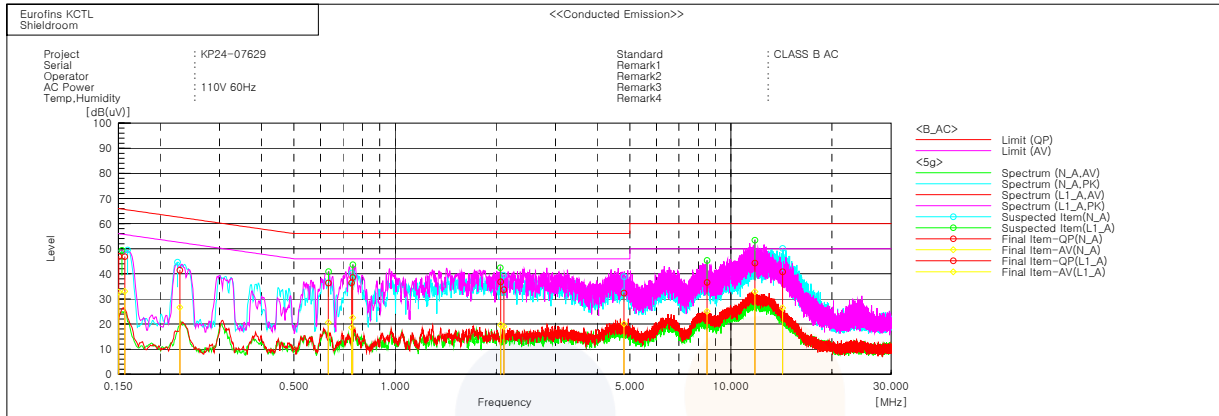


Test results

Worst case: 802.11a 2TX MIMO / UNII 4_5 865 MHz



Final Result

--- N_A Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.15667	36.7	22.9	10.1	46.8	33.0	65.6	55.6	18.8	22.6
2	0.2285	31.5	16.7	9.9	41.4	26.6	62.5	52.5	21.1	25.9
3	0.7423	26.4	8.6	10.0	36.4	18.6	56.0	46.0	19.6	27.4
4	2.10768	23.6	9.0	10.0	33.6	19.0	56.0	46.0	22.4	27.0
5	4.80376	22.2	10.0	10.1	32.3	20.1	56.0	46.0	23.7	25.9
6	14.25531	30.2	15.8	10.6	40.8	26.4	60.0	50.0	19.2	23.6

--- L1_A Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.15044	37.0	22.8	10.0	47.0	32.8	66.0	56.0	19.0	23.2
2	0.63308	26.3	10.6	10.0	36.3	20.6	56.0	46.0	19.7	25.4
3	0.74778	28.5	12.5	10.0	38.5	22.5	56.0	46.0	17.5	23.5
4	2.06177	26.9	9.8	9.9	36.8	19.7	56.0	46.0	19.2	26.3
5	8.49268	26.3	14.7	10.3	36.6	25.0	60.0	50.0	23.4	25.0
6	11.78297	33.8	22.4	10.5	44.3	32.9	60.0	50.0	15.7	17.1

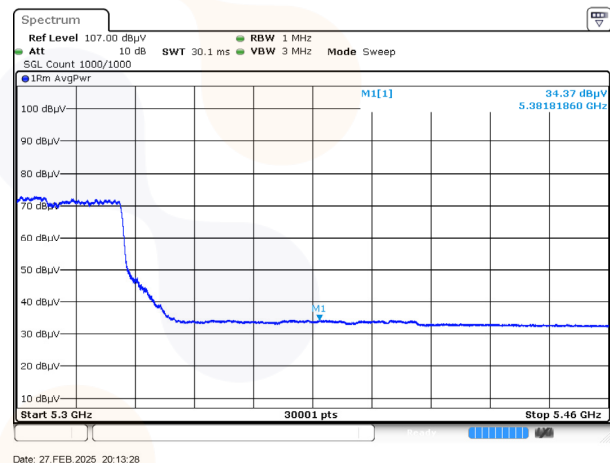
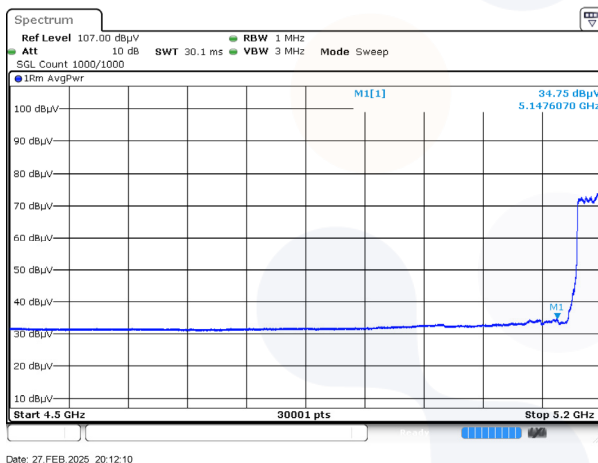
8.9. Spot check Test results

