Annex 1: Measurement diagrams to
T E S T R E P O R T
No.: 17-1-0065901T58

According to:
FCC Regulations
Part 15.205
Part 15.209
Part 15.247

IC-Regulations
RSS-Gen, Issue 4
RSS-247, Issue 2

for

Bosch Car Multimedia GmbH

AIVIP32R0

FCC-ID: YBN-AIVIP32R0
IC: 9595A-AIVIP32R0
PMN: AIVIP32R0
HVIN: AIVIP32R0
FVIN: X128

Laboratory Accreditation and Listings			
DAkkS Deutsche Akkreditierungsstelle D-PL-12047-01-01	MRA US-EU 0003	Industry Canada Reg. No.: 3462D-2 Reg. No.: 3462D-3	Voluntary Controls for Electromagnetic Emissions Reg. No.: R-2666 C-2914, T-1967, G-301
WiFi ALLIANCE AUTHORIZED RF LABORATORY	ctia Authorized™ Test Lab Lab Code: 20011130-00		

accredited according to DIN EN ISO/IEC 17025

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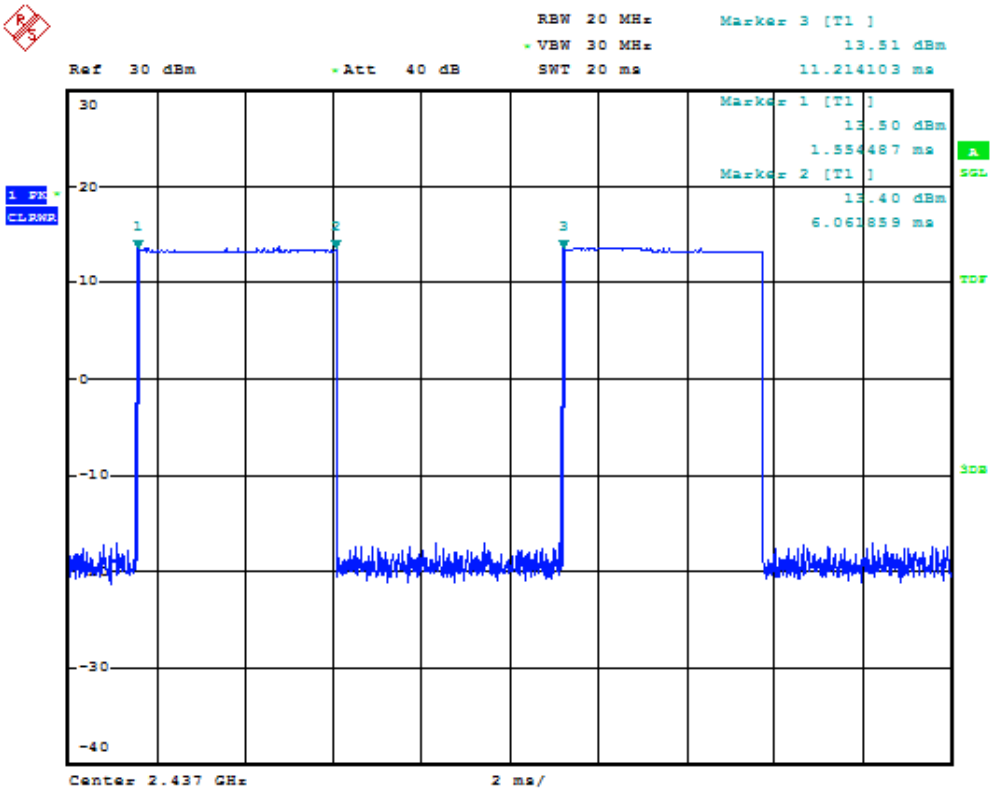
1. Conducted RF-Measurements

1.1. RF output Power

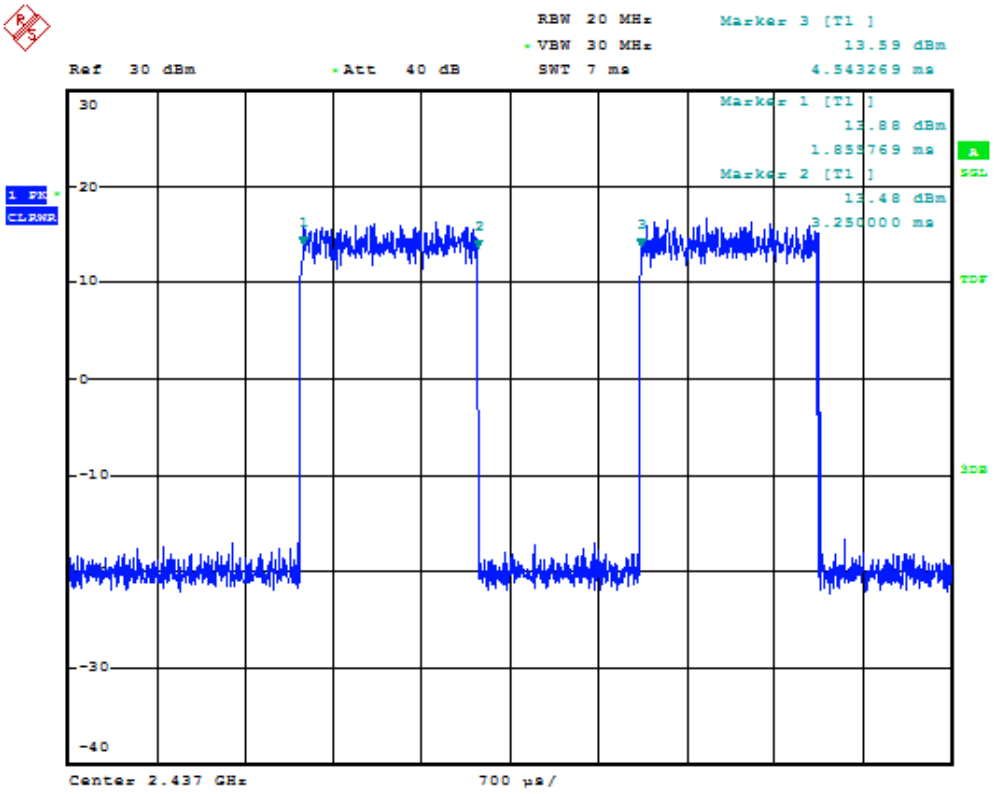
WLAN 2.4 GHz Conducted Peak Power Measurements				
EUT Information	EUT Name	A-IVI	Hardware Version	1
	Manufacturer	Robert Bosch Car Multimedia GmbH	Software Version	X128
	Serial Number	259157FH0A	Antenna Gain	5.3 dBi

WLAN 2.4GHz b-Mode		Channel No. (Frequency MHz)			b-Mode	Power Units
Data rate	Modulation	1 (2412)	6 (2437)	11 (2462)	Maximum Value	
1MBit		15,39	15,08	15,15	15,39	dBm
2Mbit		15,31	15,07	15,12		
5.5Mbit		14,84	14,54	14,59		
11MBit		14,88	15,00	14,66		
WLAN 2.4 GHz Conducted Peak Power Limits					30.0	dBm
WLAN 2.4GHz g-Mode		Channel No. (Frequency MHz)			g-Mode	Power Units
Data rate	Modulation	1 (2412)	6 (2437)	11 (2462)	Maximum Value	
6Mbit		20,81	20,3	20,14	21,19	dBm
9Mbit		21,14	20,27	21,19		
12Mbit		20,34	20,41	20,01		
18Mbit		20,15	20,05	19,94		
24Mbit		20,84	20,64	20,79		
36Mbit		20,26	20,49	20,11		
48Mbit		20,43	20,94	20,66		
54MBit		19,94	19,88	19,78		
WLAN 2.4 GHz Conducted Peak Power Limits					30.0	dBm
WLAN 2.4GHz n-Mode HT20		Channel No. (Frequency MHz)			n-Mode HT20	Power Units
Data rate	Modulation	1 (2412)	6 (2437)	11 (2462)	Maximum Value	
MCS0 -6.5Mbps	BPSK	20,22	20,74	20,57	21,07	dBm
MCS1 - 13Mbps	QPSK	20,91	20,71	20,94		
MCS2 - 19.5Mbps	QPSK	21,07	20,7	20,59		
MCS3 - 26Mbps	QAM16	20,33	19,67	20,04		
MCS4 -39Mbps	QAM16	20,34	20,07	20,06		
MCS5 - 52MBps	QAM64	20,71	20,4	20,34		
MCS6 - 58.5MBps	QAM64	20,33	20,52	19,96		
MCS7 - 65MBps	QAM64	20,32	20,49	20,13		
WLAN 2.4 GHz Conducted Peak Power Limits					30.0	dBm
WLAN 2.4GHz n-Mode HT40		Channel No. (Frequency MHz)			n-Mode HT40	Power Units
Data rate	Modulation	3 (2422)	9 (2452)		Maximum Value	
MCS0 -6.5Mbps	BPSK	21,26	21,14		21,45	dBm
MCS1 - 13Mbps	QPSK	20,74	20,07			
MCS2 - 19.5Mbps	QPSK	20,74	20,58			
MCS3 - 26Mbps	QAM16	20,68	20,78			
MCS4 -39Mbps	QAM16	20,98	20,85			
MCS5 - 52MBps	QAM64	19,75	19,68			
MCS6 - 58.5MBps	QAM64	20,38	20,16			
MCS7 - 65MBps	QAM64	21,45	20,17			
WLAN 2.4 GHz Conducted Peak Power Limits					30.0	dBm

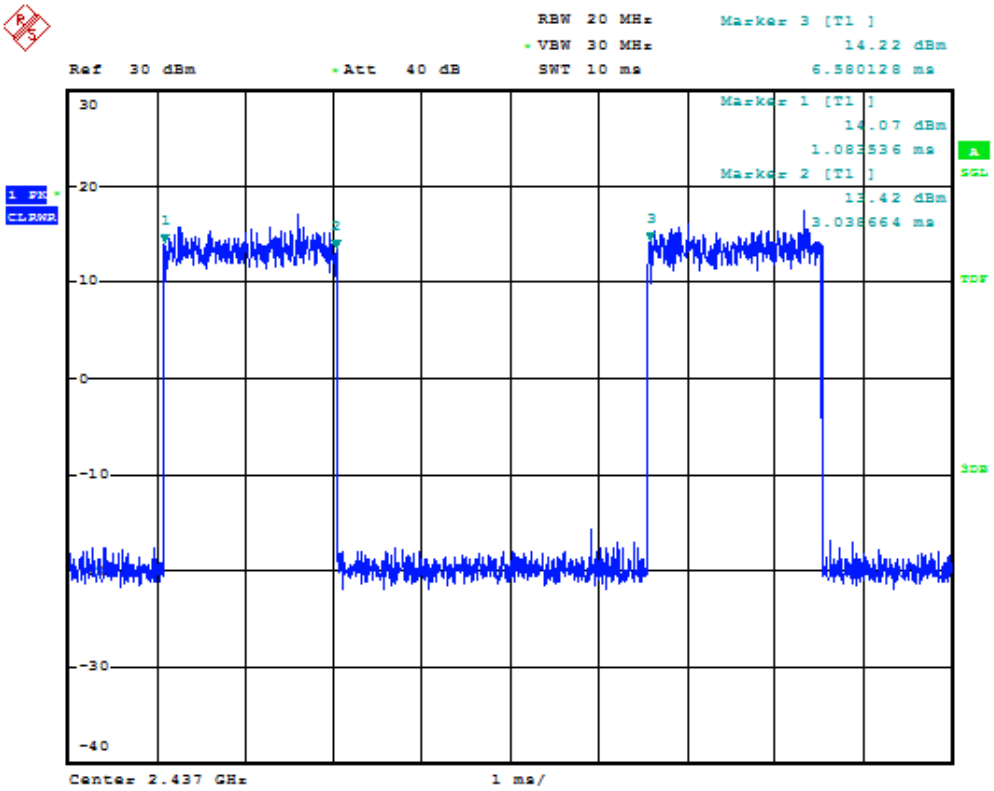
1.2. Duty Cycle Measurements



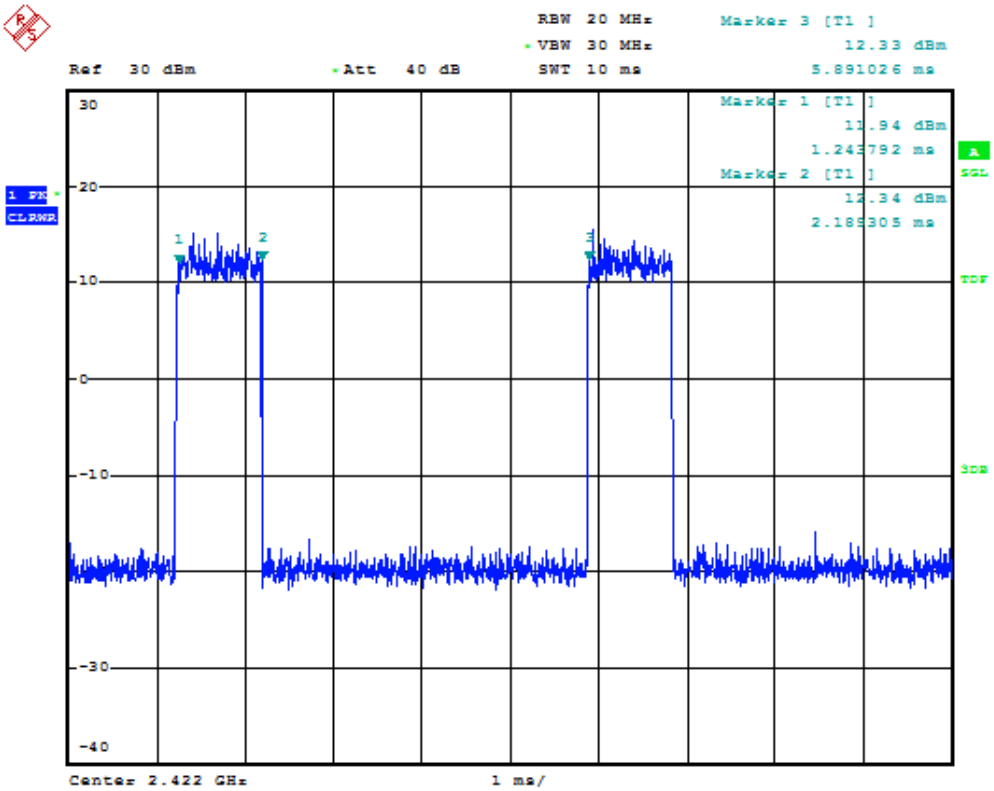
Plot 1: **Duty Cycle-WLAN 2.4 GHz-b Mode (SISO) | 20 MHz | 1 Mbit | Ch 06 (2437 MHz)**



Plot 2: **Duty Cycle-WLAN 2.4 GHz-g Mode (SISO) | 20 MHz | 9Mbit | Ch 06 (2437 MHz)**



Plot 3: **Duty Cycle-WLAN 2.4 GHz-n Mode (SISO) | 20 MHz | MCS0 | Ch 06 (2437 MHz)**



Plot 4: **Duty Cycle-WLAN 2.4 GHz-n Mode (SISO) | 40 MHz | MCS0 | Ch 03 (2420 MHz)**

1.3. Power Spectral Density Measurements (b+g+n Mode)

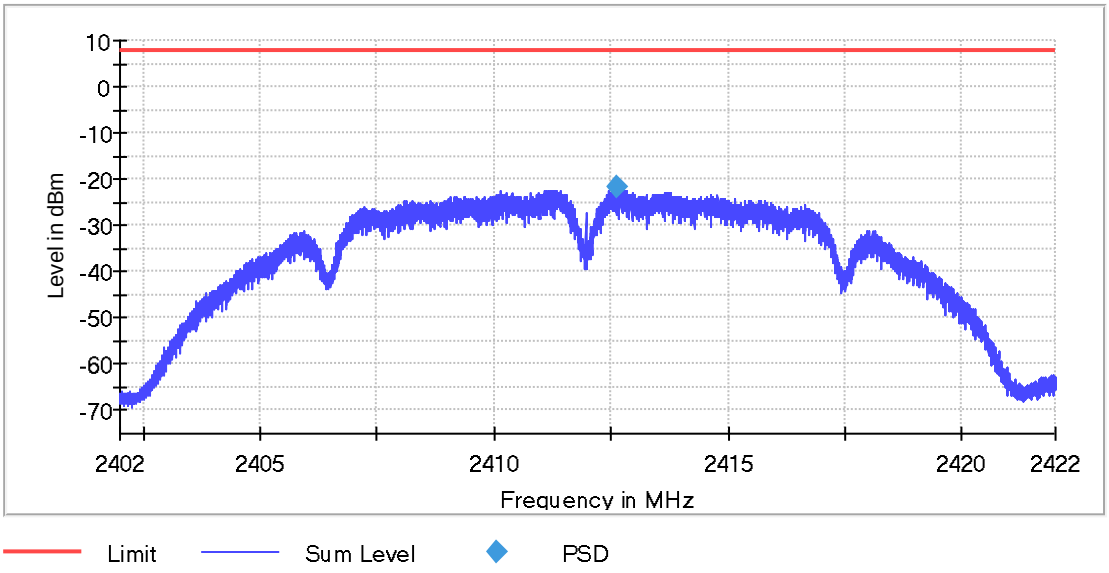
1.3.1. b-Mode |20 MHz| 1Mbps| Channel 1 (2412 MHz)

Power Spectral Density (2412 MHz; worst case (15,4 dBm); 20 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance 04 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2412.000000	2412.640602	-21.541	8.0	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40200 GHz	2.40200 GHz
Stop Frequency	2.42200 GHz	2.42200 GHz
Span	20.000 MHz	20.000 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	13301	~ 13333
Sweeptime	450.000 s	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	35.000 dB	AUTO
Detector	RMS	RMS
SweepCount	1	1
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

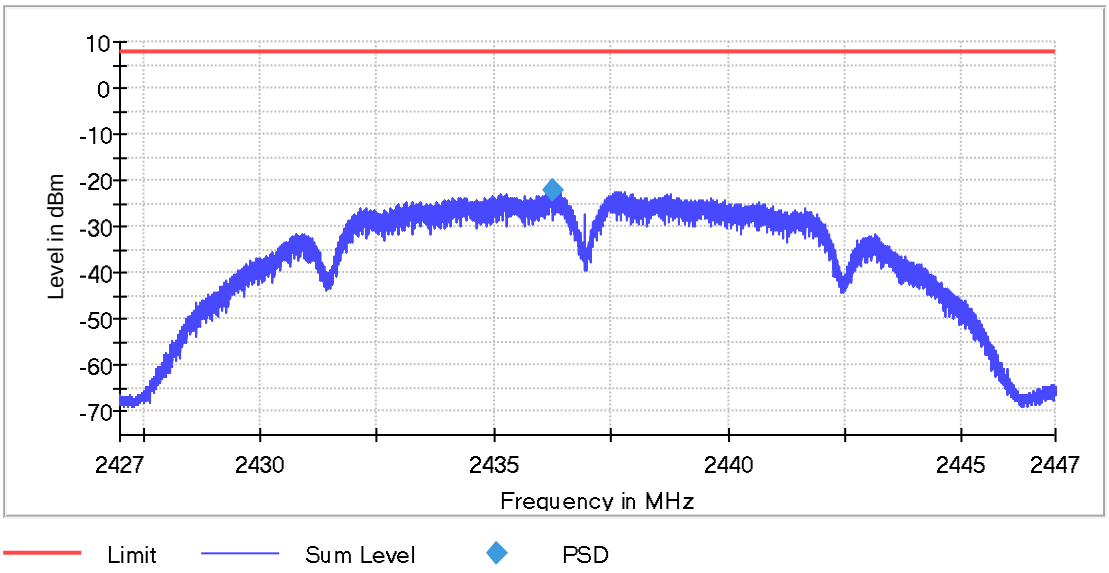
1.3.2. b-Mode |20 MHz| 1Mbps| Channel 06 (2437 MHz)

Power Spectral Density (2437 MHz; worst case (15,4 dBm); 20 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance 04 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2437.000000	2436.270677	-22.133	8.0	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.42700 GHz	2.42700 GHz
Stop Frequency	2.44700 GHz	2.44700 GHz
Span	20.000 MHz	20.000 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	13301	~ 13333
Sweeptime	450.000 s	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	35.000 dB	AUTO
Detector	RMS	RMS
SweepCount	1	1
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

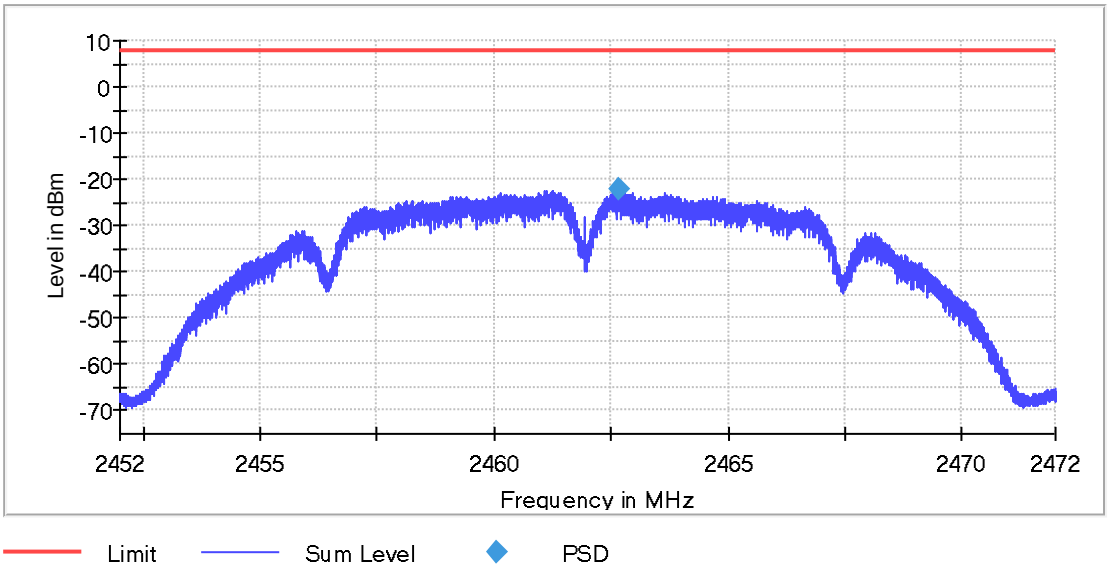
1.3.3. b-Mode |20 MHz| 1Mbps| Channel 11 (2462 MHz)

Power Spectral Density (2462 MHz; worst case (15,4 dBm); 20 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance 04 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2462.000000	2462.667669	-22.288	8.0	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.45200 GHz	2.45200 GHz
Stop Frequency	2.47200 GHz	2.47200 GHz
Span	20.000 MHz	20.000 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	13301	~ 13333
Sweeptime	450.000 s	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	35.000 dB	AUTO
Detector	RMS	RMS
SweepCount	1	1
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

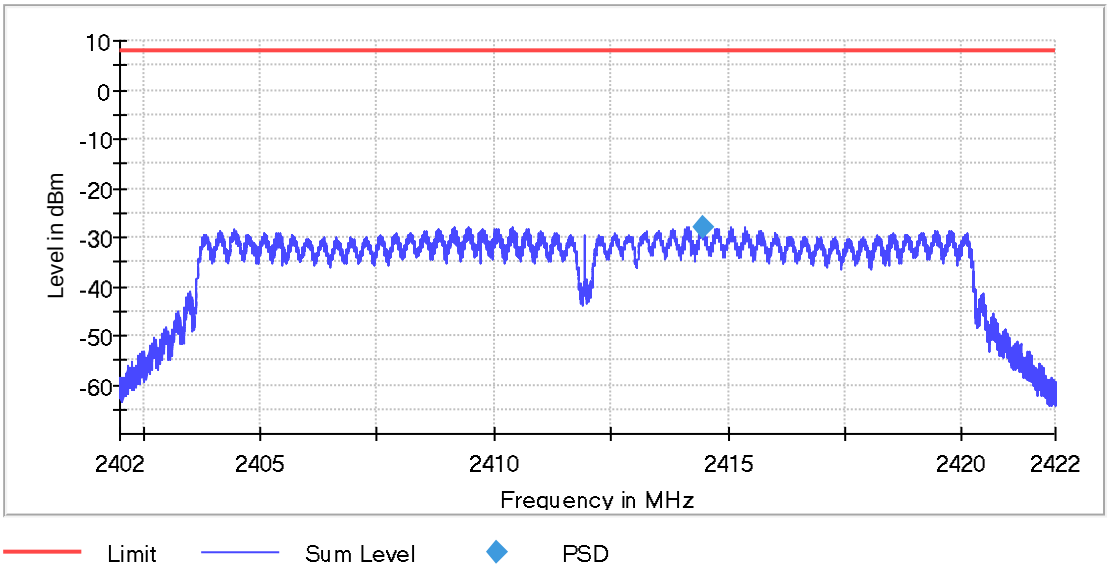
1.3.4. g Mode (SISO) | 20 MHz | 9Mbps | Ch 01 (2412 MHz)

Power Spectral Density (2412 MHz; 21,200 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance 04 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2412.000000	2414.448120	-27.868	8.0	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40200 GHz	2.40200 GHz
Stop Frequency	2.42200 GHz	2.42200 GHz
Span	20.000 MHz	20.000 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	13301	~ 13333
Sweeptime	450.000 s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	25.000 dB	AUTO
Detector	RMS	RMS
SweepCount	1	1
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

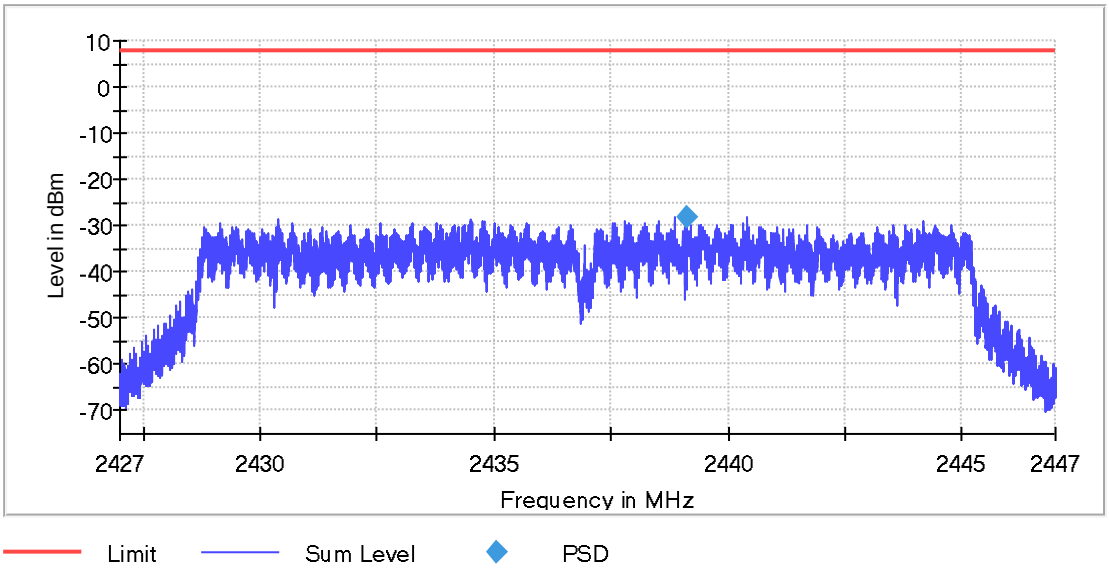
1.3.5. g Mode (SISO) | 20 MHz | 9Mbps | Ch 06 (2437 MHz)

Power Spectral Density (2437 MHz; 21,200 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance 04 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2437.000000	2439.135338	-28.051	8.0	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.42700 GHz	2.42700 GHz
Stop Frequency	2.44700 GHz	2.44700 GHz
Span	20.000 MHz	20.000 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	13301	~ 13333
Sweeptime	450.000 s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	25.000 dB	AUTO
Detector	RMS	RMS
SweepCount	1	1
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

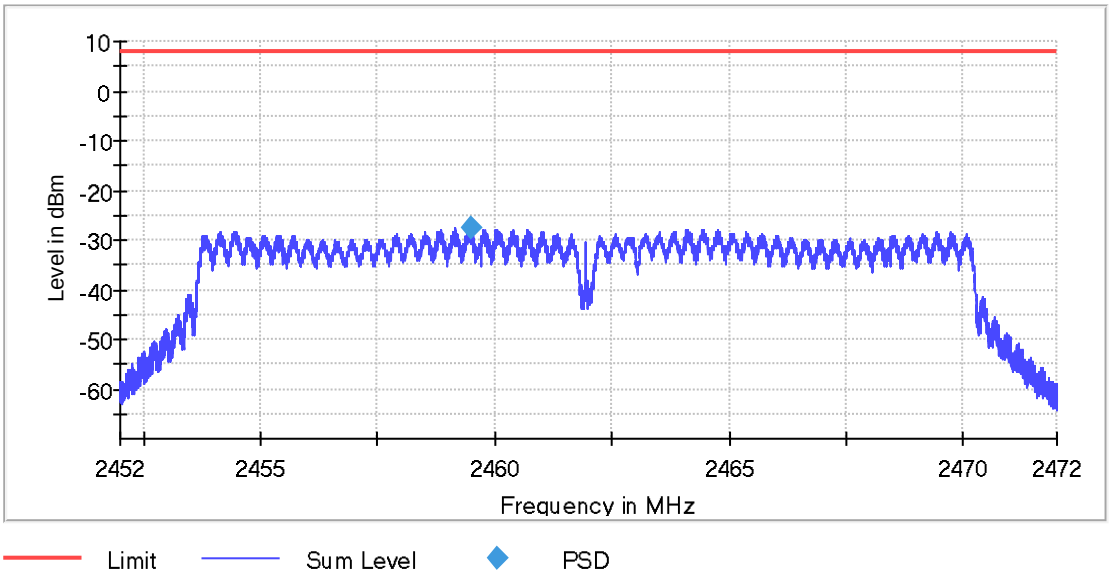
1.3.6. g Mode (SISO) | 20 MHz | 9Mbps | Ch 11 (2462 MHz)

Power Spectral Density (2462 MHz; 21,200 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance 04 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2462.000000	2459.500752	-27.644	8.0	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.45200 GHz	2.45200 GHz
Stop Frequency	2.47200 GHz	2.47200 GHz
Span	20.000 MHz	20.000 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	13301	~ 13333
Sweeptime	450.000 s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	25.000 dB	AUTO
Detector	RMS	RMS
SweepCount	1	1
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

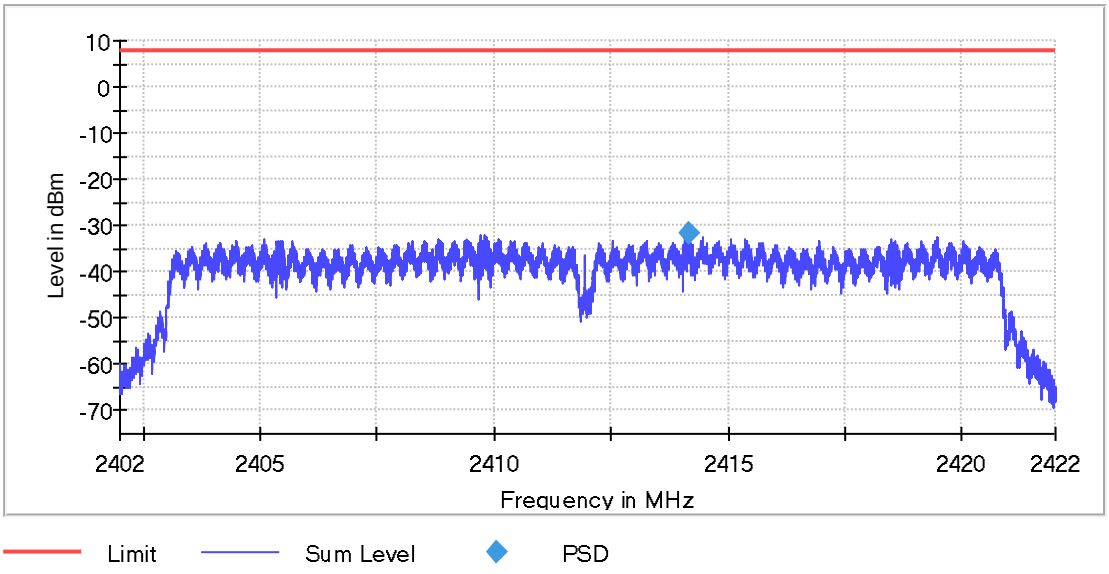
1.3.7. n Mode (SISO) | 20 MHz | MCS0 | Ch 01 (2412 MHz)

Power Spectral Density (2412 MHz; 21,100 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance 04 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2412.000000	2414.148872	-31.796	8.0	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40200 GHz	2.40200 GHz
Stop Frequency	2.42200 GHz	2.42200 GHz
Span	20.000 MHz	20.000 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	13301	~ 13333
Sweeptime	450.000 s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	25.000 dB	AUTO
Detector	RMS	RMS
SweepCount	1	1
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

