

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: P883234

Luminaire Tested: **NAV-SB3C-727-U-SL4**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883234  
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-SB3C-727-U-SL4  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

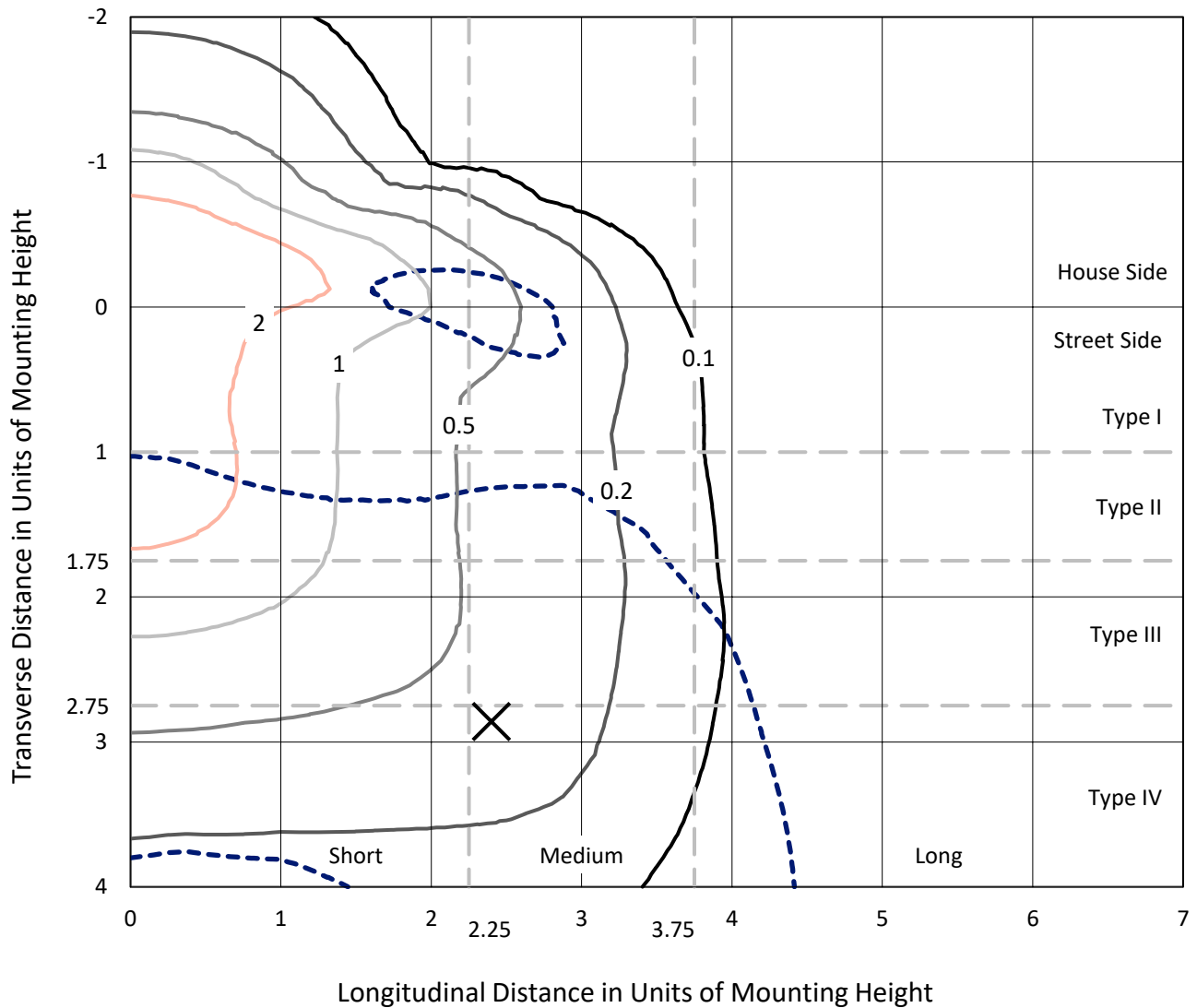
Lumens per Lamp: N/A  
Luminaire Lumens: 20180 lumens  
Efficiency: N/A  
Efficacy: 135.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 149.1  
Input Voltage (V): 120.0  
Input Current (Ain): 1.259  
Voltage Rise (V): NR  
Power Factor: 0.997  
Total Harmonic Distortion (THDi): 6.297  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P883234  
 CATALOG NUMBER: NAV-SB3C-727-U-SL4

