

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: P510081

Luminaire Tested: **VERD-M-CA4-200-730-U-T4**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510081  
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-CA4-200-730-U-T4  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(4) 70 CRI, 3000K, 910mA LEDS AND TYPE IV OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28202 lumens  
Efficiency: N/A  
Efficacy: 139.8 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

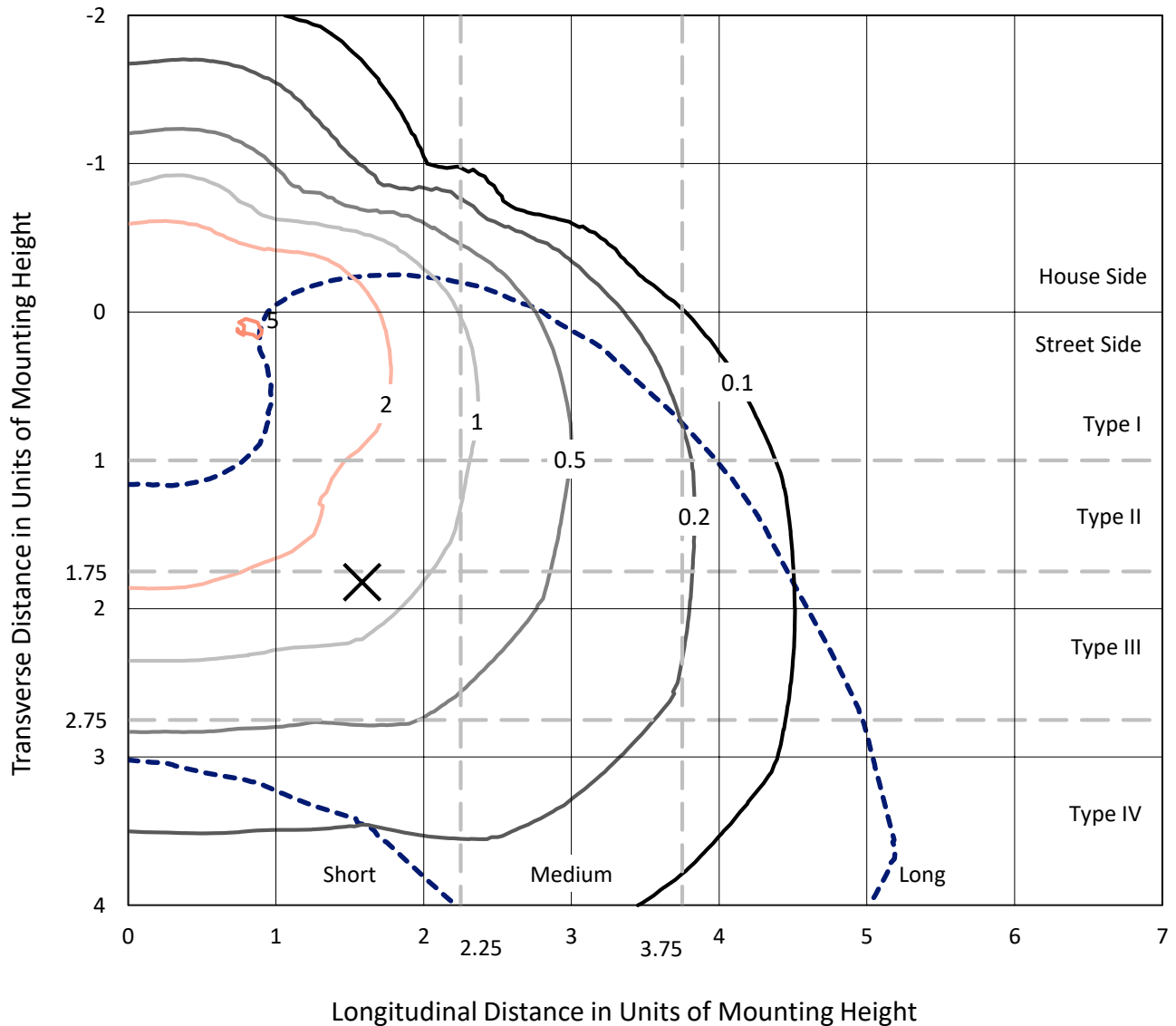
Input Watts (W): 201.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

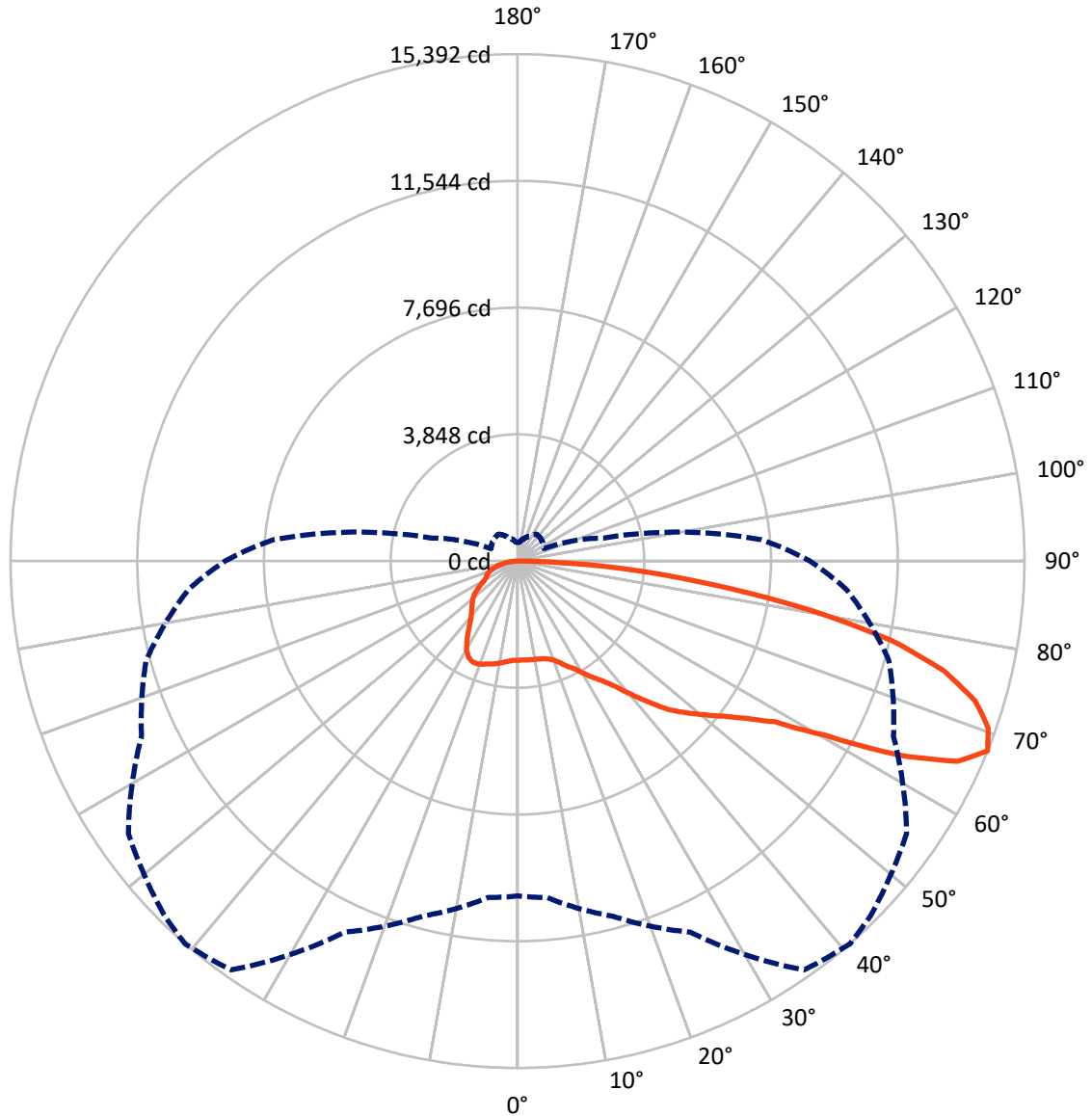
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 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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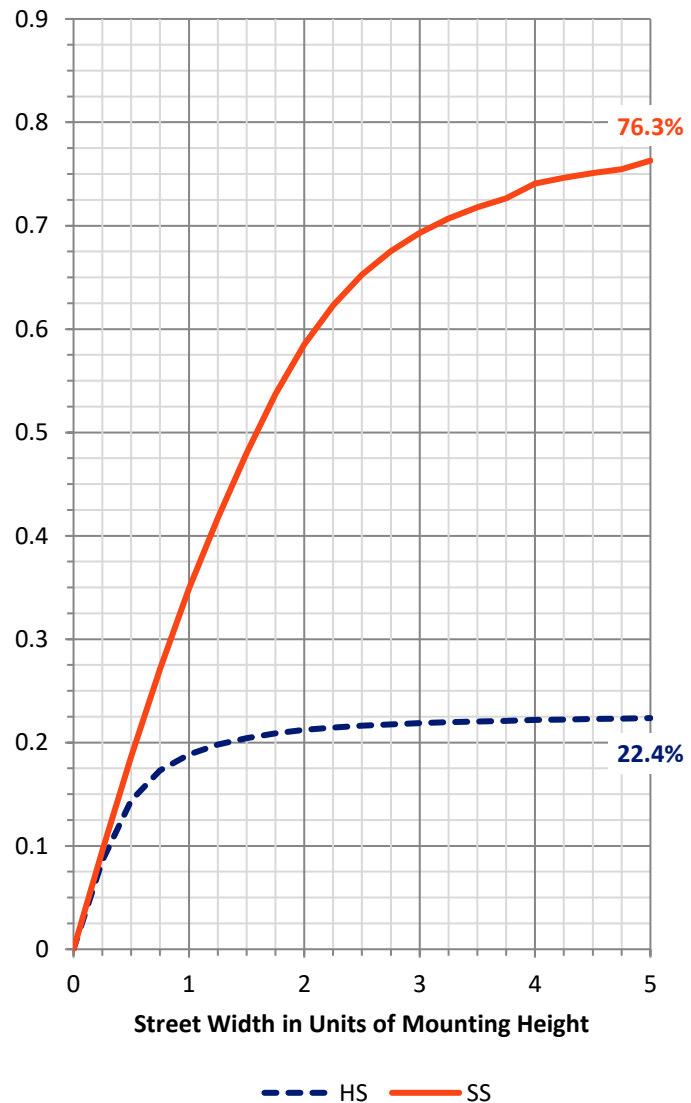
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6382.0	0.0	6382.0
	% Fixture	22.6	0.0	22.6
<b>Street Side</b>	Lumens	21820.0	0.0	21820.0
	% Fixture	77.4	0.0	77.4
<b>Total</b>	Lumens	28202.0	0.0	28202.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	291.0	1.0
10°-20°	902.4	3.2
20°-30°	1613.7	5.7
30°-40°	2530.3	9.0
40°-50°	3923.8	13.9
50°-60°	5531.6	19.6
60°-70°	7051.5	25.0
70°-80°	5276.9	18.7
