

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: P885004

Luminaire Tested: **NAV-SB6A-830-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885004
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-830-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 3000K, 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: 23616 lumens
Efficiency: N/A
Efficacy: 138.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

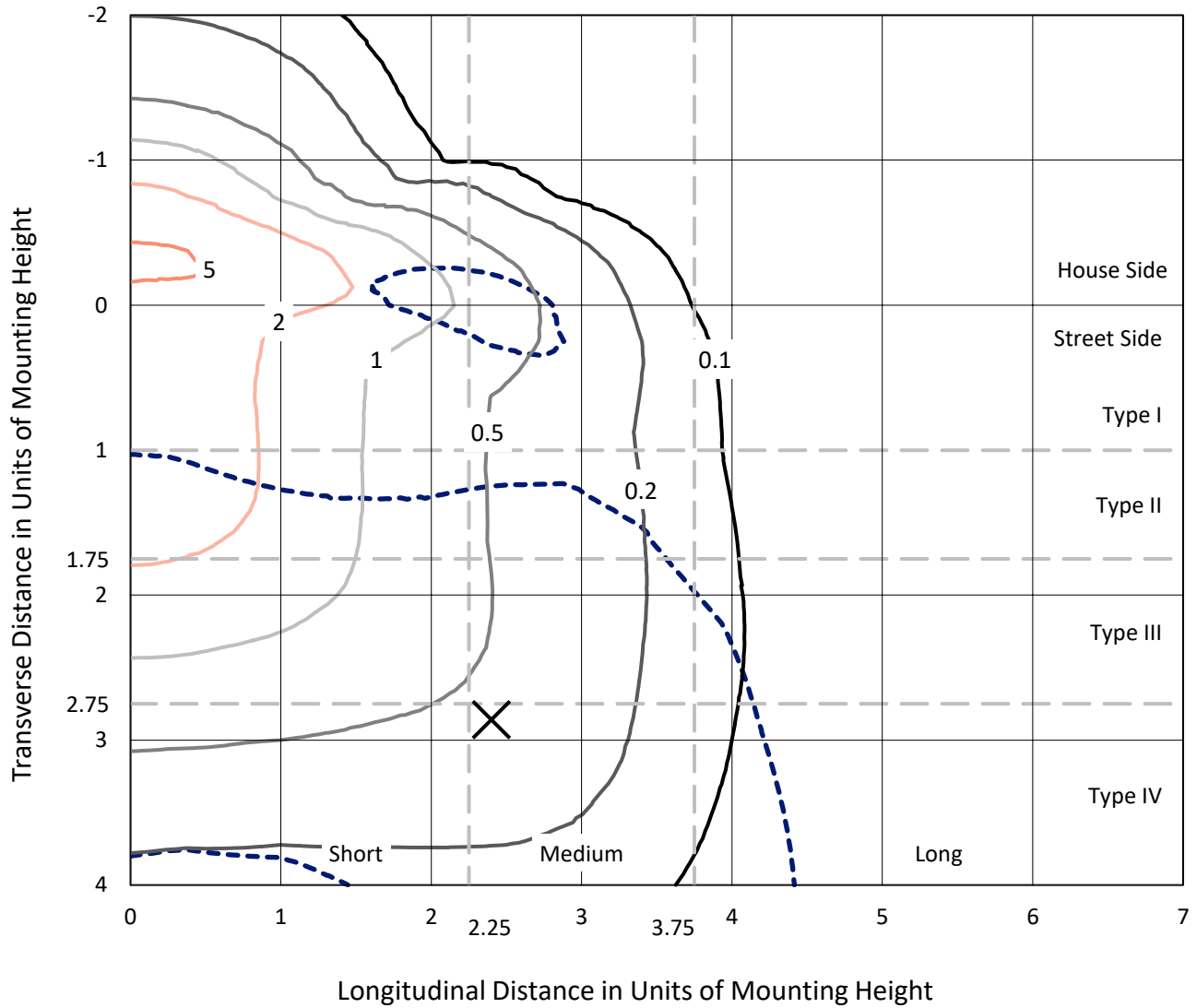
Input Watts (W): 170.9
Input Voltage (V): 120.0
Input Current (Ain): 1.434
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

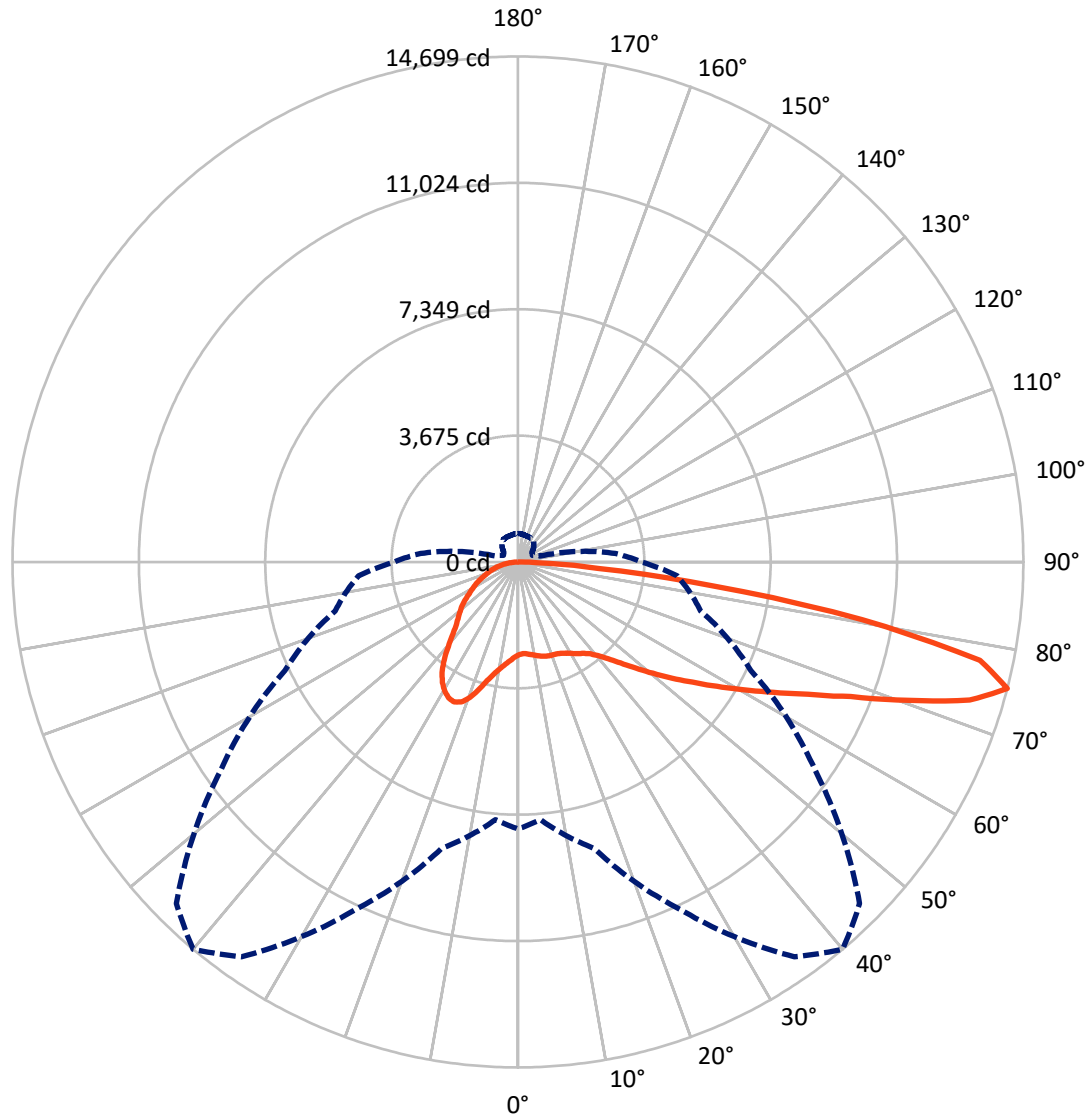
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7317.0	0.0	7317.0
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	16299.0	0.0	16299.0
	% Fixture	69.0	0.0	69.0
Total	Lumens	23616.0	0.0	23616.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.6	1.1
10°-20°	905.0	3.8
20°-30°	1652.5	7.0
30°-40°	2343.8	9.9
40°-50°	3164.8	13.4
50°-60°	4257.5	18.0
60°-70°	5403.7	22.9
70°-80°	4904.2	20.8
80°-90°	714.9	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°	23616.0	100.0
0°-180°	23616.0	100.0

Coefficient of Utilization



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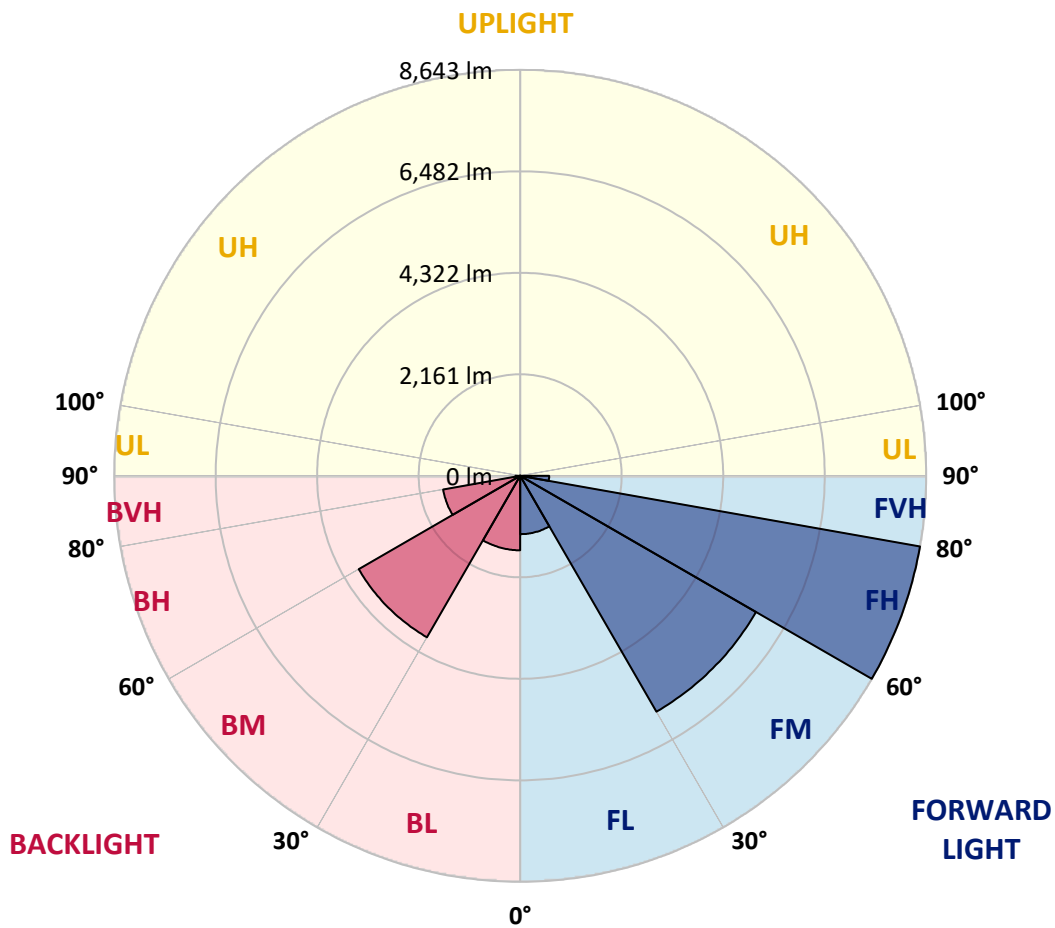
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1242.2	5.3			
FM (30°-60°)	5797.2	24.5			
FH (60°-80°)	8643.1	36.6			G4/12000
FVH (80°-90°)	616.5	2.6			G4/750
BL (0°-30°)	1584.9	6.7	B3/2500		
BM (30°-60°)	3968.8	16.8	B3/5000		
