

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: P966063

Luminaire Tested: **NAV-SB4B-722-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966063
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-SB4B-722-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 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: 19617.5 lumens
Efficiency: N/A
Efficacy: 133.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

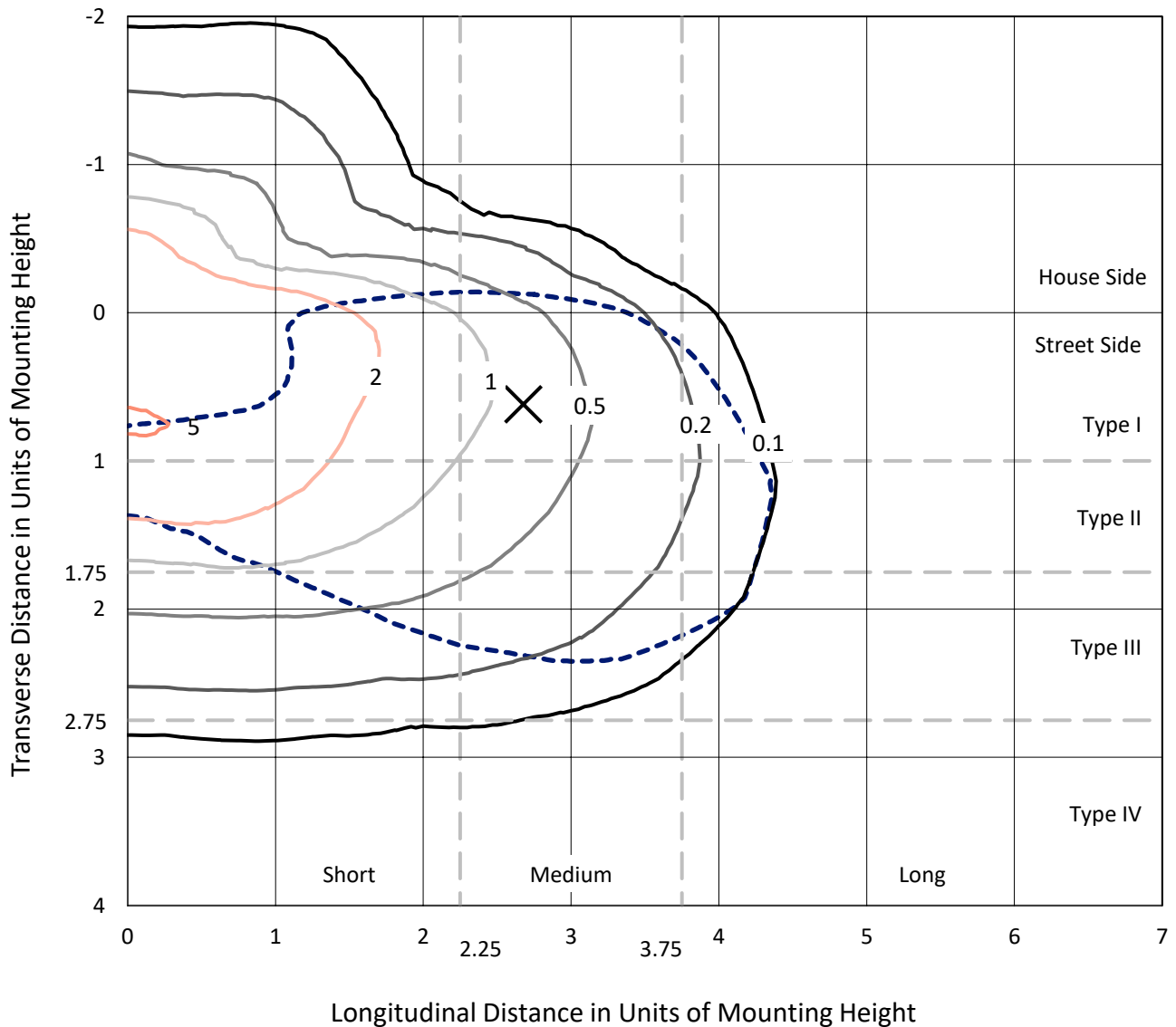
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

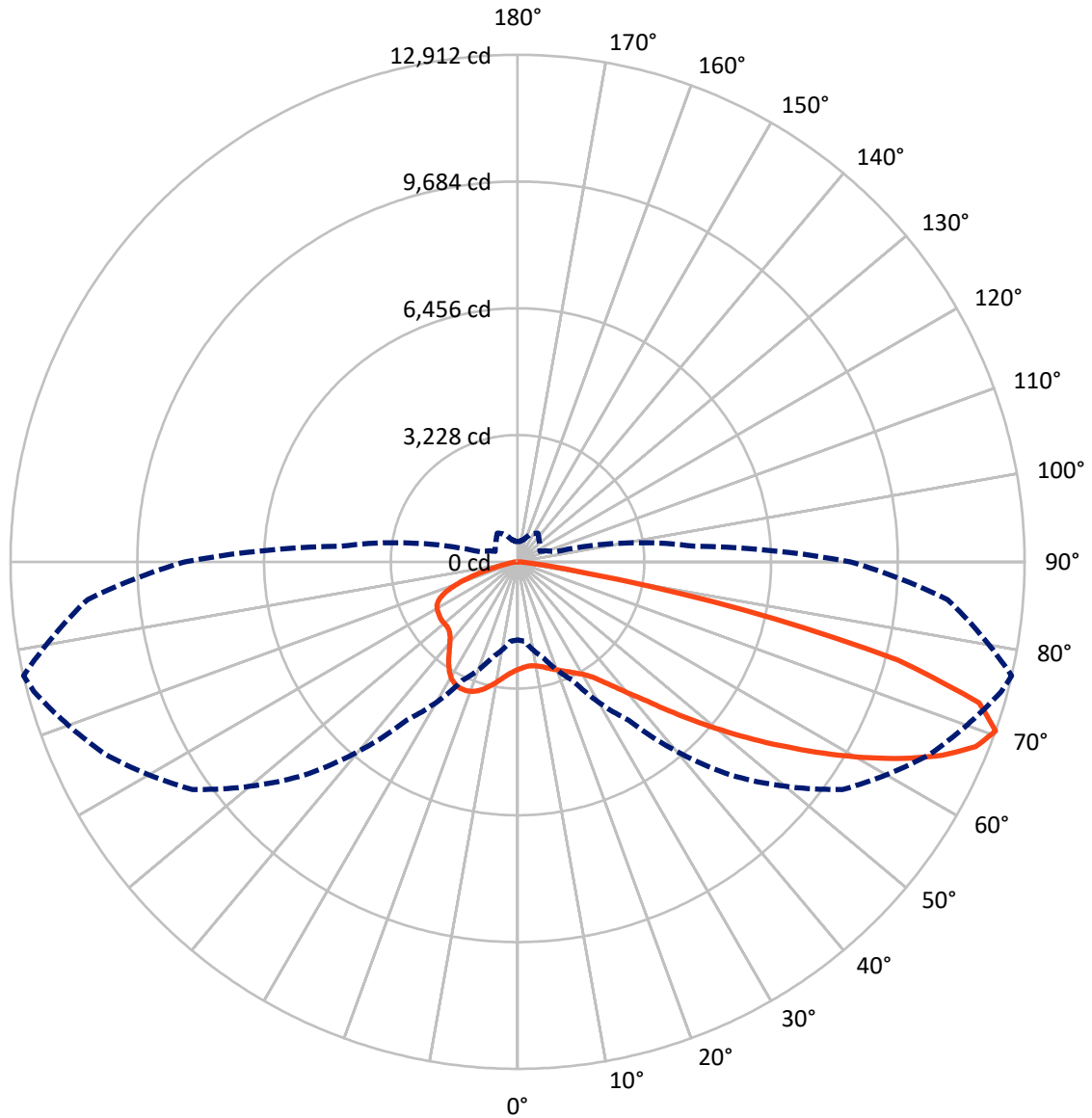
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4295.9	0.0	4295.9
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	15321.6	0.0	15321.6
	% Fixture	78.1	0.0	78.1
Total	Lumens	19617.5	0.0	19617.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.0	1.3
10°-20°	753.3	3.8
20°-30°	1288.3	6.6
30°-40°	2071.7	10.6
40°-50°	3234.5	16.5
50°-60°	4320.5	22.0
60°-70°	4605.0	23.5
70°-80°	2834.8	14.5
80°-90°	248.4	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°	19617.5	100.0
0°-180°	19617.5	100.0

Coefficient of Utilization

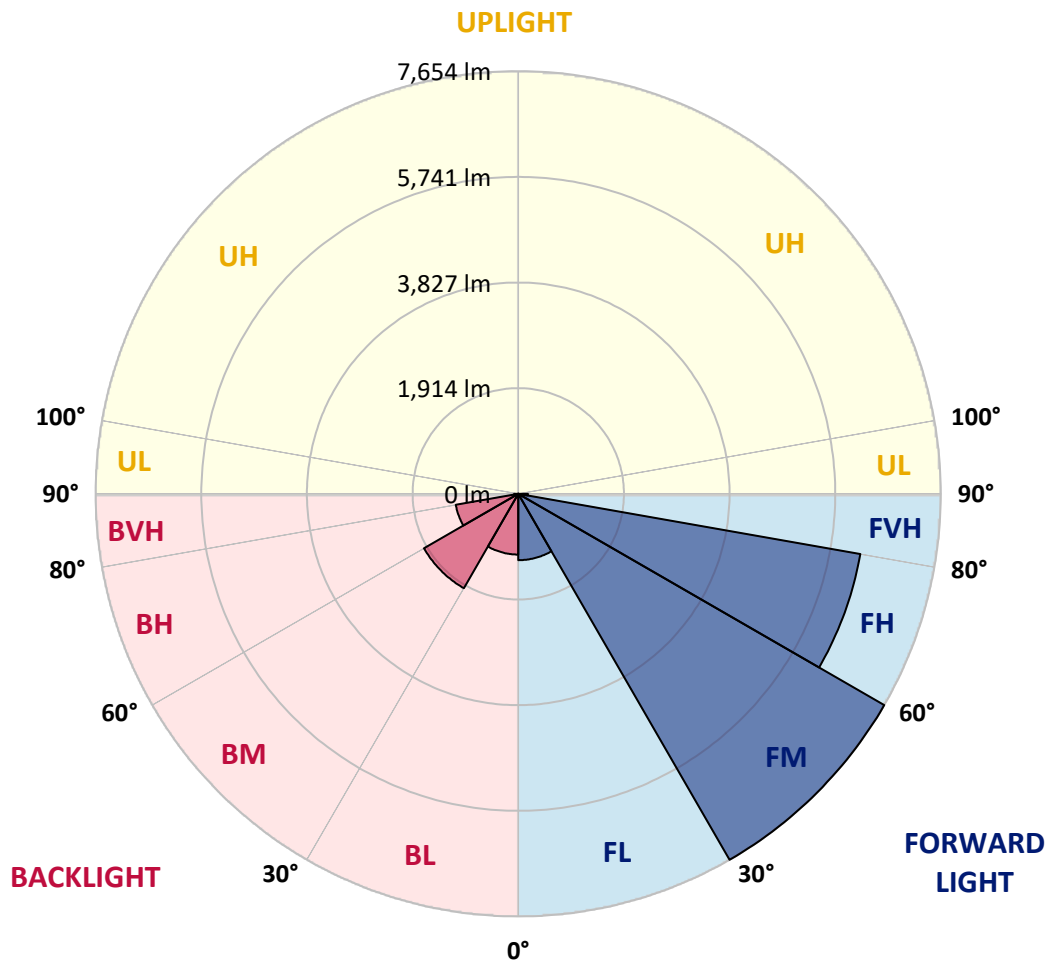


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1201.9	6.1			
FM (30°-60°)	7654.3	39.0			
FH (60°-80°)	6291.7	32.1			G3/7500
FVH (80°-90°)	173.7	0.9			G2/225
BL (0°-30°)	1100.8	5.6	B3/2500		
BM (30°-60°)	1972.3	10.1	B2/2500		
BH (60°-80°)	1148.1	5.9	B3/2500		G3/2500
