

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: P881544

Luminaire Tested: **NAV-SB1A-730-U-SL4**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881544  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1A-730-U-SL4  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 3000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT  
ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

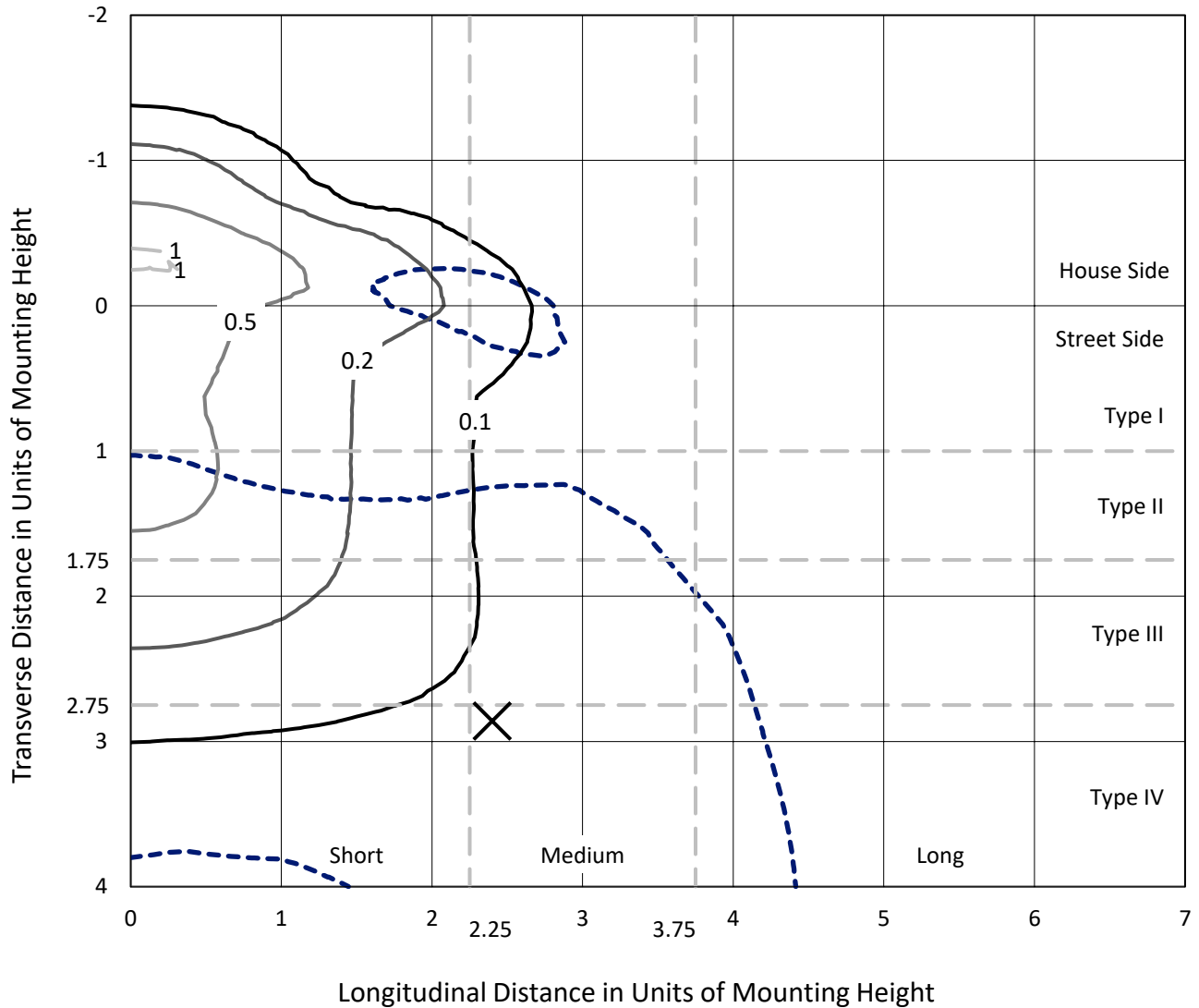
Lumens per Lamp: N/A  
Luminaire Lumens: 4381 lumens  
Efficiency: N/A  
Efficacy: 141.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 30.9  
Input Voltage (V): 120.0  
Input Current (Ain): 0.263  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 6.356  
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

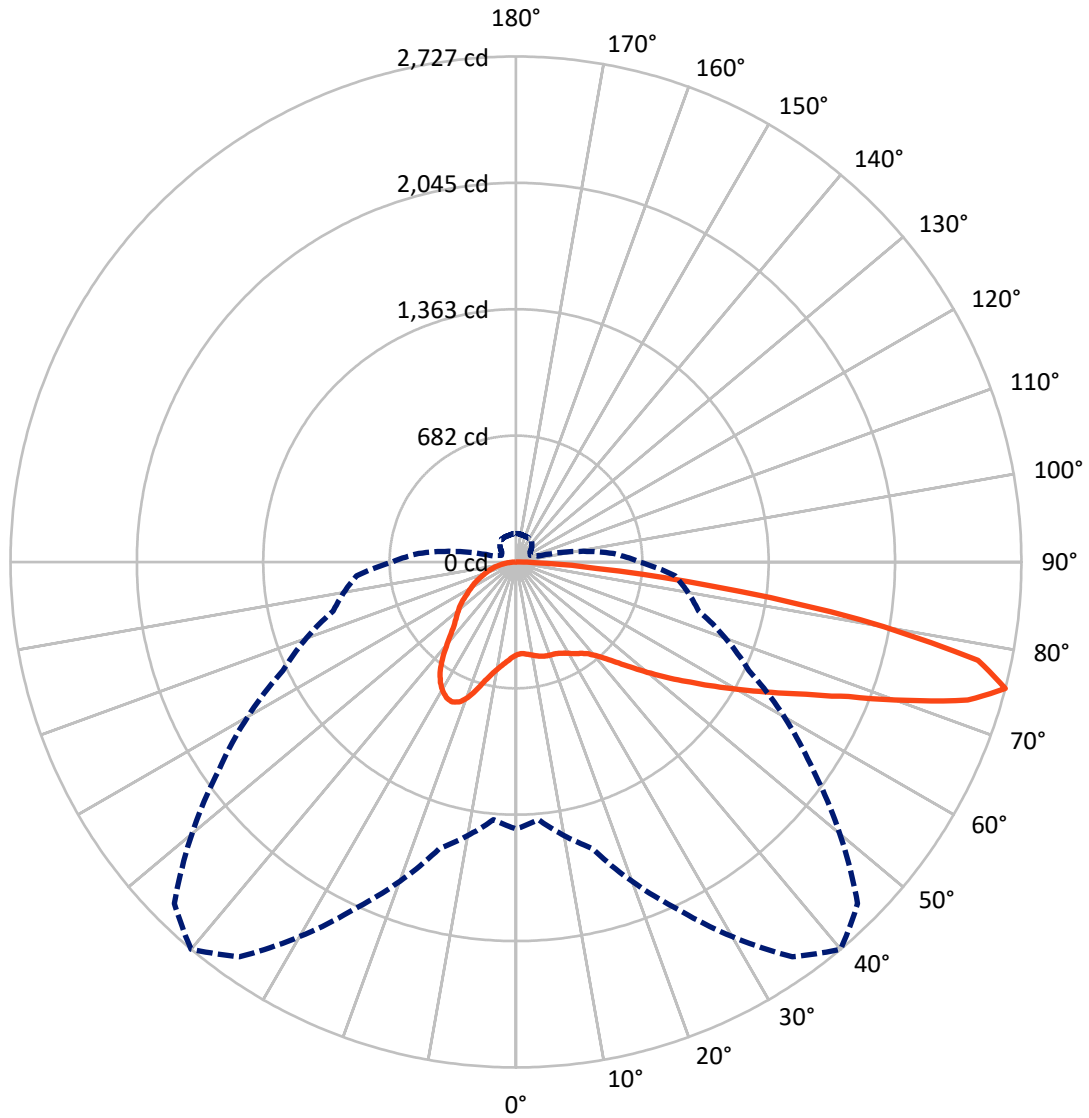
✕ Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1357.4	0.0	1357.4
	% Fixture	31.0	0.0	31.0
<b>Street Side</b>	Lumens	3023.6	0.0	3023.6
	% Fixture	69.0	0.0	69.0
<b>Total</b>	Lumens	4381.0	0.0	4381.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.0	1.1
10°-20°	167.9	3.8
20°-30°	306.6	7.0
30°-40°	434.8	9.9
40°-50°	587.1	13.4
50°-60°	789.8	18.0
60°-70°	1002.4	22.9
70°-80°	909.8	20.8
80°-90°	132.6	3.0
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°	4381.0	100.0
0°-180°	4381.0	100.0

**Coefficient of Utilization**

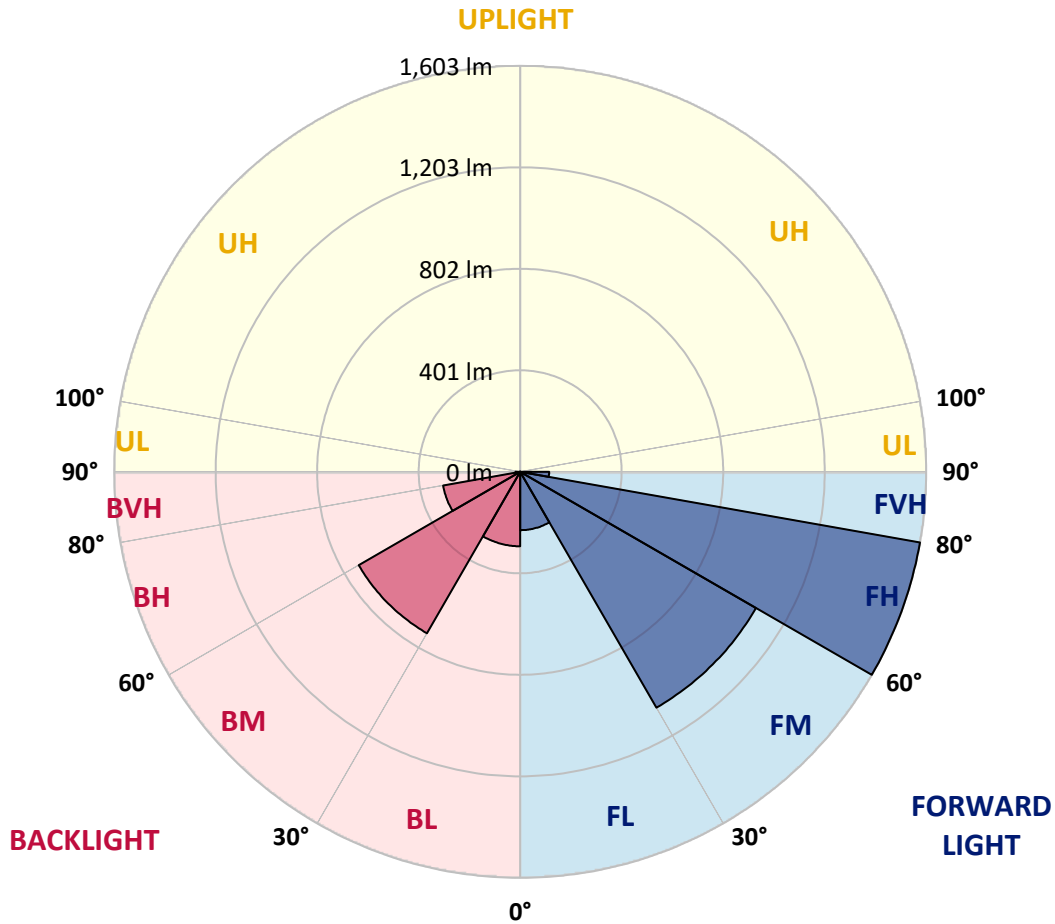


