

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: P959751

Luminaire Tested: **NAV-SB1B-727-U-SL2-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P959751  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1B-727-U-SL2-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2700K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II SPILL LIGHT  
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4340.9 lumens  
Efficiency: N/A  
Efficacy: 109.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G1

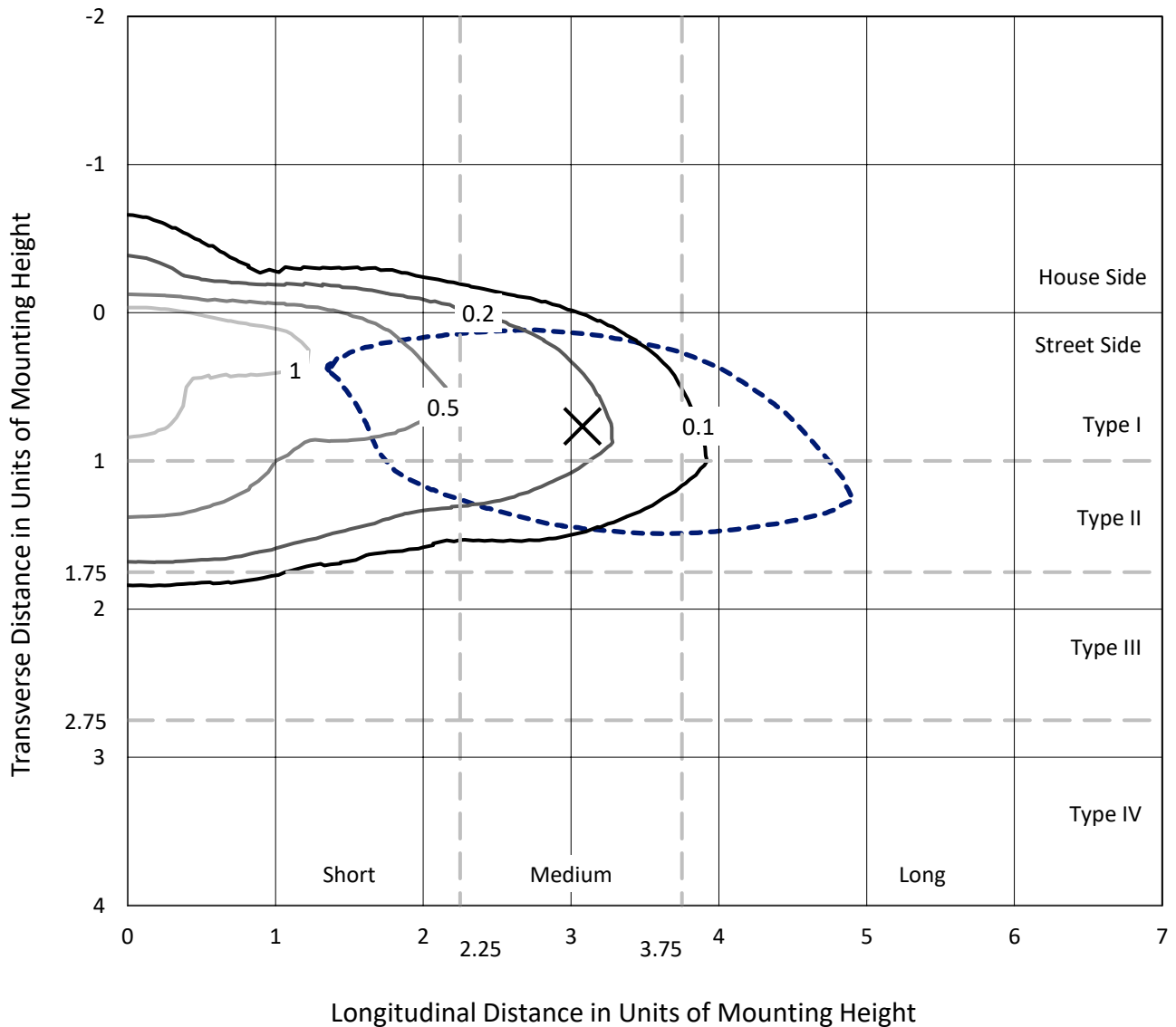
Input Watts (W): 39.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

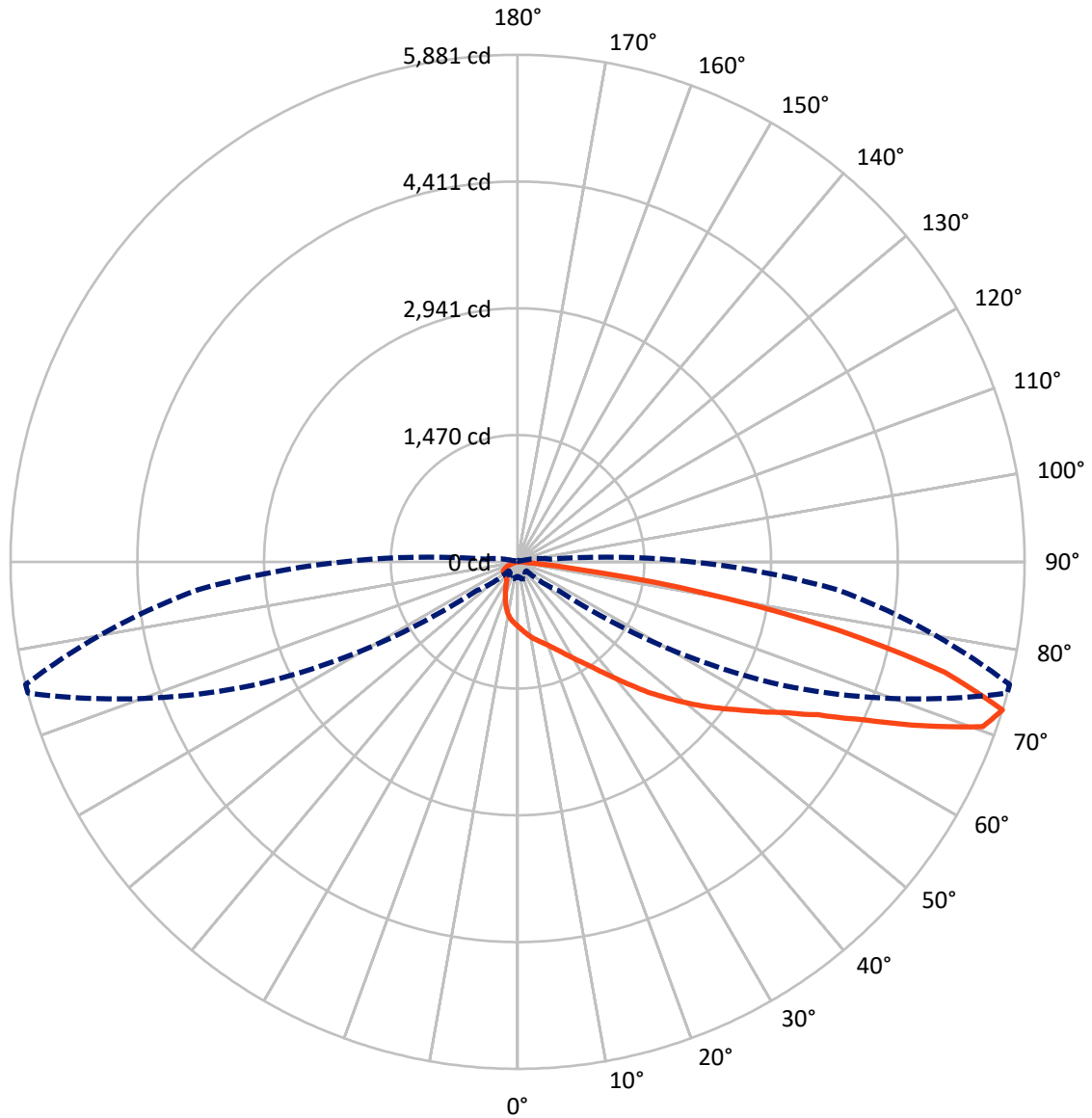
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 72.5-Deg Vertical

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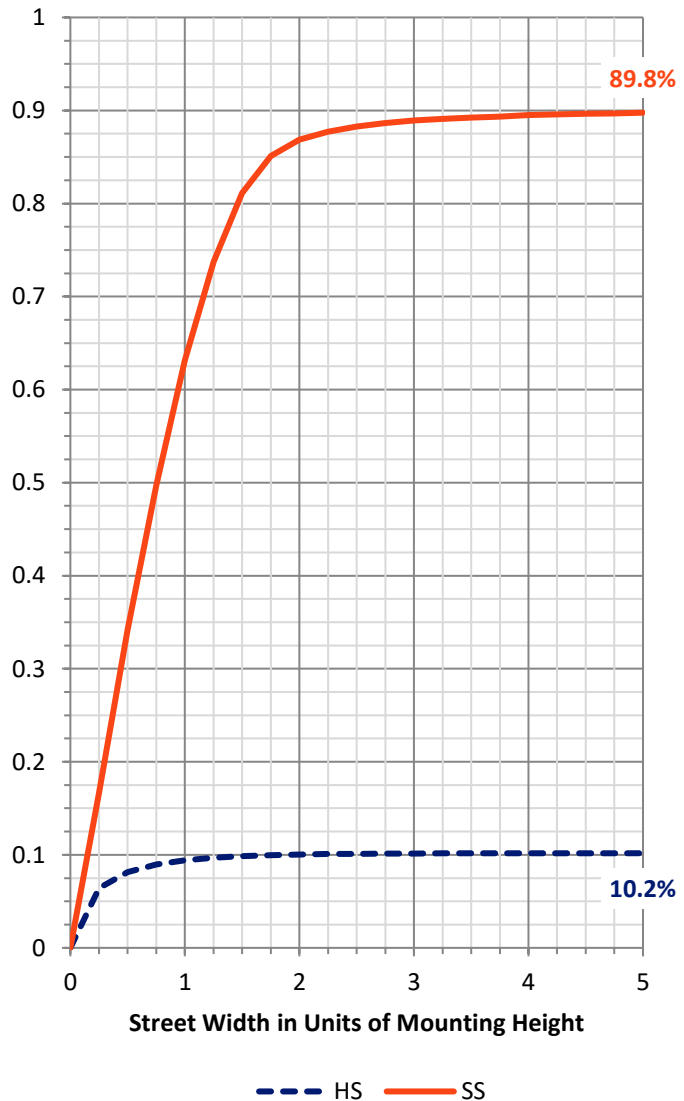
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	444.3	0.0	444.3
	% Fixture	10.2	0.0	10.2
<b>Street Side</b>	Lumens	3896.6	0.0	3896.6
	% Fixture	89.8	0.0	89.8
<b>Total</b>	Lumens	4340.9	0.0	4340.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.2	1.6
10°-20°	182.9	4.2
20°-30°	289.5	6.7
30°-40°	447.9	10.3
