

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: P965536

Luminaire Tested: **NAV-SB4A-722-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965536
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4A-722-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2200K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15627.2 lumens
Efficiency: N/A
Efficacy: 137.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G3

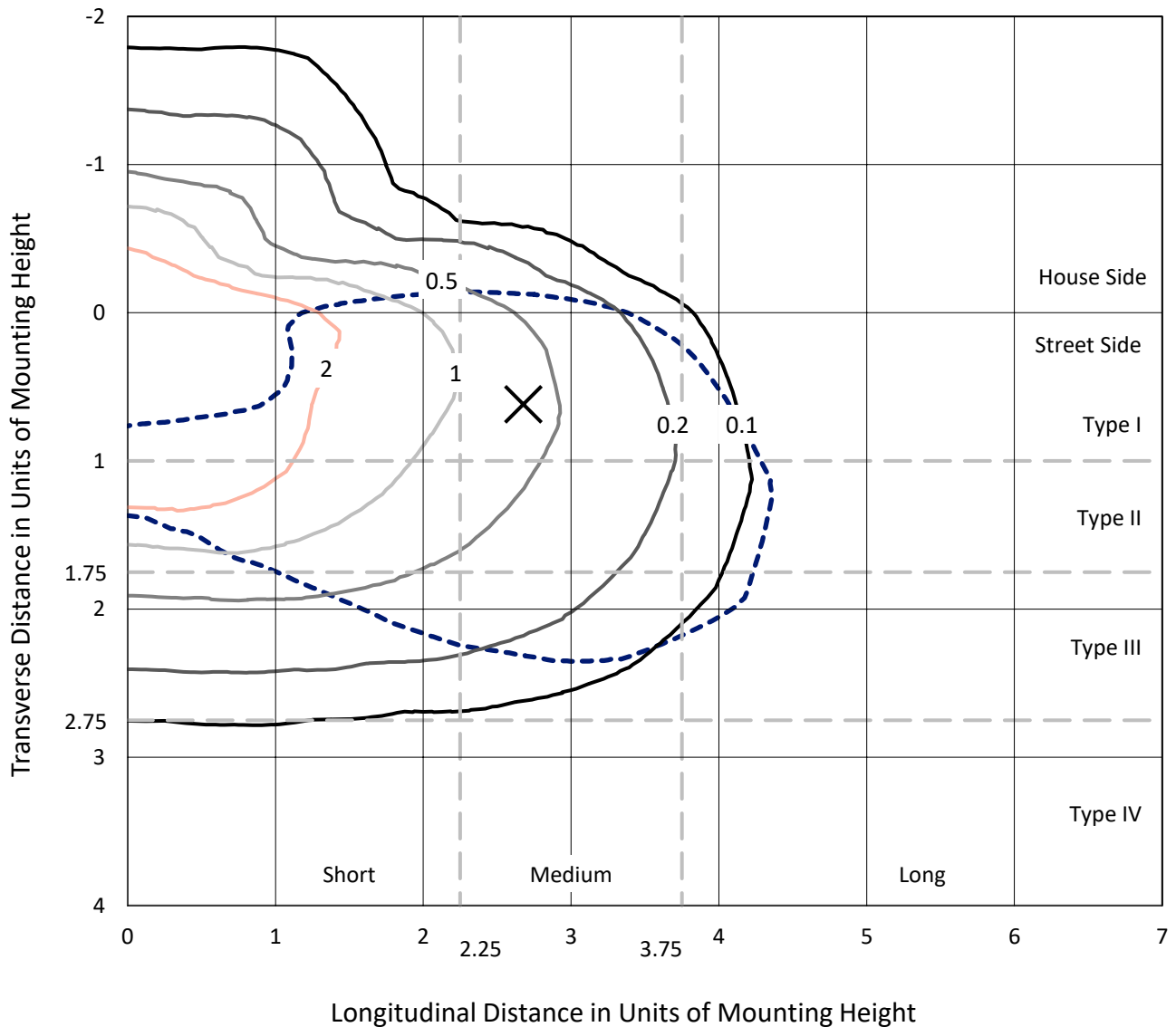
Input Watts (W): 114
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

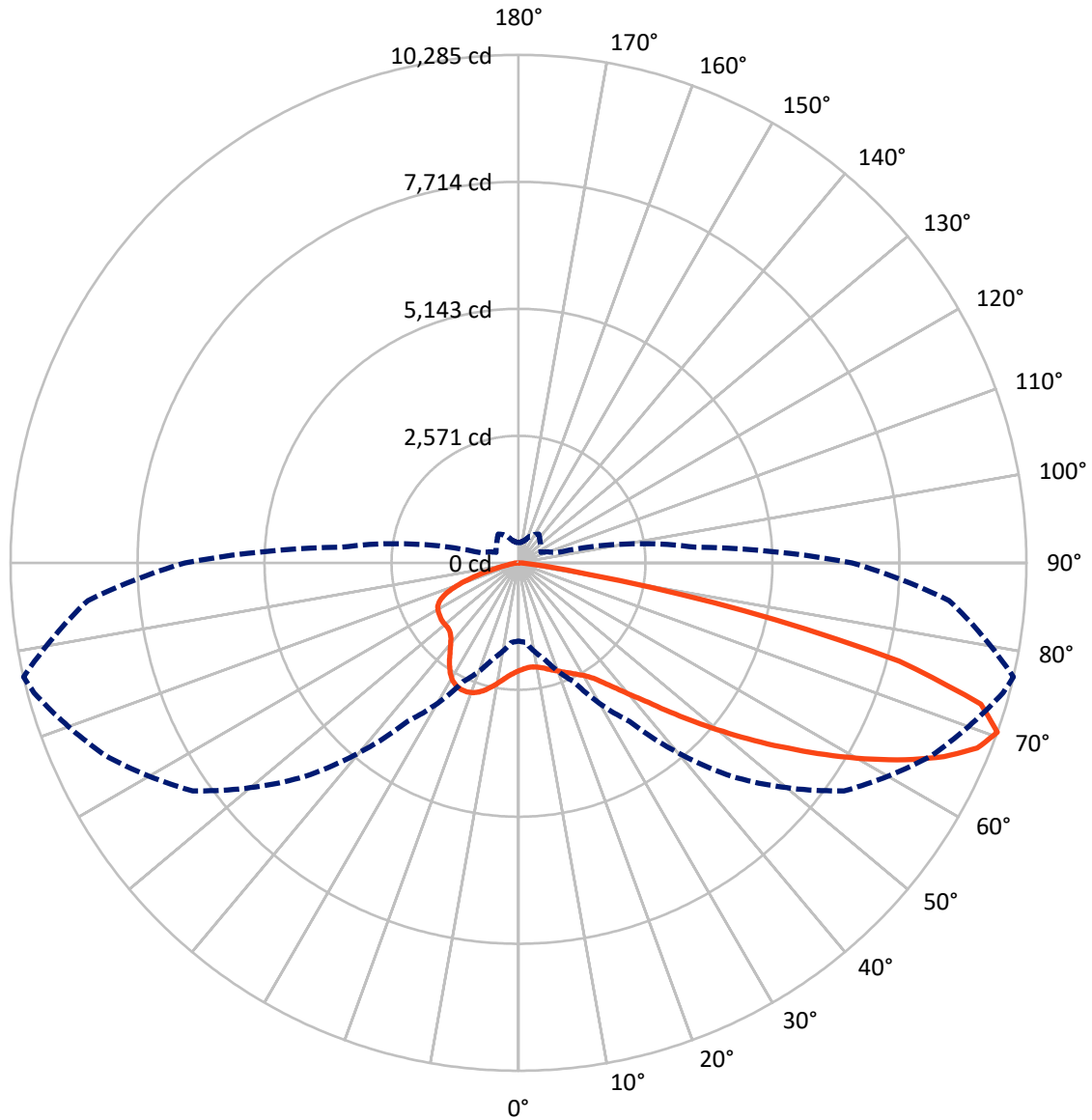
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc
 Type III - Medium - N/A

REPORT NUMBER: P965536
CATALOG NUMBER: NAV-SB4A-722-U-T3R

Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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 CATALOG NUMBER: NAV-SB4A-722-U-T3R

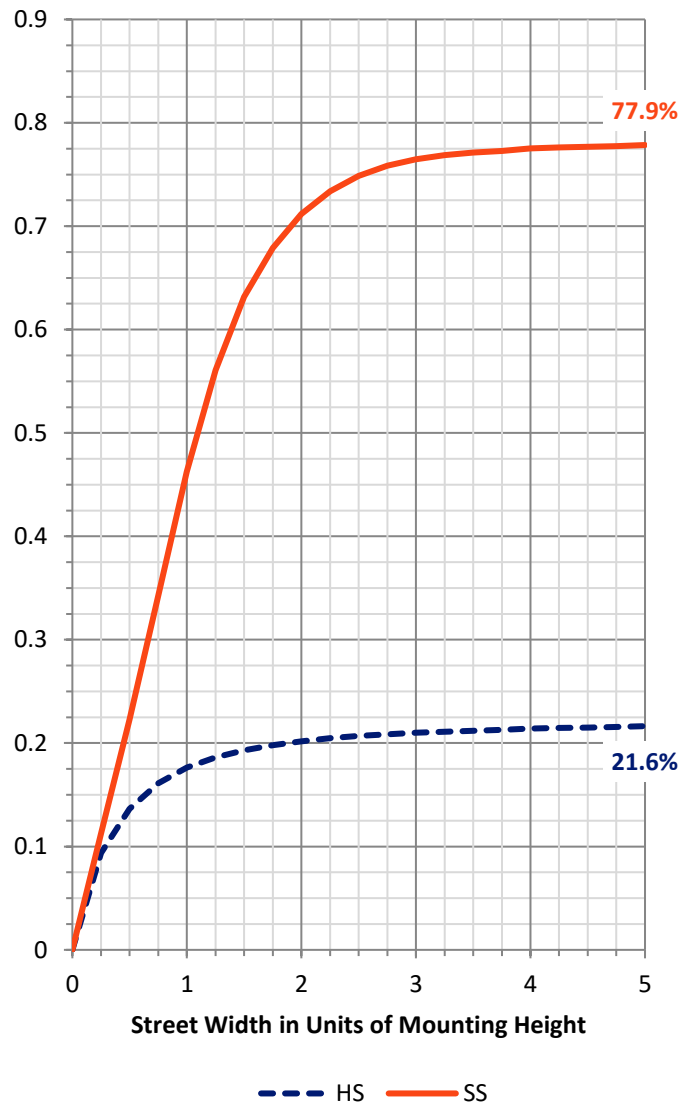
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3422.1	0.0	3422.1
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	12205.0	0.0	12205.0
	% Fixture	78.1	0.0	78.1
Total	Lumens	15627.2	0.0	15627.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.9	1.3
10°-20°	600.1	3.8
20°-30°	1026.2	6.6
30°-40°	1650.3	10.6
40°-50°	2576.6	16.5
50°-60°	3441.7	22.0
60°-70°	3668.3	23.5
70°-80°	2258.2	14.5
