

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: P968785

Luminaire Tested: **NAV-SB5C-735-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968785
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-735-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39496.3 lumens
Efficiency: N/A
Efficacy: 158.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

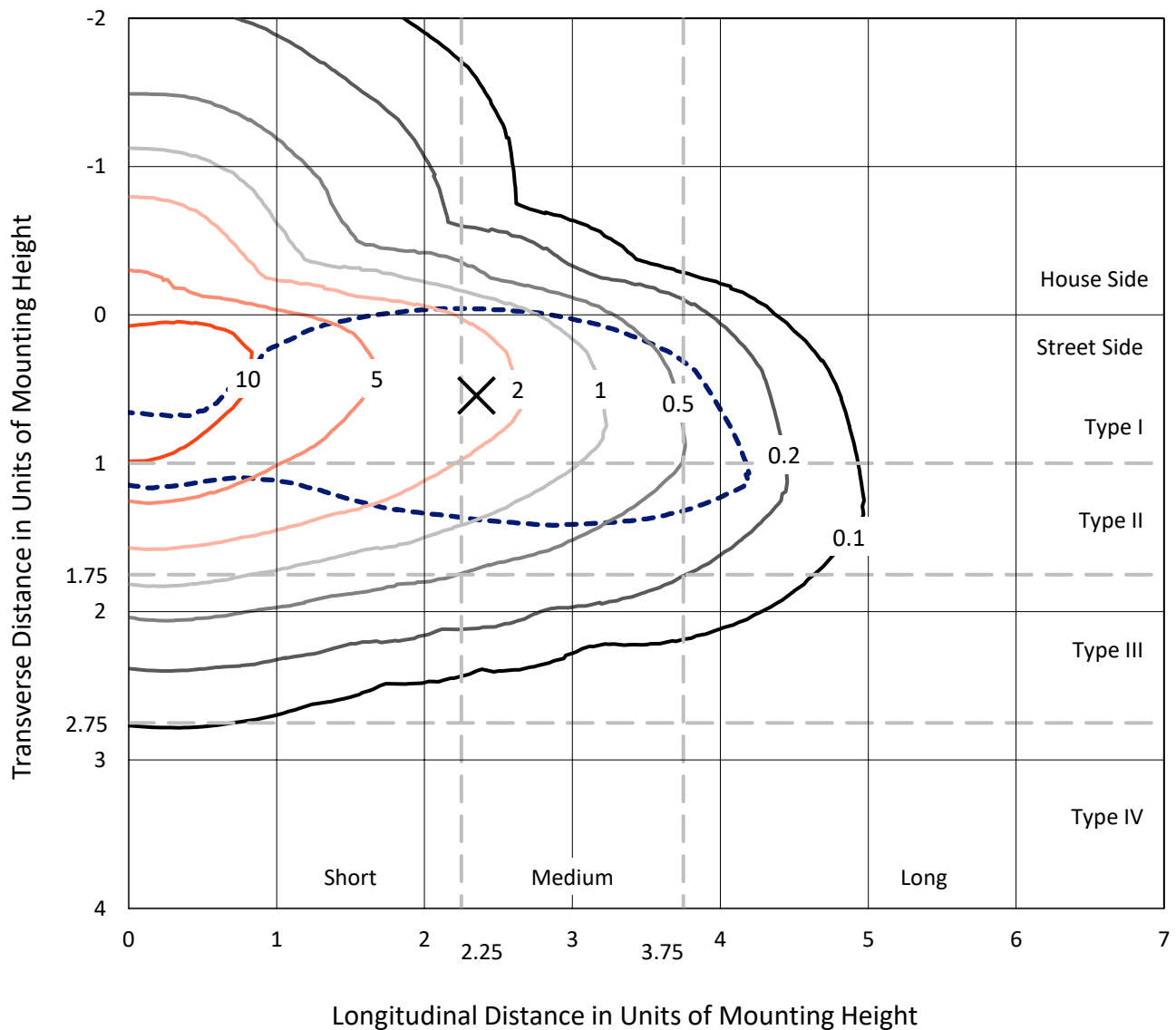
Input Watts (W): 249.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

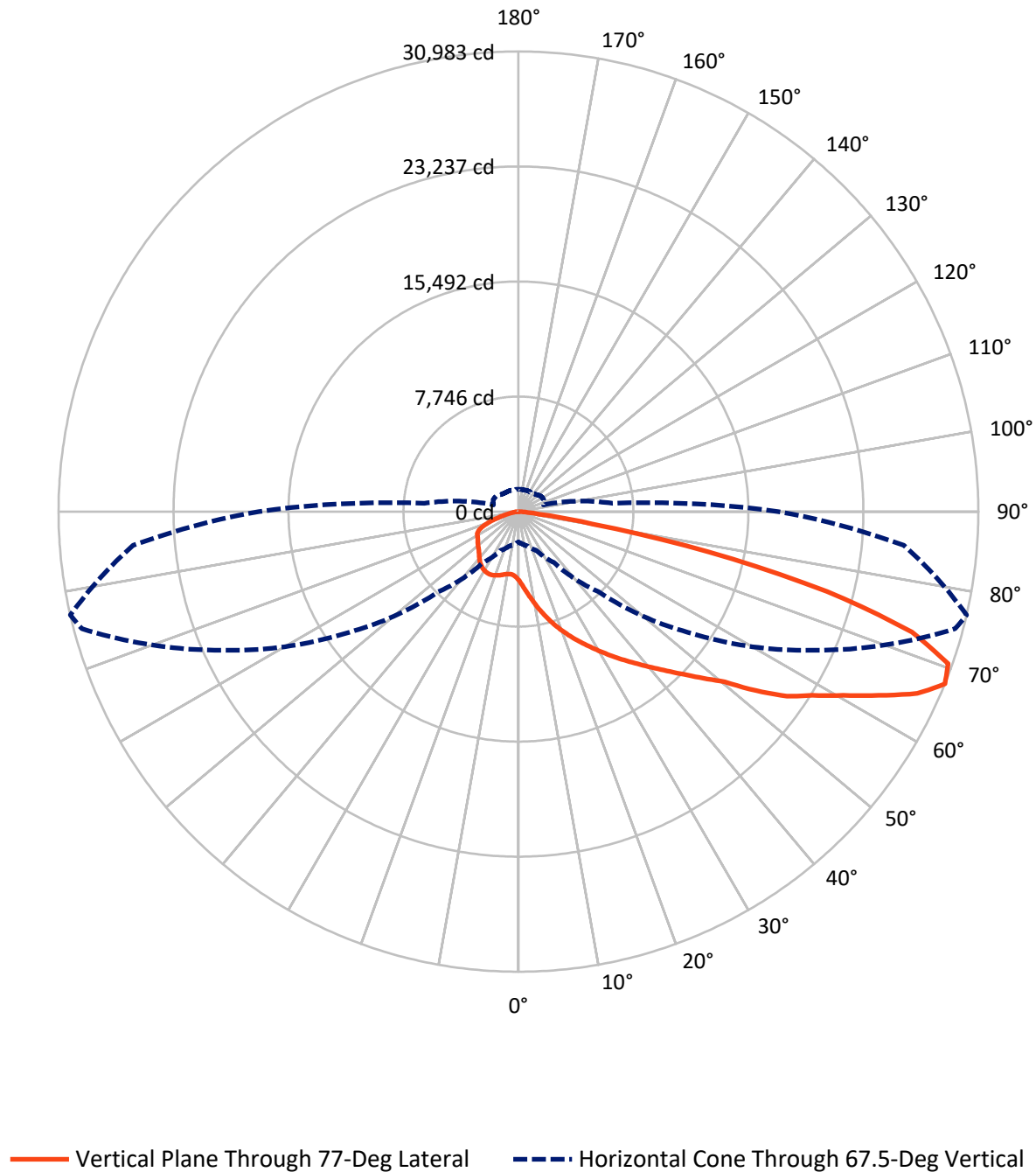
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.5 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7471.1	0.0	7471.1
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	32025.2	0.0	32025.2
	% Fixture	81.1	0.0	81.1
Total	Lumens	39496.3	0.0	39496.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	496.7	1.3
10°-20°	1784.5	4.5
20°-30°	3369.3	8.5
30°-40°	5427.9	13.7
40°-50°	7424.4	18.8
50°-60°	8374.8	21.2
60°-70°	7816.8	19.8
70°-80°	4284.9	10.8
80°-90°	516.9	1.3
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°	39496.3	100.0
0°-180°	39496.3	100.0

Coefficient of Utilization



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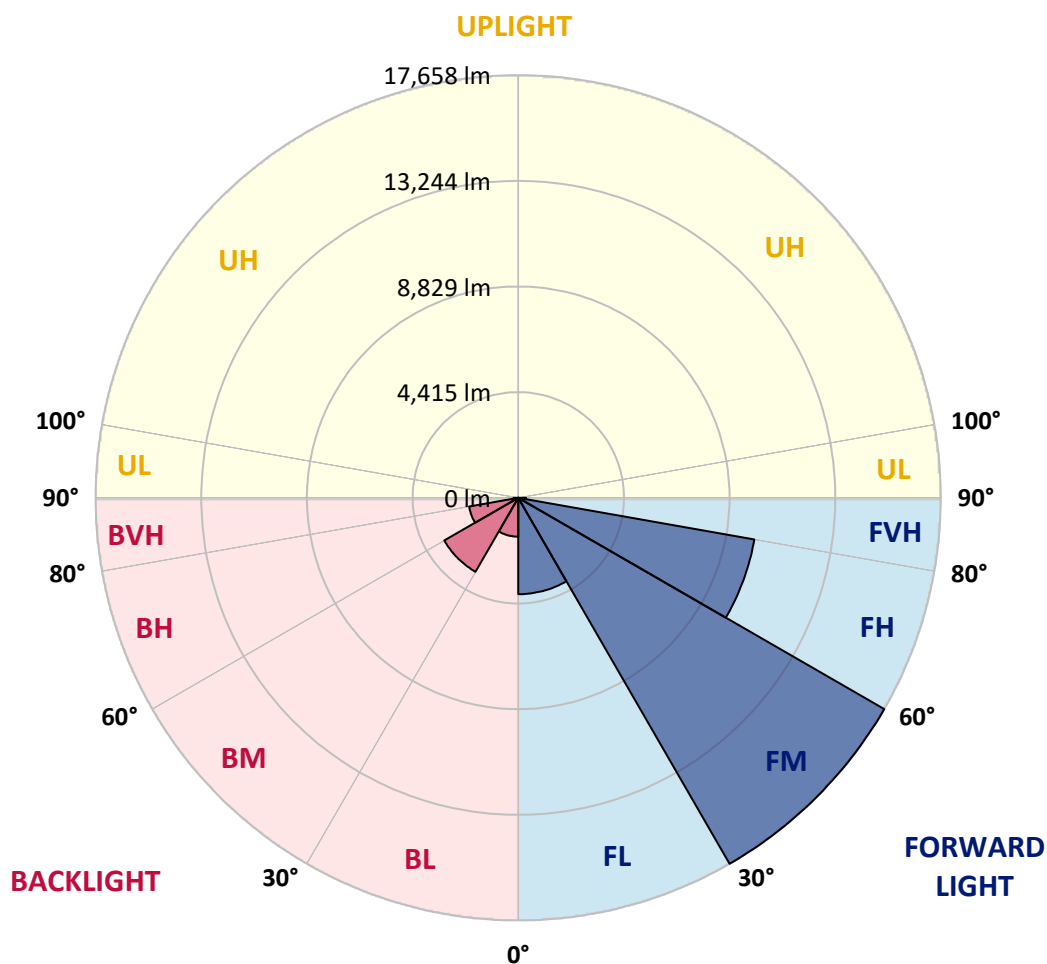
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4026.2	10.2			
FM	(30°-60°)	17658.4	44.7			
FH	(60°-80°)	10017.4	25.4			G4/12000
FVH	(80°-90°)	323.2	0.8			G3/500
BL	(0°-30°)	1624.4	4.1	B3/2500		
BM	(30°-60°)	3568.8	9.0	B3/5000		
BH	(60°-80°)	2084.3	5.3	B3/2500		G3/2500
