Appendix for Test report

Appendix A: 20dB Emission Bandwidth (EBW)

Refer to No. SYBH(Z-RF)20181114019001-2002

Appendix B: Carrier Frequency Separation

Refer to No. SYBH(Z-RF)20181114019001-2002

Appendix C: Number of Hopping Channel

Refer to No. SYBH(Z-RF)20181114019001-2002

Appendix D: Time of Occupancy (Dwell Time)

Refer to No. SYBH(Z-RF)20181114019001-2002

Appendix E: Maximum Peak Conducted Output Power

Refer to No. SYBH(Z-RF)20181114019001-2002

Appendix F: Band edge spurious emission

Refer to No. SYBH(Z-RF)20181114019001-2002

Appendix G: Conducted RF Spurious Emission

Refer to No. SYBH(Z-RF)20181114019001-2002

Appendix H: Radiated Emissions in the Restricted Bands

Note1: For adding Wireless charging protective case we only tested the RSE of the worst case, other data refer to No. SYBH(Z-RF)20181114019001-2002
Note2: We tested in two modes, mode 1 is adaptor + Wireless Charging Case and mode 2 is adaptor + Wireless charging charger+ Wireless Charging Case, and the data presented below is the worst case (mode 1).

1 Result Table

The whole testing range is from “30 MHz to 26.5 GHz (10th harmonics)” is divided into 5 parts according to the test site settings, which are:

- (Part 1): Test range of “9 KHz to 30 MHz”,
- (Part 2): Test range of “30 MHz to 1GHz
- (Part 3): Test range of “1 GHz to 3 GHz”.
- (Part 4): Test range of “3 GHz to 18 GHz”,
- (Part 5): Test range of “18 GHz to 26.5 GHz”.

In this Appendix, only the test results and plots under the worst case can be reported. In the result table, the “< Limit” denotes that “Not found obvious spikes or see marked spikes on plots and listed emissions records”.

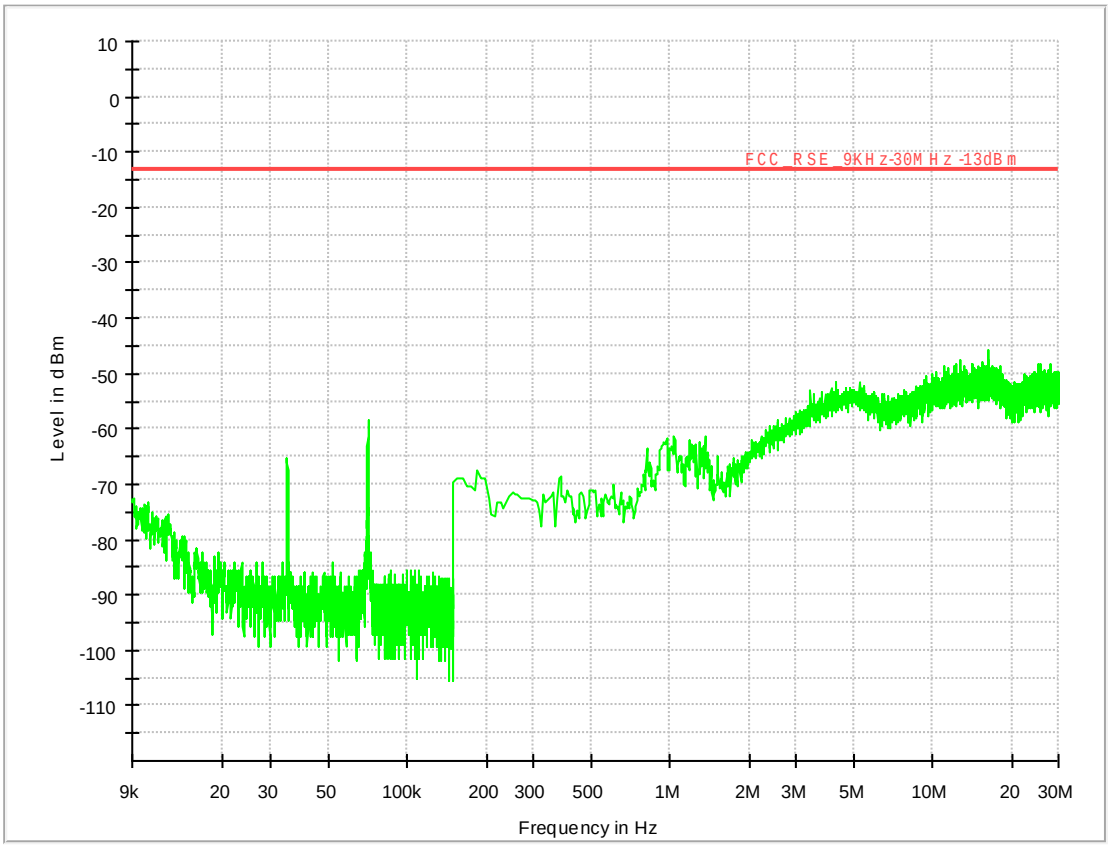
Test Range	EUT Conf.	Emissions	Verdict
30 MHz to 1 GHz	TM1_DH5_Ch0 (Worst Conf.)	< Limit	Pass
1 GHz to 3 GHz	TM1_DH5_Ch0 (Worst Conf.)	< Limit	Pass
	TM1_DH5_Ch78 (Worst Conf.)	< Limit	Pass
3 GHz to 18 GHz	TM1_DH5_Ch0 (Worse Conf.)	< Limit	Pass
18 GHz to 26.5 GHz	TM1_DH5_Ch0 (Worst Conf.)	< Limit	Pass

