

9. Emissions in non-restricted frequency bands

9.1 Test procedure

KDB 558074 D01 DTS Meas Guidance V03r04 11.0 Emissions in non-restricted frequency

9.2 Test instruments and measurement setup

The spectrum analyzer is set to as following.

- a) Set instrument center frequency to DTS channel center frequency.
- b) Set the span to ≥ 1.5 times the DTS bandwidth.
- c) Set the RBW = 100 kHz.
- d) Set the VBW $\geq 3 \times$ RBW.
- e) Detector = peak.
- f) Sweep time = auto couple.
- g) Trace mode = max hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum PSD level.

Limits FCC § 15.247

Band Edge&Out of Emission Test Instruments

Description	Model	Serial Number	Cal. Due Date
Spectrum Analyzer	E4440A	US42041291	12-Jan-17
Spectrum Analyzer	FSV40	100939	12-Jan-17
RF Cable	Length: 10 cm		-
-Spectrum Analyzer <=> EUT	Loss: 1.5 dB		-

9.3 Measurement results of band-edge & out of emission – Adapter

EUT	Biostation A2	MODEL	BSA2-OEPW
MODE	CCK, OFDM	ENVIRONMENTAL CONDITION	23.0 °C, 43.0 % R.H.
INPUT POWER	12.0 Vd.c.		

MODE –CCK

CHANNEL	Channel Frequency (MHz)	limit	PASS/FAIL
1	2 412	20dBc	PASS
11	2 462	20dBc	PASS

MODE – OFDM

CHANNEL	Channel Frequency (MHz)	limit	PASS/FAIL
1	2 412	20dBc	PASS
11	2 462	20dBc	PASS

9.3 Measurement results of band-edge & out of emission – POE

EUT	Biostation A2	MODEL	BSA2-OEPW
MODE	CCK, OFDM	ENVIRONMENTAL CONDITION	23.0 °C, 43.0 % R.H.
INPUT POWER	48.0 Vd.c.		

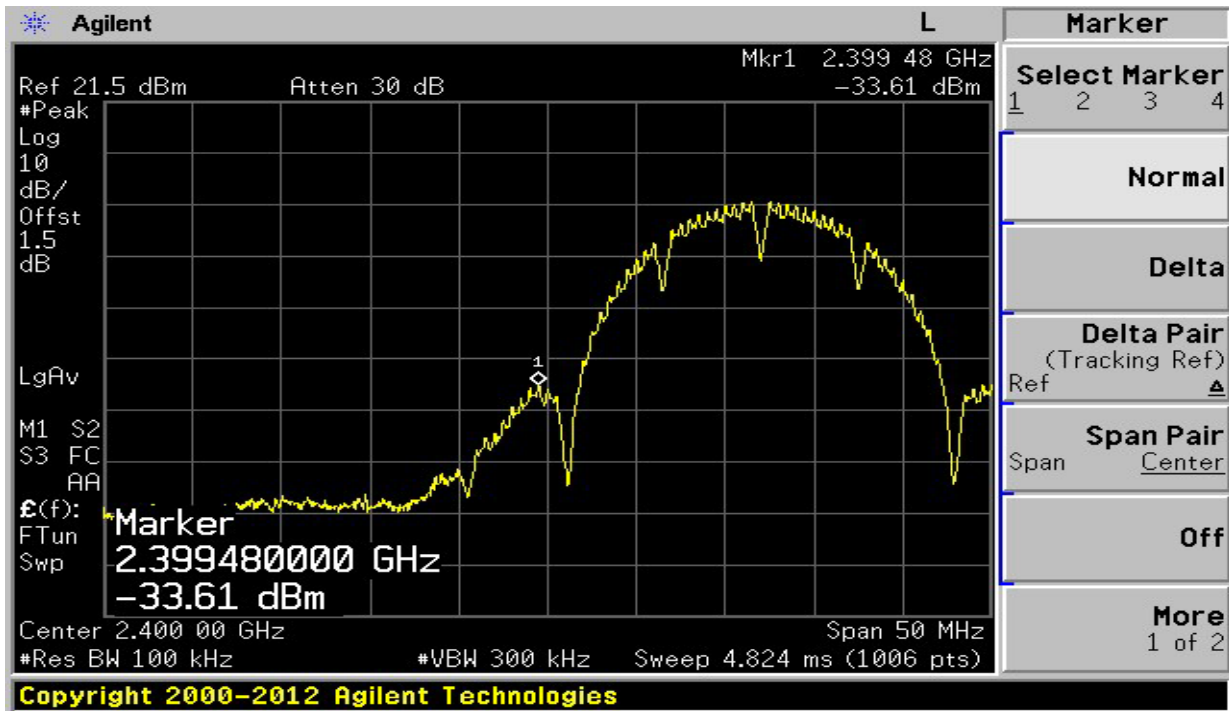
MODE –CCK

CHANNEL	Channel Frequency (MHz)	limit	PASS/FAIL
1	2 412	20dBc	PASS
11	2 462	20dBc	PASS

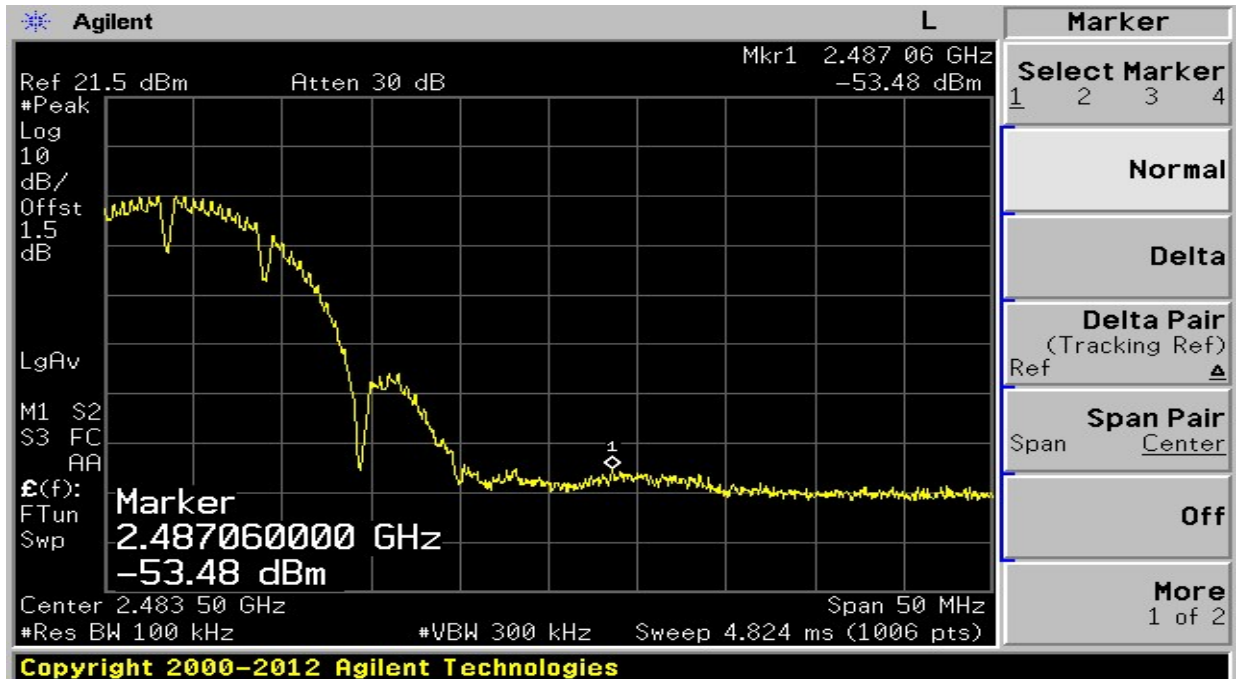
MODE – OFDM

CHANNEL	Channel Frequency (MHz)	limit	PASS/FAIL
1	2 412	20dBc	PASS
11	2 462	20dBc	PASS

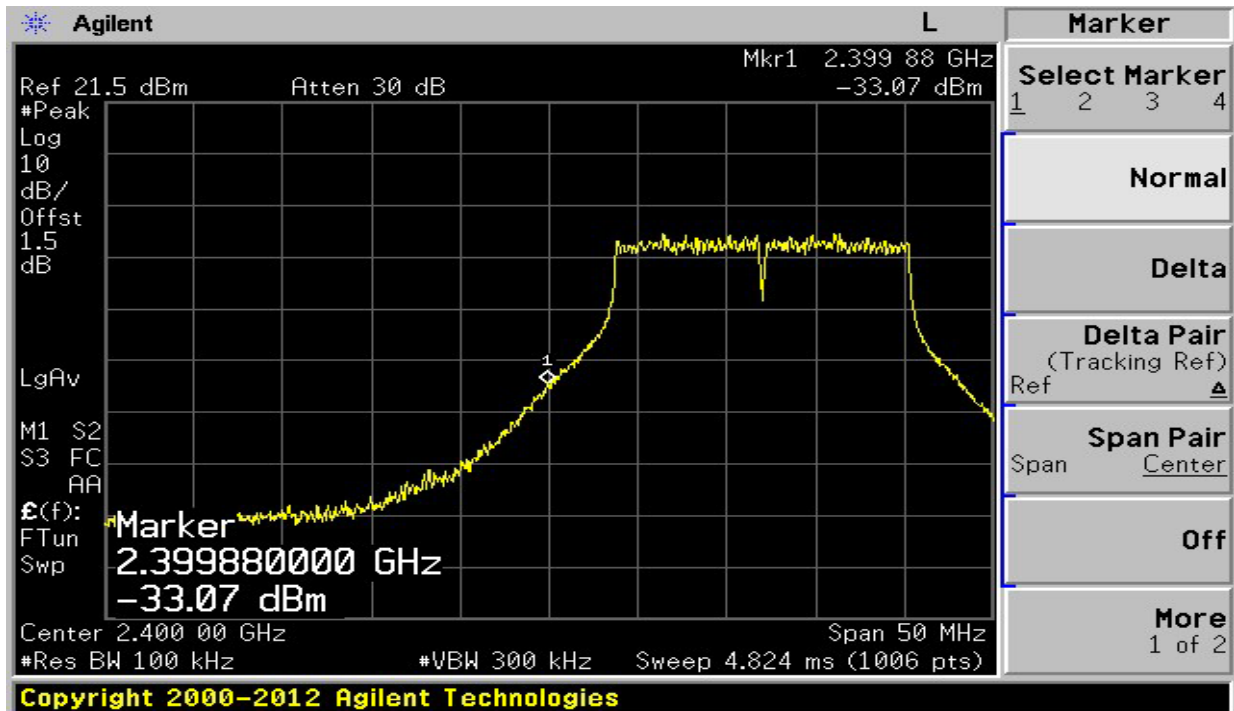
9.4 Trace data of band-edge & Out of Emission – CCK (Adapter) (ch_1)



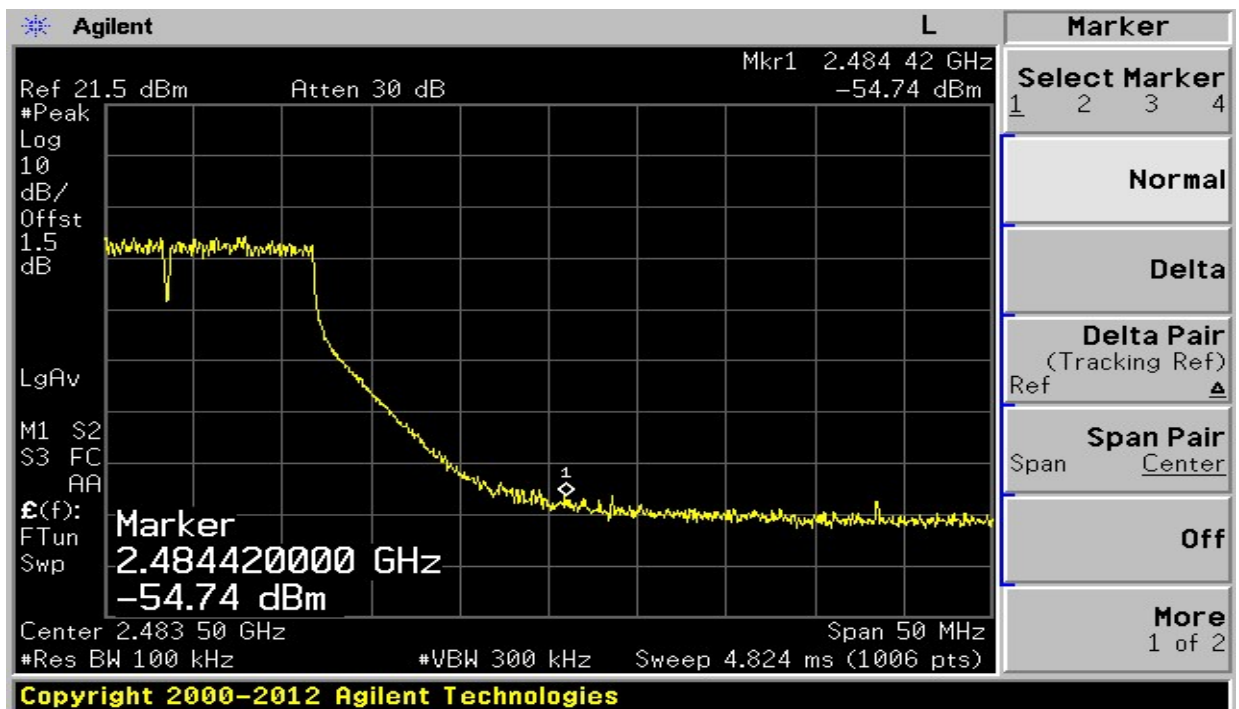
(ch_11)



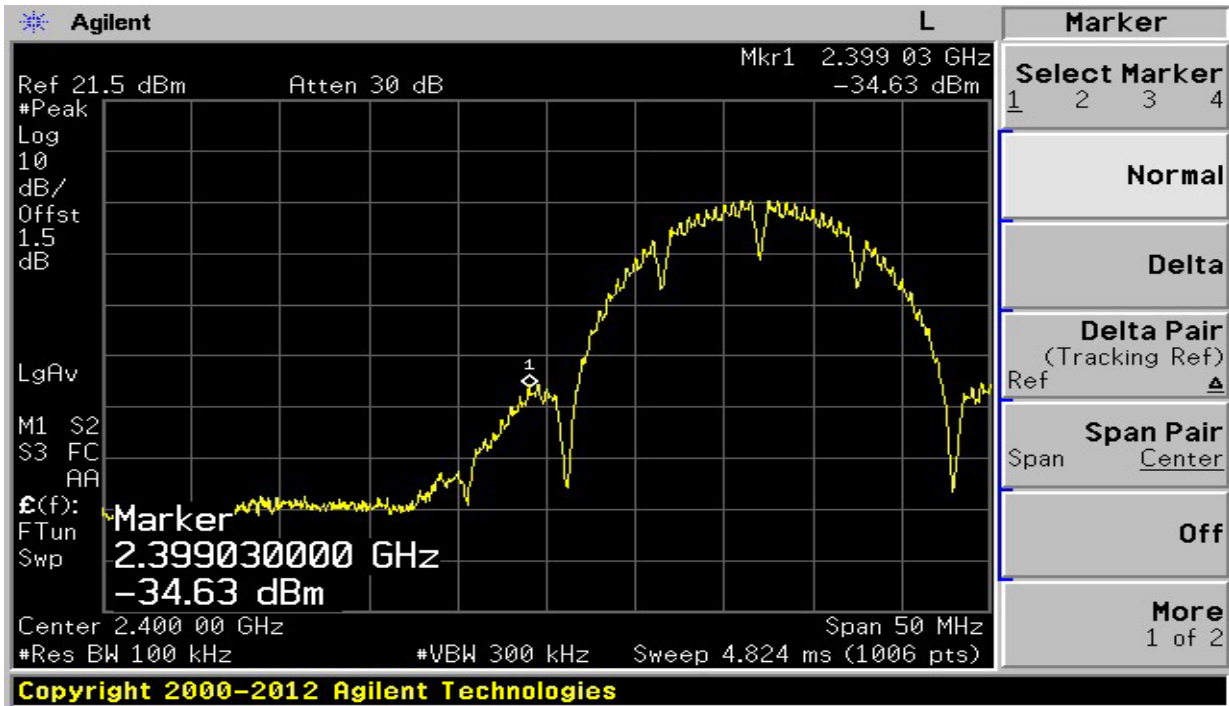
9.4 Trace data of band-edge & Out of Emission – OFDM (adapter) (ch_1)



