

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: P964061

Luminaire Tested: **NAV-SB3B-740-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964061
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-740-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18210.1 lumens
Efficiency: N/A
Efficacy: 166.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 109.2
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



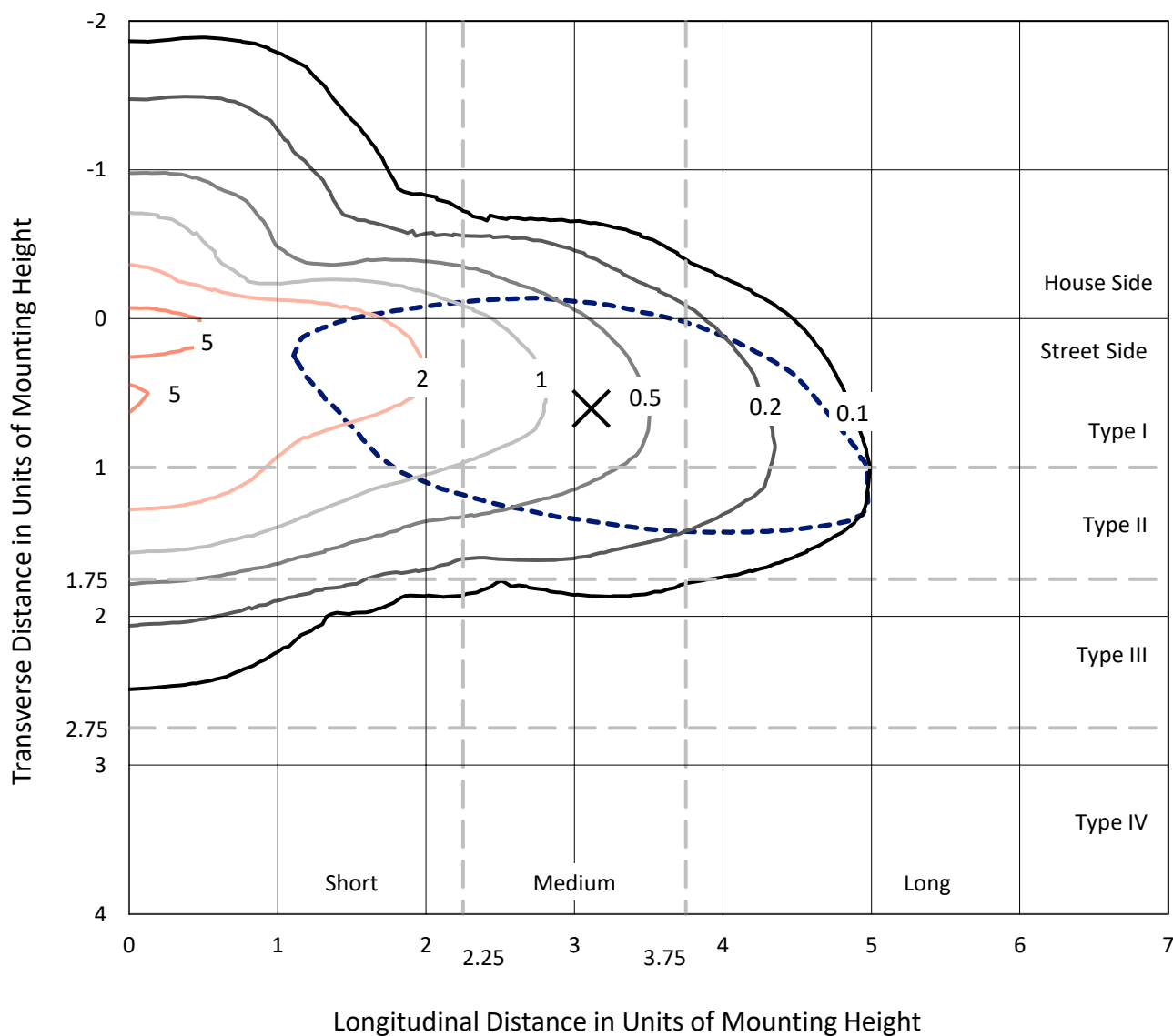
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

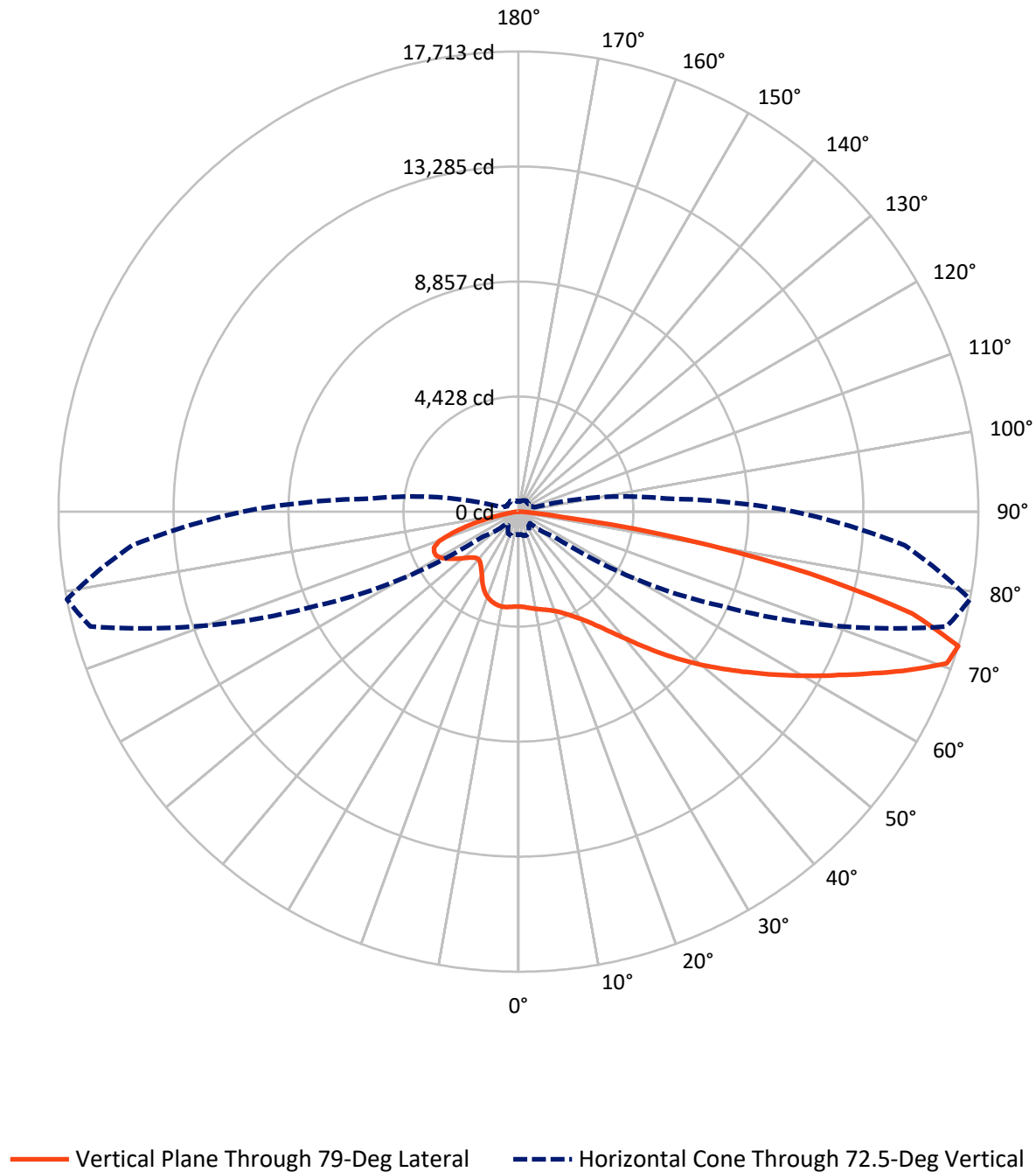
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 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	4007.2	0.0	4007.2
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	14202.9	0.0	14202.9
	% Fixture	78.0	0.0	78.0
Total	Lumens	18210.1	0.0	18210.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	331.8	1.8
10°-20°	867.5	4.8
20°-30°	1399.8	7.7
30°-40°	2101.0	11.5
40°-50°	2980.3	16.4
50°-60°	3763.8	20.7
60°-70°	3822.6	21.0
70°-80°	2605.3	14.3
80°-90°	338.0	1.9
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°	18210.1	100.0
0°-180°	18210.1	100.0

Coefficient of Utilization



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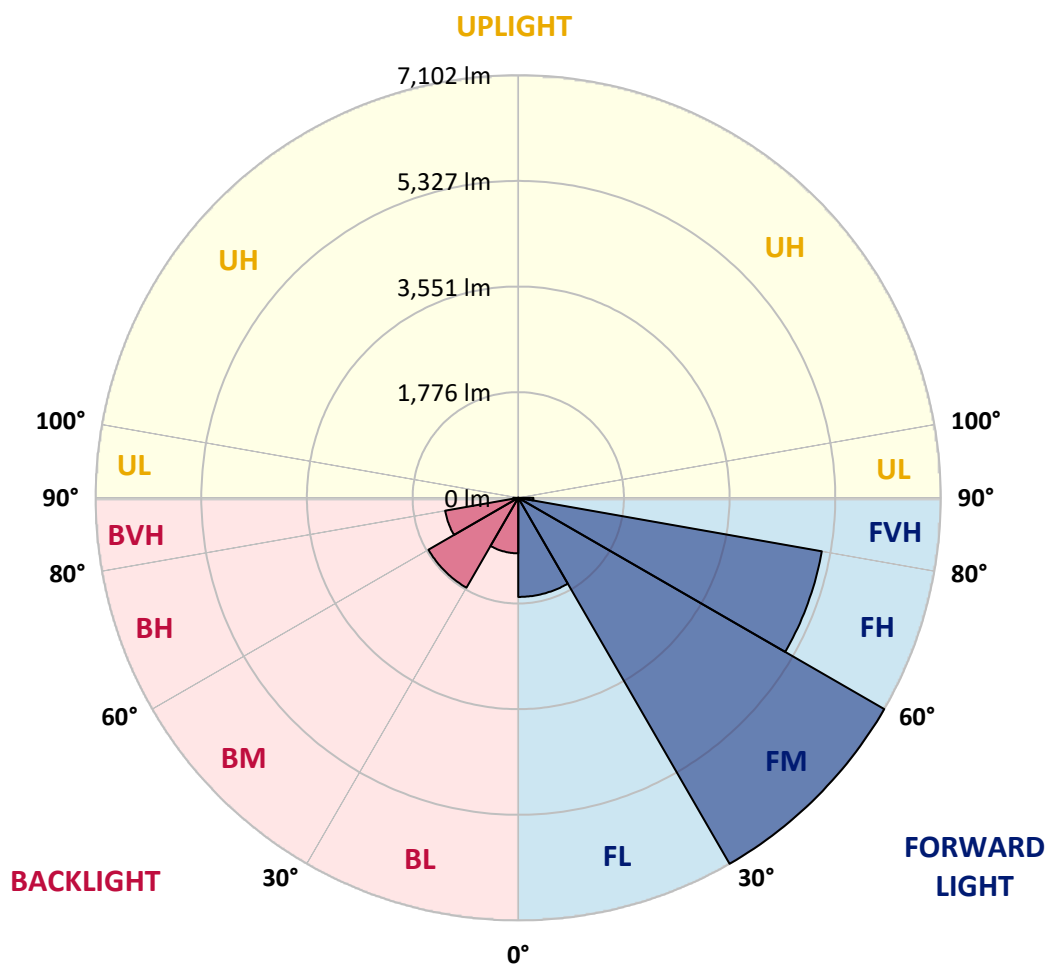
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1665.8	9.1			
FM	(30°-60°)	7102.3	39.0			
FH	(60°-80°)	5180.2	28.4			G3/7500
FVH	(80°-90°)	254.6	1.4			G3/500
BL	(0°-30°)	933.4	5.1	B2/1000		
BM	(30°-60°)	1742.7	9.6	B2/2500		