UNII 1 2TX MIMO / 802.11ac VHT160 / Band-edge

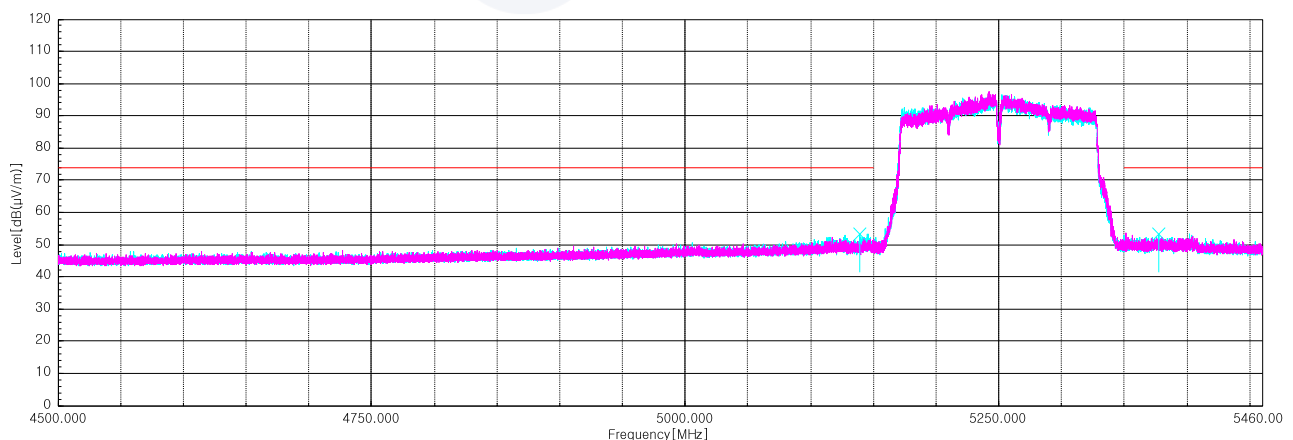
Middle Channel (5 250 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 147.61 ¹⁾	V	47.20	33.40	-27.14	-	53.46	74.00	20.54
5 381.82 ¹⁾	V	47.10	33.10	-27.04	-	53.16	74.00	20.84
Average Data								
5 147.61 ¹⁾	V	34.75	33.40	-27.14	2.69	43.70	54.00	10.30
5 381.82 ¹⁾	V	34.37	33.10	-27.04	2.69	43.12	54.00	10.88

Average data



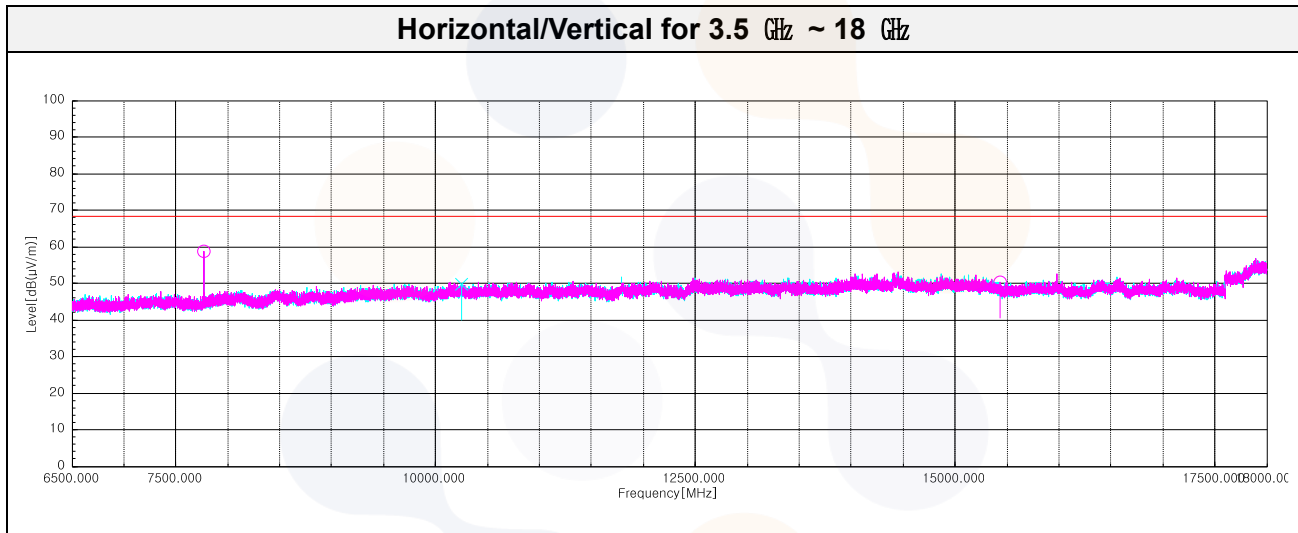
Horizontal/Vertical for Band-edge



UNII 1 2TX MIMO / 802.11a / Spurious

Lowest Channel (5 180 MHz)

