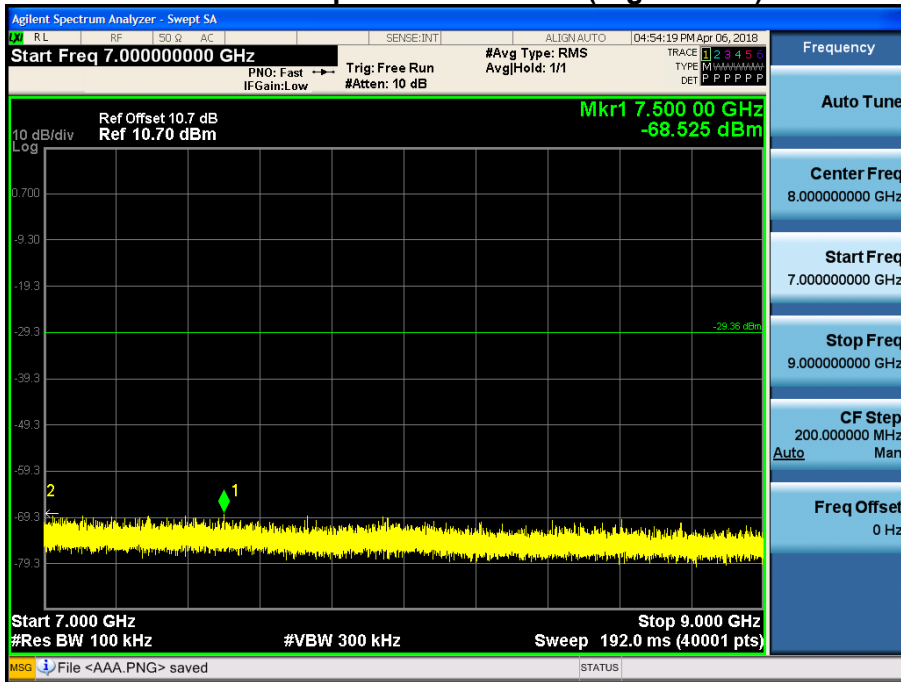


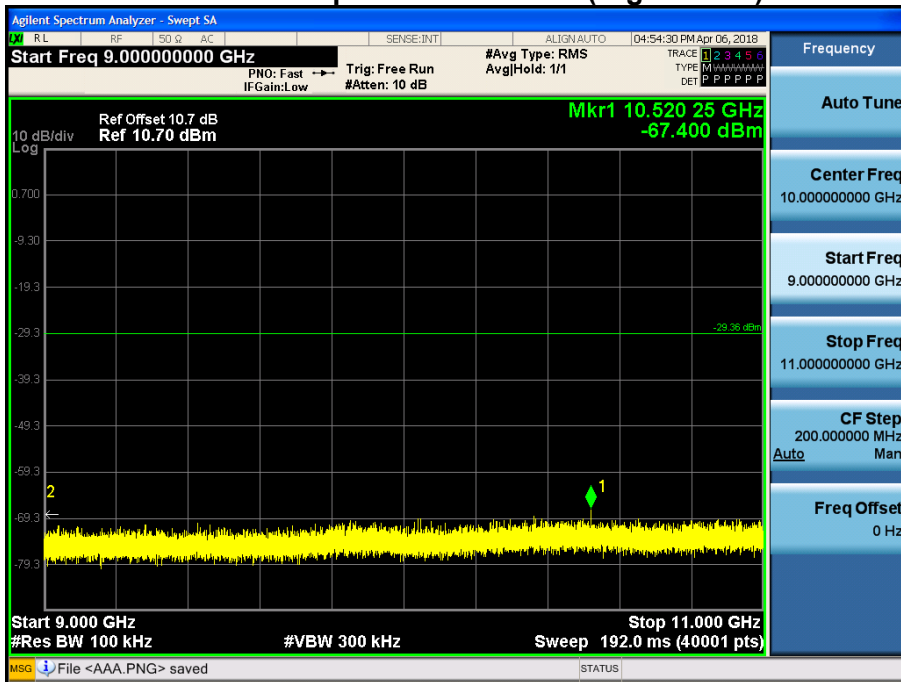
7 GHz ~ 9 GHz

Conducted Spurious Emission (High-CH 39)



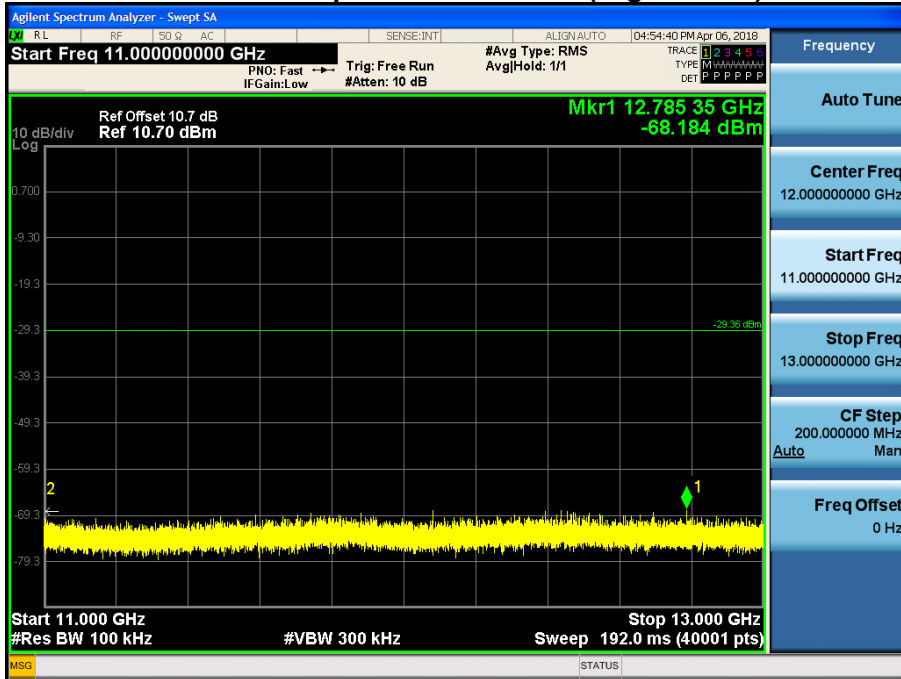
9 GHz ~ 11 GHz

Conducted Spurious Emission (High-CH 39)



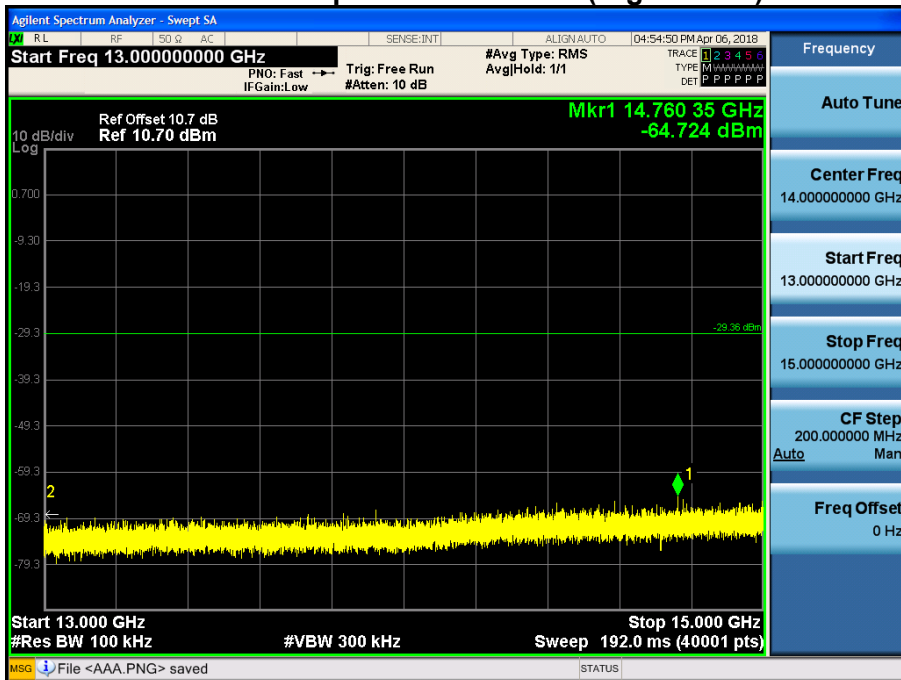
11 GHz ~ 13 GHz

Conducted Spurious Emission (High-CH 39)



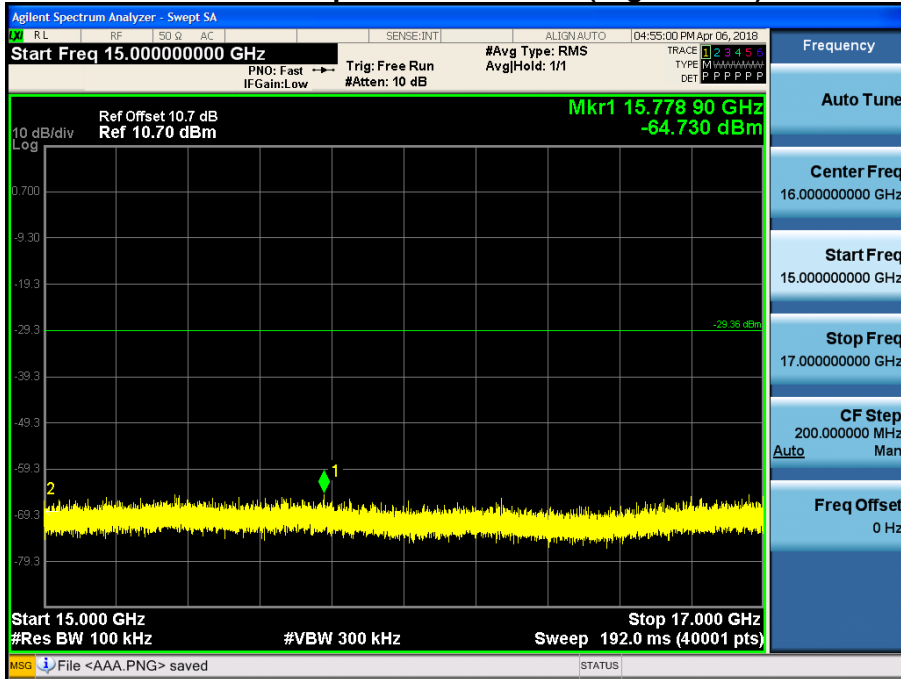
13 GHz ~ 15 GHz

Conducted Spurious Emission (High-CH 39)



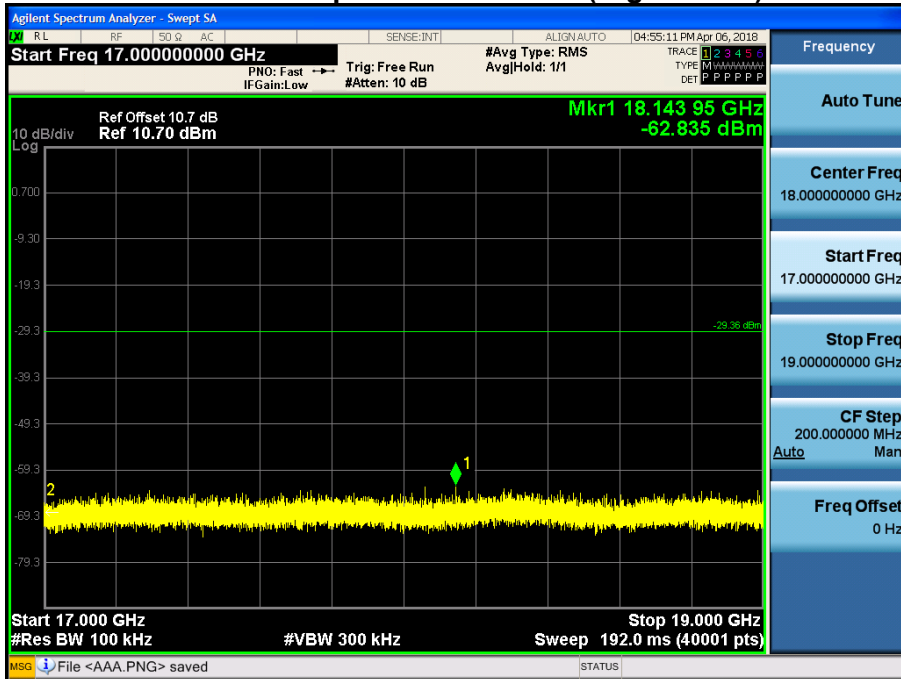
15 GHz ~ 17 GHz

Conducted Spurious Emission (High-CH 39)



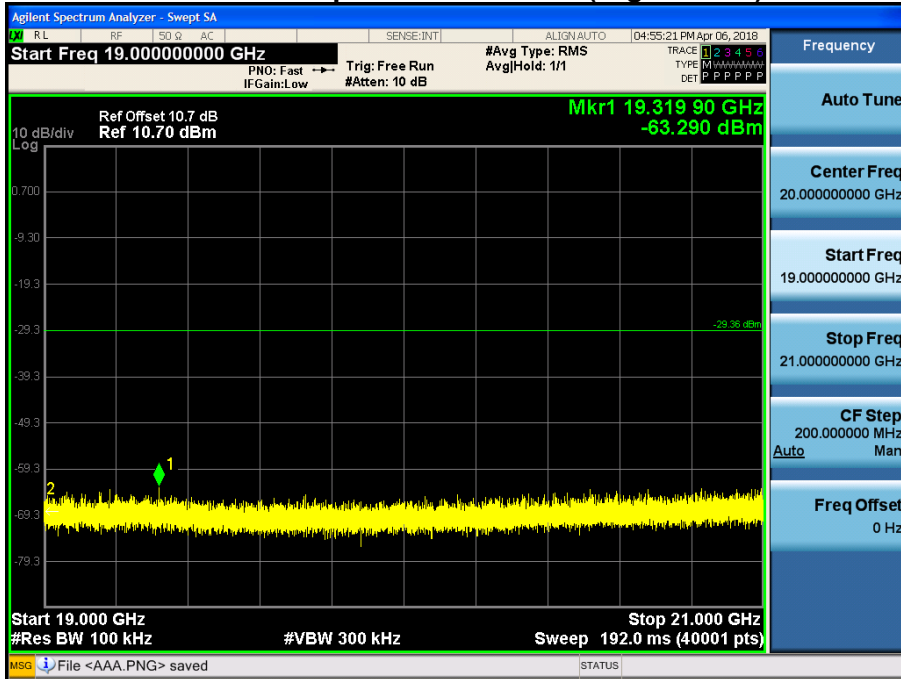
17 GHz ~ 19 GHz

Conducted Spurious Emission (High-CH 39)



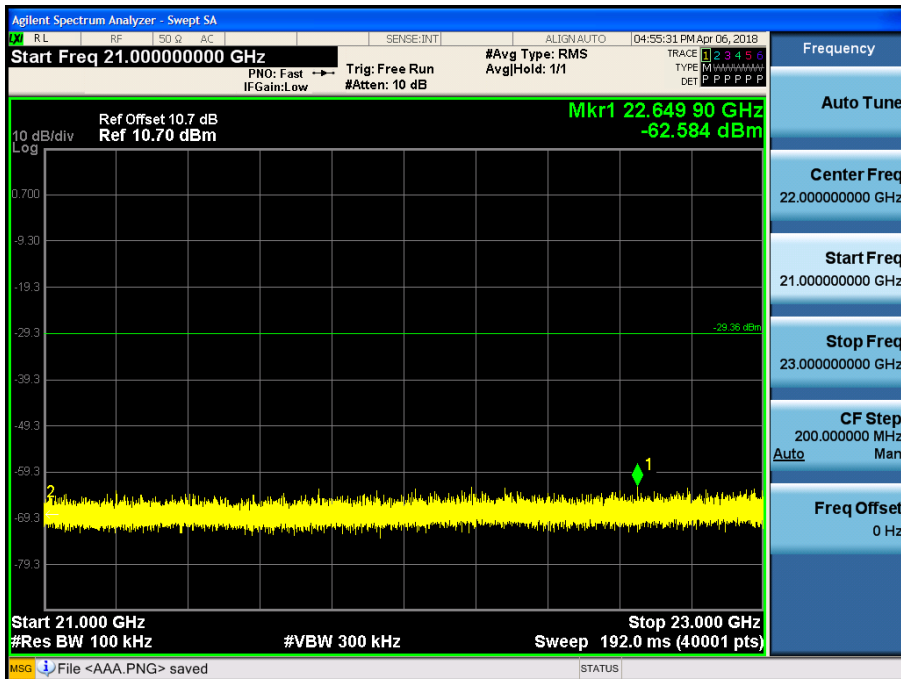
19 GHz ~ 21 GHz

Conducted Spurious Emission (High-CH 39)



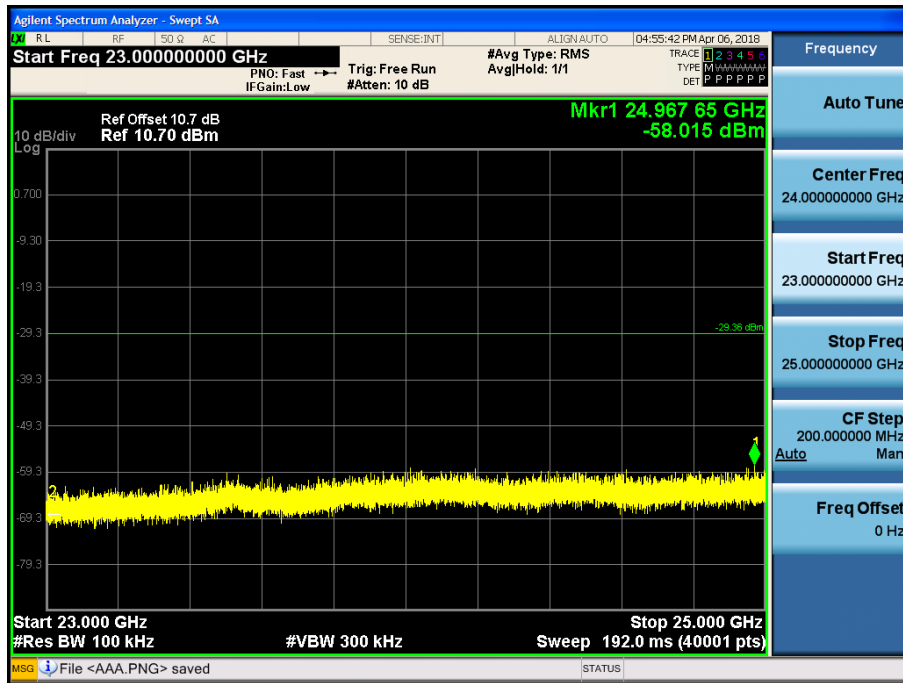
21 GHz ~ 23 GHz

Conducted Spurious Emission (High-CH 39)



23 GHz ~ 25 GHz

Conducted Spurious Emission (High-CH 39)



5.0 LE 2M: 37 Byte RESULT PLOTS

BandEdge (Low-CH 0)

