

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: P967638

Luminaire Tested: **NAV-SB5A-722-U-T2R**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P967638  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5A-722-U-T2R  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 2200K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19542.7 lumens  
Efficiency: N/A  
Efficacy: 137.9 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3

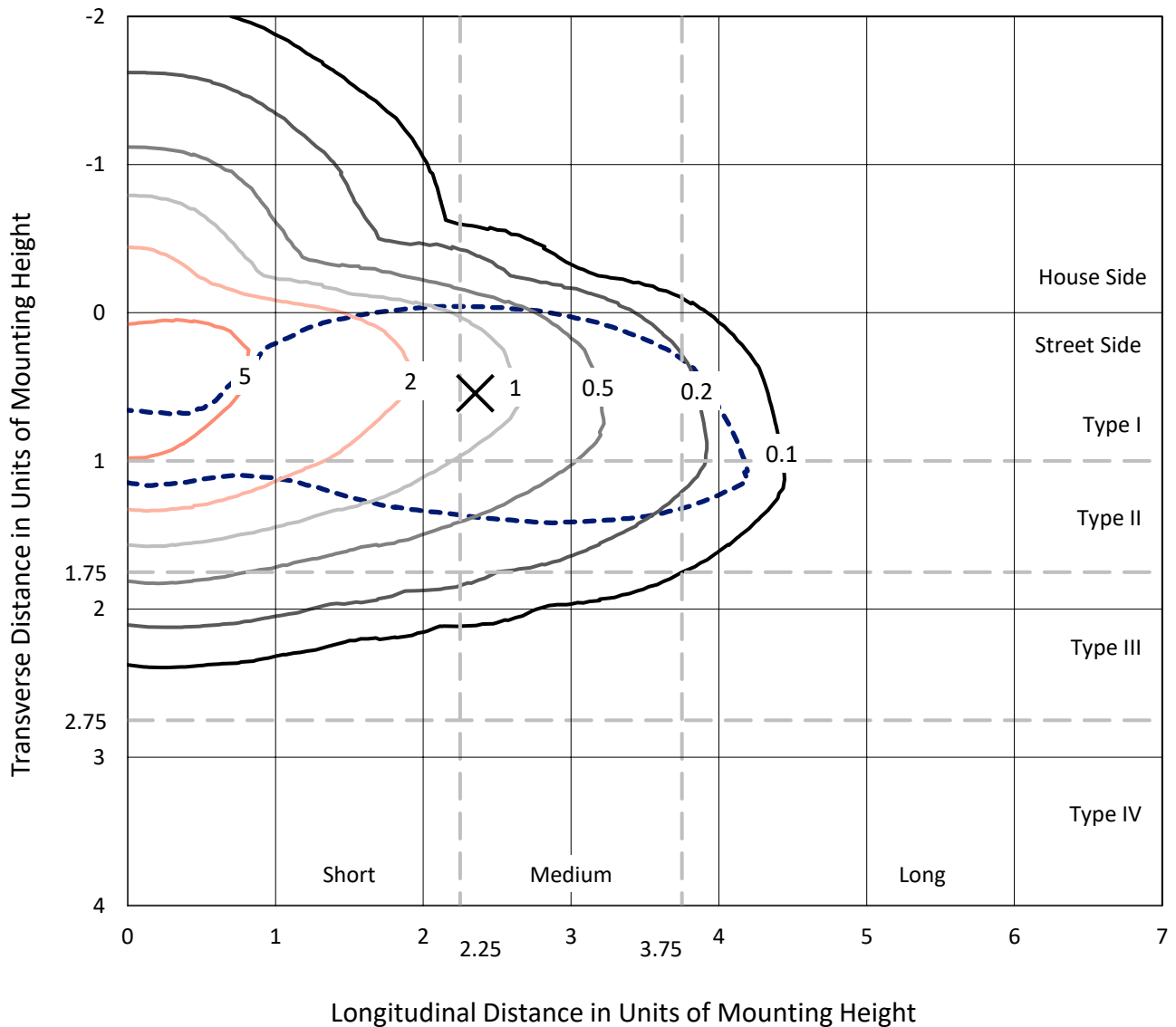
Input Watts (W): 141.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

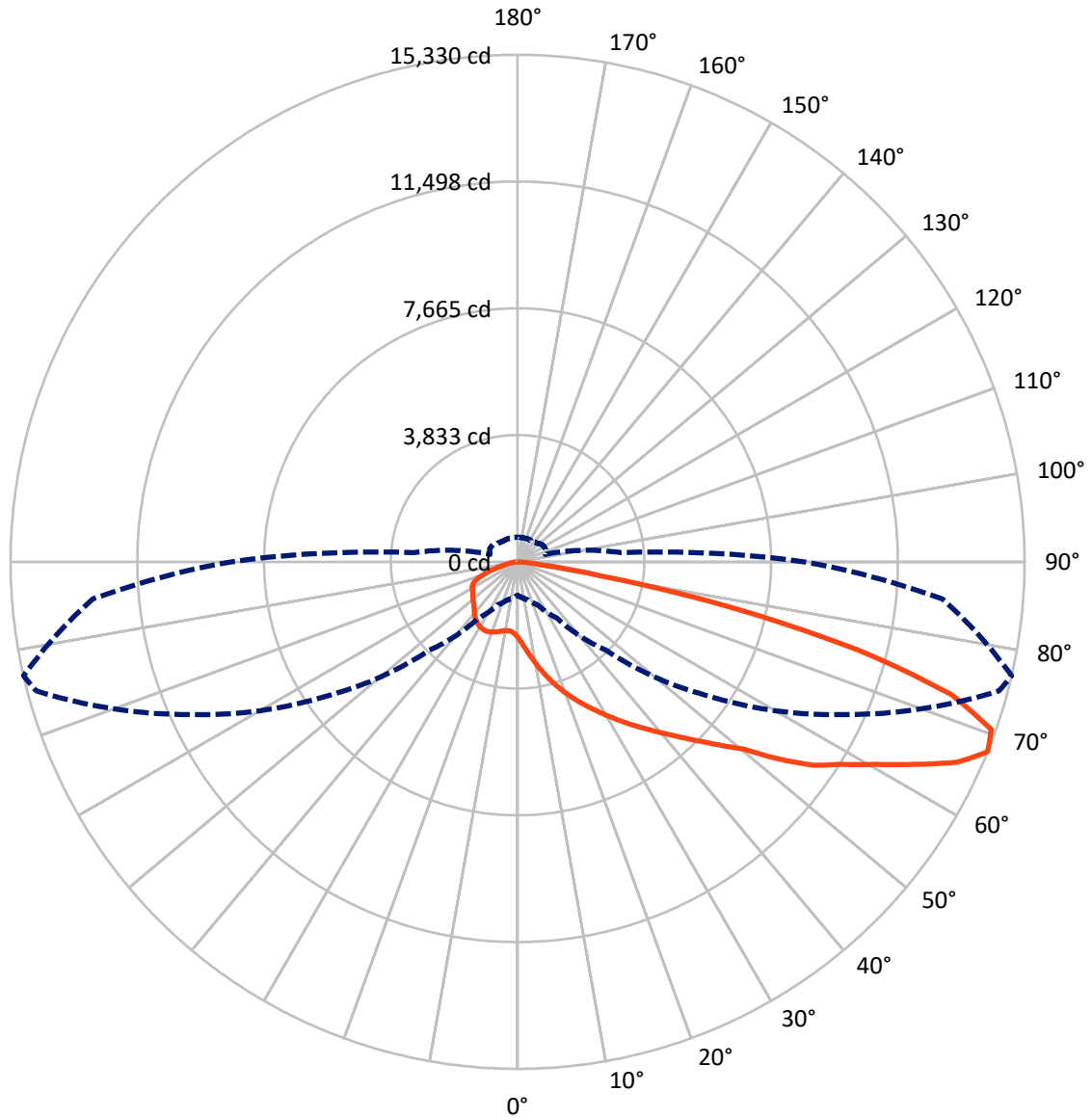
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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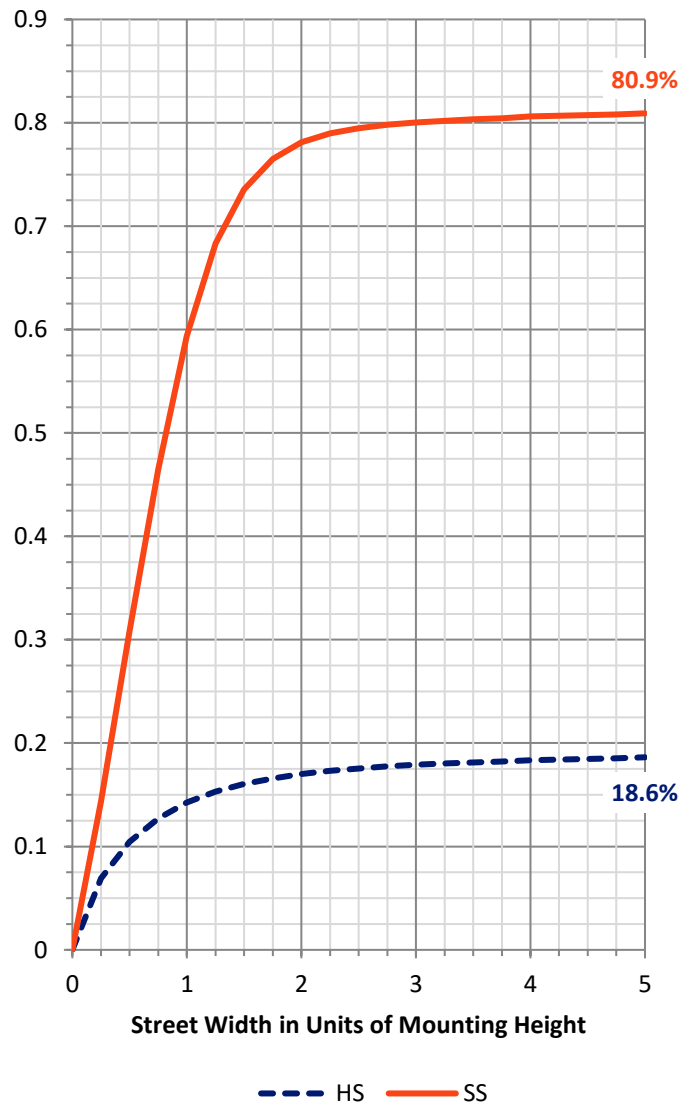
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3696.7	0.0	3696.7
	% Fixture	18.9	0.0	18.9
<b>Street Side</b>	Lumens	15846.0	0.0	15846.0
	% Fixture	81.1	0.0	81.1
<b>Total</b>	Lumens	19542.7	0.0	19542.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	245.8	1.3
10°-20°	883.0	4.5
20°-30°	1667.1	8.5
30°-40°	2685.7	13.7
40°-50°	3673.6	18.8
50°-60°	4143.8	21.2
60°-70°	3867.7	19.8
70°-80°	2120.2	10.8
80°-90°	255.7	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°	19542.7	100.0
