

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: P966066

Luminaire Tested: **NAV-SB4B-722-U-T4FT**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P966066  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB4B-722-U-T4FT  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18886.6 lumens  
Efficiency: N/A  
Efficacy: 128.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G3

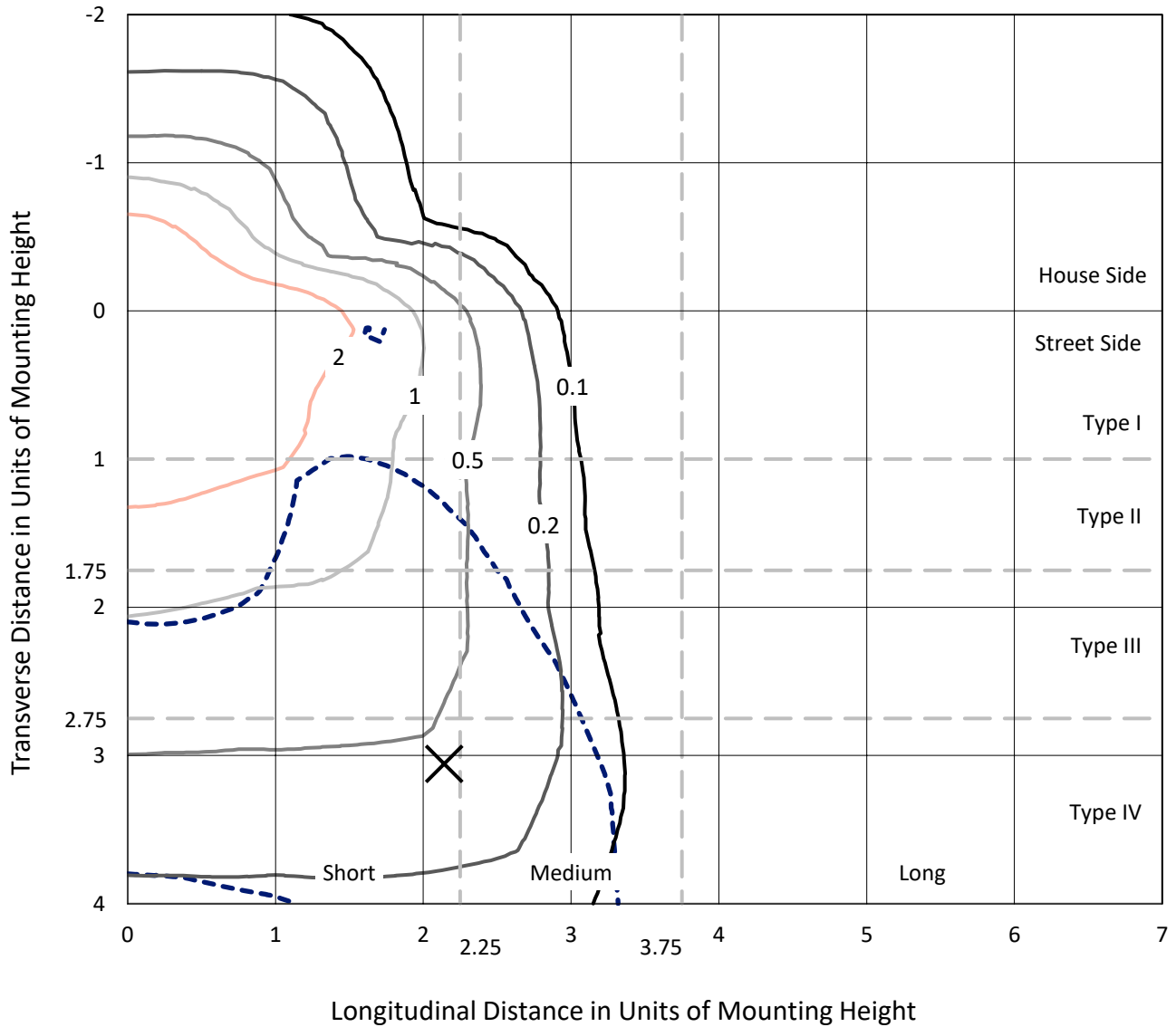
Input Watts (W): 147  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

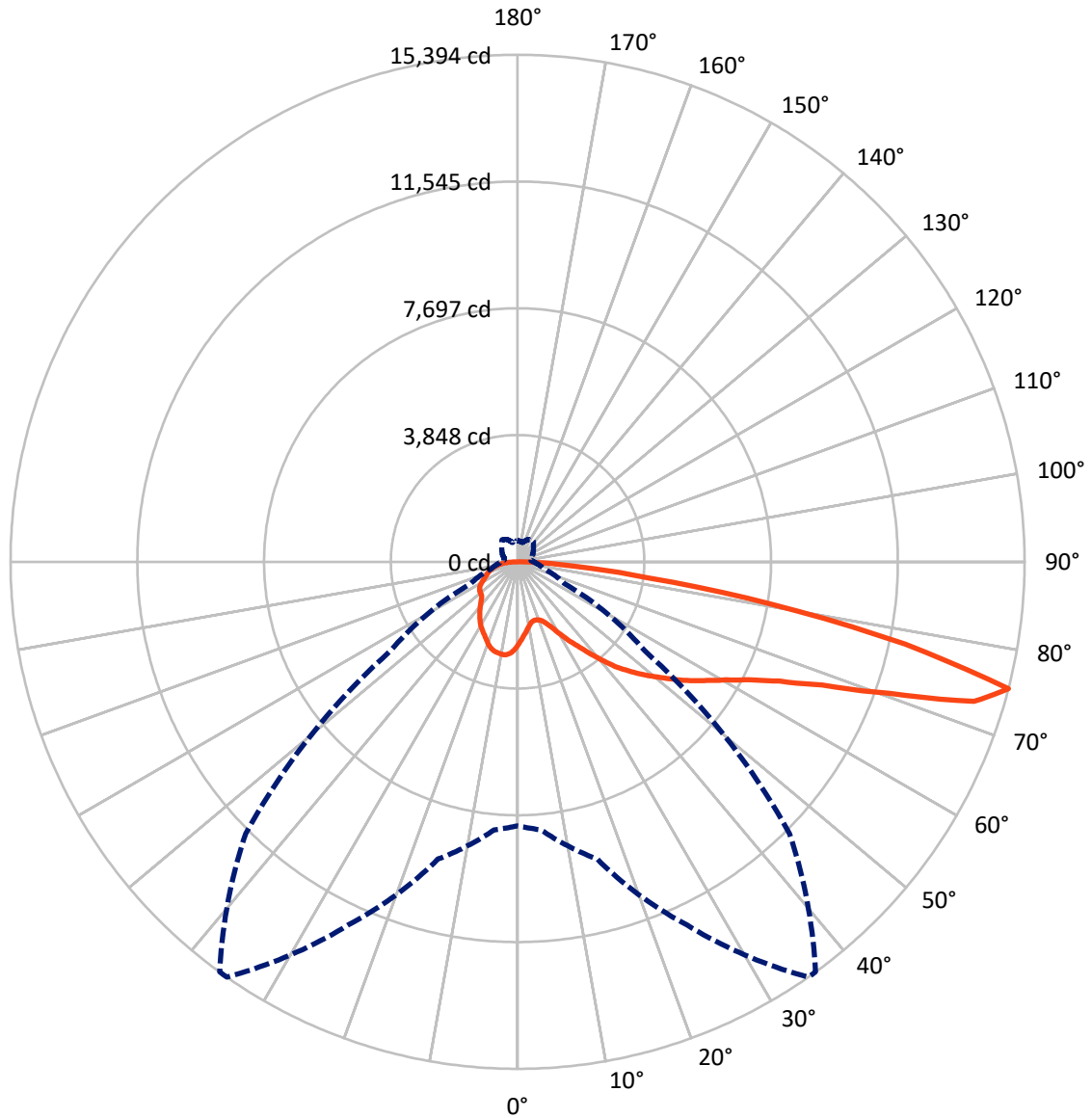
× Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4494.6	0.0	4494.6
	% Fixture	23.8	0.0	23.8
<b>Street Side</b>	Lumens	14392.1	0.0	14392.1
	% Fixture	76.2	0.0	76.2
<b>Total</b>	Lumens	18886.6	0.0	18886.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	238.3	1.3
10°-20°	687.3	3.6
20°-30°	1154.2	6.1
30°-40°	1793.8	9.5
40°-50°	2662.5	14.1
50°-60°	3675.7	19.5
60°-70°	4459.4	23.6
70°-80°	3685.4	19.5
80°-90°	530.1	2.8
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°	18886.6	100.0
0°-180°	18886.6	100.0

**Coefficient of Utilization**



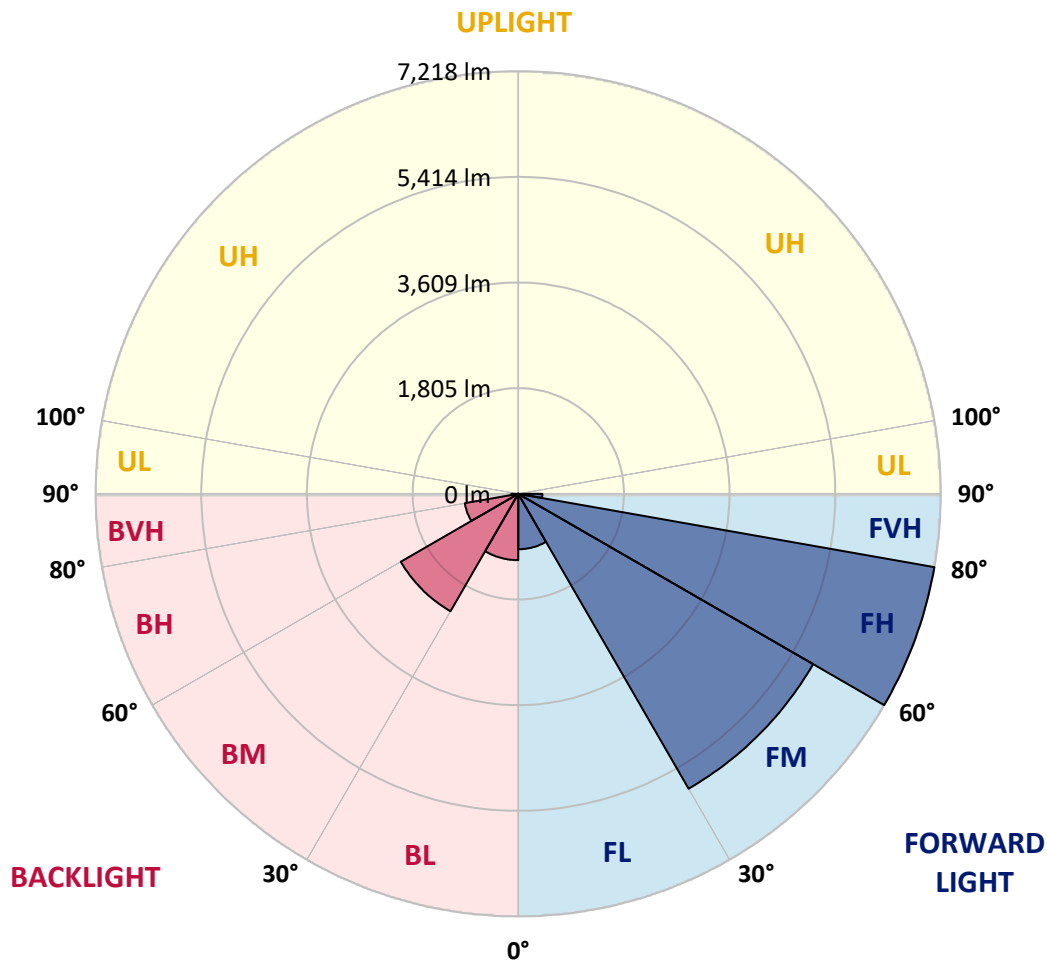
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	947.1	5.0			
FM (30°-60°)	5816.1	30.8			
FH (60°-80°)	7218.2	38.2			G3/7500
FVH (80°-90°)	410.7	2.2			G3/500
BL (0°-30°)	1132.7	6.0	B3/2500		
BM (30°-60°)	2315.9	12.3	B2/2500		
BH (60°-80°)	926.6	4.9	B2/1000		G2/1000