BVH (80°-90°)	74.7	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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2736.9	2736.9	2736.9	2736.9	2736.9	2736.9	2736.9	2736.9	2736.9	2736.9	2736.9
2.5°	2522.8	2521.8	2534.8	2538.9	2563.0	2580.1	2612.2	2646.3	2690.6	2695.6	2722.7
5°	2377.2	2377.2	2392.2	2408.2	2439.4	2473.6	2522.8	2582.1	2658.4	2670.5	2737.8
7.5°	2253.6	2261.6	2274.7	2305.8	2341.9	2391.2	2466.6	2550.9	2651.4	2670.5	2779.0
10°	2154.0	2163.2	2179.3	2204.4	2258.6	2326.9	2425.4	2533.9	2668.5	2698.6	2839.2
12.5°	2123.0	2132.0	2141.0	2160.1	2210.3	2290.8	2408.2	2541.9	2709.7	2739.8	2921.7
15°	2195.2	2206.3	2199.3	2194.3	2220.4	2293.7	2416.3	2571.0	2760.9	2804.1	3023.1
17.5°	2362.1	2366.1	2350.0	2302.8	2298.8	2337.9	2454.5	2611.2	2825.2	2872.5	3125.6
20°	2631.3	2624.3	2591.1	2497.7	2444.4	2436.4	2519.8	2671.6	2891.5	2941.7	3236.1
22.5°	2997.0	2989.0	2922.7	2775.0	2656.4	2578.1	2614.3	2749.9	2965.9	3022.1	3343.7
25°	3453.1	3442.2	3344.7	3143.7	2959.9	2766.0	2742.8	2853.4	3057.3	3109.5	3456.2
27.5°	3985.7	3976.6	3871.1	3605.8	3340.7	3023.1	2902.6	2975.0	3152.8	3212.0	3582.8
30°	4558.4	4584.5	4397.6	4112.3	3776.7	3358.7	3117.6	3124.6	3276.3	3329.6	3736.5
32.5°	5231.5	5276.7	5051.6	4690.0	4231.8	3723.4	3388.9	3333.6	3456.2	3500.4	3930.4
35°	5898.7	5949.8	5763.0	5363.1	4835.6	4153.4	3672.2	3573.8	3695.3	3743.5	4187.6
37.5°	6475.3	6543.6	6447.1	6099.6	5481.7	4671.8	4041.9	3856.0	3989.7	4050.0	4533.3
40°	6930.4	7035.0	7027.9	6810.9	6243.3	5300.8	4511.1	4204.7	4355.4	4420.7	4952.2
