

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: P882589

Luminaire Tested: **NAV-SB2C-740-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882589  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB2C-740-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16467 lumens  
Efficiency: N/A  
Efficacy: 163.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G3

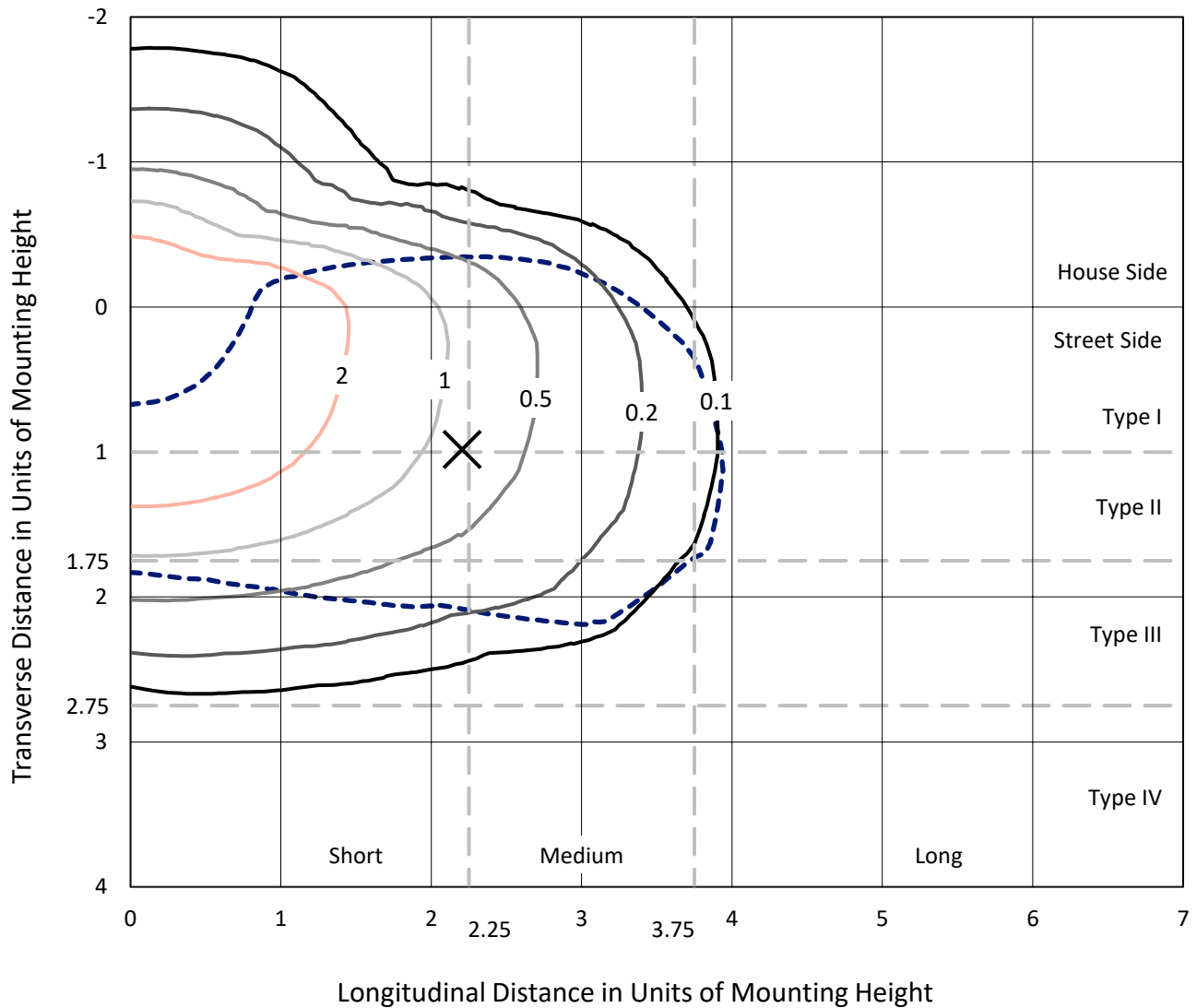
Input Watts (W): 100.9  
Input Voltage (V): 120.0  
Input Current (Ain): 0.857  
Voltage Rise (V): NR  
Power Factor: 0.994  
Total Harmonic Distortion (THDi): 9.472  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

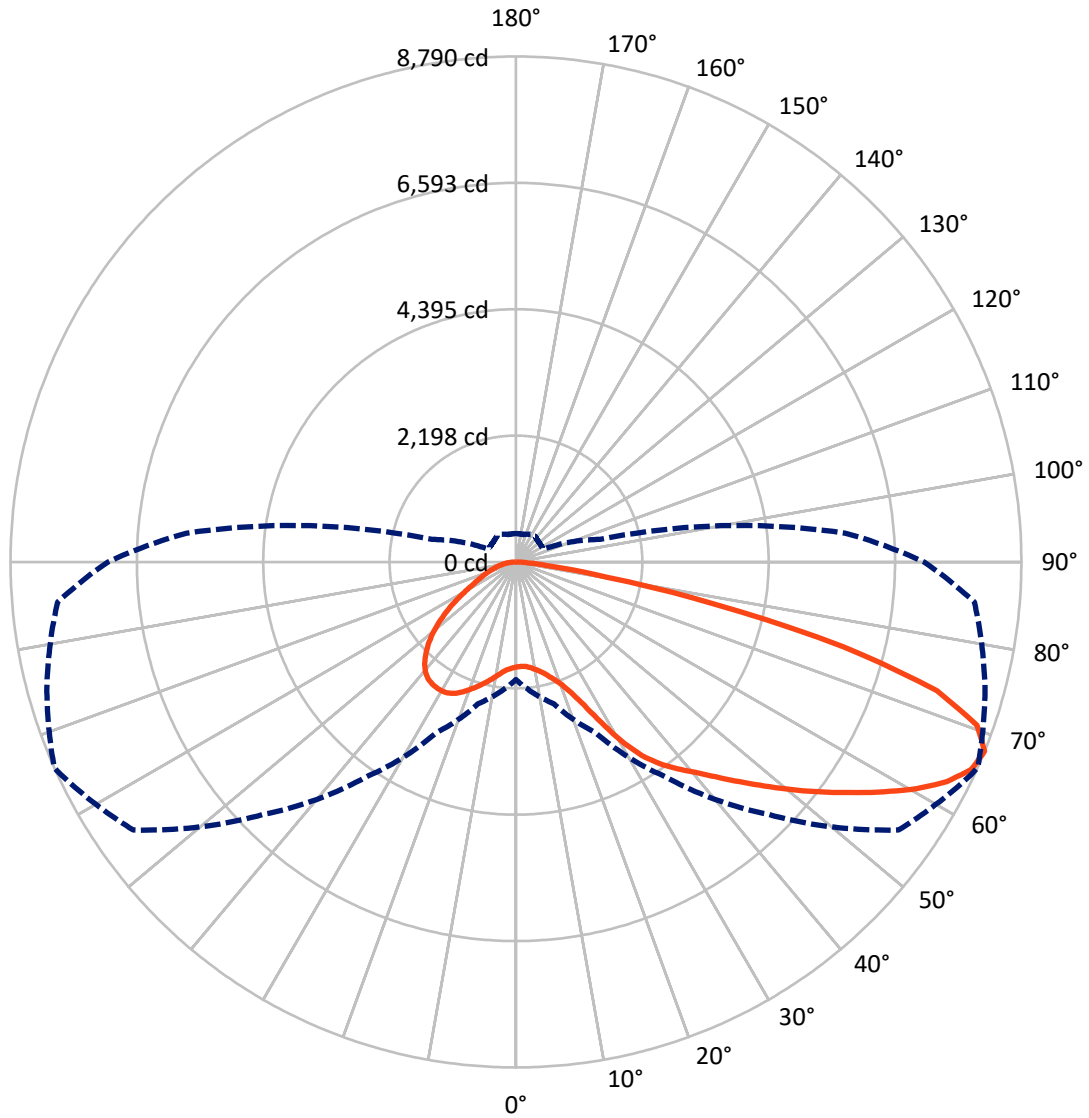
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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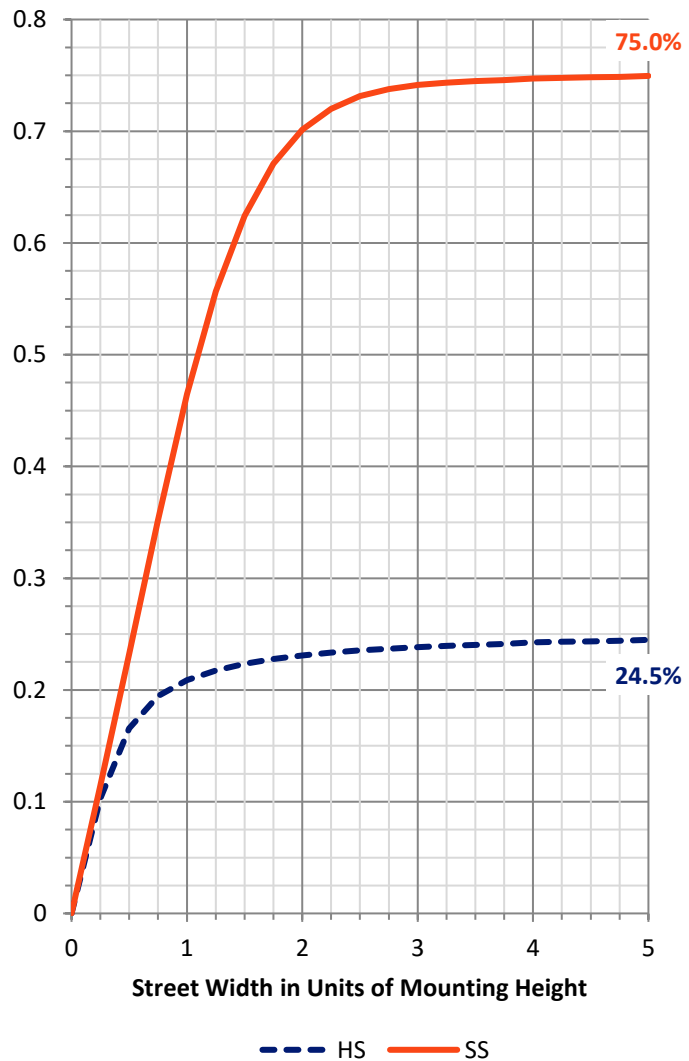
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4094.5	0.0	4094.5
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	12372.5	0.0	12372.5
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	16467.0	0.0	16467.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	181.1	1.1
10°-20°	598.3	3.6
20°-30°	1153.1	7.0
30°-40°	2021.9	12.3
40°-50°	3005.8	18.3
50°-60°	3810.2	23.1
60°-70°	3728.2	22.6
70°-80°	1778.4	10.8
80°-90°	190.1	1.2
