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EVALUATION REPORT

Applicant Name:
SAMSUNG Electronics Co., Ltd.

Address:
129, Samsung-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Rep. of Korea

Date of Issue:
March 15, 2019

Location:
HCT CO., LTD.,
74, Seoicheon-ro 578beon-gil, Majang-myeon,
Icheon-si, Gyeonggi-do, 17383, Rep. of KOREA

FCC ID:	**A3LSMT720**
IC:	**649E-SMT720**
APPLICANT:	**SAMSUNG Electronics Co., Ltd.**

Equipment Class(es) :	DSS, DTS, UNII, DXX
Rule Part(s) :	15
Application's Statement :	The applicant takes full responsibility that the test data referenced below represents compliance for this FCC ID.
Differences Brief Description :	Bluetooth & WLAN hardware and software of this device are identical to the implementation in A3LSMT725. The operational description includes detailed information about the changes between the devices. The data from that application has been verified through appropriate spot checks to demonstrate compliance for this device as shown in the summary table below.
Test Reference :	KDB 484596 D01 Reference Test Data v01

The detail test data can be found in this documents, Appendix A.

Category	Spot Check	Verdict
Unlicensed EMC	Band Edge	Share
	Spurious Emissions	Share

Reference Detail Section

Reference FCC ID	Equipment Class	Report Title	Section
A3LSMT725	DSS	Bluetooth Report	All sections
	DTS	WLAN DTS Report	All sections
		BT LE Report	All sections
	UNII	UNII Test Report	All sections
	DXX	ANT+ Report	All sections

Report prepared by : Jeong Ho Kim

Engineer of Telecommunication testing center

Approved by : Kwon Jeong

Manager of Telecommunication testing center

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Appendix A. The Spot check test data

1. Summary of the spot check for Unlicensed EMC

	Test Item	Mod/Channel	Measured Frequency	SM-T725 Result [dBuV/m]		SM-T720 Result [dBuV/m]		Deviation (dB)	
				Peak	Average	Peak	Average	Peak	Average
BT	Band Edge	2-DH5/ch.78	2483.5 MHz~2500 MHz	66.99	42.26	65.29	40.56	-1.70	-1.70
	RSE	3-DH5/ch.78	4960 MHz	53.02	39.27	52.73	39.23	-0.29	-0.04
		3-DH5/ch.39	7323 MHz	60.18	46.30	60.00	46.18	-0.18	-0.12
DTS	Band Edge	802.11n(20M)_MCS0/ch.1	2310.0 MHz~2390.0 MHz	66.43	51.61	65.85	51.53	-0.58	-0.08
	RSE	802.11n(20M)_MCS0/ch.13	4944 MHz	52.23	41.74	52.83	40.74	0.60	-1.00
		802.11g 6Mbps/ch.6	7311 MHz	60.77	48.16	60.30	48.02	-0.47	-0.14
BT(LE)	Band Edge	LE(5.0) 2M 37byte/ch.39	2483.5 MHz~2500 MHz	60.27	49.74	59.32	49.36	-0.95	-0.38
	RSE	LE(5.0) 1M 37byte/ch.19	4880 MHz	53.40	42.94	53.05	42.88	-0.35	-0.06
		LE(5.0) 1M 37byte/ch.19	7320 MHz	60.23	49.76	60.27	49.89	0.04	0.13
UNII	Band Edge	802.11n_40MHz MCS0/ch.62	5350 MHz~5460 MHz	63.64	51.81	63.41	50.48	-0.23	-1.33
	RSE	802.11n_20MHz MCS0/ch.120	11200 MHz	60.23	46.13	58.64	44.33	-1.59	-1.80
		802.11n_20MHz MCS0/ch.165	17475 MHz	62.34	-	61.60	-	-0.74	-
ANT+	Band Edge	Period 128(0dBm)/ch.78	2483.5 MHz~2500 MHz	56.33	24.45	55.15	23.27	-1.18	-1.18
	RSE	Period 128(0dBm)/ch.78	4960 MHz	53.03	41.50	52.77	41.17	-0.26	-0.33
		Period 128(0dBm)/ch.39	7323 MHz	60.75	48.50	59.99	48.28	-0.76	-0.22
	Field Strength	Period 128(0dBm)/ch.78	2480 MHz	93.50	61.62	93.32	61.44	-0.18	-0.18

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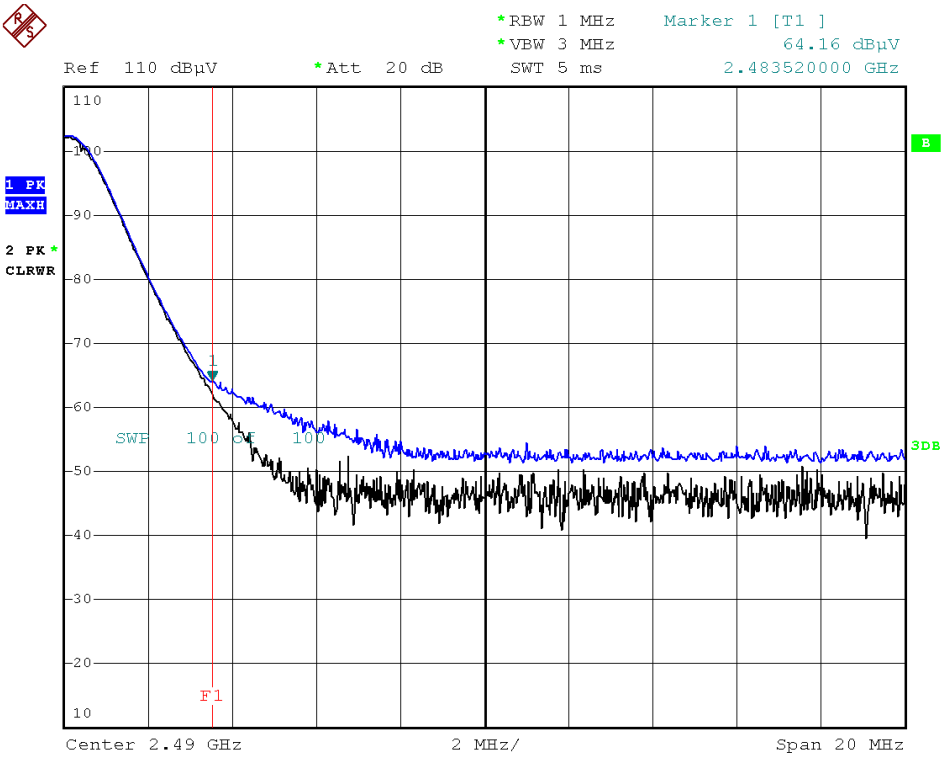
2. List of test equipment for EMC

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-EP / 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	08/23/2018	Biennial	1513-175
Schwarzbeck	VULB 9168 / Hybrid Antenna	04/06/2017	Biennial	760
Schwarzbeck	VULB 9168 / Hybrid Antenna	08/09/2018	Annual	3368
Schwarzbeck	BBHA 9120D / Horn Antenna	06/30/2017	Biennial	1300
Schwarzbeck	BBHA9170 / Horn Antenna(15 GHz ~ 40 GHz)	12/04/2017	Biennial	BBHA9170541
Rohde & Schwarz	FSP(9 kHz ~ 40 GHz) / Spectrum Analyzer	07/24/2018	Annual	100843
Wainwright Instruments	WHK3.0/18G-10EF / High Pass Filter	01/03/2019	Annual	F6
Wainwright Instruments	WHFX7.0/18G-8SS / High Pass Filter	05/09/2018	Annual	29
Wainwright Instruments	WRCJV2400/2483.5-2370/2520-60/12SS / Band Reject Filter	06/29/2018	Annual	2
Wainwright Instruments	WRCJV5100/5850-40/50-8EEK / Band Reject Filter	01/03/2019	Annual	2
Weinschel	2-3 / Attenuator (3 dB)	10/10/2018	Annual	BR0617
H+S	5910-N-50-010 / Attenuator(10 dB)	11/08/2018	Annual	NONE
CERNEX	CBLU1183540B-01 / Power Amplifier	12/21/2018	Annual	25540
CERNEX	CBL06185030 / Power Amplifier	03/28/2018	Annual	28550
CERNEX	CBL18265035 / Power Amplifier	01/03/2019	Annual	22966
CERNEX	CBL26405040 / Power Amplifier	06/29/2018	Annual	25956
TESCOM	TC-3000C / Bluetooth Tester	03/27/2018	Annual	3000C000276

