

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: P964716

Luminaire Tested: **NAV-SB3C-830-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964716
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3C-830-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20514.3 lumens
Efficiency: N/A
Efficacy: 137.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

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

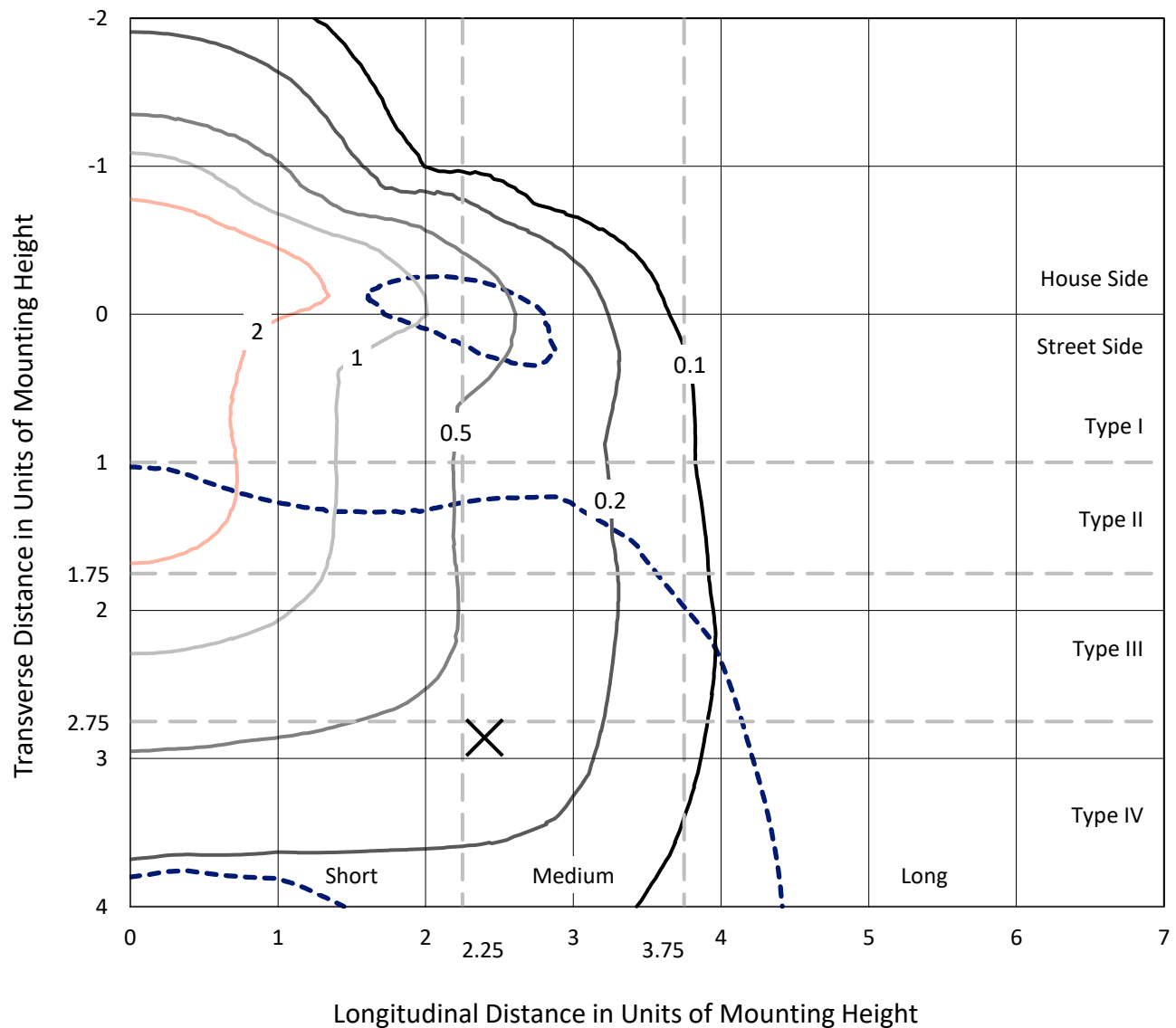


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Iso-Footcandle Lines of Horizontal Illumination

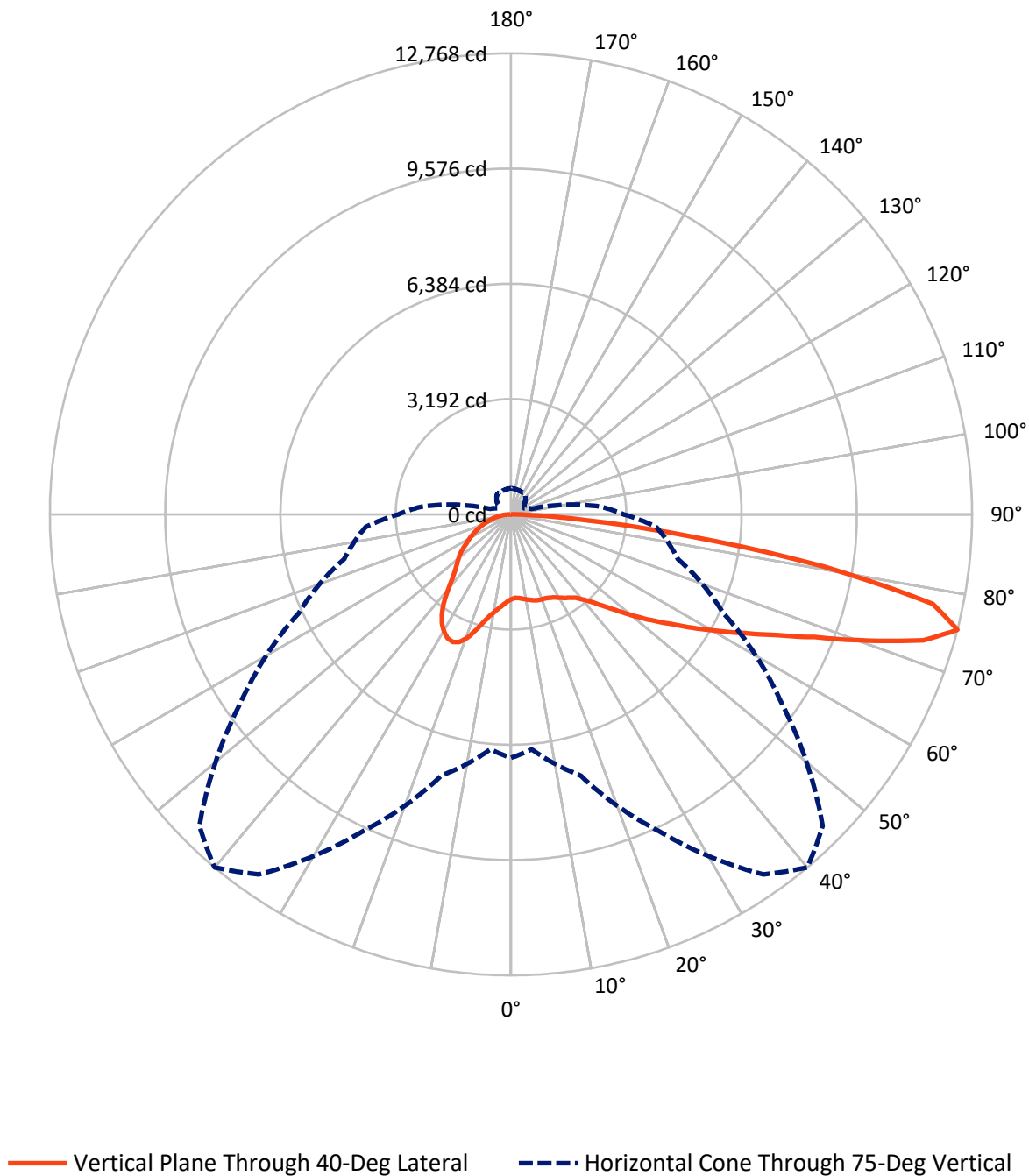
× Max cd
- - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6356.0	0.0	6356.0
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	14158.3	0.0	14158.3
	% Fixture	69.0	0.0	69.0
Total	Lumens	20514.3	0.0	20514.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.2	1.1
10°-20°	786.2	3.8
20°-30°	1435.5	7.0
30°-40°	2035.9	9.9
40°-50°	2749.1	13.4
50°-60°	3698.3	18.0
60°-70°	4694.0	22.9
70°-80°	4260.1	20.8
80°-90°	621.0	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°	20514.3	100.0
0°-180°	20514.3	100.0

Coefficient of Utilization



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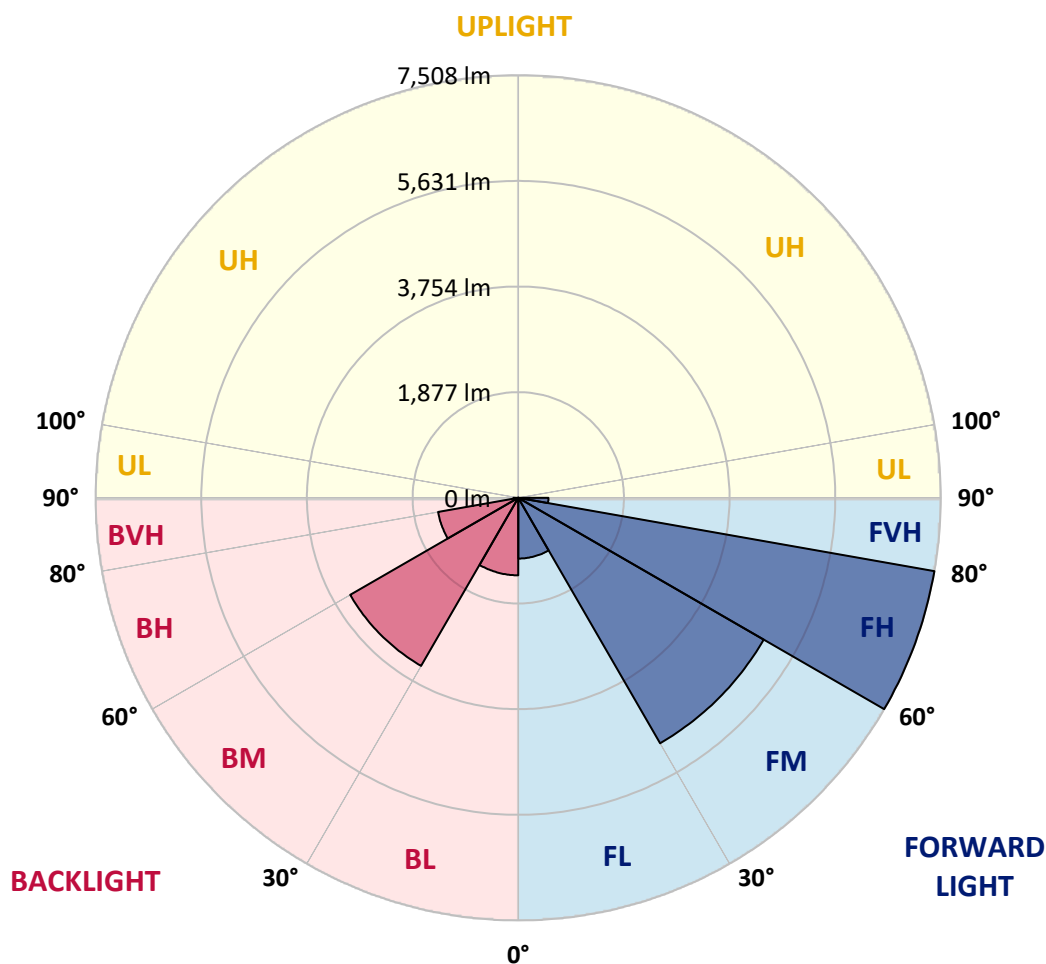
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1079.1	5.3			
FM	(30°-60°)	5035.8	24.5			
FH	(60°-80°)	7507.9	36.6			G4/12000
FVH	(80°-90°)	535.5	2.6			G4/750
BL	(0°-30°)	1376.8	6.7	B3/2500		
BM	(30°-60°)	3447.6	16.8	B3/5000		