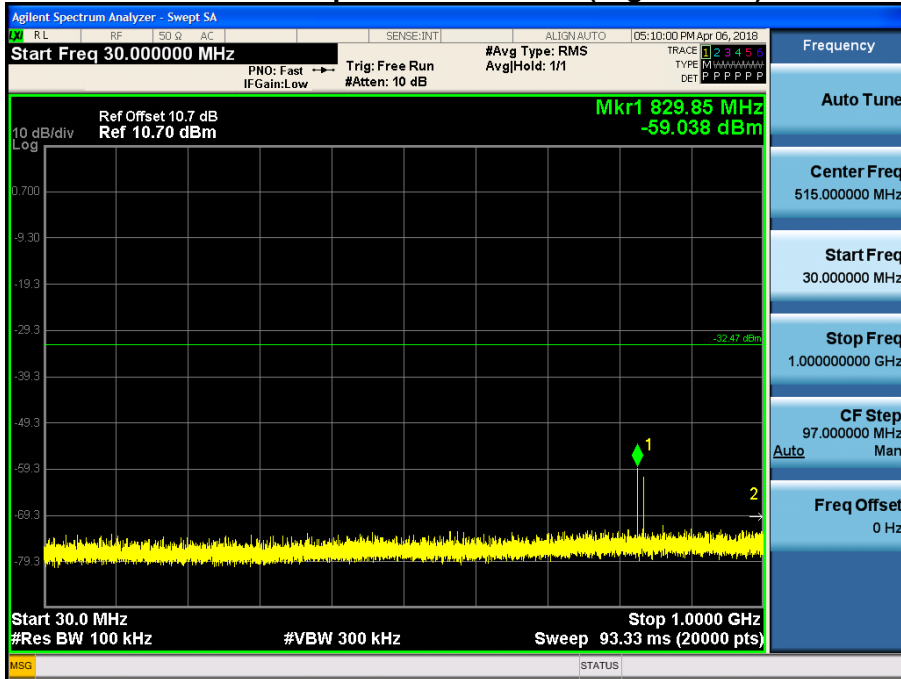


BandEdge (High-CH 39)



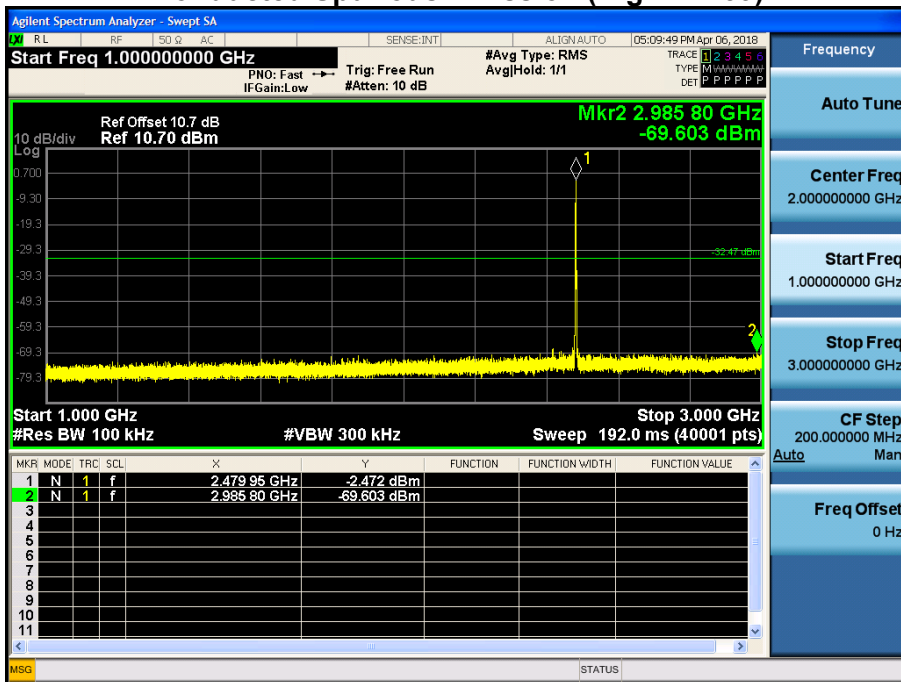
30 MHz ~ 1 GHz

Conducted Spurious Emission (High-CH 39)



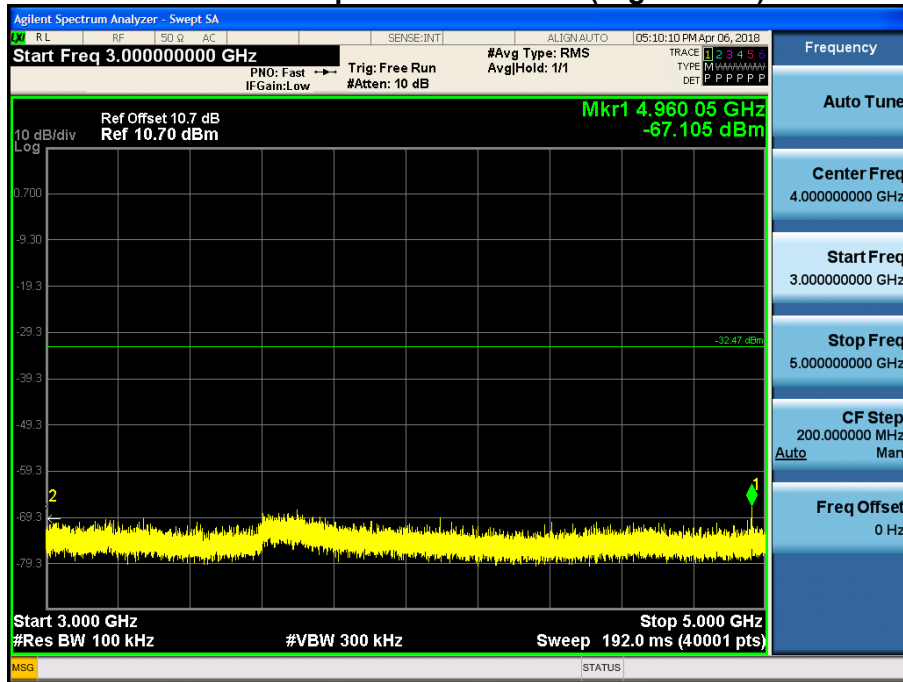
1 GHz ~ 3 GHz

Conducted Spurious Emission (High-CH 39)



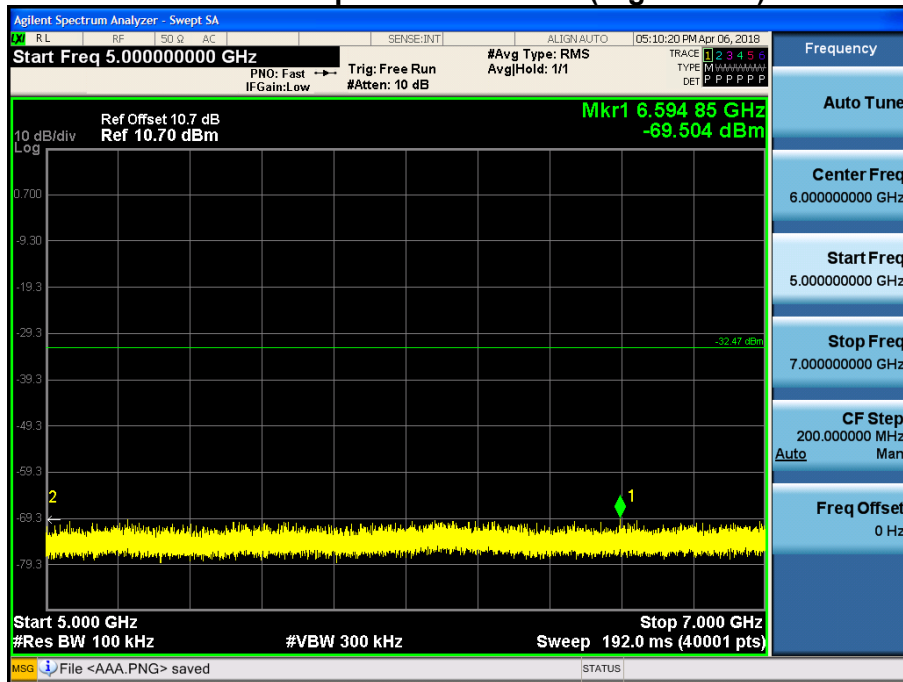
3 GHz ~ 5 GHz

Conducted Spurious Emission (High-CH 39)



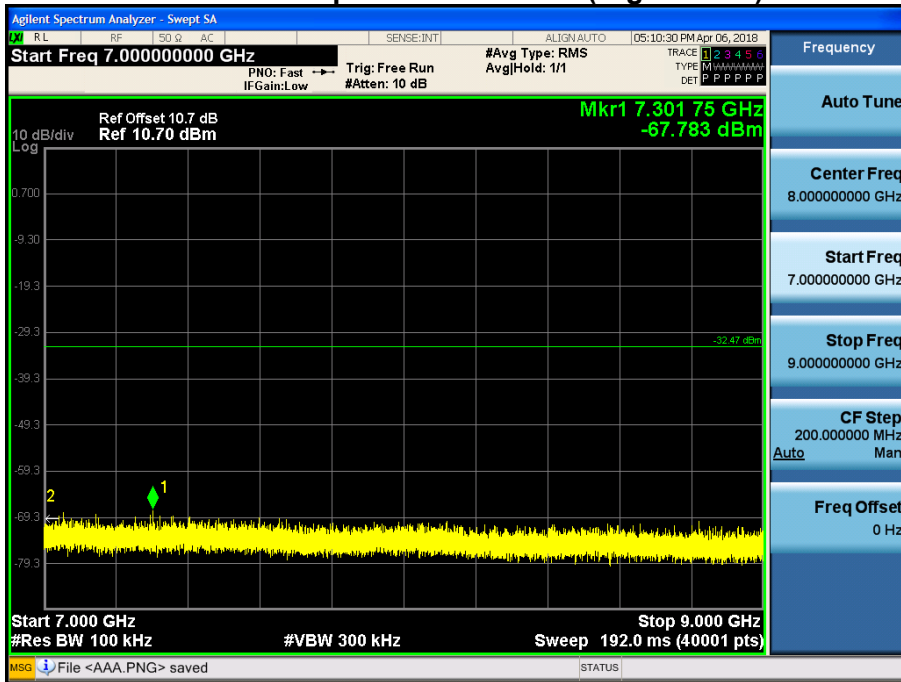
5 GHz ~ 7 GHz

Conducted Spurious Emission (High-CH 39)



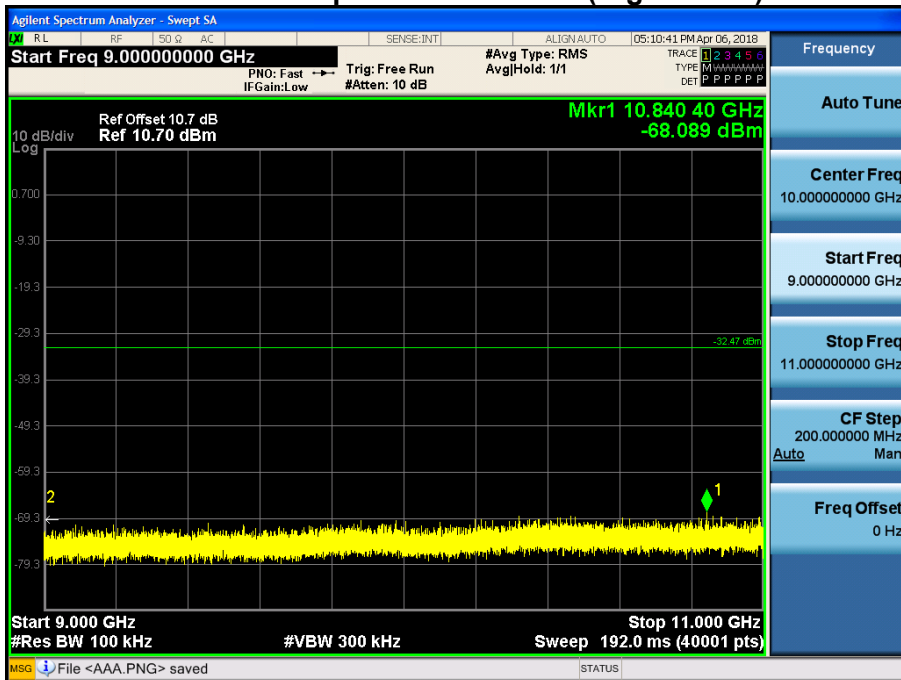
7 GHz ~ 9 GHz

Conducted Spurious Emission (High-CH 39)



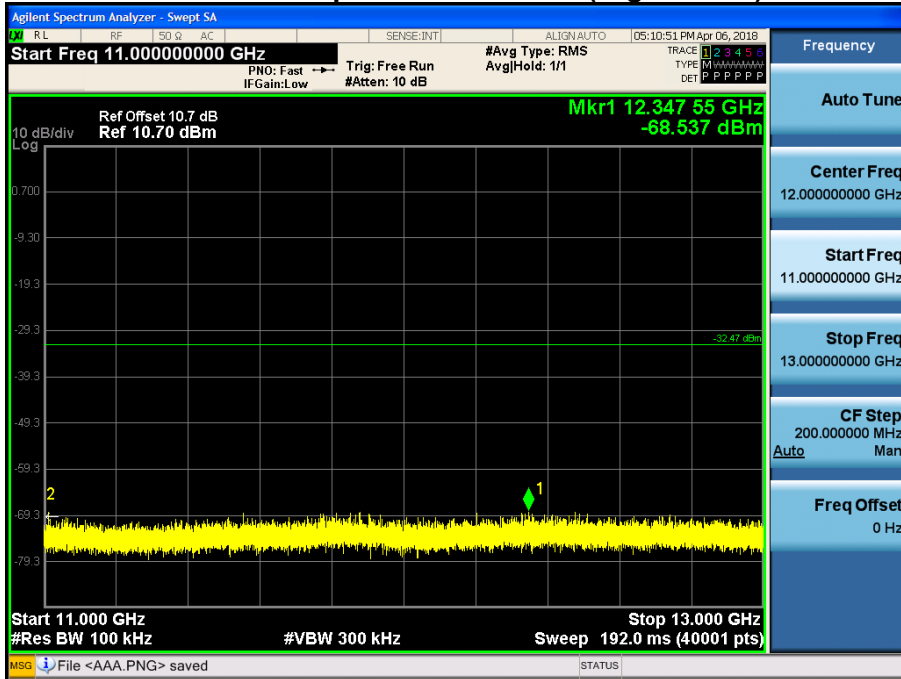
9 GHz ~ 11 GHz

Conducted Spurious Emission (High-CH 39)



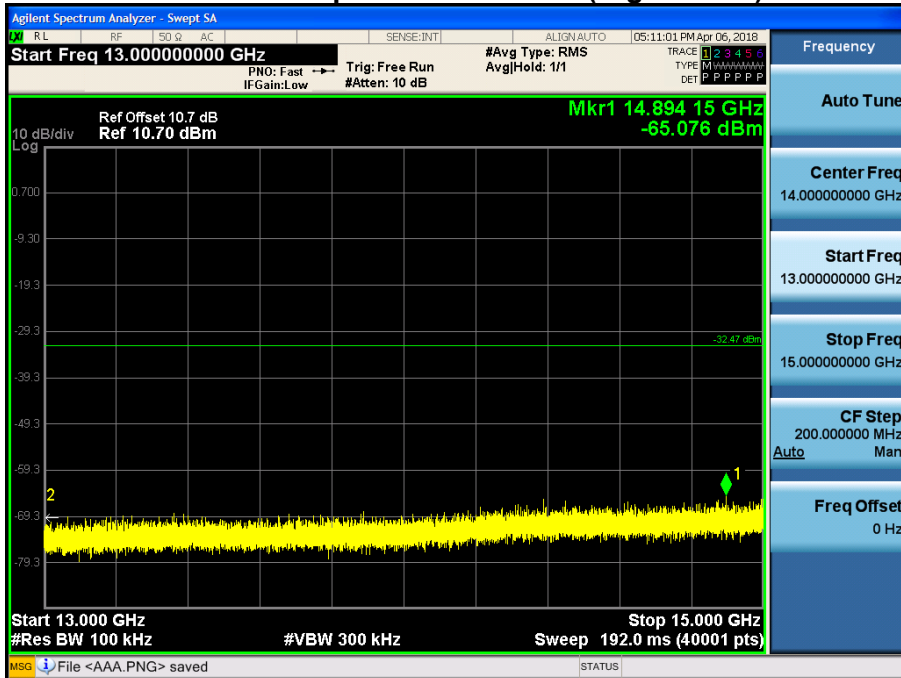
11 GHz ~ 13 GHz

Conducted Spurious Emission (High-CH 39)



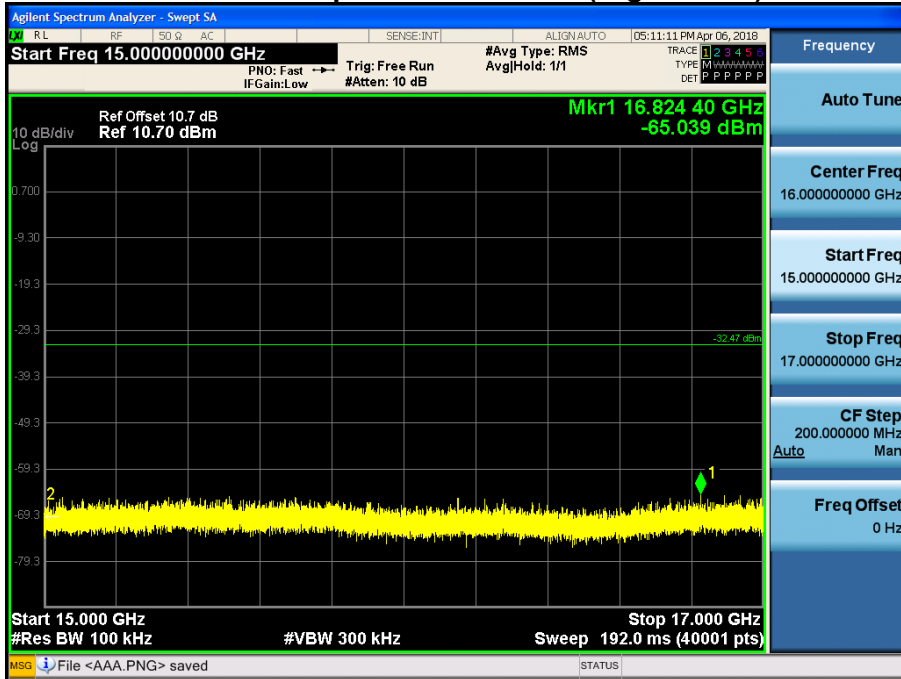
13 GHz ~ 15 GHz

Conducted Spurious Emission (High-CH 39)



