

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: P509902

Luminaire Tested: **VERD-M-CA3-160-750-U-T3-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P509902  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VERD-M-CA3-160-750-U-T3-HSS  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 1000mA LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

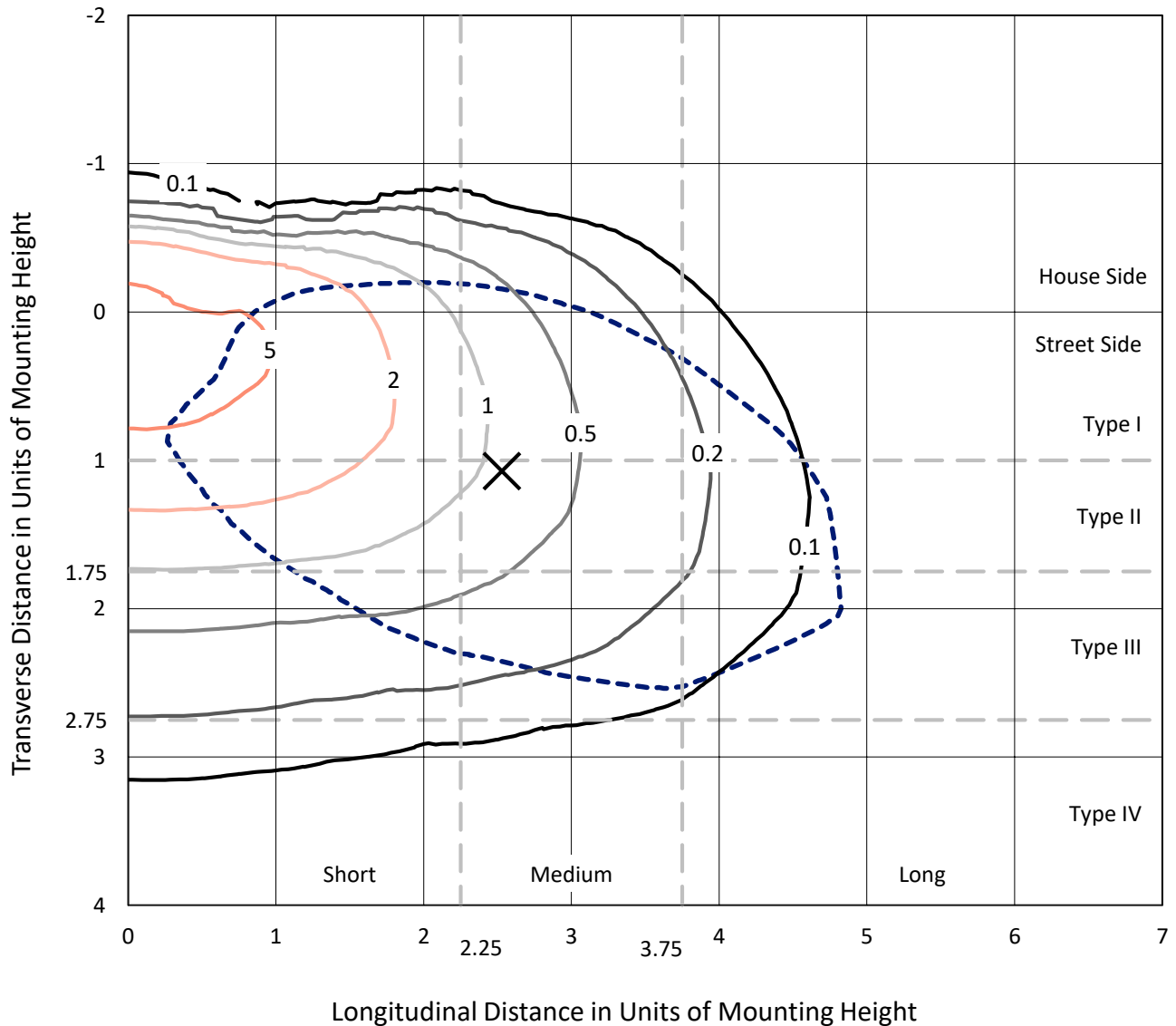
Lumens per Lamp: N/A  
Luminaire Lumens: 22178 lumens  
Efficiency: N/A  
Efficacy: 136.3 lumens/watt  
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 162.7  
Input Voltage (V): NR  
Input Current (Ain): 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

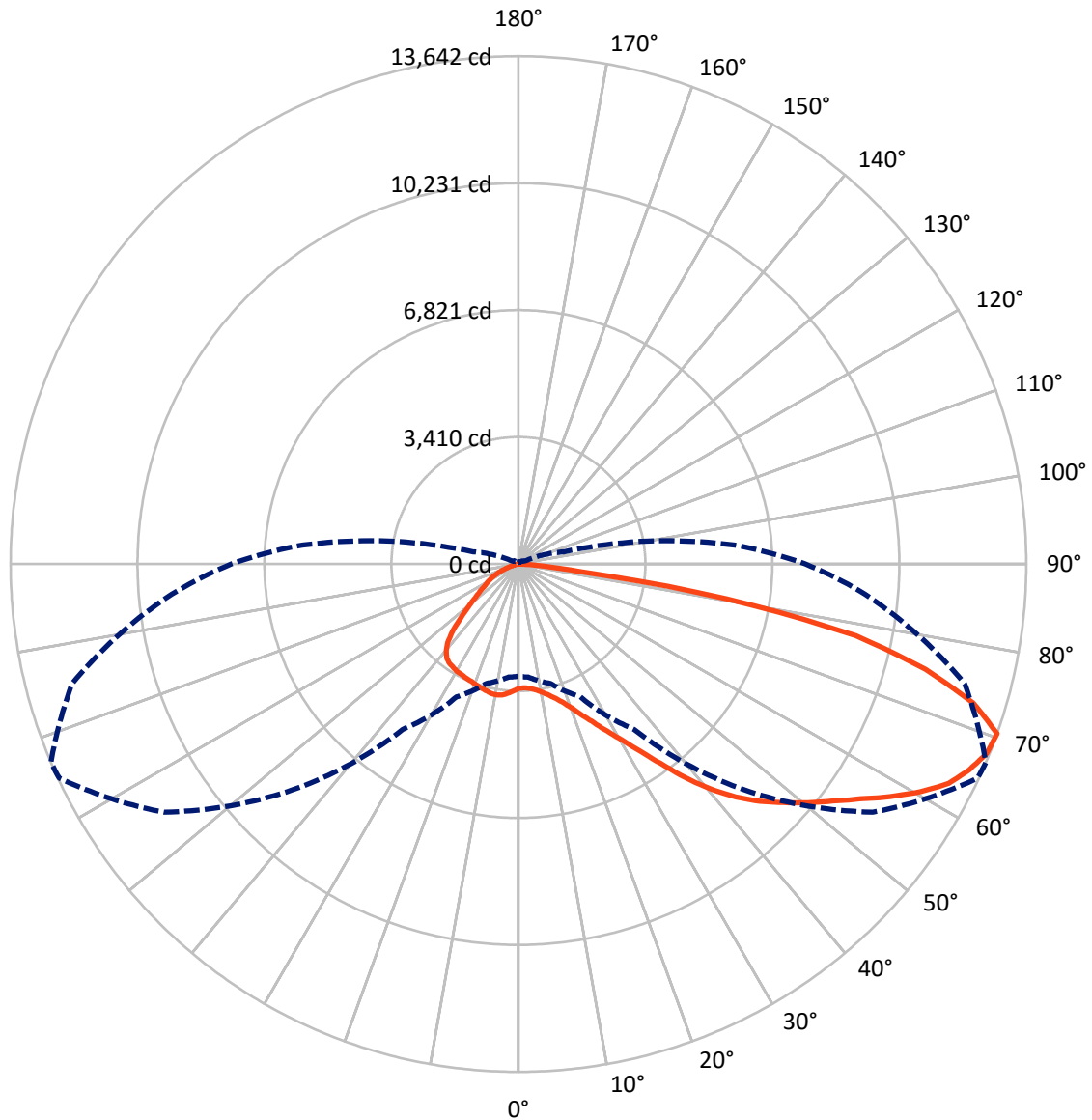
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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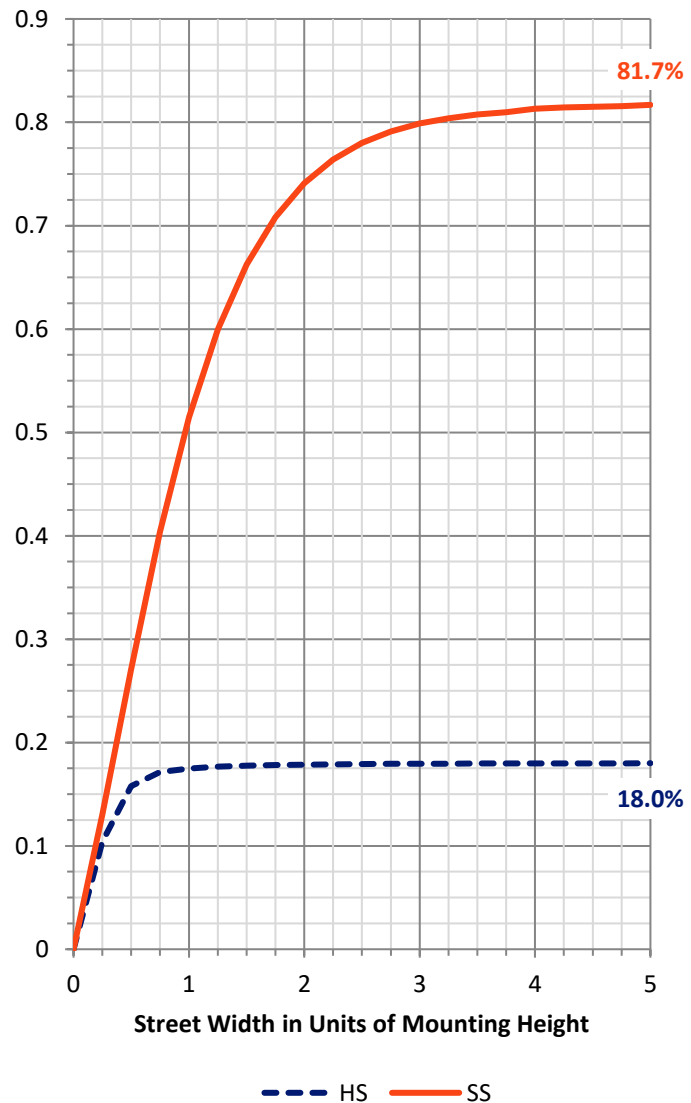
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4041.0	0.0	4041.0
	% Fixture	18.2	0.0	18.2
<b>Street Side</b>	Lumens	18137.0	0.0	18137.0
	% Fixture	81.8	0.0	81.8
<b>Total</b>	Lumens	22178.0	0.0	22178.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	332.4	1.5
10°-20°	1036.9	4.7
20°-30°	1799.1	8.1
30°-40°	2672.1	12.0
40°-50°	3666.0	16.5
50°-60°	4502.0	20.3
60°-70°	4826.6	21.8
