

Appendix B: Test Results

APPENDIX B: TEST RESULTS.....	1
APPENDIX B.1: TEST RESULTS OF FIELD STRENGTH OF FUNDAMENTAL & HARMONICS	2
30MHz - 1GHz	2
1GHz - 18GHz	6
APPENDIX B.2: TEST RESULTS OF 20dB BANDWIDTH	18
APPENDIX B.3: TEST RESULTS OF 99% BANDWIDTH	20
APPENDIX B.4: TEST RESULTS OF BAND EDGE	22
APPENDIX B.5: TEST RESULTS OF CONDUCTED EMISSION ON AC MAINS	26

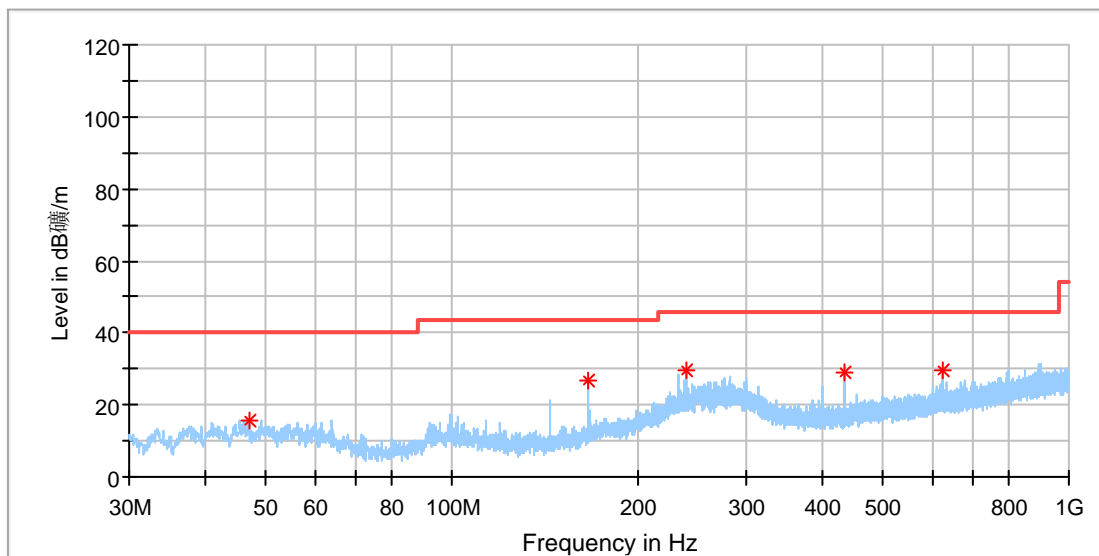
Note: The testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz to 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

Appendix B.1: Test Results of Field strength of fundamental & harmonics

30MHz - 1GHz

EUT Information

EUT Name:	Wireless Receiver
Model:	RG52-T
Test Mode:	2.4GHz LOW CH
Test Voltage::	PC USB operated
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

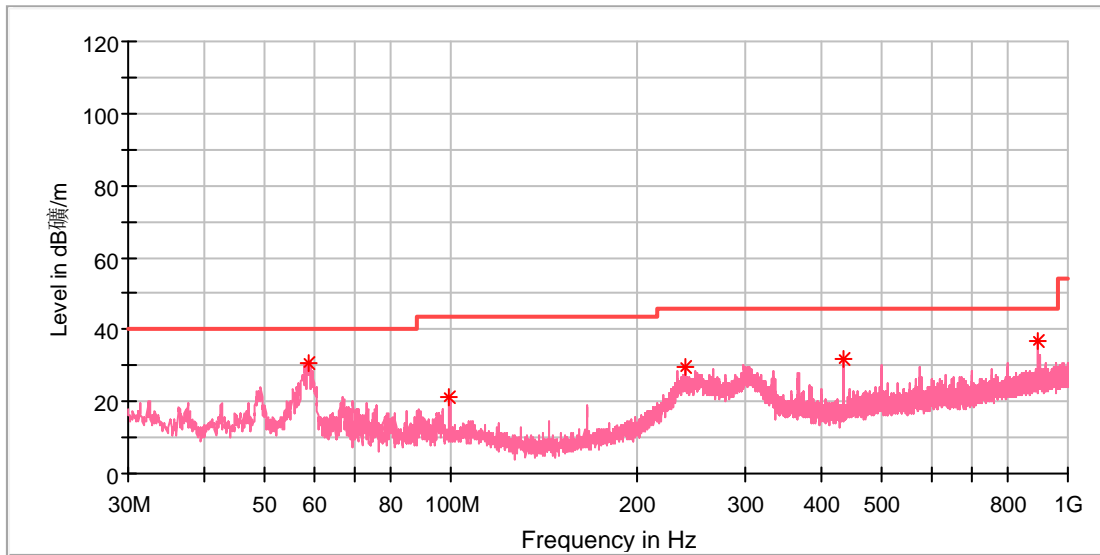


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
46.878000	15.47	40.00	24.53	100.0	H	285.0	-18.5
166.285000	26.57	43.50	16.93	100.0	H	151.0	-21.4
240.005000	29.37	46.00	16.63	100.0	H	6.0	-17.7
432.016500	29.20	46.00	16.80	100.0	H	6.0	-13.3
623.931000	29.42	46.00	16.58	100.0	H	105.0	-9.5

EUT Information

EUT Name:	Wireless Receiver
Model:	RG52-T
Test Mode:	2.4GHz LOW CH
Test Voltage::	PC USB operated
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

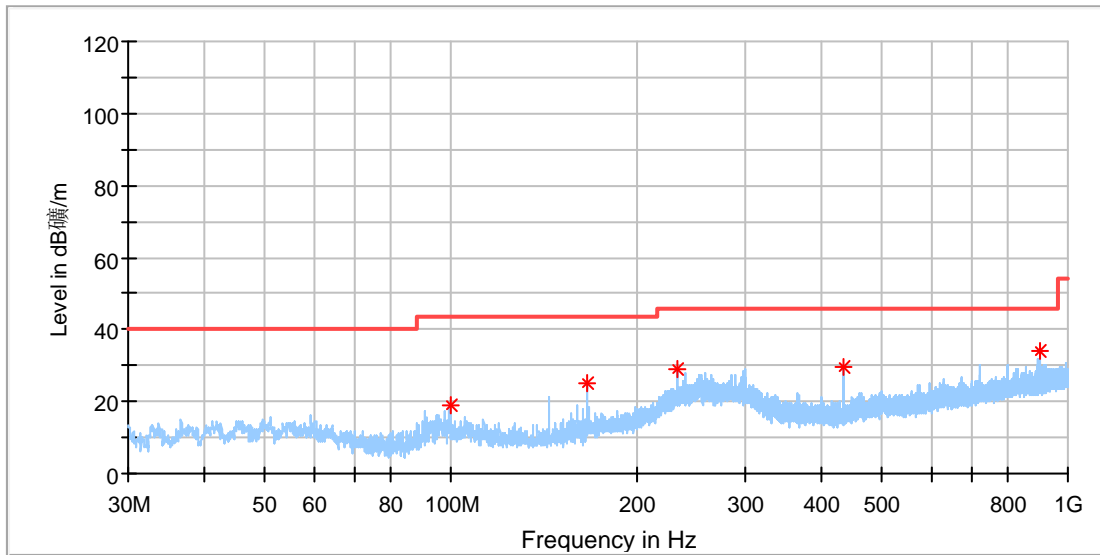


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
58.857500	30.52	40.00	9.48	100.0	V	340.0	-18.9
99.597500	21.21	43.50	22.29	100.0	V	68.0	-19.1
240.053500	29.31	46.00	16.69	100.0	V	44.0	-17.7
432.016500	31.85	46.00	14.15	100.0	V	270.0	-13.3
896.161500	36.74	46.00	9.26	100.0	V	108.0	-5.0

EUT Information

EUT Name: Wireless Receiver
 Model: RG52-T
 Test Mode: 2.4GHz HIGH CH
 Test Voltage:: PC USB operated
 Remark: Temp 23 Humi:45%
 Test Standard: FCC 15.249
 Tested By: Kei Zhang
 Reviewed By: Terry Yin

