

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: P959227

Luminaire Tested: **NAV-SB1A-727-U-SL3**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P959227  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1A-727-U-SL3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4169.7 lumens  
Efficiency: N/A  
Efficacy: 134.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G2

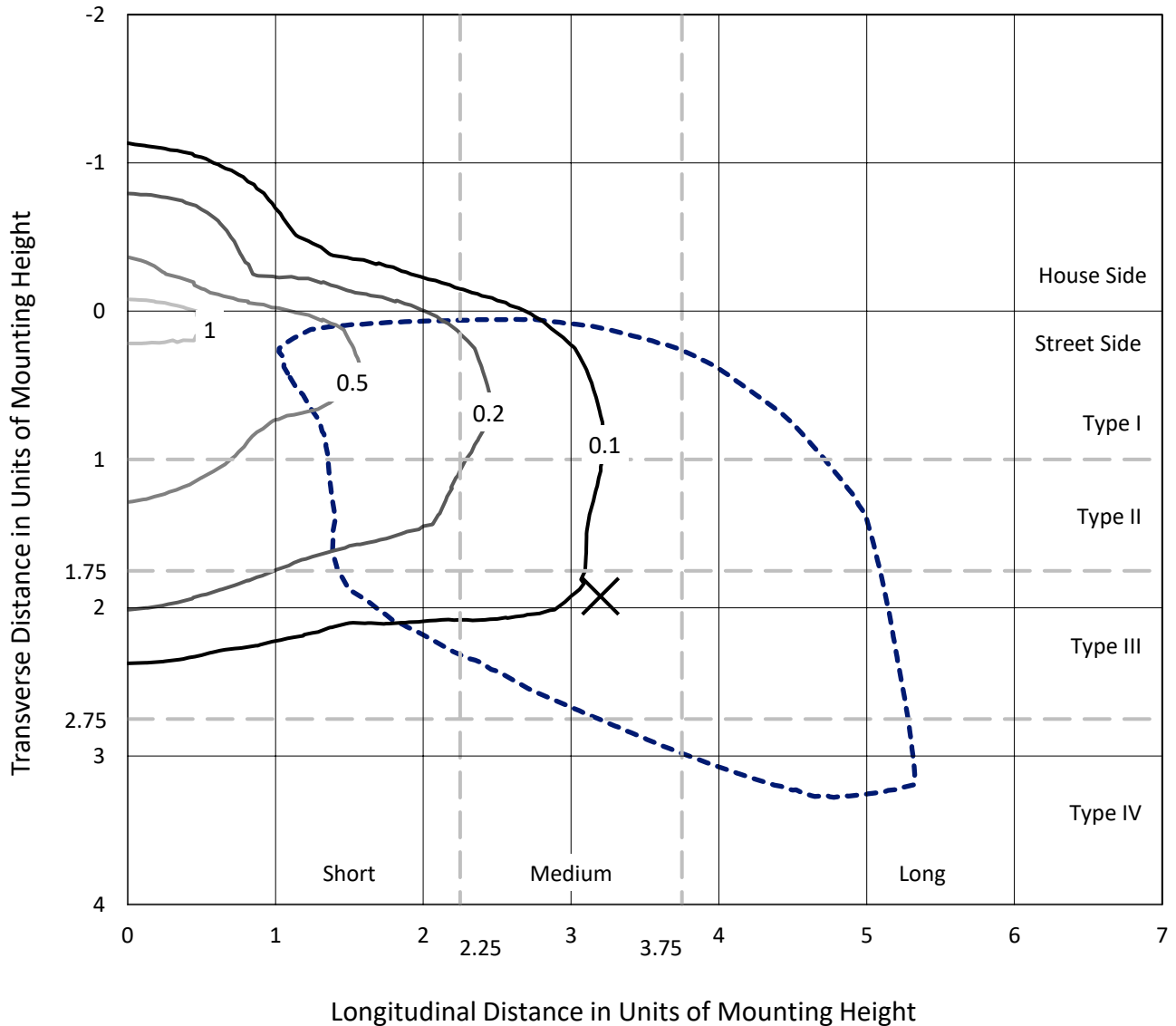
Input Watts (W): 30.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

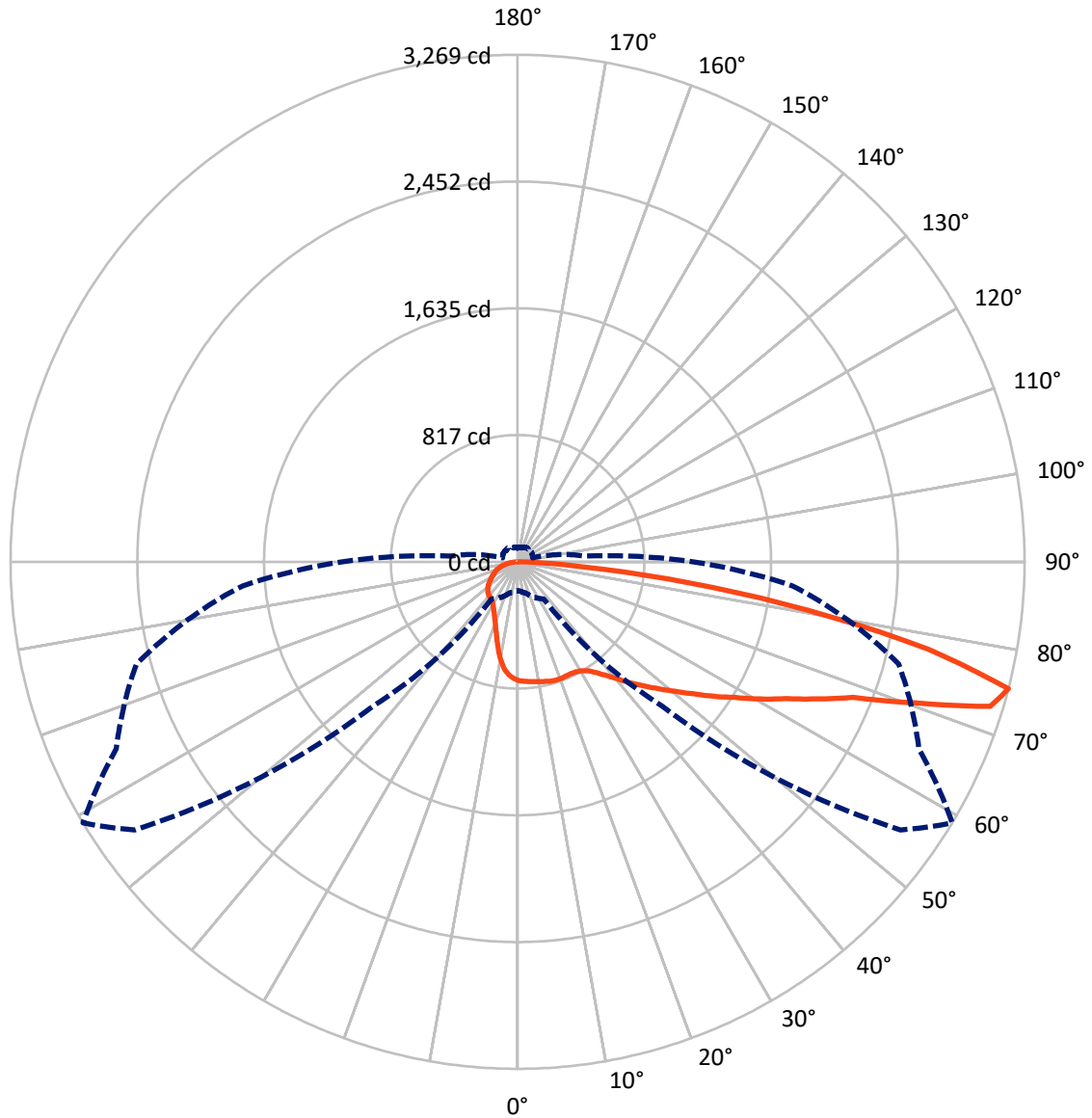
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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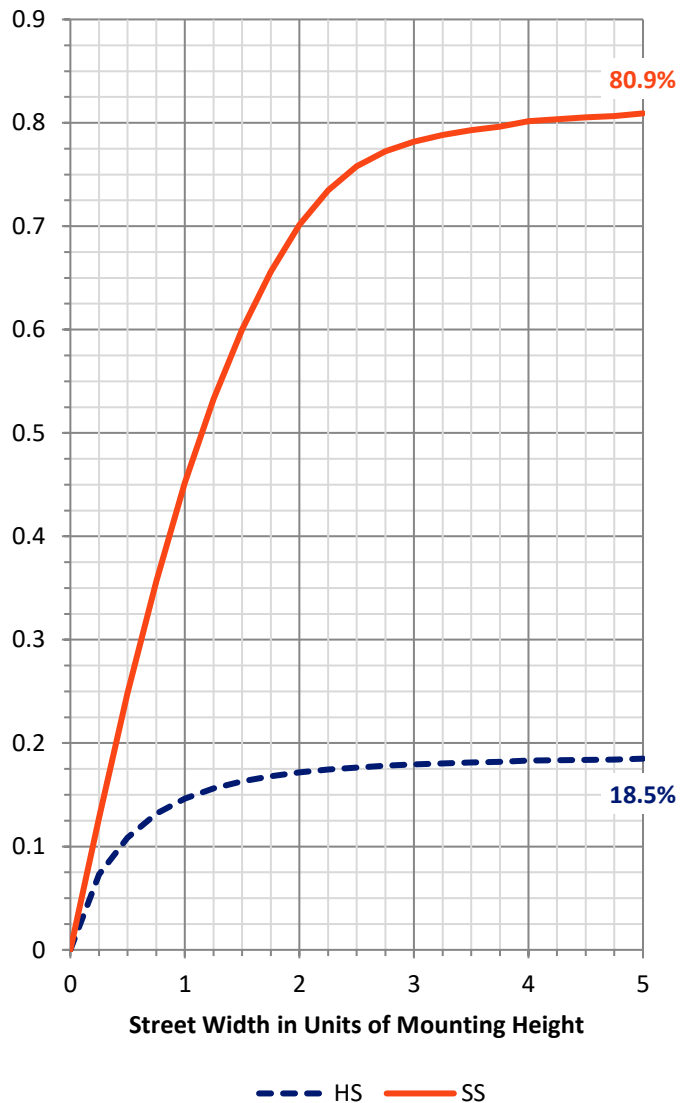
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	782.1	0.0	782.1
	% Fixture	18.8	0.0	18.8
<b>Street Side</b>	Lumens	3387.6	0.0	3387.6
	% Fixture	81.2	0.0	81.2
<b>Total</b>	Lumens	4169.7	0.0	4169.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.6	1.6
10°-20°	175.4	4.2
20°-30°	266.4	6.4
30°-40°	396.0	9.5
40°-50°	589.0	14.1
50°-60°	799.5	19.2
60°-70°	976.0	23.4
70°-80°	766.0	18.4
80°-90°	132.7	3.2
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°	4169.7	100.0
