

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: P962399

Luminaire Tested: **NAV-SB2C-727-U-T2R**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P962399  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB2C-727-U-T2R  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14502.7 lumens  
Efficiency: N/A  
Efficacy: 143.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G2

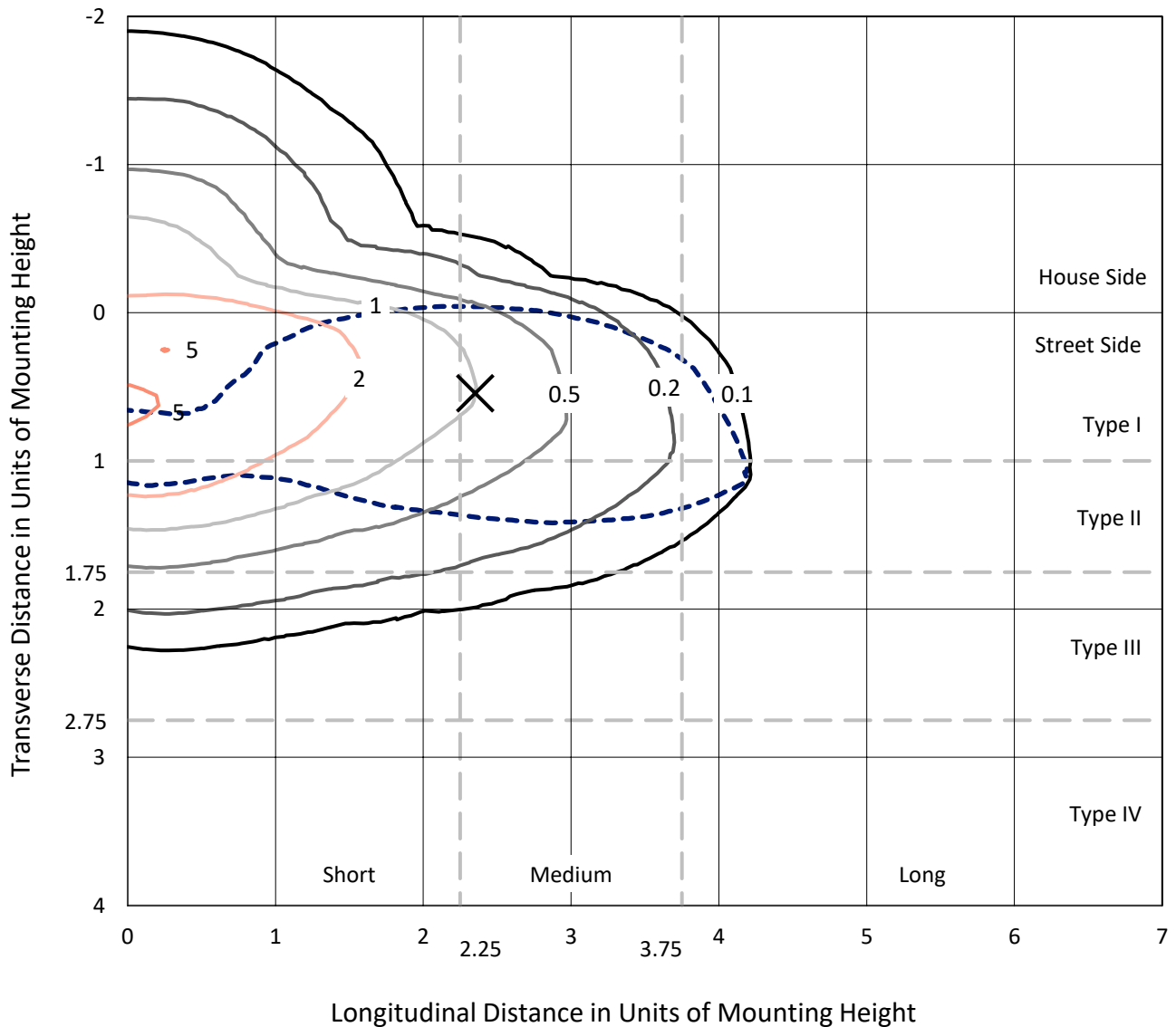
Input Watts (W): 100.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

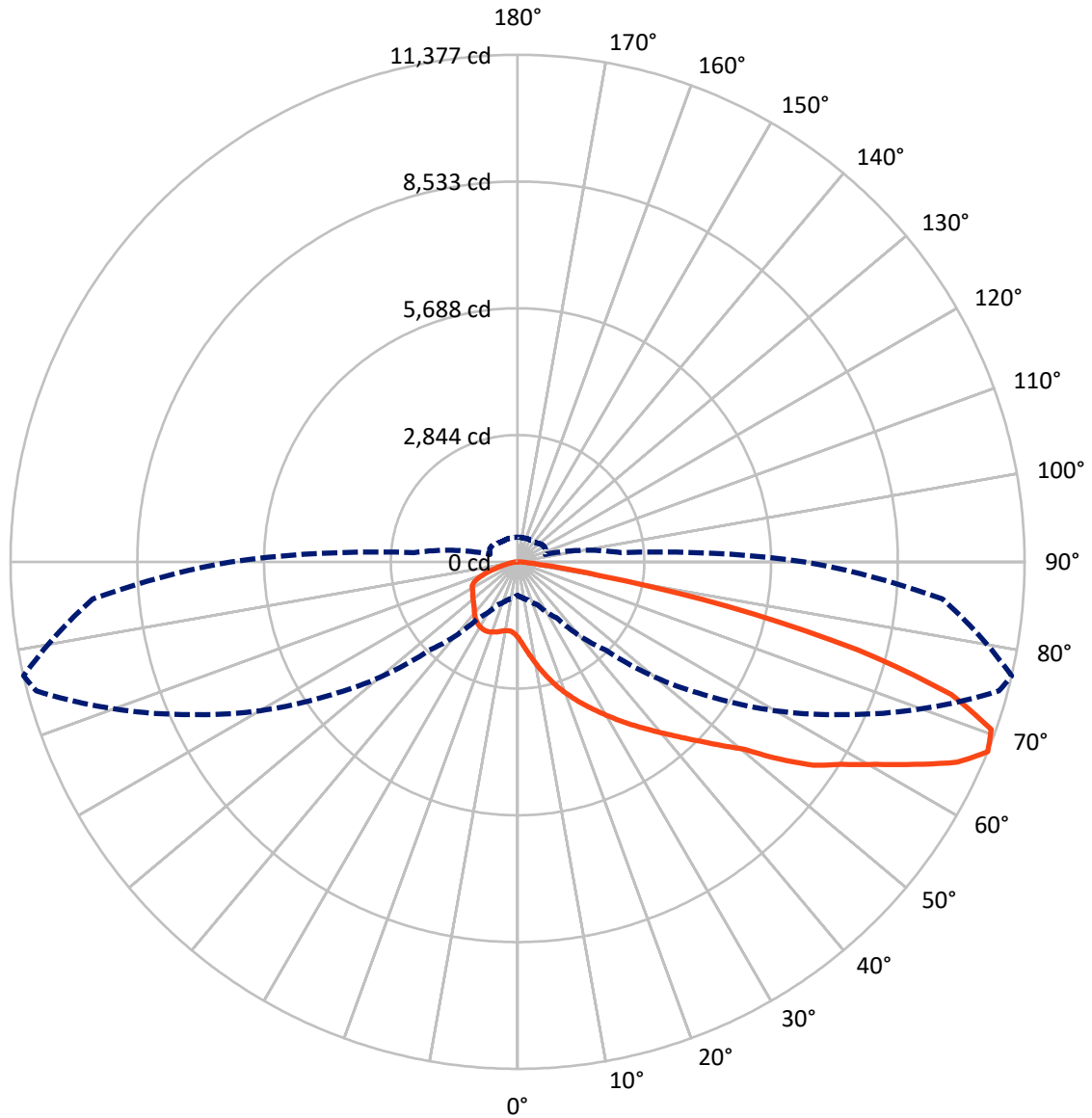
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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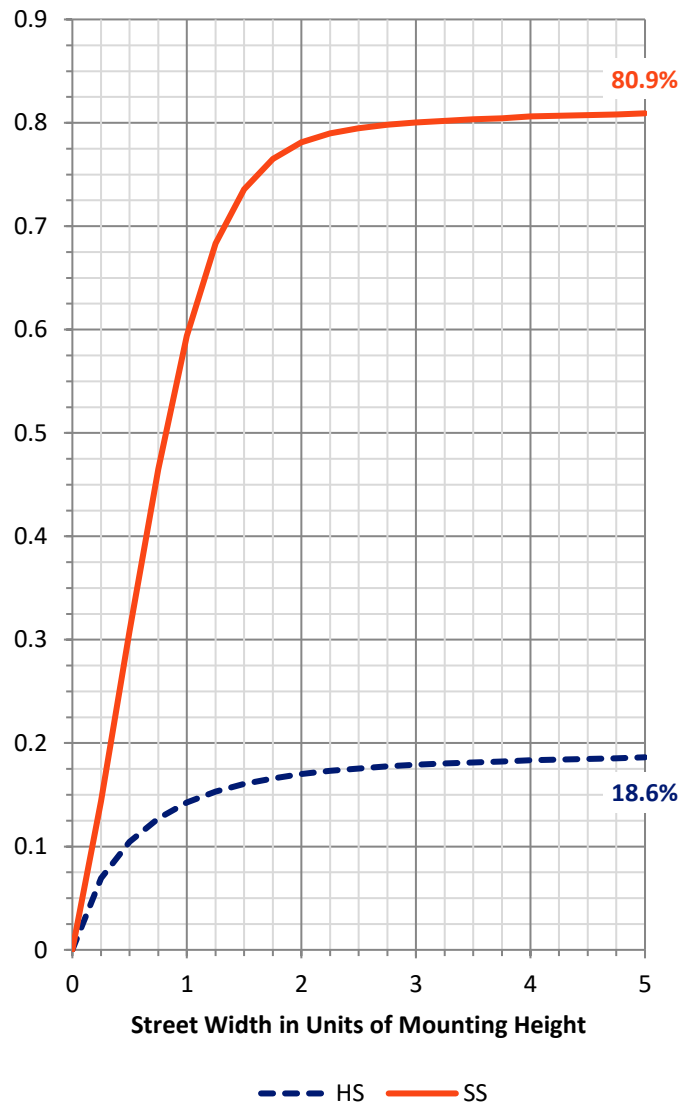
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2743.3	0.0	2743.3
	% Fixture	18.9	0.0	18.9
<b>Street Side</b>	Lumens	11759.4	0.0	11759.4
	% Fixture	81.1	0.0	81.1
<b>Total</b>	Lumens	14502.7	0.0	14502.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	182.4	1.3
10°-20°	655.3	4.5
20°-30°	1237.2	8.5
30°-40°	1993.1	13.7
40°-50°	2726.2	18.8
50°-60°	3075.2	21.2
60°-70°	2870.3	19.8
70°-80°	1573.4	10.8
80°-90°	189.8	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°	14502.7	100.0
0°-180°	14502.7	100.0