42.5°	7300.2	7390.7	7469.0	7457.9	7038.0	6015.2	5062.7	4657.8	4772.4	4847.7	5423.4
45°	7555.4	7651.8	7820.6	8002.5	7802.5	6779.8	5694.7	5195.3	5299.9	5413.3	5985.1
47.5°	7783.4	7893.0	8112.0	8400.4	8451.5	7547.4	6386.9	5821.3	5916.7	6034.3	6548.6
50°	7803.5	7898.0	8237.6	8646.5	8912.8	8284.8	7130.4	6523.5	6613.0	6738.6	7152.4
52.5°	7318.3	7466.9	8059.8	8639.4	9124.8	8901.7	7868.8	7253.9	7354.5	7505.2	7777.4
55°	5680.7	5898.7	7538.3	8370.2	9049.4	9300.5	8571.2	8030.6	8159.2	8317.0	8406.3
57.5°	4892.9	4988.4	5984.1	7879.9	8705.7	9404.1	9163.9	8815.3	9022.3	9195.1	9071.5
60°	4397.6	4477.0	5065.8	7117.3	8253.6	9240.3	9622.1	9546.7	9904.4	10110.4	9751.6
62.5°	3867.1	3942.5	4478.0	5942.8	7674.9	8968.0	9911.4	10221.9	10808.6	11033.7	10392.7
65°	3340.7	3404.9	3918.4	4993.4	6939.5	8695.7	10061.1	10805.7	11645.5	11878.6	10925.2
67.5°	2753.9	2807.2	3292.4	4212.8	6045.3	8323.0	10135.5	11264.7	12373.9	12573.9	11188.4
70°	1987.3	2028.5	2529.8	3331.6	4923.1	7682.0	10105.4	11590.3	12751.7	12911.5	10989.4
72.5°	939.4	976.6	1565.4	2163.2	3477.3	6434.1	9495.5	11332.1	12368.0	12288.5	9771.7
75°	501.3	533.5	899.2	1186.5	1836.6	4410.7	7770.4	9761.7	10385.6	9999.8	7221.8
77.5°	339.6	364.7	556.6	712.4	839.0	2093.8	4994.4	6758.6	6502.5	5865.5	3616.9
80°	269.3	295.4	456.1	482.3	405.9	756.6	2063.6	3128.6	2247.5	1797.4	1028.8
82.5°	206.9	236.1	383.8	349.6	221.0	310.5	600.9	989.6	575.7	438.1	249.2
85°	126.6	157.7	301.5	223.0	124.5	141.7	204.0	275.3	175.8	146.7	89.4
