

Annex 1: Measurement diagrams to
TEST REPORT
 No.: 17-1-0105501T06a-C1

According to:
FCC Regulations
 Part 15.209
 Part 15.247

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

for

Daimler Trucks North America

66-10777-001
 7620000296

FCC: 2AKC8CTP10777001
 ISED: 22221-CTP10777001
 PMN=CTPMIDDTNA
 HVIN= CTPMIDDTNA
 FVIN=17.02.S.016







Laboratory Accreditation and Listings			
 DAkKS Deutsche Akkreditierungsstelle D-PL-12047-01-01	 FCC FEDERAL COMMUNICATIONS COMMISSION USA 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
 WiFi ALLIANCE AUTHORIZED RF LABORATORY	 ctia Authorized Test Lab Lab Code: 20011130-00		
accredited according to DIN EN ISO/IEC 17025			
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. Radiated field strength measurements accord. §15.209&15.205

1.1. Magnetic field measurements f<30MHz

2.10_BT_LE_low

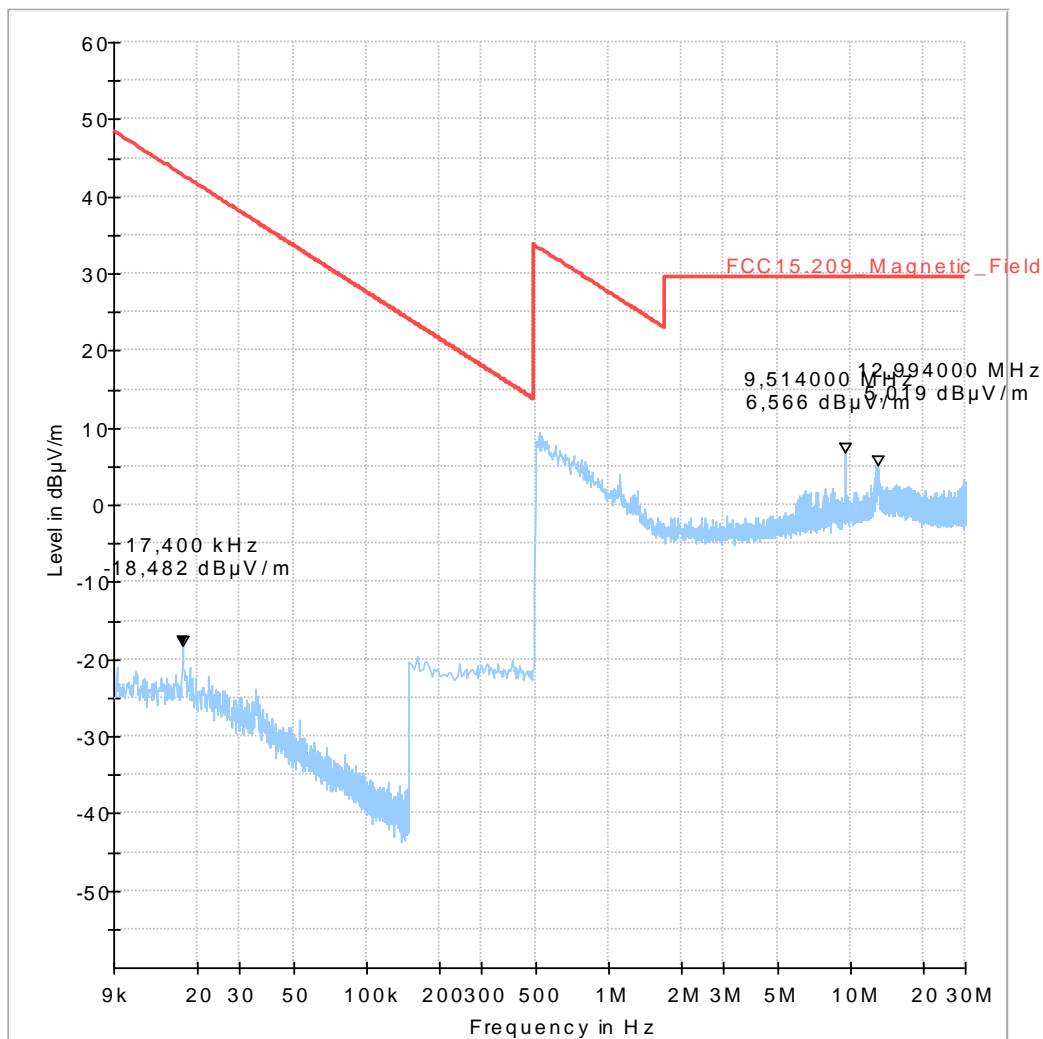
Common Information

Test Description:	Magnetic Field Strength Measurement related to 30m distance
Test site and distance	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.00
Technical Data:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Test specification:	height 1.00 m, parallel and 90° to EUT polarisation
Operating Conditions:	Bluetooth LE low
Operator Name:	TFR

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
EuT:	cTP/TDC MID DTNA-4G

HW Version:	9134G05
SW Version:	17.02.S.016
Serial Number:	2950006922
Connected Interfaces:	Main wiring + DTNA Antenna
Power Supply:	24 V DC



2.12a_BT_LE_high

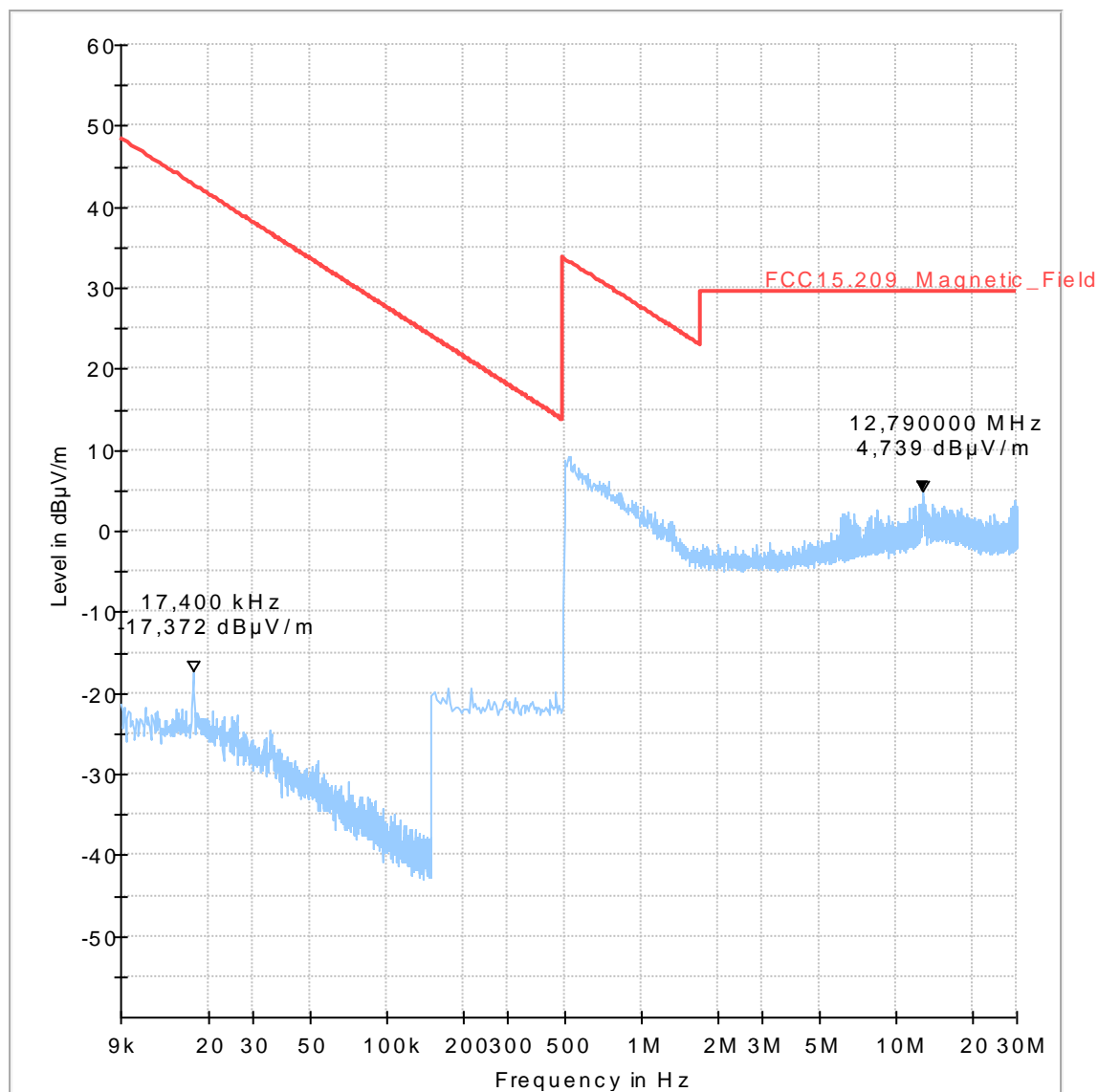
Common Information

Test Description:	Magnetic Field Strength Measurement related to 30m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.00
Technical Data:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Test specification.:	height 1.00 m, parallel and 90° to EUT polarisation
Operating Conditions:	Bluetooth LE mid
Operator Name:	TFr

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
EuT:	cTP/TDC MID DTNA-4G

HW Version:	9134G05
SW Version:	17.02.S.016
Serial Number:	2950006922
Connected Interfaces:	Main wiring + DTNA Antenna
Power Supply:	24 V DC



2.12a_BT_LE_high

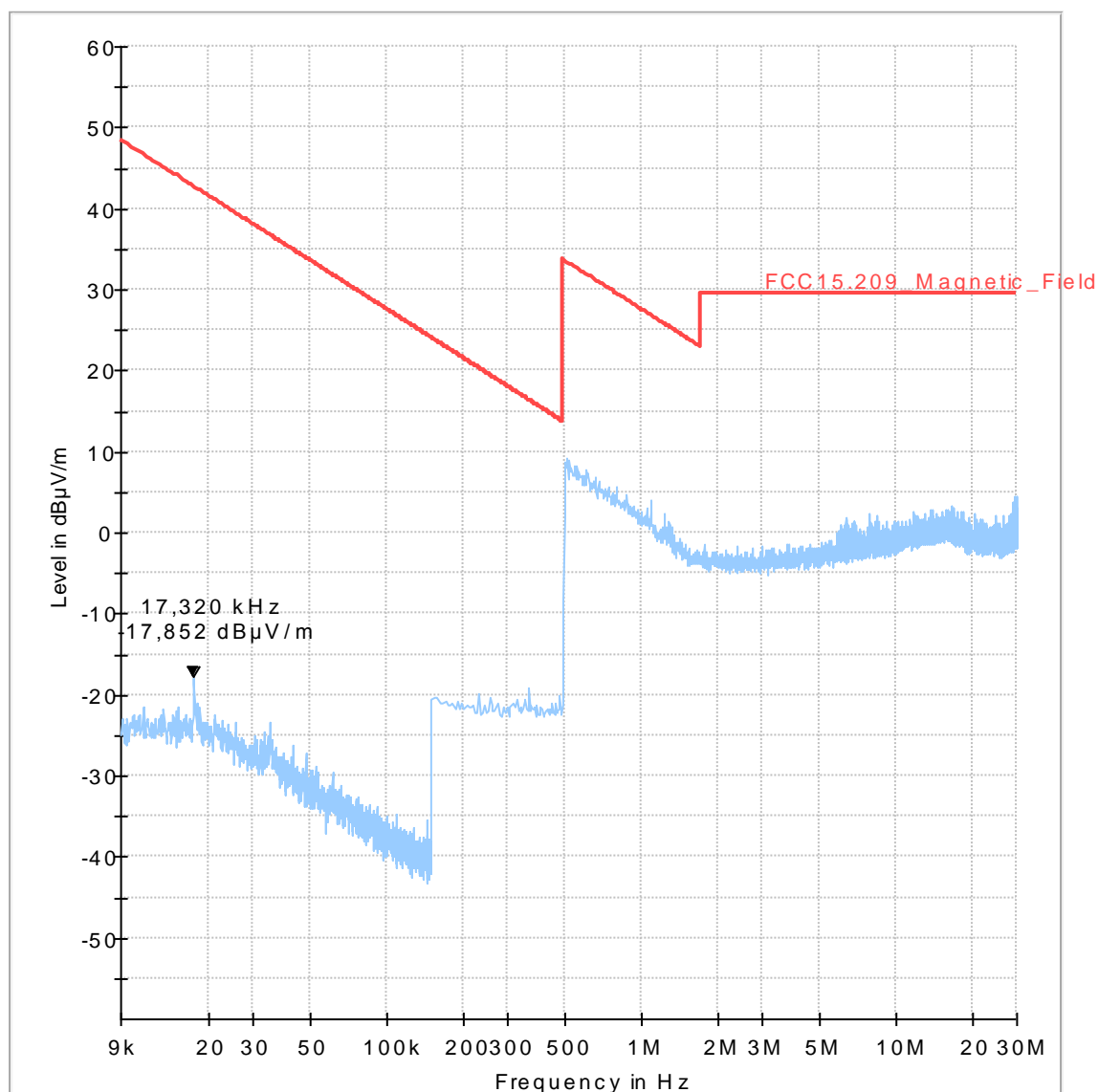
Common Information

Test Description:	Magnetic Field Strength Measurement related to 30m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.00
Technical Data:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Test specification.:	height 1.00 m, parallel and 90° to EUT polarisation
Operating Conditions:	Bluetooth LE high
Operator Name:	TFR

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
EuT:	cTP/TDC MID DTNA-4G

HW Version:	9134G05
SW Version:	17.02.S.016
Serial Number:	2950006922
Connected Interfaces:	Main wiring + DTNA Antenna
Power Supply:	24 V DC



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

Diagram No. 3.10a_BT_LE_low

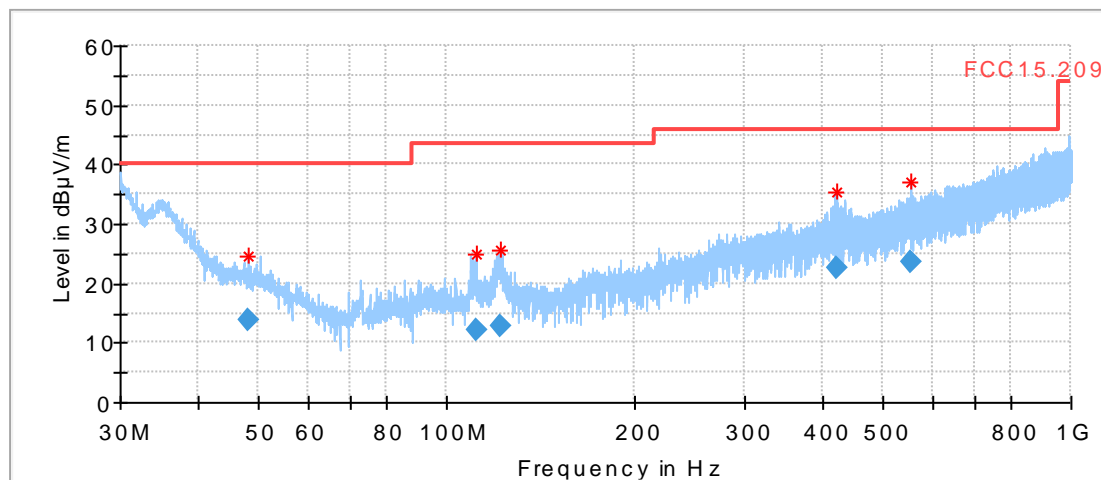
Test description:	24.08.2017 Page 1 of 1
Test site and distance:	Electric Field Strength Measurement
Version of Testsoftware:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Distance correction:	EMC32 V9.25.0
Used filter:	not used
Technical Data:	not used
Test specification.:	please see page 2 for detailed data of measurement setup
	FCC 15.209; RSS-Gen: Issue 3
Operator:	DLe
Operating conditions:	BT_LE
Power during tests:	24V DC
Comment 1:	CHANNEL 37

