

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: P883564

Luminaire Tested: **NAV-SB4A-722-U-SL4**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883564  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB4A-722-U-SL4  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 2200K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

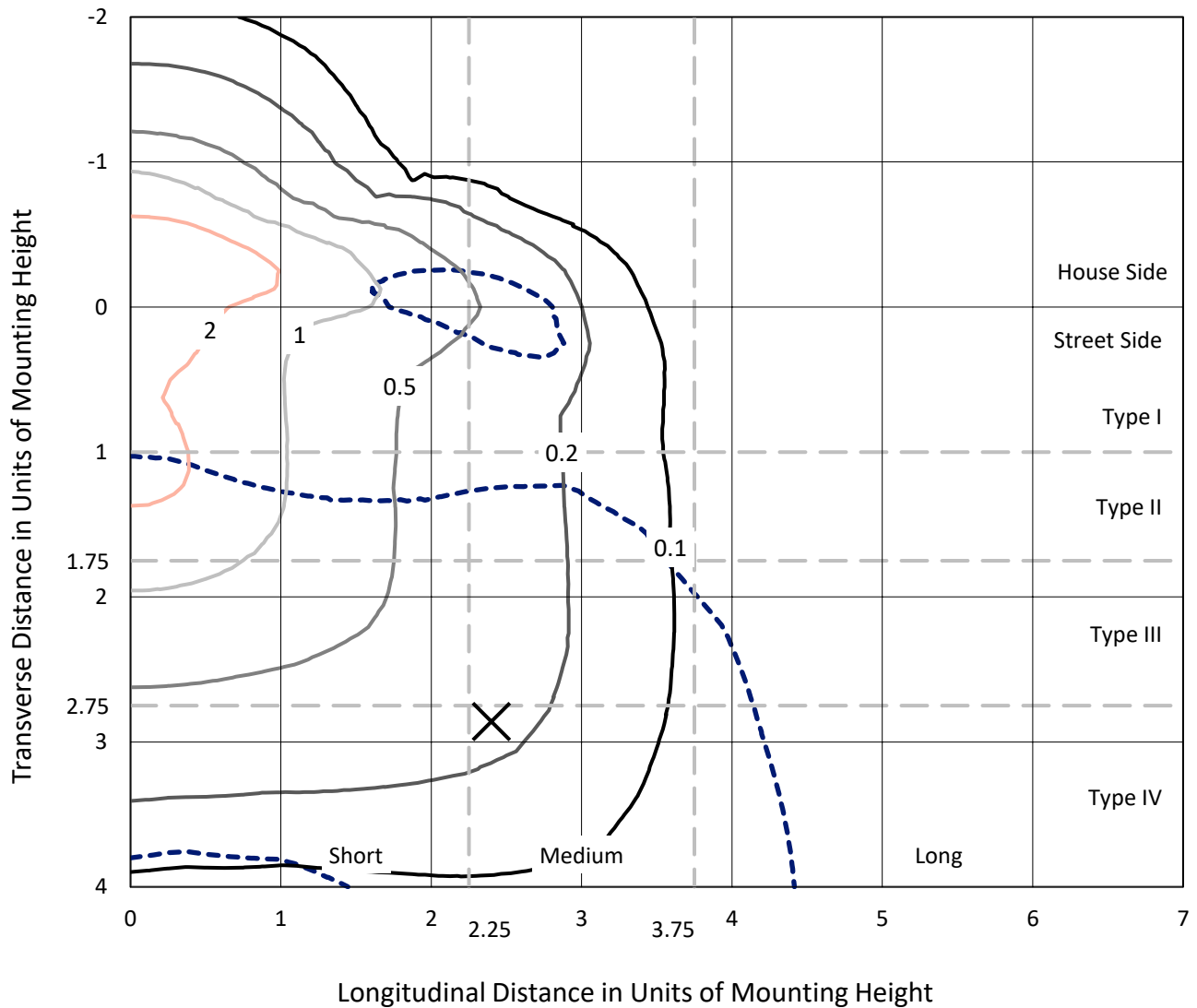
Lumens per Lamp: N/A  
Luminaire Lumens: 14360 lumens  
Efficiency: N/A  
Efficacy: 126.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 114  
Input Voltage (V): 120.0  
Input Current (Ain): 0.952  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 8.206  
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

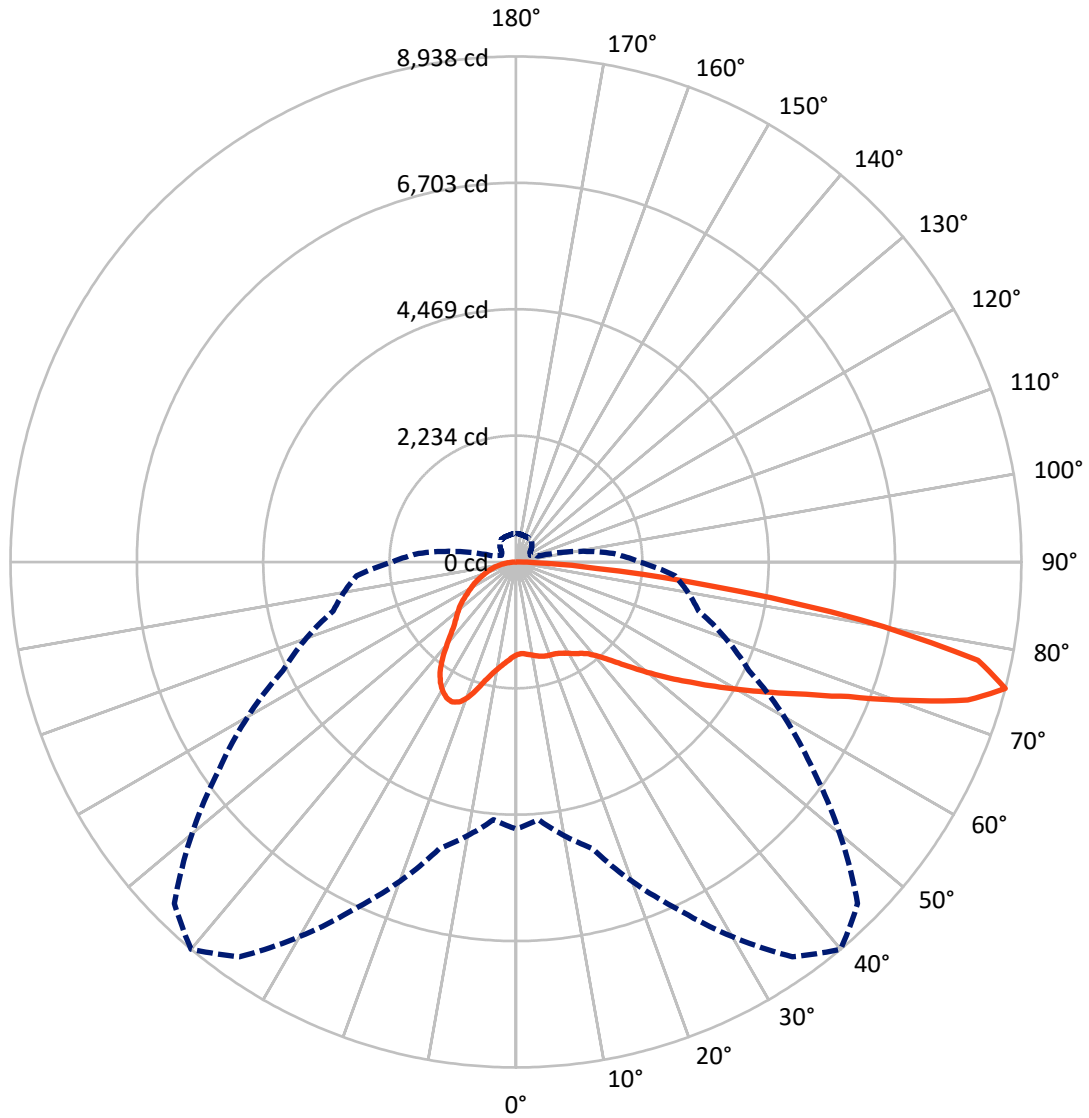
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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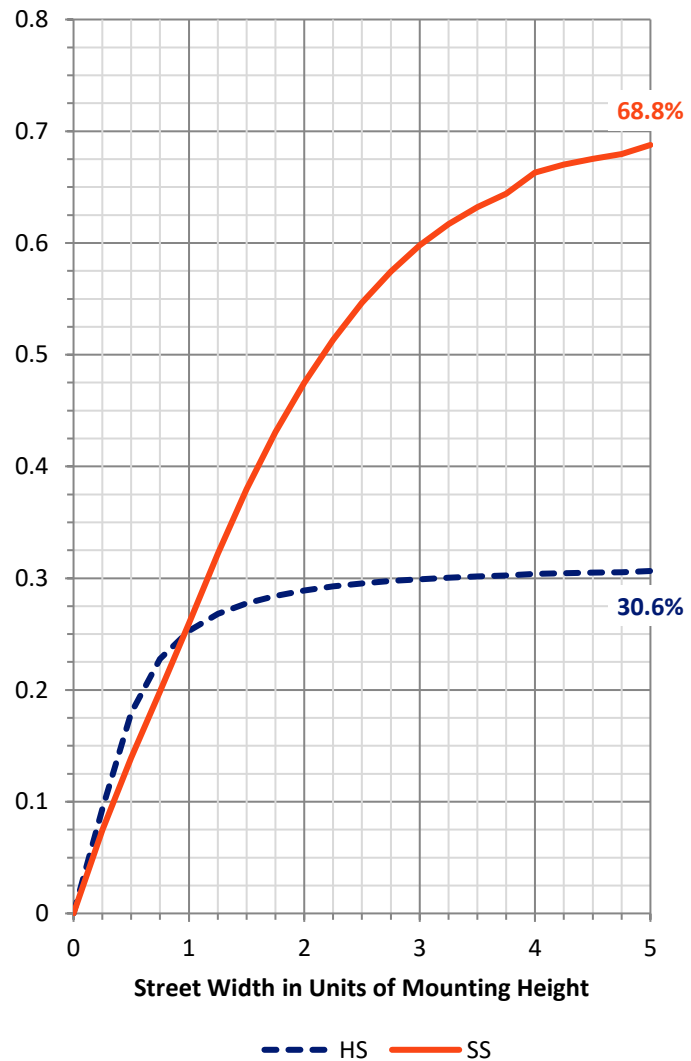
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4449.2	0.0	4449.2
	% Fixture	31.0	0.0	31.0
<b>Street Side</b>	Lumens	9910.8	0.0	9910.8
	% Fixture	69.0	0.0	69.0
<b>Total</b>	Lumens	14360.0	0.0	14360.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	163.9	1.1
10°-20°	550.3	3.8
20°-30°	1004.9	7.0
30°-40°	1425.2	9.9
40°-50°	1924.4	13.4
50°-60°	2588.8	18.0
60°-70°	3285.8	22.9
70°-80°	2982.1	20.8
