

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: P882584

Luminaire Tested: **NAV-SB2C-740-U-SL4**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882584  
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-740-U-SL4  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

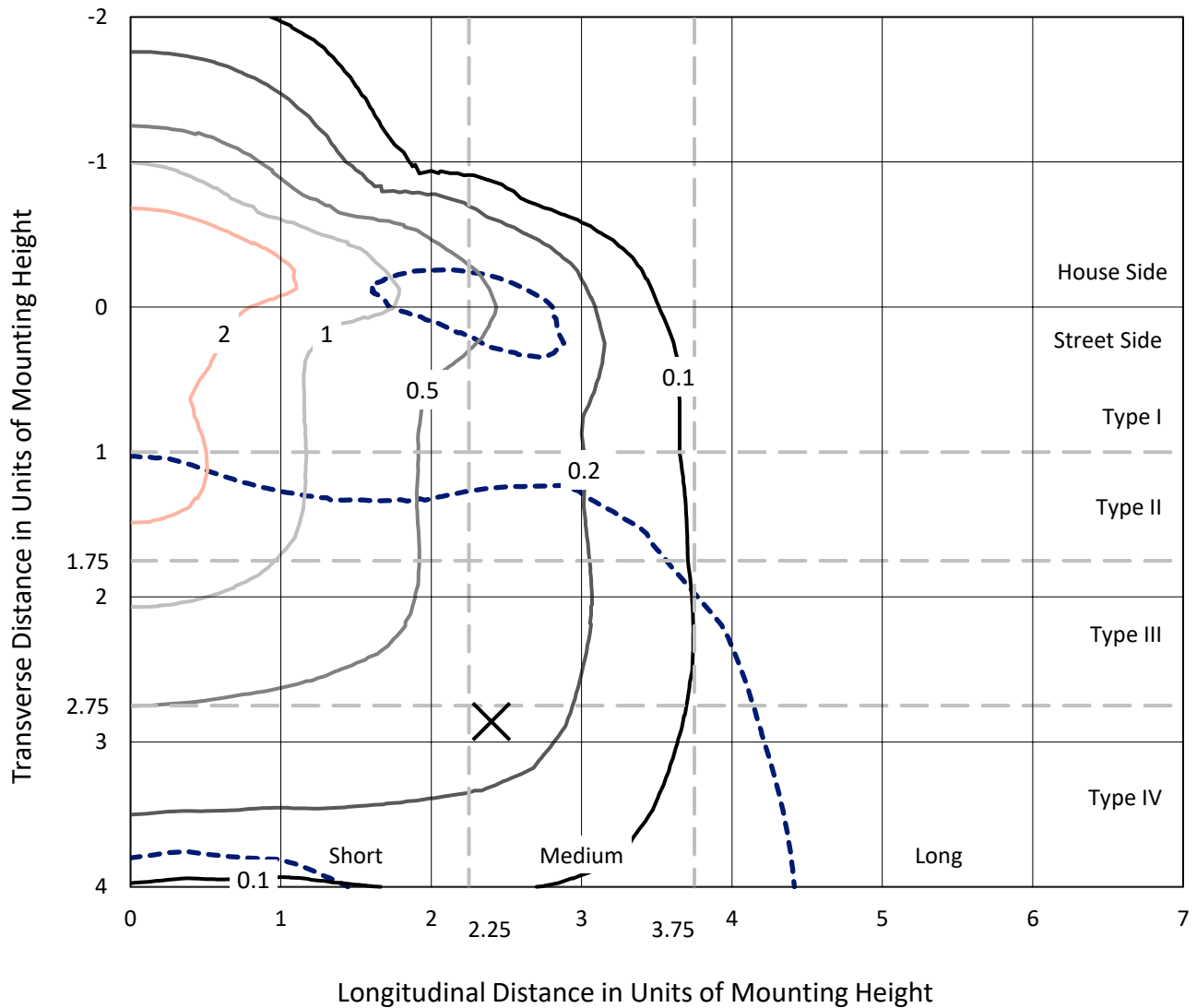
Lumens per Lamp: N/A  
Luminaire Lumens: 16312 lumens  
Efficiency: N/A  
Efficacy: 161.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 100.9  
Input Voltage (V): 120.0  
Input Current (Ain): 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

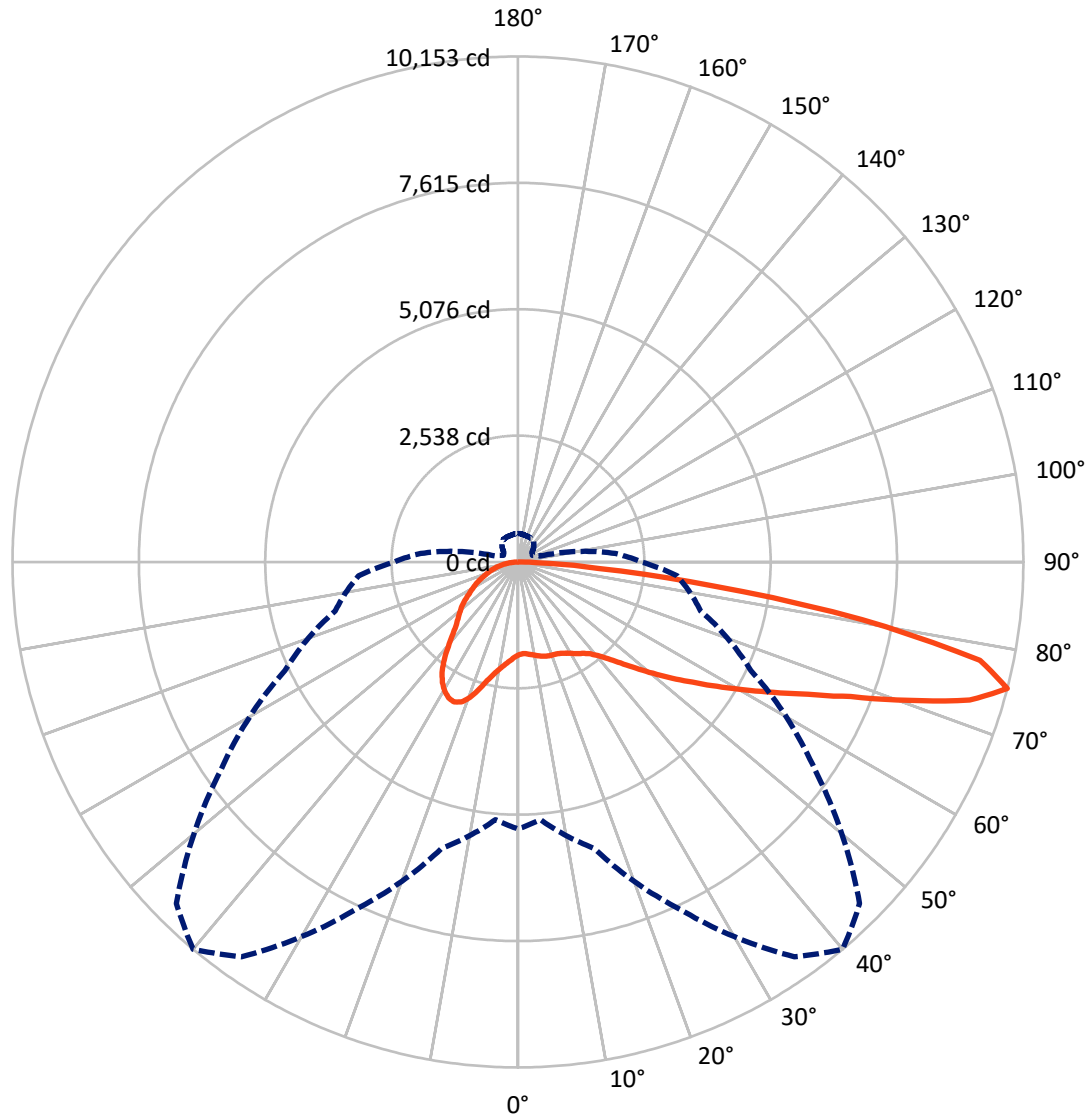
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 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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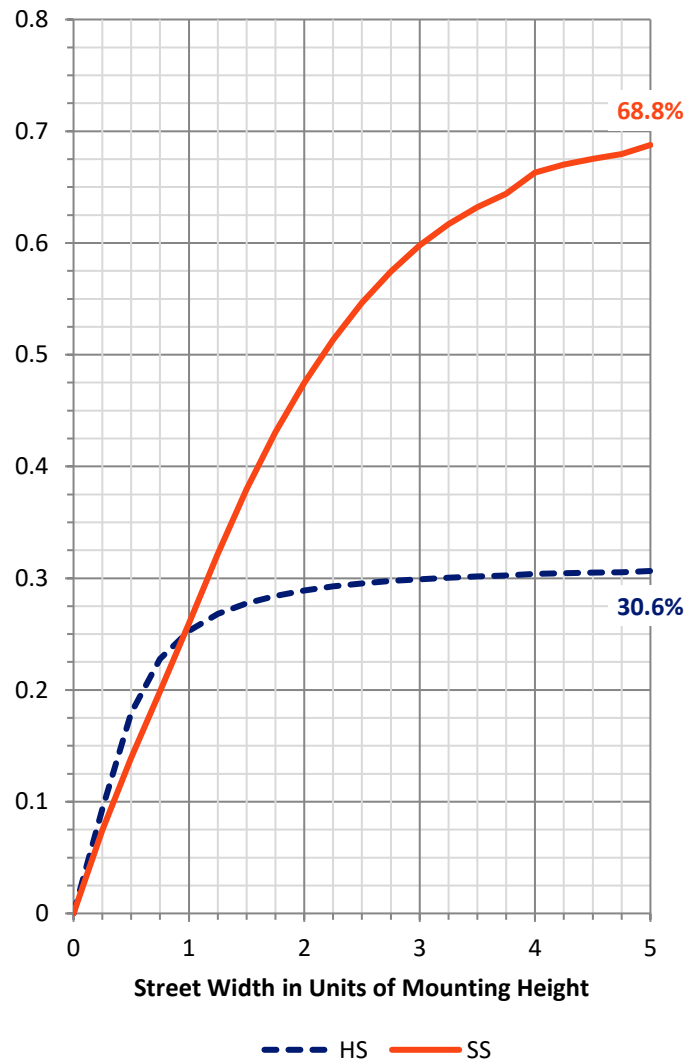
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5054.0	0.0	5054.0
	% Fixture	31.0	0.0	31.0
<b>Street Side</b>	Lumens	11258.0	0.0	11258.0
	% Fixture	69.0	0.0	69.0
<b>Total</b>	Lumens	16312.0	0.0	16312.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	186.2	1.1
10°-20°	625.1	3.8
20°-30°	1141.4	7.0
30°-40°	1618.9	9.9
40°-50°	2186.0	13.4
50°-60°	2940.7	18.0
60°-70°	3732.5	22.9
70°-80°	3387.4	20.8
