

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: P962906

Luminaire Tested: **NAV-SB2D-722-U-T4W**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P962906  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB2D-722-U-T4W  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17197.4 lumens  
Efficiency: N/A  
Efficacy: 116.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G3

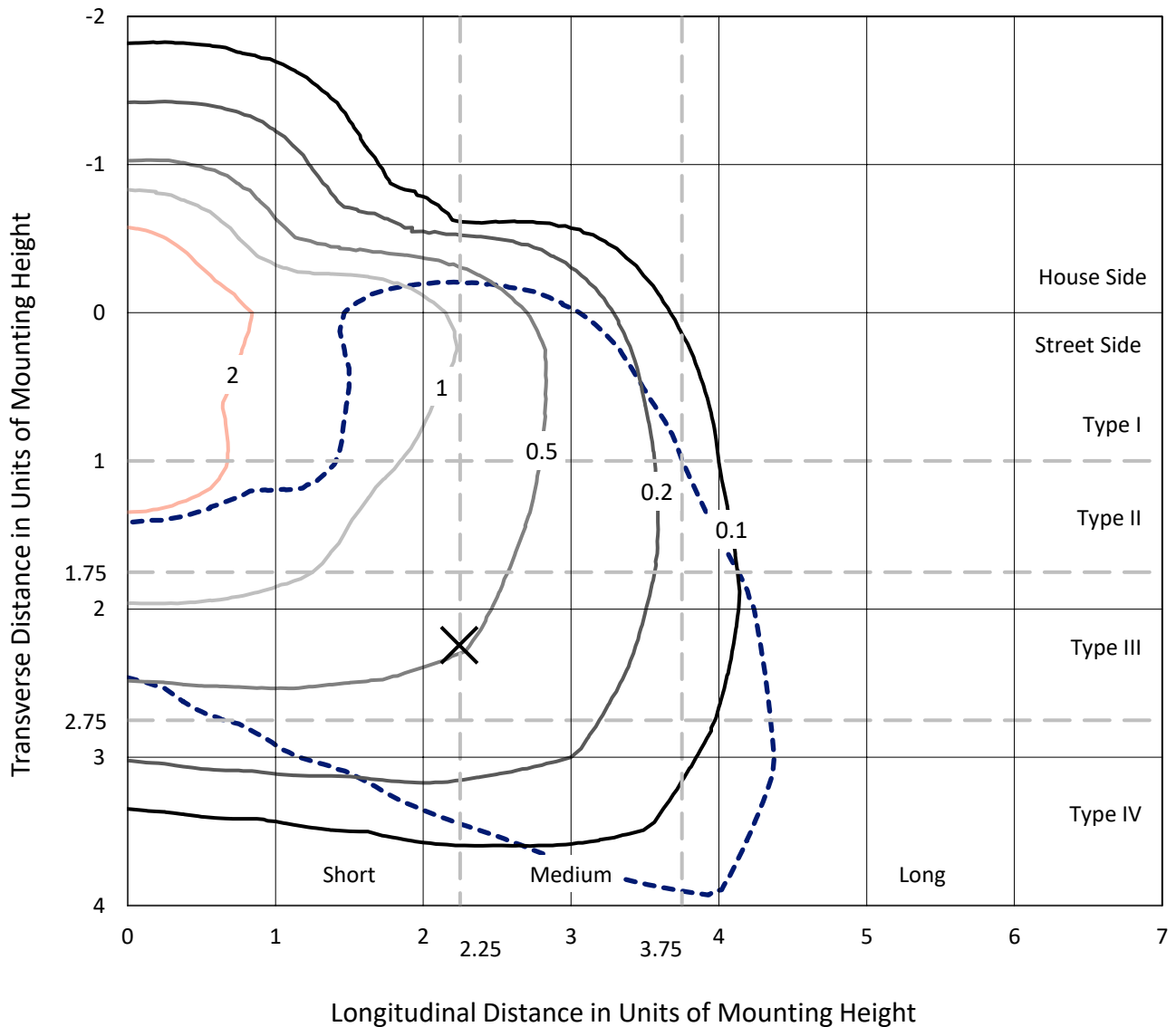
Input Watts (W): 147.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

