

Regulatory BT Antenna Information

Platform information					
Brand	ODM	RMN	Intel platform (ex: Yes, No or NA)	Platform type (ex: regular NB, convertible PC, AIO...etc)	*SAR minimum separation (mm)
HP Inc.	Primax	TPN-C162K	Yes	Keyboard	0
*****Please fill in exact product model name and make sure the model name is visible on product cover or any parts for end users recognize for authority inspection.					
Antenna information					
Vendor		Type	Antenna Part number		
Primax		PCB Antenna	651000048470		
Peak gain w/ cable loss (dBi)*					
BT - 2.4GHz					
2.91					
Module Information					
Model		Form factor and suffixes			
nRF52840		BT 5.1			

Antenna manufacturer: ZHUHAI JINZHAOFENG CIRCUIT BOARD CO LTD
Antenna manufacturer Address: plant 3, Sancun Area, Fushan Industrial, Park Zhuhai, Guangdong 519175 CHINA

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1. Applicable test methods

Measurement System Information

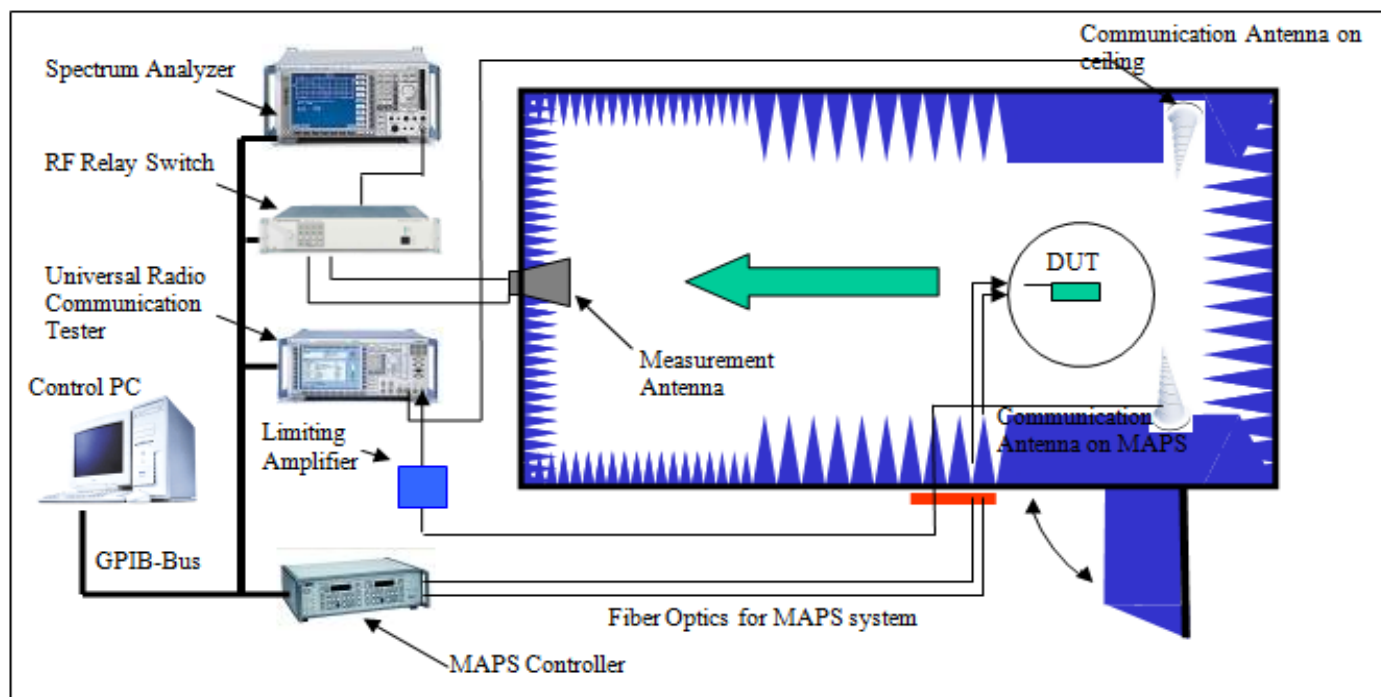
General Information

Testing Condition:

