

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: P967765

Luminaire Tested: **NAV-SB5A-740-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967765
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-740-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24347.8 lumens
Efficiency: N/A
Efficacy: 171.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

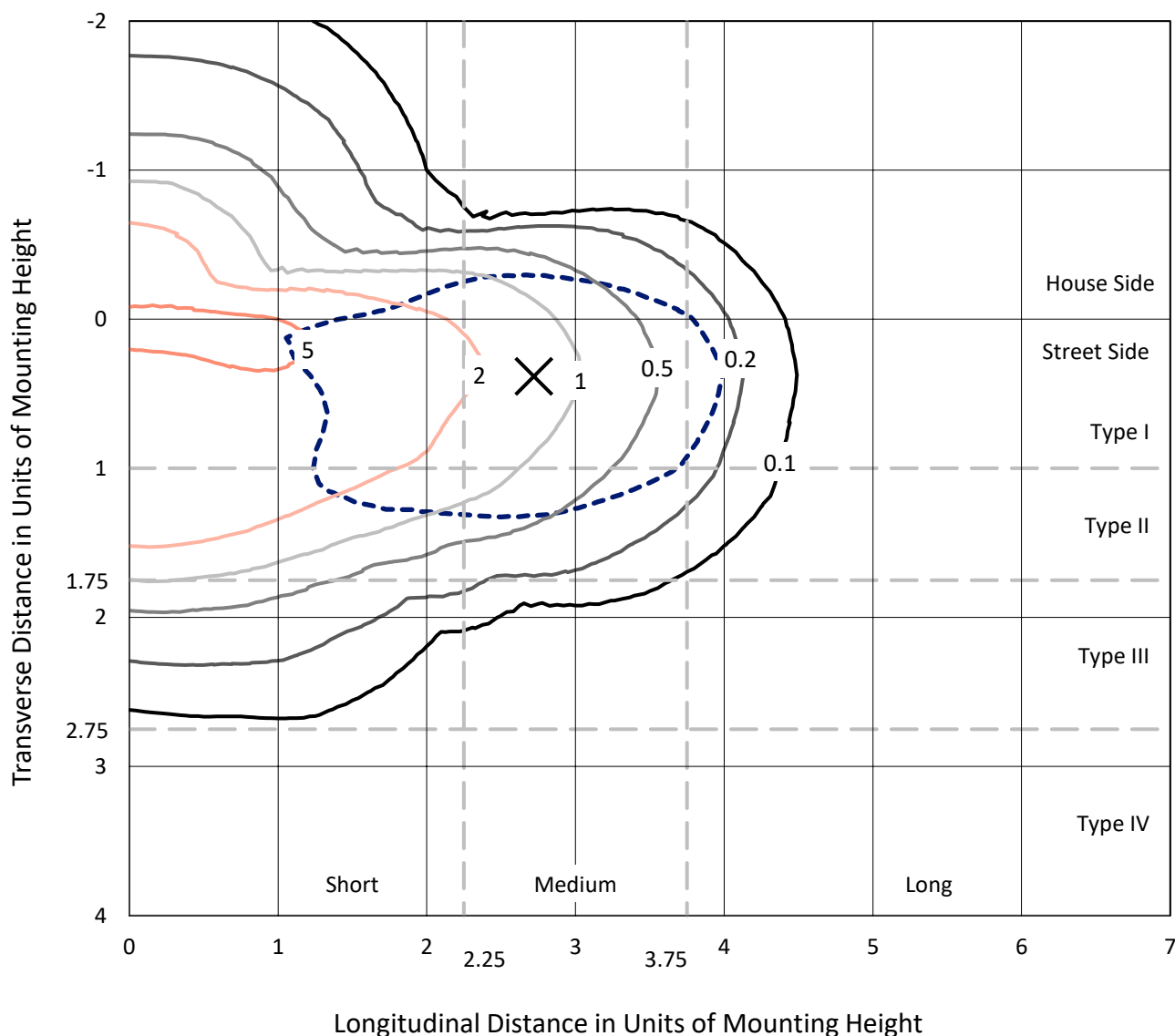
Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

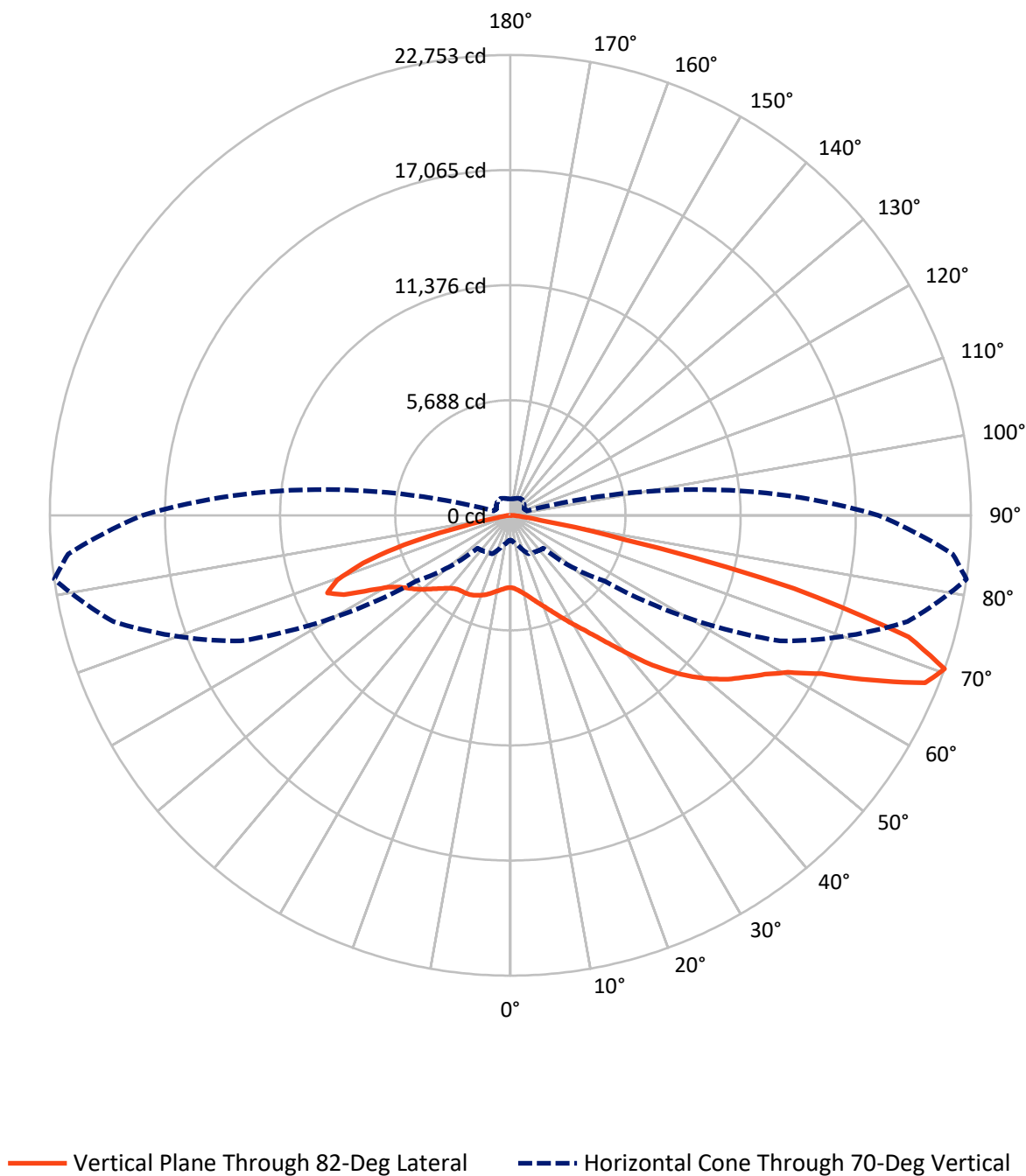
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 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	6002.3	0.0	6002.3
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	18345.5	0.0	18345.5
	% Fixture	75.3	0.0	75.3
Total	Lumens	24347.8	0.0	24347.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	337.0	1.4
10°-20°	968.3	4.0
20°-30°	1619.9	6.7
30°-40°	2530.8	10.4
40°-50°	4030.5	16.6
50°-60°	5609.0	23.0
60°-70°	5867.3	24.1
70°-80°	3066.5	12.6
80°-90°	318.4	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°	24347.8	100.0
0°-180°	24347.8	100.0

Coefficient of Utilization



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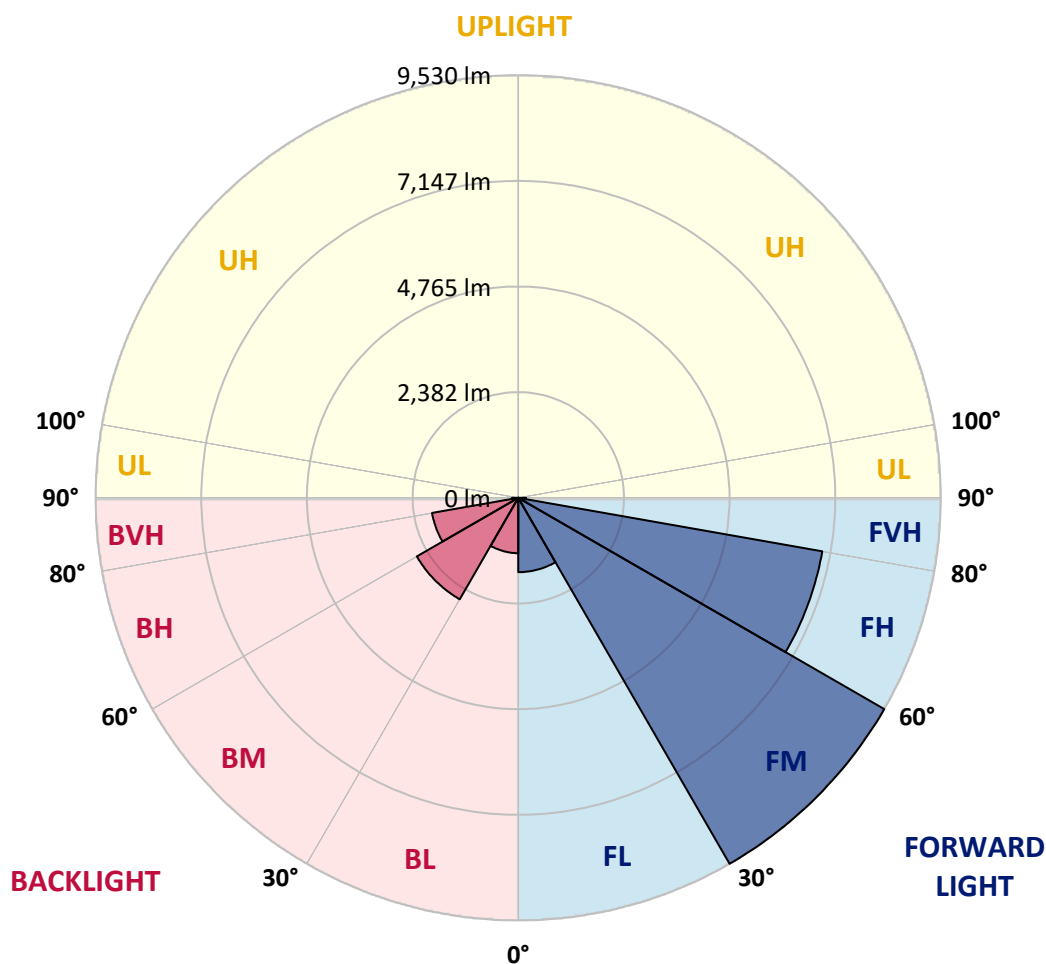
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1676.6	6.9			
FM	(30°-60°)	9529.5	39.1			
FH	(60°-80°)	6961.1	28.6			G3/7500
FVH	(80°-90°)	178.3	0.7			G2/225
BL	(0°-30°)	1248.7	5.1	B3/2500		
BM	(30°-60°)	2640.8	10.8	B3/5000		
BH	(60°-80°)	1972.7	8.1	B3/2500		G3/2500
