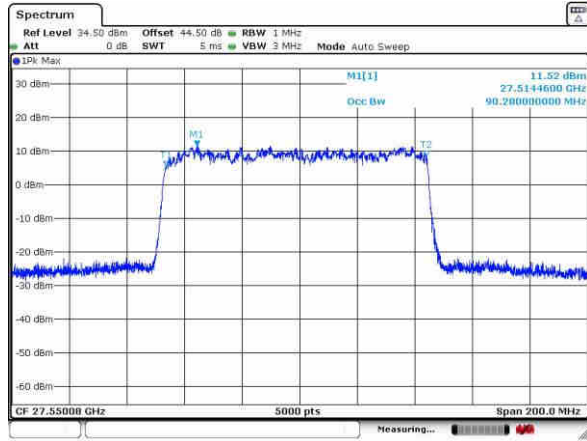




Module 2

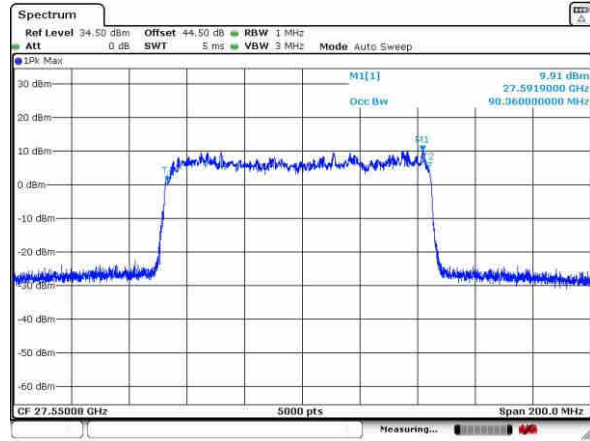
NR Band n261

Lowest Channel / 100MHz / 16QAM



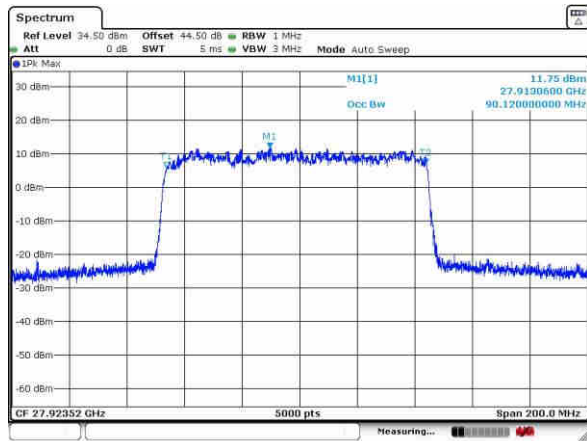
Date: 11, FEB, 2020 21:13:46

Lowest Channel / 100MHz / 64QAM



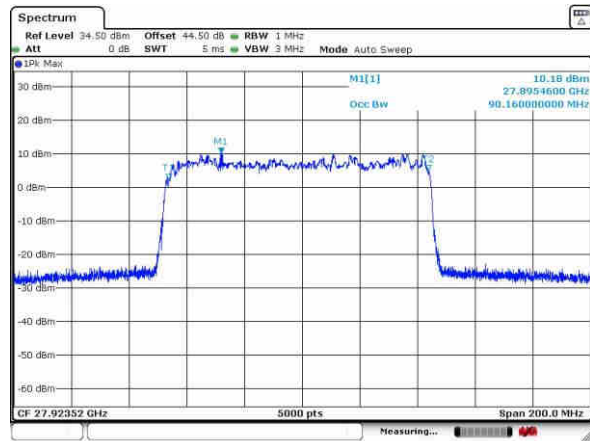
Date: 11, FEB, 2020 21:14:16

Middle Channel / 100MHz / 16QAM



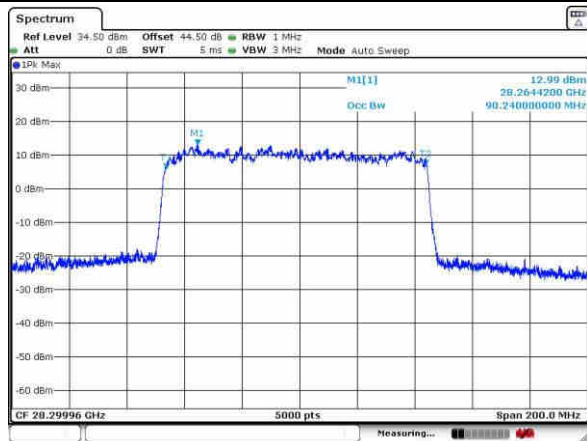
Date: 11, FEB, 2020 20:45:54

Middle Channel / 100MHz / 64QAM



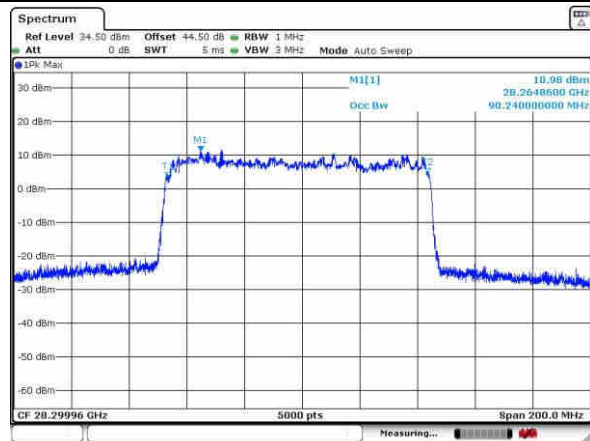
Date: 11, FEB, 2020 20:46:56

Highest Channel / 100MHz / 16QAM

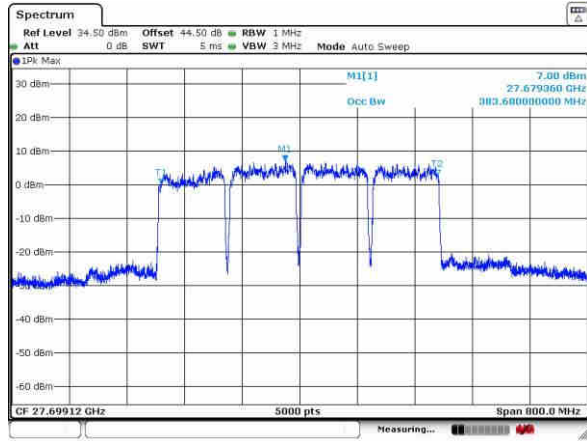
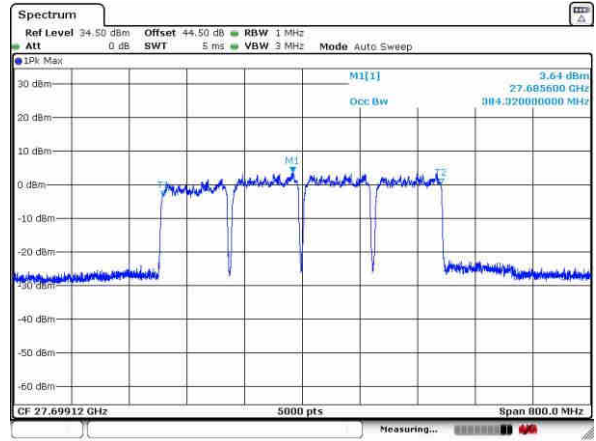
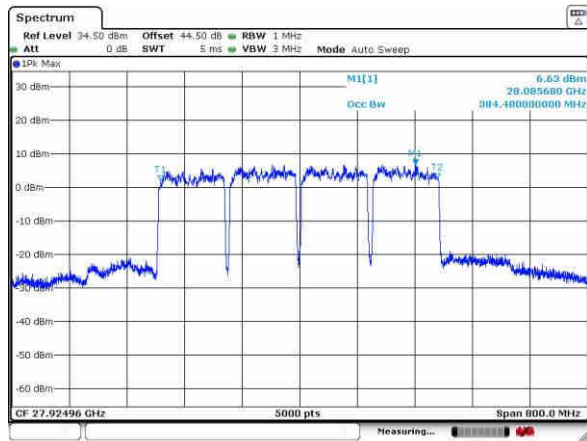
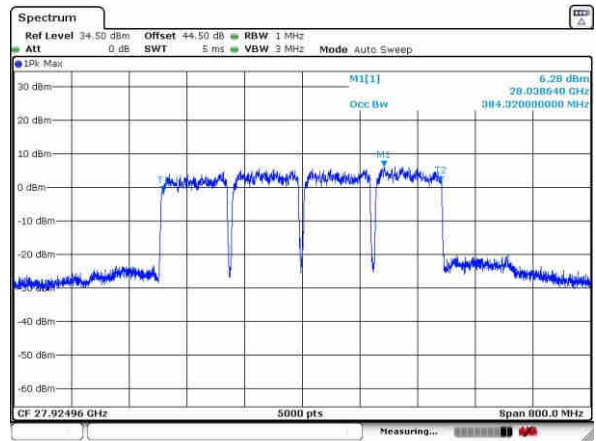
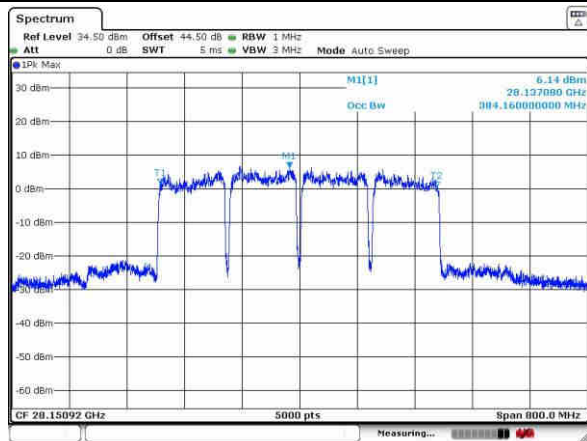
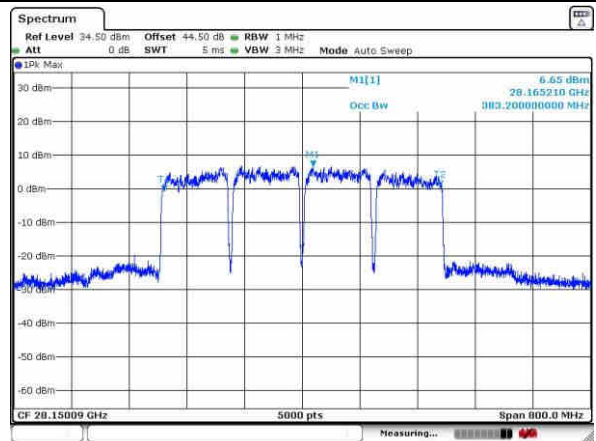


Date: 11, FEB, 2020 22:57:59

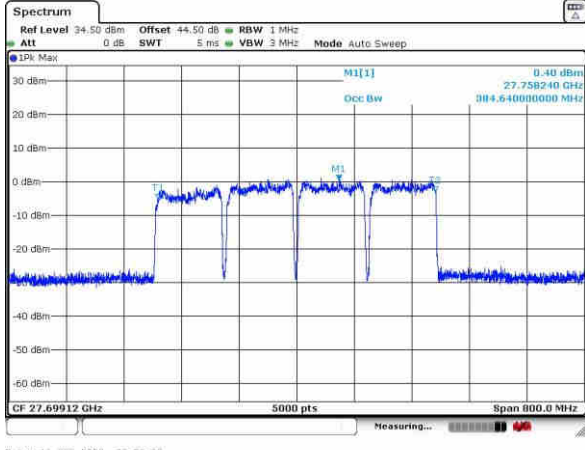
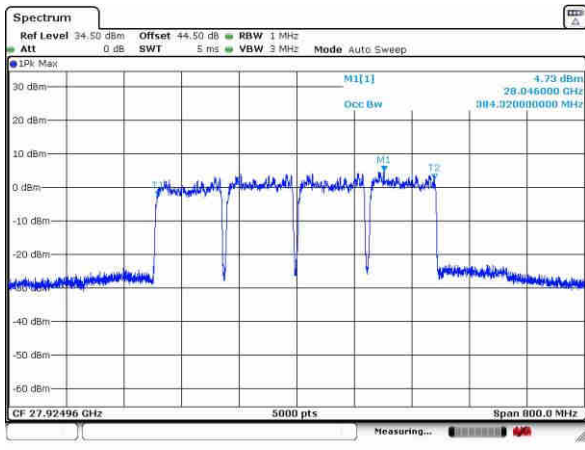
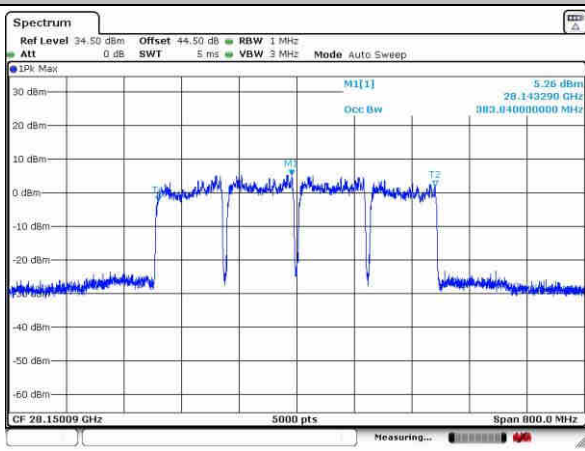
Highest Channel / 100MHz / 64QAM



Date: 11, FEB, 2020 22:57:29

Module 2
NR Band n261
Lowest Channel / 400MHz / QPSK

Lowest Channel / 400MHz / 16QAM

Middle Channel / 400MHz / QPSK

Middle Channel / 400MHz / 16QAM

Highest Channel / 400MHz / QPSK

Highest Channel / 400MHz / 16QAM


Module 2

NR Band n261	
Lowest Channel / 400MHz / 64QAM	
	intentionally blank
Middle Channel / 400MHz / 64QAM	
	intentionally blank
Highest Channel / 400MHz / 64QAM	
	intentionally blank

Radiated Out of Band Emissions

Mode			Module 0 NR Band n261 : BE (dBm)								
BW			50MHz			100MHz			400MHz		
Mod.			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Limit (dBm)											
Low CH	0~10%OB	≤-5	-15.37	-16.27	-19.07	-11.92	-13.97	-18.67	-27.32	-30.43	-31.82
	>10%OB	≤-13	-21.66	-21.90	-24.50	-21.88	-24.26	-25.81	-28.00	-30.30	-31.98
High CH	0~10%OB	≤-5	-23.26	-20.27	-20.25	-12.21	-16.57	-19.17	-27.30	-30.17	-32.81
	>10%OB	≤-13	-24.09	-27.40	-28.20	-25.77	-28.66	-29.37	-32.65	-32.72	-34.11
Result			Compliance								

Mode			Module 1 NR Band n261 : BE (dBm)								
BW			50MHz			100MHz			400MHz		
Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤-5	-16.08	-18.59	-19.86	-11.47	-12.25	-16.69	-28.33	-30.85	-32.22
	>10%OB	≤-13	-22.35	-24.15	-25.70	-21.71	-23.64	-25.46	-28.80	-31.08	-32.38
High CH	0~10%OB	≤-5	-15.40	-22.12	-21.93	-12.21	-15.41	-18.08	-29.23	-31.48	-33.17
	>10%OB	≤-13	-26.82	-28.91	-29.37	-27.47	-28.62	-29.70	-34.13	-33.27	-34.49
Result			Compliance								

