

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: P965528

Luminaire Tested: **NAV-SB4A-722-U-T2-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P965528  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB4A-722-U-T2-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 2200K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11116.1 lumens  
Efficiency: N/A  
Efficacy: 97.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G2

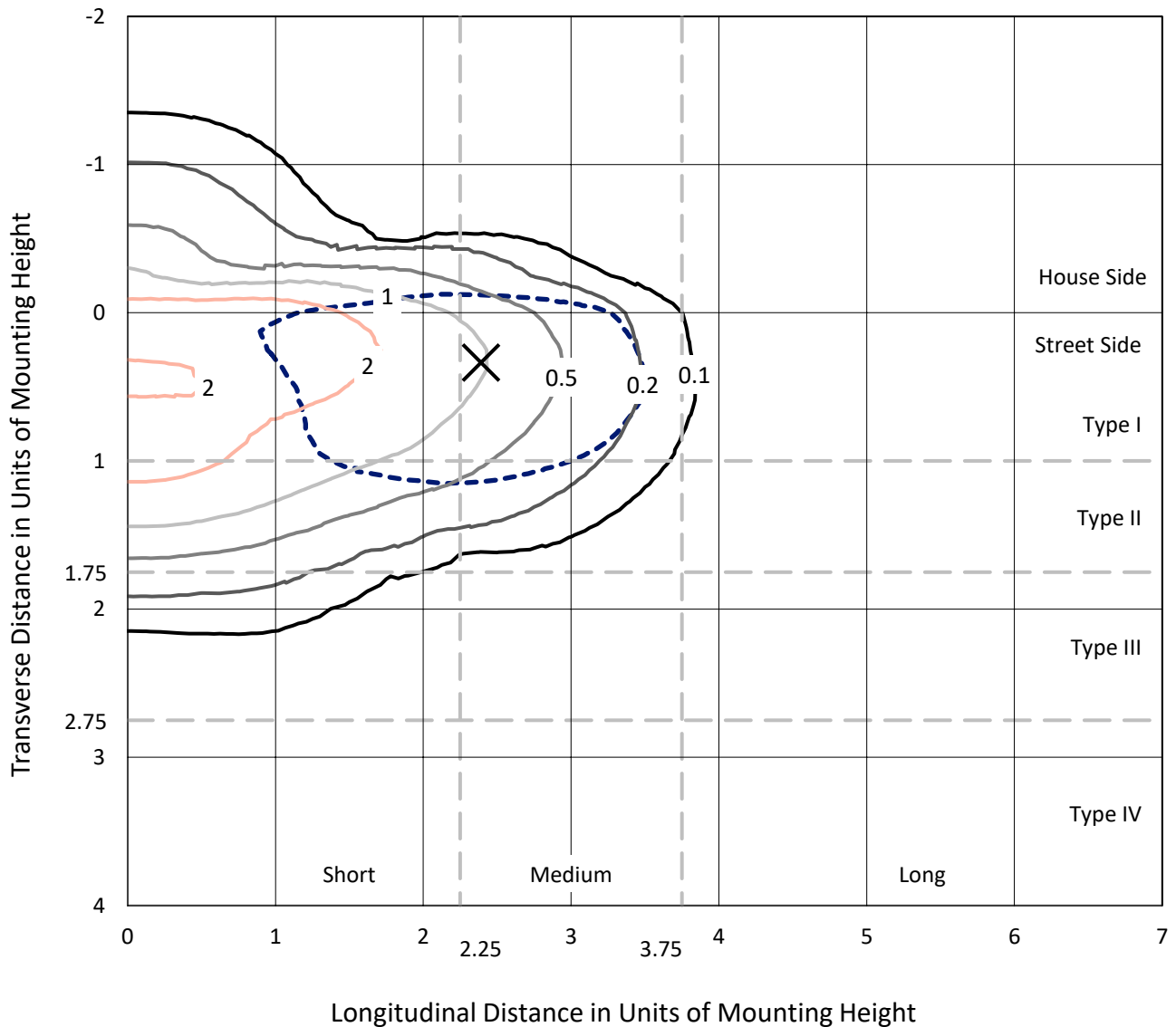
Input Watts (W): 114  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

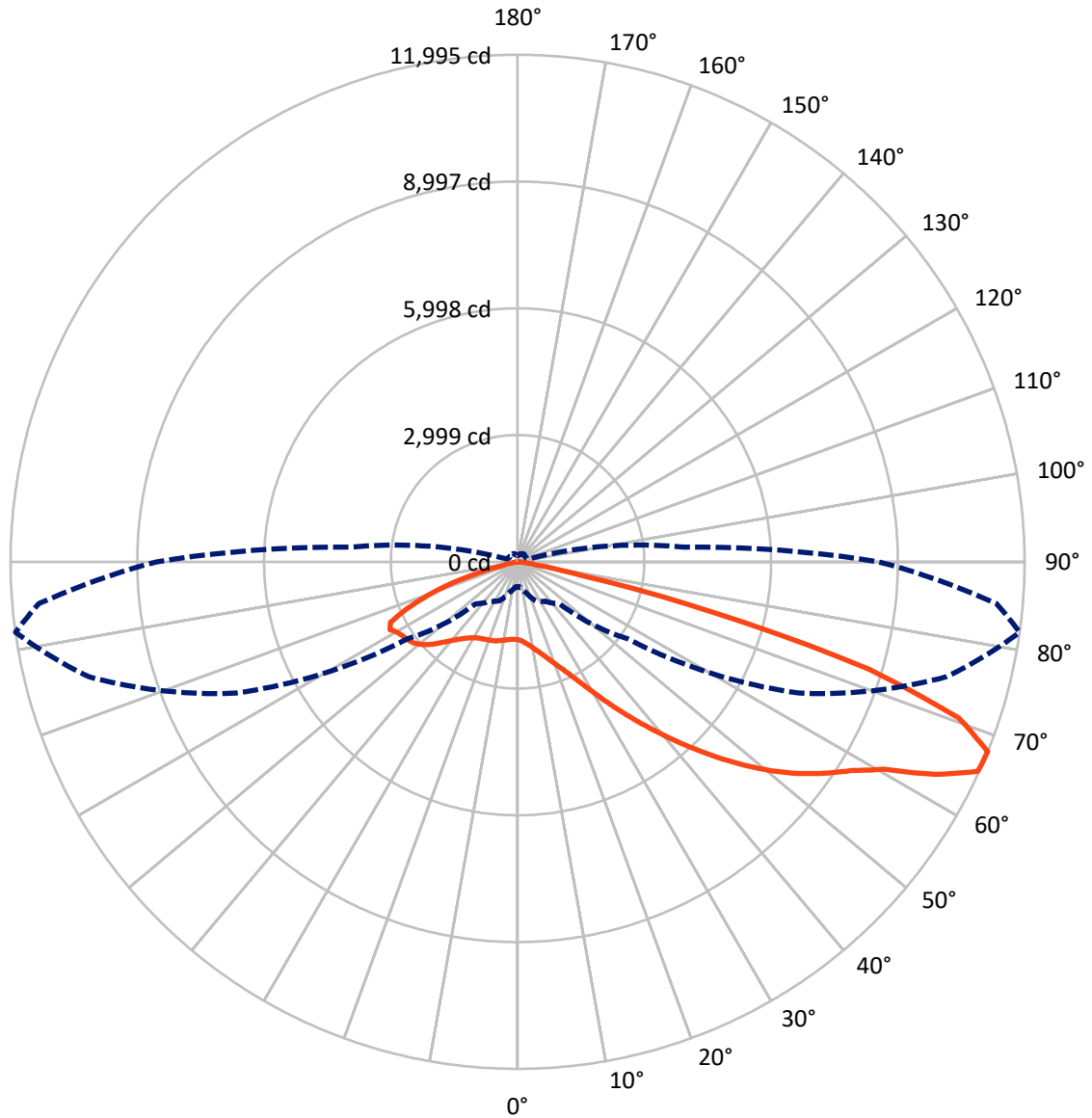
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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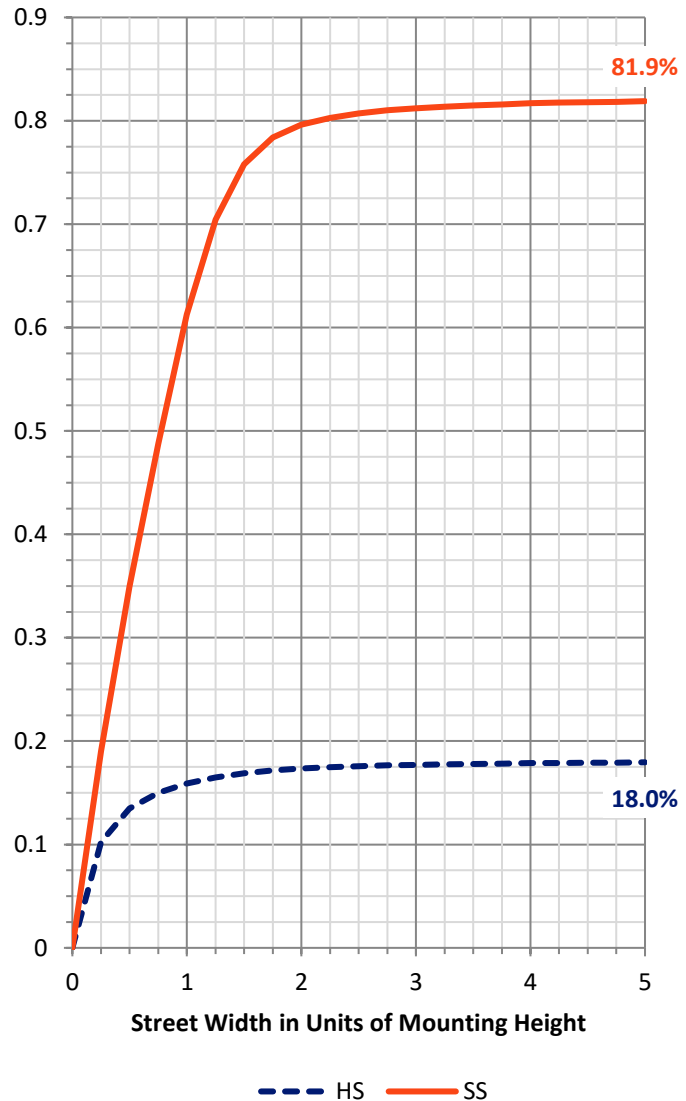
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2013.6	0.0	2013.6
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	9102.5	0.0	9102.5
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	11116.1	0.0	11116.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.1	1.5
10°-20°	426.4	3.8
20°-30°	682.9	6.1
30°-40°	1207.5	10.9
40°-50°	2115.7	19.0
50°-60°	2821.8	25.4
60°-70°	2626.9	23.6
70°-80°	1008.2	9.1
80°-90°	62.6	0.6
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°	11116.1	100.0