70°-80°	3064.0	13.8
80°-90°	278.8	1.3
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°	22178.0	100.0
0°-180°	22178.0	100.0



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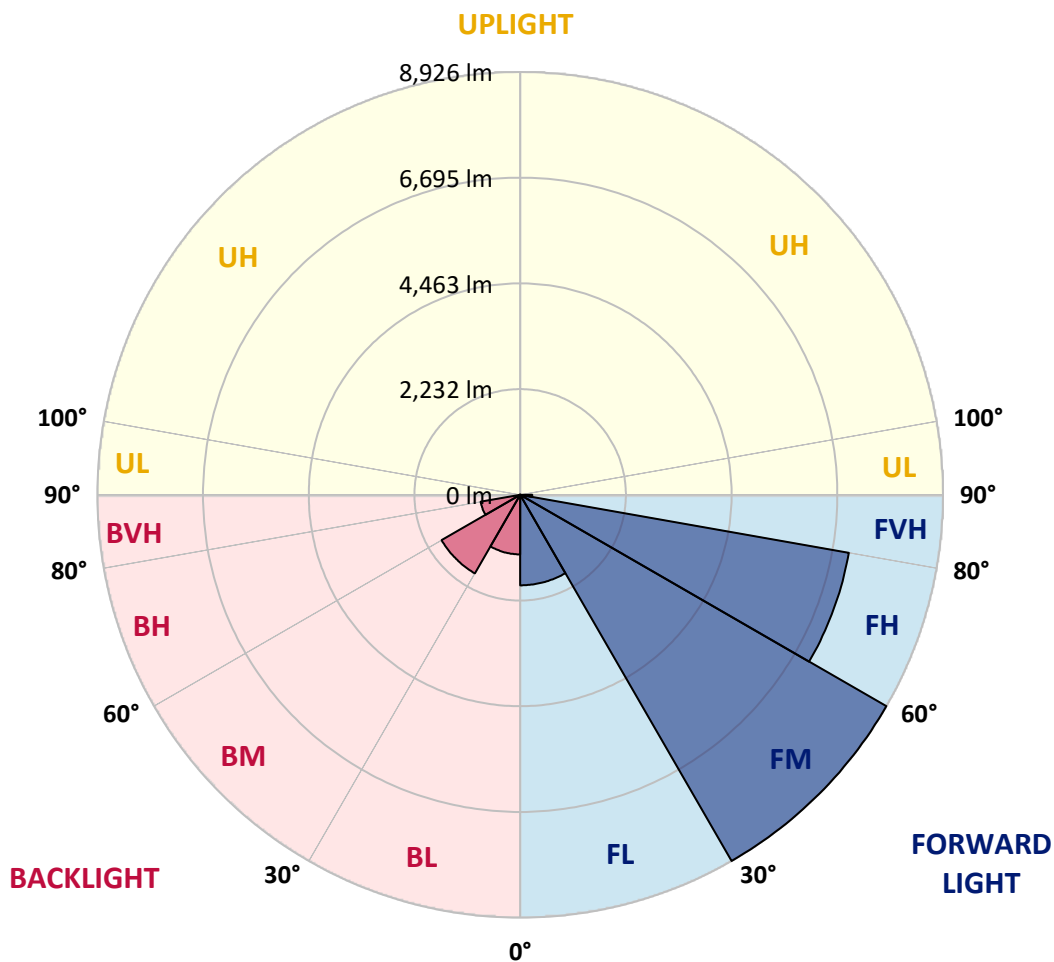
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1910.8	8.6			
FM (30°-60°)	8926.4	40.2			
FH (60°-80°)	7045.4	31.8			G3/7500
FVH (80°-90°)	254.3	1.1			G3/500
BL (0°-30°)	1257.6	5.7	B3/2500		
BM (30°-60°)	1913.6	8.6	B2/2500		
BH (60°-80°)	845.2	3.8	B2/1000		G2/1000
BVH (80°-90°)	24.5	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	3336.1	3336.1	3336.1	3336.1	3336.1	3336.1	3336.1	3336.1	3336.1	3336.1	3336.1
2.5°	3306.0	3337.1	3318.9	3316.8	3338.2	3317.8	3331.8	3328.6	3326.4	3329.6	3352.2
5°	3392.9	3429.4	3404.7	3397.2	3409.0	3372.6	3369.3	3361.8	3359.7	3360.7	3392.9
7.5°	3514.2	3557.1	3547.5	3528.1	3521.7	3461.6	3450.9	3424.1	3415.5	3417.6	3449.8
10°	3705.2	3748.1	3728.8	3685.9	3659.1	3590.4	3551.8	3517.4	3500.2	3502.4	3536.7
12.5°	3949.8	3990.6	3958.4	3880.1	3865.1	3754.6	3694.5	3621.5	3609.7	3592.5	3629.0
15°	4180.5	4216.0	4200.9	4128.0	4087.2	3956.3	3845.8	3755.6	3744.9	3728.8	3727.7
17.5°	4435.9	4471.3	4443.4	4389.8	4336.1	4180.5	4061.4	3945.6	3917.7	3903.7	3853.3
20°	4708.5	4764.3	4758.9	4714.9	4650.5	4468.1	4299.7	4168.7	4138.7	4112.9	4006.7
