

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: P959226

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

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P959226  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-13)  
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-HSS  
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 WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3435.8 lumens  
Efficiency: N/A  
Efficacy: 111.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B0 - U0 - G1

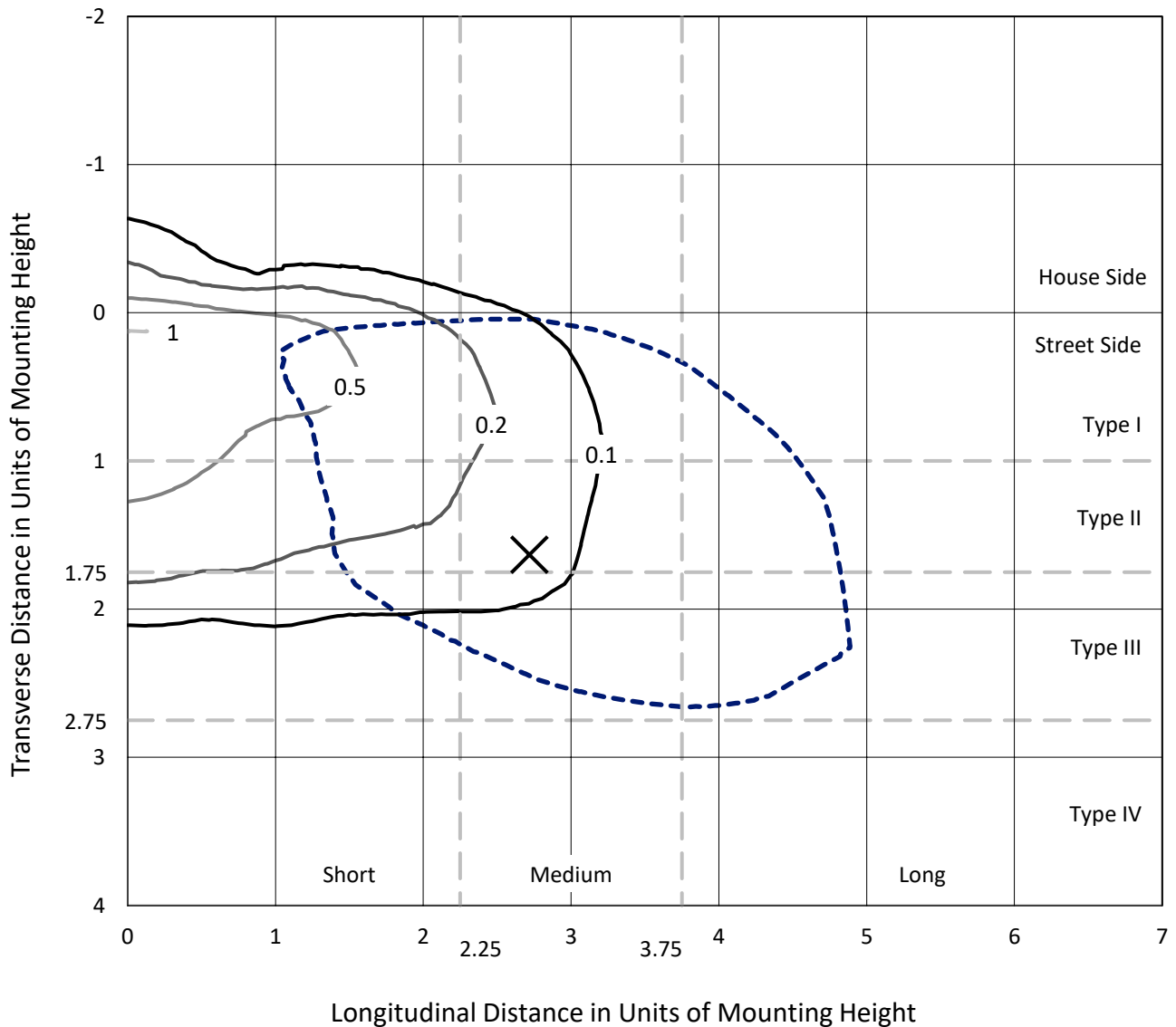
Input Watts (W): 30.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

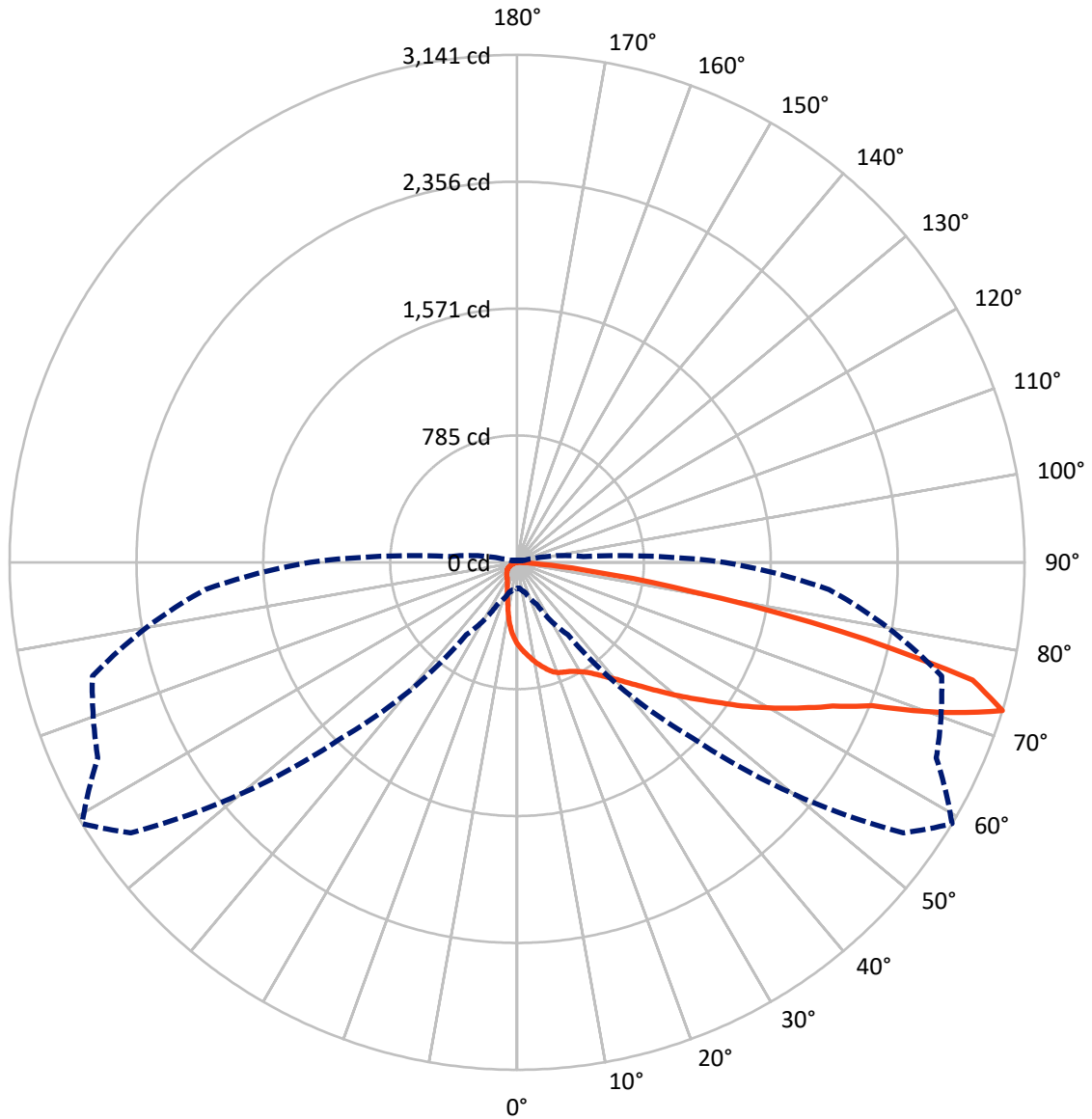
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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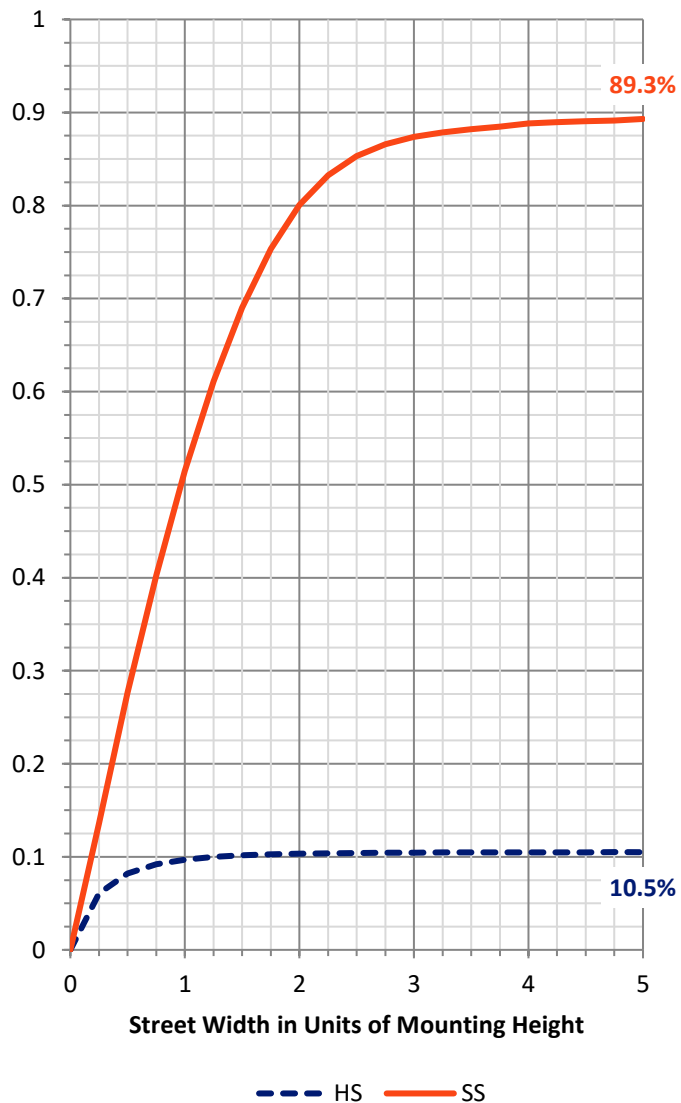
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	362.9	0.0	362.9
	% Fixture	10.6	0.0	10.6
<b>Street Side</b>	Lumens	3072.9	0.0	3072.9
	% Fixture	89.4	0.0	89.4
<b>Total</b>	Lumens	3435.8	0.0	3435.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.0	1.3
10°-20°	122.1	3.6
20°-30°	193.5	5.6
