

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: P962904

Luminaire Tested: **NAV-SB2D-722-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962904
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-SB2D-722-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17031.4 lumens
Efficiency: N/A
Efficacy: 115.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G3

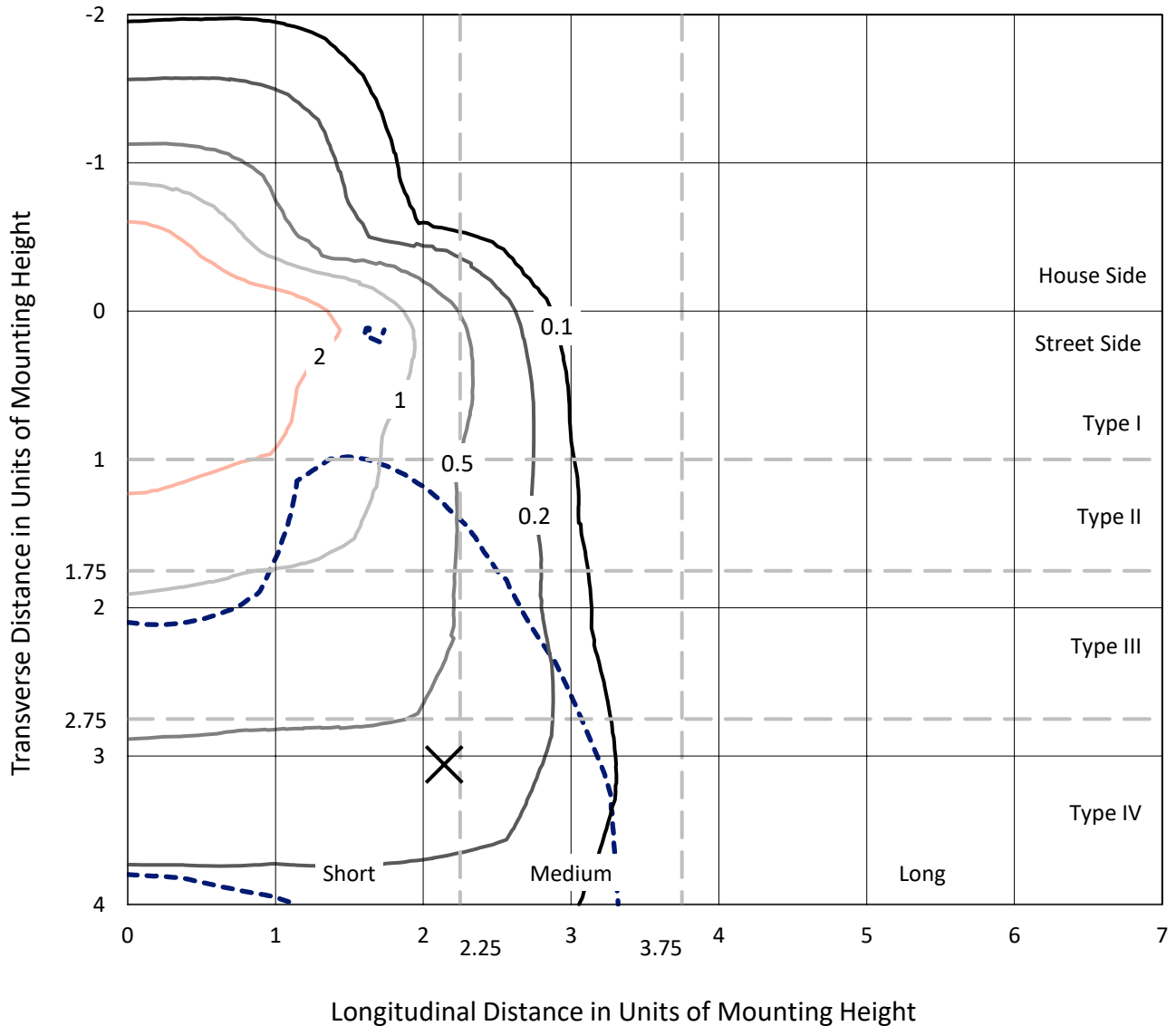
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

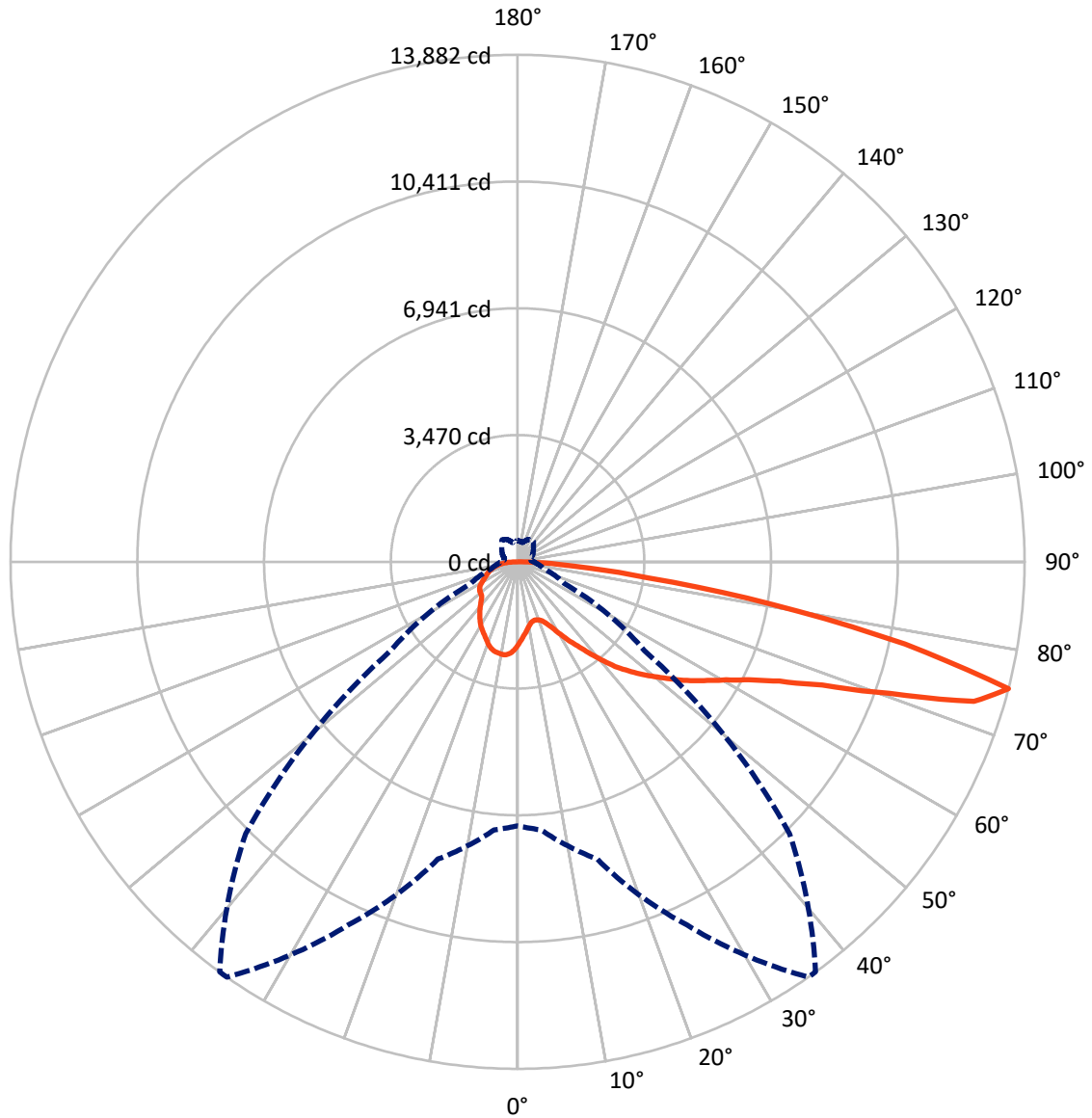
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 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	4053.1	0.0	4053.1
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	12978.4	0.0	12978.4
	% Fixture	76.2	0.0	76.2
Total	Lumens	17031.4	0.0	17031.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.9	1.3
10°-20°	619.8	3.6
20°-30°	1040.8	6.1
30°-40°	1617.6	9.5
40°-50°	2400.9	14.1
50°-60°	3314.6	19.5
60°-70°	4021.4	23.6
70°-80°	3323.4	19.5
80°-90°	478.0	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°	17031.4	100.0
0°-180°	17031.4	100.0

Coefficient of Utilization



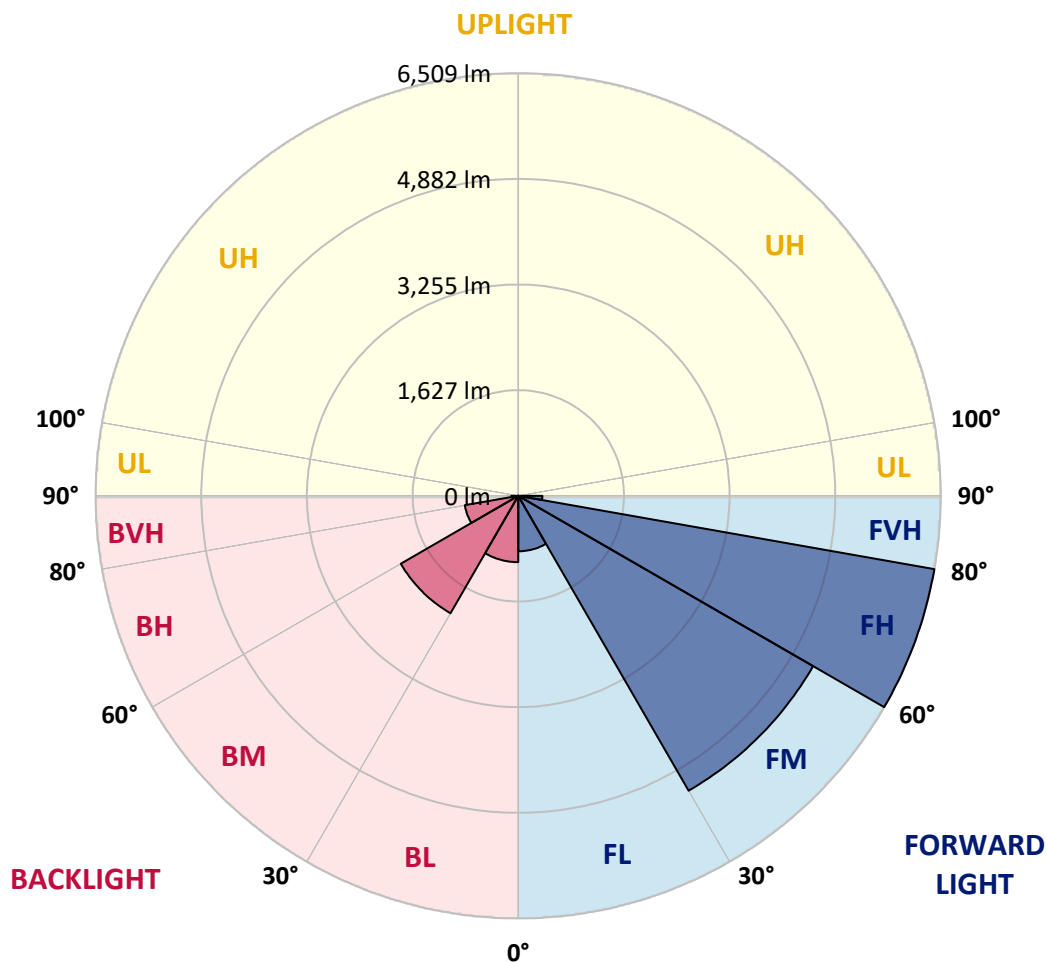
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	854.1	5.0			
FM (30°-60°)	5244.7	30.8			
FH (60°-80°)	6509.1	38.2			G3/7500
FVH (80°-90°)	370.4	2.2			G3/500
BL (0°-30°)	1021.4	6.0	B3/2500		
BM (30°-60°)	2088.4	12.3	B2/2500		
BH (60°-80°)	835.6	4.9	B2/1000		G2/1000
