

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: P967768

Luminaire Tested: **NAV-SB5A-740-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967768
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-740-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25226.3 lumens
Efficiency: N/A
Efficacy: 178.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
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



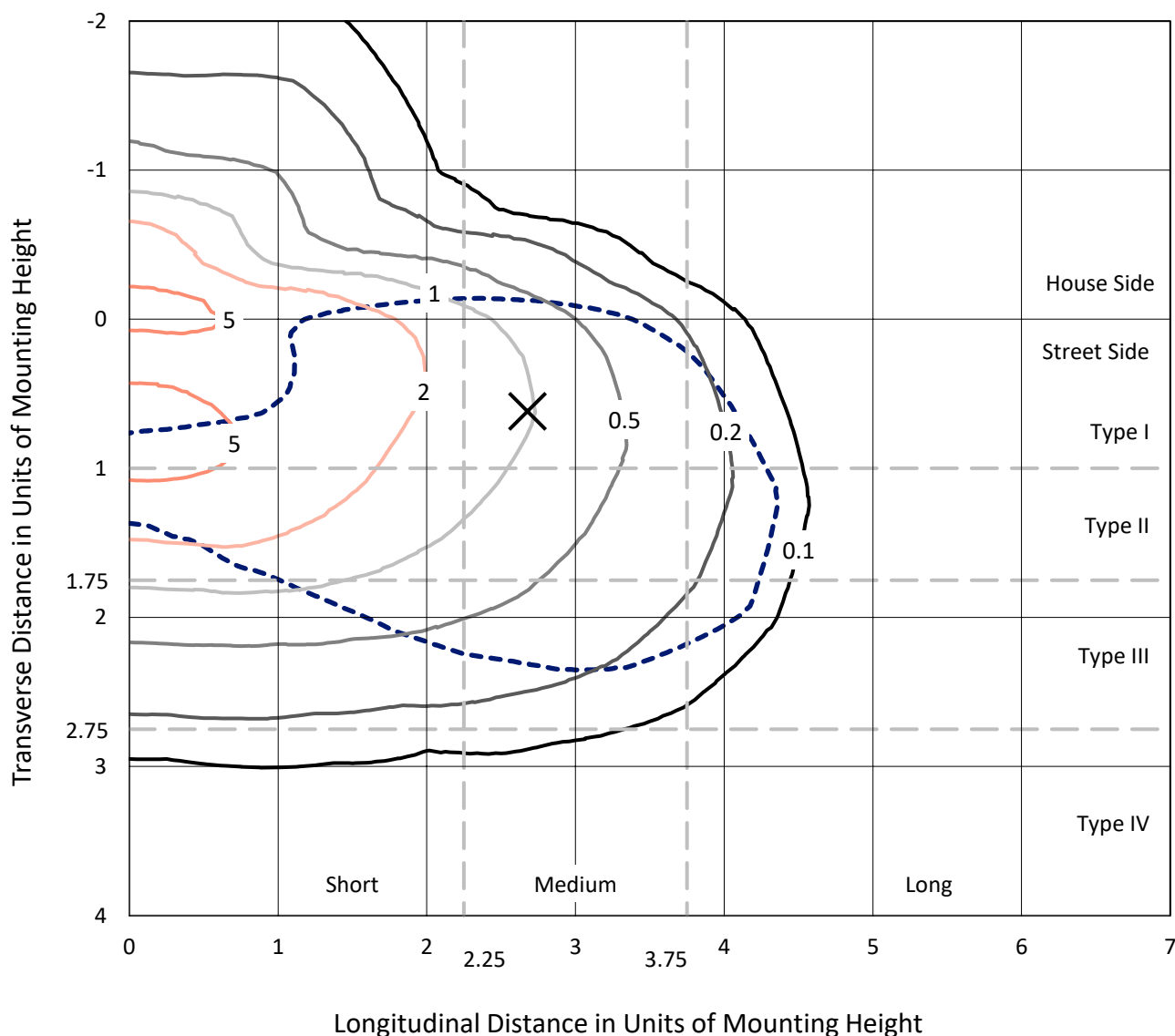
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

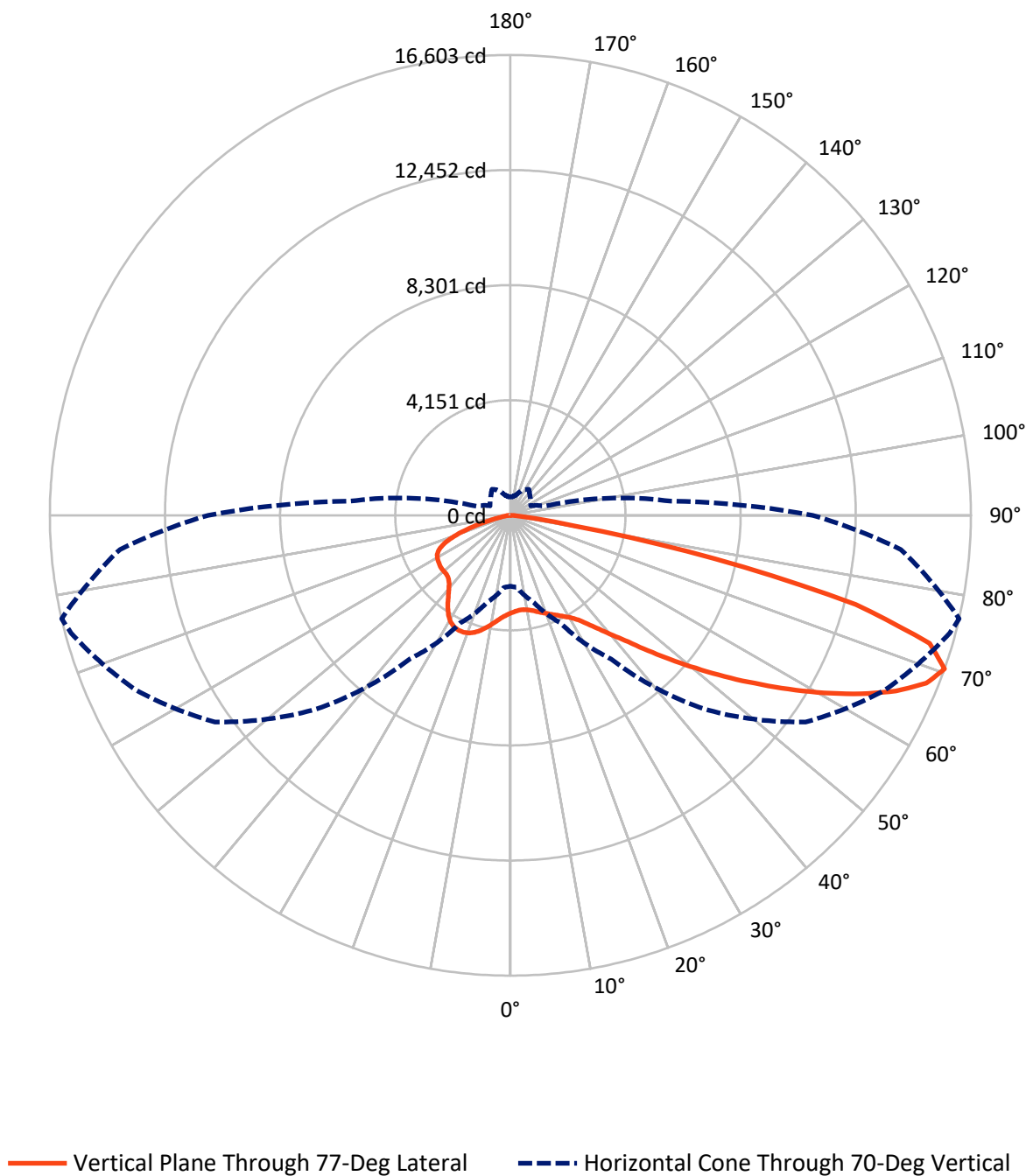


Based on 25 foot mounting height. Maximum calculated value = 6.7 fc

Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5524.2	0.0	5524.2
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	19702.1	0.0	19702.1
	% Fixture	78.1	0.0	78.1
Total	Lumens	25226.3	0.0	25226.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	335.6	1.3
10°-20°	968.7	3.8
20°-30°	1656.6	6.6
30°-40°	2664.0	10.6
40°-50°	4159.2	16.5
50°-60°	5555.7	22.0
60°-70°	5921.6	23.5
70°-80°	3645.3	14.5
80°-90°	319.4	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°	25226.3	100.0
0°-180°	25226.3	100.0

Coefficient of Utilization



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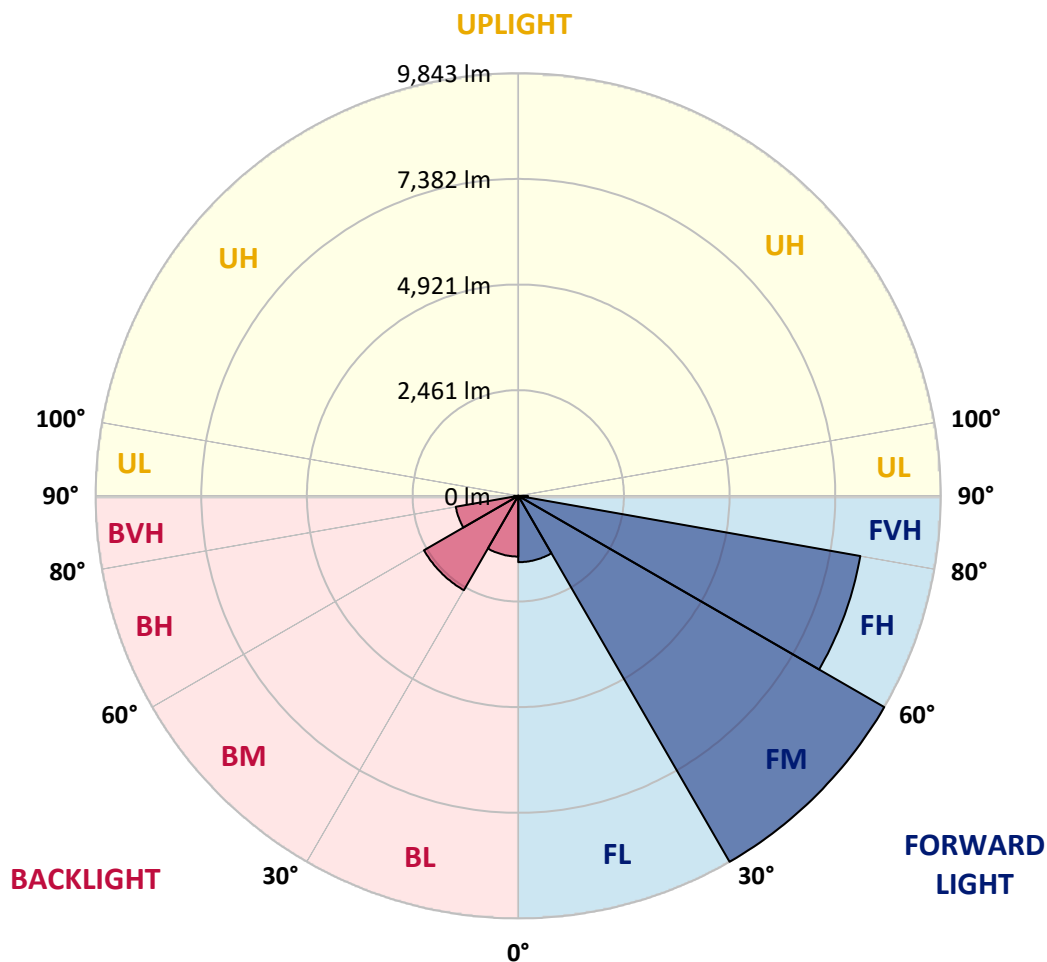
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1545.5	6.1			
FM	(30°-60°)	9842.8	39.0			
FH	(60°-80°)	8090.5	32.1			G4/12000
FVH	(80°-90°)	223.4	0.9			G2/225
BL	(0°-30°)	1415.5	5.6	B3/2500		
BM	(30°-60°)	2536.3	10.1	B3/5000		