0°-180°	19542.7	100.0

**Coefficient of Utilization**

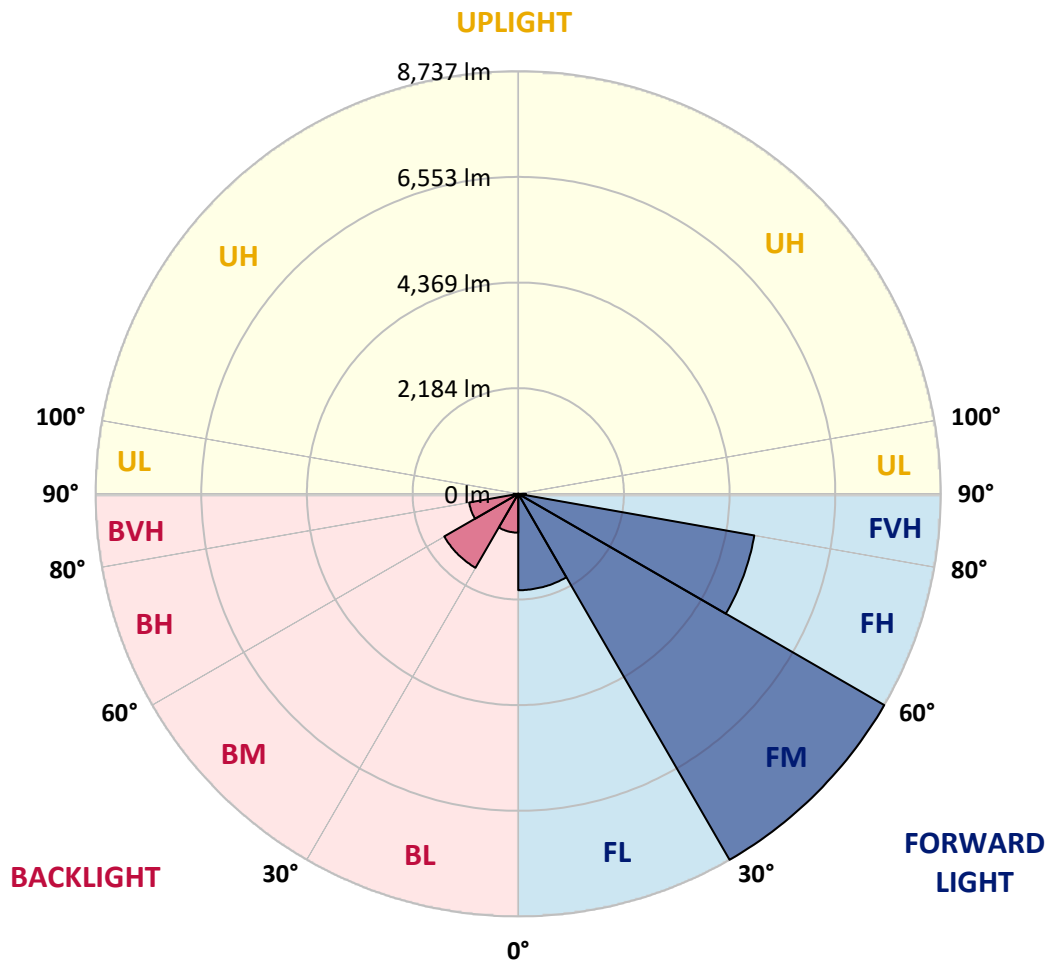


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1992.1	10.2			
FM (30°-60°)	8737.3	44.7			
FH (60°-80°)	4956.6	25.4			G2/5000
FVH (80°-90°)	159.9	0.8			G2/225
BL (0°-30°)	803.7	4.1	B2/1000		
BM (30°-60°)	1765.8	9.0	B2/2500		
BH (60°-80°)	1031.3	5.3	B3/2500		G3/2500
BVH (80°-90°)	95.8	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°	77°	85°
0°	2292.9	2292.9	2292.9	2292.9	2292.9	2292.9	2292.9	2292.9	2292.9	2292.9	2292.9
2.5°	2871.0	2891.2	2865.9	2865.9	2781.2	2736.9	2652.1	2587.5	2471.5	2451.3	2374.7
5°	3393.6	3418.8	3383.4	3368.4	3268.4	3176.7	3034.4	2894.2	2687.3	2666.2	2485.6
7.5°	3798.0	3830.3	3799.1	3783.0	3694.2	3591.3	3424.8	3229.2	2937.5	2896.2	2635.0
10°	4128.0	4133.0	4122.9	4128.9	4059.3	3974.6	3804.1	3576.1	3211.9	3155.5	2815.5
12.5°	4314.5	4337.8	4357.9	4394.3	4382.2	4329.7	4176.4	3904.0	3502.5	3429.9	3012.3
15°	4402.3	4442.7	4488.1	4571.8	4639.4	4652.5	4535.5	4256.0	3798.0	3710.3	3210.9
17.5°	4433.6	4472.0	4543.5	4664.6	4809.9	4907.7	4855.2	4598.0	4090.6	3989.7	3419.8
20°	4592.0	4603.1	4646.4	4761.4	4918.8	5081.2	5120.6	4926.9	4380.1	4266.2	3635.7
22.5°	4931.0	4908.7	4920.8	4973.3	5086.3	5243.7	5333.4	5217.5	4677.7	4546.6	3853.6
