

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: P967649

Luminaire Tested: **NAV-SB5A-722-U-T4W**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P967649  
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-SB5A-722-U-T4W  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 2200K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19149.1 lumens  
Efficiency: N/A  
Efficacy: 135.1 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G4

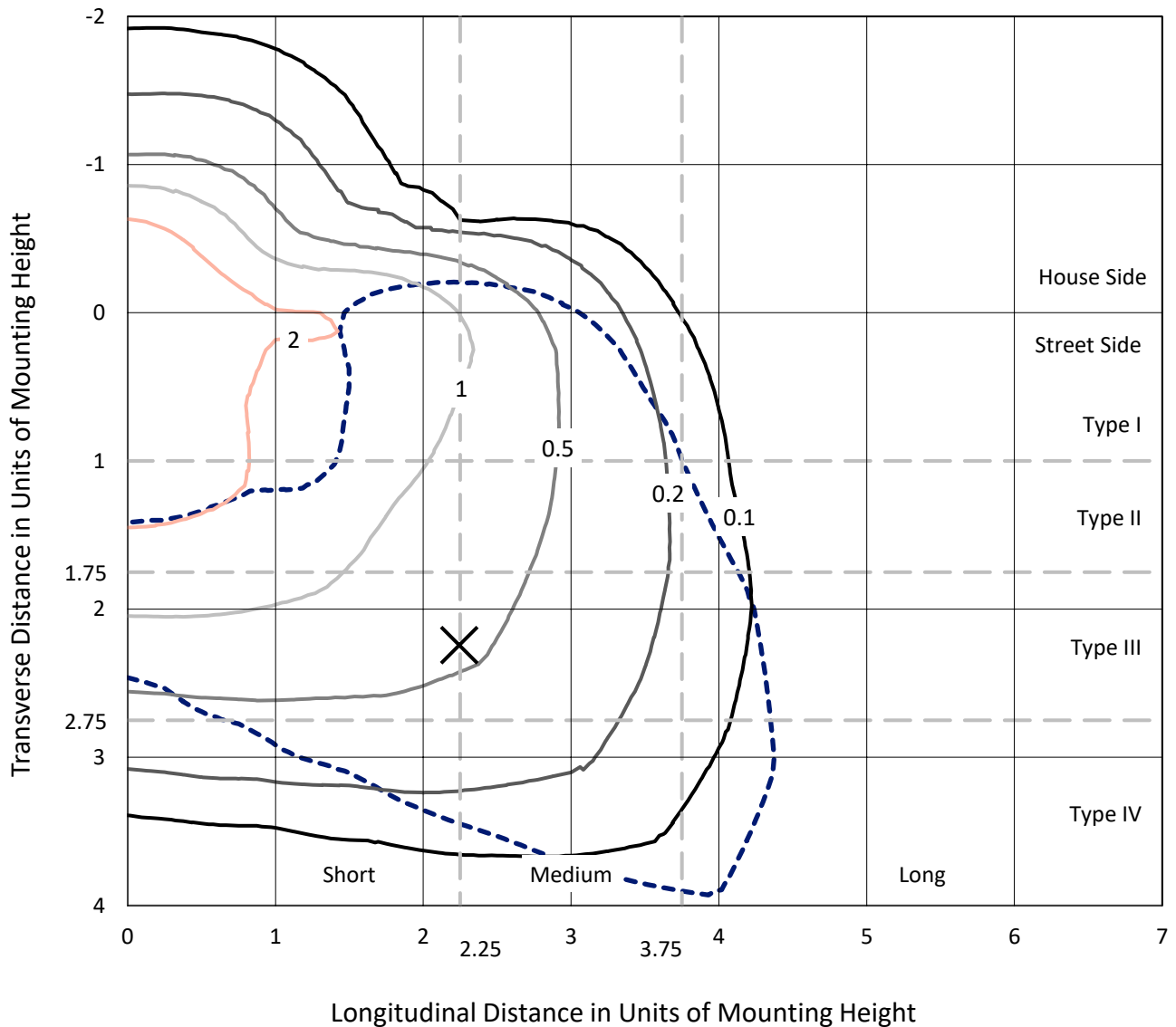
Input Watts (W): 141.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

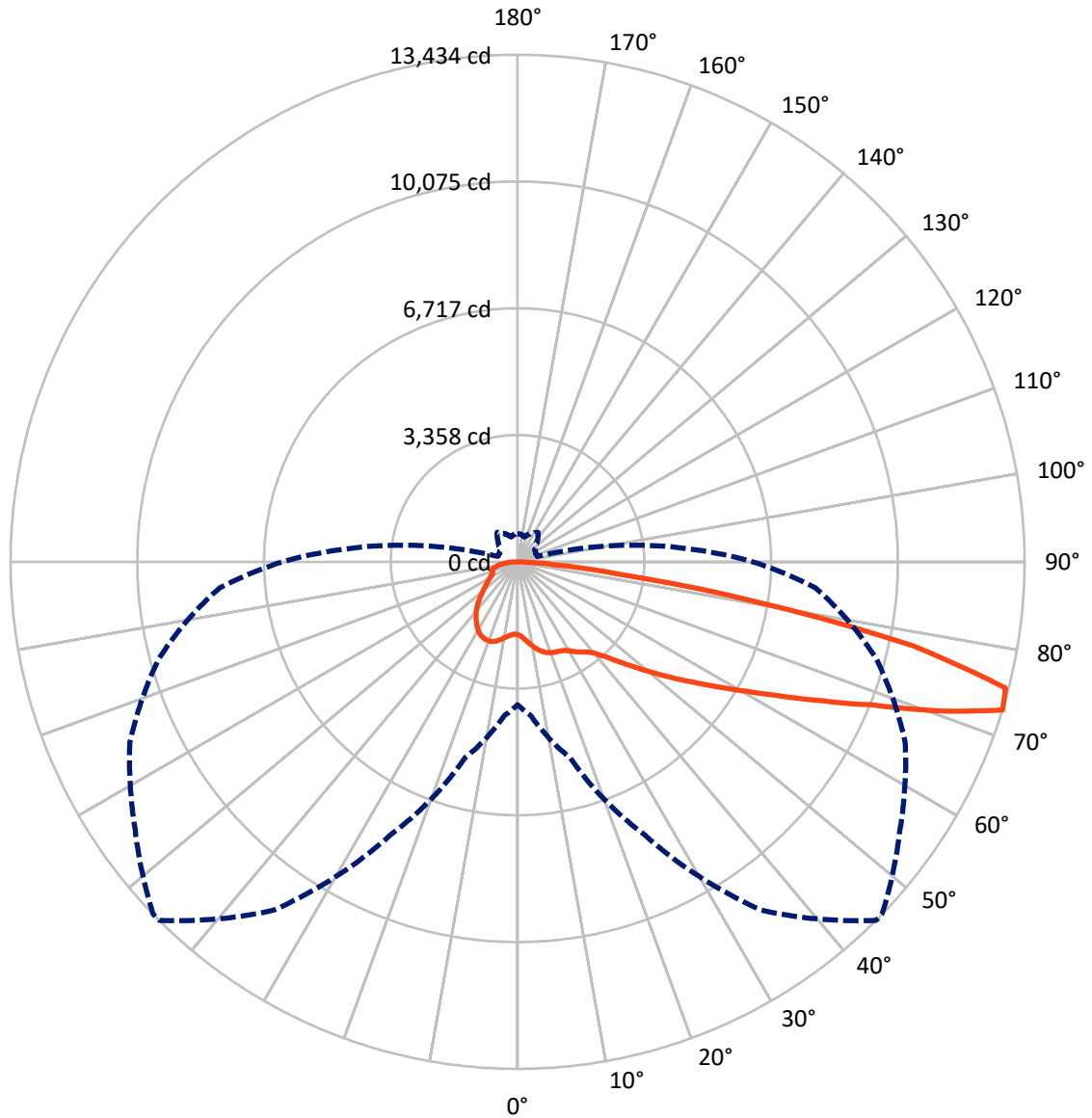
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc  
 Type IV - Short - N/A

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### 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	4329.0	0.0	4329.0
	% Fixture	22.6	0.0	22.6
<b>Street Side</b>	Lumens	14820.1	0.0	14820.1
	% Fixture	77.4	0.0	77.4
<b>Total</b>	Lumens	19149.1	0.0	19149.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	196.6	1.0
10°-20°	655.5	3.4
20°-30°	1140.4	6.0
30°-40°	1634.8	8.5
40°-50°	2301.8	12.0
50°-60°	3525.7	18.4
60°-70°	5107.6	26.7
70°-80°	4078.7	21.3
80°-90°	508.0	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°	19149.1	100.0
0°-180°	19149.1	100.0

**Coefficient of Utilization**



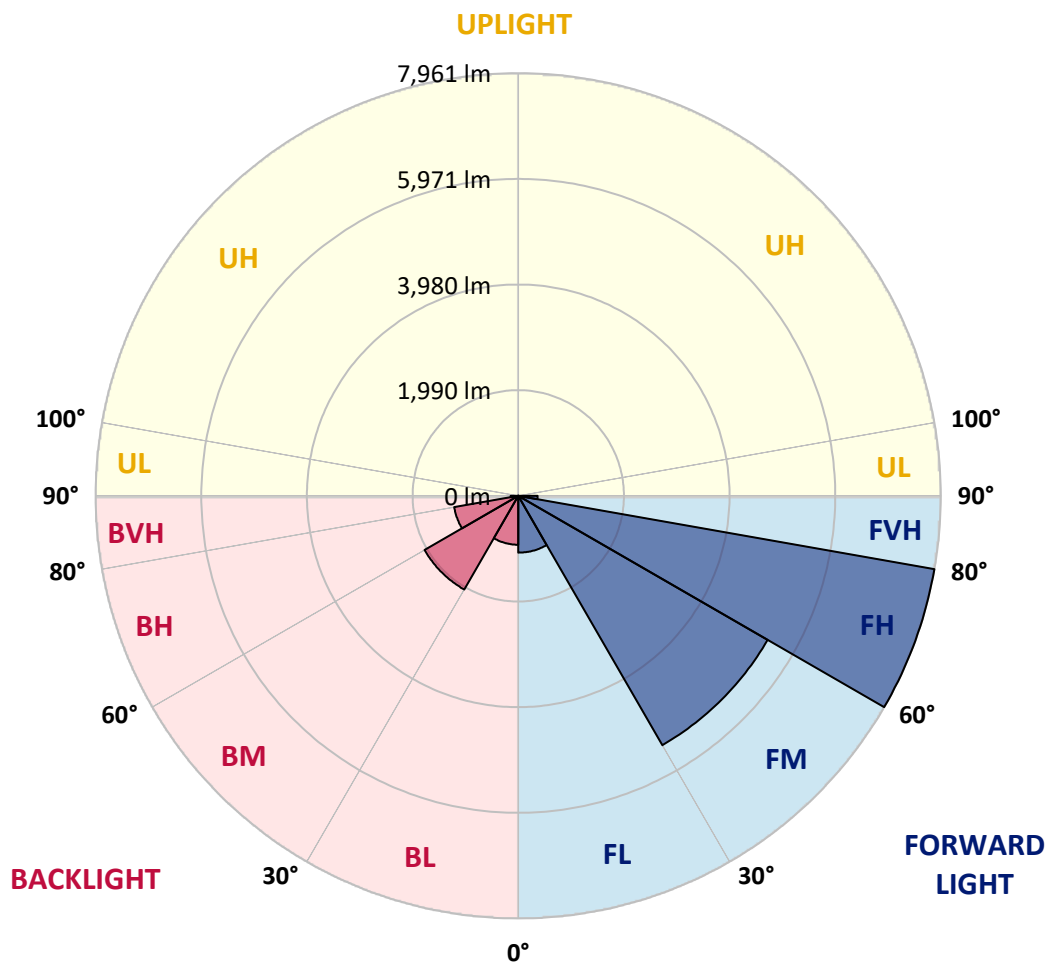
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1070.8	5.6			
FM (30°-60°)	5424.0	28.3			
FH (60°-80°)	7960.8	41.6			G4/12000
FVH (80°-90°)	364.4	1.9			G3/500