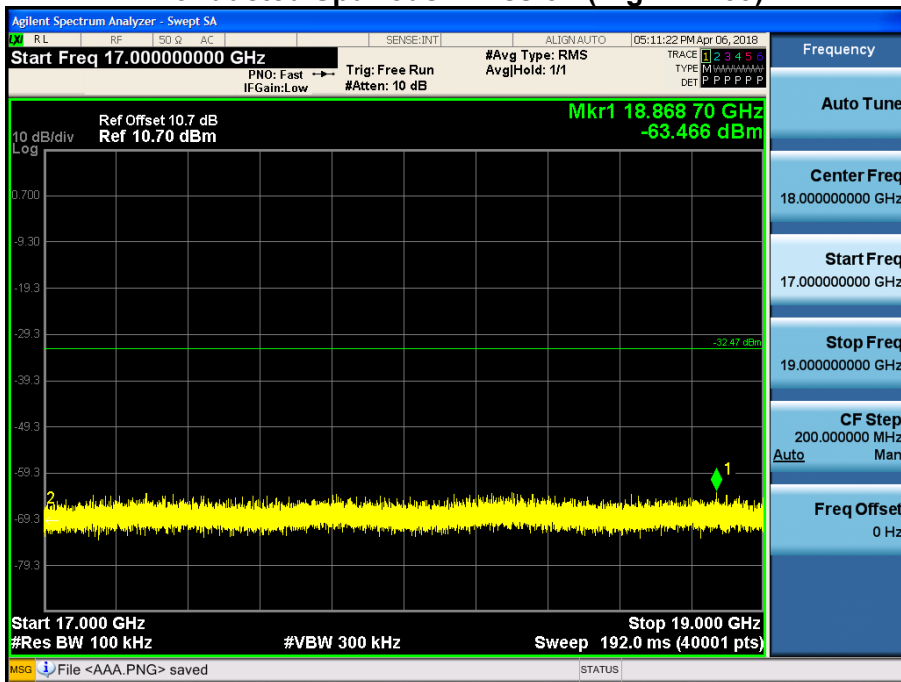
15 GHz ~ 17 GHz

Conducted Spurious Emission (High-CH 39)



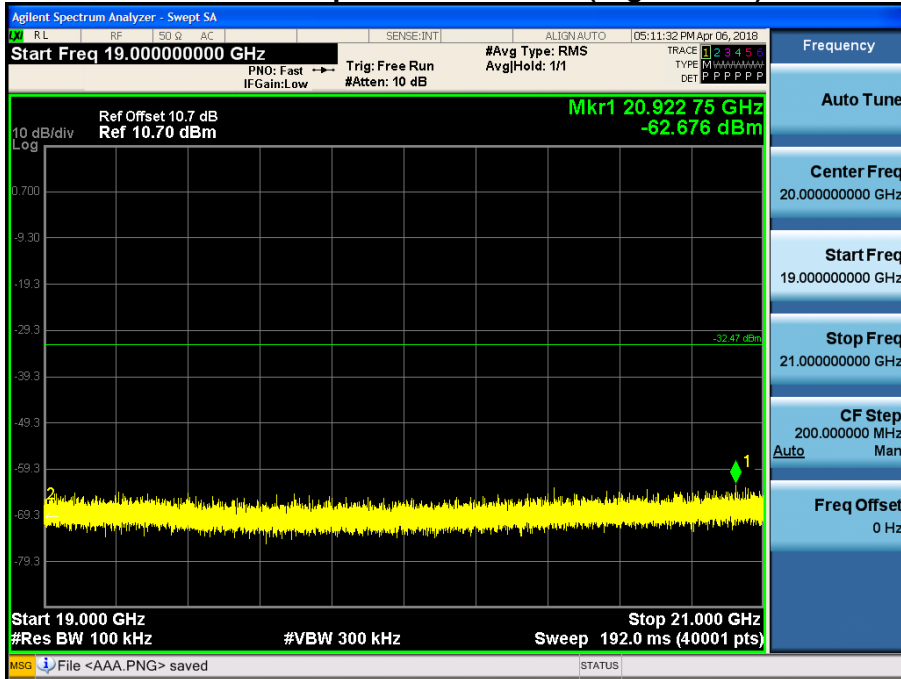
17 GHz ~ 19 GHz

Conducted Spurious Emission (High-CH 39)



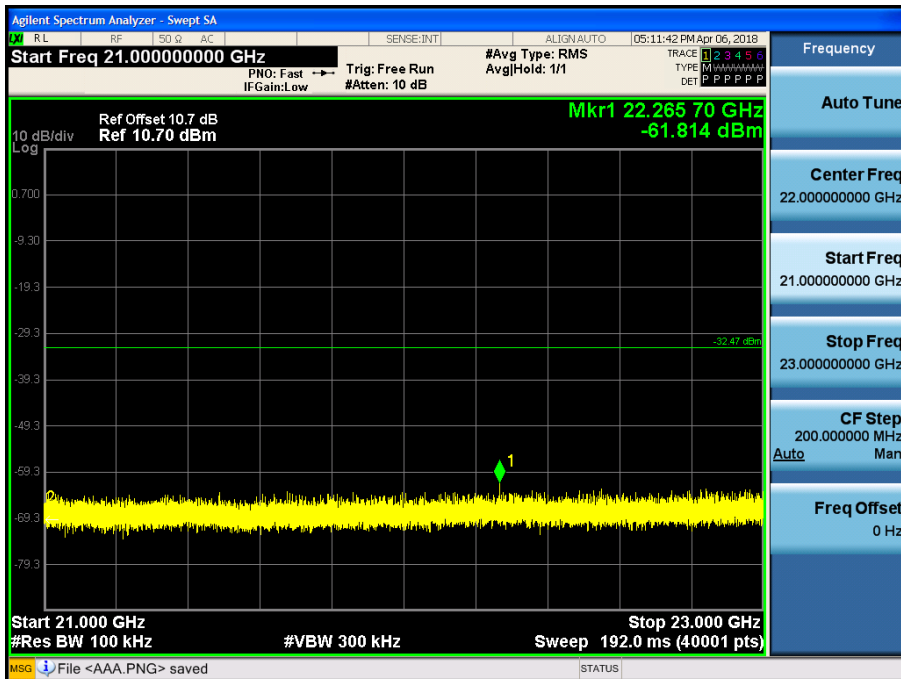
19 GHz ~ 21 GHz

Conducted Spurious Emission (High-CH 39)



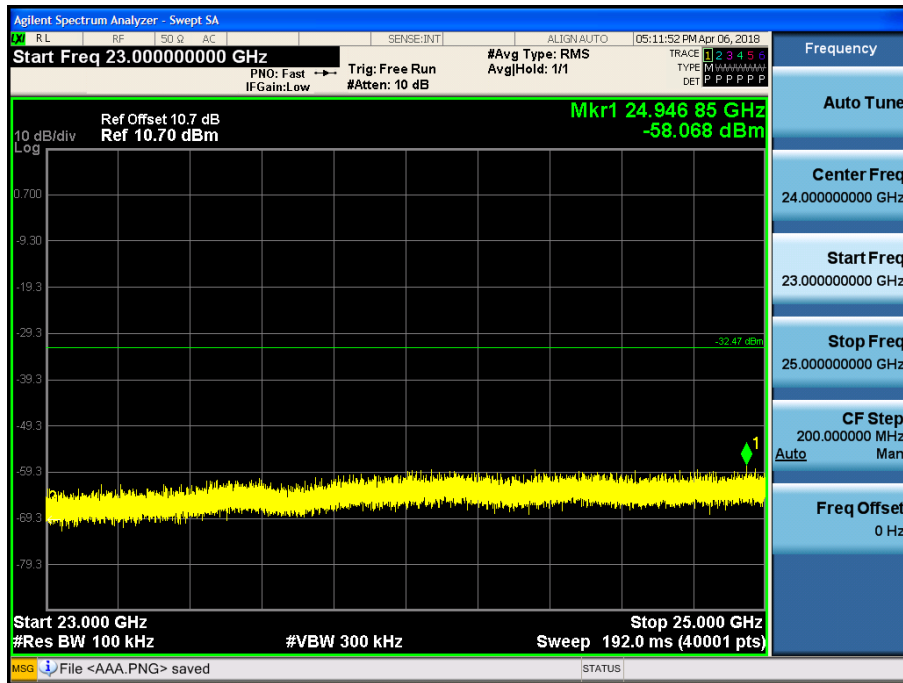
21 GHz ~ 23 GHz

Conducted Spurious Emission (High-CH 39)



23 GHz ~ 25 GHz

Conducted Spurious Emission (High-CH 39)



■ 5.0 LE 2M: 255 Byte RESULT PLOTS

BandEdge (Low-CH 0)

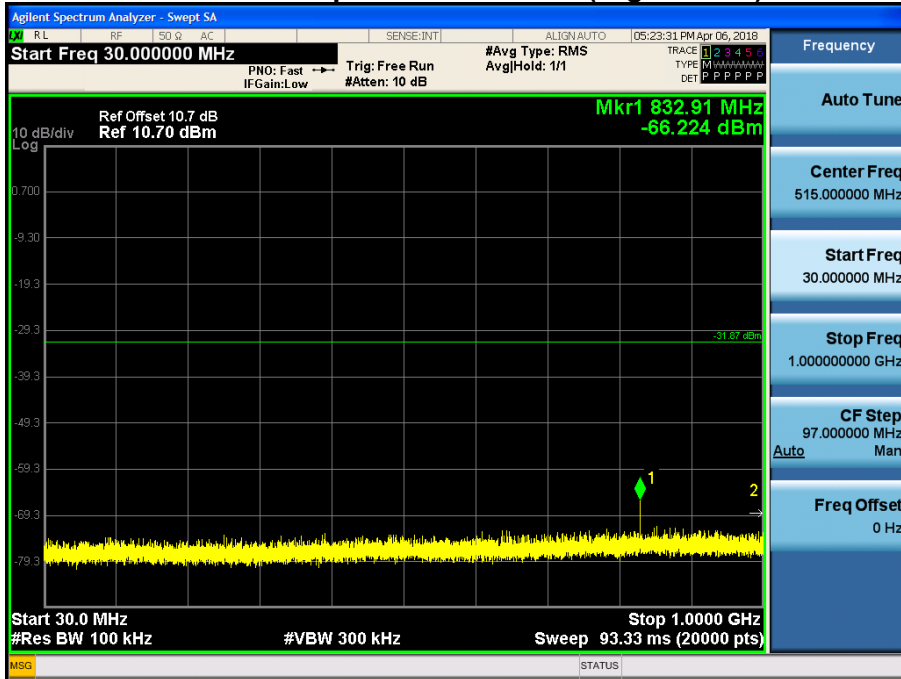


BandEdge (High-CH 39)



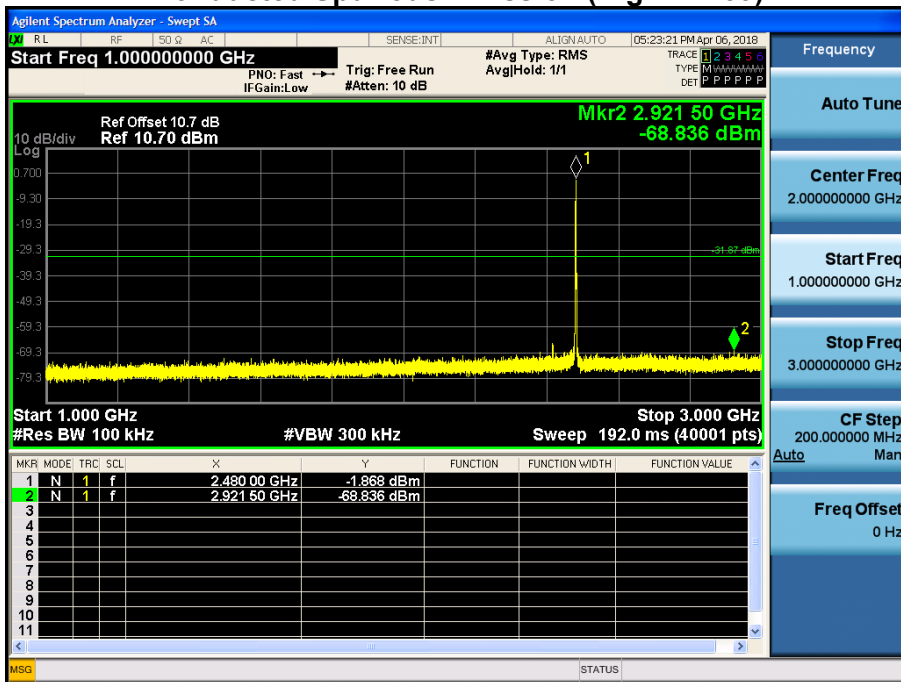
30 MHz ~ 1 GHz

Conducted Spurious Emission (High-CH 39)



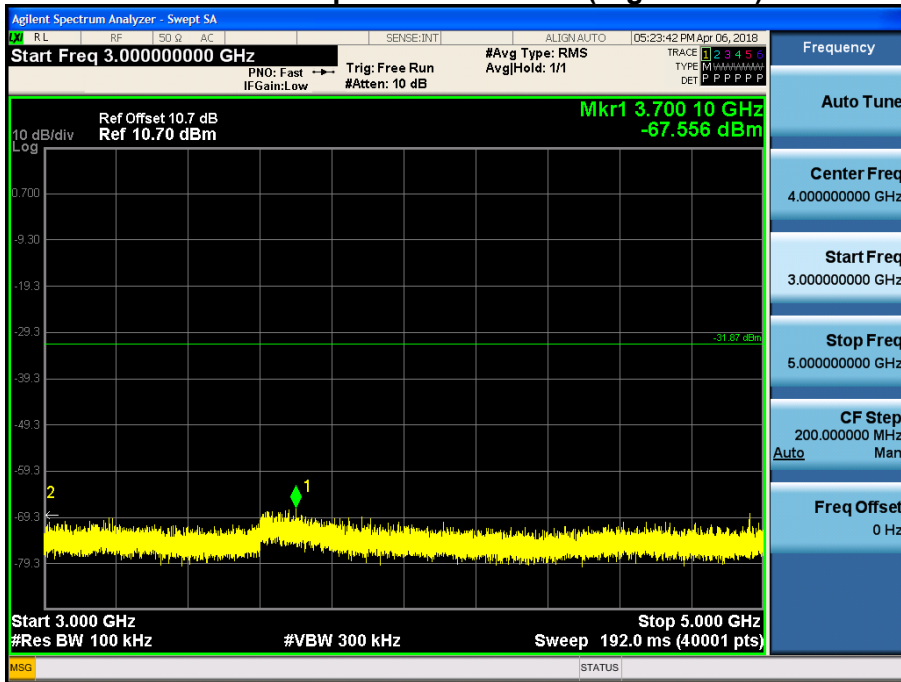
1 GHz ~ 3 GHz

Conducted Spurious Emission (High-CH 39)



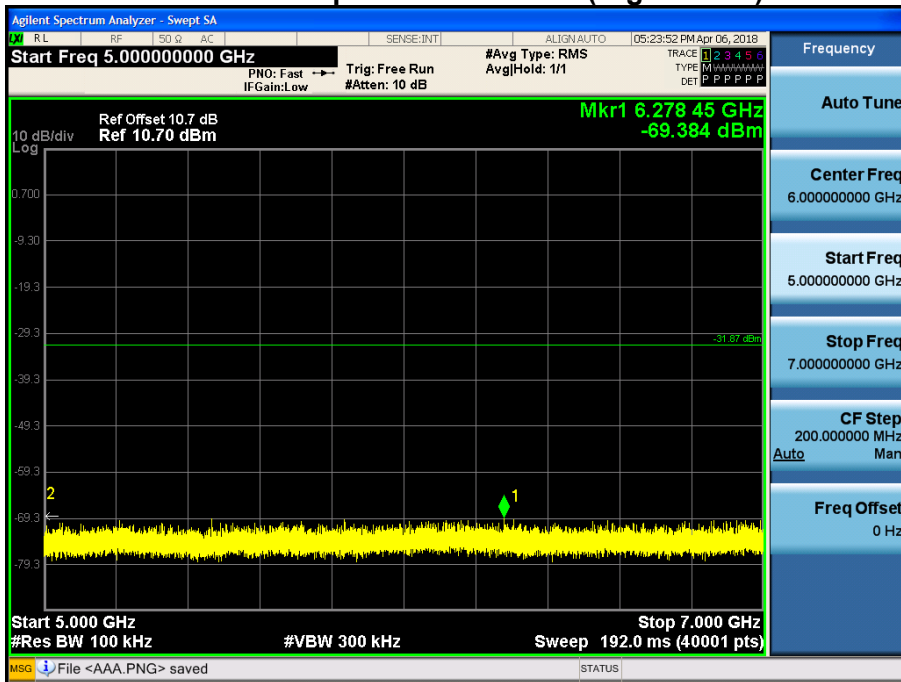
3 GHz ~ 5 GHz

Conducted Spurious Emission (High-CH 39)



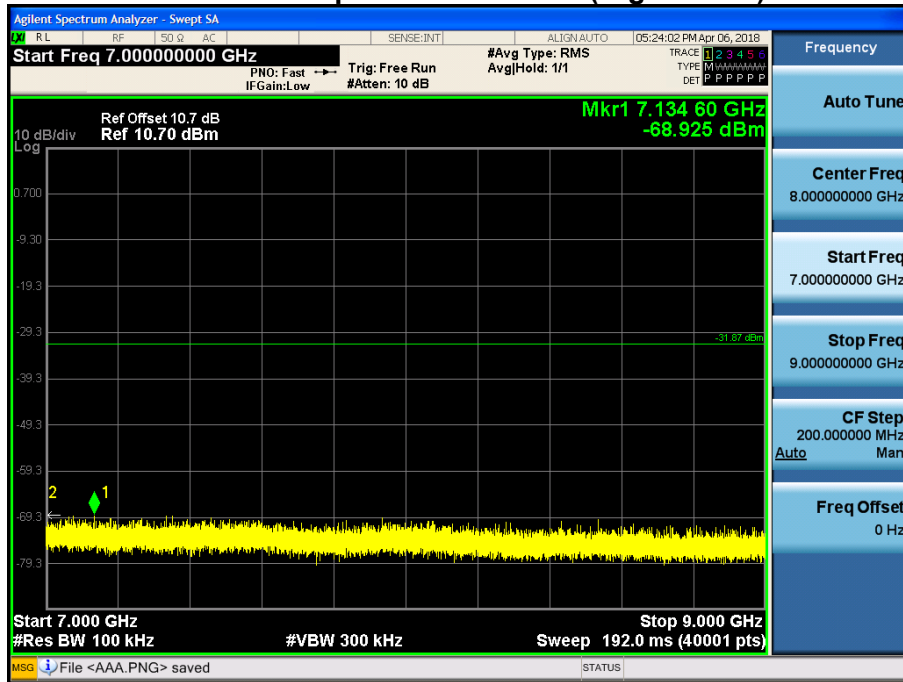
5 GHz ~ 7 GHz

Conducted Spurious Emission (High-CH 39)