87.5°	64.3	90.4	152.7	81.4	56.3	33.1	54.2	54.2	46.2	40.2	23.1
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°	2736.9	2736.9	2736.9	2736.9	2736.9	2736.9	2736.9	2736.9	2736.9	2736.9	2736.9
2.5°	2746.9	2767.0	2801.1	2833.3	2858.4	2882.5	2906.6	2919.7	2923.7	2939.8	2948.8
5°	2779.0	2816.2	2882.5	2944.8	2984.0	3008.1	3025.2	3035.2	3037.2	3042.2	3050.3
7.5°	2838.3	2897.6	2990.0	3052.2	3081.5	3079.4	3072.4	3047.2	3037.2	3028.2	3030.2
10°	2921.7	3000.1	3113.5	3156.8	3138.7	3090.5	3028.2	2954.9	2920.6	2887.5	2877.5
12.5°	3025.2	3124.6	3236.1	3234.2	3144.7	3021.2	2876.5	2763.9	2692.6	2641.3	2629.3
15°	3150.7	3265.3	3350.7	3282.4	3086.5	2864.5	2652.4	2505.7	2441.4	2385.2	2379.1
17.5°	3280.4	3402.9	3442.2	3267.3	2939.8	2632.3	2392.2	2276.6	2213.4	2183.2	2192.3
20°	3407.0	3528.6	3496.4	3180.9	2716.8	2369.1	2155.1	2091.8	2078.7	2085.8	2082.8
22.5°	3540.6	3649.1	3507.4	3014.1	2432.4	2099.8	1982.2	1984.3	2013.4	2034.5	2039.5
25°	3677.2	3750.6	3478.3	2773.0	2127.0	1901.9	1872.8	1905.0	1962.2	2003.4	2014.4
27.5°	3808.8	3841.0	3415.0	2474.6	1864.8	1760.2	1765.3	1831.6	1918.0	1975.3	1989.3
30°	3957.5	3921.3	3293.4	2139.0	1682.8	1638.7	1680.9	1758.3	1844.6	1895.8	1907.9
32.5°	4125.3	3990.7	3100.5	1828.6	1554.3	1541.2	1610.6	1660.8	1698.9	1714.0	1722.1
35°	4334.3	4088.1	2853.4	1610.6	1438.7	1469.8	1536.2	1511.1	1496.0	1488.0	1496.0
37.5°	4605.5	4219.7	2564.0	1468.9	1345.3	1418.6	1445.8	1367.5	1308.1	1279.0	1286.1
40°	4932.1	4412.6	2285.8	1359.4	1286.1	1374.4	1327.2	1232.8	1157.4	1116.2	1119.2
