

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: P959190

Luminaire Tested: **NAV-SB1A-722-U-AFL-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P959190  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1A-722-U-AFL-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2200K, 350mA LIGHTSQUARE WITH 26 LEDS AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

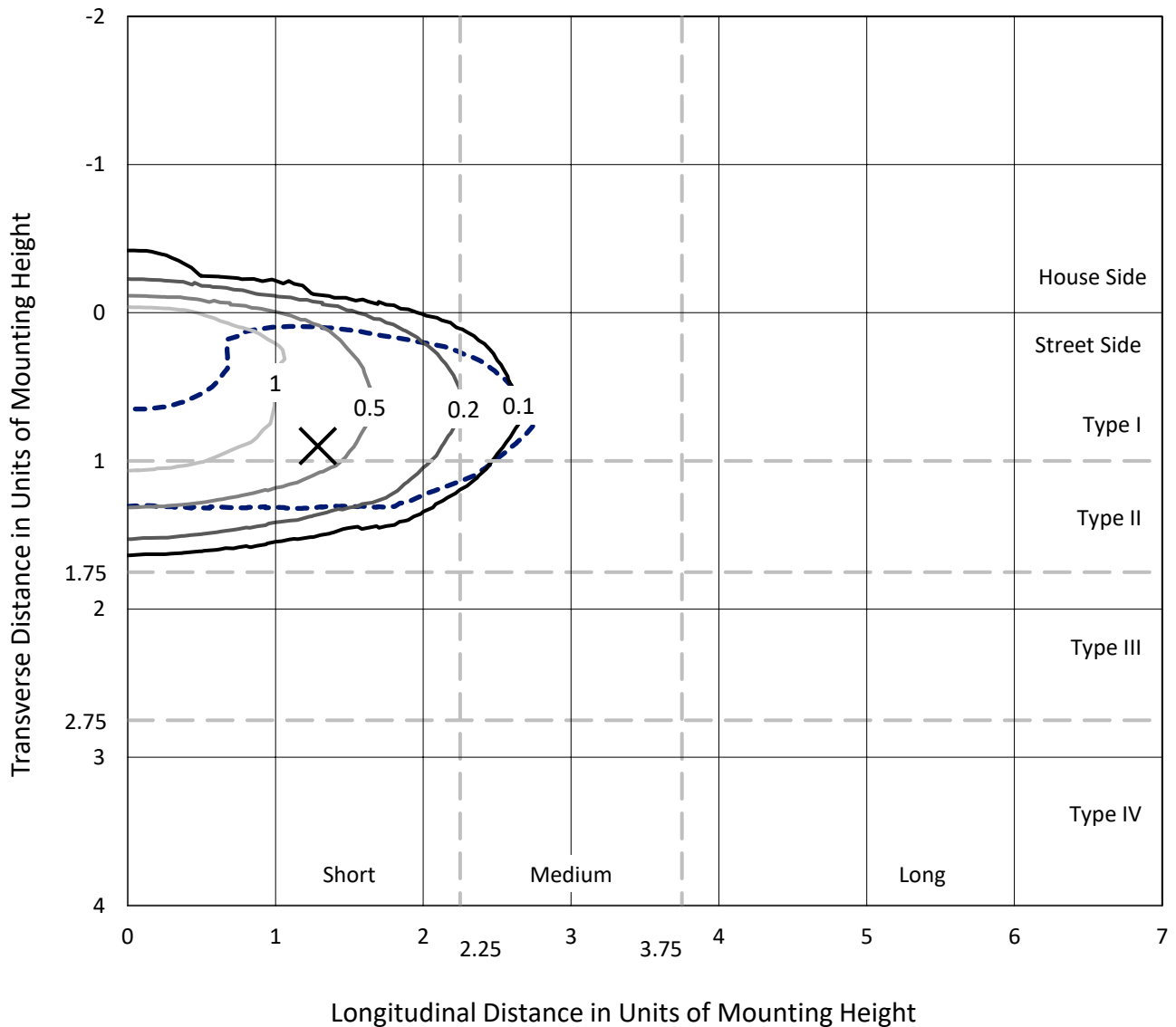
Lumens per Lamp: N/A  
Luminaire Lumens: 3240 lumens  
Efficiency: N/A  
Efficacy: 104.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B0 - U0 - G0  
  
Input Watts (W): 30.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

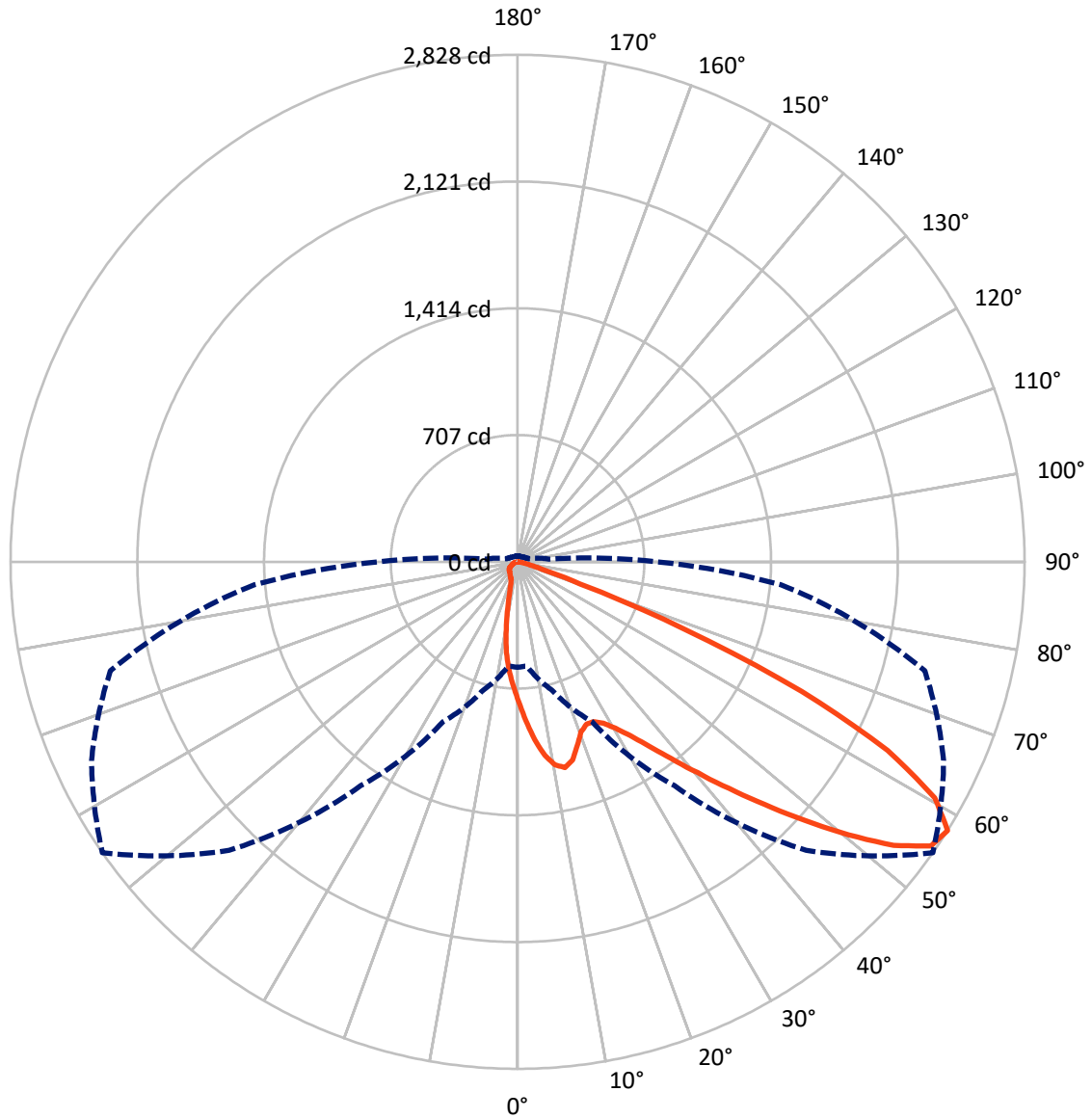
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral      - - - Horizontal Cone Through 57.5-Deg Vertical

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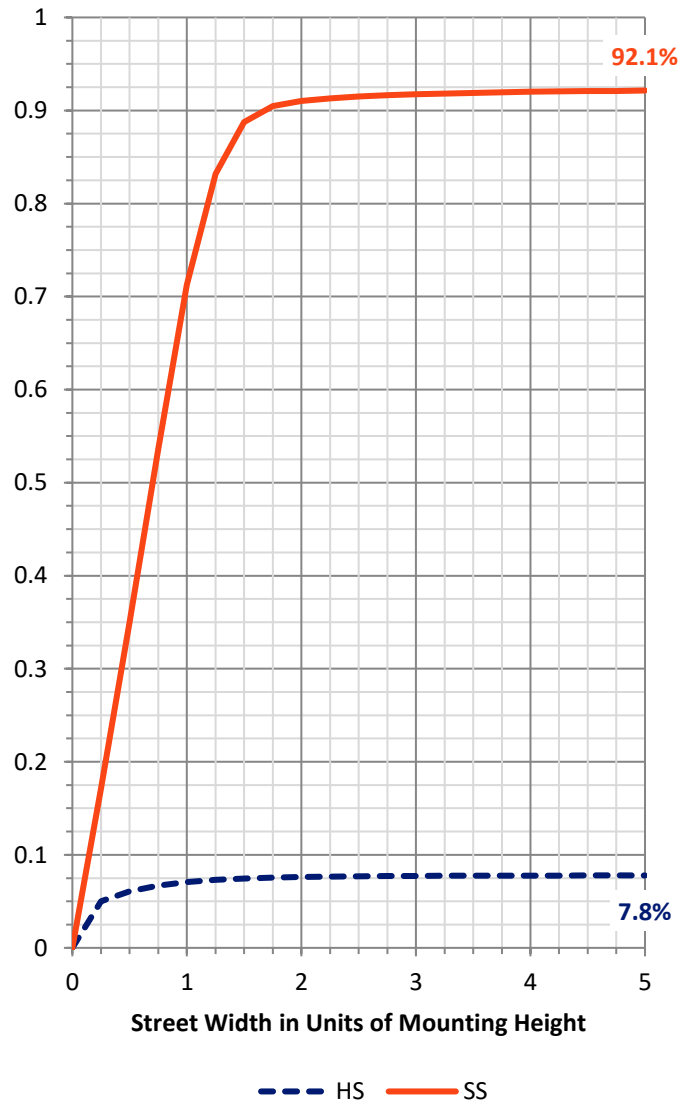
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	253.0	0.0	253.0
	% Fixture	7.8	0.0	7.8
<b>Street Side</b>	Lumens	2987.0	0.0	2987.0
	% Fixture	92.2	0.0	92.2
