

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: P959283

Luminaire Tested: **NAV-SB1A-735-U-AFL-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P959283  
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-735-U-AFL-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

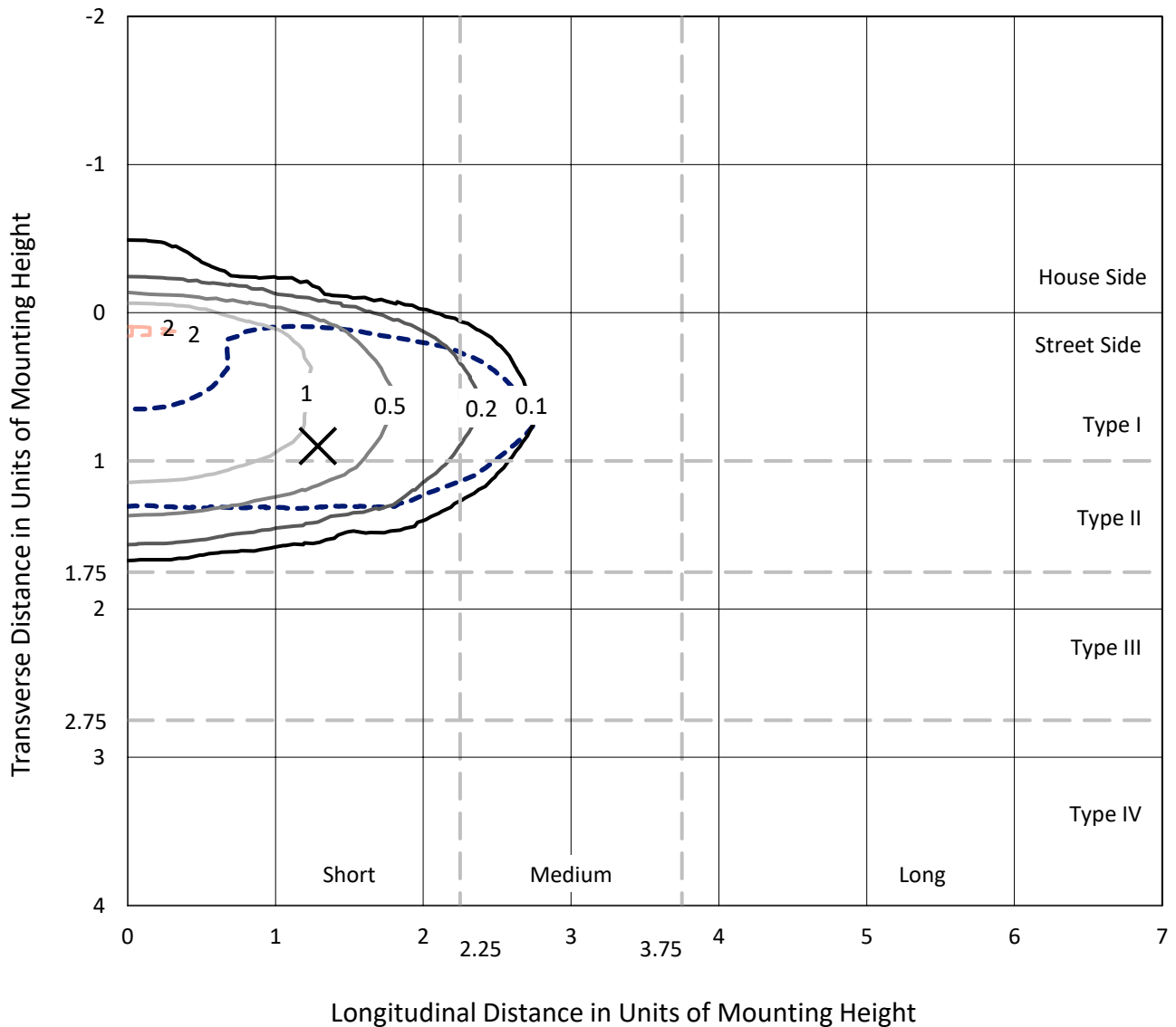
Lumens per Lamp: N/A  
Luminaire Lumens: 3921.6 lumens  
Efficiency: N/A  
Efficacy: 126.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 30.9  
Input Voltage (V): NR  
Input Current (Ain): 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

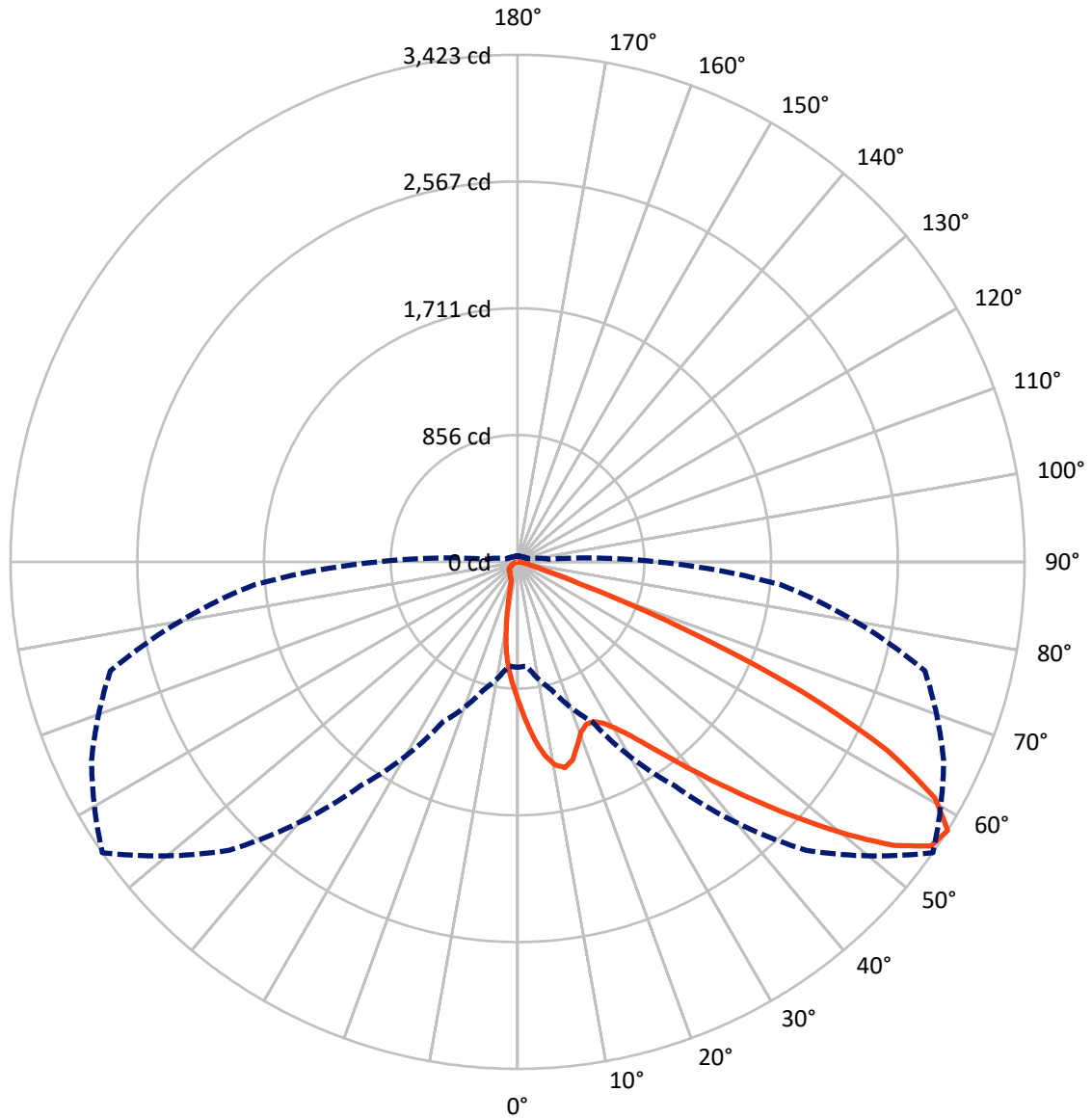
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 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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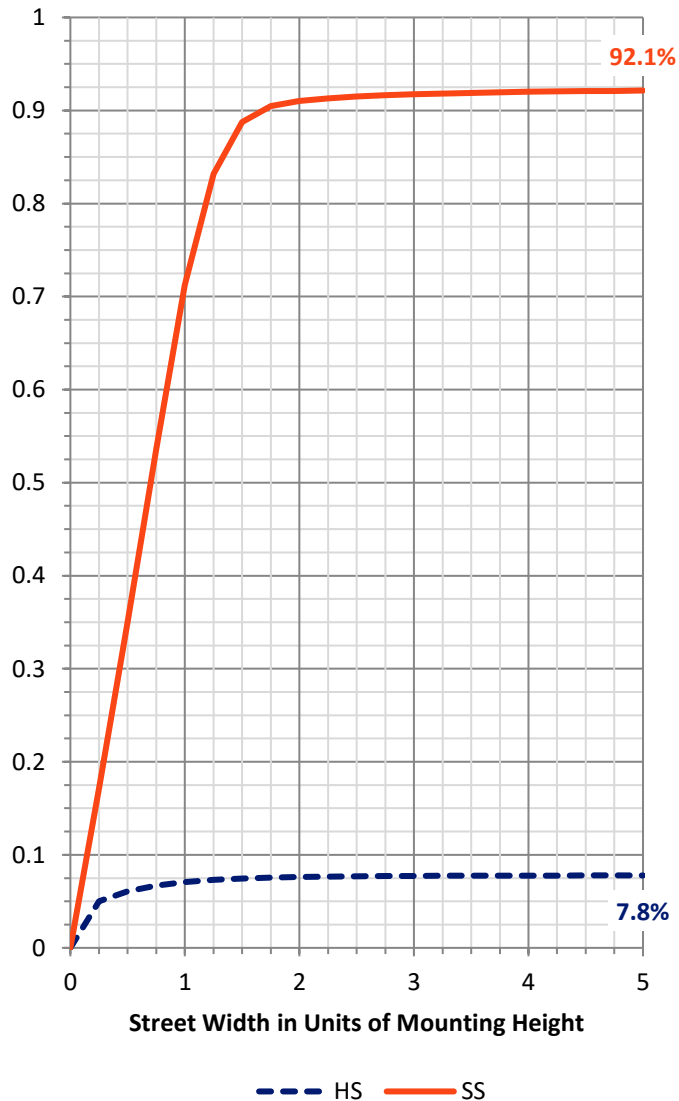
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	306.3	0.0	306.3
	% Fixture	7.8	0.0	7.8
<b>Street Side</b>	Lumens	3615.4	0.0	3615.4
	% Fixture	92.2	0.0	92.2
<b>Total</b>	Lumens	3921.6	0.0	3921.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.9	2.2
10°-20°	212.4	5.4
