

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: P884994

Luminaire Tested: **NAV-SB6A-827-U-SL4**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884994  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB6A-827-U-SL4  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

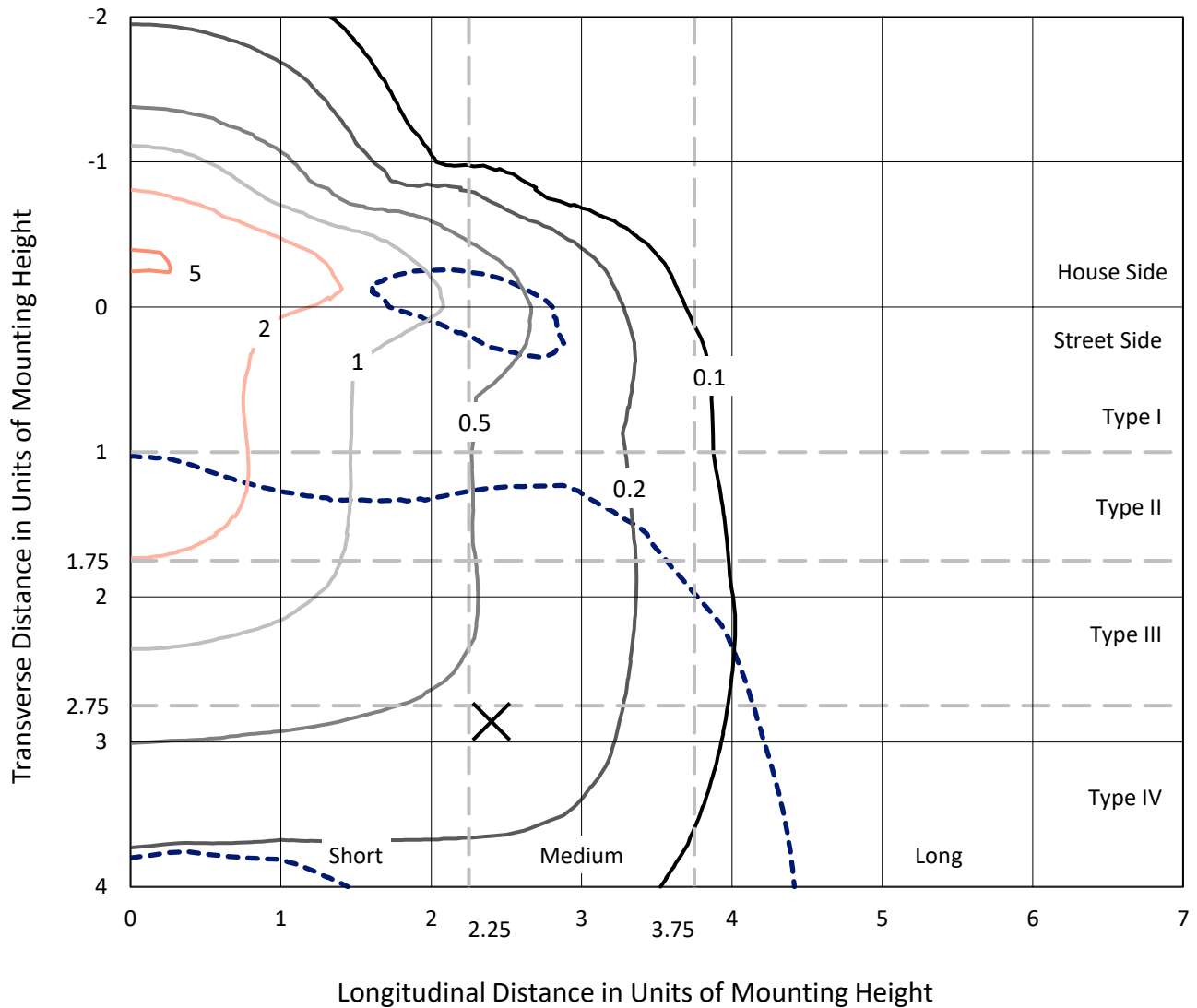
Lumens per Lamp: N/A  
Luminaire Lumens: 21929 lumens  
Efficiency: N/A  
Efficacy: 128.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 170.9  
Input Voltage (V): 120.0  
Input Current (Ain): 1.434  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 11.969  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P884994  
 CATALOG NUMBER: NAV-SB6A-827-U-SL4