0°-180°	11116.1	100.0

**Coefficient of Utilization**



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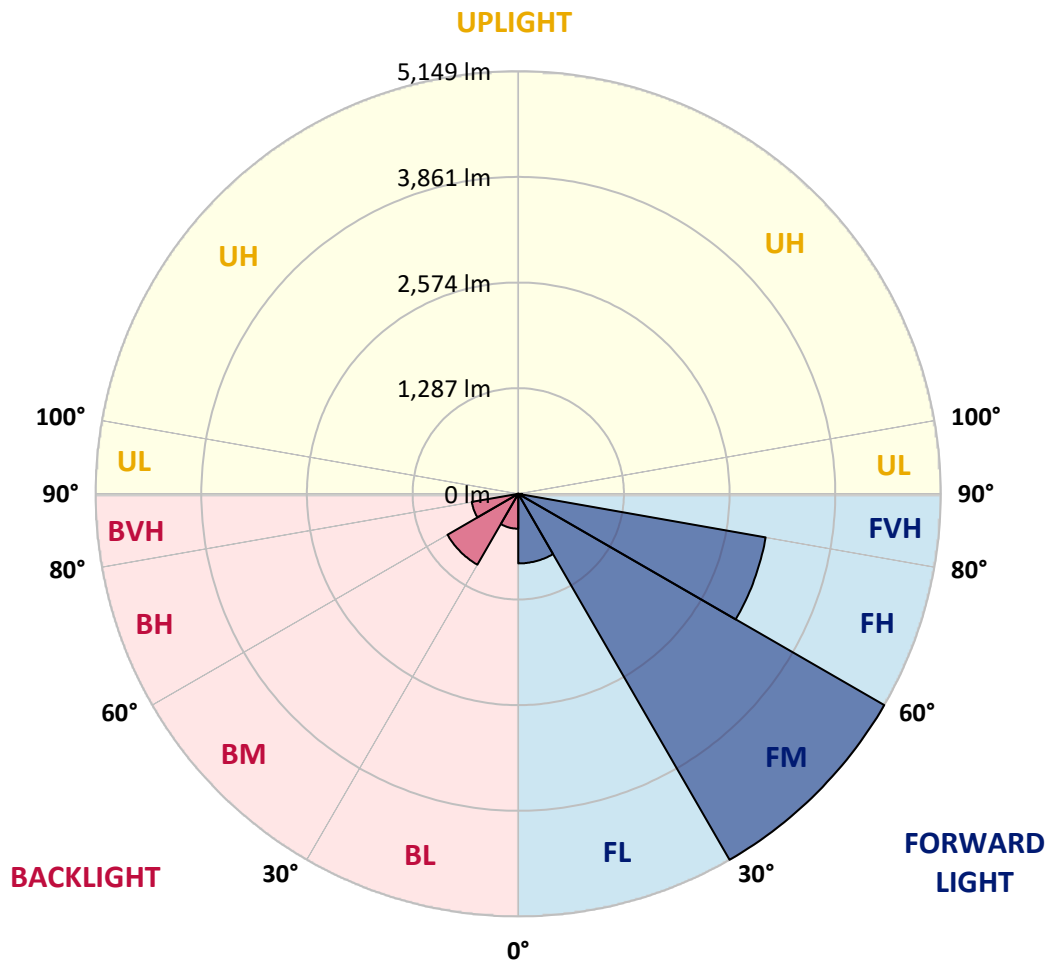
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	848.0	7.6			
FM (30°-60°)	5148.5	46.3			
FH (60°-80°)	3060.4	27.5			G2/5000
FVH (80°-90°)	45.5	0.4			G1/100
BL (0°-30°)	425.3	3.8	B1/500		
BM (30°-60°)	996.5	9.0	B1/1000		
BH (60°-80°)	574.7	5.2	B2/1000		G2/1000
BVH (80°-90°)	17.1	0.2			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 II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1841.5	1841.5	1841.5	1841.5	1841.5	1841.5	1841.5	1841.5	1841.5	1841.5	1841.5
2.5°	1946.4	1957.6	1951.2	1948.0	1942.4	1934.4	1928.0	1908.0	1887.2	1873.6	1868.8
5°	1985.6	1996.8	1996.0	1999.3	2003.3	2005.6	2004.1	1981.6	1952.0	1928.8	1915.2
7.5°	1952.0	1964.8	1975.2	1991.3	2019.2	2048.9	2063.2	2058.4	2028.1	1996.0	1979.2
10°	1856.8	1870.4	1895.2	1932.8	1992.0	2056.0	2109.7	2134.5	2115.3	2080.0	2056.9
12.5°	1682.3	1695.9	1744.8	1826.3	1925.6	2036.9	2139.3	2205.7	2210.5	2175.3	2148.1
15°	1486.2	1499.8	1551.8	1654.2	1805.5	1984.0	2155.3	2280.9	2323.4	2292.9	2260.1
17.5°	1364.6	1376.6	1415.8	1498.2	1655.9	1878.4	2149.7	2361.0	2457.8	2433.9	2394.6
