

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: P967919

Luminaire Tested: **NAV-SB5A-835-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967919
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-835-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21831.5 lumens
Efficiency: N/A
Efficacy: 154.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 141.7
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



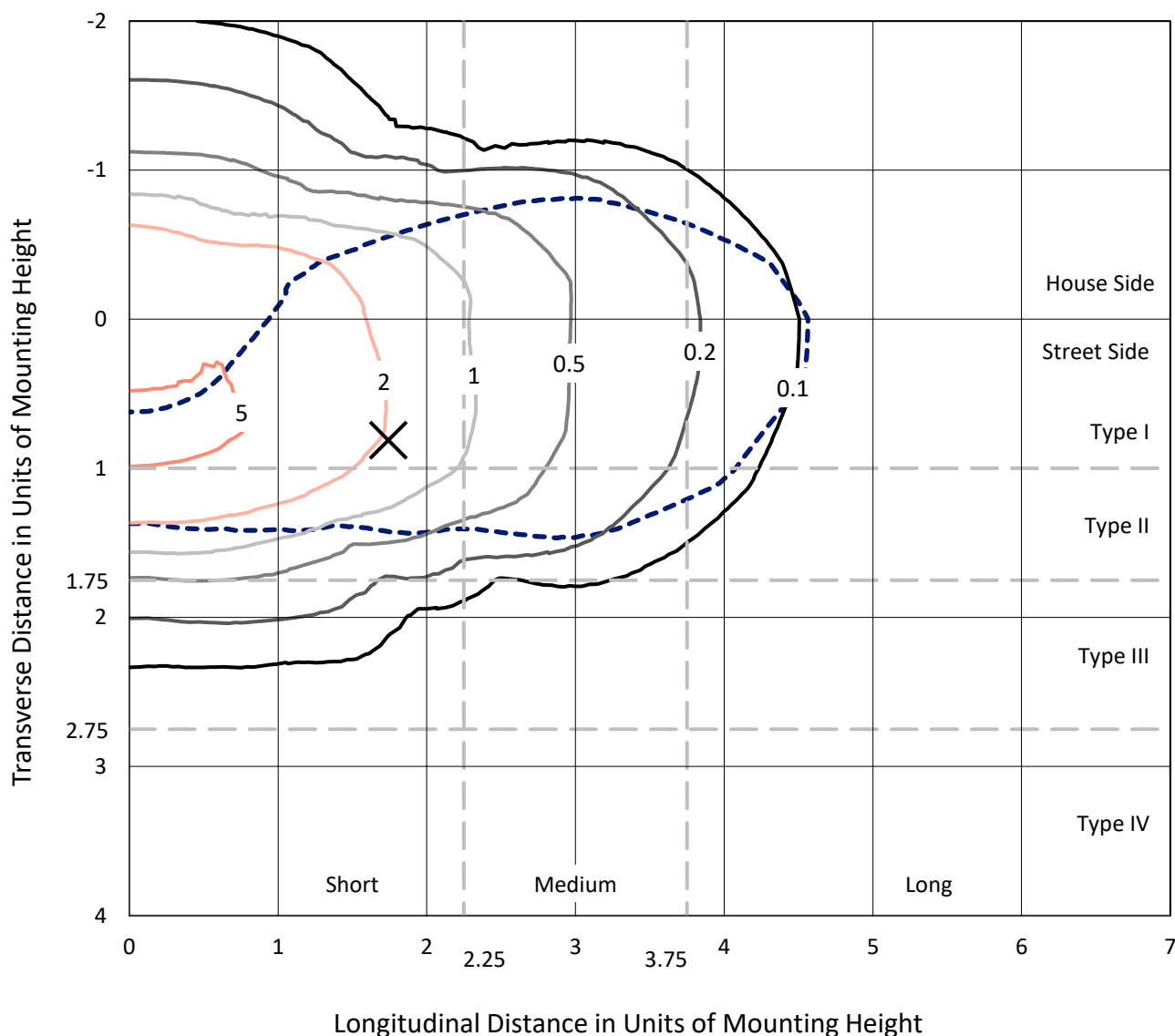
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

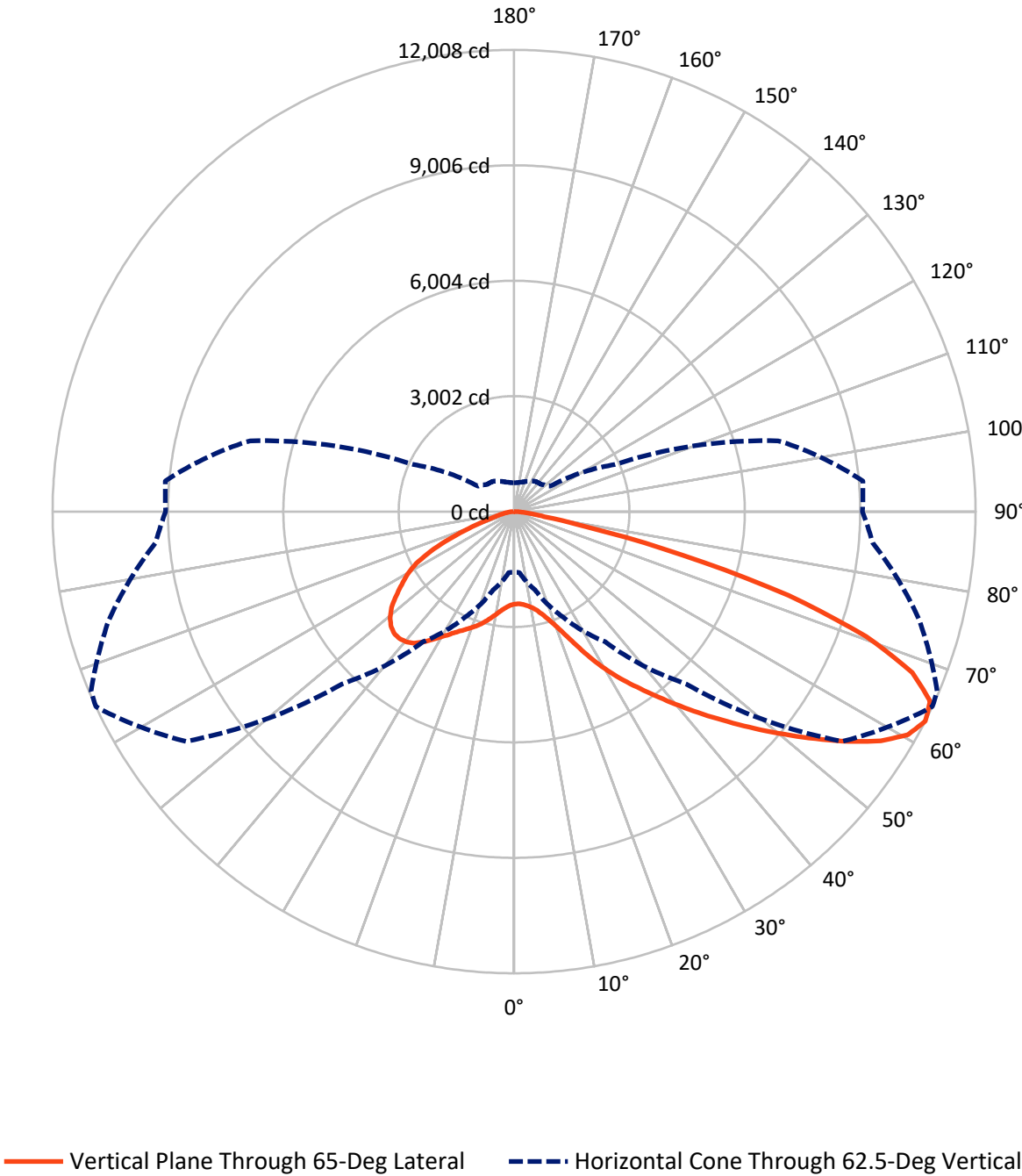


Based on 25 foot mounting height. Maximum calculated value = 6.1 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6889.0	0.0	6889.0
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	14942.4	0.0	14942.4
	% Fixture	68.4	0.0	68.4
Total	Lumens	21831.5	0.0	21831.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	239.9	1.1
10°-20°	813.3	3.7
20°-30°	1649.2	7.6
30°-40°	2853.8	13.1
40°-50°	4318.7	19.8
50°-60°	5063.4	23.2
60°-70°	4245.1	19.4
70°-80°	2343.6	10.7
80°-90°	304.4	1.4
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°	21831.5	100.0
0°-180°	21831.5	100.0

Coefficient of Utilization



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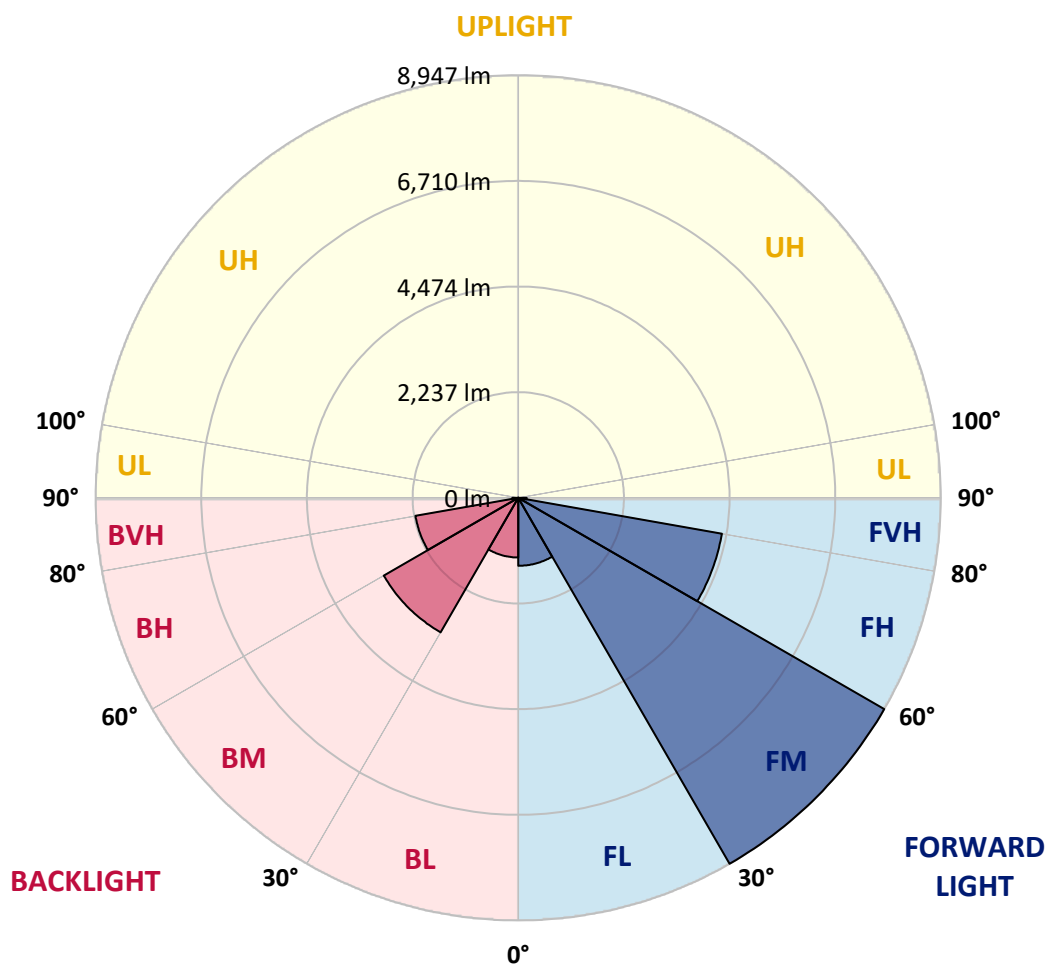
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1439.0	6.6			
FM	(30°-60°)	8947.2	41.0			
FH	(60°-80°)	4378.8	20.1			G2/5000
FVH	(80°-90°)	177.4	0.8			G2/225
BL	(0°-30°)	1263.4	5.8	B3/2500		
BM	(30°-60°)	3288.7	15.1	B3/5000		