- Temperature: $25 \pm 3^\circ\text{C}$
- Humidity: $< 80\%$

Measurement Facility:

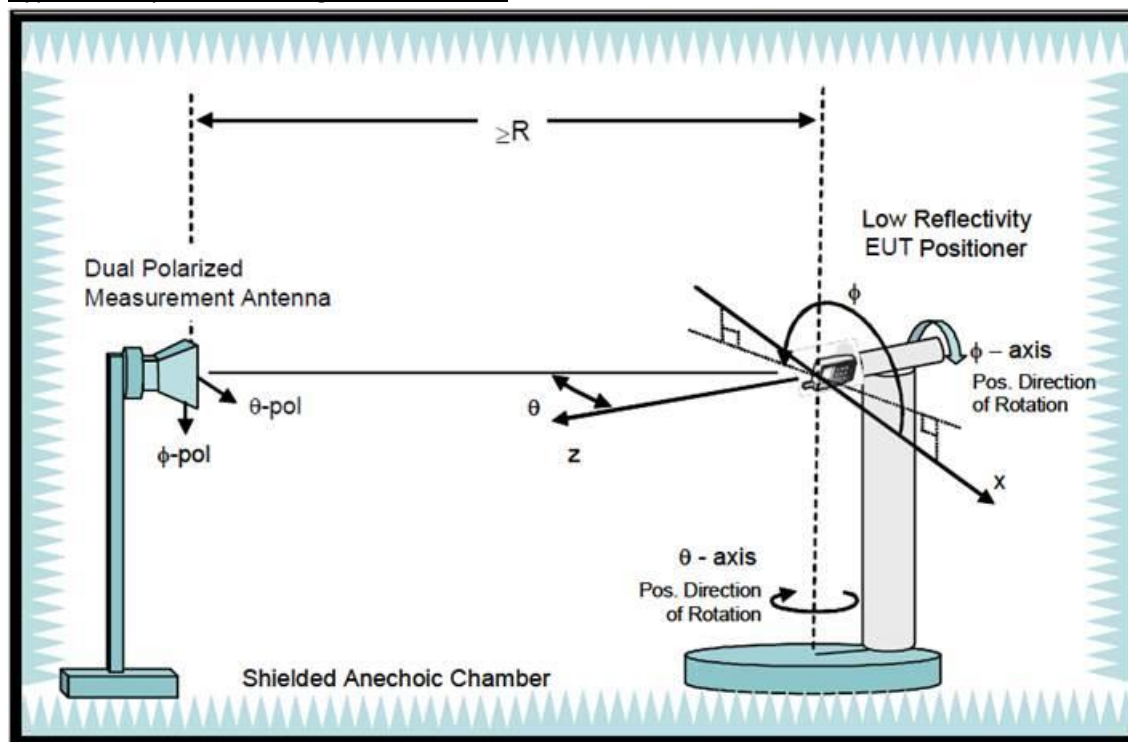
- Measurement Chamber: ETS-Lindgren 3D fully anechoic chamber and its measuring system (AMS-8500)
- Base Station Simulator: Agilent E5515C
- ETS-Lindgren EMCO-2090 Auxiliary Ports RF Relay Switches
- Spectrum Analyzer: Agilent N9010A
- Network Analyzer: Agilent E5071C



2. Test & System Description

a. Test setup

Typical Setup for ETS-Lindgren AMS-8500:



b. Equipment list

Equipment Description	Manufacturer	Identification no.	Current calibration date	Next calibration date
Network analyzer	Agilent	E5071C	2022/02/21	2023/02/20
Measurement software	ETS-Lindgren	EMQuest 1.14	N/A	N/A
Multi axis positioning system(MAPSTM)	ETS-Lindgren	EMCO 2115	N/A	N/A
Multi axis positioning system(MAPSTM)	ETS-Lindgren	EMCO 2110	N/A	N/A
MAPSTM controller	ETS-Lindgren	EMCO 2090	N/A	N/A
Horn antenna	ETS-Lindgren	3164-10	N/A	N/A

Note: Chamber calibration included full set of implement.