20°-30°	339.8	8.7
30°-40°	575.2	14.7
40°-50°	944.3	24.1
50°-60°	1037.9	26.5
60°-70°	595.3	15.2
70°-80°	121.6	3.1
80°-90°	7.2	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°	3921.6	100.0
0°-180°	3921.6	100.0

**Coefficient of Utilization**



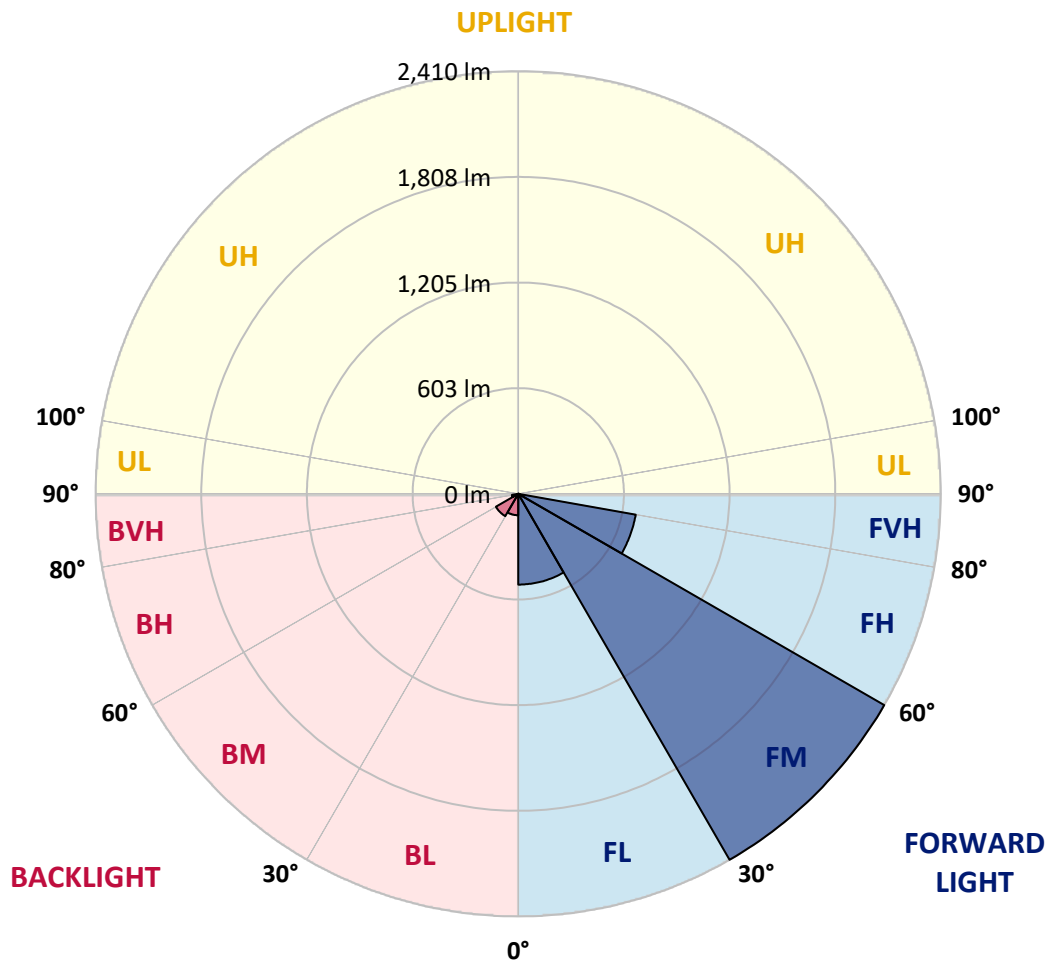
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	517.9	13.2			
FM (30°-60°)	2410.3	61.5			
FH (60°-80°)	680.5	17.4			G1/1800
FVH (80°-90°)	6.7	0.2			G0/10
BL (0°-30°)	122.3	3.1	B1/500		
BM (30°-60°)	147.1	3.8	B0/220		
BH (60°-80°)	36.4	0.9	B0/110		G0/110
BVH (80°-90°)	0.5	0.0			G0/10
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 Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	945.0	945.0	945.0	945.0	945.0	945.0	945.0	945.0	945.0	945.0	945.0
2.5°	1172.6	1157.8	1155.7	1152.7	1124.7	1103.6	1073.2	1039.9	1002.3	964.1	947.2
5°	1354.6	1343.1	1340.9	1327.4	1295.4	1259.6	1205.5	1137.0	1067.1	984.9	949.7
7.5°	1390.0	1387.7	1397.7	1397.2	1392.9	1364.6	1318.9	1237.4	1132.4	1010.5	955.9
10°	1232.6	1238.1	1267.6	1293.4	1363.4	1403.9	1394.1	1326.9	1199.7	1039.9	962.9