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°	16467.0	100.0
0°-180°	16467.0	100.0

**Coefficient of Utilization**



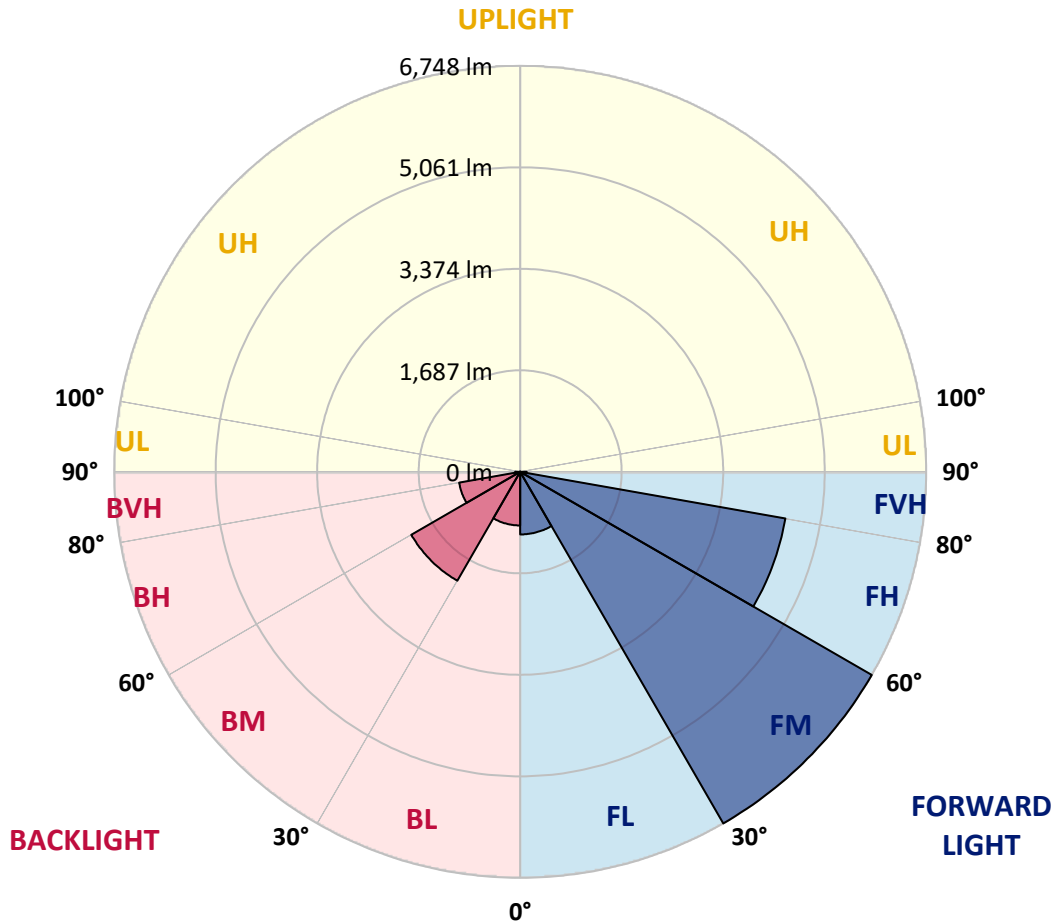
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1040.6	6.3			
FM (30°-60°)	6748.0	41.0			
FH (60°-80°)	4476.2	27.2			G2/5000
FVH (80°-90°)	107.8	0.7			G2/225
BL (0°-30°)	891.9	5.4	B2/1000		
BM (30°-60°)	2089.9	12.7	B2/2500		
BH (60°-80°)	1030.4	6.3	B3/2500		G3/2500
BVH (80°-90°)	82.3	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 III Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1826.4	1826.4	1826.4	1826.4	1826.4	1826.4	1826.4	1826.4	1826.4	1826.4	1826.4
2.5°	1807.4	1817.8	1815.2	1810.8	1810.0	1811.7	1814.3	1816.9	1816.0	1820.4	1827.3
5°	1802.2	1812.6	1811.7	1811.7	1815.2	1822.1	1826.4	1830.7	1826.4	1831.6	1841.1
7.5°	1805.6	1813.4	1816.9	1820.4	1829.0	1842.0	1852.4	1861.9	1856.7	1862.7	1874.9
10°	1849.8	1855.8	1859.3	1859.3	1865.3	1880.0	1890.4	1907.7	1903.4	1912.9	1928.5
12.5°	1930.2	1936.3	1936.3	1932.8	1937.2	1946.7	1950.1	1969.2	1961.4	1977.0	1992.5
15°	2028.9	2041.0	2031.5	2025.4	2027.1	2036.6	2035.8	2050.5	2042.7	2055.7	2069.5
17.5°	2137.9	2153.4	2137.9	2137.0	2133.5	2143.9	2144.8	2157.8	2143.9	2153.4	2163.0
20°	2266.8	2288.4	2275.4	2279.8	2272.0	2276.3	2280.6	2299.7	2278.0	2285.0	2282.4
