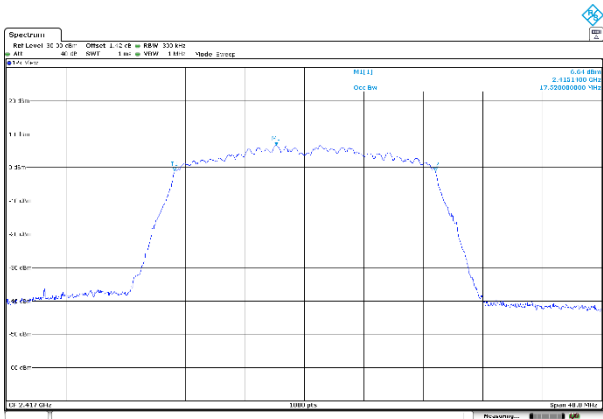
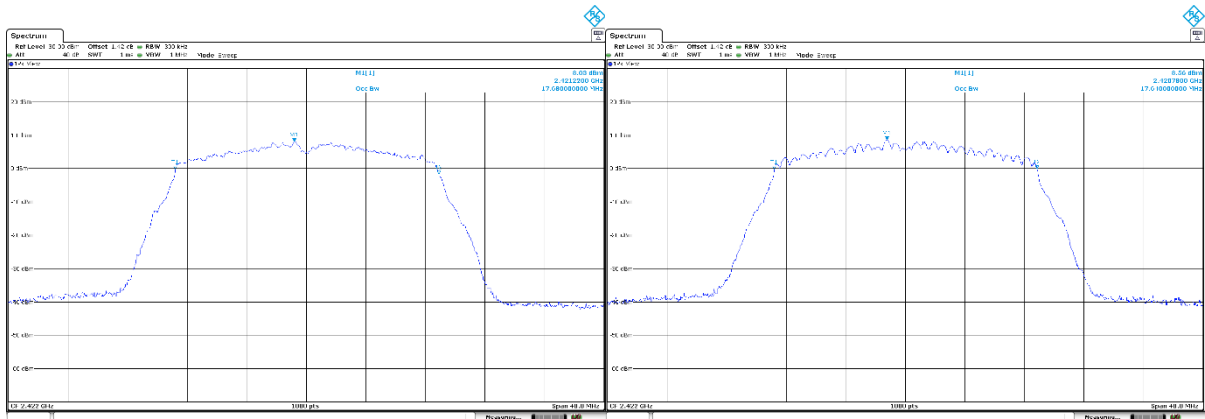




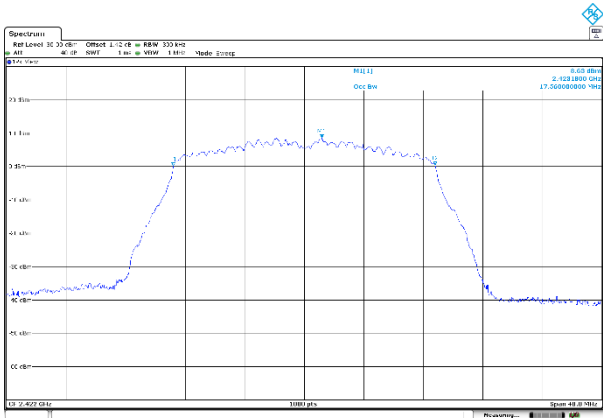
CORE 2

Channel 3



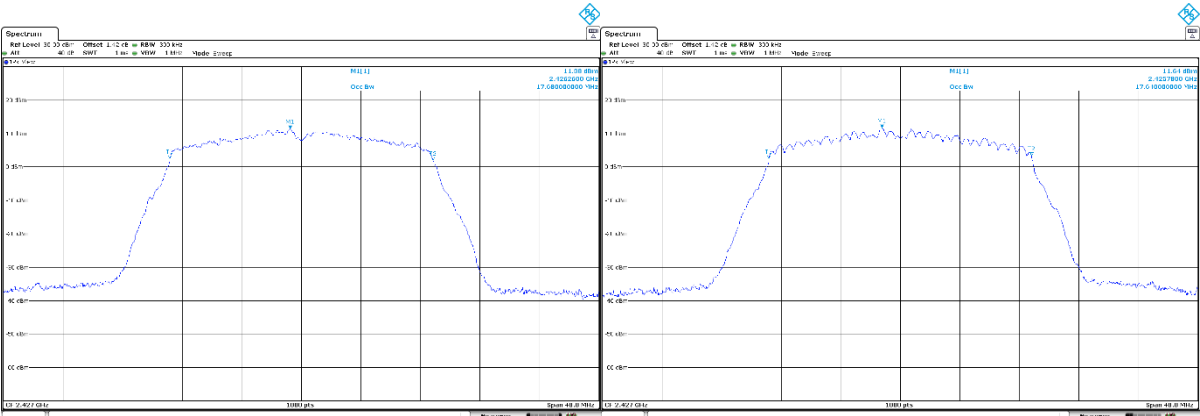
CORE 0

CORE 1



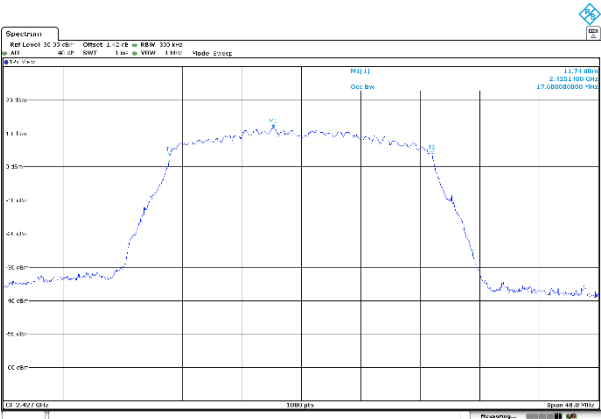
CORE 2

Channel 4



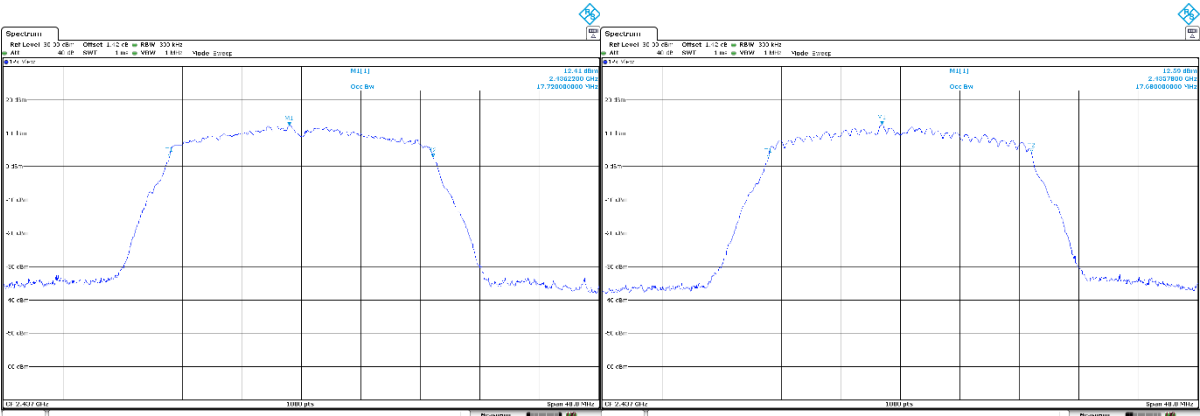
CORE 0

CORE 1



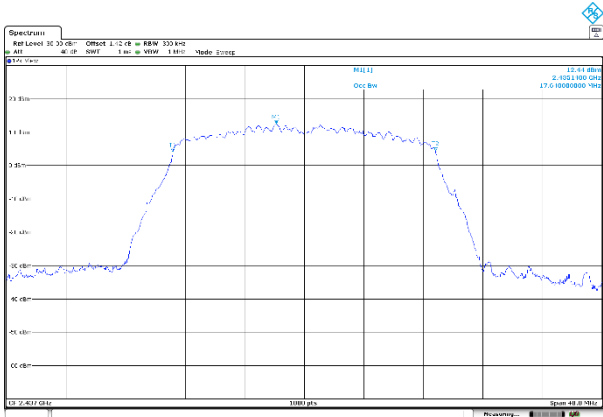
CORE 2

Channel 6



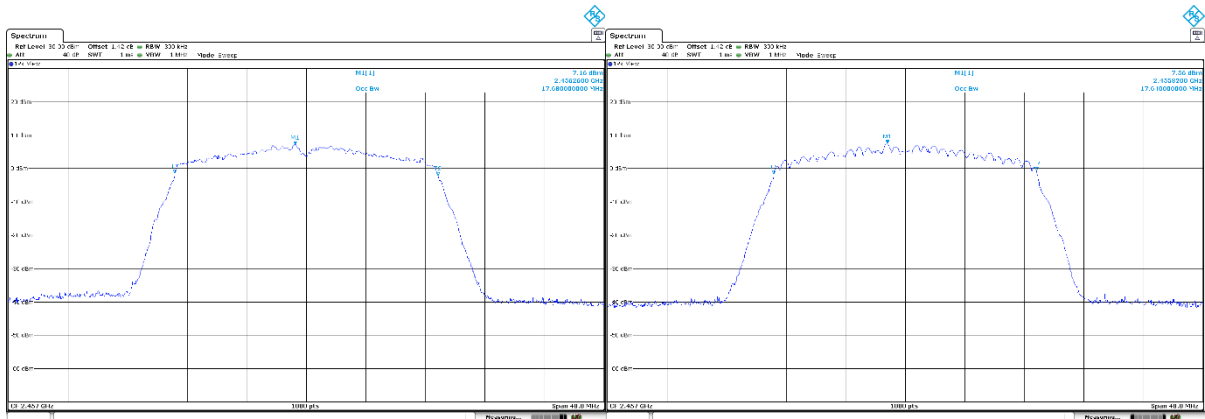
CORE 0

CORE 1



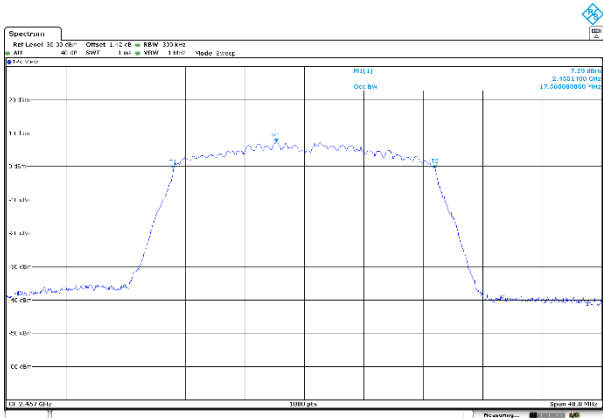
CORE 2

Channel 10



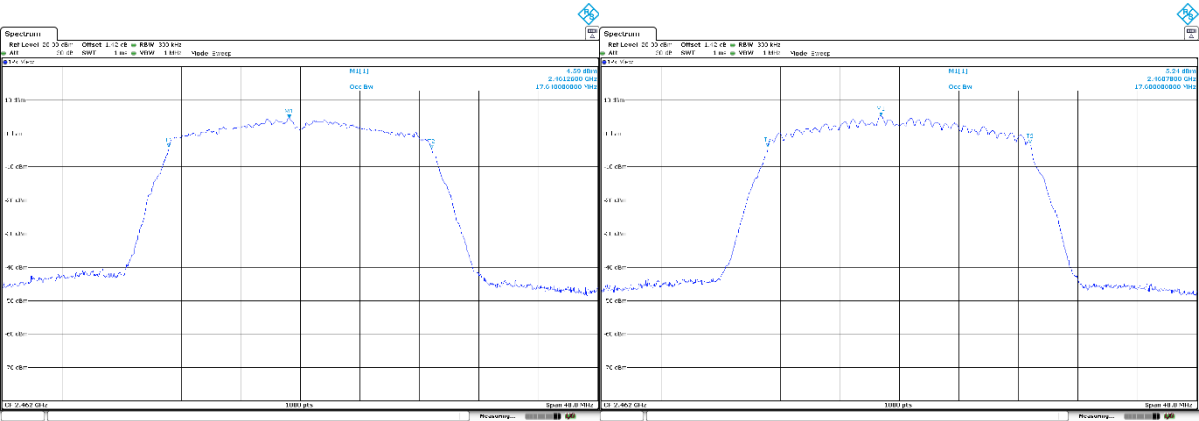
CORE 0

CORE 1



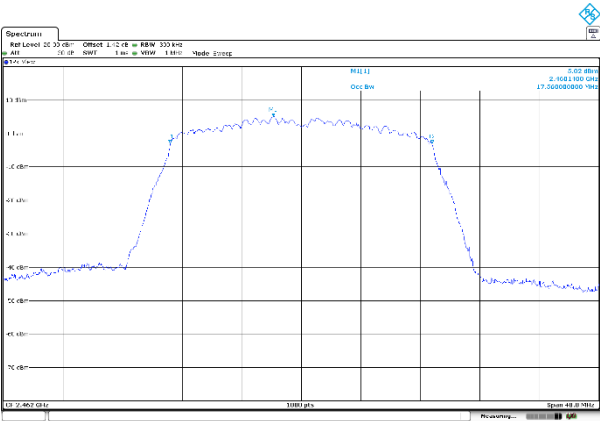
CORE 2

Channel 11



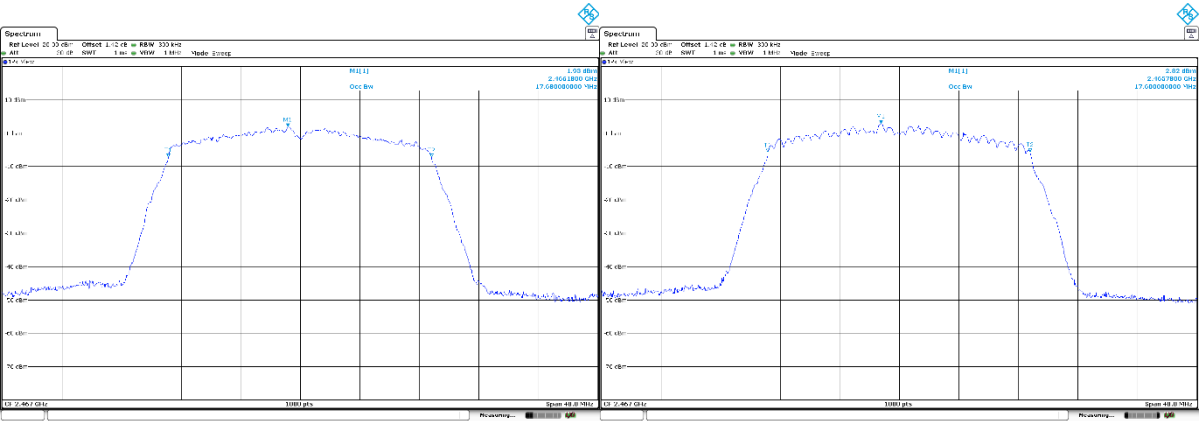
CORE 0

CORE 1



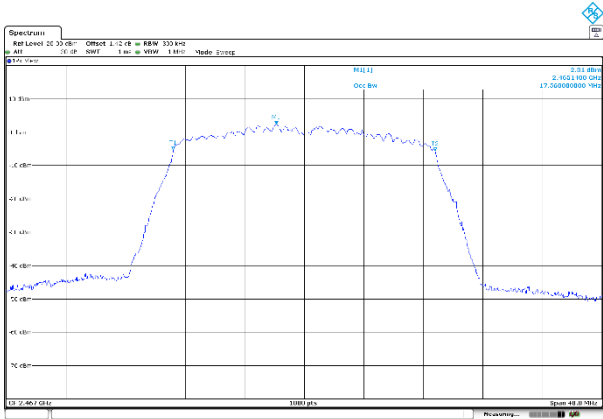
CORE 2

Channel 12



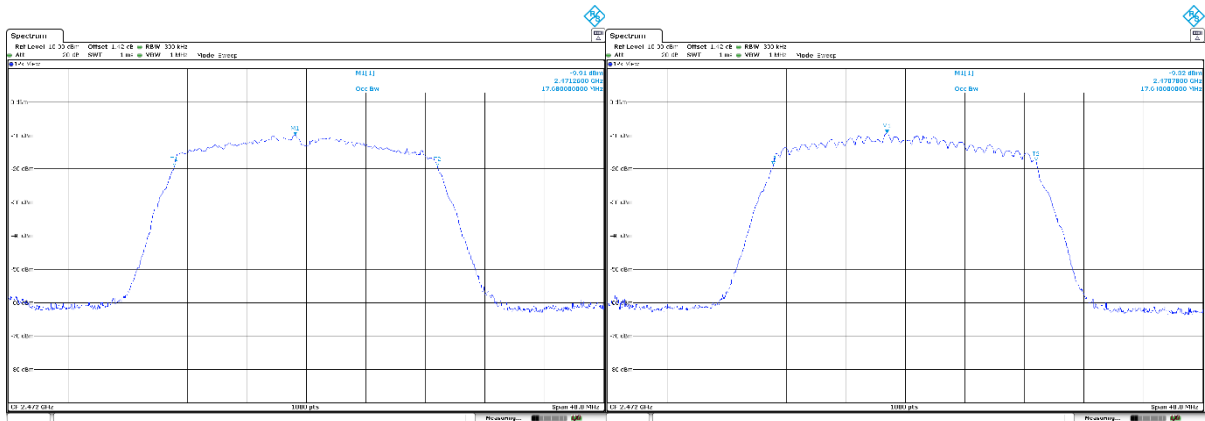
CORE 0

CORE 1



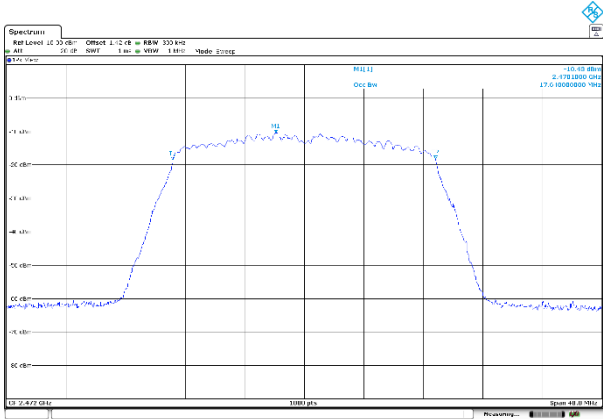
CORE 2

Channel 13



CORE 0

CORE 1



CORE 2

Mode : 802.11n HT20 – TxBF – 20MHz – MIMO – CORE 0 & CORE 1

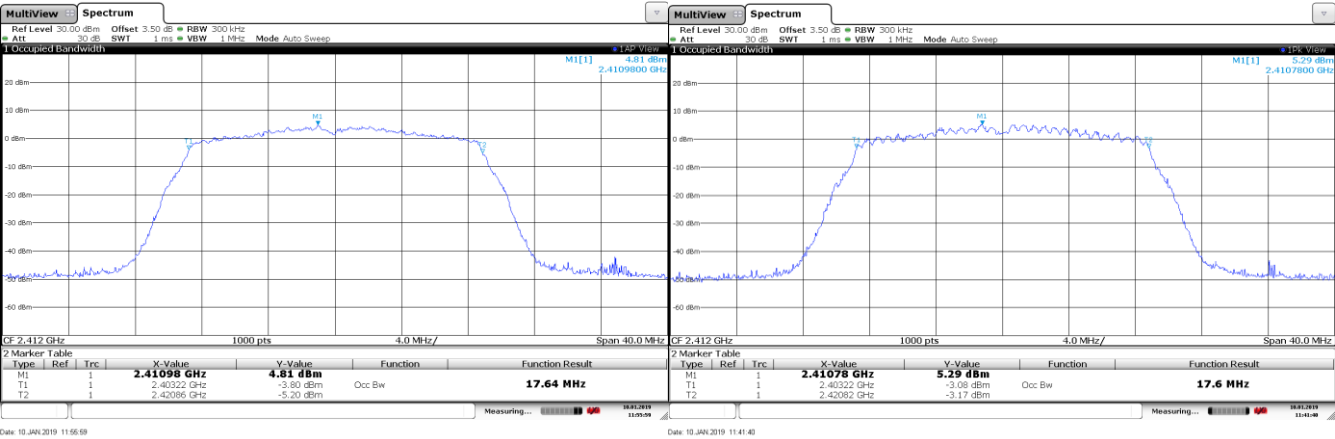
Channel	99 % bandwidth (MHz)	
	CORE 0	CORE 1
1	17.64	17.60
2	17.60	17.60
3	17.64	17.60
4	17.64	17.60
5	17.60	17.60
6	17.64	17.60
7	17.72	17.64
8	17.64	17.64
9	17.64	17.60
10	17.60	17.60
11	17.60	17.56
12	17.60	17.56
13	17.56	17.56
Measurement uncertainty (kHz)		<± 23.08

