

A.8. Radiated Unwanted Emission

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.407	-27 dBm/MHz

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

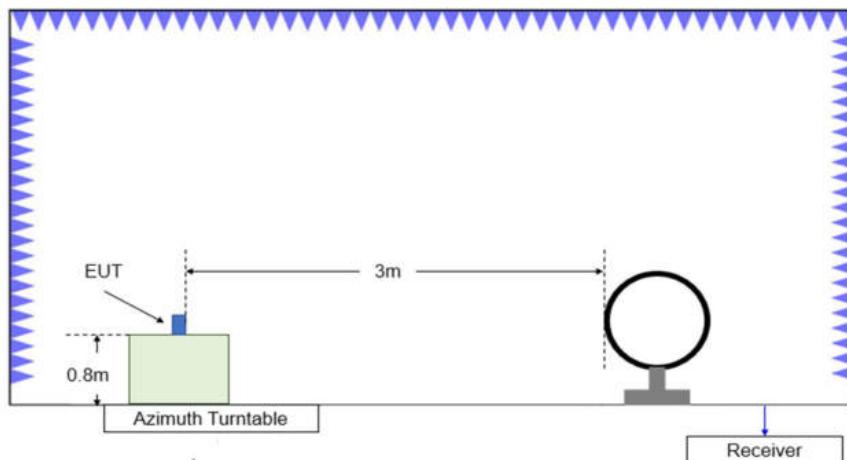
Limit in restricted band:

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)	Measurement distance(m)
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

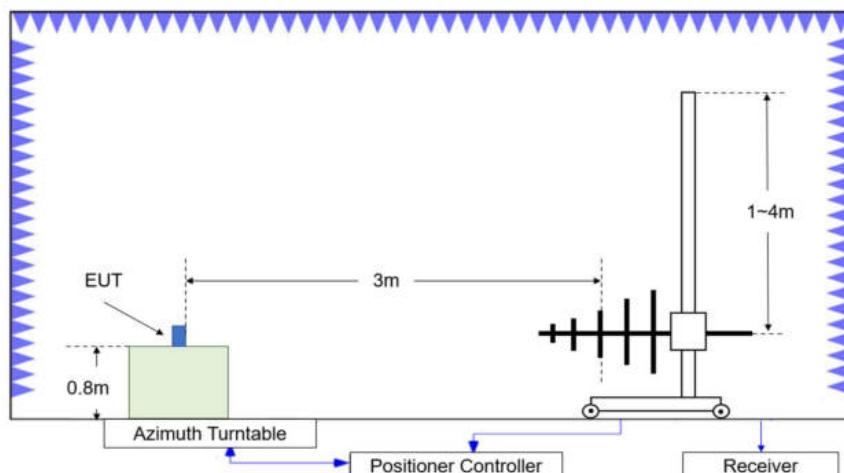
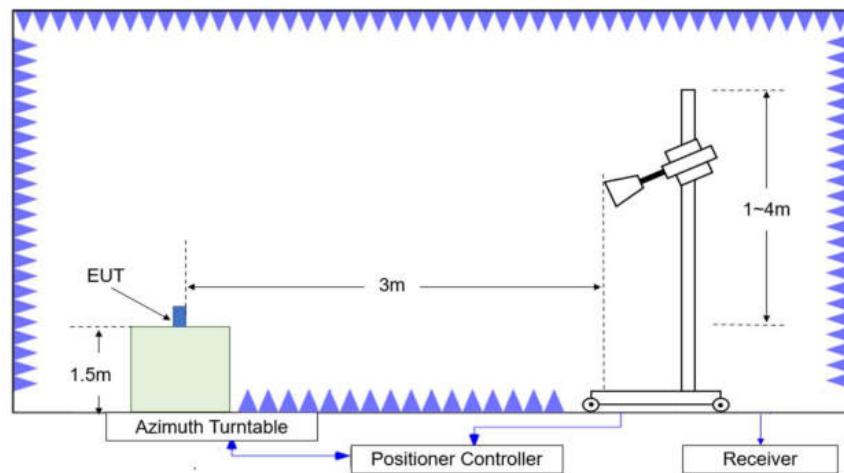
Frequency of emission (MHz)	Field strength (uV/m)	Field strength (dBuV/m)	Measurement distance (m)
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

Note: When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor.

Test setup



Test Site Diagram (9kHz-30MHz)


Test Site Diagram (30MHz-1GHz)

Test Site Diagram (1GHz-40GHz)

Test Procedures

Radiated unwanted emissions from the EUT were measured according to ANSI C63.10.

Test setting

Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	100kHz/300kHz	5
1000-3000	1MHz/3MHz	15
3000-18000	1MHz/3MHz	40
18000-26500	1MHz/3MHz	20

Sample Calculation

A "reference path loss" is established and the A_{RPL} is the attenuation of "reference path loss", and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

P_{Mea} is the field strength recorded from the instrument.

The measurement results are obtained as described below:

Result = $P_{\text{Mea}} + A_{\text{Rpl}} = P_{\text{Mea}} + \text{Cable Loss} + \text{Antenna Factor}$

Test note

1. The EUT is operating at its maximum duty cycle and its maximum power control level.
2. Investigation has been done on all modes and modulations/data rates. Only the radiated emissions of the configuration that produced the worst case emissions are reported in this section.
3. Spurious emissions for all channels were investigated and almost the same below 1GHz. According to FCC 47 CFR §15.31, emission levels are not report much lower than the limit by over 20Db
4. The test is carried out on both vertical and horizontal polarization and only maximization result of both polarizations is kept.
5. EUT in each of three orthogonal axis emissions had been tested out only the worst case (axis data) recorded in the report.
6. Measurement frequencies were performed from 9 kHz to the 10th harmonic of highest fundamental frequency or 40GHz, whichever is lower.
7. The low/mid/high channels of all working mode with different bandwidths were all tested, only the worst ones were reported.
8. The EUT supports SISOs for chain0/chain1/chain2, and MIMOs for Chain01/Chain12, all combinations are evaluated, only the worst cases are reported.
9. Both full RU and partial RU spurious emission was tested. And the results are basically noises with no suspicious emission. In this case, the measurement results of full RU were reported and represented worst cases.

Measurement Results:**AVERAGE Results:****802.11a**

Channel 1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17960.850	43.85	-27.21	45.95	25.11	54.00	10.15	H
17959.500	43.71	-27.21	45.95	24.97	54.00	10.29	V
14490.900	43.13	-23.97	41.90	25.20	54.00	10.87	V
14496.300	43.11	-23.97	41.90	25.18	54.00	10.89	V
5917.728	43.12	-26.77	34.30	35.59	68.20	25.08	V
5893.942	43.01	-26.77	34.30	35.48	68.20	25.19	H

Channel 93

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17912.250	43.96	-27.21	45.95	25.22	54.00	10.04	V
17928.000	43.90	-27.21	45.95	25.16	54.00	10.10	H
14493.600	42.96	-23.97	41.90	25.03	54.00	11.04	V
14490.900	42.90	-23.97	41.90	24.97	54.00	11.10	V
12310.200	38.61	-29.72	39.00	29.33	54.00	15.39	V
12297.600	38.43	-29.72	39.00	29.15	54.00	15.57	V

Channel 105

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17940.600	43.67	-27.21	45.95	24.93	54.00	10.33	V
17945.100	43.67	-27.21	45.95	24.93	54.00	10.33	V
14495.400	42.84	-23.97	41.90	24.91	54.00	11.16	V
14482.800	42.81	-23.97	41.90	24.88	54.00	11.19	V
12307.500	38.27	-29.72	39.00	28.99	54.00	15.73	V
12312.900	38.22	-29.72	39.00	28.94	54.00	15.78	V

Channel 149

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17944.200	43.86	-27.21	45.95	25.12	54.00	10.14	H
17898.750	43.67	-27.21	45.95	24.93	54.00	10.33	H
14497.650	43.19	-23.97	41.90	25.26	54.00	10.81	V
14494.500	43.00	-23.97	41.90	25.07	54.00	11.00	H
12299.400	38.71	-29.72	39.00	29.43	54.00	15.29	H
12303.450	38.32	-29.72	39.00	29.04	54.00	15.68	V

Channel 233

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17907.300	43.63	-27.21	45.95	24.89	54.00	10.37	H
17924.400	43.54	-27.21	45.95	24.80	54.00	10.46	V
14494.050	43.03	-23.97	41.90	25.10	54.00	10.97	H
14497.650	42.87	-23.97	41.90	24.94	54.00	11.13	H
7125.126	51.32	-25.77	35.70	41.39	68.20	16.88	V
7125.456	50.20	-25.77	35.70	40.27	68.20	18.00	V

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Channel 1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17944.200	43.58	-27.21	45.95	24.84	54.00	10.42	H
17938.350	43.54	-27.21	45.95	24.80	54.00	10.46	H
14491.350	43.02	-23.97	41.90	25.09	54.00	10.98	H
14487.300	43.01	-23.97	41.90	25.08	54.00	10.99	V
5920.416	42.81	-26.77	34.30	35.28	68.20	25.39	H
5912.646	42.76	-26.77	34.30	35.23	68.20	25.44	V

Channel 93

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17946.900	43.55	-27.21	45.95	24.81	54.00	10.45	H
17869.050	43.52	-27.21	45.95	24.78	54.00	10.48	H
14491.350	42.90	-23.97	41.90	24.97	54.00	11.10	H
14499.450	42.88	-23.97	41.90	24.95	54.00	11.12	V
12272.400	38.37	-29.60	38.95	29.02	54.00	15.63	H
12296.700	38.23	-29.72	39.00	28.95	54.00	15.77	H

Channel 105

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17910.450	43.63	-27.21	45.95	24.89	54.00	10.37	H
17987.850	43.49	-27.21	45.95	24.75	54.00	10.51	V
14497.200	42.84	-23.97	41.90	24.91	54.00	11.16	H
14483.250	42.74	-23.97	41.90	24.81	54.00	11.26	V
12297.600	38.41	-29.72	39.00	29.13	54.00	15.59	H
12287.250	38.27	-29.72	39.00	28.99	54.00	15.73	V

Channel 233

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17952.750	43.63	-27.21	45.95	24.89	54.00	10.37	H
17956.350	43.63	-27.21	45.95	24.89	54.00	10.37	H
14489.100	42.69	-23.97	41.90	24.76	54.00	11.31	H
14496.750	42.69	-23.97	41.90	24.76	54.00	11.31	V
7125.423	44.39	-25.77	35.70	34.46	68.20	23.81	V
7127.898	42.82	-25.77	35.70	32.89	68.20	25.38	V

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Channel 3

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17931.150	43.74	-27.21	45.95	25.00	54.00	10.26	V
17974.800	43.60	-27.21	45.95	24.86	54.00	10.40	H
14487.750	43.15	-23.97	41.90	25.22	54.00	10.85	H
14489.100	43.12	-23.97	41.90	25.19	54.00	10.88	H
5920.556	42.90	-26.77	34.30	35.37	68.20	25.30	H
5913.598	42.86	-26.77	34.30	35.33	68.20	25.34	V

Channel 91

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17964.000	43.50	-27.21	45.95	24.76	54.00	10.50	V
17971.200	43.47	-27.21	45.95	24.73	54.00	10.53	H
14498.550	43.01	-23.97	41.90	25.08	54.00	10.99	H
14498.100	42.97	-23.97	41.90	25.04	54.00	11.03	H
12319.650	38.19	-29.72	39.00	28.91	54.00	15.81	V
12338.550	38.17	-29.88	38.95	29.10	54.00	15.83	H

Channel 107

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17939.250	43.71	-27.21	45.95	24.97	54.00	10.29	H
17951.850	43.58	-27.21	45.95	24.84	54.00	10.42	V
14494.500	43.16	-23.97	41.90	25.23	54.00	10.84	H
14488.650	43.01	-23.97	41.90	25.08	54.00	10.99	V
12290.400	38.34	-29.72	39.00	29.06	54.00	15.66	H
12300.750	38.19	-29.72	39.00	28.91	54.00	15.81	V

Channel 155

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17925.300	43.66	-27.21	45.95	24.92	54.00	10.34	V
17964.000	43.65	-27.21	45.95	24.91	54.00	10.35	V
14489.550	43.08	-23.97	41.90	25.15	54.00	10.92	V
14472.000	43.01	-23.97	41.90	25.08	54.00	10.99	H
12285.450	38.53	-29.72	39.00	29.25	54.00	15.47	V
12310.650	38.37	-29.72	39.00	29.09	54.00	15.63	H

Channel 227

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17935.650	43.65	-27.21	45.95	24.91	54.00	10.35	H
17971.200	43.59	-27.21	45.95	24.85	54.00	10.41	V
14495.400	43.36	-23.97	41.90	25.43	54.00	10.64	H
14494.950	43.13	-23.97	41.90	25.20	54.00	10.87	V
7128.954	47.06	-25.75	35.90	36.91	68.20	21.14	V
7127.337	46.86	-25.77	35.70	36.93	68.20	21.34	H

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Channel 7

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17910.000	43.75	-27.21	45.95	25.01	54.00	10.25	H
17967.150	43.50	-27.21	45.95	24.76	54.00	10.50	V
14495.850	43.34	-23.97	41.90	25.41	54.00	10.66	V
14497.650	43.13	-23.97	41.90	25.20	54.00	10.87	V
5920.752	43.09	-26.77	34.30	35.56	68.20	25.11	H
5922.558	42.96	-26.77	34.30	35.43	68.20	25.24	H

Channel 87

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17831.250	43.59	-27.21	45.95	24.85	54.00	10.41	V
17947.800	43.50	-27.21	45.95	24.76	54.00	10.50	V
14494.050	42.97	-23.97	41.90	25.04	54.00	11.03	V
14489.550	42.94	-23.97	41.90	25.01	54.00	11.06	V
12299.400	38.32	-29.72	39.00	29.04	54.00	15.68	H
12303.900	38.22	-29.72	39.00	28.94	54.00	15.78	H

Channel 103

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17924.850	43.60	-27.21	45.95	24.86	54.00	10.40	H
17924.400	43.54	-27.21	45.95	24.80	54.00	10.46	V
14496.750	43.12	-23.97	41.90	25.19	54.00	10.88	H
14490.450	42.86	-23.97	41.90	24.93	54.00	11.14	H
12285.900	38.23	-29.72	39.00	28.95	54.00	15.77	V
12325.050	38.22	-29.72	39.00	28.94	54.00	15.78	H