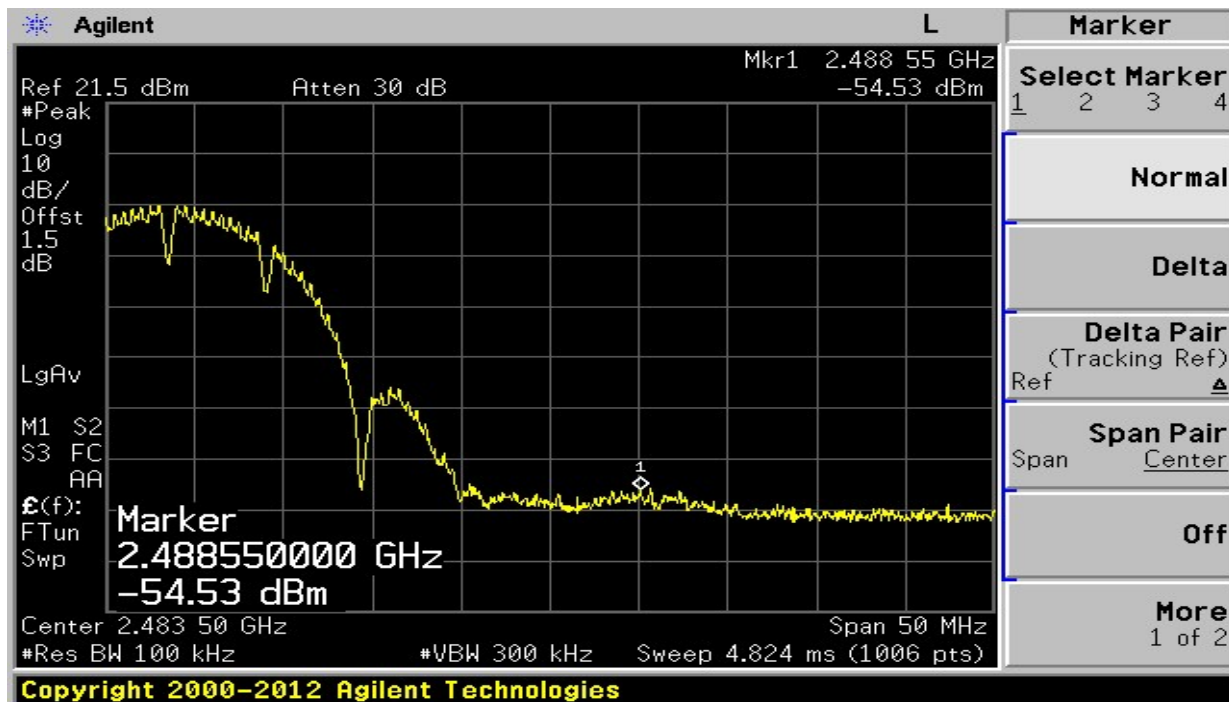
(ch_11)



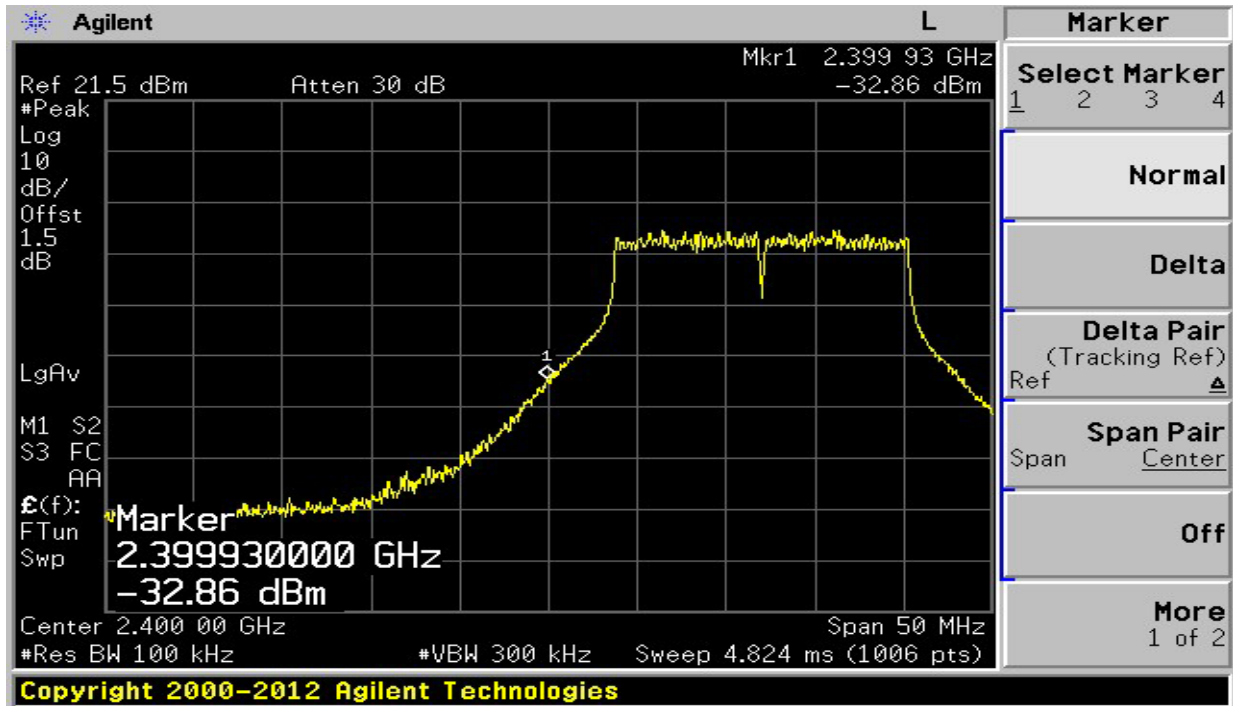
9.4 Trace data of band-edge & Out of Emission – CCK (POE) (ch_1)



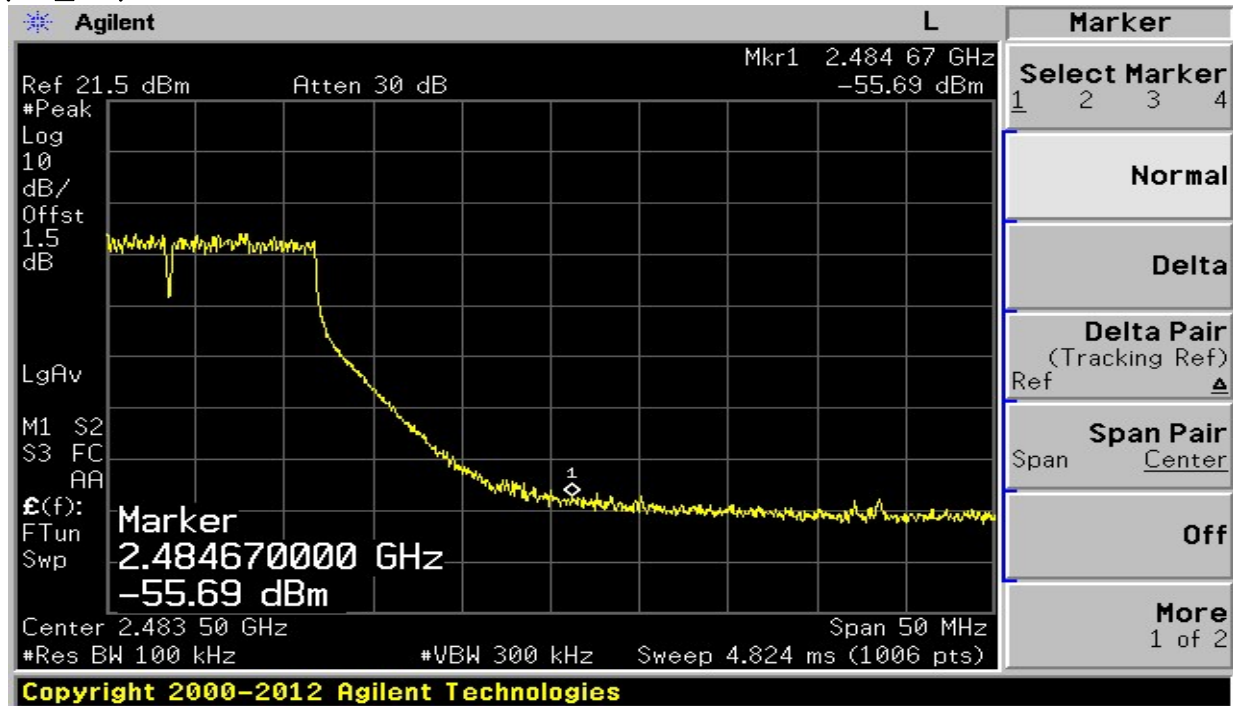
(ch_11)



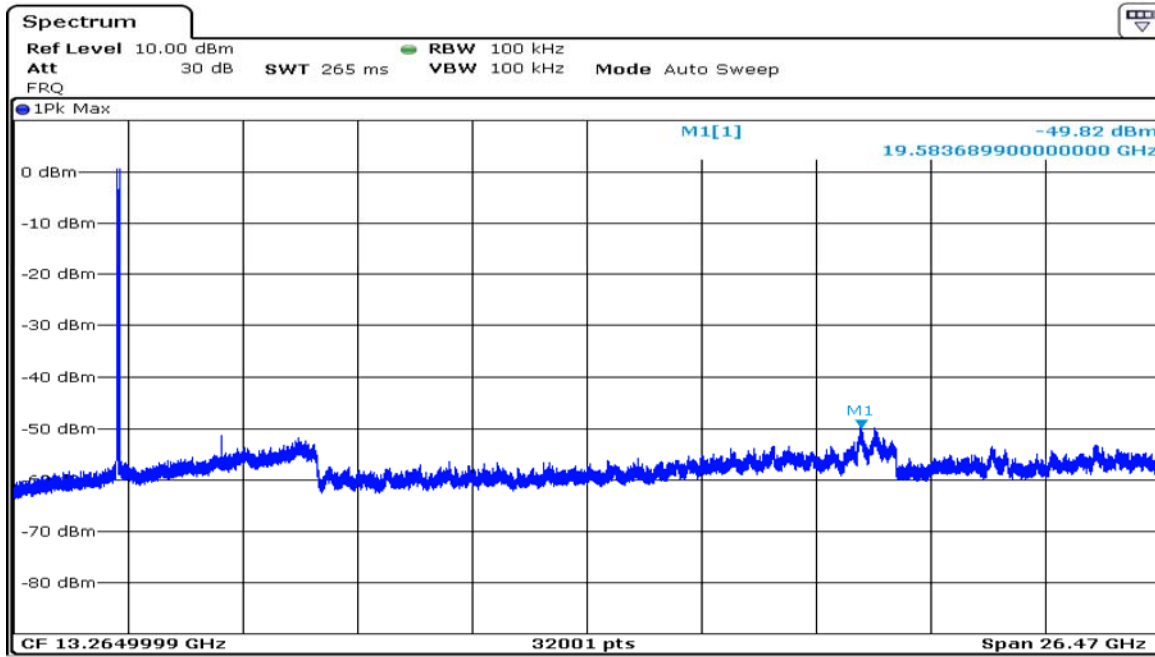
9.4 Trace data of band-edge & Out of Emission – OFDM (POE)
(ch_1)



(ch_11)

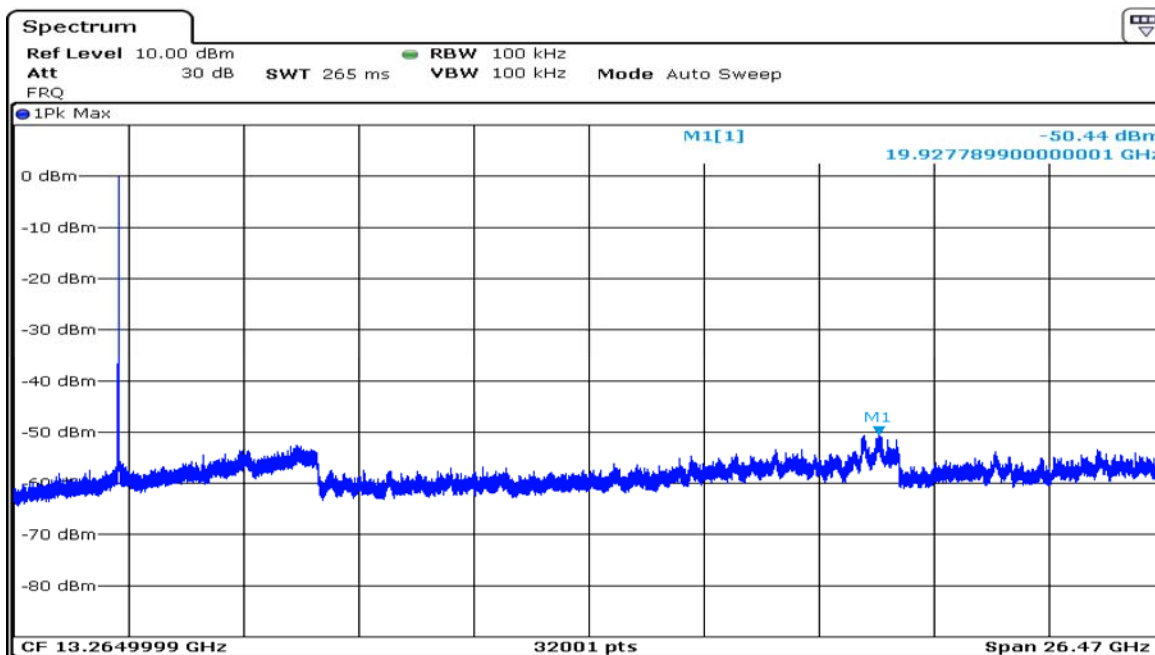


9.4 Trace data of Out of Emission – CCK (Adapter)
(ch_1)



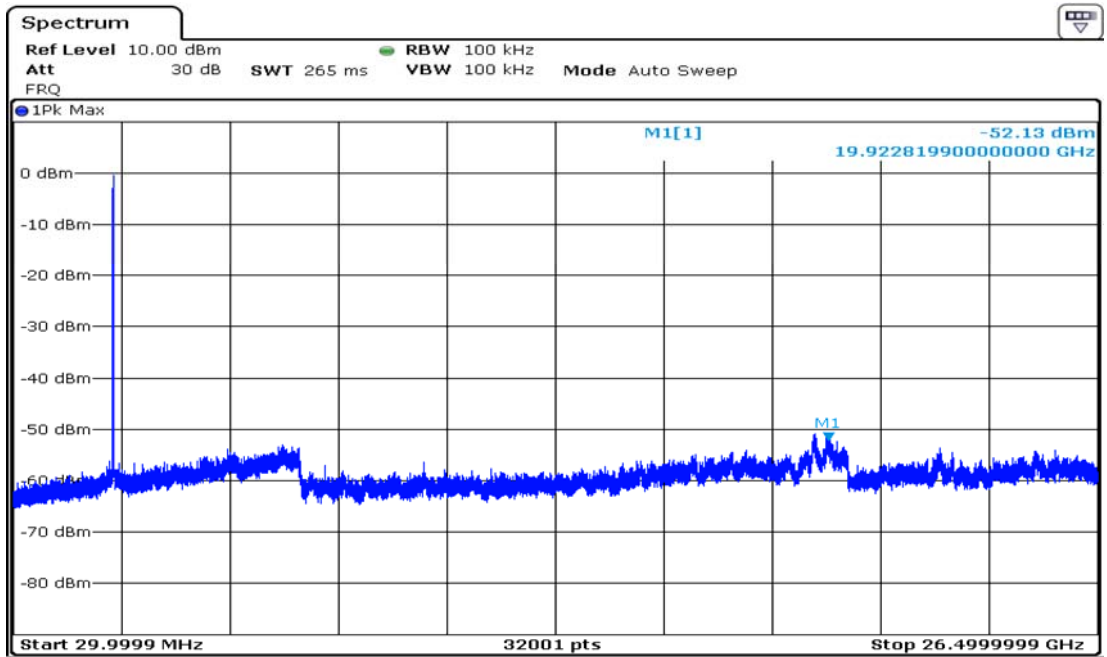
BSA2-OEPW

(ch_6)