BVH	(80°-90°)	193.6	0.5			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1
2.5°	5802.3	5843.1	5792.2	5792.2	5620.9	5531.2	5359.9	5229.4	4995.0	4954.2	4799.3
5°	6858.5	6909.4	6838.1	6807.4	6605.6	6420.1	6132.7	5849.3	5431.3	5388.5	5023.5
7.5°	7676.0	7741.2	7678.1	7645.4	7466.0	7258.0	6921.6	6526.2	5936.9	5853.4	5325.3
10°	8342.7	8352.9	8332.5	8344.7	8204.1	8032.8	7688.2	7227.5	6491.4	6377.3	5690.2
12.5°	8719.9	8766.7	8807.5	8880.9	8856.4	8750.4	8440.6	7890.0	7078.6	6931.9	6087.8
15°	8897.2	8978.8	9070.5	9239.8	9376.4	9402.8	9166.4	8601.6	7676.0	7498.6	6489.5
17.5°	8960.4	9037.9	9182.7	9427.3	9720.9	9918.6	9812.6	9292.8	8267.2	8063.4	6911.5
20°	9280.6	9302.9	9390.6	9623.0	9941.1	10269.4	10348.8	9957.4	8852.4	8622.0	7347.7
22.5°	9965.6	9920.7	9945.2	10051.2	10279.5	10597.6	10779.0	10544.6	9453.8	9188.8	7788.2
25°	11097.1	10966.6	10836.1	10713.8	10830.0	11009.4	11215.3	11131.7	10083.8	9747.4	8232.6
27.5°	12526.2	12367.2	12079.7	11678.1	11537.5	11600.6	11692.4	11676.1	10666.9	10326.5	8691.3
30°	13933.0	13747.5	13405.0	12823.9	12452.8	12285.6	12216.4	12169.5	11300.9	10938.1	9154.1
32.5°	15056.4	14909.5	14573.2	13922.8	13384.6	13099.2	12868.8	12701.6	11963.6	11600.6	9643.4
35°	16039.1	15902.5	15517.2	14807.7	14222.5	13918.8	13617.0	13260.2	12652.7	12285.6	10169.4
37.5°	16936.2	16799.5	16271.5	15533.5	14944.3	14734.3	14465.1	13859.6	13343.9	12997.2	10726.0
40°	17502.9	17472.4	16978.9	16143.0	15531.4	15427.5	15337.7	14554.9	14110.4	13788.3	11337.6
42.5°	17647.6	17715.0	17323.5	16636.5	16053.3	15969.8	16179.7	15341.8	14970.7	14662.9	12030.8
