

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: P967645

Luminaire Tested: **NAV-SB5A-722-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967645
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-722-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19199.3 lumens
Efficiency: N/A
Efficacy: 135.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

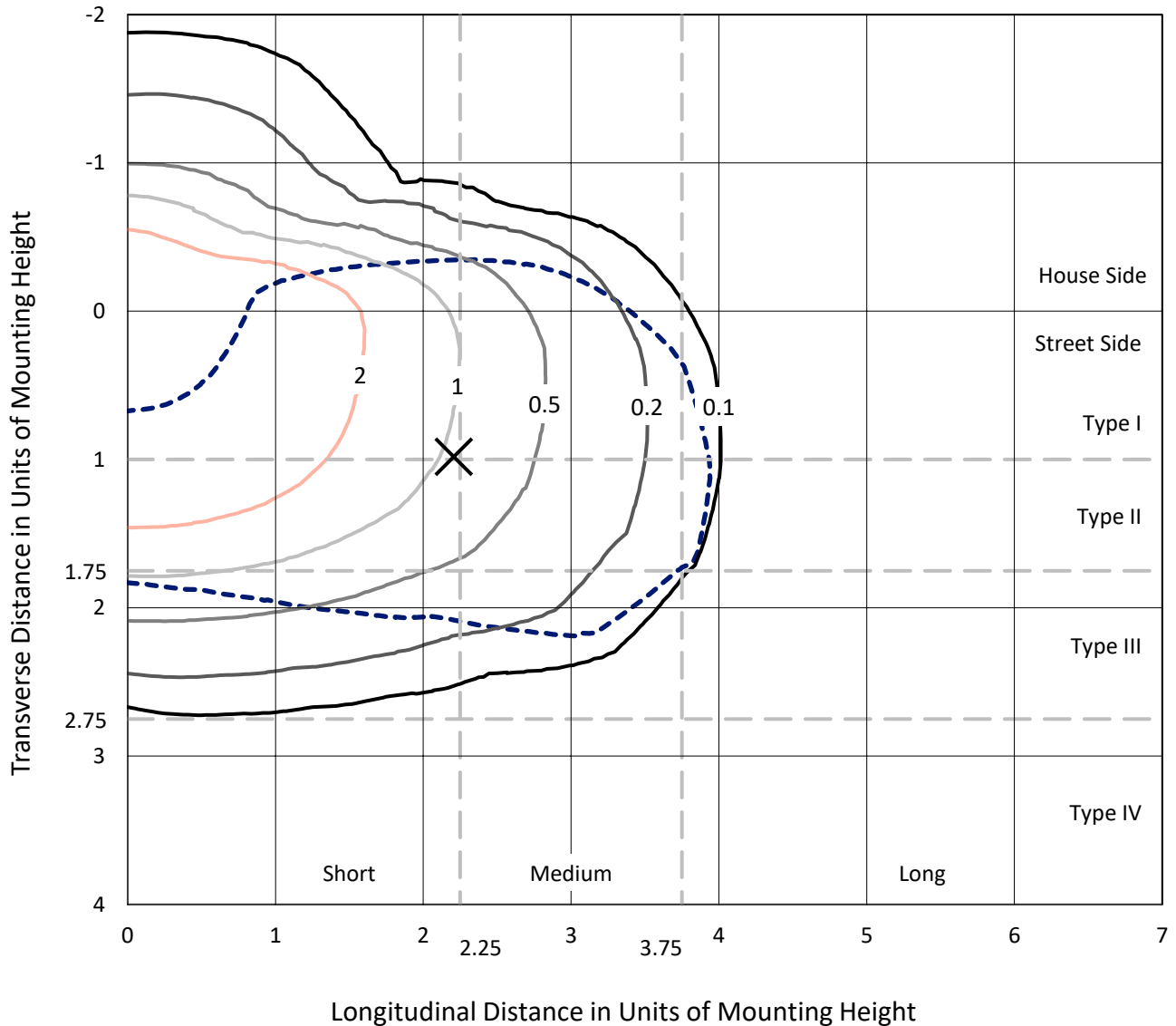
Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

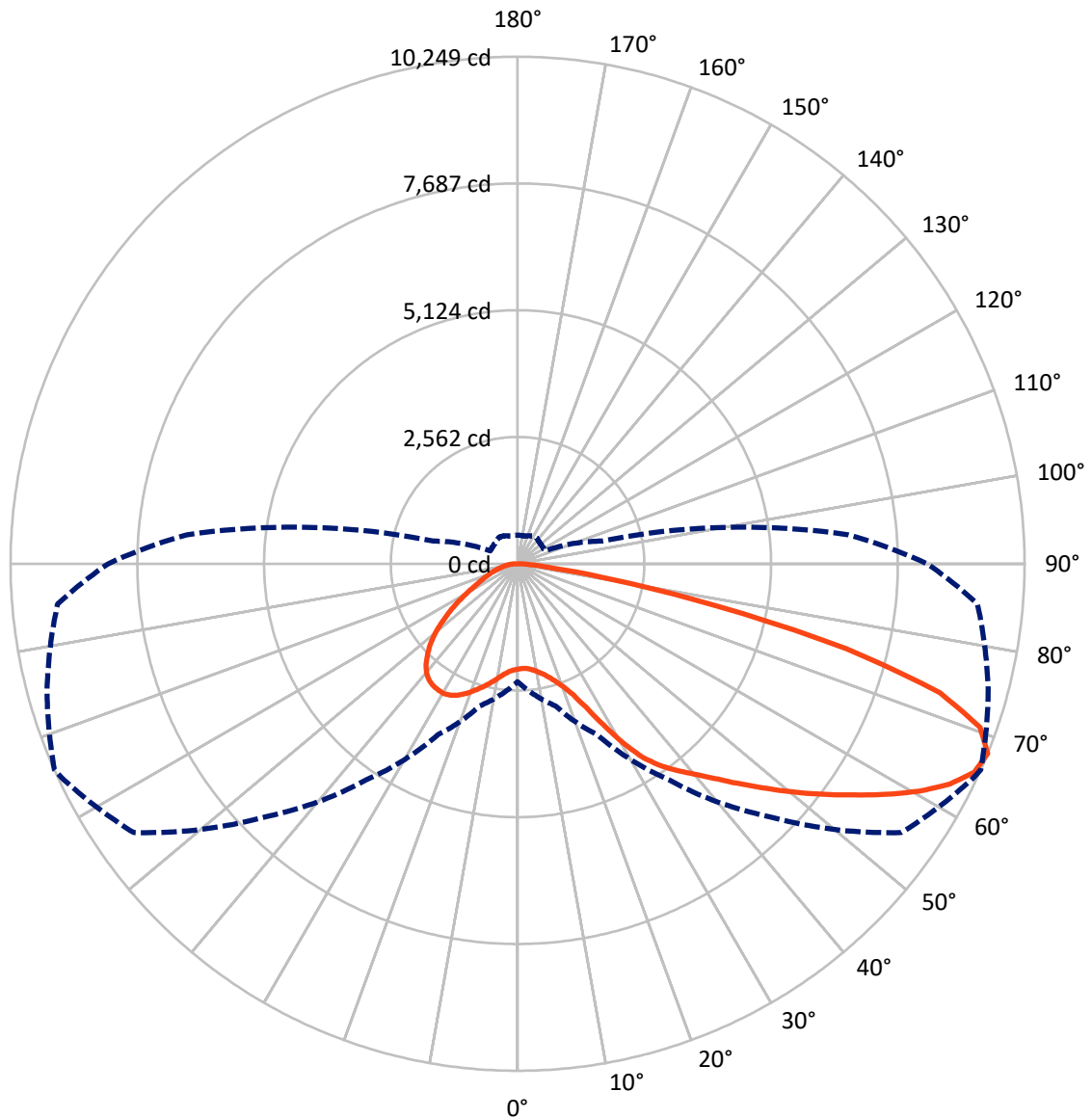
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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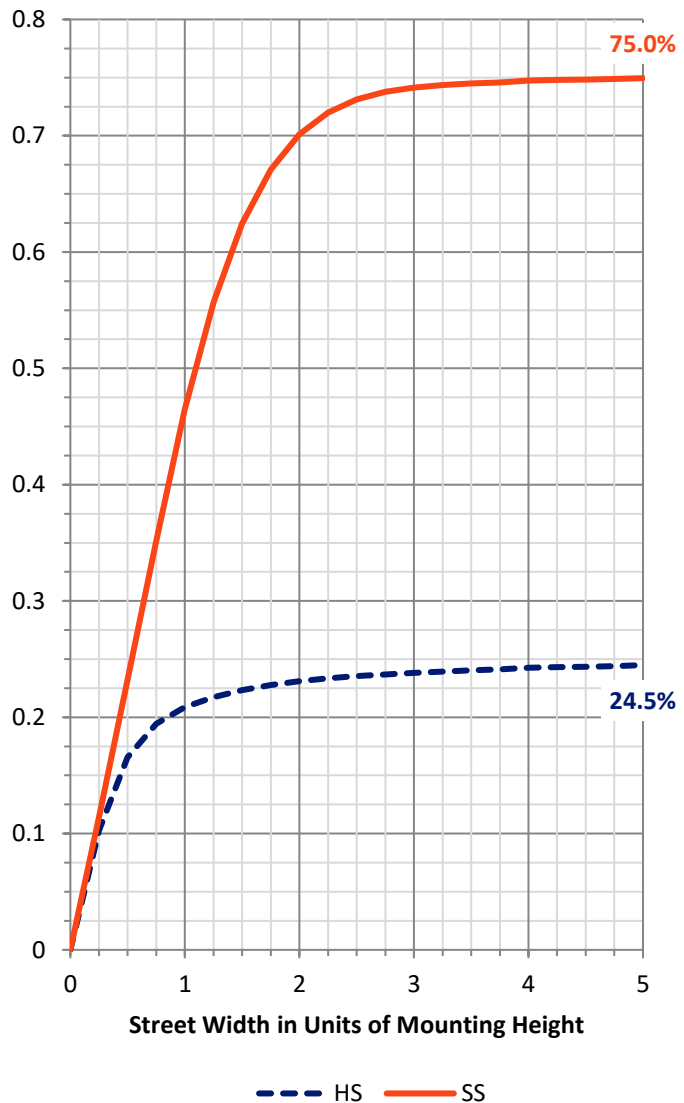
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4773.8	0.0	4773.8
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	14425.4	0.0	14425.4
	% Fixture	75.1	0.0	75.1
Total	Lumens	19199.3	0.0	19199.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.1	1.1
10°-20°	697.5	3.6
20°-30°	1344.5	7.0
30°-40°	2357.3	12.3
40°-50°	3504.6	18.3
50°-60°	4442.4	23.1
60°-70°	4346.8	22.6
70°-80°	2073.5	10.8
80°-90°	221.6	1.2
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°	19199.3	100.0
0°-180°	19199.3	100.0

Coefficient of Utilization



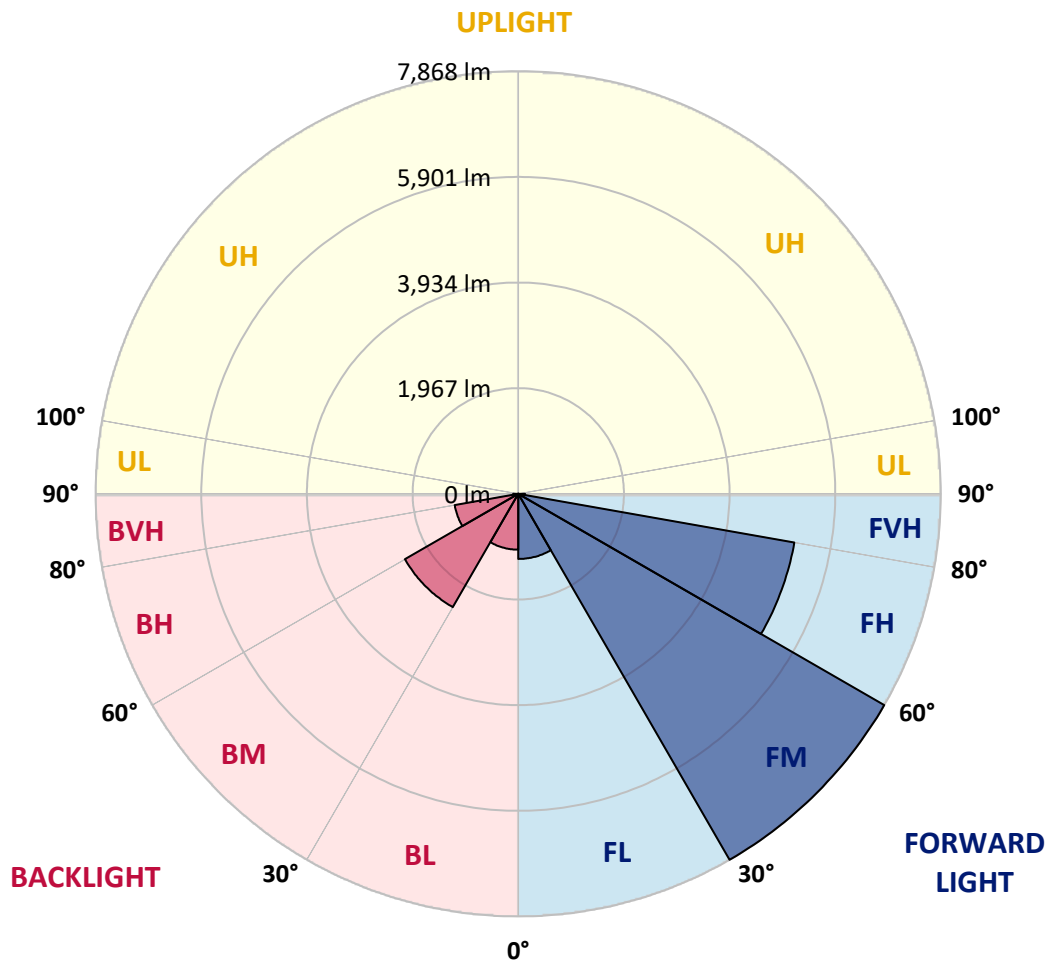