### Iso-Footcandle Lines of Horizontal Illumination

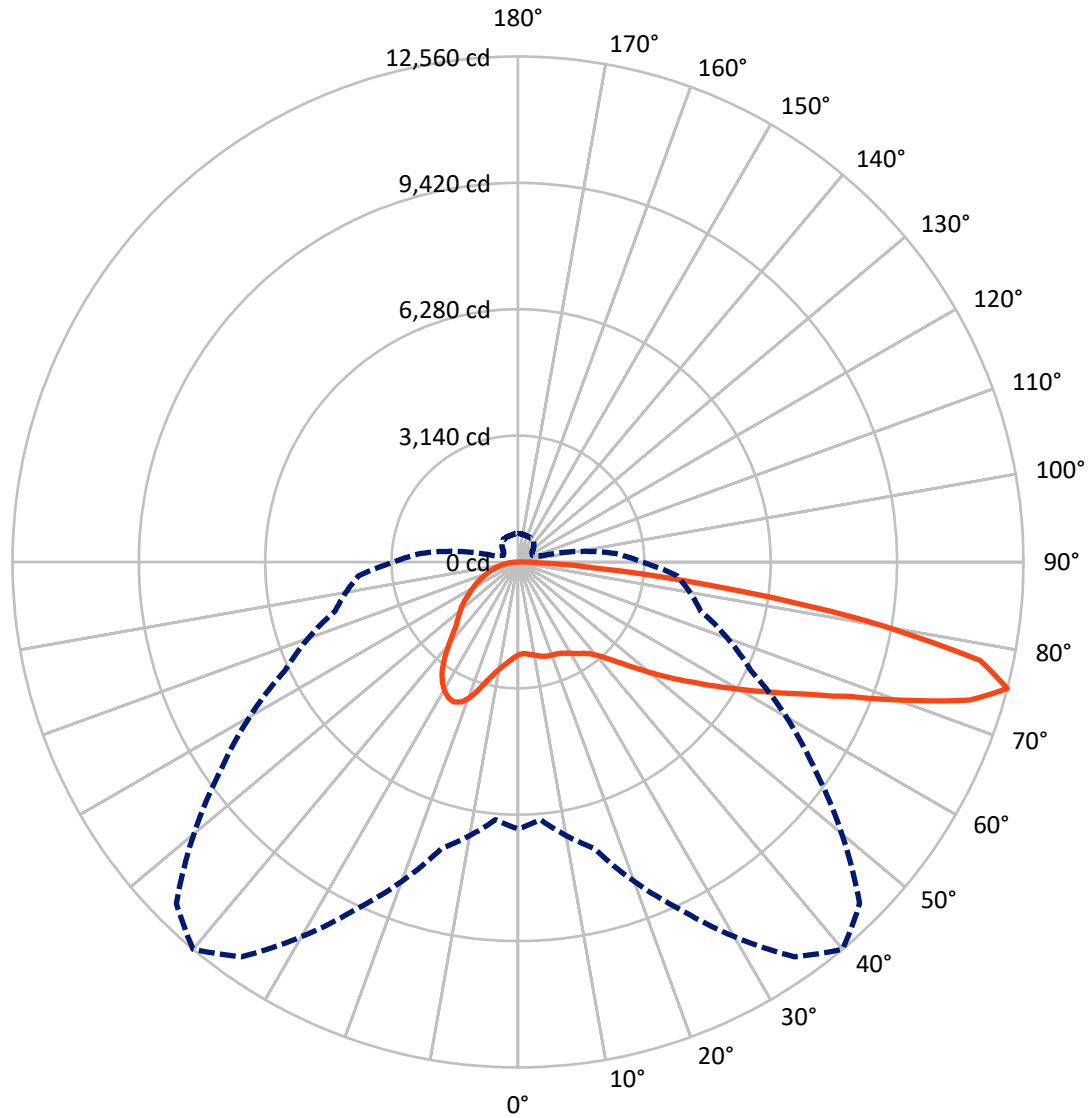
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P883234  
CATALOG NUMBER: NAV-SB3C-727-U-SL4