BSA2-OEPW

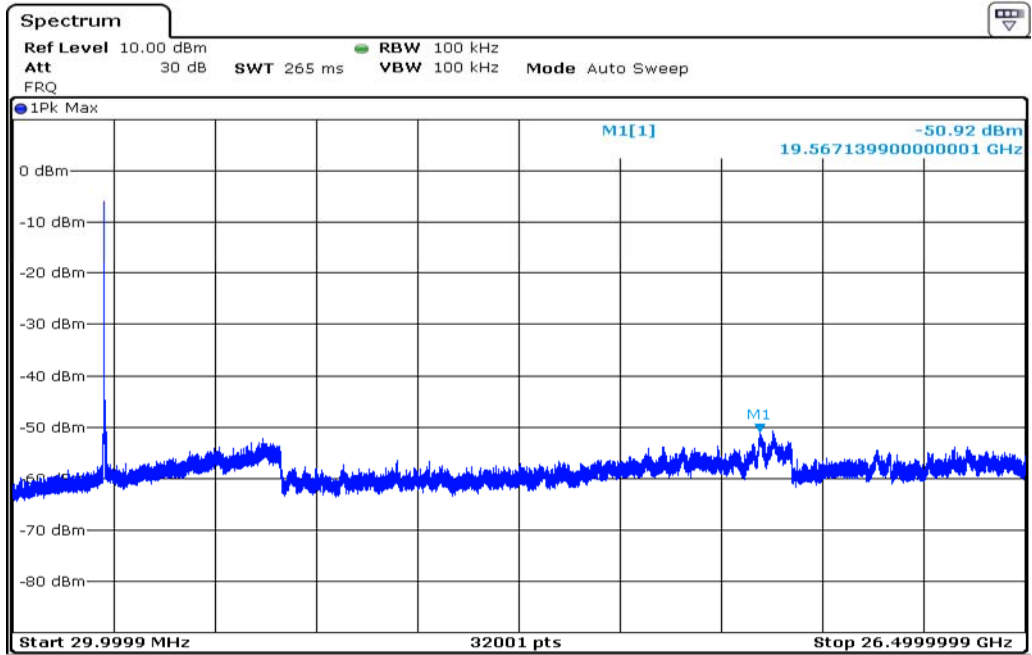
9.4 Trace data of Out of Emission – CCK
(ch_11)



BSA2-OEPW

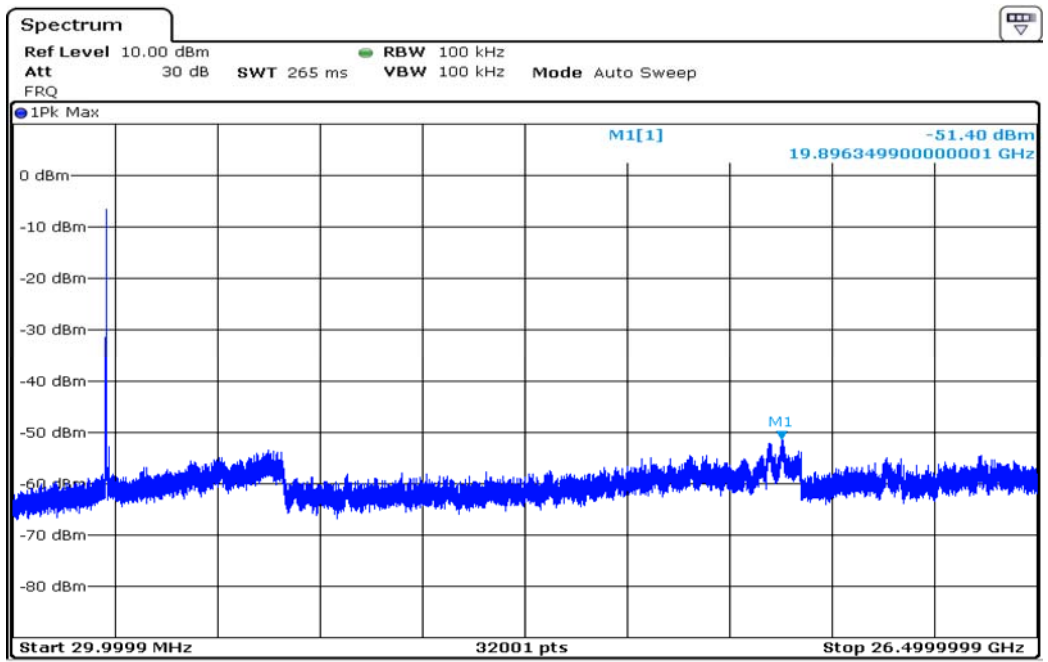
9.4 Trace data of Out of Emission – OFDM

(ch_1)



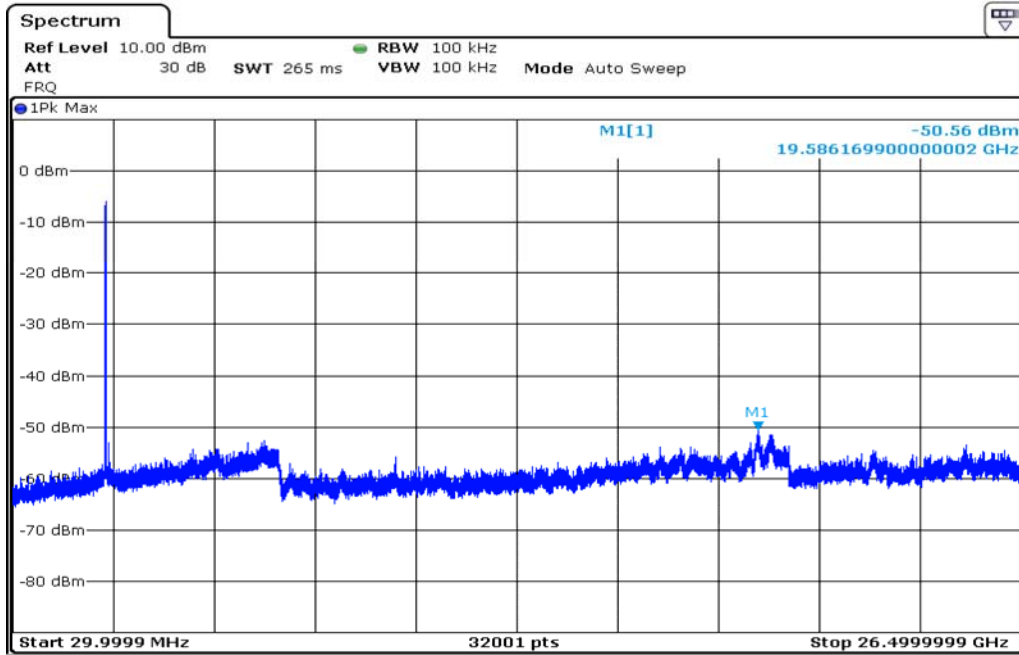
BSA2-OEPW

(ch_6)



BSA2-OEPW

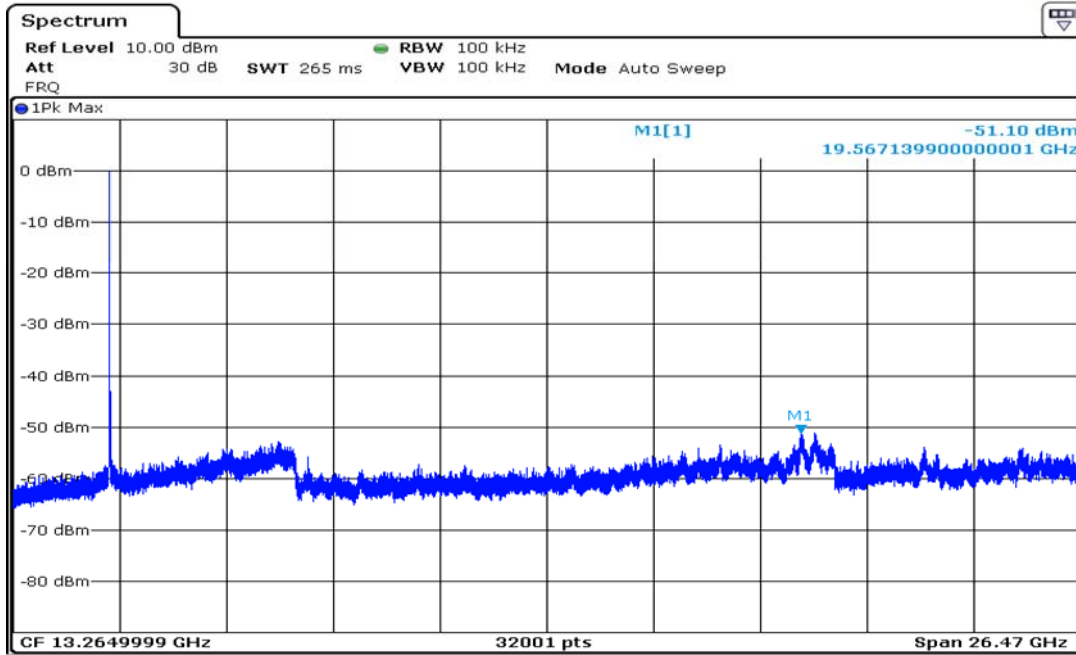
9.4 Trace data of Out of Emission – OFDM
(ch_11)



BSA2-OEPW

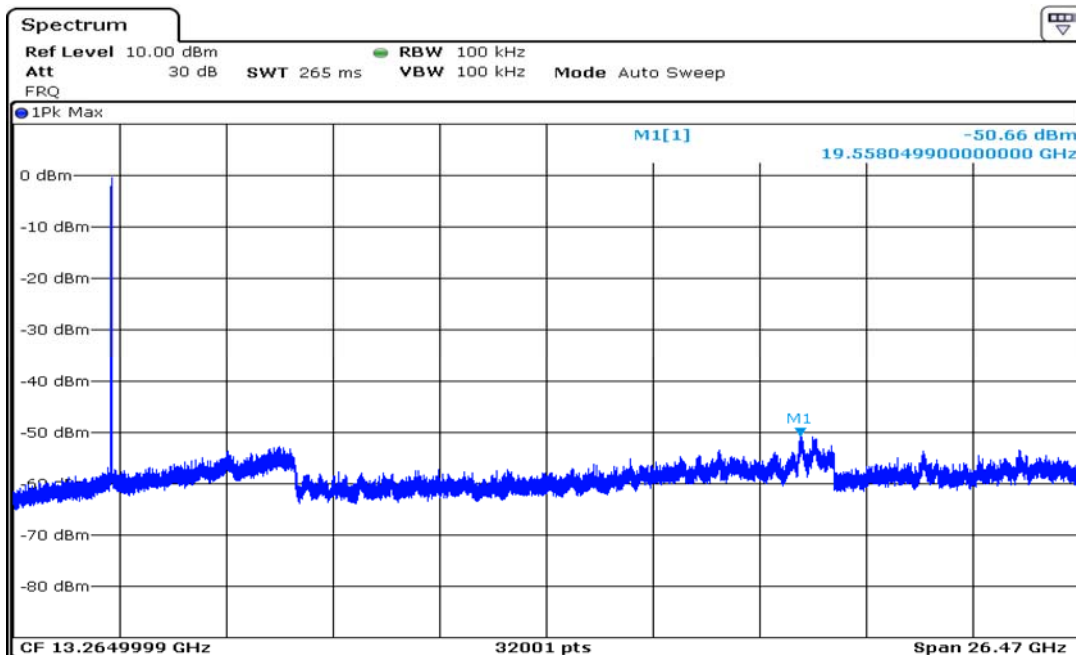
9.4 Trace data of Out of Emission – CCK (POE)

(ch_1)



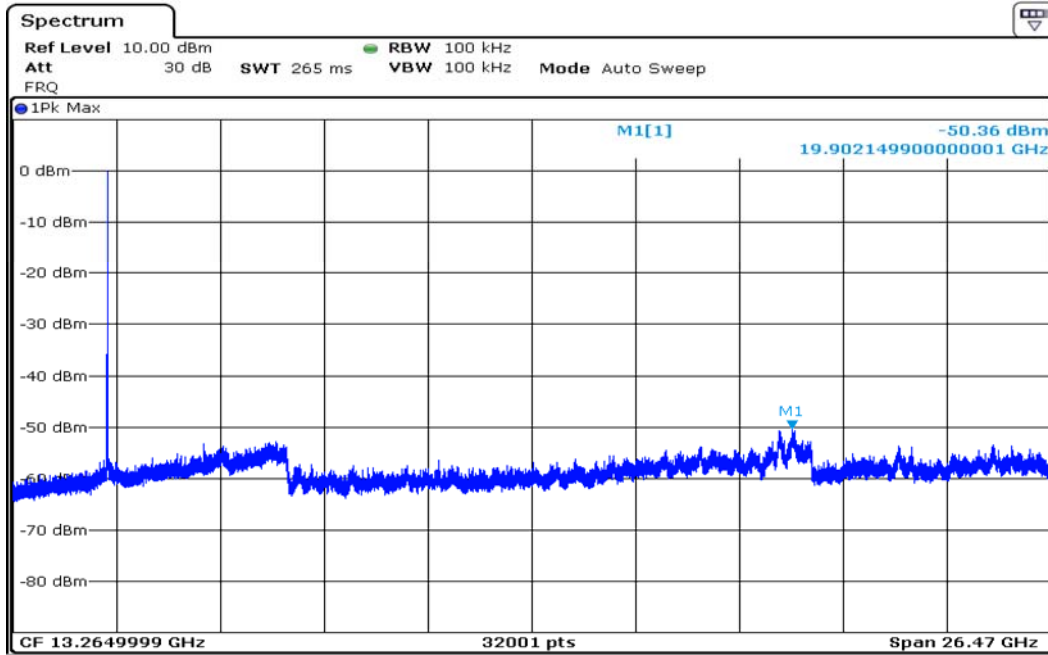
BSA2-OEPW_POE

(ch_6)