22.5°	2448.5	2474.4	2460.6	2477.0	2471.8	2468.4	2467.5	2501.3	2467.5	2470.1	2445.0
25°	2713.2	2744.4	2720.1	2742.6	2742.6	2753.9	2766.9	2810.1	2753.9	2737.4	2672.6
27.5°	3104.3	3135.4	3087.8	3101.7	3097.4	3125.1	3111.2	3218.5	3157.9	3131.1	3000.5
30°	3574.9	3630.3	3540.3	3536.9	3532.6	3576.7	3596.6	3667.5	3606.1	3579.3	3421.8
32.5°	4083.7	4141.6	4034.4	4003.2	3986.8	4013.6	3997.2	4054.3	4011.9	3970.3	3775.7
35°	4621.8	4678.9	4576.8	4516.3	4450.5	4394.3	4335.4	4350.2	4310.4	4247.2	4045.6
37.5°	5130.6	5235.2	5127.1	5062.2	4941.1	4831.2	4666.8	4598.5	4561.3	4503.3	4300.0
40°	5648.8	5708.5	5626.3	5570.9	5439.4	5267.3	5004.2	4859.8	4809.6	4753.3	4581.2
42.5°	6030.3	6087.4	6043.3	6005.3	5902.3	5702.4	5362.4	5181.6	5108.9	5045.8	4899.5
45°	6333.2	6375.6	6347.9	6361.7	6317.6	6123.8	5733.6	5526.8	5451.5	5374.5	5259.5
47.5°	6455.2	6500.1	6544.3	6626.5	6701.7	6559.0	6132.4	5900.6	5821.0	5742.2	5628.9
50°	6441.3	6487.2	6615.2	6790.0	7023.6	6976.0	6552.9	6298.6	6225.0	6135.0	6030.3
52.5°	6330.6	6382.5	6546.9	6837.6	7209.6	7288.3	6981.2	6709.5	6640.3	6533.0	6428.3
55°	6039.9	6071.0	6317.6	6729.4	7253.7	7506.4	7400.8	7147.3	7078.1	6928.4	6814.2
57.5°	5500.9	5545.8	5904.9	6437.8	7143.0	7654.3	7769.4	7607.6	7541.0	7325.5	7206.1
60°	4797.5	4869.3	5280.2	5948.2	6860.9	7653.4	8104.2	8060.1	8004.7	7716.6	7592.0