45°	17299.0	17492.8	17235.9	16769.0	16424.4	16379.6	16925.9	16202.2	15922.9	15641.5	12866.7
47.5°	16416.3	16744.5	16638.5	16573.2	16524.3	16718.0	17582.4	17115.6	17001.4	16756.7	13820.9
50°	14634.3	15256.2	15441.7	15853.6	16326.5	16981.0	18179.8	18112.5	18261.3	18014.7	14983.0
52.5°	11553.8	12410.1	13486.5	14518.1	15719.0	16893.3	18836.3	19543.8	20171.7	20037.1	16830.1
55°	9537.4	9922.7	10750.5	12642.5	14540.5	16524.3	19131.9	20699.8	22067.7	21947.5	18230.8
57.5°	7987.9	8332.5	8842.2	10422.2	12758.7	15686.4	19315.4	21405.2	23366.4	23354.2	19613.1
60°	6326.3	6691.3	7213.2	8332.5	10677.1	14238.8	19274.6	22208.5	25023.9	25125.9	21299.1
62.5°	4450.7	4852.2	5431.3	6475.1	8550.7	12363.1	18442.8	22789.4	26975.1	27252.4	23327.7
65°	2925.7	3190.7	3627.0	4528.1	6371.2	9951.3	16854.6	22864.9	29062.8	29531.7	25231.9
67.5°	2051.0	2152.9	2409.9	2899.1	4199.8	7631.1	14324.5	22084.0	30455.3	30983.3	26057.7
70°	1600.4	1651.4	1781.9	1977.6	2638.1	5131.6	10976.8	20053.4	30157.7	30708.1	25195.2
72.5°	1382.3	1431.2	1480.2	1504.6	1769.7	3168.3	7435.5	16766.9	27354.3	27727.4	21906.7
75°	1253.9	1266.1	1306.9	1298.7	1349.7	2055.1	4291.7	12216.4	21582.5	21454.1	16171.6
77.5°	1054.0	1070.4	1137.6	1127.4	1198.8	1404.8	2228.4	7884.0	13992.2	13119.6	9001.2
80°	893.0	901.2	974.6	962.3	1041.8	1017.3	1137.6	4018.4	5934.9	5027.6	2595.4
82.5°	309.9	383.2	744.2	766.6	795.1	615.7	656.5	1639.2	1812.5	1388.4	544.4
85°	150.9	161.0	379.2	538.2	536.2	309.9	320.1	585.2	570.8	448.5	181.4
