

Annex 1: Measurement diagrams to
TEST REPORT
No.: 16-1-0190801T03a

According to:

FCC Regulations
Part 15.205, Part 15.209, Part 15.247

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

for

Intel Corporation

RCM24G Radio Control Module 2.4 GHz
+
PRESTTA Antenna + INTEL FA5 Antenna Ports 1 & 5

FCC-ID: 2AJ2A-RCM24G
IC: 1000B-RCM24G
PMN:RCM24G
HVIN:D
FVIN: RCM24G_12017USCN

Laboratory Accreditation and Listings					
 DAkkS Deutsche Akkreditierungsstelle D-PL-12047-01-01	 FEDERAL COMMUNICATIONS COMMISSION USA MRA US-EU 0003	 Industry Canada Reg. No.: 3462D-2 Reg. No.: 3462D-3	 Voluntary Controls for Electromagnetic Emissions Reg. No.: R-2666 C-2914, T-1967, G-301		
	 ctia Authorized™ Test Lab Lab Code: 20011130-00	accredited according to DIN EN ISO/IEC 17025			
CETECOM GmbH					
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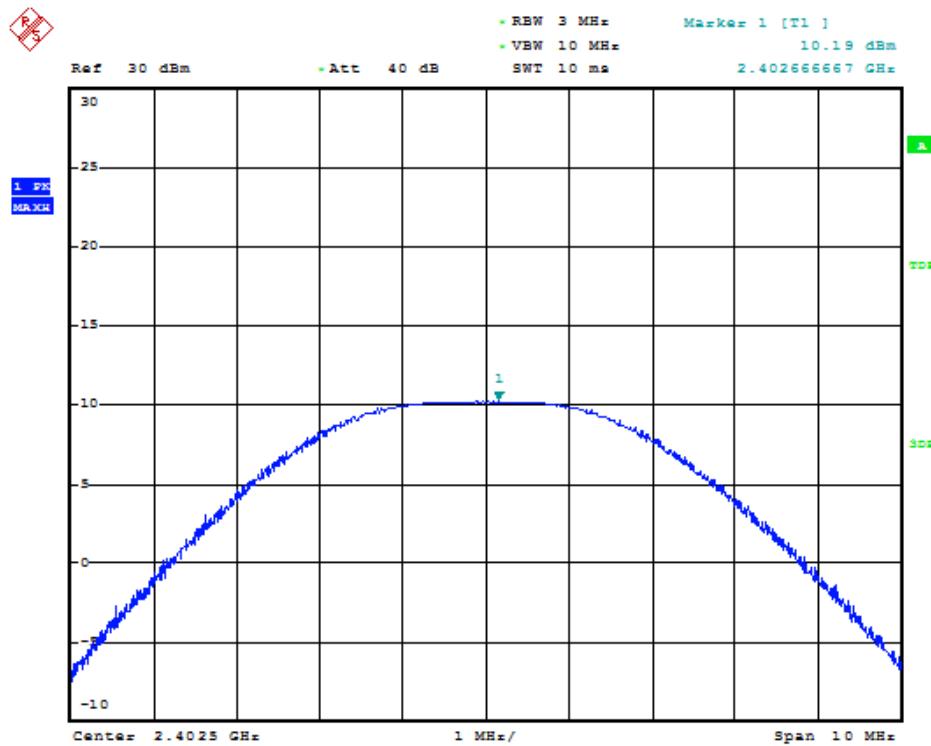
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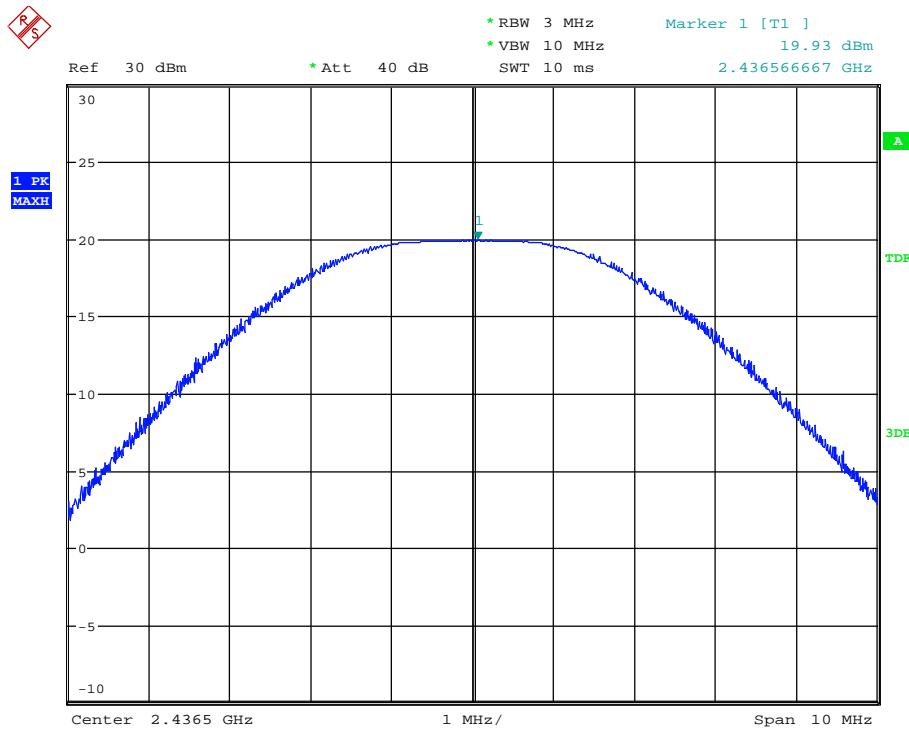
1. Conducted Measurements- RCM24G

1.1. Conducted Power

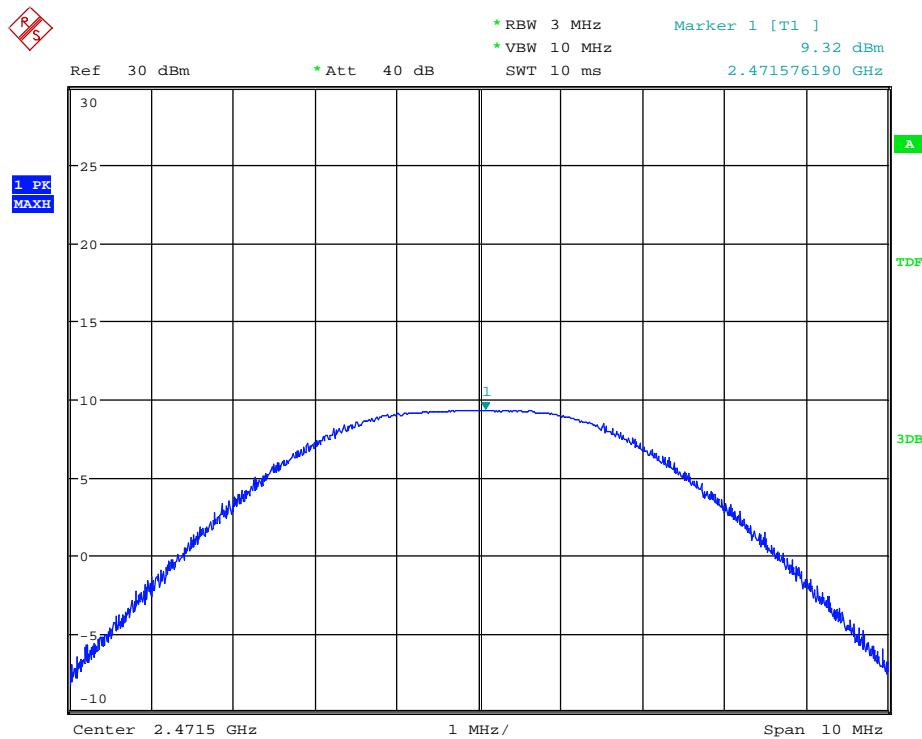
1.1.1. MSK-Data Rate 50Kbps



Plot 1: Conducted Power-RCM24G-MSK-50Kbps-Ch0(2402.5 MHz)-PWR+12dBm

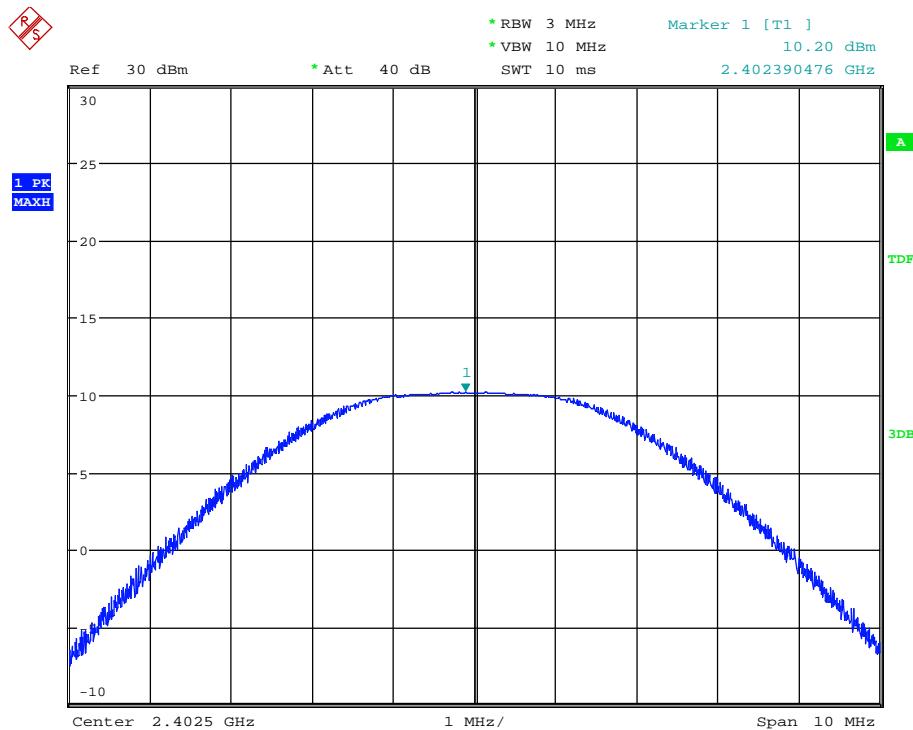


Plot 2: Conducted Power-RCM24G-MSK-50Kbps-Ch34 (2436.5 MHz)-PWR+21dBm

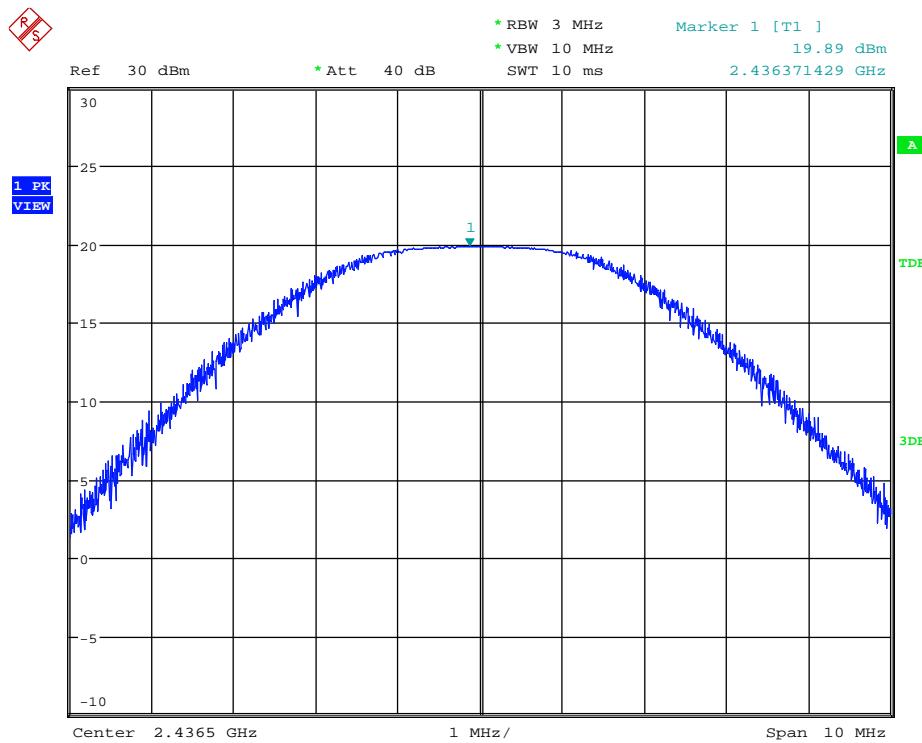


Plot 3: Conducted Power-RCM24G-MSK-50Kbps-Ch69 (2471.5 MHz)-PWR+12 dBm

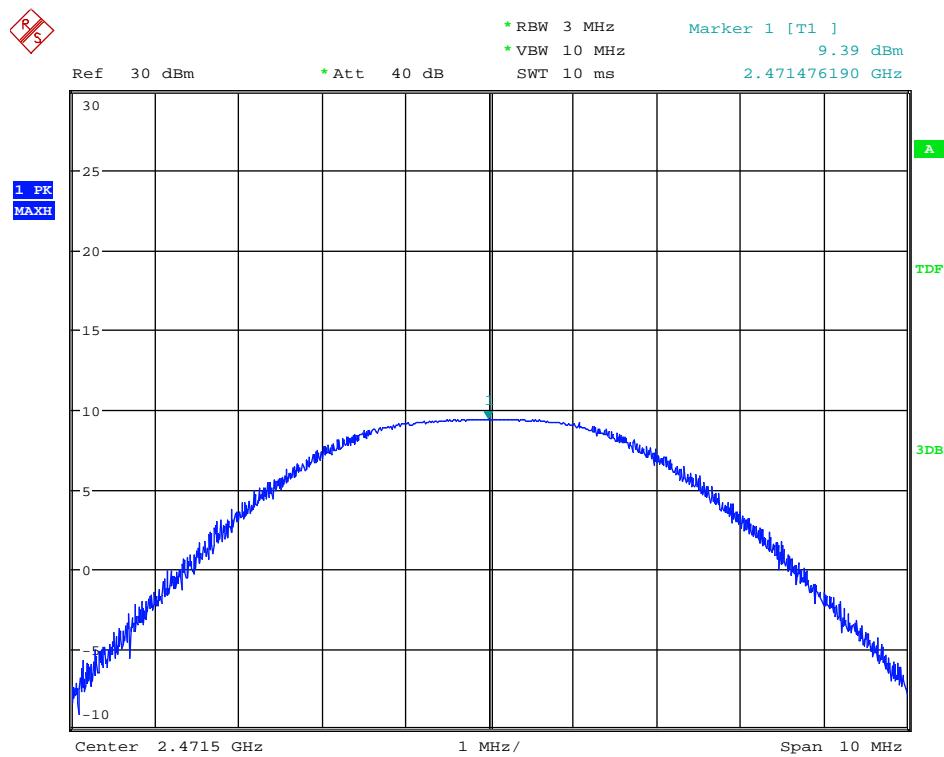
1.1.2. MSK-Data Rate 100Kbps



Plot 4: Conducted Power-RCM24G-MSK-100Kbps-Ch0(2402.5 MHz)-PWR+12dBm

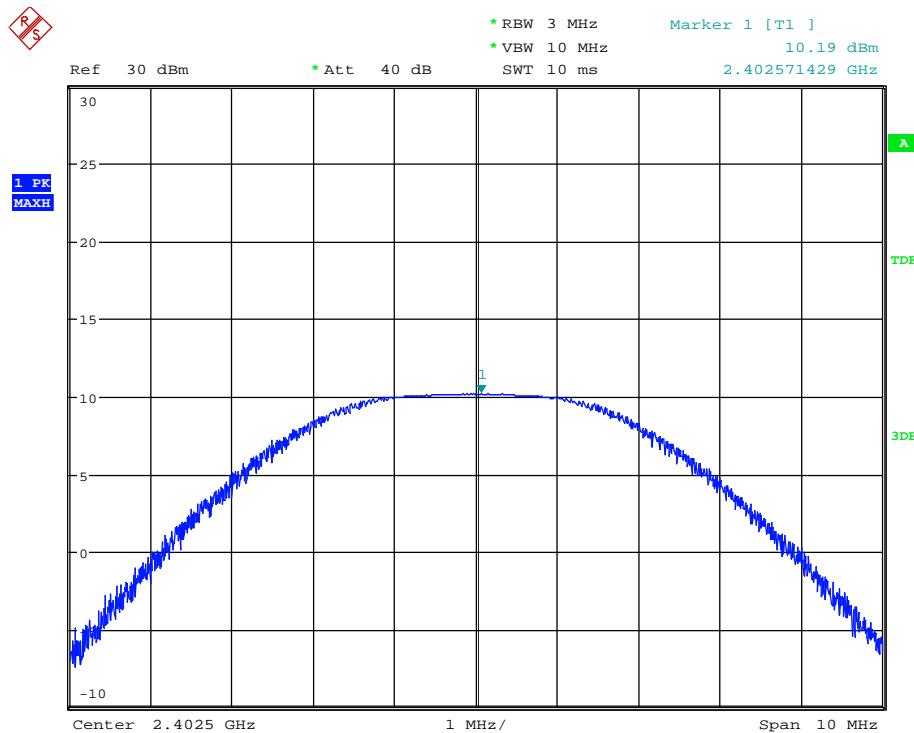


Plot 5: Conducted Power-RCM24G-MSK-100Kbps-Ch34 (2436.5 MHz)-PWR+21dBm

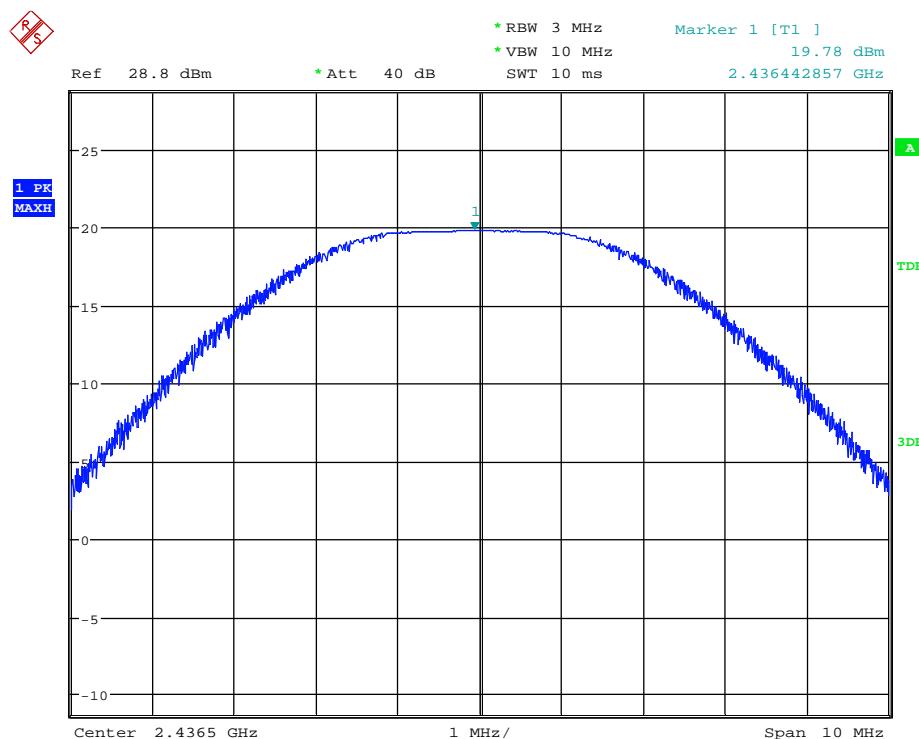


Plot 6: Conducted Power-RCM24G-MSK-100Kbps-Ch69 (2471.5 MHz)-PWR+12 dBm

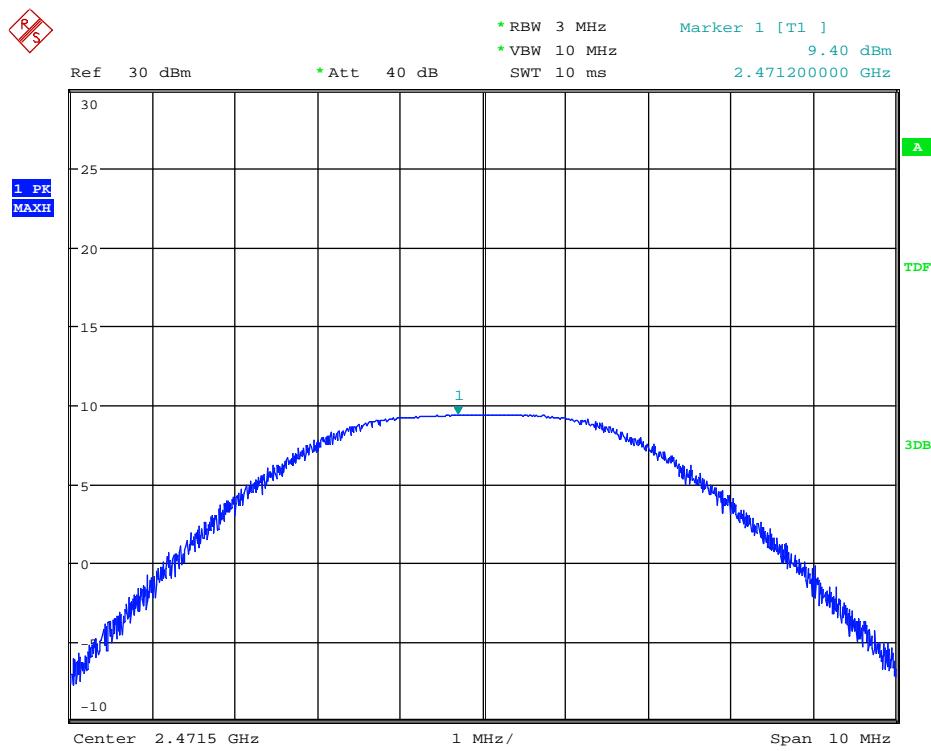
1.1.3. MSK-Data Rate 250Kbps



Plot 7: Conducted Power-RCM24G-MSK-250Kbps-Ch0(2402.5 MHz)-PWR+12dBm

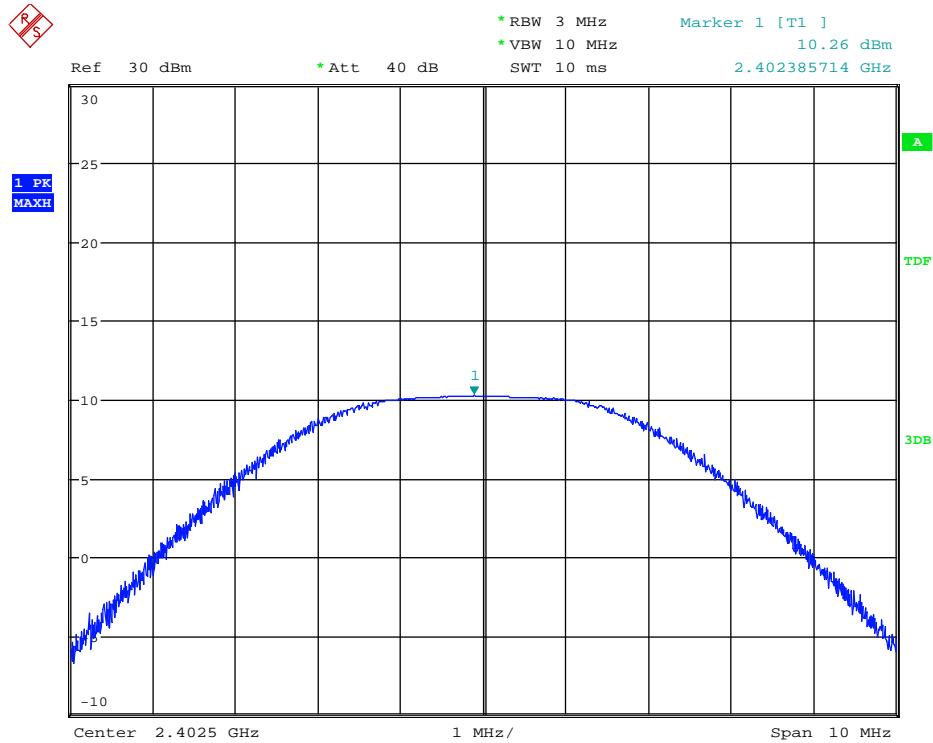


Plot 8: Conducted Power-RCM24G-MSK-250Kbps-Ch34 (2436.5 MHz)-PWR+21dBm

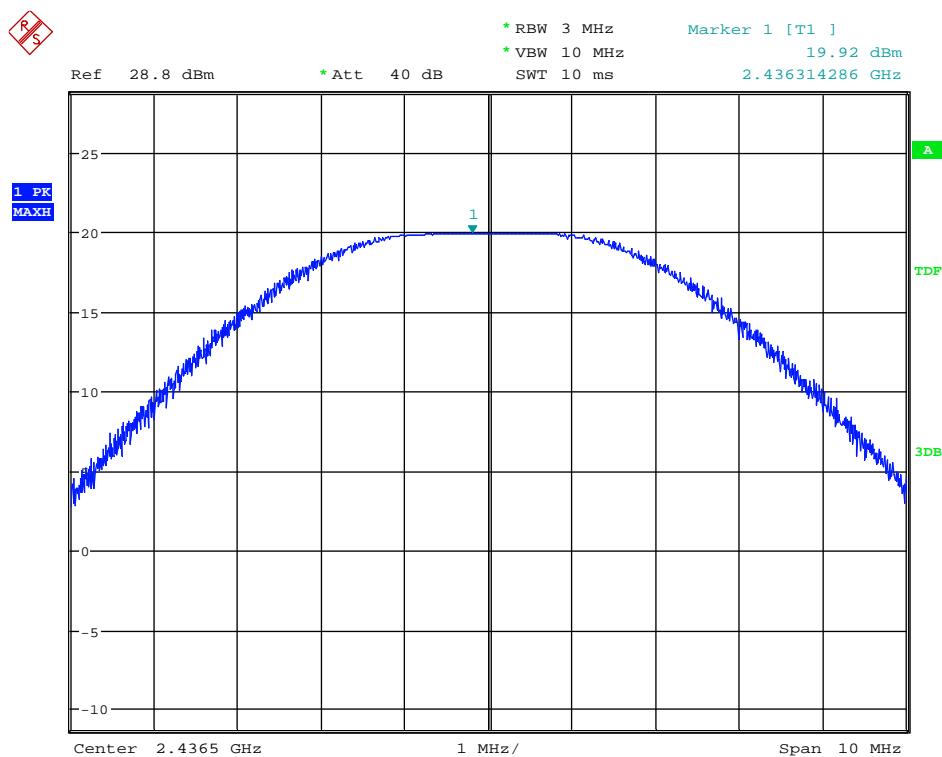


Plot 9: Conducted Power-RCM24G-MSK-250Kbps-Ch69 (2471.5 MHz)-PWR+12 dBm

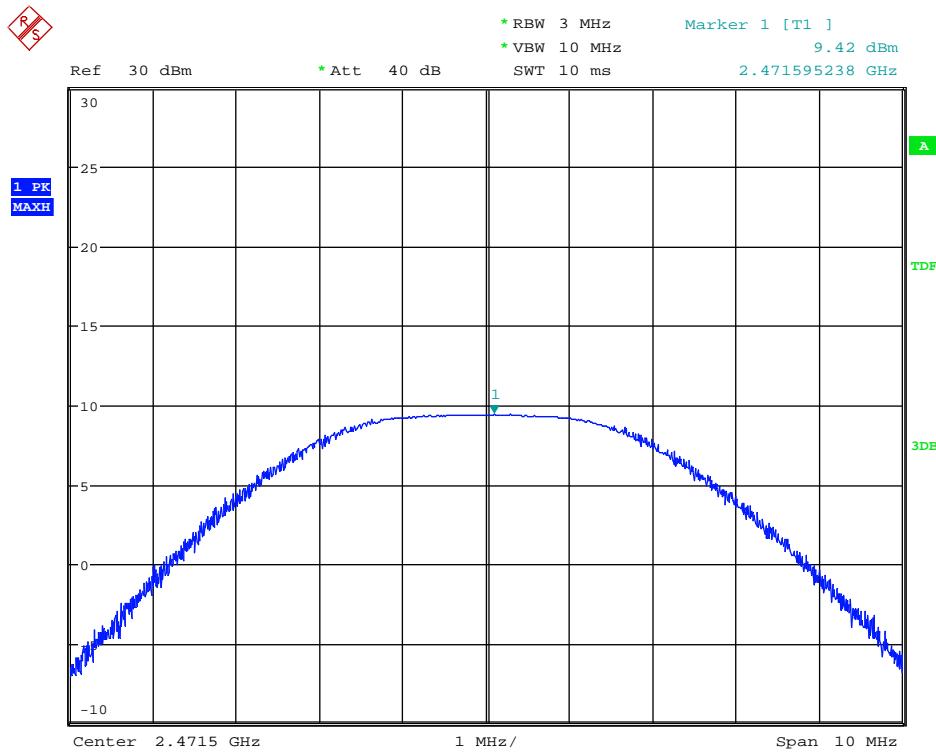
1.1.4. MSK-Data Rate 500Kbps



Plot 10: Conducted Power-RCM24G-MSK-500Kbps-Ch0(2402.5 MHz)-PWR+12dBm



Plot 11: Conducted Power-RCM24G-MSK-500Kbps-Ch34 (2436.5 MHz)-PWR+21dBm



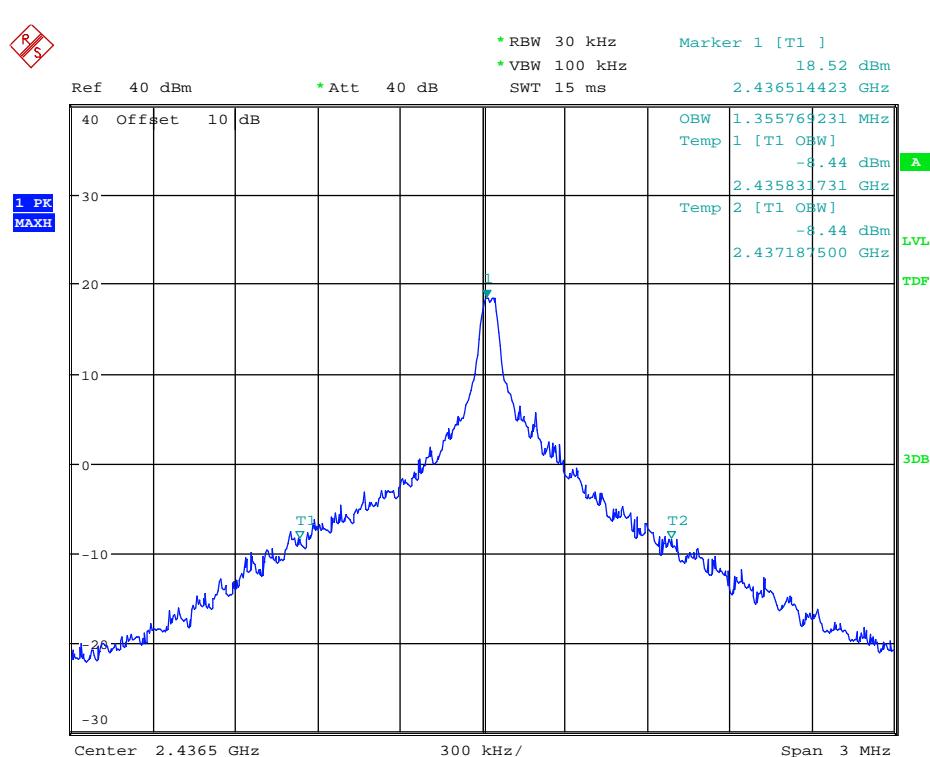
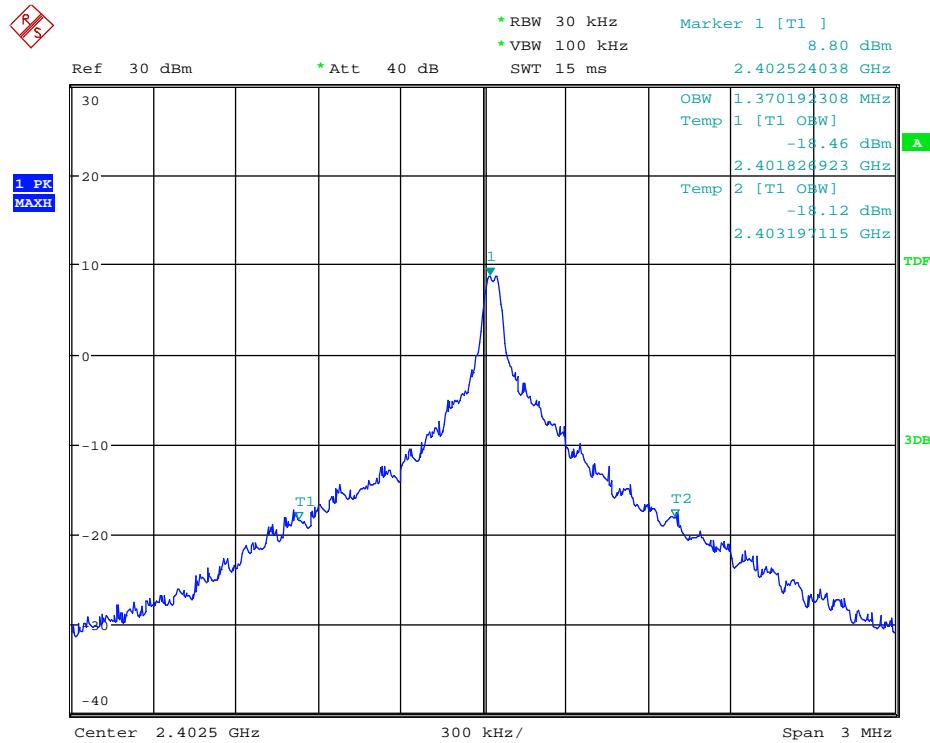
Plot 12: Conducted Power-RCM24G-MSK-500Kbps-Ch69 (2471.5 MHz)-PWR+12 dBm

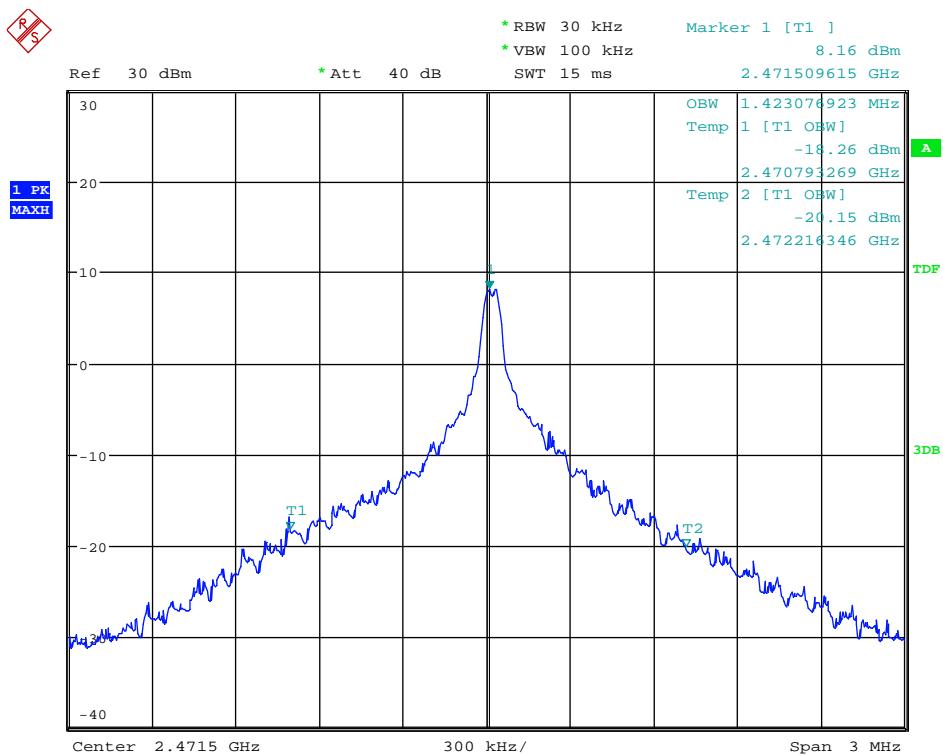
Tabular Summary of Conducted Power Measurements

Conducted Peak Power Measurements for Proprietary 2.4GHz FHSS (MSK) Modes				
Bluetooth FHSS (Mode)	Modulation (Data Rate)	Channel No. (Channel Frequency)	Conducted Peak Power (dBm)	Conducted Peak Power (mW)
2402.5 -24710.5 MHz (70 Channels FHSS Mode)	MSK (50 Kbps)	Channel No. 0 (2402,5 MHz)	10,19	10,45
	MSK (50 Kbps)	Channel No. 34 (2436,5 MHz)	19,93	98,40
	MSK (50 Kbps)	Channel No.69 (2471,5 MHz)	9,32	8,55
	MSK (100 Kbps)	Channel No. 0 (2402,5 MHz)	10,20	10,47
	MSK (100 Kbps)	Channel No. 34 (2436,5 MHz)	19,89	97,50
	MSK (100 Kbps)	Channel No.69 (2471,5 MHz)	9,39	8,69
	MSK (250 Kbps)	Channel No. 0 (2402,5 MHz)	10,19	10,45
	MSK (250 Kbps)	Channel No. 34 (2436,5 MHz)	19,78	95,06
	MSK (250 Kbps)	Channel No.69 (2471,5 MHz)	9,40	8,71
	MSK (500 Kbps)	Channel No. 0 (2402,5 MHz)	10,26	10,62
	MSK (500 Kbps)	Channel No. 34 (2436,5 MHz)	19,92	98,17
	MSK (500 Kbps)	Channel No.69 (2471,5 MHz)	9,42	8,75
FCC 15.247 Conducted Peak Power Limits			20.97 dBm	125 mW
RSS-247 Issue2 Limits				

1.2. 99% Occupied Bandwidth

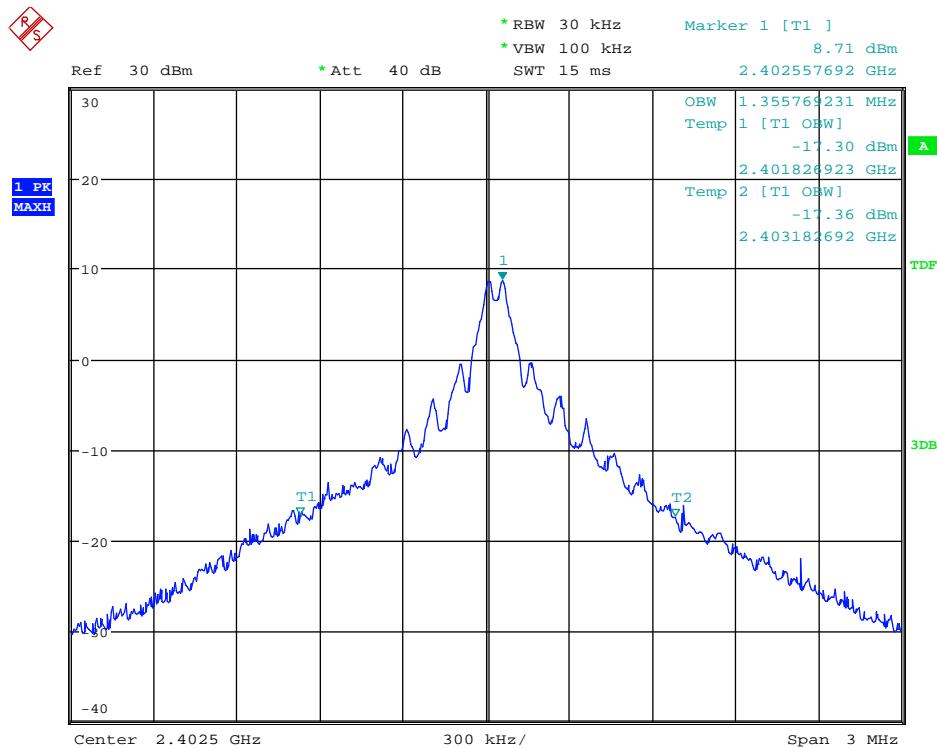
1.2.1. MSK-Data Rate 50Kbps



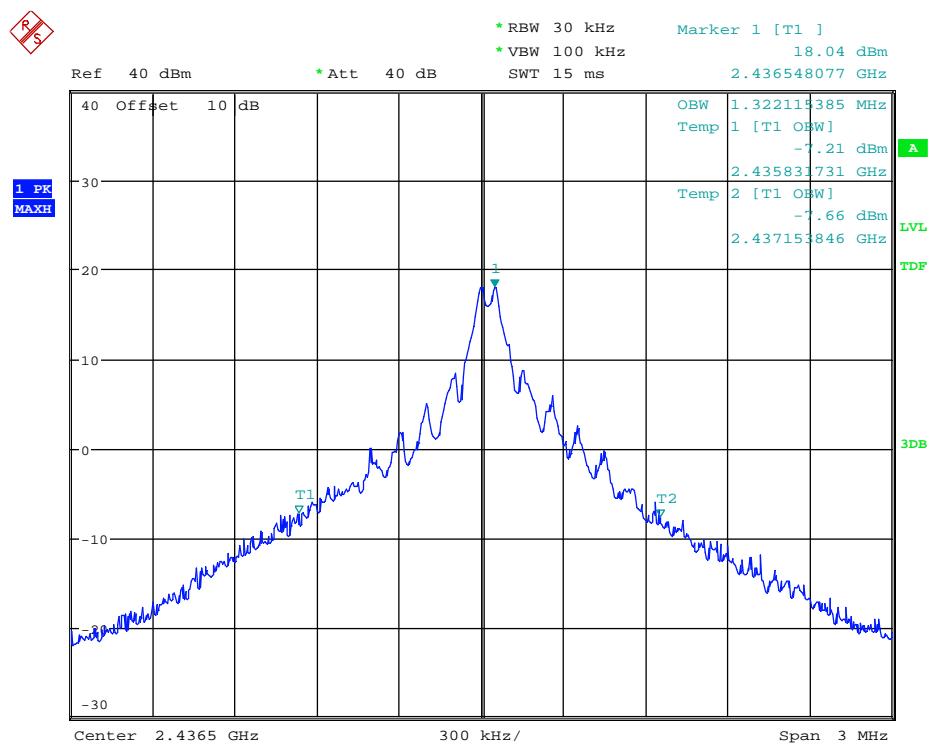


Plot 15: 99% OBW-RCM24G-MSK-50Kbps-Ch69 (2471.5 MHz)-PWR+12 dBm

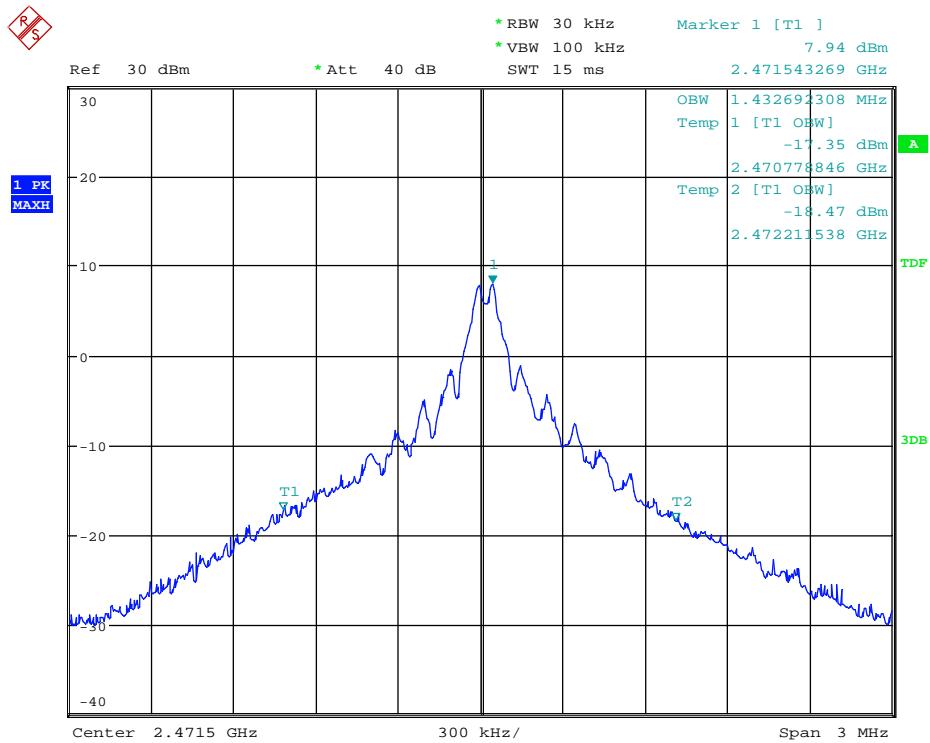
1.2.2. MSK-Data Rate 100Kbps



Plot 16: 99% OBW-RCM24G-MSK-100Kbps-Ch0(2402.5 MHz)-PWR+12dBm

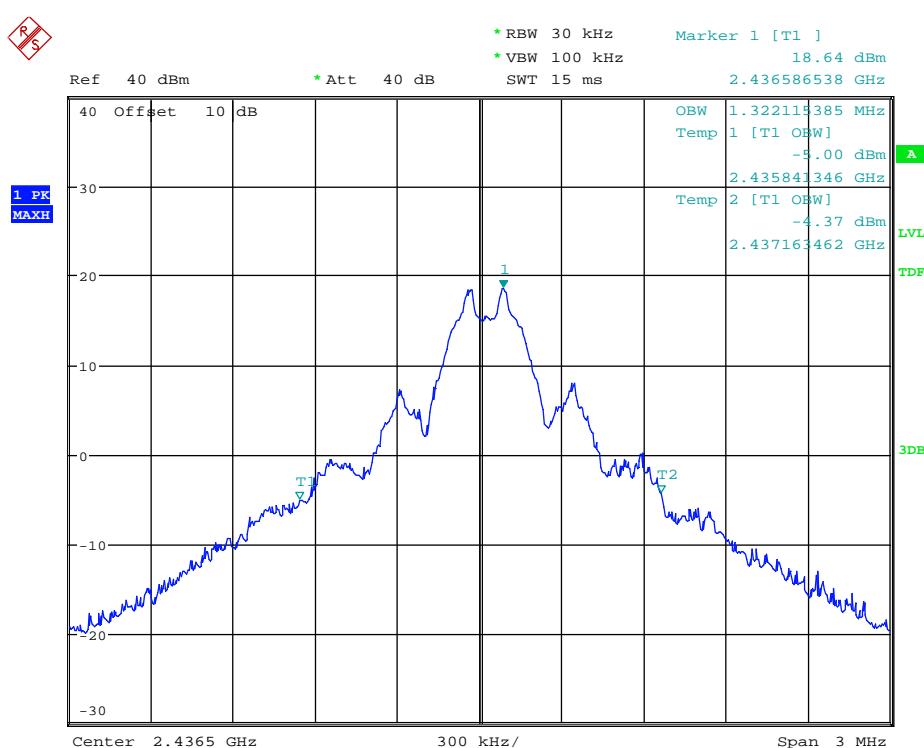
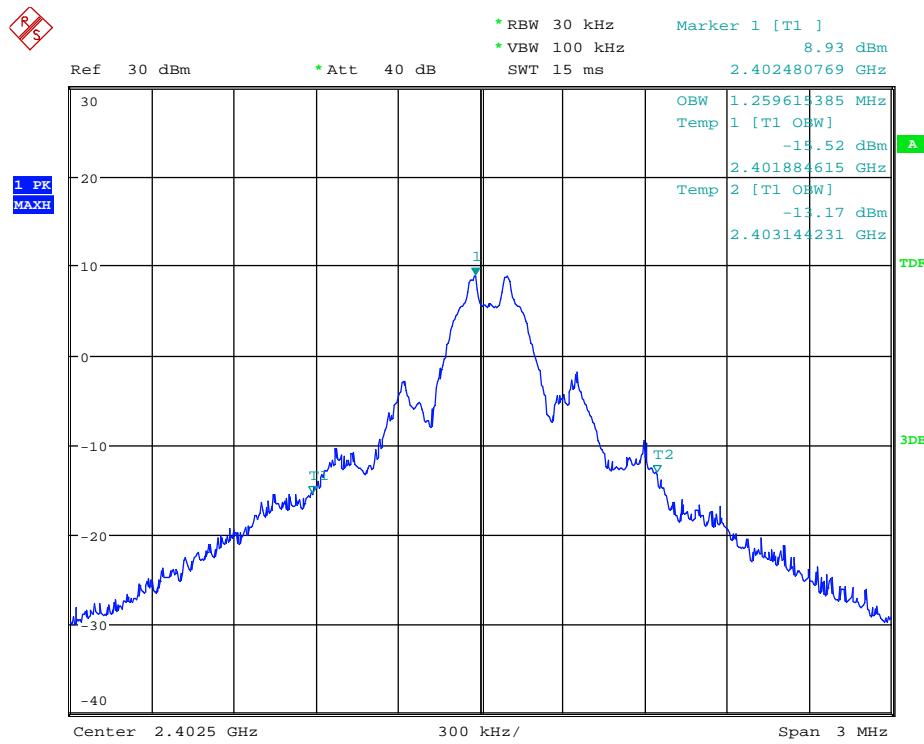


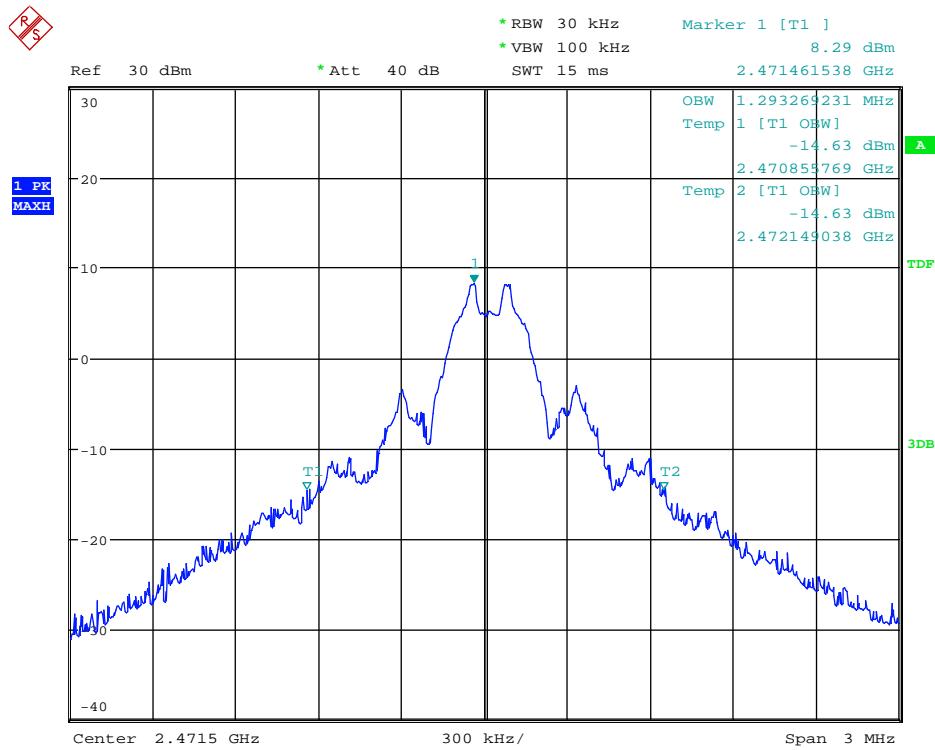
Plot 17: 99% OBW-RCM24G-MSK-100Kbps-Ch34 (2436.5 MHz)-PWR+21dBm



Plot 18: 99% OBW-RCM24G-MSK-100Kbps-Ch69 (2471.5 MHz)-PWR+12 dBm

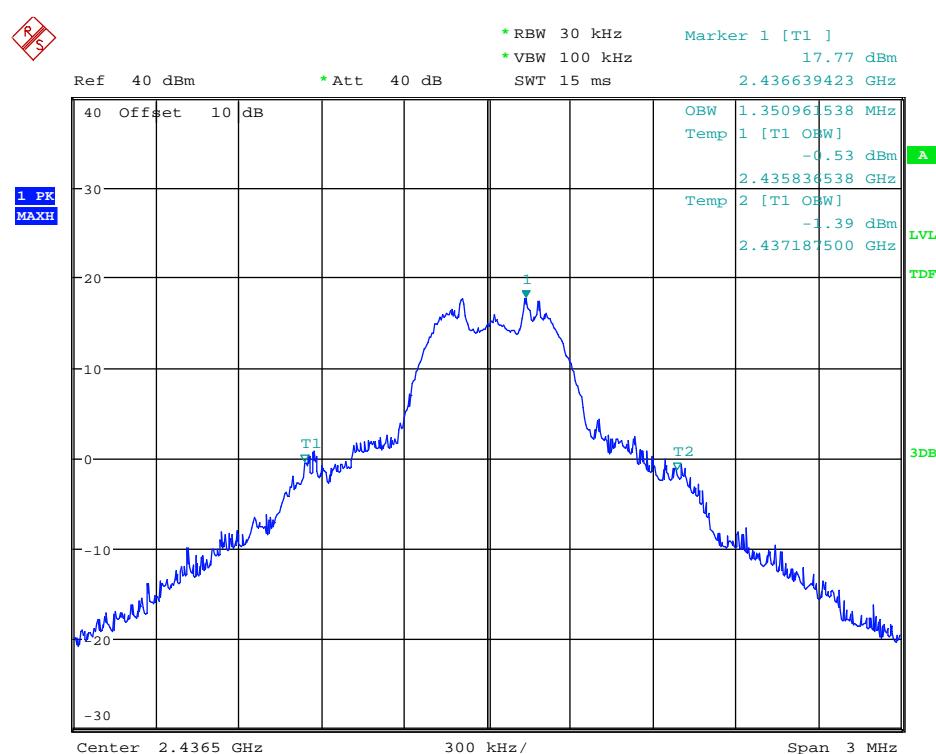
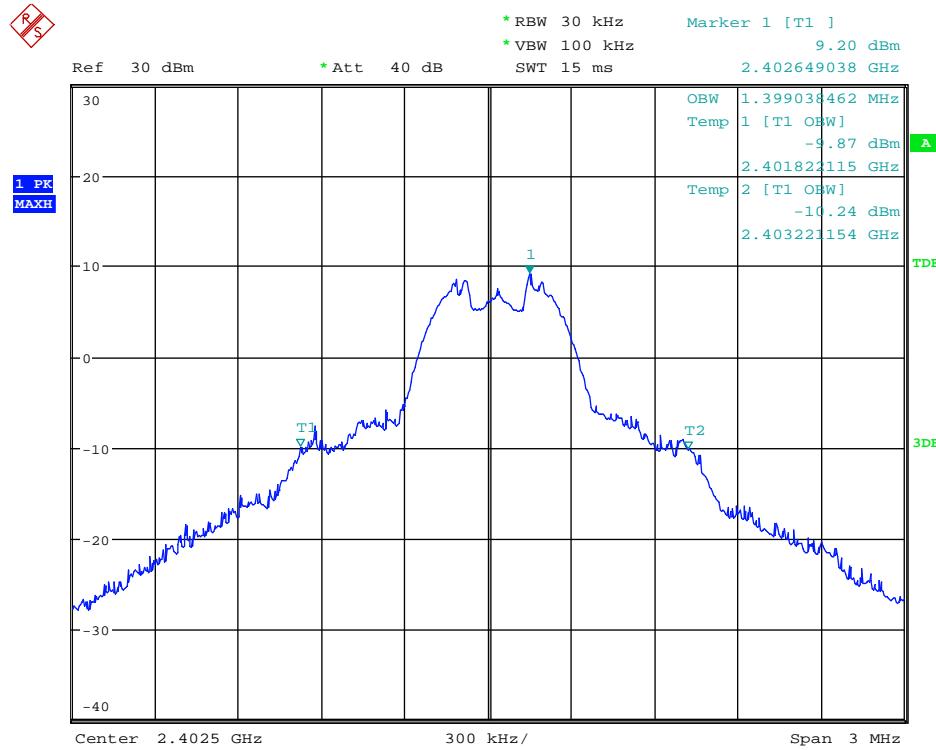
1.2.3. MSK-Data Rate 250Kbps

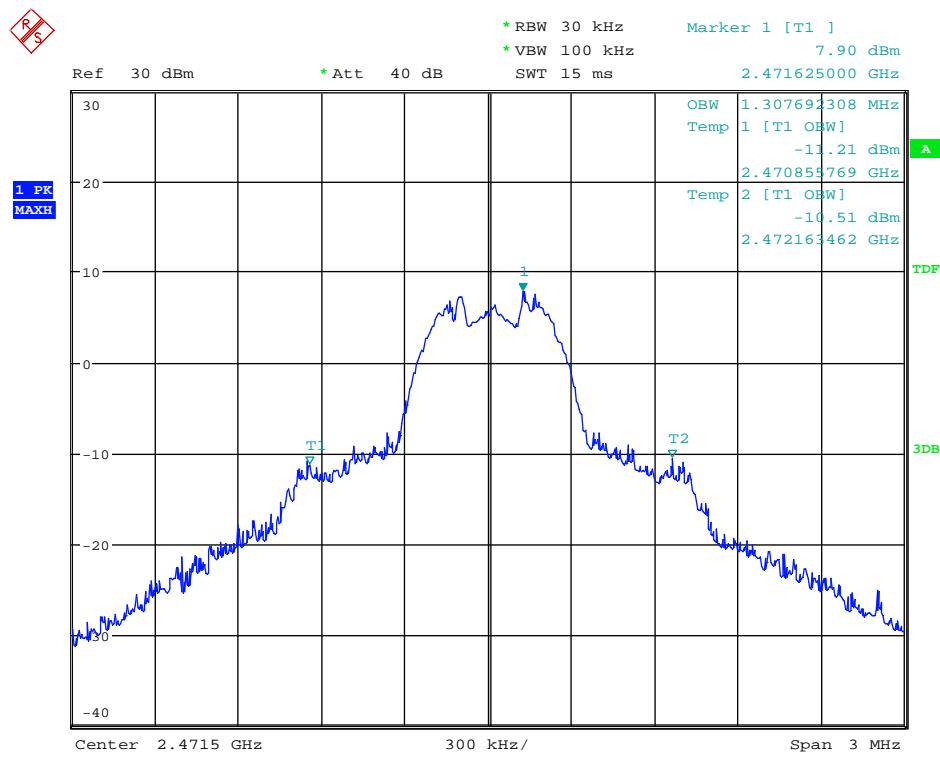




Plot 21: 99% OBW-RCM24G-MSK-250Kbps-Ch69 (2471.5 MHz)-PWR+12 dBm

1.2.4. MSK-Data Rate 500Kbps

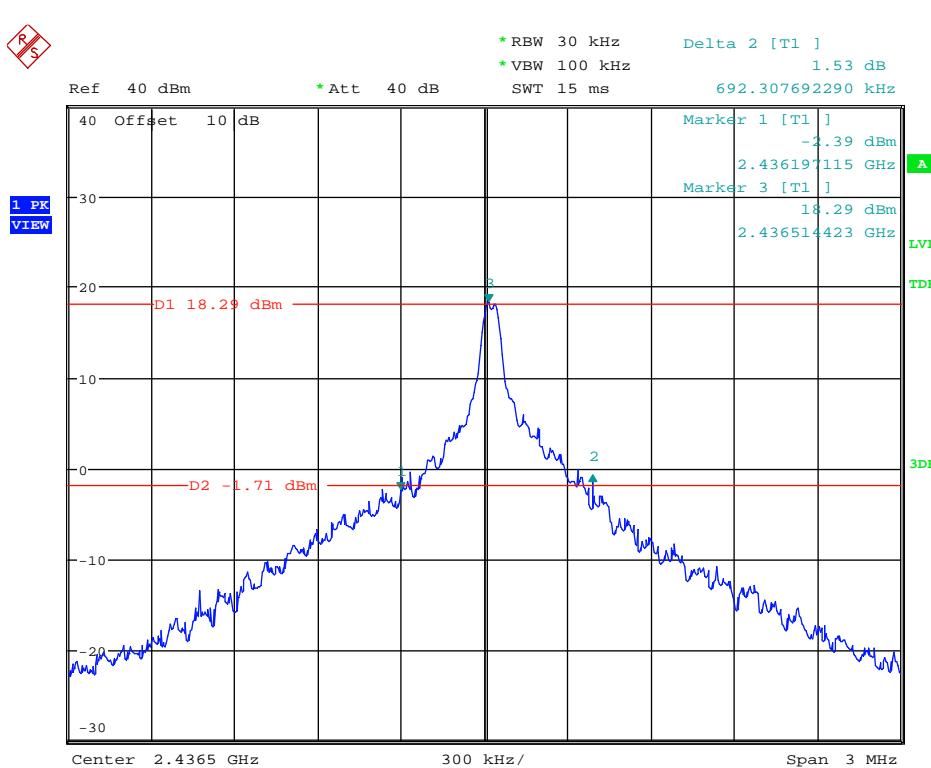
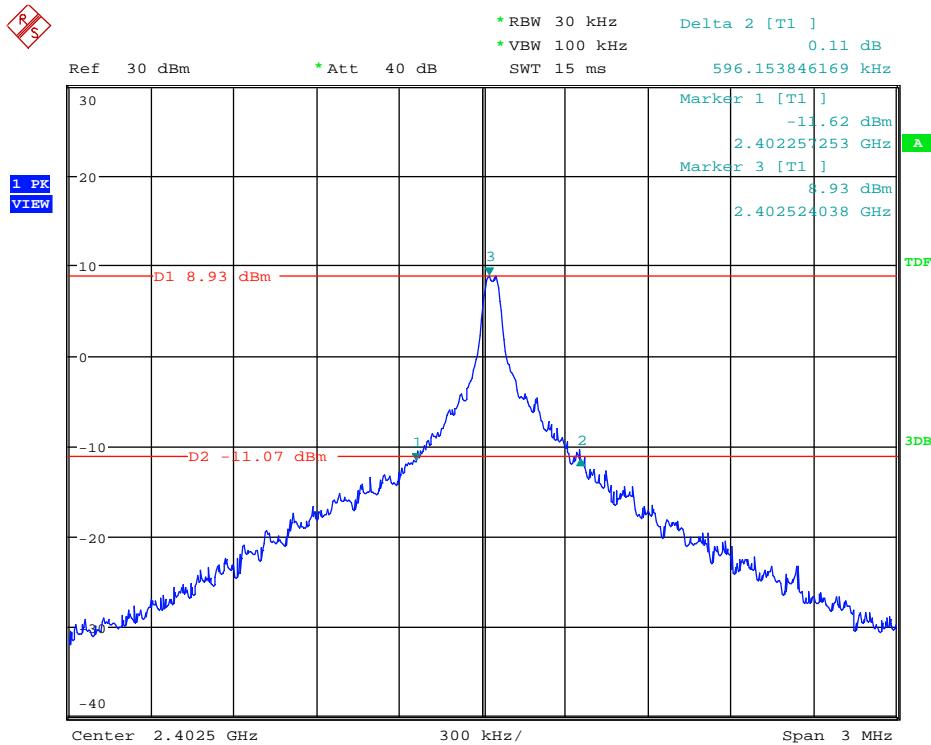


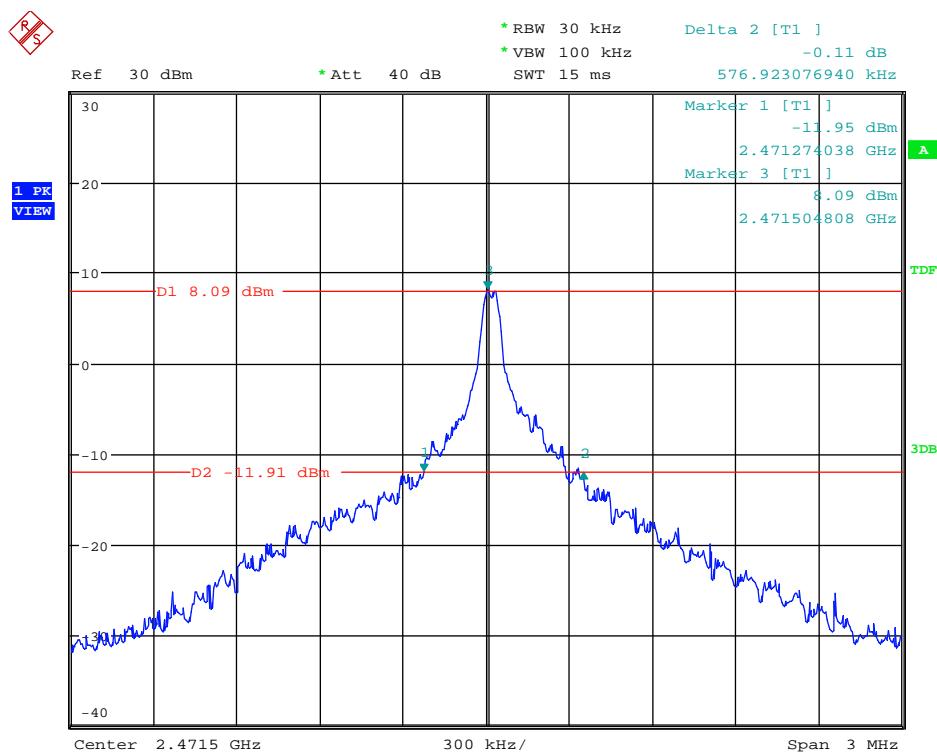


Plot 24: 99% OBW-RCM24G-MSK-500Kbps-Ch69 (2471.5 MHz)-PWR+12 dBm

1.3. 20 dB Bandwidth

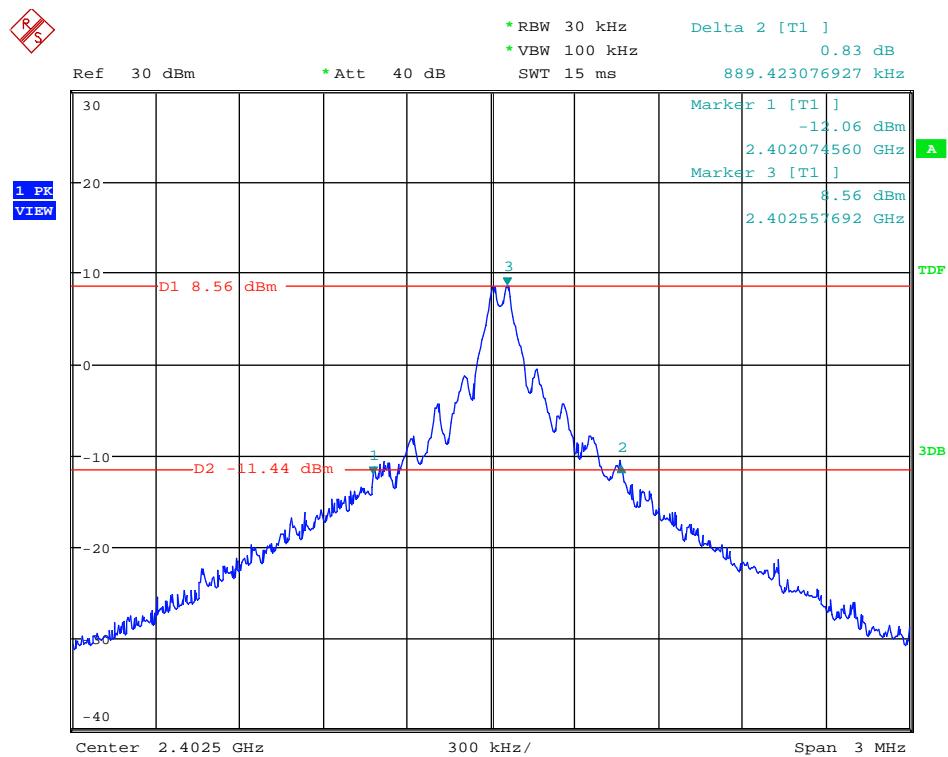
1.3.1. MSK-Data Rate 50Kbps



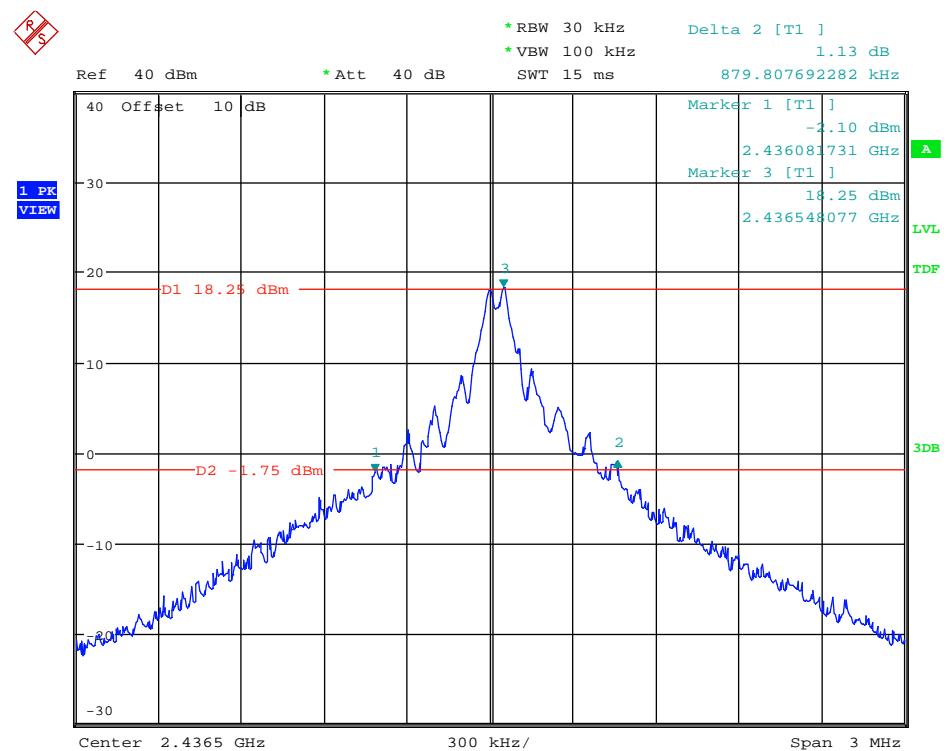


Plot 27: 20dB B.W.-RCM24G-MSK-50Kbps-Ch69 (2471.5 MHz)-PWR+12 dBm

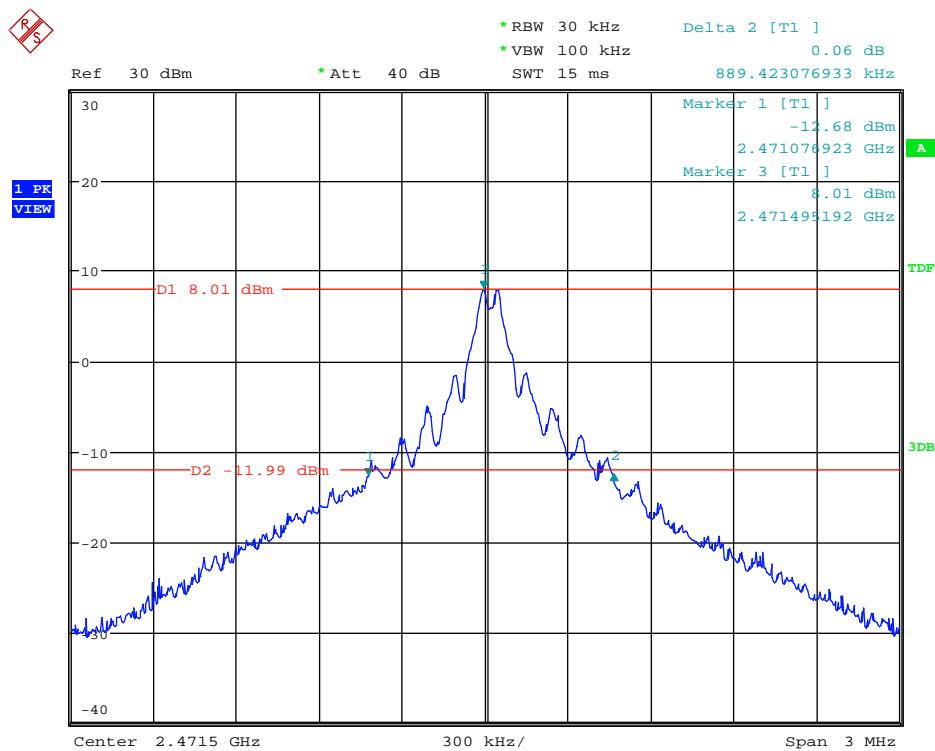
1.3.2. MSK-Data Rate 100Kbps



Plot 28: 20dB B.W.-RCM24G-MSK-100Kbps-Ch0(2402.5 MHz)-PWR+12dBm

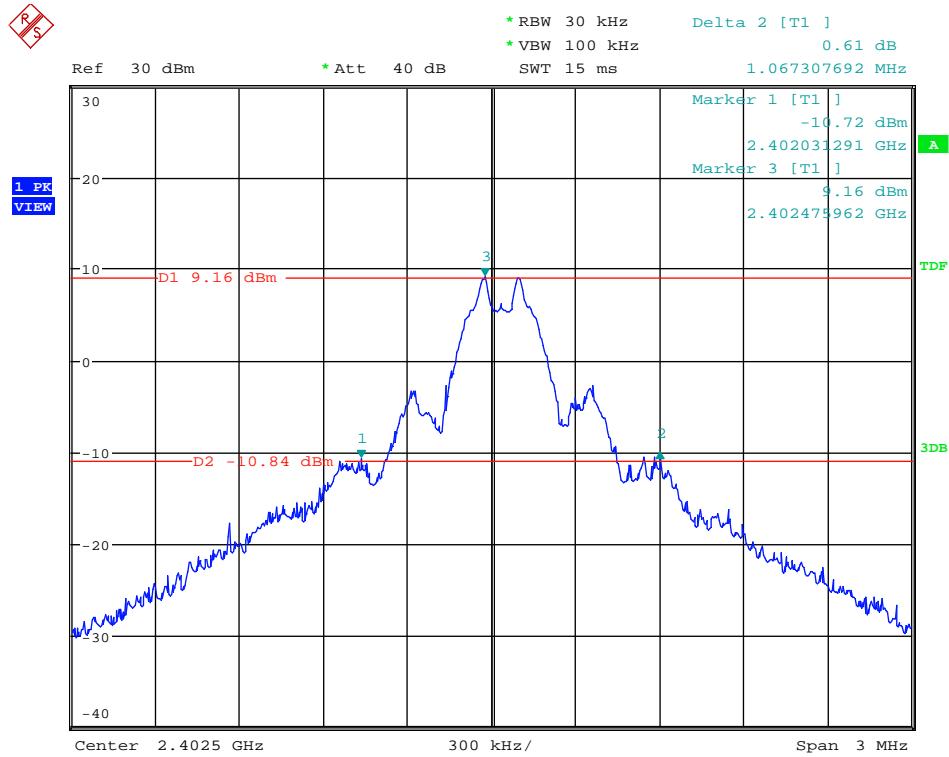


Plot 29: 20dB B.W.-RCM24G-MSK-100Kbps-Ch34 (2436.5 MHz)-PWR+21dBm

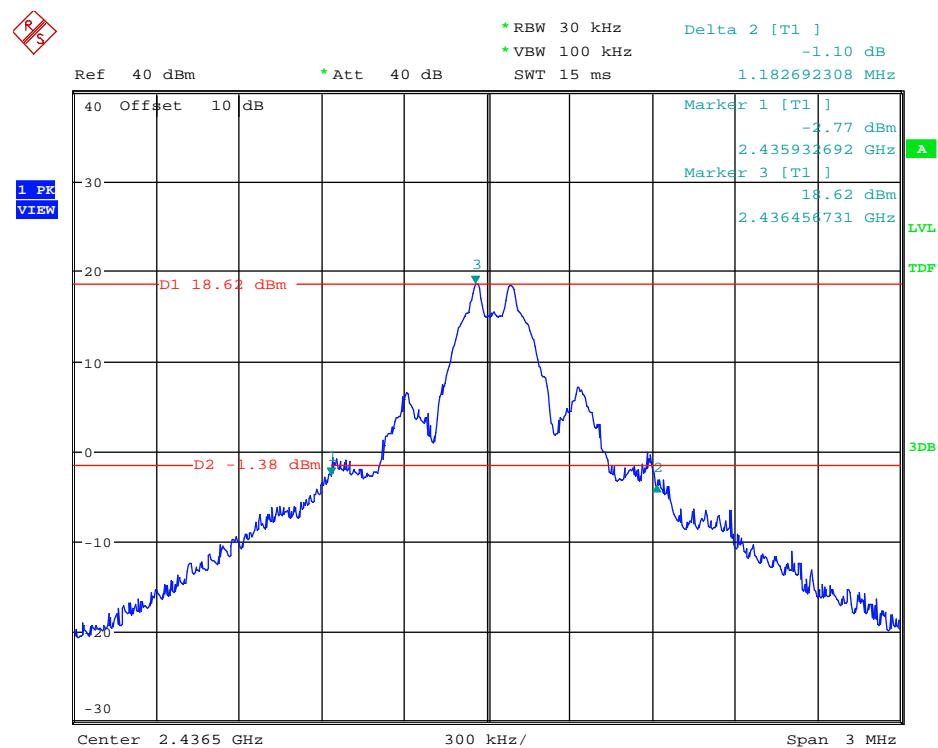


Plot 30: 20dB B.W.-RCM24G-MSK-100Kbps-Ch69 (2471.5 MHz)-PWR+12 dBm

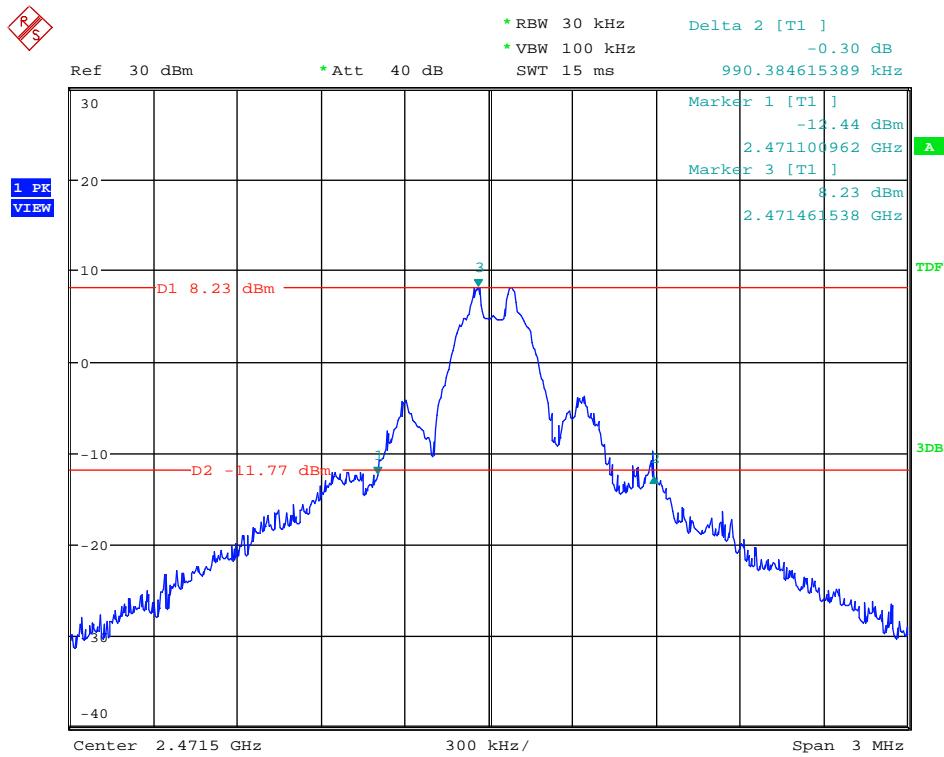
1.3.3. MSK-Data Rate 250Kbps



Plot 31: 20dB B.W.-RCM24G-MSK-250Kbps-Ch0(2402.5 MHz)-PWR+12dBm

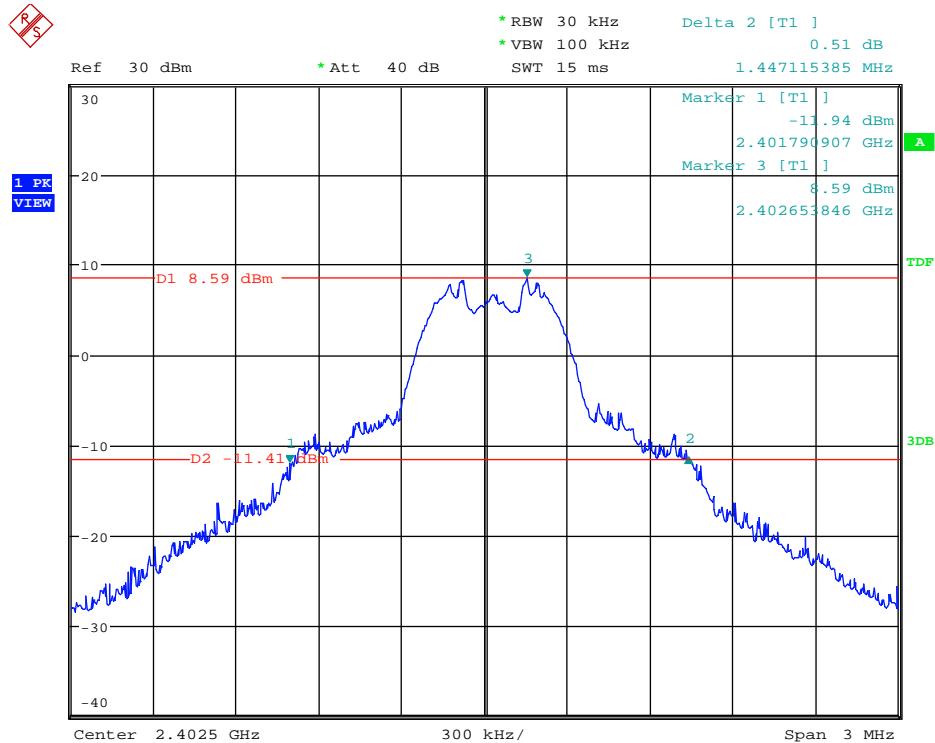


Plot 32: 20dB B.W.-RCM24G-MSK-250Kbps -Ch34 (2436.5 MHz)-PWR+21dBm

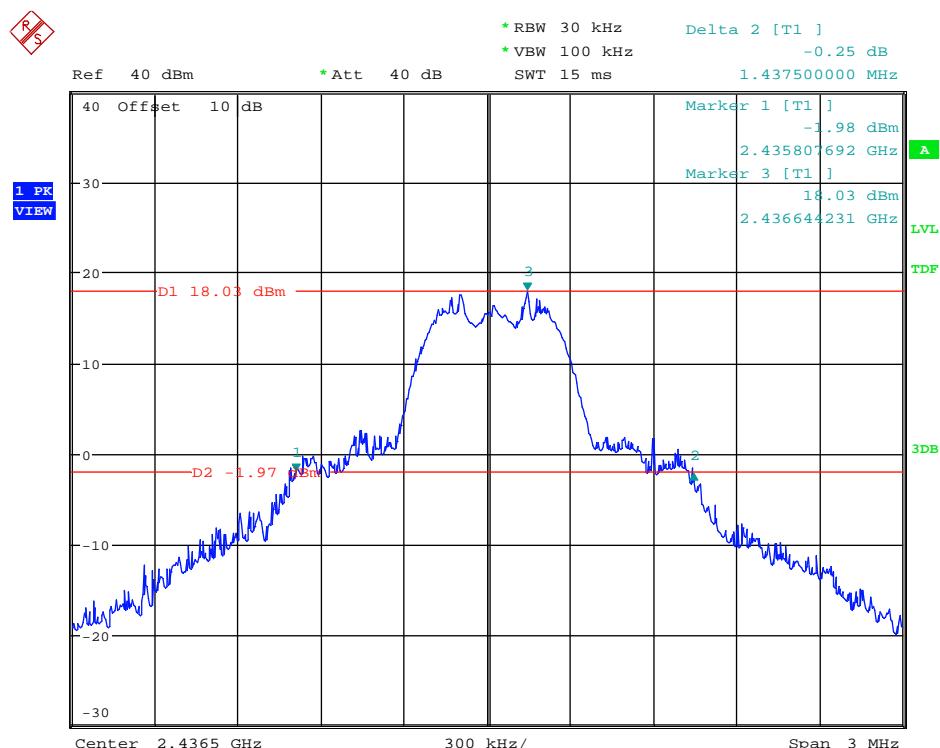


Plot 33: 20dB B.W.-RCM24G-MSK-250Kbps -Ch69 (2471.5 MHz)-PWR+12 dBm

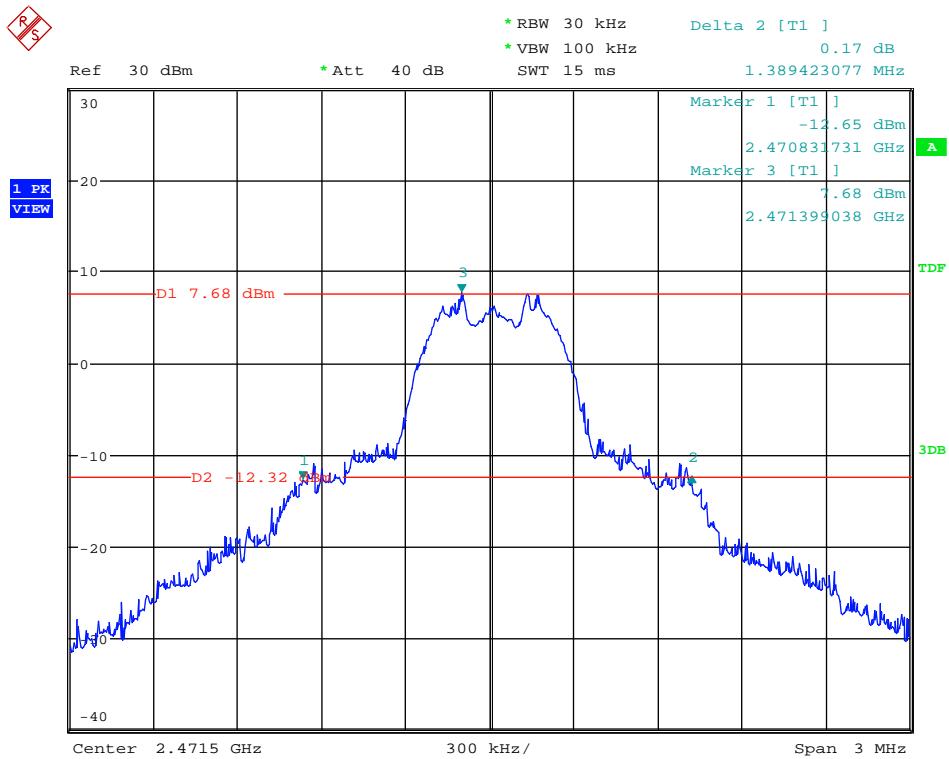
1.3.4. MSK-Data Rate 500Kbps



Plot 34: 20dB B.W.-RCM24G-MSK-500Kbps-Ch0(2402.5 MHz)-PWR+12dBm



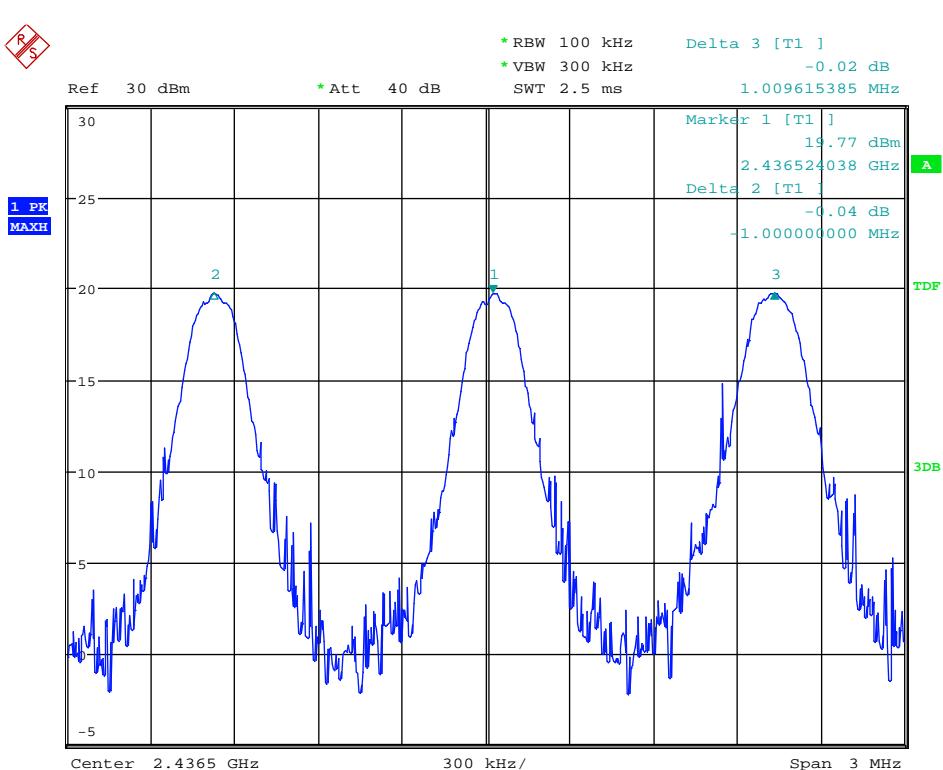
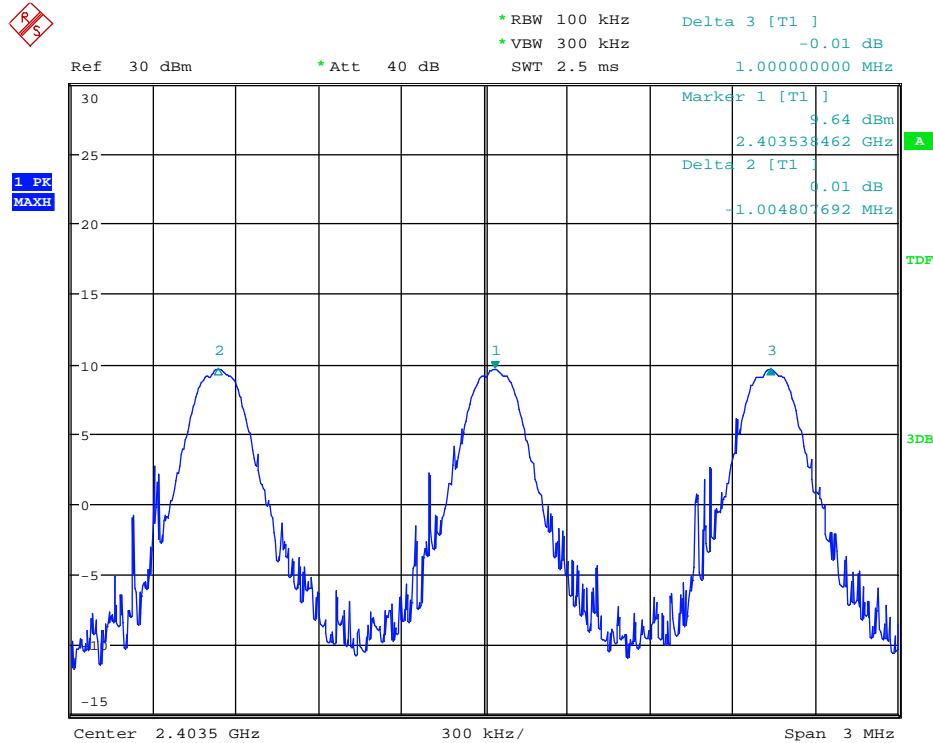
Plot 35: 20dB B.W.-RCM24G-MSK-500Kbps-Ch34 (2436.5 MHz)-PWR+21dBm