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	230.4	5.3			
FM (30°-60°)	1075.4	24.5			
FH (60°-80°)	1603.4	36.6			G1/1800
FVH (80°-90°)	114.4	2.6			G2/225
BL (0°-30°)	294.0	6.7	B1/500		
BM (30°-60°)	736.3	16.8	B1/1000		
BH (60°-80°)	308.8	7.0	B1/500		G1/500
BVH (80°-90°)	18.3	0.4			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°	40°	45°	55°	65°	75°	85°
0°	501.0	501.0	501.0	501.0	501.0	501.0	501.0	501.0	501.0	501.0	501.0
2.5°	493.3	496.1	495.4	494.5	494.5	494.7	494.5	496.1	497.7	499.3	501.9
5°	498.4	501.2	499.8	498.6	497.7	497.5	496.8	496.6	497.5	499.6	503.1
7.5°	508.4	511.2	509.1	507.0	505.2	504.2	503.3	501.9	501.2	502.4	507.2
10°	519.6	522.4	519.8	516.1	513.1	511.9	511.0	509.6	508.6	509.3	514.7
12.5°	530.7	533.5	530.0	524.9	521.0	520.3	519.1	518.6	518.4	518.2	523.5
15°	541.2	543.5	539.1	533.0	528.9	527.7	526.5	527.2	528.4	529.8	535.8
17.5°	549.3	551.6	545.1	537.2	533.3	532.8	532.1	534.4	537.7	541.2	548.6
20°	556.7	559.1	550.7	540.0	535.4	535.4	535.6	540.5	545.1	550.2	560.5
22.5°	567.2	569.1	558.8	544.2	537.5	537.9	539.8	544.7	550.5	557.4	571.6
25°	582.8	584.2	571.6	552.1	544.4	545.8	547.4	549.8	555.3	563.5	582.5
27.5°	607.9	609.0	592.5	566.0	554.4	556.7	559.1	557.4	560.0	567.0	591.4
30°	643.2	643.9	623.0	587.9	571.4	572.5	573.0	566.3	561.4	567.0	597.6
32.5°	685.0	684.8	659.9	614.4	590.7	589.5	585.6	572.3	560.9	565.8	603.2
35°	749.8	747.3	715.2	651.5	612.5	605.3	596.0	579.0	563.2	564.6	608.1
