	3120.1	3165.0	3182.2	3192.8	3208.7
12.5°	3039.4	3075.1	3089.6	3104.2	3146.5	3161.1	3151.8	3198.1	3233.8	3252.3	3269.5
15°	3031.4	3071.1	3094.9	3116.1	3162.4	3188.8	3188.8	3258.9	3301.3	3325.1	3355.5
17.5°	3087.0	3128.0	3146.5	3163.7	3206.0	3241.7	3239.1	3321.1	3383.3	3420.3	3475.8
20°	3224.5	3273.5	3284.1	3290.7	3317.1	3330.4	3326.4	3415.0	3501.0	3571.1	3633.2
22.5°	3463.9	3493.0	3498.3	3471.9	3478.5	3489.1	3482.5	3531.4	3629.3	3711.3	3822.4
25°	3659.7	3706.0	3692.8	3654.4	3659.7	3674.2	3654.4	3729.8	3799.9	3907.0	4019.4
27.5°	3866.0	3900.4	3885.9	3862.0	3856.8	3846.2	3842.2	3938.8	4041.9	4126.6	4293.2
30°	4117.3	4135.8	4093.5	4082.9	4092.2	4098.8	4073.7	4196.7	4290.6	4412.3	4637.1
32.5°	4540.6	4557.7	4496.9	4334.2	4338.2	4368.6	4347.4	4502.2	4679.4	4827.6	5056.4
35°	5080.2	5080.2	5032.6	4803.8	4630.5	4631.8	4637.1	4855.3	5184.7	5516.6	5752.1
37.5°	5626.4	5644.9	5555.0	5346.0	5126.5	5010.1	4912.2	5192.6	5623.8	6364.4	6714.9
40°	6195.1	6224.2	6089.3	5897.6	5644.9	5512.7	5398.9	5569.6	6151.5	7204.3	7482.1
42.5°	6692.5	6733.5	6594.6	6392.2	6216.3	6066.9	5894.9	5963.7	6732.1	8001.8	8159.2
45°	7155.4	7177.9	7060.1	6893.5	6748.0	6666.0	6545.6	6625.0	7396.1	8782.2	8753.1
47.5°	7496.6	7529.7	7422.5	7332.6	7183.1	7134.2	7132.9	7351.1	8143.4	9403.8	9268.9
50°	8050.8	8025.7	7784.9	7675.2	7583.9	7599.8	7638.1	8015.1	9021.6	10003.0	9702.7
52.5°	8980.6	8934.3	8400.0	8171.1	8058.7	8110.3	8130.1	8616.9	9907.7	10520.1	10061.2
55°	10182.8	10034.7	9645.9	9032.2	8679.0	8728.0	8705.5	9263.6	10616.7	11013.5	10327.0
57.5°	10977.7	11116.6	10930.1	10579.6	9702.7	9542.7	9489.8	9903.8	11272.7	11485.6	10602.1
60°	11668.1	11898.3	12194.6	11969.7	11733.0	11133.8	10640.5	10631.2	11850.7	11800.4	10713.2
62.5°	12396.9	12518.6	12974.9	13113.8	13552.9	13443.1	12781.8	11551.8	12428.7	12030.5	10778.0
65°	11660.2	11822.9	12653.5	13411.4	15036.9	15195.6	14980.0	13263.2	12829.4	12148.3	10685.4
67.5°	10538.6	10628.6	11569.0	12883.6	15708.8	15949.5	15732.6	14943.0	13051.6	12096.7	10399.8
70°	9100.9	9206.8	10104.8	11898.3	15674.4	15706.1	15621.5	15097.7	12963.0	11854.6	9680.3
72.5°	7378.9	7512.5	8302.1	10164.3	14923.1	15060.7	14927.1	14790.9	12714.3	11177.5	8441.0
75°	5582.8	5760.0	6465.0	8103.7	13187.8	13880.9	13898.1	14318.7	11748.8	9582.4	6126.4
77.5°	3807.8	3977.1	4645.0	6174.0	10947.3	12054.4	12342.7	12803.0	9816.5	7081.3	3342.3
80°	2144.0	2128.1	2975.9	4410.9	8349.7	9321.8	9684.2	9665.7	6893.5	3635.9	681.1
82.5°	990.6	993.3	1522.3	2815.9	5652.9	6294.3	6441.2	5606.6	2419.1	616.3	216.9
85°	493.3	498.6	732.7	1412.6	3191.5	3687.5	3504.9	2333.1	518.5	179.9	129.6
87.5°	195.7	187.8	289.7	580.6	1152.0	1220.8	1066.0	466.9	93.9	63.5	43.6
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°	3120.1	3120.1	3120.1	3120.1	3120.1	3120.1	3120.1	3120.1	3120.1	3120.1	3120.1
