

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: P883139

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

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883139
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
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: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14789 lumens
Efficiency: N/A
Efficacy: 135.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

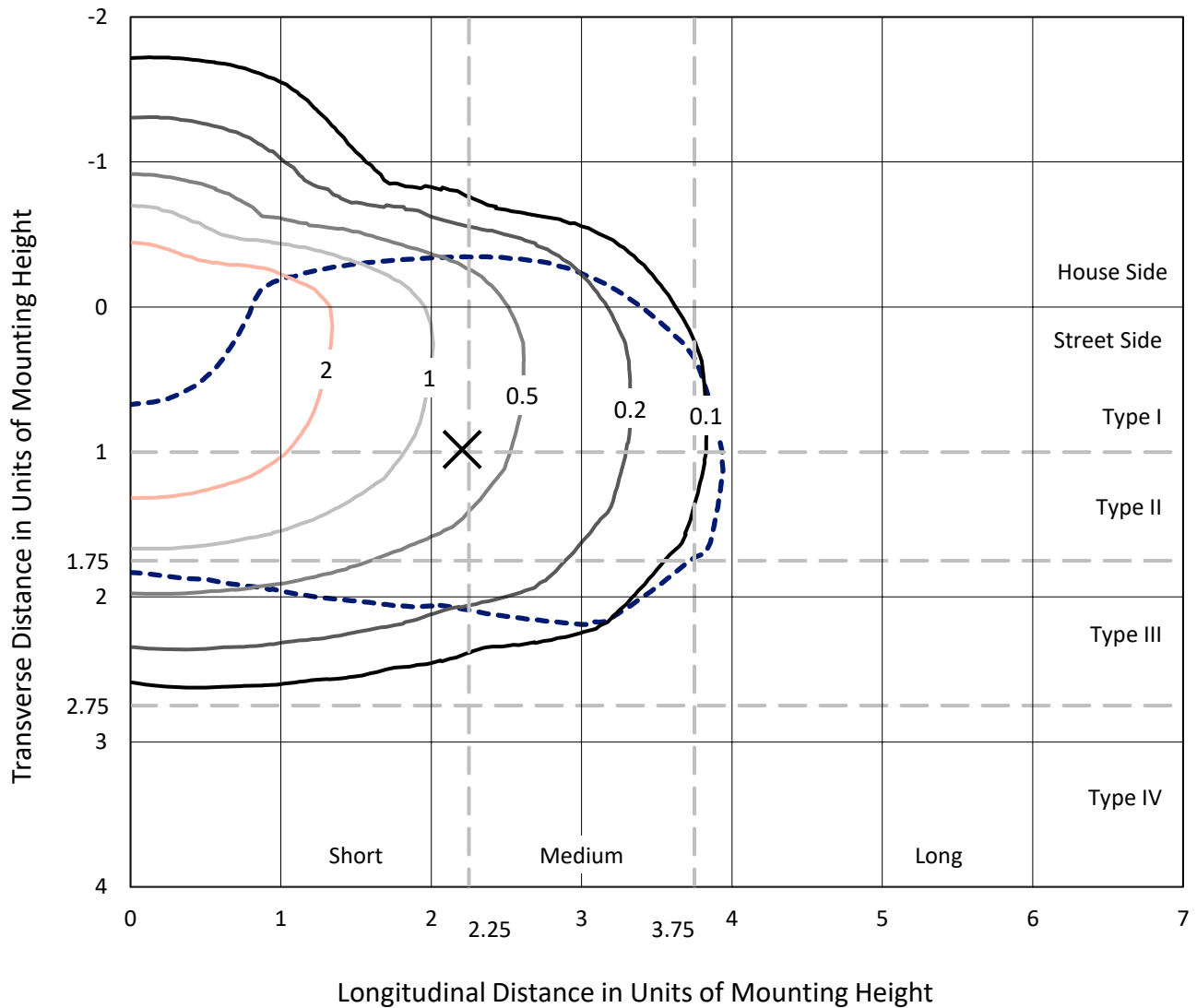
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P883139
 CATALOG NUMBER: NAV-SB3B-830-U-T3

