

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: P966060

Luminaire Tested: **NAV-SB4B-722-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966060
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4B-722-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18933.8 lumens
Efficiency: N/A
Efficacy: 128.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

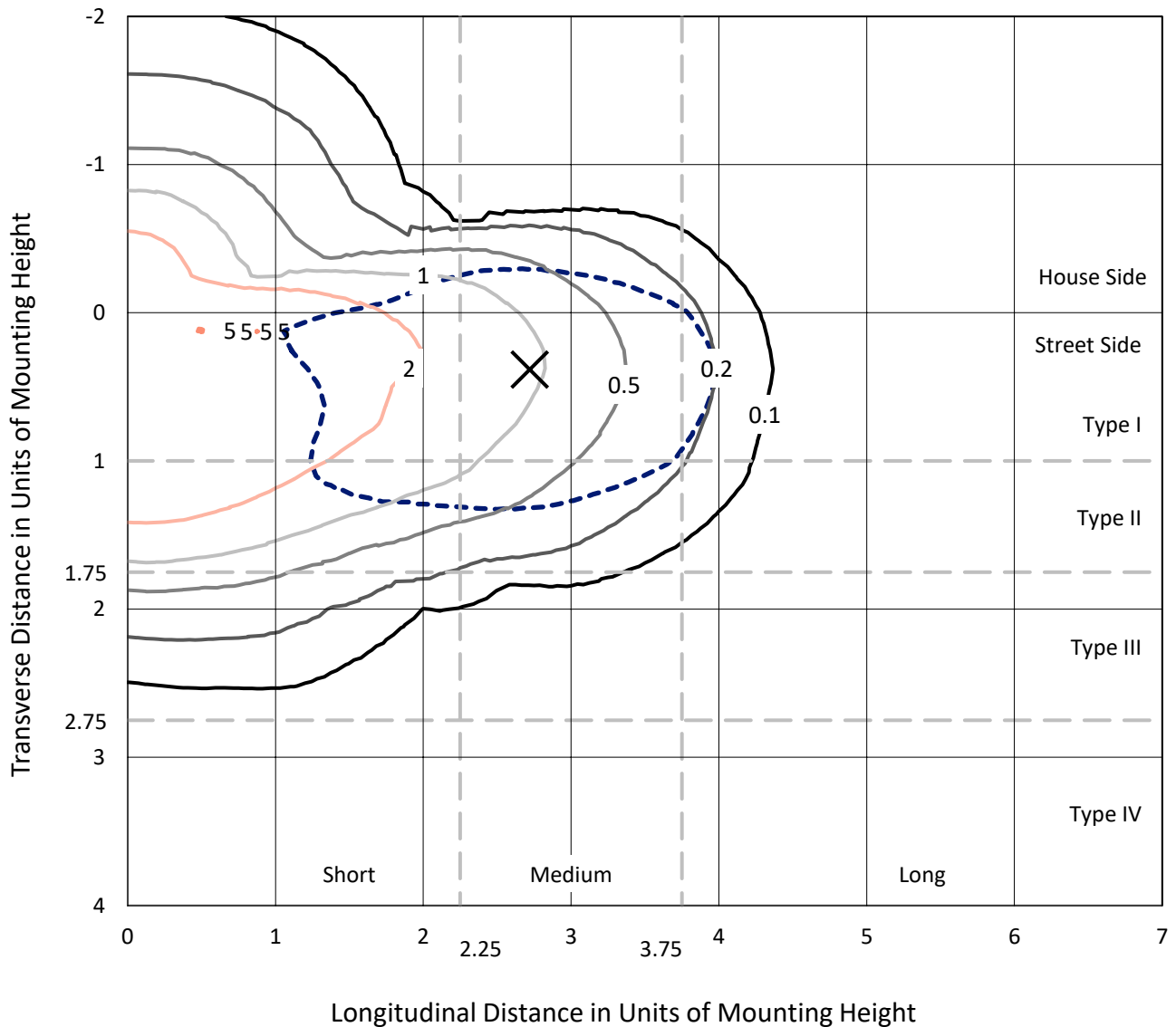
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

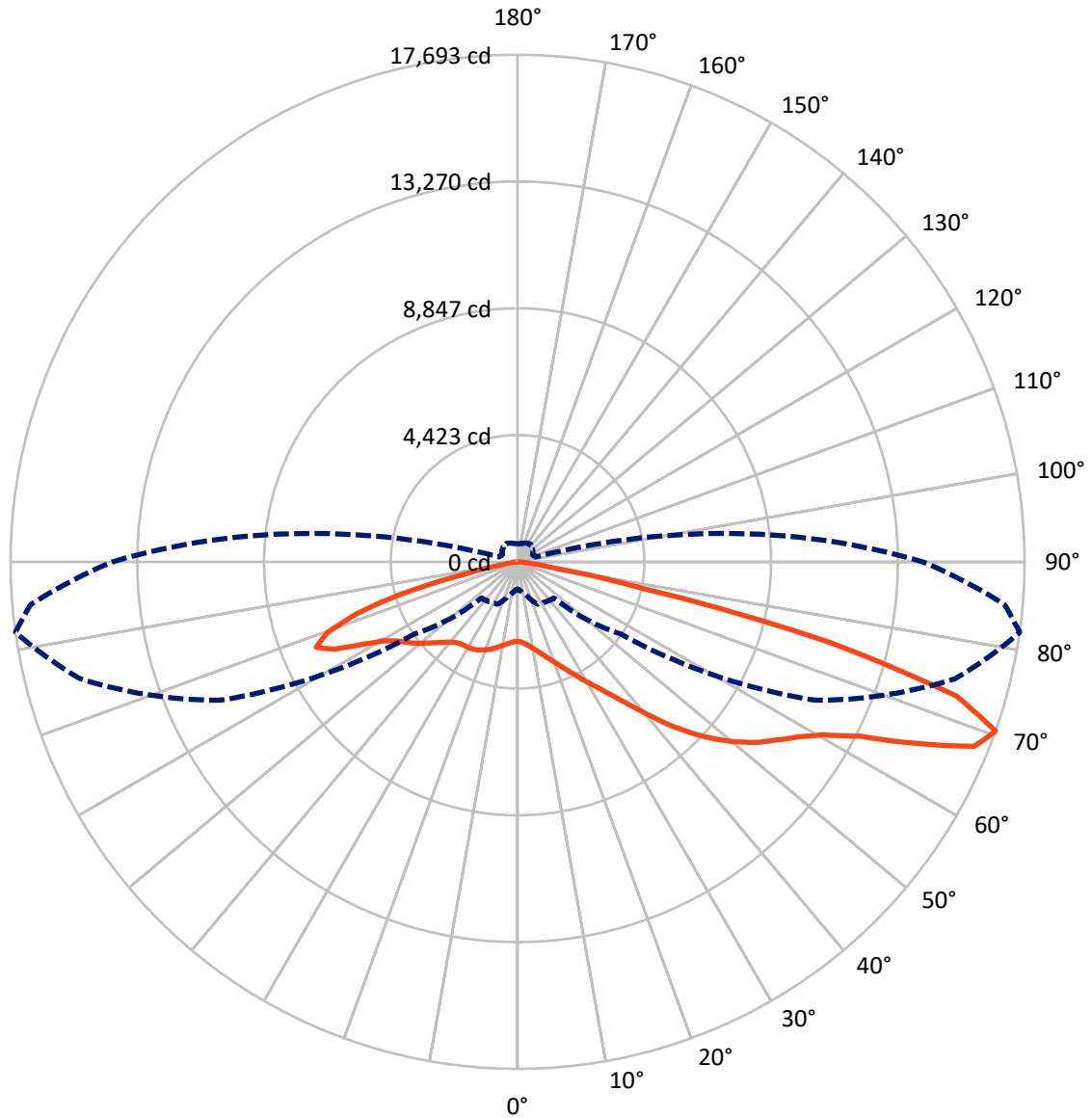
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4667.6	0.0	4667.6
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	14266.1	0.0	14266.1
	% Fixture	75.3	0.0	75.3
Total	Lumens	18933.8	0.0	18933.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	262.1	1.4
10°-20°	753.0	4.0
20°-30°	1259.7	6.7
30°-40°	1968.0	10.4
40°-50°	3134.3	16.6
50°-60°	4361.8	23.0
60°-70°	4562.6	24.1
70°-80°	2384.7	12.6
80°-90°	247.6	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°	18933.8	100.0
0°-180°	18933.8	100.0

Coefficient of Utilization

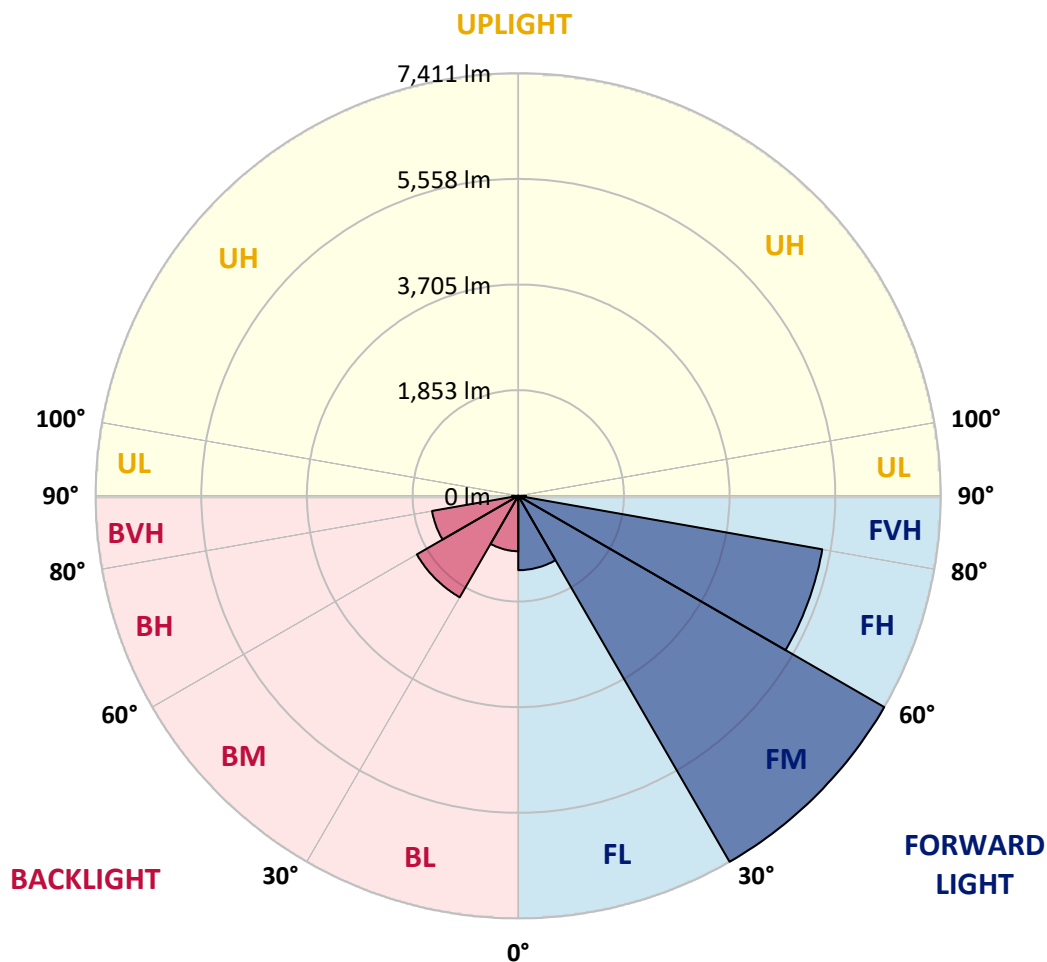


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1303.8	6.9			
FM (30°-60°)	7410.5	39.1			
FH (60°-80°)	5413.2	28.6			G3/7500
FVH (80°-90°)	138.6	0.7			G2/225
BL (0°-30°)	971.0	5.1	B2/1000		
BM (30°-60°)	2053.6	10.8	B2/2500		
BH (60°-80°)	1534.0	8.1	B3/2500		G3/2500
BVH (80°-90°)	109.0	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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2775.9	2775.9	2775.9	2775.9	2775.9	2775.9	2775.9	2775.9	2775.9	2775.9	2775.9
