

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: LUMARK

Report Number: P968168

Luminaire Tested: **NAV-SB5B-722-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968168
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-722-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23865.1 lumens
Efficiency: N/A
Efficacy: 130.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

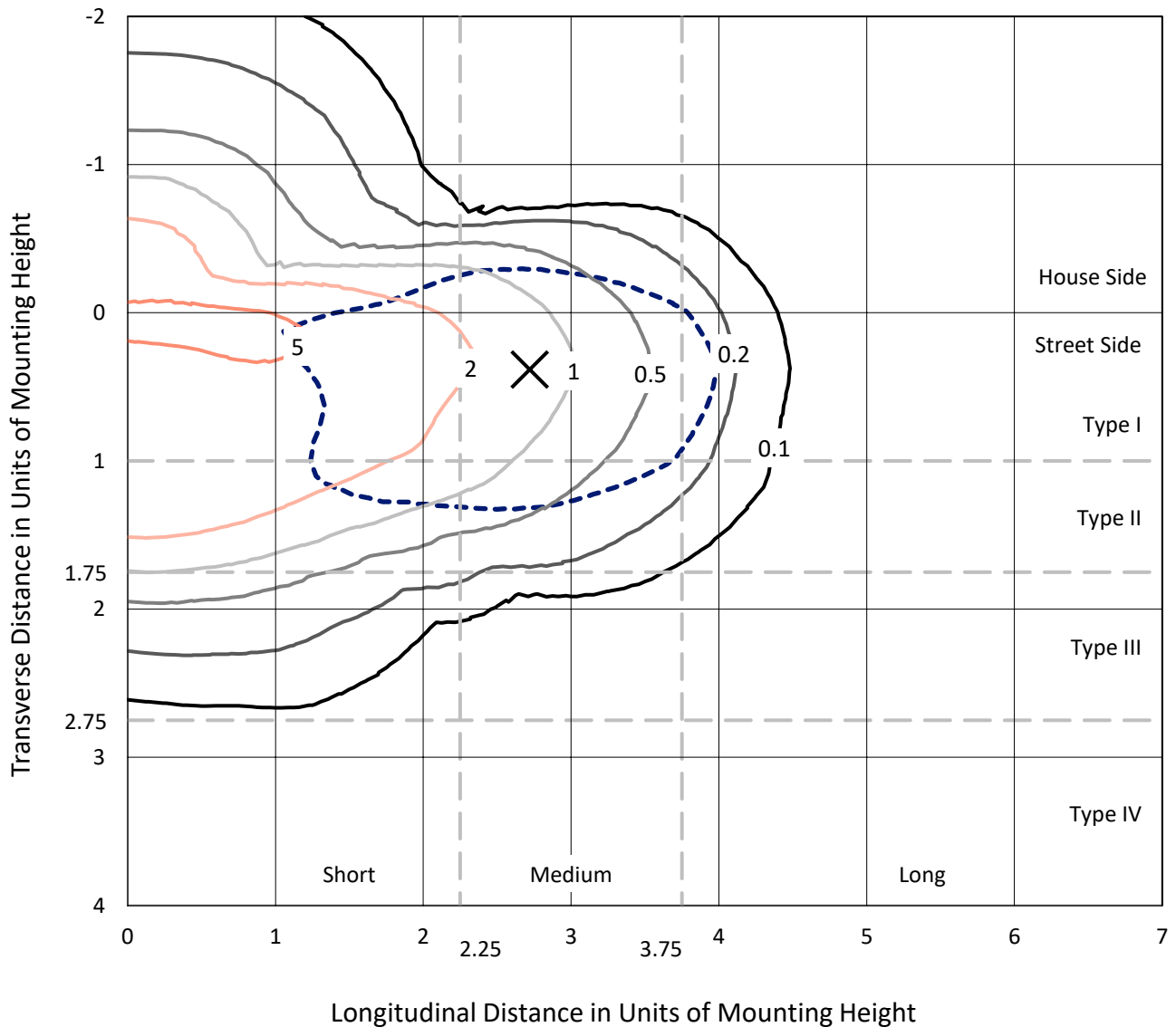
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

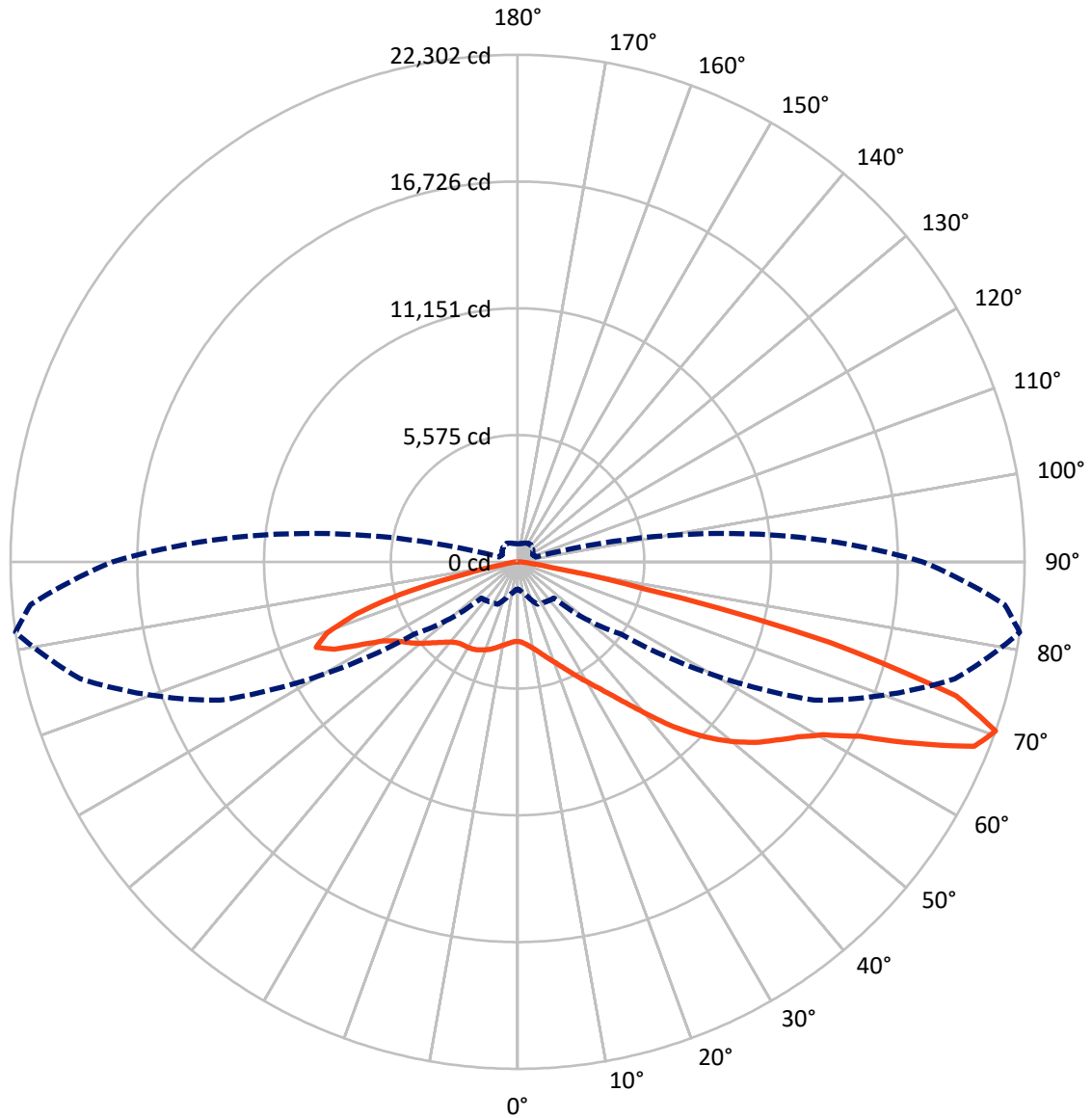
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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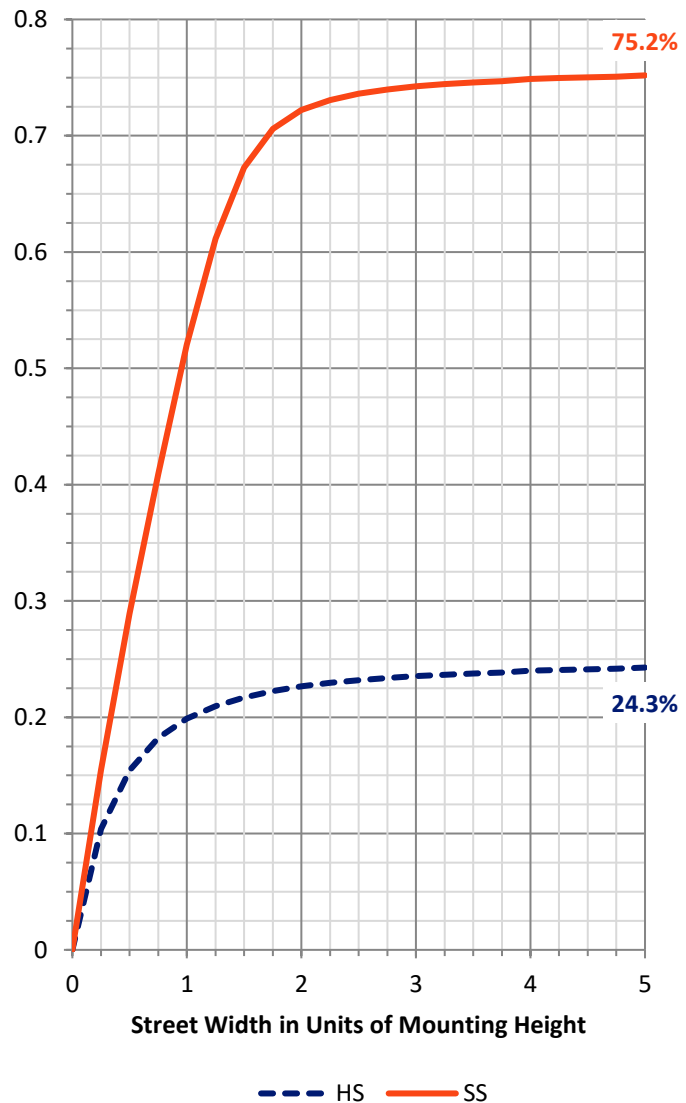
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5883.3	0.0	5883.3
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	17981.7	0.0	17981.7
	% Fixture	75.3	0.0	75.3
Total	Lumens	23865.1	0.0	23865.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	330.4	1.4
10°-20°	949.1	4.0
20°-30°	1587.8	6.7
30°-40°	2480.6	10.4
40°-50°	3950.6	16.6
50°-60°	5497.8	23.0
60°-70°	5750.9	24.1
70°-80°	3005.7	12.6
80°-90°	312.1	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°	23865.1	100.0
0°-180°	23865.1	100.0

Coefficient of Utilization

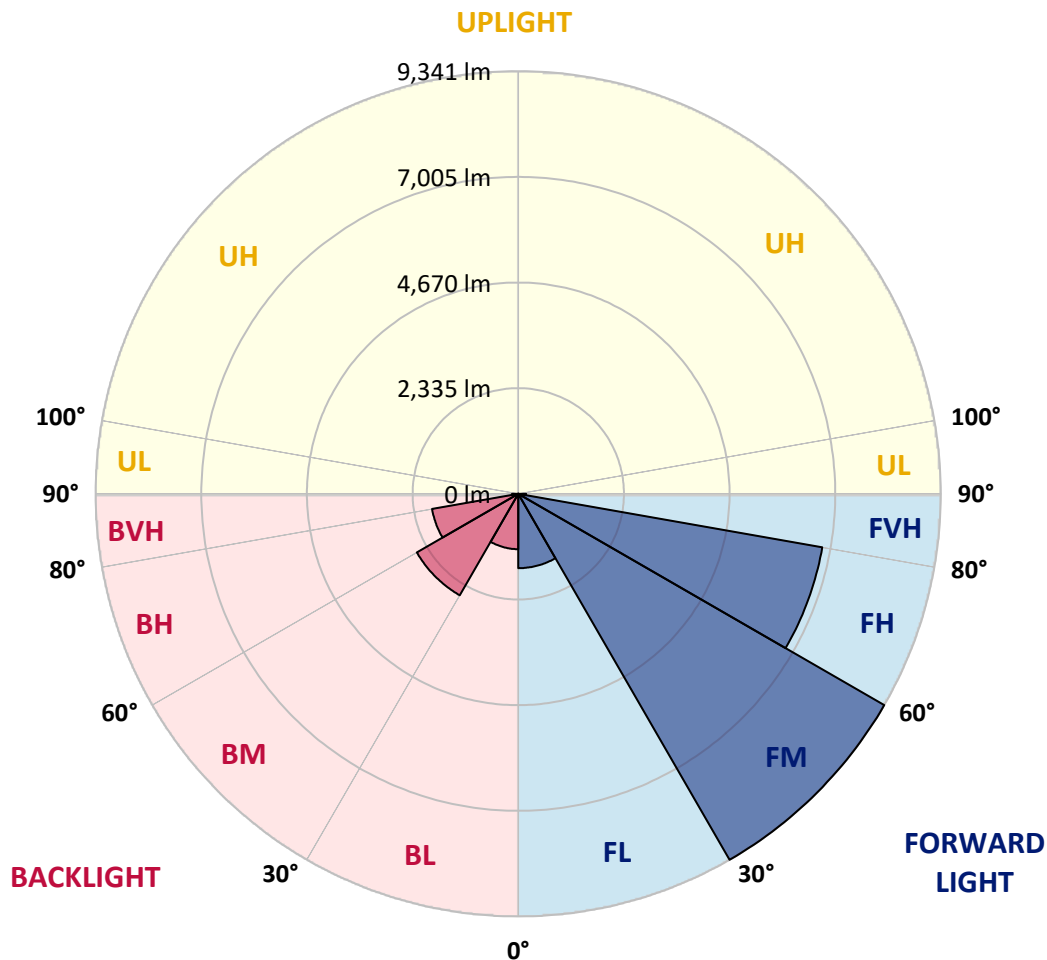