Note: We tested all modes, but the data presented below is the worst case.

2 Result Plot

Part 1: Testing Range of "9 kHz to 30MHz"

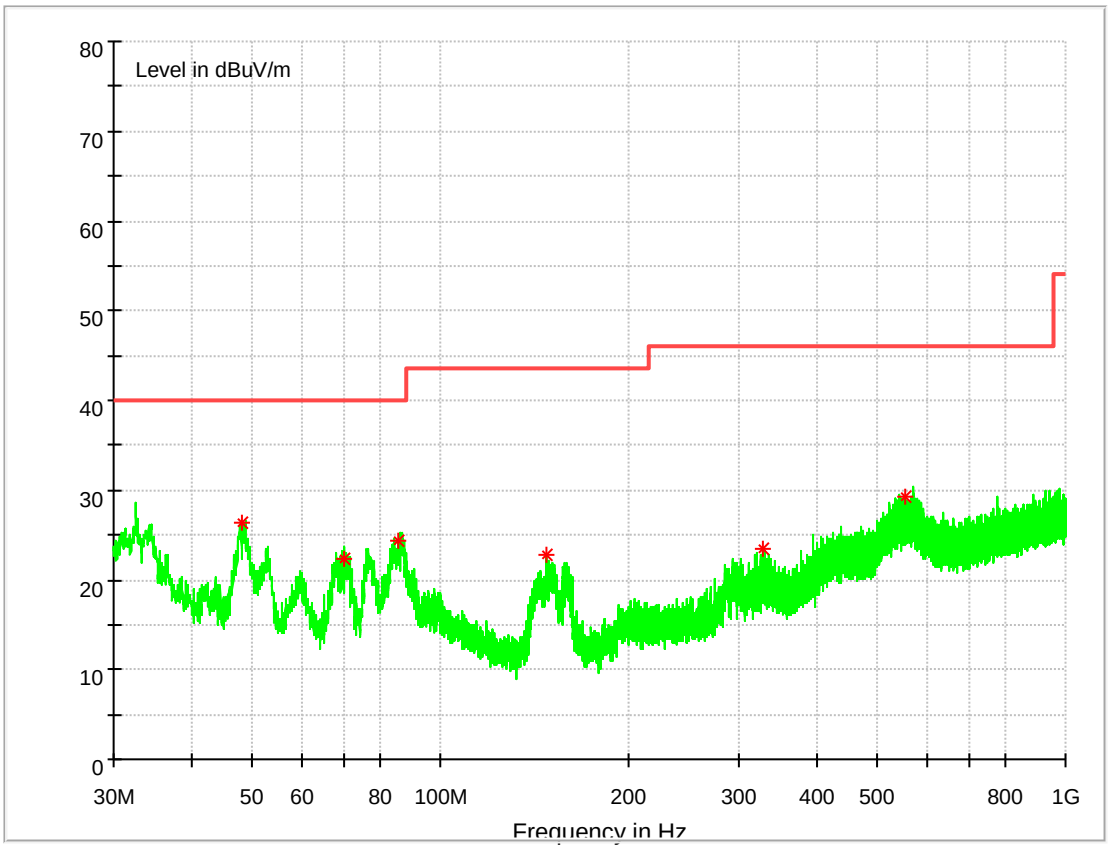
Note 1: The test results and plot for testing range of "9 kHz to 30 MHz" showed as below is the WORST case for all Test Modes and Channels. This range will not be presented for each Test Mode and each Channel.