### Iso-Footcandle Lines of Horizontal Illumination

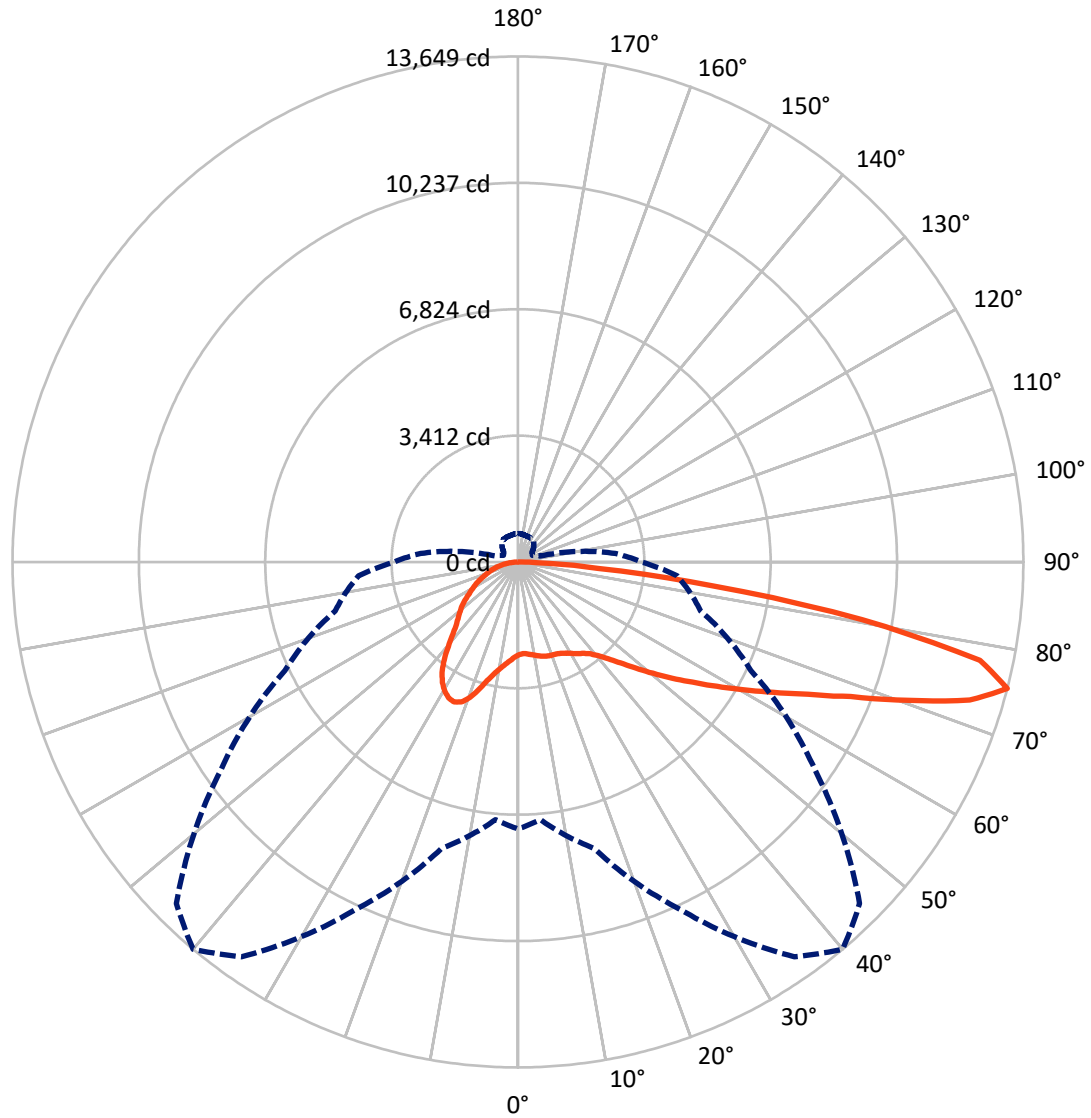
✕ Max cd  
 - - - 1/2 Max cd



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

REPORT NUMBER: P884994  
CATALOG NUMBER: NAV-SB6A-827-U-SL4

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P884994

CATALOG NUMBER: NAV-SB6A-827-U-SL4

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6794.3	0.0	6794.3
	% Fixture	31.0	0.0	31.0
<b>Street Side</b>	Lumens	15134.7	0.0	15134.7
	% Fixture	69.0	0.0	69.0
<b>Total</b>	Lumens	21929.0	0.0	21929.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	250.3	1.1
10°-20°	840.4	3.8
20°-30°	1534.5	7.0
30°-40°	2176.3	9.9
40°-50°	2938.7	13.4
50°-60°	3953.3	18.0
60°-70°	5017.7	22.9
70°-80°	4553.9	20.8
80°-90°	663.8	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°	21929.0	100.0
0°-180°	21929.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P884994

