

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: P882574

Luminaire Tested: **NAV-SB2C-735-U-SL4**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882574  
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-SB2C-735-U-SL4  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

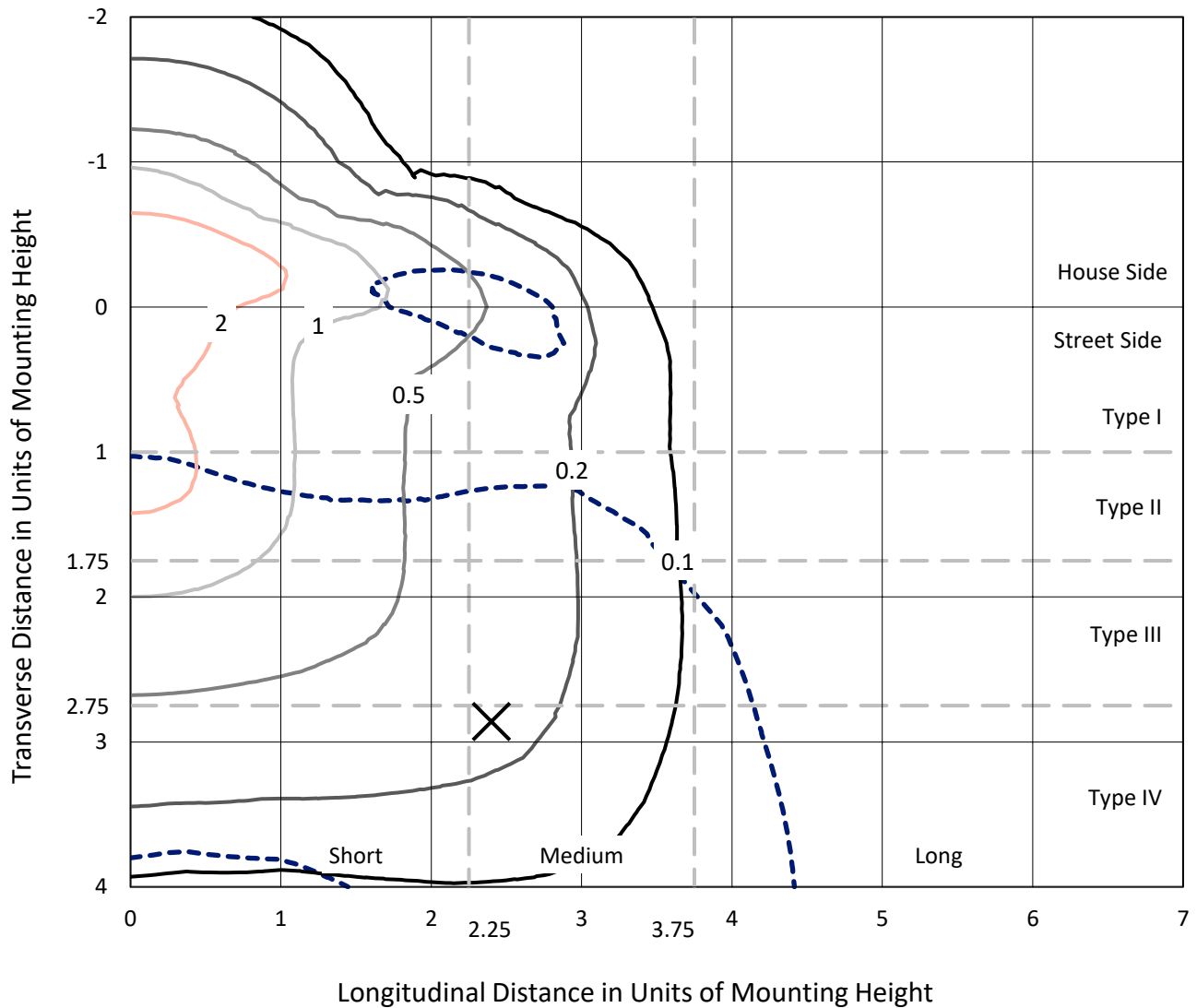
Lumens per Lamp: N/A  
Luminaire Lumens: 15130 lumens  
Efficiency: N/A  
Efficacy: 150.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 100.9  
Input Voltage (V): 120.0  
Input Current (Ain): 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

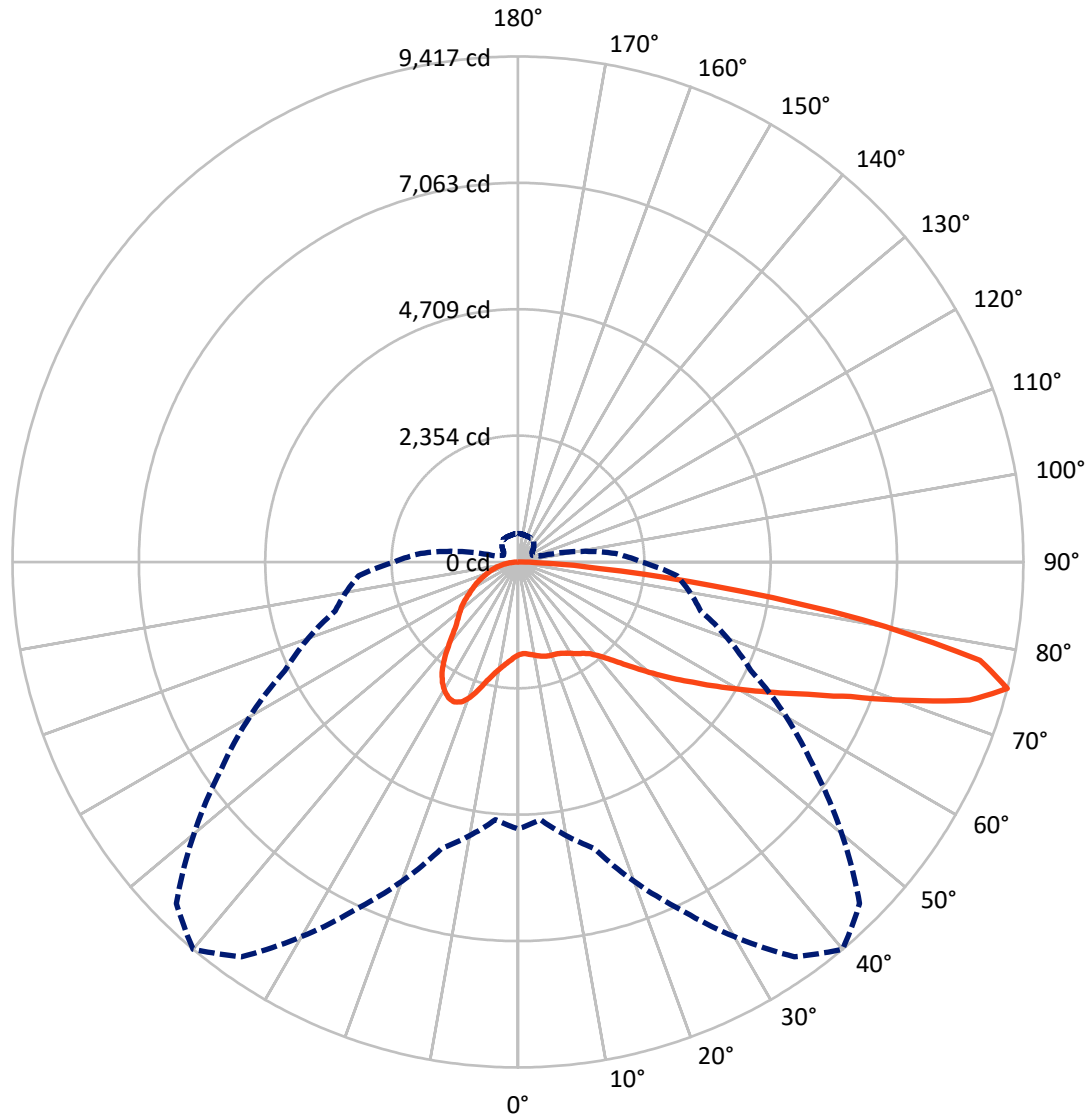
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 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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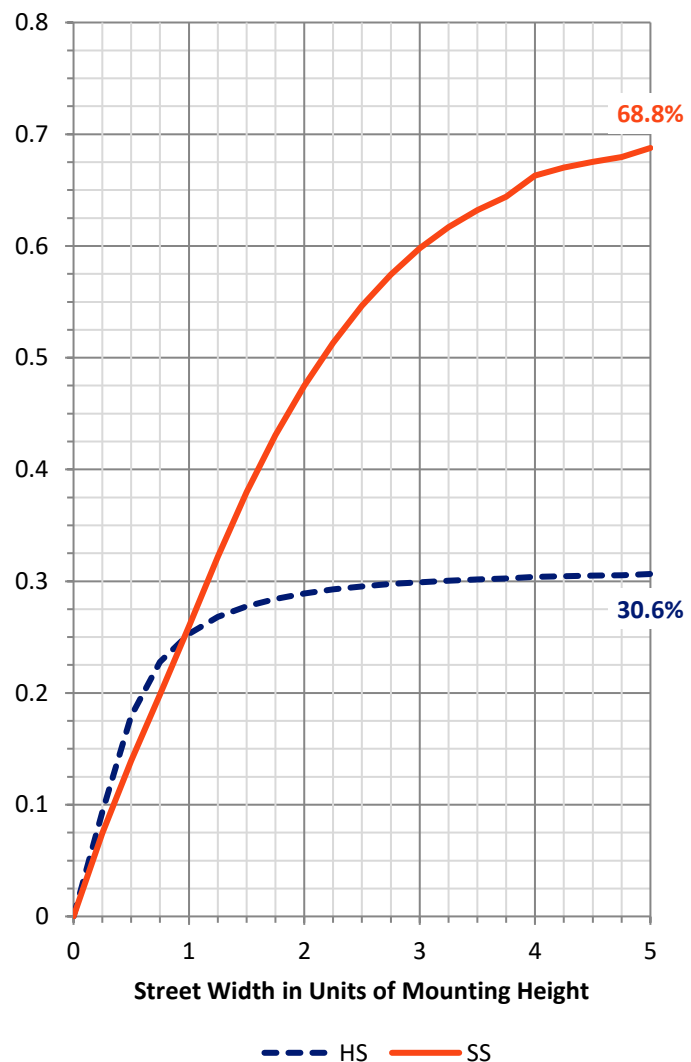
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4687.8	0.0	4687.8
	% Fixture	31.0	0.0	31.0
<b>Street Side</b>	Lumens	10442.2	0.0	10442.2
	% Fixture	69.0	0.0	69.0
<b>Total</b>	Lumens	15130.0	0.0	15130.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	172.7	1.1
10°-20°	579.8	3.8
20°-30°	1058.7	7.0
30°-40°	1501.6	9.9
40°-50°	2027.6	13.4
50°-60°	2727.6	18.0
60°-70°	3462.0	22.9
70°-80°	3142.0	20.8