BVH (80°-90°)	107.6	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°	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6
2.5°	2092.7	2105.7	2111.2	2108.4	2122.3	2120.4	2139.7	2163.7	2196.8	2229.1	2276.0
5°	1931.6	1945.4	1957.4	1968.5	1995.2	2003.5	2033.8	2079.9	2140.6	2202.3	2279.7
7.5°	1781.6	1793.5	1812.0	1832.2	1877.3	1885.6	1936.2	2008.1	2092.7	2183.0	2289.8
10°	1659.2	1671.1	1690.4	1713.4	1769.6	1779.7	1844.2	1939.9	2050.4	2164.6	2300.8
12.5°	1606.7	1610.3	1621.3	1644.4	1693.2	1699.7	1770.5	1880.1	2009.0	2150.8	2317.4
15°	1603.9	1611.2	1612.1	1624.1	1664.6	1667.4	1732.8	1841.4	1983.2	2148.0	2342.3
17.5°	1631.5	1637.0	1628.7	1636.1	1670.1	1674.7	1726.3	1823.0	1975.0	2160.0	2384.7
20°	1705.2	1709.8	1684.9	1674.7	1699.7	1703.3	1754.0	1835.0	1983.2	2184.9	2442.7
22.5°	1861.7	1864.5	1803.7	1762.3	1764.1	1765.9	1810.2	1883.7	2015.5	2230.0	2516.3
25°	2105.7	2103.8	2007.2	1927.0	1881.0	1870.9	1900.4	1963.0	2069.8	2289.8	2611.1
27.5°	2391.1	2377.3	2280.6	2160.9	2060.6	2045.8	2039.3	2066.1	2147.1	2369.0	2727.1
30°	2713.4	2700.5	2596.4	2439.9	2300.8	2276.9	2216.2	2202.3	2262.2	2476.7	2888.2
32.5°	3066.9	3058.6	2934.3	2744.6	2558.6	2531.0	2428.8	2392.0	2439.0	2639.7	3112.9
35°	3363.3	3356.0	3252.8	3057.7	2830.2	2796.2	2692.2	2650.8	2674.6	2848.7	3406.6
37.5°	3631.3	3627.6	3539.2	3385.5	3150.6	3109.2	2992.3	2978.4	2973.9	3124.0	3763.0
40°	3879.8	3870.7	3778.6	3697.6	3523.5	3485.8	3382.7	3370.7	3335.8	3462.8	4166.2
42.5°	4155.1	4131.3	3997.7	3960.0	3913.0	3881.7	3820.1	3821.8	3744.5	3844.9	4593.4
