

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: P967740

Luminaire Tested: **NAV-SB5A-735-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967740
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-735-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22955.9 lumens
Efficiency: N/A
Efficacy: 162.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 141.7
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



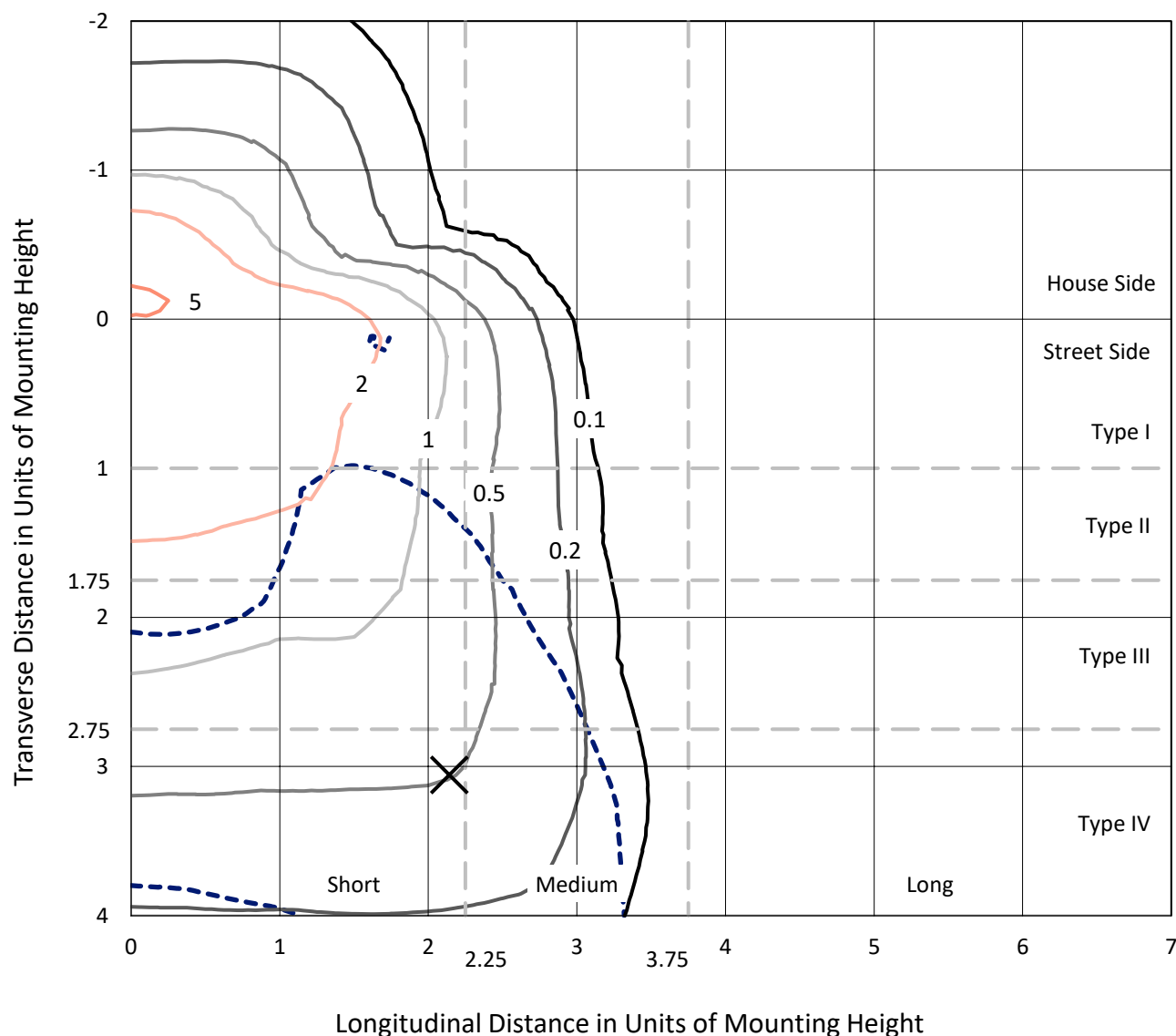
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

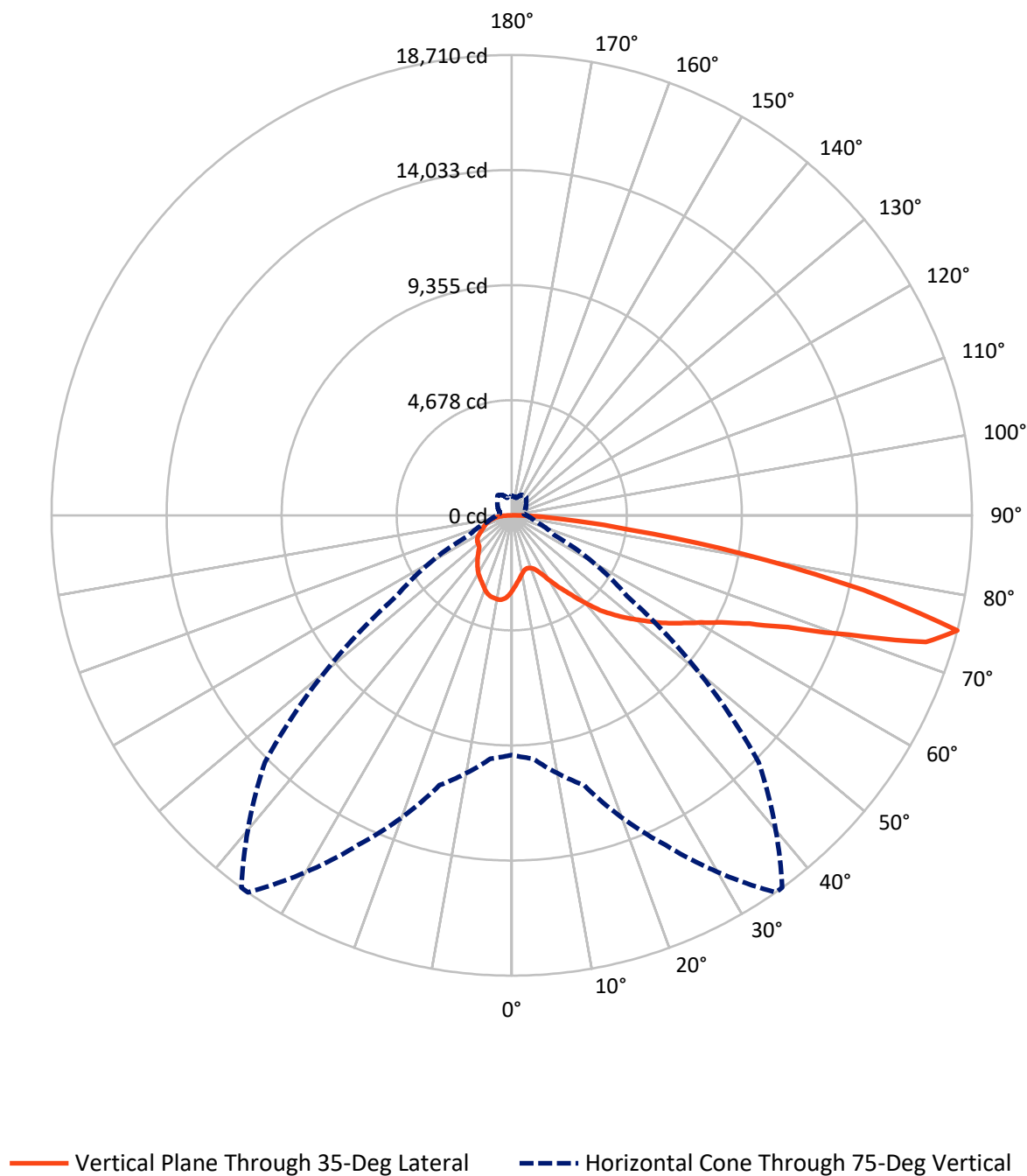


Based on 25 foot mounting height. Maximum calculated value = 5.4 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5462.9	0.0	5462.9
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	17493.0	0.0	17493.0
	% Fixture	76.2	0.0	76.2
Total	Lumens	22955.9	0.0	22955.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	289.6	1.3
10°-20°	835.4	3.6
20°-30°	1402.9	6.1
30°-40°	2180.3	9.5
40°-50°	3236.1	14.1
50°-60°	4467.6	19.5
60°-70°	5420.3	23.6
70°-80°	4479.4	19.5
80°-90°	644.3	2.8
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°	22955.9	100.0
0°-180°	22955.9	100.0

Coefficient of Utilization



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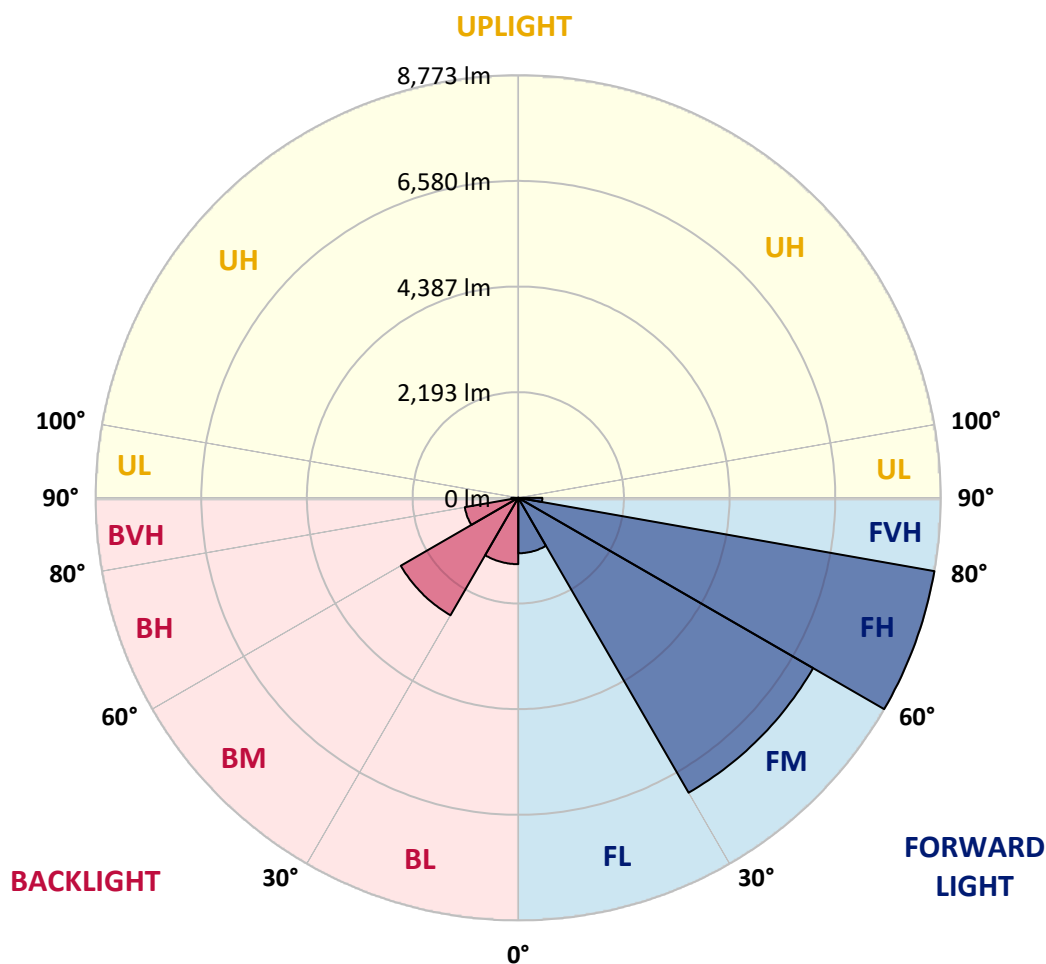
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1151.2	5.0			
FM	(30°-60°)	7069.2	30.8			
FH	(60°-80°)	8773.4	38.2			G4/12000
FVH	(80°-90°)	499.2	2.2			G3/500
BL	(0°-30°)	1376.7	6.0	B3/2500		
BM	(30°-60°)	2814.8	12.3	B3/5000		