12.5°	1089.2	1082.6	1103.6	1132.9	1214.1	1335.1	1425.3	1401.6	1276.5	1073.0	973.3
15°	999.2	996.5	1008.4	1021.9	1083.8	1205.7	1389.0	1462.3	1350.5	1112.1	989.0
17.5°	970.4	968.2	971.9	975.3	1015.4	1109.7	1302.7	1499.5	1421.4	1156.8	1006.4
20°	993.8	991.0	990.5	987.8	1004.5	1068.9	1224.6	1502.1	1485.0	1197.5	1021.4
22.5°	1062.3	1058.9	1047.0	1036.4	1037.9	1074.4	1189.7	1475.6	1532.9	1235.4	1030.8
25°	1186.3	1180.8	1156.1	1120.3	1097.6	1113.0	1195.0	1440.5	1578.6	1265.2	1026.2
27.5°	1341.6	1334.3	1302.7	1249.5	1197.5	1178.6	1233.5	1416.3	1616.5	1287.9	1016.4
30°	1493.7	1484.3	1453.0	1411.7	1335.8	1276.3	1302.9	1427.0	1661.7	1311.6	1003.3
32.5°	1657.9	1648.9	1607.6	1556.4	1493.4	1413.4	1397.9	1479.0	1717.2	1344.7	994.1
35°	1865.6	1851.6	1792.8	1722.9	1656.2	1575.2	1526.6	1568.7	1790.9	1395.3	999.2
37.5°	2102.1	2083.2	2019.9	1923.4	1836.4	1745.7	1683.3	1692.0	1899.0	1463.0	1015.0
40°	2325.1	2307.9	2249.4	2158.4	2049.2	1939.1	1872.7	1853.3	2048.2	1545.5	1042.4
42.5°	2458.8	2443.3	2418.7	2380.3	2288.1	2175.9	2091.9	2050.1	2224.8	1644.1	1076.0
45°	2466.3	2452.7	2485.8	2530.6	2512.5	2437.8	2335.5	2258.8	2402.0	1736.8	1110.9
