Antenna Report

Radiation Characteristics of antenna located into a Host Platform

Unique ID Generator
202503-152306

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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	6425-6525 MHz	6525-6875 MHz	6875-7125 MHz			
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 C1PC Apply	Antenna Metrics[2]	2.4 GHz	5.2 GHz	5.3 GHz	5.6 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
202503	Lenovo China	LCFC	ThinkBook Plus G6 Rollable	Regular NB	Yes	Luxshare-ict	PIFA	DC330028M00	Main/Ant.2	0.65	BE201D2W	KCA, CE, FCC, ISED, NCC, KCC, M	NO	Gain	0.53	1.70	1.70	2.32	2.44	2.44	2.67	1.83	1.83	1.25	Ada.Xiang@lcfuturecenter.com	2025-03-04	202503-103709
202503	Lenovo China	LCFC	ThinkBook Plus G6 Rollable	Regular NB	Yes	Luxshare-ict	PIFA	DC330028M10	Aux/Ant.1	0.65	BE201D2W	KCA, CE, FCC, ISED, NCC, KCC, M	NO	Gain	1.43	1.13	0.77	0.87	0.91	1.62	2.31	2.41	2.41	3.20	Ada.Xiang@lcfuturecenter.com	2025-03-04	202503-103709
202503	Lenovo China	LCFC	ThinkBook Plus G6 Rollable	Regular NB	Yes	Luxshare-ict	PIFA	DC330028M00	Main/Ant.2	0.65	BE201D2W	KCA, CE, FCC, ISED, NCC, KCC, M	NO	VSWR	1.97	2.08	1.95	2.00	2.00	2.00	2.00	2.00	2.00	2.00	Ada.Xiang@lcfuturecenter.com	2025-03-04	202503-103709
202503	Lenovo China	LCFC	ThinkBook Plus G6 Rollable	Regular NB	Yes	Luxshare-ict	PIFA	DC330028M10	Aux/Ant.1	0.65	BE201D2W	KCA, CE, FCC, ISED, NCC, KCC, M	NO	VSWR	2.20	2.25	2.03	2.00	2.00	2.00	2.00	2.00	2.00	2.00	Ada.Xiang@lcfuturecenter.com	2025-03-04	202503-103709

1: 3D Antenna Peak Gain required being test in system basis

2: Maximum VSWR level required by the Wi-Fi module vendor to ensure proper antenna matching is 2 (S11 < -10 dB) for dual band LB/HB modules and 2.32 (S11 < -8 dB) for triple band LB/HB/UHB modules

Intel Reference Antenna Gain and Type

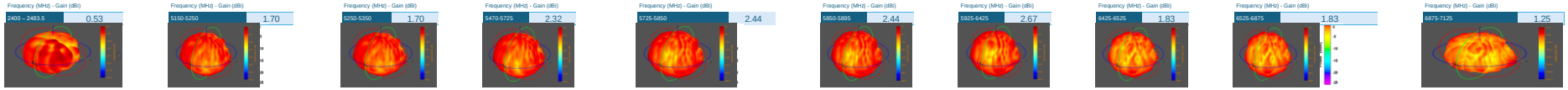
Antenna Type	Application Module	2.4 GHz	5.2 GHz	5.3 GHz	5.6 GHz	5.8 GHz	5.9 GHz	6.2 GHz	6.5GHz	6.7 GHz	7.0 GHz
PIFA5	Design Reference	3.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
PIFA6	For WiFi 6E and earlie	3.24	3.64	3.73	4.77	4.97	4.72	4.83	4.30	5.37	5.59
PIFA7	From WiFi 7 modules	2.95	5.11	4.55	5.15	5.13	4.45	5.02	5.02	4.96	4.96
Dipole	For WiFi 6E and earlie	2.89	2.92	3.19	4.41	4.22	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	4.96
Monopole	From WiFi 7	2.83	4.57	4.44	4.95	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.

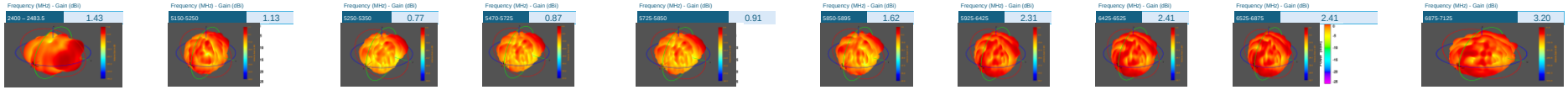
Applicable limit per antenna type and country cert — Selected Cert: UKCA, CE, FCC, ISED, NCC, KCC

		2.4 GHz	5.2 GHz	5.3 GHz	5.6 GHz	5.8 GHz	5.9 GHz	6.2 GHz	6.5GHz	6.7 GHz	7.0 GHz
Main/Ant. 2	PIFA	2.95	5.00	4.55	5.00	5.00	4.45	5.00	5.00	4.96	4.96
AUX/Ant. 1	PIFA	2.95	5.00	4.55	5.00	5.00	4.45	5.00	5.00	4.96	4.96

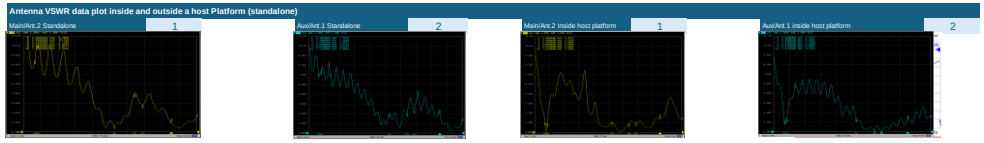
Max Antenna 3D Radiation Pattern - Main Antenna / Ant.2



Max Antenna 3D Radiation Pattern - Aux Antenna / Ant.1



Antenna VSWR data plot inside and outside a host Platform (standalone)



Maximum VSWR level required by the Wi-Fi module vendor to ensure proper antenna matching is 2 (S11 < -10dB)