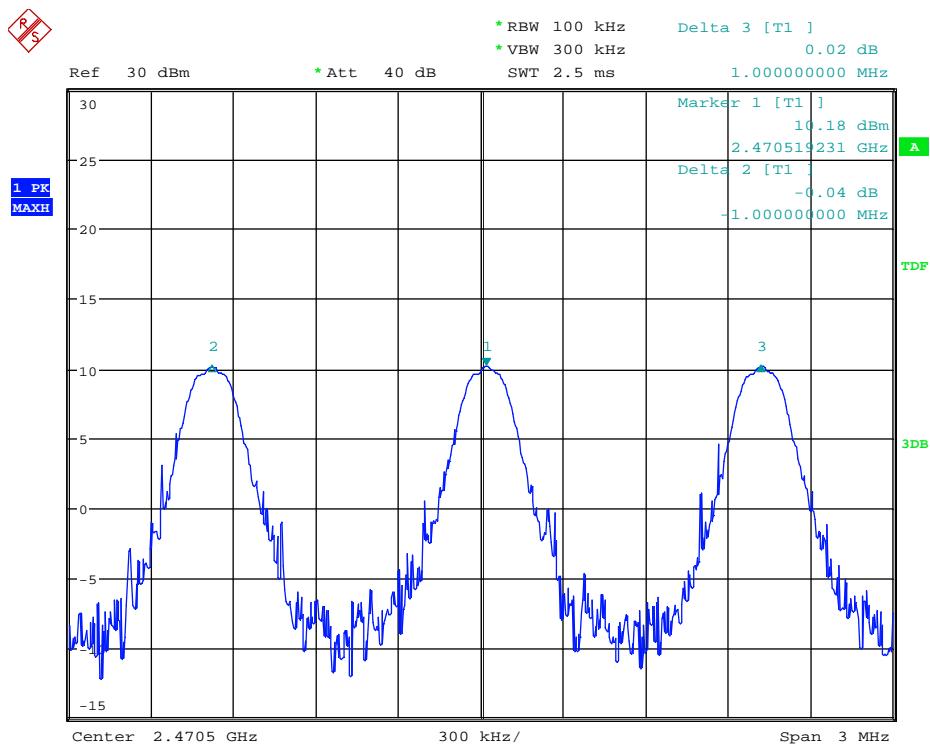


Plot 36: 20dB B.W.-RCM24G-MSK-500Kbps-Ch69 (2471.5 MHz)-PWR+12 dBm

1.4. Carrier Frequency Separations (CFS)

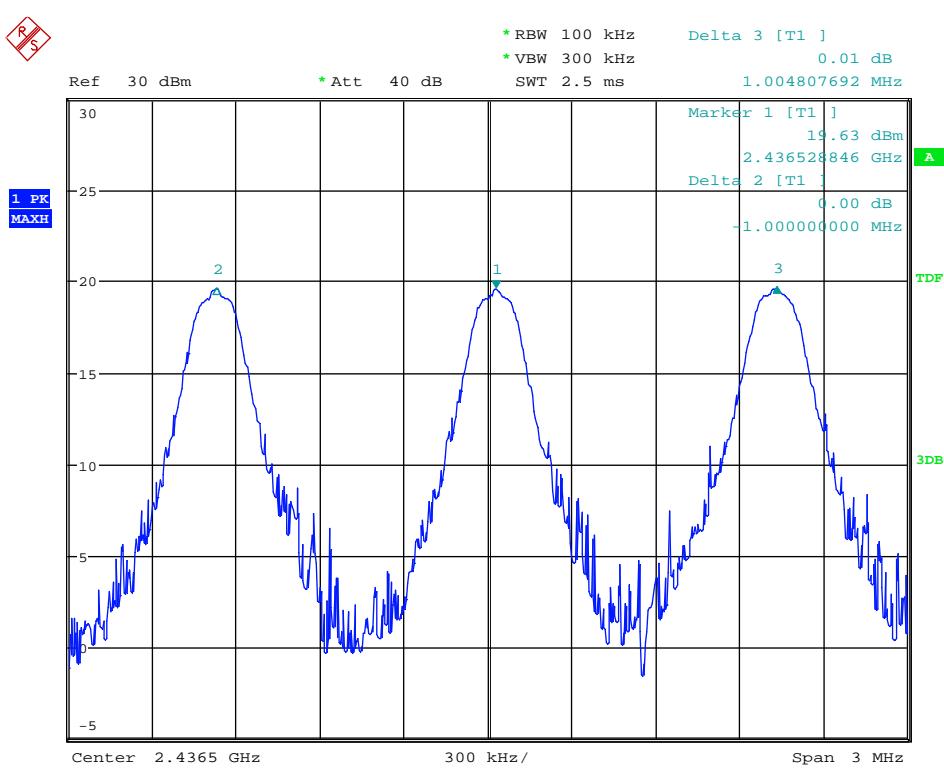
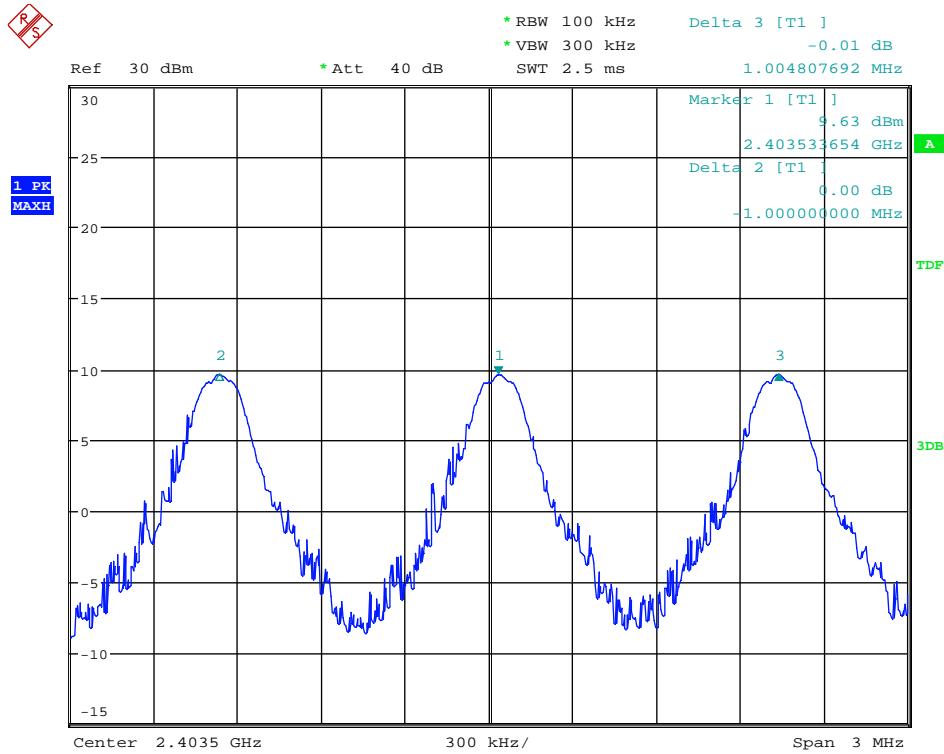
1.4.1. MSK-Data Rate 50Kbps

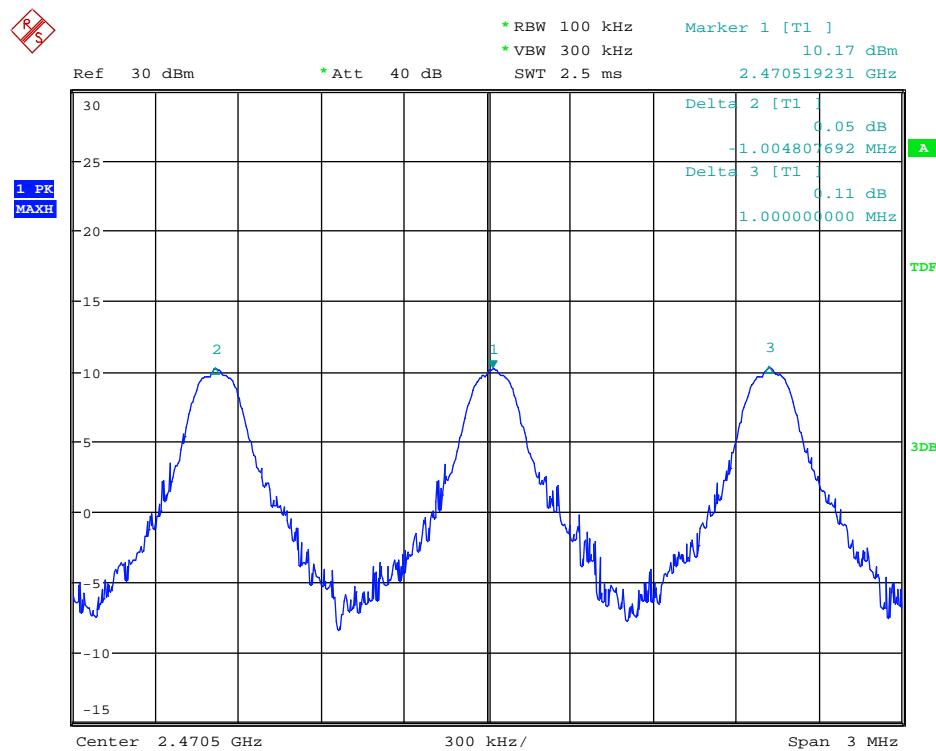




Plot 39: CFS-RCM24G-MSK-50Kbps-Ch67-Ch68-Ch69-PWR+12 dBm

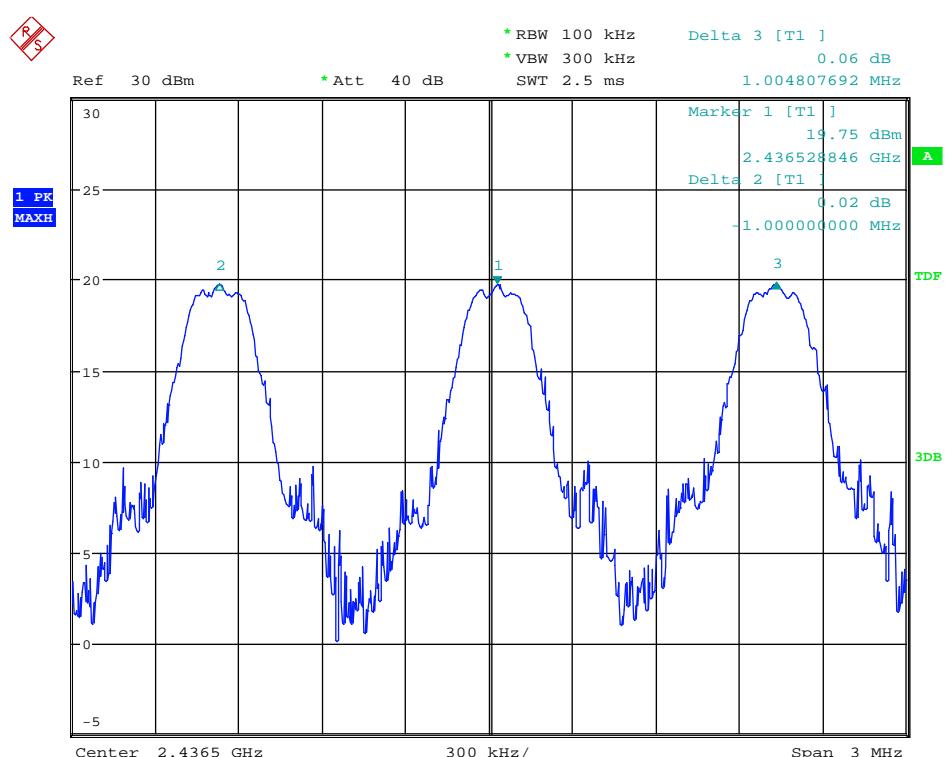
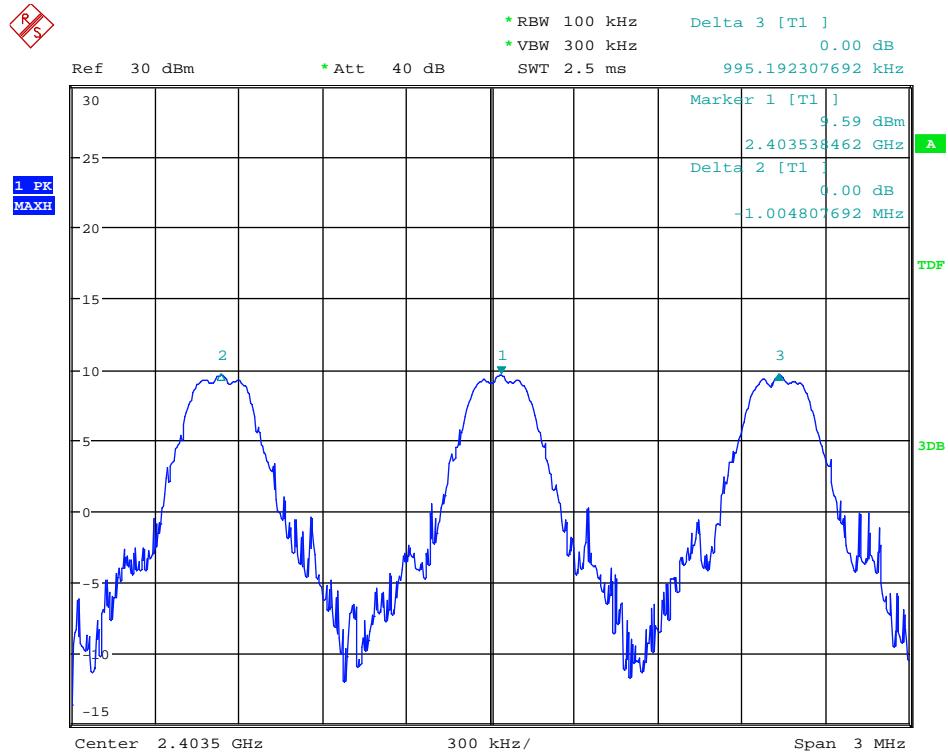
1.4.2. MSK-Data Rate 100Kbps

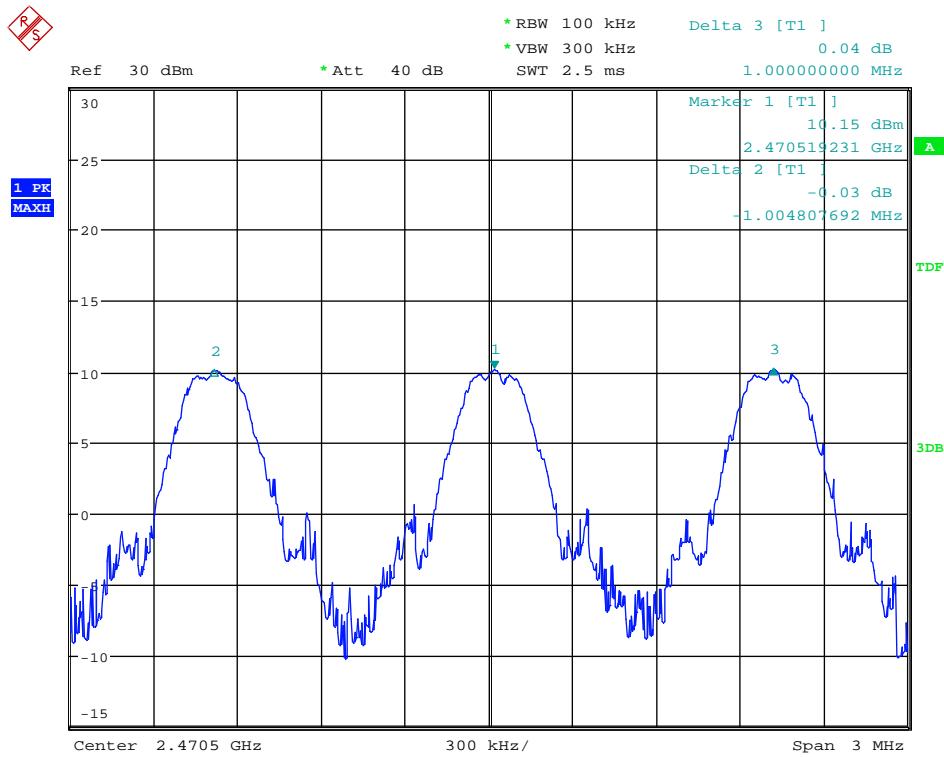




Plot 42: CFS-RCM24G-MSK-100Kbps-Ch67-Ch68-Ch69-PWR+12 dBm

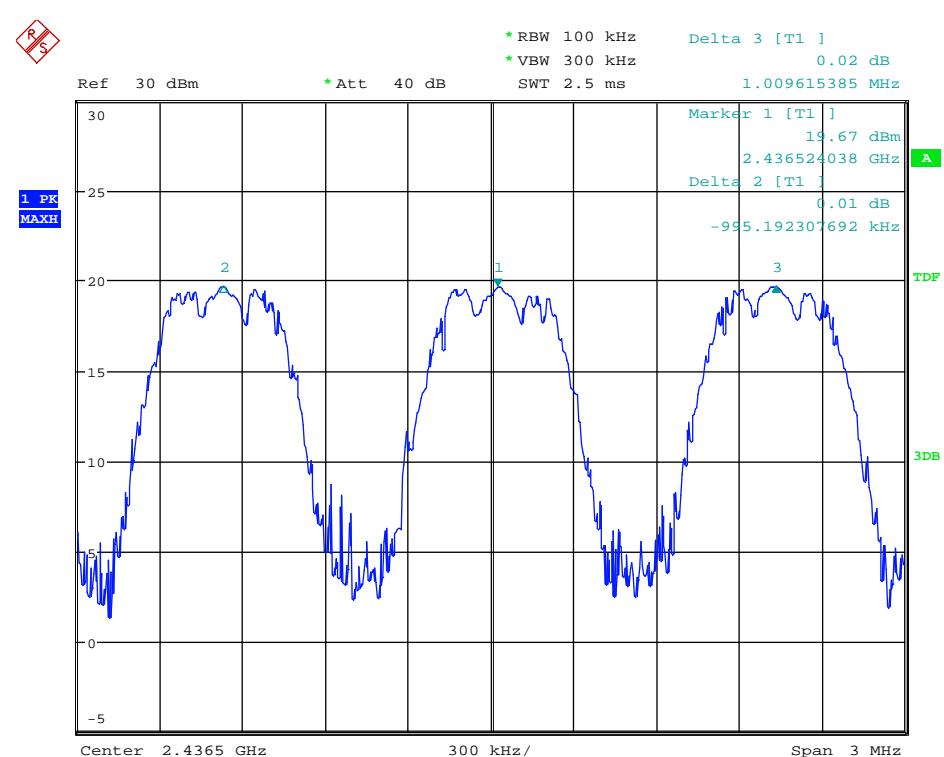
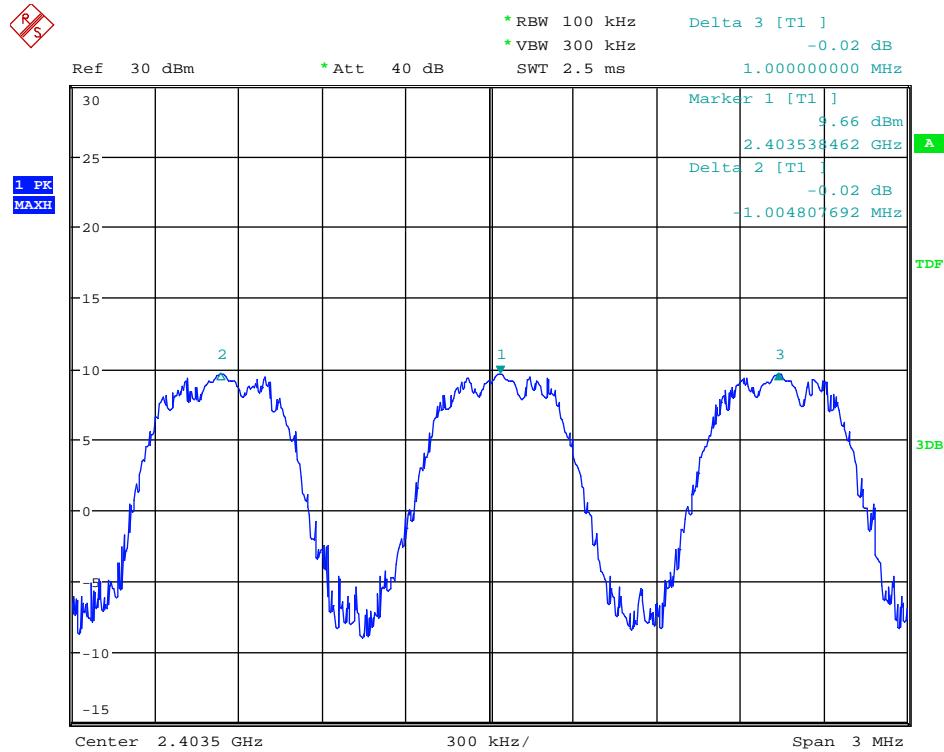
1.4.3. MSK-Data Rate 250Kbps

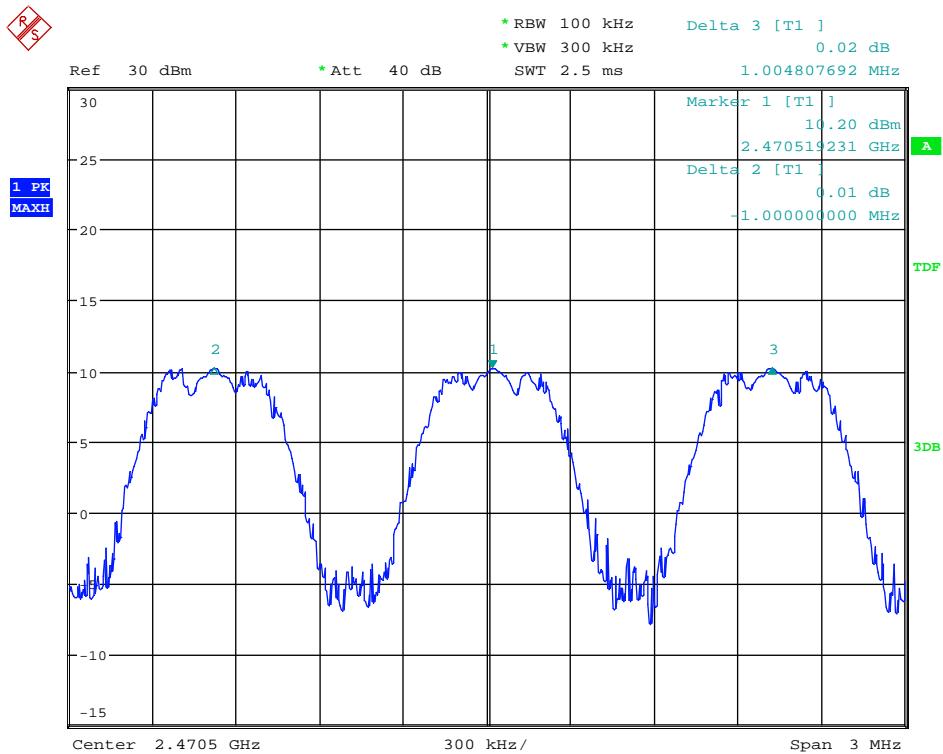




Plot 45: CFS-RCM24G-MSK-250Kbps –Ch67-Ch68-Ch69-PWR+12 dBm

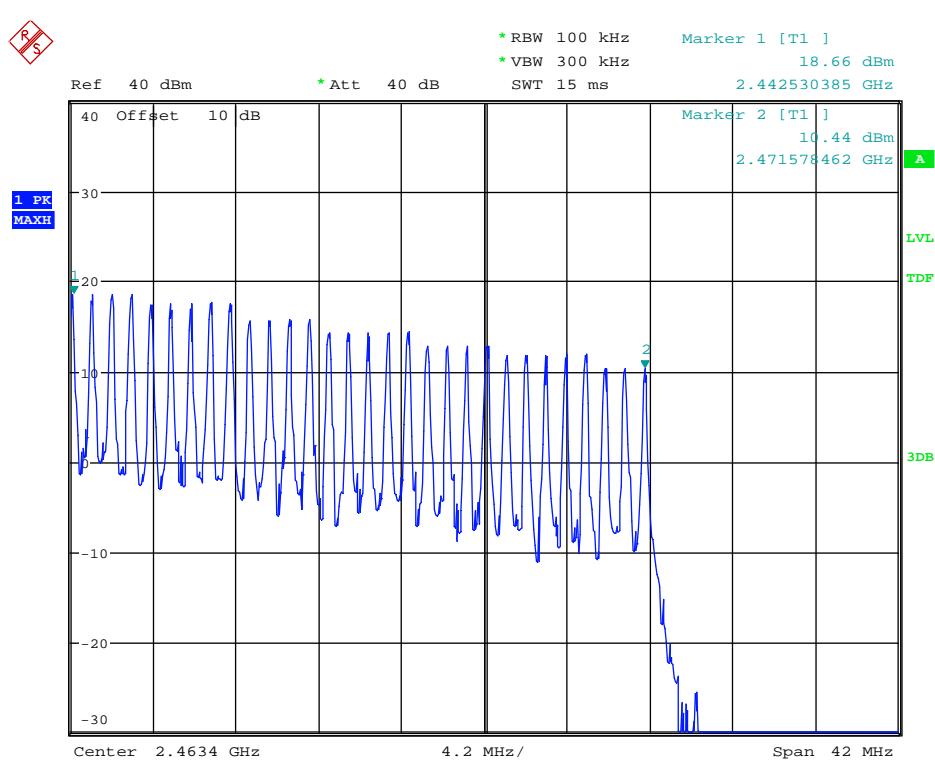
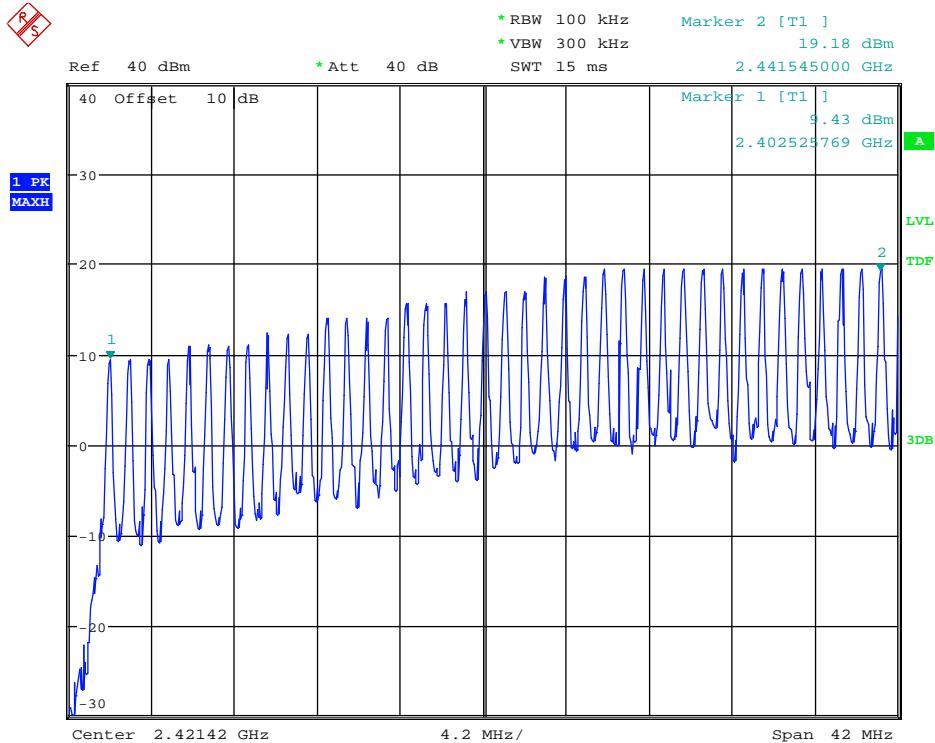
1.4.4. MSK-Data Rate 500Kbps



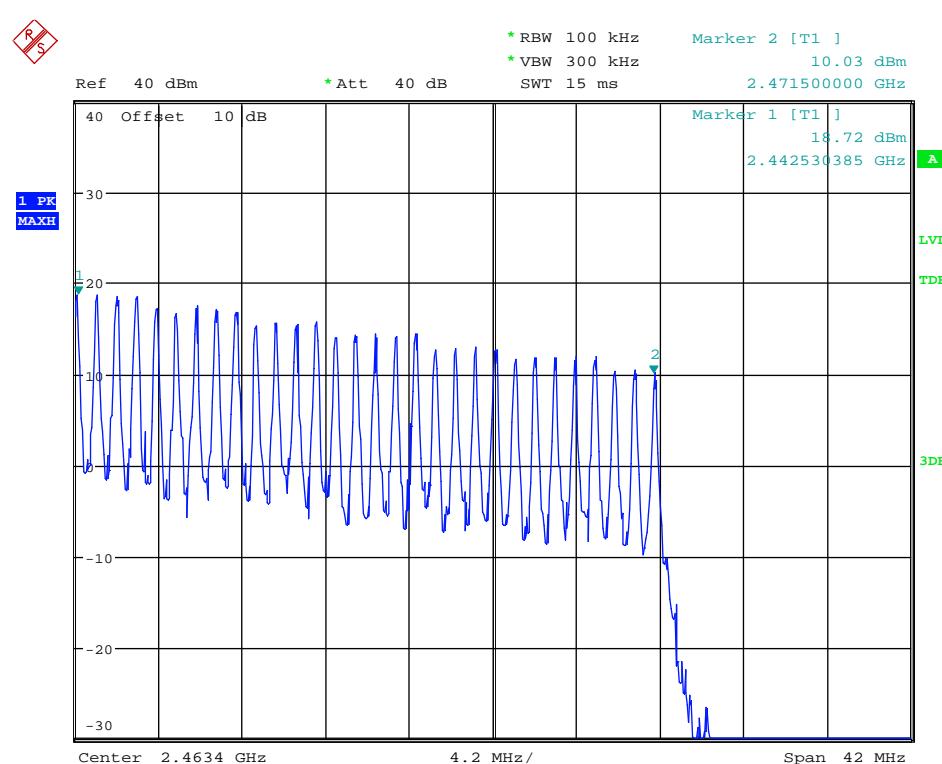
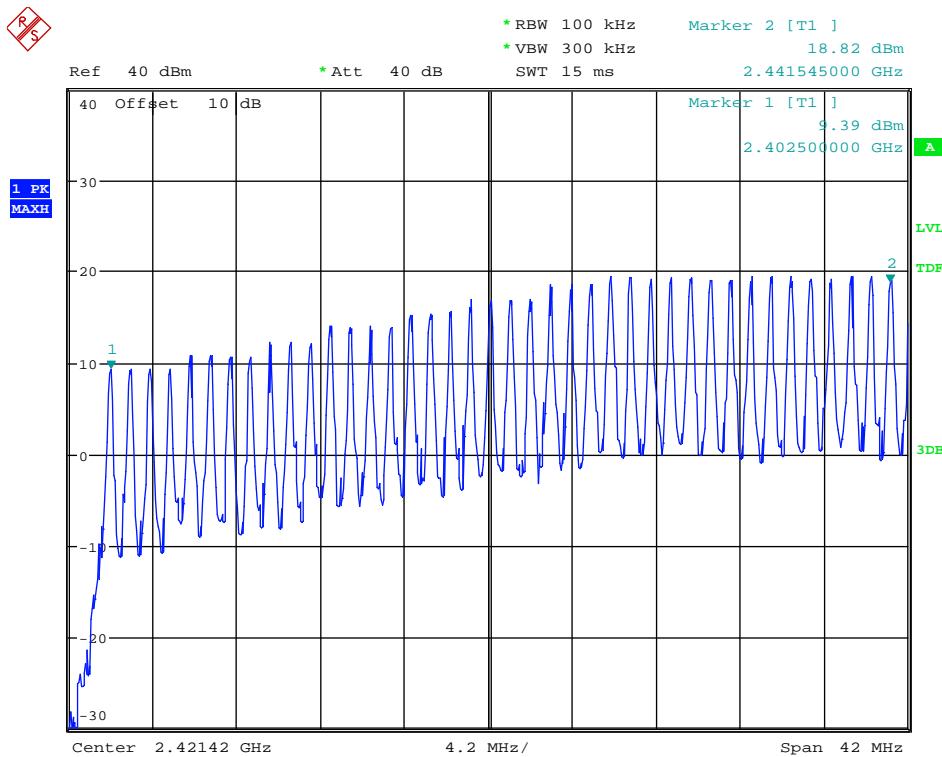
**Plot 48: CFS-RCM24G-MSK-500Kbps-Ch67-Ch68-Ch69-PWR+12 dBm**

1.5. Number of Hopping Frequencies (N-Hopping)

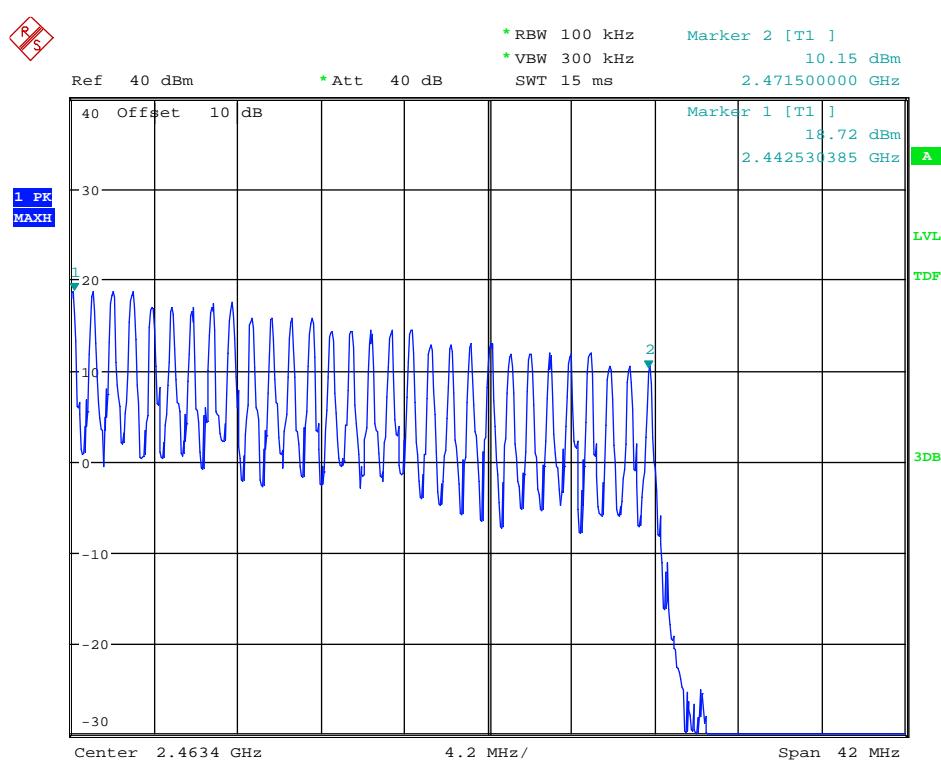
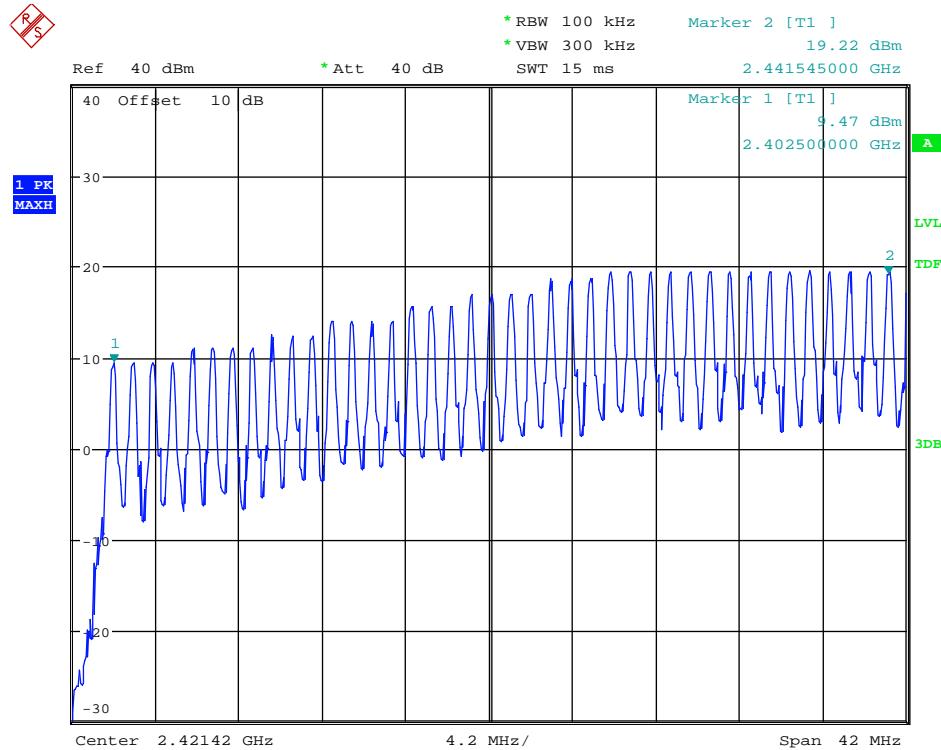
1.5.1. MSK-Data Rate 50Kbps



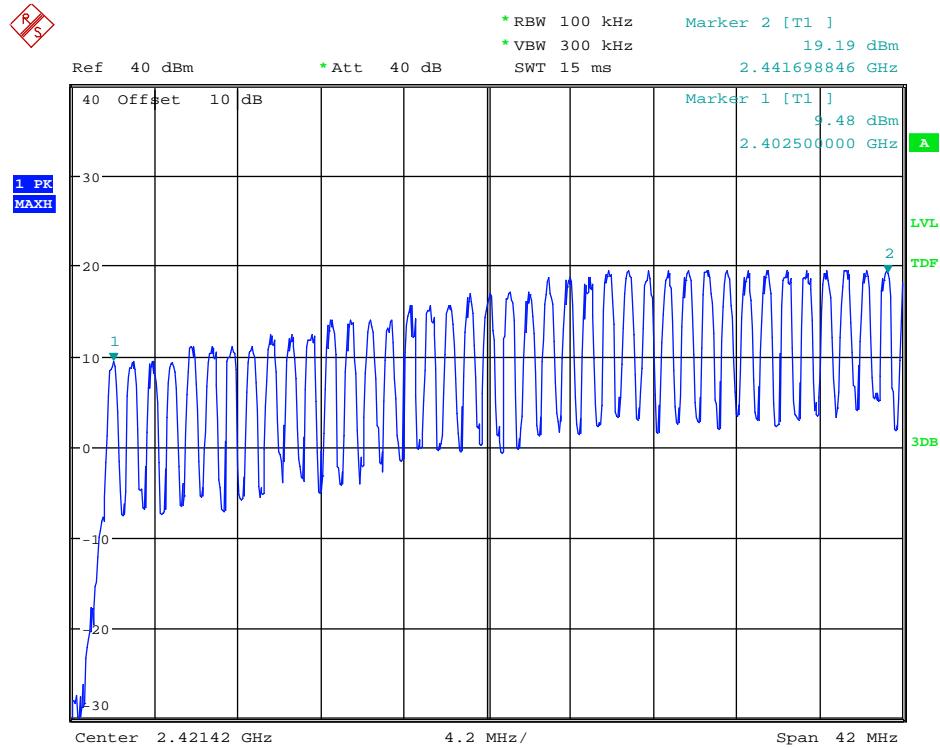
1.5.2. MSK-Data Rate 100Kbps



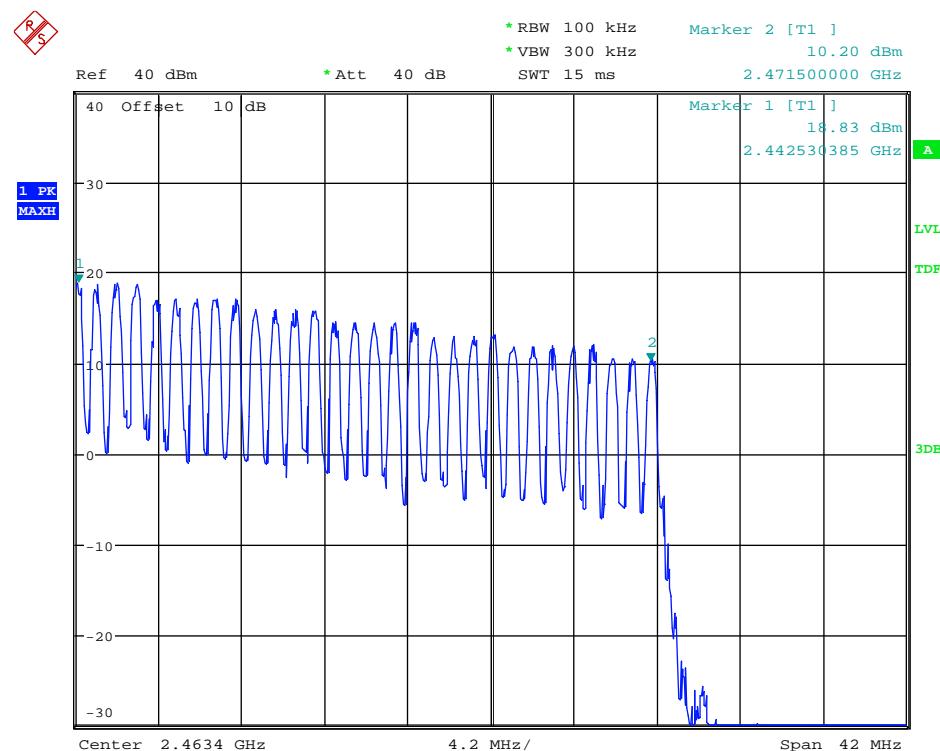
1.5.3. MSK-Data Rate 250Kbps



1.5.4. MSK-Data Rate 500Kbps



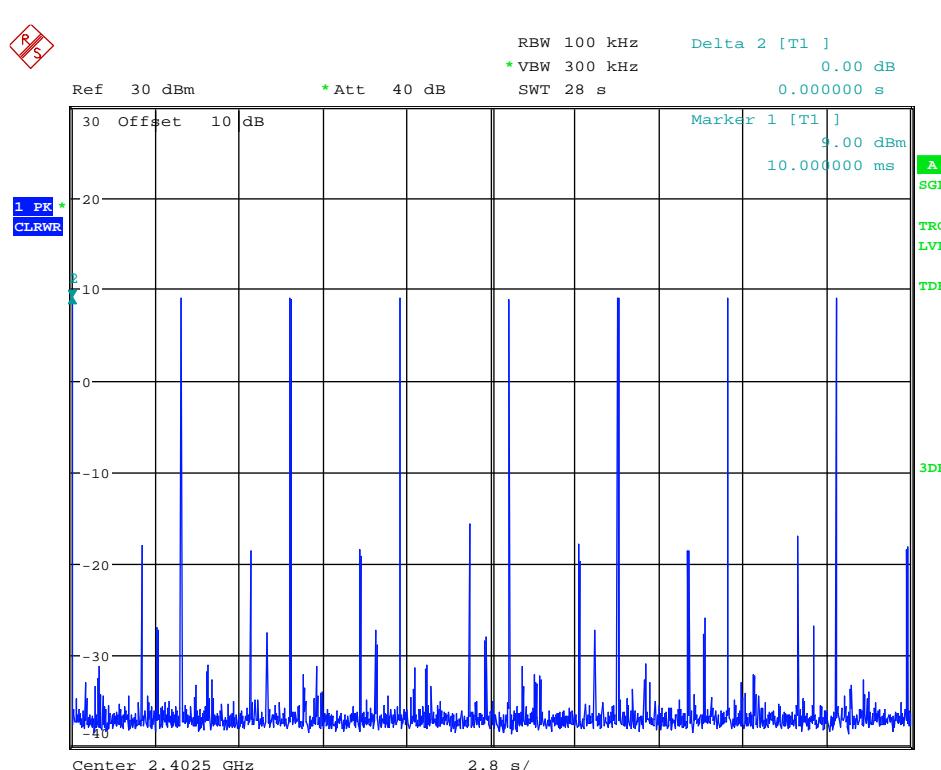
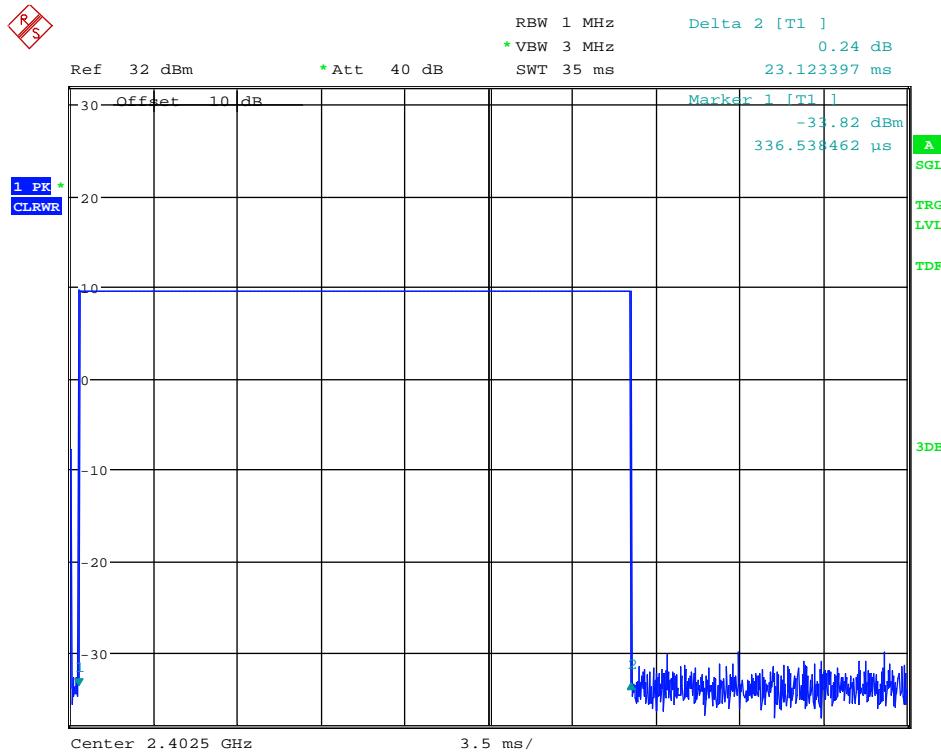
Plot 55: N-Hopping-RCM24G-MSK-500Kbps-2.4 GHz - Lower Spectrum

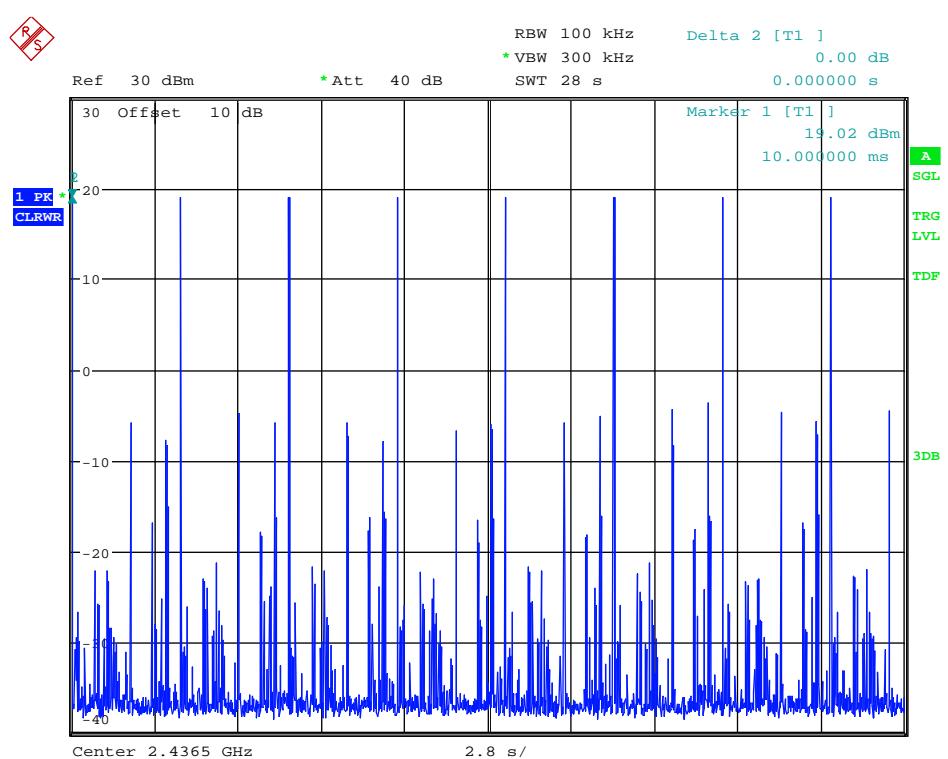
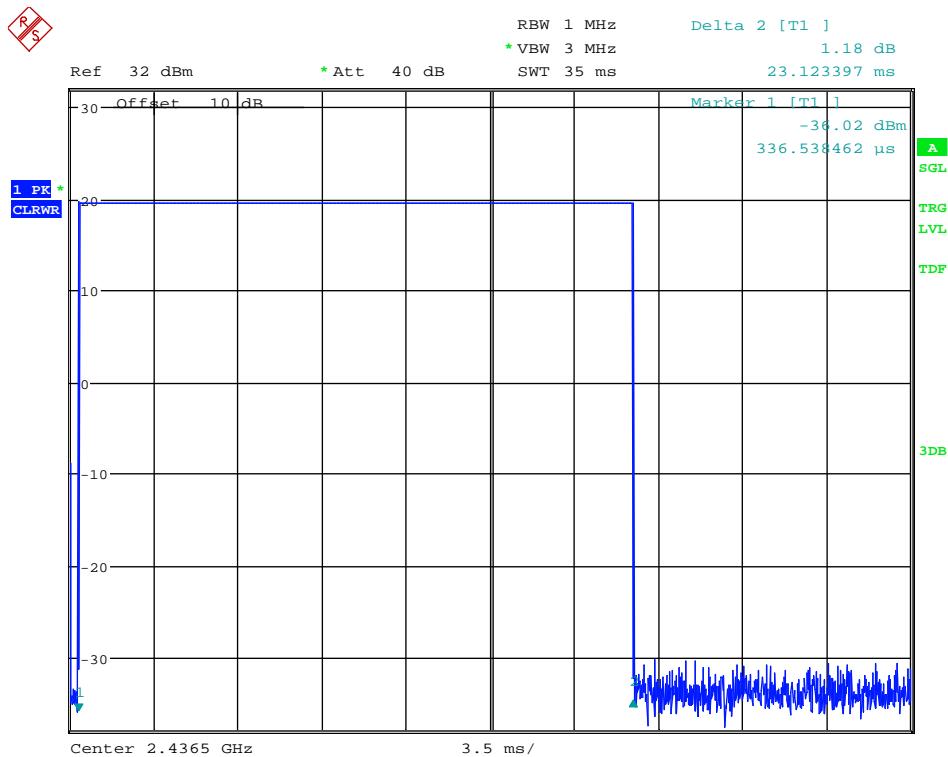


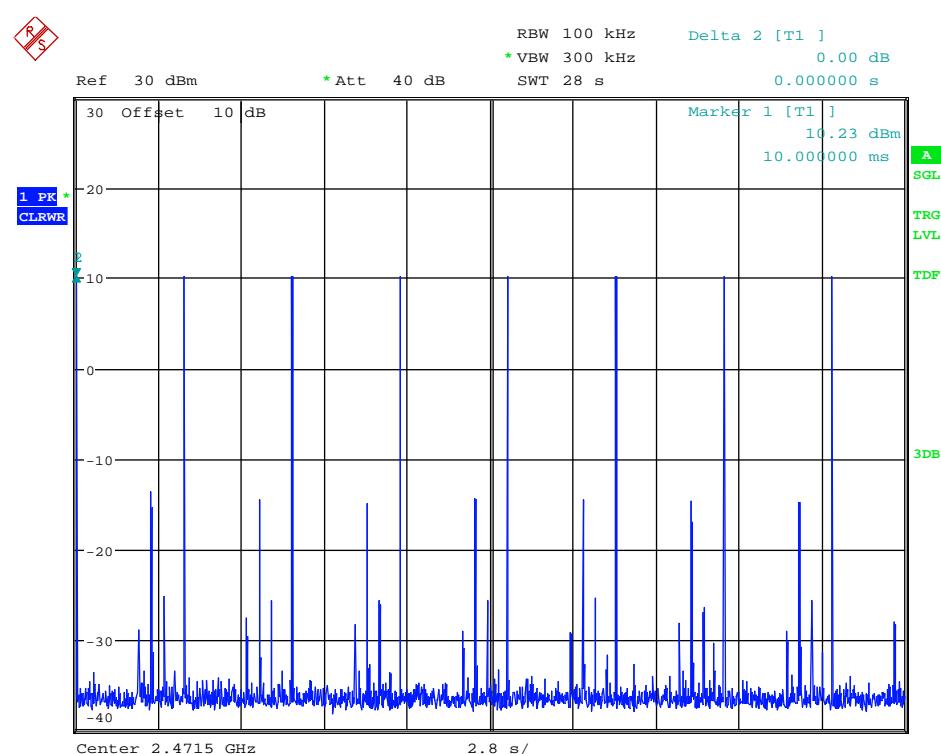
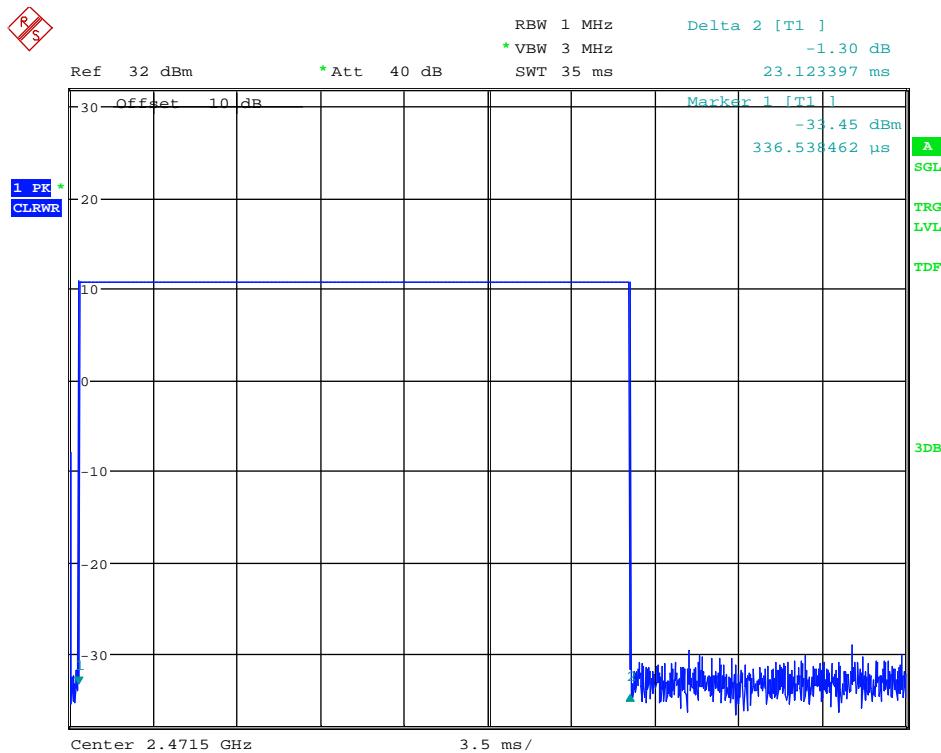
Plot 56: N-Hopping-RCM24G-MSK-500Kbps-2.4 GHz -Upper Spectrum

1.6. Average Occupancy Time (Occ.Time)

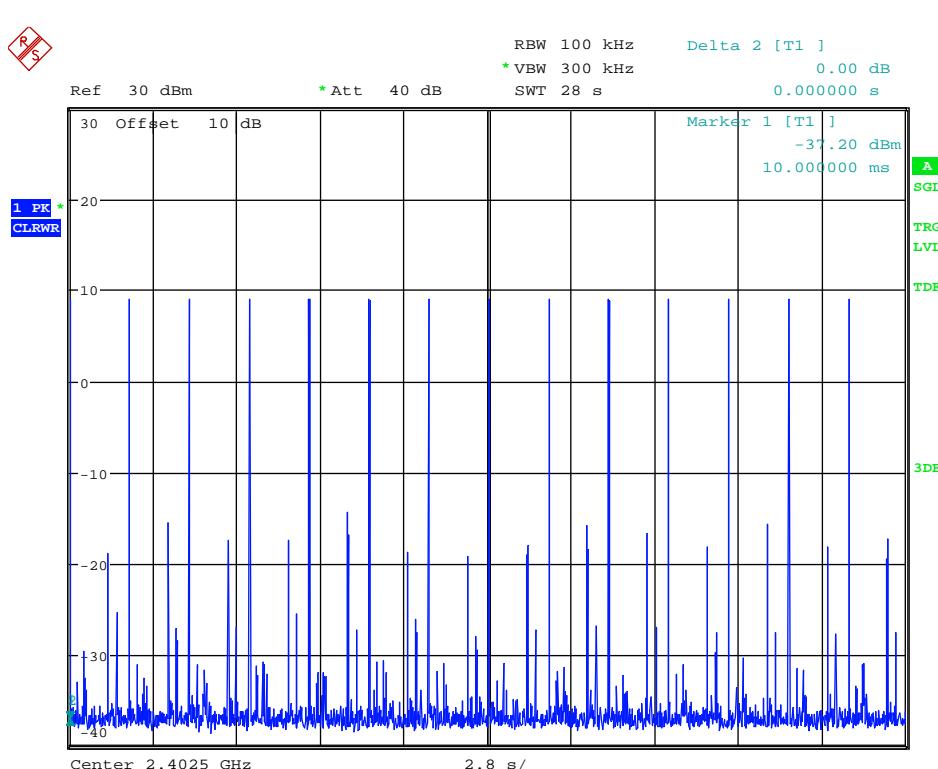
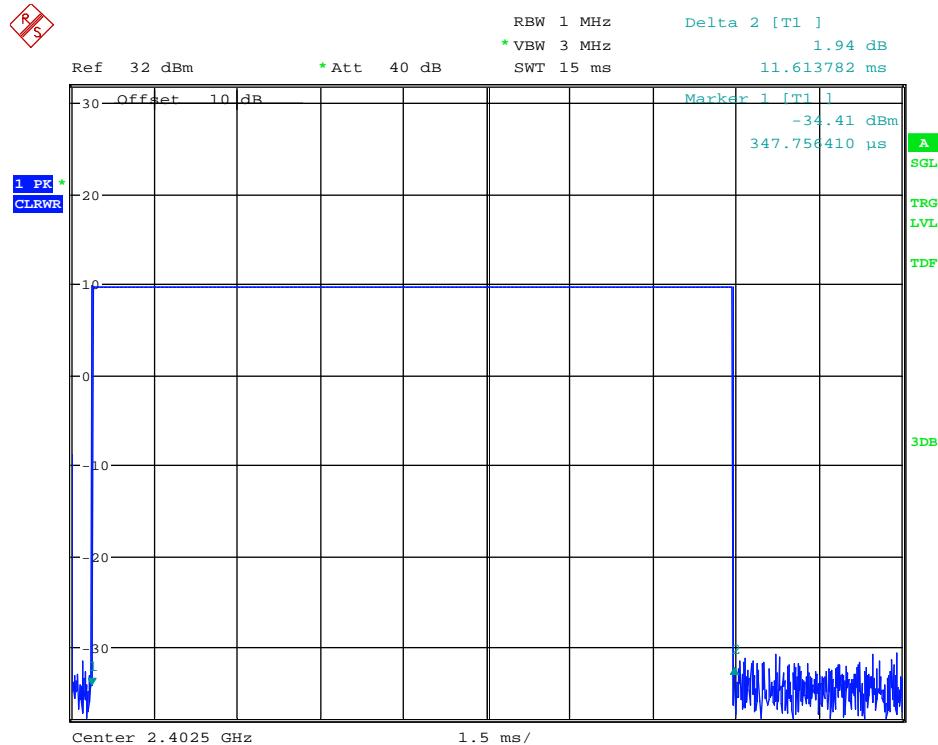
1.6.1. MSK-Data Rate 50Kbps

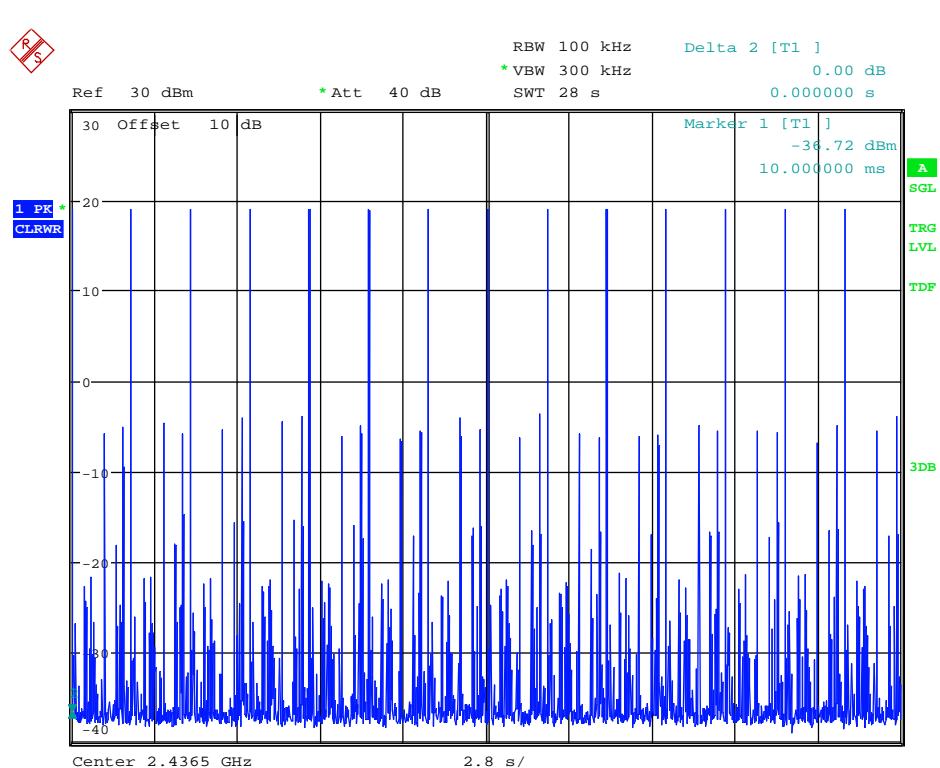
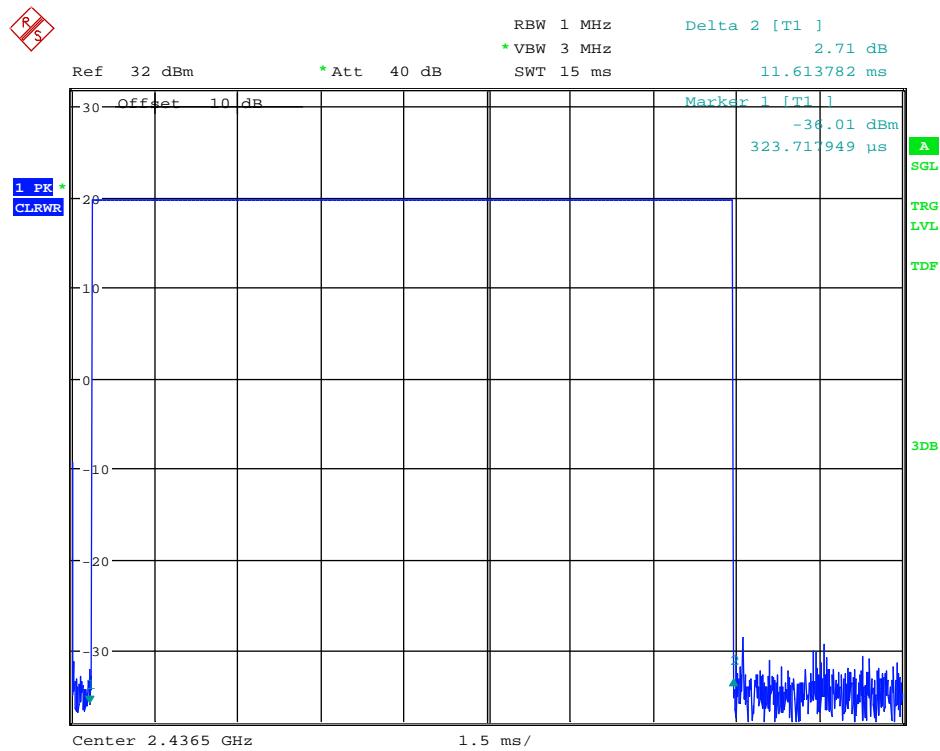


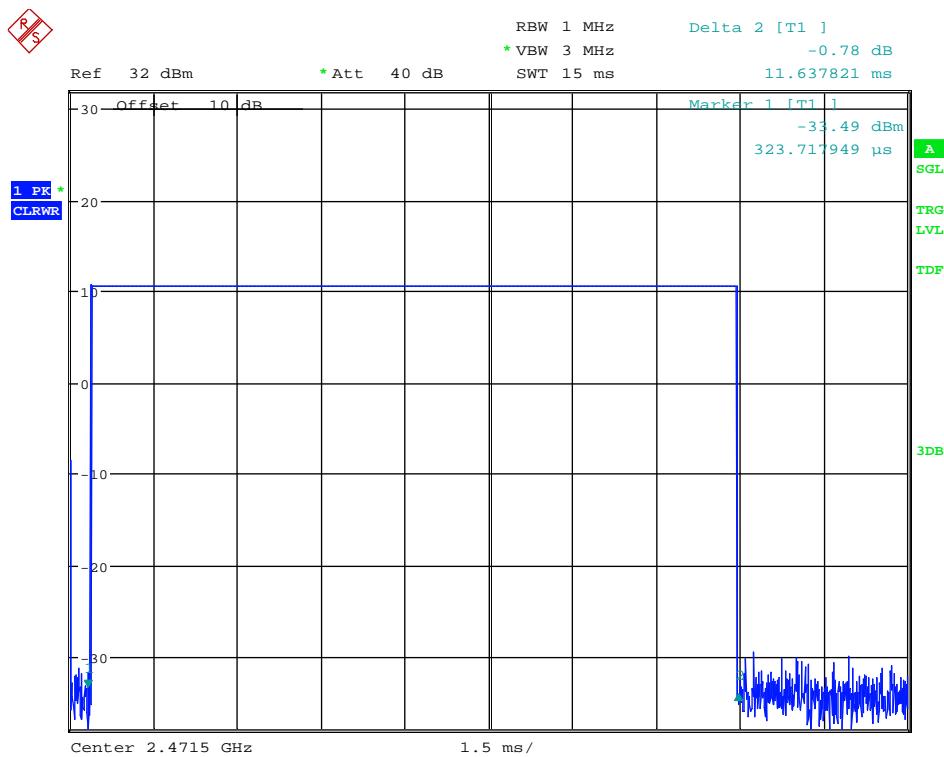




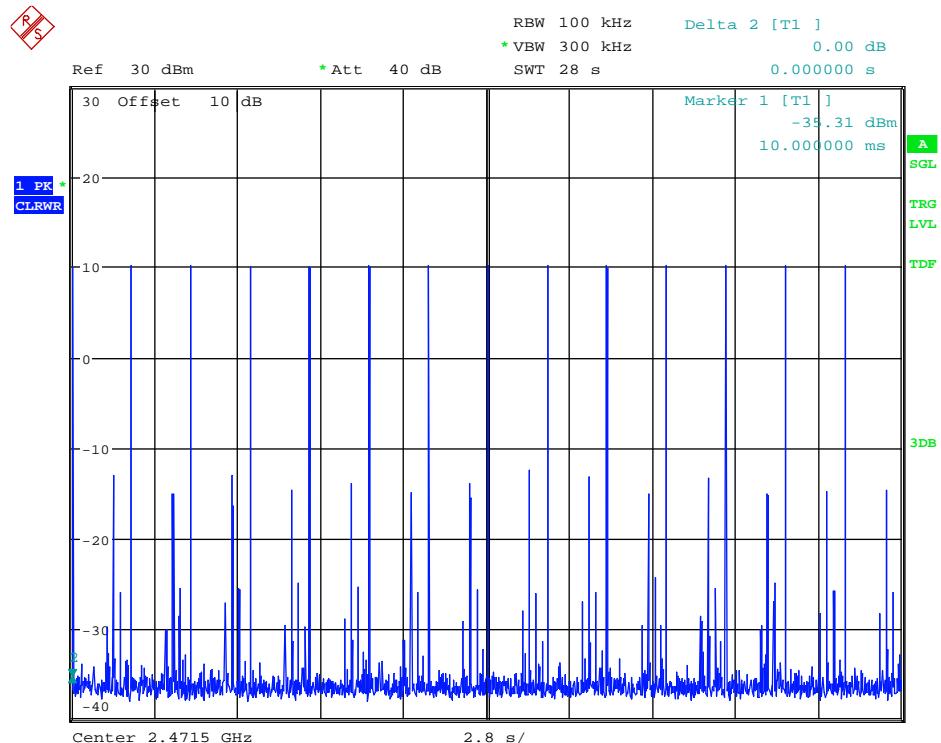
1.6.2. MSK-Data Rate 100Kbps





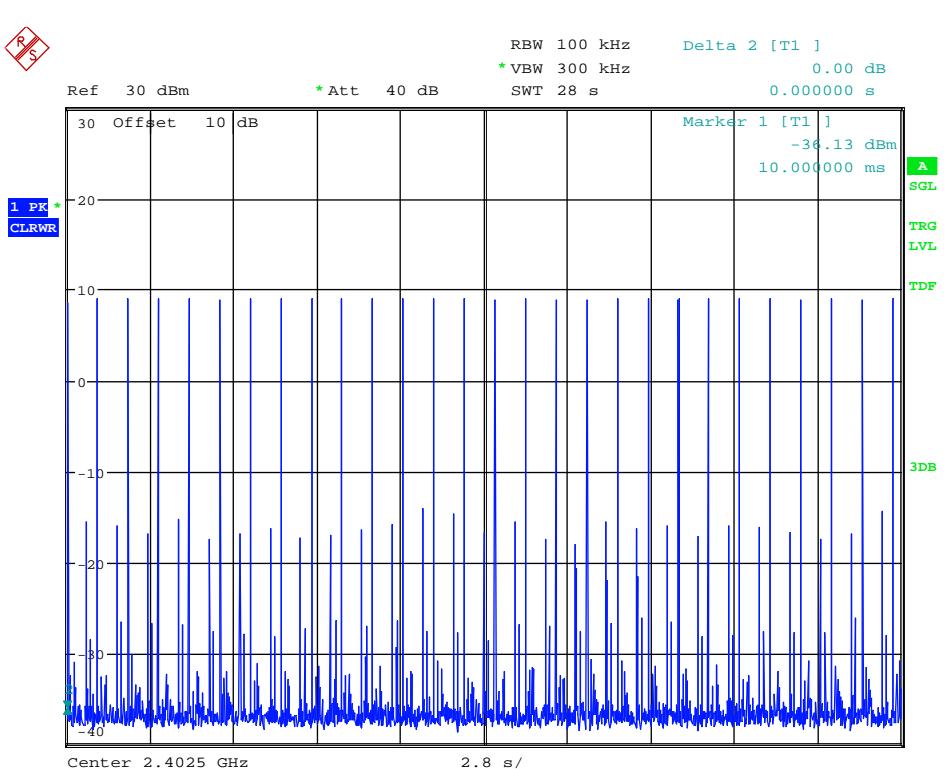
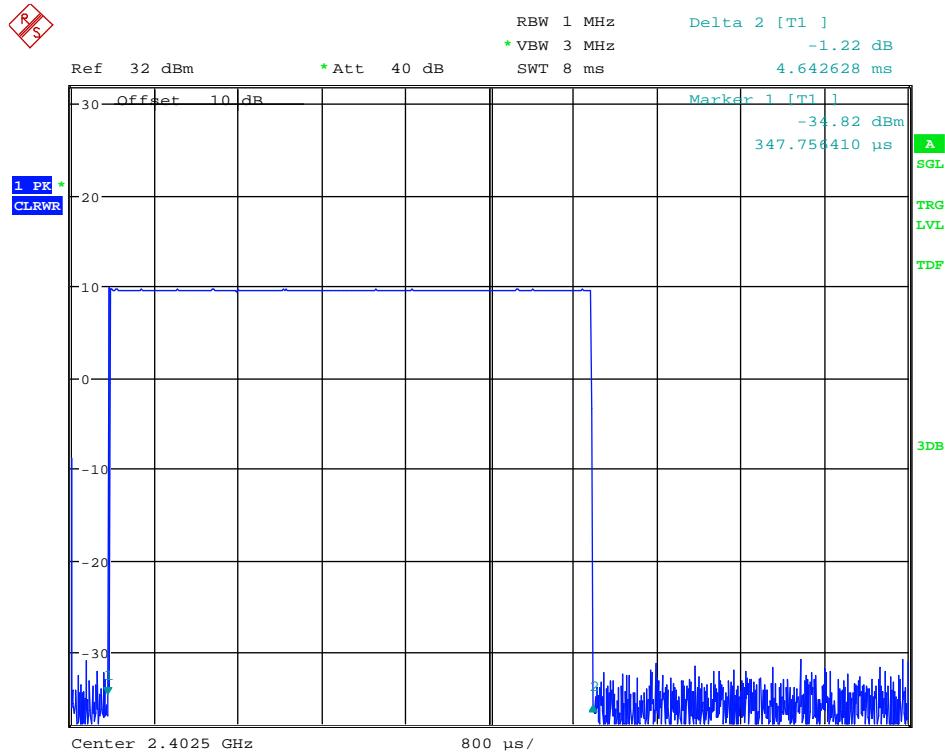


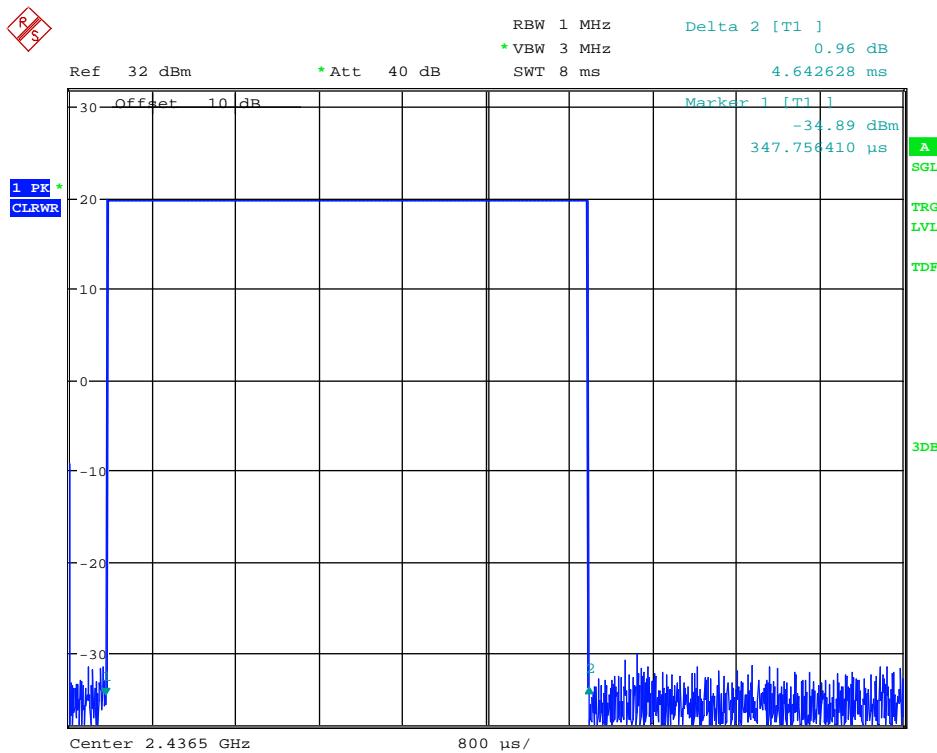
Plot 67: Occ.Time-Single Transmission-RCM24G-MSK-100Kbps-Ch69(2471.5 MHz)-PWR+12dBm



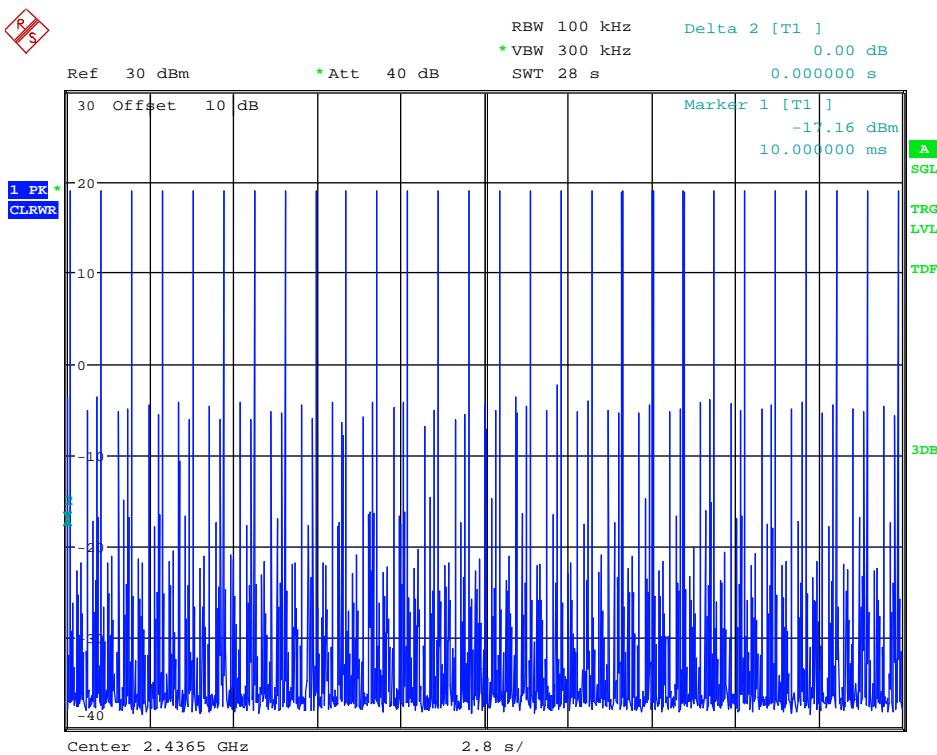
Plot 68: Transmissions in 28 Sec-RCM24G-MSK-100Kbps-Ch69(2471.5 MHz)-PWR+12dBm

1.6.3. MSK-Data Rate 250Kbps

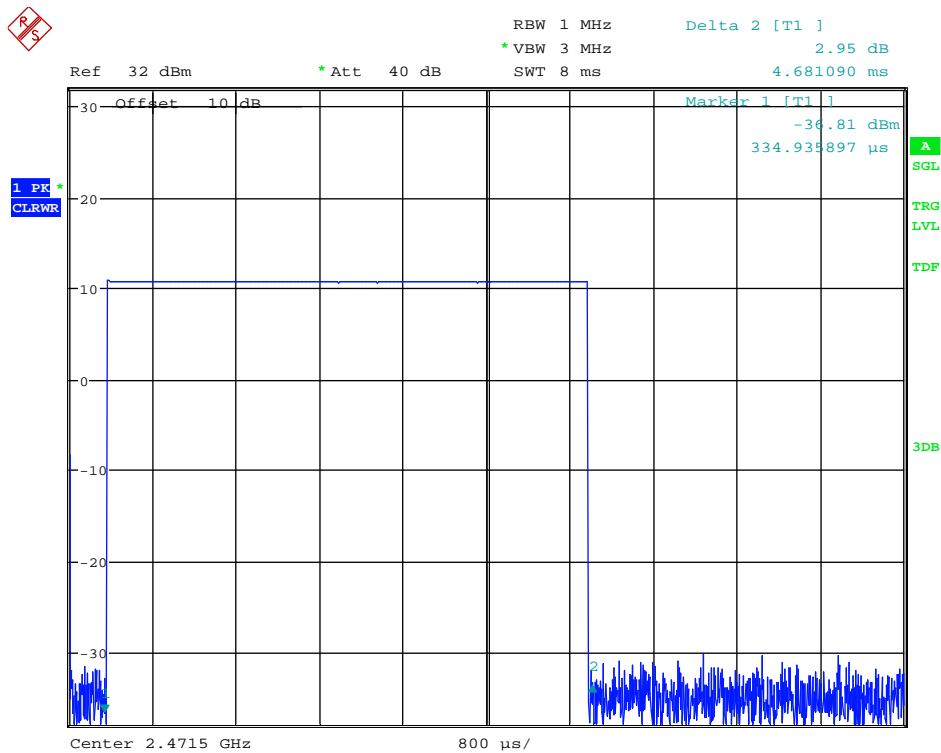




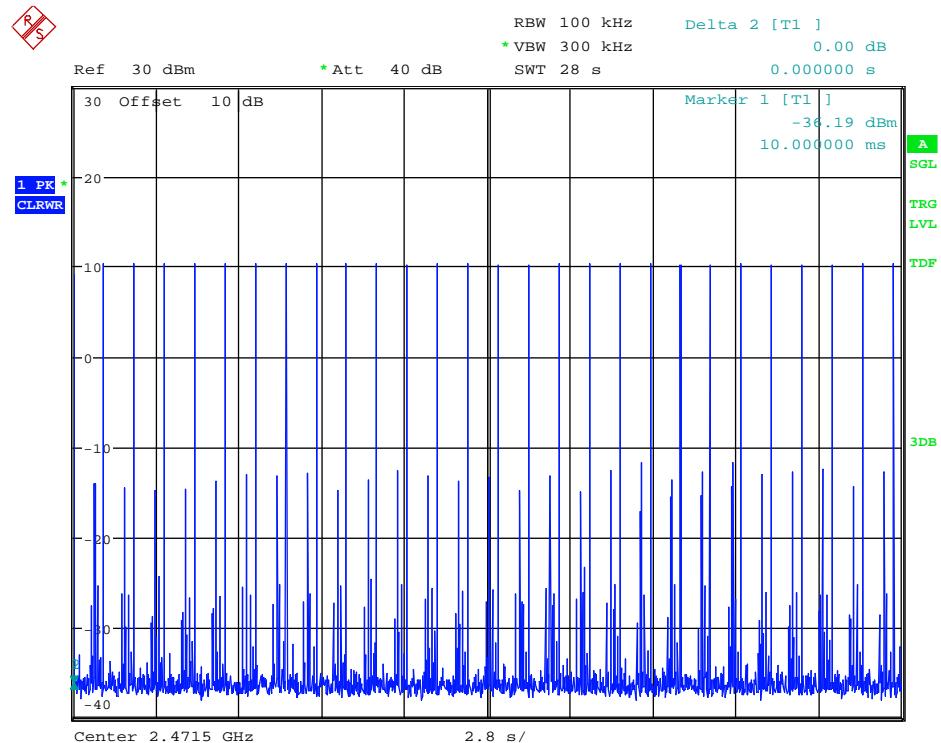
Plot 71: Occ.Time-Single Transmission-RCM24G-MSK-250Kbps-Ch34(2436.5 MHz)-PWR+21dBm