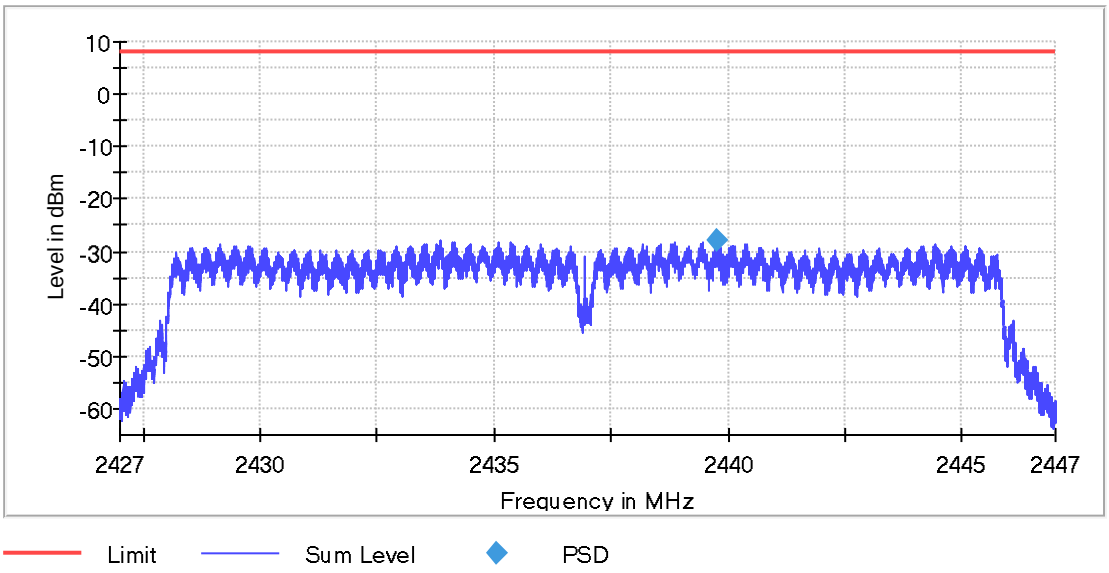
1.3.8. n Mode (SISO) | 20 MHz | MCS0 | Ch 06 (2437 MHz)

Power Spectral Density (2437 MHz; 21,100 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance 04 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2437.000000	2439.750376	-27.859	8.0	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.42700 GHz	2.42700 GHz
Stop Frequency	2.44700 GHz	2.44700 GHz
Span	20.000 MHz	20.000 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	13301	~ 13333
Sweeptime	450.000 s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	25.000 dB	AUTO
Detector	RMS	RMS
SweepCount	1	1
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

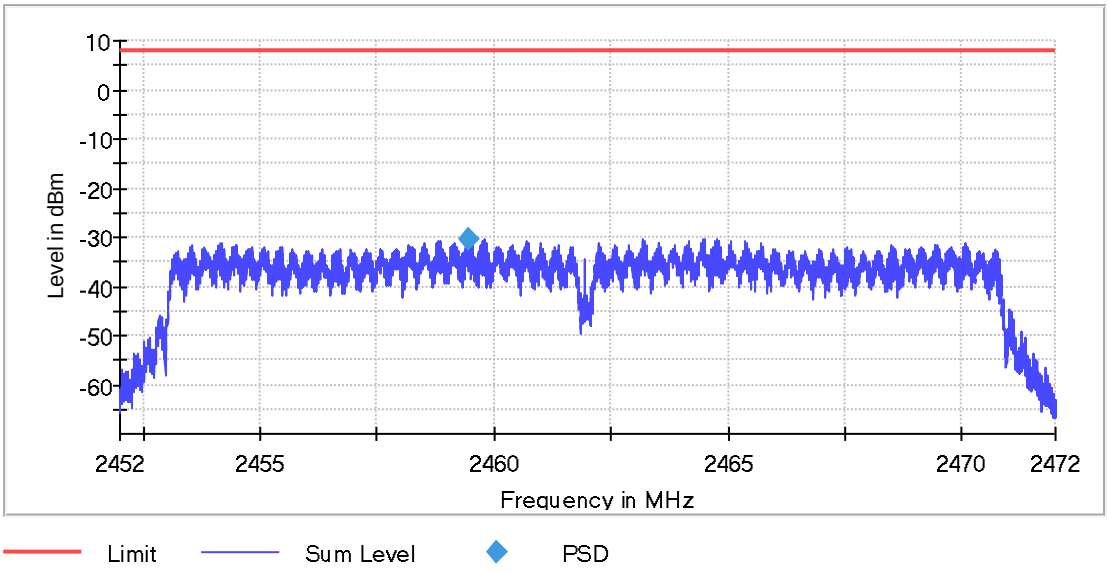
1.3.9. n Mode (SISO) | 20 MHz | MCS0 | Ch 11 (2462 MHz)

Power Spectral Density (2462 MHz; 21,100 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance 04 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2462.000000	2459.436090	-30.341	8.0	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.45200 GHz	2.45200 GHz
Stop Frequency	2.47200 GHz	2.47200 GHz
Span	20.000 MHz	20.000 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	13301	~ 13333
Sweeptime	450.000 s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	25.000 dB	AUTO
Detector	RMS	RMS
SweepCount	1	1
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

1.3.10. n Mode (SISO) | 40 MHz | MCS7 | Ch 03 (2420 MHz)

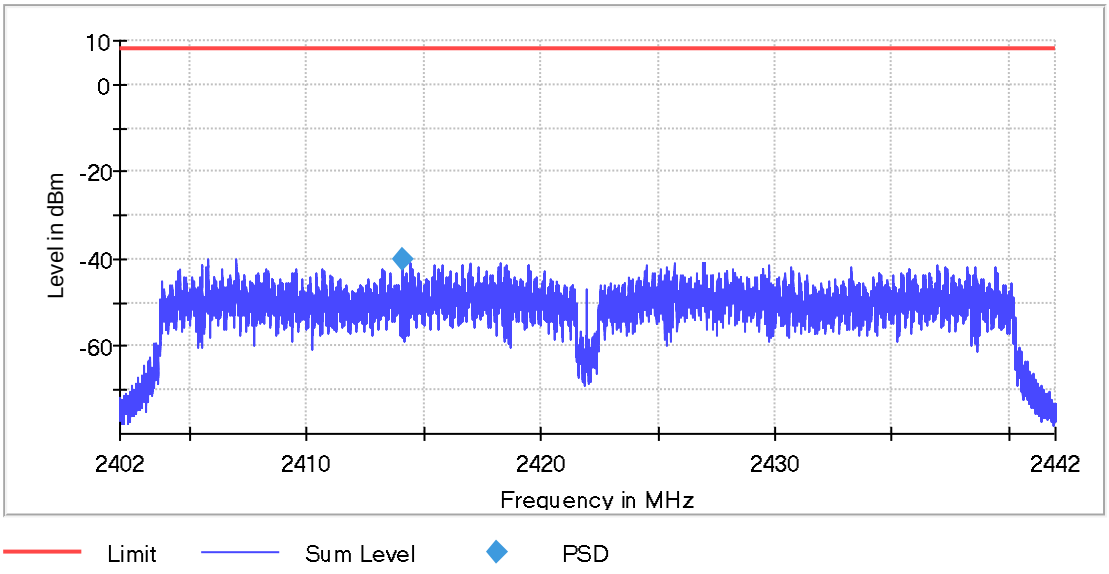
Power Spectral Density (2422 MHz; 21,500 dBm; 40 MHz)

Max level of analyzer (-39.9 dBm) more than 56.0 dB below the nominal power level.

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance 04 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2422.000000	2414.112360	-39.865	8.0	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40200 GHz	2.40200 GHz
Stop Frequency	2.44200 GHz	2.44200 GHz
Span	40.000 MHz	40.000 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	26701	~ 26667
Sweeptime	900.000 s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	25.000 dB	AUTO
Detector	RMS	RMS
SweepCount	1	1
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

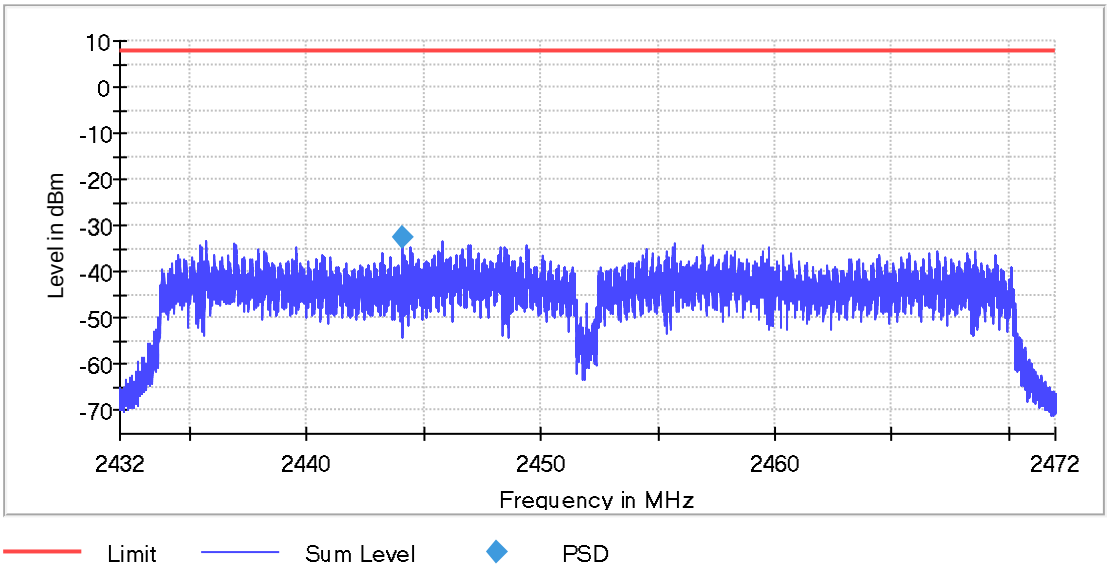
1.3.11. n Mode (SISO) | 40 MHz | MCS0 | Ch 9 (2452 MHz)

Power Spectral Density (2452 MHz; 21,500 dBm; 40 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance 04 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2452.000000	2444.089888	-32.710	8.0	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.43200 GHz	2.43200 GHz
Stop Frequency	2.47200 GHz	2.47200 GHz
Span	40.000 MHz	40.000 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	26701	~ 26667
Sweeptime	900.000 s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	25.000 dB	AUTO
Detector	RMS	RMS
SweepCount	1	1
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

1.4. Minimum Emission Bandwith 6 dB

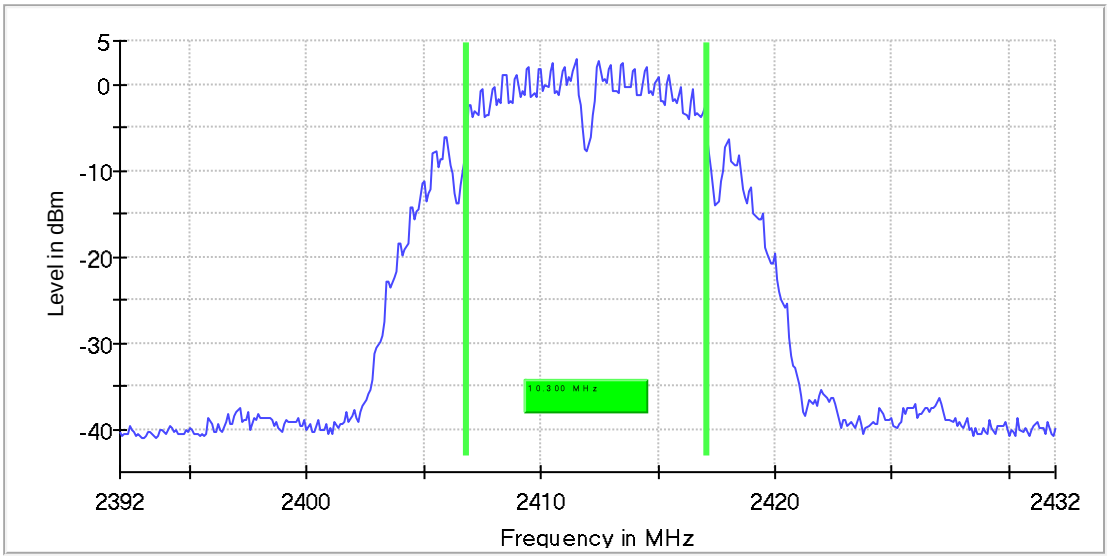
1.4.1. b-Mode |20 MHz| 1Mbps| Channel 1 (2412 MHz)

Minimum Emission Bandwidth 6 dB (2412 MHz; worst case (15,4 dBm); 20 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance 04 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
2412.000000	10.300000	0.500000	---	2406.800000	2417.100000	2.9	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39200 GHz	2.39200 GHz
Stop Frequency	2.43200 GHz	2.43200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	401	~ 400
Sweeptime	15.000 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	35.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	28 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.00 dB	0.50 dB

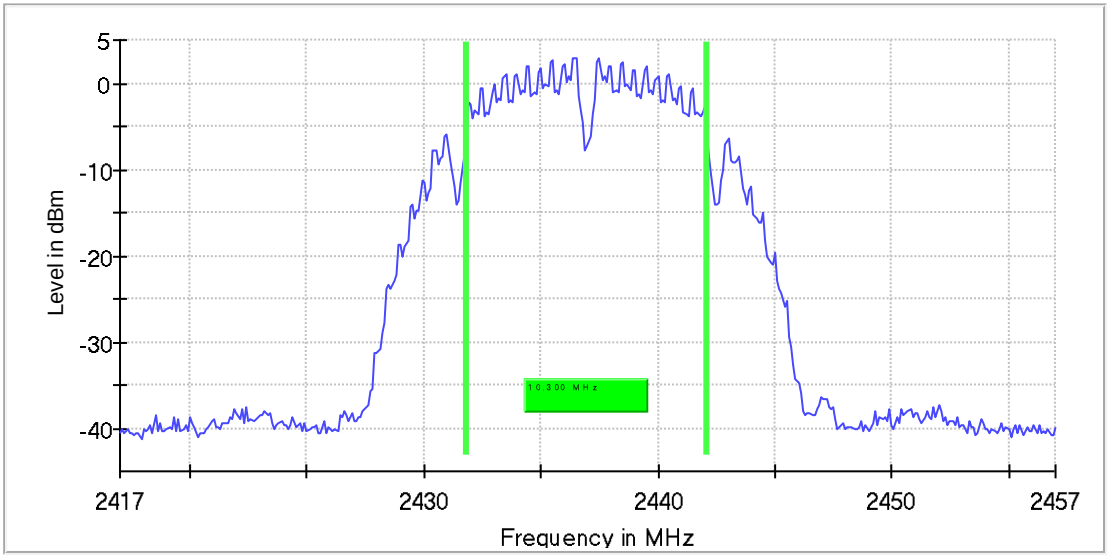
1.4.2. b-Mode |20 MHz| 1Mbps| Channel 06 (2437 MHz)

Minimum Emission Bandwidth 6 dB (2437 MHz; worst case (15,4 dBm); 20 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance 04 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
2437.000000	10.300000	0.500000	---	2431.800000	2442.100000	2.9	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.41700 GHz	2.41700 GHz
Stop Frequency	2.45700 GHz	2.45700 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	401	~ 400
Sweeptime	15.000 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	35.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	37 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.04 dB	0.50 dB

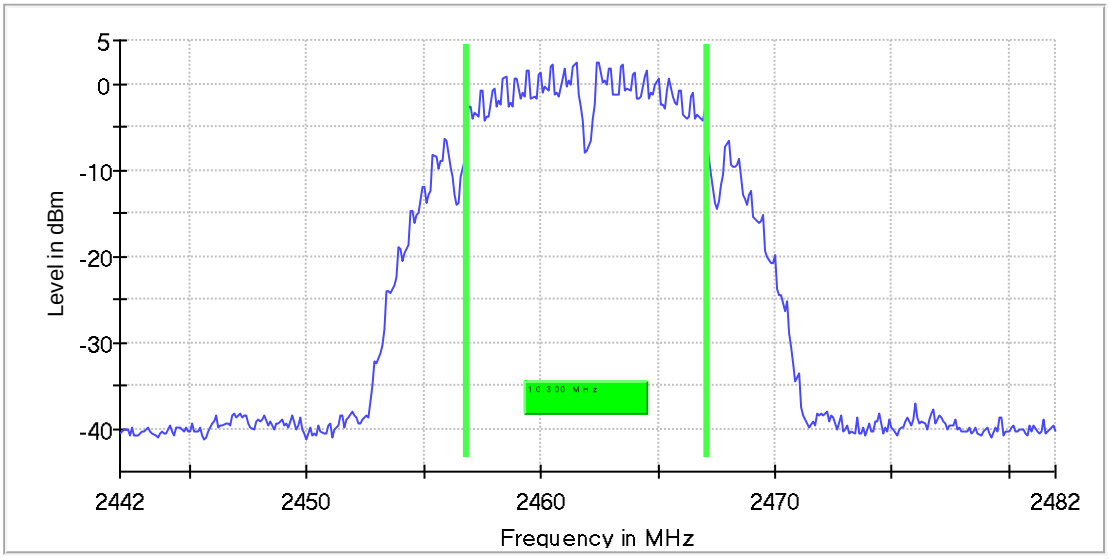
1.4.3. b-Mode |20 MHz| 1Mbps| Channel 11 (2462 MHz)

Minimum Emission Bandwidth 6 dB (2462 MHz; worst case (15,4 dBm); 20 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance 04 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
2462.000000	10.300000	0.500000	---	2456.800000	2467.100000	2.5	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44200 GHz	2.44200 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	401	~ 400
Sweeptime	15.000 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	35.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	23 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.01 dB	0.50 dB

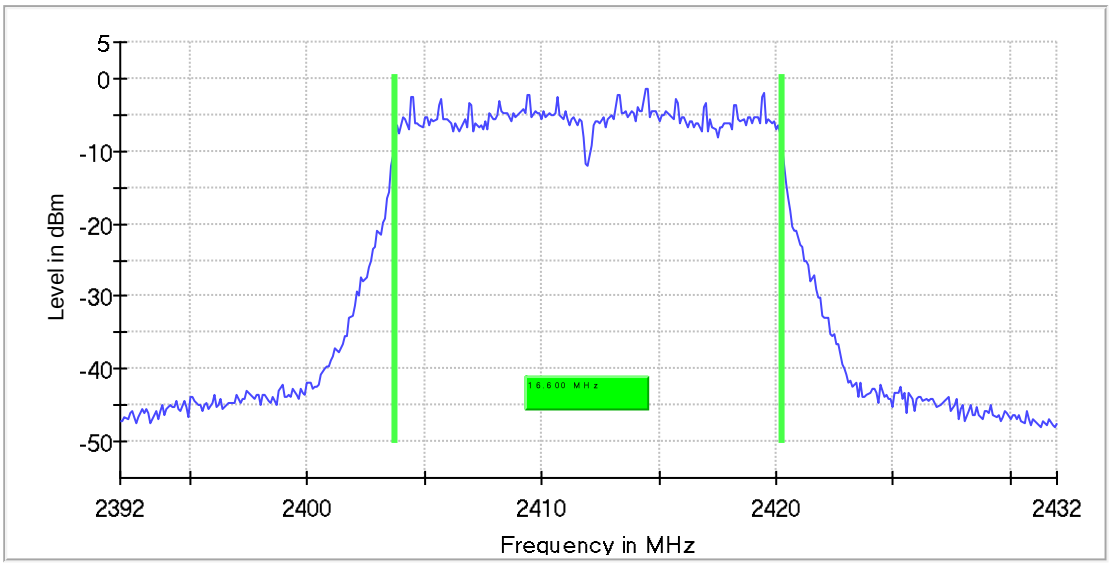
1.4.4. g Mode (SISO) | 20 MHz | 9Mbps | Ch 01 (2412 MHz)

Minimum Emission Bandwidth 6 dB (2412 MHz; 21,200 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance 04 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
2412.000000	16.600000	0.500000	---	2403.700000	2420.300000	-1.5	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39200 GHz	2.39200 GHz
Stop Frequency	2.43200 GHz	2.43200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	401	~ 400
Sweeptime	15.000 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	25.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	59 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.04 dB	0.50 dB

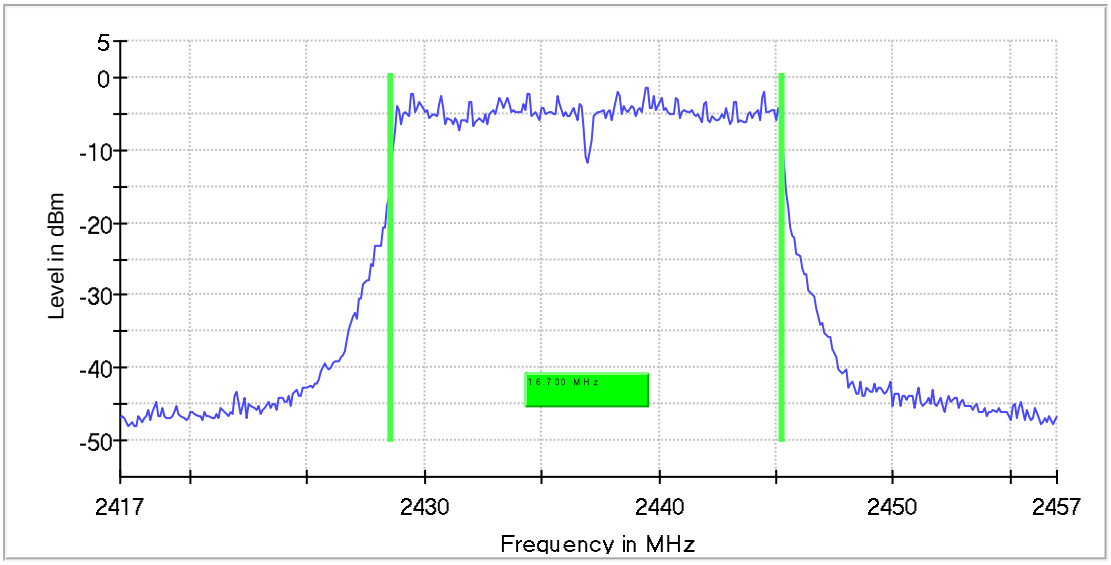
1.4.5. g Mode (SISO) | 20 MHz | 9Mbps | Ch 06 (2437 MHz)

Minimum Emission Bandwidth 6 dB (2437 MHz; 21,200 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance 04 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
2437.000000	16.700000	0.500000	---	2428.600000	2445.300000	-1.4	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.41700 GHz	2.41700 GHz
Stop Frequency	2.45700 GHz	2.45700 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	401	~ 400
Sweeptime	15.000 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	25.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	67 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.02 dB	0.50 dB

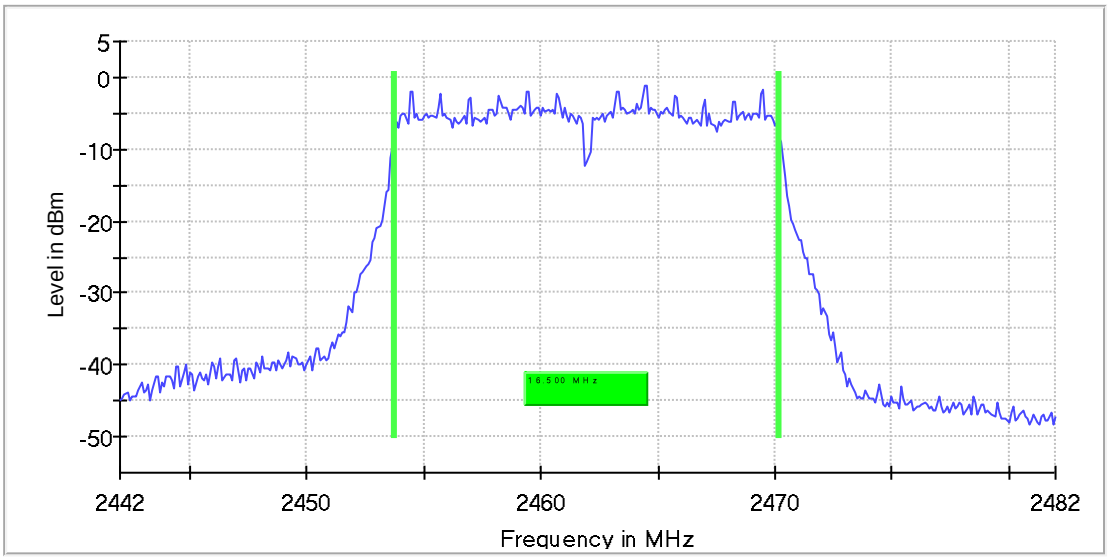
1.4.6. g Mode (SISO) | 20 MHz | 9Mbps | Ch 11 (2462 MHz)

Minimum Emission Bandwidth 6 dB (2462 MHz; 21,200 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance 04 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
2462.000000	16.500000	0.500000	---	2453.700000	2470.200000	-1.1	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44200 GHz	2.44200 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	401	~ 400
Sweeptime	15.000 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	25.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	55 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.26 dB	0.50 dB

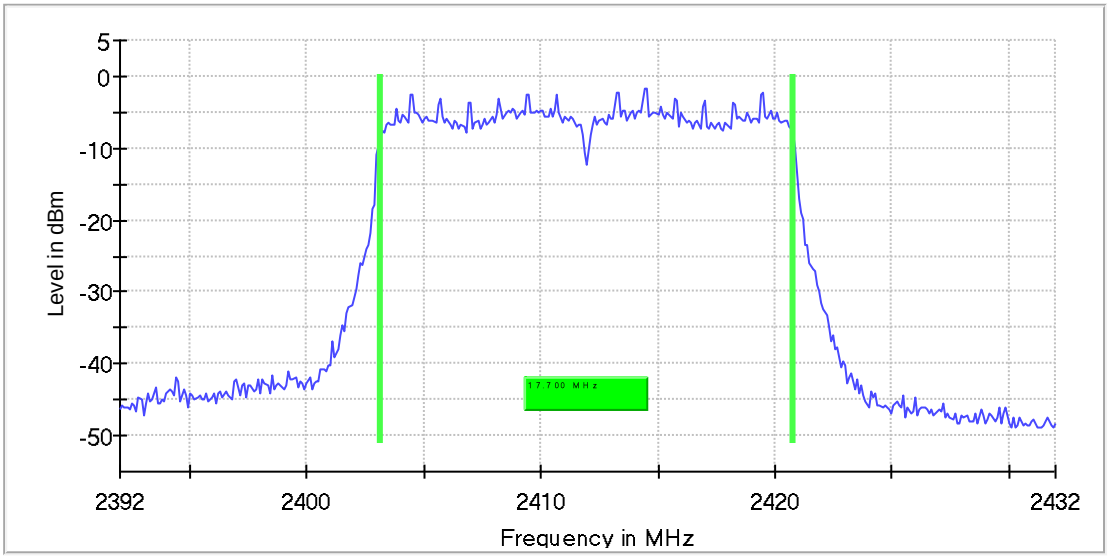
1.4.7. n Mode (SISO) | 20 MHz | MCS0 | Ch 01 (2412 MHz)

Minimum Emission Bandwidth 6 dB (2412 MHz; 21,100 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance 04 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
2412.000000	17.700000	0.500000	---	2403.100000	2420.800000	-1.6	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39200 GHz	2.39200 GHz
Stop Frequency	2.43200 GHz	2.43200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	401	~ 400
Sweeptime	15.000 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	25.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	60 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.41 dB	0.50 dB

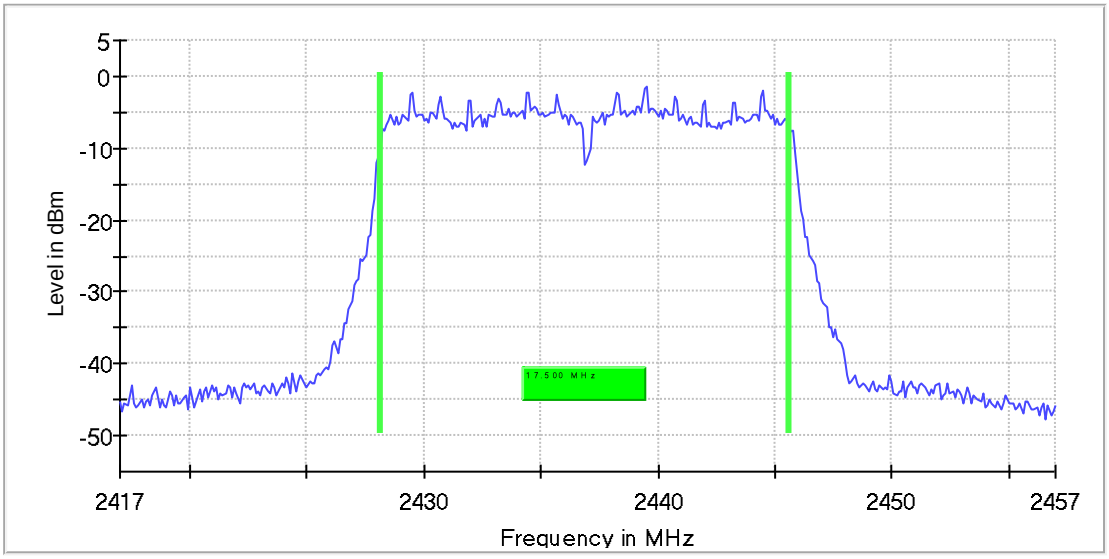
1.4.8. n Mode (SISO) | 20 MHz | MCS0 | Ch 06 (2437 MHz)

Minimum Emission Bandwidth 6 dB (2437 MHz; 21,100 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance 04 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
2437.000000	17.500000	0.500000	---	2428.100000	2445.600000	-1.4	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.41700 GHz	2.41700 GHz
Stop Frequency	2.45700 GHz	2.45700 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	401	~ 400
Sweeptime	15.000 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	25.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	62 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.21 dB	0.50 dB

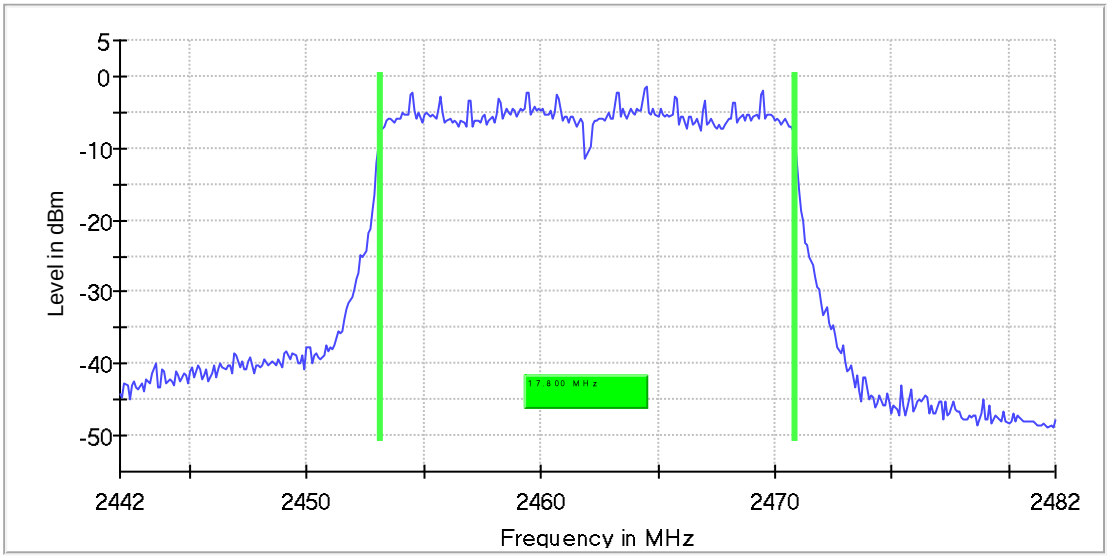
1.4.9. n Mode (SISO) | 20 MHz | MCS0 | Ch 11 (2462 MHz)

Minimum Emission Bandwidth 6 dB (2462 MHz; 21,100 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance 04 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
2462.000000	17.800000	0.500000	---	2453.100000	2470.900000	-1.5	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44200 GHz	2.44200 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	401	~ 400
Sweeptime	15.000 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	25.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	110 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.49 dB	0.50 dB

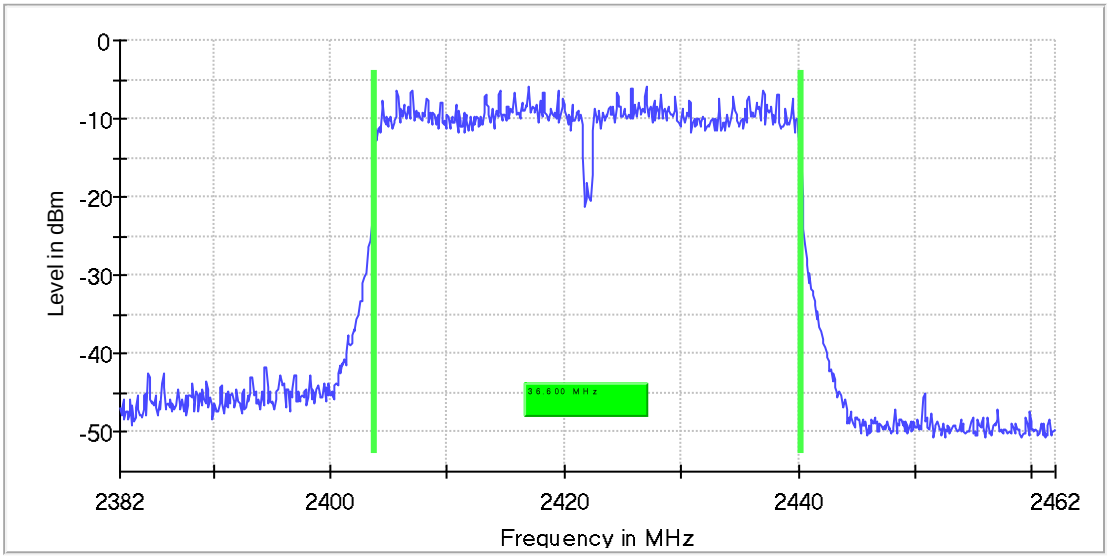
1.4.10. n Mode (SISO) | 40 MHz | MCS7 | Ch 03 (2420 MHz)

Minimum Emission Bandwidth 6 dB (2422 MHz; 21,500 dBm; 40 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance 04 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
2422.000000	36.600000	0.500000	---	2403.700000	2440.300000	-5.9	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.38200 GHz	2.38200 GHz
Stop Frequency	2.46200 GHz	2.46200 GHz
Span	80.000 MHz	80.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	801	~ 800
Sweeptime	10.000 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	25.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	150 / max. 150	max. 150
Stable	1 / 15	15
Max Stable Difference	0.33 dB	0.50 dB

1.4.11. n Mode (SISO) | 40 MHz | MCS0 | Ch 9 (2452 MHz)

Minimum Emission Bandwidth 6 dB (2452 MHz; 21,500 dBm; 40 MHz)

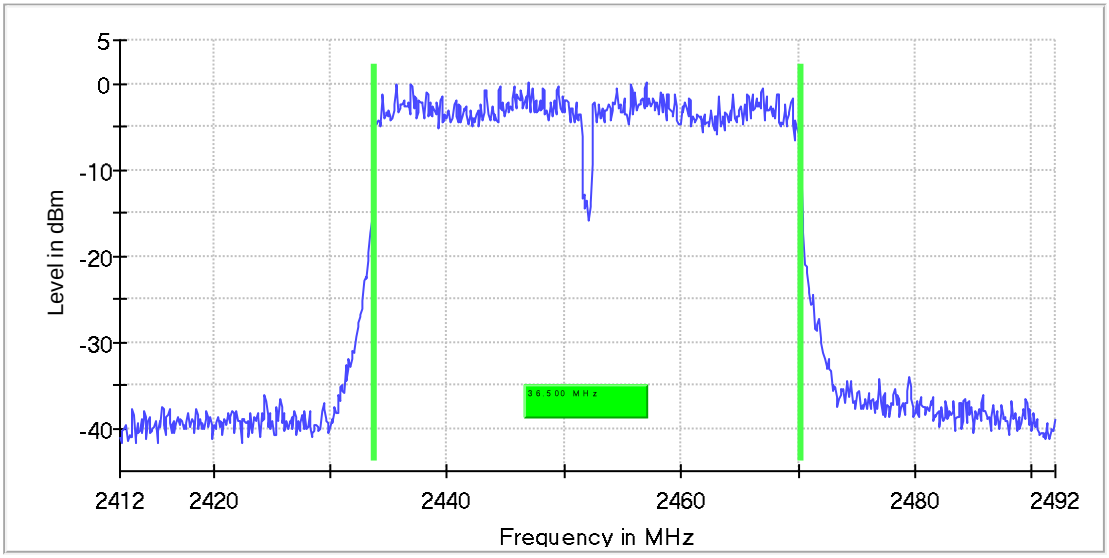
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance 04 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
2452.000000	36.500000	0.500000	---	2433.700000	2470.200000	0.1

(continuation of the "6 dB Bandwidth" table from column 7 ...)