80°-90°	493.8	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°	16312.0	100.0
0°-180°	16312.0	100.0



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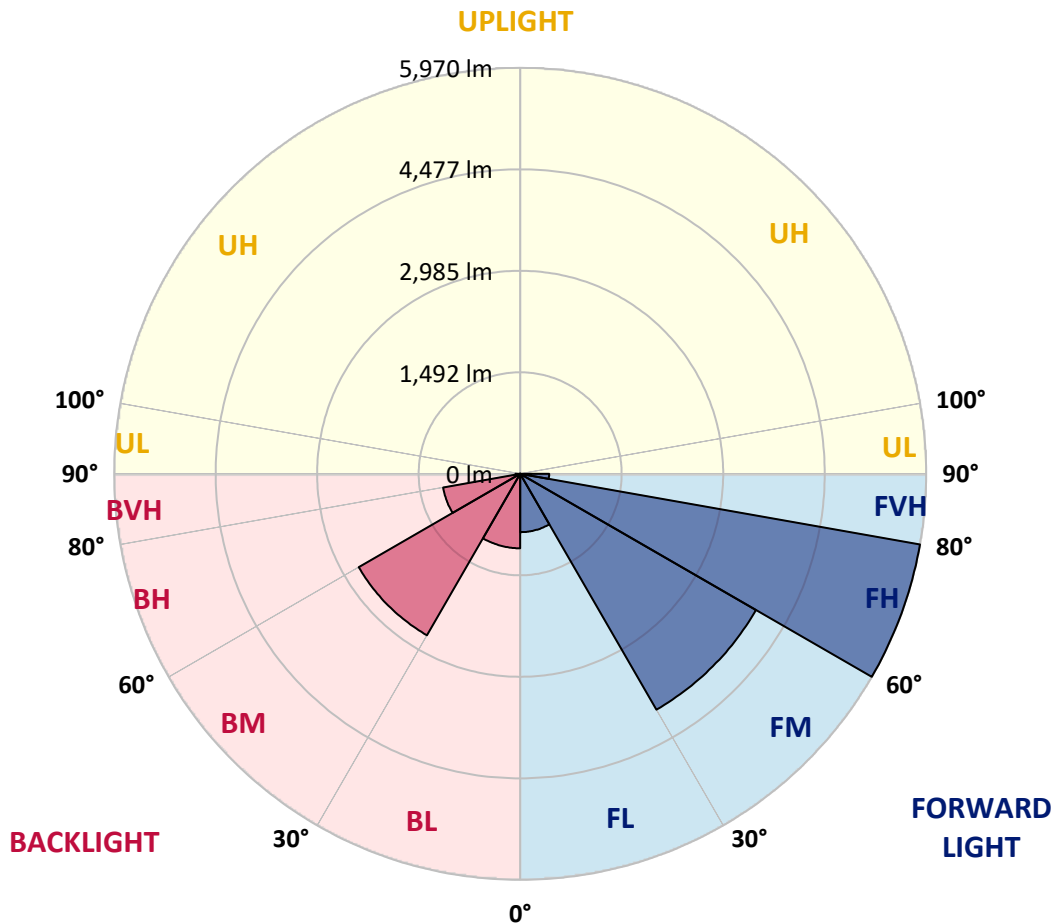
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	858.0	5.3			
FM (30°-60°)	4004.2	24.5			
FH (60°-80°)	5969.9	36.6			G3/7500
FVH (80°-90°)	425.8	2.6			G3/500
BL (0°-30°)	1094.7	6.7	B3/2500		
BM (30°-60°)	2741.3	16.8	B3/5000		
BH (60°-80°)	1149.9	7.0	B3/2500		G3/2500
BVH (80°-90°)	68.0	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°	1865.3	1865.3	1865.3	1865.3	1865.3	1865.3	1865.3	1865.3	1865.3	1865.3	1865.3
2.5°	1836.7	1847.1	1844.5	1841.1	1841.1	1841.1	1841.1	1847.1	1853.2	1859.2	1868.8
5°	1855.8	1866.2	1861.0	1856.6	1853.2	1853.2	1849.7	1848.9	1852.3	1860.1	1873.1
7.5°	1893.0	1903.4	1895.6	1887.8	1880.9	1877.4	1874.0	1868.8	1866.2	1870.5	1888.7
10°	1934.5	1944.9	1935.4	1921.5	1910.3	1906.0	1902.5	1897.3	1893.8	1896.4	1916.3
12.5°	1976.0	1986.4	1973.4	1954.4	1939.7	1937.1	1932.8	1931.1	1930.2	1929.3	1949.2
15°	2015.0	2023.6	2007.2	1984.7	1969.1	1964.8	1960.5	1963.1	1967.4	1972.6	1995.1
17.5°	2045.3	2053.9	2029.7	2000.3	1985.6	1983.8	1981.2	1989.9	2002.0	2015.0	2042.7
20°	2072.9	2081.6	2050.4	2010.6	1993.3	1993.3	1994.2	2012.4	2029.7	2048.7	2086.8
