

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: P966058

Luminaire Tested: **NAV-SB4B-722-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966058
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4B-722-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14604.2 lumens
Efficiency: N/A
Efficacy: 99.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

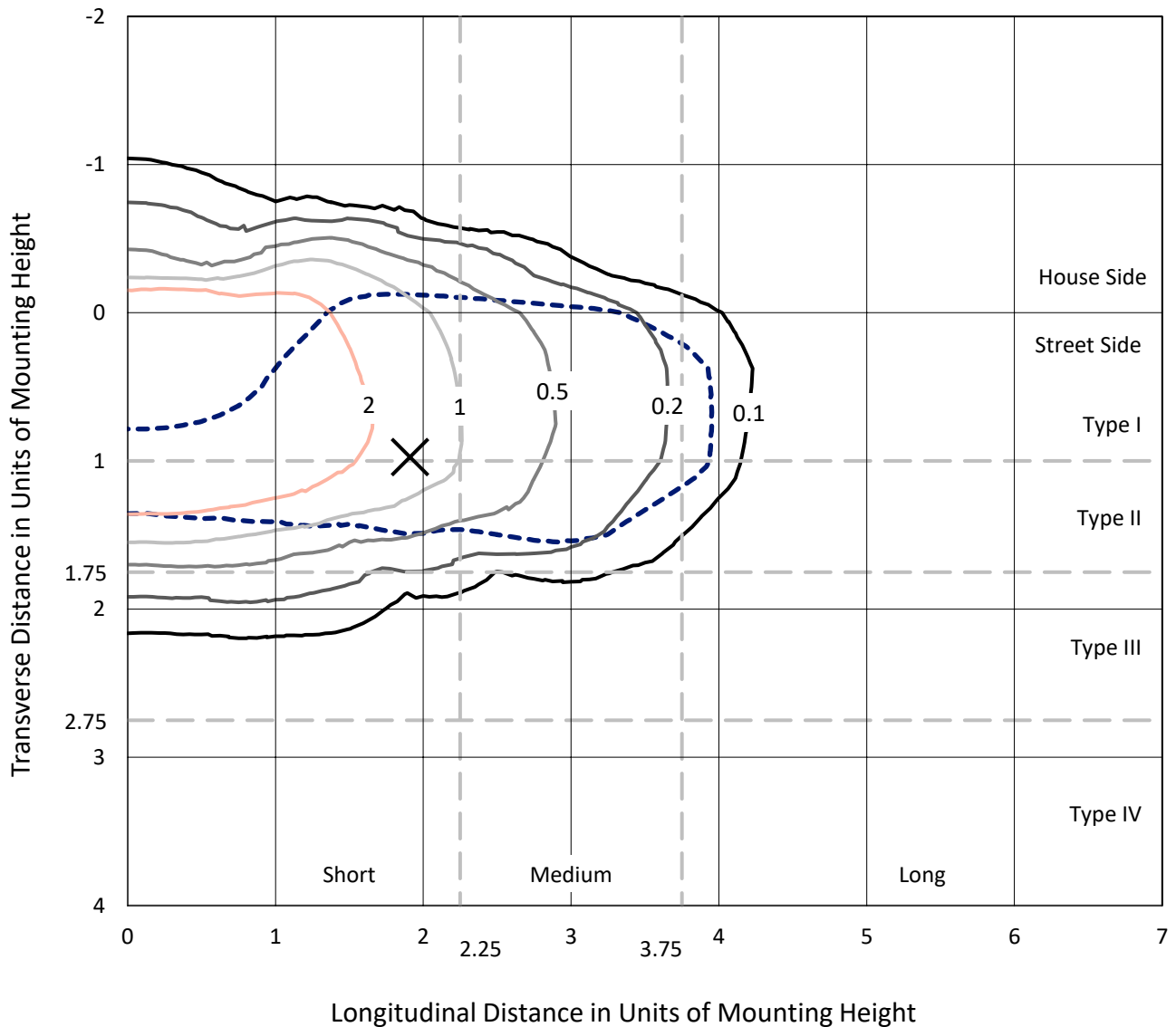
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P966058
 CATALOG NUMBER: NAV-SB4B-722-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

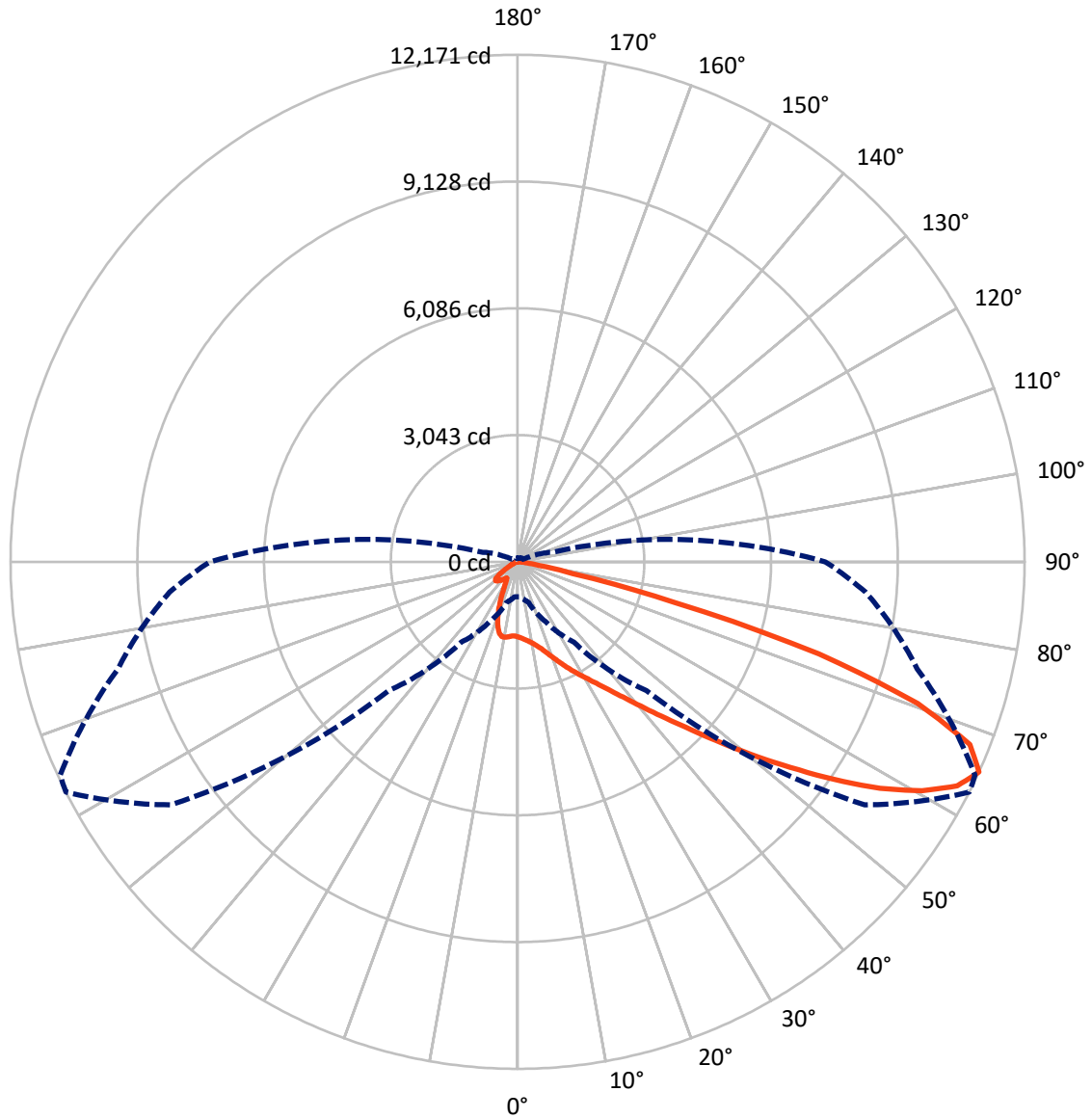
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
 Type II - Short - N/A

REPORT NUMBER: P966058
CATALOG NUMBER: NAV-SB4B-722-U-T2U-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P966058
 CATALOG NUMBER: NAV-SB4B-722-U-T2U-HSS

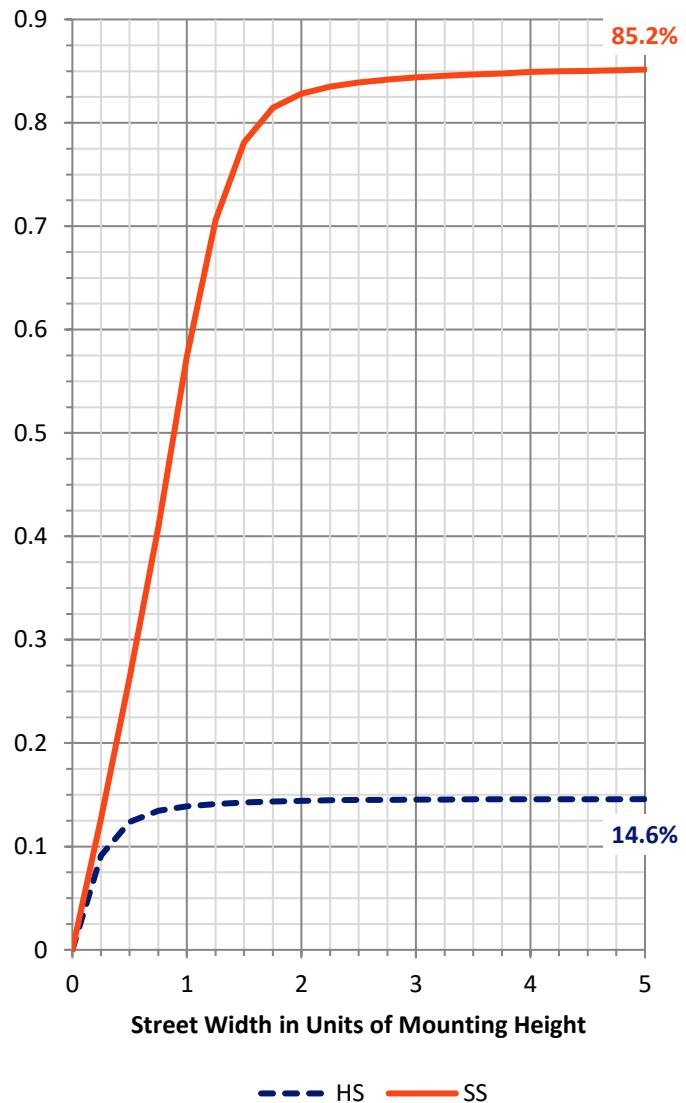
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2146.7	0.0	2146.7
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	12457.5	0.0	12457.5
	% Fixture	85.3	0.0	85.3
Total	Lumens	14604.2	0.0	14604.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.8	1.2
10°-20°	471.2	3.2
20°-30°	820.5	5.6
30°-40°	1478.8	10.1
40°-50°	2933.0	20.1
50°-60°	3995.2	27.4
60°-70°	3188.9	21.8