BSA2-OEPW_POE

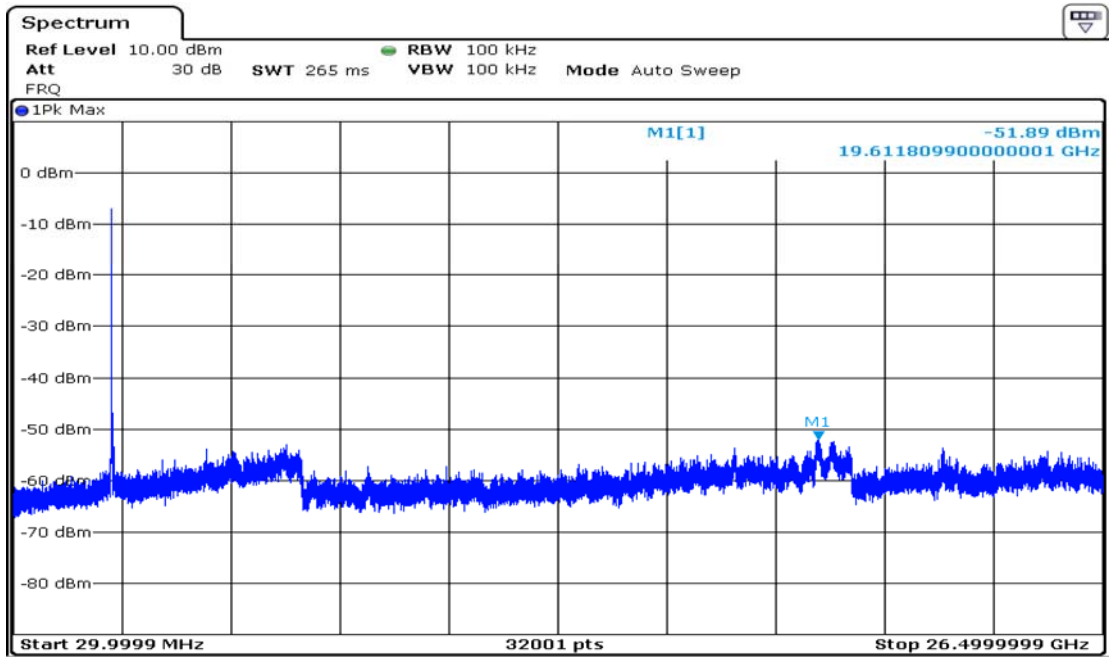
9.4 Trace data of Out of Emission – CCK
(ch_11)



BSA2-OEPW_POE

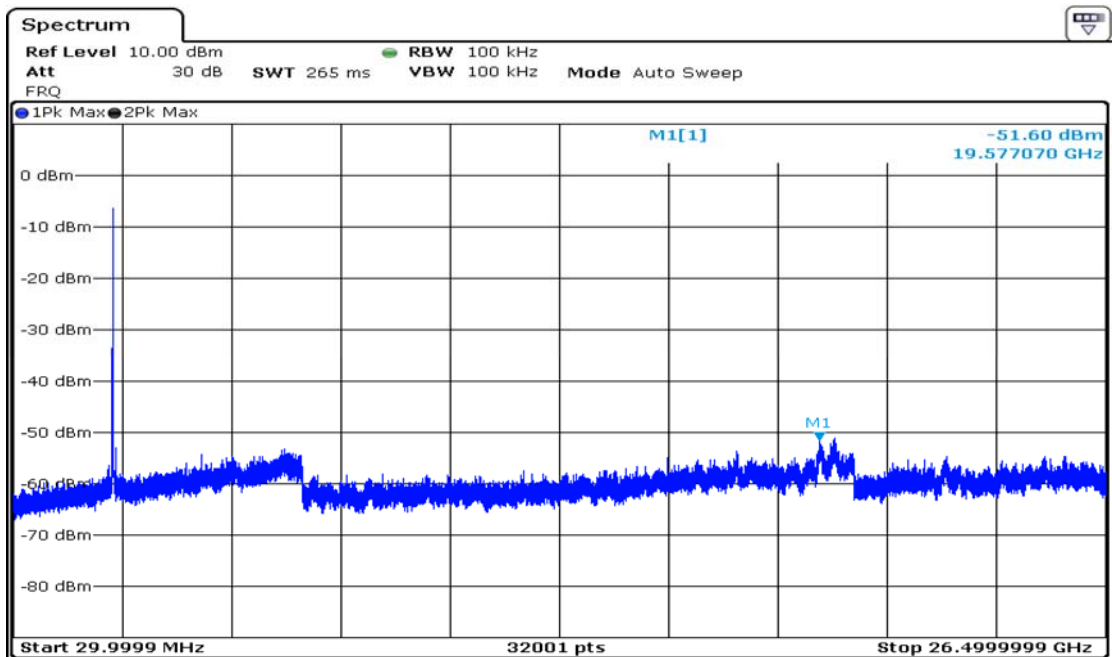
9.4 Trace data of Out of Emission – OFDM

(ch_1)



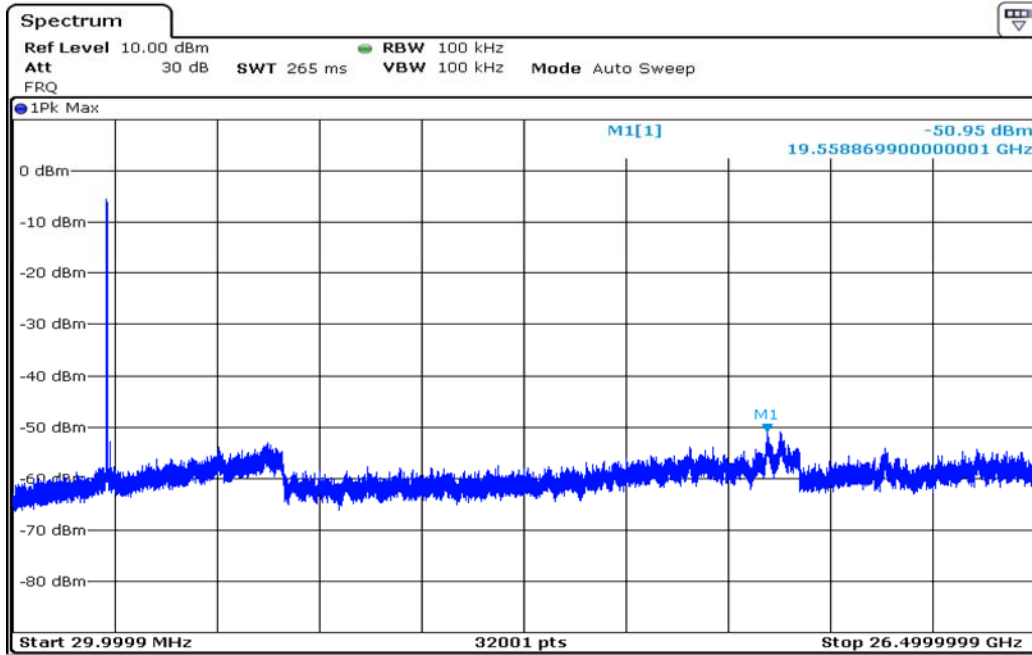
BSA2-OEPW_POE

(ch_6)



BSA2-OEPW_POE

9.4 Trace data of Out of Emission – OFDM
(ch_11)



BSA2-OEPW_POE

10. Measurement of radiated disturbance

Above 30 MHz Electric Field strength was measured in accordance with FCC PART 15.205, 15.209 . The test setup was made according to ANSI C 63.10 (2009) & KDB 558074 D01 Semi-anechoic chamber, which allows a 3 m distance measurement. The EUT was placed in the center of styrofoam. turntable. The height of this table was 0.8 m. The measurement was conducted with both horizontal and vertical antenna polarization. The turntable has fully rotated. For further description of the configuration refer to the picture of the test setup.

10.1 Measurement equipments

Equipment Name	Type	Manufacturer	Serial No.	Next Calibration date
TEST Receiver	ESCI7	ROHDE & SCHWARZ	100916	7-Dec-16
Logbicon Antenna	VULB 9168	SCHWARZBECK	9168-193	30-Sep-16
Turn Table	DT3000-2t	Innco System GmbH	N/A	-
Antenna Mast	MA4000-EP	Innco System GmbH	N/A	-
PREAMPLIFIER	8449B	AGILENT	3008A00581	7-Dec-16
Horn Antenna	BBHA 9120D	SCHWARZBECK	469	3-Sep-16
Test Receiver	ESPI7	ROHDE & SCHWARZ	100185	7-Dec-16
Spectrum Analyzer	R3273	ADVANTEST	110600592	19-Oct-16
Turn Table	DT1500-S	Innco System GmbH	N/A	-
Antenna Mast	MA4000-EP	Innco System GmbH	N/A	-
Horn Antenna	3160-09	FTS-Lindgren	00102642	3-Sep-16
Antenna Master & Turn table controller	C02000-P	Innco System GmbH	CO2000/642 /28051111/L	-

10.2 Environmental Condition

Below 1 GHz –Test Place : 10 m Semi-anechoic chamber

WLAN 802.11 b,g Mode

Temperature (°C) : (19.3 ~ 19.6) °C

Humidity (% R.H.) : (48.4 ~ 49.2) % R.H.

Above 1 GHz–Test Place : 3 m Semi-anechoic chamber

WLAN 802.11 b,g Mode

Temperature (°C) : (19.2 ~ 19.5) °C

Humidity (% R.H.) : (48.5 ~ 49.3) % R.H.

10.3 Measurement Instrument setting for Radiated Emission

10.3.1 Frequency range below 1 GHz

Detector : Quasi-Peak

10.3.2 Frequency range above 1 GHz

Peak Power Measurement Procedure (KDB 558074 section 12.2.4)

- a. RBW : 1 MHz , VBW : 3 MHz
- b. Trace mode = max hold
- c. Detector : Peak
- d. Sweep time = auto

Average Power Measurement Procedures (KDB 558074 section 12.2.5.2)

- a. Set analyzer center frequency to the frequency associated with the emission
- b. RBW : 1 MHz , VBW : 3 MHz
- c. Detector : RMS
- d. Sweep time = auto

* Note

Band	Duty cycle(%)	Ton (ms)	Ton + Toff (ms)	DCF=10*log(1/Duty) (dB)
802.11b	100.0	-	-	0.00

* This was not applied of duty cycle factor for average value because of measured with the EUT transmitting continuously more than 98 % duty cycle at its maximum power control level.

10.4 Test Data for Adapter Mode(802.11 b)

Test Date : 10-Mar-16

Measurement Distance : 3 m

Frequency (MHz)	Reading (dB μ V)	Position (V/H)	Height (m)	Correction Factor		Result Value		
				Ant Factor (dB)	Cable (dB)	Limit (dB μ V/m)	Result (dB μ V/m)	Margin (dB)
72.50	22.55	V	2.7	10.46	1.34	40.00	34.35	5.65
250.00	28.24	V	2.6	11.67	2.52	46.00	42.43	3.57
408.60	18.23	V	2.1	15.94	3.26	46.00	37.43	8.57
550.00	17.30	H	1.9	19.07	3.82	46.00	40.18	5.82
600.00	13.16	H	2.1	20.07	4.01	46.00	37.24	8.76
800.00	12.62	V	2.0	22.72	4.69	46.00	40.03	5.97
850.00	13.77	H	1.5	23.25	4.85	46.00	41.86	4.14
Remark	<p>H : Horizontal, V : Vertical TEST MODE : Adapter - CH 6(2 437 MHz)</p> <p>*Checked in all 3 axis and the maximum measured data were reported.(Worst data is Z axis of position)</p> <p>*CL = Cable Loss(In case of below 1 000 MHz)</p> <p>*Result Value = Reading + Ant Factor + Cable loss</p> <p>*The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection at frequency below 1 GHz.</p>							

10.4 Test Data for PoE Mode(802.11 g)

Test Date : 10-Mar-16

Measurement Distance : 3 m

Frequency (MHz)	Reading (dB μ V)	Position (V/H)	Height (m)	Correction Factor		Result Value		
				Ant Factor (dB)	Cable (dB)	Limit (dB μ V/m)	Result (dB μ V/m)	Margin (dB)
250.00	20.05	H	2.0	11.67	2.52	46.00	34.24	11.76
450.00	16.39	H	2.3	16.91	3.43	46.00	36.72	9.28
550.00	16.86	H	1.9	19.07	3.82	46.00	39.74	6.26
750.00	10.23	V	1.8	22.01	4.52	46.00	36.75	9.25
800.00	10.43	H	1.5	22.72	4.69	46.00	37.84	8.16
850.00	14.33	H	1.3	23.25	4.85	46.00	42.42	3.58
Remark	<p>H : Horizontal, V : Vertical TEST MODE : PoE - CH 6(2 437 MHz)</p> <p>*Checked in all 3 axis and the maximum measured data were reported.(Worst data is Z axis of position)</p> <p>*CL = Cable Loss(In case of below 1 000 MHz)</p> <p>*Result Value = Reading + Ant Factor + Cable loss</p> <p>*The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection at frequency below 1 GHz.</p>							

10.4-1 Test Data

Test Date : 11-Mar-16

Measurement Distance : 3 m

Frequency (MHz)	Reading (dB μ V)	Position (V/H)	Height (m)	Correction Factor		Duty Cycle Correction(dB)	Result Value		
				Ant Factor (dB)	Cable (dB)		Limit (dB μ V/m)	Result (dB μ V/m)	Margin (dB)
PEAK(RBW: 1 MHz VBW: 3 MHz)									
2390.00	24.17	H	1.0	26.21	5.79	0.00	74.00	56.17	17.83
2390.00	25.08	V	1.0	26.21	5.79	0.00	74.00	57.08	16.92
4824.00	50.08	H	1.0	31.13	-26.42	0.00	74.00	54.78	19.22
4824.00	50.90	V	1.0	31.13	-26.42	0.00	74.00	55.60	18.40
AV(RBW: 1 MHz VBW: 3 MHz)									
2390.00	15.97	H	1.1	26.21	5.79	0.00	54.00	47.97	6.03
2390.00	16.45	V	1.0	26.21	5.79	0.00	54.00	48.45	5.55
4824.00	40.06	H	1.0	31.13	-26.42	0.00	54.00	44.76	9.24
4824.00	41.10	V	1.0	31.13	-26.42	0.00	54.00	45.80	8.20
Remark	<p>H : Horizontal, V : Vertical TEST MODE : 802.11 b(Adapter) - CH 1(2 412 MHz)</p> <p>*The TX signal wasn't detected from 3th harmonics.</p> <p>*Checked in all 3 axis and the maximum measured data were reported.(Worst data is Z axis of position)</p> <p>*Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Duty Cycle Correction</p>								

10.4-2 Test Data

Test Date : 11-Mar-16

Measurement Distance : 3 m

Frequency (MHz)	Reading (dB μ V)	Position (V/H)	Height (m)	Correction Factor		Duty Cycle Correction(dB)	Result Value		
				Ant Factor (dB)	Cable (dB)		Limit (dB μ V/m)	Result (dB μ V/m)	Margin (dB)
PEAK(RBW: 1 MHz VBW: 3 MHz)									
2390.00	24.18	H	1.0	26.21	5.79	0.00	74.00	56.18	17.82
2390.00	24.12	V	1.0	26.21	5.79	0.00	74.00	56.12	17.88
4882.00	50.08	H	1.0	31.24	-26.52	0.00	74.00	54.80	19.20
4882.00	50.90	V	1.0	31.24	-26.52	0.00	74.00	55.62	18.38
AV(RBW: 1 MHz VBW: 3 MHz)									
2390.00	16.58	H	1.0	26.21	5.79	0.00	54.00	48.58	5.42
2390.00	16.65	V	1.0	26.21	5.79	0.00	54.00	48.65	5.35
4882.00	40.06	H	1.0	31.24	-26.52	0.00	54.00	44.78	9.22
4882.00	41.10	V	1.0	31.24	-26.52	0.00	54.00	45.82	8.18
Remark	<p>H : Horizontal, V : Vertical TEST MODE : 802.11 b(Adapter) - CH 6(2 437 MHz)</p> <p>*The TX signal wasn't detected from 3th harmonics.</p> <p>*Checked in all 3 axis and the maximum measured data were reported.(Worst data is Z axis of position)</p> <p>*Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Duty Cycle Correction</p>								