30°-40°	310.5	9.0
40°-50°	496.0	14.4
50°-60°	718.1	20.9
60°-70°	852.2	24.8
70°-80°	632.7	18.4
80°-90°	64.7	1.9
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°	3435.8	100.0
0°-180°	3435.8	100.0

**Coefficient of Utilization**

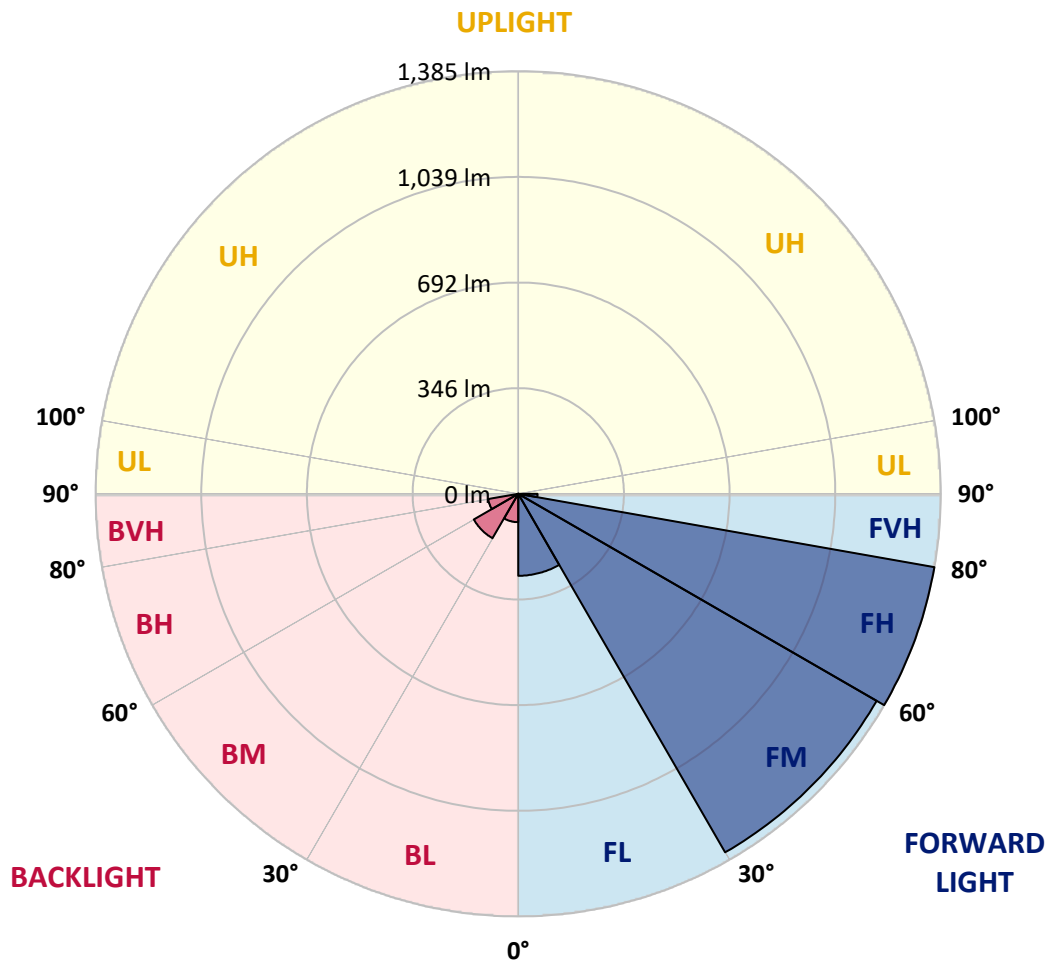


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	268.6	7.8			
FM (30°-60°)	1356.4	39.5			
FH (60°-80°)	1384.8	40.3			G1/1800
FVH (80°-90°)	63.1	1.8			G1/100
BL (0°-30°)	93.0	2.7	B0/110		
BM (30°-60°)	168.2	4.9	B0/220		
BH (60°-80°)	100.1	2.9	B0/110		G0/110
BVH (80°-90°)	1.6	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-G1**  
 Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1
2.5°	563.8	560.6	561.0	555.7	551.9	547.8	540.0	538.8	533.2	523.4	513.2
5°	612.8	610.8	609.1	603.0	595.1	585.3	572.1	567.3	557.0	540.0	520.2
7.5°	648.7	646.3	647.2	641.1	634.8	623.8	605.7	596.9	583.2	557.2	527.4
10°	655.7	654.4	660.2	662.4	662.4	655.5	637.8	628.9	609.1	575.8	534.7
12.5°	616.6	616.8	631.4	648.9	671.8	678.3	666.5	657.0	637.2	595.5	544.2
15°	571.1	571.3	585.5	607.9	645.3	682.9	692.3	686.1	665.7	616.8	555.1
17.5°	543.8	542.6	552.1	570.4	609.7	662.4	708.0	712.0	695.4	640.4	567.3