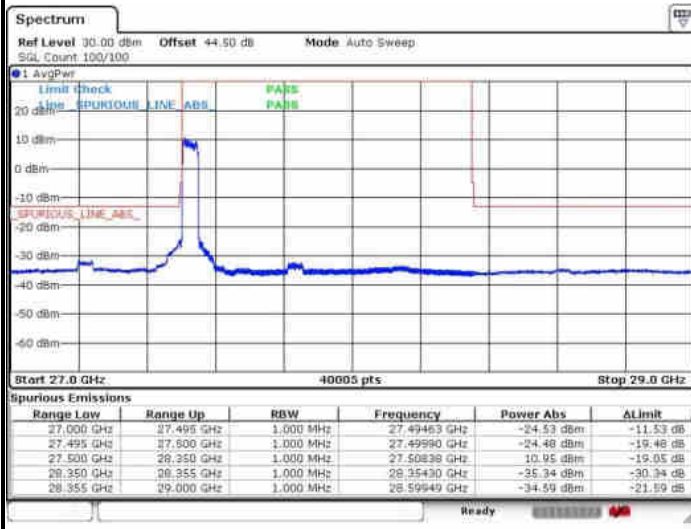
Mode			Module 2 NR Band n261 : BE (dBm)								
BW			50MHz			100MHz			400MHz		
Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤-5	-18.93	-20.81	-21.08	-14.13	-14.61	-19.64	-32.50	-33.40	-34.19
	>10%OB	≤-13	-26.53	-28.10	-29.78	-26.01	-28.14	-29.68	-31.89	-33.57	-34.19
High CH	0~10%OB	≤-5	-24.63	-27.03	-23.03	-14.51	-16.78	-19.91	-31.18	-30.06	-32.83
	>10%OB	≤-13	-26.52	-28.62	-30.26	-28.06	-29.98	-30.53	-31.23	-31.81	-33.75
Result			Compliance								