Mode : 802.11n HT20 – TxBF – 20MHz – MIMO – CORE 0 & CORE 1 & CORE 2

Channel	99 % bandwidth (MHz)		
	CORE 0	CORE 1	CORE 2
1	17.68	17.68	17.64
2	17.68	17.68	17.60
3	17.72	17.68	17.64
4	17.72	17.68	17.68
5	17.72	17.68	17.68
6	17.80	17.68	17.72
7	17.76	17.76	17.80
8	17.76	17.76	17.72
9	17.72	17.72	17.72
10	17.68	17.68	17.72
11	17.68	17.68	17.64
12	17.64	17.64	17.68
13	17.60	17.52	17.60
Measurement uncertainty (kHz)		<± 23.08	

Mode : 802.11n HT20 – TxBF – 20MHz – MIMO – CORE 0 & CORE 1

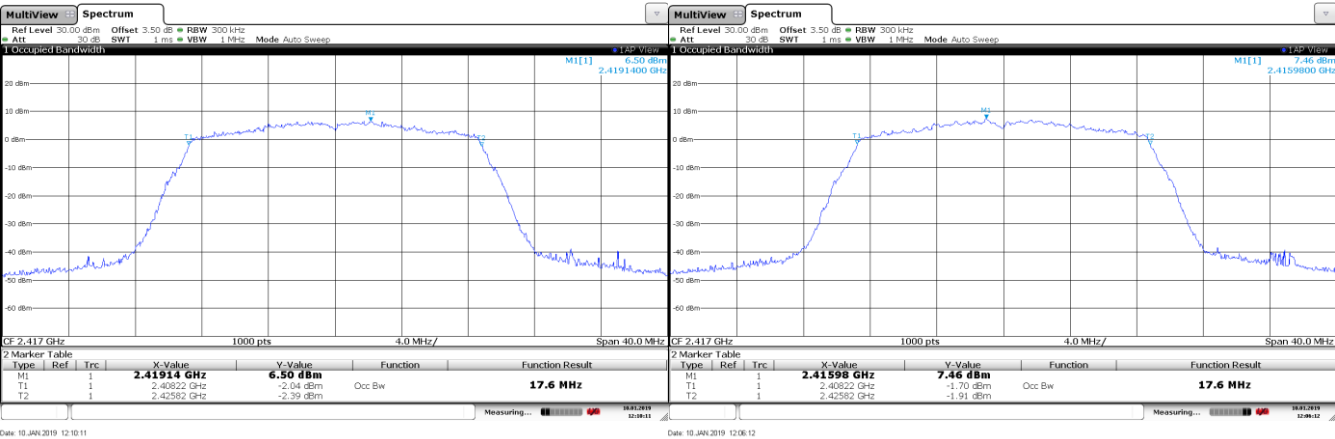
Channel 1



CORE 0

CORE 1

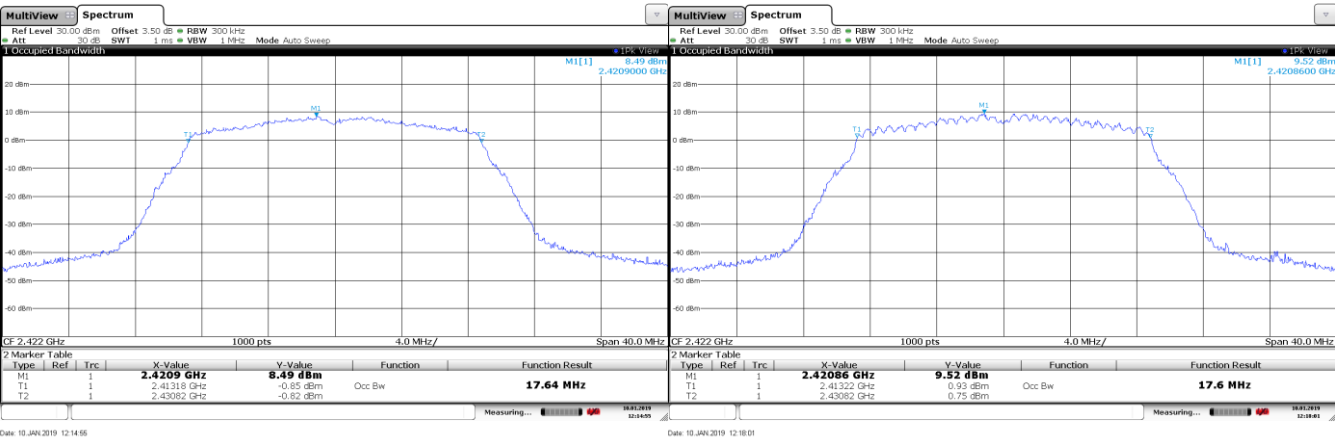
Channel 2



CORE 0

CORE 1

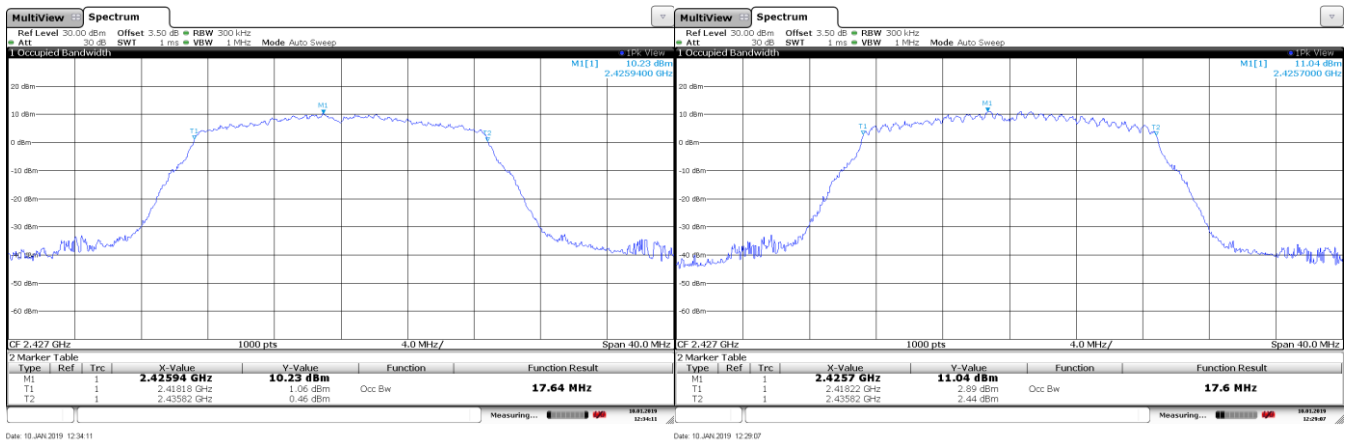
Channel 3



CORE 0

CORE 1

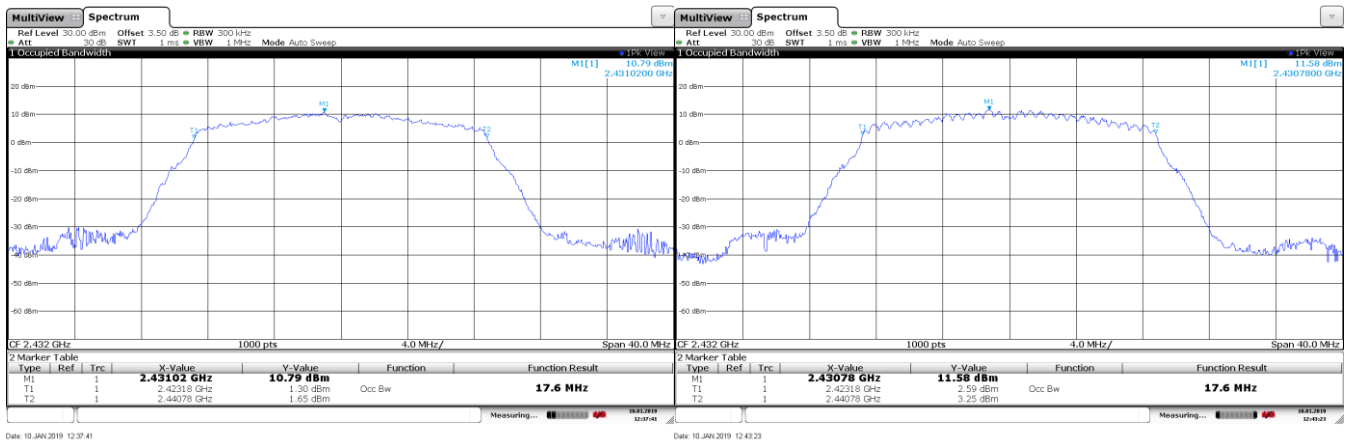
Channel 4



CORE 0

CORE 1

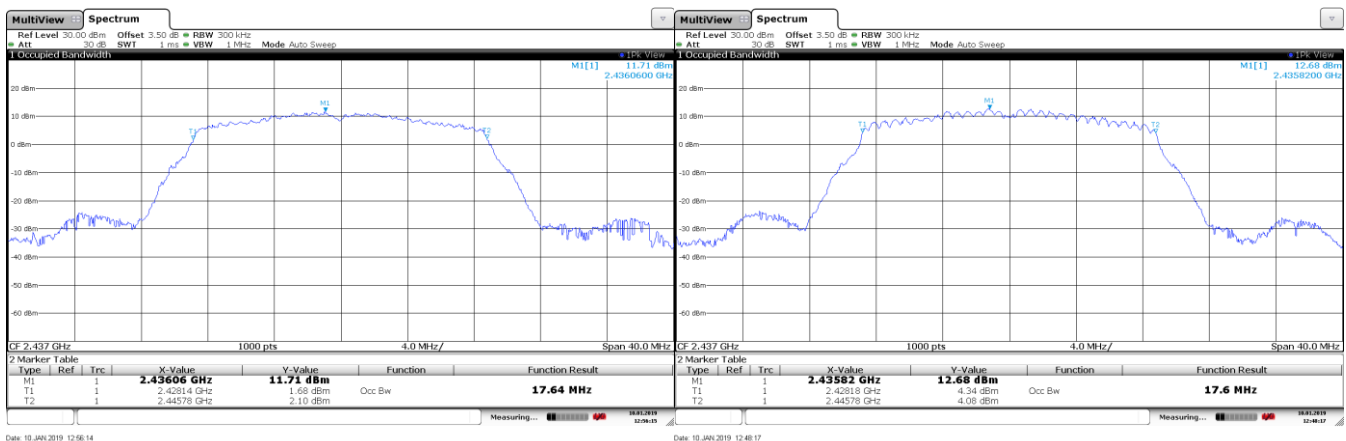
Channel 5



CORE 0

CORE 1

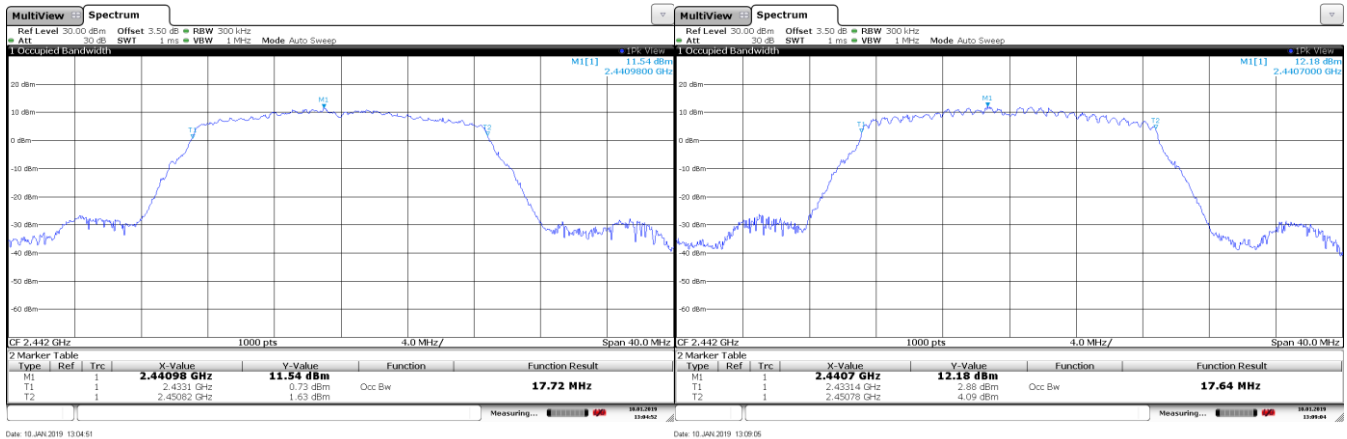
Channel 6



CORE 0

CORE 1

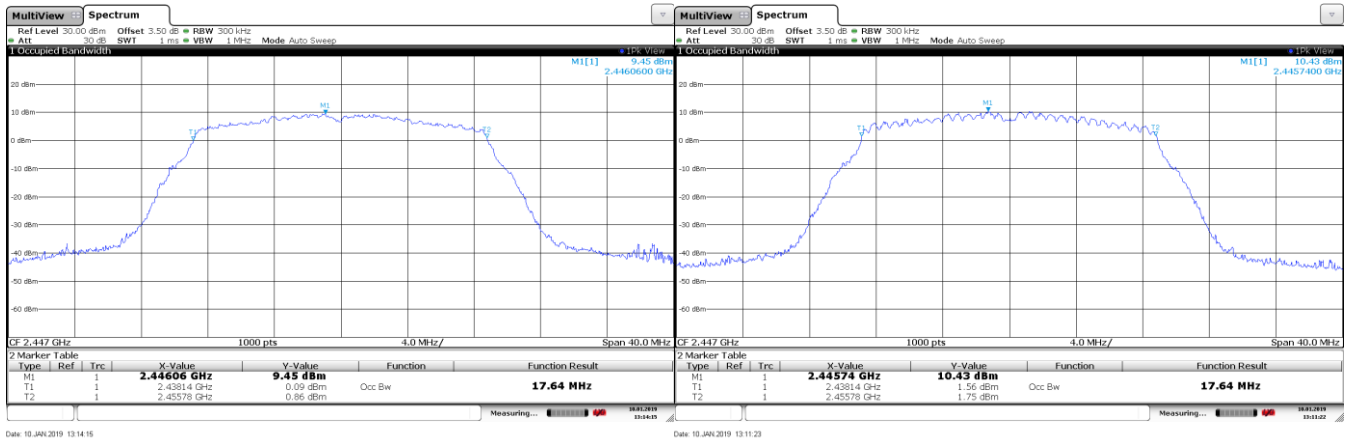
Channel 7



CORE 0

CORE 1

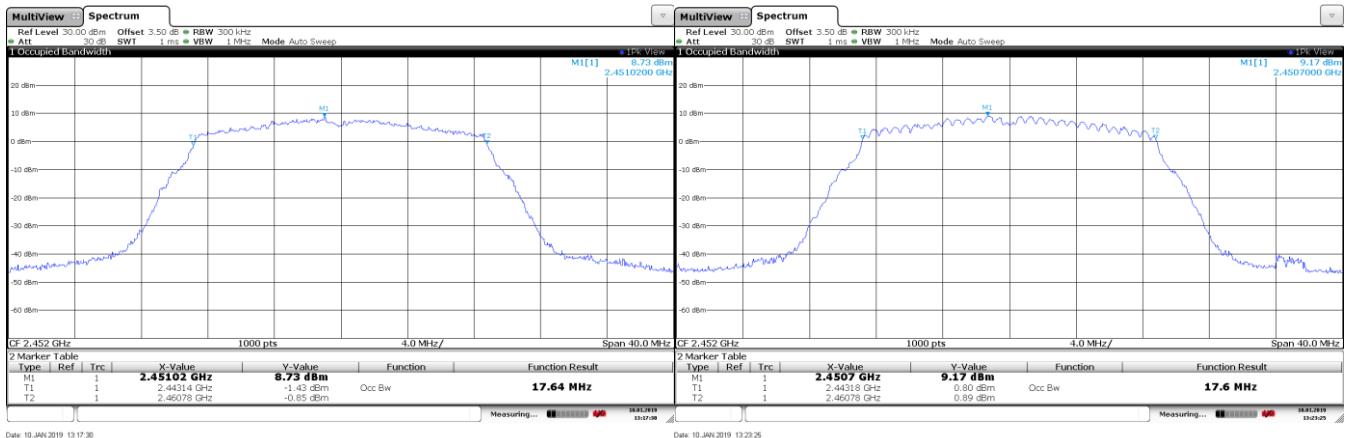
Channel 8



CORE 0

CORE 1

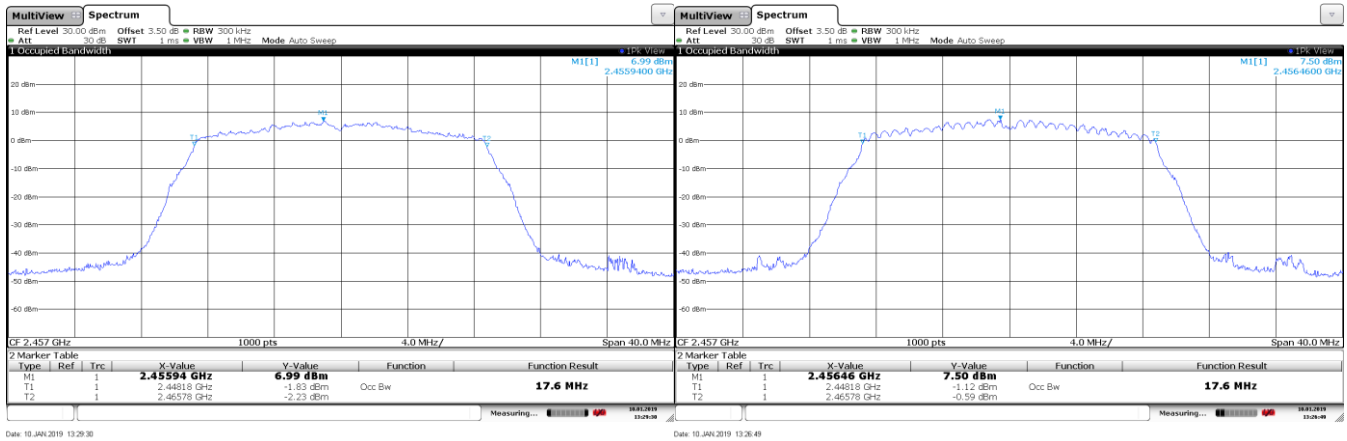
Channel 9



CORE 0

CORE 1

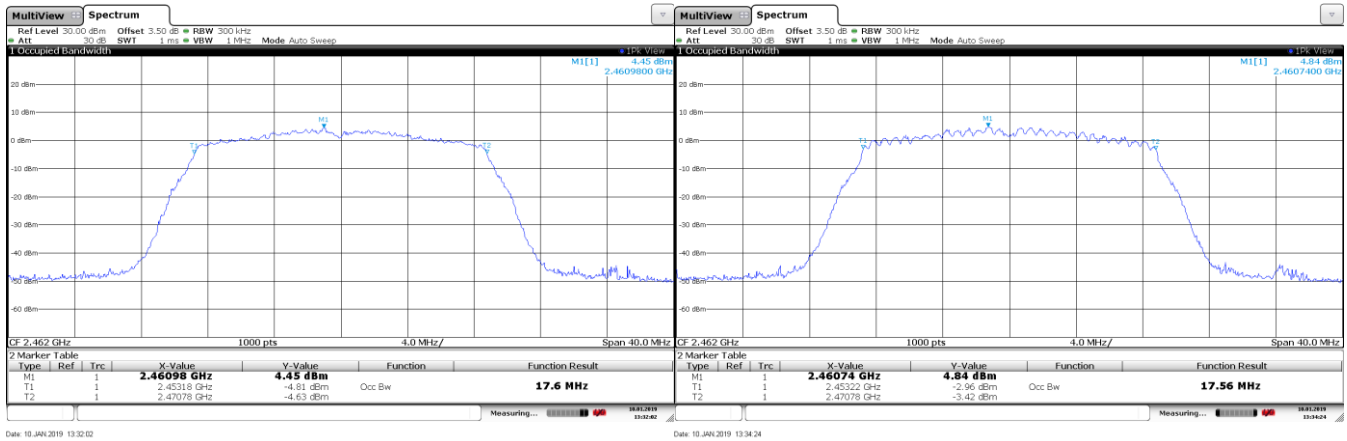
Channel 10



CORE 0

CORE 1

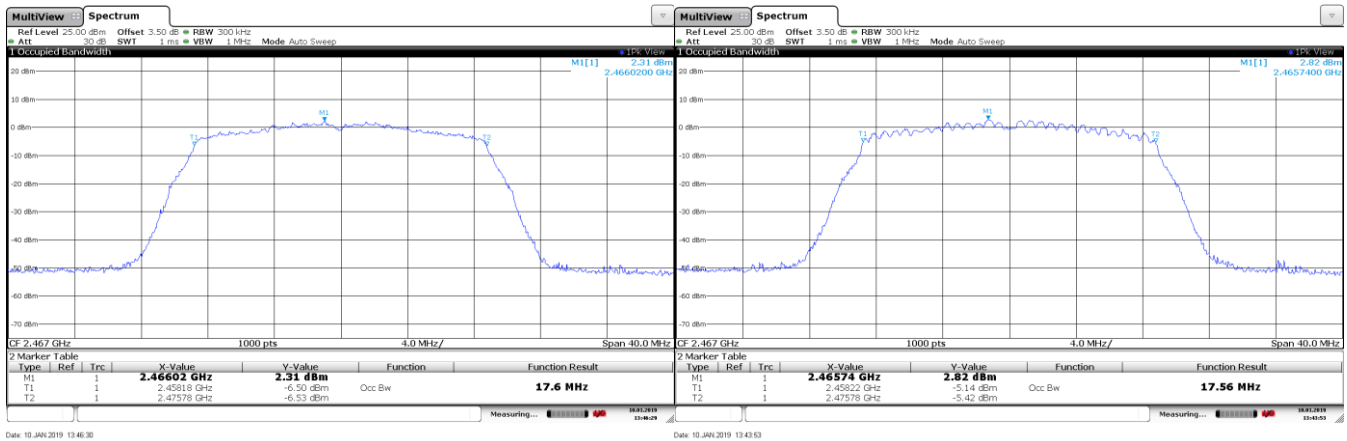
Channel 11



CORE 0

CORE 1

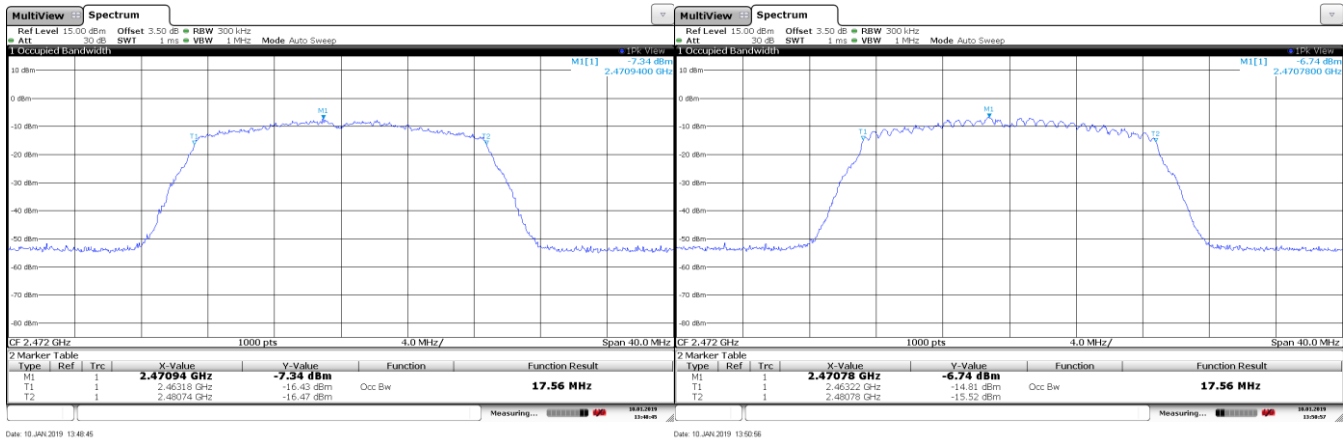
Channel 12



CORE 0

CORE 1

Channel 13

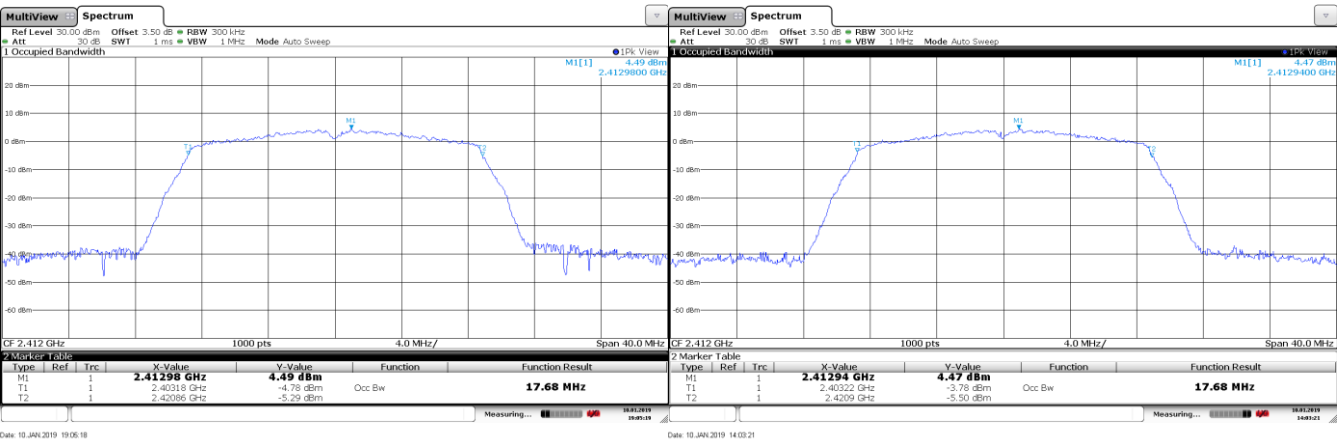


CORE 0

CORE 1

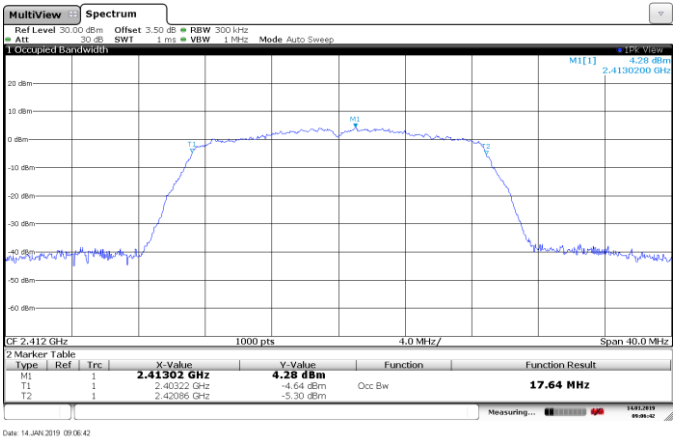
Mode : 802.11n HT20 – TxBF – 20MHz – MIMO – CORE 0 + CORE 1 + CORE 2