Part 2: Testing Range of "30 MHz to 1 GHz"

Note 1: The test results and plot for testing range of "30 MHz to 1 GHz" showed as below is the WORST case for all Test Modes and Channels. This range will not be presented for each Test Mode and each Channel.

Note 2: The emissions in this range are mainly from the Platform Device (Notepad PC and its ancillary components).



Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Transd. (dB)
48.203667	26.42	40.00	13.58	100.0	V	322.0	14.2
70.319667	22.46	40.00	17.54	100.0	V	117.0	9.6
85.645667	24.33	40.00	15.67	100.0	V	349.0	11.6
148.275333	22.87	43.50	20.63	100.0	V	150.0	9.7
329.083333	23.44	46.00	22.56	100.0	V	286.0	15.7
555.546000	29.21	46.00	16.79	100.0	H	141.0	20.0

Note:

1, Level =Reading level by receiver + Transd (Antenna factor + cable loss – preamplifier gain)

The reading level is calculated by software which is not shown in the sheet.

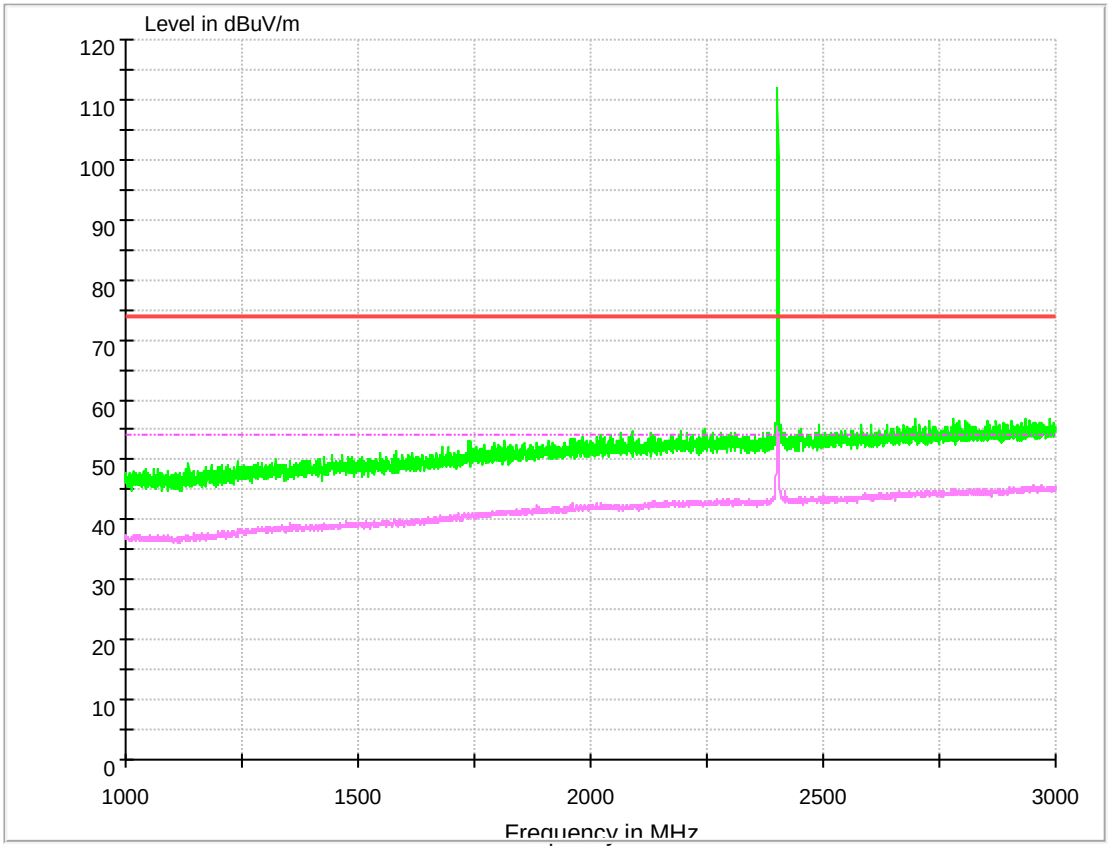
2, Margin=Limit - Level

Part 3: Testing Range of "1GHz to 3GHz"

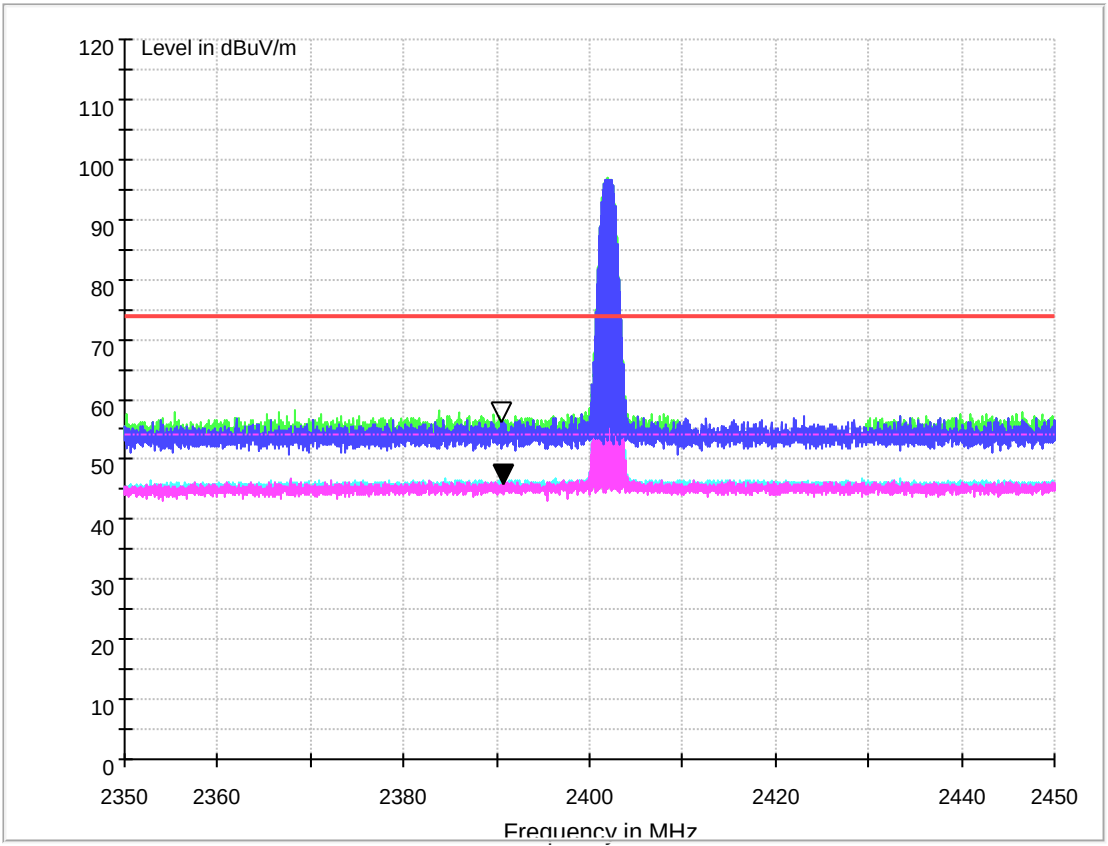
Note 1: The testing range of "1 GHz to 3 GHz" is for checking radiated emissions located in restricted bands near the EUT operating bands.