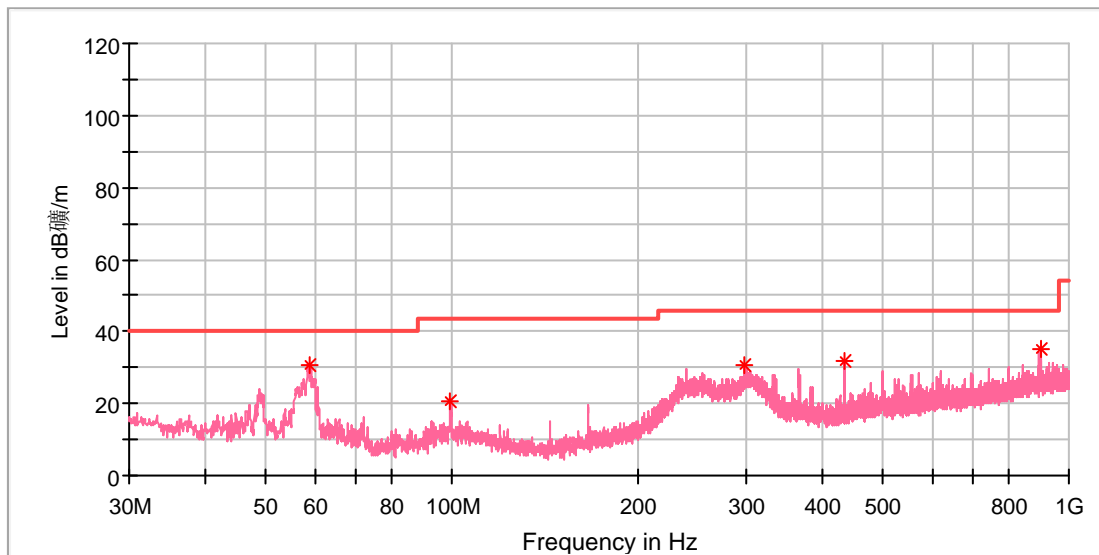


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
99.743000	18.95	43.50	24.55	100.0	H	110.0	-19.0
166.285000	24.96	43.50	18.54	100.0	H	3.0	-21.4
232.681500	29.14	46.00	16.86	100.0	H	119.0	-17.9
431.968000	29.70	46.00	16.30	100.0	H	24.0	-13.3
898.877500	34.28	46.00	11.72	100.0	H	328.0	-5.0

EUT Information

EUT Name:	Wireless Receiver
Model:	RG52-T
Test Mode:	2.4GHz HIGH CH
Test Voltage::	PC USB operated
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

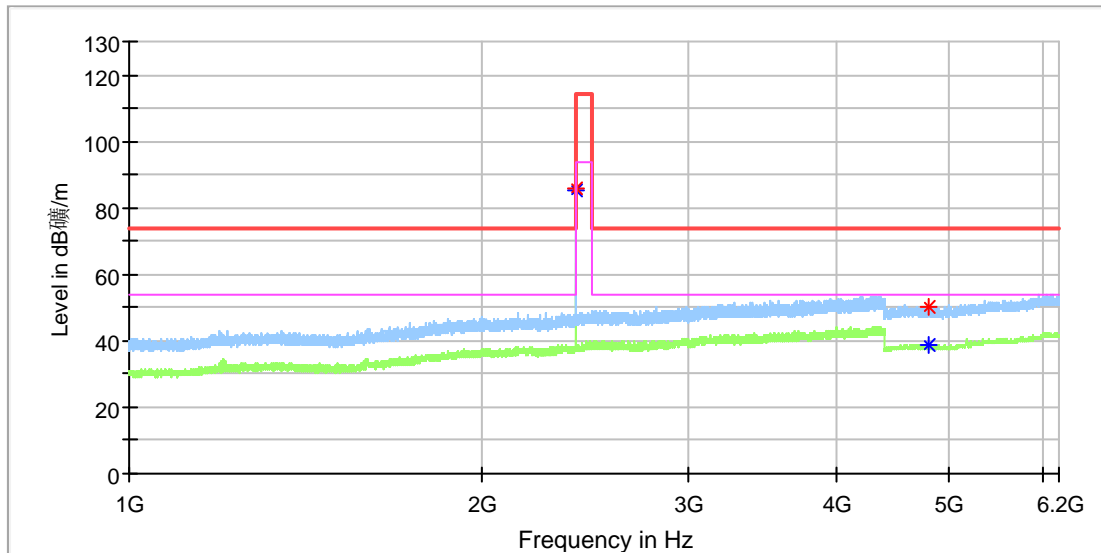
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
58.663500	30.78	40.00	9.22	100.0	V	87.0	-18.8
99.549000	20.60	43.50	22.90	100.0	V	234.0	-19.1
298.738500	30.96	46.00	15.04	100.0	V	5.0	-16.3
432.016500	31.67	46.00	14.33	100.0	V	271.0	-13.3
899.508000	35.35	46.00	10.65	100.0	V	137.0	-5.0

1GHz - 18GHz

Note: The highest waveform in the figure is 2.4GHz Fundamental.

EUT Information

EUT Name:	Wireless Receiver
Model:	RG52-T
Test Mode:	2.4GHz LOW CH
Test Voltage::	PC USB operated
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

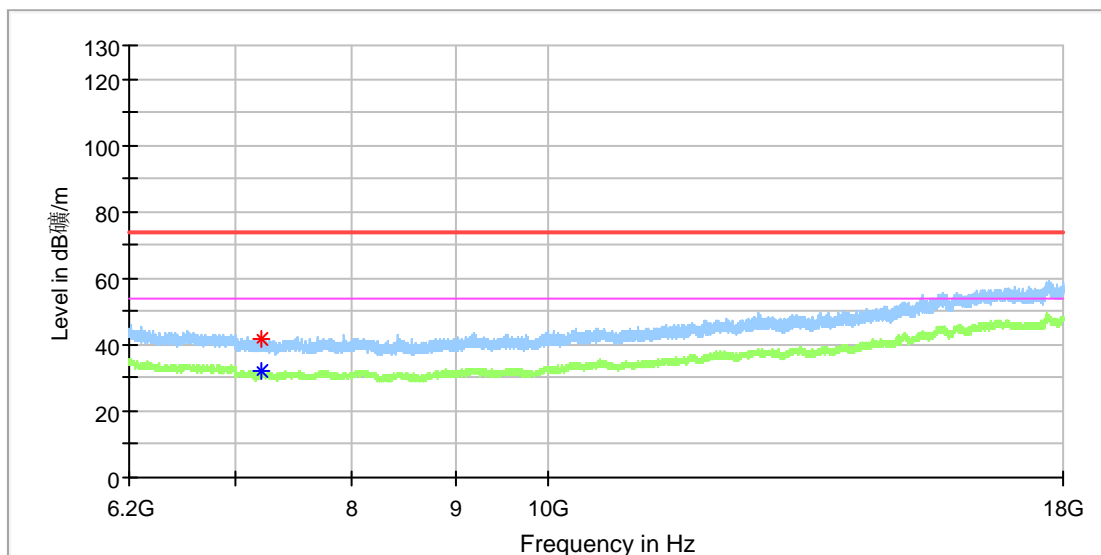


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2402.500000	85.74	---	114.00	28.26	100.0	H	107.0	7.0
2402.670000	---	85.40	94.00	8.60	100.0	H	107.0	7.0
4802.500000	---	38.64	54.00	15.36	100.0	H	111.0	11.8
4805.000000	50.03	---	74.00	23.97	100.0	H	162.0	11.8

EUT Information

EUT Name:	Wireless Receiver
Model:	RG52-T
Test Mode:	2.4GHz LOW CH
Test Voltage::	PC USB operated
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

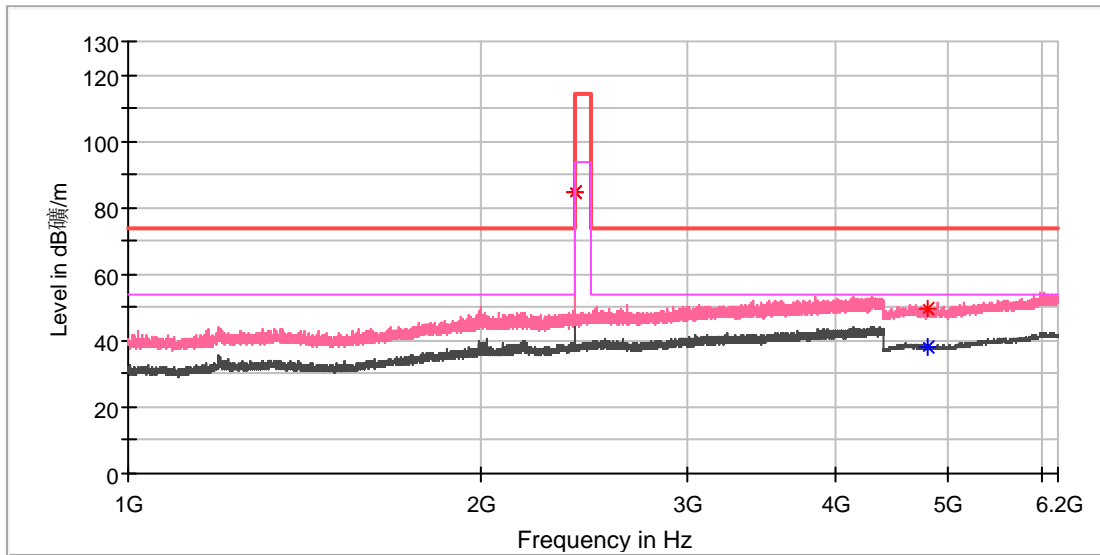


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7203.983333	---	31.83	54.00	22.17	100.0	H	180.0	8.8
7208.900000	41.46	---	74.00	32.54	100.0	H	309.0	8.8