BH	(60°-80°)	1247.7	6.9	B3/2500		G3/2500
BVH	(80°-90°)	83.4	0.5			G1/100
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°	79°	85°
0°	3655.6	3655.6	3655.6	3655.6	3655.6	3655.6	3655.6	3655.6	3655.6	3655.6	3655.6
2.5°	3657.4	3640.1	3650.7	3646.8	3651.7	3657.4	3659.4	3662.2	3671.9	3670.9	3670.0
5°	3649.7	3632.4	3646.8	3642.0	3654.5	3668.1	3679.5	3690.2	3705.6	3712.3	3702.7
7.5°	3633.3	3621.8	3636.3	3650.7	3673.8	3694.0	3710.4	3734.5	3756.6	3760.5	3767.3
10°	3538.0	3529.3	3563.0	3600.6	3664.2	3719.1	3754.7	3782.7	3806.7	3810.6	3820.3
12.5°	3438.8	3428.2	3465.7	3516.8	3619.9	3719.1	3794.2	3830.8	3852.1	3864.6	3879.0
15°	3422.4	3413.8	3435.0	3479.3	3565.0	3693.1	3821.2	3888.6	3906.9	3921.3	3927.2
17.5°	3501.4	3485.0	3493.7	3509.1	3559.2	3669.0	3842.4	3954.1	3982.0	3997.5	3997.5
20°	3684.4	3661.3	3647.8	3617.0	3608.3	3672.9	3840.5	4033.1	4069.7	4088.9	4093.7
22.5°	3928.1	3912.7	3883.8	3805.8	3721.1	3720.0	3877.1	4134.2	4202.6	4221.0	4209.4
25°	4222.9	4199.7	4163.1	4057.2	3894.4	3813.5	3938.7	4263.3	4378.0	4382.8	4349.1
27.5°	4562.0	4527.2	4477.2	4337.5	4117.8	3959.9	4033.1	4411.7	4579.3	4577.3	4508.0
30°	4919.3	4884.6	4831.6	4662.1	4385.7	4157.4	4164.1	4571.6	4818.1	4807.6	4689.1
32.5°	5180.3	5154.3	5143.8	5012.8	4693.9	4390.5	4314.3	4748.8	5112.9	5103.3	4937.6
35°	5380.6	5347.0	5359.5	5293.0	5030.1	4651.6	4498.3	4959.8	5471.2	5470.2	5264.1
37.5°	5579.1	5549.2	5559.8	5515.5	5341.2	4982.8	4722.8	5217.9	5915.3	5936.5	5659.0