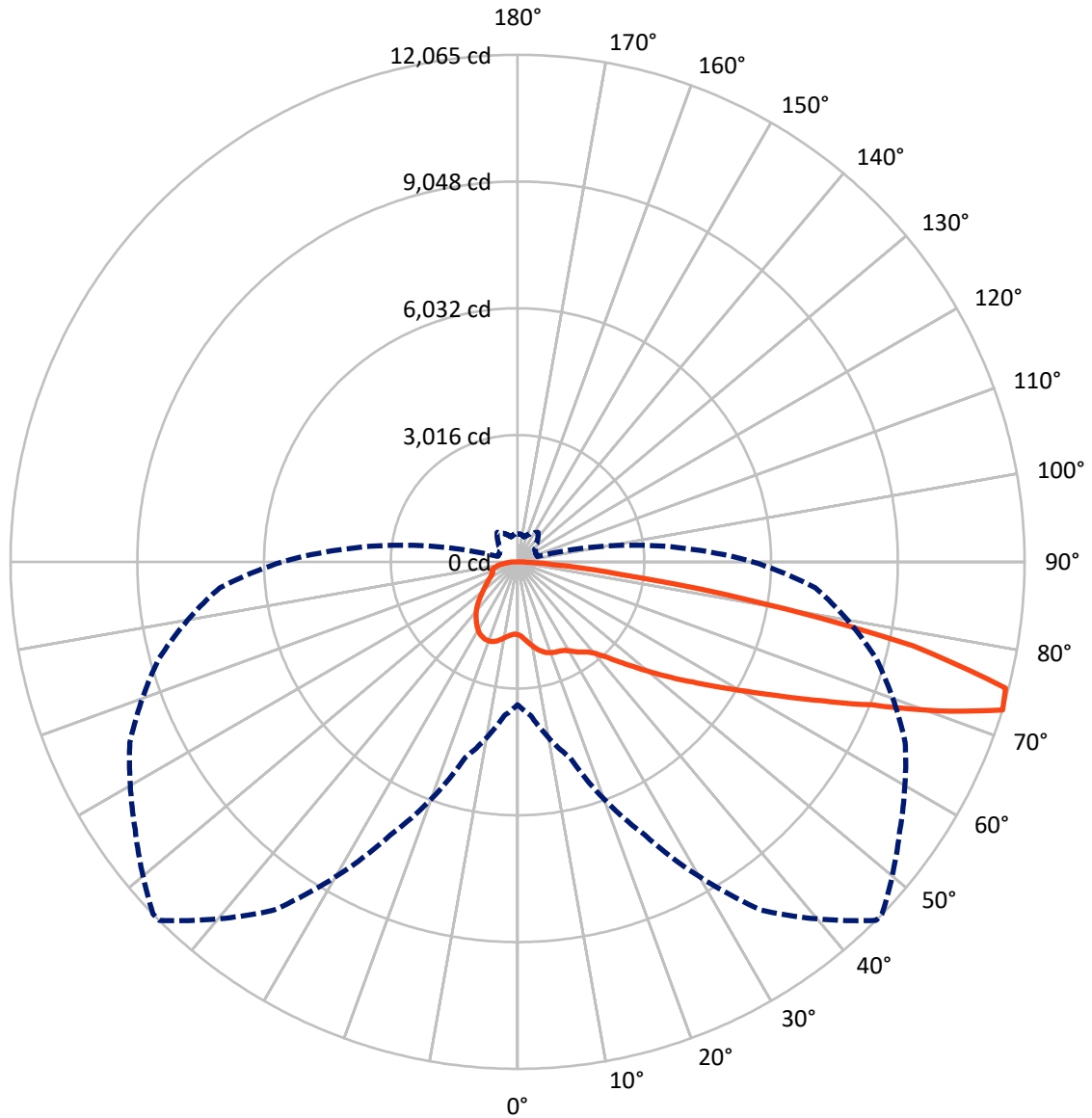
× Max cd  
 - - - 1/2 Max cd



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

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CATALOG NUMBER: NAV-SB2D-722-U-T4W

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3887.8	0.0	3887.8
	% Fixture	22.6	0.0	22.6
<b>Street Side</b>	Lumens	13309.7	0.0	13309.7
	% Fixture	77.4	0.0	77.4
<b>Total</b>	Lumens	17197.4	0.0	17197.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.6	1.0
10°-20°	588.7	3.4
20°-30°	1024.1	6.0
30°-40°	1468.1	8.5
40°-50°	2067.2	12.0
50°-60°	3166.4	18.4
60°-70°	4587.0	26.7
70°-80°	3663.0	21.3
80°-90°	456.2	2.7
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°	17197.4	100.0
0°-180°	17197.4	100.0

