

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: P510165

Luminaire Tested: **VERD-M-CA4-220-727-U-T2**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510165
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-2)
Test Lab: INNOVATION CENTER
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-M-CA4-220-727-U-T2
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 2700K, 1000mA LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26418 lumens
Efficiency: N/A
Efficacy: 118.7 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

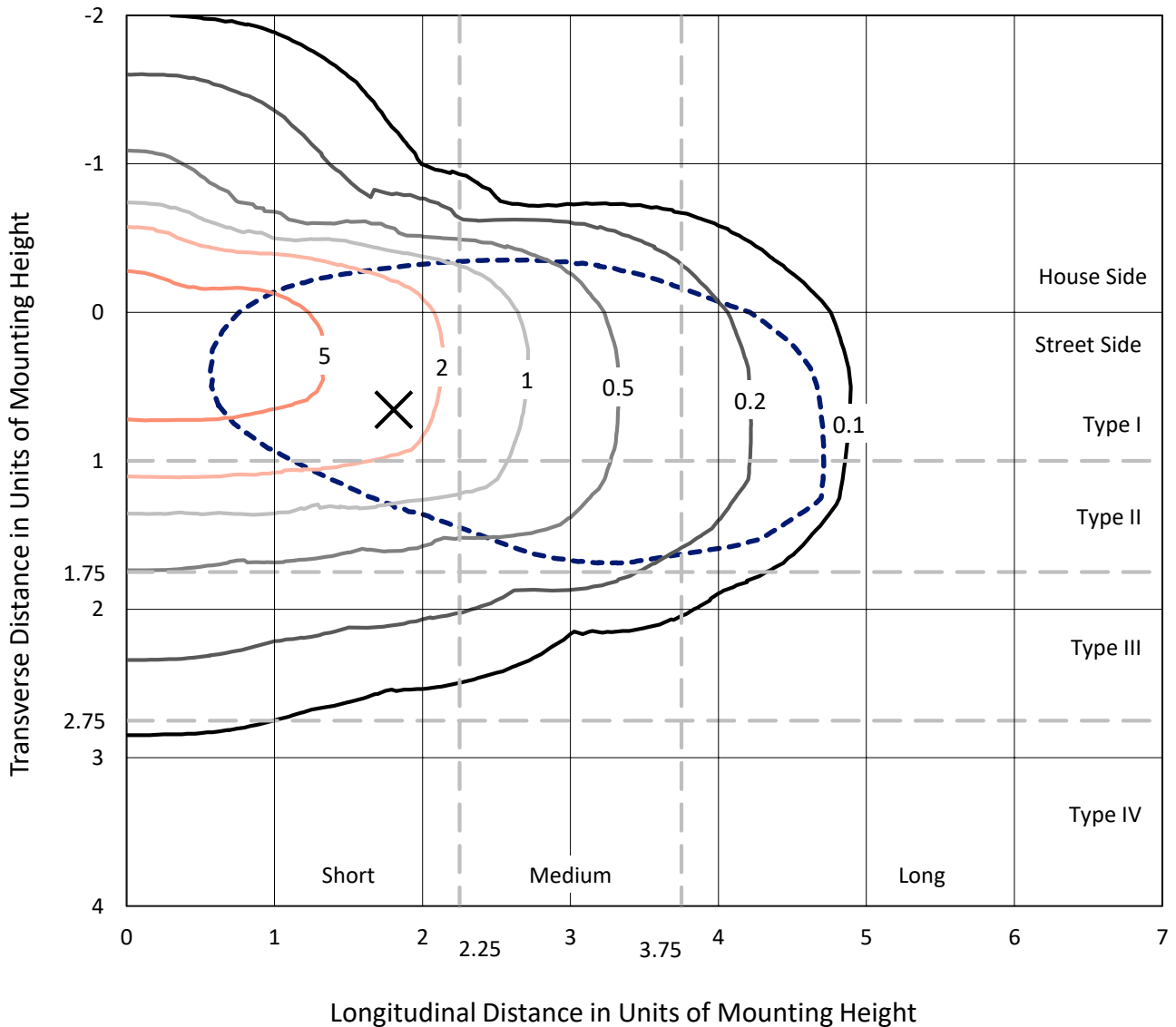
Input Watts (W): 222.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

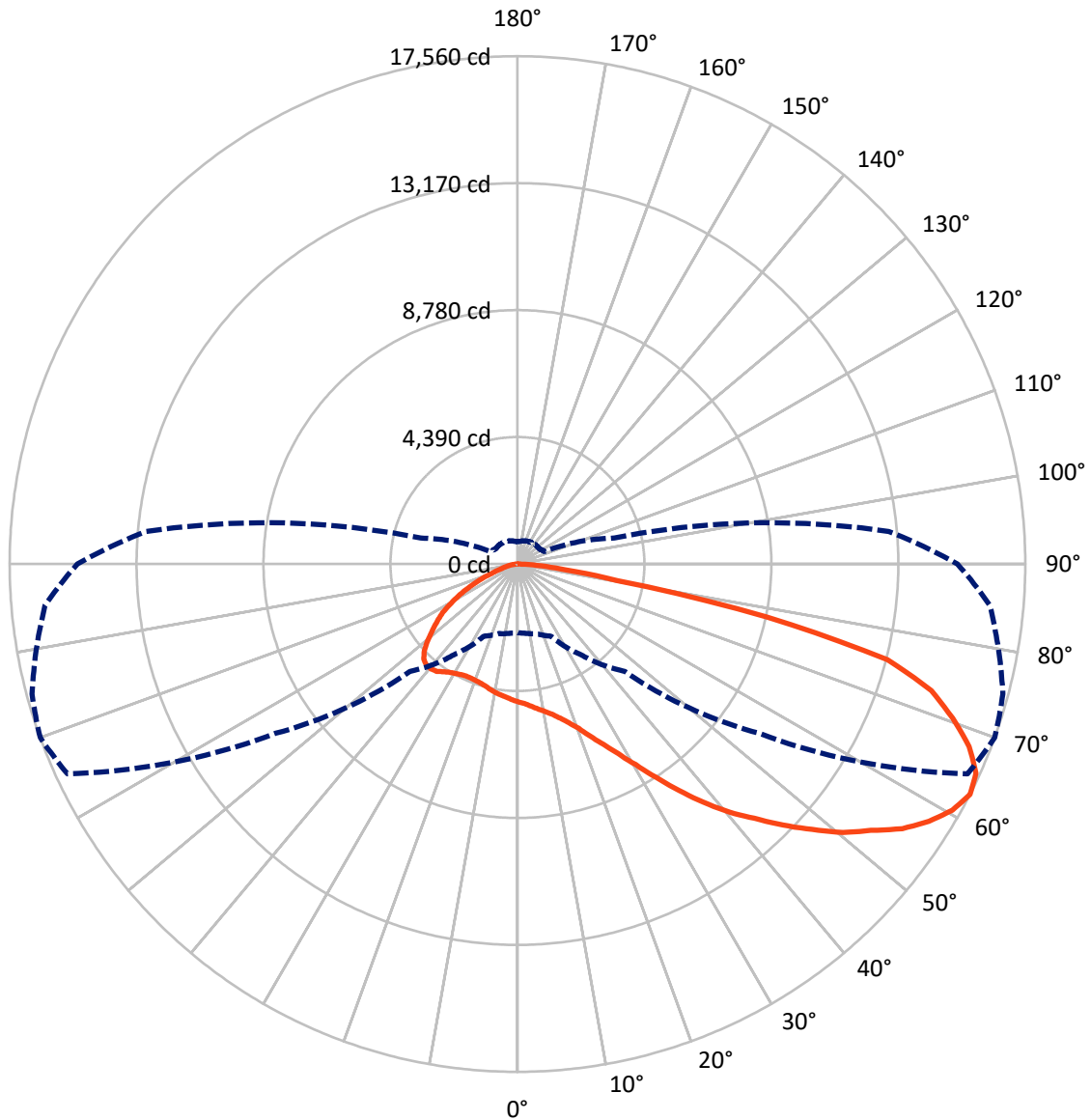
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.7 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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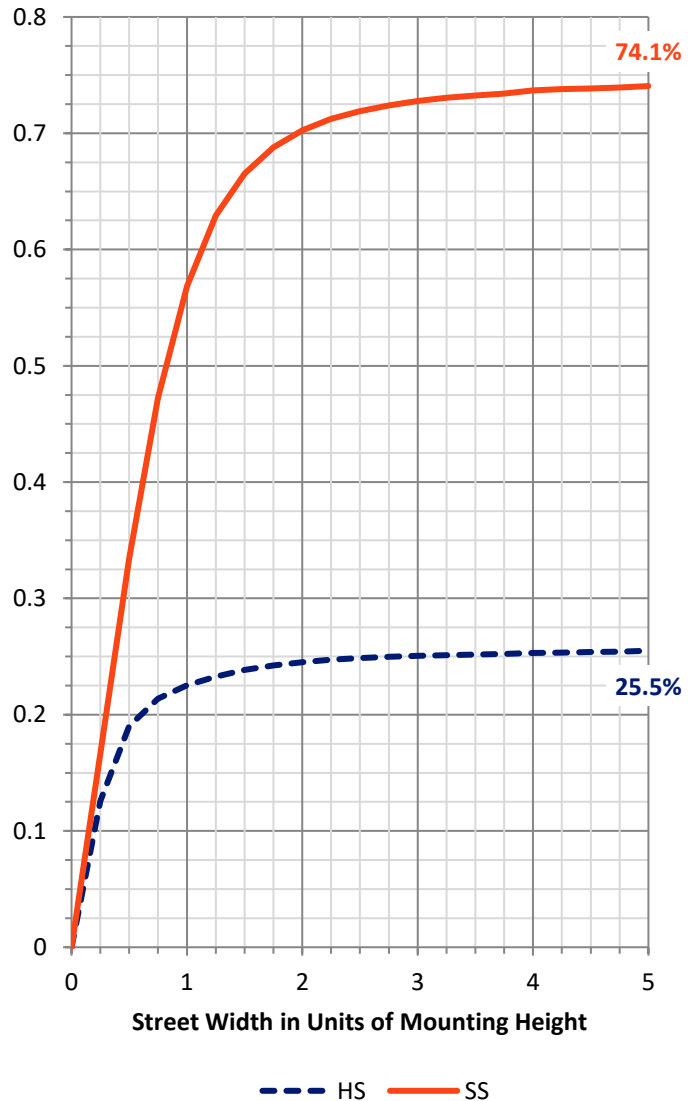
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6839.7	0.0	6839.7
	% Fixture	25.9	0.0	25.9
Street Side	Lumens	19578.3	0.0	19578.3
	% Fixture	74.1	0.0	74.1
Total	Lumens	26418.0	0.0	26418.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	458.0	1.7
10°-20°	1390.8	5.3
20°-30°	2360.4	8.9
30°-40°	3415.4	12.9
40°-50°	4481.8	17.0
50°-60°	5236.8	19.8
60°-70°	5255.4	19.9
70°-80°	3348.8	12.7