70°-80°	1443.1	9.9
80°-90°	103.7	0.7
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°	14604.2	100.0
0°-180°	14604.2	100.0

Coefficient of Utilization



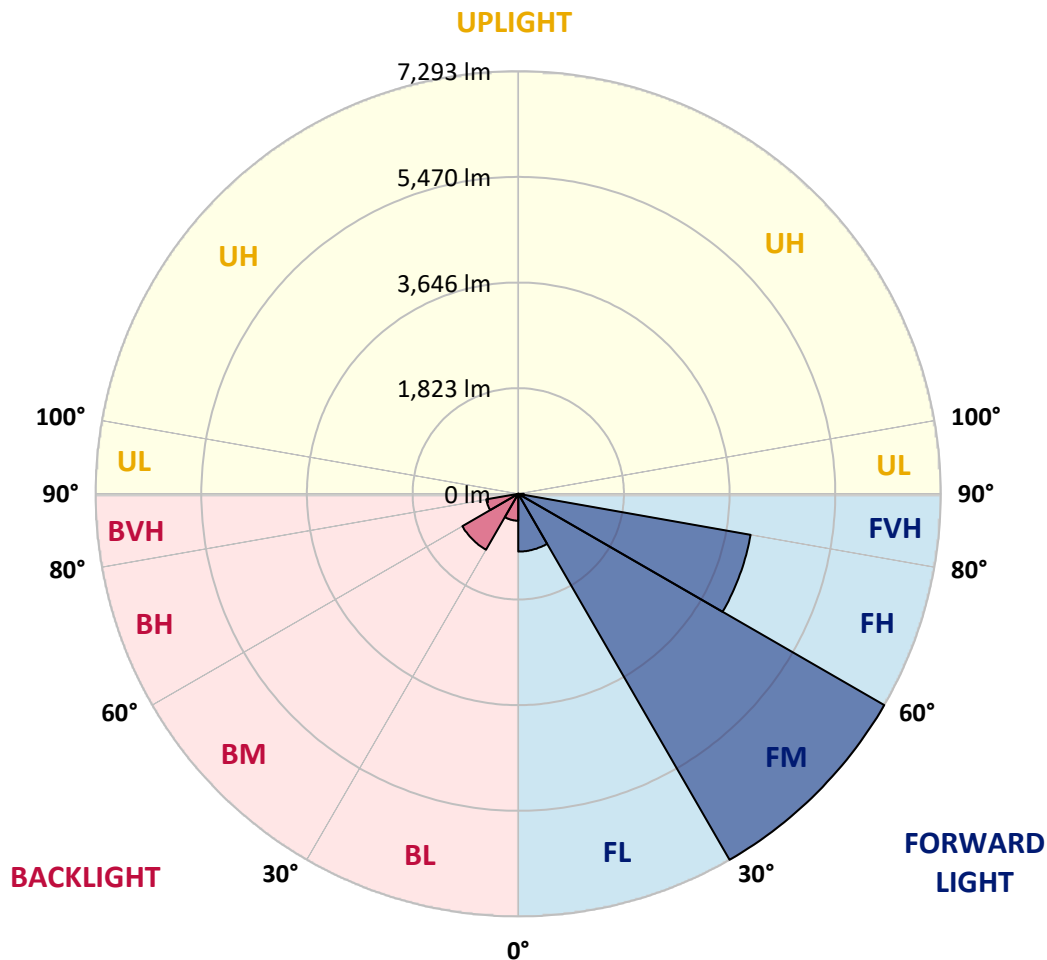
REPORT NUMBER: P966058
 CATALOG NUMBER: NAV-SB4B-722-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	996.9	6.8			
FM (30°-60°)	7293.0	49.9			
FH (60°-80°)	4071.6	27.9			G2/5000
FVH (80°-90°)	96.0	0.7			G1/100
BL (0°-30°)	464.6	3.2	B1/500		
BM (30°-60°)	1114.0	7.6	B2/2500		
BH (60°-80°)	560.4	3.8	B2/1000		G2/1000
BVH (80°-90°)	7.7	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



REPORT NUMBER: P966058
 CATALOG NUMBER: NAV-SB4B-722-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1802.5	1802.5	1802.5	1802.5	1802.5	1802.5	1802.5	1802.5	1802.5	1802.5	1802.5
2.5°	1844.6	1839.6	1846.6	1843.7	1841.6	1837.6	1835.6	1833.6	1829.5	1826.6	1814.5
5°	1849.6	1846.6	1853.7	1859.7	1865.7	1871.8	1874.7	1878.8	1874.7	1866.7	1854.6
7.5°	1807.5	1805.4	1820.5	1838.6	1865.7	1888.9	1914.0	1928.0	1929.0	1926.0	1913.0
10°	1804.4	1799.4	1814.5	1836.6	1871.8	1913.0	1957.1	1987.3	1991.3	2004.4	1990.3
12.5°	1851.7	1846.6	1867.8	1891.8	1928.0	1971.2	2025.5	2067.6	2073.7	2091.8	2081.8
15°	1931.0	1924.0	1948.1	1979.3	2025.5	2074.7	2132.0	2170.1	2175.2	2197.3	2179.1
