

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: P968171

Luminaire Tested: **NAV-SB5B-722-U-T3R**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P968171  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5B-722-U-T3R  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

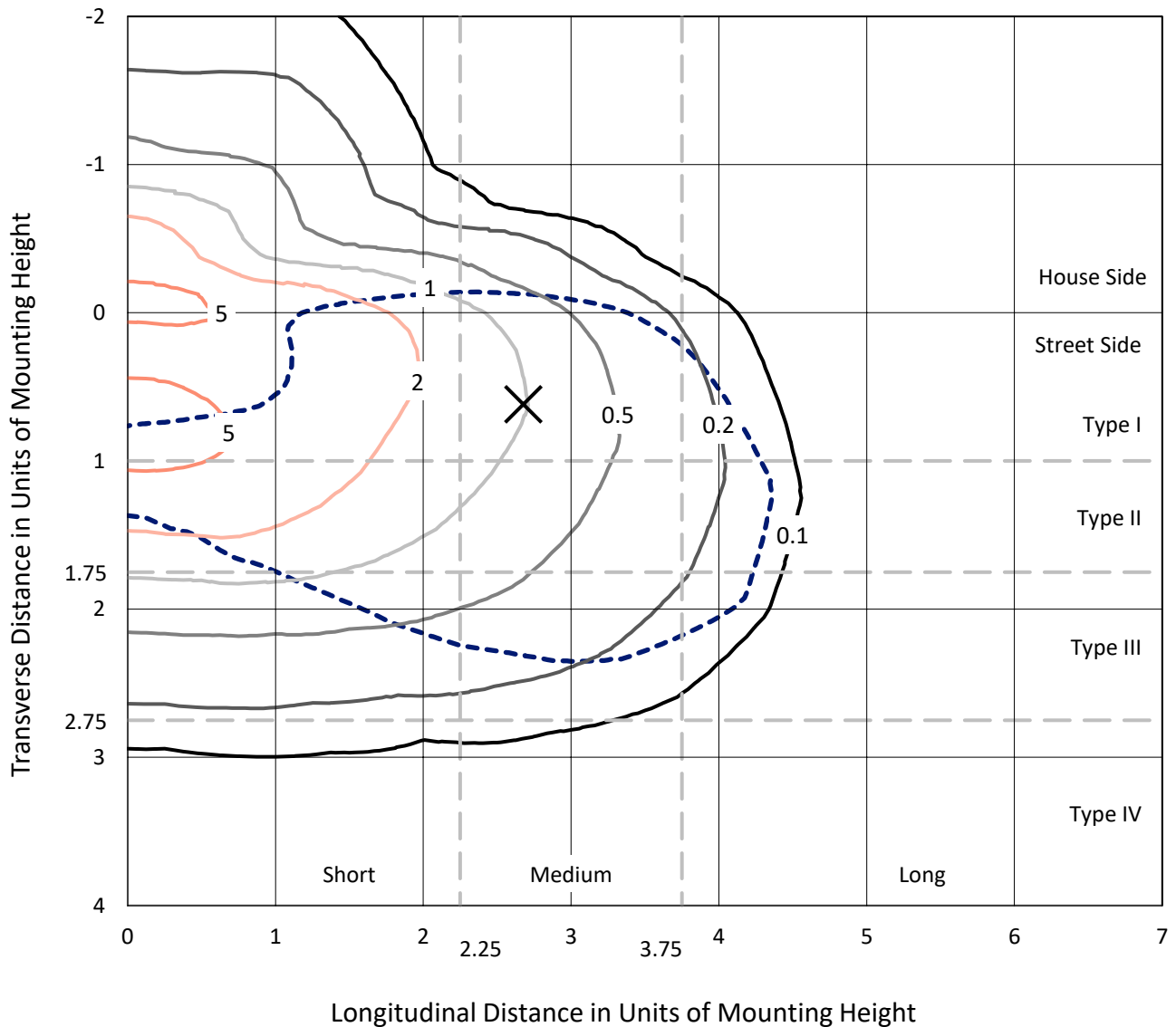
Lumens per Lamp: N/A  
Luminaire Lumens: 24726.1 lumens  
Efficiency: N/A  
Efficacy: 135.3 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 182.7  
Input Voltage (V): NR  
Input Current (Ain): 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



