

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: P883094

Luminaire Tested: **NAV-SB3B-740-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883094
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-SB3B-740-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 450mA 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: 18051 lumens
Efficiency: N/A
Efficacy: 165.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G3

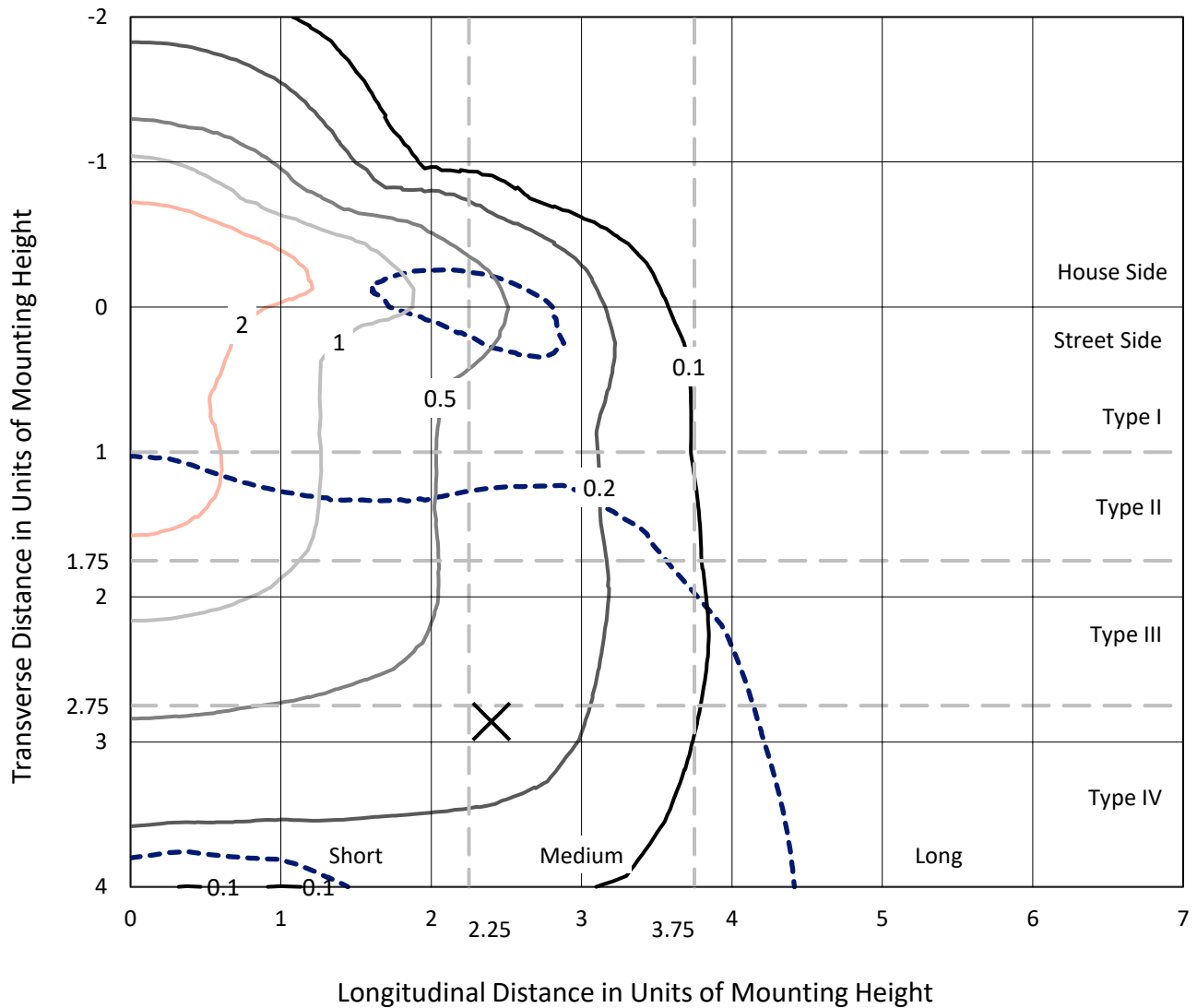
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

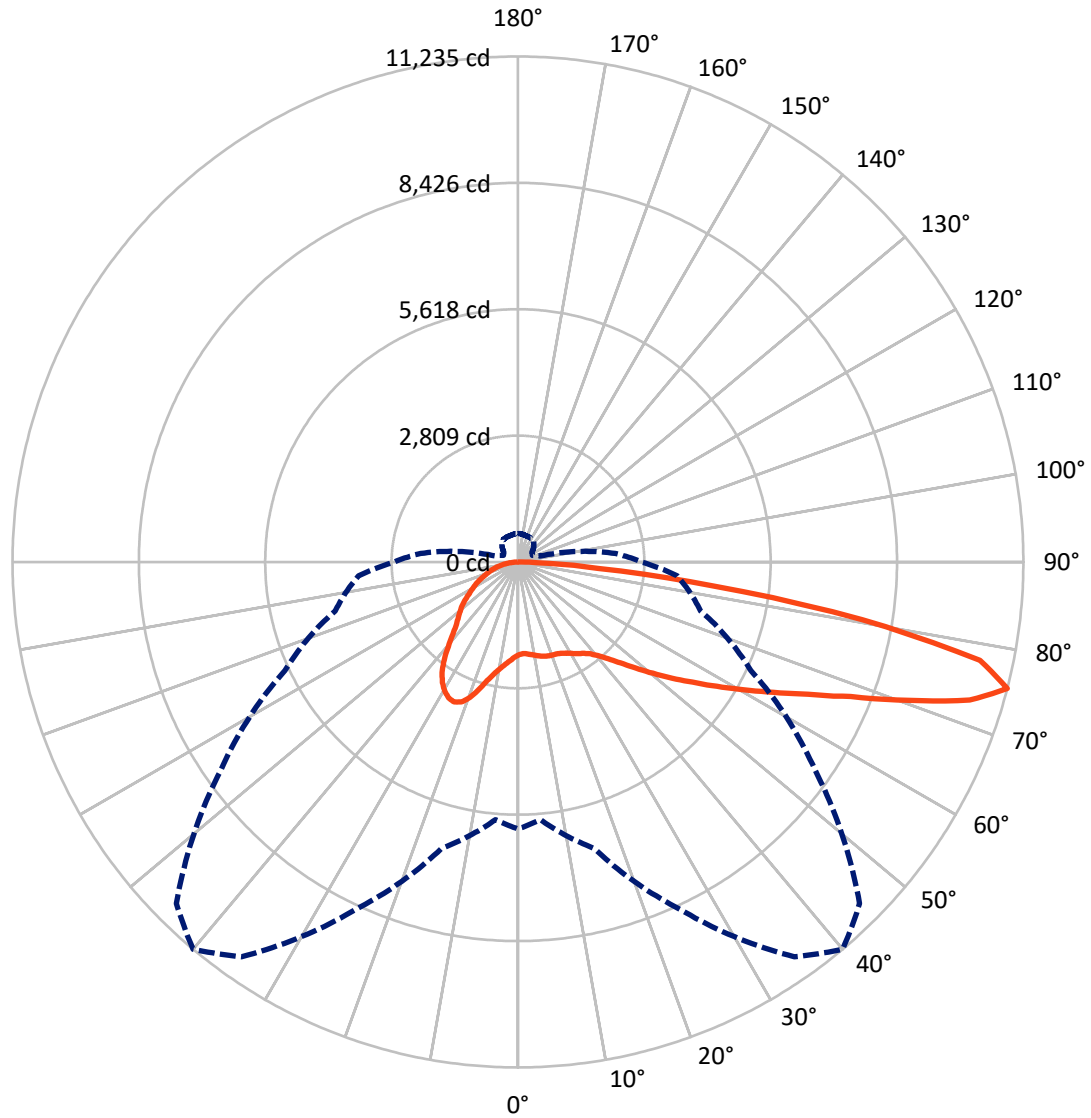
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5592.8	0.0	5592.8
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	12458.2	0.0	12458.2
	% Fixture	69.0	0.0	69.0
Total	Lumens	18051.0	0.0	18051.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.0	1.1
10°-20°	691.8	3.8
20°-30°	1263.1	7.0
30°-40°	1791.5	9.9
40°-50°	2419.0	13.4
50°-60°	3254.2	18.0
60°-70°	4130.4	22.9
70°-80°	3748.6	20.8
80°-90°	546.4	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°	18051.0	100.0
0°-180°	18051.0	100.0

Coefficient of Utilization



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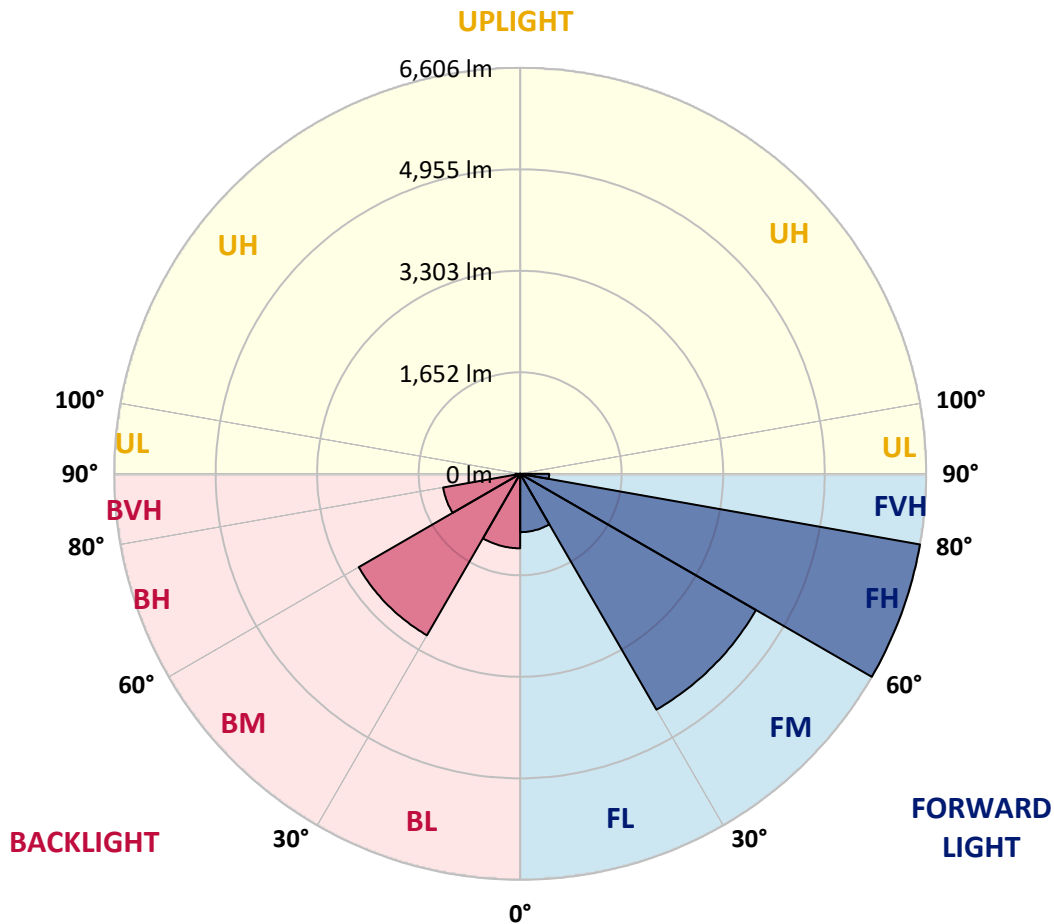
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	949.5	5.3			
FM (30°-60°)	4431.1	24.5			
FH (60°-80°)	6606.4	36.6			G3/7500
FVH (80°-90°)	471.2	2.6			G3/500
BL (0°-30°)	1211.5	6.7	B3/2500		
BM (30°-60°)	3033.6	16.8	B3/5000		
BH (60°-80°)	1272.5	7.0	B3/2500		G3/2500
