

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: P965625

Luminaire Tested: **NAV-SB4A-735-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965625
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-SB4A-735-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18674.5 lumens
Efficiency: N/A
Efficacy: 163.8 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): 114
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



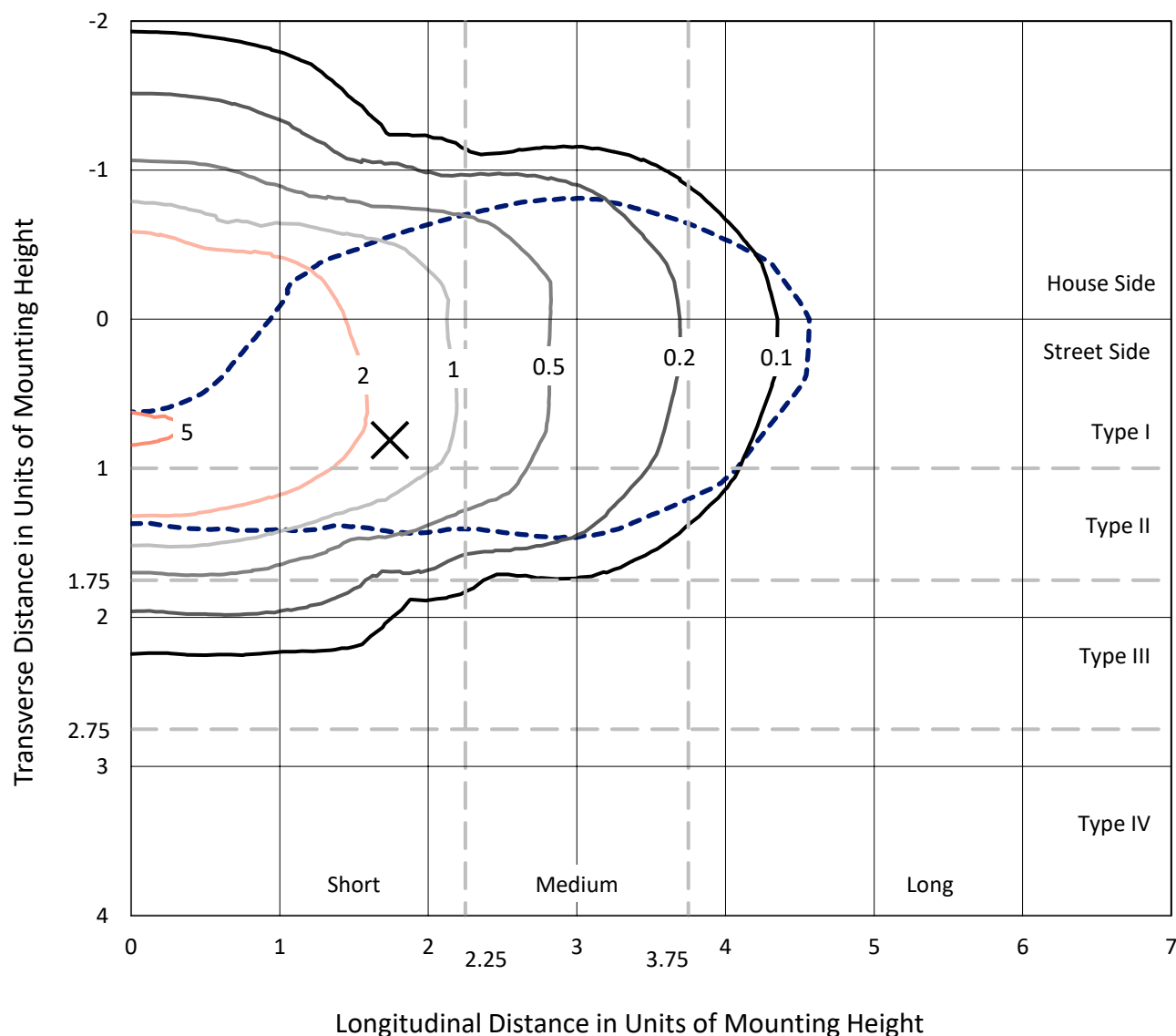
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

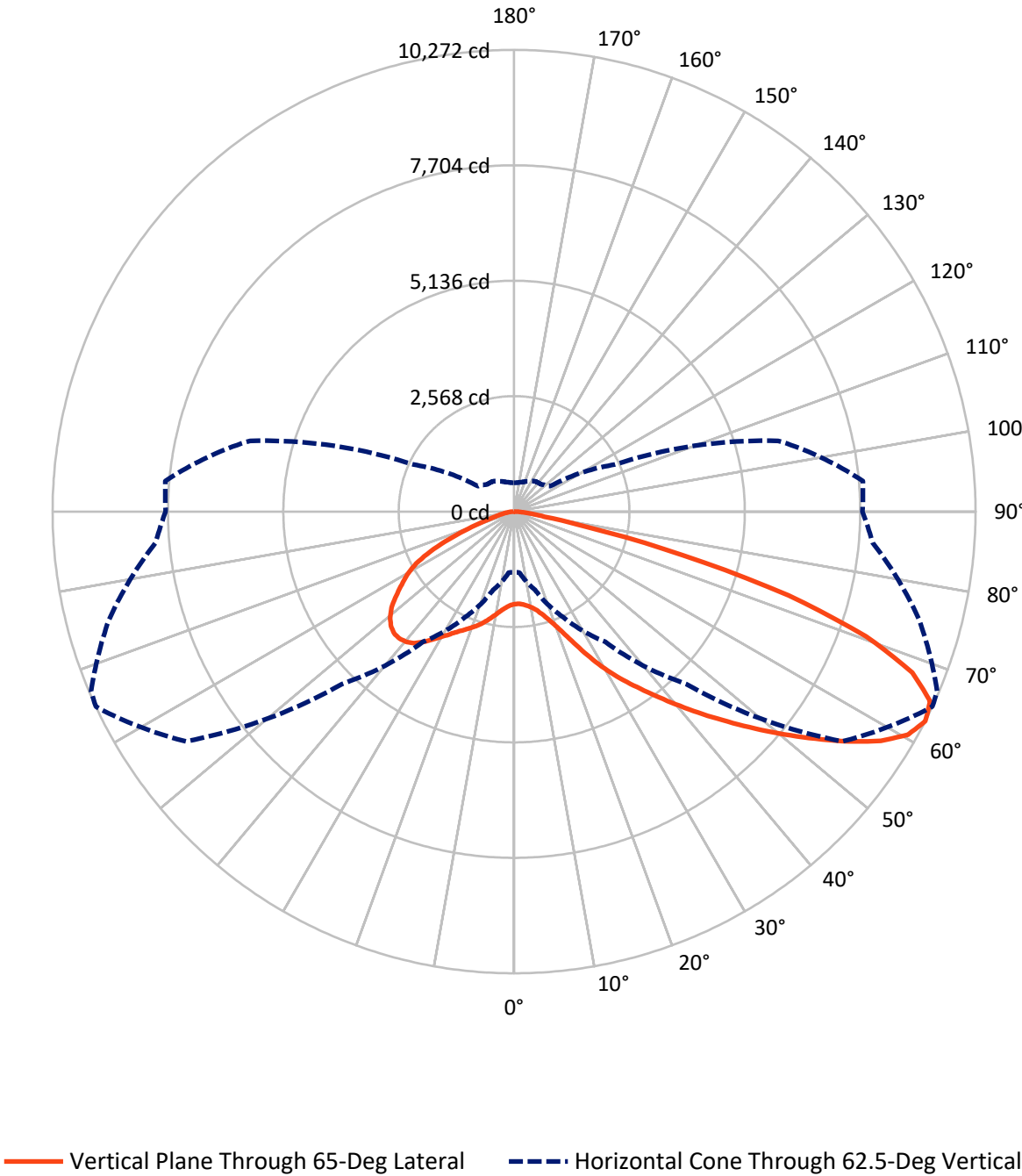
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 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	5892.9	0.0	5892.9
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	12781.6	0.0	12781.6
	% Fixture	68.4	0.0	68.4
Total	Lumens	18674.5	0.0	18674.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	205.2	1.1
10°-20°	695.7	3.7
20°-30°	1410.7	7.6
30°-40°	2441.1	13.1
40°-50°	3694.2	19.8
50°-60°	4331.2	23.2
60°-70°	3631.2	19.4
70°-80°	2004.7	10.7
80°-90°	260.4	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°	18674.5	100.0
0°-180°	18674.5	100.0

Coefficient of Utilization



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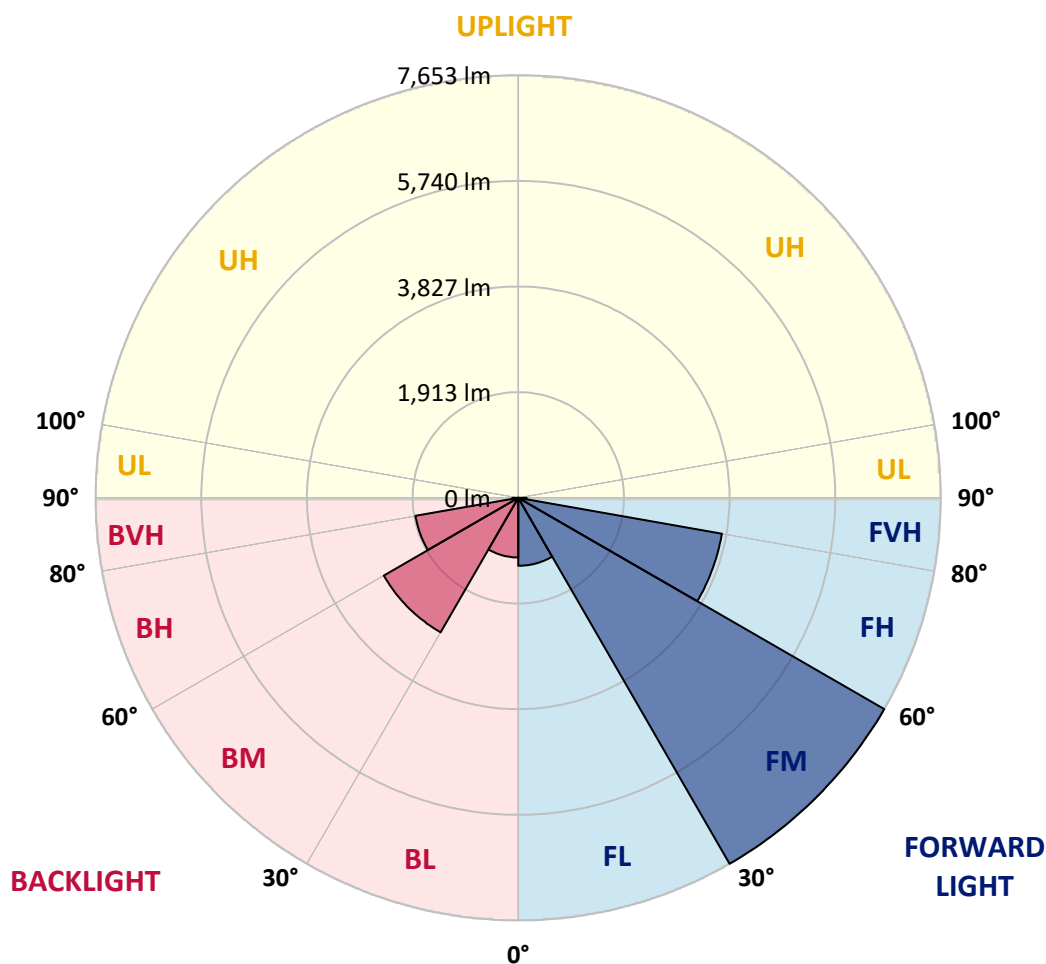
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1230.9	6.6			
FM	(30°-60°)	7653.4	41.0			
FH	(60°-80°)	3745.6	20.1			G2/5000
FVH	(80°-90°)	151.8	0.8			G2/225
BL	(0°-30°)	1080.7	5.8	B3/2500		
BM	(30°-60°)	2813.2	15.1	B3/5000		