REPORT NUMBER: P968171  
 CATALOG NUMBER: NAV-SB5B-722-U-T3R

### Iso-Footcandle Lines of Horizontal Illumination

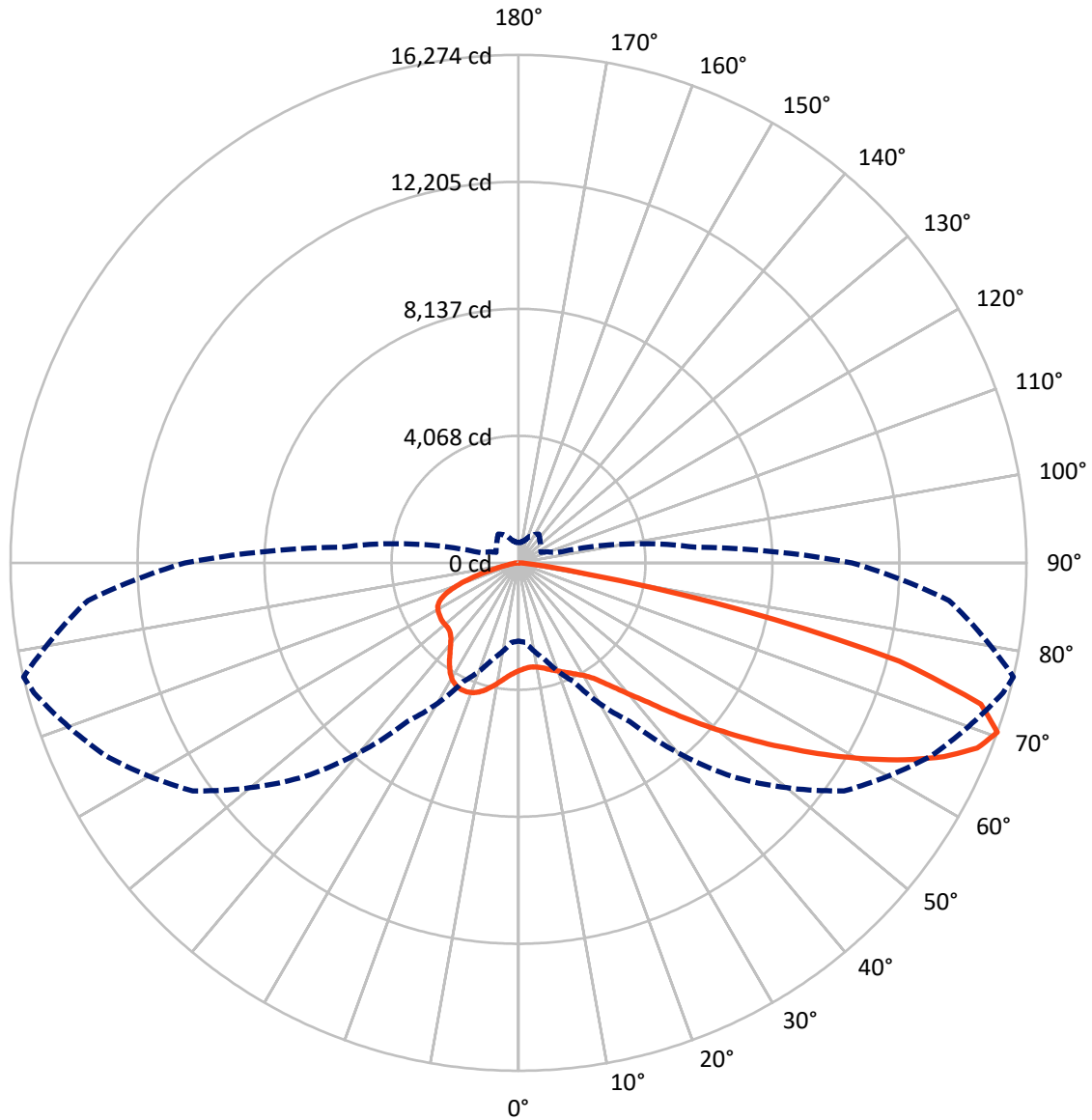
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 fc  
 Type III - Medium - N/A

REPORT NUMBER: P968171  
CATALOG NUMBER: NAV-SB5B-722-U-T3R

### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P968171  
 CATALOG NUMBER: NAV-SB5B-722-U-T3R