80°-90°	1080.7	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°	28202.0	100.0
0°-180°	28202.0	100.0



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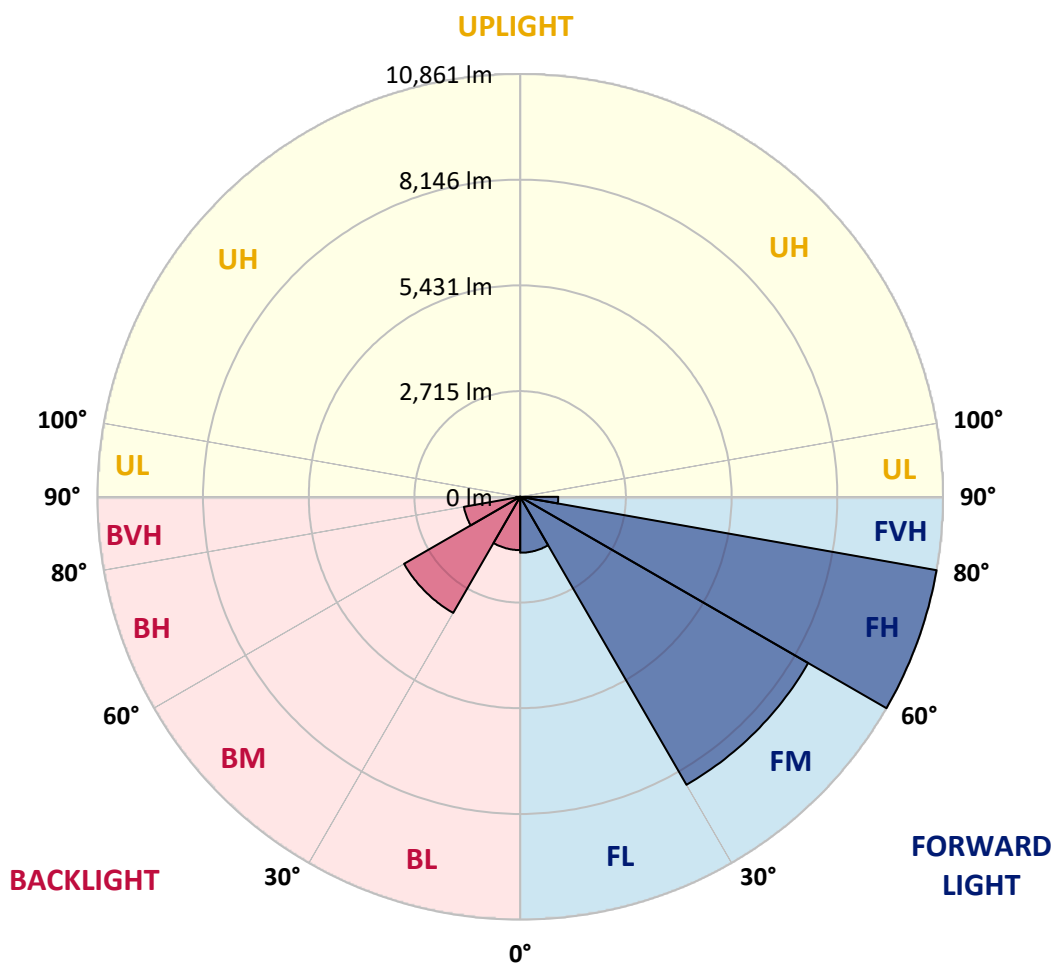
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1436.9	5.1			
FM	(30°-60°)	8542.2	30.3			
FH	(60°-80°)	10861.2	38.5			G4/12000
FVH	(80°-90°)	979.8	3.5			G5
BL	(0°-30°)	1370.2	4.9	B3/2500		
BM	(30°-60°)	3443.6	12.2	B3/5000		
BH	(60°-80°)	1467.2	5.2	B3/2500		G3/2500
BVH	(80°-90°)	101.0	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°	3011.0	3011.0	3011.0	3011.0	3011.0	3011.0	3011.0	3011.0	3011.0	3011.0	3011.0
2.5°	2974.0	3008.5	3003.4	2997.0	3007.2	3008.5	2979.1	2990.6	2997.0	3007.2	3023.8
5°	2981.7	3016.2	3013.6	3002.1	3009.8	3013.6	2986.8	3007.2	3007.2	3011.0	3030.2
7.5°	2965.1	2998.3	2998.3	2994.5	3011.0	3026.4	3002.1	3020.0	3030.2	3040.4	3053.2
10°	2949.8	2977.9	2988.1	2985.5	3023.8	3027.6	3011.0	3054.4	3071.0	3081.3	3096.6
12.5°	2933.2	2967.7	2981.7	2995.7	3036.6	3050.6	3041.7	3086.4	3120.8	3138.7	3155.3
15°	2925.5	2963.8	2986.8	3007.2	3051.9	3077.4	3077.4	3145.1	3185.9	3208.9	3238.3
17.5°	2979.1	3018.7	3036.6	3053.2	3094.0	3128.5	3125.9	3205.1	3265.1	3300.8	3354.4
20°	3111.9	3159.1	3169.3	3175.7	3201.2	3214.0	3210.2	3295.7	3378.7	3446.3	3506.3
22.5°	3342.9	3371.0	3376.1	3350.6	3357.0	3367.2	3360.8	3408.0	3502.5	3581.6	3688.8