17.5°	2023.5	2016.5	2044.6	2077.7	2128.0	2195.2	2261.6	2303.8	2309.8	2323.9	2290.7
20°	2142.0	2133.0	2155.1	2185.2	2238.5	2318.9	2398.2	2458.5	2457.5	2457.5	2403.2
22.5°	2279.7	2265.6	2284.7	2308.8	2359.0	2456.5	2562.0	2633.3	2633.3	2605.1	2515.8
25°	2427.4	2413.3	2434.4	2456.5	2500.7	2611.2	2734.8	2823.3	2827.3	2779.0	2636.3
27.5°	2612.2	2594.2	2610.3	2636.3	2662.4	2775.0	2921.7	3024.2	3026.2	2951.8	2750.9
30°	2967.9	2916.6	2866.4	2838.3	2850.3	2961.8	3118.6	3232.1	3242.2	3139.7	2875.4
32.5°	3619.0	3608.9	3432.1	3201.0	3080.4	3162.8	3338.6	3475.3	3481.3	3349.7	3037.2
35°	4630.6	4618.6	4334.3	3894.2	3501.4	3432.1	3605.8	3767.6	3763.6	3614.9	3247.2
37.5°	5838.3	5827.2	5452.5	4863.7	4227.8	3838.9	3950.5	4120.3	4145.4	3950.5	3518.4
40°	6870.2	6829.0	6591.9	6024.2	5192.3	4514.1	4440.8	4553.4	4579.4	4348.4	3863.1
42.5°	7651.8	7616.7	7496.0	7141.4	6359.7	5512.8	5018.5	5061.7	5090.9	4813.5	4259.0
45°	8056.7	8048.7	8096.9	8063.8	7549.3	6738.6	5844.3	5664.5	5675.5	5329.0	4708.0
47.5°	8114.0	8109.9	8330.0	8641.5	8572.1	8121.0	6904.3	6416.0	6376.8	5910.7	5196.3
50°	7776.4	7768.4	8190.4	8774.1	9255.3	9282.4	8108.0	7262.9	7176.5	6512.4	5705.7
52.5°	6698.4	6696.3	7389.5	8361.1	9495.4	10299.2	9297.5	8193.3	8048.7	7149.5	6244.2