BH	(60°-80°)	1476.4	5.9	B3/2500		G3/2500
BVH	(80°-90°)	96.1	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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3519.3	3519.3	3519.3	3519.3	3519.3	3519.3	3519.3	3519.3	3519.3	3519.3	3519.3
2.5°	3244.1	3242.8	3259.6	3264.8	3295.8	3317.7	3359.1	3403.0	3459.9	3466.3	3501.2
5°	3056.8	3056.8	3076.1	3096.8	3136.9	3180.8	3244.1	3320.4	3418.5	3434.1	3520.6
7.5°	2897.9	2908.2	2925.0	2965.0	3011.6	3074.9	3171.8	3280.3	3409.5	3434.1	3573.6
10°	2770.0	2781.5	2802.2	2834.5	2904.3	2992.2	3118.8	3258.3	3431.4	3470.2	3651.0
12.5°	2729.9	2741.6	2753.1	2777.7	2842.3	2945.6	3096.8	3268.6	3484.4	3523.1	3757.0
15°	2823.0	2837.1	2828.1	2821.6	2855.2	2949.5	3107.2	3306.1	3550.3	3605.8	3887.5
17.5°	3037.4	3042.6	3021.9	2961.1	2956.0	3006.4	3156.3	3357.8	3633.0	3693.7	4019.3
20°	3383.6	3374.6	3332.0	3211.8	3143.4	3133.0	3240.2	3435.3	3718.3	3782.9	4161.4
22.5°	3853.9	3843.5	3758.3	3568.4	3415.9	3315.2	3361.7	3536.0	3813.8	3886.2	4299.7
25°	4440.5	4426.3	4300.9	4042.5	3806.1	3556.7	3527.0	3669.2	3931.4	3998.6	4444.3
27.5°	5125.2	5113.6	4977.9	4636.8	4295.8	3887.5	3732.4	3825.5	4054.2	4130.4	4607.2
30°	5861.7	5895.2	5654.9	5288.0	4856.4	4319.0	4009.0	4018.0	4213.1	4281.5	4804.8
32.5°	6727.3	6785.4	6495.9	6030.9	5441.7	4788.0	4357.8	4286.8	4444.3	4501.2	5054.2
35°	7585.1	7651.0	7410.6	6896.5	6218.2	5341.0	4722.1	4595.5	4751.8	4813.8	5384.8
37.5°	8326.7	8414.5	8290.5	7843.5	7048.9	6007.6	5197.6	4958.5	5130.3	5207.9	5829.3
40°	8912.0	9046.3	9037.2	8758.2	8028.2	6816.4	5800.9	5406.9	5600.6	5684.6	6368.0