<b>Total</b>	Lumens	3240.0	0.0	3240.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.6	2.2
10°-20°	175.5	5.4
20°-30°	280.8	8.7
30°-40°	475.2	14.7
40°-50°	780.2	24.1
50°-60°	857.5	26.5
60°-70°	491.8	15.2
70°-80°	100.5	3.1
80°-90°	5.9	0.2
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°	3240.0	100.0
0°-180°	3240.0	100.0

**Coefficient of Utilization**

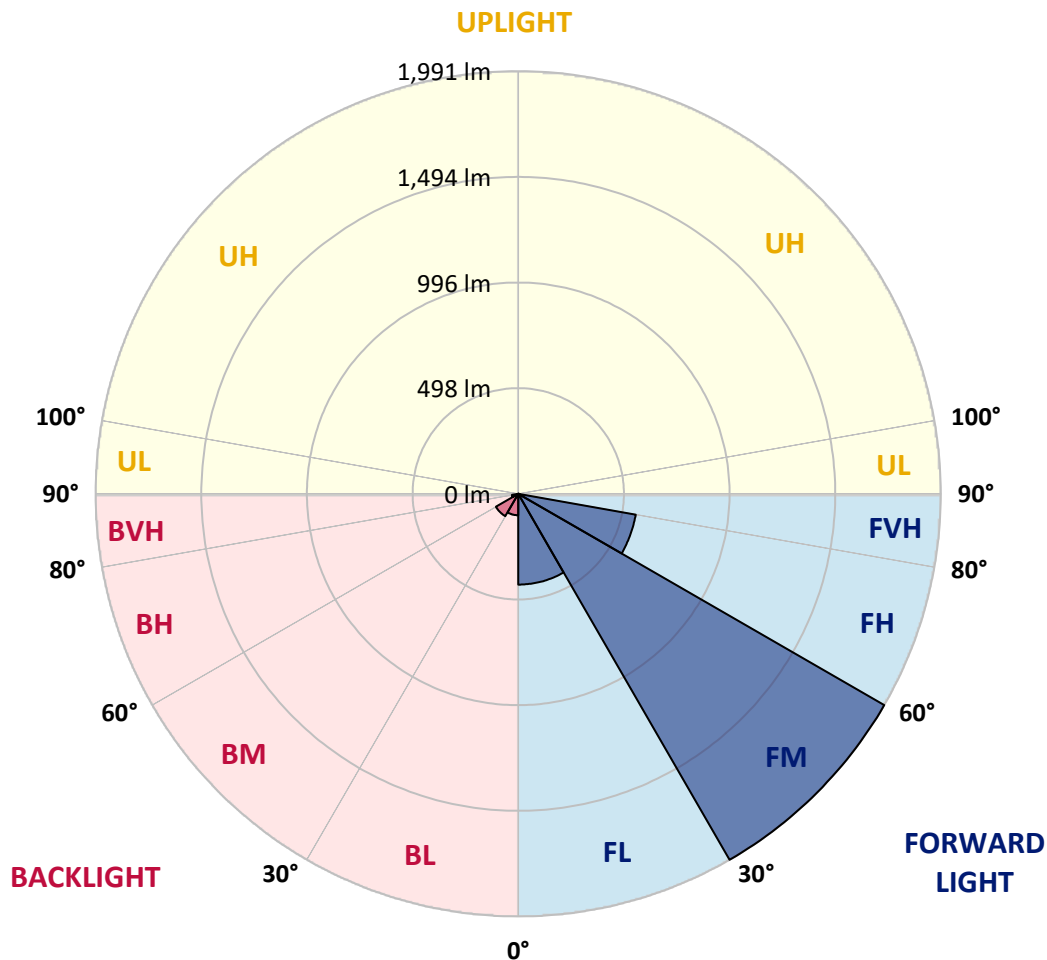


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	427.9	13.2			
FM (30°-60°)	1991.3	61.5			
FH (60°-80°)	562.3	17.4			G0/660
FVH (80°-90°)	5.5	0.2			G0/10
BL (0°-30°)	101.0	3.1	B0/110		
BM (30°-60°)	121.5	3.8	B0/220		
BH (60°-80°)	30.1	0.9	B0/110		G0/110
BVH (80°-90°)	0.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G0**  
 Type II Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	780.7	780.7	780.7	780.7	780.7	780.7	780.7	780.7	780.7	780.7	780.7
2.5°	968.7	956.5	954.8	952.4	929.2	911.8	886.6	859.1	828.1	796.5	782.6
5°	1119.2	1109.7	1107.8	1096.6	1070.3	1040.7	995.9	939.4	881.7	813.7	784.5
7.5°	1148.4	1146.6	1154.8	1154.4	1150.8	1127.4	1089.7	1022.3	935.6	834.9	789.8
10°	1018.3	1023.0	1047.2	1068.7	1126.4	1160.0	1151.8	1096.2	991.2	859.1	795.5
