Logitech

Antenna Under Test (AUT)

Report

Model Name: A00187

Equipment Type: A50 X HDMI BASESTATION

Manufacturer: Logitech Europe S.A.

Test Location: 5th Floor, No. 83, Longtan Road, Longtan District, Taoyuan City

Tested by: _Sam Wu _____

Report Date: _2023/02/02_____

Report Release History

Report version	Description	Date Issued
A00187 AUT Report	Original release	2023/02/02

Table of Contents

1. EUT Antenna Information

1) Antenna Material : PCB printed ANT
2) Antenna Type : PIFA
3) Antenna Dimension: 16.5 x 13.5 mm
4) Operating Frequency : 2.4 GHz - 2.476 GHz
5) Input Impedance : 50 Ω
6) Standing-Wave Ratio : 2<

2. Measured Values and Calculation of Antenna Gains

Measure peak horizontal/vertical EIRP on each x-y, y-z, x-z plane. The highest measured values will be used to calculate the antenna peak gain.

Ant3																		
Frequency(MHz)	2400	2405	2410	2415	2420	2425	2430	2435	2440	2445	2450	2455	2460	2465	2470	2475	2480	2485
Efficiency (%)	37.8	37.8	37.1	38.5	38.6	39.2	39.3	39.3	39.6	39.7	40.5	40.6	39.8	39.9	37.5	36.8	37.5	37.3
Peak Gain (dBi)	0.9	0.9	0.8	0.9	1.0	1.1	1.1	1.1	1.2	1.2	1.3	1.4	1.3	1.4	1.2	1.1	1.3	1.2
Ant2																		
Frequency(MHz)	2400	2405	2410	2415	2420	2425	2430	2435	2440	2445	2450	2455	2460	2465	2470	2475	2480	2485
Efficiency (%)	39.5	39.7	38.7	40.1	40.3	40.9	41.1	40.8	39.6	41.3	40.7	40.5	40.4	40.2	37.7	37.3	38.2	38.0
Peak Gain (dBi)	1.0	1.0	0.9	1.1	1.2	1.3	1.3	1.3	1.2	1.4	1.4	1.3	1.3	1.4	1.1	1.1	1.3	1.3

Test Date: _____2023/02/02_____

3. 3D Radiation Pattern Measurement

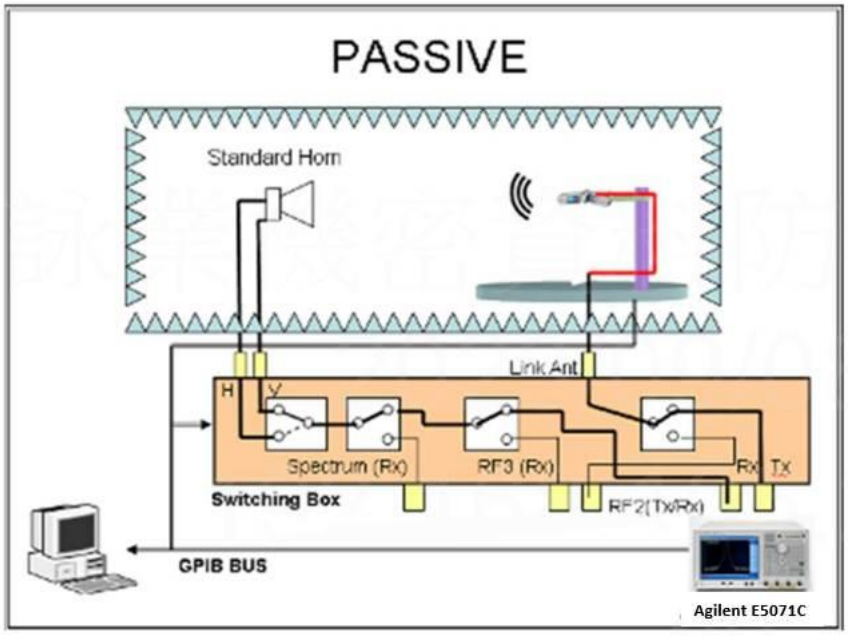
3.1 Test Location

3D radiation pattern measurement in the anechoic chamber

3.2 Description of the anechoic chamber

Please fill in our chamber specification
Length: 8M
Width: 4M
Height: 4M

Please post a Block diagram to show the chamber and test equipment like the picture



3.3 Test Instruments

Example(all instrument here should have calibration date, only turntable/controller/software could be exempted and software needs SW version):

Description	Model No.	Serial No.	Last Calibration
Spectrum Analyzer Keysight	E5071C	N/A	2022/07/22
Chamber	ETS-844	N/A	N/A
Software	OTA Maxwell 3.7.1	N/A	N/A

Note: The calibration interval of the above test instruments is _12_ months

3.4 Test Procedure

a. Connect the EUT to the network analyzer and record the EUT's power settings and measured conducted power.
b. Securely mount the EUT at the center of the turntable, record the coordinates, and take photographs.
Configure the software to continuously transmit power from the EUT (100% duty cycle). Ensure that the transmitted signal is stable and at the maximum radio frequency power level.
c. Set the channel power function through the software.
d. Read the data from the network analyzer and record it at the following locations. 6-1 Rotate the turntable along the horizontal plane in 15-degree increments between 0 and 360 degrees. 6-2 The software will record polarization data (theta and phi) for each position.
e. Rotate the EUT by 90 degrees and repeat steps 6-1 and 6-2 until measurements are completed for all three planes (X-Y, X-Z, Y-Z)."

3.5 Test Setup photos

confidential

3.6 3D Pattern Test Plot