

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: P510153

Luminaire Tested: **VERD-M-CA4-210-760-U-T4**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510153  
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-CA4-210-760-U-T4  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(4) 70 CRI, 5700K, 960mA LEDS AND TYPE IV OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29966 lumens  
Efficiency: N/A  
Efficacy: 140.3 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

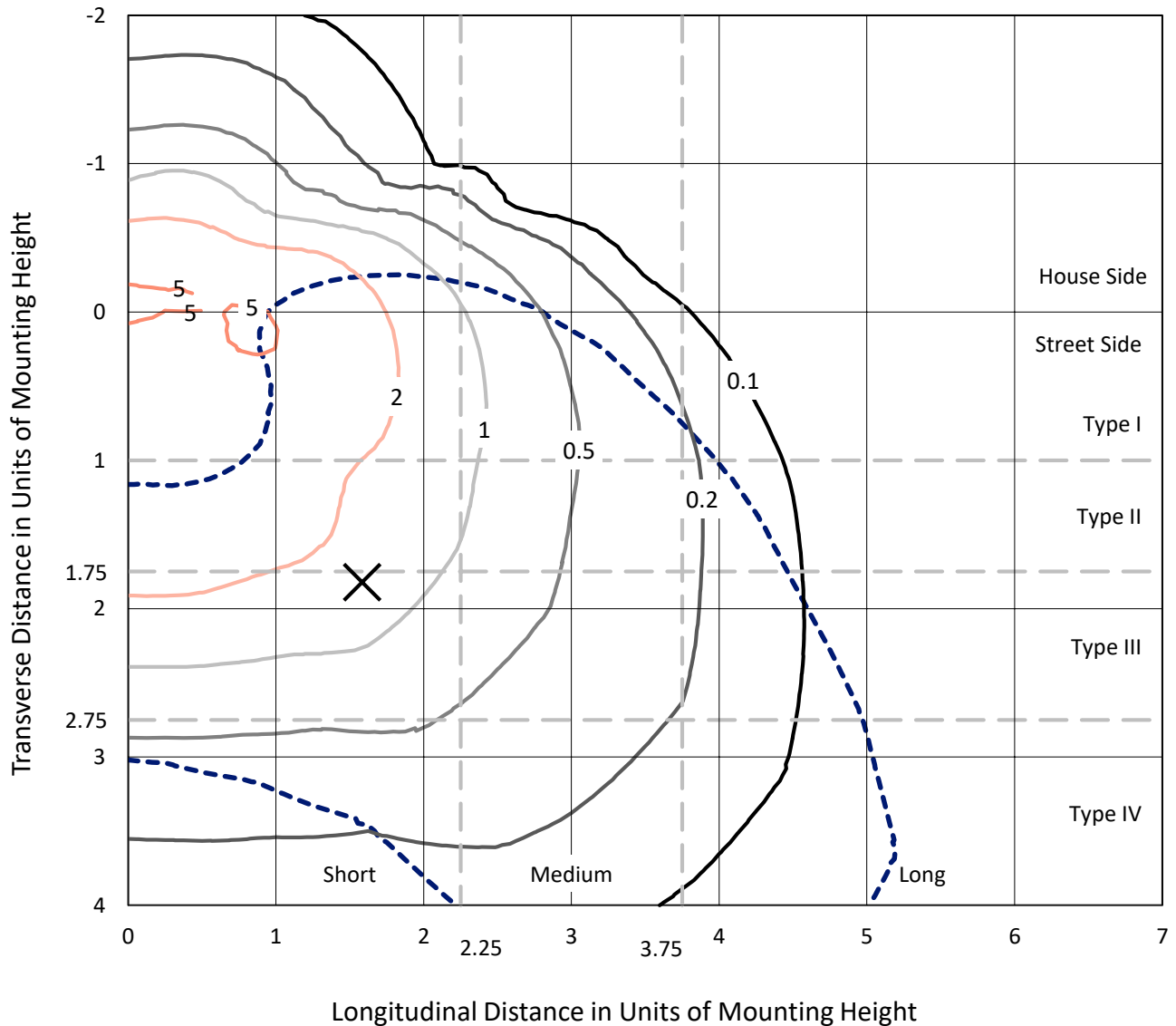
Input Watts (W): 213.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

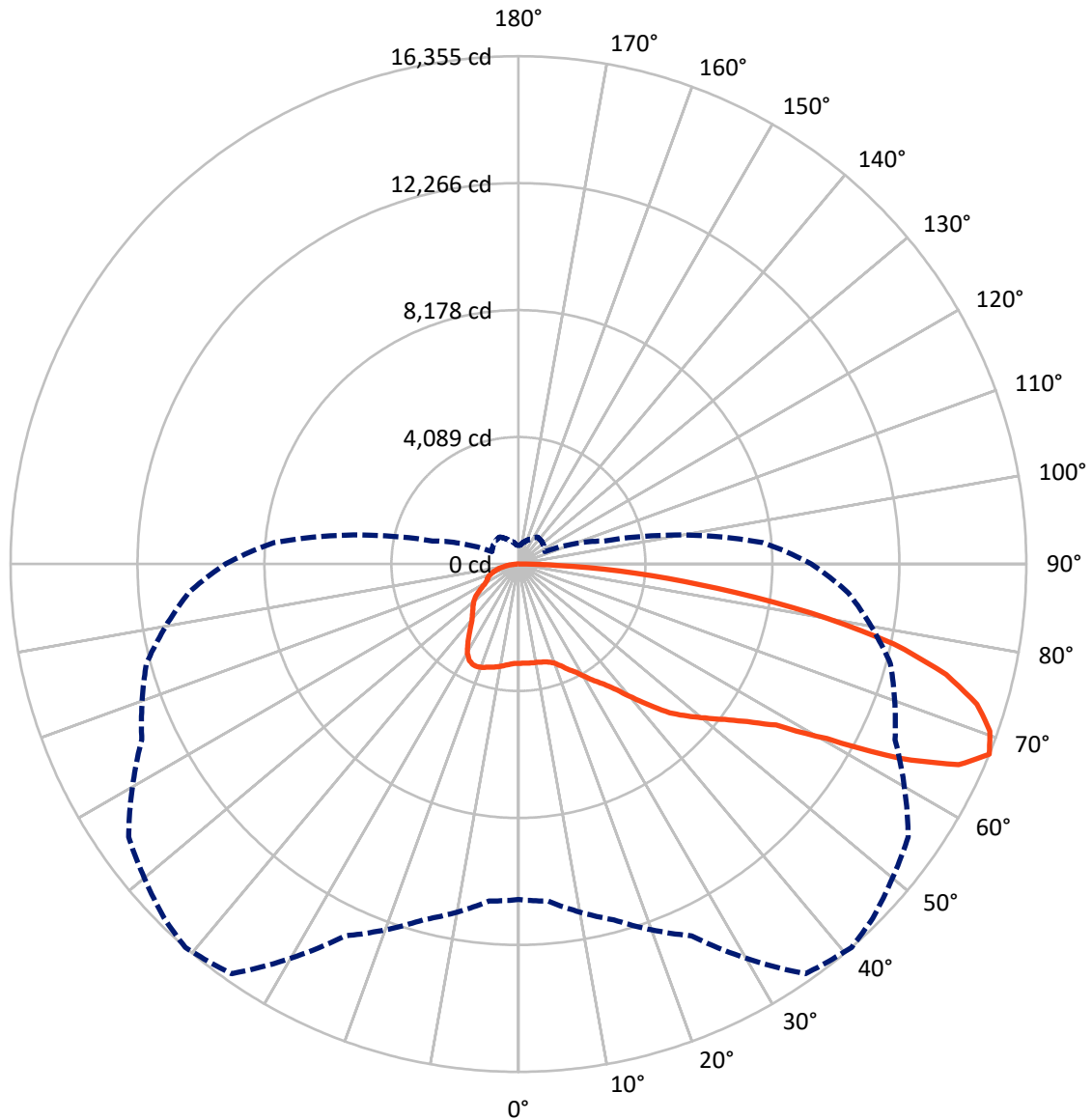
✕ Max cd  
 - - - 1/2 Max cd



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

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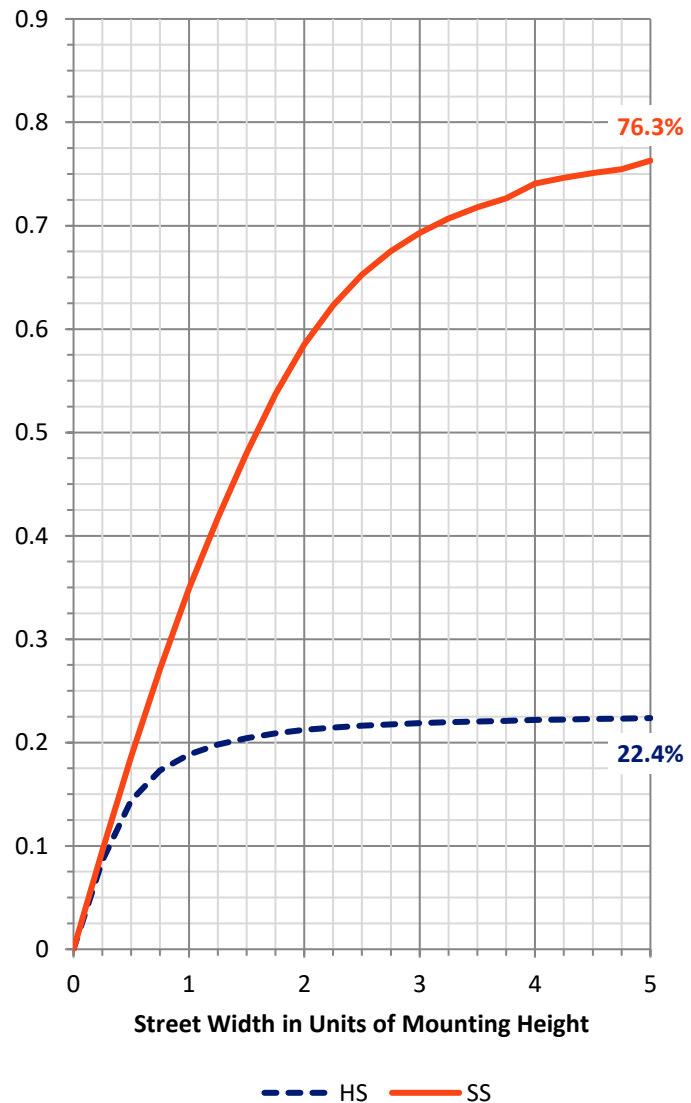
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6781.2	0.0	6781.2
	% Fixture	22.6	0.0	22.6
<b>Street Side</b>	Lumens	23184.8	0.0	23184.8
	% Fixture	77.4	0.0	77.4
<b>Total</b>	Lumens	29966.0	0.0	29966.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	309.2	1.0
10°-20°	958.8	3.2
20°-30°	1714.7	5.7
30°-40°	2688.6	9.0
40°-50°	4169.3	13.9
50°-60°	5877.6	19.6
60°-70°	7492.6	25.0
70°-80°	5606.9	18.7
80°-90°	1148.3	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°	29966.0	100.0
