Annex 1: Measurement diagrams to
T E S T R E P O R T
No.: 17-1-0181301T100a-C1

According to:
FCC Regulations
Part 15.209
Part 15.247

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

for

Kathrein Automotive GmbH

TRANSCVRP01
Intelligent Park Assistent

FCC: 2ACC7TRANSCVRP01
ISED: 11980A-TRANSCVRP01
HVIN= TRANSCVRP01
PMN:BT-Transceiver

Laboratory Accreditation and Listings			
DAkkS Deutsche Akkreditierungsstelle D-PL-12047-01-01	MRA US-EU 0003	Industry Canada Reg N.: 3462D-1 Reg. No.: 3462D-2 Reg. No.: 3462D-3	Voluntary Controls for Electromagnetic Emissions Reg. No.: R-2666 C-2914, T-1967, G-301
Wi Fi 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. Radiated field strength measurements accord. §15.209&15.205

1.1. Magnetic field measurements f<30MHz

2.10a_BT_LE_low_laying

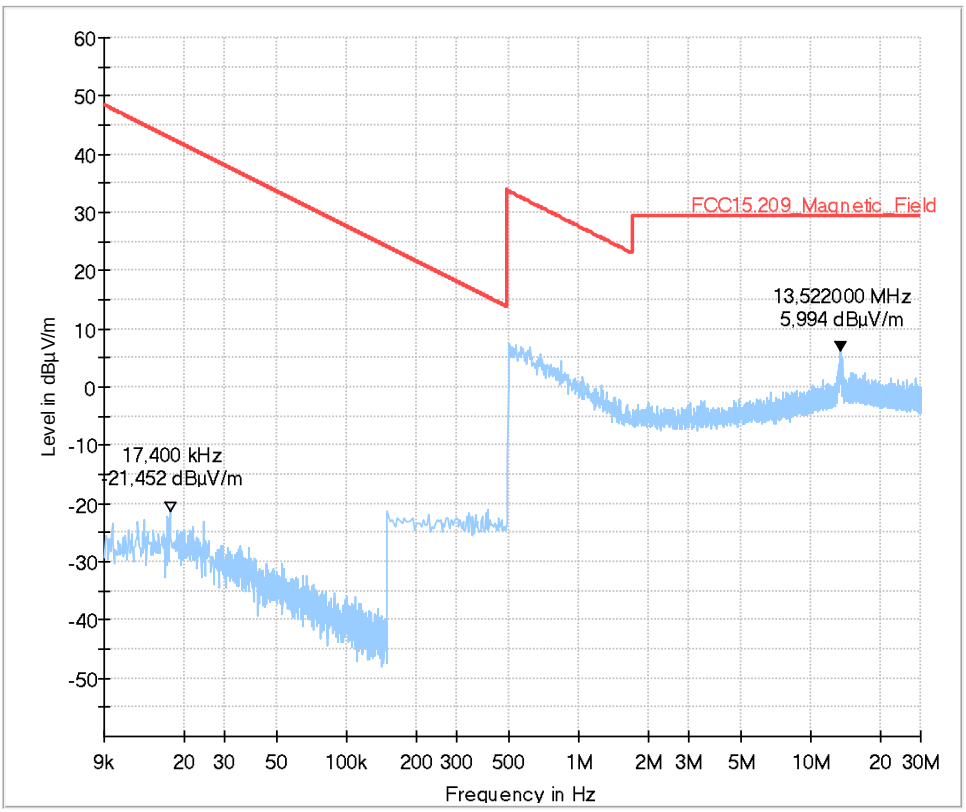
Common Information

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:	RIs
Operating conditions:	BTLE_Laying_Low
Power during tests:	12V DC
Comment 1:	

EUT Information

Manufacturer:	KATHREIN Automotive GmbHType
Model:	TRANSCVRP01
EUT:	T9Y0240
HW version:	H003
SW version:	V711
SVN:	-
Config:	-
Serial number:	000623
Connected Interfaces:	-
Power Supply:	12V DC
Comments:	-

Full Spectrum



2.10b_BT_LE_low_standing

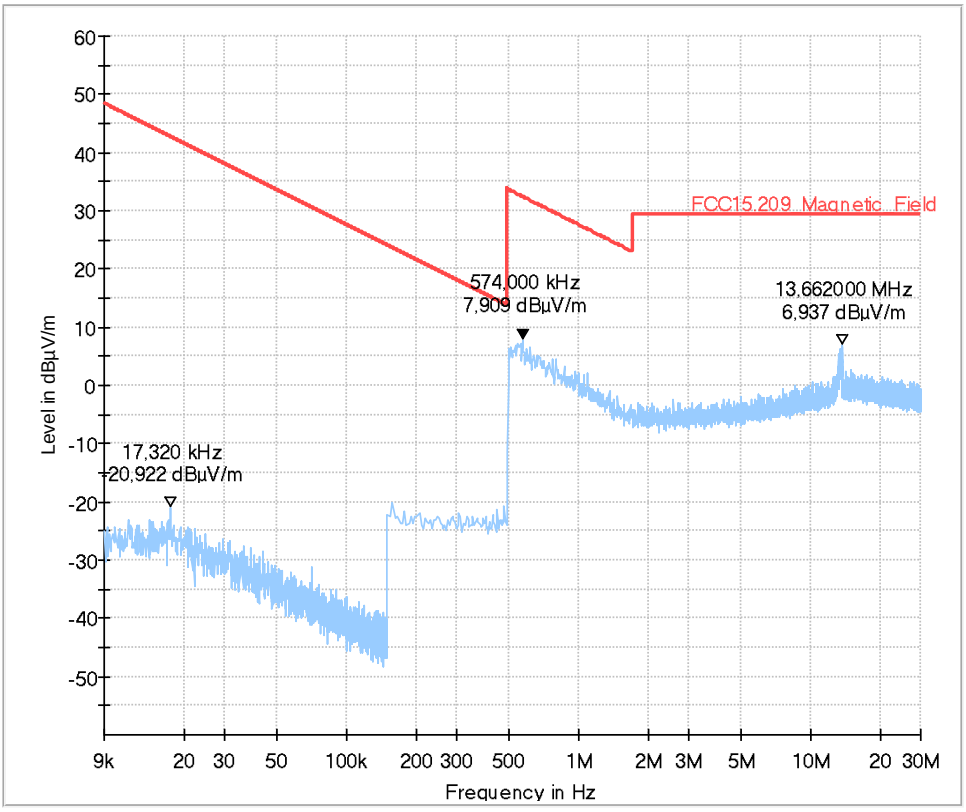
Common Information

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:	RIs
Operating conditions:	BTLE_Standing_Low
Power during tests:	12V DC
Comment 1:	

EUT Information

Manufacturer:	KATHREIN Automotive GmbHType
Model:	TRANSCVRP01
EUT:	T9Y0240
HW version:	H003
SW version:	V711
SVN:	-
Config:	-
Serial number:	000623
Connected Interfaces:	-
Power Supply:	12V DC
Comments:	-

Full Spectrum



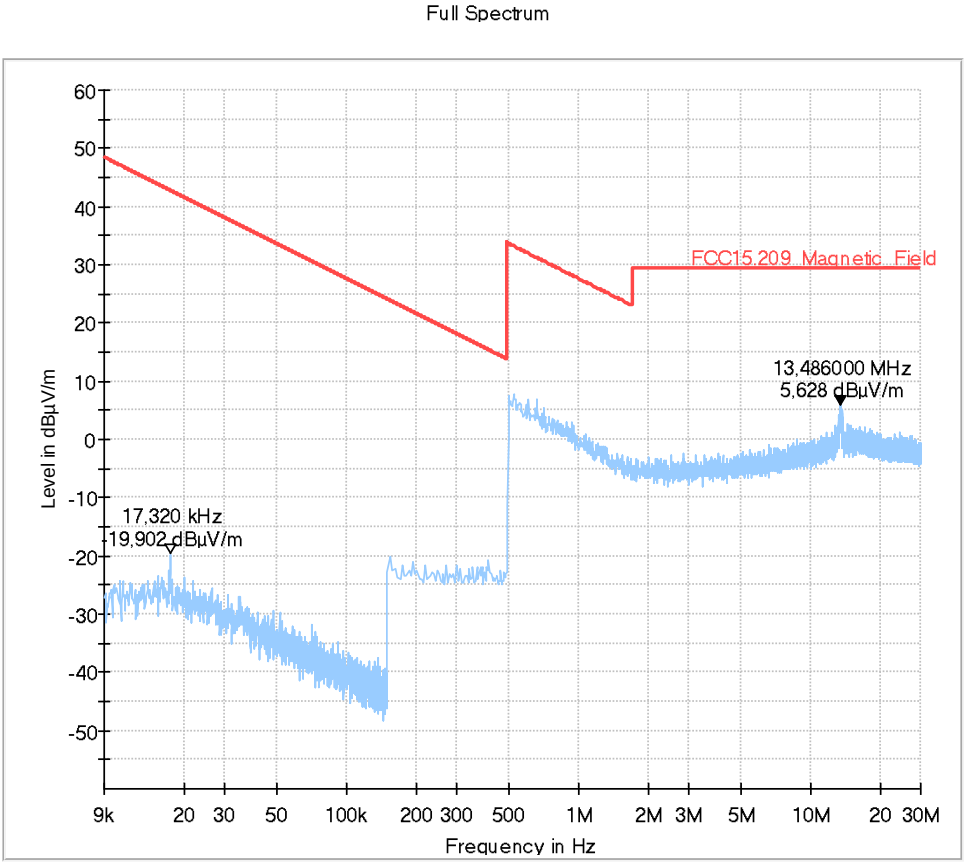
2.11a_BT_LE_mid_laying

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:	RIs
Operating conditions:	BTLE_Laying_Mid
Power during tests:	12V DC
Comment 1:	

EUT Information

Manufacturer:	KATHREIN Automotive GmbHType
Model:	TRANSCVRP01
EUT:	T9Y0240
HW version:	H003
SW version:	V711
SVN:	-
Config:	-
Serial number:	000623
Connected Interfaces:	-
Power Supply:	12V DC
Comments:	-



2.11b_BT_LE_mid_standing

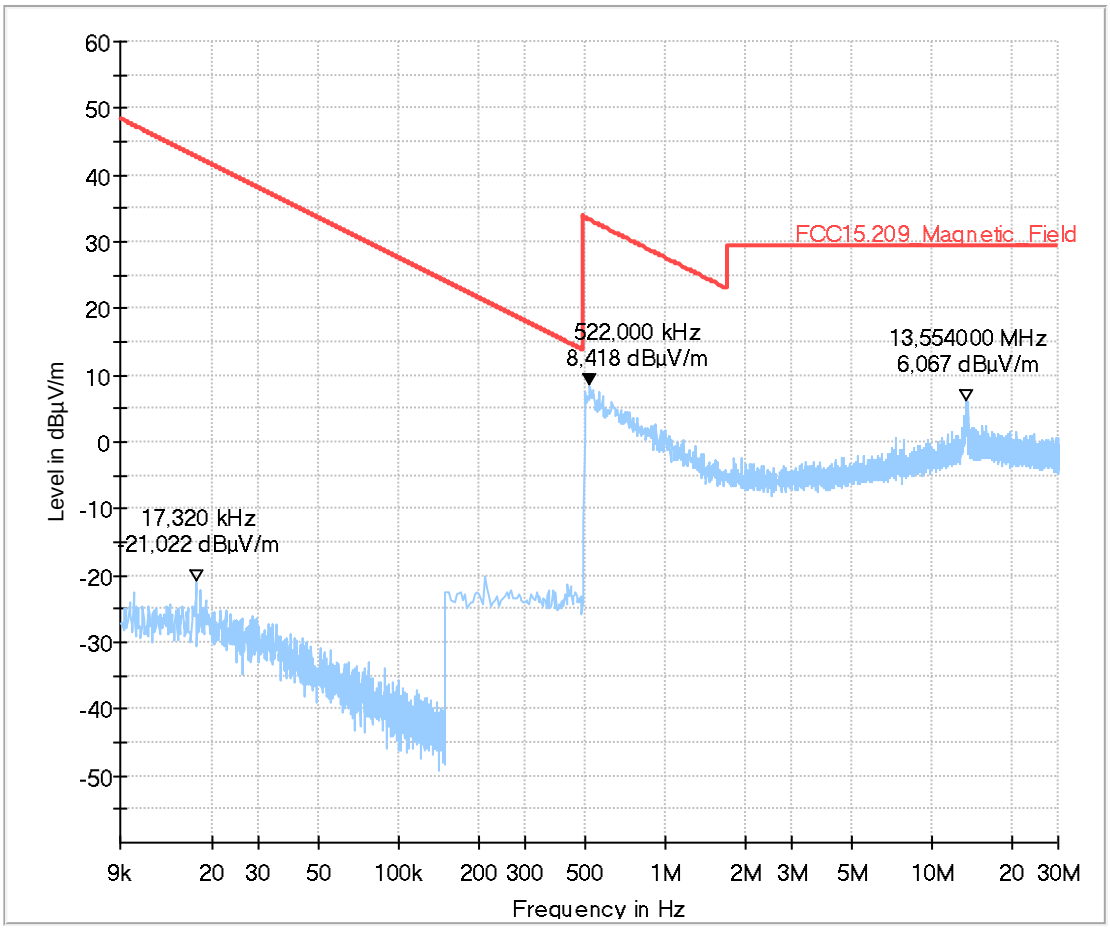
Common Information

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:	RIs
Operating conditions:	BTLE_Standing_Low
Power during tests:	12V DC
Comment 1:	

EUT Information

Manufacturer:	KATHREIN Automotive GmbHType
Model:	TRANSCVRP01
EUT:	T9Y0240
HW version:	H003
SW version:	V711
SVN:	-
Config:	-
Serial number:	000623
Connected Interfaces:	-
Power Supply:	12V DC
Comments:	-

Full Spectrum



2.12a_BT_LE_high_laying

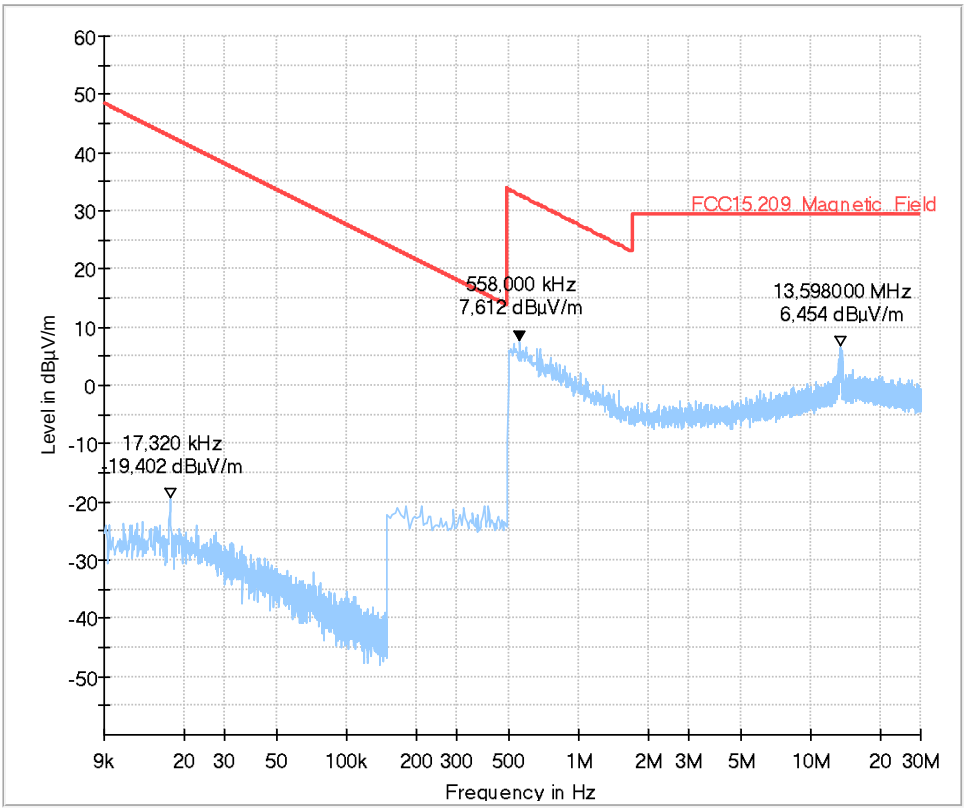
Common Information

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:	RIs
Operating conditions:	BTLE_Laying_High
Power during tests:	12V DC
Comment 1:	

