

Annex 1: Measurement diagrams to TEST REPORT

No.: 18-1-0048201T03a

According to: FCC Regulations
Part 15.209
Part 15.247

**ISED-Regulations** 

RSS-Gen, Issue 5 RSS-247, Issue 2

for

Robert Bosch Car Multimedia GmbH

# AIVISBX0 Navigationsystem with WLAN and Bluetooth

FCC ID: YBN-AIVISBX0 ISED: 9595A-AIVISBX0



Tabelle löschen, wenn nach Normen getestet wurde, die nicht auf unserer Akkreditierungsurkunde stehen

#### **CETECOM GmbH**

Laboratory Radio Communications & Electromagnetic Compatibility
Im Teelbruch 116 • 45219 Essen • Germany
Registered in Essen, Germany, Reg. No.: HRB Essen 8984
Tel.: + 49 (0) 20 54 / 95 19-954 • Fax: + 49 (0) 20 54 / 95 19-964
E-mail: info@cetecom.com • Internet: www.cetecom.com



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### 1. Conducted RF Measurements on Antenna Port

### 1.1. Duty Cycle

### **EUT Information**

Manufacturer: Robert Bosch Car Multimedia

 Product:
 AIVISBX0

 EUT Model:
 18-1-00482S06

 HW:
 tbd

 SW;
 283C24194R

 Serial No.:
 0005009

 Connected Devices:
 13.5VDC

	DUT	DutyCycle	DutyCycle	DutyCycle
Modulation	Frequency	(%)	(dB)	(dB)
	(MHz)			
	2402	31.276	31,28	5,05
DH1	2441	31.212	31,21	5,06
	2480	31.224	31,22	5,06
	2402	65.865	65,87	1,81
DH3	2441	65.919	65,92	1,81
	2480	65.876	65,88	1,81
	2402	77.221	77,22	1,12
DH5	2441	77.185	77,19	1,12
	2480	77.202	77,20	1,12
	2402	31.501	31,50	5,02
2DH1	2441	31.475	31,48	5,02
	2480	31.566	31,57	5,01
	2402	66.077	66,08	1,80
2DH3	2441	65.815	65,82	1,82
	2480	65.870	65,87	1,81
	2402	77.161	77,16	1,13
2DH5	2441	77.425	77,43	1,11
	2480	77.157	77,16	1,13
	2402	32.298	32,30	4,91
3DH1	2441	31.459	31,46	5,02
	2480	31.407	31,41	5,03
	2402	65.720	65,72	1,82
3DH3	2441	65.708	65,71	1,82
	2480	65.711	65,71	1,82
	2402	77.168	77,17	1,13
3DH5	2441	77.160	77,16	1,13
	2480	77.286	77,29	1,12

### 1.2. Peak Power Conducted

### **EUT EUT Information**

Manufacturer: Robert Bosch Car Multimedia

 Product:
 AIVISBX0

 EUT Model:
 18-1-00482S06

 HW:
 tbd

 SW;
 283C24194R

 Serial No.:
 0005009

 Connected Devices:
 13.5VDC

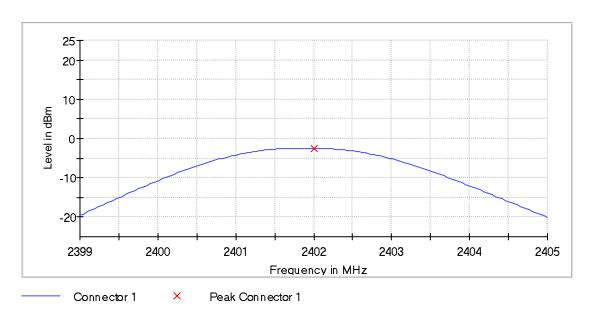
The antenna gain was measured at 3 different frequencies.

-0.38dBi

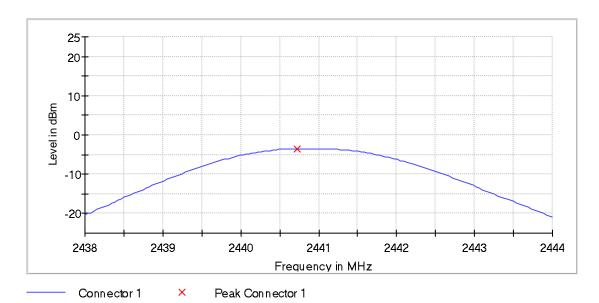
Modulation	DUT Frequency (MHz)	Peak Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)
	2402	-2,5	-0,61	-3,11
DH1	2441	-3,6	-0,38	-3,98
	2480	-2,6	-0,63	-3,23
	2402	-2,7	-0,61	-3,31
DH3	2441	-3,7	-0,38	-4,08
	2480	-2,7	-0,63	-3,33
	2402	-2,5	-0,61	-3,11
DH5	2441	-3,5	-0,38	-3,88
	2480	-2,5	-0,63	-3,13
	2402	-3,6	-0,61	-4,21
2DH1	2441	-4,3	-0,38	-4,68
	2480	-3,2	-0,63	-3,83
	2402	-3,6	-0,61	-4,21
2DH3	2441	-4,3	-0,38	-4,68
	2480	-3,6	-0,63	-4,23
	2402	-3,6	-0,61	-4,21
2DH5	2441	-4,3	-0,38	-4,68
	2480	-3,2	-0,63	-3,83
	2402	-3,3	-0,61	-3,91
3DH1	2441	-4	-0,38	-4,38
	2480	-2,8	-0,63	-3,43
	2402	-3,3	-0,61	-3,91
3DH3	2441	-4	-0,38	-4,38
	2480	-2,8	-0,63	-3,43
	2402	-3,3	-0,61	-3,91
3DH5	2441	-4	-0,38	-4,38
	2480	-2,8	-0,63	-3,43

DH5 Channel 0, 39, 78 Result

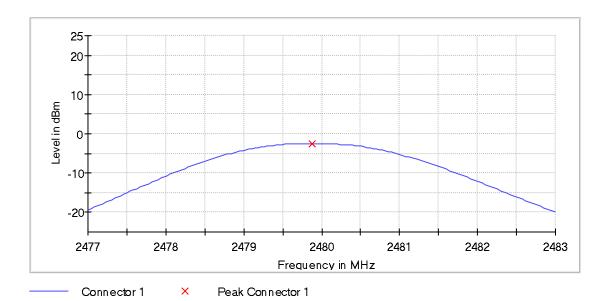
DUT Frequency	Peak Power	Limit Max	Result
(MHz)	(dBm)	(dBm)	
2402.000000	-2.5	21.0	PASS



(MHz)	Peak Power (dBm)	(dBm)	Result
2441.000000	-3.5	21.0	PASS



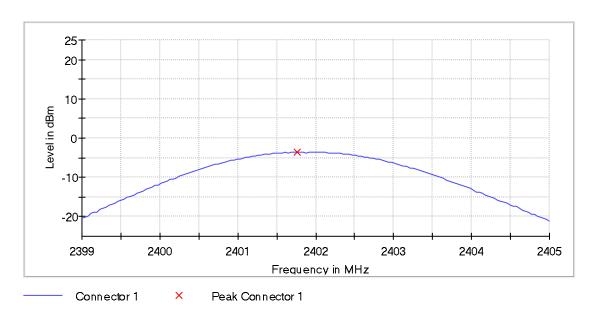
DUT Frequency	Peak Power	Limit Max	Result
(MHz)	(dBm)	(dBm)	
2480.000000	-2.5	21.0	PASS



### 2-DH5 Channel 0, 39, 78

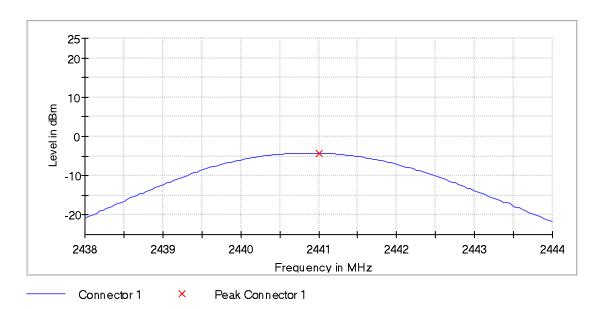
### Result

DUT Frequency	Peak Power	Limit Max	Result
(MHz)	(dBm)	(dBm)	
2402.000000	-3.6	21.0	PASS



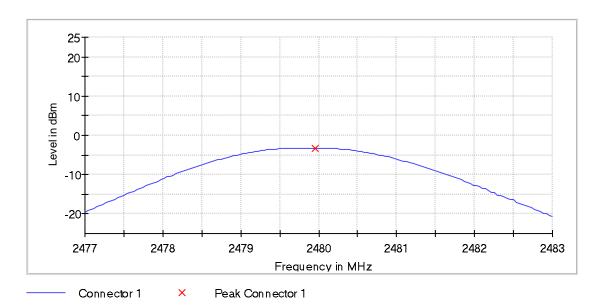
### Result

DUT Frequency (MHz)	Peak Power (dBm)	Limit Max (dBm)	Result
2441.000000	-4.3	21.0	PASS



## Result

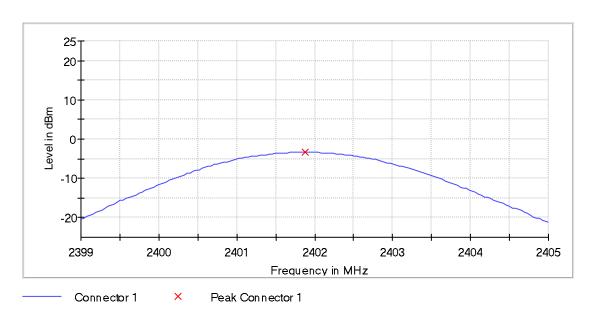
DUT Frequency	Peak Power	Limit Max	Result
(MHz)	(dBm)	(dBm)	
2480.000000	-3.2	21.0	PASS



### 3-DH5 Channel 0, 39, 78

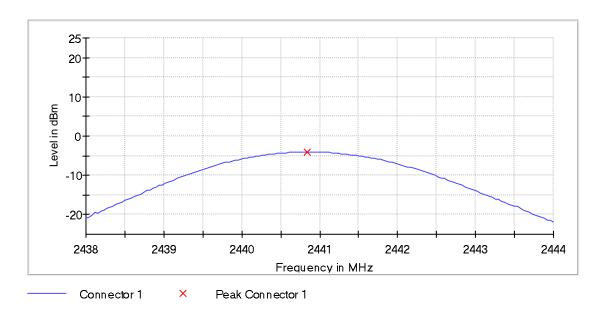
### Result

DUT Frequency	Peak Power	Limit Max	Result
(MHz)	(dBm)	(dBm)	
2402.000000	-3.3	21.0	PASS



### Result

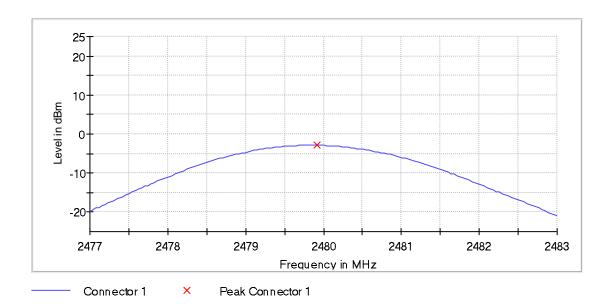
DUT Frequency	Peak Power	Limit Max	Result
(MHz)	(dBm)	(dBm)	
2441.000000	-4.0	21.0	PASS