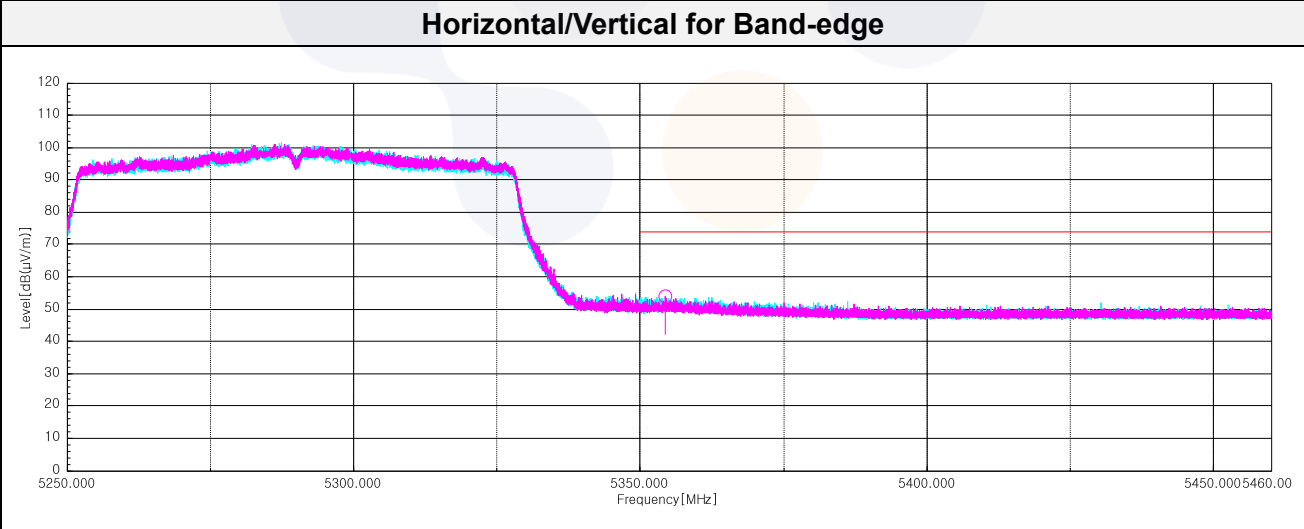
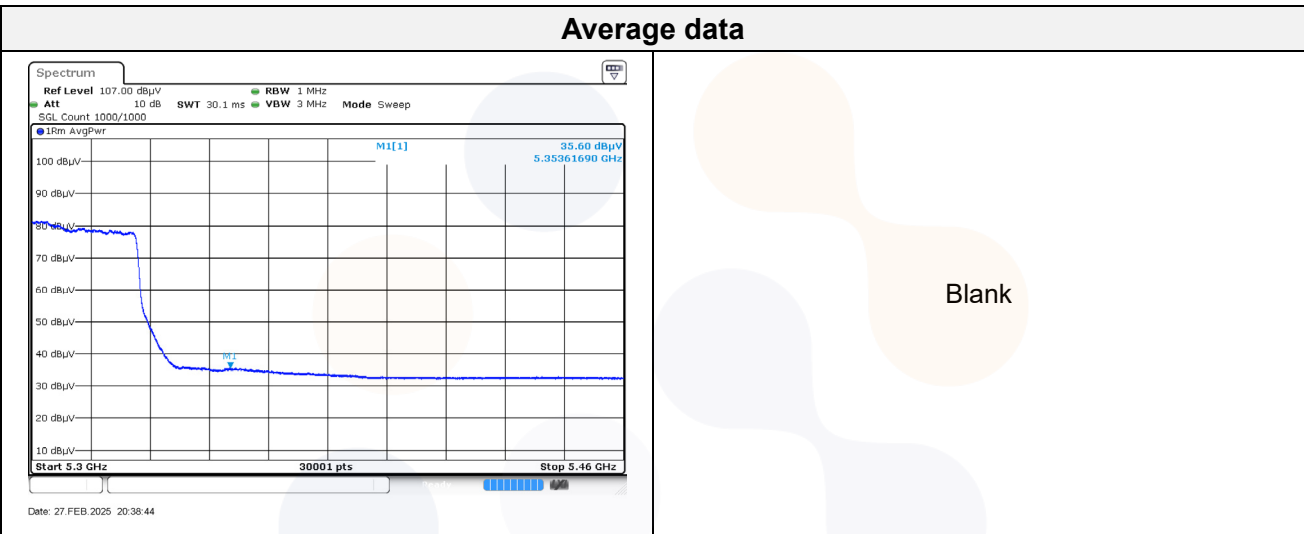
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
7 769.98	H	63.00	36.68	-41.05	-	58.63	68.20	9.57
10 249.77	V	53.40	38.70	-42.40	-	49.70	68.20	18.50
15 431.67 ¹⁾	H	52.00	38.54	-40.31	-	50.23	74.00	23.77
Average Data								
No spurious emissions were detected within 20 dB of the limit.								



UNII 2A 2TX MIMO / 802.11ac VHT80 / Band-edge

Middle Channel (5 290 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 353.62 ¹⁾	H	47.90	33.10	-27.02	-	53.98	74.00	20.02
Average Data								
5 353.62 ¹⁾	H	35.60	33.10	-27.02	1.86	43.54	54.00	10.46

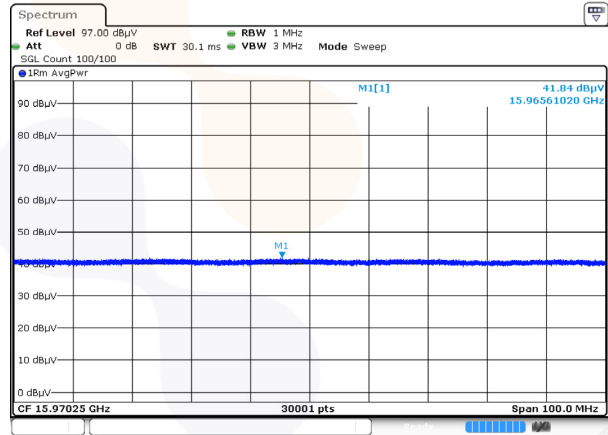
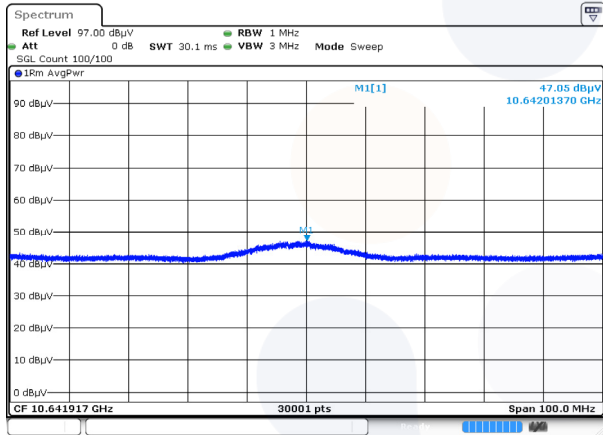


UNII 2A 2TX MIMO / 802.11a / Spurious

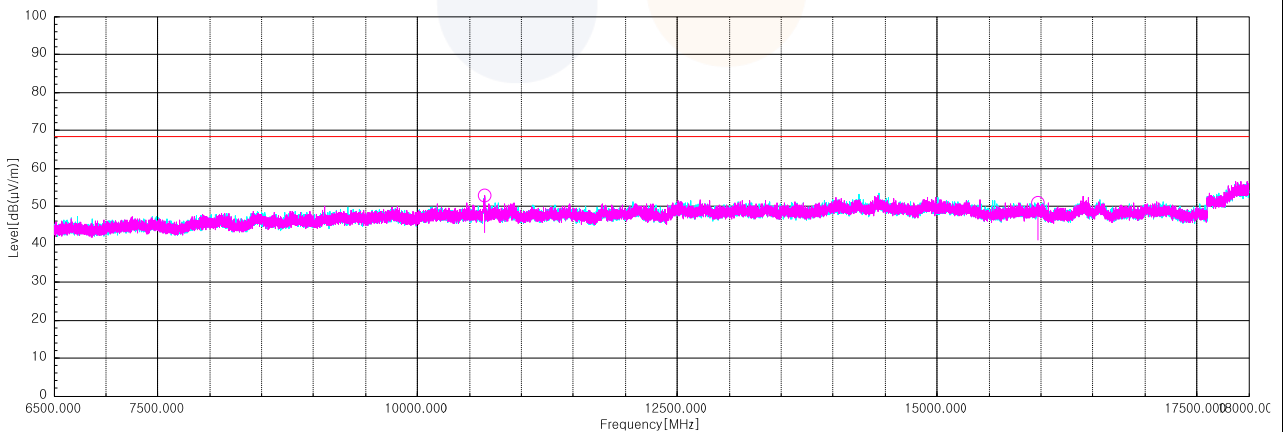
Highest Channel (5 320 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
10 642.01 ¹⁾	H	56.50	38.98	-42.49	-	52.99	74.00	21.01
15 965.61 ¹⁾	H	51.80	38.20	-39.12	-	50.88	74.00	23.12
Average Data								
10 642.01 ¹⁾	H	47.05	38.98	-42.49	0.28	43.82	54.00	10.18
15 965.61 ¹⁾	H	41.84	38.20	-39.12	0.28	41.20	54.00	12.80