EUT Information

EUT Name: Wireless Receiver
 Model: RG52-T
 Test Mode: 2.4GHz LOW CH
 Test Voltage:: PC USB operated
 Remark: Temp 23 Humi:45%
 Test Standard: FCC 15.249
 Tested By: Kei Zhang
 Reviewed By: Terry Yin

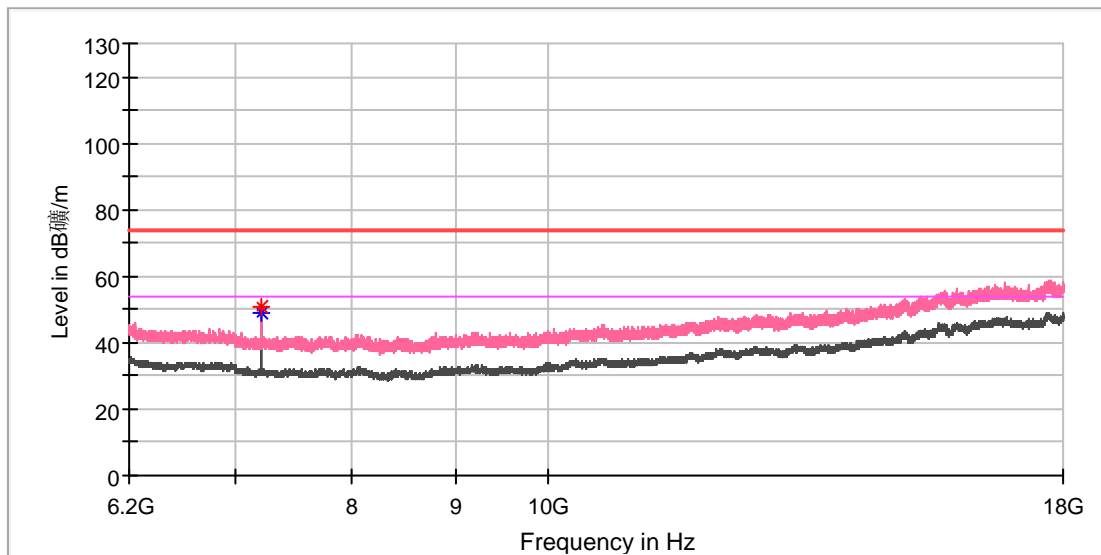


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2402.500000	84.74	---	114.00	29.26	100.0	V	318.0	7.0
2402.500000	---	84.68	94.00	9.32	100.0	V	318.0	7.0
4809.500000	---	38.38	54.00	15.62	100.0	V	69.0	11.8
4809.500000	49.51	---	74.00	24.49	100.0	V	69.0	11.8

EUT Information

EUT Name:	Wireless Receiver
Model:	RG52-T
Test Mode:	2.4GHz LOW CH
Test Voltage::	PC USB operated
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

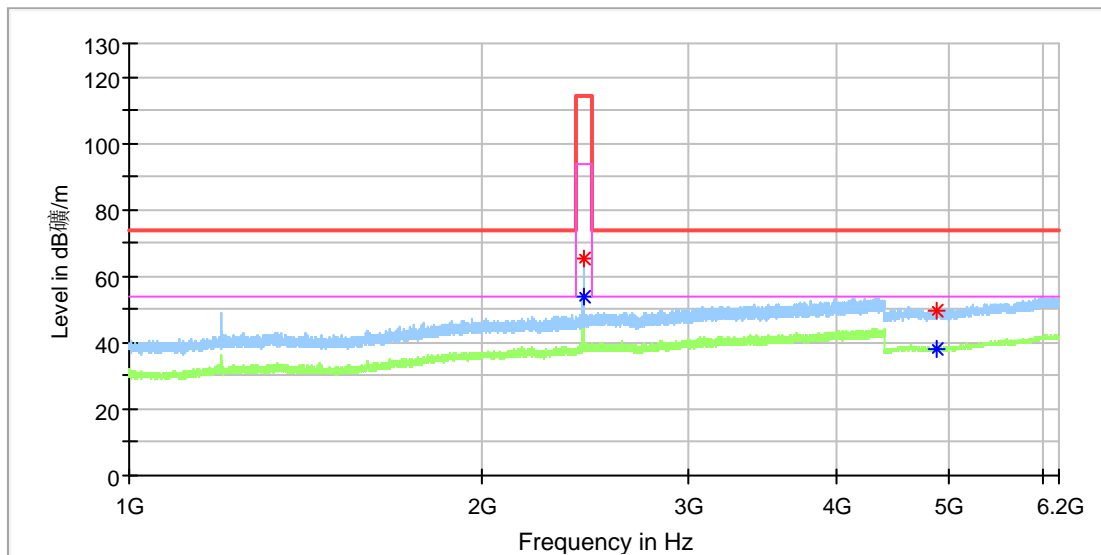


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7207.425000	50.54	---	74.00	23.46	100.0	V	177.0	8.8
7207.425000	---	48.81	54.00	5.19	100.0	V	177.0	8.8

EUT Information

EUT Name:	Wireless Receiver
Model:	RG52-T
Test Mode:	2.4GHz Middle CH
Test Voltage::	PC USB operated
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

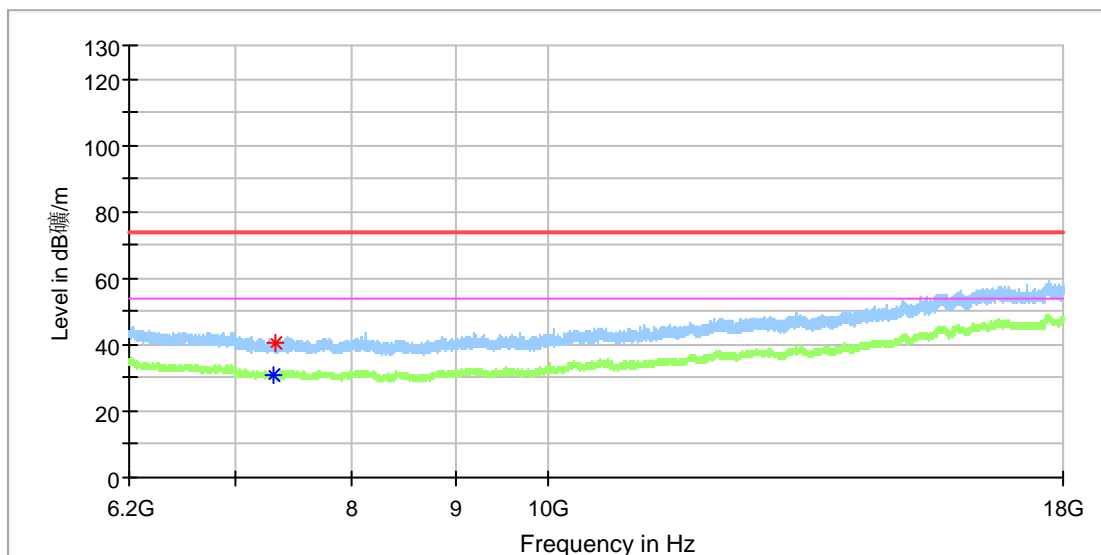


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2441.430000	65.19	---	114.00	48.81	100.0	H	193.0	7.4
2441.600000	---	53.57	94.00	40.43	100.0	H	193.0	7.4
4880.000000	49.88	---	74.00	24.12	100.0	H	74.0	11.8
4880.500000	---	38.05	54.00	15.95	100.0	H	187.0	11.8

EUT Information

EUT Name:	Wireless Receiver
Model:	RG52-T
Test Mode:	2.4GHz Middle CH
Test Voltage::	PC USB operated
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