37.5°	857.2	849.3	804.9	712.4	645.0	626.7	613.0	590.0	568.4	564.2	613.9
40°	978.2	968.3	919.5	795.8	693.8	664.3	642.2	605.5	576.7	566.3	622.5
42.5°	1121.8	1107.7	1055.2	894.1	755.6	712.9	679.7	625.3	589.0	573.0	634.1
45°	1298.2	1279.4	1205.0	1005.0	833.5	776.6	732.2	655.3	607.9	586.0	651.5
47.5°	1476.4	1481.1	1375.4	1131.8	926.9	855.1	797.9	700.3	635.3	606.9	679.7
50°	1665.8	1669.1	1544.7	1272.4	1032.9	943.9	871.8	750.8	673.4	636.7	721.7
52.5°	1813.6	1814.1	1698.6	1419.5	1143.2	1041.4	951.5	808.4	717.5	676.2	777.7
55°	1906.1	1904.9	1806.4	1558.7	1270.1	1143.9	1039.8	873.9	771.4	722.6	848.1
57.5°	1973.2	1969.7	1880.7	1678.4	1405.3	1265.0	1139.7	948.3	835.1	777.9	940.8
60°	1998.8	1996.7	1931.2	1781.8	1547.5	1398.8	1255.0	1031.5	907.4	843.2	1060.0
62.5°	2008.5	2012.5	1980.7	1881.9	1699.7	1547.1	1381.6	1130.9	988.7	917.1	1185.7
65°	2042.9	2050.1	2043.6	2013.0	1871.7	1720.6	1549.6	1249.2	1077.5	996.4	1317.0
67.5°	2111.0	2118.2	2121.0	2169.8	2081.7	1937.0	1759.2	1396.5	1181.3	1078.6	1415.8
70°	2109.4	2107.3	2156.6	2294.6	2344.8	2236.5	2041.8	1577.7	1305.2	1146.9	1428.3
72.5°	1920.0	1903.3	2019.7	2293.2	2563.7	2549.2	2386.8	1811.5	1412.1	1155.3	1239.4
75°	1440.4	1395.8	1601.4	2066.6	2600.1	2726.8	2606.2	1956.5	1386.7	1020.8	862.5
77.5°	616.0	571.1	813.5	1529.9	2327.1	2549.0	2405.0	1706.9	1107.0	675.0	423.6
80°	161.3	161.0	245.8	693.6	1582.6	1882.4	1651.4	1102.3	632.5	241.2	116.9