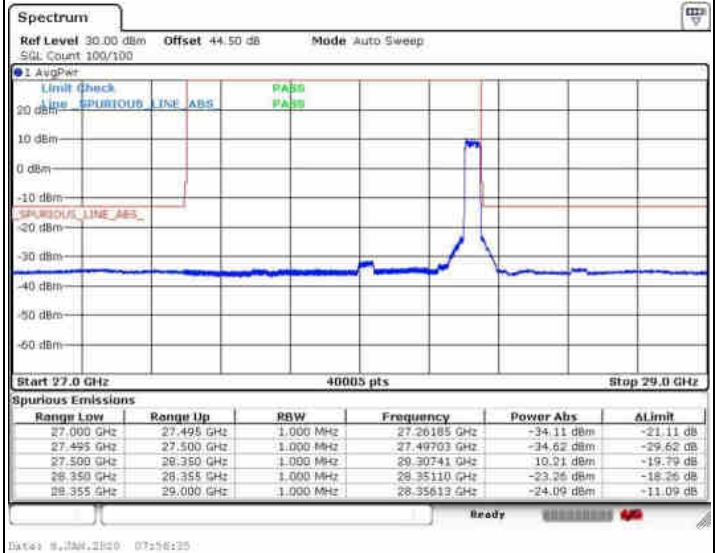
Module 0

NR Band n261 / 50MHz / QPSK

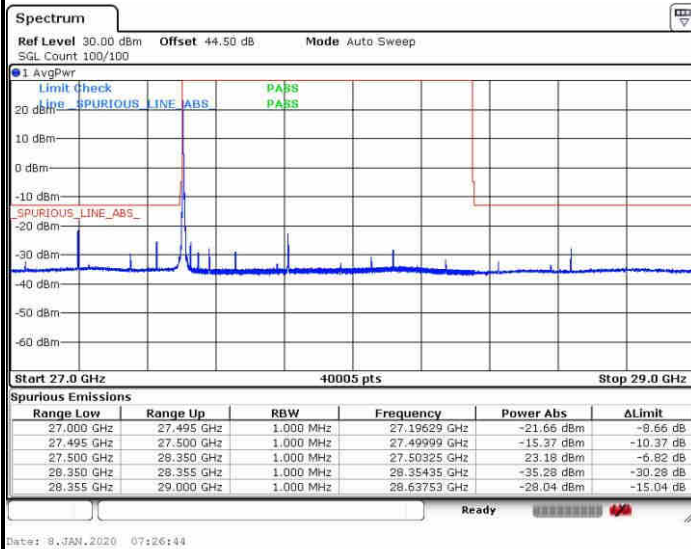
Lowest Band Edge / Full RB



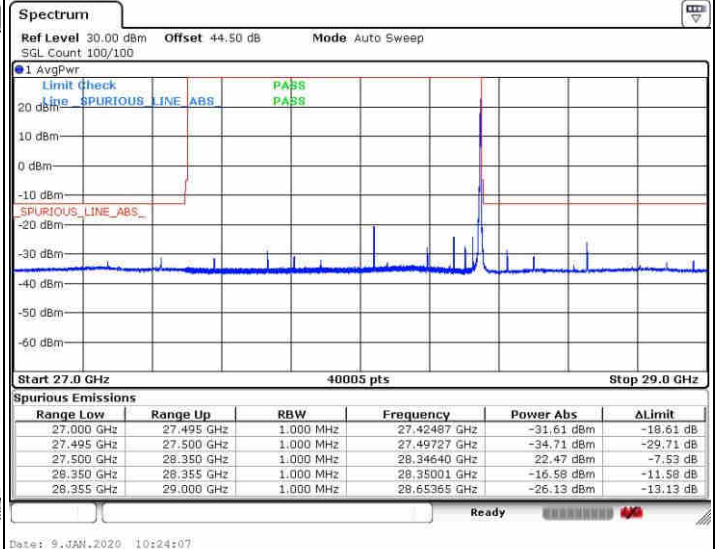
Highest Band Edge / Full RB



Lowest Band Edge / 1 RB



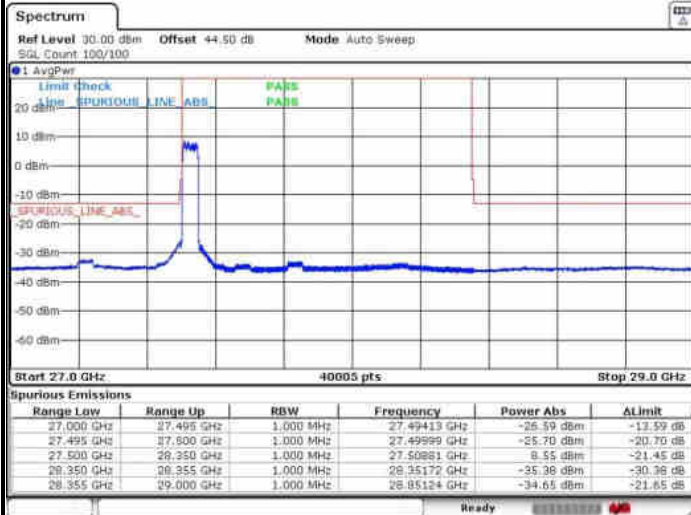
Highest Band Edge / 1 RB





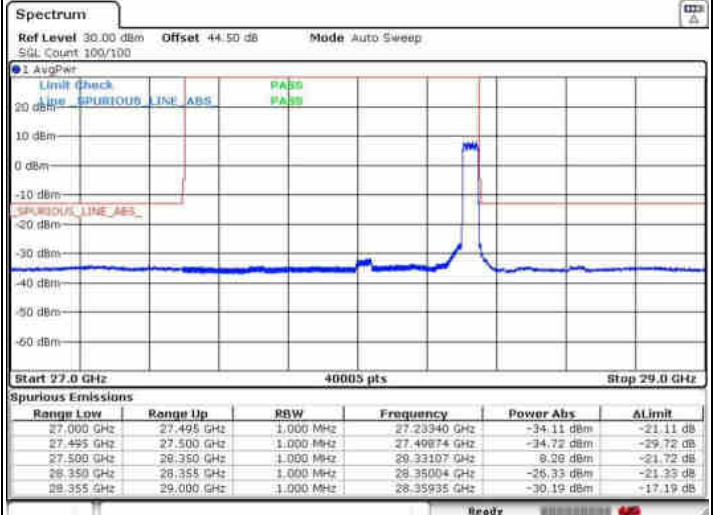
NR Band n261 / 50MHz / 16QAM

Lowest Band Edge / Full RB



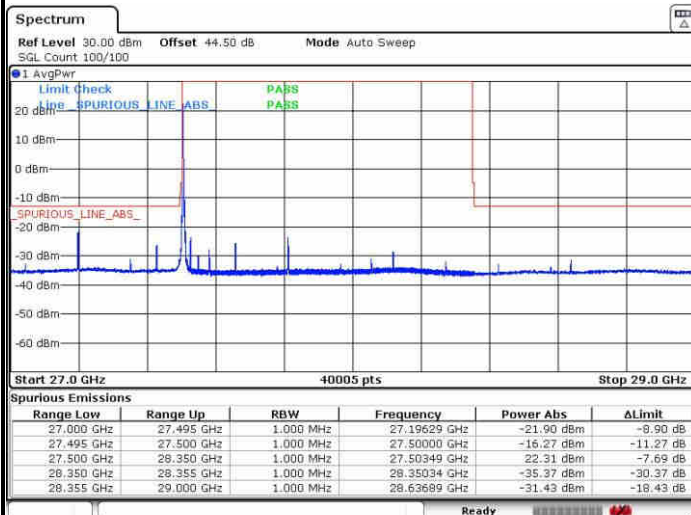
Date: 4.FEB.2020 21:40:20

Highest Band Edge / Full RB



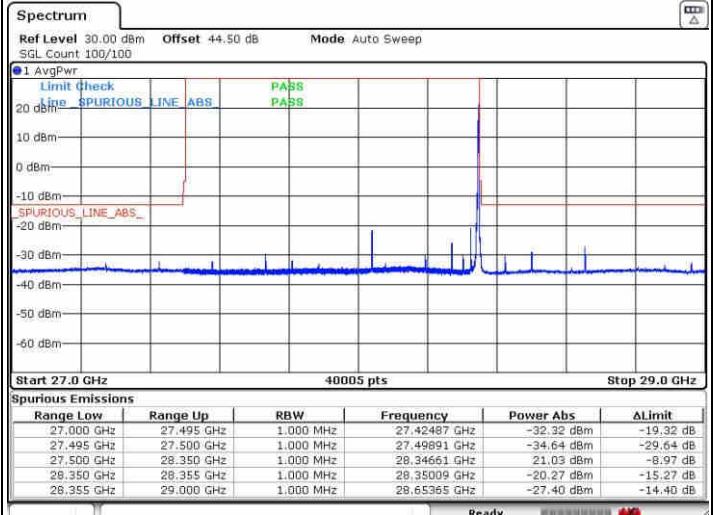
Date: 4.FEB.2020 21:52:18

Lowest Band Edge / 1 RB



Date: 4.FEB.2020 21:42:26

Highest Band Edge / 1 RB



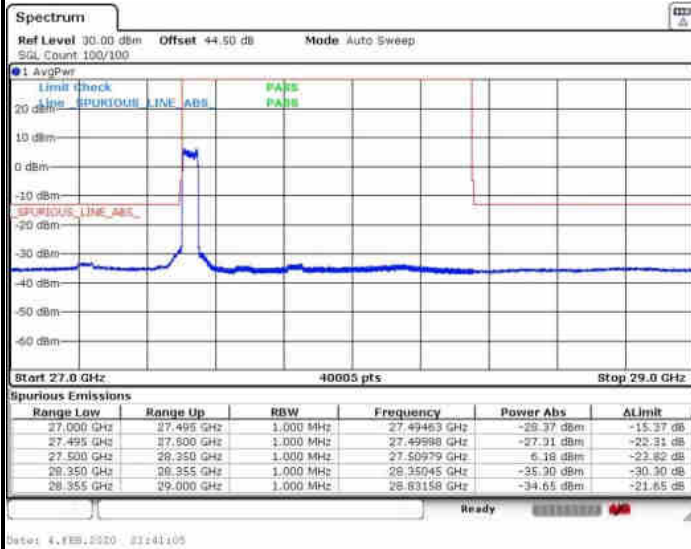
Date: 4.FEB.2020 21:56:13



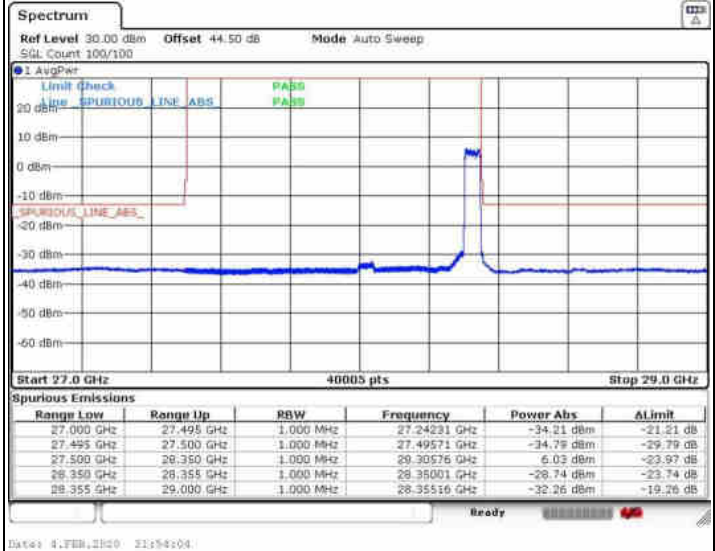
Module 0

NR Band n261 / 50MHz / 64QAM

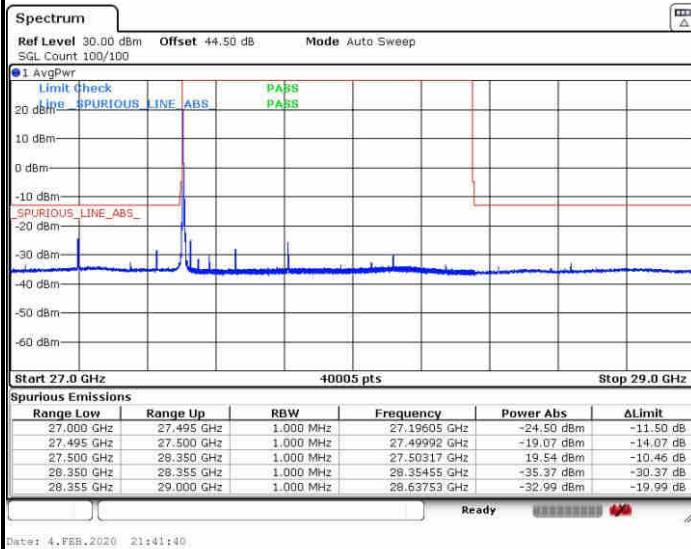
Lowest Band Edge / Full RB



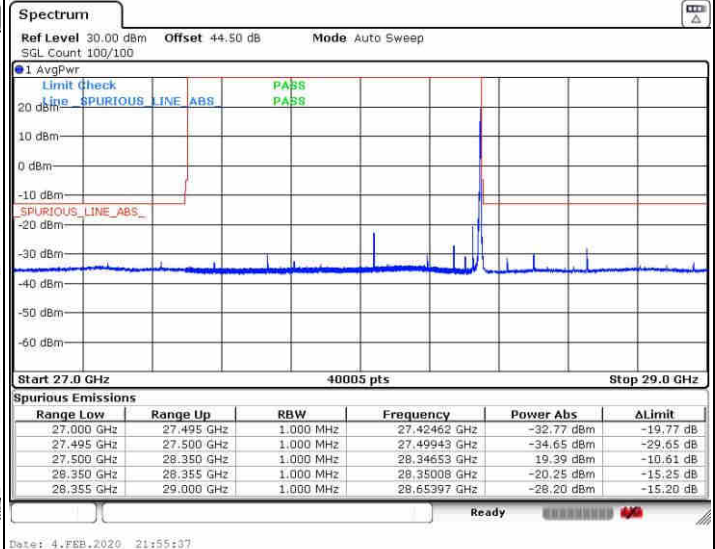
Highest Band Edge / Full RB



Lowest Band Edge / 1 RB



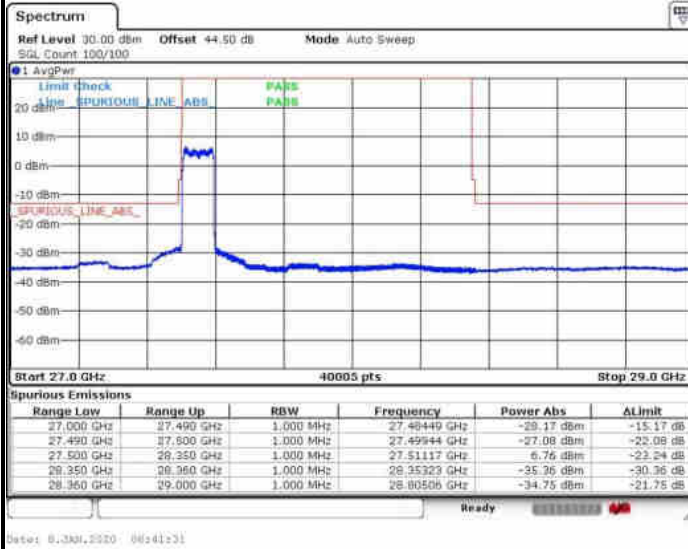
Highest Band Edge / 1 RB



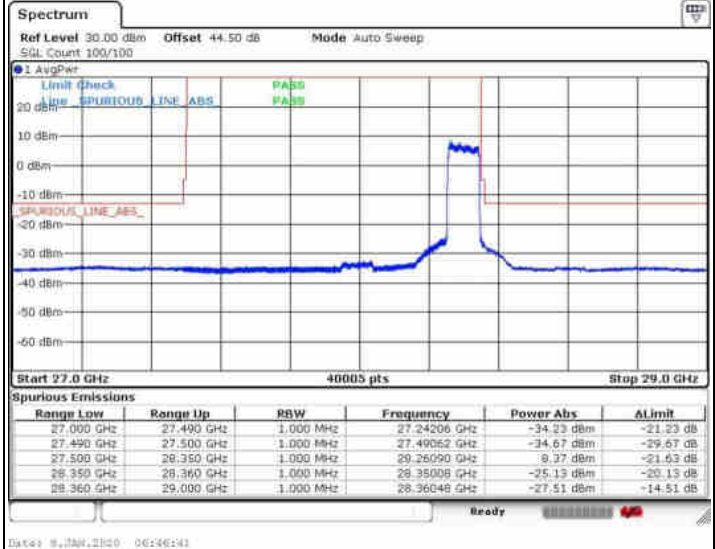


NR Band n261 / 100MHz / QPSK

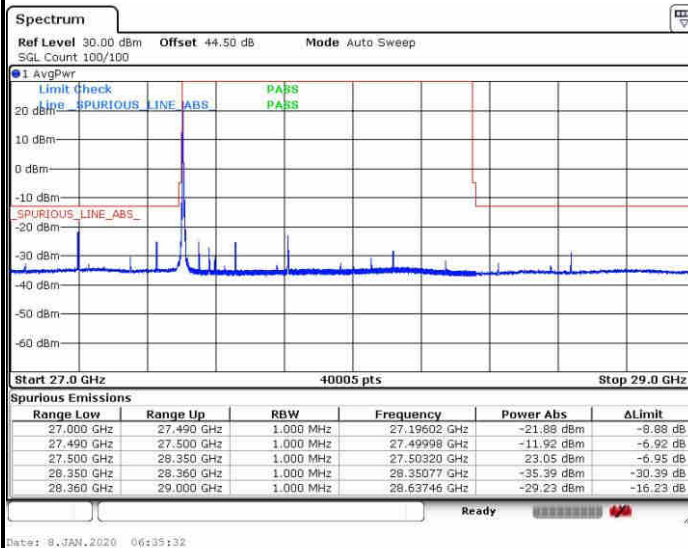
Lowest Band Edge / Full RB



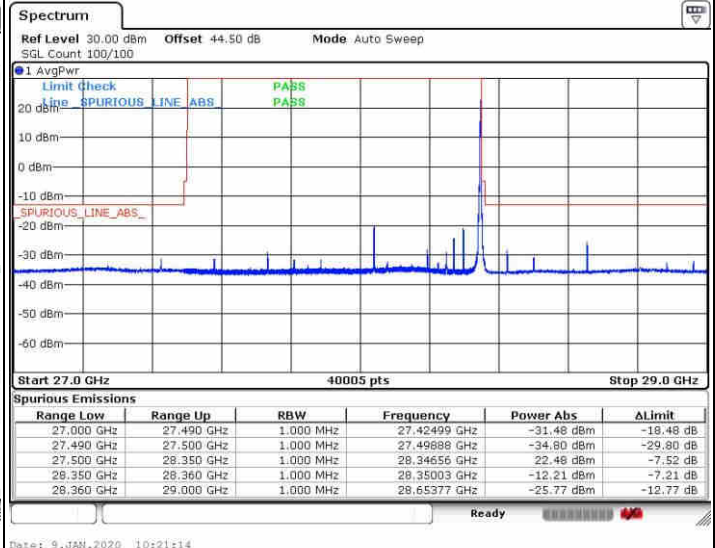
