

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: P959741

Luminaire Tested: **NAV-SB1B-722-U-T4FT-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P959741  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1B-722-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2200K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD  
THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

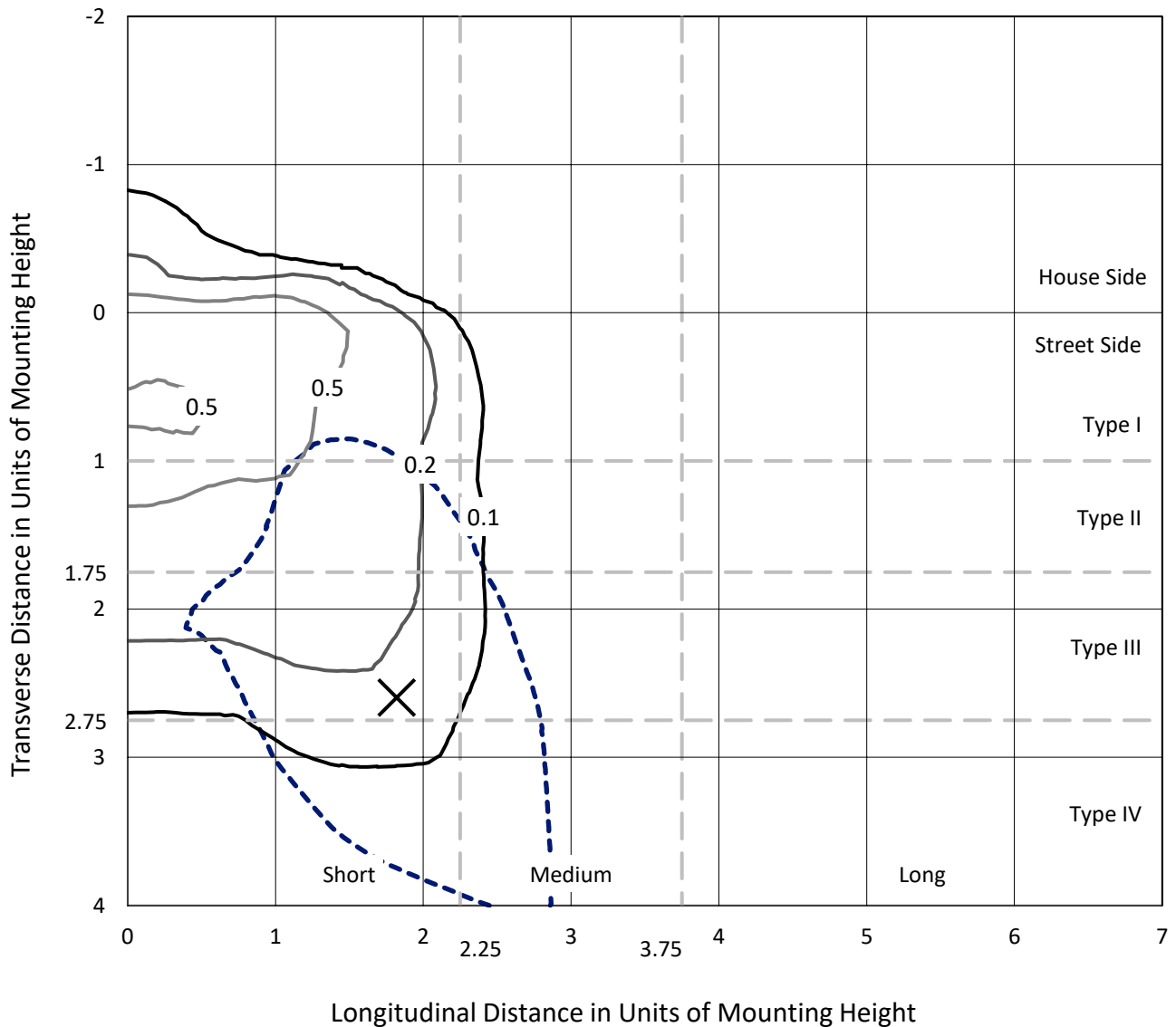
Lumens per Lamp: N/A  
Luminaire Lumens: 3611.1 lumens  
Efficiency: N/A  
Efficacy: 90.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 39.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

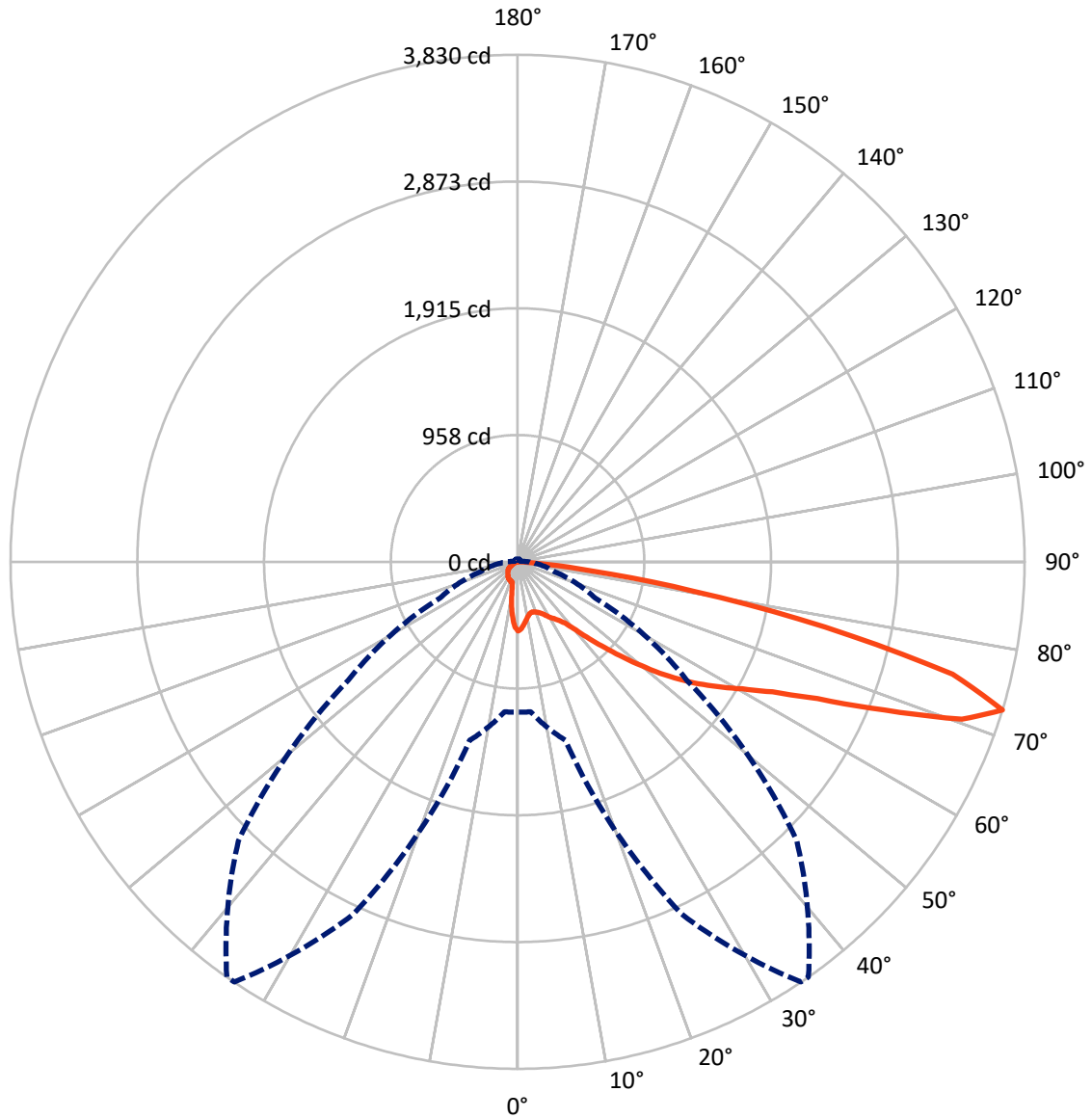
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral      - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	406.4	0.0	406.4
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	3204.7	0.0	3204.7
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	3611.1	0.0	3611.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.0	1.2
10°-20°	100.6	2.8
20°-30°	163.4	4.5
30°-40°	272.7	7.6
40°-50°	515.9	14.3
50°-60°	819.8	22.7
60°-70°	1014.2	28.1
70°-80°	630.4	17.5
80°-90°	50.9	1.4
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°	3611.1	100.0
0°-180°	3611.1	100.0

**Coefficient of Utilization**



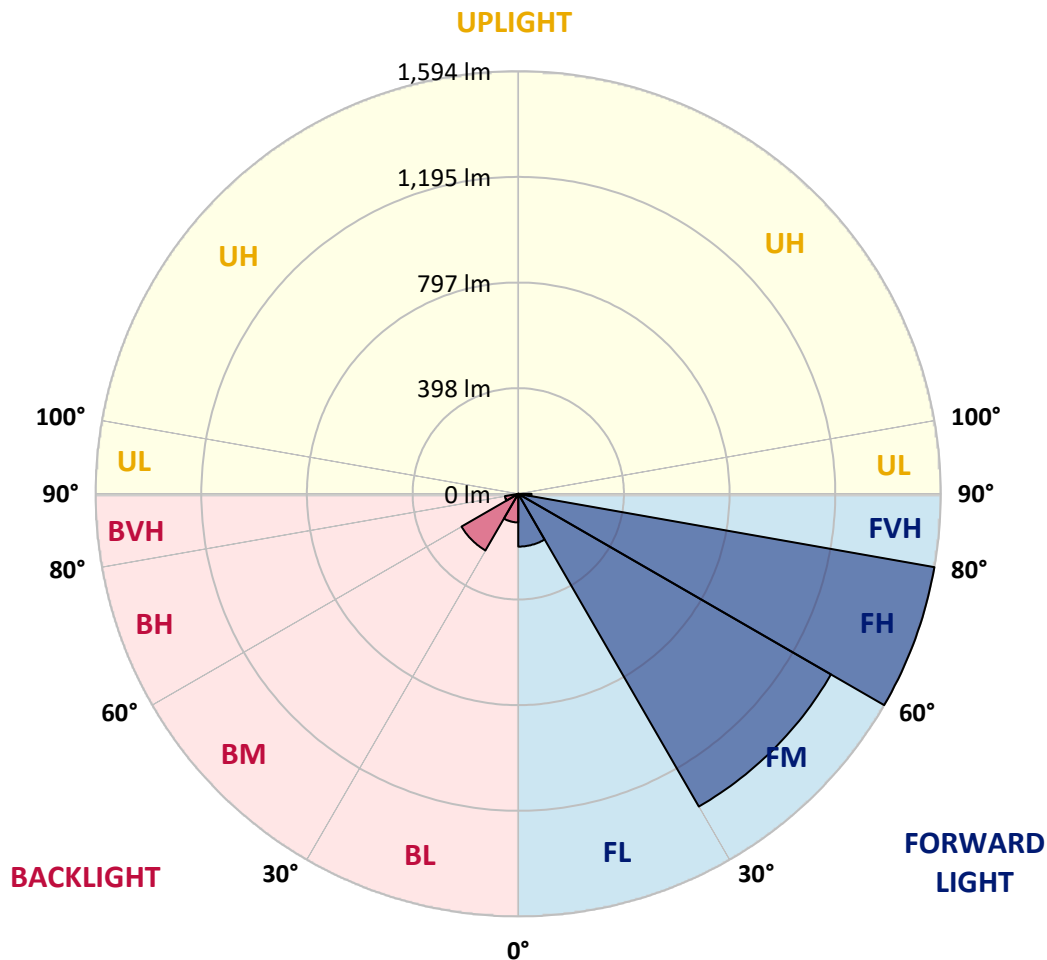