Channel 151

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17936.100	43.75	-27.21	45.95	25.01	54.00	10.25	V
17894.700	43.59	-27.21	45.95	24.85	54.00	10.41	V
14493.600	42.98	-23.97	41.90	25.05	54.00	11.02	H
14485.050	42.81	-23.97	41.90	24.88	54.00	11.19	V
12296.250	38.55	-29.72	39.00	29.27	54.00	15.45	V
12286.350	38.46	-29.72	39.00	29.18	54.00	15.54	H

Channel 215

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17958.150	43.68	-27.21	45.95	24.94	54.00	10.32	H
17959.050	43.58	-27.21	45.95	24.84	54.00	10.42	H
14495.850	42.97	-23.97	41.90	25.04	54.00	11.03	V
14499.450	42.85	-23.97	41.90	24.92	54.00	11.15	H
7125.522	47.91	-25.77	35.70	37.98	68.20	20.29	V
7125.093	47.28	-25.77	35.70	37.35	68.20	20.92	V

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Channel 15

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17946.000	43.63	-27.21	45.95	24.89	54.00	10.37	H
17951.400	43.57	-27.21	45.95	24.83	54.00	10.43	V
14499.900	43.00	-23.97	41.90	25.07	54.00	11.00	V
14490.450	42.99	-23.97	41.90	25.06	54.00	11.01	H
5893.018	43.93	-26.77	34.30	36.40	68.20	24.27	H
5922.306	43.92	-26.77	34.30	36.39	68.20	24.28	H

Channel 79

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17923.950	43.59	-27.21	45.95	24.85	54.00	10.41	H
17917.650	43.58	-27.21	45.95	24.84	54.00	10.42	V
14499.000	42.94	-23.97	41.90	25.01	54.00	11.06	H
14493.150	42.93	-23.97	41.90	25.00	54.00	11.07	V
12302.100	38.45	-29.72	39.00	29.17	54.00	15.55	V
12393.000	38.40	-30.03	38.90	29.53	54.00	15.60	V

Channel 207

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17913.150	43.76	-27.21	45.95	25.02	54.00	10.24	V
17926.200	43.66	-27.21	45.95	24.92	54.00	10.34	V
14499.450	42.91	-23.97	41.90	24.98	54.00	11.09	H
14476.950	42.85	-23.97	41.90	24.92	54.00	11.15	V
7129.317	49.41	-25.75	35.90	39.26	68.20	18.79	V
7131.363	49.20	-25.75	35.90	39.05	68.20	19.00	V

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Channel 1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17939.250	43.74	-27.21	45.95	25.00	54.00	10.26	H
17961.750	43.72	-27.21	45.95	24.98	54.00	10.28	V
14491.800	43.13	-23.97	41.90	25.20	54.00	10.87	H
14498.100	43.01	-23.97	41.90	25.08	54.00	10.99	V
5907.802	42.79	-26.77	34.30	35.26	68.20	25.41	V
5911.890	42.78	-26.77	34.30	35.25	68.20	25.42	V

Channel 93

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17899.650	43.71	-27.21	45.95	24.97	54.00	10.29	V
17949.600	43.71	-27.21	45.95	24.97	54.00	10.29	H
14482.350	42.96	-23.97	41.90	25.03	54.00	11.04	H
14495.850	42.89	-23.97	41.90	24.96	54.00	11.11	H
12302.100	38.45	-29.72	39.00	29.17	54.00	15.55	H
12290.400	38.39	-29.72	39.00	29.11	54.00	15.61	H

Channel 105

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17918.550	43.69	-27.21	45.95	24.95	54.00	10.31	V
17901.000	43.65	-27.21	45.95	24.91	54.00	10.35	V
14499.900	42.87	-23.97	41.90	24.94	54.00	11.13	V
14495.850	42.78	-23.97	41.90	24.85	54.00	11.22	H
12311.550	38.34	-29.72	39.00	29.06	54.00	15.66	H
12388.050	38.32	-30.03	38.90	29.45	54.00	15.68	H

Channel 149

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17946.900	43.69	-27.21	45.95	24.95	54.00	10.31	V
17864.100	43.64	-27.21	45.95	24.90	54.00	10.36	V
14494.950	43.30	-23.97	41.90	25.37	54.00	10.70	V
14499.900	43.05	-23.97	41.90	25.12	54.00	10.95	V
12312.000	38.30	-29.72	39.00	29.02	54.00	15.70	V
12357.450	38.28	-29.88	38.95	29.21	54.00	15.72	V

Channel 233

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17900.100	43.72	-27.21	45.95	24.98	54.00	10.28	V
17932.050	43.63	-27.21	45.95	24.89	54.00	10.37	V
14491.350	43.00	-23.97	41.90	25.07	54.00	11.00	H
14482.350	42.95	-23.97	41.90	25.02	54.00	11.05	V
7128.129	42.81	-25.77	35.70	32.88	68.20	25.39	V
7127.733	42.59	-25.77	35.70	32.66	68.20	25.61	V

802.11be-40M
Channel 3

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17950.500	43.92	-27.21	45.95	25.18	54.00	10.08	H
17933.850	43.87	-27.21	45.95	25.13	54.00	10.13	V
14496.750	43.35	-23.97	41.90	25.42	54.00	10.65	V
14490.000	42.96	-23.97	41.90	25.03	54.00	11.04	H
5906.458	43.09	-26.77	34.30	35.56	68.20	25.11	V
5917.308	42.96	-26.77	34.30	35.43	68.20	25.24	V

Channel 91

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17917.650	43.80	-27.21	45.95	25.06	54.00	10.20	H
17921.250	43.74	-27.21	45.95	25.00	54.00	10.26	H
14499.000	43.04	-23.97	41.90	25.11	54.00	10.96	H
14497.650	42.97	-23.97	41.90	25.04	54.00	11.03	V
12313.350	38.29	-29.72	39.00	29.01	54.00	15.71	H
12314.250	38.24	-29.72	39.00	28.96	54.00	15.76	V

Channel 107

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17915.400	44.12	-27.21	45.95	25.38	54.00	9.88	H
17918.100	44.08	-27.21	45.95	25.34	54.00	9.92	H
14491.800	43.53	-23.97	41.90	25.60	54.00	10.47	V
14483.700	43.36	-23.97	41.90	25.43	54.00	10.64	H
12277.800	38.90	-29.72	39.00	29.62	54.00	15.10	V
12346.650	38.75	-29.88	38.95	29.68	54.00	15.25	H

Channel 155

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17930.700	44.00	-27.21	45.95	25.26	54.00	10.00	H
17966.250	43.89	-27.21	45.95	25.15	54.00	10.11	H
14494.950	43.11	-23.97	41.90	25.18	54.00	10.89	V
14486.400	43.05	-23.97	41.90	25.12	54.00	10.95	V
12301.650	38.72	-29.72	39.00	29.44	54.00	15.28	V
12285.450	38.68	-29.72	39.00	29.40	54.00	15.32	V

Channel 227

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17939.250	43.55	-27.21	45.95	24.81	54.00	10.45	H
17861.850	43.54	-27.21	45.95	24.80	54.00	10.46	H
14498.550	42.83	-23.97	41.90	24.90	54.00	11.17	V
14490.450	42.81	-23.97	41.90	24.88	54.00	11.19	H
7125.819	48.49	-25.77	35.70	38.56	68.20	19.71	V
7126.215	47.83	-25.77	35.70	37.90	68.20	20.37	V

802.11be-80M

Channel 7

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17932.950	43.72	-27.21	45.95	24.98	54.00	10.28	V
17983.800	43.72	-27.21	45.95	24.98	54.00	10.28	V
14489.550	42.94	-23.97	41.90	25.01	54.00	11.06	V
14487.300	42.80	-23.97	41.90	24.87	54.00	11.20	V
5923.580	43.22	-26.77	34.30	35.69	68.20	24.98	H
5916.384	43.15	-26.77	34.30	35.62	68.20	25.05	H

Channel 87

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17931.600	43.65	-27.21	45.95	24.91	54.00	10.35	V
17920.800	43.64	-27.21	45.95	24.90	54.00	10.36	H
14499.450	43.09	-23.97	41.90	25.16	54.00	10.91	V
14494.500	42.96	-23.97	41.90	25.03	54.00	11.04	H
12296.700	38.32	-29.72	39.00	29.04	54.00	15.68	V
12281.850	38.30	-29.72	39.00	29.02	54.00	15.70	H

Channel 103

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17916.300	43.80	-27.21	45.95	25.06	54.00	10.20	H
17923.500	43.78	-27.21	45.95	25.04	54.00	10.22	H
14499.450	42.97	-23.97	41.90	25.04	54.00	11.03	V
14476.050	42.90	-23.97	41.90	24.97	54.00	11.10	H
12296.250	38.80	-29.72	39.00	29.52	54.00	15.20	V
12282.300	38.52	-29.72	39.00	29.24	54.00	15.48	H

Channel 151

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17921.700	43.60	-27.21	45.95	24.86	54.00	10.40	H
17849.700	43.56	-27.21	45.95	24.82	54.00	10.44	V
14496.750	43.24	-23.97	41.90	25.31	54.00	10.76	V
14492.700	43.02	-23.97	41.90	25.09	54.00	10.98	V
12310.200	38.78	-29.72	39.00	29.50	54.00	15.22	H
12305.250	38.63	-29.72	39.00	29.35	54.00	15.37	V

Channel 215

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17949.150	43.89	-27.21	45.95	25.15	54.00	10.11	H
17962.650	43.77	-27.21	45.95	25.03	54.00	10.23	H
14496.300	43.13	-23.97	41.90	25.20	54.00	10.87	H
14497.200	43.09	-23.97	41.90	25.16	54.00	10.91	H
7128.459	47.67	-25.77	35.70	37.74	68.20	20.53	V
7125.984	47.55	-25.77	35.70	37.62	68.20	20.65	V

802.11be-160M

Channel 15

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17927.550	43.64	-27.21	45.95	24.90	54.00	10.36	V
17963.550	43.63	-27.21	45.95	24.89	54.00	10.37	V
14490.900	43.06	-23.97	41.90	25.13	54.00	10.94	H
14498.550	42.95	-23.97	41.90	25.02	54.00	11.05	H
5900.340	44.91	-26.77	34.30	37.38	68.20	23.29	H
5900.676	44.68	-26.77	34.30	37.15	68.20	23.52	H

Channel 79

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17909.550	43.83	-27.21	45.95	25.09	54.00	10.17	H
17938.800	43.70	-27.21	45.95	24.96	54.00	10.30	H
14495.400	42.94	-23.97	41.90	25.01	54.00	11.06	V
14493.150	42.87	-23.97	41.90	24.94	54.00	11.13	H
12300.750	38.43	-29.72	39.00	29.15	54.00	15.57	V
12294.900	38.36	-29.72	39.00	29.08	54.00	15.64	H

Channel 111

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17984.700	43.68	-27.21	45.95	24.94	54.00	10.32	V
17912.250	43.59	-27.21	45.95	24.85	54.00	10.41	H
14494.500	42.93	-23.97	41.90	25.00	54.00	11.07	H
14486.400	42.82	-23.97	41.90	24.89	54.00	11.18	H
12305.700	38.33	-29.72	39.00	29.05	54.00	15.67	H
12290.850	38.27	-29.72	39.00	28.99	54.00	15.73	H

Channel 175

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17955.900	43.63	-27.21	45.95	24.89	54.00	10.37	H
17925.750	43.56	-27.21	45.95	24.82	54.00	10.44	V
14495.400	43.23	-23.97	41.90	25.30	54.00	10.77	V
14499.450	43.23	-23.97	41.90	25.30	54.00	10.77	H
12303.450	38.72	-29.72	39.00	29.44	54.00	15.28	H
12289.500	38.40	-29.72	39.00	29.12	54.00	15.60	H

Channel 207

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17930.700	43.48	-27.21	45.95	24.74	54.00	10.52	H
17936.550	43.45	-27.21	45.95	24.71	54.00	10.55	V
14494.950	43.28	-23.97	41.90	25.35	54.00	10.72	V
14489.100	43.19	-23.97	41.90	25.26	54.00	10.81	H
7134.366	50.49	-25.75	35.90	40.34	68.20	17.71	V
7132.353	50.30	-25.75	35.90	40.15	68.20	17.90	V

802.11be-320M
Channel 31

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17932.950	43.85	-27.21	45.95	25.11	54.00	10.15	V
17945.100	43.57	-27.21	45.95	24.83	54.00	10.43	V
14477.850	42.88	-23.97	41.90	24.95	54.00	11.12	H
14499.450	42.87	-23.97	41.90	24.94	54.00	11.13	V
5892.402	42.99	-26.77	34.30	35.46	68.20	25.21	H
5923.860	42.99	-26.77	34.30	35.46	68.20	25.21	H

Channel 63

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17934.750	43.49	-27.21	45.95	24.75	54.00	10.51	V
17976.600	43.48	-27.21	45.95	24.74	54.00	10.52	V
14494.050	42.85	-23.97	41.90	24.92	54.00	11.15	V
14497.650	42.85	-23.97	41.90	24.92	54.00	11.15	H
12294.450	38.54	-29.72	39.00	29.26	54.00	15.46	H
12310.650	38.25	-29.72	39.00	28.97	54.00	15.75	H

Channel 95

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17939.250	43.50	-27.21	45.95	24.76	54.00	10.50	V
17956.350	43.49	-27.21	45.95	24.75	54.00	10.51	V
14492.250	42.89	-23.97	41.90	24.96	54.00	11.11	V
14493.600	42.88	-23.97	41.90	24.95	54.00	11.12	H
12289.050	38.34	-29.72	39.00	29.06	54.00	15.66	H
12310.650	38.23	-29.72	39.00	28.95	54.00	15.77	V