BL (0°-30°)	921.7	4.8	B2/1000		
BM (30°-60°)	2038.3	10.6	B2/2500		
BH (60°-80°)	1225.4	6.4	B3/2500		G3/2500
BVH (80°-90°)	143.5	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-G4**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1931.8	1931.8	1931.8	1931.8	1931.8	1931.8	1931.8	1931.8	1931.8	1931.8	1931.8
2.5°	2007.5	2020.6	2008.4	1997.3	1992.3	1979.2	1978.1	1970.0	1965.0	1950.9	1946.9
5°	2147.7	2164.8	2144.6	2122.5	2102.3	2070.0	2065.9	2042.7	2016.5	1986.2	1969.1
7.5°	2306.0	2321.1	2297.9	2264.6	2229.4	2175.9	2174.8	2132.5	2091.1	2039.7	2010.4
10°	2444.2	2464.4	2433.1	2387.7	2343.4	2282.8	2275.7	2227.3	2174.8	2108.3	2063.9
12.5°	2566.3	2580.4	2550.1	2494.6	2443.2	2382.7	2373.6	2320.1	2261.7	2186.0	2129.4
15°	2663.2	2681.3	2640.9	2581.4	2526.9	2467.4	2459.4	2410.9	2352.4	2272.7	2200.1
17.5°	2726.7	2741.8	2700.5	2633.8	2581.4	2532.0	2525.9	2485.5	2434.2	2353.4	2275.7
20°	2750.9	2767.0	2723.6	2656.1	2607.6	2569.3	2566.3	2537.0	2501.7	2428.1	2349.4
22.5°	2775.1	2790.3	2733.8	2663.2	2620.7	2596.5	2595.5	2576.3	2562.2	2501.7	2425.0
25°	2873.0	2877.0	2801.3	2699.4	2638.9	2617.7	2616.7	2615.7	2621.7	2574.4	2506.7
27.5°	2957.6	2956.6	2892.1	2796.3	2702.4	2658.0	2657.1	2667.2	2686.3	2647.0	2591.5
30°	3081.8	3070.7	2994.0	2894.1	2808.4	2739.8	2733.8	2724.7	2739.8	2708.5	2676.3
32.5°	3345.0	3309.7	3185.7	3008.1	2896.1	2843.7	2835.6	2779.1	2785.1	2766.0	2749.9
35°	3722.3	3675.9	3510.4	3223.9	3005.1	2930.5	2926.4	2854.7	2842.6	2825.5	2831.6
37.5°	4171.2	4113.7	3921.0	3536.7	3192.7	3031.3	3025.3	2960.7	2911.3	2893.1	2927.4