80°-90°	458.0	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°	15130.0	100.0
0°-180°	15130.0	100.0

**Coefficient of Utilization**



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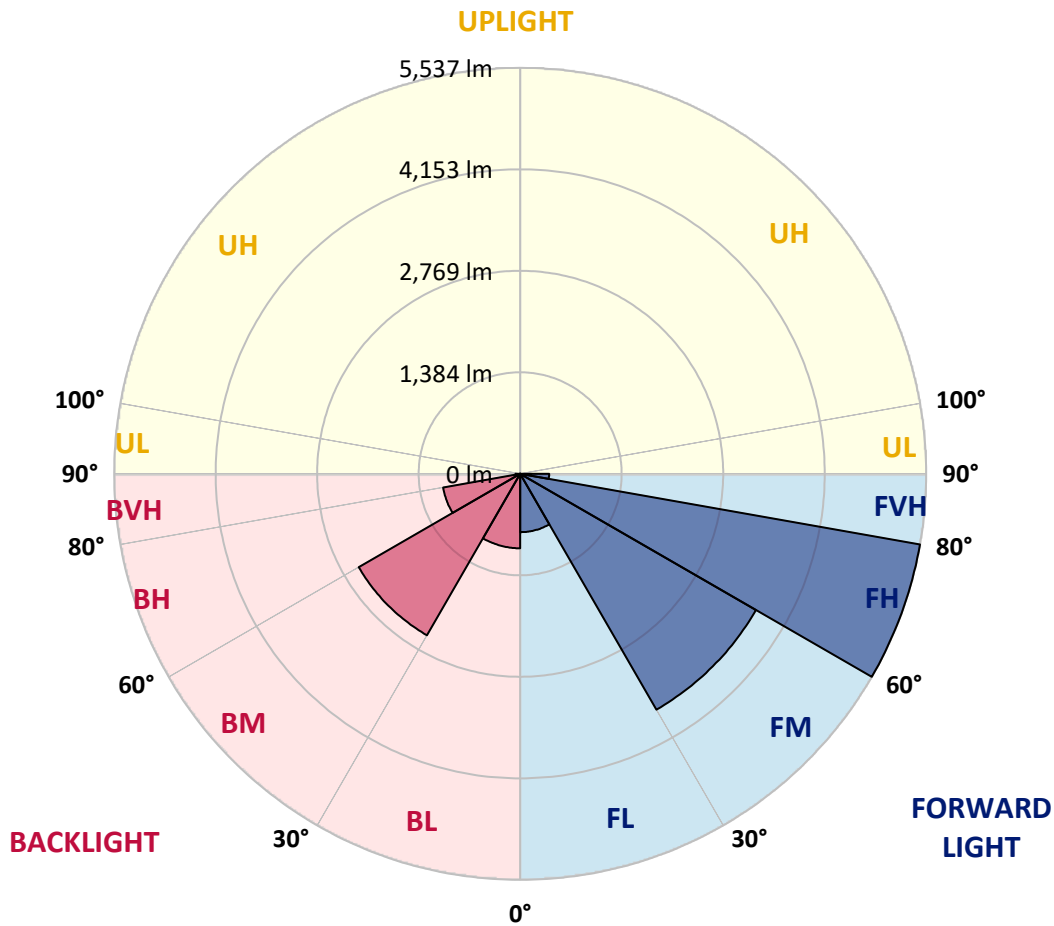
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	795.9	5.3			
FM	(30°-60°)	3714.1	24.5			
FH	(60°-80°)	5537.3	36.6			G3/7500
FVH	(80°-90°)	394.9	2.6			G3/500
BL	(0°-30°)	1015.4	6.7	B3/2500		
BM	(30°-60°)	2542.7	16.8	B3/5000		
BH	(60°-80°)	1066.6	7.0	B3/2500		G3/2500
BVH	(80°-90°)	63.1	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°	1730.1	1730.1	1730.1	1730.1	1730.1	1730.1	1730.1	1730.1	1730.1	1730.1	1730.1
2.5°	1703.7	1713.3	1710.9	1707.7	1707.7	1708.5	1707.7	1713.3	1718.9	1724.5	1733.3
5°	1721.3	1730.9	1726.1	1722.1	1718.9	1718.1	1715.7	1714.9	1718.1	1725.3	1737.4
7.5°	1755.8	1765.4	1758.2	1751.0	1744.6	1741.4	1738.2	1733.3	1730.9	1735.0	1751.8
10°	1794.3	1804.0	1795.1	1782.3	1771.9	1767.9	1764.6	1759.8	1756.6	1759.0	1777.5
12.5°	1832.9	1842.5	1830.4	1812.8	1799.1	1796.7	1792.7	1791.1	1790.3	1789.5	1808.0
15°	1869.0	1877.0	1861.7	1840.9	1826.4	1822.4	1818.4	1820.8	1824.8	1829.6	1850.5
17.5°	1897.1	1905.1	1882.6	1855.3	1841.7	1840.1	1837.7	1845.7	1856.9	1869.0	1894.6
20°	1922.7	1930.8	1901.9	1865.0	1848.9	1848.9	1849.7	1866.6	1882.6	1900.3	1935.6