BH	(60°-80°)	2209.9	10.1	B3/2500		G3/2500
BVH	(80°-90°)	127.0	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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	2405.8	2405.8	2405.8	2405.8	2405.8	2405.8	2405.8	2405.8	2405.8	2405.8	2405.8
2.5°	2389.9	2383.1	2388.8	2388.8	2391.0	2389.9	2397.8	2400.0	2403.4	2410.3	2410.3
5°	2366.1	2365.0	2375.1	2384.3	2393.3	2401.2	2411.4	2426.1	2428.4	2436.3	2446.5
7.5°	2358.1	2351.4	2367.2	2378.5	2400.0	2419.3	2446.5	2471.4	2481.6	2485.0	2504.3
10°	2419.3	2408.0	2422.7	2429.6	2447.6	2466.9	2498.6	2538.2	2549.6	2563.2	2584.7
12.5°	2523.5	2511.0	2532.6	2542.8	2559.7	2576.7	2598.3	2636.8	2642.4	2667.4	2687.8
15°	2666.2	2651.5	2665.1	2677.6	2705.9	2721.8	2743.3	2780.6	2780.6	2799.9	2814.6
17.5°	2860.0	2840.7	2850.8	2855.3	2873.5	2897.3	2933.5	2966.4	2983.4	2976.6	2956.2
20°	3148.7	3124.9	3124.9	3102.3	3095.5	3114.8	3162.3	3207.6	3225.8	3190.6	3140.8
22.5°	3582.6	3548.6	3529.3	3452.3	3421.8	3424.0	3471.6	3527.0	3541.8	3479.5	3367.3
25°	4134.1	4080.9	4054.9	3941.6	3872.6	3812.5	3849.9	3921.2	3941.6	3864.6	3683.3
27.5°	4685.8	4689.2	4664.3	4528.3	4414.0	4304.1	4284.8	4359.5	4381.1	4293.8	4069.6
30°	5459.4	5378.9	5331.3	5168.3	5005.2	4851.1	4771.8	4802.4	4808.1	4703.8	4443.4
32.5°	6126.4	6106.1	6004.1	5861.5	5651.8	5410.7	5278.1	5229.4	5220.3	5072.0	4762.8
35°	6886.5	6875.2	6767.6	6597.6	6371.1	6035.8	5796.9	5657.6	5646.2	5437.8	5078.8
37.5°	7658.9	7658.9	7553.6	7367.8	7133.4	6714.3	6350.7	6129.9	6093.6	5821.8	5400.4