40°	4622.1	4549.5	4390.1	3918.0	3469.1	3199.7	3180.6	3082.8	3026.3	2996.0	3068.6
42.5°	5059.9	4999.4	4863.2	4345.7	3810.0	3445.9	3403.5	3236.1	3193.7	3165.5	3296.6
45°	5447.3	5392.8	5292.9	4802.6	4209.6	3780.8	3739.4	3466.0	3453.0	3453.0	3642.6
47.5°	5762.0	5749.9	5644.0	5268.7	4680.7	4162.1	4090.5	3785.8	3821.2	3875.6	4133.9
50°	6111.0	6077.7	5964.8	5727.7	5234.5	4598.9	4540.4	4178.3	4310.4	4459.7	4844.0
52.5°	6431.9	6450.0	6323.8	6205.9	5859.8	5086.2	4983.2	4641.3	4926.8	5173.9	5676.2
55°	6761.7	6762.7	6727.4	6711.3	6515.5	5624.8	5511.8	5198.1	5652.1	5958.7	6646.7
57.5°	7071.4	7073.4	7125.8	7268.1	7276.2	6246.2	6118.1	5882.1	6458.0	6770.7	7647.4
60°	7347.8	7361.9	7505.2	7838.1	7945.0	6958.4	6837.4	6690.1	7291.2	7606.0	8699.5
62.5°	7440.6	7492.0	7810.8	8283.9	8605.7	7832.0	7712.9	7625.2	8166.9	8459.4	9579.1
65°	7283.2	7401.2	8017.6	8652.1	9285.6	8869.9	8752.0	8656.1	9076.8	9352.2	10301.5
67.5°	6896.8	7049.2	8005.5	9038.4	10110.8	10118.8	10008.9	9783.9	10052.3	10158.2	10536.5
70°	5879.0	6107.1	7300.4	9182.7	11058.0	11826.7	11720.8	11141.7	11025.7	10513.2	9874.7
72.5°	3787.9	4094.6	5375.6	7995.4	11268.8	13433.5	13427.5	12367.3	11333.3	9823.3	7919.8
75°	1382.0	1569.6	2497.7	5018.6	9459.1	13351.9	13391.2	12157.5	10345.8	7587.9	4933.8
77.5°	503.4	550.7	815.1	1928.7	5817.5	10713.0	10794.7	9719.4	7363.9	3808.1	1955.0
80°	264.2	290.5	417.6	748.5	2492.6	6362.2	6490.3	5776.2	3461.0	1147.0	586.1
82.5°	146.3	158.4	234.0	406.5	1122.8	2720.7	2797.3	2281.9	1217.6	486.3	242.1