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1643.4	6.9			
FM (30°-60°)	9340.5	39.1			
FH (60°-80°)	6823.1	28.6			G3/7500
FVH (80°-90°)	174.7	0.7			G2/225
BL (0°-30°)	1223.9	5.1	B3/2500		
BM (30°-60°)	2588.4	10.8	B3/5000		
BH (60°-80°)	1933.6	8.1	B3/2500		G3/2500
BVH (80°-90°)	137.4	0.6			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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3498.9	3498.9	3498.9	3498.9	3498.9	3498.9	3498.9	3498.9	3498.9	3498.9	3498.9
2.5°	3582.5	3602.8	3596.4	3590.1	3590.1	3581.2	3579.9	3567.3	3557.2	3540.7	3536.9
5°	3628.1	3649.6	3647.1	3652.2	3668.6	3672.4	3676.2	3668.6	3648.4	3628.1	3619.2
7.5°	3587.6	3611.6	3619.2	3649.6	3700.2	3745.9	3780.1	3793.9	3775.0	3745.9	3731.9
10°	3450.8	3477.4	3504.0	3576.1	3666.1	3773.7	3864.9	3919.4	3915.5	3887.7	3863.6
12.5°	3173.5	3201.3	3258.3	3398.9	3563.5	3753.4	3923.2	4037.1	4076.3	4056.1	4014.3
15°	2951.9	2975.9	3018.9	3163.4	3377.4	3666.1	3944.7	4166.3	4266.4	4254.9	4204.2
17.5°	2945.5	2955.7	2982.2	3050.6	3215.2	3529.3	3921.9	4292.9	4484.2	4482.8	4419.6
20°	3057.0	3060.8	3075.9	3089.9	3183.5	3425.4	3863.6	4398.1	4728.5	4728.5	4660.2
22.5°	3211.4	3209.0	3224.1	3211.4	3257.0	3416.6	3826.9	4490.4	5000.8	5021.1	4935.0
25°	3443.2	3430.6	3426.8	3397.6	3406.5	3498.9	3867.4	4595.6	5323.7	5365.5	5257.8
