

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: P510145

Luminaire Tested: **VERD-M-CA4-210-750-U-T4**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510145  
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-CA4-210-750-U-T4  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(4) 70 CRI, 5000K, 960mA LEDS AND TYPE IV OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 30615 lumens  
Efficiency: N/A  
Efficacy: 143.3 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

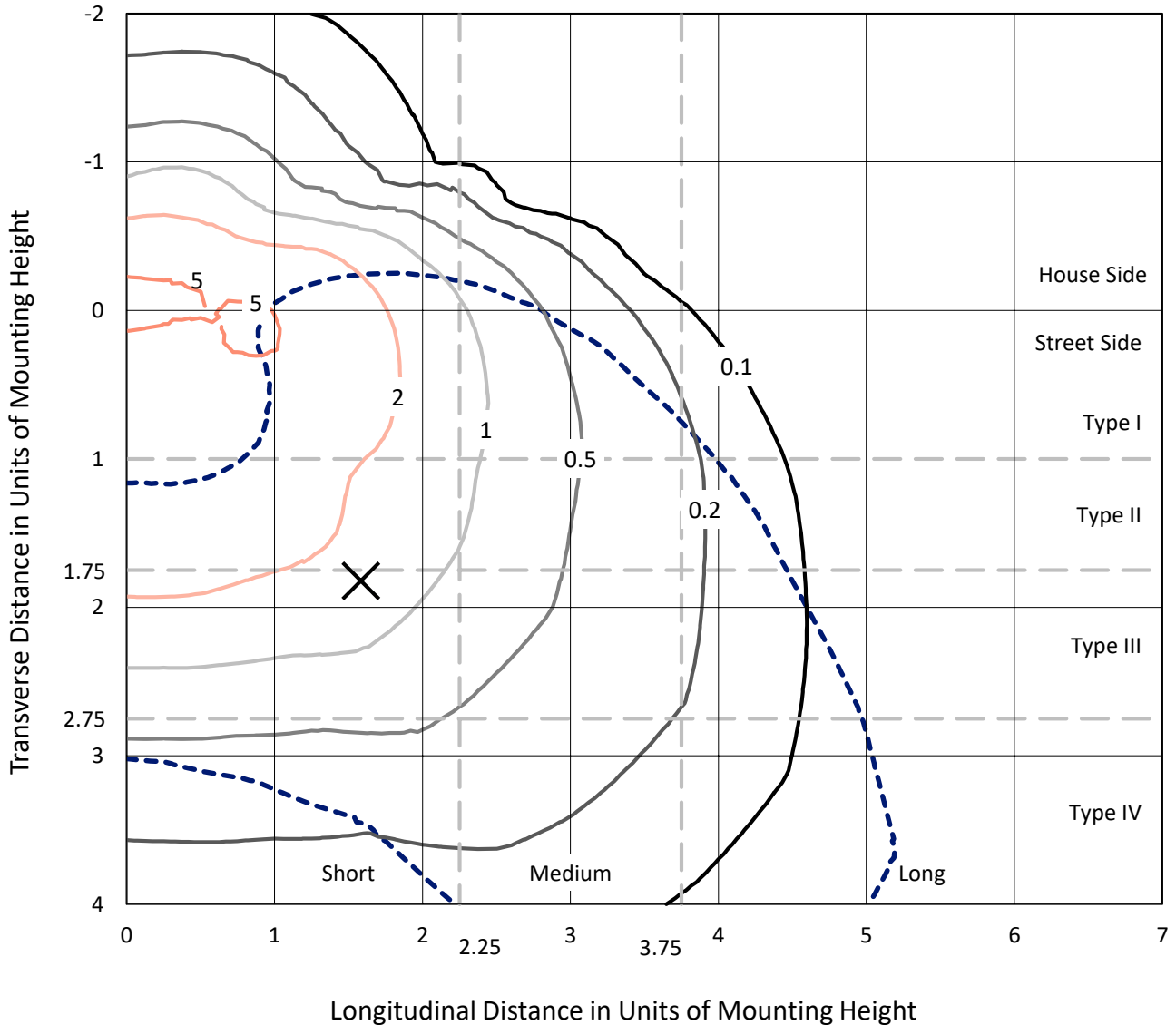
Input Watts (W): 213.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

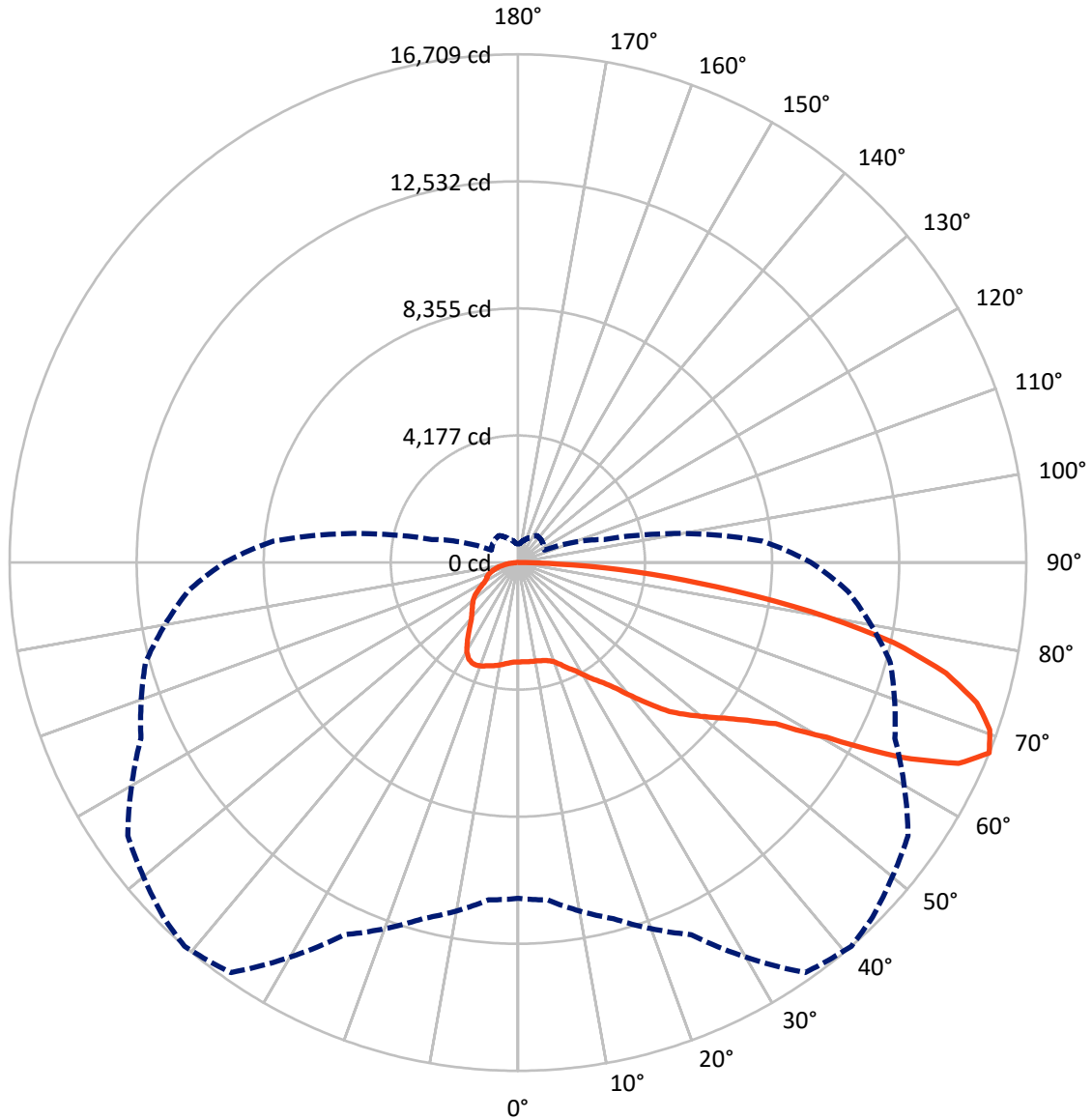
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 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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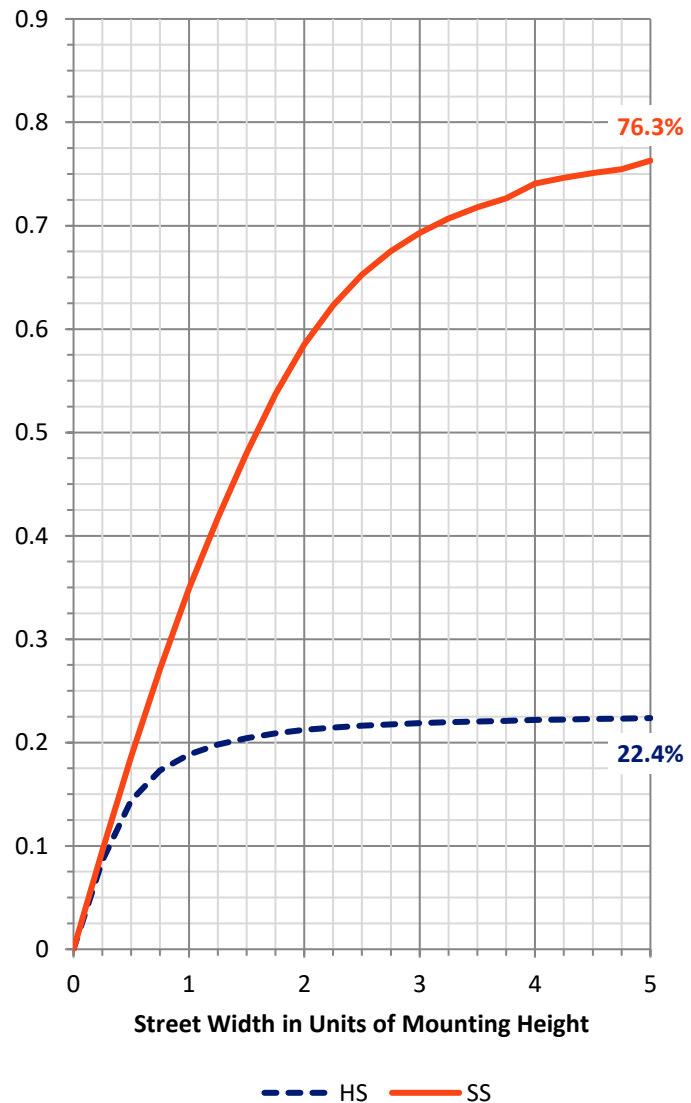
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6928.0	0.0	6928.0
	% Fixture	22.6	0.0	22.6
<b>Street Side</b>	Lumens	23687.0	0.0	23687.0
	% Fixture	77.4	0.0	77.4
<b>Total</b>	Lumens	30615.0	0.0	30615.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	315.9	1.0
10°-20°	979.6	3.2
20°-30°	1751.8	5.7
30°-40°	2746.8	9.0
40°-50°	4259.6	13.9
50°-60°	6004.9	19.6
60°-70°	7654.8	25.0
70°-80°	5728.4	18.7