85°	78.7	83.7	110.0	221.9	548.8	943.2	964.3	681.9	485.2	285.5	117.1
87.5°	23.2	28.3	36.3	70.6	214.8	211.9	216.9	135.2	191.7	144.2	38.3
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°	1931.8	1931.8	1931.8	1931.8	1931.8	1931.8	1931.8	1931.8	1931.8	1931.8	1931.8
2.5°	1940.8	1937.9	1926.7	1921.7	1915.6	1914.6	1919.6	1920.6	1921.7	1922.7	1926.7
5°	1959.0	1948.9	1938.8	1932.7	1934.8	1935.8	1945.9	1952.9	1958.0	1962.1	1964.0
7.5°	1994.3	1986.2	1969.1	1968.1	1971.1	1980.2	1993.3	2009.4	2018.5	2025.6	2027.6
10°	2046.7	2031.7	2011.5	2014.5	2020.6	2033.6	2060.9	2074.0	2089.2	2102.3	2099.2
12.5°	2100.2	2087.1	2063.9	2065.9	2076.0	2099.2	2125.4	2141.6	2151.7	2161.7	2165.8
15°	2169.8	2146.7	2121.4	2121.4	2139.6	2164.8	2176.9	2190.0	2196.1	2207.1	2211.2
17.5°	2241.5	2211.2	2177.9	2175.9	2198.1	2210.2	2217.3	2219.2	2221.3	2233.4	2237.4
20°	2313.1	2279.8	2232.3	2228.4	2233.4	2231.3	2230.4	2228.4	2231.3	2246.5	2252.5
22.5°	2383.7	2345.4	2279.8	2261.7	2247.5	2228.4	2227.3	2226.3	2228.4	2243.5	2253.6
25°	2466.5	2420.0	2332.3	2277.8	2230.4	2204.2	2207.1	2208.2	2210.2	2222.3	2238.4
27.5°	2556.1	2504.7	2380.7	2272.7	2186.9	2168.8	2163.8	2166.8	2173.8	2193.0	2212.2
30°	2645.9	2585.5	2425.0	2252.5	2132.5	2107.3	2091.1	2098.2	2120.4	2139.6	2160.8
32.5°	2727.6	2667.2	2460.3	2208.2	2062.9	2023.6	2002.3	2011.5	2033.6	2040.7	2065.9
35°	2823.5	2754.9	2475.5	2137.5	1987.3	1926.7	1898.5	1885.4	1896.5	1889.4	1911.6
37.5°	2930.5	2858.8	2473.4	2044.8	1898.5	1828.9	1789.5	1740.1	1716.9	1692.7	1707.9
