

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: P968398

Luminaire Tested: **NAV-SB5B-830-U-AFL**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P968398  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5B-830-U-AFL  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26643.8 lumens  
Efficiency: N/A  
Efficacy: 145.8 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G2

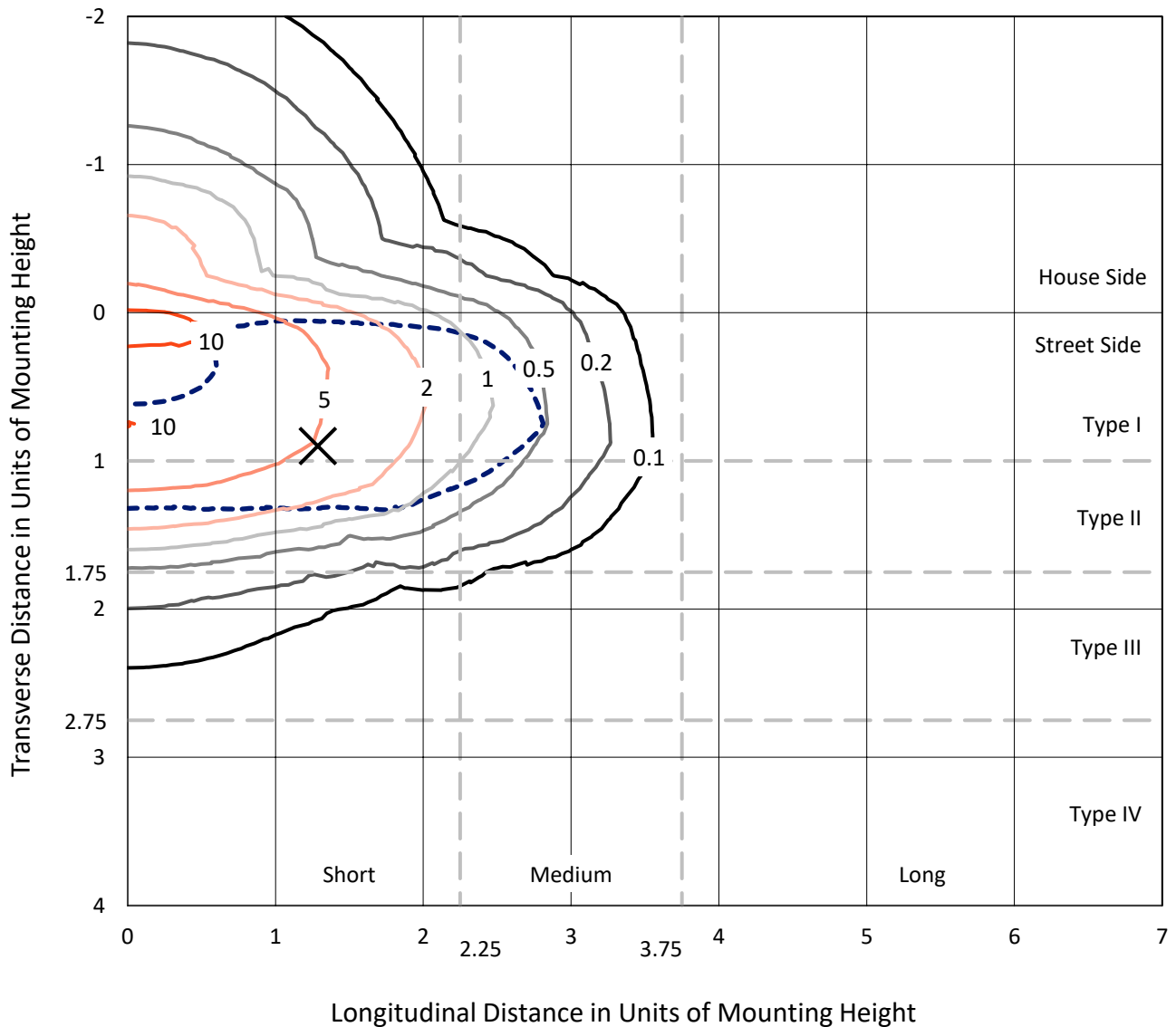
Input Watts (W): 182.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

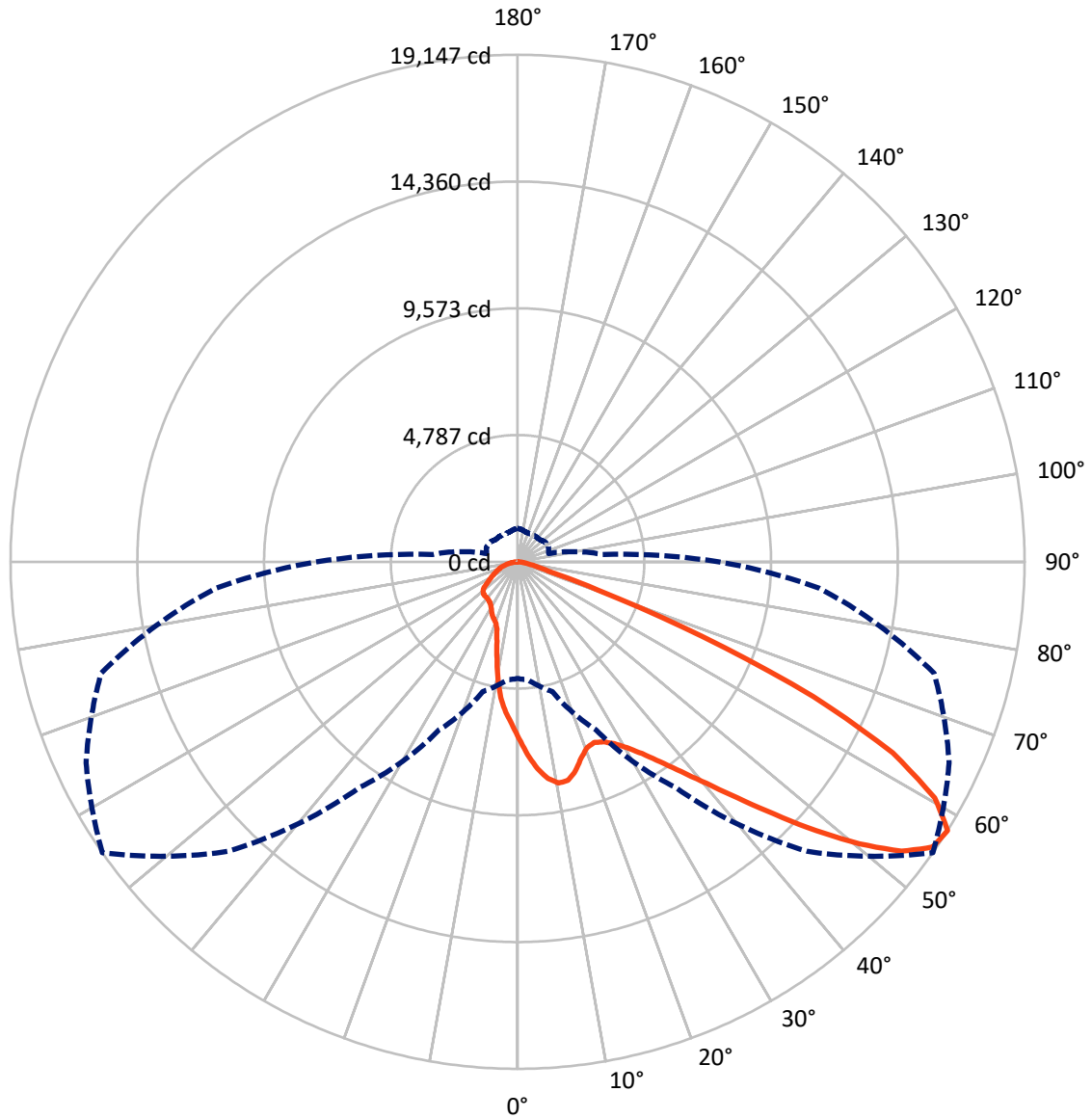
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.9 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral      - - - Horizontal Cone Through 57.5-Deg Vertical

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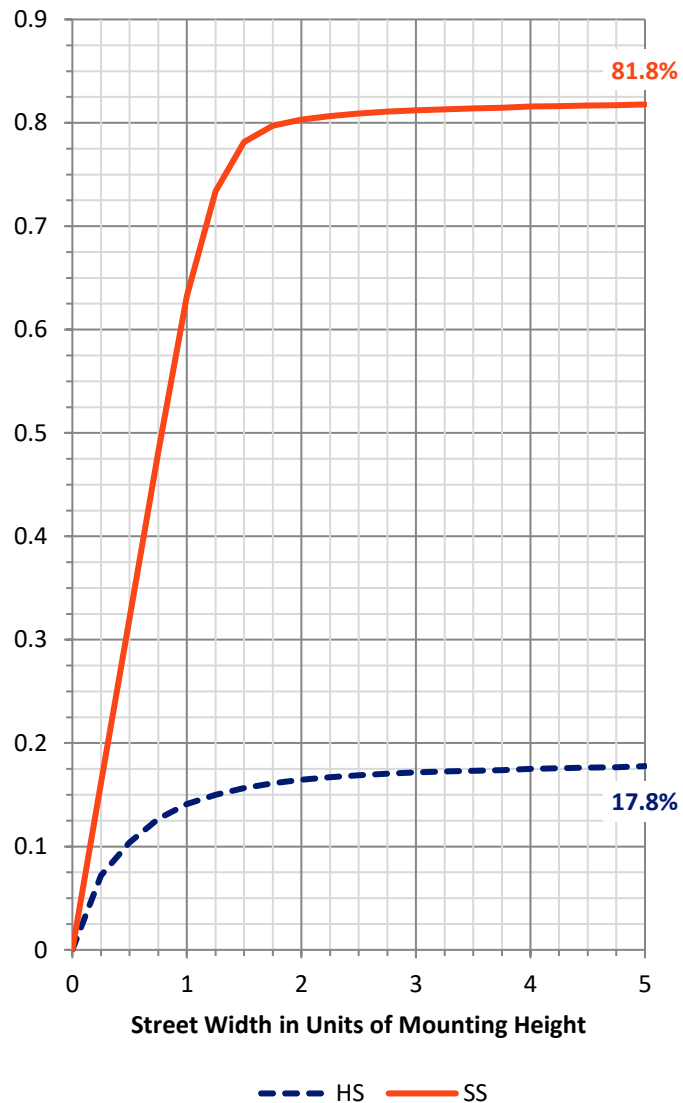
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4821.1	0.0	4821.1
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	21822.8	0.0	21822.8
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	26643.8	0.0	26643.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	619.5	2.3
10°-20°	1563.6	5.9
20°-30°	2495.1	9.4
30°-40°	3950.4	14.8
40°-50°	6046.5	22.7
50°-60°	6476.4	24.3
60°-70°	4074.3	15.3
70°-80°	1204.9	4.5
80°-90°	213.0	0.8
