

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: P968150

Luminaire Tested: **NAV-SB5B-722-U-AFL**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P968150  
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-722-U-AFL  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24495.4 lumens  
Efficiency: N/A  
Efficacy: 134.1 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G2

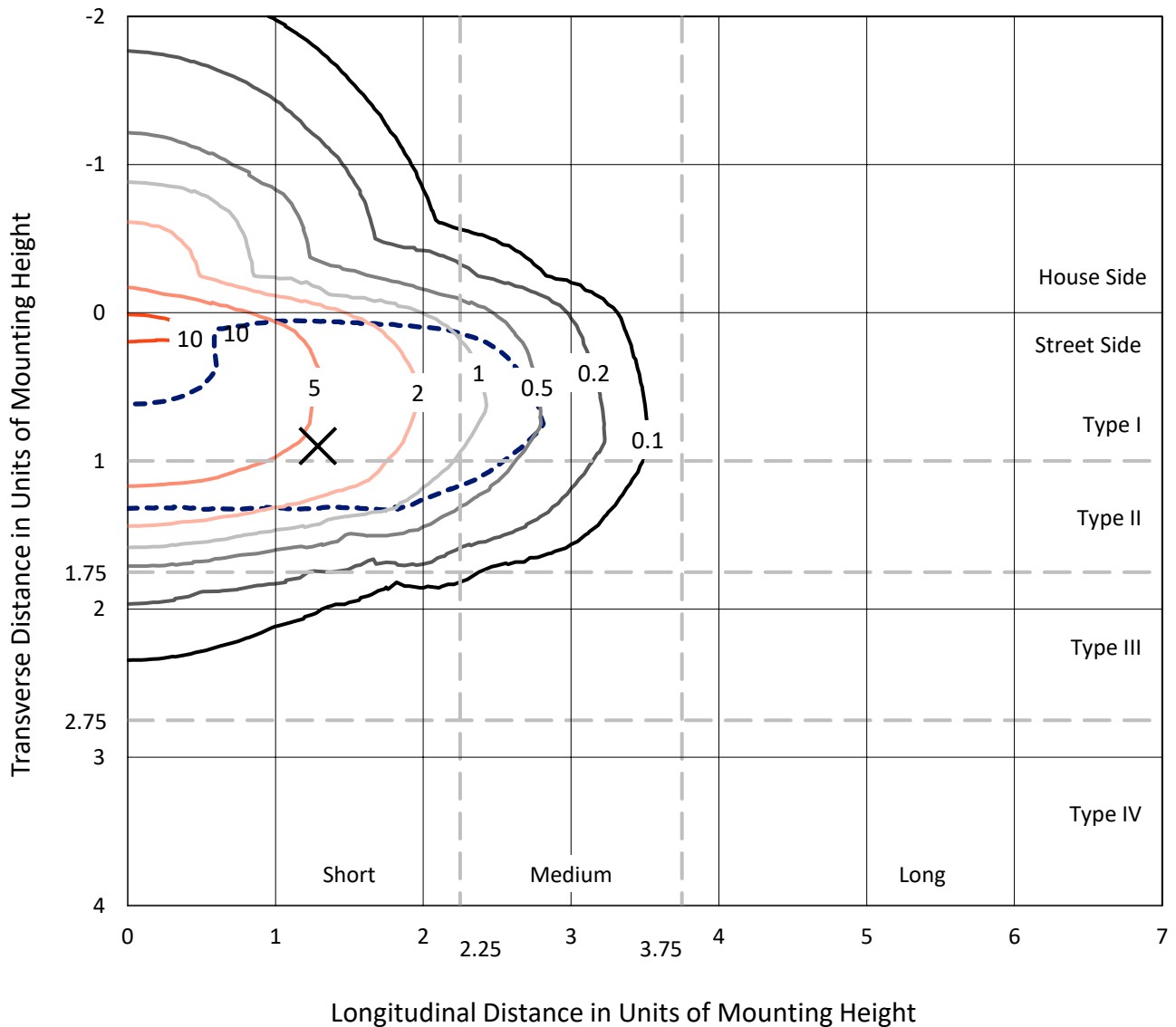
Input Watts (W): 182.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

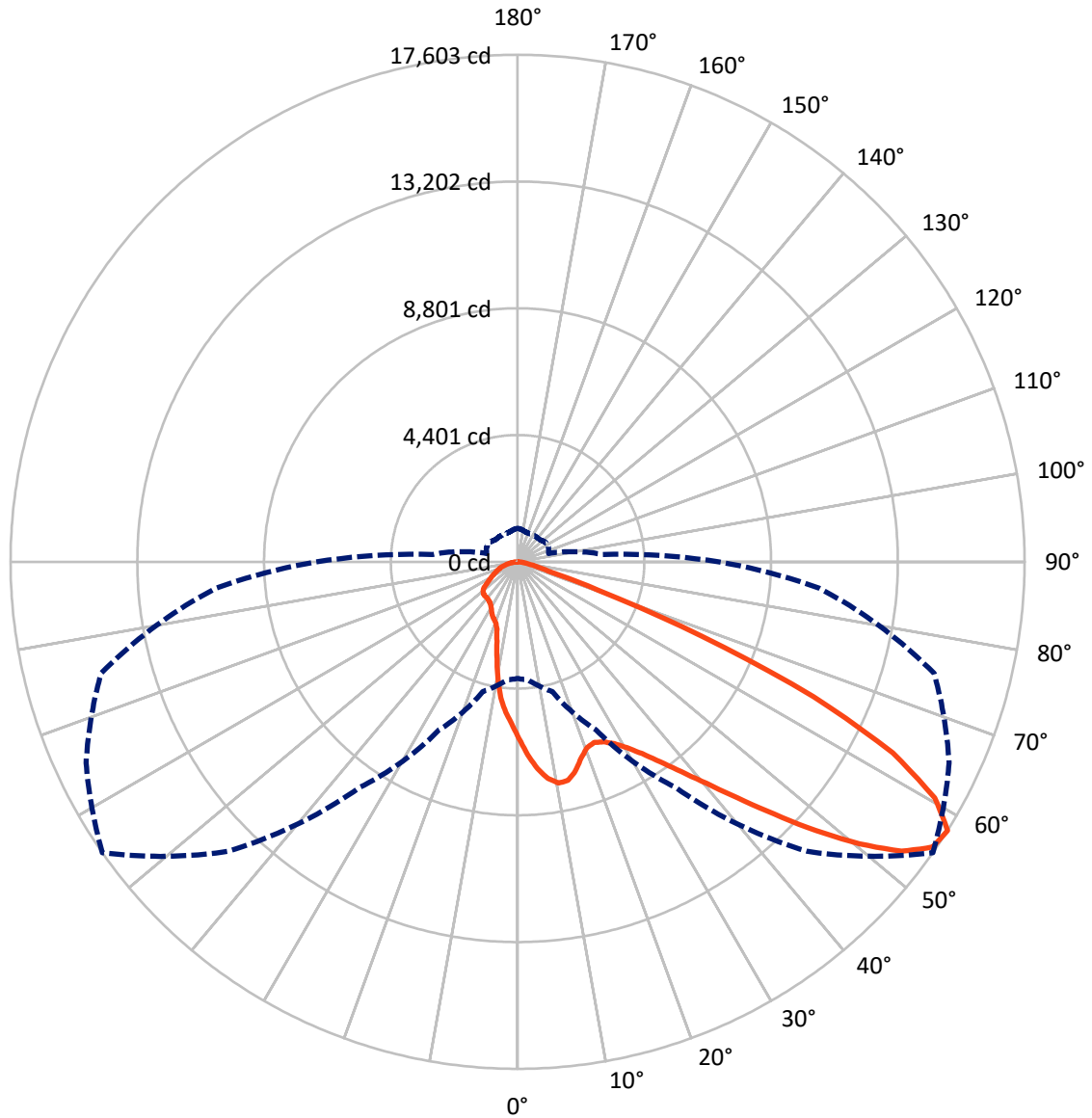
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.9 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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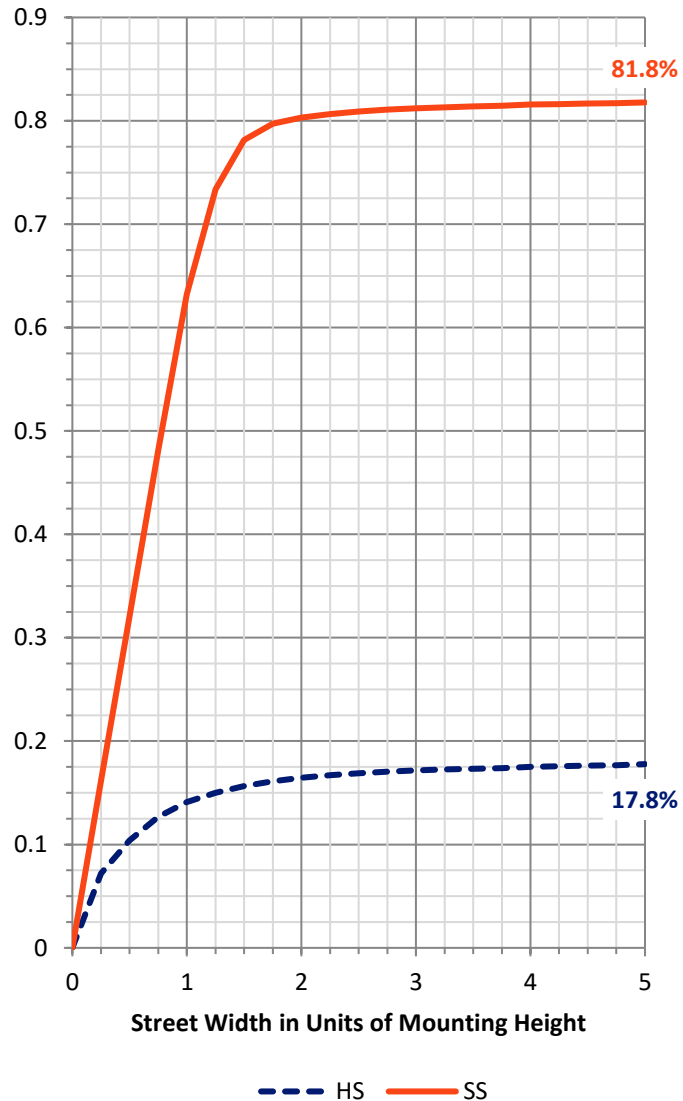
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4432.3	0.0	4432.3
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	20063.1	0.0	20063.1
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	24495.4	0.0	24495.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	569.5	2.3
10°-20°	1437.6	5.9
20°-30°	2294.0	9.4
30°-40°	3631.9	14.8
40°-50°	5559.0	22.7
50°-60°	5954.2	24.3
60°-70°	3745.8	15.3
70°-80°	1107.7	4.5
80°-90°	195.9	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°	24495.4	100.0