**Coefficient of Utilization**

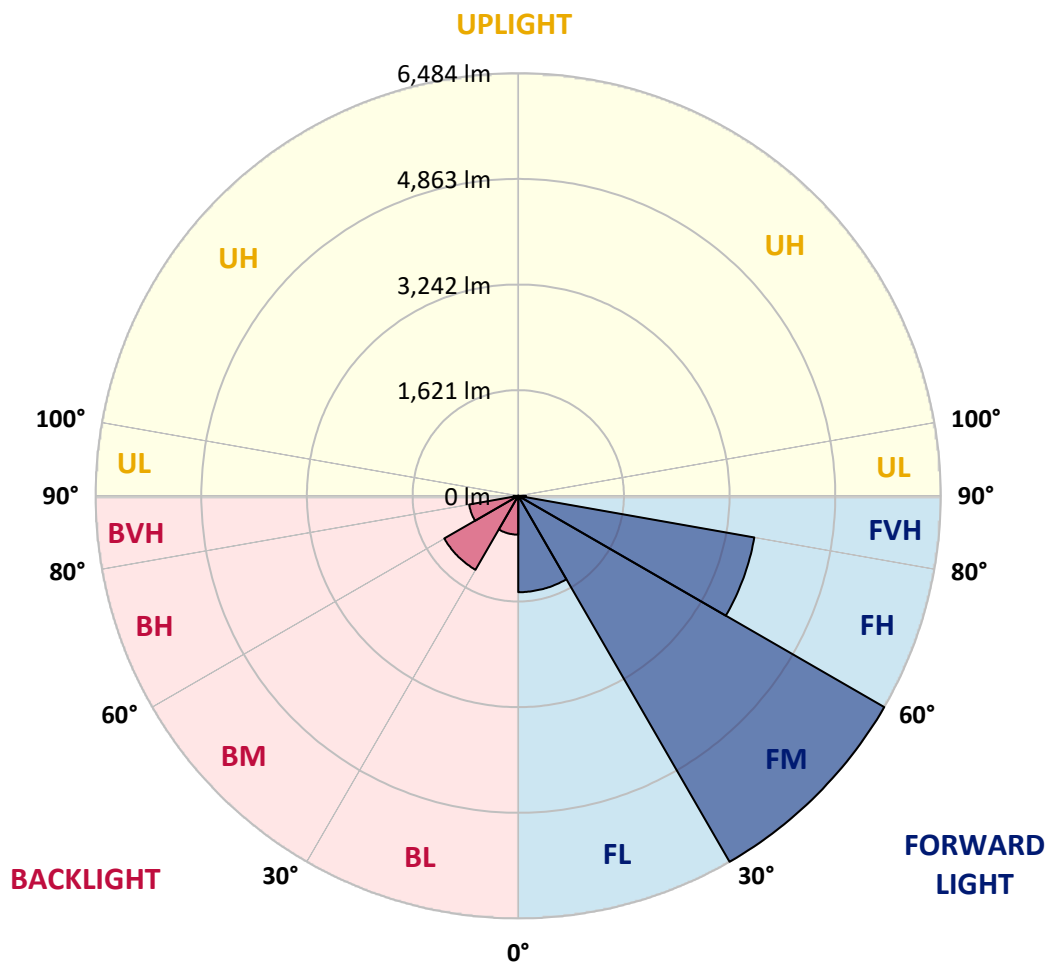


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1478.4	10.2			
FM (30°-60°)	6484.0	44.7			
FH (60°-80°)	3678.3	25.4			G2/5000
FVH (80°-90°)	118.7	0.8			G2/225
BL (0°-30°)	596.5	4.1	B2/1000		
BM (30°-60°)	1310.4	9.0	B2/2500		
BH (60°-80°)	765.3	5.3	B2/1000		G2/1000
BVH (80°-90°)	71.1	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 II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6
2.5°	2130.6	2145.5	2126.9	2126.9	2063.9	2031.0	1968.1	1920.2	1834.1	1819.2	1762.3
5°	2518.3	2537.1	2510.8	2499.7	2425.6	2357.4	2251.8	2147.8	1994.3	1978.7	1844.6
7.5°	2818.5	2842.5	2819.4	2807.4	2741.5	2665.1	2541.6	2396.3	2180.0	2149.3	1955.4
10°	3063.3	3067.1	3059.6	3064.1	3012.5	2949.5	2823.1	2653.8	2383.6	2341.7	2089.4
12.5°	3201.9	3219.1	3234.1	3261.0	3252.0	3213.1	3099.3	2897.2	2599.2	2545.3	2235.4
15°	3267.0	3296.9	3330.6	3392.7	3442.9	3452.6	3365.8	3158.4	2818.5	2753.5	2382.8
17.5°	3290.1	3318.6	3371.8	3461.6	3569.5	3642.0	3603.1	3412.2	3035.6	2960.8	2537.8
20°	3407.7	3416.0	3448.2	3533.5	3650.3	3770.8	3800.0	3656.3	3250.5	3165.9	2698.0
22.5°	3659.2	3642.8	3651.8	3690.7	3774.6	3891.3	3957.9	3871.8	3471.4	3374.1	2859.7