10.4-3 Test Data

Test Date : 11-Mar-16

Measurement Distance : 3 m

Frequency (MHz)	Reading (dB μ V)	Position (V/H)	Height (m)	Correction Factor		Duty Cycle Correction(dB)	Result Value		
				Ant Factor (dB)	Cable (dB)		Limit (dB μ V/m)	Result (dB μ V/m)	Margin (dB)
PEAK(RBW: 1 MHz VBW: 3 MHz)									
2462.00	24.54	H	1.0	26.35	5.79	0.00	74.00	56.68	17.32
2462.00	26.12	V	1.0	26.35	5.79	0.00	74.00	58.26	15.74
4924.00	51.16	H	1.0	31.32	-26.57	0.00	74.00	55.90	18.10
4924.00	50.97	V	1.0	31.32	-26.57	0.00	74.00	55.71	18.29
AV(RBW: 1 MHz VBW: 3 MHz)									
2462.00	16.18	H	1.0	26.35	5.79	0.00	54.00	48.32	5.68
2462.00	16.30	V	1.0	26.35	5.79	0.00	54.00	48.44	5.56
4924.00	40.62	H	1.0	31.32	-26.57	0.00	54.00	45.36	8.64
4924.00	41.54	V	1.0	31.32	-26.57	0.00	54.00	46.28	7.72
Remark	<p>H : Horizontal, V : Vertical TEST MODE : 802.11 b(Adapter) - CH 11(2 462 MHz)</p> <p>*The TX signal wasn't detected from 3th harmonics.</p> <p>*Checked in all 3 axis and the maximum measured data were reported.(Worst data is Z axis of position)</p> <p>*Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Duty Cycle Correction</p>								

10.4-1 Test Data

Test Date : 12-Mar-16

Measurement Distance : 3 m

Frequency (MHz)	Reading (dB μ V)	Position (V/H)	Height (m)	Correction Factor		Duty Cycle Correction(dB)	Result Value		
				Ant Factor (dB)	Cable (dB)		Limit (dB μ V/m)	Result (dB μ V/m)	Margin (dB)
PEAK(RBW: 1 MHz VBW: 3 MHz)									
2441.00	24.58	H	1.0	26.31	5.79	0.00	74.00	56.68	17.32
2441.00	25.42	V	1.0	26.31	5.79	0.00	74.00	57.52	16.48
4882.00	51.24	H	1.0	31.24	-26.52	0.00	74.00	55.96	18.04
4882.00	51.80	V	1.0	31.24	-26.52	0.00	74.00	56.52	17.48
AV(RBW: 1 MHz VBW: 3 MHz)									
2441.00	16.24	H	1.0	26.31	5.79	0.00	54.00	48.34	5.66
2441.00	16.48	V	1.0	26.31	5.79	0.00	54.00	48.58	5.42
4882.00	41.02	H	1.0	31.24	-26.52	0.00	54.00	45.74	8.26
4882.00	41.22	V	1.0	31.24	-26.52	0.00	54.00	45.94	8.06
Remark	<p>H : Horizontal, V : Vertical TEST MODE : 802.11 g(Adapter) - CH 1(2 412 MHz)</p> <p>*The TX signal wasn't detected from 3th harmonics.</p> <p>*Checked in all 3 axis and the maximum measured data were reported.(Worst data is Z axis of position)</p> <p>*Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Duty Cycle Correction</p>								

10.4-5 Test Data

Test Date : 12-Mar-16

Measurement Distance : 3 m

Frequency (MHz)	Reading (dB μ W)	Position (V/H)	Height (m)	Correction Factor		Duty Cycle Correction(dB)	Result Value		
				Ant Factor (dB)	Cable (dB)		Limit (dB μ W/m)	Result (dB μ W/m)	Margin (dB)
PEAK(RBW: 1 MHz VBW: 3 MHz)									
2483.00	23.58	H	1.0	26.39	5.79	0.00	74.00	55.76	18.24
2483.00	23.68	V	1.0	26.39	5.79	0.00	74.00	55.86	18.14
4960.00	45.20	H	1.0	31.38	-26.60	0.00	74.00	49.98	24.02
4960.00	45.40	V	1.0	31.38	-26.60	0.00	74.00	50.18	23.82
AV(RBW: 1 MHz VBW: 3 MHz)									
2483.00	16.08	H	1.0	26.39	5.79	0.00	54.00	48.26	5.74
2483.00	16.42	V	1.0	26.39	5.79	0.00	54.00	48.60	5.40
4960.00	33.21	H	1.0	31.38	-26.60	0.00	54.00	37.99	16.01
4960.00	33.01	V	1.0	31.38	-26.60	0.00	54.00	37.79	16.21
Remark	<p>H : Horizontal, V : Vertical TEST MODE : 802.11 g(Adapter) – CH 6(2 437 MHz)</p> <p>*The TX signal wasn't detected from 3th harmonics.</p> <p>*Checked in all 3 axis and the maximum measured data were reported.(Worst data is Z axis of position)</p> <p>*Total = Reading Value + Antenna Factor + Cable Loss – Amp Gain + Duty Cycle Correction</p>								

10.4-6 Test Data

Test Date : 12-Mar-16

Measurement Distance : 3 m

Frequency (MHz)	Reading (dB μ V)	Position (V/H)	Height (m)	Correction Factor		Duty Cycle Correction(dB)	Result Value		
				Ant Factor (dB)	Cable (dB)		Limit (dB μ V/m)	Result (dB μ V/m)	Margin (dB)
PEAK(RBW: 1 MHz VBW: 3 MHz)									
2483.00	24.15	H	1.0	26.39	5.79	0.00	74.00	56.33	17.67
2483.00	24.91	V	1.0	26.39	5.79	0.00	74.00	57.09	16.91
4924.00	52.08	H	1.0	31.32	-26.57	0.00	74.00	56.82	17.18
4924.00	51.62	V	1.0	31.32	-26.57	0.00	74.00	56.36	17.64
AV(RBW: 1 MHz VBW: 3 MHz)									
2483.00	16.08	H	1.0	26.39	5.79	0.00	54.00	48.26	5.74
2483.00	16.26	V	1.0	26.39	5.79	0.00	54.00	48.44	5.56
4924.00	41.08	H	1.0	31.32	-26.57	0.00	54.00	45.82	8.18
4924.00	42.10	V	1.0	31.32	-26.57	0.00	54.00	46.84	7.16
Remark	<p>H : Horizontal, V : Vertical TEST MODE : 802.11 g(Adapter) – CH 11(2 462 MHz)</p> <p>*The TX signal wasn't detected from 3th harmonics.</p> <p>*Checked in all 3 axis and the maximum measured data were reported.(Worst data is Z axis of position)</p> <p>*Total = Reading Value + Antenna Factor + Cable Loss – Amp Gain + Duty Cycle Correction</p>								

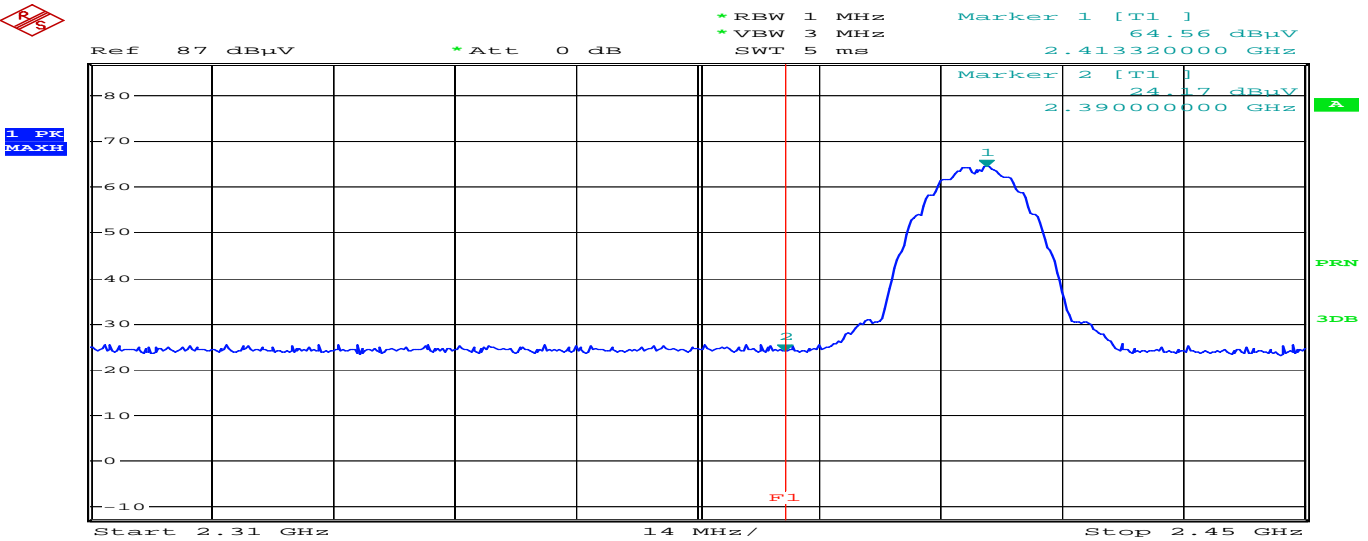
10.4-4 Restricted Band Edges

*802.11b Mode

Band Edges(CH Low)

Detector mode:Peak

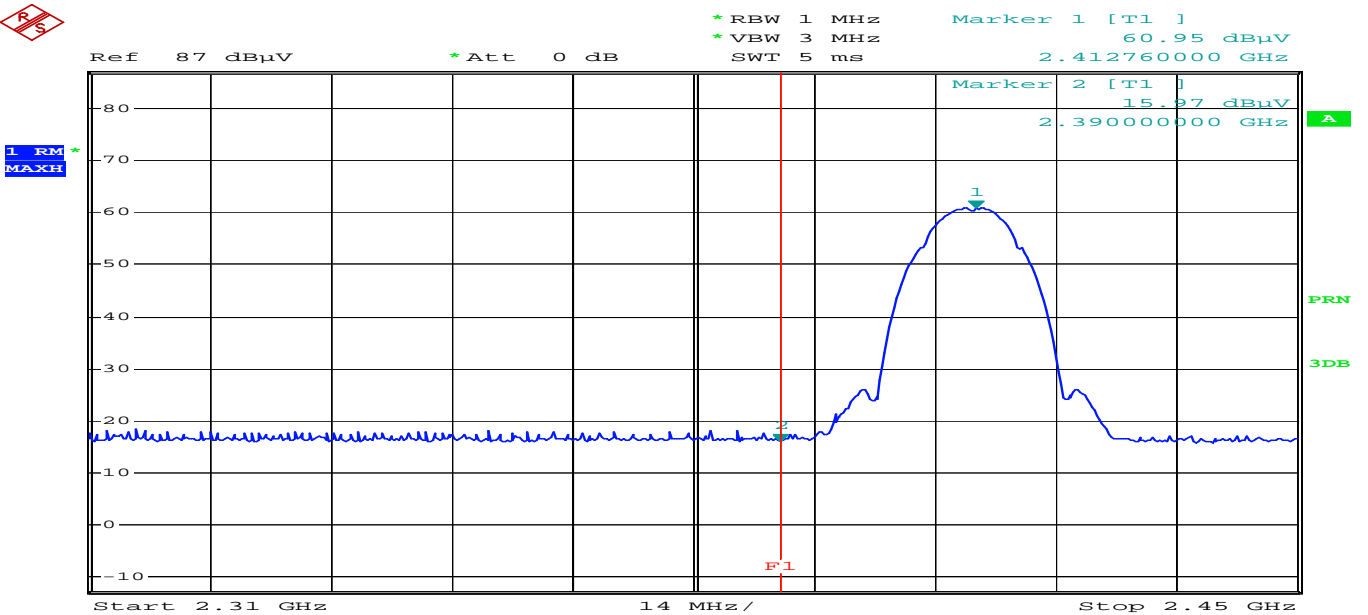
Polarity:Horizontal



Comment: 16-02123_HOR(PK_1 CH_2412 MHz)_b
Date: 11.MAR.2016 10:20:14

Detector mode:Average

Polarity:Horizontal

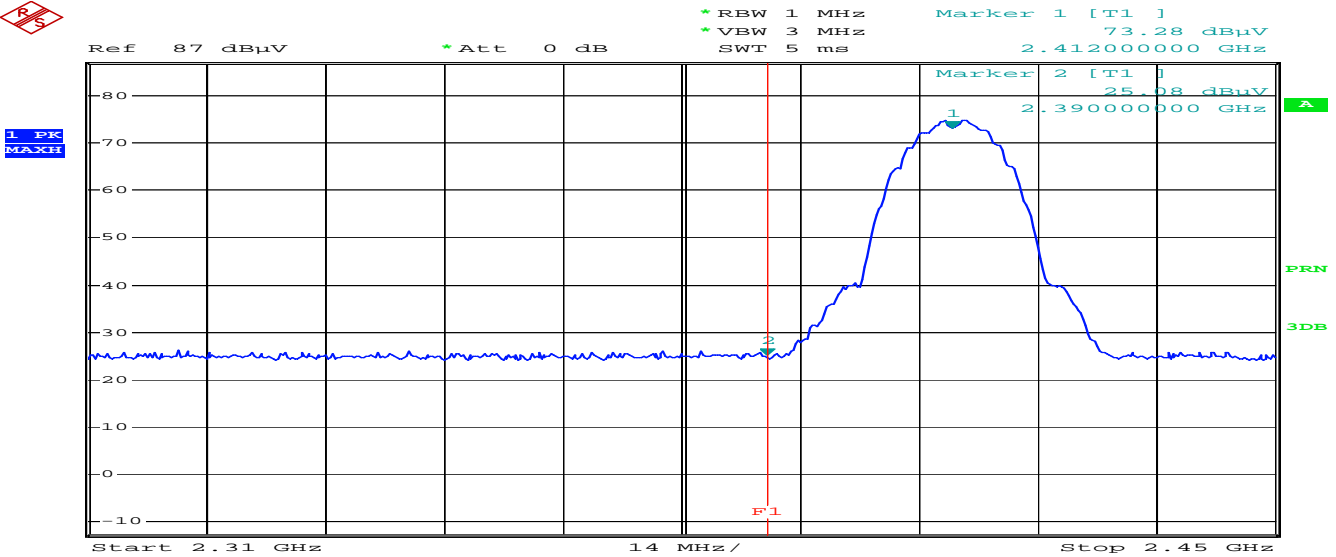


Comment: 16-02123_HOR(RM_1 CH_2412 MHz)_b
Date: 11.MAR.2016 10:23:58

Band Edges(CH Low)