BH (60°-80°)	1664.8	7.0	B3/2500		G3/2500
BVH (80°-90°)	98.4	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	2700.5	2700.5	2700.5	2700.5	2700.5	2700.5	2700.5	2700.5	2700.5	2700.5	2700.5
2.5°	2659.2	2674.2	2670.5	2665.4	2665.4	2666.7	2665.4	2674.2	2683.0	2691.8	2705.5
5°	2686.7	2701.8	2694.3	2688.0	2683.0	2681.7	2678.0	2676.7	2681.7	2693.0	2711.8
7.5°	2740.6	2755.6	2744.4	2733.1	2723.1	2718.1	2713.0	2705.5	2701.8	2708.0	2734.3
10°	2800.7	2815.8	2802.0	2781.9	2765.7	2759.4	2754.4	2746.9	2741.9	2745.6	2774.4
12.5°	2860.8	2875.9	2857.1	2829.5	2808.2	2804.5	2798.2	2795.7	2794.5	2793.2	2822.0
15°	2917.2	2929.7	2905.9	2873.4	2850.8	2844.6	2838.3	2842.1	2848.3	2855.8	2888.4
17.5°	2961.1	2973.6	2938.5	2895.9	2874.6	2872.1	2868.4	2880.9	2898.4	2917.2	2957.3
20°	3001.1	3013.7	2968.6	2911.0	2885.9	2885.9	2887.2	2913.5	2938.5	2966.1	3021.2
22.5°	3057.5	3067.5	3012.4	2933.5	2897.2	2899.7	2909.7	2936.0	2967.3	3004.9	3081.3
25°	3141.4	3148.9	3081.3	2976.1	2934.7	2942.3	2951.0	2963.6	2993.6	3037.5	3140.2
27.5°	3276.7	3283.0	3194.0	3051.2	2988.6	3001.1	3013.7	3004.9	3018.7	3056.2	3187.8
30°	3467.1	3470.8	3358.1	3169.0	3080.0	3086.3	3088.8	3052.5	3026.2	3056.2	3221.6
32.5°	3692.5	3691.3	3557.3	3311.8	3184.0	3177.7	3156.5	3085.1	3023.7	3050.0	3251.6
35°	4042.0	4028.2	3855.4	3512.2	3301.8	3262.9	3212.8	3121.4	3036.2	3043.7	3278.0
37.5°	4620.7	4578.1	4338.9	3840.4	3477.1	3378.2	3304.3	3180.3	3063.8	3041.2	3309.3
40°	5273.3	5219.4	4956.4	4290.0	3740.1	3581.1	3462.1	3264.2	3108.9	3052.5	3355.6