Average data



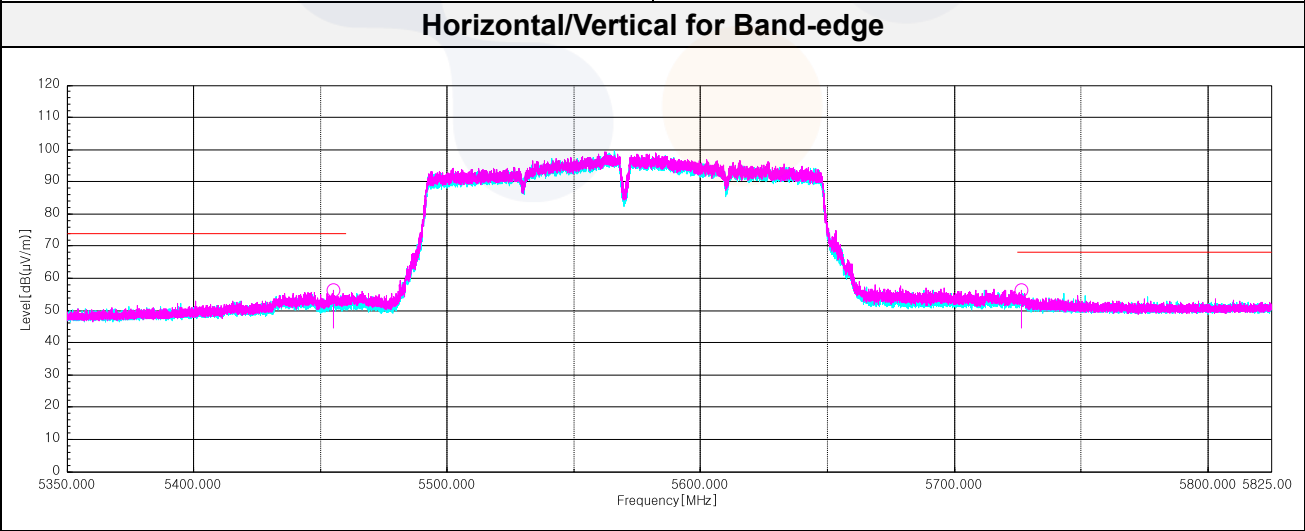
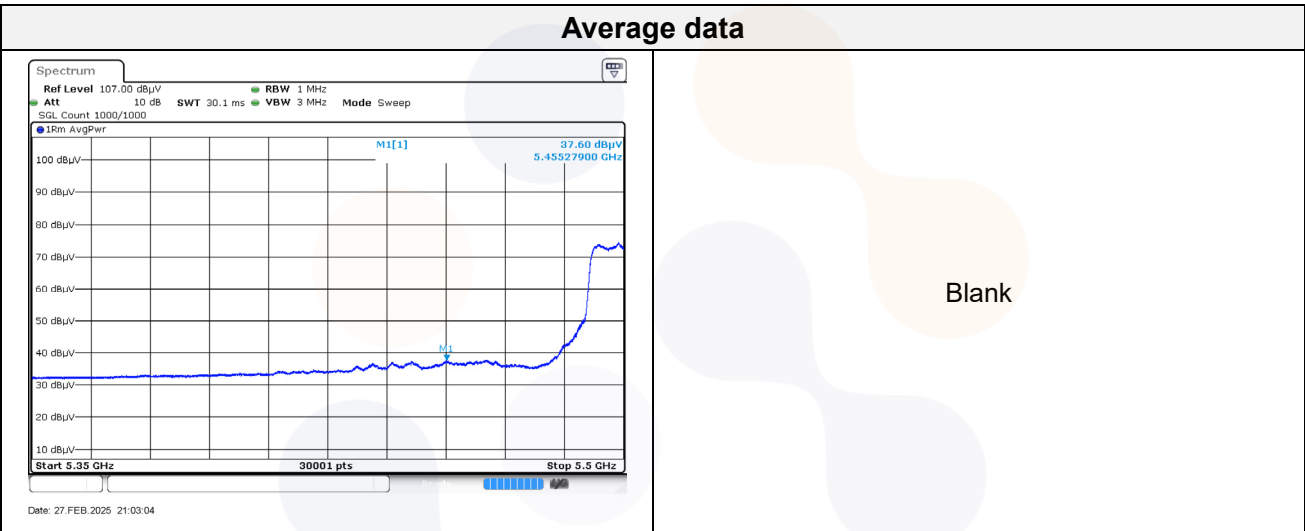
Horizontal/Vertical for 3.5 GHz ~ 18 GHz



UNII 2C 2TX MIMO / 802.11ac VHT160 / Band-edge

Middle Channel (5 570 MHz)