80°-90°	434.7	3.0
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°	14360.0	100.0
0°-180°	14360.0	100.0

**Coefficient of Utilization**



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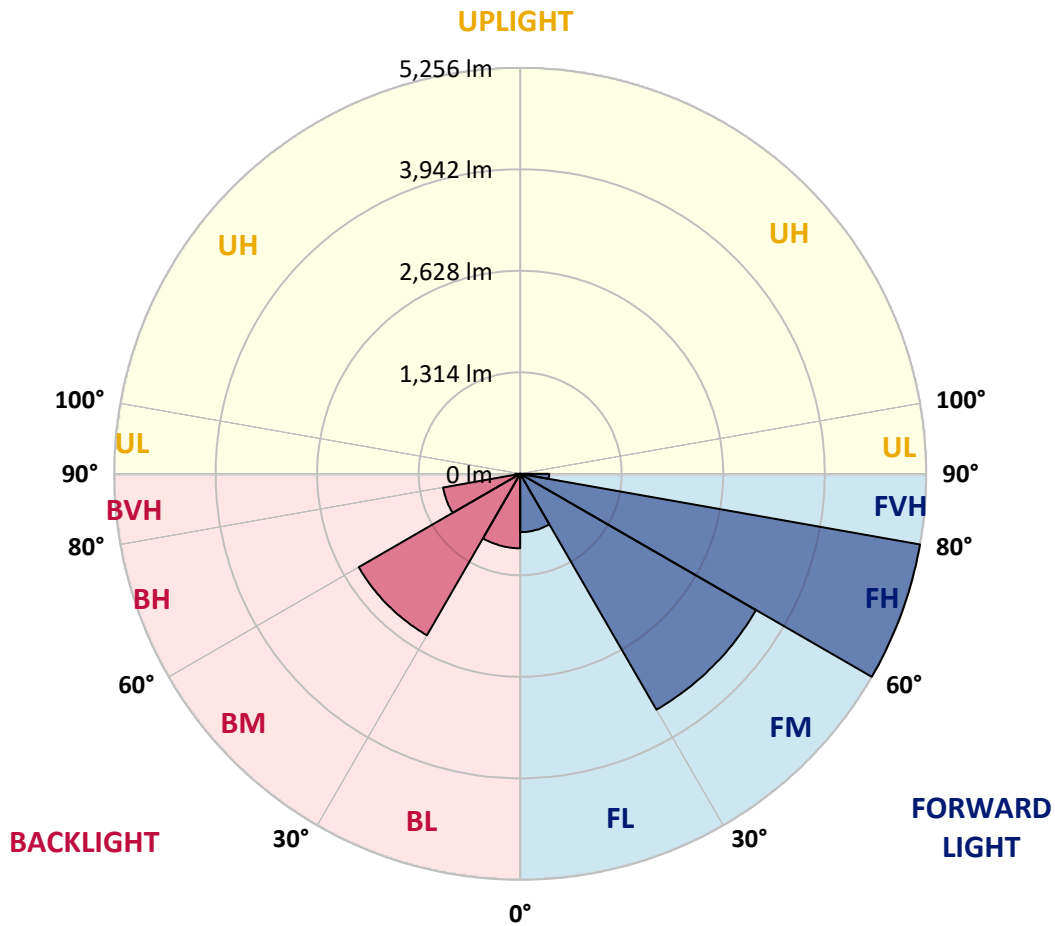
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	755.4	5.3			
FM (30°-60°)	3525.1	24.5			
FH (60°-80°)	5255.5	36.6			G3/7500
FVH (80°-90°)	374.8	2.6			G3/500
BL (0°-30°)	963.7	6.7	B2/1000		
BM (30°-60°)	2413.3	16.8	B2/2500		
BH (60°-80°)	1012.3	7.0	B3/2500		G3/2500
BVH (80°-90°)	59.8	0.4			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 IV Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1642.1	1642.1	1642.1	1642.1	1642.1	1642.1	1642.1	1642.1	1642.1	1642.1	1642.1
2.5°	1617.0	1626.1	1623.8	1620.8	1620.8	1621.5	1620.8	1626.1	1631.4	1636.8	1645.1
5°	1633.7	1642.8	1638.3	1634.5	1631.4	1630.7	1628.4	1627.6	1630.7	1637.5	1648.9
7.5°	1666.5	1675.6	1668.7	1661.9	1655.8	1652.7	1649.7	1645.1	1642.8	1646.7	1662.6
10°	1703.0	1712.2	1703.8	1691.6	1681.7	1677.9	1674.8	1670.3	1667.2	1669.5	1687.0
12.5°	1739.6	1748.7	1737.3	1720.5	1707.6	1705.3	1701.5	1700.0	1699.2	1698.4	1716.0
15°	1773.8	1781.5	1767.0	1747.2	1733.5	1729.7	1725.9	1728.1	1732.0	1736.5	1756.3
17.5°	1800.5	1808.1	1786.8	1760.9	1748.0	1746.4	1744.1	1751.8	1762.4	1773.8	1798.2