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1213.2	6.3			
FM (30°-60°)	7867.7	41.0			
FH (60°-80°)	5218.9	27.2			G3/7500
FVH (80°-90°)	125.6	0.7			G2/225
BL (0°-30°)	1039.9	5.4	B3/2500		
BM (30°-60°)	2436.6	12.7	B2/2500		
BH (60°-80°)	1201.3	6.3	B3/2500		G3/2500
BVH (80°-90°)	96.0	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2129.4	2129.4	2129.4	2129.4	2129.4	2129.4	2129.4	2129.4	2129.4	2129.4	2129.4
2.5°	2107.3	2119.4	2116.3	2111.3	2110.3	2112.3	2115.3	2118.4	2117.3	2122.4	2130.5
5°	2101.2	2113.3	2112.3	2112.3	2116.3	2124.4	2129.4	2134.5	2129.4	2135.5	2146.6
7.5°	2105.2	2114.4	2118.4	2122.4	2132.5	2147.6	2159.7	2170.8	2164.8	2171.8	2185.9
10°	2156.7	2163.8	2167.8	2167.8	2174.8	2192.0	2204.1	2224.2	2219.2	2230.3	2248.4
12.5°	2250.5	2257.6	2257.6	2253.6	2258.6	2269.7	2273.7	2295.9	2286.8	2305.0	2323.2
15°	2365.5	2379.6	2368.6	2361.5	2363.4	2374.6	2373.6	2390.7	2381.6	2396.8	2413.0
17.5°	2492.6	2510.7	2492.6	2491.6	2487.6	2499.7	2500.7	2515.8	2499.7	2510.7	2521.8
20°	2642.9	2668.1	2653.0	2658.0	2648.9	2654.0	2659.1	2681.2	2656.0	2664.1	2661.1
22.5°	2854.7	2885.0	2868.9	2888.0	2882.0	2877.9	2877.0	2916.2	2877.0	2879.9	2850.7
25°	3163.5	3199.7	3171.5	3197.7	3197.7	3210.8	3226.0	3276.4	3210.8	3191.6	3116.0