45°	4379.8	4366.0	4228.8	4206.7	4257.3	4244.4	4297.8	4311.7	4161.6	4245.3	5037.2
47.5°	4621.0	4608.2	4492.2	4476.5	4613.6	4617.3	4806.1	4810.7	4568.5	4661.6	5481.9
50°	4918.5	4900.0	4784.9	4804.3	4958.0	4971.9	5317.1	5285.8	4943.3	5084.2	5923.0
52.5°	5114.5	5125.6	5100.7	5132.1	5342.0	5354.8	5819.8	5739.7	5314.3	5501.3	6355.6
55°	5259.1	5281.2	5358.5	5430.3	5747.1	5760.0	6294.0	6171.5	5621.8	5887.9	6762.6
57.5°	5445.1	5413.7	5558.4	5698.3	6132.0	6166.0	6755.3	6587.7	5894.4	6221.2	7041.5
60°	5712.1	5690.0	5802.3	6009.5	6562.8	6617.1	7243.3	6962.4	6094.1	6485.5	7095.9
62.5°	6253.4	6198.2	6215.7	6399.0	7106.0	7177.9	7793.8	7289.3	6193.6	6588.6	6805.0
65°	7062.8	6968.0	6879.5	7006.6	7871.2	7942.0	8415.2	7546.2	6156.8	6388.8	6032.5
67.5°	8082.0	7988.0	7879.5	7999.1	8998.1	9054.2	9182.3	7690.7	5866.8	5619.0	4667.0
70°	8922.6	8887.6	9017.4	9510.1	10798.1	10799.9	10165.5	7571.0	5072.2	3983.9	2700.5
72.5°	8811.2	8790.0	9474.1	10996.9	13066.7	13017.9	11096.3	6665.1	3416.7	1797.2	1011.9
75°	7228.5	7365.6	8425.4	10970.3	13881.6	13875.1	10526.4	4237.1	1413.3	744.9	523.0
77.5°	3876.1	4093.4	5469.9	8099.4	10836.7	10999.7	7400.7	1482.4	606.7	476.9	361.8
80°	1264.1	1453.8	2180.3	4123.9	7041.5	7011.2	3171.9	581.9	415.2	337.9	250.4
82.5°	536.8	558.8	974.2	1947.3	3613.7	3557.7	1010.0	334.3	291.8	231.1	154.7
85°	209.9	234.8	430.0	900.5	1565.2	1531.1	364.6	165.7	186.9	151.0	92.0
87.5°	69.1	83.7	153.8	308.4	487.1	469.6	89.3	57.1	81.0	69.1	33.1