Detector mode:Peak

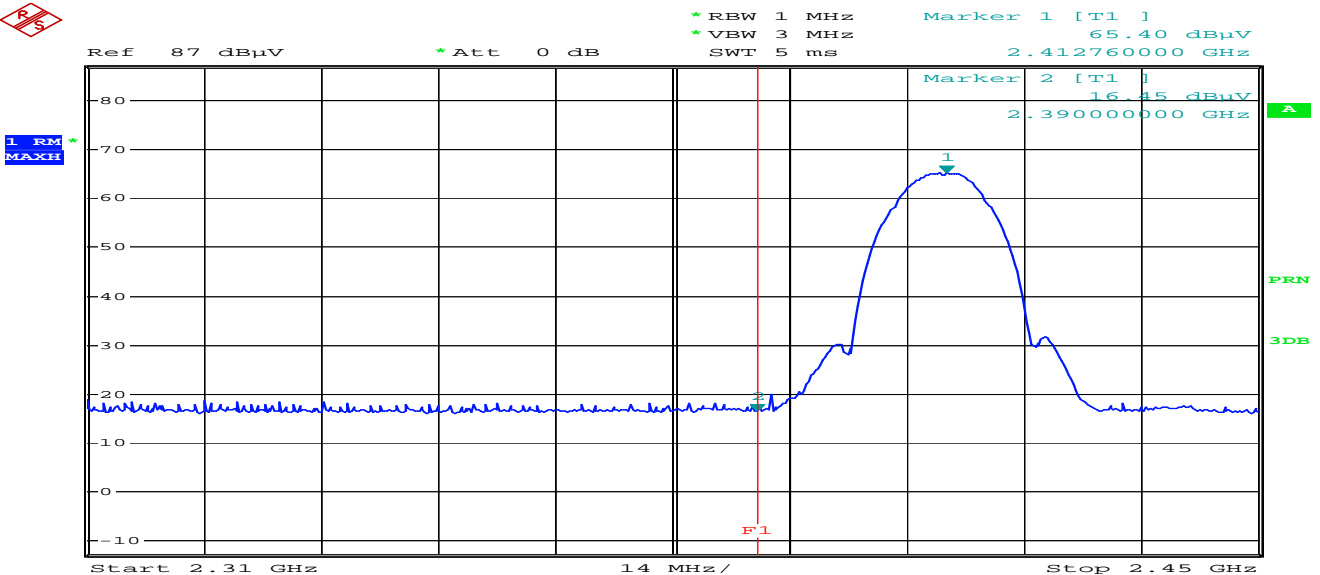
Polarity:Vertical



Comment: 16-02123_VER(PK_1 CH_2412 MHz)_b
 Date: 11.MAR.2016 10:14:24

Detector mode:Average

Polarity:Vertical



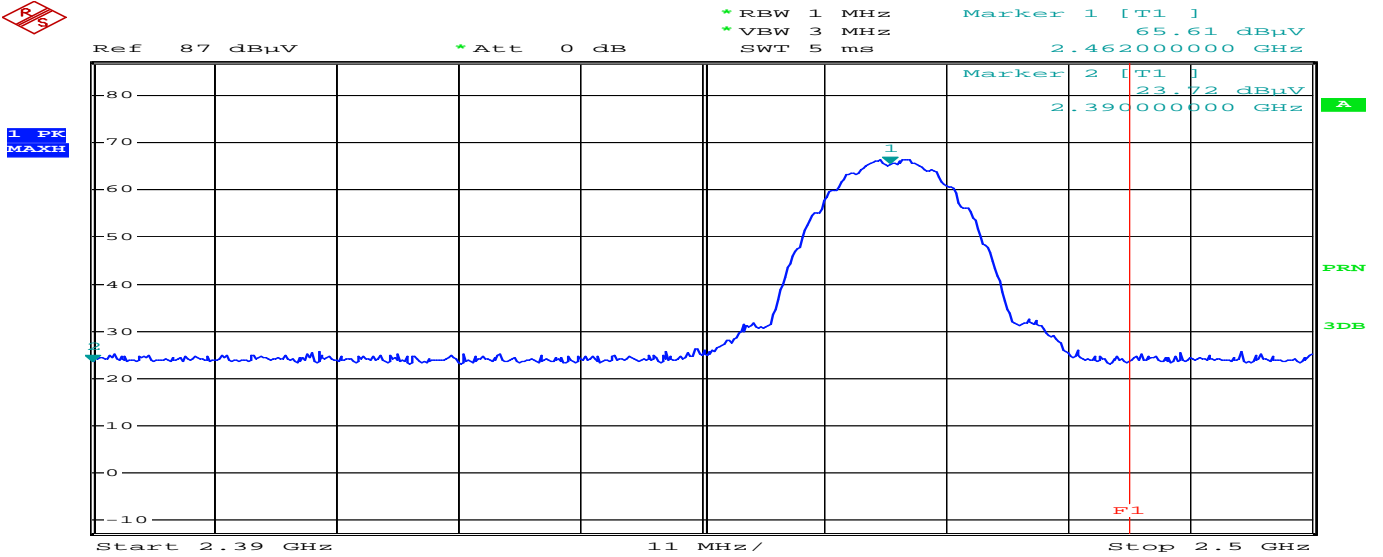
Comment: 16-02123_VER(RM_1 CH_2412 MHz)_b
 Date: 11.MAR.2016 10:28:50



Band Edges(CH High)

Detector mode:Peak

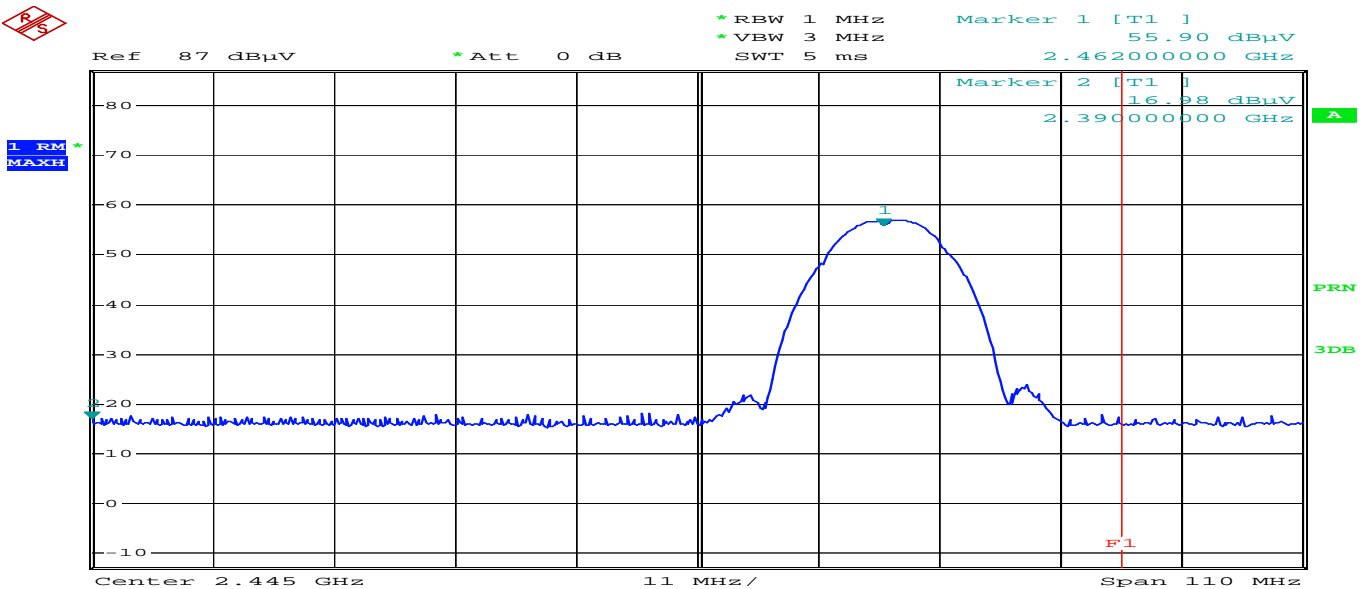
Polarity:Horizontal



Comment: 16-02123_HOR(PK_11 CH_2462 MHz)_b
Date: 11.MAR.2016 11:14:51

Detector mode:Average

Polarity:Horizontal

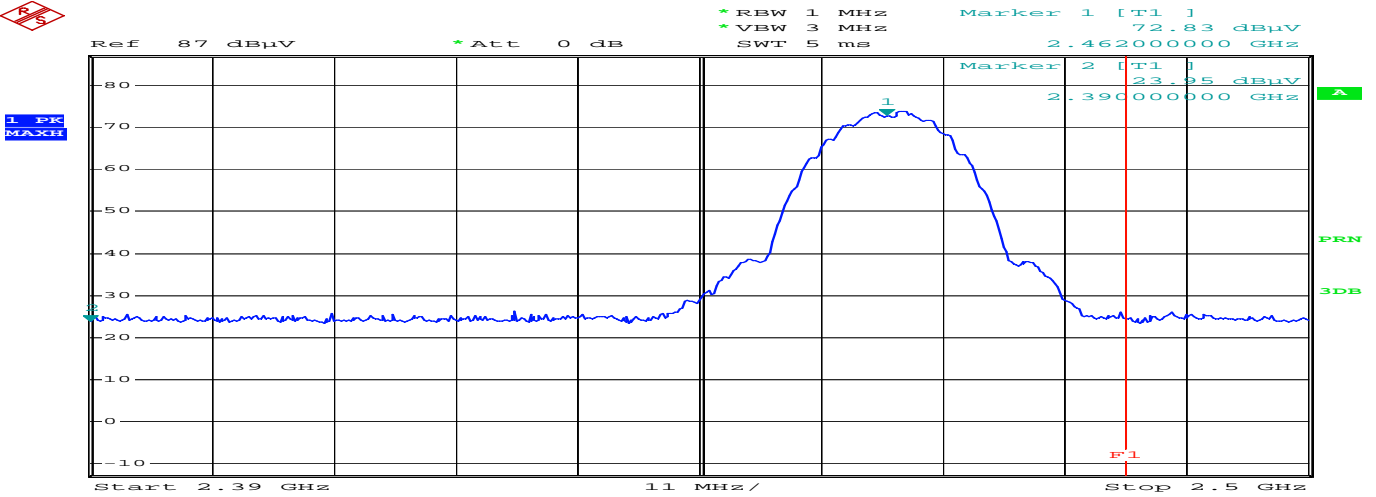


Comment: 16-02123_HOR(RM_11 CH_2462 MHz)_b
Date: 11.MAR.2016 11:11:52

Band Edges(CH High)

Detector mode:Peak

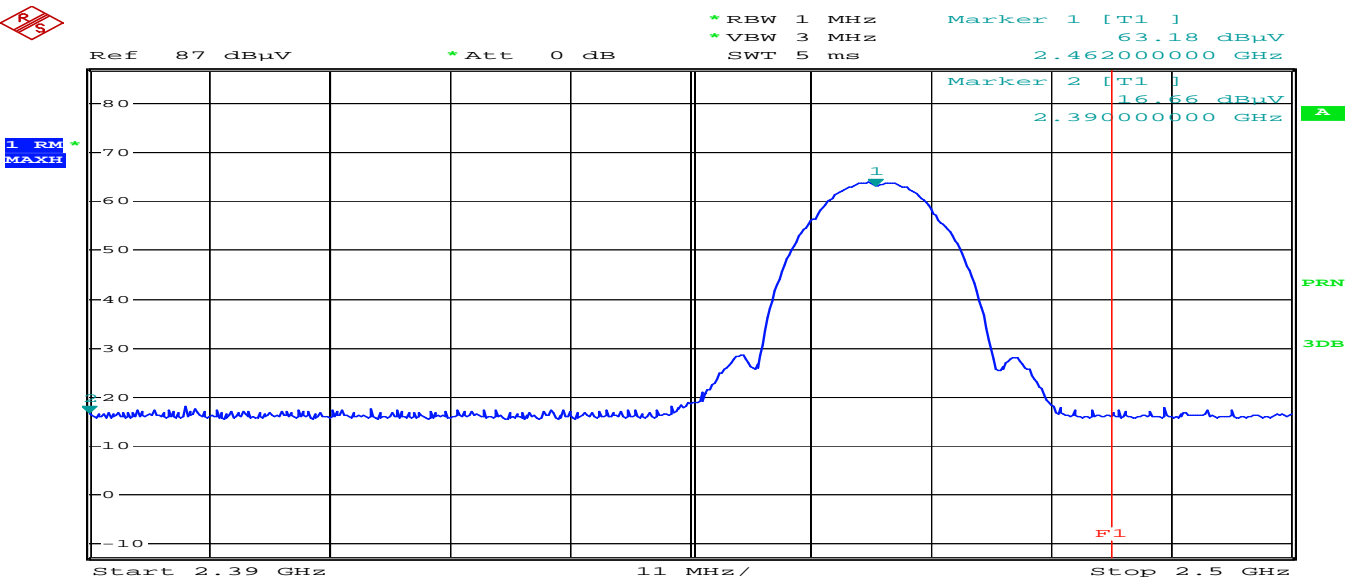
Polarity:Vertical



Comment: 16-02123_VER(PK_11 CH_2462 MHz)_b
Date: 11.MAR.2016 11:16:44

Detector mode:Average

Polarity:Vertical



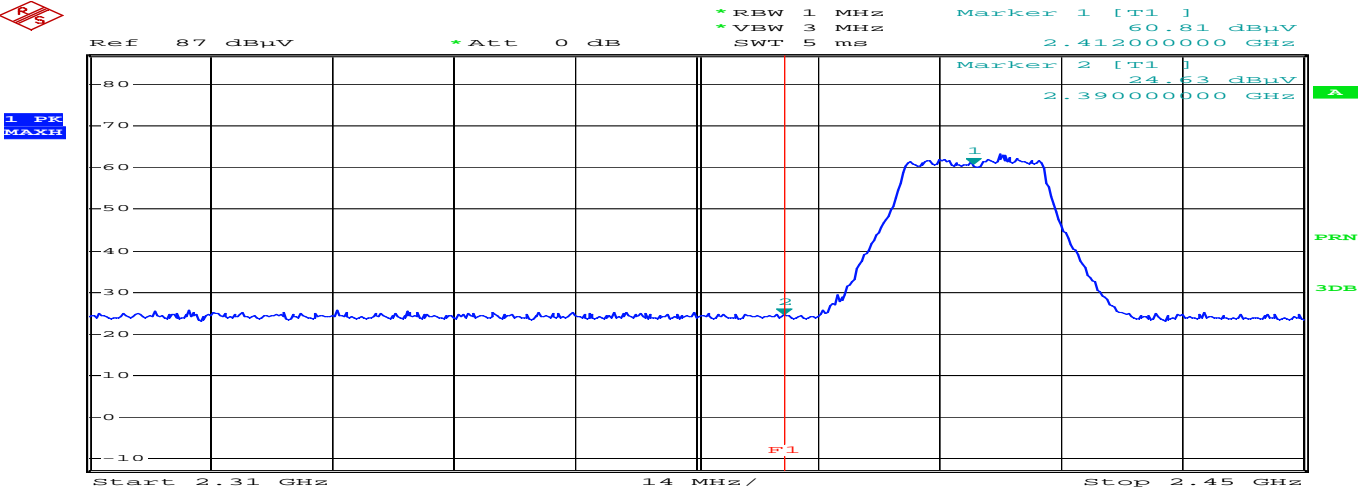
Comment: 16-02123_VER(RM_11 CH_2462 MHz)_b
Date: 11.MAR.2016 11:04:43

***802.11g Mode**

Band Edges(CH Low)