EUT Information

Manufacturer:	KATHREIN Automotive GmbHType
Model:	TRANSCVRP01
EUT:	T9Y0240
HW version:	H003
SW version:	V711
SVN:	-
Config:	-
Serial number:	000623
Connected Interfaces:	-
Power Supply:	12V DC
Comments:	-

Full Spectrum



2.12b_BT_LE_high_standing

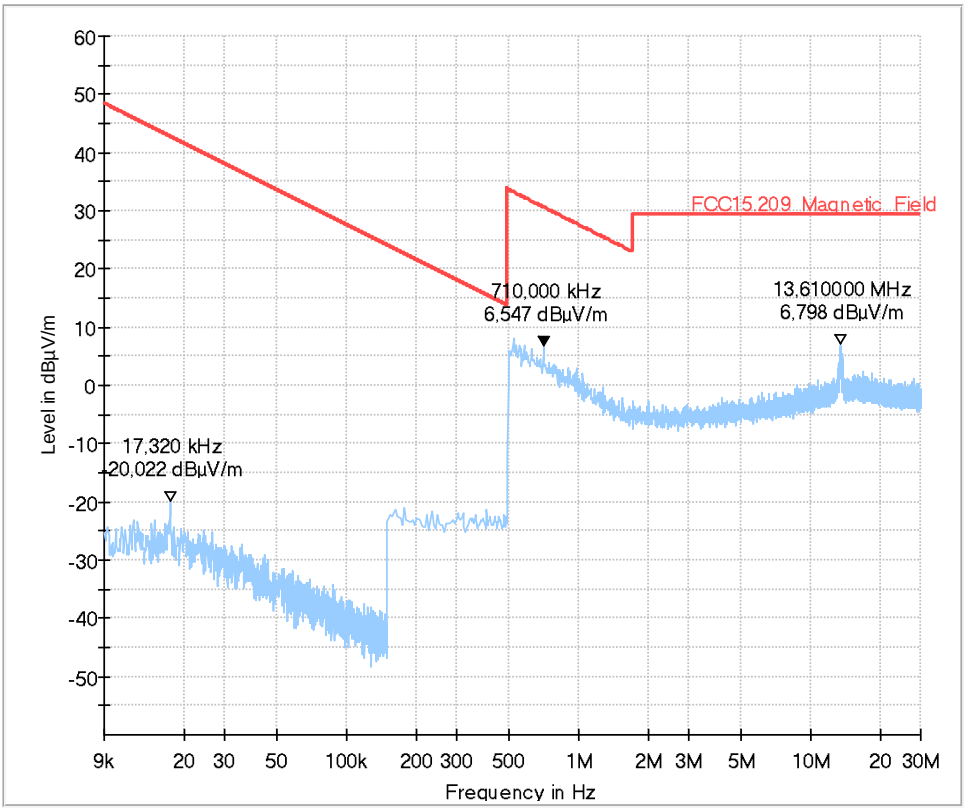
Common Information

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:	RIs
Operating conditions:	BTLE_Standing_High
Power during tests:	12V DC
Comment 1:	

EUT Information

Manufacturer:	KATHREIN Automotive GmbHType
Model:	TRANSCVRP01
EUT:	T9Y0240
HW version:	H003
SW version:	V711
SVN:	-
Config:	-
Serial number:	000623
Connected Interfaces:	-
Power Supply:	12V DC
Comments:	-

Full Spectrum



1.2. Field strength measurements 30MHz <f <1GHz

3.10a_BT_LE_low_laying

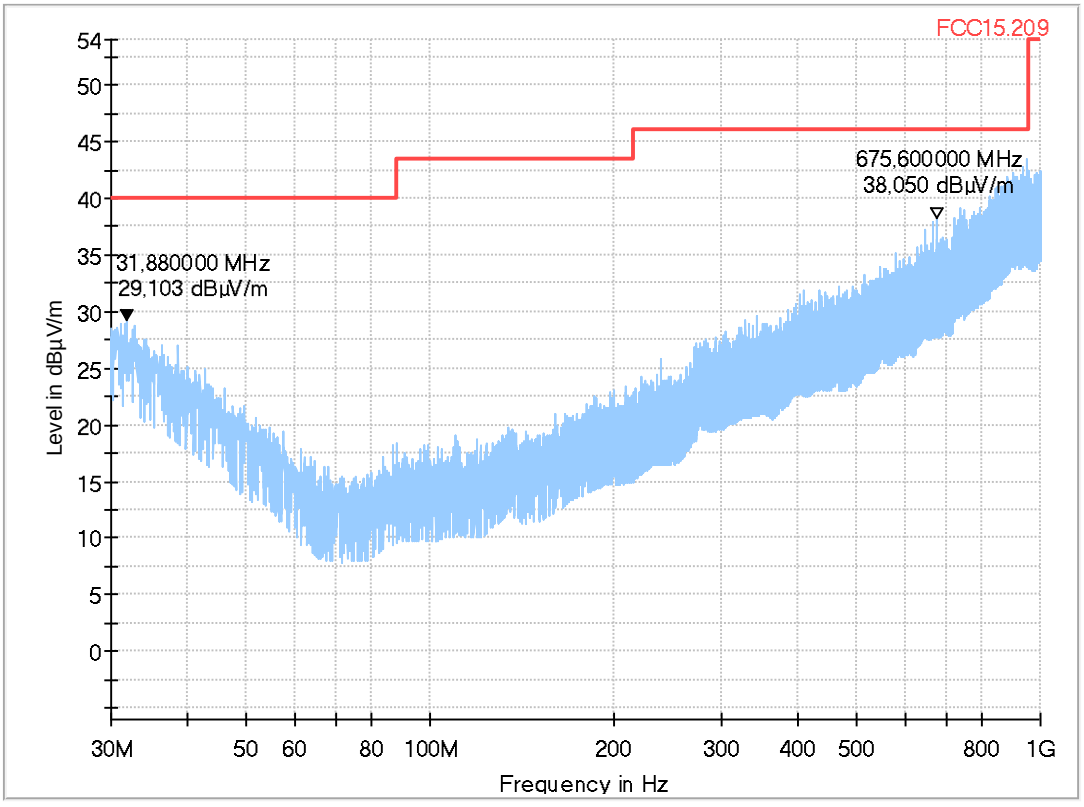
Common Information

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
Operator:	RIs
Operating conditions:	BT LE
Power during tests:	12V DC
Comment 1:	Laying

EUT Information

Manufacturer:	KATHREIN Automotive GmbHType
Model:	TRANSCVRP01
EUT:	T9Y0240
HW version:	H003
SW version:	V711
SVN:	-
Config:	-
Serial number:	000623
Connected Interfaces:	-
Power Supply:	12V DC
Comments:	-

Full Spectrum



3.10b_BT_LE_low_standing

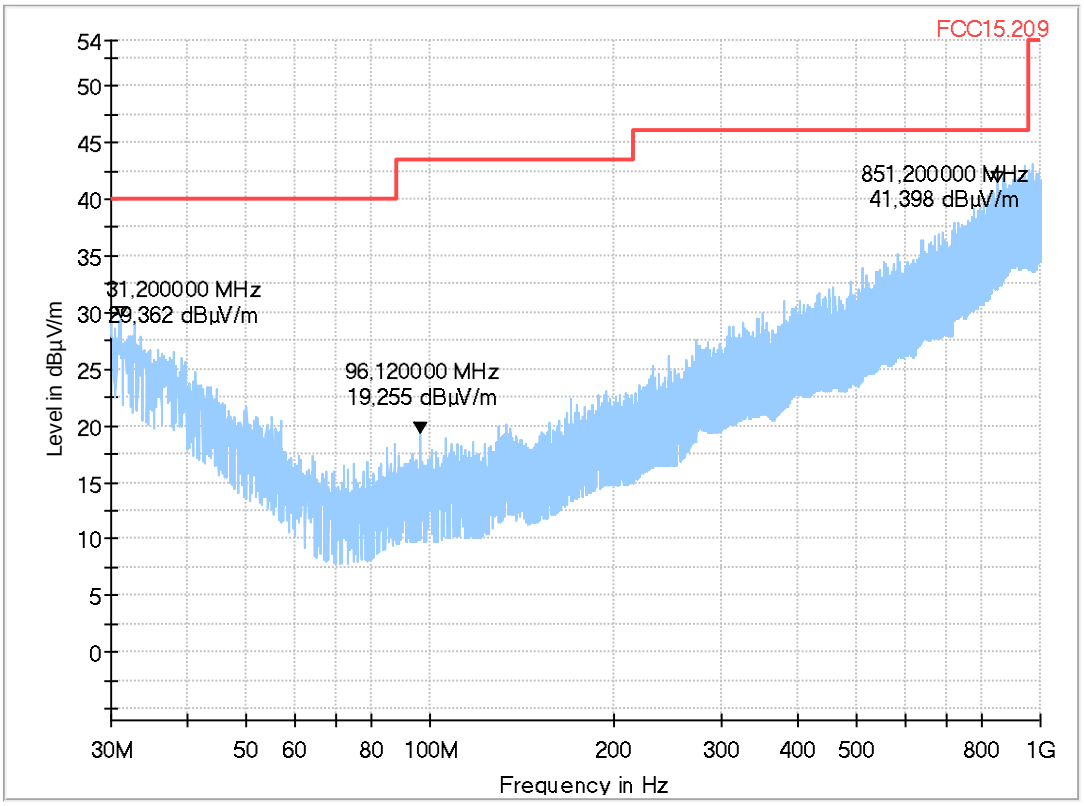
Common Information

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:	RIs
Operating conditions:	BTLE_Low_Standing
Power during tests:	12V DC
Comment 1:	

EUT Information

Manufacturer:	KATHREIN Automotive GmbHType
Model:	TRANSCVRP01
EUT:	T9Y0240
HW version:	H003
SW version:	V711
SVN:	-
Config:	-
Serial number:	000623
Connected Interfaces:	-
Power Supply:	12V DC
Comments:	-

Full Spectrum



3.11a_BT_LE_mid_laying

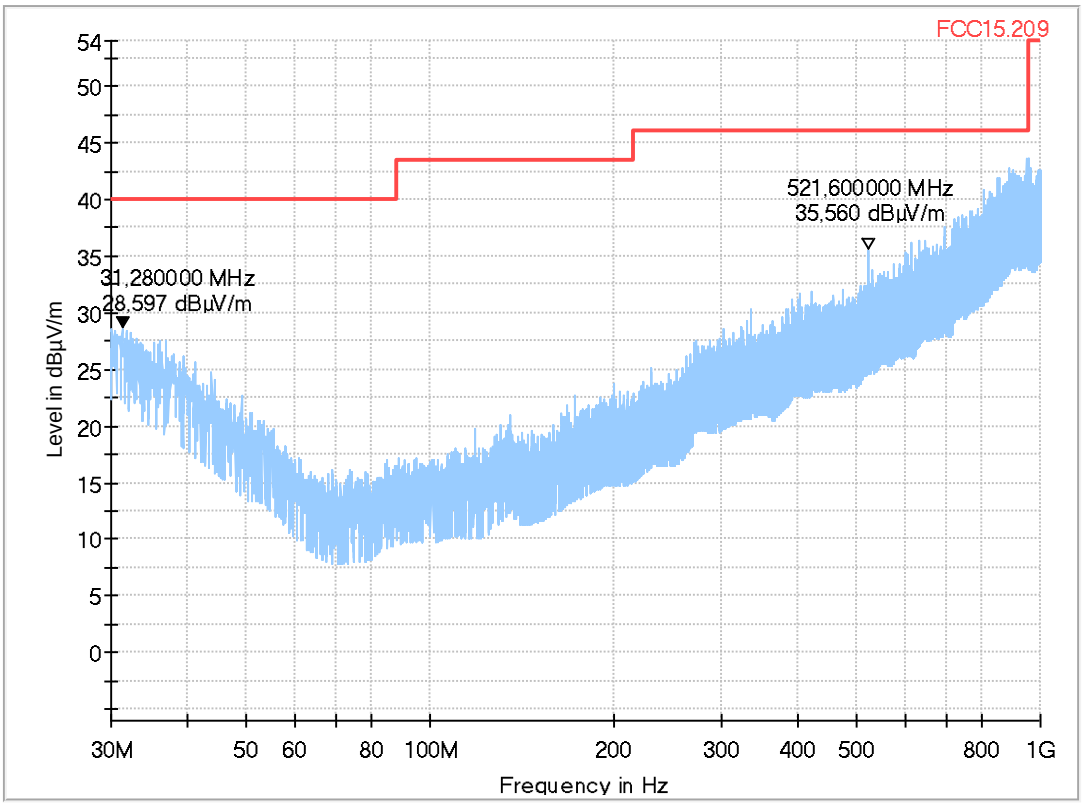
Common Information

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
Operator:	RIs
Operating conditions:	BTLE_Mid_Laying
Power during tests:	12V DC
Comment 1:	

EUT Information

Manufacturer:	KATHREIN Automotive GmbHType
Model:	TRANSCVRP01
EUT:	T9Y0240
HW version:	H003
SW version:	V711
SVN:	-
Config:	-
Serial number:	000623
Connected Interfaces:	-
Power Supply:	12V DC
Comments:	-

Full Spectrum



3.11b_BT_LE_mid_standing

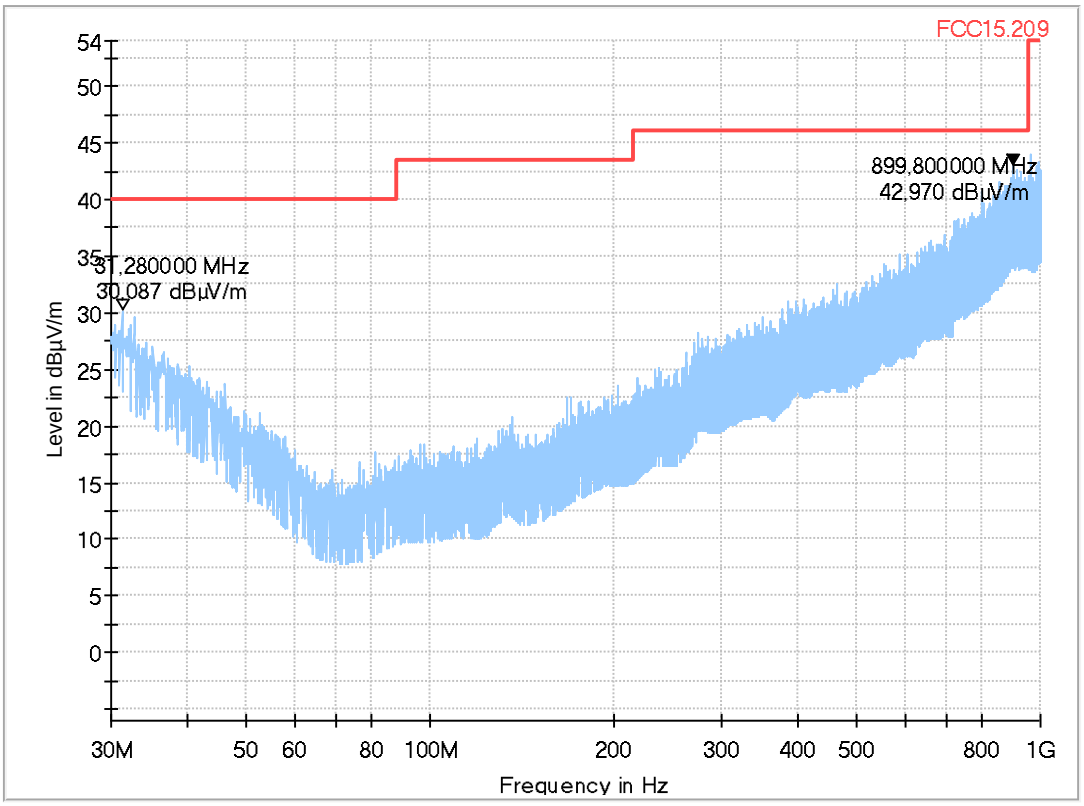
Common Information

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:	RIs
Operating conditions:	BTLE_Mid_Standing
Power during tests:	12V DC
Comment 1:	