55°	5154.1	5191.3	5986.0	7134.4	9057.4	10788.4	10365.5	9226.1	9004.1	7790.4	6740.5
57.5°	3651.0	3705.4	4491.0	5513.8	7699.0	10499.2	11087.8	10261.0	10021.9	8429.4	7243.9
60°	1961.1	2009.4	2796.1	4016.8	5727.8	9420.1	11468.6	11159.2	10933.2	9036.3	7698.1
62.5°	1168.5	1184.6	1510.0	2593.1	3874.1	7196.6	11306.9	11843.5	11657.5	9545.6	8092.9
65°	839.0	841.9	1005.7	1583.4	2352.0	4372.4	10172.6	12171.0	12113.7	9929.5	8385.2
67.5°	706.3	704.3	772.6	1052.0	1602.5	2190.2	7796.5	11707.8	11950.9	10172.6	8551.1
70°	605.9	608.8	689.2	770.6	1204.7	1239.8	3876.1	10193.7	10712.2	10236.9	8540.9
72.5°	451.1	461.1	535.5	702.3	909.3	853.0	1338.2	7558.4	8495.7	9645.1	8097.9
75°	318.5	323.5	376.8	590.8	678.1	620.9	683.2	3907.3	5108.9	7394.6	6628.1
77.5°	245.2	254.2	285.4	413.0	668.1	436.0	418.0	1352.3	2077.7	4467.0	4544.2
80°	132.6	148.7	205.9	298.4	469.2	308.4	206.9	538.5	704.3	2088.7	1752.2
82.5°	68.4	76.4	143.7	215.0	267.2	269.3	102.5	224.1	290.4	645.0	240.2
85°	27.2	33.1	96.5	118.6	137.7	132.6	46.2	90.4	104.4	178.9	73.4
87.5°	6.0	10.0	35.2	27.2	26.1	28.1	11.1	21.1	20.1	21.1	13.0
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: P966058
 CATALOG NUMBER: NAV-SB4B-722-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1802.5	1802.5	1802.5	1802.5	1802.5	1802.5	1802.5	1802.5	1802.5	1802.5	1802.5
