

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: P964204

Luminaire Tested: **NAV-SB3B-830-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964204
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-830-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15570.8 lumens
Efficiency: N/A
Efficacy: 142.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 109.2
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



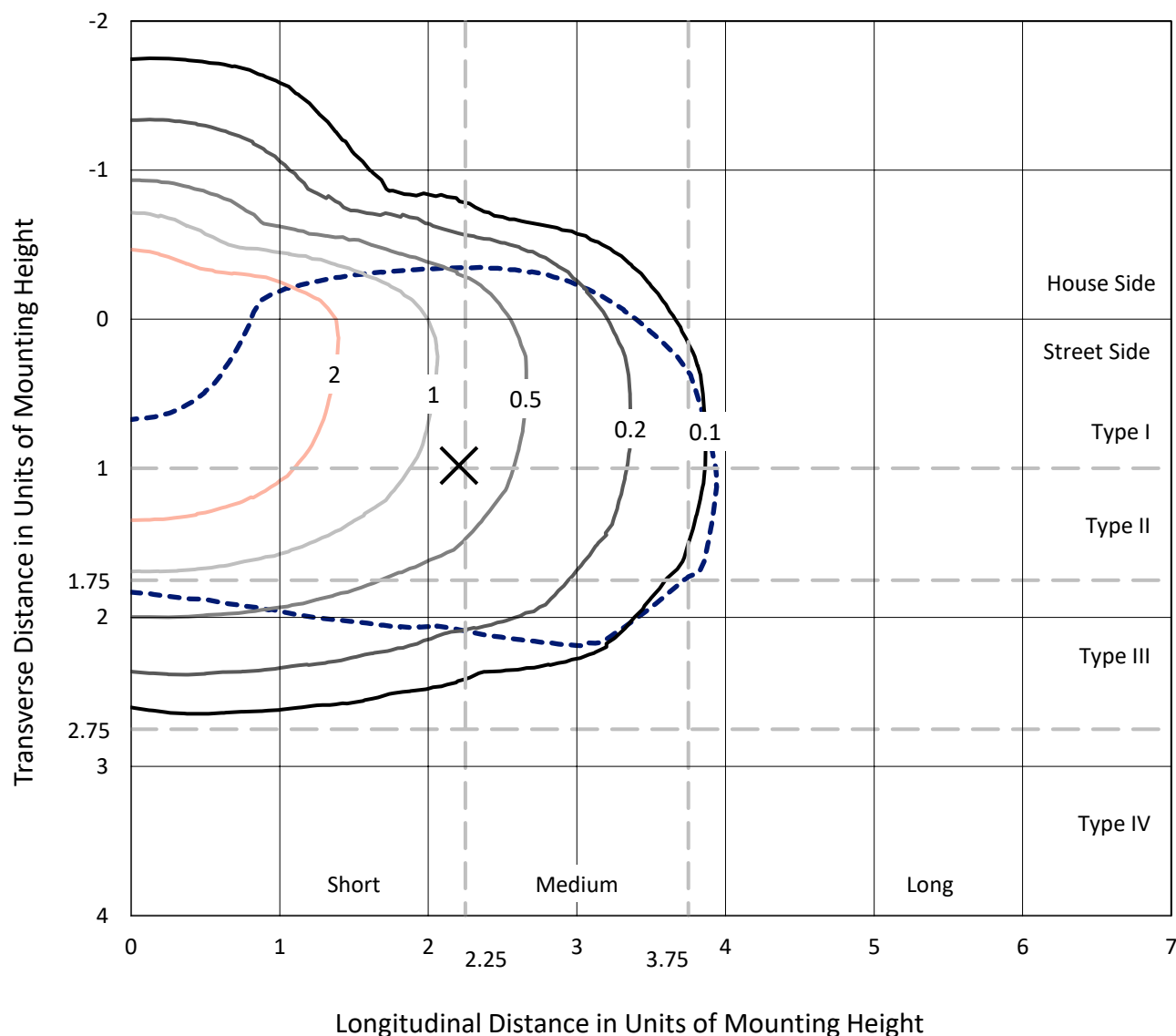
REPORT NUMBER: P964204

CATALOG NUMBER: NAV-SB3B-830-U-T3

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

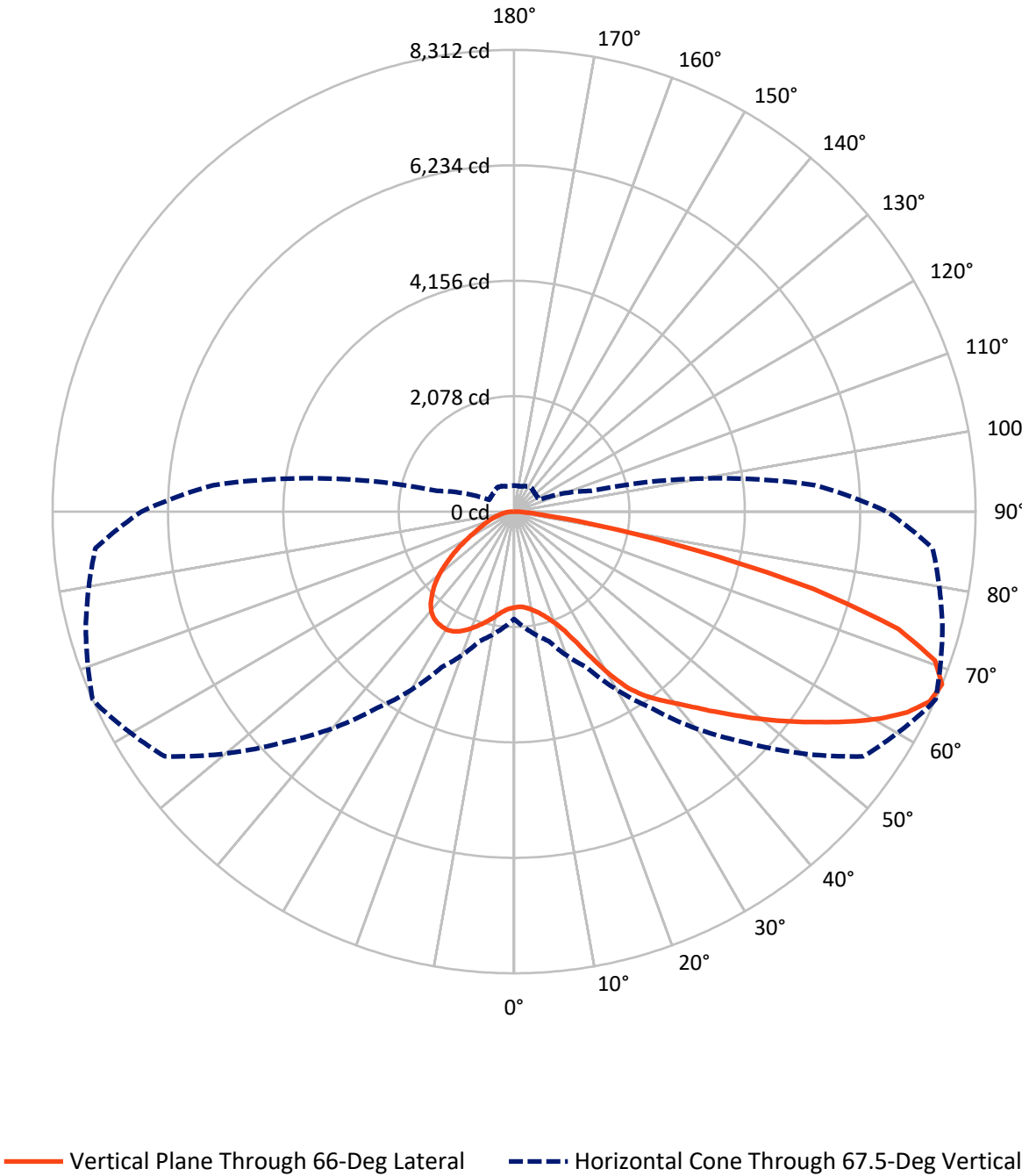


Based on 25 foot mounting height. Maximum calculated value = 3.9 fc

Type III - Short - N/A

REPORT NUMBER: P964204
CATALOG NUMBER: NAV-SB3B-830-U-T3

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3871.6	0.0	3871.6
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	11699.1	0.0	11699.1
	% Fixture	75.1	0.0	75.1
Total	Lumens	15570.8	0.0	15570.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.2	1.1
10°-20°	565.7	3.6
20°-30°	1090.4	7.0
30°-40°	1911.8	12.3
40°-50°	2842.2	18.3
50°-60°	3602.8	23.1
60°-70°	3525.3	22.6
70°-80°	1681.6	10.8
80°-90°	179.7	1.2
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°	15570.8	100.0
0°-180°	15570.8	100.0

