

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: P960776

Luminaire Tested: **NAV-SB1D-722-U-SL3-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P960776  
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-SB1D-722-U-SL3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2200K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

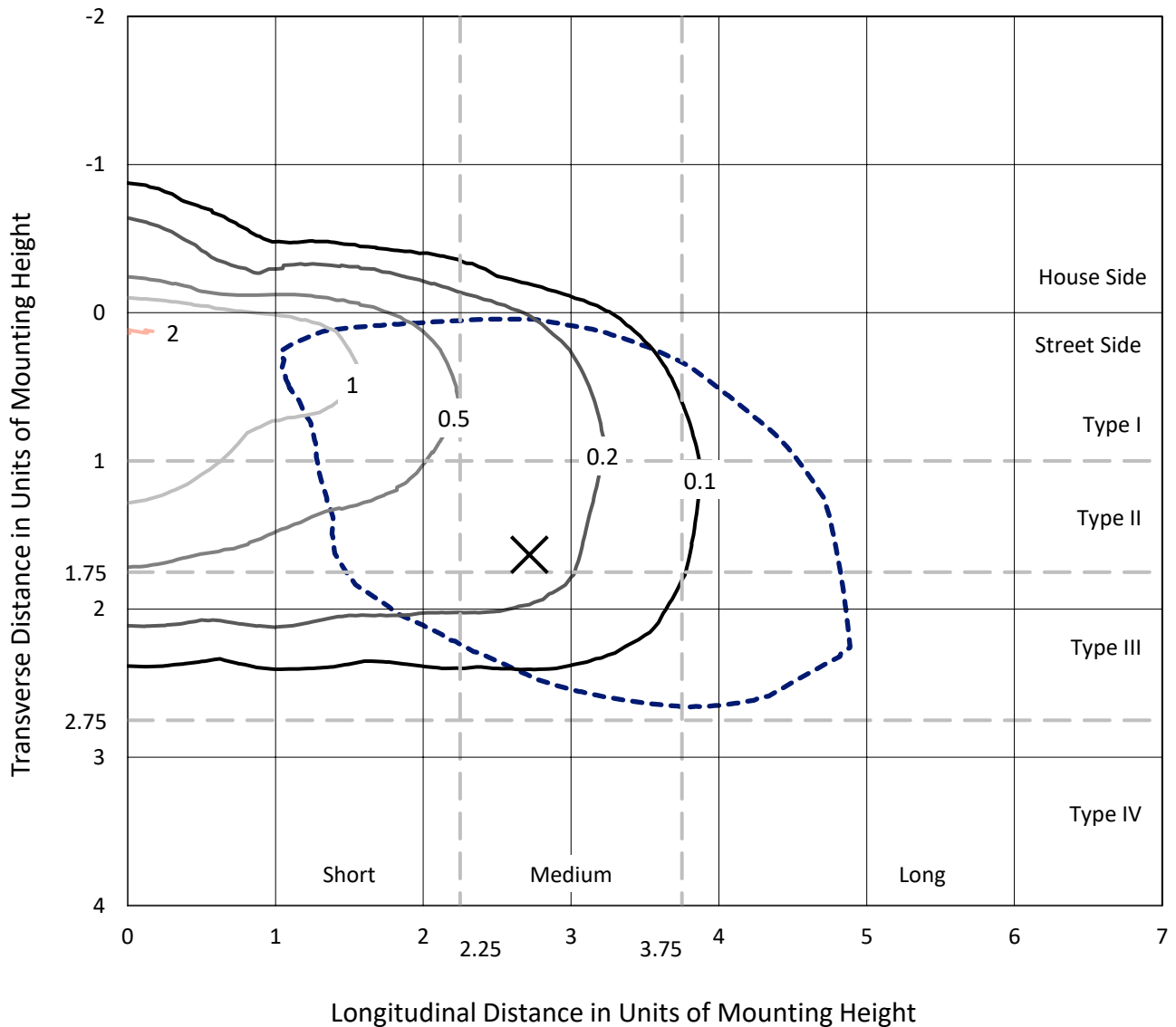
Lumens per Lamp: N/A  
Luminaire Lumens: 6941.3 lumens  
Efficiency: N/A  
Efficacy: 87.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 79.6  
Input Voltage (V): NR  
Input Current (Ain): 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

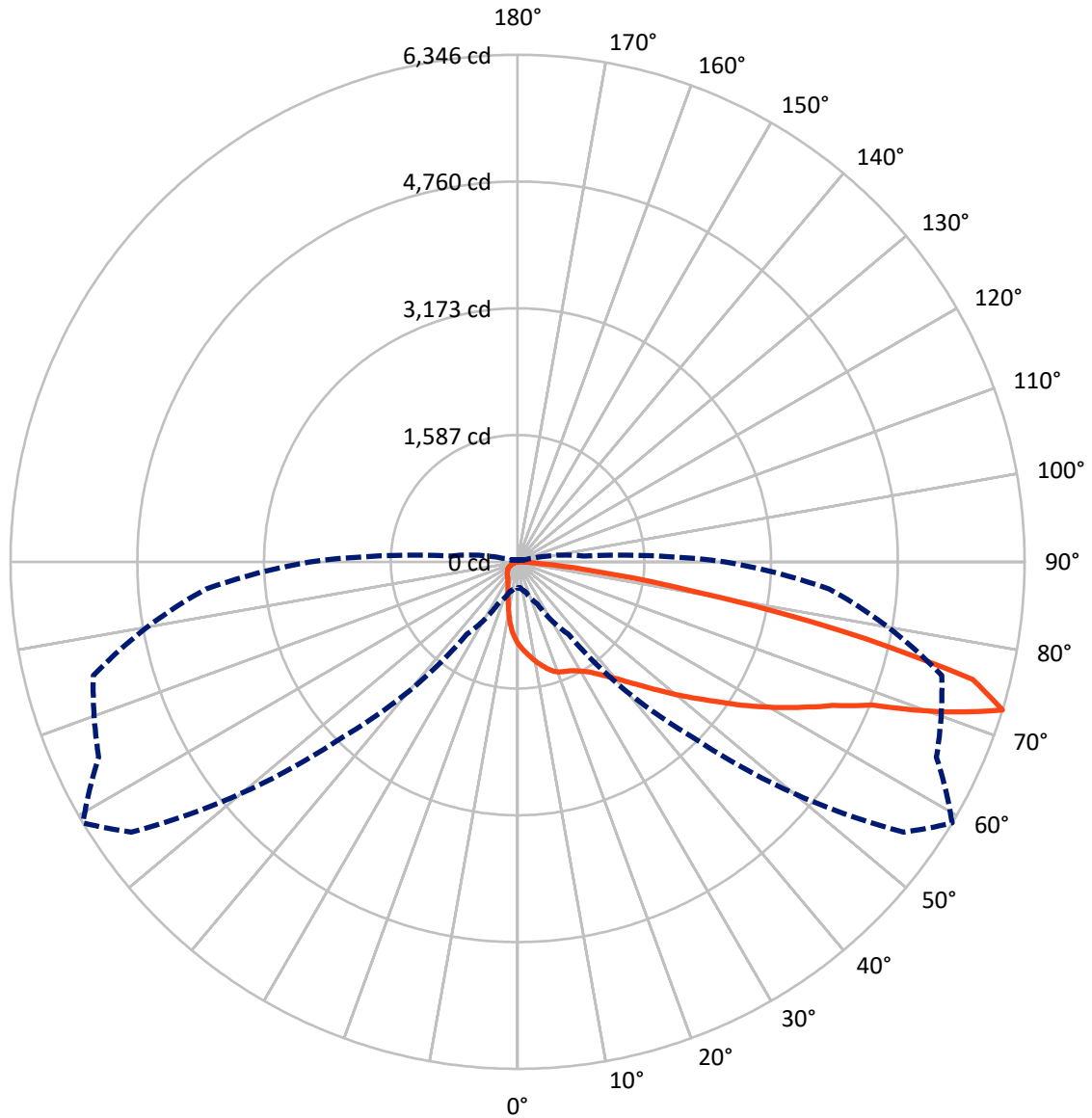
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 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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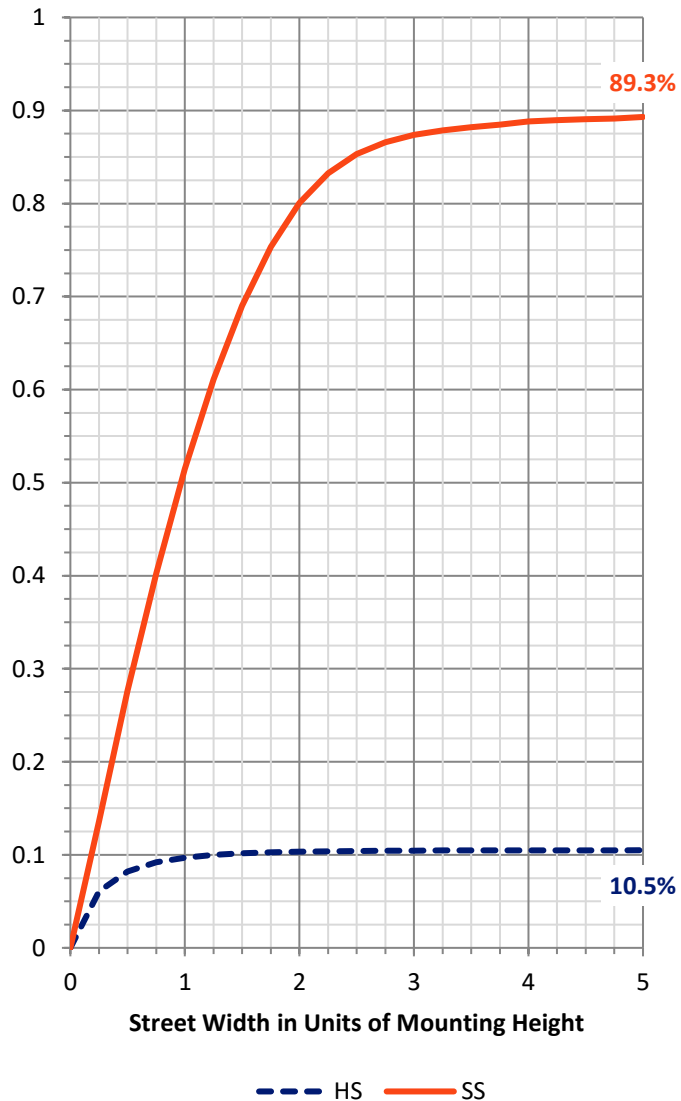
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	733.1	0.0	733.1
	% Fixture	10.6	0.0	10.6
<b>Street Side</b>	Lumens	6208.2	0.0	6208.2
	% Fixture	89.4	0.0	89.4
<b>Total</b>	Lumens	6941.3	0.0	6941.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.9	1.3
10°-20°	246.7	3.6
20°-30°	390.9	5.6
30°-40°	627.4	9.0
40°-50°	1002.0	14.4