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°	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6	2269.6
2.5°	2288.9	2303.6	2321.1	2346.8	2369.0	2387.4	2406.7	2418.7	2423.3	2437.1	2436.2
5°	2305.4	2337.7	2381.0	2423.3	2464.7	2489.6	2511.7	2522.7	2532.9	2540.3	2542.1
7.5°	2333.1	2374.5	2442.7	2497.9	2532.9	2553.2	2567.8	2564.1	2567.8	2569.7	2572.4
10°	2357.0	2415.0	2496.1	2548.6	2575.2	2576.1	2572.4	2559.5	2553.2	2554.1	2555.9
12.5°	2385.6	2450.1	2537.5	2581.7	2589.0	2568.8	2553.2	2531.0	2522.7	2519.0	2517.2
15°	2424.2	2497.9	2582.6	2599.2	2580.7	2555.0	2528.3	2492.4	2473.9	2459.2	2463.8
17.5°	2471.2	2552.2	2617.5	2605.7	2566.0	2523.7	2480.4	2426.1	2388.4	2372.7	2373.6
20°	2536.6	2609.2	2644.3	2591.8	2532.0	2467.5	2393.9	2327.6	2292.6	2276.9	2275.1
22.5°	2615.7	2685.7	2670.0	2567.8	2483.2	2380.0	2288.0	2239.2	2221.7	2210.6	2212.5
25°	2710.6	2770.4	2688.5	2532.9	2403.0	2264.0	2193.1	2177.5	2169.2	2160.9	2160.9
27.5°	2833.9	2866.2	2702.3	2481.3	2277.9	2140.6	2114.9	2117.6	2114.9	2101.0	2103.8
30°	2996.9	2990.4	2715.1	2397.6	2134.3	2029.3	2031.0	2043.0	2044.9	2035.6	2040.3
32.5°	3211.4	3146.0	2721.6	2288.9	1997.0	1931.6	1933.5	1946.4	1955.6	1939.9	1947.3
35°	3471.1	3327.5	2711.5	2152.6	1891.1	1838.6	1824.8	1828.5	1831.3	1816.6	1826.7
37.5°	3773.9	3530.9	2666.3	2001.6	1803.7	1747.5	1718.0	1693.2	1678.4	1664.6	1673.8
40°	4106.4	3752.8	2583.5	1854.3	1706.1	1650.9	1606.7	1559.6	1509.9	1491.6	1499.9