BVH (80°-90°)	75.2	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-G3

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	2064.2	2064.2	2064.2	2064.2	2064.2	2064.2	2064.2	2064.2	2064.2	2064.2	2064.2
2.5°	2032.6	2044.1	2041.2	2037.3	2037.3	2038.3	2037.3	2044.1	2050.8	2057.5	2068.0
5°	2053.6	2065.1	2059.4	2054.6	2050.8	2049.8	2046.9	2046.0	2049.8	2058.4	2072.8
7.5°	2094.8	2106.3	2097.7	2089.0	2081.4	2077.6	2073.7	2068.0	2065.1	2069.9	2090.0
10°	2140.7	2152.2	2141.7	2126.4	2113.9	2109.2	2105.3	2099.6	2095.8	2098.6	2120.6
12.5°	2186.7	2198.2	2183.8	2162.8	2146.5	2143.6	2138.8	2136.9	2136.0	2135.0	2157.0
15°	2229.8	2239.4	2221.2	2196.3	2179.0	2174.3	2169.5	2172.3	2177.1	2182.9	2207.8
17.5°	2263.3	2272.9	2246.1	2213.5	2197.2	2195.3	2192.4	2202.0	2215.4	2229.8	2260.4
20°	2293.9	2303.5	2269.0	2225.0	2205.9	2205.9	2206.8	2226.9	2246.1	2267.1	2309.3
22.5°	2337.0	2344.7	2302.5	2242.2	2214.5	2216.4	2224.0	2244.1	2268.1	2296.8	2355.2
25°	2401.2	2406.9	2355.2	2274.8	2243.2	2248.9	2255.6	2265.2	2288.2	2321.7	2400.2
27.5°	2504.6	2509.3	2441.4	2332.2	2284.4	2293.9	2303.5	2296.8	2307.3	2336.1	2436.6
30°	2650.1	2653.0	2566.8	2422.2	2354.2	2359.0	2361.0	2333.2	2313.1	2336.1	2462.4
32.5°	2822.4	2821.5	2719.0	2531.4	2433.7	2428.9	2412.6	2358.1	2311.2	2331.3	2485.4
35°	3089.5	3079.0	2946.9	2684.6	2523.7	2494.0	2455.7	2385.8	2320.7	2326.5	2505.5
37.5°	3531.9	3499.3	3316.4	2935.4	2657.7	2582.1	2525.6	2430.8	2341.8	2324.6	2529.5
40°	4030.7	3989.5	3788.4	3279.1	2858.8	2737.2	2646.3	2495.0	2376.3	2333.2	2564.9
