

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: P963524

Luminaire Tested: **NAV-SB3A-735-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963524
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-735-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13634.5 lumens
Efficiency: N/A
Efficacy: 161.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

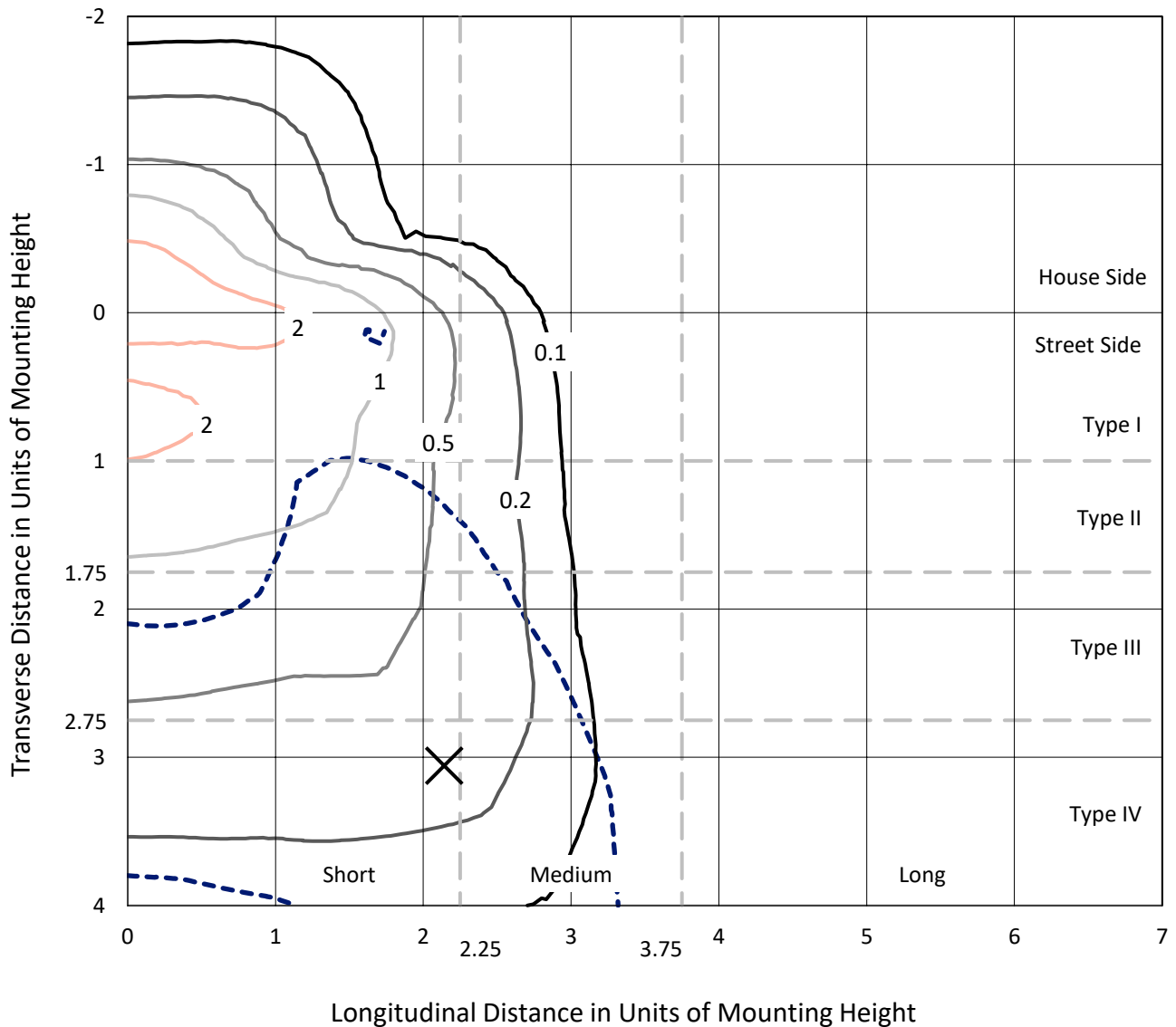
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

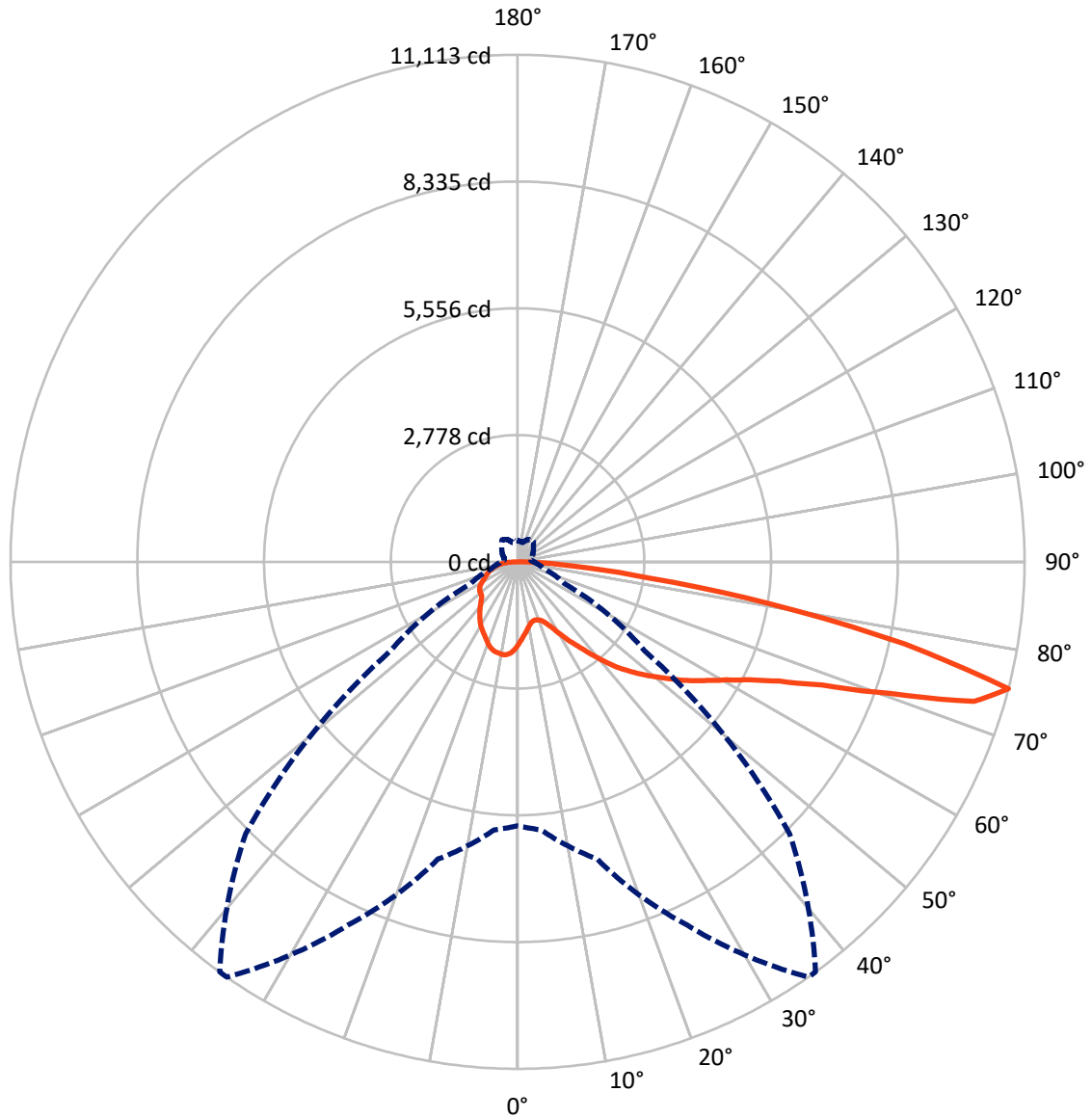
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 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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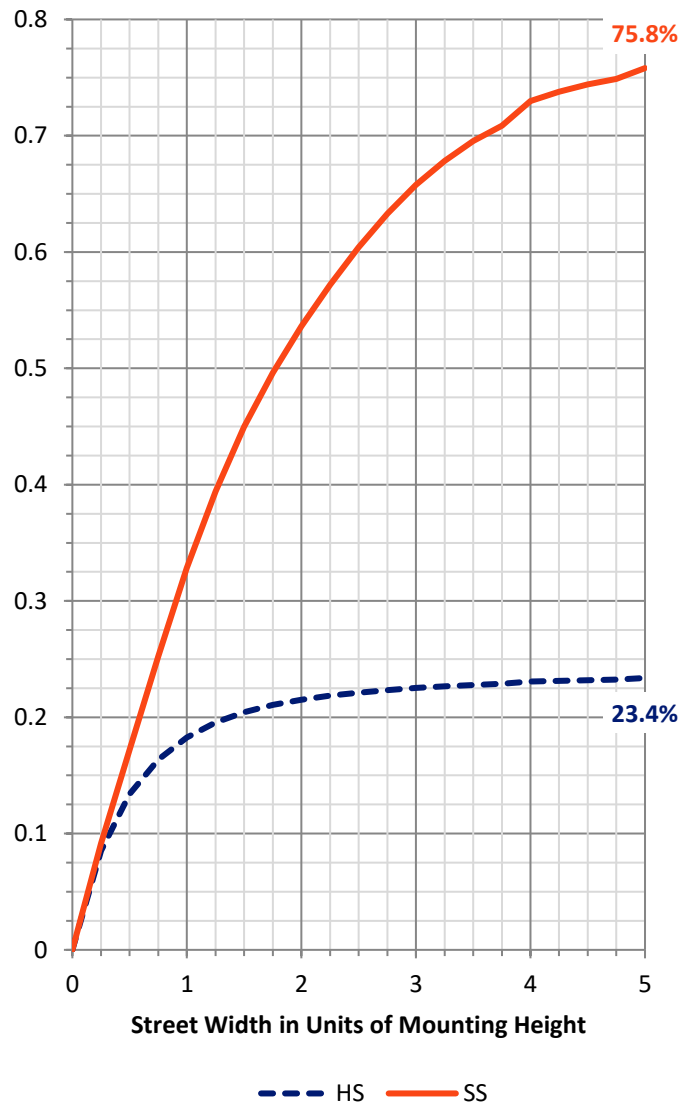
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3244.7	0.0	3244.7
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	10389.9	0.0	10389.9
	% Fixture	76.2	0.0	76.2
Total	Lumens	13634.5	0.0	13634.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.0	1.3
10°-20°	496.2	3.6
20°-30°	833.2	6.1
30°-40°	1295.0	9.5
40°-50°	1922.1	14.1
50°-60°	2653.5	19.5
60°-70°	3219.3	23.6
70°-80°	2660.5	19.5
80°-90°	382.7	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°	13634.5	100.0
0°-180°	13634.5	100.0

Coefficient of Utilization