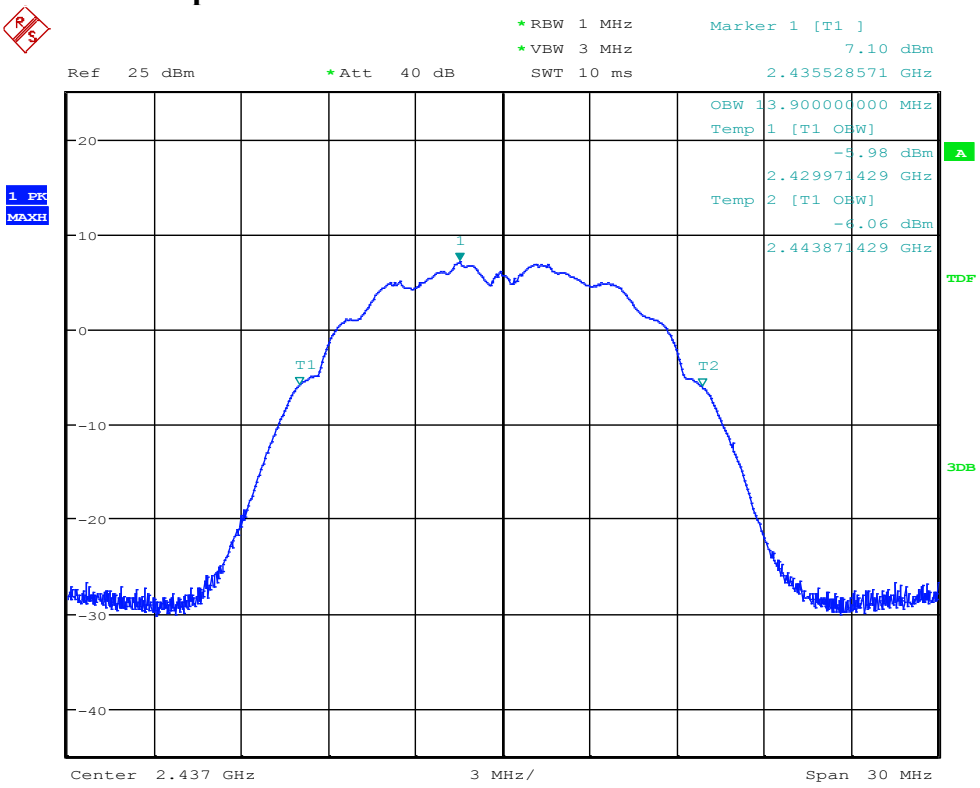
DUT Frequency (MHz)	Result
2452.000000	PASS



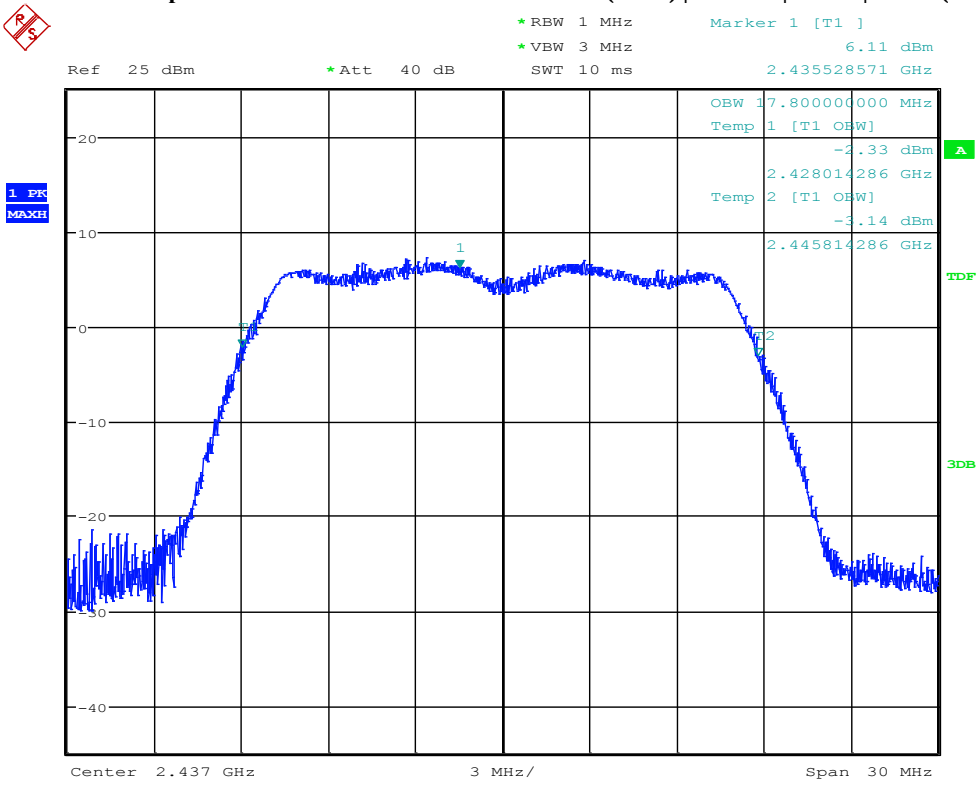
Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.41200 GHz	2.41200 GHz
Stop Frequency	2.49200 GHz	2.49200 GHz
Span	80.000 MHz	80.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	801	~ 800
Sweeptime	10.000 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	25.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	150 / max. 150	max. 150
Stable	1 / 15	15
Max Stable Difference	0.16 dB	0.50 dB

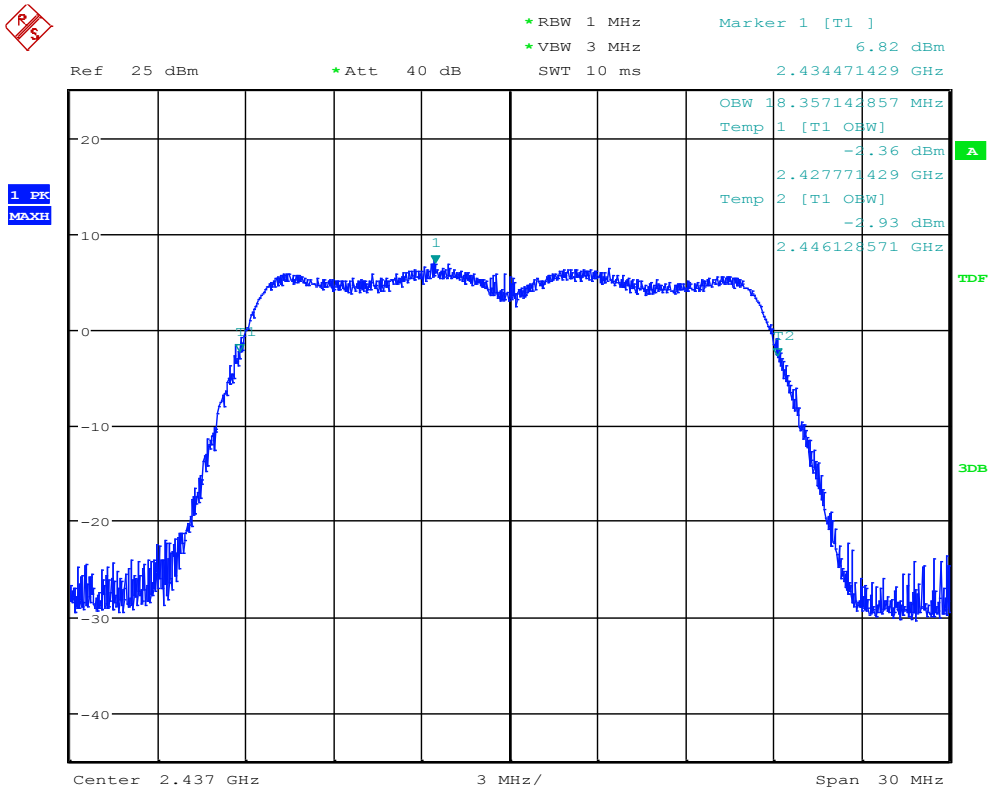
1.5. 99% occupied bandwidth



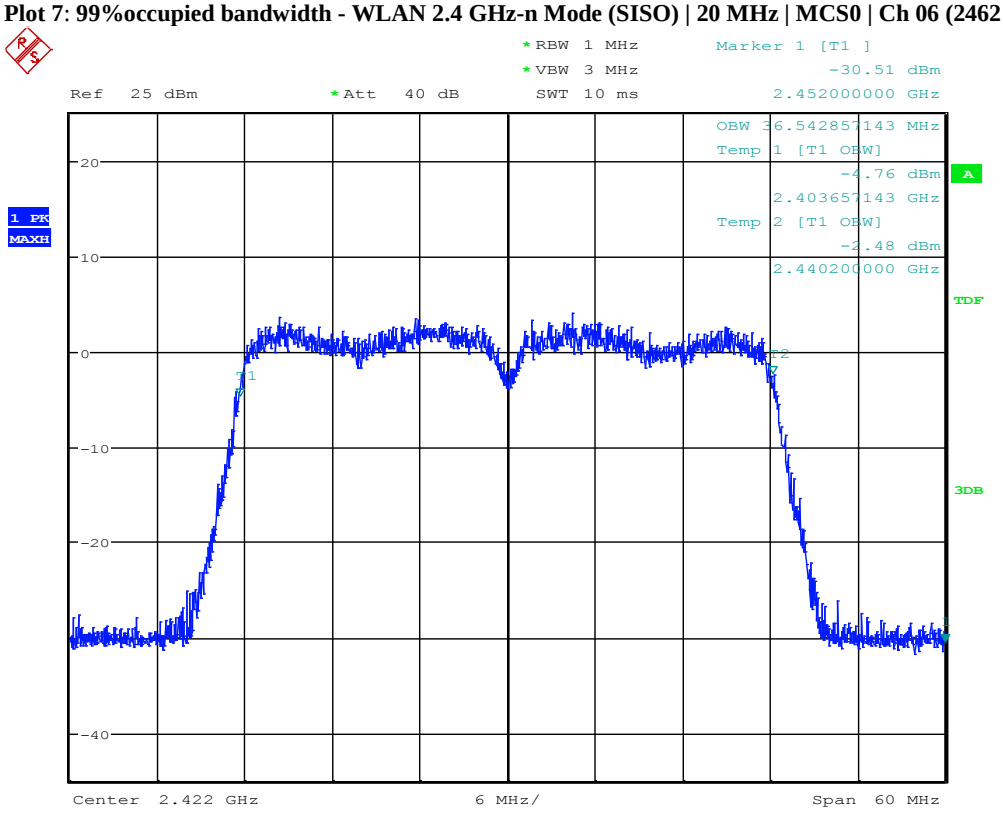
Plot 5: **99%occupied bandwidth - WLAN 2.4 GHz-b Mode (SISO) | 20 MHz | 1Mbit | Ch 06 (2412 MHz)**



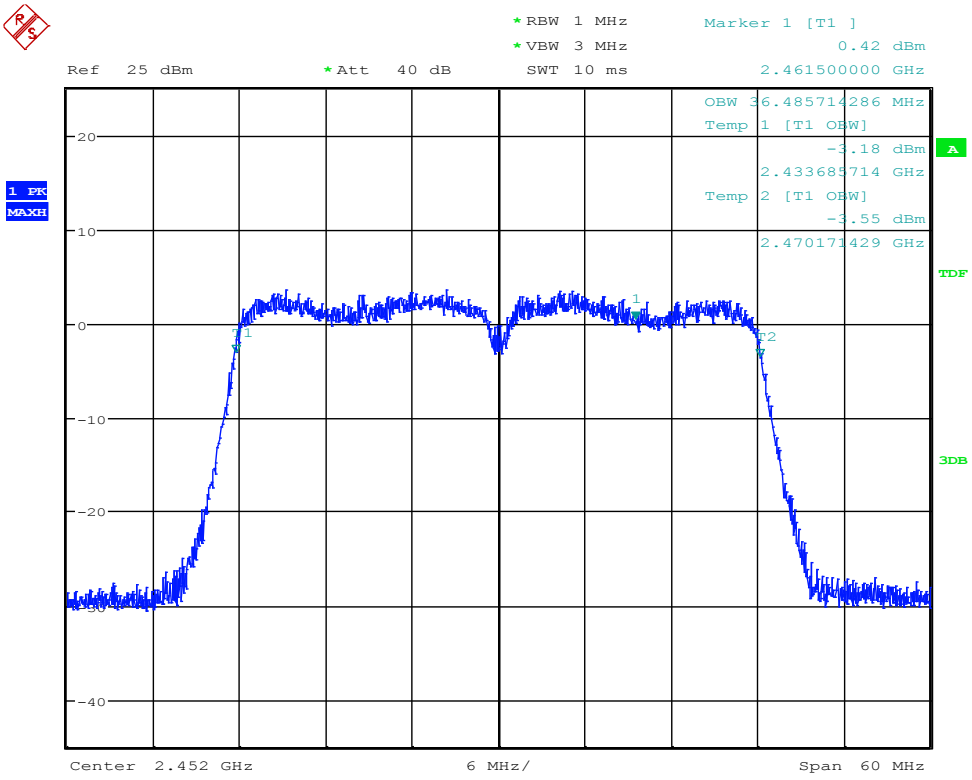
Plot 6: **99%occupied bandwidth - WLAN 2.4 GHz-g Mode (SISO) | 20 MHz | 9Mbit | Ch 06 (2437 MHz)**



Plot 7: 99%occupied bandwidth - WLAN 2.4 GHz-n Mode (SISO) | 20 MHz | MCS0 | Ch 06 (2462 MHz)

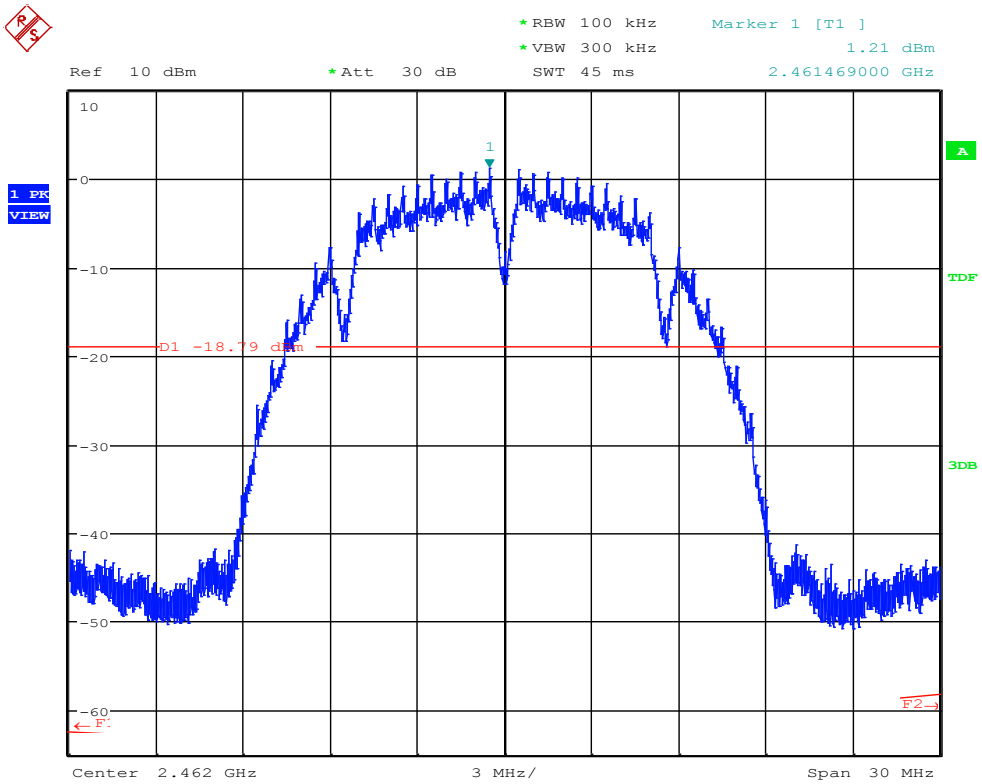


Plot 8: 99%occupied bandwidth - WLAN 2.4 GHz-n Mode (SISO) | 40 MHz | MCS7 | Ch 03 (2422 MHz)

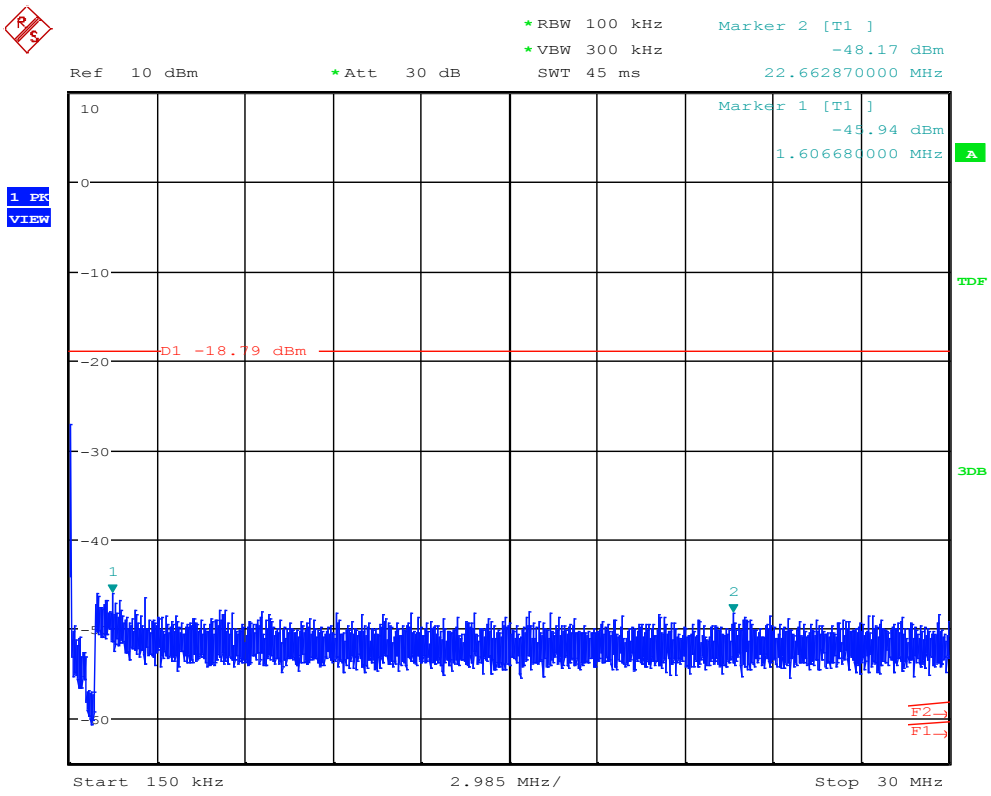


Plot 9: **99%occupied bandwidth - WLAN 2.4 GHz-n Mode (SISO) | 40 MHz | MCS0 | Ch 09 (2452 MHz)**

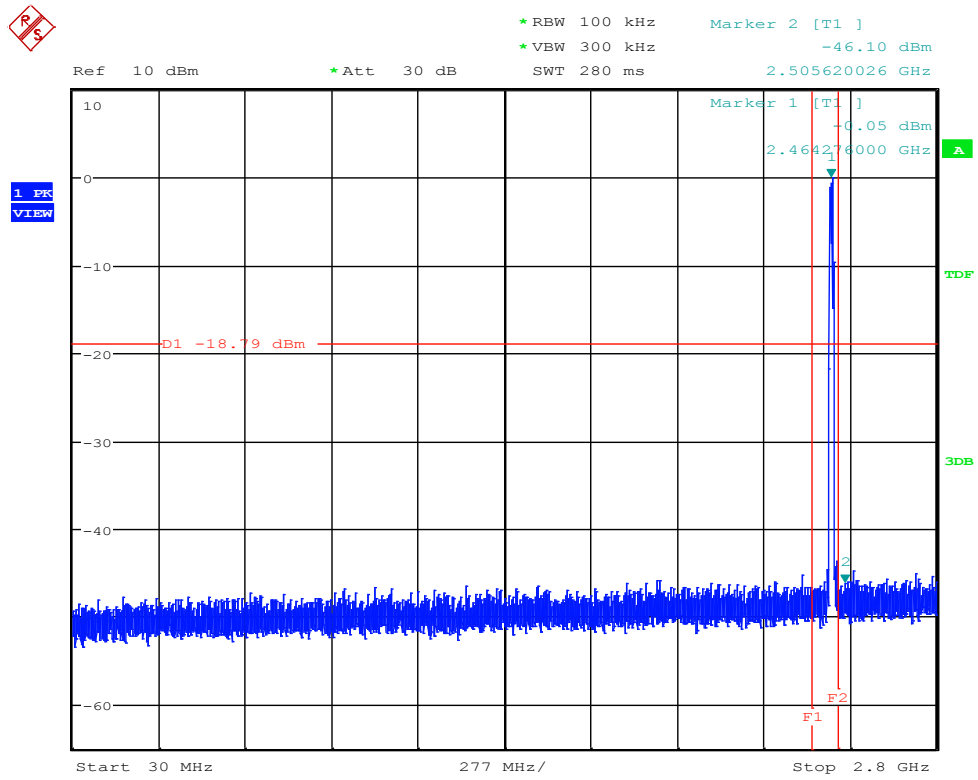
1.6. 20 dBc Measurements



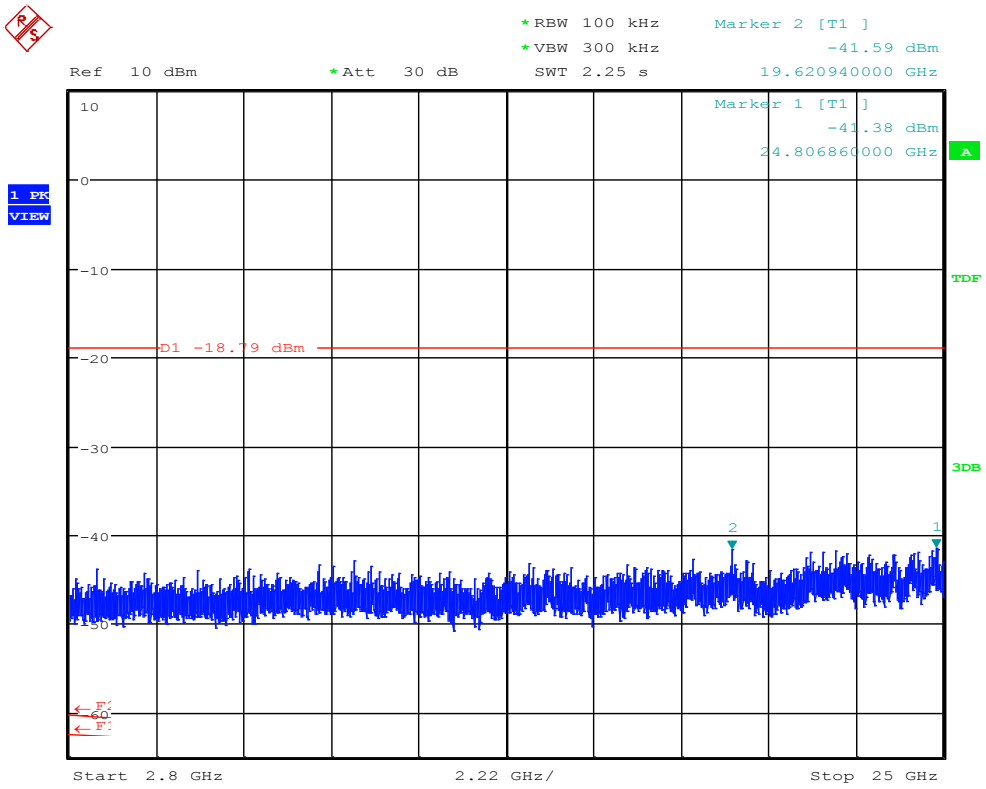
Plot 10: **20dBc Ref | b-mode | 1Mbit | Ch 11 (2462 MHz)**



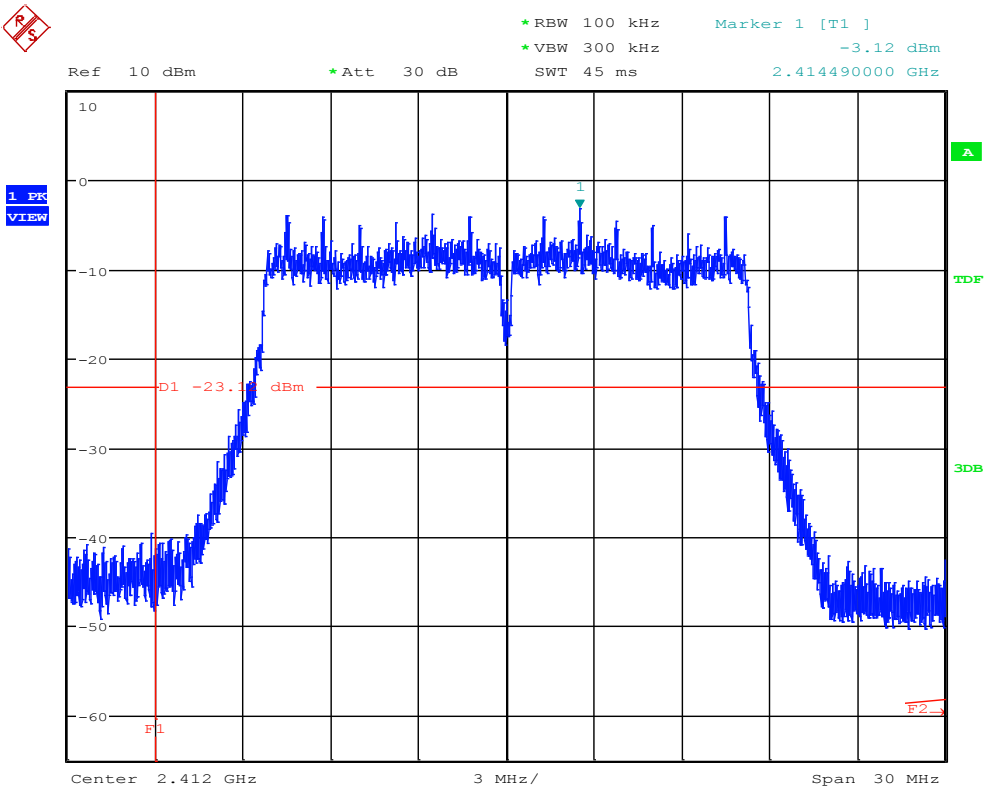
Plot 11: **20dBc | 0.15-30MHz | b-mode | 1Mbit | Ch 11 (2462 MHz)**



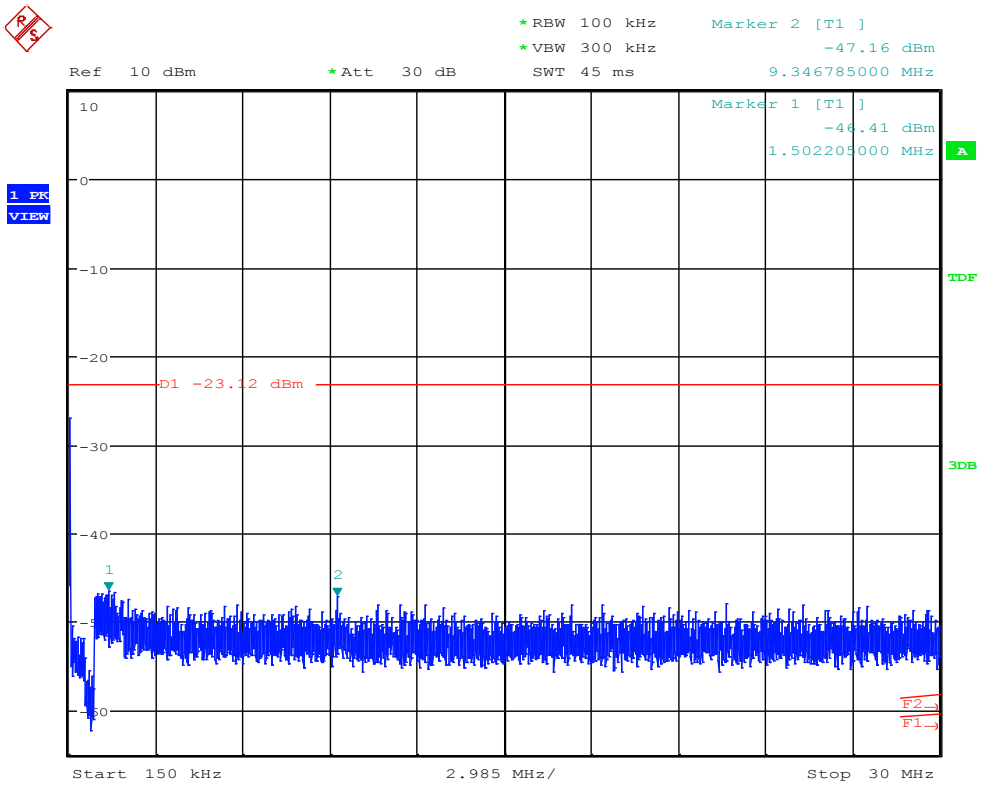
Plot 12: 20dBc | 30MHz-2.8GHz | b-mode | 1Mbit | Ch 11 (2462 MHz)



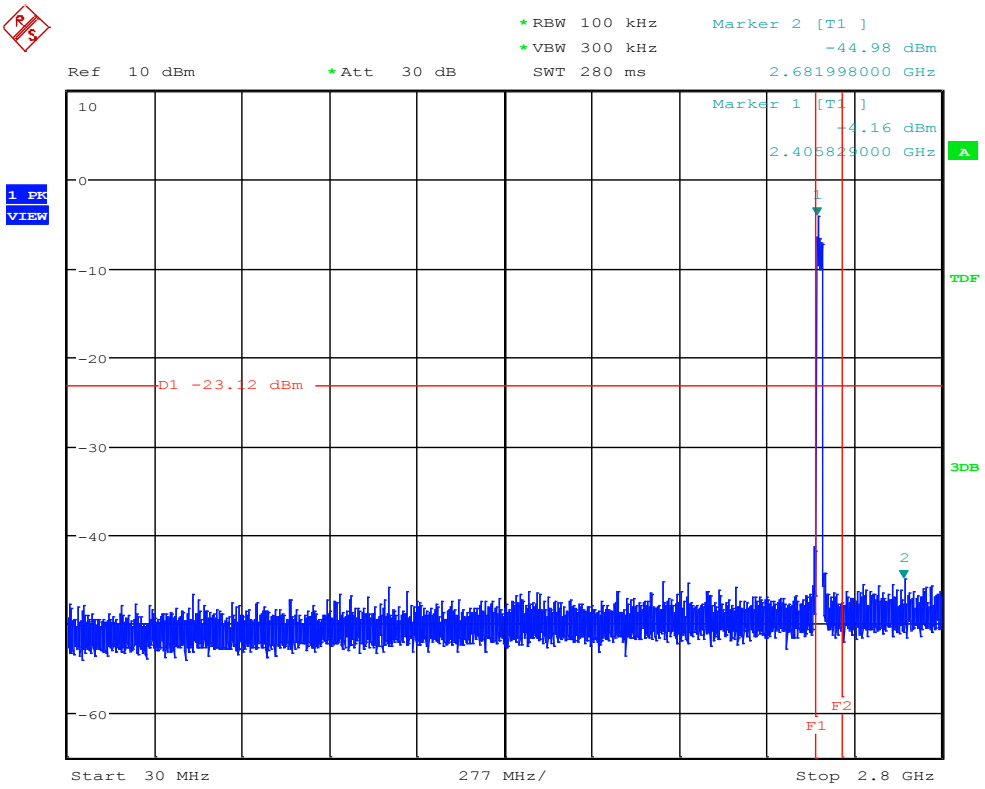
Plot 13: 20dBc | 2.8-25GHz | b-mode | 1Mbit | Ch 11 (2462 MHz)