42.5°	4622.3	4563.9	4347.6	3684.1	3113.5	2937.3	2800.4	2576.4	2427.0	2361.0	2612.7
45°	5349.0	5271.4	4965.1	4140.8	3434.2	3199.6	3016.8	2699.9	2504.6	2414.6	2684.6
47.5°	6083.3	6102.5	5666.9	4663.5	3819.1	3523.2	3287.7	2885.6	2617.5	2500.7	2800.4
50°	6863.6	6877.0	6364.8	5242.7	4255.6	3889.0	3592.2	3093.4	2774.5	2623.3	2973.7
52.5°	7472.5	7474.4	6998.6	5848.8	4710.4	4291.1	3920.6	3330.8	2956.5	2786.0	3204.4
55°	7853.6	7848.8	7442.8	6422.2	5233.2	4713.3	4284.4	3600.8	3178.6	2977.5	3494.5
57.5°	8130.2	8115.9	7749.2	6915.3	5790.4	5212.1	4696.1	3907.2	3440.9	3205.4	3876.5
60°	8235.6	8226.9	7957.0	7341.3	6376.3	5763.6	5170.9	4249.9	3738.6	3474.4	4367.7
62.5°	8275.8	8292.0	8160.9	7754.0	7003.4	6374.4	5692.7	4659.7	4073.7	3778.9	4885.6
65°	8417.5	8447.1	8420.3	8294.0	7711.9	7089.6	6384.9	5147.0	4439.5	4105.3	5426.5
67.5°	8698.0	8727.7	8739.2	8940.2	8577.4	7980.9	7248.5	5754.0	4867.4	4444.3	5833.4
70°	8691.3	8682.7	8885.6	9454.3	9661.1	9215.0	8412.7	6500.8	5377.7	4725.7	5885.1
72.5°	7911.0	7842.1	8321.7	9448.6	10563.0	10503.6	9834.4	7463.9	5818.1	4760.2	5106.8
75°	5934.9	5751.1	6598.4	8515.1	10713.3	11235.1	10738.2	8061.3	5713.8	4205.9	3553.9
77.5°	2538.1	2353.3	3351.9	6303.5	9588.4	10502.7	9909.1	7033.1	4561.1	2781.2	1745.3
80°	664.4	663.5	1012.9	2857.8	6520.9	7755.9	6804.2	4541.9	2606.0	993.8	481.6
82.5°	274.8	268.1	372.4	1111.5	3186.2	4352.3	3552.0	2025.9	941.1	269.0	159.9
85°	102.4	101.5	180.9	383.9	1124.0	1795.1	1299.2	518.0	234.6	131.2	71.8
