

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: P962618

Luminaire Tested: **NAV-SB2C-830-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962618
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2C-830-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13978.9 lumens
Efficiency: N/A
Efficacy: 138.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 100.9
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

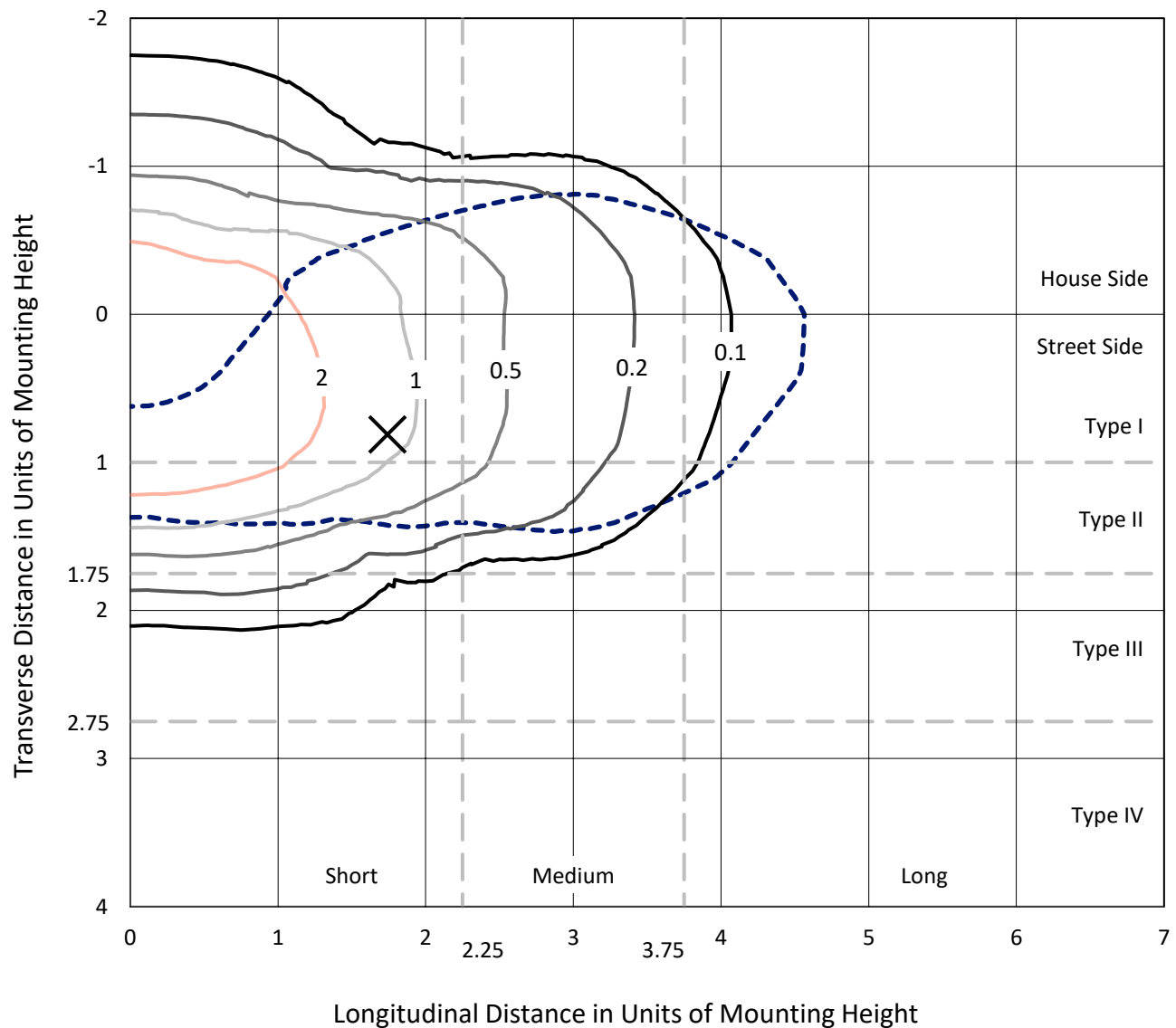


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Iso-Footcandle Lines of Horizontal Illumination

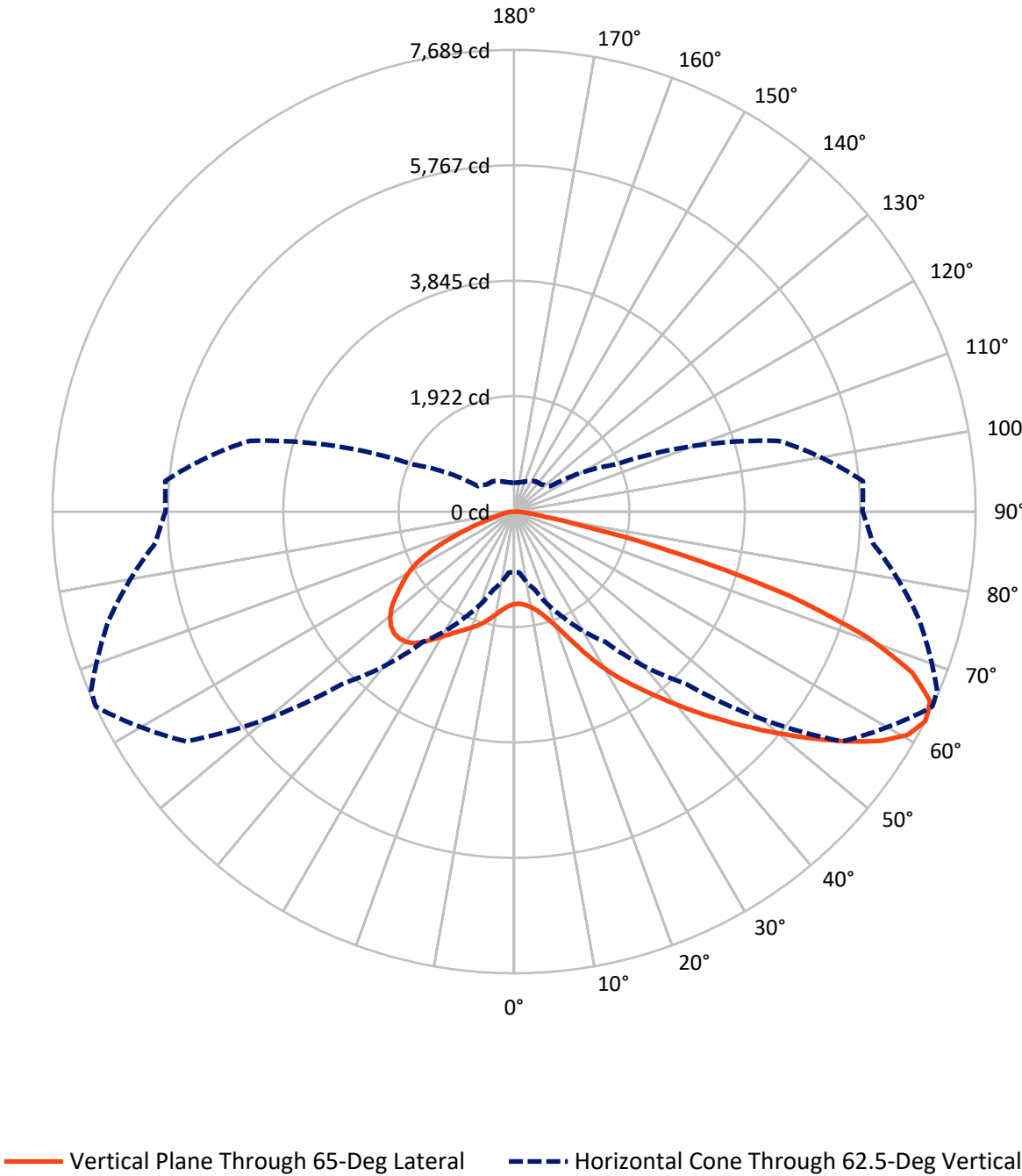
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4411.1	0.0	4411.1
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	9567.8	0.0	9567.8
	% Fixture	68.4	0.0	68.4
Total	Lumens	13978.9	0.0	13978.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.6	1.1
10°-20°	520.8	3.7
20°-30°	1056.0	7.6
30°-40°	1827.3	13.1
40°-50°	2765.3	19.8
50°-60°	3242.2	23.2
60°-70°	2718.2	19.4
70°-80°	1500.7	10.7
80°-90°	194.9	1.4
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°	13978.9	100.0
0°-180°	13978.9	100.0

Coefficient of Utilization



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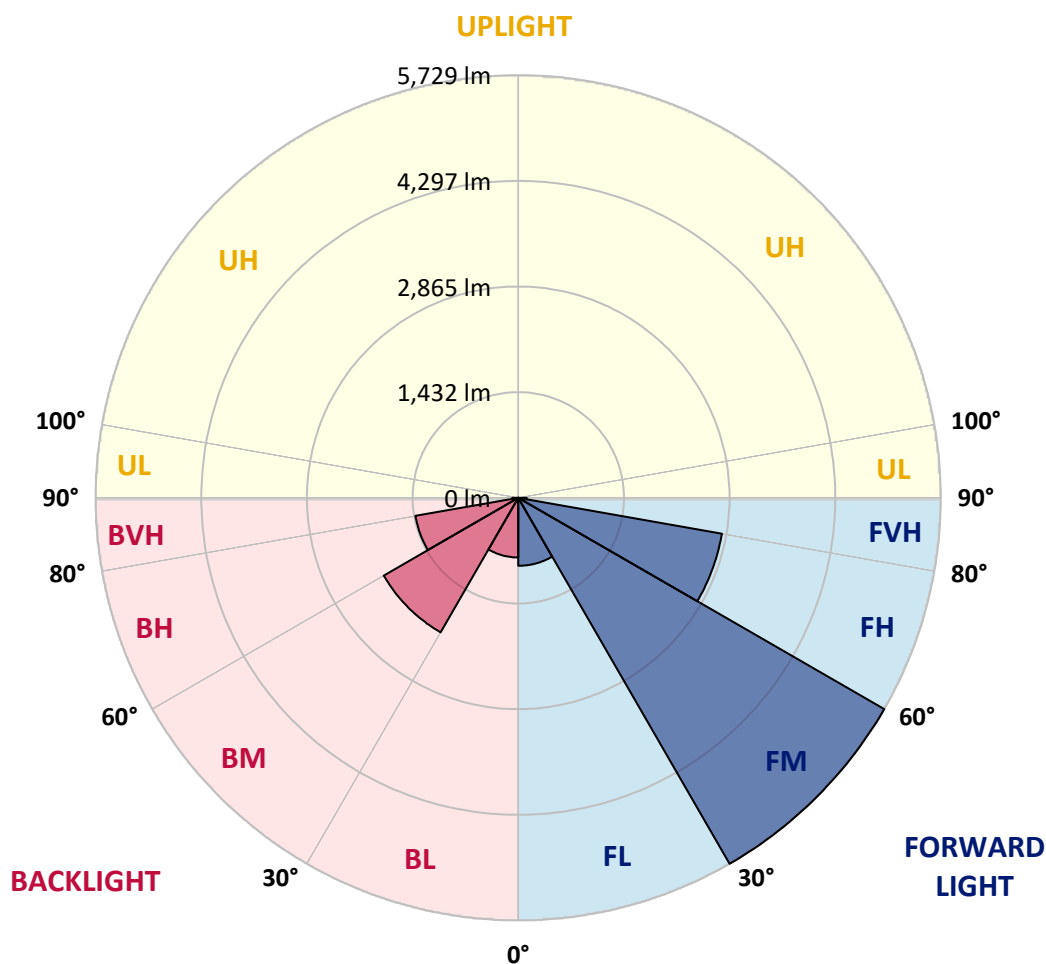
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	921.4	6.6			
FM	(30°-60°)	5729.0	41.0			
FH	(60°-80°)	2803.8	20.1			G2/5000
FVH	(80°-90°)	113.6	0.8			G2/225
BL	(0°-30°)	809.0	5.8	B2/1000		
BM	(30°-60°)	2105.8	15.1	B2/2500		