80°-90°	197.9	1.3
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°	15627.2	100.0
0°-180°	15627.2	100.0

Coefficient of Utilization

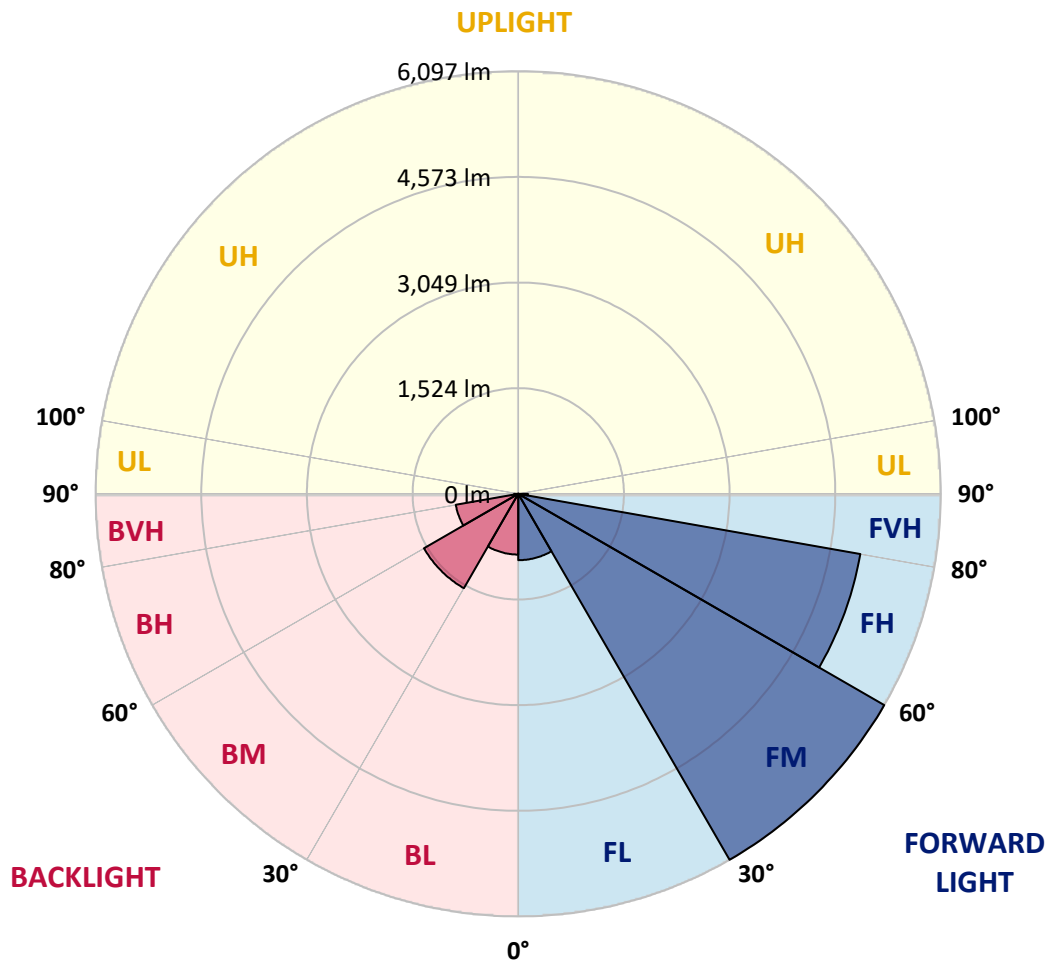


REPORT NUMBER: P965536
 CATALOG NUMBER: NAV-SB4A-722-U-T3R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	957.4	6.1			
FM (30°-60°)	6097.4	39.0			
FH (60°-80°)	5011.9	32.1			G3/7500
FVH (80°-90°)	138.4	0.9			G2/225
BL (0°-30°)	876.9	5.6	B2/1000		
BM (30°-60°)	1571.2	10.1	B2/2500		
BH (60°-80°)	914.6	5.9	B2/1000		G2/1000
BVH (80°-90°)	59.5	0.4			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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2180.2	2180.2	2180.2	2180.2	2180.2	2180.2	2180.2	2180.2	2180.2	2180.2	2180.2
2.5°	2009.6	2008.9	2019.2	2022.4	2041.7	2055.2	2080.9	2108.1	2143.3	2147.3	2168.9
5°	1893.6	1893.6	1905.6	1918.4	1943.2	1970.5	2009.6	2056.9	2117.8	2127.3	2180.9
7.5°	1795.2	1801.5	1812.0	1836.8	1865.6	1904.9	1964.8	2032.1	2112.1	2127.3	2213.8
10°	1716.0	1723.1	1735.9	1755.9	1799.2	1853.6	1932.0	2018.4	2125.7	2149.7	2261.8
12.5°	1691.1	1698.3	1705.5	1720.8	1760.7	1824.8	1918.4	2024.9	2158.5	2182.5	2327.4
15°	1748.8	1757.6	1751.9	1747.9	1768.7	1827.2	1924.8	2048.1	2199.3	2233.8	2408.2
17.5°	1881.6	1884.8	1872.0	1834.3	1831.2	1862.4	1955.2	2080.1	2250.6	2288.2	2489.8