25°	5490.8	5426.2	5361.7	5301.1	5358.6	5447.5	5549.3	5507.9	4989.4	4822.9	4073.5
27.5°	6198.0	6119.2	5977.0	5778.3	5708.7	5740.0	5785.4	5777.3	5277.9	5109.5	4300.4
30°	6894.0	6802.2	6632.8	6345.3	6161.7	6079.0	6044.6	6021.5	5591.7	5412.1	4529.5
32.5°	7449.8	7377.2	7210.8	6888.9	6622.6	6481.4	6367.4	6284.7	5919.6	5740.0	4771.6
35°	7936.1	7868.5	7677.9	7326.8	7037.2	6887.0	6737.6	6561.1	6260.5	6079.0	5031.8
37.5°	8380.0	8312.3	8051.1	7685.9	7394.4	7290.4	7157.3	6857.7	6602.4	6431.0	5307.2
40°	8660.4	8645.3	8401.1	7987.5	7684.9	7633.5	7589.1	7201.6	6981.8	6822.4	5609.8
42.5°	8732.0	8765.3	8571.7	8231.7	7943.1	7901.8	8005.7	7591.0	7407.5	7255.2	5952.8
45°	8559.5	8655.3	8528.2	8297.3	8126.7	8104.6	8374.9	8016.8	7878.6	7739.4	6366.4
47.5°	8122.7	8285.1	8232.7	8200.4	8176.2	8272.1	8699.7	8468.8	8412.3	8291.2	6838.5
50°	7241.0	7548.7	7640.6	7844.3	8078.3	8402.1	8995.3	8962.0	9035.7	8913.6	7413.5
52.5°	5716.7	6140.5	6673.1	7183.5	7777.7	8358.8	9320.1	9670.2	9980.8	9914.3	8327.5
55°	4719.1	4909.8	5319.3	6255.5	7194.6	8176.2	9466.4	10242.1	10919.0	10859.6	9020.5
57.5°	3952.4	4122.9	4375.1	5156.9	6313.0	7761.6	9557.2	10591.2	11561.7	11555.5	9704.5
60°	3130.2	3310.9	3569.0	4122.9	5283.0	7045.3	9537.0	10988.6	12381.8	12432.2	10538.7