3. Test Plot

BT Band Edge (2DH-5/ch.78)

Radiated Restricted Band Edges plot – Peak Reading



Date: 15.MAR.2019 14:22:27

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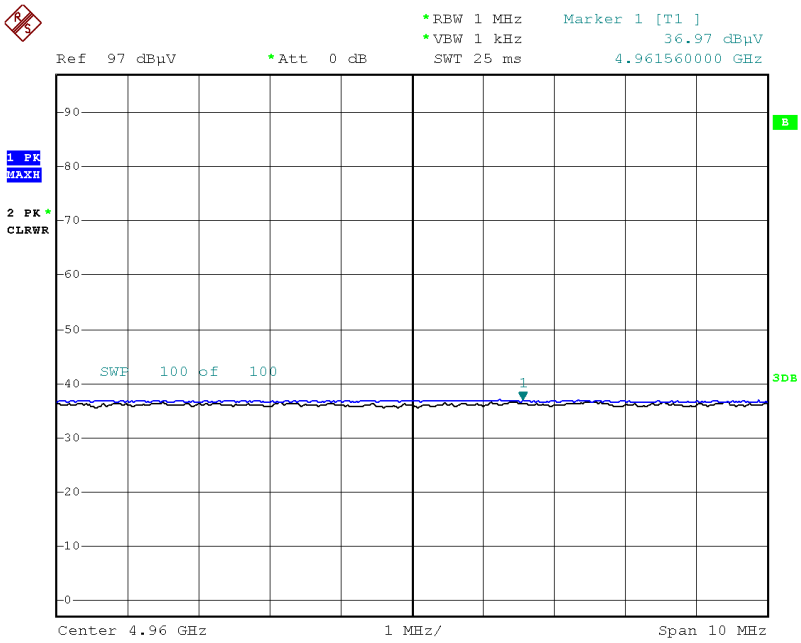
BT R.S.E 2nd Harmonic(3DH-5/ch.78)

Radiated Spurious Emissions plot – Average Reading



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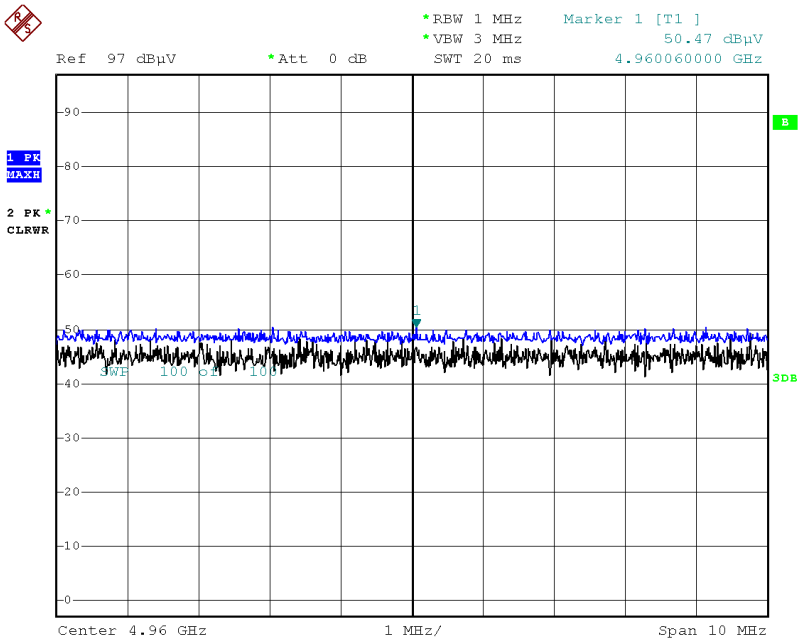
Radiated Spurious Emissions plot – Peak Reading



Date: 15.MAR.2019 14:36:05

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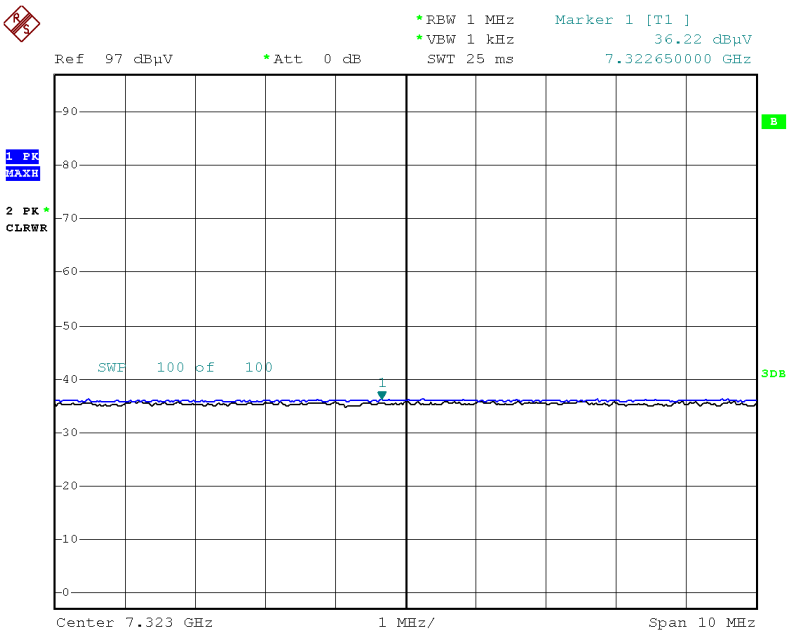
BT R.S.E 3rd Harmonic(3DH-5/ch.39)

Radiated Spurious Emissions plot – Average Reading



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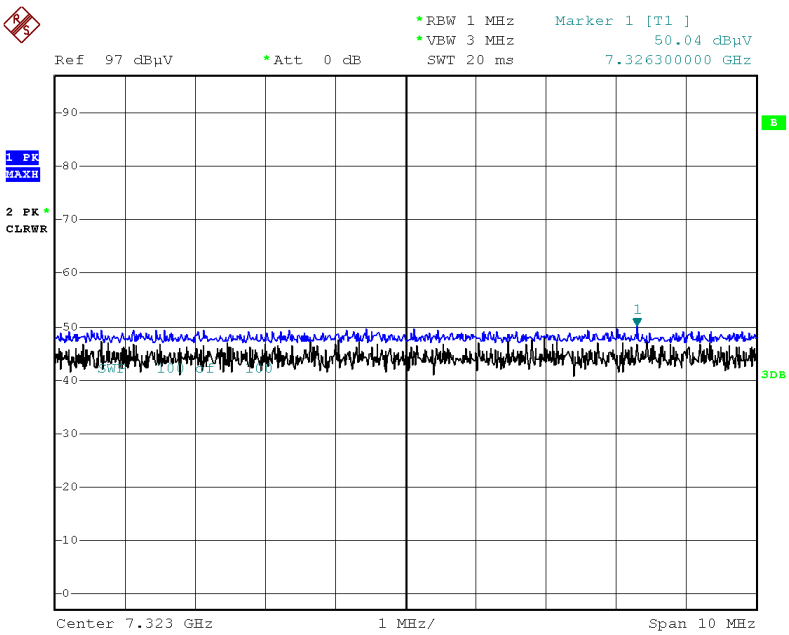
Radiated Spurious Emissions plot – Peak Reading