0°-180°	4169.7	100.0

**Coefficient of Utilization**

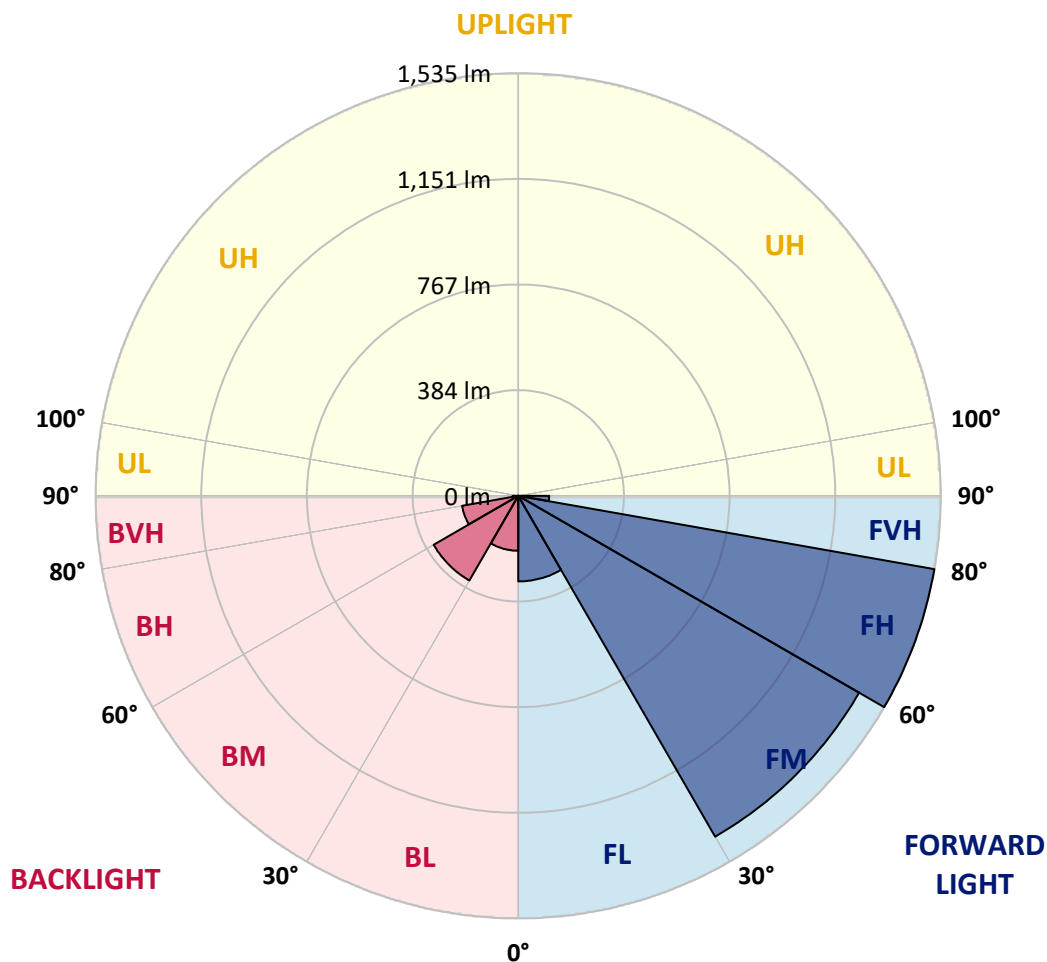


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	310.9	7.5			
FM (30°-60°)	1429.5	34.3			
FH (60°-80°)	1534.8	36.8			G1/1800
FVH (80°-90°)	112.4	2.7			G2/225
BL (0°-30°)	199.6	4.8	B1/500		
BM (30°-60°)	355.0	8.5	B1/1000		
BH (60°-80°)	207.2	5.0	B1/500		G1/500
BVH (80°-90°)	20.3	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**  
 Type IV Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	765.4	765.4	765.4	765.4	765.4	765.4	765.4	765.4	765.4	765.4	765.4
2.5°	771.8	769.2	771.8	770.7	770.3	769.4	769.6	771.2	770.3	771.4	767.6
5°	766.7	765.2	767.8	767.1	770.1	770.5	773.5	775.2	776.3	776.5	773.7
7.5°	758.2	756.6	760.4	763.5	769.8	771.6	777.7	780.6	782.2	784.8	780.6
10°	727.0	726.3	735.7	747.6	762.4	771.6	780.8	785.8	788.2	795.4	790.5
12.5°	671.8	672.7	685.0	708.0	737.5	767.1	784.4	791.6	795.4	804.3	802.2
15°	619.1	618.9	632.3	656.8	698.2	747.4	786.2	798.6	805.0	818.3	816.5
17.5°	588.6	587.7	597.1	615.7	654.3	717.1	781.7	802.4	816.2	832.8	831.3
20°	583.0	581.2	586.1	595.3	622.7	683.9	770.1	802.4	825.2	846.8	845.8