Plot 72: Transmissions in 28 Sec-RCM24G-MSK-250Kbps-Ch34(2436.5 MHz)-PWR+21dBm

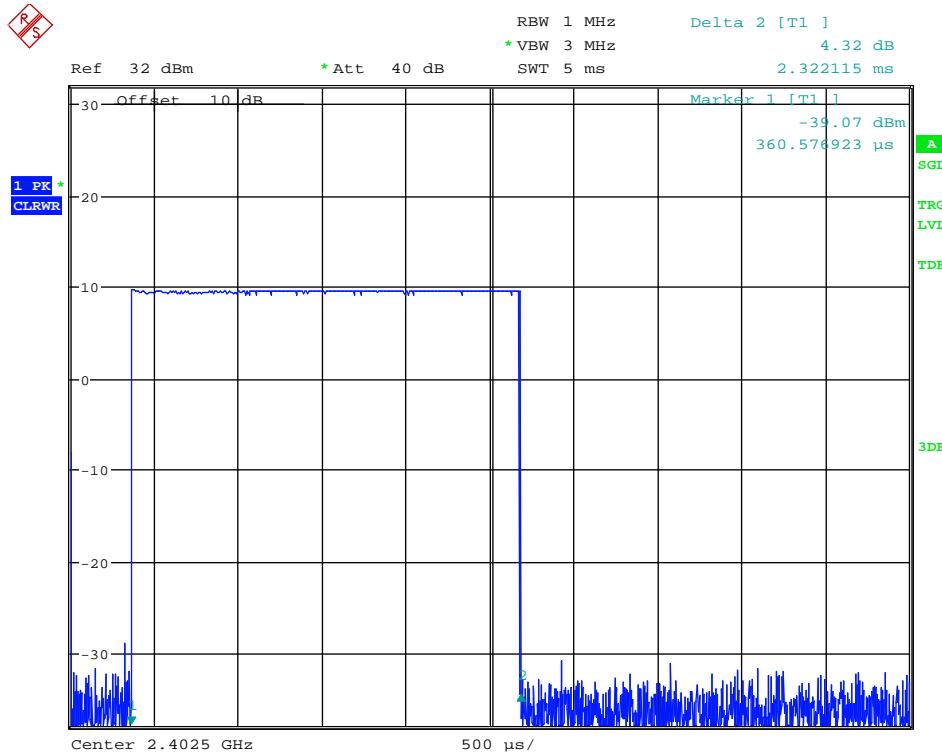


Plot 73: Occ.Time-Single Transmission-RCM24G-MSK-250Kbps-Ch69(2471.5 MHz)-PWR+12dBm

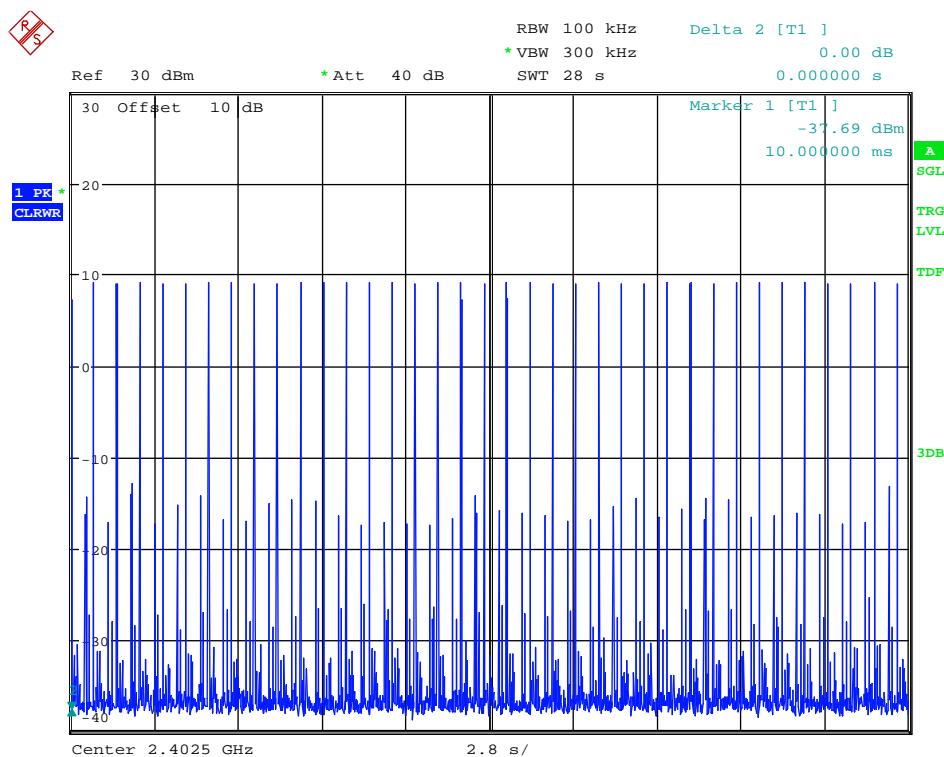


Plot 74: Transmissions in 28 Sec-RCM24G-MSK-250Kbps-Ch69(2471.5 MHz)-PWR+12dBm

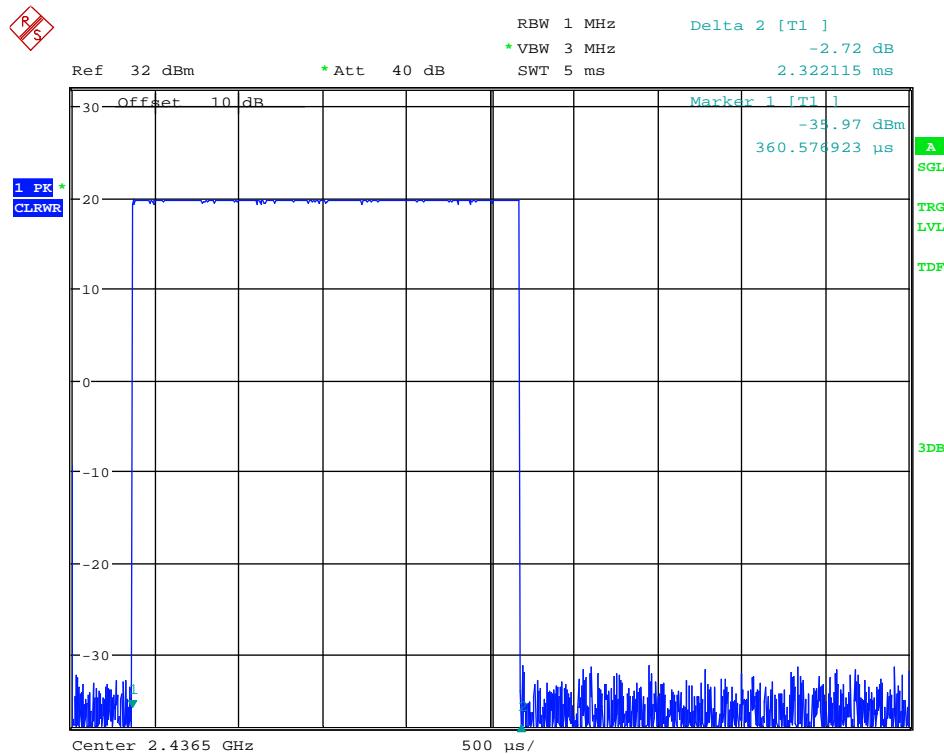
1.6.4. MSK-Data Rate 500Kbps



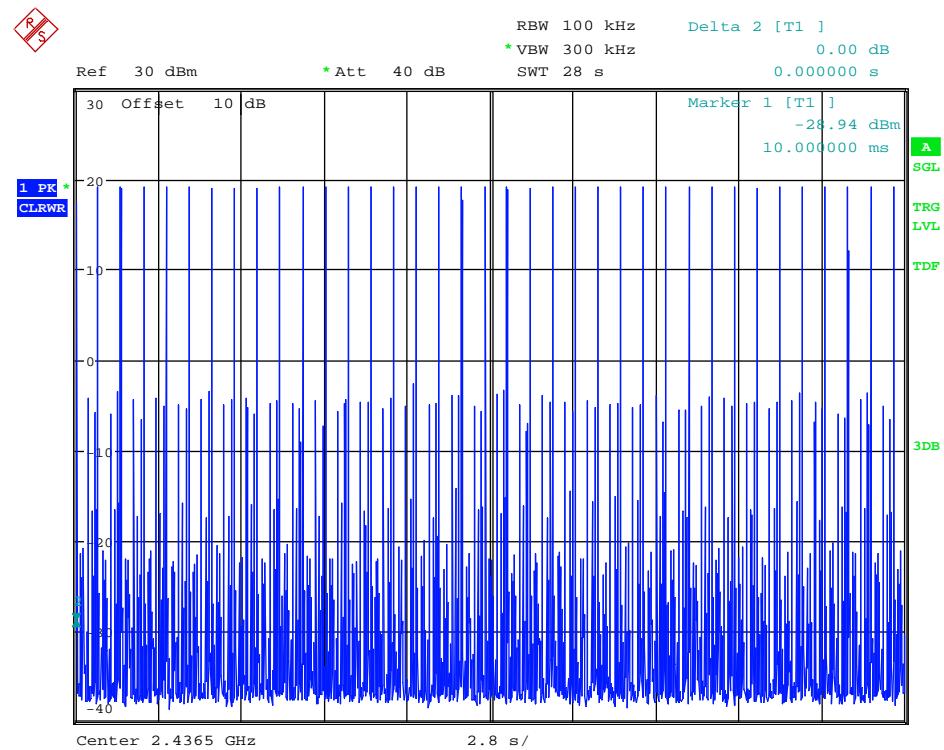
Plot 75: Occ.Time-Single Transmission-RCM24G-MSK-500Kbps-Ch0(2402.5 MHz)-PWR+12dBm



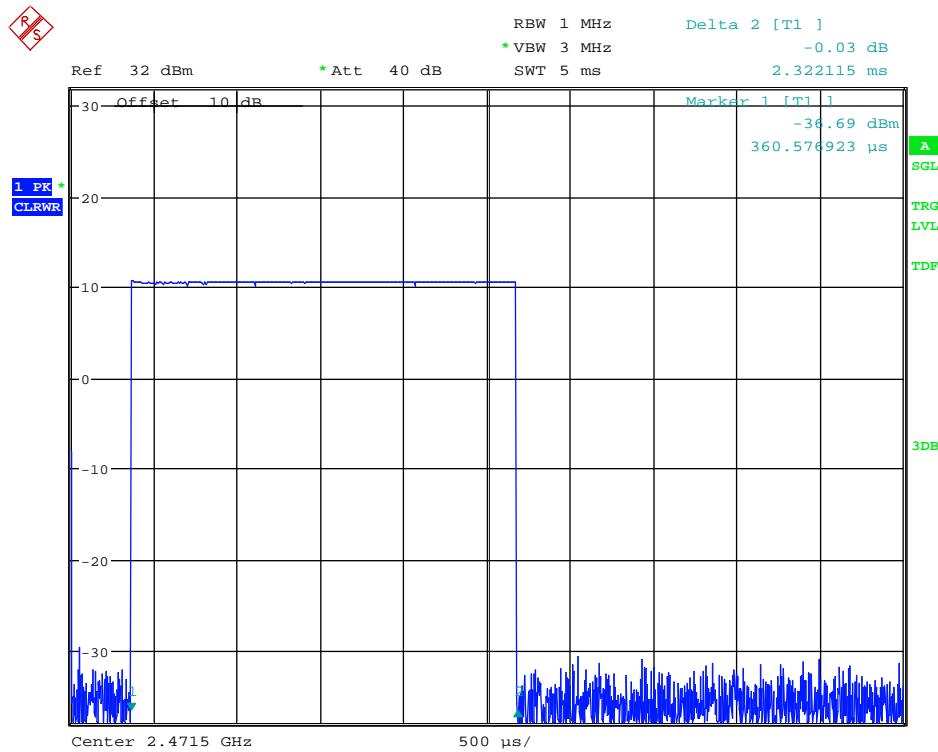
Plot 76: Transmissions in 28 Sec-RCM24G-MSK-500Kbps-Ch0(2402.5 MHz)-PWR+12dBm



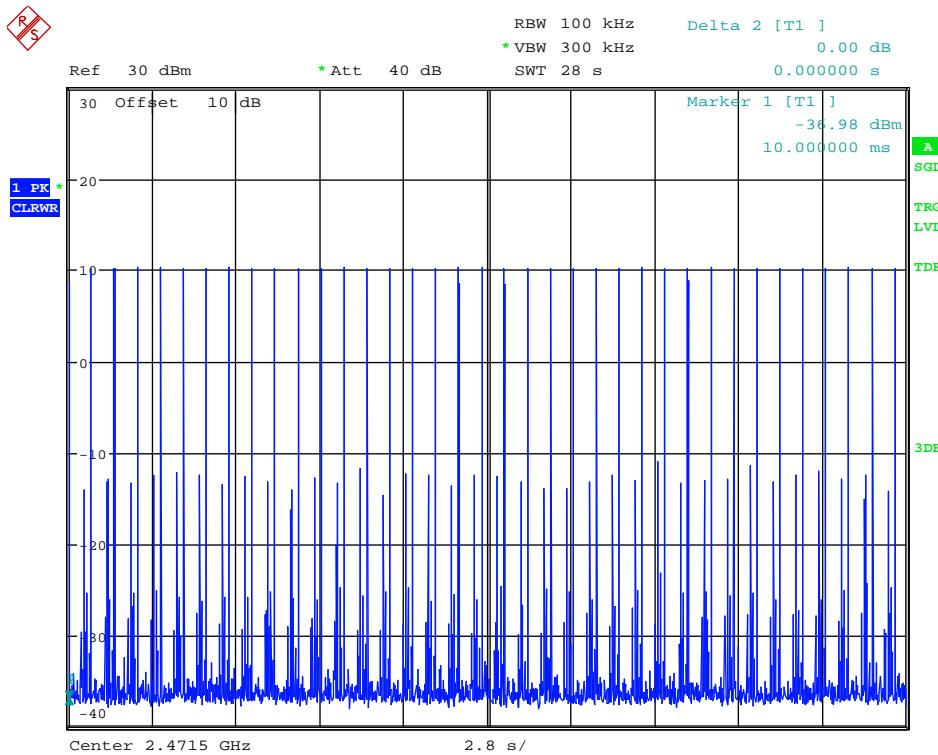
Plot 77: Occ.Time-Single Transmission-RCM24G-MSK-500Kbps-Ch34(2436.5 MHz)-PWR+21dBm



Plot 78: Transmissions in 28 Sec-RCM24G-MSK-500Kbps-Ch34(2436.5 MHz)-PWR+21dBm



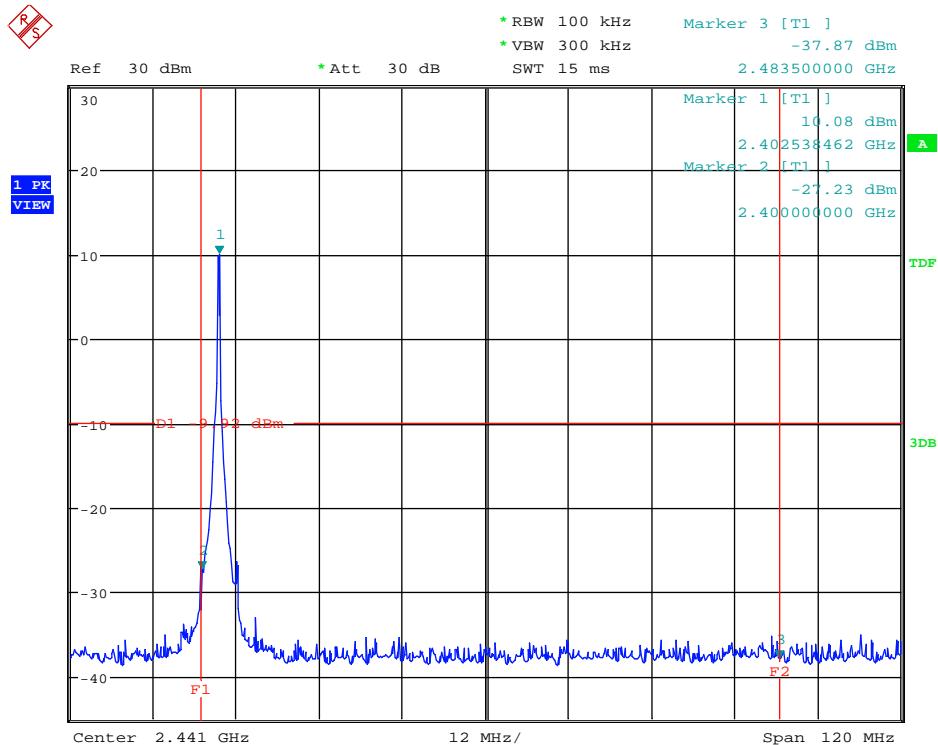
Plot 79: Occ.Time-Single Transmission-RCM24G-MSK-500Kbps-Ch69(2471.5 MHz)-PWR+12dBm



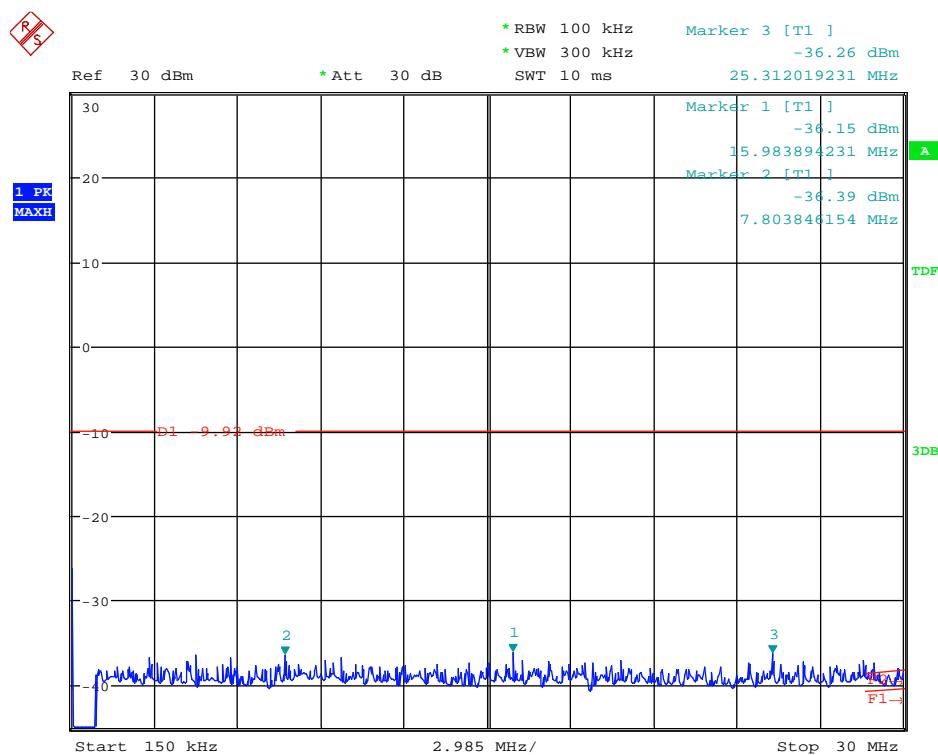
Plot 80: Transmissions in 28 Sec-RCM24G-MSK-500Kbps-Ch69(2471.5 MHz)-PWR+12dBm

1.7. 20dBc TX Conducted Spurious Emissions

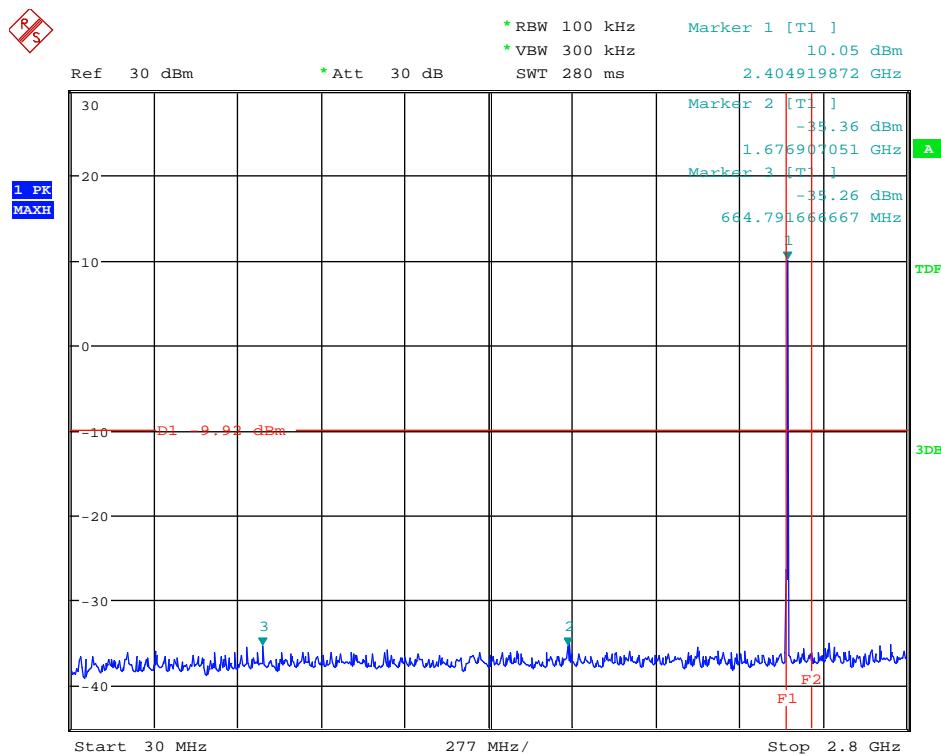
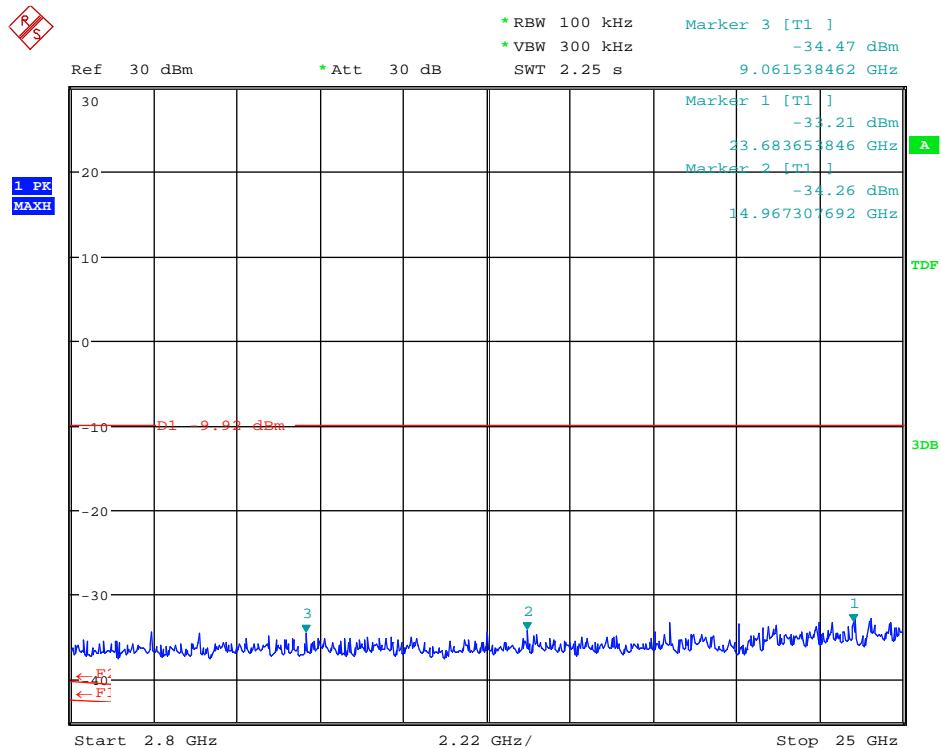
1.7.1. MSK-Data Rate 50Kbps

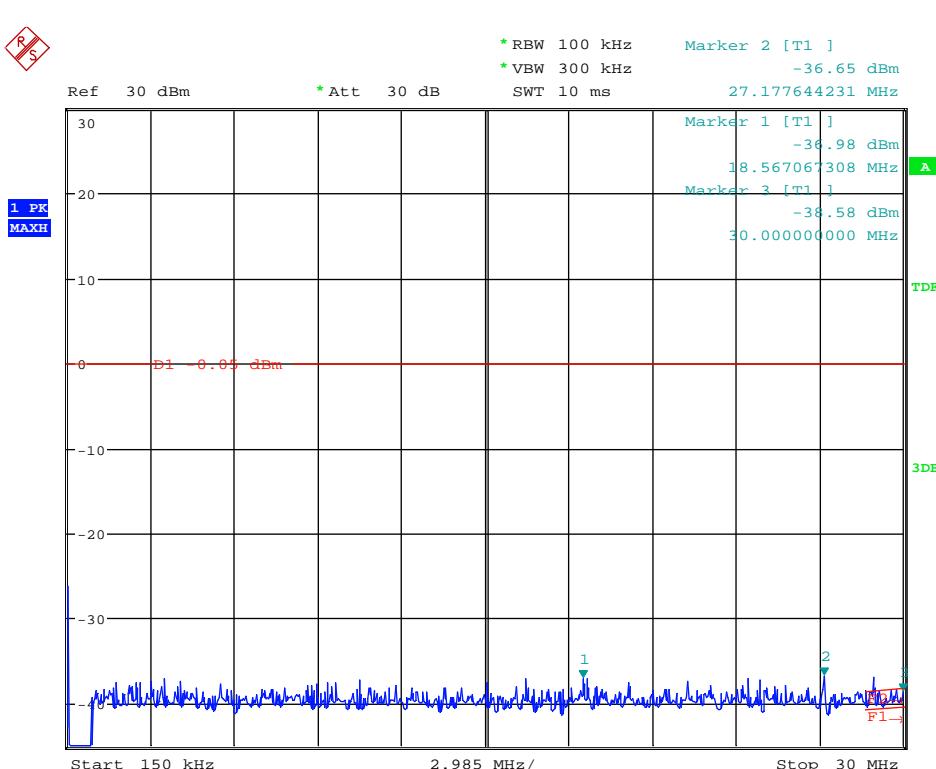
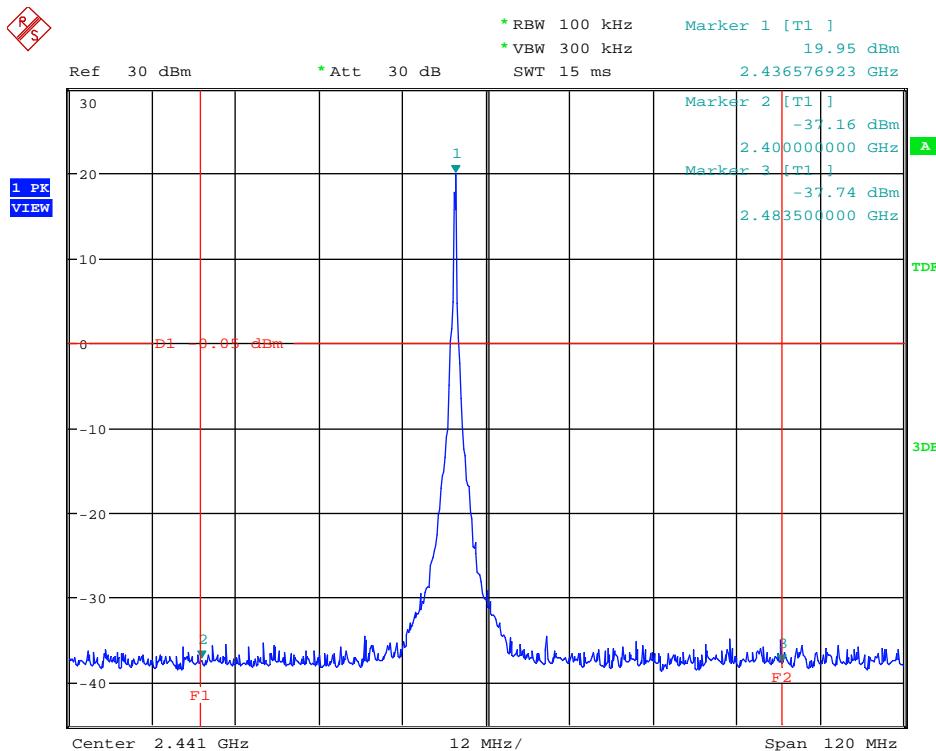


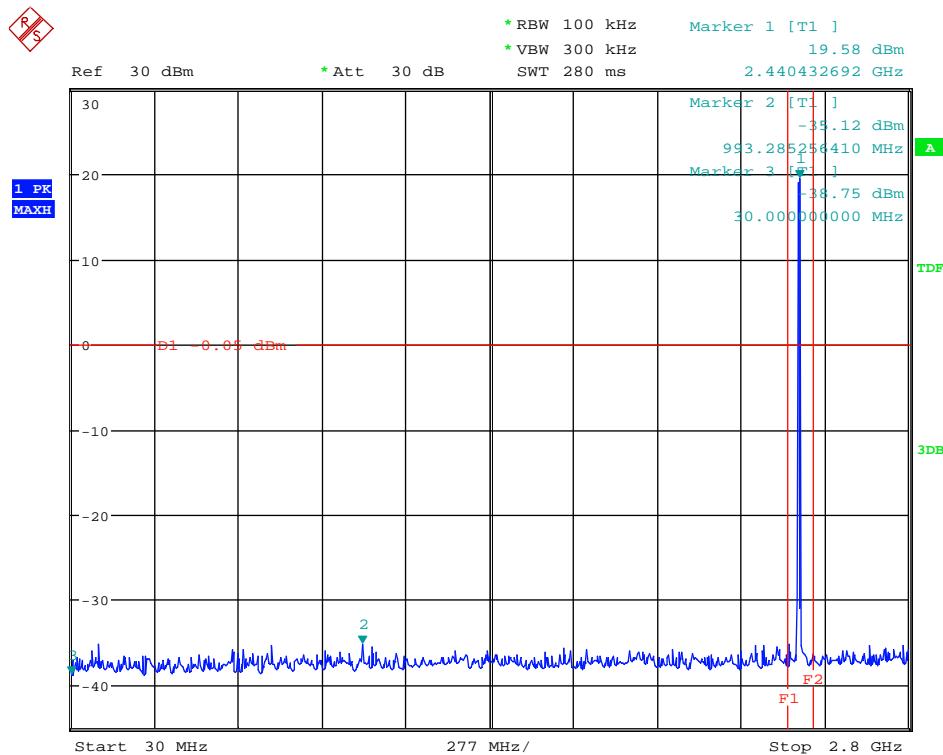
Plot 81: 20dBc-RCM24G-MSK-50Kbps-Ch0(2402.5 MHz)-PWR+12dBm-Carrier



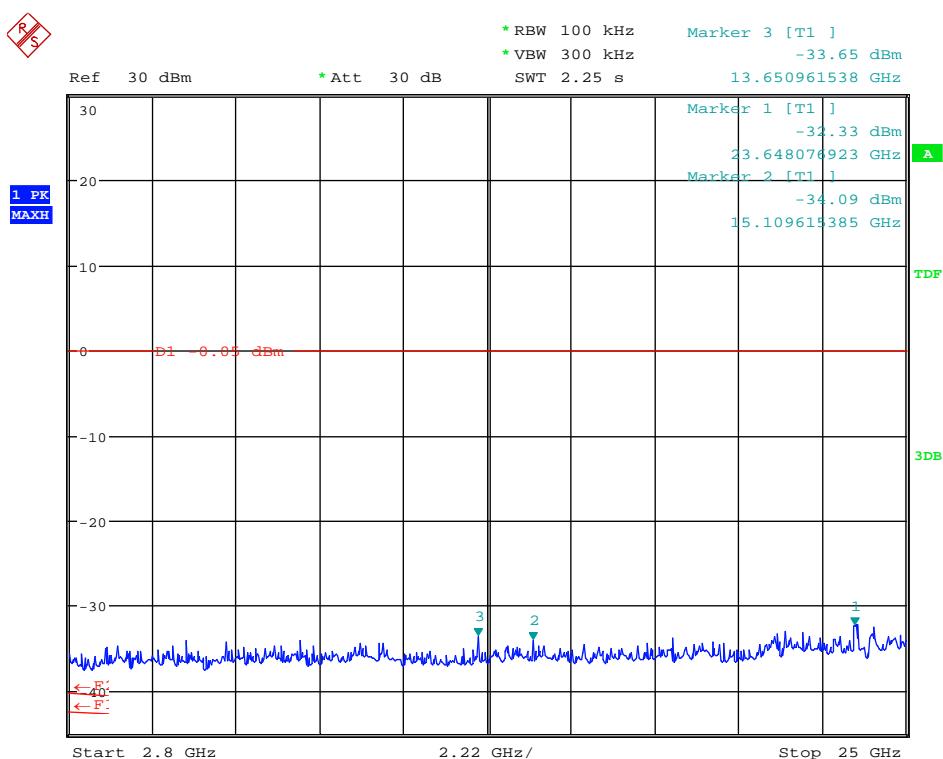
Plot 82: 20dBc-RCM24G-MSK-50Kbps-Ch0(2402.5 MHz)-PWR+12dBm-0.15MHz-30MHz


Plot 83: 20dBc-RCM24G-MSK-50Kbps-Ch0(2402.5 MHz)-PWR+12dBm-30MHz-2.8GHz

Plot 84: 20dBc-RCM24G-MSK-50Kbps-Ch0(2402.5 MHz)-PWR+12dBm-2.8GHz-25GHz

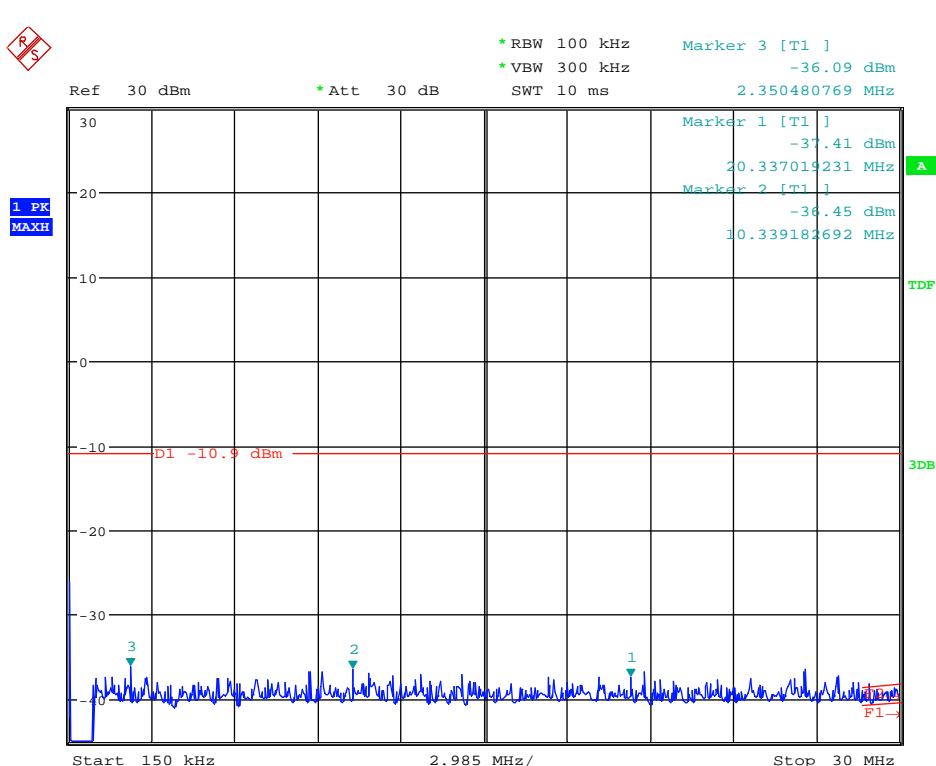
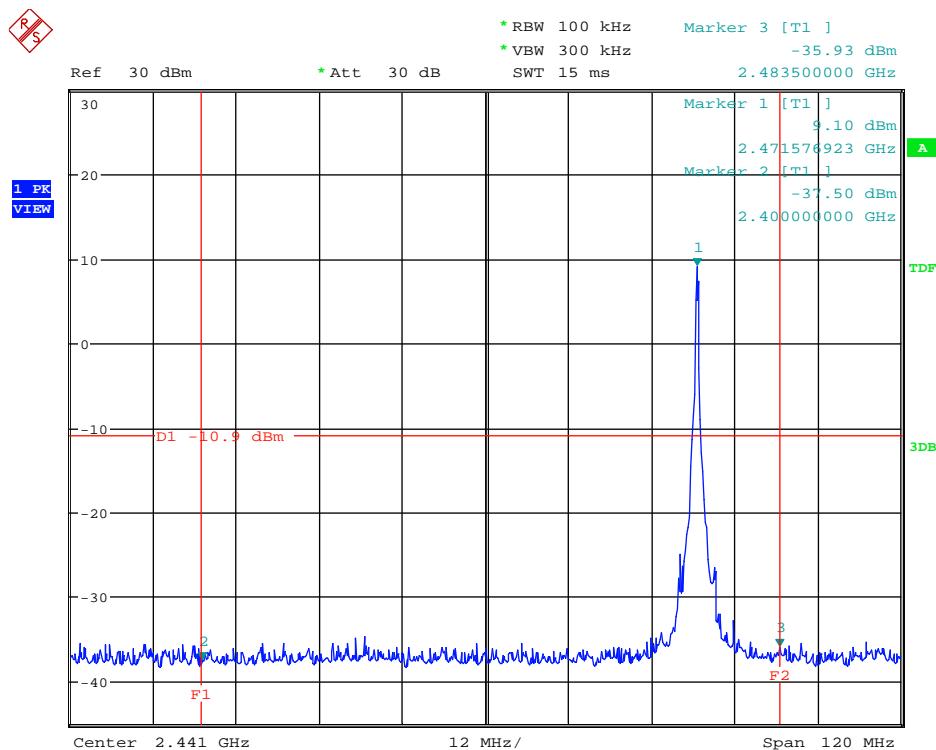


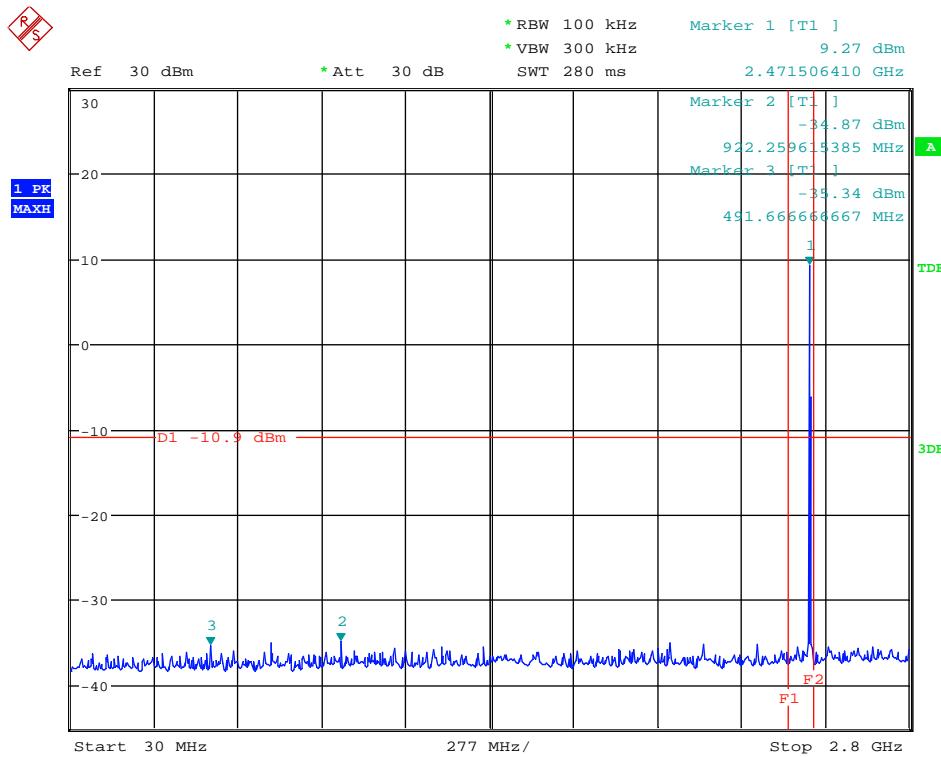


Plot 87: 20dBc-RCM24G-MSK-50Kbps-Ch34(2436.5 MHz)-PWR+21dBm-30MHz-2.8GHz

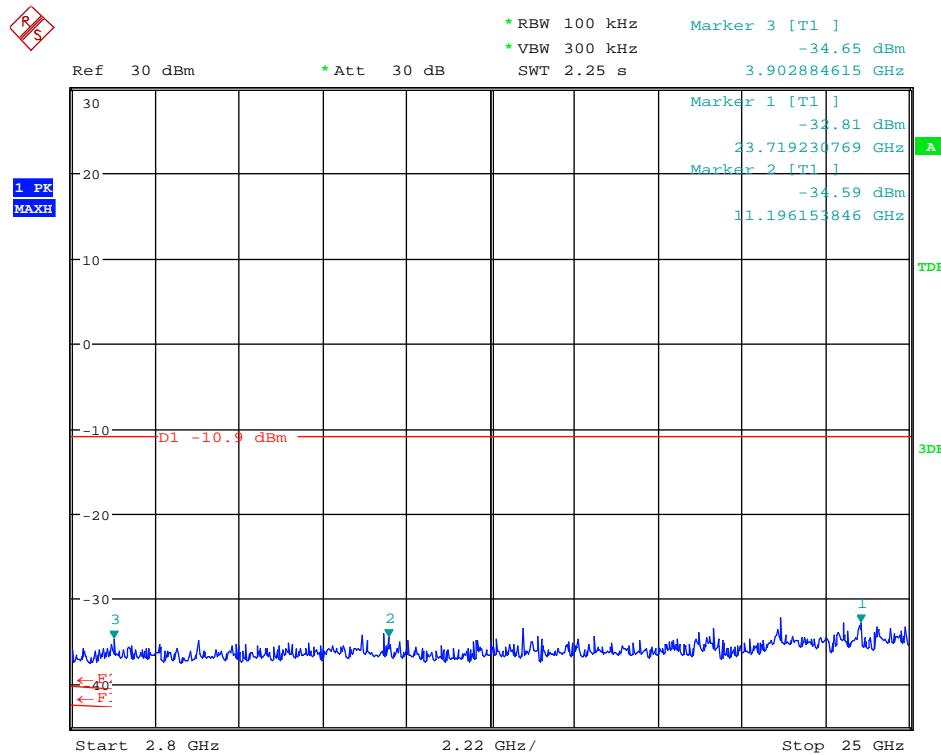


Plot 88: 20dBc-RCM24G-MSK-50Kbps-Ch34(2436.5 MHz)-PWR+21dBm-2.8GHz-25GHz

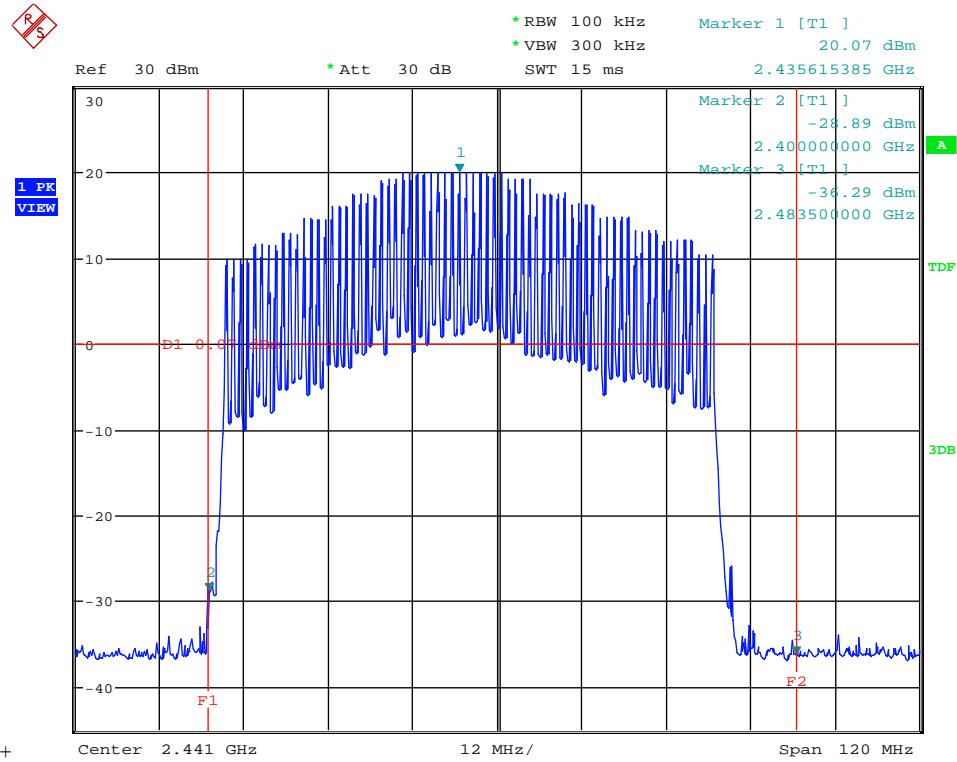




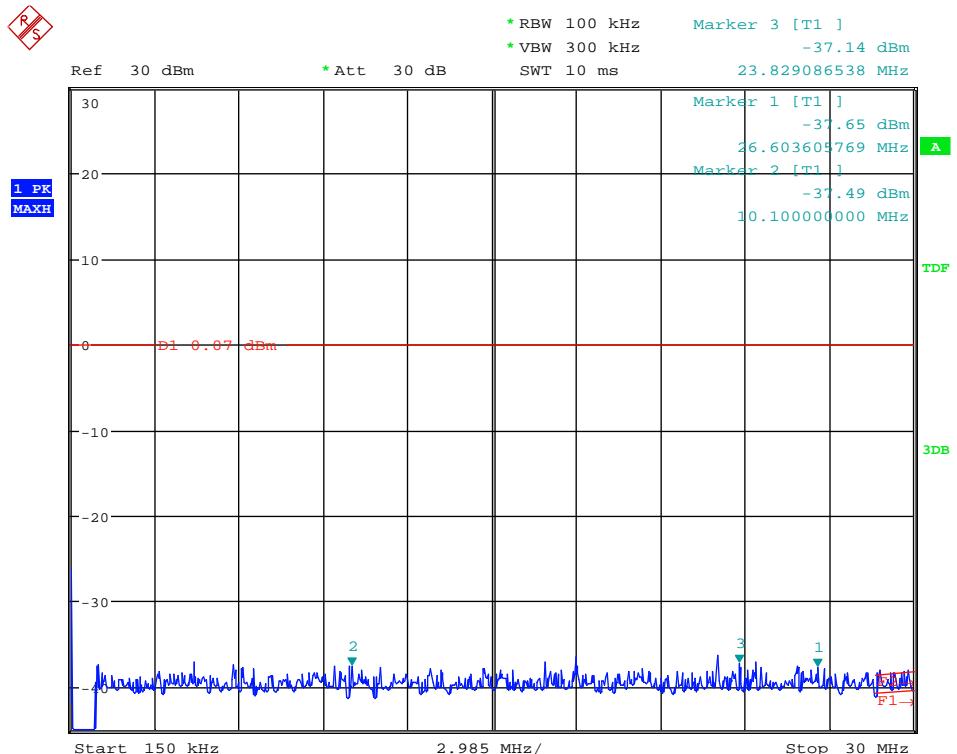
Plot 91: 20dBc-RCM24G-MSK-50Kbps-Ch69(2471.5 MHz)-PWR+12dBm-30MHz-2.8GHz



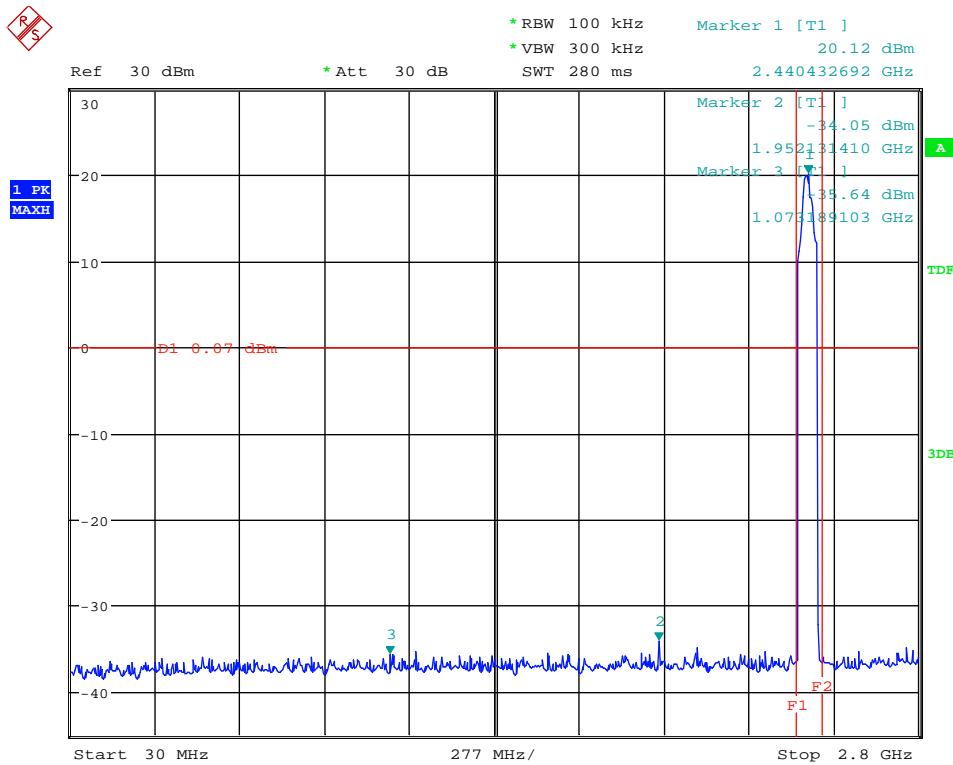
Plot 92: 20dBc-RCM24G-MSK-50Kbps-Ch69(2471.5 MHz)-PWR+12dBm-2.8GHz-25GHz



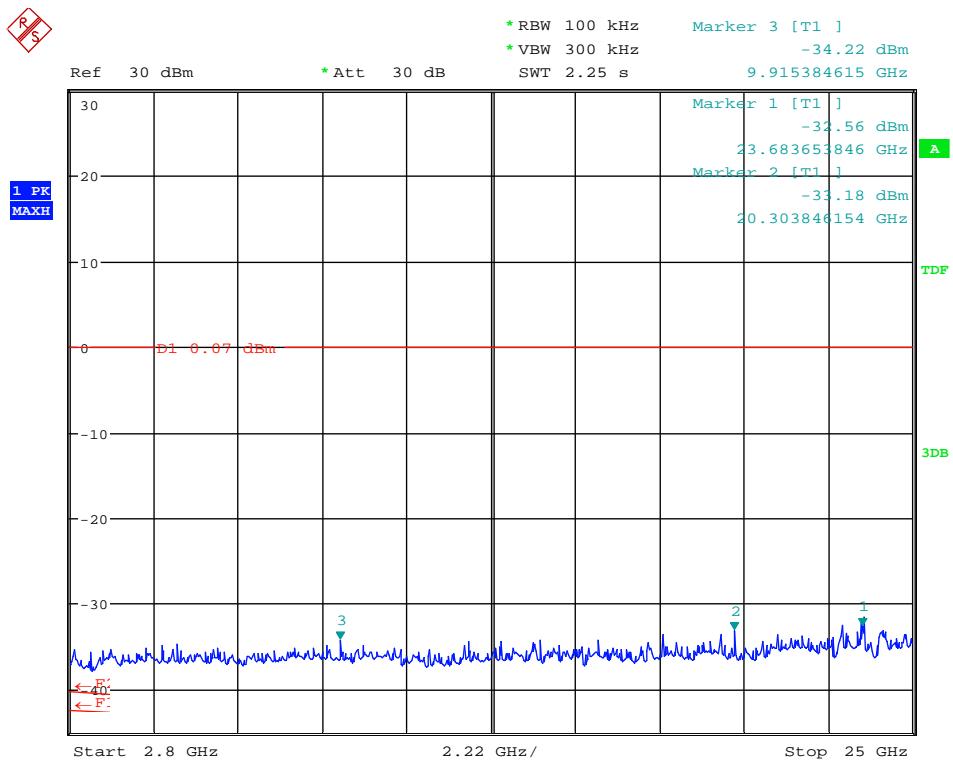
Plot 93: 20dBc-RCM24G-MSK-50Kbps-Hopping Mode-Ch0(2402.5 MHz) to Ch69(2471.5 MHz)-Carrier



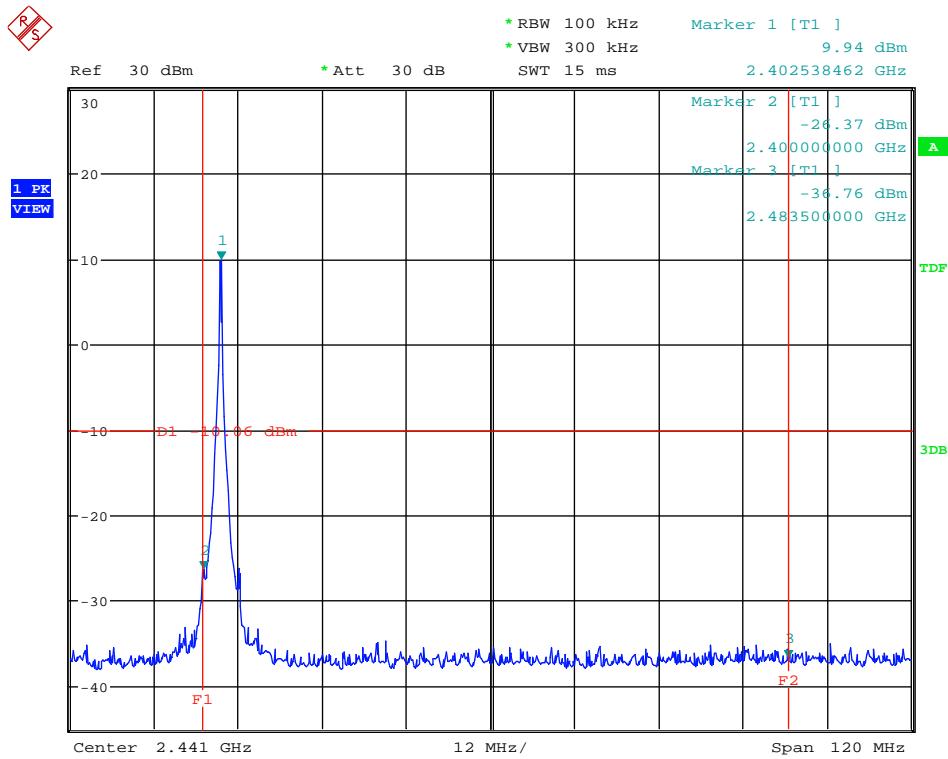
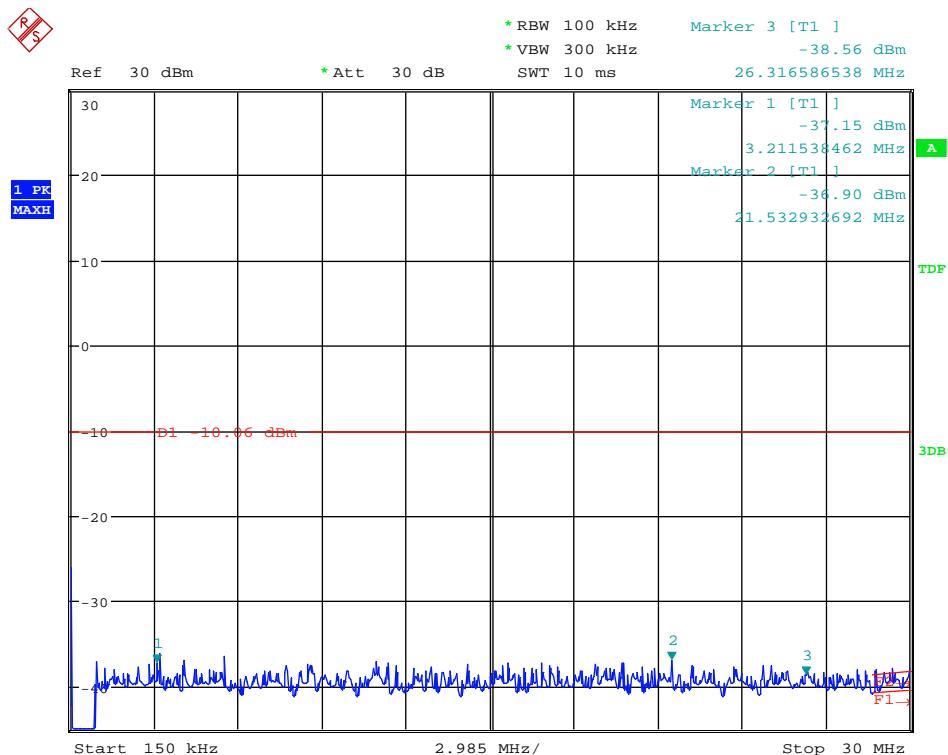
Plot 94: 20dBc-RCM24G-MSK-50Kbps-Hopping Mode-Ch0(2402.5 MHz) to Ch69(2471.5 MHz)-0.15MHz-30MHz

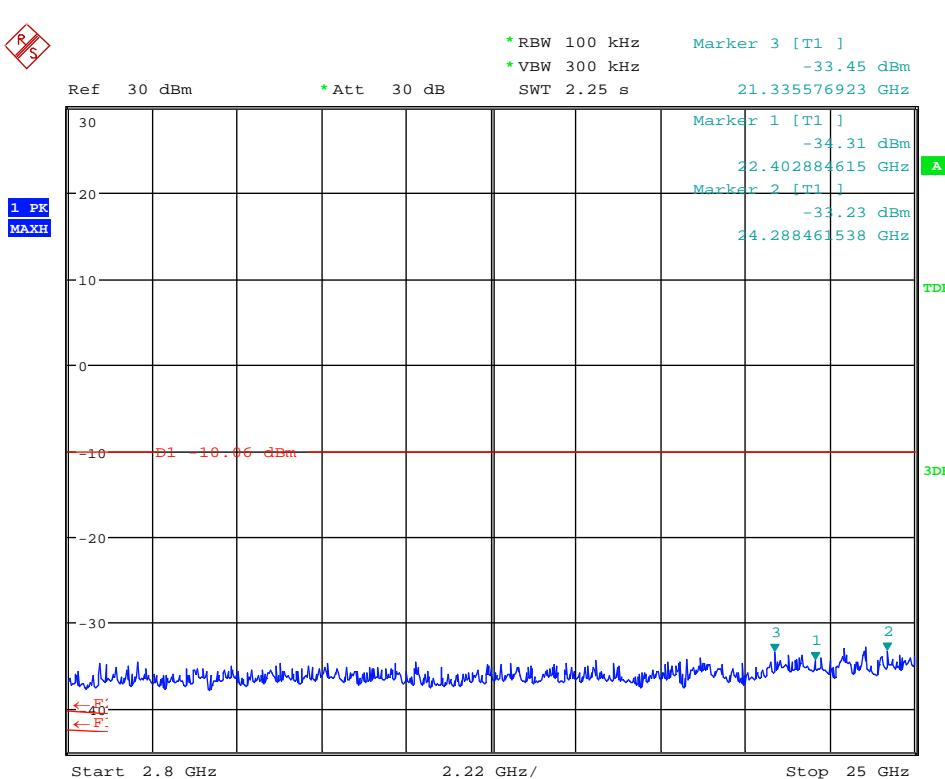
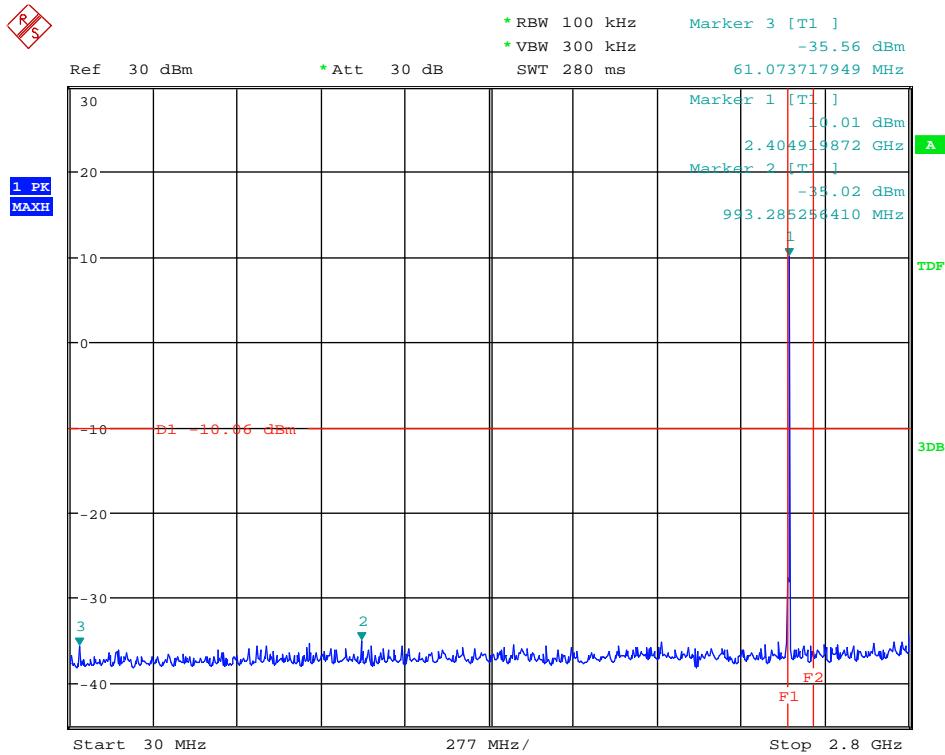


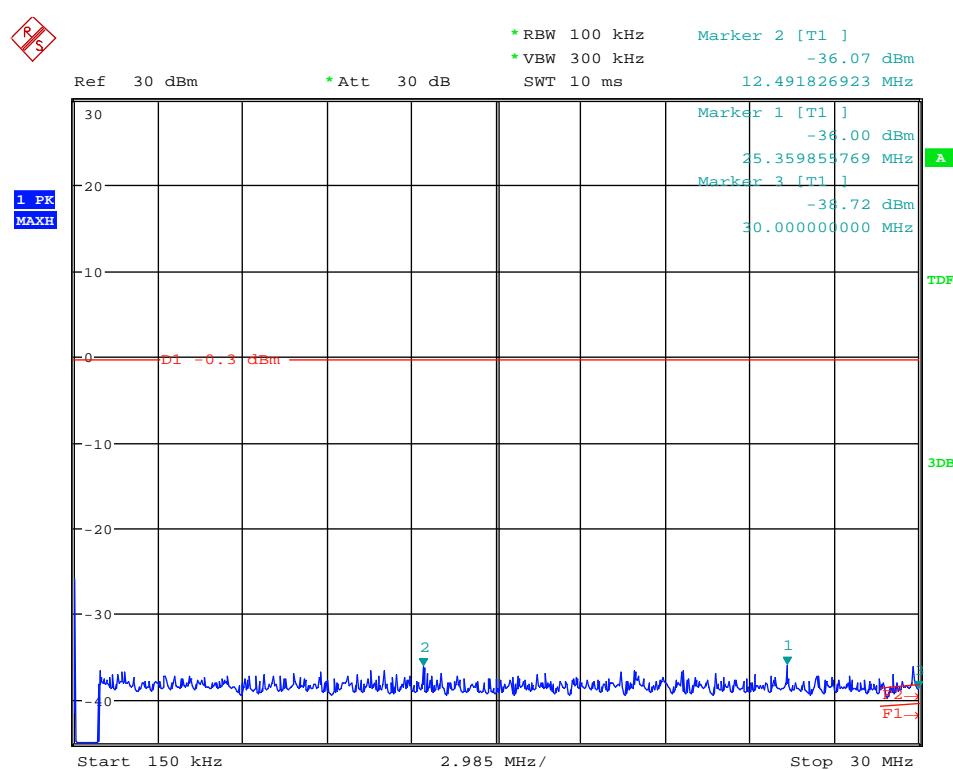
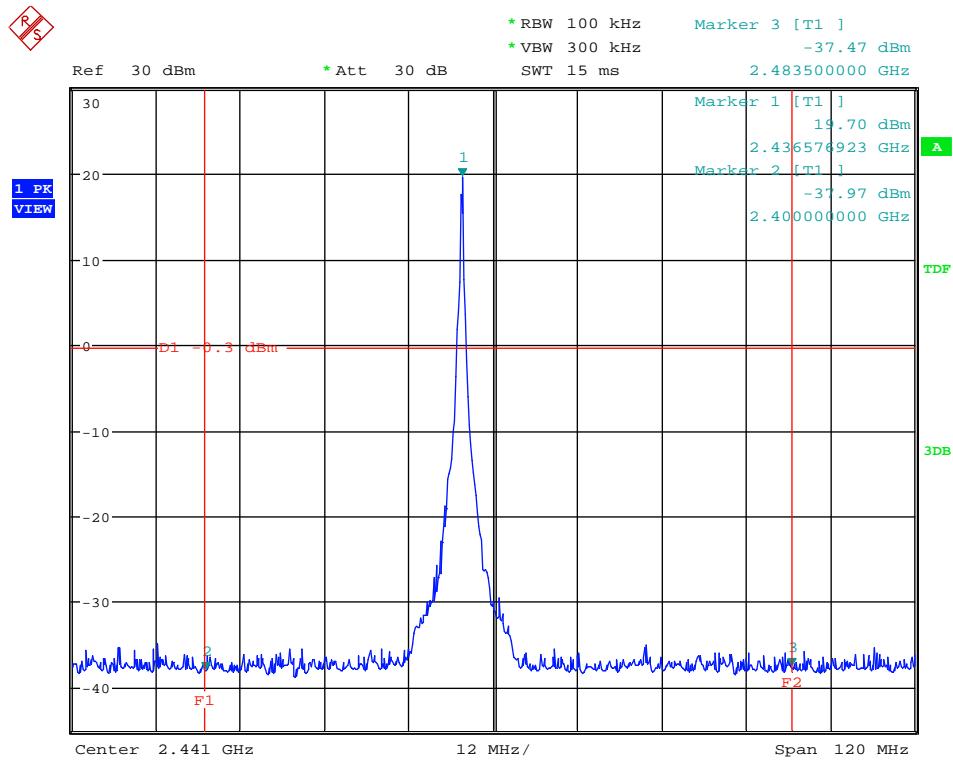
Plot 95: 20dBc-RCM24G-MSK-50Kbps-Hopping Mode-Ch0(2402.5 MHz) to Ch69(2471.5 MHz)-30MHz-2.8GHz

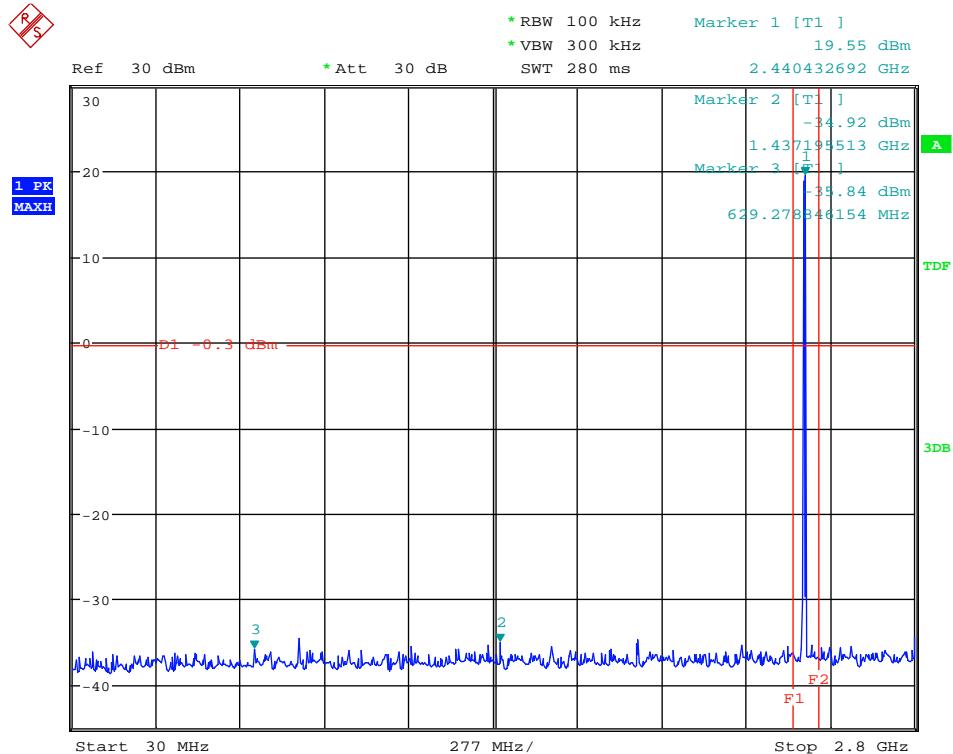
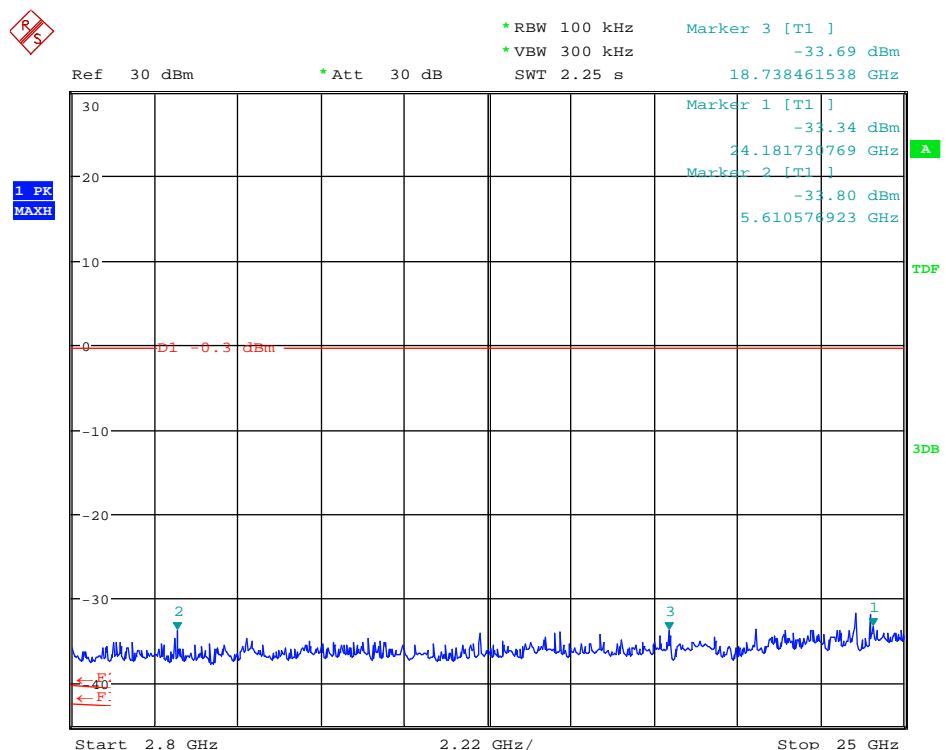


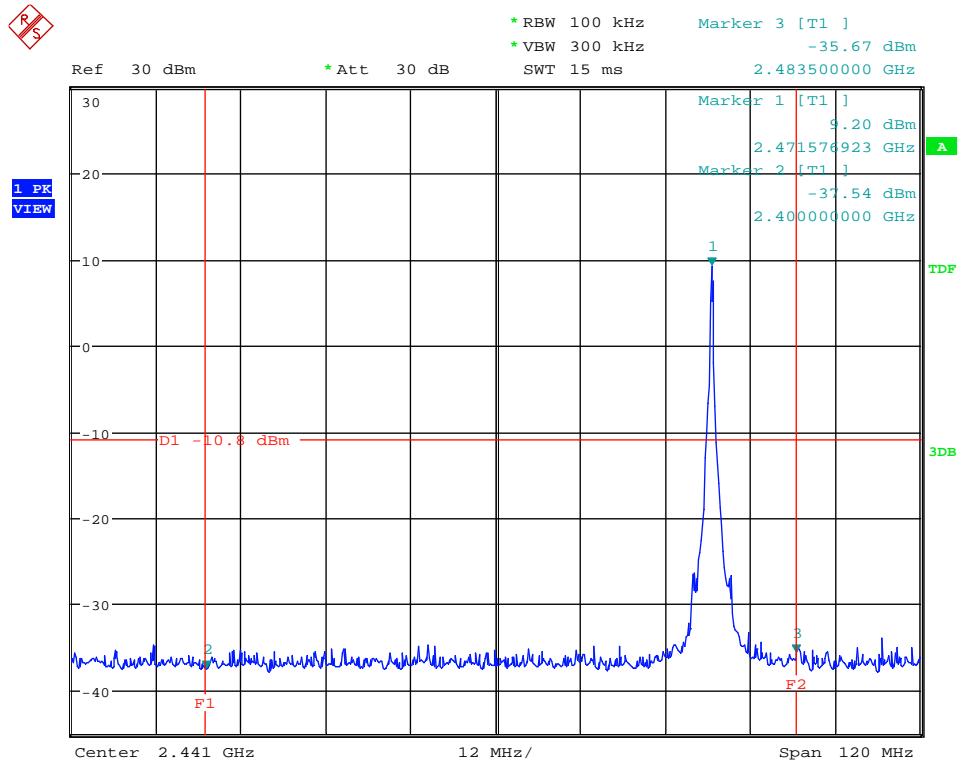
Plot 96: 20dBc-RCM24G-MSK-50Kbps-Hopping Mode-Ch0(2402.5 MHz) to Ch69(2471.5 MHz)-2.8GHz-25GHz

1.7.2. MSK-Data Rate 100Kbps

Plot 97: 20dBc-RCM24G-MSK-100Kbps-Ch0(2402.5 MHz)-PWR+12dBm-Carrier

Plot 98: 20dBc-RCM24G-MSK-100Kbps-Ch0(2402.5 MHz)-PWR+12dBm-0.15MHz-30MHz

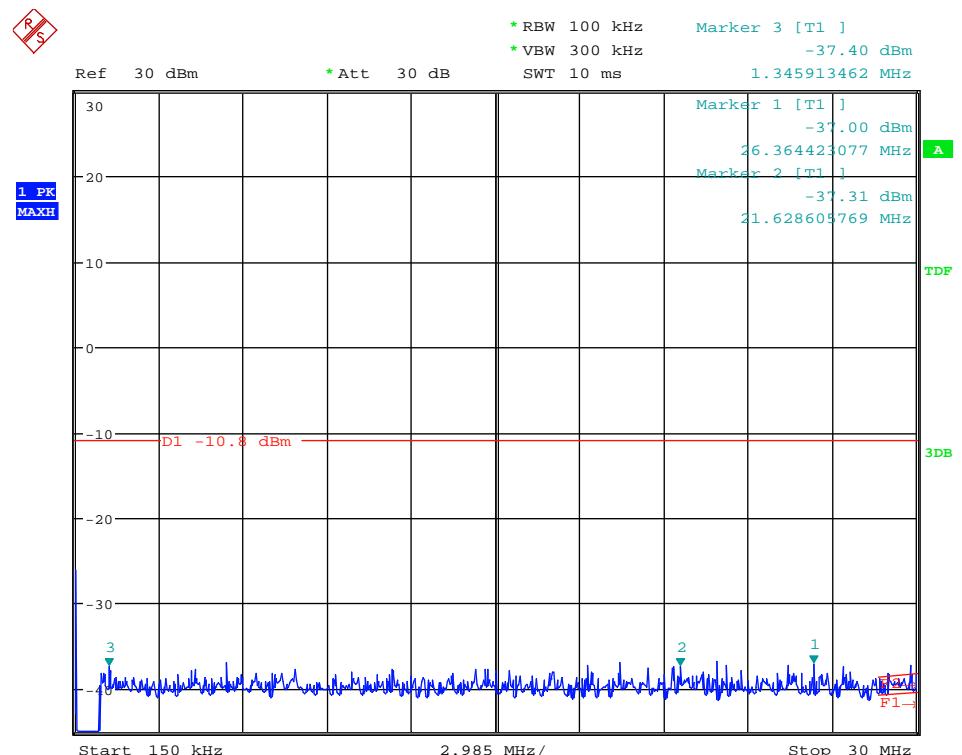




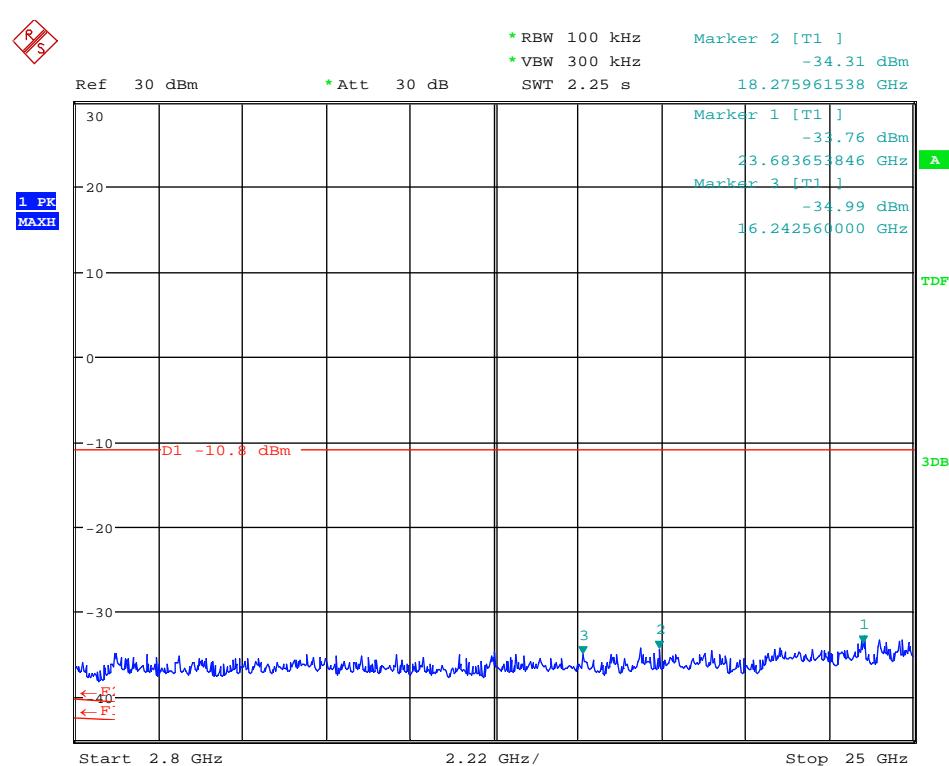
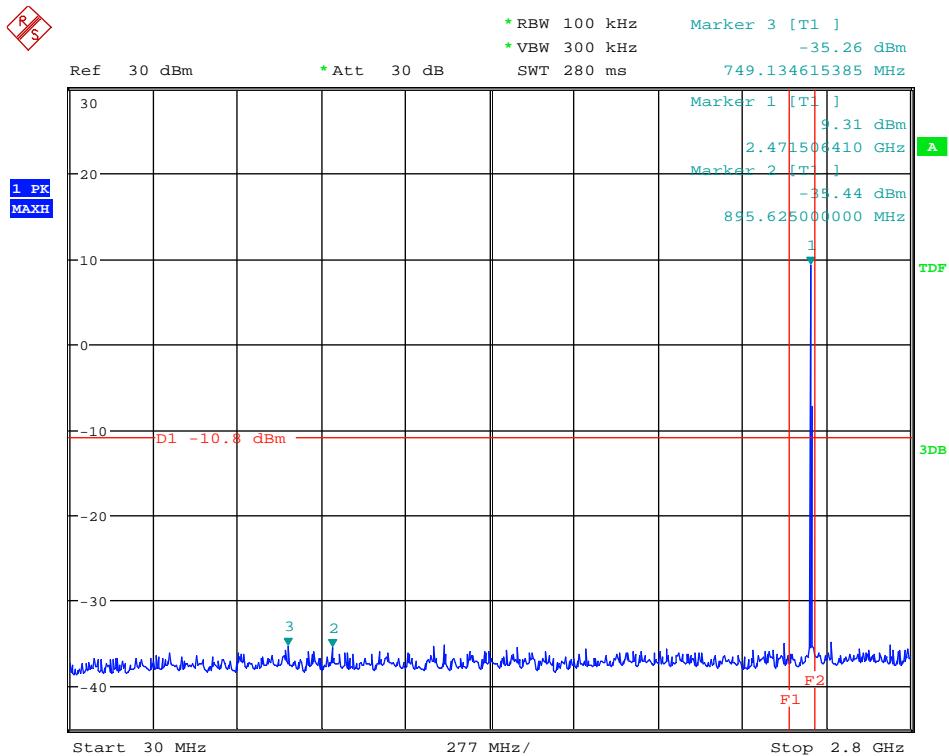

Plot 103: 20dBc-RCM24G-MSK-100Kbps-Ch34(2436.5 MHz)-PWR+21dBm-30MHz-2.8GHz

Plot 104: 20dBc-RCM24G-MSK-100Kbps-Ch34(2436.5 MHz)-PWR+21dBm-2.8GHz-25GHz

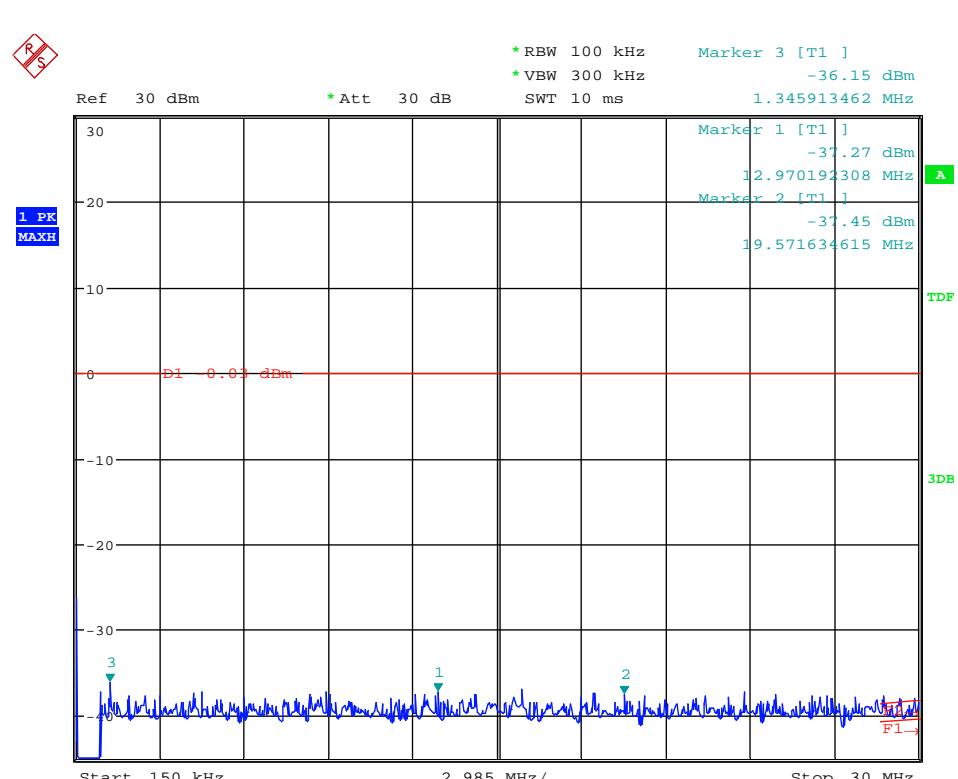
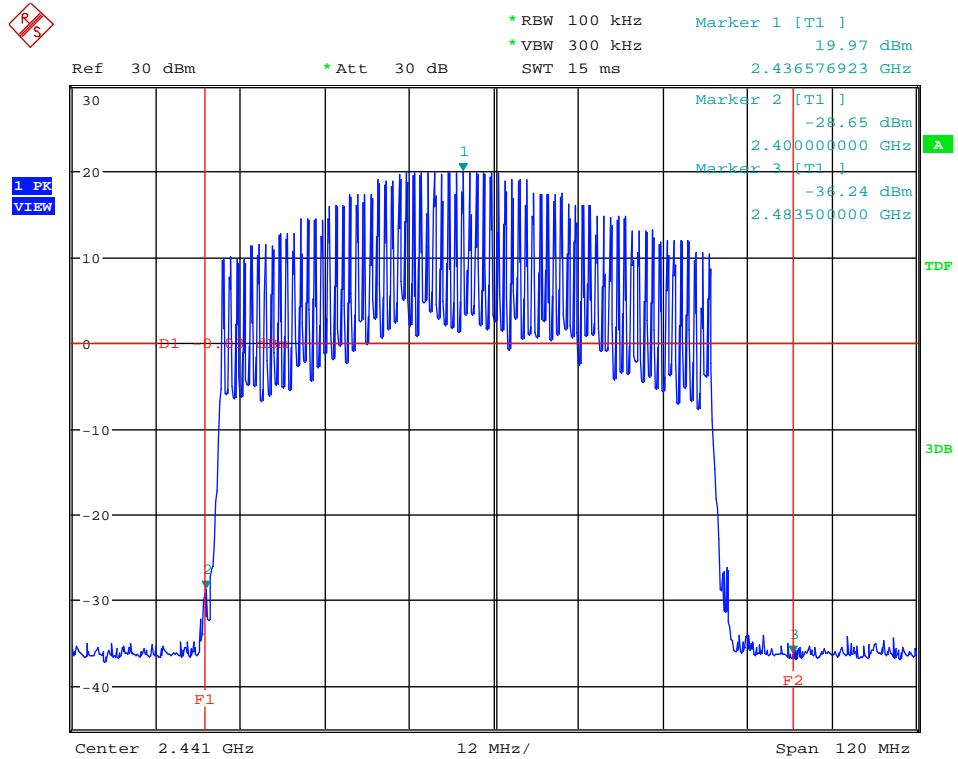


