

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: P510089

Luminaire Tested: **VERD-M-CA4-200-740-U-T4**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510089  
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-CA4-200-740-U-T4  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(4) 70 CRI, 4000K, 910mA LEDS AND TYPE IV OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28722 lumens  
Efficiency: N/A  
Efficacy: 142.3 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

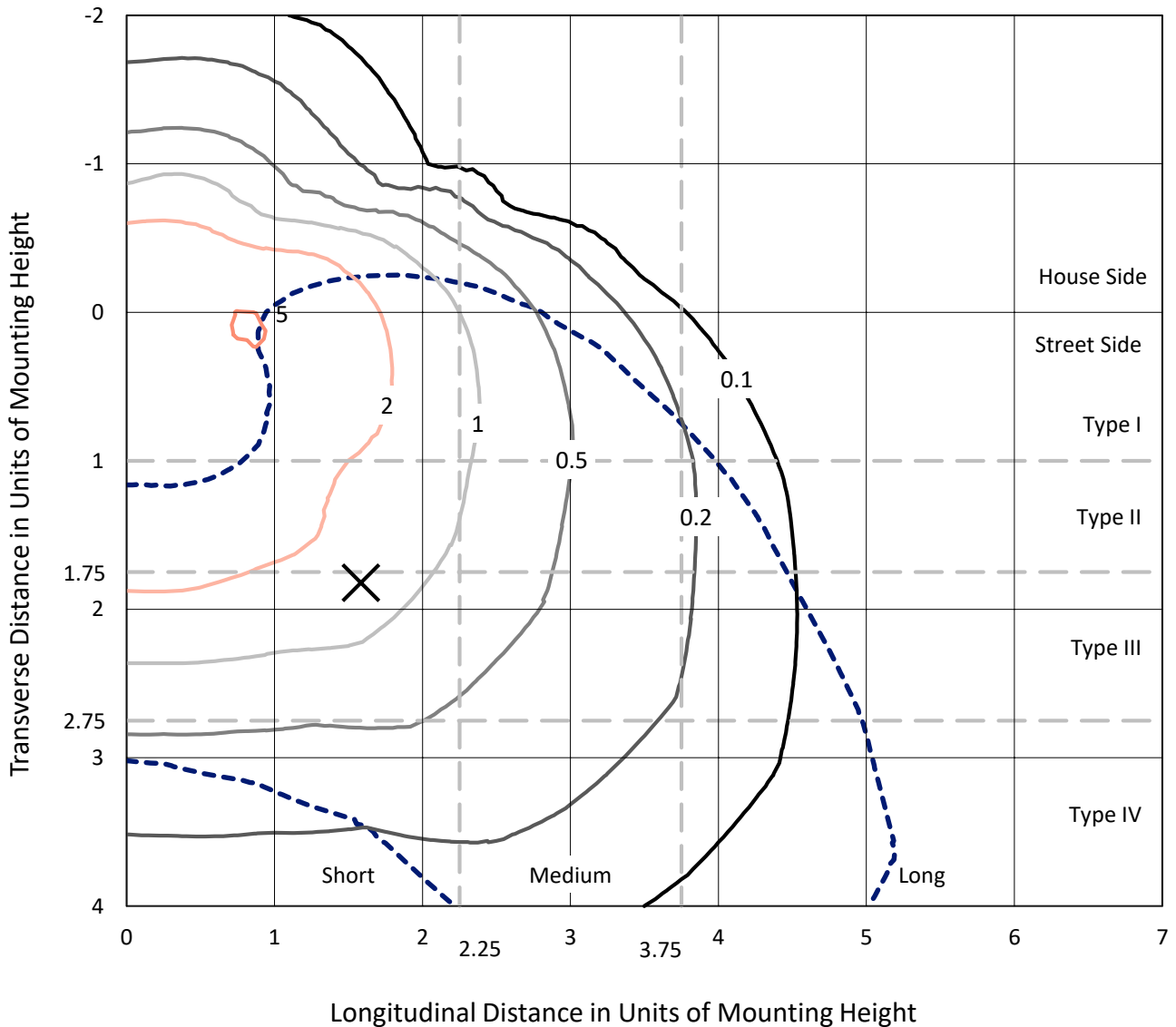
Input Watts (W): 201.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