87.5°	24.5	30.5	44.9	210.0	167.2	81.6	110.1	114.2	118.3	102.0	40.8
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°	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1
2.5°	4685.1	4583.2	4369.1	4171.3	4016.4	3867.5	3784.0	3712.7	3671.9	3663.7	3663.7
5°	4811.6	4601.5	4212.1	3883.8	3669.8	3510.7	3427.2	3374.2	3347.6	3331.4	3329.3
7.5°	4993.0	4685.1	4130.5	3757.4	3533.2	3419.0	3376.2	3368.0	3366.0	3368.0	3374.2
10°	5243.7	4821.7	4122.4	3726.9	3539.3	3476.1	3474.0	3476.1	3484.3	3486.3	3488.4
12.5°	5514.9	4962.4	4155.0	3753.3	3616.8	3582.2	3576.0	3574.0	3580.1	3584.2	3586.2
15°	5810.5	5148.0	4210.1	3810.4	3702.4	3665.7	3659.7	3647.4	3645.3	3643.3	3641.2
17.5°	6114.3	5331.4	4271.3	3871.6	3757.4	3706.5	3684.1	3655.6	3633.1	3627.0	3633.1
20°	6422.1	5512.9	4314.0	3902.2	3761.5	3690.2	3645.3	3596.4	3557.7	3535.2	3543.4
22.5°	6750.4	5702.5	4340.6	3894.1	3724.8	3627.0	3545.5	3488.4	3429.2	3390.5	3392.5
25°	7070.4	5867.6	4338.5	3851.2	3653.5	3529.2	3425.1	3351.7	3270.2	3229.5	3229.5
27.5°	7378.4	6016.4	4287.6	3775.8	3551.5	3412.9	3288.5	3200.9	3121.3	3082.6	3080.6
30°	7696.4	6140.8	4208.0	3665.7	3431.3	3278.4	3141.7	3066.3	2994.9	2958.3	2956.2
32.5°	8012.4	6255.0	4095.9	3529.2	3292.6	3145.8	3011.2	2942.0	2899.1	2899.1	2901.2
35°	8346.8	6334.5	3947.1	3370.1	3145.8	3005.2	2899.1	2858.4	2854.3	2829.8	2823.7
37.5°	8699.5	6385.4	3765.6	3207.0	3001.1	2868.6	2836.0	2787.0	2746.3	2693.2	2685.1
40°	9070.5	6436.4	3547.5	3037.8	2848.2	2774.8	2760.5	2695.2	2579.1	2448.6	2430.3
42.5°	9521.1	6471.1	3321.2	2868.6	2687.1	2662.6	2683.0	2570.9	2385.4	2287.5	2289.5
