

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: P965570

Luminaire Tested: **NAV-SB4A-727-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965570
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4A-727-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16893 lumens
Efficiency: N/A
Efficacy: 148.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G3

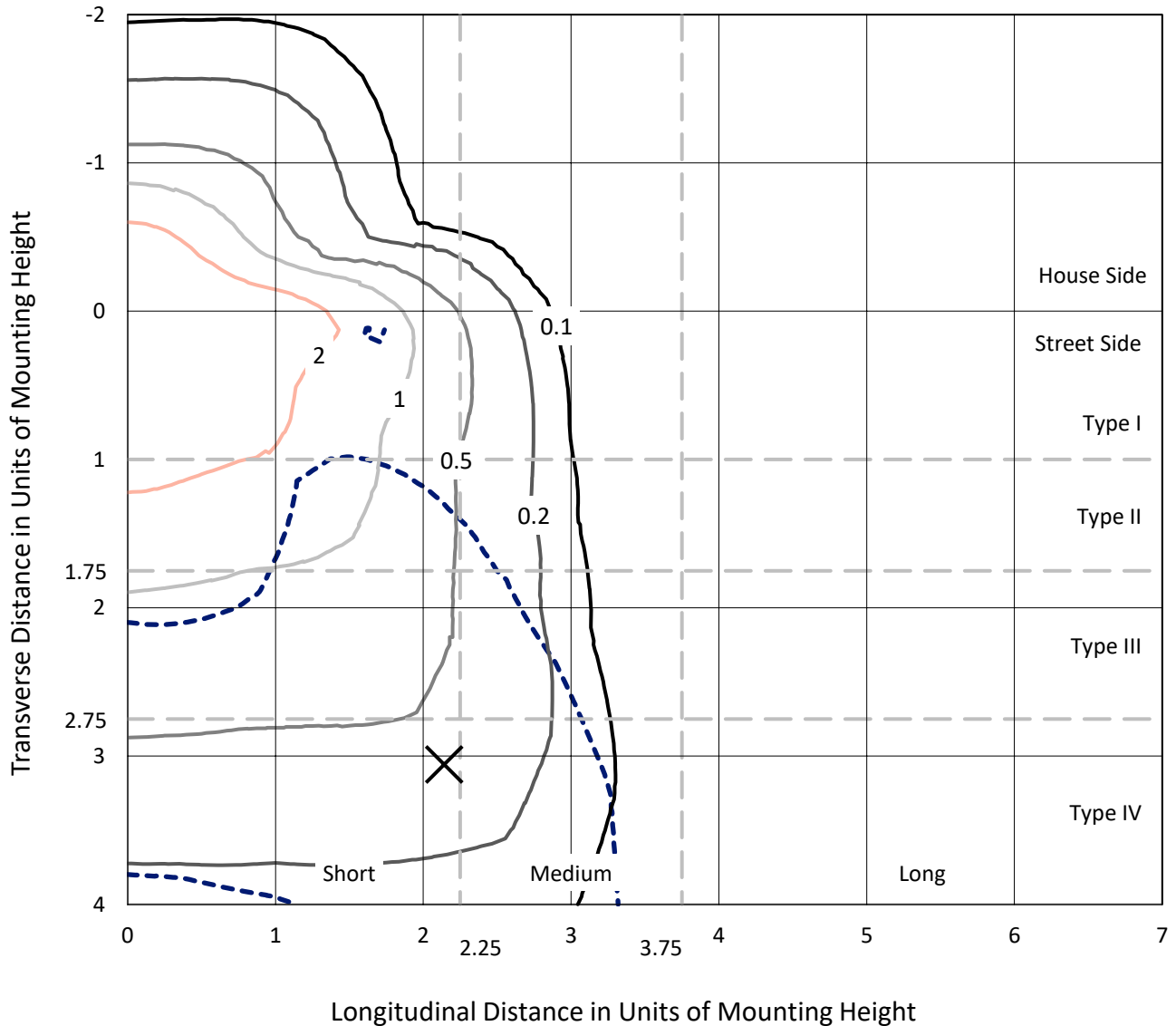
Input Watts (W): 114
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

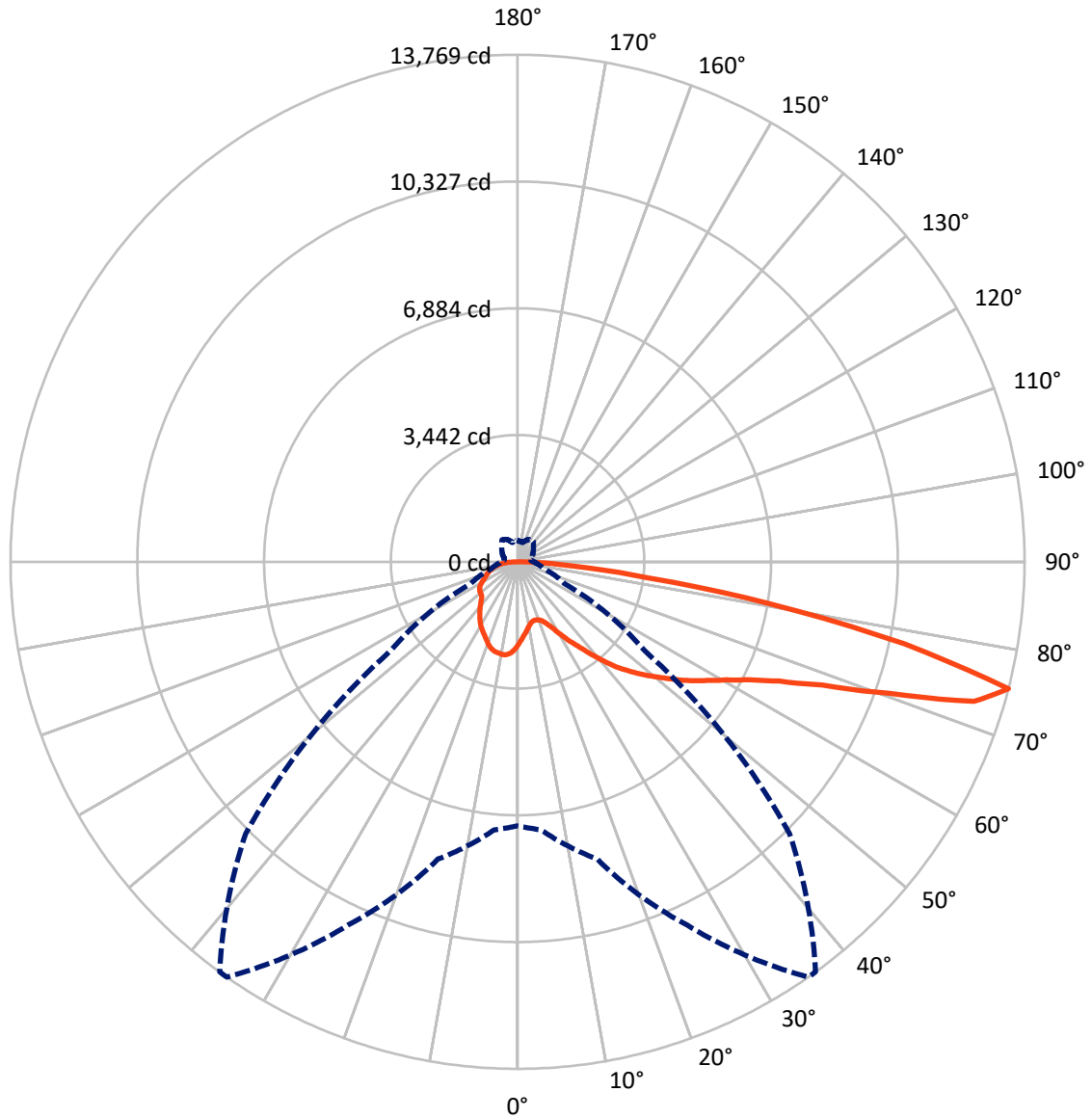
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4020.1	0.0	4020.1
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	12872.9	0.0	12872.9
	% Fixture	76.2	0.0	76.2
Total	Lumens	16893.0	0.0	16893.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.1	1.3
10°-20°	614.8	3.6
20°-30°	1032.4	6.1
30°-40°	1604.4	9.5
40°-50°	2381.4	14.1
50°-60°	3287.7	19.5
60°-70°	3988.7	23.6
70°-80°	3296.4	19.5
80°-90°	474.1	2.8
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°	16893.0	100.0
0°-180°	16893.0	100.0

Coefficient of Utilization



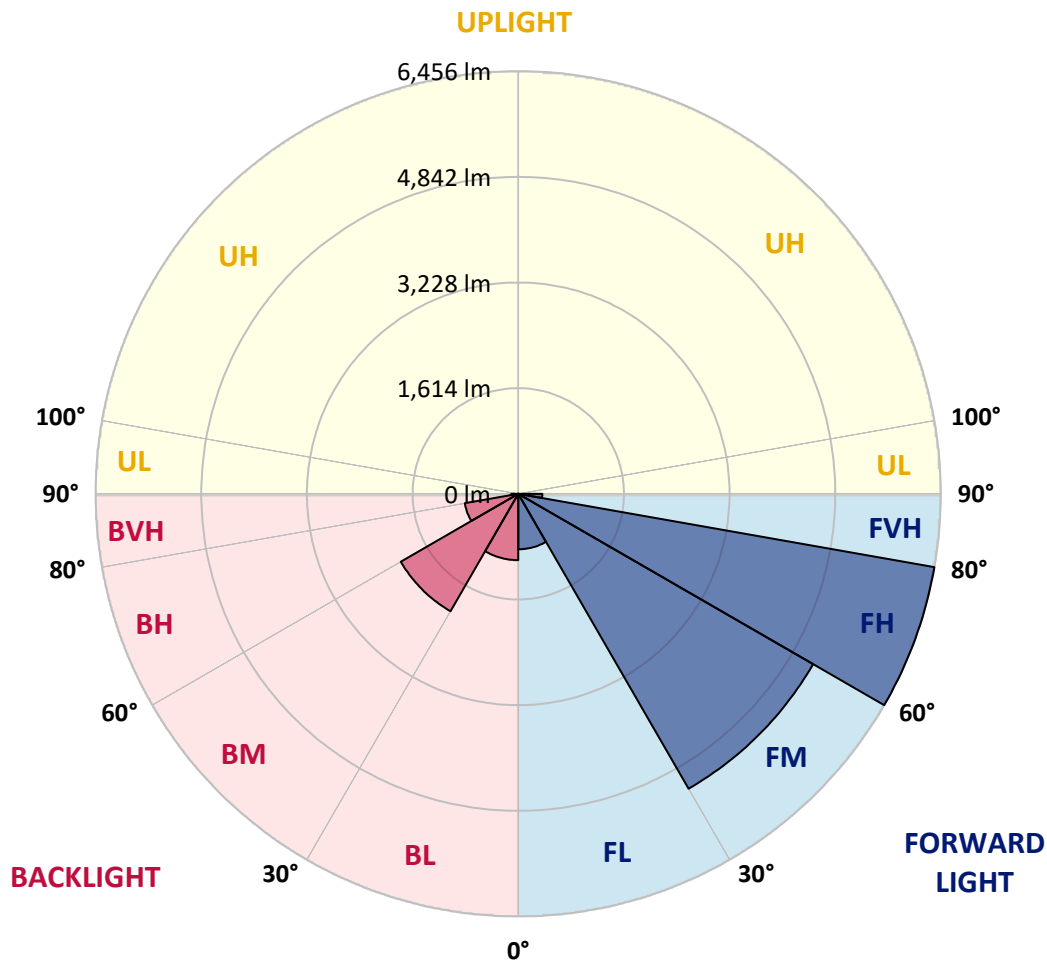
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	847.2	5.0			
FM (30°-60°)	5202.1	30.8			
FH (60°-80°)	6456.3	38.2			G3/7500
FVH (80°-90°)	367.4	2.2			G3/500
BL (0°-30°)	1013.1	6.0	B3/2500		
BM (30°-60°)	2071.4	12.3	B2/2500		
BH (60°-80°)	828.8	4.9	B2/1000		G2/1000
BVH (80°-90°)	106.8	0.6			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°	36°	45°	55°	65°	75°	85°