Channel 159

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17930.250	43.84	-27.21	45.95	25.10	54.00	10.16	V
17958.150	43.77	-27.21	45.95	25.03	54.00	10.23	V
14494.500	43.37	-23.97	41.90	25.44	54.00	10.63	H
14490.900	43.23	-23.97	41.90	25.30	54.00	10.77	H
12302.100	38.25	-29.72	39.00	28.97	54.00	15.75	H
12305.700	38.21	-29.72	39.00	28.93	54.00	15.79	V

Channel 191

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17901.900	43.73	-27.21	45.95	24.99	54.00	10.27	H
17876.250	43.64	-27.21	45.95	24.90	54.00	10.36	H
14499.450	43.19	-23.97	41.90	25.26	54.00	10.81	V
14493.150	42.85	-23.97	41.90	24.92	54.00	11.15	V
7192.446	46.31	-25.70	36.20	35.81	68.20	21.89	H
7191.885	46.25	-25.70	36.20	35.75	68.20	21.95	H

PEAK Results:**802.11a-20M**

Channel 1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14691.150	55.46	-23.94	41.50	37.90	88.20	32.74	V
14532.750	55.02	-23.63	41.90	36.75	88.20	33.18	V
17909.550	54.77	-27.21	45.95	36.03	74.00	19.23	V
17840.250	54.68	-27.21	45.95	35.94	74.00	19.32	H
5912.996	54.49	-26.77	34.30	46.96	88.20	33.71	H
5890.218	54.46	-26.90	34.20	47.16	88.20	33.74	H

Channel 93

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17593.200	55.27	-27.39	45.15	37.51	88.20	32.93	H
17851.050	55.18	-27.21	45.95	36.44	74.00	18.82	H
14665.950	55.14	-23.94	41.50	37.58	88.20	33.06	H
14626.800	54.88	-23.72	41.70	36.90	88.20	33.32	H
12922.200	49.94	-28.83	40.05	38.72	88.20	38.26	V
12896.100	49.84	-29.09	40.00	38.93	88.20	38.36	V

Channel 105

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14634.000	54.94	-23.72	41.70	36.96	88.20	33.26	V
14626.800	54.91	-23.72	41.70	36.93	88.20	33.29	V
17931.150	54.81	-27.21	45.95	36.07	74.00	19.19	V
17988.750	54.67	-27.21	45.95	35.93	74.00	19.33	V
12956.400	51.11	-28.83	40.05	39.89	88.20	37.09	V
12958.650	50.22	-28.83	40.05	39.00	88.20	37.98	V

Channel 149

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14684.850	55.55	-23.94	41.50	37.99	88.20	32.65	V
14643.900	55.00	-23.72	41.70	37.02	88.20	33.20	V
17902.800	54.40	-27.21	45.95	35.66	74.00	19.60	H
17916.750	54.35	-27.21	45.95	35.61	74.00	19.65	H
12963.600	50.45	-28.83	40.05	39.23	88.20	37.75	V
12936.600	50.42	-28.83	40.05	39.20	88.20	37.78	H

Channel 233

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17895.150	54.90	-27.21	45.95	36.16	74.00	19.10	V
14661.450	54.87	-23.94	41.50	37.31	88.20	33.33	H
14722.650	54.83	-24.20	41.35	37.68	88.20	33.37	H
17945.550	54.71	-27.21	45.95	35.97	74.00	19.29	H
7125.456	73.09	-25.77	35.70	63.16	88.20	15.11	V
7125.060	72.62	-25.77	35.70	62.69	88.20	15.58	V

802.11ax-20M

Channel 1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14625.000	55.50	-23.72	41.70	37.52	88.20	32.70	V
14669.550	54.91	-23.94	41.50	37.35	88.20	33.29	H
17914.050	54.65	-27.21	45.95	35.91	74.00	19.35	H
17933.400	54.65	-27.21	45.95	35.91	74.00	19.35	V
5878.570	54.46	-26.90	34.20	47.16	88.20	33.74	V
5896.154	54.33	-26.77	34.30	46.80	88.20	33.87	H

Channel 93

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14580.000	55.48	-23.49	41.90	37.07	88.20	32.72	V
14636.700	55.05	-23.72	41.70	37.07	88.20	33.15	V
17842.500	55.01	-27.21	45.95	36.27	74.00	18.99	H
17944.650	54.82	-27.21	45.95	36.08	74.00	19.18	V
12951.450	49.72	-28.83	40.05	38.50	88.20	38.48	V
13058.100	49.71	-27.95	40.15	37.51	88.20	38.49	V

Channel 105

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14183.550	55.47	-25.37	41.70	39.14	88.20	32.73	V
17986.950	55.28	-27.21	45.95	36.54	74.00	18.72	V
14623.200	55.17	-23.72	41.70	37.19	88.20	33.03	V
17611.650	54.92	-27.39	45.15	37.16	88.20	33.28	V
13052.700	49.95	-27.95	40.15	37.75	88.20	38.25	H
12798.000	49.77	-29.37	39.80	39.34	88.20	38.43	V

Channel 233

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14646.600	55.48	-23.72	41.70	37.50	88.20	32.72	V
14607.450	55.04	-23.72	41.70	37.06	88.20	33.16	H
17820.000	54.36	-27.21	45.95	35.62	74.00	19.64	H
17884.800	54.33	-27.21	45.95	35.59	74.00	19.67	V
7126.479	53.19	-25.77	35.70	43.26	88.20	35.01	V
7131.693	53.18	-25.75	35.90	43.03	88.20	35.02	V

802.11ax-40M
Channel 3

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14689.800	54.95	-23.94	41.50	37.39	88.20	33.25	V
17983.800	54.84	-27.21	45.95	36.10	74.00	19.16	V
14301.900	54.82	-24.93	41.80	37.95	88.20	33.38	H
17931.150	54.43	-27.21	45.95	35.69	74.00	19.57	V
5917.868	55.66	-26.77	34.30	48.13	88.20	32.54	V
5900.256	54.53	-26.77	34.30	47.00	88.20	33.67	V

Channel 91

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14568.300	55.20	-23.49	41.90	36.79	88.20	33.00	H
14597.100	55.15	-23.49	41.90	36.74	88.20	33.05	V
17922.150	54.93	-27.21	45.95	36.19	74.00	19.07	V
17998.650	54.73	-27.21	45.95	35.99	74.00	19.27	V
12296.250	50.01	-29.72	39.00	40.73	74.00	23.99	V
12846.150	49.86	-29.23	39.90	39.19	88.20	38.34	V

Channel 107

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17930.700	54.95	-27.21	45.95	36.21	74.00	19.05	H
17914.950	54.87	-27.21	45.95	36.13	74.00	19.13	V
14613.750	54.86	-23.72	41.70	36.88	88.20	33.34	V
14692.500	54.83	-23.94	41.50	37.27	88.20	33.37	V
13064.850	50.54	-27.95	40.15	38.34	88.20	37.66	H
12326.400	49.81	-29.72	39.00	40.53	74.00	24.19	H

Channel 155

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14616.000	55.63	-23.72	41.70	37.65	88.20	32.57	H
14711.400	55.42	-24.20	41.35	38.27	88.20	32.78	H
17946.450	54.89	-27.21	45.95	36.15	74.00	19.11	H
17977.950	54.84	-27.21	45.95	36.10	74.00	19.16	V
13088.700	49.60	-27.94	40.20	37.34	88.20	38.60	H
12973.500	49.47	-28.39	40.10	37.76	88.20	38.73	V

Channel 227

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14717.250	55.46	-24.20	41.35	38.31	88.20	32.74	H
14588.550	55.08	-23.49	41.90	36.67	88.20	33.12	V
17836.650	54.67	-27.21	45.95	35.93	74.00	19.33	H
17929.800	54.55	-27.21	45.95	35.81	74.00	19.45	V
7125.852	62.51	-25.77	35.70	52.58	88.20	25.69	V
7126.644	62.24	-25.77	35.70	52.31	88.20	25.96	H

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Channel 7

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17977.050	55.01	-27.21	45.95	36.27	74.00	18.99	H
17899.650	54.87	-27.21	45.95	36.13	74.00	19.13	V
14648.400	54.82	-23.72	41.70	36.84	88.20	33.38	H
14593.500	54.72	-23.49	41.90	36.31	88.20	33.48	H
5908.068	54.42	-26.77	34.30	46.89	88.20	33.78	H
5906.906	54.28	-26.77	34.30	46.75	88.20	33.92	H

Channel 87

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14697.450	55.22	-23.94	41.50	37.66	88.20	32.98	V
14608.350	55.18	-23.72	41.70	37.20	88.20	33.02	V
17959.050	54.87	-27.21	45.95	36.13	74.00	19.13	H
17935.200	54.68	-27.21	45.95	35.94	74.00	19.32	V
13000.050	49.98	-28.39	40.10	38.27	88.20	38.22	V
13048.200	49.98	-27.95	40.15	37.78	88.20	38.22	V

Channel 103

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17798.850	55.27	-27.21	45.95	36.53	74.00	18.73	V
14551.650	55.15	-23.63	41.90	36.88	88.20	33.05	H
14570.550	54.71	-23.49	41.90	36.30	88.20	33.49	V
17912.700	54.58	-27.21	45.95	35.84	74.00	19.42	V
13085.100	49.71	-27.94	40.20	37.45	88.20	38.49	H
13075.650	49.69	-27.94	40.20	37.43	88.20	38.51	V

Channel 151

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17919.000	55.45	-27.21	45.95	36.71	74.00	18.55	H
14733.000	54.79	-24.20	41.35	37.64	88.20	33.41	V
14614.650	54.65	-23.72	41.70	36.67	88.20	33.55	V
17995.500	54.64	-27.21	45.95	35.90	74.00	19.36	H
12962.700	50.30	-28.83	40.05	39.08	88.20	37.90	V
12373.200	49.78	-29.88	38.95	40.71	74.00	24.22	H

Channel 215

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14614.650	55.47	-23.72	41.70	37.49	88.20	32.73	V
14653.800	55.04	-23.94	41.50	37.48	88.20	33.16	H
17965.800	54.90	-27.21	45.95	36.16	74.00	19.10	H
17620.200	54.61	-27.39	45.15	36.85	88.20	33.59	H
7125.258	59.81	-25.77	35.70	49.88	88.20	28.39	V
7127.898	59.46	-25.77	35.70	49.53	88.20	28.74	V

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Channel 15

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14620.950	55.30	-23.72	41.70	37.32	88.20	32.90	V
14598.450	55.28	-23.49	41.90	36.87	88.20	32.92	V
17978.850	54.59	-27.21	45.95	35.85	74.00	19.41	H
17910.900	54.51	-27.21	45.95	35.77	74.00	19.49	H
5902.202	58.51	-26.77	34.30	50.98	88.20	29.69	H
5911.624	58.47	-26.77	34.30	50.94	88.20	29.73	H

Channel 79

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14656.950	54.86	-23.94	41.50	37.30	88.20	33.34	H
17968.500	54.84	-27.21	45.95	36.10	74.00	19.16	H
17945.550	54.76	-27.21	45.95	36.02	74.00	19.24	H
14633.550	54.69	-23.72	41.70	36.71	88.20	33.51	V
12969.450	49.86	-28.83	40.05	38.64	88.20	38.34	H
12304.350	49.64	-29.72	39.00	40.36	74.00	24.36	V

Channel 207

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17916.750	55.28	-27.21	45.95	36.54	74.00	18.72	H
14648.850	55.19	-23.72	41.70	37.21	88.20	33.01	H
14671.800	55.01	-23.94	41.50	37.45	88.20	33.19	H
17844.300	54.44	-27.21	45.95	35.70	74.00	19.56	H
7132.386	67.10	-25.75	35.90	56.95	88.20	21.10	V
7131.231	66.67	-25.75	35.90	56.52	88.20	21.53	V

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Channel 1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14632.200	55.47	-23.72	41.70	37.49	88.20	32.73	V
17984.250	55.39	-27.21	45.95	36.65	74.00	18.61	H
14626.350	55.20	-23.72	41.70	37.22	88.20	33.00	V
17957.250	55.04	-27.21	45.95	36.30	74.00	18.96	H
5897.470	55.57	-26.77	34.30	48.04	88.20	32.63	V
5873.726	54.68	-26.90	34.20	47.38	88.20	33.52	H

Channel 93

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14639.400	55.61	-23.72	41.70	37.63	88.20	32.59	H
17930.250	55.08	-27.21	45.95	36.34	74.00	18.92	V
14597.550	54.98	-23.49	41.90	36.57	88.20	33.22	V
17922.150	54.81	-27.21	45.95	36.07	74.00	19.19	H
13075.650	50.60	-27.94	40.20	38.34	88.20	37.60	H
12955.500	49.92	-28.83	40.05	38.70	88.20	38.28	V

Channel 105

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14660.550	55.19	-23.94	41.50	37.63	88.20	33.01	H
17923.950	54.90	-27.21	45.95	36.16	74.00	19.10	V
14666.400	54.83	-23.94	41.50	37.27	88.20	33.37	V
17944.650	54.61	-27.21	45.95	35.87	74.00	19.39	H
13083.300	50.45	-27.94	40.20	38.19	88.20	37.75	V
13080.600	50.30	-27.94	40.20	38.04	88.20	37.90	H

Channel 149

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14653.800	55.37	-23.94	41.50	37.81	88.20	32.83	V
17930.250	55.07	-27.21	45.95	36.33	74.00	18.93	V
17975.700	55.03	-27.21	45.95	36.29	74.00	18.97	V
14654.250	55.02	-23.94	41.50	37.46	88.20	33.18	H
13050.450	50.68	-27.95	40.15	38.48	88.20	37.52	H
13034.700	50.02	-27.95	40.15	37.82	88.20	38.18	H

Channel 233

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17860.500	54.98	-27.21	45.95	36.24	74.00	19.02	H
14697.450	54.93	-23.94	41.50	37.37	88.20	33.27	V
14672.700	54.83	-23.94	41.50	37.27	88.20	33.37	V
17853.750	54.72	-27.21	45.95	35.98	74.00	19.28	H
7127.535	55.74	-25.77	35.70	45.81	88.20	32.46	V
7127.568	55.61	-25.77	35.70	45.68	88.20	32.59	V