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°	26643.8	100.0
0°-180°	26643.8	100.0

**Coefficient of Utilization**



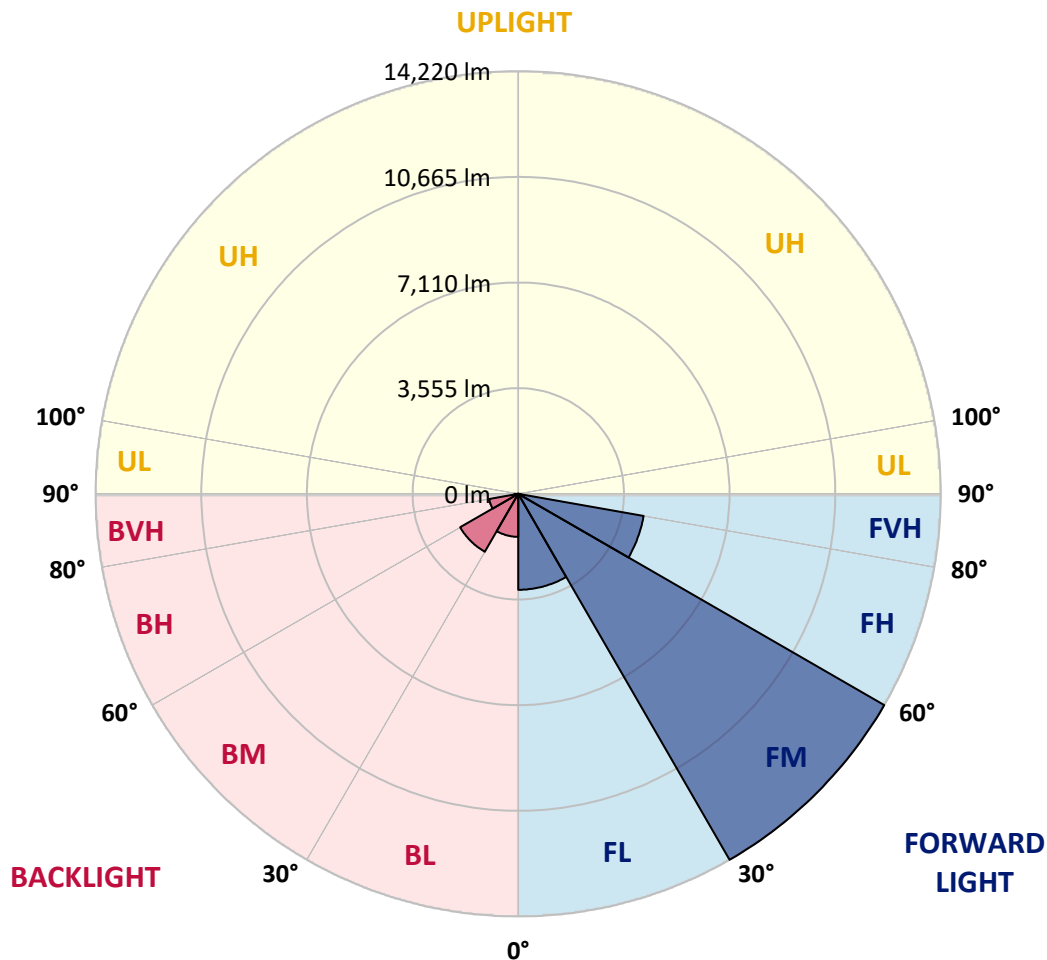
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3229.2	12.1			
FM (30°-60°)	14220.0	53.4			
FH (60°-80°)	4283.5	16.1			G2/5000
FVH (80°-90°)	90.0	0.3			G1/100
BL (0°-30°)	1449.1	5.4	B3/2500		
BM (30°-60°)	2253.3	8.5	B2/2500		
BH (60°-80°)	995.7	3.7	B2/1000		G2/1000
BVH (80°-90°)	123.0	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-G2**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	6676.1	6676.1	6676.1	6676.1	6676.1	6676.1	6676.1	6676.1	6676.1	6676.1	6676.1
2.5°	7659.5	7654.0	7684.3	7581.0	7510.8	7415.8	7290.4	7130.6	6958.4	6776.6	6698.2
5°	8349.5	8301.4	8333.0	8256.0	8178.8	8035.6	7849.6	7589.3	7271.1	6908.8	6716.0
7.5°	8240.8	8207.7	8289.0	8357.8	8415.7	8397.8	8261.4	7988.7	7578.2	7052.1	6772.5
10°	7363.4	7326.2	7440.5	7678.8	8028.6	8333.0	8498.4	8328.9	7892.3	7209.1	6827.6
12.5°	6589.3	6571.4	6647.1	6840.0	7228.4	7812.4	8468.0	8626.4	8218.8	7395.1	6901.9
15°	6258.8	6236.7	6284.9	6382.7	6630.6	7174.7	8192.5	8830.3	8539.7	7609.9	7020.4
17.5°	6185.8	6161.0	6181.6	6232.6	6392.3	6806.9	7776.6	8930.8	8874.3	7849.6	7119.5