BH	(60°-80°)	1415.1	10.1	B3/2500		G3/2500
BVH	(80°-90°)	81.3	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1540.4	1540.4	1540.4	1540.4	1540.4	1540.4	1540.4	1540.4	1540.4	1540.4	1540.4
2.5°	1530.2	1525.9	1529.5	1529.5	1531.0	1530.2	1535.3	1536.8	1538.9	1543.3	1543.3
5°	1515.1	1514.3	1520.8	1526.6	1532.5	1537.5	1544.1	1553.5	1554.9	1560.0	1566.5
7.5°	1509.9	1505.6	1515.8	1523.0	1536.8	1549.1	1566.5	1582.5	1589.1	1591.2	1603.5
10°	1549.1	1541.9	1551.3	1555.6	1567.2	1579.6	1599.9	1625.2	1632.5	1641.2	1655.0
12.5°	1615.8	1607.9	1621.7	1628.2	1639.1	1649.9	1663.7	1688.4	1692.0	1708.0	1721.0
15°	1707.2	1697.8	1706.5	1714.5	1732.7	1742.8	1756.5	1780.4	1780.4	1792.8	1802.3
17.5°	1831.3	1818.9	1825.4	1828.3	1840.0	1855.1	1878.4	1899.4	1910.3	1906.0	1892.9
20°	2016.2	2000.9	2000.9	1986.4	1982.0	1994.4	2024.9	2053.9	2065.5	2043.0	2011.2
22.5°	2294.0	2272.2	2259.8	2210.5	2190.9	2192.4	2222.9	2258.4	2267.8	2227.9	2156.2
25°	2647.2	2613.0	2596.3	2523.9	2479.6	2441.1	2465.1	2510.8	2523.9	2474.6	2358.5
27.5°	3000.4	3002.5	2986.5	2899.5	2826.2	2755.9	2743.6	2791.5	2805.2	2749.4	2605.8
30°	3495.7	3444.2	3413.8	3309.3	3204.9	3106.3	3055.4	3075.0	3078.7	3012.0	2845.1
32.5°	3922.9	3909.8	3844.6	3753.1	3619.0	3464.5	3379.6	3348.5	3342.6	3247.6	3049.7
35°	4409.4	4402.3	4333.3	4224.5	4079.5	3864.9	3711.8	3622.6	3615.4	3481.9	3252.0
37.5°	4904.1	4904.1	4836.7	4717.8	4567.6	4299.3	4066.5	3925.0	3901.9	3727.7	3457.9