40°-50°	680.4	15.7
50°-60°	937.9	21.6
60°-70°	990.9	22.8
70°-80°	679.8	15.7
80°-90°	63.3	1.5
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°	4340.9	100.0
0°-180°	4340.9	100.0

**Coefficient of Utilization**

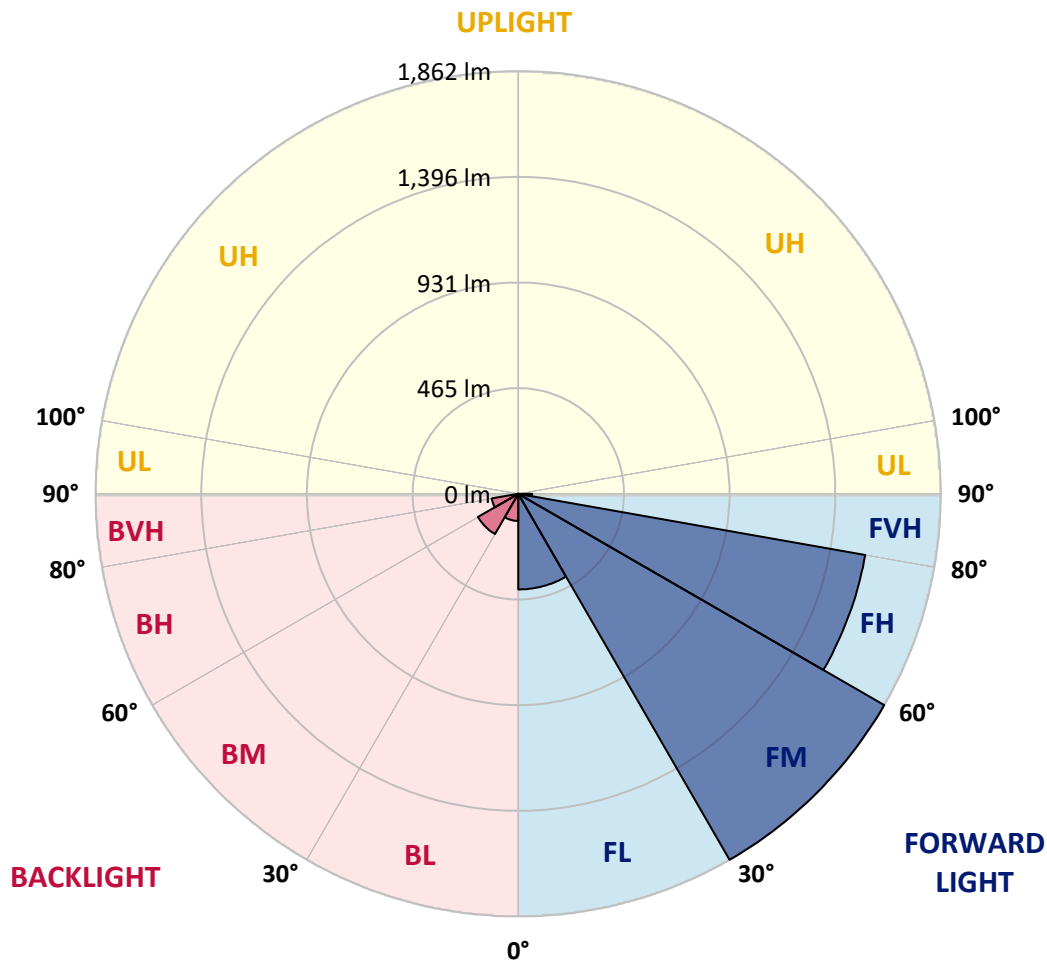


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	421.3	9.7			
FM (30°-60°)	1861.7	42.9			
FH (60°-80°)	1552.1	35.8			G1/1800
FVH (80°-90°)	61.6	1.4			G1/100
BL (0°-30°)	119.4	2.8	B1/500		
BM (30°-60°)	204.5	4.7	B0/220		
BH (60°-80°)	118.6	2.7	B1/500		G1/500
BVH (80°-90°)	1.7	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 Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	750.1	750.1	750.1	750.1	750.1	750.1	750.1	750.1	750.1	750.1	750.1
2.5°	872.1	860.5	862.7	851.3	845.8	832.9	819.4	801.7	782.0	782.0	762.8
5°	963.9	956.5	956.5	943.0	932.6	912.4	888.2	856.9	819.7	816.0	779.7
7.5°	1020.2	1015.7	1018.4	1010.6	1002.1	981.0	952.3	911.5	858.8	854.3	799.7
10°	1031.1	1030.8	1038.7	1041.0	1046.6	1036.0	1010.3	963.3	897.4	890.9	816.9
12.5°	988.6	983.3	1002.8	1025.5	1057.6	1071.9	1058.7	1010.6	932.6	923.6	832.9
15°	918.8	919.9	938.5	973.7	1027.3	1078.5	1095.6	1056.8	968.4	957.7	848.1