Date: 15.MAR.2019 14:50:52

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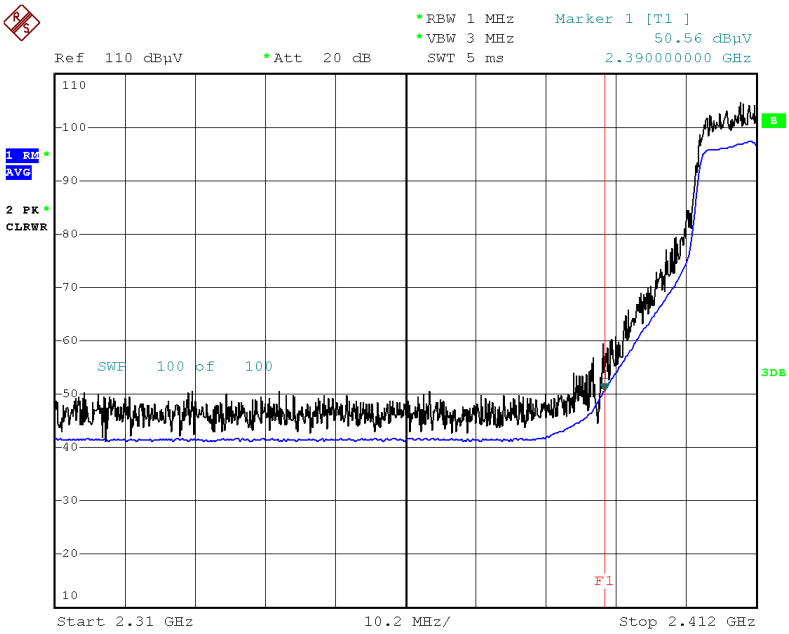
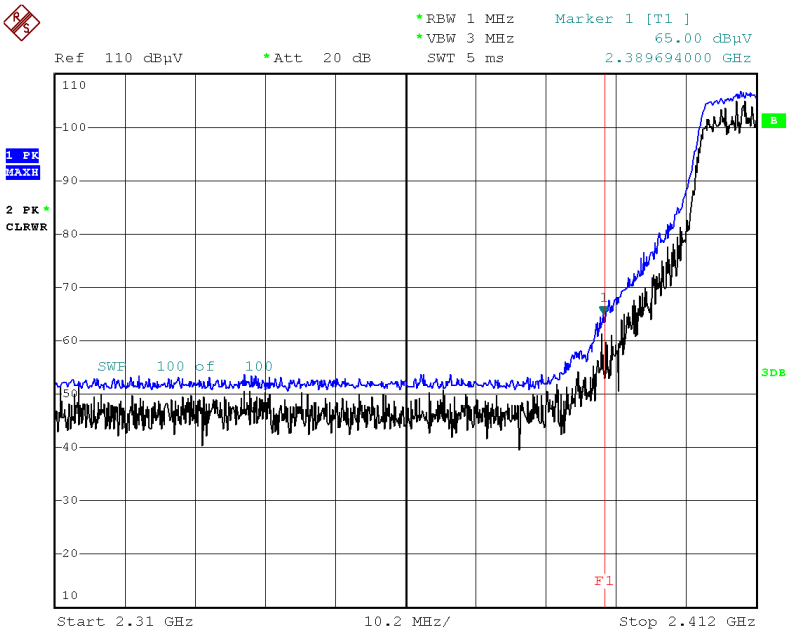
DTS Band Edge (802.11n(20M)_MCS0/ch.1)

Radiated Restricted Band Edges plot – Average Reading



Date: 15.MAR.2019 16:53:10

Radiated Restricted Band Edges plot – Peak Reading



Date: 15.MAR.2019 16:54:43

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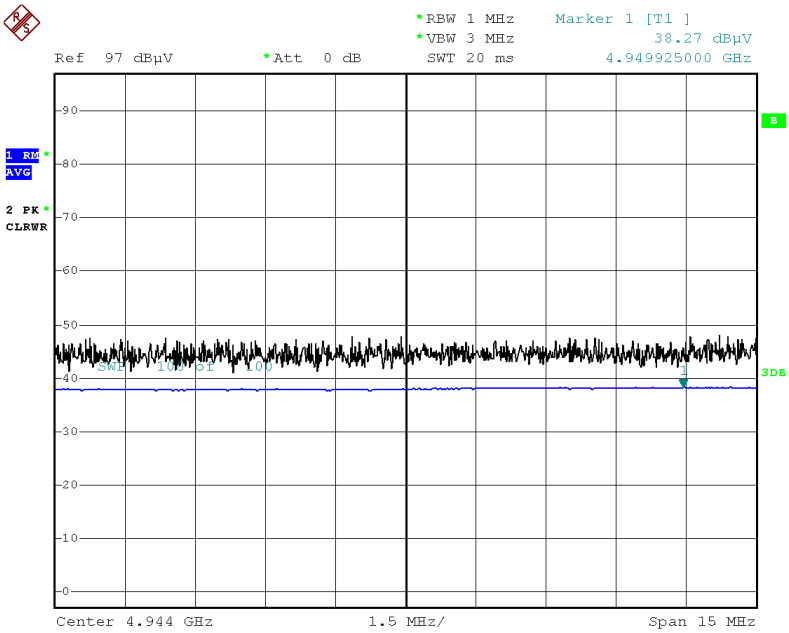
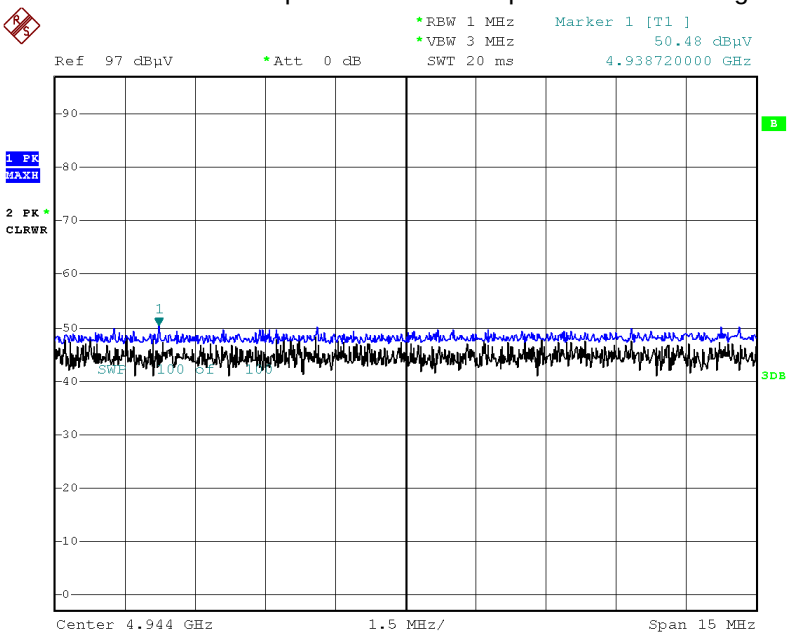
DTS R.S.E 2nd Harmonic (802.11n(20M)_MCS0/ch.13)