0°	2251.1	2251.1	2251.1	2251.1	2251.1	2251.1	2251.1	2251.1	2251.1	2251.1	2251.1
2.5°	2075.7	2088.5	2094.1	2091.3	2105.0	2103.2	2122.4	2146.0	2178.9	2210.9	2257.5
5°	1915.9	1929.7	1941.6	1952.5	1979.0	1987.2	2017.3	2063.0	2123.3	2184.5	2261.1
7.5°	1767.1	1779.0	1797.2	1817.3	1862.1	1870.3	1920.5	1991.8	2075.7	2165.3	2271.2
10°	1645.6	1657.5	1676.7	1699.6	1755.2	1765.3	1829.2	1924.1	2033.8	2147.0	2282.2
12.5°	1593.6	1597.3	1608.2	1631.0	1679.5	1685.8	1756.1	1864.8	1992.7	2133.3	2298.6
15°	1590.8	1598.2	1599.1	1610.9	1651.1	1653.8	1718.7	1826.4	1967.1	2130.6	2323.3
17.5°	1618.3	1623.7	1615.5	1622.8	1656.6	1661.1	1712.3	1808.2	1958.9	2142.5	2365.3
20°	1691.2	1695.9	1671.2	1661.1	1685.8	1689.5	1739.7	1820.1	1967.1	2167.1	2422.8
22.5°	1846.5	1849.3	1789.0	1747.9	1749.8	1751.6	1795.4	1868.5	1999.1	2211.8	2495.9
25°	2088.5	2086.7	1990.9	1911.4	1865.7	1855.7	1884.9	1947.0	2053.0	2271.2	2589.9
27.5°	2371.6	2357.9	2262.1	2143.4	2043.8	2029.2	2022.8	2049.3	2129.6	2349.7	2705.0
30°	2691.2	2678.5	2575.3	2420.0	2282.2	2258.4	2198.1	2184.5	2243.8	2456.6	2864.8
32.5°	3042.0	3033.8	2910.5	2722.3	2537.9	2510.4	2409.1	2372.6	2419.1	2618.3	3087.6
35°	3336.1	3328.7	3226.4	3032.9	2807.3	2773.4	2670.3	2629.2	2652.9	2825.5	3378.9
37.5°	3601.7	3598.2	3510.4	3357.9	3125.0	3084.0	2968.0	2954.3	2949.7	3098.6	3732.3
40°	3848.4	3839.2	3747.9	3667.6	3494.9	3457.5	3355.2	3343.3	3308.6	3434.7	4132.4
42.5°	4121.4	4097.6	3965.2	3927.8	3881.3	3850.2	3789.0	3790.9	3714.1	3813.6	4556.1