22.5°	603.4	600.4	598.5	597.4	609.5	656.5	756.9	799.7	838.4	866.7	865.2
25°	644.4	639.9	629.7	619.5	615.9	644.2	745.2	799.0	858.2	893.6	887.9
27.5°	710.8	705.2	684.4	660.1	638.4	650.5	739.9	803.0	880.0	922.1	910.5
30°	793.1	787.1	760.9	723.6	684.6	673.8	746.5	814.9	907.7	960.0	937.2
32.5°	866.9	860.2	837.8	799.9	747.1	714.2	767.1	837.5	951.5	1012.7	977.3
35°	932.4	924.6	904.5	869.4	823.9	770.9	804.3	877.7	1013.6	1098.4	1031.9
37.5°	996.6	987.4	965.4	928.4	896.6	846.5	855.8	929.3	1096.2	1202.5	1104.0
40°	1068.4	1055.1	1028.5	991.9	960.9	935.1	923.2	992.6	1180.1	1318.7	1194.2
42.5°	1138.0	1125.3	1093.5	1062.3	1023.6	1016.1	1001.5	1066.6	1271.8	1446.4	1285.8
45°	1212.9	1197.8	1159.3	1119.7	1095.3	1070.0	1077.4	1140.6	1361.8	1576.4	1381.7
47.5°	1283.0	1266.2	1220.7	1176.7	1163.3	1115.3	1146.9	1222.0	1455.3	1708.4	1476.8
50°	1320.9	1304.3	1266.5	1226.7	1216.2	1171.1	1222.2	1311.5	1553.3	1839.8	1568.1
52.5°	1352.6	1334.7	1285.0	1263.1	1259.9	1231.9	1315.1	1413.8	1651.4	1956.0	1656.3
55°	1386.2	1366.2	1303.0	1283.3	1297.6	1300.1	1425.3	1529.8	1755.0	2069.3	1739.5
57.5°	1425.1	1399.6	1320.3	1300.3	1334.4	1380.0	1551.7	1650.0	1856.8	2174.2	1813.5