25°	4074.8	4026.8	3978.9	3934.1	3976.7	4042.6	4118.1	4087.5	3702.7	3579.2	3022.9
27.5°	4599.6	4541.2	4435.6	4288.1	4236.4	4259.7	4293.3	4287.4	3916.8	3791.8	3191.3
30°	5116.1	5047.9	4922.2	4708.8	4572.6	4511.2	4485.7	4468.5	4149.6	4016.4	3361.3
32.5°	5528.5	5474.7	5351.1	5112.4	4914.7	4809.9	4725.4	4664.0	4392.9	4259.7	3541.0
35°	5889.4	5839.2	5697.8	5437.2	5222.4	5110.9	5000.1	4869.1	4645.9	4511.2	3734.2
37.5°	6218.8	6168.7	5974.7	5703.7	5487.4	5410.3	5311.4	5089.1	4899.7	4772.5	3938.5
40°	6427.0	6415.7	6234.6	5927.6	5703.0	5664.9	5631.9	5344.5	5181.2	5063.0	4163.1
42.5°	6480.0	6504.8	6361.0	6108.8	5894.7	5863.9	5941.1	5633.4	5497.2	5384.1	4417.6
45°	6352.0	6423.2	6328.9	6157.4	6030.9	6014.4	6215.1	5949.3	5846.7	5743.5	4724.5
47.5°	6027.9	6148.5	6109.5	6085.5	6067.6	6138.7	6456.2	6284.7	6242.8	6153.0	5074.9
50°	5373.7	5601.9	5670.1	5821.3	5995.0	6235.3	6675.5	6650.8	6705.4	6614.8	5501.6
52.5°	4242.5	4556.8	4952.2	5330.9	5771.9	6203.1	6916.5	7176.3	7406.9	7357.4	6179.9
55°	3502.0	3643.6	3947.5	4642.2	5339.2	6067.6	7025.0	7600.8	8103.1	8059.0	6694.2
57.5°	2933.1	3059.6	3246.8	3826.9	4684.9	5759.9	7092.5	7859.8	8580.0	8575.5	7201.8
60°	2323.0	2457.0	2648.6	3059.6	3920.5	5228.4	7077.5	8154.8	9188.6	9226.0	7820.9