80°-90°	1173.2	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°	30615.0	100.0
0°-180°	30615.0	100.0



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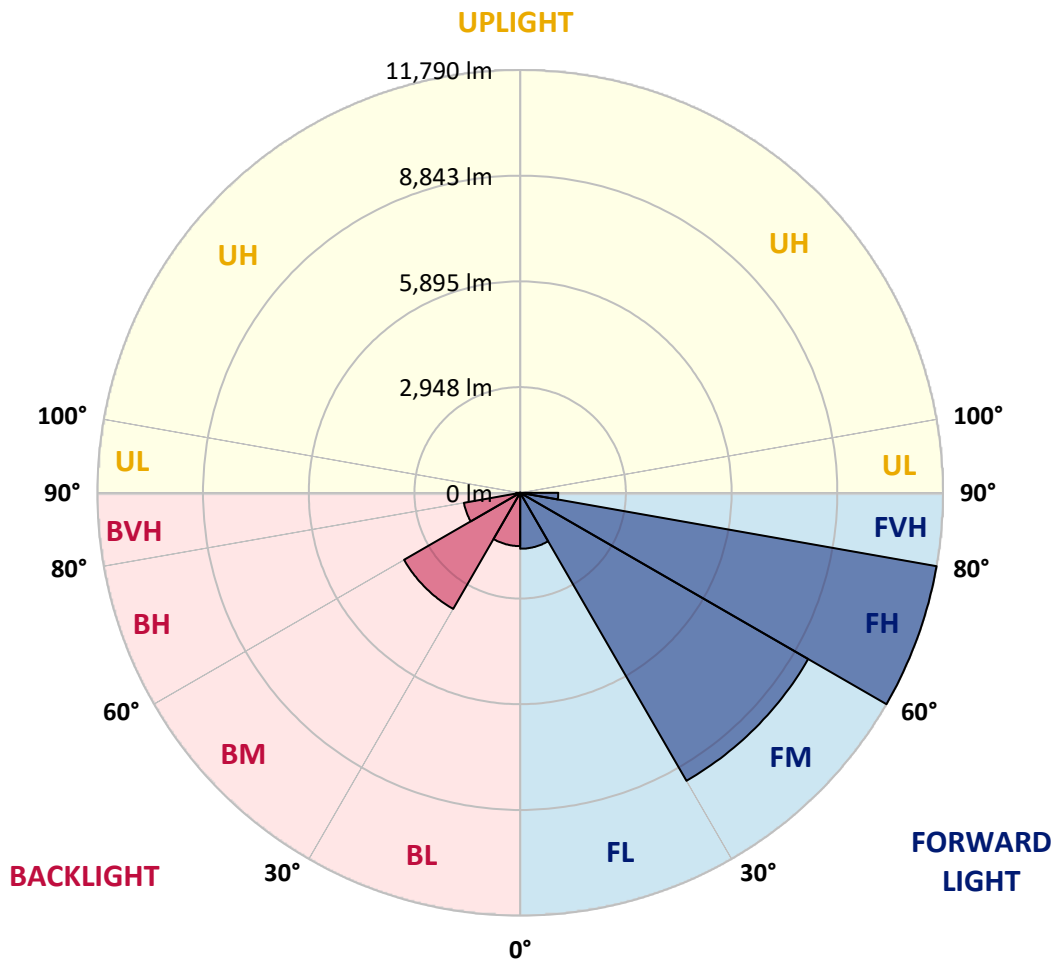
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1559.9	5.1			
FM (30°-60°)	9273.0	30.3			
FH (60°-80°)	11790.5	38.5			G4/12000
FVH (80°-90°)	1063.6	3.5			G5
BL (0°-30°)	1487.4	4.9	B3/2500		
BM (30°-60°)	3738.3	12.2	B3/5000		
BH (60°-80°)	1592.7	5.2	B3/2500		G3/2500
BVH (80°-90°)	109.6	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°	3268.7	3268.7	3268.7	3268.7	3268.7	3268.7	3268.7	3268.7	3268.7	3268.7	3268.7
2.5°	3228.5	3265.9	3260.4	3253.4	3264.5	3265.9	3234.0	3246.5	3253.4	3264.5	3282.5
5°	3236.8	3274.2	3271.5	3259.0	3267.3	3271.5	3242.4	3264.5	3264.5	3268.7	3289.5
7.5°	3218.8	3254.8	3254.8	3250.7	3268.7	3285.3	3259.0	3278.4	3289.5	3300.5	3314.4
10°	3202.2	3232.7	3243.7	3241.0	3282.5	3286.7	3268.7	3315.8	3333.8	3344.9	3361.5
12.5°	3184.2	3221.6	3236.8	3252.1	3296.4	3311.6	3301.9	3350.4	3387.8	3407.2	3425.3
15°	3175.8	3217.4	3242.4	3264.5	3313.0	3340.7	3340.7	3414.2	3458.5	3483.5	3515.3
17.5°	3234.0	3277.0	3296.4	3314.4	3358.7	3396.2	3393.4	3479.3	3544.4	3583.2	3641.4
20°	3378.1	3429.4	3440.5	3447.4	3475.1	3489.0	3484.8	3577.7	3667.7	3741.2	3806.3
22.5°	3628.9	3659.4	3665.0	3637.3	3644.2	3655.3	3648.3	3699.6	3802.1	3888.1	4004.4
