

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: P964695

Luminaire Tested: **NAV-SB3C-827-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964695
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-SB3C-827-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20296 lumens
Efficiency: N/A
Efficacy: 136.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 149.1
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

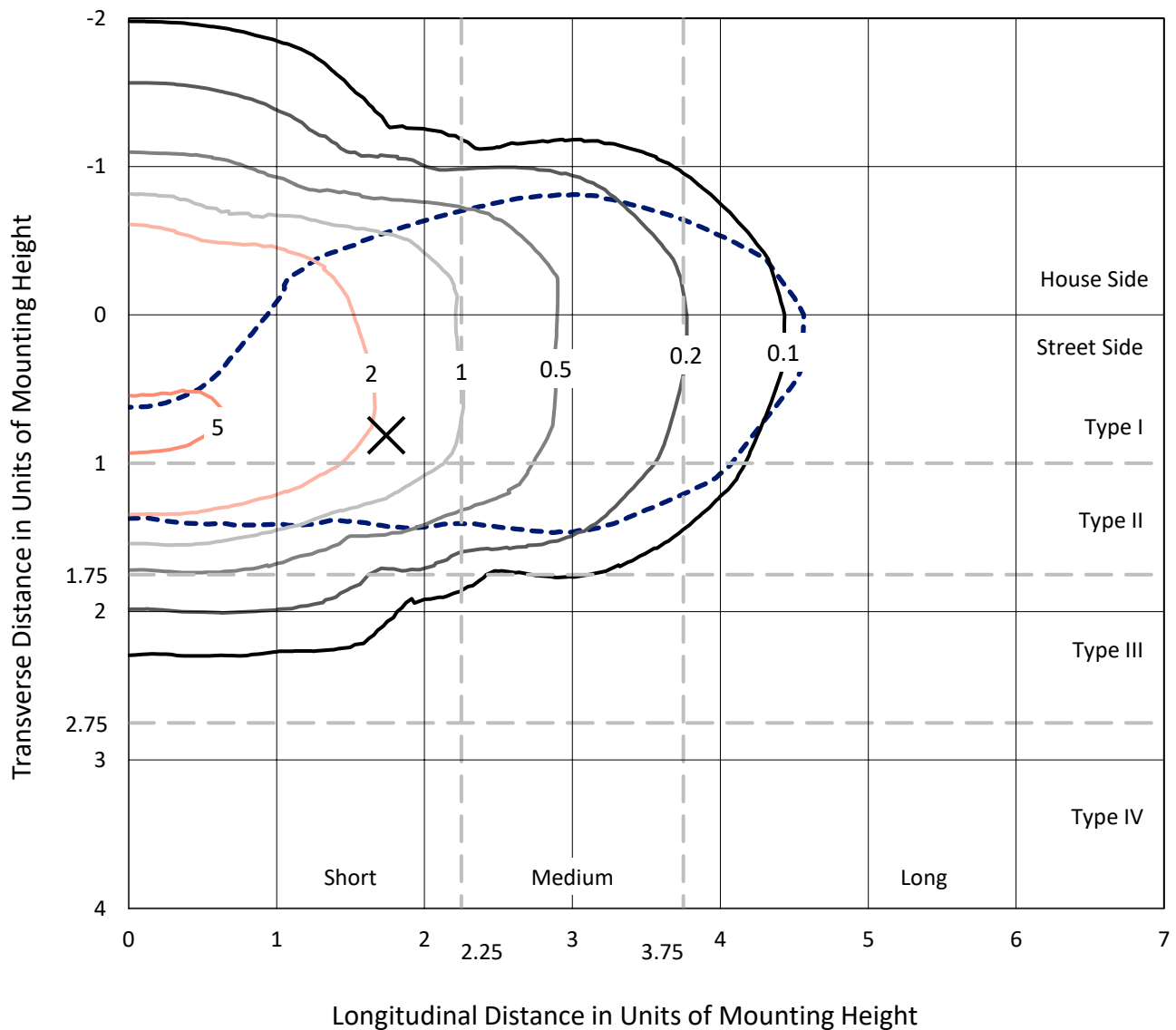


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Iso-Footcandle Lines of Horizontal Illumination

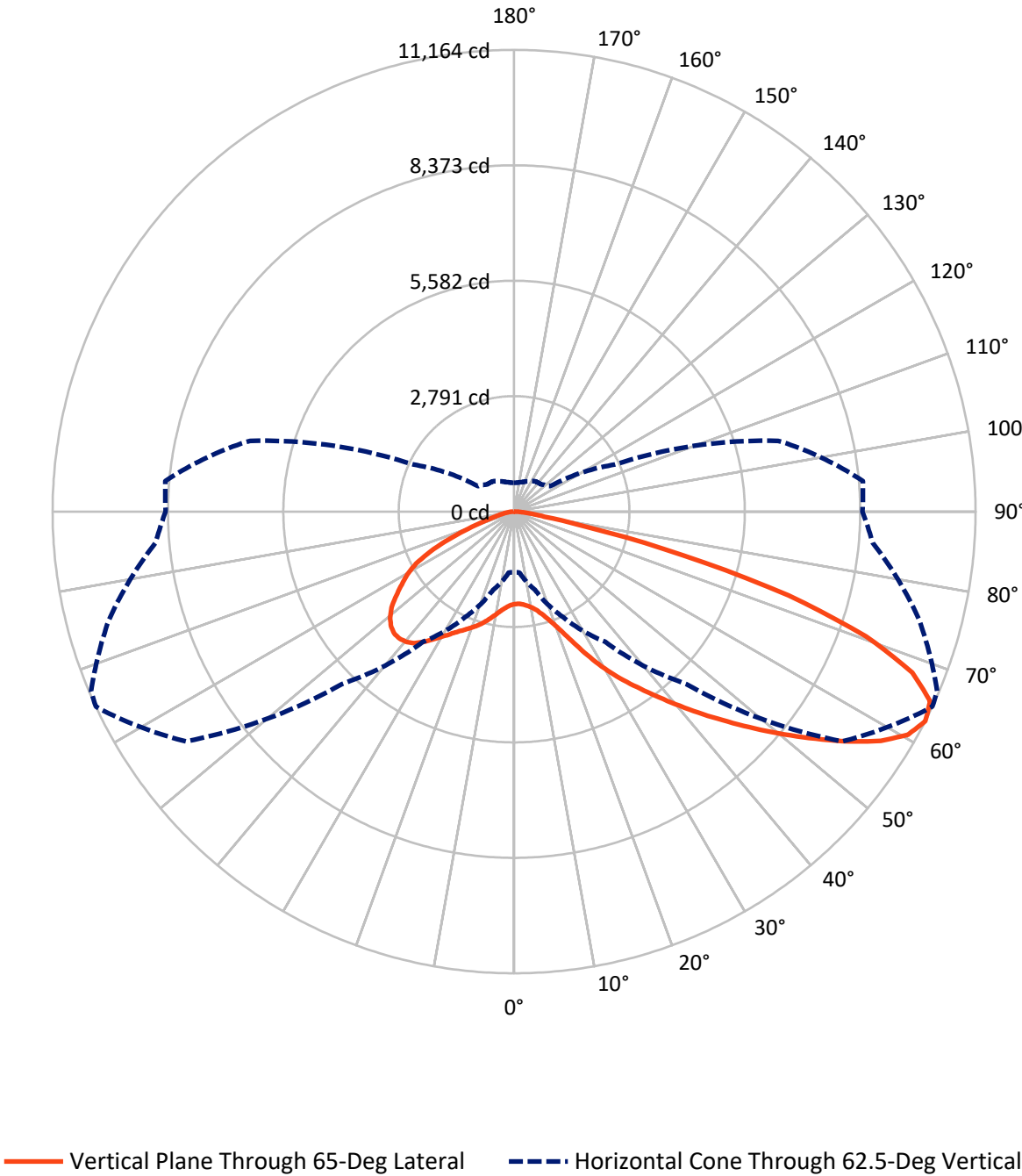
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 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	6404.5	0.0	6404.5
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	13891.5	0.0	13891.5
	% Fixture	68.4	0.0	68.4
Total	Lumens	20296.0	0.0	20296.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.0	1.1
10°-20°	756.1	3.7
20°-30°	1533.2	7.6
30°-40°	2653.1	13.1
40°-50°	4015.0	19.8
50°-60°	4707.3	23.2
60°-70°	3946.5	19.4
70°-80°	2178.8	10.7
80°-90°	283.0	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°	20296.0	100.0
0°-180°	20296.0	100.0

Coefficient of Utilization



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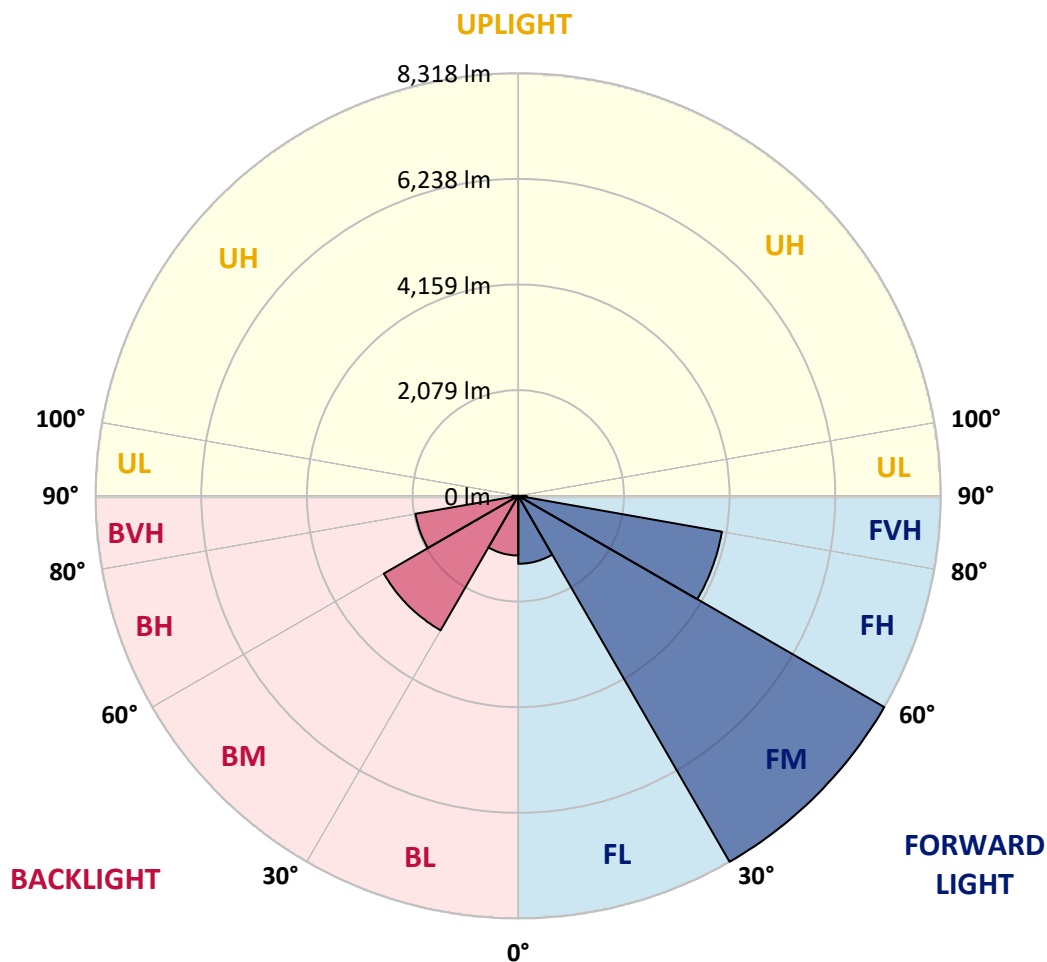
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1337.8	6.6			
FM	(30°-60°)	8318.0	41.0			
FH	(60°-80°)	4070.8	20.1			G2/5000
FVH	(80°-90°)	165.0	0.8			G2/225
BL	(0°-30°)	1174.5	5.8	B3/2500		
