

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: P883151

Luminaire Tested: **NAV-SB3B-835-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883151
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-835-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14085 lumens
Efficiency: N/A
Efficacy: 129.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

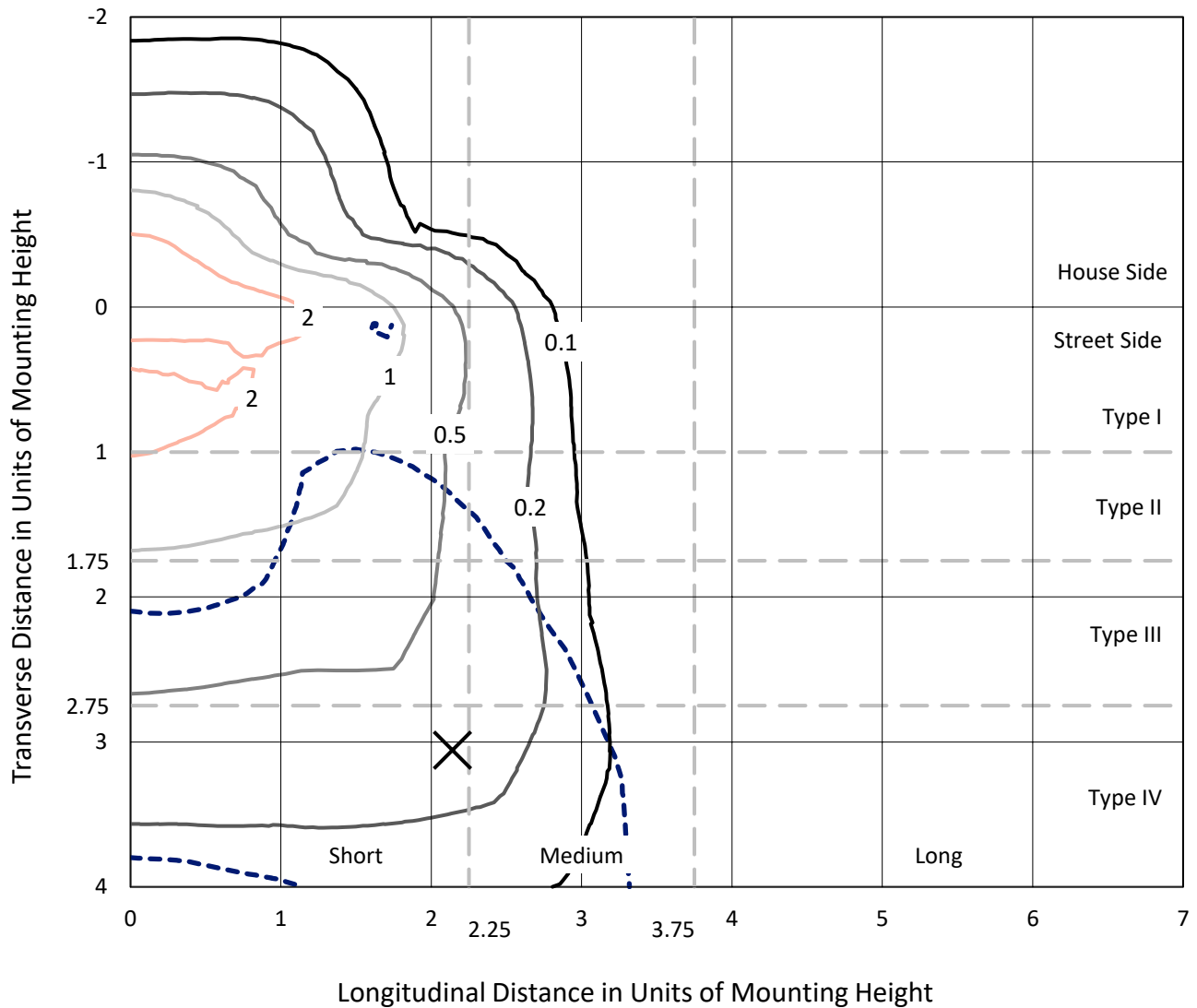
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

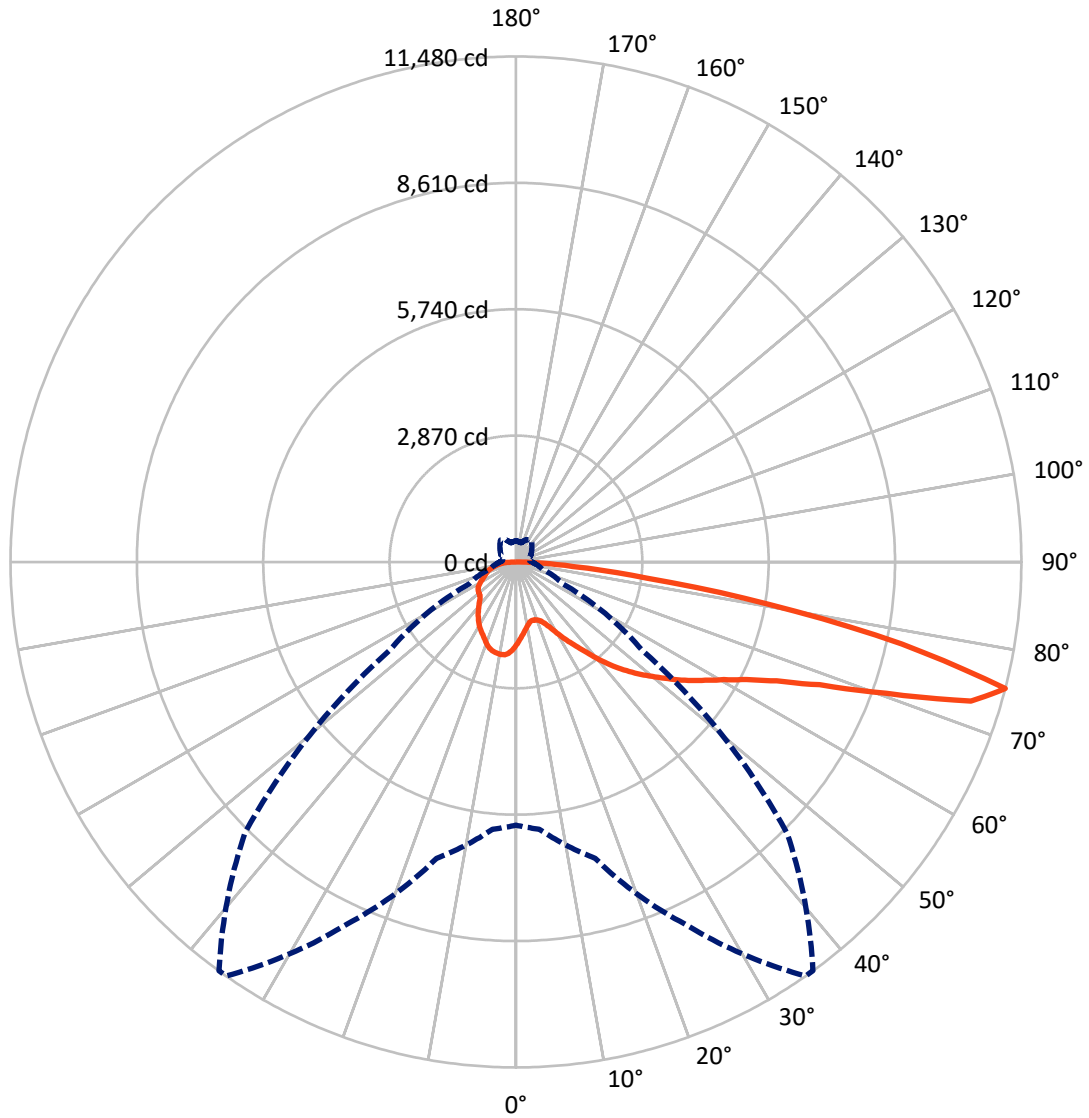
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 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	3351.9	0.0	3351.9
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	10733.1	0.0	10733.1
	% Fixture	76.2	0.0	76.2
Total	Lumens	14085.0	0.0	14085.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.7	1.3
10°-20°	512.6	3.6
20°-30°	860.8	6.1
30°-40°	1337.7	9.5
40°-50°	1985.6	14.1
50°-60°	2741.2	19.5
60°-70°	3325.7	23.6
70°-80°	2748.4	19.5
80°-90°	395.3	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°	14085.0	100.0
0°-180°	14085.0	100.0

Coefficient of Utilization



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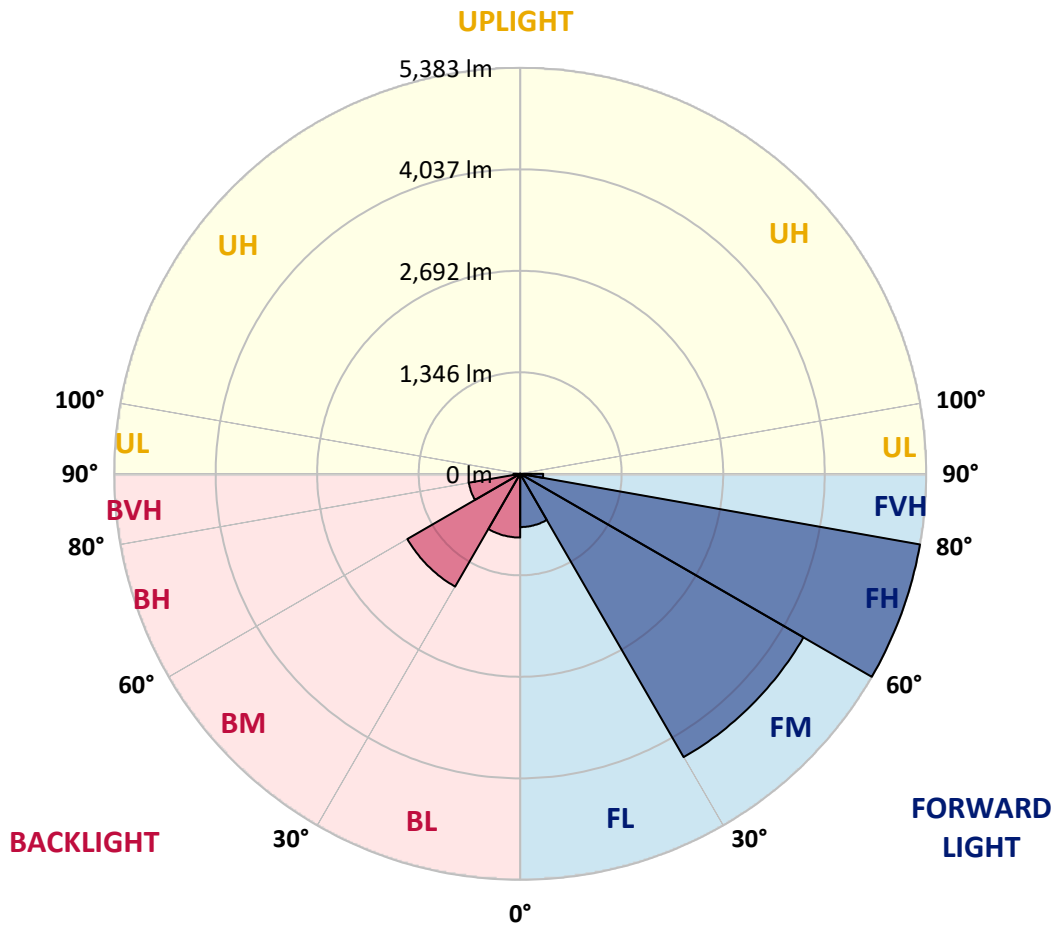
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	706.3	5.0			
FM (30°-60°)	4337.4	30.8			
FH (60°-80°)	5383.1	38.2			G3/7500
FVH (80°-90°)	306.3	2.2			G3/500
BL (0°-30°)	844.7	6.0	B2/1000		
BM (30°-60°)	1727.1	12.3	B2/2500		
BH (60°-80°)	691.1	4.9	B2/1000		G2/1000