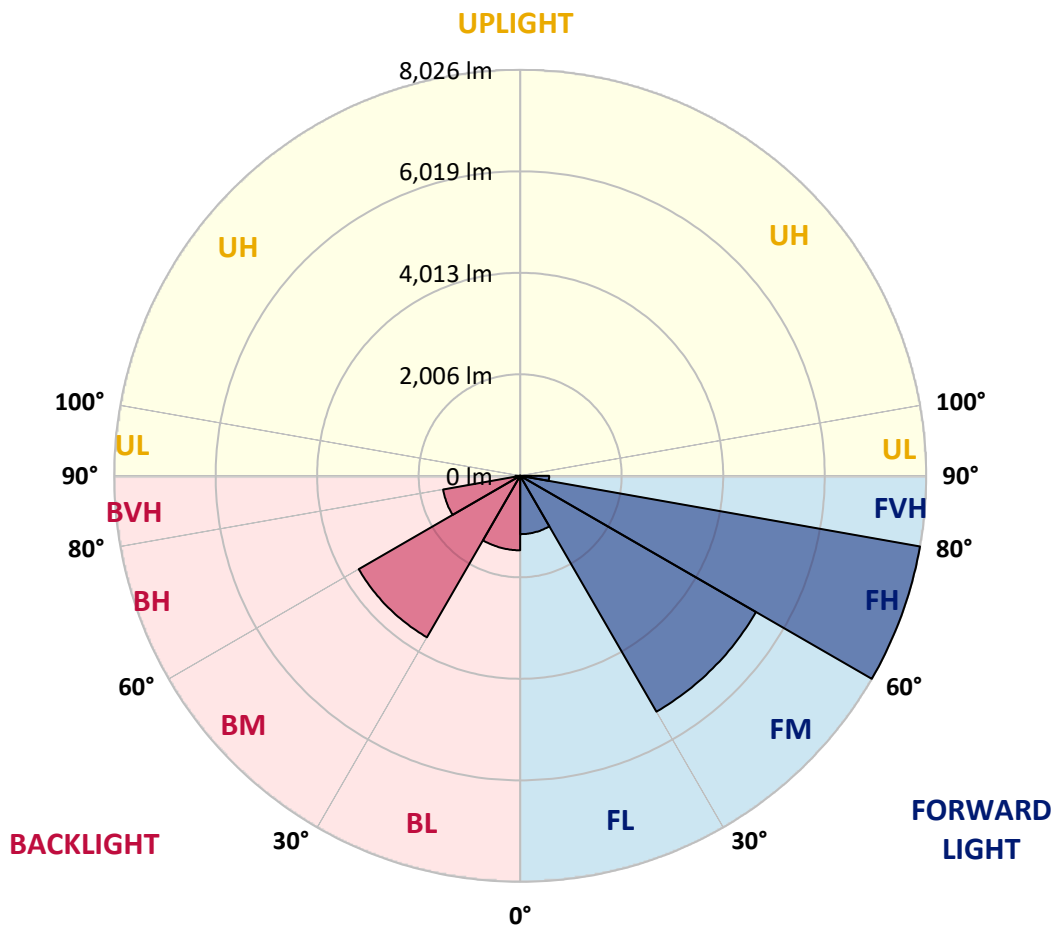
CATALOG NUMBER: NAV-SB6A-827-U-SL4

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1153.5	5.3			
FM (30°-60°)	5383.1	24.5			
FH (60°-80°)	8025.7	36.6			G4/12000
FVH (80°-90°)	572.4	2.6			G4/750
BL (0°-30°)	1471.7	6.7	B3/2500		
BM (30°-60°)	3685.3	16.8	B3/5000		
BH (60°-80°)	1545.9	7.0	B3/2500		G3/2500
BVH (80°-90°)	91.4	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-G4**