2.5°	2842.2	2858.3	2853.3	2848.3	2848.3	2841.2	2840.3	2830.2	2822.1	2809.1	2806.0
5°	2878.4	2895.5	2893.5	2897.5	2910.6	2913.6	2916.6	2910.6	2894.5	2878.4	2871.3
7.5°	2846.2	2865.4	2871.3	2895.5	2935.7	2971.9	2998.9	3010.0	2994.9	2971.9	2960.8
10°	2737.8	2758.9	2779.9	2837.2	2908.5	2993.9	3066.3	3109.4	3106.5	3084.3	3065.3
12.5°	2517.7	2539.8	2585.0	2696.6	2827.2	2977.8	3112.5	3202.9	3234.1	3218.0	3184.9
15°	2341.9	2361.0	2395.1	2509.7	2679.5	2908.5	3129.5	3305.4	3384.8	3375.7	3335.6
17.5°	2336.9	2344.9	2366.0	2420.2	2550.9	2800.1	3111.5	3405.9	3557.6	3556.5	3506.3
20°	2425.3	2428.3	2440.3	2451.4	2525.8	2717.7	3065.3	3489.3	3751.5	3751.5	3697.2
22.5°	2547.8	2545.9	2557.9	2547.8	2584.0	2710.6	3036.2	3562.6	3967.5	3983.6	3915.2
25°	2731.7	2721.7	2718.7	2695.5	2702.6	2775.9	3068.3	3646.0	4223.7	4256.8	4171.4
27.5°	2976.9	2960.8	2949.7	2896.4	2878.4	2910.6	3166.7	3746.5	4509.0	4566.3	4457.7
30°	3296.4	3267.2	3251.1	3158.7	3093.4	3098.5	3315.5	3880.0	4807.4	4899.8	4762.2
32.5°	3732.4	3687.1	3644.0	3492.3	3372.8	3333.5	3507.3	4064.9	5130.9	5278.5	5101.7
35°	4220.6	4184.5	4138.2	3904.2	3720.3	3629.9	3766.6	4323.1	5509.7	5743.8	5513.7
37.5°	4690.8	4659.8	4681.8	4366.3	4129.2	3997.6	4106.2	4669.8	5976.9	6322.4	6030.1
40°	5177.1	5153.0	5156.1	4854.6	4578.4	4430.7	4518.1	5104.8	6512.3	7010.7	6651.0
42.5°	5705.6	5687.5	5627.2	5359.9	5049.6	4911.9	4992.3	5607.2	7087.1	7794.3	7332.1