40°	5298.6	5274.8	5287.1	5237.0	5065.1	4780.1	4460.3	4255.0	4223.8	4014.9	3677.0
42.5°	5522.7	5514.8	5588.7	5644.6	5574.3	5346.5	4894.0	4612.6	4569.0	4331.1	3929.3
45°	5572.8	5564.1	5696.0	5900.6	5999.2	5905.6	5365.4	4989.0	4936.0	4661.9	4199.9
47.5°	5457.5	5440.1	5633.7	5956.5	6272.6	6437.3	5875.9	5397.2	5320.4	4983.9	4477.6
50°	5110.8	5094.1	5387.1	5815.7	6364.7	6798.4	6430.0	5830.2	5712.7	5329.1	4758.4
52.5°	4357.3	4365.3	4824.4	5413.2	6243.6	7023.3	6907.3	6286.4	6145.0	5682.3	5021.6
55°	3394.2	3411.5	3975.8	4624.2	5759.2	6989.2	7232.9	6756.4	6615.7	6014.5	5293.5
57.5°	2430.3	2507.1	3035.8	3677.7	4828.7	6448.9	7303.9	7203.1	7066.8	6377.0	5559.7
60°	1575.2	1589.1	2132.9	2779.9	3677.0	5488.7	7159.6	7541.8	7435.2	6747.0	5782.3
62.5°	1009.5	1019.0	1350.4	1944.4	2646.4	4060.6	6673.7	7689.0	7656.4	6991.3	5996.4
65°	741.9	734.7	907.3	1285.1	1782.7	2504.3	5730.2	7618.0	7682.5	7144.4	6173.3
67.5°	619.4	609.2	694.0	889.9	1313.4	1422.2	4239.8	7156.0	7392.4	7127.0	6303.1
70°	564.3	555.6	607.0	660.7	1024.8	952.2	2137.3	6221.1	6585.2	6929.0	6282.0
72.5°	478.0	462.7	533.1	586.7	797.0	730.3	883.3	4778.7	5222.5	6294.4	5986.2
75°	370.6	360.5	420.7	516.4	599.0	570.0	558.4	2901.7	3386.2	4867.8	5237.0
77.5°	293.8	279.9	335.1	402.5	538.8	430.1	406.8	1249.6	1729.7	3107.7	3918.5
80°	221.2	208.9	254.6	318.4	414.1	324.2	263.2	509.8	652.0	1574.5	1970.5
82.5°	157.3	146.5	177.7	233.5	278.5	290.8	161.7	285.8	321.2	607.0	440.2
85°	100.9	94.3	118.9	146.5	176.9	187.1	98.6	149.4	163.9	250.2	183.5
