

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: P884499

Luminaire Tested: **NAV-SB5B-830-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884499  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5B-830-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

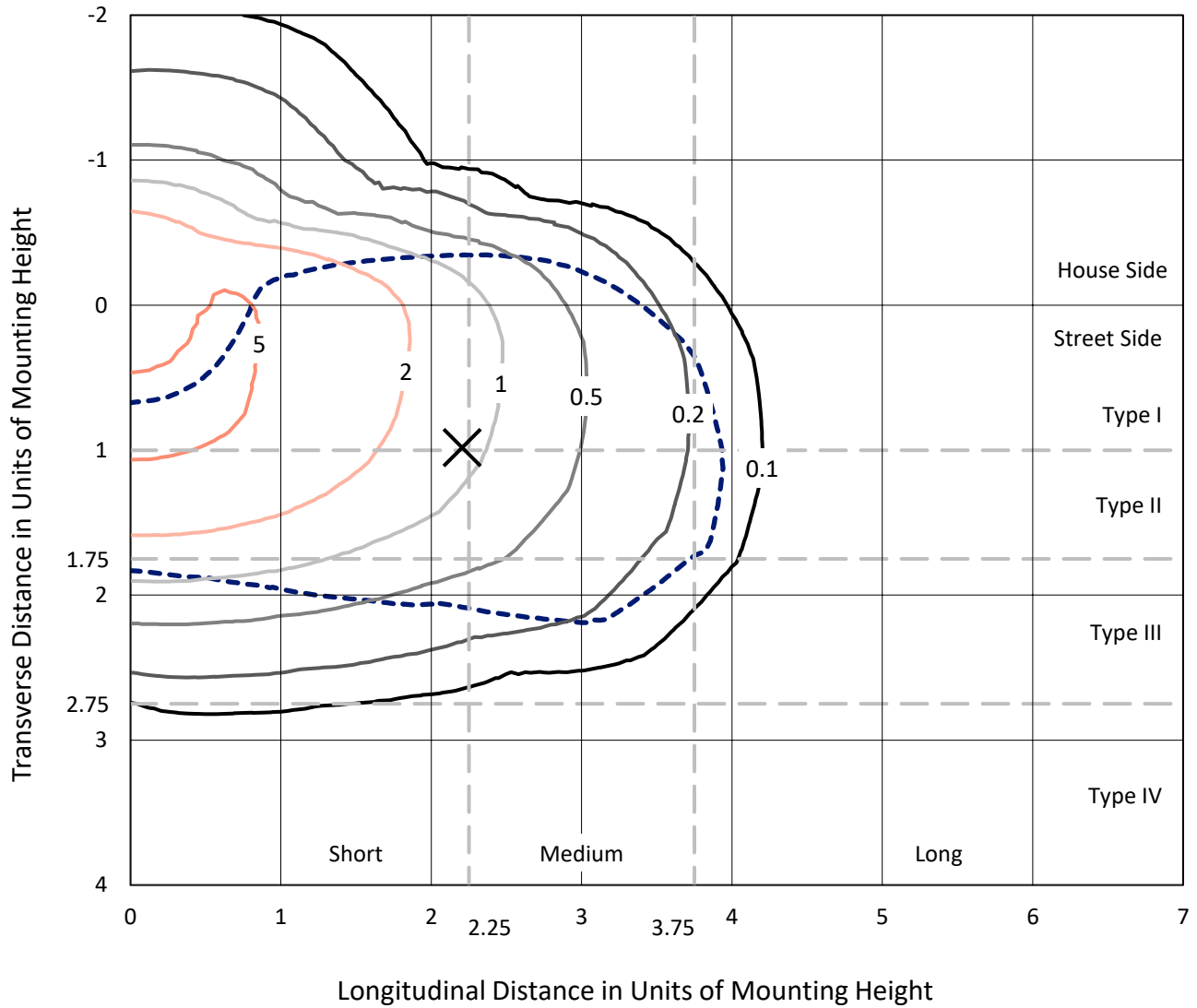
Lumens per Lamp: N/A  
Luminaire Lumens: 25019 lumens  
Efficiency: N/A  
Efficacy: 136.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 182.7  
Input Voltage (V): 120.0  
Input Current (Ain): 1.547  
Voltage Rise (V): NR  
Power Factor: 0.992  
Total Harmonic Distortion (THDi): 11.125  
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

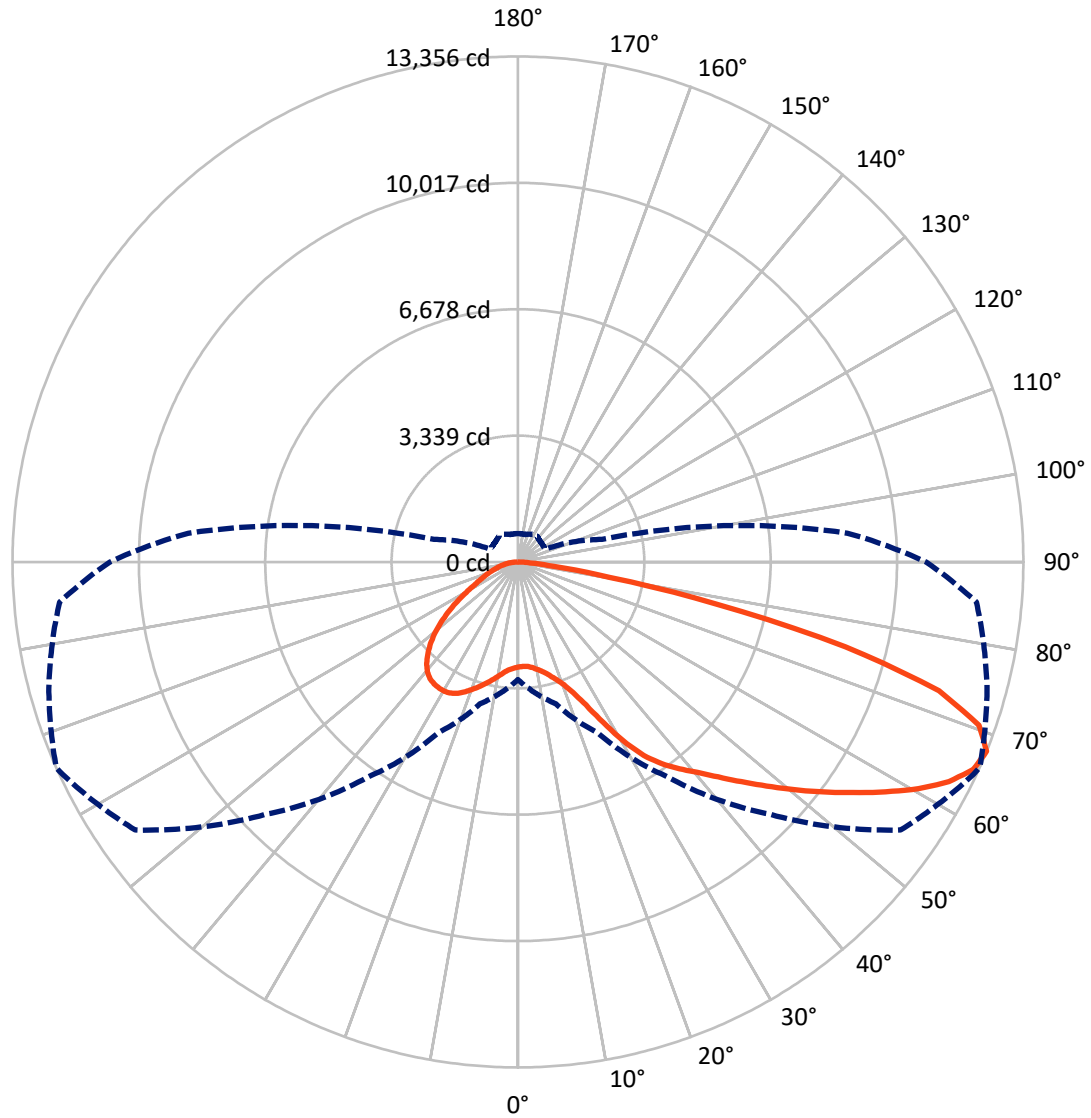
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 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
<b>House Side</b>	Lumens	6220.9	0.0	6220.9
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	18798.1	0.0	18798.1
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	25019.0	0.0	25019.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	275.1	1.1
10°-20°	909.0	3.6
20°-30°	1752.0	7.0
30°-40°	3071.9	12.3
40°-50°	4566.9	18.3
50°-60°	5789.0	23.1
60°-70°	5664.4	22.6
70°-80°	2702.0	10.8
80°-90°	288.8	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°	25019.0	100.0
0°-180°	25019.0	100.0

**Coefficient of Utilization**



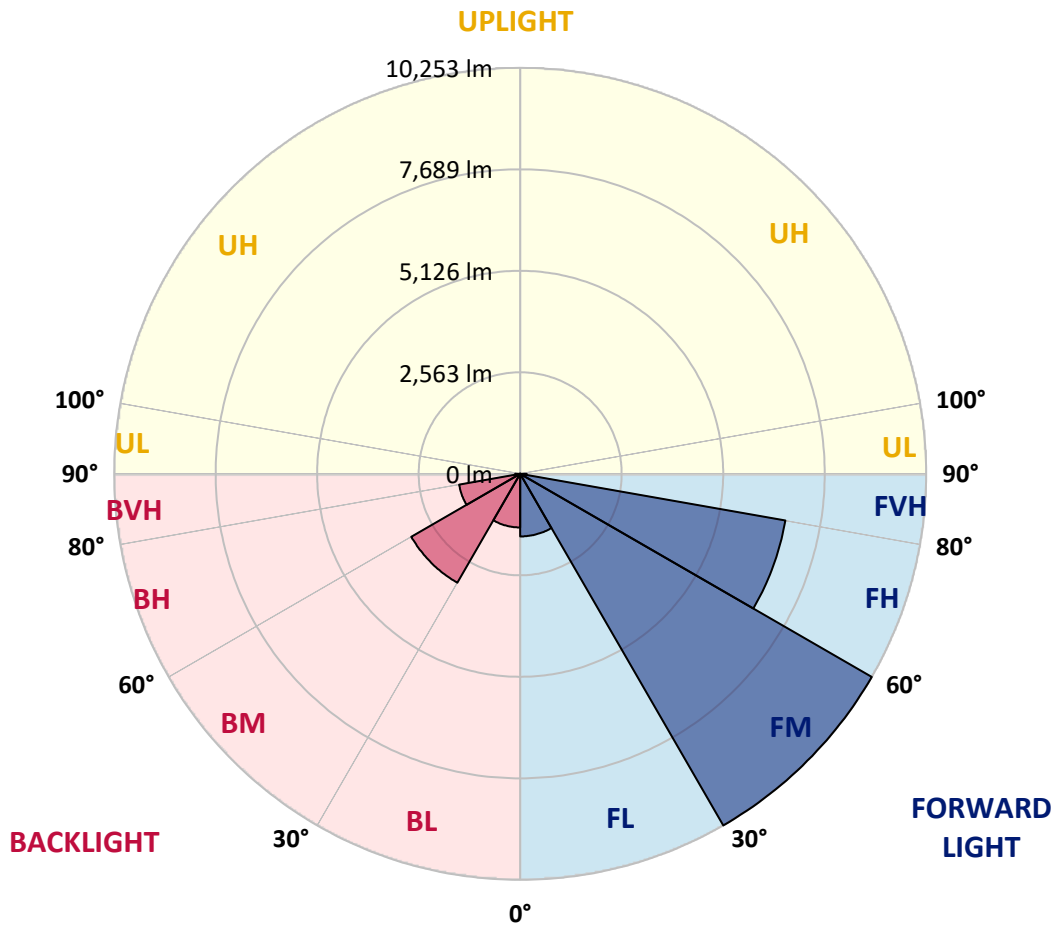
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1581.0	6.3			
FM (30°-60°)	10252.6	41.0			
FH (60°-80°)	6800.8	27.2			G3/7500
FVH (80°-90°)	163.7	0.7			G2/225