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
EuT:	cTP/TDC MID DTNA-4G

HW Version:	9134G05
SW Version:	17.02.S.016
Serial Number:	2950006922
Connected Interfaces:	Main wiring + DTNA Antenna
Power Supply:	24 V DC

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margi n (dB)	Meas. Time (ms)	Bandwidth (kHz)	Heigh t (cm)	Pol	Azimet h (deg)	Elevatio n (deg)	Corr . (dB)
48.256000	13.67	40.00	26.33	1000.0	120.000	109.0	V	181.0	90.0	13.6
111.264000	12.27	43.50	31.23	1000.0	120.000	134.0	V	127.0	0.0	8.2
121.784000	12.94	43.50	30.56	1000.0	120.000	165.0	V	9.0	90.0	8.0
422.684000	22.42	46.00	23.58	1000.0	120.000	354.0	V	238.0	0.0	19.0
552.360000	23.59	46.00	22.41	1000.0	120.000	281.0	H	2.0	0.0	21.8

Diagram No. 3.11a_BT_LE_mid

24.08.2017 Page 1 of 1
 Electric Field Strength Measurement
 Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
 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

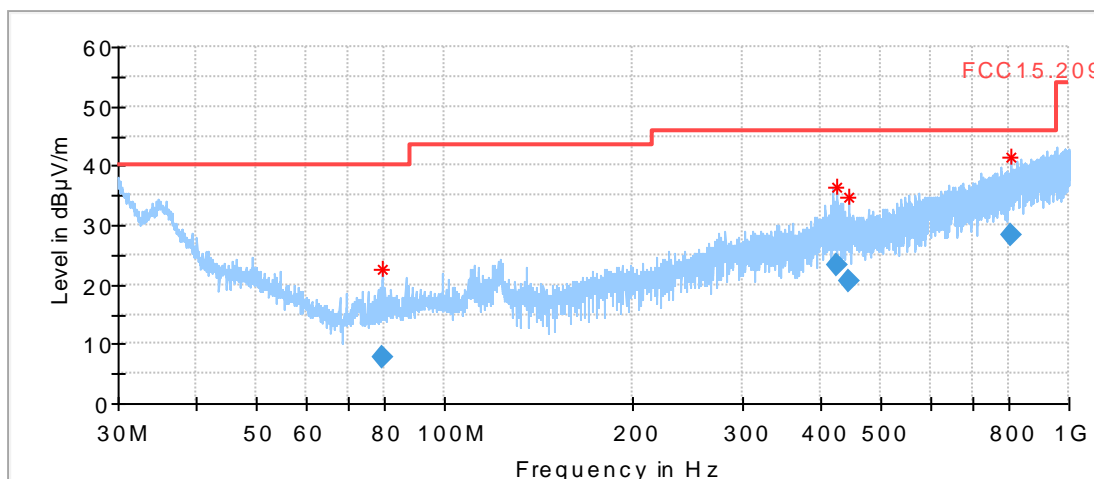
Operator: DLe
 Operating conditions: BT_LE
 Power during tests: 24V DC
 Comment 1: Channel 18

EUT Information

Manufacturer: Robert Bosch Car Multimedia GmbH
 EuT: cTP/TDC MID DTNA-4G

HW Version: 9134G05
 SW Version: 17.02.S.016
 Serial Number: 2950006922
 Connected Interfaces: Main wiring + DTNA Antenna
 Power Supply: 24 V DC

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)
79.660000	7.88	40.00	32.12	1000.0	120.000	207.0	H	129.0	90.0	6.9
425.544000	23.22	46.00	22.78	1000.0	120.000	351.0	V	249.0	90.0	19.2
445.248000	20.69	46.00	25.31	1000.0	120.000	186.0	H	10.0	90.0	19.4
804.540000	28.24	46.00	17.76	1000.0	120.000	286.0	H	100.0	90.0	25.4

Diagram No. 3.12a_BT_LE_high

24.08.2017 Page 1 of 1
 Electric Field Strength Measurement
 Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
 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

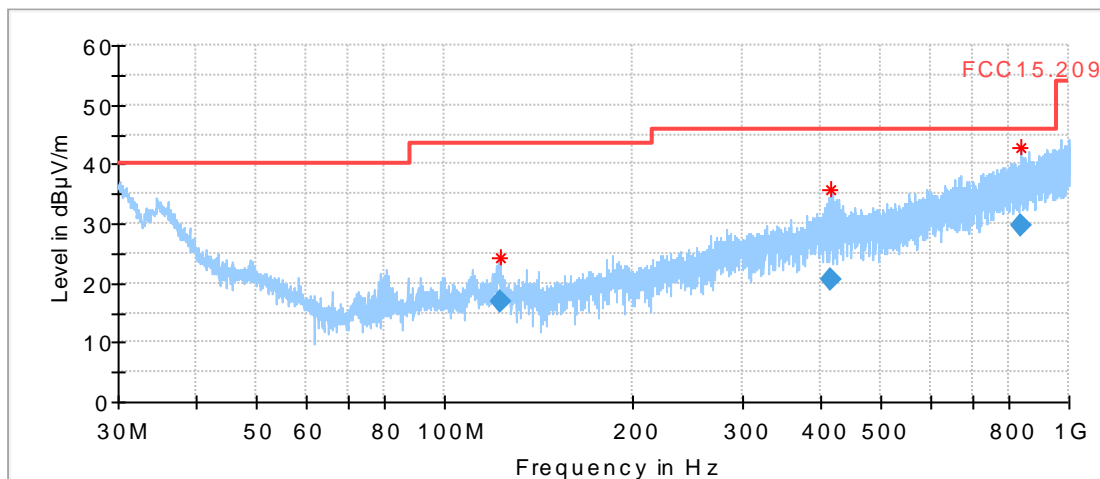
Operator: DLe
 Operating conditions: BT_LE
 Power during tests: 24V DC
 Comment 1: Channel 39

EUT Information

Manufacturer: Robert Bosch Car Multimedia GmbH
 EuT: cTP/TDC MID DTNA-4G

HW Version: 9134G05
 SW Version: 17.02.S.016
 Serial Number: 2950006922
 Connected Interfaces: Main wiring + DTNA Antenna
 Power Supply: 24 V DC

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)
123.048000	16.83	43.50	26.67	1000.0	120.000	109.0	V	111.0	90.0	8.1
415.116000	20.71	46.00	25.29	1000.0	120.000	360.0	V	224.0	0.0	18.6
838.384000	29.82	46.00	16.18	1000.0	120.000	333.0	H	46.0	90.0	26.1

1.3. Field strength measurements $f < 18\text{GHz}$

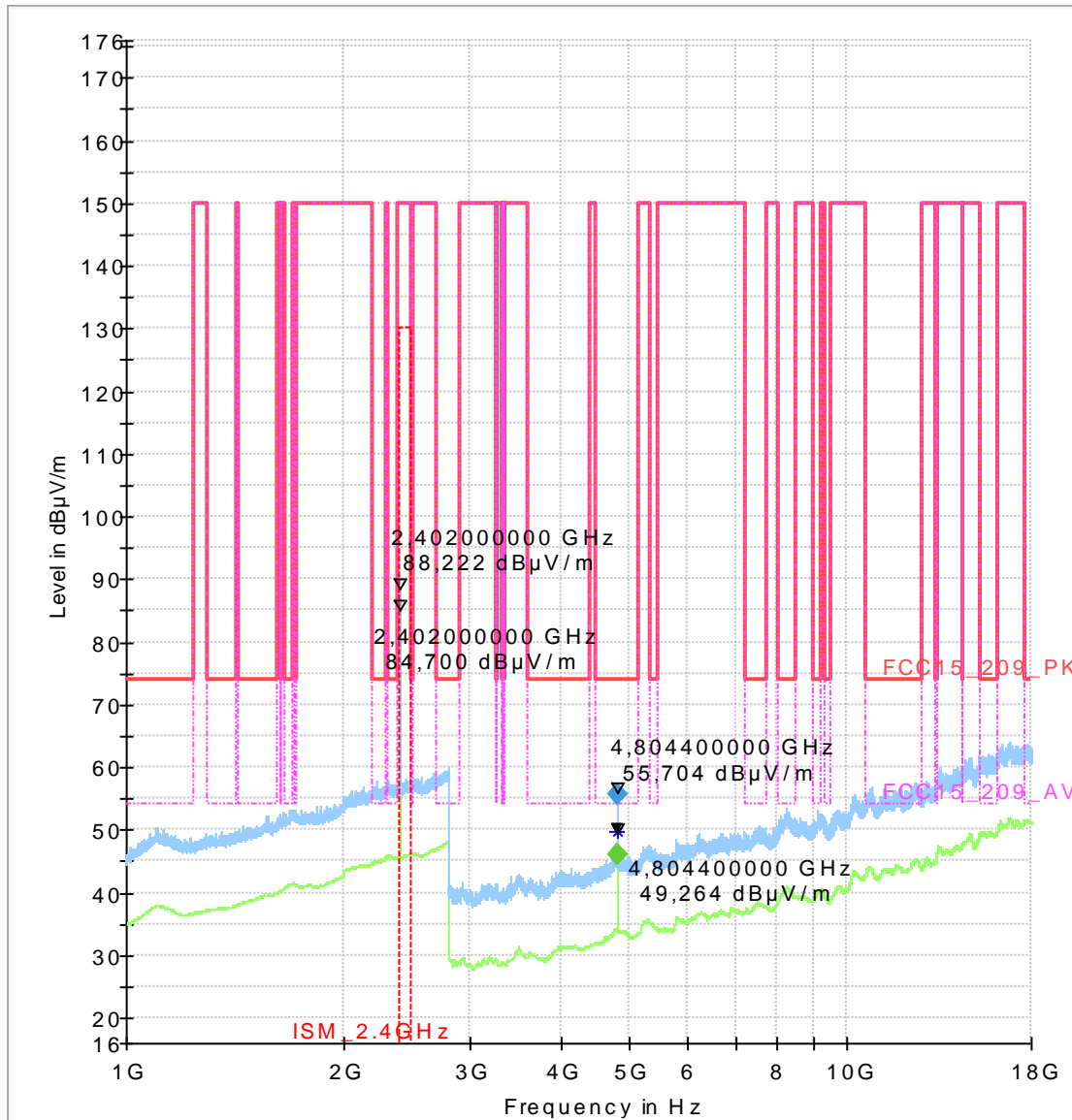
Diagram No.: 4.10a_BT_LE_low

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_TX_low
Operator Name:	HEI

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
EuT:	cTP/TDC MID DTNA-4G
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HW Version:	9134G05
SW Version:	17.02.S.016
Serial Number:	2950006922
Connected Interfaces:	Main wiring + DTNA Antenna
Power Supply:	24 V DC



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)
4803.600000	---	46.08	54.00	7.92	1000.000	155.0	H	269.0	90.0
4804.400000	55.83	---	74.00	18.17	1000.000	155.0	H	266.0	90.0

Diagram No.: 4.11a_BT_LE_mid

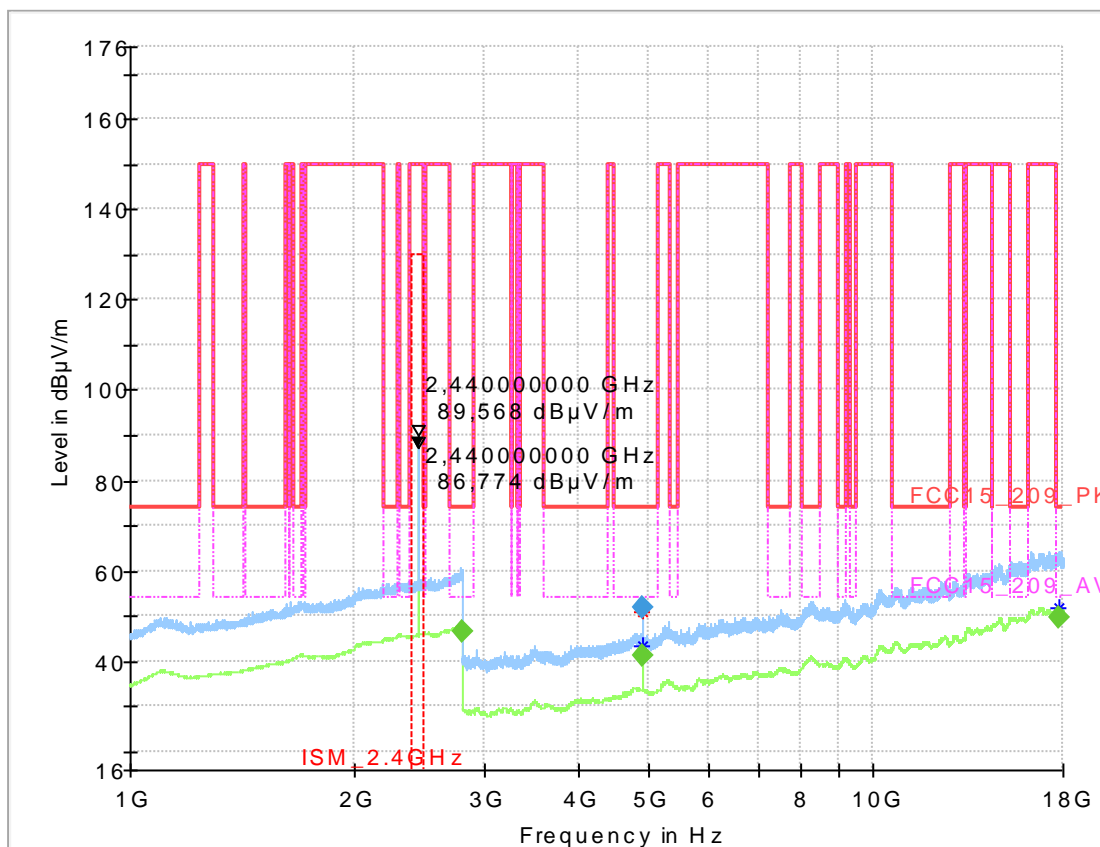
Common Information

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_TX_mid
 Operator Name: HEI

EUT Information

Manufacturer: Robert Bosch Car Multimedia GmbH
 EuT: cTP/TDC MID DTNA-4G

 HW Version: 9134G05
 SW Version: 17.02.S.016
 Serial Number: 2950006922
 Connected Interfaces: Main wiring + DTNA Antenna
 Power Supply: 24 V DC



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)
2795.200000	---	46.67	54.00	7.33	1000.000	155.0	H	-28.0	90.0
4879.600000	---	41.47	54.00	12.53	1000.000	155.0	H	269.0	90.0
4879.600000	51.93	---	74.00	22.07	1000.000	155.0	H	265.0	90.0
17781.600000	---	49.76	54.00	4.24	1000.000	155.0	H	291.0	90.0

Diagram No.: 4.12a_BT_LE_high

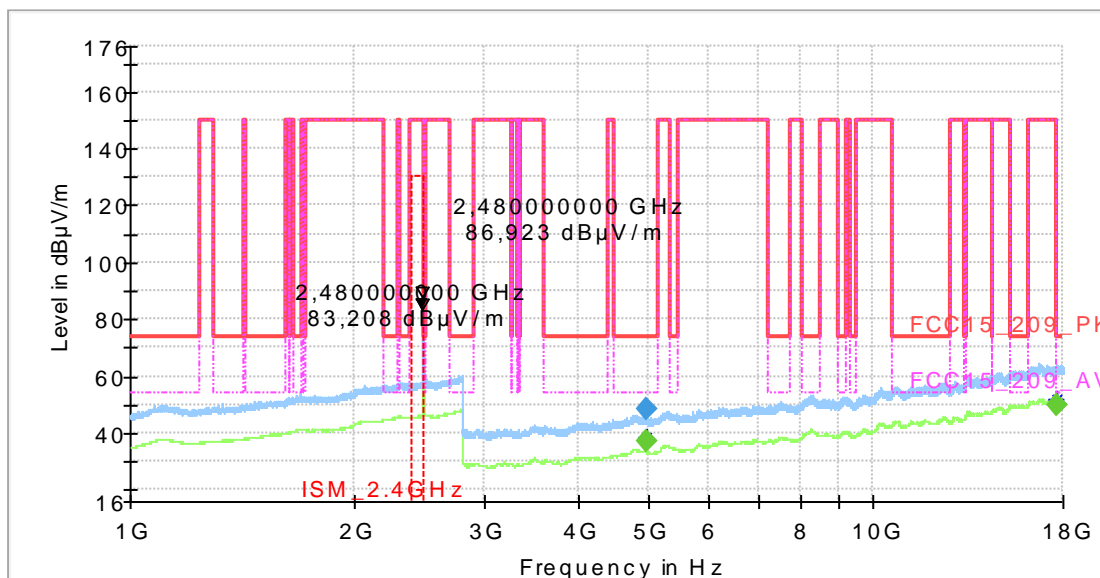
Common Information

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_TX_High
 Operator Name: HEI