Peak Power 1

### Result

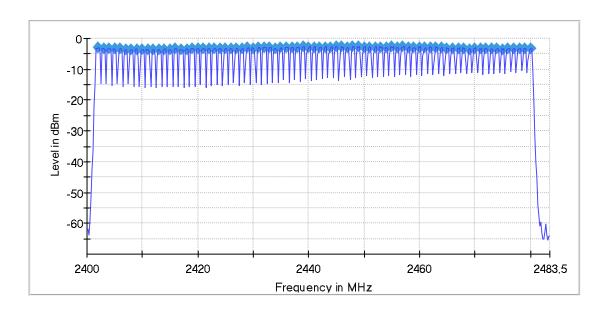
DUT Frequency	Peak Power	Limit Max	Result
(MHz)	(dBm)	(dBm)	
2480.000000	-2.8	21.0	PASS



### 1.3. Number of Hopping Frequencies

## **Channels**

Channels	Limit Min	Limit Max	Result
79	15		PASS



### 1.4. 20dB Emission Bandwidth

#### 1.4.1. DH5

Emission Bandwidth 20 dB (2402 MHz; 4,000 dBm; 1 MHz; Test Mode)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

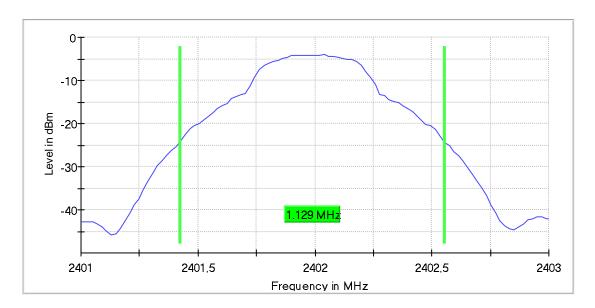
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1. Expanded Uncertainty (K=2) < 2%

### 20 dB Bandwidth

DUT Frequency	Bandwidth	Limit Min	Limit Max	Band Edge Left	Band Edge Right
(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	(MHz)
2402.000000	1.128712			2401.425743	

(continuation of the "20 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2402.000000	-4.0	PASS



Setting	Instrument Value	Target Value
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40300 GHz	2.40300 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 40
Sweeptime	41.830 μs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	12 / max. 150	max. 150
Stable	5/5	5
Max Stable Difference	0.26 dB	0.50 dB

### Emission Bandwidth 20 dB (2441 MHz; 4,000 dBm; 1 MHz; Test Mode)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

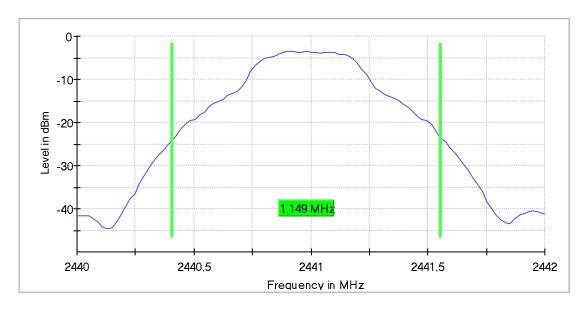
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1. Expanded Uncertainty (K=2) < 2%

### 20 dB Bandwidth

DUT Frequency	Bandwidth	Limit Min	Limit Max	Band Edge Left	Band Edge Right
(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	(MHz)
2441.000000	1.148514			2440.405941	

(continuation of the "20 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2441.000000	-3.5	PASS



Setting	Instrument	Target Value
	Value	
Start Frequency	2.44000 GHz	2.44000 GHz
Stop Frequency	2.44200 GHz	2.44200 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 40
Sweeptime	41.830 μs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	6 / max. 150	max. 150
Stable	5/5	5
Max Stable Difference	0.27 dB	0.50 dB

### Emission Bandwidth 20 dB (2480 MHz; 4,000 dBm; 1 MHz; Test Mode)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

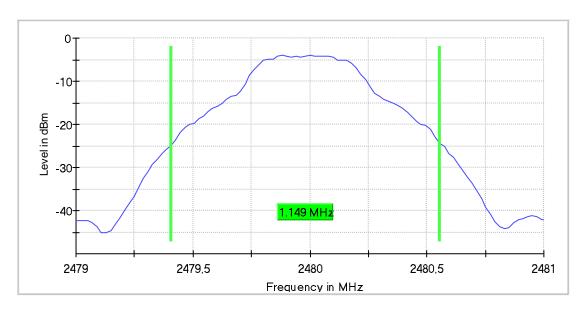
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1. Expanded Uncertainty (K=2) < 2%

### 20 dB Bandwidth

DUT Frequency	Bandwidth	Limit Min	Limit Max	Band Edge Left	Band Edge Right
(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	(MHz)
2480.000000	1.148514			2479.405941	2480.554455

(continuation of the "20 dB Bandwidth" table from column  $\ 6 \ldots$ 

DUT Frequency (MHz)	Max Level (dBm)	Result
2480.000000	-4.0	PASS



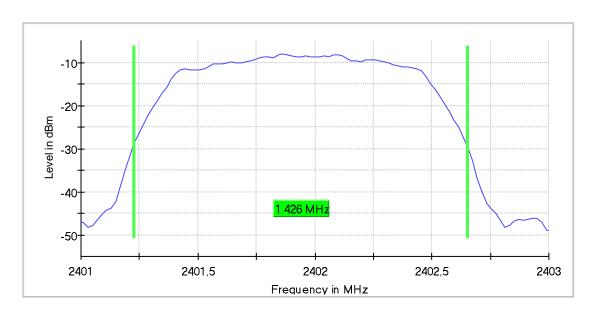
Setting	Instrument	Target Value
	Value	
Start Frequency	2.47900 GHz	2.47900 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 40
Sweeptime	41.830 μs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	8 / max. 150	max. 150
Stable	5/5	5
Max Stable Difference	0.06 dB	0.50 dB

**1.4.2. 2-DH5** Emission Bandwidth 20 dB (2402 MHz; 4,000 dBm; 1 MHz; Test Mode)

DUT Frequency	Bandwidth	Limit Min	Limit Max	Band Edge Left	Band Edge
(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	Right
					(MHz)
2402.000000	1.425742			2401.227723	2402.653465

### (continuation of the "20 dB Bandwidth" table from column $\ 6 \ldots$ )

DUT Frequency	Max Level	Result
(MHz)	(dBm)	
2402.000000	-8.0	PASS



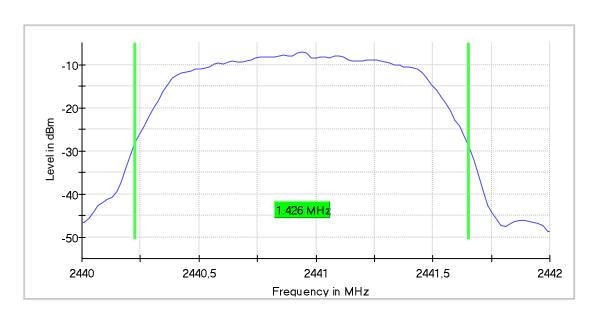
Setting	Instrument Value	Target Value
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40300 GHz	2.40300 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000  kHz
SweepPoints	101	~ 40
Sweeptime	41.830 µs	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	15 / max. 150	max. 150
Stable	5/5	5
Max Stable Difference	0.03 dB	0.50 dB

### Emission Bandwidth 20 dB (2441 MHz; 4,000 dBm; 1 MHz; Test Mode)

DUT Frequency	Bandwidth	Limit Min	Limit Max	Band Edge Left	Band Edge
(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	Right
					(MHz)
2441.000000	1.425742			2440,227723	2441.653465

### (continuation of the "20 dB Bandwidth" table from column $\ 6 \dots$ )

DUT Frequency	Max Level	Result
(MHz)	(dBm)	
2441.000000	-7.1	PASS



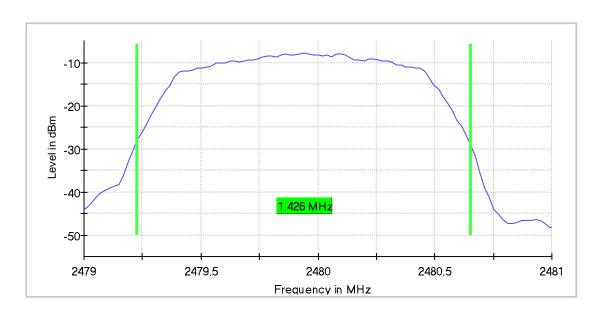
Setting	Instrument Value	Target Value
Start Frequency	2.44000 GHz	2.44000 GHz
Stop Frequency	2.44200 GHz	2.44200 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 40
Sweeptime	41.830 µs	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	14 / max. 150	max. 150
Stable	5/5	5
Max Stable Difference	0.29 dB	0.50 dB

### Emission Bandwidth 20 dB (2480 MHz; 4,000 dBm; 1 MHz; Test Mode)

DUT Frequency	Bandwidth	Limit Min	Limit Max	Band Edge Left	Band Edge
(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	Right
					(MHz)
2480.000000	1.425742			2479,227723	2480.653465

### (continuation of the "20 dB Bandwidth" table from column $\ 6 \dots$ )

DUT Frequency	Max Level	Result
(MHz)	(dBm)	
2480.000000	-7.8	PASS



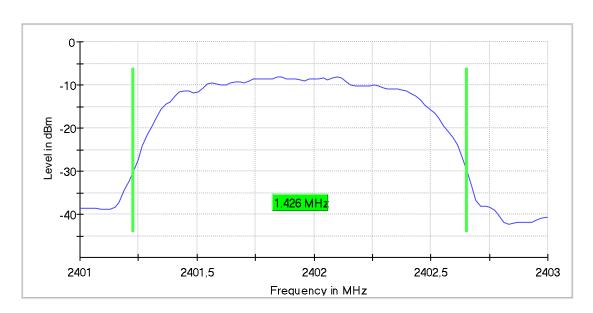
Setting	Instrument Value	Target Value
Start Frequency	2.47900 GHz	2.47900 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 40
Sweeptime	41.830 µs	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	14 / max. 150	max. 150
Stable	5/5	5
Max Stable Difference	0.04 dB	0.50 dB

**1.4.3. 3-DH5** Emission Bandwidth 20 dB (2402 MHz; 4,000 dBm; 1 MHz; Test Mode)

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right
					(MHz)
2402.000000	1.425742			2401.227723	2402.653465

### (continuation of the "20 dB Bandwidth" table from column 6 ...)

DUT Frequency	Max Level	Result
(MHz)	(dBm)	
2402.000000	-8.1	PASS



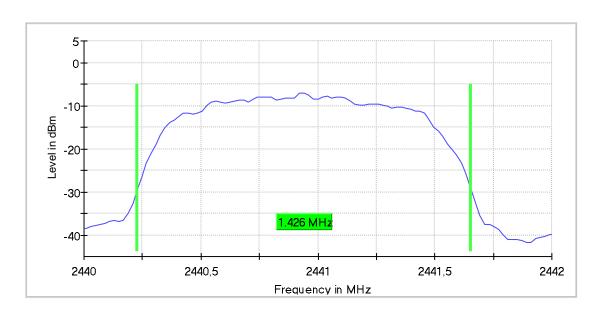
Setting	Instrument Value	Target Value
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40300 GHz	2.40300 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 40
Sweeptime	41.830 µs	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	15 / max. 150	max. 150
Stable	5/5	5
Max Stable Difference	0.17 dB	0.50 dB

### Emission Bandwidth 20 dB (2441 MHz; 4,000 dBm; 1 MHz; Test Mode)

DUT Frequency	Bandwidth	Limit Min	Limit Max	Band Edge Left	Band Edge
(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	Right
					(MHz)
2441.000000	1.425742			2440.227723	2441.653465