20°	1824.9	1832.5	1805.1	1770.0	1754.8	1754.8	1755.6	1771.6	1786.8	1803.6	1837.1
22.5°	1859.2	1865.2	1831.7	1783.7	1761.7	1763.2	1769.3	1785.3	1804.3	1827.2	1873.6
25°	1910.2	1914.8	1873.6	1809.6	1784.5	1789.1	1794.4	1802.0	1820.3	1847.0	1909.4
27.5°	1992.4	1996.2	1942.2	1855.3	1817.3	1824.9	1832.5	1827.2	1835.5	1858.4	1938.4
30°	2108.2	2110.5	2041.9	1926.9	1872.9	1876.7	1878.2	1856.1	1840.1	1858.4	1958.9
32.5°	2245.3	2244.5	2163.0	2013.8	1936.1	1932.3	1919.3	1875.9	1838.6	1854.6	1977.2
35°	2457.8	2449.4	2344.3	2135.6	2007.7	1984.1	1953.6	1898.0	1846.2	1850.8	1993.2
37.5°	2809.7	2783.8	2638.3	2335.2	2114.3	2054.1	2009.2	1933.8	1863.0	1849.2	2012.2
40°	3206.5	3173.7	3013.8	2608.6	2274.2	2177.5	2105.2	1984.8	1890.4	1856.1	2040.4
42.5°	3677.2	3630.7	3458.6	2930.8	2476.8	2336.7	2227.8	2049.6	1930.7	1878.2	2078.5
45°	4255.3	4193.6	3949.8	3294.1	2732.0	2545.4	2399.9	2147.8	1992.4	1920.8	2135.6
47.5°	4839.4	4854.7	4508.1	3709.9	3038.2	2802.8	2615.5	2295.6	2082.3	1989.4	2227.8
50°	5460.2	5470.8	5063.3	4170.7	3385.5	3093.8	2857.7	2460.8	2207.2	2086.9	2365.6
52.5°	5944.6	5946.1	5567.6	4652.8	3747.2	3413.6	3118.9	2649.7	2351.9	2216.4	2549.2
55°	6247.7	6243.9	5921.0	5109.0	4163.1	3749.5	3408.3	2864.5	2528.6	2368.7	2780.0
57.5°	6467.8	6456.4	6164.7	5501.3	4606.4	4146.3	3735.8	3108.2	2737.3	2550.0	3083.9