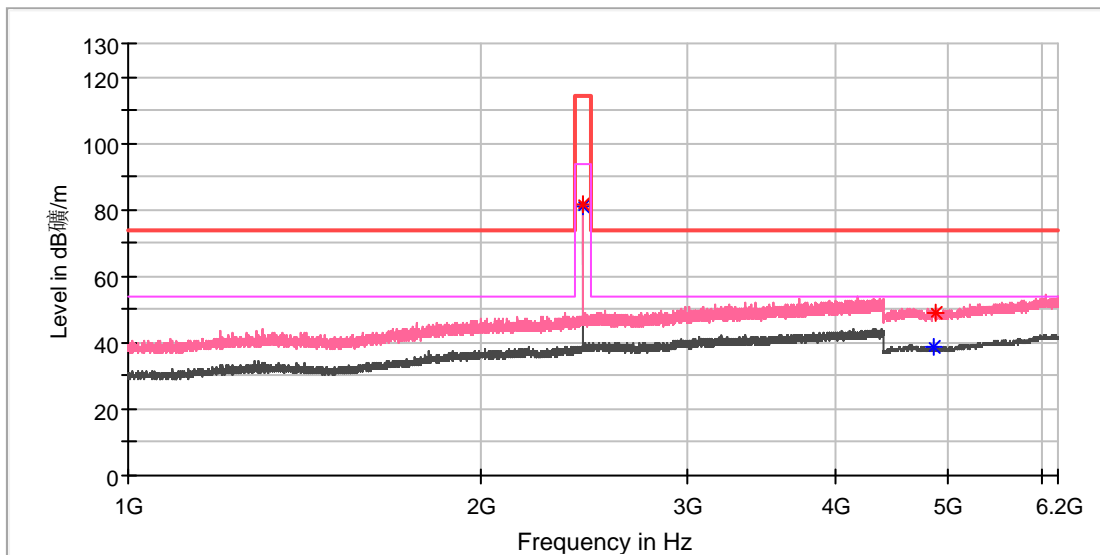


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7317.558333	---	30.93	54.00	23.07	100.0	H	105.0	8.2
7321.983333	40.68	---	74.00	33.32	100.0	H	43.0	8.2

EUT Information

EUT Name:	Wireless Receiver
Model:	RG52-T
Test Mode:	2.4GHz Middle CH
Test Voltage::	PC USB operated
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

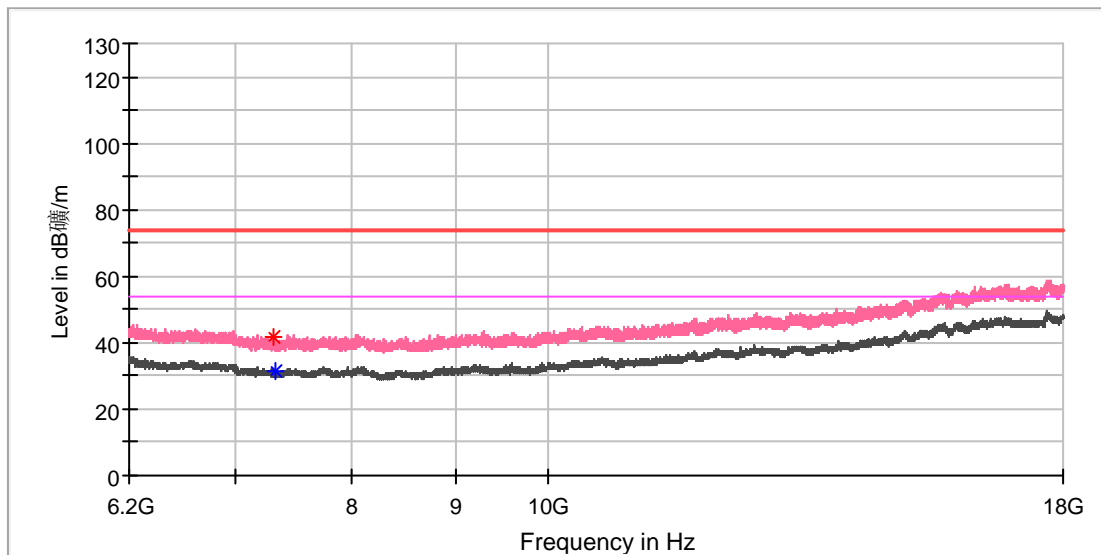


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2438.710000	---	80.80	94.00	13.20	100.0	V	223.0	7.4
2438.710000	81.68	---	114.00	32.32	100.0	V	223.0	7.4
4864.500000	---	38.44	54.00	15.56	100.0	V	67.0	11.8
4875.000000	48.94	---	74.00	25.06	100.0	V	0.0	11.8

EUT Information

EUT Name:	Wireless Receiver
Model:	RG52-T
Test Mode:	2.4GHz Middle CH
Test Voltage::	PC USB operated
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

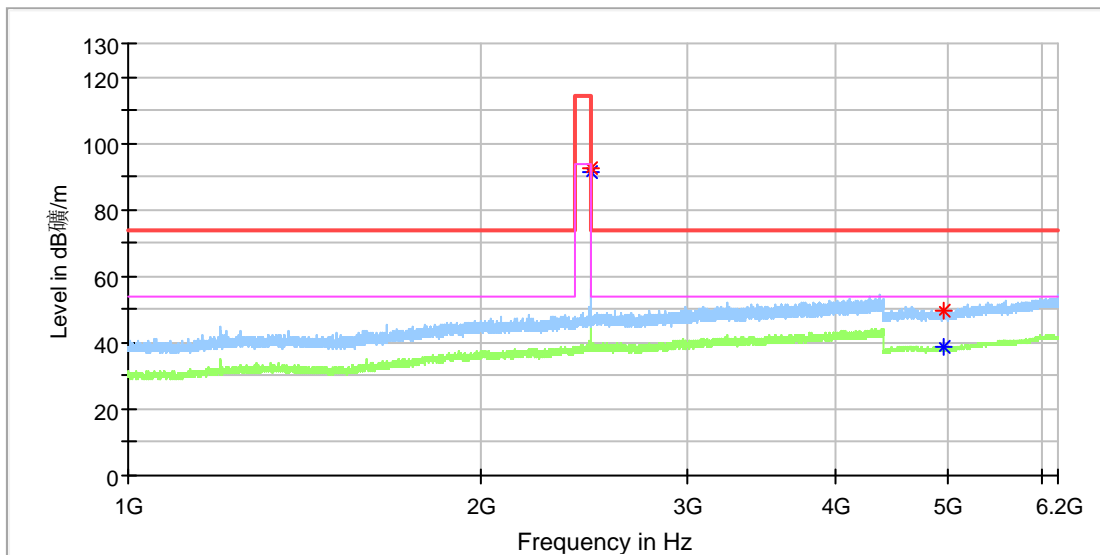


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7311.166667	41.51	---	74.00	32.49	100.0	V	323.0	8.2
7320.508333	---	31.30	54.00	22.70	100.0	V	158.0	8.2

EUT Information

EUT Name:	Wireless Receiver
Model:	RG52-T
Test Mode:	2.4GHz HIGH CH
Test Voltage::	PC USB operated
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

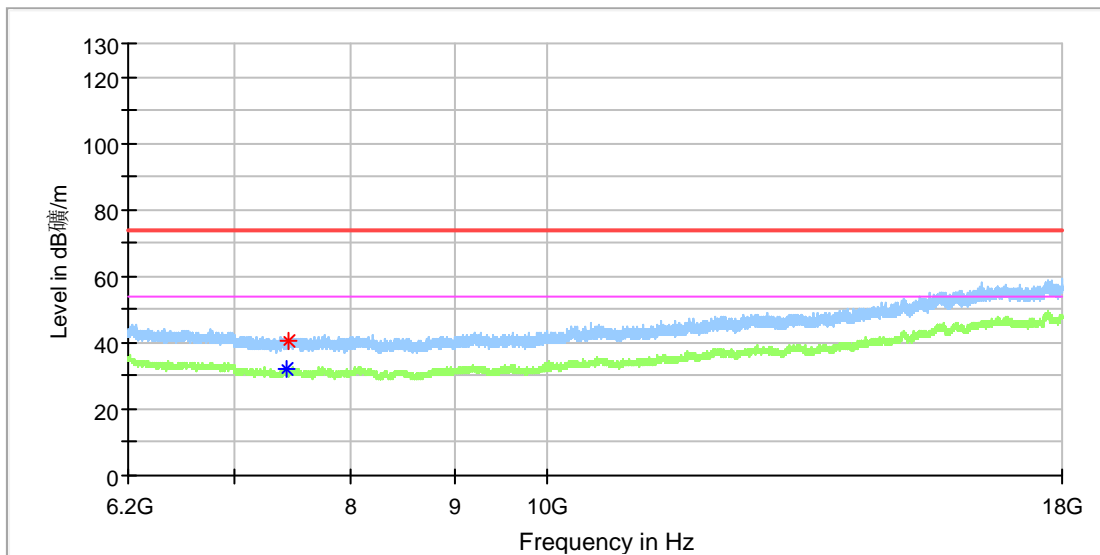


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2478.320000	---	91.17	94.00	2.83	100.0	H	294.0	7.4
2478.490000	92.51	---	114.00	21.49	100.0	H	294.0	7.4
4950.000000	---	38.48	54.00	15.52	100.0	H	98.0	11.8
4950.500000	49.62	---	74.00	24.38	100.0	H	183.0	11.8