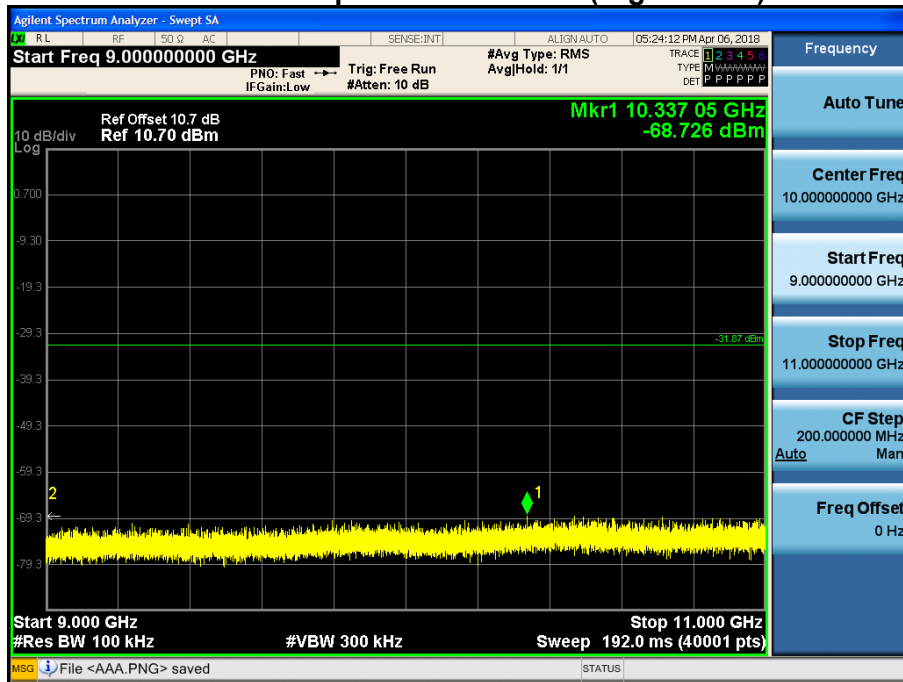
7 GHz ~ 9 GHz

Conducted Spurious Emission (High-CH 39)



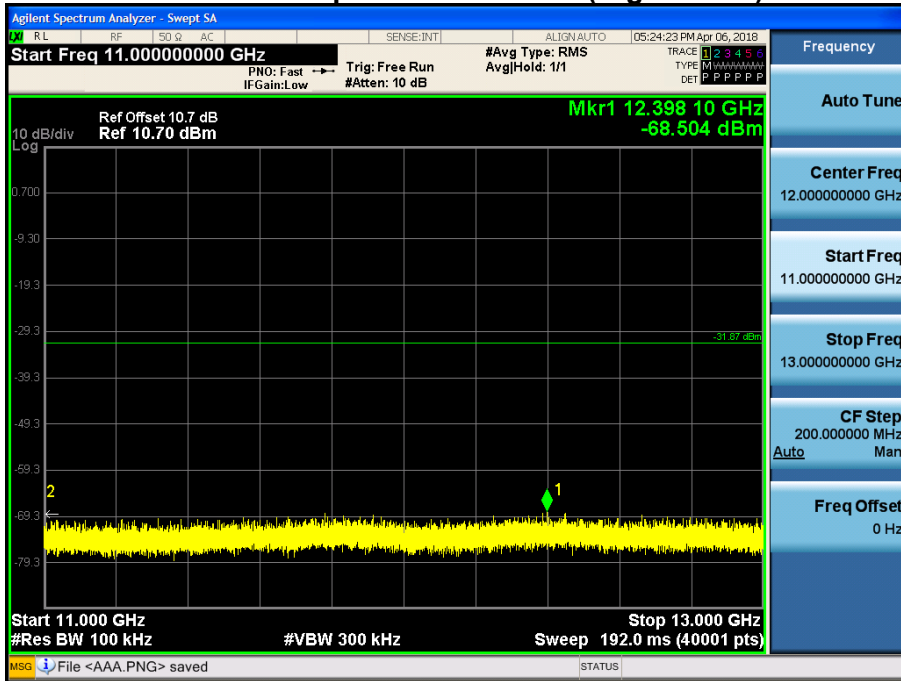
9 GHz ~ 11 GHz

Conducted Spurious Emission (High-CH 39)



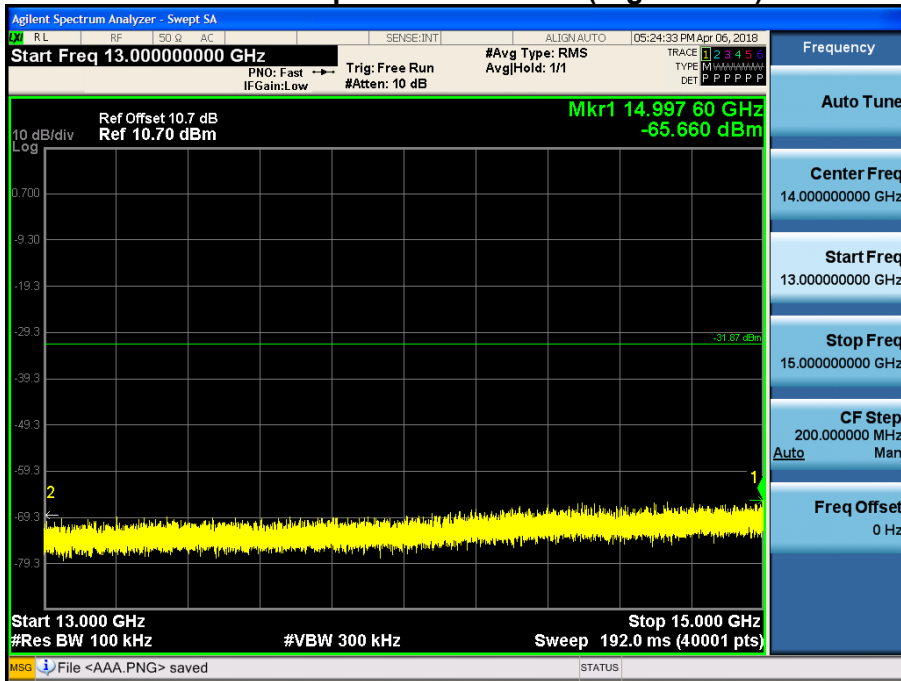
11 GHz ~ 13 GHz

Conducted Spurious Emission (High-CH 39)



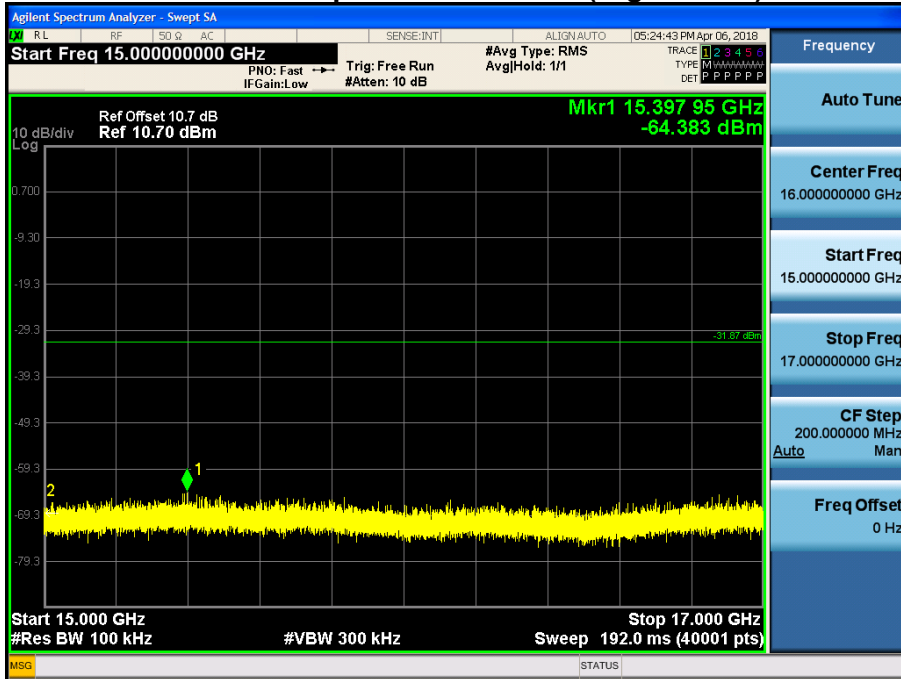
13 GHz ~ 15 GHz

Conducted Spurious Emission (High-CH 39)



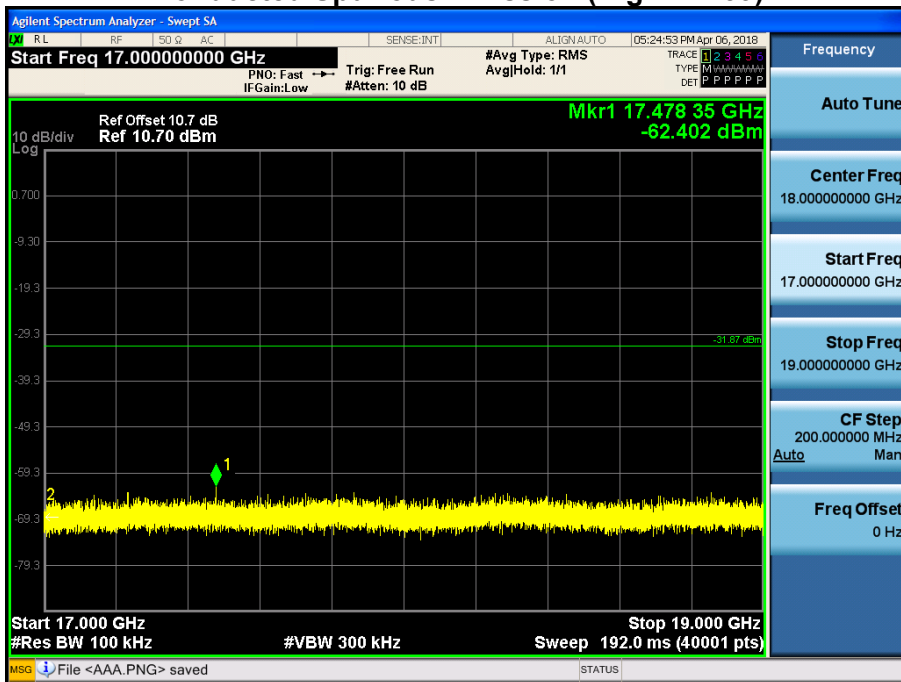
15 GHz ~ 17 GHz

Conducted Spurious Emission (High-CH 39)



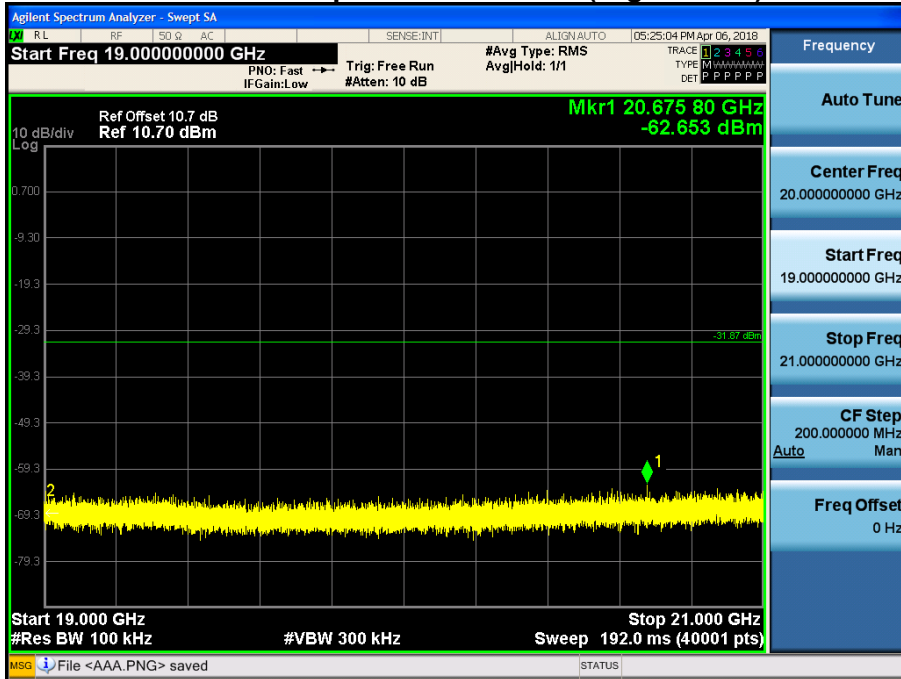
17 GHz ~ 19 GHz

Conducted Spurious Emission (High-CH 39)



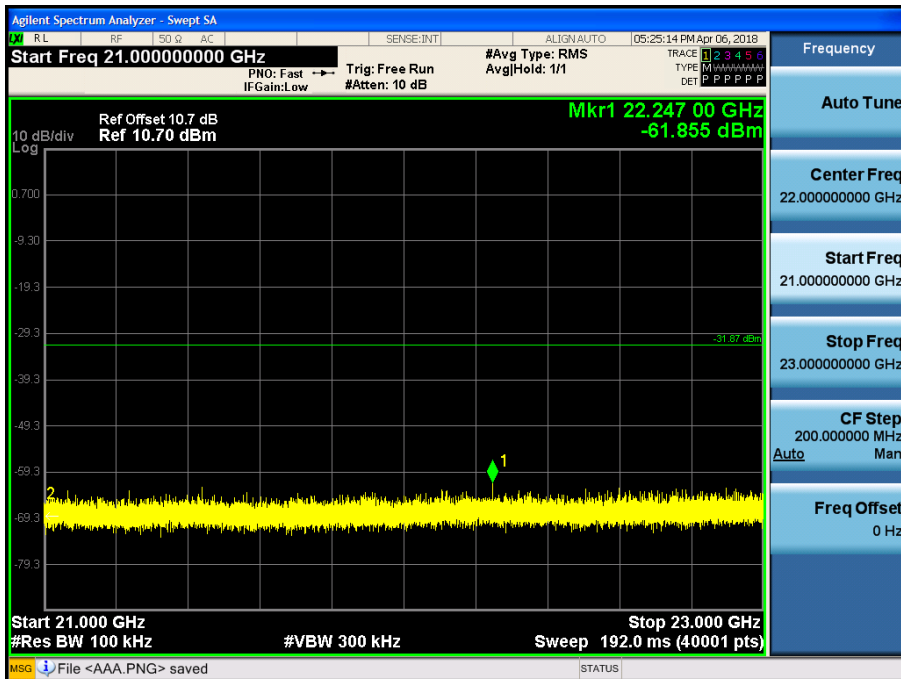
19 GHz ~ 21 GHz

Conducted Spurious Emission (High-CH 39)



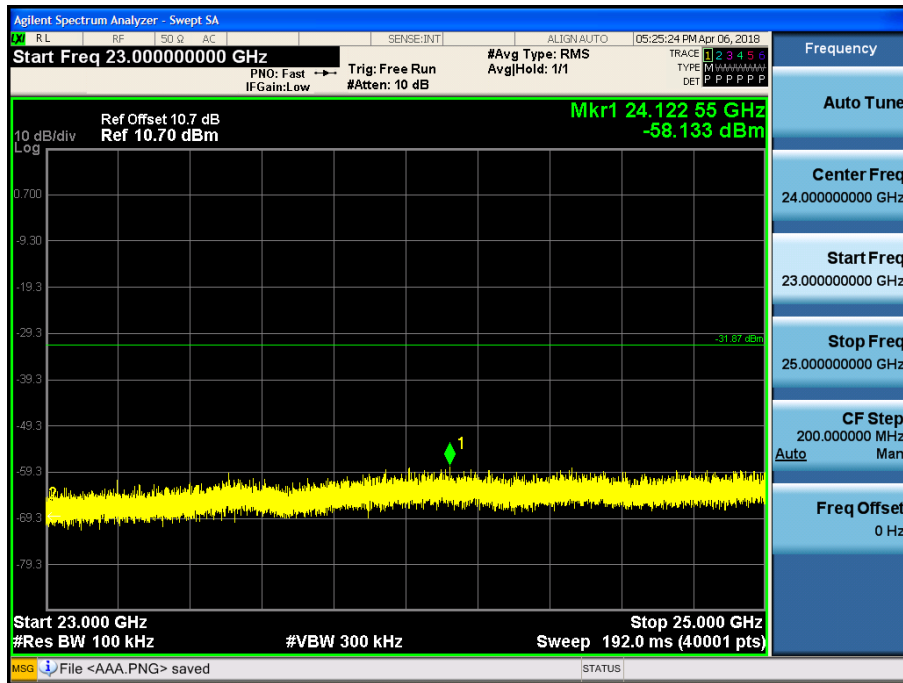
21 GHz ~ 23 GHz

Conducted Spurious Emission (High-CH 39)



23 GHz ~ 25 GHz

Conducted Spurious Emission (High-CH 39)

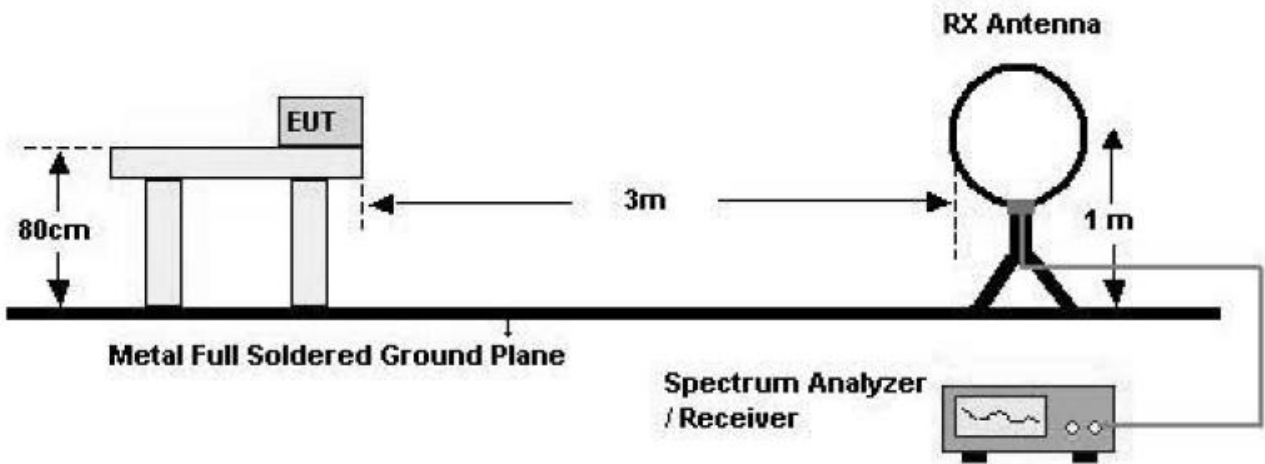


9.6 RADIATED MEASUREMENT.**9.6.1 RADIATED SPURIOUS EMISSIONS.****Test Requirements and limit, §15.205, §15.209**

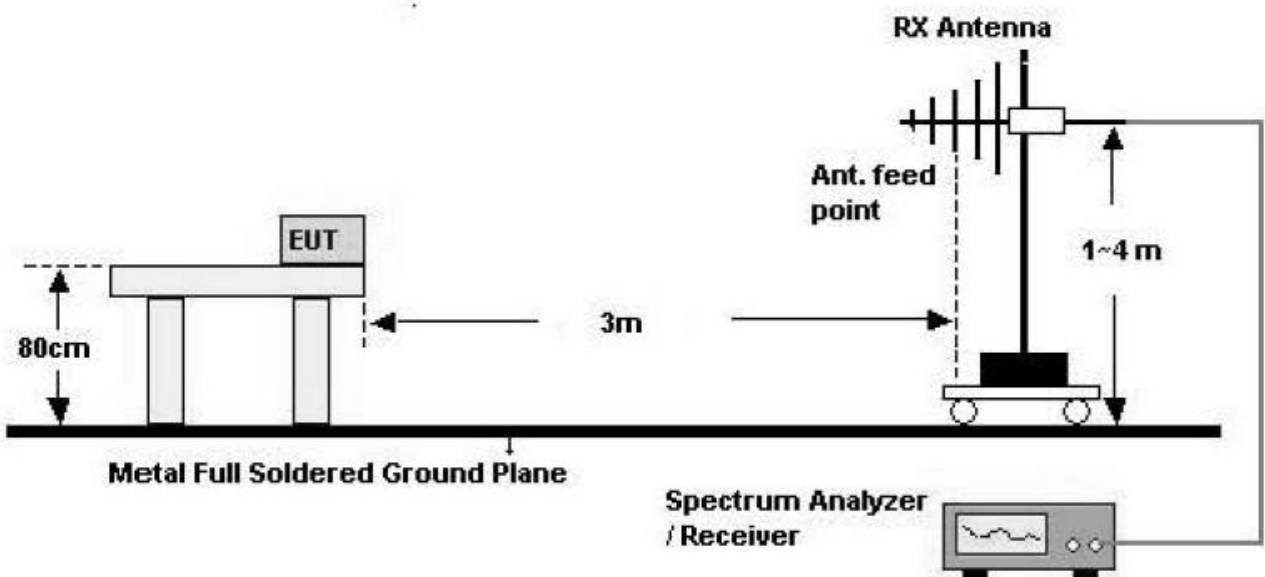
Frequency (MHz)	Field Strength (uV/m)	Measurement Distance (m)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Test Configuration