20°	1327.8	1338.1	1356.6	1414.2	1545.4	1768.7	2112.8	2436.2	2602.7	2589.0	2545.1
22.5°	1366.9	1376.6	1382.2	1407.7	1490.2	1696.7	2066.5	2513.1	2770.8	2772.3	2718.7
25°	1457.4	1467.0	1460.6	1476.6	1512.6	1674.3	2048.9	2603.5	2982.0	2999.7	2938.8
27.5°	1606.3	1607.1	1591.8	1591.1	1596.6	1708.0	2067.2	2700.4	3248.5	3281.3	3206.1
30°	1904.8	1892.8	1834.3	1771.1	1742.3	1808.7	2118.5	2814.8	3563.1	3621.5	3527.0
32.5°	2365.0	2347.4	2240.1	2088.8	1936.8	1971.2	2210.5	2945.2	3905.7	4011.2	3896.0
35°	2864.4	2859.5	2747.5	2522.6	2256.9	2202.5	2360.2	3116.5	4279.4	4447.5	4310.6
37.5°	3328.6	3326.2	3262.2	2997.2	2673.9	2525.1	2600.3	3340.6	4679.5	4922.9	4761.2
40°	3752.7	3760.0	3695.9	3459.1	3133.3	2938.8	2926.8	3617.5	5124.5	5440.7	5248.6
42.5°	4119.3	4127.3	4062.5	3887.2	3587.1	3396.6	3327.8	3956.8	5559.1	5996.9	5769.6
45°	4368.2	4417.9	4408.2	4268.2	4052.8	3855.2	3809.6	4382.6	6054.5	6586.8	6320.3
47.5°	4438.7	4484.3	4556.3	4575.5	4444.3	4249.8	4304.2	4895.6	6555.5	7177.4	6874.1
50°	4264.9	4307.4	4457.0	4656.4	4747.6	4687.5	4785.2	5445.4	7068.5	7766.4	7417.5
52.5°	3922.5	3965.6	4154.5	4469.8	4842.0	5030.9	5267.8	5987.3	7565.5	8324.2	7932.1
55°	3427.0	3472.6	3715.1	4072.1	4661.9	5172.6	5670.4	6528.3	8020.9	8826.1	8396.3
