

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: P961397

Luminaire Tested: **NAV-SB2A-735-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961397
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-735-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8986.2 lumens
Efficiency: N/A
Efficacy: 156.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G3

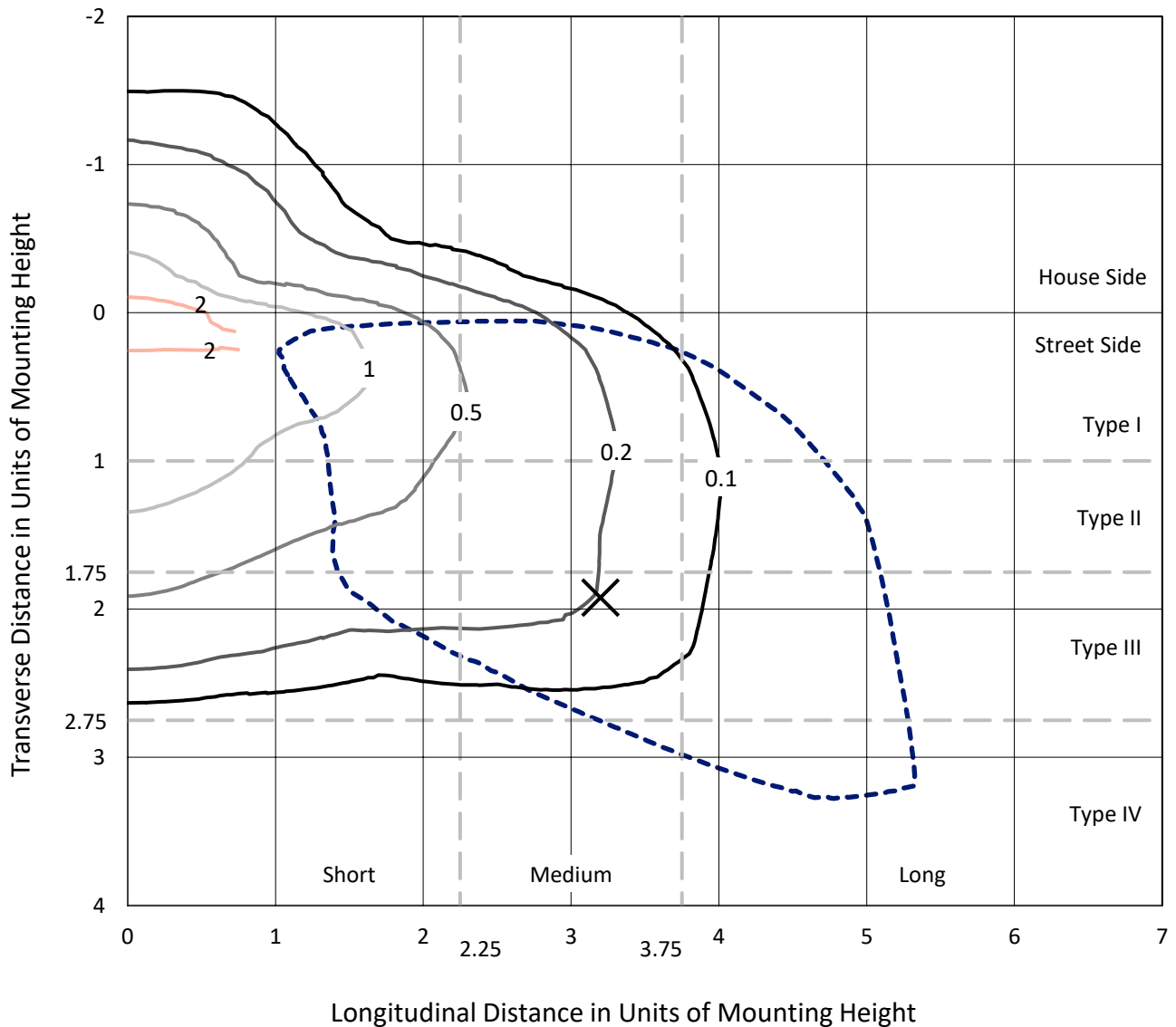
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

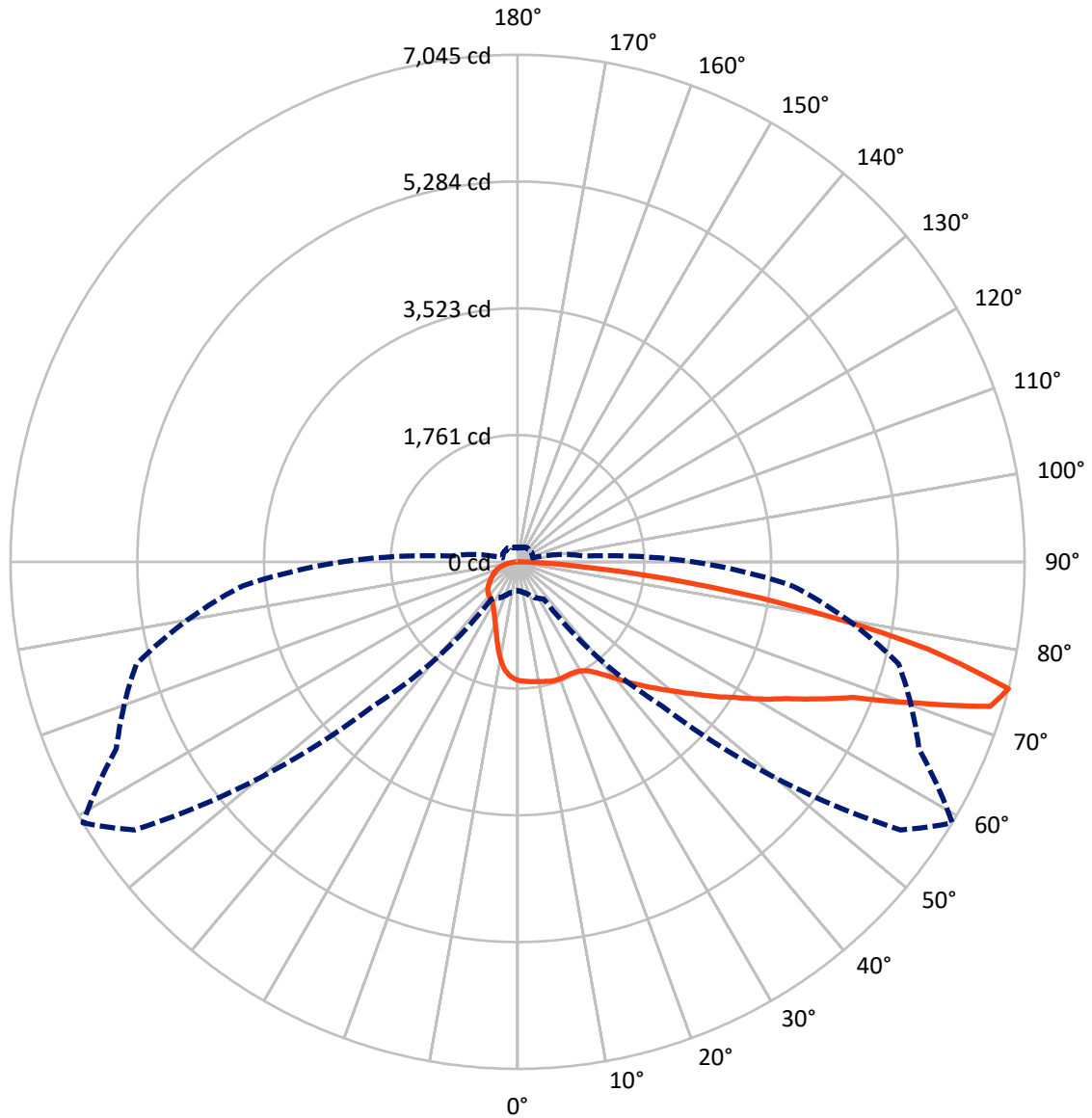
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1685.4	0.0	1685.4
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	7300.8	0.0	7300.8
	% Fixture	81.2	0.0	81.2
Total	Lumens	8986.2	0.0	8986.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.9	1.6
10°-20°	378.0	4.2
20°-30°	574.2	6.4
30°-40°	853.5	9.5
40°-50°	1269.3	14.1
50°-60°	1723.0	19.2
60°-70°	2103.5	23.4
70°-80°	1650.8	18.4
80°-90°	286.0	3.2
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°	8986.2	100.0
0°-180°	8986.2	100.0

Coefficient of Utilization

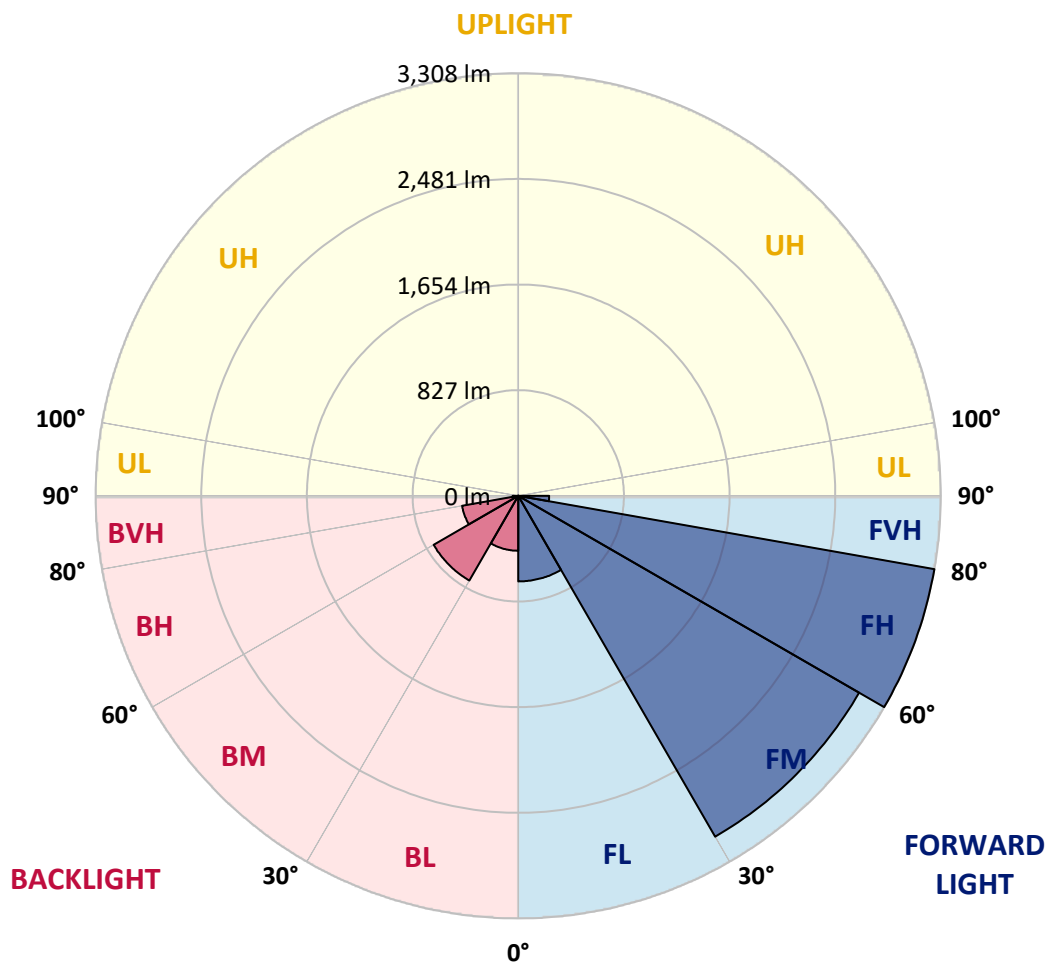


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	670.0	7.5			
FM (30°-60°)	3080.8	34.3			
FH (60°-80°)	3307.7	36.8			G2/5000
FVH (80°-90°)	242.2	2.7			G3/500
BL (0°-30°)	430.1	4.8	B1/500		
BM (30°-60°)	765.0	8.5	B1/1000		
BH (60°-80°)	446.5	5.0	B1/500		G1/500
BVH (80°-90°)	43.8	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3
 Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1649.4	1649.4	1649.4	1649.4	1649.4	1649.4	1649.4	1649.4	1649.4	1649.4	1649.4
2.5°	1663.4	1657.6	1663.4	1661.0	1660.0	1658.1	1658.6	1661.9	1660.0	1662.4	1654.2
5°	1652.3	1648.9	1654.8	1653.2	1659.6	1660.5	1666.8	1670.6	1673.1	1673.5	1667.3
7.5°	1634.0	1630.6	1638.8	1645.5	1659.1	1663.0	1676.0	1682.2	1685.6	1691.5	1682.2
10°	1566.7	1565.3	1585.6	1611.2	1643.1	1663.0	1682.7	1693.4	1698.7	1714.2	1703.6
12.5°	1447.8	1449.8	1476.3	1525.6	1589.5	1653.2	1690.5	1705.9	1714.2	1733.5	1728.7
15°	1334.2	1333.7	1362.7	1415.4	1504.8	1610.7	1694.3	1721.0	1734.9	1763.5	1759.6
17.5°	1268.4	1266.5	1286.8	1327.0	1410.1	1545.5	1684.7	1729.2	1759.1	1794.9	1791.5
20°	1256.3	1252.6	1263.1	1283.0	1341.9	1473.9	1659.6	1729.2	1778.5	1824.9	1823.0
22.5°	1300.4	1294.1	1289.8	1287.3	1313.4	1414.9	1631.0	1723.3	1807.0	1867.9	1864.5
25°	1388.9	1379.1	1356.9	1335.2	1327.5	1388.4	1605.9	1721.9	1849.5	1925.9	1913.4
27.5°	1532.0	1519.9	1474.9	1422.7	1375.8	1401.9	1594.8	1730.6	1896.5	1987.3	1962.2
30°	1709.3	1696.3	1639.7	1559.4	1475.4	1452.1	1608.7	1756.2	1956.3	2069.0	2019.7
32.5°	1868.4	1853.9	1805.5	1723.8	1610.3	1539.1	1653.2	1805.0	2050.6	2182.6	2106.2
35°	2009.5	1992.6	1949.1	1873.7	1775.6	1661.5	1733.5	1891.5	2184.5	2367.2	2223.6
37.5°	2147.8	2128.0	2080.5	2000.8	1932.2	1824.4	1844.2	2002.7	2362.4	2591.5	2379.3
40°	2302.5	2274.0	2216.5	2137.6	2070.9	2015.4	1989.7	2139.1	2543.2	2841.9	2573.7
