

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: P963521

Luminaire Tested: **NAV-SB3A-735-U-T3R**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P963521  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3A-735-U-T3R  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

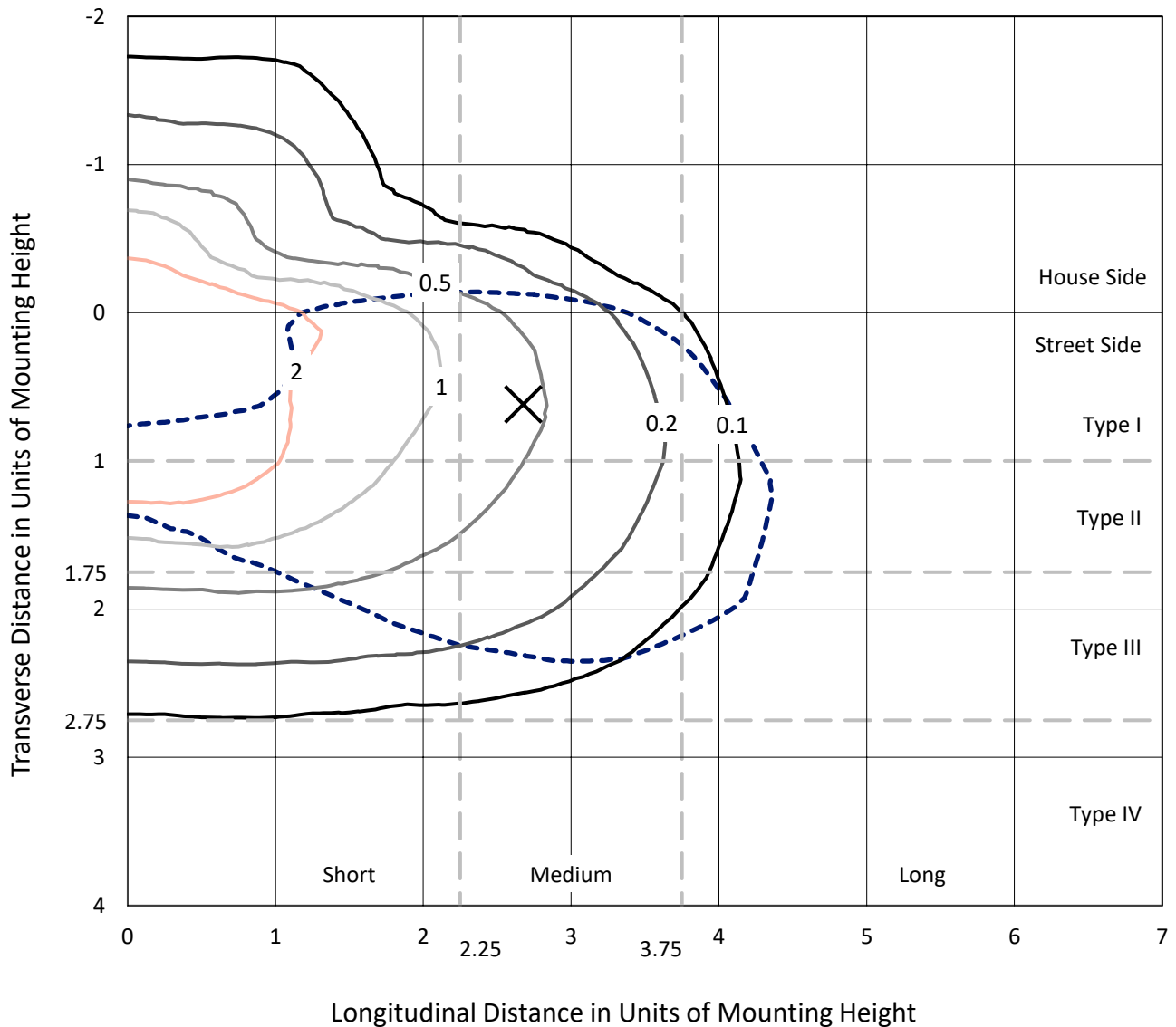
Lumens per Lamp: N/A  
Luminaire Lumens: 14162.4 lumens  
Efficiency: N/A  
Efficacy: 167.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 84.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
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