22.5°	1958.8	1965.3	1930.0	1879.4	1856.1	1857.7	1864.1	1881.0	1901.1	1925.1	1974.1
25°	2012.6	2017.4	1974.1	1906.7	1880.2	1885.0	1890.6	1898.7	1917.9	1946.0	2011.8
27.5°	2099.3	2103.3	2046.3	1954.8	1914.7	1922.7	1930.8	1925.1	1934.0	1958.0	2042.3
30°	2221.3	2223.7	2151.4	2030.3	1973.3	1977.3	1978.9	1955.6	1938.8	1958.0	2064.0
32.5°	2365.7	2364.9	2279.0	2121.7	2039.9	2035.9	2022.2	1976.5	1937.2	1954.0	2083.2
35°	2589.6	2580.8	2470.0	2250.1	2115.3	2090.4	2058.3	1999.8	1945.2	1950.0	2100.1
37.5°	2960.3	2933.0	2779.8	2460.4	2227.7	2164.3	2116.9	2037.5	1962.9	1948.4	2120.1
40°	3378.4	3343.9	3175.4	2748.5	2396.2	2294.3	2218.0	2091.2	1991.7	1955.6	2149.8
42.5°	3874.3	3825.4	3644.0	3087.9	2609.6	2462.0	2347.2	2159.5	2034.3	1978.9	2190.0
45°	4483.4	4418.4	4161.6	3470.7	2878.5	2681.9	2528.6	2263.0	2099.3	2023.8	2250.1
47.5°	5098.9	5115.0	4749.8	3908.9	3201.1	2953.1	2755.7	2418.7	2194.0	2096.1	2347.2
50°	5752.9	5764.2	5334.9	4394.4	3567.0	3259.7	3010.9	2592.8	2325.6	2198.8	2492.5
52.5°	6263.3	6264.9	5866.1	4902.3	3948.2	3596.7	3286.1	2791.8	2478.0	2335.2	2685.9
55°	6582.7	6578.7	6238.4	5383.0	4386.3	3950.6	3591.1	3018.1	2664.2	2495.7	2929.0
57.5°	6814.6	6802.6	6495.2	5796.3	4853.4	4368.7	3936.1	3274.9	2884.1	2686.7	3249.2
60°	6902.9	6895.7	6669.4	6153.4	5344.5	4830.9	4334.2	3562.2	3133.7	2912.2	3660.9