87.5°	28.7	27.8	39.3	133.1	273.8	415.5	222.1	85.2	66.1	51.7	21.1
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°	2064.2	2064.2	2064.2	2064.2	2064.2	2064.2	2064.2	2064.2	2064.2	2064.2	2064.2
2.5°	2070.9	2075.6	2084.3	2091.0	2099.6	2109.2	2122.6	2131.2	2139.8	2145.5	2141.7
5°	2079.5	2090.0	2112.0	2134.0	2159.9	2183.8	2211.6	2231.7	2248.0	2252.8	2254.7
7.5°	2098.6	2115.9	2153.2	2190.5	2231.7	2271.0	2311.2	2345.6	2373.4	2383.9	2384.9
10°	2132.1	2155.1	2207.8	2260.4	2315.0	2375.3	2427.0	2476.8	2516.0	2532.3	2533.3
12.5°	2174.3	2203.0	2271.9	2344.7	2420.3	2503.6	2570.6	2631.9	2680.7	2702.7	2702.7
15°	2228.8	2266.2	2354.2	2451.9	2563.0	2678.8	2764.0	2832.0	2886.6	2913.4	2911.5
17.5°	2288.2	2338.0	2449.0	2596.5	2755.4	2907.6	3007.2	3057.0	3113.5	3139.3	3138.4
20°	2345.6	2406.9	2565.8	2780.3	2991.9	3153.7	3234.1	3247.5	3251.3	3254.2	3261.9
22.5°	2405.0	2487.3	2712.3	3012.0	3238.9	3350.9	3362.4	3304.9	3224.5	3187.2	3197.7
25°	2470.1	2579.2	2903.8	3267.6	3451.4	3464.8	3376.8	3237.0	3084.7	3014.9	3025.4
27.5°	2533.3	2685.5	3133.6	3511.7	3604.6	3486.9	3297.3	3099.1	2915.3	2841.6	2850.2
30°	2596.5	2807.1	3387.3	3725.2	3674.5	3432.3	3171.9	2950.7	2765.9	2688.4	2697.0
32.5°	2660.6	2948.8	3679.3	3879.4	3662.1	3316.4	3015.8	2784.1	2621.4	2540.0	2550.5
35°	2733.4	3123.0	3956.0	3963.6	3578.8	3146.0	2810.0	2585.0	2443.3	2378.2	2392.5
37.5°	2828.2	3344.2	4200.1	3984.7	3433.2	2896.1	2554.3	2349.5	2232.7	2203.0	2224.0
40°	2945.9	3610.4	4386.8	3951.2	3217.8	2592.6	2274.8	2111.1	2045.0	2051.7	2074.7