20°	540.0	537.9	542.8	552.1	580.0	636.8	709.7	728.8	725.9	667.1	581.2
22.5°	563.2	560.2	557.4	557.9	569.8	615.5	705.2	738.2	757.3	699.2	600.2
25°	609.5	604.5	595.7	584.6	582.1	611.0	702.1	748.6	786.5	740.3	625.4
27.5°	665.9	659.1	642.2	625.4	611.0	623.6	708.6	765.0	819.4	788.0	654.6
30°	728.2	719.7	702.7	671.0	648.0	651.6	724.1	786.5	861.6	842.0	691.2
32.5°	819.4	799.7	770.3	721.6	691.4	681.9	747.4	813.8	913.9	914.1	744.0
35°	897.7	886.7	857.1	796.5	734.4	722.1	778.2	852.4	986.4	1009.4	818.1
37.5°	949.0	934.1	908.0	862.5	801.2	763.3	819.2	899.7	1063.0	1118.0	909.4
40°	1006.6	991.7	957.1	914.3	878.8	834.2	871.0	954.3	1147.2	1229.5	1013.7
42.5°	1075.8	1056.6	1015.7	969.4	932.4	927.5	938.8	1022.2	1233.5	1350.6	1122.3
45°	1157.2	1139.1	1092.1	1033.9	1001.3	992.6	1024.0	1101.4	1329.7	1483.4	1231.9
47.5°	1233.5	1212.5	1161.9	1108.7	1072.7	1045.1	1114.6	1194.9	1438.8	1622.3	1335.6
50°	1298.4	1276.8	1230.6	1173.8	1149.4	1113.3	1203.7	1299.2	1546.8	1763.3	1430.2
52.5°	1342.7	1323.7	1269.4	1230.8	1214.2	1196.1	1308.0	1409.8	1654.6	1892.6	1523.8
55°	1332.7	1315.6	1267.8	1265.2	1264.0	1283.1	1432.7	1535.2	1764.2	2014.8	1616.8
