

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: P959240

Luminaire Tested: **NAV-SB1A-727-U-T2**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P959240  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1A-727-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4227.1 lumens  
Efficiency: N/A  
Efficacy: 136.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G1

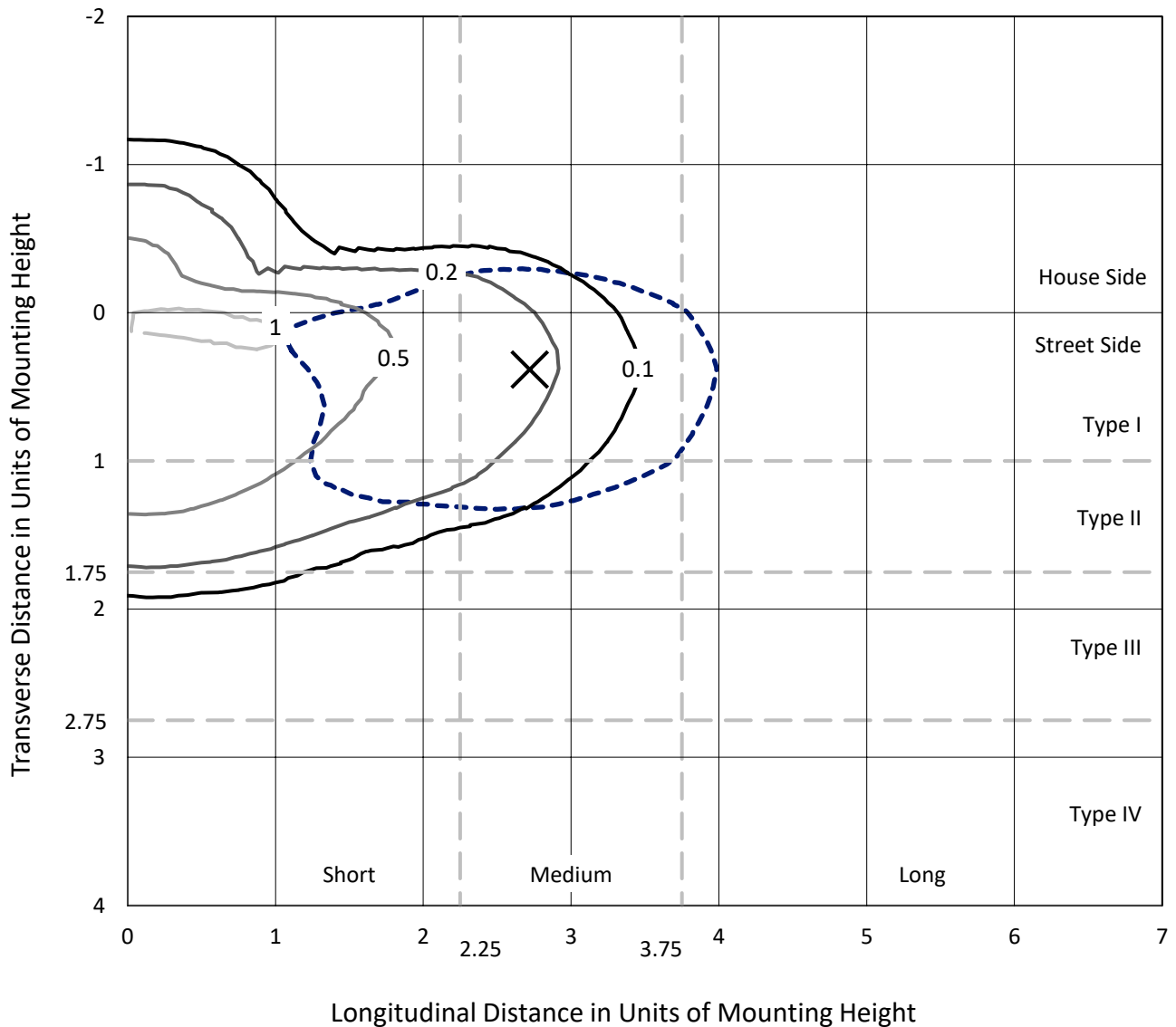
Input Watts (W): 30.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

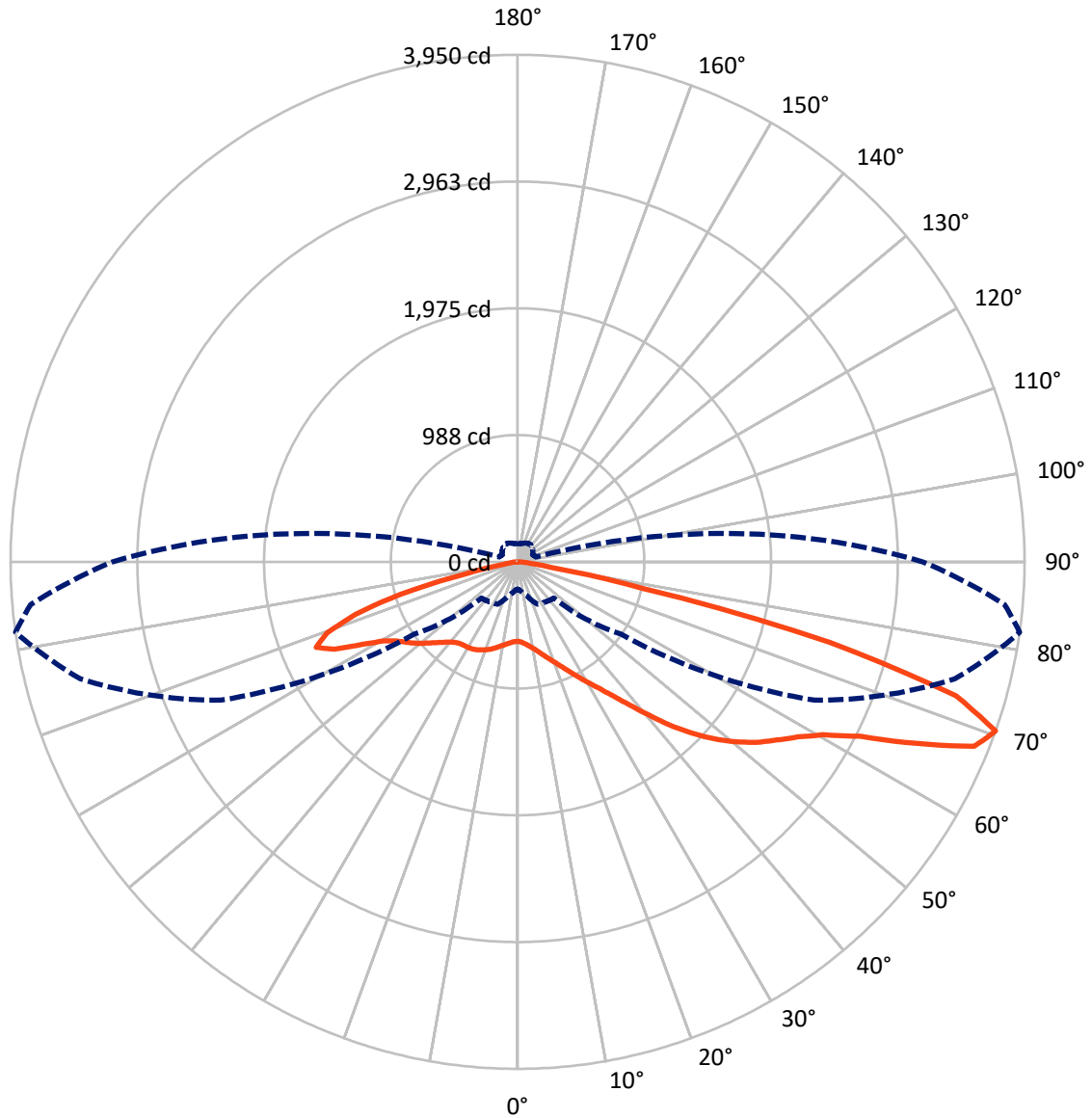
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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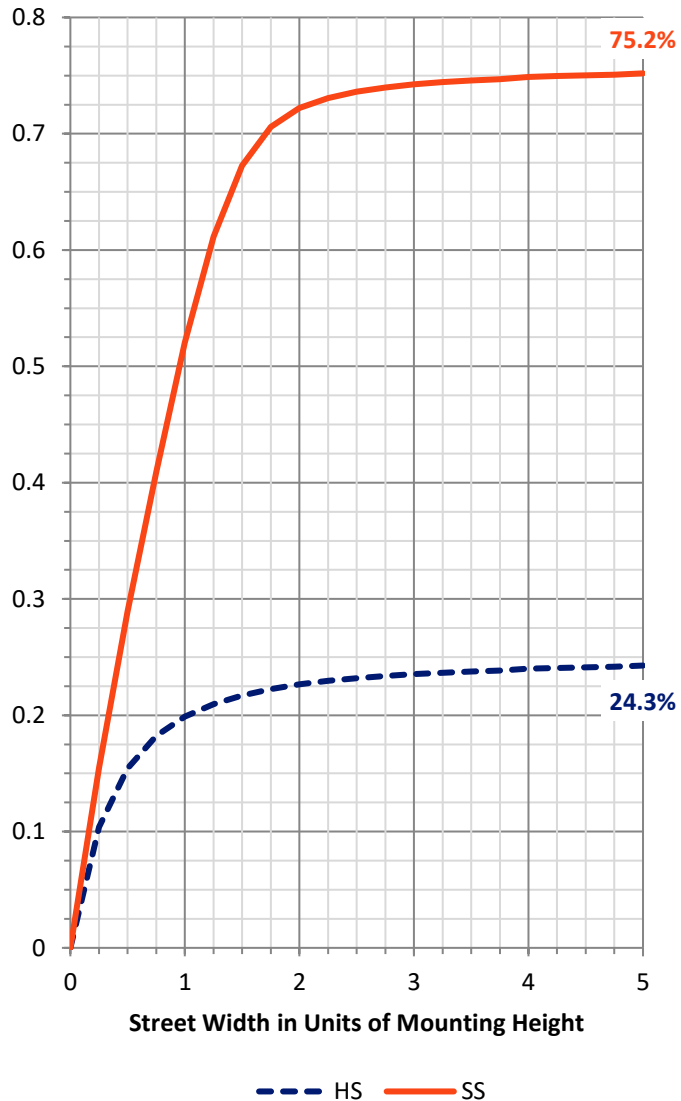
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1042.1	0.0	1042.1
	% Fixture	24.7	0.0	24.7
<b>Street Side</b>	Lumens	3185.0	0.0	3185.0
	% Fixture	75.3	0.0	75.3
<b>Total</b>	Lumens	4227.1	0.0	4227.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.5	1.4
10°-20°	168.1	4.0
20°-30°	281.2	6.7
30°-40°	439.4	10.4
40°-50°	699.8	16.6
50°-60°	973.8	23.0
60°-70°	1018.6	24.1
70°-80°	532.4	12.6
80°-90°	55.3	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°	4227.1	100.0
