

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: P881611

Luminaire Tested: **NAV-SB1A-830-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881611
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-830-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3883 lumens
Efficiency: N/A
Efficacy: 125.7 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

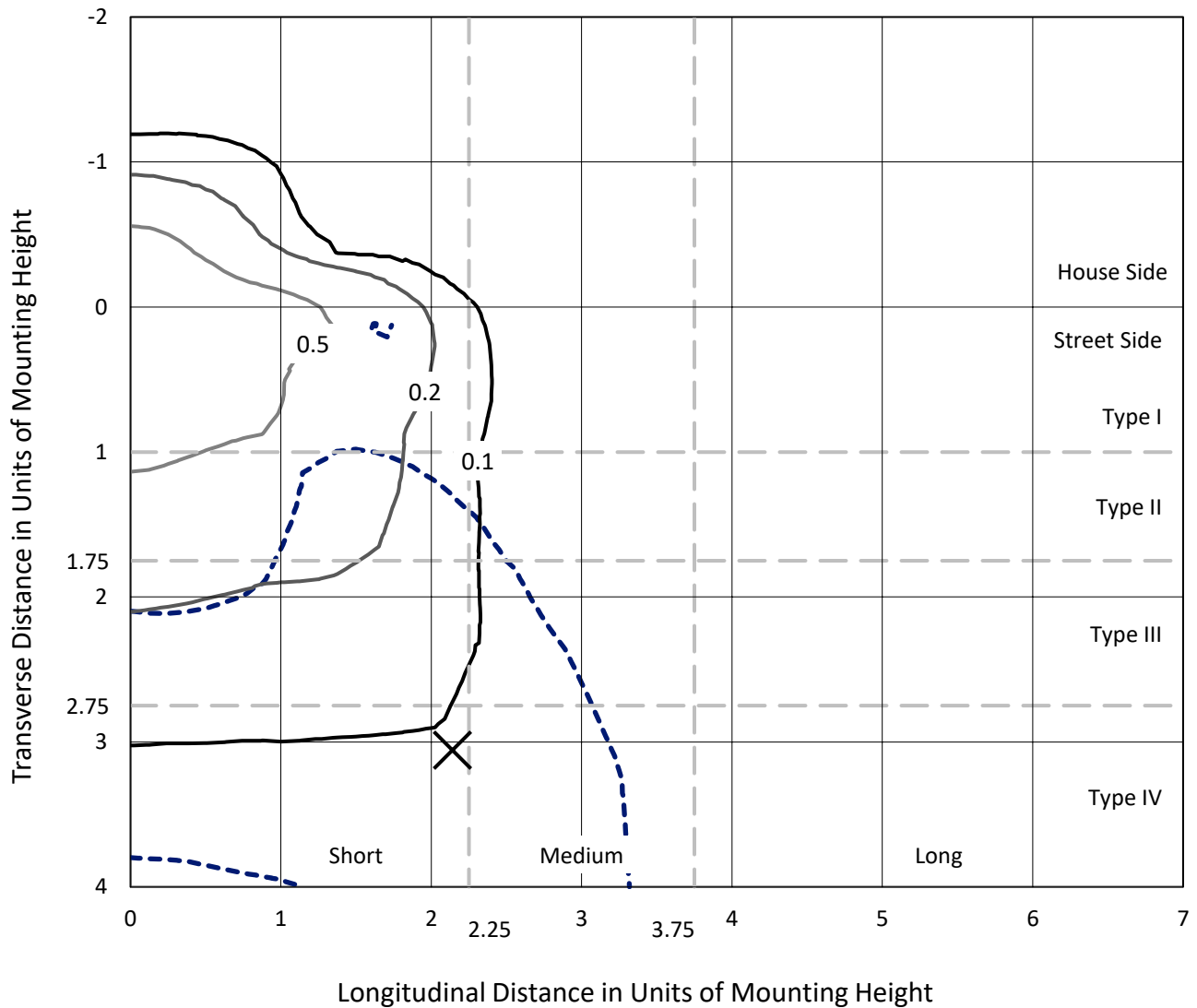
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

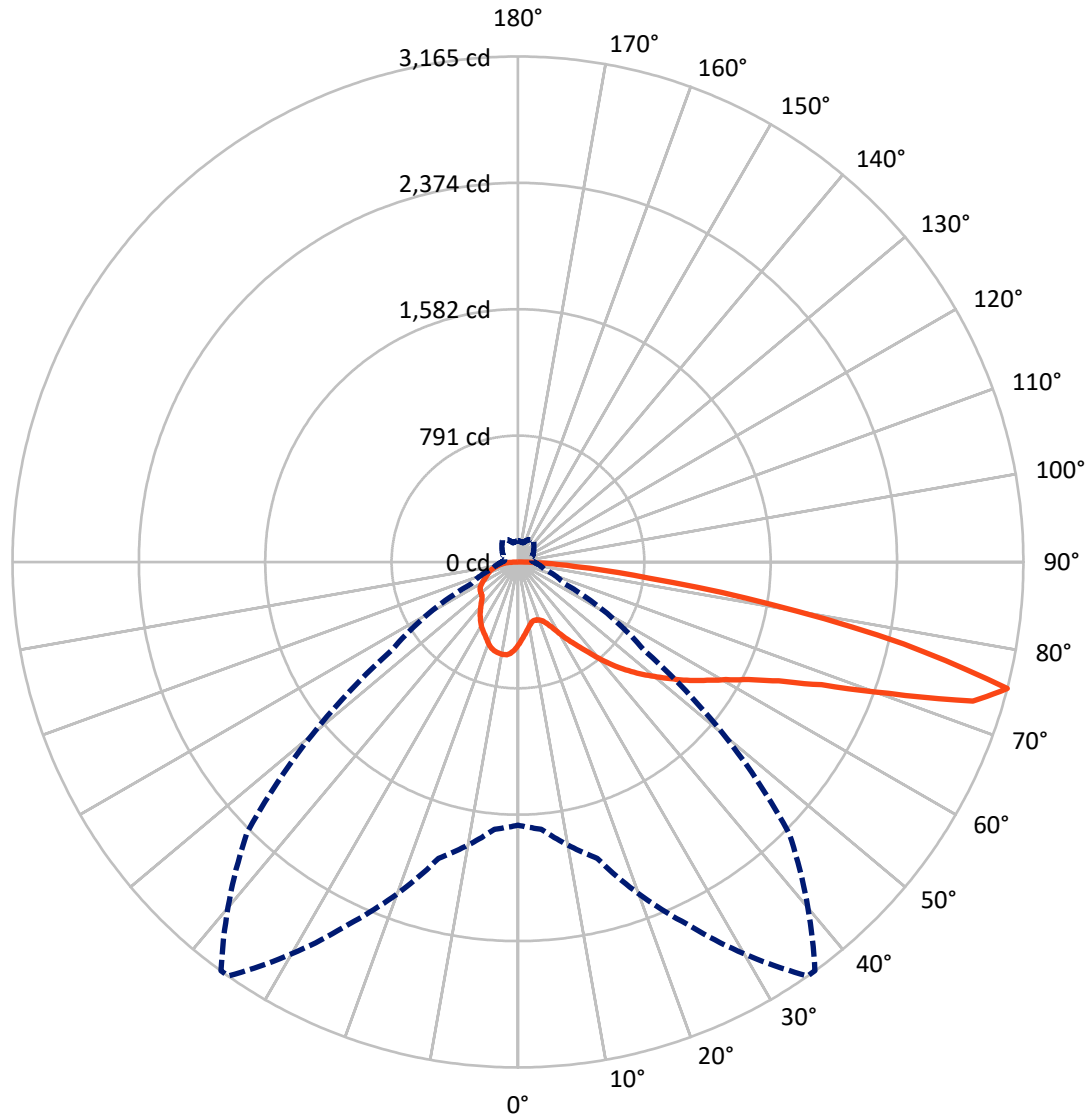
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	924.1	0.0	924.1
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	2958.9	0.0	2958.9
	% Fixture	76.2	0.0	76.2
Total	Lumens	3883.0	0.0	3883.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.0	1.3
10°-20°	141.3	3.6
20°-30°	237.3	6.1
30°-40°	368.8	9.5
40°-50°	547.4	14.1
50°-60°	755.7	19.5
60°-70°	916.8	23.6
70°-80°	757.7	19.5
80°-90°	109.0	2.8
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°	3883.0	100.0
0°-180°	3883.0	100.0



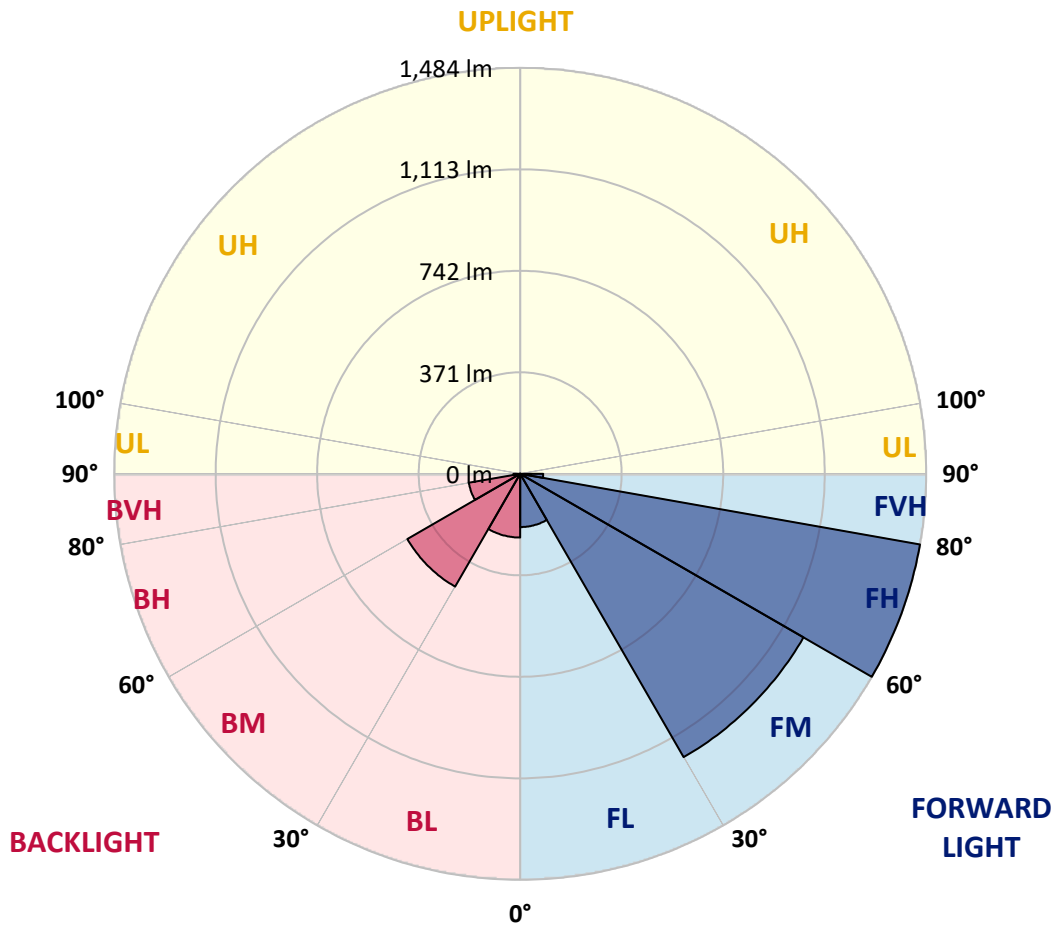
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	194.7	5.0			
FM (30°-60°)	1195.8	30.8			
FH (60°-80°)	1484.0	38.2			G1/1800
FVH (80°-90°)	84.4	2.2			G1/100
BL (0°-30°)	232.9	6.0	B1/500		
BM (30°-60°)	476.1	12.3	B1/1000		
BH (60°-80°)	190.5	4.9	B1/500		G1/500
BVH (80°-90°)	24.5	0.6			G1/100