Iso-Footcandle Lines of Horizontal Illumination

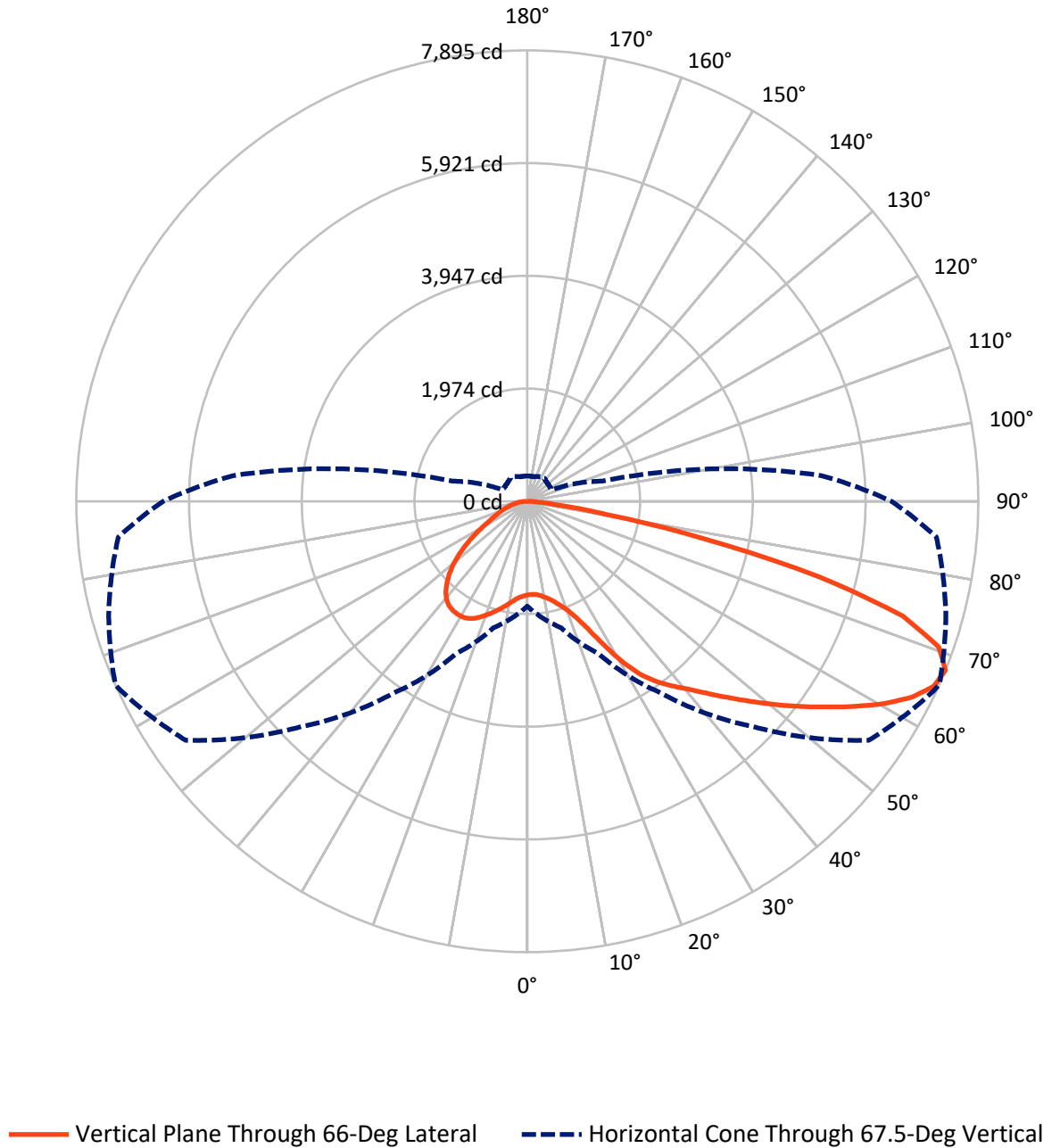
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type III - Short - N/A