**Coefficient of Utilization**



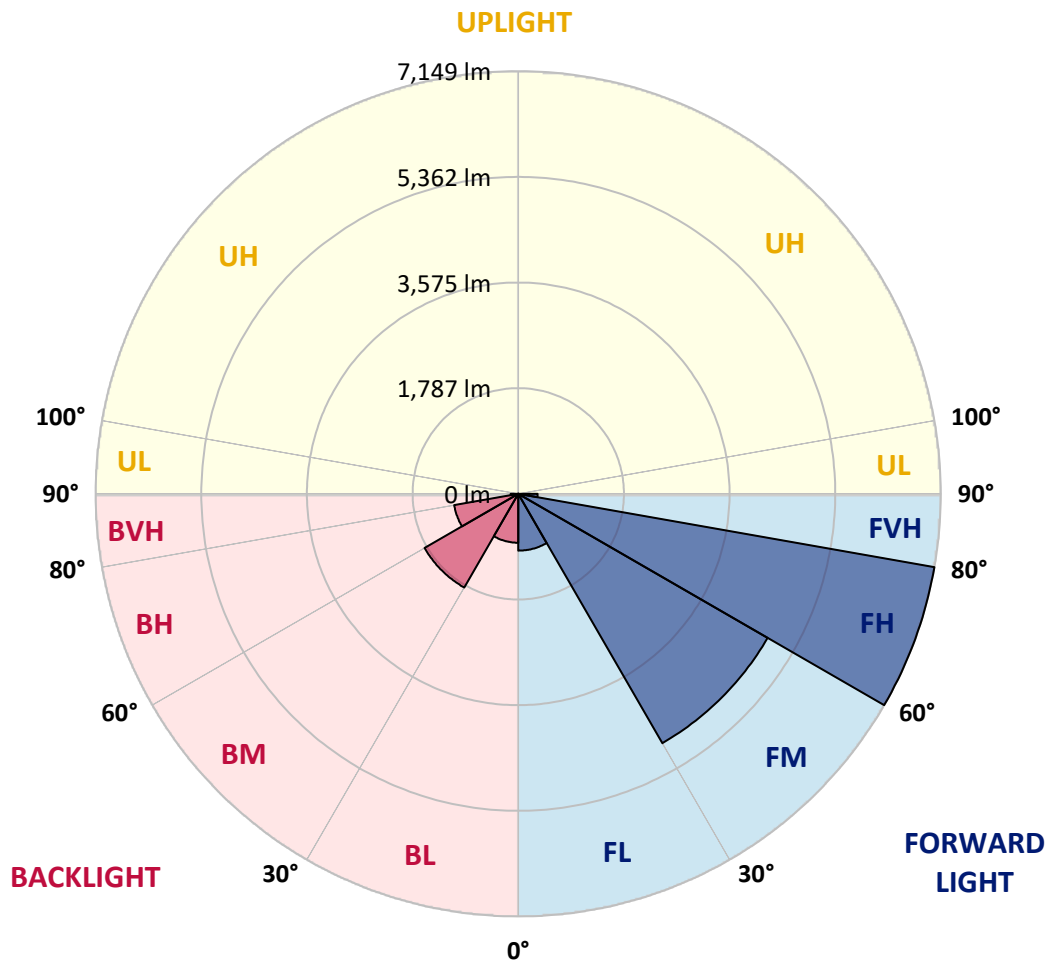
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 CATALOG NUMBER: NAV-SB2D-722-U-T4W