42.5°	9387.4	9503.7	9604.5	9590.2	9050.1	7735.0	6510.2	5989.5	6136.8	6233.7	6974.0
45°	9715.6	9839.6	10056.6	10290.5	10033.3	8718.1	7322.8	6680.7	6815.1	6961.1	7696.2
47.5°	10008.8	10149.7	10431.3	10802.1	10868.0	9705.2	8213.0	7485.6	7608.4	7759.5	8421.0
50°	10034.6	10156.1	10592.8	11118.6	11460.9	10653.5	9169.0	8388.7	8503.7	8665.1	9197.4
52.5°	9410.6	9601.8	10364.1	11109.6	11733.6	11446.8	10118.6	9327.9	9457.2	9650.9	10001.0
55°	7304.8	7585.1	9693.5	10763.3	11636.7	11959.7	11021.7	10326.7	10492.0	10694.8	10809.9
57.5°	6291.9	6414.6	7694.9	10132.8	11194.8	12092.7	11783.9	11335.7	11601.8	11824.0	11665.1
60°	5654.9	5757.0	6514.1	9152.2	10613.5	11882.1	12373.1	12276.2	12736.1	13001.0	12539.7
62.5°	4972.8	5069.6	5758.2	7641.9	9869.3	11532.1	12745.2	13144.4	13898.9	14188.3	13364.1
65°	4295.8	4378.5	5038.6	6421.0	8923.5	11181.9	12937.7	13895.0	14975.0	15274.9	14048.8
67.5°	3541.3	3609.7	4233.8	5417.2	7773.7	10702.5	13033.3	14485.4	15911.8	16168.9	14387.2
70°	2555.5	2608.4	3253.1	4284.1	6330.6	9878.3	12994.5	14904.0	16397.5	16602.9	14131.5
72.5°	1208.0	1255.8	2012.9	2781.5	4471.5	8273.7	12210.3	14572.0	15904.0	15801.9	12565.6
75°	644.7	686.0	1156.3	1525.8	2361.7	5671.7	9992.0	12552.7	13354.9	12858.8	9286.6
77.5°	436.6	468.9	715.8	916.0	1078.8	2692.5	6422.3	8691.0	8361.5	7542.5	4651.0
80°	346.2	379.9	586.5	620.1	521.9	972.8	2653.7	4023.1	2890.1	2311.3	1323.0
82.5°	266.2	303.6	493.5	449.6	284.2	399.2	772.5	1272.5	740.3	563.3	320.4
85°	162.8	202.8	387.6	286.8	160.2	182.1	262.3	354.0	226.1	188.6	115.0