87.5°	55.1	45.0	63.9	68.2	82.0	74.7	47.2	54.4	58.7	90.6	77.6
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°	1540.4	1540.4	1540.4	1540.4	1540.4	1540.4	1540.4	1540.4	1540.4	1540.4	1540.4
2.5°	1546.2	1548.4	1555.6	1557.8	1562.9	1569.5	1573.8	1578.1	1578.1	1582.5	1582.5
5°	1567.2	1572.4	1587.5	1595.5	1608.6	1621.7	1629.6	1639.1	1644.8	1647.8	1649.2
7.5°	1607.9	1615.8	1637.6	1651.4	1673.8	1692.0	1704.4	1717.4	1720.3	1728.3	1725.4
10°	1663.0	1672.4	1697.1	1723.2	1750.0	1772.5	1784.1	1793.5	1797.1	1798.6	1795.0
12.5°	1726.1	1739.8	1771.8	1803.7	1832.0	1851.6	1854.4	1852.3	1842.1	1833.4	1833.4
15°	1803.7	1816.0	1851.6	1886.4	1913.9	1917.6	1899.4	1887.8	1875.4	1873.3	1873.3
17.5°	1896.6	1903.0	1935.7	1969.7	1971.9	1959.6	1932.7	1921.9	1910.3	1902.3	1903.0
20°	2004.6	2002.4	2025.6	2040.2	2024.9	1987.2	1946.6	1928.4	1916.9	1907.4	1908.1
22.5°	2133.6	2117.0	2114.1	2110.5	2069.9	1990.8	1935.7	1912.4	1894.3	1881.3	1885.6
25°	2321.5	2257.7	2213.5	2188.8	2097.5	1971.2	1900.9	1849.4	1815.3	1792.8	1801.5
27.5°	2556.5	2449.1	2337.5	2277.2	2097.5	1931.3	1816.7	1733.4	1677.5	1654.2	1665.9
30°	2780.6	2668.2	2503.6	2383.8	2092.3	1866.0	1681.1	1565.1	1499.8	1476.6	1490.4
32.5°	2972.1	2849.5	2679.8	2500.7	2080.0	1760.1	1512.9	1384.5	1321.4	1293.9	1307.6
35°	3149.7	3019.2	2856.8	2629.0	2047.3	1604.9	1327.9	1230.0	1159.7	1115.4	1130.0
37.5°	3331.8	3176.6	3024.3	2745.1	1988.6	1423.6	1185.8	1102.4	1019.7	960.2	976.2
40°	3529.8	3344.1	3203.4	2813.9	1892.2	1251.0	1075.5	999.4	911.6	848.5	860.9