0°-180°	24495.4	100.0

**Coefficient of Utilization**



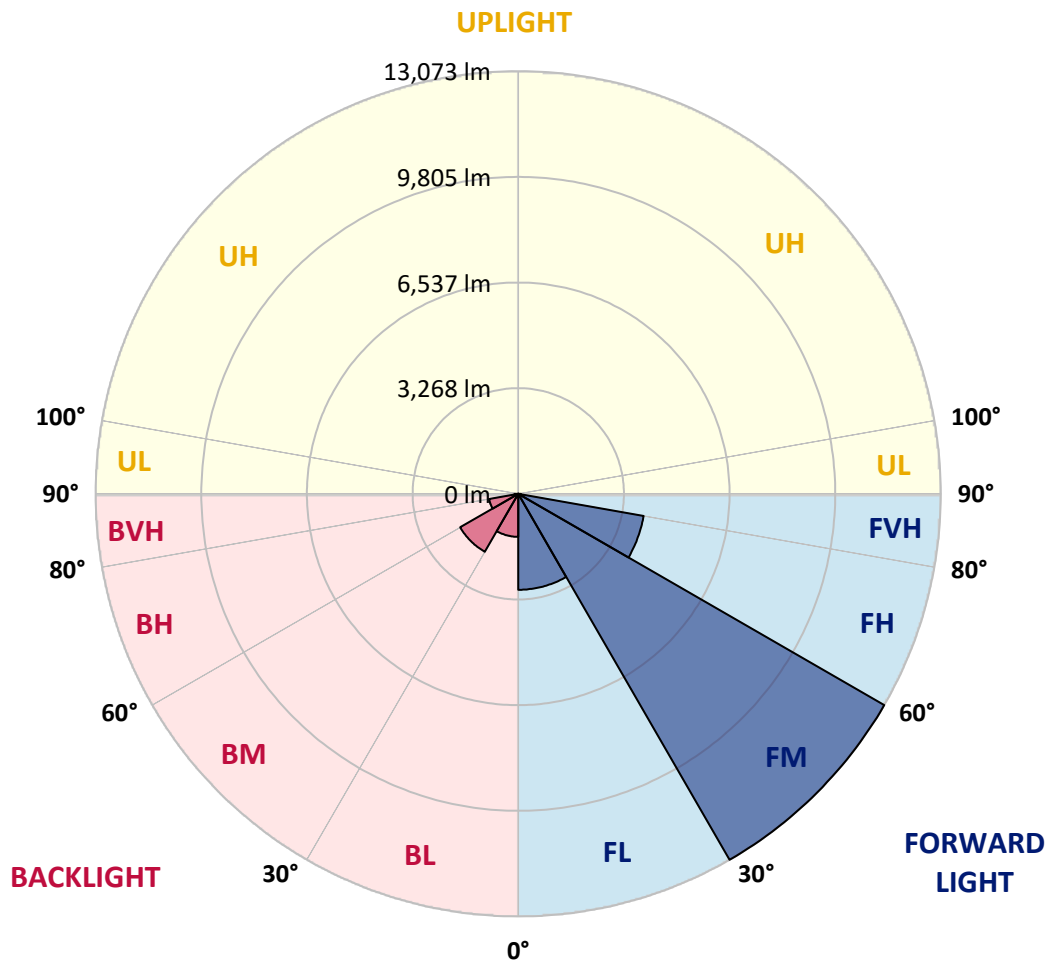
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2968.8	12.1			
FM (30°-60°)	13073.4	53.4			
FH (60°-80°)	3938.1	16.1			G2/5000
FVH (80°-90°)	82.7	0.3			G1/100
BL (0°-30°)	1332.2	5.4	B3/2500		
BM (30°-60°)	2071.6	8.5	B2/2500		
BH (60°-80°)	915.4	3.7	B2/1000		G2/1000
BVH (80°-90°)	113.1	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°	6137.8	6137.8	6137.8	6137.8	6137.8	6137.8	6137.8	6137.8	6137.8	6137.8	6137.8
2.5°	7042.0	7036.8	7064.7	6969.7	6905.1	6817.8	6702.6	6555.7	6397.3	6230.2	6158.0
5°	7676.3	7632.0	7661.2	7590.2	7519.3	7387.6	7216.6	6977.3	6684.8	6351.7	6174.5
7.5°	7576.3	7545.8	7620.6	7683.9	7737.1	7720.6	7595.2	7344.5	6967.2	6483.4	6226.4
10°	6769.6	6735.5	6840.5	7059.6	7381.2	7661.2	7813.1	7657.4	7255.9	6627.9	6277.1
12.5°	6058.0	6041.6	6111.2	6288.5	6645.6	7182.5	7785.2	7930.8	7556.0	6798.8	6345.5
15°	5754.0	5733.8	5778.1	5868.0	6096.0	6596.2	7532.0	8118.3	7851.1	6996.3	6454.3
17.5°	5687.0	5664.2	5683.1	5730.1	5876.9	6258.0	7149.6	8210.7	8158.8	7216.6	6545.5
20°	5811.0	5792.1	5794.6	5792.1	5894.7	6197.3	6883.6	8175.2	8427.2	7419.3	6634.1