### (continuation of the "20 dB Bandwidth" table from column $\ 6 \dots$ )

DUT Frequency	Max Level	Result
(MHz)	(dBm)	
2441.000000	-7.1	PASS



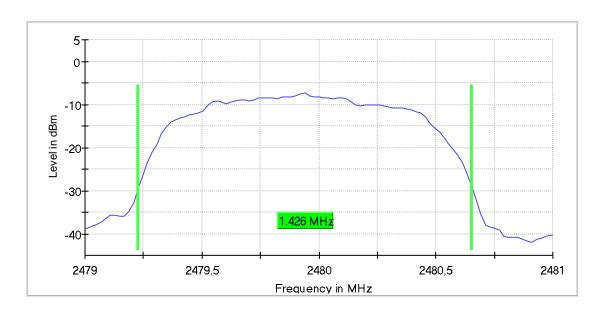
Setting	Instrument Value	Target Value
Start Frequency	2.44000 GHz	2.44000 GHz
Stop Frequency	2.44200 GHz	2.44200 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000  kHz
SweepPoints	101	~ 40
Sweeptime	41.830 µs	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	12 / max. 150	max. 150
Stable	5/5	5
Max Stable Difference	0.18 dB	0.50 dB

### Emission Bandwidth 20 dB (2480 MHz; 4,000 dBm; 1 MHz; Test Mode)

DUT Frequency	Bandwidth	Limit Min	Limit Max	Band Edge Left	Band Edge
(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	Right
					(MHz)
2480.000000	1.425742			2479.227723	2480.653465

### (continuation of the "20 dB Bandwidth" table from column $\ 6 \ldots$ )

DUT Frequency	Max Level	Result
(MHz)	(dBm)	
2480.000000	-7.4	PASS



Setting	Instrument Value	Target Value
Start Frequency	2.47900 GHz	2.47900 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 40
Sweeptime	41.830 μs	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	15 / max. 150	max. 150
Stable	5/5	5
Max Stable Difference	0.16 dB	0.50 dB

### 1.5. 99 % Occupied Bandwidth

#### 1.5.1. DH5

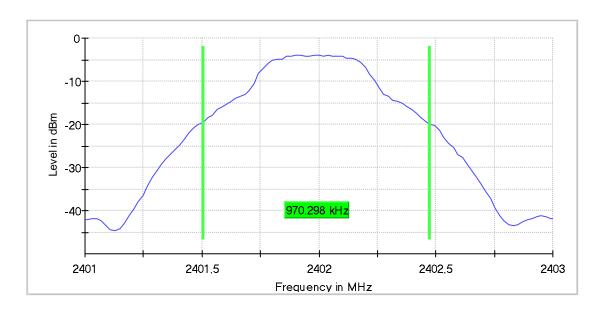
99% Occupied Bandwidth(2402 MHz; 4,000 dBm; 1 MHz; Test Mode)

99% Occupied Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right
, , ,	, ,	, ,	, í	, , ,	(MHz)
2402.000000	0.970298			2401.504950	2402.475248

(continuation of the "99% Occupied Bandwidth" table from column  $\ 6 \ldots$ )

DUT Frequency	Max Level	Result
(MHz)	(dBm)	
2402,000000	-3.9	PASS



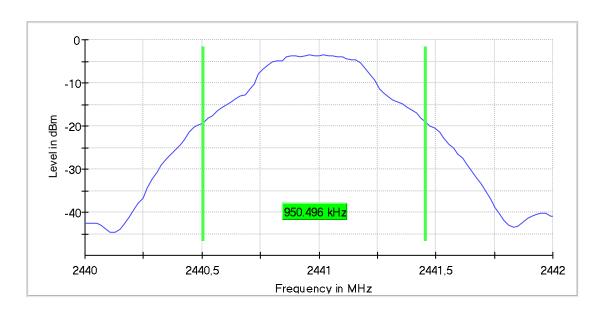
Setting	Instrument	Target Value
	Value	
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40300 GHz	2.40300 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 20
Sweeptime	41.830 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	10 / max. 150	max. 150
Stable	5/5	5
Max Stable Difference	0.00 dB	0.50 dB

99% Occupied Bandwidth(2441 MHz; 4,000 dBm; 1 MHz; Test Mode)

DUT Frequency	Bandwidth	Limit Min	Limit Max	Band Edge Left	Band Edge
(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	Right
					(MHz)
2441.000000	0.950496			2440.504950	2441.455446

### (continuation of the "99% Occupied Bandwidth" table from column $\ 6 \ldots$ )

DUT Frequency	Max Level	Result
(MHz)	(dBm)	
2441.000000	-3.5	PASS



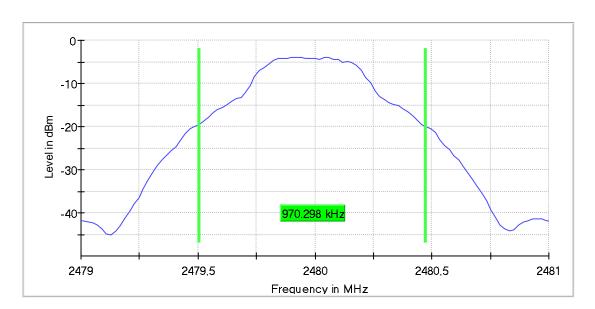
Setting	Instrument Value	Target Value
Start Frequency	2.44000 GHz	2.44000 GHz
Stop Frequency	2.44200 GHz	2.44200 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 20
Sweeptime	41.830 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	9 / max. 150	max. 150
Stable	5/5	5
Max Stable Difference	0.09 dB	0.50 dB

### 99% Occupied Bandwidth(2480 MHz; 4,000 dBm; 1 MHz; Test Mode)

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right
					(MHz)
2480.000000	0.970298			2479.504950	2480.475248

### (continuation of the "99% Occupied Bandwidth" table from column $\ 6 \ldots$ )

DUT Frequency (MHz)	Max Level (dBm)	Result
2480,000000	-3.9	PASS



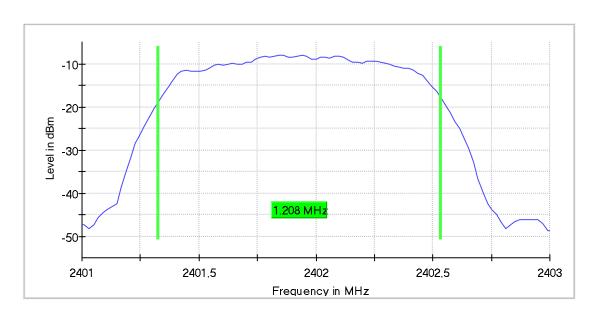
Setting	Instrument	Target Value
S	Value	
Start Frequency	2.47900 GHz	2.47900 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 20
Sweeptime	41.830 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	11 / max. 150	max. 150
Stable	5/5	5
Max Stable Difference	0.03 dB	0.50 dB

1.5.2. 2-DH5 99% Occupied Bandwidth(2402 MHz; 4,000 dBm; 1 MHz; Test Mode)

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	1.207920			2401.326733	2402.534653

### (continuation of the "99% Occupied Bandwidth" table from column $\ 6 \ldots$ )

DUT Frequency	Max Level	Result
(MHz)	(dBm)	
2402.000000	-8.0	PASS



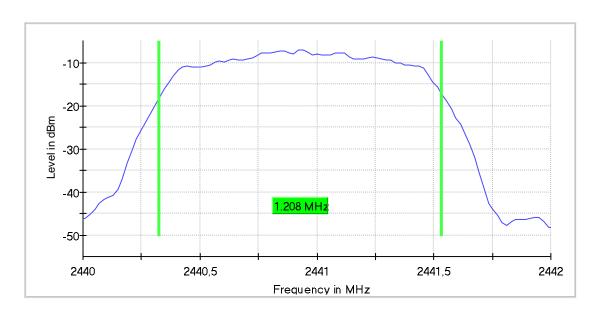
Setting	Instrument	Target Value
	Value	
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40300 GHz	2.40300 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 20
Sweeptime	41.830 µs	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	8 / max. 150	max. 150
Stable	5/5	5
Max Stable Difference	0.12 dB	0.50 dB

### 99% Occupied Bandwidth(2441 MHz; 4,000 dBm; 1 MHz; Test Mode)

DUT Frequency	Bandwidth	Limit Min	Limit Max	Band Edge Left	Band Edge
(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	Right
					(MHz)
2441.000000	1.207920			2440.326733	2441.534653

### (continuation of the "99% Occupied Bandwidth" table from column $\ 6 \ldots$ )

DUT Frequency	Max Level	Result
(MHz)	(dBm)	
2441.000000	-7.0	PASS



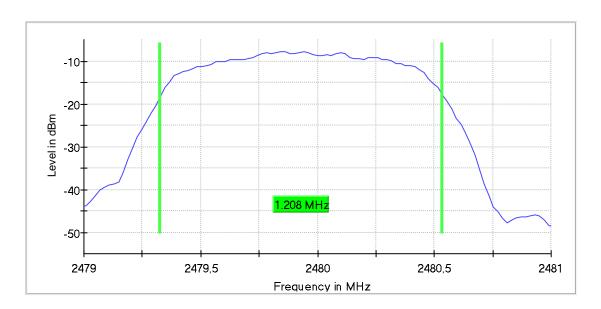
Setting	Instrument Value	Target Value
Start Frequency	2.44000 GHz	2.44000 GHz
Stop Frequency	2.44200 GHz	2.44200 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 20
Sweeptime	41.830 μs	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	14 / max. 150	max. 150
Stable	5/5	5
Max Stable Difference	0.31 dB	0.50 dB

### 99% Occupied Bandwidth(2480 MHz; 4,000 dBm; 1 MHz; Test Mode)

DUT Frequency	Bandwidth	Limit Min	Limit Max	Band Edge Left	Band Edge
(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	Right
					(MHz)
2480.000000	1.207920			2479.326733	2480.534653

### (continuation of the "99% Occupied Bandwidth" table from column $\ 6 \ldots$ )

DUT Frequency	Max Level	Result
(MHz)	(dBm)	
2480,000000	-7.7	PASS



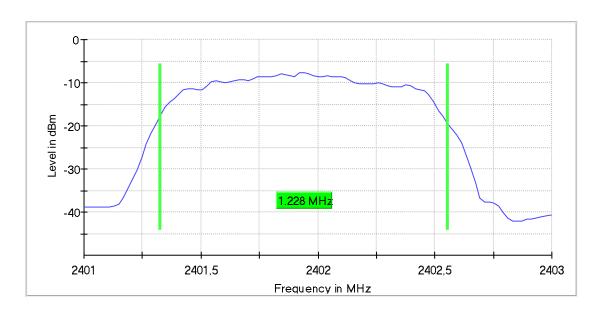
Setting	Instrument	Target Value
	Value	
Start Frequency	2.47900 GHz	2.47900 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 20
Sweeptime	41.830 µs	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	9 / max. 150	max. 150
Stable	5/5	5
Max Stable Difference	0.41 dB	0.50 dB

**1.5.3. 3-DH5** 99% Occupied Bandwidth(2402 MHz; 4,000 dBm; 1 MHz; Test Mode)

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	1.227722			2401.326733	2402.554455

### (continuation of the "99% Occupied Bandwidth" table from column 6...)

DUT Frequency	Max Level	Result
(MHz)	(dBm)	
2402,000000	-7.6	PASS



Setting	Instrument	Target Value
	Value	
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40300 GHz	2.40300 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 20
Sweeptime	41.830 µs	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	19 / max. 150	max. 150
Stable	5/5	5
Max Stable Difference	0.01 dB	0.50 dB