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Channel 3

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17927.100	55.10	-27.21	45.95	36.36	74.00	18.90	V
17916.750	55.04	-27.21	45.95	36.30	74.00	18.96	V
14426.550	55.02	-24.32	41.90	37.44	88.20	33.18	H
14552.550	54.75	-23.63	41.90	36.48	88.20	33.45	V
5924.910	59.52	-26.77	34.30	51.99	88.20	28.68	H
5920.766	56.49	-26.77	34.30	48.96	88.20	31.71	H

Channel 91

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14527.350	55.76	-23.63	41.90	37.49	88.20	32.44	V
17889.300	55.15	-27.21	45.95	36.41	74.00	18.85	H
14585.400	55.11	-23.49	41.90	36.70	88.20	33.09	V
17871.750	55.05	-27.21	45.95	36.31	74.00	18.95	V
13075.650	50.08	-27.94	40.20	37.82	88.20	38.12	H
12335.400	50.05	-29.88	38.95	40.98	74.00	23.95	H

Channel 107

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14600.250	55.96	-23.49	41.90	37.55	88.20	32.24	H
17994.600	55.81	-27.21	45.95	37.07	74.00	18.19	V
14675.850	55.68	-23.94	41.50	38.12	88.20	32.52	V
17883.900	55.66	-27.21	45.95	36.92	74.00	18.34	V
13058.100	50.97	-27.95	40.15	38.77	88.20	37.23	V
13059.000	50.49	-27.95	40.15	38.29	88.20	37.71	H

Channel 155

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17928.450	55.44	-27.21	45.95	36.70	74.00	18.56	V
14620.950	55.29	-23.72	41.70	37.31	88.20	32.91	H
14656.500	55.21	-23.94	41.50	37.65	88.20	32.99	H
17911.350	55.02	-27.21	45.95	36.28	74.00	18.98	V
12950.100	50.46	-28.83	40.05	39.24	88.20	37.74	H
13055.400	50.29	-27.95	40.15	38.09	88.20	37.91	V

Channel 227

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14623.650	55.19	-23.72	41.70	37.21	88.20	33.01	H
17900.100	55.12	-27.21	45.95	36.38	74.00	18.88	V
17847.000	54.90	-27.21	45.95	36.16	74.00	19.10	V
14725.350	54.82	-24.20	41.35	37.67	88.20	33.38	V
7128.690	61.29	-25.77	35.70	51.36	88.20	26.91	V
7130.109	61.14	-25.75	35.90	50.99	88.20	27.06	V

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Channel 7

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14666.850	55.52	-23.94	41.50	37.96	88.20	32.68	V
14609.700	55.36	-23.72	41.70	37.38	88.20	32.84	H
17940.150	54.90	-27.21	45.95	36.16	74.00	19.10	H
17953.200	54.81	-27.21	45.95	36.07	74.00	19.19	H
5923.342	55.01	-26.77	34.30	47.48	88.20	33.19	H
5868.868	54.51	-26.90	34.20	47.21	88.20	33.69	V

Channel 87

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14601.150	55.39	-23.49	41.90	36.98	88.20	32.81	V
14591.700	54.99	-23.49	41.90	36.58	88.20	33.21	V
17914.500	54.61	-27.21	45.95	35.87	74.00	19.39	H
17898.300	54.47	-27.21	45.95	35.73	74.00	19.53	V
12281.850	50.78	-29.72	39.00	41.50	74.00	23.22	V
13081.050	50.06	-27.94	40.20	37.80	88.20	38.14	V

Channel 103

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14635.800	55.20	-23.72	41.70	37.22	88.20	33.00	V
14705.100	55.07	-24.20	41.35	37.92	88.20	33.13	V
17908.200	54.77	-27.21	45.95	36.03	74.00	19.23	H
17902.350	54.75	-27.21	45.95	36.01	74.00	19.25	H
13053.600	50.04	-27.95	40.15	37.84	88.20	38.16	H
13069.350	49.78	-27.94	40.20	37.52	88.20	38.42	V

Channel 151

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14632.200	55.28	-23.72	41.70	37.30	88.20	32.92	H
17930.250	55.02	-27.21	45.95	36.28	74.00	18.98	H
14612.850	54.86	-23.72	41.70	36.88	88.20	33.34	V
17904.600	54.46	-27.21	45.95	35.72	74.00	19.54	V
13061.700	50.06	-27.95	40.15	37.86	88.20	38.14	H
12979.800	49.84	-28.39	40.10	38.13	88.20	38.36	V

Channel 215

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17950.950	56.09	-27.21	45.95	37.35	74.00	17.91	V
14603.400	54.83	-23.49	41.90	36.42	88.20	33.37	H
14617.800	54.71	-23.72	41.70	36.73	88.20	33.49	V
17885.700	54.68	-27.21	45.95	35.94	74.00	19.32	H
7126.776	60.75	-25.77	35.70	50.82	88.20	27.45	V
7125.192	60.66	-25.77	35.70	50.73	88.20	27.54	V

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Channel 15

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14718.150	55.33	-24.20	41.35	38.18	88.20	32.87	V
14725.800	55.18	-24.20	41.35	38.03	88.20	33.02	H
17950.050	54.66	-27.21	45.95	35.92	74.00	19.34	H
17890.650	54.45	-27.21	45.95	35.71	74.00	19.55	V
5899.234	60.41	-26.77	34.30	52.88	88.20	27.79	H
5900.032	60.18	-26.77	34.30	52.65	88.20	28.02	H

Channel 79

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14629.950	55.31	-23.72	41.70	37.33	88.20	32.89	H
14594.850	55.06	-23.49	41.90	36.65	88.20	33.14	H
17885.250	54.94	-27.21	45.95	36.20	74.00	19.06	V
17827.200	54.37	-27.21	45.95	35.63	74.00	19.63	V
12874.500	50.31	-29.09	40.00	39.40	88.20	37.89	V
12851.100	49.85	-29.23	39.90	39.18	88.20	38.35	V

Channel 207

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14596.200	55.26	-23.49	41.90	36.85	88.20	32.94	H
17899.200	54.90	-27.21	45.95	36.16	74.00	19.10	H
14599.350	54.79	-23.49	41.90	36.38	88.20	33.41	V
17908.650	54.53	-27.21	45.95	35.79	74.00	19.47	H
7137.270	66.81	-25.75	35.90	56.66	88.20	21.39	V
7130.340	66.77	-25.75	35.90	56.62	88.20	21.43	V

802.11be-320M

Channel 31

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17948.250	56.08	-27.21	45.95	37.34	74.00	17.92	H
14612.850	54.87	-23.72	41.70	36.89	88.20	33.33	H
14699.700	54.76	-23.94	41.50	37.20	88.20	33.44	V
17973.900	54.67	-27.21	45.95	35.93	74.00	19.33	H
5892.906	56.97	-26.77	34.30	49.44	88.20	31.23	H
5888.328	56.92	-26.90	34.20	49.62	88.20	31.28	H

Channel 63

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14676.300	54.94	-23.94	41.50	37.38	88.20	33.26	V
14652.450	54.93	-23.72	41.70	36.95	88.20	33.27	V
17918.550	54.90	-27.21	45.95	36.16	74.00	19.10	V
17919.000	54.78	-27.21	45.95	36.04	74.00	19.22	H
12997.350	49.77	-28.39	40.10	38.06	88.20	38.43	V
12928.050	49.61	-28.83	40.05	38.39	88.20	38.59	H

Channel 95

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14621.850	55.36	-23.72	41.70	37.38	88.20	32.84	H
14575.950	55.33	-23.49	41.90	36.92	88.20	32.87	H
17990.100	54.83	-27.21	45.95	36.09	74.00	19.17	V
17935.650	54.61	-27.21	45.95	35.87	74.00	19.39	H
12825.900	50.02	-29.23	39.90	39.35	88.20	38.18	H
13057.200	49.92	-27.95	40.15	37.72	88.20	38.28	H

Channel 159

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17811.450	55.22	-27.21	45.95	36.48	74.00	18.78	V
14631.750	55.21	-23.72	41.70	37.23	88.20	32.99	V
14602.950	55.14	-23.49	41.90	36.73	88.20	33.06	V
17921.250	55.07	-27.21	45.95	36.33	74.00	18.93	H
13050.000	50.54	-27.95	40.15	38.34	88.20	37.66	V
13019.400	50.36	-28.39	40.10	38.65	88.20	37.84	H

Channel 191

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
14608.350	55.35	-23.72	41.70	37.37	88.20	32.85	V
14559.750	55.01	-23.49	41.90	36.60	88.20	33.19	V
17617.950	54.79	-27.39	45.15	37.03	88.20	33.41	V
17794.350	54.57	-27.21	45.95	35.83	74.00	19.43	H
7202.181	58.13	-25.70	36.20	47.63	88.20	30.07	H
7202.676	58.11	-25.70	36.20	47.61	88.20	30.09	V

Conclusion: PASS
Note:

A "reference path loss" is established and the A_{Rpl} is the attenuation of "reference path loss", and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

P_{Mea} is the field strength recorded from the instrument.

The measurement results are obtained as described below:

Result= $P_{Mea}+A_{Rpl}= P_{Mea}+Cable\ Loss+Antenna\ Factor$

Note: The measurement results showed here are worst cases.

A.9. Band Edges Compliance

A9.1 Band Edges - Radiated

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.407	-27 dBm/MHz

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

Limit in restricted band:

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)	Measurement distance(m)
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

The measurement is made according to ANSI C63.10-2013 and KDB 789033

Measurement Result for full RU:

Mode	Channel	Test Results	Conclusion
802.11a 20M	CH1	Fig.1	P
	CH233	Fig.2	P
802.11ax 20M	CH1	Fig.3	P
	CH233	Fig.4	P
802.11ax 40M	CH3	Fig.5	P
	CH227	Fig.6	P
802.11ax 80M	CH7	Fig.7	P
	CH215	Fig.8	P
802.11ax 160M	CH15	Fig.9	P
	CH207	Fig.10	P
802.11be 20M	CH1	Fig.11	P
	CH233	Fig.12	P
802.11be 40M	CH3	Fig.13	P
	CH227	Fig.14	P
802.11be 80M	CH7	Fig.15	P
	CH215	Fig.16	P
802.11be 160M	CH15	Fig.17	P
	CH207	Fig.18	P
802.11be 320M	31	Fig.19	P
	191	Fig.20	P

Measurement Result for Partial RU:

Mode	Channel	RU size and index	Test Results	Conclusion
802.11ax 20M	CH1	26RU-index0	Fig.21	P
	CH233	6RU-index8	Fig.22	P
802.11ax 40M	CH3	26RU-index0	Fig.23	P
	CH227	26RU-index17	Fig.24	P
802.11ax 80M	CH7	26RU-index0	Fig.25	P
	CH215	26RU-index36	Fig.26	P
802.11ax 160M	CH15	26RU-index0	Fig.27	P
	CH207	26RU-index72	Fig.28	P
802.11be 20M	CH1	26RU-index0	Fig.29	P
	CH233	6RU-index8	Fig.30	P
802.11be 40M	CH3	26RU-index0	Fig.31	P
	CH227	26RU-index17	Fig.32	P
802.11be 80M	CH7	26RU-index0	Fig.33	P
	CH215	26RU-index36	Fig.34	P
802.11be 160M	CH15	26RU-index0	Fig.35	P
	CH207	26RU-index72	Fig.36	P
802.11be 320M	31	26RU-index0	Fig.37	P
	191	26RU-index144	Fig.38	P

Note1: All partial RU and full RU have been tested, in spurious domain there are basically noises with suspicious emission, thus only the full RU results were reported.

Note2: All SISO and MIMO emissions have been checked, only the worst cases were reported.

Conclusion: PASS

Test graphs as below:

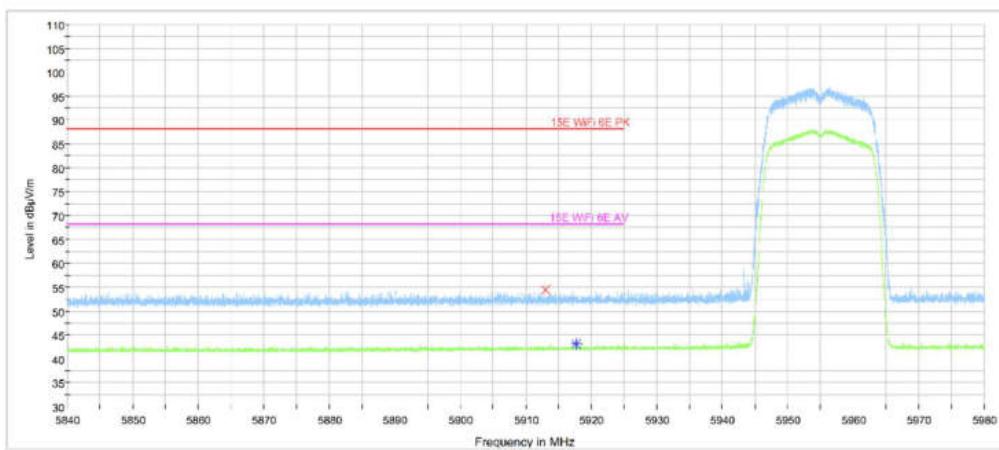


Fig.1 Band Edges (802.11a 20M Ch1 Chain2)

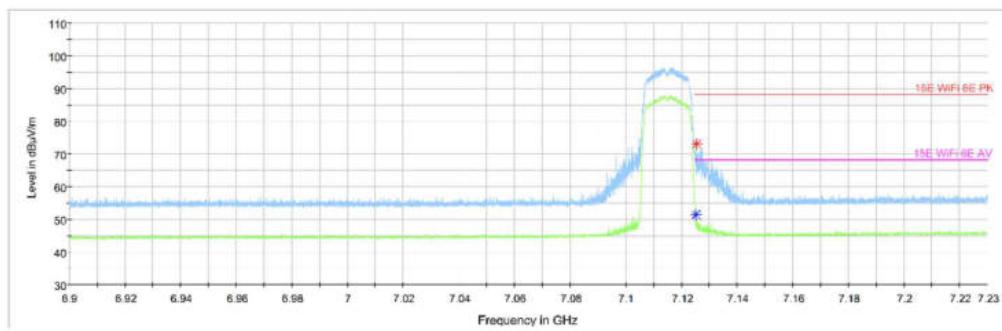


Fig.2 Band Edges (802.11a 20M Ch233 Chain2)