EUT Information

EUT Name:	Wireless Receiver
Model:	RG52-T
Test Mode:	2.4GHz HIGH CH
Test Voltage::	PC USB operated
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

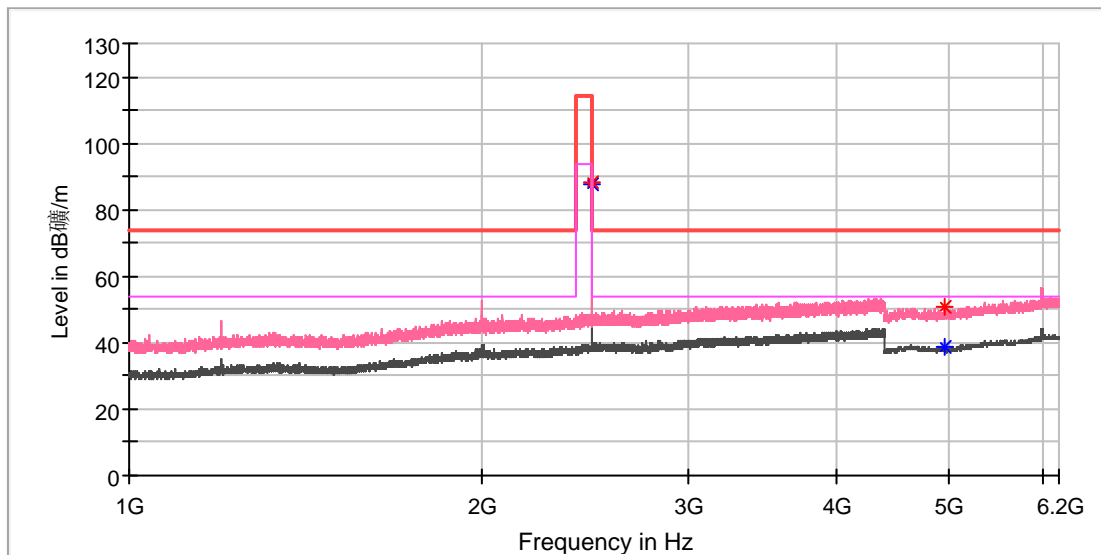


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7431.133333	---	31.80	54.00	22.20	100.0	H	0.0	8.4
7438.016667	40.80	---	74.00	33.20	100.0	H	329.0	8.4

EUT Information

EUT Name:	Wireless Receiver
Model:	RG52-T
Test Mode:	2.4GHz HIGH CH
Test Voltage::	PC USB operated
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

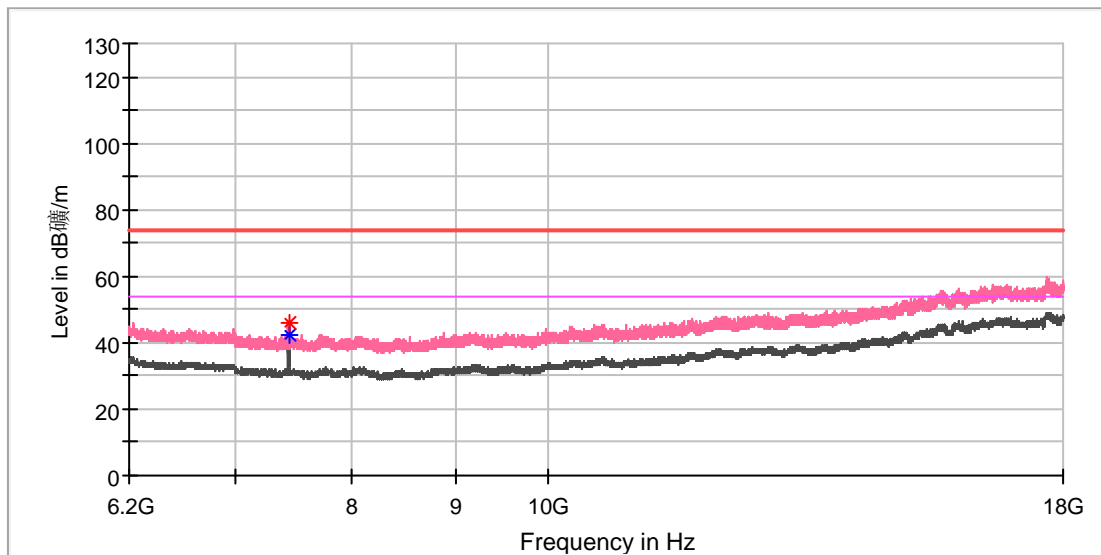


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2478.490000	88.27	---	114.00	25.73	100.0	V	6.0	7.4
2478.660000	---	87.93	94.00	6.07	100.0	V	6.0	7.4
4957.000000	---	38.64	54.00	15.36	100.0	V	0.0	11.8
4964.000000	50.49	---	74.00	23.51	100.0	V	22.0	11.8

EUT Information

EUT Name:	Wireless Receiver
Model:	RG52-T
Test Mode:	2.4GHz HIGH CH
Test Voltage::	PC USB operated
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

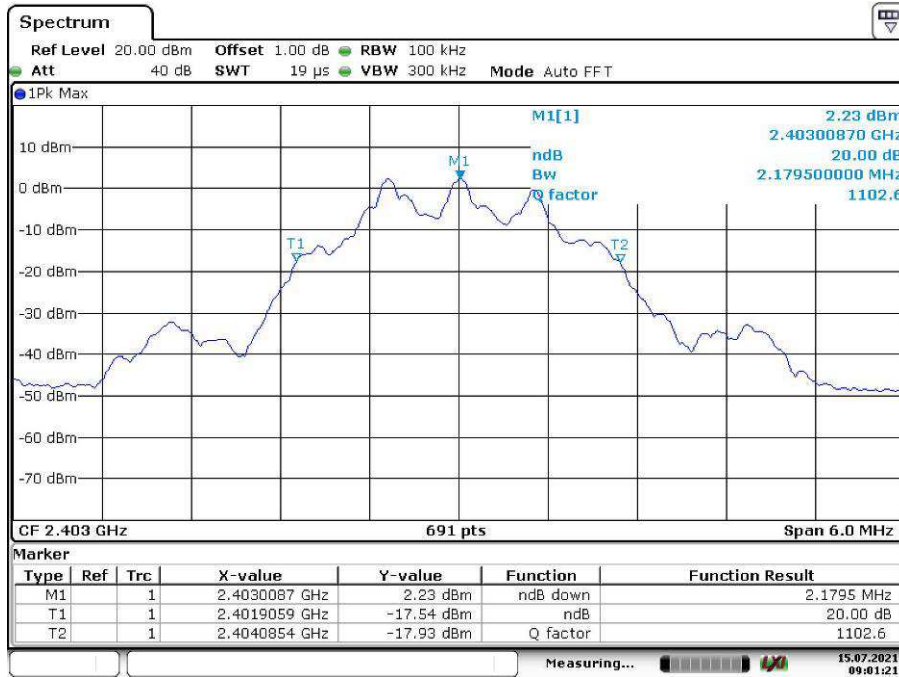


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7437.033333	45.79	---	74.00	28.21	100.0	V	10.0	8.4
7437.033333	---	42.10	54.00	11.90	100.0	V	10.0	8.4