27.5°	3752.2	3731.9	3718.0	3650.8	3628.1	3668.6	3991.6	4722.2	5683.3	5755.6	5618.7
30°	4154.8	4118.1	4098.0	3981.4	3899.1	3905.5	4178.9	4890.7	6059.5	6175.9	6002.5
32.5°	4704.4	4647.5	4593.0	4401.9	4251.1	4201.8	4420.8	5123.7	6467.2	6653.4	6430.5
35°	5320.0	5274.3	5216.1	4921.0	4689.3	4575.3	4747.5	5449.1	6944.7	7239.7	6949.7
37.5°	5912.6	5873.4	5901.1	5503.5	5204.6	5038.8	5175.5	5886.0	7533.5	7969.2	7600.6
40°	6525.5	6495.1	6498.9	6118.9	5770.7	5584.6	5694.8	6434.3	8208.5	8836.5	8383.3
42.5°	7191.6	7168.7	7092.8	6756.0	6364.6	6191.2	6292.5	7067.5	8932.8	9824.3	9241.8
45°	7937.5	7923.6	7852.6	7466.4	7018.1	6823.1	6959.9	7766.5	9660.9	10753.8	10104.1
47.5°	8582.0	8593.4	8584.6	8259.1	7794.4	7508.1	7671.5	8495.9	10338.5	11627.6	10931.1
50°	8892.3	8951.8	9039.2	8937.9	8649.2	8357.8	8389.5	9200.0	10984.3	12446.9	11723.8
52.5°	8730.2	8842.9	9081.0	9243.0	9354.6	9293.7	9208.9	9899.0	11592.1	13186.5	12473.5
55°	8126.2	8284.5	8679.6	9070.8	9639.4	10081.4	10192.8	10674.0	12184.8	13837.4	13182.6
57.5°	7025.7	7282.7	7637.4	8428.8	9386.1	10462.6	11340.2	11749.2	12812.9	14532.7	13924.7
60°	5138.8	5483.2	5924.0	7101.7	8499.7	10258.7	12316.5	13400.4	13705.7	15433.0	14891.0
62.5°	3288.7	3501.4	3906.7	5016.0	6623.0	9213.9	12615.4	15464.7	15219.0	16909.5	16339.7