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P883234  
 CATALOG NUMBER: NAV-SB3C-727-U-SL4

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6252.4	0.0	6252.4
	% Fixture	31.0	0.0	31.0
<b>Street Side</b>	Lumens	13927.6	0.0	13927.6
	% Fixture	69.0	0.0	69.0
<b>Total</b>	Lumens	20180.0	0.0	20180.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	230.3	1.1
10°-20°	773.4	3.8
20°-30°	1412.1	7.0
30°-40°	2002.8	9.9
40°-50°	2704.3	13.4
50°-60°	3638.0	18.0
60°-70°	4617.5	22.9
70°-80°	4190.7	20.8
80°-90°	610.9	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°	20180.0	100.0
0°-180°	20180.0	100.0



REPORT NUMBER: P883234

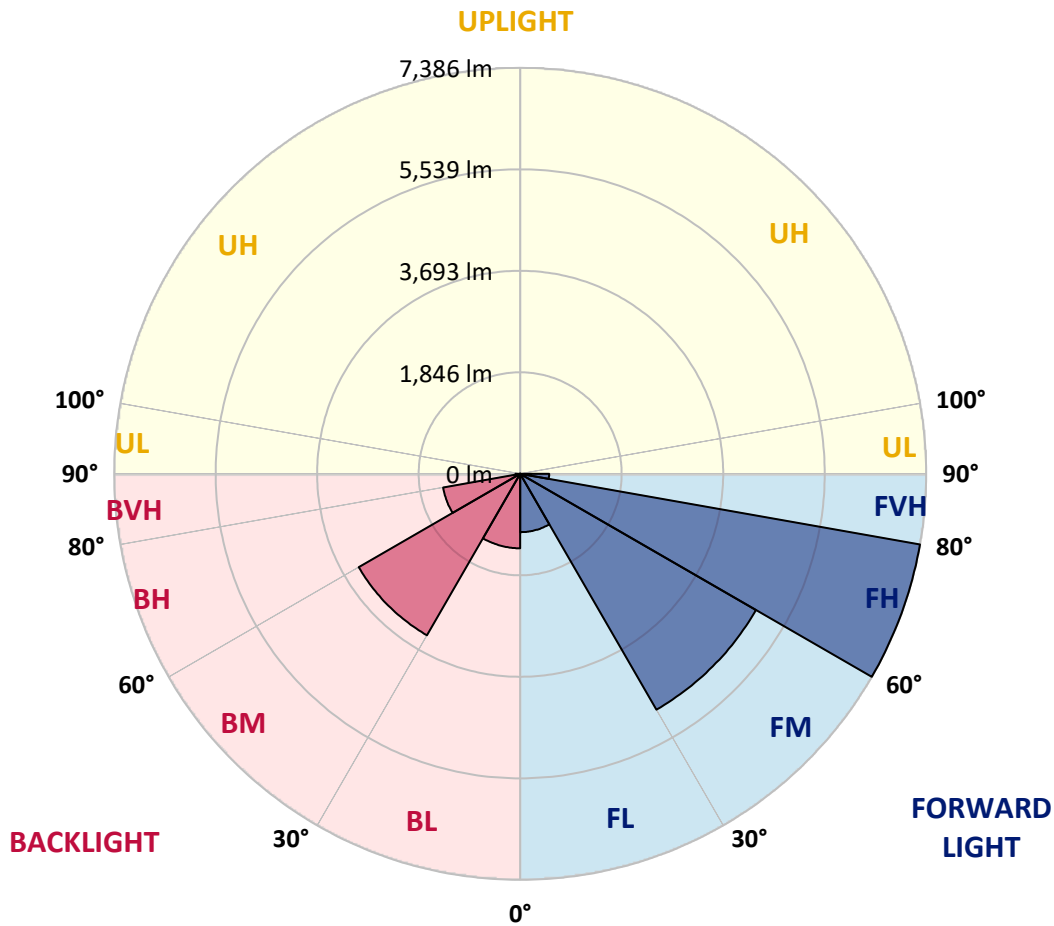
CATALOG NUMBER: NAV-SB3C-727-U-SL4

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1061.5	5.3			
FM (30°-60°)	4953.7	24.5			
FH (60°-80°)	7385.6	36.6			G3/7500
FVH (80°-90°)	526.8	2.6			G4/750
BL (0°-30°)	1354.3	6.7	B3/2500		
BM (30°-60°)	3391.4	16.8	B3/5000		
BH (60°-80°)	1422.6	7.0	B3/2500		G3/2500
BVH (80°-90°)	84.1	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: P883234