22.5°	4989.6	5062.6	5046.5	5022.9	4996.1	4791.1	4594.7	4443.4	4420.9	4366.2	4198.8
25°	5300.8	5351.2	5339.4	5351.2	5333.0	5151.6	4937.0	4752.5	4722.4	4670.9	4414.5
27.5°	5602.3	5654.9	5675.3	5650.6	5662.4	5532.6	5278.3	5113.0	5084.0	4989.6	4674.1
30°	5874.9	5940.3	5969.3	5980.0	6019.7	5885.6	5697.8	5497.2	5487.5	5390.9	5016.4
32.5°	6092.7	6165.7	6236.5	6282.6	6345.9	6286.9	6100.2	5979.0	5980.0	5893.1	5530.4
35°	6250.4	6334.1	6437.1	6559.5	6692.5	6667.8	6557.3	6559.5	6576.6	6605.6	6186.1
37.5°	6425.3	6492.9	6614.2	6784.8	6987.6	7039.1	7024.1	7194.7	7278.4	7329.9	6762.3
40°	6529.4	6598.1	6749.4	6979.0	7274.1	7397.5	7535.9	7835.3	7944.8	7891.1	7254.8
42.5°	6414.6	6475.8	6738.7	7135.7	7509.1	7789.2	8037.0	8474.8	8554.2	8379.3	7670.1
45°	6265.5	6344.9	6621.7	7178.6	7717.3	8173.3	8558.5	9031.7	9090.8	8842.9	8037.0
47.5°	6143.1	6212.9	6535.9	7132.5	7909.4	8567.1	9016.7	9557.5	9572.6	9266.7	8416.9
50°	5986.5	6071.2	6408.2	7075.6	8025.2	8915.9	9436.3	10047.9	10081.2	9705.6	8738.8
52.5°	5822.3	5904.9	6253.7	6982.2	8108.9	9205.6	9871.9	10569.4	10572.6	10170.2	9082.2
55°	5579.8	5667.8	6054.1	6847.0	8134.7	9397.7	10309.7	11101.6	11134.9	10641.3	9393.4
57.5°	5323.3	5398.4	5813.7	6636.7	8039.2	9579.0	10759.3	11692.9	11784.1	11172.5	9660.5
