

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: P966049

Luminaire Tested: **NAV-SB4B-722-U-SL4**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P966049  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB4B-722-U-SL4  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18942 lumens  
Efficiency: N/A  
Efficacy: 128.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G3

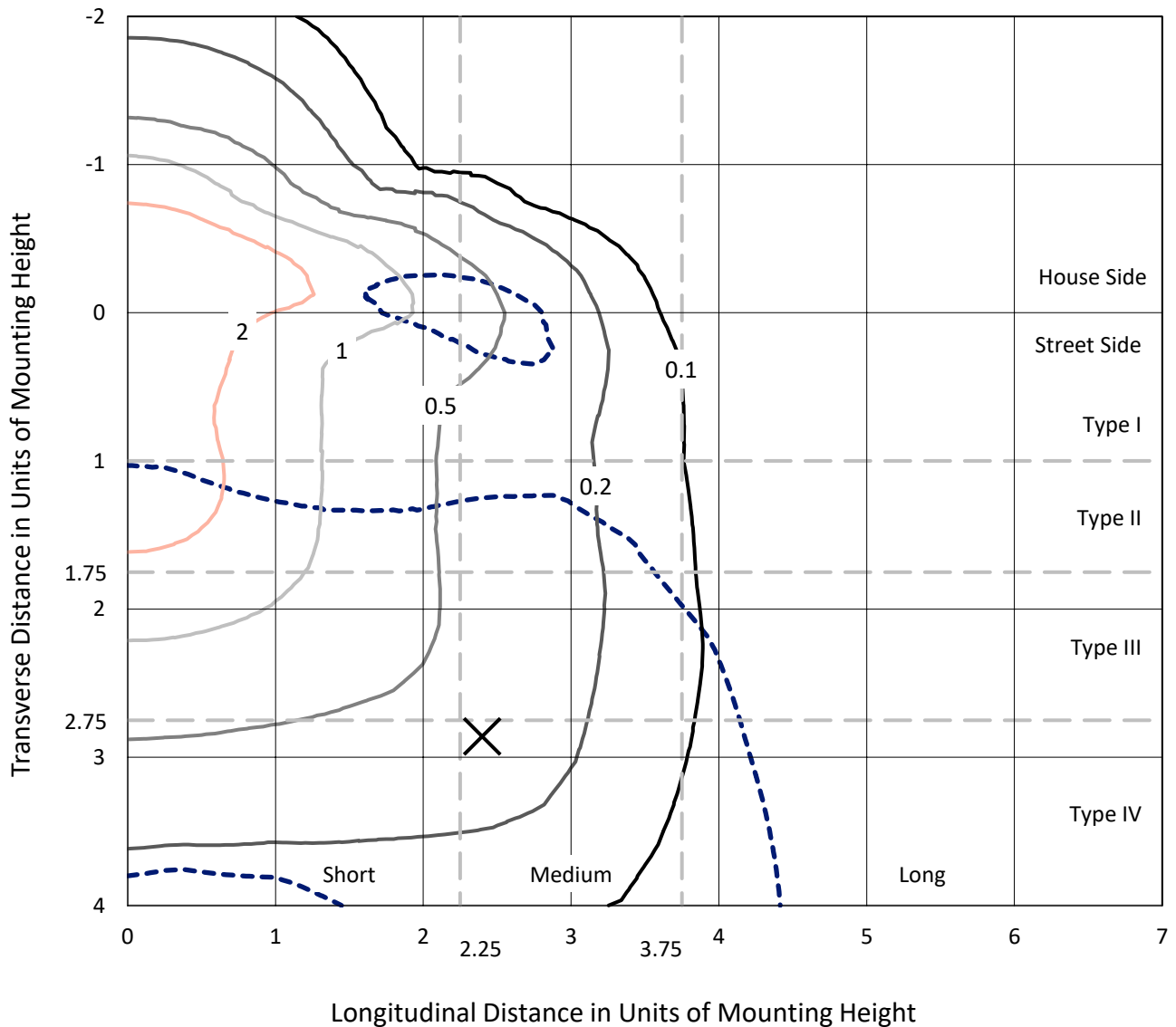
Input Watts (W): 147  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

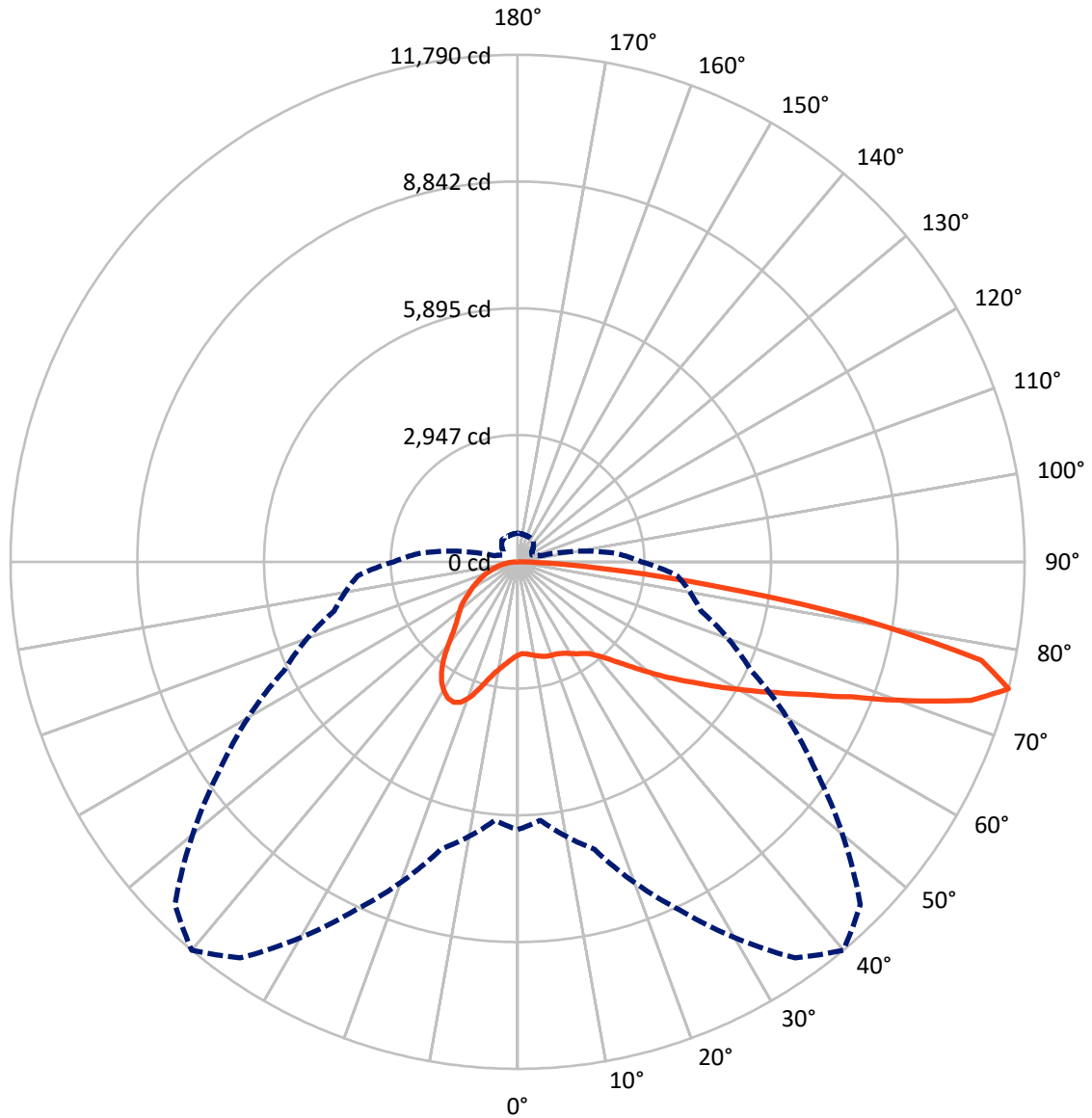
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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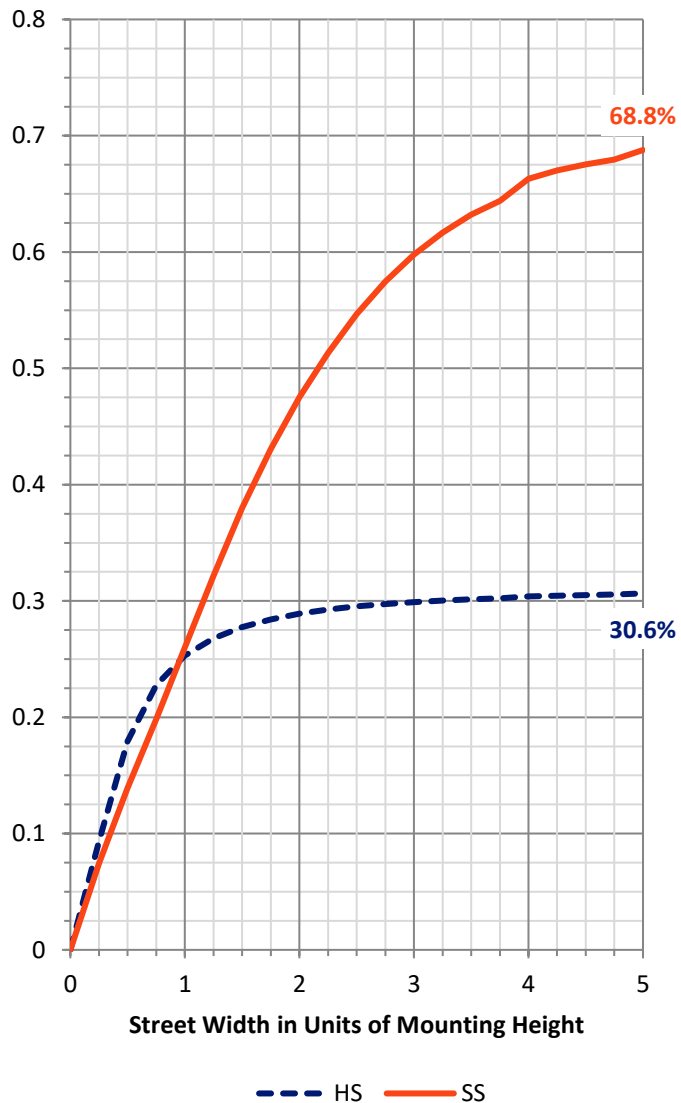
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5868.8	0.0	5868.8
	% Fixture	31.0	0.0	31.0
<b>Street Side</b>	Lumens	13073.1	0.0	13073.1
	% Fixture	69.0	0.0	69.0
<b>Total</b>	Lumens	18942.0	0.0	18942.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	216.2	1.1
10°-20°	725.9	3.8
20°-30°	1325.5	7.0
30°-40°	1879.9	9.9
40°-50°	2538.4	13.4
50°-60°	3414.9	18.0
60°-70°	4334.2	22.9
70°-80°	3933.6	20.8
80°-90°	573.4	3.0
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°	18942.0	100.0
0°-180°	18942.0	100.0