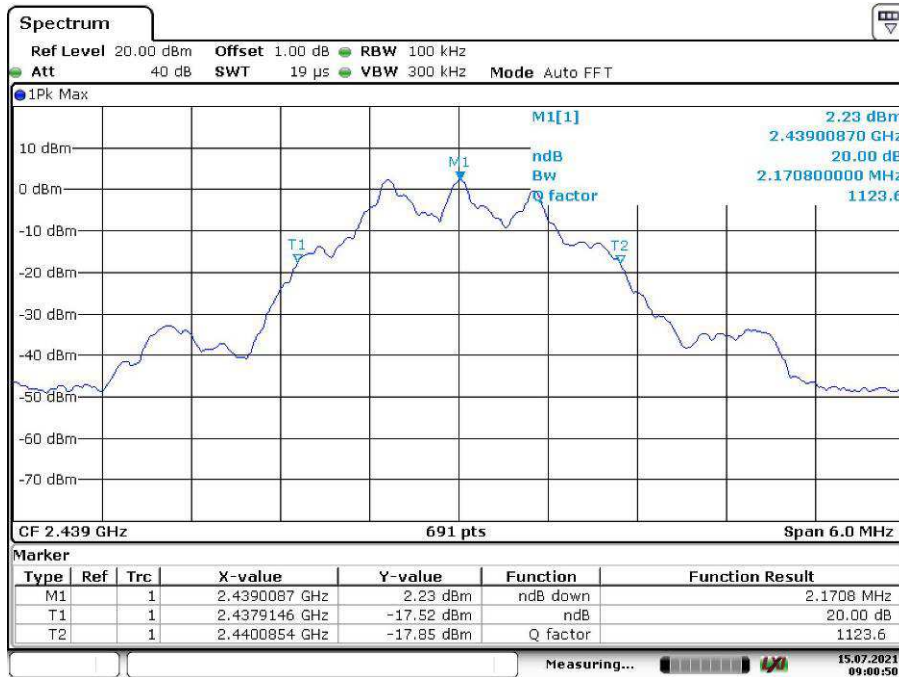
Appendix B.2: Test Results of 20dB Bandwidth

2403MHz



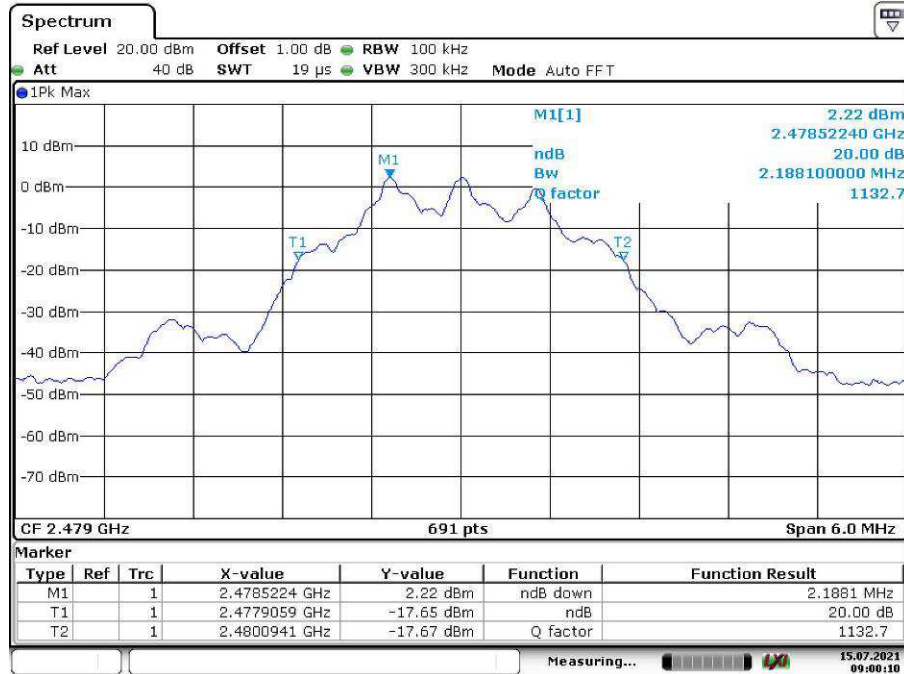
Date: 15.JUL.2021 09:01:21

2439MHz



Date: 15.JUL.2021 09:00:50

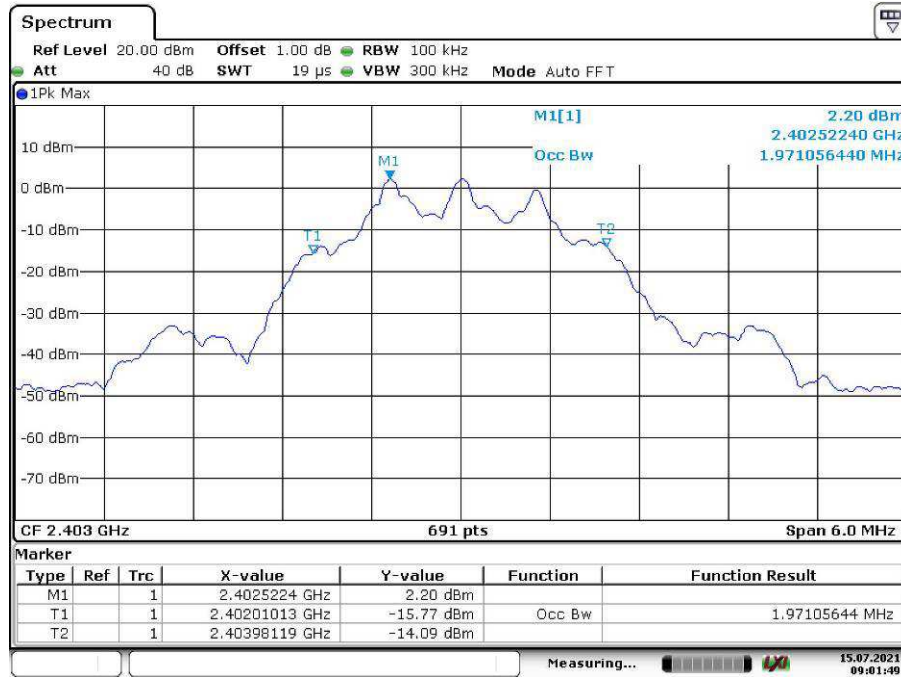
2479MHz



Date: 15.JUL.2021 09:00:10

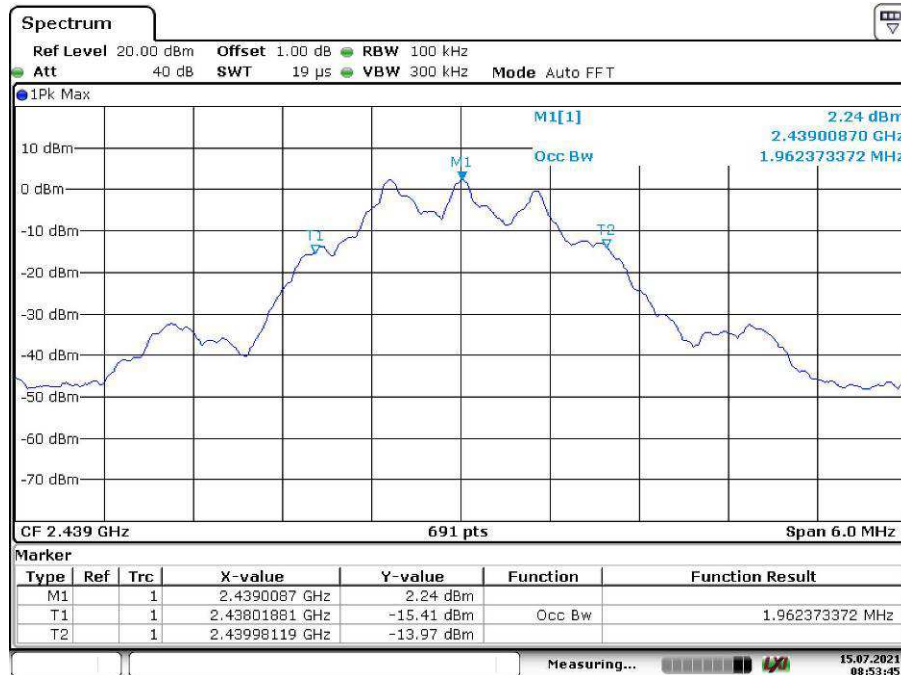
Appendix B.3: Test Results of 99% Bandwidth