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°	35°	36°	45°	55°	65°	75°	85°
0°	517.4	517.4	517.4	517.4	517.4	517.4	517.4	517.4	517.4	517.4	517.4
2.5°	477.1	480.1	481.3	480.7	483.8	483.4	487.8	493.3	500.9	508.2	518.9
5°	440.4	443.5	446.3	448.8	454.9	456.8	463.7	474.2	488.0	502.1	519.7
7.5°	406.2	408.9	413.1	417.7	428.0	429.9	441.4	457.8	477.1	497.7	522.1
10°	378.3	381.0	385.4	390.6	403.5	405.8	420.5	442.3	467.5	493.5	524.6
12.5°	366.3	367.1	369.7	374.9	386.0	387.5	403.7	428.6	458.0	490.4	528.4
15°	365.7	367.3	367.6	370.3	379.5	380.2	395.1	419.8	452.2	489.7	534.0
17.5°	372.0	373.2	371.3	373.0	380.8	381.8	393.6	415.6	450.3	492.5	543.7
20°	388.8	389.8	384.1	381.8	387.5	388.3	399.9	418.4	452.2	498.1	556.9
22.5°	424.4	425.1	411.2	401.8	402.2	402.6	412.7	429.5	459.5	508.4	573.7
25°	480.1	479.7	457.6	439.3	428.9	426.5	433.3	447.5	471.9	522.1	595.3
27.5°	545.1	542.0	520.0	492.7	469.8	466.4	465.0	471.0	489.5	540.1	621.8
30°	618.6	615.7	592.0	556.3	524.6	519.1	505.3	502.1	515.8	564.7	658.5
32.5°	699.2	697.3	669.0	625.8	583.3	577.1	553.8	545.4	556.1	601.8	709.7
35°	766.8	765.1	741.6	697.1	645.3	637.5	613.8	604.3	609.8	649.5	776.7
37.5°	827.9	827.1	806.9	771.9	718.3	708.9	682.2	679.1	678.0	712.2	857.9
40°	884.6	882.5	861.5	843.0	803.3	794.7	771.2	768.5	760.5	789.5	949.9
42.5°	947.3	941.9	911.4	902.8	892.1	885.0	870.9	871.3	853.7	876.6	1047.3