CATALOG NUMBER: NAV-SB3C-727-U-SL4

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	2307.6	2307.6	2307.6	2307.6	2307.6	2307.6	2307.6	2307.6	2307.6	2307.6	2307.6
2.5°	2272.3	2285.1	2281.9	2277.6	2277.6	2278.7	2277.6	2285.1	2292.6	2300.1	2311.9
5°	2295.8	2308.7	2302.3	2296.9	2292.6	2291.6	2288.3	2287.3	2291.6	2301.2	2317.2
7.5°	2341.9	2354.7	2345.1	2335.4	2326.9	2322.6	2318.3	2311.9	2308.7	2314.0	2336.5
10°	2393.2	2406.1	2394.3	2377.2	2363.3	2357.9	2353.6	2347.2	2342.9	2346.1	2370.8
12.5°	2444.6	2457.5	2441.4	2417.9	2399.7	2396.4	2391.1	2389.0	2387.9	2386.8	2411.4
15°	2492.8	2503.5	2483.1	2455.3	2436.0	2430.7	2425.3	2428.6	2433.9	2440.3	2468.2
17.5°	2530.2	2540.9	2511.0	2474.6	2456.4	2454.2	2451.0	2461.7	2476.7	2492.8	2527.0
20°	2564.5	2575.2	2536.7	2487.4	2466.0	2466.0	2467.1	2489.6	2511.0	2534.5	2581.6
22.5°	2612.7	2621.2	2574.1	2506.7	2475.7	2477.8	2486.4	2508.8	2535.6	2567.7	2633.0
25°	2684.4	2690.8	2633.0	2543.1	2507.8	2514.2	2521.7	2532.4	2558.1	2595.5	2683.3
27.5°	2800.0	2805.3	2729.3	2607.3	2553.8	2564.5	2575.2	2567.7	2579.5	2611.6	2724.0
30°	2962.6	2965.9	2869.5	2707.9	2631.9	2637.3	2639.4	2608.4	2585.9	2611.6	2752.9
32.5°	3155.3	3154.2	3039.7	2829.9	2720.8	2715.4	2697.2	2636.2	2583.8	2606.2	2778.6
35°	3453.9	3442.1	3294.4	3001.2	2821.4	2788.2	2745.4	2667.2	2594.5	2600.9	2801.0
37.5°	3948.4	3912.0	3707.6	3281.6	2971.2	2886.7	2823.5	2717.5	2618.0	2598.7	2827.8
40°	4506.0	4460.0	4235.3	3665.8	3196.0	3060.0	2958.4	2789.3	2656.5	2608.4	2867.4
42.5°	5167.5	5102.2	4860.3	4118.6	3480.7	3283.7	3130.7	2880.2	2713.3	2639.4	2920.9