Highest Band Edge / Full RB



Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

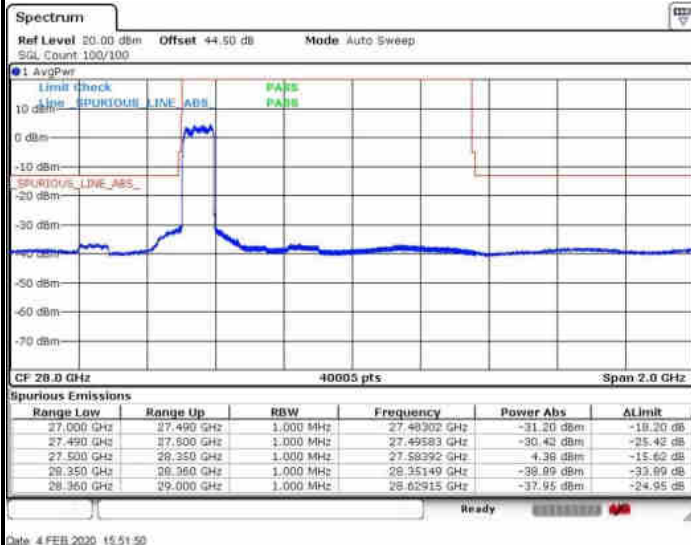




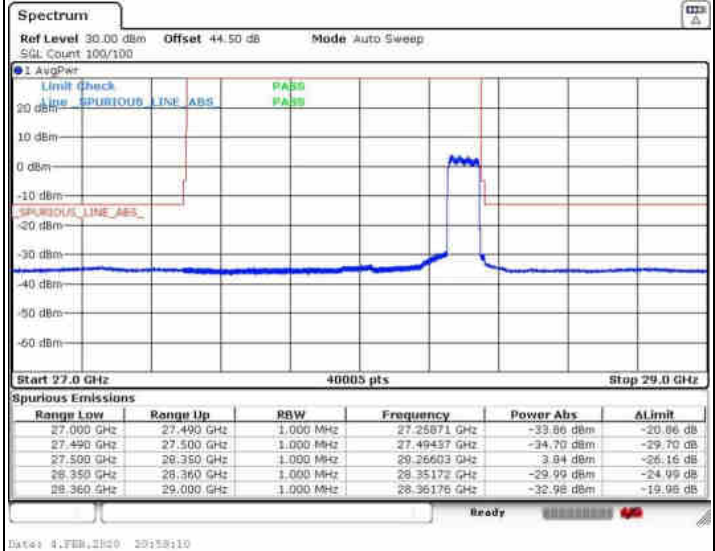
Module 0

NR Band n261 / 100MHz / 16QAM

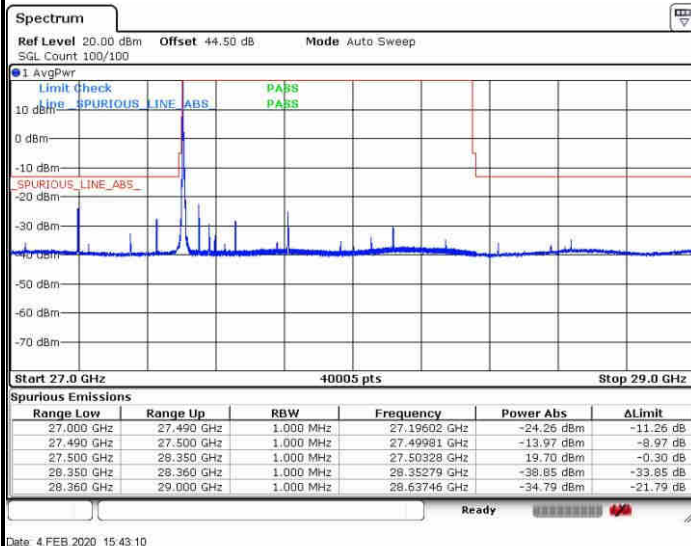
Lowest Band Edge / Full RB



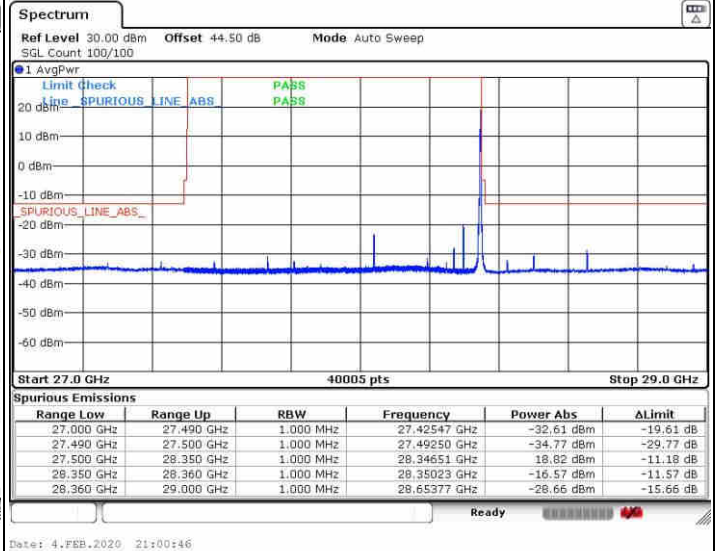
Highest Band Edge / Full RB



Lowest Band Edge / 1 RB



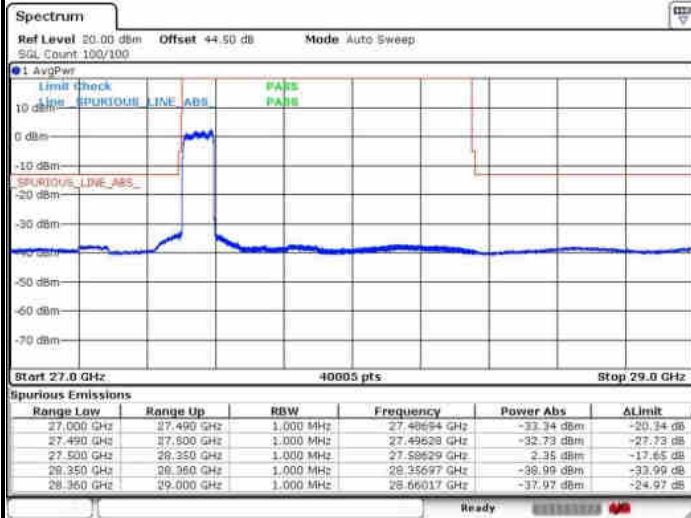
Highest Band Edge / 1 RB





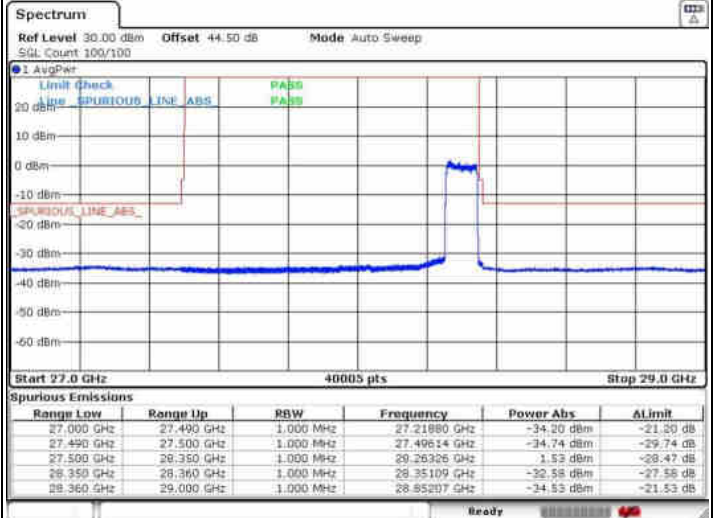
NR Band n261 / 100MHz / 64QAM

Lowest Band Edge / Full RB



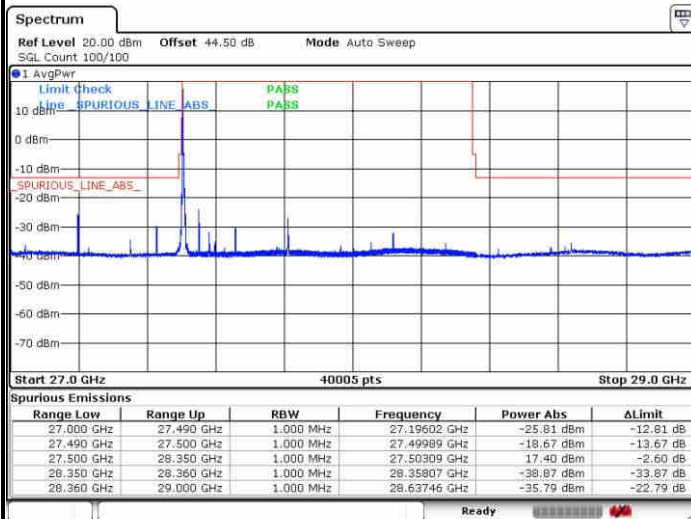
Date: 4.FEB.2020 16:15:05

Highest Band Edge / Full RB



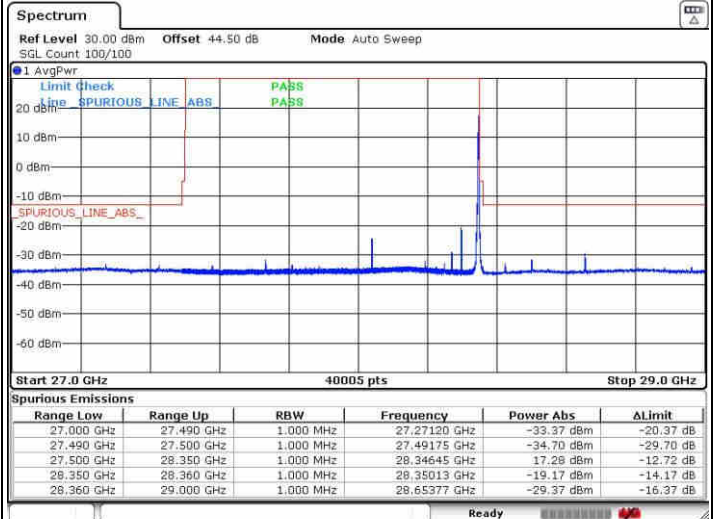
Date: 4.FEB.2020 20:59:09

Lowest Band Edge / 1 RB



Date: 4.FEB.2020 16:30:53

Highest Band Edge / 1 RB



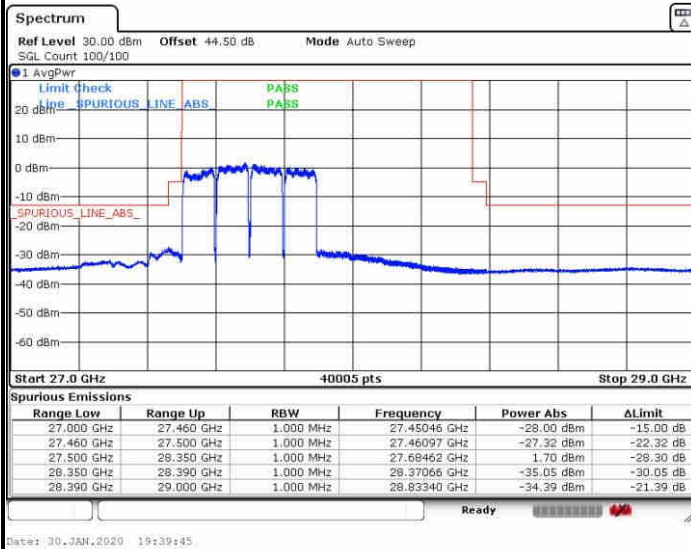
Date: 4.FEB.2020 21:00:00



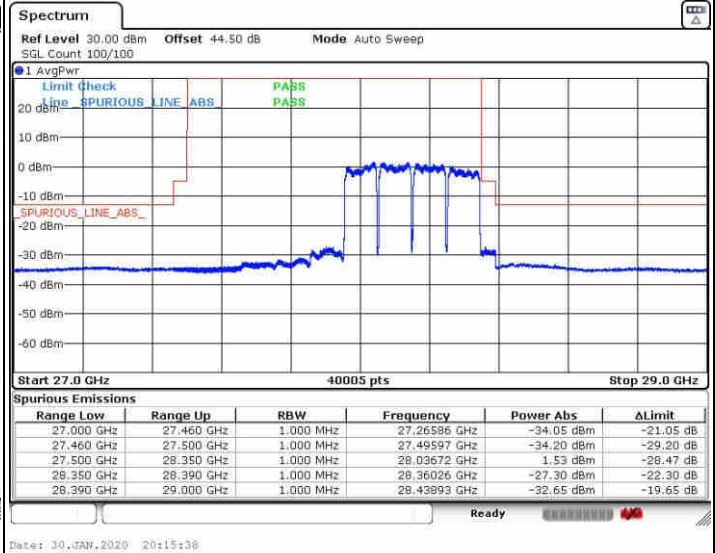
Module 0

NR Band n261 / 400MHz / QPSK

Lowest Band Edge / Full RB

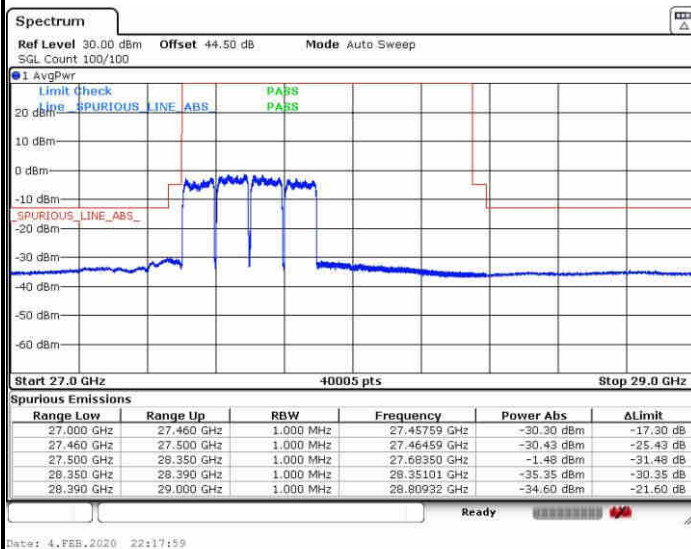


Highest Band Edge / Full RB

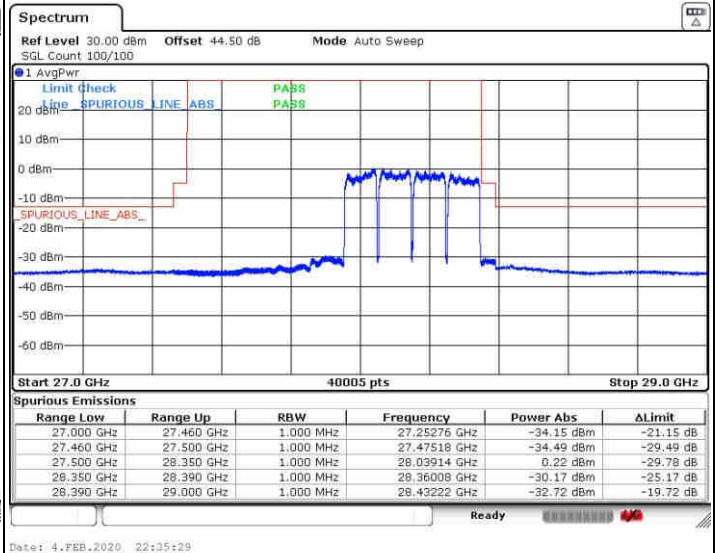


NR Band n261 / 400MHz / 16QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB



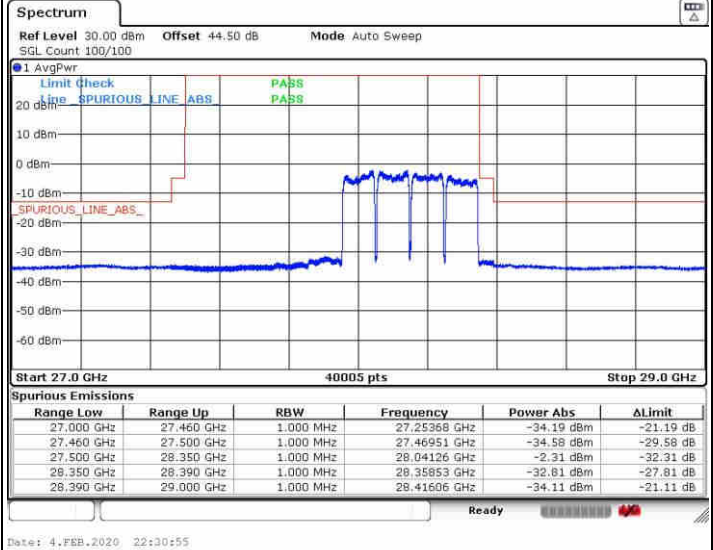
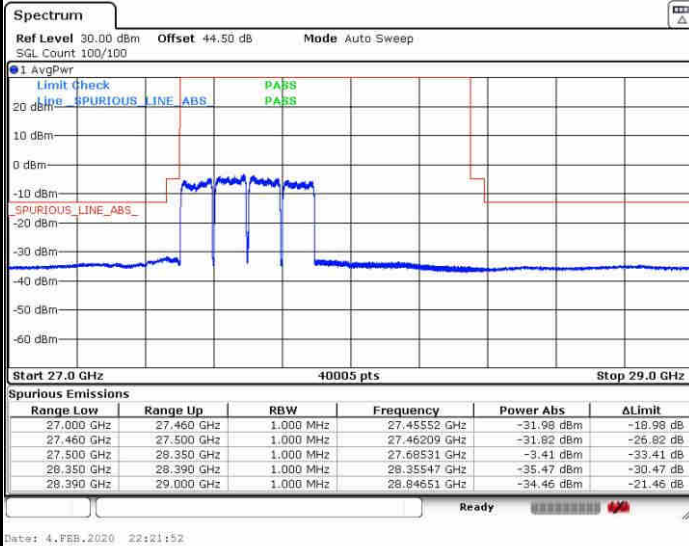