Channel 1



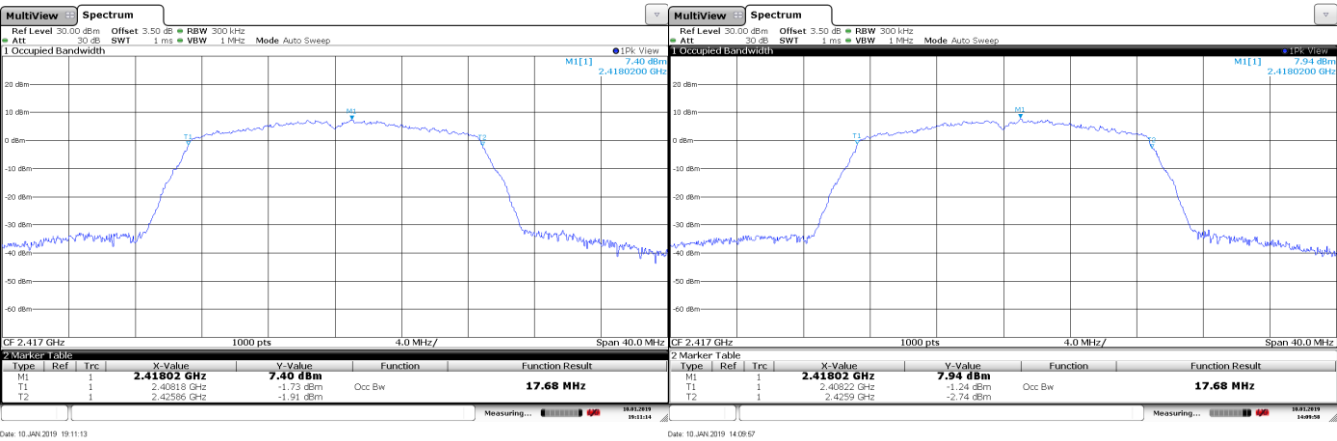
CORE 0

CORE 1



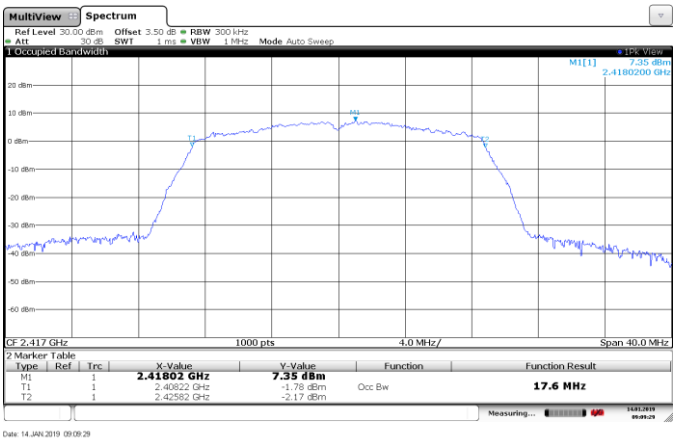
CORE 2

Channel 2



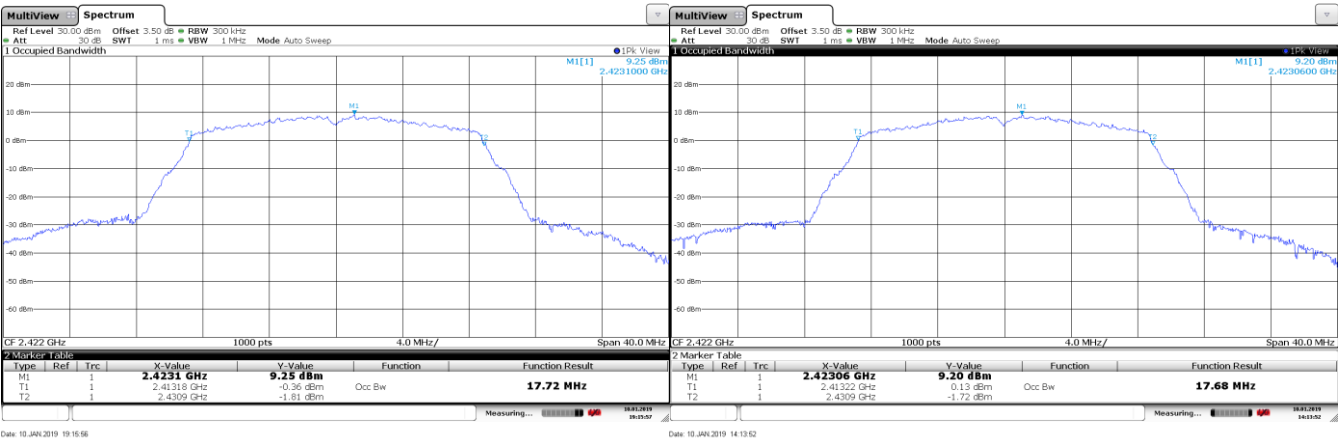
CORE 0

CORE 1



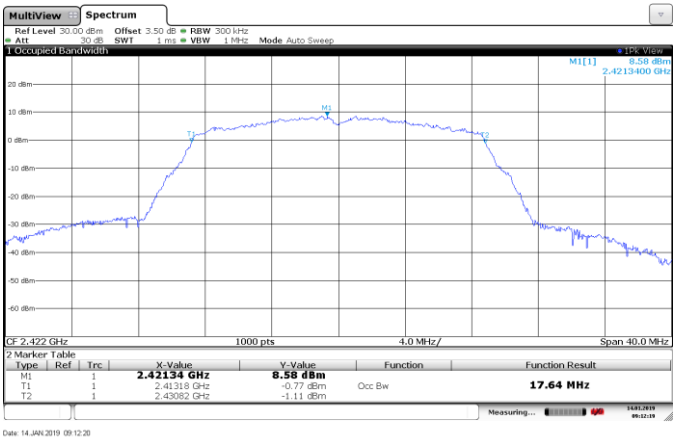
CORE 2

Channel 3



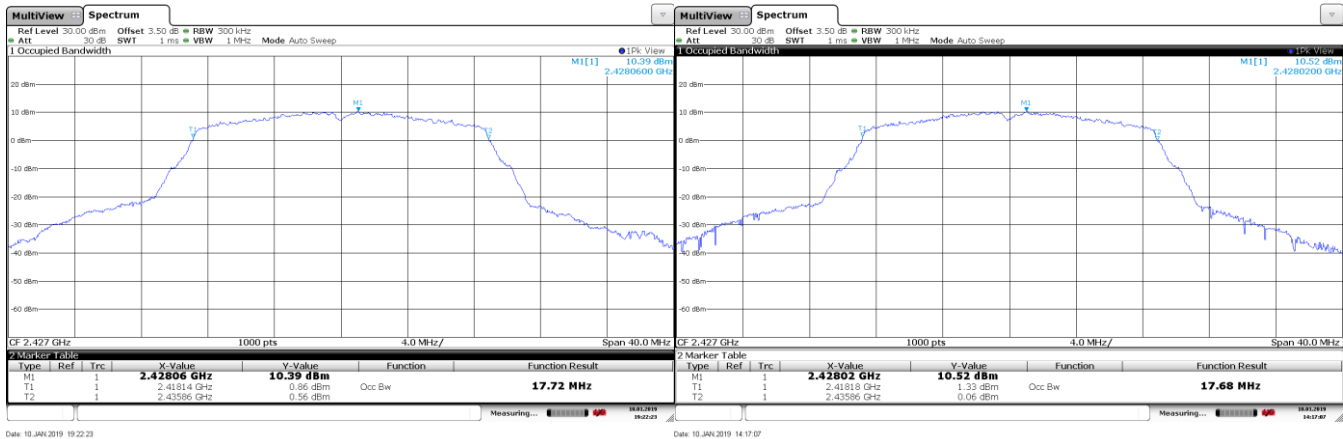
CORE 0

CORE 1



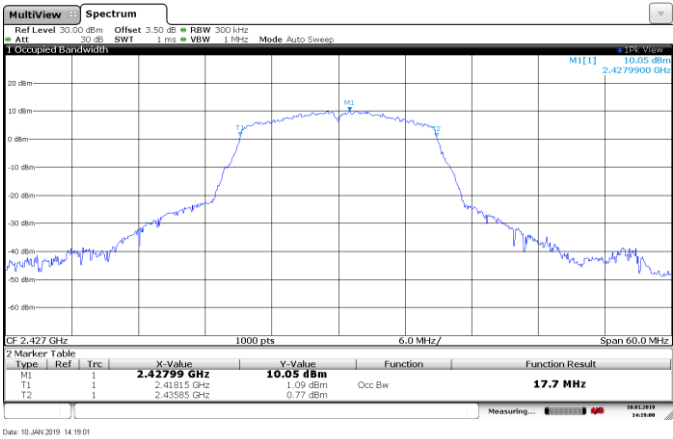
CORE 2

Channel 4



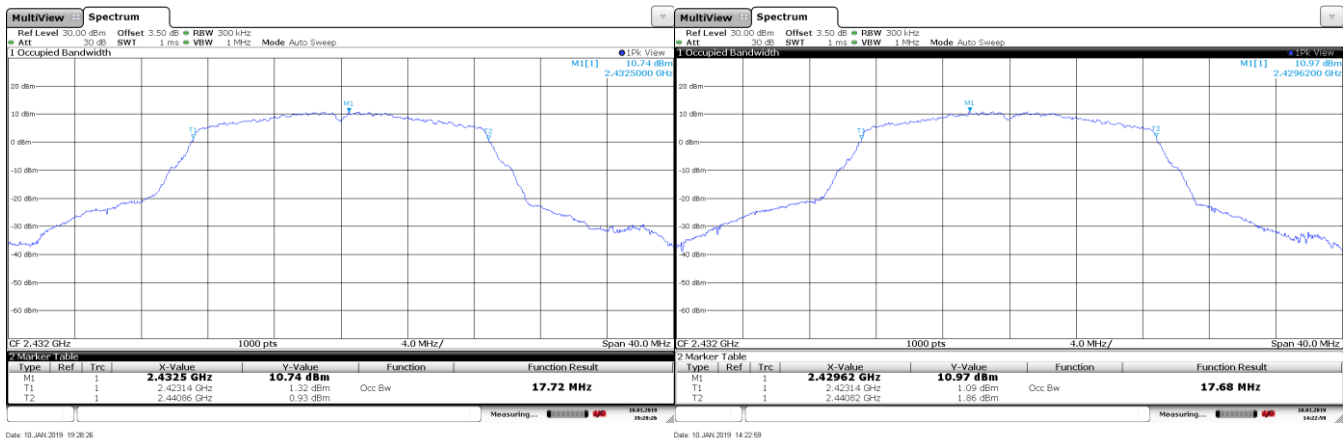
CORE 0

CORE 1



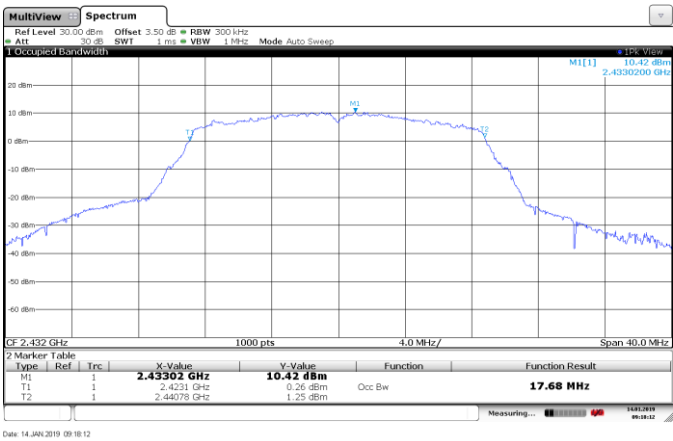
CORE 2

Channel 5



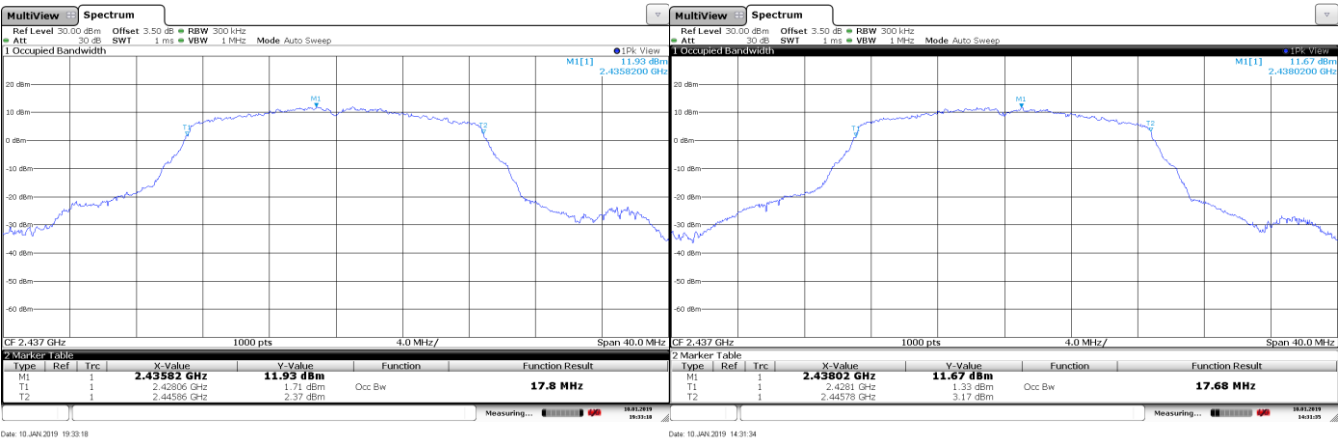
CORE 0

CORE 1



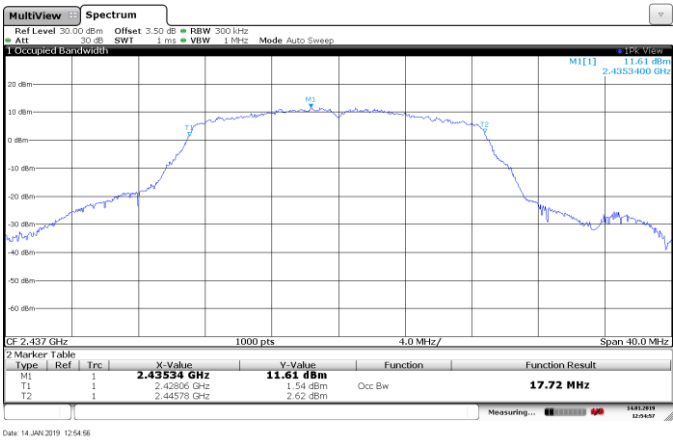
CORE 2

Channel 6



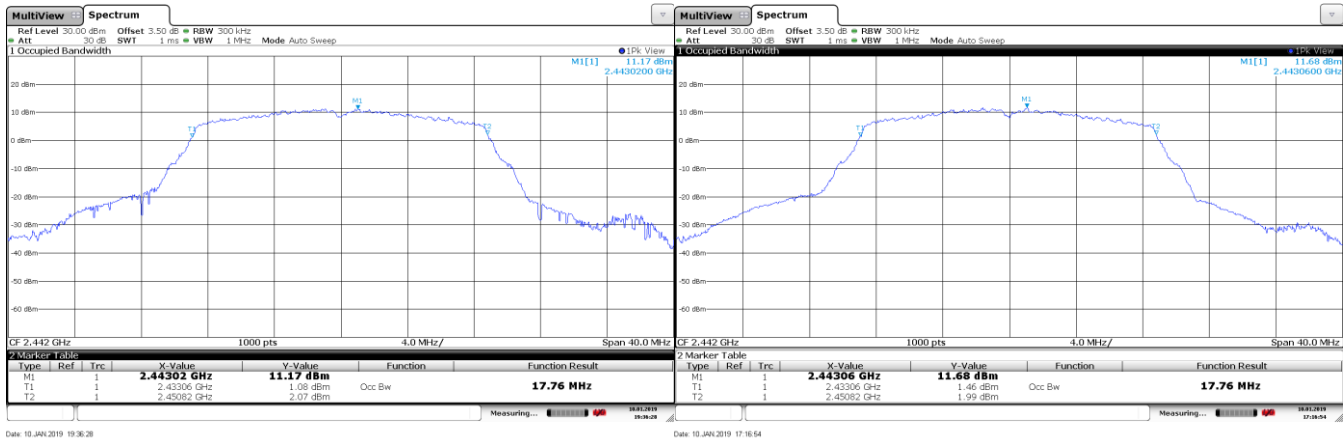
CORE 0

CORE 1



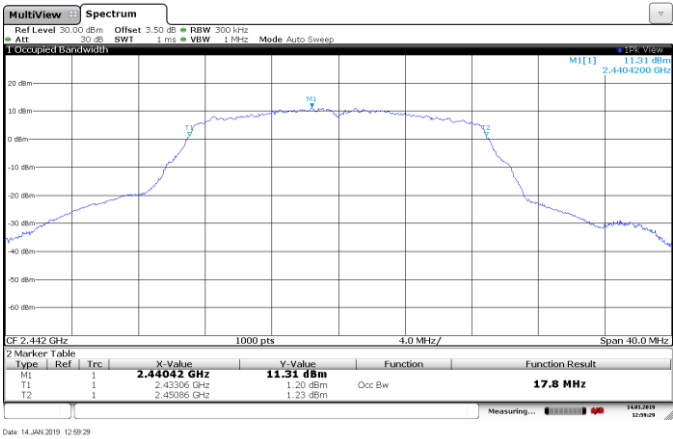
CORE 2

Channel 7



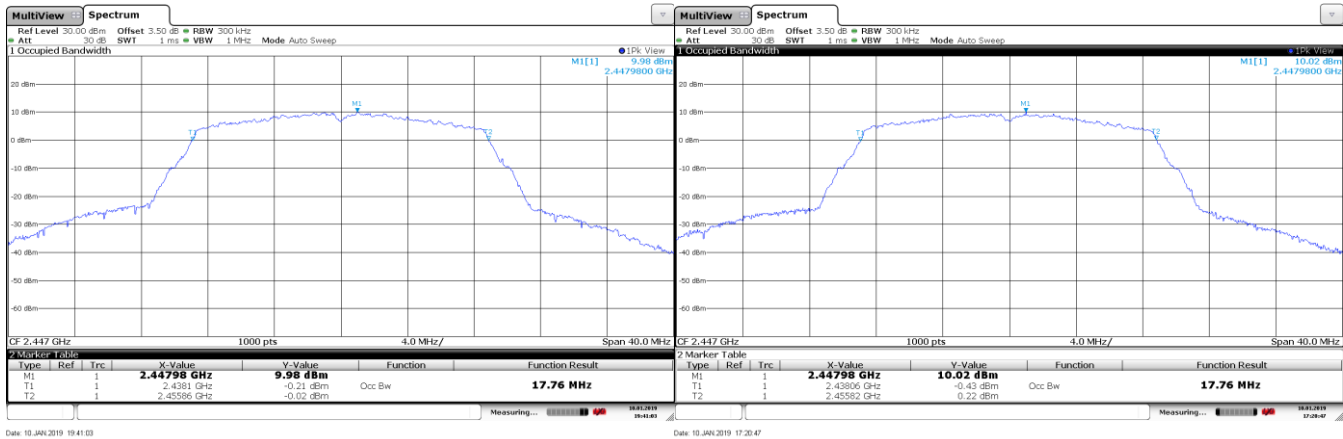