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	961.7	5.6			
FM (30°-60°)	4871.2	28.3			
FH (60°-80°)	7149.5	41.6			G3/7500
FVH (80°-90°)	327.3	1.9			G3/500
BL (0°-30°)	827.7	4.8	B2/1000		
BM (30°-60°)	1830.6	10.6	B2/2500		
BH (60°-80°)	1100.5	6.4	B3/2500		G3/2500
BVH (80°-90°)	128.9	0.7			G2/225
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 Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1734.9	1734.9	1734.9	1734.9	1734.9	1734.9	1734.9	1734.9	1734.9	1734.9	1734.9
2.5°	1802.9	1814.7	1803.7	1793.7	1789.2	1777.5	1776.5	1769.4	1764.7	1752.1	1748.4
5°	1928.7	1944.1	1926.1	1906.1	1887.9	1859.0	1855.4	1834.5	1811.0	1783.8	1768.4
7.5°	2071.0	2084.5	2063.7	2033.8	2002.1	1954.2	1953.2	1915.2	1878.0	1831.8	1805.5
10°	2195.1	2213.2	2185.1	2144.4	2104.5	2050.2	2043.8	2000.3	1953.2	1893.4	1853.6
12.5°	2304.7	2317.4	2290.3	2240.4	2194.2	2139.9	2131.7	2083.7	2031.1	1963.2	1912.4
15°	2391.7	2408.0	2371.7	2318.3	2269.4	2215.9	2208.7	2165.2	2112.6	2041.1	1975.9
17.5°	2448.7	2462.4	2425.3	2365.4	2318.3	2274.0	2268.5	2232.2	2186.0	2113.5	2043.8
20°	2470.6	2485.0	2446.1	2385.4	2341.9	2307.5	2304.7	2278.5	2246.7	2180.6	2110.0
22.5°	2492.3	2505.8	2455.1	2391.7	2353.6	2331.9	2331.0	2313.8	2301.1	2246.7	2177.9
25°	2580.1	2583.7	2515.9	2424.3	2370.0	2350.9	2350.0	2349.1	2354.5	2312.0	2251.3
27.5°	2656.2	2655.4	2597.4	2511.2	2427.0	2387.1	2386.3	2395.3	2412.5	2377.2	2327.4
30°	2767.7	2757.7	2688.9	2599.2	2522.1	2460.5	2455.1	2447.0	2460.5	2432.4	2403.5
32.5°	3004.1	2972.4	2861.0	2701.5	2600.9	2553.9	2546.6	2495.9	2501.3	2484.1	2469.6
35°	3342.9	3301.3	3152.7	2895.4	2698.8	2631.8	2628.2	2563.8	2553.0	2537.6	2543.0
37.5°	3746.1	3694.4	3521.4	3176.3	2867.3	2722.4	2717.0	2659.0	2614.6	2598.3	2629.0
40°	4151.0	4085.9	3942.7	3518.7	3115.6	2873.7	2856.5	2768.5	2717.9	2690.6	2755.9
42.5°	4544.2	4489.9	4367.5	3902.8	3421.8	3094.7	3056.7	2906.3	2868.3	2842.8	2960.6
45°	4892.1	4843.2	4753.5	4313.2	3780.5	3395.5	3358.3	3112.8	3101.0	3101.0	3271.4
47.5°	5174.8	5163.8	5068.7	4731.8	4203.6	3738.0	3673.6	3400.0	3431.7	3480.7	3712.6
50°	5488.3	5458.3	5356.9	5144.0	4701.0	4130.2	4077.7	3752.4	3871.1	4005.2	4350.3
52.5°	5776.3	5792.6	5679.4	5573.3	5262.7	4567.8	4475.4	4168.3	4424.6	4646.6	5097.7
55°	6072.5	6073.4	6041.8	6027.3	5851.5	5051.6	4950.1	4668.4	5076.0	5351.4	5969.3
57.5°	6350.7	6352.5	6399.6	6527.3	6534.6	5609.6	5494.6	5282.5	5799.9	6080.7	6868.0
60°	6599.0	6611.6	6740.2	7039.2	7135.2	6249.2	6140.5	6008.2	6548.2	6830.8	7812.9
62.5°	6682.3	6728.5	7014.8	7439.7	7728.6	7033.8	6926.8	6848.0	7334.6	7597.3	8602.8
65°	6540.9	6646.9	7200.4	7770.3	8339.2	7966.0	7860.0	7773.9	8151.7	8399.1	9251.5
67.5°	6194.0	6330.7	7189.6	8117.3	9080.3	9087.5	8988.8	8786.8	9027.8	9122.9	9462.6
70°	5279.9	5484.6	6556.3	8246.8	9931.0	10621.4	10526.2	10006.2	9902.0	9441.8	8868.3
72.5°	3401.9	3677.2	4827.8	7180.5	10120.3	12064.5	12059.0	11106.9	10178.4	8822.1	7112.6
75°	1241.2	1409.7	2243.1	4507.1	8495.1	11991.1	12026.4	10918.5	9291.4	6814.5	4431.0
77.5°	452.0	494.7	732.1	1732.1	5224.6	9621.2	9694.6	8728.8	6613.4	3419.9	1755.7
80°	237.4	260.9	375.0	672.2	2238.6	5713.8	5828.9	5187.4	3108.3	1030.0	526.3