42.5°	3099.1	3908.1	4518.0	3865.0	2918.2	2279.6	2029.7	1956.9	1988.5	2015.3	2040.2
45°	3298.2	4217.4	4599.4	3718.5	2579.2	2014.4	1885.1	1902.4	1926.3	1929.2	1948.3
47.5°	3552.9	4530.4	4653.0	3497.4	2233.6	1827.7	1793.2	1797.0	1792.3	1772.1	1787.5
50°	3870.8	4834.9	4700.8	3204.4	1939.7	1710.9	1664.9	1651.5	1585.5	1520.4	1529.0
52.5°	4232.7	5114.4	4720.9	2840.6	1710.9	1613.2	1538.5	1454.3	1330.8	1310.7	1317.4
55°	4634.8	5372.9	4669.2	2393.5	1518.4	1487.8	1374.8	1273.3	1259.9	1242.7	1245.6
57.5°	5115.4	5651.5	4563.9	1894.7	1321.2	1341.3	1231.2	1242.7	1218.8	1192.0	1187.2
60°	5641.0	5939.7	4379.2	1439.9	1117.3	1158.5	1193.9	1192.9	1186.2	1164.2	1156.5
62.5°	6114.0	6129.3	4015.3	1102.9	938.3	1016.8	1113.5	1112.5	1106.8	1094.3	1089.5
65°	6395.4	6100.6	3408.3	868.4	790.8	900.0	1004.3	1012.0	1012.9	1012.0	1012.0
67.5°	6345.7	5764.5	2575.4	691.2	669.2	781.2	896.1	906.7	914.3	916.2	918.1
70°	5782.7	5026.4	1679.3	551.5	561.0	676.9	793.7	804.2	810.9	818.6	822.4
72.5°	4507.4	3695.6	961.2	446.1	466.3	586.9	692.2	704.6	708.5	722.8	728.6
75°	2746.8	2173.3	518.9	351.4	383.0	501.7	591.7	606.0	612.7	630.0	631.9
77.5°	1305.9	941.1	295.8	273.8	308.3	409.8	499.8	516.0	497.8	507.4	499.8
80°	441.4	349.5	186.7	208.7	235.5	319.8	400.2	416.5	378.2	376.3	372.4
82.5°	154.1	141.7	118.7	138.8	152.2	228.8	302.5	323.6	281.5	280.5	267.1
85°	60.3	57.4	66.1	75.6	91.0	140.7	199.1	209.7	173.3	139.8	137.9
87.5°	12.4	13.4	16.3	17.2	27.8	48.8	71.8	88.1	69.9	59.4	54.6
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)