20°	2096.1	2090.5	2064.0	1989.6	1947.2	1940.8	2007.3	2128.1	2303.4	2343.4	2577.9
22.5°	2387.4	2381.0	2328.2	2210.5	2116.1	2053.7	2082.5	2190.5	2362.6	2407.4	2663.6
25°	2750.8	2742.0	2664.4	2504.3	2357.8	2203.3	2184.9	2272.9	2435.4	2477.0	2753.1
27.5°	3174.9	3167.8	3083.7	2872.5	2661.1	2408.2	2312.2	2369.8	2511.5	2558.7	2854.0
30°	3631.2	3652.0	3503.1	3275.8	3008.5	2675.6	2483.5	2489.1	2610.0	2652.3	2976.5
32.5°	4167.3	4203.4	4024.2	3736.0	3371.0	2966.0	2699.5	2655.6	2753.1	2788.4	3131.0
35°	4698.8	4739.6	4590.8	4272.2	3852.1	3308.6	2925.2	2846.8	2943.7	2982.0	3335.9
37.5°	5158.2	5212.6	5135.8	4858.9	4366.7	3721.6	3219.7	3071.7	3178.1	3226.2	3611.2
40°	5520.8	5604.0	5598.3	5425.5	4973.3	4222.6	3593.5	3349.4	3469.5	3521.5	3944.9
42.5°	5815.2	5887.3	5949.7	5940.9	5606.4	4791.7	4033.0	3710.4	3801.6	3861.7	4320.3
45°	6018.6	6095.4	6229.8	6374.7	6215.5	5400.7	4536.3	4138.5	4221.8	4312.3	4767.6
47.5°	6200.2	6287.5	6461.9	6691.6	6732.5	6012.1	5087.8	4637.2	4713.3	4806.8	5216.6
50°	6216.2	6291.4	6562.0	6887.7	7099.9	6599.6	5680.0	5196.6	5267.9	5367.9	5697.7
52.5°	5829.7	5948.2	6420.3	6882.2	7268.7	7091.1	6268.3	5778.4	5858.5	5978.5	6195.4
55°	4525.2	4698.8	6005.0	6667.6	7208.7	7408.8	6827.7	6397.1	6499.5	6625.2	6696.4
57.5°	3897.7	3973.7	4766.9	6277.1	6934.9	7491.2	7299.9	7022.2	7187.1	7324.8	7226.2