BL (0°-30°)	1355.1	5.4	B3/2500		
BM (30°-60°)	3175.2	12.7	B3/5000		
BH (60°-80°)	1565.5	6.3	B3/2500		G3/2500
BVH (80°-90°)	125.1	0.5			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 III Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2774.9	2774.9	2774.9	2774.9	2774.9	2774.9	2774.9	2774.9	2774.9	2774.9	2774.9
2.5°	2746.0	2761.8	2757.8	2751.3	2750.0	2752.6	2756.5	2760.5	2759.2	2765.7	2776.3
5°	2738.1	2753.9	2752.6	2752.6	2757.8	2768.4	2774.9	2781.5	2774.9	2782.8	2797.3
7.5°	2743.4	2755.2	2760.5	2765.7	2778.9	2798.6	2814.4	2828.8	2820.9	2830.1	2848.6
10°	2810.4	2819.6	2824.9	2824.9	2834.1	2856.4	2872.2	2898.5	2891.9	2906.4	2930.1
12.5°	2932.7	2941.9	2941.9	2936.6	2943.2	2957.7	2962.9	2991.8	2980.0	3003.7	3027.3
15°	3082.5	3100.9	3086.5	3077.3	3079.9	3094.4	3093.0	3115.4	3103.6	3123.3	3144.3
17.5°	3248.2	3271.8	3248.2	3246.8	3241.6	3257.4	3258.7	3278.4	3257.4	3271.8	3286.3
20°	3444.0	3476.9	3457.2	3463.7	3451.9	3458.5	3465.1	3494.0	3461.1	3471.6	3467.7
22.5°	3720.1	3759.5	3738.5	3763.5	3755.6	3750.3	3749.0	3800.3	3749.0	3752.9	3714.8
25°	4122.3	4169.6	4132.8	4167.0	4167.0	4184.1	4203.8	4269.5	4184.1	4159.1	4060.5
27.5°	4716.5	4763.8	4691.5	4712.5	4706.0	4748.0	4727.0	4890.0	4798.0	4757.2	4558.7
30°	5431.6	5515.7	5379.0	5373.7	5367.2	5434.2	5464.4	5572.2	5478.9	5438.1	5198.9
32.5°	6204.5	6292.6	6129.6	6082.3	6057.3	6098.0	6073.1	6159.8	6095.4	6032.3	5736.5
35°	7022.1	7108.9	6953.8	6861.8	6761.9	6676.4	6587.0	6609.4	6548.9	6452.9	6146.7
37.5°	7795.1	7954.1	7789.8	7691.2	7507.2	7340.2	7090.5	6986.6	6930.1	6842.0	6533.1