REPORT NUMBER: P963521  
 CATALOG NUMBER: NAV-SB3A-735-U-T3R

### Iso-Footcandle Lines of Horizontal Illumination

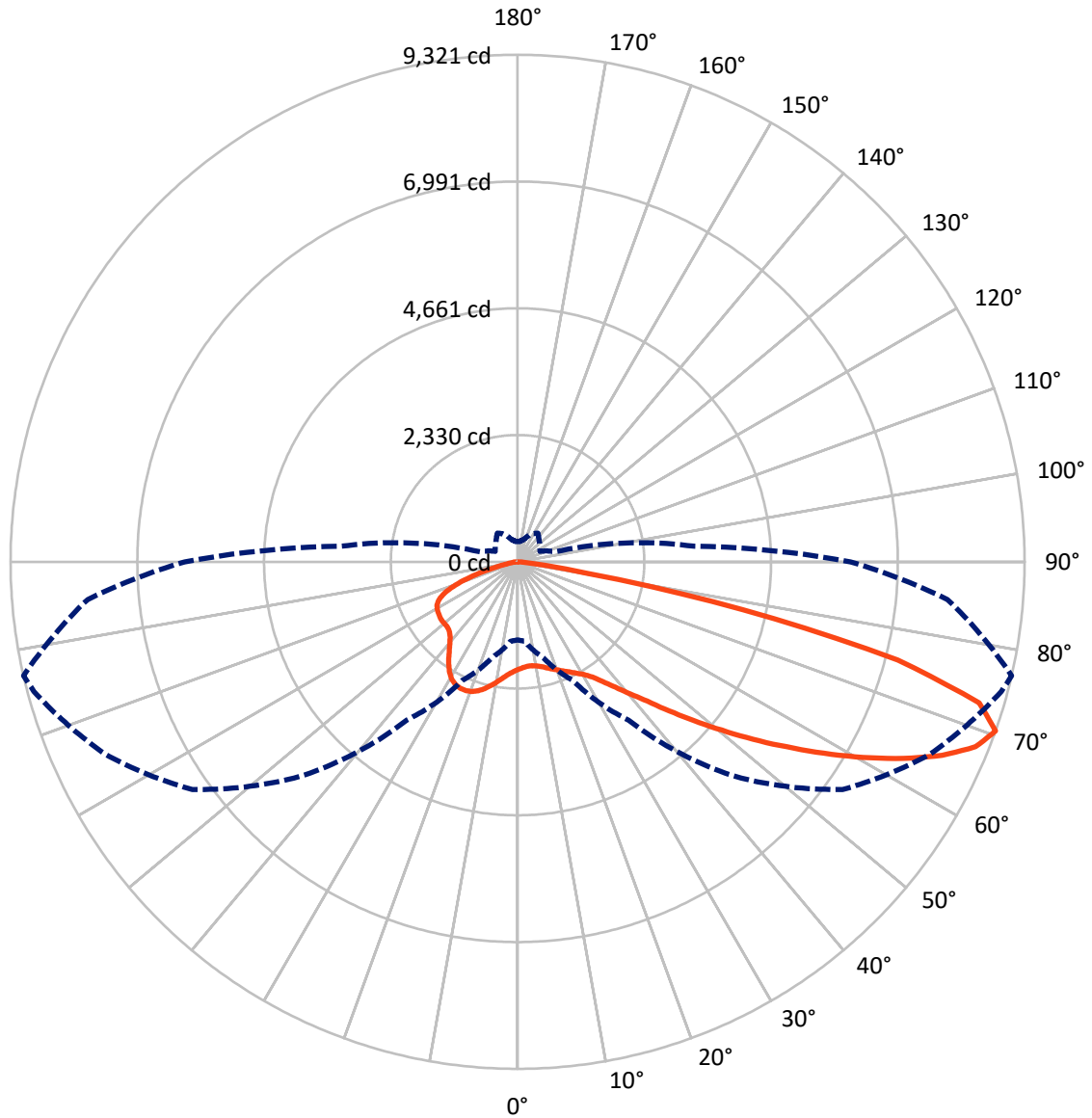
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc  
 Type III - Medium - N/A

REPORT NUMBER: P963521  
CATALOG NUMBER: NAV-SB3A-735-U-T3R

### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P963521  
 CATALOG NUMBER: NAV-SB3A-735-U-T3R