20°	6320.8	6300.1	6302.8	6300.1	6411.6	6740.8	7487.3	8892.3	9166.4	8069.9	7216.0
22.5°	6647.1	6612.7	6614.1	6541.1	6601.7	6856.5	7411.6	8789.0	9426.7	8262.8	7289.0
25°	7178.8	7116.9	7129.3	6943.2	6926.7	7115.4	7530.1	8709.1	9685.6	8417.1	7302.8
27.5°	7906.0	7835.8	7798.6	7521.8	7389.5	7483.2	7771.0	8736.6	9930.8	8550.7	7268.4
30°	8815.1	8729.7	8654.0	8261.4	8021.8	7987.3	8145.8	8918.4	10220.1	8691.2	7209.1
32.5°	9929.4	9830.3	9692.5	9171.9	8834.4	8654.0	8630.6	9242.1	10558.8	8870.2	7178.8
35°	11255.8	11126.4	10930.8	10257.3	9830.3	9461.2	9269.7	9709.0	11023.1	9140.2	7213.2
37.5°	12622.2	12476.2	12297.1	11495.5	10970.7	10426.6	10049.2	10342.7	11641.4	9506.6	7304.2
40°	13882.5	13718.5	13551.9	12838.4	12275.1	11619.4	11003.8	11144.2	12397.7	9944.6	7458.4
42.5°	14626.2	14505.0	14441.6	14056.0	13620.7	12955.5	12191.0	12094.6	13247.5	10448.6	7634.7
45°	14593.1	14543.6	14739.2	14899.0	14795.7	14426.5	13582.2	13145.5	14100.1	10885.3	7797.3
47.5°	13813.6	13846.6	14283.3	15181.3	15576.6	15769.4	15166.2	14177.2	14841.1	11211.8	7870.3
50°	11692.5	11720.0	12731.0	14667.5	15777.7	16864.4	16737.7	15184.0	15415.5	11411.4	7853.8
52.5°	10013.4	10031.4	10465.2	13144.2	15113.8	17415.4	18153.7	16133.1	15835.5	11466.6	7761.4
55°	7542.5	7604.5	8090.6	10312.3	13386.6	16978.8	19015.9	17111.0	16101.4	11472.1	7665.1