Antenna Information

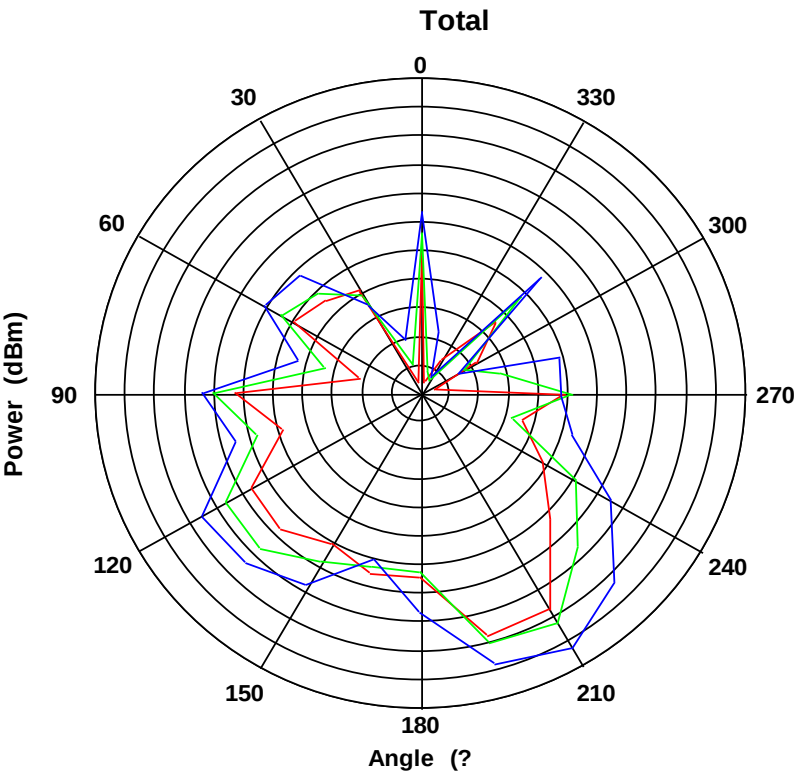
Section 1. Antenna Assembly Specifications

1A	1B	1C	1D		1E	1F	1G	1H
Antenna Part Number	Manufacturer	Antenna Type	Cable Assembly Part Number and Information	Freq Range MHz	* Peak Gain W/ Cable loss (dBi)	Peak Gain w/o Cable Loss (dBi)	Max VSWR	Cable Loss (dB)
P/N: 651000048470	Primax	PCB antenna	N/A	2402	1.41	N/A	1.386	N/A
				2442	1.66	N/A	1.1234	N/A
				2480	2.91	N/A	1.218	N/A