45°	998.6	995.4	964.1	959.1	970.6	967.7	979.9	983.0	948.8	967.9	1148.4
47.5°	1053.6	1050.6	1024.2	1020.6	1051.9	1052.7	1095.7	1096.8	1041.6	1062.8	1249.8
50°	1121.4	1117.2	1090.9	1095.3	1130.4	1133.5	1212.2	1205.1	1127.0	1159.1	1350.4
52.5°	1166.1	1168.6	1162.9	1170.1	1217.9	1220.9	1326.9	1308.6	1211.6	1254.2	1449.0
55°	1199.0	1204.1	1221.7	1238.1	1310.3	1313.2	1435.0	1407.0	1281.7	1342.4	1541.8
57.5°	1241.4	1234.3	1267.2	1299.2	1398.0	1405.8	1540.1	1501.9	1343.9	1418.4	1605.4
60°	1302.3	1297.3	1322.9	1370.1	1496.3	1508.6	1651.4	1587.4	1389.4	1478.6	1617.8
62.5°	1425.7	1413.1	1417.1	1458.9	1620.1	1636.5	1776.9	1661.9	1412.1	1502.1	1551.5
65°	1610.2	1588.6	1568.5	1597.4	1794.5	1810.7	1918.6	1720.4	1403.7	1456.6	1375.4
67.5°	1842.6	1821.2	1796.4	1823.7	2051.5	2064.3	2093.5	1753.4	1337.6	1281.1	1064.0
70°	2034.3	2026.3	2055.9	2168.2	2461.9	2462.3	2317.7	1726.1	1156.4	908.3	615.7
72.5°	2008.9	2004.0	2160.0	2507.2	2979.1	2968.0	2529.9	1519.6	779.0	409.8	230.7
75°	1648.0	1679.3	1920.9	2501.1	3164.9	3163.4	2399.9	966.0	322.2	169.8	119.2
77.5°	883.7	933.3	1247.1	1846.6	2470.7	2507.8	1687.3	338.0	138.3	108.7	82.5
80°	288.2	331.5	497.1	940.2	1605.4	1598.5	723.2	132.7	94.7	77.0	57.1
82.5°	122.4	127.4	222.1	444.0	823.9	811.1	230.3	76.2	66.5	52.7	35.3
85°	47.9	53.5	98.0	205.3	356.9	349.1	83.1	37.8	42.6	34.4	21.0