BVH	(80°-90°)	140.2	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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3569.7	3569.7	3569.7	3569.7	3569.7	3569.7	3569.7	3569.7	3569.7	3569.7	3569.7
2.5°	3654.9	3675.6	3669.2	3662.7	3662.7	3653.7	3652.4	3639.5	3629.1	3612.3	3608.4
5°	3701.5	3723.4	3720.9	3726.0	3742.8	3746.7	3750.6	3742.8	3722.2	3701.5	3692.5
7.5°	3660.2	3684.7	3692.5	3723.4	3775.1	3821.6	3856.6	3870.7	3851.3	3821.6	3807.5
10°	3520.6	3547.7	3574.9	3648.5	3740.2	3850.1	3943.1	3998.6	3994.7	3966.3	3941.7
12.5°	3237.7	3266.1	3324.2	3467.7	3635.6	3829.4	4002.5	4118.8	4158.8	4138.1	4095.5
15°	3011.6	3036.2	3080.0	3227.3	3445.6	3740.2	4024.5	4250.6	4352.7	4341.0	4289.3
17.5°	3005.1	3015.4	3042.6	3112.3	3280.3	3600.7	4001.2	4379.7	4574.9	4573.5	4509.0
20°	3118.8	3122.7	3138.1	3152.4	3248.0	3494.7	3941.7	4487.0	4824.2	4824.2	4754.5
22.5°	3276.4	3273.8	3289.3	3276.4	3322.9	3485.7	3904.3	4581.3	5101.9	5122.6	5034.8
25°	3512.9	3500.0	3496.1	3466.3	3475.4	3569.7	3945.6	4688.6	5431.4	5474.0	5364.2
27.5°	3828.1	3807.5	3793.2	3724.7	3701.5	3742.8	4072.2	4817.7	5798.3	5872.0	5732.4
30°	4238.9	4201.5	4180.8	4062.0	3977.9	3984.4	4263.5	4989.6	6182.1	6300.9	6124.0
32.5°	4799.7	4741.5	4686.0	4490.8	4337.1	4286.8	4510.2	5227.3	6598.0	6788.0	6560.6
35°	5427.6	5381.0	5321.6	5020.6	4784.2	4667.8	4843.5	5559.3	7085.1	7386.2	7090.3
37.5°	6032.2	5992.2	6020.5	5614.8	5310.0	5140.7	5280.3	6005.1	7685.9	8130.3	7754.3
40°	6657.5	6626.5	6630.3	6242.8	5887.5	5697.6	5810.0	6564.5	8374.6	9015.3	8552.8