Type IV Medium



REPORT NUMBER: P884994

CATALOG NUMBER: NAV-SB6A-827-U-SL4

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	2507.6	2507.6	2507.6	2507.6	2507.6	2507.6	2507.6	2507.6	2507.6	2507.6	2507.6
2.5°	2469.2	2483.2	2479.7	2475.0	2475.0	2476.2	2475.0	2483.2	2491.3	2499.5	2512.3
5°	2494.8	2508.8	2501.8	2496.0	2491.3	2490.2	2486.7	2485.5	2490.2	2500.6	2518.1
7.5°	2544.8	2558.8	2548.3	2537.9	2528.5	2523.9	2519.2	2512.3	2508.8	2514.6	2539.0
10°	2600.7	2614.6	2601.8	2583.2	2568.1	2562.3	2557.6	2550.6	2546.0	2549.5	2576.2
12.5°	2656.5	2670.4	2653.0	2627.4	2607.6	2604.1	2598.3	2596.0	2594.8	2593.7	2620.4
15°	2708.8	2720.5	2698.4	2668.1	2647.2	2641.4	2635.5	2639.0	2644.9	2651.8	2682.1
17.5°	2749.5	2761.2	2728.6	2689.1	2669.3	2667.0	2663.5	2675.1	2691.4	2708.8	2746.0
20°	2786.8	2798.4	2756.5	2703.0	2679.7	2679.7	2680.9	2705.3	2728.6	2754.2	2805.4
22.5°	2839.1	2848.4	2797.2	2723.9	2690.2	2692.5	2701.8	2726.3	2755.3	2790.2	2861.2
25°	2917.0	2924.0	2861.2	2763.5	2725.1	2732.1	2740.2	2751.9	2779.8	2820.5	2915.9
27.5°	3042.6	3048.4	2965.9	2833.3	2775.1	2786.8	2798.4	2790.2	2803.0	2837.9	2960.1
30°	3219.4	3222.9	3118.2	2942.6	2860.0	2865.8	2868.2	2834.4	2810.0	2837.9	2991.5
32.5°	3428.8	3427.6	3303.2	3075.2	2956.6	2950.7	2931.0	2864.7	2807.7	2832.1	3019.4
35°	3753.3	3740.5	3580.0	3261.3	3065.9	3029.8	2983.3	2898.4	2819.3	2826.3	3043.8
37.5°	4290.6	4251.1	4028.9	3566.0	3228.7	3136.8	3068.2	2953.1	2844.9	2824.0	3072.9
40°	4896.6	4846.6	4602.3	3983.6	3473.0	3325.3	3214.8	3031.0	2886.8	2834.4	3115.9
42.5°	5615.4	5544.4	5281.6	4475.5	3782.4	3568.3	3402.0	3129.9	2948.4	2868.2	3174.1
