

DEVIALET

INGÉNIERIE ACOUSTIQUE DE FRANCE

Datasheet

Customer	Name:	Devialet
	Address:	10 place Vendôme 75001 Paris, France
Equipment	Project name:	PALMA
	Product part n°:	Dual Antenna PALMA v103
	Product description:	WL1 antenna

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1. Component description

Project: PALMA			
	Antenna	Cable spec	Connector
Type	DualBand PIFA Antenna	UFL-UFL 1.37mm cable	UFL
Brand	DEVIALET	DEVIALET	HIROSE
Model	Dual Antenna PALMA v103 WL1	N0EBB4	U.FL-R-SMT-110
Dimensions (mm)	50 x 45 x 1.6	82 x 1.37	NA
2.4 GHz Gain (dBi)	3.7		
5GHz Gain (dBi)	4.6		

2. Electrical specification

Item	Specification
Working Frequency Range	2.4-2.5GHz and 5.1-5.9GHz
Return Loss	< -10dB
VSWR	< 2:1
Polarization	Linear
Radiation Pattern	Omnidirectional
Impedance	50Ω
Operation Temperature	-40 to +85°C

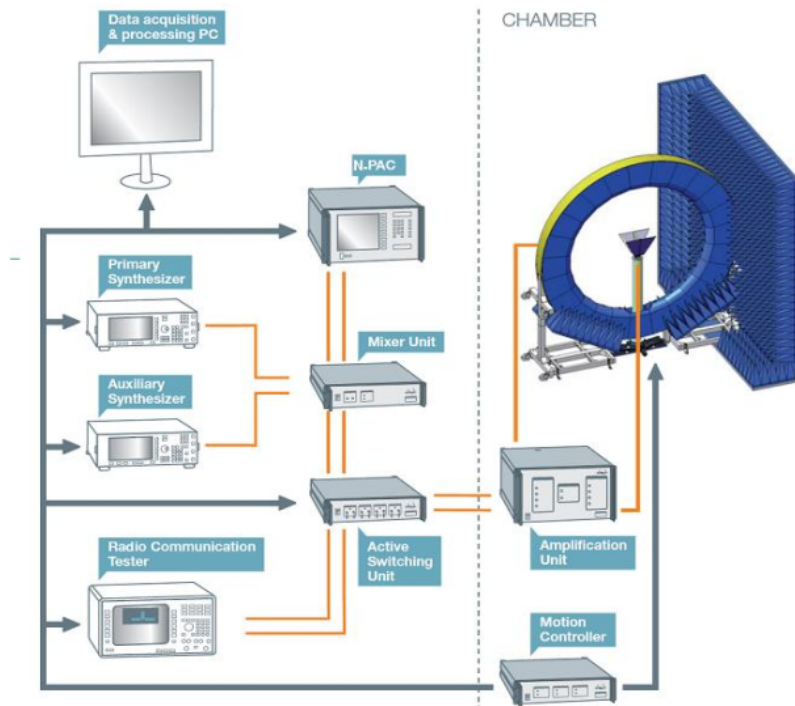
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3. Equipment of test system