40°	8275.1	8237.7	8257.0	8178.8	7910.3	7465.3	6965.8	6645.2	6596.5	6270.3	5742.5
42.5°	8625.1	8612.7	8728.2	8815.4	8705.5	8349.9	7643.1	7203.6	7135.6	6764.2	6136.7
45°	8703.3	8689.6	8895.8	9215.2	9369.2	9223.2	8379.3	7791.4	7708.7	7280.7	6559.2
47.5°	8523.2	8495.9	8798.4	9302.4	9796.2	10053.3	9176.7	8429.1	8309.1	7783.5	6993.0
50°	7981.8	7955.6	8413.3	9082.6	9940.0	10617.4	10042.0	9105.3	8921.8	8322.7	7431.2
52.5°	6804.9	6817.4	7534.4	8454.1	9750.9	10968.5	10787.3	9817.8	9596.9	8874.2	7842.4
55°	5300.8	5328.0	6209.1	7221.7	8994.3	10915.3	11295.8	10551.7	10332.0	9393.0	8267.1
57.5°	3795.5	3915.5	4741.2	5743.6	7541.1	10071.4	11406.8	11249.4	11036.5	9959.3	8682.9
60°	2460.1	2481.6	3331.1	4341.4	5742.5	8571.9	11181.4	11778.4	11611.8	10537.0	9030.6
62.5°	1576.7	1591.3	2108.9	3036.7	4133.0	6341.7	10422.6	12008.3	11957.3	10918.7	9364.7
65°	1158.7	1147.4	1417.0	2007.1	2784.0	3911.0	8949.0	11897.3	11998.1	11157.6	9641.0
67.5°	967.3	951.4	1083.9	1389.8	2051.2	2221.1	6621.4	11175.8	11545.0	11130.5	9843.8
70°	881.2	867.6	948.0	1031.9	1600.4	1487.2	3337.9	9715.8	10284.4	10821.2	9811.0
72.5°	746.4	722.6	832.5	916.4	1244.8	1140.6	1379.5	7463.0	8156.1	9830.2	9348.8
75°	578.8	562.9	656.9	806.5	935.5	890.2	872.2	4531.7	5288.3	7602.3	8178.8
77.5°	458.7	437.2	523.3	628.6	841.5	671.7	635.4	1951.5	2701.4	4853.4	6119.7
80°	345.4	326.2	397.6	497.2	646.8	506.2	411.1	796.2	1018.2	2459.0	3077.4
82.5°	245.8	228.8	277.5	364.7	434.9	454.2	252.6	446.3	501.7	948.0	687.5
85°	157.4	147.3	185.7	228.8	276.3	292.2	154.1	233.3	255.9	390.7	286.6