57.5°	1300.6	1281.2	1221.6	1262.7	1302.4	1360.7	1567.7	1683.5	1884.5	2130.1	1706.6
60°	1206.1	1199.5	1163.1	1258.0	1318.6	1436.7	1722.1	1832.4	2014.5	2231.5	1786.3
62.5°	1006.2	1012.1	1011.9	1267.8	1347.7	1523.4	1862.2	1983.2	2141.7	2329.1	1857.1
65°	753.5	773.7	799.5	1179.0	1386.7	1677.9	2029.8	2146.7	2271.0	2442.6	1929.2
67.5°	506.2	522.4	540.0	967.3	1270.5	1840.3	2308.2	2370.8	2425.8	2568.4	2010.1
70°	289.8	295.0	319.4	604.0	979.4	1795.4	2761.6	2784.2	2656.6	2723.4	2069.1
72.5°	162.4	160.6	192.9	286.7	547.3	1537.5	2920.3	3141.3	2863.1	2721.0	1937.5
75°	108.5	108.8	132.8	180.8	213.3	1076.2	2516.6	2912.7	2739.3	2412.7	1583.0
77.5°	74.0	76.5	97.6	139.7	98.7	525.1	1664.9	2040.4	2217.8	1863.1	1092.9
80°	32.1	32.3	64.4	100.2	66.6	167.1	863.2	1093.1	1390.9	1046.2	433.0
82.5°	16.6	18.9	41.0	64.8	41.9	58.5	407.8	477.5	583.6	307.1	88.9
85°	5.8	7.0	25.3	31.9	21.1	20.9	142.0	144.7	123.6	46.2	24.5
87.5°	0.0	1.1	9.8	7.9	2.7	2.5	16.8	14.1	11.2	6.5	8.1
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°	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1
2.5°	508.5	502.5	492.6	480.5	466.4	458.7	447.7	441.0	434.9	435.2	440.1