BM	(30°-60°)	3057.4	15.1	B3/5000		
BH	(60°-80°)	2054.5	10.1	B3/2500		G3/2500
BVH	(80°-90°)	118.1	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°	2236.5	2236.5	2236.5	2236.5	2236.5	2236.5	2236.5	2236.5	2236.5	2236.5	2236.5
2.5°	2221.8	2215.4	2220.8	2220.8	2222.8	2221.8	2229.2	2231.2	2234.4	2240.8	2240.8
5°	2199.6	2198.6	2208.1	2216.6	2225.0	2232.3	2241.8	2255.5	2257.6	2264.9	2274.5
7.5°	2192.3	2186.0	2200.8	2211.2	2231.2	2249.2	2274.5	2297.6	2307.1	2310.2	2328.2
10°	2249.2	2238.6	2252.3	2258.7	2275.5	2293.4	2322.9	2359.8	2370.3	2382.9	2402.9
12.5°	2346.0	2334.4	2354.4	2364.0	2379.7	2395.5	2415.5	2451.4	2456.6	2479.8	2498.7
15°	2478.8	2465.0	2477.6	2489.2	2515.6	2530.3	2550.3	2585.0	2585.0	2603.0	2616.6
17.5°	2658.7	2640.9	2650.3	2654.5	2671.5	2693.5	2727.2	2757.8	2773.5	2767.2	2748.3
20°	2927.3	2905.2	2905.2	2884.1	2877.8	2895.7	2939.9	2982.0	2998.8	2966.2	2919.9
22.5°	3330.5	3299.0	3281.1	3209.5	3181.1	3183.1	3227.4	3279.0	3292.7	3234.8	3130.6
25°	3843.3	3793.9	3769.6	3664.4	3600.1	3544.3	3579.1	3645.4	3664.4	3592.7	3424.3
27.5°	4356.1	4359.3	4336.2	4209.8	4103.5	4001.3	3983.5	4053.0	4072.9	3991.9	3783.4
30°	5075.4	5000.6	4956.4	4804.8	4653.1	4509.9	4436.2	4464.7	4469.9	4373.1	4130.9
32.5°	5695.6	5676.7	5581.8	5449.2	5254.4	5030.1	4906.9	4861.6	4853.2	4715.2	4427.8
35°	6402.2	6391.6	6291.6	6133.6	5923.1	5611.4	5389.1	5259.7	5249.1	5055.4	4721.6
37.5°	7120.3	7120.3	7022.4	6849.7	6631.6	6242.0	5904.1	5698.7	5665.1	5412.3	5020.7