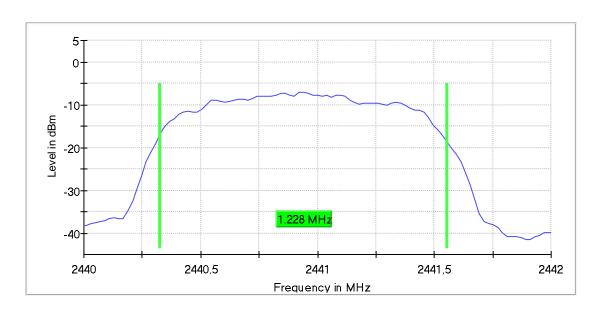
### 99% Occupied Bandwidth(2441 MHz; 4,000 dBm; 1 MHz; Test Mode)

99% Occupied Bandwidth

DUT Frequency	Bandwidth	Limit Min	Limit Max	Band Edge Left	Band Edge
(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	Right
					(MHz)
2441.000000	1.227722			2440.326733	2441.554455

### (continuation of the "99% Occupied Bandwidth" table from column $\ 6 \ldots$ )

DUT Frequency	Max Level	Result
(MHz)	(dBm)	
2441.000000	-7.0	PASS



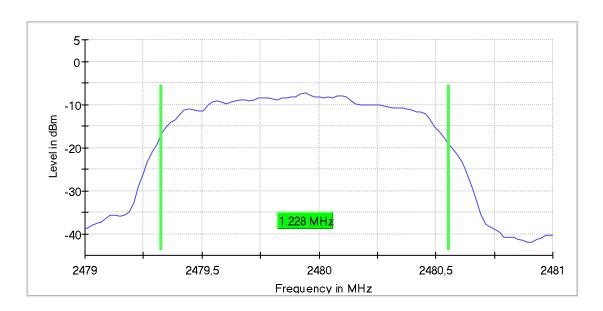
Setting	Instrument	Target Value
_	Value	
Start Frequency	2.44000 GHz	2.44000 GHz
Stop Frequency	2.44200 GHz	2.44200 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 20
Sweeptime	41.830 µs	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	17 / max. 150	max. 150
Stable	5/5	5
Max Stable Difference	0.01 dB	0.50 dB

### 99% Occupied Bandwidth(2480 MHz; 4,000 dBm; 1 MHz; Test Mode)

DUT Frequency	Bandwidth	Limit Min	Limit Max	Band Edge Left	Band Edge
(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	Right
					(MHz)
2480.000000	1.227722			2479.326733	2480.554455

### (continuation of the "99% Occupied Bandwidth" table from column $\ 6 \ldots$ )

DUT Frequency	Max Level	Result
(MHz)	(dBm)	
2480.000000	-7.4	PASS



Setting	Instrument Value	Target Value
Start Frequency	2.47900 GHz	2.47900 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 20
Sweeptime	41.830 μs	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	13 / max. 150	max. 150
Stable	5/5	5
Max Stable Difference	0.04 dB	0.50 dB

### 1.6. Carrier FrequencySeparation

Carrier Frequency Separation (2402 MHz; 4,000 dBm; 1 MHz)

 $Test\ according\ to\ FCC\ title\ 47\ part\ 15\ \S 15.247(a),\ KDB\ 558074\ D01\ DTS\ Meas\ Guidance\ v03r05\ and\ ANSI\ C63.10$ 

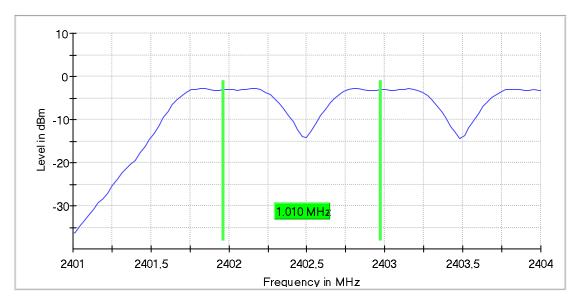
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1. Expanded Uncertainty(k = 2) < 1%

#### Result

DUT Frequency	Frequency	Limit Min	Limit Max	Center	Center
(MHz)	Separation	(MHz)	(MHz)	Frequency low	Frequency high
	(MHz)			Channel	Channel
				(MHz)	(MHz)
2402.000000	1.009901	0.752475		2401.965347	2402.975248

(continuation of the "Result" table from column 6 ...)

DUT Frequency	Result
(MHz) 2402.000000	PASS



Setting	Instrument	Target Value
	Value	
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40400 GHz	2.40400 GHz
Span	3.000 MHz	3.000 MHz
RBW	300.000 kHz	<= 300.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 10
Sweeptime	1.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	16 / max. 150	max. 150
Stable	10 / 10	10
Max Stable Difference	0.11 dB	0.50 dB

### Carrier Frequency Separation (2441 MHz; 4,000 dBm; 1 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

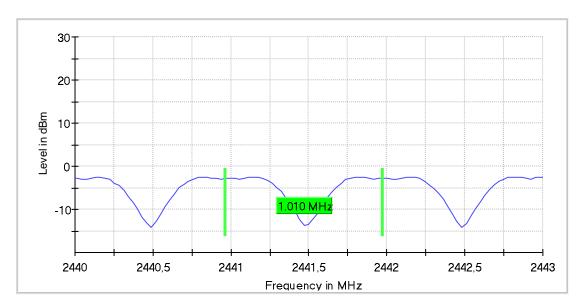
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1. Expanded Uncertainty(k = 2) <1%

#### Result

DUT Frequency	Frequency	Limit Min	Limit Max	Center	Center
(MHz)	Separation	(MHz)	(MHz)	Frequency low	Frequency high
	(MHz)			Channel	Channel
				(MHz)	(MHz)
2441.000000	1.009901	0.765676		2440.965347	2441.975248

### (continuation of the "Result" table from column $\ 6 \dots$ )

DUT Frequency	Result
(MHz)	
2441.000000	PASS



Setting	Instrument Value	Target Value
Start Frequency	2.44000 GHz	2.44000 GHz
Stop Frequency	2.44300 GHz	2.44300 GHz
Span	3.000 MHz	3.000 MHz
RBW	300.000 kHz	<= 300.000 kHz
VBW	300.000 kHz	>= 300.000  kHz
SweepPoints	101	~ 10
Sweeptime	1.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	12 / max. 150	max. 150
Stable	10 / 10	10
Max Stable Difference	0.00 dB	0.50 dB

### Carrier Frequency Separation (2480 MHz; 4,000 dBm; 1 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

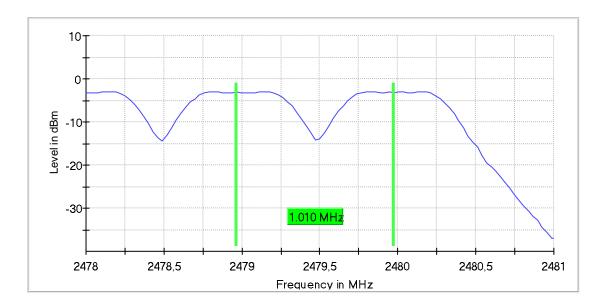
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1. Expanded Uncertainty(k = 2) <1%

#### Result

DUT Frequency	Frequency	Limit Min	Limit Max	Center	Center
(MHz)	Separation	(MHz)	(MHz)	Frequency low	Frequency high
	(MHz)			Channel	Channel
				(MHz)	(MHz)
2480.000000	1.009901	0.765676		2478.965347	2479.975248

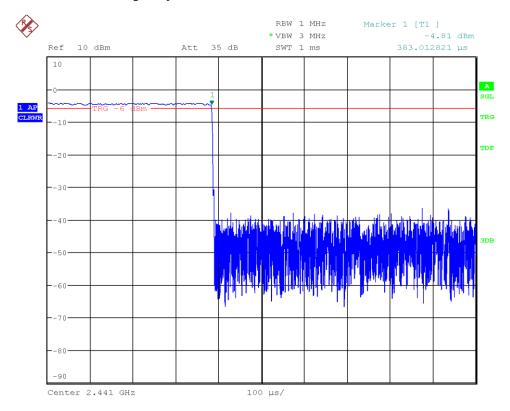
#### (continuation of the "Result" table from column 6 ...)

DUT Frequency	Result
(MHz)	
2480.000000	PASS

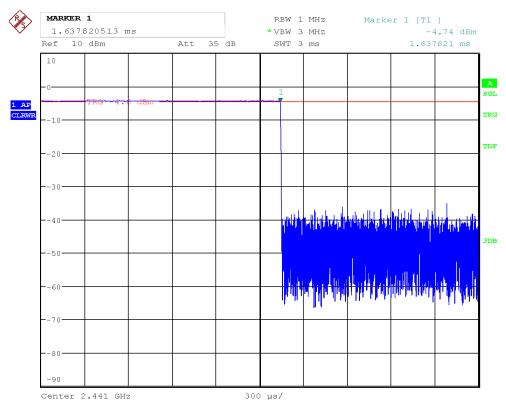


Setting	Instrument	Target Value
	Value	
Start Frequency	2.47800 GHz	2.47800 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	3.000 MHz	3.000 MHz
RBW	300.000 kHz	<= 300.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 10
Sweeptime	1.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	22 / max. 150	max. 150
Stable	10 / 10	10
Max Stable Difference	0.03 dB	0.50 dB