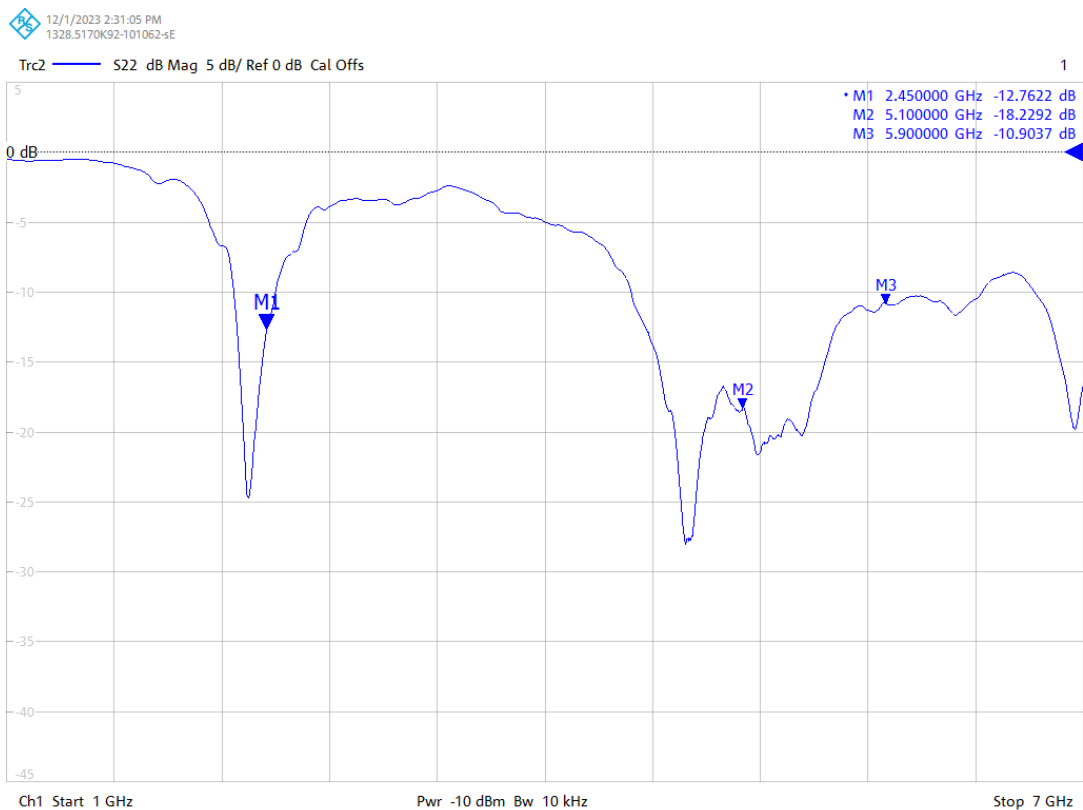
Equipment Description	Manufacturer	Identification N°	Current calibration date	Next calibration date	Calibration report or certificate references	Reference of calibration
SG 64	MVG	SAT 2000 sn#0013	01/07/2023	01/07/2024	CR.207.1.23.PAR. A SG64 Calibration Report	Calibrated by MVG according Internal Method
Anechoic chamber	MVG	SAT 2000 sn#0013	01/07/2023	01/07/2024	CR.207.1.23.PAR. A SG64 Calibration Report	Calibrated by MVG according Internal Method
Primary Synthesizer 83712B	Agilent	US37101179	2023/10/30	2024/10/30	CV20231030-006	Calibrated by accredited Lab ABN Métrologie
Auxiliary Synthesizer 83712B	Agilent	US37101195	2023/10/30	2024/10/30	CV20231030-007	Calibrated by accredited Lab ABN Métrologie
Horn Antenna	MVG	SH400 sn#00020	2018/05/08	08/05/2024 (Checked every 3 months)	ACR.128.01.18.SA TU.B	Calibrated by accredited Lab MVG US according 17025
Horn Antenna	MVG	SH2000 sn#00077	2018/05/07	08/05/2024 (Checked every 3 months)	ACR.127.02.18.SA TU.B	Calibrated by accredited Lab MVG US according 17025