57.5°	2753.1	2786.8	3038.8	3538.3	4209.0	5031.7	5967.2	7118.9	8449.9	9319.1	8856.5
60°	1794.4	1824.0	2116.8	2673.9	3458.2	4561.1	6026.5	7777.6	9019.8	9960.1	9476.7
62.5°	1193.3	1213.3	1386.9	1795.9	2435.4	3657.5	5679.9	8303.4	9855.3	11075.8	10540.4
65°	818.8	838.8	1012.4	1297.3	1573.5	2419.4	4683.5	8233.8	10612.4	11961.7	11328.7
67.5°	584.2	601.1	748.4	1017.2	1138.9	1405.4	3174.9	7343.8	10503.6	11995.4	11371.1
70°	418.6	428.1	549.8	792.3	905.2	844.4	1765.6	5616.7	9196.6	11076.6	10505.1
72.5°	292.9	296.1	381.7	603.4	729.1	616.2	840.4	3744.7	6955.6	8694.0	8144.1
75°	198.4	202.4	256.9	442.6	585.1	470.6	445.0	2008.1	4083.3	4812.4	4313.8
77.5°	121.7	123.2	165.6	302.5	437.8	358.5	286.5	850.7	1579.8	1551.0	1322.1
80°	68.8	68.8	105.7	188.1	298.5	231.3	200.9	361.7	500.2	439.4	387.3
82.5°	38.4	39.3	76.9	116.8	197.7	136.8	110.5	167.3	216.1	191.3	166.5
85°	16.0	17.6	47.3	55.2	94.4	68.1	44.8	70.4	80.1	71.2	52.1
87.5°	1.6	2.4	14.5	10.5	11.2	13.6	6.4	13.6	11.2	11.2	8.0
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°	1841.5	1841.5	1841.5	1841.5	1841.5	1841.5	1841.5	1841.5	1841.5	1841.5	1841.5
2.5°	1853.6	1841.5	1811.2	1775.9	1729.5	1707.1	1676.7	1655.9	1638.3	1639.9	1623.9
5°	1889.6	1859.1	1791.2	1706.3	1600.6	1525.4	1445.4	1390.2	1345.3	1335.8	1314.2