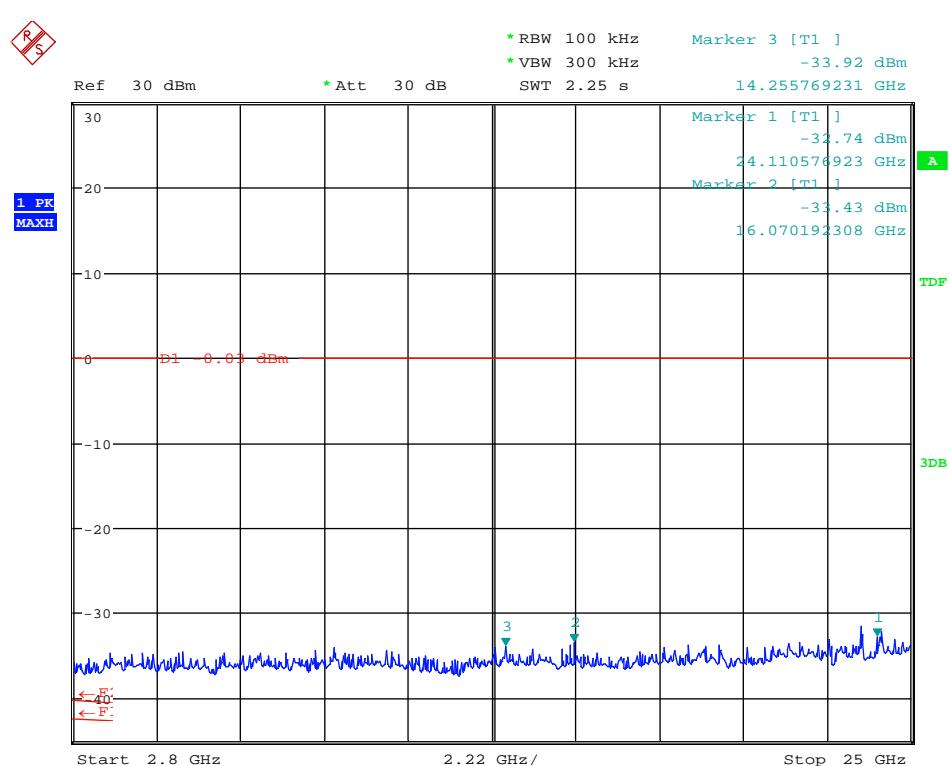
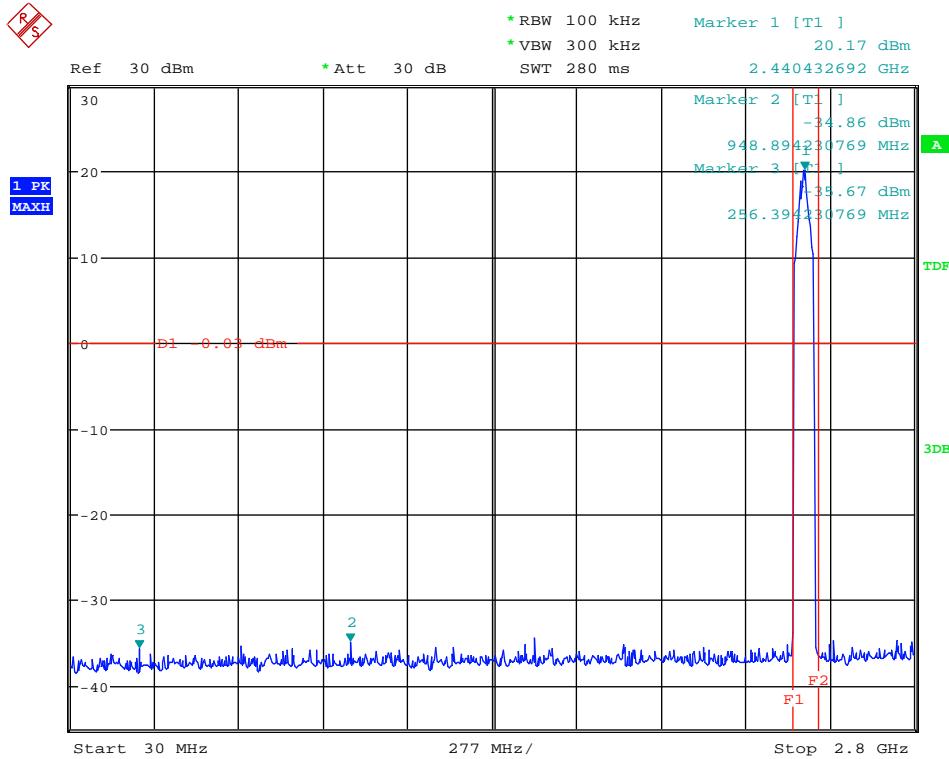
Plot 105: 20dBc-RCM24G-MSK-100Kbps-Ch69(2471.5 MHz)-PWR+12dBm-Carrier



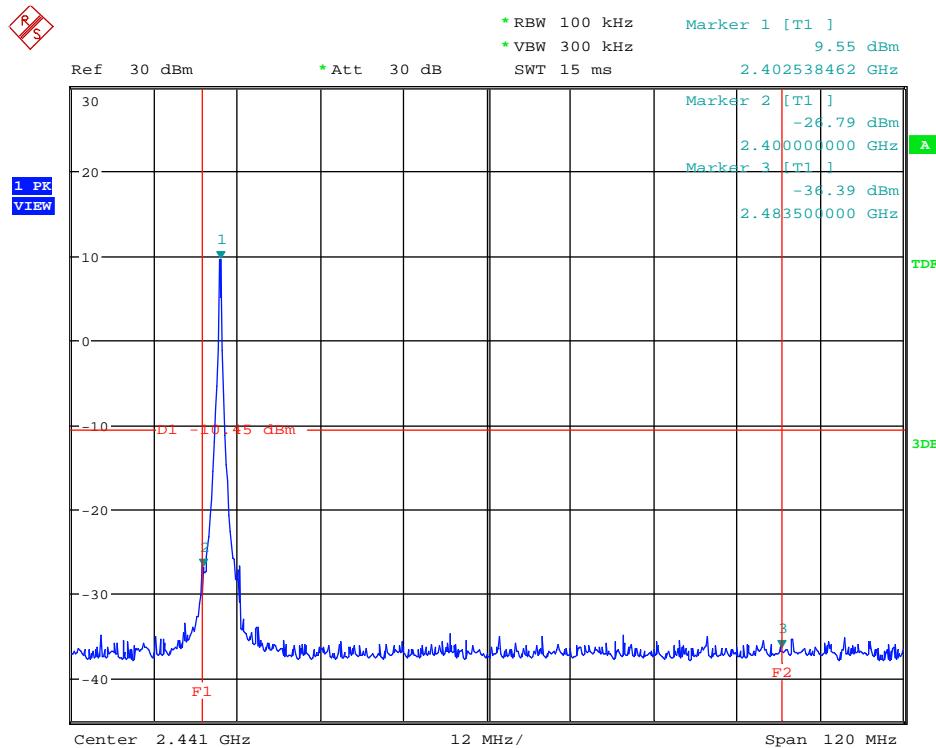
Plot 106: 20dBc-RCM24G-MSK-100Kbps- Ch69(2471.5 MHz)-PWR+12dBm-0.15MHz-30MHz



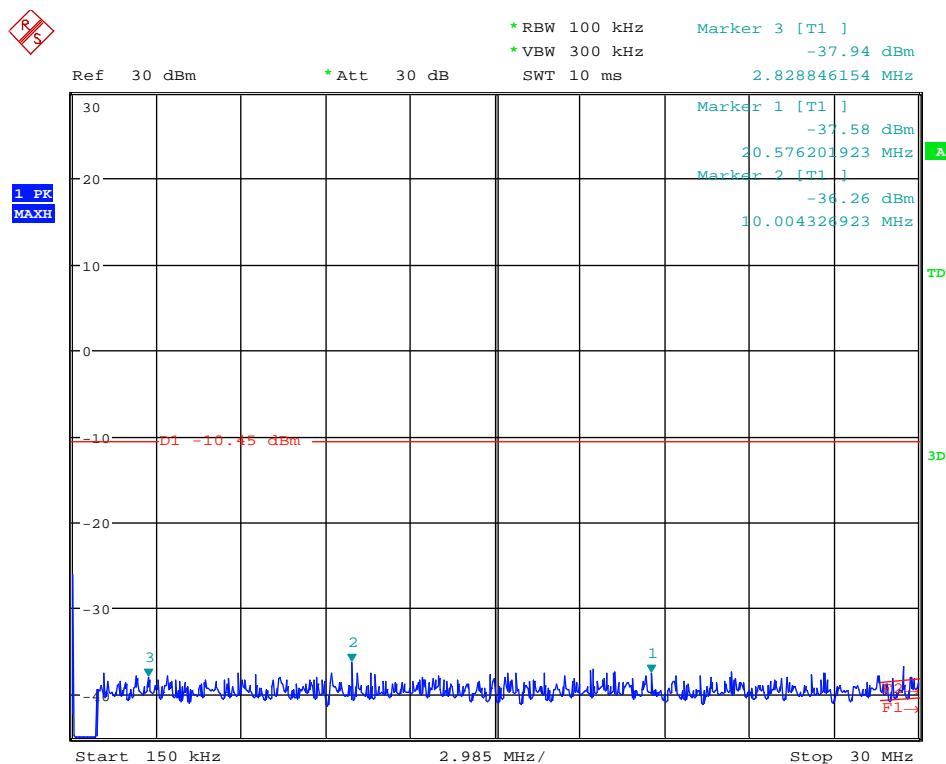




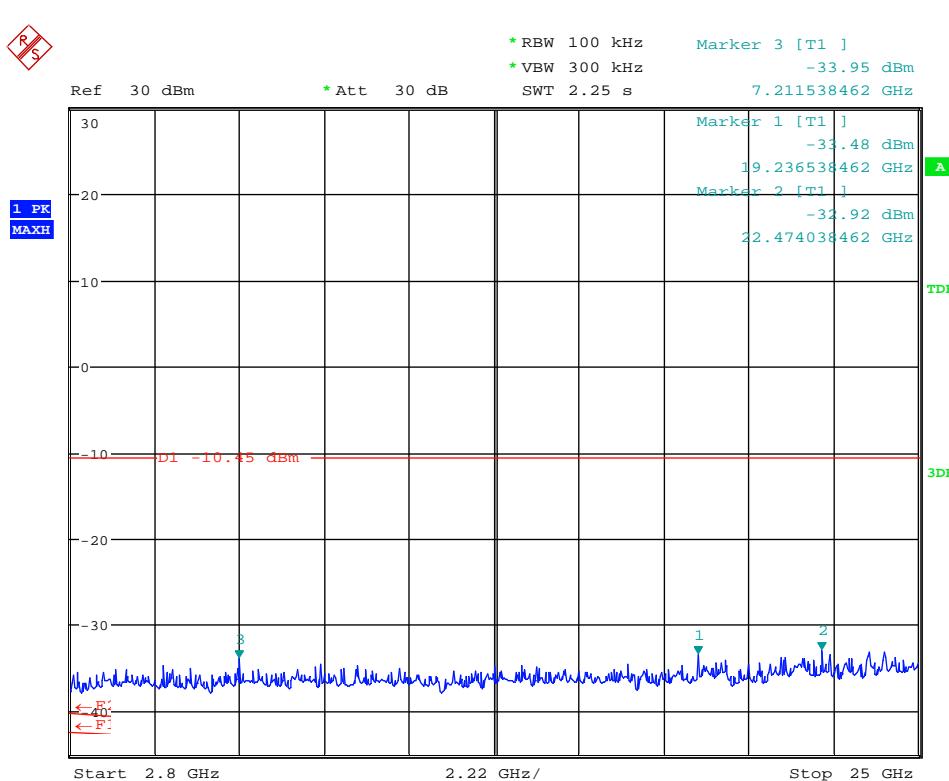
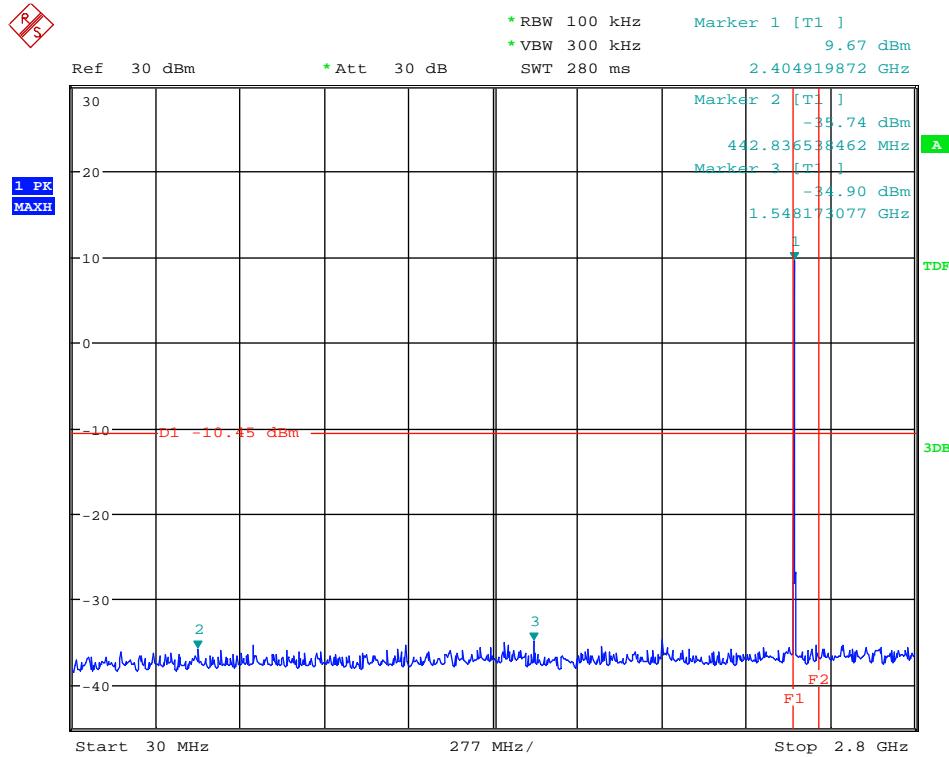
1.7.3. MSK-Data Rate 250Kbps

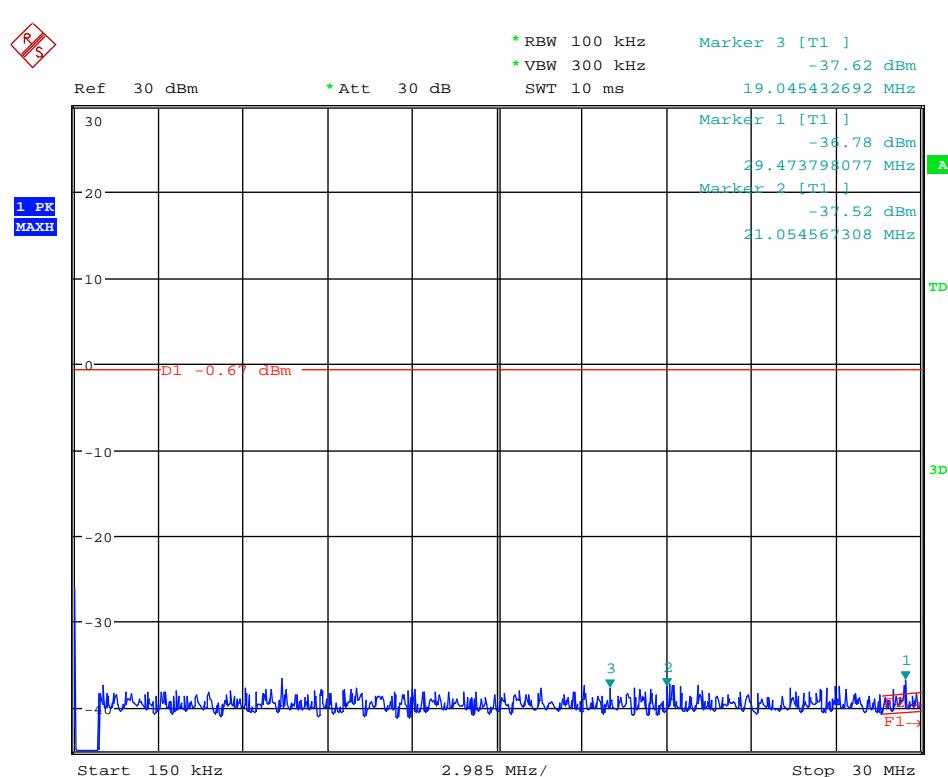
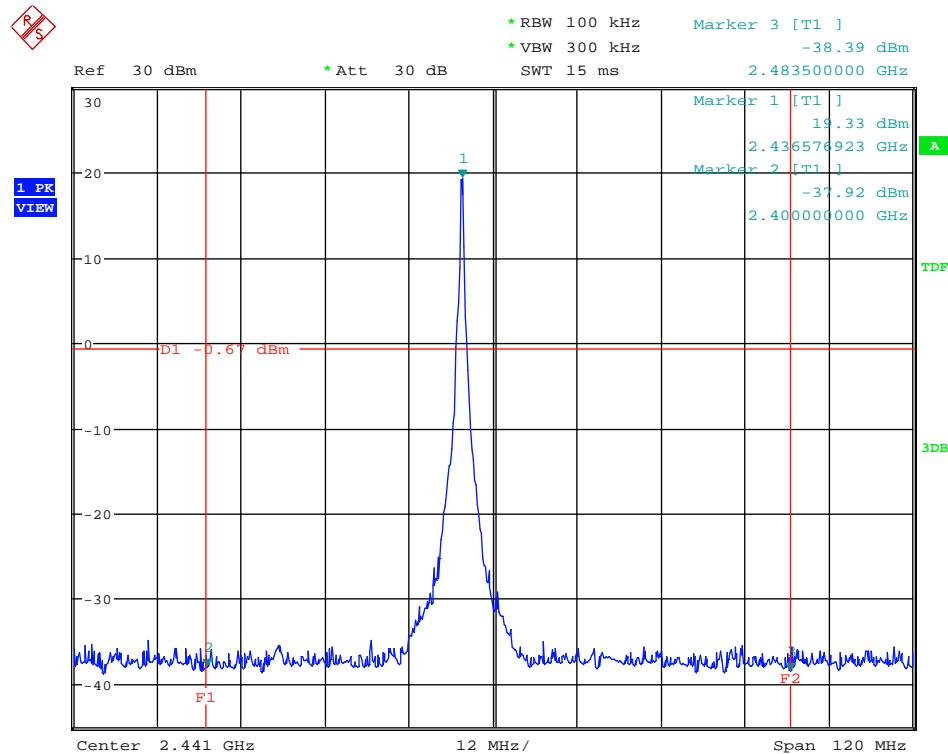


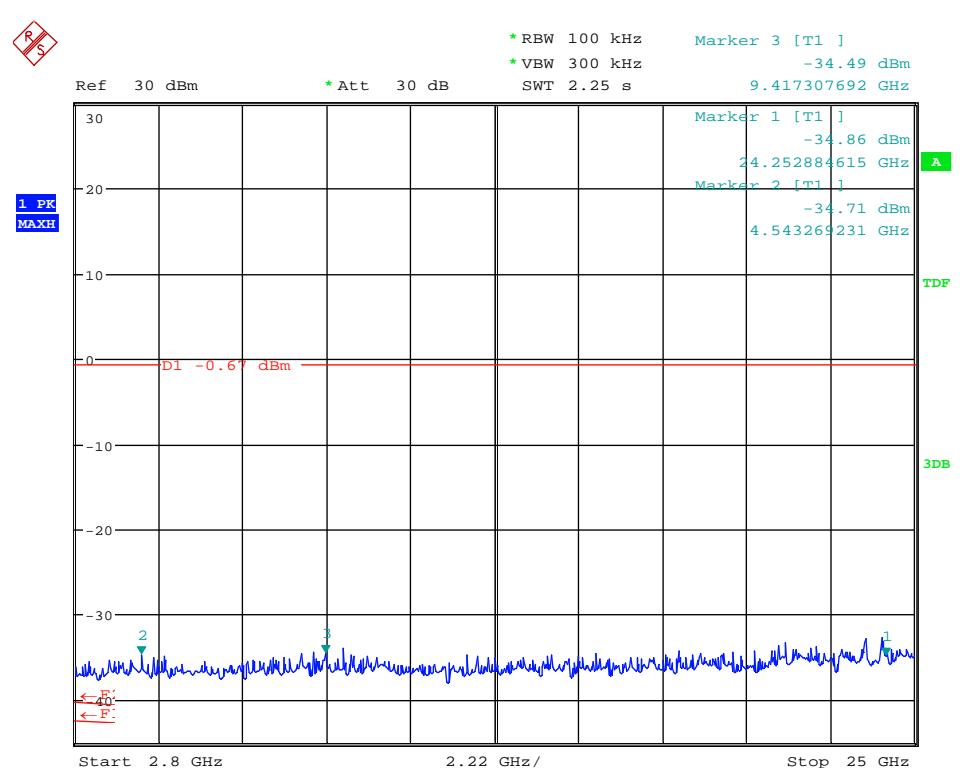
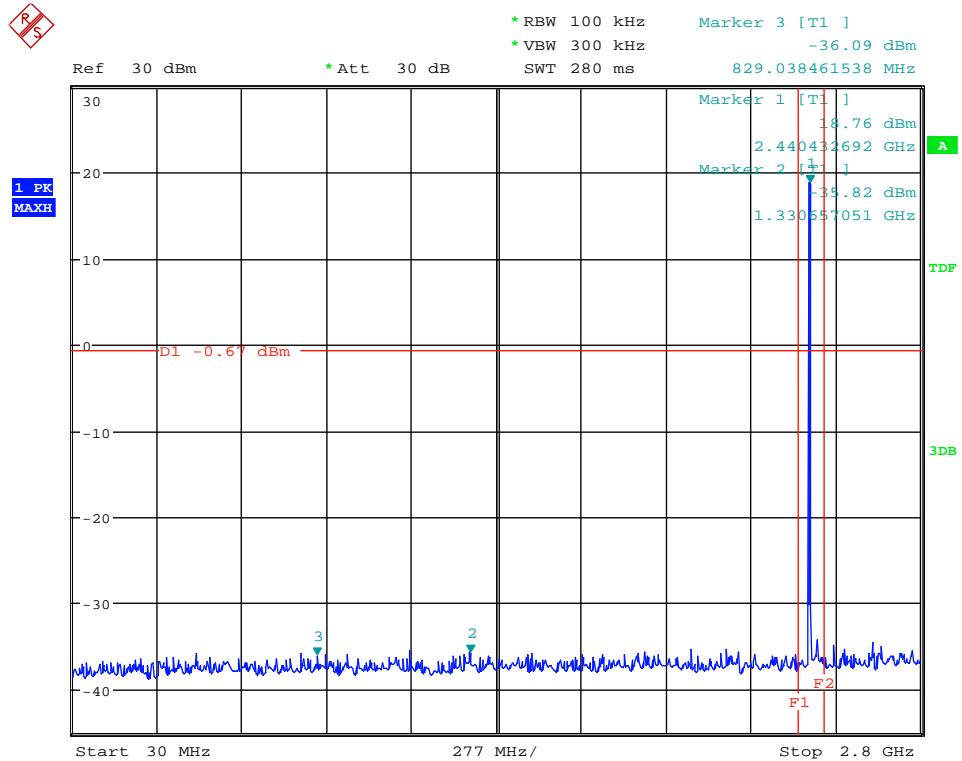
Plot 113: 20dBc-RCM24G-MSK-250Kbps-Ch0(2402.5 MHz)-PWR+12dBm-Carrier

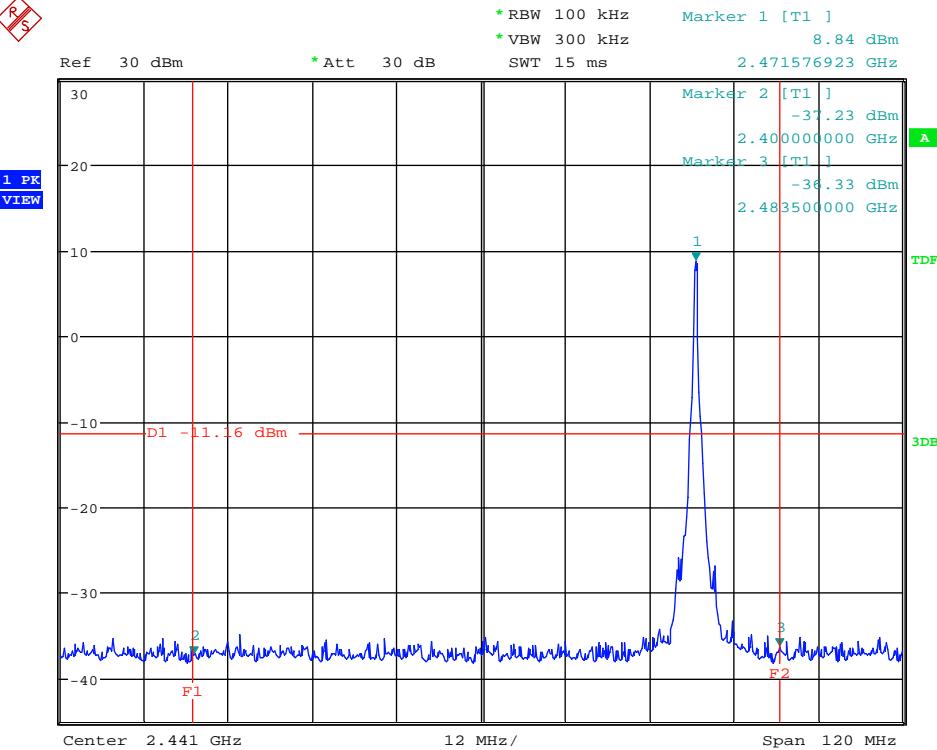


Plot 114: 20dBc-RCM24G-MSK-250Kbps-Ch0(2402.5 MHz)-PWR+12dBm-0.15MHz-30MHz

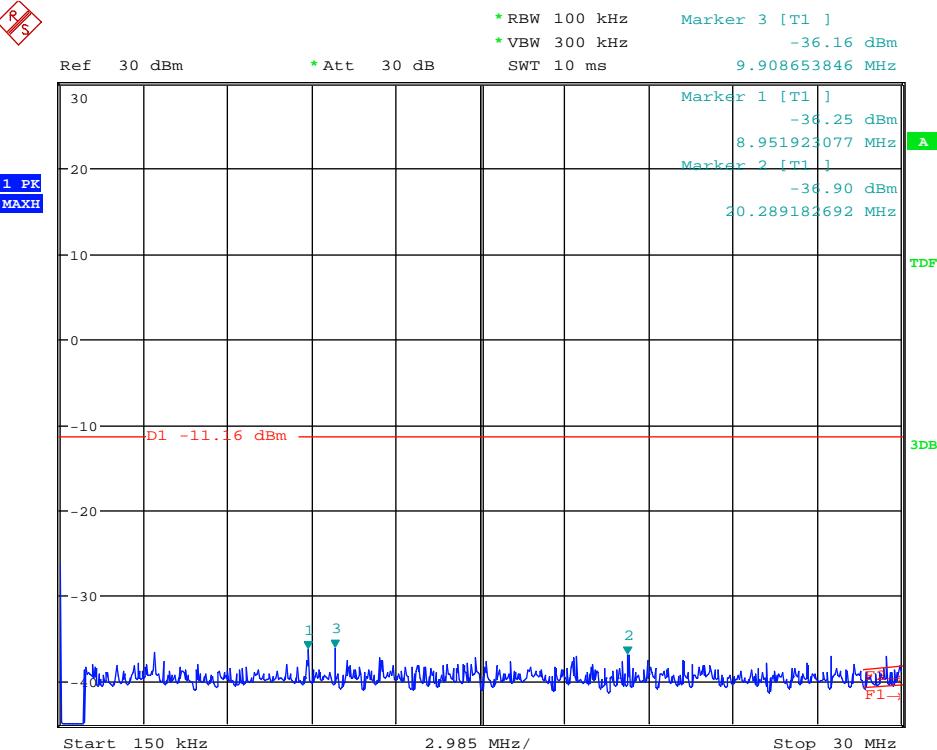




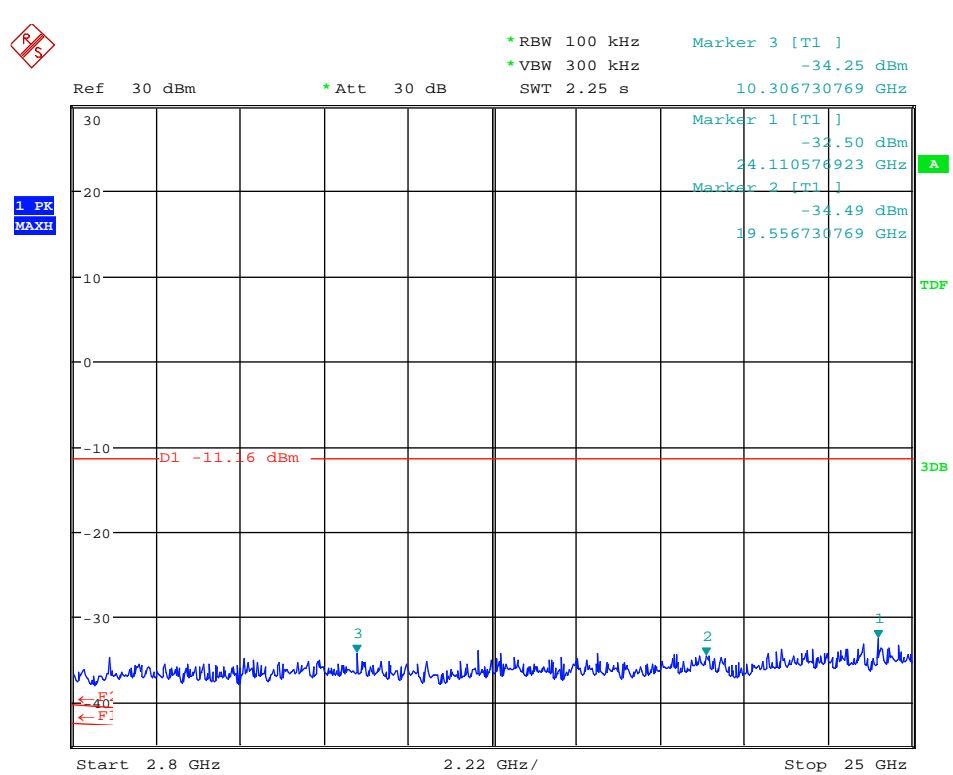
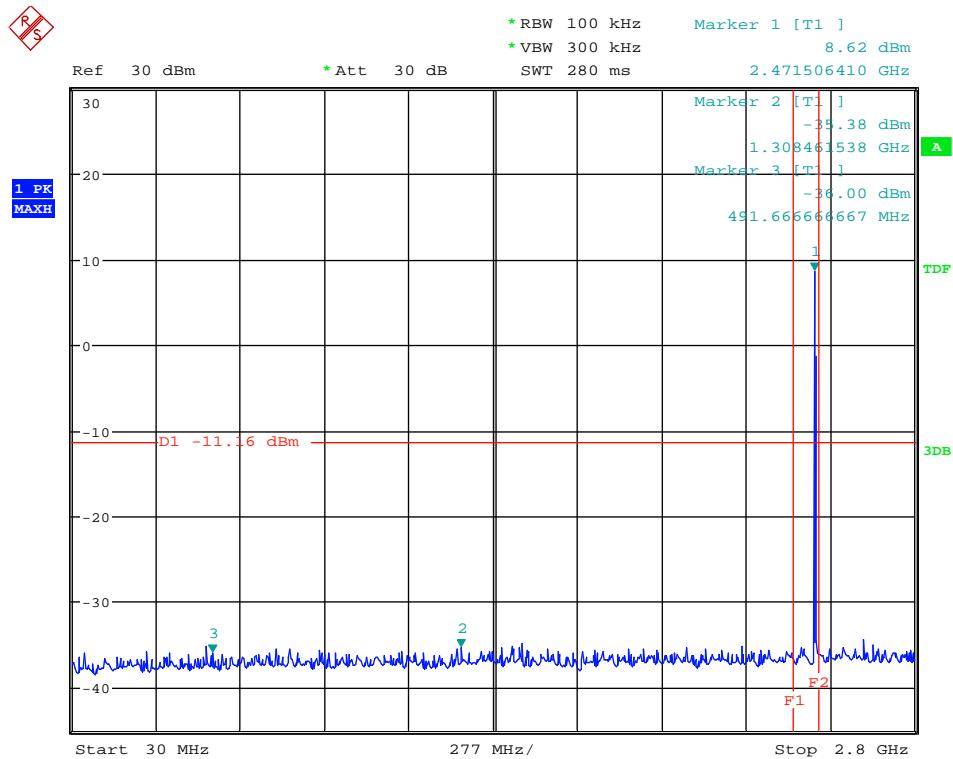


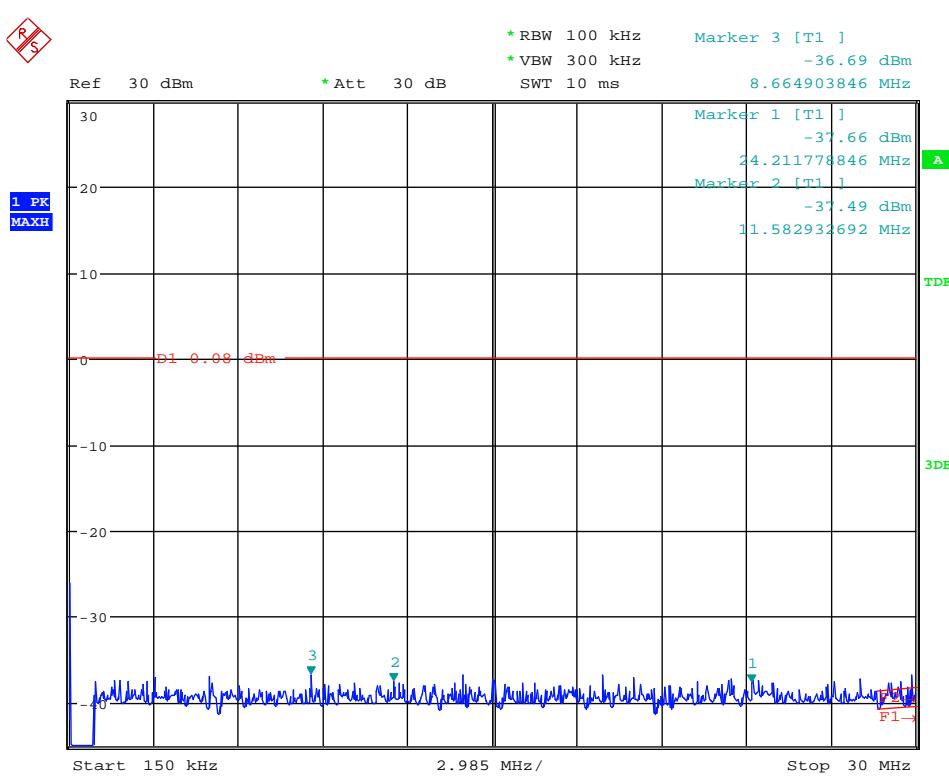
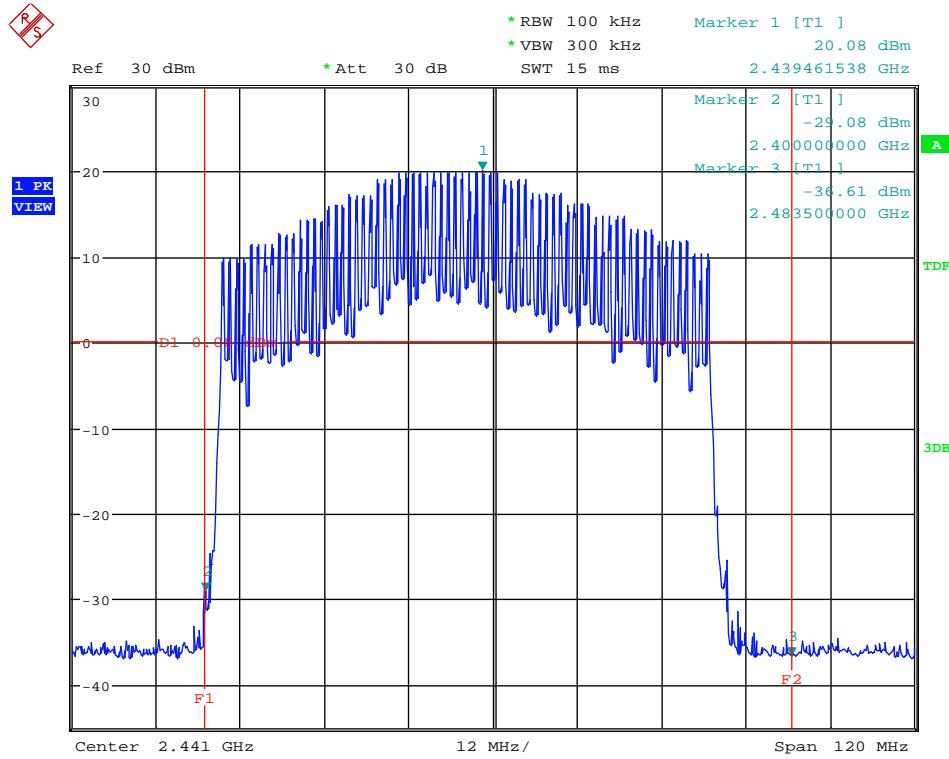



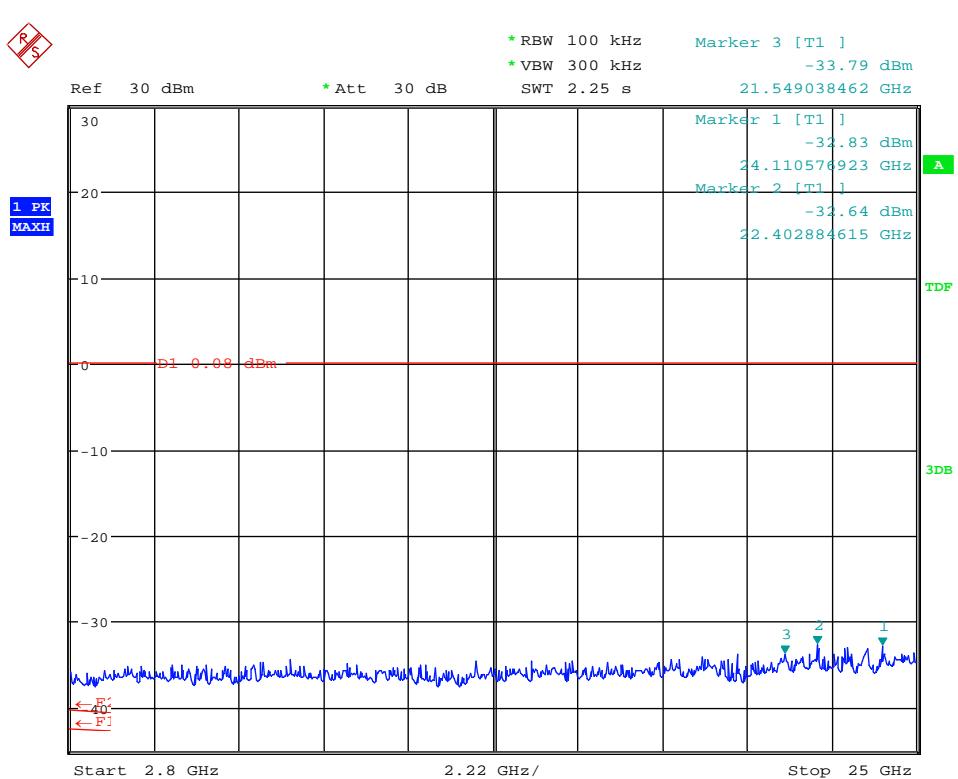
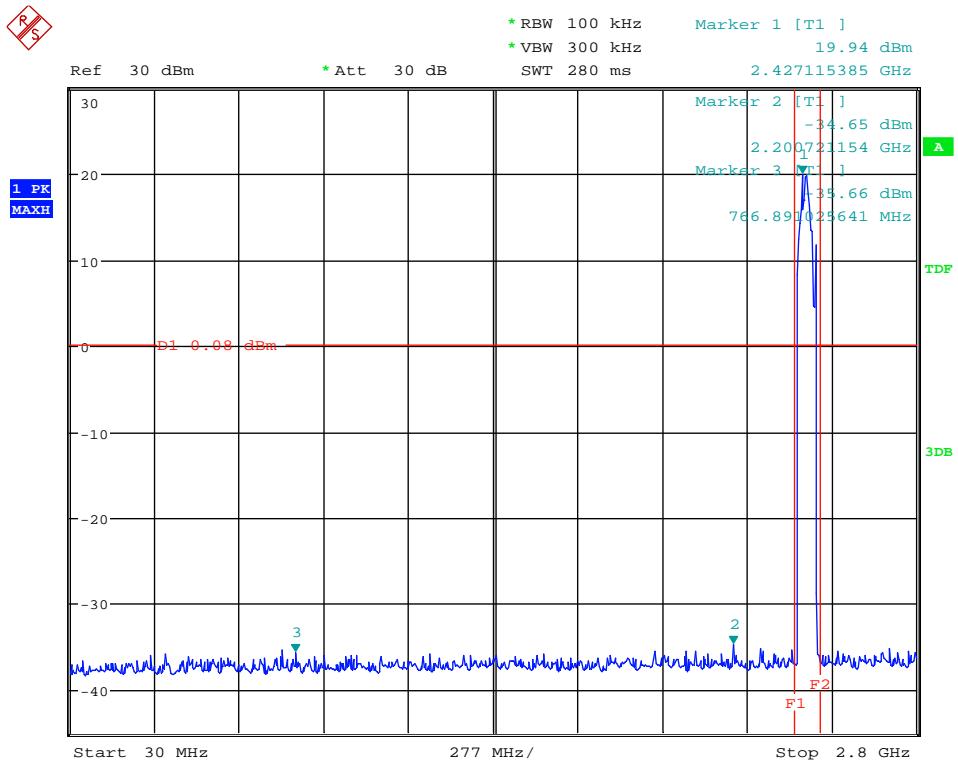
Plot 121: 20dBc-RCM24G-MSK-250Kbps-Ch69(2471.5 MHz)-PWR+12dBm-Carrier

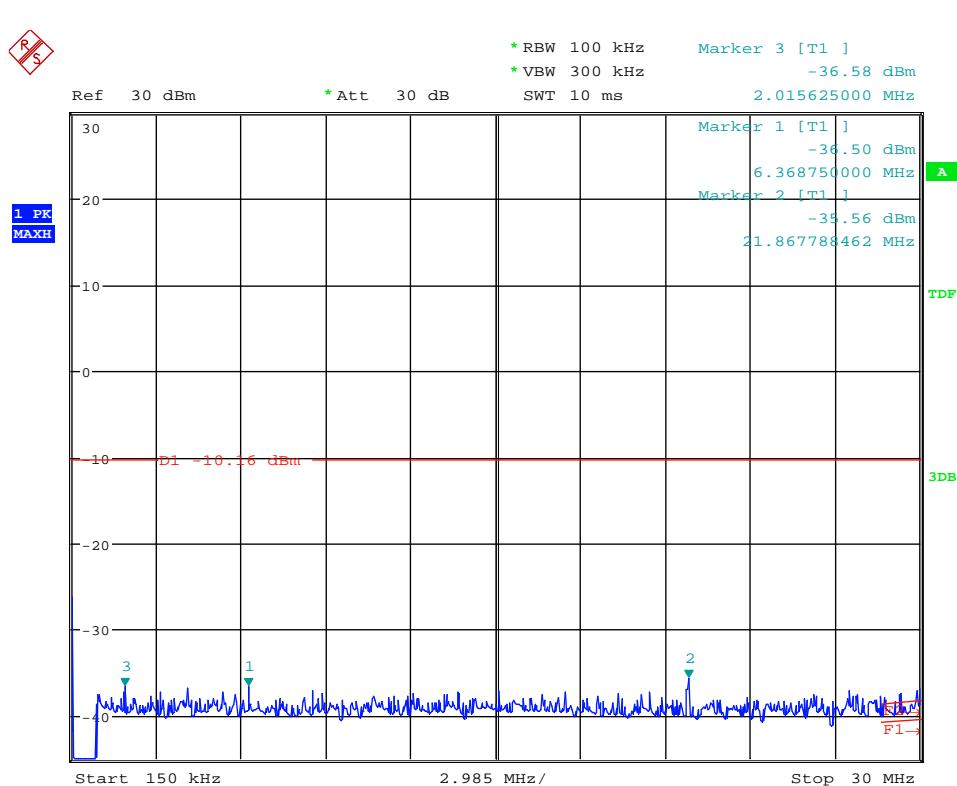
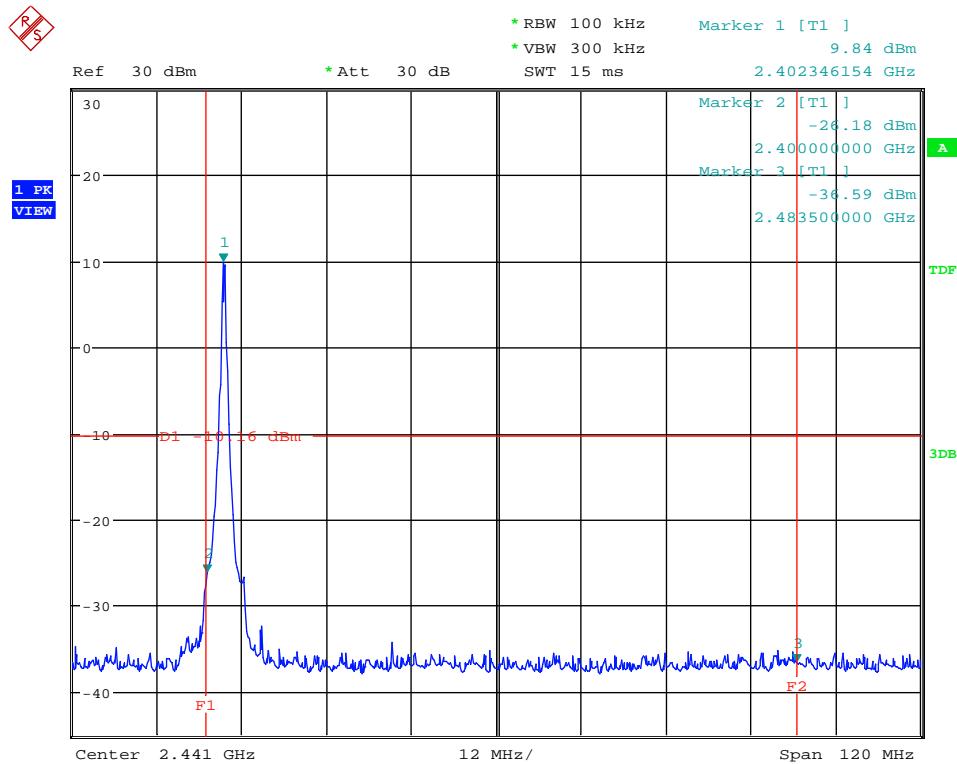



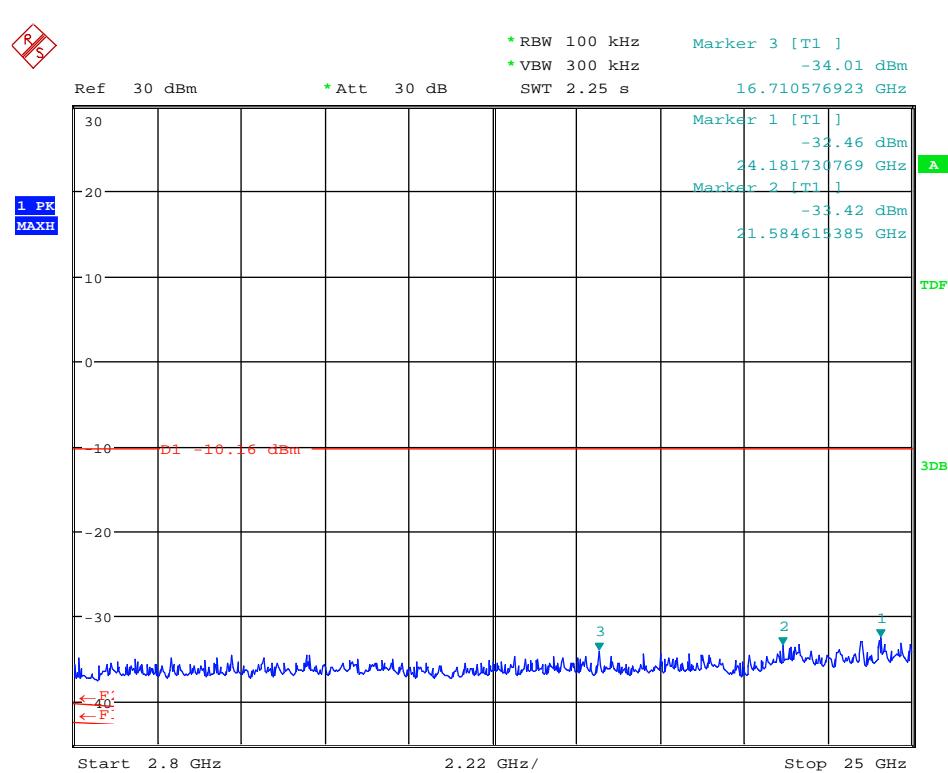
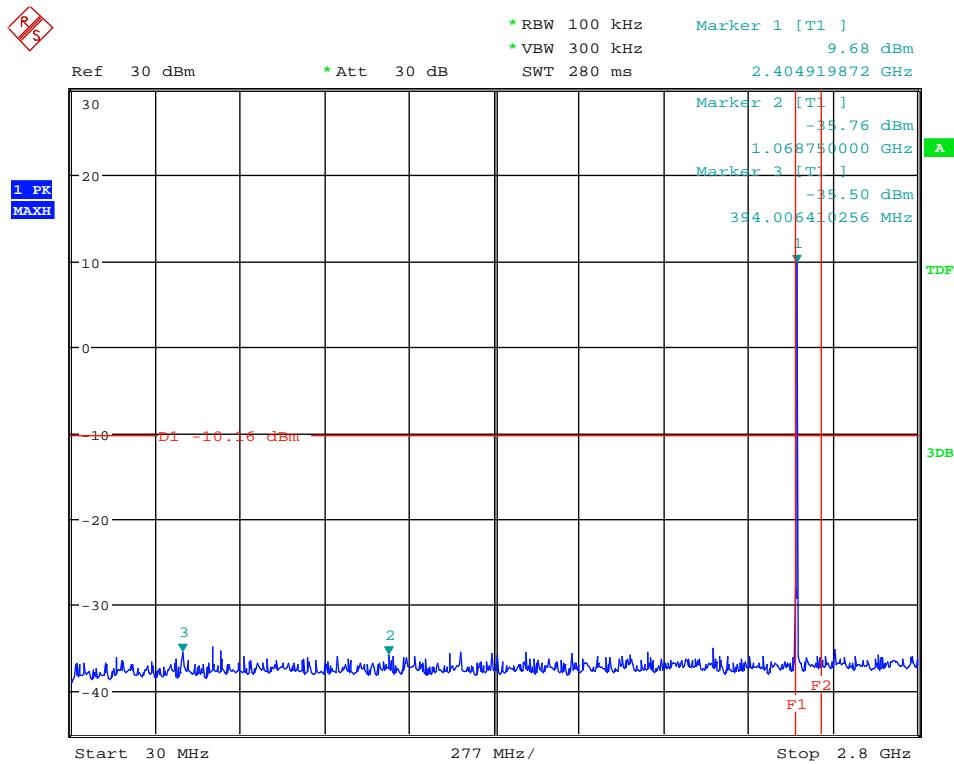
Plot 122: 20dBc-RCM24G-MSK-250Kbps- Ch69(2471.5 MHz)-PWR+12dBm-0.15MHz-30MHz

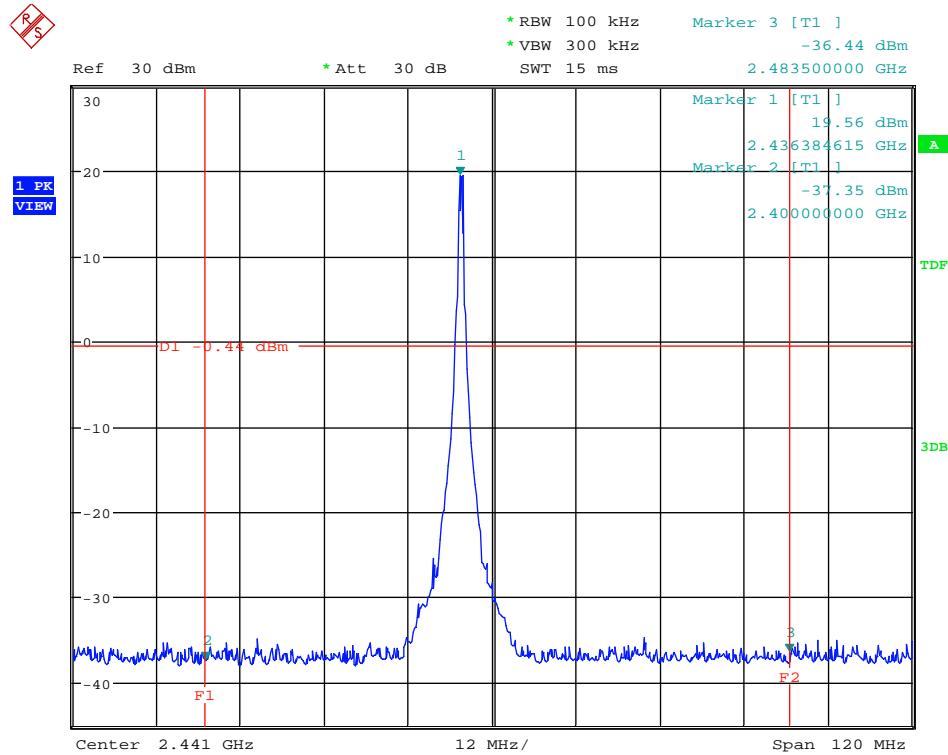




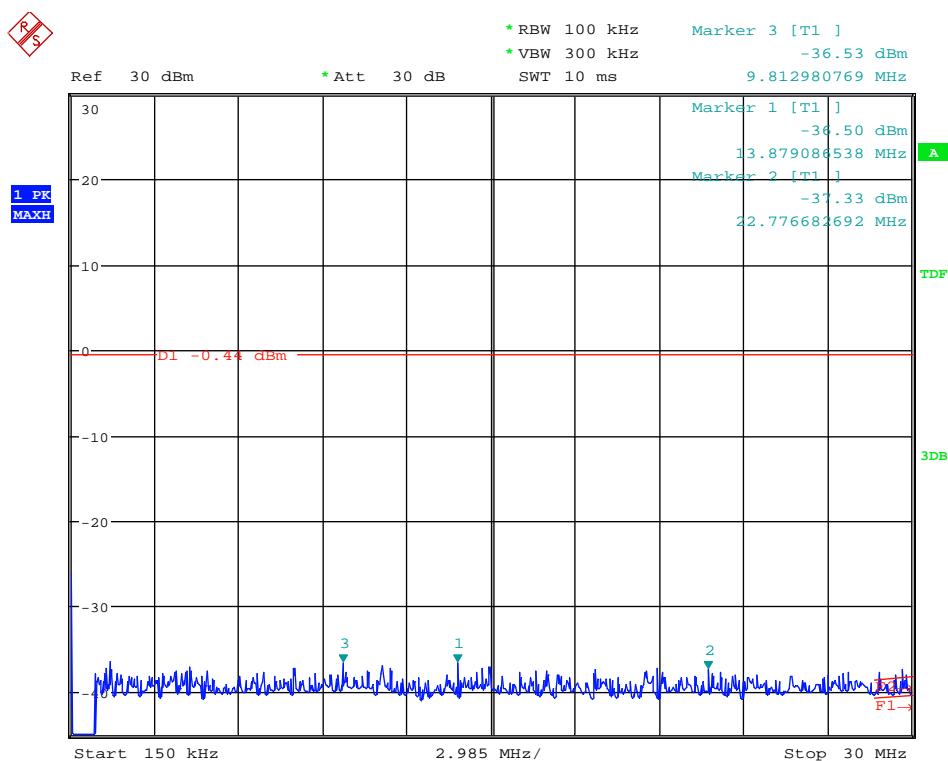


1.7.4. MSK-Data Rate 500Kbps


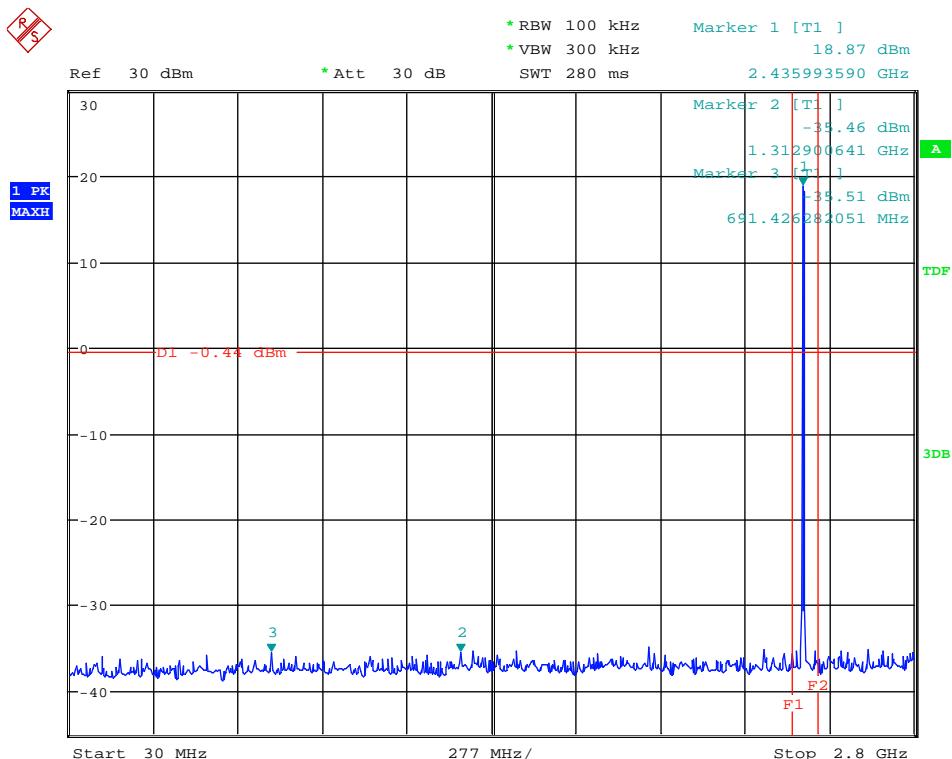




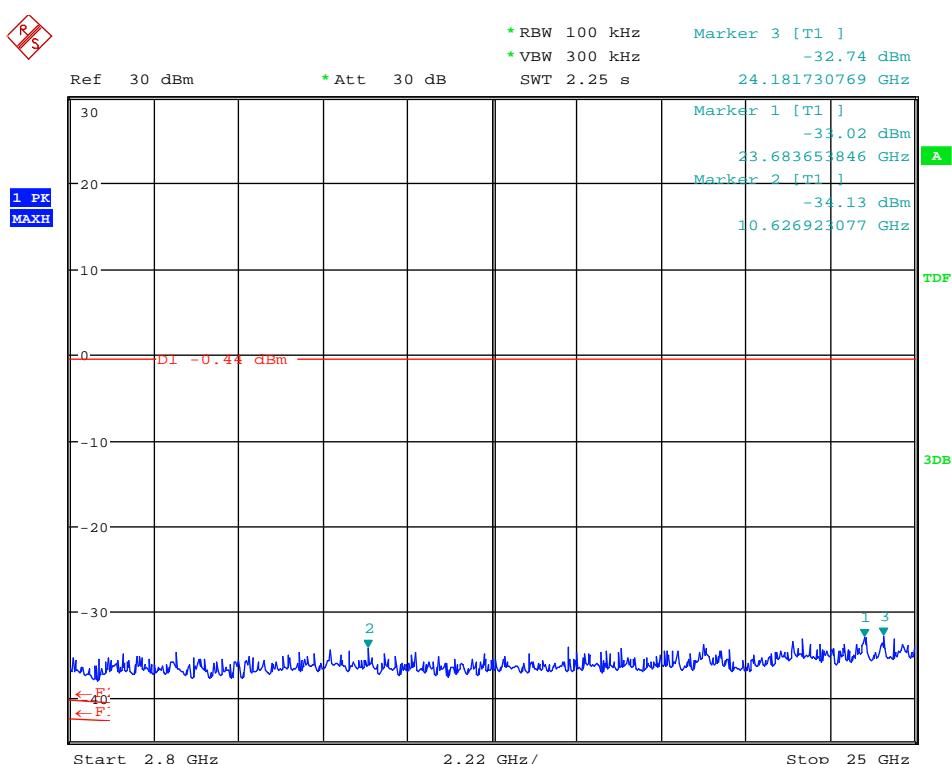
Plot 133: 20dBc-RCM24G-MSK-500Kbps-Ch34(2436.5 MHz)-PWR+21dBm-Carrier



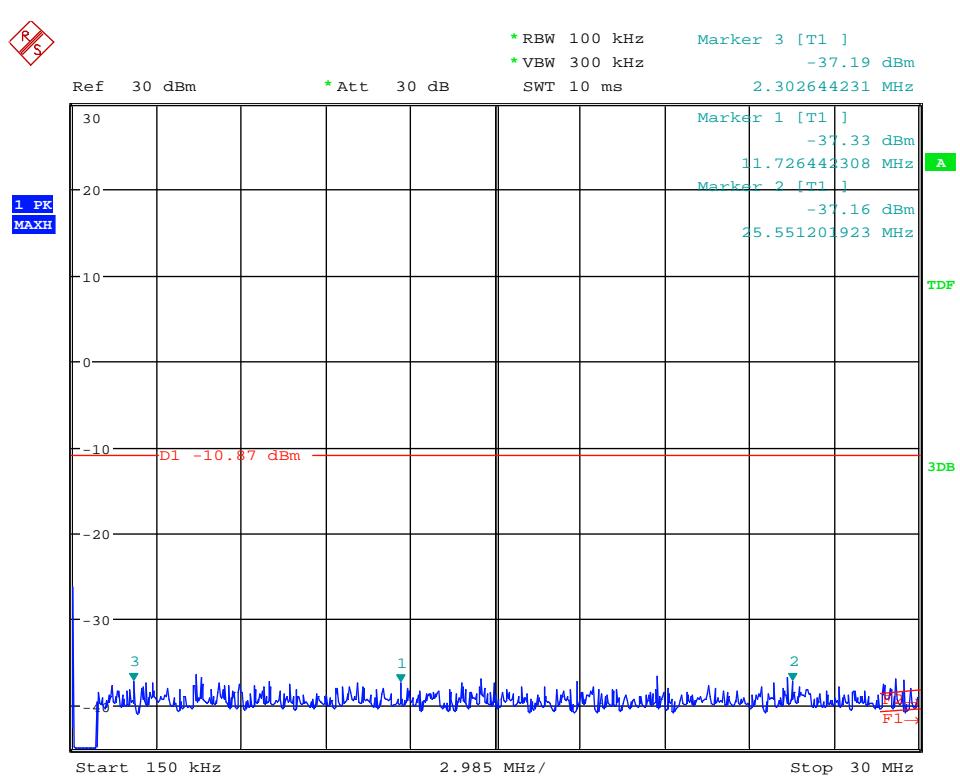
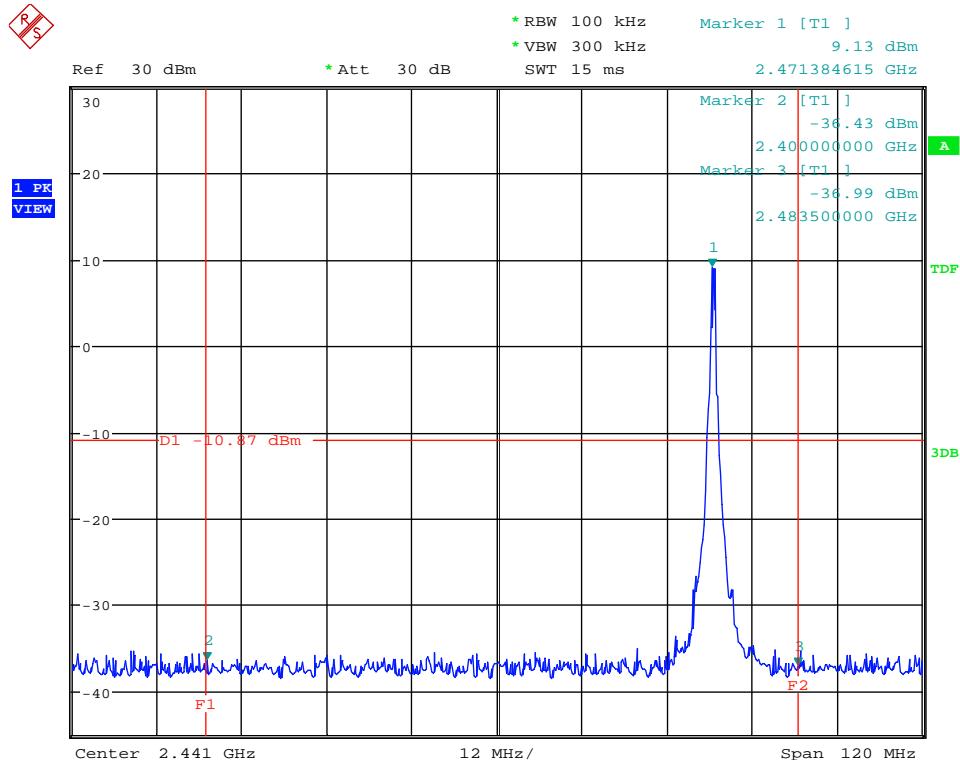
Plot 134: 20dBc-RCM24G-MSK-500Kbps- Ch34(2436.5 MHz)-PWR+21dBm-0.15MHz-30MHz

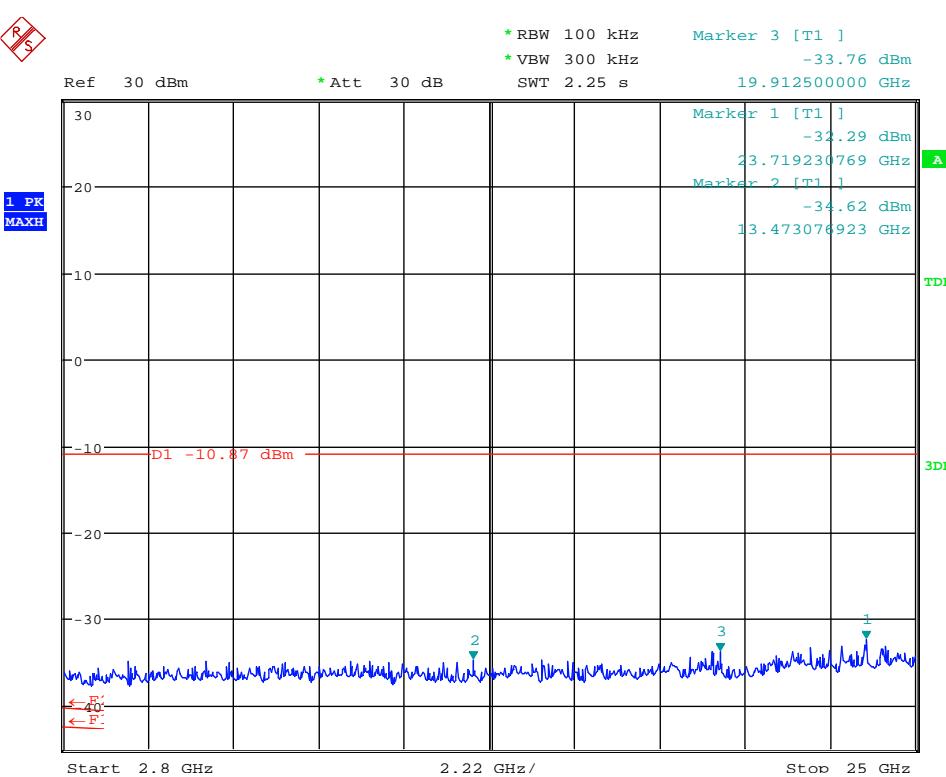
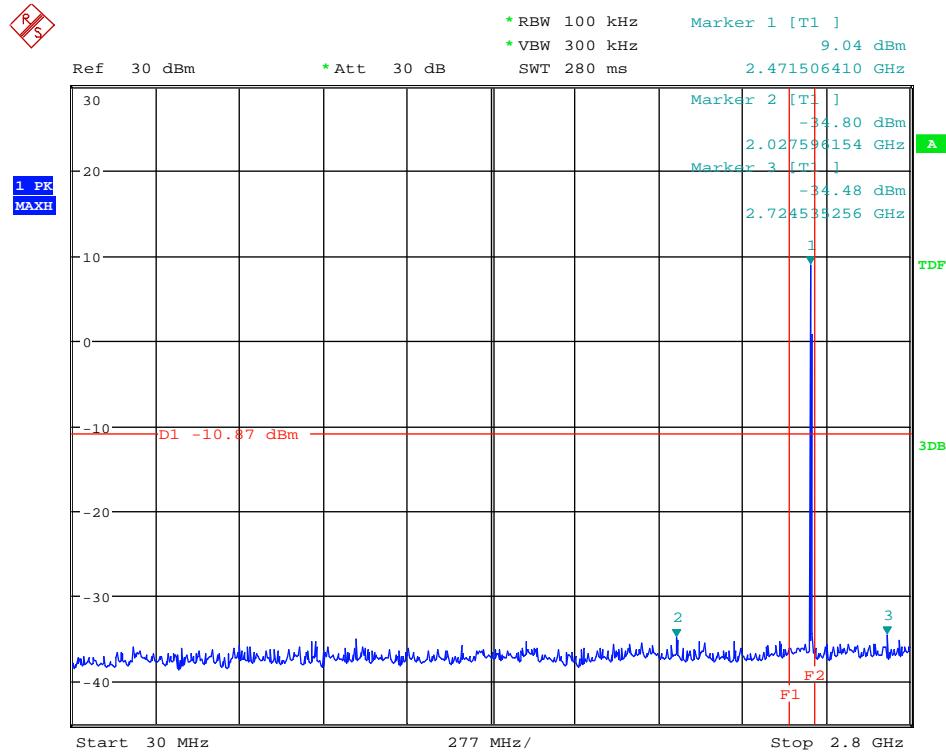


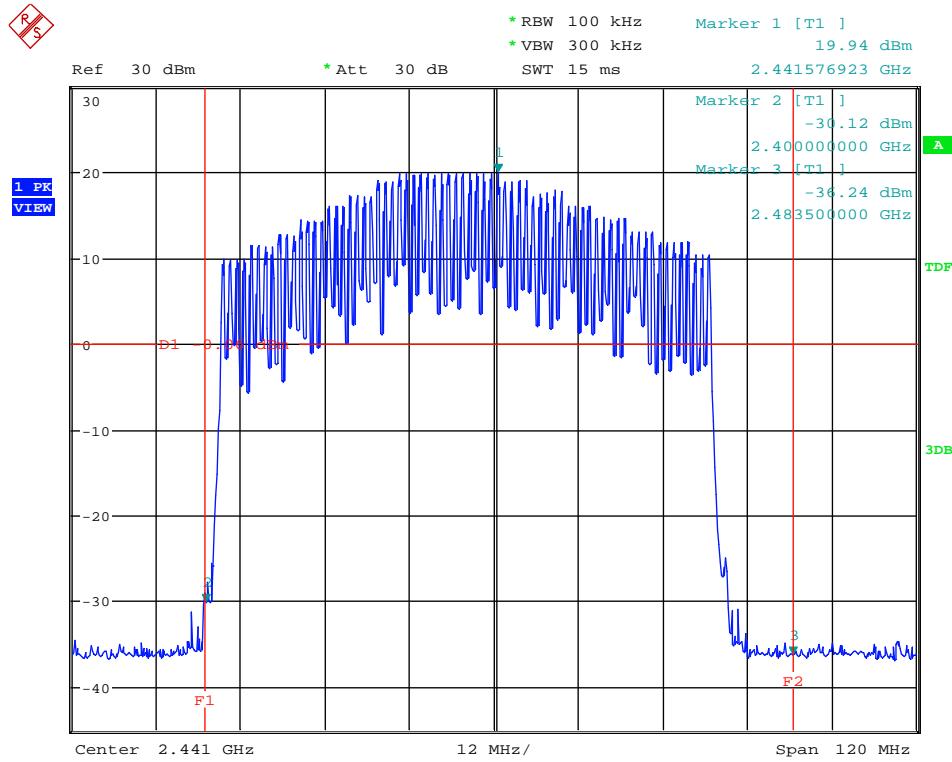
Plot 135: 20dBc-RCM24G-MSK-500Kbps-Ch34(2436.5 MHz)-PWR+21dBm-30MHz-2.8GHz



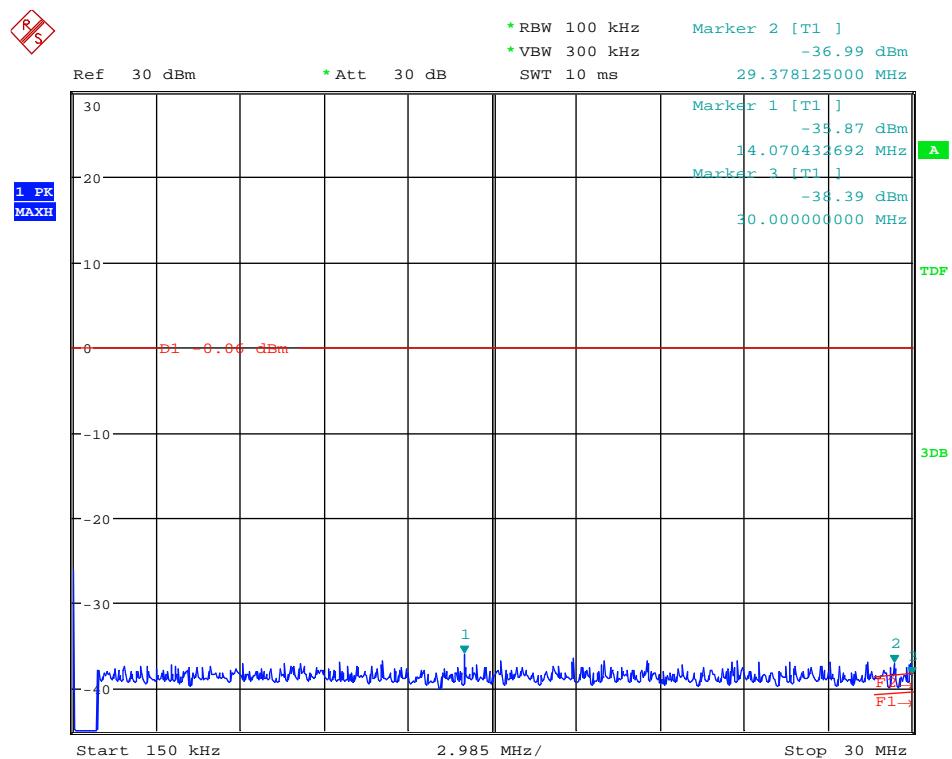
Plot 136: 20dBc-RCM24G-MSK-500Kbps-Ch34(2436.5 MHz)-PWR+21dBm-2.8GHz-25GHz



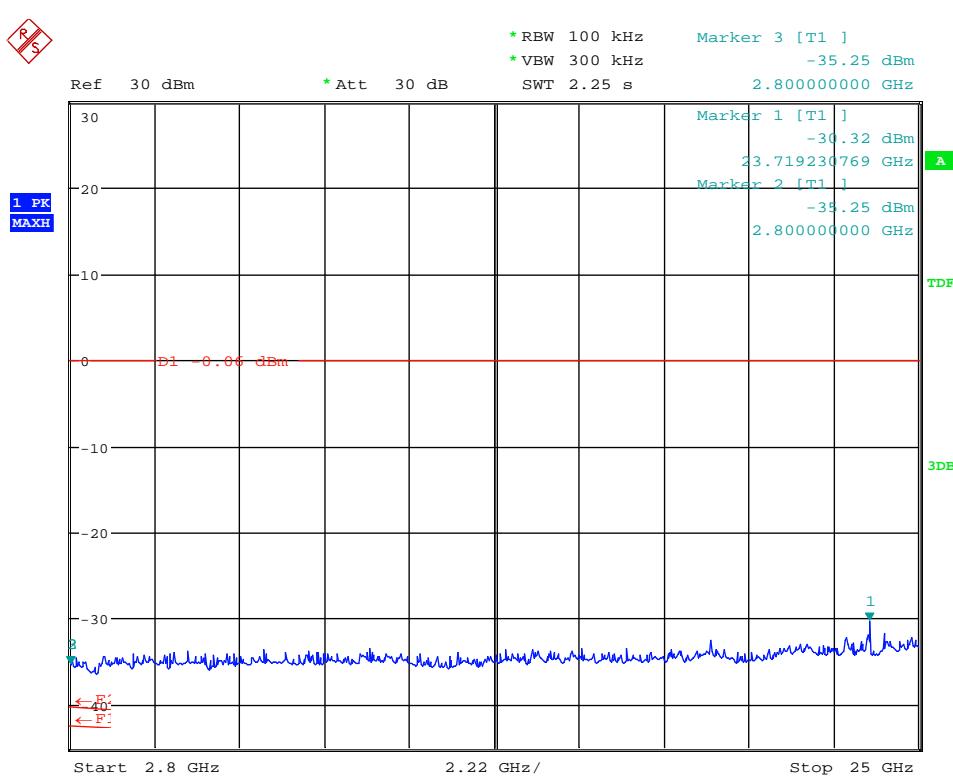
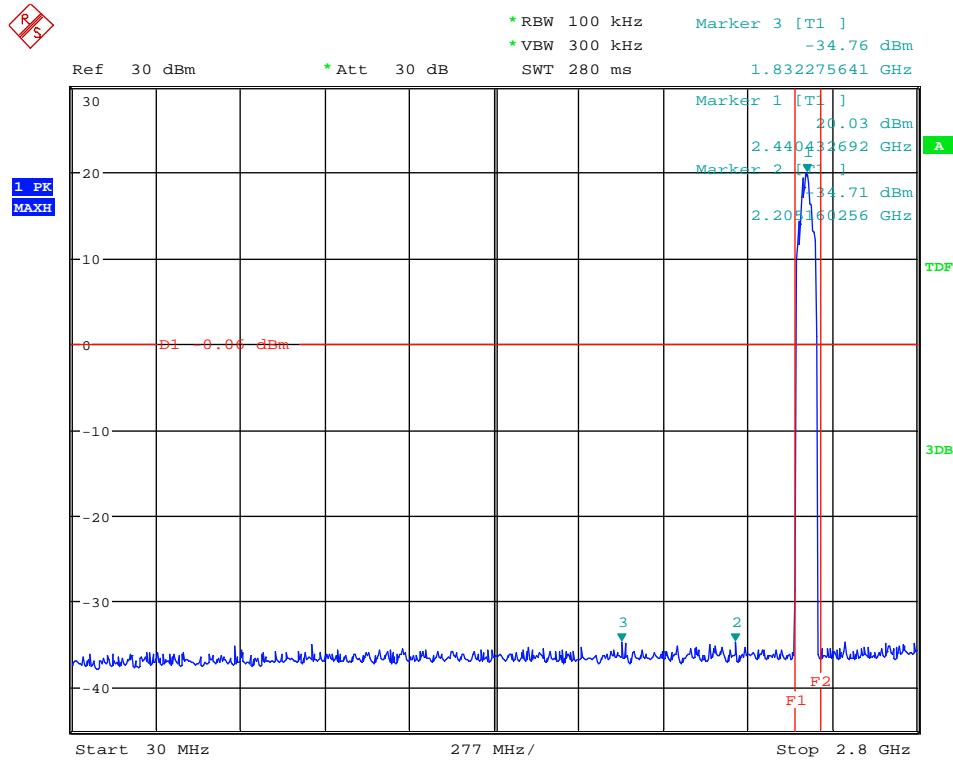




Plot 141: 20dBc-RCM24G-MSK-500Kbps-Hopping Mode-Ch0(2402.5 MHz) to Ch69(2471.5 MHz)-Carrier



Plot 142: 20dBc-RCM24G-MSK-500Kbps-Hopping Mode-Ch0(2402.5 MHz) to Ch69(2471.5 MHz)-0.15MHz-30MHz



Radiated Field Strength Measurements

RCM24G
+
PRESTTA Antenna

2. Radiated Field Strength Measurements- RCM24G + PRESTTA Antenna

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

2.01_RCM24G+PRESTTA Ant-MSK-50Kbps-Ch0-PWR +12 dBm

Common Information

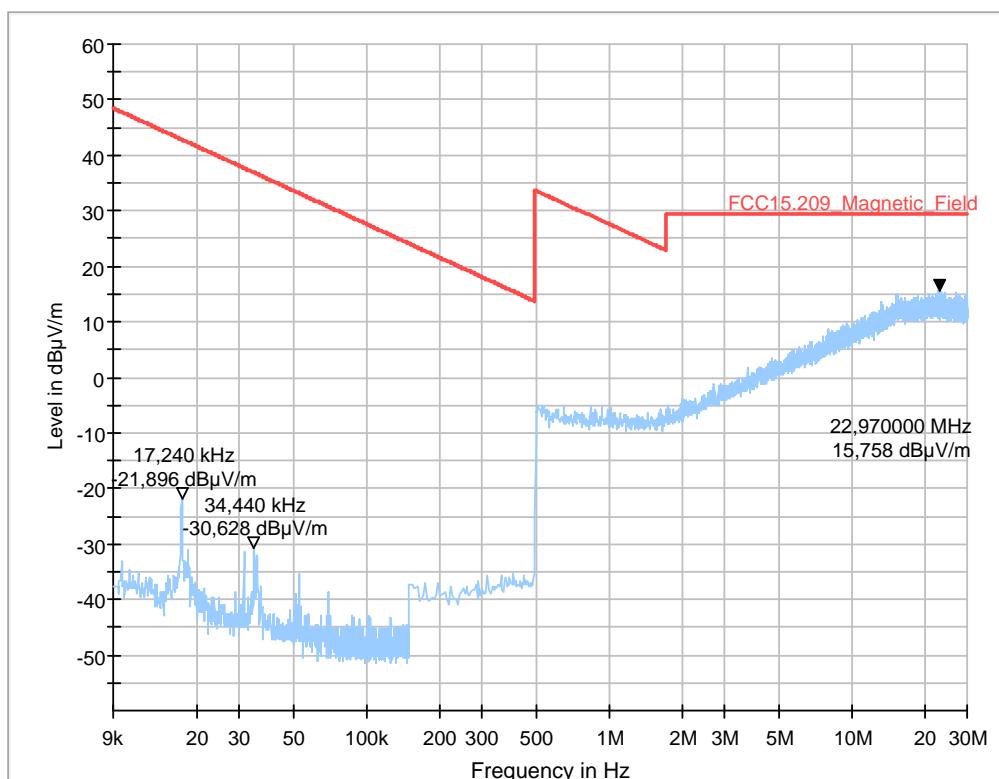
Test description: Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware: EMC32 V9.25.0
Distance correction: used accord. table, pls. see test report
Technical Data: Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan): height 1.00 m, parallel and 90° to EUT polarisation
Used filter: bypass
Test specification: FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator: AFr
Operating mode: TX-Continuous RCM24G+Prestta Antenna
MSK | 50 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated)
Power:+12dBm
3.6 V DC (direct to RCM24G) using Laboratory Power Supply

Power during tests:

EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details: PRESTTA Antenna
Antenna Type: PRESTTA WLAN Embedded Antenna-1000418
Antenna HW version: N/A
Antenna Gain: 2.5 dBi
Antenna Serial number: N/A
Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply

Full Spectrum



2.02_RCM24G+PRESTTA Ant-MSK-100Kbps-Ch69-PWR+12dBm

Common Information

Test description: Magnetic Field Strength Measurement related to 30/300 m distance

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

Version of Testsoftware: EMC32 V9.25.0

Distance correction: used accord. table, pls. see test report

Technical Data: Please see page 2 for detailed data of measurement setup

Rec. antenna (pre-scan): height 1.00 m, parallel and 90° to EUT polarisation

Used filter: bypass

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

Operator: AFr

Operating mode: TX-Continuous RCM24G+Prestta Antenna

MSK |100 Kbps |69 (2471.5 MHz) Fixed Chanel (modulated)

Power:+12dBm

3.6 V DC (direct to RCM24G) using Laboratory Power Supply

Power during tests:

EUT Information

Manufacturer: Intel

Model: RCM24G

Module Type: Proprietary 2.4 GHz RF Transceiver

Module HW version: D

Module SW version: Bootloader Version3.6

Module Serial number: PCB ID 3526

Antenna Details: PRESTTA Antenna

Antenna Type: PRESTTA WLAN Embedded Antenna-1000418

Antenna HW version: N/A

Antenna Gain: 2.5 dBi

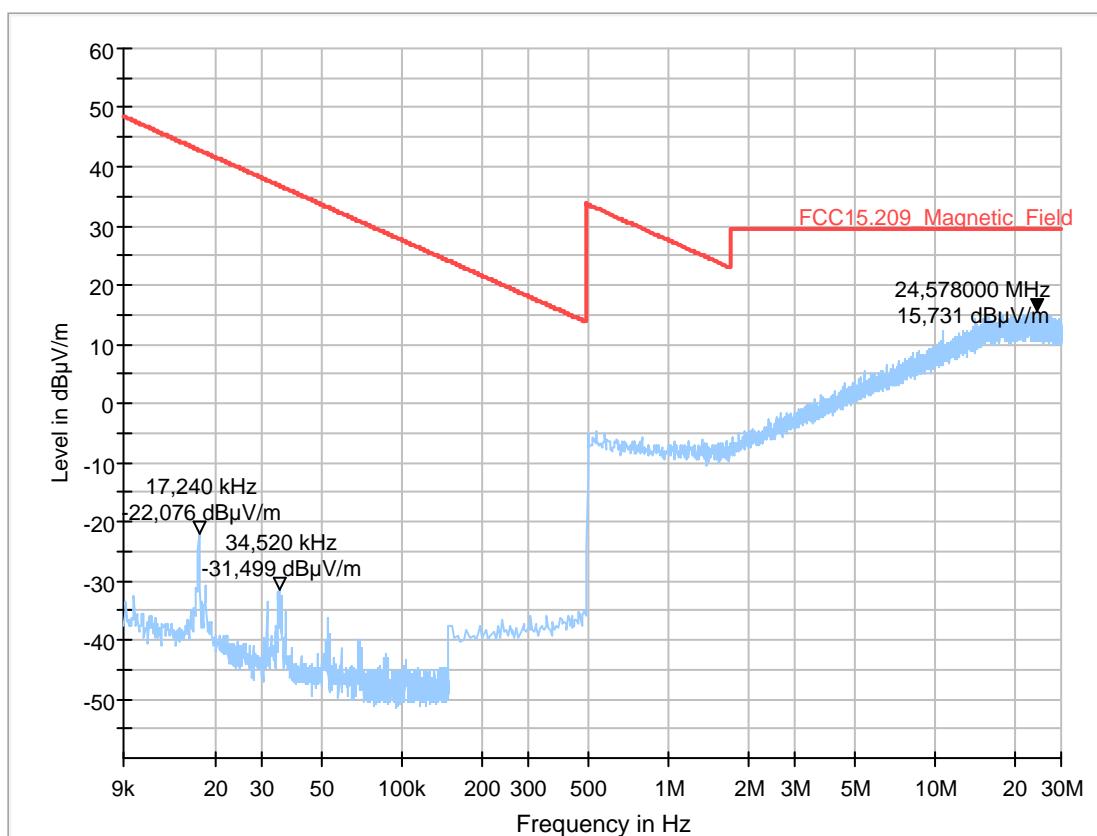
Antenna Serial number: N/A

Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length

Using RCM24G TestTool_V3_70Channels Software

3.6 V DC (Direct to RCM24G) using Laboratory Supply

Full Spectrum



2.03_RCM24G+PRESTTA Ant-MSK-250Kbps-Ch0-PWR +12dBm

Common Information

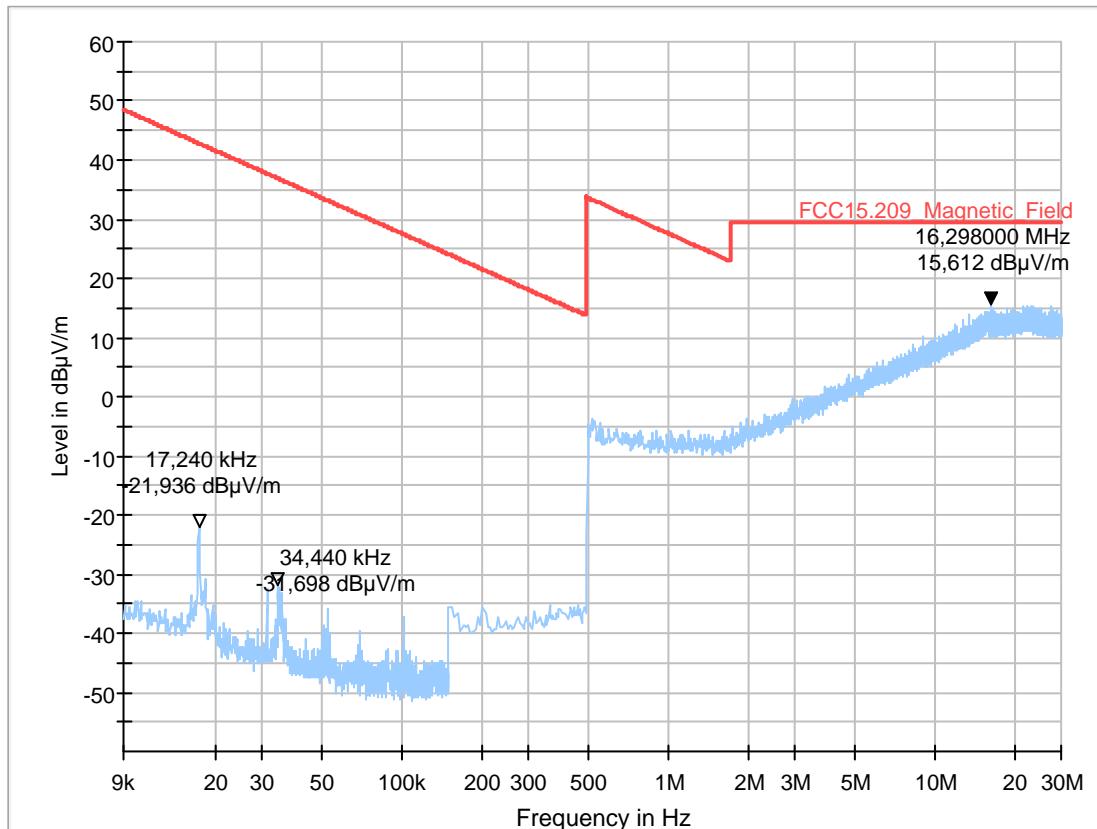
Test description: Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware: EMC32 V9.25.0
Distance correction: used accord. table, pls. see test report
Technical Data: Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan): height 1.00 m, parallel and 90° to EUT polarisation
Used filter: bypass
Test specification: FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator: AFr
Operating mode: TX-Continuous RCM24G+Prestta Antenna
MSK | 250 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated)
Power:+12dBm
3.6 V DC (direct to RCM24G) using Laboratory Power Supply

