

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: P967099

Luminaire Tested: **NAV-SB4D-722-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967099
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4D-722-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34324.2 lumens
Efficiency: N/A
Efficacy: 116.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

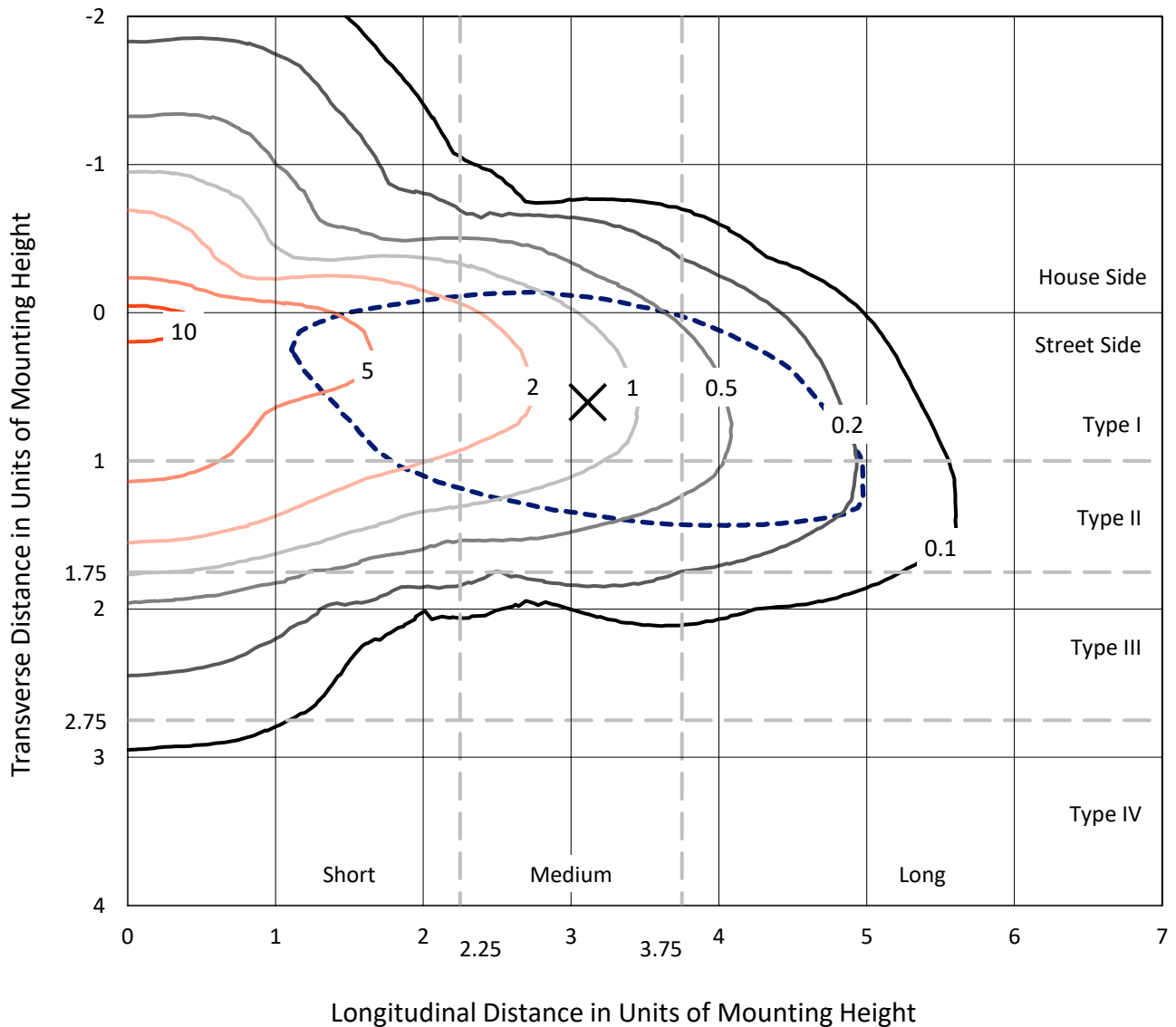
Input Watts (W): 293.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

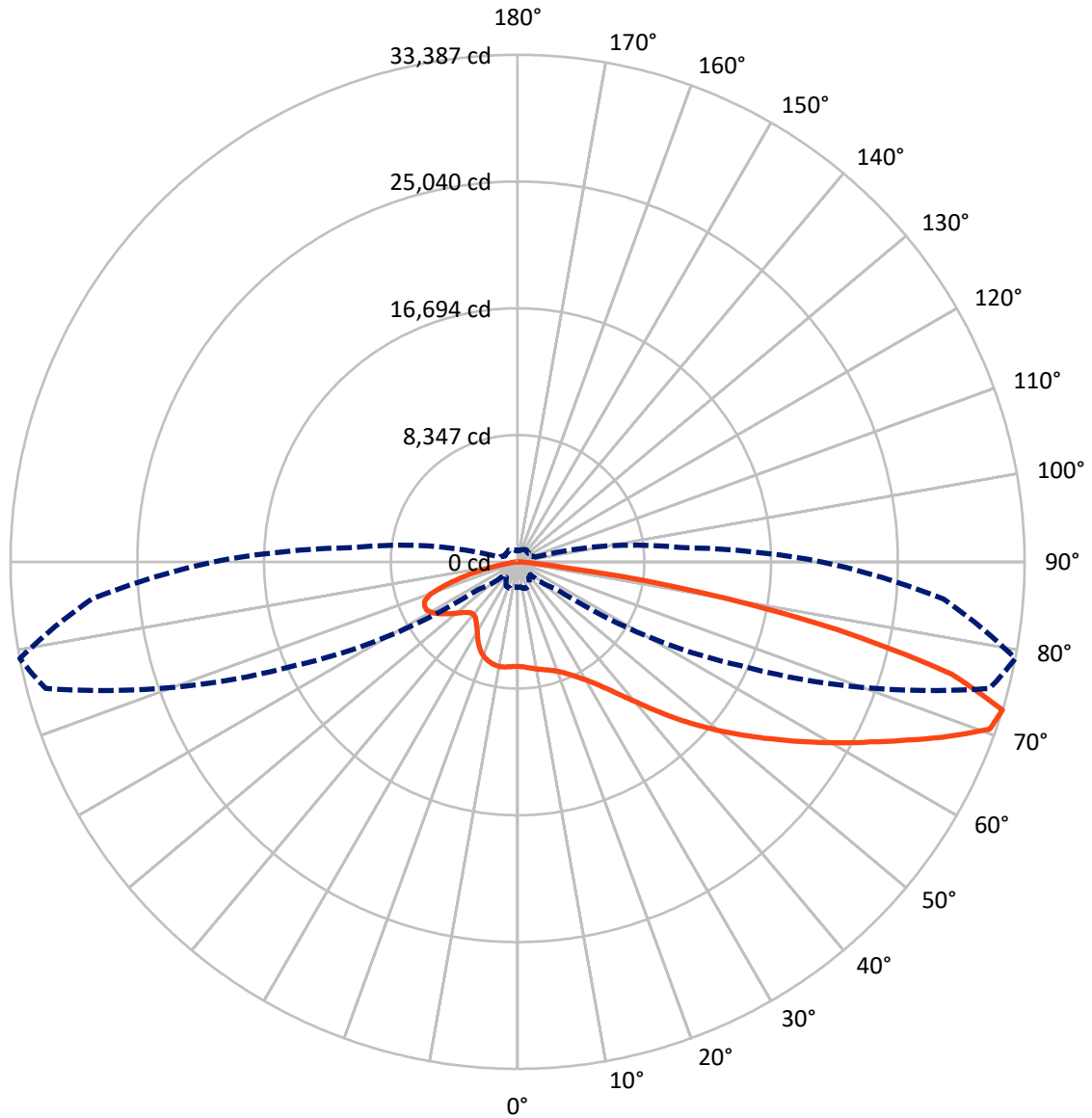
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.1 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7553.2	0.0	7553.2
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	26771.0	0.0	26771.0
	% Fixture	78.0	0.0	78.0
Total	Lumens	34324.2	0.0	34324.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	625.4	1.8
10°-20°	1635.2	4.8
20°-30°	2638.5	7.7
30°-40°	3960.1	11.5
40°-50°	5617.6	16.4
50°-60°	7094.3	20.7
60°-70°	7205.2	21.0
70°-80°	4910.7	14.3
80°-90°	637.1	1.9
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°	34324.2	100.0
0°-180°	34324.2	100.0

Coefficient of Utilization

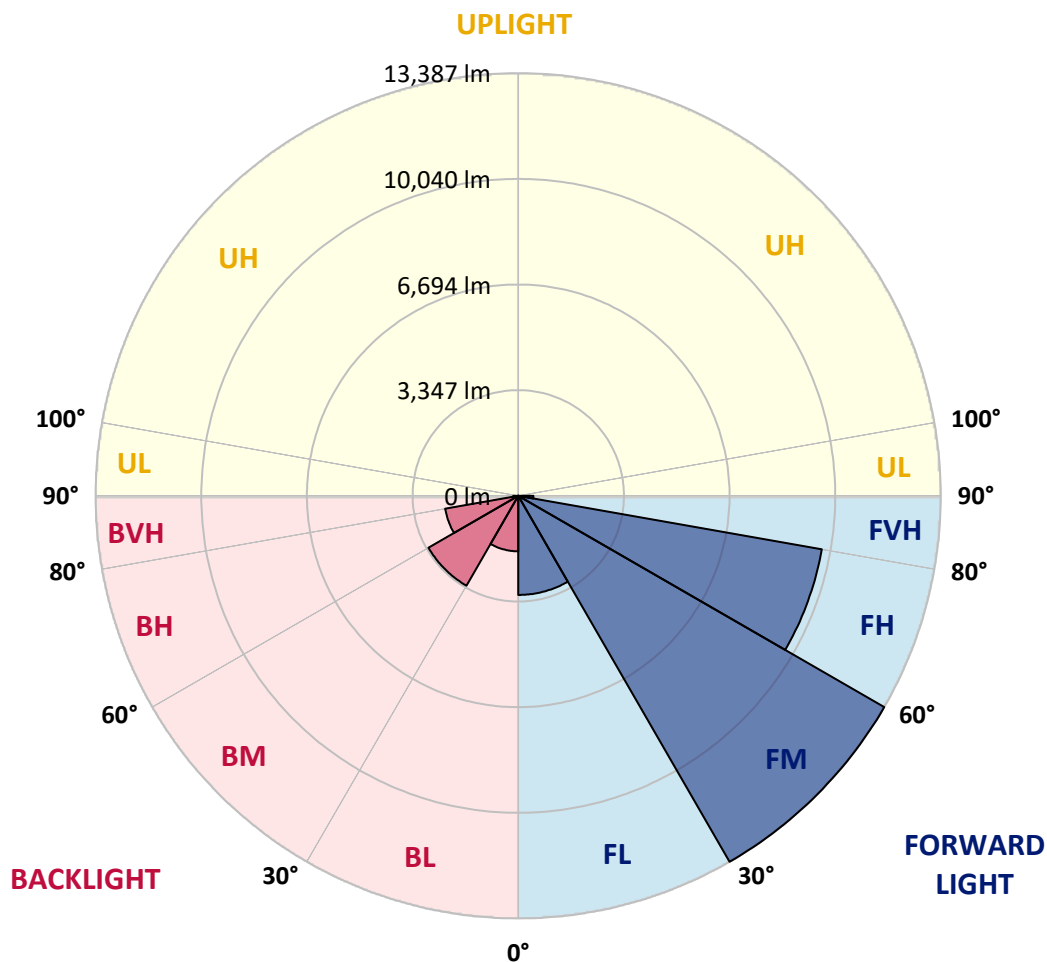


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3139.8	9.1			
FM (30°-60°)	13387.1	39.0			
FH (60°-80°)	9764.1	28.4			G4/12000
FVH (80°-90°)	479.9	1.4			G3/500
BL (0°-30°)	1759.4	5.1	B3/2500		
BM (30°-60°)	3284.8	9.6	B3/5000		
BH (60°-80°)	2351.8	6.9	B3/2500		G3/2500