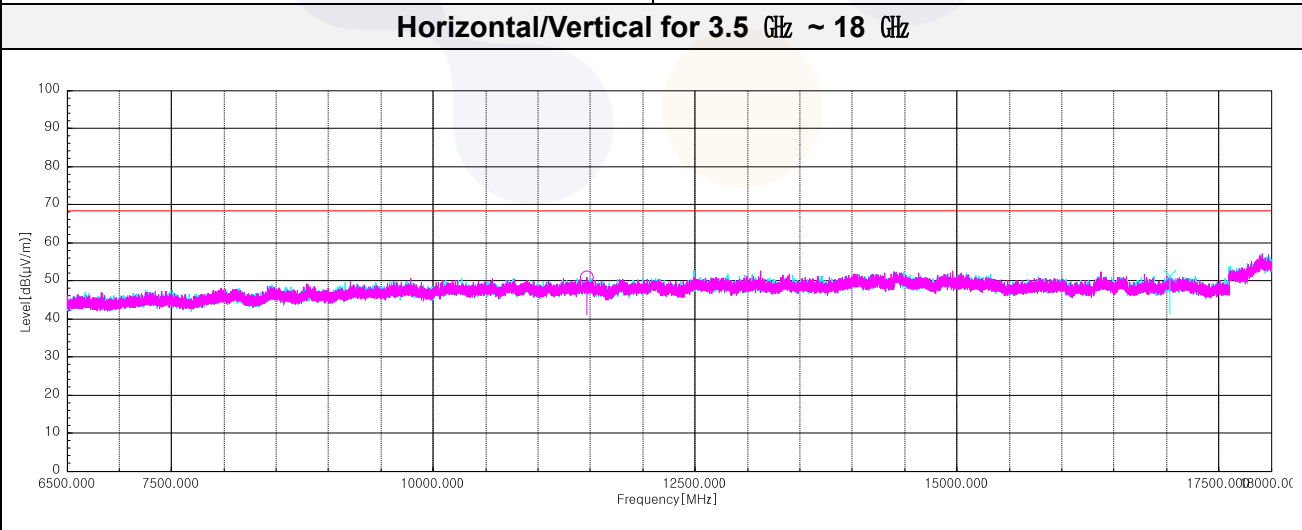
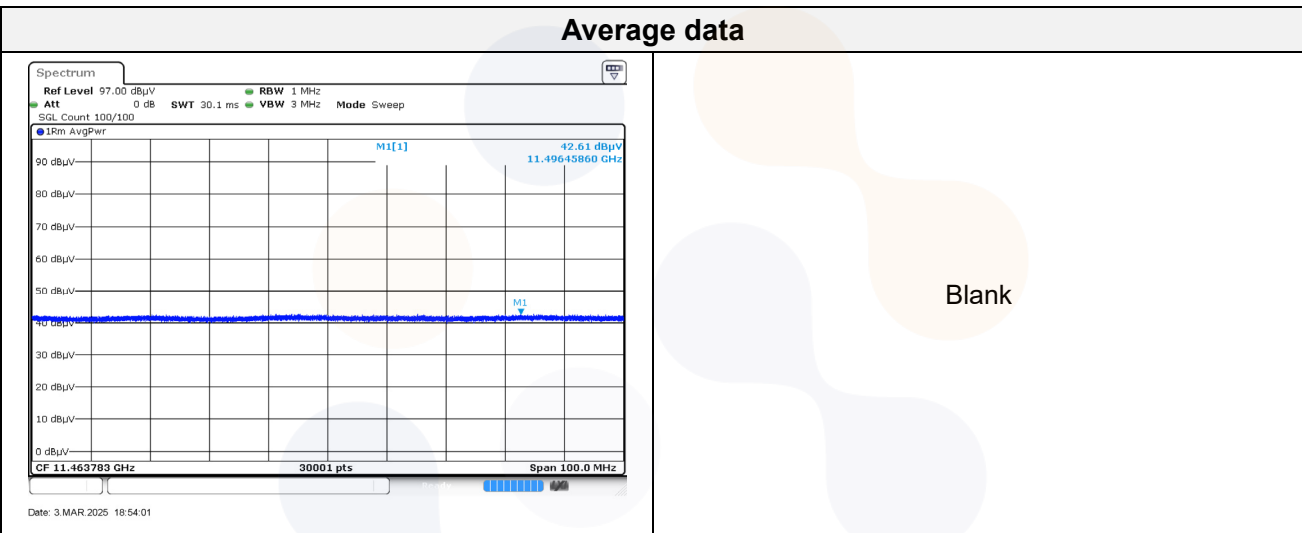
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 455.28 ¹⁾	H	50.10	33.10	-26.96	-	56.24	74.00	17.76
5 726.68	H	49.10	33.55	-26.57	-	56.08	68.20	12.12
Average Data								
5 455.28 ¹⁾	H	37.60	33.10	-26.96	2.69	46.43	54.00	7.57



UNII 2C 2TX MIMO / 802.11ac VHT80 / Spurious

Straddle Channel (5 690 MHz)

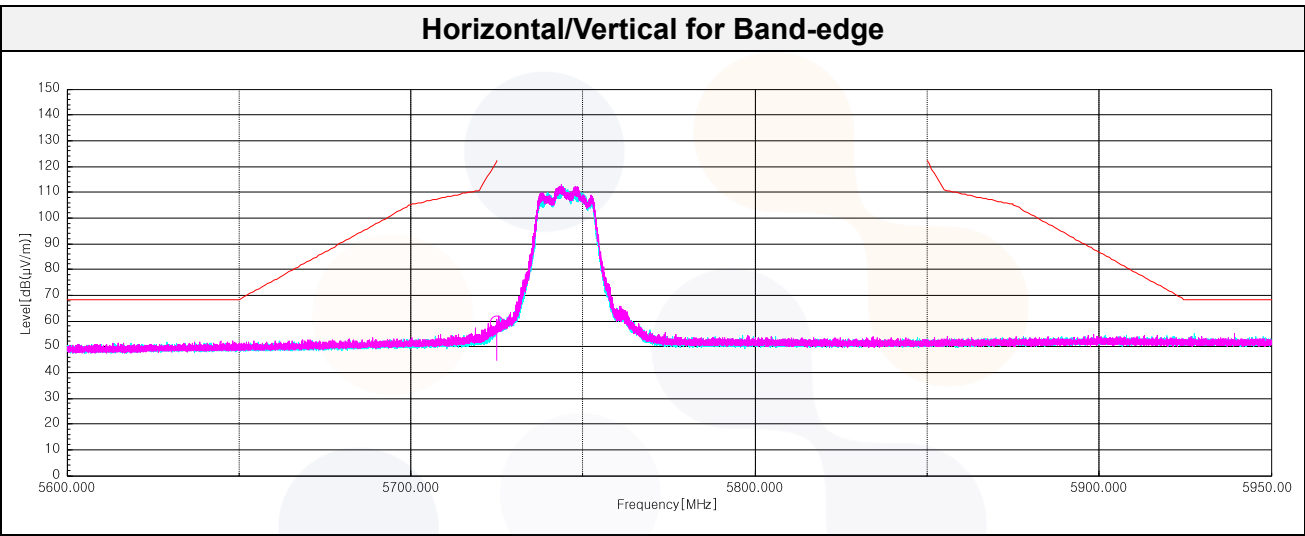
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 496.46 ¹⁾	H	53.40	38.71	-41.44	-	50.67	74.00	23.33
17 031.32	V	50.70	37.90	-37.47	-	51.13	68.20	17.07
Average Data								
11 496.46 ¹⁾	H	42.61	38.71	-41.44	1.86	41.74	54.00	12.26