2403MHz



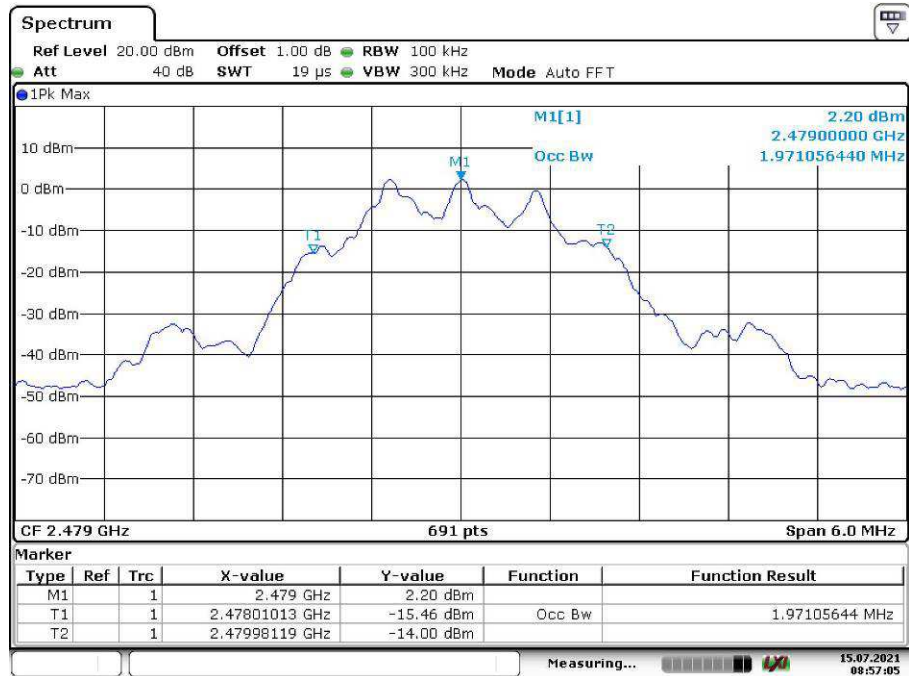
Date: 15.JUL.2021 09:01:49

2439MHz



Date: 15.JUL.2021 08:53:45

2479MHz

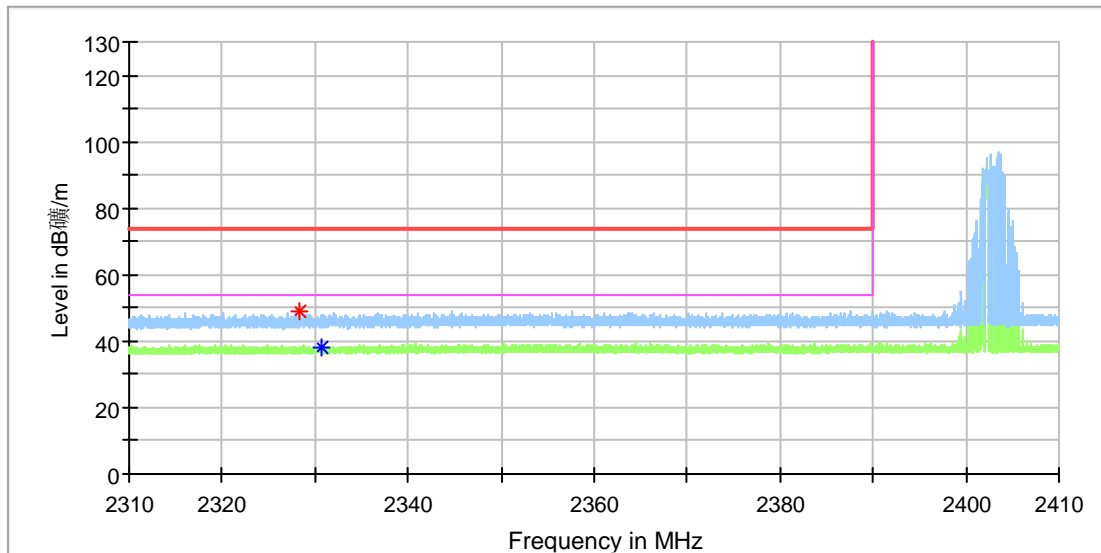


Date: 15.JUL.2021 08:57:05

Appendix B.4: Test Results of Band Edge

EUT Information

EUT Name:	Wireless Receiver
Model:	RG52-T
Test Mode:	2.4GHz LOW CH
Test Voltage::	PC USB operated
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

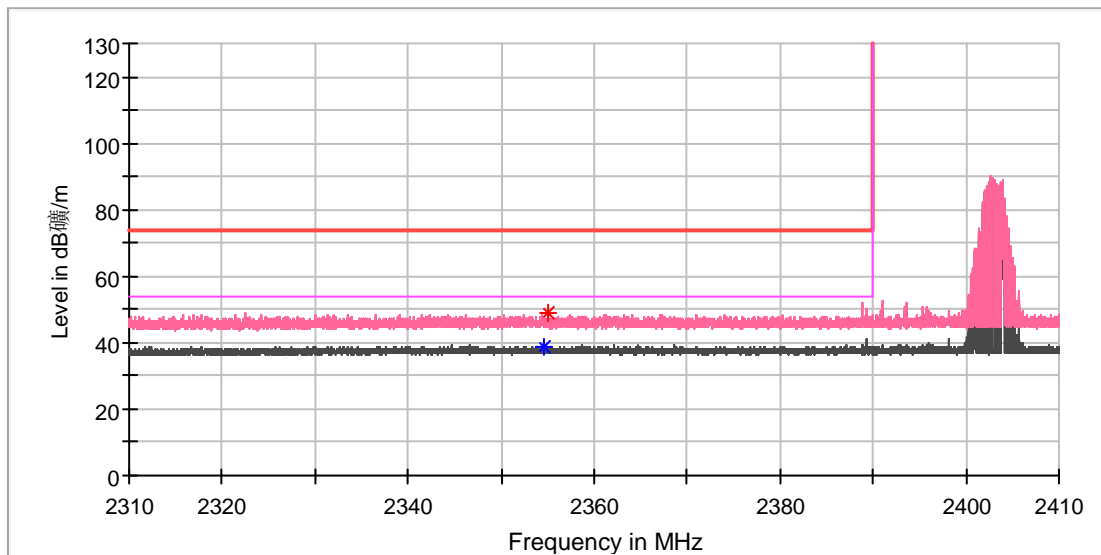


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2328.299250	49.12	---	74.00	24.88	100.0	H	309.0	6.7
2330.702250	---	38.22	54.00	15.78	100.0	H	217.0	6.7

EUT Information

EUT Name:	Wireless Receiver
Model:	RG52-T
Test Mode:	2.4GHz LOW CH
Test Voltage::	PC USB operated
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

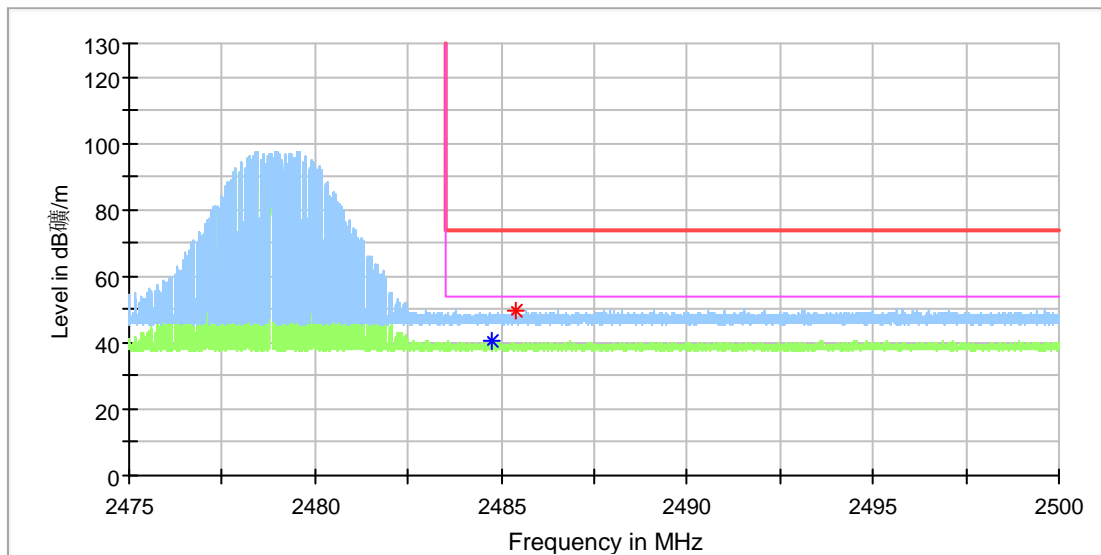


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2354.543250	---	38.99	54.00	15.01	100.0	V	194.0	6.9
2355.083250	49.23	---	74.00	24.77	100.0	V	71.0	6.9

EUT Information

EUT Name:	Wireless Receiver
Model:	RG52-T
Test Mode:	2.4GHz HIGH CH
Test Voltage::	PC USB operated
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