60°	1461.5	1436.0	1353.5	1327.5	1374.1	1472.6	1696.9	1795.6	1972.1	2267.7	1883.5
62.5°	1468.7	1447.7	1380.0	1379.8	1427.9	1580.7	1868.7	1942.5	2072.9	2360.2	1946.3
65°	1344.5	1331.3	1291.1	1377.7	1505.1	1736.4	2060.0	2130.5	2200.9	2440.9	2001.5
67.5°	1023.3	1025.1	1022.1	1189.3	1442.8	1960.0	2337.1	2331.7	2359.0	2531.5	2065.0
70°	467.9	478.5	547.0	820.9	1155.9	1985.8	2795.1	2725.4	2557.6	2648.8	2119.9
72.5°	252.8	260.9	288.9	397.7	694.9	1765.6	3137.4	3186.9	2821.6	2727.8	2059.6
75°	185.5	190.0	209.5	252.8	291.8	1312.2	3014.7	3269.0	2854.5	2543.6	1778.6
77.5°	138.9	140.8	156.8	200.3	149.3	691.8	2408.9	2707.4	2443.6	2089.9	1313.7
80°	100.8	102.9	114.8	150.3	104.8	253.0	1654.0	1900.4	1673.5	1332.2	654.8
82.5°	69.5	70.4	75.5	102.3	73.1	98.3	938.5	1114.4	934.3	467.5	176.7
85°	41.9	43.0	45.3	59.7	41.5	46.6	405.1	419.0	279.3	111.7	54.9
87.5°	17.3	18.3	20.2	25.1	16.4	13.0	66.8	83.8	52.3	32.8	17.0
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°	765.4	765.4	765.4	765.4	765.4	765.4	765.4	765.4	765.4	765.4	765.4
2.5°	766.5	764.9	760.7	754.8	749.4	742.7	739.7	737.3	735.0	730.8	728.8
5°	771.2	766.9	755.4	740.7	723.9	705.4	687.5	675.2	664.6	656.8	650.3