42.5°	2452.3	2425.3	2356.6	2289.4	2205.8	2189.8	2158.4	2298.6	2741.0	3117.0	2770.9
45°	2613.8	2581.4	2498.2	2413.2	2360.5	2305.8	2321.8	2458.2	2934.8	3397.4	2977.8
47.5°	2765.1	2728.9	2630.7	2536.0	2506.9	2403.5	2471.7	2633.6	3136.4	3681.6	3182.7
50°	2846.8	2811.1	2729.4	2643.8	2621.0	2523.9	2634.1	2826.5	3347.6	3964.9	3379.5
52.5°	2915.0	2876.3	2769.4	2722.1	2715.3	2654.9	2834.2	3046.9	3558.9	4215.3	3569.5
55°	2987.5	2944.4	2808.1	2765.6	2796.5	2801.8	3071.6	3296.8	3782.1	4459.5	3748.8
57.5°	3071.1	3016.5	2845.3	2802.4	2875.8	2973.9	3344.3	3555.9	4001.7	4685.7	3908.3
60°	3149.9	3094.8	2916.8	2860.8	2961.3	3173.6	3657.0	3869.7	4250.2	4887.3	4059.2
62.5°	3165.4	3119.9	2973.9	2973.4	3077.4	3406.6	4027.3	4186.3	4467.2	5086.5	4194.5
65°	2897.6	2869.1	2782.5	2969.1	3243.7	3742.1	4439.6	4591.4	4743.2	5260.5	4313.5
67.5°	2205.3	2209.2	2202.9	2563.0	3109.3	4224.0	5036.6	5025.1	5084.0	5455.8	4450.2
70°	1008.4	1031.1	1179.1	1769.3	2491.1	4279.6	6023.7	5873.5	5511.8	5708.5	4568.7
72.5°	544.8	562.2	622.6	857.1	1497.6	3804.9	6761.4	6868.3	6080.8	5878.8	4438.7
75°	399.7	409.5	451.5	544.8	628.9	2828.0	6497.1	7045.2	6151.8	5481.9	3833.0
77.5°	299.2	303.6	337.9	431.7	322.0	1490.9	5191.3	5834.7	5266.2	4504.0	2831.4
80°	217.1	221.9	247.5	323.9	225.7	545.3	3564.6	4095.5	3606.7	2870.9	1411.1
82.5°	149.9	151.8	162.9	220.5	157.5	211.8	2022.6	2401.6	2013.4	1007.5	380.9
85°	90.4	92.9	97.7	128.6	89.4	100.6	873.0	903.0	601.9	240.8	118.4