22.5°	2111.9	2118.8	2080.7	2026.2	2001.1	2002.9	2009.8	2028.0	2049.6	2075.5	2128.3
25°	2169.8	2175.0	2128.3	2055.6	2027.1	2032.3	2038.3	2047.0	2067.7	2098.0	2169.0
27.5°	2263.3	2267.6	2206.2	2107.5	2064.3	2072.9	2081.6	2075.5	2085.1	2111.0	2201.8
30°	2394.8	2397.4	2319.5	2188.9	2127.4	2131.8	2133.5	2108.4	2090.2	2111.0	2225.2
32.5°	2550.5	2549.6	2457.1	2287.5	2199.3	2194.9	2180.2	2130.9	2088.5	2106.7	2246.0
35°	2791.9	2782.4	2663.0	2425.9	2280.6	2253.8	2219.2	2156.0	2097.2	2102.4	2264.1
37.5°	3191.6	3162.2	2996.9	2652.6	2401.7	2333.4	2282.3	2196.7	2116.2	2100.6	2285.8
40°	3642.4	3605.1	3423.5	2963.2	2583.4	2473.5	2391.3	2254.6	2147.3	2108.4	2317.8
42.5°	4177.0	4124.2	3928.7	3329.2	2813.5	2654.3	2530.6	2328.2	2193.2	2133.5	2361.0
45°	4833.7	4763.6	4486.8	3741.8	3103.4	2891.4	2726.1	2439.8	2263.3	2181.9	2425.9
47.5°	5497.3	5514.6	5120.9	4214.2	3451.1	3183.8	2971.0	2607.6	2365.4	2259.8	2530.6
50°	6202.4	6214.5	5751.6	4737.7	3845.7	3514.3	3246.1	2795.4	2507.3	2370.6	2687.2
52.5°	6752.6	6754.4	6324.4	5285.3	4256.6	3877.7	3542.9	3009.9	2671.6	2517.6	2895.7
55°	7097.0	7092.6	6725.8	5803.5	4729.0	4259.2	3871.6	3253.9	2872.4	2690.7	3157.9
57.5°	7347.0	7334.0	7002.7	6249.1	5232.5	4710.0	4243.6	3530.7	3109.4	2896.6	3503.1
60°	7442.2	7434.4	7190.4	6634.1	5762.0	5208.3	4672.8	3840.5	3378.5	3139.7	3946.9