45°	6297.3	6286.3	6230.1	5923.6	5567.9	5413.2	5521.7	6161.7	7664.7	8531.8	8016.3
47.5°	6808.8	6817.8	6810.7	6552.5	6183.8	5956.8	6086.3	6740.4	8202.3	9225.0	8672.4
50°	7054.9	7102.1	7171.4	7091.1	6862.0	6630.9	6656.0	7299.0	8714.6	9875.0	9301.4
52.5°	6926.2	7015.7	7204.5	7333.2	7421.6	7373.3	7306.0	7853.6	9196.8	10461.8	9896.1
55°	6447.0	6572.6	6886.1	7196.5	7647.6	7998.3	8086.6	8468.4	9667.1	10978.2	10458.7
57.5°	5574.0	5777.9	6059.2	6687.2	7446.7	8300.7	8996.9	9321.5	10165.3	11529.7	11047.4
60°	4077.0	4350.3	4699.9	5634.2	6743.4	8138.9	9771.5	10631.5	10873.6	12244.0	11814.0
62.5°	2609.1	2778.0	3099.4	3979.6	5254.5	7310.1	10008.6	12269.1	12074.3	13415.5	12963.4
65°	1786.4	1894.8	2189.2	2683.4	3396.8	5441.3	9373.6	13496.9	13981.1	15272.2	14928.5
67.5°	1298.1	1380.5	1631.6	2064.7	2213.3	3220.0	7273.9	13440.6	15834.8	17185.0	16650.6
70°	946.4	1004.7	1215.6	1631.6	1702.9	1791.4	4406.6	11425.3	15794.5	17693.4	17053.4
72.5°	701.3	741.5	883.1	1265.9	1378.4	1209.6	2181.2	8303.7	13572.2	16003.5	15490.2
75°	507.4	537.5	642.0	968.5	1103.1	921.3	1088.0	4852.6	9467.1	11257.5	11347.9
77.5°	387.8	410.9	479.2	709.3	883.1	691.3	675.2	2232.4	4488.9	4511.0	4764.2
80°	311.5	326.6	363.7	499.3	677.1	517.4	440.0	901.2	1418.6	1200.6	1259.8
82.5°	229.1	254.2	307.4	350.7	484.2	356.7	268.2	455.1	539.6	464.1	468.2
85°	130.6	147.7	185.8	251.1	309.4	218.0	153.8	201.9	251.1	205.9	183.9
87.5°	46.2	60.3	65.3	98.5	134.6	90.4	59.2	58.3	82.4	61.3	51.2