42.5°	4454.3	3981.1	2483.2	1713.4	1593.8	1548.7	1501.7	1433.6	1358.9	1321.2	1325.8
45°	4815.3	4215.0	2384.7	1574.4	1478.7	1459.3	1405.0	1323.1	1242.0	1194.1	1190.4
47.5°	5168.9	4436.0	2240.1	1434.5	1370.9	1392.2	1349.7	1274.3	1184.1	1108.5	1100.2
50°	5506.8	4643.1	2003.5	1292.6	1283.5	1371.9	1331.4	1222.7	1119.6	1023.0	1014.6
52.5°	5841.9	4810.7	1700.6	1163.8	1236.6	1366.3	1307.4	1187.7	1061.6	960.3	949.3
55°	6126.4	4897.2	1408.7	1053.3	1168.4	1319.4	1278.9	1146.3	979.6	871.9	862.7
57.5°	6288.5	4827.2	1165.6	944.6	1074.5	1242.0	1230.1	1057.9	882.0	799.2	788.1
60°	6218.5	4543.7	966.8	849.8	985.1	1158.2	1145.3	970.5	807.5	729.2	718.1
62.5°	5832.7	4003.2	809.3	766.9	904.2	1072.7	1060.7	903.2	750.4	674.9	662.9
65°	5055.6	3256.5	686.9	697.9	822.2	969.5	987.0	847.1	705.3	631.6	619.6
67.5°	3855.9	2358.8	591.1	638.1	742.1	868.3	918.9	806.6	667.5	597.6	586.5
70°	2197.7	1339.7	510.0	580.0	671.2	774.3	866.4	774.3	627.0	569.0	561.6
72.5°	833.2	615.0	441.1	522.0	603.1	695.2	808.4	723.6	580.0	536.8	529.4
75°	444.7	374.7	371.0	453.9	524.8	617.8	735.6	673.9	545.1	567.1	585.6
77.5°	302.9	265.2	310.3	388.6	439.2	532.2	658.4	598.5	472.3	470.5	433.7
80°	209.9	187.8	252.3	313.0	339.8	447.5	574.5	513.7	384.9	359.1	343.4
82.5°	126.2	122.5	188.7	233.9	240.3	345.2	476.0	430.9	314.9	274.4	276.2
85°	69.1	72.8	120.6	137.1	139.9	241.2	372.9	333.3	242.1	203.5	205.3
87.5°	19.4	24.9	44.2	54.3	67.2	125.3	221.9	197.9	121.6	84.7	84.7
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)