Radiated Spurious Emissions plot – Average Reading



Date: 15.MAR.2019 14:05:46

Radiated Spurious Emissions plot – Peak Reading



Date: 15.MAR.2019 14:06:49

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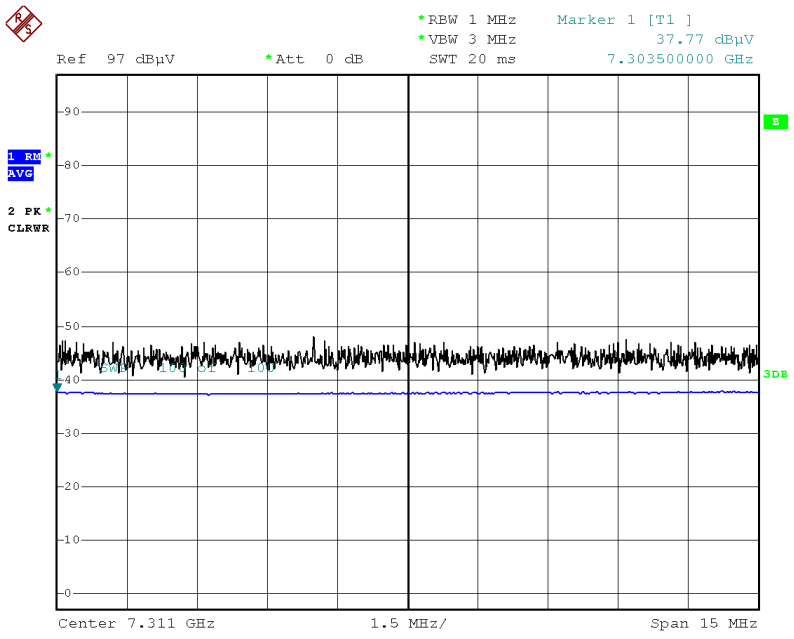
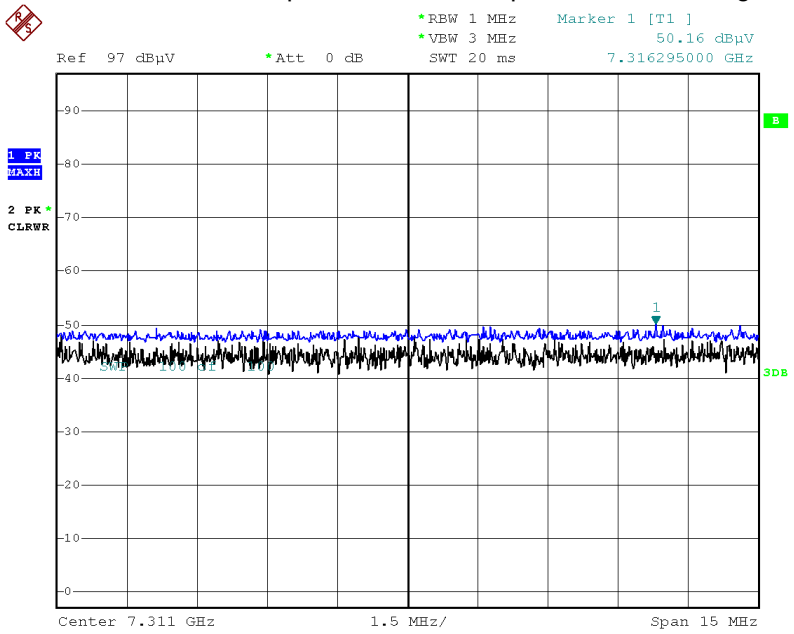
DTS R.S.E 3rd Harmonic (802.11g 6Mbps/ch.6)

Radiated Spurious Emissions plot – Average Reading



Date: 15.MAR.2019 13:35:47

Radiated Spurious Emissions plot – Peak Reading



Date: 15.MAR.2019 13:34:31

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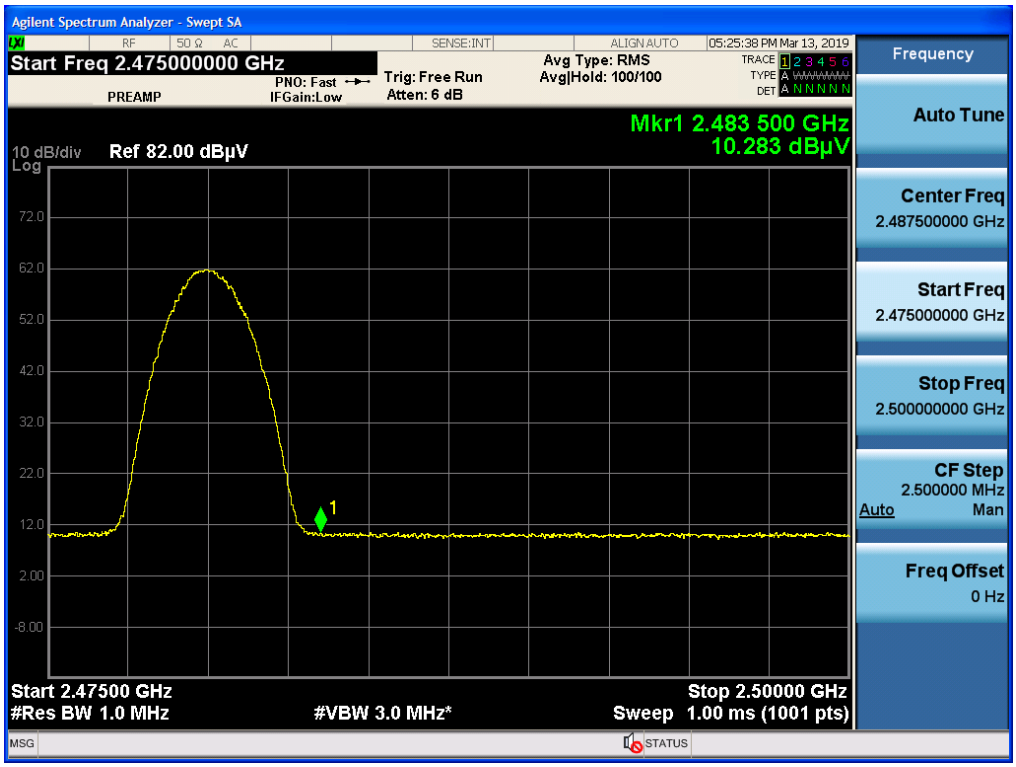
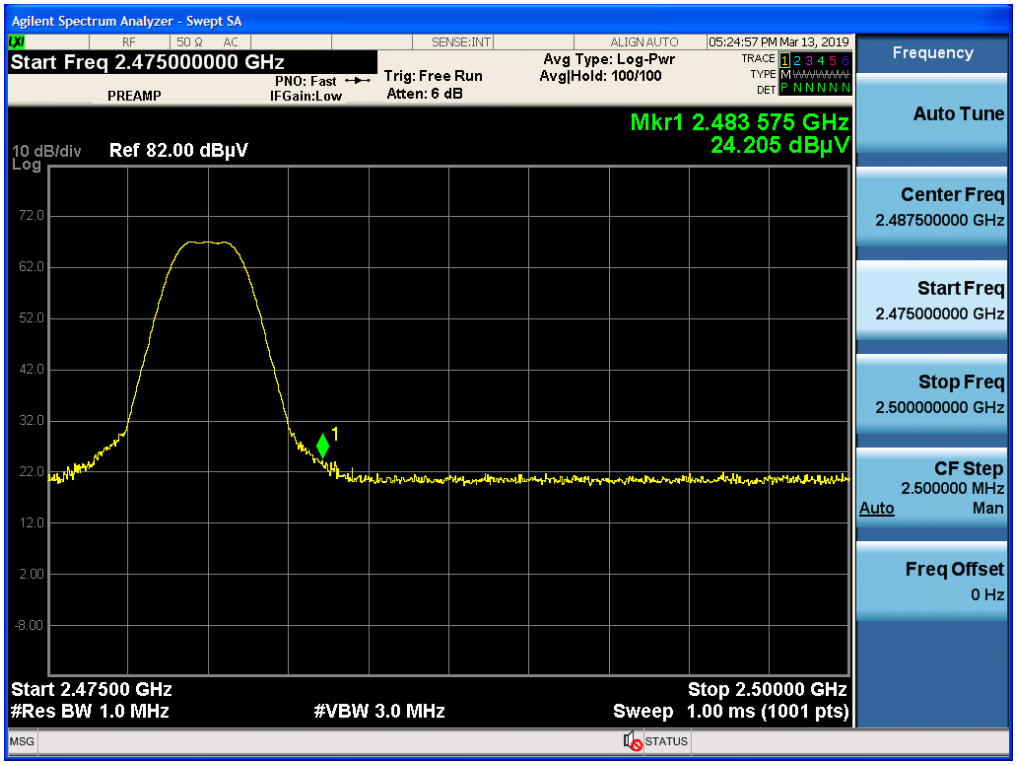
BT(LE) Band Edge (LE(5.0) 2M 37byte/ch.39)