0°-180°	4227.1	100.0

**Coefficient of Utilization**

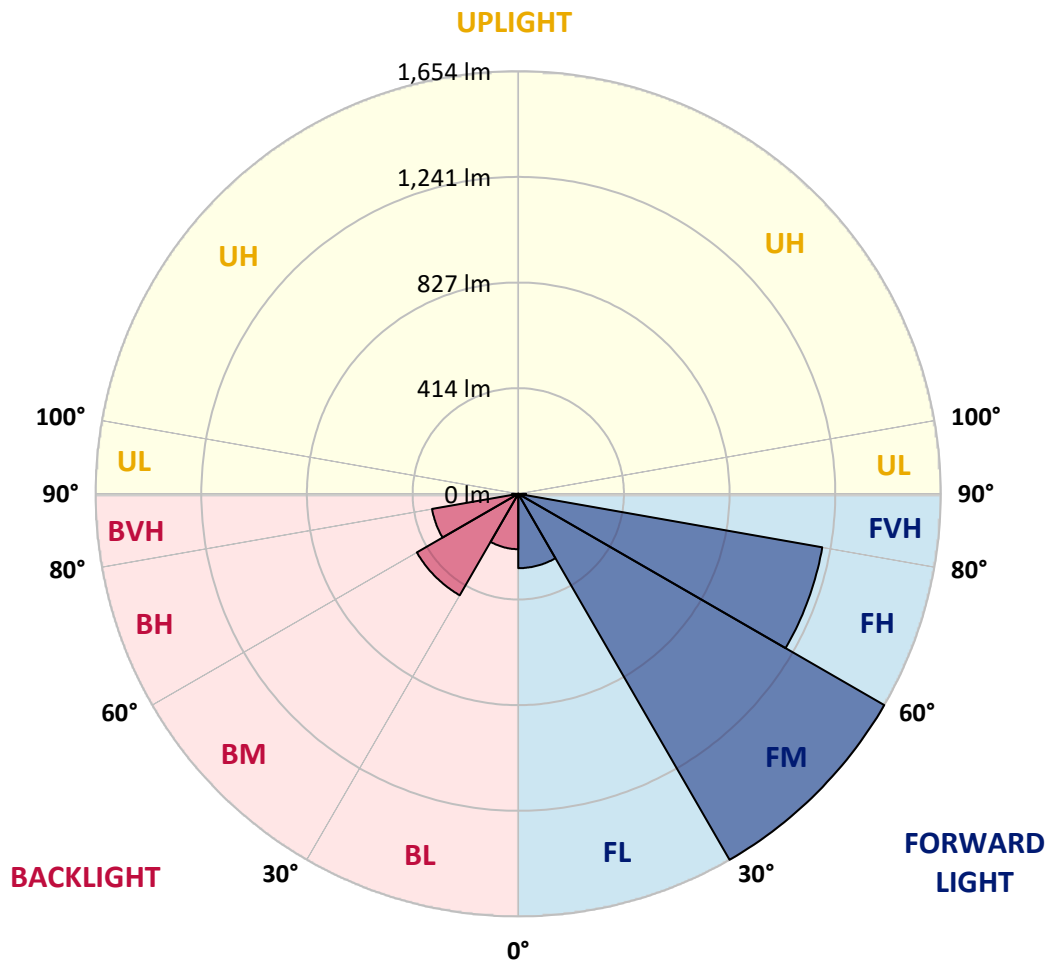


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	291.1	6.9			
FM (30°-60°)	1654.4	39.1			
FH (60°-80°)	1208.5	28.6			G1/1800
FVH (80°-90°)	30.9	0.7			G1/100
BL (0°-30°)	216.8	5.1	B1/500		
BM (30°-60°)	458.5	10.8	B1/1000		
BH (60°-80°)	342.5	8.1	B1/500		G1/500
BVH (80°-90°)	24.3	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**  
 Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	619.7	619.7	619.7	619.7	619.7	619.7	619.7	619.7	619.7	619.7	619.7
2.5°	634.6	638.2	637.0	635.9	635.9	634.4	634.1	631.8	630.1	627.2	626.5
5°	642.7	646.5	646.0	646.9	649.8	650.5	651.2	649.8	646.3	642.7	641.0
7.5°	635.4	639.7	641.0	646.5	655.4	663.5	669.5	672.0	668.6	663.5	661.0
10°	611.2	615.9	620.6	633.4	649.3	668.4	684.6	694.2	693.5	688.6	684.4
12.5°	562.1	567.0	577.2	602.0	631.2	664.8	694.8	715.0	722.0	718.4	711.0
15°	522.9	527.2	534.7	560.3	598.2	649.3	698.7	738.0	755.6	753.7	744.7
17.5°	521.7	523.6	528.2	540.4	569.5	625.1	694.6	760.3	794.3	794.1	782.8
20°	541.5	542.1	544.8	547.2	563.9	606.7	684.4	779.0	837.5	837.5	825.4