Module 0

NR Band n261 / 400MHz / 64QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

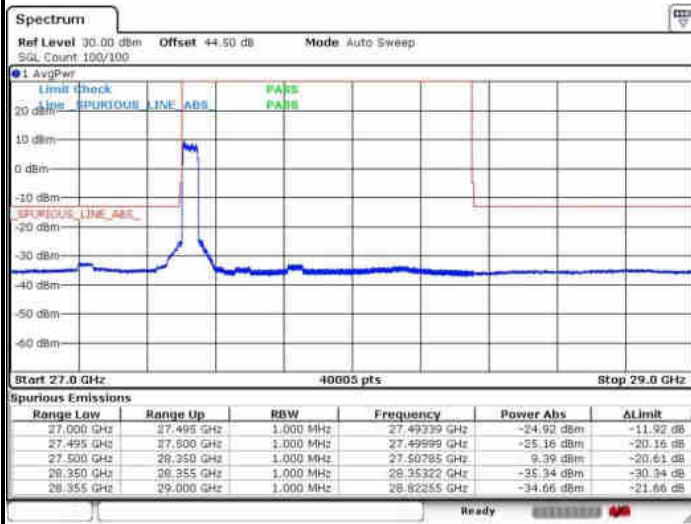




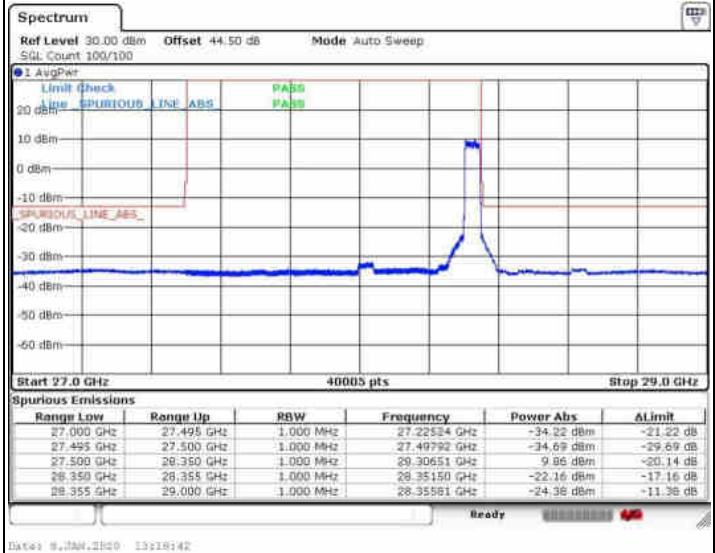
Module 1

NR Band n261 / 50MHz / QPSK

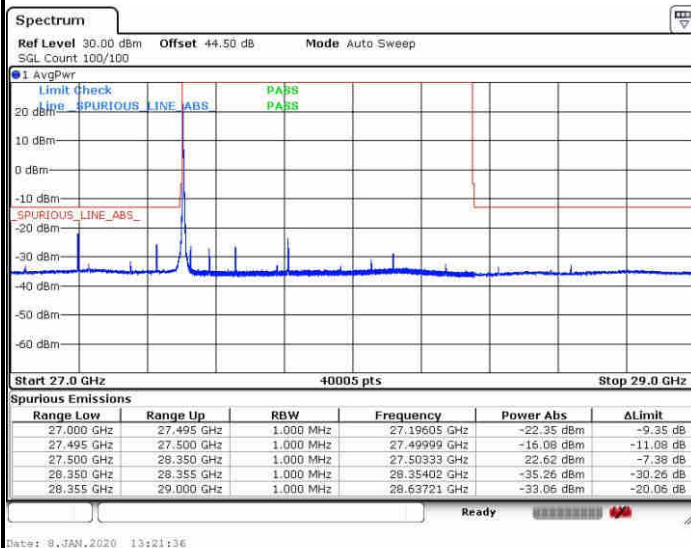
Lowest Band Edge / Full RB



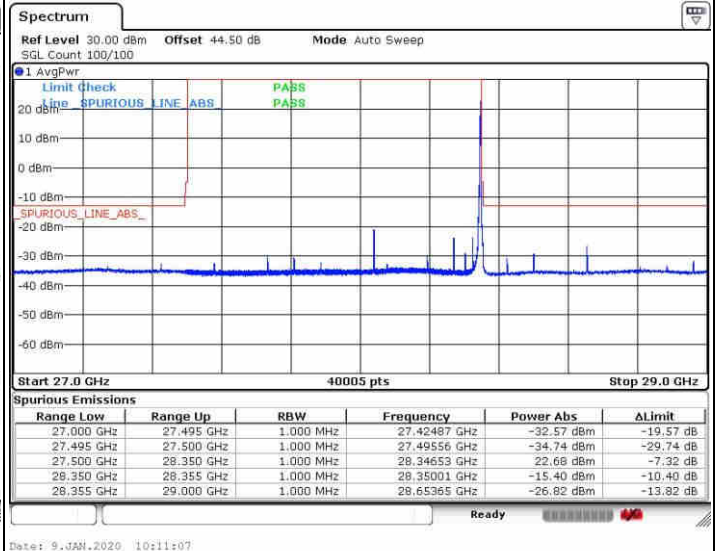
Highest Band Edge / Full RB



Lowest Band Edge / 1 RB



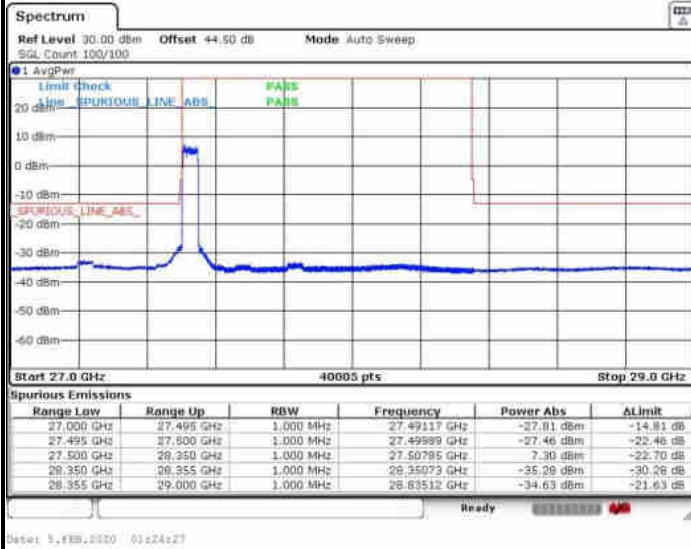
Highest Band Edge / 1 RB



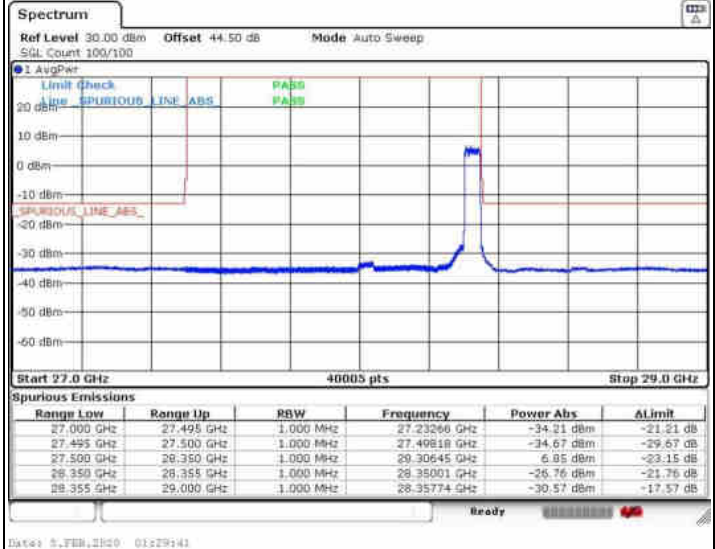


NR Band n261 / 50MHz / 16QAM

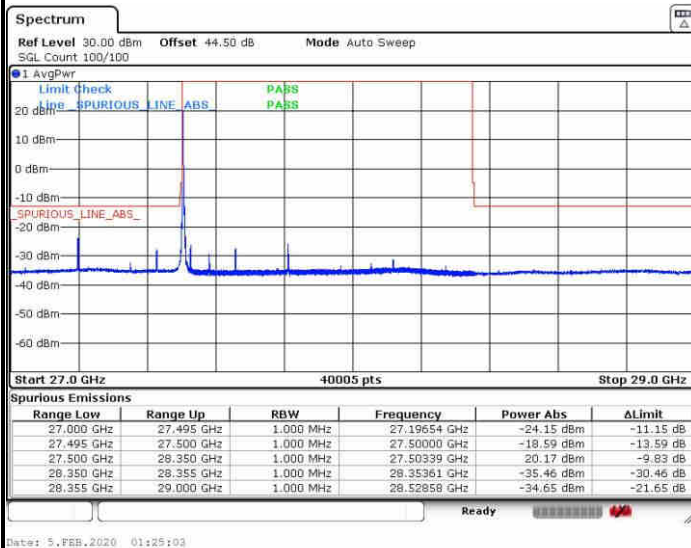
Lowest Band Edge / Full RB



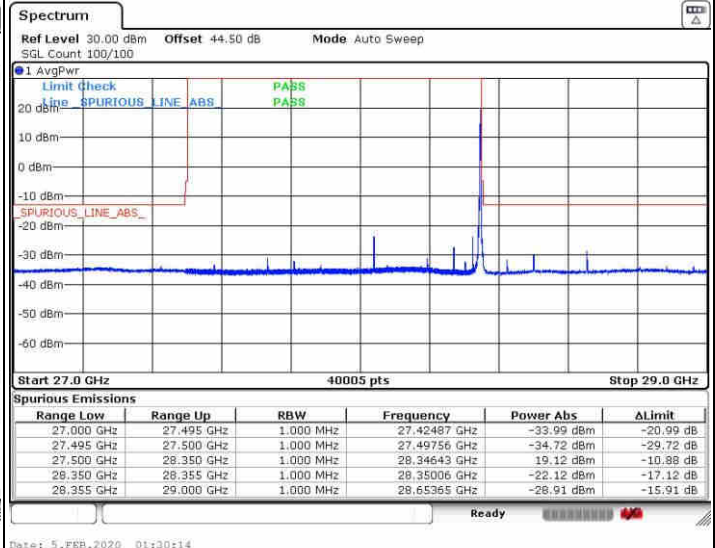
Highest Band Edge / Full RB



Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

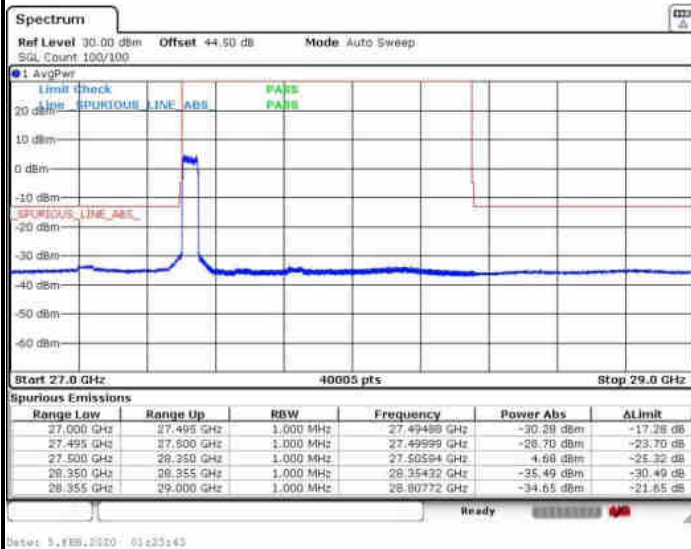




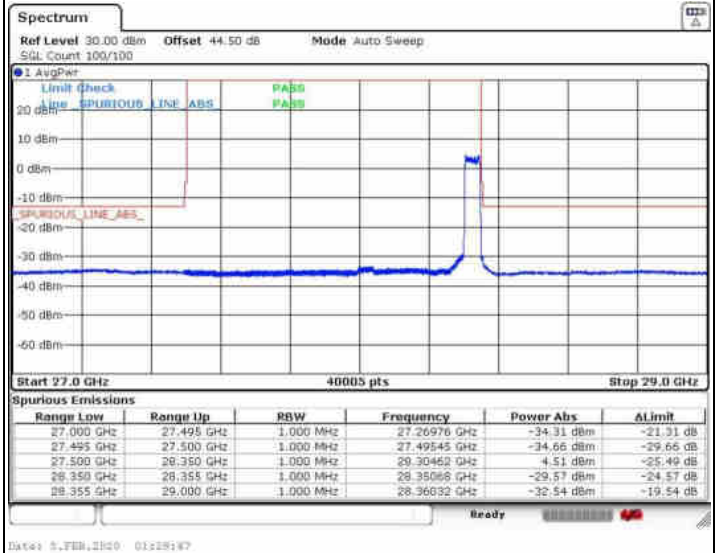
Module 1

NR Band n261 / 50MHz / 64QAM

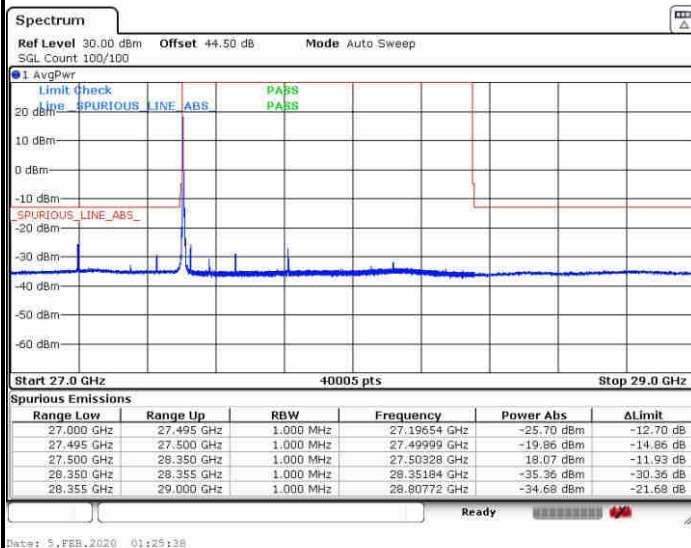
Lowest Band Edge / Full RB



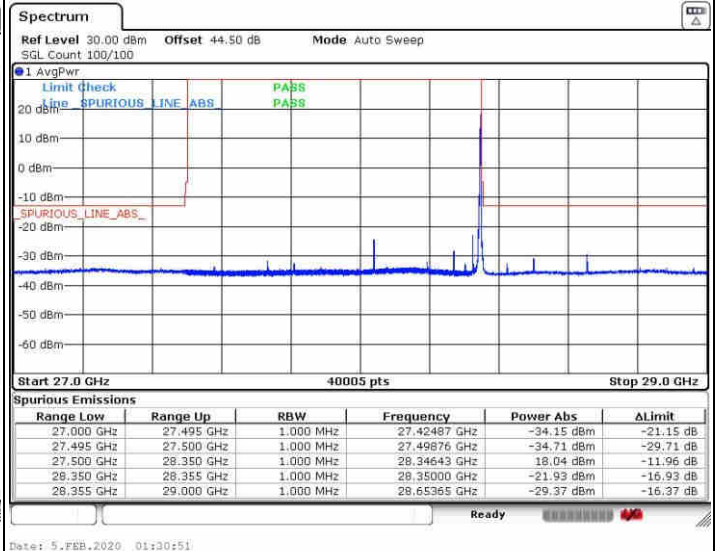
Highest Band Edge / Full RB



Lowest Band Edge / 1 RB



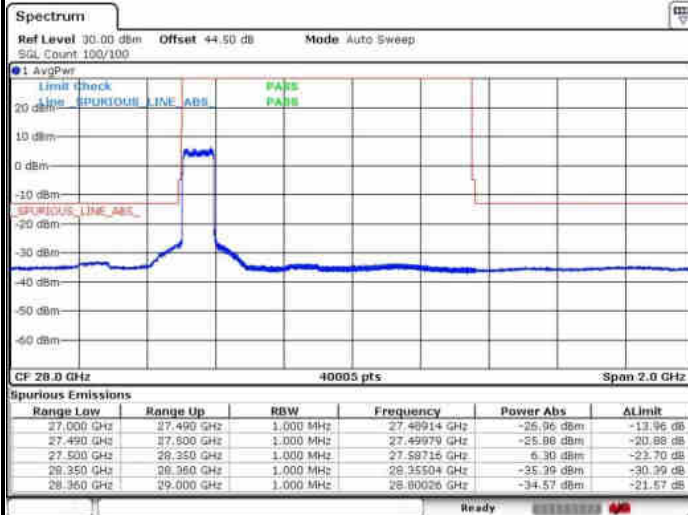
Highest Band Edge / 1 RB





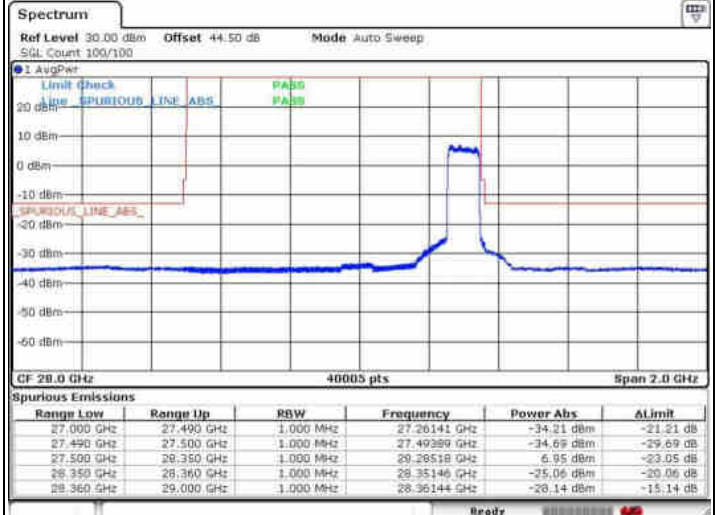
NR Band n261 / 100MHz / QPSK

Lowest Band Edge / Full RB



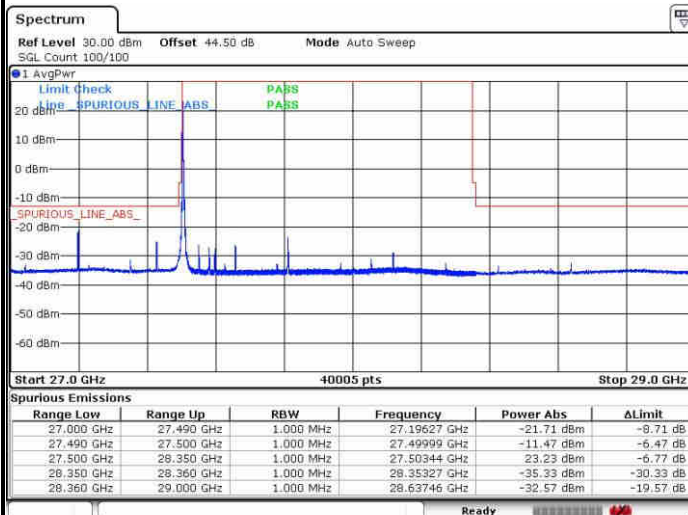
Date: 8.JAN.2020 23:00:54

Highest Band Edge / Full RB



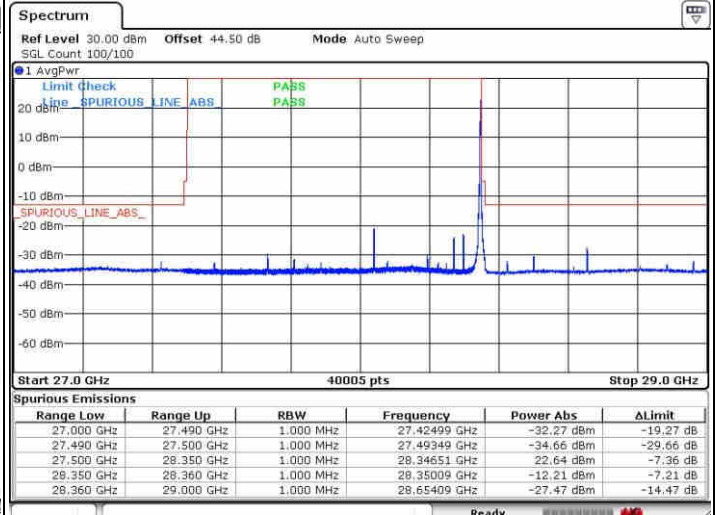
Date: 8.JAN.2020 23:22:23