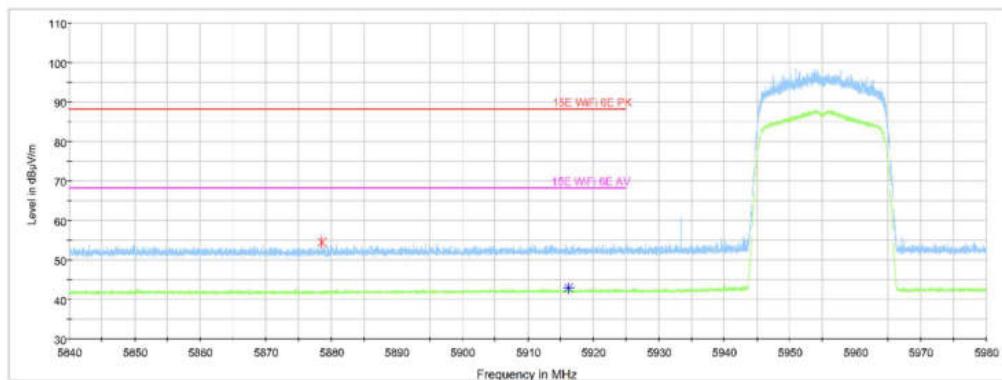


Fig.3 Band Edges (802.11ax 20M Ch1 full RU Chain2)

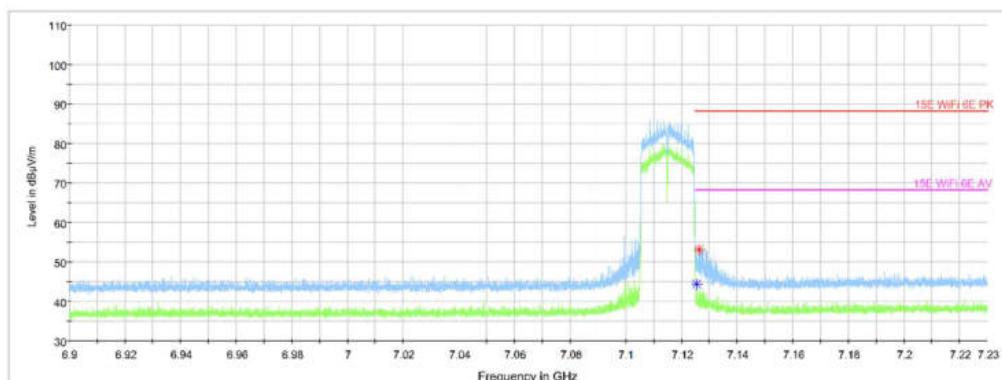


Fig.4 Band Edges (802.11ax 20M Ch233 full RU Chain2)

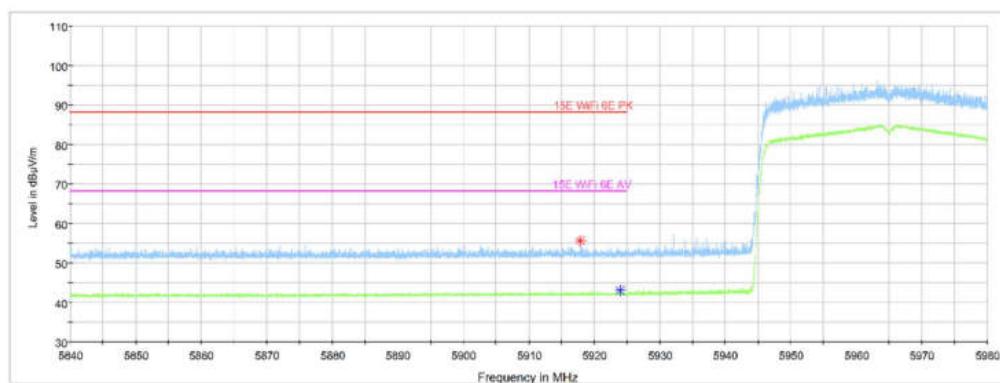


Fig.5 Band Edges (802.11ax 40M Ch3 full RU Chain2)

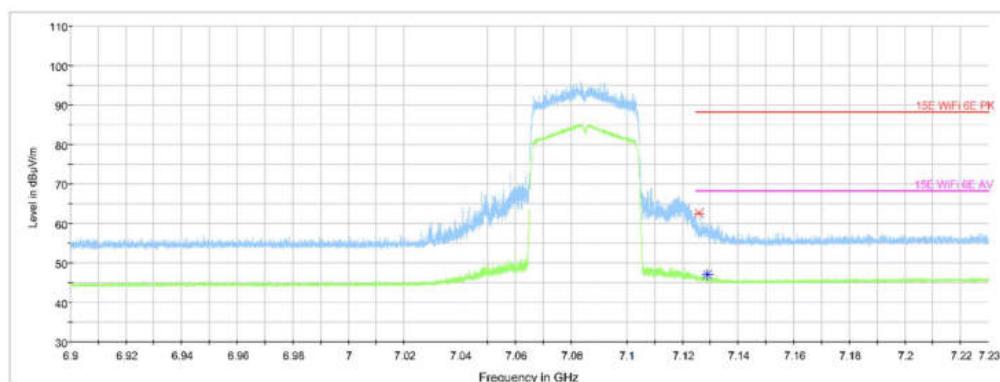


Fig.6 Band Edges (802.11ax 40M Ch227 full RU Chain2)

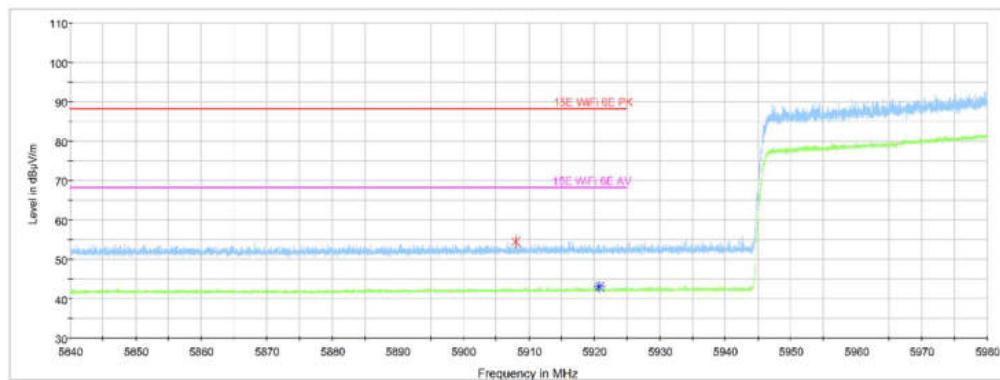


Fig.7 Band Edges (802.11ax 80M Ch7 full RU Chain2)

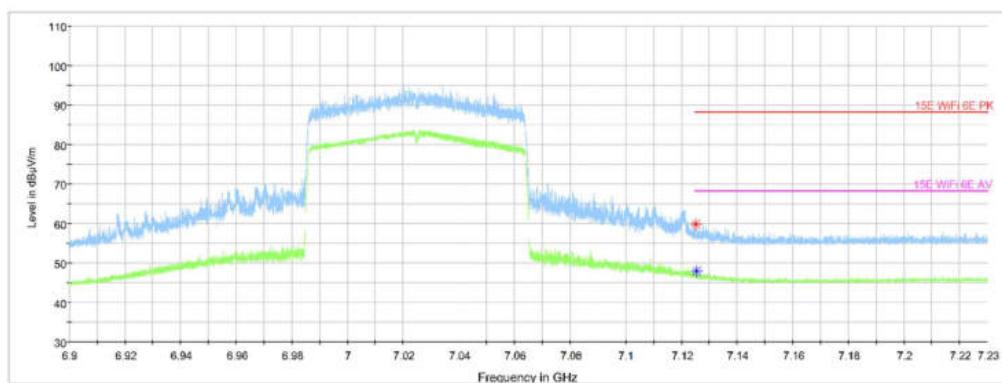


Fig.8 Band Edges (802.11ax 80M Ch215 full RU Chain2)

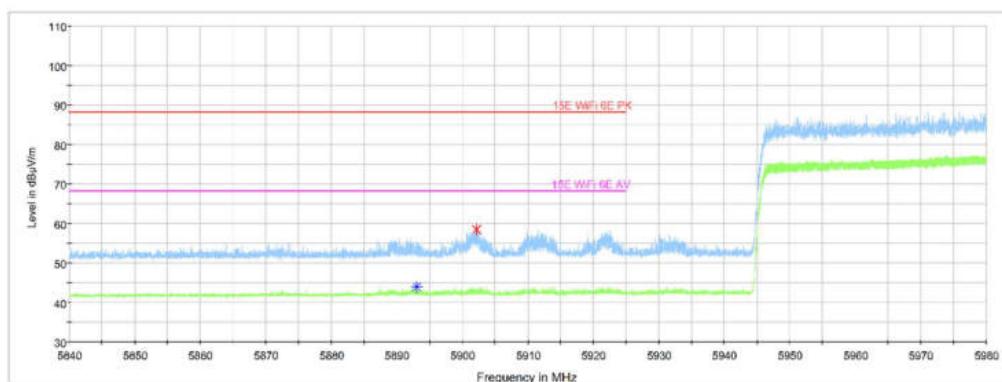


Fig.9 Band Edges (802.11ax 160M Ch15 full RU Chain2)

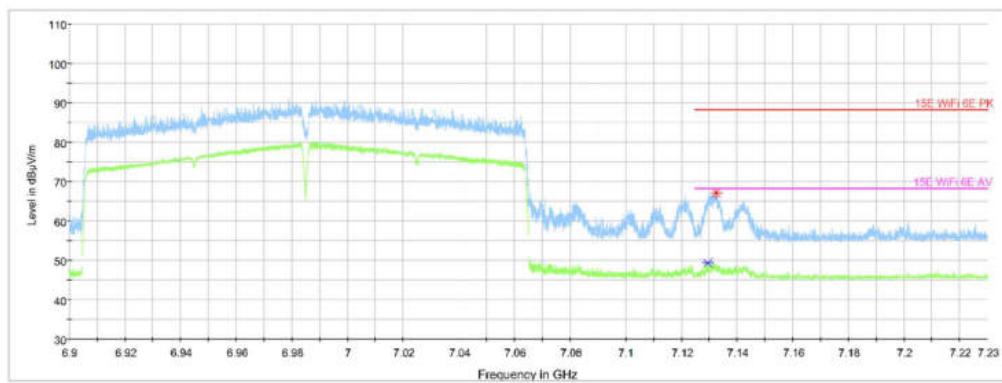


Fig.10 Band Edges (802.11ax 160M Ch207 full RU Chain2)

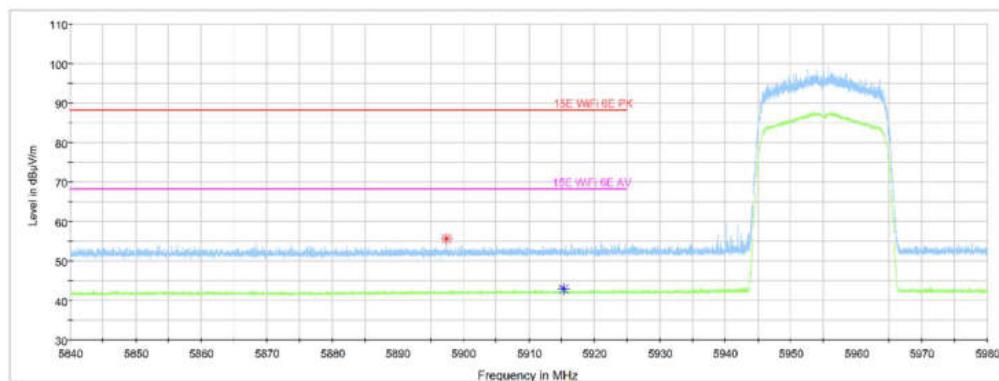


Fig.11 Band Edges (802.11be 20M Ch1 full RU Chain2)

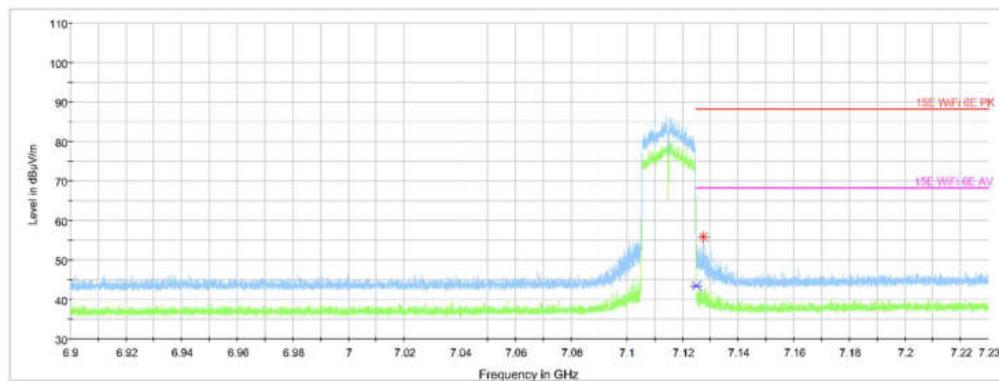


Fig.12 Band Edges (802.11be 20M Ch233 full RU Chain2)

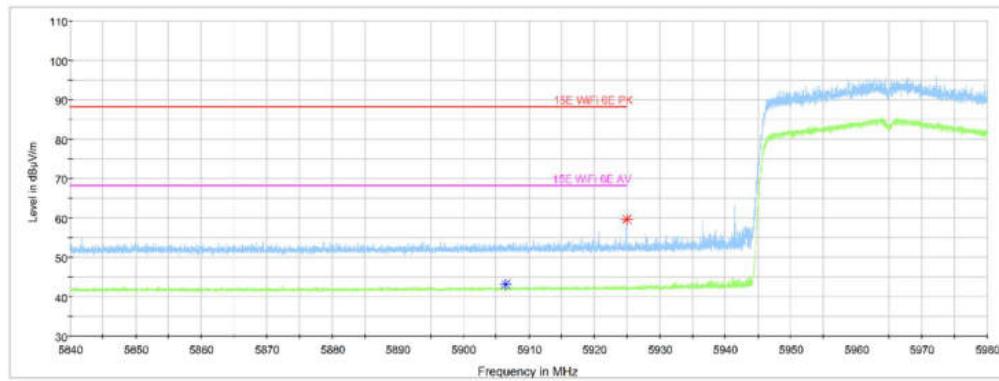


Fig.13 Band Edges (802.11be 40M Ch3 full RU Chain2)