BVH (80°-90°)	89.0	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9
2.5°	1730.7	1741.4	1746.0	1743.7	1755.1	1753.6	1769.6	1789.4	1816.8	1843.4	1882.3
5°	1597.5	1608.9	1618.8	1627.9	1650.0	1656.9	1682.0	1720.1	1770.3	1821.3	1885.3
7.5°	1473.4	1483.3	1498.5	1515.2	1552.6	1559.4	1601.3	1660.7	1730.7	1805.3	1893.7
10°	1372.1	1382.0	1398.0	1417.0	1463.5	1471.8	1525.1	1604.3	1695.7	1790.1	1902.8
12.5°	1328.7	1331.7	1340.9	1359.9	1400.3	1405.6	1464.2	1554.8	1661.4	1778.7	1916.5
15°	1326.4	1332.5	1333.3	1343.2	1376.7	1378.9	1433.0	1522.9	1640.1	1776.4	1937.1
17.5°	1349.3	1353.8	1347.0	1353.1	1381.2	1385.0	1427.7	1507.6	1633.3	1786.3	1972.1
20°	1410.2	1414.0	1393.4	1385.0	1405.6	1408.6	1450.5	1517.5	1640.1	1806.9	2020.1
22.5°	1539.6	1541.9	1491.6	1457.4	1458.9	1460.4	1497.0	1557.9	1666.8	1844.2	2081.0
25°	1741.4	1739.9	1659.9	1593.7	1555.6	1547.2	1571.6	1623.4	1711.7	1893.7	2159.4
27.5°	1977.4	1966.0	1886.1	1787.1	1704.1	1691.9	1686.6	1708.6	1775.7	1959.2	2255.4
30°	2243.9	2233.3	2147.2	2017.8	1902.8	1883.0	1832.8	1821.3	1870.8	2048.2	2388.6
32.5°	2536.3	2529.5	2426.7	2269.8	2116.0	2093.2	2008.6	1978.2	2017.0	2183.0	2574.4
35°	2781.5	2775.4	2690.1	2528.7	2340.6	2312.5	2226.4	2192.2	2212.0	2355.9	2817.3
37.5°	3003.1	3000.0	2926.9	2799.8	2605.6	2571.3	2474.6	2463.2	2459.4	2583.5	3112.0
40°	3208.7	3201.0	3124.9	3057.9	2914.0	2882.8	2797.5	2787.6	2758.7	2863.7	3445.5
42.5°	3436.3	3416.5	3306.1	3274.9	3236.1	3210.2	3159.2	3160.7	3096.7	3179.7	3798.8