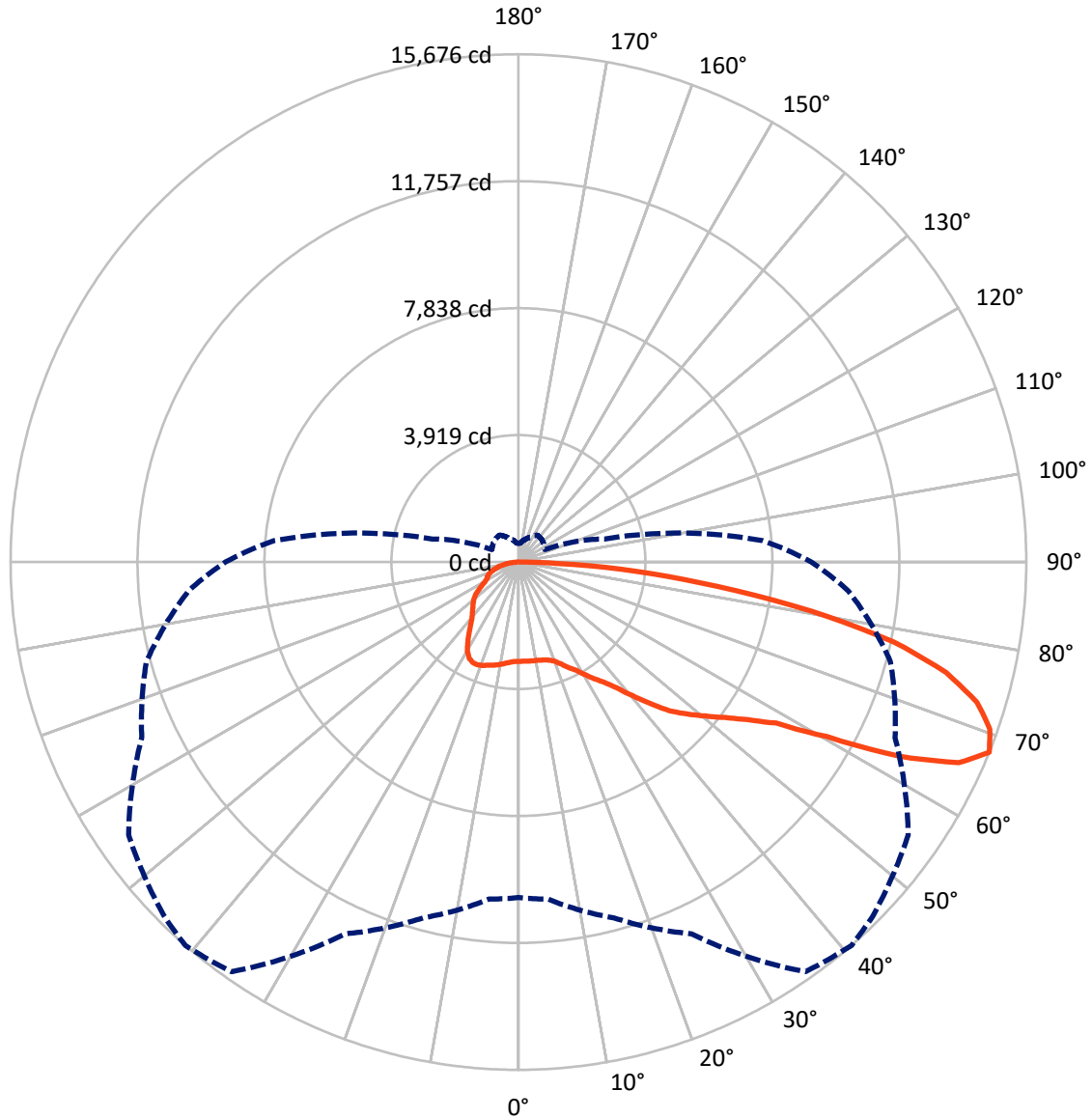
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 fc  
 Type IV - Short - N/A

REPORT NUMBER: P510089  
CATALOG NUMBER: VERD-M-CA4-200-740-U-T4

### Luminous Intensity Polar Plot



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

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CATALOG NUMBER: VERD-M-CA4-200-740-U-T4