Power during tests:

EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details: PRESTTA Antenna
Antenna Type: PRESTTA WLAN Embedded Antenna-1000418
Antenna HW version: N/A
Antenna Gain: 2.5 dBi
Antenna Serial number: N/A
Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply

Full Spectrum



2.04_RCM24G+PRESTTA Ant-MSK-500Kbps-Ch34-PWR +21dBm

Common Information

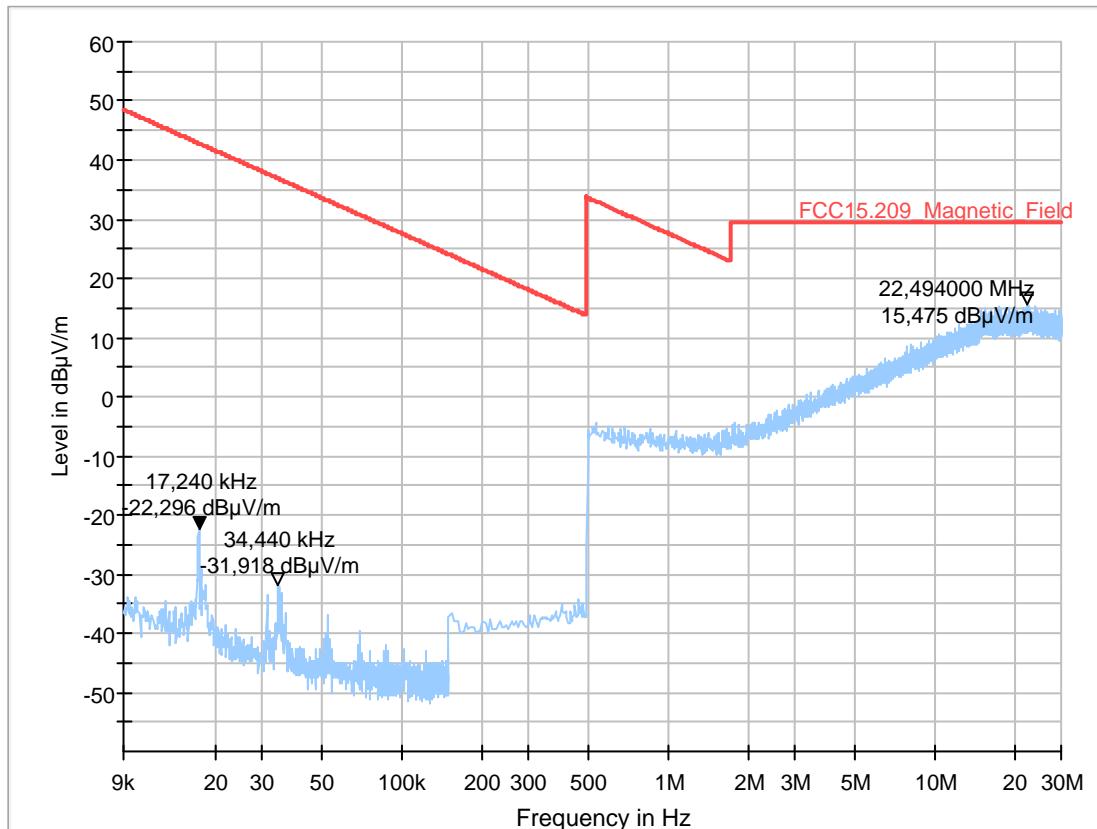
Test description: Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware: EMC32 V9.25.0
Distance correction: used accord. table, pls. see test report
Technical Data: Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan): height 1.00 m, parallel and 90° to EUT polarisation
Used filter: bypass
Test specification: FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator: AFr
Operating mode: TX-Continuous RCM24G+Prestta Antenna
MSK |500 Kbps |34 (2436.5 MHz) Fixed Chanel (modulated)
Power:+21dBm
3.6 V DC (direct to RCM24G) using Laboratory Power Supply

Power during tests:

EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details: PRESTTA Antenna
Antenna Type: PRESTTA WLAN Embedded Antenna-1000418
Antenna HW version: N/A
Antenna Gain: 2.5 dBi
Antenna Serial number: N/A
Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply

Full Spectrum



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

3.01_RCM24G+PRESTTA Ant-MSK-50Kbps-Ch0-PWR +12dBm

Common Information

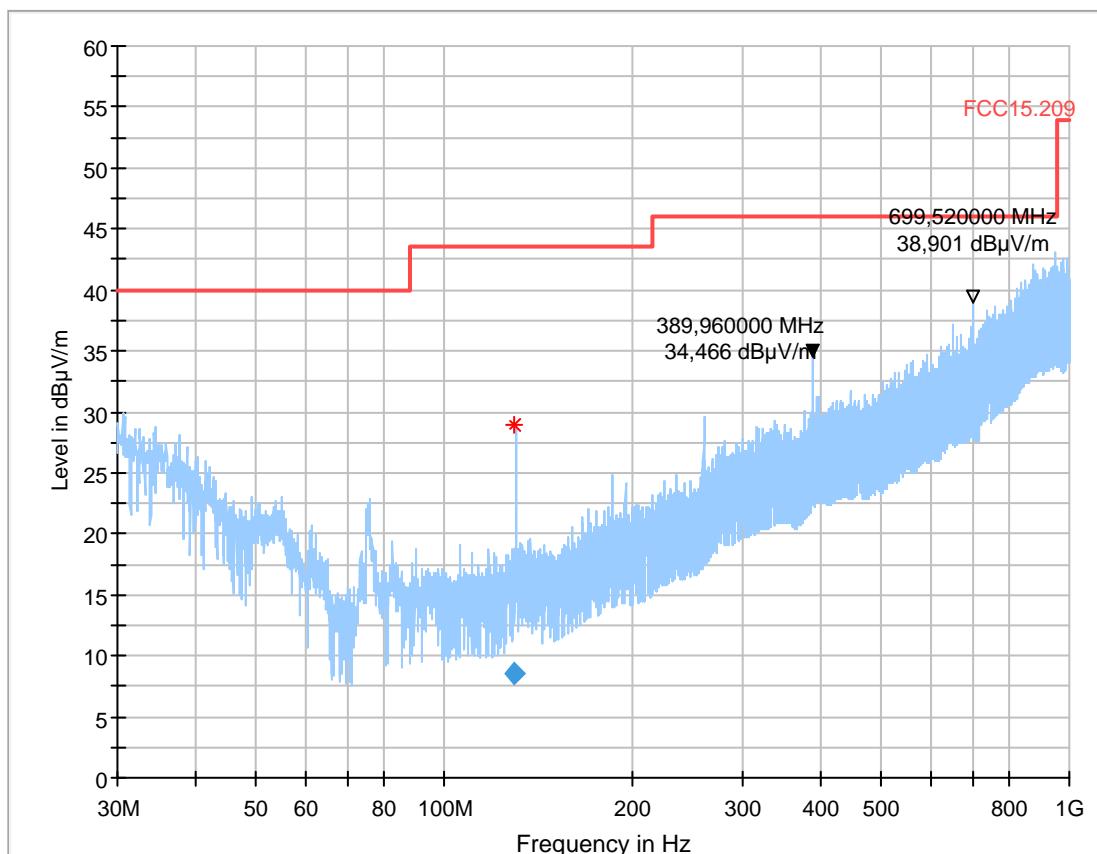
Test description: Electric Field Strength Measurement
Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware: EMC32 V9.25.0
Distance correction: not used
Used filter: not used
Technical Data: please see page 2 for detailed data of measurement setup
Test specification.: FCC 15.205 , FCC 15.209 Intentional Radiator / RSS-Gen, Issue 4
Operator: APH
Operating conditions: TX-Continuous RCM24G+Prestta Antenna
MSK | 50 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated)
Power:+12dBm
3.6 V DC (direct to RCM24G) using Laboratory Power Supply

Power during tests:

EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details: PRESTTA Antenna
Antenna Type: PRESTTA WLAN Embedded Antenna-1000418
Antenna HW version: N/A
Antenna Gain: 2.5 dBi
Antenna Serial number: N/A
Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Po I	Azimuth (deg)	Elevation (deg)	Corr. (dB)
129.864000	8.50	43.50	35.00	1000.0	120.000	183.0	H	163.0	0.0	9.0

3.02_RCM24G+PRESTTA Ant-MSK-100Kbps-Ch69-PWR+12dBm

Common Information

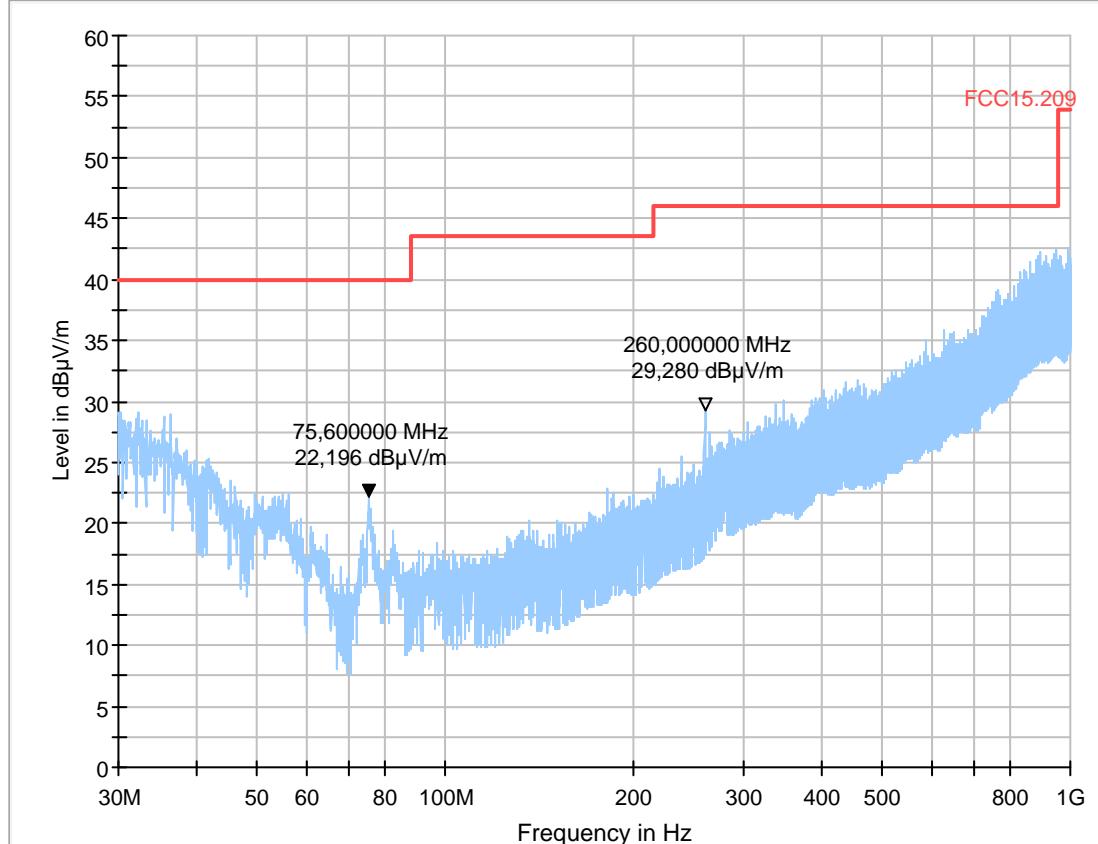
Test description: Electric Field Strength Measurement
Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware: EMC32 V9.25.0
Distance correction: not used
Used filter: not used
Technical Data: please see page 2 for detailed data of measurement setup
Test specification.: FCC 15.205 , FCC 15.209 Intentional Radiator / RSS-Gen, Issue 4
Operator: RIs
Operating conditions: TX-Continuous RCM24G+Prestta Antenna
MSK |100 Kbps |69 (2471.5 MHz) Fixed Chanel (modulated)
Power:+12dBm
3.6 V DC (direct to RCM24G) using Laboratory Power Supply

Power during tests:

EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details: PRESTTA Antenna
Antenna Type: PRESTTA WLAN Embedded Antenna-1000418
Antenna HW version: N/A
Antenna Gain: 2.5 dBi
Antenna Serial number: N/A
Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply

Full Spectrum



3.03_RCM24G+PRESTTA Ant-MSK-250Kbps-Ch0-PWR +12dBm

Common Information

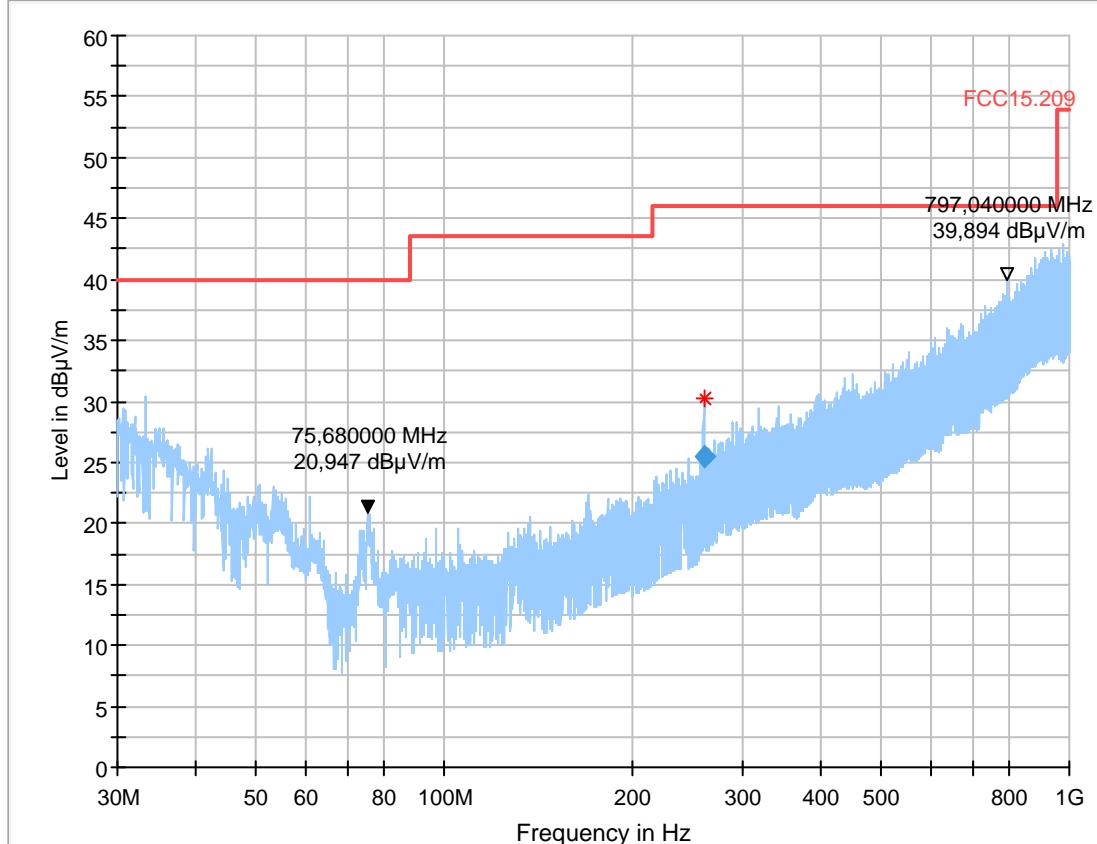
Test description: Electric Field Strength Measurement
Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware: EMC32 V9.25.0
Distance correction: not used
Used filter: not used
Technical Data: please see page 2 for detailed data of measurement setup
Test specification.: FCC 15.205 , FCC 15.209 Intentional Radiator / RSS-Gen, Issue 4
Operator: YSa
Operating conditions: TX-Continuous RCM24G+Prestta Antenna
MSK |250 Kbps |0 (2402.5 MHz) Fixed Chanel (modulated)
Power: +12dBm
3.6 V DC (direct to RCM24G) using Laboratory Power Supply

Power during tests:

EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details: PRESTTA Antenna
Antenna Type: PRESTTA WLAN Embedded Antenna-1000418
Antenna HW version: N/A
Antenna Gain: 2.5 dBi
Antenna Serial number: N/A
Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
259.996000	25.42	46.00	20.58	1000.0	120.000	125.0	H	-1.0	0.0	13.7

3.04_RCM24G+PRESTTA Ant-MSK-500Kbps-Ch34-PWR +21dBm

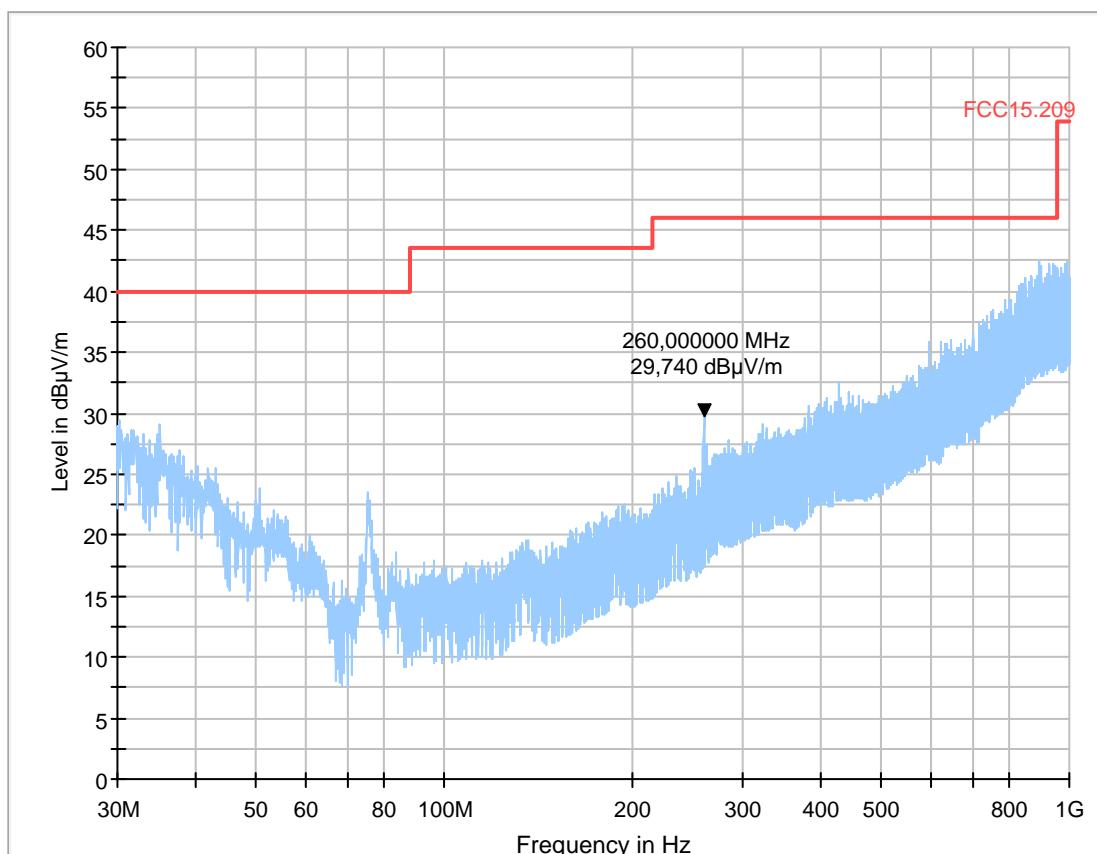
Common Information

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 15.205 , FCC 15.209 Intentional Radiator / RSS-Gen, Issue 4
Operator: YSa
Operating conditions: TX-Continuous RCM24G+Prestta Antenna
MSK |500 Kbps |34 (2436.5 MHz) Fixed Chanel (modulated)
Power:+21dBm
3.6 V DC (direct to RCM24G) using Laboratory Power Supply

EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details: PRESTTA Antenna
Antenna Type: PRESTTA WLAN Embedded Antenna-1000418
Antenna HW version: N/A
Antenna Gain: 2.5 dBi
Antenna Serial number: N/A
Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply

Full Spectrum



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

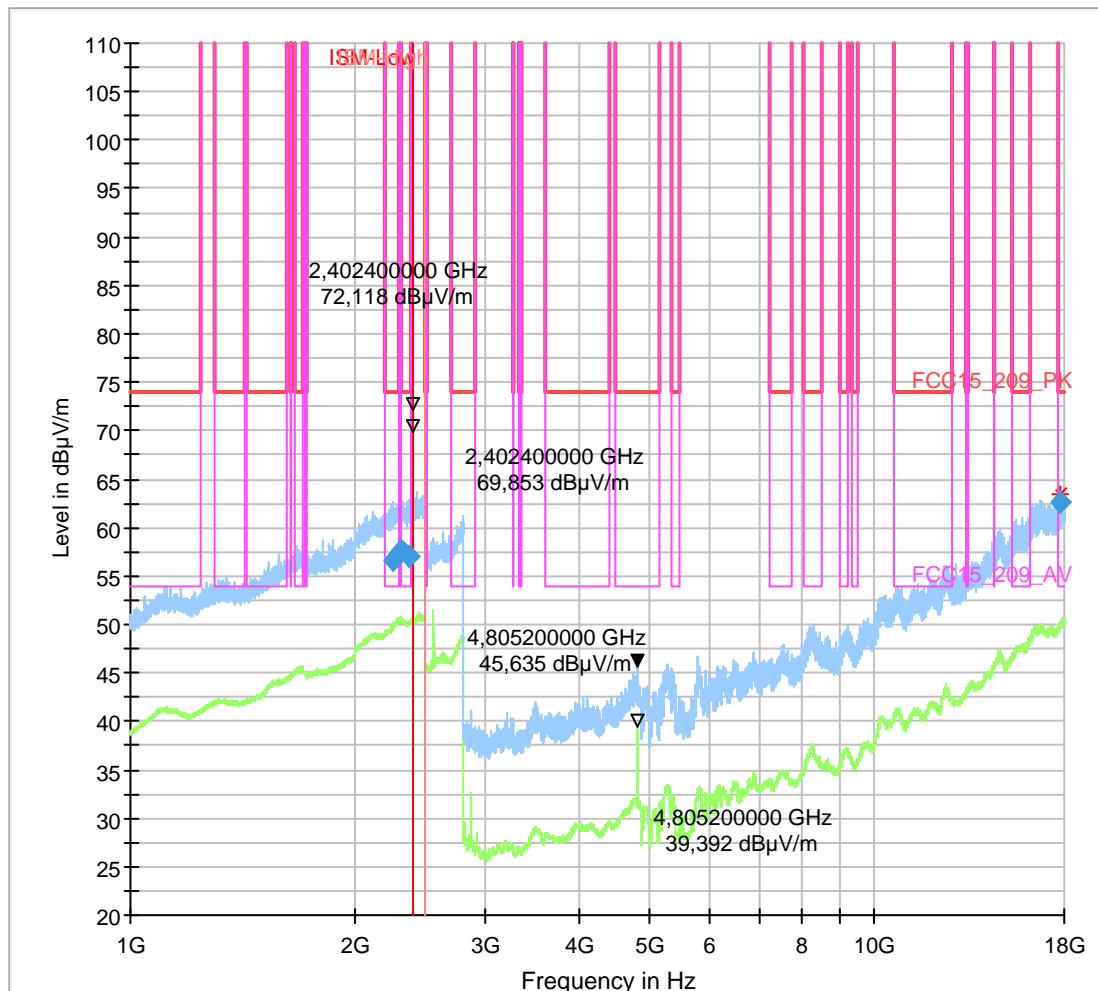
4.01_RCM24G+PRESTTA Ant-MSK-50Kbps-Ch0-PWR +12dBm

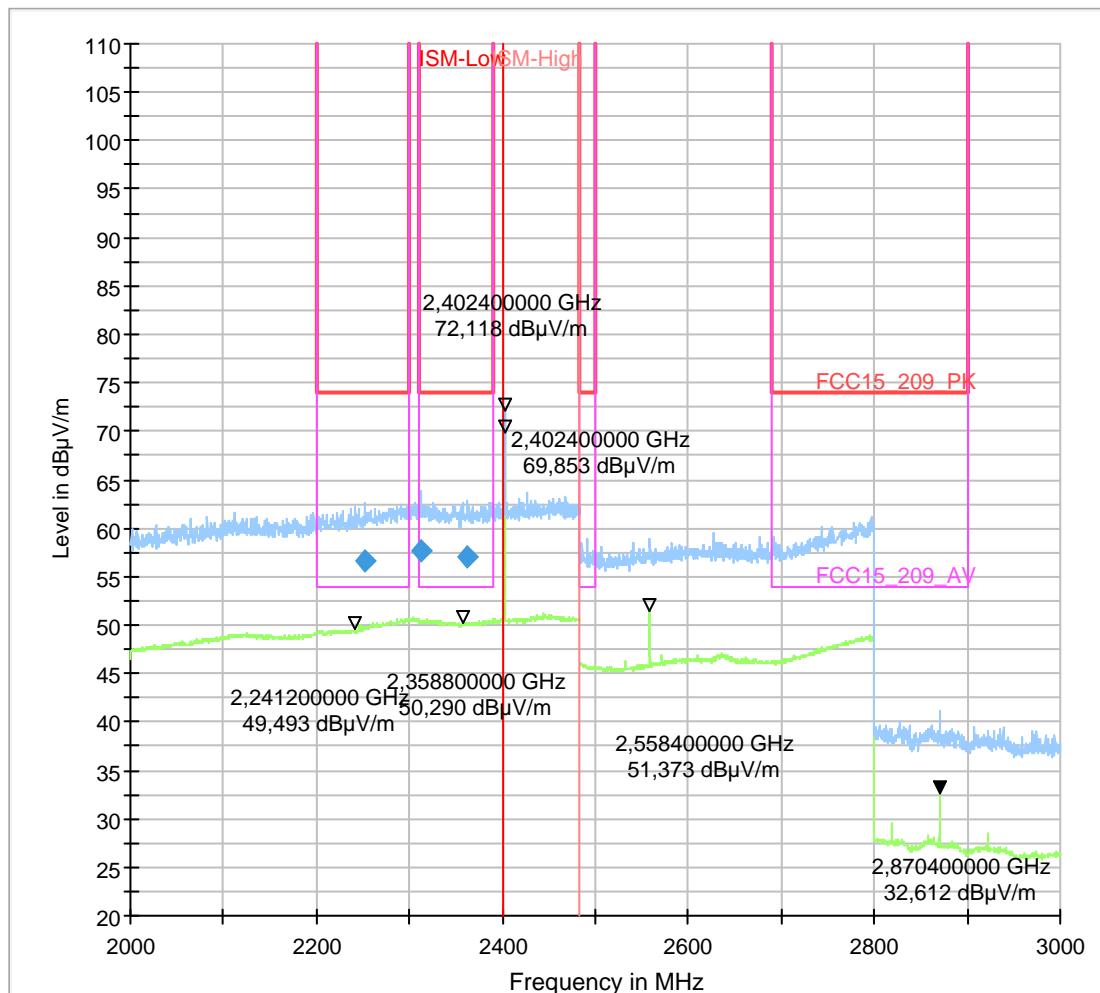
Common Information

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
 Test Site: CETECOM GmbH Essen
 Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
 Antenna polarisation: horizontal/vertical
 Operation mode: TX, continuous RCM24G + PRESTTA Antenna
 Operator Name: MSK | 50 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated) | Power:+12dBm
 Measurements performed : APh/ PSa
 with 2.4 GHz NOTCH FILTER Tuned to relevant channel frequency

EUT Information

Manufacturer: Intel
 Model: RCM24G
 Module Type: Proprietary 2.4 GHz RF Transceiver
 Module HW version: D
 Module SW version: Bootloader Version3.6
 Module Serial number: PCB ID 3526
 Antenna Details: PRESTTA Antenna
 Antenna Type: PRESTTA WLAN Embedded Antenna-1000418
 Antenna HW version: N/A
 Antenna Gain: 2.5 dBi
 Antenna Serial number: N/A
 Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length
 Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
 Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply



**Final Result**

Frequency (MHz)	MaxPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2251.880000	56.56	74.00	17.44	100.0	1000.000	155.0	H	90.0	90.0	34.8
2311.520000	57.66	74.00	16.34	100.0	1000.000	155.0	H	156.0	90.0	35.7
2362.560000	57.10	74.00	16.90	100.0	1000.000	155.0	V	71.0	0.0	35.6
17768.560000	62.58	74.00	11.42	100.0	1000.000	155.0	V	190.0	0.0	25.8

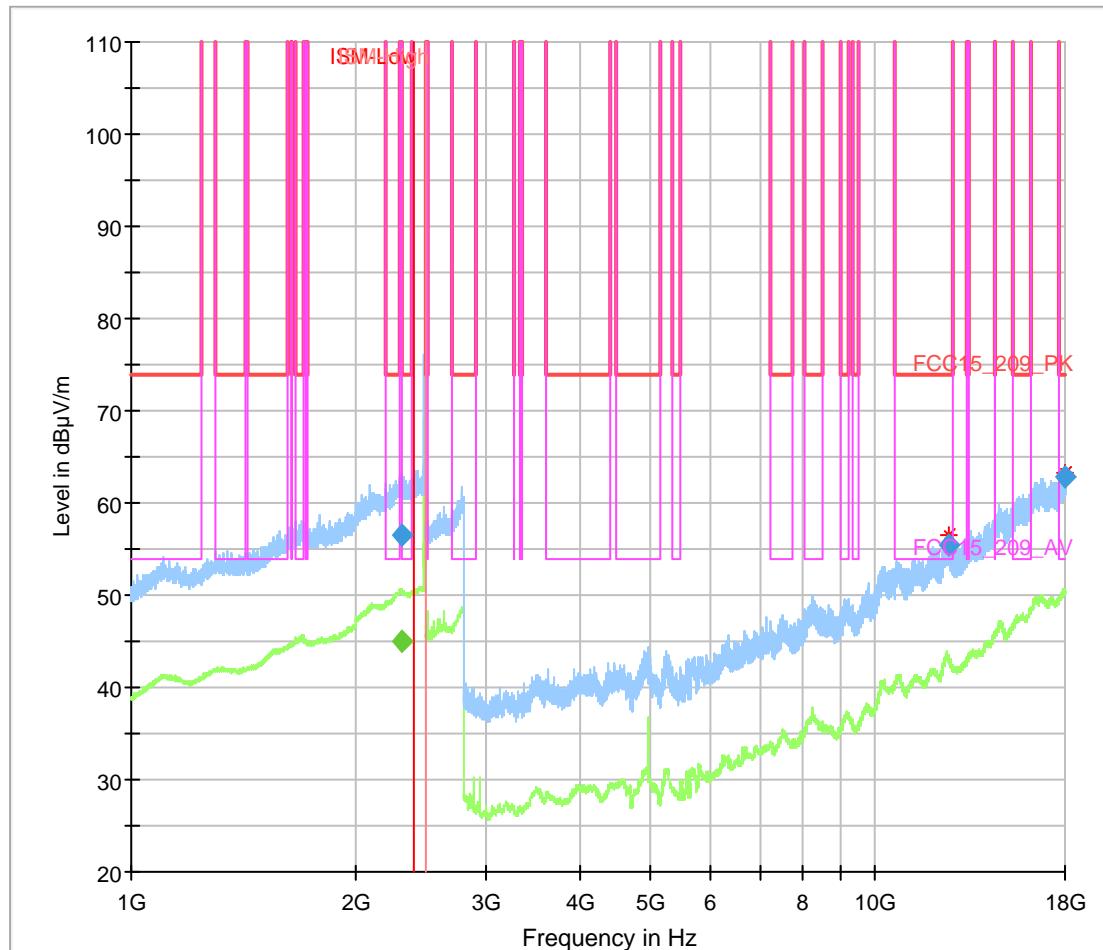
4.02_RCM24G+PRESTTA Ant-MSK-100Kbps-Ch69-PWR+12dBm

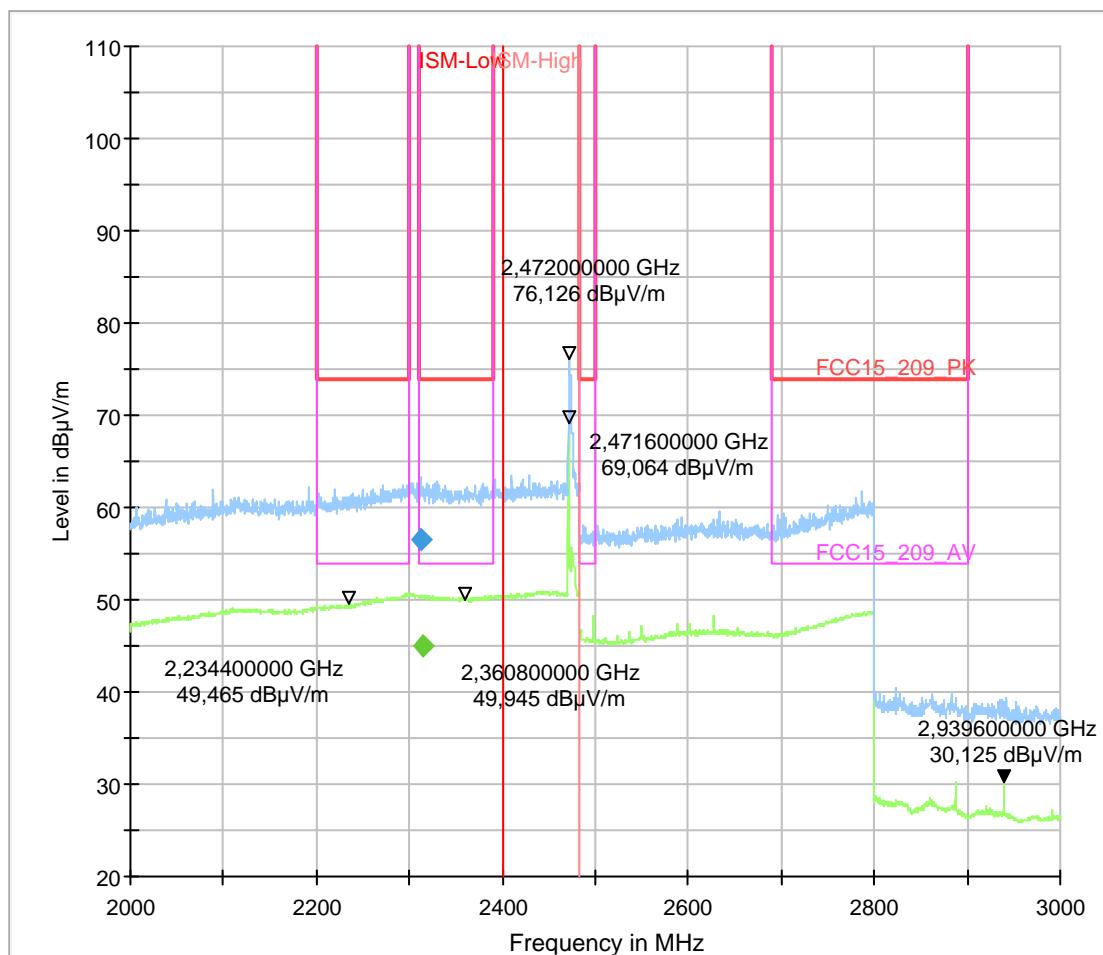
Common Information

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 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + PRESTTA Antenna
Operator Name: MSK |100 Kbps |69 (2471.5 MHz) Fixed Chanel (modulated) | Power:+12dBm
Measurements performed : APH/ PSa with 2.4 GHz NOTCH FILTER Tuned to relevant channel frequency

EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details: PRESTTA Antenna
Antenna Type: PRESTTA WLAN Embedded Antenna-1000418
Antenna HW version: N/A
Antenna Gain: 2.5 dBi
Antenna Serial number: N/A
Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply




Final_Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)
2313.360000	56.60	---	74.00	17.40	100.0	1000.000	155.0
2314.440000	---	45.00	54.00	9.00	100.0	1000.000	155.0
12565.200000	55.35	---	74.00	18.65	100.0	1000.000	155.0
17968.400000	62.90	---	74.00	11.10	100.0	1000.000	155.0

(continuation of the "Final_Result" table from column 15 ...)

Frequency (MHz)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2313.360000	V	229.0	90.0	35.7
2314.440000	V	334.0	90.0	35.7
12565.200000	V	302.0	90.0	19.4
17968.400000	H	236.0	0.0	26.4

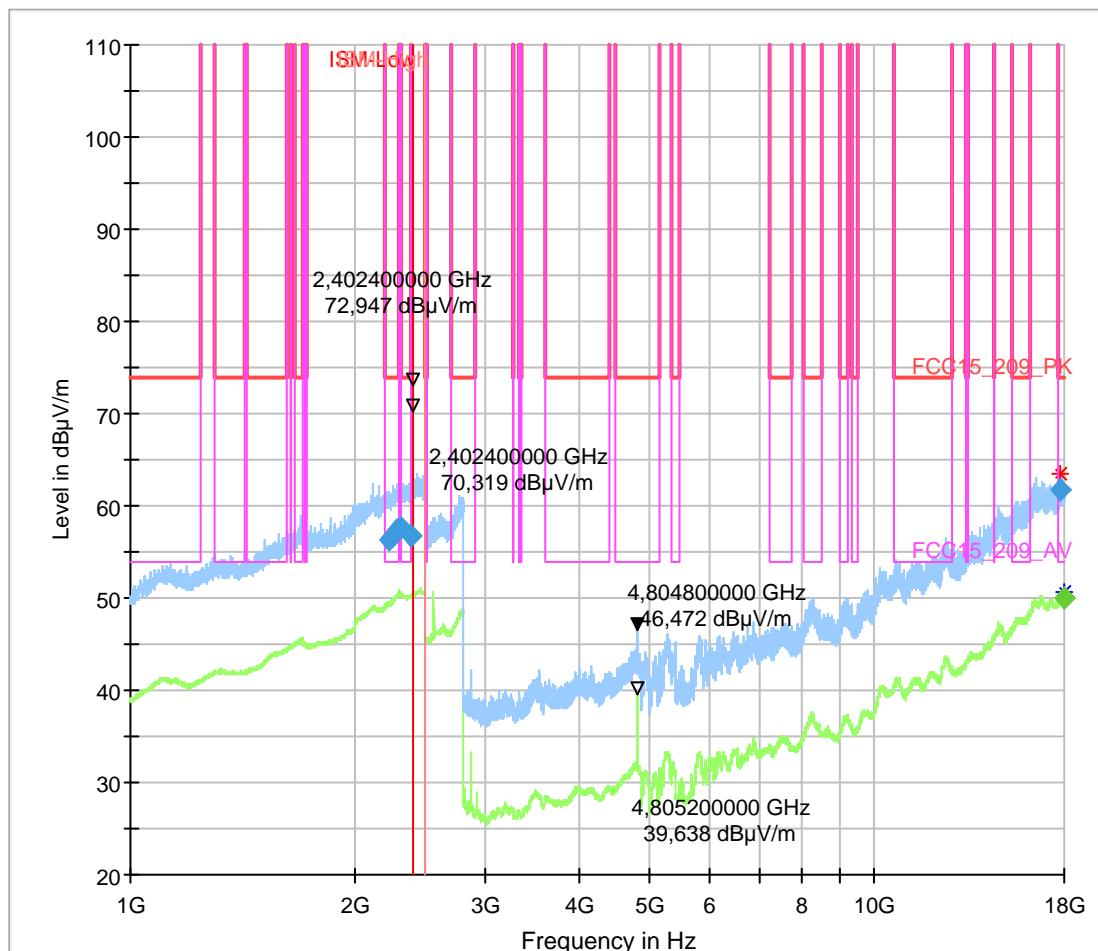
4.03_RCM24G+PRESTTA Ant-MSK-250Kbps-Ch0-PWR +12 dBm

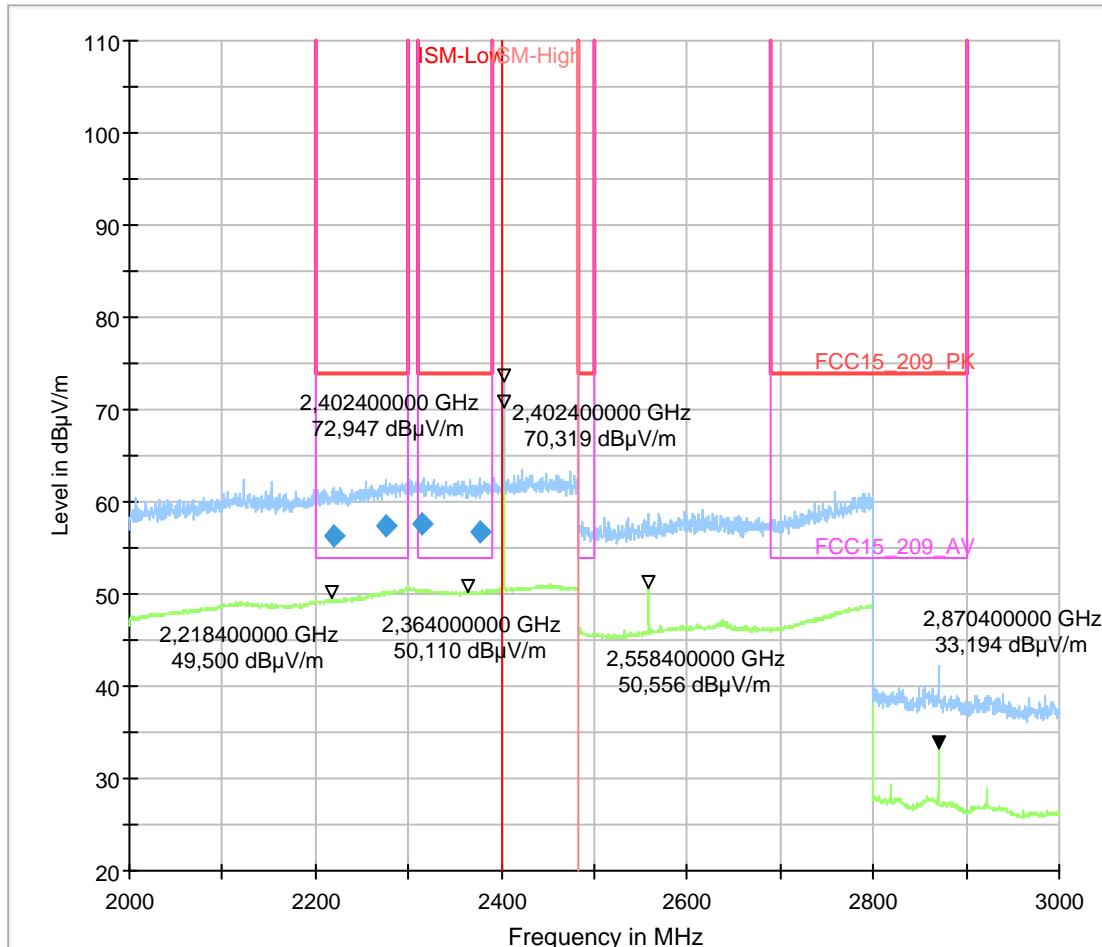
Common Information

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 247 Issue2 , RSS-Gen, Issue 4
 Antenna polarisation: horizontal/vertical
 Operation mode: TX, continuous RCM24G + PRESTTA Antenna
 Operator Name: MSK | 250 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated) | Power:+12dBm
 Measurements performed : PSa
 with 2.4 GHz NOTCH FILTER Tuned to relevant channel frequency

EUT Information

Manufacturer: Intel
 Model: RCM24G
 Module Type: Proprietary 2.4 GHz RF Transceiver
 Module HW version: D
 Module SW version: Bootloader Version3.6
 Module Serial number: PCB ID 3526
 Antenna Details: PRESTTA Antenna
 Antenna Type: PRESTTA WLAN Embedded Antenna-1000418
 Antenna HW version: N/A
 Antenna Gain: 2.5 dBi
 Antenna Serial number: N/A
 Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length
 Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
 Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply




Final_Result

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)
2219.280000	56.40	---	74.00	17.60	100.0	1000.000	155.0
2275.960000	57.33	---	74.00	16.67	100.0	1000.000	155.0
2315.240000	57.68	---	74.00	16.32	100.0	1000.000	155.0
2377.240000	56.77	---	74.00	17.23	100.0	1000.000	155.0
17795.640000	61.72	---	74.00	12.28	100.0	1000.000	155.0
17948.080000	---	49.94	54.00	4.06	100.0	1000.000	155.0

(continuation of the "Final_Result" table from column 15 ...)

Frequency (MHz)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2219.280000	H	165.0	0.0	35.0
2275.960000	V	34.0	0.0	35.2
2315.240000	H	93.0	90.0	35.7
2377.240000	H	295.0	0.0	35.5
17795.640000	V	153.0	0.0	25.9
17948.080000	H	181.0	0.0	26.3

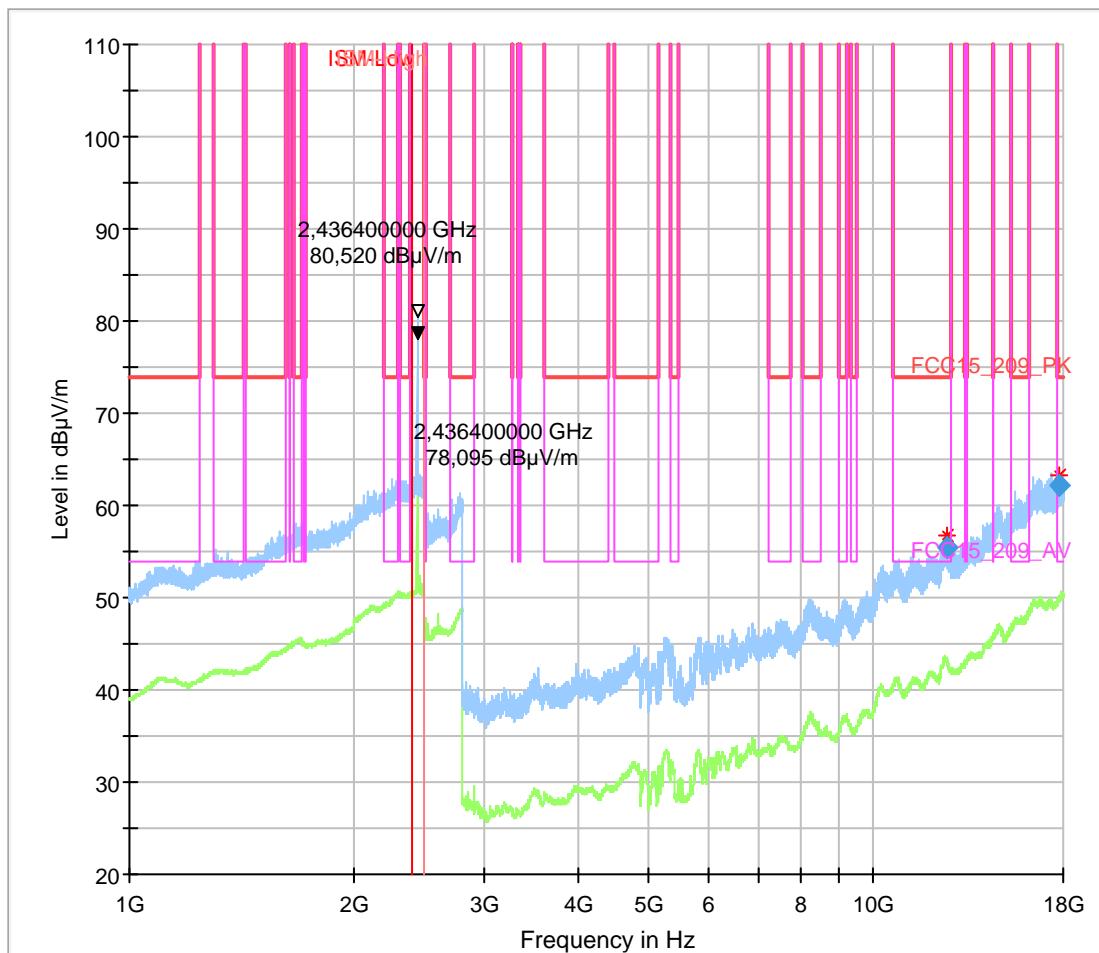
4.04_RCM24G+PRESTTA Ant-MSK-500Kbps-Ch34-PWR +21dBm

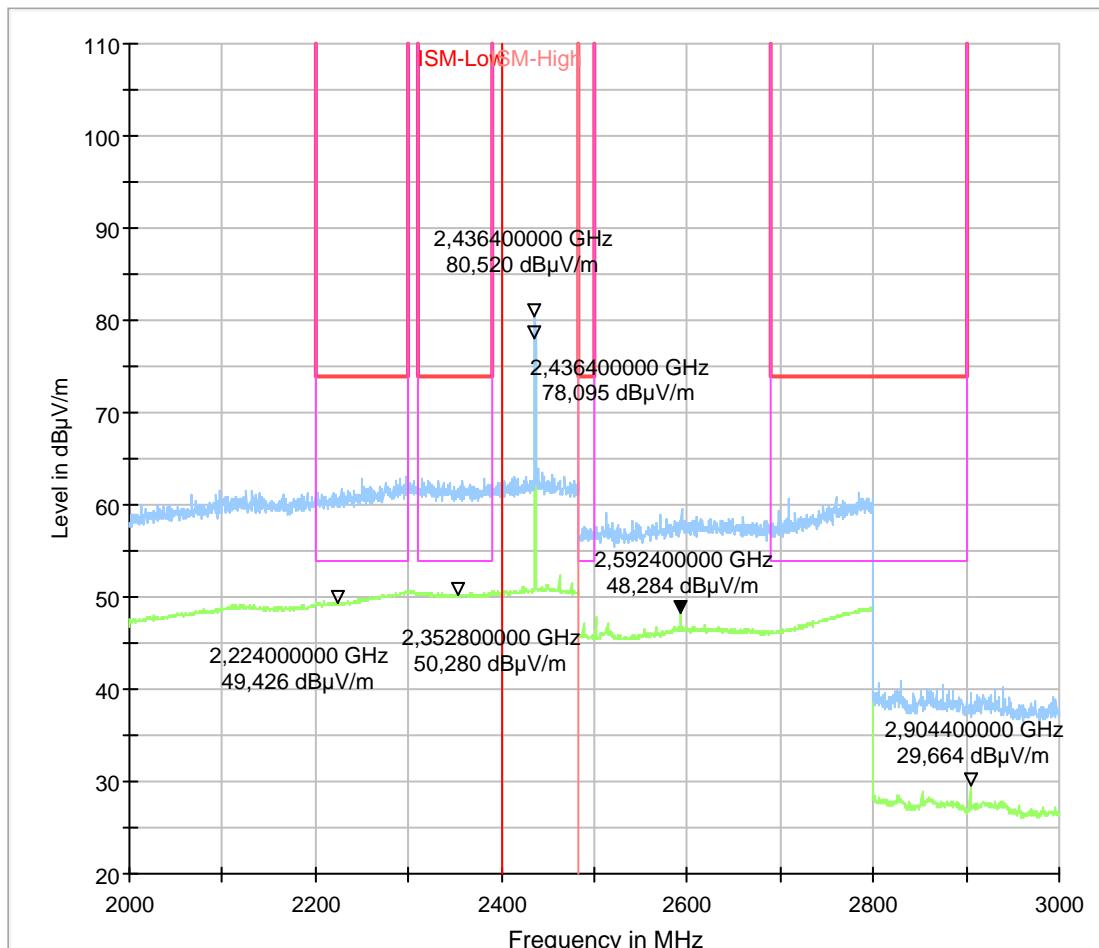
Common Information

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 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + PRESTTA Antenna
Operator Name: MSK |500 Kbps |34 (2436.5 MHz) Fixed Chanel (modulated) | Power:+21dBm
Measurements performed : APH/PSA
with 2.4 GHz NOTCH FILTER Tuned to relevant channel frequency

EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details: PRESTTA Antenna
Antenna Type: PRESTTA WLAN Embedded Antenna-1000418
Antenna HW version: N/A
Antenna Gain: 2.5 dBi
Antenna Serial number: N/A
Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply



**Final_Result**

Frequency (MHz)	MaxPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
12524.920000	55.40	74.00	18.60	100.0	1000.000	155.0	V	20.0	0.0	19.7
17826.920000	62.08	74.00	11.92	100.0	1000.000	155.0	V	11.0	0.0	26.0

2.4. Radiated Field Strength Emissions - 18GHz to 25GHz**4.01a_RCM24G+PRESTTA Ant-MSK-50Kbps-Ch0-PWR +12dBm****Common Information**

Test Description: Radiated field strength emission in 1m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
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-Continuous RCM24G+Prestta Antenna
MSK | 50 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated)
Power:+12dBm

Operator Name: TFR

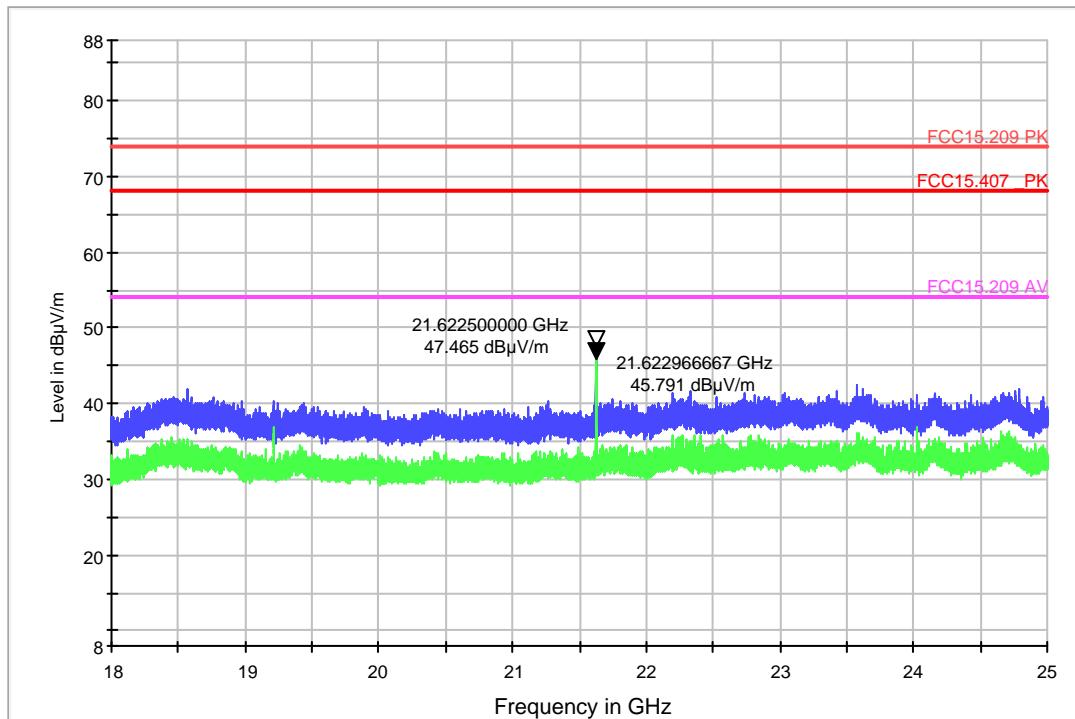
EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details:
Antenna Type: PRESTTA WLAN Embedded Antenna-1000418
Antenna HW version: N/A
Antenna Gain: 2.5 dBi
Antenna Serial number: N/A
Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length

Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software

Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply

FCC_Sweep_15.247_18_25GHz_Pre



4.02a_RCM24G+PRESTTA Ant-MSK-100Kbps-Ch69-PWR+12dBm**Common Information**

Test Description: Radiated field strength emission in 1m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
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-Continuous RCM24G+Prestta Antenna
MSK |100 Kbps |69 (2471.5 MHz) Fixed Chanel (modulated)
Power:+12dBm

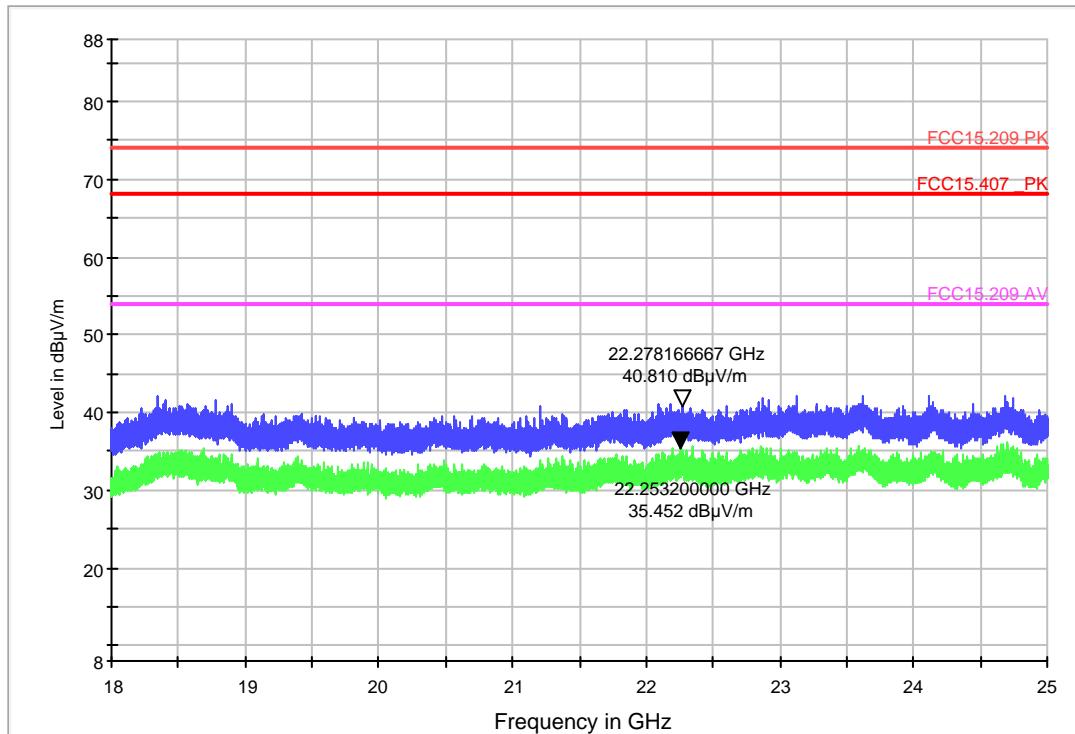
Operator Name: TFr

EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details:
Antenna Type: PRESTTA Antenna
Antenna HW version: PRESTTA WLAN Embedded Antenna-1000418
Antenna Gain: N/A
Antenna Serial number: N/A
Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length

Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply

FCC_Sweep_15.247_18_25GHz_Pre



4.03a_RCM24G+PRESTTA Ant-MSK-250Kbps-Ch0-PWR +12dBm**Common Information**

Test Description: Radiated field strength emission in 1m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
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-Continuous RCM24G+Prestta Antenna
MSK | 250 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated)
Power:+12dBm

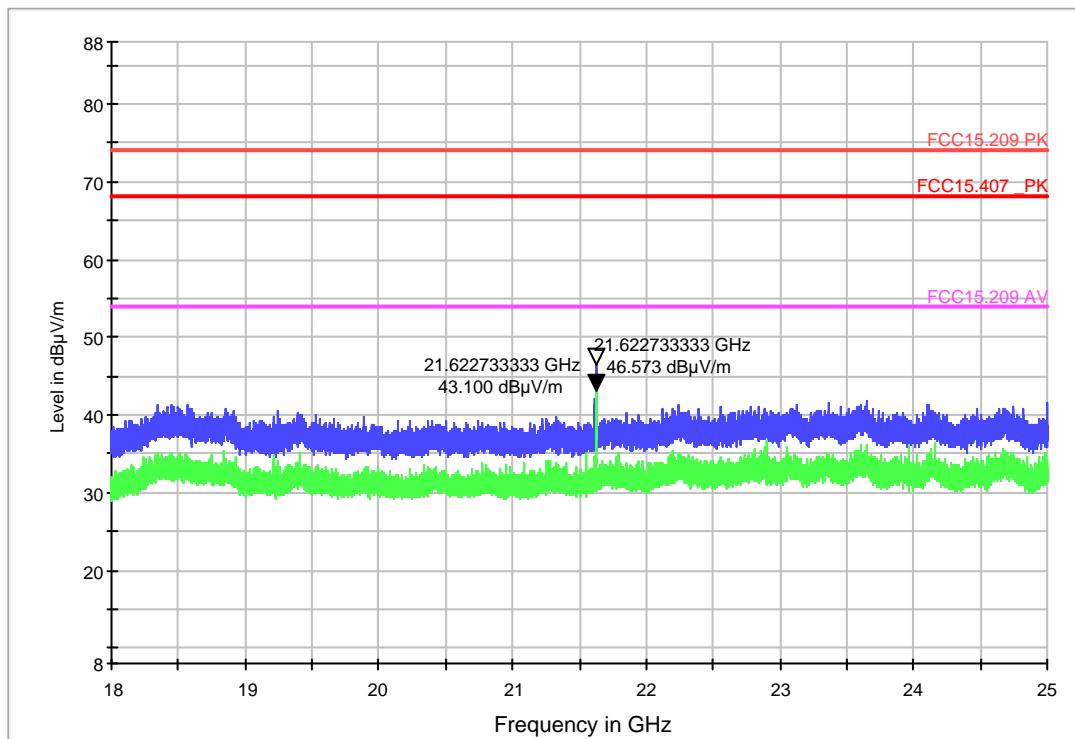
Operator Name: TFr

EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details:
Antenna Type: PRESTTA Antenna
Antenna HW version: PRESTTA WLAN Embedded Antenna-1000418
Antenna Gain: N/A
Antenna Serial number: N/A
Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length

Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply

FCC_Sweep_15.247_18_25GHz_Pre



4.04a_RCM24G+PRESTTA Ant-MSK-500Kbps-Ch34-PWR +21dBm**Common Information**

Test Description: Radiated field strength emission in 1m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
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-Continuous RCM24G+Prestta Antenna
MSK |500 Kbps |34 (2436.5 MHz) Fixed Chanel (modulated)
Power:+21dBm

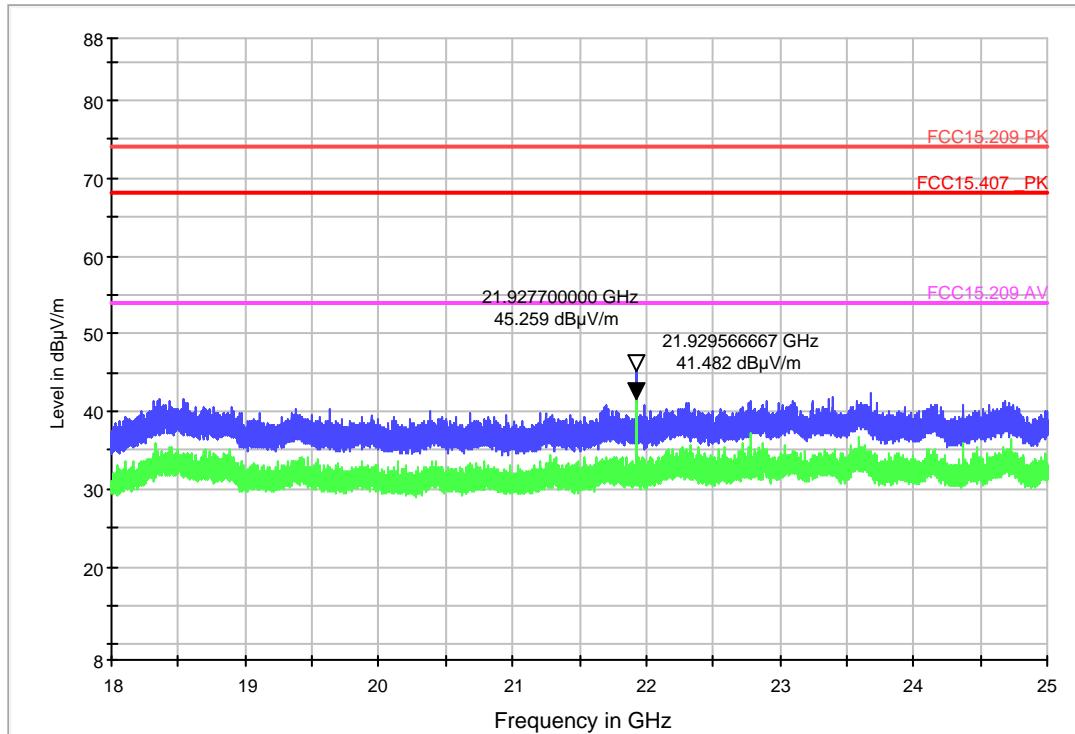
Operator Name: TFr

EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details:
Antenna Type: PRESTTA Antenna
Antenna HW version: PRESTTA WLAN Embedded Antenna-1000418
Antenna Gain: N/A
Antenna Serial number: N/A
Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length

Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply

FCC_Sweep_15.247_18_25GHz_Pre



2.5. Radiated Band-Edge Measurements

2.5.1. Low Channel 2402.5 MHz (2.4 GHz ISM: left band edge)

9.01_BE-RCM24G+PRESTTA Ant-MSK-50Kbps-Ch0-PWR+12 dBm

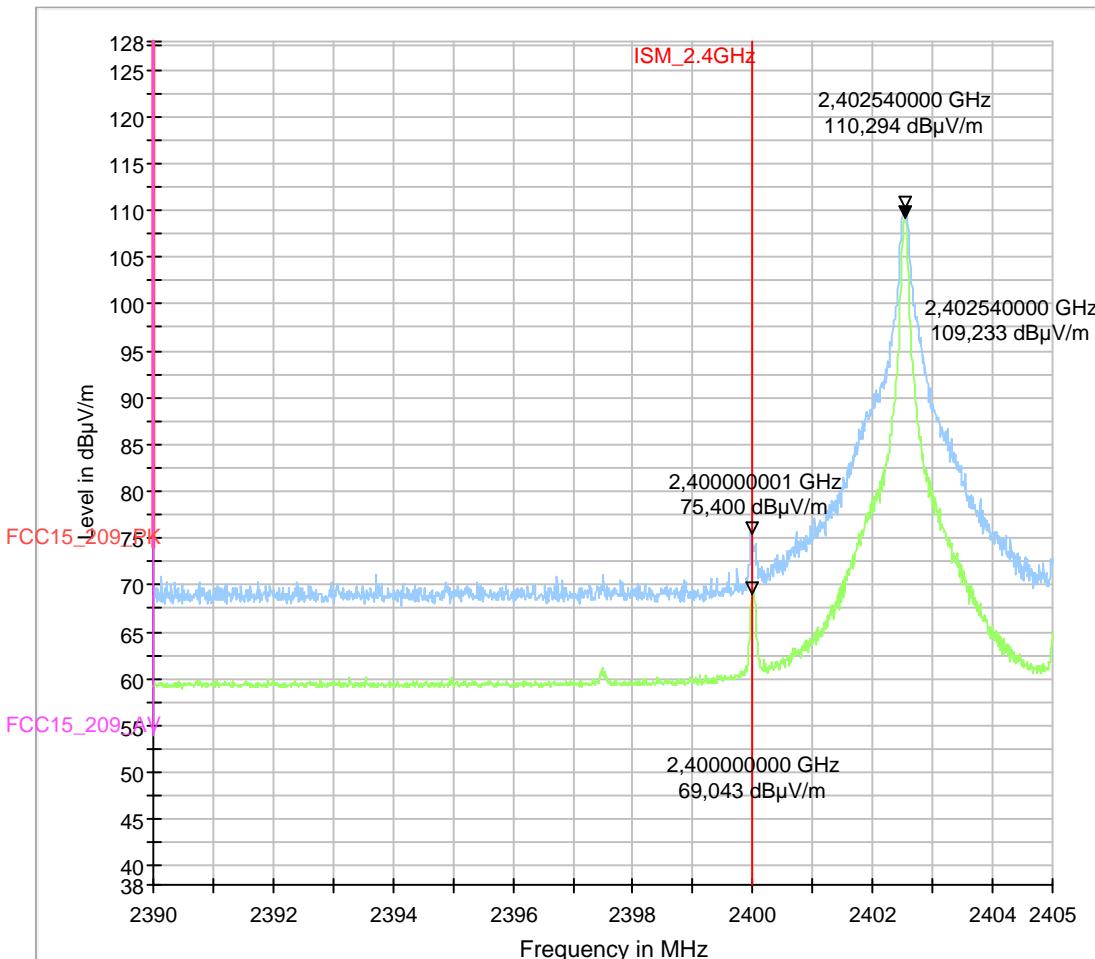
Common Information

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + PRESTTA Antenna
MSK | 50 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated) Power +12 dBm
AFr

Operator Name:

EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details: PRESTTA Antenna
Antenna Type: PRESTTA WLAN Embedded Antenna-1000418
Antenna HW version: N/A
Antenna Gain: 2.5 dBi
Antenna Serial number: N/A
Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply



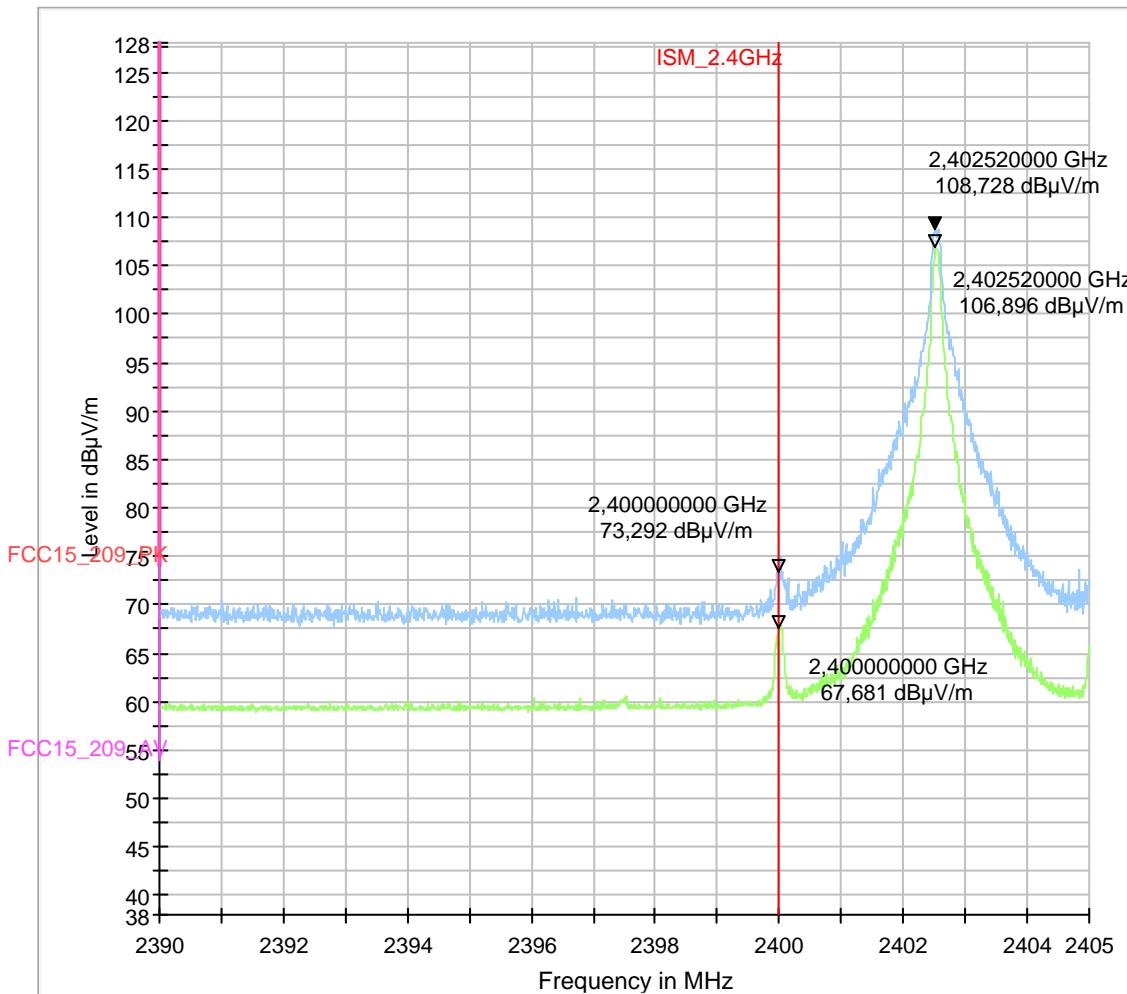
[For Restricted Band (2200-2300 MHz & 2310 – 2390 MHz) compliance refer Chapter 2.3
4.01_RCM24G+PRESTTA Ant-MSK-50Kbps-Ch0-PWR +12dBm]

9.03_BE-RCM24G+PRESTTA Ant-MSK-100Kbps- Ch0-PWR+12 dBm**Common Information**

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + PRESTTA Antenna
Operator Name: MSK | 100 Kbps | 0 (2402.5 MHz) Fixed Channel (modulated) Power +12 dBm
AFr

EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details: PRESTTA Antenna
Antenna Type: PRESTTA WLAN Embedded Antenna-1000418
Antenna HW version: N/A
Antenna Gain: 2.5 dBi
Antenna Serial number: N/A
Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply



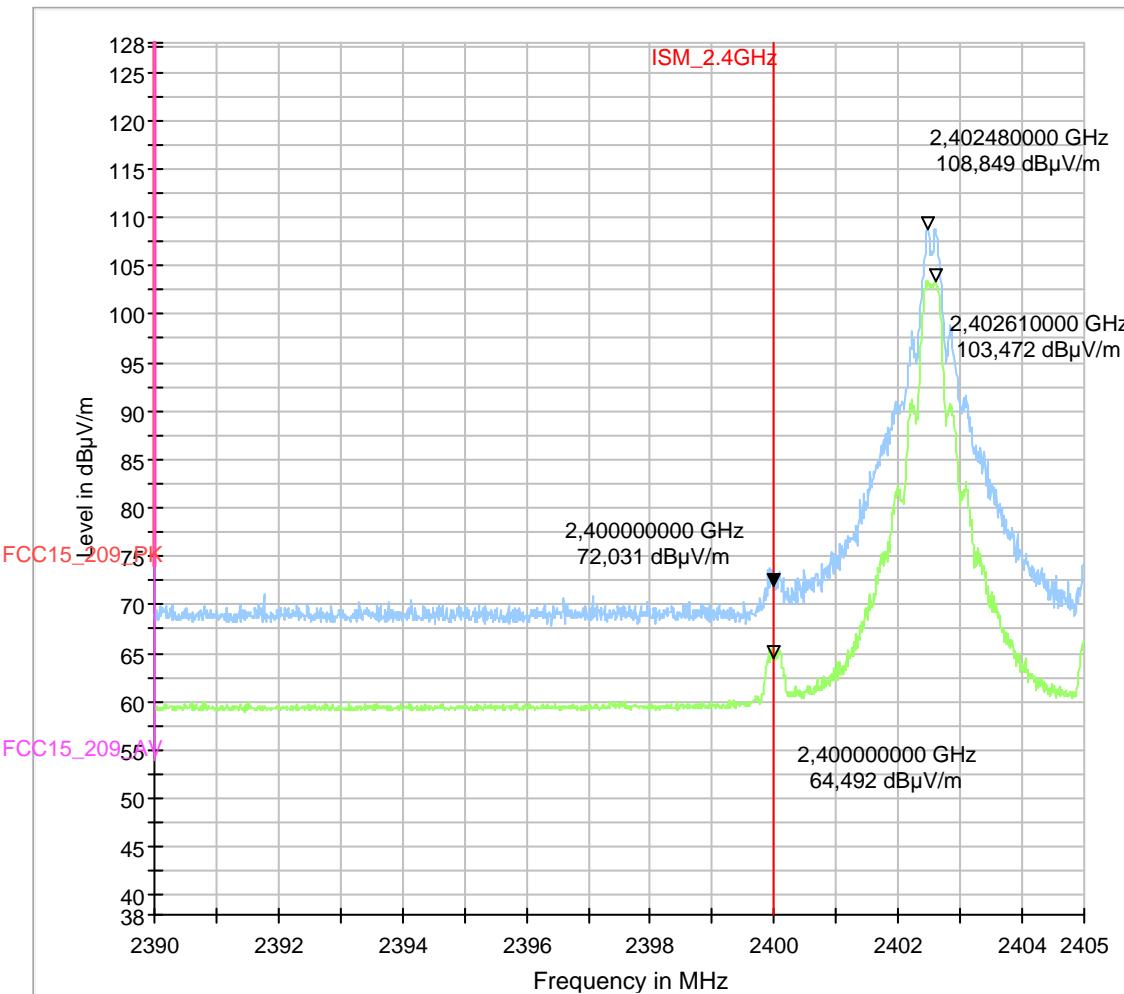
[For Restricted Band (2200-2300 MHz & 2310 – 2390 MHz) compliance refer Chapter 2.3
4.02_RCM24G+PRESTTA Ant-MSK-100Kbps-Ch69-PWR+12dBm]

9.05_BE-RCM24G+PRESTTA Ant-MSK-250Kbps- Ch0-PWR+12dBm**Common Information**

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + PRESTTA Antenna
Operator Name: MSK | 250 Kbps | 0 (2402.5 MHz) Fixed Channel (modulated) Power +12 dBm
AFr

EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details: PRESTTA Antenna
Antenna Type: PRESTTA WLAN Embedded Antenna-1000418
Antenna HW version: N/A
Antenna Gain: 2.5 dBi
Antenna Serial number: N/A
Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply



[For Restricted Band (2200-2300 MHz & 2310 – 2390 MHz) compliance refer Chapter 2.3
4.03_RCM24G+PRESTTA Ant-MSK-250Kbps-Ch0-PWR +12 dBm]

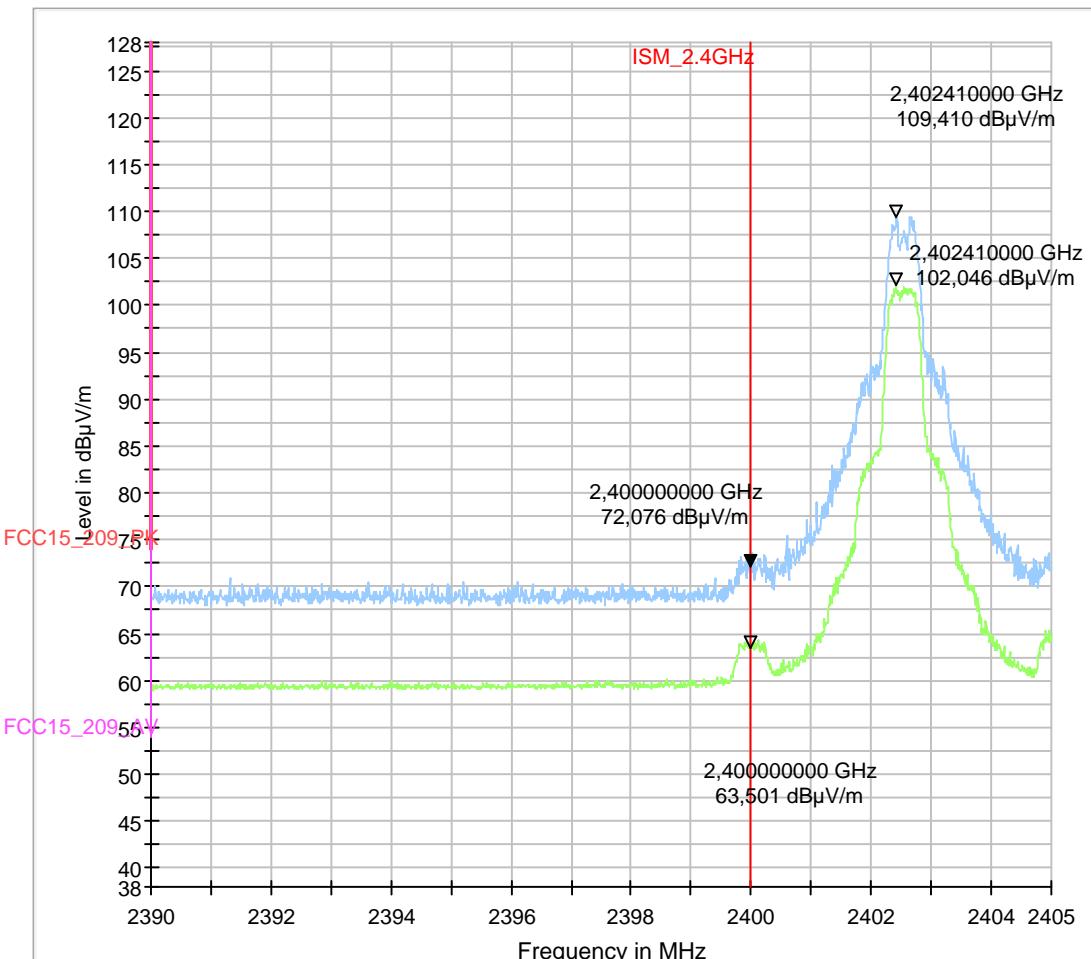
9.07_BE-RCM24G+PRESTTA Ant-MSK-500Kbps- Ch0-PWR+12dBm**Common Information**

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + PRESTTA Antenna
MSK | 500 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated) Power +12 dBm
AFr

Operator Name:

EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details: PRESTTA Antenna
Antenna Type: PRESTTA WLAN Embedded Antenna-1000418
Antenna HW version: N/A
Antenna Gain: 2.5 dBi
Antenna Serial number: N/A
Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply



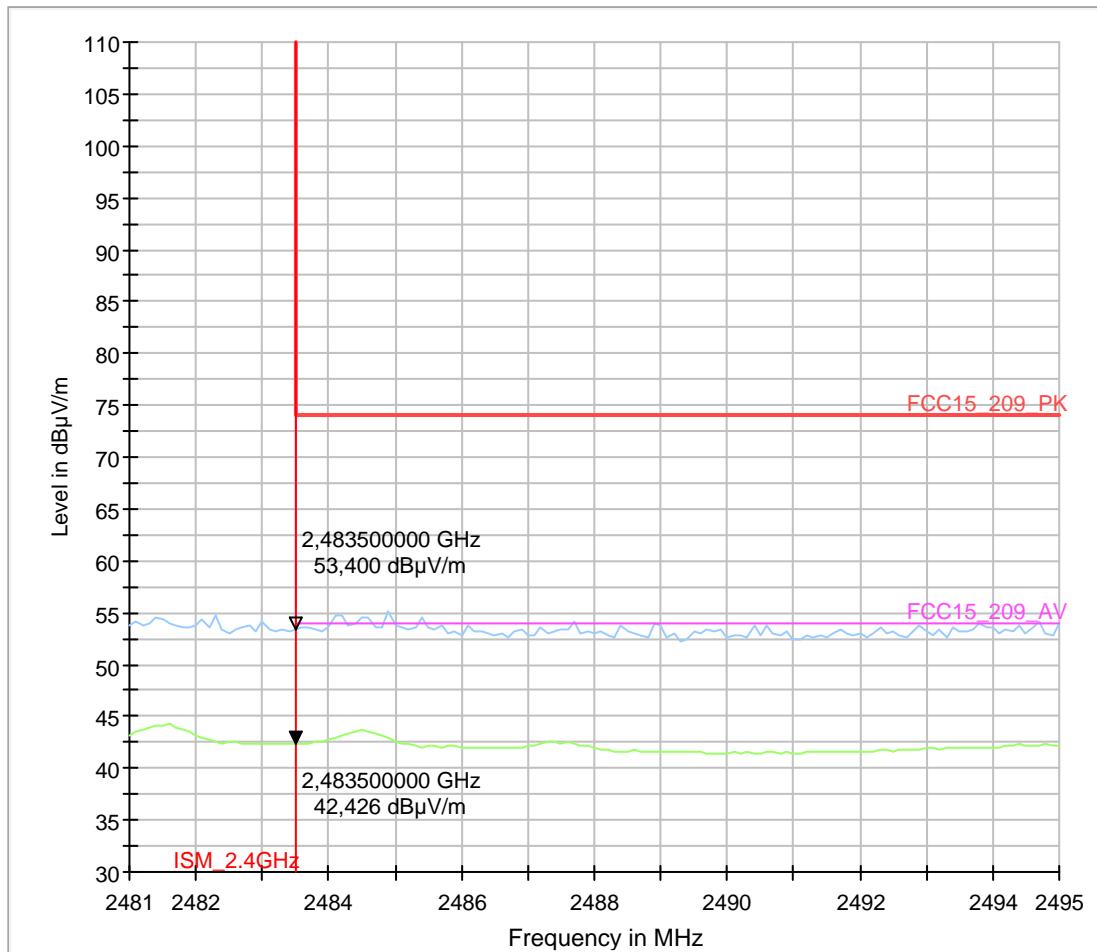
[For Restricted Band (2200-2300 MHz & 2310 – 2390 MHz) compliance refer Chapter 2.3
4.04_RCM24G+PRESTTA Ant-MSK-500Kbps-Ch34-PWR +21dBm]

2.5.2. High Channel 2471.5 MHz (2.4 GHz ISM: right band edge)**9.02_BE-RCM24G+PRESTTA Ant-MSK-50Kbps-Ch69-PWR+12dBm****Common Information**

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + PRESTTA Antenna
Operator Name: MSK | 50 Kbps |69 (2471.5 MHz) Fixed Chanel (modulated Power +12 dBm)
Measurements Performed : AFr

EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details: PRESTTA Antenna
Antenna Type: PRESTTA WLAN Embedded Antenna-1000418
Antenna HW version: N/A
Antenna Gain: 2.5 dBi
Antenna Serial number: N/A
Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply

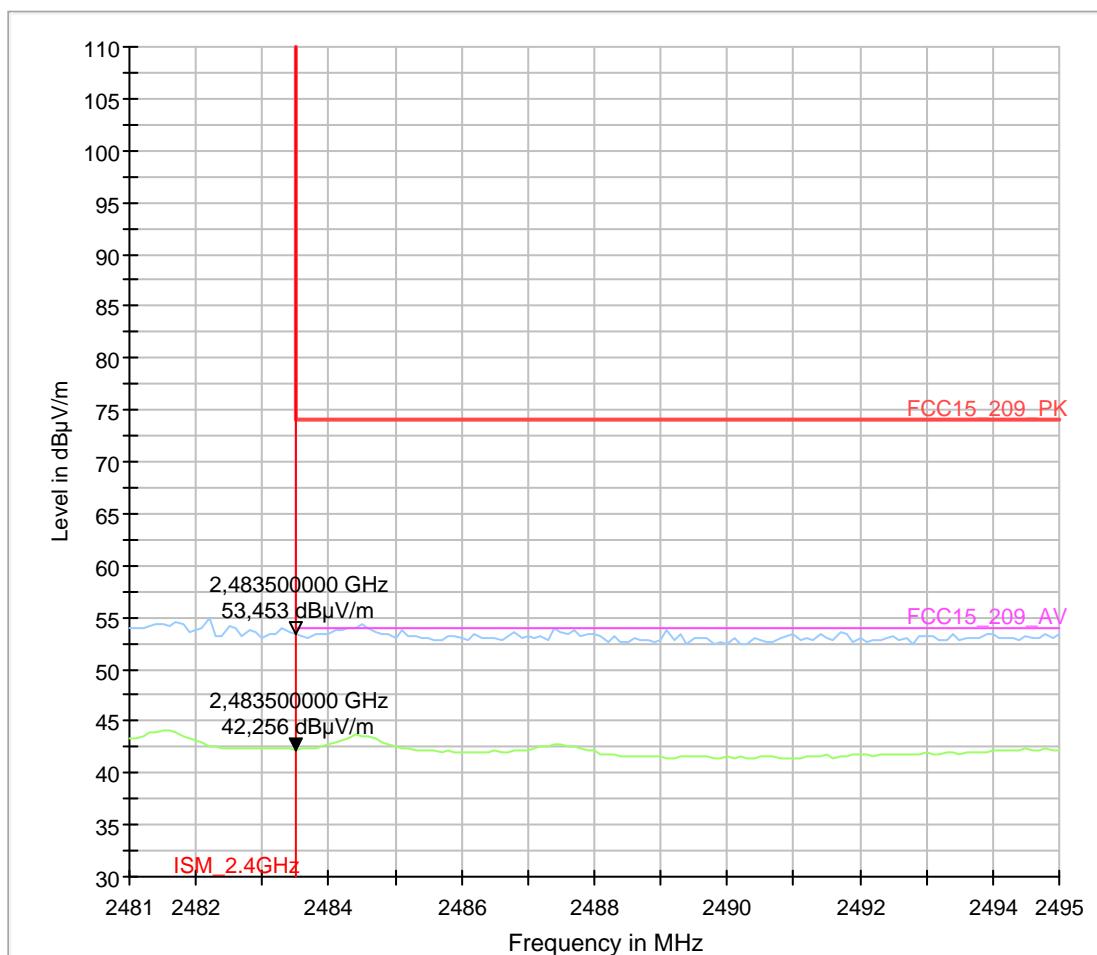


9.04_BE-RCM24G+PRESTTA Ant-MSK-100Kbps- Ch69-PWR+12dBm**Common Information**

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + PRESTTA Antenna
Operator Name: MSK | 100 Kbps | 69 (2471.5 MHz) Fixed Chanel (modulated) Power +12 dBm
Measurements Performed: AFr
With 2.4 GHz NOTCH FILTER

EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details: PRESTTA Antenna
Antenna Type: PRESTTA WLAN Embedded Antenna-1000418
Antenna HW version: N/A
Antenna Gain: 2.5 dBi
Antenna Serial number: N/A
Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply

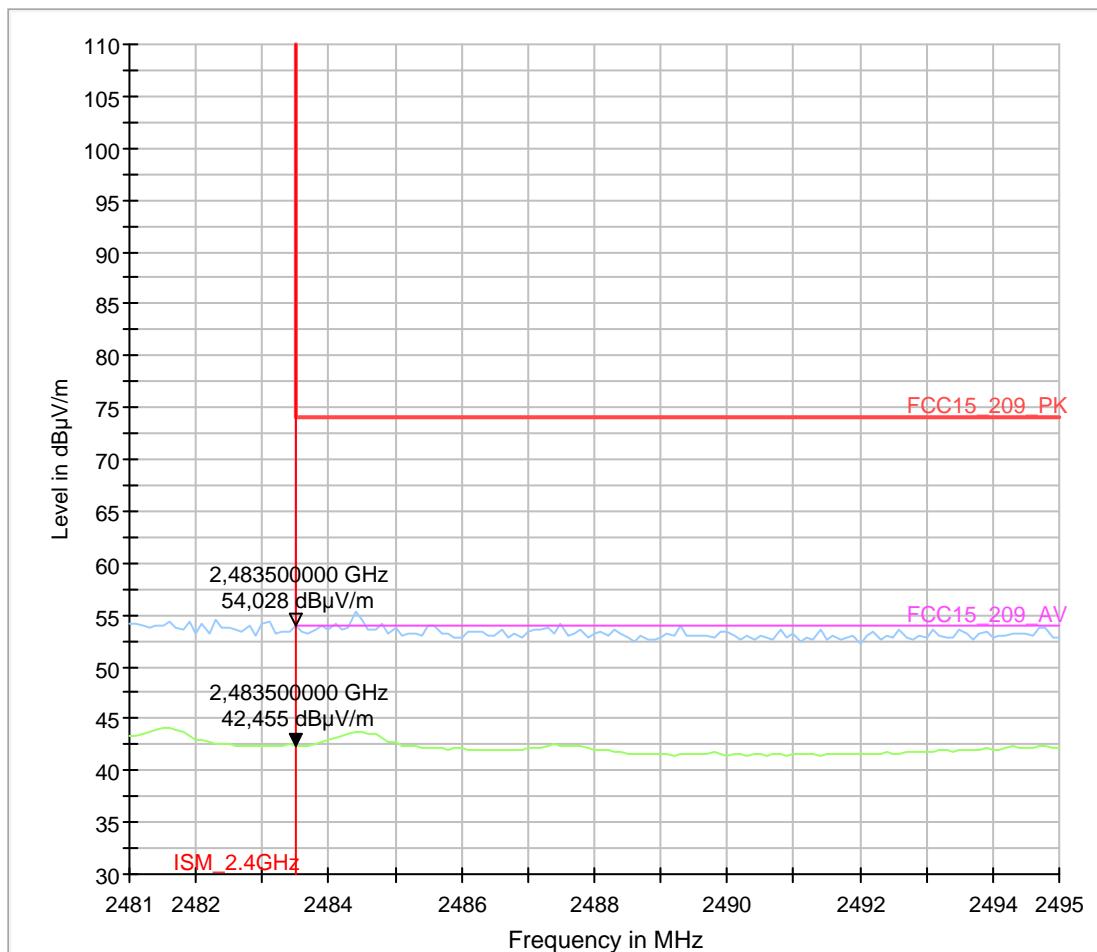


9.06_BE-RCM24G+PRESTTA Ant-MSK-250Kbps- Ch69-PWR+12dBm**Common Information**

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + PRESTTA Antenna
Operator Name: MSK | 250 Kbps |69 (2471.5 MHz) Fixed Chanel (modulated) Power +12 dBm
Measurements Performed: AFr
With 2.4 GHz NOTCH FILTER

EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details: PRESTTA Antenna
Antenna Type: PRESTTA WLAN Embedded Antenna-1000418
Antenna HW version: N/A
Antenna Gain: 2.5 dBi
Antenna Serial number: N/A
Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply

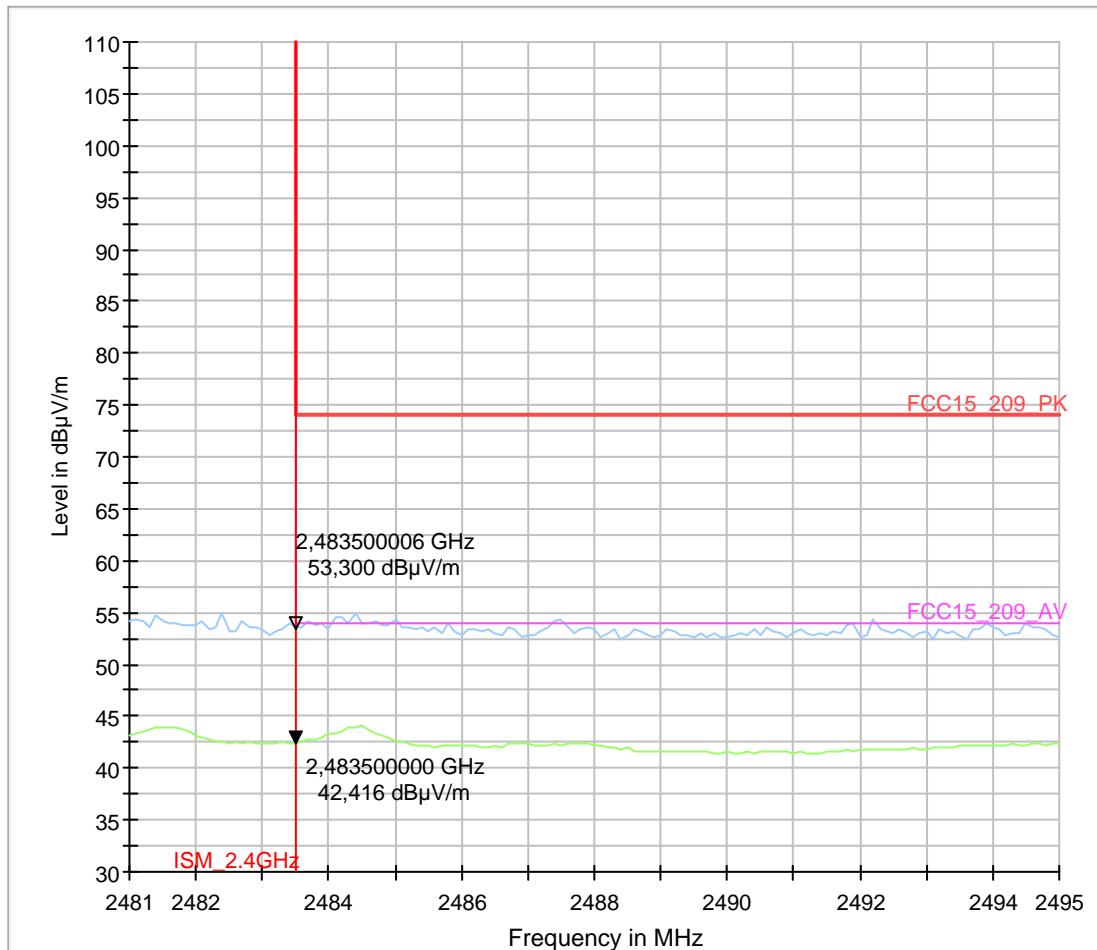


9.08_BE-RCM24G+PRESTTA Ant-MSK-500Kbps- Ch69-PWR+12dBm**Common Information**

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + PRESTTA Antenna
Operator Name: MSK | 500 Kbps |69 (2471.5 MHz) Fixed Chanel (modulated) Power +12 dBm
Measurements Performed: AFr
With 2.4 GHz NOTCH FILTER

EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details: PRESTTA Antenna
Antenna Type: PRESTTA WLAN Embedded Antenna-1000418
Antenna HW version: N/A
Antenna Gain: 2.5 dBi
Antenna Serial number: N/A
Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply



2.5.3. Low Channel Hopping Mode (2.4 GHz ISM: left band edge)

9.09a_BE-RCM24G+PRESTTA Ant-MSK-500Kbps-Low

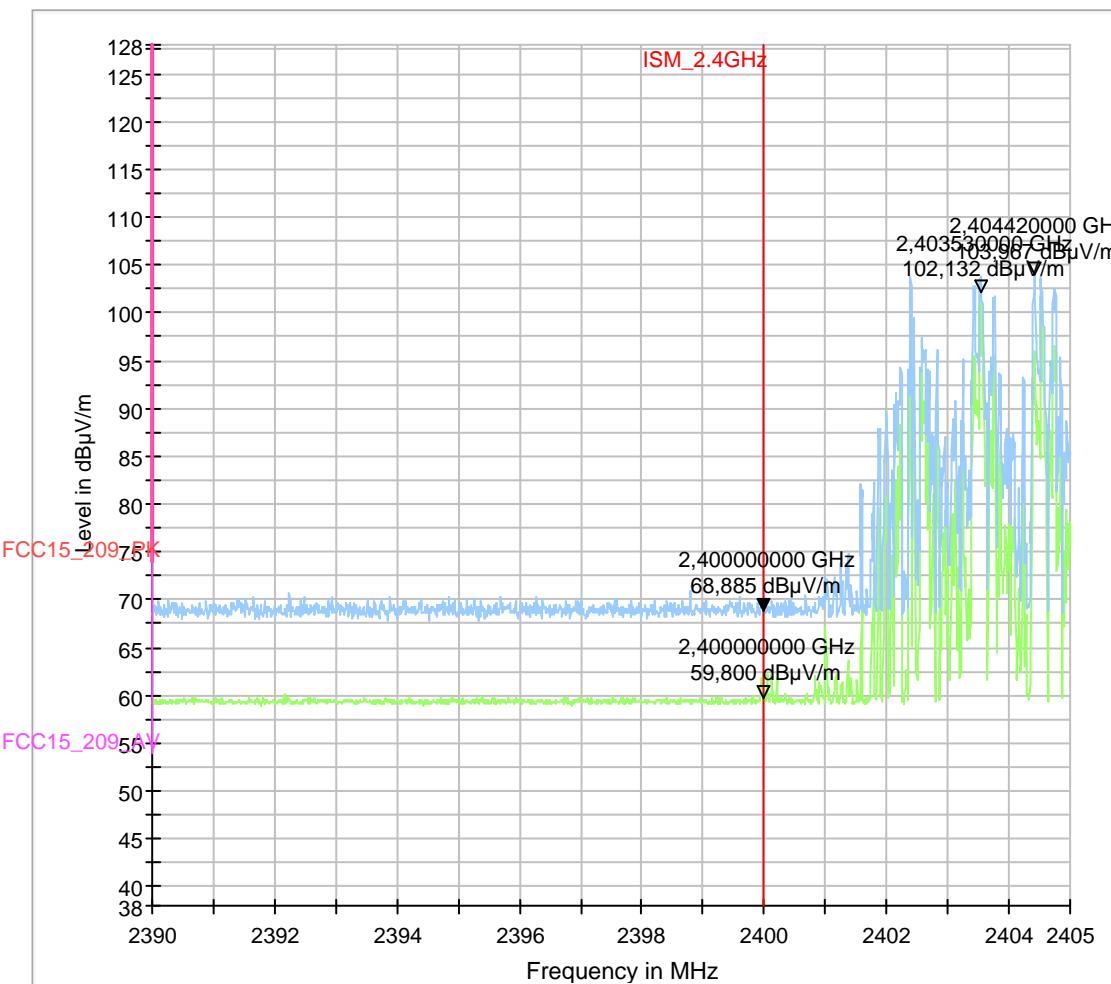
Common Information

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
 Test Site: CETECOM GmbH Essen
 Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
 Antenna polarisation: horizontal/vertical
 Operation mode: TX, continuous RCM24G + PRESTTA Antenna
 MSK | 500 Kbps | Hopping Mode (Master)
 AFR

Operator Name:

EUT Information

Manufacturer: Intel
 Model: RCM24G
 Module Type: Proprietary 2.4 GHz RF Transceiver
 Module HW version: D
 Module SW version: Bootloader Version3.6
 Module Serial number: PCB ID 3526
 Antenna Details: PRESTTA Antenna
 Antenna Type: PRESTTA WLAN Embedded Antenna-1000418
 Antenna HW version: N/A
 Antenna Gain: 2.5 dBi
 Antenna Serial number: N/A
 Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length
 Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
 Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply



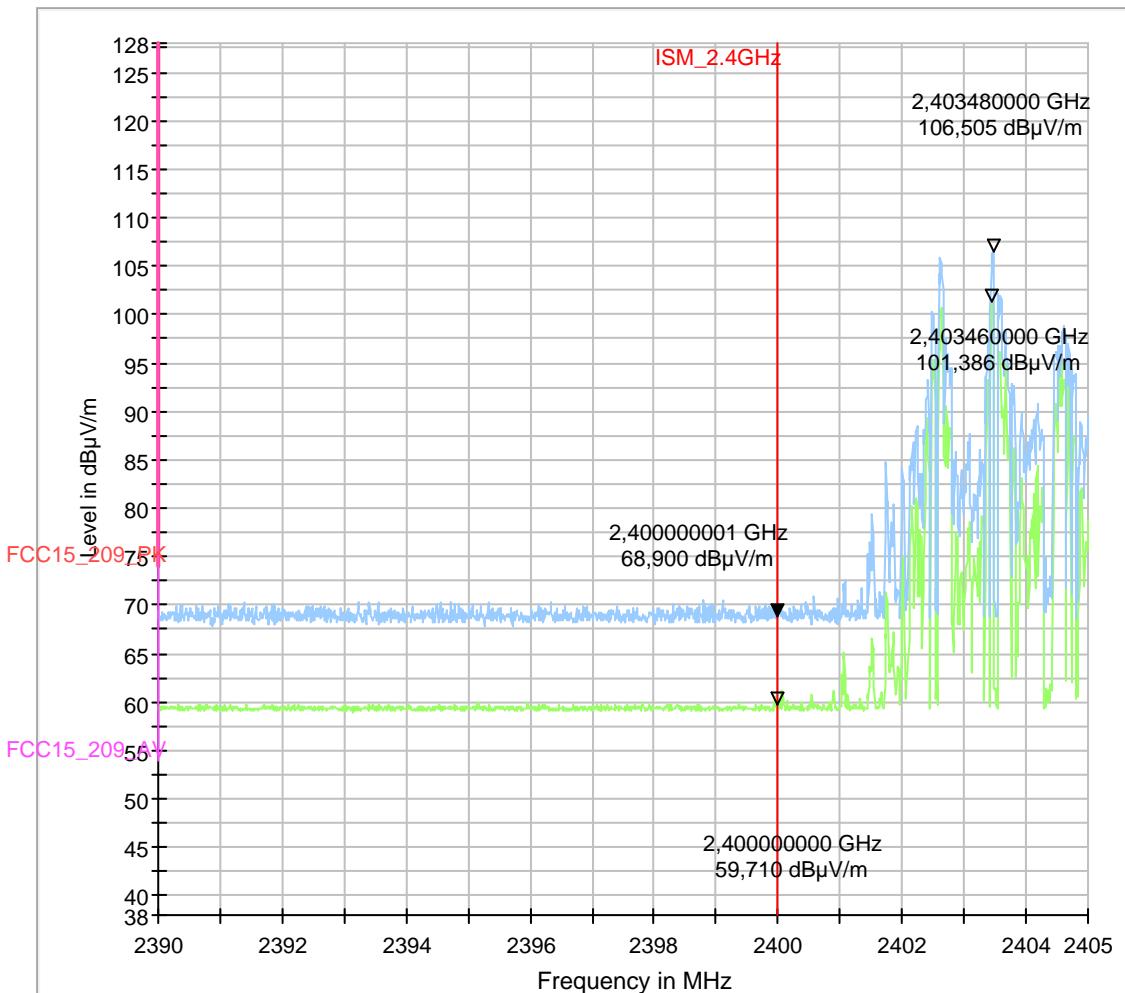
[For Restricted Band (2200-2300 MHz & 2310 – 2390 MHz) compliance refer Chapter 2.3]

9.10a_BE-RCM24G+PRESTTA Ant-MSK-250Kbps-Low**Common Information**

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + PRESTTA Antenna
Operator Name: MSK | 250 Kbps | Hopping Mode (Master)
AFr

EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details: PRESTTA Antenna
Antenna Type: PRESTTA WLAN Embedded Antenna-1000418
Antenna HW version: N/A
Antenna Gain: 2.5 dBi
Antenna Serial number: N/A
Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply



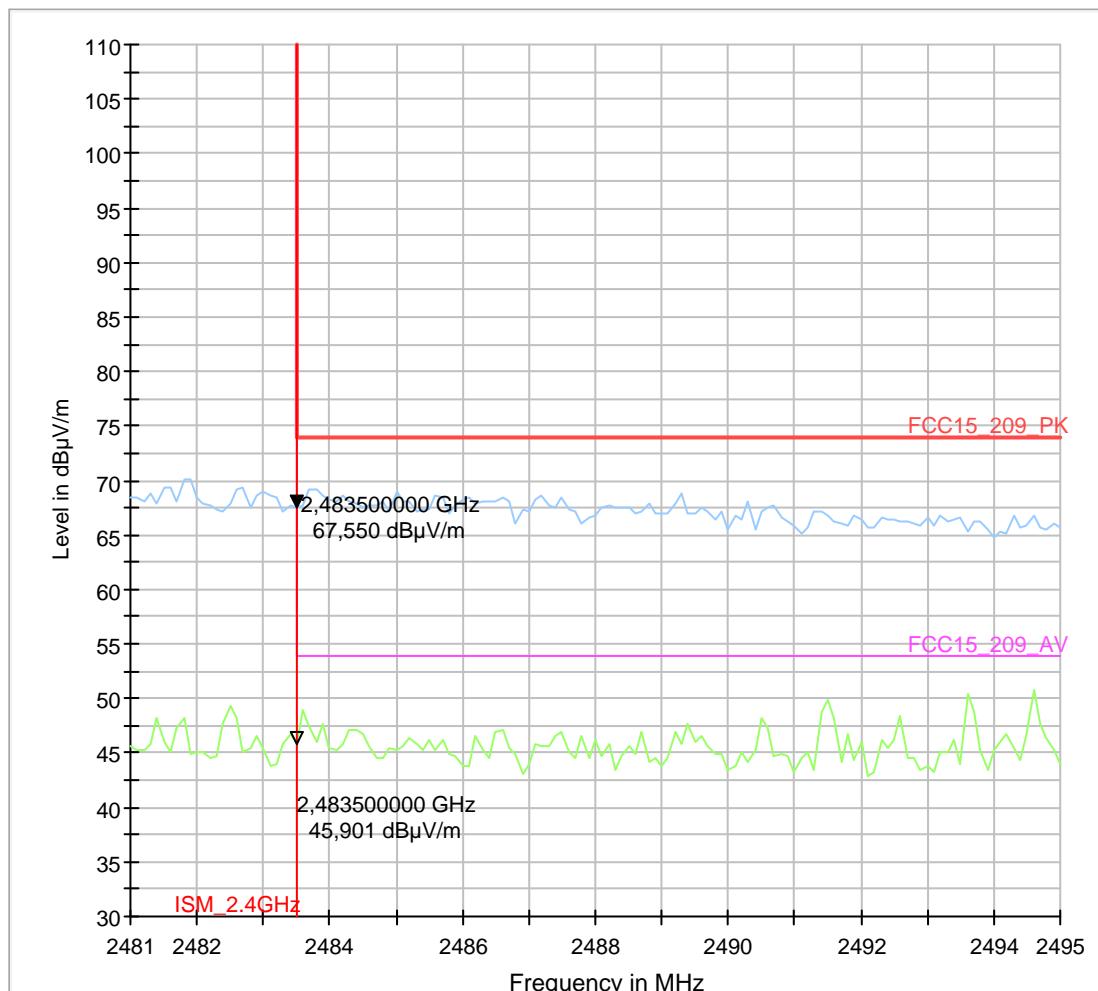
[For Restricted Band (2200-2300 MHz & 2310 – 2390 MHz) compliance refer Chapter 2.3]

2.5.4. High Channel Hopping Mode (2.4 GHz ISM: left band edge)**9.09b_BE-RCM24G+PRESTTA Ant-MSK-500Kbps-High****Common Information**

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + PRESTTA Antenna
Operator Name: MSK | 500 Kbps | Hopping Mode (Master)
Measurements Performed: AFr
With 2.4 GHz NOTCH FILTER

EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details: PRESTTA Antenna
Antenna Type: PRESTTA WLAN Embedded Antenna-1000418
Antenna HW version: N/A
Antenna Gain: 2.5 dBi
Antenna Serial number: N/A
Test Configuration: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply



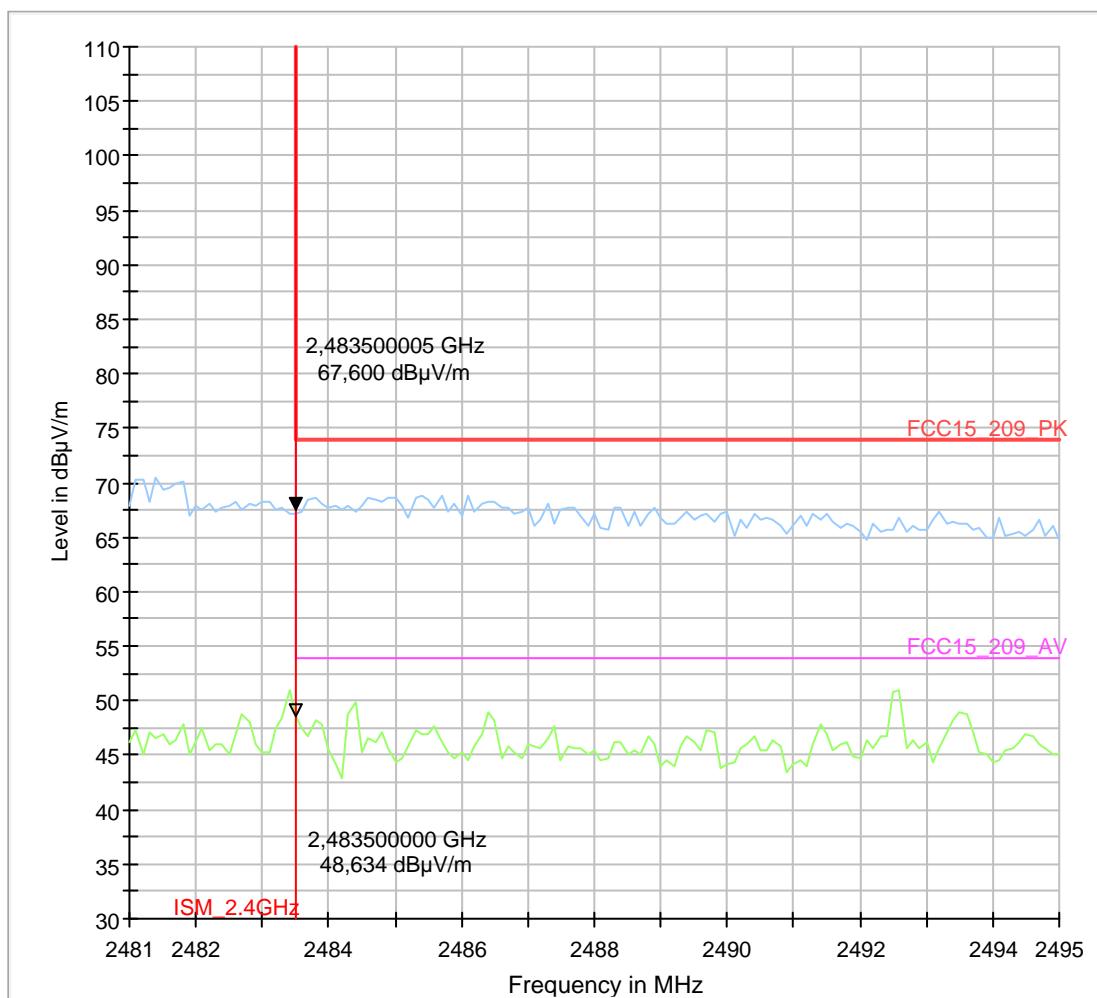
9.10b_BE-RCM24G+PRESTTA Ant-MSK-250Kbps-High

Common Information

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + PRESTTA Antenna
Operator Name: MSK | 250 Kbps | Hopping Mode (Master)
Measurements Performed: AFr
With 2.4 GHz NOTCH FILTER

EUT Information

Manufacturer: Intel
Model: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3526
Antenna Details:
Antenna Type: PRESTTA Antenna
Antenna HW version: PRESTTA WLAN Embedded Antenna-1000418
Antenna Gain: N/A
Antenna Serial number: 2.5 dBi
Test Configuration: N/A
Test Mode Settings: PRESTTA Antenna connected to RCM24G Module using micro-UFL connector cable 20 cm in length
Module Power Supply: Using RCM24G TestTool_V3_70Channels Software
3.6 V DC (Direct to RCM24G) using Laboratory Supply



Radiated Field Strength Measurements

RCM24G
+
INTEL FA5 ANTENNA PORT 1

3. Radiated Field Strength Measurements-RCM24G + INTEL FA5 ANTENNA-PORT 1

3.1. Radiated Field Strength Emissions - 9kHz to 30MHz

2.11_RCM24G+INTEL FA5 Ant-Port1-MSK-50Kbps-Ch0-PWR +12dBm

Common Information

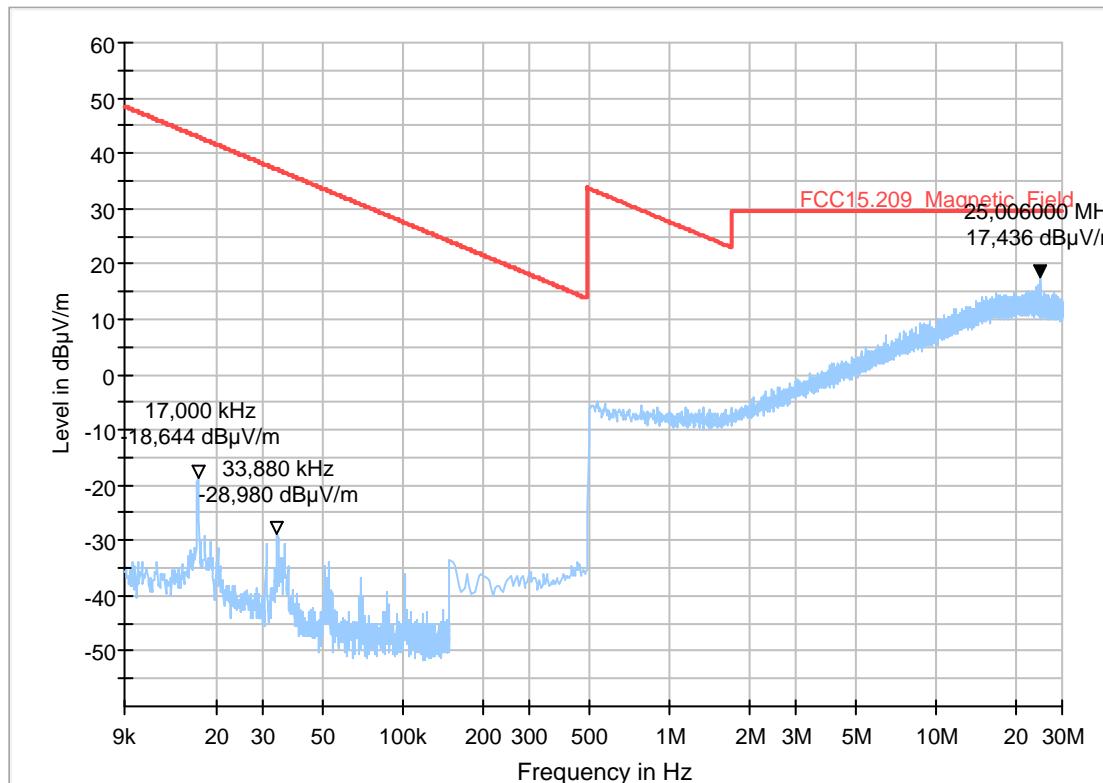
Test description: Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware: EMC32 V9.25.0
Distance correction: used accord. table, pls. see test report
Technical Data: Please see 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: TFr
Operating mode: TX-Continuous RCM24G+ INTEL FA5 ANTENNA-PORT1
MSK | 50 Kbps 0 (2402.5 MHz) Fixed Chanel (modulated)
Power:+12dBm
3.6 V DC (direct to RCM24G) using Laboratory Power Supply

Power during tests:

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT1
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 3.19 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 5 | 2| 3| 4) are terminated with 50 Ohm terminations.

Full Spectrum



2.12_RCM24G+INTEL FA5 Ant-Port1-MSK-100Kbps-Ch69-PWR+12dBm

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: TFr

Operating mode: TX-Continuous RCM24G+ INTEL FA5 ANTENNA-PORT1

MSK |100 Kbps |69 (2471.5 MHz) Fixed Chanel (modulated)

Power:+12dBm

3.6 V DC (direct to RCM24G) using Laboratory Power Supply

EUT Information

Manufacturer: Intel

Module Details: RCM24G

Module Type: Proprietary 2.4 GHz RF Transceiver

Module HW version: D

Module SW version: Bootloader Version3.6

Module Serial number: PCB ID 3518

Antenna Details: INTEL FA5 ANTENNA-PORT1

Antenna Type: Monopole

Antenna HW version: Antenna-002

Antenna Gain: 3.19 dBi

Antenna Serial number: N/A

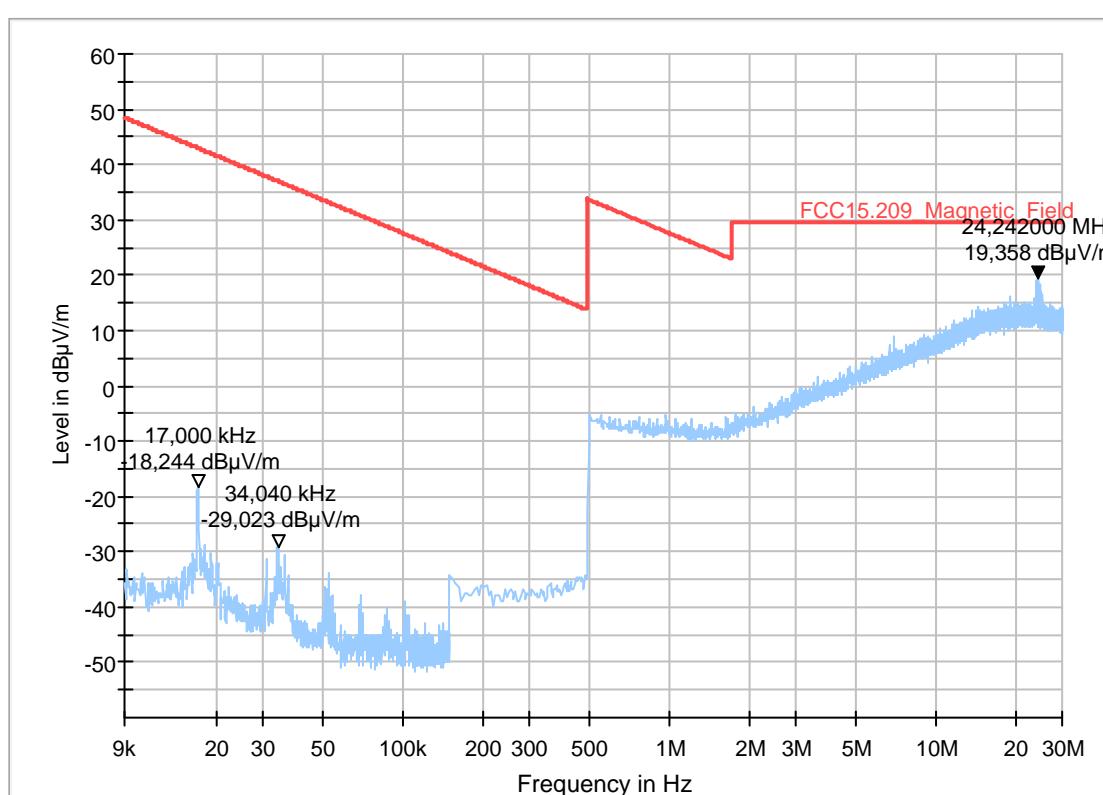
Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length

Using RCM24G TestTool_V3_70Channels Software

3.6 V DC (Direct to RCM24G) using Laboratory Supply

Comments: Unused INTEL FA5 Antenna ports (Port: 5 | 2 | 3 | 4) are terminated with 50 Ohm terminations.

Full Spectrum



2.13_RCM24G+INTEL FA5 Ant-Port1-MSK-250Kbps-Ch0-PWR +12dBm

Common Information

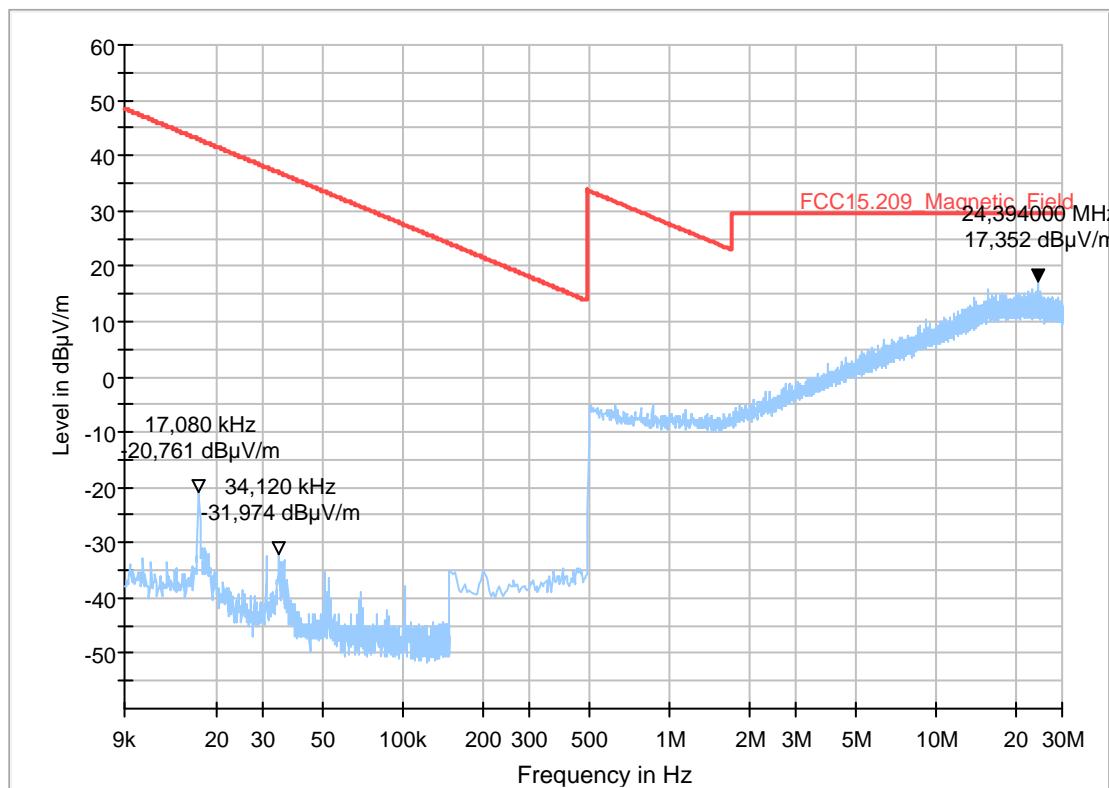
Test description: Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware: EMC32 V9.25.0
Distance correction: used accord. table, pls. see test report
Technical Data: Please see 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: TFr
Operating mode: TX-Continuous RCM24G+ INTEL FA5 ANTENNA-PORT1
MSK | 250 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated)
Power:+12dBm
3.6 V DC (direct to RCM24G) using Laboratory Power Supply

Power during tests:

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT1
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 3.19 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 5 | 2| 3| 4) are terminated with 50 Ohm terminations.

Full Spectrum



2.14_RCM24G+INTEL FA5 Ant-Port1-MSK-500Kbps-Ch34-PWR +21dBm

Common Information

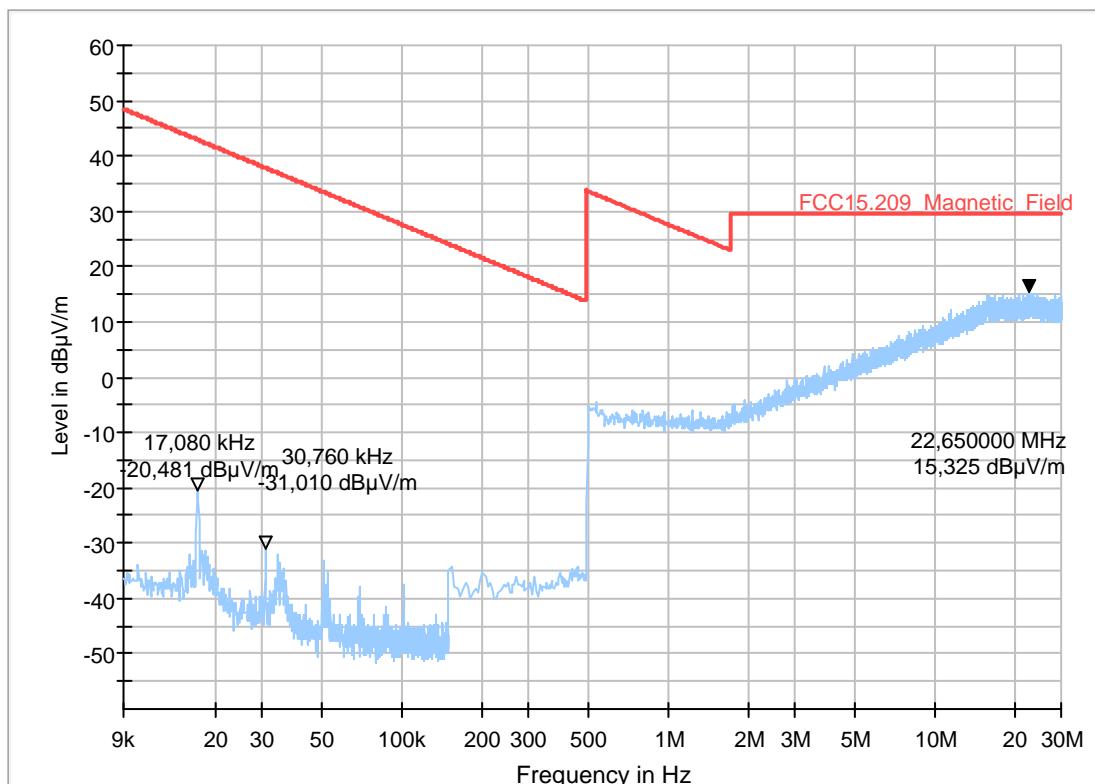
Test description: Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware: EMC32 V9.25.0
Distance correction: used accord. table, pls. see test report
Technical Data: Please see 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: TFr
Operating mode: TX-Continuous RCM24G+ INTEL FA5 ANTENNA-PORT1
MSK |500 Kbps |34 (2436.5 MHz) Fixed Chanel (modulated)
Power:+21dBm
3.6 V DC (Direct to RCM24G) using Laboratory Supply

Power during tests:

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT1
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 3.19 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 5 | 2| 3| 4) are terminated with 50 Ohm terminations.

Full Spectrum



3.2. Radiated Field Strength Emissions - 30MHz to 1GHz

3.11_RCM24G+INTEL FA5 Ant-Port1-MSK-50Kbps-Ch0-PWR +12dBm

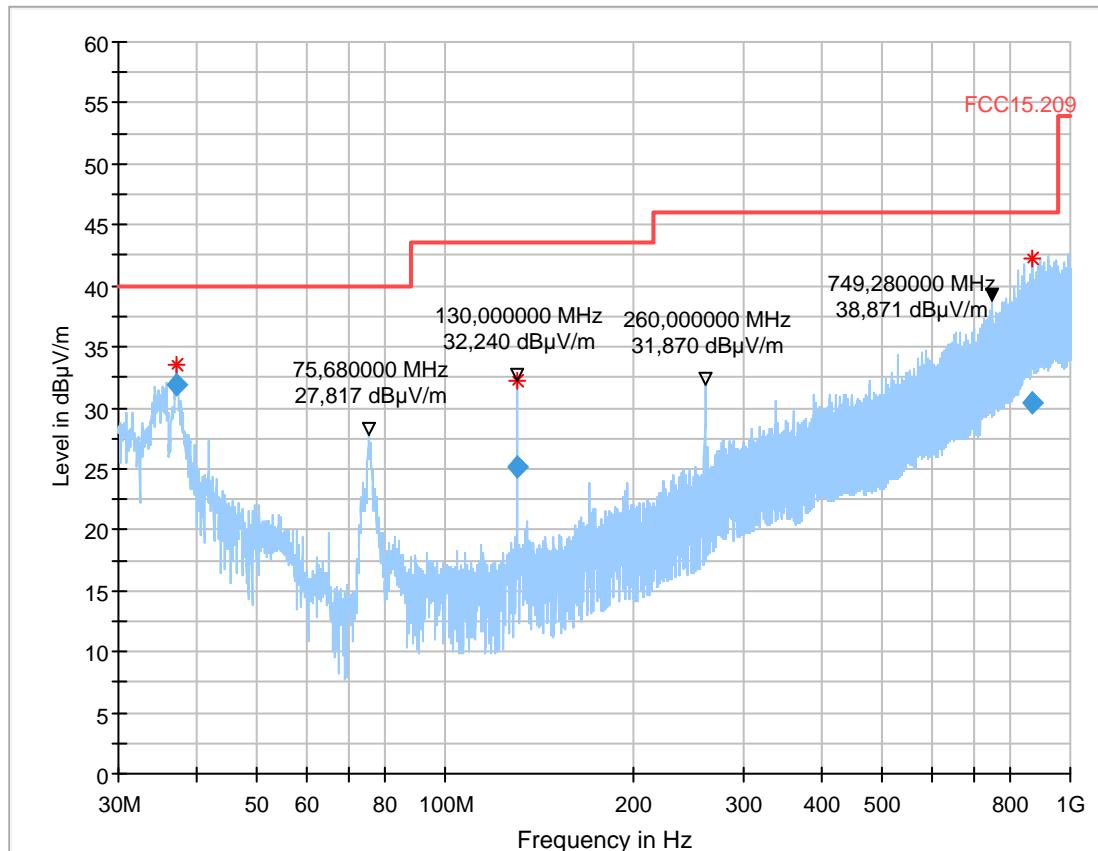
Common Information

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 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Operator:	APH
Operating conditions:	TX-Continuous RCM24G+INTEL FA5 Antenna Port 1 (Lower 2.4 GHz Port) MSK 50 Kbps 0 (2402.5 MHz) Fixed Channel (modulated) Power:+12dBm 3.6 V DC Using Laboratory Supply
Power during tests:	

EUT Information

Manufacturer:	Intel
Module Details:	RCM24G
Module Type:	Proprietary 2.4 GHz RF Transceiver
Module HW version:	D
Module SW version:	Bootloader Version3.6
Module Serial number:	PCB ID 3518
Antenna Details:	INTEL FA5 ANTENNA-PORT1
Antenna Type:	Monopole
Antenna HW version:	Antenna-002
Antenna Gain:	3.19 dBi
Antenna Serial number:	N/A
Test Configuration:	INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings:	Using RCM24G TestTool_V3_70Channels Software
Module Power Supply:	3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments:	Unused INTEL FA5 Antenna ports (Port: 5 2 3 4) are terminated with 50 Ohm terminations.

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
37.172000	31.92	40.00	8.08	1000.0	120.000	283.0	V	143.0	90.0	18.3
130.000000	25.13	43.50	18.37	1000.0	120.000	245.0	H	342.0	0.0	9.0
867.120000	30.37	46.00	15.63	1000.0	120.000	360.0	V	81.0	90.0	26.0

3.12_RCM24G+INTEL FA5 Ant-Port1-MSK-100Kbps-Ch69-PWR+12dBm

Common Information

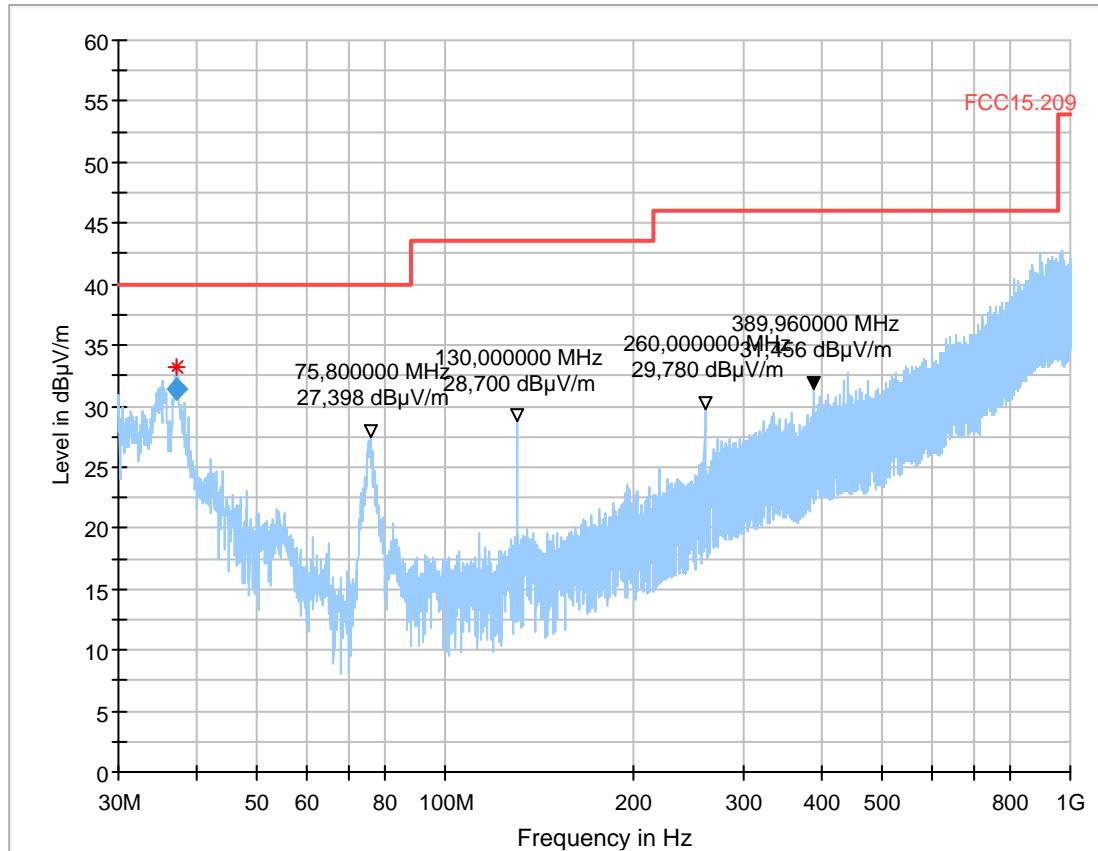
Test description:	Electric Field Strength Measurement
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	not used
Used filter:	not used
Technical Data:	please see page 2 for detailed data of measurement setup
Test specification.:	FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Operator:	APH
Operating conditions:	TX-Continuous RCM24G+INTEL FA5 Antenna Port 1 (Lower 2.4 GHz Port) MSK 100 Kbps 69 (2471.5 MHz) Fixed Chanel (modulated) Power:+12dBm 3.6 V DC Using Laboratory Supply

Power during tests:

EUT Information

Manufacturer:	Intel
Module Details:	RCM24G
Module Type:	Proprietary 2.4 GHz RF Transceiver
Module HW version:	D
Module SW version:	Bootloader Version3.6
Module Serial number:	PCB ID 3518
Antenna Details:	INTEL FA5 ANTENNA-PORT1
Antenna Type:	Monopole
Antenna HW version:	Antenna-002
Antenna Gain:	3.19 dBi
Antenna Serial number:	N/A
Test Configuration:	INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings:	Using RCM24G TestTool_V3_70Channels Software
Module Power Supply:	3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments:	Unused INTEL FA5 Antenna ports (Port: 5 2 3 4) are terminated with 50 Ohm terminations.

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
37.256000	31.32	40.00	8.68	1000.0	120.000	292.0	H	117.0	90.0	18.3

3.13_RCM24G+INTEL FA5 Ant-Port1-MSK-250Kbps-Ch0-PWR +12dBm

Common Information

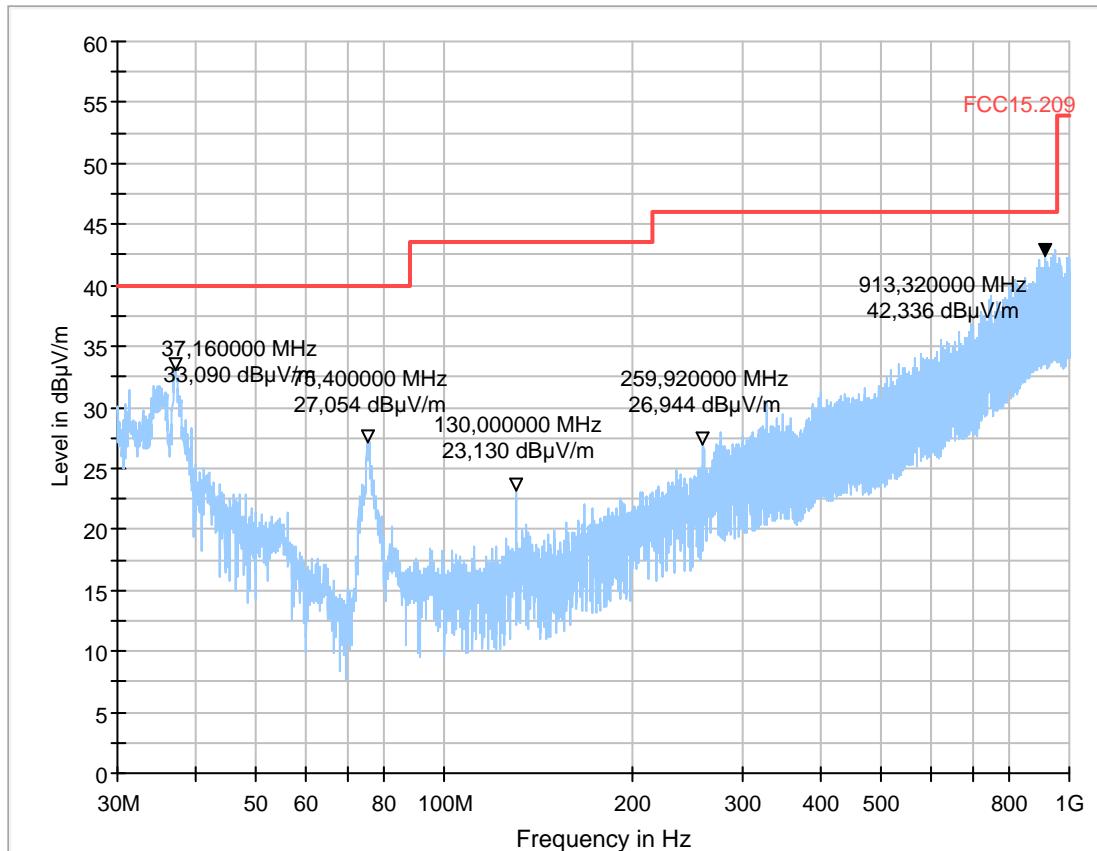
Test description: Electric Field Strength Measurement
Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware: EMC32 V9.25.0
Distance correction: not used
Used filter: not used
Technical Data: please see page 2 for detailed data of measurement setup
Test specification.: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Operator: APh
Operating conditions: TX-Continuous RCM24G+INTEL FA5 Antenna Port 1 (Lower 2.4 GHz Port)
MSK | 250 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated)
Power:+12dBm
3.6 V DC Using Laboratory Supply

Power during tests:

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT1
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 3.19 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 5 | 2| 3| 4) are terminated with 50 Ohm

Full Spectrum



3.14_RCM24G+INTEL FA5 Ant-Port1-MSK-500Kbps-Ch34-PWR +21dBm

Common Information

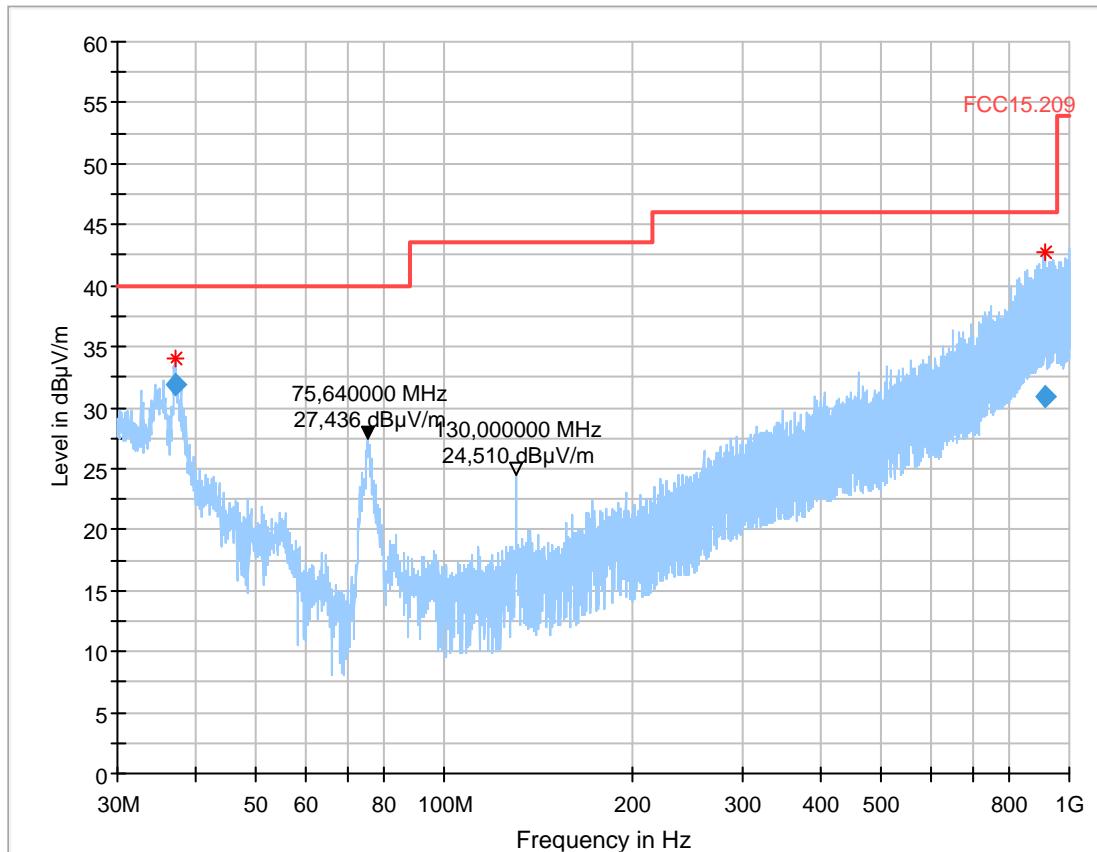
Test description: Electric Field Strength Measurement
Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware: EMC32 V9.25.0
Distance correction: not used
Used filter: not used
Technical Data: please see page 2 for detailed data of measurement setup
Test specification.: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Operator: AFr
Operating conditions: TX-Continuous RCM24G+INTEL FA5 Antenna Port 1 (Lower 2.4 GHz Port)
MSK |500 Kbps |34 (2436.5 MHz) Fixed Chanel (modulated)
Power:+21dBm
3.6 V DC Using Laboratory Supply

Power during tests:

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT1
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 3.19 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 5 | 2| 3| 4) are terminated with 50 Ohm

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
37.040000	31.85	40.00	8.15	1000.0	120.000	294.0	V	117.0	0.0	18.4
912.392000	30.92	46.00	15.08	1000.0	120.000	273.0	V	111.0	90.0	26.7

3.3. Radiated Field Strength Emissions - 1GHz to 18GHz

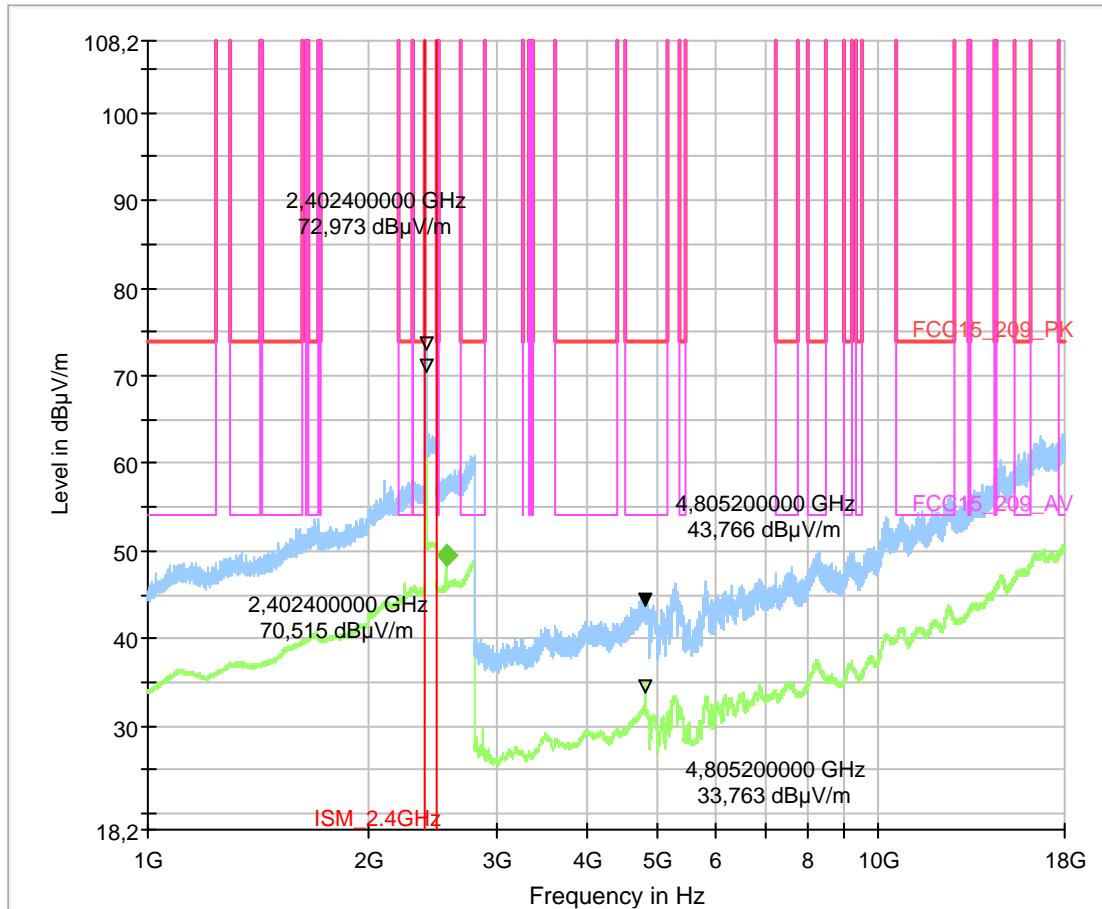
4.11_RCM24G+INTEL FA5 Ant-Port1-MSK-50Kbps-Ch0-PWR +12dBm

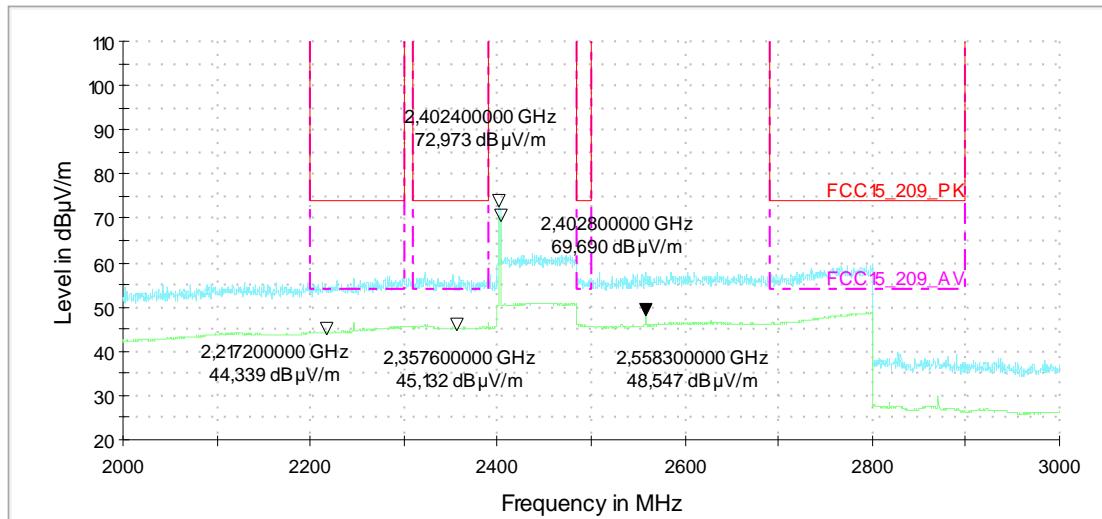
Common Information

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 247 Issue2 , RSS-Gen, Issue 4
 Antenna polarisation: horizontal/vertical
 Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 1 (Lower2.4 GHz Port)
 Operator Name: MSK | 50 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated) Power +12dBm
 Measurements Performed: TFr
 With 2.4 GHz NOTCH FILTER Tuned to relevant channel frequency

EUT Information

Manufacturer: Intel
 Module Details: RCM24G
 Module Type: Proprietary 2.4 GHz RF Transceiver
 Module HW version: D
 Module SW version: Bootloader Version3.6
 Module Serial number: PCB ID 3518
 Antenna Details: INTEL FA5 ANTENNA-PORT1
 Antenna Type: Monopole
 Antenna HW version: Antenna-002
 Antenna Gain: 3.19 dBi
 Antenna Serial number: N/A
 Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
 Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
 Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
 Comments: Unused INTEL FA5 Antenna ports (Port: 5| 2| 3| 4) are terminated with 50 Ohm



**Final_Result**

Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2558.550000	49.59	150.00	100.41	100.0	1000.000	155.0	H	58.0	90.0	36.0

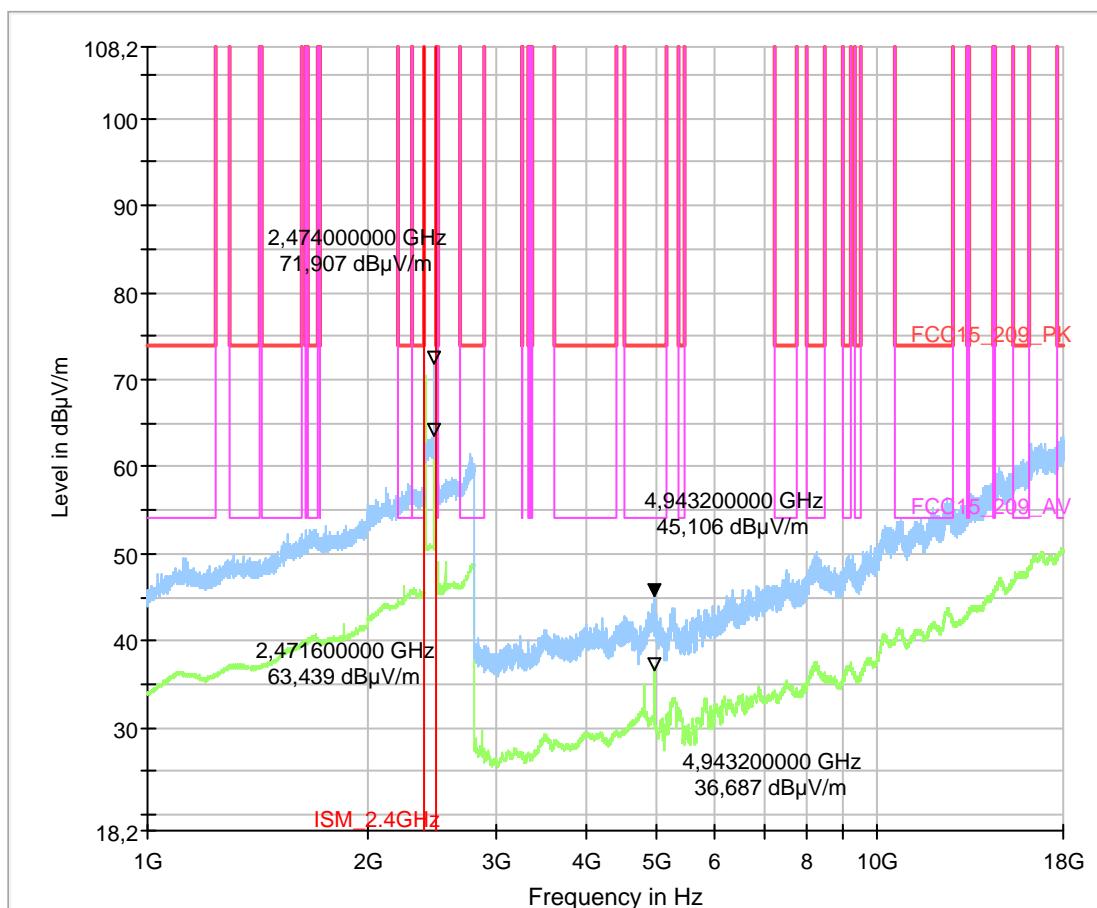
4.12_RCM24G+INTEL FA5 Ant-Port1-MSK-100Kbps-Ch69-PWR +12dBm

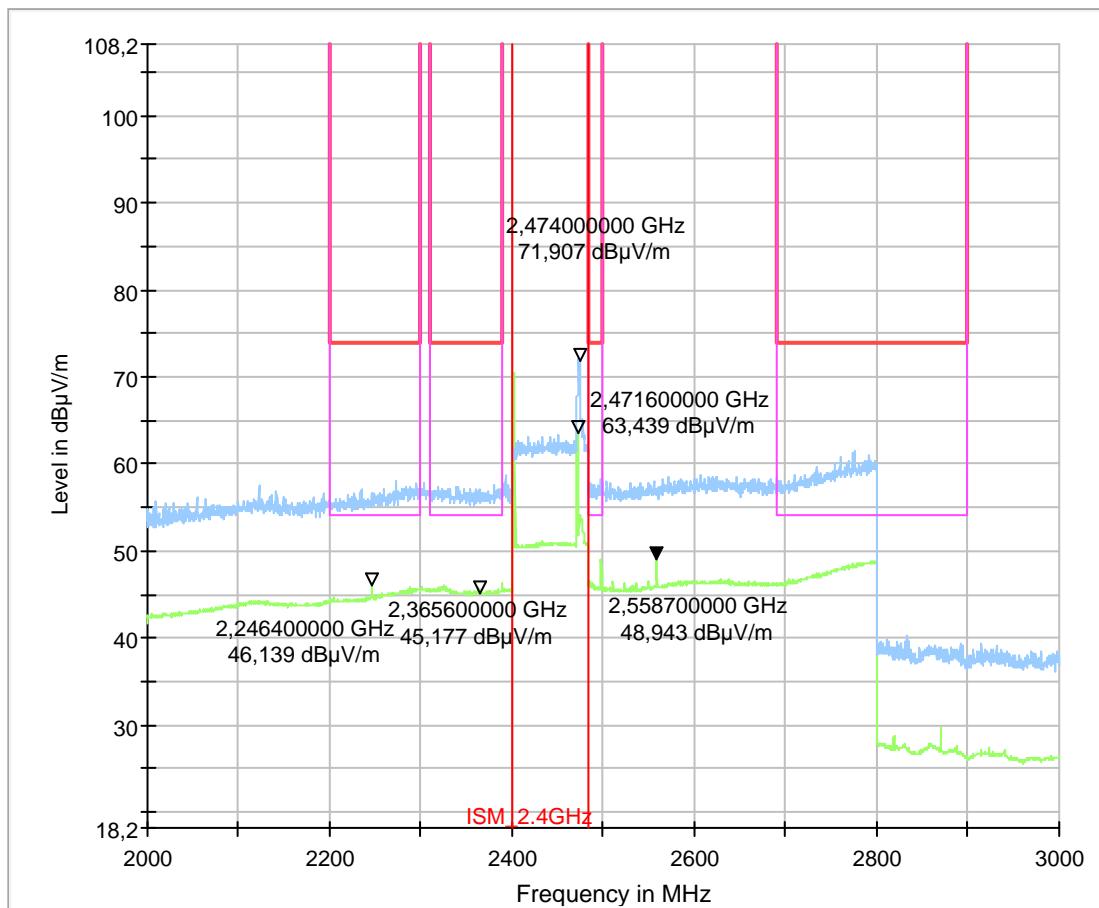
Common Information

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 247 Issue2 , RSS-Gen, Issue 4
 Antenna polarisation: horizontal/vertical
 Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 1 (Lower2.4 GHz Port)
 Operator Name: MSK |100 Kbps |69 (2471.5 MHz) Fixed Chanle (modulated) Power +12dBm
 Measurements Performed: TFr
 With 2.4 GHz NOTCH FILTER Tuned to relevant channel frequency

EUT Information

Manufacturer: Intel
 Module Details: RCM24G
 Module Type: Proprietary 2.4 GHz RF Transceiver
 Module HW version: D
 Module SW version: Bootloader Version3.6
 Module Serial number: PCB ID 3518
 Antenna Details: INTEL FA5 ANTENNA-PORT1
 Antenna Type: Monopole
 Antenna HW version: Antenna-002
 Antenna Gain: 3.19 dBi
 Antenna Serial number: N/A
 Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
 Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
 Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
 Comments: Unused INTEL FA5 Antenna ports (Port: 5|2|3|4) are terminated with 50 Ohm





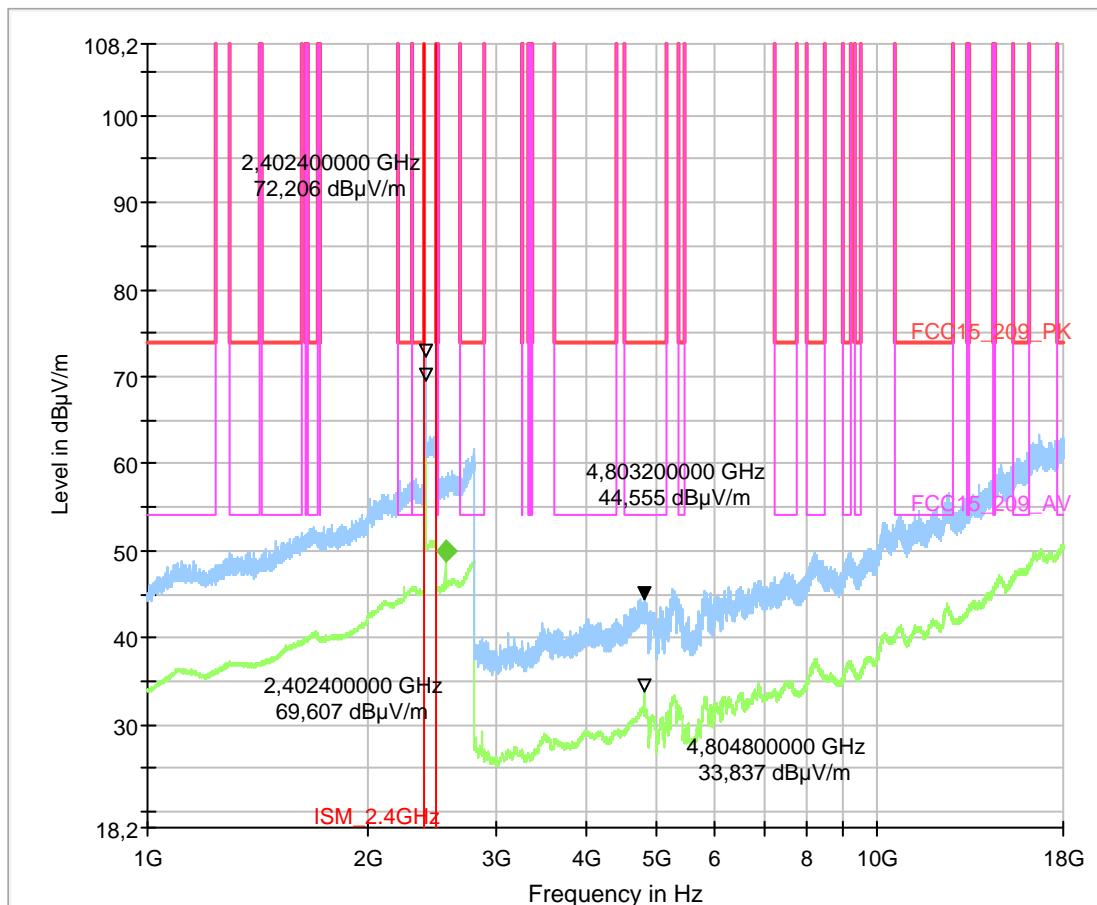
4.13_RCM24G+INTEL FA5 Ant-Port1-MSK-250Kbps-Ch0-PWR +12dBm

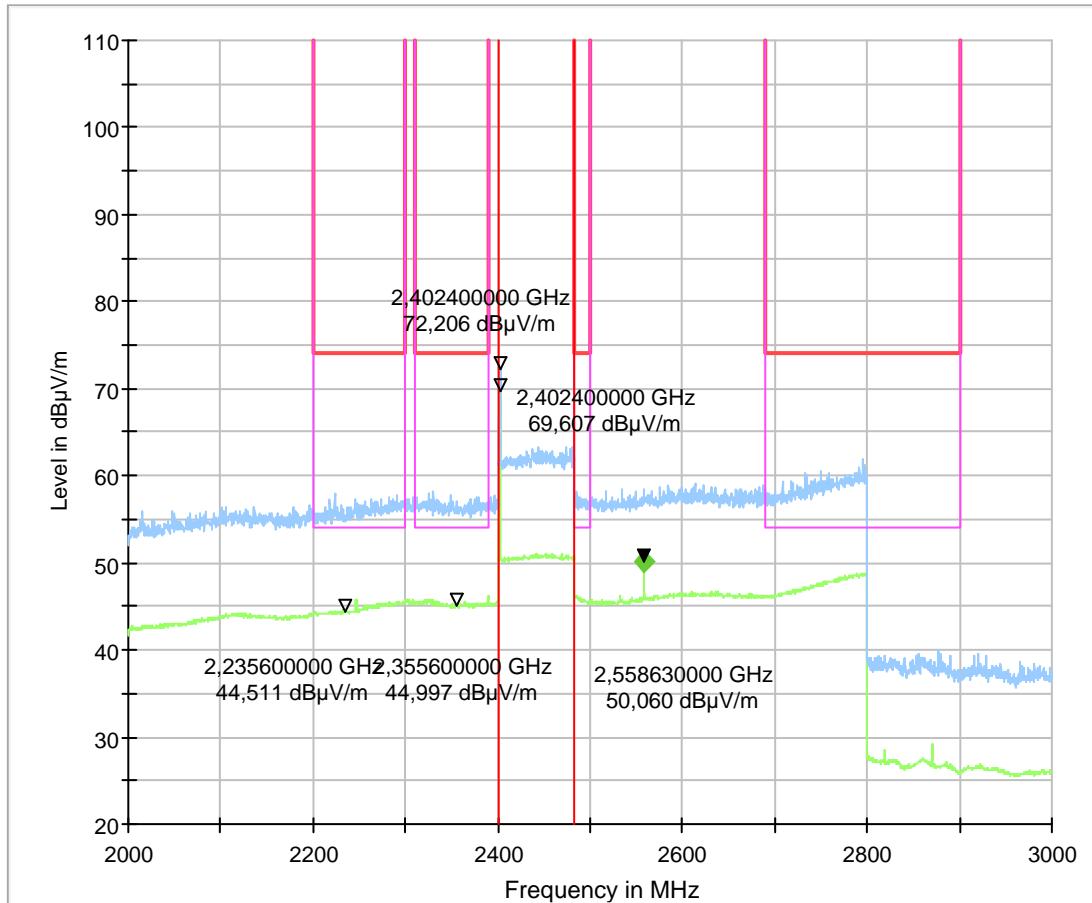
Common Information

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 247 Issue2 , RSS-Gen, Issue 4
 Antenna polarisation: horizontal/vertical
 Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 1 (Lower2.4 GHz Port)
 Operator Name: MSK | 250 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated) Power +12dBm
 Measurements Perfomed: TFr
 With 2.4 GHz NOTCH FILTER Tuned to relevant channel frequency

EUT Information

Manufacturer: Intel
 Module Details: RCM24G
 Module Type: Proprietary 2.4 GHz RF Transceiver
 Module HW version: D
 Module SW version: Bootloader Version3.6
 Module Serial number: PCB ID 3518
 Antenna Details: INTEL FA5 ANTENNA-PORT1
 Antenna Type: Monopole
 Antenna HW version: Antenna-002
 Antenna Gain: 3.19 dBi
 Antenna Serial number: N/A
 Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
 Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
 Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
 Comments: Unused INTEL FA5 Antenna ports (Port: 5|2|3|4) are terminated with 50 Ohm



**Final_Result**

Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2558.630000	50.06	150.00	99.94	100.0	1000.000	155.0	V	200.0	0.0	36.0

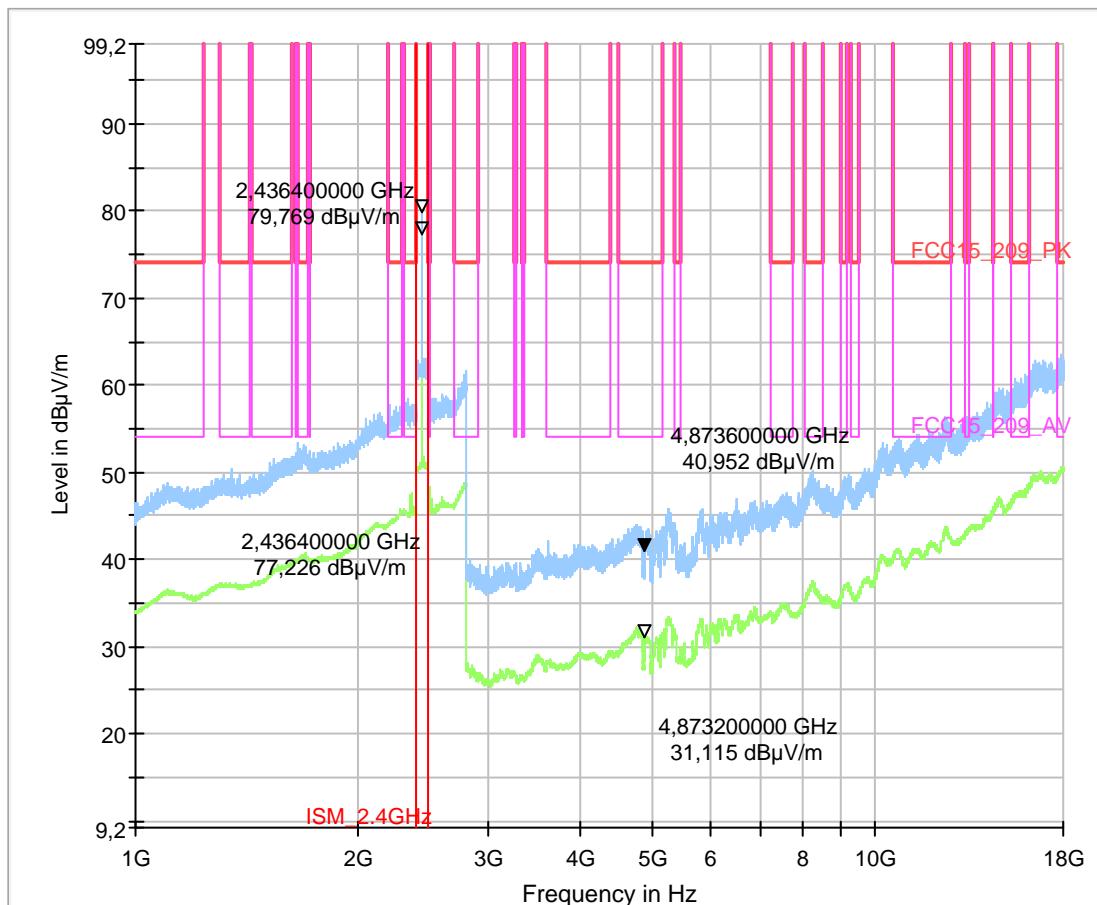
4.14_RCM24G+INTEL FA5 Ant-Port1-MSK-500Kbps-Ch34-PWR +21dBm

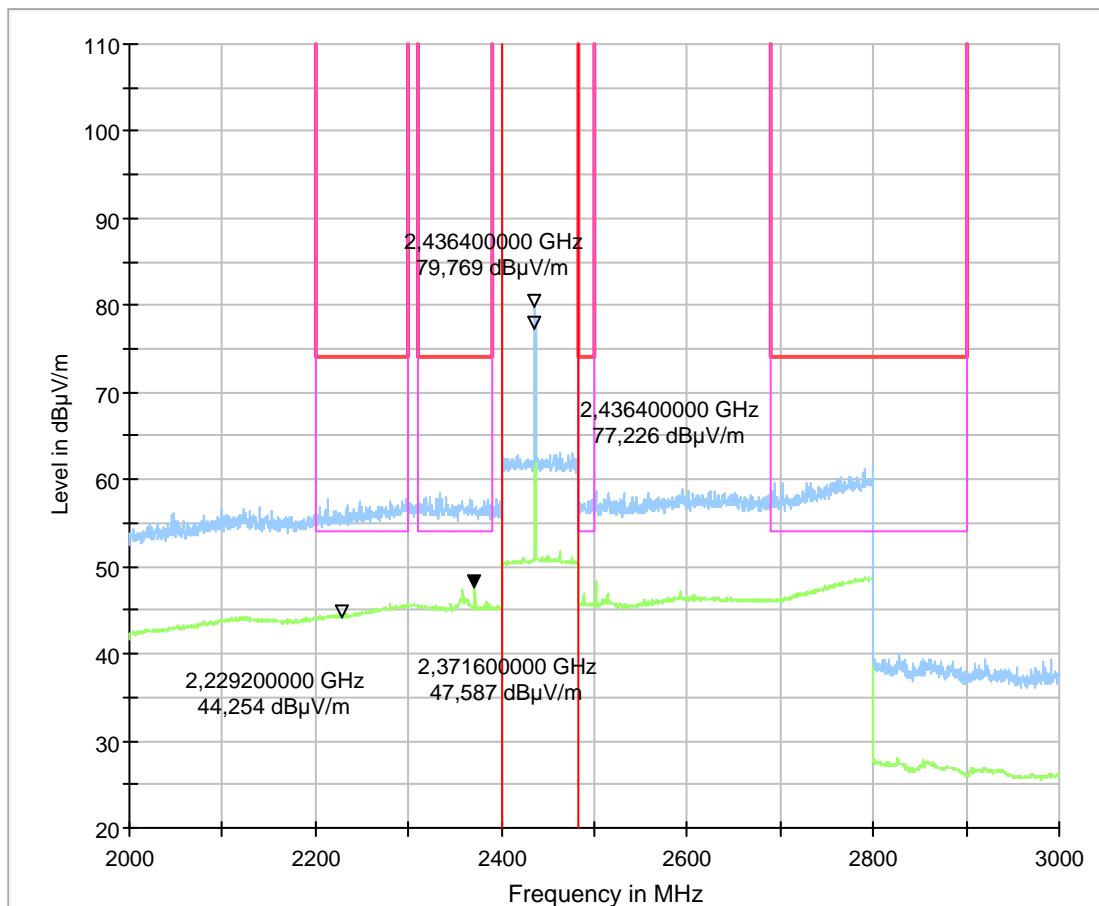
Common Information

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 247 Issue2 , RSS-Gen, Issue 4
 Antenna polarisation: horizontal/vertical
 Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 1 (Lower2.4 GHz Port)
 Operator Name: MSK |500 Kbps |34 (2436.5 MHz) Fixed Chanel (modulated) Power +21dBm
 Measurements Perfomed: TFr
 With 2.4 GHz NOTCH FILTER Tuned to relevant channel frequency

EUT Information

Manufacturer: Intel
 Module Details: RCM24G
 Module Type: Proprietary 2.4 GHz RF Transceiver
 Module HW version: D
 Module SW version: Bootloader Version3.6
 Module Serial number: PCB ID 3518
 Antenna Details: INTEL FA5 ANTENNA-PORT1
 Antenna Type: Monopole
 Antenna HW version: Antenna-002
 Antenna Gain: 3.19 dBi
 Antenna Serial number: N/A
 Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
 Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
 Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
 Comments: Unused INTEL FA5 Antenna ports (Port: 5|2|3|4) are terminated with 50 Ohm





3.4. Radiated Field Strength Emissions - 18GHz to 25GHz**4.11a_RCM24G+INTEL FA5 Ant-Port1-MSK-50Kbps-Ch0-PWR +12dBm****Common Information**

Test Description: Radiated field strength emission in 1m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
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-Continuous RCM24G+ INTEL FA5 ANTENNA-PORT1
Operator Name: TFr

EUT Information

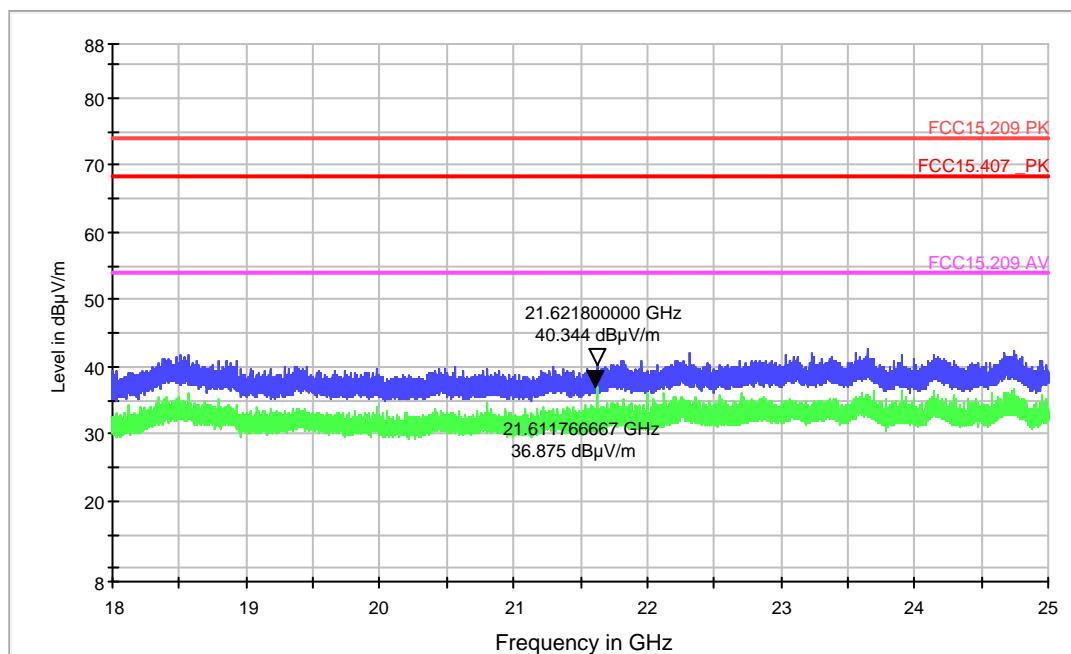
Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT1
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 3.19 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length

Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software

Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply

Comments: Unused INTEL FA5 Antenna ports (Port: 5 | 2| 3| 4) are terminated with 50Ω terminations.