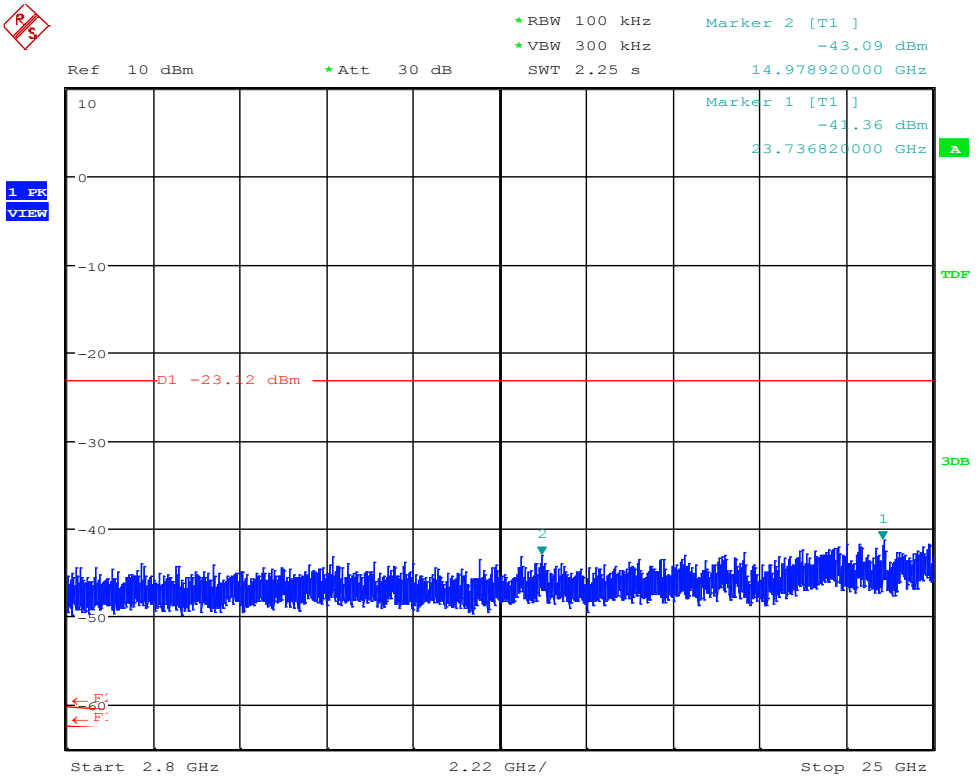
Plot 14: 20dBc Ref | g-mode | 9Mbit | Ch 11 (2462 MHz)



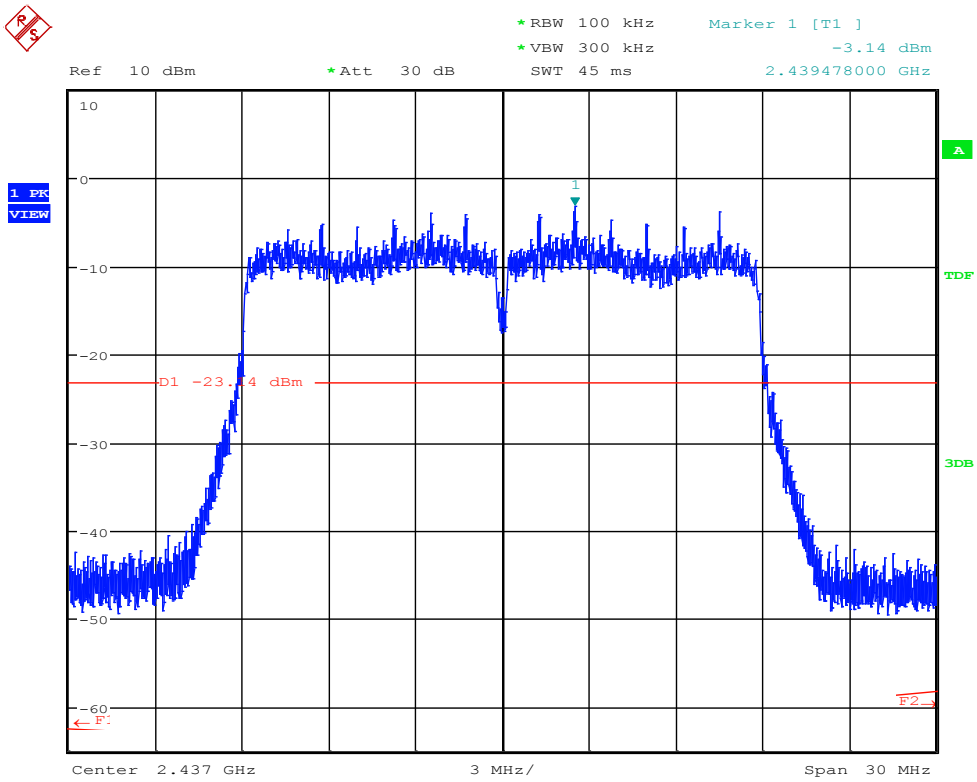
Plot 15: 20dBc | 0.15-30MHz | g-mode | 9Mbit | Ch 11 (2462 MHz)



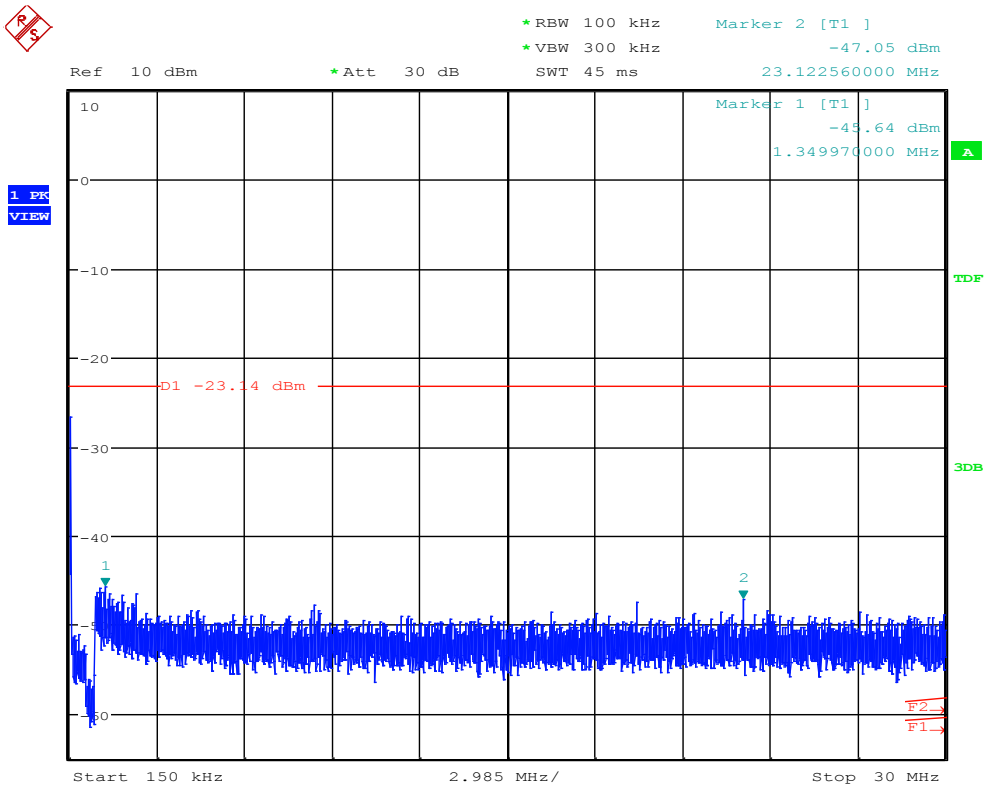
Plot 16: 20dBc | 30MHz-2.8GHz | g-mode | 9Mbit | Ch 11 (2462 MHz)



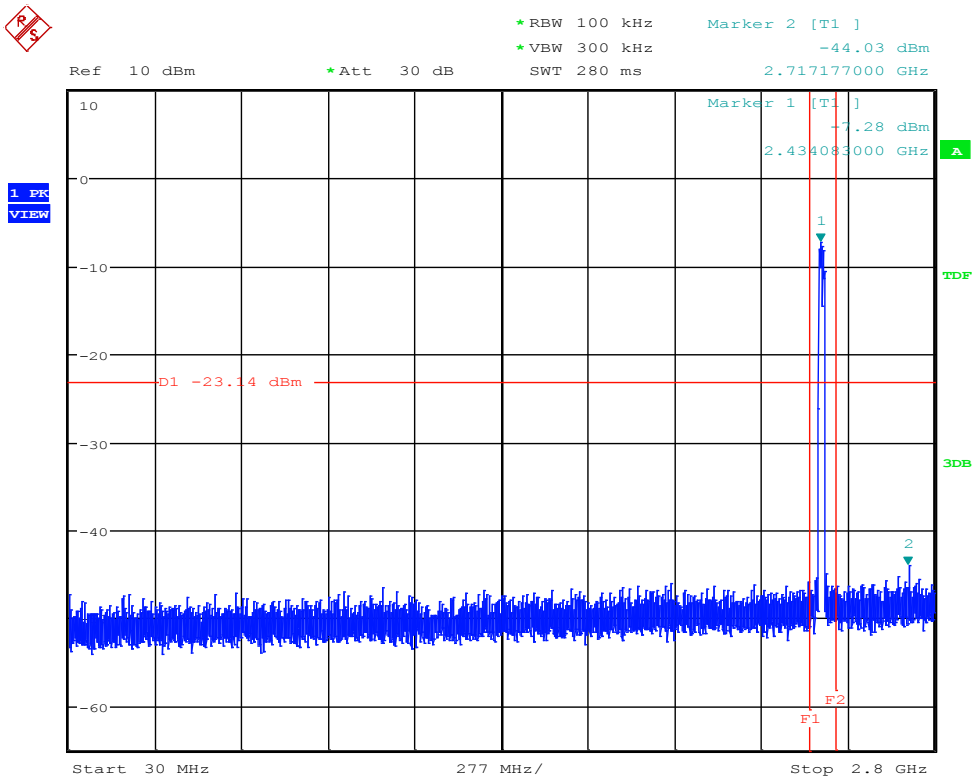
Plot 17: 20dBc | 2.8-25GHz | g-mode | 9Mbit | Ch 11 (2462 MHz)



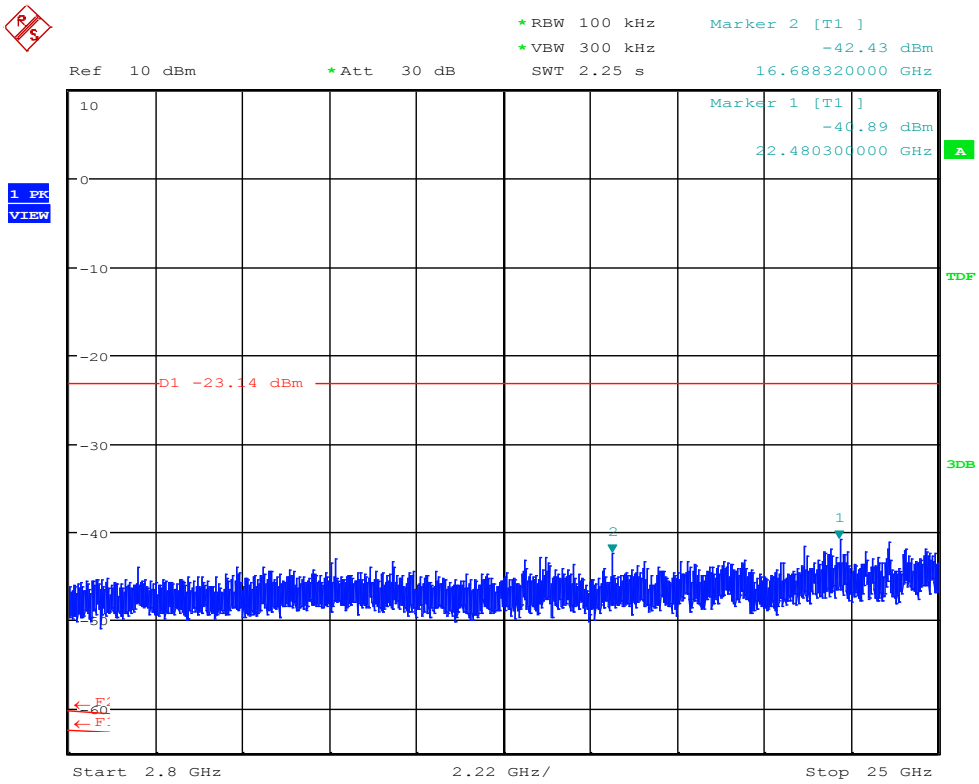
Plot 18: 20dBc Ref | n-mode | MCS0| Ch 06 (2437 MHz)



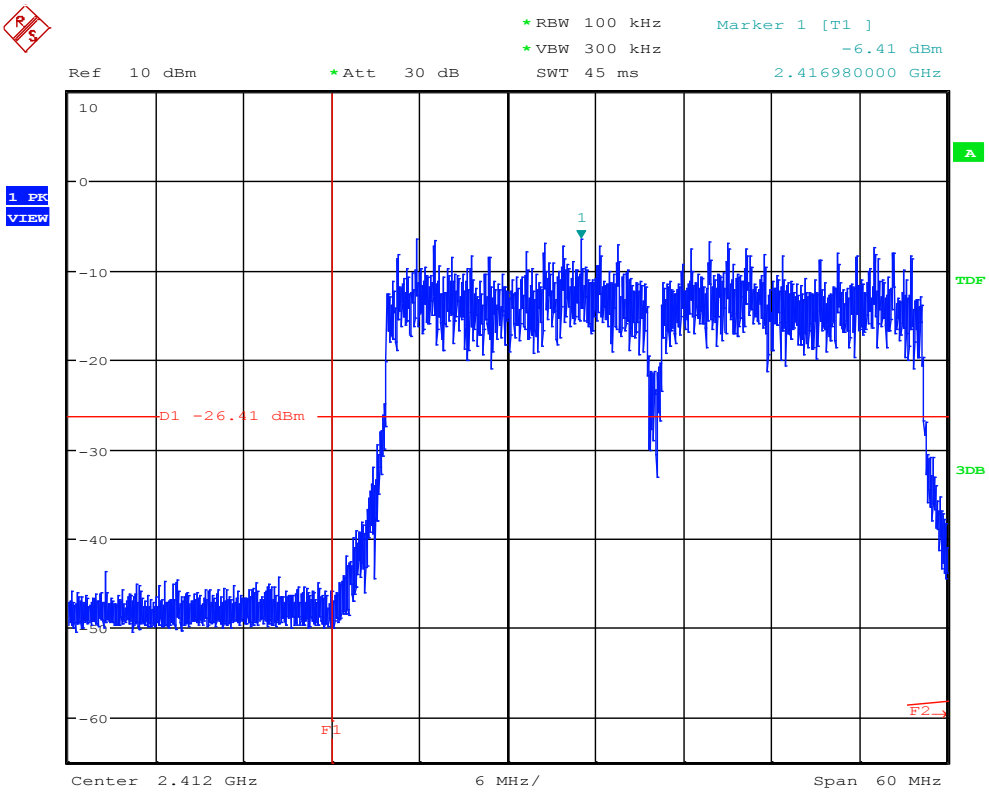
Plot 19: 20dBc | 0.15-30MHz | n-mode | MCS0| Ch 06 (2437 MHz)



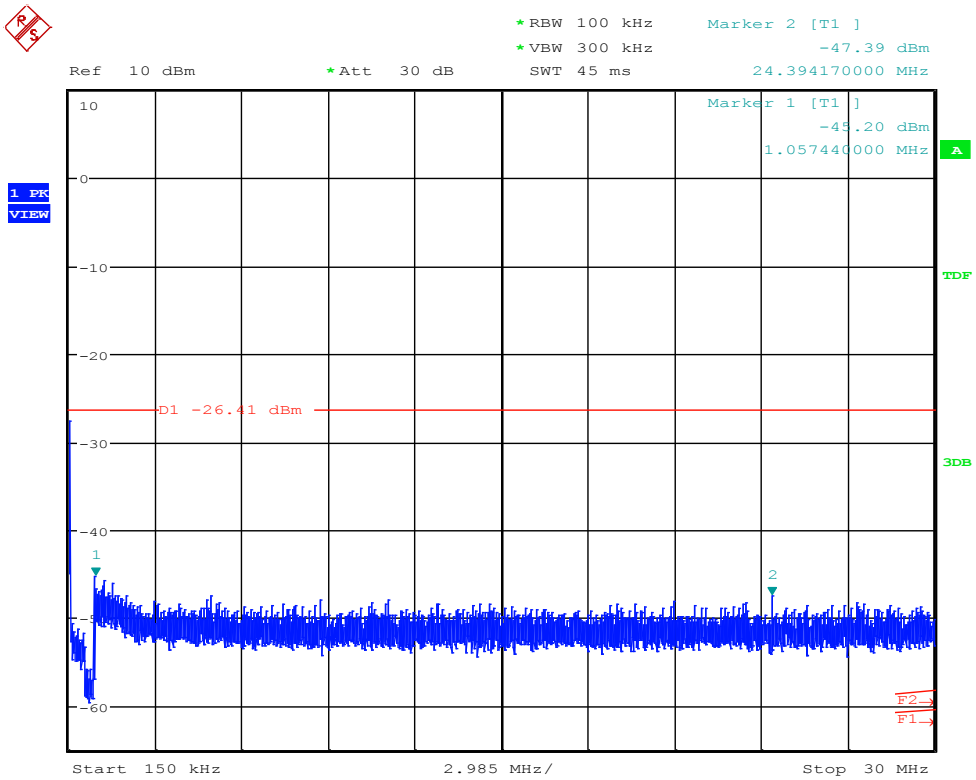
Plot 20: 20dBc | 30MHz-2.8GHz | n-mode | MCS0| Ch 06 (2437 MHz)



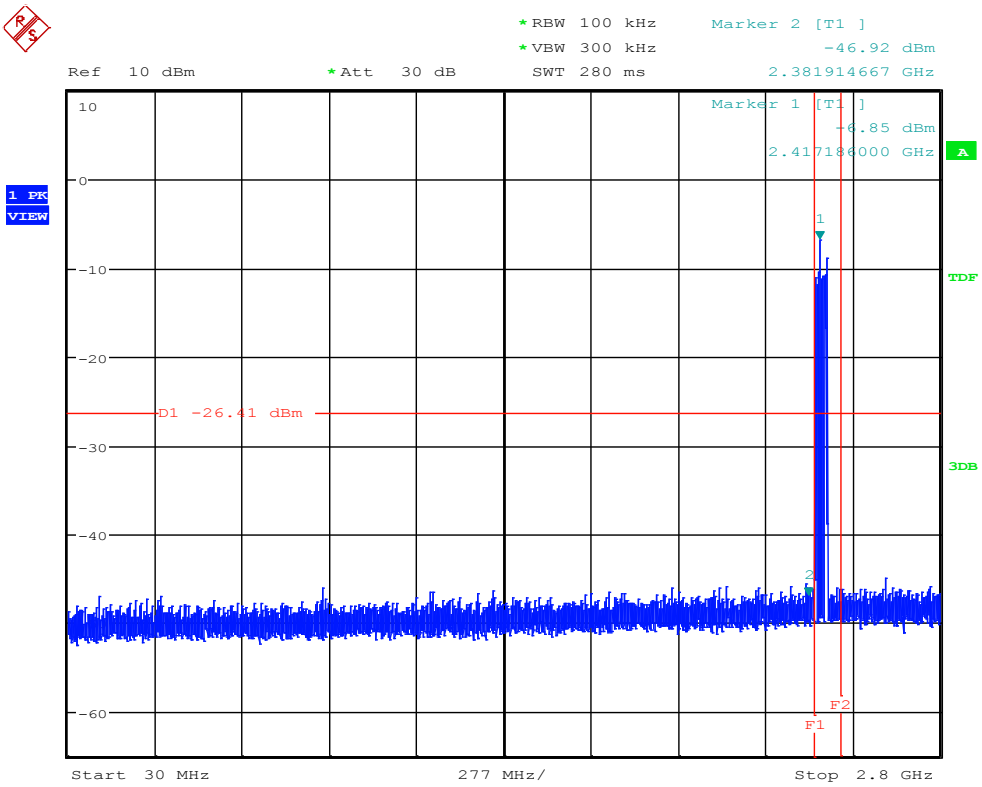
Plot 21: 20dBc | 2.8-25GHz | n-mode | MCS0 | Ch 06 (2437 MHz)



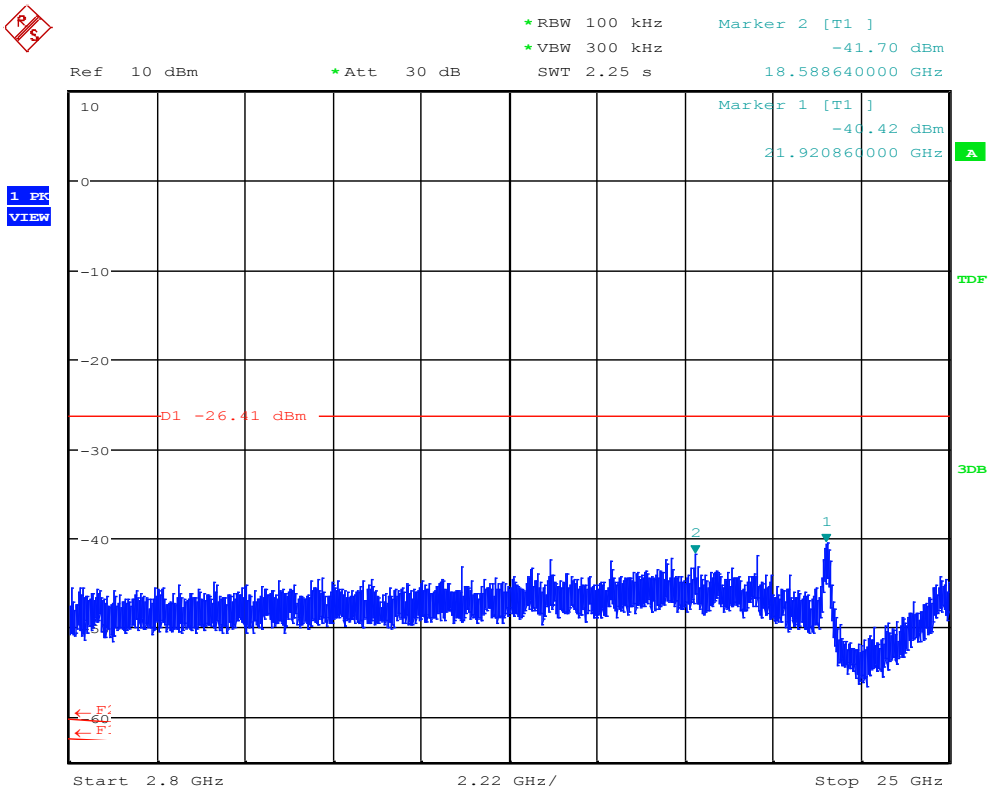
Plot 22: 20dBc Ref | n-mode | MCS7 | 40 MHz | Ch 3 (2422 MHz)



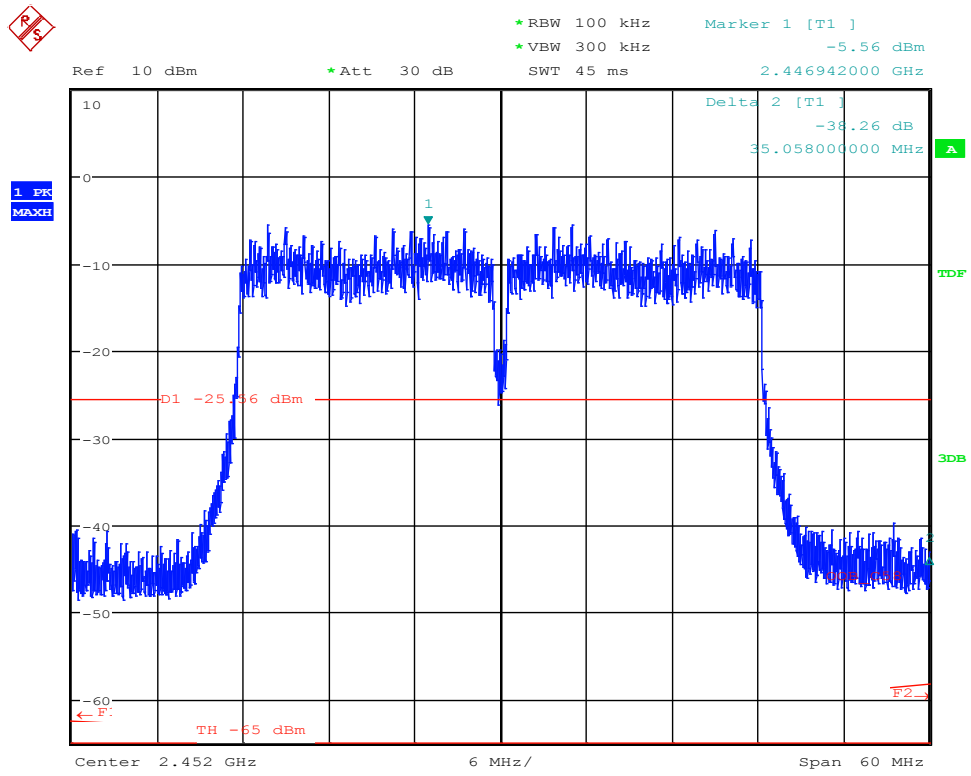
Plot 23: 20dBc | 0.15-30MHz | n-mode | MCS7 | 40 MHz | Ch 3 (2422 MHz)



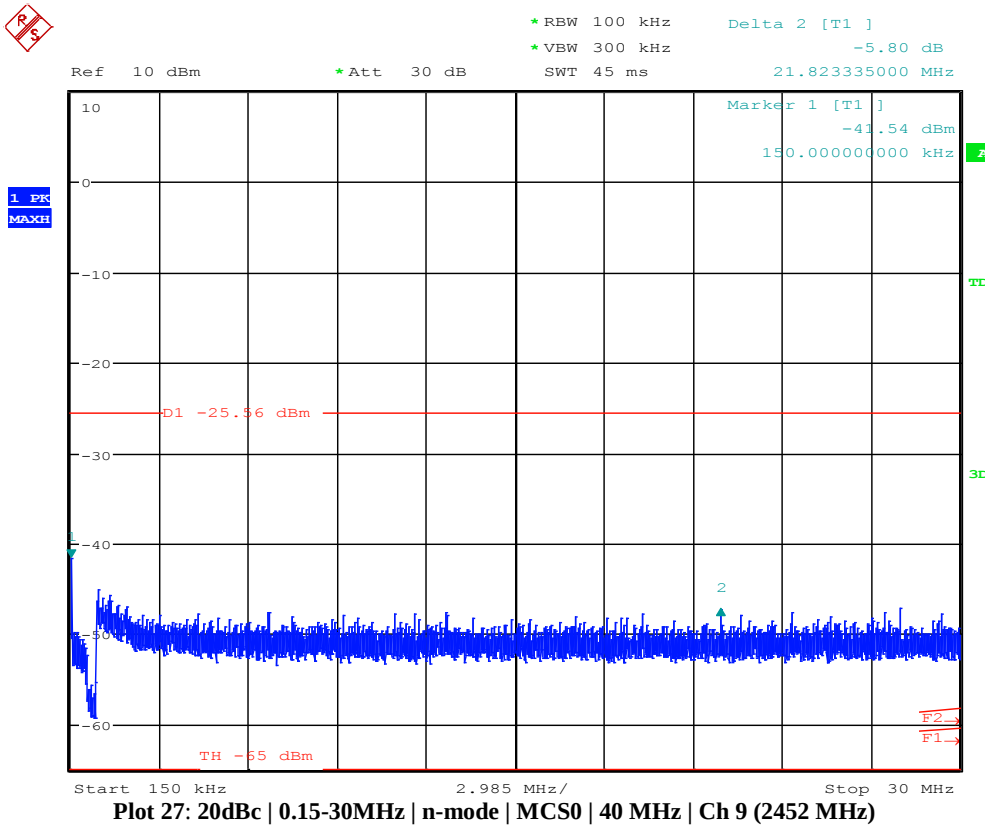
Plot 24: **20dBc | 30MHz-2.8GHz | n-mode | MCS7 | 40 MHz | Ch 3 (2422 MHz)**



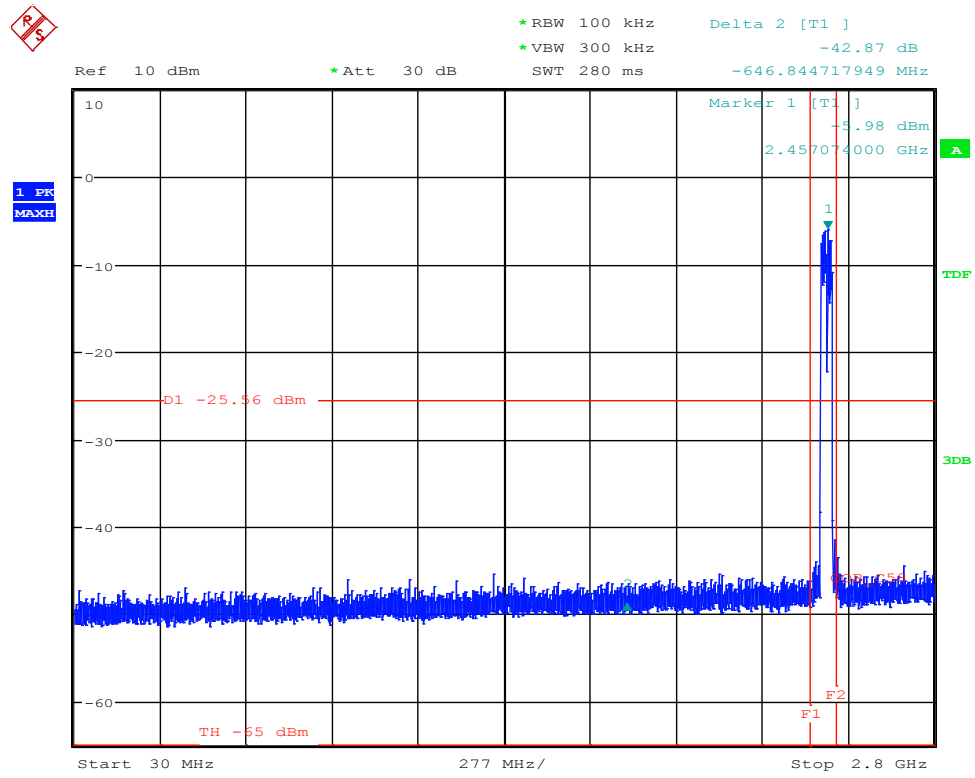
Plot 25: 20dBc | 2.8-25GHz | n-mode | MCS7 | 40 MHz | Ch 3 (2422 MHz)



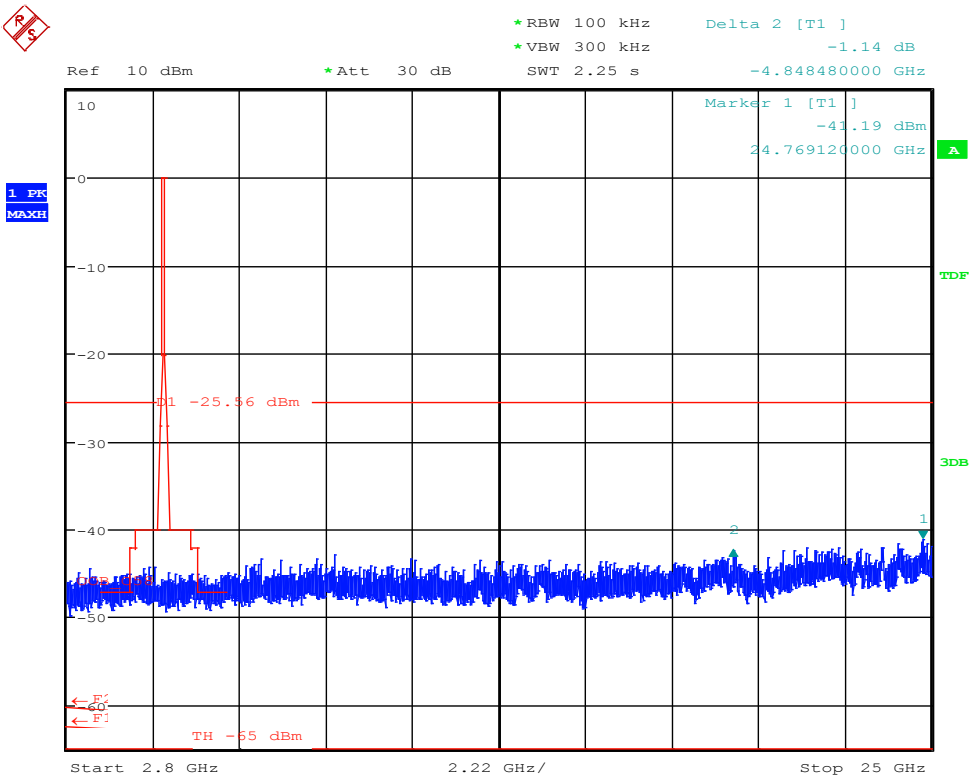
Plot 26: 20dBc Ref | n-mode | MCS0 | 40 MHz | Ch 9 (2452 MHz)