**Coefficient of Utilization**

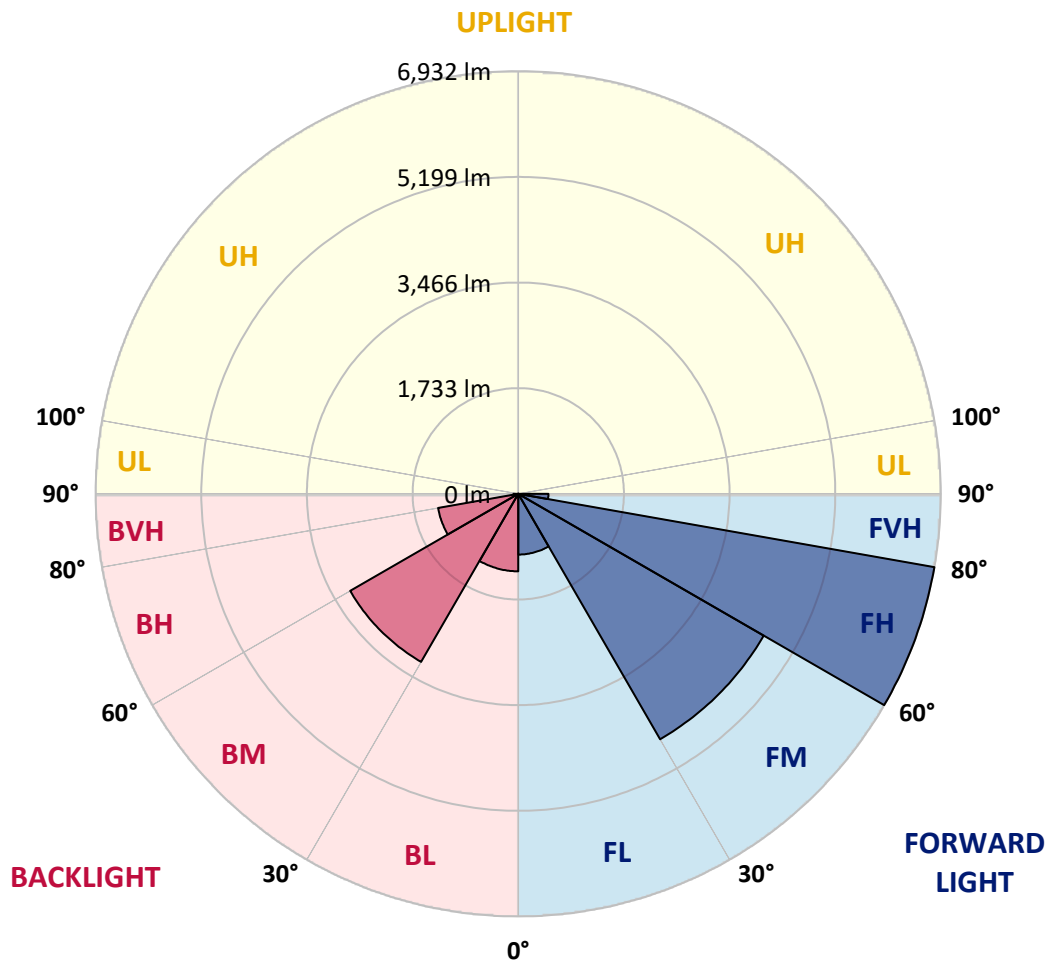


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	996.4	5.3			
FM (30°-60°)	4649.8	24.5			
FH (60°-80°)	6932.5	36.6			G3/7500
FVH (80°-90°)	494.4	2.6			G3/500
BL (0°-30°)	1271.3	6.7	B3/2500		
BM (30°-60°)	3183.3	16.8	B3/5000		
BH (60°-80°)	1335.3	7.0	B3/2500		G3/2500
BVH (80°-90°)	78.9	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**  
 Type IV Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0
2.5°	2132.9	2144.9	2141.9	2137.9	2137.9	2138.9	2137.9	2144.9	2152.0	2159.1	2170.0
5°	2155.0	2167.1	2161.0	2156.0	2152.0	2151.0	2148.0	2147.0	2151.0	2160.0	2175.0
7.5°	2198.2	2210.2	2201.2	2192.2	2184.2	2180.1	2176.1	2170.0	2167.1	2172.1	2193.2
10°	2246.4	2258.5	2247.4	2231.3	2218.3	2213.3	2209.3	2203.2	2199.2	2202.2	2225.3
12.5°	2294.7	2306.7	2291.6	2269.6	2252.4	2249.5	2244.4	2242.4	2241.4	2240.3	2263.5
15°	2339.9	2349.9	2330.8	2304.7	2286.6	2281.5	2276.5	2279.6	2284.6	2290.7	2316.7
17.5°	2375.0	2385.1	2356.9	2322.8	2305.7	2303.7	2300.7	2310.8	2324.8	2339.9	2372.0
20°	2407.1	2417.3	2381.1	2334.8	2314.8	2314.8	2315.8	2336.8	2356.9	2379.0	2423.2
22.5°	2452.4	2460.4	2416.2	2352.9	2323.8	2325.8	2333.8	2354.9	2380.0	2410.2	2471.5
25°	2519.7	2525.7	2471.5	2387.0	2353.9	2360.0	2366.9	2377.0	2401.2	2436.3	2518.6