25°	3834.0	3882.5	3868.7	3828.5	3834.0	3849.3	3828.5	3907.5	3980.9	4093.1	4210.9
27.5°	4050.2	4086.2	4071.0	4046.0	4040.5	4029.4	4025.2	4126.4	4234.5	4323.1	4497.7
30°	4313.4	4332.8	4288.5	4277.4	4287.1	4294.0	4267.7	4396.6	4495.0	4622.4	4858.0
32.5°	4756.8	4774.8	4711.1	4540.7	4544.8	4576.7	4554.5	4716.7	4902.3	5057.5	5297.2
35°	5322.2	5322.2	5272.3	5032.6	4851.1	4852.4	4858.0	5086.6	5431.6	5779.4	6026.1
37.5°	5894.4	5913.8	5819.6	5600.7	5370.7	5248.7	5146.2	5439.9	5891.7	6667.6	7034.8
40°	6490.2	6520.7	6379.4	6178.5	5913.8	5775.3	5656.1	5834.8	6444.5	7547.5	7838.5
42.5°	7011.2	7054.2	6908.7	6696.7	6512.4	6355.8	6175.7	6247.8	7052.8	8383.0	8547.9
45°	7496.2	7519.8	7396.4	7221.9	7069.4	6983.5	6857.4	6940.6	7748.4	9200.5	9170.0
47.5°	7853.7	7888.3	7776.1	7681.9	7525.3	7474.0	7472.7	7701.3	8531.3	9851.8	9710.4
50°	8434.3	8407.9	8155.8	8040.8	7945.1	7961.8	8002.0	8396.9	9451.3	10479.4	10164.9
52.5°	9408.4	9359.9	8800.1	8560.4	8442.6	8496.6	8517.4	9027.3	10379.7	11021.2	10540.4
55°	10667.9	10512.7	10105.3	9462.4	9092.4	9143.7	9120.2	9704.9	11122.4	11538.1	10818.9
57.5°	11500.7	11646.1	11450.8	11083.6	10164.9	9997.3	9941.8	10375.5	11809.6	12032.7	11107.1
60°	12223.9	12465.0	12775.4	12539.9	12291.8	11664.2	11147.3	11137.6	12415.2	12362.5	11223.5