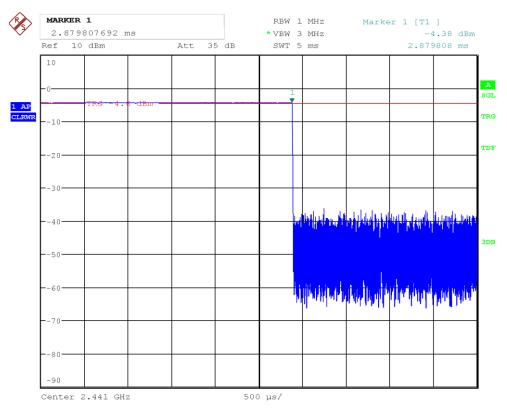
### 1.7. Time of Channel occupancy



DwT\_Hopping\_ON\_Ch39\_DH1



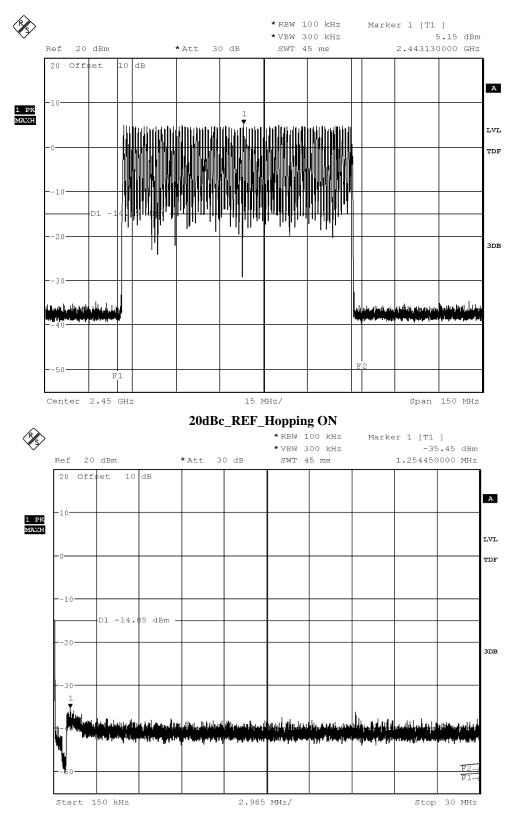
DwT\_Hopping\_ON\_Ch39\_DH3



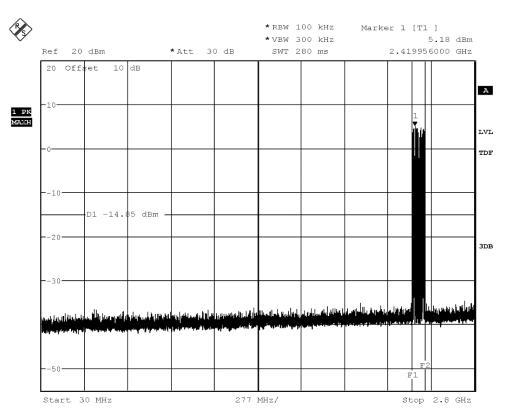
DwT\_Hopping\_ON\_Ch39\_DH5

### 1.8. 20dBc Conducted Spurious Emissions

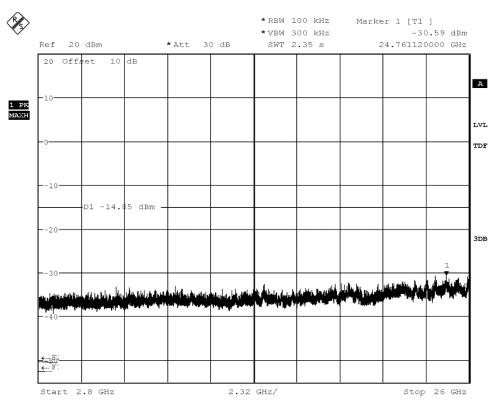
### 1.8.1. Hopping ON



20dBc\_0.15MHz-30MHz\_Hopping ON

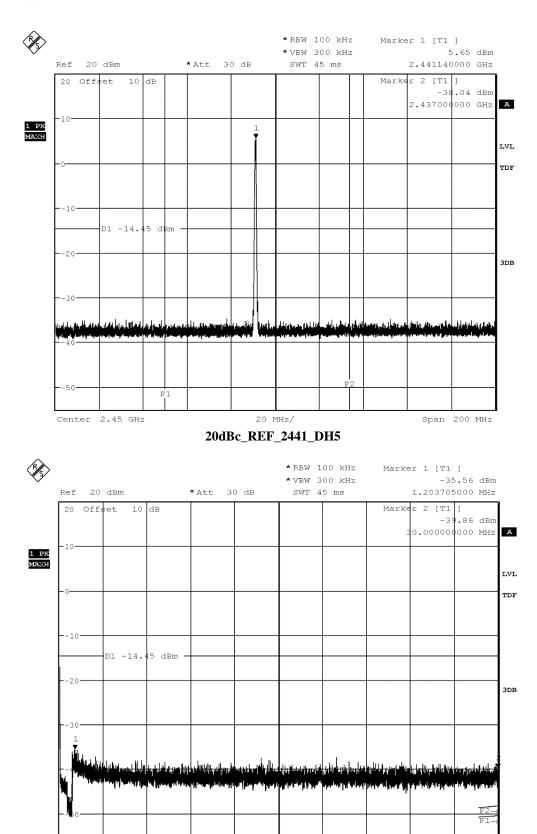


20dBc\_0.30MHz-2.8Ghz\_Hopping ON



20dBc\_2.8GHz-26Ghz\_Hopping ON

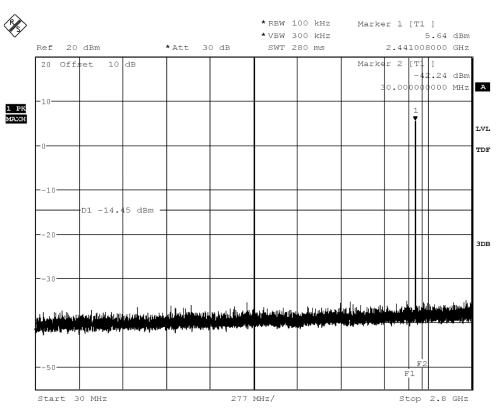
### 1.8.2. Hopping OFF



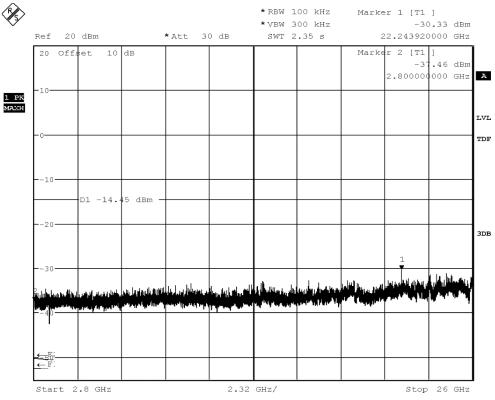
2.985 MHz/ 20dBc\_0.15MHz-30MHz\_\_2441\_DH5

Stop 30 MHz

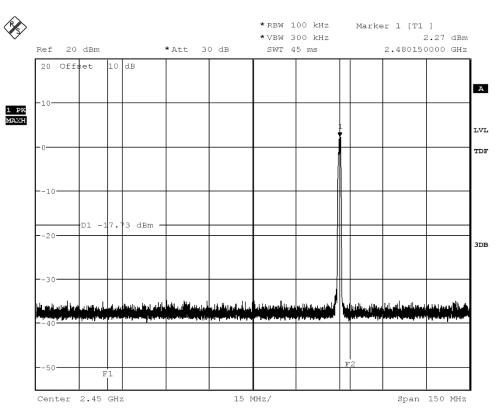
Start 150 kHz



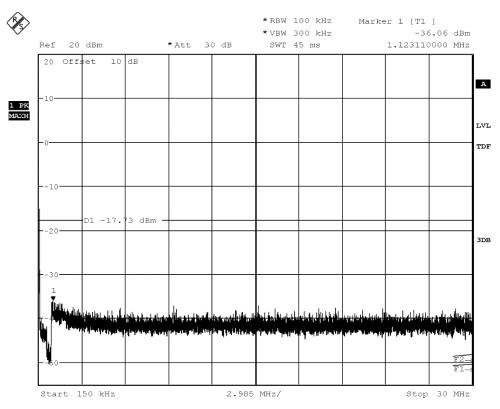
#### 20dBc\_0.30MHz-2.8Ghz\_2441\_DH5



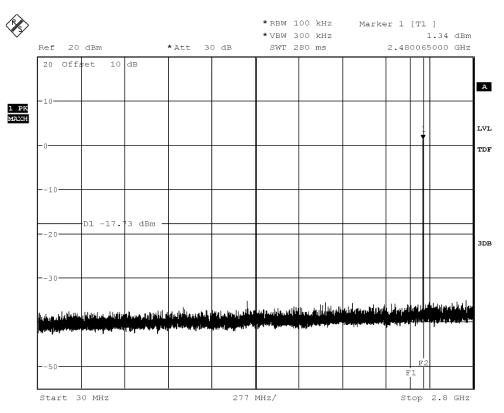
20dBc\_2.8GHz-26Ghz\_2441\_DH5



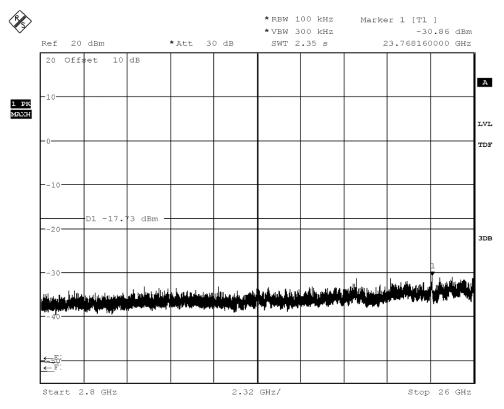
#### 20dBc\_REF\_2480\_2-DH5



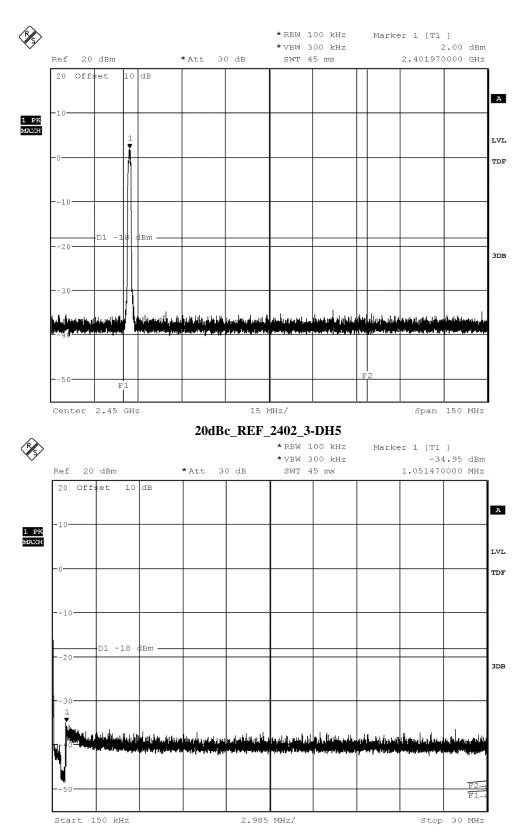
 $20dBc\_0.15MHz-30MHz\_2480\_2-DH5$ 



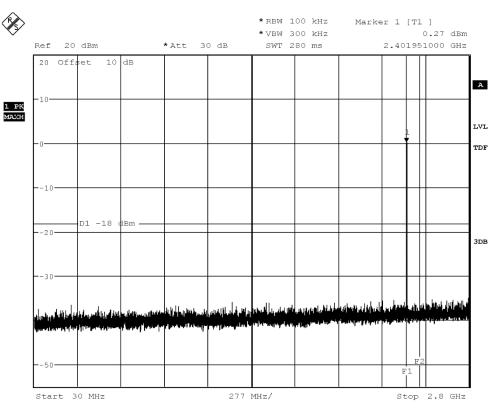
20dBc\_0.30MHz-2.8Ghz\_2480\_2-DH5



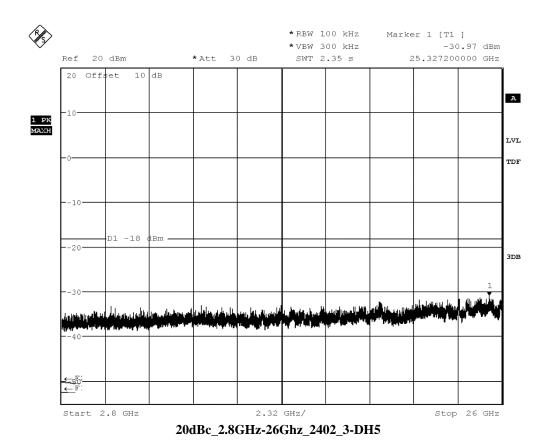
 $20 dBc\_2.8 GHz - 26 Ghz\_2480\_2 - DH5$ 



20dBc\_0.15MHz-30MHz\_2402\_3-DH5



 $20dBc\_0.30MHz\hbox{-}2.8Ghz\_2402\_3\hbox{-}DH5$ 



## 1.9. Frequency Stability

## 1.9.1. Tmin – Vnom

			Tnom -	- Vnom	Vnom	-Tnom
Modulation	Channel	99% OBW	left	right	left	right
			Bandedge	Bandedge	Bandedge	Bandedge
	MHZ	in MHZ	in HZ	in HZ	in HZ	in HZ
DH5	2402	0,970298	2401504950	2402475248	2401545455	2402493506
	2441	0,950496	2440504950	2441455446	2440545455	2441493506
	2481	0,970298	2479504950	2480475280	2479545455	2480493506
2-DH5	2402	1,20792	2401326733	2402534653	2401415584	2402623377
	2441	1,20792	2440326733	2441534653	2440415584	2441623377
	2481		2479326733	2480534653	2479415584	2480623377
3-DH5	2402	1,227722	2401326733	2402554455	2401402597	2402623377
	2441	1,227722	2440326733	2441554455	2440402597	2441623377
_	2481	1,227722	2479326733	2480554455	2479402597	2480636364