50°-60°	1450.8	20.9
60°-70°	1721.8	24.8
70°-80°	1278.2	18.4
80°-90°	130.7	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°	6941.3	100.0
0°-180°	6941.3	100.0

**Coefficient of Utilization**

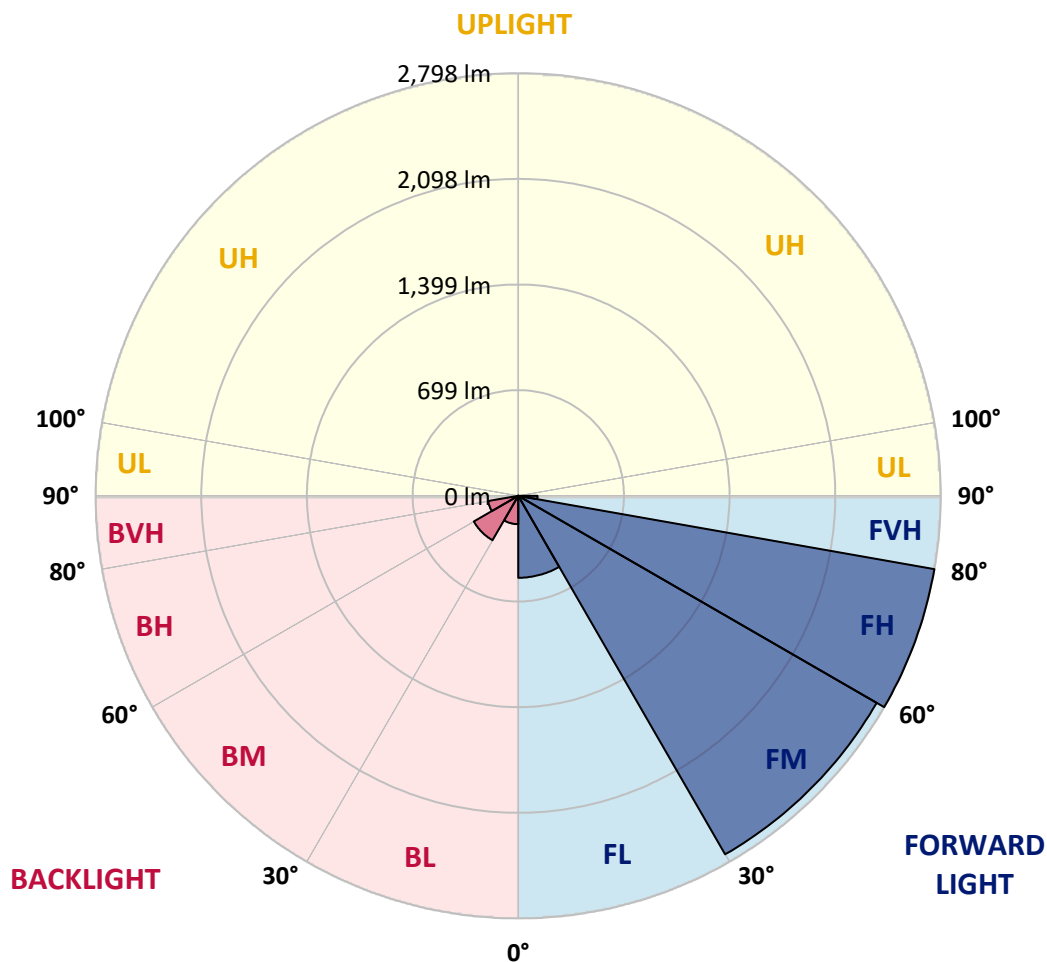


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	542.7	7.8			
FM (30°-60°)	2740.3	39.5			
FH (60°-80°)	2797.7	40.3			G2/5000
FVH (80°-90°)	127.4	1.8			G2/225
BL (0°-30°)	187.8	2.7	B1/500		
BM (30°-60°)	339.9	4.9	B1/1000		
BH (60°-80°)	202.2	2.9	B1/500		G1/500
BVH (80°-90°)	3.2	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-G2**  
 Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1026.4	1026.4	1026.4	1026.4	1026.4	1026.4	1026.4	1026.4	1026.4	1026.4	1026.4
2.5°	1138.9	1132.5	1133.4	1122.5	1114.8	1106.7	1090.8	1088.6	1077.2	1057.3	1036.9
5°	1238.1	1234.0	1230.4	1218.1	1202.3	1182.3	1155.6	1146.1	1125.2	1090.8	1050.9
7.5°	1310.6	1305.6	1307.4	1295.2	1282.5	1260.3	1223.5	1205.9	1178.2	1125.7	1065.4
10°	1324.6	1321.9	1333.7	1338.2	1338.2	1324.2	1288.4	1270.7	1230.4	1163.3	1080.4
12.5°	1245.8	1246.2	1275.7	1311.1	1357.3	1370.4	1346.4	1327.4	1287.5	1203.1	1099.4
15°	1153.8	1154.3	1182.8	1228.2	1303.8	1379.4	1398.5	1386.3	1345.0	1246.2	1121.7