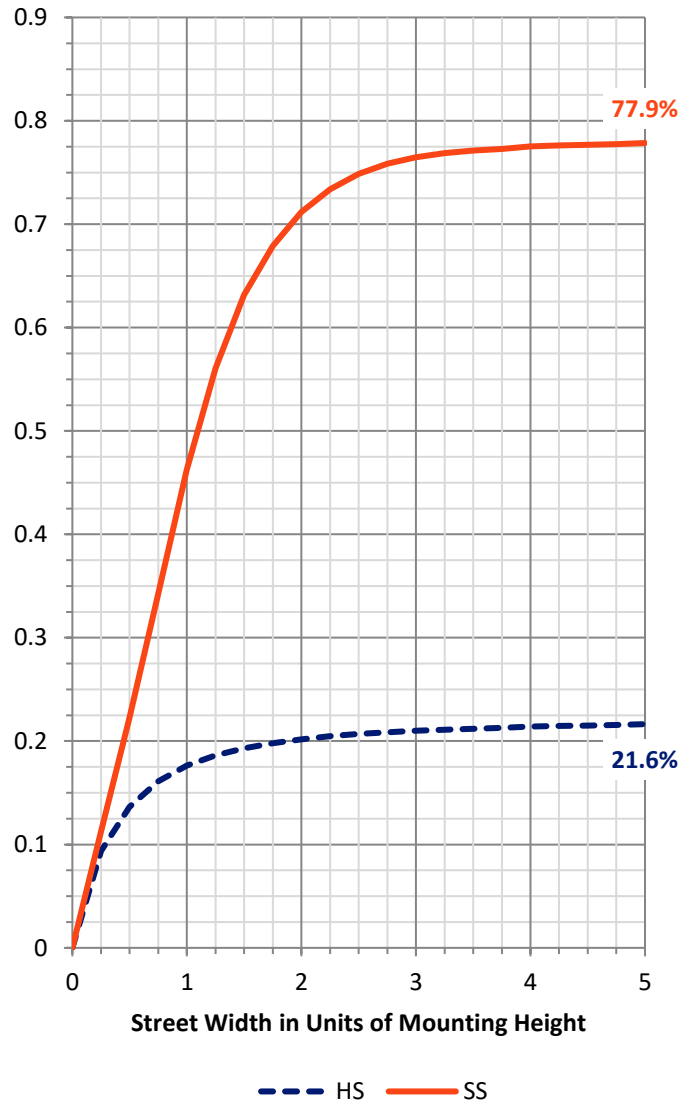
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5414.6	0.0	5414.6
	% Fixture	21.9	0.0	21.9
<b>Street Side</b>	Lumens	19311.5	0.0	19311.5
	% Fixture	78.1	0.0	78.1
<b>Total</b>	Lumens	24726.1	0.0	24726.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	329.0	1.3
10°-20°	949.5	3.8
20°-30°	1623.8	6.6
30°-40°	2611.2	10.6
40°-50°	4076.8	16.5
50°-60°	5445.6	22.0
60°-70°	5804.2	23.5
70°-80°	3573.0	14.5
80°-90°	313.1	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°	24726.1	100.0
0°-180°	24726.1	100.0