Radiated Restricted Band Edges plot – Average Reading



Radiated Restricted Band Edges plot – Peak Reading



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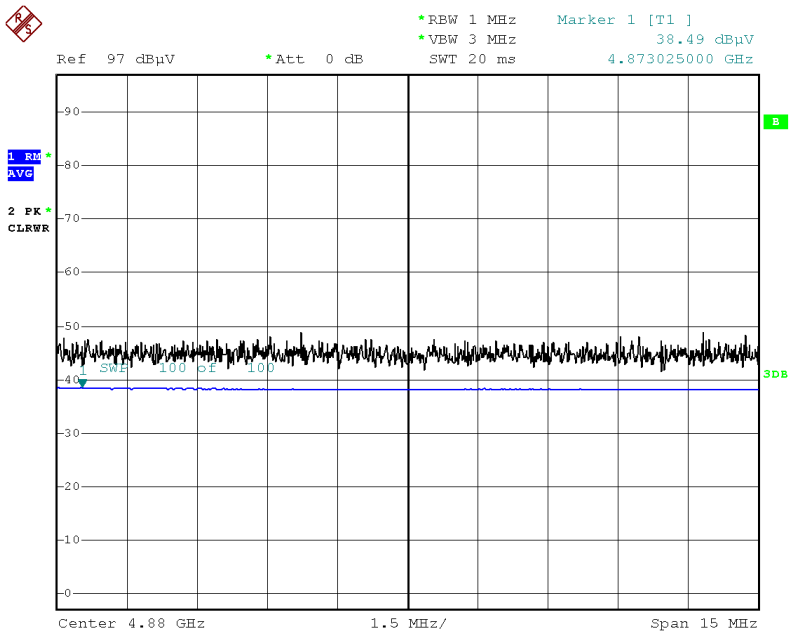
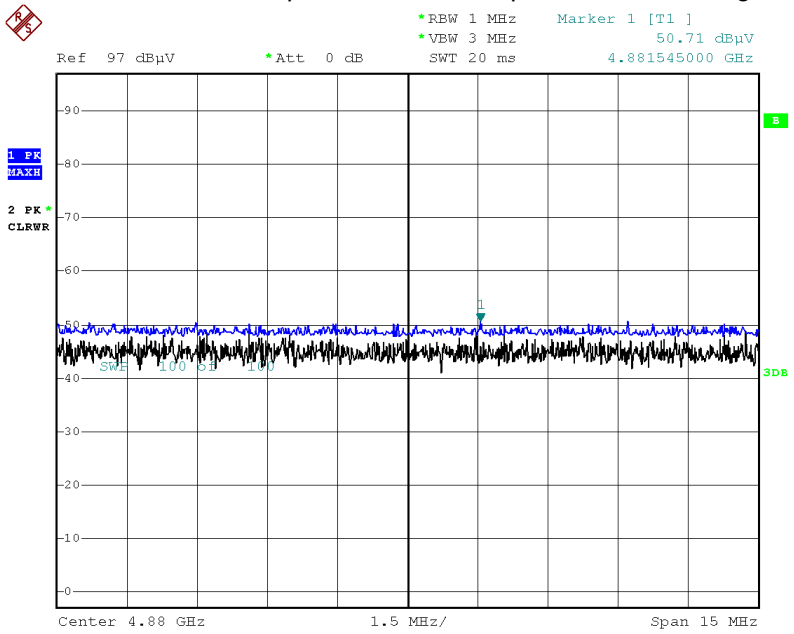
BT(LE) R.S.E 2nd Harmonic (LE(5.0) 1M 37byte/ch.19)

Radiated Spurious Emissions plot – Average Reading



Date: 15.MAR.2019 10:19:53

Radiated Spurious Emissions plot – Peak Reading



Date: 15.MAR.2019 10:18:43

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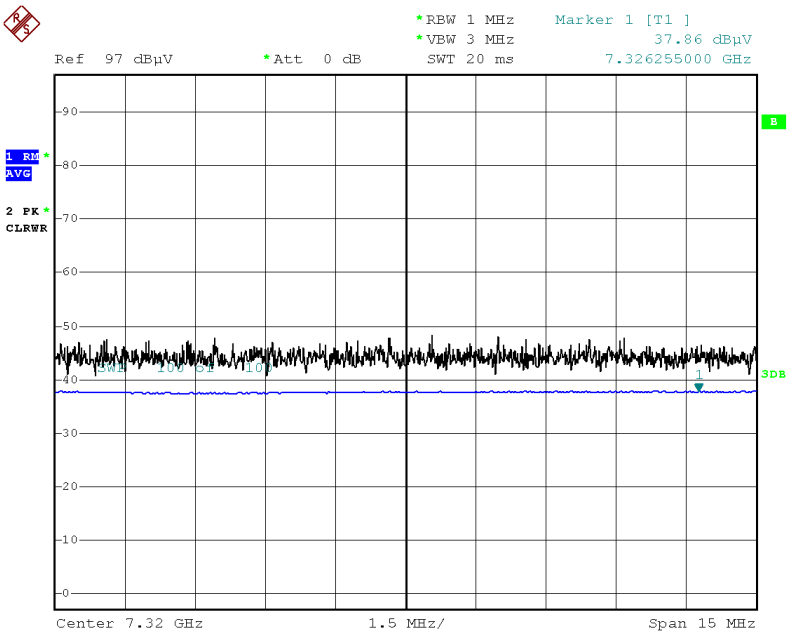
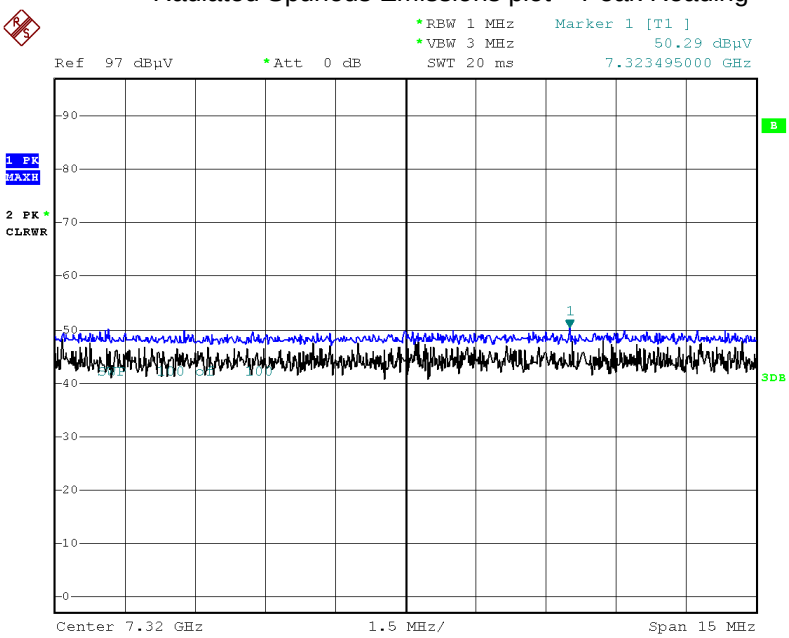
BT(LE) R.S.E 3rd Harmonic (LE(5.0) 1M 37byte/ch.19)