45°	3622.1	3610.7	3497.2	3479.0	3520.8	3510.2	3554.3	3565.8	3441.7	3510.9	4165.8
47.5°	3821.6	3811.0	3715.0	3702.1	3815.5	3818.6	3974.7	3978.5	3778.2	3855.1	4533.5
50°	4067.6	4052.3	3957.1	3973.1	4100.3	4111.7	4397.3	4371.4	4088.1	4204.6	4898.3
52.5°	4229.7	4238.9	4218.3	4244.2	4417.8	4428.5	4813.0	4746.7	4395.0	4549.5	5256.1
55°	4349.3	4367.6	4431.5	4490.9	4752.8	4763.5	5205.1	5103.9	4649.3	4869.3	5592.7
57.5°	4503.1	4477.2	4596.7	4712.5	5071.1	5099.3	5586.6	5448.0	4874.7	5145.0	5823.4
60°	4723.9	4705.6	4798.5	4969.8	5427.5	5472.4	5990.2	5757.9	5039.9	5363.5	5868.3
62.5°	5171.6	5125.9	5140.4	5291.9	5876.7	5936.1	6445.5	6028.2	5122.1	5448.8	5627.7
65°	5840.9	5762.5	5689.4	5794.5	6509.5	6568.1	6959.5	6240.7	5091.7	5283.6	4988.9
67.5°	6683.8	6606.2	6516.3	6615.3	7441.4	7487.9	7593.7	6360.2	4851.8	4647.0	3859.7
70°	7379.0	7350.1	7457.4	7864.8	8930.0	8931.6	8406.9	6261.2	4194.7	3294.7	2233.3
72.5°	7286.9	7269.4	7835.1	9094.5	10806.2	10765.8	9176.7	5512.0	2825.7	1486.3	836.8
75°	5978.0	6091.4	6967.8	9072.4	11480.1	11474.7	8705.4	3504.1	1168.8	616.0	432.5
77.5°	3205.6	3385.3	4523.6	6698.3	8962.0	9096.8	6120.4	1225.9	501.8	394.4	299.2
80°	1045.4	1202.3	1803.1	3410.4	5823.4	5798.3	2623.1	481.2	343.4	279.4	207.1
82.5°	443.9	462.2	805.6	1610.4	2988.6	2942.2	835.3	276.4	241.4	191.1	127.9
85°	173.6	194.2	355.6	744.7	1294.4	1266.3	301.5	137.1	154.6	124.9	76.1
87.5°	57.1	69.3	127.2	255.1	402.8	388.3	73.9	47.2	67.0	57.1	27.4