Lowest Band Edge / 1 RB



Date: 9.JAN.2020 23:02:25

Highest Band Edge / 1 RB



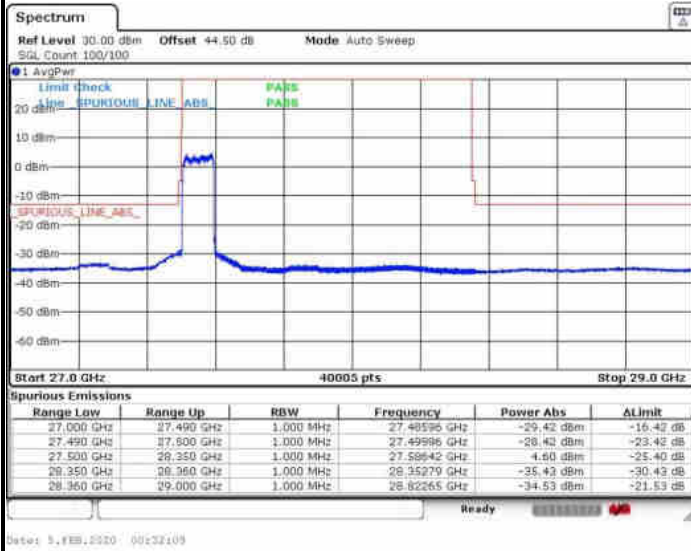
Date: 9.JAN.2020 10:09:00



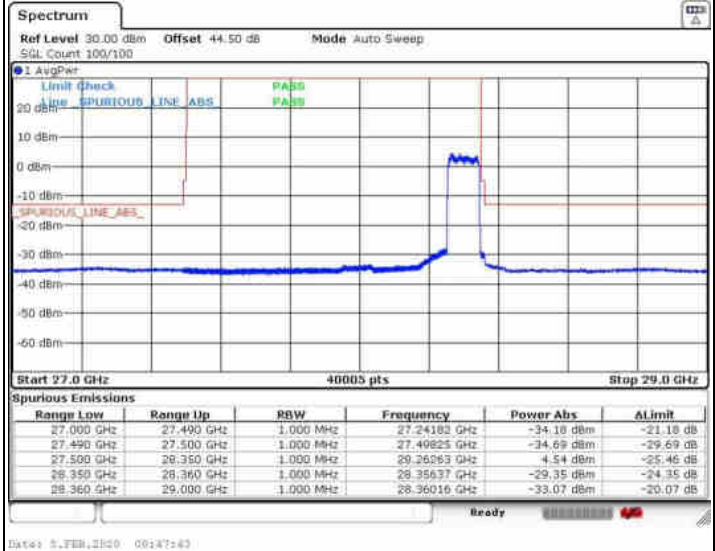
Module 1

NR Band n261 / 100MHz / 16QAM

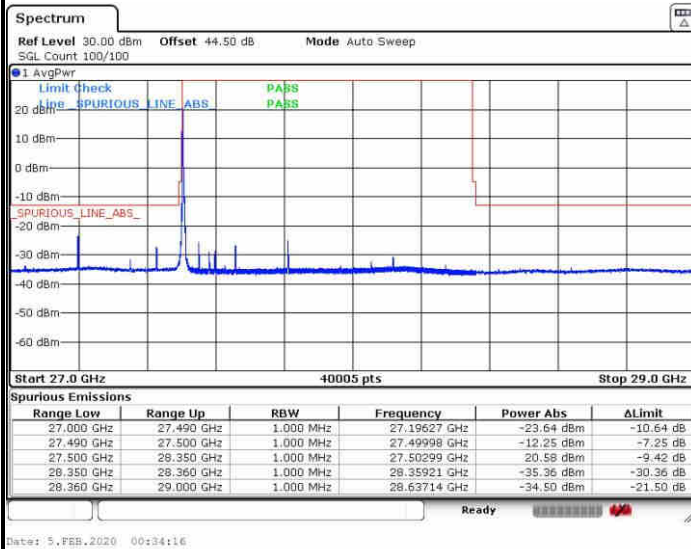
Lowest Band Edge / Full RB



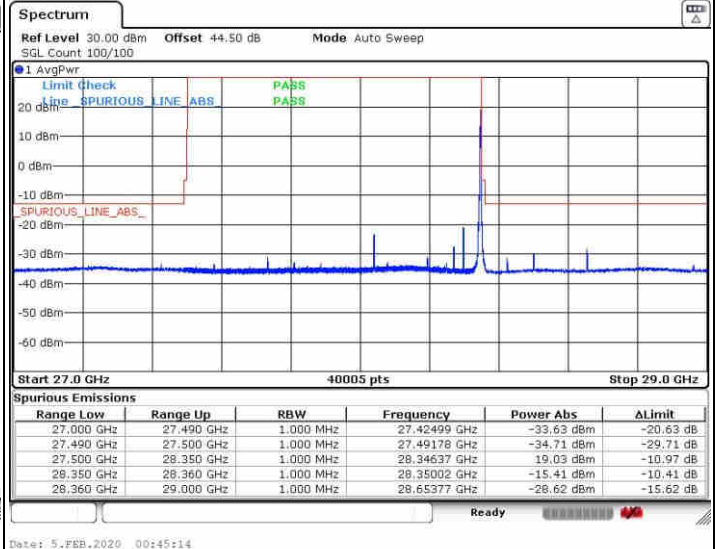
Highest Band Edge / Full RB



Lowest Band Edge / 1 RB



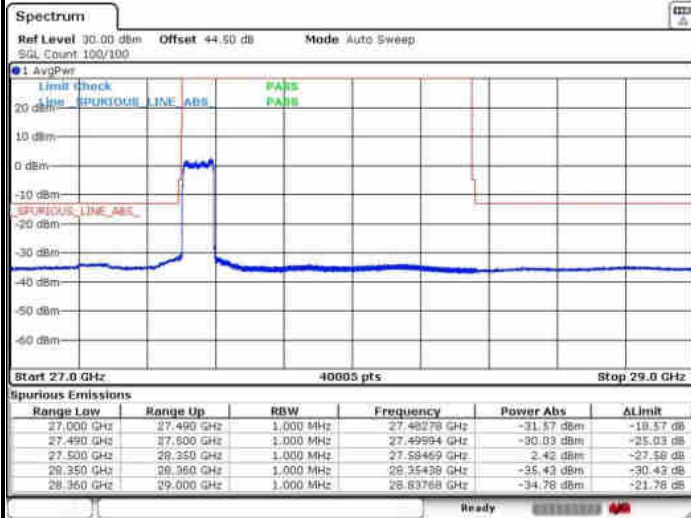
Highest Band Edge / 1 RB





NR Band n261 / 100MHz / 64QAM

Lowest Band Edge / Full RB



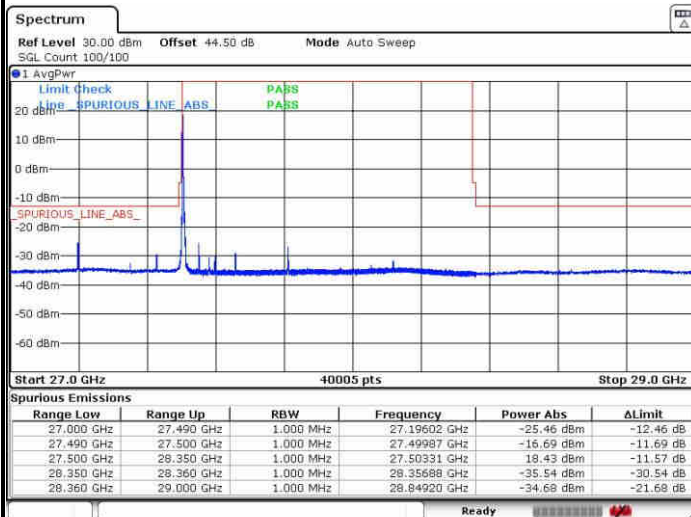
Date: 5.FEB.2020 00:33:04

Highest Band Edge / Full RB



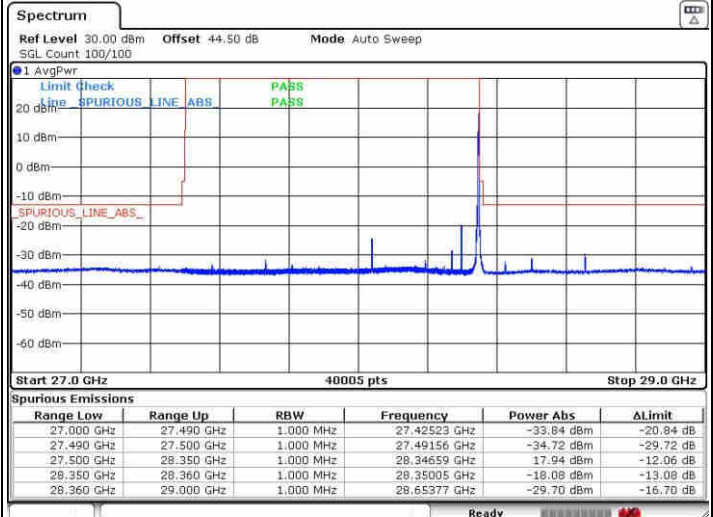
Date: 5.FEB.2020 00:46:58

Lowest Band Edge / 1 RB



Date: 5.FEB.2020 00:33:40

Highest Band Edge / 1 RB



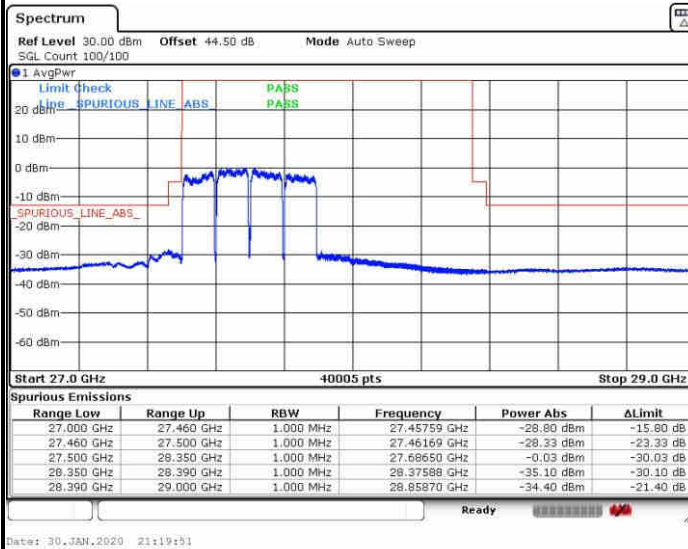
Date: 5.FEB.2020 00:46:21



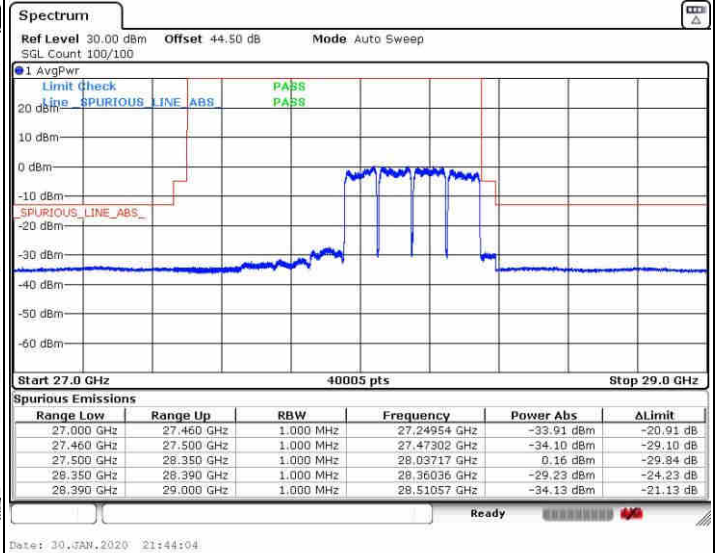
Module 1

NR Band n261 / 400MHz / QPSK

Lowest Band Edge / Full RB

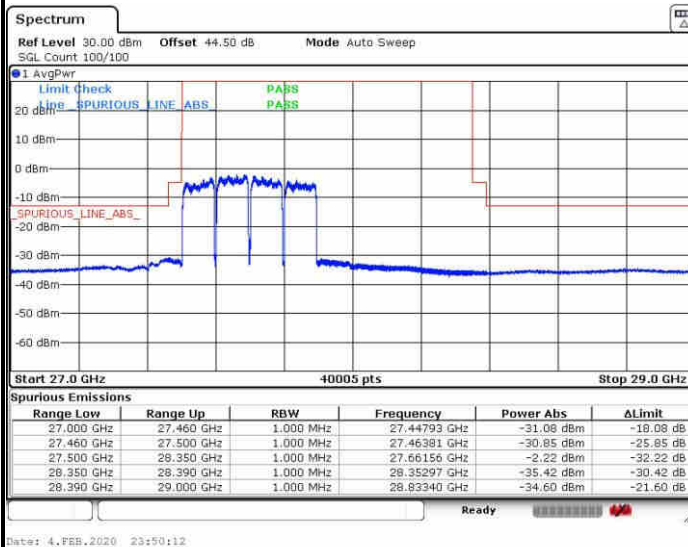


Highest Band Edge / Full RB

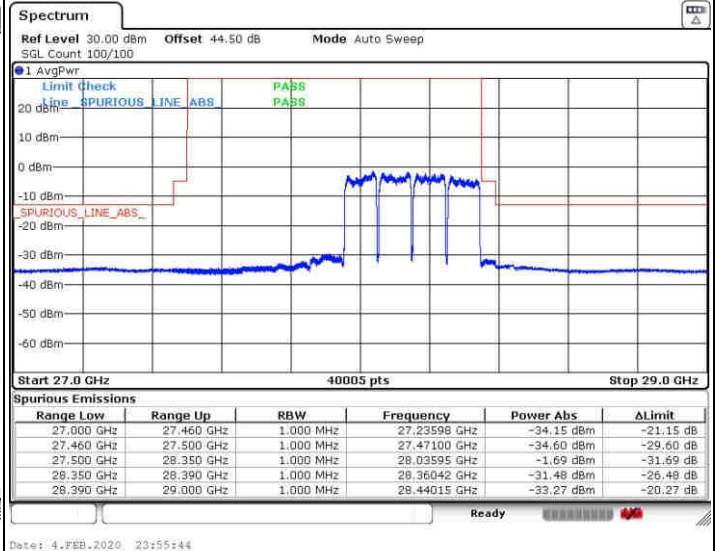


NR Band n261 / 400MHz / 16QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB



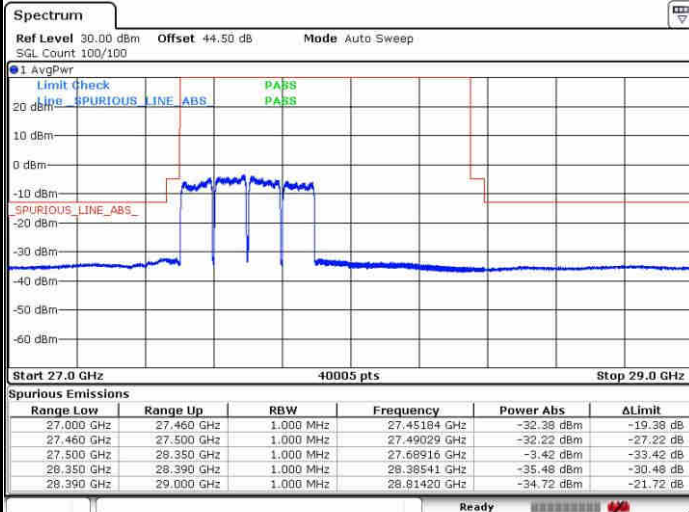


Module 1

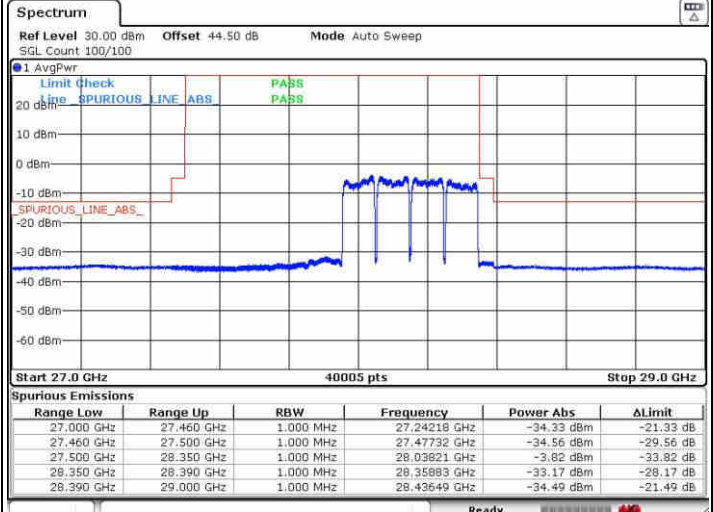
NR Band n261 / 400MHz / 64QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 4.FEB.2020 23:46:19