62.5°	1634.3	1781.8	1994.3	2377.6	3139.7	4539.6	6772.1	8368.1	9905.0	10006.9	8565.7
65°	1074.3	1171.6	1331.8	1662.7	2339.5	3654.0	6188.8	8395.8	10671.6	10843.8	9265.0
67.5°	753.1	790.6	884.9	1064.6	1542.1	2802.1	5259.8	8109.1	11183.0	11376.8	9568.2
70°	587.6	606.4	654.3	726.2	968.7	1884.3	4030.6	7363.5	11073.6	11275.7	9251.4
72.5°	507.6	525.5	543.5	552.5	649.8	1163.4	2730.2	6156.7	10044.3	10181.2	8044.0
75°	460.4	464.9	479.9	476.8	495.6	754.6	1575.8	4485.7	7924.9	7877.7	5938.0
77.5°	387.0	393.0	417.7	414.0	440.2	515.8	818.3	2894.9	5137.8	4817.4	3305.2
80°	327.9	330.9	357.8	353.3	382.5	373.6	417.7	1475.5	2179.3	1846.1	953.0
82.5°	113.8	140.7	273.3	281.5	291.9	226.1	241.1	601.9	665.5	509.8	199.9
85°	55.4	59.1	139.2	197.6	196.9	113.8	117.6	214.8	209.6	164.7	66.6
87.5°	9.0	11.3	16.5	77.1	61.4	29.9	40.4	41.9	43.5	37.4	15.0
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°	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6
2.5°	1720.4	1682.9	1604.3	1531.7	1474.8	1420.1	1389.5	1363.2	1348.3	1345.3	1345.3
5°	1766.8	1689.6	1546.6	1426.1	1347.6	1289.1	1258.4	1239.0	1229.3	1223.2	1222.5
7.5°	1833.4	1720.4	1516.7	1379.8	1297.3	1255.4	1239.7	1236.8	1235.9	1236.8	1239.0
10°	1925.5	1770.5	1513.7	1368.5	1299.6	1276.4	1275.6	1276.4	1279.4	1280.1	1280.9