Note 2: Two limits are required in the testing range above 1 GHz, that is Peak limit (74 dBμV/m) and Average Limit (54 dBμV/m).

Note 3: The peak spike exceeds the limit line is EUT's operating frequency.



Channel 0



MEASUREMENT RESULT: AV Detector

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth	Transd. (dB)
2390	46.562	54.00	7.438	150.0	H	57.0	-5.8

MEASUREMENT RESULT: PK Detector

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Transd. (dB)
2390	56.615	74.00	17.350	150.0	H	48.0	-5.8

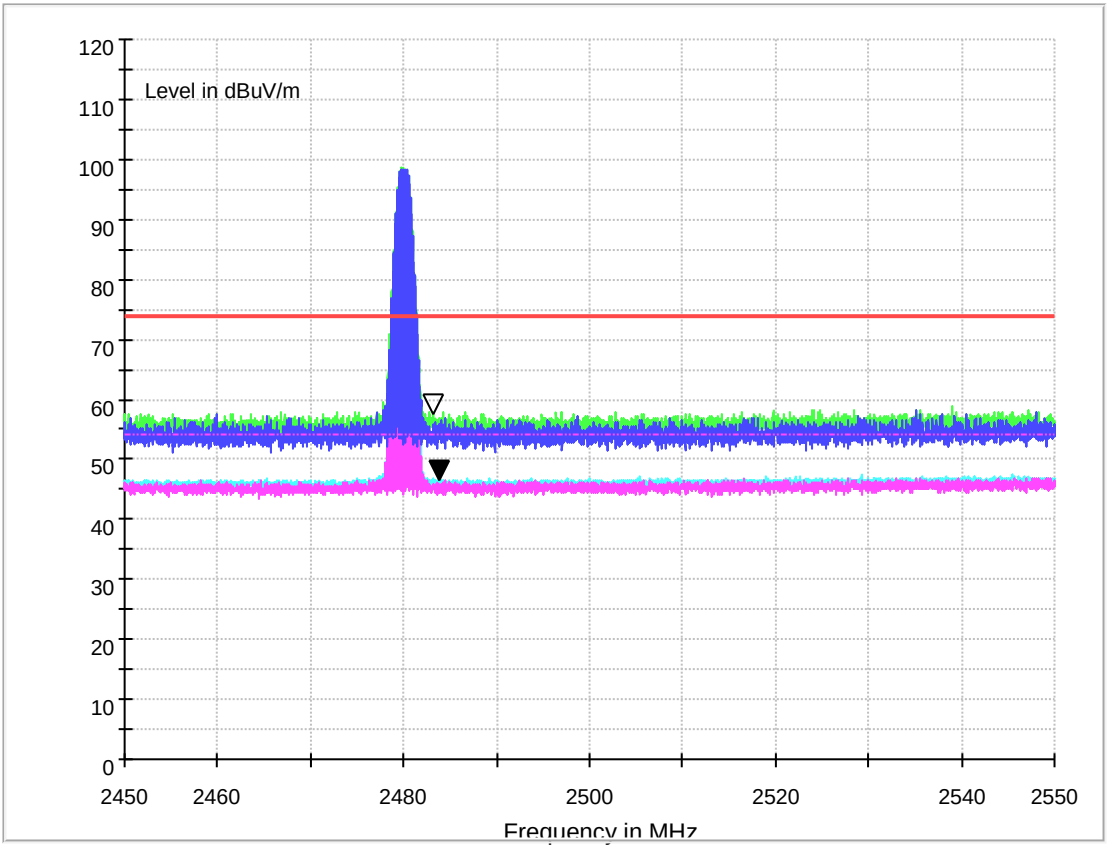
Note:

1, Level =Reading level by receiver + Transd (Antenna factor + cable loss – preamplifier gain)

The reading level is calculated by software which is not shown in the sheet.

2, Margin=Limit – Level

Channel 78



MEASUREMENT RESULT: AV Detector

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth	Transd. (dB)
2483.5	46.698	54.00	7.302	150.0	H	57.0	-10.2

MEASUREMENT RESULT: PK Detector

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Transd. (dB)
2483.5	57.944	74.00	16.056	150.0	H	-8.0	-10.2

Note:

1, Level =Reading level by receiver + Transd (Antenna factor + cable loss – preamplifier gain)

The reading level is calculated by software which is not shown in the sheet.

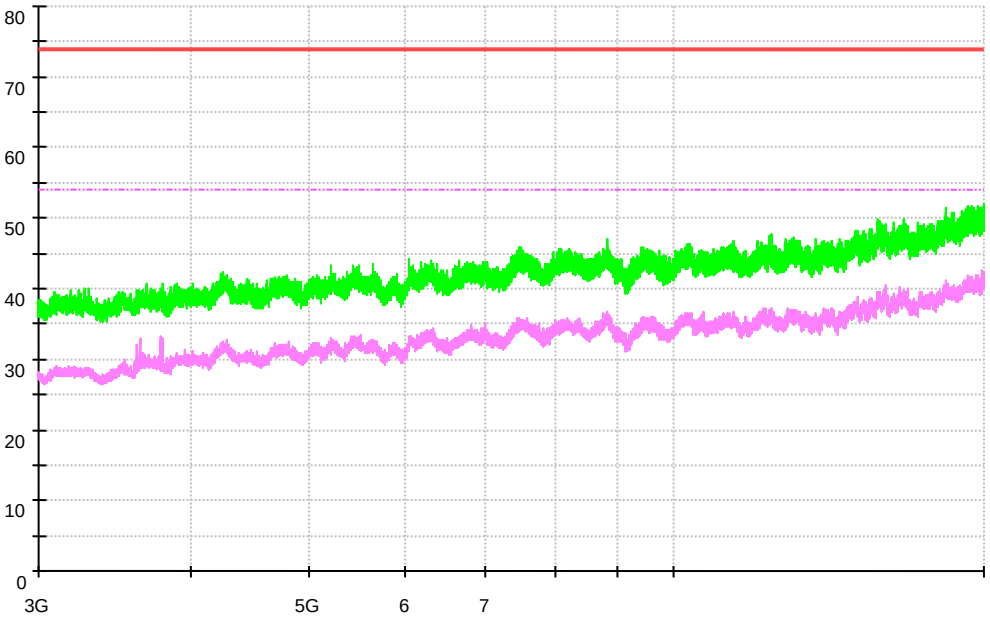
2, Margin=Limit - Level

Part 4: Testing Range of "3 GHz to 18 GHz"

Note 1: The test results and plot for testing range of "3 GHz to 18 GHz" showed as below is the WORST case for all Test Modes and Channels. This range will not be presented for each Test Mode and each Channel.

Note 2: The testing range of "3 GHz to 18 GHz" is for checking radiated emissions located in restricted bands faraway from the EUT operating bands.

Note 3: Two limits are required in the testing range above 1 GHz, that is Peak limit (74 dBμV/m) and Average Limit (54 dBμV/m).