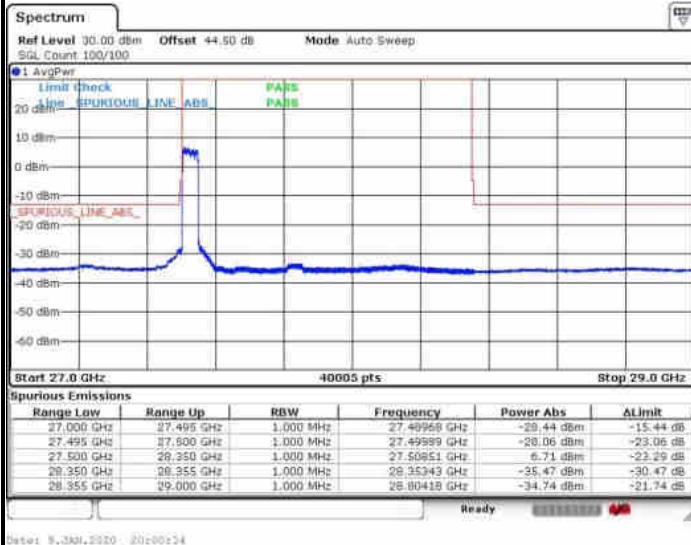
Date: 4.FEB.2020 23:59:10



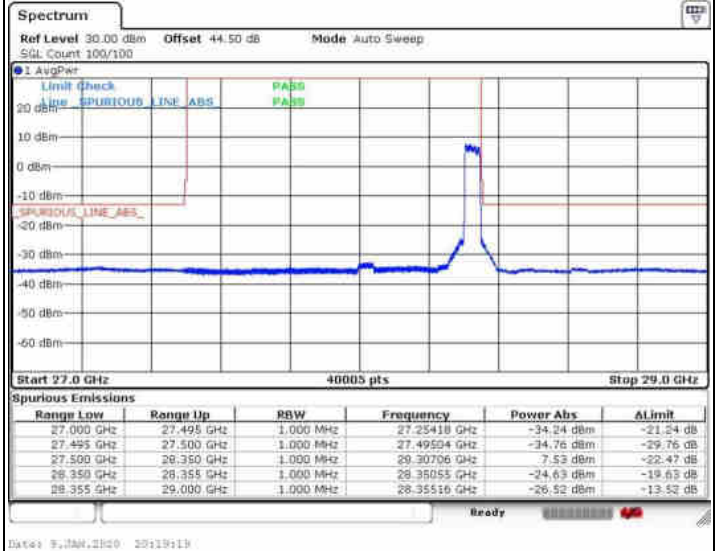
Module 2

NR Band n261 / 50MHz / QPSK

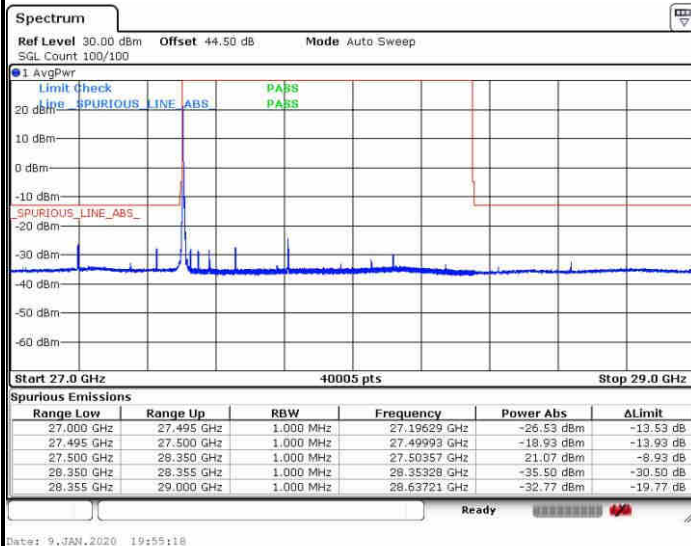
Lowest Band Edge / Full RB



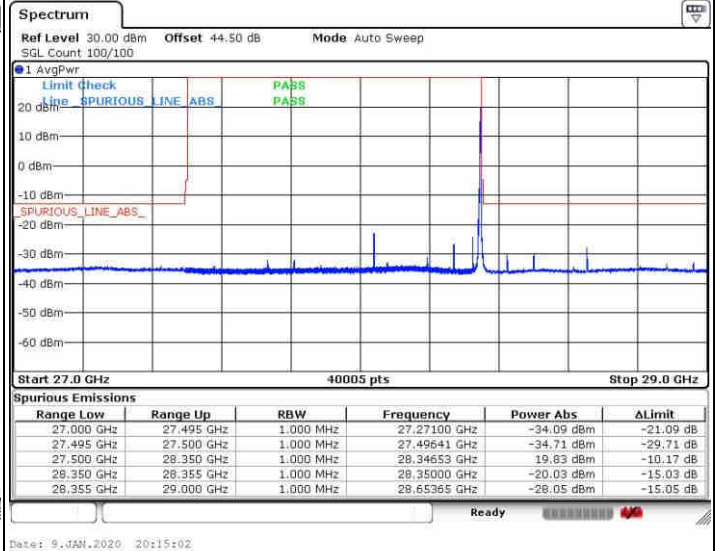
Highest Band Edge / Full RB



Lowest Band Edge / 1 RB



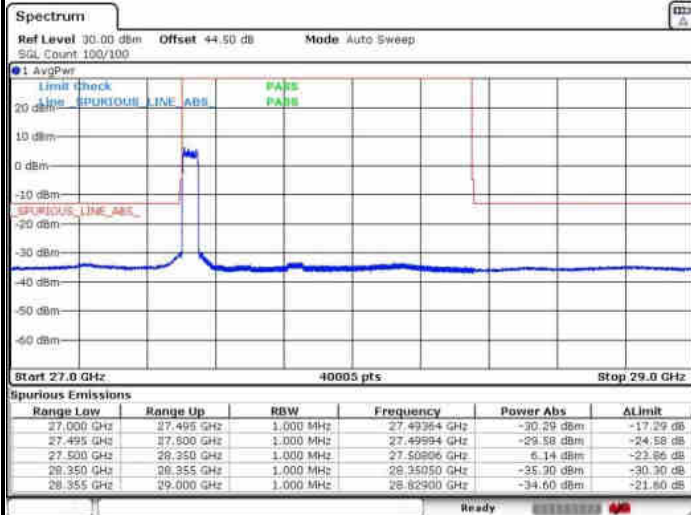
Highest Band Edge / 1 RB





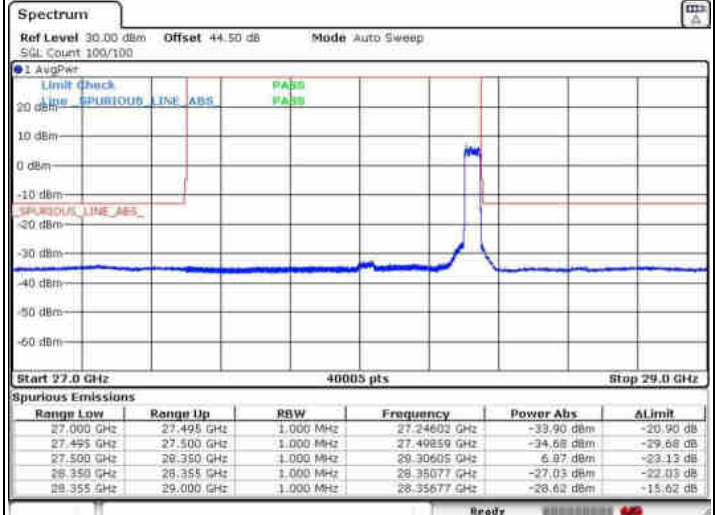
NR Band n261 / 50MHz / 16QAM

Lowest Band Edge / Full RB



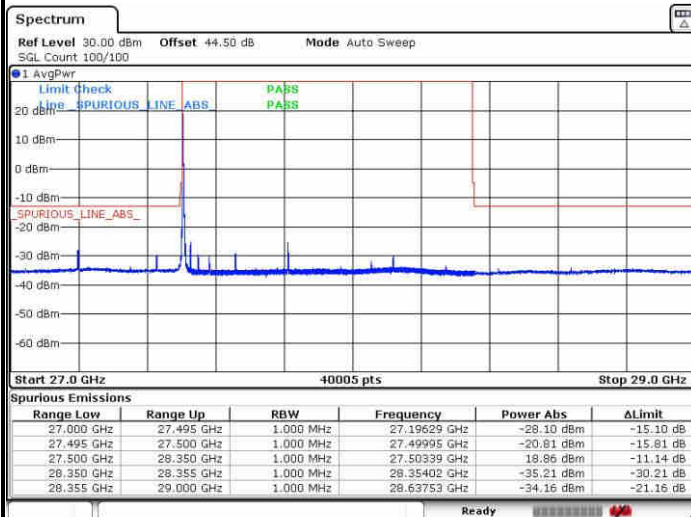
Date: 11.FEB.2020 21:34:38

Highest Band Edge / Full RB



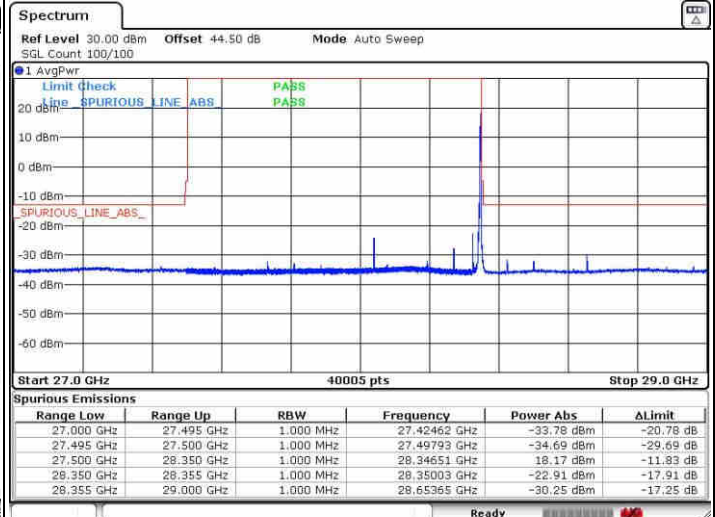
Date: 11.FEB.2020 21:11:38

Lowest Band Edge / 1 RB



Date: 11.FEB.2020 21:35:30

Highest Band Edge / 1 RB



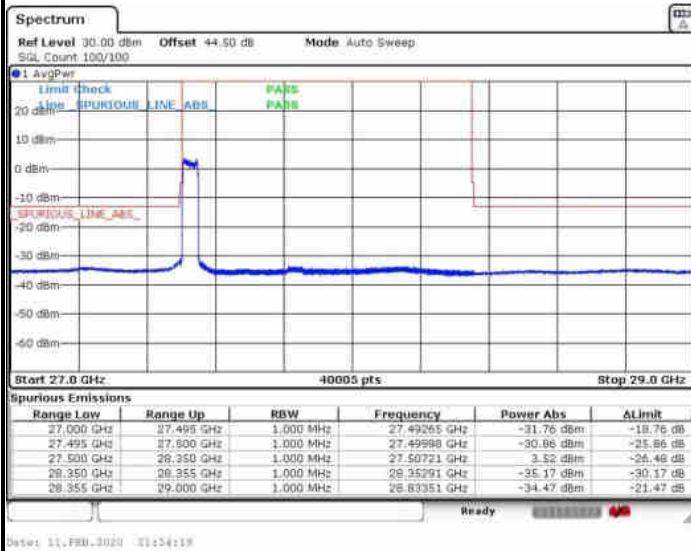
Date: 11.FEB.2020 23:13:19



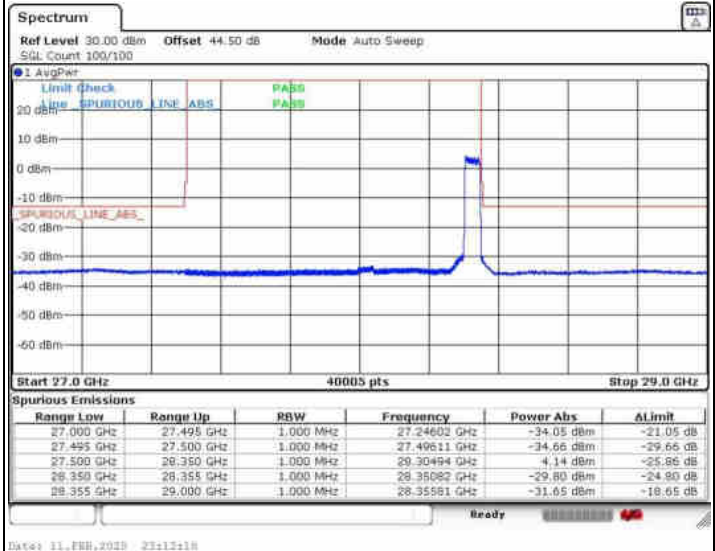
Module 2

NR Band n261 / 50MHz / 64QAM

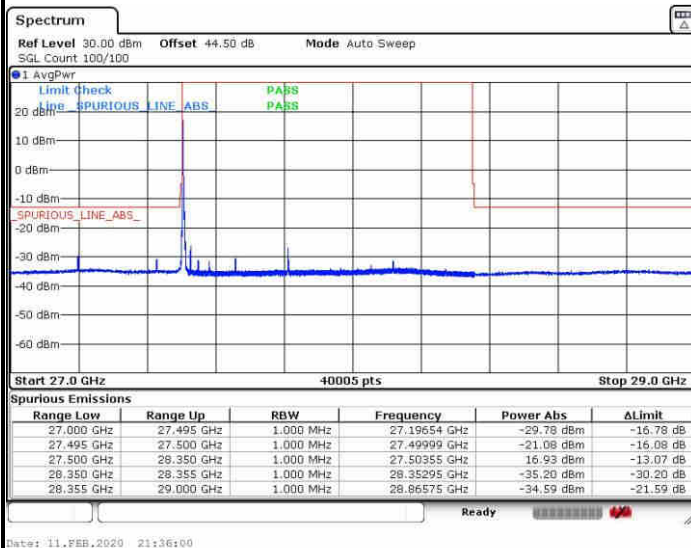
Lowest Band Edge / Full RB



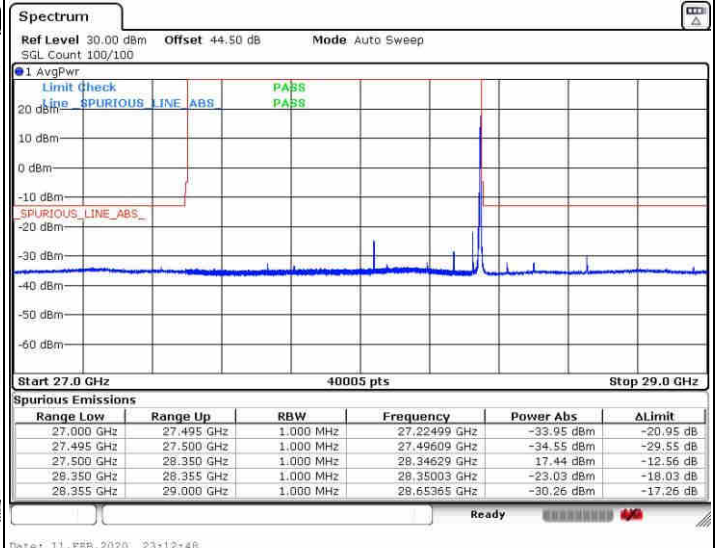
Highest Band Edge / Full RB



Lowest Band Edge / 1 RB



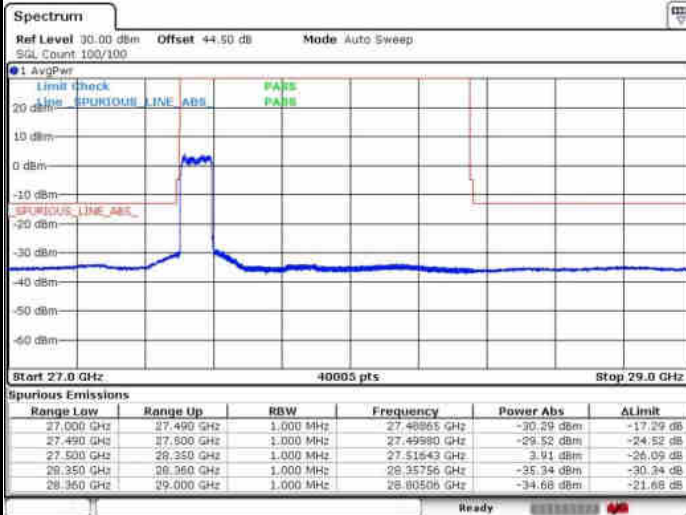