Coefficient of Utilization



REPORT NUMBER: P964204

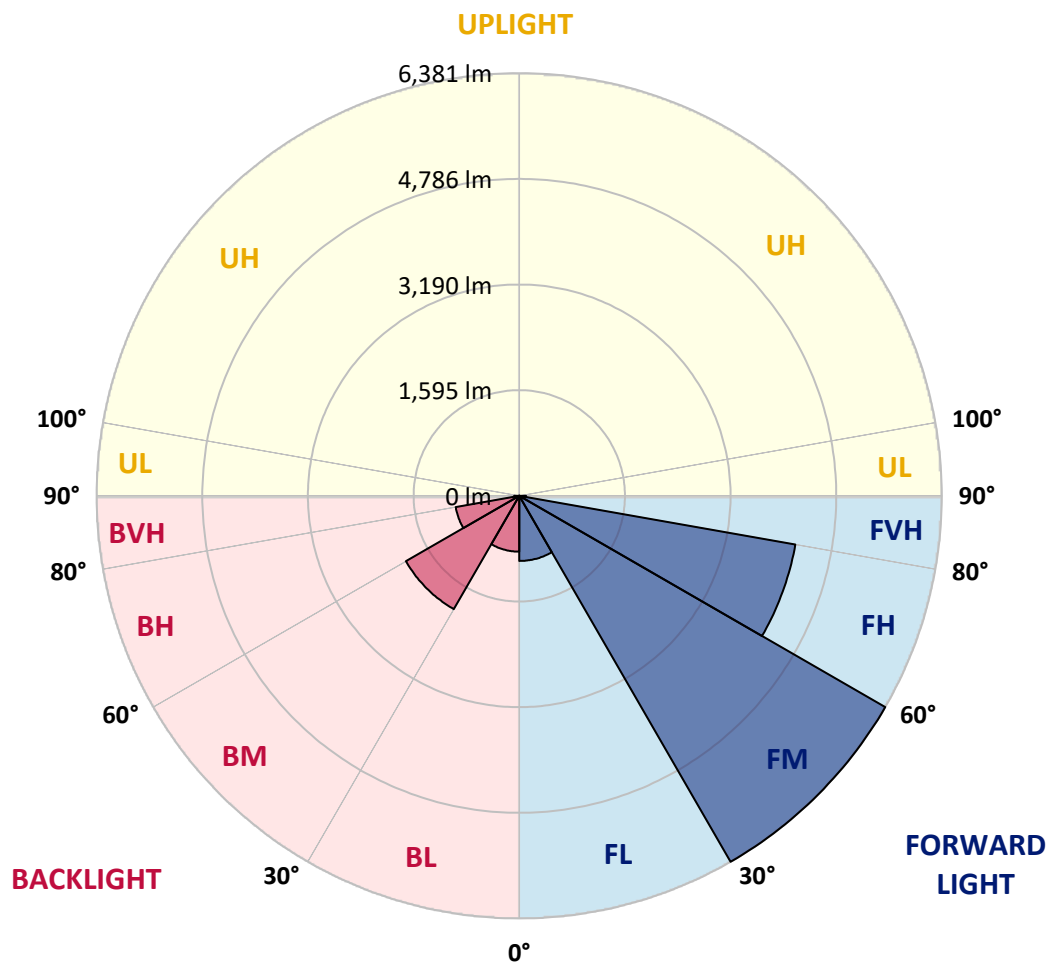
CATALOG NUMBER: NAV-SB3B-830-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	983.9	6.3			
FM	(30°-60°)	6380.8	41.0			
FH	(60°-80°)	4232.6	27.2			G2/5000
FVH	(80°-90°)	101.9	0.7			G2/225
BL	(0°-30°)	843.4	5.4	B2/1000		
BM	(30°-60°)	1976.1	12.7	B2/2500		
BH	(60°-80°)	974.3	6.3	B2/1000		G2/1000
BVH	(80°-90°)	77.8	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short



