

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: P509873

Luminaire Tested: **VERD-M-CA3-160-722-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P509873
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-CA3-160-722-U-T4
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2200K, 1000mA LEDS AND TYPE IV OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18975 lumens
Efficiency: N/A
Efficacy: 116.6 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

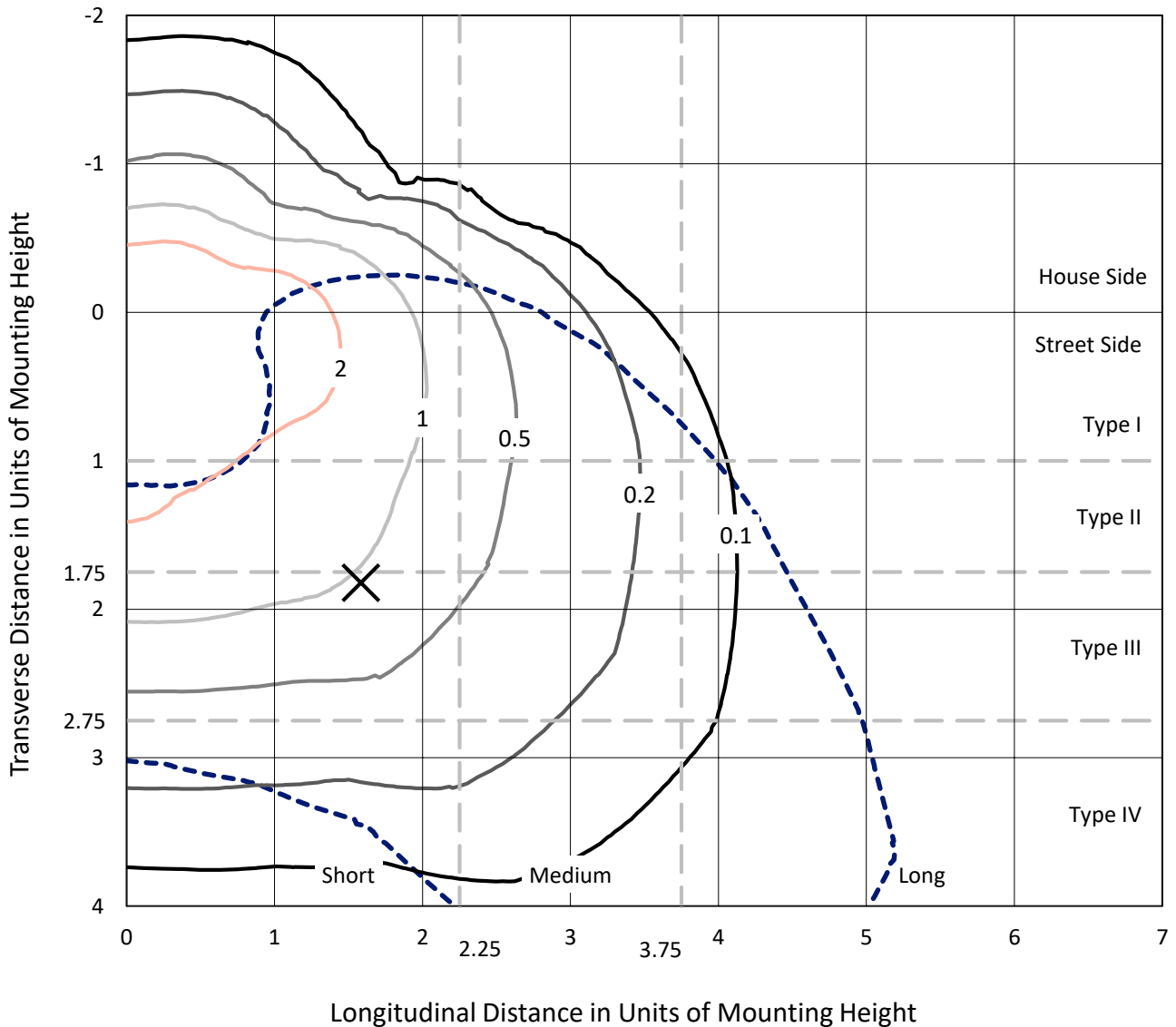
Input Watts (W): 162.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

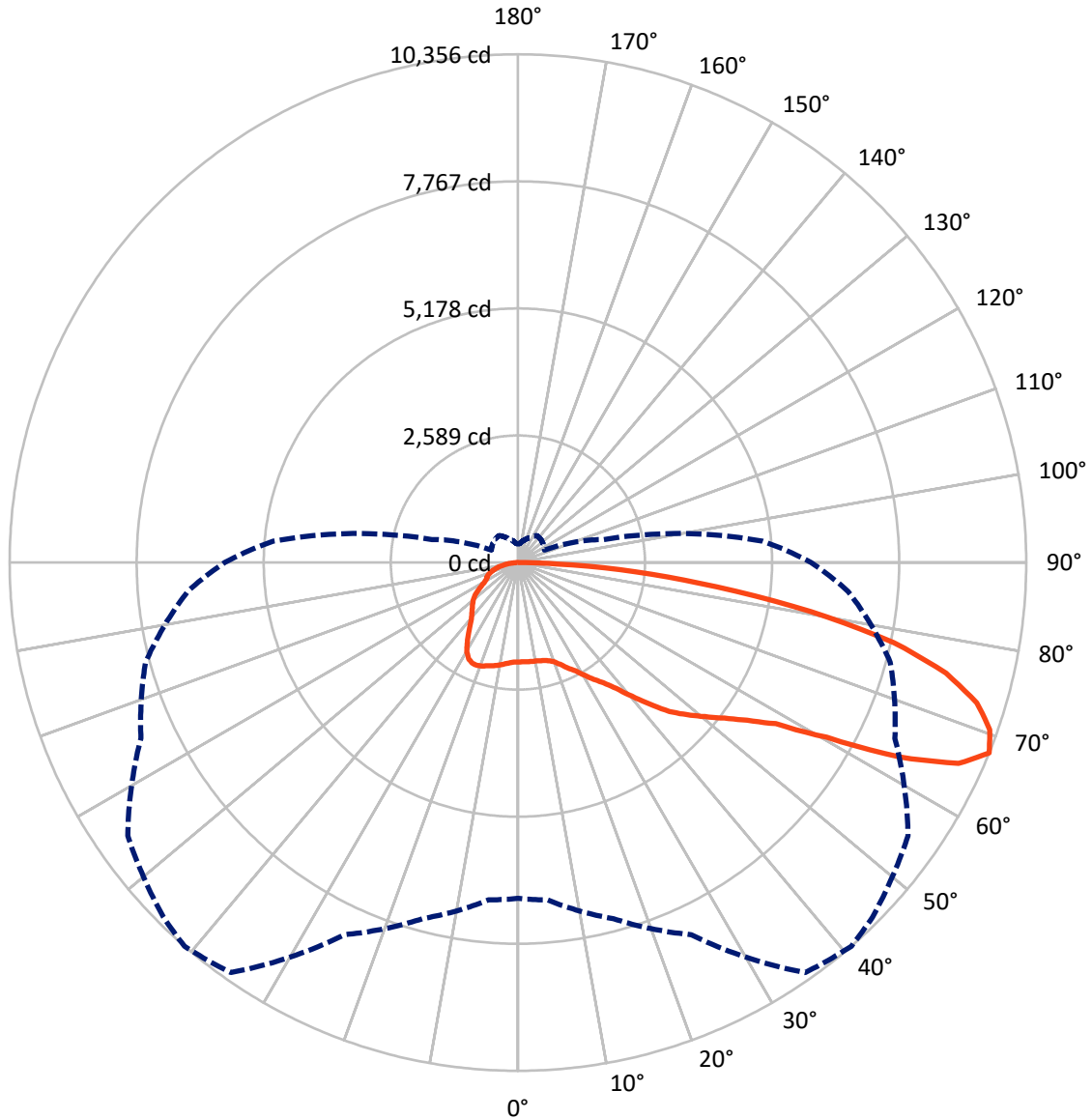
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 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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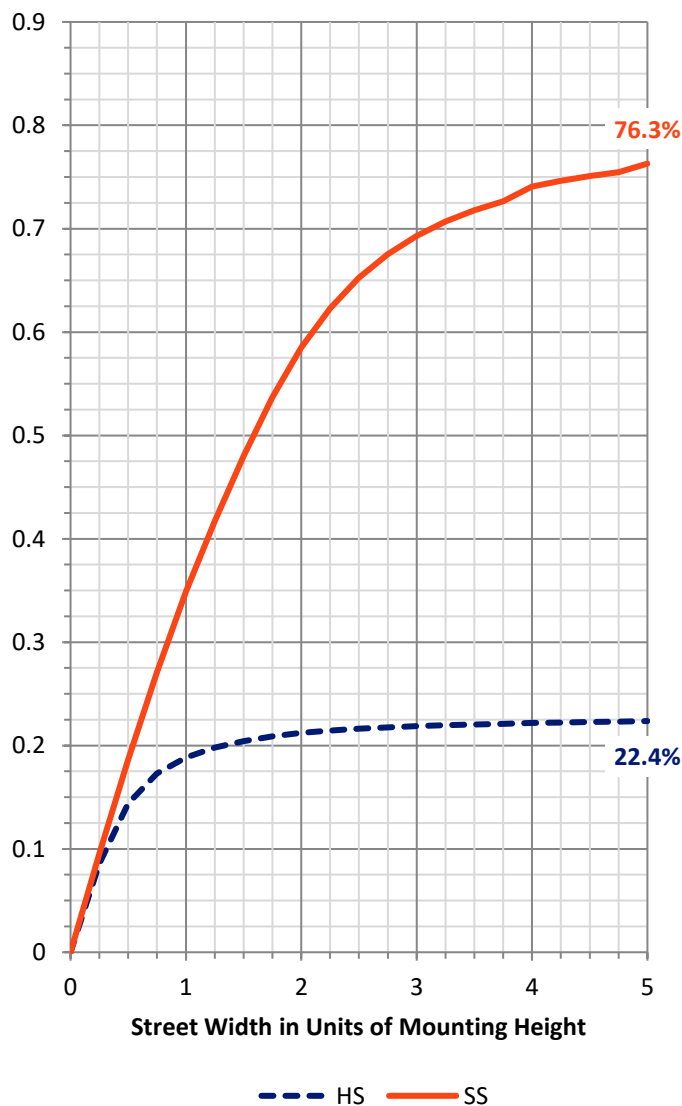
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4294.0	0.0	4294.0
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	14681.0	0.0	14681.0
	% Fixture	77.4	0.0	77.4
Total	Lumens	18975.0	0.0	18975.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.8	1.0
10°-20°	607.2	3.2
20°-30°	1085.8	5.7
30°-40°	1702.5	9.0
40°-50°	2640.0	13.9
50°-60°	3721.8	19.6
60°-70°	4744.4	25.0
70°-80°	3550.4	18.7