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°	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9	1876.9
2.5°	1892.9	1905.1	1919.6	1940.9	1959.2	1974.4	1990.4	2000.3	2004.1	2015.5	2014.7
5°	1906.6	1933.3	1969.1	2004.1	2038.3	2058.9	2077.2	2086.3	2094.7	2100.8	2102.3
7.5°	1929.5	1963.7	2020.1	2065.8	2094.7	2111.4	2123.6	2120.6	2123.6	2125.1	2127.4
10°	1949.3	1997.2	2064.2	2107.6	2129.7	2130.5	2127.4	2116.8	2111.4	2112.2	2113.7
12.5°	1972.9	2026.2	2098.5	2135.0	2141.1	2124.4	2111.4	2093.2	2086.3	2083.3	2081.7
15°	2004.8	2065.8	2135.8	2149.5	2134.3	2113.0	2090.9	2061.2	2046.0	2033.8	2037.6
17.5°	2043.7	2110.7	2164.7	2154.8	2122.1	2087.1	2051.3	2006.4	1975.1	1962.2	1963.0
20°	2097.7	2157.9	2186.8	2143.4	2093.9	2040.6	1979.7	1924.9	1896.0	1883.0	1881.5
22.5°	2163.2	2221.1	2208.1	2123.6	2053.6	1968.3	1892.2	1851.8	1837.3	1828.2	1829.7
25°	2241.6	2291.1	2223.4	2094.7	1987.3	1872.4	1813.7	1800.8	1793.9	1787.1	1787.1
27.5°	2343.7	2370.3	2234.8	2052.1	1883.8	1770.3	1749.0	1751.3	1749.0	1737.6	1739.9
30°	2478.5	2473.1	2245.5	1982.8	1765.0	1678.2	1679.7	1689.6	1691.1	1683.5	1687.3
32.5°	2655.9	2601.8	2250.8	1892.9	1651.5	1597.5	1599.0	1609.7	1617.3	1604.3	1610.4
35°	2870.6	2751.8	2242.4	1780.2	1564.0	1520.6	1509.2	1512.2	1514.5	1502.3	1510.7
37.5°	3121.1	2920.1	2205.1	1655.3	1491.6	1445.2	1420.8	1400.3	1388.1	1376.7	1384.3
40°	3396.0	3103.6	2136.6	1533.5	1410.9	1365.2	1328.7	1289.9	1248.7	1233.5	1240.4