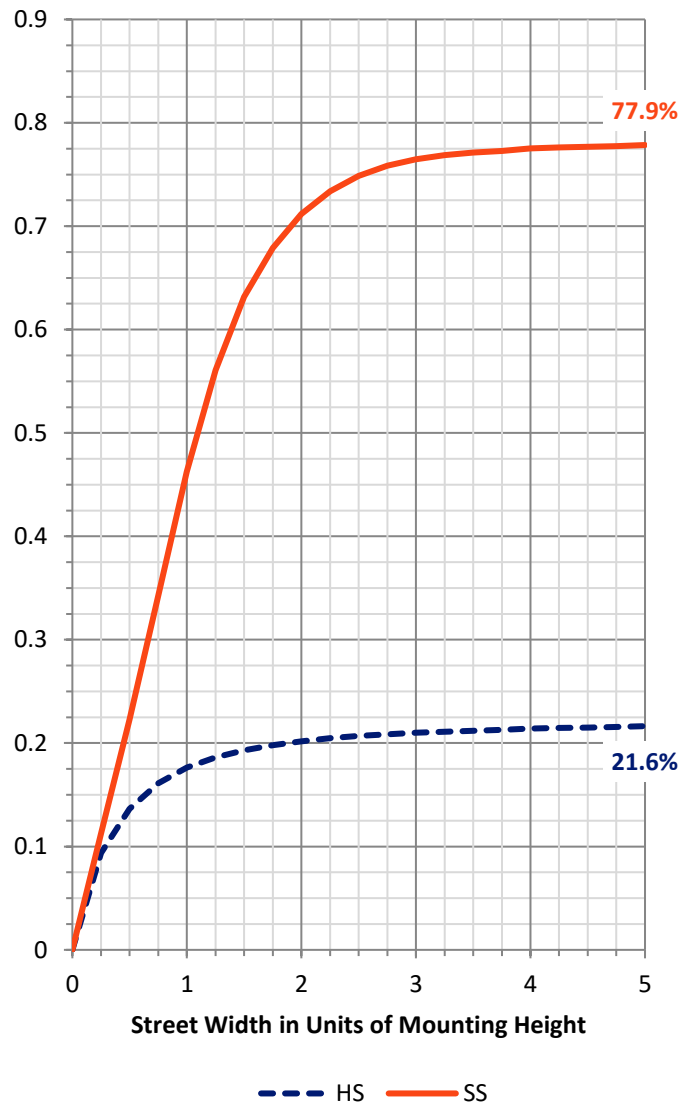
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3101.4	0.0	3101.4
	% Fixture	21.9	0.0	21.9
<b>Street Side</b>	Lumens	11061.1	0.0	11061.1
	% Fixture	78.1	0.0	78.1
<b>Total</b>	Lumens	14162.4	0.0	14162.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	188.4	1.3
10°-20°	543.8	3.8
20°-30°	930.1	6.6
30°-40°	1495.6	10.6
40°-50°	2335.1	16.5
50°-60°	3119.1	22.0
60°-70°	3324.5	23.5
70°-80°	2046.5	14.5
80°-90°	179.3	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°	14162.4	100.0
0°-180°	14162.4	100.0