EUT Information

Manufacturer:	KATHREIN Automotive GmbHType
Model:	TRANSCVRP01
EUT:	T9Y0240
HW version:	H003
SW version:	V711
SVN:	-
Config:	-
Serial number:	000623
Connected Interfaces:	-
Power Supply:	12V DC
Comments:	-

Full Spectrum



3.12a_BT_LE_high_laying

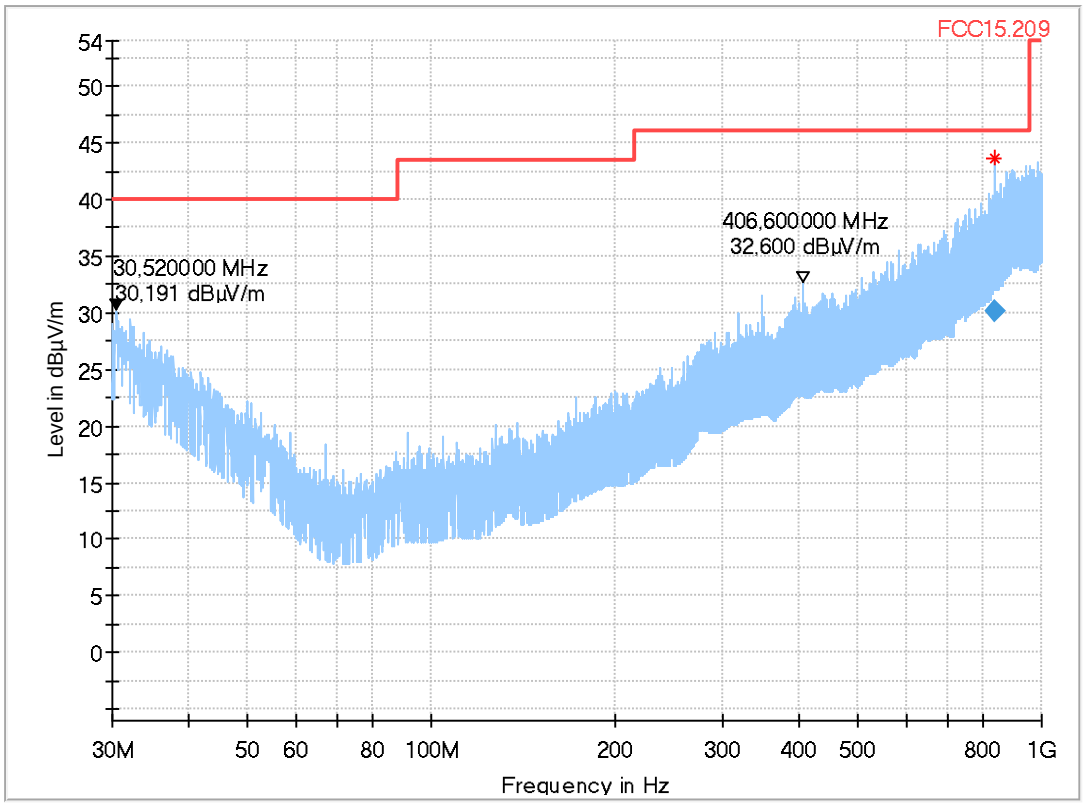
Common Information

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
Operator:	RIs
Operating conditions:	BTLE_High_Laying
Power during tests:	12V DC
Comment 1:	

EUT Information

Manufacturer:	KATHREIN Automotive GmbHType
Model:	TRANSCVRP01
EUT:	T9Y0240
HW version:	H003
SW version:	V711
SVN:	-
Config:	-
Serial number:	000623
Connected Interfaces:	-
Power Supply:	12V DC
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)	Elevation (deg)	Corr. (dB)
836.764000	30.19	46.00	15.81	1000.0	120.000	162.0	H	-9.0	0.0	25.8

3.12b_BT_LE_high_standing

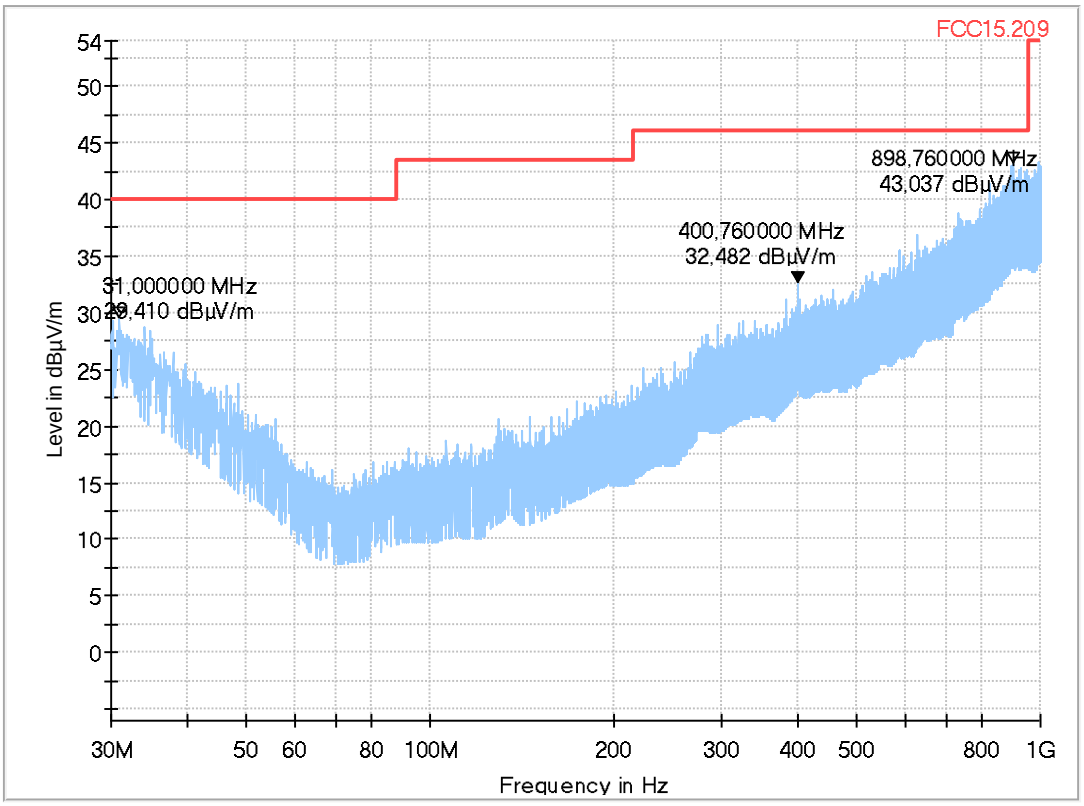
Common Information

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:	RIs
Operating conditions:	BTLE_High_Standing
Power during tests:	12V DC
Comment 1:	

EUT Information

Manufacturer:	KATHREIN Automotive GmbHType
Model:	TRANSCVRP01
EUT:	T9Y0240
HW version:	H003
SW version:	V711
SVN:	-
Config:	-
Serial number:	000623
Connected Interfaces:	-
Power Supply:	12V DC
Comments:	-

Full Spectrum



1.3. Field strength measurements 1GHz < f < 18GHz

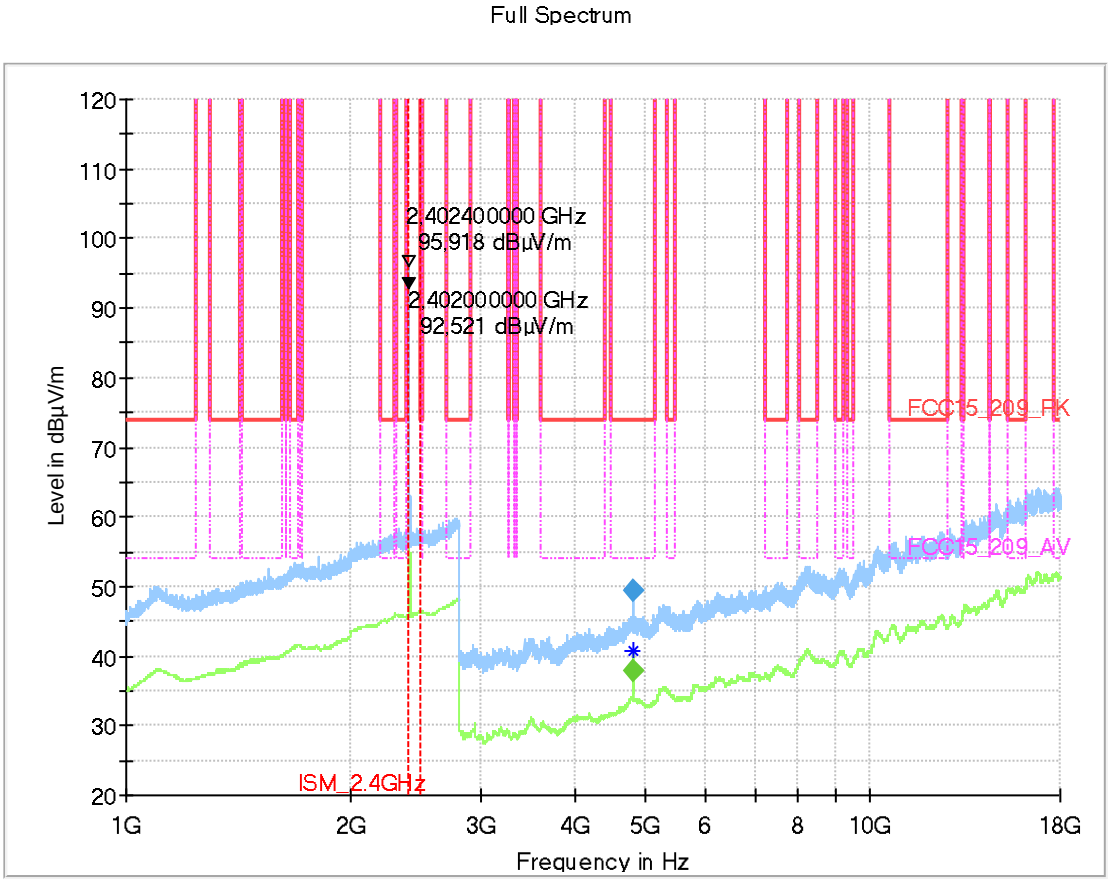
4.10_BT_LE_low

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_LE_ch0
Operator Name:	MBe

EUT Information

Manufacturer:	KATHREIN Automotive GmbHType
Model:	BT-Transceiver P001 (3)
EUT:	T9Y0240
HW version:	H003
SW version:	V711
SVN:	-
Config:	-
Serial number:	000623
Connected Interfaces:	-
Power Supply:	12V DC
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)
4804.400000	---	37.82	54.00	16.18	100.0	1000.000	155.0	H	315.0	90.0
4804.400000	49.43	---	74.00	24.57	100.0	1000.000	155.0	H	318.0	90.0

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

Frequency (MHz)	Corr.	Comment
4804.400000	4.9	21:29:40 - 16.11.2017
4804.400000	4.9	21:27:57 - 16.11.2017

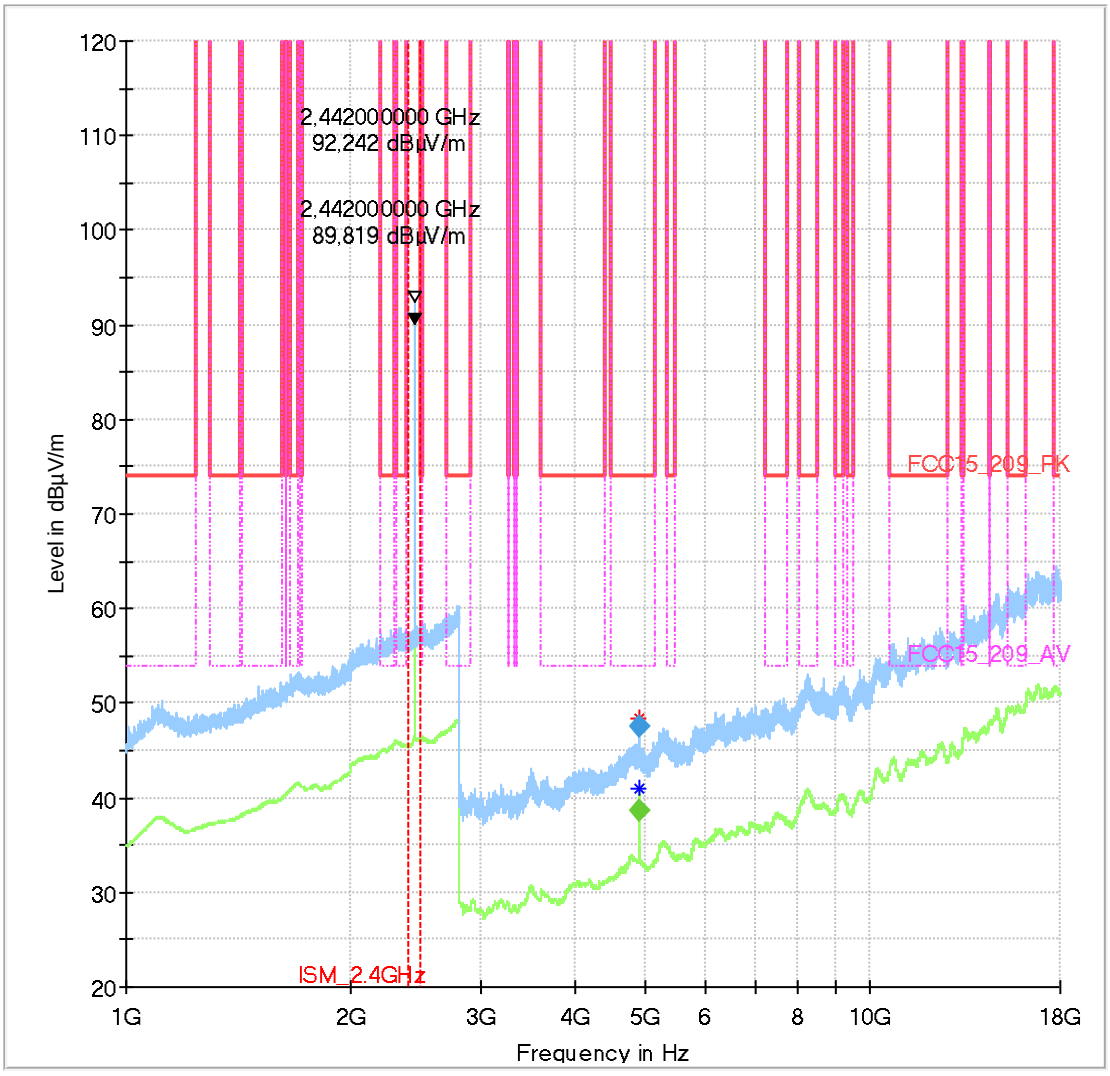
4.11_BT_LE_mid

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 LE
Operator Name:	Humidity: 40%rH; Temperature: 20°C
Comment:	Channel no. mid

EUT Information

Manufacturer:	KATHREIN Automotive GmbHType
Model:	BT-Transceiver P001 (3)
EUT:	T9Y0240
HW version:	H003
SW version:	V711
SVN:	-
Config:	-
Serial number:	000623
Connected Interfaces:	-
Power Supply:	12V DC
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)
4883.600000	---	38.65	54.00	15.35	100.0	1000.000	155.0	H	-14.0	0.0
4883.600000	47.55	---	74.00	26.45	100.0	1000.000	155.0	H	-44.0	0.0