CORE 0

CORE 1



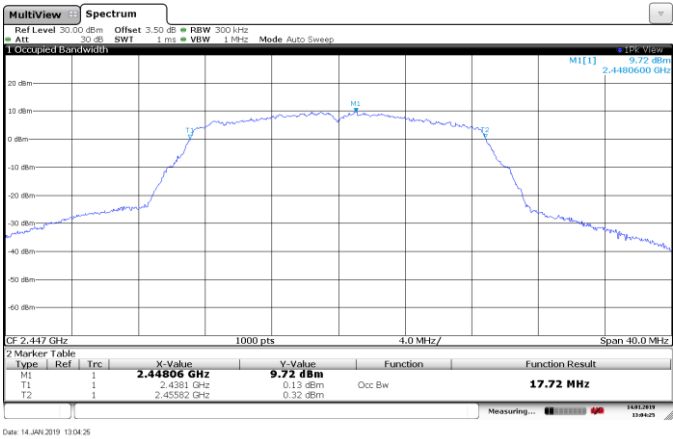
CORE 2

Channel 8



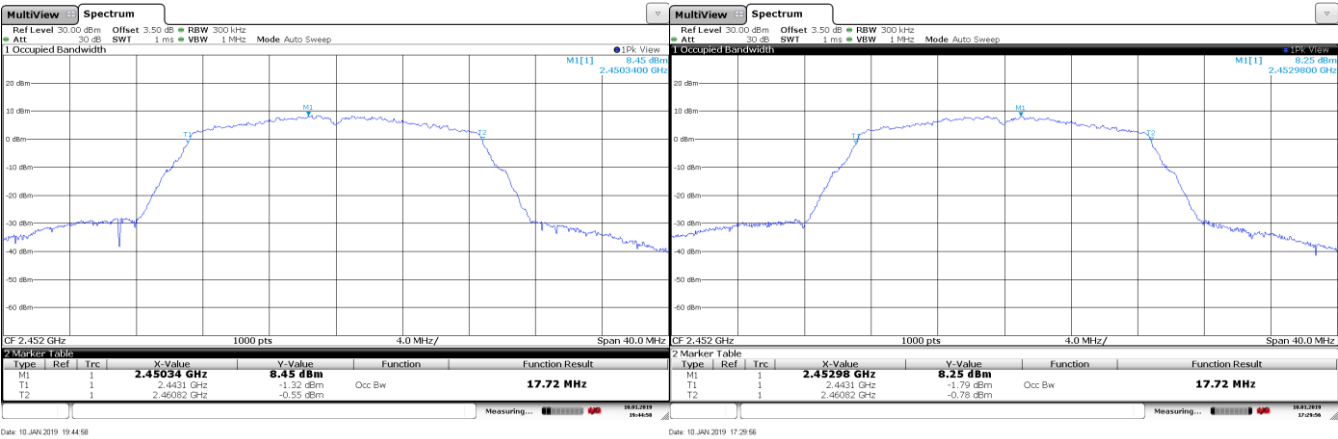
CORE 0

CORE 1



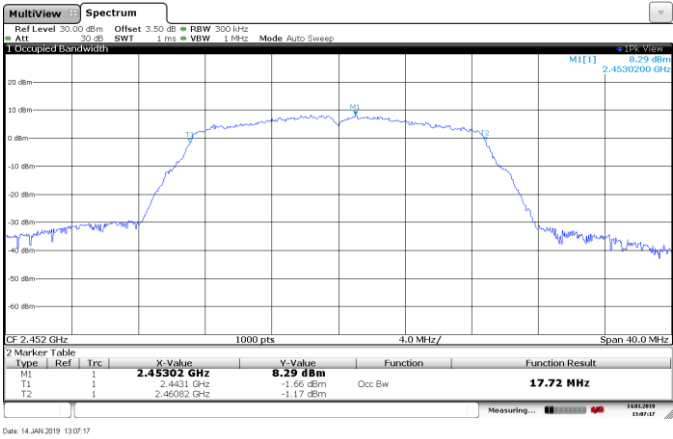
CORE 2

Channel 9



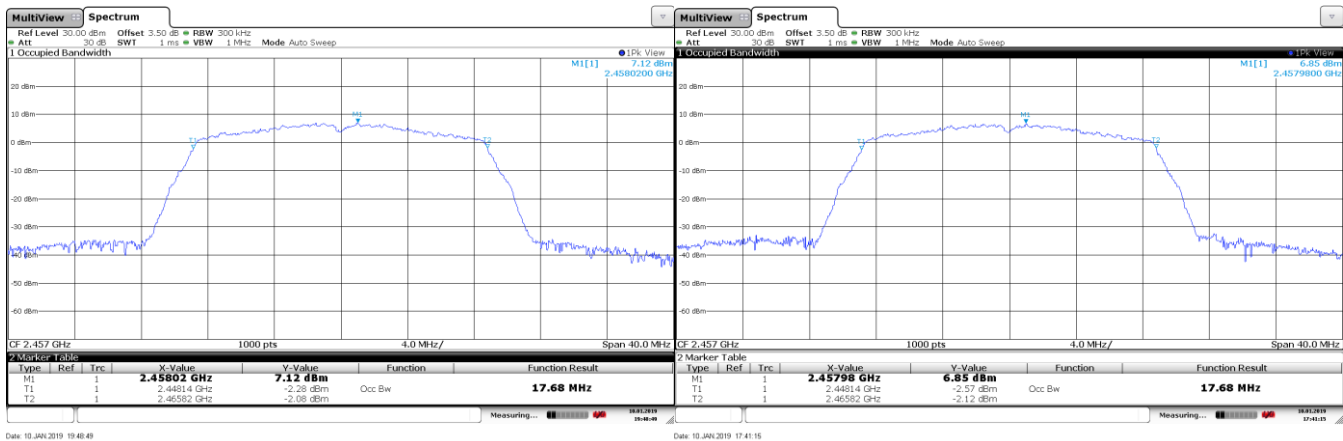
CORE 0

CORE 1



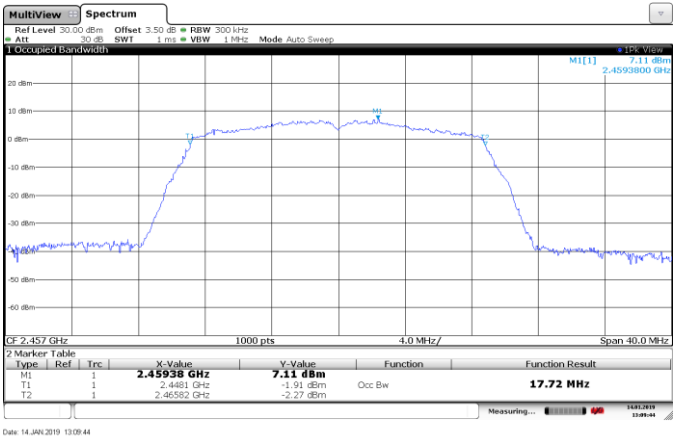
CORE 2

Channel 10



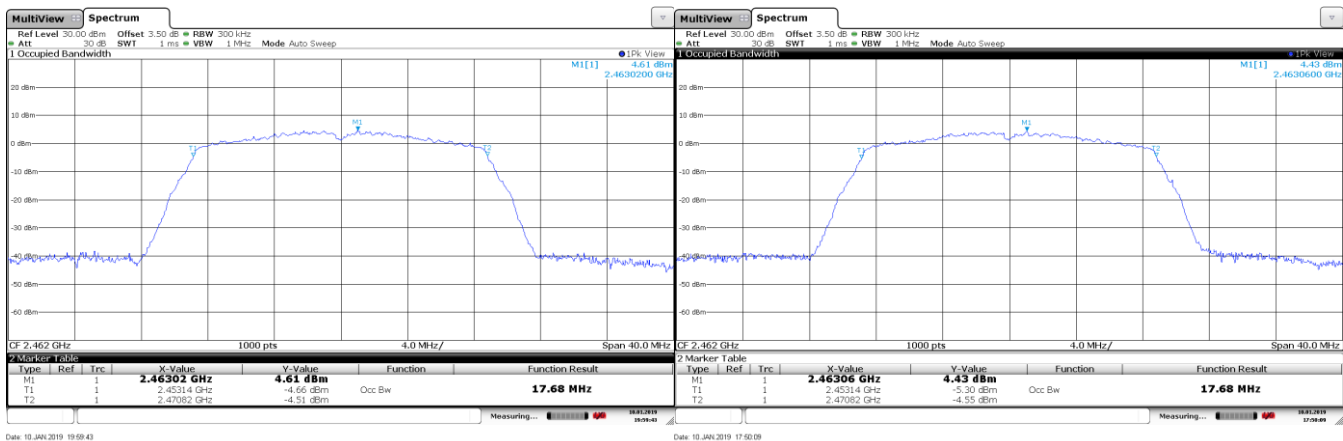
CORE 0

CORE 1



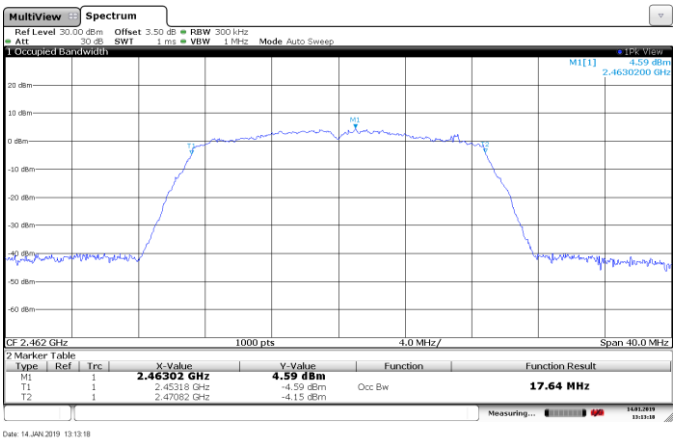
CORE 2

Channel 11



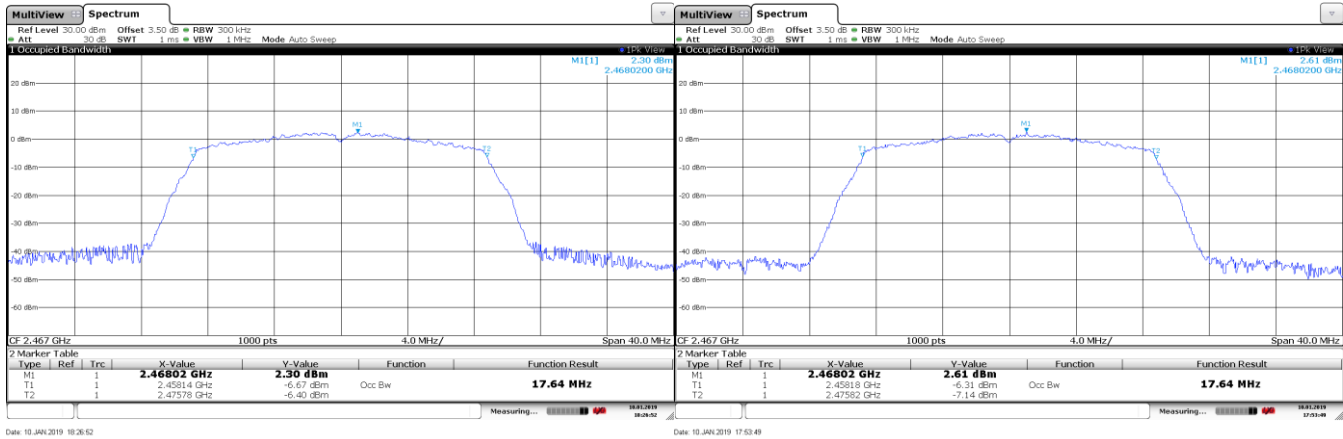
CORE 0

CORE 1



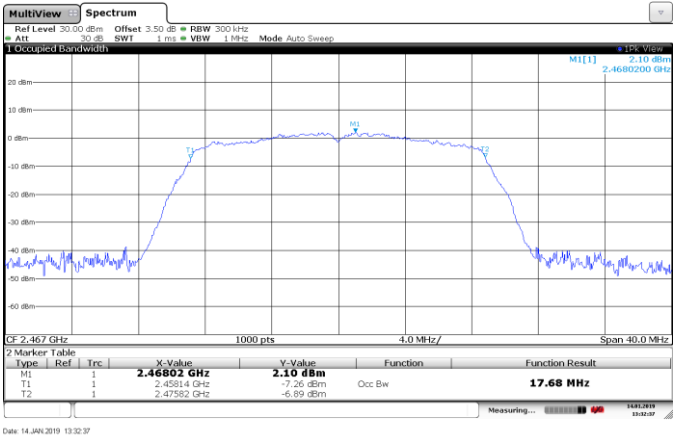
CORE 2

Channel 12



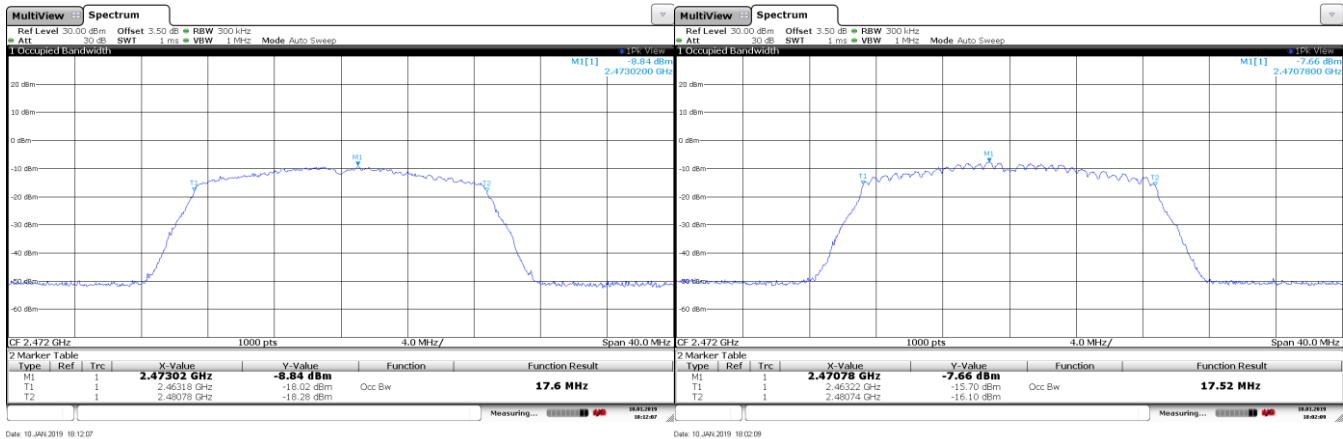
CORE 0

CORE 1



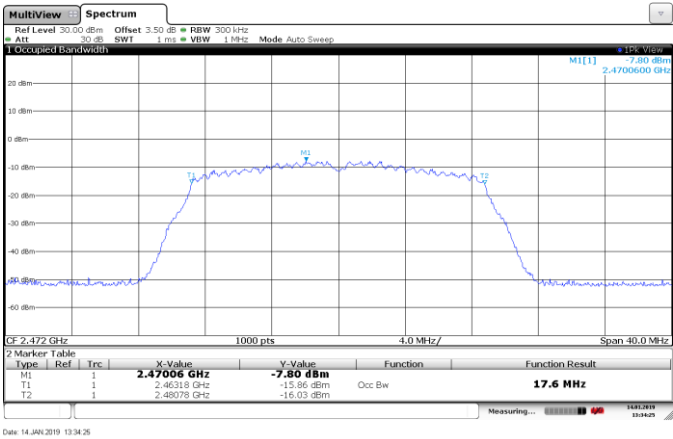
CORE 2

Channel 13



CORE 0

CORE 1



CORE 2

Transmitter Duty Cycle

RESULTS:

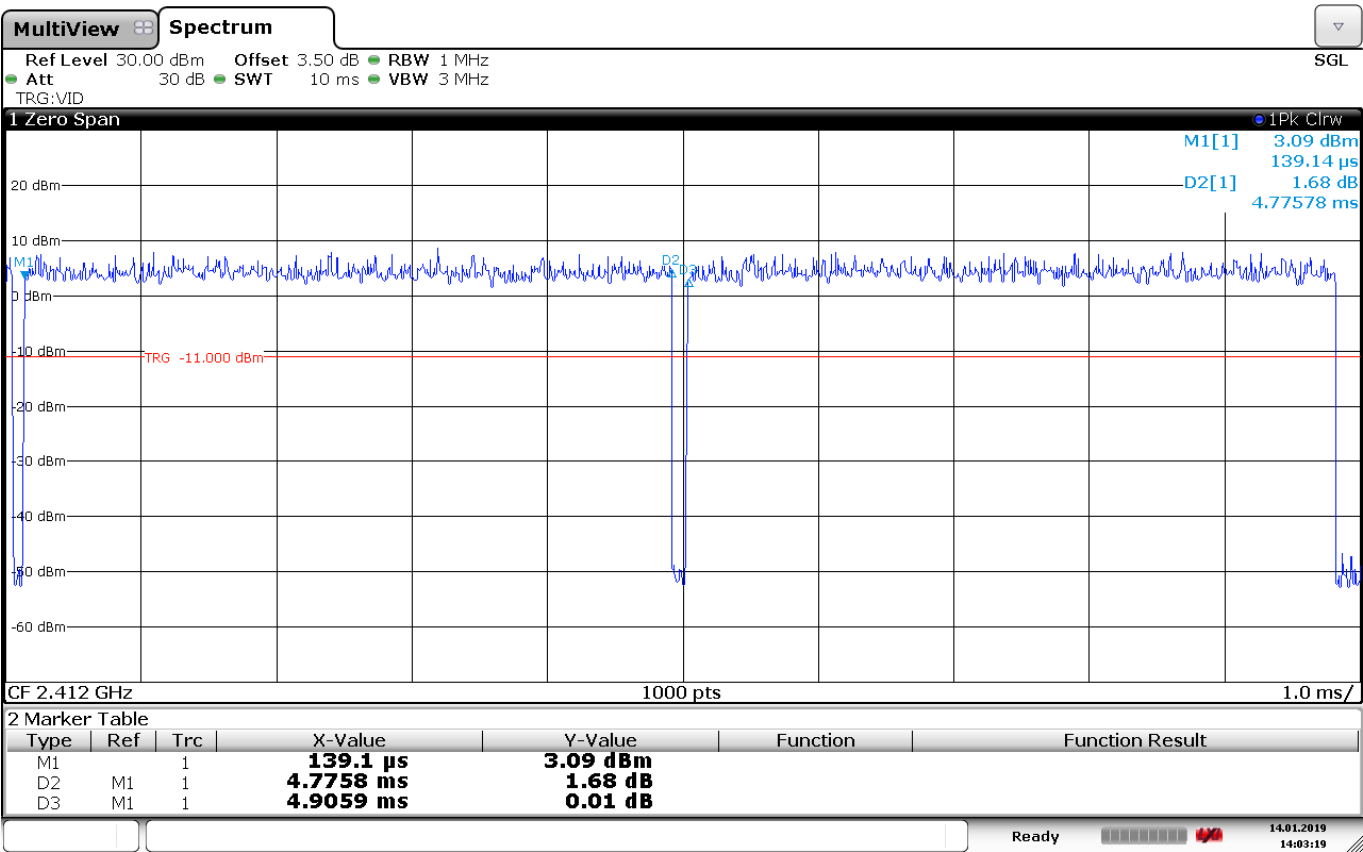
The equipment transmits continuously in all Non-TxBF modes mode with a duty cycle > 98 %.

The transmitter duty cycle in TxBF modes is measured using a spectrum analyser in time domain and calculated:

Duty cycle correction: $10 \log (1/ (\text{Pulse duration} / \text{Period}))$

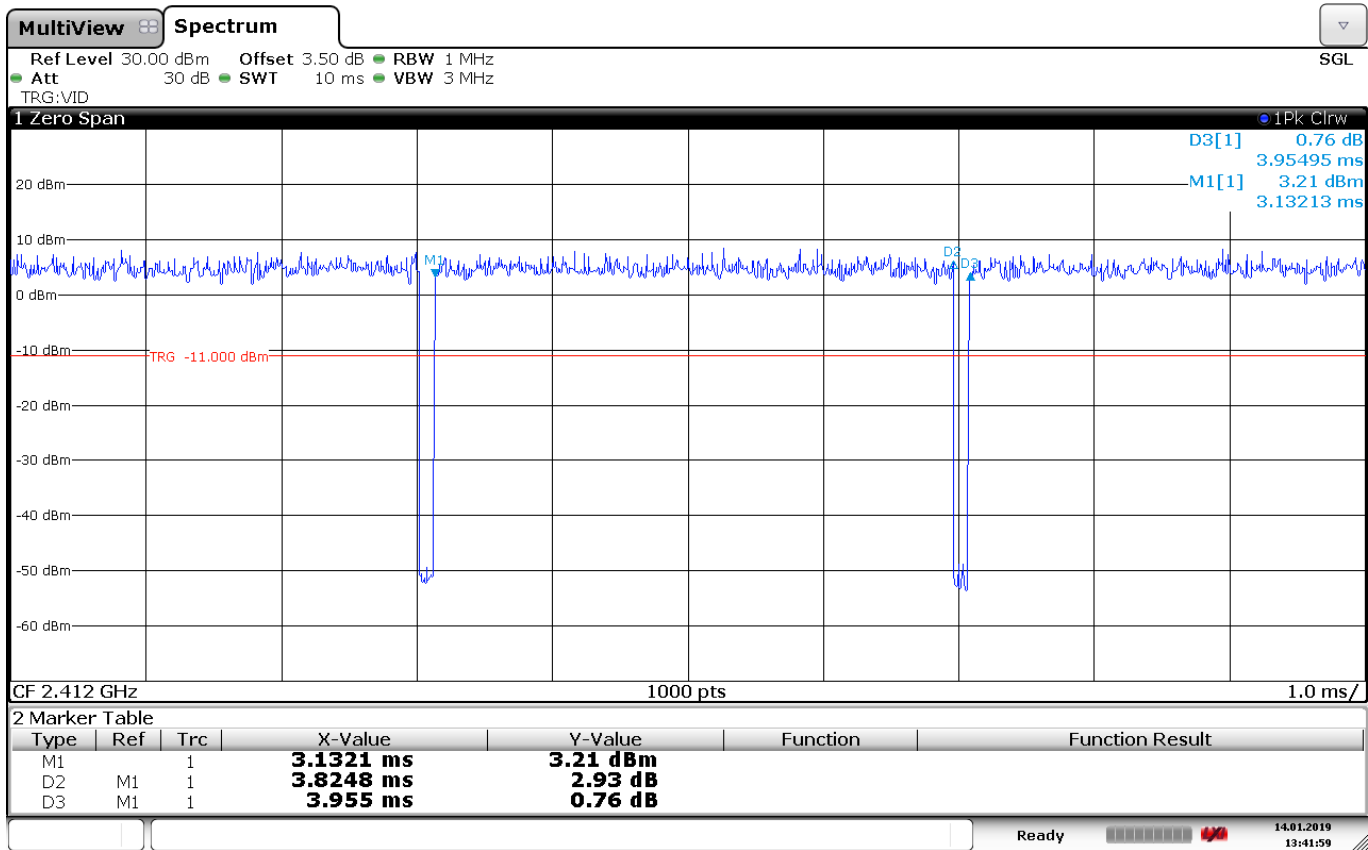
Mode	Pulse duration (ms)	Period (ms)	Duty Cycle correction (dB)
2Tx TxBF	4.7758	4.9059	0.117
3Tx TxBF	3.955	3.8248	0.145

2Tx TxBF:



Date: 14.JAN.2019 14:03:19

3Tx TxBF:



Date: 14.JAN.2019 13:41:59

FCC Section 15.247 Subclause (a) (2) / RSS-247 5.2. (a). 6 dB Bandwidth

SPECIFICATION

The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS:

6 dB Bandwidth (see next plots).

The test was performed for the next worst case modes on one antenna port since the results does not depend on either the operating port or the number of cores used:

- 802.11b: 1 Mbit/s / SISO on Core 0
- 802.11g: 6 Mbit/s / SISO on Core 0
- 802.11n HT20: MCS0 / SISO on Core 0

Mode : 802.11b - 20MHz – SISO – CORE 0

Channel	6 dB bandwidth (MHz)
1	8.064
2	8.070
3	8.070
4	8.045
6	8.555
10	8.044
11	8.070
12	8.071
13	8.518
Measurement uncertainty (kHz)	<± 1.80

Mode : 802.11g - 20MHz – SISO – CORE 0

Channel	6 dB bandwidth (MHz)
1	15.093
2	15.108
3	15.078
4	15.088
5	15.101
6	15.053
8	15.058
9	15.090
10	15.096
11	15.076
12	15.118
13	15.094
Measurement uncertainty (kHz)	<± 1.80

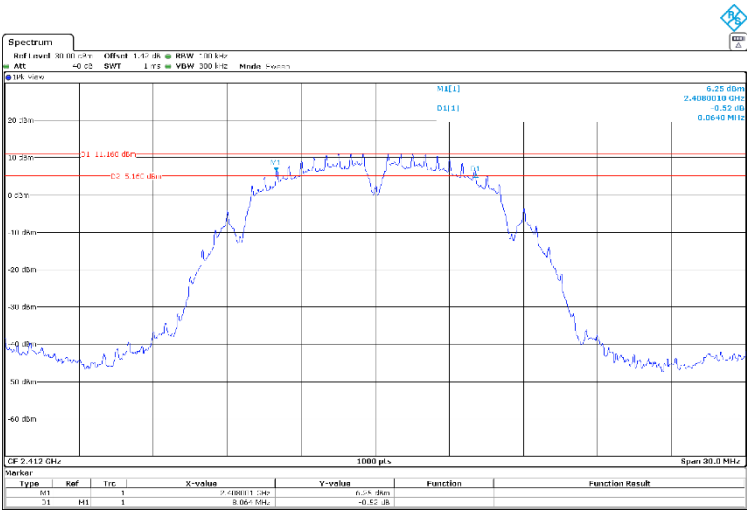
Mode : 802.11n HT20 - 20MHz – SISO – CORE 0

Channel	6 dB bandwidth (MHz)
1	15.068
2	15.088
3	15.091
4	15.078
5	15.089
6	15.059
8	15.108
9	15.089
10	15.108
11	15.096
12	15.138
13	15.049
Measurement uncertainty (kHz)	<± 1.80