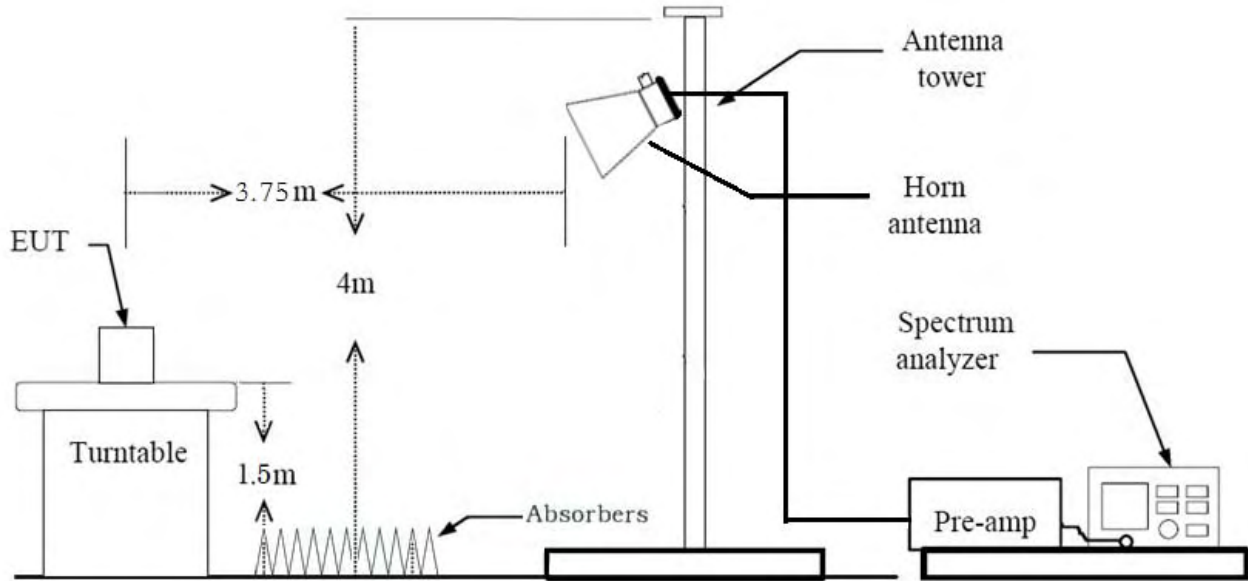
Below 30 MHz



30 MHz - 1 GHz



Above 1 GHz



TEST PROCEDURE USED

Method 12.1 in KDB 558074 v04

Spectrum Setting

- Peak

Peak emission levels are measured by setting the instrument as follows:

RBW = cf. Table 1.

VBW \geq 3 x RBW.

Detector = Peak.

Sweep time = auto.

Trace mode = max hold.

Allow sweeps to continue until the trace stabilizes.

(Note that the required measurement time may be longer for low duty cycle applications).

Table 1 —RBW as a function of frequency

Frequency	RBW
9-150 kHz	200-300 Hz
0.15-30 MHz	9-10 kHz
30-1000 MHz	100-120 kHz
> 1000 MHz	1 MHz

- Average (duty cycle < 98%, duty cycle variations are less than ±2%)

Set RBW = 1 MHz

Set VBW ≥ 3 x RBW

Detector = RMS.

Averaging type = power (i.e., RMS).

Sweep time = auto.

Trace mode = average (at least 100 traces).

A correction factor shall be added to the measurement results prior to comparing to the emission limit in order to compute the emission level that would have been measured had the test been performed at 100 percent duty cycle.

Note :

1. We are performed the RSE and radiated band edge using standard radiated method(RMS).
2. According to SVSWR requirement in ANSI 63.4-2014, We performed the radiated test at 3.75 m distance from center of turn table. So, we applied the distance factor(reference distance : 3 m).
3. Distance extrapolation factor = $20 \log (\text{test distance} / \text{specific distance})$ (dB)

LE Mode	T _{on} (ms)	T _{total} (ms)	Duty Cycle	Duty Cycle Factor (dB)
Bluetooth Version : 4.2 LE: 37 Byte	0.3914	0.6257	0.6255	2.04
Bluetooth Version : 4.2 LE: 255 Byte	2.1350	2.5000	0.8540	0.69
Bluetooth Version : 5.0 LE 1M: 37 Byte	0.3914	0.6245	0.6268	2.03
Bluetooth Version : 5.0 LE 1M: 255 Byte	2.1350	2.5000	0.8540	0.69
Bluetooth Version : 5.0 LE 2M: 37 Byte	0.2065	0.6245	0.3306	4.81
Bluetooth Version : 5.0 LE 2M: 255 Byte	1.0750	1.8750	0.5733	2.42

TEST RESULTS**9 kHz – 30MHz****Operation Mode:** Normal Mode

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
MHz	dBuV/m	dBm/m	dBm	(H/V)	dBuV/m	dBuV/m	dB
No Critical peaks found							

Notes:

1. Measuring frequencies from 9 kHz to the 30MHz.
2. The reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
3. Distance extrapolation factor = $40 \log (\text{specific distance} / \text{test distance})$ (dB)
4. Limit line = specific Limits (dBuV) + Distance extrapolation factor
5. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

TEST RESULTS**Below 1 GHz****Operation Mode:** Normal Mode

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
MHz	dBuV/m	dBm/m	dBm	(H/V)	dBuV/m	dBuV/m	dB
No Critical peaks found							

Notes:

1. Measuring frequencies from 30 MHz to the 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Quasi peak detector mode.
3. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Above 1 GHz

Operation Mode: CH.0_Normal Charging

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.-A.G.+D.F. [dBm]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
4804	48.20	0.00	0.62	V	48.82	73.98	25.16	PK
4804	36.51	2.04	0.62	V	39.17	53.98	14.81	AV
7206	46.03	0.00	10.05	V	56.08	73.98	17.90	PK
7206	33.71	2.04	10.05	V	45.8	53.98	8.18	AV
4804	49.50	0.00	0.62	H	50.12	73.98	23.86	PK
4804	37.29	2.04	0.62	H	39.95	53.98	14.03	AV
7206	45.28	0.00	10.05	H	55.33	73.98	18.65	PK
7206	33.72	2.04	10.05	H	45.81	53.98	8.17	AV

*A.F. : Antenna Factor / C.L. : Cable Loss / A.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor + Duty Cycle Factor
5. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. 4.2 LE: 37 Byte

Operation Mode: CH.19_Normal Charging

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.-A.G.+D.F. [dBm]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
4880	48.12	0.00	1.61	V	49.73	73.98	24.25	PK
4880	36.16	2.04	1.61	V	39.81	53.98	14.17	AV
7320	46.20	0.00	10.02	V	56.22	73.98	17.76	PK
7320	32.80	2.04	10.02	V	44.86	53.98	9.12	AV
4880	49.45	0.00	1.61	H	51.06	73.98	22.92	PK
4880	37.15	2.04	1.61	H	40.8	53.98	13.18	AV
7320	46.60	0.00	10.02	H	56.62	73.98	17.36	PK
7320	33.80	2.04	10.02	H	45.86	53.98	8.12	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor + Duty Cycle Factor
5. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. 4.2 LE: 37 Byte

Operation Mode: CH.39_Normal Charging

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.-A.G.+D.F. [dBm]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
4960	47.50	0.00	1.69	V	49.19	73.98	24.79	PK
4960	36.24	2.04	1.69	V	39.97	53.98	14.01	AV
7440	45.68	0.00	11.43	V	57.11	73.98	16.87	PK
7440	32.12	2.04	11.43	V	45.59	53.98	8.39	AV
4960	49.32	0.00	1.69	H	51.01	73.98	22.97	PK
4960	37.20	2.04	1.69	H	40.93	53.98	13.05	AV
7440	46.62	0.00	11.43	H	58.05	73.98	15.93	PK
7440	33.84	2.04	11.43	H	47.31	53.98	6.67	AV

Operation Mode: CH.39_Fast Charging

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.-A.G.+D.F. [dBm]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
7440	46.35	0.00	11.43	H	57.78	73.98	16.20	PK
7440	33.65	2.04	11.43	H	47.12	53.98	6.86	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
+ Duty Cycle Factor
5. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. 4.2 LE: 37 Byte

Operation Mode: CH.0_Normal Charging

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.-A.G.+D.F. [dBm]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
4804	47.68	0.00	0.62	V	48.30	73.98	25.68	PK
4804	37.25	0.69	0.62	V	38.56	53.98	15.42	AV
7206	45.15	0.00	10.05	V	55.2	73.98	18.78	PK
7206	33.69	0.69	10.05	V	44.43	53.98	9.55	AV
4804	49.40	0.00	0.62	H	50.02	73.98	23.96	PK
4804	37.41	0.69	0.62	H	38.72	53.98	15.26	AV
7206	46.14	0.00	10.05	H	56.19	73.98	17.79	PK
7206	33.62	0.69	10.05	H	44.36	53.98	9.62	AV

*A.F. : Antenna Factor / C.L. : Cable Loss / A.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor + Duty Cycle Factor
5. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. 4.2 LE: 255 Byte

Operation Mode: CH.19_Normal Charging

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.-A.G.+D.F. [dBm]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
4880	48.88	0.00	0.19	V	49.07	73.98	24.91	PK
4880	37.31	0.69	0.19	V	38.19	53.98	15.79	AV
7320	46.11	0.00	8.85	V	54.96	73.98	19.02	PK
7320	33.66	0.69	8.85	V	43.2	53.98	10.78	AV
4880	49.25	0.00	0.19	H	49.44	73.98	24.54	PK
4880	37.93	0.69	0.19	H	38.81	53.98	15.17	AV
7320	46.32	0.00	8.85	H	55.17	73.98	18.81	PK
7320	33.65	0.69	8.85	H	43.19	53.98	10.79	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor + Duty Cycle Factor
5. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. 4.2 LE: 255 Byte

Operation Mode: CH.39_Normal Charging

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.-A.G.+D.F. [dBm]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
4960	48.00	0.00	1.69	V	49.69	73.98	24.29	PK
4960	37.24	0.69	1.69	V	39.62	53.98	14.36	AV
7440	46.14	0.00	11.43	V	57.57	73.98	16.41	PK
7440	33.71	0.69	11.43	V	45.83	53.98	8.15	AV
4960	48.40	0.00	1.69	H	50.09	73.98	23.89	PK
4960	37.01	0.69	1.69	H	39.39	53.98	14.59	AV
7440	46.50	0.00	11.43	H	57.93	73.98	16.05	PK
7440	33.94	0.69	11.43	H	46.06	53.98	7.92	AV

Operation Mode: CH.39_Fast Charging

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.-A.G.+D.F. [dBm]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
7440	46.25	0.00	11.43	H	57.68	73.98	16.30	PK
7440	33.89	0.69	11.43	H	46.01	53.98	7.97	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
+ Duty Cycle Factor
5. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. 4.2 LE: 255 Byte

Operation Mode: CH.0_Normal Charging

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.-A.G.+D.F. [dBm]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
4804	49.59	0.00	0.62	V	50.21	73.98	23.77	PK
4804	37.53	0.69	0.62	V	38.84	53.98	15.14	AV
7206	46.33	0.00	10.05	V	56.38	73.98	17.60	PK
7206	34.32	0.69	10.05	V	45.06	53.98	8.92	AV
4804	50.10	0.00	0.62	H	50.72	73.98	23.26	PK
4804	37.58	0.69	0.62	H	38.89	53.98	15.09	AV
7206	46.50	0.00	10.05	H	56.55	73.98	17.43	PK
7206	34.23	0.69	10.05	H	44.97	53.98	9.01	AV

*A.F. : Antenna Factor / C.L. : Cable Loss / A.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor + Duty Cycle Factor
5. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. 5.0 LE 1M: 255 Byte (Worst data is 255 Byte)

Operation Mode: CH.19_Normal Charging

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.-A.G.+D.F. [dBm]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
4880	50.58	0.00	1.61	V	52.19	73.98	21.79	PK
4880	37.99	0.69	1.61	V	40.29	53.98	13.69	AV
7320	45.99	0.00	10.02	V	56.01	73.98	17.97	PK
7320	34.38	0.69	10.02	V	45.09	53.98	8.89	AV
4880	50.34	0.00	1.61	H	51.95	73.98	22.03	PK
4880	38.00	0.69	1.61	H	40.3	53.98	13.68	AV
7320	46.35	0.00	10.02	H	56.37	73.98	17.61	PK
7320	34.33	0.69	10.02	H	45.04	53.98	8.94	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor + Duty Cycle Factor
5. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. 5.0 LE 1M: 255 Byte (Worst data is 255 Byte)

Operation Mode: CH.39_Normal Charging

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.-A.G.+D.F. [dBm]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
4960	50.31	0.00	1.69	V	52.00	73.98	21.98	PK
4960	37.74	0.69	1.69	V	40.12	53.98	13.86	AV
7440	46.85	0.00	11.43	V	58.28	73.98	15.70	PK
7440	34.21	0.69	11.43	V	46.33	53.98	7.65	AV
4960	50.26	0.00	1.69	H	51.95	73.98	22.03	PK
4960	37.68	0.69	1.69	H	40.06	53.98	13.92	AV
7440	46.48	0.00	11.43	H	57.91	73.98	16.07	PK
7440	34.05	0.69	11.43	H	46.17	53.98	7.81	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor + Duty Cycle Factor
5. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. 5.0 LE 1M: 255 Byte (Worst data is 255 Byte)

Operation Mode: CH.0_Normal Charging

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.-A.G.+D.F. [dBm]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
4804	48.94	0.00	0.62	V	49.56	73.98	24.42	PK
4804	37.55	2.42	0.62	V	40.59	53.98	13.39	AV
7206	46.51	0.00	10.05	V	56.56	73.98	17.42	PK
7206	34.22	2.42	10.05	V	46.69	53.98	7.29	AV
4804	50.28	0.00	0.62	H	50.9	73.98	23.08	PK
4804	37.60	2.42	0.62	H	40.64	53.98	13.34	AV
7206	45.95	0.00	10.05	H	56	73.98	17.98	PK
7206	34.26	2.42	10.05	H	46.73	53.98	7.25	AV

*A.F. : Antenna Factor / C.L. : Cable Loss / A.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor + Duty Cycle Factor
5. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. 5.0 LE 2M: 255 Byte (Worst data is 255 Byte)

Operation Mode: CH.19_Normal Charging

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.-A.G.+D.F. [dBm]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
4880	49.92	0.00	0.19	V	50.11	73.98	23.87	PK
4880	37.85	2.42	0.19	V	40.46	53.98	13.52	AV
7320	46.34	0.00	8.85	V	55.19	73.98	18.79	PK
7320	34.25	2.42	8.85	V	45.52	53.98	8.46	AV
4880	49.68	0.00	0.19	H	49.87	73.98	24.11	PK
4880	37.92	2.42	0.19	H	40.53	53.98	13.45	AV
7320	45.86	0.00	8.85	H	54.71	73.98	19.27	PK
7320	34.18	2.42	8.85	H	45.45	53.98	8.53	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor + Duty Cycle Factor
5. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. 5.0 LE 2M: 255 Byte (Worst data is 255 Byte)

Operation Mode: CH.39_Normal Charging

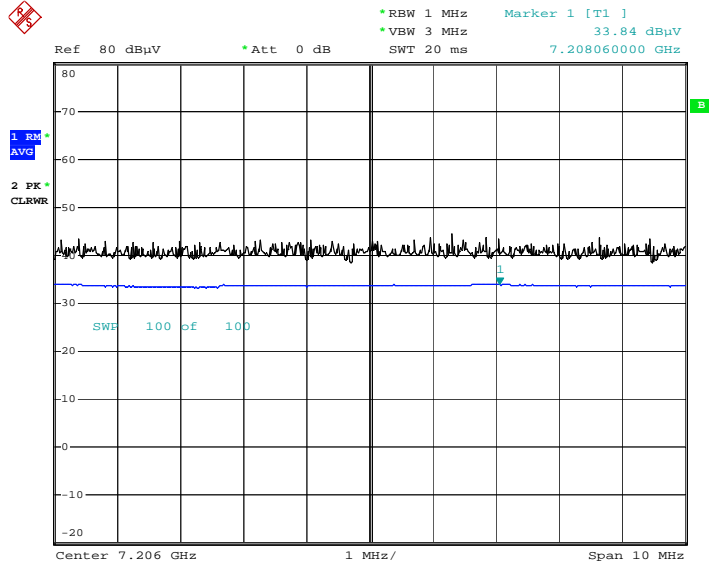
Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.-A.G.+D.F. [dBm]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
4960	50.44	0.00	1.69	V	52.13	73.98	21.85	PK
4960	37.68	2.42	1.69	V	41.79	53.98	12.19	AV
7440	46.88	0.00	11.43	V	58.31	73.98	15.67	PK
7440	34.14	2.42	11.43	V	47.99	53.98	5.99	AV
4960	49.86	0.00	1.69	H	51.55	73.98	22.43	PK
4960	37.52	2.42	1.69	H	41.63	53.98	12.35	AV
7440	45.84	0.00	11.43	H	57.27	73.98	16.71	PK
7440	33.91	2.42	11.43	H	47.76	53.98	6.22	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor + Duty Cycle Factor
5. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. 5.0 LE 1M: 255 Byte (Worst data is 255 Byte)

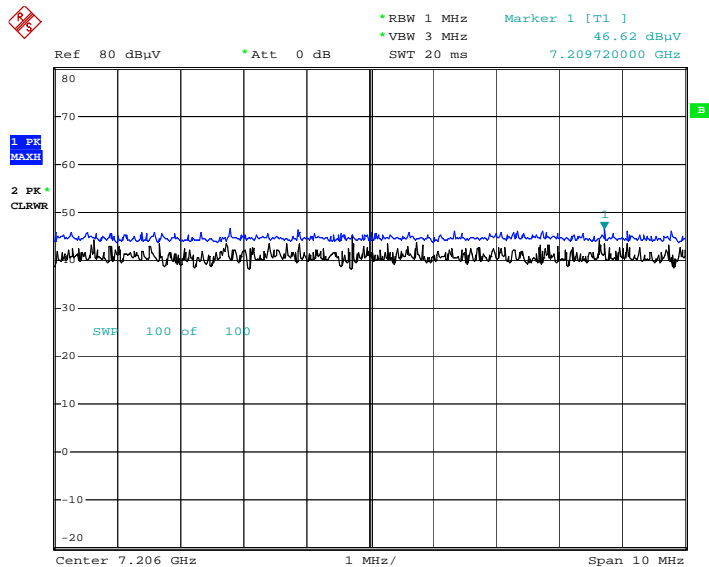
■ RESULT PLOTS_Normal Charging (Worst case : Z-H)_4.2 LE: 37 Byte