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

Frequency (MHz)	Corr.
4883.600000	4.7
4883.600000	4.7

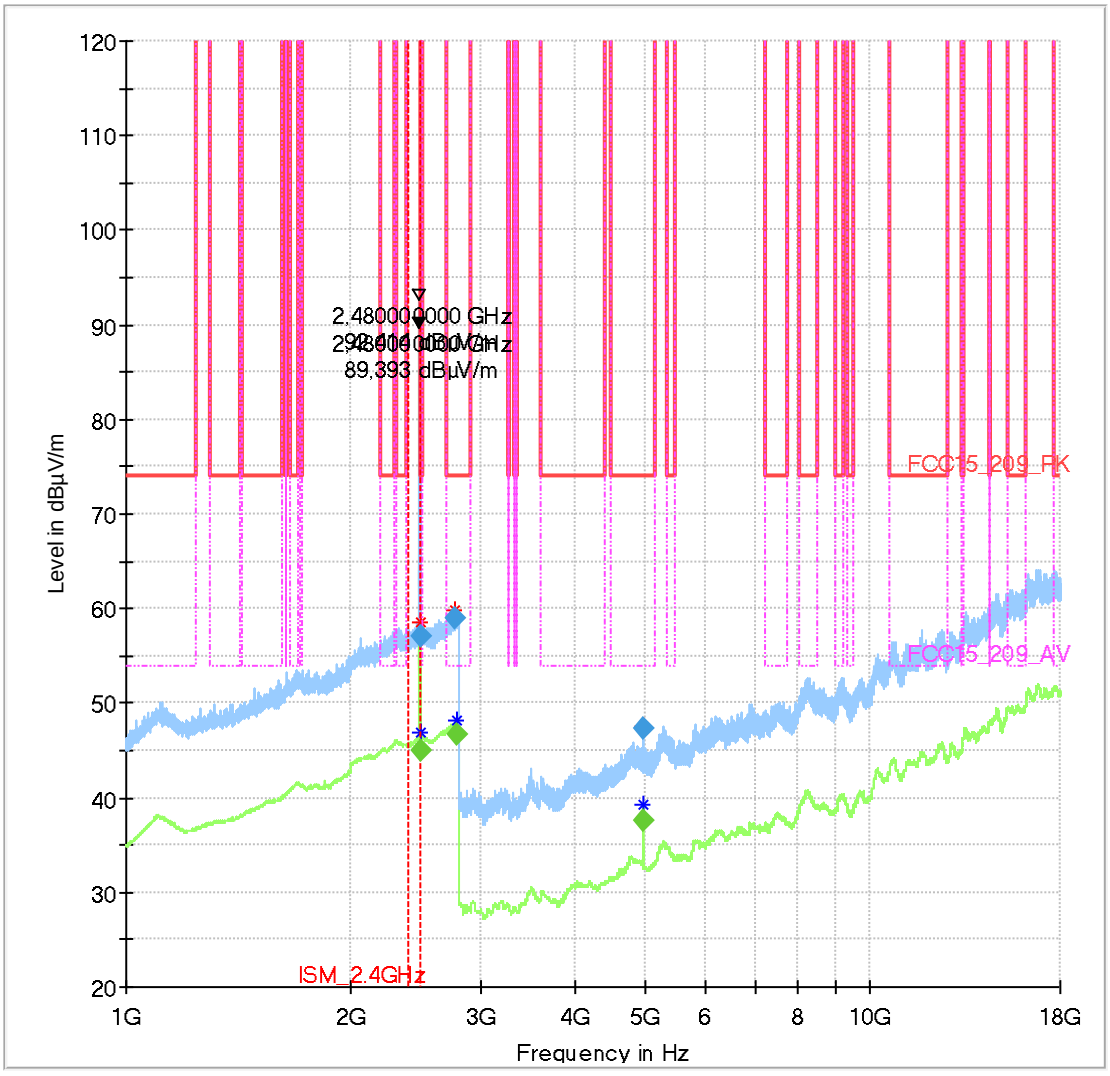
4.12_BT_LE_high

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 LE
Operator Name:	KIv
Comment:	Channel no. 39 high

EUT Information

Manufacturer:	KATHREIN Automotive GmbHType
Model:	BT-Transceiver P001 (3)
EUT:	T9Y0240
HW version:	H003
SW version:	V711
SVN:	-
Config:	-
Serial number:	000623
Connected Interfaces:	-
Power Supply:	12V DC
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)
2485.200000	---	44.93	54.00	9.07	100.0	1000.000	155.0	H	150.0	90.0
2490.400000	57.12	---	74.00	16.88	100.0	1000.000	155.0	H	8.0	90.0
2760.800000	58.99	---	74.00	15.01	100.0	1000.000	155.0	V	32.0	0.0
2778.800000	---	46.69	54.00	7.31	100.0	1000.000	155.0	H	242.0	90.0
4959.600000	---	37.51	54.00	16.49	100.0	1000.000	155.0	H	1.0	0.0
4959.600000	47.26	---	74.00	26.74	100.0	1000.000	155.0	H	-39.0	0.0

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

Frequency (MHz)	Corr.
2485.200000	35.9
2490.400000	35.9
2760.800000	37.9
2778.800000	38.3
4959.600000	4.3
4959.600000	4.3

1.4. Field strength measurements f > 18GHz

Diagram No.: 4.10a_BT-LE_CH0_2402MHz

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:	Channel no. low

EUT Information

Manufacturer:	KATHREIN Automotive GmbHType
Model:	BT-Transceiver P001 (3)
EUT:	T9Y0240
HW version:	H003
SW version:	V711
SVN:	-
Config:	-
Serial number:	000623
Connected Interfaces:	-
Power Supply:	12V DC
Comments:	-

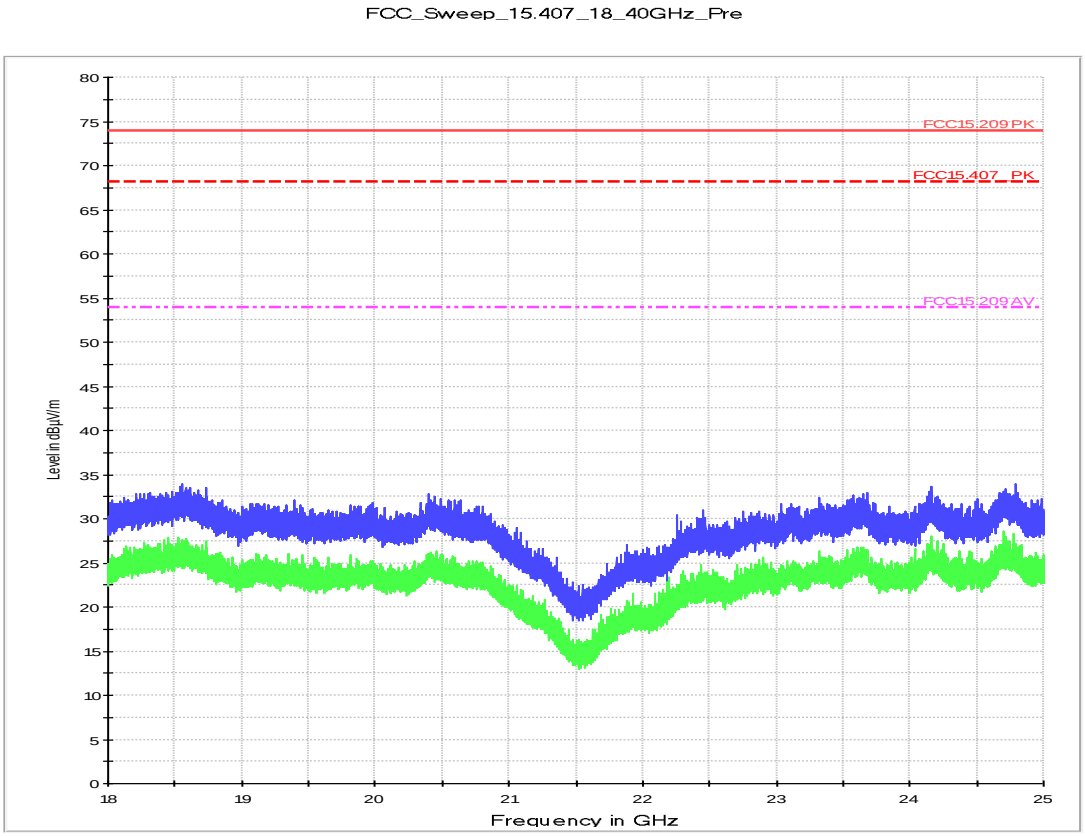


Diagram No.: 4.11a_BT-LE_CH19_2442MHz

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:	Channel no. mid

EUT Information

Manufacturer:	KATHREIN Automotive GmbHType
Model:	BT-Transceiver P001 (3)
EUT:	T9Y0240
HW version:	H003
SW version:	V711
SVN:	-
Config:	-
Serial number:	000623
Connected Interfaces:	-
Power Supply:	12V DC
Comments:	-

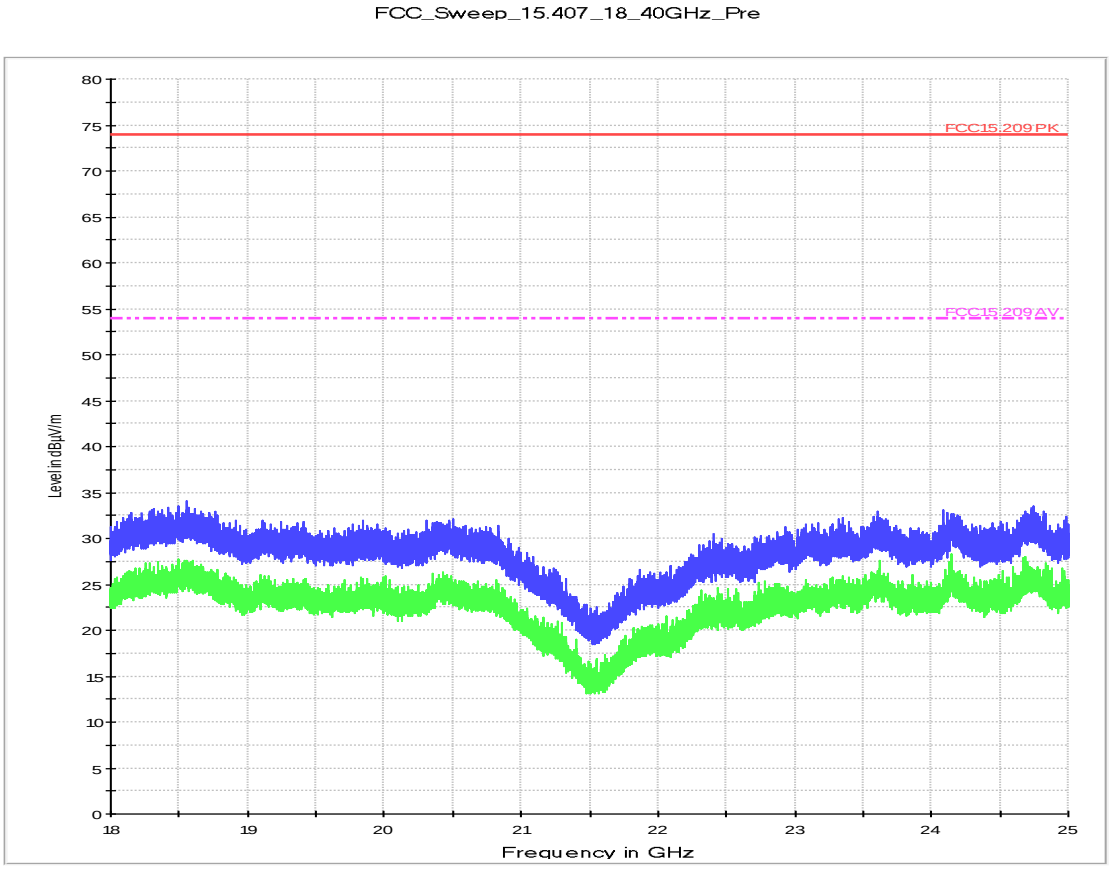


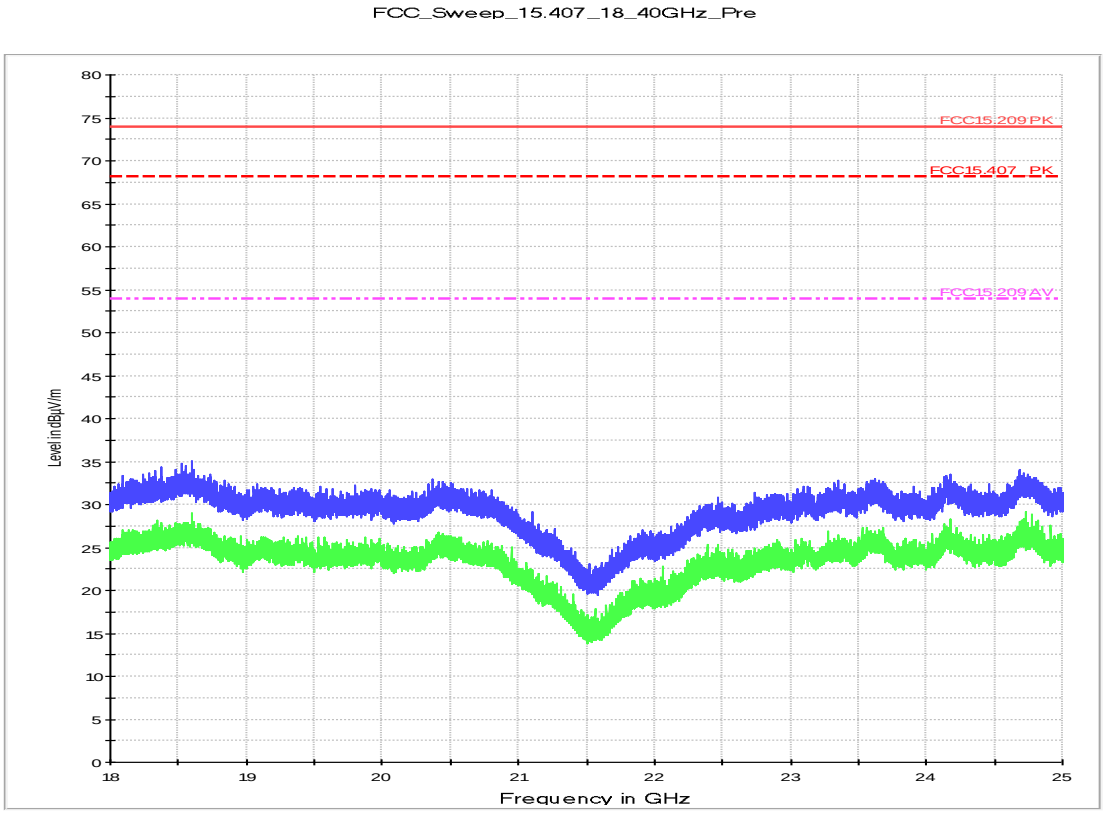
Diagram No.: 4.12a_BT-LE_CH39_2480MHz

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:	Channel no. high

EUT Information

Manufacturer:	KATHREIN Automotive GmbHType
Model:	BT-Transceiver P001 (3)
EUT:	T9Y0240
HW version:	H003
SW version:	V711
SVN:	-
Config:	-
Serial number:	000623
Connected Interfaces:	-
Power Supply:	12V DC
Comments:	-