5°	509.2	499.1	474.0	447.3	417.7	396.0	371.7	354.6	341.6	338.5	343.2
7.5°	511.2	494.2	453.2	408.7	359.4	322.8	289.4	268.2	256.4	253.3	256.4
10°	513.9	488.8	429.6	361.6	300.3	256.4	228.6	215.1	209.7	205.7	208.2
12.5°	516.2	483.2	400.0	312.9	247.8	213.5	192.5	181.2	176.5	173.6	175.2
15°	520.0	475.8	367.9	267.6	212.4	184.4	164.4	156.1	154.8	155.2	155.9
17.5°	523.8	468.6	332.0	232.2	186.4	158.8	146.7	145.3	147.2	148.9	149.6
20°	528.1	458.3	295.6	205.5	162.4	141.1	138.0	138.9	139.7	142.9	143.8
22.5°	534.3	445.3	263.8	182.9	142.5	132.5	131.0	131.7	132.3	135.5	136.4
25°	543.2	431.3	238.0	162.0	129.9	125.7	124.0	124.0	124.9	127.8	128.9
27.5°	552.7	411.6	217.1	142.7	122.5	118.0	115.3	115.3	116.4	119.8	121.2
30°	563.2	393.7	200.8	128.3	116.2	110.4	106.8	105.9	107.2	111.5	112.6
32.5°	582.3	382.0	189.1	121.6	110.6	103.4	98.5	96.0	97.4	102.3	103.6
35°	611.2	379.4	181.0	118.2	105.2	97.2	90.2	86.4	87.4	92.7	94.2
37.5°	645.1	384.9	173.1	113.8	100.0	91.1	81.9	77.0	78.7	83.4	84.8
40°	693.8	408.3	167.1	110.4	94.9	83.8	73.6	68.7	71.5	75.6	76.3
42.5°	752.6	449.8	165.5	107.2	88.6	76.3	65.9	62.3	64.6	68.4	69.1