87.5°	37.2	39.7	43.5	54.1	35.3	28.1	144.0	180.8	112.6	70.6	36.7
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°	1649.4	1649.4	1649.4	1649.4	1649.4	1649.4	1649.4	1649.4	1649.4	1649.4	1649.4
2.5°	1651.8	1648.4	1639.3	1626.7	1615.1	1600.5	1594.3	1589.0	1584.1	1574.9	1570.6
5°	1661.9	1652.8	1628.1	1596.2	1559.9	1520.3	1481.6	1455.1	1432.3	1415.4	1401.4
7.5°	1677.4	1660.0	1615.1	1549.8	1466.7	1381.6	1304.7	1250.1	1209.0	1194.0	1167.9
10°	1693.4	1672.6	1594.3	1479.3	1335.7	1204.7	1102.7	1046.6	1013.7	1003.1	986.7
12.5°	1712.3	1681.8	1561.9	1381.1	1189.2	1045.6	956.6	923.8	906.9	901.1	902.5
15°	1739.8	1689.5	1513.1	1258.3	1049.5	929.6	872.1	849.3	840.6	840.2	842.1
17.5°	1760.5	1690.9	1437.2	1126.8	942.2	859.5	812.1	803.4	809.2	817.9	821.3
20°	1783.8	1677.9	1337.6	1007.0	866.7	798.1	778.3	784.1	798.1	810.7	815.0
22.5°	1800.2	1654.2	1217.2	913.7	801.4	762.8	761.9	774.0	781.7	787.9	791.3
25°	1814.8	1614.1	1089.6	835.4	747.8	741.6	752.1	748.4	743.0	748.4	751.7
27.5°	1825.3	1550.8	975.5	766.7	710.1	727.0	720.8	712.1	711.6	714.5	719.3
30°	1821.9	1466.2	881.7	701.4	683.6	700.0	685.0	683.6	682.1	683.6	688.9
32.5°	1821.9	1370.0	809.7	656.5	666.7	660.3	658.9	655.5	649.7	649.2	655.5
35°	1832.1	1273.8	747.8	632.3	652.6	637.7	638.6	630.4	618.3	612.4	618.3
37.5°	1852.9	1196.5	686.4	620.7	627.9	627.5	623.6	609.6	588.3	569.9	576.3
40°	1903.2	1173.7	644.4	615.4	616.3	622.2	612.0	585.0	536.6	506.7	510.4