42.5°	6047.4	5971.0	5687.9	4819.9	4073.3	3842.9	3663.7	3370.6	3175.2	3088.8	3418.2
45°	6998.1	6896.6	6495.8	5417.3	4492.9	4186.1	3946.8	3532.2	3276.7	3159.0	3512.2
47.5°	7958.8	7983.8	7413.9	6101.2	4996.5	4609.4	4301.3	3775.2	3424.5	3271.7	3663.7
50°	8979.6	8997.1	8327.0	6859.0	5567.6	5087.9	4699.6	4047.0	3629.9	3432.0	3890.5
52.5°	9776.2	9778.7	9156.2	7651.9	6162.6	5614.0	5129.2	4357.7	3867.9	3645.0	4192.3
55°	10274.8	10268.5	9737.4	8402.2	6846.5	6166.4	5605.2	4710.9	4158.5	3895.5	4571.8
57.5°	10636.7	10618.0	10138.2	9047.2	7575.5	6818.9	6143.8	5111.7	4501.7	4193.6	5071.6
60°	10774.5	10763.3	10410.0	9604.6	8342.1	7540.4	6765.1	5560.1	4891.2	4545.5	5714.2
62.5°	10827.1	10848.4	10676.8	10144.5	9162.5	8339.5	7447.7	6096.2	5329.6	4943.9	6391.8
65°	11012.5	11051.3	11016.3	10850.9	10089.4	9275.2	8353.3	6733.8	5808.1	5371.0	7099.5
67.5°	11379.5	11418.3	11433.4	11696.4	11221.7	10441.3	9483.1	7527.9	6368.0	5814.4	7631.9
70°	11370.7	11359.5	11625.0	12369.0	12639.6	12055.9	11006.3	8504.9	7035.6	6182.6	7699.5
72.5°	10349.9	10259.7	10887.3	12361.5	13819.5	13741.8	12866.3	9765.0	7611.8	6227.7	6681.2
75°	7764.6	7524.1	8632.6	11140.3	14016.2	14698.8	14048.7	10546.6	7475.3	5502.5	4649.5
77.5°	3320.5	3078.8	4385.2	8246.9	12544.4	13740.6	12964.0	9201.3	5967.2	3638.7	2283.4
80°	869.3	868.0	1325.2	3738.9	8531.2	10147.0	8901.9	5942.1	3409.5	1300.2	630.0
82.5°	359.5	350.7	487.2	1454.2	4168.5	5694.1	4647.0	2650.4	1231.3	352.0	209.2
85°	134.0	132.8	236.7	502.3	1470.5	2348.6	1699.7	677.6	306.9	171.6	93.9