## 1.9.2. Tmax - Vnom

			Tnom	- Vnom	Tmax	- Vnom
Modulation	Channel	99% OBW	left	right	left	right
			Bandedge	Bandedge	Bandedge	Bandedge
		in MHZ	in HZ	in HZ	in HZ	in HZ
DH5	2402	0,970298	2401504950	2402475248	2401506494	2402454545
	2441	0,950496	2440504950	2441455446	2440506494	2441454545
	2481	0,970298	2479504950	2480475280	2479506494	2480454545
2-DH5	2402	1,20792	2401326733	2402534653	2401376623	2402584416
	2441	1,20792	2440326733	2441534653	2440376623	2441584416
	2481		2479326733	2480534653	2479376623	2480584416
3-DH5	2402	1,227722	2401326733	2402554455	2401363636	2402597403
	2441	1,227722	2440326733	2441554455	2440363636	2441597403
	2481	1,227722	2479326733	2480554455	2479363636	2480597403

## **1.9.3.** Tnom – Vmin

			Tnom	- Vnom	Tnom	- Vmin
Modulation	Channel	99% OBW	left	right	left	right
			Bandedge	Bandedge	Bandedge	Bandedge
		in MHZ	in HZ	in HZ		
DH5	2402	0,970298	2401504950	2402475248	2401506494	2402454545
	2441	0,950496	2440504950	2441455446	2440506494	2441467532
	2481	0,970298	2479504950	2480475280	2479506494	2480467532
2-DH5	2402	1,20792	2401326733	2402534653	2401376623	2402584416
	2441	1,20792	2440326733	2441534653	2440376623	2441597403
	2481		2479326733	2480534653	2479376623	2480597403
3-DH5	2402	1,227722	2401326733	2402554455	2401363636	2402597403
	2441	1,227722	2440326733	2441554455	2440363636	2441597403
	2481	1,227722	2479326733	2480554455	2479363636	2480597403

## 1.9.4. Tnom – Vmax

		99%	Tnom	- Vnom	Tnom -	- Vmax
Modulation	Channel	OBW	left Bandedge	right Bandedge	left Bandedge	right Bandedge
		in MHZ	in HZ	in HZ		
DH5	2402	0,970298	2401504950	2402475248	2401506494	2402454545
	2441	0,950496	2440504950	2441455446	2440506494	2441454545
	2481	0,970298	2479504950	2480475280	2479506494	2480454545
2-DH5	2402	1,20792	2401326733	2402534653	2.401.376.623	2.402.584.416
	2441	1,20792	2440326733	2441534653	2.440.376.623	2.441.584.416
	2481		2479326733	2480534653	2.479.376.623	2.480.584.416
		·		·		
3-DH5	2402	1,227722	2401326733	2402554455	2401363636	2402584416
	2441	1,227722	2440326733	2441554455	2440363636	2441597403
	2481	1,227722	2479326733	2480554455	2479363636	2480597403

## 2. Radiated Field Strength Measurements

### 2.1. Magnetic field emissions radiated Bluetooth BDR below 30 MHz

## 2.02a\_BT\_BDR\_ch00

#### **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 test software: EMC32 V9.25.0

Used filter: bypass

Test specification: FCC 15.205 § 15.209; RSS-Gen: Issue 4

Operator:

Operating conditions: Humidity: 48%rH; Temperature: 20°C

Power during tests: 13.5V DC Comment: laying

#### **EUT Information**

Manufacturer: Robert Bosch Car Multimedia

 Product:
 AIVISBX0

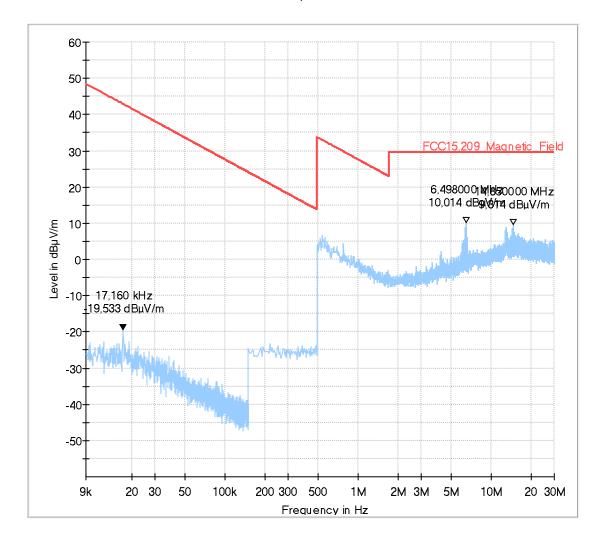
 EUT Model:
 18-1-00482S06

 HW:
 tbd

 SW;
 283C24194R

 Serial No.:
 0005000

 Connected Devices:
 13.5VDC



## 2.02b\_BT\_BDR\_ch00

#### **Common Information**

Date: 31.08.2018 Page 1 of 5

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 test software: EMC32 V9.25.0

Used filter: bypass

Test specification: FCC 15.205 § 15.209; RSS-Gen: Issue 4

Operator: TFr

Operating conditions: Humidity: 48%rH; Temperature: 20°C

Power during tests: 13.5V DC Comment: standing

#### **EUT Information**

Manufacturer: Robert Bosch Car Multimedia

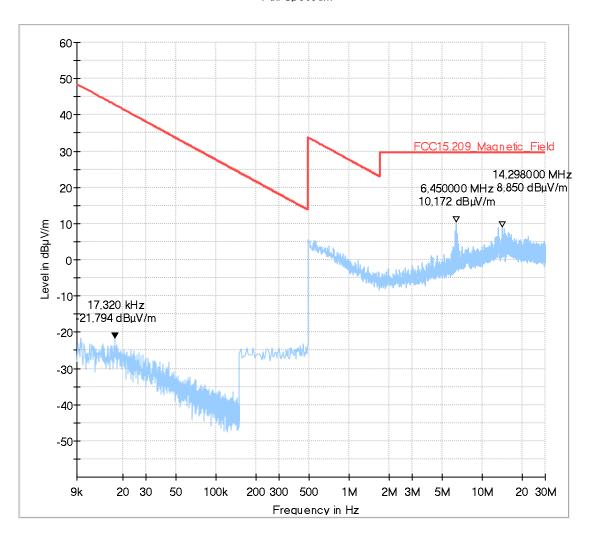
Product: AIVISBX0 EUT Model: 18-1-00482S06

HW: tbd

 SW;
 283C24194R

 Serial No.:
 0005000

 Connected Devices:
 13.5VDC



## 2.2. Spurious emissions radiated Bluetooth BDR 30 MHz to 1 GHz 3.01a\_BT\_EDR\_ch78

09.11.2018 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

Operatingmode: BT\_EDR, 2-DH5, ch78

Operator: TFra

Operating conditions: Humidity: 48%rH; Temperature: 20°C

Comment 1: laying\_TX

### **EUT Information**

Manufacturer: Robert Bosch Car Multimedia

Product: AIVISBX0 EUT Model: 18-1-00482S06

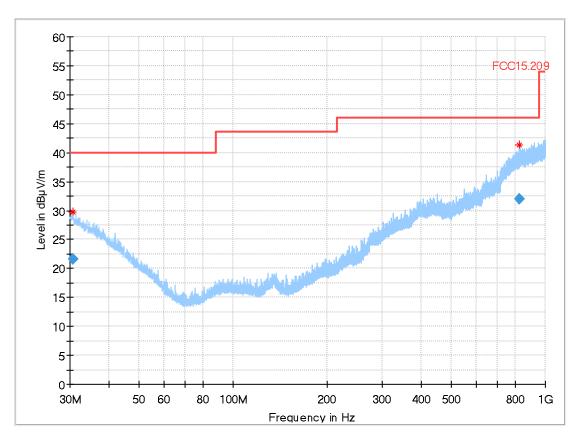
HW: tbd

SW;

Serial Nr.:

Conected Devices: 13.5VDC

#### Full Spectrum



#### Final\_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margi n	Meas. Time	Bandwidth (kHz)	Heigh t	Pol	Azimut h	Corr
			(dB)	(ms)		(cm)		(deg)	(dB)
30.592000	21.65	40.00	18.35	1000.0	120.000	117.0	V	241.0	21.3
826.080000	32.01	46.00	13.99	1000.0	120.000	287.0	Н	175.0	25.8

## 3.01b\_BT\_EDR\_ch78

09.11.2018 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
Operatingmode: BT\_EDR, 2-DH5, ch78

Operator: TFra

Operating conditions: Humidity: 48%rH; Temperature: 20°C

Comment 1: standing\_TX

#### **EUT Information**

Manufacturer: Robert Bosch Car Multimedia

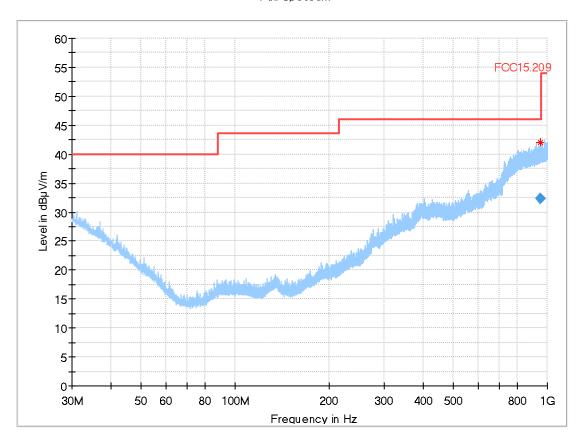
Product: AIVISBX0 EUT Model: 18-1-00482S06

HW: tbd

SW; Serial Nr.:

Conected Devices: 13.5VDC

#### Full Spectrum



#### Final\_Result

_										
	Frequency	QuasiPeak	Limit	Margi	Meas.	Bandwidth	Heigh	Pol	Azimut	Corr
	(MHz)	(dBµV/m)	(dBµV/m)	n	Time	(kHz)	t		h	
				(dB)	(ms)		(cm)		(deg)	(dB)
Ī	948.140000	32.41	46.00	13.59	1000.0	120.000	324.0	V	313.0	27.1

## **3.02a\_BT\_BDR\_ch00**

#### **Common Information**

31.08.2018 Page 1 of 1
Electric Field Strength Measurement

Test description: Electric Field Strength Measurement
Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance

Version of test software: EMC32 V9.25.0

Test specification.: FCC 15.209; RSS-Gen: Issue 3

Operator: TFr

Operating conditions: Humidity: 55%rH; Temperature: 20°C

Power during tests: 13,5V DC
Comment 1: Laying

#### **EUT Information**

Manufacturer: Robert Bosch Car Multimedia

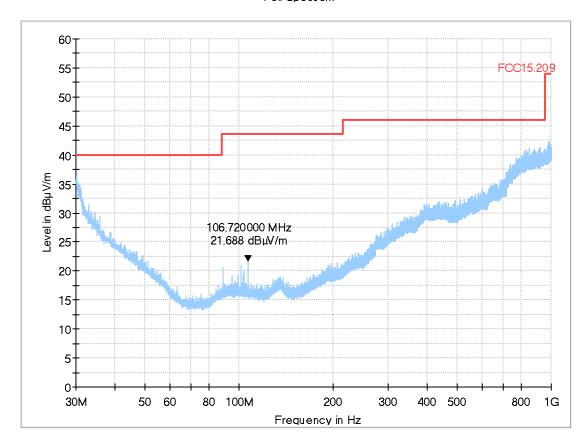
Product: AIVISBX0 EUT Model: 18-1-00482S06