62.5°	7478.5	7493.2	7374.7	7007.0	6328.7	5760.3	5144.3	4210.8	3681.3	3414.8	4414.9
65°	7606.5	7633.4	7609.1	7494.9	6968.9	6406.6	5769.8	4651.1	4011.8	3709.8	4903.8
67.5°	7860.0	7886.9	7897.2	8078.9	7751.0	7212.0	6550.2	5199.7	4398.5	4016.1	5271.5
70°	7854.0	7846.2	8029.6	8543.5	8730.4	8327.2	7602.2	5874.5	4859.6	4270.5	5318.2
72.5°	7148.9	7086.6	7520.0	8538.3	9545.4	9491.7	8887.0	6744.8	5257.6	4301.6	4614.8
75°	5363.2	5197.1	5962.7	7694.8	9681.2	10152.7	9703.7	7284.7	5163.3	3800.7	3211.5
77.5°	2293.6	2126.6	3028.9	5696.3	8664.6	9490.9	8954.5	6355.5	4121.7	2513.3	1577.2
80°	600.4	599.6	915.3	2582.5	5892.6	7008.7	6148.7	4104.3	2355.0	898.0	435.2
82.5°	248.3	242.2	336.5	1004.5	2879.3	3933.0	3209.8	1830.7	850.5	243.1	144.5
85°	92.6	91.7	163.5	346.9	1015.7	1622.2	1174.0	468.1	212.0	118.5	64.9
87.5°	26.0	25.1	35.5	120.3	247.4	375.5	200.7	77.0	59.7	46.7	19.0
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°	1865.3	1865.3	1865.3	1865.3	1865.3	1865.3	1865.3	1865.3	1865.3	1865.3	1865.3
2.5°	1871.4	1875.7	1883.5	1889.5	1897.3	1906.0	1918.1	1925.9	1933.6	1938.8	1935.4
5°	1879.1	1888.7	1908.6	1928.5	1951.8	1973.4	1998.5	2016.7	2031.4	2035.7	2037.5
7.5°	1896.4	1912.0	1945.8	1979.5	2016.7	2052.2	2088.5	2119.7	2144.7	2154.3	2155.1