12.5°	2025.0	1822.1	1525.7	1378.2	1328.1	1315.3	1313.1	1312.3	1314.6	1316.1	1316.8
15°	2133.5	1890.3	1545.9	1399.2	1359.5	1346.0	1343.8	1339.3	1338.5	1337.8	1337.0
17.5°	2245.2	1957.6	1568.4	1421.7	1379.8	1361.0	1352.8	1342.2	1334.0	1331.8	1334.0
20°	2358.1	2024.3	1584.1	1432.8	1381.2	1355.0	1338.5	1320.6	1306.4	1298.2	1301.1
22.5°	2478.7	2093.9	1593.8	1429.9	1367.8	1331.8	1301.9	1280.9	1259.2	1245.0	1245.7
25°	2596.2	2154.5	1593.1	1414.2	1341.5	1295.9	1257.7	1230.7	1200.8	1185.8	1185.8
27.5°	2709.3	2209.2	1574.4	1386.4	1304.1	1253.2	1207.6	1175.4	1146.2	1131.9	1131.2
30°	2826.0	2254.9	1545.2	1346.0	1259.9	1203.8	1153.6	1126.0	1099.7	1086.3	1085.5
32.5°	2942.1	2296.8	1504.0	1295.9	1209.0	1155.2	1105.7	1080.2	1064.6	1064.6	1065.3
35°	3064.9	2325.9	1449.4	1237.5	1155.2	1103.5	1064.6	1049.6	1048.1	1039.0	1036.9
37.5°	3194.4	2344.7	1382.7	1177.6	1102.0	1053.3	1041.3	1023.4	1008.4	988.9	985.9
40°	3330.6	2363.4	1302.6	1115.4	1045.8	1018.8	1013.6	989.6	947.0	899.1	892.4
42.5°	3496.1	2376.2	1219.5	1053.3	986.7	977.7	985.2	944.0	875.9	840.0	840.7
45°	3687.7	2397.1	1143.2	991.9	926.1	926.1	957.5	903.5	847.5	825.0	828.7
47.5°	3936.3	2445.8	1072.0	924.6	869.9	884.9	896.1	855.0	823.5	795.8	795.0