40°	5760.2	5728.4	5770.7	5729.3	5583.0	5335.4	4978.0	5509.8	6429.6	6470.1	6136.9
42.5°	5869.0	5844.0	5914.4	5915.3	5793.0	5633.1	5258.4	5831.5	7024.9	7115.4	6724.4
45°	5906.7	5898.0	6003.9	6026.1	5978.8	5805.5	5510.7	6182.1	7666.5	7828.3	7393.8
47.5°	5866.2	5849.8	5996.2	6078.0	6115.7	5886.4	5719.7	6561.6	8321.5	8558.4	8124.0
50°	5662.0	5630.1	5847.8	6020.2	6154.2	5939.4	5930.6	6999.9	9066.0	9325.1	8858.0
52.5°	5294.9	5270.9	5518.4	5818.0	6069.4	5965.4	6167.6	7478.6	9773.1	10108.2	9610.3
55°	4825.9	4794.0	5066.7	5457.7	5858.5	5956.7	6404.6	8014.2	10607.2	10947.3	10387.7
57.5°	4082.3	4018.6	4363.5	4825.9	5514.6	5946.1	6651.2	8546.9	11454.9	11862.3	11217.0
60°	2997.6	2903.2	3326.1	3874.2	4842.2	5843.0	6956.6	9144.1	12472.1	12839.0	12122.5
62.5°	1745.4	1690.5	1967.0	2478.4	3649.7	5236.2	7128.1	9838.6	13472.0	13857.3	13012.5
65°	1355.3	1339.9	1364.0	1403.4	2031.4	3920.4	6599.2	10515.8	14743.4	15013.2	13940.1
67.5°	1239.7	1228.2	1238.7	1164.6	1030.6	2183.7	5220.8	10687.2	16105.4	16269.2	14752.1
70°	1102.0	1088.4	1123.1	1059.5	811.1	993.1	3373.3	10065.0	17189.1	17496.3	15369.6
72.5°	897.7	882.3	963.3	934.4	683.0	637.7	1694.3	8586.3	17075.5	17713.1	14927.4
75°	689.7	681.0	777.4	801.4	556.8	501.8	812.9	6382.5	15026.6	15669.1	12865.1
77.5°	535.6	528.8	578.0	665.6	448.8	389.2	499.9	4048.5	11323.9	11436.6	8865.7
80°	401.7	382.4	427.6	515.4	349.6	284.1	339.1	2360.9	7157.9	6488.5	3858.7
82.5°	251.4	241.8	279.3	343.9	246.6	195.6	220.6	1304.2	2868.6	1689.5	744.6
85°	143.5	139.7	152.2	196.5	133.9	112.7	126.2	576.0	524.0	360.3	224.5