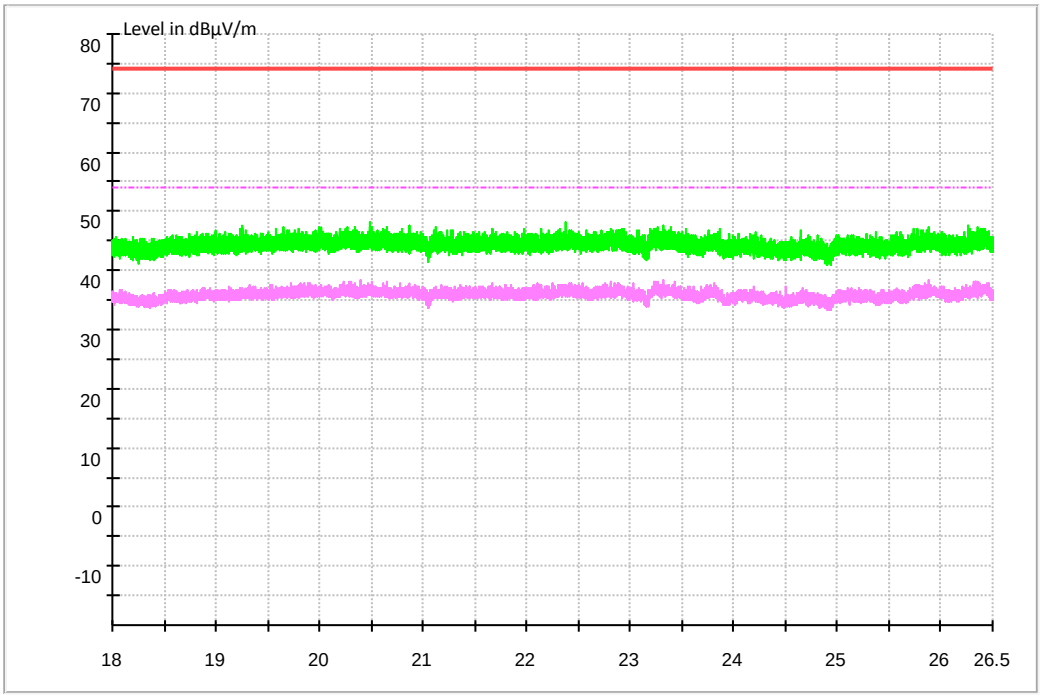


Part 5: Testing Range of "18 GHz to 26.5 GHz"

Note 1: The test results and plot for testing range of "18 GHz to 26.5 GHz" showed as below is the WORST case for all Test Modes and Channels. This range will not be presented for each Test Mode and each Channel.

Note 2: The testing range of "18 GHz to 26.5 GHz" is for checking radiated emissions located in restricted bands far away from the EUT operating bands.

Note 3: Two limits are required in the testing range above 1 GHz, that is Peak limit (74 dBµV/m) and Average Limit (54 dBµV/m).



Appendix I: Conducted Emission at Power Port

Note: We tested in two modes, mode 1 is adaptor + Wireless Charging Case and mode 2 is adaptor + Wireless charging charger+ Wireless Charging Case, and the data presented below is the worst case (mode 1).