BH	(60°-80°)	1890.4	10.1	B3/2500		G3/2500
BVH	(80°-90°)	108.6	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°	2057.9	2057.9	2057.9	2057.9	2057.9	2057.9	2057.9	2057.9	2057.9	2057.9	2057.9
2.5°	2044.3	2038.5	2043.3	2043.3	2045.3	2044.3	2051.0	2053.0	2055.9	2061.7	2061.7
5°	2024.0	2022.9	2031.7	2039.4	2047.2	2054.0	2062.7	2075.3	2077.3	2084.0	2092.7
7.5°	2017.2	2011.4	2024.9	2034.6	2053.0	2069.5	2092.7	2114.1	2122.8	2125.6	2142.1
10°	2069.5	2059.7	2072.3	2078.2	2093.7	2110.2	2137.3	2171.2	2180.9	2192.5	2210.9
12.5°	2158.6	2148.0	2166.3	2175.0	2189.6	2204.2	2222.5	2255.5	2260.3	2281.6	2299.1
15°	2280.7	2268.1	2279.7	2290.4	2314.6	2328.2	2346.5	2378.5	2378.5	2395.0	2407.6
17.5°	2446.4	2429.9	2438.6	2442.5	2458.0	2478.3	2509.3	2537.4	2551.9	2546.1	2528.7
20°	2693.4	2673.1	2673.1	2653.7	2647.9	2664.4	2705.1	2743.8	2759.3	2729.3	2686.6
22.5°	3064.4	3035.4	3018.9	2953.0	2926.9	2928.8	2969.5	3017.0	3029.6	2976.3	2880.4
25°	3536.4	3490.7	3468.5	3371.6	3312.5	3261.1	3293.1	3354.2	3371.6	3305.7	3150.7
27.5°	4008.2	4011.0	3989.7	3873.5	3775.6	3681.6	3665.2	3729.2	3747.5	3672.9	3481.1
30°	4669.9	4601.1	4560.4	4420.9	4281.3	4149.6	4081.8	4107.9	4112.8	4023.6	3800.8
32.5°	5240.5	5223.1	5135.9	5013.8	4834.6	4628.2	4514.8	4473.2	4465.4	4338.5	4074.1
35°	5890.7	5880.9	5788.9	5643.5	5449.8	5163.0	4958.6	4839.4	4829.7	4651.4	4344.4
37.5°	6551.4	6551.4	6461.3	6302.4	6101.8	5743.4	5432.4	5243.4	5212.4	4979.9	4619.5
40°	7078.4	7046.5	7063.0	6996.1	6766.4	6385.7	5958.4	5684.2	5642.6	5363.6	4912.1