BVH (80°-90°)	157.2	0.5			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	6890.3	6890.3	6890.3	6890.3	6890.3	6890.3	6890.3	6890.3	6890.3	6890.3	6890.3
2.5°	6893.8	6861.2	6881.1	6874.0	6883.0	6893.8	6897.5	6903.0	6921.1	6919.3	6917.5
5°	6879.4	6846.7	6874.0	6864.8	6888.4	6913.8	6935.7	6955.6	6984.7	6997.4	6979.2
7.5°	6848.5	6826.7	6854.0	6881.1	6924.8	6962.9	6993.8	7039.1	7080.9	7088.2	7100.9
10°	6668.8	6652.5	6715.9	6786.7	6906.6	7010.1	7077.2	7129.9	7175.3	7182.6	7200.7
12.5°	6481.7	6461.8	6532.5	6628.8	6823.1	7010.1	7151.7	7220.7	7260.6	7284.3	7311.4
15°	6450.8	6434.5	6474.5	6558.0	6719.6	6961.1	7202.6	7329.7	7364.1	7391.4	7402.2
17.5°	6599.8	6568.9	6585.2	6614.3	6708.7	6915.7	7242.4	7453.1	7505.8	7534.8	7534.8
20°	6944.7	6901.1	6875.7	6817.6	6801.3	6923.0	7238.9	7602.0	7671.0	7707.3	7716.4
22.5°	7404.1	7375.0	7320.6	7173.5	7013.7	7011.9	7307.8	7792.6	7921.5	7956.0	7934.2
25°	7959.6	7916.1	7847.1	7647.3	7340.5	7188.0	7424.1	8035.9	8252.0	8261.1	8197.5
27.5°	8598.7	8533.4	8438.9	8175.7	7761.7	7463.9	7602.0	8315.5	8631.4	8627.8	8497.0
30°	9272.4	9207.0	9107.1	8787.5	8266.5	7836.2	7848.9	8616.9	9081.7	9061.7	8838.4
32.5°	9764.4	9715.4	9695.4	9448.4	8847.5	8275.5	8132.1	8951.0	9637.3	9619.1	9306.8
35°	10142.0	10078.5	10102.1	9976.8	9481.1	8767.6	8478.9	9348.6	10312.7	10310.9	9922.3
37.5°	10516.0	10459.7	10479.7	10396.2	10067.6	9392.2	8901.9	9835.2	11149.6	11189.6	10666.8
40°	10857.4	10797.5	10877.3	10799.3	10523.3	10056.7	9383.1	10385.3	12119.2	12195.4	11567.2
42.5°	11062.5	11015.4	11147.9	11149.6	10919.1	10617.7	9911.4	10991.7	13241.3	13411.9	12674.8