45°	825.4	502.7	172.7	103.2	81.7	68.9	59.9	57.9	58.5	62.3	64.2
47.5°	903.7	557.0	192.5	99.6	75.6	62.8	55.1	53.4	52.9	56.5	58.7
50°	983.0	605.2	215.8	96.9	71.3	57.9	51.6	49.3	48.3	50.4	51.4
52.5°	1061.2	643.6	231.0	92.5	67.0	52.9	48.5	45.1	43.0	44.2	45.1
55°	1140.6	677.2	232.0	85.7	63.0	49.8	45.3	41.5	39.1	39.1	39.5
57.5°	1214.9	706.8	218.7	76.7	57.4	46.8	41.0	37.9	35.3	34.3	34.5
60°	1280.6	728.8	196.7	66.6	52.5	43.0	36.8	34.3	31.0	29.1	28.7
62.5°	1339.2	739.5	166.7	56.3	46.4	38.5	32.8	30.0	25.5	23.4	23.1
65°	1388.8	728.6	135.3	46.6	41.3	33.6	28.1	25.3	20.4	17.7	17.7
67.5°	1437.9	678.3	102.3	39.3	35.9	28.3	23.1	20.6	17.0	14.8	14.8
70°	1444.1	572.7	71.5	33.0	29.8	21.7	18.7	17.0	13.9	11.9	11.7
72.5°	1285.6	412.0	43.6	27.0	23.4	15.5	14.8	13.4	10.4	9.0	8.7
75°	1027.6	252.6	25.5	20.2	15.5	11.0	11.0	9.6	7.0	5.8	5.8
77.5°	710.2	132.1	15.1	13.0	9.2	6.5	7.2	5.8	3.4	2.7	2.7
80°	284.4	50.2	8.1	6.0	4.3	2.9	2.5	1.3	0.7	0.4	0.7
82.5°	56.8	13.2	2.7	1.5	1.5	0.7	0.0	0.0	0.0	0.0	0.0
85°	14.6	2.9	0.7	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.5	0.0	0.0	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	0.0

(END OF REPORT)