45°	10043.1	6528.1	3113.2	2701.4	2522.0	2522.0	2607.6	2460.8	2307.9	2246.7	2256.9
47.5°	10719.9	6660.7	2919.5	2517.9	2369.1	2409.9	2440.4	2328.3	2242.7	2167.3	2165.2
50°	11698.5	6978.7	2719.7	2332.4	2252.8	2334.4	2291.6	2226.3	2126.5	2065.3	2059.1
52.5°	12913.7	7166.3	2542.3	2165.2	2152.9	2234.5	2173.3	2112.2	2036.8	1955.2	1938.9
55°	13741.4	7200.9	2393.5	2042.8	2085.7	2077.5	2055.1	2000.1	1959.3	1851.3	1853.2
57.5°	14666.9	7270.3	2271.2	1969.4	2042.8	1953.1	1945.0	1898.1	1845.1	1771.7	1747.2
60°	15774.0	7378.4	2165.2	1940.9	2006.1	1871.6	1830.9	1812.5	1759.5	1722.7	1733.0
62.5°	16981.0	7476.2	2057.2	1945.0	1963.4	1792.1	1730.9	1724.8	1692.2	1680.0	1680.0
65°	17804.7	7209.1	1922.6	1940.9	1896.0	1710.5	1633.0	1631.0	1604.5	1600.4	1598.4
67.5°	17517.1	6363.0	1741.2	1883.8	1826.8	1629.0	1543.3	1535.2	1500.5	1502.5	1502.5
70°	16077.8	5156.1	1490.4	1743.1	1741.2	1555.5	1449.6	1423.1	1376.2	1384.4	1392.5
72.5°	13378.5	3820.7	1153.9	1508.7	1604.5	1488.3	1341.5	1298.7	1239.5	1247.7	1245.7
75°	9661.8	2597.5	840.0	1147.8	1396.6	1408.8	1235.5	1162.1	1090.7	1103.0	1107.1
77.5°	4944.1	1472.0	617.8	791.1	1096.9	1280.3	1139.7	1041.8	1025.5	1139.7	1123.4
80°	1612.6	738.0	428.1	554.5	719.7	1048.0	999.0	886.8	882.8	909.3	780.8
82.5°	481.1	311.9	275.2	364.9	397.6	803.3	862.4	670.8	577.0	607.5	627.9
85°	165.1	150.9	157.0	181.4	189.6	471.0	603.5	444.4	419.9	462.8	456.6
87.5°	38.7	53.0	44.9	40.8	40.8	114.2	234.4	185.5	256.9	171.3	165.1
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)