87.5°	15.7	19.1	35.1	70.3	111.0	107.1	20.4	13.0	18.5	15.7	7.6
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°	517.4	517.4	517.4	517.4	517.4	517.4	517.4	517.4	517.4	517.4	517.4
2.5°	521.8	525.2	529.2	535.1	540.1	544.3	548.7	551.4	552.5	555.6	555.4
5°	525.6	533.0	542.8	552.5	561.9	567.6	572.6	575.2	577.5	579.2	579.6
7.5°	531.9	541.4	556.9	569.5	577.5	582.1	585.4	584.6	585.4	585.9	586.5
10°	537.4	550.6	569.1	581.0	587.1	587.3	586.5	583.6	582.1	582.3	582.7
12.5°	543.9	558.6	578.5	588.6	590.3	585.7	582.1	577.1	575.2	574.3	573.9
15°	552.7	569.5	588.8	592.6	588.4	582.5	576.4	568.2	564.0	560.7	561.7
17.5°	563.4	581.9	596.8	594.1	585.0	575.4	565.5	553.1	544.5	540.9	541.2
20°	578.3	594.9	602.9	590.9	577.3	562.6	545.8	530.7	522.7	519.1	518.7
22.5°	596.4	612.3	608.7	585.4	566.1	542.6	521.6	510.5	506.5	504.0	504.4
25°	618.0	631.6	612.9	577.5	547.9	516.2	500.0	496.4	494.6	492.7	492.7
27.5°	646.1	653.5	616.1	565.7	519.3	488.0	482.2	482.8	482.2	479.0	479.7
30°	683.3	681.8	619.0	546.6	486.6	462.6	463.1	465.8	466.2	464.1	465.2
32.5°	732.2	717.3	620.5	521.8	455.3	440.4	440.8	443.8	445.9	442.3	444.0
35°	791.4	758.6	618.2	490.8	431.2	419.2	416.0	416.9	417.5	414.2	416.5
37.5°	860.4	805.0	607.9	456.4	411.2	398.4	391.7	386.0	382.7	379.5	381.6
40°	936.2	855.6	589.0	422.8	389.0	376.4	366.3	355.6	344.3	340.1	341.9