Plot 27: 20dBc | 0.15-30MHz | n-mode | MCS0 | 40 MHz | Ch 9 (2452 MHz)



Plot 28: **20dBc | 30MHz-2.8GHz | n-mode | MCS0 | 40 MHz | Ch 9 (2452 MHz)**



Plot 29: 20dBc | 2.8-25GHz | n-mode| MCS0 | 40 MHz | Ch 9 (2452 MHz)

2. Radiated Field Strength Measurements

2.1. Radiated Field Strength Emissions – 9 kHz to 30 MHz

2.01a_WLAN_b mode_1Mbps_Ch11_standing

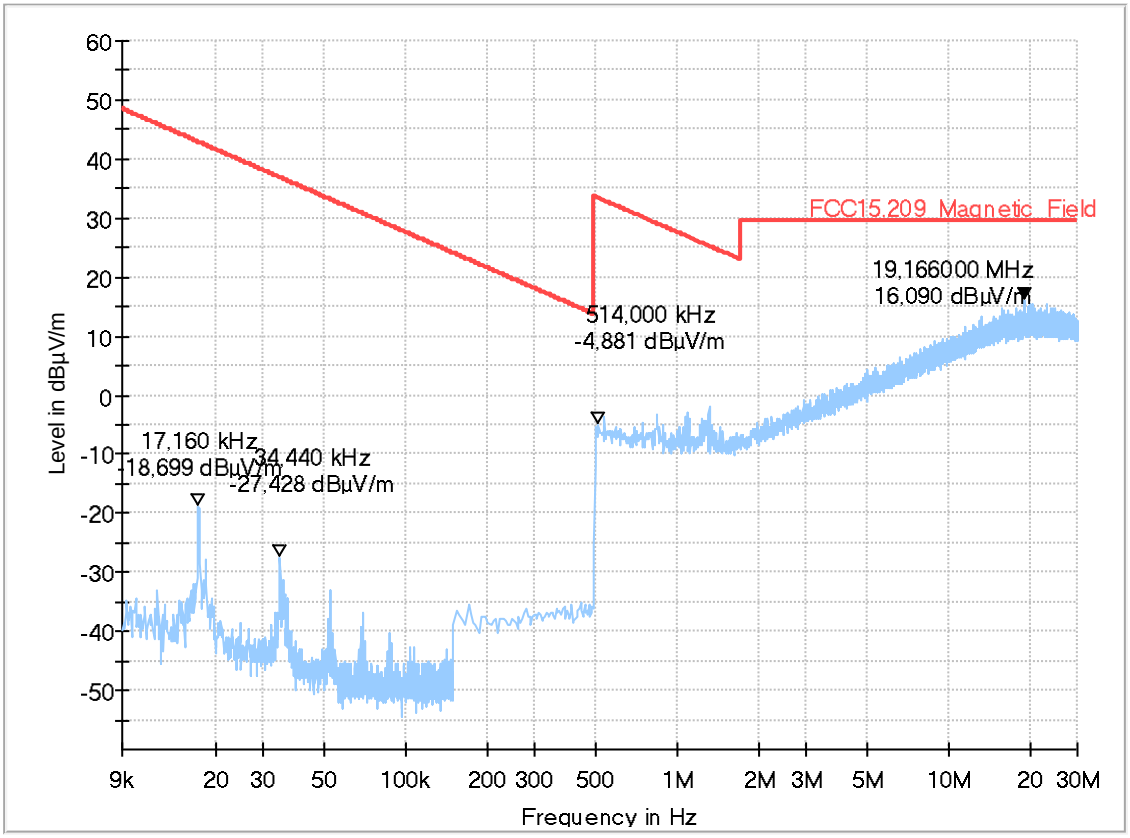
Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Testi Site:	Semi Anechoic Room (SAR); CETECOM GmbH Essen
Test Description	FCC 15.209
Operating Conditions:	WLAN b-Mode, 1M, CH 11
Operator Name:	Mah
Comment:	EUT Standing

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-

Full Spectrum



2.01b_WLAN_b mode_1Mbps_Ch11_laying

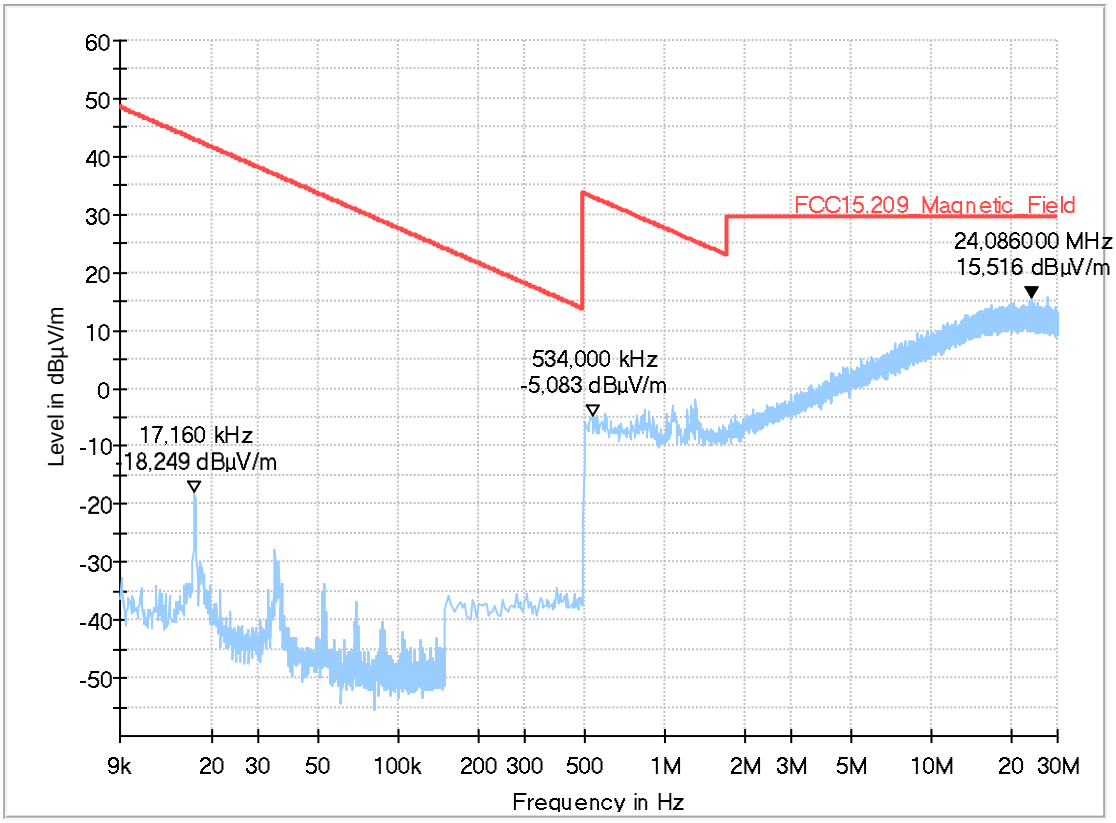
Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Testi Site:	Semi Anechoic Room (SAR); CETECOM GmbH Essen
Test Description	FCC 15.209
Operating Conditions:	WLAN b-Mode, 1M, CH 11
Operator Name:	Mah
Comment:	EUT Laying

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-

Full Spectrum



2.02a_WLAN_g mode_9Mbps_Ch1_standing

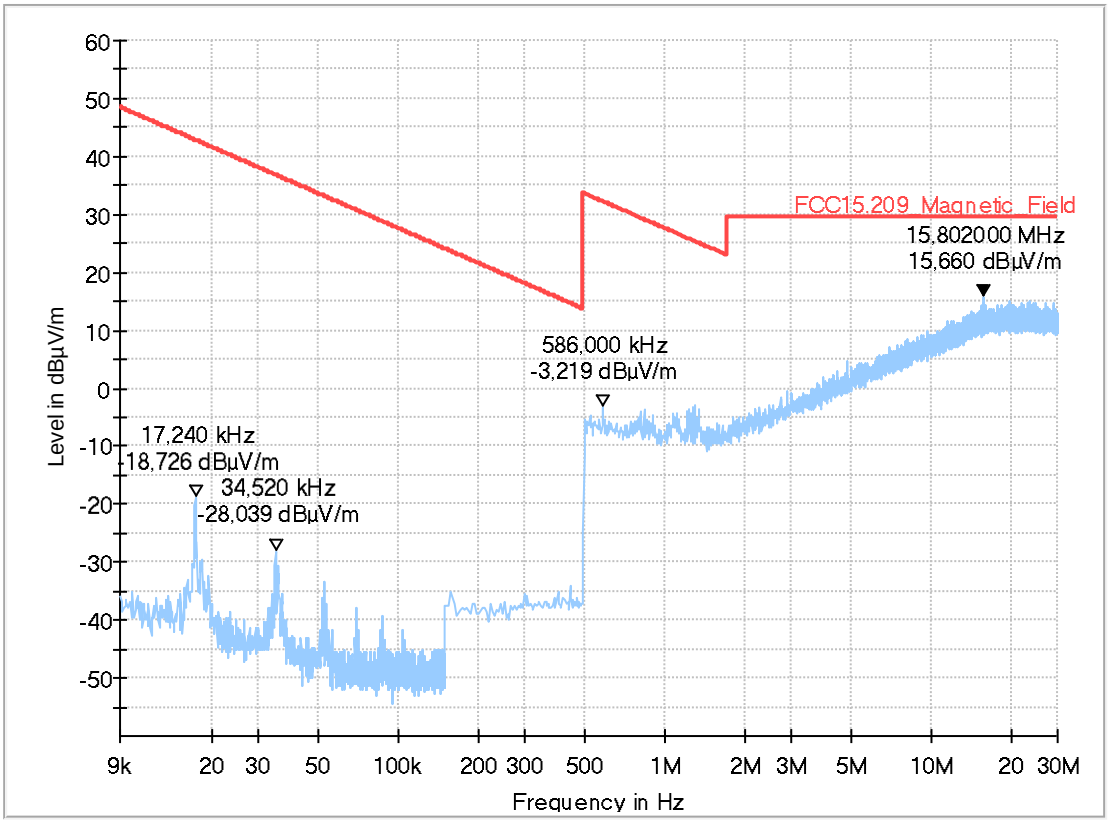
Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Testi Site:	Semi Anechoic Room (SAR); CETECOM GmbH Essen
Test Description	FCC 15.209
Operating Conditions:	WLAN g-Mode, 9M, CH 1
Operator Name:	Mah
Comment:	EUT Standing

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-

Full Spectrum



2.02b_WLAN_g mode_9Mbps_Ch1_laying

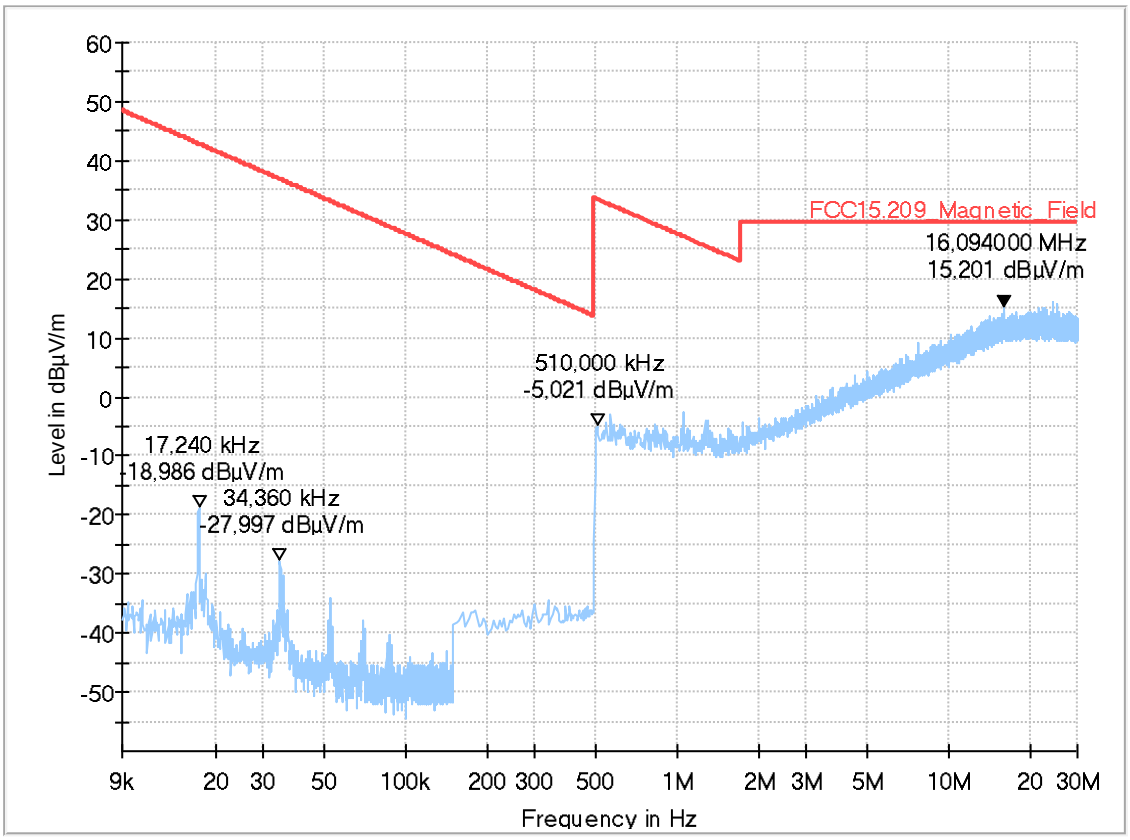
Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Testi Site:	Semi Anechoic Room (SAR); CETECOM GmbH Essen
Test Description	FCC 15.209
Operating Conditions:	WLAN g-Mode, 9M, CH 1
Operator Name:	Mah
Comment:	EUT Laying

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-

Full Spectrum



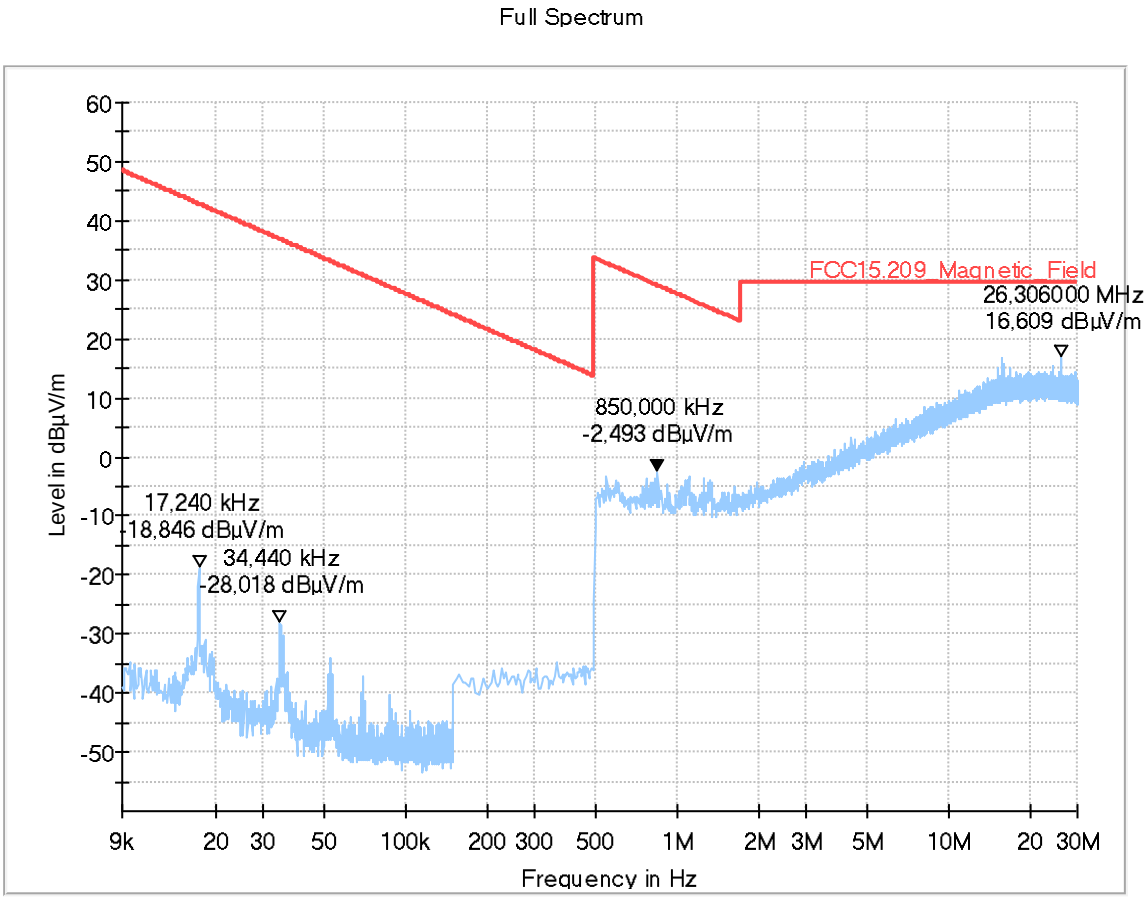
2.03a_WLAN_n mode_MCS0_Ch6_ standing

Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Testi Site:	Semi Anechoic Room (SAR); CETECOM GmbH Essen
Test Description	FCC 15.209
Operating Conditions:	WLAN n-Mode, MCS0, CH 6
Operator Name:	Mah
Comment:	EUT Standing

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-



2.03b_WLAN_n mode_MCS0_Ch6_ laying

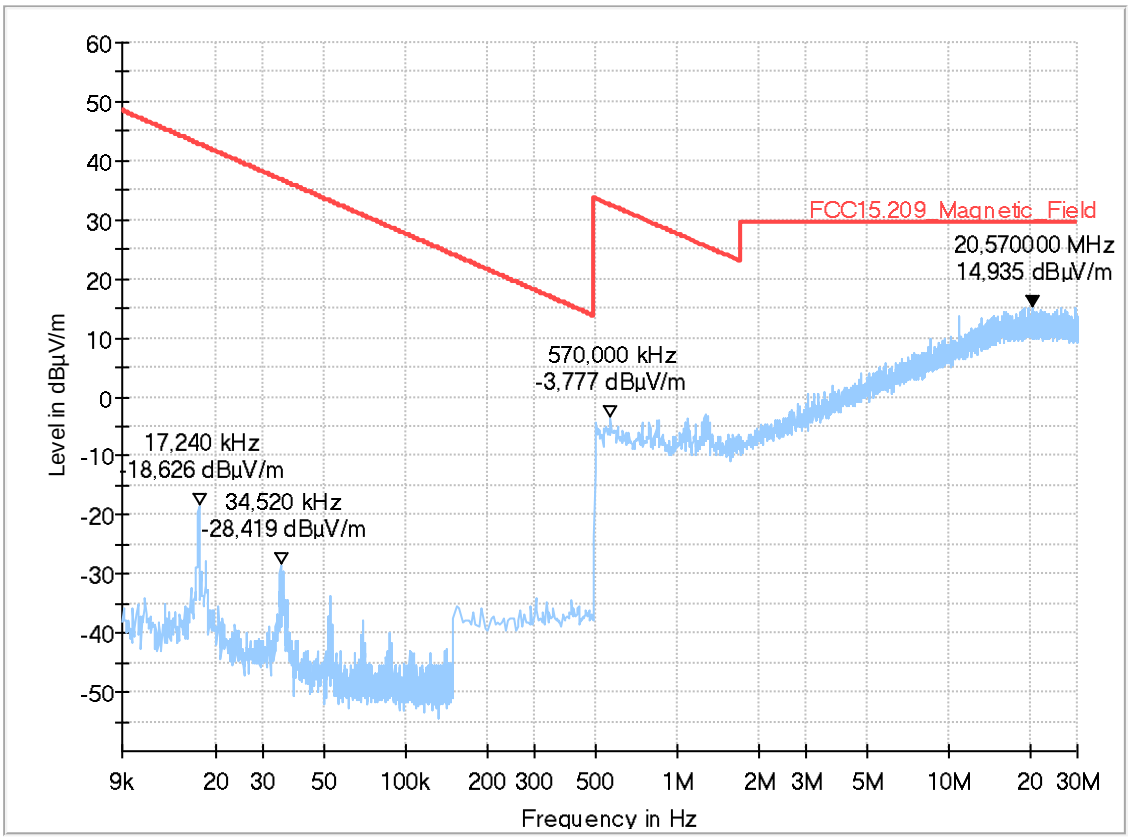
Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Testi Site:	Semi Anechoic Room (SAR); CETECOM GmbH Essen
Test Description	FCC 15.209
Operating Conditions:	WLAN n-Mode, MCS0, CH 6
Operator Name:	Mah
Comment:	EUT Laying

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-

Full Spectrum



2.04a_WLAN_n mode_HT40_MCS7_Ch3_ standing

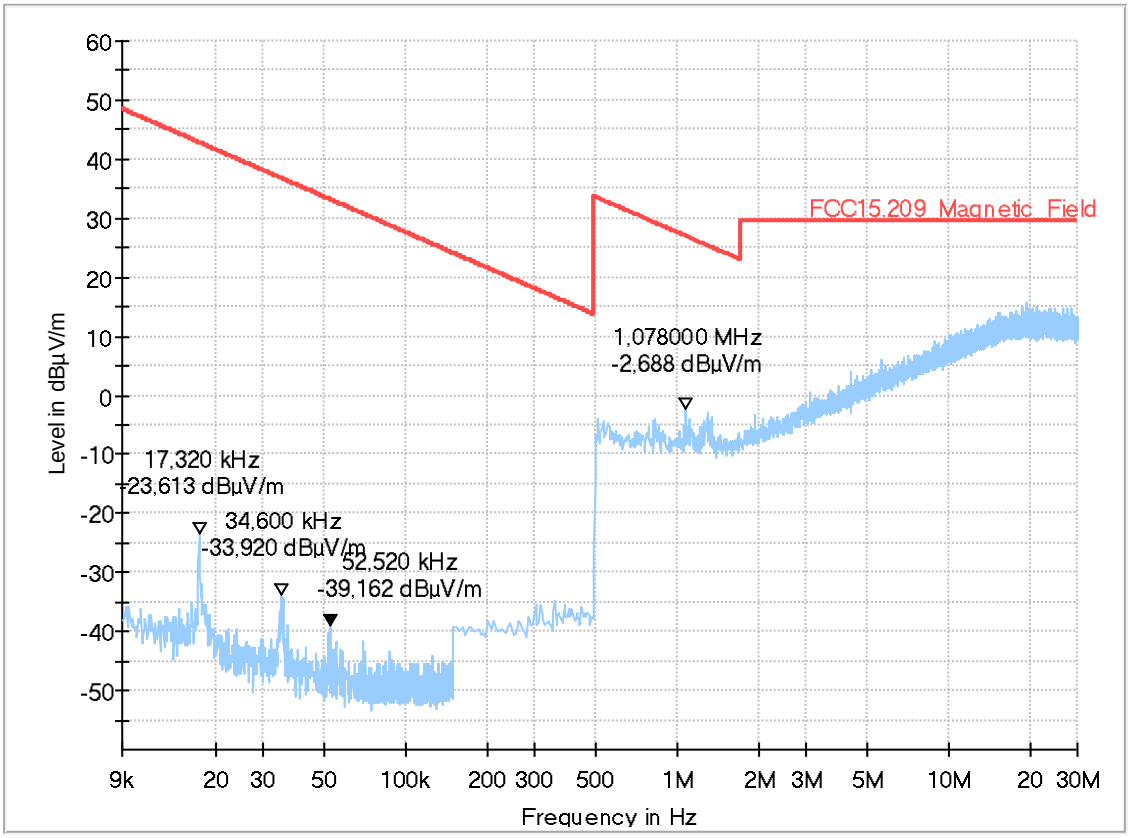
Common Information

Test description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	AFr
Operating mode:	n(HT40) | MCS7 | Ch 3 | Power level 11
Operating conditions:	Humidity: 45%rH; Temperature: 20°C
Power during tests:	15 V DC
Comment 1:	DUT Standing

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-

Full Spectrum



2.04b_WLAN_n mode_HT40_MCS7_Ch3_ laying

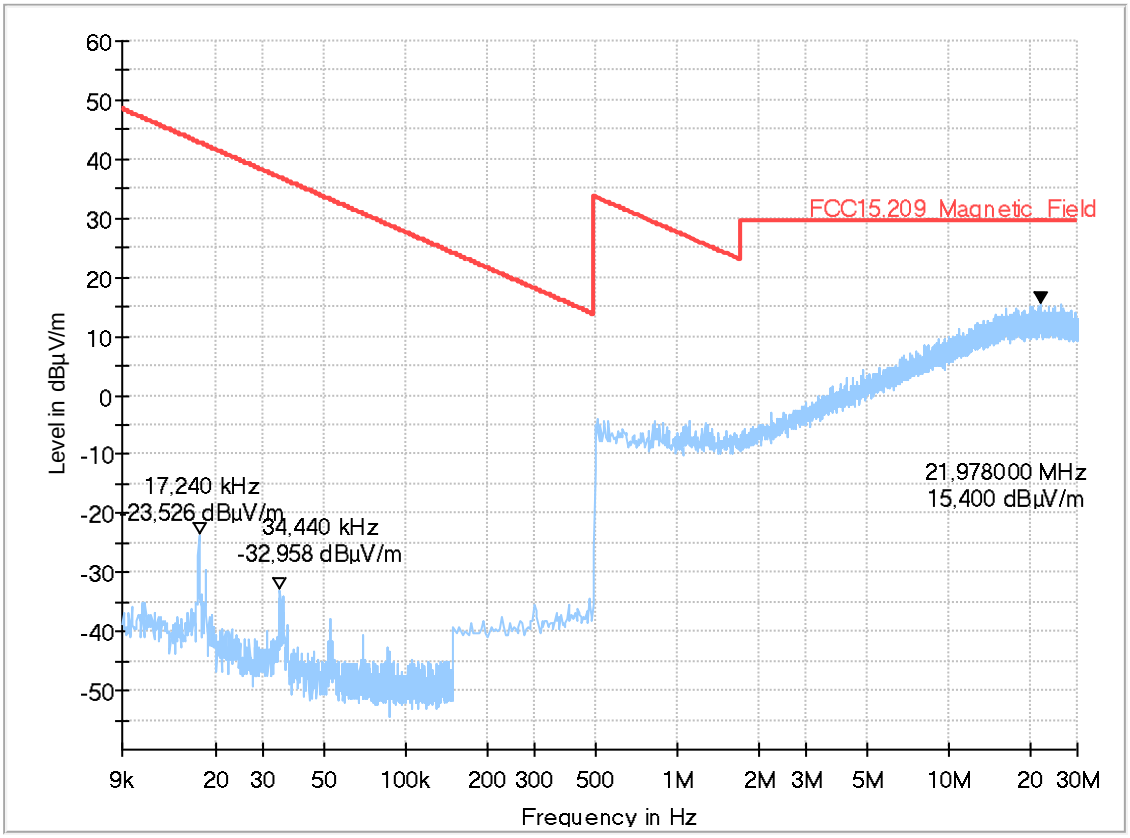
Common Information

Test description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	AFr
Operating mode:	n(HT40) | MCS7 | Ch 3 | Power level 11
Operating conditions:	Humidity: 45%rH; Temperature: 20°C
Power during tests:	15 V DC
Comment 1:	DUT Laying

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-

Full Spectrum



2.05a_WLAN_n mode_HT40_MCS0_Ch9_ standing

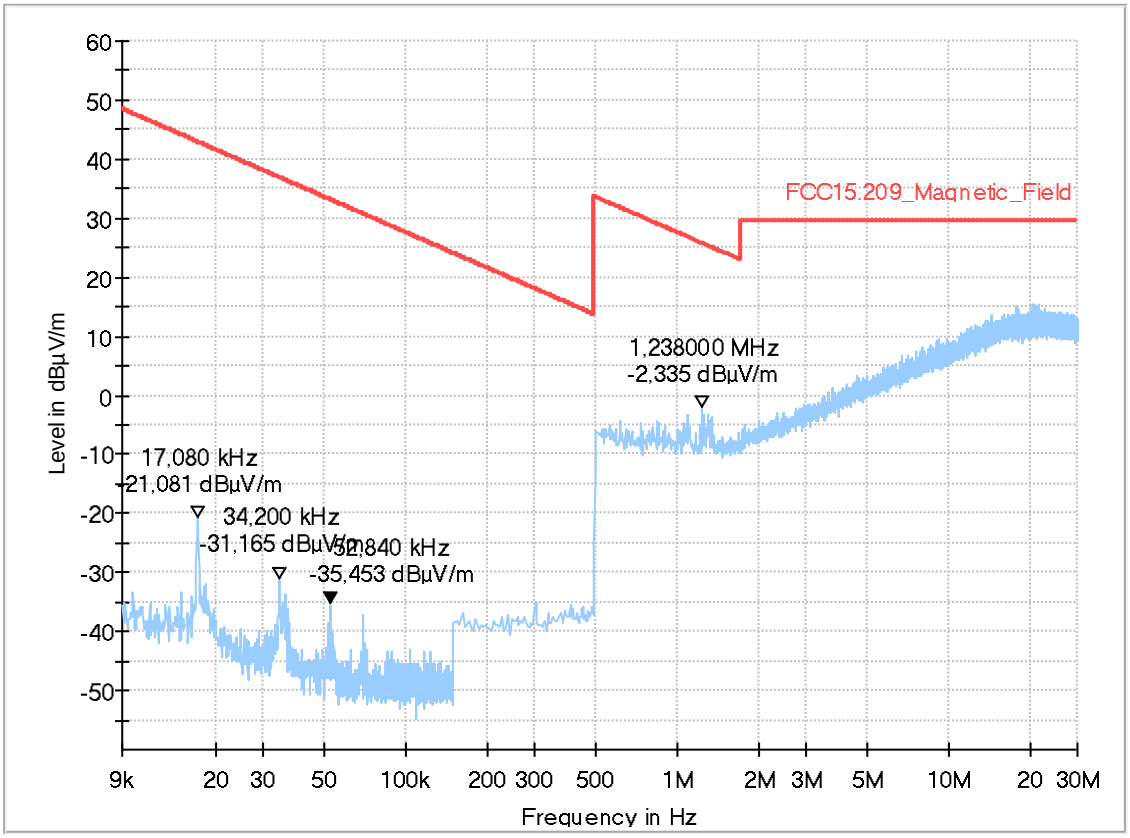
Common Information

Test description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	AFr
Operating Mode:	n(HT40) | MCS0 | Ch 11 | Power level 11
Operating conditions:	Humidity: 45%rH; Temperature: 20°C
Power during tests:	15 V DC
Comment 1:	DUT Standing

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-

Full Spectrum



2.05b_WLAN_n mode_HT40_MCS0_Ch9_ laying

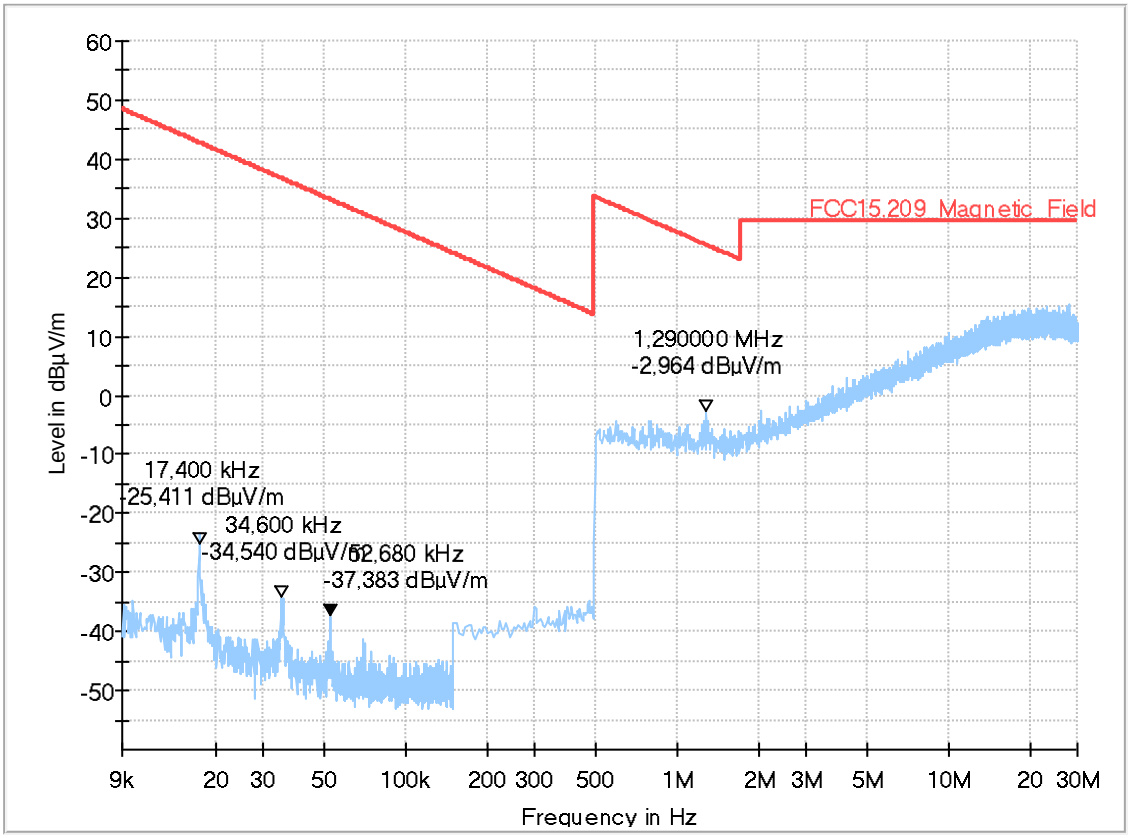
Common Information

Test description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	AFr
Operating mode:	n(HT40) | MCS0 | Ch 11 | Power level 11
Operating conditions:	Humidity: 45%rH; Temperature: 20°C
Power during tests:	15 V DC
Comment 1:	DUT Laying