7.5°	778.4	770.3	749.4	719.1	680.6	641.0	605.4	580.0	561.0	554.0	541.9
10°	785.8	776.1	739.7	686.3	619.7	558.9	511.7	485.6	470.4	465.5	457.8
12.5°	794.5	780.3	724.8	640.8	551.8	485.1	443.9	428.7	420.8	418.1	418.8
15°	807.3	783.9	702.1	583.8	487.0	431.3	404.7	394.1	390.1	389.8	390.7
17.5°	816.9	784.6	666.9	522.9	437.2	398.8	376.8	372.8	375.5	379.6	381.1
20°	827.7	778.6	620.6	467.2	402.2	370.3	361.1	363.9	370.3	376.2	378.2
22.5°	835.3	767.6	564.8	423.9	371.9	353.9	353.5	359.2	362.7	365.6	367.2
25°	842.0	749.0	505.6	387.7	347.0	344.1	349.0	347.3	344.8	347.3	348.8
27.5°	847.0	719.6	452.6	355.8	329.5	337.3	334.5	330.4	330.2	331.5	333.7
30°	845.4	680.3	409.2	325.4	317.1	324.8	317.9	317.1	316.5	317.1	319.6
32.5°	845.4	635.7	375.8	304.6	309.3	306.4	305.8	304.1	301.5	301.2	304.1
35°	850.1	591.0	347.0	293.4	302.8	295.8	296.3	292.5	286.9	284.2	286.9
37.5°	859.8	555.1	318.5	288.0	291.4	291.2	289.4	282.9	273.0	264.4	267.4
40°	883.1	544.6	299.0	285.6	286.0	288.6	283.9	271.4	249.0	235.0	236.9
42.5°	919.6	562.3	294.8	279.5	282.4	285.1	275.9	246.7	230.8	222.5	222.5
45°	966.1	593.3	303.9	270.7	273.9	278.6	251.2	237.3	230.1	230.3	231.4
47.5°	1024.9	625.9	321.0	263.1	261.6	264.2	234.8	226.3	216.5	218.9	225.2