42.5°	7337.1	7313.8	7236.3	6892.6	6493.4	6316.5	6419.8	7210.5	9113.5	10023.1	9428.8
45°	8098.0	8083.9	8011.5	7617.4	7160.0	6961.1	7100.7	7923.7	9856.4	10971.4	10308.6
47.5°	8755.7	8767.2	8758.2	8426.2	7952.1	7660.0	7826.7	8667.8	10547.6	11862.8	11152.2
50°	9072.2	9132.9	9222.0	9118.7	8824.1	8527.0	8559.3	9386.1	11206.5	12698.7	11961.0
52.5°	8906.8	9021.7	9264.7	9430.1	9543.8	9481.8	9395.2	10099.3	11826.7	13453.2	12725.9
55°	8290.5	8452.0	8855.1	9254.3	9834.5	10285.4	10399.0	10890.0	12431.3	14117.3	13449.3
57.5°	7167.8	7430.1	7791.8	8599.3	9576.1	10674.2	11569.6	11986.9	13072.1	14826.6	14206.4
60°	5242.8	5594.2	6043.8	7245.3	8671.7	10466.2	12565.7	13671.6	13982.9	15745.1	15192.2
62.5°	3355.2	3572.3	3985.7	5117.5	6757.0	9400.4	12870.5	15777.5	15526.8	17251.6	16670.2
65°	2297.1	2436.6	2815.2	3450.9	4368.1	6997.3	12054.0	17356.2	17979.0	19639.2	19197.3
67.5°	1669.2	1775.2	2098.2	2655.0	2846.2	4140.8	9353.8	17283.9	20362.6	22099.1	21411.7
70°	1217.0	1292.0	1563.2	2098.2	2189.9	2303.6	5666.5	14692.2	20311.0	22752.7	21929.8
72.5°	901.8	953.5	1135.6	1627.9	1772.5	1555.5	2804.8	10678.0	17453.2	20579.7	19919.5
75°	652.4	691.2	825.5	1245.5	1418.6	1184.7	1399.2	6240.2	12174.2	14476.5	14592.7
77.5°	498.7	528.4	616.2	912.1	1135.6	888.9	868.2	2870.7	5772.5	5800.9	6126.5
80°	400.5	419.8	467.7	642.1	870.7	665.3	565.9	1158.9	1824.3	1543.9	1620.1
82.5°	294.6	326.9	395.3	450.9	622.7	458.7	344.9	585.3	693.8	596.9	602.1
85°	168.0	189.9	239.0	323.0	397.9	280.3	197.6	259.7	323.0	264.9	236.5
87.5°	59.4	77.5	83.9	126.6	173.1	116.2	76.3	74.9	106.0	78.8	65.9