80°-90°	470.6	1.8
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°	26418.0	100.0
0°-180°	26418.0	100.0

Coefficient of Utilization



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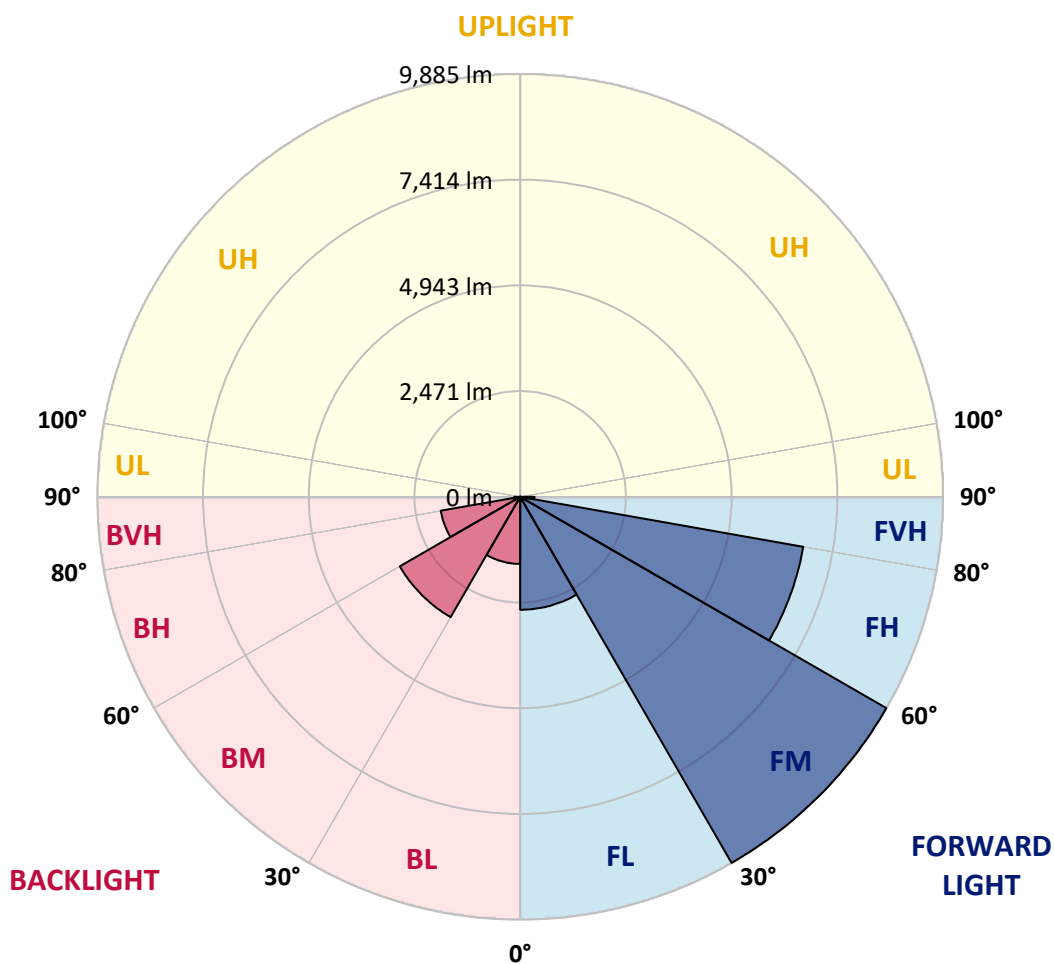
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2640.5	10.0			
FM	(30°-60°)	9885.3	37.4			
FH	(60°-80°)	6720.5	25.4			G3/7500
FVH	(80°-90°)	332.0	1.3			G3/500
BL	(0°-30°)	1568.7	5.9	B3/2500		
BM	(30°-60°)	3248.7	12.3	B3/5000		
BH	(60°-80°)	1883.7	7.1	B3/2500		G3/2500
BVH	(80°-90°)	138.7	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	4768.1	4768.1	4768.1	4768.1	4768.1	4768.1	4768.1	4768.1	4768.1	4768.1	4768.1
2.5°	4950.7	5003.3	4996.1	4963.9	4986.6	4924.5	4901.8	4867.2	4831.4	4819.4	4799.1
5°	5184.7	5254.0	5240.8	5197.9	5196.7	5108.3	5058.2	4992.5	4937.6	4894.6	4831.4
7.5°	5403.2	5483.2	5471.2	5429.5	5427.1	5325.6	5221.7	5119.1	5055.8	5000.9	4885.1
10°	5634.8	5695.7	5684.9	5631.2	5620.5	5521.4	5399.6	5270.7	5177.6	5101.2	4936.4
12.5°	5848.5	5912.9	5917.7	5850.9	5834.2	5727.9	5621.7	5450.9	5330.4	5243.2	5000.9
15°	6047.9	6124.3	6109.9	6043.1	6025.2	5917.7	5813.9	5656.3	5530.9	5409.2	5105.9
17.5°	6207.8	6280.6	6262.7	6232.9	6223.3	6139.8	6053.8	5883.1	5772.1	5615.7	5268.3
20°	6317.7	6385.7	6392.9	6384.5	6439.4	6360.6	6312.9	6192.3	6070.5	5929.7	5490.3