**Coefficient of Utilization**

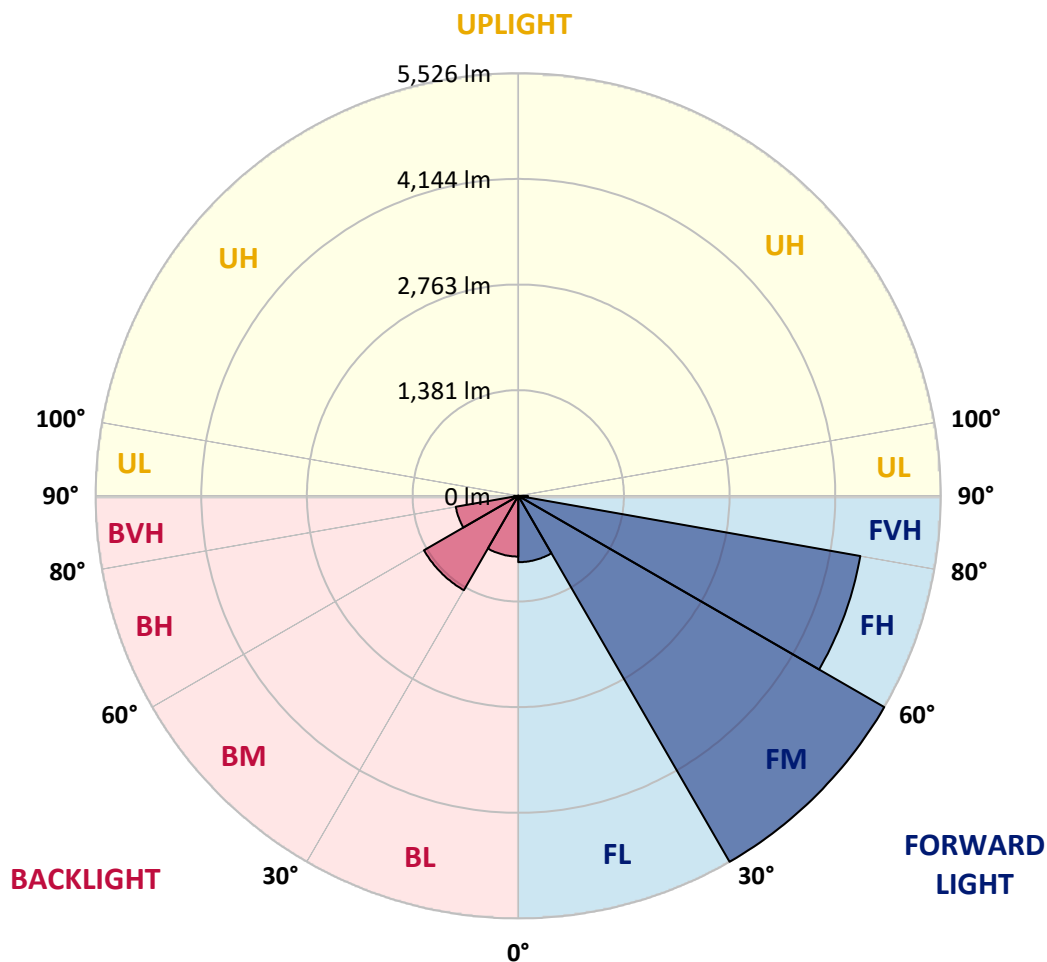


REPORT NUMBER: P963521  
 CATALOG NUMBER: NAV-SB3A-735-U-T3R

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	867.7	6.1			
FM (30°-60°)	5525.9	39.0			
FH (60°-80°)	4542.1	32.1			G2/5000
FVH (80°-90°)	125.4	0.9			G2/225
BL (0°-30°)	794.7	5.6	B2/1000		
BM (30°-60°)	1423.9	10.1	B2/2500		
BH (60°-80°)	828.9	5.9	B2/1000		G2/1000
BVH (80°-90°)	53.9	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**  
 Type III Medium