25°	3531.8	3576.5	3563.7	3526.7	3531.8	3545.9	3526.7	3599.5	3667.1	3770.5	3879.0
27.5°	3730.9	3764.1	3750.1	3727.1	3722.0	3711.8	3708.0	3801.1	3900.7	3982.4	4143.2
30°	3973.5	3991.3	3950.5	3940.3	3949.2	3955.6	3931.3	4050.0	4140.7	4258.1	4475.1
32.5°	4381.9	4398.5	4339.8	4182.8	4186.6	4216.0	4195.6	4344.9	4515.9	4658.9	4879.7
35°	4902.7	4902.7	4856.7	4635.9	4468.7	4470.0	4475.1	4685.7	5003.5	5323.9	5551.1
37.5°	5429.8	5447.7	5360.9	5159.2	4947.4	4835.0	4740.6	5011.2	5427.3	6142.1	6480.3
40°	5978.7	6006.8	5876.6	5691.5	5447.7	5320.1	5210.3	5375.0	5936.6	6952.6	7220.6
42.5°	6458.6	6498.2	6364.2	6168.9	5999.1	5854.9	5689.0	5755.3	6496.9	7722.3	7874.2
45°	6905.4	6927.1	6813.5	6652.6	6512.2	6433.1	6316.9	6393.5	7137.7	8475.4	8447.3
47.5°	7234.7	7266.6	7163.2	7076.4	6932.2	6885.0	6883.7	7094.3	7858.9	9075.3	8945.1
50°	7769.5	7745.3	7512.9	7407.0	7318.9	7334.2	7371.3	7735.0	8706.4	9653.5	9363.7
52.5°	8666.8	8622.1	8106.5	7885.7	7777.2	7826.9	7846.1	8315.8	9561.6	10152.6	9709.6
55°	9827.1	9684.1	9308.9	8716.6	8375.8	8423.0	8401.3	8940.0	10245.7	10628.7	9966.2
57.5°	10594.2	10728.2	10548.2	10210.0	9363.7	9209.3	9158.2	9557.8	10878.8	11084.3	10231.7
60°	11260.5	11482.6	11768.5	11551.5	11323.0	10744.8	10268.7	10259.8	11436.6	11388.1	10338.9