62.5°	6936.6	6950.2	6840.3	6499.2	5870.1	5342.9	4771.5	3905.6	3414.5	3167.4	4095.0
65°	7055.4	7080.2	7057.8	6951.8	6463.9	5942.3	5351.7	4314.1	3721.1	3441.0	4548.4
67.5°	7290.5	7315.4	7325.0	7493.5	7189.4	6689.4	6075.5	4822.9	4079.8	3725.1	4889.5
70°	7284.9	7277.6	7447.8	7924.4	8097.8	7723.8	7051.3	5448.8	4507.5	3961.0	4932.8
72.5°	6630.8	6573.1	6975.1	7919.6	8853.7	8804.0	8243.0	6256.1	4876.6	3989.9	4280.4
75°	4974.5	4820.5	5530.7	7137.2	8979.7	9417.0	9000.6	6756.8	4789.2	3525.3	2978.8
77.5°	2127.4	1972.5	2809.5	5283.5	8036.8	8803.1	8305.6	5895.0	3823.0	2331.2	1462.9
80°	556.9	556.1	849.0	2395.4	5465.7	6500.8	5703.2	3806.9	2184.3	833.0	403.6
82.5°	230.3	224.7	312.2	931.7	2670.6	3648.1	2977.2	1698.0	788.8	225.5	134.0
85°	85.9	85.1	151.7	321.8	942.1	1504.6	1089.0	434.1	196.6	109.9	60.2
87.5°	24.1	23.3	32.9	111.5	229.5	348.3	186.2	71.4	55.4	43.3	17.7
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°	1730.1	1730.1	1730.1	1730.1	1730.1	1730.1	1730.1	1730.1	1730.1	1730.1	1730.1
2.5°	1735.8	1739.8	1747.0	1752.6	1759.8	1767.9	1779.1	1786.3	1793.5	1798.3	1795.1
5°	1743.0	1751.8	1770.3	1788.7	1810.4	1830.4	1853.7	1870.6	1884.2	1888.2	1889.8
7.5°	1759.0	1773.5	1804.8	1836.1	1870.6	1903.5	1937.2	1966.1	1989.3	1998.2	1999.0