10°	1926.7	1947.5	1995.1	2042.7	2092.0	2146.5	2193.2	2238.2	2273.7	2288.4	2289.2
12.5°	1964.8	1990.7	2053.0	2118.8	2187.1	2262.4	2323.0	2378.3	2422.5	2442.4	2442.4
15°	2014.1	2047.8	2127.4	2215.7	2316.1	2420.7	2497.7	2559.2	2608.5	2632.7	2631.0
17.5°	2067.7	2112.7	2213.1	2346.3	2489.9	2627.5	2717.5	2762.5	2813.5	2836.9	2836.0
20°	2119.7	2175.0	2318.6	2512.4	2703.6	2849.9	2922.5	2934.6	2938.1	2940.7	2947.6
22.5°	2173.3	2247.7	2451.0	2721.8	2926.9	3028.1	3038.5	2986.6	2913.9	2880.1	2889.7
25°	2232.1	2330.8	2624.0	2952.8	3118.9	3131.0	3051.4	2925.1	2787.6	2724.4	2733.9
27.5°	2289.2	2426.8	2831.7	3173.4	3257.4	3150.9	2979.6	2800.5	2634.4	2567.8	2575.6
30°	2346.3	2536.7	3061.0	3366.4	3320.5	3101.6	2866.3	2666.4	2499.5	2429.4	2437.2
32.5°	2404.3	2664.7	3324.8	3505.7	3309.3	2996.9	2725.3	2515.9	2368.8	2295.3	2304.8
35°	2470.1	2822.2	3574.9	3581.8	3234.0	2842.9	2539.3	2335.9	2207.9	2149.1	2162.1
37.5°	2555.7	3022.0	3795.5	3600.8	3102.5	2617.1	2308.3	2123.1	2017.6	1990.7	2009.8
40°	2662.1	3262.5	3964.2	3570.5	2907.8	2342.9	2055.6	1907.7	1848.0	1854.1	1874.8
42.5°	2800.5	3531.6	4082.7	3492.7	2637.0	2060.0	1834.2	1768.4	1797.0	1821.2	1843.7
45°	2980.5	3811.1	4156.3	3360.3	2330.8	1820.3	1703.5	1719.1	1740.7	1743.3	1760.6
47.5°	3210.6	4094.0	4204.7	3160.5	2018.4	1651.6	1620.5	1623.9	1619.6	1601.4	1615.3