87.5°	57.8	55.9	69.4	87.6	49.1	41.4	44.3	138.7	115.6	106.9	74.2
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°	3655.6	3655.6	3655.6	3655.6	3655.6	3655.6	3655.6	3655.6	3655.6	3655.6	3655.6
2.5°	3666.1	3666.1	3652.6	3631.5	3607.4	3591.9	3566.9	3560.1	3534.1	3526.4	3538.9
5°	3710.4	3702.7	3661.3	3601.5	3519.7	3444.6	3361.7	3309.7	3236.5	3210.5	3229.8
7.5°	3766.3	3745.1	3673.8	3542.8	3371.3	3202.8	3027.4	2894.6	2767.4	2722.1	2727.9
10°	3817.3	3787.5	3666.1	3436.8	3140.2	2848.3	2569.0	2373.4	2225.1	2164.4	2177.9
12.5°	3868.3	3813.5	3615.1	3260.6	2811.7	2415.8	2118.2	1966.0	1874.5	1801.2	1825.3
15°	3916.5	3839.4	3536.0	3024.6	2451.5	2049.8	1830.1	1708.8	1635.6	1587.4	1596.1
17.5°	3972.4	3861.7	3417.6	2725.1	2108.5	1796.4	1617.2	1544.1	1529.6	1523.9	1527.7
20°	4050.5	3881.9	3261.5	2389.8	1856.2	1594.2	1501.7	1495.0	1494.0	1491.1	1500.7
22.5°	4134.2	3906.0	3055.4	2085.5	1641.3	1468.0	1451.6	1438.1	1429.5	1428.5	1439.1
25°	4233.5	3913.7	2797.2	1836.0	1458.4	1408.2	1389.0	1368.8	1362.9	1362.9	1368.8
27.5°	4329.8	3887.6	2496.7	1619.2	1355.3	1353.4	1328.3	1321.5	1320.6	1323.5	1331.2
30°	4426.2	3838.5	2198.1	1418.9	1295.6	1295.6	1286.9	1291.7	1295.6	1305.2	1311.9
32.5°	4556.1	3786.6	1948.6	1270.5	1243.5	1233.9	1242.6	1252.2	1256.0	1268.6	1279.2
35°	4746.9	3750.0	1750.2	1189.6	1189.6	1177.1	1181.9	1180.0	1171.3	1165.5	1179.1
37.5°	4999.2	3748.0	1586.5	1152.0	1144.3	1142.4	1143.4	1130.9	1097.2	1056.7	1057.6
40°	5302.6	3800.0	1460.3	1126.1	1120.2	1131.8	1126.1	1092.3	999.9	929.6	927.6