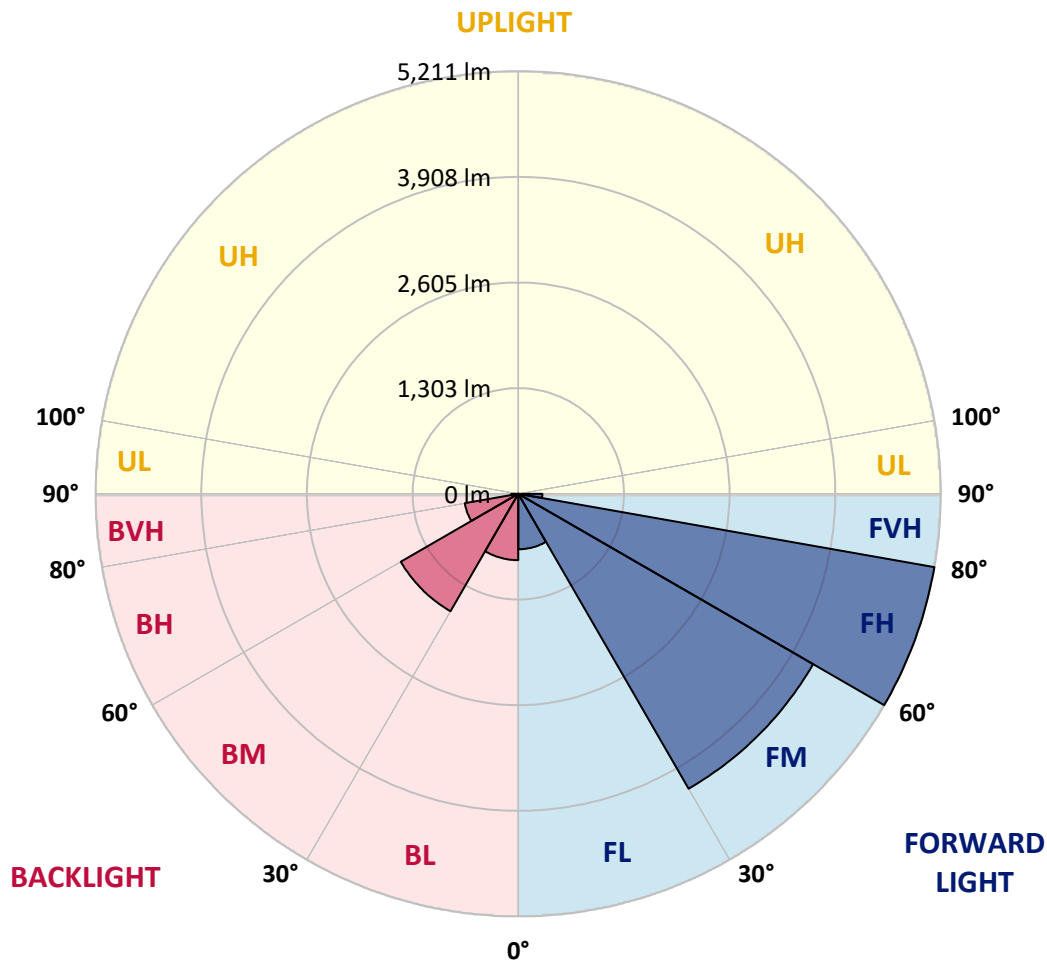
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	683.7	5.0			
FM (30°-60°)	4198.7	30.8			
FH (60°-80°)	5210.9	38.2			G3/7500
FVH (80°-90°)	296.5	2.2			G3/500
BL (0°-30°)	817.7	6.0	B2/1000		
BM (30°-60°)	1671.9	12.3	B2/2500		
BH (60°-80°)	669.0	4.9	B2/1000		G2/1000
BVH (80°-90°)	86.2	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°	1816.9	1816.9	1816.9	1816.9	1816.9	1816.9	1816.9	1816.9	1816.9	1816.9	1816.9
2.5°	1675.4	1685.7	1690.1	1687.9	1698.9	1697.5	1713.0	1732.1	1758.7	1784.4	1822.0
5°	1546.4	1557.5	1567.0	1575.8	1597.3	1603.9	1628.2	1665.0	1713.7	1763.1	1825.0
7.5°	1426.3	1435.8	1450.6	1466.8	1502.9	1509.5	1550.1	1607.6	1675.4	1747.6	1833.1
10°	1328.2	1337.8	1353.3	1371.7	1416.7	1424.7	1476.4	1553.0	1641.4	1732.9	1841.9
12.5°	1286.2	1289.1	1298.0	1316.4	1355.5	1360.7	1417.4	1505.1	1608.3	1721.8	1855.2
15°	1284.0	1289.9	1290.6	1300.2	1332.6	1334.9	1387.1	1474.2	1587.6	1719.6	1875.1
17.5°	1306.1	1310.6	1303.9	1309.7	1337.0	1340.7	1382.0	1459.4	1581.1	1729.2	1909.1
20°	1365.1	1368.8	1348.9	1340.7	1360.7	1363.6	1404.1	1469.0	1587.6	1749.1	1955.5
22.5°	1490.4	1492.6	1443.9	1410.8	1412.2	1413.7	1449.1	1508.1	1613.5	1785.2	2014.4