EUT Information

Manufacturer: Robert Bosch Car Multimedia GmbH
 EuT: cTP/TDC MID DTNA-4G

 HW Version: 9134G05
 SW Version: 17.02.S.016
 Serial Number: 2950006922
 Connected Interfaces: Main wiring + DTNA Antenna
 Power Supply: 24 V DC



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)
4959.600000	---	37.03	54.00	16.97	1000.000	155.0	V	152.0	0.0
4959.600000	48.20	---	74.00	25.80	1000.000	155.0	V	129.0	0.0
17706.000000	---	49.67	54.00	4.33	1000.000	155.0	V	135.0	0.0

1.4. Field strength measurements $f > 18\text{GHz}$ Diagram No.: 4.10_BT_LE_low

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:	Robert Bosch Car Multimedia GmbH
EuT:	cTP/TDC MID DTNA-4G

HW Version:	9134G05
SW Version:	17.02.S.016
Serial Number:	2950006922
Connected Interfaces:	Main wiring + DTNA Antenna
Power Supply:	24 V DC

FCC_Sweep_15.247_18_25GHz_Pre

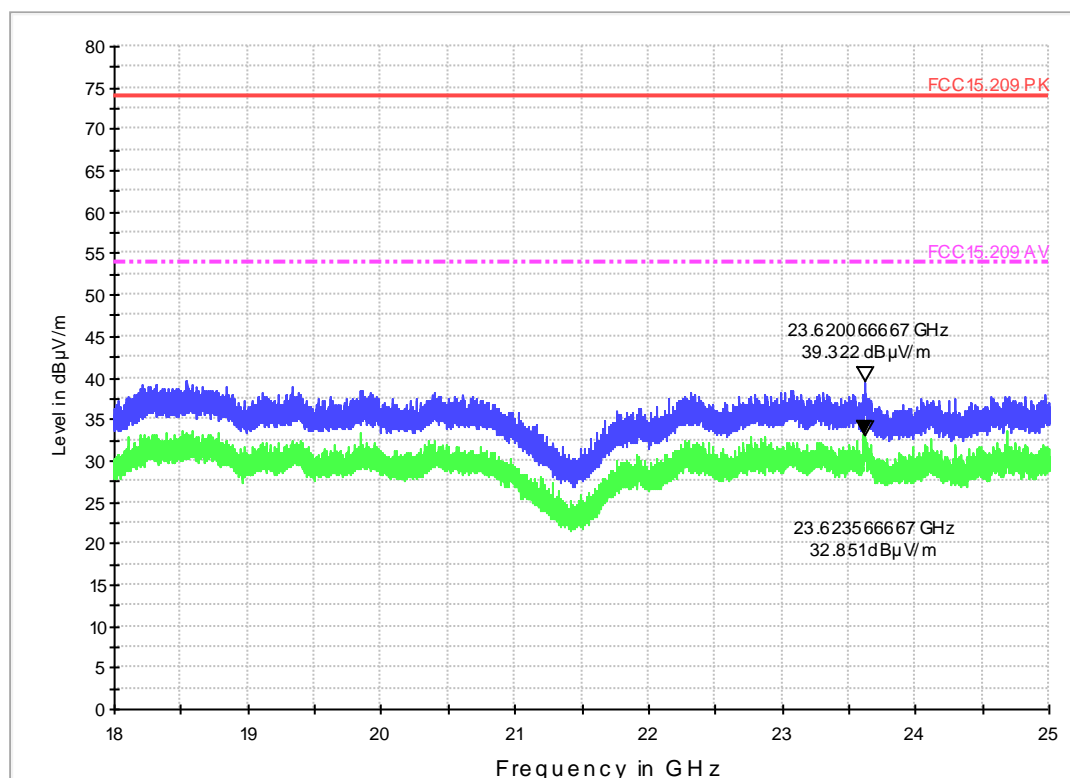


Diagram No.: 4.11_BT_LE_mid

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. middle

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
EuT:	cTP/TDC MID DTNA-4G

HW Version:	9134G05
SW Version:	17.02.S.016
Serial Number:	2950006922
Connected Interfaces:	Main wiring + DTNA Antenna
Power Supply:	24 V DC

FCC_Sweep_15.247_18_25GHz_Pre

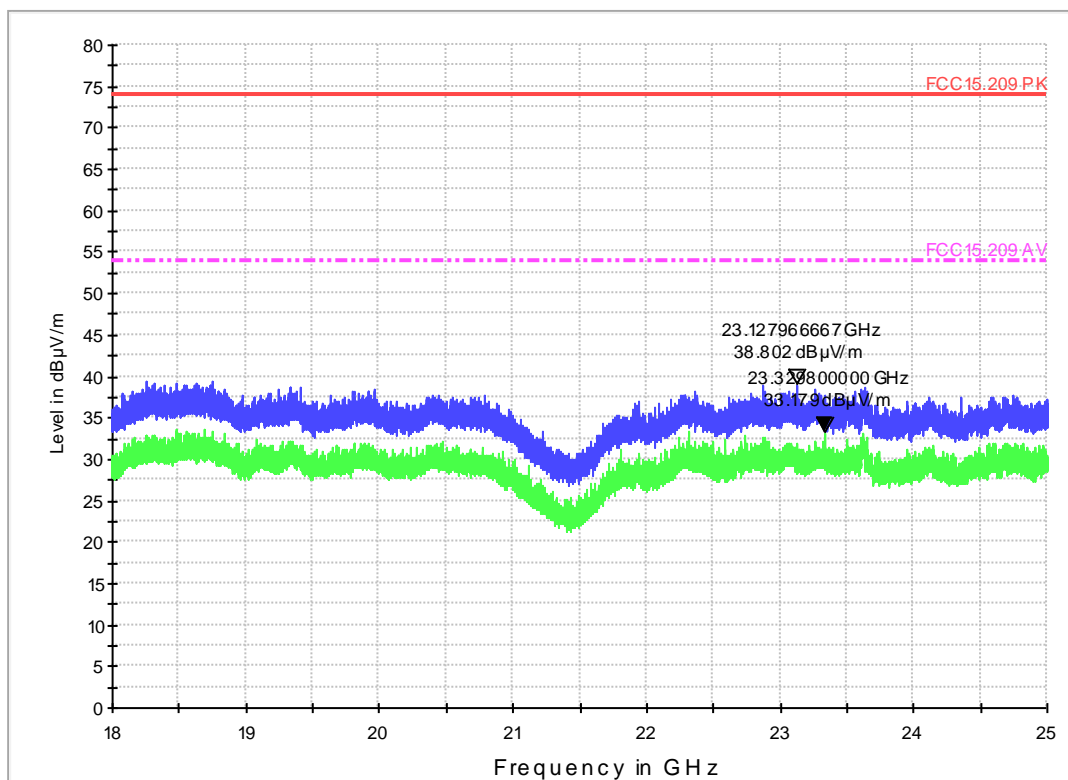


Diagram No.: 4.12_BT_LE_high

Common Information

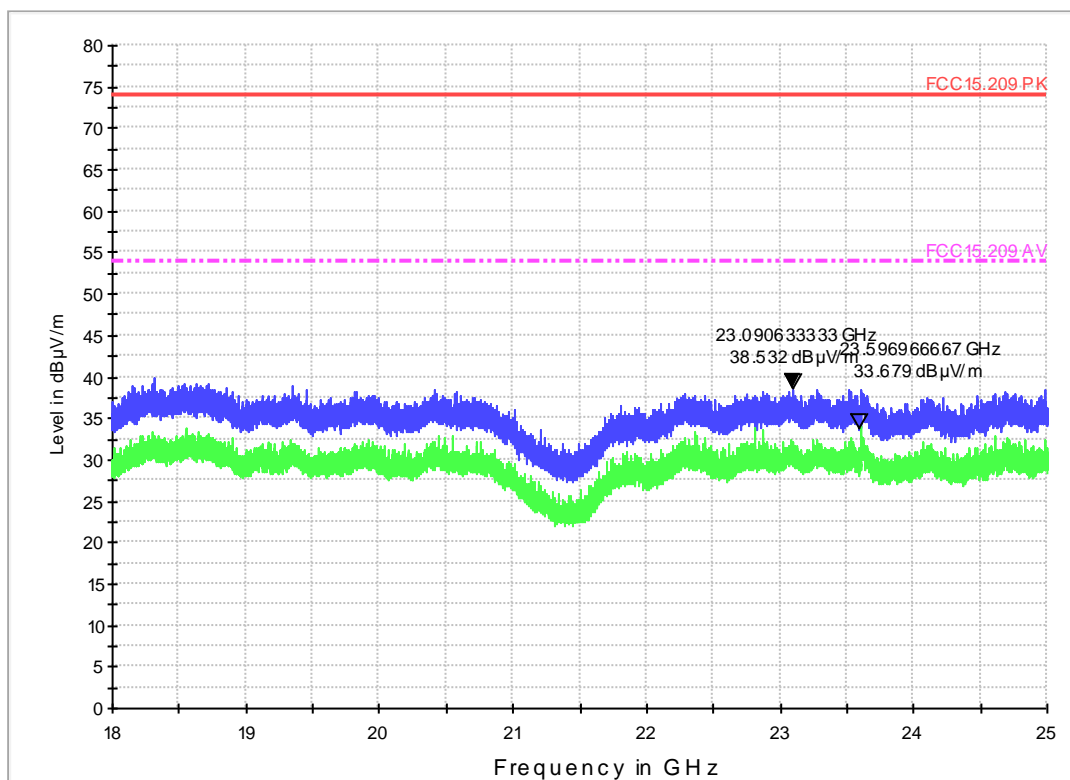
Test Description:	Radiated field strength emission in 1m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247, 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Distance correction factor	3 to 1m: -10.5 dB applying to measurement results
SW-Version:	EMC32 V8.53.0
Operation mode:	TX mode continuous
Operator Name:	TFR
Comment:	Channel no. high

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
EuT:	cTP/TDC MID DTNA-4G

HW Version:	9134G05
SW Version:	17.02.S.016
Serial Number:	2950006922
Connected Interfaces:	Main wiring + DTNA Antenna
Power Supply:	24 V DC

FCC_Sweep_15.247_18_25GHz_Pre



2. Radiated band-edge measurements accord. §15.209 & §15.205 (§15.247)

2.1. Channel 37 (left band edge)

Diagram No.: 9.07a_BE_BT_LE_low

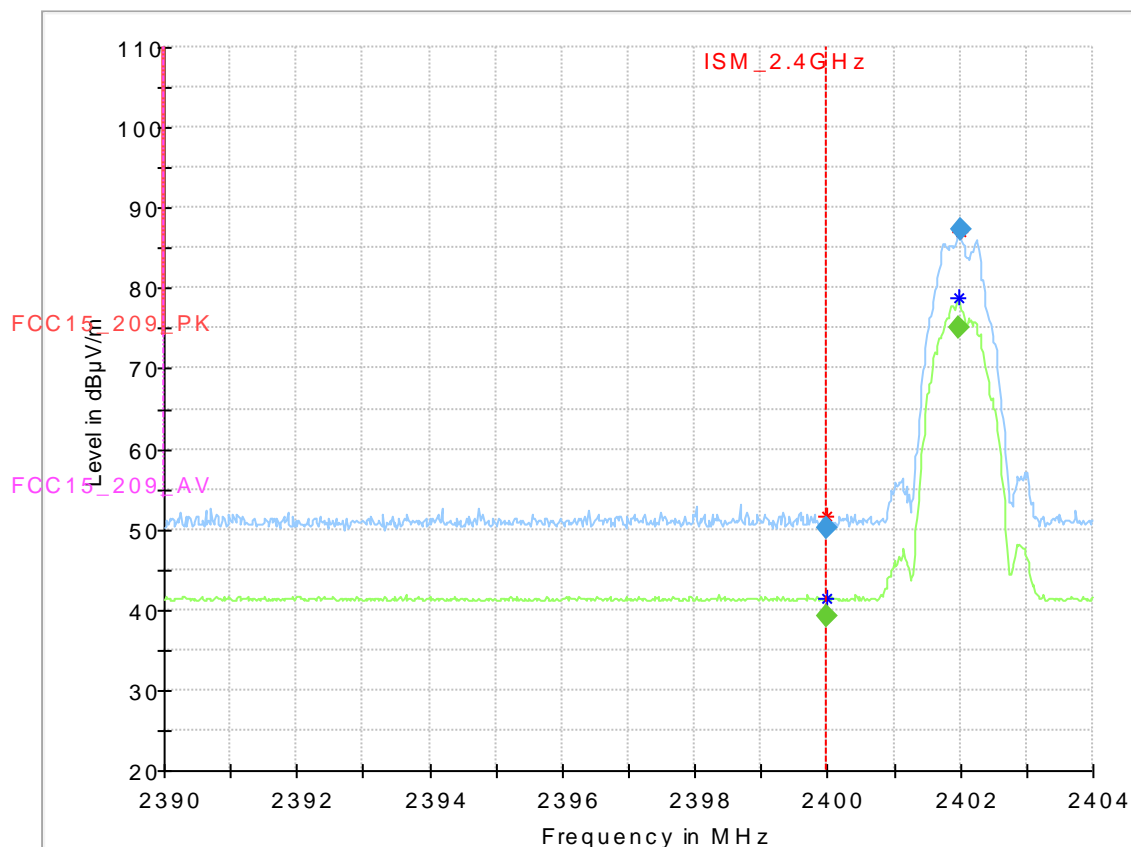
Common Information

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:	Mah
Comment:	Channel no. low
Comment2:	BT LE low

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
EuT:	cTP/TDC MID DTNA-4G

HW Version:	9134G05
SW Version:	17.02.S.016
Serial Number:	2950006922
Connected Interfaces:	Main wiring + DTNA Antenna
Power Supply:	24 V DC



Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)
2399.980000	50.18	---	150.00	99.82	100.0
2400.000000	---	39.20	150.00	110.80	100.0
2401.980000	---	75.01	150.00	74.99	100.0
2402.000000	87.30	---	150.00	62.70	100.0

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

Frequency (MHz)	Corr. (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)
2399.980000	35.6	100.000	155.0	V	20.0	90.0
2400.000000	35.6	100.000	155.0	V	-1.0	90.0
2401.980000	35.6	100.000	155.0	V	51.0	90.0
2402.000000	35.6	100.000	155.0	V	48.0	90.0