45°	11133.3	11117.0	11316.7	11358.4	11269.5	10942.7	10387.1	11652.6	14450.4	14755.5	13936.6
47.5°	11057.1	11026.2	11302.2	11456.5	11527.4	11095.2	10781.2	12368.0	15685.1	16131.8	15312.9
50°	10672.2	10612.2	11022.5	11347.6	11599.9	11195.0	11178.8	13194.1	17088.6	17576.9	16696.3
52.5°	9980.4	9935.0	10401.6	10966.3	11440.1	11244.0	11625.3	14096.4	18421.2	19053.0	18114.4
55°	9096.3	9036.3	9550.1	10287.3	11042.5	11227.7	12072.0	15105.9	19993.5	20634.5	19579.6
57.5°	7694.6	7574.7	8224.7	9096.3	10394.4	11207.8	12536.8	16109.9	21591.3	22359.2	21142.8
60°	5650.2	5472.3	6269.3	7302.4	9127.1	11013.5	13112.3	17235.6	23508.6	24200.4	22849.5
62.5°	3289.8	3186.4	3707.5	4671.5	6879.4	9869.6	13435.5	18544.7	25393.1	26119.5	24527.1
65°	2554.6	2525.5	2570.9	2645.3	3829.1	7389.5	12438.8	19821.0	27789.8	28298.1	26275.6
67.5°	2336.7	2314.9	2334.8	2195.0	1942.7	4116.0	9840.6	20144.2	30357.0	30665.7	27806.1
70°	2077.1	2051.6	2117.0	1997.2	1528.8	1871.9	6358.3	18971.3	32399.6	32978.8	28969.9
72.5°	1692.2	1663.1	1815.6	1761.2	1287.3	1201.9	3193.7	16184.3	32185.4	33387.3	28136.6
75°	1300.0	1283.6	1465.2	1510.5	1049.4	946.0	1532.4	12030.2	28323.5	29534.6	24249.3
77.5°	1009.5	996.8	1089.4	1254.6	846.0	733.5	942.3	7631.0	21344.4	21556.8	16710.9
80°	757.1	720.8	806.2	971.4	659.1	535.6	639.1	4450.0	13491.9	12230.0	7273.3
82.5°	473.9	455.7	526.5	648.2	464.8	368.6	415.7	2458.4	5406.9	3184.6	1403.4
85°	270.5	263.2	286.9	370.4	252.4	212.4	237.8	1085.8	987.7	679.1	423.0
87.5°	109.0	105.3	130.7	165.2	92.6	78.1	83.5	261.5	217.9	201.5	139.8