87.5°	37.6	36.3	51.4	174.1	358.2	543.6	290.6	111.5	86.4	67.6	27.6
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°	2700.5	2700.5	2700.5	2700.5	2700.5	2700.5	2700.5	2700.5	2700.5	2700.5	2700.5
2.5°	2709.3	2715.6	2726.8	2735.6	2746.9	2759.4	2776.9	2788.2	2799.5	2807.0	2802.0
5°	2720.6	2734.3	2763.1	2792.0	2825.8	2857.1	2893.4	2919.7	2941.0	2947.3	2949.8
7.5°	2745.6	2768.2	2817.0	2865.9	2919.7	2971.1	3023.7	3068.8	3105.1	3118.9	3120.1
10°	2789.5	2819.5	2888.4	2957.3	3028.7	3107.6	3175.2	3240.4	3291.7	3313.0	3314.3
12.5°	2844.6	2882.1	2972.3	3067.5	3166.5	3275.4	3363.1	3443.3	3507.2	3536.0	3536.0
15°	2916.0	2964.8	3080.0	3207.8	3353.1	3504.7	3616.1	3705.1	3776.5	3811.5	3809.0
17.5°	2993.6	3058.8	3204.1	3396.9	3604.9	3804.0	3934.3	3999.4	4073.3	4107.1	4105.9
20°	3068.8	3148.9	3356.9	3637.4	3914.3	4125.9	4231.2	4248.7	4253.7	4257.5	4267.5
22.5°	3146.4	3254.2	3548.5	3940.6	4237.4	4384.0	4399.0	4323.8	4218.6	4169.8	4183.6
25°	3231.6	3374.4	3799.0	4275.0	4515.5	4533.0	4417.8	4234.9	4035.8	3944.3	3958.1
27.5°	3314.3	3513.4	4099.6	4594.4	4715.9	4561.8	4313.8	4054.5	3814.0	3717.6	3728.9
30°	3396.9	3672.5	4431.6	4873.7	4807.3	4490.4	4149.7	3860.4	3618.6	3517.2	3528.5
32.5°	3480.9	3857.9	4813.6	5075.4	4791.0	4338.9	3945.6	3642.4	3429.5	3323.0	3336.8
35°	3576.1	4085.9	5175.6	5185.6	4682.1	4115.9	3676.3	3381.9	3196.5	3111.4	3130.1
37.5°	3700.1	4375.2	5495.0	5213.2	4491.7	3789.0	3341.8	3073.8	2921.0	2882.1	2909.7
40°	3854.1	4723.4	5739.2	5169.3	4209.9	3391.9	2976.1	2761.9	2675.5	2684.2	2714.3