25°	1685.7	1684.2	1606.8	1542.7	1505.8	1497.7	1521.3	1571.4	1656.9	1833.1	2090.4
27.5°	1914.2	1903.1	1825.7	1729.9	1649.5	1637.7	1632.6	1654.0	1718.8	1896.5	2183.2
30°	2172.2	2161.8	2078.6	1953.2	1841.9	1822.8	1774.2	1763.1	1811.0	1982.8	2312.2
32.5°	2455.2	2448.6	2349.1	2197.2	2048.4	2026.2	1944.4	1914.9	1952.5	2113.2	2492.1
35°	2692.6	2686.6	2604.1	2447.8	2265.8	2238.5	2155.2	2122.1	2141.2	2280.5	2727.2
37.5°	2907.0	2904.1	2833.3	2710.2	2522.3	2489.1	2395.5	2384.5	2380.8	2500.9	3012.5
40°	3106.1	3098.7	3025.0	2960.1	2820.8	2790.6	2708.0	2698.4	2670.4	2772.1	3335.2
42.5°	3326.4	3307.3	3200.4	3170.1	3132.6	3107.5	3058.1	3059.6	2997.7	3078.1	3677.3
45°	3506.3	3495.2	3385.4	3367.7	3408.2	3398.0	3440.7	3451.7	3331.6	3398.7	4032.6
47.5°	3699.4	3689.1	3596.2	3583.7	3693.5	3696.5	3847.5	3851.2	3657.4	3731.8	4388.5
50°	3937.4	3922.8	3830.6	3846.1	3969.2	3980.2	4256.6	4231.6	3957.3	4070.2	4741.6
52.5°	4094.5	4103.3	4083.4	4108.5	4276.5	4286.9	4659.0	4595.0	4254.4	4404.0	5088.0
55°	4210.2	4227.9	4289.8	4347.3	4600.8	4611.2	5038.7	4940.6	4500.6	4713.6	5413.8
57.5°	4359.1	4334.0	4449.7	4561.8	4908.9	4936.2	5407.9	5273.8	4718.8	4980.5	5637.2
60°	4572.8	4555.1	4645.1	4810.9	5253.8	5297.4	5798.6	5573.7	4878.7	5191.9	5680.7