60°	4983.2	5058.3	5497.2	6361.0	7836.4	9782.9	11274.4	12405.4	12415.0	11602.7	9854.8
62.5°	4617.3	4682.7	5086.2	5928.5	7522.0	9861.2	11716.5	12975.2	12974.1	11985.8	9951.3
65°	4182.7	4209.5	4620.5	5397.4	7033.8	9746.4	11911.8	13350.7	13314.2	12261.6	9919.1
67.5°	3667.6	3696.6	4007.8	4737.5	6325.5	9297.9	11824.9	13532.1	13568.5	12507.3	9779.7
70°	3015.2	3049.6	3321.0	3937.0	5423.1	8582.1	11621.0	13610.4	13641.5	12408.6	9349.4
72.5°	2225.5	2271.6	2437.9	2930.5	4116.2	7210.8	10676.7	12753.0	12770.2	11584.5	8453.4
75°	1382.1	1466.8	1623.5	1947.6	2670.8	5057.2	9126.2	11401.0	11293.7	10333.3	6995.1
77.5°	552.6	566.6	644.9	912.1	1302.7	2633.2	6615.3	9062.9	9267.8	8267.7	5003.6
80°	321.9	319.8	338.0	424.9	559.1	900.3	2573.1	5084.0	5666.7	4541.1	2251.2
82.5°	259.7	250.0	250.0	272.6	268.3	378.8	843.4	1485.1	1628.9	1445.4	640.6
85°	136.3	133.1	108.4	134.1	134.1	188.9	324.1	420.6	444.2	387.4	240.4
87.5°	34.3	34.3	34.3	41.8	33.3	39.7	54.7	66.5	68.7	55.8	35.4
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°	3336.1	3336.1	3336.1	3336.1	3336.1	3336.1	3336.1	3336.1	3336.1	3336.1	3336.1
2.5°	3360.7	3370.4	3408.0	3402.6	3409.0	3409.0	3419.8	3431.6	3467.0	3446.6	3438.0
5°	3399.4	3418.7	3465.9	3483.1	3508.8	3512.0	3533.5	3541.0	3579.6	3558.2	3558.2