62.5°	2202.2	2400.9	2687.3	3203.8	4230.8	6117.2	9125.5	11276.1	13347.1	13484.4	11542.5
65°	1447.6	1578.7	1794.7	2240.5	3152.5	4923.9	8339.6	11313.4	14380.1	14612.2	12484.7
67.5°	1014.9	1065.3	1192.4	1434.5	2078.1	3775.9	7087.7	10927.1	15069.1	15330.4	12893.3
70°	791.9	817.1	881.7	978.6	1305.3	2539.1	5431.3	9922.4	14921.8	15194.3	12466.6
72.5°	684.0	708.2	732.4	744.5	875.7	1567.6	3679.0	8296.2	13534.8	13719.4	10839.4
75°	620.4	626.5	646.7	642.6	667.8	1016.9	2123.5	6044.6	10679.0	10615.4	8001.7
77.5°	521.5	529.6	562.9	557.8	593.2	695.1	1102.6	3900.9	6923.3	6491.5	4453.7
80°	441.9	445.9	482.2	476.1	515.5	503.4	562.9	1988.3	2936.5	2487.7	1284.2
82.5°	153.3	189.6	368.2	379.4	393.4	304.6	324.8	811.1	896.8	687.0	269.4
85°	74.6	79.6	187.7	266.3	265.3	153.3	158.4	289.6	282.5	221.9	89.8
87.5°	12.1	15.2	22.2	103.9	82.7	40.4	54.4	56.5	58.5	50.4	20.2
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°	2292.9	2292.9	2292.9	2292.9	2292.9	2292.9	2292.9	2292.9	2292.9	2292.9	2292.9
2.5°	2318.1	2267.7	2161.8	2063.9	1987.3	1913.7	1872.3	1837.0	1816.8	1812.8	1812.8
5°	2380.8	2276.8	2084.1	1921.8	1815.8	1737.2	1695.8	1669.5	1656.4	1648.3	1647.4
7.5°	2470.5	2318.1	2043.7	1859.1	1748.2	1691.8	1670.5	1666.5	1665.5	1666.5	1669.5