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°	2775.9	2775.9	2775.9	2775.9	2775.9	2775.9	2775.9	2775.9	2775.9	2775.9	2775.9
2.5°	2796.0	2791.0	2770.9	2743.8	2715.6	2688.6	2679.5	2660.4	2647.4	2640.3	2648.3
5°	2852.3	2836.2	2789.0	2728.8	2665.4	2597.1	2548.9	2504.7	2472.5	2442.4	2454.5
7.5°	2932.6	2904.5	2823.2	2717.7	2605.1	2491.6	2407.2	2342.9	2299.7	2271.6	2277.7
10°	3026.1	2982.9	2858.3	2700.6	2526.7	2364.1	2264.5	2209.3	2182.1	2167.1	2171.2
12.5°	3133.6	3072.3	2894.5	2661.4	2407.2	2221.4	2153.0	2136.9	2137.9	2139.0	2141.0
15°	3266.3	3180.8	2923.6	2576.0	2251.5	2111.8	2099.8	2126.0	2153.0	2166.1	2165.1
17.5°	3415.9	3295.4	2928.6	2435.3	2098.8	2041.5	2079.7	2136.0	2177.1	2195.2	2199.2
20°	3576.6	3411.9	2892.4	2236.4	1973.2	1984.2	2052.6	2124.9	2170.1	2193.2	2199.2
22.5°	3760.5	3536.5	2806.0	2027.4	1870.7	1922.0	2002.3	2072.7	2119.9	2143.0	2149.0
25°	3970.5	3676.2	2670.4	1851.7	1782.3	1851.7	1932.0	1990.2	2028.5	2049.6	2055.5
27.5°	4203.6	3821.8	2489.6	1712.0	1705.0	1779.3	1845.6	1890.8	1910.9	1927.0	1933.0
30°	4437.6	3954.4	2270.6	1606.5	1637.6	1708.0	1755.2	1775.3	1781.3	1784.3	1791.4
32.5°	4690.8	4068.9	2040.5	1519.0	1573.4	1638.7	1666.8	1675.8	1647.7	1628.6	1634.6
35°	4997.3	4191.5	1815.5	1449.8	1510.0	1566.3	1575.3	1567.3	1534.1	1495.0	1497.0
37.5°	5376.0	4344.3	1635.6	1400.6	1450.8	1487.9	1476.9	1474.9	1477.8	1431.7	1434.7
40°	5840.2	4543.2	1504.0	1362.3	1402.5	1410.6	1379.4	1396.5	1411.5	1341.2	1343.3