BVH (80°-90°)	119.4	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 IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	2516.8	2516.8	2516.8	2516.8	2516.8	2516.8	2516.8	2516.8	2516.8	2516.8	2516.8
2.5°	2320.7	2335.1	2341.2	2338.1	2353.4	2351.4	2372.8	2399.3	2436.1	2471.9	2524.0
5°	2142.0	2157.4	2170.6	2182.9	2212.6	2221.7	2255.4	2306.5	2373.8	2442.3	2528.0
7.5°	1975.7	1988.9	2009.3	2031.8	2081.9	2091.0	2147.2	2226.8	2320.7	2420.8	2539.2
10°	1839.9	1853.1	1874.5	1900.0	1962.4	1973.6	2045.1	2151.3	2273.8	2400.3	2551.5
12.5°	1781.7	1785.8	1798.0	1823.5	1877.6	1884.8	1963.4	2084.8	2227.8	2385.1	2569.9
15°	1778.6	1786.8	1787.8	1801.0	1846.0	1849.0	1921.6	2042.0	2199.2	2382.0	2597.5
17.5°	1809.2	1815.4	1806.2	1814.4	1852.1	1857.2	1914.4	2021.6	2190.0	2395.3	2644.4
20°	1890.9	1896.0	1868.5	1857.2	1884.8	1888.9	1945.0	2034.8	2199.2	2422.8	2708.8
22.5°	2064.5	2067.5	2000.2	1954.2	1956.2	1958.3	2007.3	2089.0	2235.0	2472.9	2790.4
25°	2335.1	2333.0	2225.8	2136.9	2085.9	2074.7	2107.4	2176.8	2295.2	2539.2	2895.5
27.5°	2651.6	2636.2	2529.0	2396.2	2285.0	2268.6	2261.6	2291.2	2381.0	2627.1	3024.3
30°	3008.9	2994.6	2879.2	2705.7	2551.5	2525.0	2457.5	2442.3	2508.6	2746.5	3202.9
32.5°	3401.0	3391.7	3254.0	3043.6	2837.4	2806.8	2693.4	2652.6	2704.7	2927.2	3452.0
35°	3729.8	3721.6	3607.2	3390.8	3138.5	3100.8	2985.4	2939.5	2966.0	3158.9	3777.7
37.5°	4026.8	4022.7	3924.7	3754.3	3493.9	3447.9	3318.2	3303.0	3297.8	3464.3	4172.9
40°	4302.5	4292.3	4190.2	4100.3	3907.4	3865.5	3751.2	3737.9	3699.1	3840.0	4620.1