45°	4344.3	4330.5	4194.5	4172.6	4222.8	4210.0	4263.0	4276.6	4127.8	4210.9	4996.3
47.5°	4583.5	4570.7	4455.7	4440.1	4576.2	4579.8	4767.1	4771.6	4531.4	4623.7	5437.3
50°	4878.5	4860.2	4746.1	4765.2	4917.7	4931.5	5273.9	5242.9	4903.1	5042.9	5874.8
52.5°	5073.0	5083.9	5059.3	5090.4	5298.5	5311.3	5772.5	5693.1	5271.2	5456.6	6304.1
55°	5216.3	5238.3	5315.0	5386.3	5700.3	5713.1	6242.9	6121.4	5576.2	5840.1	6707.7
57.5°	5400.8	5369.8	5513.2	5652.0	6082.1	6115.9	6700.3	6534.2	5846.5	6170.7	6984.4
60°	5665.7	5643.8	5755.2	5960.7	6509.5	6563.4	7184.3	6905.8	6044.6	6432.8	7038.3
62.5°	6202.7	6147.8	6165.2	6346.9	7048.3	7119.5	7730.4	7230.0	6143.3	6535.1	6749.7
65°	7005.4	6911.3	6823.6	6949.7	7807.2	7877.5	8346.9	7484.9	6106.7	6336.9	5983.4
67.5°	8016.3	7923.1	7815.4	7934.1	8925.0	8980.7	9107.6	7628.2	5819.1	5573.4	4629.2
70°	8850.1	8815.4	8944.2	9432.8	10710.3	10712.2	10082.9	7509.5	5031.0	3951.6	2678.5
72.5°	8739.6	8718.5	9397.1	10907.6	12960.5	12912.1	11006.2	6610.8	3389.0	1782.6	1003.7
75°	7169.8	7305.8	8356.9	10881.1	13768.7	13762.4	10441.0	4202.7	1401.8	738.8	518.8
77.5°	3844.7	4060.2	5425.5	8033.6	10748.7	10910.3	7340.5	1470.3	601.8	473.0	358.9
80°	1253.9	1442.0	2162.5	4090.4	6984.4	6954.2	3146.0	577.2	411.8	335.2	248.4
82.5°	532.4	554.3	966.2	1931.5	3584.4	3528.8	1001.8	331.5	289.5	229.2	153.4
85°	208.2	232.9	426.5	893.2	1552.5	1518.7	361.6	164.4	185.4	149.8	91.3
87.5°	68.5	83.1	152.5	306.0	483.1	465.8	88.6	56.6	80.4	68.5	32.9