7.5°	3473.4	3496.0	3539.9	3546.4	3558.2	3537.8	3543.2	3519.6	3545.3	3519.6	3520.6
10°	3557.1	3572.1	3602.2	3559.3	3541.0	3492.7	3482.0	3424.1	3444.4	3411.2	3402.6
12.5°	3637.6	3632.2	3609.7	3533.5	3483.1	3403.7	3370.4	3292.1	3287.8	3243.8	3235.2
15°	3713.8	3676.2	3603.3	3485.2	3399.4	3288.9	3209.5	3123.6	3093.6	3043.1	3038.8
17.5°	3807.1	3742.8	3612.9	3439.1	3298.5	3137.6	3024.9	2928.3	2866.1	2819.9	2818.9
20°	3920.9	3822.2	3617.2	3386.5	3194.4	2988.4	2830.7	2708.3	2619.3	2561.3	2560.3
22.5°	4063.6	3929.5	3656.9	3326.4	3061.4	2808.1	2611.8	2400.4	2278.1	2160.0	2138.6
25°	4231.0	4037.8	3691.2	3295.3	2930.5	2620.4	2328.5	2019.5	1829.5	1735.1	1699.7
27.5°	4466.0	4218.1	3741.7	3236.3	2807.1	2388.6	1963.7	1626.7	1398.2	1317.7	1317.7
30°	4737.5	4445.6	3836.1	3200.9	2635.4	2063.4	1563.4	1201.8	989.3	868.1	864.9
32.5°	5151.6	4717.1	3921.9	3124.7	2427.2	1709.3	1131.0	774.7	604.1	529.0	524.7
35°	5747.2	5234.3	4060.4	3048.5	2125.7	1272.6	717.9	444.2	344.4	301.5	299.4
37.5°	6320.2	5726.8	4358.7	2897.2	1697.5	799.4	398.1	256.5	210.3	204.9	202.8
40°	6723.6	6151.7	4569.0	2666.5	1206.1	423.8	230.7	185.6	182.4	180.3	179.2
42.5°	7163.6	6467.2	4718.1	2372.5	715.7	245.7	187.8	167.4	162.0	159.9	159.9