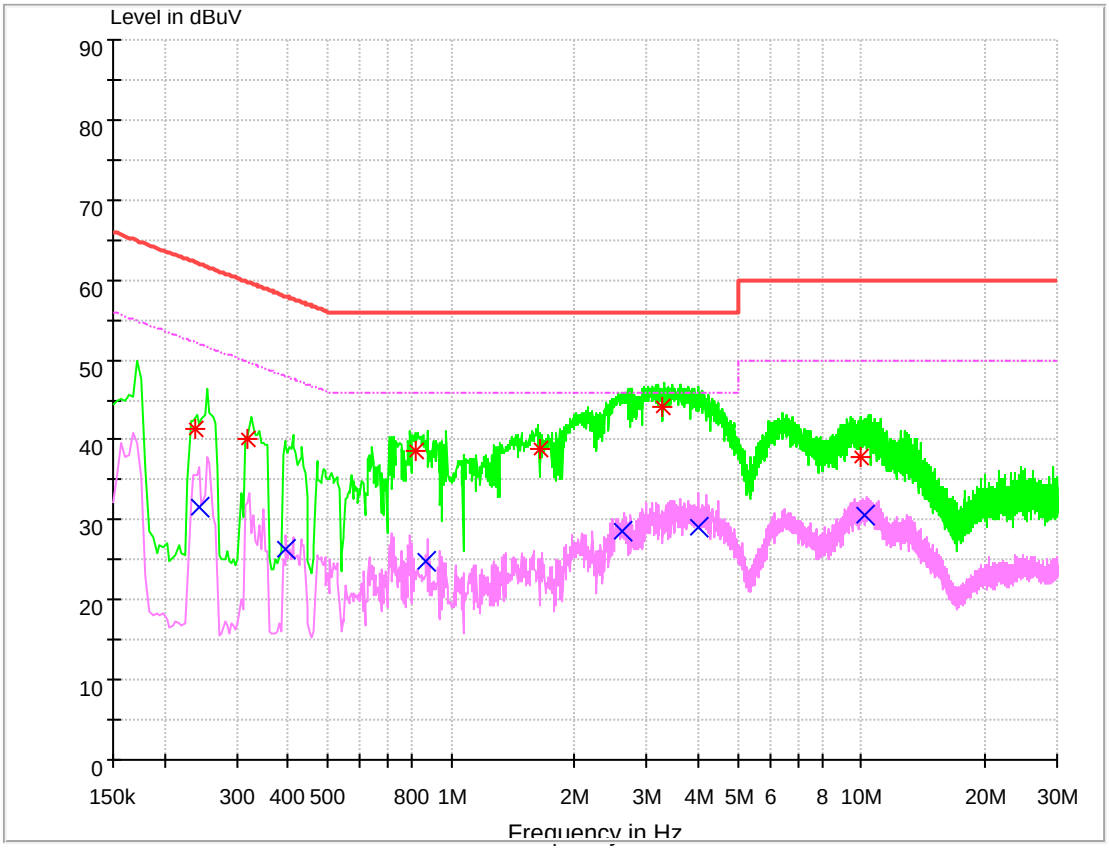
1 Result Table

In this Appendix, only the test results and plots under the worst case can be reported.

EUT Conf.	Maximum Emissions	Verdict
TM1_DH5_Ch78	Not found obvious spikes or see marked spikes on plots and listed emissions records.	Pass

2 Result Plot

Channel 78



MEASUREMENT RESULT: QK Detector

Frequency (MHz)	Level (dB μ V)	Limit (dB μ V)	Transd. (dB)	Margin (dB)	Line	PE
0.238870	41.39	62.17	9.7	20.78	L1	FLO
0.319518	40.12	59.75	9.7	19.63	L1	FLO
0.816748	38.71	56.00	9.7	17.29	N	FLO
1.644011	38.76	56.00	9.7	17.24	L1	FLO
3.281436	44.16	56.00	9.7	11.84	L1	FLO
9.916085	37.83	60.00	9.7	22.17	N	FLO

MEASUREMENT RESULT: AV Detector

Frequency (MHz)	Level (dB μ V)	Limit (dB μ V)	Transd. (dB)	Margin (dB)	Line	PE
0.244531	31.57	51.94	9.7	20.37	N	FLO
0.395032	26.41	47.94	9.7	21.53	L1	FLO
0.873236	24.82	46.00	9.7	21.18	L1	FLO

2.612059	28.48	46.00	9.7	17.52	N	FLO
4.022632	28.99	46.00	9.7	17.01	L1	FLO
10.213114	30.69	50.00	9.7	19.31	L1	FLO

Note:

1, Level =Reading level by receiver + Transd (Antenna factor + cable loss – preamplifier gain)

The reading level is calculated by software which is not shown in the sheet.

2, Margin=Limit - Level

END