10°	2594.6	2385.8	2039.7	1844.1	1751.2	1720.0	1718.9	1720.0	1724.0	1725.0	1726.0
12.5°	2728.8	2455.4	2055.9	1857.2	1789.5	1772.4	1769.4	1768.4	1771.4	1773.5	1774.5
15°	2875.0	2547.1	2083.1	1885.4	1832.0	1813.8	1810.8	1804.7	1803.7	1802.7	1801.6
17.5°	3025.3	2637.9	2113.4	1915.7	1859.1	1833.9	1822.9	1808.7	1797.6	1794.7	1797.6
20°	3177.7	2727.7	2134.6	1930.8	1861.2	1825.9	1803.7	1779.5	1760.3	1749.3	1753.3
22.5°	3340.1	2821.5	2147.7	1926.8	1843.1	1794.7	1754.3	1726.0	1696.8	1677.6	1678.6
25°	3498.4	2903.3	2146.7	1905.6	1807.7	1746.2	1694.7	1658.4	1618.1	1597.9	1597.9
27.5°	3650.7	2976.9	2121.4	1868.3	1757.3	1688.7	1627.2	1583.8	1544.5	1525.3	1524.3
30°	3808.2	3038.4	2082.1	1813.8	1697.8	1622.2	1554.5	1517.2	1481.9	1463.7	1462.8
32.5°	3964.5	3095.0	2026.6	1746.2	1629.1	1556.6	1489.9	1455.7	1434.5	1434.5	1435.5
35°	4129.9	3134.2	1953.0	1667.5	1556.6	1487.0	1434.5	1414.3	1412.2	1400.1	1397.2
37.5°	4304.5	3159.5	1863.2	1586.8	1484.9	1419.3	1403.2	1379.0	1358.8	1332.6	1328.6
40°	4488.1	3184.7	1755.3	1503.1	1409.3	1373.0	1365.9	1333.6	1276.1	1211.6	1202.4
42.5°	4711.0	3201.9	1643.3	1419.3	1329.5	1317.4	1327.6	1272.0	1180.3	1131.8	1132.8
45°	4969.3	3230.1	1540.4	1336.6	1247.8	1247.8	1290.3	1217.6	1142.0	1111.7	1116.7
47.5°	5304.2	3295.7	1444.5	1245.9	1172.2	1192.4	1207.6	1152.0	1109.7	1072.4	1071.3