Detector mode:Peak

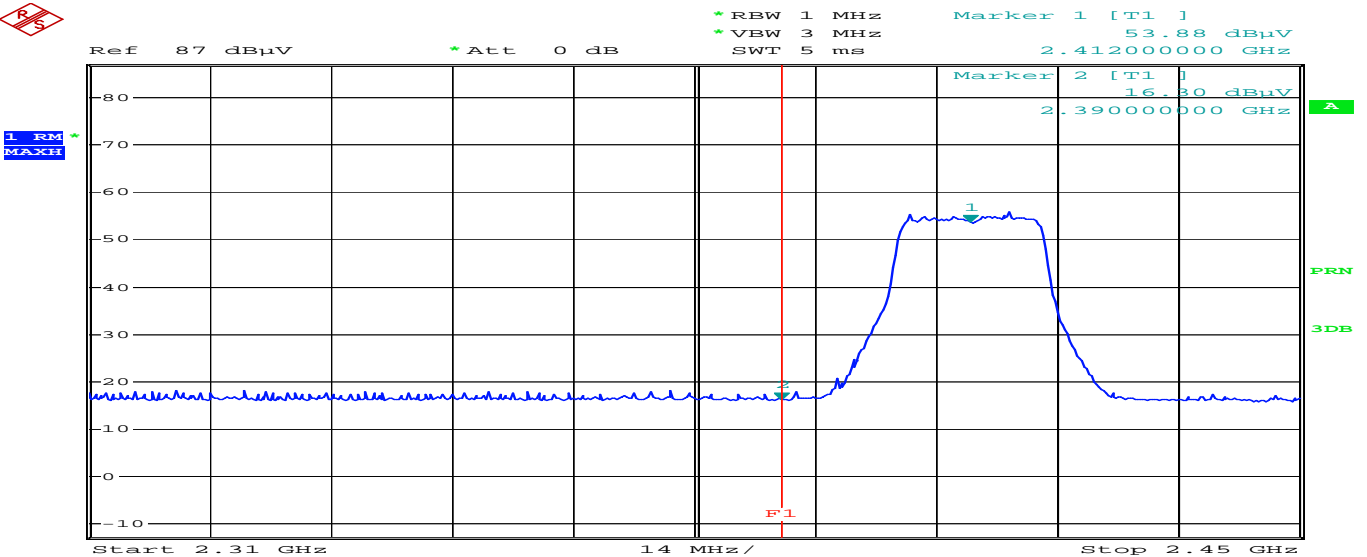
Polarity:Horizontal



Comment: 16-02123_HOR(PK_1 CH_2412 MHz)_g
Date: 12.MAR.2016 13:20:02

Detector mode:Average

Polarity:Horizontal



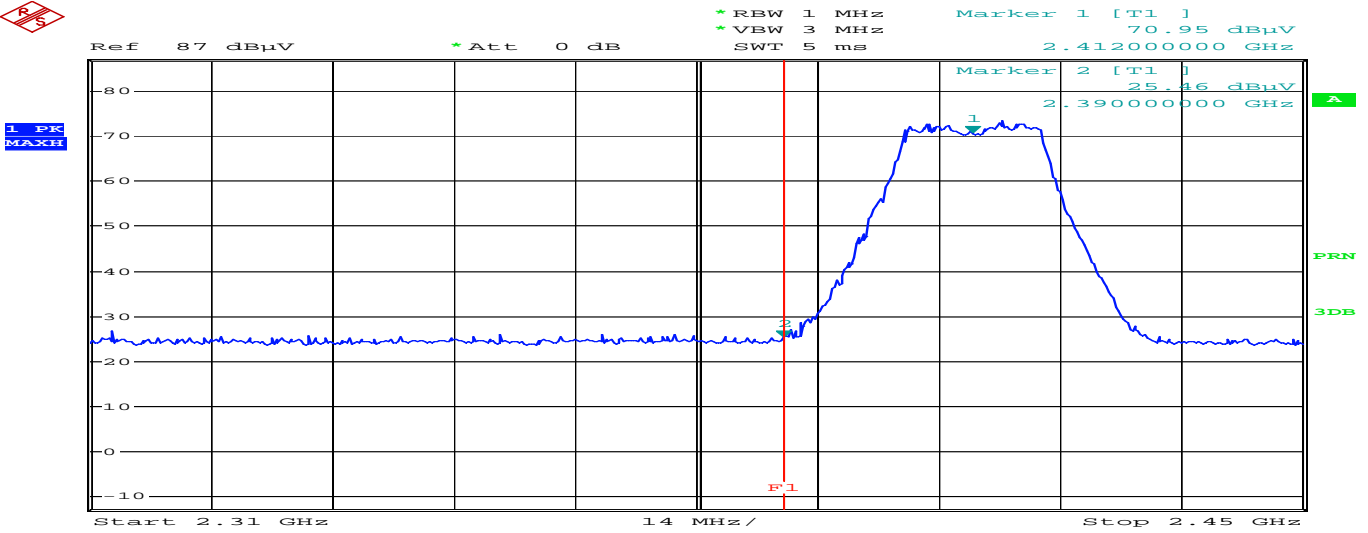
Comment: 16-02123_HOR(RM_1 CH_2412 MHz)_g
Date: 12.MAR.2016 13:22:06



Band Edges(CH Low)

Detector mode:Peak

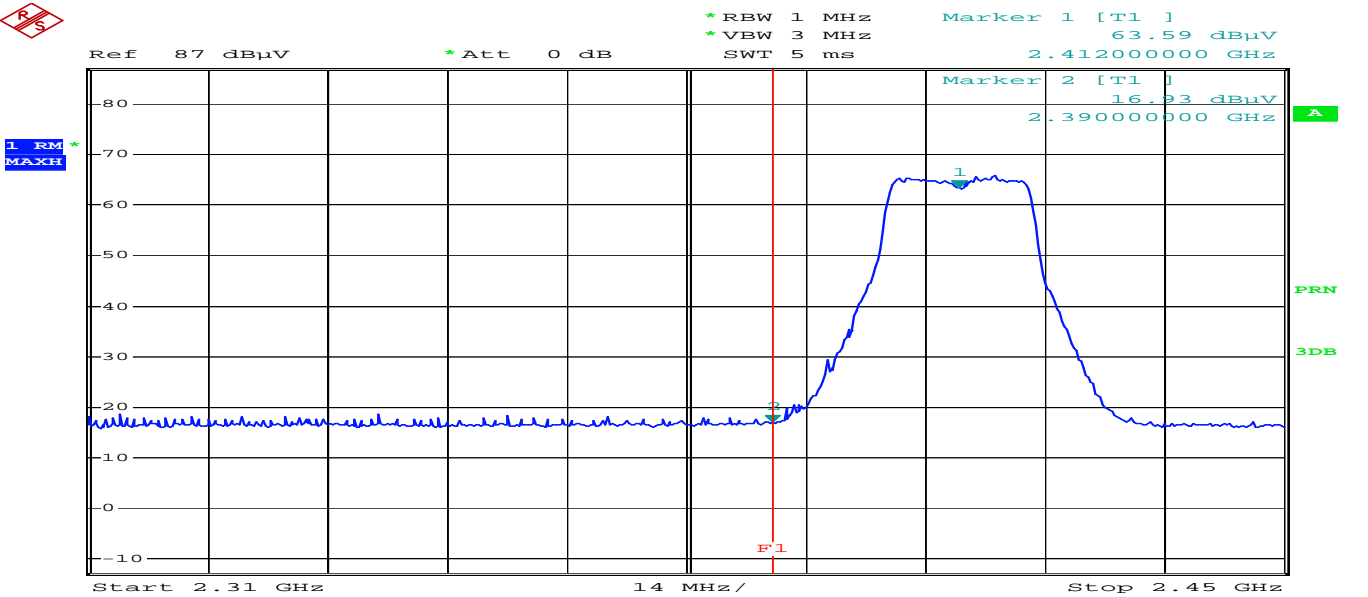
Polarity:Vertical



Comment: 16-02123_VER(PK_1 CH_2412 MHz)_g
Date: 12.MAR.2016 13:18:11

Detector mode:Average

Polarity:Vertical

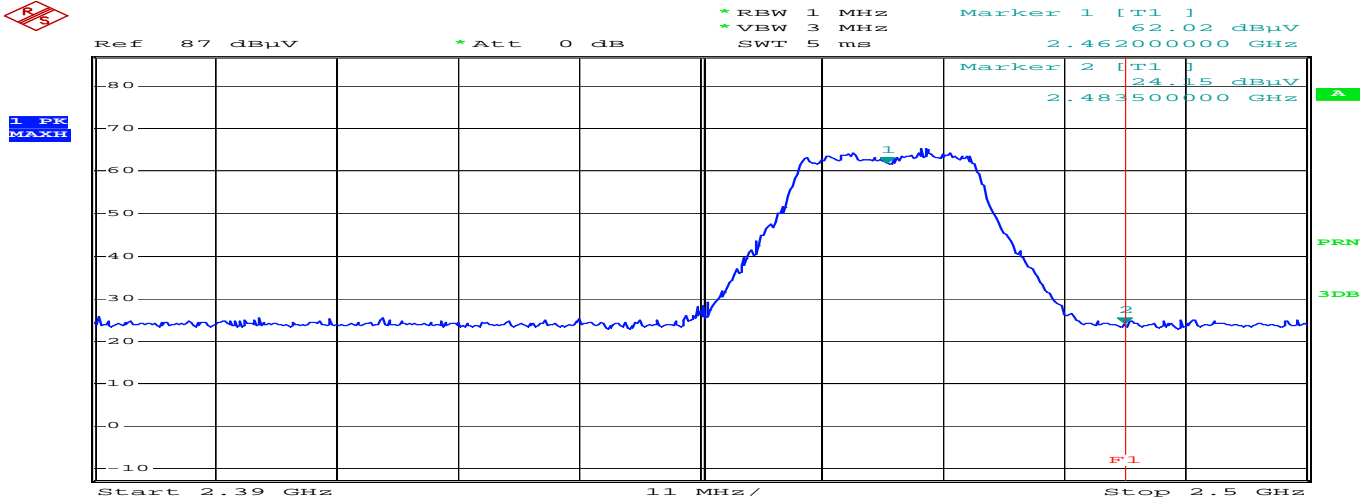


Comment: 16-02123_VER(RM_1 CH_2412 MHz)_g
Date: 12.MAR.2016 13:34:42

Band Edges(CH High)

Detector mode:Peak

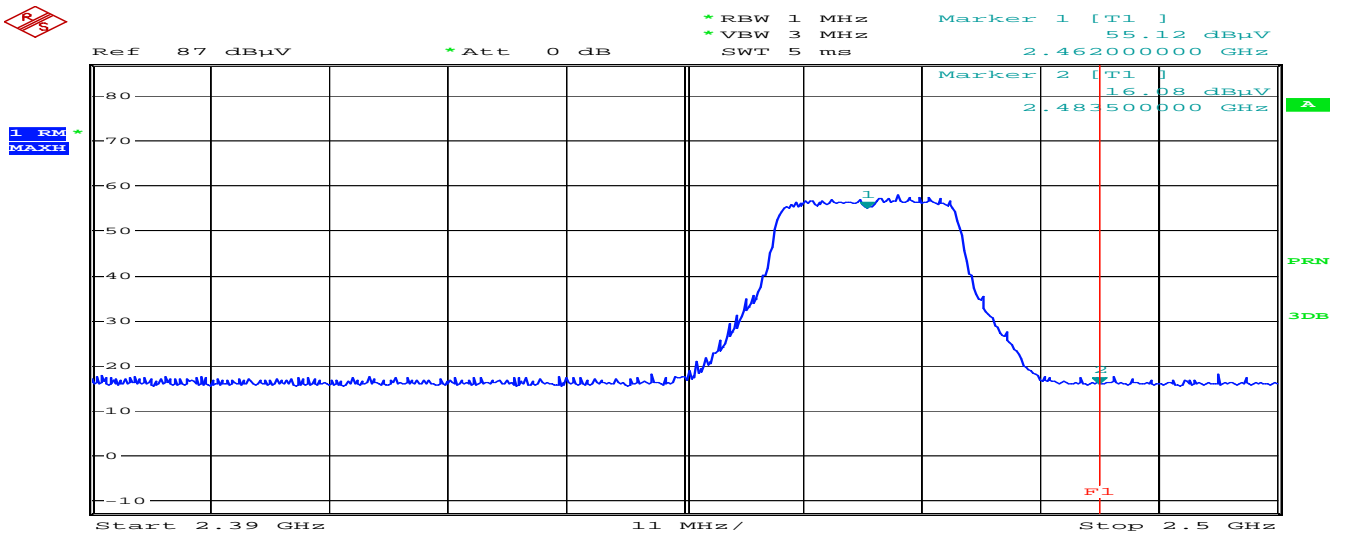
Polarity:Horizontal



Comment: 16-02123_HOR(PK_11 CH_2462 MHz)_g
Date: 12.MAR.2016 13:59:10

Detector mode:Average

Polarity:Horizontal

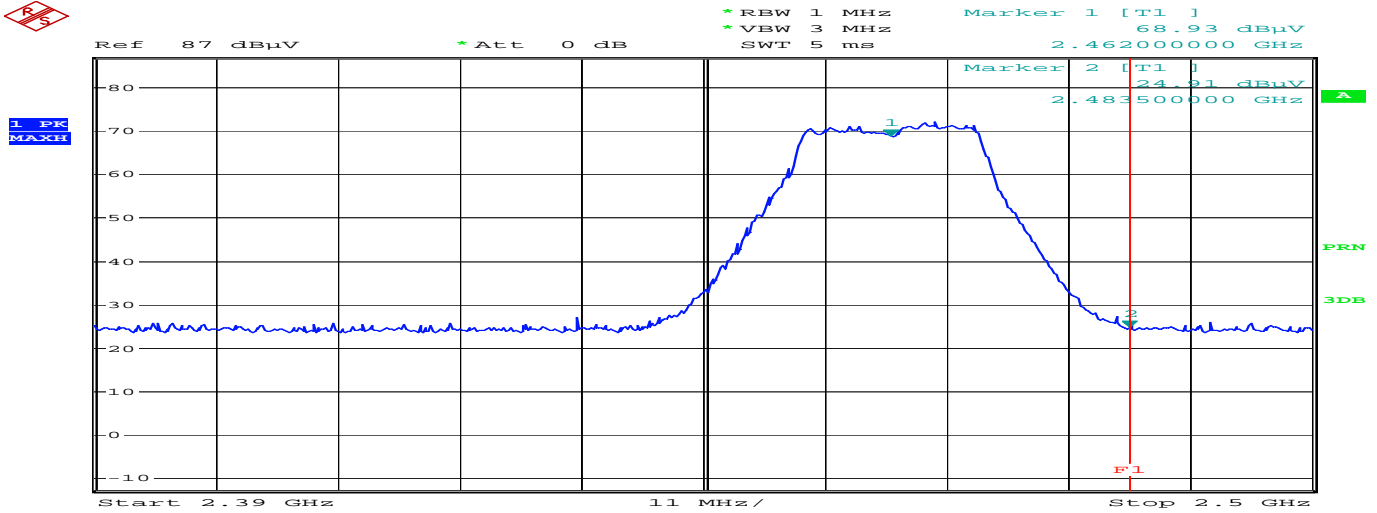


Comment: 16-02123_HOR(RM_11 CH_2462 MHz)_g
Date: 12.MAR.2016 14:06:08

Band Edges(CH High)

Detector mode:Peak

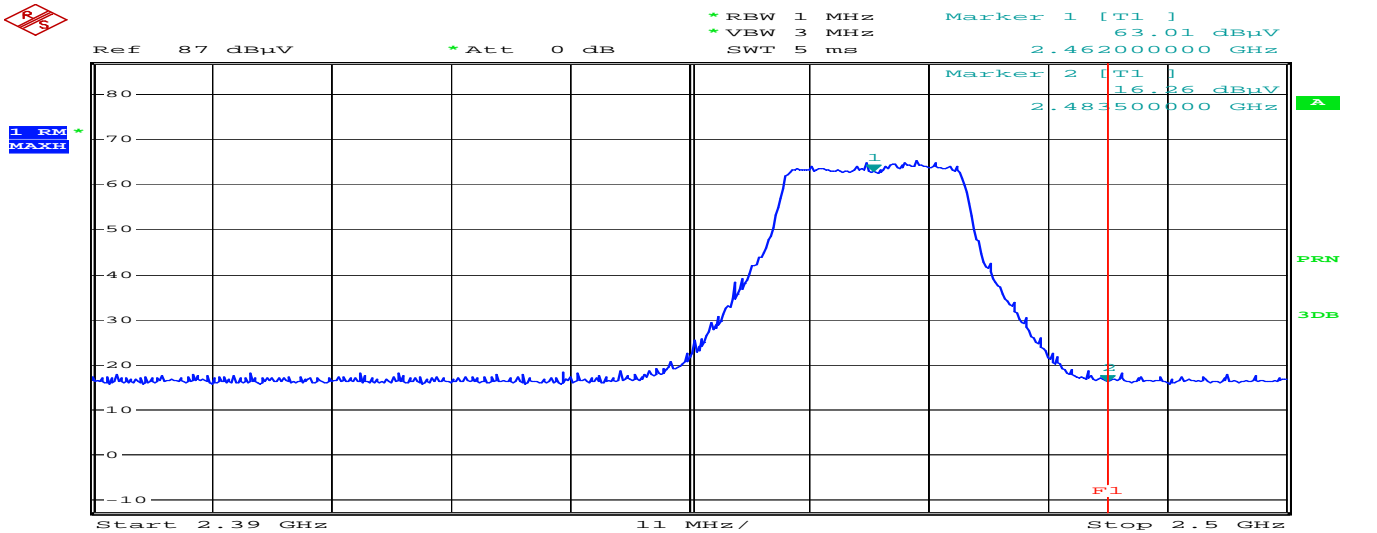
Polarity:Vertical



Comment: 16-02123_VER(PK_11 CH_2462 MHz)_g
 Date: 12.MAR.2016 13:51:16

Detector mode:Average

Polarity:Vertical



Comment: 16-02123_VER(RM_11 CH_2462 MHz)_g
 Date: 12.MAR.2016 14:16:34

11. Measurement of conducted disturbance

The continuous disturbance voltage of AC Mains in the frequency from 0.15 MHz to 30 MHz was measured in accordance to FCC PART 15.207. The test setup was made according to ANSI C 63.10 (2009) in a shielded room. The EUT was placed on a non-conductive table at least 0.8 m above the ground plan. A grounded vertical reference plane was positioned in a distance of 0.4 m from the EUT. The distance from the EUT to other metal surfaces was at least 0.8 m. The EUT was only earthen by its power cord through the line impedance stabilizing network. The power cord has been bundled to a length of 1.0 m. The test receiver with Quasi Peak detector complies with CISPR 16.