42.5°	7377.8	7367.2	7466.0	7540.6	7446.6	7142.4	6537.9	6161.9	6103.8	5786.0	5249.2
45°	7444.7	7433.1	7609.4	7882.6	8014.4	7889.4	7167.6	6664.8	6594.0	6227.8	5610.6
47.5°	7290.6	7267.4	7526.1	7957.2	8379.6	8599.5	7849.7	7210.3	7107.6	6658.0	5981.7
50°	6827.5	6805.3	7196.6	7769.2	8502.7	9082.0	8589.9	7788.7	7631.6	7119.1	6356.6
52.5°	5820.9	5831.5	6444.8	7231.5	8340.8	9382.3	9227.4	8398.0	8209.1	7590.9	6708.3
55°	4534.2	4557.5	5311.2	6177.4	7693.6	9336.8	9662.4	9025.8	8837.9	8034.7	7071.7
57.5°	3246.6	3349.3	4055.6	4913.0	6450.6	8615.0	9757.3	9622.7	9440.6	8519.2	7427.3
60°	2104.3	2122.8	2849.4	3713.6	4912.1	7332.3	9564.5	10075.1	9932.7	9013.2	7724.7
62.5°	1348.7	1361.2	1804.0	2597.5	3535.3	5424.6	8915.3	10271.8	10228.2	9339.8	8010.5
65°	991.2	981.4	1212.1	1716.8	2381.5	3345.5	7654.9	10176.8	10263.1	9544.2	8246.8
67.5°	827.4	813.8	927.2	1188.8	1754.6	1899.9	5663.9	9559.7	9875.6	9520.9	8420.3
70°	753.8	742.1	811.0	882.6	1369.0	1272.1	2855.2	8310.8	8797.2	9256.5	8392.2
72.5°	638.5	618.2	712.1	783.8	1064.8	975.6	1180.1	6383.8	6976.8	8408.7	7996.9
75°	495.1	481.5	561.9	689.8	800.3	761.5	746.0	3876.3	4523.5	6502.9	6996.1
77.5°	392.4	374.0	447.6	537.7	719.9	574.5	543.6	1669.3	2310.8	4151.6	5234.7
80°	295.5	279.0	340.1	425.4	553.2	433.1	351.7	681.1	871.0	2103.4	2632.4
82.5°	210.2	195.7	237.4	312.0	372.1	388.5	216.1	381.7	429.2	811.0	588.1
85°	134.7	126.0	158.9	195.7	236.4	250.0	131.8	199.6	218.9	334.3	245.1