BH	(60°-80°)	1446.2	7.0	B3/2500		G3/2500
BVH	(80°-90°)	85.5	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°	2345.8	2345.8	2345.8	2345.8	2345.8	2345.8	2345.8	2345.8	2345.8	2345.8	2345.8
2.5°	2309.9	2323.0	2319.8	2315.4	2315.4	2316.5	2315.4	2323.0	2330.6	2338.2	2350.2
5°	2333.9	2346.9	2340.4	2335.0	2330.6	2329.5	2326.2	2325.2	2329.5	2339.4	2355.7
7.5°	2380.7	2393.7	2383.9	2374.1	2365.4	2361.1	2356.7	2350.2	2346.9	2352.4	2375.2
10°	2432.8	2446.0	2434.0	2416.5	2402.4	2397.0	2392.7	2386.1	2381.8	2385.0	2410.1
12.5°	2485.1	2498.1	2481.8	2458.0	2439.4	2436.1	2430.7	2428.5	2427.4	2426.4	2451.4
15°	2534.1	2545.0	2524.3	2496.0	2476.4	2471.0	2465.5	2468.8	2474.2	2480.8	2509.1
17.5°	2572.1	2583.0	2552.6	2515.6	2497.1	2495.0	2491.7	2502.5	2517.7	2534.1	2568.9
20°	2607.0	2617.8	2578.7	2528.7	2506.8	2506.8	2508.0	2530.8	2552.6	2576.5	2624.4
22.5°	2656.0	2664.7	2616.7	2548.3	2516.7	2518.8	2527.5	2550.4	2577.6	2610.3	2676.6
25°	2728.9	2735.4	2676.6	2585.3	2549.3	2555.8	2563.4	2574.3	2600.4	2638.6	2727.7
27.5°	2846.3	2851.8	2774.6	2650.5	2596.1	2607.0	2617.8	2610.3	2622.3	2654.9	2769.1
30°	3011.8	3015.0	2917.0	2752.7	2675.6	2681.0	2683.1	2651.6	2628.7	2654.9	2798.5
32.5°	3207.5	3206.5	3090.1	2876.8	2765.9	2760.4	2741.9	2679.9	2626.6	2649.4	2824.6
35°	3511.1	3499.1	3349.0	3050.9	2868.2	2834.3	2790.9	2711.4	2637.4	2644.0	2847.4
37.5°	4013.8	3976.8	3769.0	3336.0	3020.5	2934.5	2870.3	2762.6	2661.4	2641.8	2874.6
40°	4580.7	4533.9	4305.4	3726.6	3248.9	3110.8	3007.4	2835.5	2700.6	2651.6	2914.9