2.5°	1813.5	1809.4	1798.5	1786.4	1772.3	1764.2	1759.2	1758.2	1751.2	1746.2	1751.2
5°	1843.7	1839.6	1818.6	1793.4	1766.3	1745.2	1725.1	1707.0	1680.9	1675.9	1673.8
7.5°	1903.9	1892.9	1858.7	1824.5	1773.2	1712.1	1637.6	1552.3	1475.9	1452.8	1441.8
10°	1978.2	1963.2	1920.0	1859.7	1746.2	1579.4	1399.5	1232.8	1100.1	1062.9	1048.9
12.5°	2062.6	2049.6	1992.3	1880.8	1632.6	1330.2	1054.9	848.0	719.3	687.3	678.1
15°	2163.2	2144.0	2064.7	1848.7	1429.7	1010.8	724.4	601.8	555.6	549.6	543.6
17.5°	2269.7	2238.5	2128.9	1733.1	1156.4	718.3	559.6	524.5	504.4	498.4	495.3
20°	2367.0	2326.9	2167.2	1558.3	864.1	559.6	501.3	478.3	460.1	453.2	449.1
22.5°	2464.5	2407.3	2167.2	1320.2	648.0	496.3	460.1	439.0	418.0	408.9	403.8
25°	2566.0	2489.6	2128.9	1054.9	521.4	455.1	421.0	397.9	379.8	368.7	364.7
27.5°	2664.5	2559.0	2041.6	803.8	464.2	418.9	384.8	362.7	345.6	337.5	337.5
30°	2757.9	2627.3	1919.0	609.9	427.0	383.8	351.7	332.5	315.5	307.4	308.4
32.5°	2884.5	2713.7	1788.3	500.3	394.8	350.7	321.5	303.4	288.3	282.3	282.3
35°	3060.3	2841.3	1675.9	491.3	367.8	323.5	294.4	277.3	262.2	257.2	257.2
37.5°	3309.5	3047.2	1616.5	551.6	345.6	299.4	272.2	254.2	240.2	236.1	235.1
40°	3616.9	3326.5	1648.7	611.8	330.6	278.3	252.2	234.1	222.0	217.0	216.0