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
----------	----------
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-

Full Spectrum



2.2. Radiated Field Strength Emissions – 30 MHz to 1 GHz

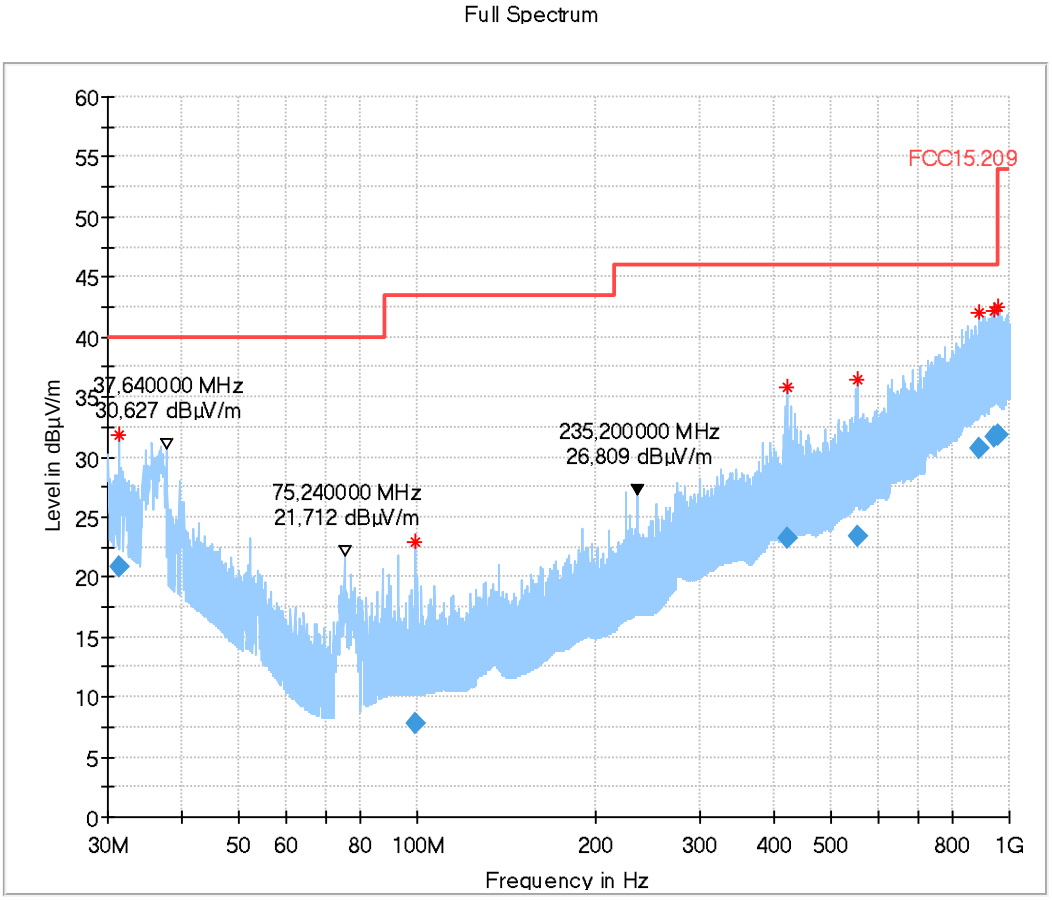
Diagram No. 3.01a_WLAN_b-mode_1Mbps_Ch11_standing

Common Information

Test description:	Electric Field Strength Measurement
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	not used
Used filter:	not used
Technical Data:	please see page 2 for detailed data of measurement setup
Test specification.:	FCC 15.209; RSS-Gen: Issue 3
Operating Mode:	B | 1 Mbit | Ch 11| Power level 14
Operator:	Klv
Operating conditions:	WLAN
Power during tests:	13 V DC
comment:	EUT standing

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-



Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
31.380000	20.90	40.00	19.10	1000.0	120.000	368.0	H	55.0	20.9
99.256000	7.72	43.50	35.78	1000.0	120.000	134.0	H	283.0	8.1
420.668000	23.22	46.00	22.78	1000.0	120.000	360.0	V	89.0	18.9
555.096000	23.38	46.00	22.62	1000.0	120.000	290.0	H	236.0	21.6
889.196000	30.77	46.00	15.23	1000.0	120.000	327.0	H	55.0	26.6
946.020000	31.70	46.00	14.30	1000.0	120.000	237.0	V	152.0	27.0
954.944000	31.82	46.00	14.18	1000.0	120.000	134.0	H	320.0	27.3

3.01b_WLAN_b-mode_1Mbps_Ch11_laying

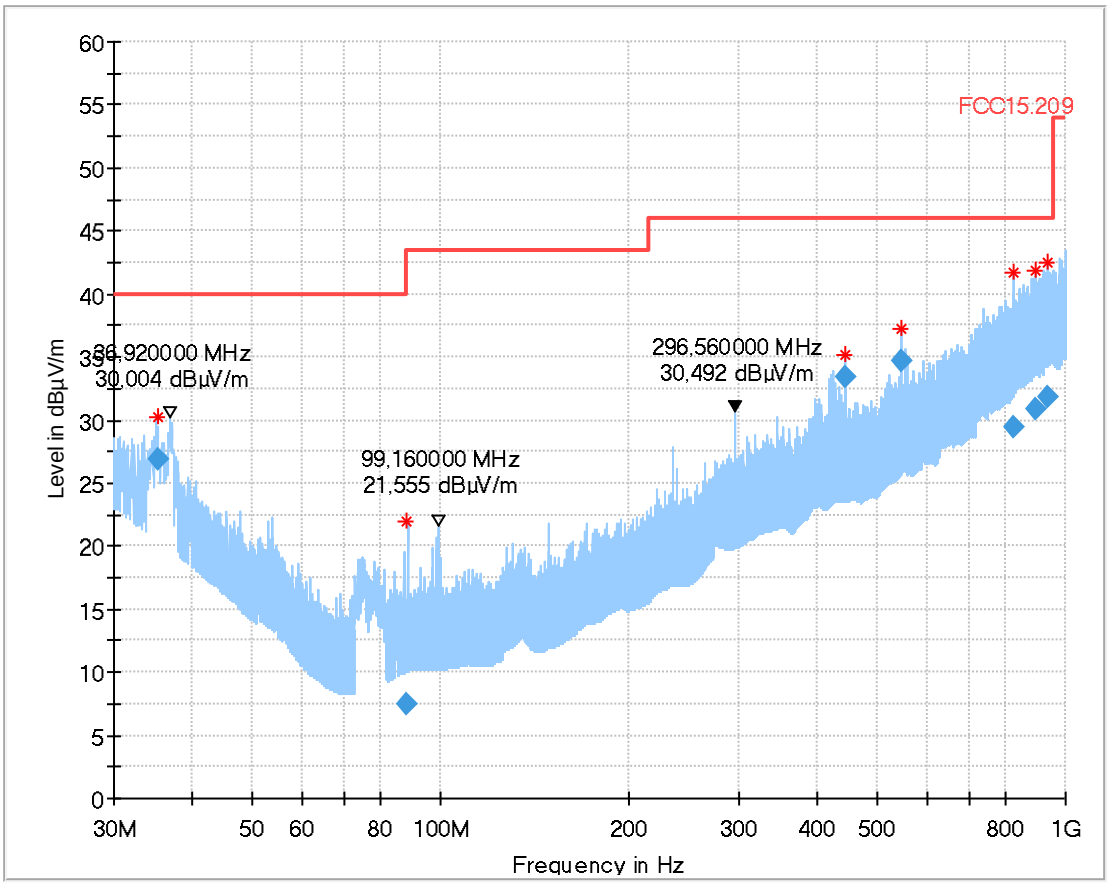
Common Information

Test description:	Electric Field Strength Measurement
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	not used
Used filter:	not used
Technical Data:	please see page 2 for detailed data of measurement setup
Test specification.:	FCC 15.209; RSS-Gen: Issue 3
Operating Mode:	B | 1 Mbit | Ch 11| Power level 14
Operator:	Klv
Operating conditions:	WLAN
Power during tests:	13 V DC
comment:	EUT laying

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
35.248000	26.83	40.00	13.17	1000.0	120.000	257.0	H	329.0	19.1
88.448000	7.52	43.50	35.98	1000.0	120.000	284.0	V	210.0	8.1
445.492000	33.42	46.00	12.58	1000.0	120.000	151.0	V	15.0	19.4
544.492000	34.65	46.00	11.35	1000.0	120.000	159.0	H	233.0	21.2
827.328000	29.46	46.00	16.54	1000.0	120.000	150.0	H	350.0	25.5
892.948000	30.86	46.00	15.14	1000.0	120.000	137.0	H	242.0	26.7
938.488000	31.76	46.00	14.24	1000.0	120.000	368.0	H	147.0	27.0

3.02a_WLAN_g-mode_9Mbps_Ch1_standing

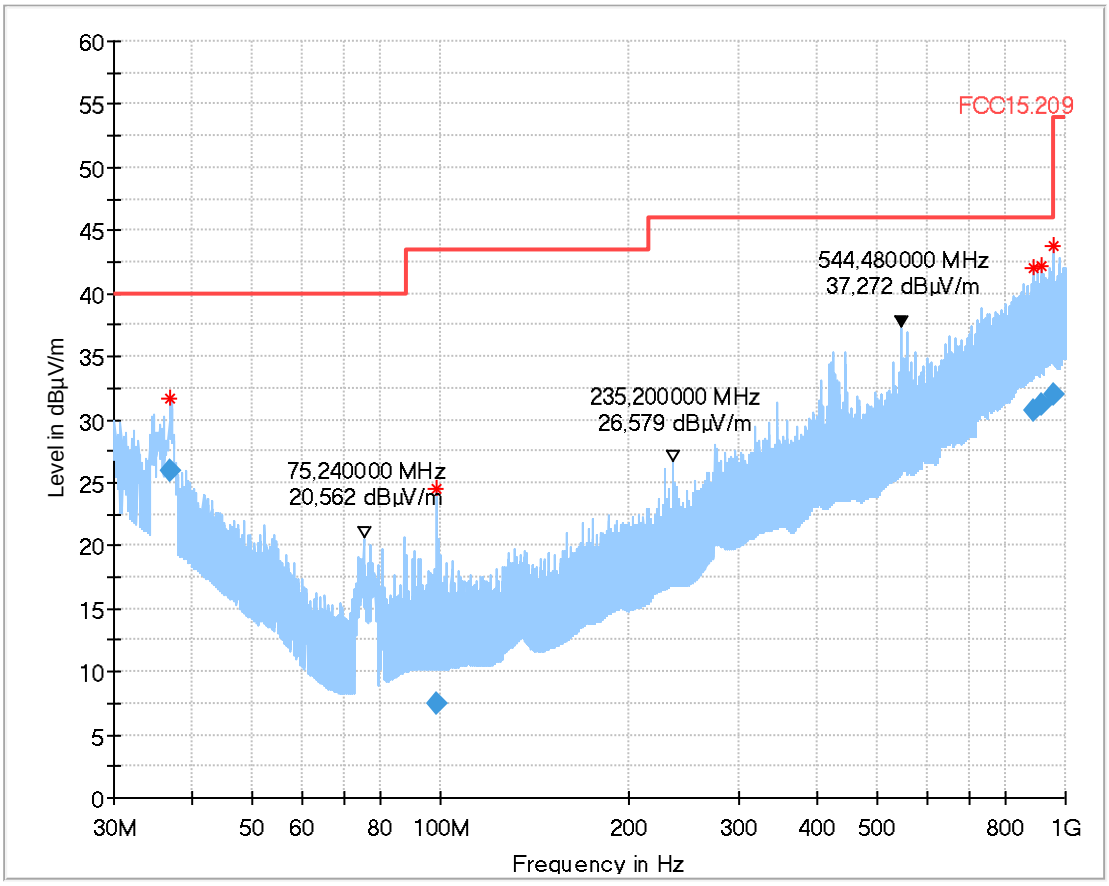
Common Information:

	08.06.2017 Page 1 of 2
Test description:	Electric Field Strength Measurement
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	not used
Used filter:	not used
Technical Data:	please see page 2 for detailed data of measurement setup
Test specification.:	FCC 15.209; RSS-Gen: Issue 3
Operating Mode	g | 9 Mbit | Ch 1| Power level 11
Operator:	Klv
Operating conditions:	Humidity: 45%rH; Temperature: 20°C
Power during tests:	13 V DC
comment:	EUT standing

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
36.864000	26.02	40.00	13.98	1000.0	120.000	125.0	V	110.0	18.5
98.552000	7.46	43.50	36.04	1000.0	120.000	198.0	V	90.0	8.1
889.216000	30.77	46.00	15.23	1000.0	120.000	360.0	V	196.0	26.6
915.900000	31.18	46.00	14.82	1000.0	120.000	134.0	V	258.0	26.8
959.816000	31.92	46.00	14.08	1000.0	120.000	137.0	H	304.0	27.5

3.02b_WLAN_g mode_9Mbps_Ch1_laying

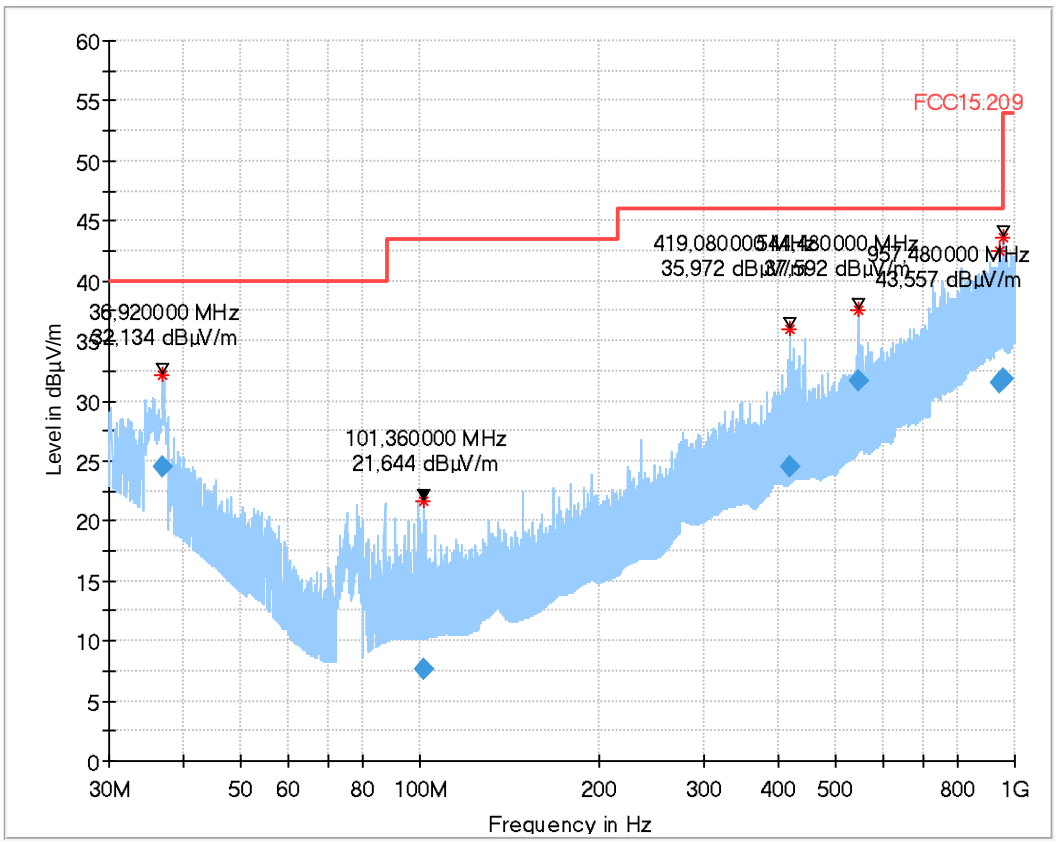
Common Information:

	08.06.2017 Page 1 of 2
Test description:	Electric Field Strength Measurement
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	not used
Used filter:	not used
Technical Data:	please see page 2 for detailed data of measurement setup
Test specification.:	FCC 15.209; RSS-Gen: Issue 3
Operating Mode:	g | 9 Mbit | Ch 1| Power level 11
Operator:	Klv
Operating conditions:	WLAN
Power during tests:	13 V DC
comment:	EUT laying

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
----------	----------
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
36.848000	24.46	40.00	15.54	1000.0	120.000	292.0	V	69.0	18.5
101.456000	7.67	43.50	35.83	1000.0	120.000	165.0	H	0.0	8.1
419.100000	24.48	46.00	21.52	1000.0	120.000	360.0	V	25.0	18.8
544.492000	31.70	46.00	14.30	1000.0	120.000	204.0	H	222.0	21.2
940.336000	31.54	46.00	14.46	1000.0	120.000	346.0	V	20.0	26.8
957.524000	31.86	46.00	14.14	1000.0	120.000	301.0	H	354.0	27.4

3.03a_WLAN_n-mode_MCS0_Ch6_standing

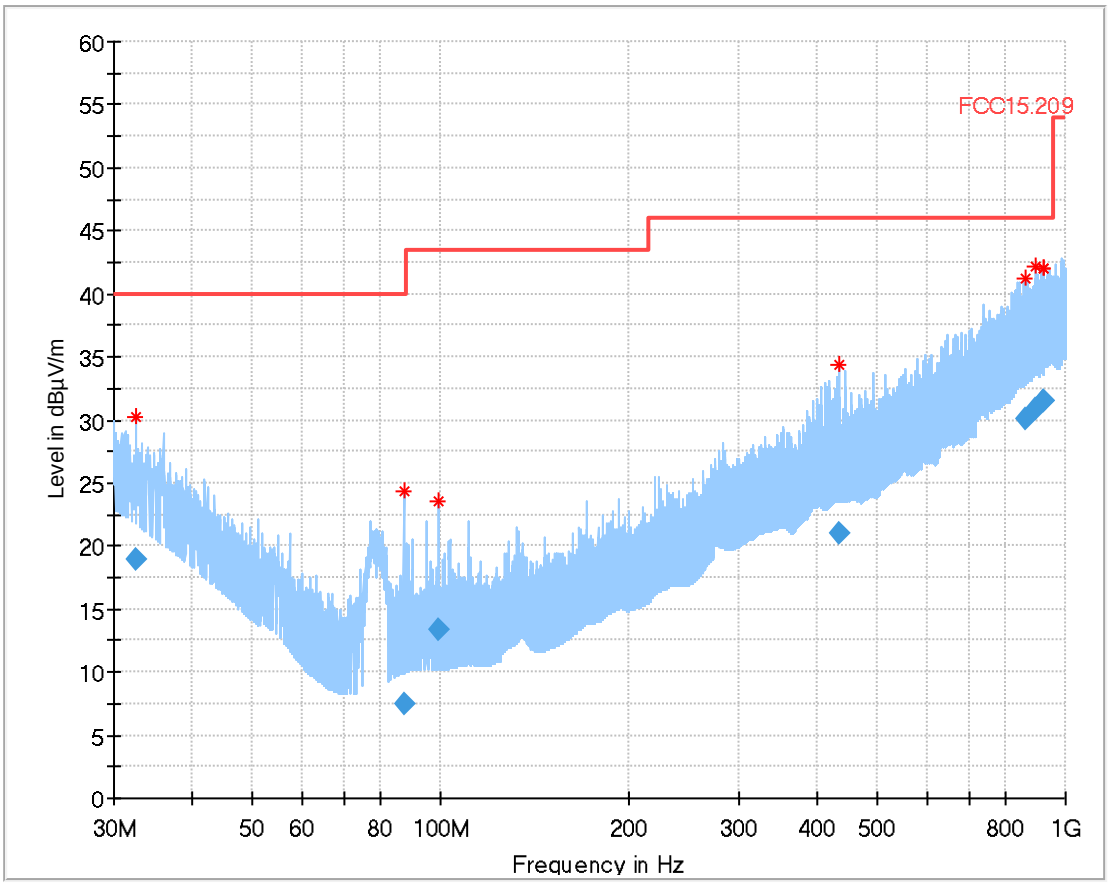
Common Information

Test description:	Electric Field Strength Measurement
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	not used
Used filter:	not used
Technical Data:	please see page 2 for detailed data of measurement setup
Test specification.:	FCC 15.209; RSS-Gen: Issue 3
Operating Mode	n(HT20) | MCS0 | Ch 6| Power level 11
Operator:	Klv
Operating conditions:	Humidity: 45%rH; Temperature: 20°C
Power during tests:	13VDC
comment:	EUT standing

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
32.456000	18.91	40.00	21.09	1000.0	120.000	117.0	H	161.0	20.4
87.220000	7.50	40.00	32.50	1000.0	120.000	360.0	V	317.0	8.0
99.196000	13.33	43.50	30.17	1000.0	120.000	360.0	V	276.0	8.1
433.184000	20.95	46.00	25.05	1000.0	120.000	142.0	H	134.0	19.4
863.276000	30.14	46.00	15.86	1000.0	120.000	308.0	V	309.0	25.9
895.020000	30.94	46.00	15.06	1000.0	120.000	228.0	H	196.0	26.8
921.692000	31.51	46.00	14.49	1000.0	120.000	129.0	V	266.0	27.1
923.500000	31.57	46.00	14.43	1000.0	120.000	360.0	V	94.0	27.1

3.03b_WLAN_n-mode_MCS0_Ch6_laying

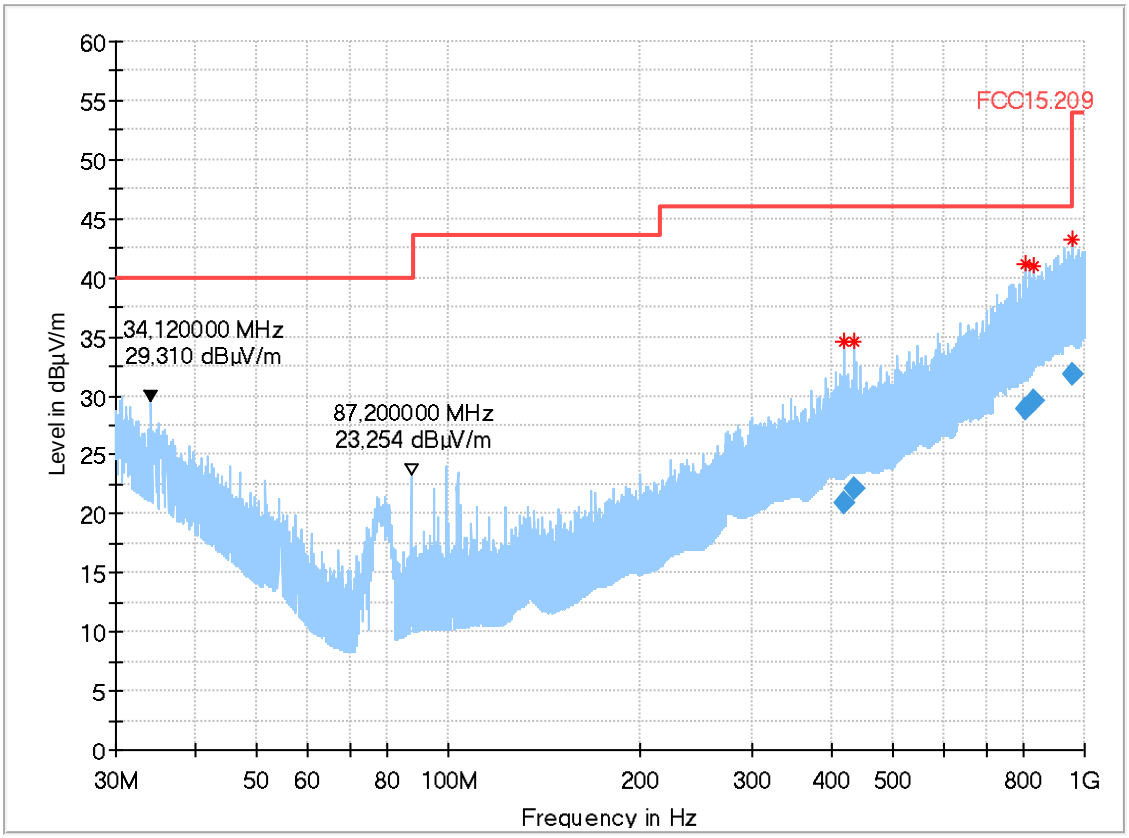
Common Information

Test description:	Electric Field Strength Measurement
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	not used
Used filter:	not used
Technical Data:	please see page 2 for detailed data of measurement setup
Test specification.:	FCC 15.209; RSS-Gen: Issue 3
Operating Mode	n(HT20) | MCS0 | Ch 6| Power level 11
Operator:	HEl
Operating conditions:	Humidity: 45%rH; Temperature: 20°C
Power during tests:	13VDC
comment:	EUT standing

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
418.088000	20.97	46.00	25.03	1000.0	120.000	360.0	V	259.0	18.7
433.312000	22.07	46.00	23.93	1000.0	120.000	350.0	V	21.0	19.4
808.480000	28.89	46.00	17.11	1000.0	120.000	118.0	V	219.0	25.4
828.916000	29.60	46.00	16.40	1000.0	120.000	129.0	V	65.0	25.6
956.648000	31.81	46.00	14.19	1000.0	120.000	226.0	V	93.0	27.4

3.04b_WLAN_n mode_HT40_MCS7_Ch3_ laying

Common Information

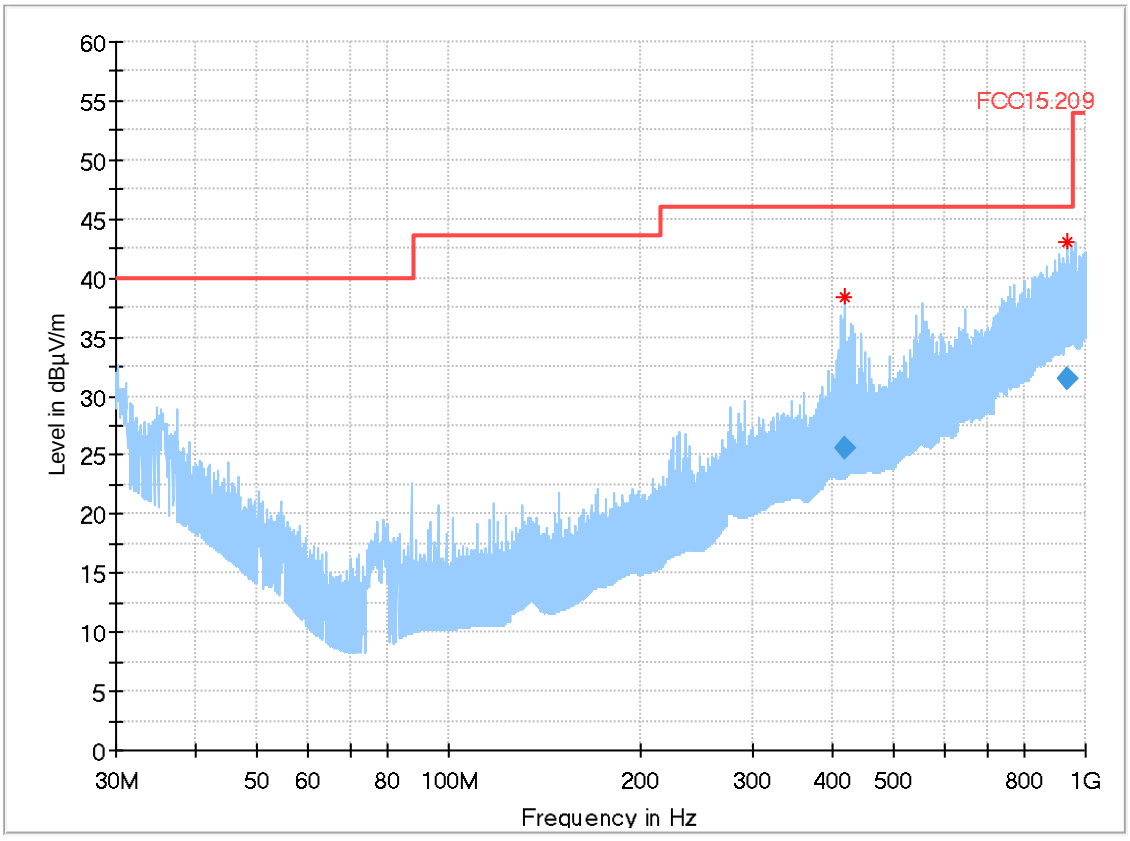
23.06.2017 Page 1 of 2

Test description:	Electric Field Strength Measurement
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	not used
Used filter:	not used
Technical Data:	please see page 2 for detailed data of measurement setup
Test specification.:	FCC 15.209; RSS-Gen: Issue 3
Operator:	AFr
Operating mode:	n(HT40) | MCS7 | Ch 3 | Power level 11
Operating conditions:	Humidity: 45%rH; Temperature: 20°C
Power during tests:	15 V DC
comment:	DUT Laying

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
----------	----------
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
419.128000	25.61	46.00	20.39	1000.0	120.000	343.0	V	269.0	18.8
934.748000	31.43	46.00	14.57	1000.0	120.000	243.0	H	336.0	26.9

3.05a_WLAN_n mode_HT40_MCS0_Ch9_ standing

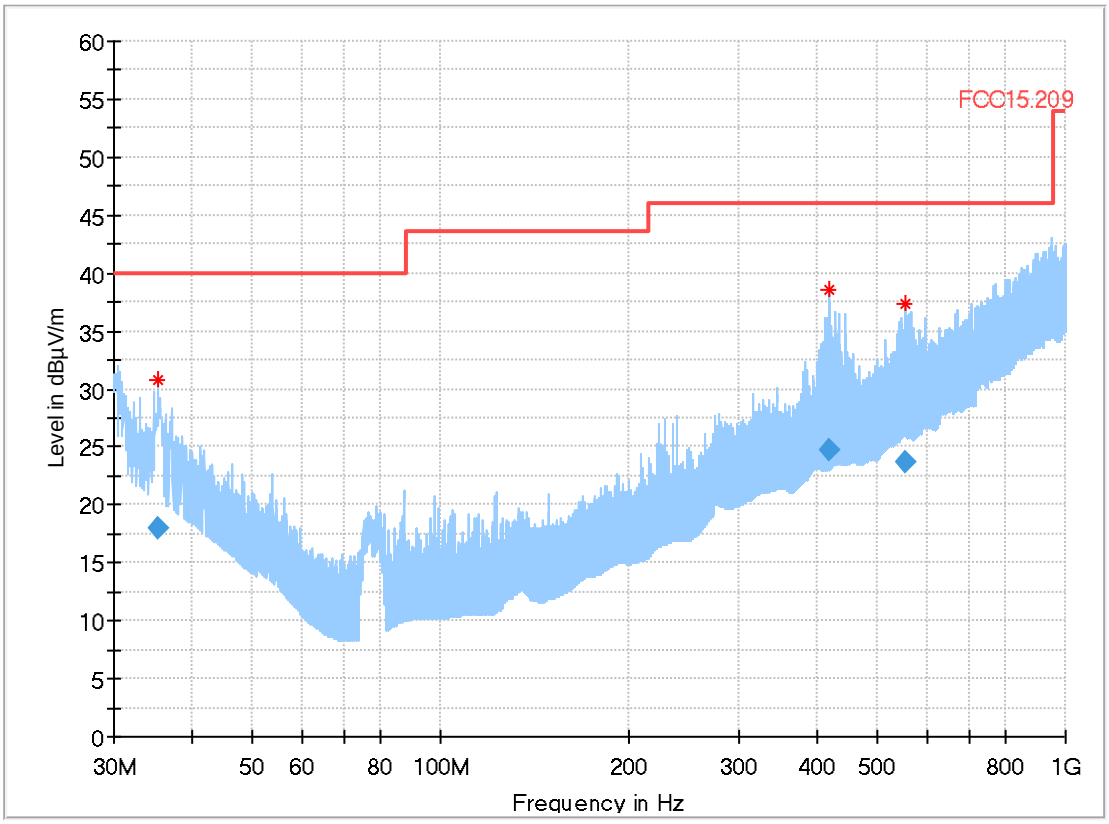
Common Information

Test description:	Electric Field Strength Measurement
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	not used
Used filter:	not used
Technical Data:	please see page 2 for detailed data of measurement setup
Test specification.:	FCC 15.209; RSS-Gen: Issue 3
Operator:	AFr
Operating mode:	n(HT40) | MCS0 | Ch 9 | Power level 11
Operating conditions:	Humidity: 45%rH; Temperature: 20°C
Power during tests:	15 V DC
comment:	DUT Standing