82.5°	66.7	65.1	90.4	269.8	773.3	1056.3	862.1	491.7	228.4	65.3	38.8
85°	24.9	24.6	43.9	93.2	272.8	435.7	315.3	125.7	56.9	31.8	17.4
87.5°	7.0	6.7	9.5	32.3	66.5	100.8	53.9	20.7	16.0	12.5	5.1
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°	501.0	501.0	501.0	501.0	501.0	501.0	501.0	501.0	501.0	501.0	501.0
2.5°	502.6	503.8	505.9	507.5	509.6	511.9	515.1	517.2	519.3	520.7	519.8
5°	504.7	507.2	512.6	517.9	524.2	530.0	536.8	541.6	545.6	546.7	547.2
7.5°	509.3	513.5	522.6	531.6	541.6	551.2	560.9	569.3	576.0	578.6	578.8
10°	517.5	523.0	535.8	548.6	561.9	576.5	589.0	601.1	610.6	614.6	614.8
12.5°	527.7	534.7	551.4	569.1	587.4	607.6	623.9	638.8	650.6	656.0	656.0
15°	540.9	550.0	571.4	595.1	622.0	650.1	670.8	687.3	700.6	707.1	706.6
17.5°	555.3	567.4	594.4	630.2	668.7	705.7	729.9	741.9	755.6	761.9	761.7
20°	569.3	584.2	622.7	674.8	726.1	765.4	784.9	788.2	789.1	789.8	791.7
22.5°	583.7	603.7	658.3	731.0	786.1	813.3	816.1	802.1	782.6	773.5	776.1
25°	599.5	626.0	704.8	793.1	837.7	840.9	819.5	785.6	748.7	731.7	734.3
27.5°	614.8	651.8	760.5	852.3	874.8	846.3	800.3	752.2	707.5	689.7	691.7
30°	630.2	681.3	822.1	904.1	891.8	833.0	769.8	716.1	671.3	652.5	654.6
32.5°	645.7	715.7	893.0	941.5	888.8	804.9	731.9	675.7	636.2	616.5	619.0
35°	663.4	758.0	960.1	962.0	868.6	763.5	682.0	627.4	593.0	577.2	580.7
37.5°	686.4	811.6	1019.4	967.1	833.3	702.9	619.9	570.2	541.9	534.7	539.8
40°	715.0	876.2	1064.7	959.0	781.0	629.2	552.1	512.4	496.3	498.0	503.5