Radiated Spurious Emissions plot – Average Reading



Date: 15.MAR.2019 10:21:09

Radiated Spurious Emissions plot – Peak Reading



Date: 15.MAR.2019 10:22:18

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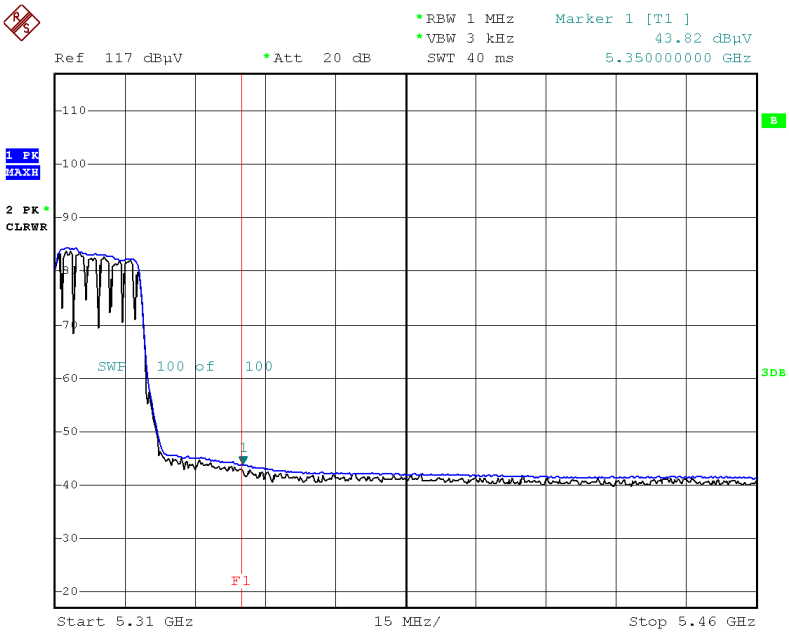
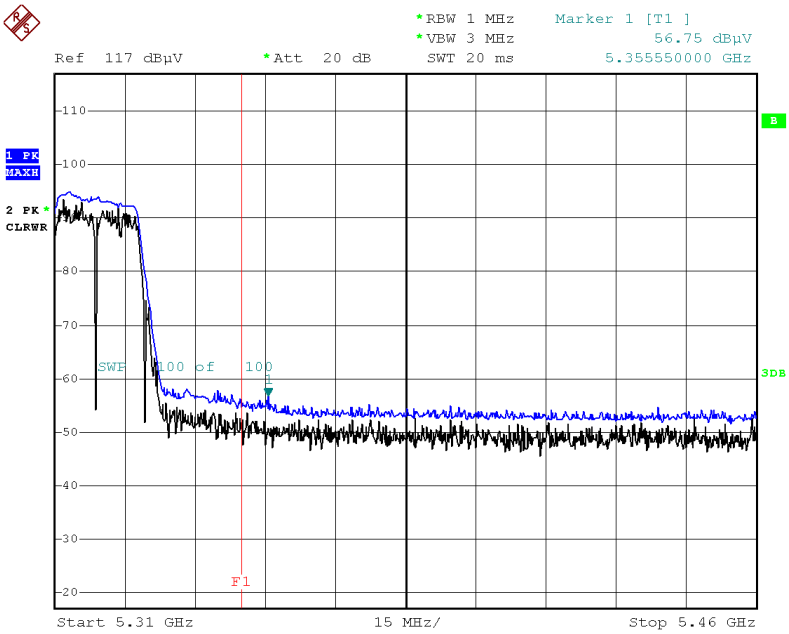
U-NII Band Edge (802.11n_40MHz MCS0/ch.62)

Radiated Restricted Band Edges plot – Average Reading



Date: 14.MAR.2019 14:43:41

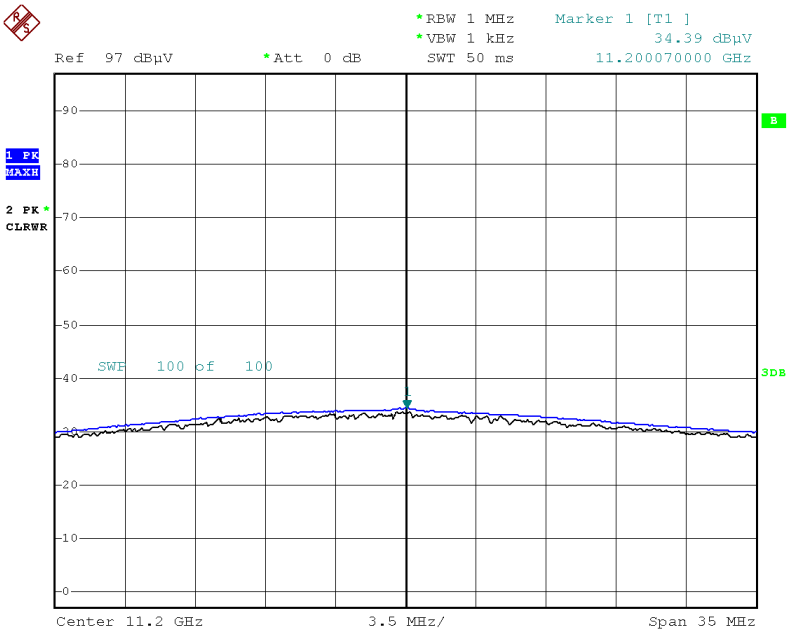
Radiated Restricted Band Edges plot – Peak Reading



Date: 14.MAR.2019 14:42:26

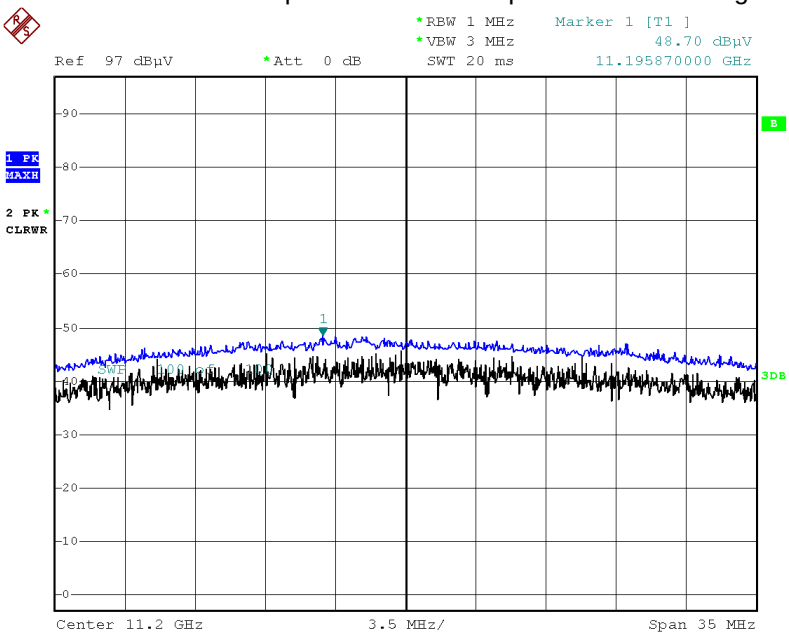
U-NII R.S.E 2nd Harmonic (802.11n_20MHz MCS0/ch.120)

Radiated Spurious Emissions plot – Average Reading



Date: 15.MAR.2019 09:09:49

Radiated Spurious Emissions plot – Peak Reading



Date: 15.MAR.2019 08:52:04

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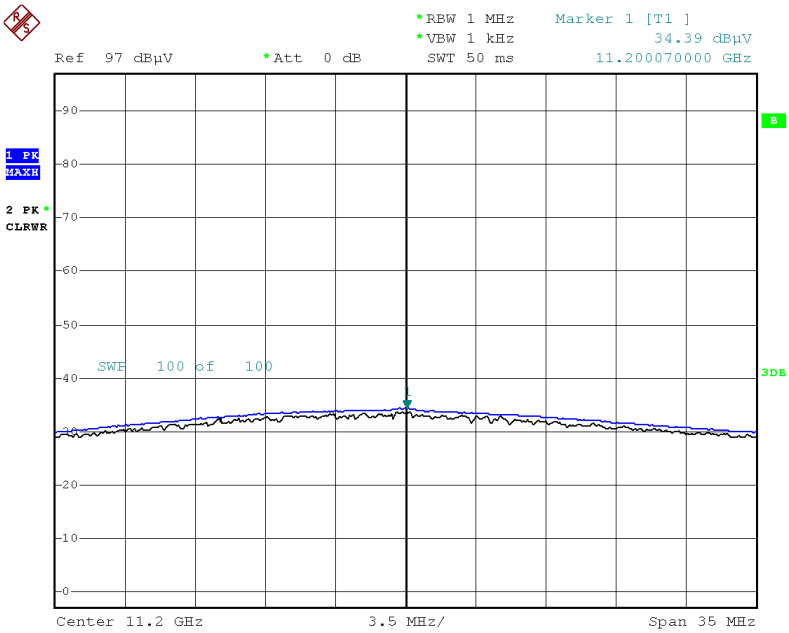
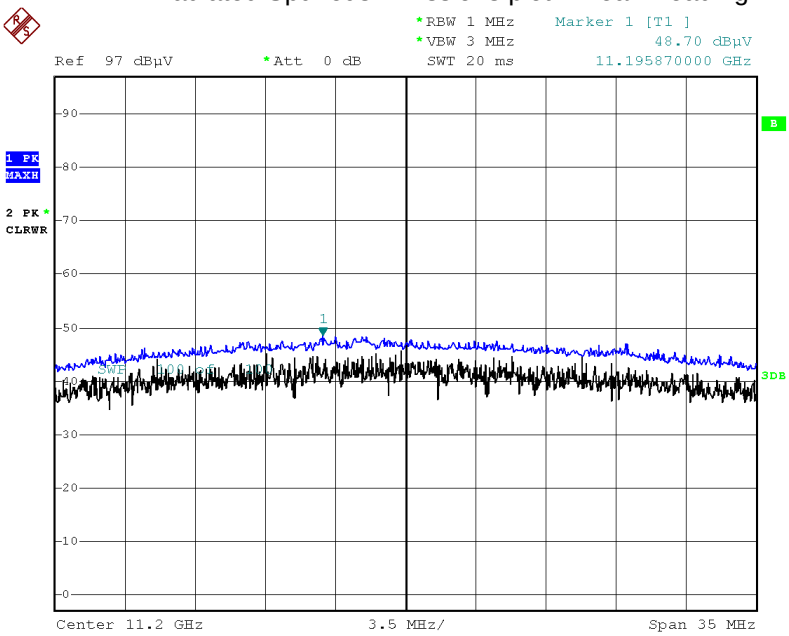
U-NII R.S.E 3rd Harmonic (802.11n_20MHz MCS0/ch.165)