45°	5979.9	5893.2	5550.7	4629.1	3839.2	3577.0	3372.6	3018.3	2800.0	2699.3	3001.2
47.5°	6800.8	6822.2	6335.2	5213.5	4269.5	3938.8	3675.5	3225.9	2926.3	2795.7	3130.7
50°	7673.1	7688.1	7115.5	5861.1	4757.6	4347.6	4015.8	3458.2	3101.8	2932.7	3324.4
52.5°	8353.8	8356.0	7824.0	6538.6	5266.0	4797.2	4383.0	3723.6	3305.1	3114.6	3582.4
55°	8779.8	8774.5	8320.7	7179.7	5850.4	5269.2	4789.7	4025.5	3553.5	3328.7	3906.7
57.5°	9089.2	9073.1	8663.2	7730.9	6473.3	5826.8	5249.9	4368.0	3846.7	3583.4	4333.7
60°	9206.9	9197.3	8895.4	8207.2	7128.3	6443.3	5780.8	4751.2	4179.6	3884.2	4882.8
62.5°	9251.8	9270.0	9123.4	8668.5	7829.4	7126.2	6364.1	5209.2	4554.2	4224.6	5461.8
65°	9410.3	9443.4	9413.5	9272.2	8621.4	7925.7	7138.0	5754.0	4963.1	4589.5	6066.6
67.5°	9723.9	9757.0	9769.9	9994.6	9589.0	8922.2	8103.4	6432.6	5441.5	4968.4	6521.5
70°	9716.4	9706.7	9933.6	10569.4	10800.6	10301.8	9404.9	7267.5	6012.0	5283.1	6579.3
72.5°	8844.1	8767.0	9303.2	10563.0	11808.8	11742.5	10994.3	8344.2	6504.3	5321.6	5709.1
75°	6634.9	6429.4	7376.6	9519.4	11976.9	12560.2	12004.7	9012.1	6387.7	4701.9	3973.0
77.5°	2837.4	2630.8	3747.2	7047.0	10719.3	11741.4	11077.8	7862.6	5099.0	3109.3	1951.2
80°	742.8	741.7	1132.4	3194.9	7289.9	8670.7	7606.8	5077.6	2913.4	1111.0	538.4
82.5°	307.2	299.7	416.4	1242.6	3562.0	4865.7	3970.9	2264.8	1052.1	300.8	178.7
85°	114.5	113.5	202.3	429.2	1256.6	2006.8	1452.4	579.0	262.2	146.6	80.3
87.5°	32.1	31.0	43.9	148.8	306.1	464.5	248.3	95.3	73.9	57.8	23.5
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: P883234