42.5°	4607.8	4581.2	4433.2	4391.3	4339.2	4304.6	4236.1	4238.2	4152.4	4263.7	5093.7
45°	4857.0	4841.6	4689.5	4665.0	4721.2	4706.8	4766.0	4781.3	4615.0	4707.8	5585.9
47.5°	5124.4	5110.1	4981.5	4964.1	5116.3	5120.3	5329.6	5334.7	5066.3	5169.4	6079.1
50°	5454.2	5433.7	5306.1	5327.6	5498.1	5513.4	5896.3	5861.6	5481.8	5638.0	6568.1
52.5°	5671.6	5683.9	5656.4	5691.1	5923.9	5938.1	6453.8	6364.9	5893.2	6100.5	7048.0
55°	5831.9	5856.4	5942.2	6021.9	6373.1	6387.4	6979.5	6843.8	6234.3	6529.4	7499.3
57.5°	6038.2	6003.5	6163.8	6319.0	6799.8	6837.7	7491.1	7305.3	6536.4	6899.0	7808.7
60°	6334.3	6309.8	6434.3	6664.1	7277.7	7338.0	8032.2	7720.8	6758.0	7191.9	7868.9
62.5°	6934.6	6873.4	6892.8	7096.0	7880.1	7959.7	8642.8	8083.3	6868.3	7306.3	7546.3
65°	7832.1	7727.0	7629.0	7769.8	8728.6	8807.2	9332.0	8368.1	6827.4	7084.7	6689.7
67.5°	8962.4	8858.3	8737.7	8870.5	9978.3	10040.6	10182.5	8528.4	6505.9	6231.2	5175.4
70°	9894.5	9855.8	9999.7	10545.9	11974.4	11976.4	11272.9	8395.7	5624.7	4417.9	2994.6
72.5°	9771.0	9747.5	10506.1	12194.8	14490.1	14436.0	12305.1	7391.1	3788.9	1993.0	1122.1
75°	8015.9	8168.0	9343.2	12165.2	15393.7	15386.5	11673.1	4698.7	1567.2	825.9	579.9
77.5°	4298.4	4539.4	6065.7	8981.8	12017.2	12197.9	8206.9	1643.8	672.8	528.9	401.3
80°	1401.8	1612.1	2417.8	4573.0	7808.7	7774.9	3517.4	645.2	460.4	374.7	277.7
82.5°	595.2	619.7	1080.2	2159.5	4007.4	3945.1	1120.0	370.6	323.7	256.2	171.5
85°	232.8	260.3	476.8	998.6	1735.7	1697.9	404.4	183.8	207.3	167.5	102.1
87.5°	76.6	92.9	170.5	342.0	540.1	520.7	99.0	63.3	89.9	76.6	36.8