27.5°	3619.4	3655.7	3600.2	3616.3	3611.3	3643.6	3627.5	3752.5	3681.9	3650.6	3498.3
30°	4168.2	4232.6	4127.8	4123.8	4118.7	4170.1	4193.4	4276.1	4204.4	4173.2	3989.6
32.5°	4761.2	4828.9	4703.7	4667.4	4648.3	4679.5	4660.4	4727.0	4677.5	4629.1	4402.2
35°	5388.7	5455.3	5336.3	5265.6	5189.0	5123.4	5054.8	5071.9	5025.6	4951.9	4716.8
37.5°	5981.8	6103.9	5977.8	5902.2	5760.9	5632.8	5441.1	5361.5	5318.1	5250.5	5013.5
40°	6586.0	6655.6	6559.8	6495.3	6342.0	6141.2	5834.6	5666.1	5607.6	5542.1	5341.3
42.5°	7030.9	7097.5	7046.1	7001.7	6881.6	6648.7	6252.2	6041.3	5956.6	5883.0	5712.5
45°	7384.0	7433.4	7401.1	7417.3	7365.9	7139.8	6684.9	6443.9	6356.1	6266.3	6132.2
47.5°	7526.3	7578.6	7630.1	7725.9	7813.7	7647.3	7150.0	6879.6	6786.8	6695.0	6562.9
50°	7510.1	7563.6	7712.8	7916.6	8188.9	8133.5	7640.2	7343.6	7257.9	7153.0	7030.9
52.5°	7380.9	7441.5	7633.2	7972.0	8405.8	8497.7	8139.5	7822.8	7742.1	7617.0	7494.9
55°	7042.1	7078.3	7365.9	7846.0	8457.3	8751.9	8628.8	8333.2	8252.5	8078.0	7944.9
57.5°	6413.5	6466.0	6884.6	7506.1	8328.1	8924.4	9058.5	8869.8	8792.1	8541.0	8401.8
60°	5593.4	5677.2	6156.4	6935.0	7999.3	8923.3	9448.9	9397.4	9332.8	8996.9	8851.7
62.5°	4665.4	4762.3	5223.3	6128.1	7424.4	8670.2	9693.0	9839.3	9806.0	9417.6	9232.0