BH	(60°-80°)	1126.3	4.9	B3/2500		G3/2500
BVH	(80°-90°)	145.1	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-G4

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	3059.0	3059.0	3059.0	3059.0	3059.0	3059.0	3059.0	3059.0	3059.0	3059.0	3059.0
2.5°	2820.8	2838.1	2845.6	2841.8	2860.5	2858.0	2884.0	2916.3	2961.0	3004.4	3067.7
5°	2603.6	2622.2	2638.4	2653.2	2689.2	2700.4	2741.4	2803.4	2885.3	2968.4	3072.6
7.5°	2401.3	2417.5	2442.3	2469.5	2530.4	2541.5	2609.8	2706.6	2820.8	2942.4	3086.4
10°	2236.2	2252.4	2278.5	2309.4	2385.2	2398.8	2485.7	2614.8	2763.7	2917.6	3101.2
12.5°	2165.5	2170.4	2185.4	2216.4	2282.2	2290.9	2386.4	2534.1	2707.8	2898.9	3123.6
15°	2161.8	2171.8	2173.0	2189.1	2243.7	2247.4	2335.6	2481.9	2673.1	2895.2	3157.1
17.5°	2199.0	2206.5	2195.3	2205.2	2251.1	2257.4	2326.9	2457.1	2661.9	2911.3	3214.2
20°	2298.3	2304.5	2271.0	2257.4	2290.9	2295.8	2364.1	2473.3	2673.1	2944.8	3292.3
22.5°	2509.3	2513.0	2431.1	2375.2	2377.7	2380.3	2439.8	2539.0	2716.6	3005.7	3391.6
25°	2838.1	2835.7	2705.4	2597.4	2535.3	2521.7	2561.4	2645.7	2789.7	3086.4	3519.4
27.5°	3222.8	3204.3	3073.9	2912.6	2777.3	2757.5	2748.7	2784.7	2894.0	3193.1	3675.8
30°	3657.2	3639.8	3499.6	3288.6	3101.2	3069.0	2987.1	2968.4	3049.1	3338.2	3893.0
32.5°	4133.7	4122.5	3955.1	3699.3	3448.7	3411.5	3273.7	3224.0	3287.4	3557.9	4195.7
35°	4533.4	4523.4	4384.4	4121.3	3814.7	3768.8	3628.6	3572.8	3605.0	3839.6	4591.7
37.5°	4894.5	4889.5	4770.3	4563.1	4246.7	4190.8	4033.2	4014.6	4008.4	4210.7	5071.9
40°	5229.5	5217.1	5093.0	4983.8	4749.2	4698.4	4559.4	4543.2	4496.1	4667.3	5615.5