22.5°	568.9	568.4	571.0	568.9	576.9	605.2	677.8	795.4	885.8	889.4	874.1
25°	609.9	607.6	607.0	601.8	603.4	619.7	685.0	814.0	943.0	950.4	931.3
27.5°	664.6	661.0	658.6	646.7	642.7	649.8	707.0	836.4	1006.7	1019.5	995.3
30°	735.9	729.4	725.8	705.2	690.6	691.8	740.2	866.2	1073.3	1093.9	1063.2
32.5°	833.3	823.2	813.5	779.7	753.0	744.3	783.0	907.5	1145.5	1178.4	1139.0
35°	942.3	934.2	923.9	871.7	830.6	810.4	840.9	965.1	1230.1	1282.4	1230.9
37.5°	1047.2	1040.3	1045.3	974.8	921.9	892.5	916.8	1042.5	1334.3	1411.5	1346.2
40°	1155.8	1150.5	1151.1	1083.8	1022.1	989.1	1008.7	1139.7	1454.0	1565.2	1484.9
42.5°	1273.8	1269.8	1256.3	1196.7	1127.3	1096.6	1114.6	1251.8	1582.2	1740.1	1636.9
45°	1405.9	1403.4	1390.9	1322.5	1243.1	1208.6	1232.8	1375.7	1711.2	1904.8	1789.8
47.5°	1520.1	1522.1	1520.6	1462.9	1380.6	1329.8	1358.8	1504.8	1831.2	2059.5	1936.1
50°	1575.0	1585.6	1601.0	1583.1	1532.0	1480.4	1486.0	1629.5	1945.6	2204.7	2076.5
52.5°	1546.3	1566.3	1608.4	1637.1	1656.9	1646.2	1631.1	1753.4	2053.3	2335.7	2209.4
55°	1439.3	1467.4	1537.4	1606.7	1707.3	1785.7	1805.4	1890.6	2158.2	2451.0	2335.0
57.5°	1244.5	1290.0	1352.8	1492.9	1662.6	1853.2	2008.6	2081.1	2269.5	2574.1	2466.5