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
----------	----------
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
35.388000	18.00	40.00	22.00	1000.0	120.000	179.0	V	327.0	19.1
419.040000	24.68	46.00	21.32	1000.0	120.000	360.0	V	359.0	18.8
555.168000	23.63	46.00	22.37	1000.0	120.000	233.0	H	58.0	21.6

3.05b_WLAN_n mode_HT40_MCS0_Ch9_ laying

Common Information

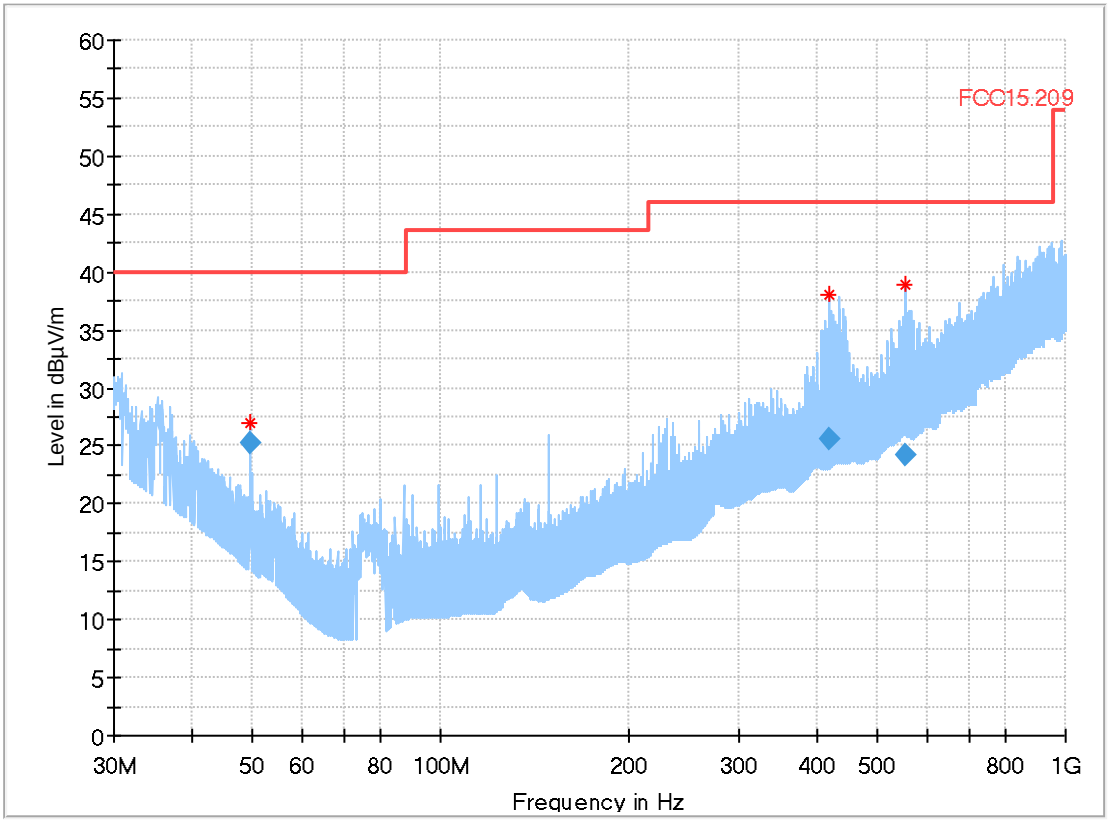
23.06.2017 Page 1 of 2

Test description:	Electric Field Strength Measurement
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	not used
Used filter:	not used
Technical Data:	please see page 2 for detailed data of measurement setup
Test specification.:	FCC 15.209; RSS-Gen: Issue 3
Operator:	AFr
Operating mode:	n(HT40) | MCS0 | Ch 9 | Power level 11
Operating conditions:	Humidity: 45%rH; Temperature: 20°C
Power during tests:	15 V DC
comment:	DUT Laying

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
49.500000	25.26	40.00	14.74	1000.0	120.000	105.0	V	306.0	13.1
418.996000	25.65	46.00	20.35	1000.0	120.000	360.0	V	222.0	18.8
555.136000	24.27	46.00	21.73	1000.0	120.000	144.0	H	6.0	21.6

2.3. Radiated Field Strength Emissions – 1 GHz to 18 GHz

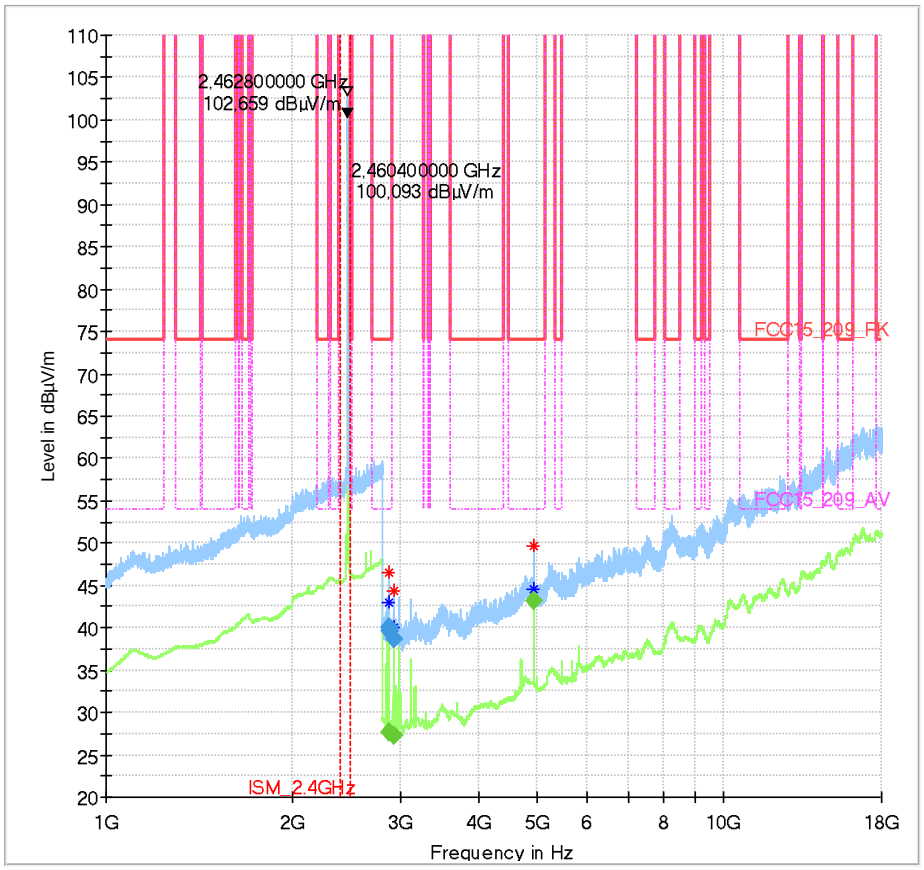
4.01_WLAN_b mode_1Mbps_Ch11

Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 4
Antenna polarisation:	horizontal/vertical
Operation mode:	b | 1 Mbit | Ch 11| Power level 14
Operator Name:	RIs
Comment:	

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-



Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)
2862.450000	---	27.59	54.00	26.41	100.0	1000.000
2862.770000	39.72	---	74.00	34.28	100.0	1000.000
2863.200000	39.99	---	74.00	34.01	100.0	1000.000
2924.570000	---	27.23	150.00	122.77	100.0	1000.000
2924.690000	38.75	---	150.00	111.25	100.0	1000.000
4924.010000	---	43.28	54.00	10.72	100.0	1000.000

(continuation of the "Final_Result" table from column 16 ...)

Frequency (MHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2862.450000	155.0	V	227.0	0.0	-0.2
2862.770000	155.0	V	193.0	0.0	-0.3
2863.200000	155.0	H	-14.0	0.0	-0.3
2924.570000	155.0	V	2.0	90.0	-0.8
2924.690000	155.0	V	-39.0	90.0	-0.8
4924.010000	155.0	H	7.0	0.0	4.4

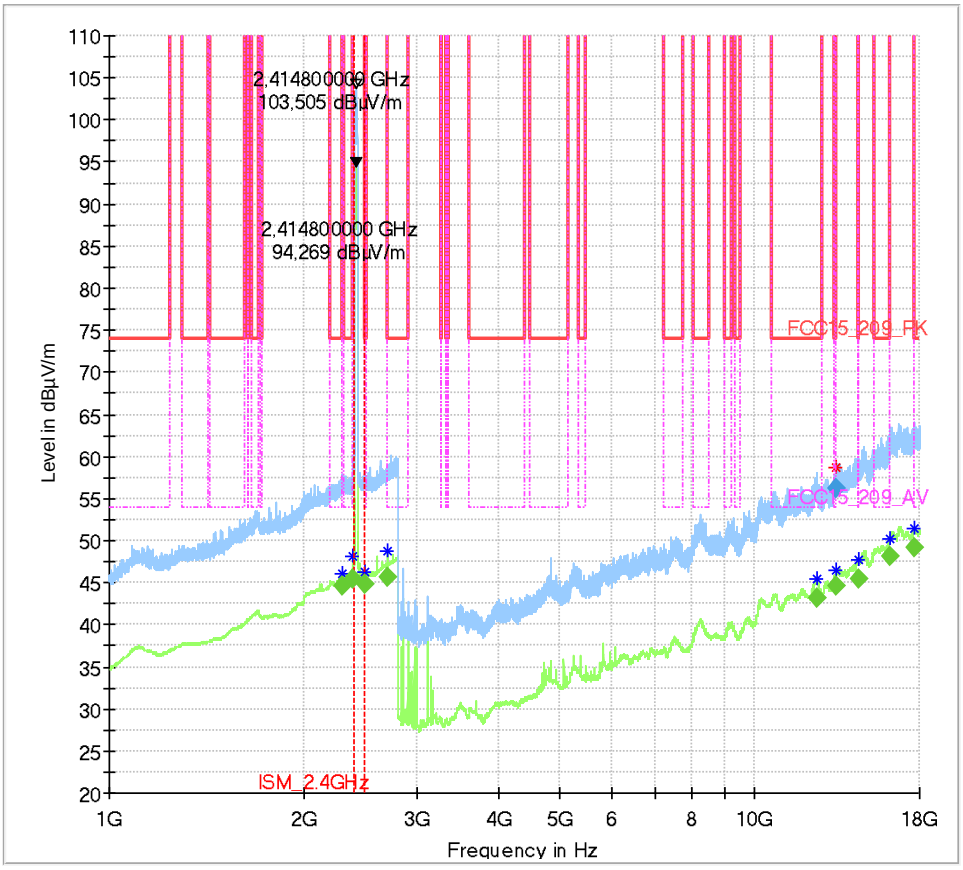
4.02_WLAN_g mode_9Mbps_Ch1

Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 4
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	KIv
Comment:	Channel no. 1
Comment2:	Modulation Type: g-mode Data Rate: 9 Mbps

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
----------	----------
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-



Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2299.730000	---	44.62	54.00	9.38	1000.000	155.0	V	38.0	0.0	35.8
2389.210000	---	45.41	54.00	8.59	1000.000	155.0	H	4.0	0.0	35.5
2483.500000	---	44.73	54.00	9.27	1000.000	155.0	H	82.0	0.0	35.6
2702.530000	---	45.64	54.00	8.36	1000.000	155.0	V	-22.0	90.0	37.1
12501.210000	---	43.16	54.00	10.84	1000.000	155.0	H	-27.0	0.0	19.9
13357.490000	56.23	---	74.00	17.77	1000.000	155.0	H	3.0	0.0	19.9
13394.810000	---	44.63	54.00	9.37	1000.000	155.0	H	346.0	90.0	20.1
14475.210000	---	45.53	54.00	8.47	1000.000	155.0	V	169.0	90.0	22.2
16194.250000	---	48.22	54.00	5.78	1000.000	155.0	V	50.0	90.0	24.8
17720.410000	---	49.21	54.00	4.79	1000.000	155.0	H	118.0	0.0	25.7

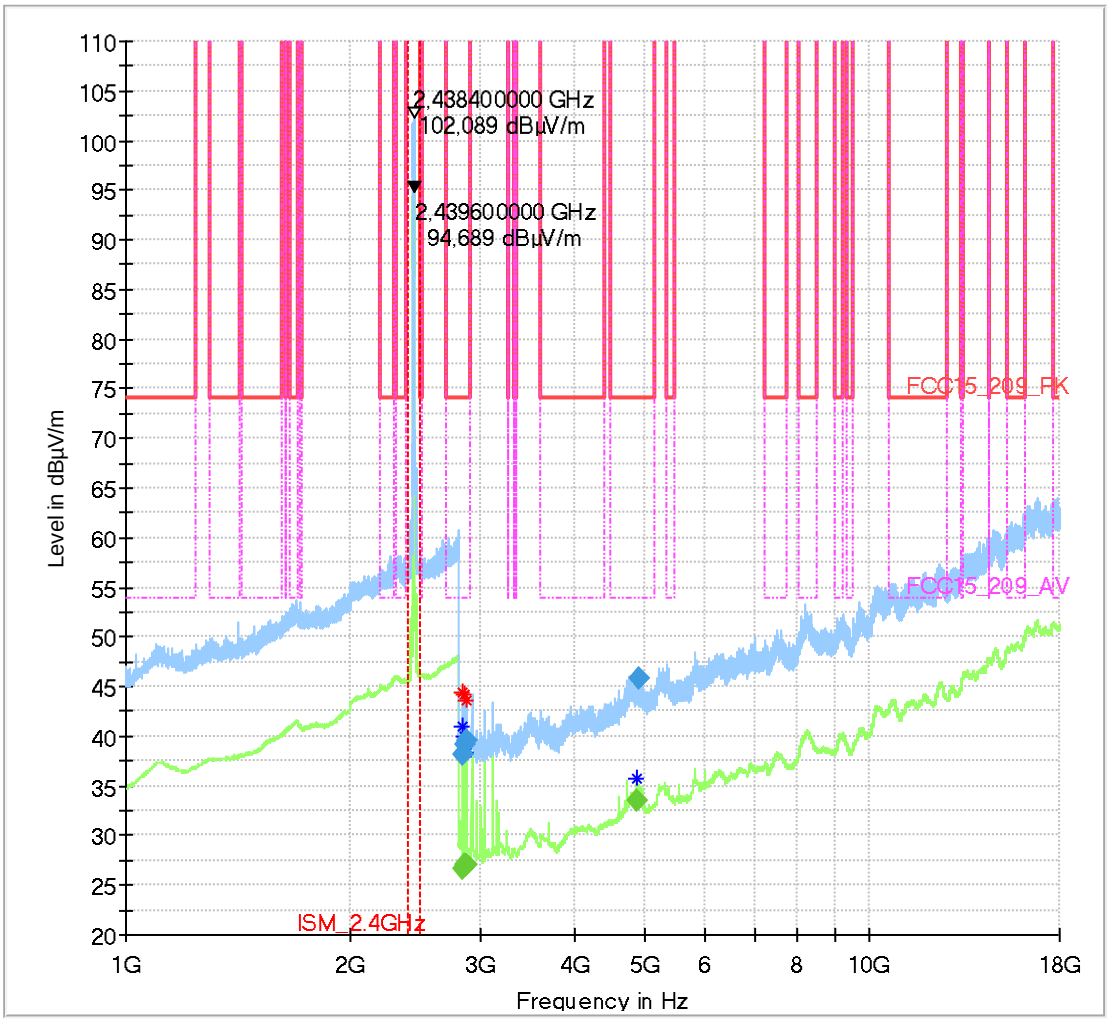
4.03_WLAN_n mode_MCS0_Ch6

Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 4
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	KIv
Comment:	Channel no. 6
Comment2:	Modulation Type: n-mode Data Rate: MCS0

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-



Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)
2842.570000	---	26.66	54.00	27.34	100.0	1000.000	155.0
2842.610000	38.20	---	74.00	35.80	100.0	1000.000	155.0
2852.170000	39.25	---	74.00	34.75	100.0	1000.000	155.0
2852.730000	---	27.11	54.00	26.89	100.0	1000.000	155.0
2869.450000	39.66	---	74.00	34.34	100.0	1000.000	155.0
2869.530000	---	27.10	54.00	26.90	100.0	1000.000	155.0
4874.010000	---	33.55	54.00	20.45	100.0	1000.000	155.0
4878.970000	45.76	---	74.00	28.24	100.0	1000.000	155.0

(continuation of the "Final_Result" table from column 16 ...)

Frequency (MHz)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2842.570000	V	54.0	90.0	-0.7
2842.610000	V	50.0	90.0	-0.7
2852.170000	V	271.0	0.0	-0.4
2852.730000	V	291.0	0.0	-0.4
2869.450000	V	36.0	0.0	-0.7
2869.530000	V	-26.0	0.0	-0.7
4874.010000	H	10.0	0.0	4.7
4878.970000	H	339.0	0.0	4.6

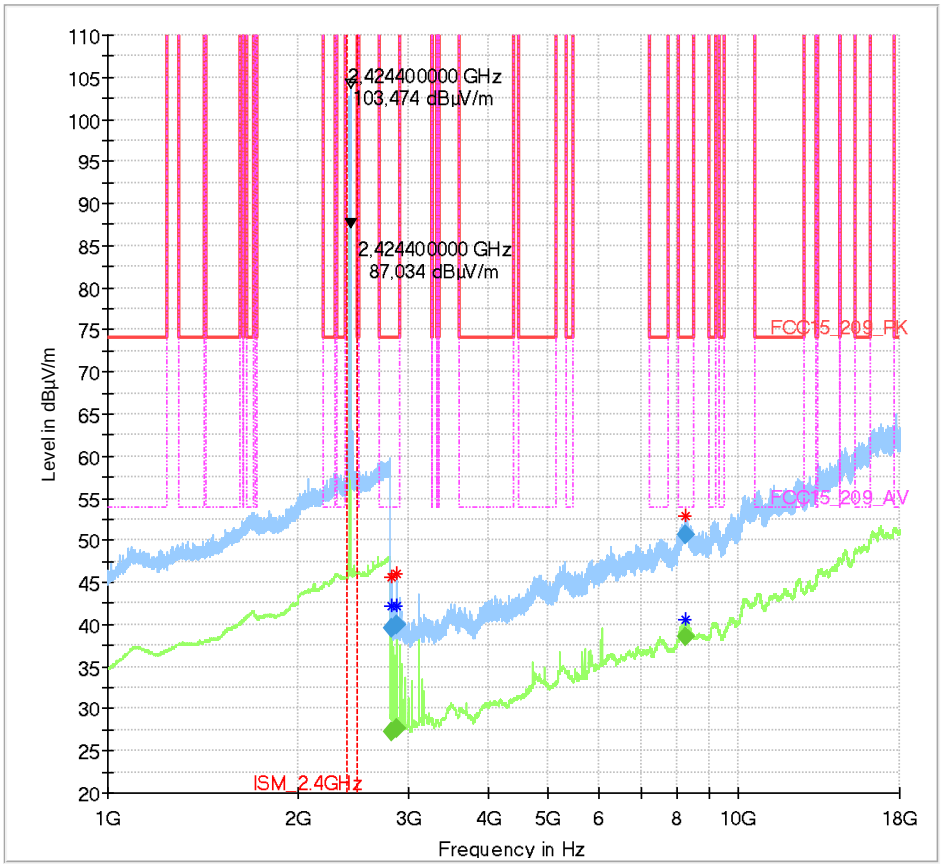
4.04_WLAN_n mode_HT40_MCS7_Ch3

Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 4
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	RIs
Comment:	Channel no. 3
Comment2:	Modulation Type: n-mode Data Rate: MCS7

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-



Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)
2824.690000	39.58	---	74.00	34.42	100.0	1000.000	155.0	V	17.0	90.0
2825.290000	---	27.30	54.00	26.70	100.0	1000.000	155.0	V	14.0	90.0
2862.930000	39.97	---	74.00	34.03	100.0	1000.000	155.0	H	-7.0	0.0
2863.490000	---	27.67	54.00	26.33	100.0	1000.000	155.0	H	39.0	0.0
8223.450000	---	38.49	54.00	15.51	100.0	1000.000	155.0	H	155.0	90.0
8234.930000	50.60	---	74.00	23.40	100.0	1000.000	155.0	V	161.0	90.0

(continuation of the "Final_Result" table from column 16 ...)

Frequency (MHz)	Corr.	Comment
2824.690000	-0.3	01:26:50 - 10.06.2017
2825.290000	-0.3	01:35:18 - 10.06.2017
2862.930000	-0.3	01:24:35 - 10.06.2017
2863.490000	-0.3	01:31:02 - 10.06.2017
8223.450000	13.9	01:32:58 - 10.06.2017
8234.930000	14.0	01:28:50 - 10.06.2017

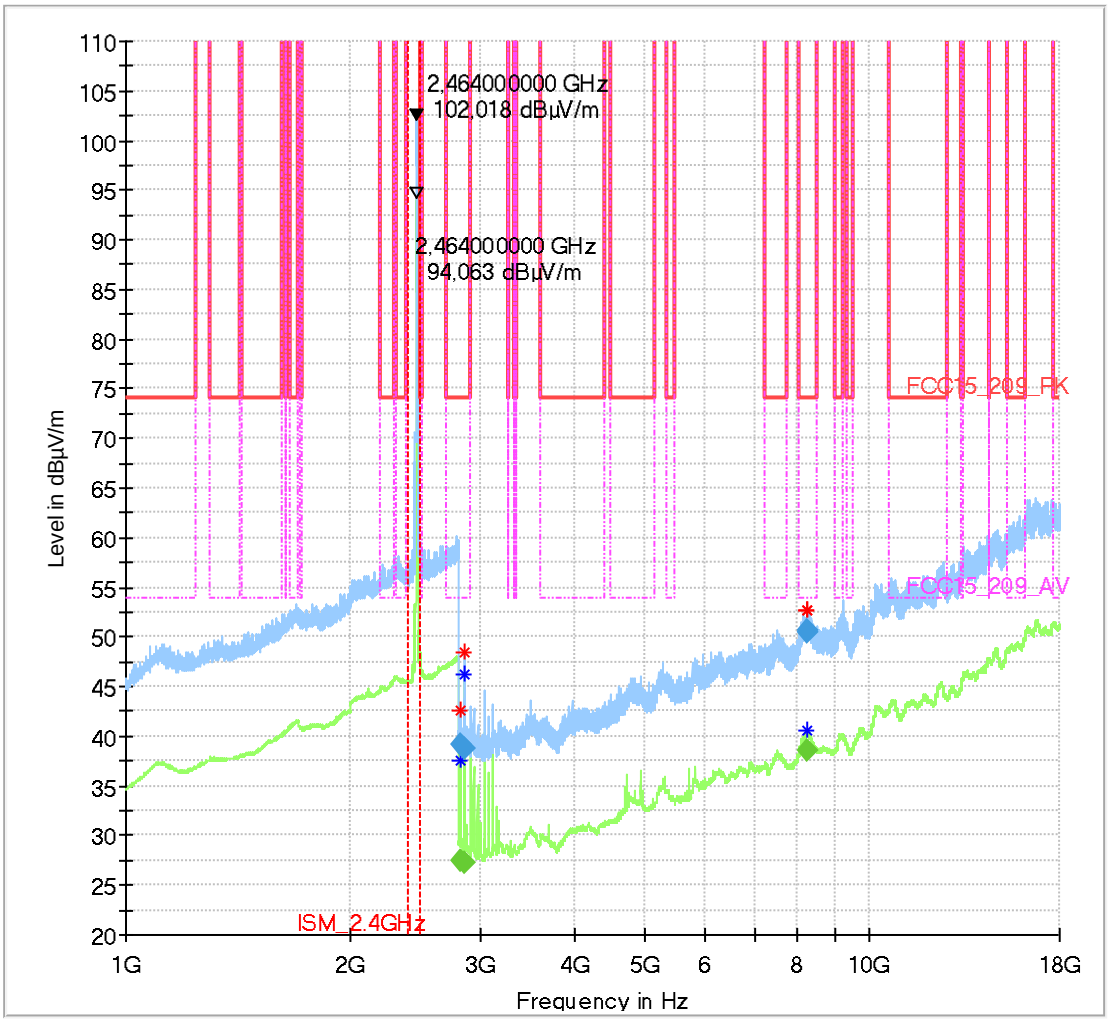
4.05_WLAN_n mode_HT40_MCS0_Ch9

Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 4
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	RIs
Comment:	Channel no. 9
Comment2:	Modulation Type: n-mode Data Rate: MCS0

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-



Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)
2819.810000	39.08	---	74.00	34.93	100.0	1000.000	155.0
2820.650000	---	27.39	54.00	26.61	100.0	1000.000	155.0
2848.650000	38.67	---	74.00	35.33	100.0	1000.000	155.0
2849.010000	---	27.23	54.00	26.77	100.0	1000.000	155.0
8231.050000	---	38.56	54.00	15.44	100.0	1000.000	155.0
8240.170000	50.43	---	74.00	23.57	100.0	1000.000	155.0
8241.370000	50.59	---	74.00	23.41	100.0	1000.000	155.0

(continuation of the "Final_Result" table from column 16 ...)

Frequency (MHz)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2819.810000	V	241.0	90.0	-0.6
2820.650000	V	277.0	90.0	-0.6
2848.650000	V	155.0	0.0	-0.5
2849.010000	V	141.0	0.0	-0.5
8231.050000	V	272.0	90.0	14.0
8240.170000	V	277.0	90.0	14.0
8241.370000	V	300.0	90.0	14.0

2.4. Radiated Field Strength Emissions – 18 GHz to 25 GHz

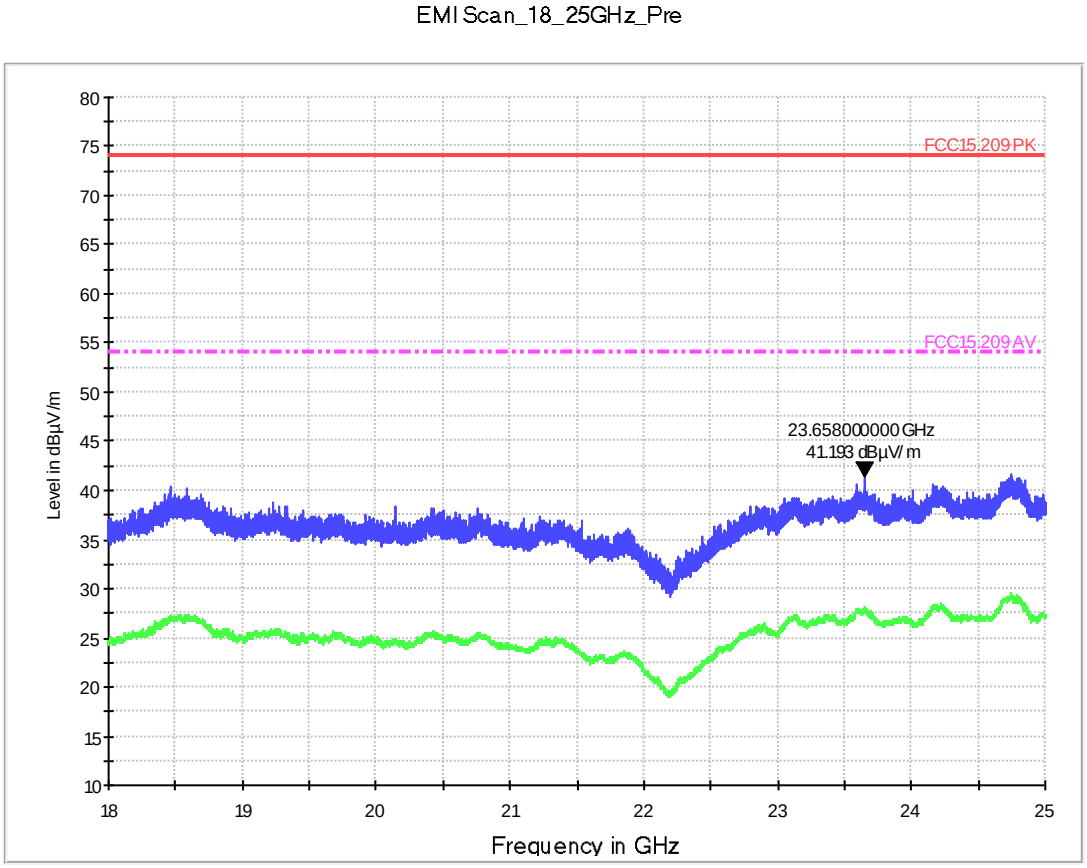
4.01b_WLAN_b mode_1Mbps_Ch11

Common Information

Test Description:	Radiated field strength emission in 1m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247, 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Distance correction factor	3 to 1m: -10.5 dB applying to measurement results
SW-Version:	EMC32 V8.53.0
Operation mode:	TX mode continuous
Operator Name:	TFr
Comment:	b | 1 Mbit | Ch 11| Power level 14

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-



4.02b_WLAN_g mode_9Mbps_Ch1

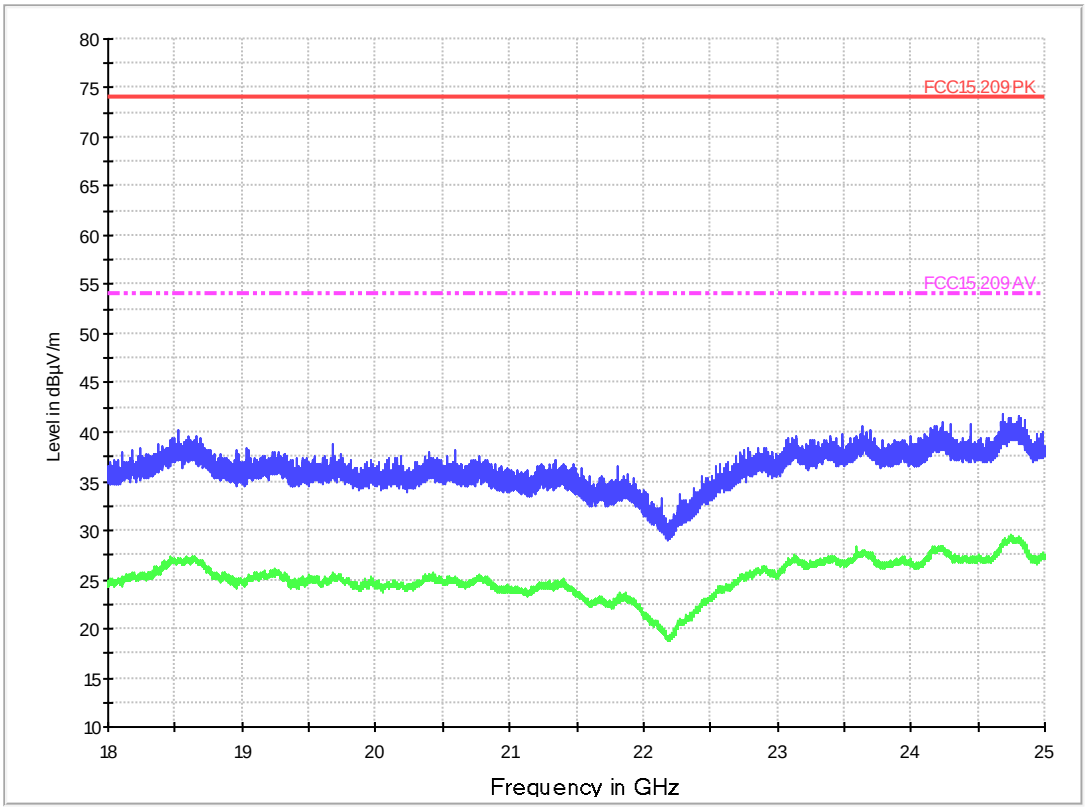
Common Information

Test Description:	Radiated field strength emission in 1m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247, 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Distance correction factor	3 to 1m: -10.5 dB applying to measurement results
SW-Version:	EMC32 V8.53.0
Operation mode:	TX mode continuous
Operator Name:	TFr
Comment:	g | 9 Mbit | Ch 1| Power level 11

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-

EMI Scan_18_25GHz_Pre



4.03b_WLAN_n mode_MCS0_Ch6

Common Information

Test Description:	Radiated field strength emission in 1m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247, 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Distance correction factor	3 to 1m: -10.5 dB applying to measurement results
SW-Version:	EMC32 V8.53.0
Operation mode:	TX mode continuous
Operator Name:	TFr
Comment:	n(HT20) | MCS0 | Ch 6| Power level 11