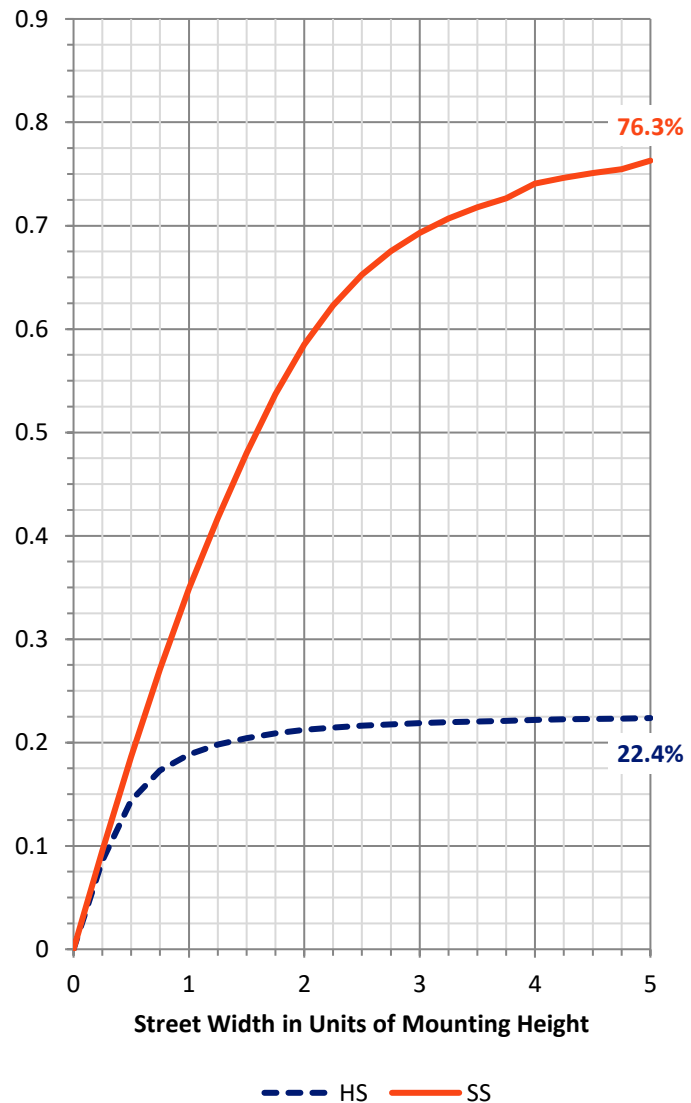
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6499.7	0.0	6499.7
	% Fixture	22.6	0.0	22.6
<b>Street Side</b>	Lumens	22222.4	0.0	22222.4
	% Fixture	77.4	0.0	77.4
<b>Total</b>	Lumens	28722.0	0.0	28722.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	296.3	1.0
10°-20°	919.1	3.2
20°-30°	1643.5	5.7
30°-40°	2577.0	9.0
40°-50°	3996.2	13.9
50°-60°	5633.6	19.6
60°-70°	7181.5	25.0
70°-80°	5374.2	18.7
80°-90°	1100.7	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°	28722.0	100.0
0°-180°	28722.0	100.0