60°	6551.6	6544.7	6329.9	5840.2	5072.5	4585.0	4113.6	3380.9	2974.2	2764.0	3474.6
62.5°	6583.6	6596.5	6492.2	6168.5	5571.4	5071.0	4528.7	3706.9	3240.8	3006.2	3886.6
65°	6696.3	6719.9	6698.6	6598.0	6135.0	5639.9	5079.3	4094.5	3531.7	3265.9	4316.9
67.5°	6919.5	6943.1	6952.2	7112.1	6823.5	6349.0	5766.3	4577.4	3872.2	3535.5	4640.6
70°	6914.1	6907.3	7068.7	7521.1	7685.7	7330.7	6692.5	5171.5	4278.1	3759.4	4681.8
72.5°	6293.4	6238.6	6620.1	7516.6	8403.1	8355.9	7823.5	5937.7	4628.5	3786.8	4062.6
75°	4721.4	4575.1	5249.2	6774.0	8522.7	8937.8	8542.5	6413.0	4545.4	3345.9	2827.2
77.5°	2019.1	1872.1	2666.5	5014.6	7627.8	8355.1	7882.9	5595.0	3628.4	2212.5	1388.5
80°	528.6	527.8	805.8	2273.5	5187.5	6170.0	5412.9	3613.2	2073.2	790.6	383.1
82.5°	218.6	213.3	296.3	884.3	2534.7	3462.4	2825.7	1611.6	748.7	214.0	127.2
85°	81.5	80.7	143.9	305.4	894.2	1428.1	1033.5	412.0	186.6	104.3	57.1
87.5°	22.8	22.1	31.2	105.9	217.8	330.5	176.7	67.8	52.6	41.1	16.8
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°	1642.1	1642.1	1642.1	1642.1	1642.1	1642.1	1642.1	1642.1	1642.1	1642.1	1642.1
2.5°	1647.4	1651.2	1658.1	1663.4	1670.3	1677.9	1688.5	1695.4	1702.3	1706.8	1703.8
5°	1654.3	1662.6	1680.2	1697.7	1718.2	1737.3	1759.4	1775.4	1788.3	1792.1	1793.7