62.5°	5006.2	4962.0	4976.0	5122.6	5688.7	5746.3	6239.4	5835.4	4958.3	5274.5	5447.8
65°	5654.1	5578.2	5507.4	5609.2	6301.3	6358.1	6736.9	6041.0	4928.8	5114.5	4829.3
67.5°	6470.1	6394.9	6308.0	6403.7	7203.5	7248.4	7350.9	6156.8	4696.7	4498.4	3736.2
70°	7143.0	7115.0	7219.0	7613.3	8644.4	8645.9	8138.1	6061.0	4060.5	3189.3	2161.8
72.5°	7053.8	7036.8	7584.5	8803.6	10460.6	10421.6	8883.3	5335.7	2735.3	1438.8	810.1
75°	5786.8	5896.6	6745.0	8782.3	11112.9	11107.7	8427.0	3392.0	1131.4	596.3	418.6
77.5°	3103.1	3277.0	4379.0	6484.0	8675.4	8805.9	5924.6	1186.7	485.7	381.8	289.7
80°	1012.0	1163.9	1745.4	3301.3	5637.2	5612.8	2539.2	465.9	332.4	270.5	200.5
82.5°	429.7	447.4	779.8	1558.9	2893.1	2848.1	808.6	267.5	233.7	185.0	123.8
85°	168.1	188.0	344.2	720.9	1253.1	1225.8	291.9	132.6	149.6	120.8	73.7
87.5°	55.2	67.0	123.1	246.9	389.9	375.9	71.5	45.7	64.9	55.2	26.5
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°	1816.9	1816.9	1816.9	1816.9	1816.9	1816.9	1816.9	1816.9	1816.9	1816.9	1816.9
2.5°	1832.4	1844.2	1858.2	1878.8	1896.5	1911.2	1926.7	1936.3	1940.0	1951.1	1950.3
5°	1845.6	1871.4	1906.1	1940.0	1973.1	1993.0	2010.7	2019.6	2027.7	2033.6	2035.0
7.5°	1867.8	1901.0	1955.5	1999.7	2027.7	2044.0	2055.7	2052.8	2055.7	2057.2	2059.4
10°	1886.9	1933.4	1998.2	2040.3	2061.6	2062.3	2059.4	2049.1	2044.0	2044.7	2046.1