87.5°	82.7	116.2	196.4	104.7	72.4	42.6	69.8	69.8	59.4	51.7	29.7
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°	3519.3	3519.3	3519.3	3519.3	3519.3	3519.3	3519.3	3519.3	3519.3	3519.3	3519.3
2.5°	3532.3	3558.1	3602.0	3643.4	3675.6	3706.6	3737.7	3754.5	3759.6	3780.3	3791.9
5°	3573.6	3621.3	3706.6	3786.8	3837.1	3868.1	3890.1	3903.0	3905.6	3912.0	3922.4
7.5°	3649.8	3726.0	3844.9	3924.9	3962.4	3959.9	3950.8	3918.5	3905.6	3894.0	3896.5
10°	3757.0	3857.8	4003.8	4059.3	4036.0	3974.0	3894.0	3799.7	3755.7	3713.1	3700.1
12.5°	3890.1	4018.0	4161.4	4158.8	4043.8	3885.0	3698.9	3554.2	3462.4	3396.5	3381.1
15°	4051.6	4198.9	4308.7	4220.8	3968.9	3683.3	3410.8	3222.2	3139.5	3067.1	3059.3
17.5°	4218.3	4375.8	4426.3	4201.5	3780.3	3385.0	3076.1	2927.6	2846.2	2807.5	2819.1
20°	4381.1	4537.4	4496.1	4090.4	3493.5	3046.4	2771.3	2689.9	2673.1	2682.1	2678.2
22.5°	4552.8	4692.3	4510.2	3875.8	3127.8	2700.2	2549.1	2551.6	2589.0	2616.2	2622.7
25°	4728.5	4822.9	4472.8	3565.8	2735.1	2445.6	2408.2	2449.5	2523.2	2576.1	2590.4
27.5°	4897.9	4939.2	4391.4	3182.1	2397.9	2263.5	2270.0	2355.2	2466.4	2540.0	2558.1
30°	5089.0	5042.5	4235.0	2750.6	2164.0	2107.2	2161.4	2260.9	2372.1	2438.0	2453.4
32.5°	5304.8	5131.7	3986.9	2351.4	1998.6	1981.8	2071.0	2135.6	2184.7	2204.1	2214.4
35°	5573.5	5257.0	3669.2	2071.0	1850.1	1890.1	1975.4	1943.1	1923.7	1913.4	1923.7
37.5°	5922.3	5426.2	3297.1	1888.9	1729.9	1824.3	1859.1	1758.4	1682.1	1644.6	1653.7
40°	6342.2	5674.3	2939.2	1748.0	1653.7	1767.4	1706.7	1585.3	1488.3	1435.4	1439.2