42.5°	6355.6	4783.3	1420.6	1336.2	1362.3	1343.3	1295.0	1314.2	1312.1	1219.6	1218.7
45°	6881.0	5044.5	1391.4	1317.1	1325.2	1287.0	1233.8	1238.8	1196.6	1113.1	1116.2
47.5°	7403.5	5324.8	1409.6	1301.0	1279.0	1235.7	1194.5	1172.5	1110.2	1047.9	1047.9
50°	7915.9	5619.2	1475.9	1268.9	1215.6	1190.5	1160.4	1121.2	1054.9	1001.6	997.6
52.5°	8391.1	5915.6	1550.2	1215.6	1136.3	1151.4	1132.3	1087.1	1021.7	967.5	968.5
55°	8841.1	6211.9	1579.3	1142.4	1061.9	1117.2	1106.2	1022.7	944.4	900.2	896.2
57.5°	9331.5	6568.6	1547.2	1048.9	1001.6	1078.0	1035.9	943.4	898.2	865.0	862.0
60°	10010.7	7128.2	1477.8	933.4	944.4	1019.8	947.4	909.3	860.0	822.9	820.8
62.5°	11138.9	8172.1	1366.3	818.8	877.1	933.4	905.2	867.0	816.8	780.6	780.6
65°	12806.7	9622.8	1156.4	729.4	801.8	848.9	860.0	821.8	769.6	731.4	733.4
67.5°	14213.2	10533.1	875.0	655.1	724.4	780.6	811.8	774.6	719.3	682.1	683.2
70°	14135.9	9872.0	668.1	581.7	656.1	713.3	753.5	724.4	665.1	630.0	632.9
72.5°	12555.5	8258.4	540.5	507.4	586.7	643.0	691.3	669.1	608.8	574.7	574.7
75°	9224.0	5862.3	432.0	432.0	500.3	569.7	622.9	608.8	553.6	529.5	522.4
77.5°	3888.1	2459.5	338.6	358.6	415.9	489.2	555.6	560.6	512.4	542.5	492.3
80°	1033.8	678.1	258.2	282.3	326.6	403.8	483.3	481.2	429.0	400.9	372.7
82.5°	393.8	267.2	183.9	199.0	236.1	309.4	382.7	394.8	342.6	296.4	296.4
85°	151.7	114.5	113.6	119.5	137.7	205.0	289.4	299.4	258.2	219.0	226.0
87.5°	39.2	34.1	42.2	40.2	63.3	109.5	165.7	171.8	157.7	91.4	130.6
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)