

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: P967764

Luminaire Tested: **NAV-SB5A-740-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967764
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-740-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24901.4 lumens
Efficiency: N/A
Efficacy: 175.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

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

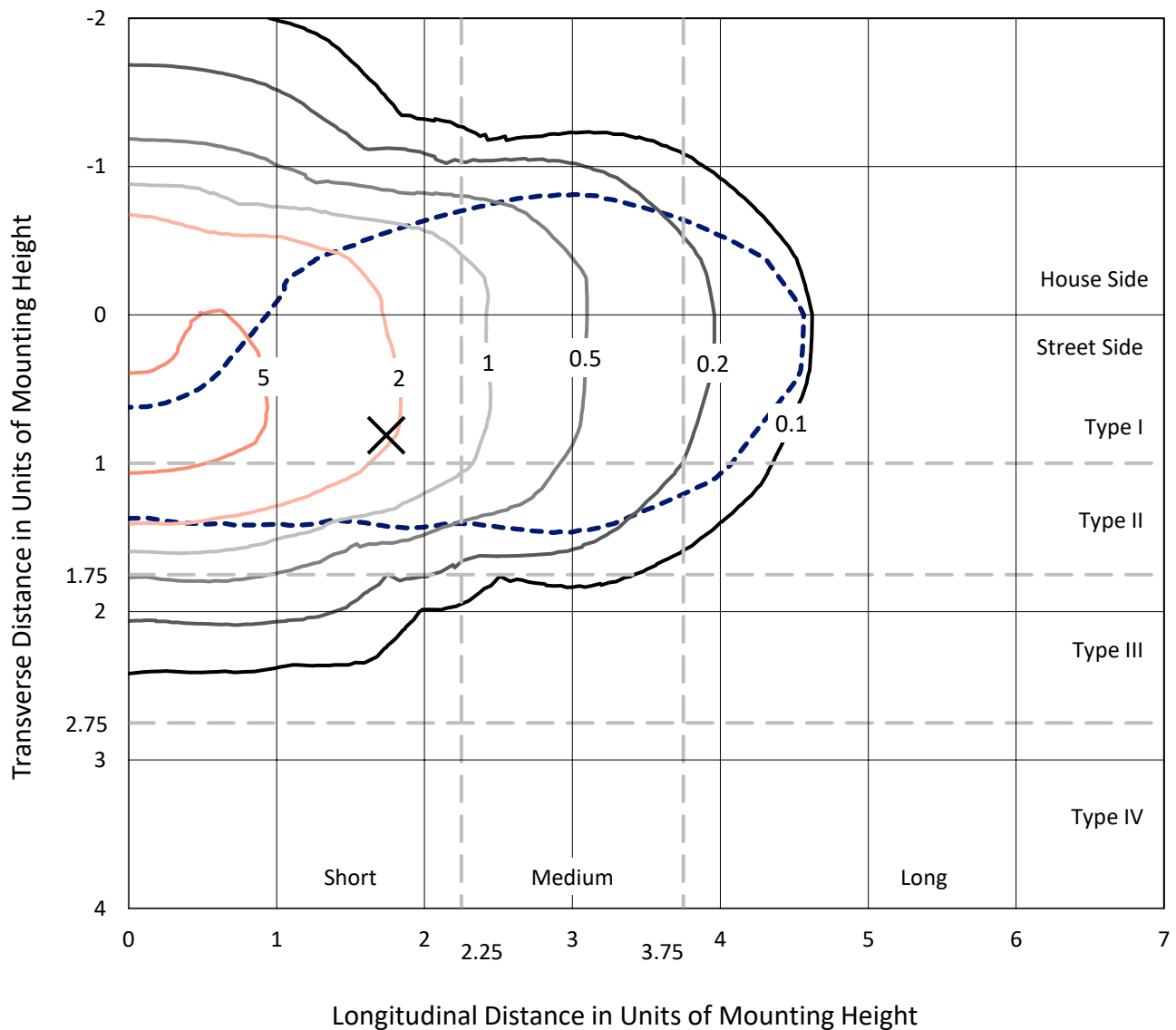


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Iso-Footcandle Lines of Horizontal Illumination

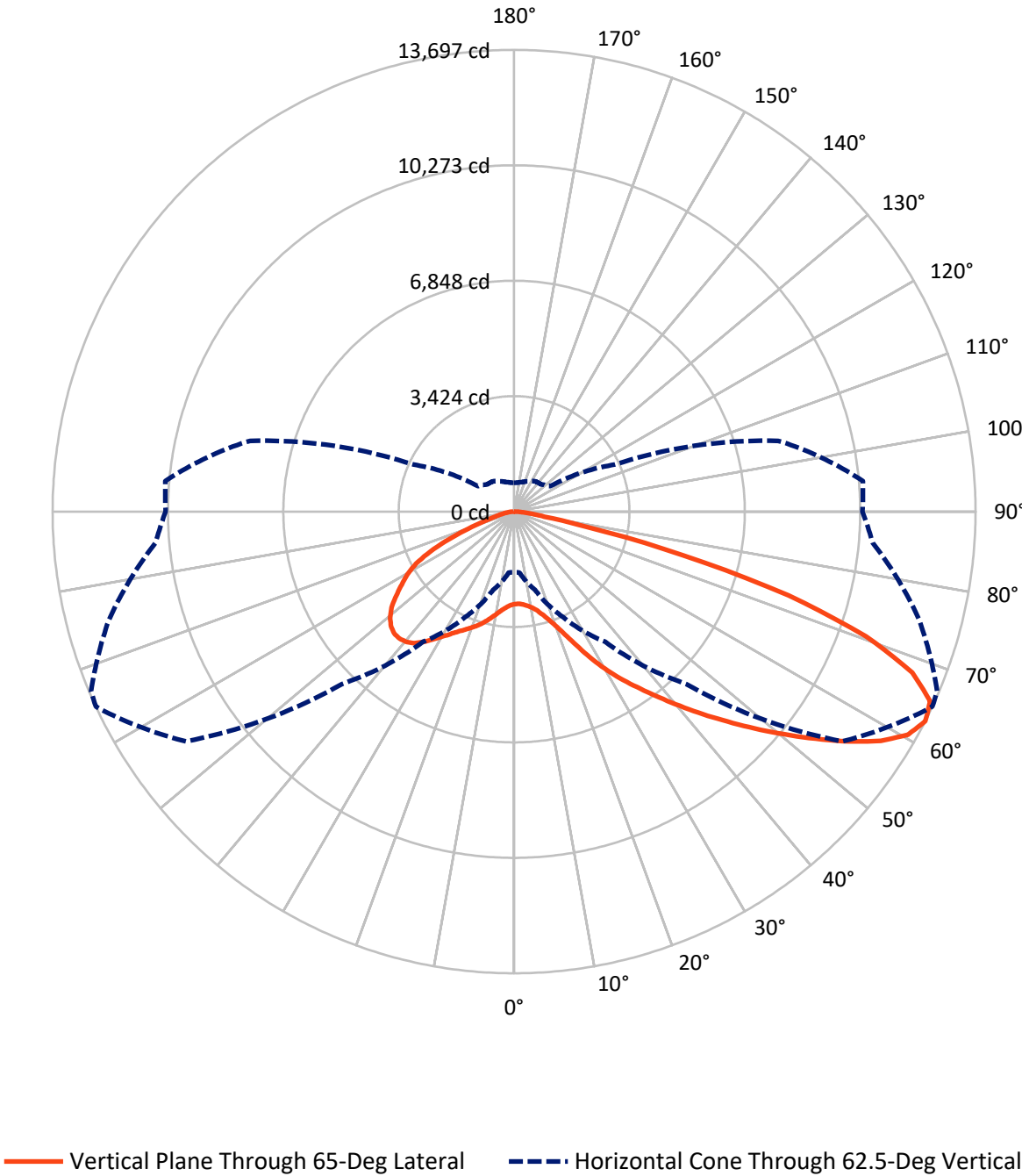
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 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	7857.8	0.0	7857.8
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	17043.6	0.0	17043.6
	% Fixture	68.4	0.0	68.4
Total	Lumens	24901.4	0.0	24901.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	273.6	1.1
10°-20°	927.7	3.7
20°-30°	1881.1	7.6
30°-40°	3255.1	13.1
40°-50°	4926.0	19.8
50°-60°	5775.4	23.2
60°-70°	4842.0	19.4
70°-80°	2673.2	10.7
80°-90°	347.2	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°	24901.4	100.0
0°-180°	24901.4	100.0

Coefficient of Utilization



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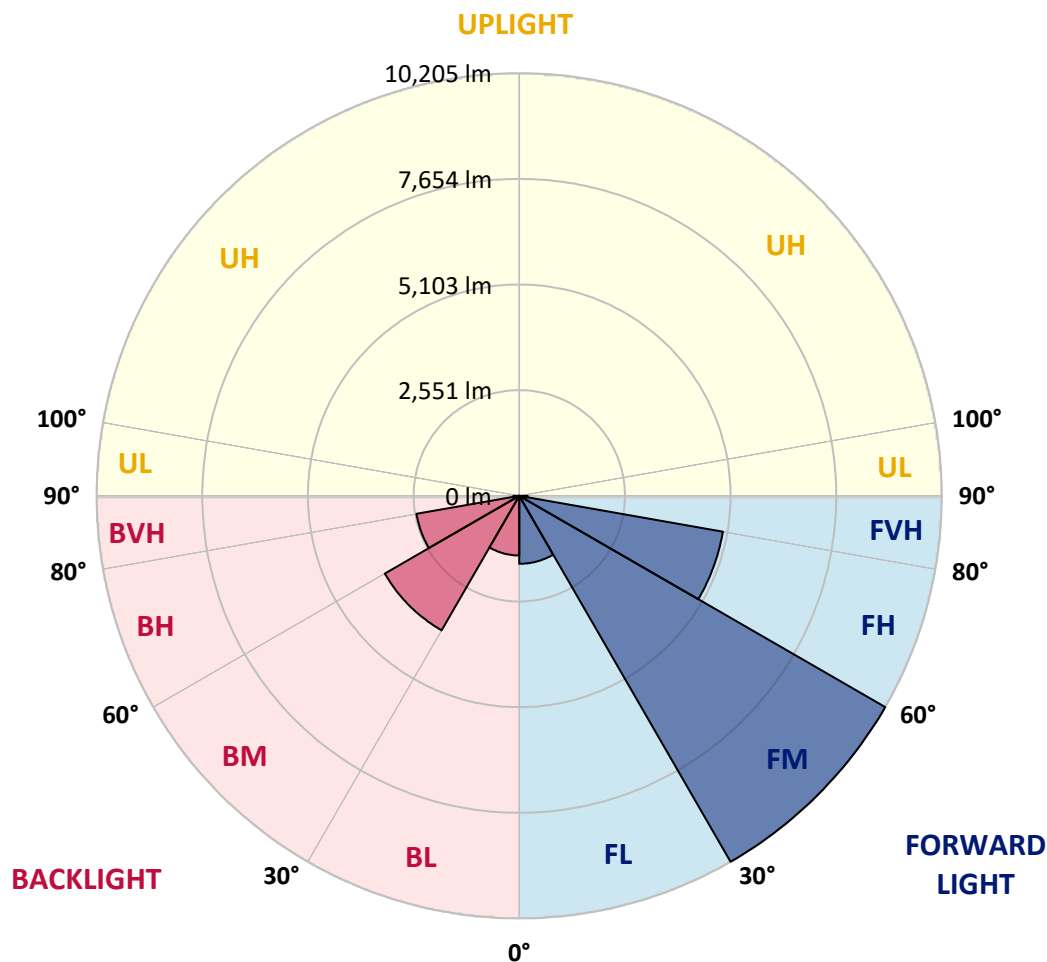
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1641.3	6.6			
FM	(30°-60°)	10205.4	41.0			
FH	(60°-80°)	4994.5	20.1			G2/5000
FVH	(80°-90°)	202.4	0.8			G2/225
BL	(0°-30°)	1441.0	5.8	B3/2500		