87.5°	86.1	70.2	99.6	106.5	128.0	116.6	73.6	85.0	91.7	141.6	121.2
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°	2405.8	2405.8	2405.8	2405.8	2405.8	2405.8	2405.8	2405.8	2405.8	2405.8	2405.8
2.5°	2414.8	2418.2	2429.6	2432.9	2440.8	2451.1	2457.8	2464.6	2464.6	2471.4	2471.4
5°	2447.6	2455.6	2479.4	2491.8	2512.2	2532.6	2545.1	2559.7	2568.9	2573.4	2575.6
7.5°	2511.0	2523.5	2557.5	2579.0	2614.2	2642.4	2661.7	2682.1	2686.6	2699.1	2694.5
10°	2597.1	2611.9	2650.3	2691.1	2733.1	2768.2	2786.3	2801.0	2806.7	2808.9	2803.3
12.5°	2695.6	2717.2	2767.1	2816.9	2861.1	2891.6	2896.1	2892.8	2876.9	2863.3	2863.3
15°	2816.9	2836.2	2891.6	2946.1	2989.0	2994.7	2966.4	2948.3	2929.0	2925.7	2925.7
17.5°	2961.8	2972.1	3023.0	3076.2	3079.6	3060.4	3018.5	3001.5	2983.4	2971.0	2972.1
20°	3130.7	3127.3	3163.5	3186.1	3162.3	3103.4	3040.0	3011.7	2993.6	2978.9	2980.0
22.5°	3332.3	3306.1	3301.6	3296.0	3232.5	3109.1	3023.0	2986.7	2958.5	2938.1	2944.8
25°	3625.6	3525.9	3456.8	3418.3	3275.6	3078.5	2968.7	2888.2	2835.0	2799.9	2813.5
27.5°	3992.6	3824.9	3650.5	3556.5	3275.6	3016.3	2837.3	2707.0	2619.8	2583.5	2601.7
30°	4342.5	4167.0	3909.9	3723.0	3267.7	2914.3	2625.4	2444.2	2342.3	2306.0	2327.6
32.5°	4641.6	4450.1	4185.1	3905.4	3248.4	2748.9	2362.7	2162.2	2063.6	2020.7	2042.1
35°	4919.1	4715.2	4461.5	4105.8	3197.5	2506.5	2073.9	1921.0	1811.1	1742.0	1764.6
37.5°	5203.4	4961.0	4723.1	4287.1	3105.7	2223.3	1851.9	1721.6	1592.5	1499.6	1524.6
40°	5512.6	5222.6	5002.9	4394.7	2955.1	1953.9	1679.7	1560.8	1423.7	1325.2	1344.5