42.5°	6808.7	5933.9	2638.1	1642.0	1611.1	1720.9	1594.3	1449.6	1293.2	1276.4	1293.2
45°	7298.3	6201.4	2432.7	1560.7	1590.4	1680.8	1529.7	1295.8	1184.7	1253.2	1289.3
47.5°	7787.9	6446.8	2308.7	1500.0	1580.0	1635.6	1472.8	1210.5	1131.8	1231.2	1277.8
50°	8333.1	6666.5	2253.2	1456.0	1568.5	1617.6	1387.5	1188.6	1076.2	1142.1	1191.2
52.5°	8874.4	6837.1	2211.8	1412.1	1551.6	1603.3	1346.2	1162.8	1009.0	1012.9	1040.1
55°	9414.5	6948.2	2166.6	1353.9	1514.1	1572.4	1342.3	1134.4	958.7	940.5	953.5
57.5°	9990.7	7011.4	2111.1	1289.3	1449.6	1493.5	1338.4	1112.3	943.1	913.4	917.3
60°	10577.3	7104.5	2038.7	1210.5	1363.0	1399.2	1329.4	1104.6	934.1	883.7	887.5
62.5°	11103.1	7136.8	1952.1	1135.6	1251.9	1306.2	1310.1	1098.2	909.6	823.0	823.0
65°	11448.0	6997.3	1801.0	1050.3	1131.8	1210.5	1272.5	1076.2	865.6	779.0	779.0
67.5°	11433.9	6599.4	1564.6	940.5	1015.5	1104.6	1218.3	1038.7	812.6	724.8	728.7
70°	10901.6	5813.8	1264.8	812.6	887.5	991.0	1148.5	983.2	749.4	665.3	673.1
72.5°	9349.9	4550.3	918.6	662.8	739.0	873.4	1058.1	916.0	684.7	612.4	608.5
75°	6679.4	2879.7	622.7	509.0	574.9	740.3	945.7	837.2	625.4	615.0	580.0
77.5°	3412.0	1376.0	412.2	372.1	400.5	583.9	794.6	748.0	634.4	507.8	452.2
80°	1109.8	507.8	259.6	253.2	266.2	388.9	615.0	613.7	480.6	344.9	304.9
82.5°	354.0	218.3	169.2	162.8	156.3	244.2	429.0	485.7	324.3	218.3	217.1
85°	140.8	130.5	99.5	91.7	65.9	115.0	224.8	323.0	241.6	157.6	161.5
87.5°	51.7	51.7	27.2	19.4	14.2	38.7	60.7	96.9	138.3	81.4	80.1
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)