80°-90°	727.1	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°	18975.0	100.0
0°-180°	18975.0	100.0

Coefficient of Utilization



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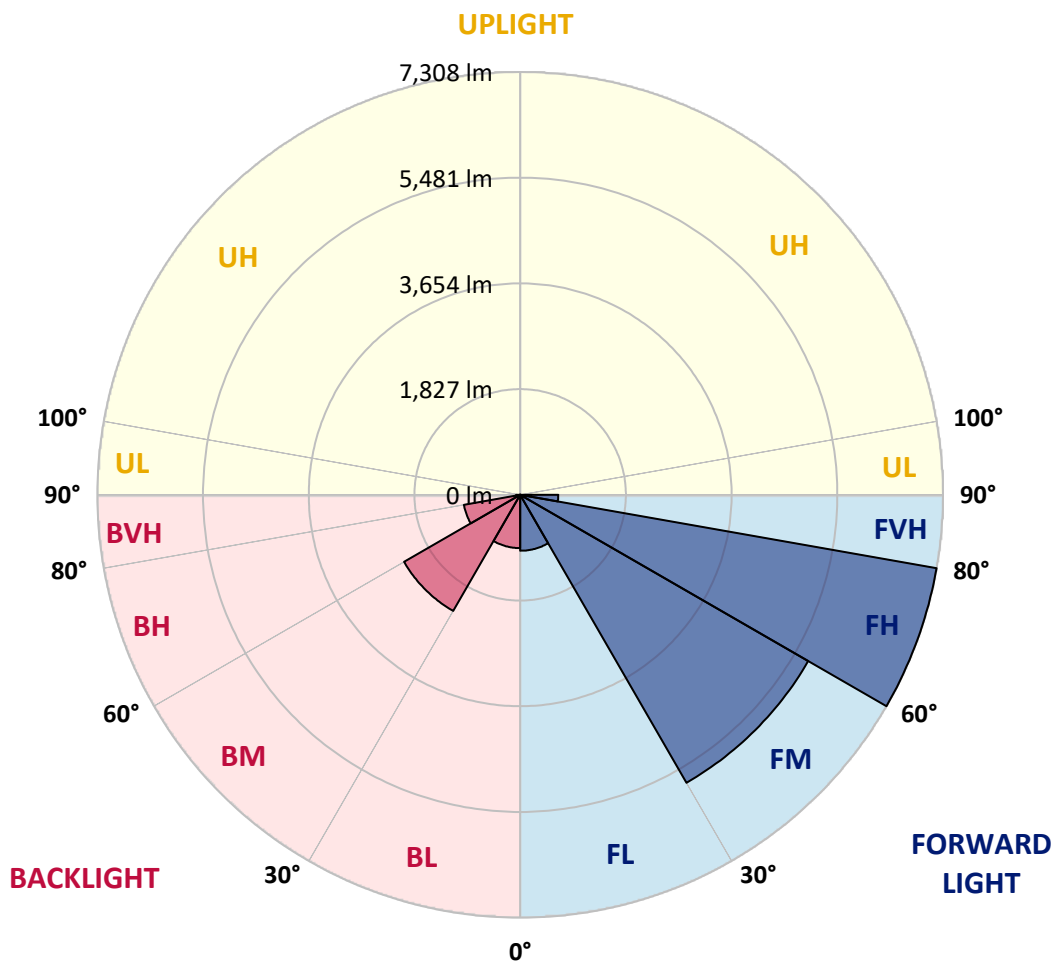
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	966.8	5.1			
FM (30°-60°)	5747.4	30.3			
FH (60°-80°)	7307.7	38.5			G3/7500
FVH (80°-90°)	659.2	3.5			G4/750
BL (0°-30°)	921.9	4.9	B2/1000		
BM (30°-60°)	2317.0	12.2	B2/2500		
BH (60°-80°)	987.2	5.2	B2/1000		G2/1000
BVH (80°-90°)	67.9	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	2025.9	2025.9	2025.9	2025.9	2025.9	2025.9	2025.9	2025.9	2025.9	2025.9	2025.9
2.5°	2001.0	2024.2	2020.8	2016.5	2023.3	2024.2	2004.4	2012.2	2016.5	2023.3	2034.5
5°	2006.2	2029.3	2027.6	2019.9	2025.0	2027.6	2009.6	2023.3	2023.3	2025.9	2038.8
7.5°	1995.0	2017.3	2017.3	2014.7	2025.9	2036.2	2019.9	2031.9	2038.8	2045.7	2054.2
10°	1984.7	2003.6	2010.4	2008.7	2034.5	2037.1	2025.9	2055.1	2066.3	2073.1	2083.4
12.5°	1973.5	1996.7	2006.2	2015.6	2043.1	2052.5	2046.5	2076.6	2099.8	2111.8	2123.0
15°	1968.4	1994.1	2009.6	2023.3	2053.4	2070.6	2070.6	2116.1	2143.6	2159.0	2178.8
17.5°	2004.4	2031.1	2043.1	2054.2	2081.7	2104.9	2103.2	2156.4	2196.8	2220.9	2256.9
20°	2093.8	2125.5	2132.4	2136.7	2153.9	2162.5	2159.9	2217.4	2273.2	2318.8	2359.1
