CONFIDENTIAL

Type1PJ
Antenna Under Test Report
for DVLD1152ZA

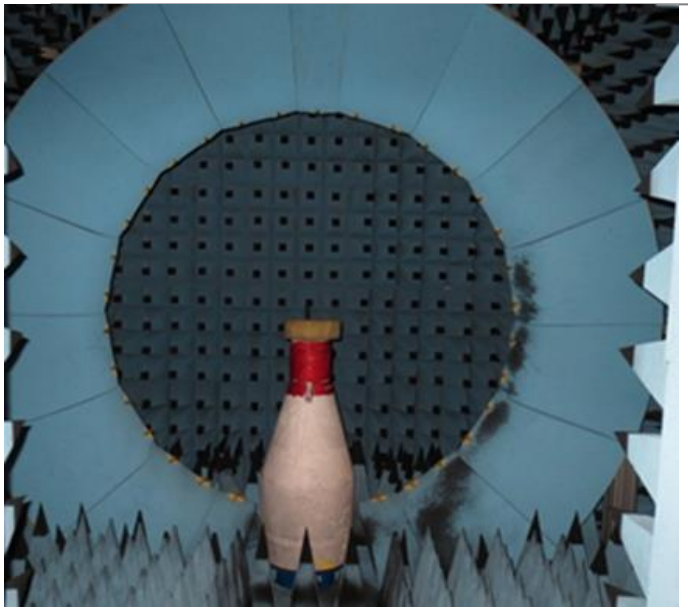
Index

1. Test method for antenna gain measurement

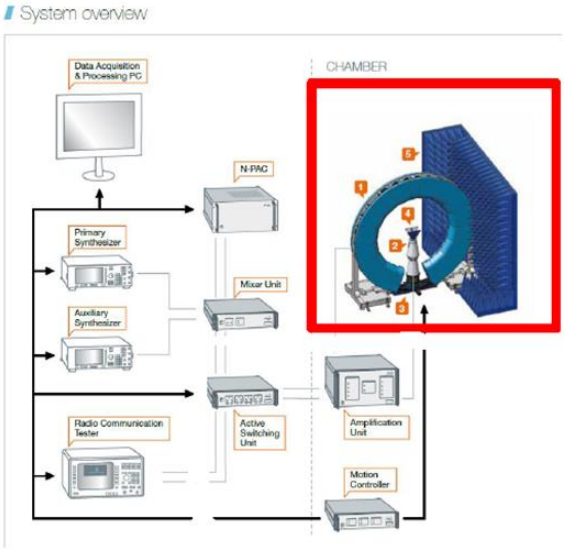
- Test method for antenna gain measurement:
  Standard antenna method (comparative method)
  * Comparing a measured antenna to a standard antenna with a known gain factor

- Equipment used for antenna gain measurement (model name, serial number, calibration date, etc.);
  - Measurement system
    Microwave Vision Group (former SATIMO) SG32 (details next page)
  - Equipment
    PAC (MW 000021H-0068)
    E4428C (MY45280451, MY45280466)
  - Calibration date
    November 11, 2022
  - Antenna gain measurement date / Measurement person
    April 26, 2023 / Harumi matsuoka

2. Test Equipment (Details of SG32)



Anechoic chamber size		Approximately 3.5m x 3.5m x 3m (H)		
Frequency band		800~6000MHz (18~40GHz compatible with Option)		
Measurement time	Elevation 1 cut	Real time		
	Global surface measurement	< Approx. 20 seconds (when measuring 10 frequencies)		
Measurement uncertainty	Peak gain	< +/-0.75dB (1.0~6.0GHz)		
		< +/-1.0dB (0.8~1.0GHz)		
	Low gain	< +/-2dB (@-20dB from peak)		
Dynamic range		70dB		
Cross Polar Isolation		> 45dB		
DUT size	0.8 GHz	1.8 GHz	2.5 GHz	6 GHz
	75 cm	75 cm	65 cm	30 cm



Peak gain variation is secured within ±0.75 dB by system calibration.

3. Measurement result

Part number: DVLD1152ZA
Supplier: Panasonic

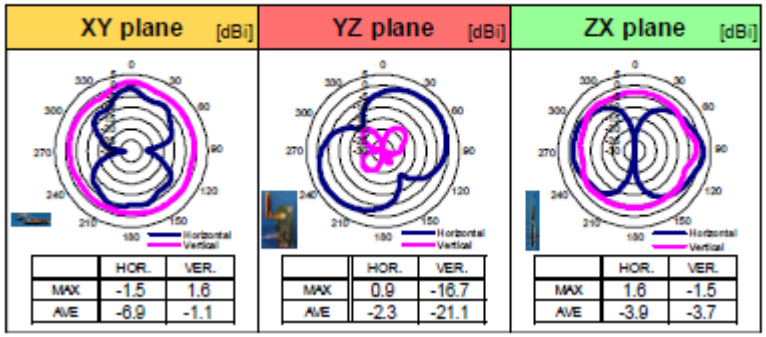
<Efficiency>

[dBi] [dB]

LINEAR POLARIZATION		XY-plane hor.	XY-plane ver.	YZ-plane hor.	YZ-plane ver.	ZX-plane hor.	ZX-plane ver.	Total Efficiency
2400 MHz	MAX.	-4.2	1.4	1.0	-19.1	1.4	-3.0	
	AVE.	-7.5	-0.9	-2.1	-22.2	-4.0	-4.1	-1.0
2442 MHz	**MAX.**	**-1.5**	**1.6**	**0.9**	**-16.7**	**1.6**	**-1.5**	
	AVE.	**-6.9**	**-1.1**	**-2.3**	**-21.1**	**-3.9**	**-3.7**	**-1.1**
2484 MHz	MAX.	-3.2	-0.7	0.4	-15.9	-0.6	-2.8	
	AVE.	-7.0	-1.5	-3.1	-21.1	-4.4	-3.9	-1.3

*Red color shows peak gain

<Directivity>



@2442MHz