**Coefficient of Utilization**

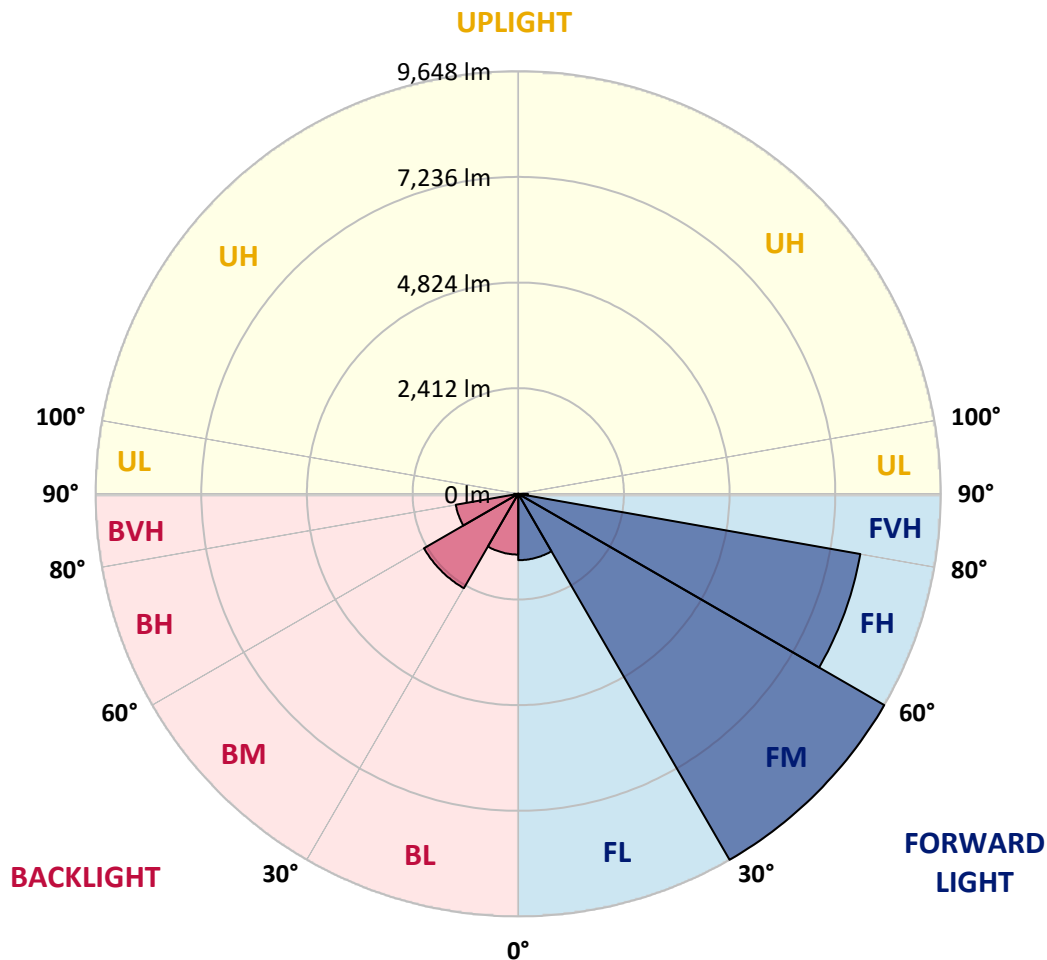


REPORT NUMBER: P968171  
 CATALOG NUMBER: NAV-SB5B-722-U-T3R

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1514.9	6.1			
FM (30°-60°)	9647.6	39.0			
FH (60°-80°)	7930.1	32.1			G4/12000
FVH (80°-90°)	218.9	0.9			G2/225
BL (0°-30°)	1387.4	5.6	B3/2500		
BM (30°-60°)	2486.0	10.1	B2/2500		
BH (60°-80°)	1447.1	5.9	B3/2500		G3/2500
BVH (80°-90°)	94.2	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**  
 Type III Medium