0°-180°	29966.0	100.0



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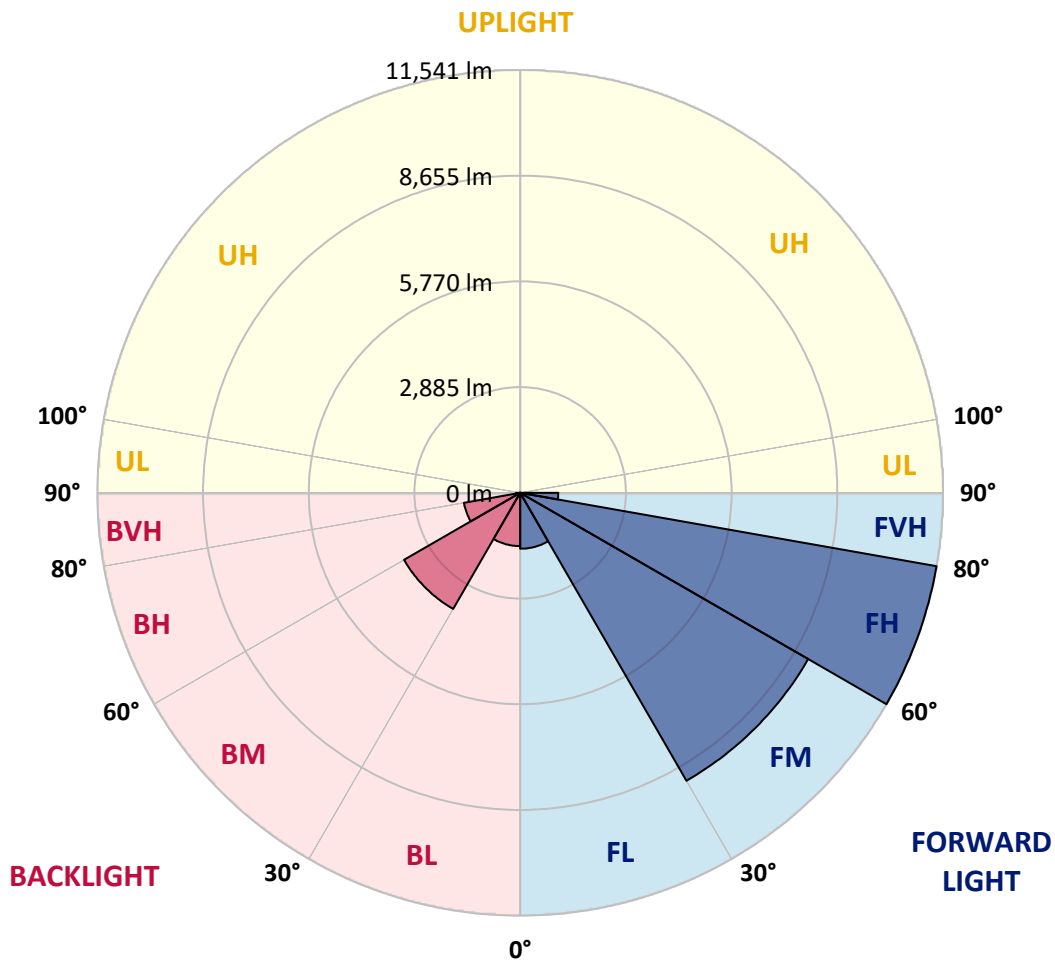
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1526.8	5.1			
FM (30°-60°)	9076.5	30.3			
FH (60°-80°)	11540.5	38.5			G4/12000
FVH (80°-90°)	1041.1	3.5			G5
BL (0°-30°)	1455.9	4.9	B3/2500		
BM (30°-60°)	3659.0	12.2	B3/5000		
BH (60°-80°)	1559.0	5.2	B3/2500		G3/2500
BVH (80°-90°)	107.3	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°	3199.4	3199.4	3199.4	3199.4	3199.4	3199.4	3199.4	3199.4	3199.4	3199.4	3199.4
2.5°	3160.1	3196.7	3191.2	3184.5	3195.3	3196.7	3165.5	3177.7	3184.5	3195.3	3212.9
5°	3168.2	3204.8	3202.1	3189.9	3198.0	3202.1	3173.6	3195.3	3195.3	3199.4	3219.7
7.5°	3150.6	3185.8	3185.8	3181.8	3199.4	3215.7	3189.9	3208.9	3219.7	3230.6	3244.1
10°	3134.3	3164.1	3175.0	3172.3	3212.9	3217.0	3199.4	3245.5	3263.1	3274.0	3290.3
12.5°	3116.7	3153.3	3168.2	3183.1	3226.5	3241.4	3231.9	3279.4	3316.0	3335.0	3352.6
15°	3108.5	3149.2	3173.6	3195.3	3242.8	3269.9	3269.9	3341.8	3385.2	3409.6	3440.8
17.5°	3165.5	3207.5	3226.5	3244.1	3287.5	3324.2	3321.4	3405.5	3469.3	3507.3	3564.2
20°	3306.5	3356.7	3367.6	3374.3	3401.5	3415.0	3411.0	3501.8	3590.0	3661.9	3725.6
22.5°	3552.0	3581.8	3587.3	3560.1	3566.9	3577.8	3571.0	3621.2	3721.5	3805.6	3919.6