50°	3497.9	4369.1	4248.0	2895.7	1752.8	1546.1	1504.5	1492.4	1432.7	1373.9	1381.7
52.5°	3824.9	4621.7	4266.1	2566.9	1546.1	1457.8	1390.3	1314.2	1202.6	1184.4	1190.5
55°	4188.3	4855.3	4219.4	2162.9	1372.2	1344.5	1242.4	1150.7	1138.6	1123.0	1125.6
57.5°	4622.6	5107.1	4124.2	1712.2	1193.9	1212.1	1112.6	1123.0	1101.4	1077.1	1072.8
60°	5097.6	5367.5	3957.3	1301.2	1009.6	1046.9	1078.9	1078.0	1071.9	1052.0	1045.1
62.5°	5525.0	5538.8	3628.5	996.7	847.9	918.8	1006.2	1005.3	1000.1	988.9	984.6
65°	5779.3	5512.8	3080.0	784.7	714.6	813.3	907.6	914.5	915.3	914.5	914.5
67.5°	5734.3	5209.2	2327.3	624.7	604.8	706.0	809.8	819.3	826.2	828.0	829.7
70°	5225.6	4542.1	1517.5	498.3	507.0	611.7	717.2	726.7	732.8	739.7	743.2
72.5°	4073.2	3339.5	868.6	403.2	421.3	530.3	625.5	636.8	640.2	653.2	658.4
75°	2482.2	1963.9	468.9	317.5	346.1	453.3	534.7	547.7	553.7	569.3	571.0
77.5°	1180.1	850.5	267.3	247.4	278.6	370.3	451.6	466.3	449.9	458.5	451.6
80°	398.8	315.8	168.7	188.6	212.8	289.0	361.6	376.3	341.7	340.0	336.5
82.5°	139.3	128.0	107.3	125.4	137.6	206.8	273.4	292.4	254.4	253.5	241.4
85°	54.5	51.9	59.7	68.3	82.2	127.2	180.0	189.5	156.6	126.3	124.6
87.5°	11.2	12.1	14.7	15.6	25.1	44.1	64.9	79.6	63.2	53.6	49.3
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)