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6. Measurement results

a. Return loss



b. Efficiency

Frequency (GHz)	Efficiency (%)
2.45	48.5
5.25	48
5.50	41.5
5.75	47.5

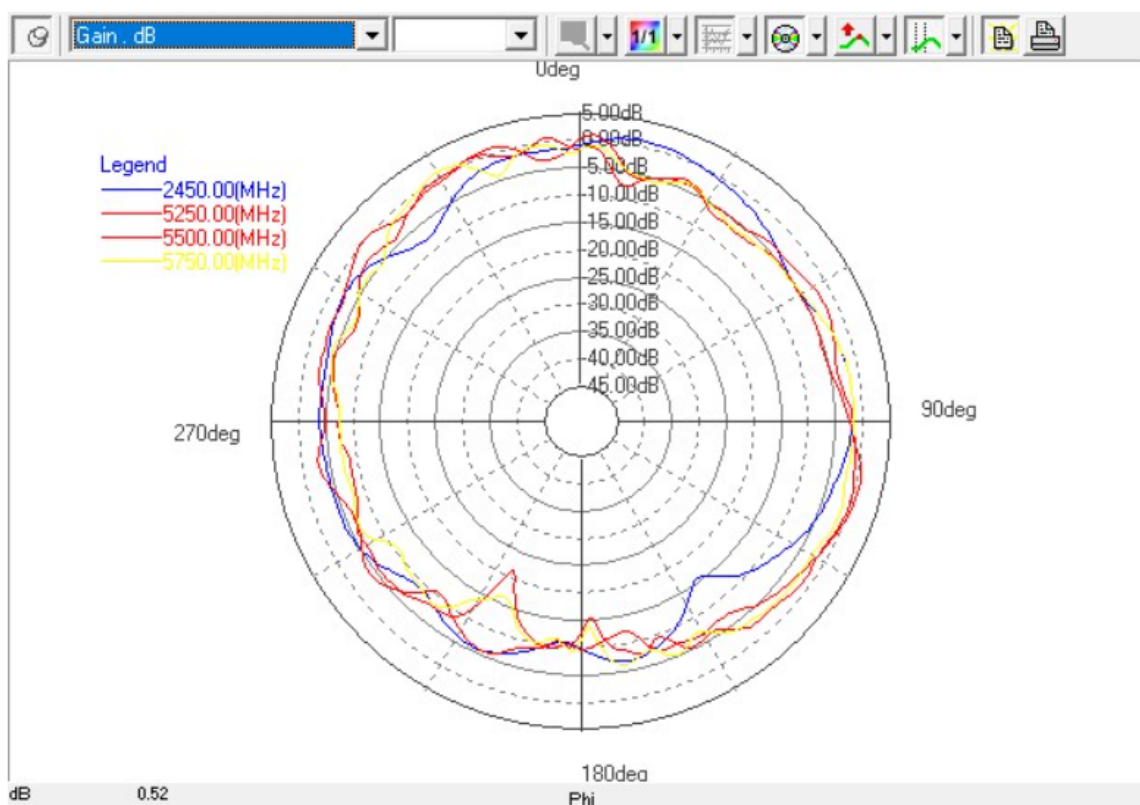
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c. 2D radiation patterns

Linear Polarization (dBi)		XY-plane	YZ-plane	ZX-plane
2450 MHz	MAX.	0.88	3.25	3.34
	AVE.	-3.94	-2.21	-2.12
5250 MHz	MAX.	0.95	4.02	0.00
	AVE.	-3.47	-1.90	-6.28
5500 MHz	MAX.	0.59	3.00	2.51
	AVE.	-3.90	-2.83	-5.99
5750 MHz	MAX.	0.92	2.58	2.42
	AVE.	-4.27	-2.54	-5.46