42.5°	752.2	948.5	1096.5	938.0	708.2	553.3	492.6	474.9	482.6	489.1	495.2
45°	800.5	1023.6	1116.3	902.5	626.0	488.9	457.5	461.7	467.5	468.2	472.9
47.5°	862.3	1099.5	1129.3	848.8	542.1	443.6	435.2	436.1	435.0	430.1	433.8
50°	939.4	1173.4	1140.9	777.7	470.8	415.2	404.1	400.8	384.8	369.0	371.1
52.5°	1027.3	1241.3	1145.8	689.4	415.2	391.5	373.4	353.0	323.0	318.1	319.7
55°	1124.9	1304.0	1133.2	580.9	368.5	361.1	333.7	309.0	305.8	301.6	302.3
57.5°	1241.5	1371.6	1107.7	459.8	320.7	325.5	298.8	301.6	295.8	289.3	288.1
60°	1369.1	1441.6	1062.8	349.5	271.2	281.2	289.8	289.5	287.9	282.6	280.7
62.5°	1483.9	1487.6	974.5	267.7	227.7	246.8	270.2	270.0	268.6	265.6	264.4
65°	1552.2	1480.6	827.2	210.8	191.9	218.4	243.7	245.6	245.8	245.6	245.6
67.5°	1540.1	1399.1	625.1	167.8	162.4	189.6	217.5	220.0	221.9	222.4	222.8
70°	1403.5	1219.9	407.6	133.8	136.2	164.3	192.6	195.2	196.8	198.7	199.6
72.5°	1094.0	896.9	233.3	108.3	113.2	142.4	168.0	171.0	171.9	175.4	176.8
75°	666.6	527.5	125.9	85.3	92.9	121.8	143.6	147.1	148.7	152.9	153.4
77.5°	316.9	228.4	71.8	66.5	74.8	99.5	121.3	125.2	120.8	123.2	121.3
80°	107.1	84.8	45.3	50.7	57.2	77.6	97.1	101.1	91.8	91.3	90.4
82.5°	37.4	34.4	28.8	33.7	36.9	55.5	73.4	78.5	68.3	68.1	64.8
85°	14.6	13.9	16.0	18.4	22.1	34.2	48.3	50.9	42.1	33.9	33.5
87.5°	3.0	3.3	4.0	4.2	6.7	11.9	17.4	21.4	17.0	14.4	13.2
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)