Section 3. Radiation characteristics of antenna loaded in Host Platform

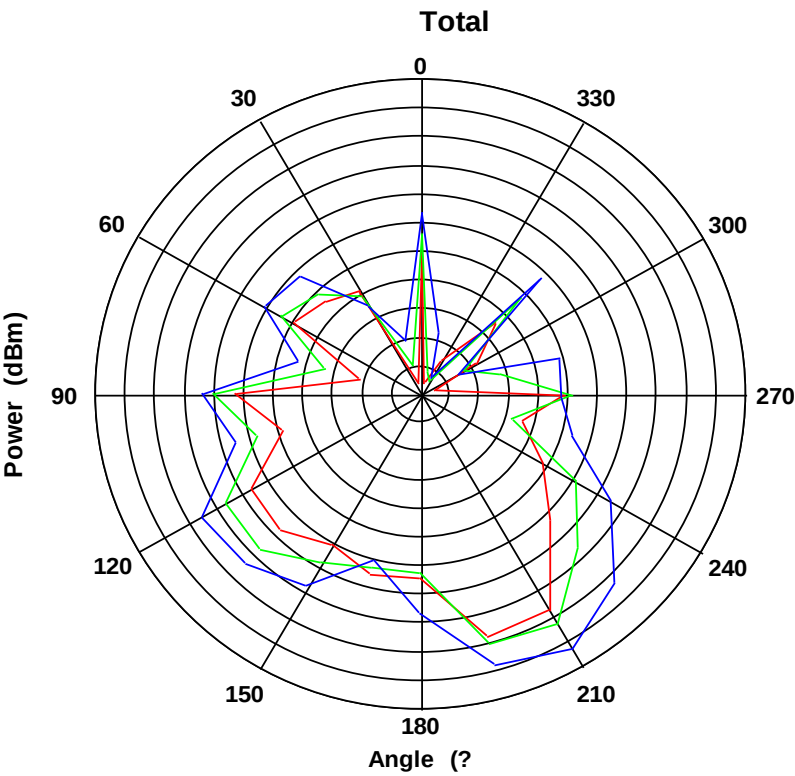
Max Antenna 2D Radiation Pattern 2402 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
2402	1.41



Max Antenna 2D Radiation Pattern 2442 MHz

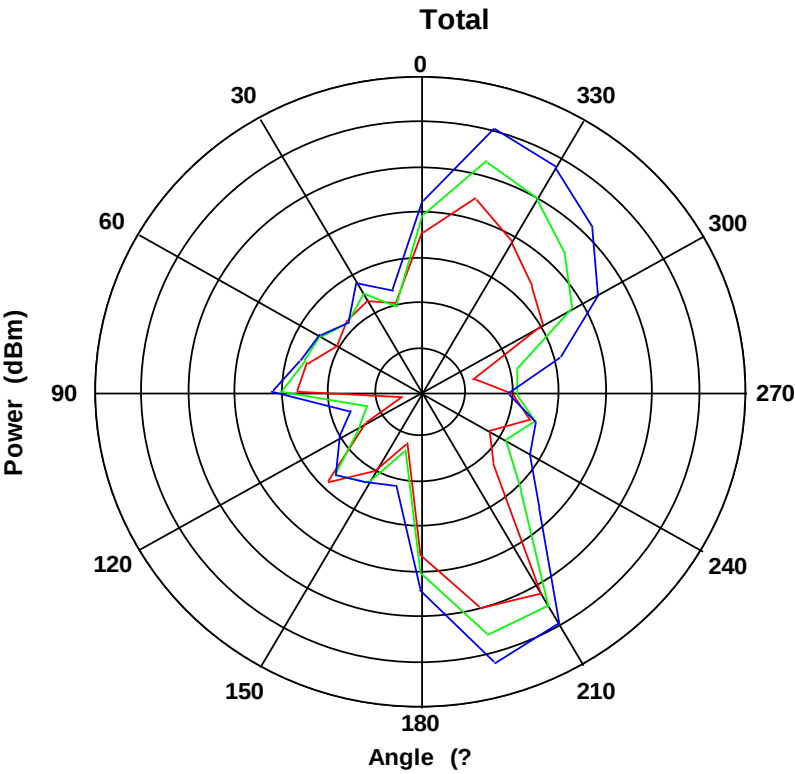
Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
2442	1.66



2402 MHz
2442 MHz
2480 MHz

Max Antenna 2D Radiation Pattern 5250-5350 MHz

Frequency (MHz)	Horizontal+ Vertical (dBi) peak (dBi)
2480	2.91



2402 MHz
2442 MHz
2480 MHz