62.5°	11963.8	12081.2	12521.6	12655.6	13079.4	12973.4	12335.2	11148.2	11994.4	11610.2	10401.5
65°	11252.8	11409.8	12211.4	12942.8	14511.5	14664.7	14456.6	12799.8	12381.2	11723.8	10312.1
67.5°	10170.4	10257.2	11164.8	12433.5	15159.9	15392.2	15182.9	14420.9	12595.6	11674.0	10036.4
70°	8783.0	8885.1	9751.8	11482.6	15126.7	15157.4	15075.7	14570.2	12510.1	11440.5	9342.0
72.5°	7121.1	7250.0	8012.0	9809.2	14401.7	14534.5	14405.6	14274.1	12270.1	10786.9	8146.0
75°	5387.7	5558.8	6239.1	7820.6	12727.1	13395.9	13412.5	13818.4	11338.3	9247.6	5912.3
77.5°	3674.8	3838.2	4482.7	5958.3	10564.8	11633.2	11911.5	12355.6	9473.5	6833.9	3225.5
80°	2069.1	2053.7	2871.9	4256.8	8058.0	8996.1	9345.9	9328.0	6652.6	3508.8	657.4
82.5°	956.0	958.6	1469.1	2717.5	5455.4	6074.4	6216.1	5410.7	2334.6	594.8	209.3
85°	476.1	481.2	707.1	1363.2	3080.0	3558.6	3382.5	2251.6	500.4	173.6	125.1
87.5°	188.9	181.3	279.5	560.3	1111.8	1178.1	1028.8	450.6	90.6	61.3	42.1
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°	3011.0	3011.0	3011.0	3011.0	3011.0	3011.0	3011.0	3011.0	3011.0	3011.0	3011.0
2.5°	3020.0	3022.5	3034.0	3011.0	3017.4	3012.3	3008.5	3028.9	3027.6	3031.5	3025.1
5°	3028.9	3035.3	3046.8	3036.6	3046.8	3041.7	3045.5	3073.6	3077.4	3076.1	3076.1
7.5°	3053.2	3059.6	3081.3	3068.5	3091.5	3085.1	3086.4	3113.2	3118.3	3110.6	3108.1