25°	3752.7	3800.2	3786.6	3747.3	3752.7	3767.7	3747.3	3824.6	3896.5	4006.4	4121.6
27.5°	3964.3	3999.6	3984.7	3960.2	3954.8	3944.0	3939.9	4038.9	4144.7	4231.5	4402.4
30°	4222.0	4241.0	4197.6	4186.7	4196.2	4203.0	4177.2	4303.4	4399.7	4524.4	4755.0
32.5°	4656.0	4673.6	4611.2	4444.4	4448.5	4479.7	4458.0	4616.7	4798.4	4950.3	5184.9
35°	5209.3	5209.3	5160.5	4925.9	4748.2	4749.6	4755.0	4978.8	5316.5	5656.9	5898.3
37.5°	5769.5	5788.5	5696.2	5482.0	5256.8	5137.5	5037.1	5324.6	5766.8	6526.3	6885.7
40°	6352.7	6382.5	6244.2	6047.5	5788.5	5652.8	5536.2	5711.2	6307.9	7387.5	7672.3
42.5°	6862.6	6904.7	6762.2	6554.7	6374.4	6221.1	6044.8	6115.3	6903.3	8205.3	8366.7
45°	7337.3	7360.4	7239.6	7068.8	6919.6	6835.5	6712.1	6793.4	7584.1	9005.5	8975.6
47.5°	7687.2	7721.1	7611.3	7519.0	7365.8	7315.6	7314.2	7538.0	8350.4	9642.9	9504.6
50°	8255.5	8229.7	7982.9	7870.3	7776.7	7793.0	7832.3	8218.9	9251.0	10257.3	9949.4
52.5°	9208.9	9161.4	8613.5	8378.9	8263.6	8316.5	8336.9	8836.0	10159.6	10787.6	10317.0
55°	10441.7	10289.8	9891.1	9261.8	8899.7	8949.9	8926.8	9499.2	10886.6	11293.5	10589.6
57.5°	11256.9	11399.3	11208.0	10848.6	9949.4	9785.3	9731.1	10155.6	11559.3	11777.7	10871.7
60°	11964.8	12200.8	12504.6	12274.0	12031.3	11416.9	10911.0	10901.5	12152.0	12100.4	10985.6