60°	3503.1	3566.3	4035.3	5669.6	6574.8	7360.7	7664.8	7604.9	7889.7	8053.8	7768.1
62.5°	3080.5	3140.5	3567.1	4734.1	6113.8	7143.8	7895.4	8142.7	8610.1	8789.4	8278.7
65°	2661.1	2712.4	3121.3	3977.7	5527.9	6927.0	8014.6	8607.6	9276.8	9462.4	8702.9
67.5°	2193.7	2236.1	2622.8	3355.8	4815.7	6630.0	8073.8	8973.5	9857.0	10016.3	8912.6
70°	1583.1	1615.9	2015.3	2653.9	3921.6	6119.5	8049.8	9232.7	10158.0	10285.2	8754.1
72.5°	748.4	778.0	1246.9	1723.1	2770.0	5125.4	7564.0	9027.1	9852.2	9789.0	7784.2
75°	399.3	425.0	716.3	945.2	1463.0	3513.5	6189.9	7776.2	8273.1	7965.8	5752.8
77.5°	270.5	290.5	443.4	567.4	668.3	1667.9	3978.5	5383.9	5179.8	4672.4	2881.3
80°	214.5	235.3	363.4	384.2	323.4	602.7	1643.9	2492.3	1790.4	1431.8	819.6
82.5°	164.8	188.1	305.8	278.5	176.1	247.3	478.6	788.3	458.6	348.9	198.4
85°	100.9	125.7	240.1	177.6	99.2	112.9	162.5	219.2	140.0	116.8	71.2
87.5°	51.2	72.1	121.7	64.8	44.8	26.4	43.3	43.3	36.8	32.0	18.4
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: P965536
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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2180.2	2180.2	2180.2	2180.2	2180.2	2180.2	2180.2	2180.2	2180.2	2180.2	2180.2
2.5°	2188.2	2204.2	2231.3	2256.9	2276.9	2296.2	2315.4	2325.8	2329.0	2341.8	2349.0
5°	2213.8	2243.3	2296.2	2345.8	2377.0	2396.2	2409.9	2417.9	2419.4	2423.4	2429.9