42.5°	3981.6	3671.1	1826.6	658.0	320.5	260.2	233.1	213.0	205.0	203.0	203.0
45°	4400.6	4050.0	2098.8	707.4	304.4	243.1	214.0	199.0	192.9	191.9	190.9
47.5°	4876.8	4465.9	2414.3	768.6	288.3	227.0	199.0	188.9	183.9	181.8	181.8
50°	5349.1	4884.8	2738.8	802.8	275.3	212.0	186.9	178.9	174.9	173.8	173.8
52.5°	5843.3	5315.9	3001.0	770.6	264.2	200.0	176.8	170.8	166.8	165.7	165.7
55°	6314.5	5664.5	3046.3	654.1	242.1	187.9	165.7	162.8	157.7	157.7	156.7
57.5°	6720.4	5839.3	2726.8	480.2	220.1	169.8	154.8	151.7	147.7	146.7	145.7
60°	7093.2	5789.1	2104.8	323.5	195.9	151.7	140.6	138.7	134.6	129.6	128.6
62.5°	7303.1	5568.0	1439.7	210.9	171.8	132.6	124.5	123.6	114.5	104.4	102.5
65°	7382.6	5113.9	898.2	153.8	143.7	113.6	107.5	105.5	92.5	81.4	80.4
67.5°	7313.2	4366.4	453.2	121.6	113.6	94.4	88.5	88.5	79.3	69.3	68.4
70°	7035.9	3273.3	190.9	97.5	87.4	72.4	72.4	76.4	67.3	56.3	55.2
72.5°	6434.1	2202.3	101.5	74.3	65.3	51.2	59.2	62.3	53.3	42.2	42.2
75°	5115.0	1343.3	70.3	55.2	41.2	36.2	45.2	47.3	36.2	28.1	27.2
77.5°	3498.3	771.6	47.3	35.2	26.1	21.1	31.2	29.1	19.1	13.0	14.0
80°	1536.2	321.5	27.2	16.1	10.0	8.0	11.1	8.0	6.0	4.0	4.0
82.5°	179.9	75.3	10.0	6.0	4.0	2.0	1.0	0.0	0.0	0.0	0.0
85°	37.2	9.0	5.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.1	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)