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°	6890.3	6890.3	6890.3	6890.3	6890.3	6890.3	6890.3	6890.3	6890.3	6890.3	6890.3
2.5°	6910.2	6910.2	6884.8	6844.8	6799.4	6770.4	6723.2	6710.5	6661.5	6646.9	6670.6
5°	6993.8	6979.2	6901.1	6788.6	6634.2	6492.7	6336.4	6238.5	6100.5	6051.4	6087.8
7.5°	7099.0	7059.1	6924.8	6677.9	6354.7	6036.9	5706.5	5455.9	5216.2	5130.9	5141.8
10°	7195.3	7139.0	6910.2	6478.1	5918.9	5368.7	4842.2	4473.7	4194.1	4079.7	4105.1
12.5°	7291.5	7188.0	6814.0	6145.9	5299.8	4553.6	3992.6	3705.7	3533.2	3395.2	3440.6
15°	7382.3	7237.0	6665.2	5701.0	4620.7	3863.6	3449.6	3220.9	3082.9	2992.2	3008.5
17.5°	7487.6	7278.8	6441.8	5136.4	3974.3	3386.1	3048.5	2910.4	2883.2	2872.3	2879.5
20°	7634.6	7317.0	6147.6	4504.6	3498.7	3004.9	2830.5	2817.8	2816.0	2810.5	2828.7
22.5°	7792.6	7362.3	5759.2	3930.8	3093.8	2767.0	2736.1	2710.7	2694.4	2692.6	2712.6
25°	7979.6	7376.8	5272.5	3460.6	2748.8	2654.4	2618.2	2580.0	2569.1	2569.1	2580.0
27.5°	8161.2	7327.8	4706.1	3052.0	2554.6	2550.9	2503.8	2491.1	2489.2	2494.6	2509.2
30°	8342.8	7235.2	4143.3	2674.4	2442.0	2442.0	2425.7	2434.8	2442.0	2460.2	2472.9
32.5°	8587.9	7137.2	3673.0	2394.8	2344.0	2325.8	2342.1	2360.3	2367.5	2391.1	2411.1
35°	8947.3	7068.2	3299.0	2242.3	2242.3	2218.7	2227.7	2224.1	2207.7	2196.9	2222.3
37.5°	9423.0	7064.5	2990.3	2171.5	2156.9	2153.3	2155.2	2131.5	2067.9	1991.7	1993.5
40°	9995.0	7162.6	2752.4	2122.5	2111.6	2133.3	2122.5	2058.9	1884.6	1752.0	1748.4
42.5°	10762.9	7442.2	2599.9	2062.5	2095.2	2122.5	2078.9	1859.1	1741.2	1652.2	1648.6