BM	(30°-60°)	3751.2	15.1	B3/5000		
BH	(60°-80°)	2520.7	10.1	B4/5000		G4/5000
BVH	(80°-90°)	144.9	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	2744.0	2744.0	2744.0	2744.0	2744.0	2744.0	2744.0	2744.0	2744.0	2744.0	2744.0
2.5°	2725.9	2718.2	2724.7	2724.7	2727.2	2725.9	2735.0	2737.6	2741.5	2749.2	2749.2
5°	2698.8	2697.5	2709.2	2719.4	2729.8	2738.9	2750.5	2767.3	2769.9	2778.9	2790.6
7.5°	2689.8	2682.0	2700.1	2713.0	2737.6	2759.5	2790.6	2819.0	2830.5	2834.4	2856.4
10°	2759.5	2746.6	2763.4	2771.2	2791.8	2813.8	2849.9	2895.2	2908.1	2923.6	2948.1
12.5°	2878.4	2864.2	2888.8	2900.3	2919.7	2939.1	2963.7	3007.6	3014.0	3042.4	3065.7
15°	3041.2	3024.4	3039.8	3054.1	3086.4	3104.4	3129.0	3171.7	3171.7	3193.6	3210.4
17.5°	3262.1	3240.1	3251.7	3256.9	3277.5	3304.7	3346.0	3383.5	3402.9	3395.1	3371.8
20°	3591.5	3564.3	3564.3	3538.5	3530.8	3552.8	3607.0	3658.7	3679.3	3639.4	3582.5
22.5°	4086.4	4047.5	4025.6	3937.7	3902.9	3905.5	3959.7	4023.0	4039.8	3968.8	3840.9
25°	4715.5	4654.7	4625.0	4495.9	4417.0	4348.6	4391.2	4472.6	4495.9	4408.0	4201.3
27.5°	5344.7	5348.6	5320.1	5165.1	5034.6	4909.2	4887.3	4972.6	4997.1	4897.7	4641.8
30°	6227.0	6135.2	6081.0	5895.0	5708.9	5533.3	5442.9	5477.7	5484.2	5365.3	5068.2
32.5°	6987.9	6964.7	6848.4	6685.7	6446.6	6171.4	6020.3	5964.8	5954.4	5785.2	5432.5
35°	7854.8	7841.9	7719.2	7525.3	7267.0	6884.6	6612.0	6453.1	6440.2	6202.5	5792.9
37.5°	8735.9	8735.9	8615.7	8403.9	8136.4	7658.5	7243.8	6991.8	6950.5	6640.5	6159.8
40°	9438.7	9396.1	9418.0	9328.9	9022.7	8515.0	7945.3	7579.7	7524.1	7152.0	6550.0