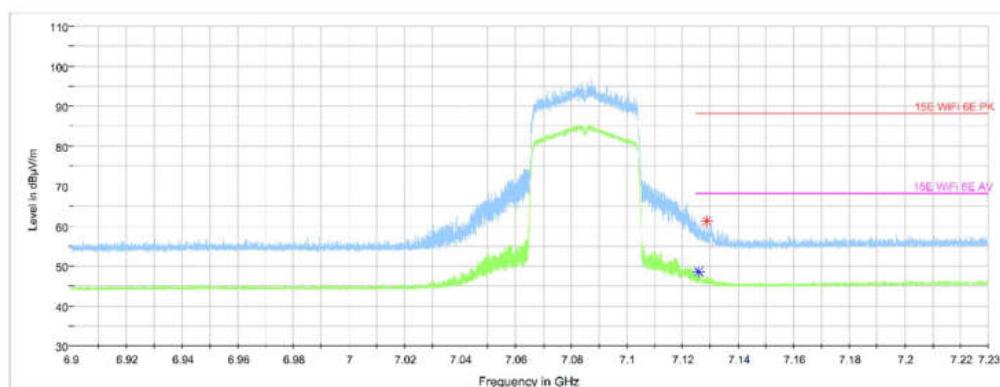


Fig.14 Band Edges (802.11be 40M Ch227 full RU Chain2)

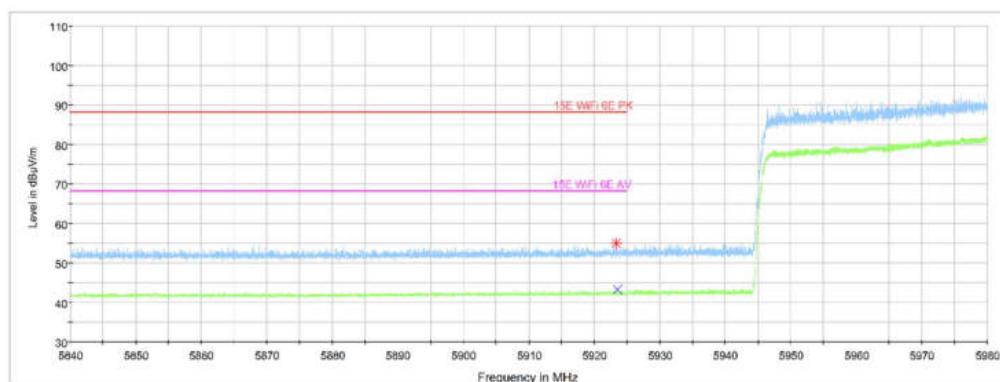


Fig.15 Band Edges (802.11be 80M Ch7 full RU Chain2)

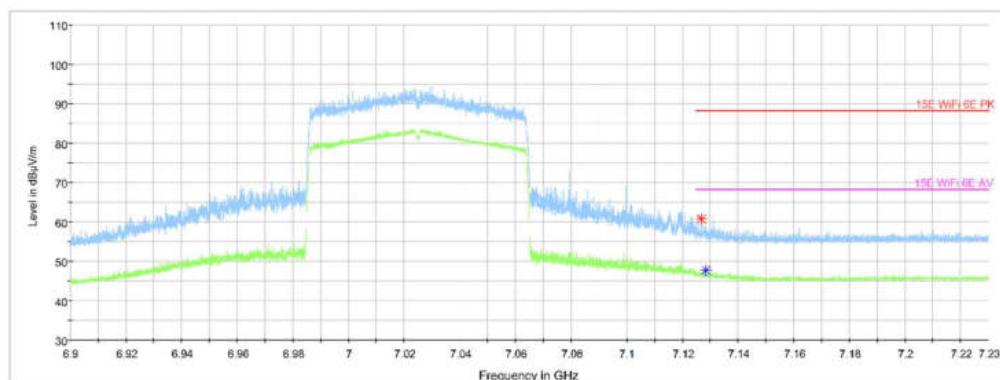


Fig.16 Band Edges (802.11be 80M Ch215 full RU Chain2)

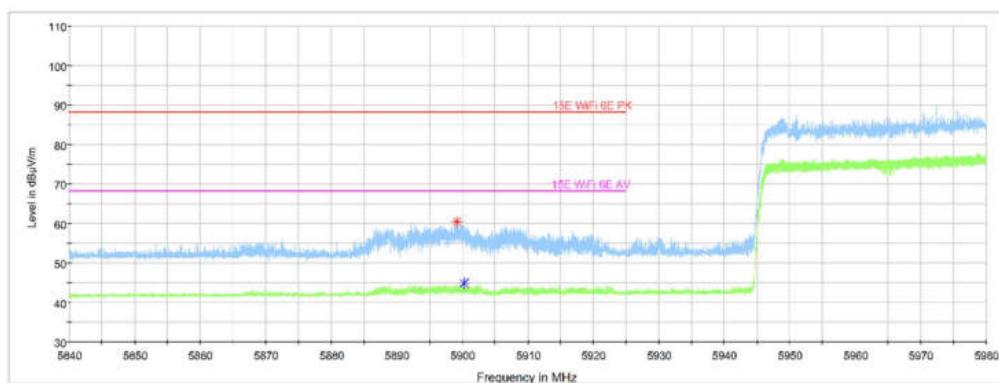


Fig.17 Band Edges (802.11be 160M Ch15 full RU Chain2)

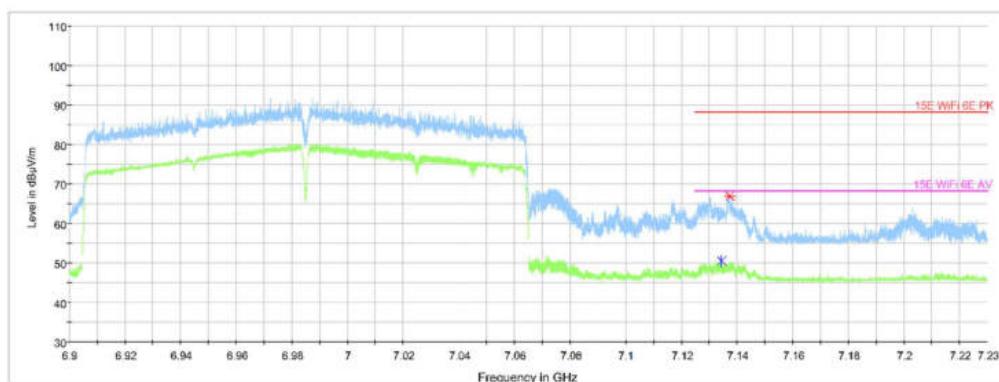


Fig.18 Band Edges (802.11be 160M Ch207 full RU Chain2)

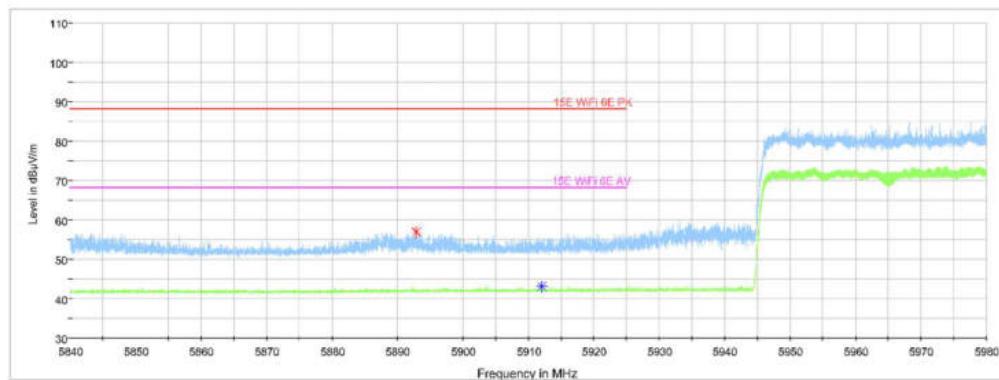


Fig.19 Band Edges (802.11be 320M Ch31 full RU Chain2)

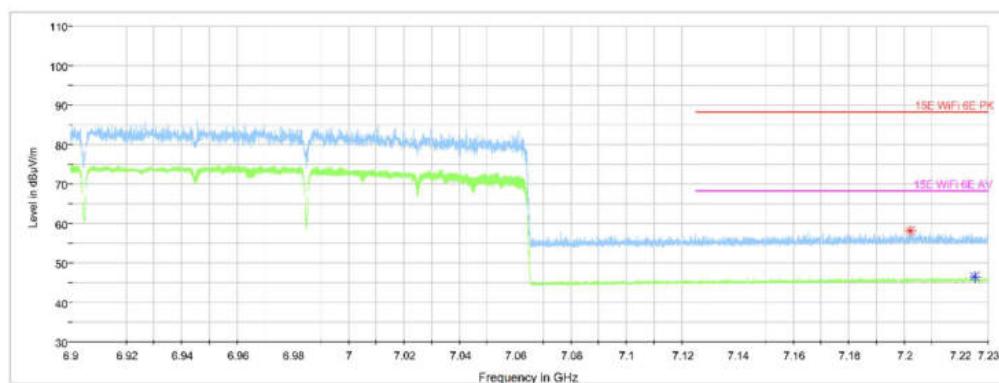


Fig.20 Band Edges (802.11be 320M Ch191 full RU Chain2)

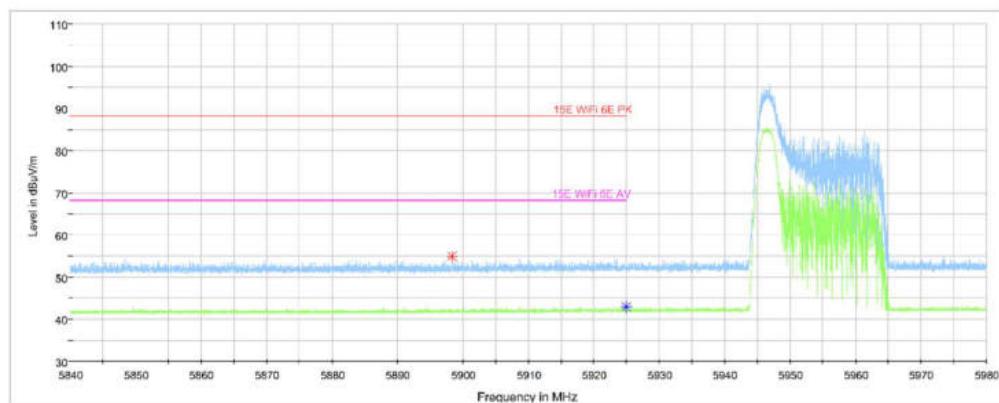


Fig.21 Band Edges (802.11ax 20M Ch1 partial RU Chain2)

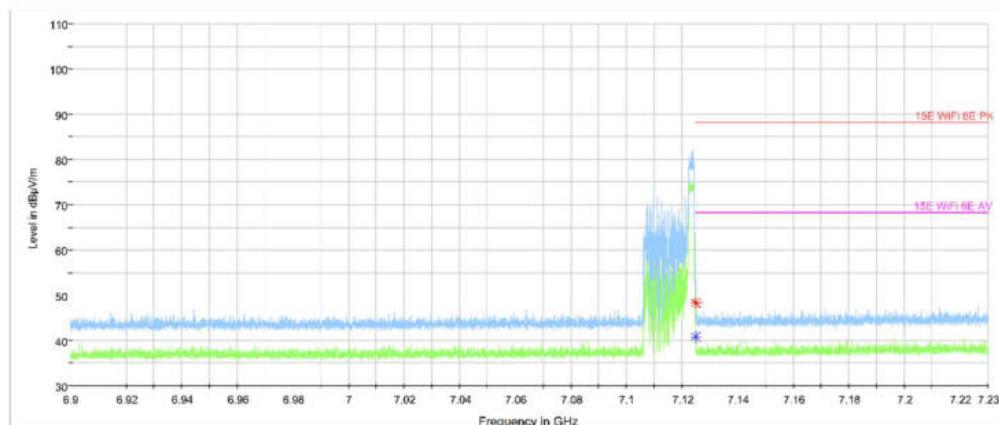


Fig.22 Band Edges (802.11ax 20M Ch233 partial RU Chain2)

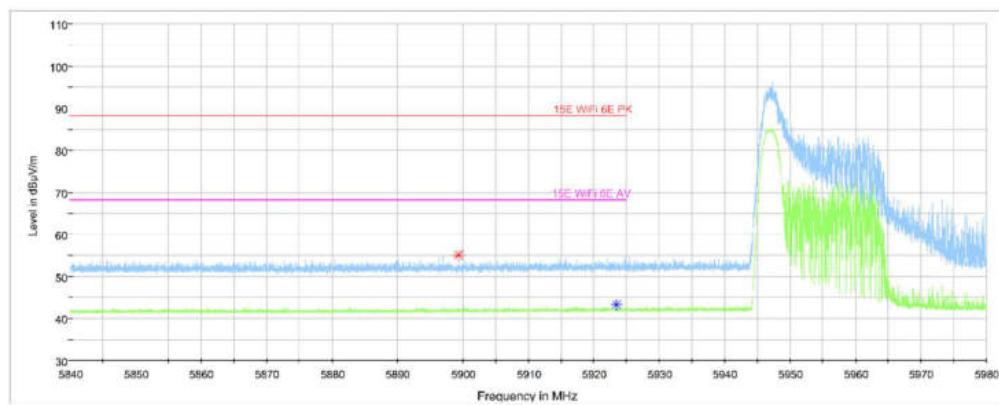


Fig.23 Band Edges (802.11ax 40M Ch3 partial RU Chain2)