45°	11667.2	7896.1	2521.9	1999.0	2064.4	2097.0	1886.4	1790.2	1695.8	1588.6	1581.4
47.5°	12691.1	8468.0	2503.8	1939.1	1995.4	2015.4	1804.7	1761.2	1654.0	1537.8	1528.8
50°	13805.9	9145.3	2552.8	1868.3	1895.5	1826.6	1777.5	1737.6	1626.8	1512.4	1499.7
52.5°	14958.8	9891.5	2650.8	1772.0	1795.6	1719.3	1766.6	1732.0	1610.5	1456.1	1445.2
55°	16091.8	10643.1	2745.3	1659.5	1694.0	1623.2	1735.7	1710.3	1536.0	1361.7	1352.6
57.5°	17242.9	11391.1	2837.8	1559.6	1595.9	1530.5	1686.7	1652.2	1452.5	1274.6	1270.9
60°	18439.3	12117.4	2881.4	1463.4	1488.8	1445.2	1612.2	1552.4	1358.1	1185.6	1180.2
62.5°	19559.6	12722.0	2810.5	1367.1	1383.5	1365.3	1514.2	1434.4	1263.6	1085.8	1083.9
65°	20683.5	13081.5	2592.7	1272.7	1276.3	1267.3	1376.3	1307.3	1152.9	998.6	987.7
67.5°	21702.0	13283.0	2245.9	1171.1	1162.0	1158.4	1247.3	1169.2	1045.8	911.4	900.6
70°	21918.1	12771.0	1715.7	1051.2	1051.2	1042.1	1105.7	1025.8	927.7	818.9	815.2
72.5°	20019.0	10743.0	1218.3	915.1	929.6	911.4	964.1	896.9	807.9	735.3	713.5
75°	16142.6	7877.9	886.0	775.3	800.7	769.8	818.9	771.6	695.4	693.5	624.5
77.5°	11091.6	4871.3	642.8	639.1	657.2	617.4	673.6	648.2	579.2	548.3	513.8
80°	4733.3	1942.7	468.4	493.8	493.8	457.6	522.9	530.1	470.3	455.7	455.7
82.5°	942.3	552.0	328.6	339.5	319.6	308.6	370.4	410.3	566.5	630.1	631.8
85°	283.2	203.4	197.9	185.2	163.4	165.2	217.9	412.2	508.4	290.5	250.5
87.5°	78.1	50.8	52.7	41.7	34.5	45.4	74.4	312.3	170.7	72.7	61.7
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)