42.5°	5600.6	5568.3	5388.3	5337.5	5274.1	5232.0	5148.9	5151.3	5047.1	5182.4	6191.3
45°	5903.4	5884.7	5699.8	5670.1	5738.4	5720.9	5792.9	5811.5	5609.2	5722.2	6789.4
47.5°	6228.5	6211.1	6054.8	6033.7	6218.6	6223.5	6477.9	6484.2	6157.8	6283.1	7388.8
50°	6629.4	6604.5	6449.4	6475.4	6682.7	6701.3	7166.7	7124.5	6662.8	6852.7	7983.2
52.5°	6893.6	6908.6	6875.1	6917.2	7200.2	7217.5	7844.2	7736.3	7163.0	7414.8	8566.5
55°	7088.5	7118.3	7222.6	7319.3	7746.2	7763.6	8483.4	8318.3	7577.4	7936.1	9115.0
57.5°	7339.2	7297.0	7491.8	7680.4	8265.0	8310.9	9105.1	8879.3	7944.8	8385.3	9491.1
60°	7699.1	7669.3	7820.6	8100.0	8845.8	8918.9	9762.8	9384.3	8214.0	8741.5	9564.3
62.5°	8428.8	8354.3	8377.9	8624.9	9577.9	9674.8	10504.9	9824.9	8348.1	8880.5	9172.1
65°	9519.6	9391.8	9272.7	9443.9	10609.2	10704.7	11342.6	10171.1	8298.5	8611.2	8130.9
67.5°	10893.4	10766.8	10620.3	10781.7	12128.1	12203.9	12376.4	10365.9	7907.6	7573.7	6290.5
70°	12026.4	11979.3	12154.2	12818.1	14554.3	14556.7	13701.7	10204.6	6836.5	5369.8	3639.8
72.5°	11876.3	11847.7	12769.8	14822.3	17612.1	17546.3	14956.4	8983.5	4605.3	2422.4	1363.9
75°	9742.9	9927.8	11356.3	14786.3	18710.4	18701.6	14188.2	5711.0	1905.0	1004.0	704.9
77.5°	5224.5	5517.4	7372.7	10917.0	14606.4	14826.0	9975.0	1998.0	817.8	642.9	487.7
80°	1703.9	1959.5	2938.7	5558.4	9491.1	9450.1	4275.2	784.3	559.6	455.4	337.5
82.5°	723.4	753.3	1312.9	2624.7	4870.9	4795.2	1361.4	450.5	393.4	311.5	208.5
85°	282.9	316.4	579.5	1213.7	2109.7	2063.7	491.4	223.3	251.9	203.6	124.1