47.5°	2346.3	2337.2	2437.8	2594.0	2671.9	2703.2	2608.9	2450.1	2548.3	1803.2	1125.1
50°	2019.5	2016.1	2223.0	2509.8	2732.5	2935.9	2897.5	2628.1	2661.7	1837.5	1111.6
52.5°	1751.0	1738.7	1859.4	2240.4	2644.3	3058.3	3179.4	2802.7	2741.0	1844.1	1079.9
55°	1328.1	1317.2	1468.5	1789.6	2359.7	3014.7	3385.7	2982.9	2797.8	1827.4	1023.2
57.5°	712.4	705.6	896.9	1191.2	1844.6	2753.6	3422.9	3173.4	2845.7	1783.2	943.6
60°	277.4	276.1	347.8	577.9	1121.0	2240.2	3235.0	3287.8	2875.6	1728.8	877.1
62.5°	167.8	171.5	183.1	259.4	495.3	1391.6	2801.9	3157.6	2895.7	1679.0	822.2
65°	138.8	139.1	140.5	178.2	237.2	582.3	2109.3	2729.7	2846.2	1590.2	744.4
67.5°	119.0	121.2	126.7	141.4	167.4	255.3	1214.4	2114.5	2544.7	1383.6	622.9
70°	93.8	96.8	103.7	116.3	129.1	159.8	448.8	1406.9	1944.0	1042.9	471.1
72.5°	79.0	78.8	82.4	94.5	102.5	112.4	172.6	788.3	1129.8	497.9	233.1
75°	61.2	63.6	68.2	79.0	83.9	81.5	93.6	288.0	404.8	150.9	79.3
77.5°	47.9	49.8	53.9	64.6	69.4	57.8	53.9	103.0	130.1	54.1	35.8
80°	21.5	23.2	36.8	47.7	56.6	39.9	29.2	52.7	57.8	24.7	18.1
82.5°	3.9	6.6	21.5	25.1	29.0	25.8	15.3	27.4	28.3	9.9	6.3