CATALOG NUMBER: NAV-SB3C-727-U-SL4

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2307.6	2307.6	2307.6	2307.6	2307.6	2307.6	2307.6	2307.6	2307.6	2307.6	2307.6
2.5°	2315.1	2320.5	2330.1	2337.6	2347.2	2357.9	2372.9	2382.5	2392.2	2398.6	2394.3
5°	2324.7	2336.5	2361.1	2385.7	2414.6	2441.4	2472.4	2494.9	2513.1	2518.5	2520.6
7.5°	2346.1	2365.4	2407.1	2448.9	2494.9	2538.8	2583.8	2622.3	2653.3	2665.1	2666.2
10°	2383.6	2409.3	2468.2	2527.0	2588.0	2655.5	2713.3	2768.9	2812.8	2831.0	2832.1
12.5°	2430.7	2462.8	2539.9	2621.2	2705.8	2798.9	2873.8	2942.3	2996.9	3021.5	3021.5
15°	2491.7	2533.4	2631.9	2741.1	2865.2	2994.8	3090.0	3166.0	3227.0	3257.0	3254.8
17.5°	2558.1	2613.7	2737.9	2902.7	3080.4	3250.6	3361.9	3417.5	3480.7	3509.6	3508.5
20°	2622.3	2690.8	2868.5	3108.2	3344.7	3525.6	3615.5	3630.5	3634.8	3638.0	3646.6
22.5°	2688.6	2780.7	3032.2	3367.2	3620.9	3746.1	3759.0	3694.7	3604.8	3563.1	3574.9
25°	2761.4	2883.4	3246.3	3653.0	3858.5	3873.5	3775.0	3618.8	3448.6	3370.4	3382.2
27.5°	2832.1	3002.2	3503.2	3925.9	4029.8	3898.1	3686.2	3464.6	3259.1	3176.7	3186.3
30°	2902.7	3138.2	3786.8	4164.6	4107.9	3837.1	3546.0	3298.7	3092.2	3005.5	3015.1
32.5°	2974.4	3296.6	4113.2	4336.9	4094.0	3707.6	3371.5	3112.5	2930.5	2839.6	2851.3
35°	3055.8	3491.4	4422.6	4431.1	4000.9	3517.1	3141.4	2889.9	2731.5	2658.7	2674.7
37.5°	3161.7	3738.6	4695.5	4454.7	3838.2	3237.7	2855.6	2626.6	2496.0	2462.8	2486.4
40°	3293.4	4036.2	4904.2	4417.2	3597.3	2898.4	2543.1	2360.1	2286.2	2293.7	2319.4
42.5°	3464.6	4369.0	5050.8	4320.9	3262.3	2548.4	2269.1	2187.7	2223.1	2253.0	2280.9
45°	3687.3	4714.8	5141.8	4157.1	2883.4	2252.0	2107.5	2126.7	2153.5	2156.7	2178.1
47.5°	3972.0	5064.8	5201.8	3909.9	2497.1	2043.2	2004.7	2009.0	2003.6	1981.2	1998.3
50°	4327.3	5405.1	5255.3	3582.4	2168.5	1912.7	1861.3	1846.3	1772.4	1699.7	1709.3
52.5°	4731.9	5717.6	5277.7	3175.6	1912.7	1803.5	1720.0	1625.8	1487.7	1465.3	1472.8
55°	5181.4	6006.6	5220.0	2675.8	1697.5	1663.3	1537.0	1423.5	1408.5	1389.3	1392.5
57.5°	5718.7	6318.1	5102.2	2118.2	1477.0	1499.5	1376.4	1389.3	1362.5	1332.5	1327.2
60°	6306.3	6640.3	4895.6	1609.8	1249.1	1295.1	1334.7	1333.6	1326.1	1301.5	1292.9
62.5°	6835.1	6852.2	4488.9	1233.0	1048.9	1136.7	1244.8	1243.7	1237.3	1223.4	1218.0
65°	7149.7	6820.1	3810.3	970.8	884.1	1006.1	1122.8	1131.3	1132.4	1131.3	1131.3
67.5°	7094.1	6444.4	2879.2	772.8	748.2	873.4	1001.8	1013.6	1022.2	1024.3	1026.4
70°	6464.7	5619.2	1877.3	616.5	627.2	756.7	887.3	899.1	906.6	915.1	919.4
72.5°	5039.1	4131.4	1074.6	498.8	521.2	656.1	773.8	787.8	792.0	808.1	814.5
75°	3070.7	2429.6	580.1	392.8	428.1	560.8	661.5	677.5	685.0	704.3	706.4
77.5°	1459.9	1052.1	330.7	306.1	344.6	458.1	558.7	576.9	556.6	567.3	558.7
80°	493.4	390.7	208.7	233.3	263.3	357.5	447.4	465.6	422.8	420.6	416.4
82.5°	172.3	158.4	132.7	155.2	170.2	255.8	338.2	361.8	314.7	313.6	298.6
85°	67.4	64.2	73.9	84.6	101.7	157.3	222.6	234.4	193.7	156.3	154.1
87.5°	13.9	15.0	18.2	19.3	31.0	54.6	80.3	98.5	78.1	66.4	61.0
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)