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	199.1	5.5			
FM (30°-60°)	1361.7	37.7			
FH (60°-80°)	1593.6	44.1			G1/1800
FVH (80°-90°)	50.3	1.4			G1/100
BL (0°-30°)	108.0	3.0	B0/110		
BM (30°-60°)	246.7	6.8	B1/1000		
BH (60°-80°)	51.0	1.4	B0/110		G0/110
BVH (80°-90°)	0.7	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 IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	523.4	523.4	523.4	523.4	523.4	523.4	523.4	523.4	523.4	523.4	523.4
2.5°	500.1	504.3	505.1	506.5	506.5	508.0	510.7	514.3	520.5	523.7	525.7
5°	460.9	464.1	468.0	471.2	477.3	478.2	488.4	498.5	512.5	523.1	530.5
7.5°	421.5	425.2	430.5	438.2	446.1	448.4	464.1	481.0	503.3	523.1	535.6
10°	393.7	394.0	398.7	406.4	419.1	422.0	441.1	465.1	492.9	519.9	540.3
12.5°	378.1	380.0	382.1	387.9	400.1	401.9	422.3	450.6	482.6	518.0	545.8
15°	378.1	379.5	380.8	383.7	393.5	395.0	413.1	441.4	477.3	518.9	554.8
17.5°	382.1	384.2	383.1	386.5	396.9	397.9	413.8	438.7	477.0	523.9	568.6
20°	391.5	393.2	391.0	393.2	403.5	405.6	422.0	443.7	481.5	532.6	585.8
22.5°	406.7	407.4	402.4	404.1	414.6	417.3	436.3	458.0	492.4	546.6	608.8
25°	425.7	427.3	419.6	421.5	431.5	434.7	456.6	479.4	509.6	566.0	638.2
27.5°	447.7	448.4	441.9	441.6	454.6	459.1	481.3	505.9	532.6	590.3	675.3
30°	472.8	475.2	468.8	467.8	484.2	487.9	509.8	538.4	566.5	626.8	727.9
32.5°	492.7	494.6	490.8	493.4	510.1	513.0	544.6	584.5	619.7	678.7	799.6