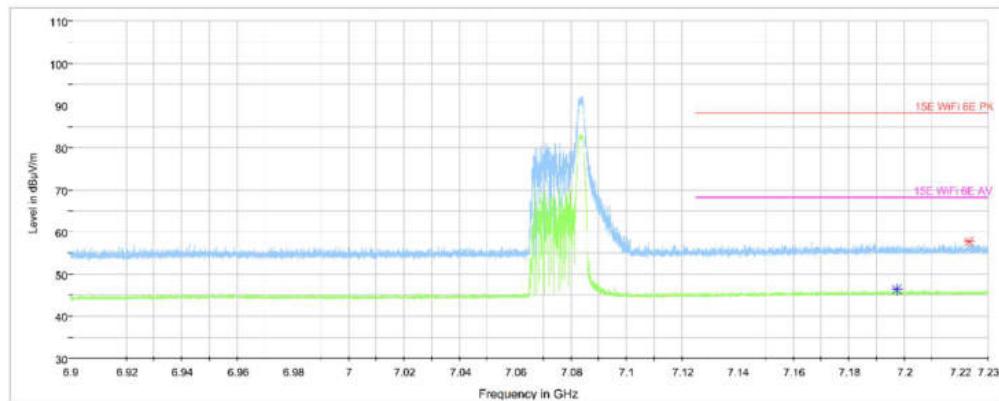


Fig.24 Band Edges (802.11ax 40M Ch227 partial RU Chain2)

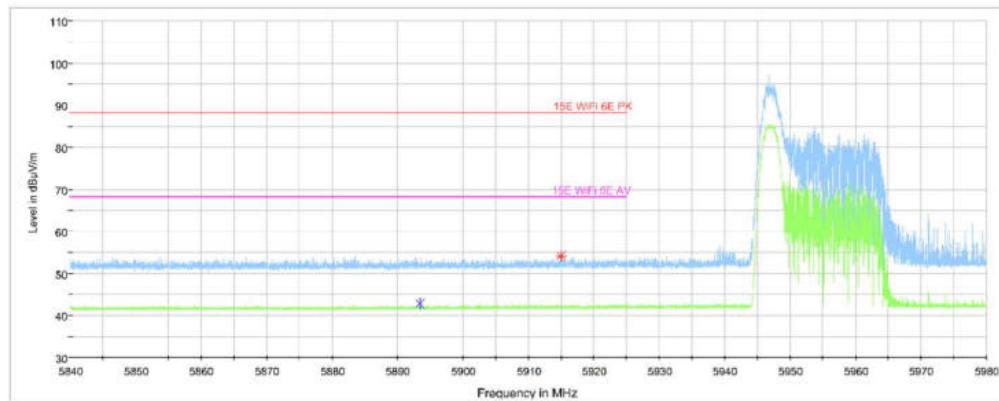


Fig.25 Band Edges (802.11ax 80M Ch7 partial RU Chain2)

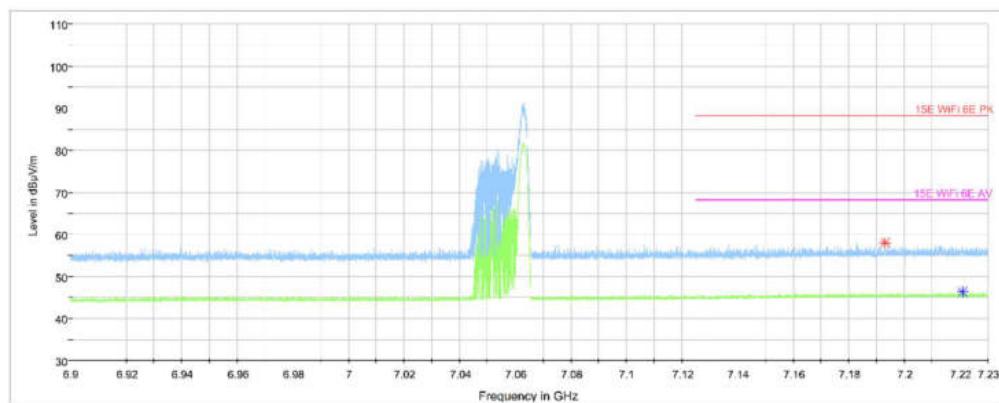


Fig.26 Band Edges (802.11ax 80M Ch215 partial RU Chain2)

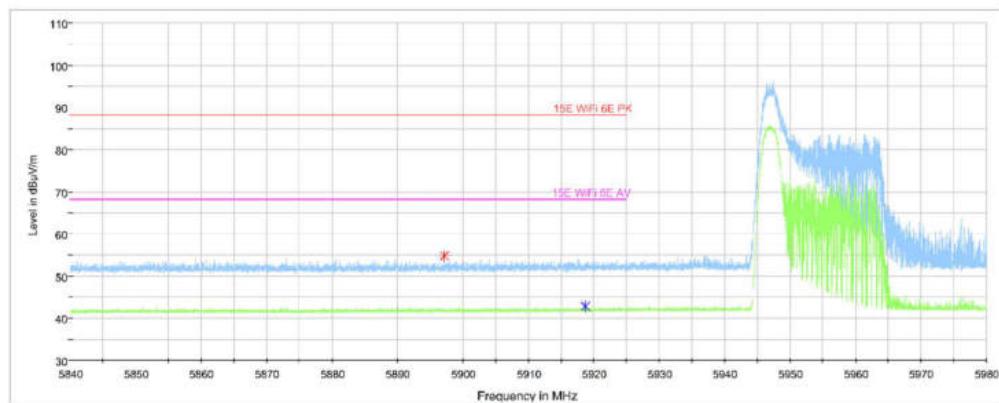


Fig.27 Band Edges (802.11ax 160M Ch15 partial RU Chain2)

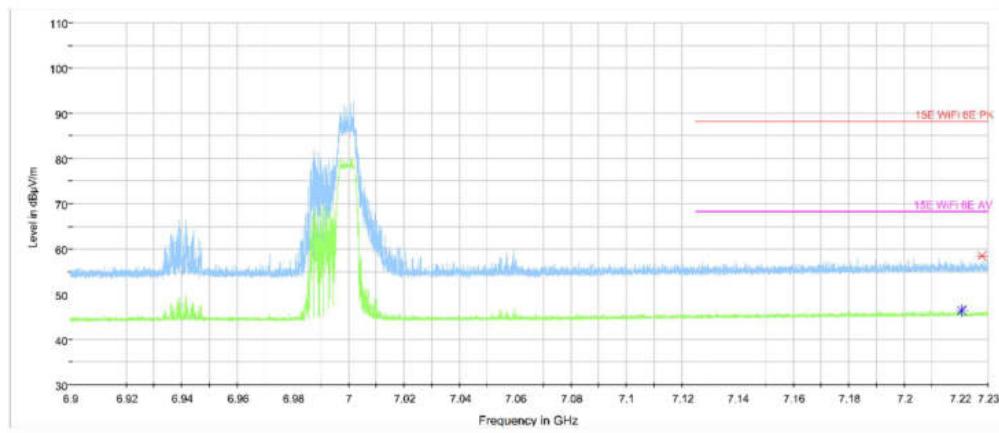


Fig.28 Band Edges (802.11ax 160M Ch207 partial RU Chain2)

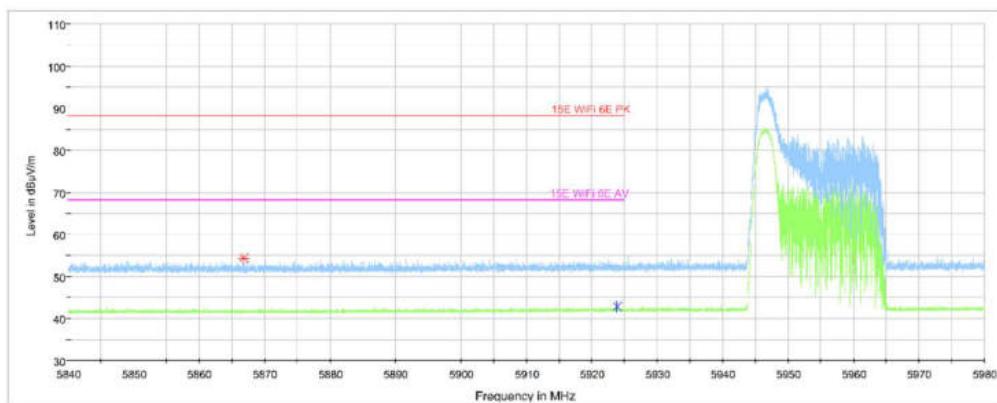


Fig.29 Band Edges (802.11be 20M Ch1 partial RU Chain2)

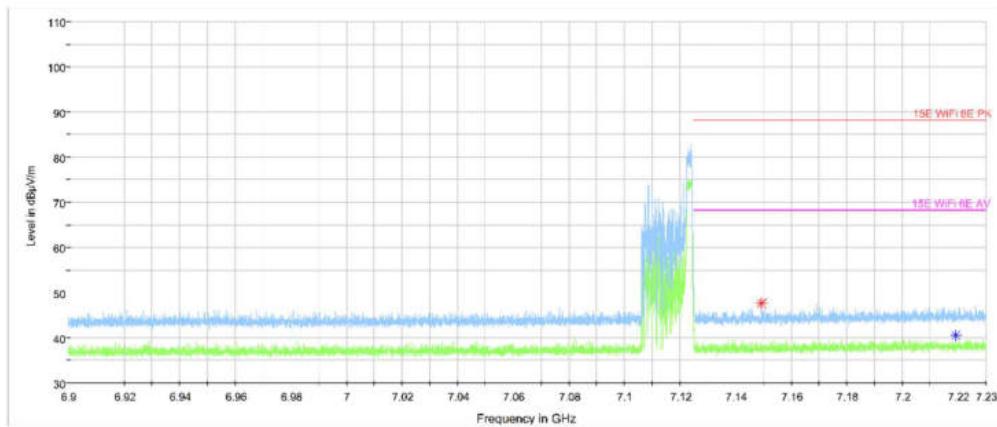


Fig.30 Band Edges (802.11be 20M Ch233 partial RU Chain2)

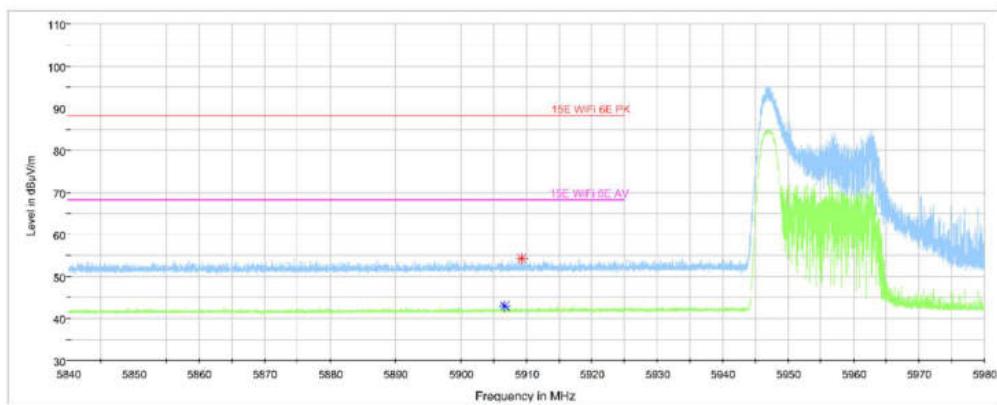


Fig.31 Band Edges (802.11be 40M Ch3 partial RU Chain2)

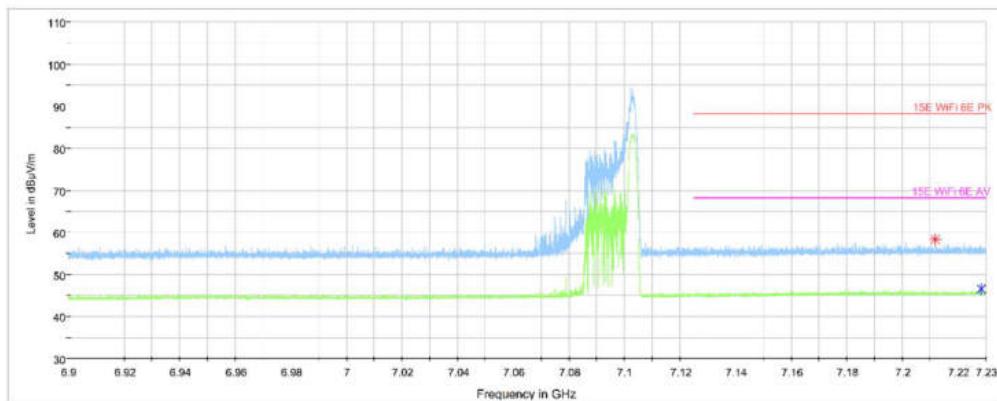


Fig.32 Band Edges (802.11be 40M Ch227 partial RU Chain2)

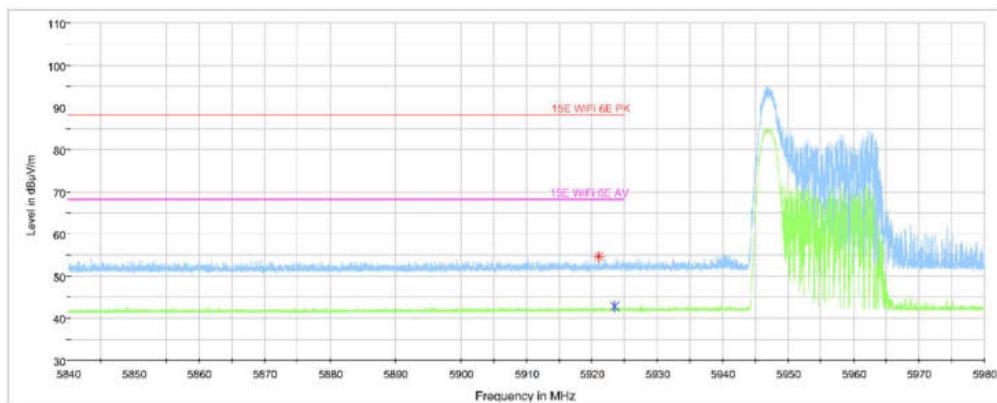


Fig.33 Band Edges (802.11be 80M Ch7 partial RU Chain2)