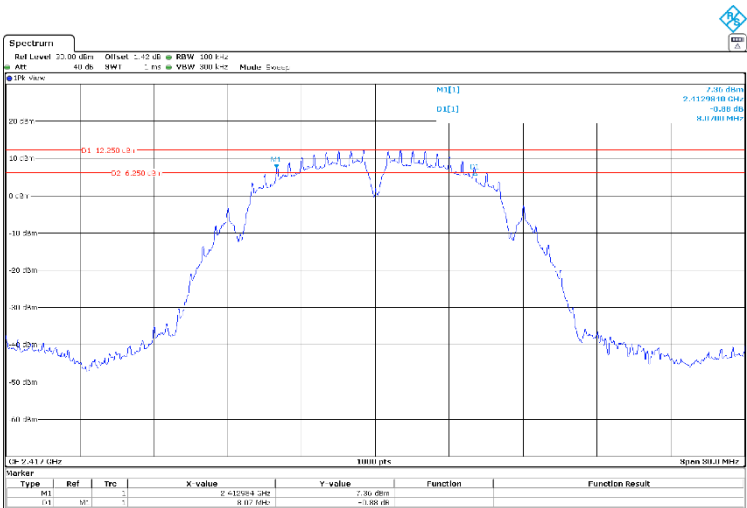
Verdict: PASS

Mode : 802.11b - 20MHz – SISO – CORE 0

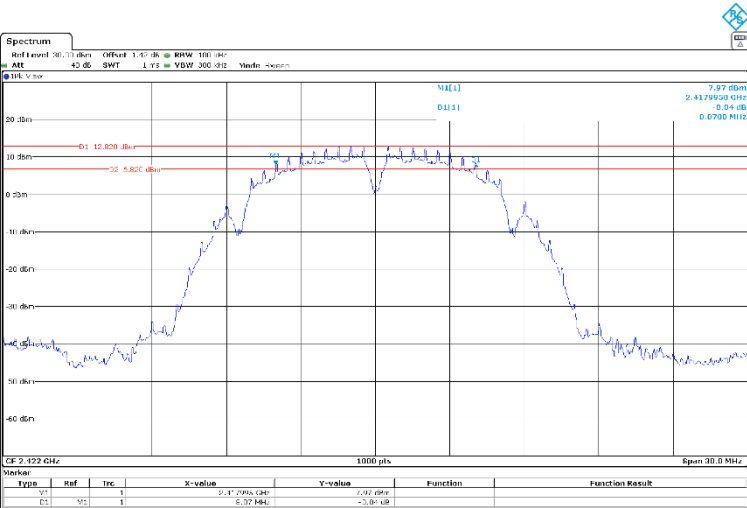
Channel 1



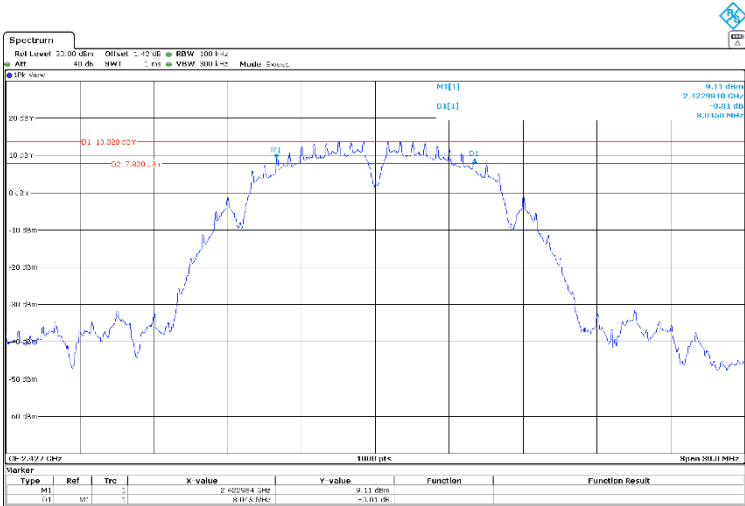
Channel 2



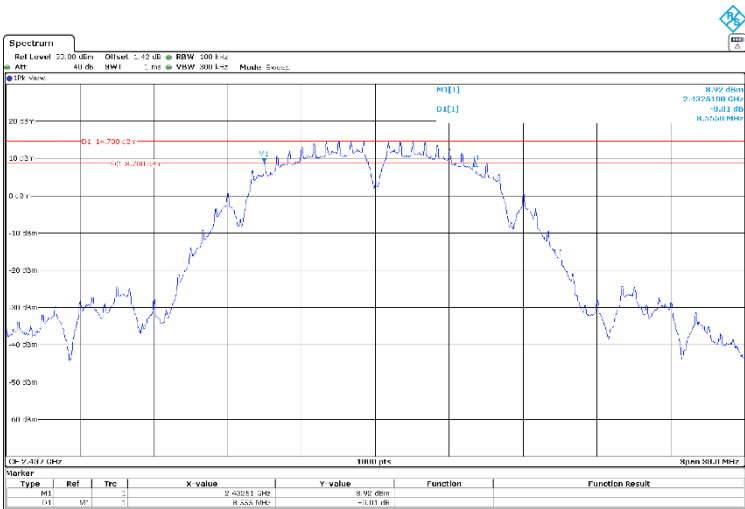
Channel 3



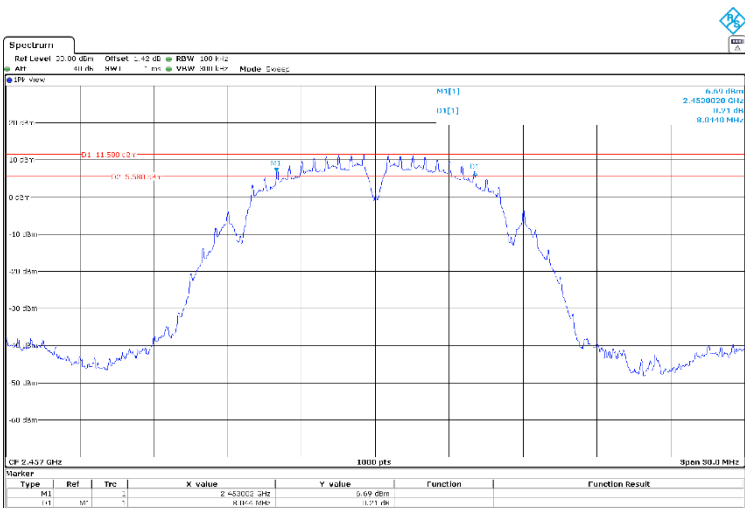
Channel 4



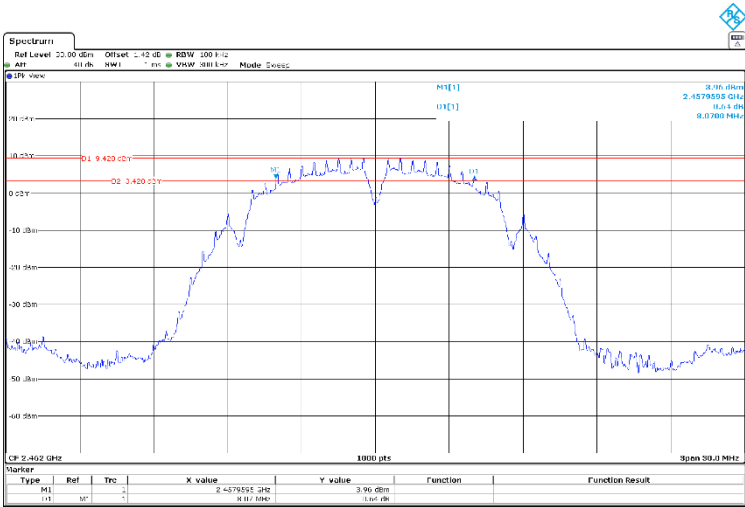
Channel 6



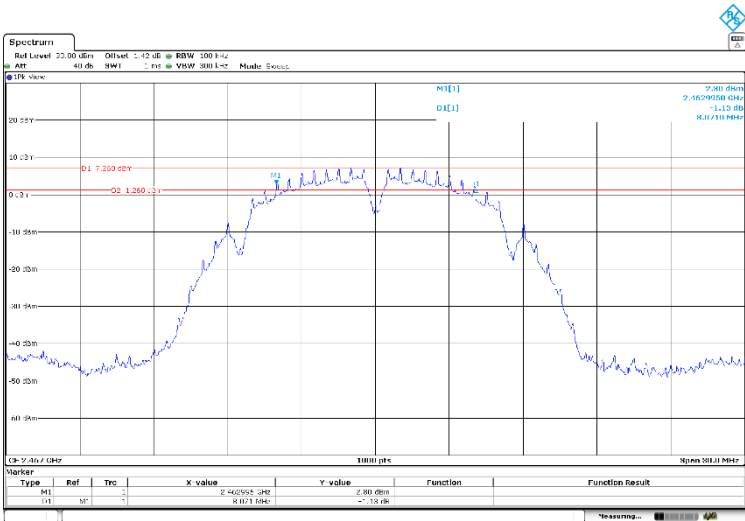
Channel 10



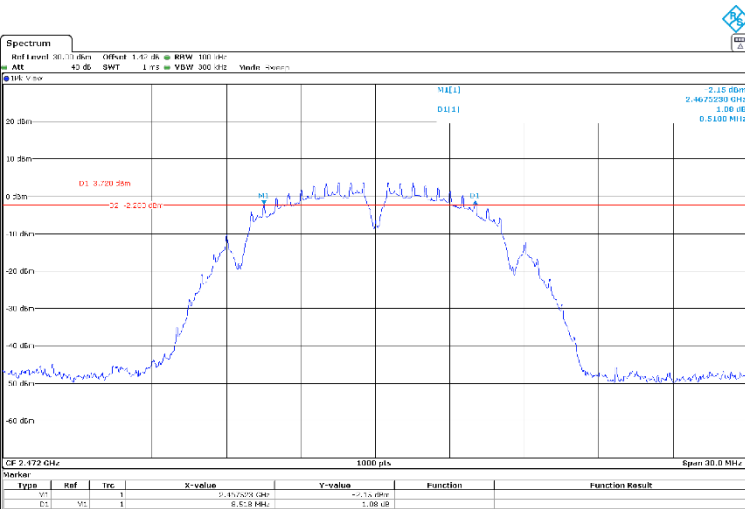
Channel 11



Channel 12

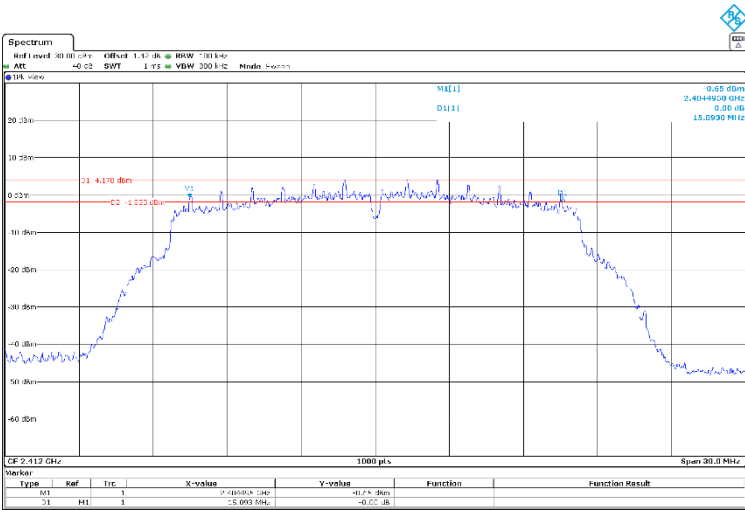


Channel 13

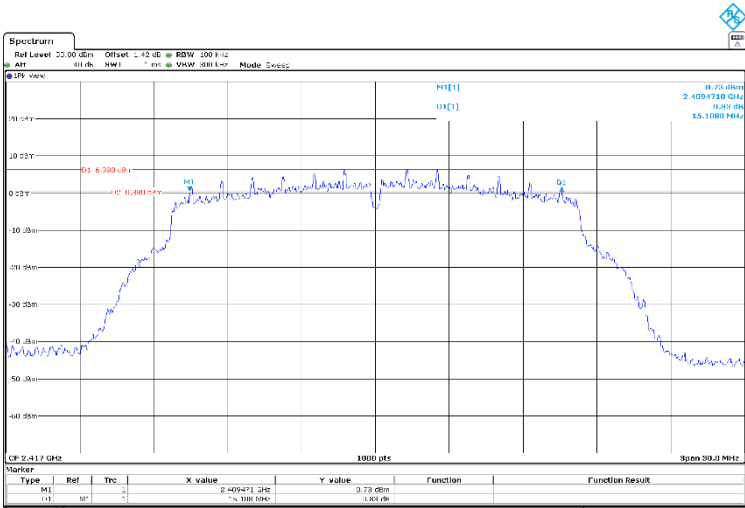


Mode : 802.11g - 20MHz – SISO – CORE 0

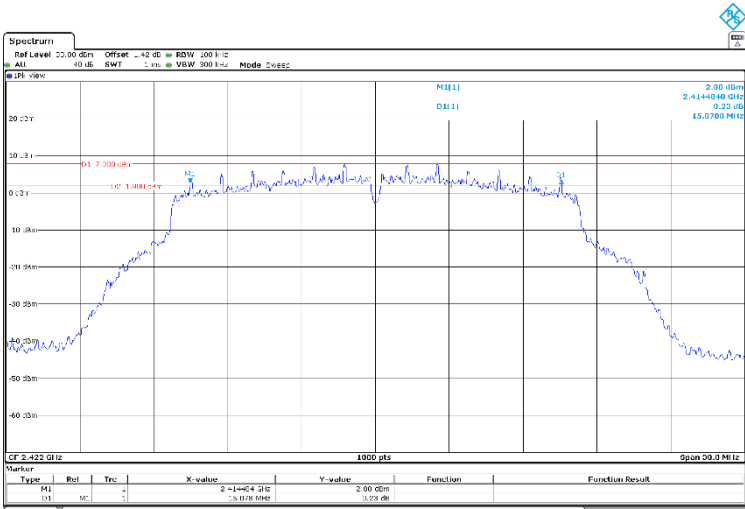
Channel 1



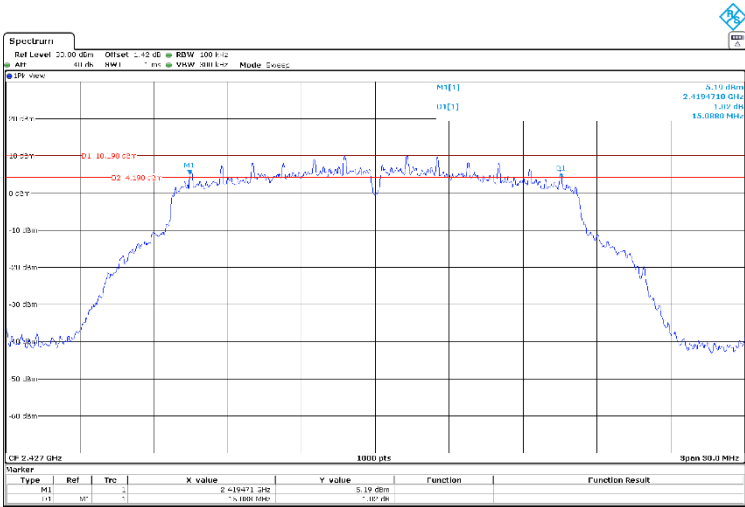
Channel 2



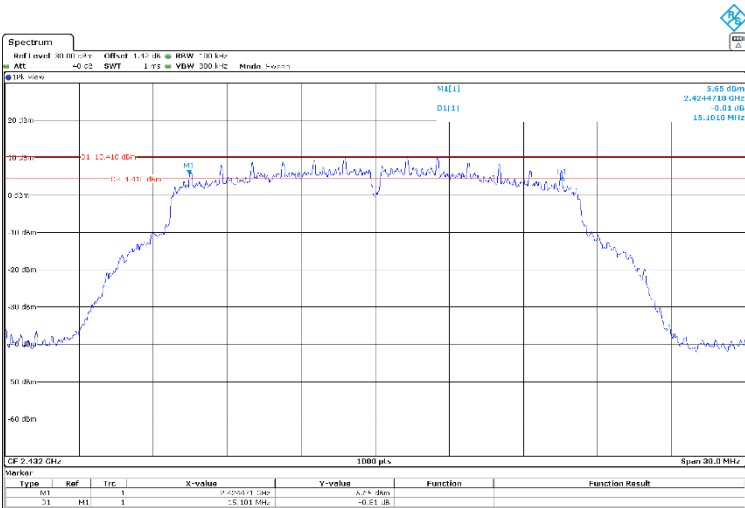
Channel 3



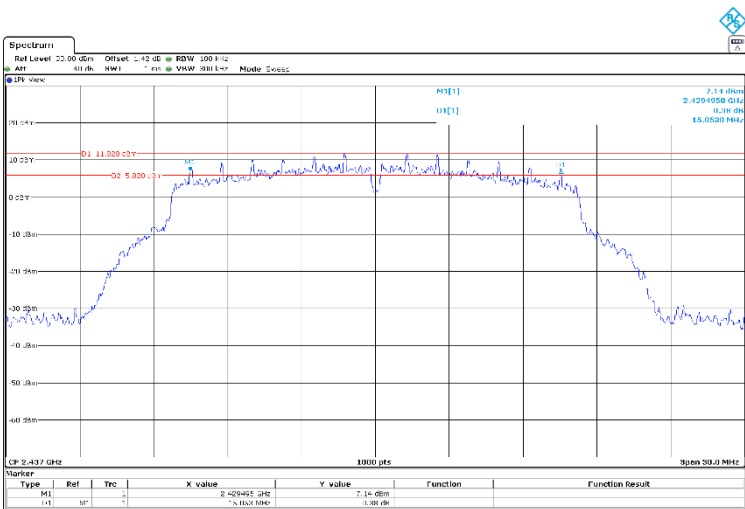
Channel 4



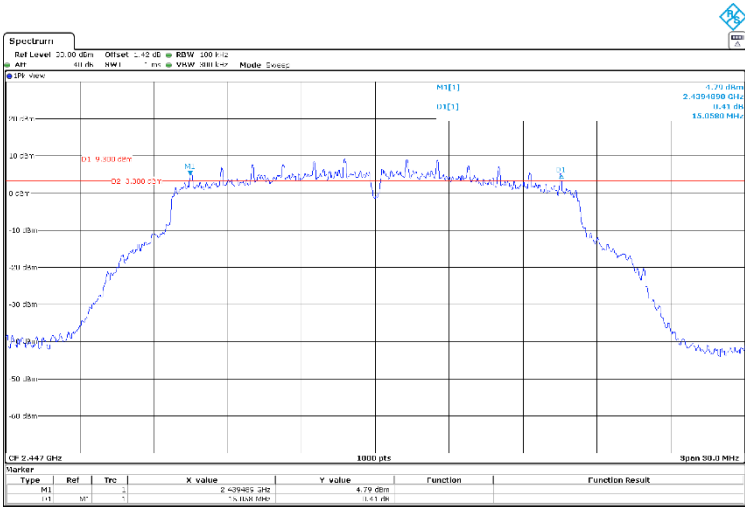
Channel 5



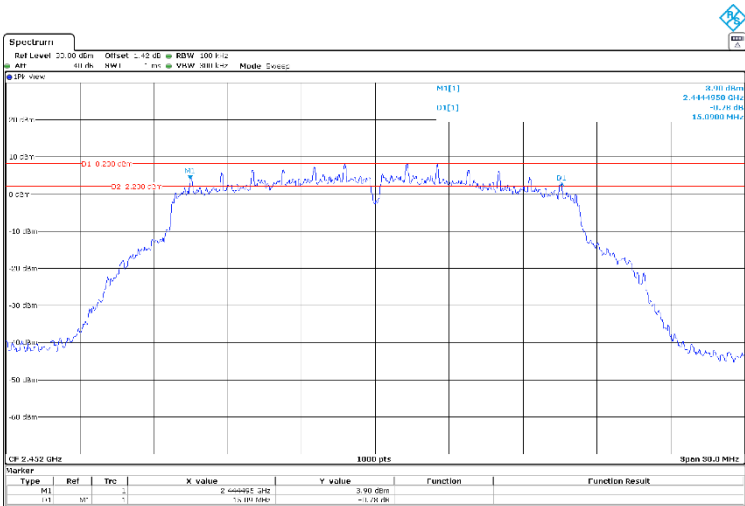
Channel 6



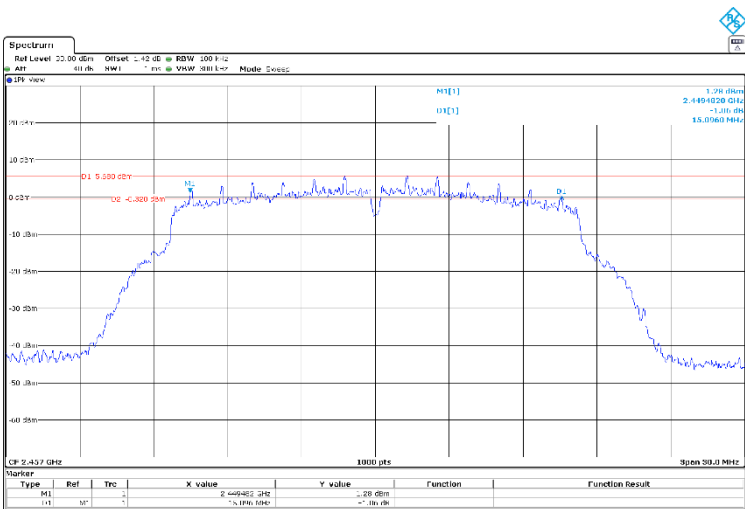
Channel 8



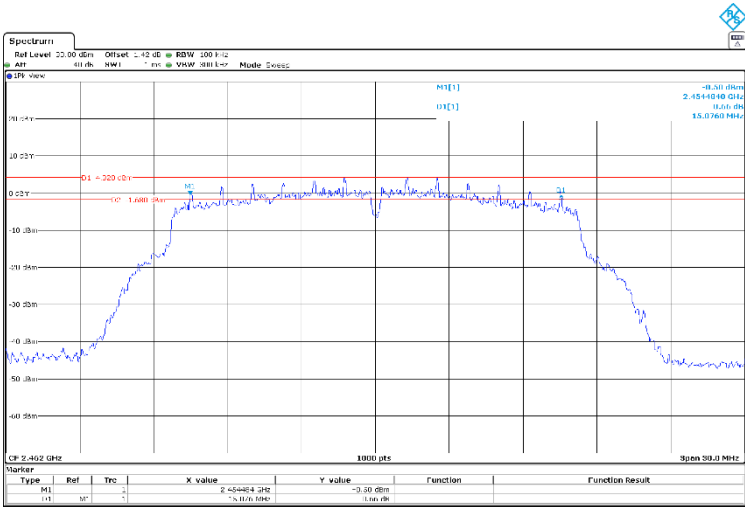
Channel 9



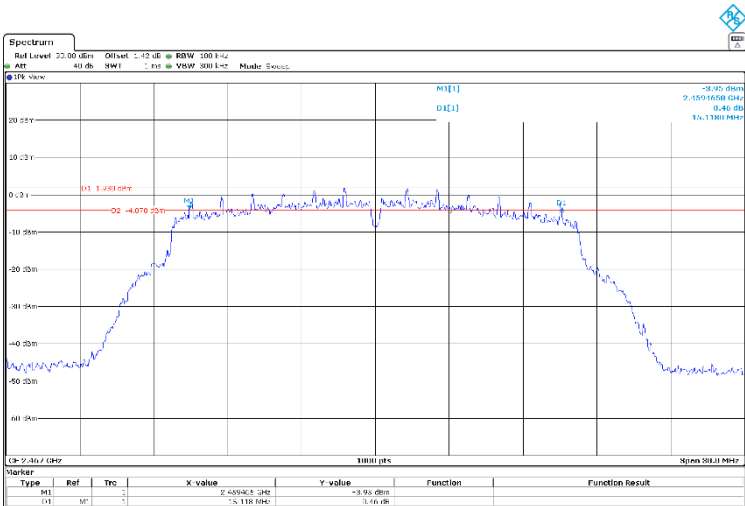
Channel 10



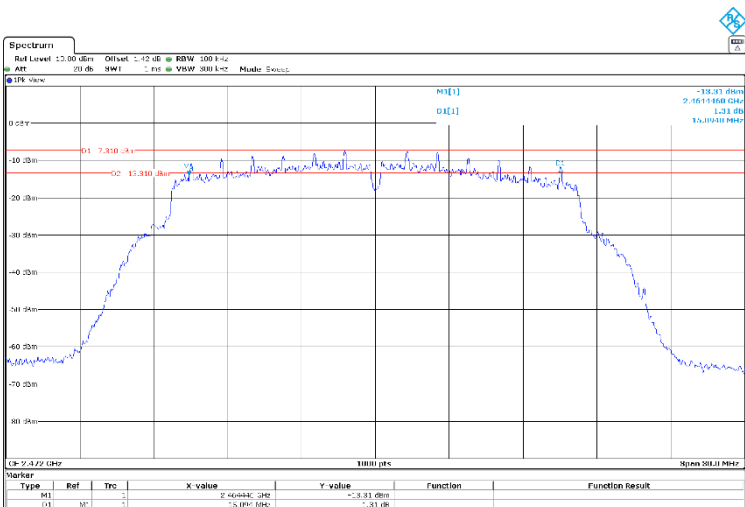
Channel 11



Channel 12

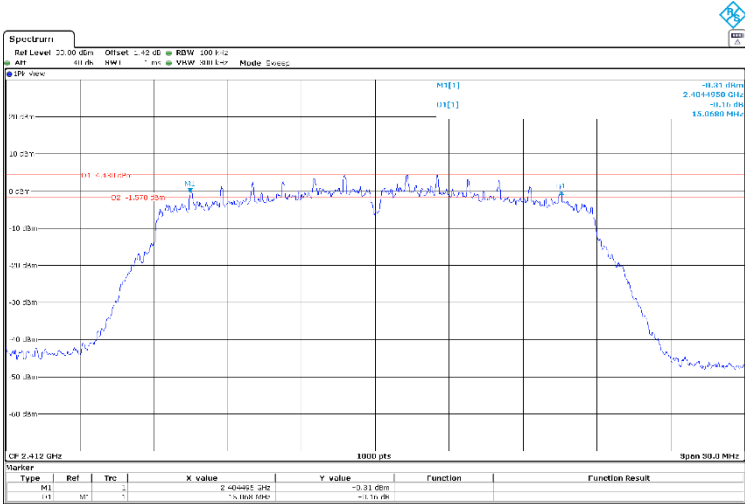


Channel 13

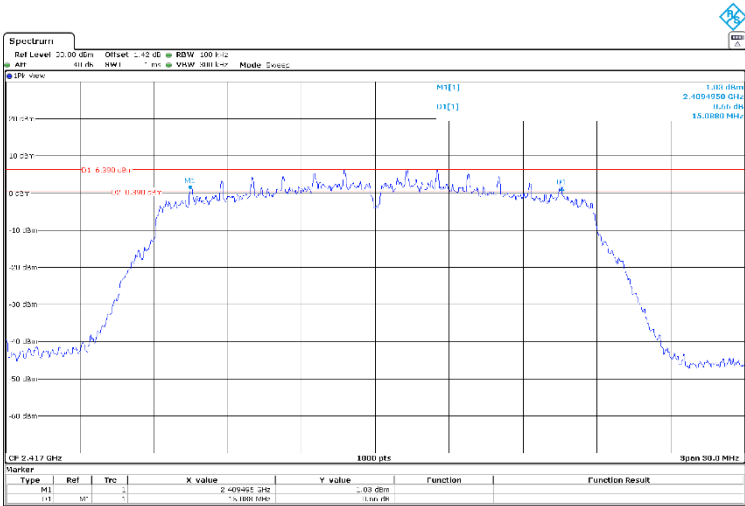


Mode : 802.11n HT20 - 20MHz – SISO – CORE 0

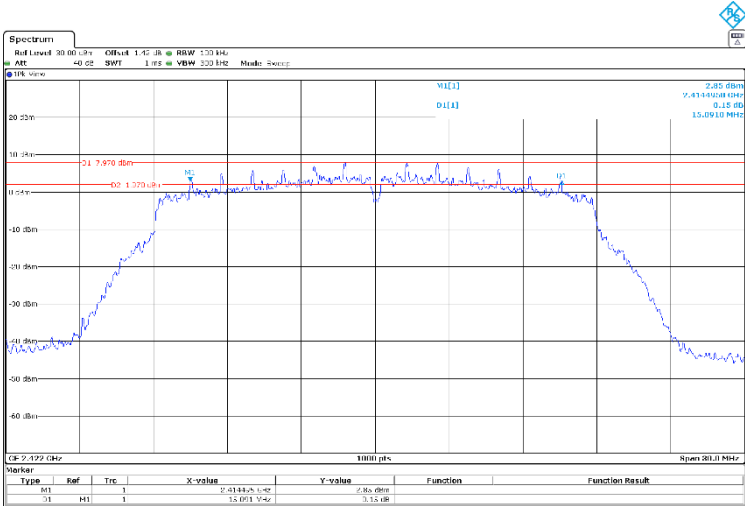
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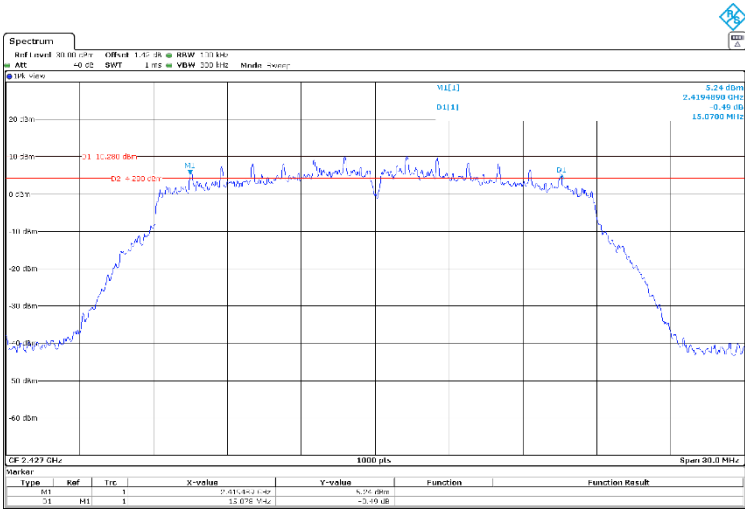
Channel 2