57.5°	4406.2	4473.7	5074.2	6999.7	10404.6	15456.8	19146.7	17978.7	16281.8	11428.0	7607.1
60°	2158.3	2187.2	2448.9	3678.9	6415.8	12524.4	18094.4	18398.9	16382.4	11404.6	7604.5
62.5°	1454.5	1450.4	1461.3	1815.4	3161.1	8046.6	15901.6	17663.3	16328.7	11315.1	7576.9
65°	1250.6	1235.5	1194.1	1274.1	1637.6	3680.4	12286.1	15467.8	15919.6	11090.5	7388.2
67.5°	1081.3	1082.6	1083.9	1059.2	1169.4	1698.3	7508.0	12184.2	14451.3	10027.2	6661.0
70°	895.3	907.6	913.2	913.2	953.1	1114.3	3205.2	8351.0	11399.0	7862.0	5364.8
72.5°	815.4	789.2	792.0	778.2	778.2	848.5	1290.6	4734.0	7181.6	4422.7	3274.0
75°	665.2	681.8	684.6	674.9	643.2	647.4	765.8	1986.1	3073.0	1834.6	1618.4
77.5°	574.4	574.4	579.8	573.0	548.2	484.8	511.0	770.0	1045.4	752.0	808.5
80°	461.5	460.0	483.5	497.2	458.7	358.1	326.5	425.6	464.2	330.6	420.0
82.5°	224.5	238.3	331.9	378.7	348.5	258.9	199.7	264.4	247.9	146.0	188.7
85°	130.9	123.9	148.7	210.7	199.7	143.3	96.5	137.8	129.5	74.4	75.7
87.5°	41.3	38.5	30.3	71.6	57.8	40.0	26.1	40.0	35.8	16.5	16.5
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6676.1	6676.1	6676.1	6676.1	6676.1	6676.1	6676.1	6676.1	6676.1	6676.1
2.5°	6600.3	6437.8	6276.7	6129.3	6039.7	5981.9	5924.1	5859.3	5834.5	5797.3