87.5°	93.1	113.0	207.3	415.7	656.5	632.9	120.3	77.0	109.2	93.1	44.7
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°	3059.0	3059.0	3059.0	3059.0	3059.0	3059.0	3059.0	3059.0	3059.0	3059.0	3059.0
2.5°	3085.0	3104.9	3128.5	3163.3	3193.1	3217.9	3243.9	3260.1	3266.3	3284.9	3283.7
5°	3107.4	3150.8	3209.2	3266.3	3322.1	3355.6	3385.4	3400.3	3414.0	3423.9	3426.4
7.5°	3144.7	3200.5	3292.3	3366.8	3414.0	3441.2	3461.1	3456.1	3461.1	3463.6	3467.3
10°	3176.9	3255.1	3364.4	3435.1	3471.1	3472.3	3467.3	3449.9	3441.2	3442.5	3445.0
12.5°	3215.4	3302.2	3420.1	3479.8	3489.6	3462.3	3441.2	3411.5	3400.3	3395.3	3392.9
15°	3267.5	3366.8	3481.0	3503.3	3478.4	3443.7	3407.7	3359.3	3334.5	3314.6	3320.9
17.5°	3330.8	3440.0	3528.2	3512.0	3458.7	3401.6	3343.2	3270.0	3219.1	3198.0	3199.2
20°	3418.9	3517.0	3564.1	3493.4	3412.7	3325.8	3226.6	3137.2	3090.1	3069.0	3066.5
22.5°	3525.6	3620.0	3598.9	3461.1	3346.9	3207.9	3083.8	3018.1	2994.5	2979.6	2982.1
25°	3653.5	3734.1	3623.7	3414.0	3239.0	3051.6	2956.0	2934.9	2923.8	2912.6	2912.6
27.5°	3819.8	3863.2	3642.3	3344.5	3070.2	2885.3	2850.5	2854.3	2850.5	2832.0	2835.7
30°	4039.4	4030.7	3659.7	3231.5	2876.6	2735.1	2737.6	2753.8	2756.2	2743.8	2750.0
32.5°	4328.6	4240.4	3668.4	3085.0	2691.6	2603.6	2606.1	2623.5	2635.9	2614.8	2624.7
35°	4678.5	4484.9	3654.7	2901.5	2549.0	2478.2	2459.6	2464.6	2468.3	2448.4	2462.2
37.5°	5086.8	4759.2	3593.9	2697.9	2431.1	2355.3	2315.7	2282.2	2262.3	2243.7	2256.1
40°	5534.8	5058.3	3482.2	2499.4	2299.6	2225.1	2165.5	2102.3	2035.2	2010.4	2021.6