82.5°	131.4	142.3	210.2	365.1	1008.3	2443.3	2512.2	2049.3	1093.5	436.6	217.4
85°	70.6	75.2	98.7	199.3	492.8	847.1	866.1	612.4	435.7	256.4	105.1
87.5°	20.8	25.3	32.6	63.4	193.0	190.2	194.7	121.4	172.1	129.6	34.4
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°	1734.9	1734.9	1734.9	1734.9	1734.9	1734.9	1734.9	1734.9	1734.9	1734.9	1734.9
2.5°	1743.0	1740.3	1730.4	1725.8	1720.4	1719.4	1724.0	1725.0	1725.8	1726.7	1730.4
5°	1759.3	1750.3	1741.3	1735.8	1737.6	1738.5	1747.5	1753.9	1758.5	1762.1	1763.9
7.5°	1791.1	1783.8	1768.4	1767.5	1770.2	1778.4	1790.2	1804.6	1812.8	1819.2	1820.9
10°	1838.1	1824.6	1806.5	1809.1	1814.7	1826.3	1850.8	1862.6	1876.3	1887.9	1885.3
12.5°	1886.2	1874.4	1853.6	1855.4	1864.5	1885.3	1908.9	1923.3	1932.4	1941.5	1945.0
15°	1948.7	1927.8	1905.2	1905.2	1921.5	1944.1	1955.0	1966.8	1972.2	1982.2	1985.8
17.5°	2013.0	1985.8	1955.9	1954.2	1974.0	1984.9	1991.3	1993.1	1994.9	2005.7	2009.4
20°	2077.4	2047.4	2004.9	2001.2	2005.7	2004.0	2003.1	2001.2	2004.0	2017.5	2022.9
22.5°	2140.7	2106.4	2047.4	2031.1	2018.4	2001.2	2000.3	1999.5	2001.2	2014.8	2023.9
25°	2215.0	2173.4	2094.6	2045.6	2003.1	1979.5	1982.2	1983.1	1984.9	1995.8	2010.3
27.5°	2295.7	2249.5	2138.0	2041.1	1964.1	1947.8	1943.3	1946.0	1952.3	1969.5	1986.8
30°	2376.3	2321.9	2177.9	2022.9	1915.2	1892.6	1878.0	1884.4	1904.3	1921.5	1940.5
32.5°	2449.6	2395.3	2209.6	1983.1	1852.7	1817.3	1798.3	1806.5	1826.3	1832.7	1855.4
35°	2535.7	2474.1	2223.2	1919.7	1784.7	1730.4	1705.0	1693.2	1703.1	1696.9	1716.8
37.5°	2631.8	2567.4	2221.4	1836.4	1705.0	1642.5	1607.2	1562.7	1541.9	1520.2	1533.8
40°	2774.1	2681.6	2199.6	1735.8	1606.3	1549.2	1485.7	1410.6	1363.5	1320.9	1323.6
42.5°	2967.9	2840.2	2159.8	1625.2	1494.9	1441.4	1355.3	1267.4	1193.1	1122.5	1116.1
45°	3256.8	3047.6	2110.0	1507.5	1374.3	1321.7	1228.5	1129.8	1045.5	954.9	944.0
47.5°	3673.6	3326.6	2062.8	1373.4	1247.5	1199.5	1115.2	1023.8	924.0	836.2	826.3
50°	4246.2	3727.1	2019.4	1242.9	1122.5	1086.2	1019.2	925.9	825.3	754.6	750.1
52.5°	4974.5	4271.6	2001.2	1117.0	1005.6	992.0	938.6	851.6	756.4	696.7	692.2
55°	5810.7	4922.9	2001.2	996.5	903.2	907.7	870.6	790.0	707.6	654.1	648.6
57.5°	6664.1	5582.5	1965.0	885.1	816.2	835.3	811.7	741.1	666.8	611.5	602.5
60°	7450.5	6135.0	1818.2	783.6	739.2	769.2	753.8	693.0	602.5	556.3	549.0
62.5°	8054.8	6446.7	1535.6	703.0	675.9	710.2	702.1	629.7	590.7	571.6	565.3
65°	8357.3	6396.0	1174.1	631.4	622.4	675.9	658.7	655.9	625.1	603.3	596.1
67.5°	8171.6	5959.3	851.6	578.9	591.6	644.1	710.2	721.1	664.1	621.5	614.3
70°	7357.1	5169.4	634.2	529.1	552.6	645.0	810.0	754.6	651.4	601.6	593.4
72.5°	5596.9	3854.8	491.9	476.5	501.9	649.5	854.3	739.2	615.1	664.9	659.5
75°	3200.7	2116.3	395.0	412.3	438.5	607.0	831.7	699.4	587.0	610.6	610.6
77.5°	1220.3	813.5	326.2	348.8	352.4	530.0	795.4	696.7	558.9	545.4	497.3
80°	423.1	318.0	270.0	277.3	272.6	471.1	762.8	606.1	457.5	409.5	395.9
82.5°	173.0	158.6	213.8	204.8	193.8	366.0	616.0	495.6	374.1	330.7	327.1
85°	75.2	100.6	141.3	124.1	112.3	253.7	493.7	419.4	316.2	272.6	271.8
87.5°	15.4	38.0	59.8	56.2	58.0	169.4	350.7	298.1	223.8	167.6	131.4
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)