5°	6534.2	6220.2	5940.6	5699.5	5480.6	5308.4	5134.8	4994.3	4931.0	4973.7
7.5°	6495.6	6041.1	5610.0	5167.8	4742.3	4402.1	4105.9	3898.0	3804.3	3827.7
10°	6461.2	5838.6	5181.7	4483.3	3871.7	3450.3	3147.3	2988.9	2929.7	2942.1
12.5°	6429.5	5611.4	4665.1	3746.5	3096.3	2818.1	2731.3	2732.6	2743.7	2752.0
15°	6424.0	5337.3	4088.0	3101.9	2677.6	2659.7	2753.4	2812.6	2844.3	2853.9
17.5°	6415.8	5009.5	3499.9	2662.4	2575.6	2696.9	2783.7	2822.2	2847.0	2848.4
20°	6382.7	4593.5	2957.2	2453.1	2553.6	2658.3	2712.0	2742.3	2763.0	2769.9
22.5°	6280.8	4130.8	2534.3	2359.4	2465.4	2549.5	2612.8	2647.3	2659.7	2668.0
25°	6097.6	3612.8	2242.4	2269.9	2342.9	2448.9	2499.9	2506.8	2502.6	2515.0
27.5°	5858.0	3057.8	2060.6	2148.7	2242.4	2333.2	2360.8	2356.7	2348.4	2362.2
30°	5568.7	2559.1	1944.8	2012.3	2140.4	2223.0	2247.8	2238.2	2221.7	2236.9
32.5°	5262.9	2151.5	1849.8	1917.3	2056.4	2137.6	2162.4	2152.8	2140.4	2152.8
35°	4977.8	1866.3	1761.7	1853.9	1990.2	2070.2	2101.9	2103.2	2103.2	2118.4
37.5°	4716.1	1699.7	1688.7	1813.9	1944.8	2016.5	2061.9	2064.7	2005.4	2009.6
40°	4473.7	1629.4	1655.6	1787.8	1900.8	1969.6	1972.4	1818.1	1709.3	1706.5
42.5°	4275.4	1615.6	1665.2	1785.0	1869.1	1871.9	1677.6	1557.8	1527.5	1528.9
45°	4089.4	1611.5	1687.3	1785.0	1822.2	1617.0	1486.1	1454.5	1457.2	1468.3