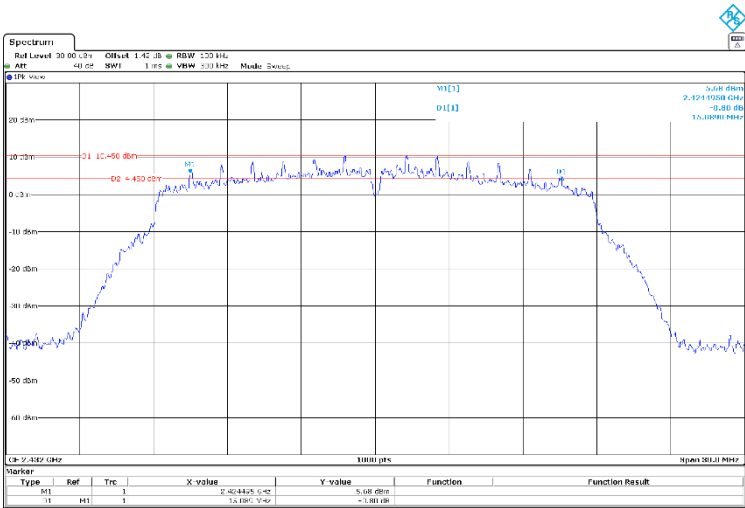
Channel 3



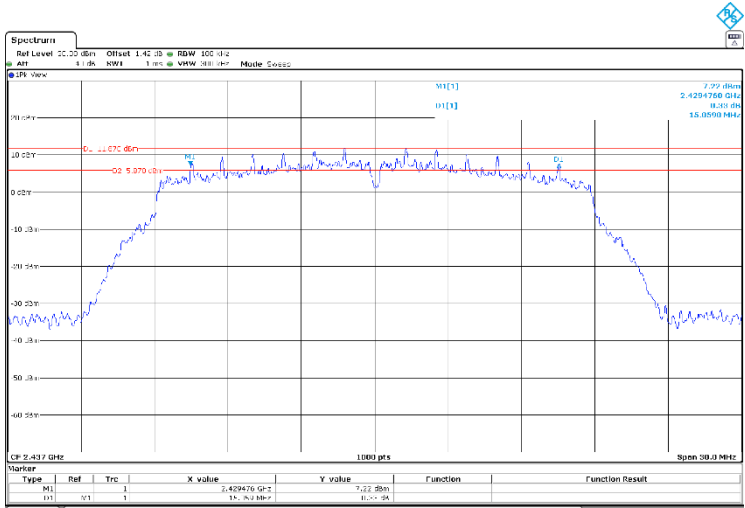
Channel 4



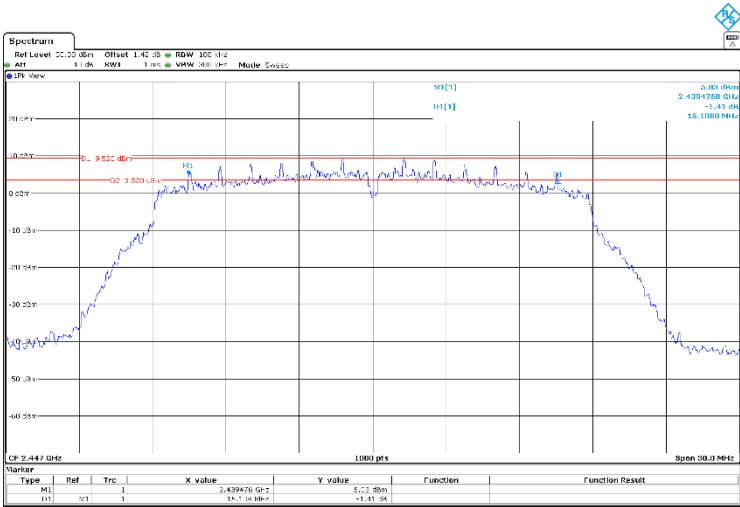
Channel 5



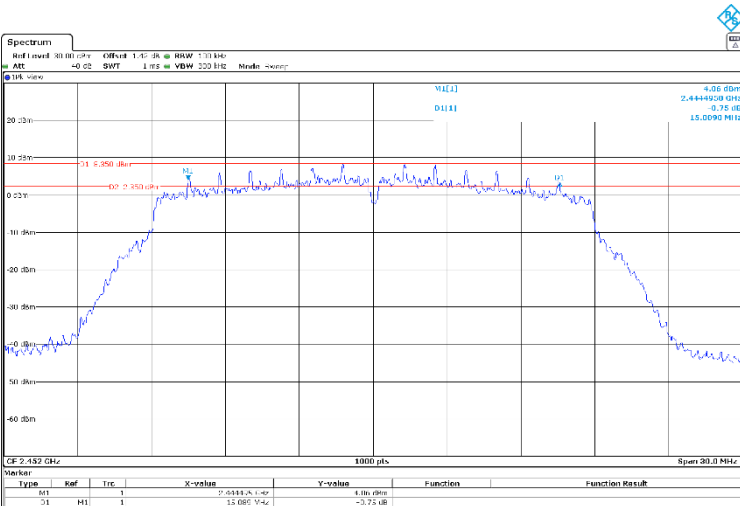
Channel 6



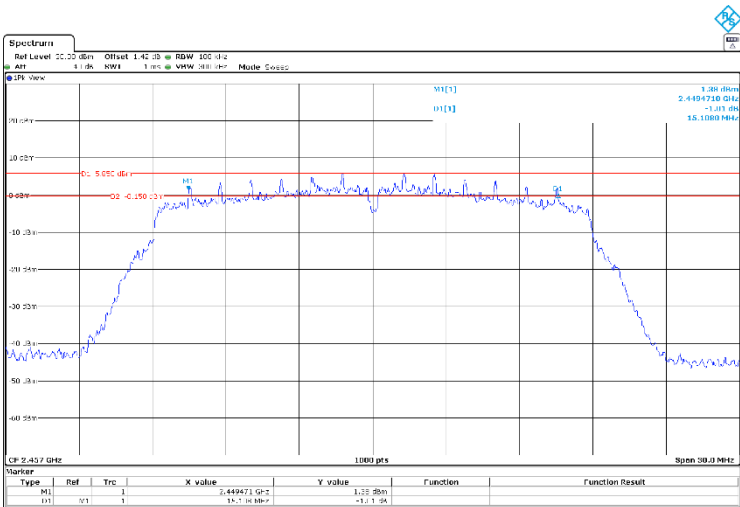
Channel 8



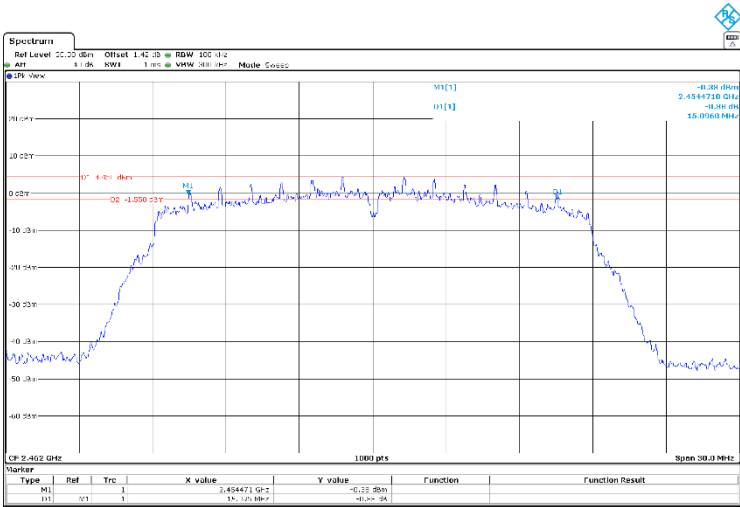
Channel 9



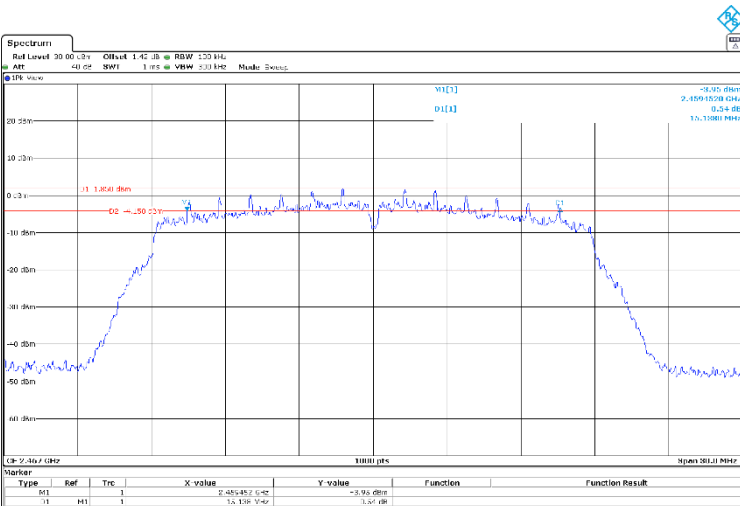
Channel 10



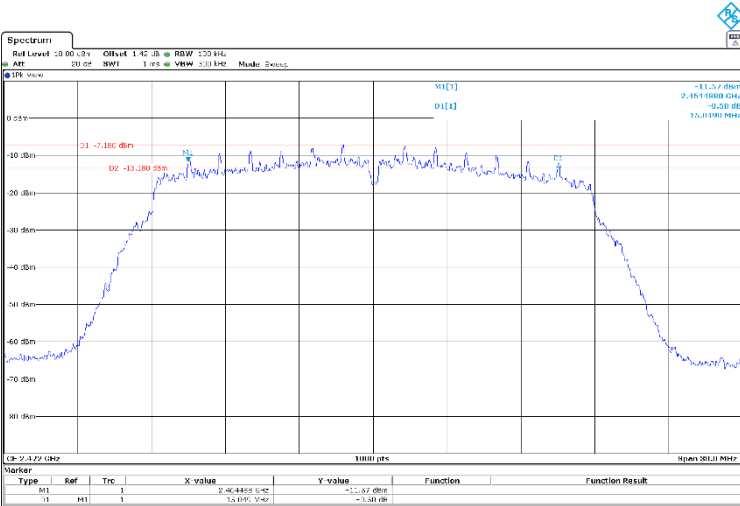
Channel 11



Channel 12



Channel 13



FCC Section 15.247 Subclause (b) / RSS-247 5.4. (d). Maximum output power and antenna gain

SPECIFICATION

For systems using digital modulation in the 2400-2483.5 MHz band: 1 watt (30 dBm).

The e.i.r.p. shall not exceed 4 W (36 dBm) (RSS-247).

RESULTS:

The maximum conducted (average) output power was measured using the method according to the Guidance for Performing Compliance Measurements on Digital Transmission System, Frequency Hopping Spread Spectrum System, and Hybrid Systems Devices Operating Under Section 15.247 of the FCC Rules. 558074 D01 Meas Guidance v05 dated August 24, 2018.

The EUT in Non-Tx BF modes was transmitting at >98% duty cycle and the testing was performed in according with Method AVGSA-1.

The EUT in Tx BF modes was transmitting at <98% duty cycle and the testing was performed in according with Method AVGSA-2.

In the measure-and-sum approach for MIMO mode, the conducted emission level (e.g., transmit power or power in specified bandwidth) is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically to determine the total emission level from the device. Summing is performed in linear power units (mW—not dBm).

The EIRP power (dBm) is calculated by adding the declared maximum antenna gain to the measured conducted power.

As declared in the 15.247 (b) (4), the conducted output power is reduced by the amount in dB that the directional gain of the antenna exceeds 6dB. The applicable output power limit shall be calculated as follows:

$$P_{\text{Out}} = P_{\text{Limit}} - (G_{\text{Tx}} - 6)$$

Test performed on the following worst cases in all relevant tests channels:

- 802.11b: 1 Mbit/s / SISO on Core 0
- 802.11g: 6 Mbit/s / SISO on Core 0
- 802.11n HT20: MCS0 / SISO on Core 0
- 802.11b / MIMO (2Tx CDD) on Core 0 & Core 1
- 802.11b / MIMO (3Tx CDD) on Core 0 & Core 1 & Core 2
- 802.11n HT20: MCS0 / MIMO (2Tx CDD) on Core 0 & Core 1
- 802.11n HT20: MCS0 / MIMO (3Tx CDD) on Core 0 & Core 1 & Core 2
- 802.11n HT20: MCS0 / MIMO (2Tx Tx BF) on Core 0 & Core 1
- 802.11n HT20: MCS0 / MIMO (3Tx Tx BF) on Core 0 & Core 1 & Core 2

Mode : 802.11b - 20MHz – SISO – CORE 0

Declared antenna gain: 5.90 dBi

	channel 1 2412 MHz	channel 2 2417 MHz	channel 3 2422 MHz	channel 4 2427 MHz	channel 6 2437 MHz
Max. conducted power (dBm)	18.84	19.94	20.89	22.03	23.02
Conducted Peak Power Limit (dBm)	30				
Margin (dB)	11.16	10.06	9.11	7.97	6.98
Maximum EIRP power (dBm)	24.74	25.84	26.79	27.93	28.92
EIRP power Limit (dBm)	36				
Margin (dB)	11.26	10.16	9.21	8.07	7.08
Measurement uncertainty (dB)	<±1.20				

	channel 10 2457 MHz	channel 11 2462 MHz	channel 12 2467 MHz	channel 13 2472 MHz
Max. conducted power (dBm)	19.40	17.32	15.16	12.01
Conducted Peak Power Limit (dBm)	30			
Margin (dB)	10.60	12.68	14.84	17.99
Maximum EIRP power (dBm)	25.30	23.22	21.06	17.91
EIRP power Limit (dBm)	36			
Margin (dB)	10.70	12.78	14.94	18.09
Measurement uncertainty (dB)	<±1.20			

Mode : 802.11g - 20MHz – SISO – CORE 0:

Declared antenna gain: 5.90 dBi

	channel 1 2412 MHz	channel 2 2417 MHz	channel 3 2422 MHz	channel 4 2427 MHz	channel 5 2432 MHz
Max. conducted power (dBm)	14.06	16.12	17.7	19.81	20.10
Conducted Peak Power Limit (dBm)	30				
Margin (dB)	15.94	13.88	12.3	10.19	9.9
Maximum EIRP power (dBm)	19.96	22.02	23.6	25.71	26.00
EIRP power Limit (dBm)	36				
Margin (dB)	16.04	13.98	12.4	10.29	10.00
Measurement uncertainty (dB)	<±1.20				

	channel 6 2437 MHz	channel 8 2447 MHz	channel 9 2452 MHz	channel 10 2457 MHz	channel 11 2462 MHz
Max. conducted power (dBm)	21.60	19.07	18.34	15.87	14.01
Conducted Peak Power Limit (dBm)	30				
Margin (dB)	8.40	10.93	11.66	14.13	15.99
Maximum EIRP power (dBm)	27.50	24.97	24.24	21.77	19.91
EIRP power Limit (dBm)	36				
Margin (dB)	8.50	11.03	11.76	14.23	16.09
Measurement uncertainty (dB)	<±1.20				

	channel 12 2467 MHz	channel 13 2472 MHz
Max. conducted power (dBm)	11.78	2.67
Conducted Peak Power Limit (dBm)	30	
Margin (dB)	18.22	27.33
Maximum EIRP power (dBm)	17.68	8.57
EIRP power Limit (dBm)	36	
Margin (dB)	18.32	27.43
Measurement uncertainty (dB)	<±1.20	

Mode : 802.11n HT20 - 20MHz – SISO – CORE 0

Declared antenna gain: 5.90 dBi

	channel 1 2412 MHz	channel 2 2417 MHz	channel 3 2422 MHz	channel 4 2427 MHz	channel 5 2432 MHz
Max. conducted power (dBm)	14.15	16.14	17.80	19.72	20.41
Conducted Peak Power Limit (dBm)	30				
Margin (dB)	15.85	13.86	12.20	10.28	9.59
Maximum EIRP power (dBm)	20.05	22.04	23.70	25.62	26.31
EIRP power Limit (dBm)	36				
Margin (dB)	15.95	13.96	12.30	10.38	9.69
Measurement uncertainty (dB)	<±1.20				

	channel 6 2437 MHz	channel 8 2447 MHz	channel 9 2452 MHz	channel 10 2457 MHz	channel 11 2462 MHz
Max. conducted power (dBm)	21.85	19.19	18.40	15.78	14.36
Conducted Peak Power Limit (dBm)	30				
Margin (dB)	8.15	10.81	11.60	14.22	15.64
Maximum EIRP power (dBm)	27.75	25.09	24.30	21.68	20.26
EIRP power Limit (dBm)	36				
Margin (dB)	8.25	10.91	11.70	14.32	15.74
Measurement uncertainty (dB)	<±1.20				

	channel 12 2467 MHz	channel 13 2472 MHz
Max. conducted power (dBm)	11.88	2.57
Conducted Peak Power Limit (dBm)	30	
Margin (dB)	18.12	27.43
Maximum EIRP power (dBm)	17.78	8.47
EIRP power Limit (dBm)	36	
Margin (dB)	18.22	27.53
Measurement uncertainty (dB)	<±1.20	

Mode : 802.11b – CDD – 20MHz – MIMO – CORE 0 & CORE 1

Directional Antenna Gain: 8.63 dBi

	channel 1 2412 MHz		channel 2 2417 MHz		channel 3 2422 MHz	
	CORE 0	CORE 1	CORE 0	CORE 1	CORE 0	CORE 1
Max. conducted power (dBm)	17.95	17.93	18.30	18.30	19.99	19.84
Combined Conducted Peak Power (dBm)	20.95		21.31		22.93	
Conducted Peak Power Limit (dBm)	27.37					
Margin (dB)	6.42		6.06		4.44	
Maximum EIRP power (dBm)	29.58		29.94		31.56	
EIRP power Limit (dBm)	36					
Margin (dB)	6.42		6.06		4.44	
Measurement uncertainty (dB)	<±1.20					

	channel 4 2417 MHz		channel 6 2437 MHz		channel 8 2447 MHz	
	CORE 0	CORE 1	CORE 0	CORE 1	CORE 0	CORE 1
Max. conducted power (dBm)	21.81	21.89	22.49	22.42	20.96	20.85
Combined Conducted Peak Power (dBm)	24.86		25.47		23.92	
Conducted Peak Power Limit (dBm)	27.37					
Margin (dB)	2.51		1.90		3.45	
Maximum EIRP power (dBm)	33.49		34.10		32.55	
EIRP power Limit (dBm)	36					
Margin (dB)	2.51		1.90		3.45	
Measurement uncertainty (dB)	<±1.20					

	channel 9 2452 MHz		channel 10 2457 MHz		channel 11 2462 MHz	
	CORE 0	CORE 1	CORE 0	CORE 1	CORE 0	CORE 1
Max. conducted power (dBm)	19.41	19.42	17.47	17.4	15.49	15.42
Combined Conducted Peak Power (dBm)	22.43		20.45		18.47	
Conducted Peak Power Limit (dBm)	27.37					
Margin (dB)	4.94		6.92		8.90	
Maximum EIRP power (dBm)	31.06		29.08		27.10	
EIRP power Limit (dBm)	36					
Margin (dB)	4.94		6.92		8.90	
Measurement uncertainty (dB)	<±1.20					

	channel 12 2467 MHz		channel 13 2472 MHz	
	CORE 0	CORE 1	CORE 0	CORE 1
Max. conducted power (dBm)	14.29	14.32	10.96	10.95
Combined Conducted Peak Power (dBm)	17.32		13.97	
Conducted Peak Power Limit (dBm)	27.37			
Margin (dB)	10.05		13.40	
Maximum EIRP power (dBm)	25.95		22.60	
EIRP power Limit (dBm)	36			
Margin (dB)	10.05		13.40	
Measurement uncertainty (dB)	<±1.20			