REPORT NUMBER: P510089

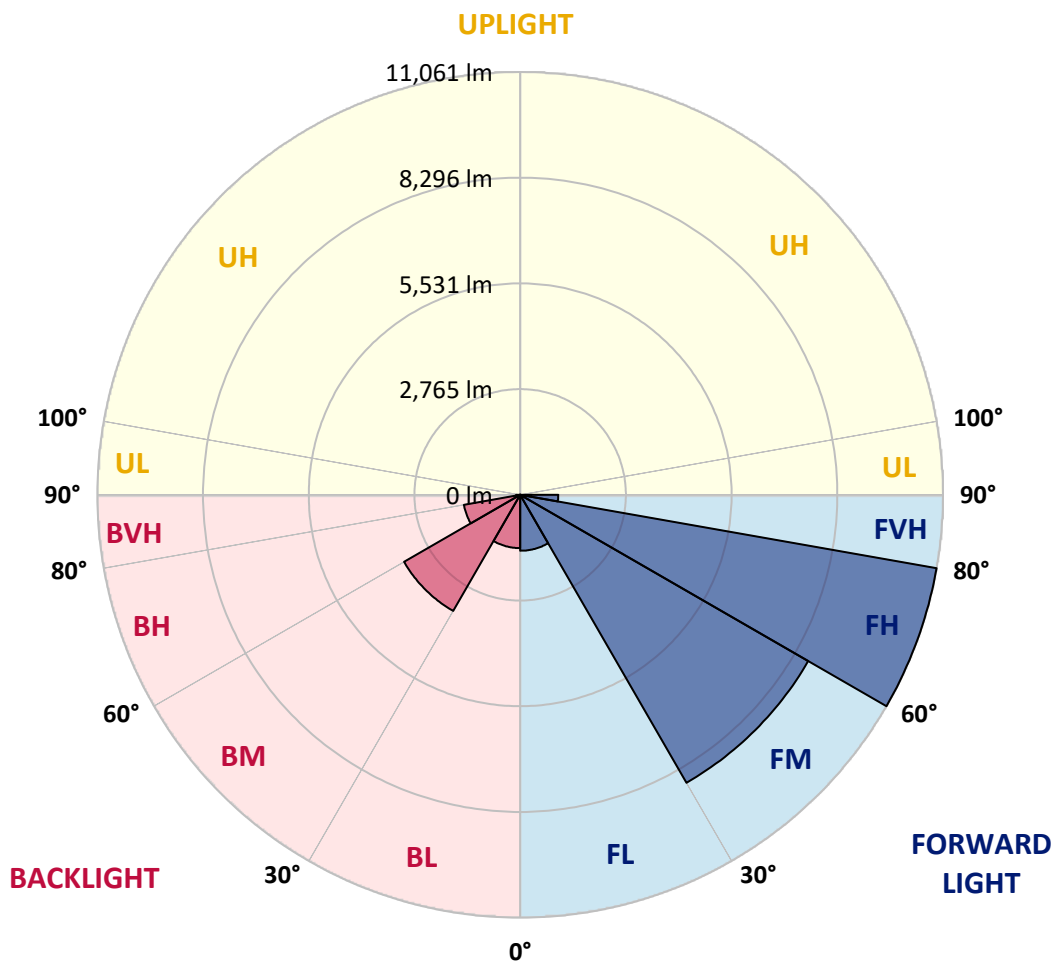
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1463.4	5.1			
FM (30°-60°)	8699.7	30.3			
FH (60°-80°)	11061.4	38.5			G4/12000
FVH (80°-90°)	997.9	3.5			G5
BL (0°-30°)	1395.4	4.9	B3/2500		
BM (30°-60°)	3507.1	12.2	B3/5000		
BH (60°-80°)	1494.3	5.2	B3/2500		G3/2500
BVH (80°-90°)	102.8	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°	3066.6	3066.6	3066.6	3066.6	3066.6	3066.6	3066.6	3066.6	3066.6	3066.6	3066.6
2.5°	3028.9	3064.0	3058.8	3052.3	3062.7	3064.0	3034.1	3045.8	3052.3	3062.7	3079.6
5°	3036.7	3071.8	3069.2	3057.5	3065.3	3069.2	3041.9	3062.7	3062.7	3066.6	3086.1
7.5°	3019.8	3053.6	3053.6	3049.7	3066.6	3082.2	3057.5	3075.7	3086.1	3096.5	3109.5
10°	3004.2	3032.8	3043.2	3040.6	3079.6	3083.5	3066.6	3110.8	3127.7	3138.1	3153.7
12.5°	2987.3	3022.4	3036.7	3051.0	3092.6	3106.9	3097.8	3143.3	3178.4	3196.6	3213.5
15°	2979.5	3018.5	3041.9	3062.7	3108.2	3134.2	3134.2	3203.1	3244.7	3268.1	3298.0
17.5°	3034.1	3074.4	3092.6	3109.5	3151.1	3186.2	3183.6	3264.2	3325.3	3361.7	3416.3
20°	3169.3	3217.4	3227.8	3234.3	3260.3	3273.3	3269.4	3356.5	3441.0	3509.8	3570.9
22.5°	3404.6	3433.2	3438.4	3412.4	3418.9	3429.3	3422.8	3470.9	3567.0	3647.6	3756.8
25°	3596.9	3642.4	3629.4	3591.7	3596.9	3611.2	3591.7	3665.8	3734.7	3840.0	3950.5
27.5°	3799.7	3833.5	3819.2	3795.8	3790.6	3780.2	3776.3	3871.2	3972.6	4055.8	4219.6
30°	4046.7	4064.9	4023.3	4012.9	4022.0	4028.5	4003.8	4124.7	4217.0	4336.6	4557.6
32.5°	4462.7	4479.6	4419.8	4259.9	4263.8	4293.7	4272.9	4425.0	4599.2	4744.8	4969.7
35°	4993.1	4993.1	4946.3	4721.4	4551.1	4552.4	4557.6	4772.1	5095.8	5422.1	5653.5
37.5°	5530.0	5548.2	5459.8	5254.4	5038.6	4924.2	4828.0	5103.6	5527.4	6255.3	6599.8
40°	6088.9	6117.5	5984.9	5796.5	5548.2	5418.2	5306.4	5474.1	6046.0	7080.8	7353.8
42.5°	6577.7	6618.0	6481.5	6282.6	6109.7	5962.8	5793.9	5861.4	6616.7	7864.7	8019.4
45°	7032.7	7054.8	6939.1	6775.3	6632.3	6551.7	6433.4	6511.4	7269.3	8631.6	8603.0
47.5°	7368.1	7400.6	7295.3	7206.9	7060.0	7011.9	7010.6	7225.1	8003.8	9242.6	9110.0
50°	7912.8	7888.1	7651.5	7543.6	7453.9	7469.5	7507.2	7877.7	8866.9	9831.5	9536.4