11.1 Measurement equipments

Equipment Name	Type	Manufacturer	Serial No.	Next Calibration date
TEST RECEIVER	ESPI	Rohde & Schwarz	100005	7-Dec-16
LISN	ESH3-Z5	Rohde & Schwarz	836679/025	7-Dec-16
Pulse Limiter	ESH3Z2	Rohde & Schwarz	NONE	7-Dec-16

11.2 Environmental Condition

Test Place : Shielded Room

Temperature (°C) : 19.5 °C

Humidity (% R.H.) : 48.8 % R.H.

11.3 Test Data

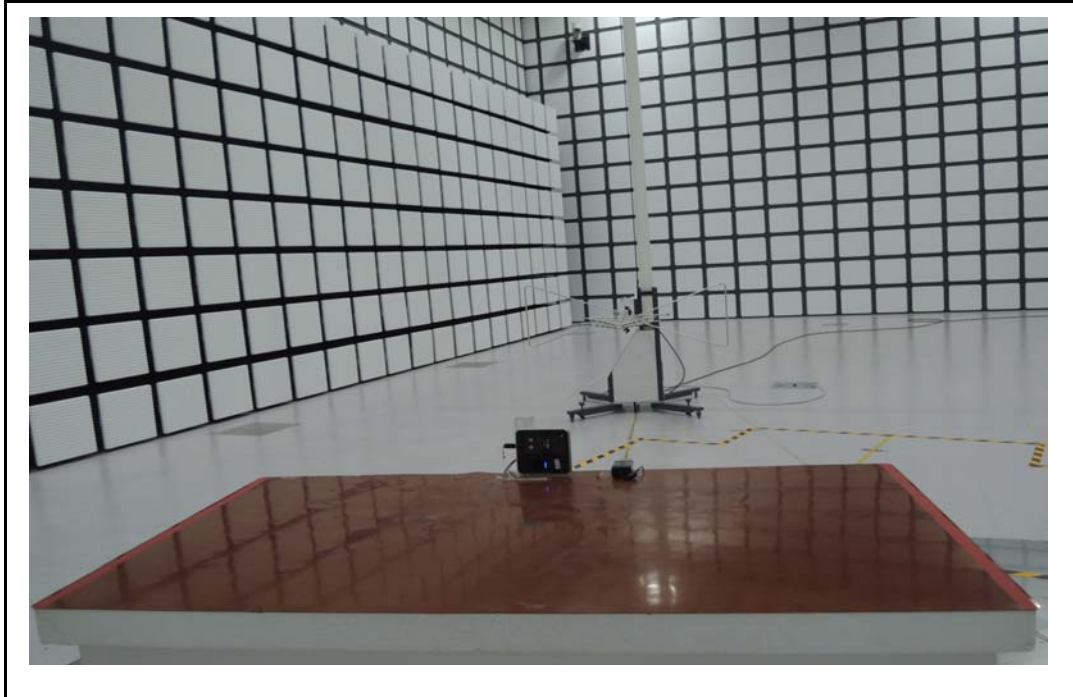
Test Date : 10-Mar-16

Frequency (MHz)	Correction Factor		Line (H/N)	Quasi-peak Value			Average Value		
	Lisn (dB)	Cable (dB)		Limit (dB μ V)	Reading (dB μ V)	Result (dB μ V)	Limit (dB μ V)	Reading (dB μ V)	Result (dB)
0.20	0.13	0.14	N	63.61	43.04	43.31	53.61		
0.33	0.12	0.15	H	59.45	35.59	35.87	49.45		
0.66	0.14	0.18	N	56.00	35.82	36.14	46.00		
7.90	0.38	0.32	H	60.00	43.40	44.10	50.00		
9.85	0.37	0.34	N	60.00	46.34	47.05	50.00		
10.50	0.47	0.35	H	60.00	45.32	46.13	50.00		
Remark	H : Hot Line, N : Neutral Line *Correction Factor = Lisn + Cable *Result = Correction Factor + Reading *Test Mode : Adapter								

12. Photographs of test setup

12.1. Setup for Radiated Test : (30 ~ 1 000) MHz

[Front]



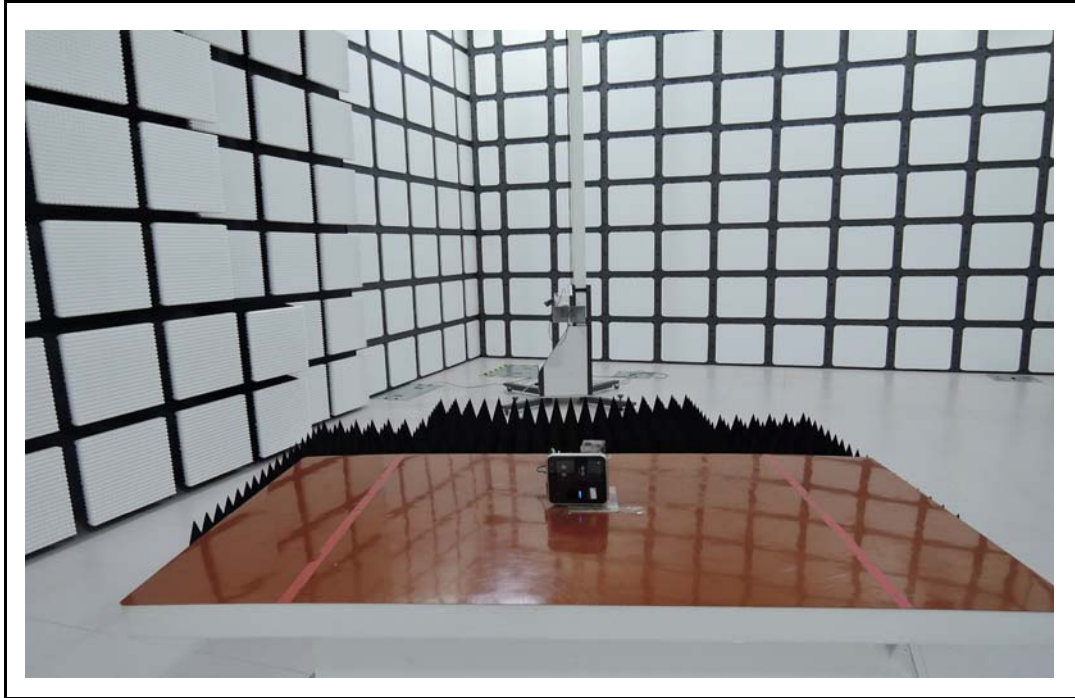
[Rear]



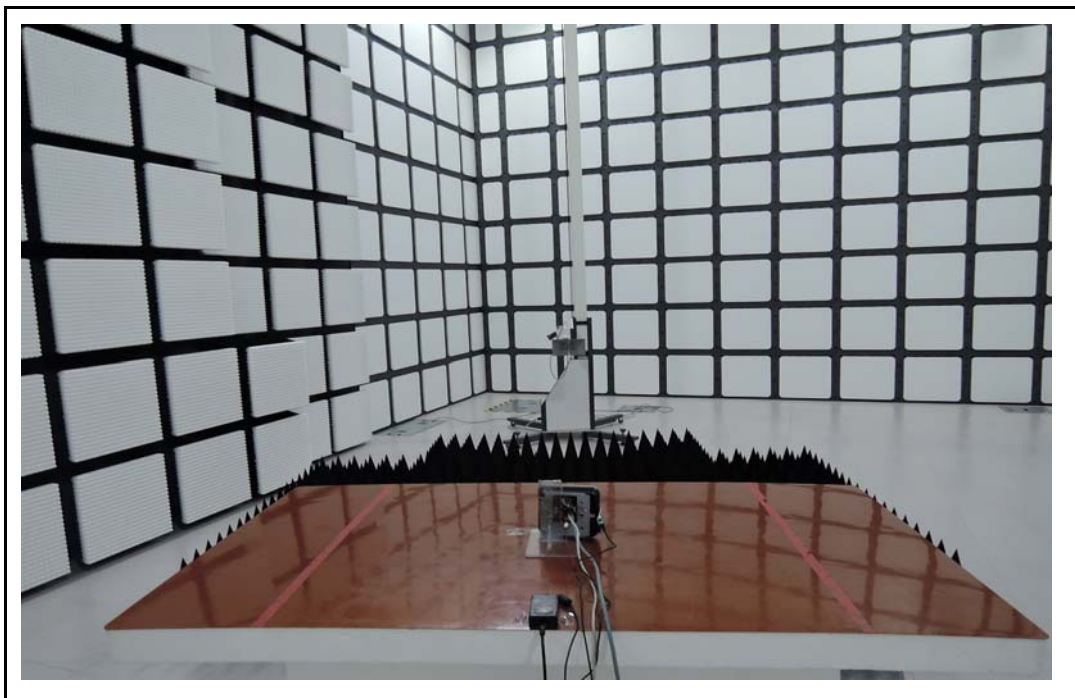


12.2.Setup for Radiated Test : Above 1 GHz

[Front]



[Rear]



12.3. Setup for Conducted Test : (0.15 ~ 30) MHz

[Front]



[Rear]



12.4. Photographs of EUT

[Front]

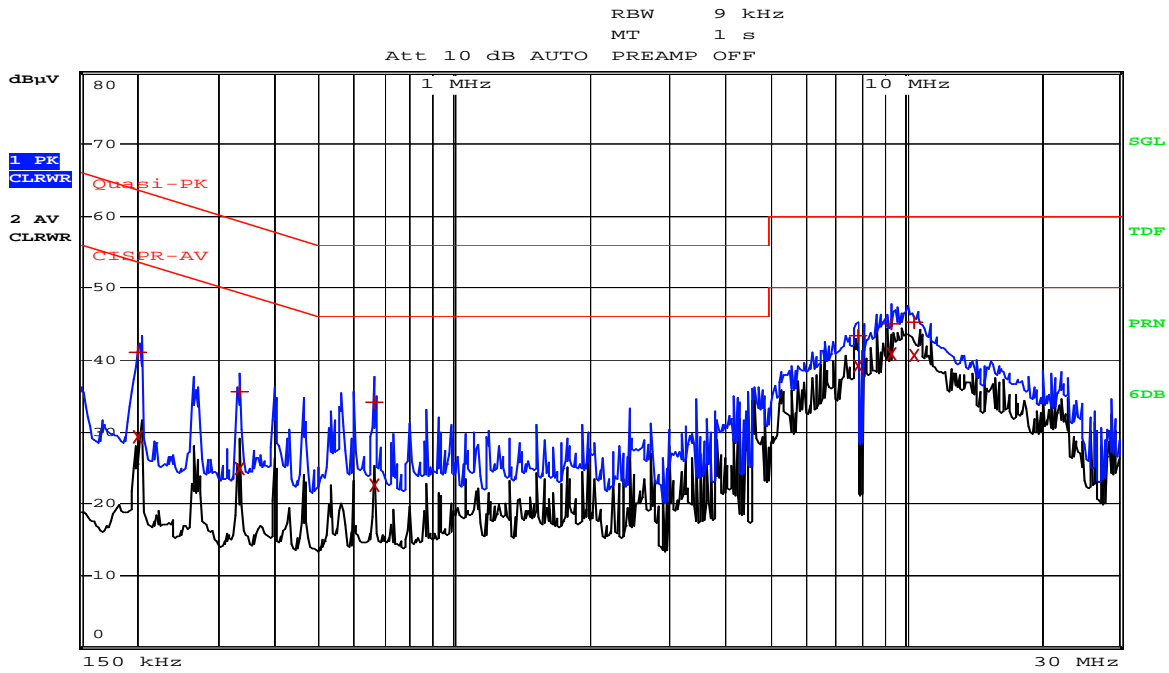


[Rear]



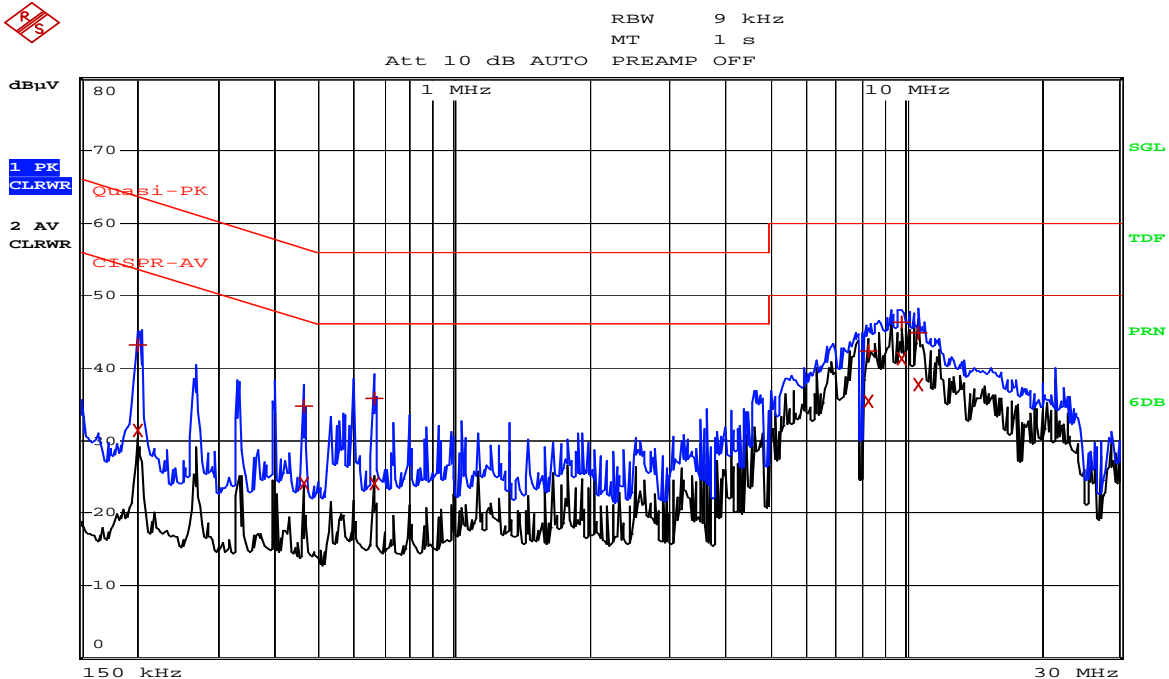
Appendix 1. Special diagram

* HOT LINE



Comment: 16-02123_HOT
Date: 10.MAR.2016 09:17:29

* NEUTRAL LINE



Comment: 16-02123_NEUTRAL
Date: 10.MAR.2016 09:21:30

Appendix 3. Antenna Requirement

1. Antenna Requirement

1.1 Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.204

1.2 Antenna Connected Construction

The antenna types used in this product are Intergrated SMD antenna . The maximum Gain of this antenna is 2.1 dBi.