2.2. Channel 39 (right band edge)

Diagram No.: 9.08a_BE_BT_LE_high

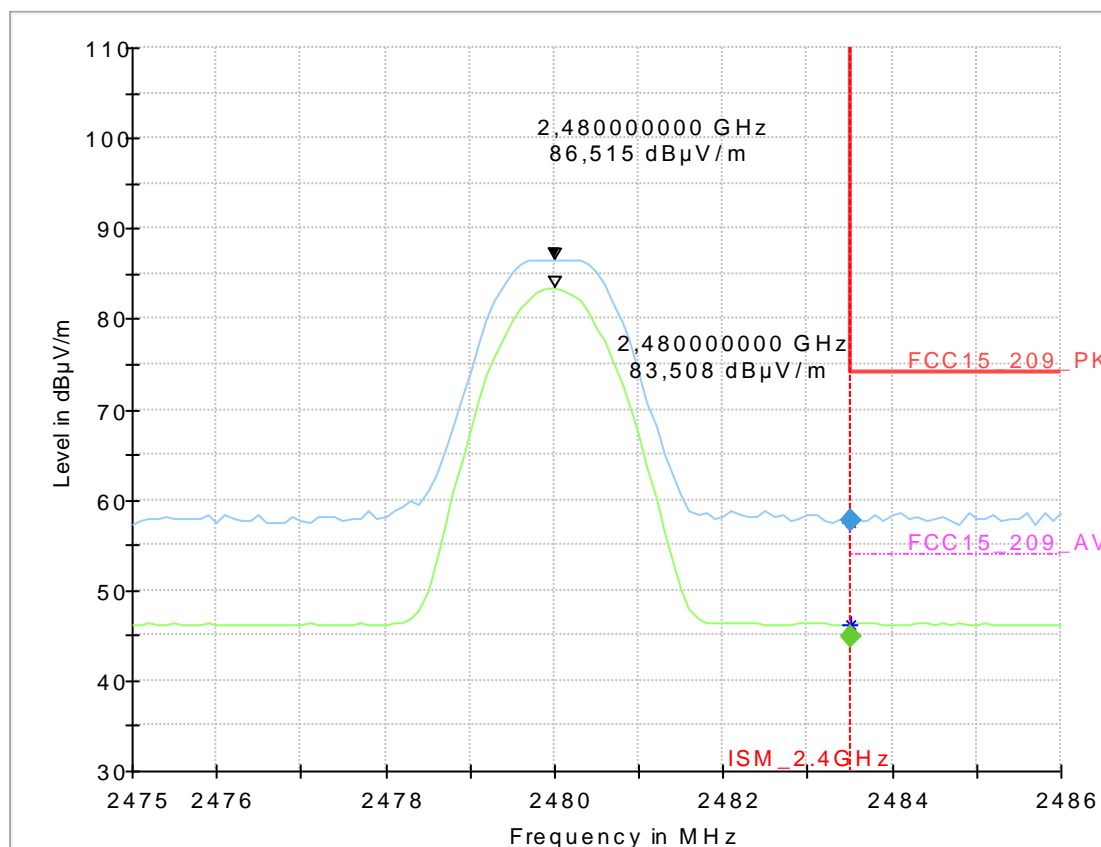
Common Information

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:	Mah
Comment:	Channel no. high
Comment2:	BT LE high

EUT Information

Manufacturer:	Robert Bosch Car Multimedia GmbH
EuT:	cTP/TDC MID DTNA-4G

HW Version:	9134G05
SW Version:	17.02.S.016
Serial Number:	2950006922
Connected Interfaces:	Main wiring + DTNA Antenna
Power Supply:	24 V DC



Final_Result

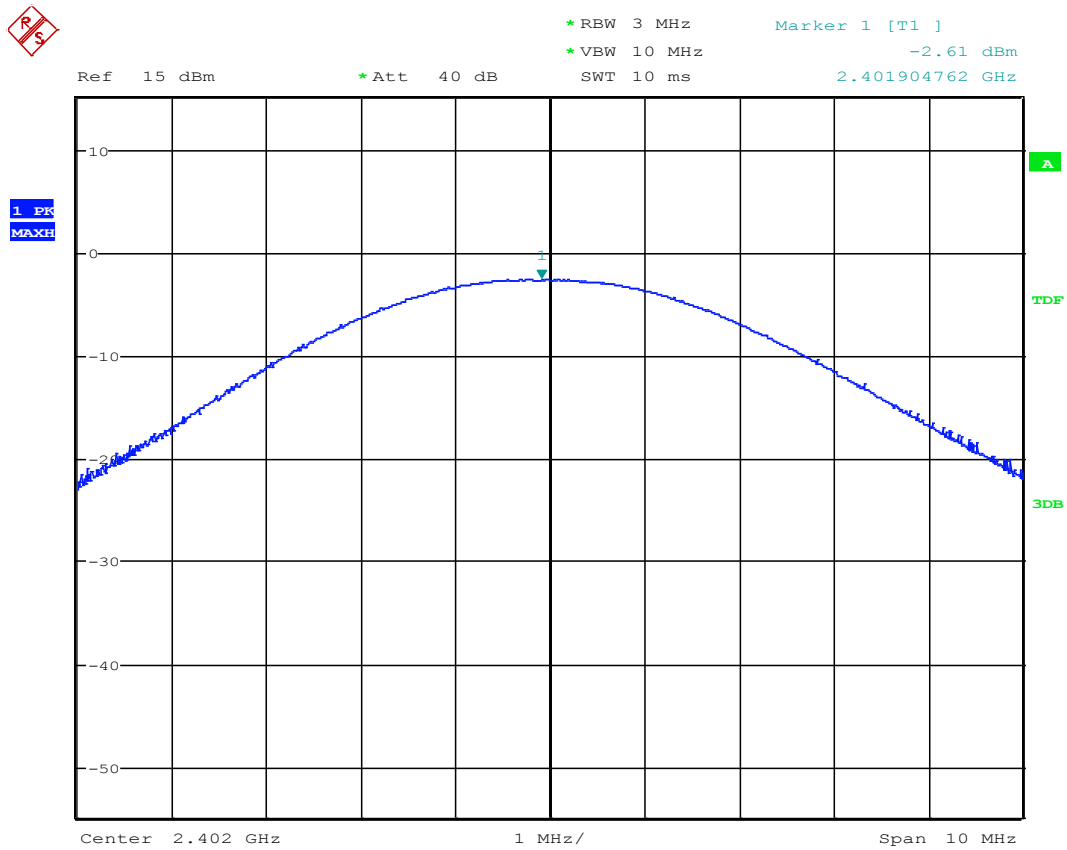
Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)
2483.500000	---	44.83	54.00	9.17	100.0
2483.500000	57.71	---	74.00	16.29	100.0

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

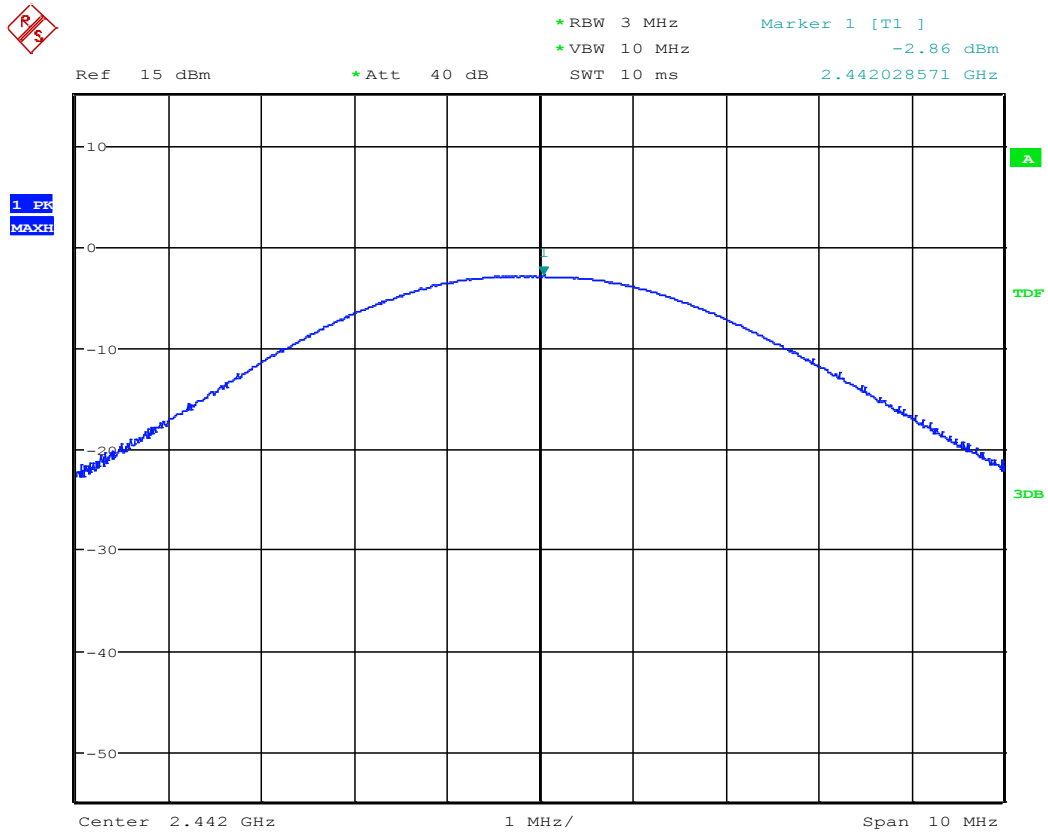
Frequency (MHz)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)
2483.500000	1000.000	155.0	V	196.0	90.0
2483.500000	1000.000	155.0	H	178.0	90.0