42.5°	4054.5	5113.0	5910.8	5056.6	3817.8	2982.3	2655.4	2560.2	2601.6	2636.6	2669.2
45°	4315.1	5517.5	6017.3	4864.9	3374.4	2635.4	2466.3	2488.8	2520.2	2523.9	2549.0
47.5°	4648.3	5927.1	6087.4	4575.6	2922.2	2391.1	2346.0	2351.1	2344.8	2318.5	2338.5
50°	5064.1	6325.4	6150.1	4192.3	2537.7	2238.3	2178.2	2160.7	2074.2	1989.1	2000.3
52.5°	5537.6	6691.2	6176.4	3716.3	2238.3	2110.6	2012.9	1902.6	1741.1	1714.8	1723.5
55°	6063.6	7029.4	6108.7	3131.4	1986.6	1946.5	1798.7	1665.9	1648.4	1625.8	1629.6
57.5°	6692.4	7393.9	5971.0	2478.8	1728.5	1754.8	1610.8	1625.8	1594.5	1559.4	1553.2
60°	7380.1	7770.9	5729.2	1883.9	1461.7	1515.6	1561.9	1560.7	1551.9	1523.1	1513.1
62.5°	7998.9	8018.9	5253.2	1443.0	1227.5	1330.2	1456.7	1455.5	1448.0	1431.7	1425.4
65°	8367.1	7981.3	4459.1	1136.1	1034.6	1177.4	1313.9	1324.0	1325.2	1324.0	1324.0
67.5°	8302.0	7541.7	3369.4	904.3	875.5	1022.1	1172.4	1186.2	1196.2	1198.7	1201.2
70°	7565.5	6575.9	2197.0	721.5	734.0	885.6	1038.4	1052.2	1060.9	1070.9	1075.9
72.5°	5897.1	4834.9	1257.6	583.7	610.0	767.8	905.6	921.9	926.9	945.7	953.2
75°	3593.6	2843.3	678.9	459.7	501.0	656.3	774.1	792.9	801.6	824.2	826.7
77.5°	1708.5	1231.3	387.0	358.2	403.3	536.1	653.8	675.1	651.3	663.9	653.8
80°	577.4	457.2	244.2	273.1	308.1	418.4	523.6	544.9	494.8	492.3	487.2
82.5°	201.7	185.4	155.3	181.6	199.2	299.4	395.8	423.4	368.3	367.0	349.5
85°	78.9	75.2	86.4	99.0	119.0	184.1	260.5	274.3	226.7	182.9	180.4
87.5°	16.3	17.5	21.3	22.5	36.3	63.9	93.9	115.2	91.4	77.7	71.4
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)