65°	2251.5	2388.4	2759.4	3382.4	4281.5	6858.6	11815.1	17012.1	17622.5	19249.7	18816.6
67.5°	1636.1	1739.9	2056.6	2602.4	2789.7	4058.7	9168.3	16941.2	19958.9	21660.9	20987.2
70°	1192.9	1266.4	1532.3	2056.6	2146.5	2257.9	5554.2	14400.9	19908.3	22301.6	21495.0
72.5°	884.0	934.6	1113.1	1595.6	1737.5	1524.7	2749.3	10466.4	17107.0	20171.7	19524.5
75°	639.5	677.5	809.2	1220.8	1390.4	1161.2	1371.4	6116.5	11932.7	14189.4	14303.4
77.5°	488.8	517.9	604.0	894.0	1113.1	871.2	851.0	2813.8	5658.0	5685.9	6005.1
80°	392.6	411.5	458.4	629.3	853.5	652.2	554.6	1135.9	1788.1	1513.3	1588.0
82.5°	288.7	320.4	387.6	442.0	610.4	449.6	338.1	573.7	680.0	585.1	590.1
85°	164.6	186.1	234.3	316.6	390.0	274.8	193.7	254.5	316.6	259.6	231.8
87.5°	58.2	76.0	82.3	124.1	169.7	114.0	74.7	73.5	103.8	77.3	64.6
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°	3498.9	3498.9	3498.9	3498.9	3498.9	3498.9	3498.9	3498.9	3498.9	3498.9	3498.9
2.5°	3524.3	3517.9	3492.6	3458.4	3423.0	3388.8	3377.4	3353.3	3336.8	3328.0	3338.1
5°	3595.2	3574.9	3515.3	3439.4	3359.6	3273.5	3212.8	3157.0	3116.5	3078.5	3093.7
7.5°	3696.5	3661.0	3558.4	3425.4	3283.7	3140.5	3034.2	2953.1	2898.7	2863.2	2870.8
10°	3814.2	3759.8	3602.8	3403.9	3184.9	2979.7	2854.3	2784.7	2750.5	2731.5	2736.5