7.5°	1669.5	1683.2	1712.9	1742.6	1775.4	1806.6	1838.6	1866.0	1888.1	1896.5	1897.2
10°	1696.2	1714.4	1756.3	1798.2	1841.6	1889.6	1930.7	1970.3	2001.6	2014.5	2015.3
12.5°	1729.7	1752.5	1807.4	1865.2	1925.4	1991.7	2045.0	2093.7	2132.6	2150.1	2150.1
15°	1773.1	1802.8	1872.9	1950.5	2038.9	2131.1	2198.8	2252.9	2296.3	2317.7	2316.1
17.5°	1820.3	1859.9	1948.3	2065.6	2192.0	2313.1	2392.3	2431.9	2476.8	2497.4	2496.6
20°	1866.0	1914.8	2041.2	2211.8	2380.1	2508.8	2572.8	2583.5	2586.5	2588.8	2594.9
22.5°	1913.2	1978.7	2157.7	2396.1	2576.6	2665.7	2674.9	2629.2	2565.2	2535.5	2543.9
25°	1965.0	2051.8	2310.0	2599.5	2745.7	2756.4	2686.3	2575.1	2454.0	2398.4	2406.8
27.5°	2015.3	2136.4	2492.8	2793.7	2867.6	2773.9	2623.1	2465.4	2319.2	2260.5	2267.4
30°	2065.6	2233.1	2694.7	2963.5	2923.2	2730.5	2523.3	2347.4	2200.4	2138.7	2145.5
32.5°	2116.6	2345.8	2927.0	3086.1	2913.3	2638.3	2399.2	2214.8	2085.4	2020.6	2029.0
35°	2174.5	2484.5	3147.1	3153.2	2847.0	2502.7	2235.4	2056.4	1943.7	1891.9	1903.3
37.5°	2249.9	2660.4	3341.3	3169.9	2731.2	2303.9	2032.0	1869.1	1776.1	1752.5	1769.3
40°	2343.6	2872.1	3489.8	3143.3	2559.9	2062.5	1809.6	1679.4	1626.9	1632.2	1650.5
42.5°	2465.4	3109.0	3594.2	3074.7	2321.5	1813.5	1614.7	1556.8	1581.9	1603.2	1623.0
45°	2623.8	3355.0	3658.9	2958.2	2051.8	1602.5	1499.7	1513.4	1532.4	1534.7	1549.9