17.5°	1098.5	1096.2	1115.3	1152.4	1231.7	1338.2	1430.3	1438.4	1404.9	1293.9	1146.1
20°	1090.8	1086.7	1096.6	1115.3	1171.9	1286.6	1433.9	1472.4	1466.5	1347.8	1174.2
22.5°	1138.0	1131.6	1126.2	1127.1	1151.1	1243.5	1424.7	1491.4	1529.9	1412.6	1212.7
25°	1231.3	1221.3	1203.7	1181.0	1176.0	1234.5	1418.5	1512.3	1588.9	1495.5	1263.4
27.5°	1345.5	1331.5	1297.4	1263.4	1234.5	1259.8	1431.6	1545.4	1655.5	1592.0	1322.4
30°	1471.0	1453.8	1419.8	1355.5	1309.2	1316.5	1462.9	1588.9	1740.7	1701.2	1396.3
32.5°	1655.5	1615.6	1556.3	1457.9	1396.7	1377.7	1510.0	1644.1	1846.2	1846.7	1503.2
35°	1813.6	1791.4	1731.6	1609.2	1483.7	1458.8	1572.0	1722.1	1992.6	2039.3	1652.7
37.5°	1917.4	1887.0	1834.4	1742.5	1618.8	1542.2	1655.0	1817.7	2147.6	2258.7	1837.2
40°	2033.4	2003.5	1933.8	1847.2	1775.6	1685.4	1759.7	1927.8	2317.5	2483.9	2048.0
42.5°	2173.4	2134.5	2052.0	1958.7	1883.8	1873.9	1896.6	2065.2	2492.1	2728.5	2267.3
45°	2337.9	2301.2	2206.5	2088.7	2023.0	2005.3	2068.8	2225.1	2686.4	2996.9	2488.9
47.5°	2492.1	2449.4	2347.5	2240.0	2167.2	2111.4	2251.8	2414.1	2906.7	3277.4	2698.2
50°	2623.0	2579.5	2486.1	2371.5	2322.1	2249.2	2431.8	2624.8	3125.1	3562.5	2889.5
52.5°	2712.8	2674.2	2564.5	2486.6	2453.0	2416.3	2642.4	2848.3	3342.6	3823.5	3078.5