1.5. Bandedge

9.01_BT_LE_high

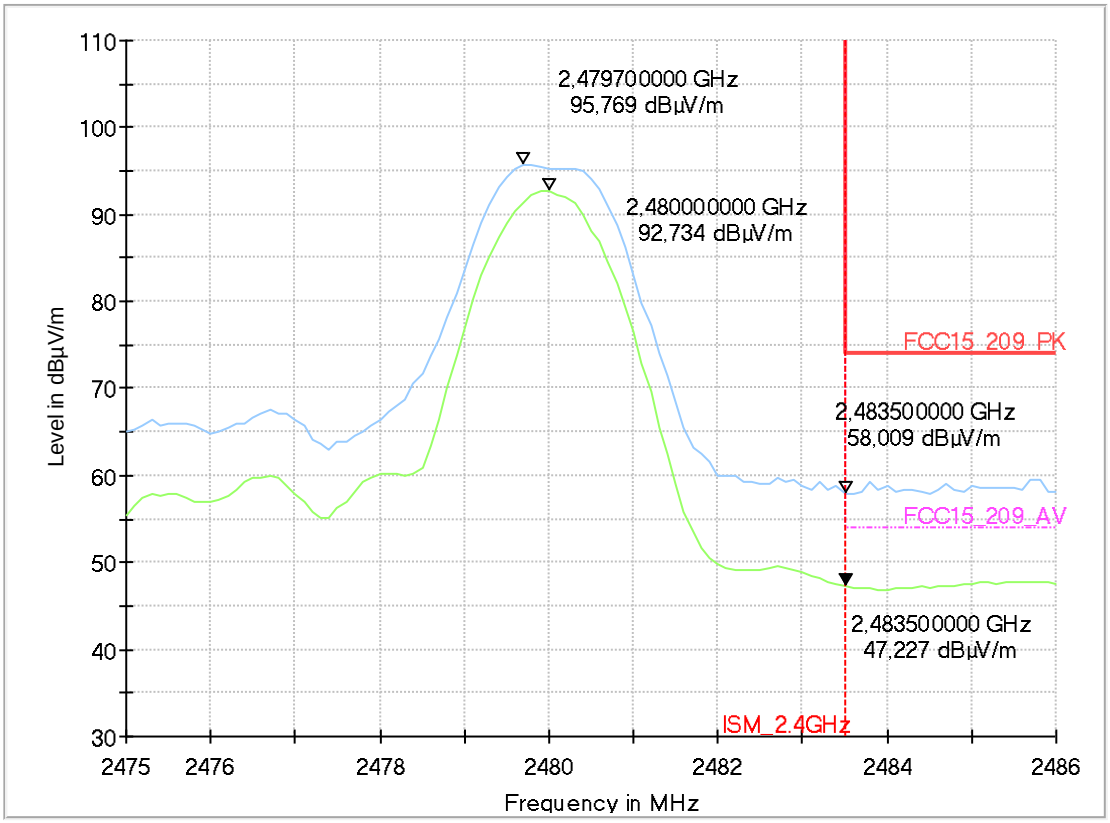
Common Information

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:	Lor
Comment:	Channel no. low/high
Comment2:	Modulation Type: xxx Data Rate: yyy

EUT Information

Manufacturer:	KATHREIN Automotive GmbHType
Model:	BT-Transceiver P001 (3)
EUT:	T9Y0240
HW version:	H003
SW version:	V711
SVN:	-
Config:	-
Serial number:	000623
Connected Interfaces:	-
Power Supply:	12V DC
Comments:	-

Full Spectrum



9.02_BT_LE_low

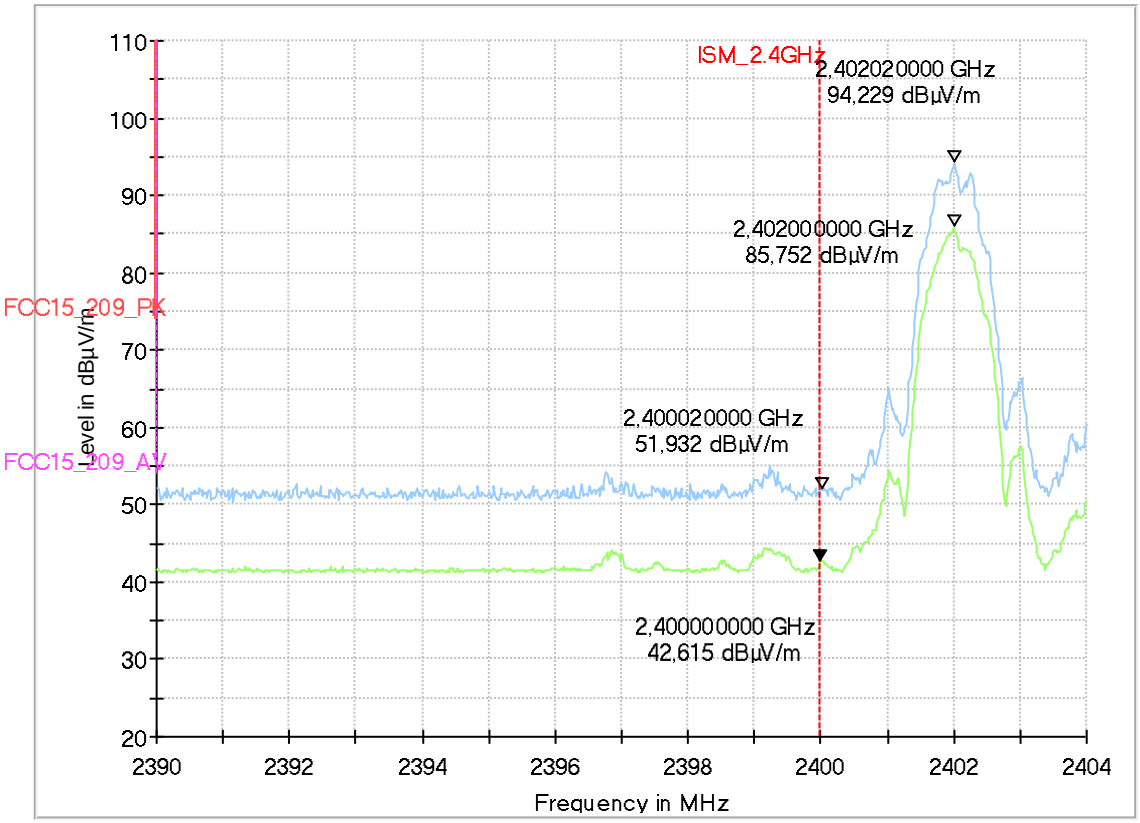
Common Information

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:	Lor
Comment:	Channel no. low/high
Comment2:	Modulation Type: xxx Data Rate: yyy

EUT Information

Manufacturer:	KATHREIN Automotive GmbHType
Model:	BT-Transceiver P001 (3)
EUT:	T9Y0240
HW version:	H003
SW version:	V711
SVN:	-
Config:	-
Serial number:	000623
Connected Interfaces:	-
Power Supply:	12V DC
Comments:	-

Full Spectrum

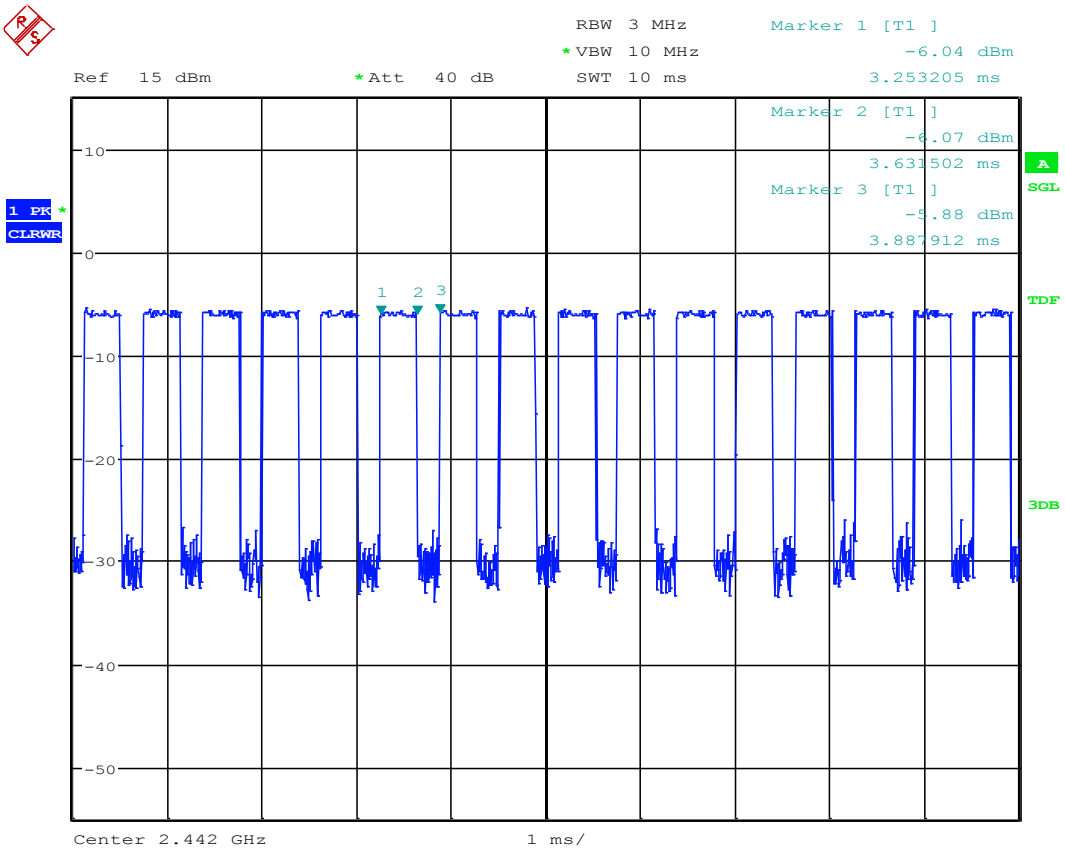


2. Conducted RF-measurements on antenna port

2.1. RF output Power

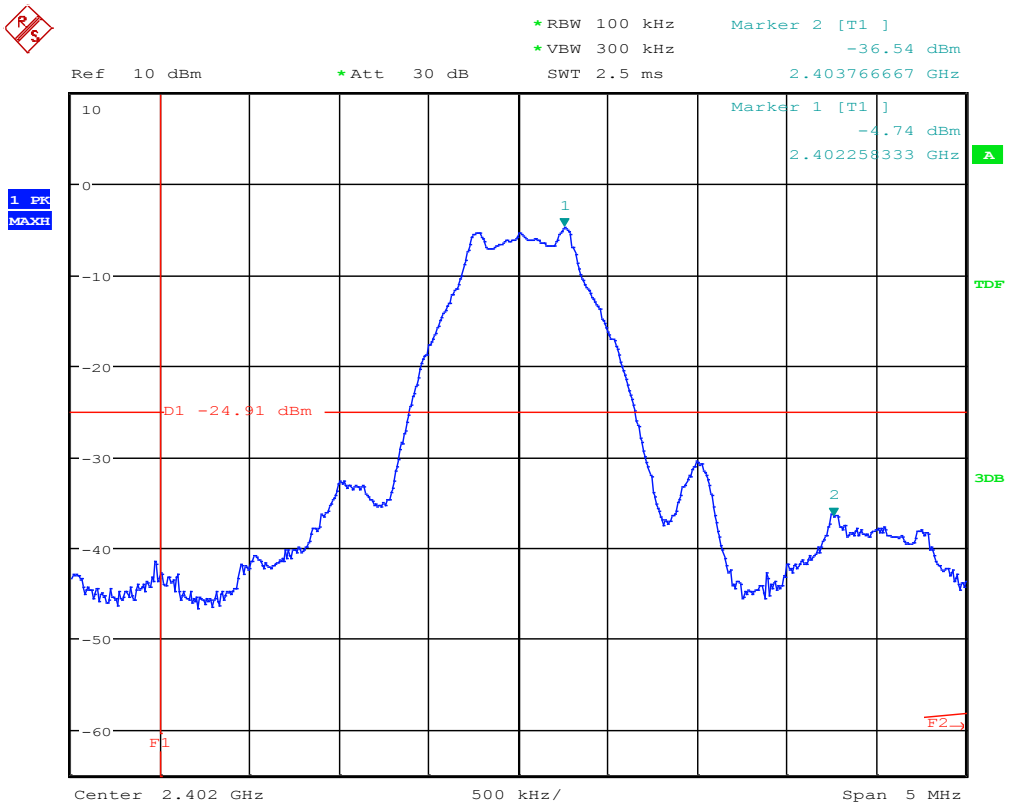
Conducted Peak Power Measurements for Bluetooth DSSS (LE) Modes				
Bluetooth DSSS (Mode)	**Modulation (Data Rate)**	**Channel No. (Channel Frequency)**	**Conducted Peak Power TX-modulated (dBm)**	**Conducted Peak Power TX-modulated (mW)**
Bluetooth Low Energy (LE Mode)	GFSK (1 Mbps)	Channel No. 0 (2402 MHz)	-4,79	0,331894458
	GFSK (1 Mbps)	Channel No. 19 (2440 MHz)	-5,46	0,284446111
	GFSK (1 Mbps)	Channel No. 39 (2480 MHz)	-6,09	0,24603676
Conducted Peak Power Limits			**30**	**1000**