22.5°	2249.2	2268.1	2271.5	2254.3	2258.6	2265.5	2261.2	2293.0	2356.5	2409.8	2481.9
25°	2376.3	2406.4	2397.8	2372.9	2376.3	2385.7	2372.9	2421.8	2467.3	2536.9	2609.9
27.5°	2510.3	2532.6	2523.2	2507.7	2504.3	2497.4	2494.8	2557.5	2624.5	2679.5	2787.7
30°	2673.4	2685.5	2658.0	2651.1	2657.1	2661.4	2645.1	2725.0	2785.9	2865.0	3011.0
32.5°	2948.3	2959.4	2919.9	2814.3	2816.9	2836.6	2822.9	2923.4	3038.4	3134.6	3283.2
35°	3298.6	3298.6	3267.7	3119.2	3006.7	3007.5	3011.0	3152.7	3366.5	3582.1	3734.9
37.5°	3653.3	3665.4	3607.0	3471.3	3328.7	3253.1	3189.6	3371.6	3651.6	4132.5	4360.1
40°	4022.6	4041.5	3953.9	3829.4	3665.4	3579.5	3505.6	3616.4	3994.3	4677.9	4858.2
42.5°	4345.5	4372.1	4282.0	4150.6	4036.4	3939.3	3827.7	3872.3	4371.3	5195.7	5297.9
45°	4646.1	4660.7	4584.3	4476.1	4381.6	4328.4	4250.2	4301.7	4802.4	5702.4	5683.5
47.5°	4867.7	4889.1	4819.6	4761.2	4664.1	4632.4	4631.5	4773.2	5287.6	6106.1	6018.5
50°	5227.5	5211.2	5054.9	4983.6	4924.4	4934.7	4959.6	5204.3	5857.9	6495.1	6300.2
52.5°	5831.2	5801.2	5454.2	5305.7	5232.7	5266.2	5279.0	5595.1	6433.3	6830.9	6532.9
55°	6611.9	6515.7	6263.2	5864.7	5635.4	5667.2	5652.6	6015.0	6893.6	7151.2	6705.5
57.5°	7128.0	7218.2	7097.1	6869.5	6300.2	6196.2	6161.9	6430.7	7319.5	7457.8	6884.1
60°	7576.3	7725.8	7918.1	7772.1	7618.4	7229.4	6909.0	6903.0	7694.8	7662.2	6956.3