22.5°	6111.2	6079.5	6080.8	6013.7	6069.4	6303.6	6814.0	8080.3	8666.6	7596.6	6701.2
25°	6600.0	6543.0	6554.4	6383.4	6368.2	6541.8	6922.8	8006.8	8904.6	7738.3	6714.0
27.5°	7268.6	7204.0	7169.8	6915.3	6793.7	6879.8	7144.5	8032.1	9130.1	7861.2	6682.3
30°	8104.4	8025.9	7956.2	7595.2	7375.0	7343.3	7489.0	8199.3	9396.0	7990.4	6627.9
32.5°	9128.8	9037.6	8910.9	8432.3	8122.1	7956.2	7934.6	8496.8	9707.5	8155.0	6600.0
35°	10348.2	10229.2	10049.4	9430.1	9037.6	8698.3	8522.3	8926.1	10134.2	8403.2	6631.6
37.5°	11604.4	11470.2	11305.5	10568.6	10086.1	9585.9	9238.9	9508.6	10702.7	8740.0	6715.2
40°	12763.1	12612.3	12459.2	11803.2	11285.2	10682.6	10116.4	10245.7	11398.0	9142.7	6857.0
42.5°	13446.9	13335.5	13277.1	12922.6	12522.4	11910.8	11208.1	11119.4	12179.3	9606.2	7019.1
45°	13416.4	13370.9	13550.7	13697.6	13602.6	13263.3	12487.0	12085.6	12963.2	10007.6	7168.5
47.5°	12699.7	12730.1	13131.6	13957.2	14320.6	14497.9	13943.3	13034.0	13644.4	10307.7	7235.7
50°	10749.6	10775.0	11704.5	13484.8	14505.5	15504.6	15388.1	13959.7	14172.5	10491.3	7220.4
52.5°	9206.0	9222.4	9621.4	12084.3	13895.1	16011.1	16689.9	14832.2	14558.7	10541.9	7135.6
55°	6934.2	6991.2	7438.2	9480.8	12307.2	15609.7	17482.6	15731.3	14803.0	10547.0	7047.0