Radiated Spurious Emissions plot – Average Reading (Ch.39 3rd Harmonic)



Date: 17.APR.2018 17:04:41

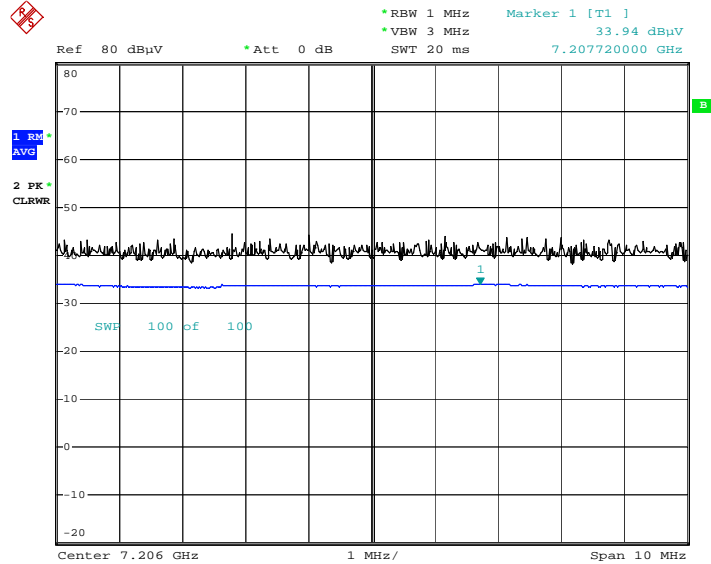
Radiated Spurious Emissions plot – Peak Reading (Ch.39 3rd Harmonic)



Date: 17.APR.2018 17:10:12

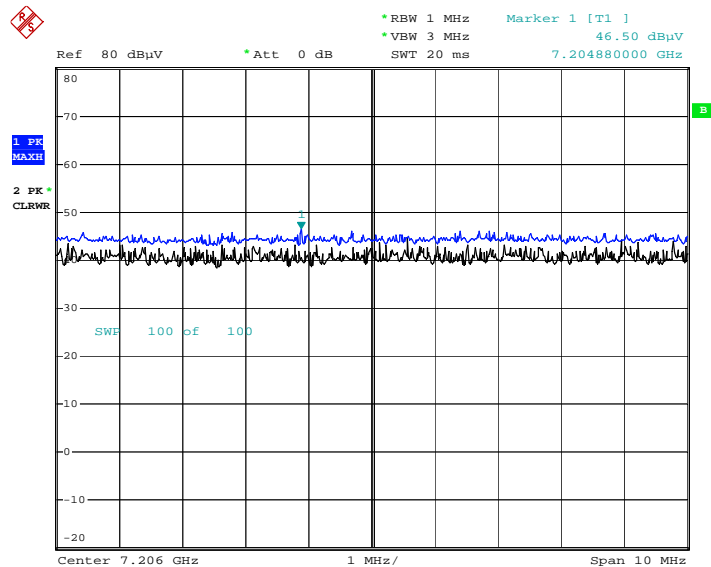
■ RESULT PLOTS_Normal Charging (Worst case : Z-H)_4.2 LE: 255 Byte

Radiated Spurious Emissions plot – Average Reading (Ch.39 3rd Harmonic)



Date: 17.APR.2018 17:17:33

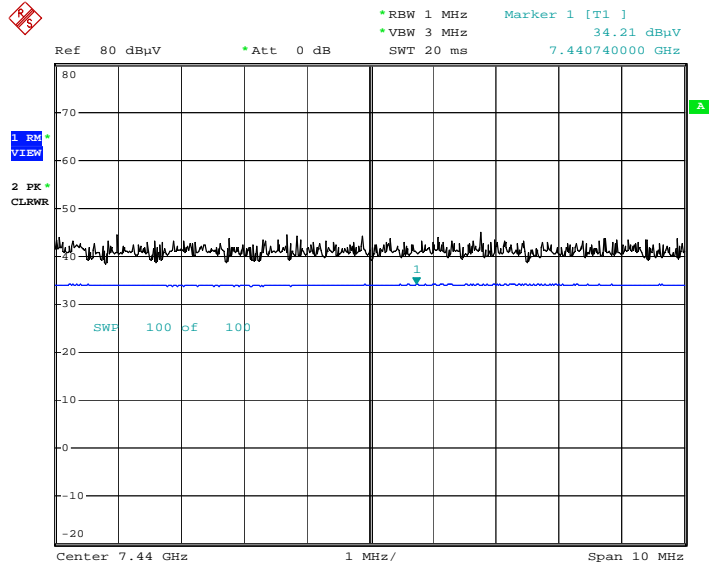
Radiated Spurious Emissions plot – Peak Reading (Ch.39 3rd Harmonic)



Date: 17.APR.2018 17:18:42

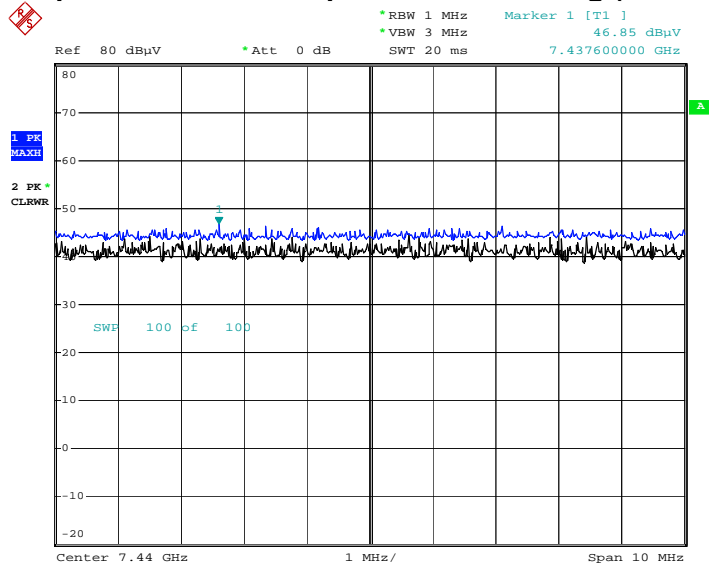
RESULT PLOTS_Normal Charging (Worst case : V)_ 5.0 LE 1M: 255 Byte

Radiated Spurious Emissions plot – Average Reading (Ch.39 3rd Harmonic)



Date: 18.APR.2018 10:00:48

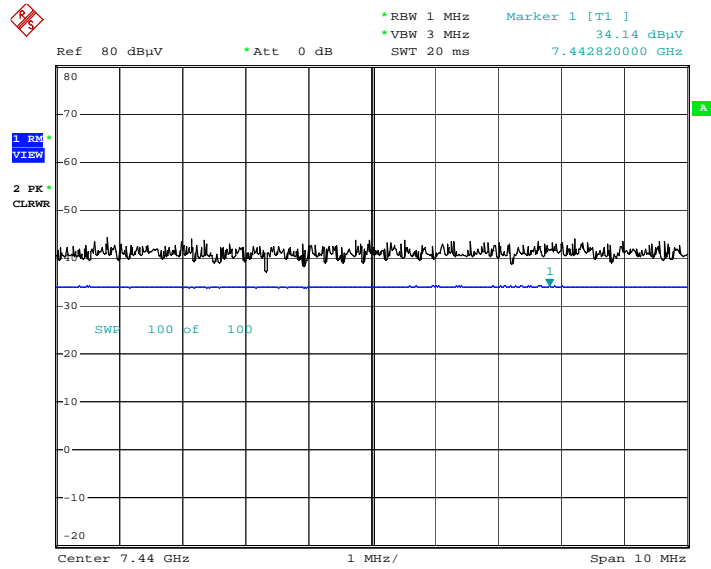
Radiated Spurious Emissions plot – Peak Reading (Ch. 39 3rd Harmonic)



Date: 18.APR.2018 10:01:20

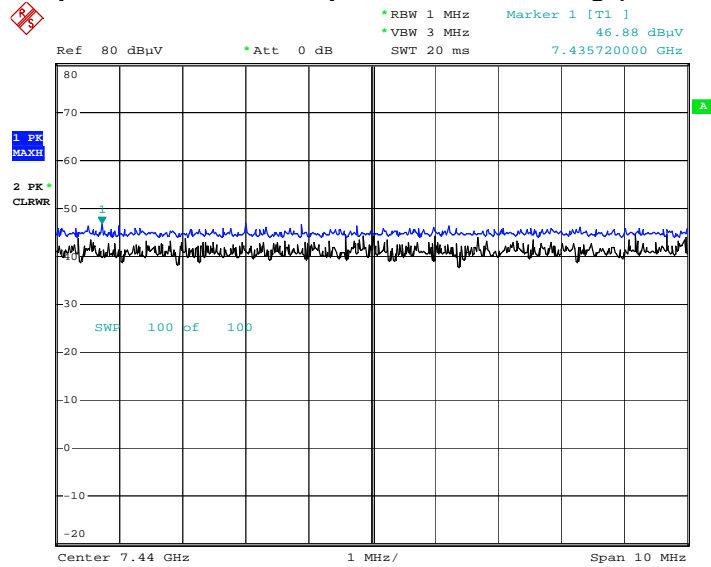
RESULT PLOTS_Normal Charging (Worst case : V) 5.0 LE 2M: 255 Byte

Radiated Spurious Emissions plot – Average Reading (Ch. 39 3rd Harmonic)



Date: 18.APR.2018 10:02:23

Radiated Spurious Emissions plot – Peak Reading (Ch. 39 3rd Harmonic)



Date: 18.APR.2018 10:02:00

Note : Only the worst case plots for Radiated Spurious Emissions.

9.6.2 RADIATED RESTRICTED BAND EDGES

Test Requirements and limit, §15.247(d) §15.205, §15.209

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. 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)).

Operation Mode	BT_LE_Normal Charging
Operating Frequency	2402 MHz
Channel No.	0

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2390.0	15.94	0.00	33.30	H	49.24	73.98	24.74	PK
2390.0	4.49	2.04	33.30	H	39.83	53.98	14.15	AV
2390.0	15.54	0.00	33.30	V	48.84	73.98	25.14	PK
2390.0	4.36	2.04	33.30	V	39.70	53.98	14.29	AV

Notes:

1. Frequency range of measurement = 2310 MHz ~ 2390 MHz
2. Total = Reading Value + Antenna Factor + Cable Loss + Duty Cycle Factor + Distance Factor
3. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)
4. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
5. 4.2 LE: 37 Byte

Operation Mode BT_LE_Normal Charging
 Operating Frequency 2480 MHz
 Channel No. 39

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2483.5	16.48	0.00	33.41	H	49.89	73.98	24.09	PK
2483.5	4.55	2.04	33.41	H	40.00	53.98	13.98	AV
2483.5	16.13	0.00	33.41	V	49.54	73.98	24.44	PK
2483.5	4.42	2.04	33.41	V	39.87	53.98	14.11	AV

Operation Mode BT_LE_Fast Charging
 Operating Frequency 2480 MHz
 Channel No. 39

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2483.5	16.31	0.00	33.41	H	49.72	73.98	24.26	PK
2483.5	4.51	2.04	33.41	H	39.96	53.98	14.02	AV

Notes:

1. Frequency range of measurement = 2483.5 MHz ~ 2500 MHz
2. Total = Reading Value + Antenna Factor + Cable Loss + Duty Cycle Factor + Distance Factor
3. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)
4. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
5. 4.2 LE: 37 Byte

Operation Mode BT_LE_Normal Charging
 Operating Frequency 2402 MHz
 Channel No. 0

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2390.0	15.54	0.00	33.30	H	48.84	73.98	25.14	PK
2390.0	4.34	0.69	33.30	H	38.33	53.98	15.65	AV
2390.0	15.69	0.00	33.30	V	48.99	73.98	24.99	PK
2390.0	4.29	0.69	33.30	V	38.28	53.98	15.70	AV

Operation Mode BT_LE_Fast Charging
 Operating Frequency 2402 MHz
 Channel No. 0

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2483.5	16.22	0.00	33.41	H	49.63	73.98	24.35	PK
2483.5	4.64	0.69	33.41	H	38.74	53.98	15.25	AV

Notes:

1. Frequency range of measurement = 2310 MHz ~ 2390 MHz
2. Total = Reading Value + Antenna Factor + Cable Loss + Duty Cycle Factor + Distance Factor
3. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)
4. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
5. 4.2 LE: 255 Byte

Operation Mode	BT_LE_Normal Charging
Operating Frequency	2480 MHz
Channel No.	39

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2483.5	16.39	0.00	33.41	H	49.80	73.98	24.18	PK
2483.5	4.75	0.69	33.41	H	38.85	53.98	15.13	AV
2483.5	16.36	0.00	33.41	V	49.77	73.98	24.21	PK
2483.5	4.69	0.69	33.41	V	38.79	53.98	15.19	AV

Notes:

1. Frequency range of measurement = 2483.5 MHz ~ 2500 MHz
2. Total = Reading Value + Antenna Factor + Cable Loss + Duty Cycle Factor + Distance Factor
3. Distance extrapolation factor = $20 \log (\text{test distance} / \text{specific distance})$ (dB)
4. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
5. 4.2 LE: 255 Byte

Operation Mode	BT_LE_Normal Charging
Operating Frequency	2402 MHz
Channel No.	0

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2390.0	14.65	0.00	33.30	H	47.95	73.98	26.03	PK
2390.0	3.69	0.69	33.30	H	37.68	53.98	16.30	AV
2390.0	14.11	0.00	33.30	V	47.41	73.98	26.57	PK
2390.0	3.67	0.69	33.30	V	37.66	53.98	16.32	AV

Notes:

1. Frequency range of measurement = 2310 MHz ~ 2390 MHz
2. Total = Reading Value + Antenna Factor + Cable Loss + Duty Cycle Factor + Distance Factor
3. Distance extrapolation factor = $20 \log(\text{test distance} / \text{specific distance})$ (dB)
4. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
5. 5.0 LE 1M: 255 Byte (Worst data is 255 Byte)

Operation Mode	BT_LE_Normal Charging
Operating Frequency	2480 MHz
Channel No.	39

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2483.5	16.04	0.00	33.41	H	49.45	73.98	24.53	PK
2483.5	3.78	0.69	33.41	H	37.88	53.98	16.10	AV
2483.5	15.85	0.00	33.41	V	49.26	73.98	24.72	PK
2483.5	3.57	0.69	33.41	V	37.67	53.98	16.31	AV

Notes:

1. Frequency range of measurement = 2483.5 MHz ~ 2500 MHz
2. Total = Reading Value + Antenna Factor + Cable Loss + Duty Cycle Factor + Distance Factor
3. Distance extrapolation factor = $20 \log(\text{test distance} / \text{specific distance})$ (dB)
4. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
5. 5.0 LE 1M: 255 Byte (Worst data is 255 Byte)

Operation Mode	BT_LE_Normal Charging
Operating Frequency	2402 MHz
Channel No.	0

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2390.0	14.48	0.00	33.30	H	47.78	73.98	26.20	PK
2390.0	3.67	2.42	33.30	H	39.39	53.98	14.59	AV
2390.0	14.31	0.00	33.30	V	47.61	73.98	26.37	PK
2390.0	3.61	2.42	33.30	V	39.33	53.98	14.65	AV

Notes:

1. Frequency range of measurement = 2310 MHz ~ 2390 MHz
2. Total = Reading Value + Antenna Factor + Cable Loss + Duty Cycle Factor + Distance Factor
3. Distance extrapolation factor = $20 \log(\text{test distance} / \text{specific distance})$ (dB)
4. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
5. 5.0 LE 2M: 255 Byte (Worst data is 255 Byte)

Operation Mode	BT_LE_Normal Charging
Operating Frequency	2480 MHz
Channel No.	39

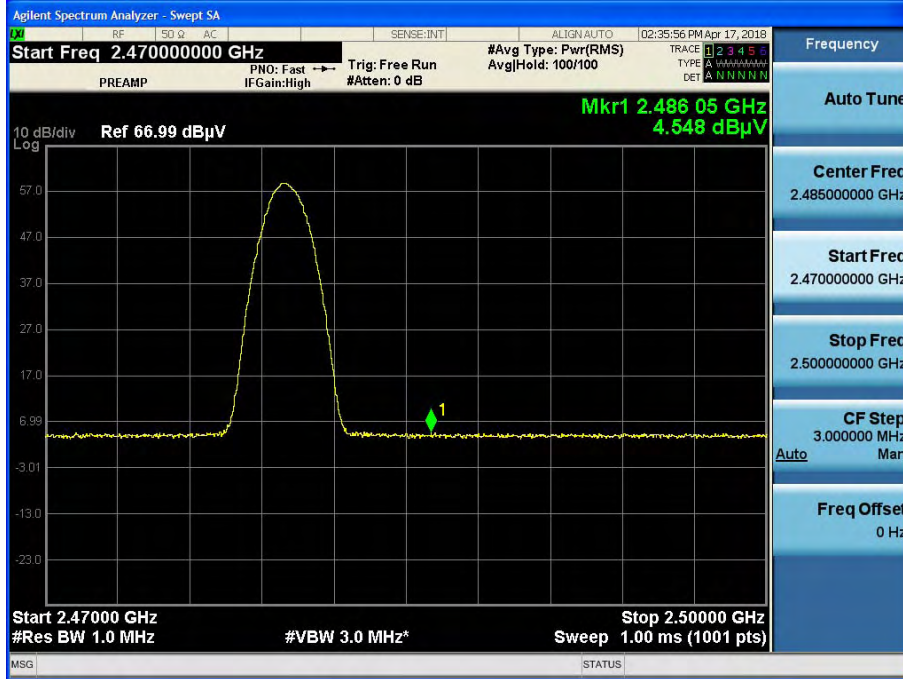
Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2483.5	15.83	0.00	33.41	H	49.24	73.98	24.74	PK
2483.5	4.09	2.42	33.41	H	39.92	53.98	14.06	AV
2483.5	15.53	0.00	33.41	V	48.94	73.98	25.04	PK
2483.5	3.99	2.42	33.41	V	39.82	53.98	14.16	AV

Notes:

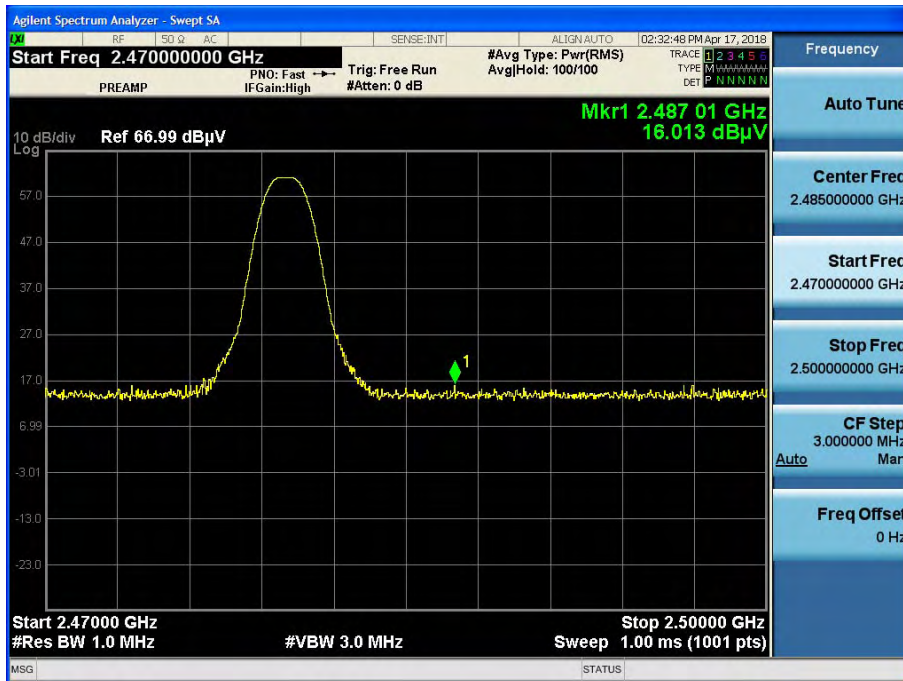
1. Frequency range of measurement = 2483.5 MHz ~ 2500 MHz
2. Total = Reading Value + Antenna Factor + Cable Loss + Duty Cycle Factor + Distance Factor
3. Distance extrapolation factor = $20 \log(\text{test distance} / \text{specific distance})$ (dB)
4. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
5. 5.0 LE 2M: 255 Byte (Worst data is 255 Byte)

RESULT PLOTS_Normal Charging (Worst case : Z-H) _4.2 LE: 37 Byte

Radiated Restricted Band Edges plot – Average Reading (Ch.39)

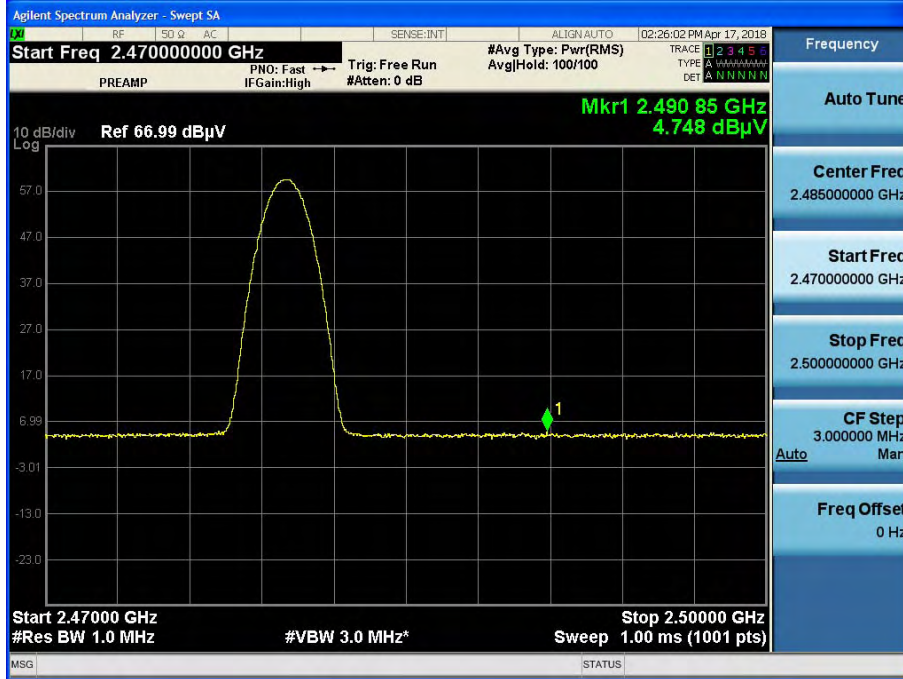


Radiated Restricted Band Edges plot – Peak Reading (Ch.39)

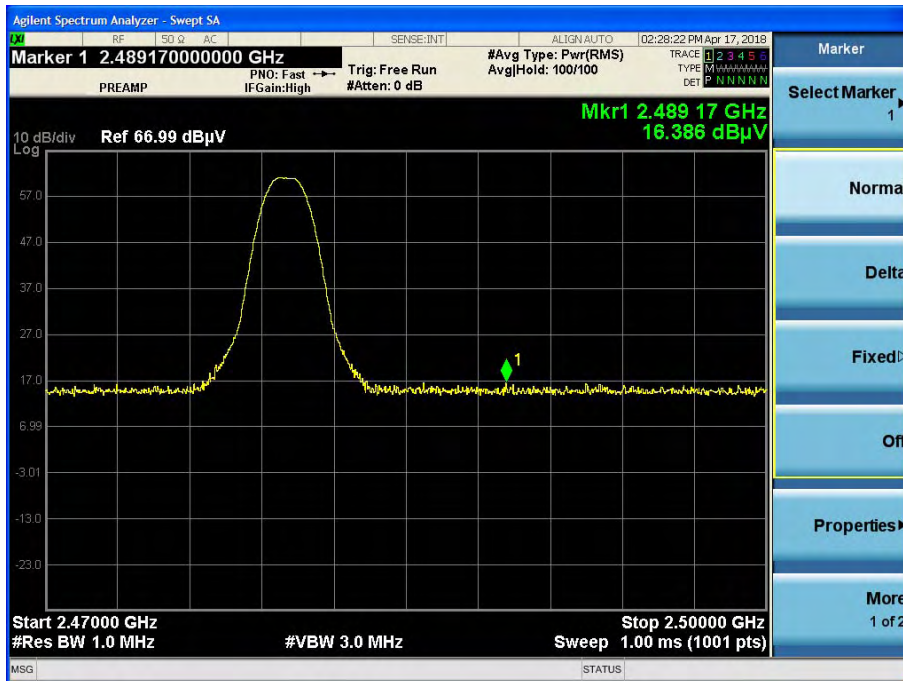


RESULT PLOTS_Normal Charging (Worst case : Z-H) _4.2 LE: 255 Byte

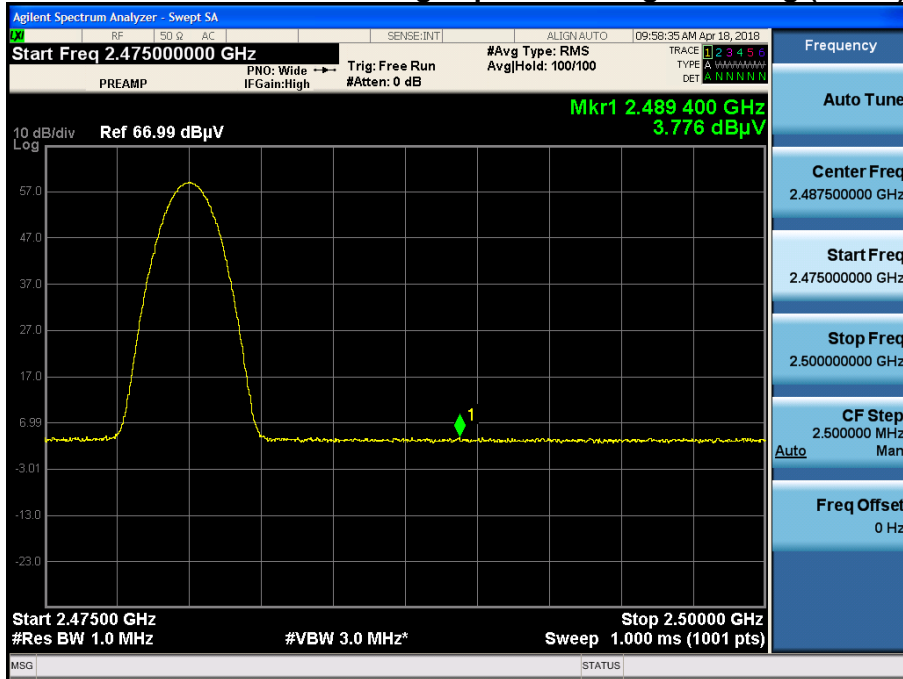
Radiated Restricted Band Edges plot – Average Reading (Ch.39)



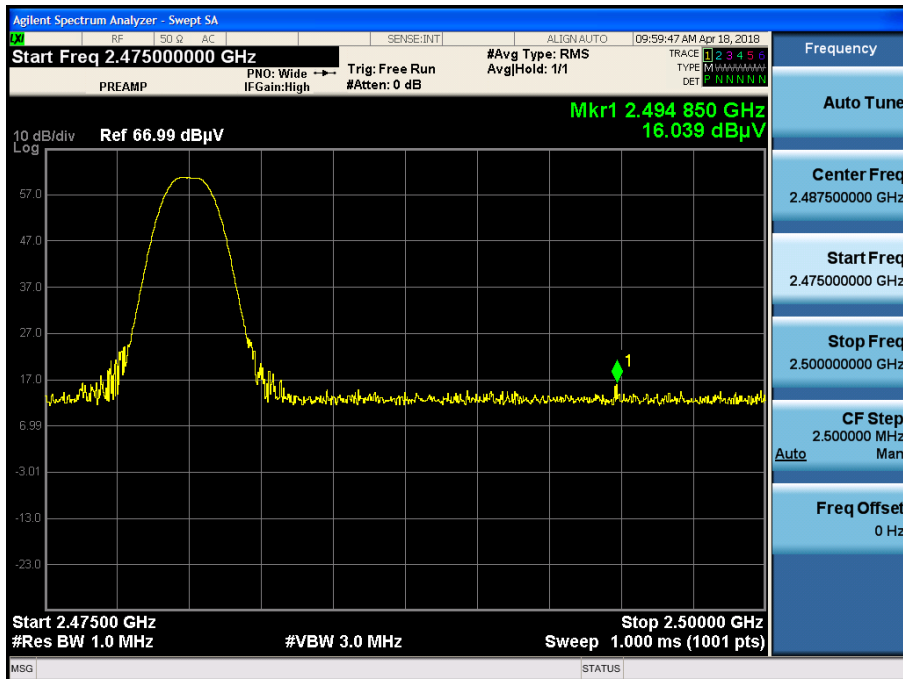
Radiated Restricted Band Edges plot – Peak Reading (Ch.39)



▣ RESULT PLOTS_Normal Charging (Worst case : Z-H)_ 5.0 LE 1M: 255 Byte
Radiated Restricted Band Edges plot – Average Reading (Ch.39)

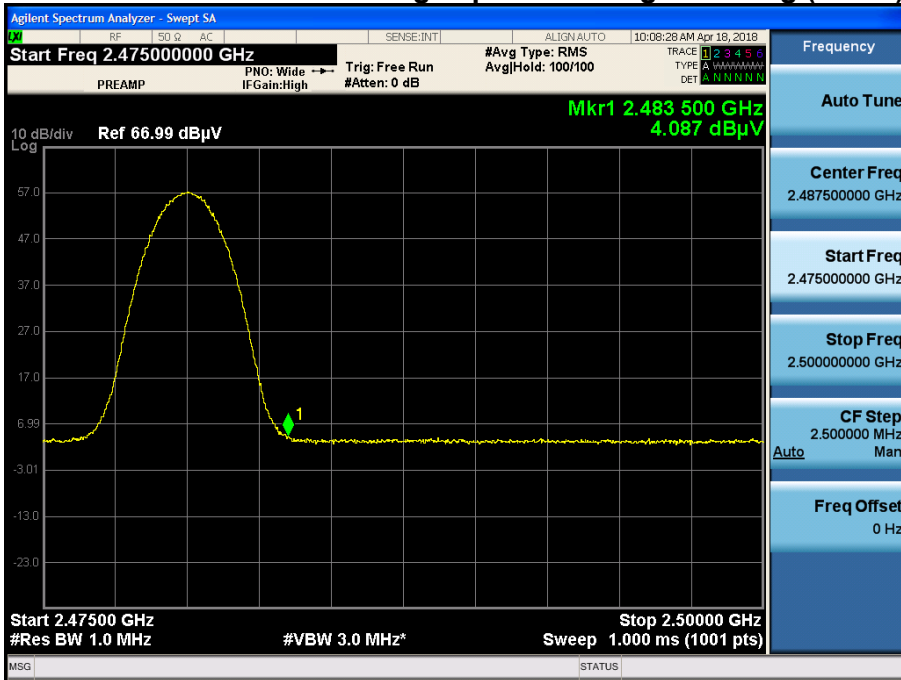


Radiated Restricted Band Edges plot – Peak Reading (Ch.39)

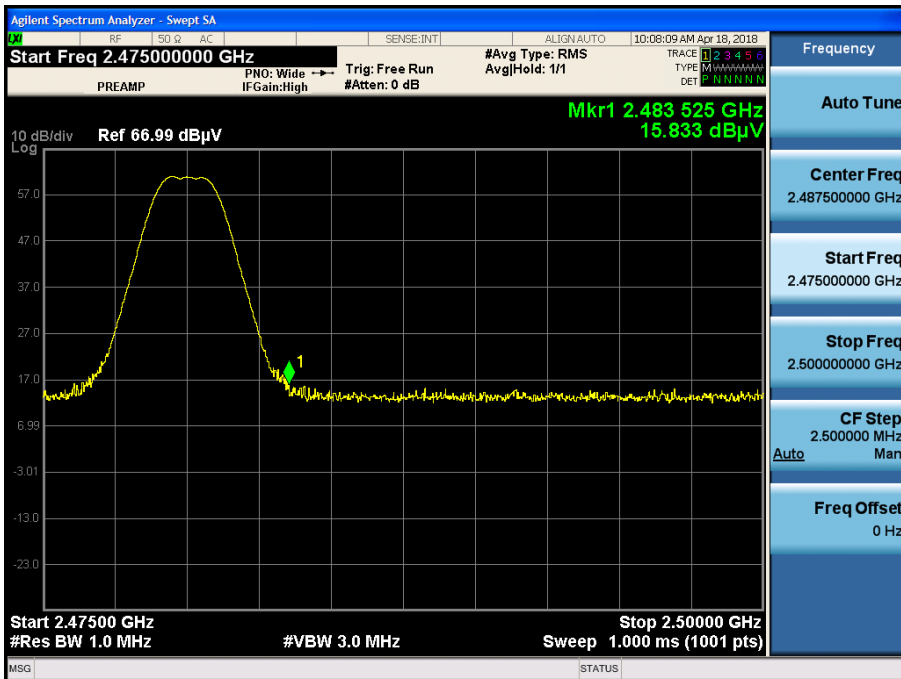


▣ RESULT PLOTS_Normal Charging (Worst case : Z-H)_ 5.0 LE 2M: 255 Byte

Radiated Restricted Band Edges plot – Average Reading (Ch.39)



Radiated Restricted Band Edges plot – Peak Reading (Ch.39)



Note : Only the worst case plots for Radiated Restricted Band Edges.

9.7 POWERLINE CONDUCTED EMISSIONS

Test Requirements and limit, §15.207

For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed 250 microvolts (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range is listed as follows:

Frequency Range (MHz)	Limits (dB μ V)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line (LINE and NEUTRAL) and ground at the power terminals.

Test Configuration

See test photographs attached in Appendix 1 for the actual connections between EUT and support equipment.

TEST PROCEDURE

1. The EUT is placed on a wooden table 80 cm above the reference ground plane.
2. The EUT is connected via LISN to a test power supply.
3. The measurement results are obtained as described below:
4. Detectors – Quasi Peak and Average Detector.

Sample Calculation

Quasi-peak(Final Result) = Reading Value + Correction Factor

▣ **RESULT PLOTS_Normal Charging**
Conducted Emissions (Line 1)

EMI Auto Test(21)

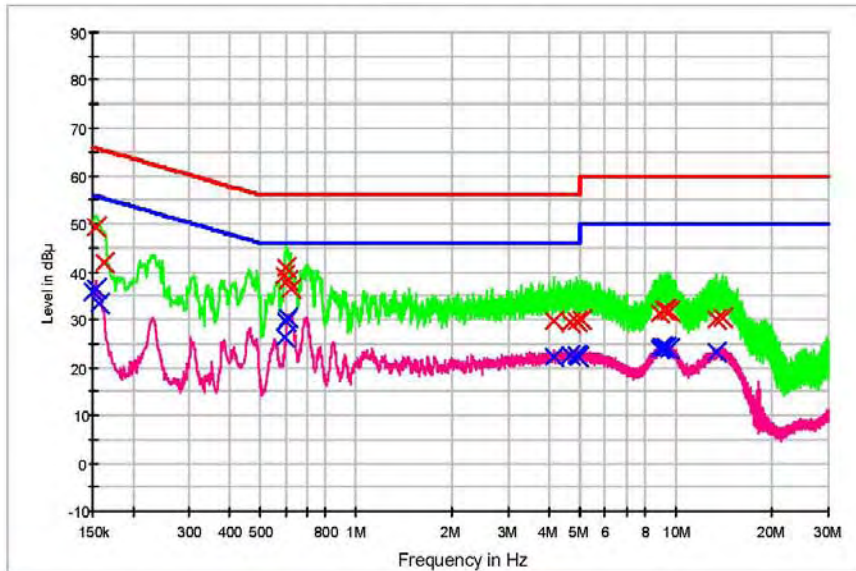
1 / 2

HCT TEST Report

Common Information

EUT: SM-G8750
 Manufacturer: SAMSUNG
 Test Site: SHIELD ROOM
 Operating Conditions: BT LE MODE

FCC CLASS B_Exten Cable



— FCC CLASS B_OP — FCC CLASS B_AV — Preview Result 1-PK+
 — Preview Result 2-AVG X Final Result 1-QPK X Final Result 2-CAV

Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.154000	49.2	9.000	Off	N	9.7	16.6	65.8
0.162000	41.8	9.000	Off	N	9.7	23.6	65.4
0.596000	39.2	9.000	Off	N	9.7	16.8	56.0
0.606000	40.9	9.000	Off	N	9.7	15.1	56.0
0.614000	38.2	9.000	Off	N	9.7	17.8	56.0
0.622000	36.5	9.000	Off	N	9.7	19.5	56.0
4.150000	29.6	9.000	Off	N	9.9	26.4	56.0
4.676000	29.4	9.000	Off	N	10.0	26.6	56.0
4.886000	29.6	9.000	Off	N	10.0	26.4	56.0
4.894000	29.5	9.000	Off	N	10.0	26.5	56.0
4.902000	29.5	9.000	Off	N	10.0	26.5	56.0
5.100000	29.9	9.000	Off	N	10.0	30.1	60.0
8.882000	31.4	9.000	Off	N	10.2	28.6	60.0
9.196000	31.9	9.000	Off	N	10.2	28.1	60.0
9.320000	32.1	9.000	Off	N	10.2	27.9	60.0
9.510000	31.8	9.000	Off	N	10.2	28.2	60.0
13.328000	30.1	9.000	Off	N	10.4	29.9	80.0
14.064000	30.2	9.000	Off	N	10.4	29.8	60.0

EMI Auto Test(21)