62.5°	8049.5	8128.5	8424.8	8515.0	8800.1	8728.8	8299.4	7500.8	8070.1	7811.6	6998.4
65°	7571.2	7676.8	8216.1	8708.2	9763.7	9866.7	9726.8	8612.0	8330.4	7888.1	6938.2
67.5°	6842.9	6901.3	7511.9	8365.6	10200.0	10356.3	10215.4	9702.7	8474.6	7854.6	6752.7
70°	5909.4	5978.1	6561.2	7725.8	10177.6	10198.2	10143.3	9803.2	8417.1	7697.4	6285.6
72.5°	4791.2	4878.0	5390.7	6599.9	9689.8	9779.2	9692.4	9604.0	8255.6	7257.7	5480.9
75°	3625.0	3740.1	4197.8	5261.9	8563.1	9013.1	9024.3	9297.4	7628.7	6222.0	3978.0
77.5°	2472.5	2582.4	3016.1	4008.9	7108.3	7827.1	8014.3	8313.2	6374.0	4598.0	2170.2
80°	1392.1	1381.8	1932.3	2864.1	5421.6	6052.8	6288.1	6276.1	4476.1	2360.8	442.3
82.5°	643.2	645.0	988.5	1828.4	3670.5	4087.0	4182.4	3640.5	1570.7	400.2	140.8
85°	320.3	323.8	475.8	917.2	2072.3	2394.3	2275.8	1514.9	336.6	116.8	84.2
87.5°	127.1	121.9	188.1	377.0	748.0	792.7	692.2	303.2	61.0	41.2	28.3
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°	2025.9	2025.9	2025.9	2025.9	2025.9	2025.9	2025.9	2025.9	2025.9	2025.9	2025.9
2.5°	2031.9	2033.6	2041.4	2025.9	2030.2	2026.8	2024.2	2037.9	2037.1	2039.6	2035.4
5°	2037.9	2042.2	2050.0	2043.1	2050.0	2046.5	2049.1	2068.0	2070.6	2069.7	2069.7
7.5°	2054.2	2058.5	2073.1	2064.6	2080.0	2075.7	2076.6	2094.6	2098.0	2092.9	2091.2