62.5°	12712.1	12836.9	13304.8	13447.2	13897.5	13784.9	13106.8	11845.5	12744.7	12336.4	11052.1
65°	11956.7	12123.5	12975.2	13752.3	15419.2	15581.9	15360.9	13600.4	13155.6	12457.1	10957.1
67.5°	10806.6	10898.8	11863.1	13211.2	16108.1	16355.0	16132.6	15322.9	13383.4	12404.2	10664.2
70°	9332.3	9440.8	10361.7	12200.8	16072.9	16105.4	16018.6	15481.6	13292.6	12156.0	9926.4
72.5°	7566.5	7703.5	8513.2	10422.8	15302.5	15443.6	15306.6	15166.9	13037.6	11461.6	8655.6
75°	5724.7	5906.5	6629.3	8309.7	13523.1	14233.8	14251.4	14682.7	12047.5	9826.0	6282.1
77.5°	3904.6	4078.2	4763.1	6331.0	11225.7	12360.8	12656.5	13128.5	10066.1	7261.3	3427.2
80°	2198.5	2182.2	3051.6	4523.1	8562.0	9558.8	9930.4	9911.5	7068.8	3728.3	698.5
82.5°	1015.8	1018.5	1561.0	2887.5	5796.6	6454.4	6604.9	5749.1	2480.6	632.0	222.4
85°	505.9	511.3	751.4	1448.5	3272.6	3781.2	3594.1	2392.4	531.6	184.4	132.9
87.5°	200.7	192.6	297.0	595.4	1181.3	1251.8	1093.1	478.8	96.3	65.1	44.8
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°	3199.4	3199.4	3199.4	3199.4	3199.4	3199.4	3199.4	3199.4	3199.4	3199.4	3199.4
2.5°	3208.9	3211.6	3223.8	3199.4	3206.2	3200.7	3196.7	3218.4	3217.0	3221.1	3214.3
5°	3218.4	3225.2	3237.4	3226.5	3237.4	3231.9	3236.0	3265.8	3269.9	3268.6	3268.6
7.5°	3244.1	3250.9	3274.0	3260.4	3284.8	3278.0	3279.4	3307.9	3313.3	3305.2	3302.5