7.5°	2260.9	2308.2	2381.8	2431.4	2454.7	2453.0	2447.5	2427.4	2419.4	2412.2	2413.9
10°	2327.4	2389.8	2480.3	2514.6	2500.3	2461.8	2412.2	2353.8	2326.5	2300.2	2292.2
12.5°	2409.9	2489.1	2577.9	2576.3	2505.1	2406.6	2291.4	2201.7	2144.9	2104.1	2094.5
15°	2509.9	2601.1	2669.1	2614.7	2458.7	2281.8	2112.9	1996.1	1944.8	1900.0	1895.2
17.5°	2613.1	2710.7	2742.0	2602.7	2341.8	2096.9	1905.6	1813.5	1763.1	1739.1	1746.4
20°	2714.0	2810.8	2785.2	2533.9	2164.1	1887.2	1716.8	1666.3	1655.9	1661.5	1659.1
22.5°	2820.4	2906.8	2793.9	2401.1	1937.7	1672.7	1579.1	1580.7	1603.9	1620.7	1624.7
25°	2929.2	2987.7	2770.8	2209.0	1694.3	1515.1	1491.9	1517.4	1563.0	1595.9	1604.6
27.5°	3034.1	3059.7	2720.4	1971.3	1485.4	1402.2	1406.2	1459.0	1527.9	1573.5	1584.6
30°	3152.6	3123.7	2623.5	1704.0	1340.6	1305.3	1339.0	1400.6	1469.4	1510.2	1519.9
32.5°	3286.3	3178.9	2469.8	1456.6	1238.1	1227.7	1283.0	1323.0	1353.4	1365.4	1371.8
35°	3452.7	3256.6	2272.9	1283.0	1146.1	1170.9	1223.7	1203.8	1191.7	1185.3	1191.7
37.5°	3668.8	3361.4	2042.5	1170.1	1071.6	1130.1	1151.7	1089.3	1042.0	1018.8	1024.5
40°	3928.8	3515.1	1820.8	1082.9	1024.5	1094.9	1057.3	982.1	922.0	889.2	891.5
42.5°	4217.8	3676.0	1634.3	1017.2	998.0	1066.1	987.6	898.0	801.1	790.8	801.1
45°	4521.2	3841.6	1507.1	966.8	985.2	1041.2	947.6	802.8	733.9	776.3	798.8