62.5°	4001.5	4084.5	4479.9	5256.0	6367.8	7436.3	8313.6	8439.0	8410.5	8077.4	7918.2
65°	3073.1	3130.2	3523.9	4360.5	5600.3	6969.9	8337.8	8697.7	8702.9	8351.6	8088.6
67.5°	2046.2	2210.6	2552.3	3272.1	4572.5	6207.7	8125.0	8740.1	8790.3	8445.9	8003.0
70°	998.4	1214.7	1549.5	2126.6	3272.1	5038.8	7568.6	8392.3	8503.9	8170.8	7492.5
72.5°	414.4	484.5	667.1	1049.5	1878.3	3400.2	6450.8	7449.3	7656.0	7239.9	6299.4
75°	279.5	302.8	381.5	538.1	855.7	1676.7	4652.1	5554.5	5887.6	5468.0	4469.6
77.5°	215.4	230.1	277.7	376.4	508.7	634.2	2490.0	3347.4	3519.6	3258.3	2325.6
80°	169.6	180.8	207.6	274.3	360.8	339.2	848.7	1516.7	1616.2	1355.7	747.5
82.5°	147.1	151.4	148.8	186.0	239.7	198.1	278.6	559.8	617.7	448.2	244.0
85°	106.4	118.5	123.7	115.1	127.2	100.4	114.2	198.1	218.0	194.7	137.6
87.5°	43.3	64.0	78.7	74.4	46.7	28.6	35.5	58.0	66.6	72.7	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

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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1826.4	1826.4	1826.4	1826.4	1826.4	1826.4	1826.4	1826.4	1826.4	1826.4	1826.4
2.5°	1828.1	1834.2	1838.5	1843.7	1847.2	1852.4	1862.7	1868.8	1869.7	1874.0	1873.1
5°	1844.6	1853.2	1862.7	1876.6	1892.2	1905.1	1925.0	1938.9	1944.1	1948.4	1947.5