60°	910.2	971.2	1049.3	1257.9	1505.5	1817.0	2181.6	2373.6	2427.6	2733.6	2637.5
62.5°	582.5	620.2	692.0	888.5	1173.1	1632.0	2234.5	2739.2	2695.6	2995.0	2894.2
65°	398.8	423.0	488.7	599.1	758.4	1214.8	2092.7	3013.3	3121.4	3409.6	3332.9
67.5°	289.8	308.2	364.3	460.9	494.2	718.9	1623.9	3000.7	3535.2	3836.7	3717.4
70°	211.3	224.3	271.4	364.3	380.2	400.0	983.8	2550.7	3526.2	3950.1	3807.3
72.5°	156.5	165.5	197.2	282.6	307.7	270.1	487.0	1853.8	3030.1	3572.9	3458.2
75°	113.3	120.0	143.3	216.3	246.3	205.7	242.9	1083.4	2113.5	2513.3	2533.5
77.5°	86.6	91.7	107.0	158.4	197.2	154.4	150.8	498.4	1002.1	1007.2	1063.6
80°	69.5	72.9	81.2	111.5	151.2	115.5	98.2	201.2	316.7	268.0	281.3
82.5°	51.1	56.8	68.7	78.3	108.1	79.6	59.9	101.6	120.4	103.6	104.6
85°	29.1	33.0	41.5	56.1	69.1	48.7	34.3	45.1	56.1	46.0	41.0
87.5°	10.4	13.4	14.6	21.9	30.0	20.2	13.2	13.0	18.3	13.6	11.5
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°	619.7	619.7	619.7	619.7	619.7	619.7	619.7	619.7	619.7	619.7	619.7
2.5°	624.2	623.1	618.6	612.5	606.3	600.2	598.2	594.0	591.0	589.5	591.2
5°	636.8	633.2	622.7	609.2	595.1	579.8	569.1	559.1	552.0	545.3	548.0
7.5°	654.8	648.4	630.3	606.7	581.6	556.3	537.4	523.1	513.4	507.2	508.5