12.5°	899.8	894.4	911.8	936.0	1003.2	1103.0	1177.5	1157.9	1054.6	886.4	804.1
15°	825.5	823.3	833.1	844.3	895.4	996.1	1147.6	1208.1	1115.8	918.8	817.1
17.5°	801.8	799.9	803.0	805.8	838.9	916.9	1076.2	1238.9	1174.3	955.8	831.5
20°	821.1	818.8	818.4	816.1	829.9	883.0	1011.7	1241.1	1226.9	989.3	843.9
22.5°	877.7	874.8	865.1	856.3	857.5	887.6	983.0	1219.1	1266.5	1020.7	851.7
25°	980.1	975.6	955.2	925.6	906.8	919.6	987.4	1190.1	1304.2	1045.3	847.9
27.5°	1108.4	1102.4	1076.2	1032.3	989.3	973.7	1019.2	1170.1	1335.6	1064.1	839.7
30°	1234.1	1226.3	1200.5	1166.3	1103.6	1054.5	1076.5	1179.0	1372.9	1083.6	828.9
32.5°	1369.7	1362.3	1328.2	1285.9	1233.9	1167.8	1155.0	1221.9	1418.7	1111.0	821.3
35°	1541.4	1529.8	1481.2	1423.5	1368.4	1301.4	1261.3	1296.0	1479.6	1152.8	825.5
37.5°	1736.8	1721.2	1668.8	1589.1	1517.2	1442.3	1390.7	1397.9	1569.0	1208.7	838.6
40°	1921.0	1906.8	1858.4	1783.3	1693.0	1602.1	1547.1	1531.1	1692.2	1276.8	861.3
42.5°	2031.4	2018.6	1998.2	1966.5	1890.4	1797.6	1728.4	1693.8	1838.0	1358.3	889.1
45°	2037.6	2026.4	2053.8	2090.8	2075.8	2014.0	1929.6	1866.2	1984.5	1434.9	917.8