85°	0.2	0.5	7.5	9.2	11.6	8.5	4.6	10.9	9.4	3.4	2.5
87.5°	0.0	0.0	0.0	0.2	0.2	1.2	1.4	1.9	1.4	1.2	0.9
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°	945.0	945.0	945.0	945.0	945.0	945.0	945.0	945.0	945.0	945.0
2.5°	929.8	895.4	862.1	834.8	818.8	791.7	773.8	770.9	763.4	770.0
5°	911.9	850.4	788.3	732.7	687.0	628.0	583.9	565.4	549.2	554.7
7.5°	903.4	806.5	709.7	614.7	517.0	422.7	352.6	323.3	301.0	304.2
10°	892.1	760.8	609.2	464.0	333.2	240.2	191.8	173.8	164.0	164.2
12.5°	883.3	706.1	492.3	314.6	202.8	153.3	138.3	134.0	131.1	131.3
15°	879.0	641.8	377.0	209.6	145.1	129.9	126.2	124.3	122.4	122.1
17.5°	871.8	570.2	275.9	153.0	127.0	121.7	118.5	116.3	113.9	113.4
20°	860.9	488.9	201.7	129.4	119.0	114.9	110.5	107.6	104.8	104.2
22.5°	840.8	403.1	155.0	119.7	113.2	108.5	103.2	99.8	97.0	96.5
25°	803.6	322.6	130.6	113.7	108.1	102.5	96.8	92.1	89.5	89.0
27.5°	756.4	253.4	118.5	108.1	101.6	96.5	90.0	85.6	83.2	82.7
30°	700.8	195.2	111.5	101.8	93.8	89.5	83.6	80.1	78.6	78.6
32.5°	640.8	156.0	108.5	95.5	87.0	82.2	77.6	76.2	75.6	75.4
35°	584.5	135.4	107.1	90.4	81.0	76.5	74.5	74.7	75.6	75.6