10°	3104.2	3109.3	3140.0	3137.4	3146.3	3141.2	3136.1	3147.6	3145.1	3133.6	3128.5
12.5°	3162.9	3177.0	3211.4	3212.7	3224.2	3198.7	3171.9	3168.0	3160.4	3142.5	3138.7
15°	3251.0	3267.6	3319.9	3307.2	3299.5	3244.6	3200.0	3164.2	3133.6	3118.3	3104.2
17.5°	3377.4	3405.5	3478.2	3438.6	3382.5	3302.1	3224.2	3146.3	3081.3	3026.4	3004.7
20°	3538.2	3570.1	3631.4	3579.1	3493.5	3373.5	3247.2	3106.8	2965.1	2843.8	2826.0
22.5°	3729.7	3780.7	3825.4	3705.4	3579.1	3427.2	3247.2	3045.5	2810.7	2629.4	2584.7
25°	3953.0	3992.6	3978.6	3810.1	3627.6	3436.1	3211.4	2937.0	2605.2	2394.5	2358.8
27.5°	4195.6	4213.4	4104.9	3859.9	3632.7	3383.8	3110.6	2744.3	2365.2	2199.3	2164.8
30°	4494.2	4440.6	4233.8	3890.5	3581.6	3267.6	2930.6	2462.2	2169.9	2024.4	1984.8
32.5°	4815.9	4717.6	4325.8	3868.8	3469.3	3073.6	2652.4	2263.1	2039.7	1862.3	1829.1
35°	5428.6	5149.0	4459.8	3803.7	3274.0	2814.5	2383.1	2109.9	1901.8	1711.7	1681.0
37.5°	6255.7	5769.4	4647.4	3713.1	3043.0	2563.0	2182.7	1946.5	1766.6	1570.0	1521.5
40°	6899.0	6396.1	4948.6	3616.1	2829.8	2324.3	2037.1	1861.0	1677.2	1467.9	1425.7
42.5°	7511.7	6969.2	5318.8	3507.6	2610.3	2158.4	1973.3	1841.9	1653.0	1439.8	1400.2
45°	8052.9	7432.5	5637.9	3399.1	2362.6	2005.2	1926.1	1804.8	1618.5	1404.1	1365.8
47.5°	8490.7	7830.8	5914.9	3281.6	2138.0	1889.1	1864.8	1737.2	1552.1	1331.3	1285.3