47.5°	3881.4	1595.0	1691.4	1760.2	1687.3	1438.0	1399.4	1385.6	1380.2	1382.8
50°	3654.1	1535.8	1639.1	1710.7	1455.9	1360.8	1312.6	1308.5	1315.4	1319.5
52.5°	3414.5	1439.3	1549.5	1621.1	1349.8	1293.3	1239.6	1249.3	1279.6	1289.2
55°	3257.4	1326.5	1431.1	1442.1	1275.4	1230.0	1184.5	1206.5	1263.0	1280.9
57.5°	3216.1	1206.5	1296.1	1283.7	1180.4	1174.9	1147.4	1166.7	1238.2	1264.4
60°	3203.7	1099.1	1163.9	1154.3	1088.1	1114.3	1107.4	1117.0	1141.8	1150.0
62.5°	3107.3	1013.7	1045.4	1031.7	1005.5	1050.9	1067.4	1046.8	1066.1	1075.7
65°	2862.2	944.8	929.7	920.0	931.1	972.4	1005.5	964.1	982.1	1009.6
67.5°	2457.2	851.2	809.9	820.9	855.4	877.4	920.0	873.3	888.4	935.2
70°	1987.6	732.8	695.6	727.2	760.3	805.8	812.6	780.9	816.8	869.1
72.5°	1406.3	612.9	586.7	651.5	662.6	721.7	706.6	691.5	741.0	758.9
75°	975.2	494.5	479.3	528.9	568.9	619.8	608.7	626.7	731.3	739.6
77.5°	617.0	384.3	374.6	406.3	461.5	517.9	535.8	739.6	1249.3	1298.9
80°	358.1	286.5	275.5	300.2	348.5	400.8	516.5	907.6	823.7	814.1
82.5°	199.7	197.0	183.2	190.0	232.8	289.3	730.0	639.1	519.3	535.8
85°	93.7	115.7	99.2	95.0	130.9	338.9	487.6	365.0	242.4	236.9
87.5°	24.8	22.0	22.0	24.8	55.1	292.0	194.2	155.6	92.2	89.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)