REPORT NUMBER: P883139
CATALOG NUMBER: NAV-SB3B-830-U-T3

Luminous Intensity Polar Plot



REPORT NUMBER: P883139
 CATALOG NUMBER: NAV-SB3B-830-U-T3

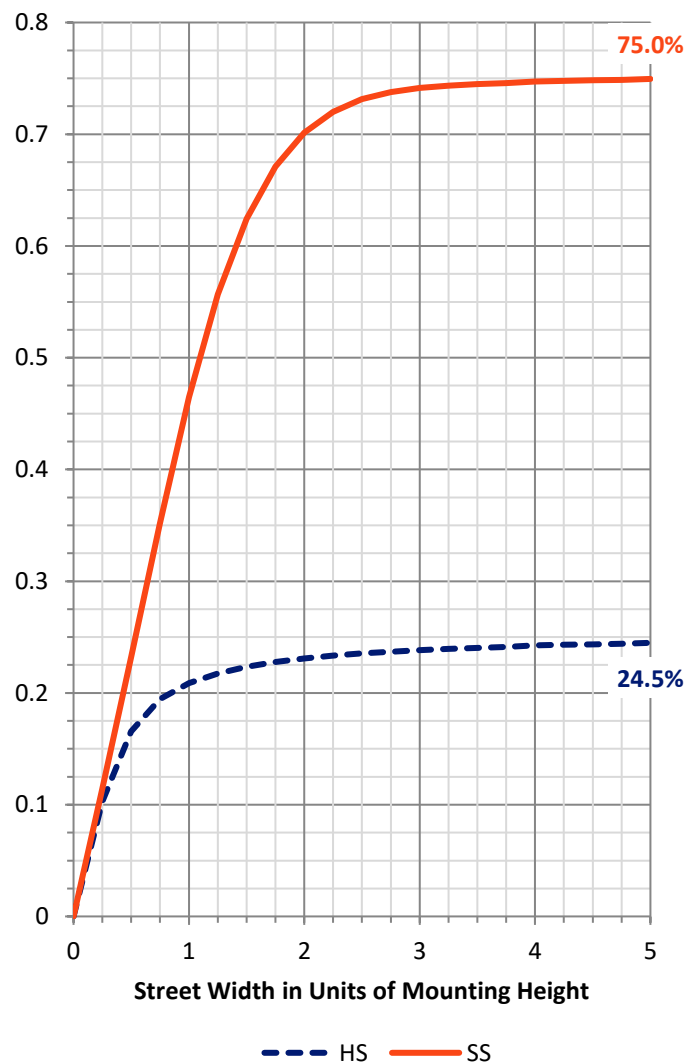
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3677.3	0.0	3677.3
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	11111.8	0.0	11111.8
	% Fixture	75.1	0.0	75.1
Total	Lumens	14789.0	0.0	14789.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.6	1.1
10°-20°	537.3	3.6
20°-30°	1035.6	7.0
30°-40°	1815.8	12.3
40°-50°	2699.5	18.3
50°-60°	3421.9	23.1
60°-70°	3348.3	22.6
70°-80°	1597.2	10.8
80°-90°	170.7	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°	14789.0	100.0
0°-180°	14789.0	100.0