REPORT NUMBER: P964204

CATALOG NUMBER: NAV-SB3B-830-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1727.0	1727.0	1727.0	1727.0	1727.0	1727.0	1727.0	1727.0	1727.0	1727.0	1727.0
2.5°	1709.0	1718.8	1716.4	1712.3	1711.4	1713.1	1715.5	1718.0	1717.2	1721.3	1727.8
5°	1704.1	1713.9	1713.1	1713.1	1716.4	1722.9	1727.0	1731.1	1727.0	1731.9	1741.0
7.5°	1707.3	1714.7	1718.0	1721.3	1729.5	1741.7	1751.5	1760.5	1755.6	1761.4	1772.8
10°	1749.1	1754.8	1758.1	1758.1	1763.8	1777.8	1787.5	1803.9	1799.8	1808.8	1823.6
12.5°	1825.2	1830.9	1830.9	1827.7	1831.7	1840.7	1844.0	1862.0	1854.6	1869.4	1884.1
15°	1918.4	1929.9	1920.8	1915.2	1916.9	1925.8	1925.0	1938.9	1931.5	1943.8	1956.9
17.5°	2021.5	2036.3	2021.5	2020.7	2017.4	2027.2	2028.1	2040.4	2027.2	2036.3	2045.3
20°	2143.4	2163.9	2151.6	2155.7	2148.3	2152.4	2156.5	2174.5	2154.0	2160.6	2158.1
22.5°	2315.2	2339.8	2326.6	2342.2	2337.3	2334.0	2333.2	2365.1	2333.2	2335.7	2312.0
25°	2565.6	2595.0	2572.1	2593.4	2593.4	2604.0	2616.3	2657.2	2604.0	2588.4	2527.1
27.5°	2935.3	2964.8	2919.8	2932.8	2928.8	2955.0	2941.9	3043.3	2986.0	2960.7	2837.2
30°	3380.3	3432.7	3347.6	3344.4	3340.3	3382.0	3400.8	3467.9	3409.9	3384.4	3235.6
32.5°	3861.4	3916.2	3814.7	3785.3	3769.7	3795.2	3779.6	3833.6	3793.5	3754.3	3570.2
35°	4370.3	4424.3	4327.8	4270.5	4208.3	4155.1	4099.5	4113.4	4075.8	4016.1	3825.4
37.5°	4851.3	4950.3	4848.0	4786.6	4672.2	4568.2	4412.8	4348.2	4313.0	4258.2	4066.0
40°	5341.4	5397.9	5320.1	5267.8	5143.3	4980.6	4731.9	4595.3	4547.8	4494.6	4331.9
42.5°	5702.2	5756.1	5714.4	5678.4	5581.0	5392.1	5070.6	4899.6	4830.8	4771.2	4632.9
45°	5988.5	6028.5	6002.4	6015.5	5973.7	5790.5	5421.5	5226.0	5154.8	5082.1	4973.2
47.5°	6103.9	6146.4	6188.1	6265.8	6337.0	6202.0	5798.6	5579.4	5504.1	5429.7	5322.5
50°	6090.8	6134.1	6255.2	6420.4	6641.3	6596.3	6196.2	5955.8	5886.2	5801.1	5702.2
52.5°	5986.0	6035.1	6190.6	6465.4	6817.2	6891.7	6601.2	6344.3	6278.9	6177.5	6078.5
55°	5711.1	5740.6	5973.7	6363.2	6858.9	7097.8	6998.0	6758.3	6692.8	6551.3	6443.4
57.5°	5201.5	5244.0	5583.5	6087.5	6754.2	7237.7	7346.5	7193.6	7130.5	6926.8	6813.9
60°	4536.3	4604.3	4992.9	5624.4	6487.5	7236.9	7663.1	7621.4	7569.0	7296.6	7178.8
62.5°	3783.7	3862.2	4236.1	4969.9	6021.2	7031.6	7861.1	7979.7	7952.8	7637.8	7487.2
65°	2905.9	2959.9	3332.1	4123.2	5295.6	6590.6	7884.0	8224.3	8229.2	7897.1	7648.4
67.5°	1934.8	2090.3	2413.4	3094.1	4323.7	5869.9	7682.8	8264.5	8311.8	7986.3	7567.4
70°	944.1	1148.6	1465.2	2010.8	3094.1	4764.6	7156.8	7935.6	8041.1	7726.1	7084.7
72.5°	391.9	458.2	630.8	992.3	1776.1	3215.1	6099.8	7043.8	7239.4	6845.9	5956.6
75°	264.2	286.4	360.8	508.8	809.1	1585.5	4398.9	5252.2	5567.2	5170.4	4226.3
77.5°	203.7	217.6	262.6	355.9	481.0	599.6	2354.5	3165.2	3328.1	3080.9	2199.0
80°	160.3	171.0	196.4	259.3	341.1	320.7	802.6	1434.1	1528.2	1282.0	706.8
82.5°	139.1	143.2	140.7	175.9	226.6	187.4	263.4	529.3	584.1	423.7	230.7
85°	100.7	112.0	117.0	108.9	120.2	94.9	108.0	187.4	206.1	184.1	130.1
87.5°	40.9	60.6	74.4	70.3	44.2	27.0	33.5	54.8	63.0	68.7	42.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P964204