42.5°	5873.9	5536.3	5314.3	4450.1	2748.9	1762.4	1567.5	1450.9	1321.8	1241.4	1257.3
45°	6251.1	5881.9	5598.7	4449.0	2519.0	1672.9	1531.4	1415.8	1273.0	1189.3	1202.8
47.5°	6646.3	6243.2	5844.4	4376.5	2319.7	1685.4	1511.0	1339.9	1182.4	1101.0	1112.2
50°	7042.8	6638.4	6082.2	4240.6	2234.7	1658.1	1435.1	1233.5	1047.7	974.1	978.6
52.5°	7435.8	7058.7	6287.3	4046.9	2148.6	1557.4	1337.6	1095.3	992.2	941.3	941.3
55°	7831.1	7474.3	6510.4	3764.9	1933.5	1439.6	1174.5	1043.1	948.0	901.6	897.1
57.5°	8227.5	7954.5	6722.3	3482.8	1662.8	1294.6	1085.1	979.7	903.8	864.2	857.4
60°	8639.8	8503.9	6940.8	3223.5	1395.4	1108.8	1019.4	928.8	851.8	807.6	804.2
62.5°	9064.6	9108.8	7111.9	2889.4	1149.6	995.6	960.5	867.6	792.8	750.9	749.8
65°	9492.7	9692.0	7224.0	2426.1	932.1	888.0	897.1	800.7	724.9	688.7	687.5
67.5°	9815.5	10112.2	7192.3	1836.0	764.5	786.1	817.7	730.5	659.2	630.9	632.0
70°	9851.7	10062.4	6879.7	1257.3	639.9	686.3	729.4	661.4	587.8	567.4	568.6
72.5°	9369.2	9382.8	6008.7	821.1	541.4	602.6	636.5	591.2	519.9	499.5	498.4
75°	8104.1	7759.8	4411.6	541.4	453.0	517.6	549.3	517.6	448.5	453.0	437.2
77.5°	6140.1	5495.5	2678.7	385.1	378.3	434.9	478.0	455.3	396.5	445.2	391.9
80°	3163.5	2973.2	1194.9	287.7	299.0	347.7	393.0	363.6	313.8	299.0	273.0
82.5°	724.9	842.7	471.2	206.1	216.4	250.3	300.1	273.0	225.4	190.2	188.0
85°	253.7	277.5	208.4	129.1	126.9	156.3	203.9	182.3	152.9	122.3	129.1
87.5°	80.5	105.4	78.1	52.1	54.3	70.2	94.0	86.1	71.3	46.4	48.7
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)