47.5°	1938.5	1930.9	2014.0	2143.1	2207.4	2233.4	2155.5	2024.3	2105.4	1489.8	929.6
50°	1668.4	1665.6	1836.6	2073.6	2257.6	2425.6	2393.9	2171.3	2199.0	1518.1	918.4
52.5°	1446.7	1436.4	1536.2	1851.0	2184.7	2526.7	2626.8	2315.6	2264.5	1523.6	892.3
55°	1097.3	1088.2	1213.3	1478.7	1949.5	2490.8	2797.2	2464.4	2311.6	1509.8	845.3
57.5°	588.6	583.0	741.0	984.1	1524.0	2275.0	2828.0	2621.8	2351.0	1473.2	779.6
60°	229.2	228.2	287.3	477.4	926.2	1850.8	2672.8	2716.2	2375.8	1428.2	724.7
62.5°	138.7	141.7	151.2	214.3	409.2	1149.7	2315.0	2608.8	2392.5	1387.1	679.3
65°	114.7	114.9	116.0	147.3	196.0	481.1	1742.7	2255.2	2351.5	1313.8	614.9
67.5°	98.3	100.1	104.7	116.8	138.3	210.9	1003.4	1746.9	2102.4	1143.2	514.7
70°	77.5	79.9	85.7	96.1	106.7	132.0	370.8	1162.4	1606.1	861.7	389.2
72.5°	65.3	65.1	68.2	78.1	84.7	92.9	142.7	651.3	933.4	411.3	192.6
75°	50.5	52.6	56.4	65.3	69.3	67.3	77.3	237.9	334.5	124.6	65.5
77.5°	39.6	41.2	44.6	53.3	57.3	47.8	44.6	85.1	107.5	44.8	29.5
80°	17.7	19.2	30.3	39.4	46.7	33.0	24.2	43.6	47.8	20.4	15.0
82.5°	3.2	5.4	17.7	20.8	24.0	21.4	12.6	22.5	23.4	8.2	5.2