35°	521.2	522.3	513.8	518.6	537.6	545.1	591.9	649.0	686.6	743.7	893.3
37.5°	624.7	624.7	588.8	565.2	583.4	590.1	656.7	730.3	769.2	831.1	1011.3
40°	767.8	765.5	712.8	664.6	662.3	675.3	749.1	832.7	875.8	935.8	1144.1
42.5°	920.6	916.9	845.1	797.4	789.6	794.1	855.7	958.9	1002.9	1063.6	1287.0
45°	1056.0	1054.9	989.3	925.3	911.0	925.3	988.8	1106.5	1138.1	1202.0	1429.6
47.5°	1169.5	1169.5	1121.7	1079.8	1072.4	1080.9	1169.0	1270.3	1267.4	1349.4	1568.6
50°	1300.2	1299.2	1253.7	1235.6	1243.3	1255.2	1376.4	1442.8	1401.3	1494.1	1692.6
52.5°	1391.7	1398.1	1382.5	1379.5	1418.7	1439.4	1587.0	1611.6	1521.1	1631.5	1785.4
55°	1464.2	1471.7	1489.6	1510.0	1585.5	1612.4	1791.0	1771.7	1621.4	1750.6	1839.0
57.5°	1566.9	1556.4	1584.1	1624.3	1746.3	1778.9	1988.7	1922.8	1702.1	1847.2	1844.8
60°	1691.6	1693.1	1697.9	1748.6	1906.9	1948.7	2183.5	2065.7	1754.0	1906.4	1780.2
62.5°	1841.3	1843.7	1853.5	1931.5	2122.6	2162.0	2390.9	2182.6	1777.8	1889.7	1613.5
65°	1831.0	1841.0	1950.3	2217.3	2450.4	2489.3	2633.0	2264.6	1741.8	1737.3	1313.7
67.5°	1668.0	1684.4	1867.2	2558.6	2944.6	2988.1	2925.7	2280.8	1586.5	1351.1	857.0
70°	1454.2	1460.0	1679.9	2865.6	3517.0	3560.8	3187.5	2103.3	1203.9	753.6	384.0
72.5°	1135.6	1136.9	1394.9	2936.7	3827.7	3830.0	2981.9	1561.4	647.5	289.5	133.4
75°	811.3	803.3	934.3	2381.6	3367.4	3394.5	2235.5	732.4	247.4	136.8	66.4