10°	1787.1	1806.4	1850.5	1894.6	1940.4	1990.9	2034.3	2076.0	2108.9	2122.5	2123.3
12.5°	1822.4	1846.5	1904.3	1965.3	2028.7	2098.5	2154.6	2206.0	2246.9	2265.4	2265.4
15°	1868.2	1899.5	1973.3	2055.1	2148.2	2245.3	2316.7	2373.7	2419.5	2441.9	2440.3
17.5°	1917.9	1959.6	2052.7	2176.3	2309.5	2437.1	2520.6	2562.3	2609.6	2631.3	2630.5
20°	1966.1	2017.4	2150.6	2330.4	2507.7	2643.4	2710.8	2722.0	2725.2	2727.6	2734.0
22.5°	2015.8	2084.8	2273.4	2524.6	2714.8	2808.7	2818.3	2770.1	2702.7	2671.4	2680.3
25°	2070.4	2161.9	2433.9	2738.8	2892.9	2904.2	2830.3	2713.2	2585.6	2527.0	2535.8
27.5°	2123.3	2250.9	2626.5	2943.5	3021.3	2922.6	2763.7	2597.6	2443.5	2381.7	2389.0
30°	2176.3	2352.9	2839.2	3122.4	3079.9	2876.9	2658.6	2473.2	2318.3	2253.3	2260.6
32.5°	2230.1	2471.6	3083.9	3251.6	3069.5	2779.8	2527.8	2333.6	2197.2	2129.0	2137.8
35°	2291.1	2617.7	3315.8	3322.2	2999.7	2636.9	2355.3	2166.7	2047.9	1993.3	2005.4
37.5°	2370.5	2803.0	3520.5	3339.9	2877.7	2427.5	2141.0	1969.3	1871.4	1846.5	1864.1
40°	2469.2	3026.1	3676.9	3311.8	2697.1	2173.1	1906.7	1769.5	1714.1	1719.7	1739.0
42.5°	2597.6	3275.7	3786.9	3239.6	2445.9	1910.7	1701.2	1640.3	1666.7	1689.2	1710.1
45°	2764.5	3534.9	3855.1	3116.8	2161.9	1688.4	1580.1	1594.5	1614.6	1617.0	1633.0
47.5°	2978.0	3797.3	3900.0	2931.4	1872.2	1531.9	1503.0	1506.2	1502.2	1485.4	1498.2