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°	2516.8	2516.8	2516.8	2516.8	2516.8	2516.8	2516.8	2516.8	2516.8	2516.8	2516.8
2.5°	2538.2	2554.5	2574.0	2602.6	2627.1	2647.5	2668.9	2682.2	2687.2	2702.6	2701.6
5°	2556.6	2592.3	2640.3	2687.2	2733.3	2760.8	2785.3	2797.5	2808.8	2816.9	2819.0
7.5°	2587.2	2633.1	2708.8	2770.0	2808.8	2831.3	2847.6	2843.5	2847.6	2849.6	2852.7
10°	2613.8	2678.1	2767.9	2826.1	2855.8	2856.8	2852.7	2838.4	2831.3	2832.3	2834.3
12.5°	2645.4	2716.9	2813.9	2862.9	2871.0	2848.6	2831.3	2806.8	2797.5	2793.4	2791.4
15°	2688.3	2770.0	2864.0	2882.3	2861.9	2833.3	2803.7	2763.8	2743.4	2727.1	2732.2
17.5°	2740.3	2830.2	2902.7	2889.5	2845.5	2798.6	2750.6	2690.3	2648.5	2631.2	2632.1
20°	2812.9	2893.6	2932.3	2874.1	2807.8	2736.3	2654.6	2581.1	2542.3	2525.0	2522.9
22.5°	2900.6	2978.2	2960.9	2847.6	2753.7	2639.3	2537.2	2483.1	2463.7	2451.4	2453.4
25°	3005.8	3072.2	2981.3	2808.8	2664.8	2510.6	2432.0	2414.7	2405.5	2396.2	2396.2
27.5°	3142.6	3178.4	2996.7	2751.6	2526.0	2373.8	2345.2	2348.3	2345.2	2329.9	2333.0
30°	3323.4	3316.2	3010.9	2658.6	2366.7	2250.3	2252.3	2265.6	2267.6	2257.5	2262.6
32.5°	3561.3	3488.8	3018.1	2538.2	2214.5	2142.0	2144.1	2158.4	2168.6	2151.3	2159.5
35°	3849.2	3689.9	3006.8	2387.1	2097.1	2038.9	2023.7	2027.8	2030.7	2014.4	2025.7
37.5°	4185.1	3915.5	2956.8	2219.6	2000.2	1937.9	1905.2	1877.6	1861.3	1846.0	1856.2
40°	4553.7	4161.6	2865.0	2056.3	1891.9	1830.6	1781.7	1729.6	1674.4	1654.0	1663.2