42.5°	5710.1	3948.3	1379.3	1094.3	1111.6	1126.1	1102.9	986.4	923.7	876.6	874.6
45°	6189.8	4189.2	1337.9	1060.6	1095.2	1112.5	1000.8	949.8	899.6	842.9	839.0
47.5°	6733.1	4492.6	1328.3	1028.8	1058.6	1069.2	957.5	934.4	877.5	815.9	811.1
50°	7324.5	4851.8	1354.3	991.2	1005.6	969.0	943.0	921.8	863.0	802.4	795.6
52.5°	7936.2	5247.8	1406.3	940.1	952.6	912.1	937.3	918.9	854.4	772.5	766.7
55°	8537.2	5646.5	1456.4	880.4	898.7	861.1	920.9	907.3	814.9	722.4	717.6
57.5°	9147.9	6043.4	1505.5	827.4	846.6	812.0	894.8	876.6	770.6	676.2	674.2
60°	9782.7	6428.7	1528.7	776.3	789.9	766.7	855.4	823.6	720.5	629.0	626.1
62.5°	10377.0	6749.4	1491.1	725.3	734.0	724.4	803.4	761.0	670.5	576.0	575.0
65°	10973.2	6940.2	1375.6	675.3	677.1	672.3	730.1	693.5	611.6	529.8	524.0
67.5°	11513.6	7047.1	1191.6	621.3	616.4	614.6	661.7	620.3	554.8	483.6	477.8
70°	11628.3	6775.5	910.3	557.7	557.7	552.9	586.6	544.3	492.2	434.4	432.4
72.5°	10620.7	5699.5	646.4	485.4	493.2	483.6	511.5	475.8	428.7	390.1	378.5
75°	8564.2	4179.5	470.1	411.3	424.8	408.5	434.4	409.4	368.9	368.0	331.4
77.5°	5884.4	2584.4	341.0	339.1	348.7	327.5	357.3	343.9	307.3	290.9	272.5
80°	2511.1	1030.6	248.6	262.0	262.0	242.7	277.4	281.3	249.5	241.8	241.8
82.5°	499.9	292.8	174.4	180.1	169.5	163.8	196.5	217.7	300.5	334.3	335.2
85°	150.3	107.9	105.0	98.3	86.7	87.6	115.6	218.6	269.7	154.2	132.9
87.5°	41.4	27.0	28.0	22.1	18.3	24.1	39.5	165.6	90.5	38.5	32.8
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)