52.5°	8826.6	8781.1	8255.9	8031.1	7920.6	7971.3	7990.8	8469.1	9737.9	10339.8	9888.7
55°	10008.3	9862.7	9480.5	8877.3	8530.2	8578.3	8556.2	9104.8	10434.7	10824.6	10150.0
57.5°	10789.5	10926.0	10742.7	10398.3	9536.4	9379.1	9327.1	9734.0	11079.4	11288.7	10420.4
60°	11468.1	11694.3	11985.5	11764.5	11531.8	10942.9	10458.1	10449.0	11647.5	11598.1	10529.5
62.5°	12184.4	12304.0	12752.5	12888.9	13320.5	13212.6	12562.7	11353.7	12215.6	11824.3	10593.2
65°	11460.3	11620.2	12436.6	13181.4	14779.1	14935.1	14723.2	13035.8	12609.5	11940.0	10502.3
67.5°	10358.0	10446.4	11370.6	12662.8	15439.4	15676.0	15462.8	14686.8	12827.9	11889.3	10221.5
70°	8944.9	9048.9	9931.6	11694.3	15405.6	15436.8	15353.6	14838.9	12740.8	11651.4	9514.3
72.5°	7252.4	7383.7	8159.8	9990.1	14667.3	14802.5	14671.2	14537.3	12496.4	10985.8	8296.2
75°	5487.1	5661.3	6354.1	7964.8	12961.7	13642.9	13659.8	14073.2	11547.4	9418.1	6021.3
77.5°	3742.5	3908.9	4565.4	6068.1	10759.6	11847.7	12131.1	12583.5	9648.2	6959.9	3285.0
80°	2107.2	2091.6	2924.9	4335.3	8206.5	9162.0	9518.2	9500.0	6775.3	3573.5	669.5
82.5°	973.7	976.3	1496.2	2767.6	5556.0	6186.4	6330.7	5510.5	2377.6	605.8	213.2
85°	484.9	490.1	720.2	1388.3	3136.8	3624.2	3444.9	2293.1	509.6	176.8	127.4
87.5°	192.4	184.6	284.7	570.7	1132.3	1199.8	1047.8	458.9	92.3	62.4	42.9
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°	3066.6	3066.6	3066.6	3066.6	3066.6	3066.6	3066.6	3066.6	3066.6	3066.6	3066.6
2.5°	3075.7	3078.3	3090.0	3066.6	3073.1	3067.9	3064.0	3084.8	3083.5	3087.4	3080.9
5°	3084.8	3091.3	3103.0	3092.6	3103.0	3097.8	3101.7	3130.3	3134.2	3132.9	3132.9
7.5°	3109.5	3116.0	3138.1	3125.1	3148.5	3142.0	3143.3	3170.6	3175.8	3168.0	3165.4
10°	3161.5	3166.7	3197.9	3195.3	3204.4	3199.2	3194.0	3205.7	3203.1	3191.4	3186.2
12.5°	3221.3	3235.6	3270.7	3272.0	3283.7	3257.7	3230.4	3226.5	3218.7	3200.5	3196.6
15°	3311.0	3327.9	3381.2	3368.2	3360.4	3304.5	3259.0	3222.6	3191.4	3175.8	3161.5
17.5°	3439.7	3468.3	3542.3	3502.1	3444.9	3363.0	3283.7	3204.4	3138.1	3082.2	3060.1
20°	3603.4	3635.9	3698.3	3645.0	3557.9	3435.8	3307.1	3164.1	3019.8	2896.3	2878.1
22.5°	3798.4	3850.4	3895.9	3773.7	3645.0	3490.4	3307.1	3101.7	2862.5	2677.9	2632.4