42.5°	3761.1	3545.0	3402.9	2849.5	1760.1	1128.5	1003.8	929.1	846.3	794.9	805.0
45°	4002.6	3766.2	3584.8	2848.8	1612.9	1071.2	980.5	906.5	815.2	761.5	770.2
47.5°	4255.7	3997.5	3742.3	2802.4	1485.3	1079.1	967.5	857.9	757.2	704.9	712.2
50°	4509.6	4250.7	3894.6	2715.3	1430.9	1061.8	918.9	789.8	670.9	623.7	626.6
52.5°	4761.2	4519.7	4025.8	2591.3	1375.8	997.2	856.5	701.3	635.3	602.7	602.7
55°	5014.3	4785.9	4168.7	2410.7	1238.0	921.8	752.0	668.0	607.0	577.3	574.4
57.5°	5268.2	5093.4	4304.3	2230.1	1064.7	828.9	694.7	627.3	578.7	553.4	549.0
60°	5532.1	5445.1	4444.3	2064.0	893.5	710.0	652.7	594.7	545.4	517.1	515.0
62.5°	5804.2	5832.5	4553.8	1850.1	736.2	637.4	615.0	555.6	507.7	480.8	480.1
65°	6078.2	6206.0	4625.6	1553.5	596.9	568.6	574.4	512.7	464.1	441.0	440.2
67.5°	6285.0	6475.0	4605.3	1175.6	489.5	503.3	523.7	467.8	422.1	404.0	404.7
70°	6308.2	6443.0	4405.1	805.0	409.8	439.5	467.1	423.5	376.4	363.4	364.1
72.5°	5999.2	6007.9	3847.4	525.8	346.7	385.8	407.5	378.5	332.9	319.8	319.1
75°	5189.2	4968.7	2824.8	346.7	290.1	331.5	351.8	331.5	287.2	290.1	279.9
77.5°	3931.6	3518.9	1715.2	246.6	242.2	278.5	306.1	291.5	253.8	285.1	250.9
80°	2025.6	1903.7	765.2	184.2	191.5	222.6	251.6	232.8	200.9	191.5	174.8
82.5°	464.1	539.6	301.7	132.0	138.5	160.3	192.2	174.8	144.3	121.9	120.4
85°	162.5	177.7	133.5	82.7	81.2	100.0	130.6	116.7	97.9	78.3	82.7
87.5°	51.5	67.4	50.0	33.3	34.8	45.0	60.2	55.1	45.7	29.7	31.2
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)