55°	2692.4	2657.9	2561.4	2555.9	2553.7	2592.2	2894.5	3101.5	3564.2	4070.5	3266.6
57.5°	2627.6	2588.5	2468.0	2550.9	2631.2	2748.9	3167.2	3401.2	3807.2	4303.4	3447.8
60°	2436.7	2423.2	2349.7	2541.4	2663.8	2902.6	3479.1	3702.0	4070.0	4508.3	3608.7
62.5°	2033.0	2044.8	2044.3	2561.4	2722.7	3077.6	3762.3	4006.5	4326.9	4705.4	3751.9
65°	1522.2	1563.0	1615.1	2381.9	2801.5	3389.8	4100.8	4337.0	4588.0	4934.7	3897.4
67.5°	1022.8	1055.4	1090.8	1954.2	2566.8	3717.9	4663.2	4789.6	4900.7	5189.0	4060.9
70°	585.5	595.9	645.3	1220.4	1978.6	3627.3	5579.1	5624.9	5367.0	5502.1	4180.2
72.5°	328.1	324.5	389.7	579.1	1105.8	3106.1	5900.0	6346.3	5784.4	5497.1	3914.2
75°	219.4	219.8	268.2	365.3	431.0	2174.3	5084.2	5884.5	5534.3	4874.4	3198.1
77.5°	149.5	154.6	197.1	282.3	199.4	1060.9	3363.5	4122.1	4480.6	3764.1	2207.8
80°	64.8	65.3	130.1	202.5	134.6	337.6	1743.8	2208.4	2810.1	2113.7	874.6
82.5°	33.5	38.0	82.9	131.0	84.8	118.3	823.9	964.8	1179.2	620.4	179.5
85°	11.8	14.0	51.2	64.4	42.6	42.1	286.9	292.3	249.7	93.4	49.4
87.5°	0.0	2.3	20.0	15.9	5.4	5.0	34.0	28.6	22.7	13.1	16.3
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°	1026.4	1026.4	1026.4	1026.4	1026.4	1026.4	1026.4	1026.4	1026.4	1026.4	1026.4