3. Conducted RF-measurements on antenna port

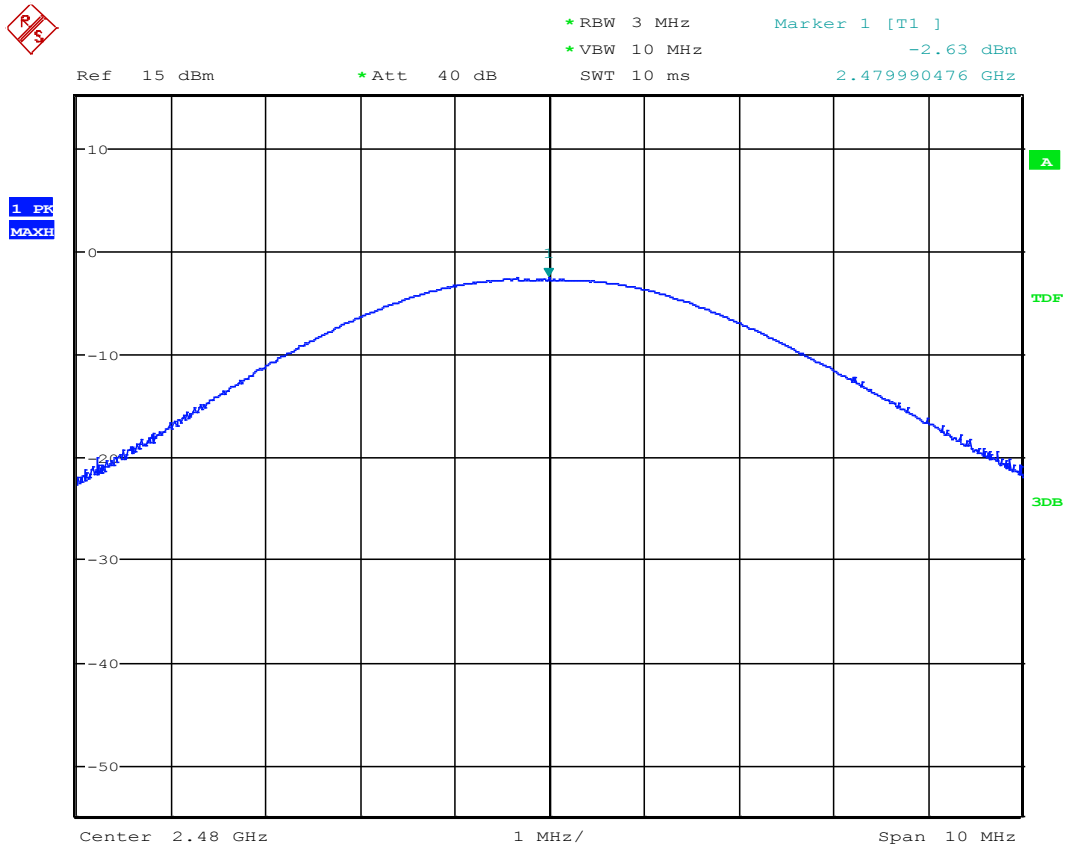
3.1. RF output Power



Peak Power_low_2402

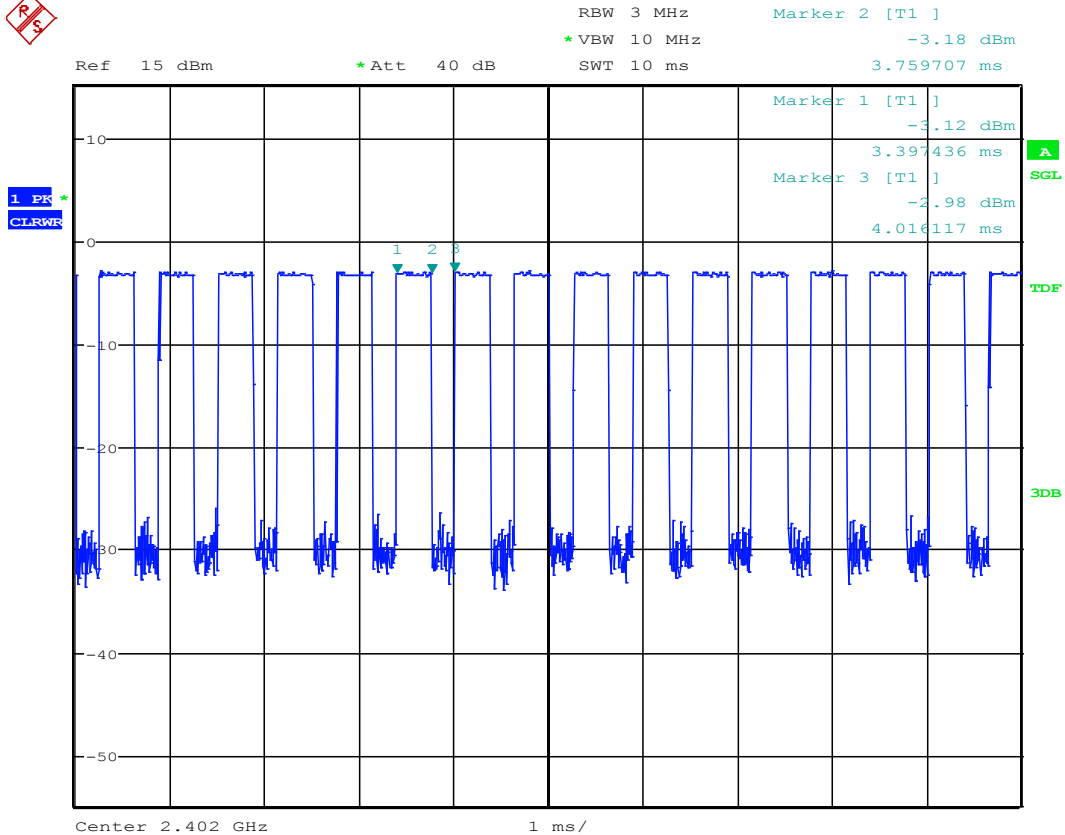


Peak Power_mid_2442

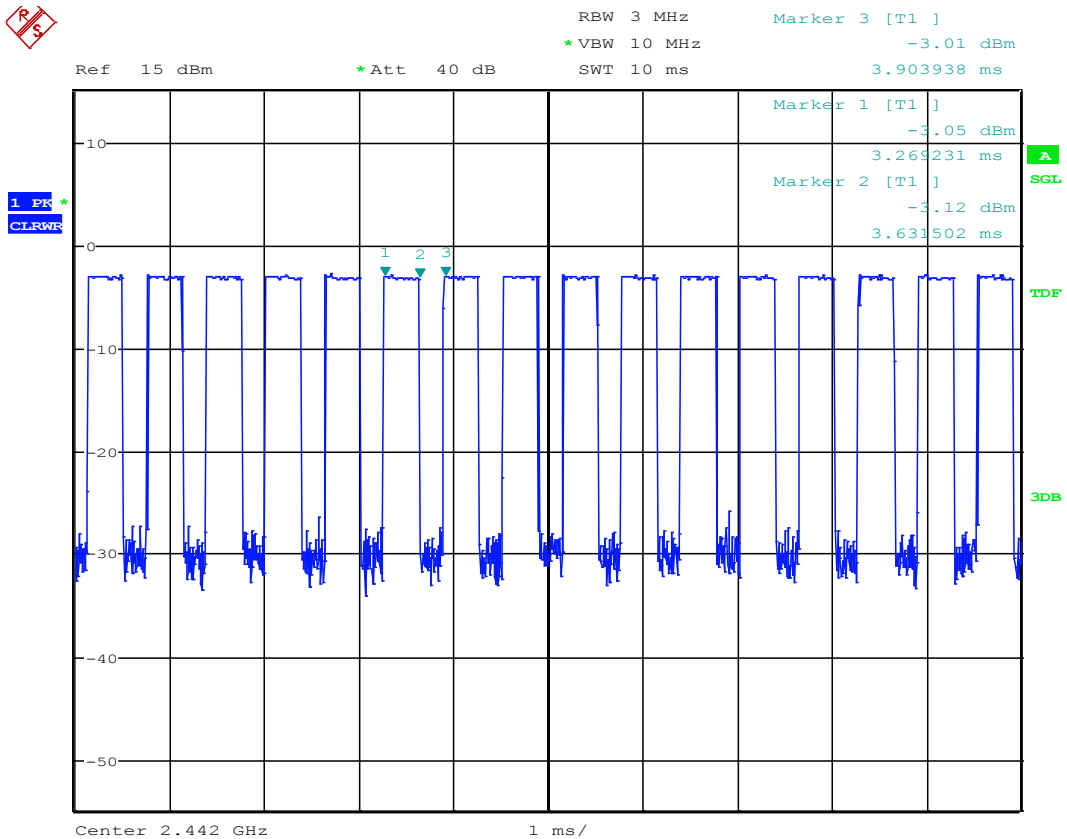


Peak Power_high_2480

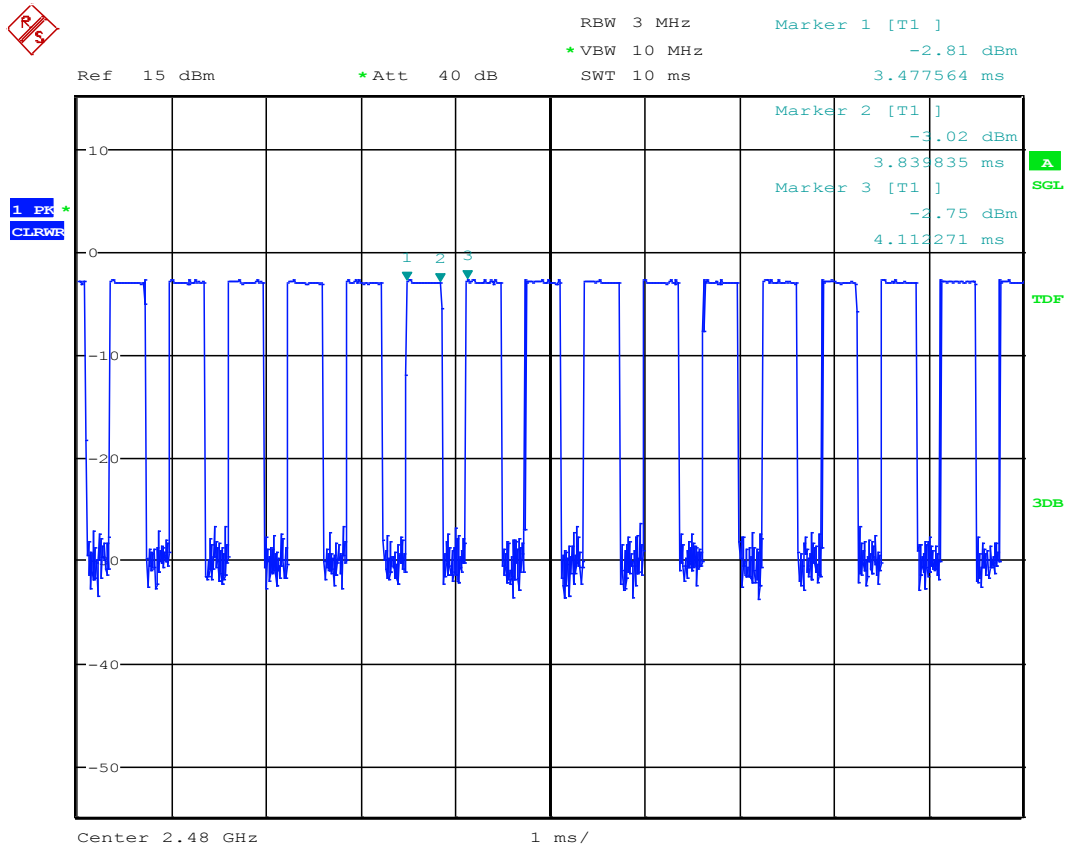
3.2. Duty Cycle



DC_low_2402

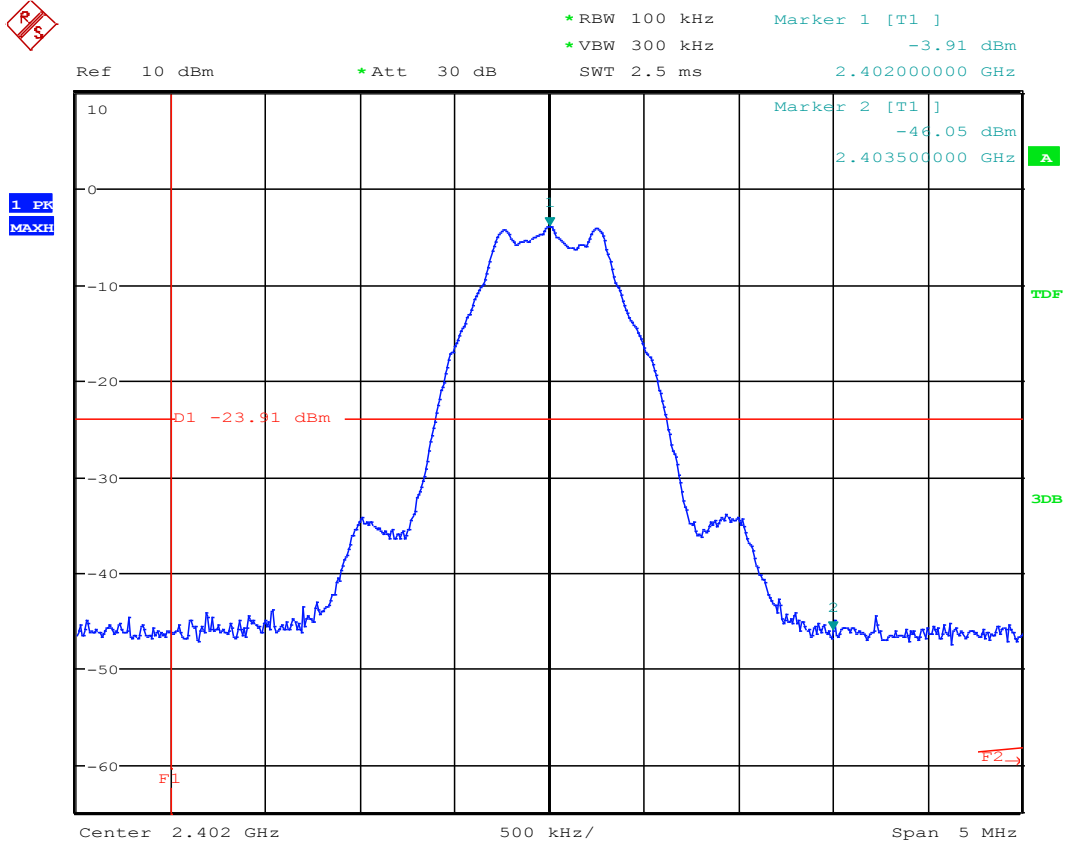


DC_mid_2442

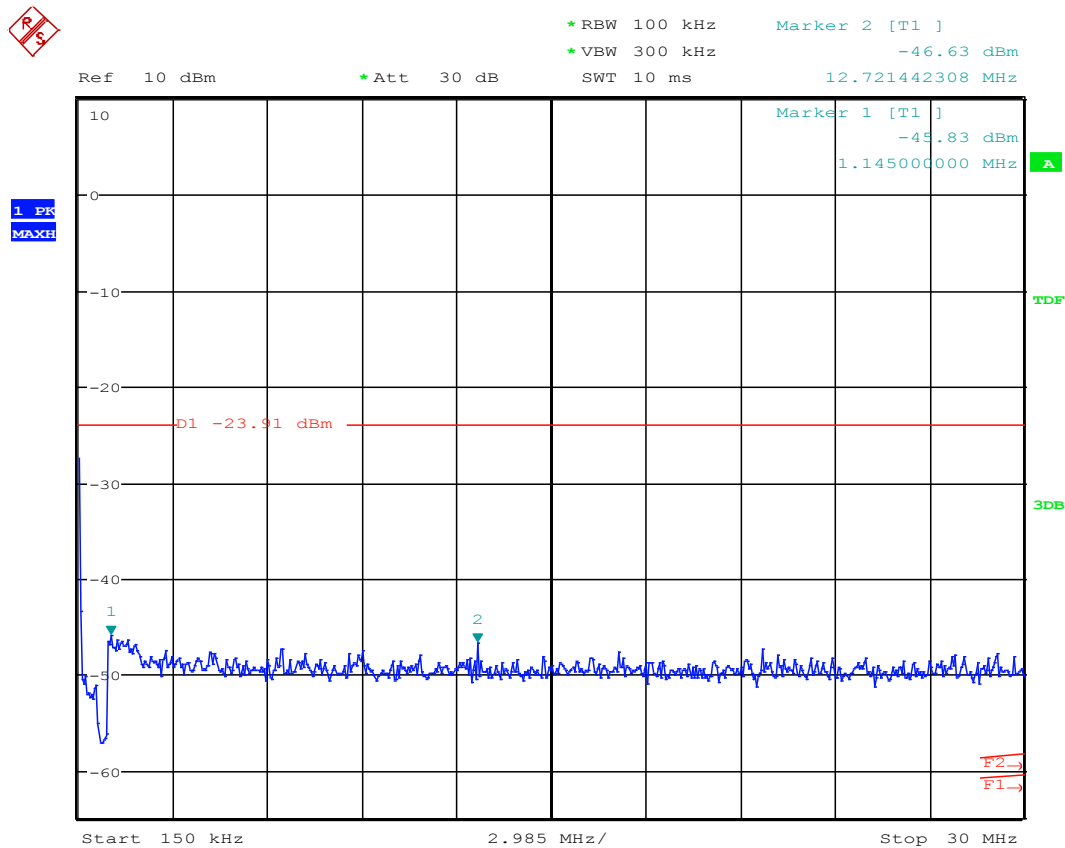


DC_high_2480

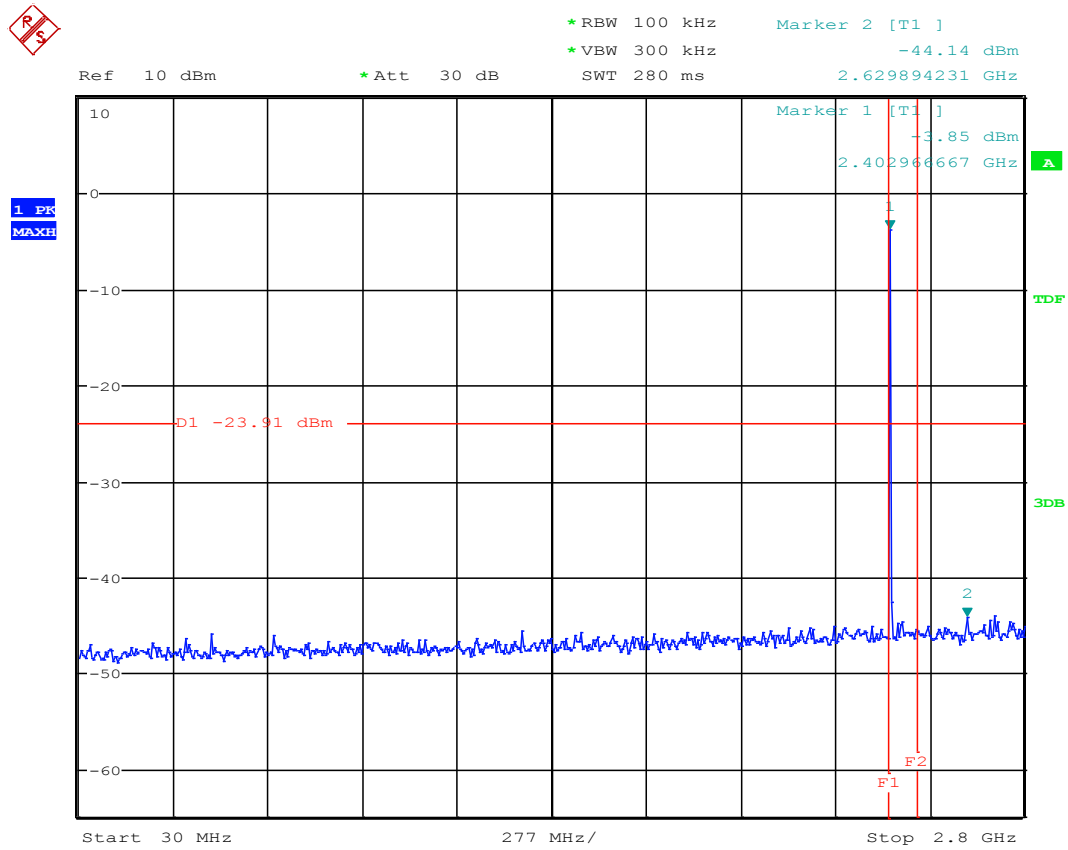
3.3. 20dBc



20dBc_ref_low_BT_LE

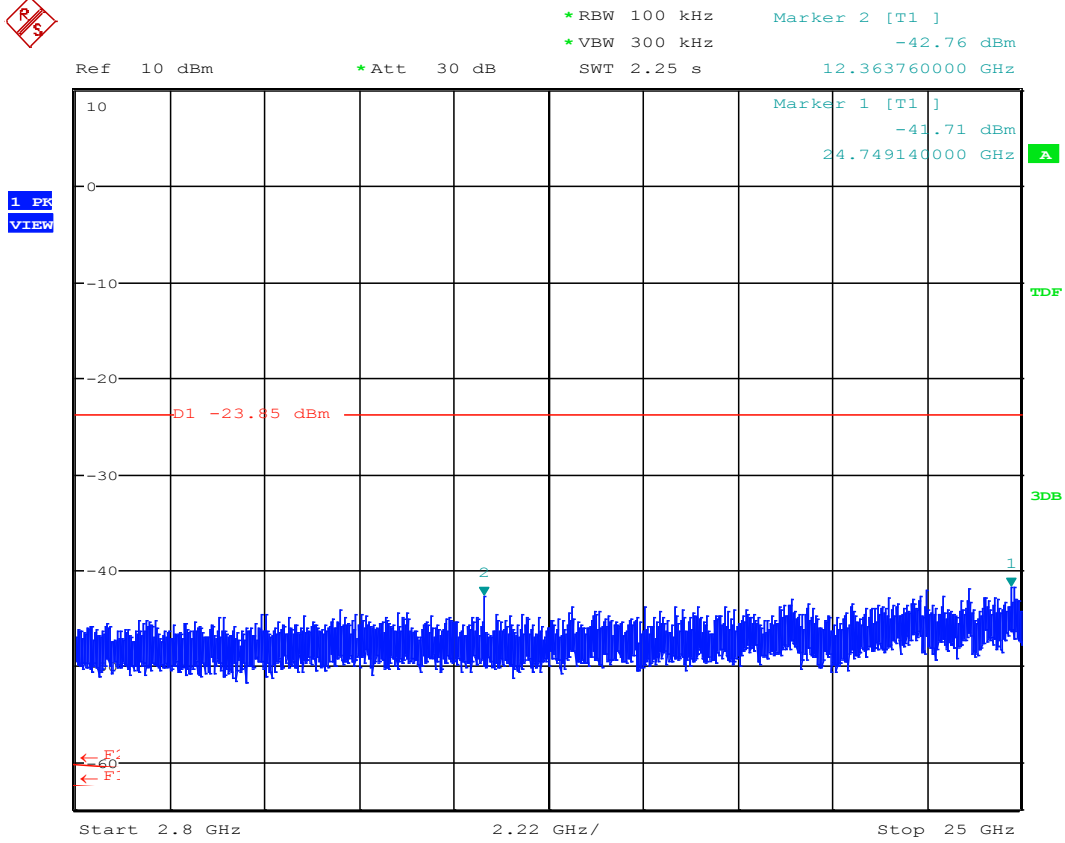


20dBc_150kHz-30MHz_low_BT_LE

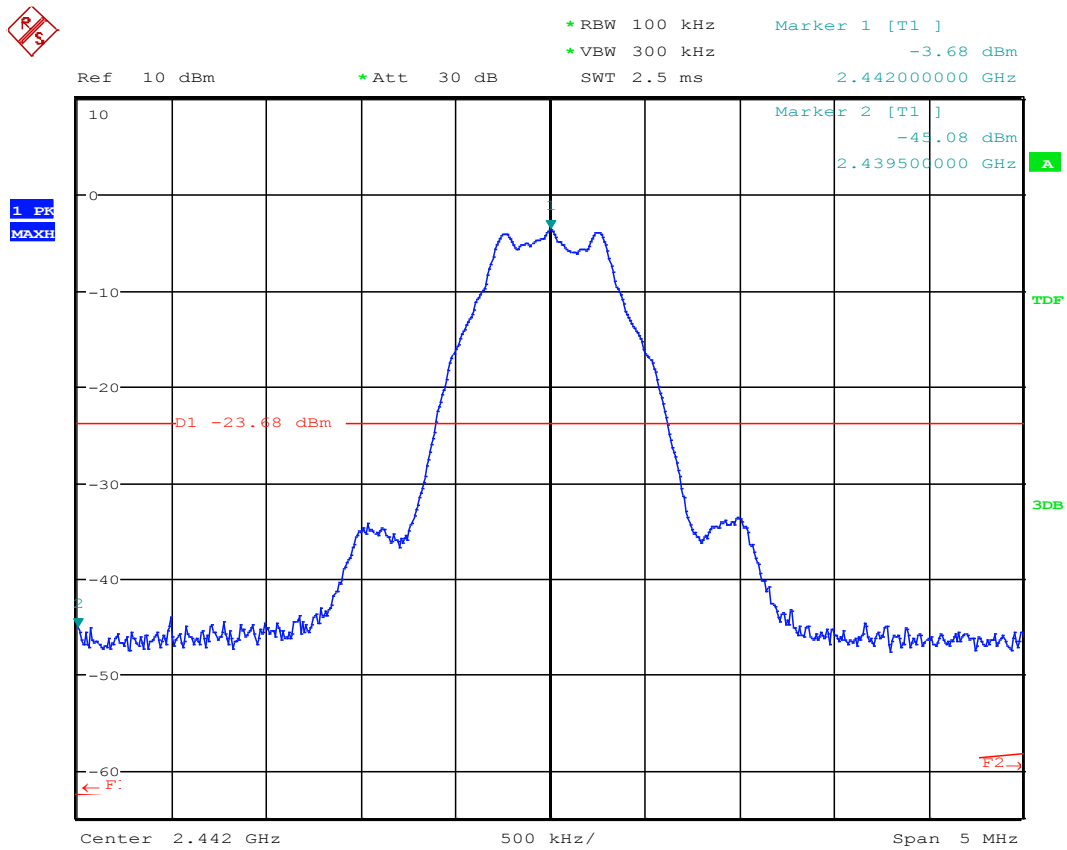


Date: 27.SEP.2017 10:02:30

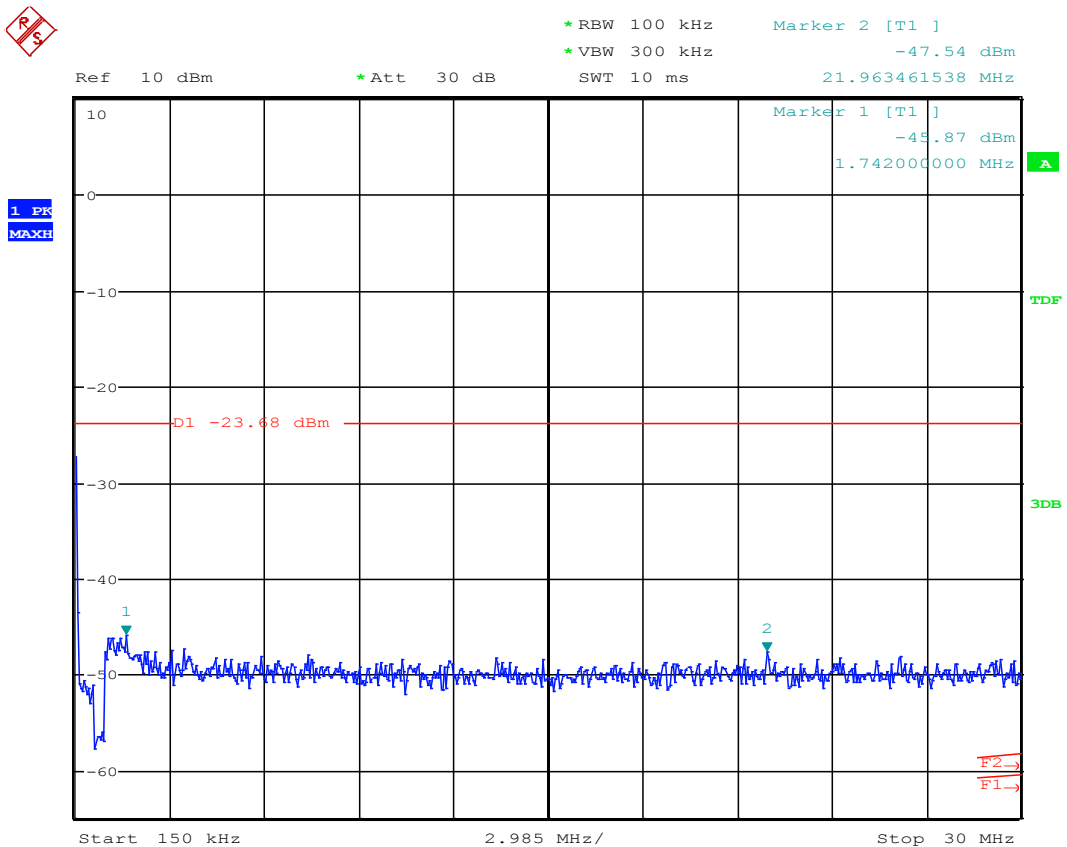
20dBc_30MHz-2.8GHz_low_BT_LE



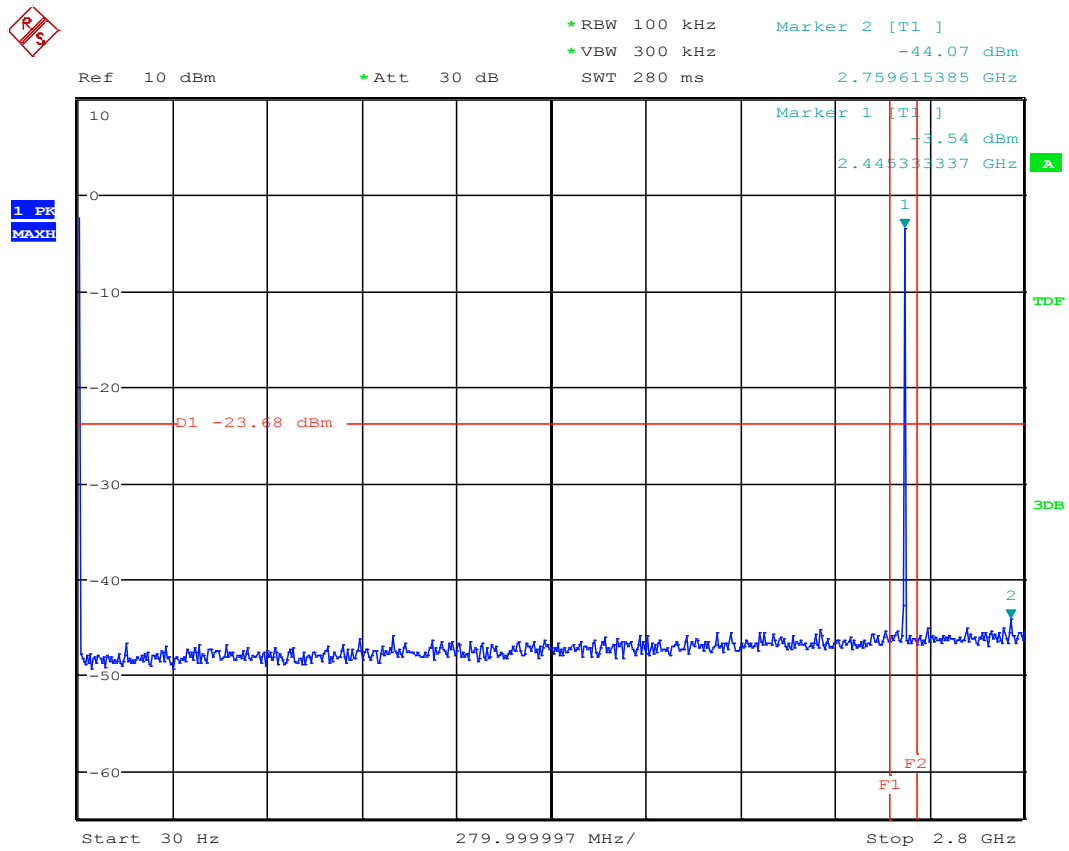
20dBc_2.8-25GHz_low_BT_LE



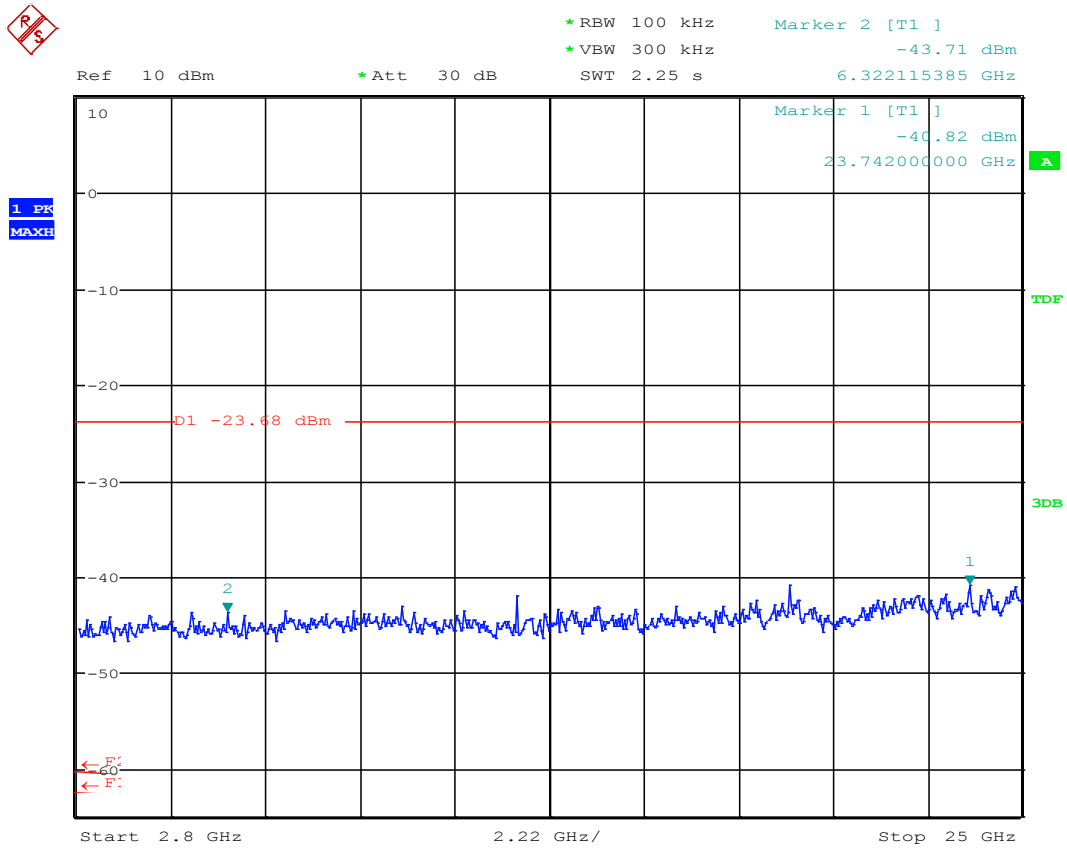
20dBc_ref_mid_BT_LE