65°	3583.1	3649.6	4108.6	5084.1	6529.6	8126.4	9721.2	10140.8	10146.9	9737.4	9430.7
67.5°	2385.7	2577.4	2975.8	3815.0	5331.2	7237.7	9473.0	10190.3	10248.8	9847.4	9330.9
70°	1164.1	1416.2	1806.7	2479.5	3815.0	5874.9	8824.4	9784.8	9914.9	9526.6	8735.7
72.5°	483.2	564.9	777.8	1223.6	2190.0	3964.4	7521.1	8685.2	8926.3	8441.2	7344.6
75°	325.8	353.0	444.8	627.4	997.6	1955.0	5424.0	6476.2	6864.5	6375.3	5211.2
77.5°	251.2	268.3	323.8	438.8	593.2	739.4	2903.1	3902.8	4103.6	3799.0	2711.5
80°	197.7	210.8	242.1	319.8	420.7	395.4	989.5	1768.3	1884.4	1580.7	871.6
82.5°	171.5	176.5	173.5	216.9	279.4	231.0	324.8	652.6	720.3	522.5	284.4
85°	124.0	138.2	144.2	134.2	148.3	117.1	133.1	231.0	254.2	226.9	160.4
87.5°	50.4	74.6	91.8	86.7	54.4	33.3	41.3	67.5	77.7	84.8	52.5
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°	2129.4	2129.4	2129.4	2129.4	2129.4	2129.4	2129.4	2129.4	2129.4	2129.4	2129.4
2.5°	2131.5	2138.6	2143.6	2149.6	2153.6	2159.7	2171.8	2178.8	2179.9	2184.9	2184.0
5°	2150.7	2160.7	2171.8	2188.0	2206.1	2221.3	2244.4	2260.6	2266.7	2271.7	2270.7
7.5°	2192.0	2206.1	2226.3	2254.5	2280.7	2300.9	2329.2	2348.4	2367.5	2374.6	2375.5
10°	2253.6	2273.7	2303.0	2341.3	2369.5	2395.7	2425.0	2441.1	2460.3	2468.4	2472.4