27.5°	2628.2	2633.2	2561.9	2447.4	2397.1	2407.1	2417.3	2410.2	2421.3	2451.4	2556.9
30°	2780.9	2783.9	2693.5	2541.8	2470.5	2475.5	2477.5	2448.3	2427.3	2451.4	2584.0
32.5°	2961.7	2960.7	2853.2	2656.3	2553.9	2548.9	2531.8	2474.5	2425.3	2446.4	2608.1
35°	3242.1	3231.0	3092.3	2817.1	2648.3	2617.1	2577.0	2503.6	2435.3	2441.3	2629.2
37.5°	3706.2	3672.1	3480.2	3080.3	2788.9	2709.6	2650.2	2550.8	2457.4	2439.3	2654.3
40°	4229.6	4186.4	3975.5	3440.9	2999.9	2872.4	2776.8	2618.2	2493.5	2448.3	2691.4
42.5°	4850.5	4789.2	4562.2	3865.9	3267.2	3082.3	2938.7	2703.5	2546.8	2477.5	2741.7
45°	5613.0	5531.6	5210.2	4345.2	3603.7	3357.6	3165.7	2833.1	2628.2	2533.7	2817.1
47.5°	6383.6	6403.7	5946.5	4893.7	4007.5	3697.2	3449.9	3028.1	2746.7	2624.2	2938.7
50°	7202.4	7216.4	6679.0	5501.5	4465.7	4080.9	3769.4	3246.1	2911.5	2752.7	3120.5
52.5°	7841.4	7843.4	7344.0	6137.5	4943.0	4502.9	4114.0	3495.2	3102.4	2923.5	3362.6
55°	8241.2	8236.2	7810.2	6739.3	5491.4	4945.9	4495.9	3778.6	3335.5	3124.5	3667.0
57.5°	8531.6	8516.5	8131.7	7256.7	6076.2	5469.4	4927.9	4100.0	3610.8	3363.6	4067.8
60°	8642.1	8633.1	8349.8	7703.7	6691.0	6048.0	5426.1	4459.7	3923.2	3645.9	4583.3
62.5°	8684.3	8701.3	8563.7	8136.8	7349.0	6689.0	5973.7	4889.7	4274.9	3965.4	5126.7