10°	3298.4	3303.8	3336.4	3333.7	3343.1	3337.7	3332.3	3344.5	3341.8	3329.6	3324.2
12.5°	3360.8	3375.7	3412.3	3413.7	3425.9	3398.8	3370.3	3366.2	3358.1	3339.1	3335.0
15°	3454.4	3472.0	3527.6	3514.0	3505.9	3447.6	3400.1	3362.1	3329.6	3313.3	3298.4
17.5°	3588.6	3618.5	3695.8	3653.7	3594.1	3508.6	3425.9	3343.1	3274.0	3215.7	3192.6
20°	3759.5	3793.4	3858.5	3802.9	3712.0	3584.6	3450.3	3301.1	3150.6	3021.7	3002.7
22.5°	3963.0	4017.2	4064.7	3937.2	3802.9	3641.5	3450.3	3236.0	2986.5	2793.9	2746.4
25°	4200.3	4242.3	4227.4	4048.4	3854.5	3651.0	3412.3	3120.7	2768.1	2544.3	2506.3
27.5°	4458.0	4477.0	4361.7	4101.3	3859.9	3595.4	3305.2	2915.9	2513.1	2336.8	2300.2
30°	4775.3	4718.4	4498.7	4133.8	3805.6	3472.0	3113.9	2616.2	2305.6	2151.0	2109.0
32.5°	5117.1	5012.7	4596.3	4110.8	3686.3	3265.8	2818.3	2404.6	2167.3	1978.8	1943.5
35°	5768.1	5471.1	4738.7	4041.6	3478.8	2990.5	2532.1	2241.9	2020.8	1818.7	1786.2
37.5°	6647.0	6130.2	4938.1	3945.3	3233.3	2723.3	2319.2	2068.3	1877.0	1668.2	1616.6
40°	7330.5	6796.2	5258.2	3842.2	3006.8	2469.7	2164.6	1977.4	1782.1	1559.7	1514.9
42.5°	7981.5	7405.1	5651.5	3727.0	2773.5	2293.4	2096.8	1957.1	1756.3	1529.8	1487.8
45°	8556.6	7897.4	5990.5	3611.7	2510.4	2130.7	2046.6	1917.7	1719.7	1491.9	1451.2
47.5°	9021.8	8320.6	6284.8	3486.9	2271.7	2007.2	1981.5	1845.9	1649.2	1414.6	1365.7