12.5°	2330.2	2351.4	2389.7	2443.2	2469.4	2487.6	2497.6	2493.6	2497.6	2504.7	2506.7
15°	2418.0	2441.1	2484.5	2542.0	2560.1	2544.0	2521.8	2501.7	2498.6	2500.7	2507.8
17.5°	2521.8	2539.0	2589.5	2637.8	2624.7	2558.2	2509.7	2477.4	2461.3	2456.3	2463.4
20°	2667.2	2667.2	2708.5	2738.7	2651.0	2538.0	2462.4	2409.9	2376.6	2362.5	2359.4
22.5°	2843.7	2827.5	2853.7	2832.6	2645.9	2481.5	2376.6	2285.9	2235.3	2215.2	2212.2
25°	3067.6	3048.5	3041.4	2910.2	2609.6	2391.7	2221.3	2111.3	2066.9	2055.8	2057.8
27.5°	3405.6	3357.1	3265.3	2952.6	2543.0	2250.5	2039.6	1937.8	1912.5	1913.6	1916.6
30°	3855.4	3758.6	3533.6	2959.7	2434.1	2050.8	1854.0	1781.4	1769.4	1774.4	1791.5
32.5°	4272.0	4180.3	3808.0	2927.4	2266.7	1855.0	1687.7	1639.2	1621.0	1627.1	1635.2
35°	4598.9	4573.7	4062.2	2882.0	2060.9	1671.5	1538.3	1497.0	1461.6	1453.6	1459.6
37.5°	4907.5	4897.4	4252.8	2818.4	1857.1	1541.4	1418.3	1363.9	1312.4	1284.1	1285.1
40°	5246.5	5236.4	4378.0	2720.6	1676.5	1428.3	1310.4	1238.7	1175.2	1123.7	1128.8
42.5°	5627.8	5568.2	4437.4	2580.3	1523.1	1332.5	1222.6	1125.8	1042.0	994.7	997.6
45°	6044.4	5910.3	4436.4	2401.8	1394.1	1244.8	1128.8	991.6	913.9	869.5	867.6
47.5°	6486.2	6237.0	4382.0	2204.1	1268.9	1147.9	983.5	878.6	827.2	799.9	793.9