65°	8832.9	8864.1	8836.0	8703.4	8092.5	7439.4	6700.0	5401.0	4658.6	4308.0	5694.4
67.5°	9127.3	9158.5	9170.5	9381.5	9000.7	8374.9	7606.2	6038.0	5107.7	4663.6	6121.4
70°	9120.2	9111.2	9324.2	9921.0	10138.0	9669.8	8827.9	6821.6	5643.1	4959.0	6175.6
72.5°	8301.5	8229.1	8732.5	9914.9	11084.3	11022.1	10319.8	7832.3	6105.3	4995.1	5358.8
75°	6227.9	6035.0	6924.1	8935.4	11242.1	11789.7	11268.2	8459.2	5995.8	4413.4	3729.3
77.5°	2663.4	2469.4	3517.3	6614.6	10061.6	11021.1	10398.2	7380.2	4786.2	2918.5	1831.5
80°	697.2	696.2	1062.9	2998.9	6842.7	8138.7	7140.2	4766.1	2734.7	1042.8	505.3
82.5°	288.3	281.3	390.8	1166.4	3343.6	4567.2	3727.3	2125.8	987.6	282.3	167.8
85°	107.5	106.5	189.8	402.8	1179.5	1883.7	1363.4	543.6	246.1	137.7	75.3
87.5°	30.1	29.1	41.2	139.6	287.3	436.0	233.1	89.4	69.3	54.2	22.1
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°	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0
2.5°	2173.1	2178.1	2187.1	2194.2	2203.2	2213.3	2227.3	2236.3	2245.4	2251.4	2247.4
5°	2182.1	2193.2	2216.3	2239.4	2266.5	2291.6	2320.8	2341.8	2358.9	2364.0	2366.0
7.5°	2202.2	2220.3	2259.5	2298.7	2341.8	2383.0	2425.3	2461.4	2490.5	2501.6	2502.6
10°	2237.4	2261.5	2316.7	2372.0	2429.2	2492.6	2546.8	2599.1	2640.2	2657.3	2658.3