47.5°	4824.5	3993.7	1430.2	929.2	978.8	1013.2	912.4	749.9	701.1	762.7	791.5
50°	5162.2	4129.7	1395.8	902.0	971.6	1002.0	859.6	736.4	666.7	707.5	737.9
52.5°	5497.6	4235.4	1370.2	874.7	961.2	993.2	833.9	720.3	625.0	627.5	644.3
55°	5832.0	4304.3	1342.1	838.8	938.0	974.1	831.6	702.7	593.9	582.6	590.6
57.5°	6189.1	4343.4	1307.8	798.8	898.0	925.2	829.1	689.1	584.2	565.8	568.3
60°	6552.4	4401.0	1262.9	749.9	844.4	866.7	823.6	684.3	578.6	547.5	549.8
62.5°	6878.2	4421.1	1209.3	703.5	775.5	809.1	811.6	680.3	563.4	509.8	509.8
65°	7091.9	4334.6	1115.7	650.7	701.1	749.9	788.3	666.7	536.2	482.6	482.6
67.5°	7083.1	4088.1	969.2	582.6	629.0	684.3	754.7	643.5	503.4	449.0	451.4
70°	6753.3	3601.5	783.5	503.4	549.8	613.9	711.5	609.1	464.2	412.2	417.0
72.5°	5792.1	2818.9	569.1	410.6	457.8	541.0	655.5	567.4	424.1	379.4	377.0
75°	4137.7	1783.9	385.8	315.3	356.2	458.6	585.9	518.6	387.3	381.0	359.4
77.5°	2113.7	852.4	255.3	230.5	248.2	361.7	492.2	463.4	393.0	314.6	280.1
80°	687.5	314.6	160.8	156.8	164.8	240.9	381.0	380.2	297.8	213.7	188.9
82.5°	219.2	135.3	104.9	100.9	96.9	151.3	265.7	300.9	200.9	135.3	134.5
85°	87.2	80.9	61.6	56.8	40.8	71.2	139.3	200.1	149.6	97.7	100.0
87.5°	32.0	32.0	16.8	12.0	8.8	24.0	37.6	60.1	85.6	50.4	49.6
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)