57.5°	4050.9	4112.9	4665.1	6435.4	9565.6	14210.4	17602.8	16529.0	14969.0	10506.5	6993.8
60°	1984.3	2010.8	2251.5	3382.3	5898.5	11514.4	16635.4	16915.3	15061.4	10484.9	6991.2
62.5°	1337.2	1333.4	1343.6	1669.0	2906.2	7397.7	14619.5	16239.1	15012.0	10402.6	6965.9
65°	1149.8	1135.9	1097.9	1171.4	1505.6	3383.5	11295.4	14220.5	14635.9	10196.3	6792.5
67.5°	994.0	995.3	996.6	973.7	1075.1	1561.4	6902.7	11201.7	13286.0	9218.6	6123.9
70°	823.1	834.5	839.6	839.6	876.3	1024.5	2946.7	7677.6	10479.9	7228.1	4932.2
72.5°	749.7	725.6	728.2	715.4	715.4	780.0	1186.5	4352.3	6602.5	4066.1	3010.0
75°	611.6	626.8	629.3	620.5	591.3	595.1	704.1	1826.0	2825.1	1686.7	1487.9
77.5°	528.1	528.1	533.1	526.7	504.0	445.8	469.8	707.9	961.1	691.4	743.3
80°	424.2	422.9	444.4	457.2	421.7	329.2	300.1	391.2	426.7	303.9	386.2
82.5°	206.4	219.0	305.1	348.2	320.4	238.1	183.6	243.1	228.0	134.3	173.5
85°	120.3	114.0	136.7	193.7	183.6	131.7	88.7	126.6	119.0	68.4	69.6
87.5°	38.0	35.5	27.9	65.8	53.2	36.7	24.1	36.7	32.9	15.2	15.2
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6137.8	6137.8	6137.8	6137.8	6137.8	6137.8	6137.8	6137.8	6137.8	6137.8
2.5°	6068.1	5918.7	5770.5	5635.0	5552.7	5499.5	5446.3	5386.9	5364.0	5329.9
5°	6007.3	5718.6	5461.6	5240.0	5038.6	4880.3	4720.7	4591.6	4533.4	4572.6