UNII 3 2TX MIMO / 802.11a / Band-edge

Lowest Channel (5 745 MHz)

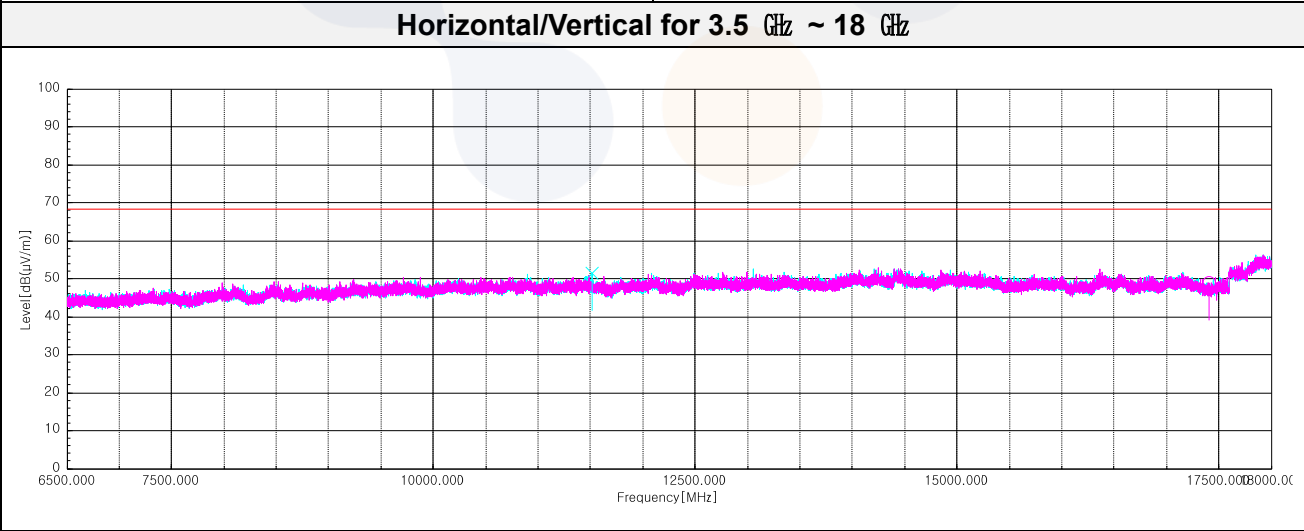
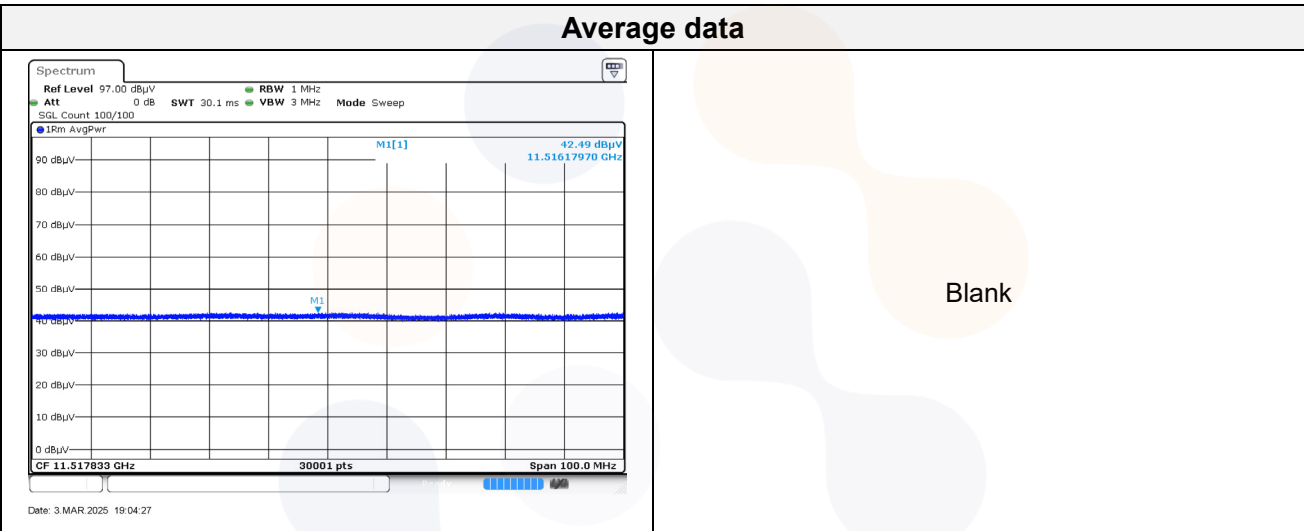
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
5 725.00 ¹⁾	H	52.40	33.55	-26.58	-	59.37	122.20	62.83
Average Data								
No spurious emissions were detected within 20 dB of the limit.								