HW: tbd

 SW;
 283C24194R

 Serial No.:
 0005000

 Connected Devices:
 13.5VDC



## $3.02b_BT_BDR_ch00$

### **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 test software: EMC32 V9.25.0

Test specification.: FCC 15.209; RSS-Gen: Issue 3

Operator: TFr

Operating conditions: Humidity: 55%rH; Temperature: 20°C

Power during tests: 13,5V DC
Comment 1: standing

#### **EUT Information**

Manufacturer: Robert Bosch Car Multimedia

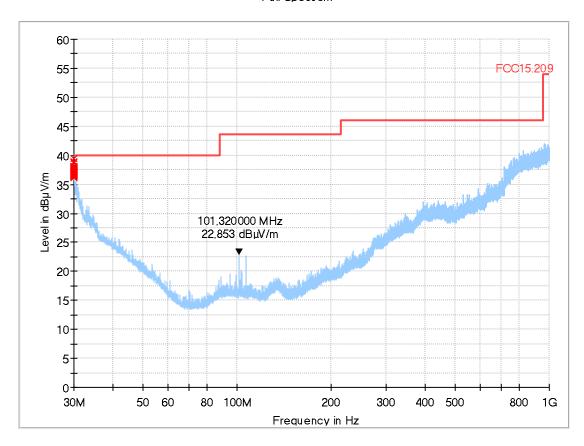
Product: AIVISBX0 EUT Model: 18-1-00482S06

HW: tbd

 SW;
 283C24194R

 Serial No.:
 0005000

 Connected Devices:
 13.5VDC



## 3.03a\_BT\_EDR\_ch39

09.11.2018 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

Operatingmode: BT\_EDR, DH5, ch39

Operator: TFra

Operating conditions: Humidity: 48%rH; Temperature: 20°C

Comment 1: laying\_TX

#### **EUT Information**

Manufacturer: Robert Bosch Car Multimedia

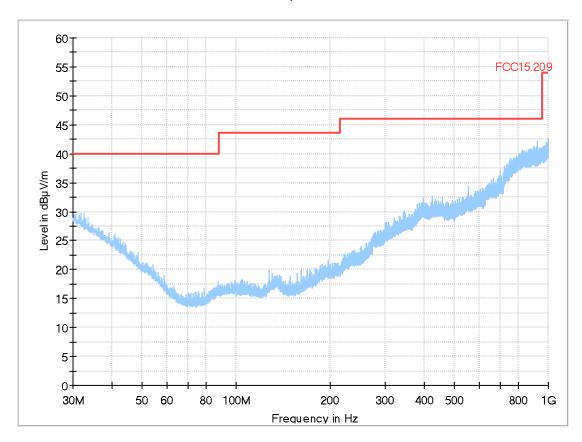
Product: AIVISBX0
EUT Model: 18-1-00482S06

HW: tbd

SW;

Serial Nr.:

Conected Devices: 13.5VDC



## 3.03b\_BT\_EDR\_ch39

09.11.2018 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

Operatingmode: BT\_EDR, DH5, ch39

Operator: TFra

Operating conditions: Humidity: 48%rH; Temperature: 20°C

Comment 1: standing\_TX

#### **EUT Information**

Manufacturer: Robert Bosch Car Multimedia

Product: AIVISBX0 EUT Model: 18-1-00482S06

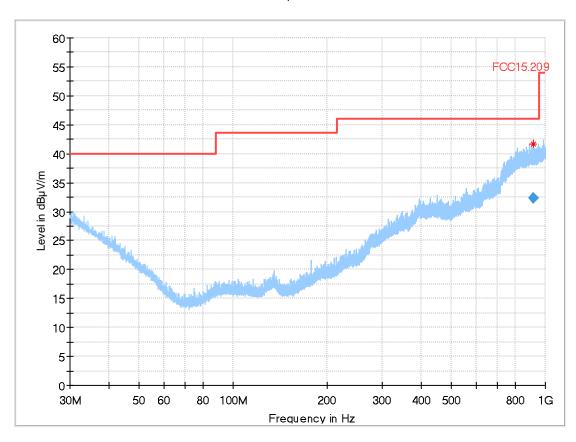
HW: tbd

SW;

Serial Nr.:

Conected Devices: 13.5VDC

#### Full Spectrum



#### Final\_Result

	Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margi n	Meas. Time	Bandwidth (kHz)	Heigh t	Pol	Azimut h	Corr
	, ,		• /	(dB)	(ms)	` ,	(cm)		(deg)	(dB)
Ī	913.208000	32.39	46.00	13.61	1000.0	120.000	325.0	Н	8.0	27.1

## 2.3. Spurious emissions radiated Bluetooth BDR 1 GHz to 18 GHz 4.01b\_BT\_EDR\_ch78

#### **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: BT\_EDR | 2-DH5 | ch78

Operator Name: HE

#### **EUT Information**

Manufacturer: Robert Bosch Car Multimedia

Product: AIVISBX0 EUT Model: 18-1-00482S06

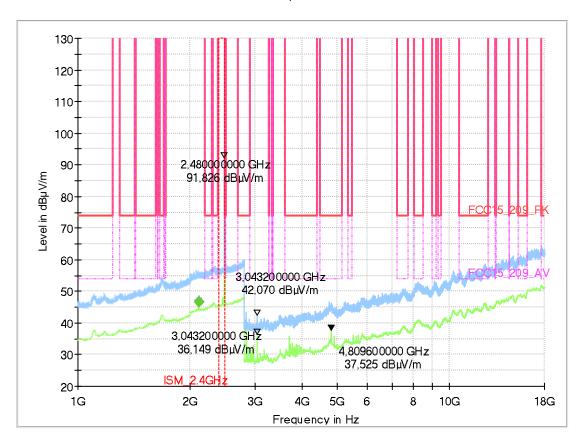
HW: tbd

SW; 283C24194R

Serial Nr.:

Conected Devices: 13.5VDC

#### Full Spectrum



#### Final\_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margi n (dB)	Meas. Time (ms)	Bandwidth (kHz)	Heigh t (cm)	Pol	Azimut h (deg)	Elevatio n (deg)

## 4.02a\_BT\_BDR\_ch00

#### **Common Information**

Test Description: Radiated field strength emission in 3m distance

Test Site: CETECOM GmbH Essen

Version of test software: EMC32 V9.26.0

Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 4

Antenna polarisation: horizontal/vertical Operation mode: TX, continuous Operator Name: TFra Channel no. low

Comment:

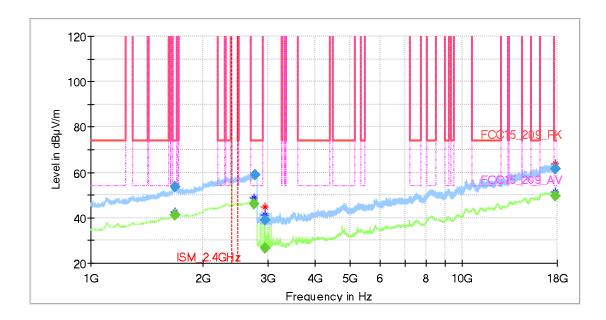
#### **EUT Information**

Manufacturer: Robert Bosch Car Multimedia

AIVISBX0 Product: EUT Model: 18-1-00482S06

HW: tbd

283C24194R SW; Serial No.: 0005000 13.5VDC Connected Devices:



Frequency	MaxPeak	Average	Limit	Margi	Heigh	Pol	Azimut	Elevatio	Corr
(MHz)	(dBµV/m)	(dBµV/m)	(dBµV/m)	n	t		h	n	
				(dB)	(cm)		(deg)	(deg)	(dB)
1686.000000	53.47		74.00	20.53	155.0	Н	236.0	0.0	33.7
1687.200000		41.04	54.00	12.96	155.0	Н	144.0	90.0	33.8
2752.400000		45.94	54.00	8.06	155.0	Н	109.0	90.0	37.7
2764.800000	58.94		74.00	15.06	155.0	Н	21.0	90.0	37.8
2940.800000		26.42	150.00	123.58	155.0	V	174.0	0.0	-1.0
2940.800000	38.93		150.00	111.07	155.0	V	172.0	0.0	-1.0
17748.400000	61.69		74.00	12.31	155.0	Н	139.0	0.0	26.1
17773.200000		49.44	54.00	4.56	155.0	V	218.0	0.0	26.1

## 4.03a\_BT\_EDR\_ch39\_1\_2.8GHz

#### **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: BT\_ BT EDR | DH5 | ch39

Operator Name: HE

#### **EUT Information**

Manufacturer: Robert Bosch Car Multimedia

Product: AIVISBX0 EUT Model: 18-1-00482S06

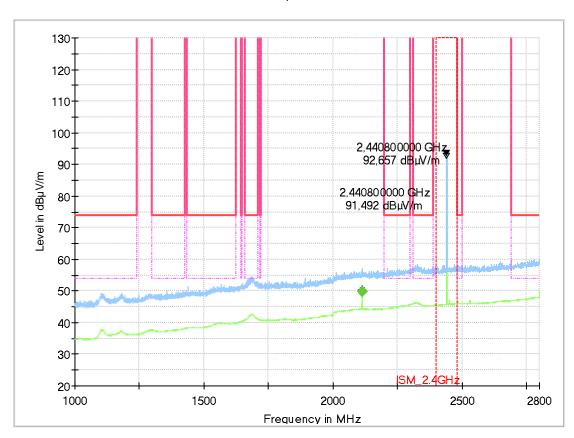
HW: tbd

SW; 283C24194R

Serial Nr.:

Conected Devices: 13.5VDC

#### Full Spectrum



### Final\_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margi n	Meas. Time	Bandwidth (kHz)	Heigh t	Pol	Azimut h	Elevatio n
				(dB)	(ms)		(cm)		(deg)	(deg)

## 4.03a\_BT\_EDR\_ch39\_2.8\_18GHz

#### **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: BT\_ BT EDR | DH5 | ch39

Operator Name: HI

### **EUT Information**

Manufacturer: Robert Bosch Car Multimedia

Product: AIVISBX0 EUT Model: 18-1-00482S06

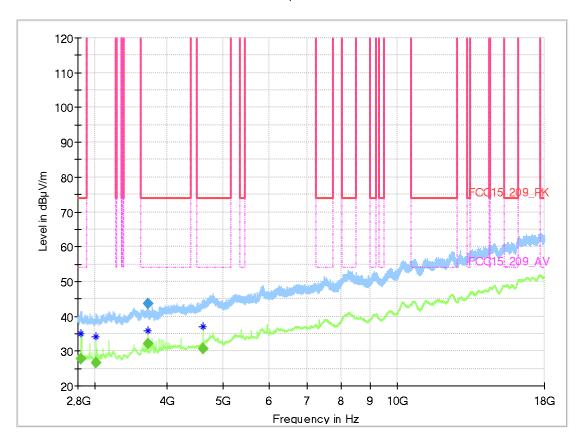
HW: tbd

SW; 283C24194R

Serial Nr.:

Conected Devices: 13.5VDC

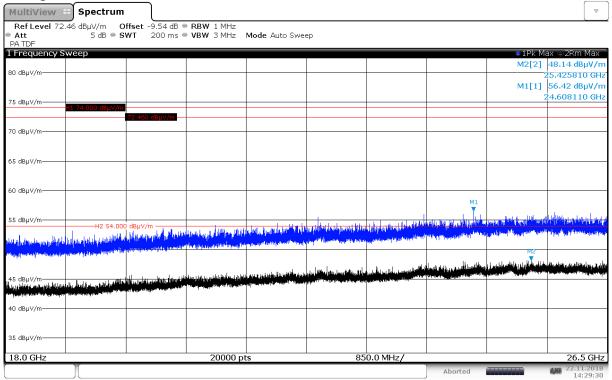
#### Full Spectrum



## $F\underline{inal\_Result}$

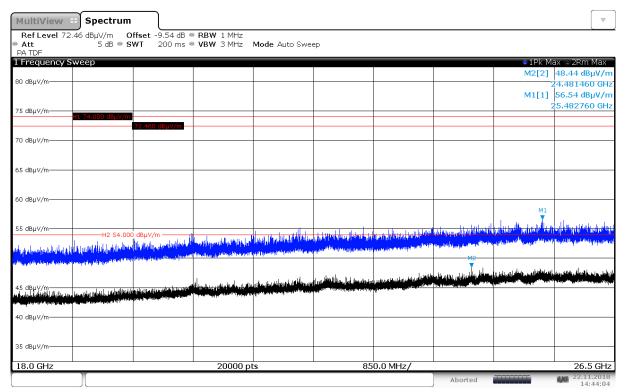
Frequency	MaxPeak	Average	Limit	Margi	Meas.	Bandwidth	Heigh	Pol	Azimut	Elevatio
(MHz)	(dBµV/m)	(dBµV/m)	(dBµV/m)	n	Time	(kHz)	t		h	n
				(dB)	(ms)		(cm)		(deg)	(deg)
2830.800000		27.77	54.00	26.23	100.0	1000.000	155.0	Н	252.0	90.0
3004.400000		26.62	150.00	123.38	100.0	1000.000	155.0	Н	121.0	90.0
3696.000000		31.98	54.00	22.02	100.0	1000.000	155.0	Н	277.0	90.0
3696.000000	43.63		74.00	30.37	100.0	1000.000	155.0	Н	105.0	90.0
4612.800000		30.69	54.00	23.31	100.0	1000.000	155.0	Н	125.0	90.0





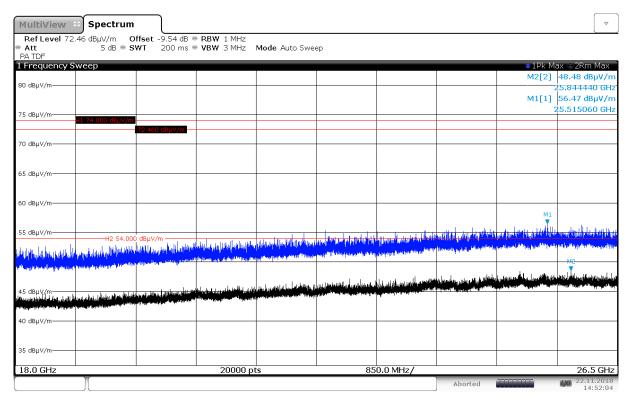
14:29:30 22.11.2018

#### $4.01b\_BT\_EDR\_ch78$



14:44:04 22.11.2018

4.02b\_BT\_EDR\_ch00



14:52:04 22.11.2018

4.03b\_BT\_EDR\_ch39

## 3. Radiated Band Edge Measurements

# 3.1. Radiated emissions on Bluetooth BDR band-edge low Diagram No.: 9.01a\_BT\_EDR\_ch00

#### **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: BT EDR | 2-DH5 | ch00

Operator Name: HE

#### **EUT Information**

Manufacturer: Robert Bosch Car Multimedia

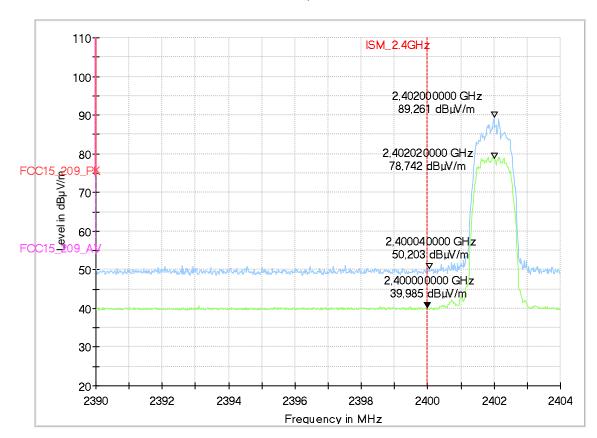
Product: AIVISBX0 EUT Model: 18-1-00482S06

HW: tbd

SW; 283C24194R

Serial Nr.:

Conected Devices: 13.5VDC



## 9.02a\_BT\_EDR\_ch00

#### **Common Information**

Test Description: Band-Edge: Radiated Field Strength Emissions Emissions in 3m distance

Test Site: CETECOM GmbH Essen

Version of Testsoftware: EMC32 V9.26.0

Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 4

Antenna polarisation: horizontal/vertical
Operation mode: BT EDR | DH5 | ch00

Operator Name: MSo

Comment: Channel no. low

#### **EUT Information**

Manufacturer: Robert Bosch Car Multimedia

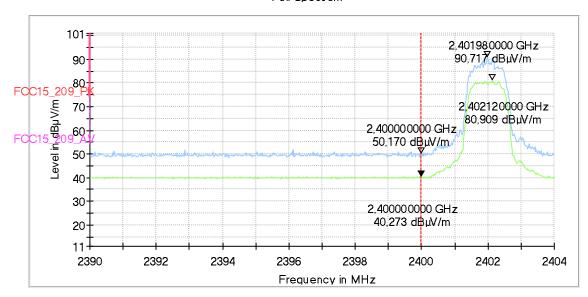
Product: AIVISBX0 EUT Model: 18-1-00482S06

HW: tbd

 SW;
 283C24194R

 Serial No.:
 0005000

 Connected Devices:
 13.5VDC



## Diagram No.: 9.03a\_BT\_BR\_ch00

#### **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: BT EDR | DH5 | ch00

Operator Name:

#### **EUT Information**

Manufacturer: Robert Bosch Car Multimedia

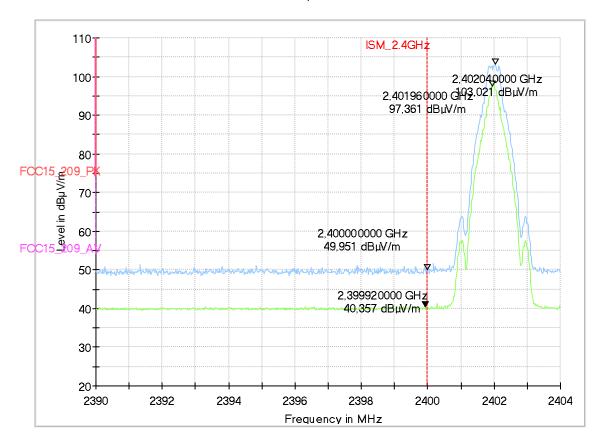
Product: AIVISBX0 EUT Model: 18-1-00482S06

HW: tbd

SW; 283C24194R

Serial Nr.:

Conected Devices: 13.5VDC



## Diagram No.: 9.04a\_BT\_EDR\_ch00

#### **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: BT EDR | Hopping ON

Operator Name: HI

#### **EUT Information**

Manufacturer: Robert Bosch Car Multimedia

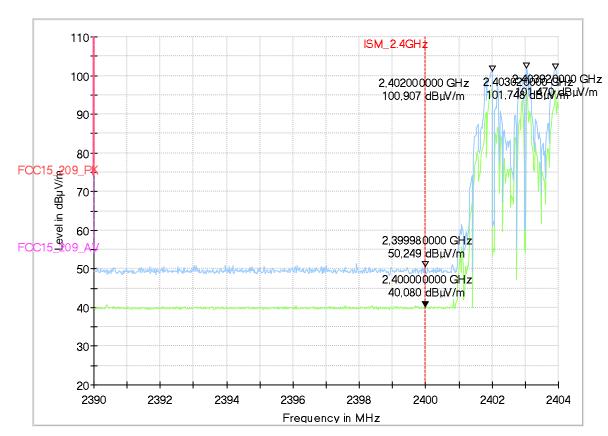
Product: AIVISBX0 EUT Model: 18-1-00482S06

HW: tbd

SW; 283C24194R

Serial Nr.:

Conected Devices: 13.5VDC



## 3.2. Radiated emissions on Bluetooth EDR band-edge high Diagram No.: 9.01b\_BT\_EDR\_ch78

#### **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: BT EDR | 2-DH5 | ch78

Operator Name: HE

#### **EUT Information**

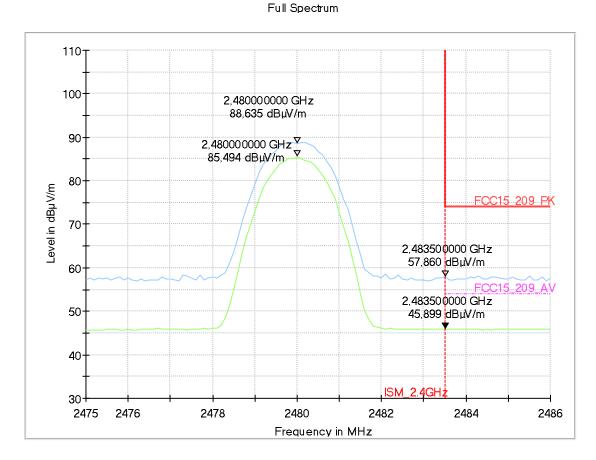
Manufacturer: Robert Bosch Car Multimedia

Product: AIVISBX0 EUT Model: 18-1-00482S06

HW: tbd

SW; 283C24194R

Serial Nr.: Conected Devices: 13.5VDC



## 9.02b\_BT\_EDR\_ch78

#### **Common Information**

Test Description: Band-Edge: Radiated Field Strength Emissions Emissions in 3m distance

Test Site: CETECOM GmbH Essen

Version of Testsoftware: EMC32 V9.26.0

Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 4

Antenna polarisation: horizontal/vertical
Operation mode: BT EDR | DH5 | ch78

Operator Name: MSo

Comment: Channel no. 78 / high

#### **EUT Information**

Manufacturer: Robert Bosch Car Multimedia

Product: AIVISBX0 EUT Model: 18-1-00482S06

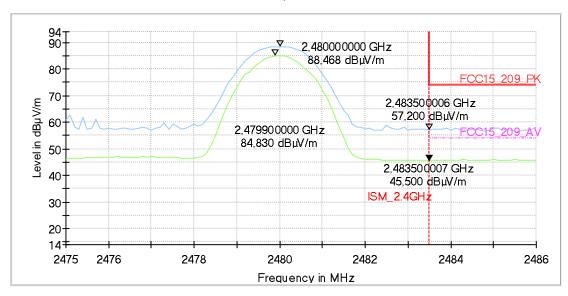
HW: tbd

 SW;
 283C24194R

 Serial No.:
 0005000

 Connected Devices:
 13.5VDC

### **Full Spectrum**



## Diagram No.: 9.03b\_BT\_BR\_ch78

#### **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: BT EDR | DH5 | ch78

Operator Name: HE

#### **EUT Information**

Manufacturer: Robert Bosch Car Multimedia

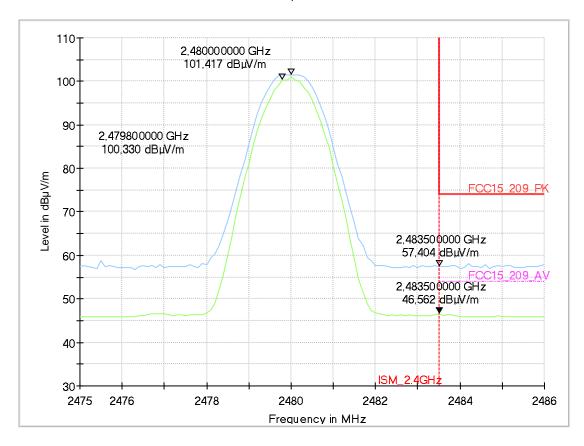
Product: AIVISBX0 EUT Model: 18-1-00482S06

HW: tbd

SW; 283C24194R

Serial Nr.:

Conected Devices: 13.5VDC



## Diagram No.: 9.04b\_BT\_EDR\_ch78

#### **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: BT EDR | Hopping ON

Operator Name: HI

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Product: AIVISBX0 EUT Model: 18-1-00482S06

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Conected Devices: 13.5VDC