10°	675.6	665.9	638.2	602.9	564.2	527.8	505.5	493.2	487.2	483.8	484.7
12.5°	699.6	685.9	646.3	594.2	537.4	495.9	480.7	477.1	477.3	477.5	478.0
15°	729.2	710.1	652.7	575.1	502.7	471.5	468.8	474.6	480.7	483.6	483.4
17.5°	762.6	735.7	653.8	543.7	468.5	455.8	464.3	476.8	486.1	490.1	491.0
20°	798.5	761.7	645.8	499.3	440.5	443.0	458.3	474.4	484.5	489.6	491.0
22.5°	839.6	789.6	626.5	452.6	417.7	429.1	447.0	462.7	473.2	478.5	479.8
25°	886.4	820.7	596.2	413.4	397.9	413.4	431.3	444.3	452.8	457.6	458.9
27.5°	938.5	853.2	555.9	382.2	380.7	397.2	412.0	422.1	426.6	430.2	431.5
30°	990.8	882.8	507.0	358.6	365.6	381.3	391.9	396.4	397.7	398.3	400.0
32.5°	1047.2	908.5	455.5	339.2	351.3	365.8	372.1	374.1	367.9	363.6	364.9
35°	1115.7	935.8	405.3	323.7	337.1	349.7	351.7	349.9	342.6	333.7	334.3
37.5°	1200.3	969.9	365.2	312.7	323.9	332.2	329.7	329.2	329.9	319.6	320.3
40°	1303.9	1014.3	335.8	304.1	313.1	314.9	308.0	311.8	315.2	299.4	299.9
42.5°	1418.9	1067.9	317.1	298.3	304.1	299.9	289.2	293.4	292.9	272.3	272.0
45°	1536.3	1126.3	310.7	294.1	295.8	287.3	275.4	276.5	267.1	248.6	249.2
47.5°	1652.9	1188.8	314.7	290.5	285.6	275.9	266.7	261.8	247.8	233.9	233.9