UNII 3 2TX MIMO / 802.11ac VHT80 / Spurious

Middle Channel (5 775 MHz)

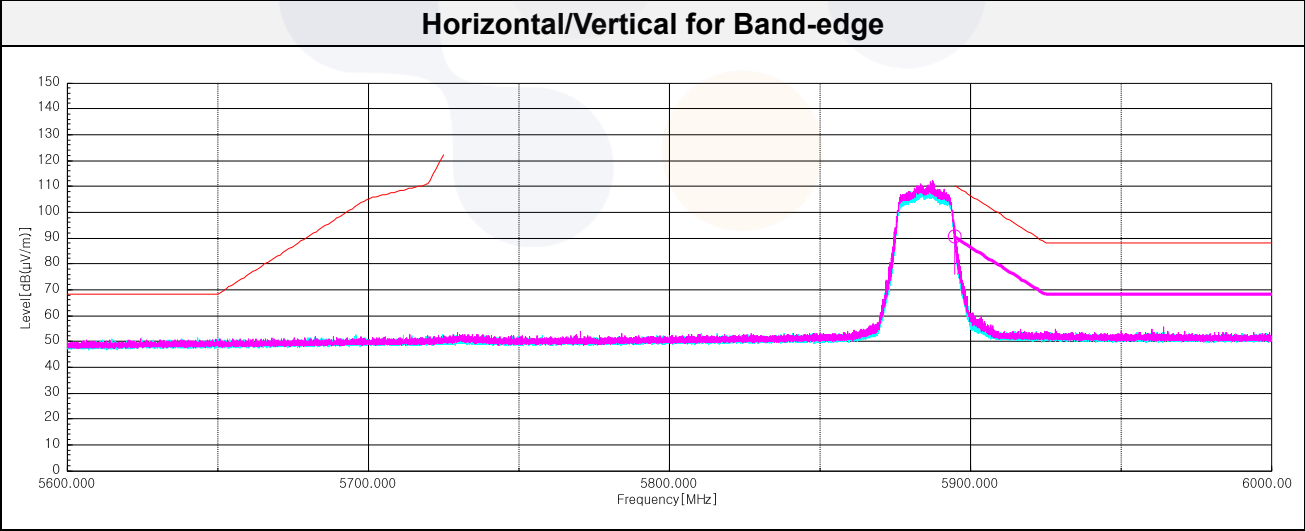
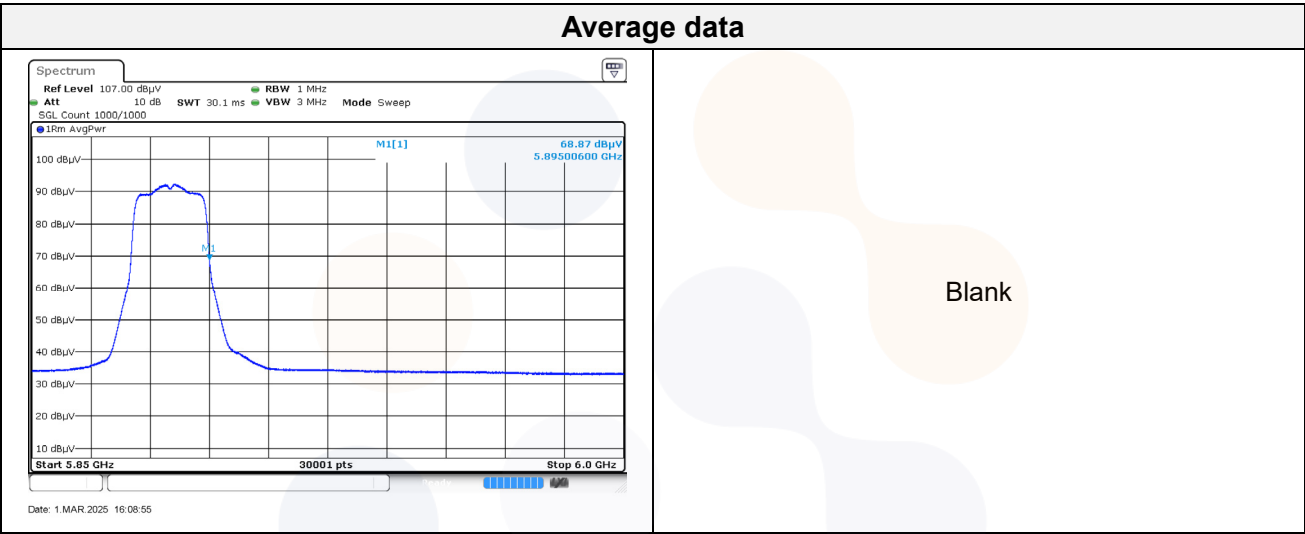
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
11 516.18 ¹⁾	V	54.30	38.80	-41.55	-	51.55	74.00	22.45
17 402.77	H	46.70	38.91	-36.62	-	48.99	68.20	19.21
Average Data								
11 516.18 ¹⁾	V	42.49	38.80	-41.55	1.86	41.60	54.00	12.40



UNII 4 2TX MIMO / 802.11n_HT20 / Band-edge

Highest Channel (5 885 MHz)