42.5°	4939.6	4414.8	2753.7	1900.0	1767.4	1717.3	1665.2	1589.7	1507.0	1465.1	1470.3
45°	5339.8	4674.2	2644.4	1745.9	1639.7	1618.3	1558.1	1467.2	1377.3	1324.2	1320.2
47.5°	5731.9	4919.2	2484.1	1590.7	1520.3	1543.8	1496.8	1413.1	1313.0	1229.3	1220.1
50°	6106.6	5148.9	2221.7	1433.5	1423.3	1521.3	1476.4	1355.9	1241.6	1134.4	1125.1
52.5°	6478.3	5334.7	1885.8	1290.6	1371.2	1515.2	1449.9	1317.1	1177.2	1064.9	1052.7
55°	6793.8	5430.8	1562.1	1168.0	1295.7	1463.1	1418.2	1271.1	1086.4	966.9	956.6
57.5°	6973.5	5353.2	1292.6	1047.6	1191.5	1377.3	1364.1	1173.1	978.2	886.2	874.0
60°	6895.9	5038.7	1072.0	942.4	1092.4	1284.4	1270.1	1076.1	895.4	808.6	796.4
62.5°	6468.1	4439.3	897.5	850.5	1002.7	1189.5	1176.2	1001.6	832.1	748.4	735.1
65°	5606.3	3611.3	761.7	773.9	911.7	1075.1	1094.5	939.3	782.1	700.4	687.2
67.5°	4276.0	2615.8	655.5	707.6	823.0	962.8	1019.0	894.4	740.3	662.7	650.4
70°	2437.1	1485.5	565.6	643.2	744.4	858.6	960.7	858.6	695.3	631.0	622.8
72.5°	924.0	682.0	489.0	578.9	668.7	770.9	896.5	802.5	643.2	595.2	587.1
75°	493.1	415.5	411.4	503.4	582.0	685.1	815.8	747.3	604.4	628.9	649.3
77.5°	335.9	294.1	344.1	430.9	487.0	590.1	730.0	663.7	523.8	521.7	480.9
80°	232.8	208.3	279.7	347.2	376.8	496.2	637.1	569.7	426.8	398.2	380.8
82.5°	139.9	135.8	209.3	259.3	266.5	382.8	527.9	477.9	349.2	304.2	306.3
85°	76.6	80.7	133.8	152.1	155.2	267.5	413.5	369.6	268.5	225.6	227.7
87.5°	21.4	27.6	49.0	60.3	74.5	138.9	246.1	219.6	134.8	93.9	93.9
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)