12.5°	3949.7	3872.4	3648.4	3354.5	3034.2	2799.9	2713.8	2693.5	2694.8	2696.1	2698.6
15°	4116.9	4009.3	3685.1	3246.9	2837.9	2661.8	2646.7	2679.6	2713.8	2730.3	2729.0
17.5°	4305.6	4153.6	3691.4	3069.7	2645.4	2573.3	2621.3	2692.3	2744.1	2767.0	2772.0
20°	4508.2	4300.5	3645.8	2818.9	2487.1	2501.0	2587.1	2678.3	2735.3	2764.4	2772.0
22.5°	4739.9	4457.5	3536.9	2555.5	2357.9	2422.5	2523.9	2612.5	2672.0	2701.1	2708.8
25°	5004.6	4633.6	3366.0	2333.9	2246.5	2333.9	2435.2	2508.6	2556.8	2583.3	2591.0
27.5°	5298.4	4817.2	3138.0	2157.8	2149.0	2242.7	2326.2	2383.2	2408.5	2428.8	2436.4
30°	5593.4	4984.4	2861.9	2024.9	2064.1	2152.8	2212.4	2237.7	2245.3	2249.1	2257.9
32.5°	5912.6	5128.7	2571.9	1914.7	1983.1	2065.4	2100.8	2112.2	2076.9	2052.8	2060.4
35°	6298.8	5283.2	2288.3	1827.4	1903.3	1974.3	1985.6	1975.5	1933.7	1884.4	1886.8
37.5°	6776.3	5475.7	2061.6	1765.3	1828.6	1875.4	1861.5	1859.0	1862.8	1804.5	1808.3
40°	7361.2	5726.5	1895.7	1717.2	1767.8	1778.0	1738.7	1760.2	1779.2	1690.5	1693.1
42.5°	8010.9	6029.0	1790.6	1684.3	1717.2	1693.1	1632.3	1656.4	1653.8	1537.3	1536.1
45°	8673.2	6358.4	1753.9	1660.2	1670.3	1622.2	1555.0	1561.4	1508.2	1403.1	1406.9
47.5°	9331.7	6711.6	1776.7	1639.9	1612.0	1557.6	1505.7	1477.8	1399.3	1320.8	1320.8