42.5°	9837.9	9823.7	9955.5	10054.9	9929.6	9524.0	8717.8	8216.6	8139.0	7715.3	6999.6
45°	9927.0	9911.5	10146.7	10511.0	10686.6	10520.1	9557.6	8887.1	8792.8	8304.4	7481.5
47.5°	9721.6	9690.7	10035.6	10610.5	11173.7	11467.0	10467.1	9614.4	9477.5	8878.0	7976.2
50°	9104.2	9074.4	9596.4	10359.9	11337.8	12110.4	11454.1	10385.7	10176.4	9492.9	8476.2
52.5°	7761.8	7776.1	8593.8	9642.8	11122.1	12510.8	12304.2	11198.3	10946.4	10122.1	8945.2
55°	6046.2	6077.1	7082.2	8237.2	10259.1	12450.2	12884.2	12035.4	11784.8	10713.8	9429.7
57.5°	4329.2	4466.1	5407.9	6551.3	8601.6	11487.7	13010.8	12831.3	12588.4	11359.8	9903.8
60°	2806.0	2830.5	3799.5	4951.9	6550.0	9777.2	12753.8	13434.6	13244.6	12018.6	10300.4
62.5°	1798.4	1815.2	2405.6	3463.6	4714.2	7233.4	11888.2	13696.9	13638.8	12454.1	10681.5
65°	1321.6	1308.7	1616.2	2289.2	3175.6	4461.0	10207.4	13570.3	13685.2	12726.6	10996.7
67.5°	1103.3	1085.2	1236.4	1585.2	2339.7	2533.4	7552.5	12747.3	13168.5	12695.6	11228.1
70°	1005.1	989.6	1081.4	1176.9	1825.4	1696.3	3807.3	11082.0	11730.5	12342.9	11190.5
72.5°	851.4	824.2	949.6	1045.2	1419.8	1300.9	1573.6	8512.4	9303.1	11212.5	10663.5
75°	660.2	642.1	749.3	919.8	1067.1	1015.5	994.8	5169.0	6031.9	8671.3	9328.9
77.5°	523.3	498.7	596.9	717.0	959.9	766.1	724.8	2226.0	3081.3	5535.8	6980.2
80°	394.0	372.1	453.5	567.1	737.7	577.5	468.9	908.3	1161.4	2804.7	3510.1
82.5°	280.3	261.0	316.5	415.9	496.1	518.0	288.1	509.0	572.4	1081.4	784.2
85°	179.6	168.0	211.9	261.0	315.2	333.3	175.7	266.1	292.0	445.7	326.9