REPORT NUMBER: P968171  
 CATALOG NUMBER: NAV-SB5B-722-U-T3R

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3449.5	3449.5	3449.5	3449.5	3449.5	3449.5	3449.5	3449.5	3449.5	3449.5	3449.5
2.5°	3179.8	3178.5	3195.0	3200.0	3230.4	3251.9	3292.5	3335.6	3391.2	3397.6	3431.8
5°	2996.2	2996.2	3015.1	3035.4	3074.7	3117.7	3179.8	3254.5	3350.7	3365.9	3450.8
7.5°	2840.4	2850.5	2867.0	2906.3	2951.8	3013.9	3108.8	3215.2	3341.9	3365.9	3502.7
10°	2715.0	2726.4	2746.7	2778.4	2846.7	2932.8	3057.0	3193.7	3363.4	3401.4	3578.7
12.5°	2675.8	2687.1	2698.6	2722.6	2786.0	2887.2	3035.4	3203.8	3415.3	3453.3	3682.5
15°	2767.0	2780.9	2772.0	2765.7	2798.7	2891.0	3045.6	3240.5	3479.9	3534.4	3810.4
17.5°	2977.2	2982.2	2961.9	2902.5	2897.4	2946.8	3093.7	3291.2	3561.0	3620.5	3939.6
20°	3316.6	3307.7	3265.9	3148.1	3081.0	3070.9	3176.0	3367.2	3644.5	3707.8	4078.9
22.5°	3777.5	3767.4	3683.7	3497.6	3348.2	3249.5	3295.1	3465.9	3738.3	3809.1	4214.4
25°	4352.5	4338.5	4215.6	3962.3	3730.6	3486.2	3457.1	3596.4	3853.5	3919.3	4356.2
27.5°	5023.5	5012.1	4879.2	4544.8	4210.6	3810.4	3658.4	3749.7	3973.8	4048.4	4515.7
30°	5745.4	5778.3	5542.8	5183.1	4760.2	4233.4	3929.4	3938.4	4129.5	4196.7	4709.6
32.5°	6593.8	6650.8	6367.2	5911.3	5333.8	4693.1	4271.4	4201.7	4356.2	4411.9	4953.9
35°	7434.7	7499.3	7263.8	6759.8	6094.9	5235.1	4628.5	4504.4	4657.6	4718.4	5278.1
37.5°	8161.6	8247.7	8126.1	7687.9	6909.1	5888.5	5094.5	4860.2	5028.6	5104.6	5713.8
40°	8735.3	8867.0	8858.0	8584.5	7869.0	6681.3	5685.9	5299.7	5489.6	5571.9	6241.8
42.5°	9201.2	9315.2	9414.0	9400.1	8870.8	7581.6	6381.1	5870.8	6015.1	6110.1	6835.7
45°	9522.9	9644.4	9857.2	10086.4	9834.4	8545.2	7177.7	6548.2	6679.9	6823.0	7543.6
47.5°	9810.4	9948.3	10224.5	10587.8	10652.4	9512.7	8050.1	7337.2	7457.5	7605.6	8254.0
50°	9835.7	9954.7	10382.7	10898.1	11233.7	10442.3	8987.2	8222.3	8335.1	8493.4	9015.1
52.5°	9224.1	9411.4	10158.6	10889.3	11500.9	11219.8	9918.0	9143.0	9269.6	9459.5	9802.8
55°	7159.9	7434.7	9501.3	10549.9	11405.9	11722.5	10803.2	10121.9	10283.9	10482.8	10595.4
57.5°	6167.1	6287.3	7542.4	9931.9	10972.8	11853.0	11550.3	11110.9	11371.8	11589.6	11433.8
60°	5542.8	5642.8	6384.9	8970.8	10403.0	11646.6	12127.7	12032.8	12483.6	12743.2	12291.1
62.5°	4874.2	4969.1	5644.1	7490.4	9673.5	11303.4	12492.5	12883.7	13623.3	13907.0	13099.0
65°	4210.6	4291.7	4938.8	6293.7	8746.6	10960.2	12681.1	13619.5	14678.2	14972.0	13770.2
67.5°	3471.1	3538.2	4149.8	5309.8	7619.5	10490.4	12774.9	14198.2	15596.3	15848.2	14102.0
70°	2504.8	2556.8	3188.7	4199.2	6205.0	9682.5	12736.9	14608.5	16072.4	16273.7	13851.2
72.5°	1184.1	1230.9	1972.9	2726.4	4382.8	8109.7	11968.2	14283.1	15588.6	15488.6	12316.4
75°	631.9	672.4	1133.3	1495.6	2314.9	5559.2	9793.9	12303.8	13090.2	12603.9	9102.4
77.5°	428.0	459.7	701.5	897.8	1057.4	2639.1	6294.9	8518.7	8195.8	7392.9	4558.8
80°	339.4	372.3	574.9	607.8	511.6	953.6	2601.0	3943.4	2832.8	2265.5	1296.7
82.5°	260.9	297.6	483.7	440.6	278.6	391.3	757.3	1247.3	725.6	552.2	314.1
85°	159.6	198.8	379.9	281.2	157.0	178.6	257.1	347.0	221.6	184.9	112.7
87.5°	81.1	114.0	192.5	102.6	70.9	41.8	68.4	68.4	58.2	50.6	29.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P968171  
 CATALOG NUMBER: NAV-SB5B-722-U-T3R