Coefficient of Utilization



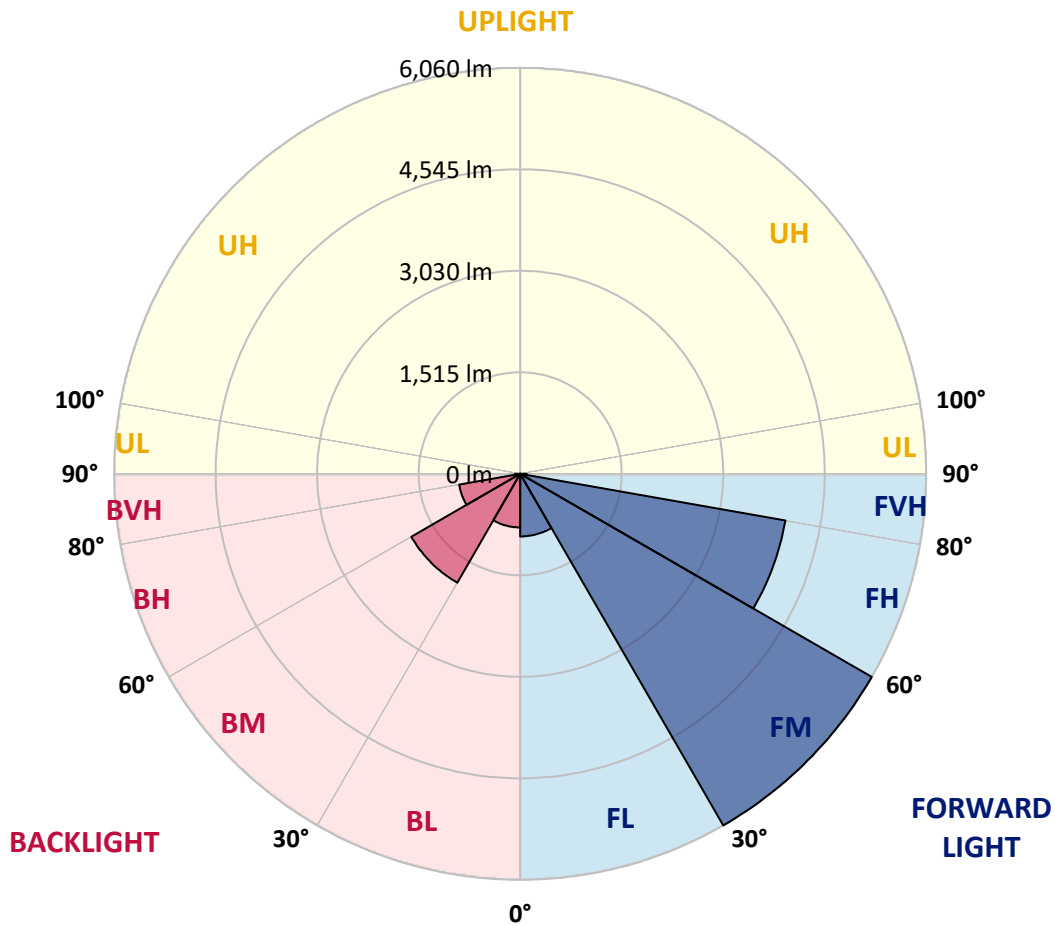
REPORT NUMBER: P883139
 CATALOG NUMBER: NAV-SB3B-830-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	934.5	6.3			
FM (30°-60°)	6060.4	41.0			
FH (60°-80°)	4020.1	27.2			G2/5000
FVH (80°-90°)	96.8	0.7			G1/100
BL (0°-30°)	801.0	5.4	B2/1000		
BM (30°-60°)	1876.9	12.7	B2/2500		
BH (60°-80°)	925.4	6.3	B2/1000		G2/1000
BVH (80°-90°)	73.9	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: P883139