45°	6498.2	6403.9	6031.8	5030.3	4172.0	3887.0	3664.9	3279.9	3042.6	2933.3	3261.3
47.5°	7390.2	7413.5	6884.3	5665.4	4639.5	4280.2	3994.0	3505.5	3179.9	3038.0	3402.0
50°	8338.2	8354.4	7732.2	6369.1	5169.9	4724.4	4363.9	3757.9	3370.6	3186.9	3612.5
52.5°	9077.9	9080.2	8502.1	7105.3	5722.4	5212.9	4762.8	4046.4	3591.6	3384.6	3892.8
55°	9540.8	9535.0	9041.8	7802.0	6357.4	5725.9	5204.8	4374.4	3861.4	3617.2	4245.3
57.5°	9876.9	9859.5	9414.0	8401.0	7034.3	6331.8	5704.9	4746.5	4180.1	3894.0	4709.3
60°	10004.9	9994.4	9666.4	8918.5	7746.1	7001.8	6281.8	5162.9	4541.8	4220.8	5306.0
62.5°	10053.7	10073.5	9914.1	9419.8	8508.0	7743.8	6915.7	5660.7	4948.9	4590.7	5935.2
65°	10225.8	10261.9	10229.3	10075.8	9368.6	8612.6	7756.6	6252.7	5393.2	4987.3	6592.4
67.5°	10566.6	10602.7	10616.6	10860.9	10420.1	9695.5	8805.7	6990.1	5913.1	5399.0	7086.7
70°	10558.5	10548.0	10794.6	11485.5	11736.7	11194.7	10220.0	7897.3	6533.0	5741.0	7149.5
72.5°	9610.6	9526.8	10109.5	11478.5	12832.3	12760.2	11947.2	9067.4	7068.1	5782.9	6203.9
75°	7210.0	6986.6	8016.0	10344.5	13014.9	13648.8	13045.2	9793.2	6941.3	5109.4	4317.4
77.5°	3083.3	2858.9	4072.0	7657.7	11648.3	12759.0	12037.9	8544.0	5540.9	3378.8	2120.3
80°	807.2	806.0	1230.5	3471.8	7921.8	9422.1	8266.0	5517.7	3165.9	1207.3	585.0
82.5°	333.8	325.7	452.4	1350.3	3870.7	5287.4	4315.0	2461.1	1143.3	326.8	194.2
85°	124.5	123.3	219.8	466.4	1365.5	2180.8	1578.3	629.2	285.0	159.3	87.2
87.5°	34.9	33.7	47.7	161.7	332.6	504.8	269.8	103.5	80.3	62.8	25.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P884994  
 CATALOG NUMBER: NAV-SB6A-827-U-SL4