2.5°	1027.4	1015.2	995.2	970.7	942.2	926.7	904.6	890.9	878.7	879.1	889.2
5°	1028.7	1008.3	957.6	903.6	843.8	799.9	750.9	716.5	690.2	683.9	693.4
7.5°	1032.8	998.4	915.4	825.7	726.0	652.1	584.6	542.0	518.0	511.7	518.0
10°	1038.2	987.5	867.9	730.5	606.8	518.0	461.8	434.6	423.7	415.5	420.6
12.5°	1042.7	976.1	808.0	632.2	500.8	431.4	388.8	366.1	356.7	350.8	353.9
15°	1050.5	961.2	743.2	540.7	429.2	372.5	332.2	315.4	312.7	313.6	315.0
17.5°	1058.2	946.7	670.7	469.0	376.6	320.8	296.4	293.7	297.2	300.9	302.3
20°	1066.8	925.9	597.3	415.1	328.1	285.1	278.7	280.5	282.3	288.6	290.5
22.5°	1079.4	899.5	532.9	369.3	287.8	267.8	264.7	266.0	267.4	273.7	275.5
25°	1097.6	871.5	480.8	327.2	262.4	253.8	250.6	250.6	252.5	258.3	260.6
27.5°	1116.6	831.6	438.7	288.2	247.4	238.4	233.0	233.0	235.2	242.0	244.7
30°	1138.0	795.3	405.6	259.2	234.7	222.9	215.8	213.9	216.6	225.2	227.4
32.5°	1176.5	771.7	382.0	245.6	223.4	208.9	199.0	193.9	196.7	206.6	209.4
35°	1234.9	766.3	365.7	238.8	212.6	196.2	182.1	174.5	176.7	187.2	190.3
37.5°	1303.4	777.7	349.8	229.8	202.1	184.0	165.4	155.4	159.1	168.6	171.3
40°	1401.7	824.8	337.6	222.9	191.7	169.5	148.6	138.7	144.5	152.7	154.1