62.5°	12987.4	13114.9	13592.9	13738.4	14198.5	14083.4	13390.6	12102.0	13020.7	12603.6	11291.4
65°	12215.6	12386.1	13256.2	14050.2	15753.1	15919.4	15693.5	13895.0	13440.5	12726.9	11194.4
67.5°	11040.6	11134.8	12120.0	13497.3	16457.0	16709.2	16482.0	15654.7	13673.3	12672.9	10895.1
70°	9534.5	9645.3	10586.1	12465.0	16421.0	16454.2	16365.6	15816.9	13580.5	12419.3	10141.4
72.5°	7730.4	7870.3	8697.5	10648.5	15634.0	15778.1	15638.1	15495.4	13320.0	11709.9	8843.0
75°	5848.7	6034.4	6772.9	8489.7	13816.0	14542.1	14560.1	15000.7	12308.5	10038.8	6418.2
77.5°	3989.2	4166.6	4866.3	6468.1	11468.8	12628.5	12930.6	13412.8	10284.1	7418.6	3501.5
80°	2246.1	2229.5	3117.6	4621.0	8747.4	9765.9	10145.5	10126.1	7221.9	3809.1	713.6
82.5°	1037.8	1040.6	1594.8	2950.0	5922.1	6594.2	6748.0	5873.6	2534.3	645.7	227.2
85°	516.8	522.4	767.6	1479.8	3343.5	3863.1	3671.9	2444.2	543.2	188.4	135.8
87.5°	205.1	196.8	303.5	608.3	1206.9	1278.9	1116.8	489.1	98.4	66.5	45.7
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°	3268.7	3268.7	3268.7	3268.7	3268.7	3268.7	3268.7	3268.7	3268.7	3268.7	3268.7
2.5°	3278.4	3281.1	3293.6	3268.7	3275.6	3270.1	3265.9	3288.1	3286.7	3290.8	3283.9
5°	3288.1	3295.0	3307.5	3296.4	3307.5	3301.9	3306.1	3336.6	3340.7	3339.3	3339.3
7.5°	3314.4	3321.3	3344.9	3331.0	3356.0	3349.0	3350.4	3379.5	3385.1	3376.8	3374.0