42.5°	1015.6	907.7	566.1	390.6	363.4	353.1	342.4	326.8	309.8	301.2	302.3
45°	1097.8	961.0	543.7	359.0	337.1	332.7	320.3	301.6	283.2	272.3	271.4
47.5°	1178.5	1011.4	510.7	327.0	312.6	317.4	307.7	290.5	269.9	252.7	250.8
50°	1255.5	1058.6	456.8	294.7	292.6	312.8	303.5	278.8	255.3	233.2	231.3
52.5°	1331.9	1096.8	387.7	265.3	281.9	311.5	298.1	270.8	242.0	218.9	216.4
55°	1396.8	1116.5	321.2	240.1	266.4	300.8	291.6	261.3	223.3	198.8	196.7
57.5°	1433.7	1100.6	265.8	215.4	245.0	283.2	280.4	241.2	201.1	182.2	179.7
60°	1417.8	1035.9	220.4	193.7	224.6	264.1	261.1	221.2	184.1	166.3	163.7
62.5°	1329.8	912.7	184.5	174.9	206.1	244.5	241.8	205.9	171.1	153.9	151.1
65°	1152.6	742.5	156.6	159.1	187.5	221.0	225.0	193.1	160.8	144.0	141.3
67.5°	879.1	537.8	134.8	145.5	169.2	197.9	209.5	183.9	152.2	136.2	133.7
70°	501.1	305.4	116.3	132.2	153.0	176.5	197.5	176.5	143.0	129.7	128.0
72.5°	190.0	140.2	100.5	119.0	137.5	158.5	184.3	165.0	132.2	122.4	120.7
75°	101.4	85.4	84.6	103.5	119.7	140.9	167.7	153.7	124.3	129.3	133.5
77.5°	69.1	60.5	70.7	88.6	100.1	121.3	150.1	136.4	107.7	107.3	98.9
80°	47.9	42.8	57.5	71.4	77.5	102.0	131.0	117.1	87.7	81.9	78.3
82.5°	28.8	27.9	43.0	53.3	54.8	78.7	108.5	98.2	71.8	62.6	63.0
85°	15.7	16.6	27.5	31.3	31.9	55.0	85.0	76.0	55.2	46.4	46.8
87.5°	4.4	5.7	10.1	12.4	15.3	28.5	50.6	45.1	27.7	19.3	19.3
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)