FCC_Sweep_15.247_18_25GHz_Pre



4.12a_RCM24G+INTEL FA5 Ant-Port1-MSK-100Kbps-Ch69-PWR+12dBm

Common Information

Test Description: Radiated field strength emission in 1m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
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-Continuous RCM24G+ INTEL FA5 ANTENNA-PORT1
MSK |100 Kbps |69 (2471.5 MHz) Fixed Chanel (modulated)
Power:+12dBm

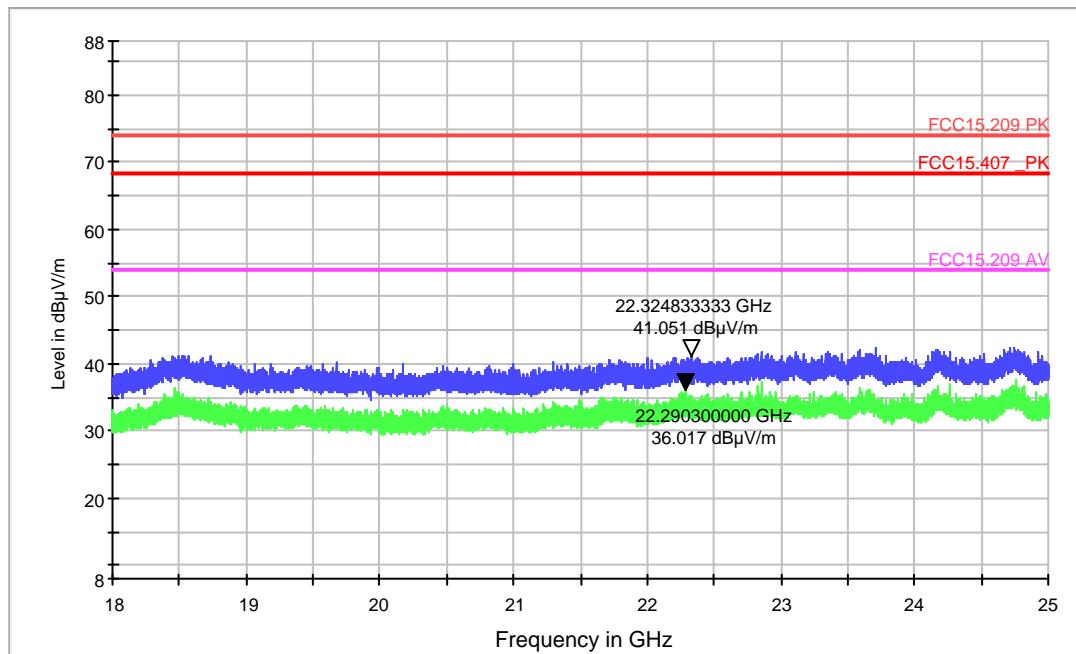
Operator Name: TFr

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT1
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 3.19 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length

Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 5 | 2| 3| 4) are terminated with $50\ \Omega$ terminations.

FCC_Sweep_15.247_18_25GHz_Pre



**4.13a_RCM24G+INTEL FA5 Ant-Port1-MSK-250Kbps-Ch0-PWR
+12dBm****Common Information**

Test Description: Radiated field strength emission in 1m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
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-Continuous RCM24G+ INTEL FA5 ANTENNA-PORT1
MSK | 250 Kbps |0 (2402.5 MHz) Fixed Chanel (modulated)
Power:+12dBm

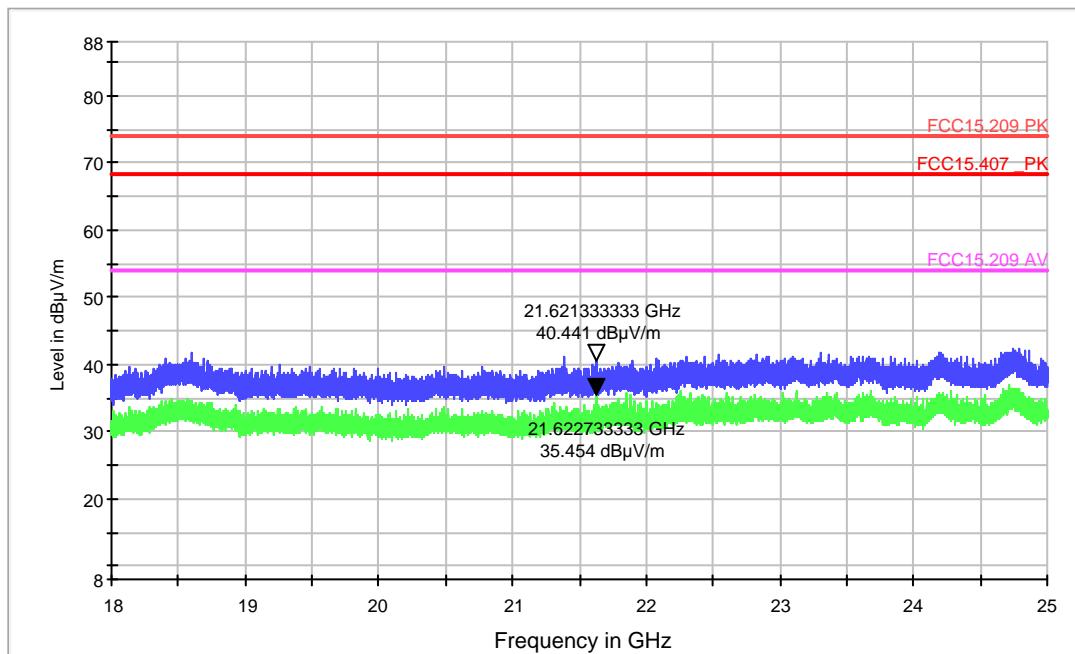
Operator Name: TFr

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details:
Antenna Type: INTEL FA5 ANTENNA-PORT1
Antenna HW version: Monopole
Antenna Gain: Antenna-002
3.19 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length

Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 5 | 2 | 3 | 4) are terminated with 50Ω terminations.

FCC_Sweep_15.247_18_25GHz_Pre



4.14a_RCM24G+INTEL FA5 Ant-Port1-MSK-500Kbps-Ch34-PWR +21dBm

Common Information

Test Description: Radiated field strength emission in 1m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
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-Continuous RCM24G+ INTEL FA5 ANTENNA-PORT1
MSK |500 Kbps |34 (2436.5 MHz) Fixed Chanel (modulated)
Power:+21dBm

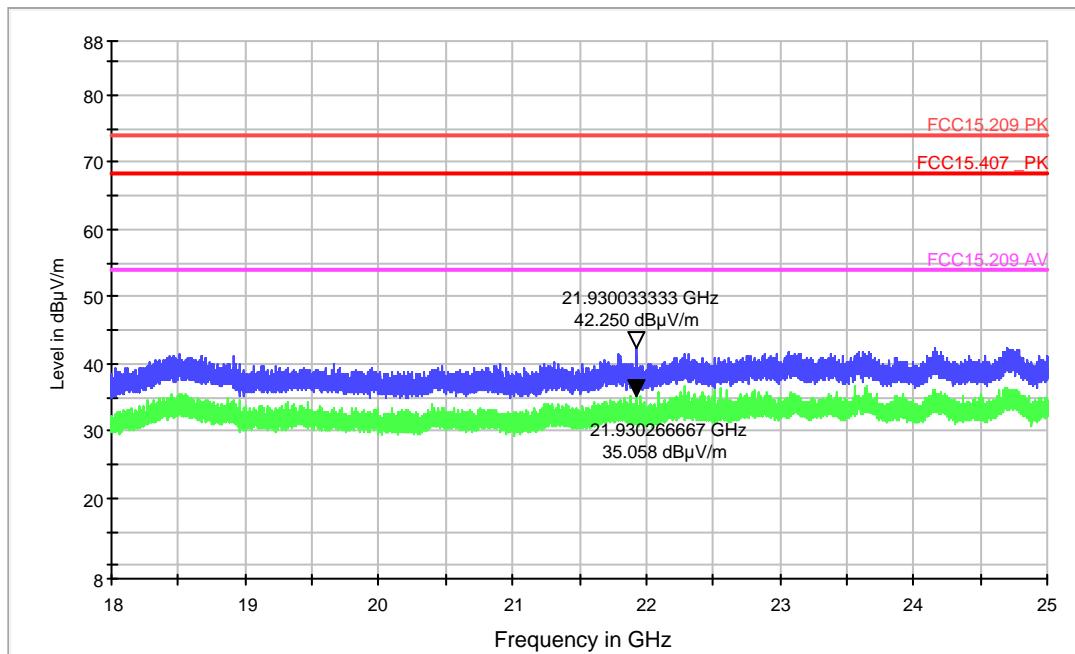
Operator Name: TFr

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT1
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 3.19 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length

Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 5 | 2| 3| 4) are terminated with $50\ \Omega$ terminations.

FCC_Sweep_15.247_18_25GHz_Pre



3.5. Radiated Band-Edge Measurements

3.5.1. Low Channel 2402.5 MHz (2.4 GHz ISM: left band edge)

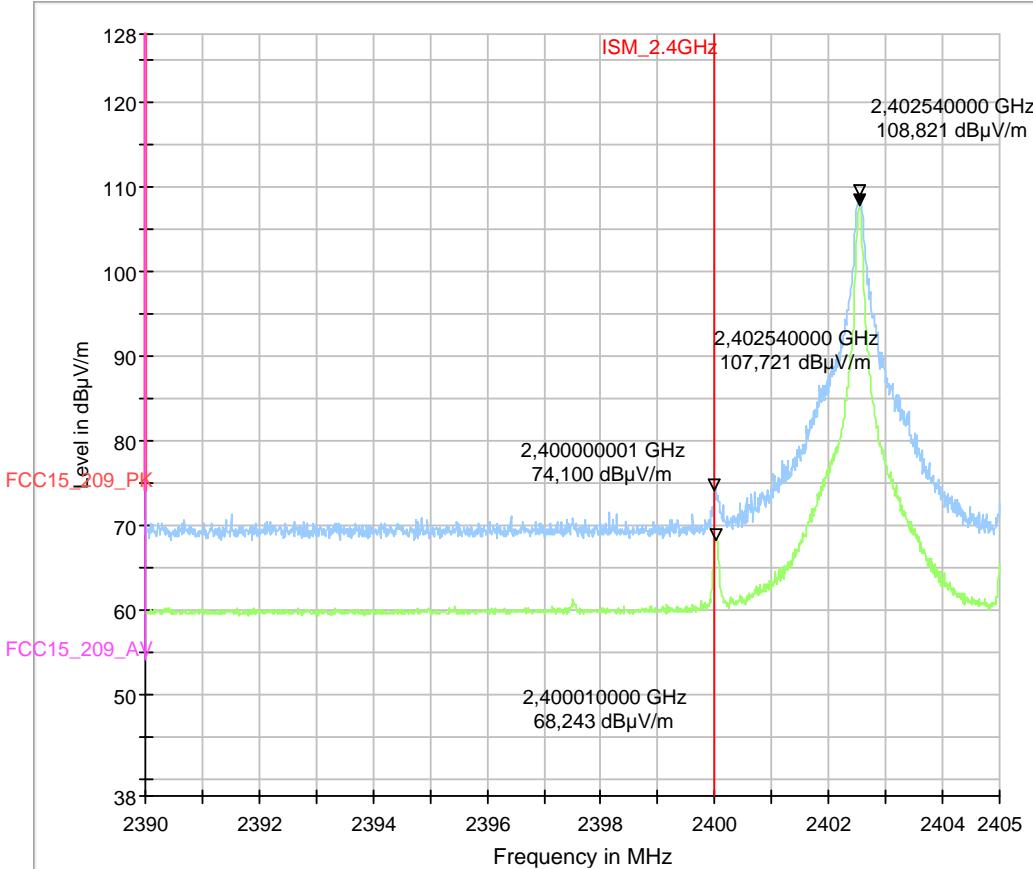
9.11_BE-RCM24G+INTEL FA5 Ant-Port1-MSK-50Kbps- Ch0- PWR+12 dBm

Common Information

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: MSK | 50 Kbps [0 (2402.5 MHz) Fixed Chanle (modulated) Power +12dBm
Operator Name: TFr
Comment: Channel low

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT1
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 3.19 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 5 | 2 | 3 | 4) are terminated with 50 Ω



[For Restricted Band (2200-2300 MHz & 2310 – 2390 MHz) compliance refer Chapter 3.3
4.11_RCM24G+INTEL FA5 Ant-Port1-MSK-50Kbps-Ch0-PWR +12dBm]

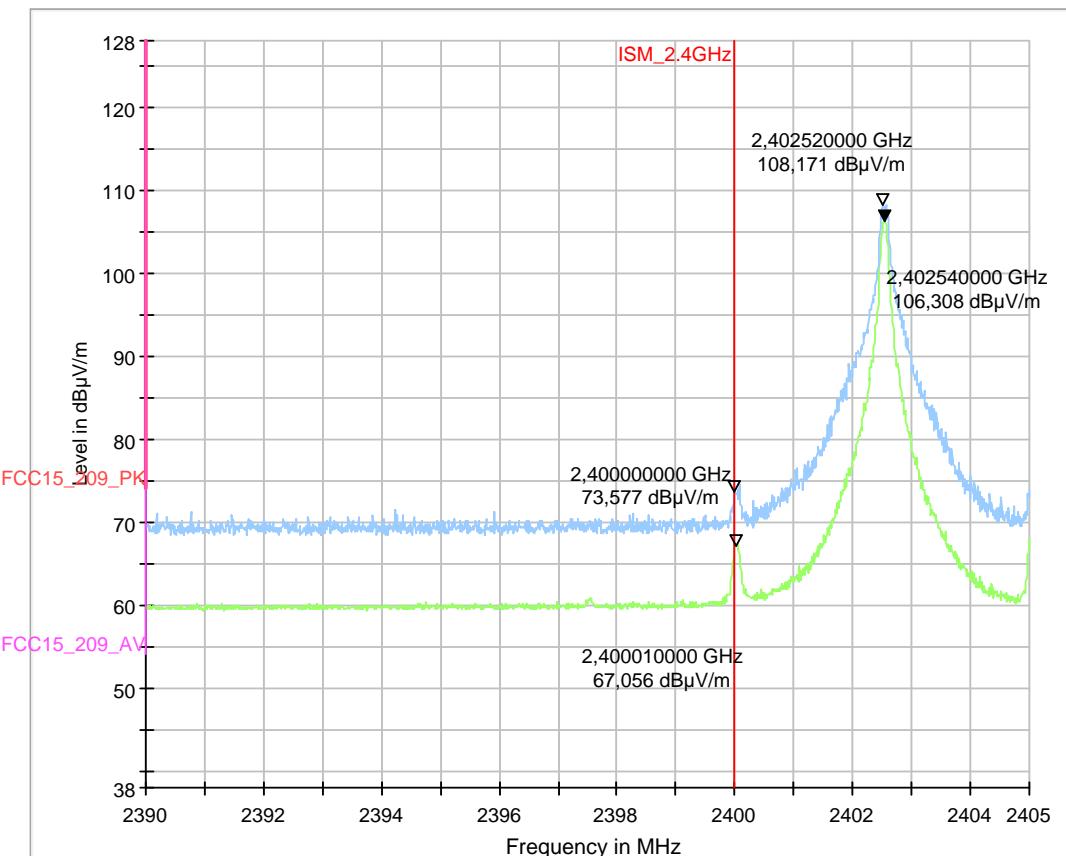
9.13_BE-RCM24G+INTEL FA5 Ant-Port1-MSK-100Kbps-Ch0-PWR+12 dBm

Common Information

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: MSK | 100 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated) Power +12dBm
Operator Name: TFr
Comment: Channel low

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT1
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 3.19 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 5 | 2| 3 | 4) are terminated with 50 Ω.



[For Restricted Band (2200-2300 MHz & 2310 – 2390 MHz) compliance refer Chapter 3.3
4.12_RCM24G+INTEL FA5 Ant-Port1-MSK-100Kbps-Ch69- PWR +12dBm

9.15_BE-RCM24G+INTEL FA5 Ant-Port1-MSK-250Kbps-Ch0-PWR+12 dBm

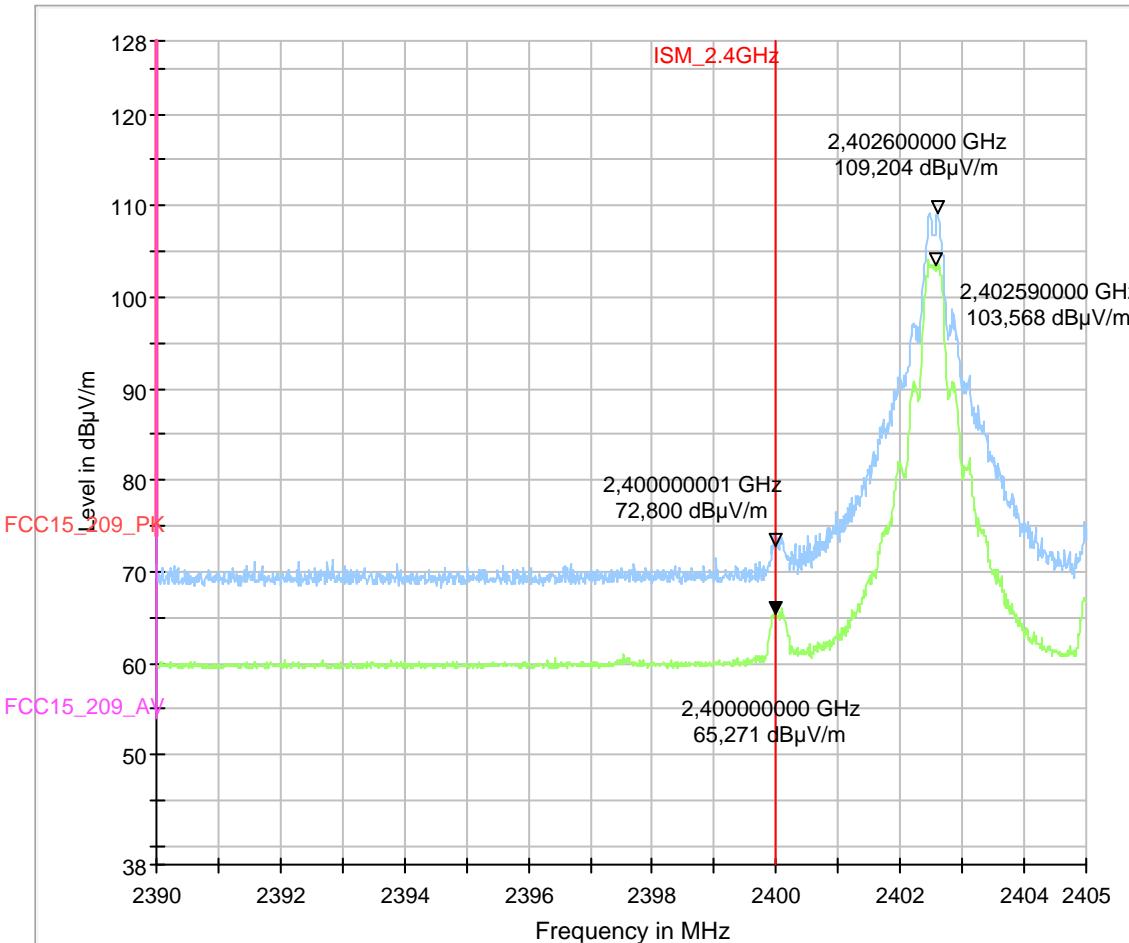
Common Information

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 1 (Lower2.4 GHz Port)
MSK | 100 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated)| Power:+12dBm
TFr

Operator Name:

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT1
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 3.19 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 5 | 2| 3| 4) are terminated with 50 Ω.



[For Restricted Band (2200-2300 MHz & 2310 – 2390 MHz) compliance refer Chapter 3.3
4.13_RCM24G+INTEL FA5 Ant-Port1-MSK-250Kbps-Ch0-PWR +12dBm]

9.17_BE-RCM24G+INTEL FA5 Ant-Port1-MSK-500Kbps-Ch0-PWR+12 dBm

Common Information

Test Description:
Test Site:
Test Standard:
Antenna polarisation:
Operation mode:

Operator Name:

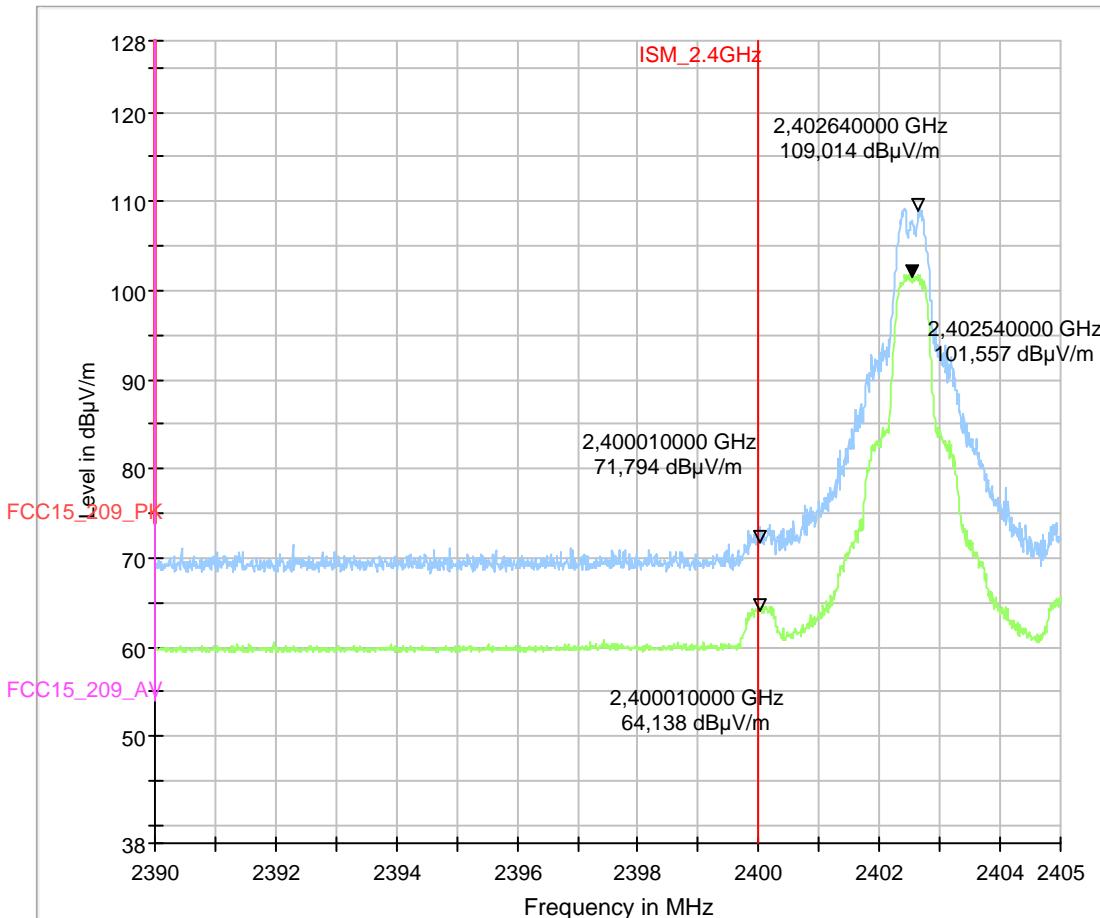
Band-Edge: Radiated Field Strength Emissions in 3m distance
CETECOM GmbH Essen
FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
horizontal/vertical
TX, continuous RCM24G + INTEL FA5 Antenna Port 1 (Lower2.4 GHz Port)
MSK | 500 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated) Power 12 dBm
TFr

EUT Information

Manufacturer:
Module Details:
Module Type:
Module HW version:
Module SW version:
Module Serial number:
Antenna Details:
Antenna Type:
Antenna HW version:
Antenna Gain:
Antenna Serial number:
Test Configuration:

Test Mode Settings:
Module Power Supply:
Comments:

Intel
RCM24G
Proprietary 2.4 GHz RF Transceiver
D
Bootloader Version3.6
PCB ID 3518
INTEL FA5 ANTENNA-PORT1
Monopole
Antenna-002
3.19 dBi
N/A
INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using
micro-UFL connector cable 40 cm in length
Using RCM24G TestTool_V3_70Channels Software
3.6 V DC (Direct to RCM24G) using Laboratory Supply
Unused INTEL FA5 Antenna ports (Port: 5 | 2| 3| 4) are terminated with 50 Ω.



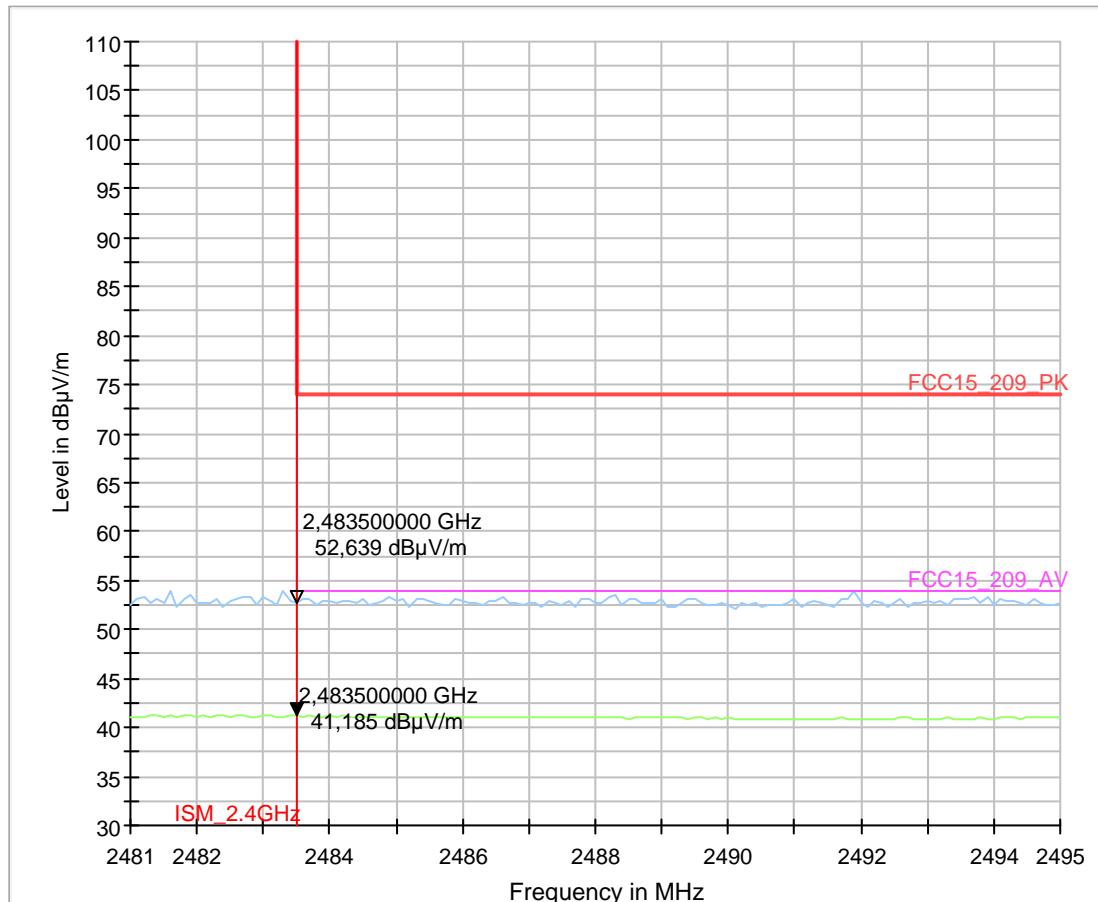
[For Restricted Band (2200-2300 MHz & 2310 – 2390 MHz) compliance refer Chapter 3.3
4.14_RCM24G+INTEL FA5 Ant-Port1-MSK-500Kbps-Ch34- PWR +21dBm

3.5.2. High Channel 2471.5 MHz (2.4 GHz ISM: right band edge)**9.12_BE-RCM24G+INTEL FA5 Ant-Port1-MSK-50Kbps- Ch69-
PWR+12dBm****Common Information**

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 1 (Lower2.4 GHz Port)
MSK | 50 Kbps [69 (2471.5 MHz) Fixed Chanel (modulated) Power 12 dBm
AFr
With 2.4 GHz NOTCH FILTER

EUT Information

Manufacturer: Intel
Module Details: CM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT1
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 3.19 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 5 | 2| 3| 4) are terminated with 50 Ω.



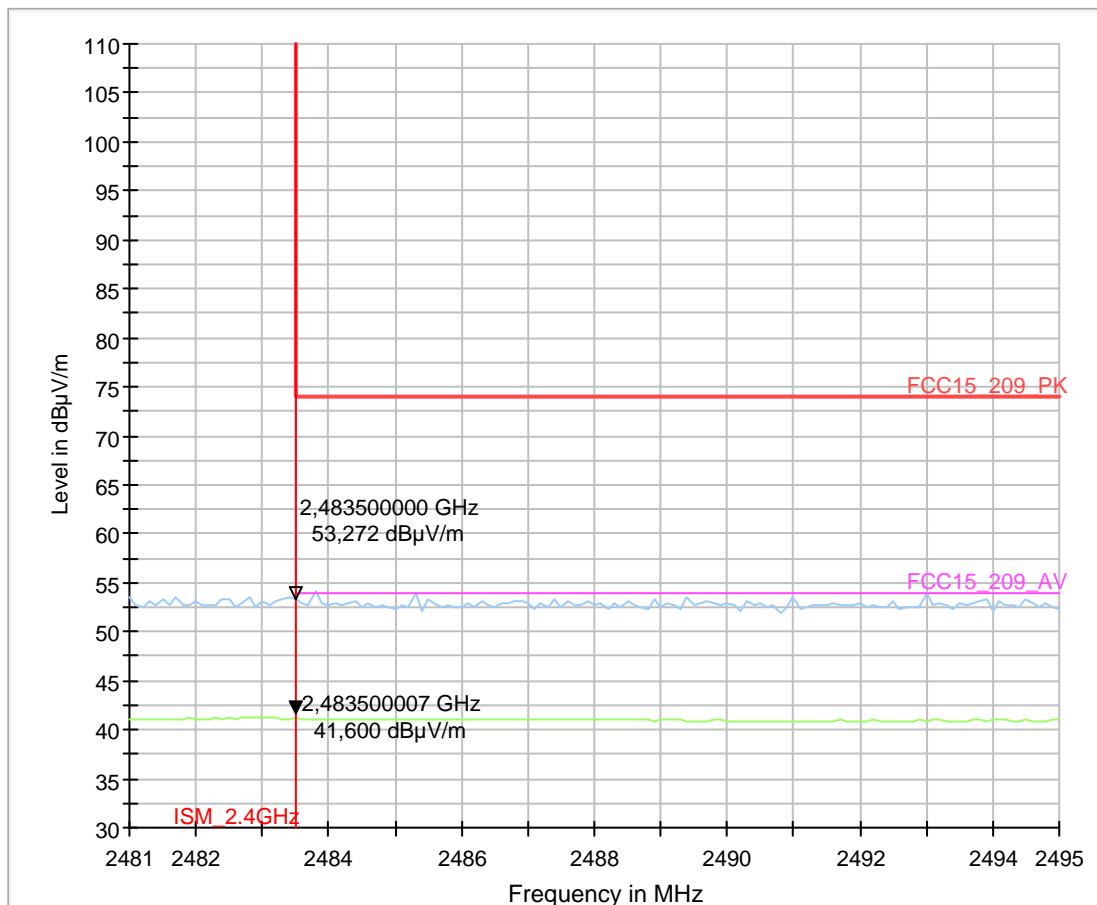
9.14_BE-RCM24G+INTEL FA5 Ant-Port1-MSK-100Kbps- Ch69-PWR+12dBm

Common Information

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 1 (Lower2.4 GHz Port)
Operator Name: MSK | 100 Kbps | 69 (2471.5 MHz) Fixed Chanel (modulated) Power 12dBm
Measurements Performed: AFr
With 2.4 GHz NOTCH FILTER

EUT Information

Manufacturer: Intel
Module Details: CM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT1
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 3.19 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 5 | 2| 3| 4) are terminated with 50Ω.



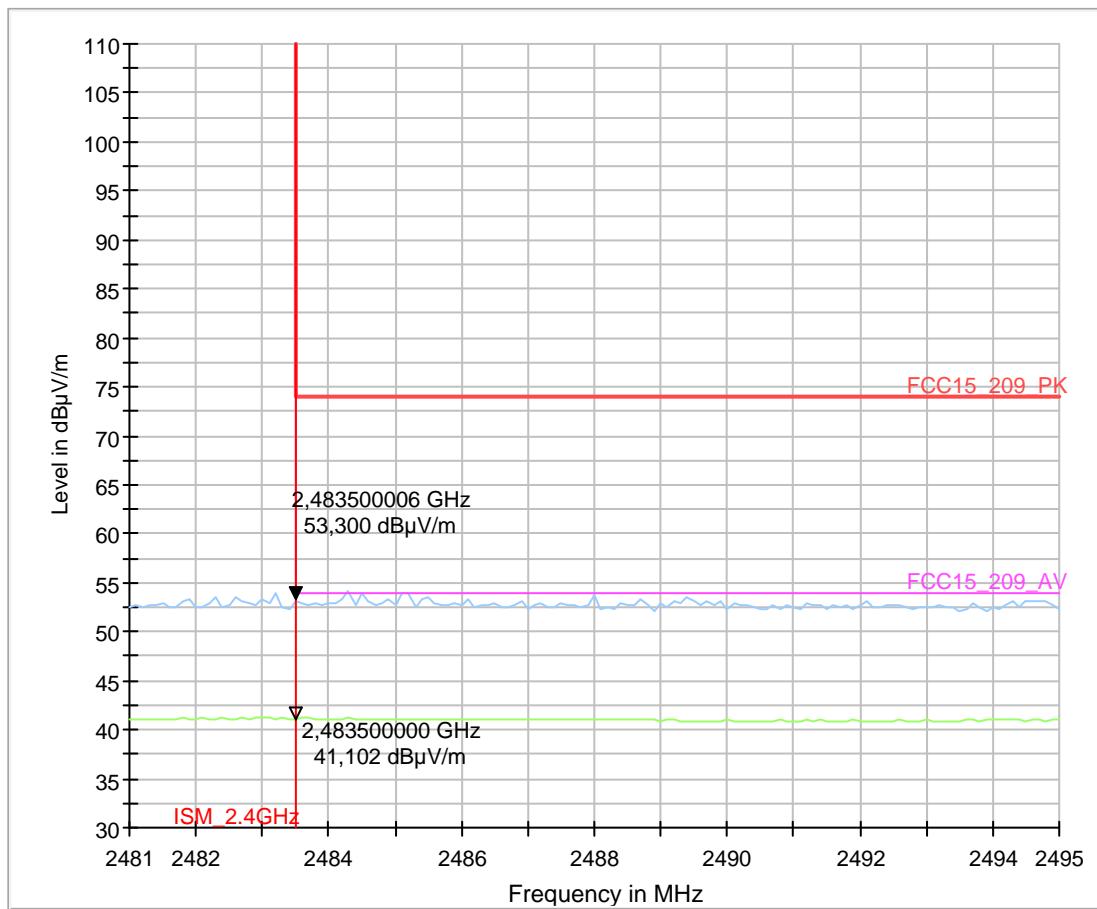
9.16_BE-RCM24G+INTEL FA5 Ant-Port1-MSK-250Kbps- Ch69-PWR+12dBm

Common Information

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 1 (Lower2.4 GHz Port)
MSK | 250 Kbps | 69 (2471.5 MHz) Fixed Chanel (modulated Power 12dBm)
Operator Name: AFr
Measurments Perfomed: With 2.4 GHz NOTCH FILTER

EUT Information

Manufacturer: Intel
Module Details: CM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT1
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 3.19 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 5 | 2| 3| 4) are terminated with 50Ω.



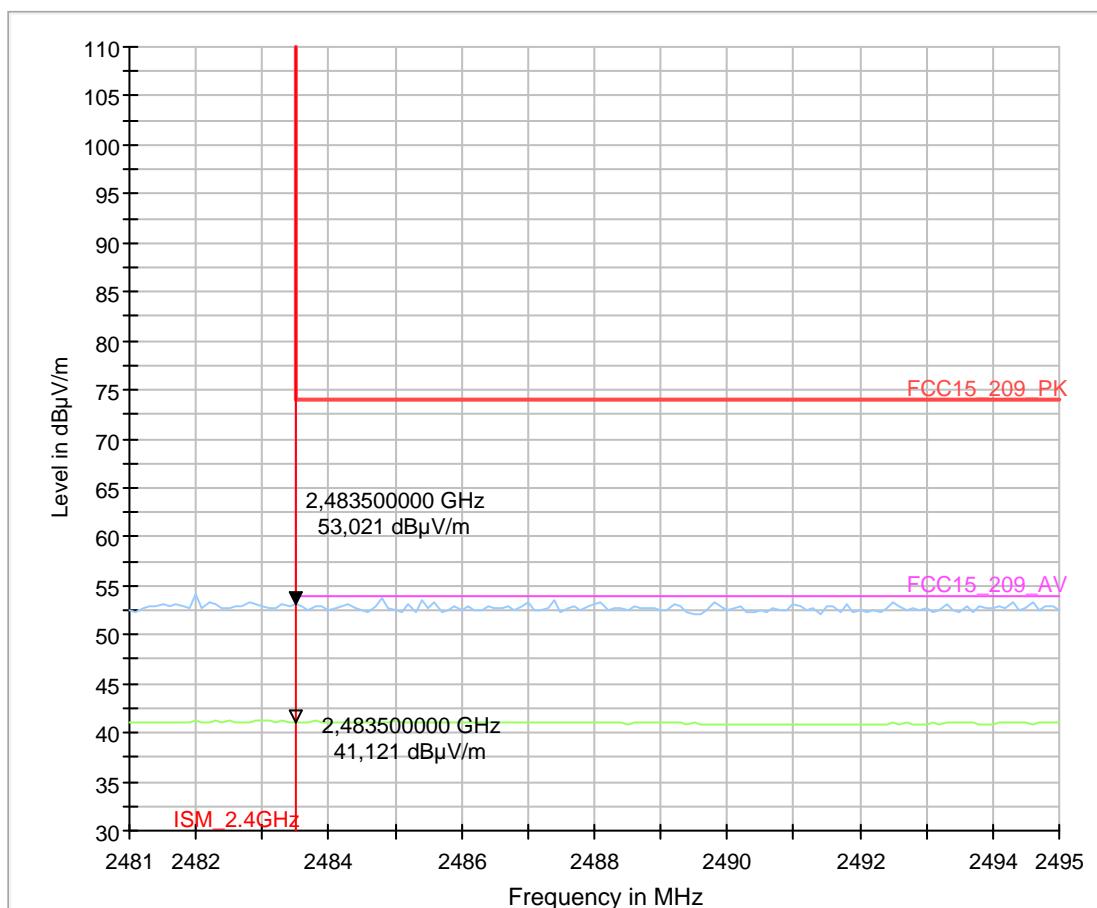
9.18_BE-RCM24G+INTEL FA5 Ant-Port1-MSK-500Kbps- Ch69-PWR+12dBm

Common Information

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 1 (Lower2.4 GHz Port)
Operator Name: MSK | 500 Kbps | 69 (2471.5 MHz) Fixed Chanel (modulated) Power 12dBm
Measurements Performed: AFr
With 2.4 GHz NOTCH FILTER

EUT Information

Manufacturer: Intel
Module Details: CM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT1
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 3.19 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 5 | 2| 3| 4) are terminated with 50Ω.



3.5.3. Low Channel Hopping Mode (2.4 GHz ISM: left band edge)

9.19a_BE-RCM24G+INTEL FA5 Ant-Port1-MSK-500Kbps-Low

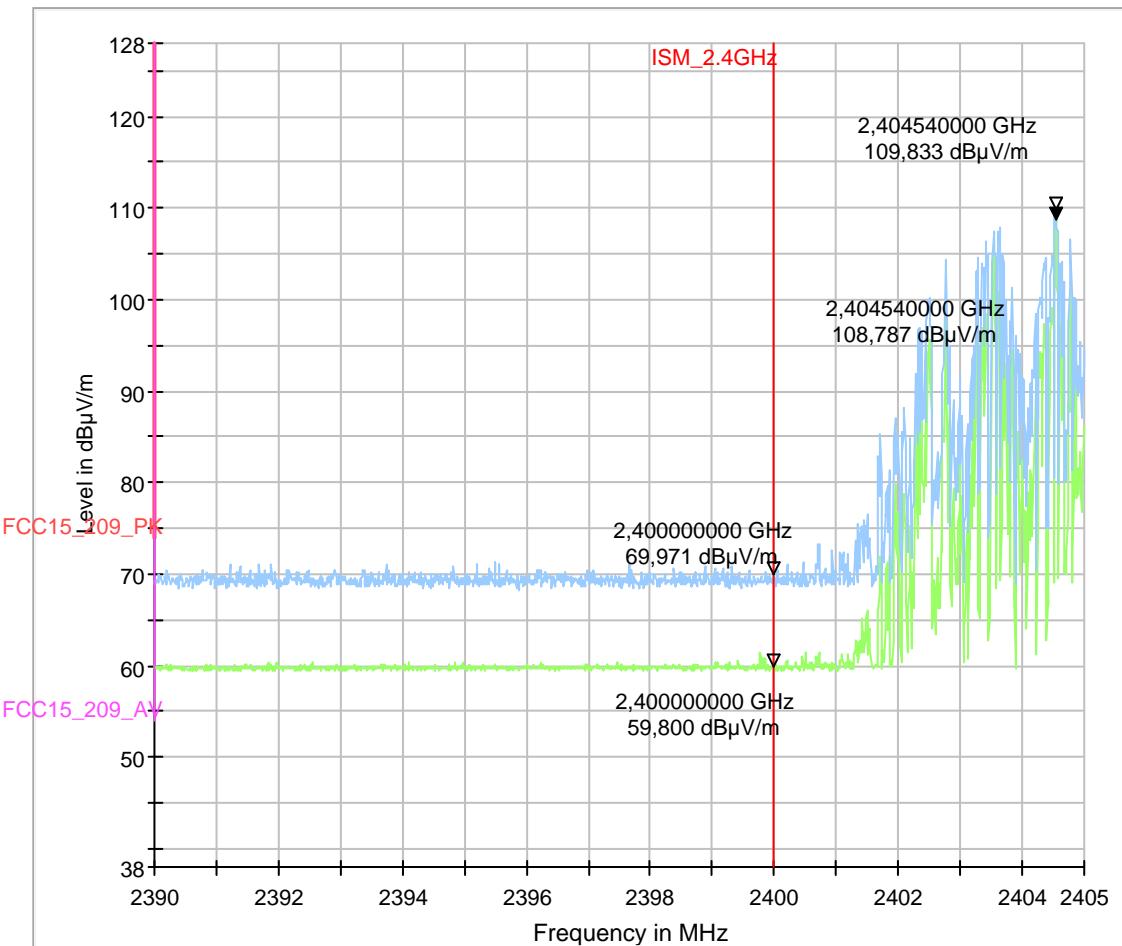
Common Information

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
 Test Site: CETECOM GmbH Essen
 Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
 Antenna polarisation: horizontal/vertical
 Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 1 (Lower2.4 GHz Port)
 MSK | 500 Kbps | Hopping Mode (Master)
 TFr

Operator Name:

EUT Information

Manufacturer: Intel
 Module Details: RCM24G
 Module Type: Proprietary 2.4 GHz RF Transceiver
 Module HW version: D
 Module SW version: Bootloader Version3.6
 Module Serial number: PCB ID 3518
 Antenna Details: INTEL FA5 ANTENNA-PORT1
 Antenna Type: Monopole
 Antenna HW version: Antenna-002
 Antenna Gain: 3.19 dBi
 Antenna Serial number: N/A
 Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
 Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
 Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
 Comments: Unused INTEL FA5 Antenna ports (Port: 5 | 2| 3| 4) are terminated with 50Ω.



[For Restricted Band (2200-2300 MHz & 2310 – 2390 MHz) compliance refer Chapter 3.3]

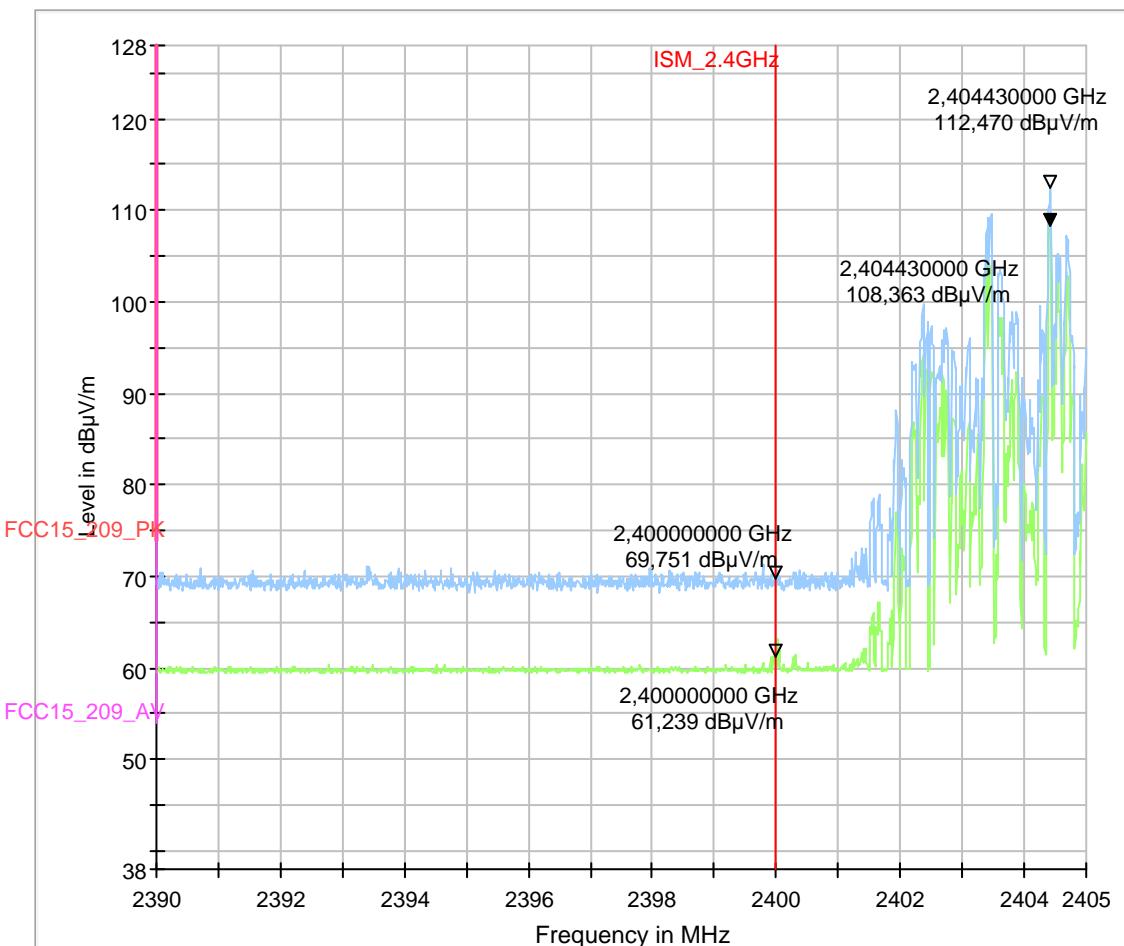
9.20a_BE-RCM24G+INTEL FA5 Ant-Port1-MSK-250Kbps-Low**Common Information**

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 1 (Lower2.4 GHz Port)
MSK | 250 Kbps | Hopping Mode (Master)
TFr

Operator Name:

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT1
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 3.19 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 5 | 2| 3| 4) are terminated with 50 Ω.



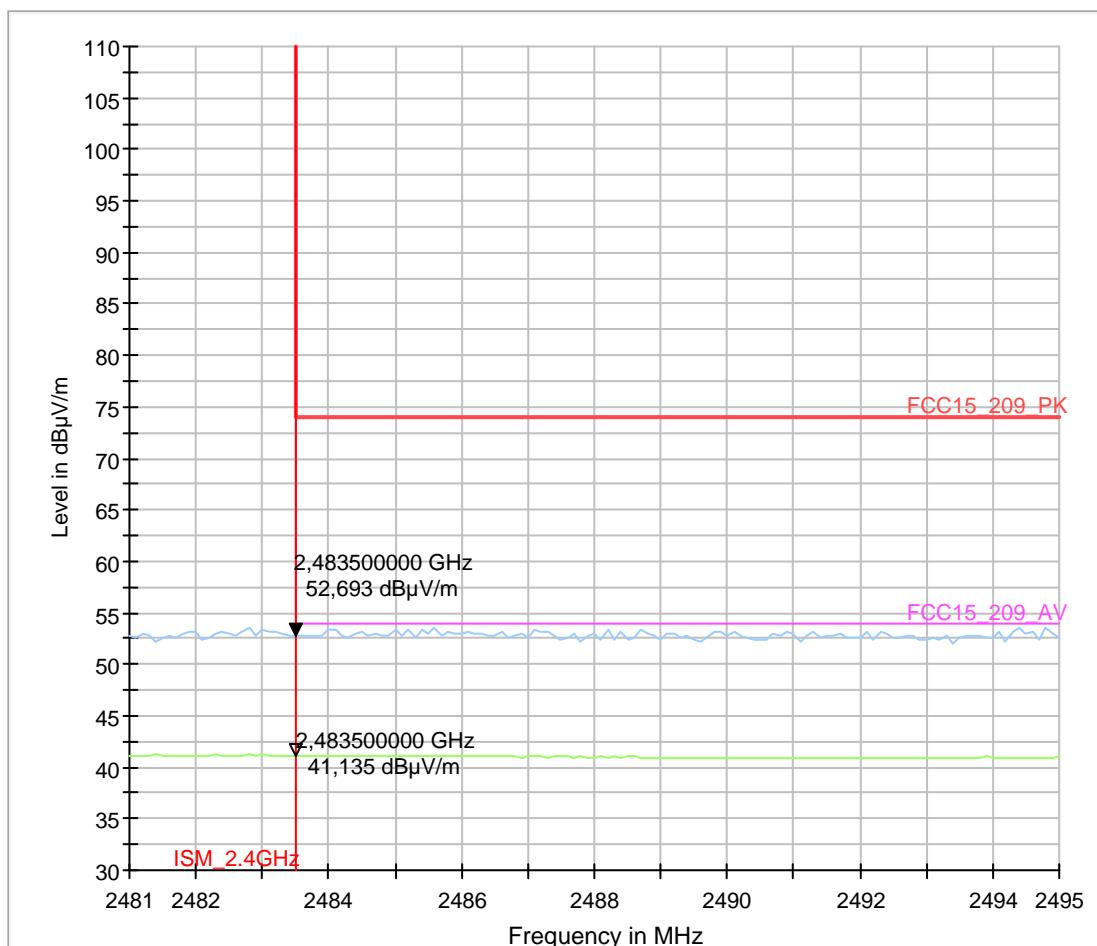
[For Restricted Band (2200-2300 MHz & 2310 – 2390 MHz) compliance refer Chapter 3.3]

3.5.4. High Channel Hopping Mode (2.4 GHz ISM: left band edge)**9.19b_BE-RCM24G+INTEL FA5 Ant-Port1-MSK-500Kbps-High****Common Information**

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 1 (Lower2.4 GHz Port)
MSK | 500 Kbps | Hopping Mode (Master)
AFr
Measurements Performed: With 2.4 GHz NOTCH FILTER

EUT Information

Manufacturer: Intel
Module Details: CM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT1
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 3.19 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 5 | 2| 3| 4) are terminated with 50 Ω.

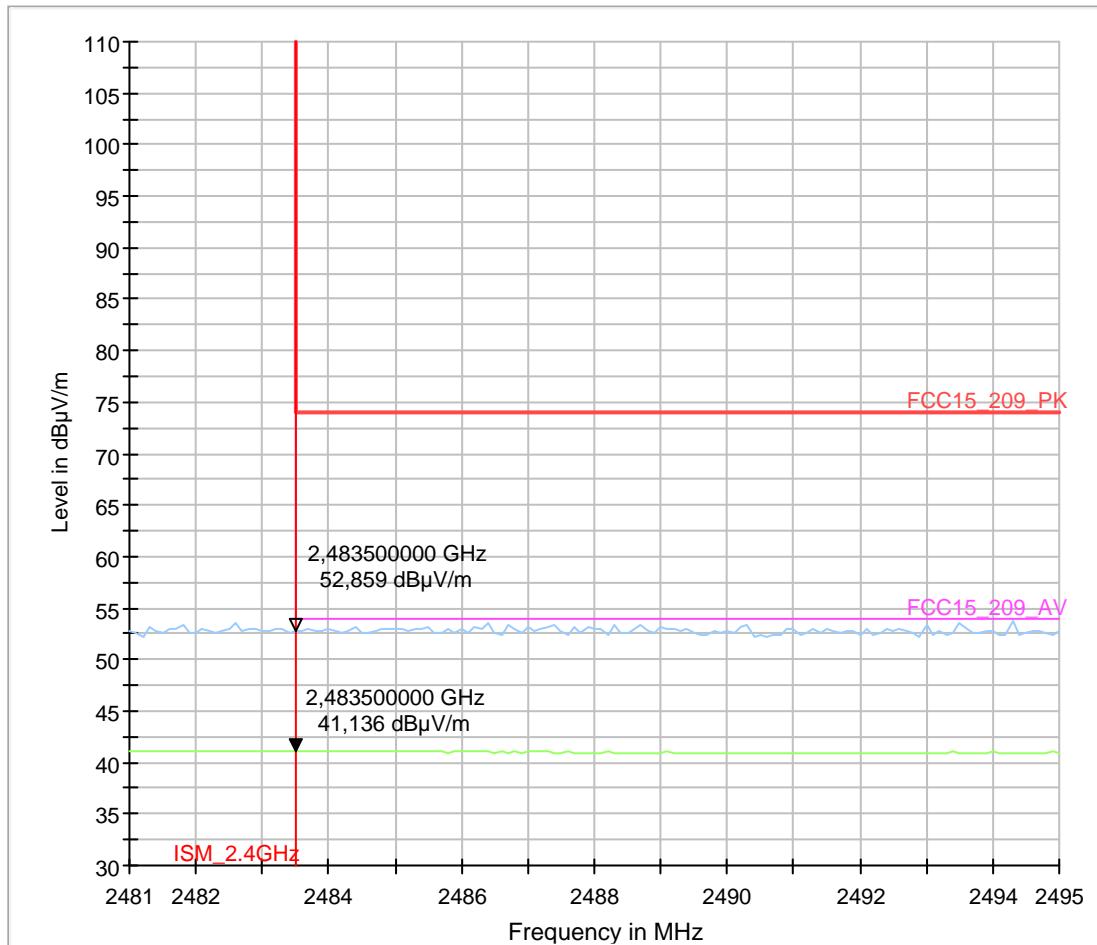


9.20b_BE-RCM24G+INTEL FA5 Ant-Port1-MSK-250Kbps-High**Common Information**

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 1 (Lower2.4 GHz Port)
MSK | 250 Kbps | Hopping Mode (Master)
AFr
Operator Name:
Measurements Performed: With 2.4 GHz NOTCH FILTER

EUT Information

Manufacturer: Intel
Module Details: CM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT1
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 3.19 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 1(Lower 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 5 | 2| 3| 4) are terminated with 50Ω



Radiated Field Strength Measurements

RCM24G

+

INTEL FA5 ANTENNA PORT 5

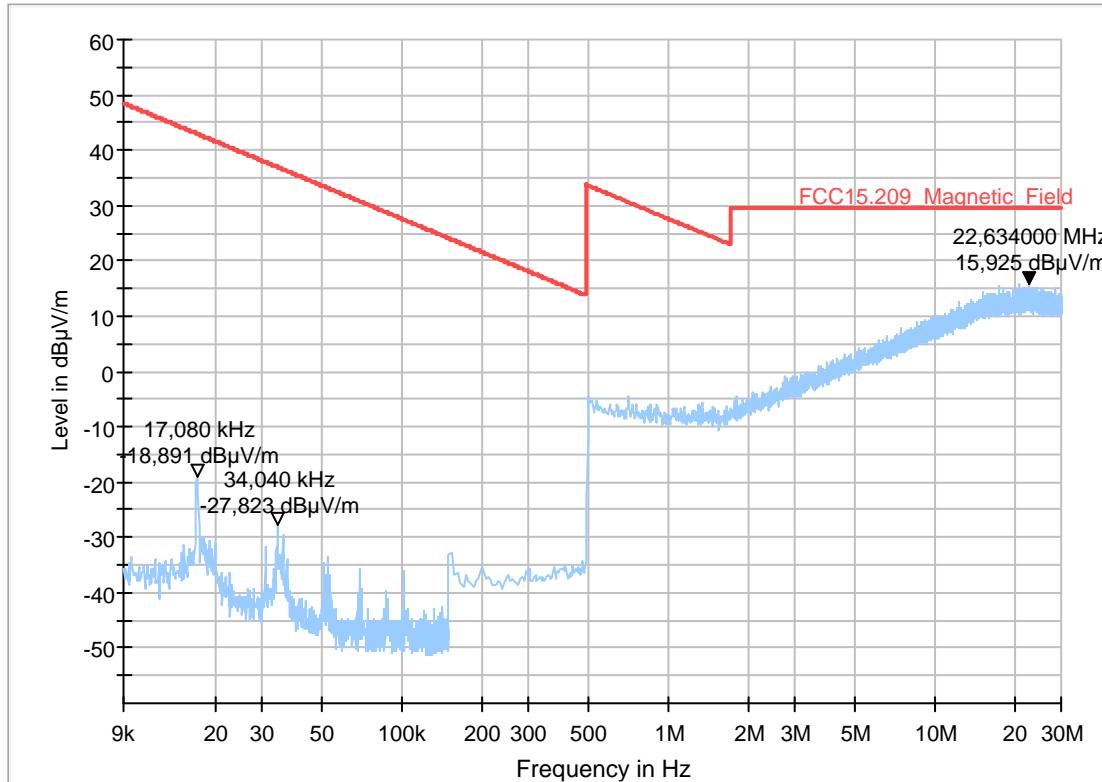
4. Radiated Field Strength Measurements-RCM24G + INTEL FA5 ANTENNA-PORT 5**4.1. Radiated Field Strength Emissions - 9kHz to 30MHz****2.21_RCM24G+INTEL FA5 Ant-Port5-MSK-50Kbps-Ch0-PWR +12dBm****Common Information**

Test description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	AFr
Operating mode:	TX-Continuous RCM24G+ INTEL FA5 ANTENNA-PORT5 MSK 50 Kbps 0 (2402.5 MHz) Fixed Channel (modulated)
Power during tests:	Power:+12dBm 3.6 V DC (direct to RCM24G) using Laboratory Power Supply

EUT Information

Manufacturer:	Intel
Module Details:	RCM24G
Module Type:	Proprietary 2.4 GHz RF Transceiver
Module HW version:	D
Module SW version:	Bootloader Version3.6
Module Serial number:	PCB ID 3518
Antenna Details:	INTEL FA5 ANTENNA-PORT5
Antenna Type:	Monopole
Antenna HW version:	Antenna-002
Antenna Gain:	4.86 dBi
Antenna Serial number:	N/A
Test Configuration:	INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings:	Using RCM24G TestTool_V3_70Channels Software
Module Power Supply:	3.6 V DC (Direct to RCM24G) using Laboratory Supply

Full Spectrum



2.22_RCM24G+INTEL FA5 Ant-Port5-MSK-100Kbps- Ch69-PWR+12dBm

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: TFr

Operating mode: TX-Continuous RCM24G+ INTEL FA5 ANTENNA-PORT5

MSK |100 Kbps |69 (2471.5 MHz) Fixed Chanel (modulated)

Power:+12dBm

3.6 V DC (direct to RCM24G) using Laboratory Power Supply

Power during tests:

EUT Information

Manufacturer: Intel

Module Details: RCM24G

Module Type: Proprietary 2.4 GHz RF Transceiver

Module HW version: D

Module SW version: Bootloader Version3.6

Module Serial number: PCB ID 3518

Antenna Details: INTEL FA5 ANTENNA-PORT5

Antenna Type: Monopole

Antenna HW version: Antenna-002

Antenna Gain: 4.86 dBi

Antenna Serial number: N/A

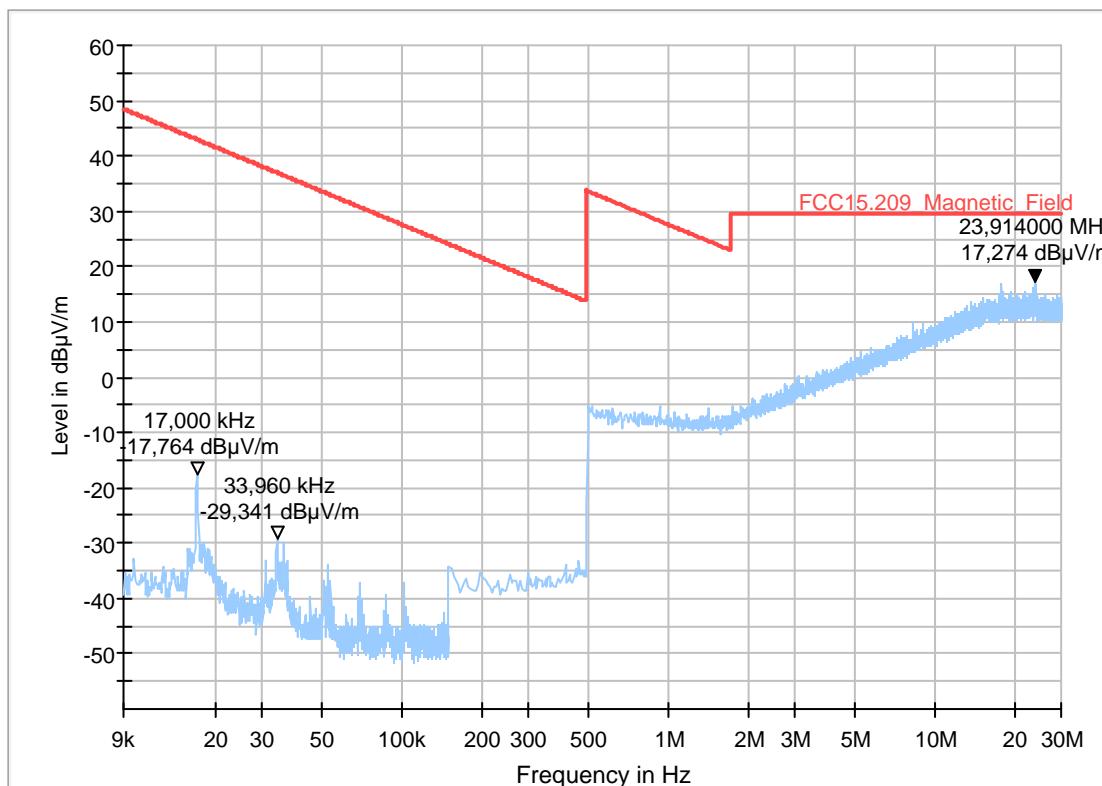
Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length

Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software

Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply

Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2 | 3 | 4) are terminated with 50 Ω terminations.

Full Spectrum



2.23_RCM24G+INTEL FA5 Ant-Port5-MSK-250Kbps- Ch0-PWR +12dBm**Common Information**

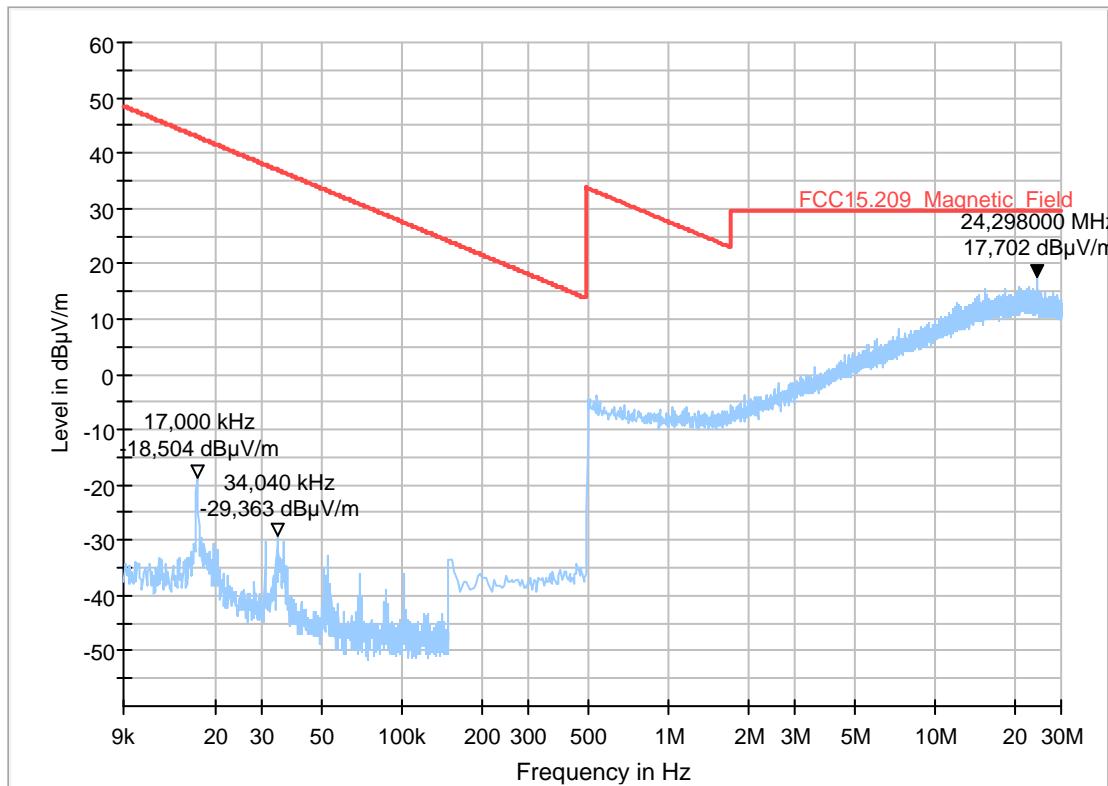
Test description: Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware: EMC32 V9.25.0
Distance correction: used accord. table, pls. see test report
Technical Data: Please see 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: TFr
Operating mode: TX-Continuous RCM24G+ INTEL FA5 ANTENNA-PORTS
MSK | 250 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated)
Power:+12dBm
3.6 V DC (direct to RCM24G) using Laboratory Power Supply

Power during tests:

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT5
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 4.86 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2| 3| 4) are terminated with 50 Ω terminations.

Full Spectrum



2.24_RCM24G+INTEL FA5 Ant-Port5-MSK-500Kbps- Ch34- PWR +21dBm

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: TFr

Operating mode: TX-Continuous RCM24G+ INTEL FA5 ANTENNA-PORT5

MSK |500 Kbps |34 (2436.5 MHz) Fixed Chanel (modulated)

Power:+21dBm

3.6 V DC (direct to RCM24G) using Laboratory Power Supply

Power during tests:

EUT Information

Manufacturer: Intel

Module Details: RCM24G

Module Type: Proprietary 2.4 GHz RF Transceiver

Module HW version: D

Module SW version: Bootloader Version3.6

Module Serial number: PCB ID 3518

Antenna Details: INTEL FA5 ANTENNA-PORT5

Antenna Type: Monopole

Antenna HW version: Antenna-002

Antenna Gain: 4.86 dBi

Antenna Serial number: N/A

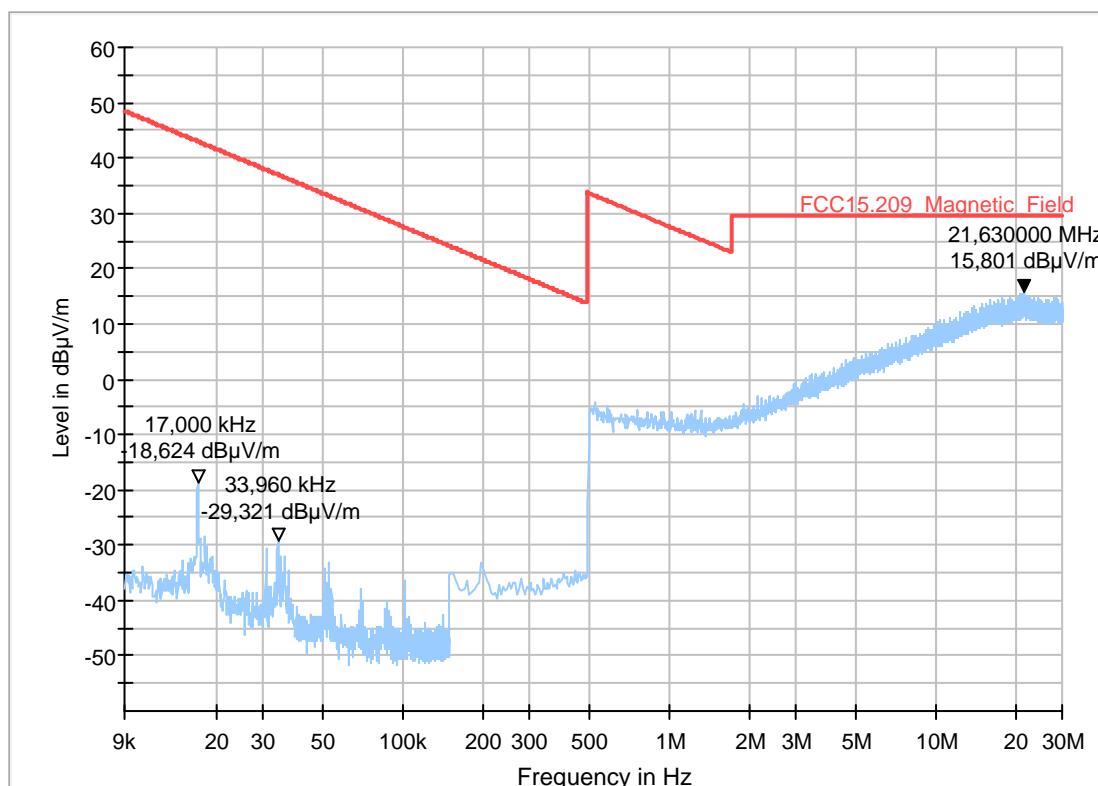
Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length

Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software

Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply

Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2 | 3 | 4) are terminated with 50 Ω terminations.

Full Spectrum



4.2. Radiated Field Strength Emissions - 30MHz to 1GHz**3.21_RCM24G+INTEL FA5 Ant-Port5-MSK-50Kbps-Ch0-PWR +12dBm****Common Information**

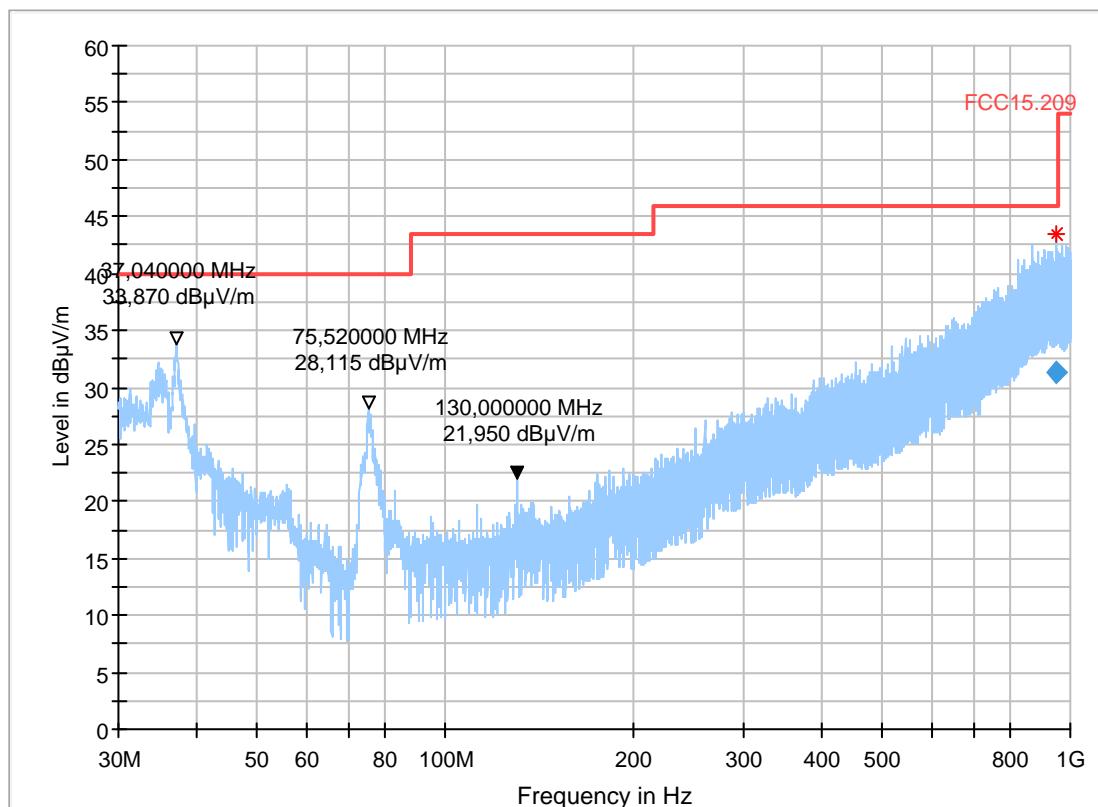
Test description: Electric Field Strength Measurement
Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware: EMC32 V9.25.0
Distance correction: not used
Used filter: not used
Technical Data: please see page 2 for detailed data of measurement setup
Test specification.: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Operator: AFr
Operating conditions: TX-Continuous RCM24G+INTEL FA5 Antenna Port 5
MSK | 50 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated)
Power:+12dBm
3.6 V DC Using Laboratory Supply

Power during tests:

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT5
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 4.86 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2| 3| 4) are terminated with 50Ω.

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
946.664000	31.29	46.00	14.71	1000.0	120.000	315.0	V	89.0	90.0	27.0

3.22_RCM24G+INTEL FA5 Ant-Port5-MSK-100Kbps- Ch69-PWR+12dBm

Common Information

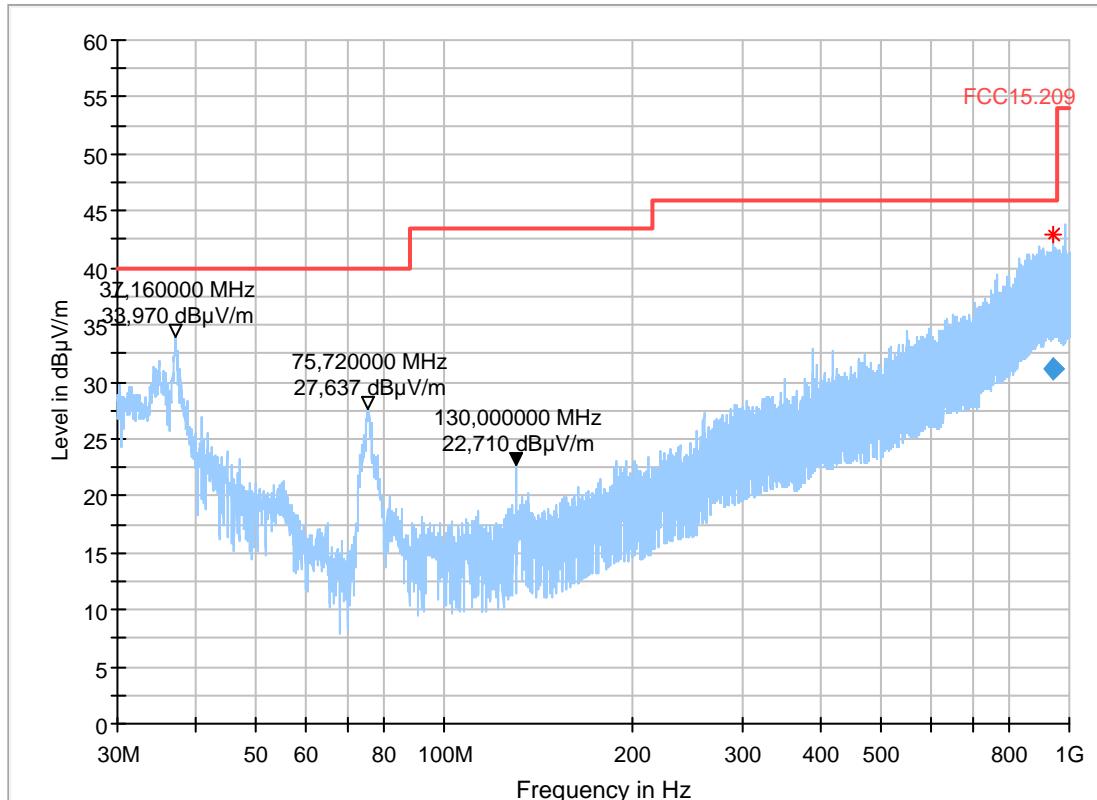
Test description: Electric Field Strength Measurement
Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware: EMC32 V9.25.0
Distance correction: not used
Used filter: not used
Technical Data: please see page 2 for detailed data of measurement setup
Test specification.: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Operator: AFr
Operating conditions: TX-Continuous RCM24G+INTEL FA5 Antenna Port 5
MSK |100 Kbps |69 (2471.5 MHz) Fixed Chanel (modulated)
Power:+12dBm
3.6 V DC Using Laboratory Supply

Power during tests:

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT5
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 4.86 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2| 3| 4) are terminated with 50 Ω.