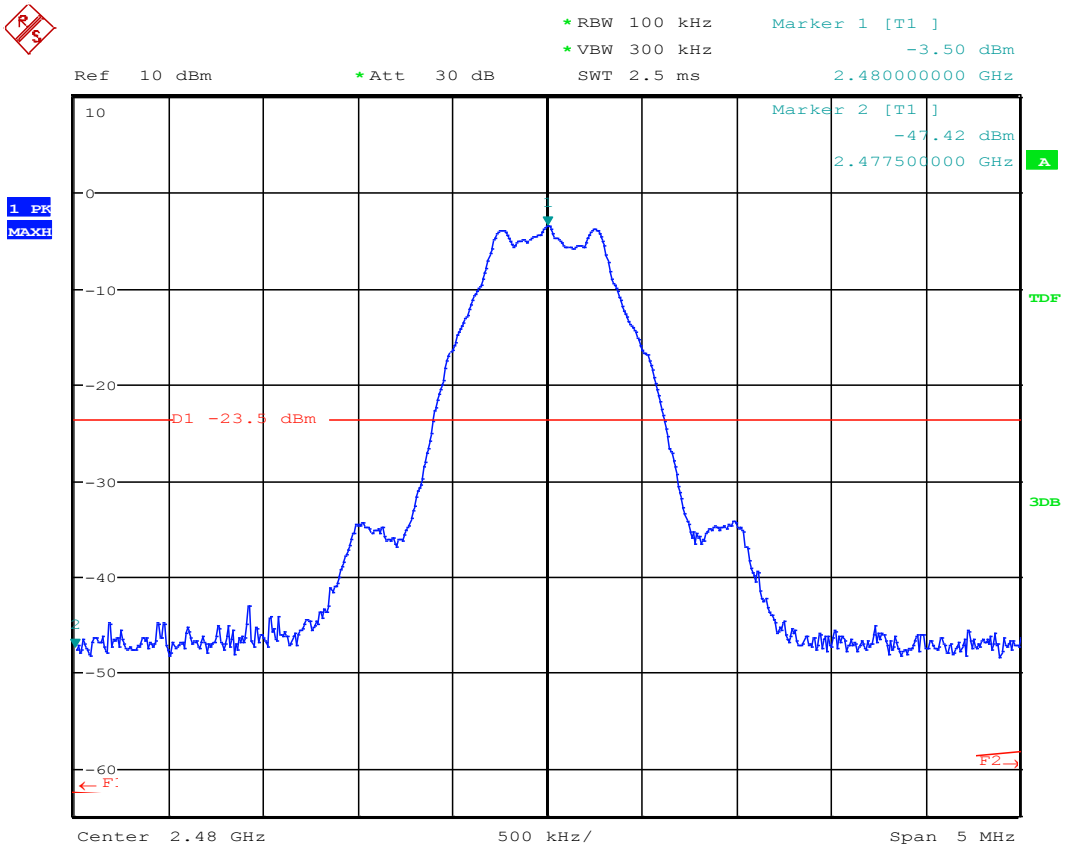
20dBc_150kHz-30MHz_mid_BT_LE



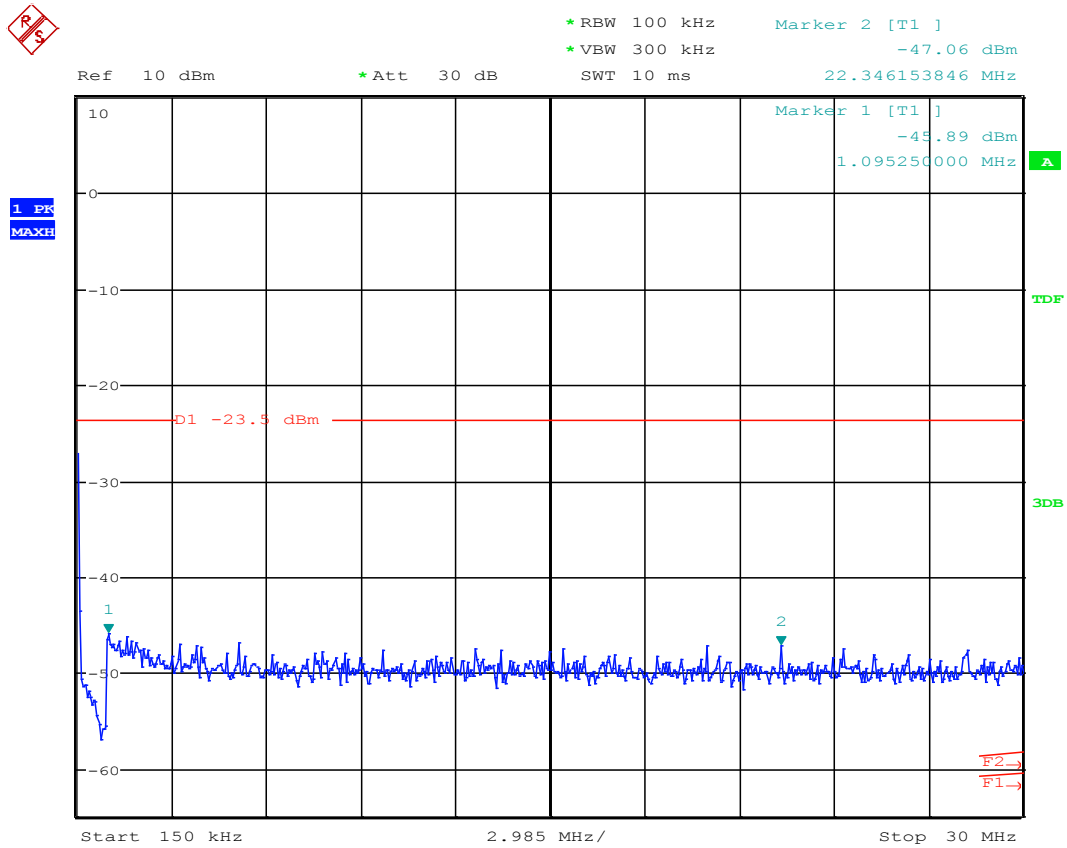
20dBc_30MHz-2.8GHz_mid_BT_LE



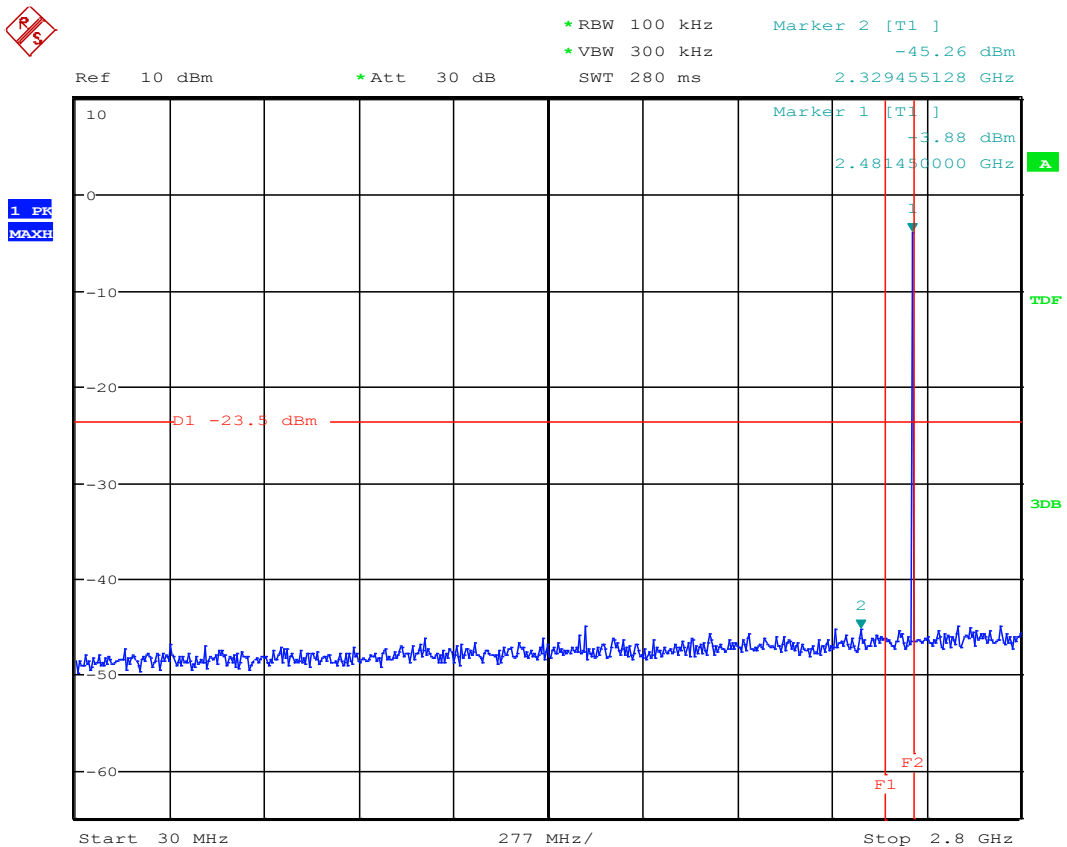
20dBc_2.8-25GHz_mid_BT_LE



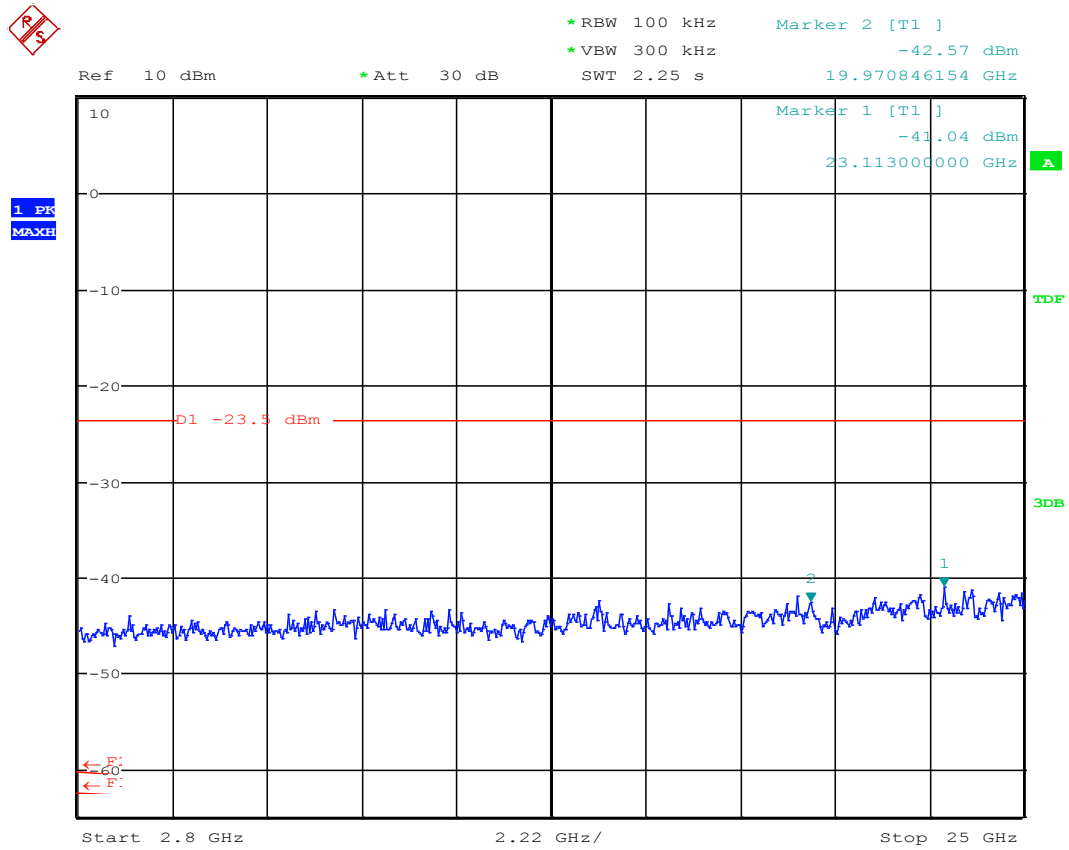
20dBc_ref_mid_BT_LE



20dBc_150kHz-30MHz_mid_BT_LE



20dBc_30MHz-2.8GHz_high_BT_LE



20dBc_2.8-25GHz_mid_BT_LE

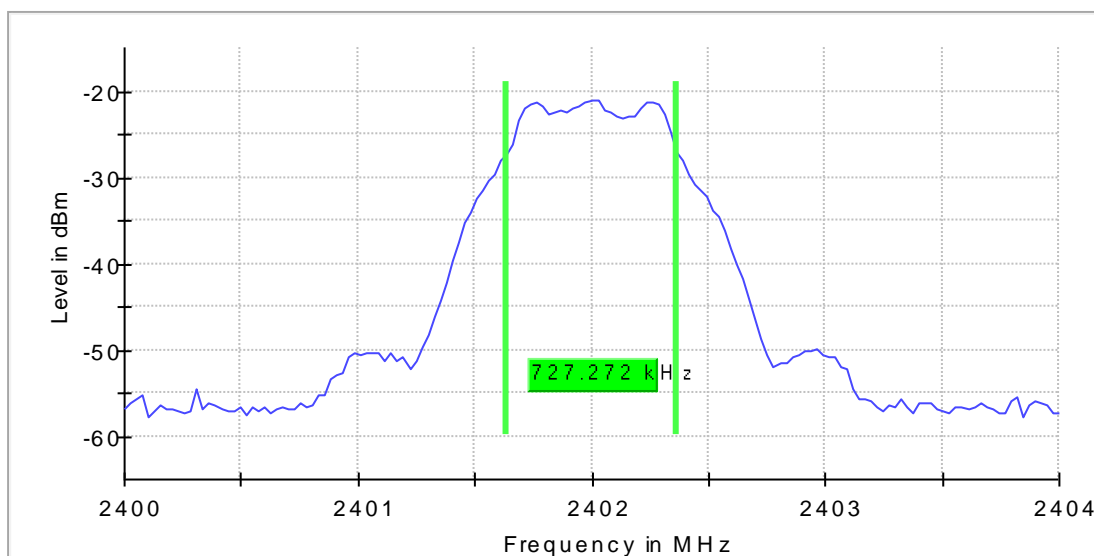
3.4. 6dB bandwidth

Minimum Emission Bandwidth 6 dB (2402 MHz; 2 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
2402.000000	0.727272	0.500000	---	2401.636364	2402.363636	-0.2	PASS



Measurement

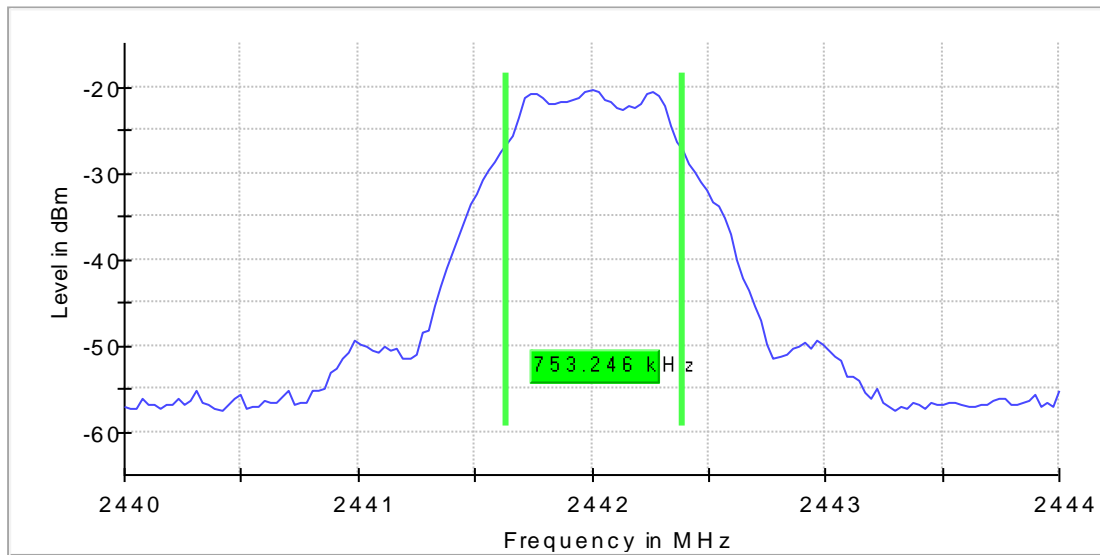
Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.40400 GHz	2.40400 GHz
Span	4.000 MHz	4.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	155	~ 40