12.5°	2281.5	2311.7	2384.0	2460.4	2539.7	2627.2	2697.5	2761.8	2813.0	2836.2	2836.2
15°	2338.8	2378.0	2470.5	2573.0	2689.5	2811.1	2900.4	2971.8	3029.1	3057.2	3055.1
17.5°	2401.2	2453.3	2569.9	2724.7	2891.4	3051.1	3155.7	3207.8	3267.2	3294.2	3293.2
20°	2461.4	2525.7	2692.5	2917.6	3139.6	3309.3	3393.8	3407.8	3411.8	3414.8	3422.9
22.5°	2523.7	2610.1	2846.2	3160.7	3398.8	3516.3	3528.4	3468.1	3383.7	3344.5	3355.5
25°	2592.0	2706.5	3047.1	3428.9	3621.8	3635.9	3543.4	3396.7	3237.1	3163.7	3174.7
27.5°	2658.3	2818.0	3288.2	3685.1	3782.6	3658.9	3460.1	3252.1	3059.2	2981.8	2990.8
30°	2724.7	2945.6	3554.5	3909.1	3855.8	3601.7	3328.5	3096.3	2902.5	2821.1	2830.1
32.5°	2791.9	3094.4	3860.9	4070.9	3842.8	3480.2	3164.7	2921.6	2750.8	2665.3	2676.4
35°	2868.3	3277.2	4151.2	4159.2	3755.4	3301.3	2948.7	2712.6	2563.9	2495.6	2510.6
37.5°	2967.8	3509.3	4407.4	4181.4	3602.7	3039.1	2680.5	2465.4	2342.8	2311.7	2333.8
40°	3091.3	3788.6	4603.4	4146.2	3376.7	2720.7	2387.0	2215.2	2145.9	2153.0	2177.1
42.5°	3252.1	4101.0	4740.9	4055.8	3062.2	2392.0	2129.8	2053.5	2086.7	2114.8	2140.9
45°	3461.0	4425.5	4826.4	3902.1	2706.5	2113.8	1978.1	1996.3	2021.4	2024.4	2044.5
47.5°	3728.3	4754.1	4882.6	3670.0	2343.9	1917.9	1881.7	1885.7	1880.7	1859.7	1875.6