85°	0.2	0.4	6.1	7.6	9.6	7.0	3.8	9.0	7.8	2.8	1.9
87.5°	0.0	0.0	0.0	0.2	0.2	1.0	1.2	1.6	1.2	1.0	0.8
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	780.7	780.7	780.7	780.7	780.7	780.7	780.7	780.7	780.7	780.7
2.5°	768.1	739.8	712.3	689.6	676.5	654.1	639.3	636.9	630.7	636.1
5°	753.4	702.6	651.3	605.4	567.6	518.9	482.5	467.1	453.7	458.3
7.5°	746.4	666.2	586.4	507.9	427.1	349.2	291.3	267.1	248.8	251.3
10°	737.0	628.5	503.3	383.3	275.3	198.3	158.5	143.6	135.5	135.6
12.5°	729.8	583.3	406.7	259.9	167.6	126.7	114.3	110.7	108.2	108.4
15°	726.2	530.2	311.5	173.2	119.8	107.3	104.2	102.7	101.1	100.9
17.5°	720.3	471.1	228.0	126.5	104.9	100.4	97.9	96.1	94.1	93.7
20°	711.2	404.0	166.7	106.9	98.3	94.9	91.3	88.9	86.5	86.1
22.5°	694.6	333.0	128.0	98.9	93.5	89.7	85.3	82.5	80.2	79.7
25°	663.9	266.5	107.9	93.9	89.3	84.7	79.9	76.2	73.9	73.5
27.5°	624.9	209.4	97.9	89.3	83.9	79.7	74.3	70.7	68.8	68.4
30°	579.0	161.2	92.1	84.2	77.5	73.9	69.1	66.1	64.9	64.9
32.5°	529.4	128.8	89.7	78.9	72.0	68.0	64.2	62.9	62.5	62.3
35°	482.9	111.9	88.5	74.7	66.9	63.1	61.5	61.7	62.5	62.5
37.5°	441.6	106.5	87.9	71.8	62.5	59.1	60.2	61.9	61.1	61.1