45°	7520.9	6770.9	4746.0	1951.9	360.5	202.8	171.7	152.4	145.9	150.2	151.3
47.5°	7850.3	7057.4	4651.6	1467.9	243.6	188.9	161.0	141.6	137.3	148.1	148.1
50°	8131.5	7299.9	4434.9	1095.6	228.6	178.1	150.2	130.9	129.8	139.5	140.6
52.5°	8411.5	7495.2	4093.6	827.3	216.8	166.3	139.5	121.3	118.0	124.5	125.5
55°	8633.7	7564.9	3840.4	615.9	208.2	155.6	129.8	111.6	104.1	103.0	105.2
57.5°	8756.0	7503.7	3592.5	452.8	198.5	145.9	120.2	98.7	86.9	86.9	86.9
60°	8758.1	7429.7	3327.5	358.4	187.8	135.2	109.4	84.8	73.0	70.8	70.8
62.5°	8734.5	7297.7	2942.3	311.2	176.0	126.6	95.5	71.9	63.3	60.1	60.1
65°	8630.4	7048.8	2475.5	266.1	162.0	120.2	81.6	64.4	56.9	52.6	52.6
67.5°	8306.4	6582.0	1905.7	231.8	149.2	106.2	74.0	57.9	50.4	46.1	45.1
70°	7711.9	5827.7	1257.6	197.4	136.3	94.4	67.6	52.6	45.1	40.8	39.7
72.5°	6715.1	4742.8	632.0	167.4	117.0	86.9	61.2	46.1	38.6	34.3	34.3
75°	5262.2	3292.1	344.4	133.1	92.3	76.2	53.7	38.6	33.3	30.0	30.0
77.5°	3226.6	1632.1	235.0	103.0	69.7	62.2	42.9	32.2	29.0	27.9	27.9
80°	1177.1	534.4	157.7	73.0	52.6	48.3	34.3	27.9	26.8	26.8	26.8
82.5°	424.9	271.5	106.2	49.4	33.3	36.5	27.9	23.6	22.5	23.6	24.7
85°	174.9	119.1	38.6	27.9	18.2	19.3	17.2	16.1	17.2	18.2	18.2
87.5°	26.8	23.6	13.9	13.9	10.7	9.7	7.5	8.6	10.7	12.9	12.9
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)