50°	4061.9	5073.5	4932.9	3362.6	2035.4	1795.3	1747.1	1733.1	1663.7	1595.4	1604.4
52.5°	4441.6	5366.9	4953.9	2980.8	1795.3	1692.9	1614.5	1526.1	1396.5	1375.3	1382.4
55°	4863.5	5638.1	4899.7	2511.7	1593.4	1561.3	1442.7	1336.2	1322.1	1304.0	1307.1
57.5°	5367.9	5930.5	4789.2	1988.2	1386.4	1407.5	1292.0	1304.0	1278.9	1250.8	1245.8
60°	5919.5	6232.9	4595.3	1511.1	1172.4	1215.6	1252.9	1251.8	1244.8	1221.7	1213.6
62.5°	6415.8	6431.8	4213.6	1157.3	984.6	1066.9	1168.4	1167.4	1161.4	1148.3	1143.3
65°	6711.1	6401.6	3576.5	911.2	829.8	944.3	1053.9	1061.9	1062.9	1061.9	1061.9
67.5°	6658.9	6049.0	2702.5	725.4	702.2	819.8	940.3	951.4	959.4	961.4	963.5
70°	6068.1	5274.4	1762.2	578.7	588.8	710.3	832.8	843.9	851.0	859.0	863.0
72.5°	4730.0	3878.0	1008.7	468.2	489.2	615.8	726.4	739.4	743.4	758.5	764.5
75°	2882.4	2280.6	544.5	368.7	401.9	526.4	620.8	635.9	643.0	661.0	663.1
77.5°	1370.3	987.6	310.5	287.3	323.5	430.0	524.4	541.5	522.4	532.5	524.4
80°	463.2	366.7	195.9	219.0	247.1	335.6	419.9	437.1	396.9	394.8	390.8
82.5°	161.7	148.7	124.5	145.7	159.7	240.2	317.4	339.6	295.4	294.4	280.3
85°	63.2	60.3	69.3	79.3	95.4	147.7	209.0	220.1	181.8	146.7	144.6
87.5°	13.0	14.0	17.1	18.0	29.1	51.2	75.3	92.5	73.4	62.3	57.3
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)