87.5°	73.6	60.1	85.3	91.1	109.5	99.8	62.9	72.7	78.5	121.2	103.6
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°	2057.9	2057.9	2057.9	2057.9	2057.9	2057.9	2057.9	2057.9	2057.9	2057.9	2057.9
2.5°	2065.6	2068.6	2078.2	2081.1	2087.9	2096.6	2102.4	2108.2	2108.2	2114.1	2114.1
5°	2093.7	2100.4	2120.8	2131.5	2148.9	2166.3	2177.0	2189.6	2197.4	2201.2	2203.1
7.5°	2148.0	2158.6	2187.7	2206.1	2236.1	2260.3	2276.8	2294.3	2298.2	2308.8	2304.9
10°	2221.6	2234.2	2267.1	2302.0	2337.8	2367.9	2383.3	2395.9	2400.9	2402.8	2397.9
12.5°	2305.8	2324.3	2366.9	2409.6	2447.3	2473.5	2477.3	2474.5	2460.9	2449.2	2449.2
15°	2409.6	2426.0	2473.5	2520.0	2556.8	2561.7	2537.4	2521.9	2505.4	2502.5	2502.5
17.5°	2533.6	2542.3	2585.9	2631.4	2634.4	2617.8	2582.0	2567.4	2551.9	2541.3	2542.3
20°	2677.9	2675.0	2706.0	2725.4	2705.1	2654.6	2600.4	2576.1	2560.7	2548.0	2549.1
22.5°	2850.3	2828.1	2824.2	2819.4	2765.1	2659.5	2585.9	2554.9	2530.6	2513.2	2519.0
25°	3101.3	3016.1	2956.9	2924.0	2801.9	2633.3	2539.3	2470.6	2425.0	2395.0	2406.6
27.5°	3415.2	3271.8	3122.7	3042.2	2801.9	2580.0	2427.0	2315.6	2241.0	2210.0	2225.5
30°	3714.6	3564.4	3344.5	3184.6	2795.2	2492.9	2245.8	2090.8	2003.6	1972.6	1991.0
32.5°	3970.3	3806.6	3579.9	3340.6	2778.7	2351.5	2021.0	1849.5	1765.3	1728.5	1746.8
35°	4207.7	4033.4	3816.3	3512.1	2735.1	2144.1	1774.0	1643.2	1549.2	1490.1	1509.5
37.5°	4451.0	4243.6	4040.1	3667.1	2656.6	1901.9	1584.0	1472.6	1362.2	1282.8	1304.1
40°	4715.4	4467.4	4279.5	3759.2	2527.8	1671.3	1436.8	1335.1	1217.8	1133.5	1150.0