Radiated Spurious Emissions plot – Average Reading



Date: 15.MAR.2019 09:09:49

Radiated Spurious Emissions plot – Peak Reading



Date: 15.MAR.2019 08:52:04

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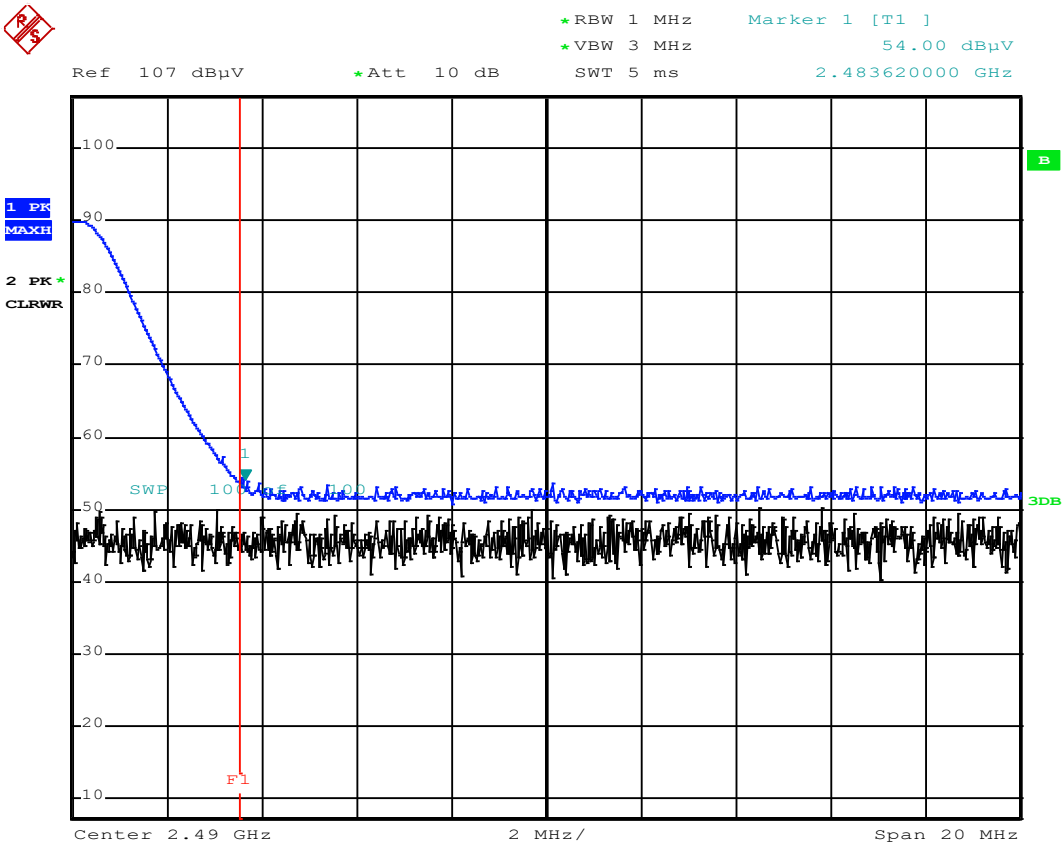
ANT+ Band Edge (Period 128(0dBm)/ch.78)

Radiated Restricted Band Edges plot – Peak Reading



Date: 14.MAR.2019 14:09:20

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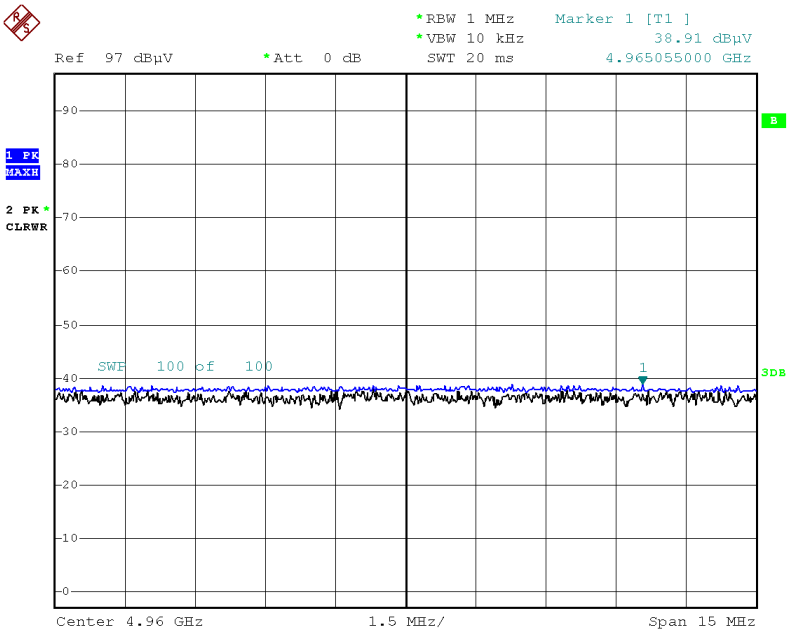
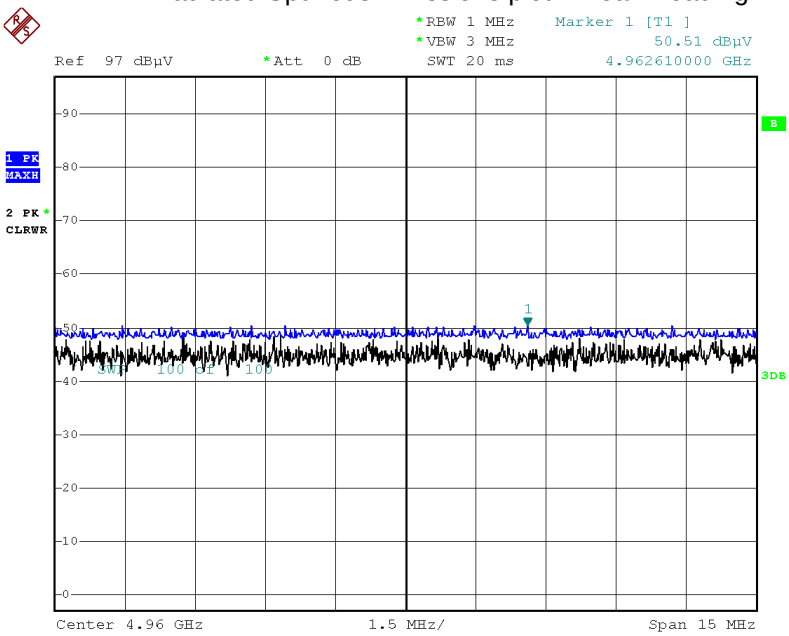
ANT+ R.S.E 2nd Harmonic(Period 128(0dBm)/ch.78)