77.5°	435.0	443.7	528.7	1412.4	2326.3	2372.4	1219.8	211.2	126.0	93.2	44.0
80°	134.4	141.9	216.7	646.7	1317.6	1345.4	452.2	93.9	87.8	66.4	28.8
82.5°	42.3	44.0	101.1	271.7	546.9	559.6	131.0	53.2	60.1	44.0	16.9
85°	12.2	12.4	45.0	101.4	135.2	137.9	36.8	20.6	34.4	27.3	8.7
87.5°	1.3	4.2	16.9	16.9	11.9	11.7	4.0	4.5	9.8	3.5	1.5
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°	523.4	523.4	523.4	523.4	523.4	523.4	523.4	523.4	523.4	523.4	523.4
2.5°	524.4	524.7	521.2	515.5	509.1	503.8	497.1	491.9	488.2	487.1	488.9
5°	528.1	526.2	516.5	498.8	477.5	459.3	439.0	422.8	412.3	407.7	409.3
7.5°	533.7	528.4	507.0	472.0	431.5	395.5	359.1	330.8	312.7	303.7	305.0
10°	538.4	527.9	491.1	433.4	371.5	317.0	267.7	233.6	214.6	205.6	205.8
12.5°	542.9	527.6	470.5	387.7	303.7	237.1	191.3	174.4	169.1	167.2	166.7
15°	551.4	528.4	444.5	335.3	236.3	179.2	162.5	162.2	163.3	162.8	162.5
17.5°	563.0	529.2	415.1	279.7	182.3	158.0	157.1	159.6	161.1	160.3	160.1
20°	578.1	532.4	384.0	224.7	156.6	152.6	154.6	156.6	158.0	156.6	156.4
22.5°	599.3	537.9	349.8	180.5	148.4	149.4	151.1	153.4	154.8	152.9	152.6
25°	625.2	546.6	316.2	156.9	144.4	145.8	148.2	150.8	152.4	150.6	150.3
27.5°	658.9	560.7	285.3	151.6	140.5	141.2	144.7	148.7	150.8	148.4	148.4
30°	707.6	583.7	258.5	154.0	138.1	136.2	141.0	146.6	148.9	146.9	146.6
32.5°	772.1	616.2	242.1	157.7	137.0	130.5	135.0	142.1	146.1	144.7	144.7