10°	2088.6	2092.0	2112.6	2110.9	2116.9	2113.5	2110.1	2117.8	2116.1	2108.4	2104.9
12.5°	2128.1	2137.6	2160.7	2161.6	2169.3	2152.2	2134.1	2131.5	2126.4	2114.4	2111.8
15°	2187.4	2198.5	2233.7	2225.1	2220.0	2183.1	2153.0	2129.0	2108.4	2098.0	2088.6
17.5°	2272.4	2291.3	2340.2	2313.6	2275.8	2221.7	2169.3	2116.9	2073.1	2036.2	2021.6
20°	2380.6	2402.1	2443.3	2408.1	2350.5	2269.8	2184.8	2090.3	1995.0	1913.4	1901.4
22.5°	2509.4	2543.8	2573.8	2493.1	2408.1	2305.9	2184.8	2049.1	1891.1	1769.1	1739.1
25°	2659.7	2686.3	2676.9	2563.5	2440.7	2311.9	2160.7	1976.1	1752.8	1611.1	1587.1
27.5°	2822.9	2834.9	2761.9	2597.0	2444.1	2276.7	2092.9	1846.4	1591.4	1479.7	1456.5
30°	3023.8	2987.8	2848.6	2617.6	2409.8	2198.5	1971.8	1656.6	1460.0	1362.1	1335.4
32.5°	3240.3	3174.1	2910.5	2603.0	2334.2	2068.0	1784.6	1522.7	1372.4	1253.0	1230.7
35°	3652.5	3464.4	3000.6	2559.2	2202.8	1893.7	1603.4	1419.6	1279.6	1151.7	1131.0
37.5°	4209.0	3881.8	3126.9	2498.2	2047.4	1724.5	1468.5	1309.7	1188.6	1056.3	1023.7
40°	4641.8	4303.4	3329.6	2433.0	1904.0	1563.9	1370.6	1252.1	1128.5	987.6	959.3
42.5°	5054.0	4689.0	3578.6	2360.0	1756.2	1452.2	1327.7	1239.2	1112.1	968.7	942.1
45°	5418.2	5000.8	3793.3	2287.0	1589.6	1349.2	1295.9	1214.3	1089.0	944.7	918.9