42.5°	5253.1	5186.7	4940.8	4186.8	3538.3	3338.1	3182.5	2927.9	2758.2	2683.1	2969.3
45°	6079.0	5990.8	5642.6	4705.9	3902.9	3636.3	3428.4	3068.3	2846.3	2744.0	3050.9
47.5°	6913.5	6935.3	6440.2	5299.9	4340.3	4004.1	3736.3	3279.4	2974.8	2842.0	3182.5
50°	7800.2	7815.5	7233.4	5958.2	4836.4	4419.7	4082.4	3515.5	3153.2	2981.3	3379.5
52.5°	8492.2	8494.5	7953.7	6646.9	5353.3	4876.6	4455.6	3785.3	3360.0	3166.2	3641.7
55°	8925.3	8919.9	8458.5	7298.6	5947.3	5356.4	4869.1	4092.2	3612.3	3383.8	3971.4
57.5°	9239.8	9223.5	8806.7	7859.0	6580.5	5923.4	5336.9	4440.3	3910.5	3642.8	4405.6
60°	9359.5	9349.6	9042.9	8343.2	7246.4	6550.1	5876.5	4829.9	4248.8	3948.5	4963.7
62.5°	9405.1	9423.6	9274.6	8812.1	7959.1	7244.3	6469.6	5295.6	4629.6	4294.5	5552.3
65°	9566.1	9599.9	9569.4	9425.8	8764.3	8057.0	7256.2	5849.4	5045.3	4665.6	6167.1
67.5°	9885.0	9918.7	9931.7	10160.2	9747.9	9070.0	8237.6	6539.2	5531.6	5050.8	6629.5
70°	9877.3	9867.6	10098.2	10744.6	10979.6	10472.5	9560.7	7387.9	6111.6	5370.6	6688.2
72.5°	8990.6	8912.3	9457.4	10738.0	12004.5	11937.0	11176.5	8482.5	6612.1	5409.8	5803.7
75°	6744.8	6535.9	7498.9	9677.1	12175.4	12768.3	12203.6	9161.4	6493.5	4779.8	4038.8
77.5°	2884.5	2674.4	3809.3	7163.7	10896.9	11935.9	11261.4	7992.8	5183.5	3160.8	1983.5
80°	755.1	754.0	1151.2	3247.8	7410.7	8814.3	7732.8	5161.7	2961.6	1129.4	547.2
82.5°	312.3	304.6	423.2	1263.2	3621.0	4946.2	4036.7	2302.4	1069.6	305.8	181.7
85°	116.4	115.3	205.6	436.3	1277.4	2040.1	1476.5	588.7	266.6	149.0	81.6