87.5°	98.2	80.1	113.7	121.5	146.0	133.0	83.9	96.9	104.7	161.5	138.3
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°	2744.0	2744.0	2744.0	2744.0	2744.0	2744.0	2744.0	2744.0	2744.0	2744.0	2744.0
2.5°	2754.4	2758.3	2771.2	2775.0	2784.1	2795.7	2803.5	2811.2	2811.2	2819.0	2819.0
5°	2791.8	2800.9	2828.0	2842.2	2865.5	2888.8	2902.9	2919.7	2930.1	2935.2	2937.9
7.5°	2864.2	2878.4	2917.1	2941.6	2981.7	3014.0	3035.9	3059.2	3064.4	3078.6	3073.5
10°	2962.4	2979.2	3023.0	3069.6	3117.3	3157.4	3178.1	3194.9	3201.4	3203.9	3197.5
12.5°	3074.8	3099.3	3156.2	3213.0	3263.4	3298.2	3303.4	3299.6	3281.4	3266.0	3266.0
15°	3213.0	3234.9	3298.2	3360.3	3409.4	3415.8	3383.5	3362.8	3340.9	3337.0	3337.0
17.5°	3378.4	3390.0	3448.1	3508.9	3512.7	3490.7	3443.0	3423.6	3402.9	3388.6	3390.0
20°	3570.9	3567.0	3608.3	3634.1	3607.0	3539.8	3467.5	3435.2	3414.5	3397.8	3399.0
22.5°	3800.8	3771.1	3766.0	3759.5	3687.1	3546.3	3448.1	3406.8	3374.5	3351.2	3358.9
25°	4135.4	4021.7	3942.9	3899.0	3736.2	3511.4	3386.1	3294.4	3233.7	3193.6	3209.1
27.5°	4554.0	4362.8	4163.9	4056.6	3736.2	3440.4	3236.2	3087.7	2988.2	2946.9	2967.5
30°	4953.2	4752.9	4459.7	4246.5	3727.2	3324.1	2994.6	2787.9	2671.7	2630.4	2654.9
32.5°	5294.2	5075.9	4773.6	4454.5	3705.2	3135.5	2694.9	2466.3	2353.9	2304.8	2329.3
35°	5610.7	5378.3	5088.8	4683.2	3647.1	2859.0	2365.5	2191.0	2065.8	1987.0	2012.8
37.5°	5935.1	5658.6	5387.3	4889.9	3542.4	2536.1	2112.3	1963.7	1816.4	1710.5	1738.9
40°	6287.8	5957.0	5706.4	5012.7	3370.6	2228.6	1915.9	1780.2	1623.9	1511.6	1533.5