10°	3369.8	3375.4	3408.6	3405.9	3415.6	3410.0	3404.5	3416.9	3414.2	3401.7	3396.2
12.5°	3433.6	3448.8	3486.2	3487.6	3500.1	3472.4	3443.3	3439.1	3430.8	3411.4	3407.2
15°	3529.2	3547.2	3604.0	3590.1	3581.8	3522.2	3473.8	3435.0	3401.7	3385.1	3369.8
17.5°	3666.4	3696.8	3775.8	3732.9	3671.9	3584.6	3500.1	3415.6	3344.9	3285.3	3261.8
20°	3840.9	3875.6	3942.1	3885.3	3792.4	3662.2	3525.0	3372.6	3218.8	3087.2	3067.8
22.5°	4048.8	4104.2	4152.7	4022.5	3885.3	3720.4	3525.0	3306.1	3051.1	2854.4	2805.9
25°	4291.3	4334.2	4319.0	4136.1	3937.9	3730.1	3486.2	3188.3	2828.1	2599.4	2560.6
27.5°	4554.5	4573.9	4456.2	4190.1	3943.5	3673.3	3376.8	2979.1	2567.6	2387.4	2350.0
30°	4878.8	4820.6	4596.1	4223.4	3888.1	3547.2	3181.4	2672.9	2355.6	2197.6	2154.6
32.5°	5227.9	5121.3	4695.9	4199.8	3766.1	3336.6	2879.3	2456.7	2214.2	2021.6	1985.6
35°	5893.0	5589.6	4841.4	4129.1	3554.1	3055.3	2587.0	2290.4	2064.6	1858.1	1824.9
37.5°	6790.9	6263.0	5045.0	4030.8	3303.3	2782.3	2369.4	2113.1	1917.7	1704.3	1651.7
40°	7489.3	6943.3	5372.1	3925.5	3071.9	2523.2	2211.5	2020.2	1820.7	1593.5	1547.7
42.5°	8154.4	7565.5	5773.9	3807.7	2833.6	2343.1	2142.2	1999.5	1794.4	1563.0	1520.0
45°	8741.9	8068.5	6120.3	3689.9	2564.8	2176.8	2090.9	1959.3	1757.0	1524.2	1482.6
47.5°	9217.1	8500.8	6421.0	3562.4	2320.9	2050.7	2024.4	1885.8	1684.9	1445.2	1395.3