7.5°	1880.0	1892.2	1909.5	1933.7	1956.2	1973.5	1997.7	2014.2	2030.6	2036.6	2037.5
10°	1932.8	1950.1	1975.2	2008.1	2032.3	2054.8	2079.9	2093.8	2110.2	2117.1	2120.6
12.5°	1998.6	2016.7	2049.6	2095.5	2118.0	2133.5	2142.2	2138.7	2142.2	2148.3	2150.0
15°	2073.9	2093.8	2131.0	2180.3	2195.8	2182.0	2163.0	2145.7	2143.1	2144.8	2150.9
17.5°	2163.0	2177.7	2220.9	2262.5	2251.2	2194.1	2152.6	2124.9	2111.1	2106.7	2112.8
20°	2287.6	2287.6	2323.0	2349.0	2273.7	2176.8	2111.9	2066.9	2038.4	2026.3	2023.7
22.5°	2439.0	2425.1	2447.6	2429.4	2269.4	2128.4	2038.4	1960.5	1917.3	1899.9	1897.4
25°	2631.0	2614.6	2608.5	2496.1	2238.2	2051.4	1905.1	1810.8	1772.8	1763.2	1765.0
27.5°	2920.9	2879.3	2800.6	2532.4	2181.1	1930.2	1749.4	1662.0	1640.4	1641.3	1643.9
30°	3306.7	3223.7	3030.7	2538.5	2087.7	1758.9	1590.2	1527.9	1517.5	1521.9	1536.6
32.5°	3664.1	3585.3	3266.1	2510.8	1944.1	1591.1	1447.5	1405.9	1390.4	1395.5	1402.5
35°	3944.4	3922.8	3484.1	2471.8	1767.6	1433.6	1319.4	1283.9	1253.7	1246.7	1251.9
37.5°	4209.1	4200.5	3647.6	2417.3	1592.8	1322.0	1216.5	1169.7	1125.6	1101.4	1102.2
40°	4499.8	4491.2	3754.9	2333.4	1437.9	1225.1	1123.9	1062.4	1007.9	963.8	968.1
42.5°	4826.9	4775.8	3806.0	2213.1	1306.4	1142.9	1048.6	965.5	893.7	853.1	855.7
45°	5184.2	5069.1	3805.1	2060.0	1195.7	1067.6	968.1	850.5	783.9	745.8	744.1