17.5°	878.8	874.6	890.6	922.2	981.3	1053.7	1112.8	1099.8	1006.3	994.2	863.7
20°	874.0	873.7	877.4	891.7	936.8	1018.2	1110.9	1141.8	1051.1	1037.1	885.9
22.5°	907.2	906.7	903.6	900.8	913.2	983.6	1102.4	1181.8	1104.6	1089.5	917.4
25°	958.3	957.4	952.6	935.4	923.3	965.0	1094.5	1218.9	1168.0	1151.1	955.7
27.5°	1020.5	1019.9	1011.2	985.2	954.0	966.7	1090.6	1257.3	1241.3	1224.6	999.9
30°	1096.8	1095.6	1077.6	1041.0	1000.2	993.4	1095.9	1300.3	1317.5	1304.8	1050.8
32.5°	1192.5	1189.4	1165.7	1110.6	1053.4	1029.2	1106.1	1344.6	1407.9	1396.0	1119.0
35°	1266.6	1261.8	1247.9	1199.2	1115.1	1073.1	1129.8	1397.0	1516.6	1506.2	1206.0
37.5°	1330.2	1325.4	1314.2	1274.2	1203.5	1129.1	1167.7	1466.8	1645.0	1639.9	1312.2
40°	1398.9	1391.0	1385.7	1342.9	1279.0	1210.0	1222.1	1548.5	1792.8	1793.4	1439.7
42.5°	1451.8	1448.7	1449.4	1416.3	1351.9	1305.7	1294.2	1640.5	1969.9	1975.3	1593.2
45°	1497.2	1494.7	1505.1	1481.9	1425.4	1368.5	1378.6	1744.7	2163.7	2174.6	1764.9
47.5°	1532.1	1534.9	1549.8	1534.9	1501.7	1412.8	1453.6	1857.1	2367.2	2368.7	1942.4
50°	1567.0	1568.1	1593.0	1585.6	1572.0	1468.7	1522.5	1982.7	2581.9	2584.3	2108.2
52.5°	1578.0	1576.3	1615.7	1633.7	1634.4	1538.0	1611.8	2119.5	2792.2	2800.4	2278.9