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3449.5	3449.5	3449.5	3449.5	3449.5	3449.5	3449.5	3449.5	3449.5	3449.5	3449.5
2.5°	3462.1	3487.5	3530.5	3571.1	3602.8	3633.1	3663.6	3680.0	3685.1	3705.3	3716.8
5°	3502.7	3549.6	3633.1	3711.6	3761.0	3791.5	3813.0	3825.6	3828.2	3834.5	3844.6
7.5°	3577.5	3652.2	3768.6	3847.1	3883.8	3881.4	3872.4	3840.8	3828.2	3816.8	3819.3
10°	3682.5	3781.3	3924.4	3978.8	3956.1	3895.3	3816.8	3724.3	3681.3	3639.5	3626.8
12.5°	3813.0	3938.4	4078.9	4076.3	3963.7	3807.9	3625.5	3483.7	3393.8	3329.2	3314.0
15°	3971.3	4115.6	4223.2	4137.1	3890.2	3610.4	3343.1	3158.2	3077.3	3006.3	2998.7
17.5°	4134.6	4289.1	4338.5	4118.1	3705.3	3317.8	3015.1	2869.5	2789.7	2751.7	2763.2
20°	4294.1	4447.4	4406.9	4009.2	3424.2	2986.0	2716.4	2636.5	2620.1	2628.9	2625.1
22.5°	4462.5	4599.4	4420.8	3799.1	3065.8	2646.7	2498.5	2501.0	2537.8	2564.3	2570.7
25°	4634.8	4727.3	4384.0	3495.1	2680.9	2397.2	2360.5	2401.0	2473.1	2525.1	2539.0
27.5°	4800.7	4841.2	4304.3	3119.0	2350.3	2218.6	2225.0	2308.5	2417.5	2489.6	2507.4
30°	4988.2	4942.5	4151.0	2696.1	2121.1	2065.4	2118.6	2216.0	2325.0	2389.6	2404.8
32.5°	5199.6	5029.9	3907.9	2304.7	1959.0	1942.6	2029.9	2093.3	2141.4	2160.4	2170.5
35°	5463.0	5152.8	3596.4	2029.9	1813.4	1852.7	1936.2	1904.6	1885.6	1875.4	1885.6
37.5°	5804.9	5318.6	3231.7	1851.4	1695.7	1788.1	1822.2	1723.5	1648.8	1612.0	1620.9
40°	6216.4	5561.8	2881.0	1713.4	1620.9	1732.4	1672.8	1553.8	1458.8	1406.9	1410.7
42.5°	6673.6	5816.3	2585.9	1609.6	1579.1	1686.7	1562.7	1420.9	1267.6	1251.1	1267.6
45°	7153.6	6078.5	2384.6	1529.7	1558.8	1647.5	1499.4	1270.2	1161.2	1228.4	1263.8
47.5°	7633.5	6319.0	2263.0	1470.3	1548.8	1603.2	1443.6	1186.5	1109.4	1206.8	1252.4
50°	8167.9	6534.3	2208.5	1427.2	1537.3	1585.5	1360.1	1165.0	1054.8	1119.4	1167.6
52.5°	8698.5	6701.4	2168.0	1384.2	1520.9	1571.5	1319.5	1139.7	989.0	992.8	1019.4
55°	9227.9	6810.4	2123.7	1327.2	1484.2	1541.1	1315.7	1111.8	939.6	921.9	934.6
57.5°	9792.6	6872.4	2069.2	1263.8	1420.9	1463.9	1311.9	1090.3	924.4	895.3	899.1
60°	10367.6	6963.6	1998.2	1186.5	1336.0	1371.4	1303.1	1082.7	915.5	866.2	870.0
62.5°	10882.9	6995.3	1913.5	1113.1	1227.1	1280.2	1284.1	1076.4	891.5	806.7	806.7
65°	11221.1	6858.5	1765.3	1029.5	1109.4	1186.5	1247.3	1054.8	848.5	763.6	763.6
67.5°	11207.1	6468.5	1533.5	921.9	995.4	1082.7	1194.1	1018.1	796.5	710.4	714.2
70°	10685.4	5698.5	1239.7	796.5	870.0	971.3	1125.8	963.7	734.5	652.2	659.8
72.5°	9164.5	4460.1	900.4	649.6	724.4	856.1	1037.1	897.8	671.2	600.2	596.4
75°	6547.0	2822.6	610.4	499.0	563.5	725.6	927.0	820.6	612.9	602.8	568.6
77.5°	3344.4	1348.7	404.0	364.7	392.6	572.4	778.8	733.2	621.8	497.6	443.2
80°	1087.8	497.6	254.5	248.2	260.9	381.2	602.8	601.5	471.1	338.1	298.9
82.5°	347.0	214.0	165.8	159.6	153.2	239.3	420.5	476.1	317.9	214.0	212.8
85°	138.1	127.9	97.5	89.9	64.6	112.7	220.4	316.6	236.8	154.5	158.3
87.5°	50.6	50.6	26.5	19.0	13.9	38.0	59.6	95.0	135.5	79.7	78.5
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)