50°	9977.6	7082.6	1860.3	1599.4	1532.3	1500.6	1462.7	1413.3	1329.6	1262.6	1257.5
52.5°	10576.6	7456.3	1954.0	1532.3	1432.2	1451.2	1427.2	1370.2	1287.9	1219.4	1220.8
55°	11143.9	7829.9	1990.7	1439.8	1338.5	1408.1	1394.2	1289.1	1190.3	1134.7	1129.6
57.5°	11761.9	8279.3	1950.2	1322.0	1262.6	1358.7	1305.6	1189.1	1132.1	1090.3	1086.5
60°	12617.9	8984.7	1862.8	1176.4	1190.3	1285.4	1194.1	1146.1	1084.0	1037.1	1034.6
62.5°	14040.0	10300.4	1722.2	1032.1	1105.6	1176.4	1141.0	1092.9	1029.5	984.0	984.0
65°	16142.1	12129.0	1457.6	919.3	1010.5	1070.1	1084.0	1035.9	970.1	921.9	924.4
67.5°	17915.1	13276.4	1103.0	825.6	913.1	984.0	1023.3	976.3	906.7	859.9	861.1
70°	17817.5	12443.1	842.1	733.2	827.0	899.1	949.8	913.1	838.3	794.0	797.8
72.5°	15825.6	10409.4	681.3	639.5	739.5	810.5	871.2	843.4	767.4	724.4	724.4
75°	11626.4	7389.1	544.5	544.5	630.7	718.0	785.2	767.4	697.7	667.4	658.5
77.5°	4900.7	3100.0	426.8	452.1	524.3	616.7	700.3	706.6	645.9	683.8	620.5
80°	1303.1	854.7	325.4	355.9	411.5	509.1	609.2	606.6	540.7	505.2	469.9
82.5°	496.4	336.8	231.8	250.7	297.6	390.0	482.5	497.6	431.8	373.6	373.6
85°	191.3	144.3	143.1	150.7	173.5	258.3	364.7	377.4	325.4	276.0	285.0
87.5°	49.4	43.0	53.2	50.6	79.7	138.1	209.0	216.6	198.8	115.2	164.6
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)