7.5°	1939.2	1891.2	1771.9	1619.1	1440.6	1305.3	1184.5	1106.9	1051.6	1034.0	1016.4
10°	2003.3	1933.6	1747.1	1509.4	1252.6	1080.5	950.8	890.0	852.4	839.6	829.9
12.5°	2077.7	1982.5	1714.3	1375.8	1058.8	893.2	810.8	780.3	768.3	764.3	761.9
15°	2171.3	2043.2	1664.7	1217.3	894.7	778.7	743.5	739.5	741.1	739.5	738.7
17.5°	2282.6	2109.7	1583.8	1054.0	784.3	720.3	707.5	710.7	714.7	713.9	712.3
20°	2404.2	2175.3	1480.6	909.2	709.1	678.7	671.5	674.7	677.8	676.3	675.5
22.5°	2542.6	2245.8	1366.1	796.3	658.7	640.2	632.2	633.0	633.0	629.9	628.2
25°	2708.4	2323.4	1246.1	716.3	620.2	605.9	596.2	593.1	588.2	578.6	577.1
27.5°	2906.0	2405.8	1130.9	660.3	589.9	576.3	565.1	557.0	545.0	529.0	527.5
30°	3128.5	2505.8	1033.2	625.0	565.8	552.3	539.5	527.5	509.8	489.8	488.2
32.5°	3390.2	2613.1	962.0	601.9	544.3	529.8	514.7	500.2	481.0	460.9	461.8
35°	3702.3	2742.7	920.3	585.9	527.5	508.2	491.4	475.4	460.9	443.4	441.8
37.5°	4040.9	2880.4	907.5	577.8	516.2	486.6	467.4	456.2	454.6	444.2	443.4
40°	4411.4	3043.6	917.2	573.1	504.2	465.8	445.0	442.6	446.6	428.1	429.0
42.5°	4803.6	3237.4	933.2	567.4	487.4	445.0	425.0	425.0	421.8	396.2	396.2
45°	5227.8	3460.6	949.1	553.8	467.4	424.1	409.0	403.3	389.8	365.0	364.2