40°	7693.1	7658.3	7676.2	7603.6	7354.1	6940.2	6475.8	6177.9	6132.6	5829.3	5338.6
42.5°	8018.5	8006.9	8114.3	8195.4	8093.2	7762.6	7105.5	6696.9	6633.8	6288.4	5705.0
45°	8091.1	8078.4	8270.1	8567.1	8710.2	8574.4	7790.0	7243.5	7166.6	6768.6	6097.8
47.5°	7923.7	7898.4	8179.6	8648.1	9107.2	9346.3	8531.3	7836.3	7724.7	7236.1	6501.1
50°	7420.4	7396.2	7821.6	8443.8	9241.0	9870.6	9335.7	8465.0	8294.3	7737.3	6908.6
52.5°	6326.3	6337.9	7004.4	7859.5	9065.1	10197.1	10028.6	9127.2	8921.9	8250.1	7290.8
55°	4928.0	4953.2	5772.5	6713.9	8361.7	10147.6	10501.4	9809.6	9605.3	8732.4	7685.8
57.5°	3528.6	3640.2	4407.8	5339.6	7010.8	9363.1	10604.5	10458.2	10260.2	9258.8	8072.2
60°	2287.1	2307.1	3096.8	4036.0	5338.6	7969.0	10395.0	10950.0	10795.2	9795.9	8395.5
62.5°	1465.7	1479.5	1960.6	2823.1	3842.3	5895.7	9689.5	11163.7	11116.3	10150.8	8706.0
65°	1077.2	1066.7	1317.3	1865.9	2588.2	3636.0	8319.6	11060.6	11154.3	10372.9	8963.0
67.5°	899.2	884.5	1007.7	1292.0	1906.9	2064.9	6155.7	10389.8	10733.1	10347.7	9151.5
70°	819.2	806.6	881.3	959.3	1487.9	1382.5	3103.2	9032.5	9561.1	10060.2	9121.0
72.5°	693.9	671.8	774.0	851.9	1157.2	1060.4	1282.6	6938.1	7582.5	9138.8	8691.3
75°	538.1	523.4	610.7	749.7	869.7	827.7	810.8	4213.0	4916.4	7067.6	7603.6
77.5°	426.5	406.4	486.5	584.5	782.4	624.4	590.7	1814.2	2511.4	4512.0	5689.3
80°	321.1	303.3	369.6	462.3	601.3	470.7	382.2	740.3	946.6	2286.1	2861.0
82.5°	228.5	212.7	258.0	339.1	404.4	422.2	234.8	414.9	466.5	881.3	639.2
85°	146.4	136.8	172.7	212.7	257.0	271.6	143.2	216.9	238.0	363.3	266.4