50°	6942.1	6542.7	4289.2	1977.1	1140.9	1038.0	892.8	821.1	781.8	756.6	747.4
52.5°	7370.9	6820.1	4177.2	1720.0	1010.8	931.1	852.4	796.9	755.5	727.3	715.2
55°	7769.3	7059.2	4018.8	1456.6	904.9	859.5	833.2	786.8	739.4	706.1	693.0
57.5°	8123.4	7214.6	3745.5	1209.5	829.2	810.1	813.0	769.7	715.2	687.0	668.8
60°	8417.9	7328.5	3341.0	980.5	767.6	761.6	781.8	737.4	673.8	641.5	627.4
62.5°	8594.5	7326.5	2844.7	803.0	715.2	717.2	740.5	697.0	632.5	602.2	593.2
65°	8579.4	7146.9	2299.9	687.0	664.7	666.8	697.0	652.6	598.2	580.0	579.0
67.5°	8275.7	6709.1	1764.3	611.3	609.3	618.4	653.6	622.4	577.0	575.0	578.0
70°	7453.6	5800.3	1271.0	550.7	551.8	564.9	611.3	603.2	565.9	569.9	569.0
72.5°	5976.8	4422.4	853.4	487.2	488.2	509.4	570.9	588.1	554.8	608.2	616.3
75°	3980.5	2757.9	548.8	419.6	420.7	447.9	535.7	558.8	524.6	606.3	611.3
77.5°	1912.5	1239.7	397.5	353.0	353.0	378.3	463.0	500.3	446.9	471.1	431.7
80°	660.7	466.1	312.7	284.4	278.4	295.6	390.4	433.8	385.3	355.1	332.9
82.5°	260.2	242.1	251.2	220.9	200.7	211.9	303.6	358.1	283.4	256.2	255.2
85°	149.3	157.3	177.5	146.3	116.0	130.2	222.9	257.3	213.8	188.6	192.7
87.5°	40.4	55.5	81.7	75.6	52.5	55.5	105.9	142.3	123.1	94.8	97.9
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)