47.5°	5563.1	5349.4	3758.4	1890.4	1088.4	984.6	843.6	753.6	709.5	686.1	680.9
50°	5954.2	5611.6	3678.8	1695.8	978.5	890.3	765.7	704.3	670.5	648.9	641.1
52.5°	6321.9	5849.5	3582.7	1475.1	866.9	798.6	731.1	683.5	648.0	623.8	613.4
55°	6663.7	6054.6	3446.9	1249.3	776.1	737.1	714.6	674.8	634.2	605.6	594.4
57.5°	6967.3	6187.8	3212.4	1037.4	711.2	694.7	697.3	660.1	613.4	589.2	573.6
60°	7220.0	6285.6	2865.5	841.0	658.4	653.2	670.5	632.5	577.9	550.3	538.1
62.5°	7371.4	6283.8	2439.8	688.7	613.4	615.1	635.0	597.8	542.5	516.5	508.7
65°	7358.4	6129.8	1972.6	589.2	570.2	571.9	597.8	559.8	513.1	497.5	496.6
67.5°	7098.0	5754.4	1513.2	524.3	522.6	530.4	560.6	533.8	494.9	493.2	495.8
70°	6392.9	4974.8	1090.1	472.4	473.3	484.5	524.3	517.4	485.4	488.8	488.0
72.5°	5126.2	3793.0	731.9	417.9	418.8	436.9	489.7	504.4	475.9	521.7	528.6
75°	3414.0	2365.4	470.7	359.9	360.8	384.1	459.4	479.3	449.9	520.0	524.3
77.5°	1640.4	1063.3	340.9	302.8	302.8	324.4	397.1	429.1	383.3	404.0	370.3
80°	566.7	399.7	268.2	244.0	238.8	253.5	334.8	372.0	330.5	304.5	285.5
82.5°	223.2	207.6	215.4	189.5	172.2	181.7	260.4	307.1	243.1	219.8	218.9
85°	128.0	135.0	152.3	125.5	99.5	111.6	191.2	220.6	183.4	161.8	165.3
87.5°	34.6	47.6	70.1	64.9	45.0	47.6	90.8	122.0	105.6	81.3	83.9
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)