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°	3569.7	3569.7	3569.7	3569.7	3569.7	3569.7	3569.7	3569.7	3569.7	3569.7	3569.7
2.5°	3595.5	3589.0	3563.2	3528.4	3492.2	3457.3	3445.6	3421.1	3404.3	3395.3	3405.7
5°	3667.9	3647.3	3586.5	3509.0	3427.6	3339.8	3277.7	3220.9	3179.5	3140.8	3156.3
7.5°	3771.3	3735.1	3630.4	3494.7	3350.1	3204.0	3095.5	3012.9	2957.3	2921.1	2928.8
10°	3891.4	3835.9	3675.6	3472.8	3249.2	3039.9	2912.1	2841.0	2806.1	2786.8	2791.9
12.5°	4029.7	3950.9	3722.2	3422.4	3095.5	2856.6	2768.7	2748.0	2749.3	2750.6	2753.1
15°	4200.1	4090.4	3759.6	3312.6	2895.3	2715.7	2700.2	2733.8	2768.7	2785.4	2784.2
17.5°	4392.6	4237.7	3766.1	3131.7	2698.9	2625.2	2674.3	2746.7	2799.7	2823.0	2828.1
20°	4599.4	4387.5	3719.5	2875.9	2537.4	2551.6	2639.5	2732.5	2790.7	2820.4	2828.1
22.5°	4835.8	4547.7	3608.4	2607.2	2405.7	2471.5	2574.9	2665.3	2726.1	2755.7	2763.5
25°	5105.8	4727.3	3434.1	2381.1	2291.9	2381.1	2484.5	2559.4	2608.5	2635.6	2643.4
27.5°	5405.5	4914.7	3201.5	2201.5	2192.5	2288.1	2373.4	2431.5	2457.3	2478.0	2485.7
30°	5706.6	5085.1	2919.8	2065.9	2105.9	2196.4	2257.0	2282.9	2290.7	2294.6	2303.6
32.5°	6032.2	5232.4	2624.0	1953.4	2023.2	2107.2	2143.4	2155.0	2118.8	2094.3	2102.1
35°	6426.2	5390.1	2334.5	1864.3	1941.9	2014.1	2025.8	2015.5	1972.8	1922.5	1925.1
37.5°	6913.3	5586.5	2103.3	1801.0	1865.6	1913.4	1899.2	1896.6	1900.5	1841.0	1844.9
40°	7510.2	5842.3	1934.1	1751.9	1803.6	1813.9	1773.9	1795.8	1815.2	1724.8	1727.3