50°	9646.7	8866.6	6628.8	3426.6	2082.6	1948.2	1914.9	1751.4	1542.2	1330.2	1298.3
52.5°	9911.3	9114.6	6753.5	3448.8	1856.7	1833.2	1779.1	1611.5	1417.5	1236.0	1194.4
55°	10188.5	9348.8	6752.1	3324.1	1668.3	1660.0	1608.7	1479.8	1327.4	1175.0	1150.1
57.5°	10302.1	9369.6	6626.0	2738.0	1502.0	1449.4	1438.3	1370.4	1237.4	1093.3	1065.5
60°	10378.3	9278.1	6387.7	1869.2	1292.8	1255.4	1309.4	1263.7	1143.1	992.1	964.4
62.5°	10303.5	9178.4	5762.8	1349.6	1133.4	1154.2	1205.5	1155.6	1029.5	892.3	868.8
65°	10124.7	8797.3	4550.4	1051.7	1062.8	1108.5	1148.7	1065.5	834.1	698.4	684.5
67.5°	9637.0	8072.6	2927.8	964.4	1022.6	1069.7	1083.6	902.0	755.2	624.9	609.7
70°	8610.2	6480.5	1127.9	909.0	982.4	1003.2	946.4	827.2	694.2	582.0	568.1
72.5°	6735.5	4255.2	651.2	831.4	896.5	877.1	878.5	742.7	626.3	519.6	508.5
75°	4186.0	1540.8	579.2	739.9	759.3	795.3	749.6	644.3	539.0	475.3	461.4
77.5°	1384.2	437.9	536.2	637.4	680.3	654.0	627.7	550.1	461.4	411.5	404.6
80°	335.3	328.4	480.8	498.8	533.5	489.1	486.4	457.3	389.4	360.3	353.3
82.5°	206.5	235.6	382.4	310.4	356.1	360.3	410.1	376.9	284.1	295.1	285.4
85°	127.5	181.5	200.9	149.6	151.0	202.3	245.3	227.2	170.4	160.7	159.3
87.5°	43.0	37.4	43.0	31.9	43.0	73.4	110.8	105.3	70.7	48.5	45.7
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)