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°	2251.1	2251.1	2251.1	2251.1	2251.1	2251.1	2251.1	2251.1	2251.1	2251.1	2251.1
2.5°	2270.3	2284.9	2302.3	2327.8	2349.7	2368.0	2387.2	2399.0	2403.6	2417.4	2416.4
5°	2286.8	2318.7	2361.6	2403.6	2444.7	2469.3	2491.3	2502.2	2512.3	2519.6	2521.4
7.5°	2314.1	2355.2	2422.8	2477.6	2512.3	2532.4	2547.0	2543.3	2547.0	2548.9	2551.5
10°	2337.8	2395.4	2475.8	2527.9	2554.3	2555.2	2551.5	2538.8	2532.4	2533.3	2535.1
12.5°	2366.2	2430.1	2516.9	2560.7	2568.0	2547.9	2532.4	2510.4	2502.2	2498.6	2496.8
15°	2404.5	2477.6	2561.6	2578.1	2559.7	2534.2	2507.8	2472.1	2453.8	2439.2	2443.8
17.5°	2451.1	2531.4	2596.3	2584.4	2545.2	2503.2	2460.2	2406.4	2368.9	2353.4	2354.3
20°	2516.0	2588.1	2622.8	2570.7	2511.4	2447.5	2374.4	2308.6	2274.0	2258.4	2256.6
22.5°	2594.5	2663.9	2648.4	2547.0	2463.0	2360.7	2269.4	2221.0	2203.6	2192.7	2194.5
25°	2688.6	2747.9	2666.6	2512.3	2383.5	2245.7	2175.4	2159.8	2151.6	2143.4	2143.4
27.5°	2811.0	2842.8	2680.4	2461.1	2259.3	2123.3	2097.7	2100.4	2097.7	2084.0	2086.7
30°	2972.6	2966.1	2693.1	2378.0	2116.8	2012.8	2014.5	2026.4	2028.3	2019.1	2023.8
32.5°	3185.4	3120.5	2699.5	2270.3	1980.8	1915.9	1917.8	1930.6	1939.7	1924.1	1931.5
35°	3442.9	3300.4	2689.5	2135.2	1875.7	1823.7	1810.0	1813.6	1816.4	1801.8	1811.9
37.5°	3743.3	3502.2	2644.7	1985.3	1789.0	1733.3	1704.1	1679.5	1664.8	1651.1	1660.3
40°	4073.0	3722.3	2562.5	1839.3	1692.2	1637.4	1593.6	1547.0	1497.7	1479.4	1487.7