REPORT NUMBER: P963521  
 CATALOG NUMBER: NAV-SB3A-735-U-T3R

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1975.8	1975.8	1975.8	1975.8	1975.8	1975.8	1975.8	1975.8	1975.8	1975.8	1975.8
2.5°	1821.3	1820.6	1830.0	1832.9	1850.3	1862.6	1885.9	1910.5	1942.4	1946.1	1965.6
5°	1716.2	1716.2	1727.0	1738.6	1761.1	1785.8	1821.3	1864.1	1919.2	1927.9	1976.5
7.5°	1626.9	1632.7	1642.2	1664.6	1690.7	1726.3	1780.6	1841.6	1914.1	1927.9	2006.2
10°	1555.1	1561.6	1573.3	1591.4	1630.6	1679.9	1750.9	1829.3	1926.5	1948.2	2049.8
12.5°	1532.6	1539.1	1545.7	1559.4	1595.7	1653.7	1738.6	1835.1	1956.2	1977.9	2109.2
15°	1584.9	1592.8	1587.7	1584.1	1603.0	1655.9	1744.4	1856.1	1993.2	2024.4	2182.5
17.5°	1705.2	1708.2	1696.6	1662.4	1659.6	1687.9	1772.0	1885.1	2039.6	2073.7	2256.5
20°	1899.6	1894.5	1870.6	1803.2	1764.7	1758.9	1819.1	1928.6	2087.5	2123.8	2336.3
22.5°	2163.7	2157.8	2110.0	2003.4	1917.8	1861.2	1887.3	1985.2	2141.1	2181.8	2413.9
25°	2492.9	2485.0	2414.6	2269.6	2136.8	1996.8	1980.1	2059.9	2207.1	2244.9	2495.2
27.5°	2877.4	2870.8	2794.7	2603.2	2411.7	2182.5	2095.5	2147.7	2276.1	2318.9	2586.5
30°	3290.8	3309.6	3174.7	2968.7	2726.5	2424.7	2250.7	2255.7	2365.3	2403.7	2697.5
32.5°	3776.8	3809.4	3647.0	3385.8	3055.1	2688.1	2446.6	2406.6	2495.2	2527.0	2837.5
35°	4258.4	4295.4	4160.5	3871.8	3490.9	2998.5	2651.1	2580.0	2667.8	2702.5	3023.1
37.5°	4674.7	4724.0	4654.4	4403.5	3957.4	3372.8	2918.0	2783.8	2880.2	2923.8	3272.6
40°	5003.3	5078.8	5073.6	4917.0	4507.1	3826.8	3256.7	3035.5	3144.3	3191.4	3575.1
42.5°	5270.2	5335.5	5392.1	5384.1	5080.9	4342.5	3654.9	3362.6	3445.3	3499.7	3915.3
45°	5454.4	5524.0	5645.9	5777.2	5632.9	4894.5	4111.2	3750.7	3826.1	3908.0	4320.8
47.5°	5619.0	5698.2	5856.2	6064.4	6101.4	5448.7	4610.9	4202.5	4271.5	4356.4	4727.7
50°	5633.6	5701.8	5946.9	6242.1	6434.3	5981.1	5147.7	4709.6	4774.1	4864.8	5163.6
52.5°	5283.3	5390.6	5818.5	6237.1	6587.4	6426.3	5680.8	5236.8	5309.4	5418.2	5614.7
55°	4101.0	4258.4	5442.1	6042.7	6533.0	6714.4	6187.7	5797.5	5890.4	6004.2	6068.8
57.5°	3532.4	3601.2	4320.1	5688.7	6285.0	6789.1	6615.7	6364.0	6513.5	6638.2	6548.9
60°	3174.7	3232.0	3657.1	5138.2	5958.5	6670.8	6946.4	6892.0	7150.3	7298.9	7040.0
62.5°	2791.8	2846.2	3232.7	4290.3	5540.7	6474.2	7155.3	7379.5	7803.0	7965.5	7502.8
65°	2411.7	2458.2	2828.8	3604.8	5009.8	6277.7	7263.5	7800.9	8407.3	8575.6	7887.2
67.5°	1988.1	2026.5	2376.9	3041.3	4364.2	6008.5	7317.1	8132.4	8933.1	9077.5	8077.2
70°	1434.7	1464.4	1826.3	2405.2	3554.1	5545.9	7295.3	8367.4	9205.8	9321.1	7933.6
72.5°	678.1	705.0	1130.1	1561.6	2510.3	4645.0	6855.1	8180.9	8928.8	8871.5	7054.6
75°	361.9	385.2	649.1	856.6	1325.9	3184.2	5609.6	7047.3	7497.7	7219.2	5213.7
77.5°	245.2	263.3	401.8	514.2	605.7	1511.6	3605.6	4879.3	4694.3	4234.5	2611.2
80°	194.3	213.2	329.3	348.2	293.0	546.1	1489.8	2258.7	1622.6	1297.6	742.7
82.5°	149.4	170.5	277.1	252.5	159.6	224.2	433.8	714.4	415.6	316.2	179.9
85°	91.4	113.9	217.6	161.0	89.9	102.3	147.2	198.7	126.9	105.9	64.6
87.5°	46.4	65.3	110.3	58.7	40.6	24.0	39.2	39.2	33.4	29.0	16.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P963521  
 CATALOG NUMBER: NAV-SB3A-735-U-T3R