42.5°	1520.4	908.7	334.5	216.6	179.0	154.1	133.2	126.0	130.5	138.2	139.6
45°	1667.7	1015.6	348.9	208.5	164.9	139.1	121.0	117.0	118.3	126.0	129.6
47.5°	1825.8	1125.2	388.8	201.2	152.7	126.9	111.5	107.8	106.9	114.2	118.7
50°	1985.8	1222.7	435.9	195.8	144.1	117.0	104.2	99.7	97.5	102.0	103.7
52.5°	2144.0	1300.2	466.8	186.8	135.5	106.9	97.9	91.1	87.0	89.3	91.1
55°	2304.4	1368.2	468.6	173.1	127.3	100.7	91.5	83.8	78.8	78.8	79.7
57.5°	2454.5	1427.9	441.9	155.0	116.0	94.7	82.9	76.6	71.1	69.3	69.8
60°	2587.2	1472.4	397.4	134.6	106.1	87.0	74.3	69.3	62.5	58.9	58.0
62.5°	2705.5	1494.1	336.7	113.8	93.8	77.9	66.2	60.7	51.7	47.2	46.6
65°	2805.6	1471.9	273.3	94.3	83.4	68.0	56.7	51.2	41.2	35.8	35.8
67.5°	2904.8	1370.4	206.6	79.3	72.5	57.1	46.6	41.7	34.4	29.9	29.9
70°	2917.6	1157.0	144.5	66.6	60.3	44.0	37.6	34.4	28.1	24.0	23.6
72.5°	2597.1	832.5	87.9	54.4	47.2	31.3	29.9	27.2	20.8	18.1	17.6
75°	2076.0	510.2	51.7	40.8	31.3	22.2	22.2	19.5	14.0	11.8	11.8
77.5°	1434.8	266.9	30.3	26.2	18.6	13.1	14.5	11.8	6.8	5.4	5.4
80°	574.6	101.5	16.3	12.2	8.6	5.8	5.0	2.8	1.3	0.9	1.3
82.5°	114.7	26.8	5.4	3.2	3.2	1.3	0.0	0.0	0.0	0.0	0.0
85°	29.4	5.8	1.3	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.0	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)