35°	856.8	665.7	235.7	162.0	136.2	124.3	127.5	135.2	142.1	143.4	143.4
37.5°	959.4	734.5	237.6	163.8	133.9	119.3	121.0	127.5	136.5	140.7	141.9
40°	1076.1	814.7	248.2	162.0	131.2	115.1	115.3	120.4	128.3	134.7	136.8
42.5°	1196.5	908.4	267.7	155.1	128.8	111.4	110.6	114.1	119.3	123.8	125.7
45°	1311.1	1004.7	287.1	145.5	126.0	107.7	105.9	107.1	108.2	110.1	111.1
47.5°	1411.1	1072.4	281.6	136.8	122.0	103.4	100.2	99.7	96.6	96.4	96.0
50°	1480.1	1087.2	250.0	128.0	116.1	98.7	93.7	90.5	85.0	82.3	82.5
52.5°	1502.1	1028.7	204.3	119.3	106.6	92.4	85.2	80.2	73.3	70.9	70.6
55°	1473.0	914.2	163.3	108.8	93.4	83.8	76.0	69.3	63.8	60.9	60.9
57.5°	1401.8	768.3	129.1	96.4	79.3	74.3	66.4	59.8	55.0	52.2	51.6
60°	1283.8	610.2	102.1	81.5	67.8	64.1	55.9	51.6	47.4	44.0	43.2
62.5°	1104.6	435.5	80.2	64.6	56.6	52.4	47.7	44.5	39.5	34.6	33.8
65°	862.0	266.4	61.9	47.4	45.5	43.4	40.5	37.6	31.5	26.8	25.9
67.5°	543.8	126.2	44.2	35.7	36.0	35.0	33.6	31.3	26.8	22.4	21.9
70°	239.4	61.1	29.1	27.3	26.8	26.8	27.8	27.0	22.8	18.8	18.0
72.5°	81.5	32.8	21.7	20.6	19.3	19.1	23.3	22.4	18.2	14.6	13.7
75°	42.6	21.9	15.9	14.9	11.7	14.0	18.6	17.4	12.9	9.5	8.7
77.5°	27.8	15.6	10.9	9.5	6.7	9.2	13.7	12.2	7.7	4.7	4.2
80°	17.4	10.4	6.4	4.5	3.2	5.0	7.4	5.3	2.9	1.0	0.8
82.5°	9.2	5.3	2.4	1.5	1.3	1.5	1.8	1.3	0.5	0.0	0.0
85°	3.7	1.8	0.8	0.5	0.3	0.0	0.5	0.3	0.0	0.0	0.0
87.5°	1.3	0.3	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)