42.5°	5294.8	4614.7	2051.6	1276.9	1252.9	1338.2	1239.8	1127.3	1005.7	992.6	1005.7
45°	5675.6	4822.6	1891.8	1213.7	1236.8	1307.1	1189.6	1007.7	921.3	974.6	1002.7
47.5°	6056.3	5013.5	1795.4	1166.4	1228.8	1271.9	1145.3	941.4	880.2	957.5	993.6
50°	6480.4	5184.2	1752.2	1132.3	1219.8	1257.9	1079.0	924.3	836.9	888.2	926.3
52.5°	6901.3	5316.9	1720.1	1098.2	1206.6	1246.8	1046.9	904.3	784.6	787.7	808.8
55°	7321.3	5403.3	1684.9	1052.9	1177.5	1222.7	1043.9	882.1	745.5	731.4	741.5
57.5°	7769.4	5452.5	1641.6	1002.7	1127.3	1161.4	1040.9	865.1	733.4	710.3	713.3
60°	8225.5	5524.9	1585.5	941.4	1060.0	1088.1	1033.8	859.1	726.4	687.3	690.2
62.5°	8634.4	5550.0	1518.1	883.1	973.5	1015.8	1018.7	854.0	707.4	640.0	640.0
65°	8902.7	5441.5	1400.6	816.8	880.2	941.4	989.6	836.9	673.1	605.9	605.9
67.5°	8891.7	5132.1	1216.7	731.4	789.7	859.1	947.4	807.8	631.9	563.6	566.6
70°	8477.7	4521.2	983.6	631.9	690.2	770.6	893.2	764.5	582.7	517.4	523.5
72.5°	7271.0	3538.6	714.3	515.4	574.7	679.2	822.9	712.4	532.5	476.2	473.2
75°	5194.3	2239.5	484.3	395.9	447.1	575.7	735.4	651.1	486.3	478.3	451.1
77.5°	2653.4	1070.0	320.5	289.4	311.5	454.2	617.9	581.7	493.3	394.8	351.7
80°	863.0	394.8	201.9	196.9	206.9	302.4	478.3	477.2	373.7	268.2	237.1
82.5°	275.3	169.8	131.6	126.6	121.6	189.9	333.5	377.8	252.2	169.8	168.8
85°	109.5	101.5	77.4	71.3	51.2	89.4	174.9	251.2	187.9	122.6	125.6
87.5°	40.2	40.2	21.1	15.1	11.1	30.1	47.3	75.3	107.5	63.3	62.3
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)