47.5°	2826.4	3604.1	3701.5	2782.3	1776.9	1454.0	1426.5	1429.6	1425.8	1409.8	1422.0
50°	3079.3	3846.3	3739.6	2549.2	1543.1	1361.0	1324.5	1313.8	1261.3	1209.5	1216.3
52.5°	3367.2	4068.7	3755.6	2259.8	1361.0	1283.4	1223.9	1156.9	1058.7	1042.7	1048.0
55°	3687.1	4274.3	3714.5	1904.1	1208.0	1183.6	1093.7	1013.0	1002.3	988.6	990.9
57.5°	4069.4	4495.9	3630.7	1507.3	1051.1	1067.1	979.5	988.6	969.6	948.2	944.4
60°	4487.6	4725.2	3483.7	1145.5	888.8	921.6	949.8	949.0	943.7	926.1	920.1
62.5°	4863.8	4876.0	3194.3	877.4	746.4	808.9	885.8	885.0	880.5	870.5	866.7
65°	5087.7	4853.1	2711.4	690.8	629.1	715.9	799.0	805.0	805.8	805.0	805.0
67.5°	5048.1	4585.8	2048.8	549.9	532.4	621.5	712.9	721.3	727.4	728.9	730.4
70°	4600.3	3998.6	1335.9	438.7	446.3	538.5	631.4	639.8	645.1	651.2	654.2
72.5°	3585.8	2939.9	764.7	354.9	370.9	466.9	550.7	560.6	563.6	575.0	579.6
75°	2185.1	1728.9	412.8	279.5	304.7	399.1	470.7	482.1	487.4	501.2	502.7
77.5°	1038.9	748.7	235.3	217.8	245.2	326.0	397.6	410.5	396.1	403.7	397.6
80°	351.1	278.0	148.5	166.0	187.4	254.4	318.4	331.3	300.8	299.3	296.3
82.5°	122.6	112.7	94.4	110.4	121.1	182.0	240.7	257.4	223.9	223.2	212.5
85°	48.0	45.7	52.6	60.2	72.4	112.0	158.4	166.8	137.9	111.2	109.7
87.5°	9.9	10.7	12.9	13.7	22.1	38.8	57.1	70.1	55.6	47.2	43.4
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)