22.5°	6360.6	6441.8	6511.0	6564.8	6678.2	6666.2	6657.9	6588.6	6469.3	6263.9	5784.0
25°	6373.8	6454.9	6562.4	6694.9	6897.8	6970.7	7023.2	7039.9	6909.8	6747.4	6149.3
27.5°	6376.1	6463.3	6573.1	6786.8	7096.0	7315.7	7441.0	7499.5	7426.7	7297.8	6646.0
30°	6326.0	6415.5	6556.4	6841.7	7251.2	7611.7	7819.5	8078.5	8047.5	7938.8	7267.9
32.5°	6181.6	6262.7	6457.3	6832.2	7405.2	7915.0	8238.5	8687.4	8792.4	8722.0	7985.4
35°	5922.5	6021.6	6273.5	6753.4	7488.8	8209.8	8731.5	9429.9	9619.7	9624.5	8865.2
37.5°	5661.1	5736.3	6032.3	6605.4	7535.3	8471.3	9199.5	10173.7	10449.4	10455.4	9597.1
40°	5382.9	5452.1	5778.0	6407.2	7487.6	8676.6	9635.3	10888.8	11283.9	11246.9	10315.7
42.5°	5022.4	5098.8	5422.3	6137.4	7368.2	8835.4	10078.2	11639.7	12019.3	12061.1	11065.4
45°	4714.4	4775.2	5058.2	5716.0	7149.7	8921.4	10493.6	12440.7	12875.3	12831.1	11865.3
47.5°	4334.7	4425.5	4727.5	5373.3	6757.0	8899.9	10891.1	13233.4	13716.9	13676.3	12558.9
50°	3343.9	3448.9	4150.9	5014.0	6255.6	8731.5	11251.7	13991.5	14592.0	14485.7	13293.1
52.5°	3037.1	3066.9	3346.3	4601.0	5761.3	8349.5	11516.7	14948.9	15304.7	15262.9	14036.8
55°	2849.6	2906.9	3034.7	3790.4	5317.2	7728.7	11700.5	15748.8	16149.9	15954.1	14710.1
57.5°	2684.9	2725.5	2877.1	3244.8	4806.3	6874.0	11646.8	16423.3	16781.4	16508.0	15367.9