2.2. Dutycyle

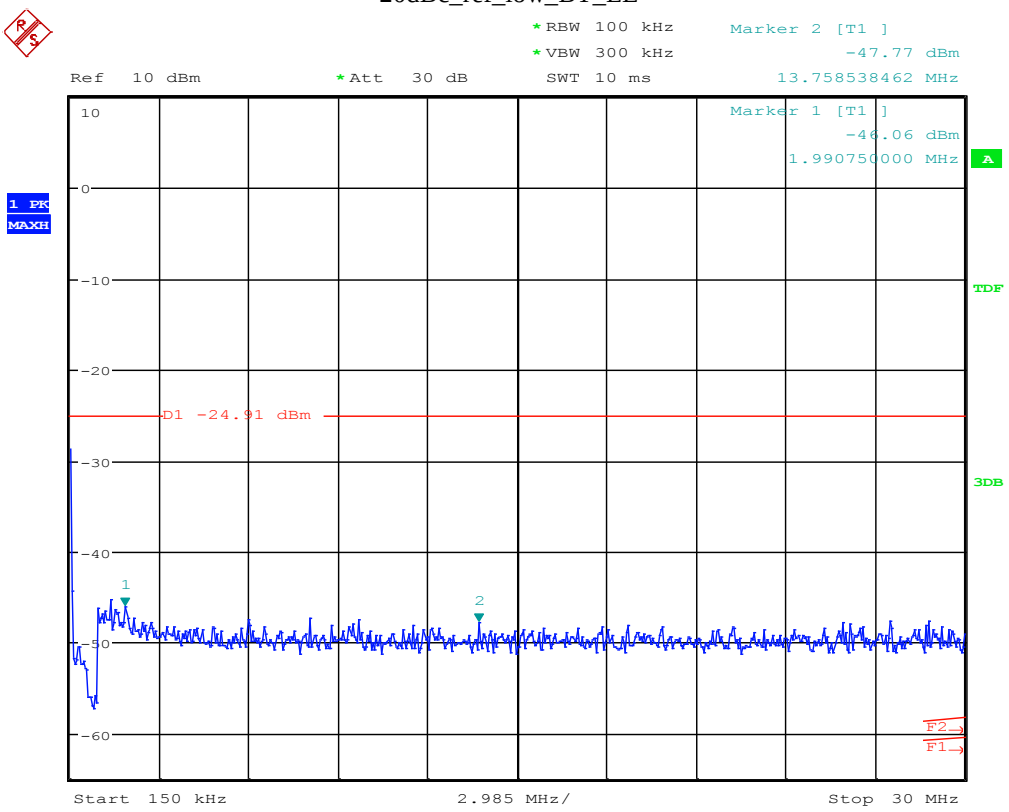


DC_mid_2442

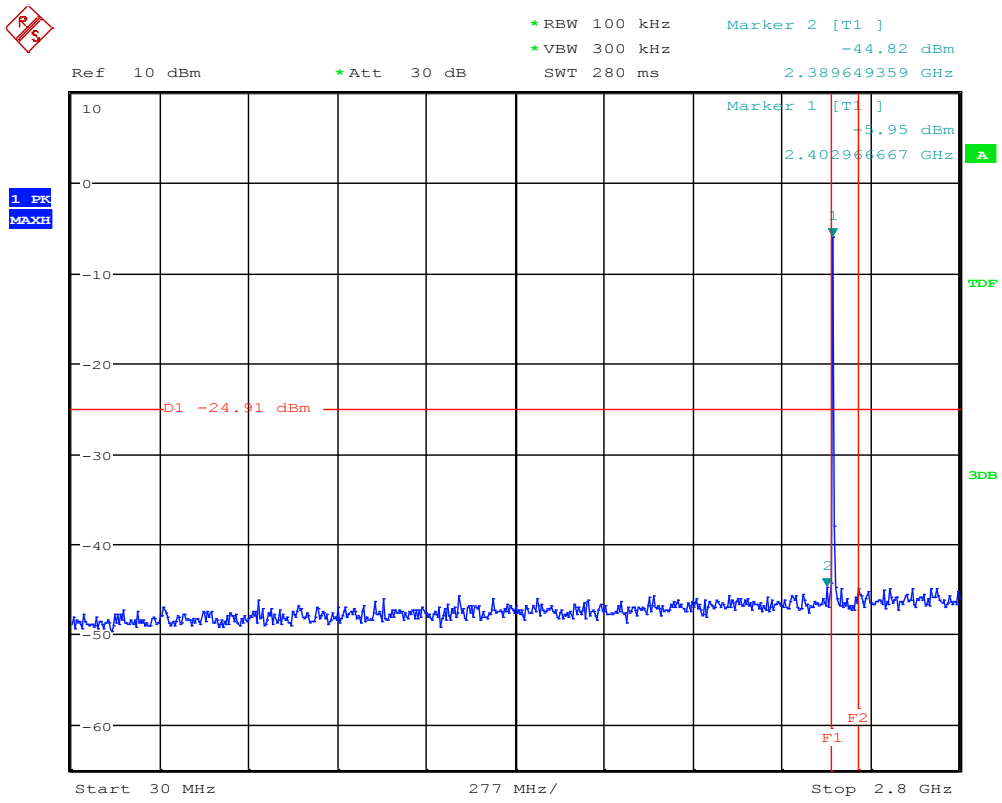
2.3. 20dBc



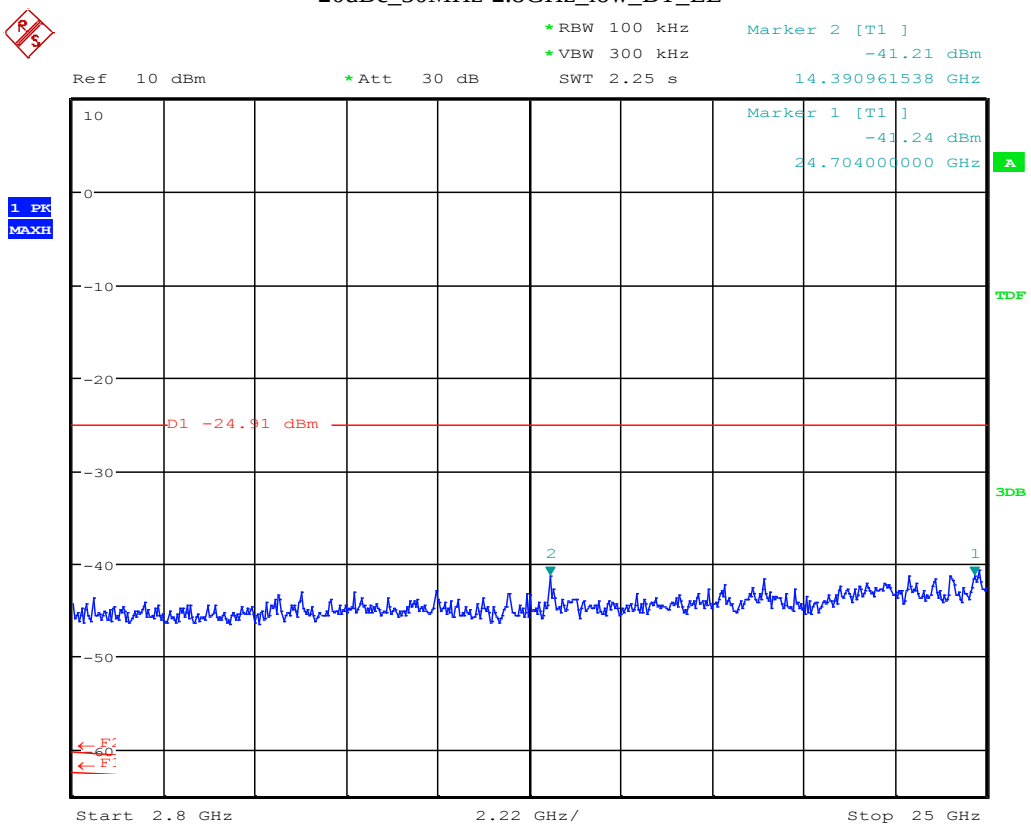
20dBc_ref_low_BT_LE



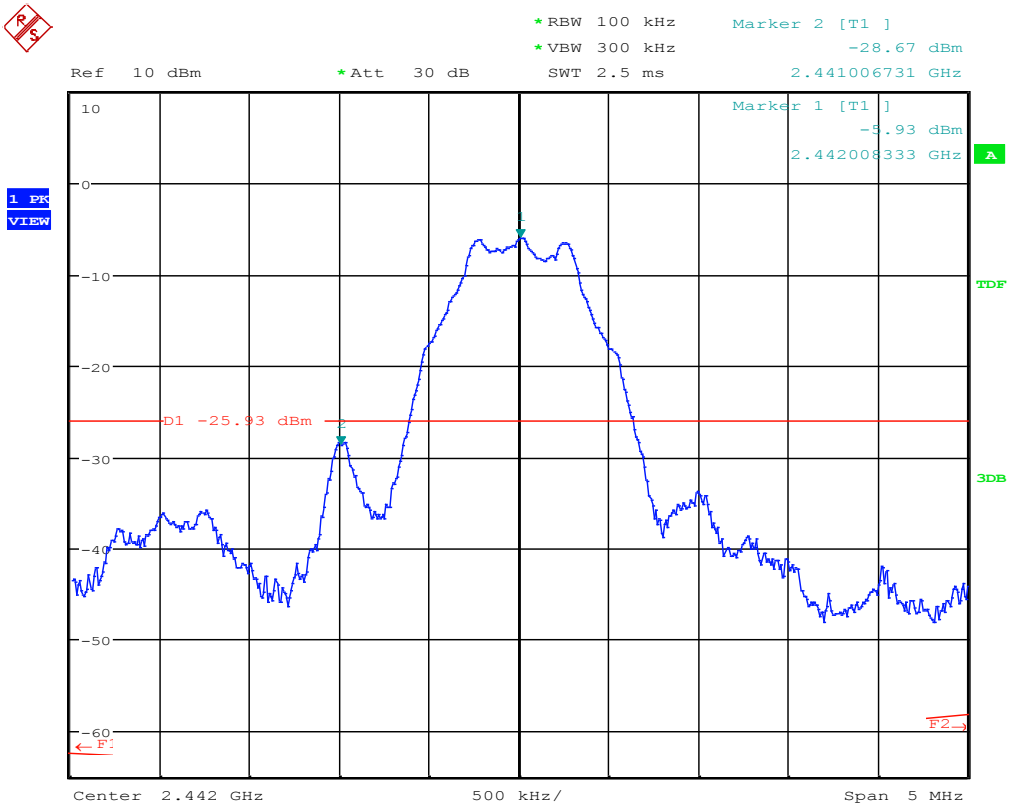
20dBc_150kHz-30MHz _low_BT_LE



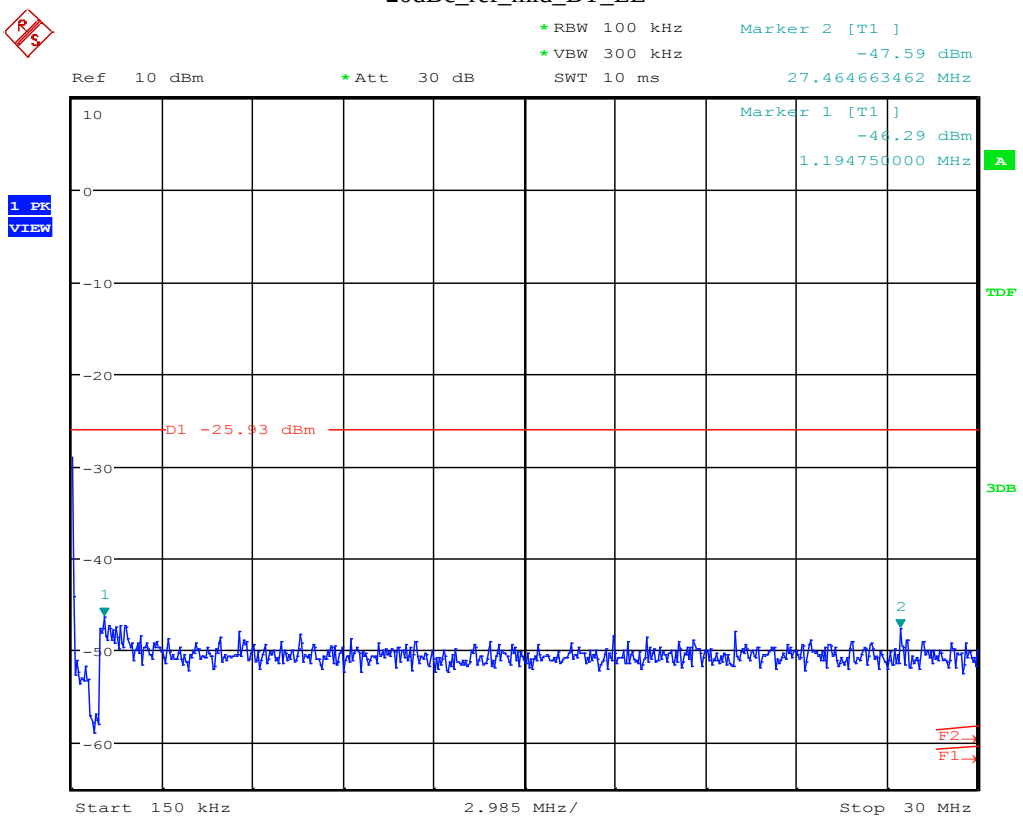
20dBc_30MHz-2.8GHz_low_BT_LE



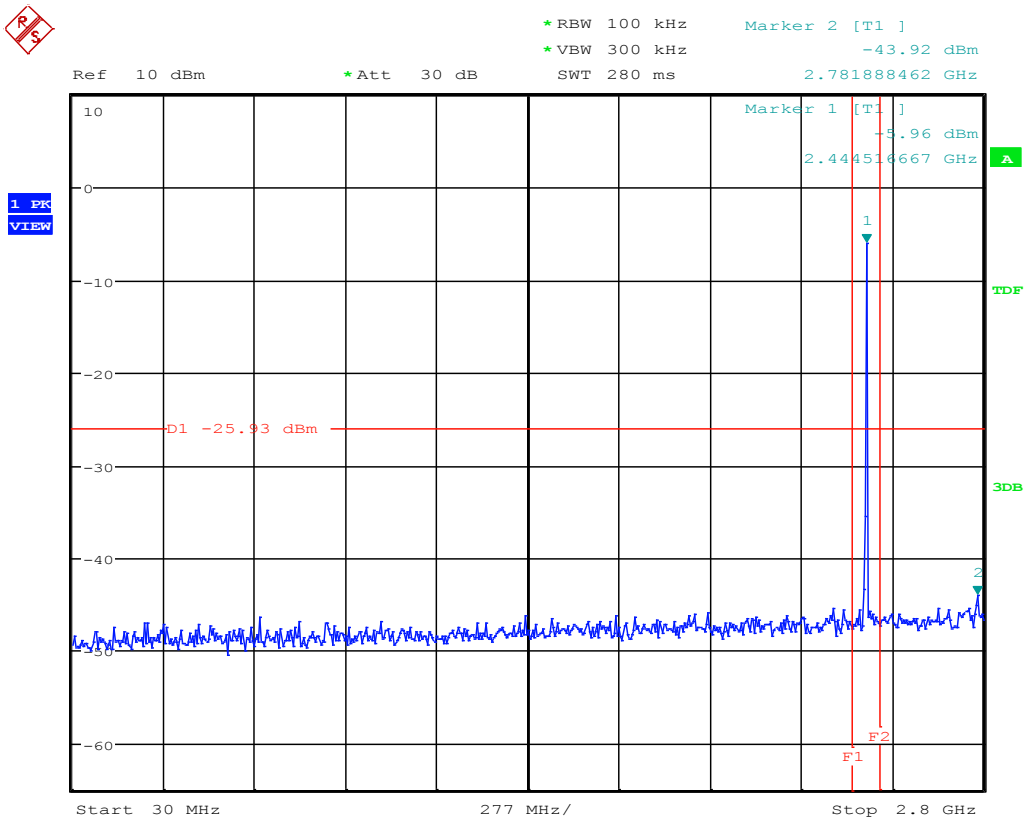
20dBc_2.8-25GHz_low_BT_LE



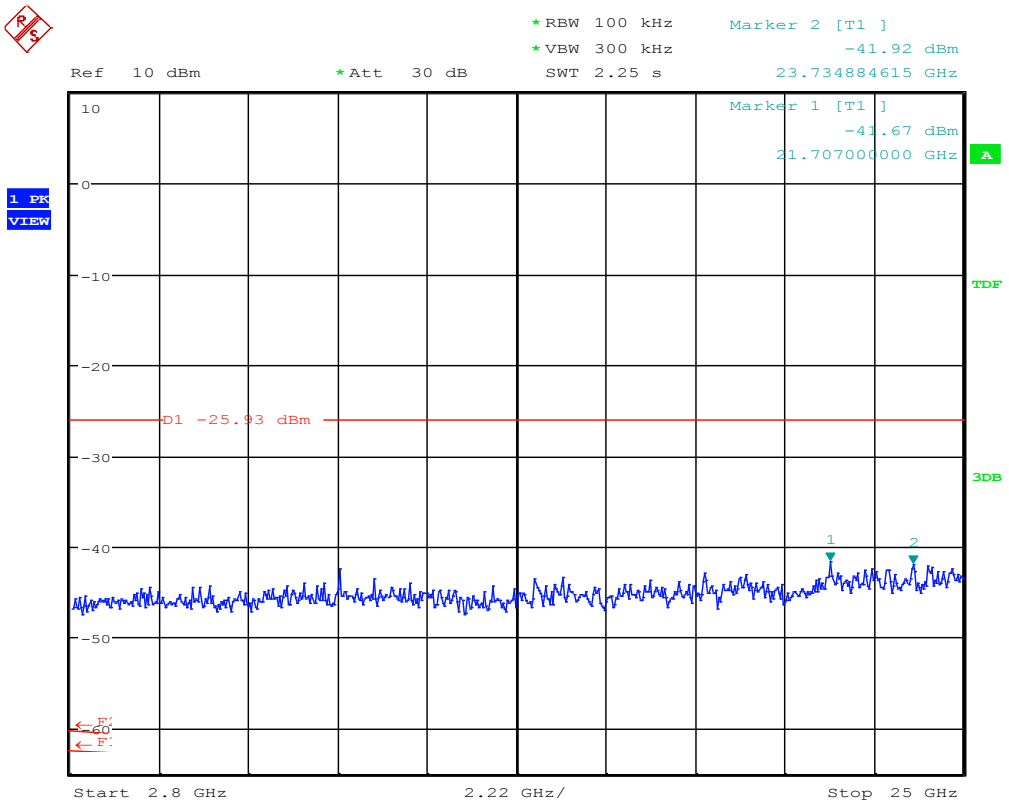
20dBc_ref_mid_BT_LE



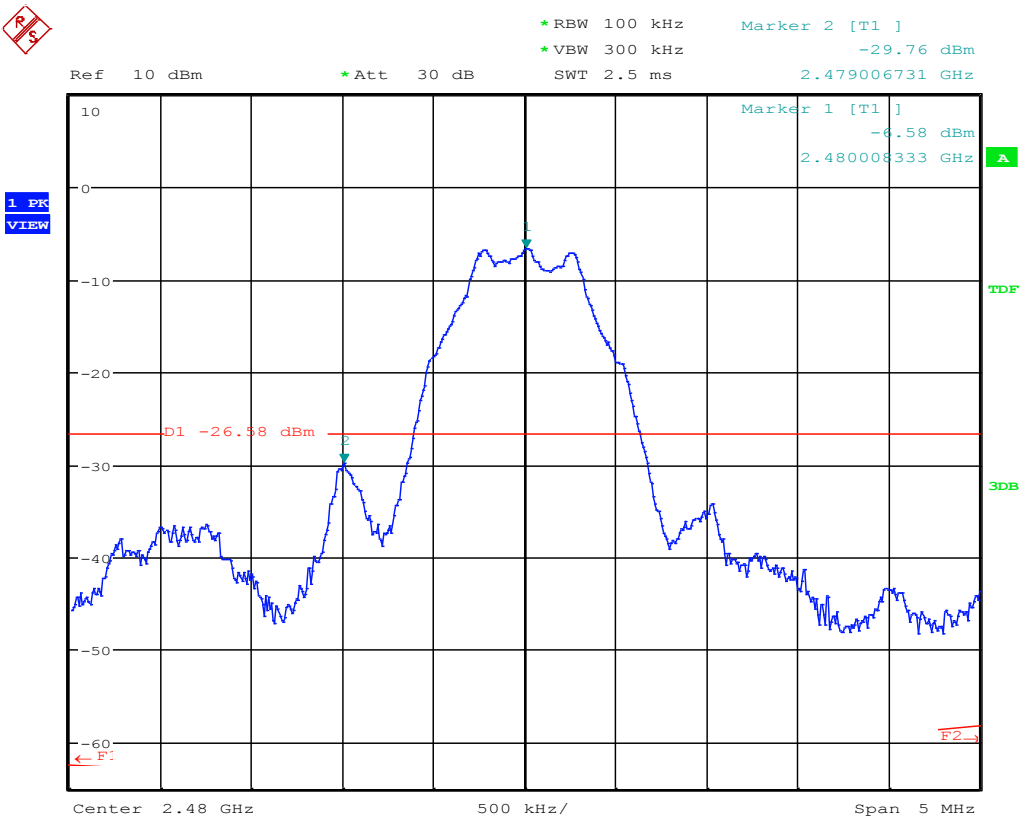
20dBc_150kHz-30MHz _mid_BT_LE



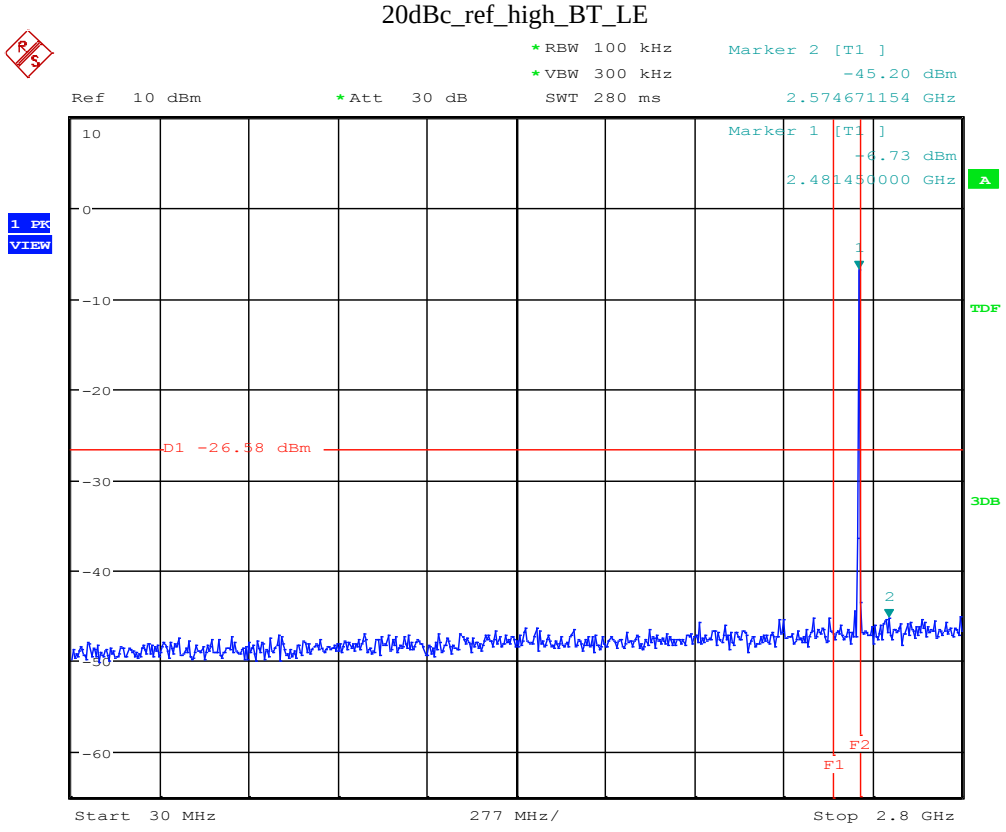
20dBc_30MHz-2.8GHz_mid_BT_LE



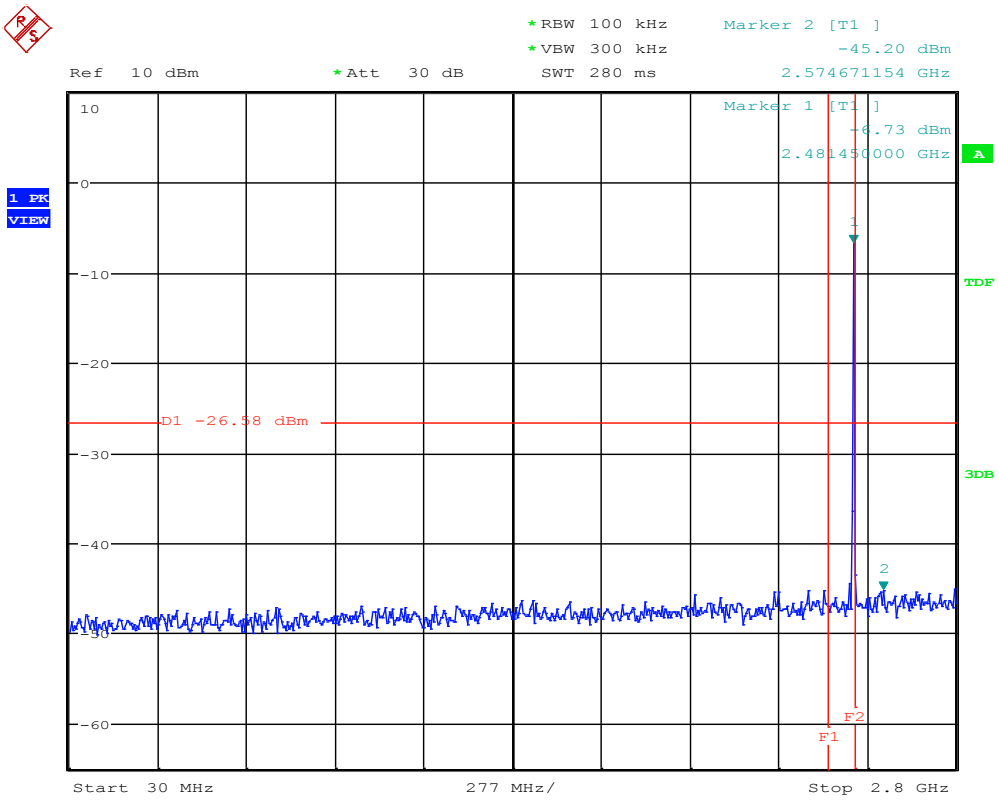
20dBc_2.8-25GHz_mid_BT_LE



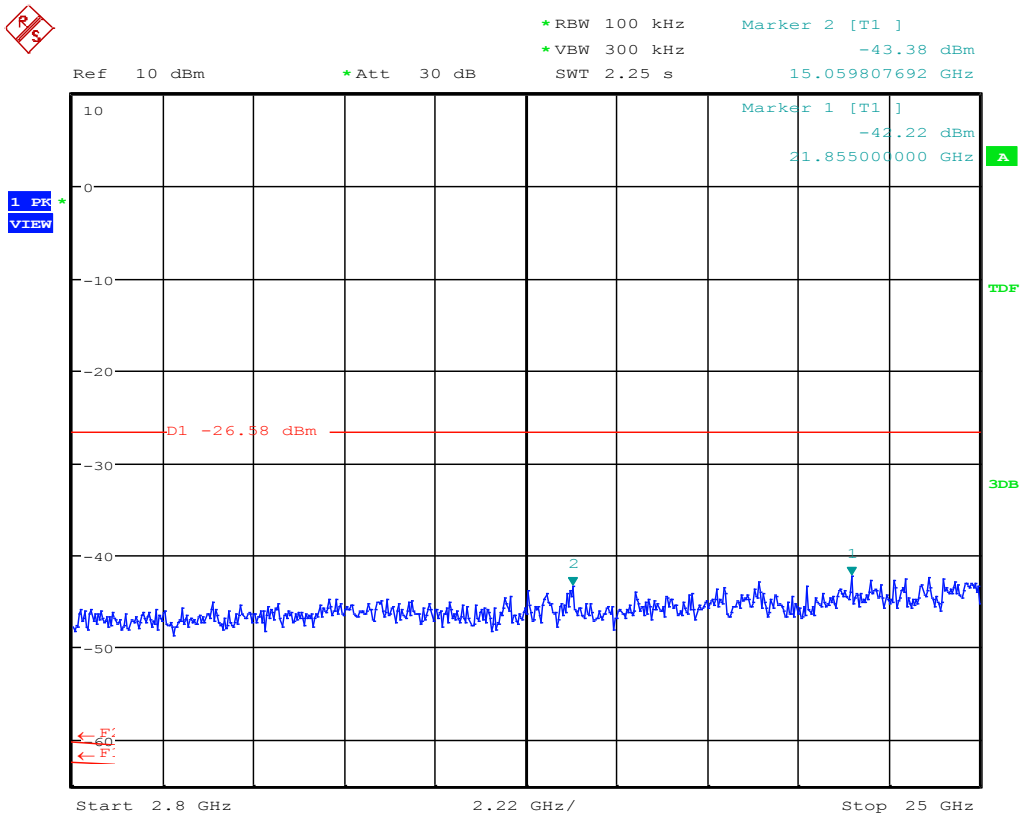
20dBc_ref_high_BT_LE



20dBc_150kHz-30MHz _high_BT_LE



20dBc_30MHz-2.8GHz_high_BT_LE



20dBc_2.8-25GHz_mid_BT_LE

2.4. 6dB bandwidth

Minimum Emission Bandwidth 6 dB (2402 MHz; default (-4 dBm); 1 MHz)

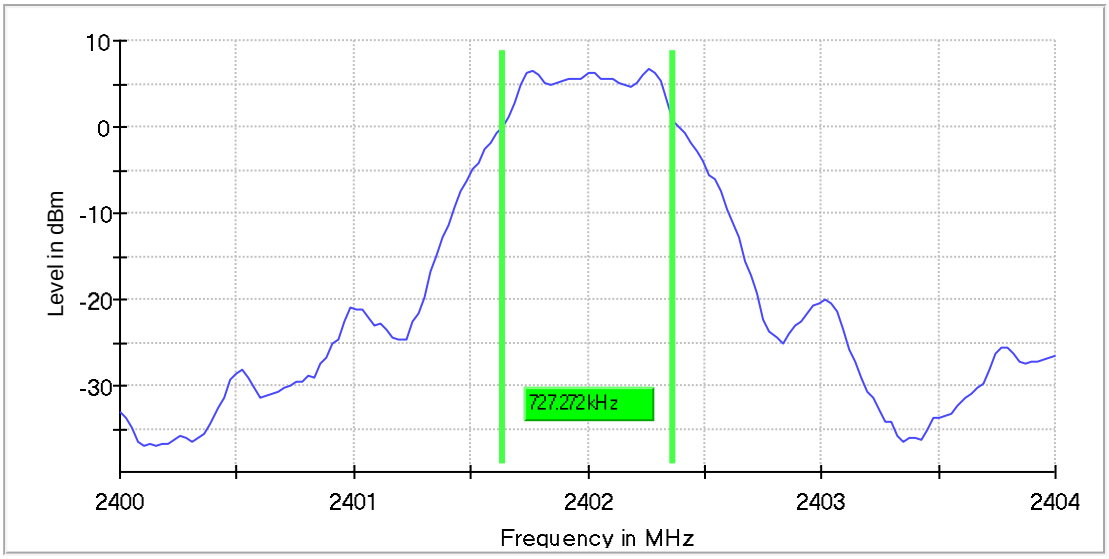
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04and ANSI C63.10

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)
2402.000000	0.727272	0.500000	---	2401.636364	2402.363636	6.8

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

DUT Frequency (MHz)	Result