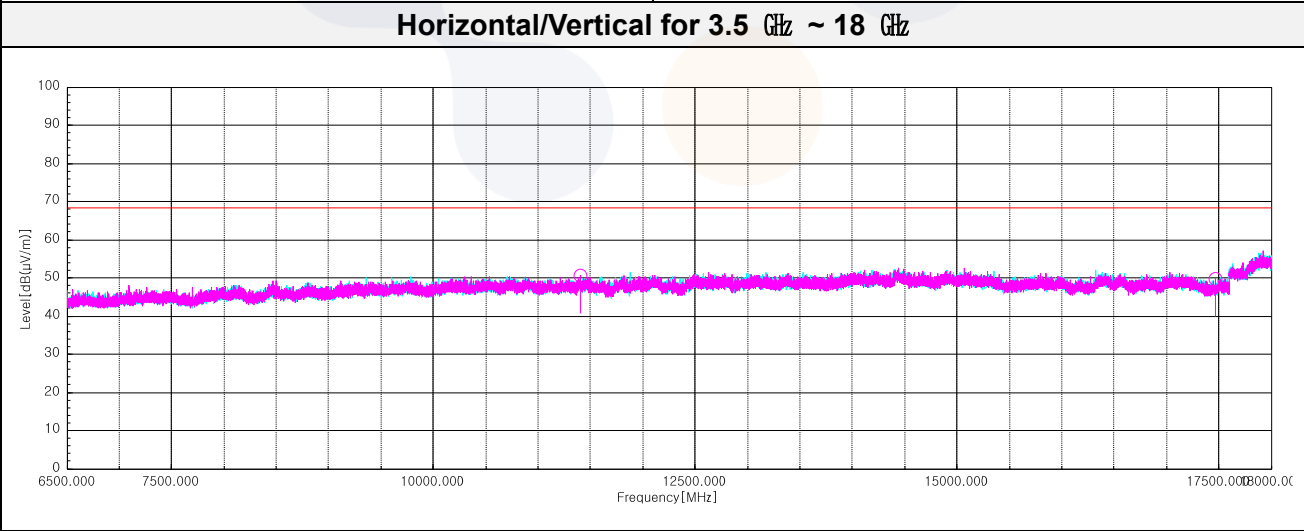
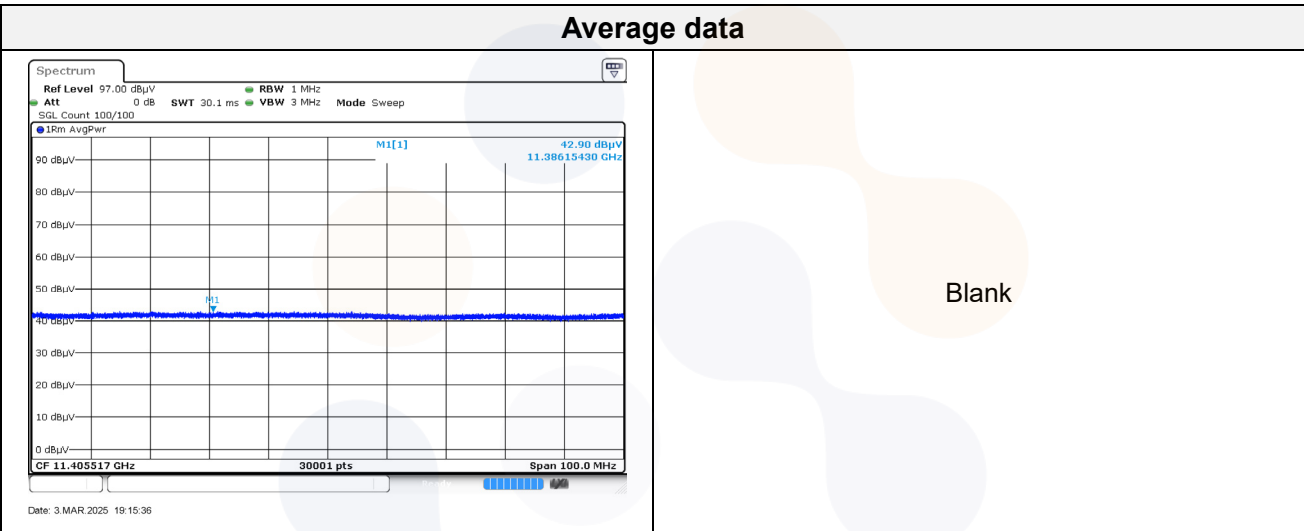
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 895.01	H	82.50	34.48	-26.16	-	90.82	110.20	19.38
Average Data								
5 895.01	H	68.87	34.48	-26.16	0.61	77.80	90.20	12.40



UNII 4 2TX MIMO / 802.11ac VHT160 / Spurious

Middle Channel (5 815 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 386.15 ¹⁾	H	53.40	38.90	-41.81	-	50.49	74.00	23.51
17 464.10	H	46.60	39.28	-36.34	-	49.54	68.20	18.66
Average Data								
11 386.15 ¹⁾	H	42.90	38.90	-41.81	2.69	42.68	54.00	11.32



9. Measurement equipment

Equipment Name	Manufacturer	Model No.	Serial No.	Next Cal. Date
Spectrum Analyzer	R&S	FSV3044	101427	25.03.28
Spectrum Analyzer	R&S	FSV40	100988	25.05.27
EMI TEST RECEIVER	R&S	ESCI3	101408	25.08.12
Signal Generator	R&S	SMB100A	176206	26.01.17
Vector Signal Generator	R&S	SMBV100A	257566	25.07.01
DC Power Supply	AGILENT	E3632A	MY40000265	25.04.24
DC Power Supply	POWERCOM	DCP-50100A	20220610-01	26.01.16
Attenuator	API Inmet	40AH2W-10	10	24.06.24
Step Attenuator	HP	8496A	3308A16640	25.07.01
Power Splitter	Mini-Circuits	ZFSC-2-10G+	1	25.07.01
Power Splitter	Mini-Circuits	ZFSC-2-10G+	4	25.07.01
Mldd 4 Way Power Divider	KRYTAR	7005265	151063	25.06.24
Horn Antenna	SCHWARZBECK	BBHA9120D	2764	25.10.24
Horn Antenna	SCHWARZBECK	BBHA9170	1266	25.10.15
Bi-log Antenna	Teseq GmbH	CBL 6112D	61521	26.12.11
Loop Antenna	R&S	HFH2-Z2	100355	26.06.25
Amplifier	SONOMA INSTRUMENT	310N	421910	25.10.11
Broadband PreAmplifier	SCHWARZBECK	BBV9718D	53	26.01.16
Low Noise Amplifier	TESTEK	TK-PA18H	220123-L	25.10.11
Low Noise Amplifier	TESTEK	TK-PA1840H	220234-L	25.10.14
High Pass Filter	Wainwright Instruments GmbH	WHKX8-5655-6500-18000-40SS	SN7	25.10.15
High Pass Filter	Qotana	DBHF058004000A	23041800061	25.06.24
TWO-LINE V - NETWORK	R&S	ENV216	101358	25.10.13

End of test report