55°	1521.7	1526.4	1590.1	1663.4	1692.3	1633.7	1732.4	2292.6	3016.4	3019.8	2447.8
57.5°	1246.3	1272.7	1413.6	1583.3	1729.8	1770.9	1905.5	2495.2	3275.1	3272.0	2619.0
60°	756.3	787.9	956.2	1328.0	1607.6	1908.5	2160.6	2808.8	3557.8	3549.1	2792.2
62.5°	422.9	432.6	486.3	794.9	1222.6	1821.0	2409.8	3211.7	3937.4	3907.8	2962.6
65°	311.7	314.8	327.5	389.4	600.9	1400.6	2355.1	3693.6	4470.7	4418.1	3166.7
67.5°	270.9	274.0	286.4	294.8	268.3	735.7	1940.4	3960.8	5148.0	5079.0	3443.0
70°	228.1	229.8	249.8	255.4	192.1	279.9	1246.6	3878.3	5774.7	5725.4	3739.4
72.5°	170.0	176.8	205.8	219.4	154.1	148.7	586.8	3390.8	5880.9	5881.4	3719.4
75°	115.4	121.7	154.9	180.5	118.8	104.1	236.8	2532.1	5120.9	5120.9	3260.4
77.5°	78.8	83.9	107.8	141.7	90.1	71.5	122.8	1607.0	3673.8	3803.1	2323.9
80°	35.0	38.0	69.6	102.8	68.5	46.2	69.6	880.0	2221.7	2194.4	910.9
82.5°	17.2	19.7	44.5	64.2	44.2	28.4	36.6	418.4	720.1	684.3	142.2
85°	3.4	4.5	24.0	27.3	20.6	12.7	13.8	128.6	86.7	99.1	30.1
87.5°	0.0	0.0	7.3	5.0	2.3	2.8	2.8	11.6	6.8	7.9	7.9
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	750.1	750.1	750.1	750.1	750.1	750.1	750.1	750.1	750.1	750.1	750.1