60°	2509.4	2535.7	2687.3	2961.8	4254.7	5929.7	11101.3	17119.3	17278.0	17027.3	15924.3
62.5°	2373.3	2398.4	2489.1	2752.9	3825.0	5254.0	10208.3	17168.2	17559.8	17377.1	16397.0
65°	2199.0	2215.7	2329.1	2536.9	3426.2	4851.7	9421.6	16708.6	17423.7	17378.3	16578.5
67.5°	2006.8	2027.1	2134.5	2281.4	2916.5	4377.7	8106.0	16460.3	16848.3	16892.4	16238.2
70°	1781.2	1795.5	1906.5	2012.8	2495.1	3842.9	6444.2	15508.8	15961.3	15960.1	15187.7
72.5°	1537.6	1536.4	1646.3	1758.5	2090.4	3228.1	5045.0	13769.4	14966.8	14877.3	13693.0
75°	1267.8	1285.7	1392.0	1480.3	1739.4	2616.8	3513.4	9974.3	13213.1	13336.1	11817.5
77.5°	810.6	822.5	882.2	973.0	1216.5	1999.6	2292.1	5542.9	8822.3	10641.6	9302.2
80°	592.1	598.1	650.6	703.2	809.4	1217.7	1165.2	2409.1	3496.7	5224.1	5706.4
82.5°	403.5	404.7	446.5	458.4	464.4	549.2	552.7	1172.3	1665.4	1961.4	2520.1
85°	267.4	222.0	173.1	229.2	235.2	201.8	197.0	528.9	826.1	990.9	933.6
87.5°	59.7	58.5	68.0	69.2	66.9	57.3	47.8	81.2	124.2	123.0	157.6
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°	4768.1	4768.1	4768.1	4768.1	4768.1	4768.1	4768.1	4768.1	4768.1	4768.1	4768.1
2.5°	4780.0	4774.1	4740.6	4670.2	4622.4	4573.5	4546.0	4529.3	4535.3	4507.8	4495.9
5°	4792.0	4762.1	4667.8	4584.2	4509.0	4424.3	4353.8	4344.3	4358.6	4333.5	4319.2