2.5°	3129.3	3132.0	3143.9	3120.1	3126.7	3121.4	3117.4	3138.6	3137.3	3141.2	3134.6
5°	3138.6	3145.2	3157.1	3146.5	3157.1	3151.8	3155.8	3184.9	3188.8	3187.5	3187.5
7.5°	3163.7	3170.3	3192.8	3179.6	3203.4	3196.8	3198.1	3225.9	3231.2	3223.2	3220.6
10°	3216.6	3221.9	3253.6	3251.0	3260.3	3255.0	3249.7	3261.6	3258.9	3247.0	3241.7
12.5°	3277.5	3292.0	3327.7	3329.0	3340.9	3314.5	3286.7	3282.7	3274.8	3256.3	3252.3
15°	3368.7	3385.9	3440.1	3426.9	3419.0	3362.1	3315.8	3278.8	3247.0	3231.2	3216.6
17.5°	3499.7	3528.7	3604.1	3563.1	3504.9	3421.6	3340.9	3260.3	3192.8	3135.9	3113.4
20°	3666.3	3699.4	3762.9	3708.6	3620.0	3495.7	3364.7	3219.3	3072.4	2946.8	2928.3
22.5°	3864.7	3917.6	3963.9	3839.6	3708.6	3551.2	3364.7	3155.8	2912.4	2724.6	2678.3
25°	4096.2	4137.2	4122.6	3948.0	3758.9	3560.5	3327.7	3043.3	2699.5	2481.2	2444.2
27.5°	4347.4	4366.0	4253.5	3999.6	3764.2	3506.3	3223.2	2843.6	2450.8	2278.9	2243.2
30°	4656.9	4601.4	4387.1	4031.3	3711.3	3385.9	3036.7	2551.3	2248.5	2097.7	2056.7
32.5°	4990.2	4888.4	4482.4	4008.9	3594.9	3184.9	2748.4	2345.0	2113.5	1929.7	1895.3
35°	5625.1	5335.4	4621.2	3941.4	3392.5	2916.4	2469.3	2186.3	1970.7	1773.6	1741.9
37.5°	6482.2	5978.2	4815.7	3847.5	3153.1	2655.8	2261.7	2017.0	1830.5	1626.8	1576.6
40°	7148.8	6627.6	5127.8	3747.0	2932.2	2408.5	2110.9	1928.4	1737.9	1521.0	1477.4
42.5°	7783.6	7221.5	5511.4	3634.6	2704.8	2236.5	2044.8	1908.5	1712.8	1491.9	1450.9
45°	8344.4	7701.6	5842.0	3522.1	2448.2	2077.8	1995.8	1870.2	1677.1	1454.9	1415.2
47.5°	8798.1	8114.3	6129.0	3400.5	2215.4	1957.5	1932.3	1800.1	1608.3	1379.5	1331.9
50°	9208.1	8463.4	6327.4	3270.8	1987.9	1859.6	1827.9	1671.8	1472.1	1269.7	1239.3
52.5°	9460.7	8700.2	6446.4	3292.0	1772.3	1749.8	1698.2	1538.2	1353.0	1179.8	1140.1
55°	9725.2	8923.7	6445.1	3173.0	1592.4	1584.5	1535.6	1412.6	1267.1	1121.6	1097.8
57.5°	9833.7	8943.6	6324.8	2613.5	1433.7	1383.5	1372.9	1308.1	1181.1	1043.5	1017.1
60°	9906.4	8856.3	6097.3	1784.2	1234.0	1198.3	1249.9	1206.2	1091.2	947.0	920.5
62.5°	9835.0	8761.0	5500.8	1288.2	1081.9	1101.7	1150.7	1103.1	982.7	851.8	829.3
65°	9664.4	8397.3	4343.5	1003.9	1014.4	1058.1	1096.5	1017.1	796.2	666.6	653.4
67.5°	9198.8	7705.6	2794.7	920.5	976.1	1021.1	1034.3	861.0	720.8	596.5	582.0
70°	8218.8	6185.9	1076.6	867.6	937.7	957.6	903.3	789.6	662.6	555.5	542.3
72.5°	6429.3	4061.8	621.6	793.6	855.7	837.2	838.5	708.9	597.8	496.0	485.4
75°	3995.6	1470.8	552.9	706.3	724.8	759.2	715.5	615.0	514.5	453.7	440.4
77.5°	1321.3	417.9	511.9	608.4	649.4	624.3	599.1	525.1	440.4	392.8	386.2
80°	320.1	313.5	458.9	476.1	509.2	466.9	464.2	436.5	371.7	343.9	337.3
82.5°	197.1	224.8	365.0	296.3	339.9	343.9	391.5	359.8	271.1	281.7	272.5
85°	121.7	173.3	191.8	142.8	144.2	193.1	234.1	216.9	162.7	153.4	152.1
87.5°	41.0	35.7	41.0	30.4	41.0	70.1	105.8	100.5	67.5	46.3	43.6
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)