2.5°	752.7	742.3	719.4	696.9	673.8	652.7	638.1	623.4	614.4	610.5	611.0
5°	758.6	737.5	689.6	639.5	589.9	541.5	505.1	471.1	460.4	442.7	443.8
7.5°	767.9	733.5	658.0	573.6	493.0	422.1	370.8	330.0	313.6	298.0	297.7
10°	774.1	726.2	616.4	503.5	394.5	314.8	265.8	236.3	225.5	216.0	215.7
12.5°	776.6	712.7	568.6	424.9	306.9	240.0	210.6	196.8	193.2	189.8	189.8
15°	778.9	699.5	515.1	349.1	242.4	200.8	189.2	184.7	182.1	179.9	179.9
17.5°	780.8	682.5	453.9	283.8	204.7	185.0	179.4	174.6	172.6	170.0	170.0
20°	787.6	666.2	399.2	234.3	184.2	173.7	167.6	162.5	160.8	159.1	159.4
22.5°	800.2	653.0	346.3	200.8	171.8	162.2	154.3	148.7	147.6	146.5	145.5
25°	815.5	636.6	296.5	179.1	159.7	148.9	140.2	135.4	134.3	134.6	134.1
27.5°	834.9	618.7	253.7	165.3	148.9	136.5	126.7	123.1	123.6	124.7	124.1
30°	856.3	602.0	220.2	155.7	139.4	125.6	115.7	113.2	115.2	116.8	116.3
32.5°	888.2	587.4	196.8	148.1	130.9	116.5	108.6	105.6	107.8	110.1	109.6
35°	931.5	580.0	183.6	141.7	123.6	109.6	101.7	99.4	101.7	102.2	101.9
37.5°	984.7	579.5	177.9	136.3	116.8	103.6	94.9	94.1	95.7	96.0	95.4
40°	1053.4	583.1	173.7	132.3	109.8	96.9	88.7	87.8	88.5	90.4	90.1