Mode : 802.11b – CDD – 20MHz – MIMO – CORE 0 & CORE 1 & CORE 2

Directional Antenna Gain: 9.71 dBi

	channel 1 2412 MHz			channel 2 2417 MHz		
	CORE 0	CORE 1	CORE 2	CORE 0	CORE 1	CORE 2
Max. conducted power (dBm)	16.31	16.48	16.42	18.30	18.48	18.40
Combined Conducted Peak Power (dBm)	21.18			23.17		
Conducted Peak Power Limit (dBm)	26.29					
Margin (dB)	5.11			3.12		
Maximum EIRP power (dBm)	30.89			32.88		
EIRP power Limit (dBm)	36					
Margin (dB)	5.11			3.12		
Measurement uncertainty (dB)	<±1.20					

	channel 3 2422 MHz			channel 4 2427 MHz		
	CORE 0	CORE 1	CORE 2	CORE 0	CORE 1	CORE 2
Max. conducted power (dBm)	19.95	19.85	19.93	20.86	21.04	20.84
Combined Conducted Peak Power (dBm)	24.68			25.69		
Conducted Peak Power Limit (dBm)	26.29					
Margin (dB)	1.61			0.60		
Maximum EIRP power (dBm)	34.39			35.40		
EIRP power Limit (dBm)	36					
Margin (dB)	1.61			0.60		
Measurement uncertainty (dB)	<±1.20					

	channel 5 2432 MHz			channel 6 2437 MHz		
	CORE 0	CORE 1	CORE 2	CORE 0	CORE 1	CORE 2
Max. conducted power (dBm)	21.51	21.40	21.62	21.51	21.29	21.43
Combined Conducted Peak Power (dBm)	26.28			26.18		
Conducted Peak Power Limit (dBm)	26.29					
Margin (dB)	0.01			0.11		
Maximum EIRP power (dBm)	35.99			35.89		
EIRP power Limit (dBm)	36					
Margin (dB)	0.01			0.11		
Measurement uncertainty (dB)	<±1.20					

	channel 10 2457 MHz			channel 11 2462 MHz		
	CORE 0	CORE 1	CORE 2	CORE 0	CORE 1	CORE 2
Max. conducted power (dBm)	17.89	17.88	17.82	15.87	15.83	15.85
Combined Conducted Peak Power (dBm)	22.63			20.62		
Conducted Peak Power Limit (dBm)	26.29					
Margin (dB)	3.66			5.67		
Maximum EIRP power (dBm)	32.34			30.33		
EIRP power Limit (dBm)	36					
Margin (dB)	3.66			5.67		
Measurement uncertainty (dB)	<±1.20					

	channel 12 2467 MHz			channel 13 2472 MHz		
	CORE 0	CORE 1	CORE 2	CORE 0	CORE 1	CORE 2
Max. conducted power (dBm)	13.76	13.85	13.87	10.34	10.44	10.43
Combined Conducted Peak Power (dBm)	18.60			15.17		
Conducted Peak Power Limit (dBm)	26.29					
Margin (dB)	7.69			11.12		
Maximum EIRP power (dBm)	28.31			24.88		
EIRP power Limit (dBm)	36					
Margin (dB)	7.69			11.12		
Measurement uncertainty (dB)	<±1.20					

Mode : 802.11n HT20 – CDD – 20MHz – MIMO – CORE 0 & CORE 1

Directional Antenna Gain: 8.63 dBi

	channel 1 2412 MHz		channel 2 2417 MHz		channel 3 2422 MHz	
	CORE 0	CORE 1	CORE 0	CORE 1	CORE 0	CORE 1
Max. conducted power (dBm)	11.71	11.74	14.4	14.32	17.27	17.29
Combined Conducted Peak Power (dBm)	14.74		17.37		20.29	
Conducted Peak Power Limit (dBm)	27.37					
Margin (dB)	12.63		10.00		7.08	
Maximum EIRP power (dBm)	23.37		26.00		28.92	
EIRP power Limit (dBm)	36					
Margin (dB)	12.63		10.00		7.08	
Measurement uncertainty (dB)	<±1.20					

	channel 4 2417 MHz		channel 6 2437 MHz		channel 8 2447 MHz	
	CORE 0	CORE 1	CORE 0	CORE 1	CORE 0	CORE 1
Max. conducted power (dBm)	19.64	19.45	19.73	19.63	19.03	18.94
Combined Conducted Peak Power (dBm)	22.56		22.69		22.00	
Conducted Peak Power Limit (dBm)	27.37					
Margin (dB)	4.81		4.68		5.37	
Maximum EIRP power (dBm)	31.19		31.32		30.63	
EIRP power Limit (dBm)	36					
Margin (dB)	4.81		4.68		5.37	
Measurement uncertainty (dB)	<±1.20					

	channel 9 2452 MHz		channel 10 2457 MHz		channel 11 2462 MHz	
	CORE 0	CORE 1	CORE 0	CORE 1	CORE 0	CORE 1
Max. conducted power (dBm)	16.99	16.94	15.35	15.29	12.81	12.81
Combined Conducted Peak Power (dBm)	19.98		18.33		15.82	
Conducted Peak Power Limit (dBm)	27.37					
Margin (dB)	7.39		9.04		11.55	
Maximum EIRP power (dBm)	28.61		26.96		24.45	
EIRP power Limit (dBm)	36					
Margin (dB)	7.39		9.04		11.55	
Measurement uncertainty (dB)	<±1.20					

	channel 12 2467 MHz		channel 13 2472 MHz	
	CORE 0	CORE 1	CORE 0	CORE 1
Max. conducted power (dBm)	9.88	9.83	0.57	0.74
Combined Conducted Peak Power (dBm)	12.87		3.67	
Conducted Peak Power Limit (dBm)	27.37			
Margin (dB)	14.50		23.70	
Maximum EIRP power (dBm)	21.50		12.30	
EIRP power Limit (dBm)	36			
Margin (dB)	14.50		23.70	
Measurement uncertainty (dB)	<±1.20			

Mode : 802.11n HT20 – CDD – 20MHz – MIMO – CORE 0 & CORE 1 & CORE 2

Directional Antenna Gain: 9.71 dBi

	channel 1 2412 MHz			channel 2 2417 MHz		
	CORE 0	CORE 1	CORE 2	CORE 0	CORE 1	CORE 2
Max. conducted power (dBm)	11.44	11.40	11.43	14.34	14.36	14.41
Combined Conducted Peak Power (dBm)	16.19			19.14		
Conducted Peak Power Limit (dBm)	26.29					
Margin (dB)	10.10			7.15		
Maximum EIRP power (dBm)	25.90			28.85		
EIRP power Limit (dBm)	36					
Margin (dB)	10.10			7.15		
Measurement uncertainty (dB)	<±1.20					

	channel 3 2422 MHz			channel 4 2427 MHz		
	CORE 0	CORE 1	CORE 2	CORE 0	CORE 1	CORE 2
Max. conducted power (dBm)	15.82	15.91	15.85	18.8	19.03	18.53
Combined Conducted Peak Power (dBm)	20.63			23.56		
Conducted Peak Power Limit (dBm)	26.29					
Margin (dB)	5.66			2.73		
Maximum EIRP power (dBm)	30.34			33.27		
EIRP power Limit (dBm)	36					
Margin (dB)	5.66			2.73		
Measurement uncertainty (dB)	<±1.20					

	channel 6 2437 MHz			channel 10 2457 MHz		
	CORE 0	CORE 1	CORE 2	CORE 0	CORE 1	CORE 2
Max. conducted power (dBm)	19.51	19.88	19.83	14.94	14.86	14.77
Combined Conducted Peak Power (dBm)	24.51			19.63		
Conducted Peak Power Limit (dBm)	26.29					
Margin (dB)	1.78			6.66		
Maximum EIRP power (dBm)	34.22			29.34		
EIRP power Limit (dBm)	36					
Margin (dB)	1.78			6.66		
Measurement uncertainty (dB)	<±1.20					

	channel 11 2462 MHz			channel 12 2467 MHz		
	CORE 0	CORE 1	CORE 2	CORE 0	CORE 1	CORE 2
Max. conducted power (dBm)	12.45	12.45	12.48	9.9	9.75	9.73
Combined Conducted Peak Power (dBm)	17.23			14.57		
Conducted Peak Power Limit (dBm)	26.29					
Margin (dB)	9.06			11.72		
Maximum EIRP power (dBm)	26.94			24.28		
EIRP power Limit (dBm)	36					
Margin (dB)	9.06			11.72		
Measurement uncertainty (dB)	<±1.20					

	channel 13 2472 MHz		
	CORE 0	CORE 1	CORE 2
Max. conducted power (dBm)	-0.09	-0.12	-0.28
Combined Conducted Peak Power (dBm)	4.61		
Conducted Peak Power Limit (dBm)	26.29		
Margin (dB)	21.68		
Maximum EIRP power (dBm)	14.32		
EIRP power Limit (dBm)	36		
Margin (dB)	21.68		
Measurement uncertainty (dB)	<±1.20		

Mode : 802.11n HT20 – TxBF – 20MHz – MIMO – CORE 0 & CORE 1

Directional Antenna Gain: 8.63 dBi

	channel 1 2412 MHz		channel 2 2417 MHz		channel 3 2422 MHz	
	CORE 0	CORE 1	CORE 0	CORE 1	CORE 0	CORE 1
Max. conducted power (dBm)	11.29	11.24	13.83	13.87	15.26	15.37
Duty Cycle Correction Factor (dB)	0.117	0.117	0.117	0.117	0.117	0.117
Max. conducted power corrected (dBm)	11.407	11.357	13.947	13.987	15.377	15.487
Combined Conducted Peak Power (dBm)	14.392		16.977		18.442	
Conducted Peak Power Limit (dBm)	27.37					
Margin (dB)	12.978		10.393		8.928	
Maximum EIRP power (dBm)	23.022		25.607		27.072	
EIRP power Limit (dBm)	36					
Margin (dB)	12.978		10.393		8.928	
Measurement uncertainty (dB)	<±1.20					

	channel 4 2427 MHz		channel 5 2432 MHz		channel 6 2437 MHz	
	CORE 0	CORE 1	CORE 0	CORE 1	CORE 0	CORE 1
Max. conducted power (dBm)	16.75	16.94	17.20	17.28	18.30	18.26
Duty Cycle Correction Factor (dB)	0.117	0.117	0.117	0.117	0.117	0.117
Max. conducted power corrected (dBm)	16.867	17.057	17.317	17.397	18.417	18.377
Combined Conducted Peak Power (dBm)	19.973		20.367		21.407	
Conducted Peak Power Limit (dBm)	27.37					
Margin (dB)	7.397		7.003		5.963	
Maximum EIRP power (dBm)	28.603		28.997		30.037	
EIRP power Limit (dBm)	36					
Margin (dB)	7.397		7.003		5.963	
Measurement uncertainty (dB)	<±1.20					

	channel 7 2442 MHz		channel 8 2447 MHz		channel 9 2452 MHz	
	CORE 0	CORE 1	CORE 0	CORE 1	CORE 0	CORE 1
Max. conducted power (dBm)	17.86	17.80	16.33	16.35	14.76	14.8
Duty Cycle Correction Factor (dB)	0.117	0.117	0.117	0.117	0.117	0.117
Max. conducted power corrected (dBm)	17.977	17.917	16.447	16.467	14.877	14.917
Combined Conducted Peak Power (dBm)	20.957		19.467		17.907	
Conducted Peak Power Limit (dBm)	27.37					
Margin (dB)	6.413		7.903		9.463	
Maximum EIRP power (dBm)	29.587		28.097		26.537	
EIRP power Limit (dBm)	36					
Margin (dB)	6.413		7.903		9.463	
Measurement uncertainty (dB)	<±1.20					

	channel 10 2457 MHz		channel 11 2462 MHz		channel 12 2467 MHz	
	CORE 0	CORE 1	CORE 0	CORE 1	CORE 0	CORE 1
Max. conducted power (dBm)	13.31	13.14	10.76	10.65	9.00	8.74
Duty Cycle Correction Factor (dB)	0.117	0.117	0.117	0.117	0.117	0.117
Max. conducted power corrected (dBm)	13.427	13.257	10.877	10.767	9.117	8.857
Combined Conducted Peak Power (dBm)	16.353		13.832		11.999	
Conducted Peak Power Limit (dBm)	27.37					
Margin (dB)	11.017		13.538		15.371	
Maximum EIRP power (dBm)	24.983		22.462		20.629	
EIRP power Limit (dBm)	36					
Margin (dB)	11.017		13.538		15.371	
Measurement uncertainty (dB)	<±1.20					

	channel 13 2472 MHz	
	CORE 0	CORE 1
Max. conducted power (dBm)	0.44	0.14
Duty Cycle Correction Factor (dB)	0.117	0.117
Max. conducted power corrected (dBm)	0.557	0.257
Combined Conducted Peak Power (dBm)	3.420	
Conducted Peak Power Limit (dBm)	27.37	
Margin (dB)	23.950	
Maximum EIRP power (dBm)	12.050	
EIRP power Limit (dBm)	36	
Margin (dB)	23.950	
Measurement uncertainty (dB)	<±1.20	

Mode : 802.11n HT20 – TxBF – 20MHz – MIMO – CORE 0 & CORE 1 & CORE 2

Directional Antenna Gain: 9.71 dBi

	channel 1 2412 MHz			channel 2 2417 MHz		
	CORE 0	CORE 1	CORE 2	CORE 0	CORE 1	CORE 2
Max. conducted power (dBm)	10.68	10.69	10.66	13.60	13.55	13.38
Duty Cycle Correction Factor (dB)	0.145	0.145	0.145	0.145	0.145	0.145
Max. conducted power corrected (dBm)	10.825	10.835	10.805	13.745	13.695	13.525
Combined Conducted Peak Power (dBm)	15.448			18.282		
Conducted Peak Power Limit (dBm)	26.29					
Margin (dB)	10.842			8.008		
Maximum EIRP power (dBm)	25.158			27.992		
EIRP power Limit (dBm)	36					
Margin (dB)	10.842			8.008		
Measurement uncertainty (dB)	<±1.20					

	channel 3 2422 MHz			channel 4 2427 MHz		
	CORE 0	CORE 1	CORE 2	CORE 0	CORE 1	CORE 2
Max. conducted power (dBm)	15.28	15.40	14.95	16.75	16.90	16.48
Duty Cycle Correction Factor (dB)	0.145	0.145	0.145	0.145	0.145	0.145
Max. conducted power corrected (dBm)	15.425	15.545	15.095	16.895	17.045	16.625
Combined Conducted Peak Power (dBm)	19.985			21.485		
Conducted Peak Power Limit (dBm)	26.29					
Margin (dB)	6.305			4.805		
Maximum EIRP power (dBm)	29.695			31.195		
EIRP power Limit (dBm)	36					
Margin (dB)	6.305			4.805		
Measurement uncertainty (dB)	<±1.20					

	channel 5 2432 MHz			channel 6 2437 MHz		
	CORE 0	CORE 1	CORE 2	CORE 0	CORE 1	CORE 2
Max. conducted power (dBm)	17.31	17.48	16.98	18.24	18.35	18.04
Duty Cycle Correction Factor (dB)	0.145	0.145	0.145	0.145	0.145	0.145
Max. conducted power corrected (dBm)	17.455	17.625	17.125	18.385	18.495	18.185
Combined Conducted Peak Power (dBm)	22.033			22.983		
Conducted Peak Power Limit (dBm)	26.29					
Margin (dB)	4.257			3.307		
Maximum EIRP power (dBm)	31.743			32.693		
EIRP power Limit (dBm)	36					
Margin (dB)	4.257			3.307		
Measurement uncertainty (dB)	<±1.20					

	channel 7 2442 MHz			channel 8 2447 MHz		
	CORE 0	CORE 1	CORE 2	CORE 0	CORE 1	CORE 2
Max. conducted power (dBm)	17.63	17.73	17.28	16.29	16.34	16.02
Duty Cycle Correction Factor (dB)	0.145	0.145	0.145	0.145	0.145	0.145
Max. conducted power corrected (dBm)	17.775	17.875	17.425	16.435	16.485	16.165
Combined Conducted Peak Power (dBm)	22.322			20.990		
Conducted Peak Power Limit (dBm)	26.29					
Margin (dB)	3.968			5.300		
Maximum EIRP power (dBm)	32.032			30.700		
EIRP power Limit (dBm)	36					
Margin (dB)	3.968			5.300		
Measurement uncertainty (dB)	<±1.20					

	channel 9 2452 MHz			channel 10 2457 MHz		
	CORE 0	CORE 1	CORE 2	CORE 0	CORE 1	CORE 2
Max. conducted power (dBm)	14.60	14.62	14.33	13.15	13.05	12.92
Duty Cycle Correction Factor (dB)	0.145	0.145	0.145	0.145	0.145	0.145
Max. conducted power corrected (dBm)	14.745	14.765	14.475	13.295	13.195	13.065
Combined Conducted Peak Power (dBm)	19.290			17.812		
Conducted Peak Power Limit (dBm)	26.29					
Margin (dB)	7.000			8.478		
Maximum EIRP power (dBm)	29.000			27.522		
EIRP power Limit (dBm)	36					
Margin (dB)	7.000			8.478		
Measurement uncertainty (dB)	<±1.20					

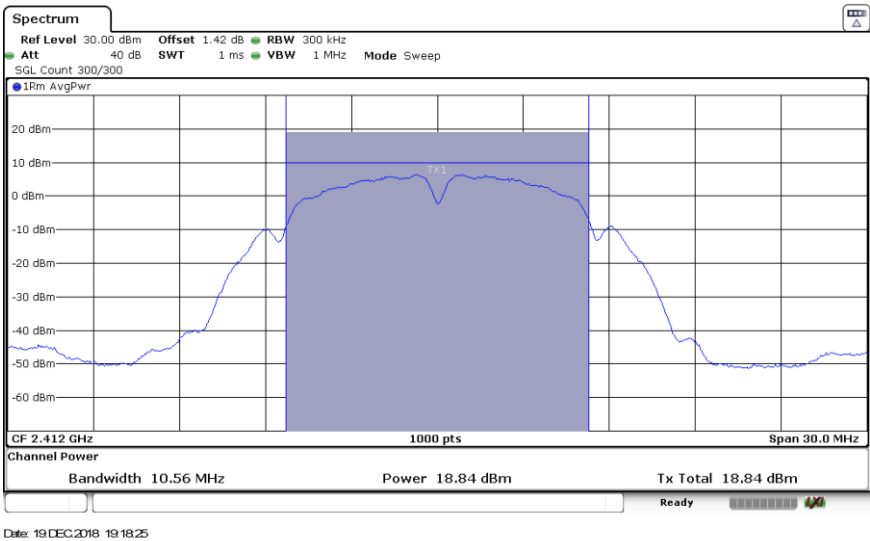
	channel 11 2462 MHz			channel 12 2467 MHz		
	CORE 0	CORE 1	CORE 2	CORE 0	CORE 1	CORE 2
Max. conducted power (dBm)	10.66	10.82	10.66	8.70	8.78	8.44
Duty Cycle Correction Factor (dB)	0.145	0.145	0.145	0.145	0.145	0.145
Max. conducted power corrected (dBm)	10.805	10.965	10.805	8.845	8.925	8.585
Combined Conducted Peak Power (dBm)	15.485			13.414		
Conducted Peak Power Limit (dBm)	26.29					
Margin (dB)	10.805			12.876		
Maximum EIRP power (dBm)	25.195			23.124		
EIRP power Limit (dBm)	36					
Margin (dB)	10.805			12.876		
Measurement uncertainty (dB)	<±1.20					

	channel 13 2472 MHz		
	CORE 0	CORE 1	CORE 2
Max. conducted power (dBm)	-0.46	-0.50	-0.23
Duty Cycle Correction Factor (dB)	0.145	0.145	0.145
Max. conducted power corrected (dBm)	-0.315	-0.355	-0.085
Combined Conducted Peak Power (dBm)	4.376		
Conducted Peak Power Limit (dBm)	26.29		
Margin (dB)	21.914		
Maximum EIRP power (dBm)	14.086		
EIRP power Limit (dBm)	36		
Margin (dB)	21.914		
Measurement uncertainty (dB)	<±1.20		

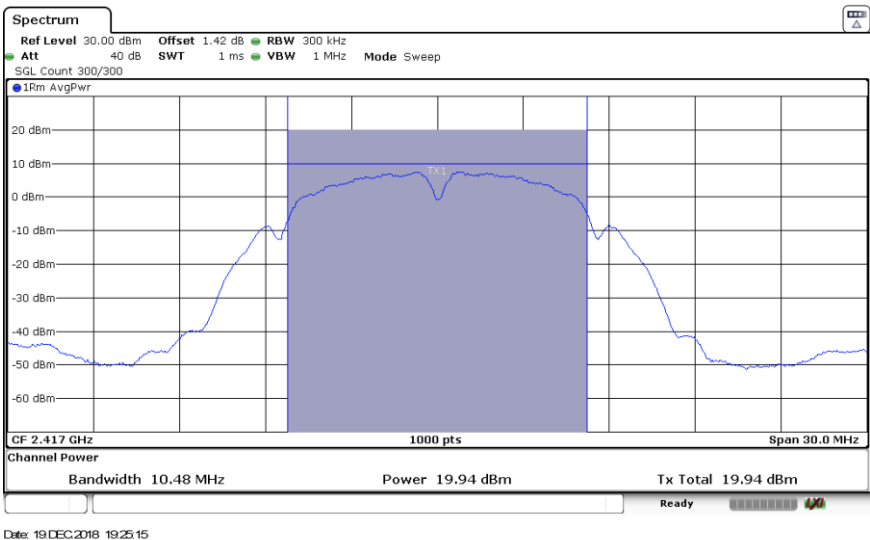
Verdict: PASS

Mode: 802.11b - 20MHz – SISO – CORE 0

Channel 1



Channel 2



Channel 3