2 / 2

Final Result 2

Frequency (MHz)	CAverage (dBμV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.150000	35.8	9.000	Off	N	9.7	20.2	56.0
0.154000	36.4	9.000	Off	N	9.7	19.4	55.8
0.158000	33.5	9.000	Off	N	9.7	22.0	55.6
0.596000	26.3	9.000	Off	N	9.7	19.7	46.0
0.604000	29.6	9.000	Off	N	9.7	16.4	46.0
0.608000	30.2	9.000	Off	N	9.7	15.8	46.0
4.150000	22.3	9.000	Off	N	9.9	23.7	46.0
4.676000	22.5	9.000	Off	N	10.0	23.5	46.0
4.886000	22.5	9.000	Off	N	10.0	23.5	46.0
4.894000	22.4	9.000	Off	N	10.0	23.6	46.0
4.902000	22.4	9.000	Off	N	10.0	23.6	46.0
4.936000	22.3	9.000	Off	N	10.0	23.7	46.0
8.882000	23.9	9.000	Off	N	10.2	26.1	50.0
9.014000	24.2	9.000	Off	N	10.2	25.8	50.0
9.134000	24.3	9.000	Off	N	10.2	25.7	50.0
9.320000	24.3	9.000	Off	N	10.2	25.7	50.0
9.510000	24.0	9.000	Off	N	10.2	26.0	50.0
13.328000	23.1	9.000	Off	N	10.4	26.9	50.0

2018-04-13

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Conducted Emissions (Line 2)

EMI Auto Test(21)

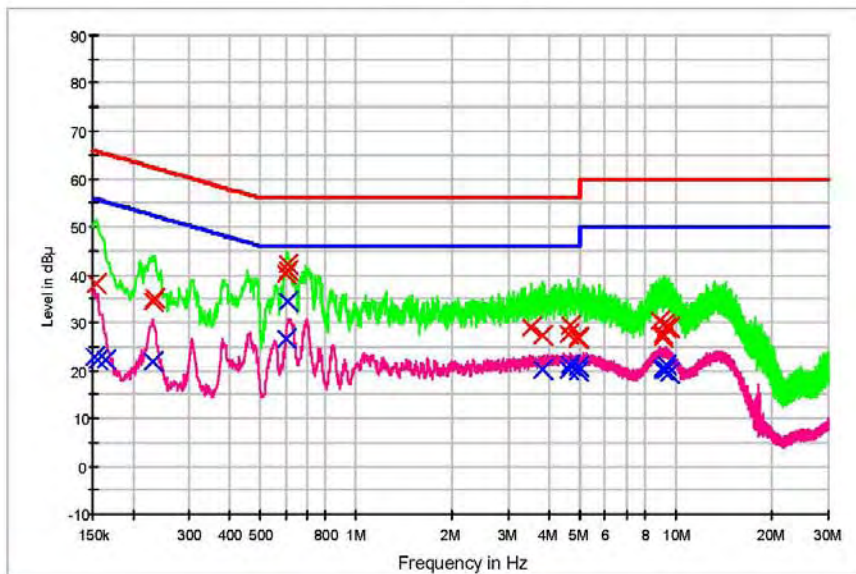
1 / 2

HCT TEST Report

Common Information

EUT: SM-G8750
 Manufacturer: SAMSUNG
 Test Site: SHIELD ROOM
 Operating Conditions: BT LE MODE

FCC CLASS B_Exten Cable



— FCC CLASS B_OP
 — FCC CLASS B_AV
 — Preview Result 1-PK+
— Preview Result 2-AVG
 X Final Result 1-QPK
 X Final Result 2-CAV

Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.154000	38.0	9.000	Off	L1	9.7	27.8	65.8
0.230000	34.3	9.000	Off	L1	9.7	28.1	62.4
0.234000	35.0	9.000	Off	L1	9.7	27.3	62.3
0.600000	40.0	9.000	Off	L1	9.7	16.0	56.0
0.608000	42.1	9.000	Off	L1	9.7	13.9	56.0
0.612000	40.7	9.000	Off	L1	9.7	15.3	56.0
3.524000	28.9	9.000	Off	L1	9.9	27.1	56.0
3.846000	27.3	9.000	Off	L1	9.9	28.7	56.0
4.636000	27.8	9.000	Off	L1	10.0	28.2	56.0
4.674000	29.4	9.000	Off	L1	10.0	26.6	56.0
4.936000	26.8	9.000	Off	L1	10.0	29.2	56.0
4.972000	26.7	9.000	Off	L1	10.0	29.3	56.0
8.848000	30.4	9.000	Off	L1	10.1	29.6	60.0
9.050000	26.8	9.000	Off	L1	10.1	33.2	60.0
9.056000	27.7	9.000	Off	L1	10.1	32.3	60.0
9.216000	29.6	9.000	Off	L1	10.1	30.4	60.0
9.308000	29.0	9.000	Off	L1	10.1	31.0	60.0
9.496000	29.1	9.000	Off	L1	10.1	30.9	60.0

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EMI Auto Test(21)

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Final Result 2

Frequency (MHz)	CAverage (dBμV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.152000	23.0	9.000	Off	L1	9.7	32.9	55.9
0.156000	22.1	9.000	Off	L1	9.7	33.5	55.7
0.164000	22.3	9.000	Off	L1	9.7	32.9	55.3
0.230000	21.7	9.000	Off	L1	9.7	30.7	52.4
0.600000	26.5	9.000	Off	L1	9.7	19.5	46.0
0.614000	34.3	9.000	Off	L1	9.7	11.7	46.0
3.846000	20.2	9.000	Off	L1	9.9	25.8	46.0
4.636000	20.2	9.000	Off	L1	10.0	25.8	46.0
4.674000	21.2	9.000	Off	L1	10.0	24.8	46.0
4.936000	20.8	9.000	Off	L1	10.0	25.2	46.0
4.972000	19.8	9.000	Off	L1	10.0	26.2	46.0
4.980000	19.8	9.000	Off	L1	10.0	26.2	46.0
9.050000	20.4	9.000	Off	L1	10.1	29.6	50.0
9.056000	20.3	9.000	Off	L1	10.1	29.7	50.0
9.260000	20.0	9.000	Off	L1	10.1	30.0	50.0
9.270000	20.0	9.000	Off	L1	10.1	30.0	50.0
9.308000	21.3	9.000	Off	L1	10.1	28.7	50.0
9.496000	19.4	9.000	Off	L1	10.1	30.6	50.0

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RESULT PLOTS_Fast Charging
Conducted Emissions (Line 1)

EMI Auto Test(22)

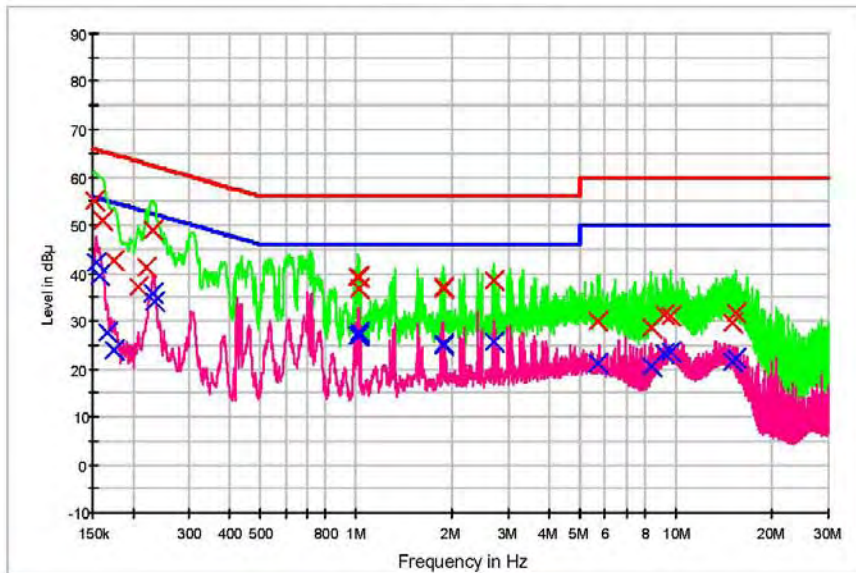
1 / 2

HCT TEST Report

Common Information

EUT: SM-G8750
 Manufacturer: SAMSUNG
 Test Site: SHIELD ROOM
 Operating Conditions: BT LE MODE (FAST CHARGING)

FCC CLASS B_Exten Cable



— FCC CLASS B_OP — FCC CLASS B_AV — Preview Result 1-PK+
— Preview Result 2-AVG x Final Result 1-QPK x Final Result 2-CAV

Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.152000	55.0	9.000	Off	N	9.7	10.9	65.9
0.160000	51.1	9.000	Off	N	9.7	14.3	65.5
0.174000	42.5	9.000	Off	N	9.7	22.2	64.8
0.208000	37.2	9.000	Off	N	9.7	26.1	63.3
0.220000	41.3	9.000	Off	N	9.7	21.5	62.8
0.230000	48.9	9.000	Off	N	9.7	13.6	62.4
1.012000	39.1	9.000	Off	N	9.8	16.9	56.0
1.016000	36.8	9.000	Off	N	9.8	19.2	56.0
1.022000	39.2	9.000	Off	N	9.8	16.8	56.0
1.868000	37.2	9.000	Off	N	9.8	18.8	56.0
1.882000	36.8	9.000	Off	N	9.8	19.2	56.0
2.690000	38.4	9.000	Off	N	9.9	17.6	56.0
5.706000	30.0	9.000	Off	N	10.0	30.0	60.0
8.398000	28.7	9.000	Off	N	10.2	31.3	60.0
9.198000	31.2	9.000	Off	N	10.2	28.8	60.0
9.696000	31.1	9.000	Off	N	10.2	28.9	60.0
15.128000	29.7	9.000	Off	N	10.5	30.3	60.0
15.486000	31.8	9.000	Off	N	10.5	28.2	60.0

EMI Auto Test(22)

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Final Result 2

Frequency (MHz)	CAverage (dBμV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.154000	42.2	9.000	Off	N	9.7	13.6	55.8
0.158000	39.5	9.000	Off	N	9.7	16.0	55.6
0.166000	27.7	9.000	Off	N	9.7	27.4	55.2
0.174000	24.0	9.000	Off	N	9.7	30.8	54.8
0.230000	35.7	9.000	Off	N	9.7	16.8	52.4
0.234000	34.2	9.000	Off	N	9.7	18.1	52.3
1.012000	26.8	9.000	Off	N	9.8	19.2	46.0
1.016000	27.5	9.000	Off	N	9.8	18.5	46.0
1.022000	26.8	9.000	Off	N	9.8	19.2	46.0
1.868000	25.0	9.000	Off	N	9.8	21.0	46.0
1.882000	25.3	9.000	Off	N	9.8	20.7	46.0
2.690000	25.7	9.000	Off	N	9.9	20.3	46.0
5.706000	21.0	9.000	Off	N	10.0	29.0	50.0
8.398000	20.5	9.000	Off	N	10.2	29.5	50.0
9.198000	23.2	9.000	Off	N	10.2	26.8	50.0
9.696000	23.6	9.000	Off	N	10.2	26.4	50.0
15.128000	21.7	9.000	Off	N	10.5	28.3	50.0
15.486000	22.1	9.000	Off	N	10.5	27.9	50.0

2018-04-18

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Conducted Emissions (Line 2)

EMI Auto Test(23)

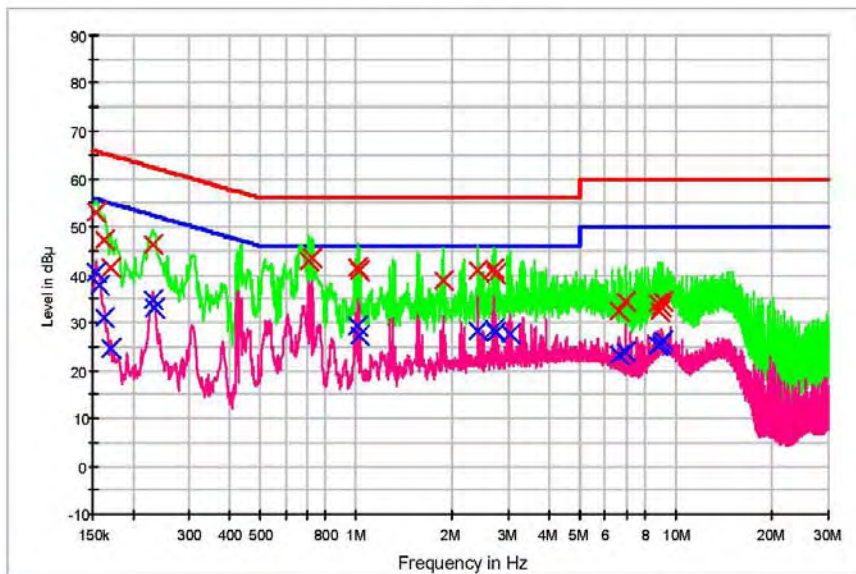
1 / 2

HCT TEST Report

Common Information

EUT: SM-G8750
 Manufacturer: SAMSUNG
 Test Site: SHIELD ROOM
 Operating Conditions: BT LE MODE (FAST CHARGING)

FCC CLASS B_Exten Cable



— FCC CLASS B_OP — FCC CLASS B_AV — Preview Result 1-PK+
— Preview Result 2-AVG X Final Result 1-QPK X Final Result 2-CAV

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.154000	52.9	9.000	Off	L1	9.7	12.8	65.8
0.162000	47.1	9.000	Off	L1	9.7	18.2	65.4
0.170000	41.4	9.000	Off	L1	9.7	23.5	65.0
0.230000	46.1	9.000	Off	L1	9.7	16.3	62.4
0.708000	42.8	9.000	Off	L1	9.7	13.2	56.0
0.730000	43.4	9.000	Off	L1	9.7	12.6	56.0
1.014000	41.6	9.000	Off	L1	9.8	14.4	56.0
1.026000	40.8	9.000	Off	L1	9.8	15.2	56.0
1.882000	38.8	9.000	Off	L1	9.8	17.2	56.0
2.408000	40.8	9.000	Off	L1	9.8	15.2	56.0
2.692000	41.2	9.000	Off	L1	9.9	14.8	56.0
2.712000	40.3	9.000	Off	L1	9.9	15.7	56.0
6.660000	32.3	9.000	Off	L1	10.1	27.7	60.0
6.940000	34.3	9.000	Off	L1	10.1	25.7	60.0
8.764000	34.0	9.000	Off	L1	10.1	26.0	60.0
8.896000	32.5	9.000	Off	L1	10.1	27.5	60.0
9.038000	33.5	9.000	Off	L1	10.1	26.5	60.0
9.118000	34.4	9.000	Off	L1	10.1	25.6	60.0

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EMI Auto Test(23)

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Final Result 2

Frequency (MHz)	CAverage (dBμV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.154000	40.3	9.000	Off	L1	9.7	15.4	55.8
0.158000	37.7	9.000	Off	L1	9.7	17.9	55.6
0.162000	31.2	9.000	Off	L1	9.7	24.2	55.4
0.170000	24.5	9.000	Off	L1	9.7	30.5	55.0
0.230000	34.7	9.000	Off	L1	9.7	17.8	52.4
0.234000	33.1	9.000	Off	L1	9.7	19.2	52.3
1.014000	29.3	9.000	Off	L1	9.8	16.7	46.0
1.026000	27.1	9.000	Off	L1	9.8	18.9	46.0
2.408000	28.4	9.000	Off	L1	9.8	17.6	46.0
2.692000	28.5	9.000	Off	L1	9.9	17.5	46.0
2.712000	27.8	9.000	Off	L1	9.9	18.2	46.0
3.016000	27.7	9.000	Off	L1	9.9	18.3	46.0
6.660000	23.4	9.000	Off	L1	10.1	26.6	50.0
6.940000	23.9	9.000	Off	L1	10.1	26.1	50.0
8.764000	25.1	9.000	Off	L1	10.1	24.9	50.0
8.824000	25.1	9.000	Off	L1	10.1	24.9	50.0
9.038000	25.8	9.000	Off	L1	10.1	24.2	50.0
9.118000	26.1	9.000	Off	L1	10.1	23.9	50.0

2018-04-18

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10. LIST OF TEST EQUIPMENT

10.1 LIST OF TEST EQUIPMENT(Conducted Test)

Manufacturer	Model / Equipment	Calibration Date	Calibration Interval	Serial No.
Rohde & Schwarz	ENV216 / LISN	12/20/2017	Annual	102245
Rohde & Schwarz	ESCI / Test Receiver	06/27/2017	Annual	100033
ESPAC	SU-642 /Temperature Chamber	03/30/2018	Annual	0093008124
Agilent	N9020A / Signal Analyzer	06/13/2017	Annual	MY51110085
Agilent	N9030A / Signal Analyzer	11/22/2017	Annual	MY49431210
Agilent	87300B / Directional Coupler	11/20/2017	Annual	3116A03621
Hewlett Packard	11667B / Power Splitter	06/12/2017	Annual	05001
Hewlett Packard	E3632A / DC Power Supply	06/30/2017	Annual	KR75303960
Agilent	8493C / Attenuator(10 dB)	07/10/2017	Annual	07560
Rohde & Schwarz	EMC32 / Software	N/A	N/A	N/A
HCT CO., LTD.	FCC WLAN&BT&BLE Conducted Test Software v3.0	N/A	N/A	N/A

10.2 LIST OF TEST EQUIPMENT(Radiated Test)

Manufacturer	Model / Equipment	Calibration Date	Calibration Interval	Serial No.
Innco system	CO3000 / Controller(Antenna mast)	N/A	N/A	CO3000-4p
Innco system	MA4640 /800-XP-ET / Antenna Position Tower	N/A	N/A	N/A
Audix	EM1000 / Controller	N/A	N/A	060520
Audix	Turn Table	N/A	N/A	N/A
Rohde & Schwarz	Loop Antenna	04/06/2017	Biennial	1513-175
Schwarzbeck	VULB 9168 / Hybrid Antenna	04/06/2017	Biennial	760
Schwarzbeck	BBHA 9120D / Horn Antenna	05/02/2017	Biennial	9120D-937
Schwarzbeck	BBHA9170 / Horn Antenna(15 GHz ~ 40 GHz)	12/04/2017	Biennial	BBHA9170541
Rohde & Schwarz	FSP(9 kHz ~ 30 GHz) / Spectrum Analyzer	09/06/2017	Annual	100688
Rohde & Schwarz	FSV40-N / Spectrum Analyzer	09/27/2017	Annual	101068-SZ
Wainwright Instruments	WHK3.0/18G-10EF / High Pass Filter	06/12/2017	Annual	8
Wainwright Instruments	WHFX7.0/18G-8SS / High Pass Filter	05/15/2017	Annual	29
Wainwright Instruments	WRCJV2400/2483.5-2370/2520-60/12SS / Band Reject Filter	06/30/2017	Annual	2
Wainwright Instruments	WRCJV5100/5850-40/50-8EEK / Band Reject Filter	01/03/2018	Annual	2
Api tech.	18B-03 / Attenuator (3 dB)	06/12/2017	Annual	1
Agilent	8493C-10 / Attenuator(10 dB)	07/19/2017	Annual	08285
CERNEX	CBLU1183540 / Power Amplifier	07/11/2017	Annual	22964
CERNEX	CBL06185030 / Power Amplifier	07/11/2017	Annual	22965
CERNEX	CBL18265035 / Power Amplifier	01/10/2018	Annual	22966
CERNEX	CBL26405040 / Power Amplifier	06/30/2017	Annual	25956