42.5°	6003.9	5366.0	3346.9	2309.4	2148.2	2087.3	2024.1	1932.2	1831.7	1780.8	1787.0
45°	6490.4	5681.3	3214.2	2122.1	1993.0	1967.0	1893.8	1783.3	1674.1	1609.6	1604.6
47.5°	6966.9	5979.0	3019.3	1933.5	1847.9	1876.4	1819.3	1717.5	1595.9	1494.1	1483.0
50°	7422.3	6258.2	2700.4	1742.3	1729.9	1849.1	1794.5	1648.0	1509.0	1378.7	1367.6
52.5°	7874.0	6484.2	2292.1	1568.6	1666.6	1841.6	1762.2	1600.8	1430.9	1294.4	1279.4
55°	8257.5	6600.8	1898.7	1419.7	1574.8	1778.4	1723.7	1545.0	1320.4	1175.2	1162.8
57.5°	8475.9	6506.5	1571.1	1273.3	1448.2	1674.1	1657.9	1425.9	1188.9	1077.2	1062.3
60°	8381.6	6124.3	1303.1	1145.4	1327.9	1561.2	1543.8	1308.0	1088.3	982.9	968.0
62.5°	7861.6	5395.8	1090.8	1033.7	1218.6	1445.8	1429.6	1217.4	1011.4	909.7	893.5
65°	6814.2	4389.4	925.8	940.6	1108.2	1306.8	1330.3	1141.7	950.6	851.4	835.2
67.5°	5197.3	3179.4	796.7	860.0	1000.2	1170.2	1238.5	1087.1	899.7	805.4	790.5
70°	2962.2	1805.6	687.5	781.9	904.7	1043.7	1167.8	1043.7	845.1	766.9	757.0
72.5°	1123.1	829.0	594.4	703.7	812.8	937.0	1089.6	975.4	781.9	723.4	713.6
75°	599.4	505.1	500.1	611.8	707.4	832.7	991.6	908.4	734.6	764.4	789.2
77.5°	408.3	357.4	418.2	523.7	591.9	717.3	887.3	806.7	636.6	634.2	584.5
80°	282.9	253.2	340.0	421.9	458.0	603.1	774.4	692.5	518.8	484.0	462.9
82.5°	170.0	165.0	254.4	315.2	323.9	465.4	641.5	580.8	424.5	369.8	372.3
85°	93.1	98.0	162.6	184.9	188.6	325.1	502.6	449.3	326.4	274.3	276.8
87.5°	26.0	33.5	59.6	73.2	90.6	168.8	299.1	266.8	163.8	114.2	114.2
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)