12.5°	1909.8	1961.3	2031.3	2066.8	2072.7	2056.5	2044.0	2026.2	2019.6	2016.7	2015.2
15°	1940.7	1999.7	2067.5	2080.8	2066.0	2045.4	2024.0	1995.3	1980.5	1968.7	1972.4
17.5°	1978.4	2043.1	2095.5	2086.0	2054.2	2020.4	1985.7	1942.2	1911.9	1899.4	1900.1
20°	2030.6	2088.8	2116.9	2074.9	2026.9	1975.4	1916.4	1863.3	1835.4	1822.8	1821.3
22.5°	2094.1	2150.0	2137.5	2055.7	1987.9	1905.4	1831.7	1792.6	1778.6	1769.8	1771.2
25°	2169.9	2217.9	2152.3	2027.7	1923.8	1812.5	1755.7	1743.2	1736.6	1729.9	1729.9
27.5°	2268.7	2294.6	2163.4	1986.4	1823.6	1713.7	1693.1	1695.2	1693.1	1682.0	1684.2
30°	2399.2	2394.0	2173.6	1919.3	1708.6	1624.5	1626.0	1635.6	1637.0	1629.6	1633.3
32.5°	2570.9	2518.6	2178.8	1832.4	1598.7	1546.4	1547.9	1558.2	1565.6	1553.0	1558.9
35°	2778.8	2663.8	2170.6	1723.3	1513.9	1471.9	1460.9	1463.8	1466.1	1454.3	1462.4
37.5°	3021.3	2826.6	2134.6	1602.4	1443.9	1399.0	1375.3	1355.5	1343.7	1332.6	1340.0
40°	3287.4	3004.4	2068.2	1484.5	1365.8	1321.5	1286.2	1248.7	1208.8	1194.0	1200.7
42.5°	3566.0	3187.1	1987.9	1371.7	1275.9	1239.7	1202.2	1147.6	1087.9	1057.7	1061.4
45°	3854.9	3374.3	1909.1	1260.4	1183.8	1168.3	1124.7	1059.1	994.4	956.0	953.0
47.5°	4137.9	3551.2	1793.3	1148.4	1097.5	1114.5	1080.6	1020.1	947.9	887.4	880.8