87.5°	80.1	65.3	92.7	99.0	119.0	108.4	68.5	78.9	85.3	131.6	112.6
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°	2236.5	2236.5	2236.5	2236.5	2236.5	2236.5	2236.5	2236.5	2236.5	2236.5	2236.5
2.5°	2245.0	2248.1	2258.7	2261.8	2269.1	2278.7	2284.9	2291.3	2291.3	2297.6	2297.6
5°	2275.5	2282.9	2305.0	2316.6	2335.6	2354.4	2366.0	2379.7	2388.1	2392.4	2394.5
7.5°	2334.4	2346.0	2377.6	2397.7	2430.3	2456.6	2474.6	2493.4	2497.7	2509.3	2505.0
10°	2414.5	2428.2	2464.0	2501.9	2540.9	2573.5	2590.4	2604.0	2609.2	2611.4	2606.2
12.5°	2506.1	2526.1	2572.4	2618.8	2659.9	2688.3	2692.5	2689.3	2674.5	2661.9	2661.9
15°	2618.8	2636.7	2688.3	2738.8	2778.8	2784.1	2757.8	2741.0	2723.0	2719.8	2719.8
17.5°	2753.6	2763.0	2810.4	2859.9	2863.0	2845.2	2806.2	2790.4	2773.5	2762.0	2763.0
20°	2910.5	2907.3	2940.9	2962.0	2939.9	2885.2	2826.2	2799.9	2783.1	2769.3	2770.4
22.5°	3097.9	3073.7	3069.5	3064.1	3005.2	2890.4	2810.4	2776.7	2750.4	2731.4	2737.8
25°	3370.6	3278.0	3213.7	3177.9	3045.3	2862.0	2759.9	2685.1	2635.6	2603.0	2615.6
27.5°	3711.7	3555.9	3393.8	3306.3	3045.3	2804.1	2637.7	2516.6	2435.5	2401.9	2418.7
30°	4037.2	3873.9	3634.9	3461.1	3037.9	2709.3	2440.8	2272.3	2177.6	2143.9	2163.9
32.5°	4315.1	4137.2	3890.8	3630.7	3020.0	2555.6	2196.5	2010.1	1918.5	1878.5	1898.5
35°	4573.1	4383.5	4147.7	3817.1	2972.6	2330.2	1928.0	1785.9	1683.8	1619.5	1640.5
37.5°	4837.4	4612.1	4390.9	3985.5	2887.3	2067.0	1721.6	1600.5	1480.5	1394.1	1417.3
40°	5124.9	4855.3	4651.0	4085.5	2747.2	1816.4	1561.6	1451.0	1323.6	1231.9	1249.9