40°	3088.8	2985.9	2449.2	1932.7	1788.5	1725.0	1654.4	1570.6	1518.1	1470.8	1473.7
42.5°	3304.7	3162.4	2404.9	1809.7	1664.5	1604.9	1509.1	1411.2	1328.5	1249.9	1242.8
45°	3626.4	3393.5	2349.4	1678.5	1530.3	1471.8	1367.9	1257.9	1164.1	1063.2	1051.1
47.5°	4090.5	3704.1	2296.9	1529.3	1389.1	1335.6	1241.8	1139.9	1028.9	931.1	919.9
50°	4728.0	4150.0	2248.5	1384.1	1249.9	1209.5	1134.9	1030.9	919.0	840.3	835.3
52.5°	5539.1	4756.3	2228.4	1243.8	1119.7	1104.5	1045.1	948.2	842.3	775.7	770.7
55°	6470.1	5481.6	2228.4	1109.7	1005.7	1010.8	969.4	879.7	787.8	728.4	722.3
57.5°	7420.4	6215.9	2188.0	985.5	908.9	930.1	903.8	825.1	742.4	680.9	670.9
60°	8296.0	6831.3	2024.6	872.6	823.2	856.4	839.3	771.7	670.9	619.4	611.3
62.5°	8968.9	7178.3	1709.8	782.8	752.6	790.9	781.8	701.1	657.7	636.5	629.5
65°	9305.8	7121.8	1307.4	703.2	693.0	752.6	733.4	730.3	696.1	671.8	663.8
67.5°	9098.9	6635.5	948.2	644.6	658.8	717.2	790.9	803.0	739.4	692.0	684.0
70°	8192.1	5756.0	706.1	589.1	615.3	718.2	901.8	840.3	725.3	669.8	660.7
72.5°	6232.1	4292.3	547.8	530.6	558.8	723.2	951.3	823.2	684.9	740.5	734.4
75°	3563.9	2356.5	439.8	459.0	488.2	675.9	926.1	778.8	653.6	679.9	679.9
77.5°	1358.8	905.9	363.2	388.4	392.4	590.1	885.7	775.7	622.4	607.3	553.8
80°	471.1	354.0	300.6	308.7	303.6	524.6	849.4	674.9	509.4	455.9	440.9
82.5°	192.7	176.5	238.1	228.0	215.9	407.5	685.9	551.8	416.7	368.2	364.2
85°	83.7	111.9	157.3	138.2	125.0	282.5	549.8	467.1	352.1	303.6	302.6
87.5°	17.1	42.3	66.6	62.5	64.6	188.6	390.4	331.9	249.2	186.7	146.3
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)