XY-Plane - Theta=90.00°



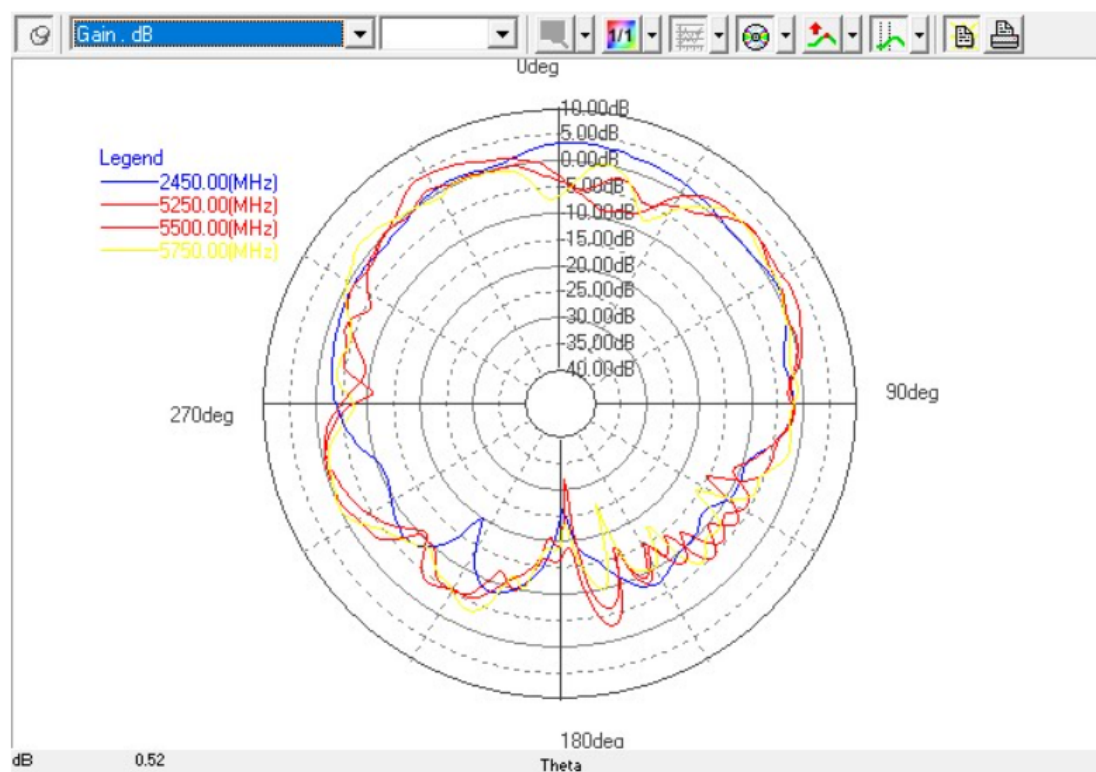
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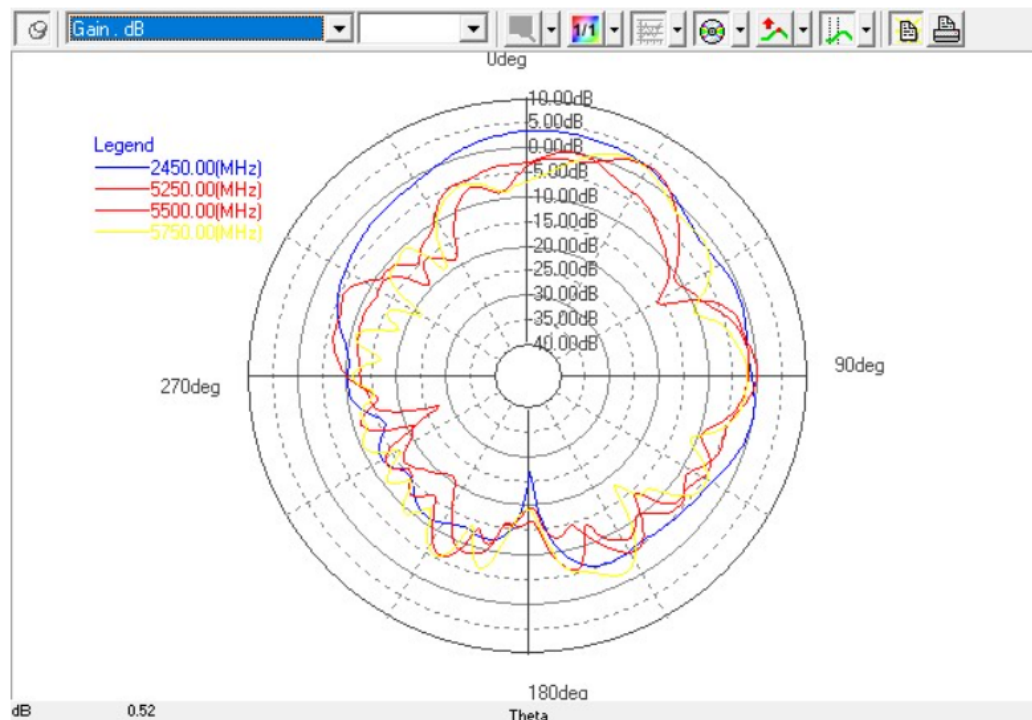
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YZ-Plane - $\Phi=90.00^\circ$



ZX-Plane - $\Phi=0.00^\circ$



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