37.5°	534.4	128.8	106.4	86.8	75.6	71.5	72.8	74.9	74.0	74.0
40°	489.2	129.7	105.9	84.2	71.3	68.9	71.3	69.6	67.2	66.9
42.5°	454.6	135.7	105.0	82.0	68.7	66.9	66.0	63.3	63.1	63.6
45°	429.5	140.9	104.8	81.0	65.8	62.6	61.4	58.7	63.6	64.8
47.5°	399.7	140.9	104.8	77.6	61.0	59.8	57.8	54.9	59.8	61.0
50°	361.3	132.0	100.6	73.8	57.1	56.4	53.0	49.3	48.4	49.1
52.5°	312.6	115.8	90.2	68.5	53.2	51.8	47.7	45.0	44.3	44.3
55°	257.3	97.0	76.2	60.7	49.1	46.4	43.6	42.3	41.6	41.1
57.5°	209.2	79.5	61.2	53.9	45.2	41.8	40.9	39.5	38.2	37.5
60°	171.7	62.6	50.5	47.9	41.3	38.2	37.9	36.1	32.9	32.4
62.5°	132.5	45.9	42.5	41.6	37.5	34.8	34.3	30.4	25.6	24.7
65°	93.6	35.8	34.3	36.5	33.4	31.0	29.7	24.0	18.9	18.1
67.5°	65.8	30.0	27.1	31.9	29.0	25.8	25.1	20.3	15.7	15.3
70°	46.9	24.4	22.2	27.4	23.2	22.8	21.3	16.9	12.8	12.3
72.5°	33.1	18.7	17.2	23.7	16.0	19.6	17.4	13.0	9.6	9.2
75°	24.4	13.3	12.1	13.7	11.6	14.8	12.3	8.7	6.0	5.8
77.5°	17.9	8.5	7.3	6.8	6.8	9.2	6.8	3.6	2.7	2.5
80°	12.6	3.9	3.4	2.9	2.7	2.2	0.9	0.5	0.2	0.2
82.5°	7.5	1.7	1.7	1.2	0.7	0.0	0.0	0.0	0.0	0.0
85°	1.7	0.7	0.7	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)