42.5°	3683.8	3292.4	2053.6	1417.0	1318.0	1280.7	1241.9	1185.5	1123.9	1092.7	1096.5
45°	3982.3	3485.8	1972.1	1302.0	1222.9	1206.9	1161.9	1094.2	1027.2	987.6	984.5
47.5°	4274.7	3668.6	1852.6	1186.3	1133.8	1151.3	1116.3	1053.8	979.2	916.8	909.9
50°	4554.1	3839.9	1656.9	1069.0	1061.4	1134.5	1101.0	1011.2	925.9	845.9	839.1
52.5°	4831.3	3978.5	1406.4	962.4	1022.6	1130.0	1081.2	982.2	877.9	794.2	785.0
55°	5066.5	4050.0	1165.0	871.1	966.3	1091.1	1057.6	948.0	810.2	721.1	713.5
57.5°	5200.6	3992.2	964.0	781.2	888.6	1027.2	1017.3	874.9	729.4	660.9	651.8
60°	5142.7	3757.7	799.5	702.8	814.7	957.9	947.2	802.5	667.8	603.1	593.9
62.5°	4823.7	3310.7	669.3	634.3	747.7	887.1	877.2	747.0	620.6	558.1	548.2
65°	4181.0	2693.2	568.0	577.2	680.0	801.8	816.3	700.5	583.3	522.3	512.4
67.5°	3188.9	1950.8	488.8	527.7	613.7	718.0	759.9	667.0	552.0	494.2	485.0
70°	1817.5	1107.9	421.8	479.7	555.1	640.4	716.5	640.4	518.5	470.6	464.5
72.5°	689.1	508.6	364.7	431.7	498.7	574.9	668.5	598.5	479.7	443.9	437.8
75°	367.8	309.9	306.9	375.4	434.0	510.9	608.4	557.4	450.8	469.0	484.3
77.5°	250.5	219.3	256.6	321.3	363.2	440.1	544.4	494.9	390.6	389.1	358.6
80°	173.6	155.3	208.6	258.9	281.0	370.1	475.1	424.9	318.3	297.0	284.0
82.5°	104.3	101.3	156.1	193.4	198.7	285.5	393.7	356.3	260.4	226.9	228.4
85°	57.1	60.2	99.7	113.5	115.7	199.5	308.4	275.6	200.3	168.3	169.8
87.5°	16.0	20.6	36.5	44.9	55.6	103.6	183.5	163.7	100.5	70.1	70.1
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)