7.5°	4823.0	4759.7	4639.2	4495.9	4370.5	4290.6	4189.1	4137.8	4134.2	4109.1	4113.9
10°	4840.9	4758.5	4597.4	4424.3	4277.4	4135.4	4026.7	3969.4	3965.8	3930.0	3921.7
12.5°	4889.9	4771.7	4548.4	4337.1	4173.6	3983.7	3869.1	3816.6	3810.6	3760.5	3741.4
15°	4965.1	4801.5	4497.1	4235.6	4024.3	3846.5	3709.2	3638.7	3628.0	3569.5	3549.2
17.5°	5084.4	4886.3	4481.6	4143.7	3894.2	3699.6	3538.5	3462.1	3400.0	3367.7	3340.3
20°	5245.6	4991.3	4499.5	4057.8	3730.7	3506.2	3305.7	3205.4	3162.4	3109.9	3113.5
22.5°	5474.8	5156.1	4530.5	3990.9	3582.6	3299.7	3074.1	2961.8	2884.2	2840.1	2842.5
25°	5797.2	5404.4	4591.4	3927.6	3421.5	3074.1	2807.8	2651.5	2572.7	2544.0	2514.2
27.5°	6204.2	5701.6	4735.9	3850.0	3230.5	2818.6	2523.7	2341.1	2261.1	2218.1	2212.1
30°	6727.1	6092.0	4905.4	3792.7	3029.9	2499.8	2171.5	2027.1	1956.7	1895.8	1867.1
32.5°	7364.6	6643.6	5094.0	3735.4	2781.6	2142.9	1845.6	1734.6	1622.4	1544.8	1548.4
35°	8104.8	7244.0	5374.5	3662.6	2490.3	1809.8	1604.5	1461.2	1356.2	1304.8	1281.0
37.5°	8803.2	7860.1	5704.0	3588.6	2164.4	1593.7	1366.9	1234.4	1153.2	1113.8	1122.2
40°	9509.9	8495.2	5988.2	3407.1	1799.1	1398.0	1131.7	1056.5	1024.3	993.3	996.8
42.5°	10142.6	9001.3	6195.9	3205.4	1543.6	1173.5	964.6	981.3	1000.4	982.5	977.7
45°	10801.6	9593.5	6378.5	2861.6	1329.9	996.8	922.8	969.4	1011.2	1008.8	1002.8