25°	4025.9	4066.2	4051.9	3880.3	3694.4	3499.5	3270.7	2991.2	2653.2	2438.7	2402.3
27.5°	4272.9	4291.1	4180.6	3931.0	3699.6	3446.2	3168.0	2794.9	2408.8	2239.8	2204.7
30°	4577.1	4522.5	4311.9	3962.2	3647.6	3327.9	2984.7	2507.6	2209.9	2061.7	2021.4
32.5°	4904.7	4804.6	4405.5	3940.1	3533.2	3130.3	2701.3	2304.8	2077.3	1896.6	1862.8
35°	5528.7	5244.0	4542.0	3873.8	3334.4	2866.4	2427.0	2148.8	1936.9	1743.2	1712.0
37.5°	6371.0	5875.7	4733.1	3781.5	3099.1	2610.3	2222.9	1982.4	1799.1	1598.9	1549.5
40°	7026.2	6514.0	5039.9	3682.7	2882.0	2367.2	2074.7	1895.3	1708.1	1494.9	1452.0
42.5°	7650.2	7097.7	5416.9	3572.2	2658.4	2198.2	2009.7	1875.8	1683.4	1466.3	1426.0
45°	8201.3	7569.6	5741.9	3461.8	2406.2	2042.2	1961.6	1838.1	1648.3	1429.9	1390.9
47.5°	8647.2	7975.2	6023.9	3342.2	2177.4	1923.9	1899.2	1769.2	1580.7	1355.8	1309.0
50°	9050.2	8318.3	6218.9	3214.8	1953.8	1827.7	1796.5	1643.1	1446.8	1247.9	1218.0
52.5°	9298.5	8551.0	6335.9	3235.6	1741.9	1719.8	1669.1	1511.8	1329.8	1159.6	1120.6
55°	9558.5	8770.7	6334.6	3118.6	1565.1	1557.3	1509.2	1388.3	1245.3	1102.4	1079.0
57.5°	9665.1	8790.2	6216.3	2568.7	1409.1	1359.7	1349.3	1285.6	1160.9	1025.7	999.7
60°	9736.6	8704.4	5992.7	1753.6	1212.8	1177.7	1228.4	1185.5	1072.5	930.8	904.8
62.5°	9666.4	8610.8	5406.5	1266.1	1063.4	1082.9	1131.0	1084.2	965.9	837.2	815.1
65°	9498.7	8253.3	4269.0	986.7	997.1	1040.0	1077.7	999.7	782.6	655.2	642.2
67.5°	9041.1	7573.5	2746.8	904.8	959.4	1003.6	1016.6	846.3	708.5	586.3	572.0
70°	8077.9	6079.8	1058.2	852.8	921.7	941.2	887.9	776.1	651.3	546.0	533.0
72.5°	6319.0	3992.1	611.0	780.0	841.1	822.9	824.2	696.8	587.6	487.5	477.1
75°	3927.1	1445.5	543.4	694.2	712.4	746.2	703.3	604.5	505.7	445.9	432.9
77.5°	1298.6	410.8	503.1	598.0	638.3	613.6	588.9	516.1	432.9	386.1	379.6
80°	314.6	308.1	451.1	468.0	500.5	458.9	456.3	429.0	365.3	338.0	331.5
82.5°	193.7	221.0	358.8	291.2	334.1	338.0	384.8	353.6	266.5	276.9	267.8
85°	119.6	170.3	188.5	140.4	141.7	189.8	230.1	213.2	159.9	150.8	149.5
87.5°	40.3	35.1	40.3	29.9	40.3	68.9	104.0	98.8	66.3	45.5	42.9
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)