87.5°	32.6	31.6	44.6	151.3	311.2	472.2	252.5	96.9	75.0	58.7	24.0
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°	2345.8	2345.8	2345.8	2345.8	2345.8	2345.8	2345.8	2345.8	2345.8	2345.8	2345.8
2.5°	2353.5	2358.9	2368.7	2376.4	2386.1	2397.0	2412.2	2422.0	2431.8	2438.4	2434.0
5°	2363.2	2375.2	2400.2	2425.3	2454.7	2481.8	2513.4	2536.3	2554.7	2560.1	2562.4
7.5°	2385.0	2404.5	2447.0	2489.4	2536.3	2580.8	2626.6	2665.7	2697.3	2709.3	2710.3
10°	2423.1	2449.2	2509.1	2568.9	2630.9	2699.4	2758.2	2814.8	2859.4	2877.9	2879.0
12.5°	2471.0	2503.6	2582.0	2664.7	2750.6	2845.3	2921.5	2991.1	3046.5	3071.6	3071.6
15°	2533.0	2575.4	2675.6	2786.5	2912.7	3044.4	3141.2	3218.5	3280.5	3311.0	3308.8
17.5°	2600.4	2657.0	2783.3	2950.8	3131.4	3304.4	3417.6	3474.1	3538.3	3567.7	3566.6
20°	2665.7	2735.4	2916.0	3159.7	3400.1	3584.0	3675.4	3690.7	3695.0	3698.3	3707.0
22.5°	2733.2	2826.7	3082.5	3423.0	3680.9	3808.2	3821.2	3756.0	3664.6	3622.1	3634.1
25°	2807.2	2931.2	3300.1	3713.6	3922.5	3937.6	3837.6	3678.7	3505.7	3426.3	3438.3
27.5°	2879.0	3052.0	3561.2	3990.9	4096.5	3962.6	3747.3	3522.0	3313.1	3229.4	3239.1
30°	2950.8	3190.2	3849.5	4233.7	4176.0	3900.6	3604.7	3353.4	3143.4	3055.2	3065.1
32.5°	3023.7	3351.2	4181.4	4408.8	4161.8	3769.0	3427.4	3164.1	2979.1	2886.6	2898.6
35°	3106.4	3549.3	4495.9	4504.6	4067.1	3575.3	3193.4	2937.8	2776.7	2702.7	2719.0
37.5°	3214.1	3800.6	4773.3	4528.4	3901.8	3291.4	2902.9	2670.1	2537.4	2503.6	2527.5
40°	3348.0	4103.1	4985.5	4490.4	3657.0	2946.5	2585.3	2399.1	2324.1	2331.7	2357.8