47.5°	5655.1	3688.0	961.2	529.0	443.4	406.6	393.0	380.2	360.2	337.7	336.9
50°	6060.9	3892.0	948.4	492.2	416.2	389.8	375.4	357.7	336.1	320.9	318.6
52.5°	6423.5	4068.9	894.0	449.0	387.3	372.2	359.4	340.9	323.3	307.3	305.8
55°	6738.8	4212.1	798.0	408.2	361.7	356.9	344.1	320.9	296.9	283.3	281.7
57.5°	7041.3	4321.0	677.8	374.5	338.6	340.1	320.9	300.1	277.7	263.3	261.7
60°	7443.9	4466.6	556.3	343.4	313.8	318.6	297.8	282.5	254.5	236.1	233.7
62.5°	8087.4	4693.2	441.8	304.9	285.0	286.5	277.7	259.3	225.7	204.1	202.4
65°	8598.0	4609.9	348.2	263.3	252.2	254.5	254.5	234.5	198.4	173.6	171.3
67.5°	8540.3	3947.3	277.7	222.5	220.9	222.5	228.1	211.3	176.1	156.1	152.8
70°	7867.3	3139.7	222.5	184.9	192.1	188.1	204.1	192.9	158.5	138.5	136.0
72.5°	6419.5	2261.8	169.6	152.8	147.3	153.6	184.1	173.6	132.0	109.7	107.2
75°	3751.2	1206.9	126.5	120.8	106.4	128.0	163.3	148.1	100.9	80.9	78.4
77.5°	1221.3	421.0	92.9	88.9	79.2	103.2	139.3	124.8	82.4	64.1	61.6
80°	327.4	127.2	63.2	58.4	51.2	76.9	110.5	99.2	59.2	41.6	40.8
82.5°	131.3	53.6	36.8	32.8	28.0	52.8	87.2	80.1	44.0	26.4	26.4
85°	42.4	17.6	13.6	10.5	12.8	32.8	52.1	54.4	31.3	13.6	10.5
87.5°	5.6	2.4	2.4	3.2	2.4	5.6	16.0	15.2	8.8	1.6	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)