SweepTime	2.500 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	15.000 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	17 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.00 dB	0.50 dB

Minimum Emission Bandwidth 6 dB (2442 MHz; 2 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
2442.000000	0.753246	0.500000	---	2441.636364	2442.389610	-20.4	PASS



Measurement

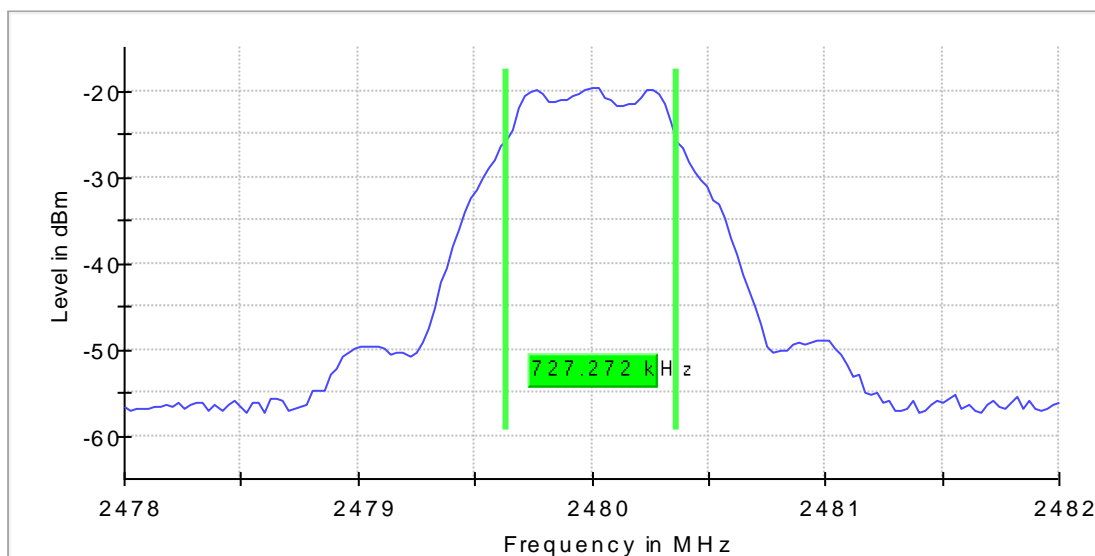
Setting	Instrument Value	Target Value
Start Frequency	2.44000 GHz	2.44000 GHz
Stop Frequency	2.44400 GHz	2.44400 GHz
Span	4.000 MHz	4.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	155	~ 40
Sweptime	2.500 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	15.000 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	17 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.06 dB	0.50 dB

Minimum Emission Bandwidth 6 dB (2480 MHz; 2 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10