42.5°	4418.2	3948.8	2463.0	1699.6	1580.8	1536.1	1489.4	1421.9	1347.9	1310.5	1315.1
45°	4776.2	4180.8	2365.3	1561.6	1466.7	1447.5	1393.6	1312.3	1231.9	1184.5	1180.8
47.5°	5126.8	4399.9	2221.9	1422.8	1359.8	1380.8	1338.8	1263.9	1174.4	1099.5	1091.3
50°	5462.0	4605.4	1987.2	1282.2	1273.0	1360.7	1320.5	1212.8	1110.5	1014.6	1006.3
52.5°	5794.4	4771.6	1686.7	1154.4	1226.5	1355.3	1296.8	1178.0	1053.0	952.5	941.6
55°	6076.6	4857.5	1397.3	1044.8	1158.9	1308.6	1268.4	1136.9	971.7	864.8	855.7
57.5°	6237.3	4788.1	1156.1	937.0	1065.7	1231.9	1220.1	1049.3	874.8	792.6	781.8
60°	6167.9	4506.8	958.9	843.0	977.1	1148.8	1136.0	962.6	800.9	723.2	712.3
62.5°	5785.3	3970.7	802.7	760.8	896.8	1063.9	1052.1	895.8	744.3	669.4	657.5
65°	5014.5	3230.1	681.3	692.2	815.5	961.7	979.0	840.2	699.6	626.5	614.6
67.5°	3824.6	2339.7	586.3	632.8	736.1	861.2	911.4	800.0	662.0	592.7	581.7
70°	2179.9	1328.7	505.9	575.3	665.7	768.0	859.4	768.0	621.9	564.4	557.1
72.5°	826.5	610.1	437.5	517.8	598.2	689.5	801.9	717.8	575.3	532.4	525.1
75°	441.1	371.7	368.1	450.2	520.5	612.7	729.7	668.5	540.6	562.5	580.8
77.5°	300.4	263.0	307.8	385.4	435.6	527.9	652.9	593.6	468.5	466.7	430.1
80°	208.2	186.3	250.2	310.5	337.0	443.8	569.9	509.6	381.7	356.2	340.6
82.5°	125.2	121.5	187.2	232.0	238.3	342.5	472.1	427.4	312.3	272.1	274.0
85°	68.5	72.2	119.6	136.1	138.8	239.2	369.8	330.6	240.2	201.8	203.7
87.5°	19.2	24.7	43.9	53.9	66.6	124.2	220.1	196.4	120.5	84.0	84.0
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)