42.5°	1981.9	1211.9	635.2	602.3	608.6	614.4	594.6	531.8	497.4	479.5	479.5
45°	2082.1	1278.6	655.0	583.4	590.2	600.4	541.4	511.5	496.0	496.5	498.9
47.5°	2208.7	1348.7	691.8	567.0	563.6	569.5	506.1	487.8	466.5	471.8	485.3
50°	2355.1	1419.7	726.5	544.8	534.1	515.3	483.4	466.0	438.9	426.4	429.8
52.5°	2513.7	1488.4	740.6	517.7	502.2	480.5	467.9	446.7	413.8	393.0	392.6
55°	2664.1	1550.8	725.1	485.3	470.4	453.5	451.5	438.5	403.1	374.1	374.1
57.5°	2806.1	1603.0	686.4	452.4	438.0	427.8	440.9	434.6	390.1	352.9	351.0
60°	2926.6	1638.8	630.4	419.1	409.0	403.6	423.4	421.6	371.8	330.2	328.7
62.5°	3022.3	1652.8	568.5	387.2	384.8	375.2	399.3	399.3	348.5	307.9	306.5
65°	3097.2	1639.3	505.6	355.8	360.6	346.1	369.8	367.0	323.9	288.1	286.2
67.5°	3163.5	1594.8	436.0	324.8	336.0	317.6	338.9	332.1	296.8	268.2	266.4
70°	3192.9	1491.3	356.8	293.9	307.4	289.6	307.9	295.4	266.4	247.0	243.1
72.5°	2956.0	1239.4	280.8	261.5	273.2	258.6	274.6	260.0	233.5	224.8	217.5
75°	2445.5	930.1	216.1	226.2	234.9	223.9	234.4	223.9	199.7	205.9	188.1
77.5°	1776.0	627.9	165.3	189.0	192.9	187.1	196.3	184.2	162.5	160.9	153.8
80°	883.1	367.9	129.6	149.3	147.9	144.0	154.7	148.9	130.5	138.3	136.8
82.5°	255.7	157.5	94.3	104.9	102.0	103.0	110.7	113.6	170.1	168.7	172.6
85°	80.3	61.9	56.6	58.5	55.6	57.1	65.3	129.6	119.9	70.1	75.8
87.5°	20.8	21.3	14.0	15.0	15.5	18.3	20.8	78.8	37.7	24.7	26.1
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)