47.5°	5712.7	5268.7	3979.7	2208.0	1438.5	1271.0	1254.7	1168.8	1044.3	895.7	864.8
50°	5979.0	5495.5	4108.5	2123.8	1290.8	1207.5	1186.9	1085.5	955.8	824.4	804.7
52.5°	6143.0	5649.2	4185.8	2137.6	1150.8	1136.2	1102.7	998.8	878.6	766.0	740.3
55°	6314.8	5794.3	4184.9	2060.3	1034.0	1028.8	997.1	917.2	822.7	728.3	712.8
57.5°	6385.2	5807.2	4106.8	1697.0	930.9	898.3	891.4	849.4	766.9	677.6	660.4
60°	6432.4	5750.5	3959.1	1158.5	801.3	778.1	811.6	783.2	708.5	614.9	597.7
62.5°	6386.0	5688.7	3571.7	836.5	702.5	715.4	747.2	716.2	638.1	553.1	538.5
65°	6275.2	5452.5	2820.3	651.8	658.7	687.0	711.9	660.4	517.0	432.8	424.2
67.5°	5973.0	5003.4	1814.6	597.7	633.8	663.0	671.6	559.1	468.0	387.3	377.9
70°	5336.6	4016.6	699.1	563.4	608.9	621.8	586.6	512.7	430.3	360.7	352.1
72.5°	4174.6	2637.4	403.6	515.3	555.6	543.6	544.5	460.3	388.2	322.0	315.2
75°	2594.4	955.0	359.0	458.6	470.6	493.0	464.6	399.3	334.1	294.6	286.0
77.5°	857.9	271.4	332.4	395.0	421.7	405.4	389.0	340.9	286.0	255.1	250.8
80°	207.8	203.5	298.0	309.2	330.6	303.2	301.4	283.4	241.3	223.3	219.0
82.5°	128.0	146.0	237.0	192.4	220.7	223.3	254.2	233.6	176.1	182.9	176.9
85°	79.0	112.5	124.5	92.8	93.6	125.4	152.0	140.8	105.6	99.6	98.8
87.5°	26.6	23.2	26.6	19.8	26.6	45.5	68.7	65.3	43.8	30.1	28.3
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)