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3
2.5°	1623.2	1632.5	1630.2	1626.3	1625.5	1627.1	1629.4	1631.7	1631.0	1634.9	1641.1
5°	1618.5	1627.9	1627.1	1627.1	1630.2	1636.4	1640.3	1644.2	1640.3	1645.0	1653.5
7.5°	1621.6	1628.6	1631.7	1634.9	1642.6	1654.3	1663.6	1672.2	1667.5	1672.9	1683.8
10°	1661.3	1666.7	1669.8	1669.8	1675.3	1688.5	1697.8	1713.3	1709.5	1718.0	1732.0
12.5°	1733.5	1739.0	1739.0	1735.9	1739.8	1748.3	1751.4	1768.5	1761.5	1775.5	1789.5
15°	1822.1	1833.0	1824.4	1819.0	1820.6	1829.1	1828.3	1841.5	1834.6	1846.2	1858.6
17.5°	1920.0	1934.0	1920.0	1919.2	1916.1	1925.5	1926.2	1937.9	1925.5	1934.0	1942.6
20°	2035.8	2055.2	2043.6	2047.5	2040.5	2044.3	2048.2	2065.3	2045.9	2052.1	2049.8
22.5°	2199.0	2222.3	2209.9	2224.6	2220.0	2216.8	2216.1	2246.4	2216.1	2218.4	2195.9
25°	2436.7	2464.7	2443.0	2463.2	2463.2	2473.3	2484.9	2523.8	2473.3	2458.5	2400.2
27.5°	2788.0	2815.9	2773.2	2785.6	2781.7	2806.6	2794.2	2890.5	2836.1	2812.0	2694.7
30°	3210.7	3260.4	3179.6	3176.5	3172.6	3212.2	3230.1	3293.8	3238.6	3214.5	3073.1
32.5°	3667.5	3719.6	3623.3	3595.3	3580.5	3604.6	3589.8	3641.1	3603.1	3565.8	3390.9
35°	4150.9	4202.1	4110.5	4056.1	3997.0	3946.5	3893.7	3906.9	3871.1	3814.4	3633.4
37.5°	4607.7	4701.8	4604.6	4546.4	4437.6	4338.9	4191.3	4129.9	4096.5	4044.4	3861.8
40°	5073.2	5126.8	5053.0	5003.3	4885.1	4730.5	4494.3	4364.5	4319.5	4269.0	4114.3
42.5°	5415.9	5467.1	5427.5	5393.3	5300.9	5121.4	4816.0	4653.6	4588.3	4531.6	4400.3
45°	5687.8	5725.9	5701.0	5713.5	5673.8	5499.8	5149.3	4963.6	4896.0	4826.9	4723.5
47.5°	5797.4	5837.8	5877.4	5951.2	6018.8	5890.6	5507.5	5299.3	5227.8	5157.1	5055.3
50°	5784.9	5826.1	5941.1	6098.1	6307.9	6265.1	5885.2	5656.7	5590.7	5509.9	5415.9
52.5°	5685.5	5732.1	5879.7	6140.8	6474.9	6545.6	6269.8	6025.8	5963.7	5867.3	5773.3
55°	5424.4	5452.4	5673.8	6043.7	6514.6	6741.5	6646.7	6419.0	6356.8	6222.4	6119.8
57.5°	4940.3	4980.7	5303.2	5781.8	6415.1	6874.3	6977.7	6832.4	6772.5	6579.1	6471.8
60°	4308.6	4373.1	4742.2	5342.0	6161.8	6873.5	7278.4	7238.7	7189.0	6930.3	6818.4
62.5°	3593.7	3668.3	4023.4	4720.4	5718.9	6678.5	7466.4	7579.1	7553.4	7254.3	7111.3
65°	2760.0	2811.3	3164.8	3916.2	5029.7	6259.7	7488.2	7811.4	7816.1	7500.6	7264.4
67.5°	1837.7	1985.3	2292.2	2938.7	4106.6	5575.1	7297.0	7849.5	7894.6	7585.3	7187.5
70°	896.7	1090.9	1391.6	1909.9	2938.7	4525.4	6797.4	7537.1	7637.4	7338.2	6729.0
72.5°	372.2	435.1	599.1	942.5	1686.9	3053.7	5793.5	6690.2	6875.9	6502.1	5657.5
75°	251.0	272.0	342.7	483.3	768.5	1505.9	4178.1	4988.5	5287.6	4910.8	4014.1
77.5°	193.5	206.7	249.4	338.0	456.9	569.6	2236.3	3006.3	3160.9	2926.3	2088.6
80°	152.3	162.4	186.5	246.3	324.0	304.6	762.3	1362.1	1451.5	1217.6	671.3
82.5°	132.1	136.0	133.6	167.1	215.2	177.9	250.2	502.7	554.8	402.5	219.1
85°	95.6	106.5	111.1	103.3	114.2	90.1	102.6	177.9	195.8	174.8	123.5
87.5°	38.9	57.5	70.7	66.8	42.0	25.6	31.9	52.1	59.8	65.3	40.4