40°	8582.5	8673.2	8548.3	8464.2	8264.3	8002.8	7603.1	7383.6	7307.4	7221.9	6960.3
42.5°	9162.2	9248.9	9181.9	9124.0	8967.6	8664.0	8147.4	7872.6	7762.2	7666.2	7444.1
45°	9622.2	9686.6	9644.6	9665.6	9598.6	9304.1	8711.3	8397.1	8282.7	8165.8	7990.9
47.5°	9807.6	9875.9	9943.0	10067.9	10182.2	9965.3	9317.3	8965.0	8844.0	8724.4	8552.2
50°	9786.6	9856.2	10050.8	10316.3	10671.2	10598.9	9956.1	9569.7	9457.9	9321.2	9162.2
52.5°	9618.3	9697.2	9946.9	10388.6	10953.8	11073.5	10606.8	10194.1	10088.9	9925.9	9766.8
55°	9176.6	9223.9	9598.6	10224.3	11020.9	11404.7	11244.3	10859.2	10754.0	10526.6	10353.1
57.5°	8357.7	8426.0	8971.6	9781.3	10852.6	11629.5	11804.3	11558.5	11457.3	11130.0	10948.6
60°	7289.0	7398.1	8022.5	9037.3	10424.1	11628.2	12313.0	12246.0	12161.9	11724.1	11534.9
62.5°	6079.6	6205.8	6806.6	7985.7	9674.8	11298.2	12631.2	12821.8	12778.4	12272.3	12030.4
65°	4669.2	4755.9	5354.0	6625.1	8508.8	10589.7	12668.0	13214.8	13222.7	12689.0	12289.4
67.5°	3108.8	3358.6	3877.8	4971.5	6947.2	9431.6	12344.6	13279.2	13355.5	12832.3	12159.2
70°	1516.9	1845.6	2354.3	3231.1	4971.5	7655.7	11499.4	12750.8	12920.4	12414.3	11383.7
72.5°	629.7	736.1	1013.5	1594.5	2853.8	5166.0	9801.0	11318.0	11632.1	10999.8	9571.0
75°	424.6	460.1	579.7	817.6	1300.1	2547.5	7068.1	8439.2	8945.3	8307.7	6790.8
77.5°	327.3	349.7	422.0	571.8	772.9	963.5	3783.2	5085.9	5347.4	4950.5	3533.4
80°	257.6	274.7	315.5	416.7	548.2	515.3	1289.5	2304.3	2455.5	2059.8	1135.7
82.5°	223.5	230.0	226.1	282.6	364.1	301.0	423.3	850.5	938.6	680.9	370.7