7.5°	5971.9	5554.0	5157.7	4751.2	4359.8	4047.1	3774.9	3583.6	3497.5	3519.0
10°	5940.2	5367.8	4763.8	4121.8	3559.6	3172.1	2893.5	2747.9	2693.4	2704.8
12.5°	5911.1	5158.9	4289.0	3444.3	2846.6	2590.9	2511.0	2512.4	2522.4	2530.1
15°	5906.0	4906.9	3758.4	2851.8	2461.6	2445.2	2531.3	2585.8	2614.9	2623.8
17.5°	5898.5	4605.5	3217.7	2447.8	2368.0	2479.4	2559.2	2594.7	2617.4	2618.7
20°	5868.0	4223.1	2718.7	2255.3	2347.8	2444.0	2493.3	2521.2	2540.2	2546.5
22.5°	5774.3	3797.6	2330.0	2169.2	2266.7	2344.0	2402.2	2433.9	2445.2	2452.8
25°	5605.9	3321.5	2061.6	2086.9	2153.9	2251.5	2298.4	2304.7	2300.9	2312.3
27.5°	5385.6	2811.2	1894.4	1975.4	2061.6	2145.1	2170.4	2166.6	2159.1	2171.7
30°	5119.7	2352.8	1788.0	1850.0	1967.8	2043.8	2066.6	2057.8	2042.5	2056.5
32.5°	4838.5	1977.9	1700.7	1762.7	1890.6	1965.3	1988.1	1979.3	1967.8	1979.3
35°	4576.4	1715.8	1619.6	1704.5	1829.8	1903.2	1932.3	1933.7	1933.7	1947.6
37.5°	4335.9	1562.6	1552.5	1667.7	1788.0	1853.8	1895.6	1898.2	1843.8	1847.6
40°	4112.9	1498.0	1522.1	1643.7	1747.5	1810.8	1813.3	1671.5	1571.5	1569.0
42.5°	3930.6	1485.3	1530.9	1641.1	1718.4	1720.9	1542.3	1432.2	1404.4	1405.6
45°	3759.7	1481.5	1551.2	1641.1	1675.4	1486.7	1366.3	1337.2	1339.8	1349.9