50°	4408.4	3717.1	1603.9	1034.8	1027.5	1098.3	1065.8	978.9	896.3	818.9	812.2
52.5°	4676.8	3851.2	1361.4	931.6	989.9	1093.8	1046.6	950.8	849.8	768.7	759.9
55°	4904.5	3920.5	1127.7	843.3	935.3	1056.3	1023.8	917.7	784.2	698.0	690.6
57.5°	5034.3	3864.5	933.2	756.2	860.2	994.4	984.7	846.9	706.1	639.8	630.9
60°	4978.2	3637.5	774.0	680.3	788.6	927.2	917.0	776.8	646.5	583.7	574.9
62.5°	4669.4	3204.8	647.9	614.0	723.9	858.7	849.1	723.0	600.8	540.3	530.7
65°	4047.3	2607.1	549.8	558.7	658.3	776.1	790.2	678.1	564.6	505.6	496.1
67.5°	3086.9	1888.4	473.2	510.8	594.1	695.1	735.6	645.6	534.3	478.4	469.6
70°	1759.4	1072.5	408.4	464.3	537.3	619.9	693.6	619.9	501.9	455.5	449.7
72.5°	667.1	492.4	353.0	417.9	482.8	556.5	647.2	579.3	464.3	429.7	423.8
75°	356.0	300.0	297.0	363.4	420.1	494.6	589.0	539.6	436.3	454.1	468.7
77.5°	242.5	212.3	248.4	311.1	351.6	426.0	527.1	479.1	378.1	376.7	347.2
80°	168.1	150.4	201.9	250.6	271.9	358.2	459.9	411.3	308.1	287.4	274.9
82.5°	101.0	98.0	151.1	187.3	192.4	276.4	381.1	344.9	252.0	219.7	221.1
85°	55.2	58.2	96.6	109.8	112.0	193.1	298.5	266.8	193.8	162.9	164.4
87.5°	15.5	19.9	35.4	43.5	53.8	100.2	177.6	158.5	97.3	67.9	67.9
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)