85°	161.7	180.1	188.0	174.8	193.2	152.5	173.5	301.0	331.3	295.8	209.0
87.5°	65.7	97.3	119.6	113.0	71.0	43.4	53.9	88.1	101.2	110.4	68.4
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°	2774.9	2774.9	2774.9	2774.9	2774.9	2774.9	2774.9	2774.9	2774.9	2774.9	2774.9
2.5°	2777.6	2786.8	2793.3	2801.2	2806.5	2814.4	2830.1	2839.3	2840.7	2847.2	2845.9
5°	2802.5	2815.7	2830.1	2851.2	2874.8	2894.6	2924.8	2945.8	2953.7	2960.3	2959.0
7.5°	2856.4	2874.8	2901.1	2937.9	2972.1	2998.4	3035.2	3060.2	3085.2	3094.4	3095.7
10°	2936.6	2962.9	3001.0	3051.0	3087.8	3122.0	3160.1	3181.1	3206.1	3216.6	3221.9
12.5°	3036.5	3064.1	3114.1	3183.8	3217.9	3241.6	3254.7	3249.5	3254.7	3263.9	3266.6
15°	3150.9	3181.1	3237.6	3312.6	3336.2	3315.2	3286.3	3260.0	3256.0	3258.7	3267.9
17.5°	3286.3	3308.6	3374.4	3437.5	3420.4	3333.6	3270.5	3228.4	3207.4	3200.8	3210.0
20°	3475.6	3475.6	3529.5	3568.9	3454.5	3307.3	3208.7	3140.4	3097.0	3078.6	3074.6
22.5°	3705.6	3684.6	3718.8	3691.2	3448.0	3233.7	3097.0	2978.7	2913.0	2886.7	2882.7
25°	3997.4	3972.5	3963.3	3792.4	3400.6	3116.7	2894.6	2751.3	2693.4	2679.0	2681.6
27.5°	4437.8	4374.7	4255.1	3847.6	3313.9	2932.7	2657.9	2525.2	2492.3	2493.6	2497.6
30°	5024.1	4897.9	4604.7	3856.8	3171.9	2672.4	2416.1	2321.4	2305.7	2312.2	2334.6
32.5°	5567.0	5447.3	4962.3	3814.7	2953.7	2417.4	2199.2	2136.1	2112.4	2120.3	2130.8
35°	5992.9	5960.0	5293.5	3755.6	2685.6	2178.1	2004.6	1950.7	1904.7	1894.2	1902.1
37.5°	6395.1	6382.0	5542.0	3672.8	2420.0	2008.6	1848.2	1777.2	1710.2	1673.4	1674.7
40°	6836.8	6823.6	5705.0	3545.2	2184.7	1861.4	1707.6	1614.2	1531.4	1464.4	1470.9