42.5°	5024.4	4735.8	4545.9	3806.6	2351.5	1507.6	1340.9	1241.1	1130.7	1061.9	1075.4
45°	5347.1	5031.2	4789.0	3805.6	2154.8	1431.0	1309.8	1211.0	1089.0	1017.3	1028.9
47.5°	5685.3	5340.4	4999.3	3743.6	1984.2	1441.7	1292.4	1146.2	1011.5	941.8	951.4
50°	6024.3	5678.5	5202.8	3627.4	1911.5	1418.4	1227.5	1055.0	896.2	833.2	837.1
52.5°	6360.5	6037.9	5378.1	3461.7	1837.9	1332.2	1144.2	936.8	848.7	805.1	805.1
55°	6698.7	6393.4	5568.9	3220.4	1653.8	1231.4	1004.7	892.4	811.0	771.2	767.3
57.5°	7037.8	6804.3	5750.1	2979.3	1422.3	1107.4	928.1	838.0	773.2	739.2	733.4
60°	7390.5	7274.1	5937.1	2757.4	1193.6	948.5	872.0	794.5	728.6	690.7	687.9
62.5°	7753.7	7791.5	6083.5	2471.6	983.4	851.7	821.5	742.1	678.2	642.4	641.3
65°	8119.9	8290.5	6179.3	2075.3	797.3	759.6	767.3	685.0	620.0	589.1	588.1
67.5°	8396.1	8650.0	6152.3	1570.5	653.9	672.4	699.6	624.9	563.9	539.7	540.6
70°	8427.1	8607.3	5884.8	1075.4	547.5	587.1	623.9	565.8	502.9	485.4	486.4
72.5°	8014.4	8026.0	5139.8	702.4	463.1	515.5	544.5	505.7	444.7	427.2	426.3
75°	6932.2	6637.6	3773.6	463.1	387.6	442.8	469.9	442.8	383.7	387.6	374.0
77.5°	5252.2	4700.9	2291.4	329.4	323.6	372.1	408.9	389.5	339.1	380.8	335.2
80°	2706.0	2543.2	1022.1	246.1	255.7	297.5	336.2	311.0	268.3	255.7	233.5
82.5°	620.0	720.8	403.0	176.3	185.0	214.1	256.8	233.5	192.8	162.8	160.8
85°	217.0	237.4	178.2	110.5	108.5	133.7	174.4	156.0	130.8	104.7	110.5
87.5°	68.8	90.1	66.8	44.6	46.5	60.1	80.5	73.6	61.0	39.8	41.6
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)