

Radiation Characteristics of antenna located into a Host Platform

Antenna Peak Gain and VSWR w/ cable loss (dB) ¹														Unique ID Generator 2025 03-161541 1. Operate within the value of the parameter 2. Operate for integrated every part on the 3. Operate. The value 2.0 value for standard test module.														
Antenna Cycle	OEM	ODM	Host Platform Name	Host Platform Type	Intel Platform	Antenna Manufacturer	Antenna Type	Antenna-PN	Antenna Model Part	SAR min Separation (cm)	WiFi-Module	Applicable Certification	SAR FCC/ISED CUPC RoPpy	Antenna Metric ²	2400 ~ 2483.5 MHz	5150-5250 MHz	5270-5280 MHz	5470-5725 MHz	5725-5850 MHz	5850-5955 MHz	5925-6425 MHz	6425-6525 MHz	6525-6875 MHz	6875-7125 MHz	Applicant e-mail	Application Date	UniqueID	
202503	Lanwei China	LCFC	ThinkBook Plus G6 Rolslate	Regular NB	Yes	INPAQ	PIFA	DC330038LL0	MainAnt.2	0.65	BE2020ZVW	UKCA, CE, FCC, ISED, NCC, KCC, MIC	NO	Gain	0.53	1.70	1.70	2.32	2.44	2.44	2.67	1.83	1.83	1.25	Ada.Xiang@chinaucenter.com	2025-03-04	2025 03-161541	
202503	Lanwei China	LCFC	ThinkBook Plus G6 Rolslate	Regular NB	Yes	INPAQ	PIFA	DC330038LL0	AuxAnt.1	0.65	BE2020ZVW	UKCA, CE, FCC, ISED, NCC, KCC, MIC	NO	Gain	1.43	1.13	0.77	0.87	0.91	1.62	2.31	2.41	2.41	3.20	Ada.Xiang@chinaucenter.com	2025-03-04	2025 03-161541	
202503	Lanwei China	LCFC	ThinkBook Plus G6 Rolslate	Regular NB	Yes	INPAQ	PIFA	DC330038LL0	MainAnt.2	0.65	BE2020ZVW	UKCA, CE, FCC, ISED, NCC, KCC, MIC	NO	VSWR	1.97	2.08	1.95	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	Ada.Xiang@chinaucenter.com	2025-03-04	2025 03-161541
202503	Lanwei China	LCFC	ThinkBook Plus G6 Rolslate	Regular NB	Yes	INPAQ	PIFA	DC330038LL0	AuxAnt.1	0.65	BE2020ZVW	UKCA, CE, FCC, ISED, NCC, KCC, MIC	NO	VSWR	2.20	2.25	2.03	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	Ada.Xiang@chinaucenter.com	2025-03-04	2025 03-161541

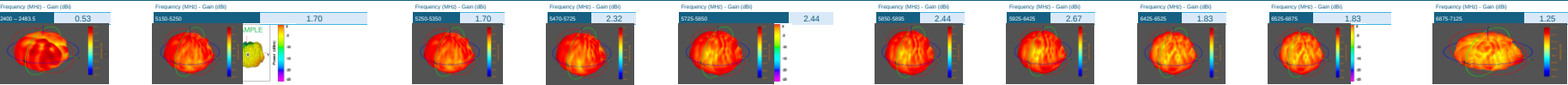
1. 3D Antenna Peak Gain required being test in system basis

2. Maximum VSWR been required by the Wi-Fi module vendor to ensure proper antenna matching is 2 (S11 < -10 dB) for dual band LRRH modules and 3.20 (S11 < -8 dB) for triple band LRRH/LRR modules

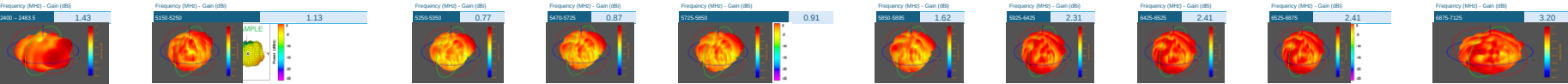
Intel Reference Antenna Gain and Type											
Antenna Type	Application Module	2.4 GHz	5.2 GHz	5.3 GHz	5.8 GHz	5.9 GHz	5.9 GHz	5.9 GHz	6.5GHz	6.7 GHz	7.3 GHz
PIFAS	Design Reference	3.08	3.95	3.86	3.86	3.95	3.86	3.95	3.95	3.95	3.95
PIFAS	For WiFi 6E and earlier	3.24	3.64	3.73	4.37	4.37	4.72	4.53	4.30	5.37	5.39
PIFAS	From WiFi 7 modules	2.96	3.14	3.56	5.24	5.11	5.46	5.02	5.00	4.96	4.96
Optical	For WiFi 6E and earlier	2.89	2.52	2.33	4.45	4.33	4.22	4.53	4.30	4.49	5.34
Optical	From WiFi 7	2.96	4.00	4.41	5.26	5.13	4.46	5.02	4.71	4.49	4.96
Microstrip	From WiFi 7	2.83	4.57	4.64	4.96	4.96	4.43	4.57	4.94	4.94	4.79

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

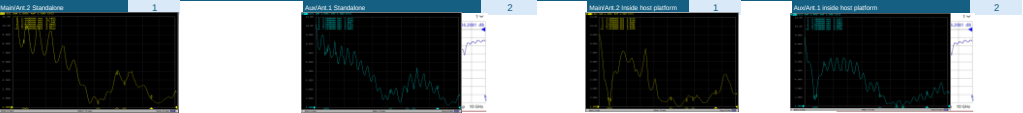
Max Antenna 3D Radiation Pattern - Main Antenna / Ant.2



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)