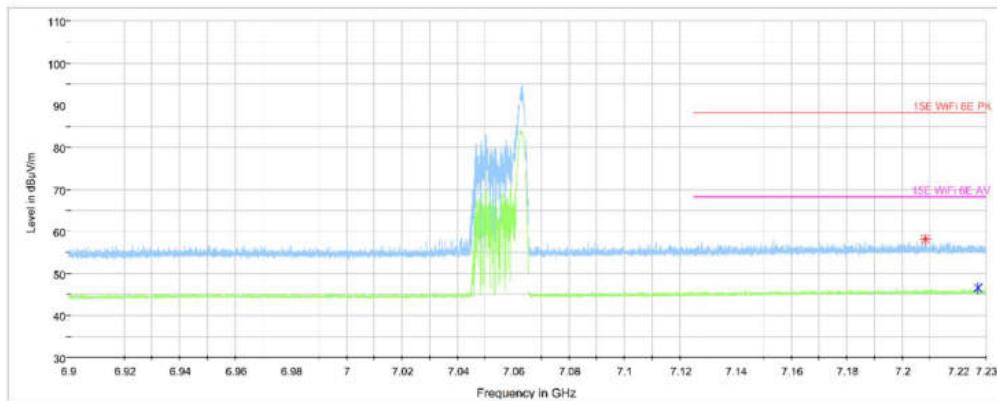


Fig.34 Band Edges (802.11be 80M Ch215 partial RU Chain2)

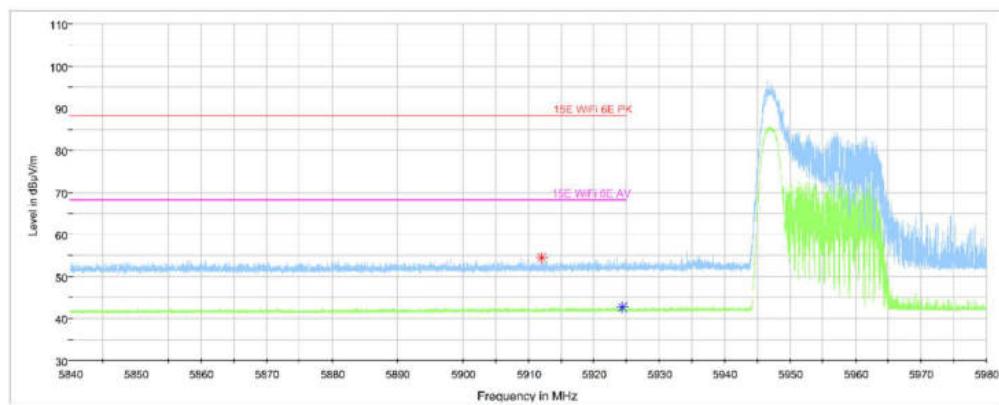


Fig.35 Band Edges (802.11be 160M Ch15 partial RU Chain2)

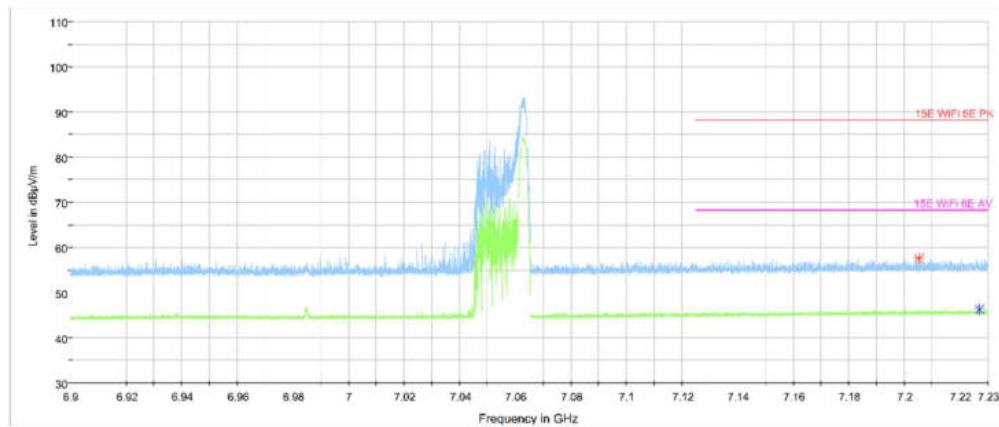


Fig.36 Band Edges (802.11be 160M Ch207 partial RU Chain2)

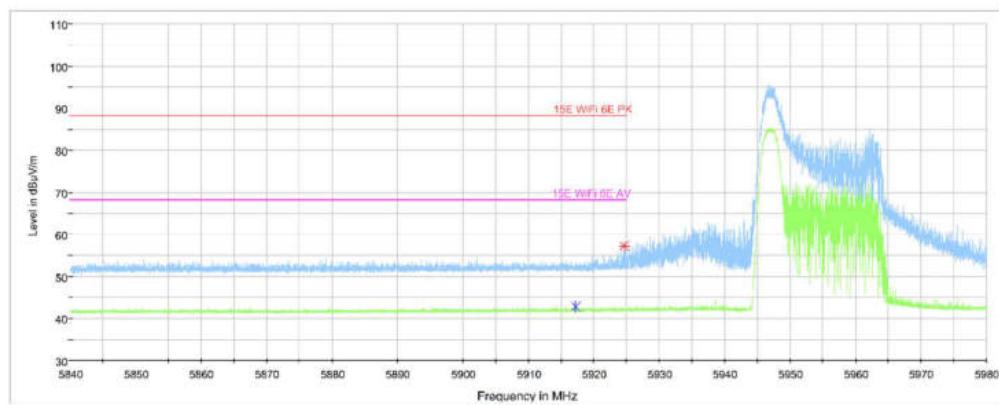


Fig.37 Band Edges (802.11be 320M Ch31 partial RU Chain2)

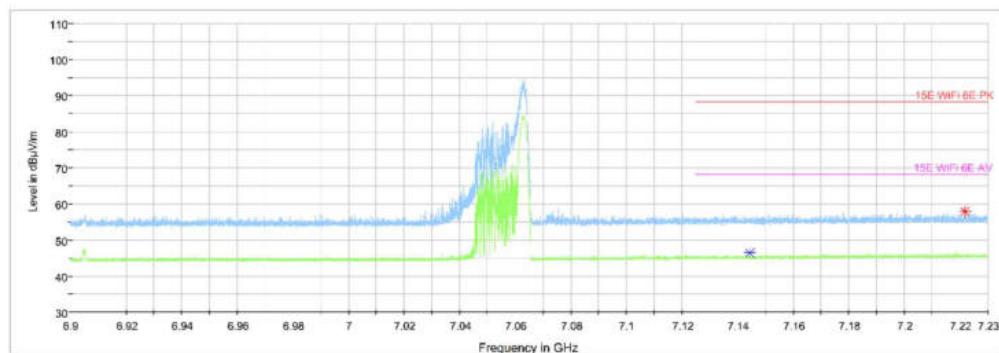


Fig.38 Band Edges (802.11be 320M Ch191 partial RU Chain2)

A.10. AC Powerline Conducted Emission (150kHz- 30MHz)

Test Condition:

Voltage (V)	Frequency (Hz)
120	60

Measurement uncertainty:

Expanded measurement uncertainty for this test item is U =3.08dB, k=2.

Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Result (dB μ V)		Conclusion	
		With charger			
		802.11ax	Idle		
0.15 to 0.5	66 to 56	Fig.39	Fig.40	P	
0.5 to 5	56				
5 to 30	60				

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dB μ V)	Result (dB μ V)		Conclusion	
		With charger			
		802.11ax	Idle		
0.15 to 0.5	67 56 to 46	Fig.39	Fig.40	P	
0.5 to 5	46				
5 to 30	50				

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

Conclusion: PASS

Test graphs as below:

Traffic:

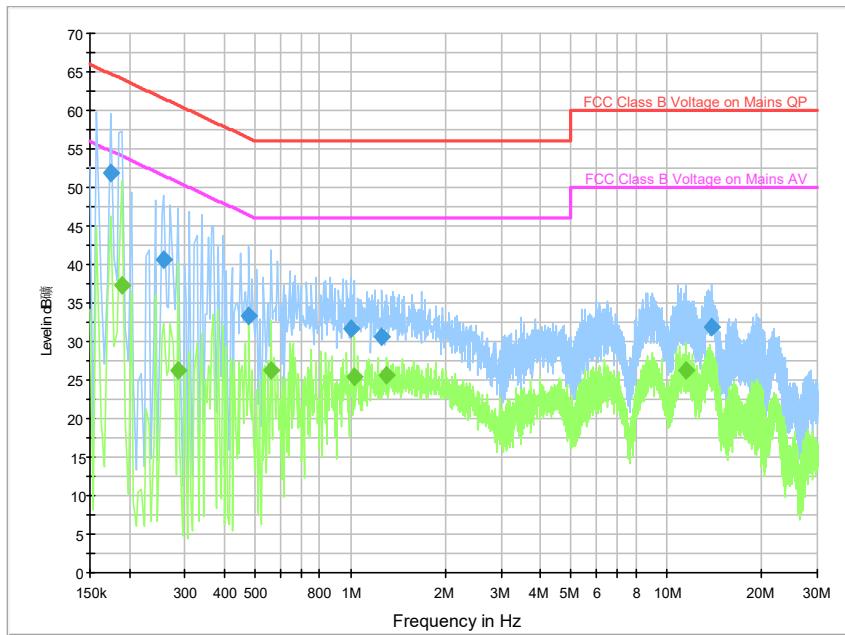


Fig.39 Conducted Emission (802.11ax, Ch1, TX)

Note1: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dB _{μV})	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB _{μV})
0.174000	51.9	2000.0	9.000	On	L1	19.9	12.9	64.8
0.258000	40.5	2000.0	9.000	On	L1	19.9	21.0	61.5
0.478000	33.3	2000.0	9.000	On	L1	20.0	23.1	56.4
1.002000	31.6	2000.0	9.000	On	N	19.7	24.4	56.0
1.262000	30.7	2000.0	9.000	On	N	19.7	25.3	56.0
13.866000	31.8	2000.0	9.000	On	L1	20.0	28.2	60.0

Final Result 2

Frequency (MHz)	QuasiPeak (dB _{μV})	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB _{μV})
0.190000	37.3	2000.0	9.000	On	L1	19.9	16.8	54.0
0.286000	26.3	2000.0	9.000	On	N	19.8	24.3	50.6
0.562000	26.3	2000.0	9.000	On	N	19.9	19.7	46.0
1.030000	25.3	2000.0	9.000	On	N	19.7	20.7	46.0
1.306000	25.6	2000.0	9.000	On	N	19.7	20.4	46.0
11.478000	26.2	2000.0	9.000	On	L1	20.0	23.8	50.0

Note2: The measurement results showed here are worst cases of the combinations of different cables and chargers

Idle:

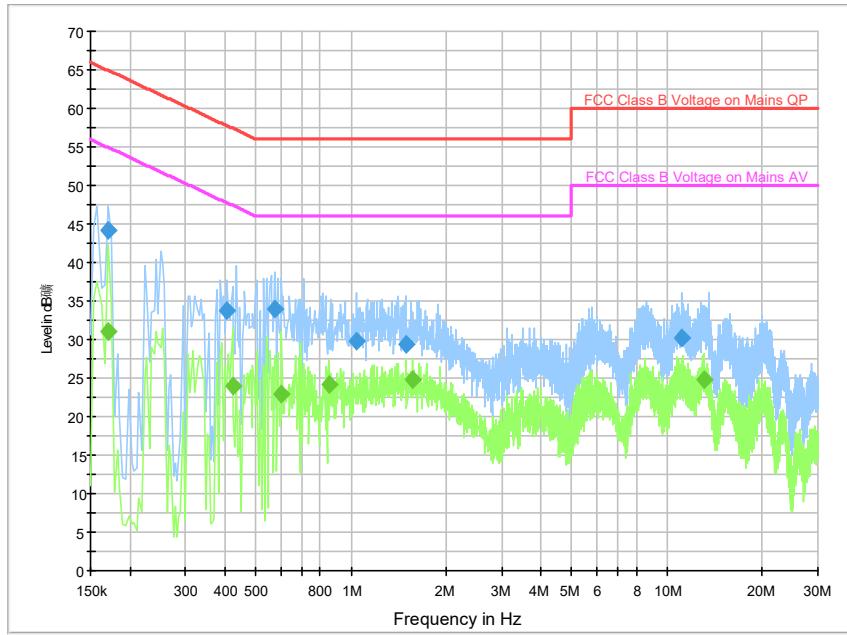


Fig.40 Conducted Emission(802.11ax, CH1 IDLE)

Note1: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.170000	44.1	2000.0	9.000	On	L1	19.9	20.8	65.0
0.406000	33.8	2000.0	9.000	On	N	19.9	24.0	57.7
0.574000	33.9	2000.0	9.000	On	N	19.9	22.1	56.0
1.042000	29.9	2000.0	9.000	On	N	19.7	26.1	56.0
1.498000	29.4	2000.0	9.000	On	N	19.7	26.6	56.0
11.094000	30.2	2000.0	9.000	On	L1	19.9	29.8	60.0

Final Result 2

Frequency (MHz)	QuasiPeak (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.170000	31.1	2000.0	9.000	On	L1	19.9	23.9	55.0
0.422000	23.9	2000.0	9.000	On	N	19.9	23.5	47.4
0.602000	23.0	2000.0	9.000	On	N	19.9	23.0	46.0
0.850000	24.2	2000.0	9.000	On	N	19.8	21.8	46.0
1.566000	24.7	2000.0	9.000	On	N	19.7	21.3	46.0
13.078000	24.8	2000.0	9.000	On	L1	20.0	25.2	50.0

Note2: The measurement results showed here are worst cases of the combinations of different cables and chargers

ANNEX B: EUT parameters

Disclaimer: The antenna gain and worse case provided by the client may affect the validity of the measurement results in this report, and the client shall bear the impact and consequences arising therefrom.

ANNEX C: Accreditation Certificate



Accredited Laboratory

A2LA has accredited

TELECOMMUNICATION TECHNOLOGY LABS, CAICT

Beijing, People's Republic of China

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 23rd day of July 2024.



Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 7049.01
Valid to July 31, 2026

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.

***** END OF REPORT BODY *****