47.5°	11463.0	10142.6	6396.4	2405.5	1135.3	937.1	921.6	956.2	1011.2	1020.7	1013.5
50°	12144.6	10718.0	6291.4	1868.3	1052.9	944.3	922.8	928.8	989.7	1000.4	996.8
52.5°	12900.3	11340.0	6032.3	1420.6	1020.7	956.2	926.4	918.0	952.7	971.8	975.3
55°	13595.1	11834.3	5546.4	1254.7	996.8	957.4	952.7	925.2	926.4	916.8	940.7
57.5°	14178.9	12305.8	4994.9	1164.0	975.3	946.7	964.6	913.3	898.9	859.5	850.0
60°	14783.0	12689.0	4218.9	1101.9	950.3	933.6	934.8	893.0	857.2	799.9	783.1
62.5°	15211.5	12892.0	3465.6	1029.1	915.7	913.3	895.4	864.3	832.1	781.9	774.8
65°	15335.7	12784.5	2662.2	952.7	870.3	879.8	847.6	804.6	670.9	608.8	608.8
67.5°	14925.0	12123.2	1971.0	864.3	815.4	834.5	771.2	633.9	564.7	527.7	533.6
70°	13799.3	11054.7	1283.3	735.4	736.6	752.1	636.3	570.6	505.0	482.3	494.2
72.5°	12295.1	9470.5	846.4	586.2	620.8	594.5	581.4	525.3	466.8	440.5	448.9
75°	10131.9	7478.0	587.4	460.8	402.3	507.4	516.9	441.7	396.3	481.1	500.2
77.5°	8004.5	5197.9	484.7	322.3	297.3	374.9	414.3	409.5	655.4	770.0	761.7
80°	4759.7	2992.9	395.2	223.2	210.1	241.1	325.9	470.4	734.2	551.5	525.3
82.5°	2158.4	1360.9	210.1	117.0	137.3	160.0	243.5	585.0	481.1	353.4	333.1
85°	842.8	444.1	83.6	51.3	47.8	59.7	111.0	281.7	193.4	156.4	156.4
87.5°	108.6	80.0	23.9	17.9	15.5	19.1	35.8	156.4	90.7	76.4	74.0
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)