50°	1092.9	658.8	337.1	252.8	247.8	239.1	224.3	216.3	203.7	197.8	199.4
52.5°	1166.4	690.6	343.7	240.3	233.1	222.9	217.1	207.3	192.0	182.3	182.1
55°	1236.1	719.6	336.5	225.2	218.2	210.4	209.5	203.5	187.1	173.6	173.6
57.5°	1302.1	743.8	318.5	209.9	203.3	198.5	204.6	201.6	181.0	163.8	162.9
60°	1357.9	760.4	292.5	194.4	189.7	187.3	196.5	195.6	172.5	153.2	152.5
62.5°	1402.4	766.9	263.8	179.7	178.6	174.0	185.3	185.3	161.7	142.9	142.2
65°	1437.2	760.7	234.6	165.1	167.4	160.6	171.6	170.3	150.3	133.7	132.8
67.5°	1467.9	739.9	202.3	150.8	155.9	147.4	157.2	154.1	137.8	124.5	123.6
70°	1481.5	692.0	165.5	136.4	142.7	134.4	142.9	137.0	123.6	114.6	112.9
72.5°	1371.7	575.1	130.3	121.4	126.7	120.0	127.4	120.6	108.3	104.3	101.0
75°	1134.8	431.5	100.2	105.0	109.1	103.8	108.8	103.8	92.7	95.5	87.2
77.5°	824.1	291.4	76.7	87.7	89.5	86.8	91.0	85.5	75.3	74.7	71.3
80°	409.8	170.7	60.1	69.3	68.7	66.8	71.8	69.1	60.6	64.2	63.4
82.5°	118.7	73.1	43.8	48.7	47.4	47.8	51.4	52.7	78.9	78.3	80.1
85°	37.2	28.7	26.2	27.2	25.8	26.4	30.2	60.1	55.7	32.5	35.3
87.5°	9.6	9.8	6.5	7.0	7.2	8.5	9.6	36.6	17.5	11.5	12.1
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)