50°	5788.4	3453.0	1345.7	1154.0	1114.7	1155.1	1133.9	1101.6	1052.2	1021.9	1018.8
52.5°	6389.6	3545.9	1258.0	1071.3	1065.3	1105.7	1075.3	1045.1	1007.8	967.4	959.4
55°	6799.2	3563.0	1184.3	1010.8	1032.0	1028.0	1016.9	989.6	969.4	915.9	917.0
57.5°	7257.2	3597.3	1123.8	974.5	1010.8	966.4	962.4	939.2	913.0	876.6	864.5
60°	7805.0	3650.7	1071.3	960.3	992.6	926.1	905.9	896.8	870.5	852.4	857.5
62.5°	8402.1	3699.2	1017.8	962.4	971.5	886.7	856.5	853.4	837.3	831.3	831.3
65°	8809.7	3567.0	951.3	960.3	938.2	846.3	808.0	807.0	793.9	791.9	790.9
67.5°	8667.4	3148.4	861.5	932.1	903.8	806.1	763.6	759.6	742.5	743.4	743.4
70°	7955.2	2551.2	737.4	862.5	861.5	769.7	717.2	704.2	680.9	685.0	689.0
72.5°	6619.7	1890.4	570.9	746.5	793.9	736.4	663.8	642.6	613.4	617.4	616.3
75°	4780.6	1285.1	415.6	568.0	691.1	697.1	611.3	575.0	539.7	545.7	547.8
77.5°	2446.3	728.4	305.7	391.4	542.7	633.6	564.0	515.5	507.4	564.0	555.9
80°	798.0	365.2	211.9	274.4	356.1	518.5	494.3	438.8	436.8	449.9	386.3
82.5°	238.1	154.4	136.2	180.6	196.7	397.5	426.7	331.9	285.5	300.6	310.7
85°	81.7	74.6	77.7	89.8	93.8	233.0	298.6	220.0	207.8	229.0	226.0
87.5°	19.2	26.2	22.2	20.2	20.2	56.5	116.0	91.8	127.1	84.8	81.7
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)