47.5°	3568.4	1466.4	1555.0	1618.4	1551.2	1322.0	1286.6	1273.9	1268.8	1271.4
50°	3359.5	1411.9	1506.9	1572.8	1338.4	1251.1	1206.8	1202.9	1209.3	1213.1
52.5°	3139.2	1323.3	1424.5	1490.5	1241.0	1189.1	1139.7	1148.5	1176.4	1185.2
55°	2994.8	1219.4	1315.7	1325.8	1172.6	1130.8	1089.1	1109.3	1161.2	1177.6
57.5°	2956.8	1109.3	1191.6	1180.2	1085.3	1080.1	1054.8	1072.6	1138.4	1162.5
60°	2945.4	1010.5	1070.0	1061.2	1000.4	1024.5	1018.1	1026.9	1049.8	1057.4
62.5°	2856.8	932.0	961.1	948.4	924.4	966.2	981.3	962.4	980.1	989.0
65°	2631.4	868.7	854.7	845.9	856.0	894.0	924.4	886.4	902.9	928.2
67.5°	2259.1	782.6	744.6	754.7	786.4	806.7	845.9	802.9	816.7	859.8
70°	1827.3	673.6	639.5	668.6	698.9	740.8	747.1	718.0	750.9	799.0
72.5°	1292.9	563.5	539.5	599.0	609.1	663.6	649.6	635.7	681.3	697.7
75°	896.6	454.6	440.6	486.3	523.0	569.8	559.8	576.2	672.4	680.0
77.5°	567.3	353.3	344.4	373.5	424.2	476.1	492.6	680.0	1148.5	1194.1
80°	329.2	263.4	253.3	276.0	320.4	368.5	474.9	834.5	757.3	748.4
82.5°	183.6	181.1	168.4	174.8	214.0	265.9	671.2	587.5	477.4	492.6
85°	86.1	106.4	91.1	87.3	120.3	311.5	448.2	335.6	222.8	217.8
87.5°	22.8	20.3	20.3	22.8	50.6	268.4	178.6	143.1	84.9	82.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)