

Antenna Report

Radiation Characteristics of antenna located into a Host Platform

Unique ID Generator

202601-112719

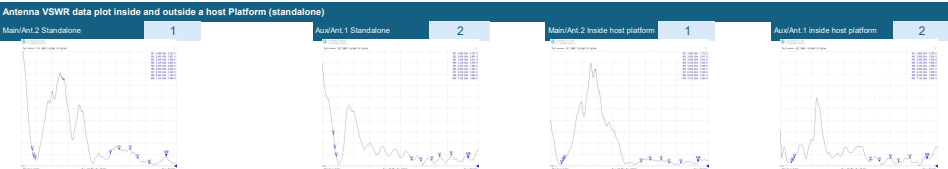
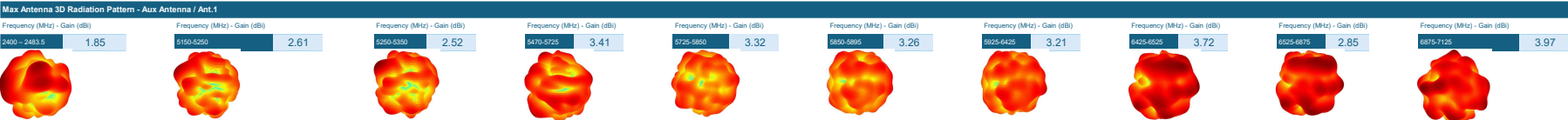
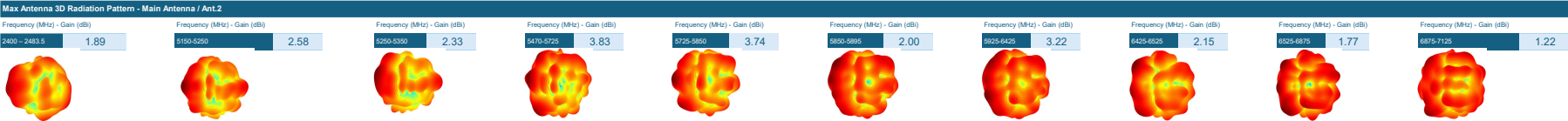
Copyrights belong to the owner of the generator. It is advised to use the report every time the file is updated. The same ID will be the expected in the file too.

Antenna Peak Gain and VSWR w/ cable loss (dBi) ¹													2400 ~ 2483.5 MHz 5150-5250 MHz 5250-5350 MHz 5470-5725 MHz 5725-5850 MHz 5850-5895 MHz 5925-6425 MHz 6425-6625 MHz 6625-6875 MHz 6875-7125 MHz										Notes: The gain is measured in the E-plane. The phase is measured in the H-plane.			
Antenna Cycle	OEM	ODM	Host Platform Name	Host Platform Type	Intel-Platform	Antenna-Manufacturer	Antenna-Type	Antenna-PN	Antenna Main/Aux	SAR min separation (mm)	WiFi-Module	Applicable Certification	SAR FCC-ISED C/PC AP/DP	Antenna Metrics ²	2.4 GHz	5.2 GHz	5.3 GHz	5.8 GHz	5.9 GHz	6.2 GHz	6.5 GHz	6.7 GHz	7.0 GHz	Applicant e-mail	Application Date	UniqueID
202601	Lenovo China	LCFC	TP00172B_ThinkPad T14s Gen 7	Regular NB	AMD Panther Lake	ATC	PIFA	DC330028E00	Main/Ant.2	10.80	MT7925B14L	YES	Gain	1.89	2.58	2.33	3.83	3.74	2.00	3.22	2.15	1.77	1.22	-----	2025-12-17	202601-095826
202601	Lenovo China	LCFC	TP00172B_ThinkPad T14s Gen 7	Regular NB	AMD Panther Lake	ATC	PIFA	DC330028E00	Aux/Ant.1	10.80	MT7925B14L	YES	Gain	1.85	2.61	2.52	3.41	3.32	3.26	3.21	3.72	2.85	3.97	-----	2025-12-17	202601-095826
202601	Lenovo China	LCFC	TP00172B_ThinkPad T14s Gen 7	Regular NB	AMD Panther Lake	ATC	PIFA	DC330028E00	Main/Ant.2	10.80	MT7925B14L	YES	VSWR	1.41	1.33	1.44	1.38	1.50	1.34	1.28	1.24	1.43	1.35	-----	2025-12-17	202601-095826
202601	Lenovo China	LCFC	TP00172B_ThinkPad T14s Gen 7	Regular NB	AMD Panther Lake	ATC	PIFA	DC330028E00	Aux/Ant.1	10.80	MT7925B14L	YES	VSWR	1.43	1.58	1.67	1.21	1.67	1.59	1.46	1.64	1.39	1.62	-----	2025-12-17	202601-095826

1: 3D Antenna Peak Gain required being test in system basis
2: OEM/ODM and platform antenna vendors should try to adapt the antenna with a VSWR of 2 (S11<-10dB) for a good antenna matching, and if not possible, try to achieve a VSWR of 3 (S11<-6dB) for a medium antenna matching.

Intel Reference Antenna Gain and Type										
Antenna Type	2.4 GHz	5.2 GHz	5.3 GHz	5.8 GHz	5.9 GHz	6.2 GHz	6.5 GHz	6.7 GHz	7.0 GHz	
PiFAS	Design Reference	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	
PiFAB	For WiFi 6E and eee	3.24	3.73	4.77	4.97	4.72	4.83	4.30	5.37	5.59
PiFAX	From WiFi 7 module	2.95	5.11	5.15	5.13	4.45	5.02	5.02	4.96	4.96
Dipole	For WiFi 6E and eee	2.89	2.92	3.19	4.41	4.22	4.83	4.30	4.49	5.34
Dipole7	From WiFi 7	2.95	4.03	4.11	5.15	5.13	4.45	5.02	4.71	4.49
Monopole	From WiFi 7	2.83	4.57	4.44	4.95	4.43	4.87	4.91	4.91	4.79

3D Peak Antenna gain should be equal or greater than -2 dBi. If a host integrator plans to use a lower gain antenna of the same type, additional CBP(FCC)/EDT(EU) testing need to be performed while the module is installed in the host.



Maximum VSWR of 2 (S11<-10dB) is a good antenna matching. If not possible, try to achieve a VSWR of 3 (S11<-6dB) for a medium antenna matching.

non Combo Cable Loss (dB)										
	2.4GHz	5.2GHz	5.3GHz	5.8GHz	5.9GHz	6.2GHz	6.5GHz	6.7GHz	7.0 GHz	
	2400-2483.5 MHz	5150-5250MHz	5250-5350MHz	5470-5725MHz	5725-5850MHz	5850-5895MHz	5925-6425 MHz	6425-6625 MHz	6625-6875 MHz	6875-7125MHz
Main	0.38	0.58	0.58	0.60	0.61	0.62	0.63	0.64	0.65	
Aux	0.63	0.96	0.97	1.00	1.01	1.02	1.04	1.06	1.07	1.09