40°	404.2	107.1	87.5	69.5	58.9	57.0	58.9	57.5	55.6	55.4
42.5°	375.6	112.0	86.7	67.8	56.8	55.4	54.5	52.4	52.2	52.6
45°	354.9	116.4	86.5	66.9	54.3	51.8	50.7	48.6	52.6	53.5
47.5°	330.3	116.4	86.5	64.2	50.3	49.3	47.8	45.3	49.3	50.3
50°	298.5	109.1	83.1	60.9	47.2	46.5	43.8	40.8	40.0	40.6
52.5°	258.3	95.7	74.5	56.6	44.0	42.7	39.4	37.2	36.6	36.6
55°	212.6	80.2	62.9	50.1	40.6	38.3	36.0	35.0	34.3	33.9
57.5°	172.8	65.7	50.5	44.6	37.3	34.5	33.7	32.6	31.6	31.0
60°	141.9	51.8	41.7	39.6	34.1	31.6	31.4	29.7	27.2	26.8
62.5°	109.5	37.9	35.2	34.3	31.0	28.8	28.4	25.2	21.2	20.4
65°	77.3	29.5	28.4	30.1	27.6	25.5	24.6	19.8	15.6	15.0
67.5°	54.3	24.8	22.3	26.3	24.0	21.4	20.8	16.8	13.0	12.6
70°	38.7	20.2	18.3	22.5	19.2	18.8	17.6	13.9	10.6	10.1
72.5°	27.4	15.4	14.1	19.6	13.2	16.2	14.3	10.8	8.0	7.6
75°	20.2	11.0	9.9	11.4	9.6	12.2	10.1	7.2	5.0	4.8
77.5°	14.8	7.0	5.9	5.6	5.6	7.6	5.6	3.0	2.2	1.9
80°	10.4	3.2	2.8	2.4	2.2	1.8	0.8	0.4	0.2	0.2
82.5°	6.1	1.4	1.4	1.0	0.6	0.0	0.0	0.0	0.0	0.0
85°	1.4	0.6	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.2	0.2	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

(END OF REPORT)