42.5°	8172.9	6151.0	1826.9	1718.3	1751.9	1727.3	1665.3	1689.9	1687.4	1568.5	1567.1
45°	8848.6	6486.9	1789.3	1693.8	1704.1	1655.0	1586.5	1593.0	1538.7	1431.5	1435.4
47.5°	9520.5	6847.4	1812.6	1673.1	1644.7	1589.2	1536.2	1507.7	1427.6	1347.6	1347.6
50°	10179.4	7225.9	1897.9	1631.8	1563.2	1530.9	1492.2	1441.9	1356.6	1288.1	1282.9
52.5°	10790.5	7607.1	1993.5	1563.2	1461.2	1480.6	1456.0	1397.9	1313.9	1244.1	1245.5
55°	11369.3	7988.2	2030.9	1468.9	1365.6	1436.6	1422.5	1315.2	1214.4	1157.6	1152.4
57.5°	11999.8	8446.8	1989.6	1348.8	1288.1	1386.3	1332.0	1213.2	1155.0	1112.4	1108.5
60°	12873.2	9166.5	1900.5	1200.3	1214.4	1311.4	1218.3	1169.2	1105.9	1058.1	1055.5
62.5°	14324.0	10508.8	1757.1	1053.0	1127.9	1200.3	1164.1	1115.0	1050.3	1003.9	1003.9
65°	16468.7	12374.4	1487.1	938.0	1030.9	1091.7	1105.9	1056.9	989.6	940.5	943.1
67.5°	18277.4	13545.0	1125.3	842.3	931.5	1003.9	1043.9	996.1	925.1	877.2	878.5
70°	18178.0	12694.8	859.2	748.0	843.7	917.3	968.9	931.5	855.3	810.1	814.0
72.5°	16145.7	10619.9	695.1	652.4	754.5	826.9	888.9	860.5	782.9	739.0	739.0
75°	11861.5	7538.6	555.6	555.6	643.4	732.6	801.0	782.9	711.9	680.9	671.8
77.5°	5000.0	3162.7	435.4	461.2	534.8	629.1	714.4	720.9	658.9	697.6	633.0
80°	1329.4	872.1	332.0	363.1	419.8	519.4	621.5	618.9	551.7	515.5	479.3
82.5°	506.5	343.7	236.5	255.8	303.6	397.9	492.2	507.8	440.5	381.1	381.1
85°	195.1	147.3	146.0	153.8	177.0	263.5	372.1	385.0	332.0	281.7	290.7
87.5°	50.4	44.0	54.2	51.7	81.4	140.8	213.2	220.9	202.8	117.6	168.0
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)