50°	9442.2	8678.6	6488.3	3354.0	2038.4	1906.9	1874.3	1714.3	1509.5	1302.0	1270.8
52.5°	9701.2	8921.4	6610.3	3375.7	1817.4	1794.3	1741.4	1577.3	1387.4	1209.8	1169.1
55°	9972.5	9150.6	6609.0	3253.6	1632.9	1624.8	1574.6	1448.5	1299.3	1150.1	1125.7
57.5°	10083.7	9170.9	6485.6	2679.9	1470.2	1418.6	1407.8	1341.3	1211.1	1070.1	1043.0
60°	10158.3	9081.4	6252.3	1829.6	1265.4	1228.8	1281.7	1236.9	1118.9	971.1	943.9
62.5°	10085.1	8983.8	5640.6	1321.0	1109.4	1129.8	1179.9	1131.1	1007.7	873.4	850.4
65°	9910.1	8610.8	4453.9	1029.4	1040.2	1085.0	1124.3	1043.0	816.5	683.5	670.0
67.5°	9432.7	7901.5	2865.8	943.9	1000.9	1047.0	1060.6	882.9	739.2	611.7	596.7
70°	8427.7	6343.2	1104.0	889.7	961.6	981.9	926.3	809.7	679.5	569.6	556.1
72.5°	6592.7	4165.0	637.4	813.7	877.5	858.5	859.9	726.9	613.0	508.6	497.7
75°	4097.2	1508.1	566.9	724.2	743.2	778.5	733.7	630.7	527.6	465.2	451.6
77.5°	1354.9	428.6	524.9	623.9	665.9	640.1	614.4	538.4	451.6	402.8	396.0
80°	328.2	321.4	470.6	488.2	522.2	478.8	476.0	447.6	381.1	352.6	345.8
82.5°	202.1	230.6	374.3	303.8	348.6	352.6	401.4	368.9	278.0	288.9	279.4
85°	124.8	177.7	196.7	146.5	147.8	198.0	240.1	222.4	166.8	157.3	156.0
87.5°	42.0	36.6	42.0	31.2	42.0	71.9	108.5	103.1	69.2	47.5	44.8
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)