42.5°	5460.8	5146.9	4940.6	4137.2	2555.6	1638.5	1457.3	1348.9	1228.9	1154.0	1168.8
45°	5811.4	5468.2	5204.8	4136.1	2341.8	1555.2	1423.6	1316.2	1183.6	1105.7	1118.3
47.5°	6178.9	5804.1	5433.4	4068.7	2156.5	1566.8	1404.7	1245.7	1099.3	1023.5	1034.0
50°	6547.4	6171.5	5654.5	3942.4	2077.6	1541.6	1334.1	1146.7	974.1	905.6	909.8
52.5°	6912.8	6562.2	5845.1	3762.3	1997.5	1447.8	1243.5	1018.2	922.4	875.0	875.0
55°	7280.3	6948.7	6052.5	3500.1	1797.4	1338.3	1091.9	969.8	881.3	838.1	833.9
57.5°	7648.9	7395.1	6249.4	3237.9	1545.8	1203.6	1008.8	910.8	840.3	803.4	797.1
60°	8032.1	7905.8	6452.7	2996.8	1297.2	1030.8	947.7	863.5	791.8	750.8	747.6
62.5°	8427.0	8468.0	6611.7	2686.1	1068.8	925.6	893.0	806.6	737.1	698.1	697.1
65°	8825.0	9010.4	6715.9	2255.5	866.6	825.5	833.9	744.5	673.9	640.2	639.2
67.5°	9125.2	9401.0	6686.5	1706.9	710.7	730.7	760.2	679.2	612.8	586.5	587.5
70°	9158.9	9354.7	6395.8	1168.8	594.9	638.1	678.1	614.9	546.5	527.6	528.6
72.5°	8710.2	8722.9	5586.0	763.4	503.3	560.2	591.7	549.7	483.3	464.3	463.3
75°	7534.1	7214.0	4101.3	503.3	421.2	481.2	510.7	481.2	417.0	421.2	406.4
77.5°	5708.2	5109.1	2490.3	358.0	351.7	404.4	444.3	423.3	368.6	413.8	364.3
80°	2940.9	2764.1	1110.9	267.4	278.0	323.3	365.4	338.0	291.7	278.0	253.8
82.5°	673.9	783.4	438.1	191.7	201.1	232.7	279.0	253.8	209.5	176.9	174.8
85°	235.9	258.0	193.7	120.0	118.0	145.3	189.5	169.5	142.2	113.7	120.0
87.5°	74.7	97.9	72.7	48.5	50.5	65.3	87.4	80.1	66.3	43.2	45.3
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)