50°	1767.3	1254.5	329.5	283.3	271.4	265.8	259.0	250.3	235.5	223.7	222.7
52.5°	1873.4	1320.7	346.1	271.4	253.7	257.1	252.8	242.7	228.2	216.0	216.3
55°	1973.8	1386.8	352.6	255.0	237.1	249.4	246.9	228.4	210.8	201.0	200.1
57.5°	2083.3	1466.5	345.4	234.2	223.7	240.7	231.2	210.6	200.5	193.1	192.5
60°	2234.9	1591.4	329.9	208.4	210.8	227.7	211.6	203.0	192.0	183.7	183.3
62.5°	2486.9	1824.5	305.0	182.8	195.8	208.4	202.1	193.6	182.3	174.2	174.2
65°	2859.1	2148.4	258.2	162.9	179.0	189.5	192.0	183.5	171.8	163.3	163.7
67.5°	3173.2	2351.6	195.4	146.3	161.7	174.2	181.2	172.9	160.6	152.3	152.5
70°	3156.0	2204.0	149.1	129.9	146.5	159.3	168.2	161.7	148.5	140.6	141.3
72.5°	2803.1	1843.8	120.6	113.3	131.0	143.6	154.4	149.3	135.9	128.3	128.3
75°	2059.3	1308.8	96.5	96.5	111.7	127.2	139.1	135.9	123.6	118.2	116.6
77.5°	868.1	549.1	75.5	80.1	92.9	109.3	124.0	125.2	114.4	121.2	109.9
80°	230.8	151.4	57.6	63.0	72.9	90.2	107.9	107.4	95.7	89.5	83.2
82.5°	87.9	59.7	41.0	44.4	52.7	69.1	85.5	88.1	76.5	66.2	66.2
85°	33.8	25.5	25.3	26.6	30.7	45.7	64.6	66.8	57.6	48.9	50.4
87.5°	8.7	7.6	9.4	9.0	14.1	24.5	37.0	38.3	35.3	20.4	29.1
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)