Radiated Spurious Emissions plot – Average Reading



Date: 15.MAR.2019 11:15:51

Radiated Spurious Emissions plot – Peak Reading



Date: 15.MAR.2019 11:08:30

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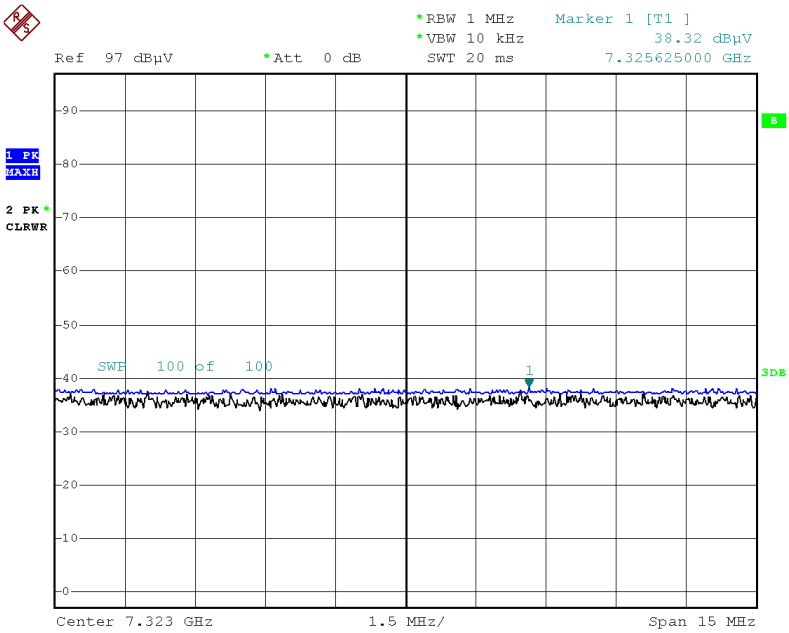
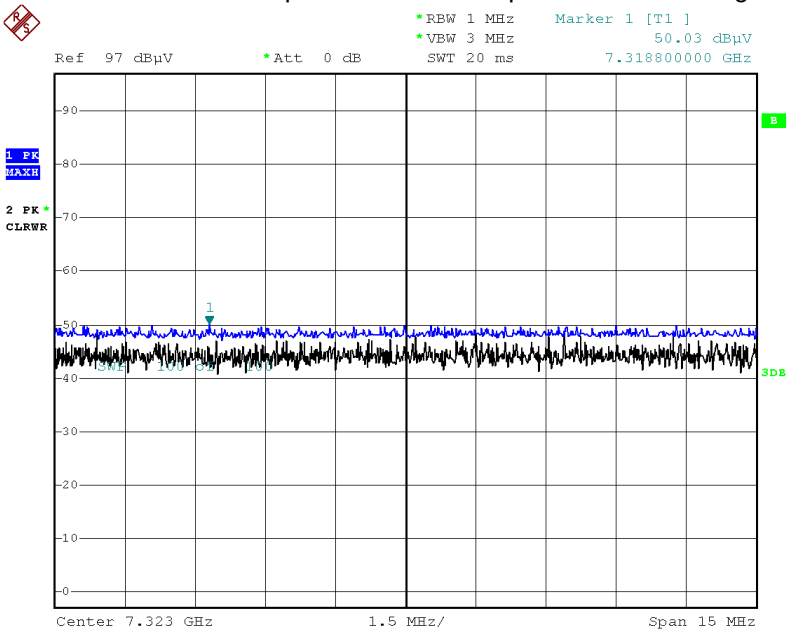
ANT+ R.S.E 3rd Harmonic(Period 128(0dBm)/ch.39)

Radiated Spurious Emissions plot – Average Reading



Date: 15.MAR.2019 11:15:05

Radiated Spurious Emissions plot – Peak Reading



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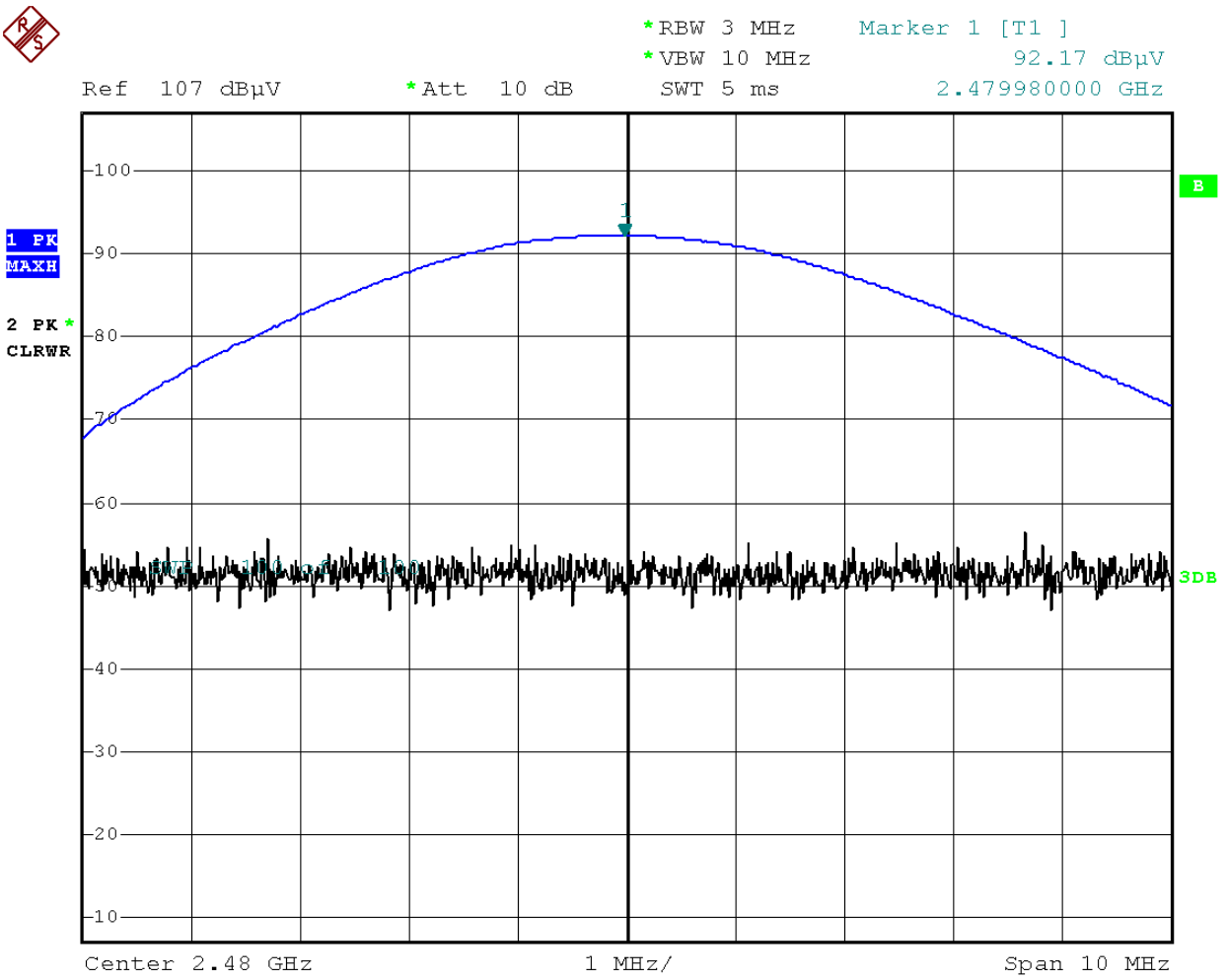
ANT+ Field Strength (Period 128(0dBm)/ch.78)



Date: 14.MAR.2019 14:00:03