6 dB Bandwidth

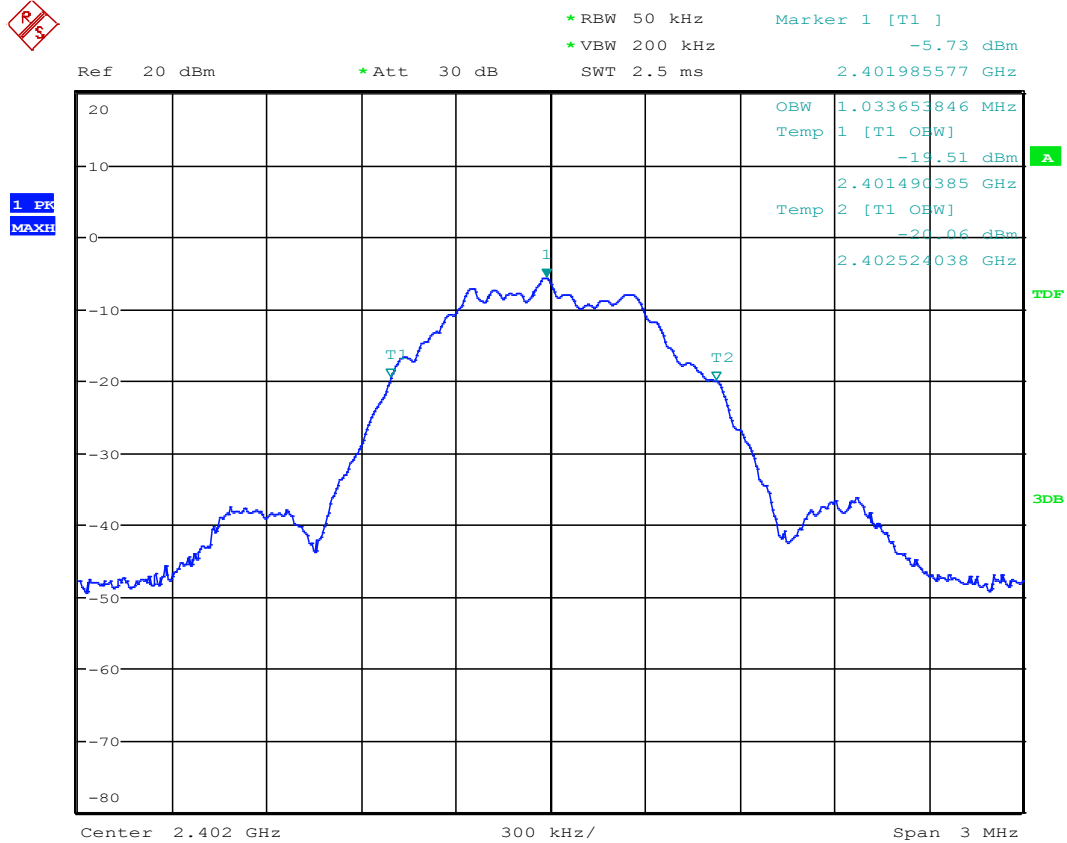
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
2480.00000	0.727272	0.500000	---	2479.636364	2480.363636	-19.6	PASS



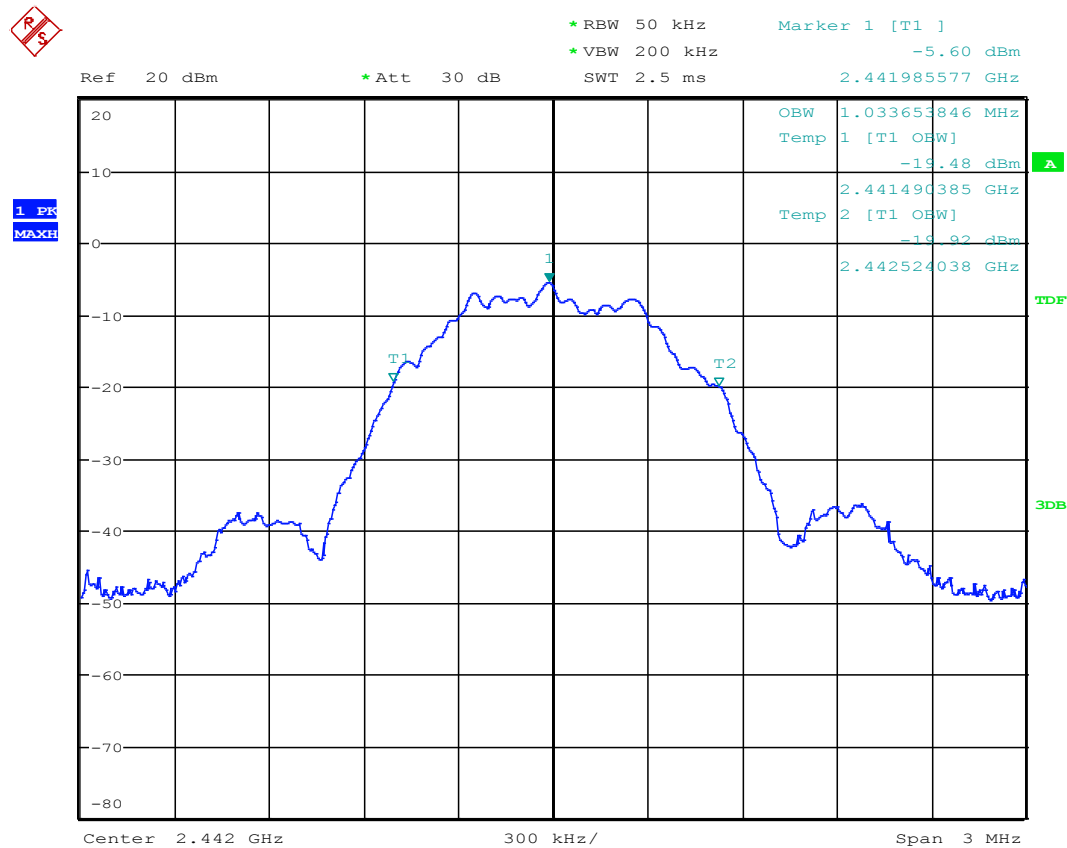
Measurement

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
Sweptime	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	17 / max. 150	max. 150
Stable	15 / 15	15
Max Stable Difference	0.01 dB	0.50 dB

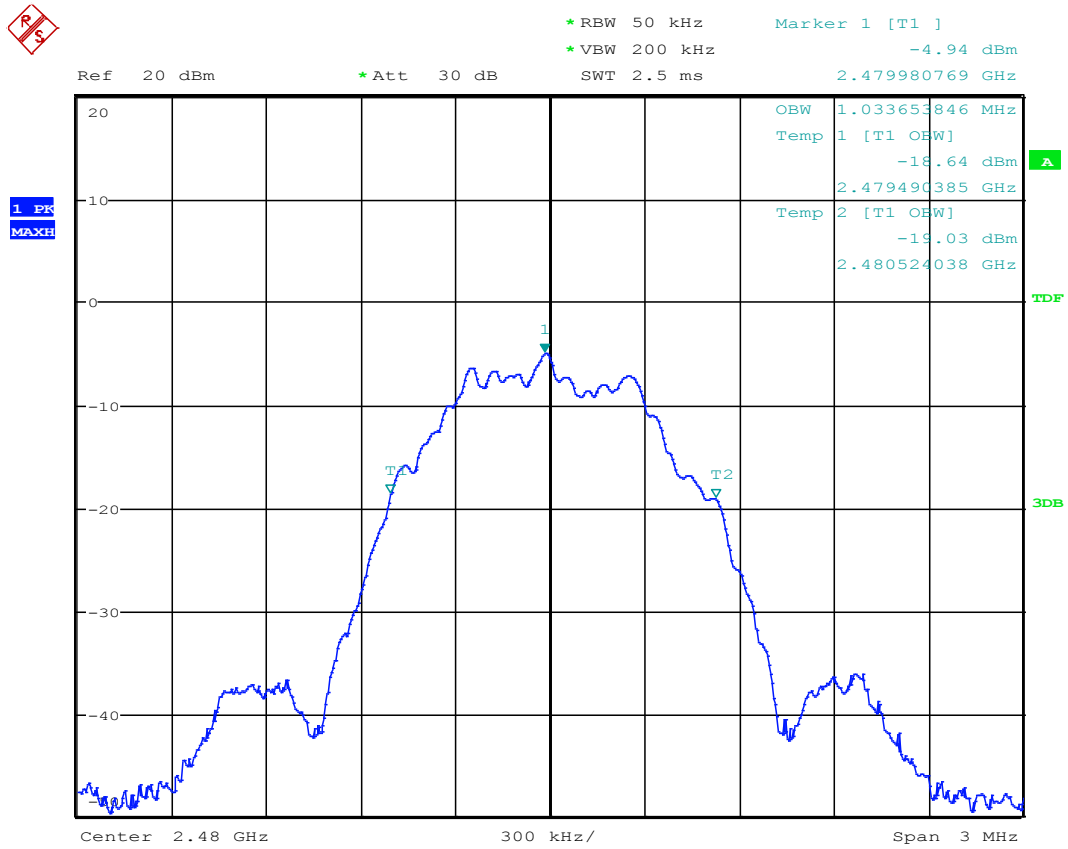
3.5. 99% occupied channel bandwidth



99%OBW_low_2402



99%OBW_mid_2442



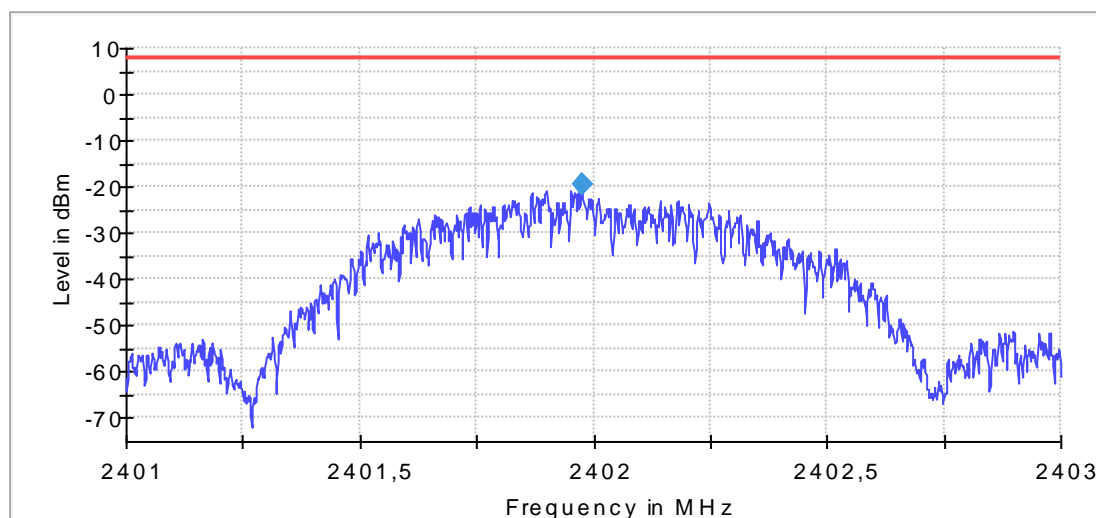
99%OBW_high_2480

3.6. Power spectral density Power Spectral Density (2402 MHz; 2 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2402.000000	2401.975385	-19.429	8.0	PASS



— Limit — Sum Level ◆ PSD

Measurement

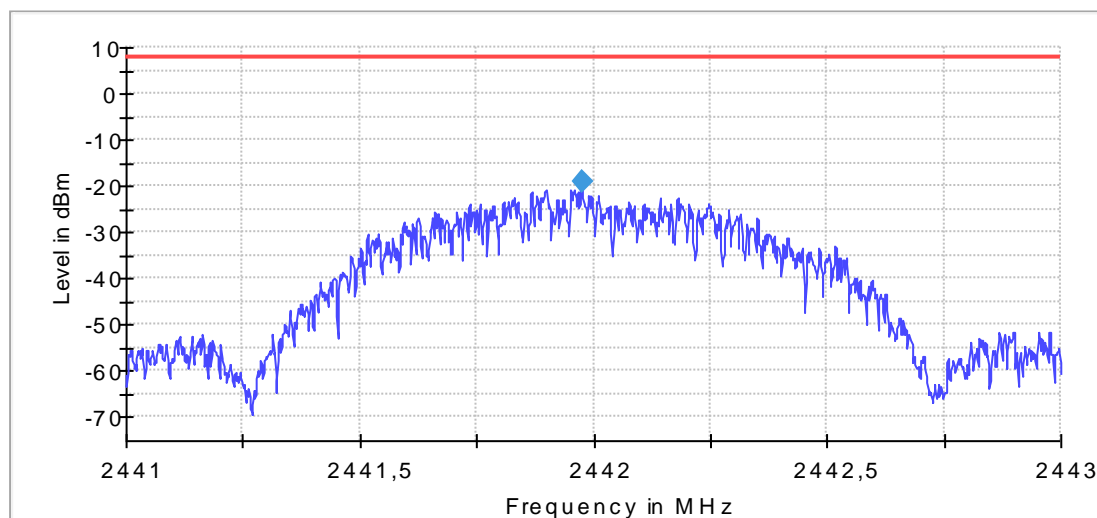
Setting	Instrument Value	Target Value
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40300 GHz	2.40300 GHz
Span	2.000 MHz	2.000 MHz
RBW	3.000 kHz	≤ 3.000 kHz
VBW	10.000 kHz	≥ 9.000 kHz
SweepPoints	1301	~ 1333
SweepTime	45.000 s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	15.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	1	1
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off

Power Spectral Density (2442 MHz; 2 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2442.000000	2441.975385	-19.089	8.0	PASS



— Limit — Sum Level ◆ PSD

Measurement

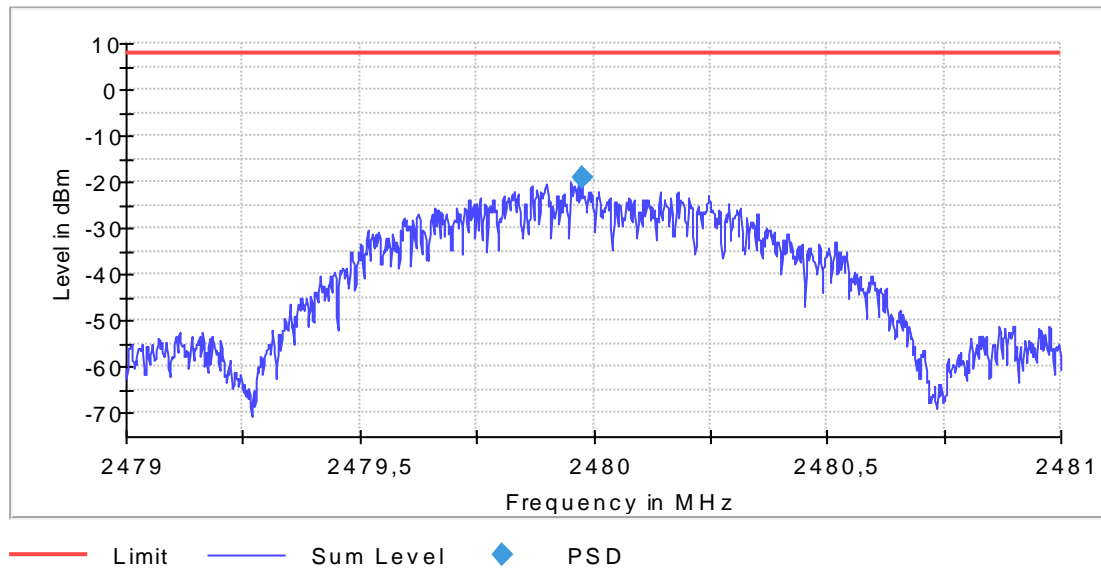
Setting	Instrument Value	Target Value
Start Frequency	2.44100 GHz	2.44100 GHz
Stop Frequency	2.44300 GHz	2.44300 GHz
Span	2.000 MHz	2.000 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	1301	~ 1333
SweepTime	45.000 s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	15.000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

Power Spectral Density (2480 MHz; 2 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2480.000000	2479.975385	-18.922	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	MaxPeak	MaxPeak
SweepCount	1	1
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	Sweep
Preamp	off	off