50°	4295.6	2562.5	998.7	856.4	827.3	857.2	841.4	817.5	780.8	758.4	756.1
52.5°	4741.8	2631.4	933.6	795.0	790.6	820.5	798.1	775.6	747.8	717.9	712.0
55°	5045.8	2644.1	878.8	750.1	765.9	762.8	754.6	734.4	719.4	679.8	680.5
57.5°	5385.6	2669.6	833.9	723.1	750.1	717.2	714.2	697.0	677.5	650.6	641.5
60°	5792.1	2709.3	795.0	712.7	736.7	687.3	672.3	665.5	646.1	632.6	636.3
62.5°	6235.3	2745.2	755.3	714.2	720.9	658.0	635.6	633.3	621.4	616.8	616.8
65°	6537.8	2647.2	705.9	712.7	696.2	628.1	599.6	598.9	589.2	587.6	586.9
67.5°	6432.2	2336.5	639.3	691.8	670.8	598.2	566.7	563.8	550.9	551.8	551.8
70°	5903.7	1893.3	547.2	640.1	639.3	571.2	532.3	522.5	505.3	508.3	511.3
72.5°	4912.4	1402.9	423.7	554.0	589.2	546.5	492.6	476.8	455.2	458.2	457.5
75°	3547.7	953.8	308.4	421.5	512.8	517.3	453.7	426.7	400.5	405.0	406.5
77.5°	1815.4	540.5	226.8	290.5	402.7	470.2	418.5	382.5	376.6	418.5	412.5
80°	592.1	271.0	157.2	203.7	264.2	384.8	366.8	325.6	324.1	333.8	286.7
82.5°	176.7	114.5	101.1	134.0	146.0	295.0	316.6	246.3	211.9	223.0	230.6
85°	60.7	55.4	57.6	66.6	69.6	172.9	221.6	163.2	154.3	169.9	167.7
87.5°	14.2	19.5	16.5	15.0	15.0	41.9	86.1	68.2	94.3	62.9	60.7
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)