50°	3244.4	4052.5	3940.2	2685.9	1625.8	1434.0	1395.5	1384.3	1328.9	1274.3	1281.6
52.5°	3547.7	4286.8	3957.0	2380.9	1434.0	1352.2	1289.6	1219.0	1115.4	1098.6	1104.2
55°	3884.8	4503.5	3913.7	2006.2	1272.7	1247.0	1152.4	1067.3	1056.1	1041.6	1044.0
57.5°	4287.6	4737.0	3825.4	1588.1	1107.4	1124.3	1032.0	1041.6	1021.6	999.1	995.1
60°	4728.2	4978.6	3670.5	1206.9	936.5	971.0	1000.7	999.9	994.3	975.8	969.4
62.5°	5124.6	5137.4	3365.6	924.5	786.4	852.2	933.3	932.5	927.7	917.2	913.2
65°	5360.5	5113.4	2856.8	727.8	662.8	754.3	841.8	848.2	849.0	848.2	848.2
67.5°	5318.8	4831.7	2158.7	579.4	560.9	654.8	751.1	759.9	766.4	768.0	769.6
70°	4846.9	4213.0	1407.5	462.2	470.3	567.3	665.3	674.1	679.7	686.1	689.3
72.5°	3778.1	3097.6	805.7	374.0	390.8	491.9	580.2	590.6	593.8	605.9	610.7
75°	2302.3	1821.6	434.9	294.5	321.0	420.5	495.9	508.0	513.6	528.0	529.6
77.5°	1094.6	788.8	248.0	229.5	258.4	343.5	418.9	432.5	417.3	425.3	418.9
80°	369.9	292.9	156.5	174.9	197.4	268.0	335.4	349.1	317.0	315.4	312.2
82.5°	129.2	118.8	99.5	116.4	127.6	191.8	253.6	271.2	235.9	235.1	223.9
85°	50.6	48.1	55.4	63.4	76.2	118.0	166.9	175.7	145.2	117.2	115.6
87.5°	10.4	11.2	13.6	14.4	23.3	40.9	60.2	73.8	58.6	49.8	45.7
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)