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
941.192000	31.17	46.00	14.83	1000.0	120.000	282.0	H	143.0	90.0	26.8

3.23_RCM24G+INTEL FA5 Ant-Port5-MSK-250Kbps- Ch0-PWR +12dBm

Common Information

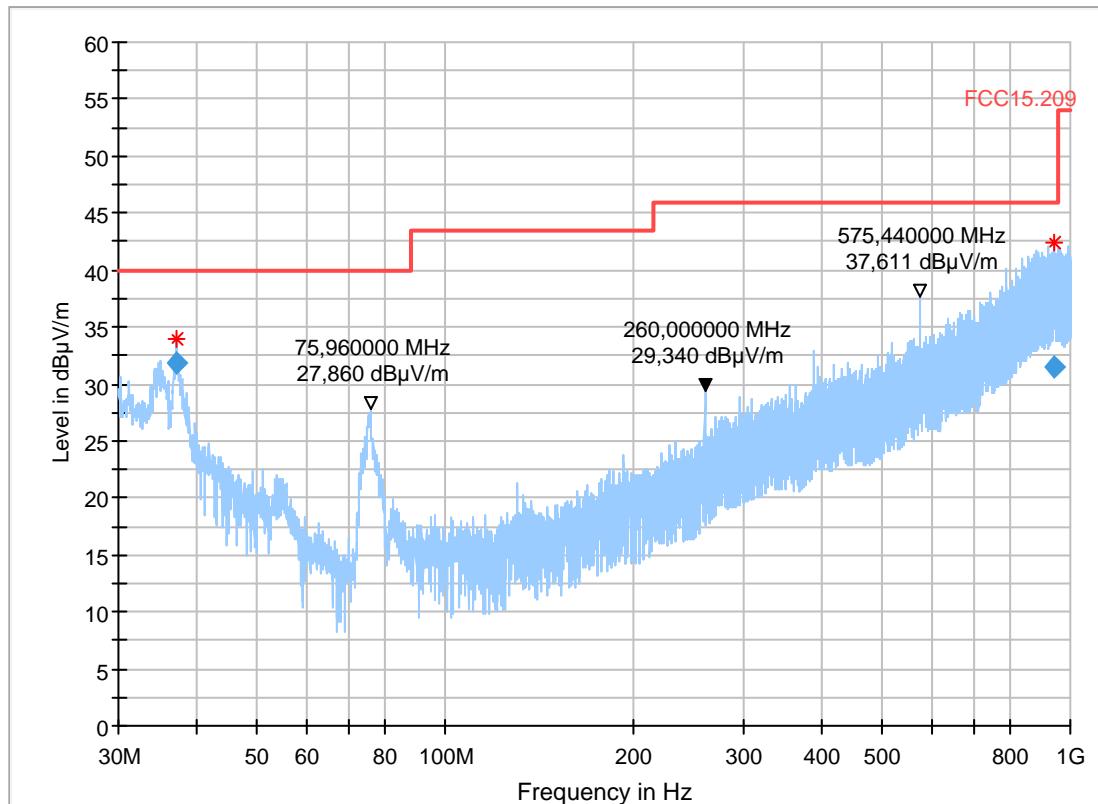
Test description: Electric Field Strength Measurement
Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware: EMC32 V9.25.0
Distance correction: not used
Used filter: not used
Technical Data: please see page 2 for detailed data of measurement setup
Test specification.: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Operator: AFr
Operating conditions: TX-Continuous RCM24G+INTEL FA5 Antenna Port 5
MSK | 250 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated)
Power:+12dBm
3.6 V DC Using Laboratory Supply

Power during tests:

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT5
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 4.86 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2 | 3 | 4) are terminated with 50 Ω

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
37.192000	31.77	40.00	8.23	1000.0	120.000	284.0	H	132.0	90.0	18.3
945.000000	31.44	46.00	14.57	1000.0	120.000	248.0	H	218.0	90.0	27.1

3.24_RCM24G+INTEL FA5 Ant-Port5-MSK-500Kbps- Ch34-PWR +21dBm

Common Information

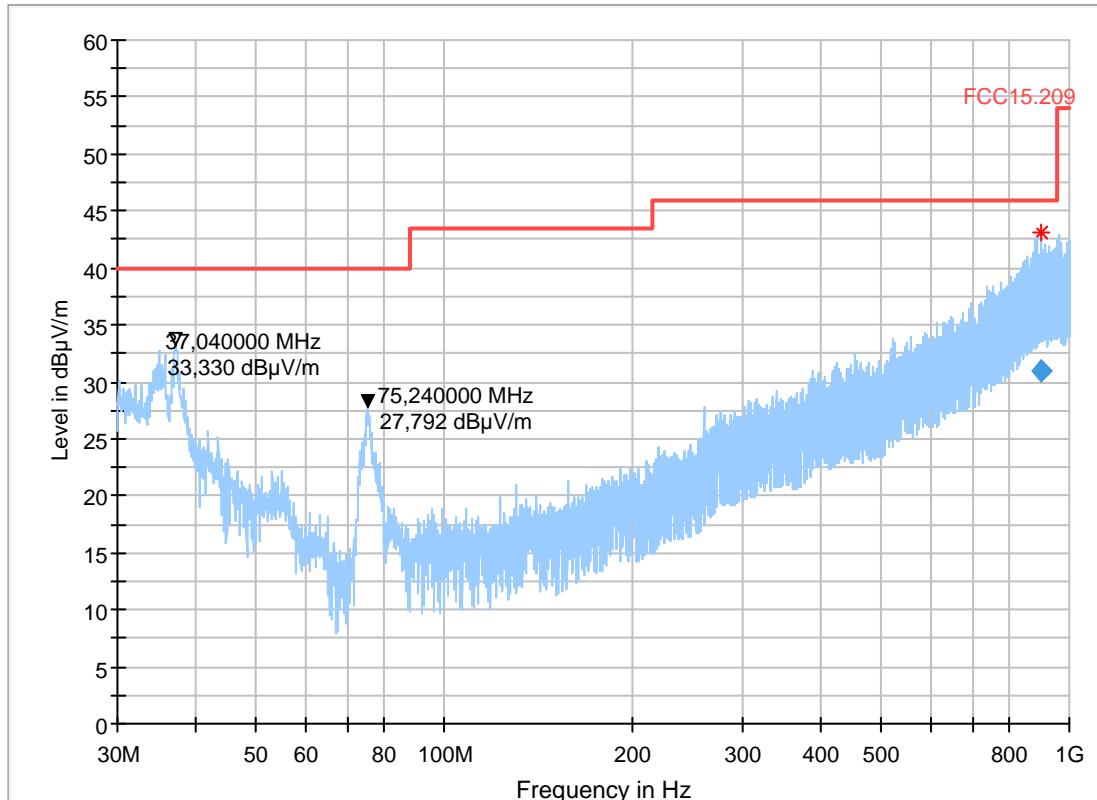
Test description: Electric Field Strength Measurement
Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware: EMC32 V9.25.0
Distance correction: not used
Used filter: not used
Technical Data: please see page 2 for detailed data of measurement setup
Test specification.: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Operator: AFr
Operating conditions: TX-Continuous RCM24G+INTEL FA5 Antenna Port 5
MSK |500 Kbps |34 (2436.5 MHz) Fixed Chanel (modulated)
Power:+21dBm
3.6 V DC Using Laboratory Supply

Power during tests:

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT5
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 4.86 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2| 3| 4) are terminated with 50 Ω

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
903.392000	30.96	46.00	15.04	1000.0	120.000	276.0	V	104.0	90.0	26.7

4.3. Radiated Field Strength Emissions - 1GHz to 18GHz

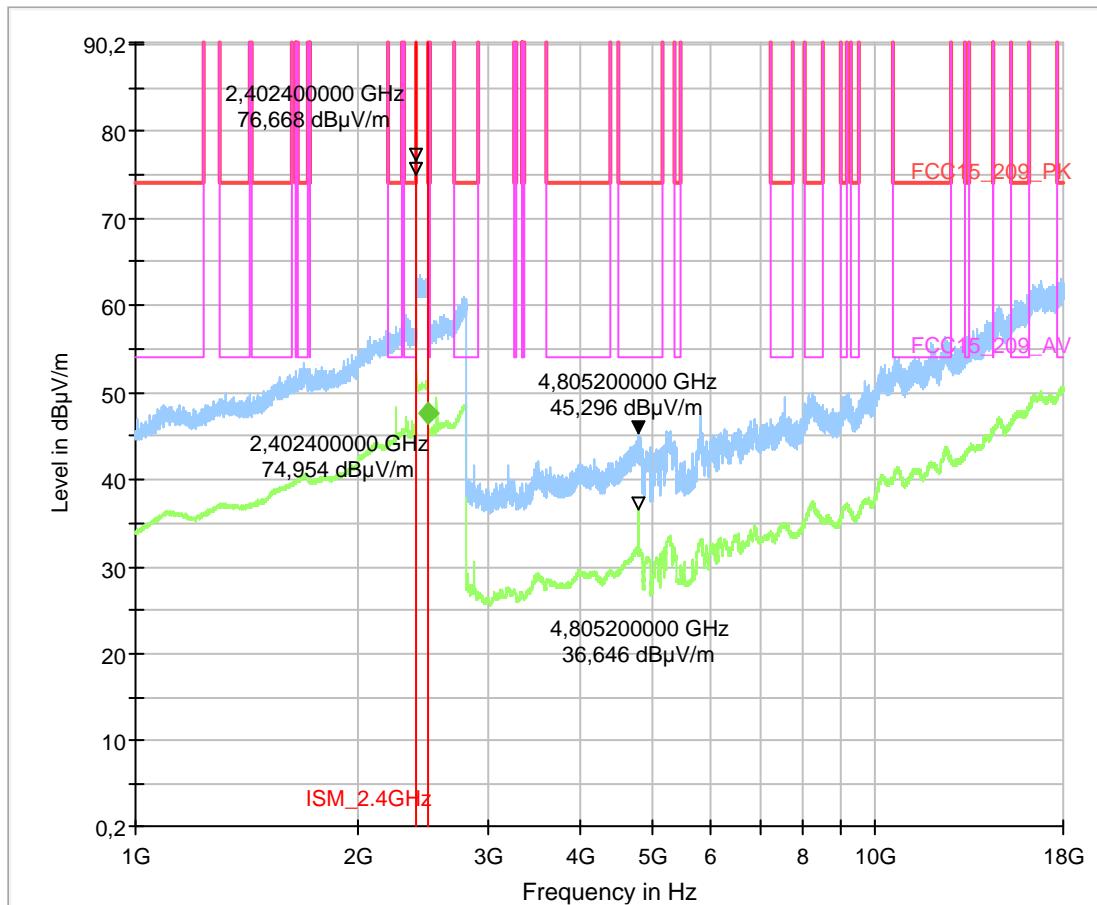
4.21_RCM24G+INTEL FA5 Ant-Port5-MSK-50Kbps-Ch0-PWR +12dBm

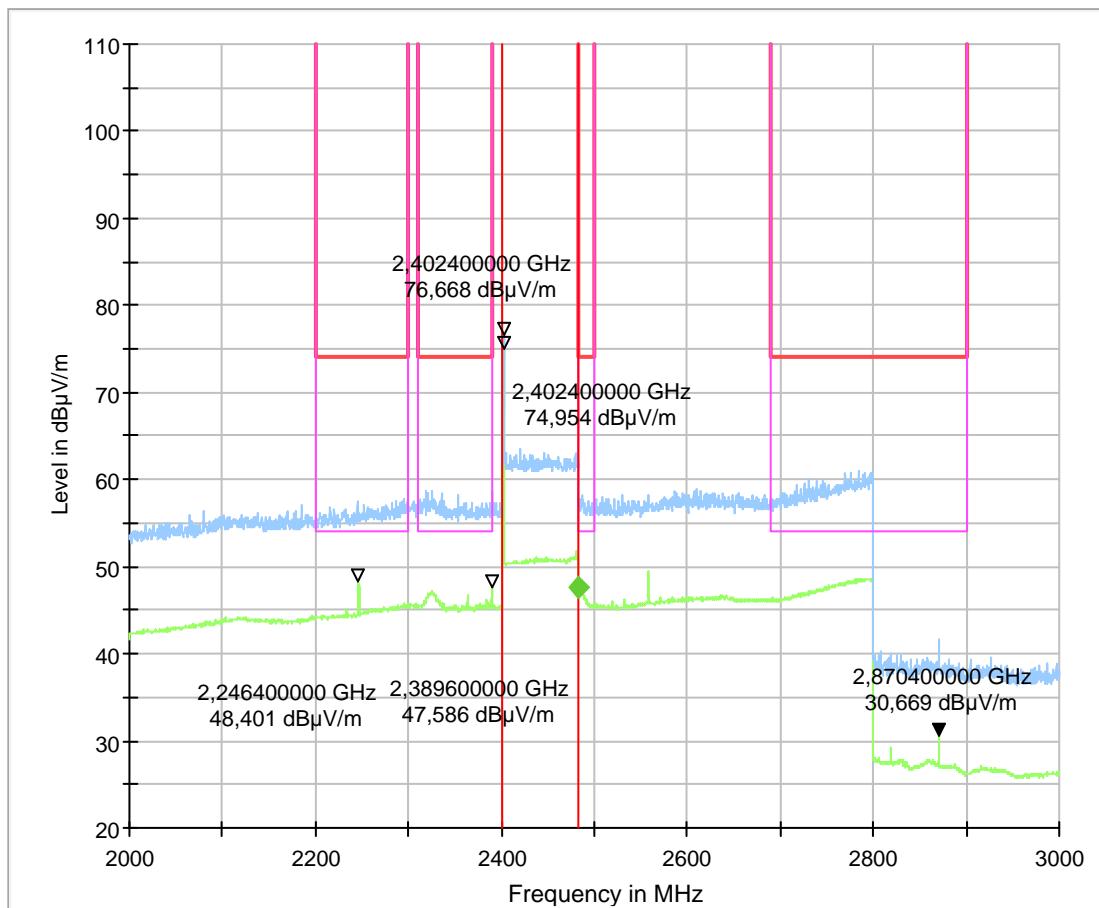
Common Information

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
 Test Site: CETECOM GmbH Essen
 Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
 Antenna polarisation: horizontal/vertical
 Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 5
 MSK | 50 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated)-Power:+12dBm
 TFr
 Operator Name:
 Measurements Performed: With 2.4 GHz NOTCH FILTER Tuned to relevant channel frequency

EUT Information

Manufacturer: Intel
 Module Details: RCM24G
 Module Type: Proprietary 2.4 GHz RF Transceiver
 Module HW version: D
 Module SW version: Bootloader Version3.6
 Module Serial number: PCB ID 3518
 Antenna Details: INTEL FA5 ANTENNA-PORT5
 Antenna Type: Monopole
 Antenna HW version: Antenna-002
 Antenna Gain: 4.86 dBi
 Antenna Serial number: N/A
 Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
 Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
 Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
 Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2| 3| 4) are terminated with 50 Ω




Final_Result

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Band-width (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2483.500000	47.59	54.00	6.41	100.0	1000.000	155.0	H	270.0	90.0	35.6

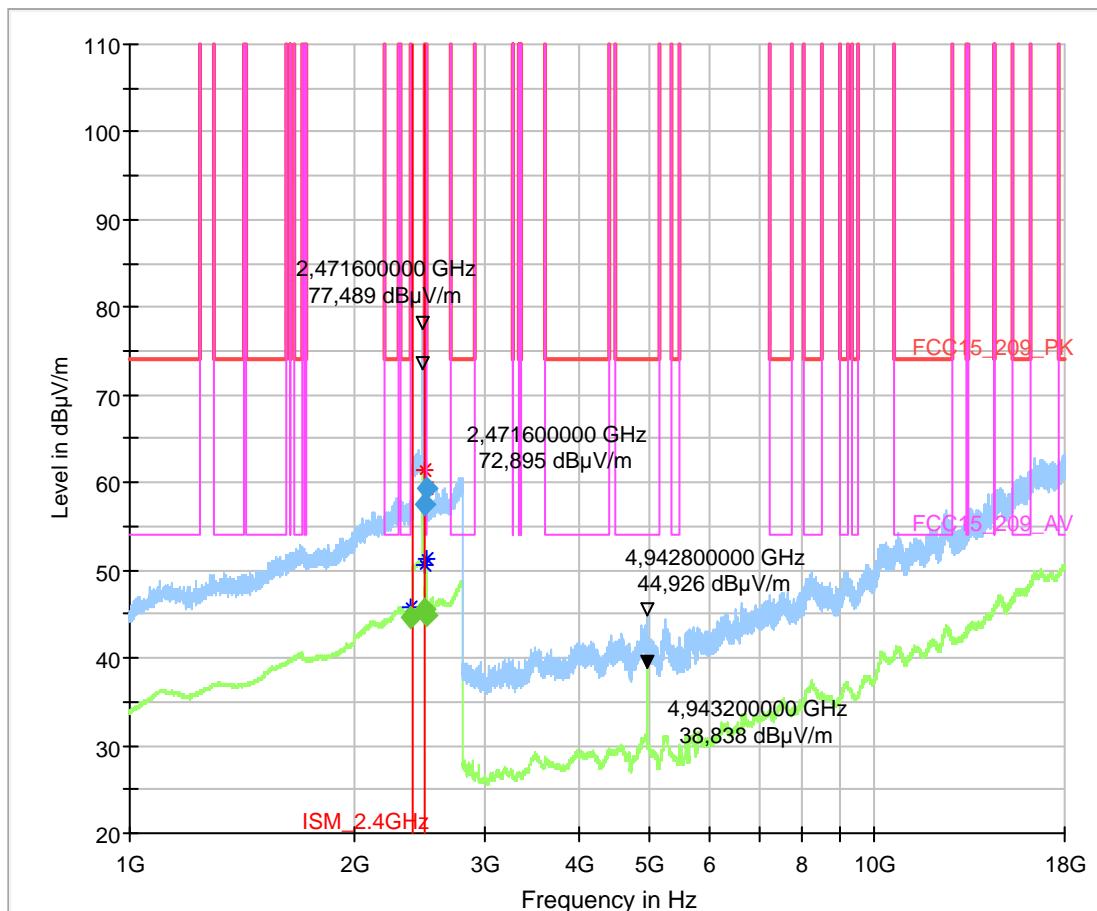
4.22_RCM24G+INTEL FA5 Ant-Port5-MSK-100Kbps- Ch69-PWR+12dBm

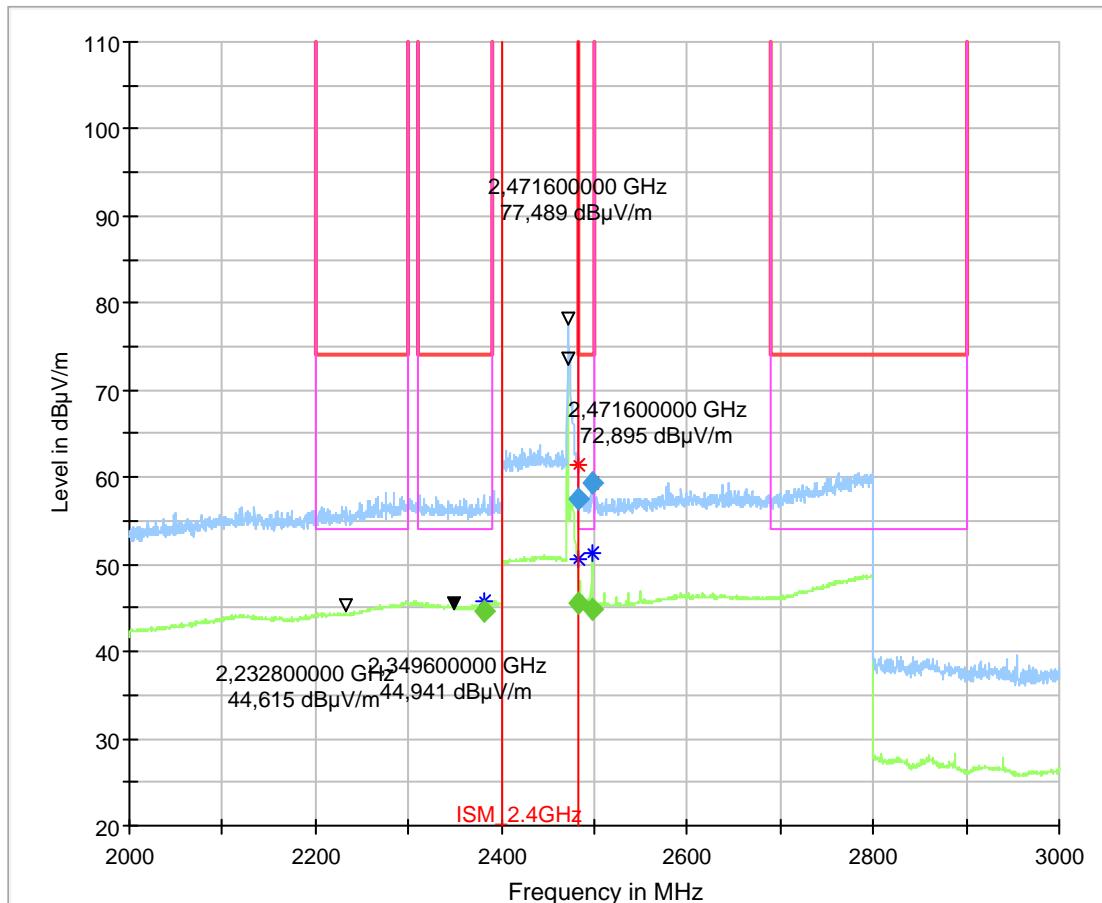
Common Information

Test Description:	Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous RCM24G + INTEL FA5 Antenna Port 5
Operator Name:	MSK 100 Kbps 69 (2471.5 MHz) Fixed Chanel (modulated) Power:+12dBm
Measurements Performed:	PSa With 2.4 GHz NOTCH FILTER Tuned to relevant channel frequency

EUT Information

Manufacturer:	Intel
Module Details:	RCM24G
Module Type:	Proprietary 2.4 GHz RF Transceiver
Module HW version:	D
Module SW version:	Bootloader Version3.6
Module Serial number:	PCB ID 3518
Antenna Details:	INTEL FA5 ANTENNA-PORT5
Antenna Type:	Monopole
Antenna HW version:	Antenna-002
Antenna Gain:	4.86 dBi
Antenna Serial number:	N/A
Test Configuration:	INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings:	Using RCM24G TestTool_V3_70Channels Software
Module Power Supply:	3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments:	Unused INTEL FA5 Antenna ports (Port: 1 2 3 4) are terminated with 50 Ω




Final_Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)
2380.530000	---	44.68	54.00	9.32	100.0	1000.000	155.0
2483.500000	---	45.56	54.00	8.44	100.0	1000.000	155.0
2483.500000	57.59	---	74.00	16.41	100.0	1000.000	155.0
2496.950000	---	44.95	54.00	9.05	100.0	1000.000	155.0
2497.550000	59.39	---	74.00	14.61	100.0	1000.000	155.0

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

Frequency (MHz)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2380.530000	V	270.0	0.0	35.5
2483.500000	H	139.0	0.0	35.6
2483.500000	H	218.0	0.0	35.6
2496.950000	H	282.0	90.0	35.6
2497.550000	V	151.0	0.0	35.6

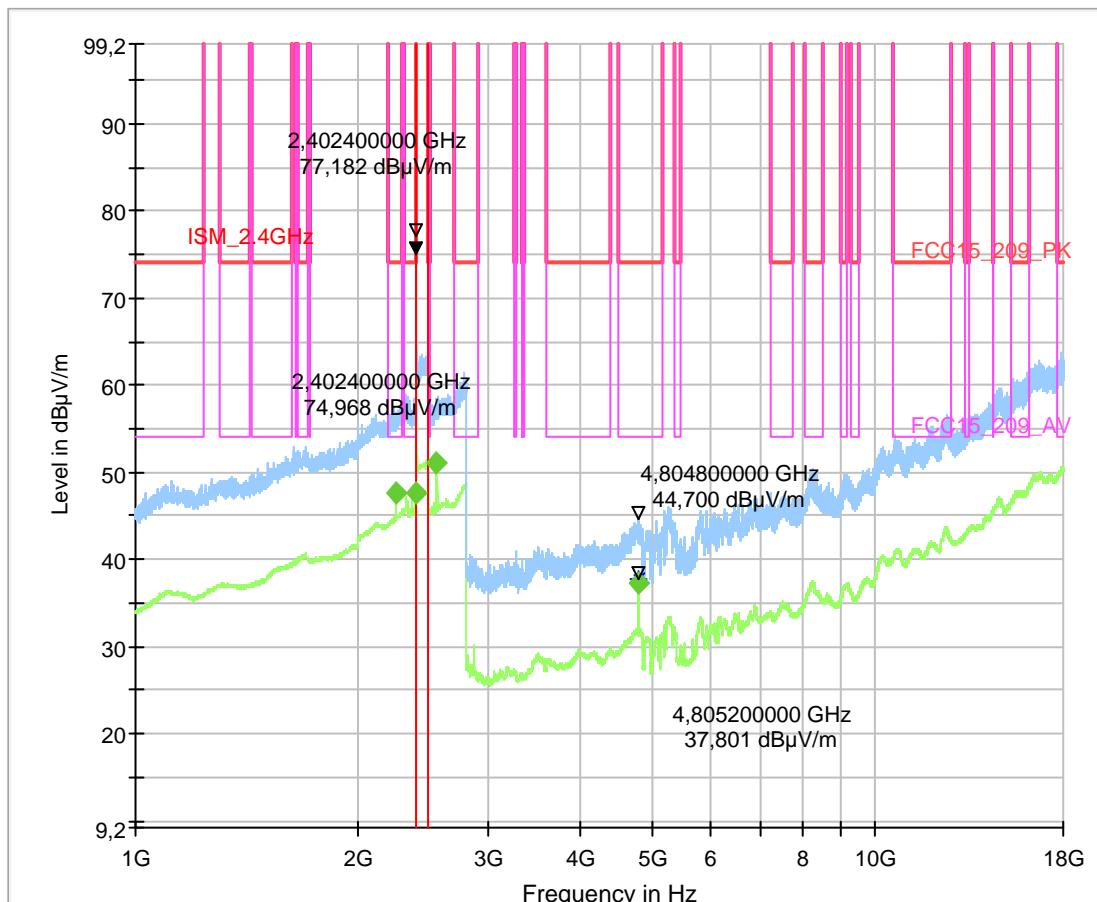
4.23_RCM24G+INTEL FA5 Ant-Port5-MSK-250Kbps- Ch0- PWR +12 dBm

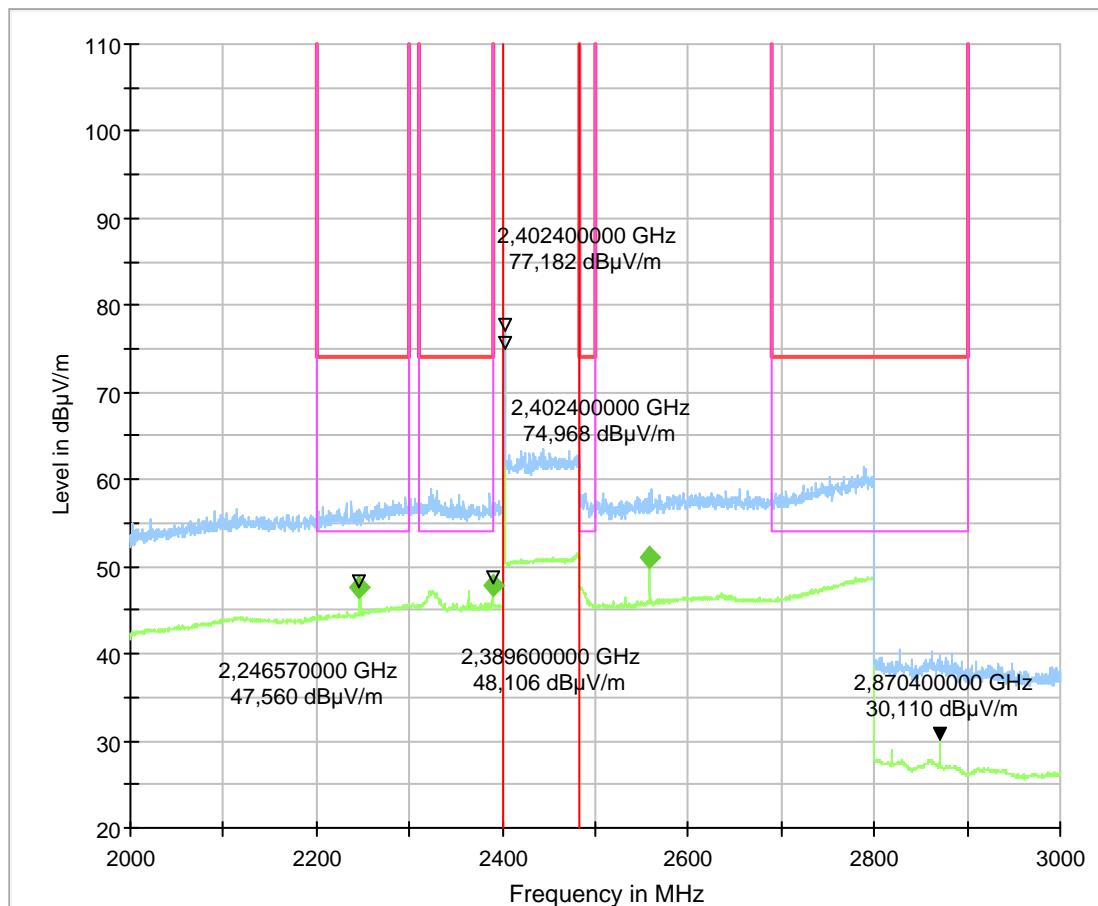
Common Information

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 5
Operator Name: MSK | 250 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated) Power +12 dBm
Measurements Performed: TFr
With 2.4 GHz NOTCH FILTER Tuned to relevant channel frequency

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT5
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 4.86 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2 | 3 | 4) are terminated with 50 Ω





Final_Result

Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Band-width (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2246.570000	47.56	54.00	6.44	100.0	1000.000	155.0	H	253.0	90.0	34.8
2389.450000	47.74	54.00	6.26	100.0	1000.000	155.0	H	272.0	90.0	35.5
2558.550000	51.01	150.00	99.00	100.0	1000.000	155.0	V	280.0	0.0	36.0
4805.210000	37.36	54.00	16.64	100.0	1000.000	155.0	V	139.0	0.0	4.9

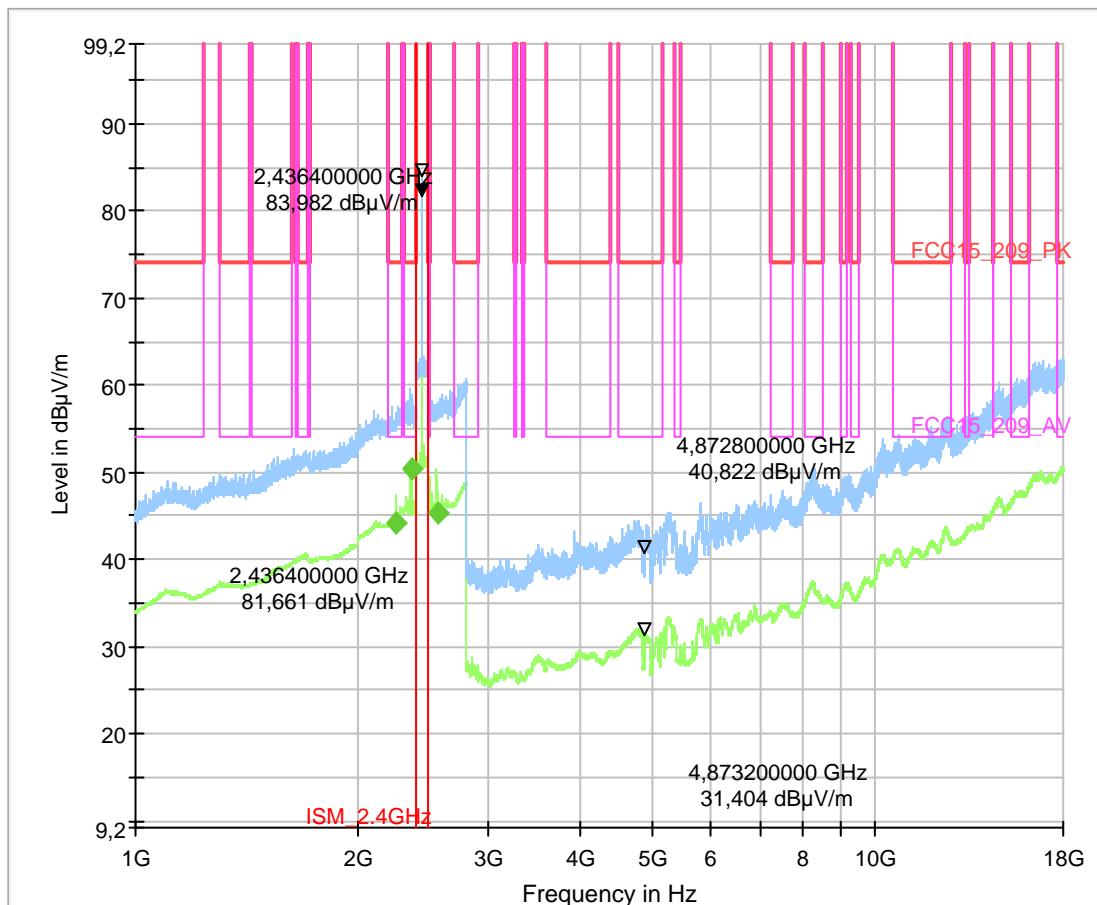
4.24_RCM24G+INTEL FA5 Ant-Port5-MSK-500Kbps- Ch34- PWR +21dBm

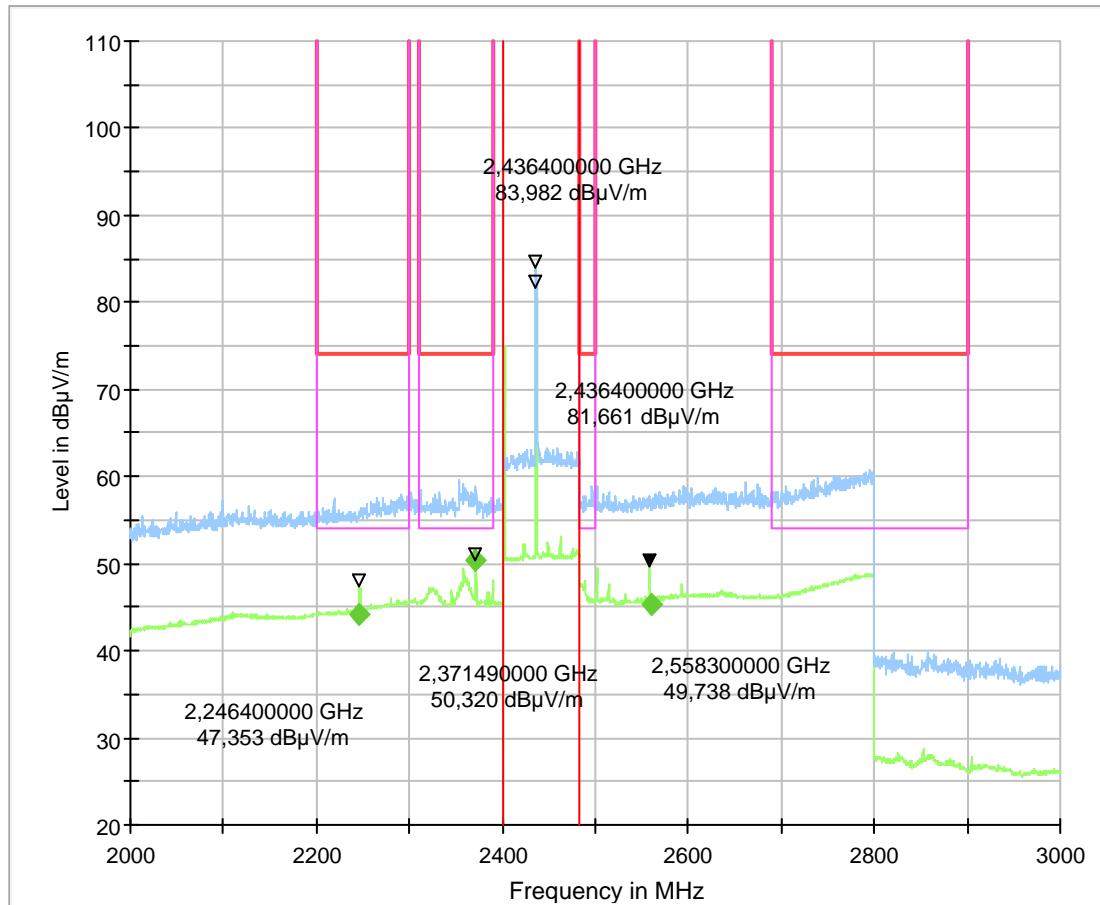
Common Information

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
 Test Site: CETECOM GmbH Essen
 Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
 Antenna polarisation: horizontal/vertical
 Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 5
 Operator Name: MSK |500 Kbps |34 (2436.5 MHz) Fixed Chanel (modulated) Power +21dBm
 Measurements Performed: TFr
 With 2.4 GHz NOTCH FILTER Tuned to relevant channel frequency

EUT Information

Manufacturer: Intel
 Module Details: RCM24G
 Module Type: Proprietary 2.4 GHz RF Transceiver
 Module HW version: D
 Module SW version: Bootloader Version3.6
 Module Serial number: PCB ID 3518
 Antenna Details: INTEL FA5 ANTENNA-PORT5
 Antenna Type: Monopole
 Antenna HW version: Antenna-002
 Antenna Gain: 4.86 dBi
 Antenna Serial number: N/A
 Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
 Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
 Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
 Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2 | 3 | 4) are terminated with 50 Ω





Final_Result

Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Band-width (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2245.730000	44.10	54.00	9.90	100.0	1000.000	155.0	H	245.0	90.0	34.8
2371.490000	50.32	54.00	3.68	100.0	1000.000	155.0	H	277.0	90.0	35.5
2559.270000	45.33	150.00	104.67	100.0	1000.000	155.0	V	251.0	0.0	36.0

4.4. Radiated Field Strength Emissions - 18GHz to 25GHz**4.21a_RCM24G+INTEL FA5 Ant-Port5-MSK-50Kbps-Ch0-PWR +12dBm****Common Information**

Test Description: Radiated field strength emission in 1m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
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-Continuous RCM24G+ INTEL FA5 ANTENNA-PORT5
MSK | 50 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated)
Power : +12dBm

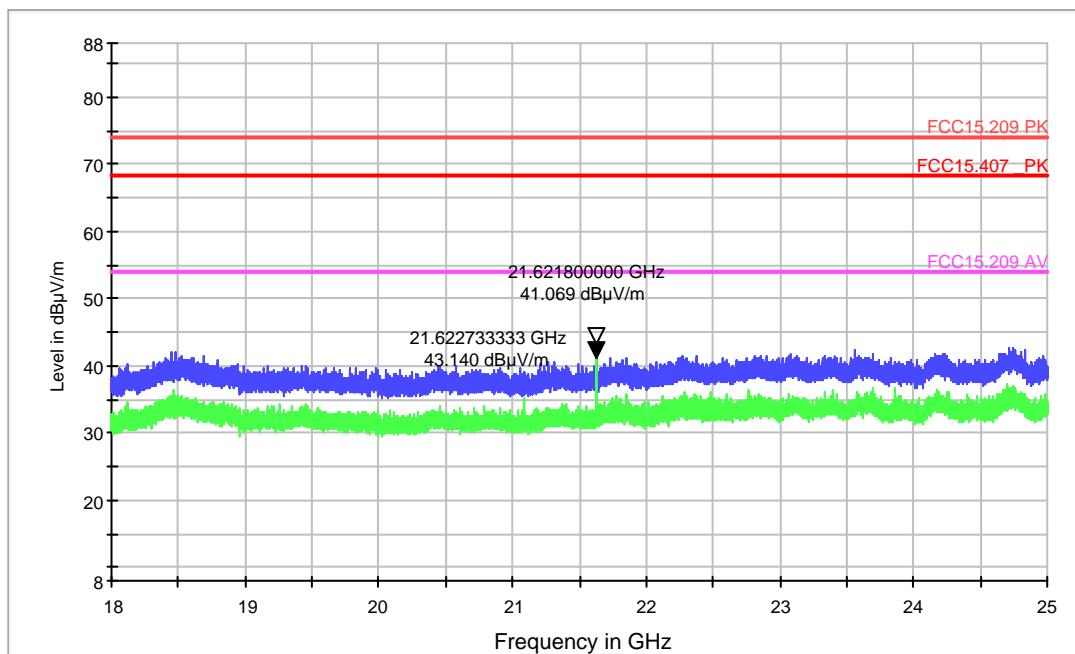
Operator Name: TFr

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT5
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 4.86 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length

Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2 | 3 | 4) are terminated with 50 Ω terminations.

FCC_Sweep_15.247_18_25GHz_Pre



4.22a_RCM24G+INTEL FA5 Ant-Port5-MSK-100Kbps- Ch69-PWR+12dBm

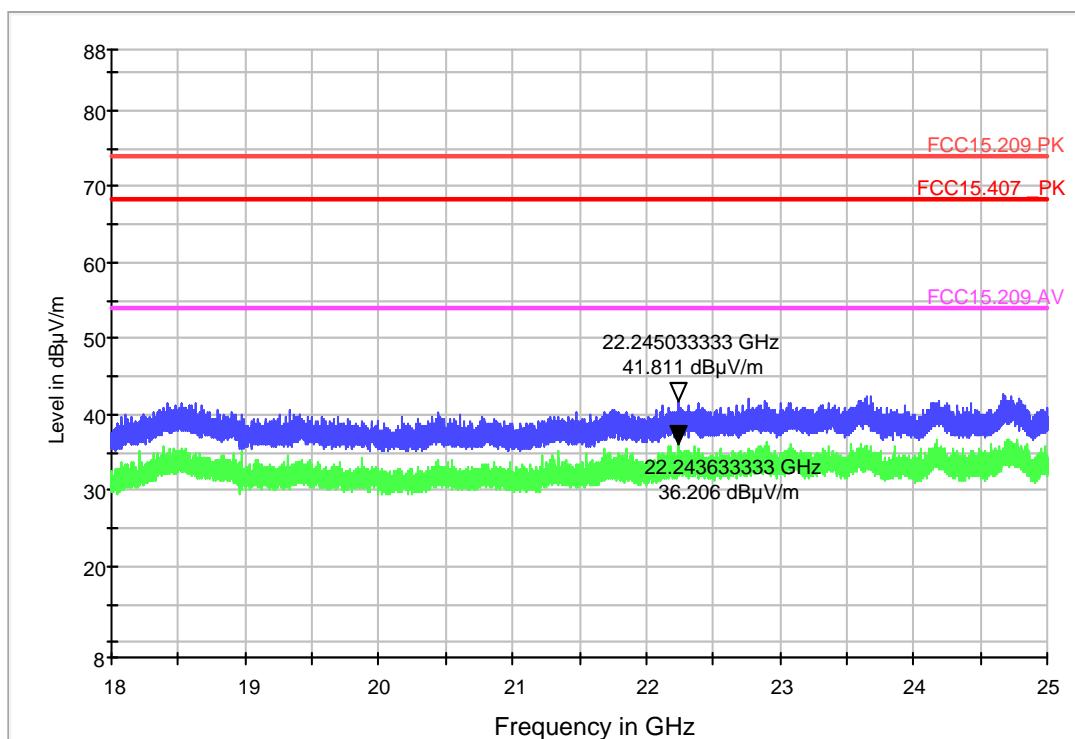
Common Information

Test Description: Radiated field strength emission in 1m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
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-Continuous RCM24G+ INTEL FA5 ANTENNA-PORTS
MSK |100 Kbps |69 (2471.5 MHz) Fixed Chanel (modulated)| +12dBm
Power Settings: +12dBm
Operator Name: TFr

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT5
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 4.86 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2 | 3 | 4) are terminated with 50 Ω terminations.

FCC_Sweep_15.247_18_25GHz_Pre

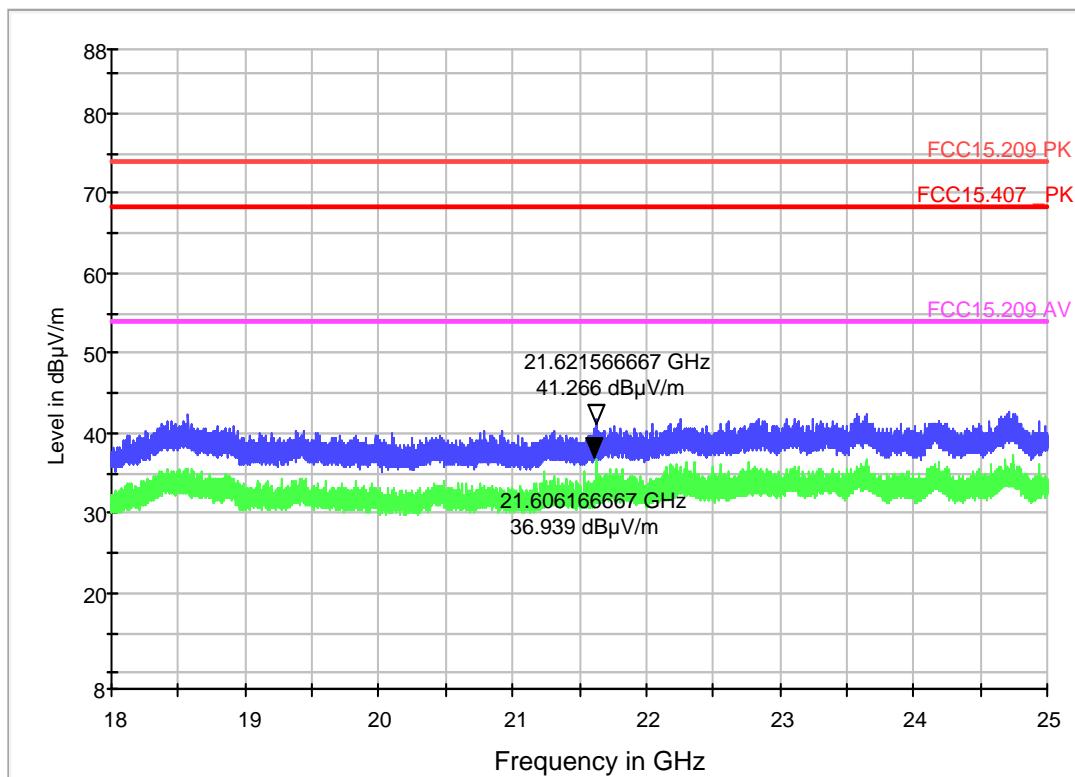


4.23a_RCM24G+INTEL FA5 Ant-Port5-MSK-250Kbps- Ch0-PWR +12dBm**Common Information**

Test Description:	Radiated field strength emission in 1m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
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-Continuous RCM24G+ INTEL FA5 ANTENNA-PORT5 MSK 250 Kbps 0 (2402.5 MHz) Fixed Chanel (modulated) Power:+12dBm
Operator Name:	TFr

EUT Information

Manufacturer:	Intel
Module Details:	RCM24G
Module Type:	Proprietary 2.4 GHz RF Transceiver
Module HW version:	D
Module SW version:	Bootloader Version3.6
Module Serial number:	PCB ID 3518
Antenna Details:	INTEL FA5 ANTENNA-PORT5
Antenna Type:	Monopole
Antenna HW version:	Antenna-002
Antenna Gain:	4.86 dBi
Antenna Serial number:	N/A
Test Configuration:	INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings:	Using RCM24G TestTool_V3_70Channels Software
Module Power Supply:	3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments:	Unused INTEL FA5 Antenna ports (Port: 1 2 3 4) are terminated with 50 Ω terminations.

FCC_Sweep_15.247_18_25GHz_Pre

4.24a_RCM24G+INTEL FA5 Ant-Port5-MSK-500Kbps- Ch34- PWR +21dBm

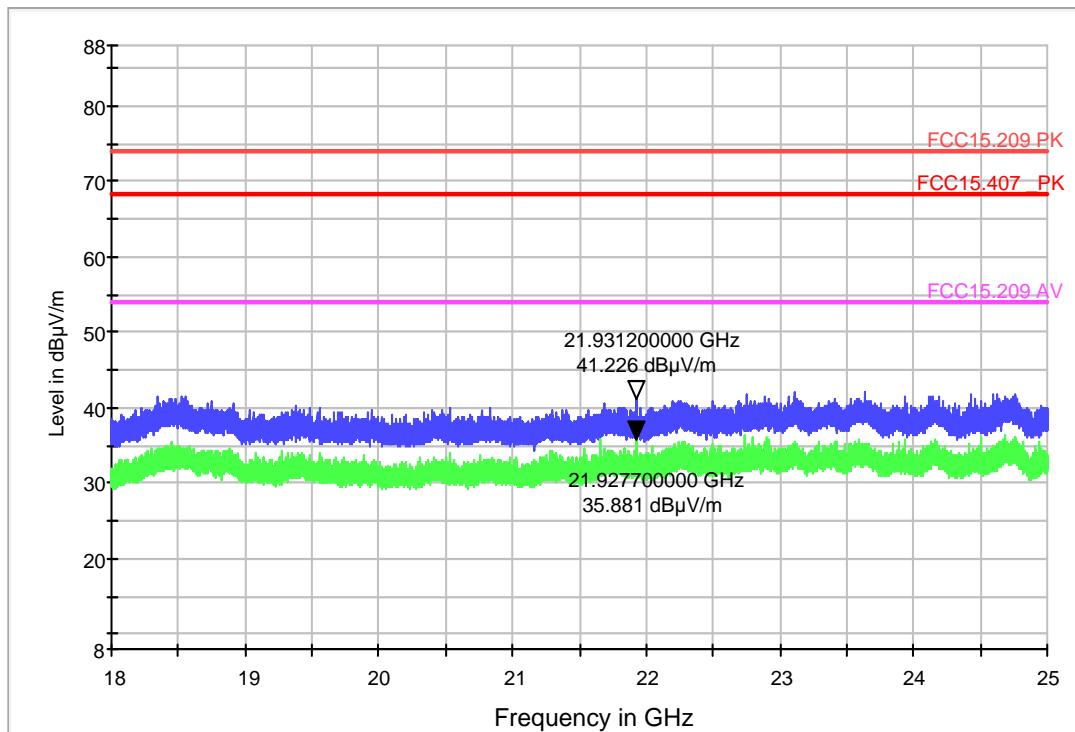
Common Information

Test Description: Radiated field strength emission in 1m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
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-Continuous RCM24G+ INTEL FA5 ANTENNA-PORTS
MSK |500 Kbps |34 (2436.5 MHz) Fixed Chanel (modulated
Power:+21dBm
Operator Name: TFr

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORTS
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 4.86 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2 | 3 | 4) are terminated with 50 Ω terminations.

FCC_Sweep_15.247_18_25GHz_Pre



4.5. Radiated Band-Edge Measurements

4.5.1. Low Channel 2402.5 MHz (2.4 GHz ISM: left band edge)

9.21_BE-RCM24G+INTEL FA5 Ant-Port5-MSK-50Kbps-Ch0-PWR+12dBm

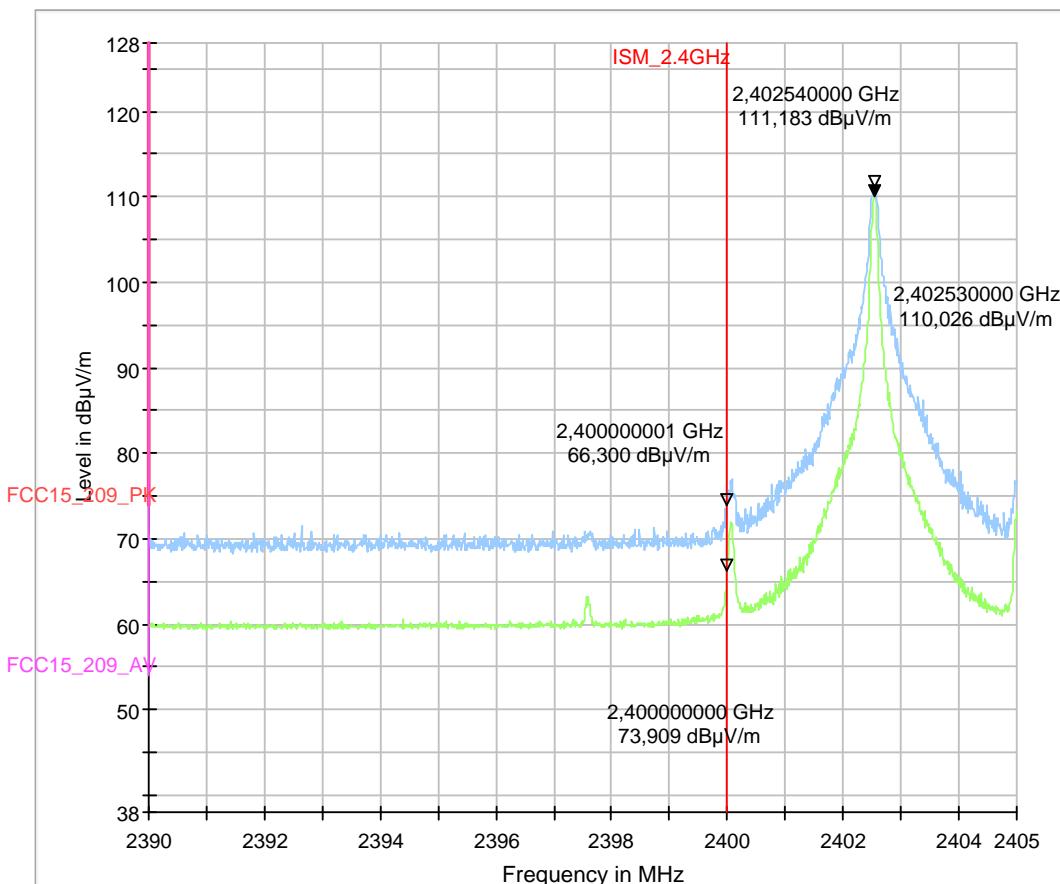
Common Information

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 5 (Upper2.4 GHz Port)
MSK | 50 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated) Power 12 dBm
TFr

Operator Name:

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT5
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 4.86 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2 | 3 | 4) are terminated with 50 Ω



[For Restricted Band (2200-2300 MHz & 2310 – 2390 MHz) compliance refer Chapter 4.3
4.21_RCM24G+INTEL FA5 Ant-Port5-MSK-50Kbps-Ch0-PWR +12dBm]

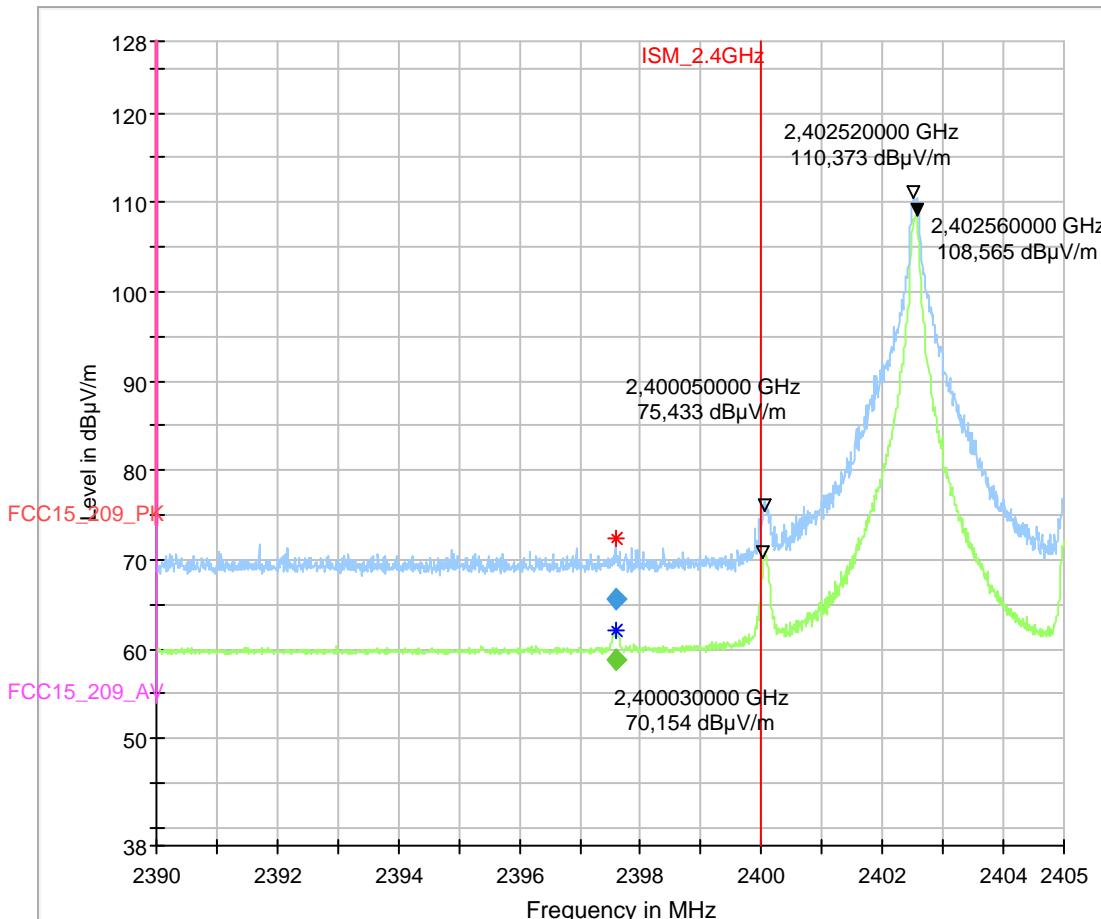
9.23_BE-RCM24G+INTEL FA5 Ant-Port5-MSK-100Kbps-Ch0-PWR+12dBm

Common Information

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 5 (Upper2.4 GHz Port)
Operator Name: MSK | 100 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated) Power 12dBm
TFr

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT5
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 4.86 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2| 3| 4) are terminated with 50 Ω



[For Restricted Band (2200-2300 MHz & 2310 – 2390 MHz) compliance refer Chapter 4.3
4.22_RCM24G+INTEL FA5 Ant-Port5-MSK-100Kbps- Ch69-PWR+12dBm]

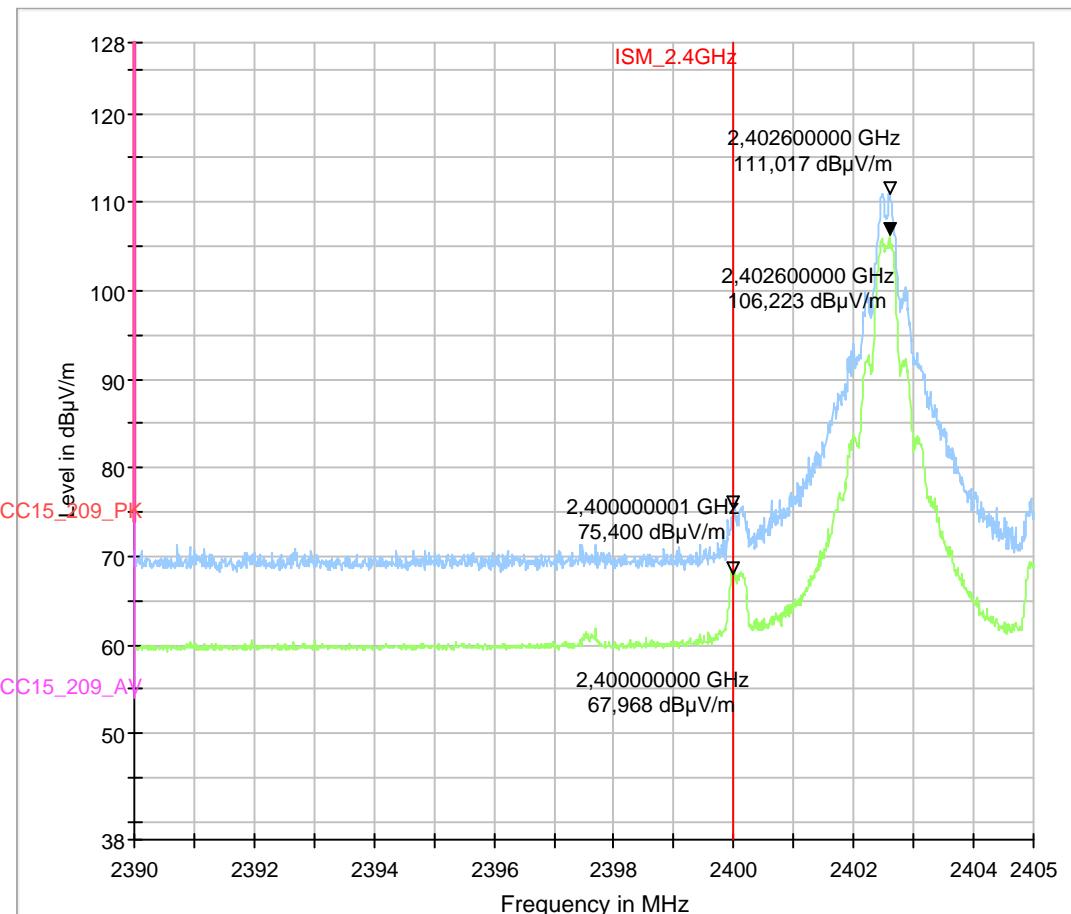
9.25_BE-RCM24G+INTEL FA5 Ant-Port5-MSK-250Kbps-Ch0-PWR+12dBm

Common Information

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 5 (Upper2.4 GHz Port)
Operator Name: MSK | 250 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated) Power 12 dBm
TFr

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT5
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 4.86 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2| 3| 4) are terminated with 50 Ω



[For Restricted Band (2200-2300 MHz & 2310 – 2390 MHz) compliance refer Chapter 4.3
4.23_RCM24G+INTEL FA5 Ant-Port5-MSK-250Kbps- Ch0- PWR +12 dBm

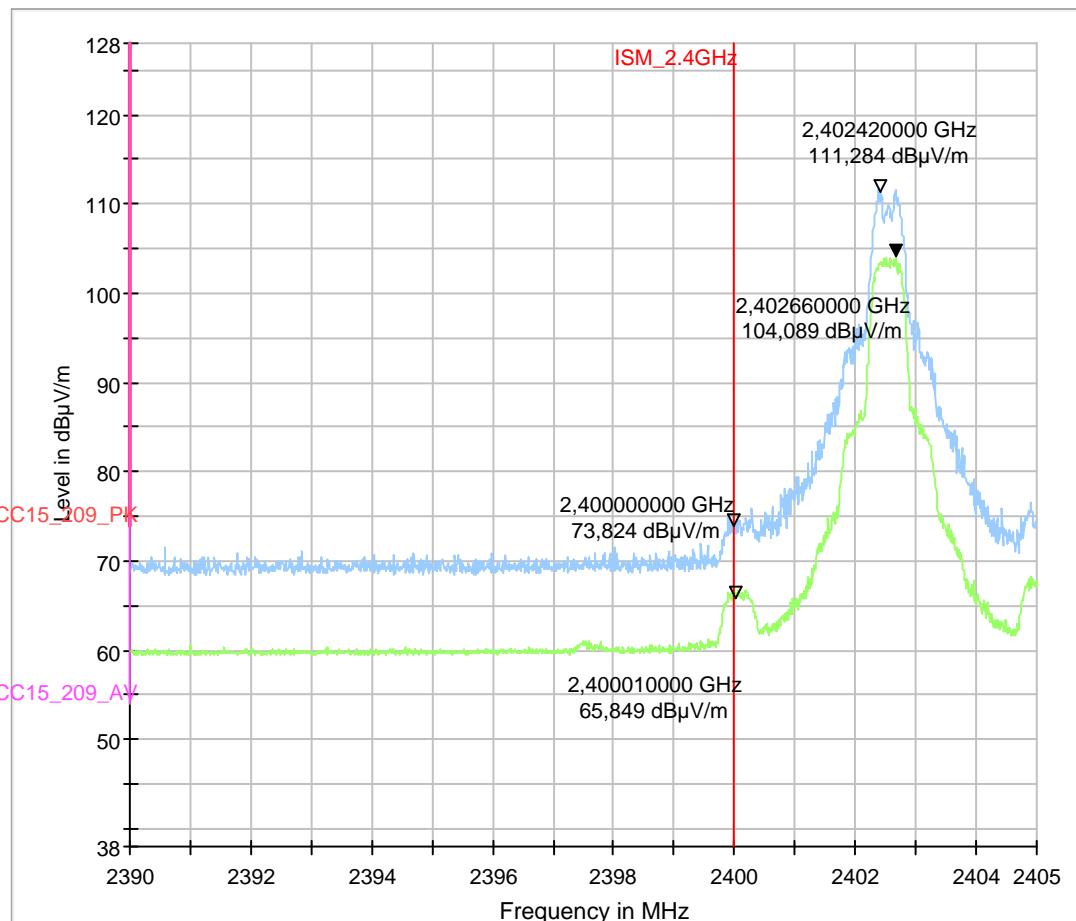
9.27_BE-RCM24G+INTEL FA5 Ant-Port5-MSK-500Kbps-Ch0-PWR+12dBm

Common Information

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 5 (Upper2.4 GHz Port)
Operator Name: MSK | 500 Kbps | 0 (2402.5 MHz) Fixed Chanel (modulated) Power 12dBm
TFr

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT5
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 4.86 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2| 3| 4) are terminated with 50 Ω



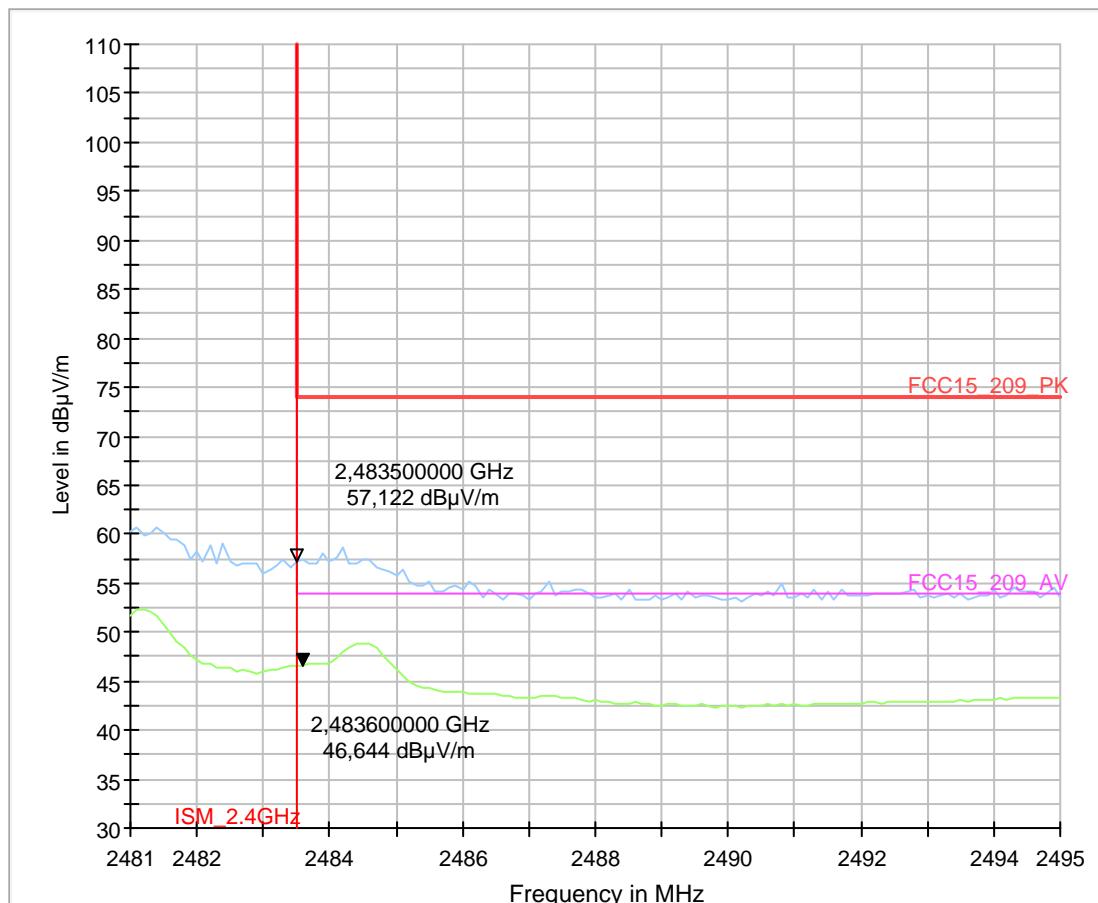
[For Restricted Band (2200-2300 MHz & 2310 – 2390 MHz) compliance refer Chapter 4.3
4.24_RCM24G+INTEL FA5 Ant-Port5-MSK-500Kbps- Ch34- PWR +21dBm

4.5.2. High Channel 2471.5 MHz (2.4 GHz ISM: right band edge)**9.22_BE-RCM24G+INTEL FA5 Ant-Port5-MSK-50Kbps- Ch69-
PWR+12dBm****Common Information**

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 5 (Upper 2.4 GHz Port)
MSK | 50 Kbps |69 (2471.5 MHz) Fixed Chanel (modulated)-Power+12dBm
TFr
With 2.4 GHz NOTCH FILTER

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT5
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 4.86 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2| 3| 4) are terminated with 50 Ω



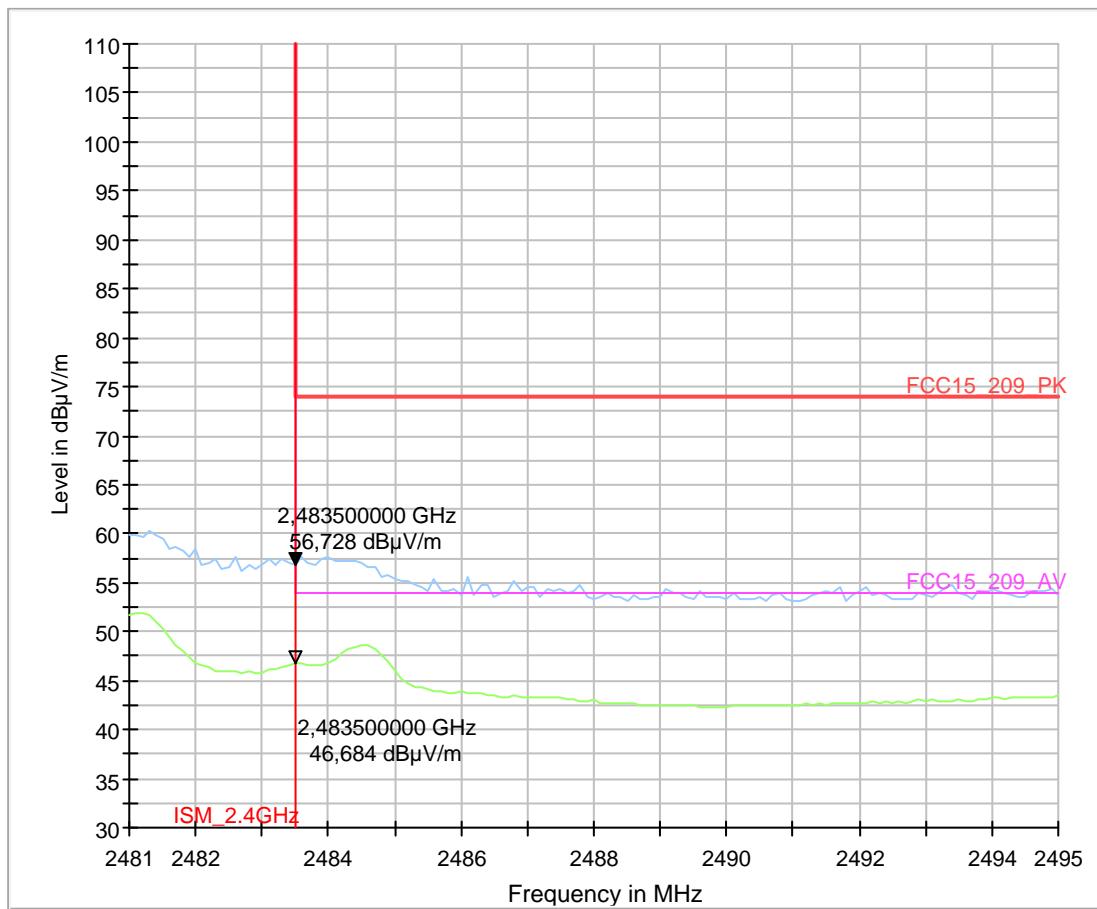
9.24_BE-RCM24G+INTEL FA5 Ant-Port5-MSK-100Kbps- Ch69- PWR+12dBm

Common Information

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 5 (Upper2.4 GHz Port)
Operator Name: MSK | 100 Kbps | 69 (2471.5 MHz) Fixed Chanel (modulated)-Power+12dBm
Measurements Performed: TFr
With 2.4 GHz NOTCH FILTER

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT5
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 4.86 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2 | 3 | 4) are terminated with 50 Ω



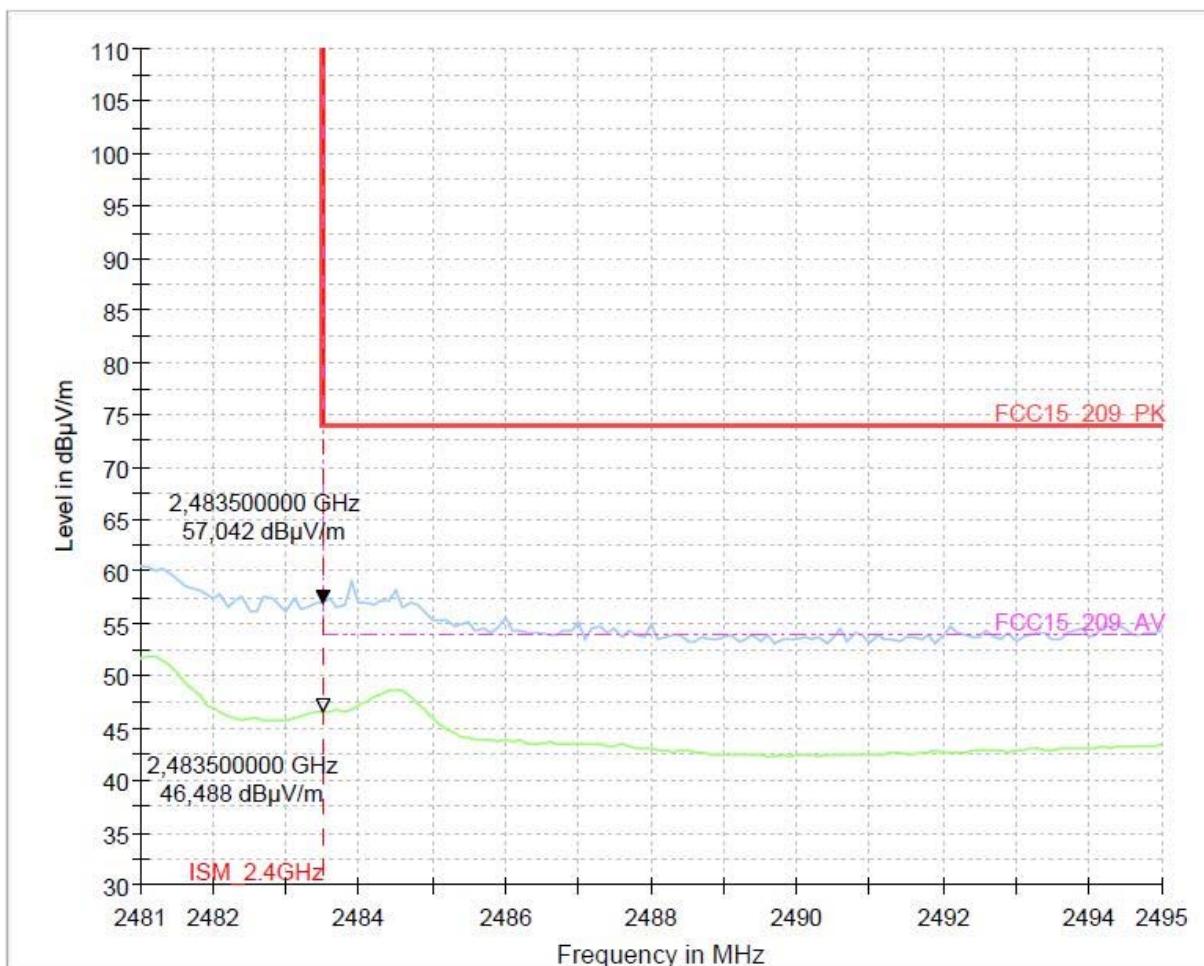
9.26_BE-RCM24G+INTEL FA5 Ant-Port5-MSK-250Kbps- Ch69-PWR+12dBm

Common Information

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 5 (Upperr2.4 GHz Port)
MSK | 250 Kbps |69 (2471.5 MHz) Fixed Chanel (modulated) Power +12dBm
TFr
Operator Name:
Measurements Performed: With 2.4 GHz NOTCH FILTER

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT5
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 4.86 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2| 3| 4) are terminated with 50 Ω



9.28_BE-RCM24G+INTEL FA5 Ant-Port5-MSK-500Kbps- Ch69- PWR+12dBm

Common Information

Test Description:
Test Site:
Test Standard:
Antenna polarisation:
Operation mode:

Operator Name:
Measurements Performed:

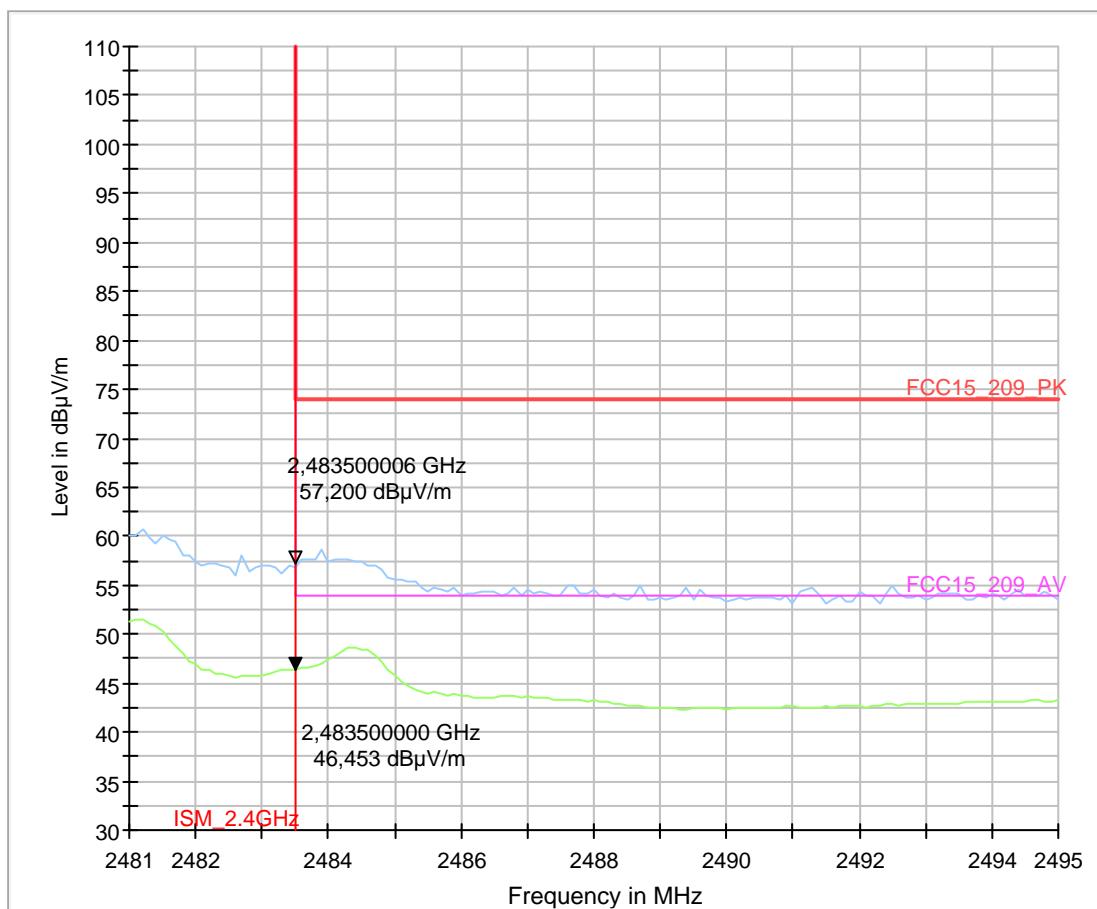
Band-Edge: Radiated Field Strength Emissions in 3m distance
CETECOM GmbH Essen
FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
horizontal/vertical
TX, continuous RCM24G + INTEL FA5 Antenna Port 5 (Upper 2.4 GHz Port)
MSK | 500 Kbps | 69 (2471.5 MHz) Fixed Channel (modulated) Power 12dBm
TFR
With 2.4 GHz NOTCH FILTER

EUT Information

Manufacturer:
Module Details:
Module Type:
Module HW version:
Module SW version:
Module Serial number:
Antenna Details:
Antenna Type:
Antenna HW version:
Antenna Gain:
Antenna Serial number:
Test Configuration:

Test Mode Settings:
Module Power Supply:
Comments:

Intel
RCM24G
Proprietary 2.4 GHz RF Transceiver
D
Bootloader Version3.6
PCB ID 3518
INTEL FA5 ANTENNA-PORT5
Monopole
Antenna-002
4.86 dBi
N/A
INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using
micro-UFL connector cable 40 cm in length
Using RCM24G TestTool_V3_70Channels Software
3.6 V DC (Direct to RCM24G) using Laboratory Supply
Unused INTEL FA5 Antenna ports (Port: 1 | 2 | 3 | 4) are terminated with 50 Ω



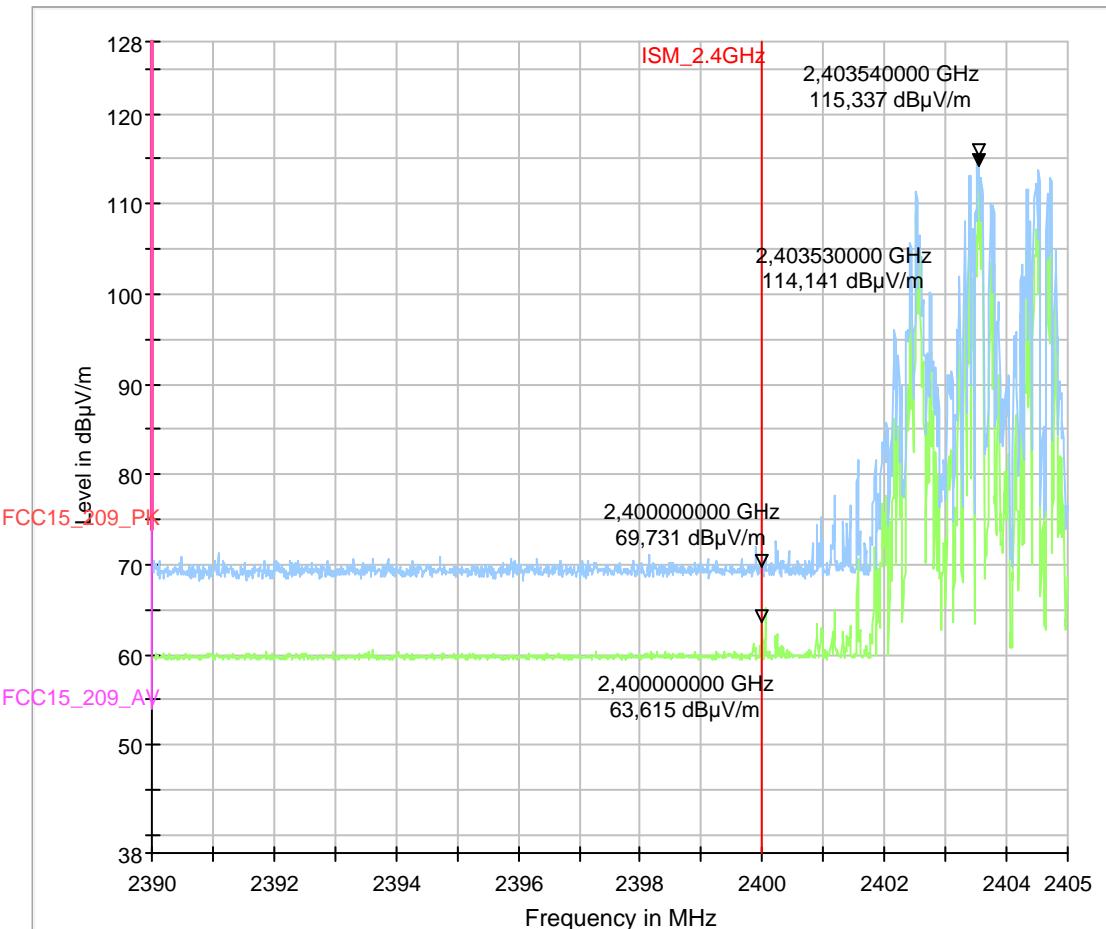
4.5.3. Low Channel Hopping Mode (2.4 GHz ISM: left band edge)**9.29a_BE-RCM24G+INTEL FA5 Ant-Port5-MSK-500Kbps-Low****Common Information**

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 5 (Upper 2.4 GHz Port)
MSK | 500 Kbps | Hopping Mode (Master)
TFr

Operator Name:

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT5
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 4.86 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2| 3| 4) are terminated with 50 Ω



[For Restricted Band (2200-2300 MHz & 2310 – 2390 MHz) compliance refer Chapter 4.3]

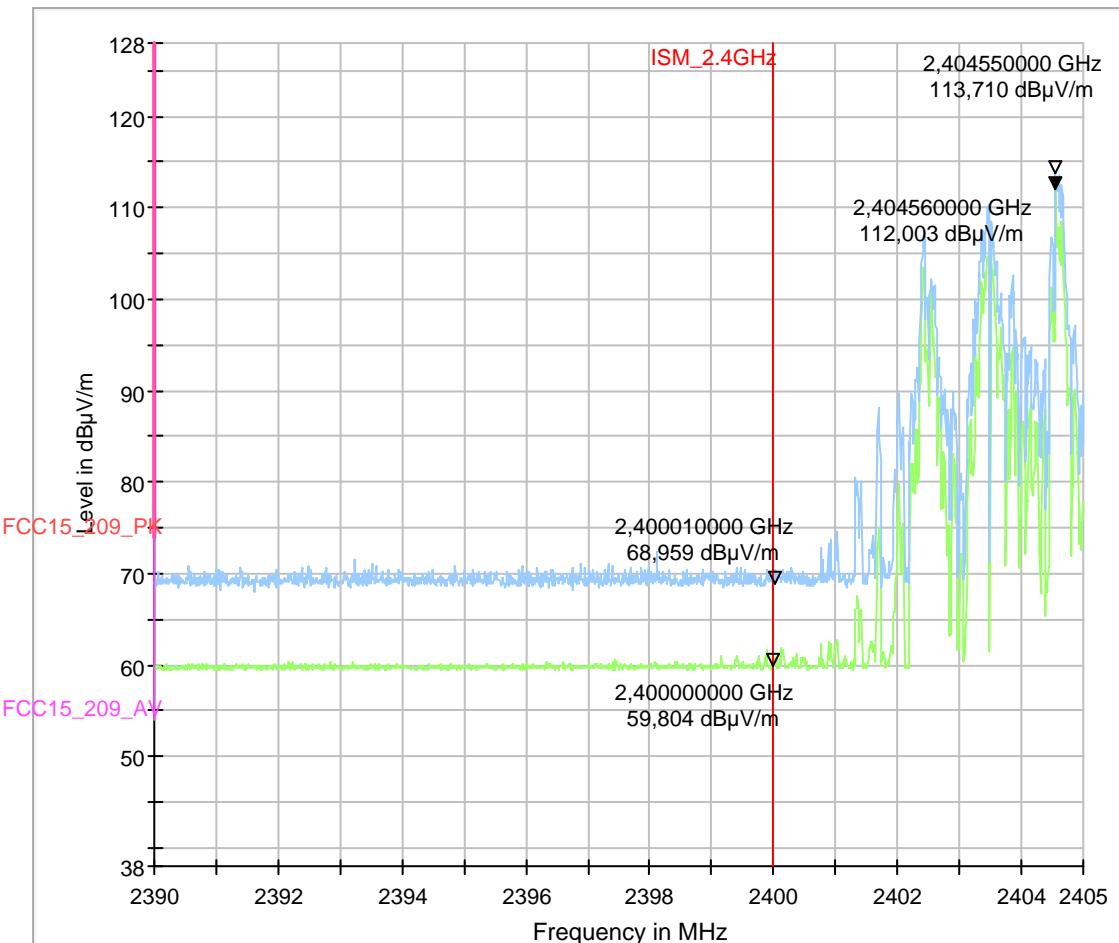
9.30a_BE-RCM24G+INTEL FA5 Ant-Port5-MSK-250Kbps-Low**Common Information**

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 5 (Upper2.4 GHz Port)
MSK | 250 Kbps | Hopping Mode (Master)

Operator Name: TFr

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT5
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 4.86 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2| 3| 4) are terminated with 50 Ω



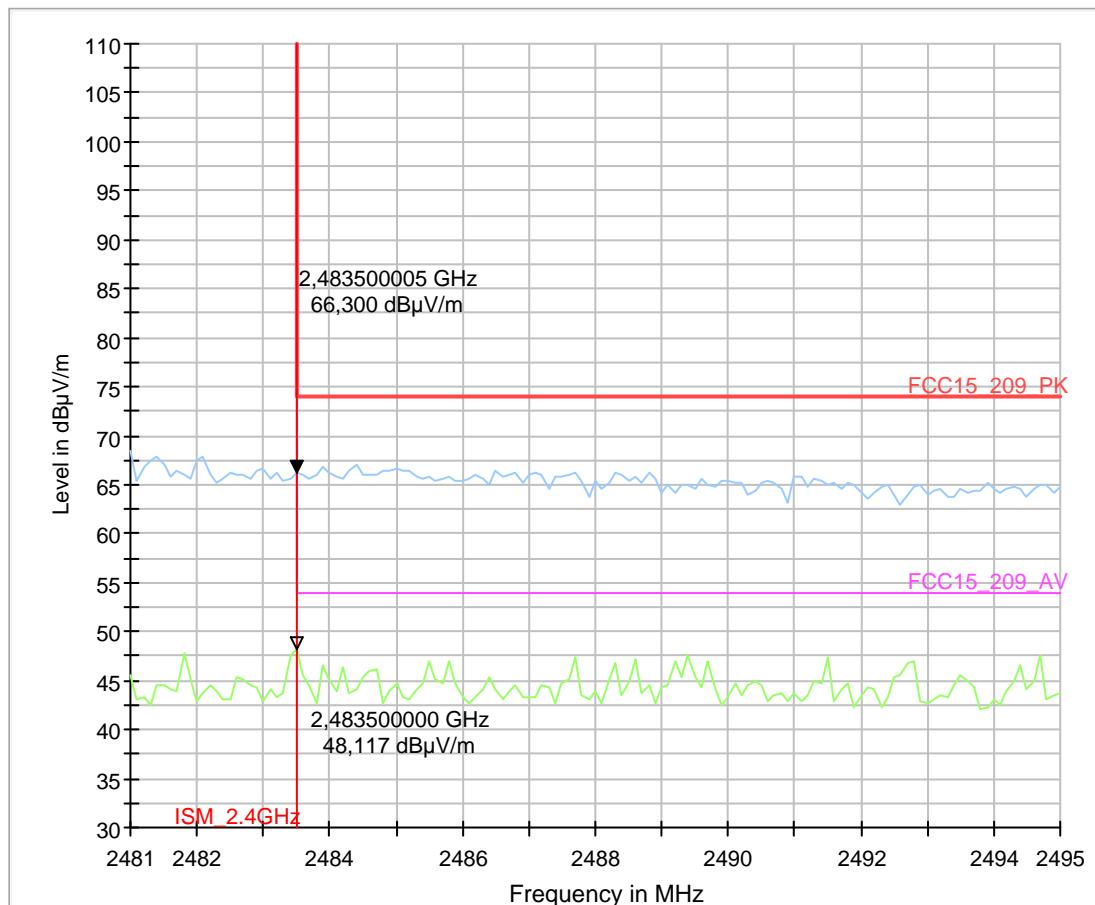
[For Restricted Band (2200-2300 MHz & 2310 – 2390 MHz) compliance refer Chapter 4.3]

4.5.4. High Channel Hopping Mode (2.4 GHz ISM: left band edge)**9.29b_BE-RCM24G+INTEL FA5 Ant-Port5-MSK-500Kbps-High- FINAL****Common Information**

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 5 (Upper 2.4 GHz Port)
MSK | 500 Kbps | Hopping Mode (Master)
AFr
Measurements Performed: With 2.4 GHz NOTCH FILTER

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT5
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 4.86 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length
Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2 | 3 | 4) are terminated with 50 Ω



9.30b_BE-RCM24G+INTEL FA5 Ant-Port5-MSK-250Kbps-High**Common Information**

Test Description: Band-Edge: Radiated Field Strength Emissions in 3m distance
Test Site: CETECOM GmbH Essen
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS 247 Issue2 , RSS-Gen, Issue 4
Antenna polarisation: horizontal/vertical
Operation mode: TX, continuous RCM24G + INTEL FA5 Antenna Port 5 (Upper 2.4 GHz Port)
MSK | 250 Kbps | Hopping Mode (Master)

Operator Name: AFr
Measurements Performed: With 2.4 GHz NOTCH FILTER

EUT Information

Manufacturer: Intel
Module Details: RCM24G
Module Type: Proprietary 2.4 GHz RF Transceiver
Module HW version: D
Module SW version: Bootloader Version3.6
Module Serial number: PCB ID 3518
Antenna Details: INTEL FA5 ANTENNA-PORT5
Antenna Type: Monopole
Antenna HW version: Antenna-002
Antenna Gain: 4.86 dBi
Antenna Serial number: N/A
Test Configuration: INTEL FA5 Antenna's Port 5(Upper 2.4 GHz Port) connected to RCM24G Module using micro-UFL connector cable 40 cm in length

Test Mode Settings: Using RCM24G TestTool_V3_70Channels Software
Module Power Supply: 3.6 V DC (Direct to RCM24G) using Laboratory Supply
Comments: Unused INTEL FA5 Antenna ports (Port: 1 | 2 | 3 | 4) are terminated with 50 Ω