42.5°	6699.8	6314.8	6061.6	5075.9	3135.5	2010.2	1788.0	1655.0	1507.7	1415.9	1434.0
45°	7130.1	6708.9	6386.0	5074.7	2873.2	1908.1	1746.7	1614.9	1452.1	1356.5	1372.0
47.5°	7580.9	7121.0	6666.3	4992.0	2645.8	1922.4	1723.4	1528.4	1348.8	1255.7	1268.6
50°	8033.1	7571.9	6937.6	4836.9	2549.0	1891.3	1636.8	1406.9	1195.0	1111.0	1116.2
52.5°	8481.4	8051.2	7171.4	4616.0	2450.8	1776.4	1525.7	1249.3	1131.7	1073.6	1073.6
55°	8932.3	8525.3	7425.9	4294.3	2205.3	1642.0	1339.7	1189.8	1081.4	1028.4	1023.2
57.5°	9384.5	9073.1	7667.5	3972.6	1896.6	1476.6	1237.7	1117.5	1030.9	985.7	978.0
60°	9854.7	9699.7	7916.8	3676.8	1591.6	1264.7	1162.8	1059.3	971.5	921.2	917.3
62.5°	10339.2	10389.6	8112.0	3295.7	1311.3	1135.6	1095.5	989.6	904.4	856.5	855.3
65°	10827.5	11054.9	8239.8	2767.3	1063.2	1012.9	1023.2	913.4	826.9	785.5	784.2
67.5°	11195.7	11534.2	8203.7	2094.2	872.1	896.6	932.7	833.3	751.9	719.6	720.9
70°	11237.1	11477.3	7847.1	1434.0	729.9	782.9	832.0	754.5	670.5	647.3	648.5
72.5°	10686.6	10702.2	6853.6	936.6	617.6	687.3	726.0	674.3	593.0	569.7	568.5
75°	9243.7	8850.9	5032.0	617.6	516.8	590.4	626.6	590.4	511.6	516.8	498.7
77.5°	7003.4	6268.4	3055.4	439.2	431.5	496.1	545.2	519.4	452.1	507.7	447.0
80°	3608.3	3391.3	1362.9	328.1	341.0	396.6	448.3	414.7	357.8	341.0	311.4
82.5°	826.9	961.1	537.4	235.1	246.7	285.5	342.3	311.4	257.1	217.0	214.4
85°	289.4	316.5	237.7	147.3	144.7	178.2	232.6	208.0	174.5	139.5	147.3
87.5°	91.7	120.1	89.2	59.4	62.0	80.1	107.2	98.2	81.4	53.0	55.6
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)