

Antenna Report

Rev 04

Radiation Characteristics of antenna located into a Host Platform

Antenna Peak Gain and VSWR w/ cable loss (dB) ¹													2400 ~ 2483.5 MHz 5100-5200 MHz 5200-5300 MHz 5470-5720 MHz 5720-5800 MHz 5800-5985 MHz 5925-6400 MHz 6400-6525 MHz 6525-6675 MHz 6675-7125 MHz														
Antenna Cycle	CRM	CRM	Host Platform Name	Host Platform Type	Antenna Platform	Antenna Manufacturer	Antenna Type	Antenna P/N	SAR mW/kg (max)	RFI Module	Applicable Certification	SAR FCC/ISED C/ICP Apply	Antenna Metric ²	2.4 GHz	5.2 GHz	5.3 GHz	5.8 GHz	5.9 GHz	5.9 GHz	6.2 GHz	6.5 GHz	6.7 GHz	7.0 GHz	Applicant e-mail	Application Date	UniqueID	
202503	Lemnos Japan	Watson	TP0118BA,TP0118BB, ThinkPad L13 Gen 8, ThinkPad L13 2-in-1 Gen 8, ThinkPad L13 Gen 8 AMD, ThinkPad L13 2-in-1 Gen 8 AMD, ThinkPad S2 Gen 10, ThinkPad S2 2-in-1 Gen 10	Convertible PC	Yes	Speed	PFA	025.903.EJ.0001	MacroV4.2	2.00	8E201020N, A0211020W	*, FCC, ISED, NCC,	NO	Gain	0.77	1.44	0.01	-1.33	-1.19	-0.08	0.37	0.90	2.74	2.74	antenna@lemnos.jp	2025-03-19	202503~154216
202504	Lemnos Japan	Watson	TP0118BA,TP0118BB, ThinkPad L13 Gen 8, ThinkPad L13 2-in-1 Gen 8, ThinkPad L13 Gen 8 AMD, ThinkPad L13 2-in-1 Gen 8 AMD, ThinkPad S2 Gen 10, ThinkPad S2 2-in-1 Gen 10	Convertible PC	Yes	Speed	PFA	025.903.EJ.0011	MacroV4.3	3.00	8E201020N, A0211020W	*, FCC, ISED, NCC,	NO	Gain	0.77	1.44	0.01	-1.33	-1.19	-0.08	0.37	0.90	2.74	2.74	antenna@lemnos.jp	2025-03-19	202503~154217
202503	Lemnos Japan	Watson	TP0118BA,TP0118BB, ThinkPad L13 Gen 8, ThinkPad L13 2-in-1 Gen 8, ThinkPad L13 Gen 8 AMD, ThinkPad L13 2-in-1 Gen 8 AMD, ThinkPad S2 Gen 10, ThinkPad S2 2-in-1 Gen 10	Convertible PC	Yes	Speed	PFA	025.903.BJ.0001	MacroV4.2	2	8E201020N, A0211020W	*, FCC, ISED, NCC,	NO	VSWR	1.13	1.33	1.89	1.21	1.18	1.18	1.19	1.27	1.35	1.97	lemnos_jp_jh	2025-03-19	202503~154217
202503	Lemnos Japan	Watson	TP0118BA,TP0118BB, ThinkPad L13 Gen 8, ThinkPad L13 2-in-1 Gen 8, ThinkPad L13 Gen 8 AMD, ThinkPad L13 2-in-1 Gen 8 AMD, ThinkPad S2 Gen 10, ThinkPad S2 2-in-1 Gen 10	Convertible PC	Yes	Speed	PFA	025.903.EJ.0011	MacroV4.3	2	8E201020N, A0211020W	*, FCC, ISED, NCC,	NO	VSWR	1.54	1.33	1.40	1.47	1.49	1.49	1.21	1.16	1.19	1.90	lemnos_jp_jh	2025-03-19	202503~154217

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

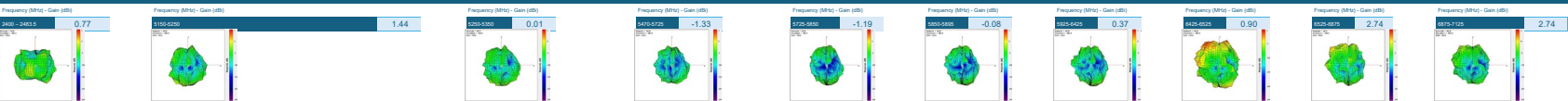
2: Maximum VSWR level required by the RFI module vendor to ensure proper antenna matching is 2 (0.11 ~ +0.05) for dual band (LNB) modules and 2.50 (0.11 ~ +0.05) for triple band (SBS/HS) modules

Intel Reference Antenna Gain and Type

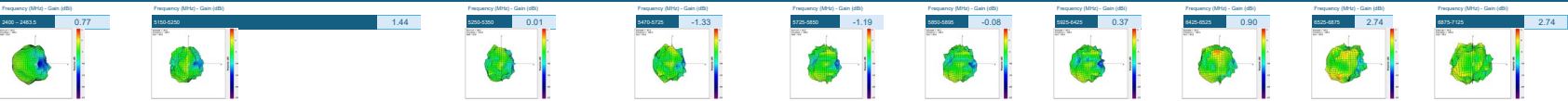
Antenna Type	Antenna Module	2.4 GHz	5.2 GHz	5.3 GHz	5.8 GHz	5.9 GHz	5.9 GHz	6.2 GHz	6.5GHz	6.7 GHz	7.0 GHz
PPFA0	Design Reference	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
PPFA6	For WFI-05 and wfi-06	3.64	3.64	3.73	4.77	4.97	4.72	4.83	4.30	5.00	5.00
PPFA7	From WFI-17 module	2.95	5.11	4.98	5.15	5.13	4.45	5.02	5.02	4.96	4.96
Optima	For WFI-05 and wfi-06	2.95	2.92	3.19	4.41	4.22	4.22	4.83	4.30	4.49	5.14
DynaW	From WFI-17	2.95	4.93	4.11	5.15	5.13	4.45	5.02	4.71	4.49	4.96
MicroPDA	From WFI-17	2.95	4.97	4.44	4.95	4.95	4.43	4.97	4.91	4.91	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 CEM/CE/EDT(ES) testing need to be performed while the module is installed in the host

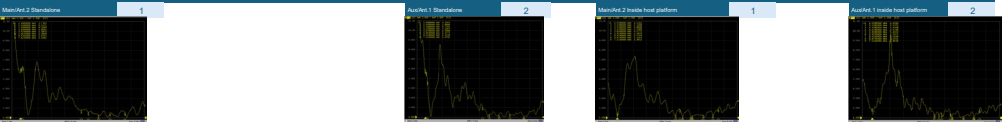
Max Antenna 3D Radiation Pattern - Main Antenna / Ant.1



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 RFI module vendor to ensure proper antenna matching is 2 (0.11 ~ +0.05)

Unique ID Generator

202503150205

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