2402.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.40400 GHz	2.40400 GHz
Span	4.000 MHz	4.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	155	~ 40
Sweeptime	2.500 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	20 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.06 dB	0.50 dB

Minimum Emission Bandwidth 6 dB (2442 MHz; default (-4 dBm); 1 MHz)

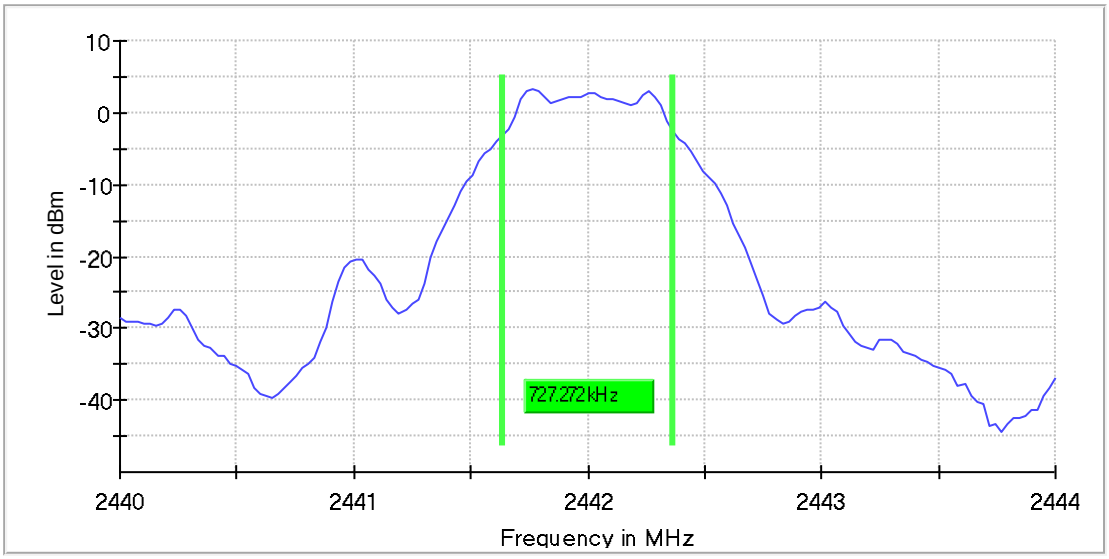
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04and ANSI C63.10

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)
2442.000000	0.727272	0.500000	---	2441.636364	2442.363636	3.3

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

DUT Frequency (MHz)	Result
2442.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44000 GHz	2.44000 GHz
Stop Frequency	2.44400 GHz	2.44400 GHz
Span	4.000 MHz	4.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	155	~ 40
Sweeptime	2.500 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	15.000 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	22 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.25 dB	0.50 dB

Minimum Emission Bandwidth 6 dB (2480 MHz; default (-4 dBm); 1 MHz)

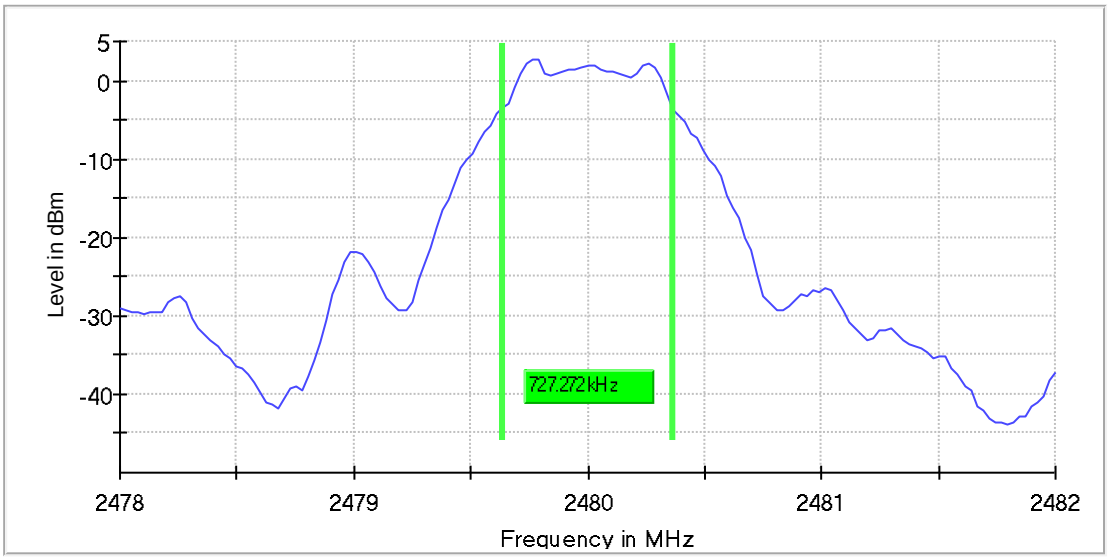
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04and ANSI C63.10