CATALOG NUMBER: NAV-SB3B-830-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1727.0	1727.0	1727.0	1727.0	1727.0	1727.0	1727.0	1727.0	1727.0	1727.0	1727.0
2.5°	1728.7	1734.4	1738.5	1743.3	1746.6	1751.5	1761.4	1767.1	1767.9	1772.0	1771.2
5°	1744.1	1752.3	1761.4	1774.5	1789.1	1801.4	1820.3	1833.3	1838.2	1842.3	1841.5
7.5°	1777.8	1789.1	1805.5	1828.5	1849.7	1866.1	1889.0	1904.6	1920.0	1925.8	1926.6
10°	1827.7	1844.0	1867.8	1898.8	1921.7	1943.0	1966.7	1979.8	1995.4	2001.9	2005.2
12.5°	1889.8	1907.0	1938.1	1981.4	2002.7	2017.4	2025.6	2022.3	2025.6	2031.3	2033.0
15°	1961.0	1979.8	2014.9	2061.6	2076.3	2063.2	2045.3	2028.9	2026.4	2028.1	2033.8
17.5°	2045.3	2059.1	2100.0	2139.3	2128.7	2074.7	2035.4	2009.2	1996.2	1992.1	1997.8
20°	2163.1	2163.1	2196.6	2221.2	2149.9	2058.3	1997.0	1954.5	1927.4	1916.0	1913.6
22.5°	2306.2	2293.1	2314.4	2297.2	2145.8	2012.5	1927.4	1853.8	1812.9	1796.5	1794.1
25°	2487.9	2472.3	2466.6	2360.2	2116.4	1939.7	1801.4	1712.3	1676.3	1667.3	1668.9
27.5°	2761.9	2722.6	2648.2	2394.6	2062.4	1825.2	1654.1	1571.5	1551.1	1552.0	1554.4
30°	3126.8	3048.2	2865.8	2400.3	1974.0	1663.2	1503.7	1444.7	1434.9	1439.0	1452.9
32.5°	3464.6	3390.2	3088.3	2374.1	1838.2	1504.5	1368.7	1329.4	1314.7	1319.6	1326.1
35°	3729.7	3709.3	3294.5	2337.3	1671.4	1355.6	1247.6	1214.0	1185.4	1178.9	1183.8
37.5°	3980.1	3971.9	3449.1	2285.8	1506.1	1250.1	1150.3	1106.1	1064.4	1041.4	1042.2
40°	4254.9	4246.8	3550.5	2206.4	1359.7	1158.5	1062.7	1004.6	953.0	911.3	915.4
42.5°	4564.1	4515.9	3598.8	2092.7	1235.3	1080.7	991.6	913.0	845.1	806.7	809.1
45°	4902.1	4793.2	3598.0	1947.9	1130.6	1009.5	915.4	804.2	741.2	705.2	703.6
47.5°	5260.4	5058.3	3553.8	1787.5	1029.2	931.0	797.7	712.6	670.9	648.7	643.8
50°	5630.1	5306.2	3478.5	1603.5	925.3	841.8	724.1	665.9	634.1	613.6	606.2
52.5°	5977.8	5531.2	3387.7	1394.8	819.7	755.1	691.3	646.3	612.7	589.9	580.0
55°	6301.0	5725.0	3259.3	1181.3	733.8	697.0	675.8	638.2	599.6	572.7	562.0
57.5°	6588.2	5851.0	3037.6	980.9	672.5	656.9	659.4	624.2	580.0	557.1	542.4
60°	6827.0	5943.5	2709.6	795.2	622.6	617.7	634.1	598.0	546.5	520.3	508.8
62.5°	6970.2	5941.8	2307.1	651.2	580.0	581.7	600.4	565.3	512.9	488.4	481.0
65°	6957.9	5796.3	1865.3	557.1	539.2	540.8	565.3	529.3	485.1	470.4	469.6
67.5°	6711.7	5441.2	1430.9	495.8	494.2	501.5	530.1	504.8	467.9	466.3	468.7
70°	6044.9	4704.0	1030.8	446.7	447.5	458.2	495.8	489.2	459.0	462.3	461.5
72.5°	4847.2	3586.6	692.1	395.1	396.0	413.2	463.0	476.9	450.0	493.3	499.9
75°	3228.2	2236.7	445.1	340.3	341.1	363.3	434.4	453.3	425.4	491.7	495.8
77.5°	1551.1	1005.4	322.4	286.4	286.4	306.8	375.5	405.8	362.4	382.0	350.1
80°	535.9	377.9	253.6	230.7	225.8	239.7	316.6	351.8	312.5	287.9	270.0
82.5°	211.0	196.4	203.7	179.2	162.8	171.8	246.2	290.4	229.9	207.8	206.9
85°	121.1	127.6	144.0	118.6	94.1	105.6	180.8	208.6	173.4	153.0	156.2
87.5°	32.7	45.0	66.2	61.4	42.5	45.0	85.9	115.3	99.8	76.9	79.3
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)