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2507.6	2507.6	2507.6	2507.6	2507.6	2507.6	2507.6	2507.6	2507.6	2507.6	2507.6
2.5°	2515.8	2521.6	2532.0	2540.2	2550.6	2562.3	2578.6	2589.0	2599.5	2606.5	2601.8
5°	2526.2	2539.0	2565.8	2592.5	2623.9	2653.0	2686.7	2711.2	2730.9	2736.7	2739.1
7.5°	2549.5	2570.4	2615.8	2661.1	2711.2	2758.8	2807.7	2849.6	2883.3	2896.1	2897.2
10°	2590.2	2618.1	2682.1	2746.0	2812.3	2885.6	2948.4	3008.9	3056.6	3076.4	3077.5
12.5°	2641.4	2676.3	2760.0	2848.4	2940.3	3041.5	3122.9	3197.3	3256.6	3283.4	3283.4
15°	2707.7	2753.0	2860.0	2978.7	3113.6	3254.3	3357.8	3440.4	3506.7	3539.3	3536.9
17.5°	2779.8	2840.3	2975.2	3154.3	3347.4	3532.3	3653.2	3713.7	3782.4	3813.8	3812.6
20°	2849.6	2924.0	3117.1	3377.6	3634.6	3831.2	3928.9	3945.2	3949.8	3953.3	3962.6
22.5°	2921.7	3021.7	3295.0	3659.1	3934.7	4070.8	4084.8	4015.0	3917.3	3871.9	3884.7
25°	3000.8	3133.3	3527.6	3969.6	4192.9	4209.2	4102.2	3932.4	3747.5	3662.6	3675.3
27.5°	3077.5	3262.5	3806.8	4266.2	4379.0	4236.0	4005.7	3764.9	3541.6	3452.0	3462.5
30°	3154.3	3410.2	4115.0	4525.6	4463.9	4169.7	3853.3	3584.6	3360.2	3265.9	3276.4
32.5°	3232.2	3582.3	4469.7	4712.8	4448.8	4028.9	3663.7	3382.2	3184.5	3085.7	3098.5
35°	3320.6	3794.0	4805.9	4815.2	4347.6	3821.9	3413.7	3140.3	2968.2	2889.1	2906.5
37.5°	3435.8	4062.7	5102.5	4840.8	4170.8	3518.3	3103.1	2854.2	2712.3	2676.3	2701.8
40°	3578.8	4386.0	5329.3	4800.1	3909.1	3149.6	2763.5	2564.6	2484.3	2492.5	2520.4
42.5°	3764.9	4747.7	5488.6	4695.4	3545.1	2769.3	2465.7	2377.3	2415.7	2448.3	2478.5
45°	4006.8	5123.4	5587.5	4517.4	3133.3	2447.1	2290.1	2311.0	2340.1	2343.6	2366.9
47.5°	4316.2	5503.7	5652.6	4248.7	2713.5	2220.3	2178.5	2183.1	2177.3	2152.9	2171.5
50°	4702.4	5873.6	5710.7	3892.8	2356.4	2078.4	2022.6	2006.3	1926.1	1847.0	1857.4
52.5°	5142.0	6213.2	5735.2	3450.9	2078.4	1959.8	1869.1	1766.7	1616.7	1592.3	1600.4
55°	5630.5	6527.2	5672.4	2907.7	1844.7	1807.4	1670.2	1546.9	1530.6	1509.7	1513.2
57.5°	6214.4	6865.7	5544.4	2301.7	1605.1	1629.5	1495.7	1509.7	1480.6	1448.0	1442.2
60°	6852.9	7215.8	5319.9	1749.3	1357.3	1407.3	1450.4	1449.2	1441.1	1414.3	1405.0
62.5°	7427.5	7446.1	4878.0	1339.9	1139.8	1235.2	1352.7	1351.5	1344.5	1329.4	1323.6
65°	7769.4	7411.2	4140.6	1054.9	960.7	1093.3	1220.1	1229.4	1230.5	1229.4	1229.4
67.5°	7708.9	7002.9	3128.7	839.7	813.0	949.1	1088.6	1101.4	1110.7	1113.1	1115.4
70°	7025.0	6106.2	2040.1	669.9	681.6	822.3	964.2	977.0	985.1	994.4	999.1
72.5°	5475.8	4489.5	1167.7	542.0	566.4	713.0	840.9	856.0	860.7	878.1	885.1
75°	3336.9	2640.2	630.4	426.9	465.2	609.5	718.8	736.2	744.4	765.3	767.6
77.5°	1586.4	1143.3	359.4	332.6	374.5	497.8	607.1	626.9	604.8	616.4	607.1
80°	536.2	424.5	226.8	253.6	286.1	388.5	486.2	505.9	459.4	457.1	452.4
82.5°	187.3	172.1	144.2	168.6	184.9	278.0	367.5	393.1	341.9	340.8	324.5
85°	73.3	69.8	80.3	91.9	110.5	171.0	241.9	254.7	210.5	169.8	167.5
87.5°	15.1	16.3	19.8	20.9	33.7	59.3	87.2	107.0	84.9	72.1	66.3
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)