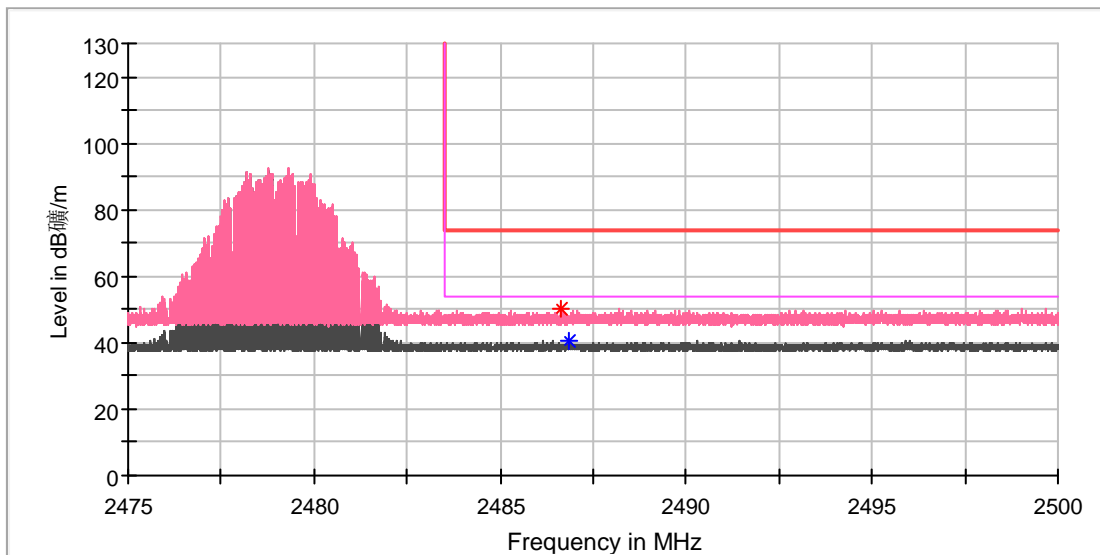


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.750000	---	40.80	54.00	13.20	100.0	H	48.0	7.4
2485.410000	49.39	---	74.00	24.61	100.0	H	264.0	7.4

EUT Information

EUT Name:	Wireless Receiver
Model:	RG52-T
Test Mode:	2.4GHz HIGH CH
Test Voltage::	PC USB operated
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



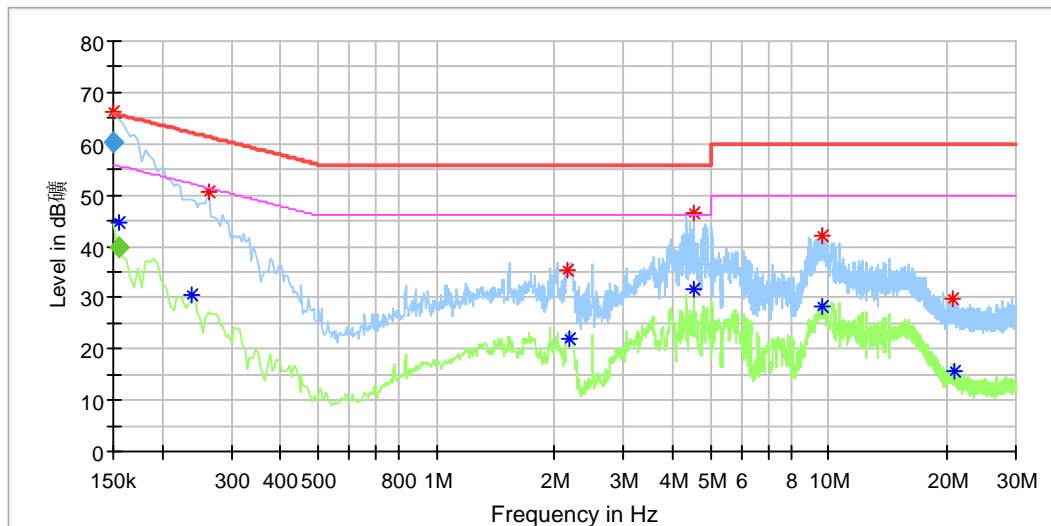
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2486.635000	50.44	---	74.00	23.56	100.0	V	203.0	7.4
2486.840000	---	40.67	54.00	13.33	100.0	V	203.0	7.4

Appendix B.5: Test Results of Conducted Emission on AC Mains

EUT Information

EUT Name:	Wireless Receiver
Order No:	168326036 80
Model:	RG52-T
Test mode:	On (2.4GHz)
Test Voltage:	AC 120V/60Hz
Test By:	Richard Lin
Review By:	Gary Chen
Remark:	SR2



Critical Freqs

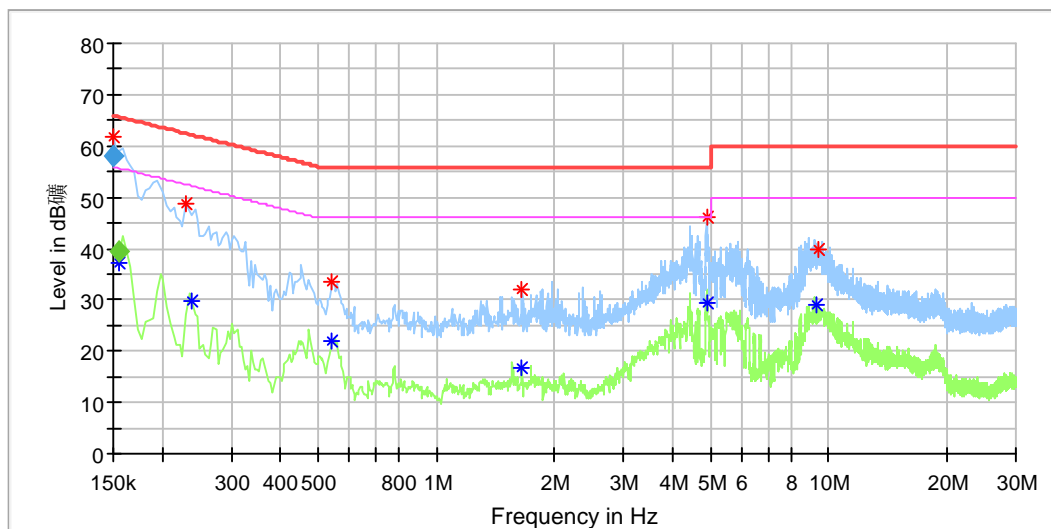
Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.150000	66.40	---	66.00	-0.40	L1	9.9
0.154500	---	44.77	56.00	11.23	L1	9.9
0.238000	---	30.50	52.17	21.67	L1	9.9
0.262000	50.78	---	61.37	10.59	L1	9.9
2.162000	35.37	---	56.00	20.63	L1	10.1
2.178000	---	21.85	46.00	24.15	L1	10.2
4.538000	---	31.72	46.00	14.28	L1	10.2
4.538000	46.49	---	56.00	9.51	L1	10.2
9.638000	---	28.13	50.00	21.87	L1	10.3
9.670000	42.13	---	60.00	17.87	L1	10.3
20.758000	29.59	---	60.00	30.41	L1	10.4
20.886000	---	15.46	50.00	34.54	L1	10.4

Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.150000	60.46	---	66.00	5.54	200.0	9.000	L1	9.9
0.154500	---	39.98	55.75	15.78	200.0	9.000	L1	9.9

EUT Information

EUT Name: Wireless Receiver
 Order No: 168326036 80
 Model: RG52-T
 Test mode: On (2.4GHz)
 Test Voltage: AC 120V/60Hz
 Test By: Richard Lin
 Review By: Gary Chen
 Remark: SR2



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.150000	61.62	---	66.00	4.38	N	9.8
0.154500	---	37.12	56.00	18.88	N	9.8
0.230000	48.77	---	62.45	13.68	N	9.8
0.238000	---	29.59	52.17	22.58	N	9.8
0.542000	---	22.01	46.00	23.99	N	9.8
0.542000	33.49	---	56.00	22.51	N	9.8
1.654000	---	16.74	46.00	29.26	N	9.8
1.654000	31.93	---	56.00	24.07	N	9.8
4.878000	46.23	---	56.00	9.77	N	9.9
4.886000	---	29.36	46.00	16.64	N	9.9
9.294000	---	28.88	50.00	21.12	N	10.0
9.406000	39.91	---	60.00	20.09	N	10.0

Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.150000	58.05	---	66.00	7.95	200.0	9.000	N	9.8
0.154500	---	39.54	55.75	16.21	200.0	9.000	N	9.8