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: P883139
 CATALOG NUMBER: NAV-SB3B-830-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3
2.5°	1641.8	1647.3	1651.2	1655.8	1658.9	1663.6	1672.9	1678.4	1679.1	1683.0	1682.3
5°	1656.6	1664.4	1672.9	1685.4	1699.3	1711.0	1728.9	1741.3	1746.0	1749.9	1749.1
7.5°	1688.5	1699.3	1714.9	1736.6	1756.8	1772.4	1794.1	1808.9	1823.7	1829.1	1829.9
10°	1735.9	1751.4	1773.9	1803.5	1825.2	1845.4	1868.0	1880.4	1895.2	1901.4	1904.5
12.5°	1794.9	1811.2	1840.8	1881.9	1902.2	1916.1	1923.9	1920.8	1923.9	1929.3	1930.9
15°	1862.5	1880.4	1913.8	1958.1	1972.1	1959.7	1942.6	1927.0	1924.7	1926.2	1931.7
17.5°	1942.6	1955.8	1994.6	2031.9	2021.8	1970.5	1933.2	1908.4	1895.9	1892.1	1897.5
20°	2054.4	2054.4	2086.3	2109.6	2042.0	1955.0	1896.7	1856.3	1830.7	1819.8	1817.5
22.5°	2190.4	2178.0	2198.2	2181.9	2038.1	1911.5	1830.7	1760.7	1721.9	1706.3	1704.0
25°	2362.9	2348.2	2342.7	2241.7	2010.2	1842.3	1711.0	1626.3	1592.1	1583.6	1585.1
27.5°	2623.2	2585.9	2515.2	2274.3	1958.9	1733.5	1571.1	1492.7	1473.2	1474.0	1476.3
30°	2969.8	2895.2	2721.9	2279.8	1875.0	1579.7	1428.2	1372.2	1362.9	1366.8	1380.0
32.5°	3290.7	3220.0	2933.3	2254.9	1746.0	1428.9	1300.0	1262.7	1248.7	1253.3	1259.6
35°	3542.4	3523.0	3129.1	2220.0	1587.5	1287.5	1185.0	1153.1	1125.9	1119.7	1124.4
37.5°	3780.2	3772.4	3275.9	2171.0	1430.5	1187.3	1092.5	1050.5	1010.9	989.2	989.9
40°	4041.3	4033.5	3372.3	2095.6	1291.4	1100.3	1009.4	954.2	905.2	865.6	869.5
42.5°	4335.0	4289.2	3418.1	1987.6	1173.3	1026.4	941.8	867.2	802.7	766.1	768.5
45°	4655.9	4552.6	3417.3	1850.1	1073.8	958.8	869.5	763.8	704.0	669.8	668.2
47.5°	4996.3	4804.3	3375.4	1697.8	977.5	884.3	757.6	676.8	637.2	616.2	611.5
50°	5347.5	5039.8	3303.9	1523.0	878.8	799.6	687.7	632.5	602.2	582.8	575.8
52.5°	5677.7	5253.5	3217.7	1324.8	778.6	717.2	656.6	613.8	582.0	560.2	550.9
55°	5984.6	5437.6	3095.7	1122.0	697.0	662.0	641.8	606.1	569.6	543.9	533.8
57.5°	6257.4	5557.3	2885.1	931.7	638.7	623.9	626.3	592.9	550.9	529.2	515.2
60°	6484.3	5645.1	2573.5	755.3	591.3	586.7	602.2	568.0	519.1	494.2	483.3
62.5°	6620.2	5643.5	2191.2	618.5	550.9	552.5	570.3	536.9	487.2	463.9	456.9
65°	6608.6	5505.2	1771.6	529.2	512.1	513.6	536.9	502.7	460.8	446.8	446.0
67.5°	6374.7	5168.0	1359.0	470.9	469.3	476.3	503.5	479.4	444.5	442.9	445.2
70°	5741.4	4467.9	979.0	424.3	425.0	435.1	470.9	464.7	435.9	439.0	438.2
72.5°	4603.9	3406.5	657.4	375.3	376.1	392.4	439.8	453.0	427.4	468.5	474.8
75°	3066.1	2124.4	422.7	323.2	324.0	345.0	412.6	430.5	404.1	467.0	470.9
77.5°	1473.2	955.0	306.1	272.0	272.0	291.4	356.7	385.4	344.2	362.9	332.6
80°	509.0	359.0	240.9	219.1	214.5	227.7	300.7	334.1	296.8	273.5	256.4
82.5°	200.5	186.5	193.5	170.2	154.6	163.2	233.9	275.8	218.3	197.4	196.6
85°	115.0	121.2	136.8	112.7	89.4	100.2	171.7	198.1	164.7	145.3	148.4
87.5°	31.1	42.7	62.9	58.3	40.4	42.7	81.6	109.6	94.8	73.0	75.4
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)