42.5°	3522.0	4441.4	5134.5	4392.4	3316.4	2590.7	2306.7	2223.9	2259.9	2290.4	2318.7
45°	3748.3	4792.9	5227.0	4226.0	2931.2	2289.2	2142.4	2161.9	2189.2	2192.5	2214.2
47.5°	4037.8	5148.7	5288.0	3974.6	2538.4	2077.1	2037.9	2042.3	2036.9	2014.0	2031.3
50°	4399.0	5494.7	5342.3	3641.7	2204.4	1944.3	1892.2	1876.9	1801.8	1727.8	1737.6
52.5°	4810.3	5812.4	5365.2	3228.2	1944.3	1833.4	1748.5	1652.7	1512.4	1489.5	1497.1
55°	5267.3	6106.1	5306.4	2720.1	1725.7	1690.8	1562.4	1447.1	1431.9	1412.2	1415.5
57.5°	5813.5	6422.8	5186.7	2153.2	1501.5	1524.4	1399.2	1412.2	1385.1	1354.6	1349.2
60°	6410.8	6750.2	4976.8	1636.4	1269.8	1316.5	1356.8	1355.7	1348.1	1323.1	1314.4
62.5°	6948.3	6965.7	4563.3	1253.5	1066.3	1155.5	1265.4	1264.3	1257.8	1243.6	1238.2
65°	7268.2	6933.1	3873.5	986.9	898.7	1022.7	1141.3	1150.0	1151.2	1150.0	1150.0
67.5°	7211.6	6551.2	2926.9	785.6	760.6	887.9	1018.4	1030.4	1039.0	1041.3	1043.4
70°	6571.9	5712.3	1908.4	626.7	637.6	769.3	902.0	914.0	921.6	930.3	934.6
72.5°	5122.5	4199.9	1092.4	507.1	529.9	667.0	786.7	800.8	805.1	821.4	828.0
75°	3121.6	2469.8	589.7	399.3	435.2	570.1	672.4	688.7	696.4	716.0	718.1
77.5°	1484.1	1069.6	336.2	311.2	350.3	465.7	568.0	586.5	565.8	576.7	568.0
80°	501.6	397.2	212.2	237.2	267.6	363.4	454.8	473.3	429.8	427.6	423.2
82.5°	175.2	161.0	134.9	157.7	173.0	260.0	343.8	367.8	319.9	318.8	303.6
85°	68.6	65.3	75.0	86.0	103.3	159.9	226.3	238.3	196.9	158.9	156.7
87.5°	14.1	15.3	18.4	19.6	31.6	55.5	81.6	100.1	79.4	67.4	62.0
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)