42.5°	7333.7	7256.1	5782.5	3362.5	1984.9	1736.5	1593.2	1467.0	1357.9	1296.1	1300.1
45°	7876.6	7701.7	5781.2	3129.9	1816.7	1622.1	1470.9	1292.2	1190.9	1133.1	1130.5
47.5°	8452.3	8127.6	5710.2	2872.2	1653.7	1495.9	1281.7	1144.9	1077.9	1042.4	1034.5
50°	9046.5	8525.9	5589.3	2576.4	1486.7	1352.6	1163.3	1070.0	1018.7	985.9	974.1
52.5°	9605.1	8887.4	5443.4	2241.2	1317.1	1213.3	1110.8	1038.5	984.6	947.8	932.0
55°	10124.4	9199.0	5237.0	1898.2	1179.1	1120.0	1085.8	1025.3	963.5	920.2	903.1
57.5°	10585.8	9401.4	4880.8	1576.1	1080.5	1055.6	1059.5	1003.0	932.0	895.2	871.5
60°	10969.6	9549.9	4353.7	1277.7	1000.3	992.5	1018.7	960.9	878.1	836.0	817.6
62.5°	11199.7	9547.3	3706.9	1046.4	932.0	934.6	964.9	908.3	824.2	784.8	772.9
65°	11179.9	9313.3	2997.1	895.2	866.3	868.9	908.3	850.5	779.5	755.8	754.5
67.5°	10784.3	8742.8	2299.1	796.6	794.0	805.8	851.8	811.1	751.9	749.3	753.2
70°	9712.9	7558.5	1656.3	717.7	719.0	736.1	796.6	786.1	737.4	742.7	741.4
72.5°	7788.5	5762.8	1112.1	634.9	636.2	663.8	744.0	766.4	723.0	792.7	803.2
75°	5187.1	3593.9	715.1	546.8	548.2	583.6	698.0	728.2	683.5	790.0	796.6
77.5°	2492.3	1615.5	517.9	460.1	460.1	492.9	603.4	652.0	582.3	613.9	562.6
80°	861.0	607.3	407.5	370.7	362.8	385.2	508.7	565.2	502.1	462.7	433.8
82.5°	339.1	315.5	327.3	287.9	261.6	276.0	395.7	466.7	369.4	333.9	332.6
85°	194.5	205.1	231.4	190.6	151.2	169.6	290.5	335.2	278.7	245.8	251.1
87.5°	52.6	72.3	106.5	98.6	68.4	72.3	138.0	185.3	160.4	123.6	127.5
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)