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1975.8	1975.8	1975.8	1975.8	1975.8	1975.8	1975.8	1975.8	1975.8	1975.8	1975.8
2.5°	1983.1	1997.5	2022.2	2045.4	2063.5	2081.0	2098.4	2107.8	2110.7	2122.3	2128.8
5°	2006.2	2033.1	2081.0	2126.0	2154.2	2171.7	2184.0	2191.2	2192.7	2196.3	2202.1
7.5°	2049.1	2091.8	2158.5	2203.5	2224.6	2223.1	2218.0	2200.0	2192.7	2186.1	2187.6
10°	2109.2	2165.8	2247.8	2279.0	2266.0	2231.1	2186.1	2133.2	2108.5	2084.5	2077.4
12.5°	2184.0	2255.7	2336.3	2334.8	2270.3	2181.1	2076.6	1995.4	1943.9	1906.9	1898.2
15°	2274.6	2357.3	2419.0	2369.6	2228.2	2067.9	1914.9	1808.9	1762.6	1721.9	1717.6
17.5°	2368.2	2456.7	2485.0	2358.7	2122.3	1900.4	1727.0	1643.6	1597.9	1576.1	1582.7
20°	2459.6	2547.3	2524.2	2296.4	1961.2	1710.3	1555.8	1510.1	1500.7	1505.8	1503.6
22.5°	2556.0	2634.4	2532.2	2176.0	1756.0	1516.0	1431.1	1432.5	1453.6	1468.8	1472.4
25°	2654.6	2707.6	2511.0	2001.9	1535.6	1373.1	1352.0	1375.2	1416.6	1446.3	1454.3
27.5°	2749.7	2772.9	2465.4	1786.5	1346.2	1270.8	1274.4	1322.2	1384.7	1426.0	1436.1
30°	2857.1	2830.9	2377.6	1544.3	1214.9	1183.1	1213.5	1269.4	1331.7	1368.7	1377.4
32.5°	2978.1	2881.0	2238.4	1320.1	1122.1	1112.6	1162.7	1198.9	1226.5	1237.4	1243.2
35°	3129.0	2951.4	2059.9	1162.7	1038.6	1061.2	1109.0	1090.9	1080.0	1074.2	1080.0
37.5°	3324.9	3046.4	1851.0	1060.5	971.2	1024.2	1043.8	987.2	944.3	923.3	928.4
40°	3560.6	3185.6	1650.1	981.3	928.4	992.2	958.2	890.0	835.6	805.9	808.0
42.5°	3822.4	3331.5	1481.1	921.9	904.5	966.2	895.0	813.8	726.0	716.6	726.0
45°	4097.3	3481.5	1365.8	876.2	892.9	943.6	858.7	727.5	665.1	703.6	723.9
47.5°	4372.2	3619.4	1296.1	842.1	887.0	918.3	826.9	679.7	635.4	691.3	717.4
50°	4678.3	3742.7	1265.0	817.4	880.6	908.2	779.0	667.3	604.2	641.1	668.7
52.5°	4982.2	3838.4	1241.8	792.7	871.1	900.2	755.8	652.8	566.5	568.7	583.8
55°	5285.4	3900.8	1216.4	760.1	850.0	882.7	753.6	636.8	538.2	528.1	535.3
57.5°	5608.9	3936.3	1185.2	723.9	813.8	838.4	751.4	624.5	529.5	512.8	515.0
60°	5938.2	3988.6	1144.5	679.7	765.3	785.6	746.4	620.1	524.4	496.1	498.3
62.5°	6233.4	4006.7	1095.9	637.6	702.8	733.3	735.4	616.5	510.7	462.1	462.1
65°	6427.2	3928.4	1011.1	589.7	635.4	679.7	714.4	604.2	486.0	437.4	437.4
67.5°	6419.2	3705.0	878.3	528.1	570.1	620.1	684.0	583.1	456.2	406.9	409.1
70°	6120.3	3264.0	710.1	456.2	498.3	556.4	644.8	552.0	420.7	373.5	377.9
72.5°	5249.2	2554.6	515.7	372.1	414.9	490.4	594.1	514.2	384.4	343.8	341.6
75°	3750.0	1616.7	349.6	285.8	322.8	415.6	530.9	470.0	351.1	345.2	325.6
77.5°	1915.6	772.4	231.3	208.9	224.9	327.9	446.1	419.9	356.1	285.1	253.9
80°	623.1	285.1	145.8	142.2	149.4	218.3	345.2	344.5	269.8	193.6	171.2
82.5°	198.7	122.6	95.0	91.4	87.7	137.0	240.8	272.8	182.0	122.6	121.9
85°	79.0	73.3	55.9	51.5	37.0	64.6	126.2	181.3	135.6	88.5	90.7
87.5°	29.0	29.0	15.3	10.9	8.0	21.7	34.1	54.4	77.6	45.7	45.0
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)