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)
2480.000000	0.727272	0.500000	---	2479.636364	2480.363636	2.7

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

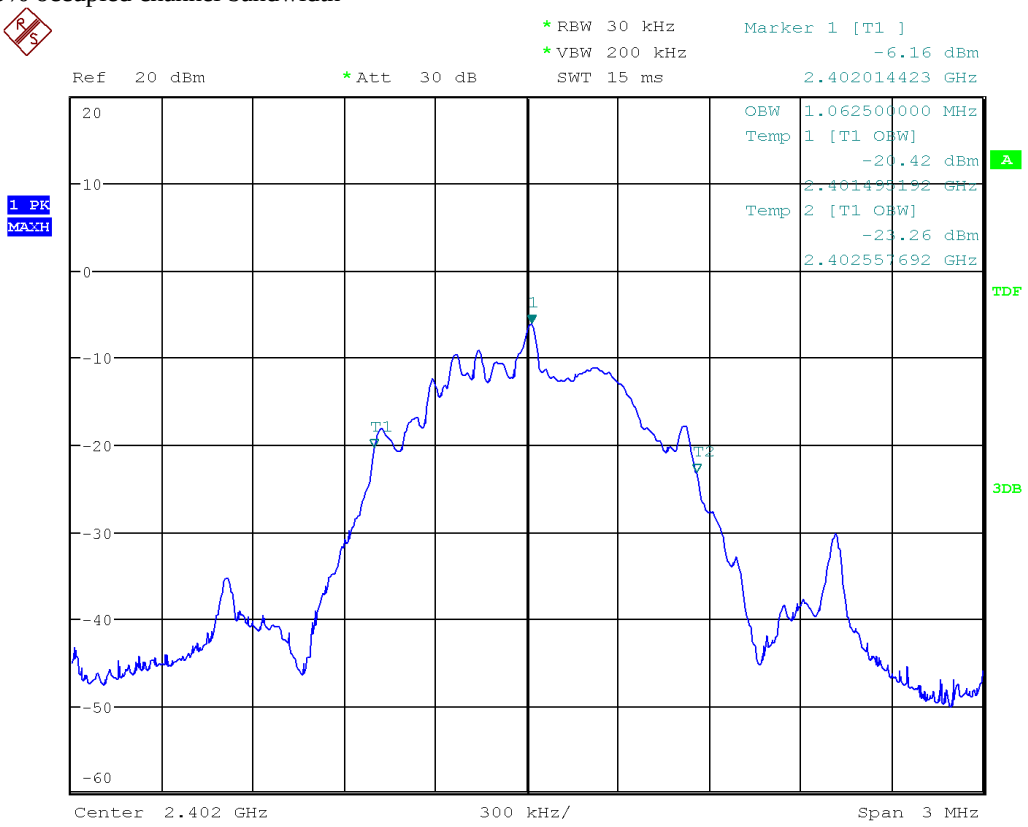
DUT Frequency (MHz)	Result
2480.000000	PASS



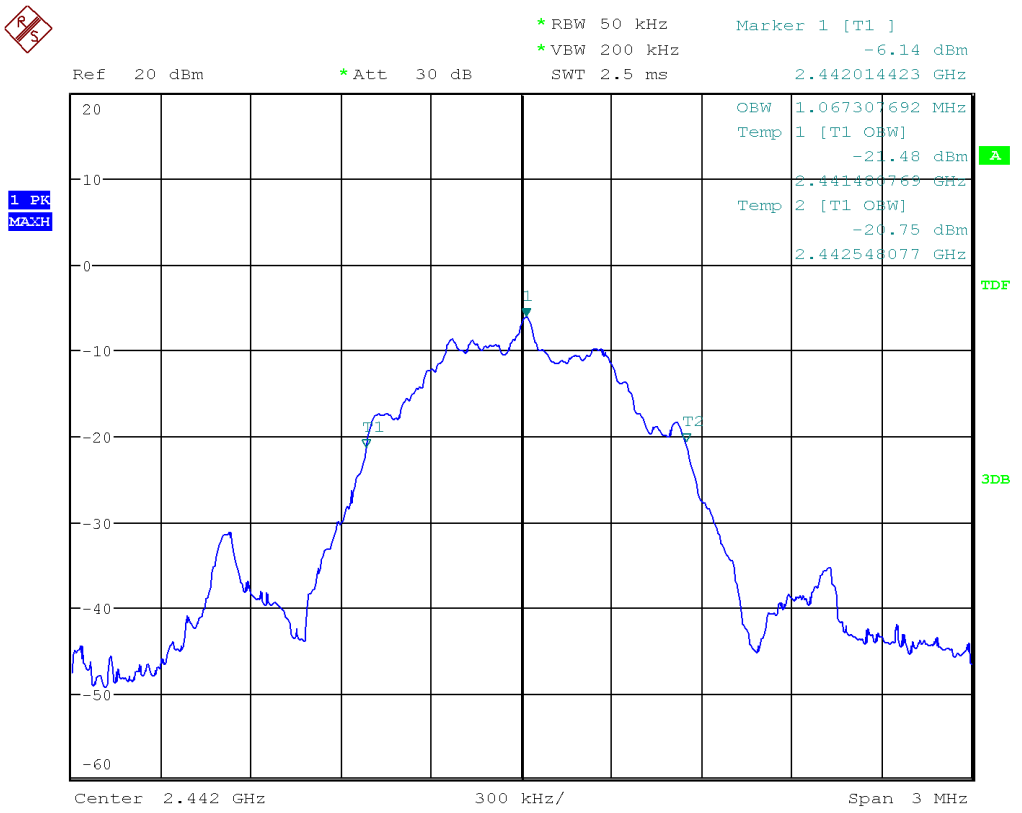
Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47800 GHz	2.47800 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	4.000 MHz	4.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	155	~ 40
Sweeptime	2.500 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	15.000 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	18 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.13 dB	0.50 dB

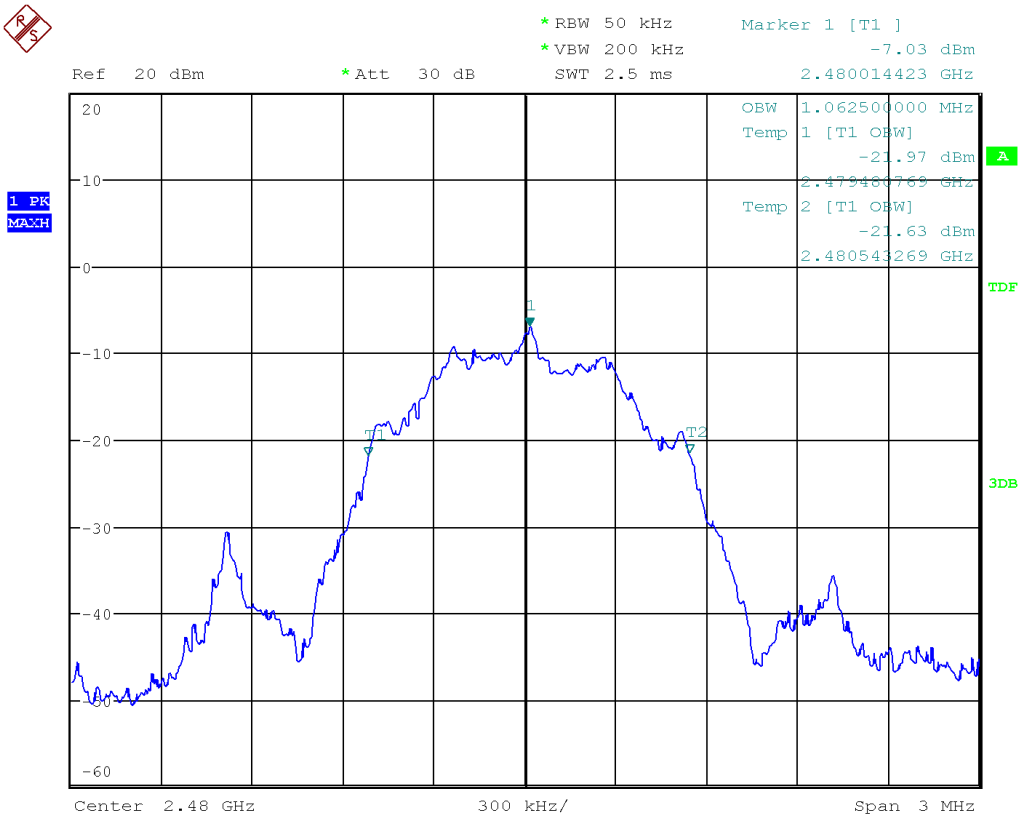
2.4.1. 99% occupied channel bandwidth



99%OBW_low_2402



99%OBW_mid_2442



99%OBW_high_2480

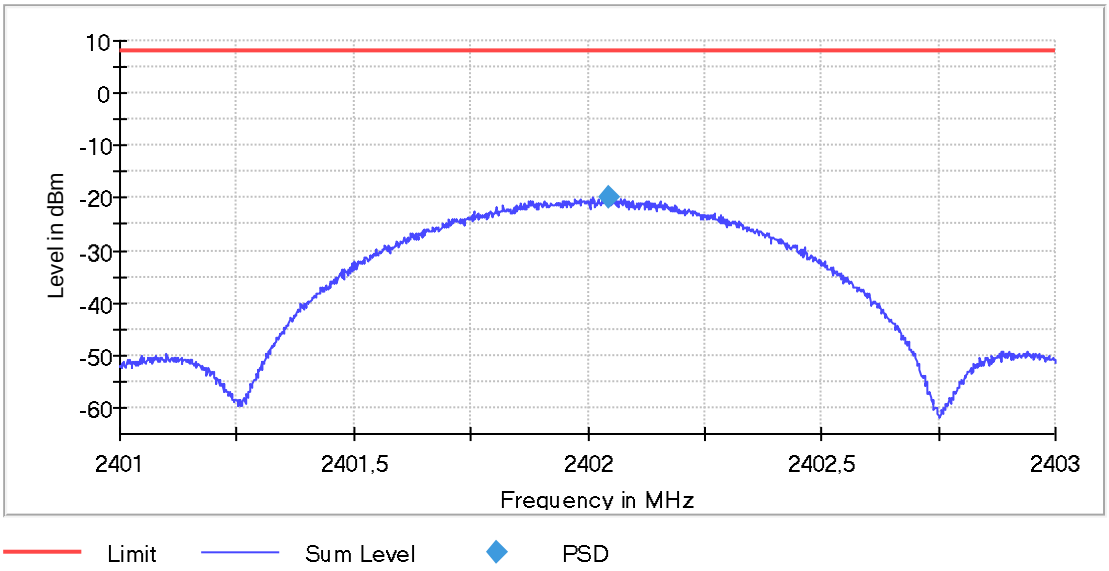
2.5.Power spectral density

Power Spectral Density (2402 MHz; default (-4 dBm); 1 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2402.000000	2402.044615	-19.705	8.0	PASS



Measurement

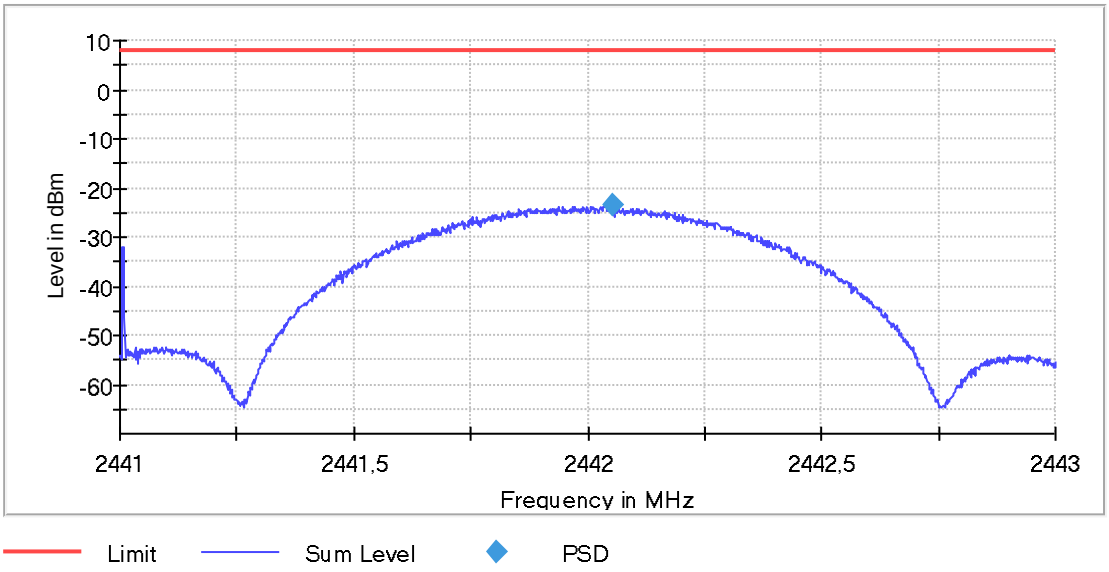
Setting	Instrument Value	Target Value
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40300 GHz	2.40300 GHz
Span	2.000 MHz	2.000 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	1301	~ 1333
Sweeptime	45.000 s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	25.000 dB	AUTO
Detector	RMS	RMS
SweepCount	1	1
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

Power Spectral Density (2442 MHz; default (-4 dBm); 1 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2442.000000	2442.052308	-23.558	8.0	PASS



Measurement

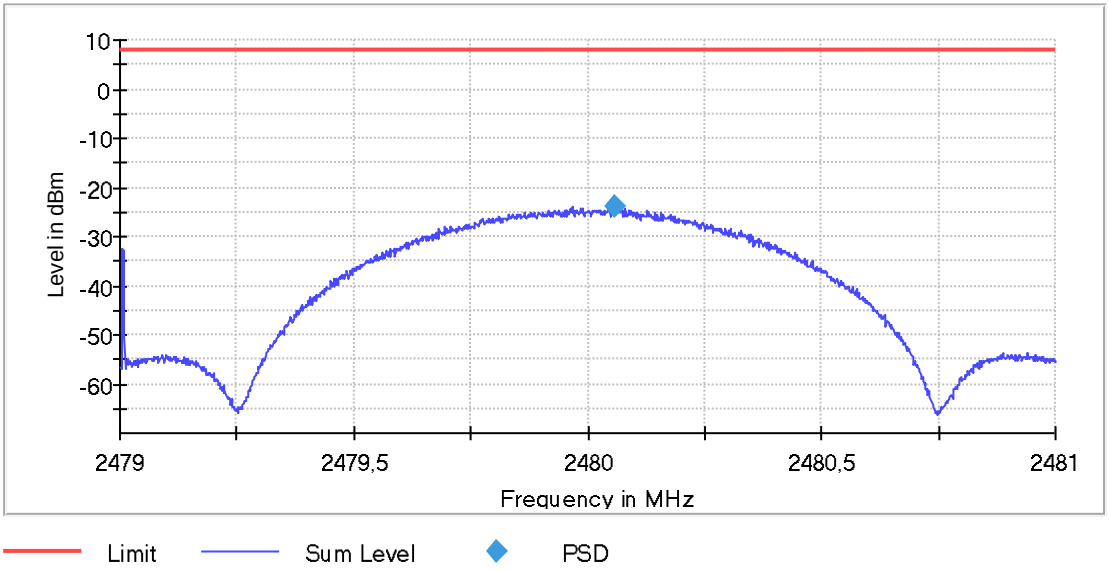
Setting	Instrument Value	Target Value
Start Frequency	2.44100 GHz	2.44100 GHz
Stop Frequency	2.44300 GHz	2.44300 GHz
Span	2.000 MHz	2.000 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	1301	~ 1333
Sweeptime	45.000 s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	15.000 dB	AUTO
Detector	RMS	RMS
SweepCount	1	1
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

Power Spectral Density (2480 MHz; default (-4 dBm); 1 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2480.000000	2480.056923	-23.941	8.0	PASS



Measurement

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	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	1301	~ 1333
Sweeptime	45.000 s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	15.000 dB	AUTO
Detector	RMS	RMS
SweepCount	1	1
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off