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-

EMI Scan_18_25GHz_Pre

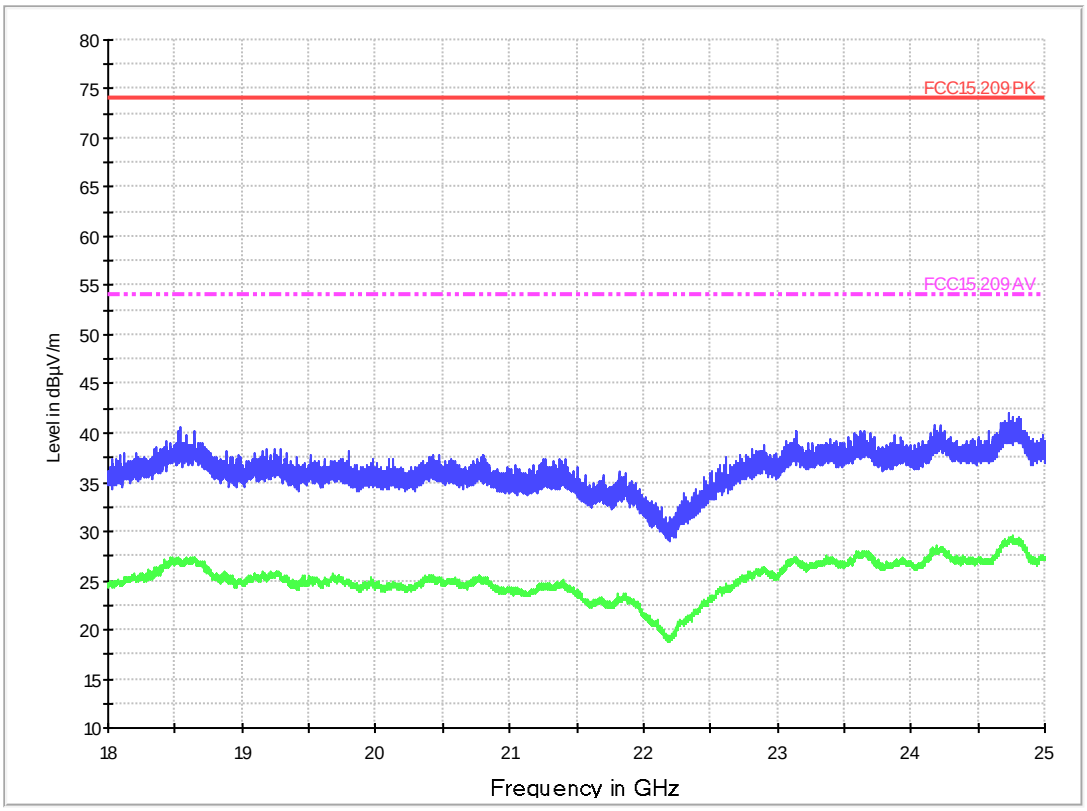


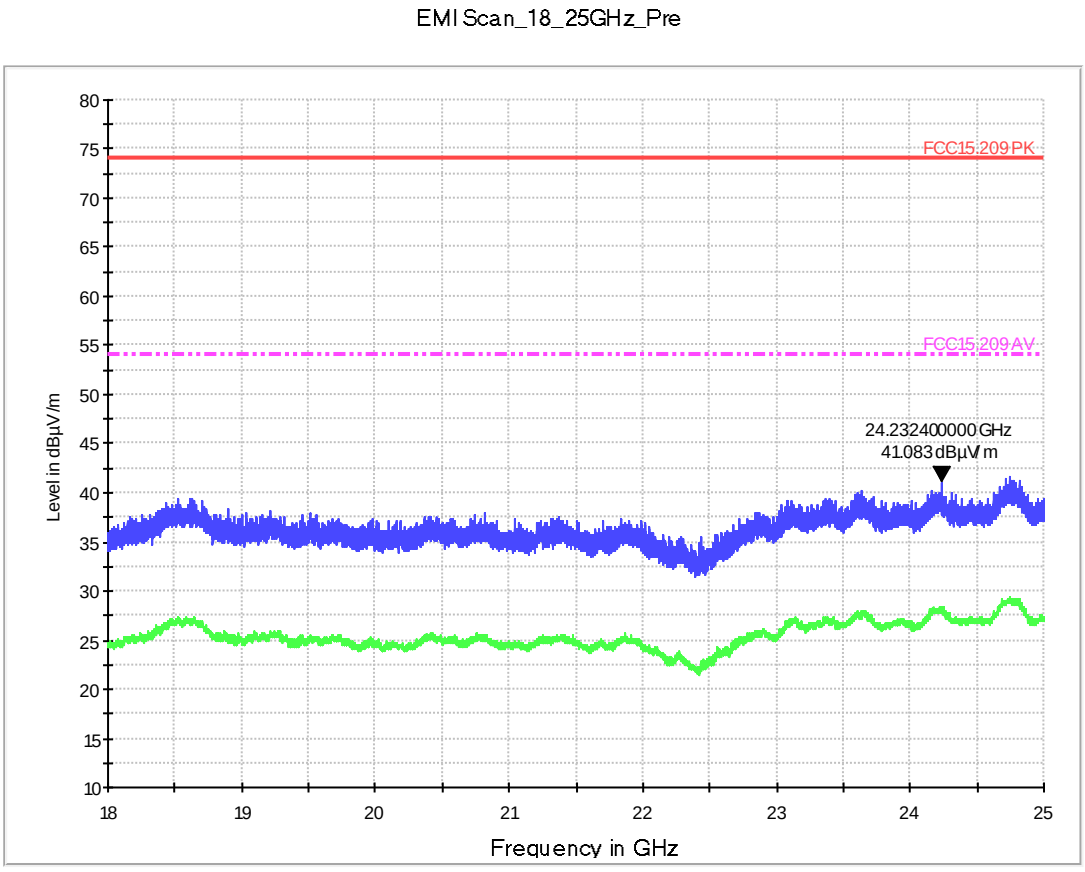
Diagram No.: 4.04b_WLAN_n mode_HT40_MCS3_Ch3

Common Information

Test Description:	Radiated field strength emission in 1m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247, 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Distance correction factor	3 to 1m: -10.5 dB applying to measurement results
SW-Version:	EMC32 V8.53.0
Operation mode:	TX mode continuous
Operator Name:	TFr
Comment:	n(HT40) | MCS7 | Ch 3 | Power level 11

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-



4.05b_WLAN_n mode_HT40_MCS0_Ch9

Common Information

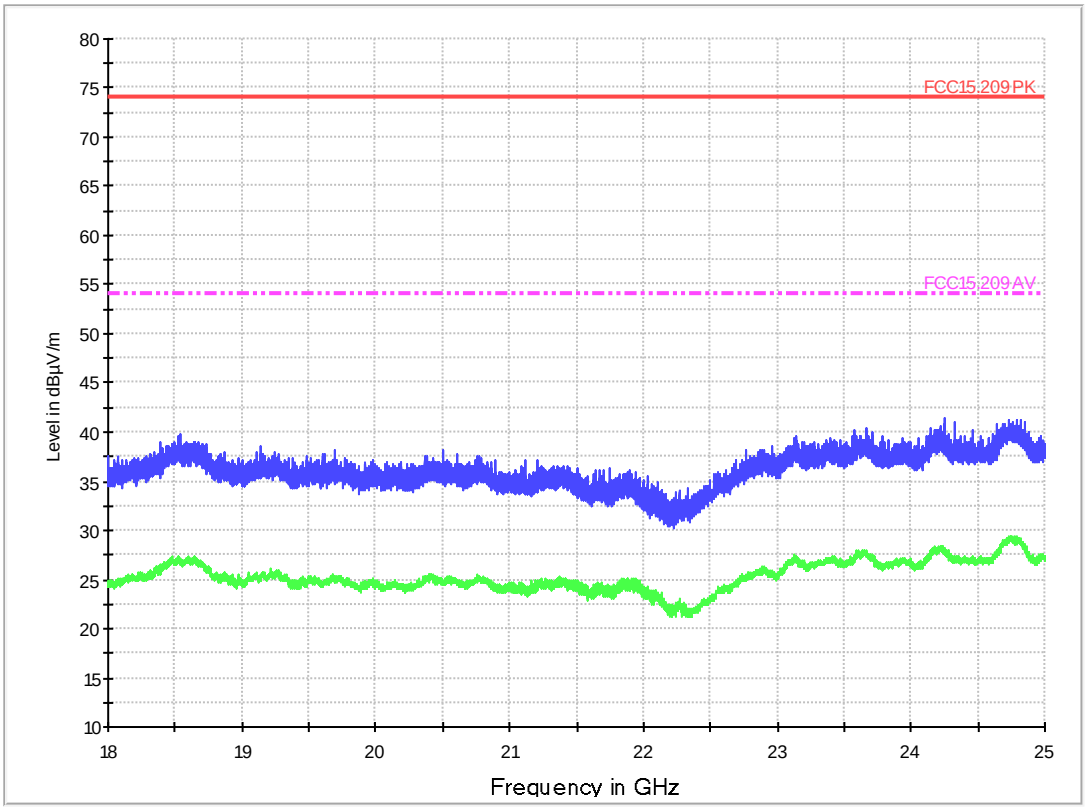
Test Description:	Radiated field strength emission in 1m distance

Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247, 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Distance correction factor	3 to 1m: -10.5 dB applying to measurement results
SW-Version:	EMC32 V8.53.0
Operation mode:	TX mode continuous
Operator Name:	TFr
Comment:	n(HT40) | MCS0 | Ch 9 | Power level 11

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-

EMI Scan_18_25GHz_Pre



3. Radiated Band-Edge Measurements

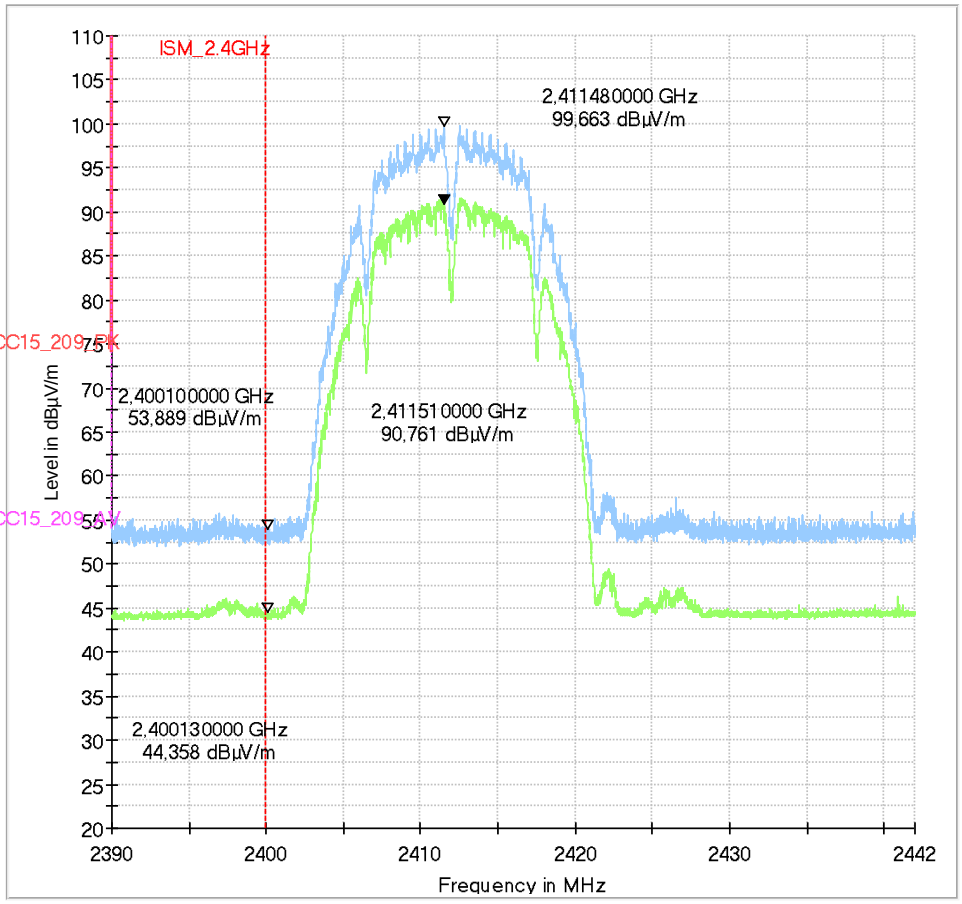
Diagram No.: 9.01_BE_WLAN_b mode_1Mbps_Ch1

Common Information

Test Description:	Band-Edge: Radiated Field Strength Emissions Emissions in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 4
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	KIv
Comment:	b-Mode; Channel 1; 1Mbps

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-



9.02_BE_WLAN_b mode_1Mbps_Ch11

Common Information

Test Description:	Band-Edge: Radiated Field Strength Emissions Emissions in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 4
Antenna polarisation:	horizontal/vertical
Operation mode:	ch 11
Operator Name:	Mah
Comment:	Channel no. 11
Comment2:	Modulation Type: b Data Rate: 1Mbit

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
----------	----------
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-

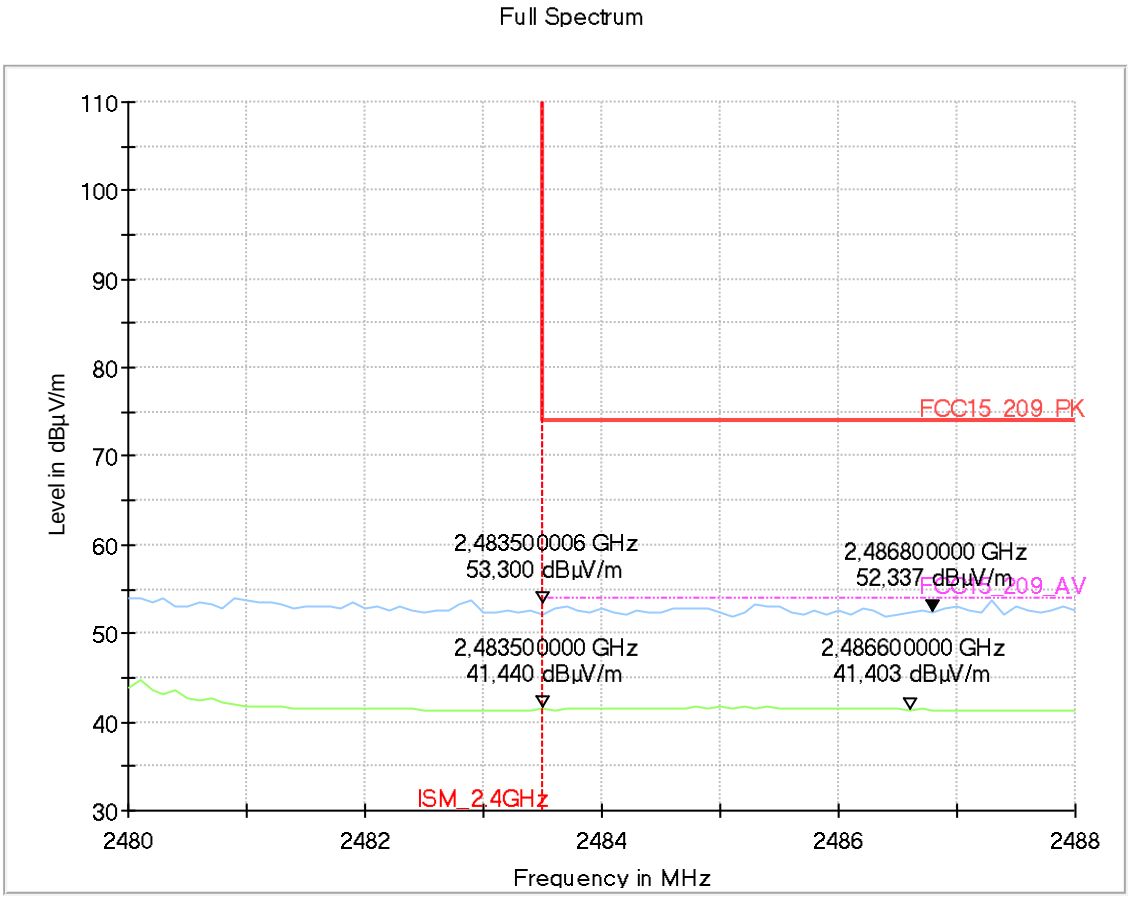


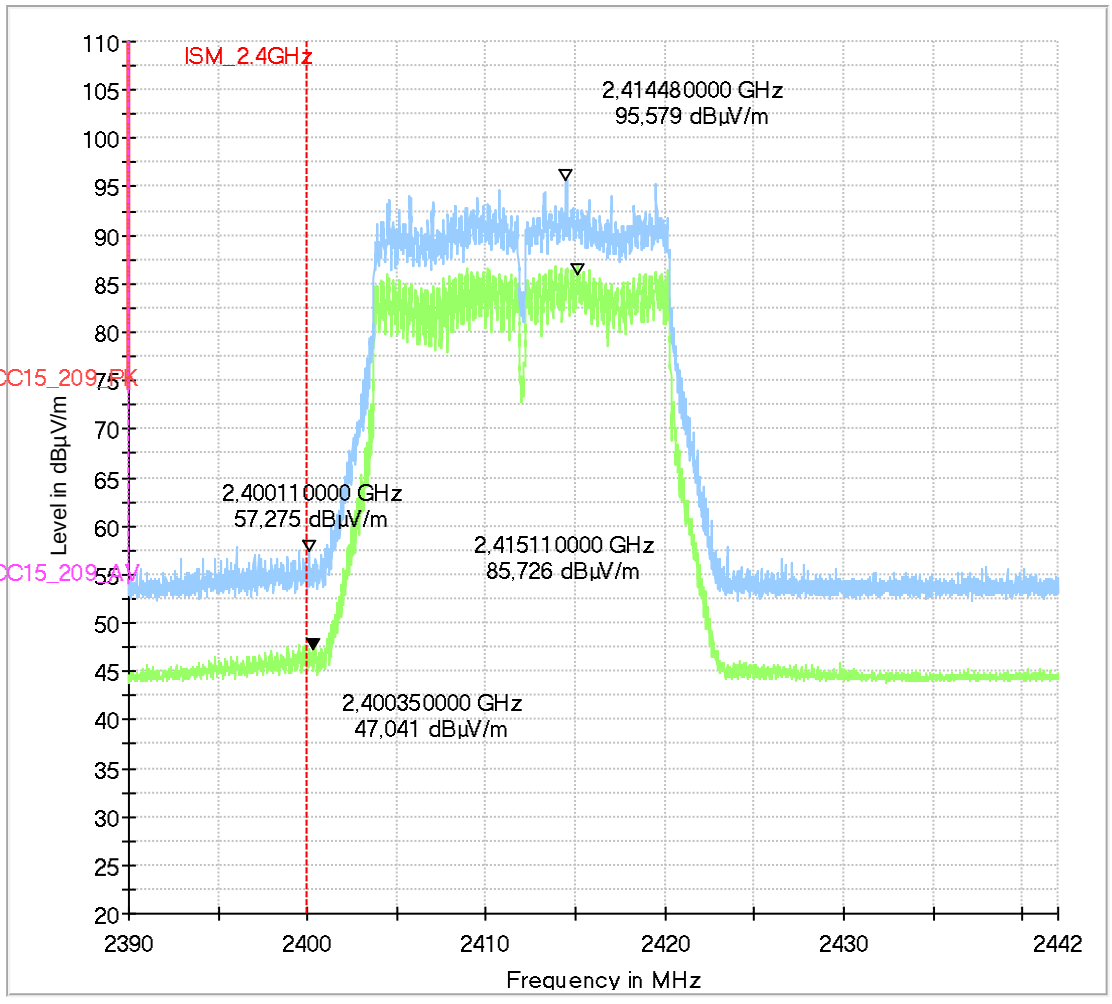
Diagram No.: 9.03_BE_WLAN _g mode_9Mbps_Ch1

Common Information

Test Description:	Band-Edge: Radiated Field Strength Emissions Emissions in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 4
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	
Comment:	Channel no. low/high
Comment2:	Modulation Type: g-mode Data Rate: 9Mbps

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-



9.04_BE_WLAN _g mode_9Mbps_Ch11

Common Information

Test Description:	Band-Edge: Radiated Field Strength Emissions Emissions in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 4
Antenna polarisation:	horizontal/vertical
Operation mode:	ch 11
Operator Name:	Mah
Comment:	Channel no. 11
Comment2:	Modulation Type: g Data Rate: 9Mbit

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-

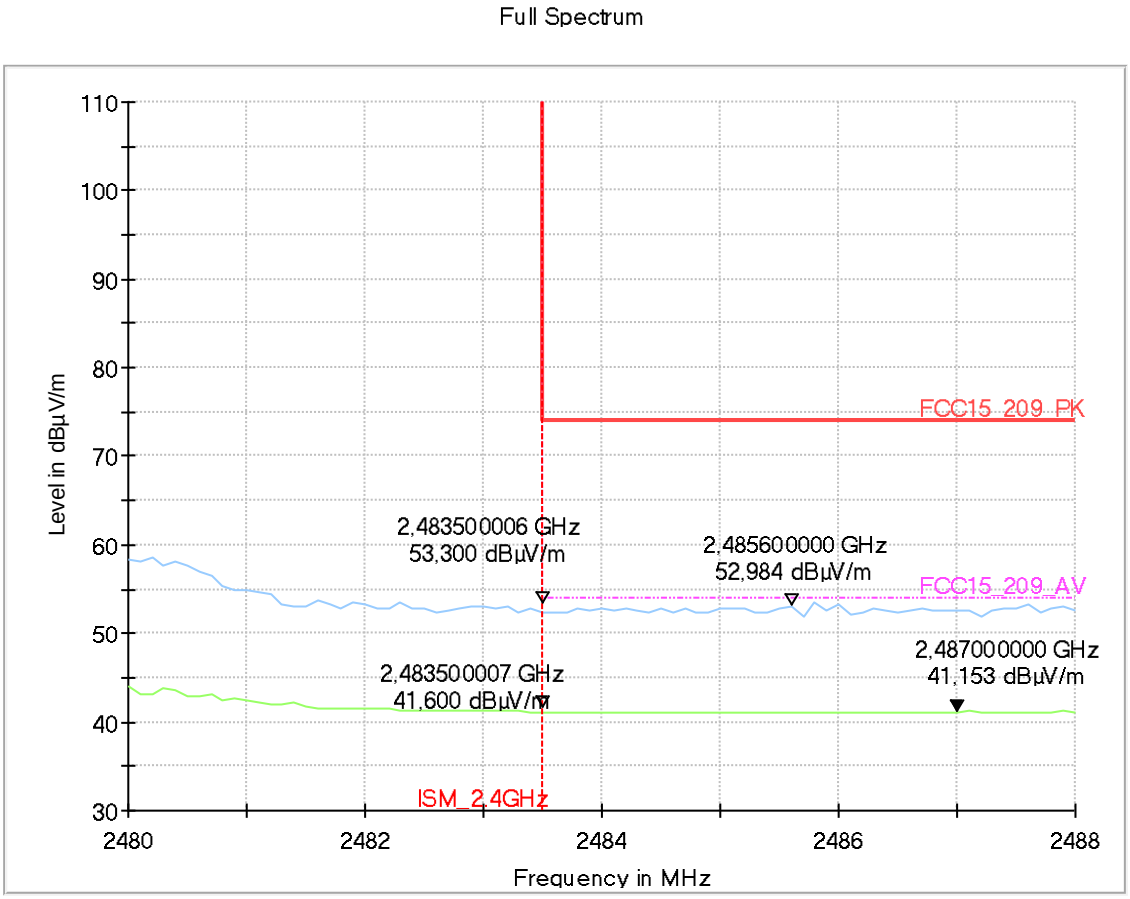


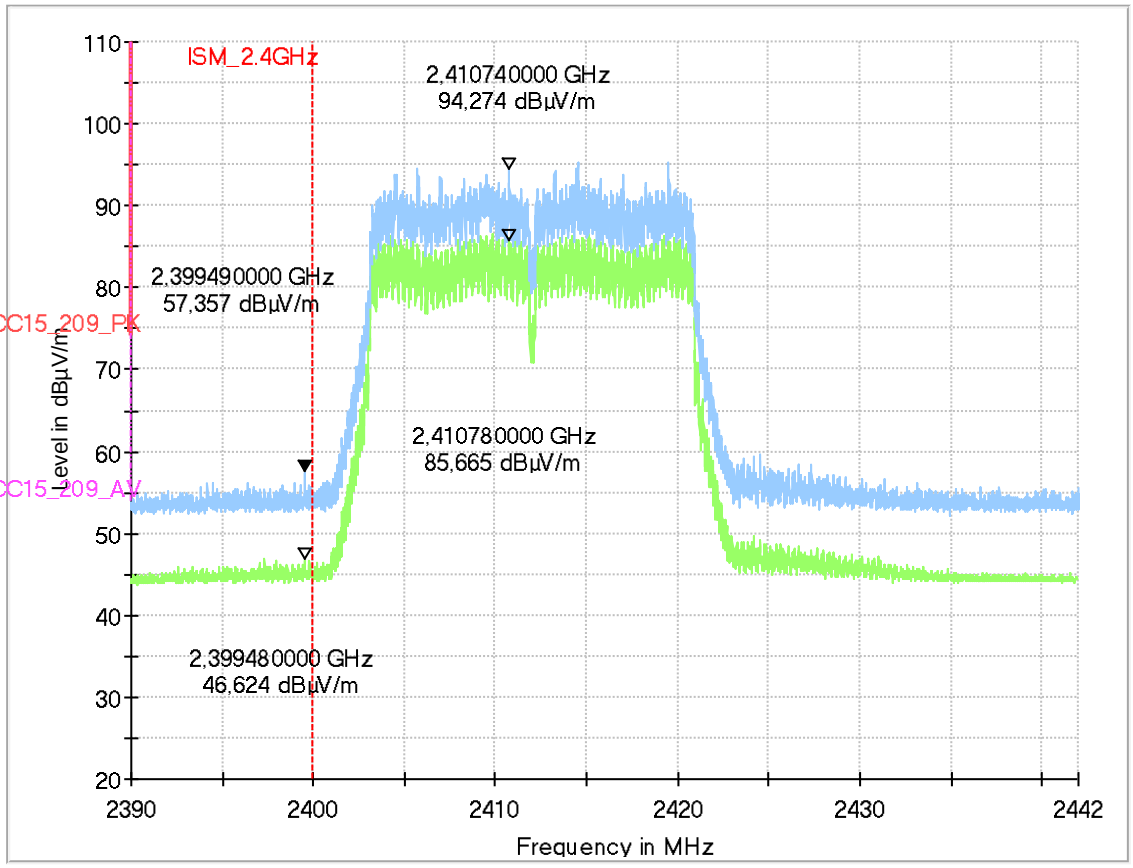
Diagram No.: 9.05_BE_WLAN _n mode_MCS0_Ch1

Common Information

Test Description:	Band-Edge: Radiated Field Strength Emissions Emissions in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 4
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	npe
Comment:	Channel no. 1
Comment2:	Modulation Type: n-mode Data Rate: MCS0

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
----------	----------
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-



9.06_BE_WLAN _n mode_MCS0_Ch11

Common Information

Test Description:	Band-Edge: Radiated Field Strength Emissions Emissions in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 4
Antenna polarisation:	horizontal/vertical
Operator Name:	Mah
Comment:	Channel no. 11
Comment2:	Modulation Type: b Data Rate: MCS0

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-

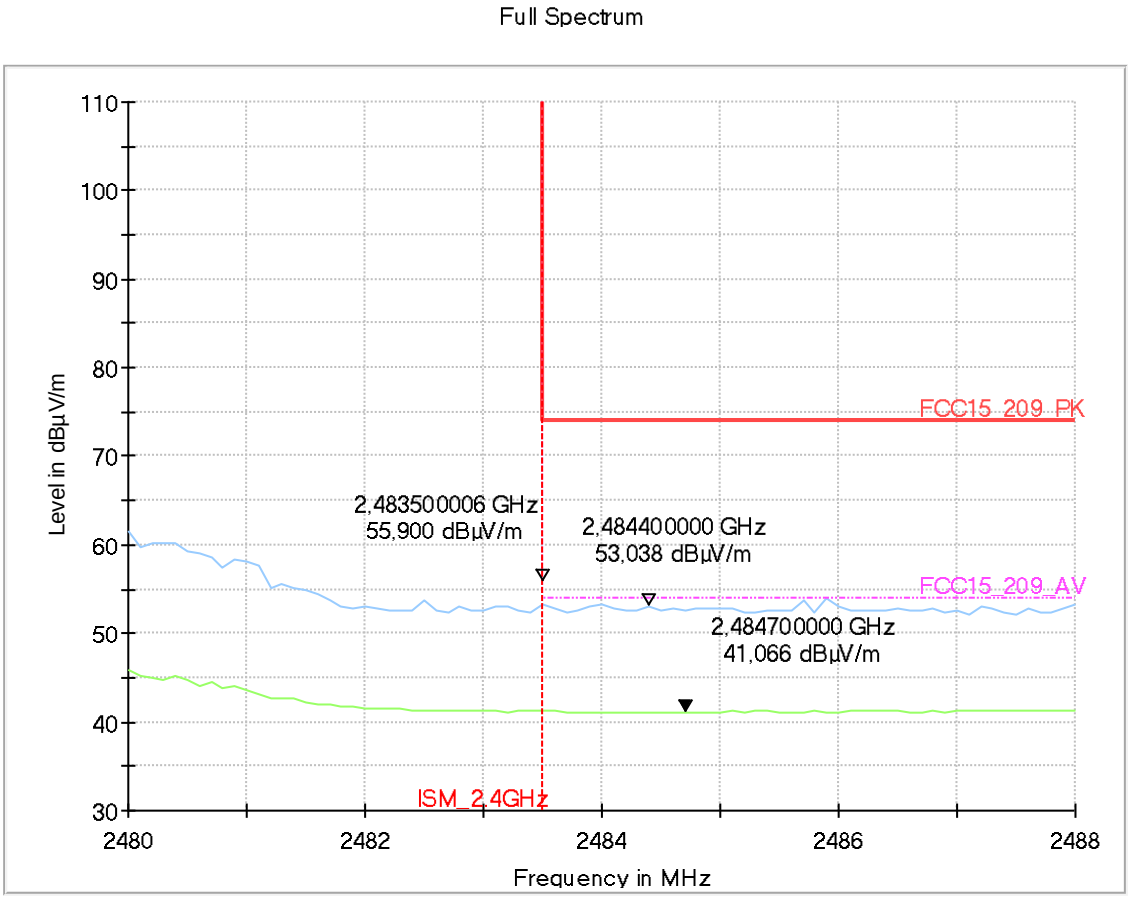


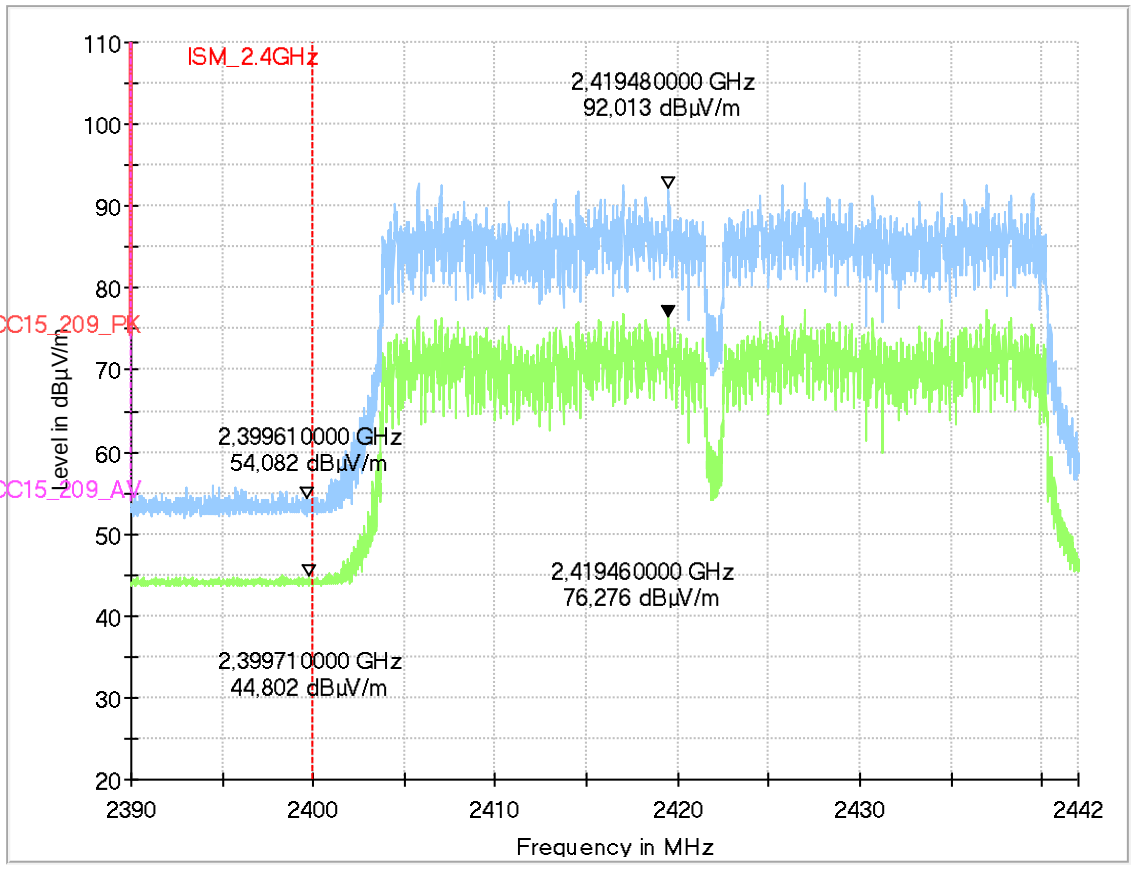
Diagram No.: 9.07_BE_WLAN_n mode_HT40_MCS0_Ch3

Common Information

Test Description:	Band-Edge: Radiated Field Strength Emissions Emissions in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 4
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	npe
Comment:	Channel no. 3
Comment2:	Modulation Type: n-mode HT40 Data Rate: MCS0

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
---	---
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-



9.08_BE_WLAN _n mode_HT40_MCS0_Ch9

Common Information

Test Description:	Band-Edge: Radiated Field Strength Emissions Emissions in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 4
Antenna polarisation:	horizontal/vertical
Operation mode:	ch 9
Operator Name:	Mah
Comment:	11n 20MHz
Comment2:	Modulation Type: n Data Rate: MCS0

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
Model:	AIVIP32R0
Type:	-
----------	----------
EUT:	-
HW version:	001
SW version:	X128
SVN:	-
Config:	-
Serial number:	259157FH0A
Connected Interfaces:	-
Power Supply:	15VDC
Comments:	-