42.5°	1140.4	598.4	167.8	127.3	102.2	90.1	83.6	81.7	81.4	83.6	83.3
45°	1249.7	631.9	159.9	119.1	95.4	84.5	78.0	75.7	74.9	75.4	76.3
47.5°	1368.8	673.0	152.0	111.5	90.7	79.9	73.5	70.7	69.3	69.3	69.3
50°	1484.2	719.4	146.7	103.6	87.3	75.7	68.7	65.9	63.7	63.0	62.8
52.5°	1598.6	765.1	142.5	95.7	83.3	70.4	64.2	61.1	58.5	57.4	56.9
55°	1702.7	808.4	135.2	88.1	78.3	64.8	59.7	56.6	53.5	51.6	50.6
57.5°	1802.7	844.5	121.7	80.3	70.4	59.4	54.9	51.6	47.9	45.3	44.2
60°	1893.7	863.0	104.8	71.9	62.5	53.8	49.6	46.4	41.7	37.4	36.3
62.5°	1962.9	855.8	86.4	62.2	54.3	48.7	43.4	40.3	34.6	29.5	27.6
65°	2033.9	815.8	69.0	52.1	47.6	41.9	36.3	33.2	26.8	21.4	20.0
67.5°	2126.0	730.4	54.3	43.4	41.1	33.2	28.4	26.4	21.9	16.9	15.8
70°	2185.1	567.4	42.2	35.2	33.8	24.2	21.9	21.7	17.4	12.9	11.6
72.5°	2022.9	372.0	32.4	26.8	24.2	15.8	16.9	16.9	12.7	8.7	7.6
75°	1688.7	217.7	23.4	19.2	13.8	10.1	11.6	11.6	7.9	4.2	3.4
77.5°	1206.0	116.0	15.5	11.8	7.1	4.5	6.1	5.9	2.6	0.3	0.0
80°	461.2	40.0	7.3	4.8	1.9	0.8	0.5	0.3	0.3	0.0	0.0
82.5°	70.4	10.5	1.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.7	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.8	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)