50°	8886.4	8167.7	6106.3	3156.6	1918.4	1794.6	1764.0	1613.4	1420.6	1225.4	1196.0
52.5°	9130.2	8396.2	6221.2	3177.0	1710.4	1688.7	1638.9	1484.5	1305.8	1138.6	1100.3
55°	9385.4	8611.9	6219.9	3062.1	1536.8	1529.1	1481.9	1363.2	1222.8	1082.4	1059.4
57.5°	9490.1	8631.1	6103.8	2522.2	1383.6	1335.1	1324.9	1262.4	1139.8	1007.1	981.6
60°	9560.3	8546.8	5884.2	1721.9	1190.9	1156.4	1206.2	1164.1	1053.0	913.9	888.4
62.5°	9491.4	8454.9	5308.6	1243.2	1044.1	1063.2	1110.5	1064.5	948.4	822.0	800.3
65°	9326.7	8103.9	4191.7	968.8	979.0	1021.1	1058.1	981.6	768.4	643.3	630.5
67.5°	8877.4	7436.4	2697.1	888.4	942.0	985.4	998.2	830.9	695.6	575.7	561.6
70°	7931.6	5969.8	1039.0	837.3	905.0	924.1	871.8	762.0	639.5	536.1	523.3
72.5°	6204.6	3919.9	599.9	765.8	825.8	808.0	809.2	684.2	576.9	478.7	468.4
75°	3856.0	1419.4	533.5	681.6	699.5	732.7	690.5	593.5	496.5	437.8	425.0
77.5°	1275.1	403.3	494.0	587.1	626.7	602.5	578.2	506.7	425.0	379.1	372.7
80°	308.9	302.5	442.9	459.5	491.4	450.6	448.0	421.2	358.7	331.9	325.5
82.5°	190.2	217.0	352.3	285.9	328.0	331.9	377.8	347.2	261.7	271.9	262.9
85°	117.4	167.2	185.1	137.9	139.1	186.4	225.9	209.3	157.0	148.1	146.8
87.5°	39.6	34.5	39.6	29.4	39.6	67.6	102.1	97.0	65.1	44.7	42.1
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)