Highest Band Edge / 1 RB





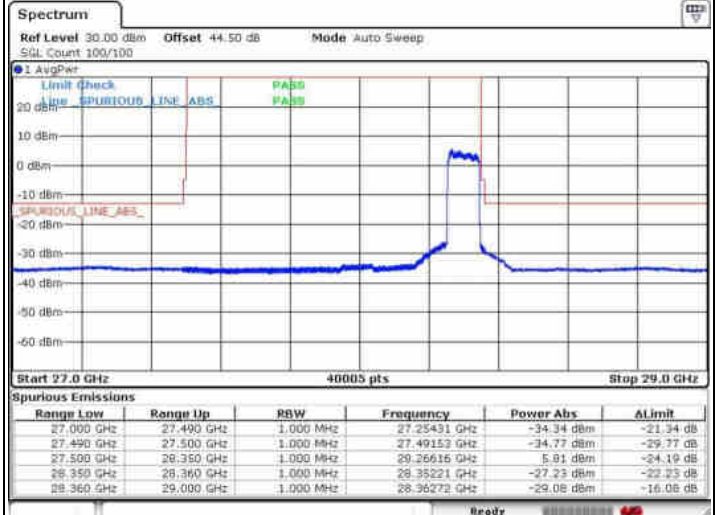
NR Band n261 / 100MHz / QPSK

Lowest Band Edge / Full RB



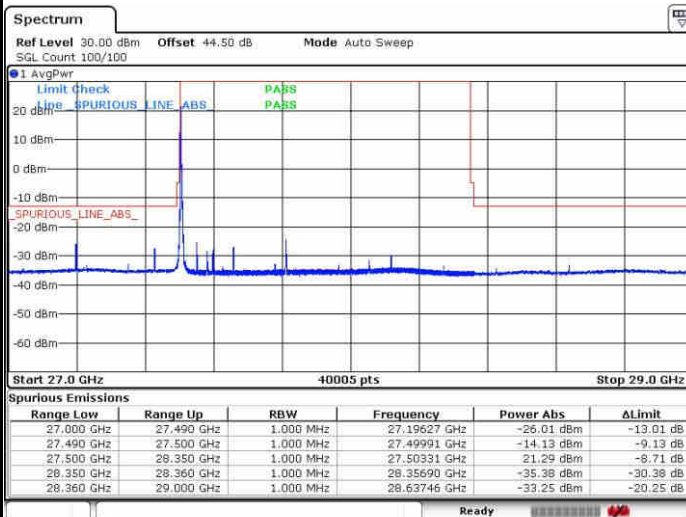
Date: 9, JAN, 2020 20:43:00

Highest Band Edge / Full RB



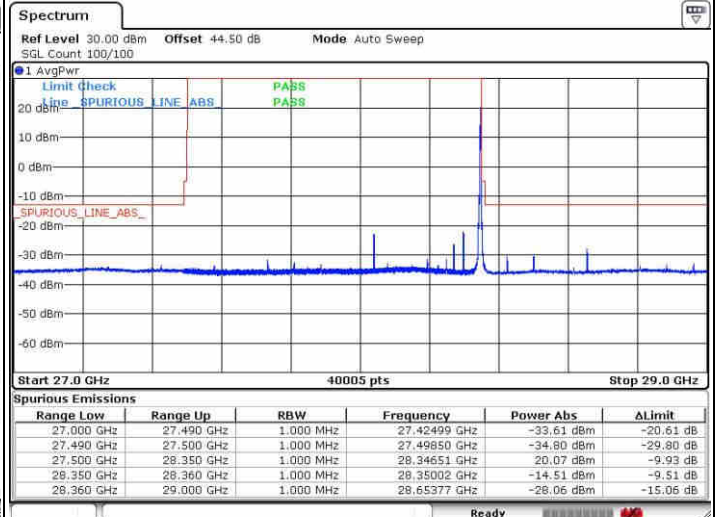
Date: 9, JAN, 2020 20:43:18

Lowest Band Edge / 1 RB



Date: 9, JAN, 2020 20:37:43

Highest Band Edge / 1 RB



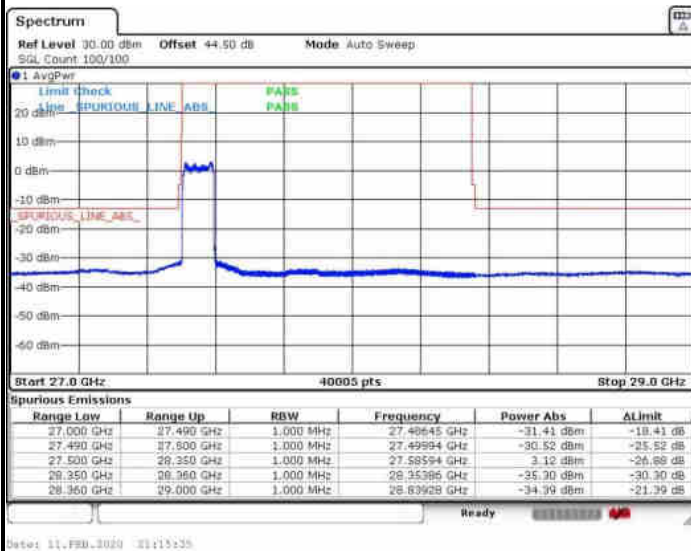
Date: 9, JAN, 2020 20:27:20



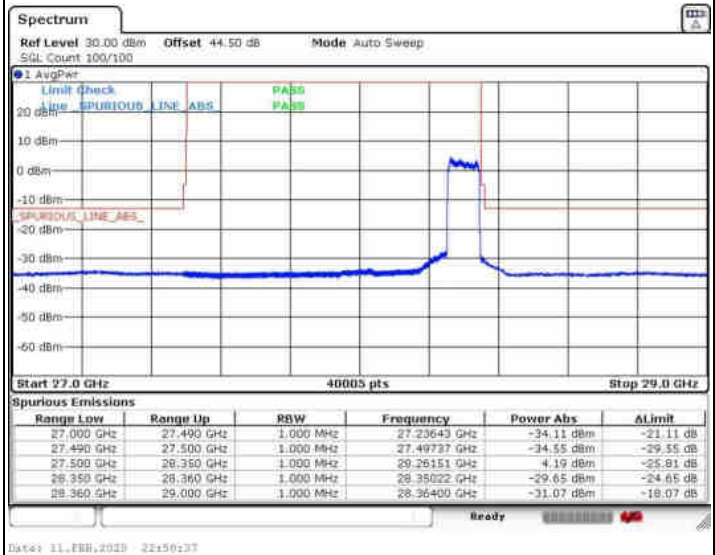
Module 2

NR Band n261 / 100MHz / 16QAM

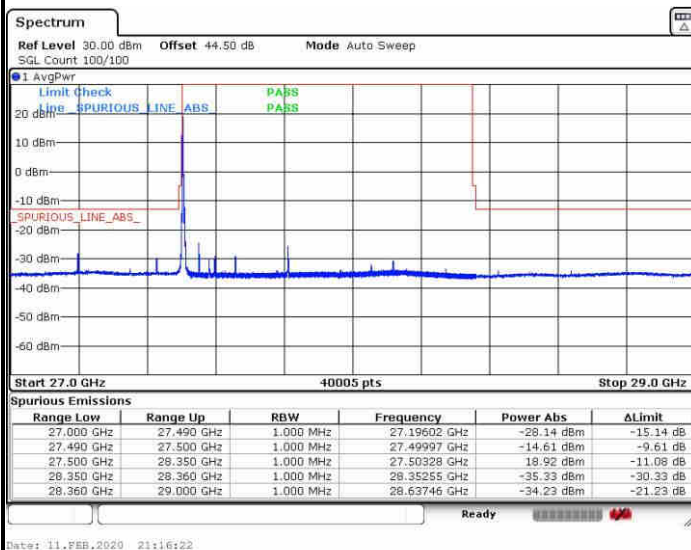
Lowest Band Edge / Full RB



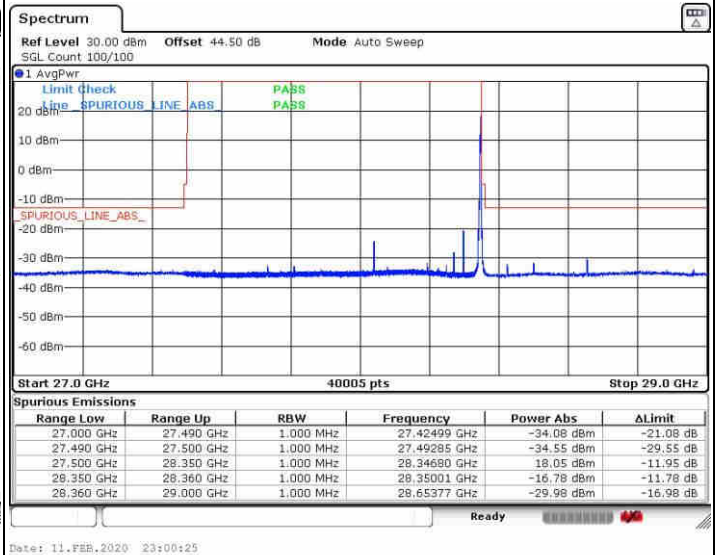
Highest Band Edge / Full RB



Lowest Band Edge / 1 RB



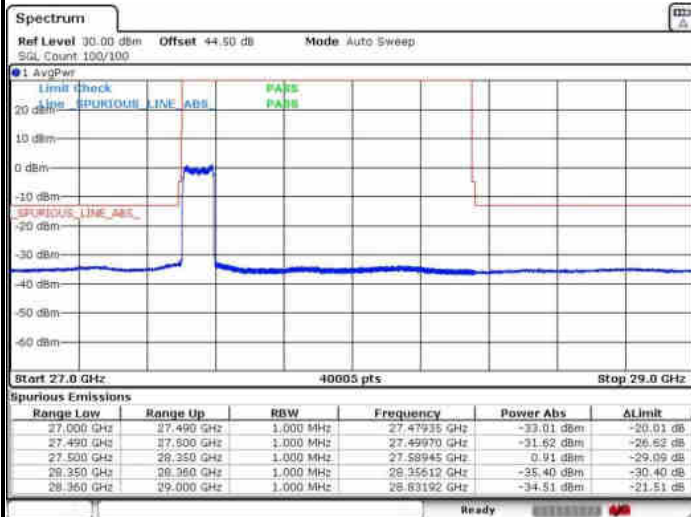
Highest Band Edge / 1 RB





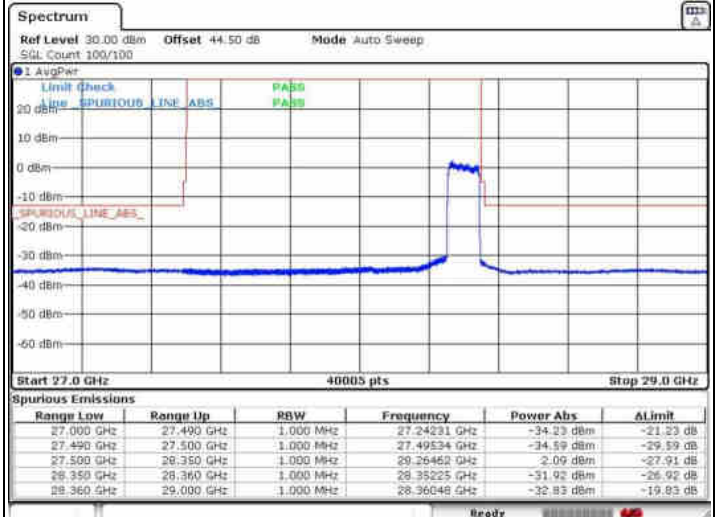
NR Band n261 / 100MHz / 64QAM

Lowest Band Edge / Full RB



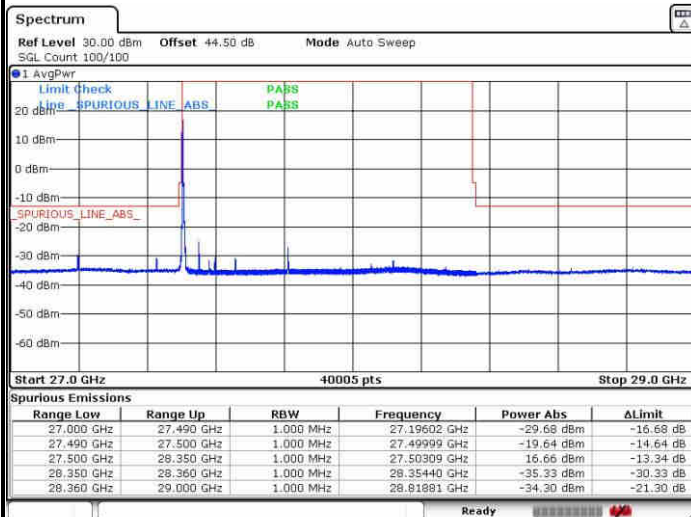
Date: 11.FEB.2020 21:14:35

Highest Band Edge / Full RB



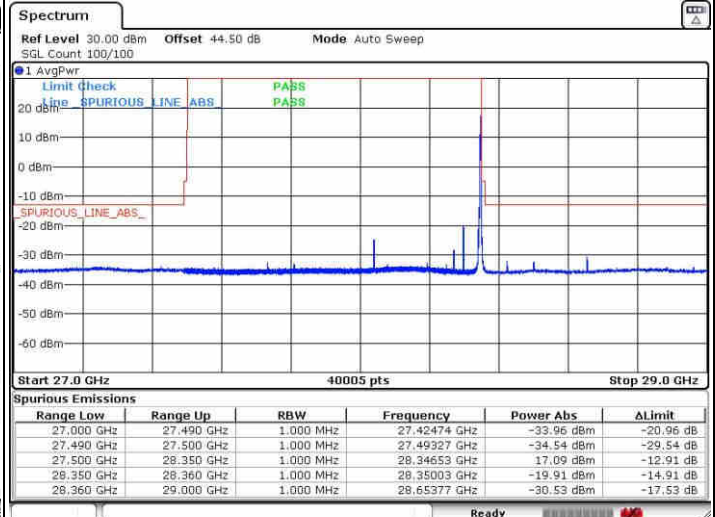
Date: 11.FEB.2020 21:59:19

Lowest Band Edge / 1 RB



Date: 11.FEB.2020 21:16:56

Highest Band Edge / 1 RB



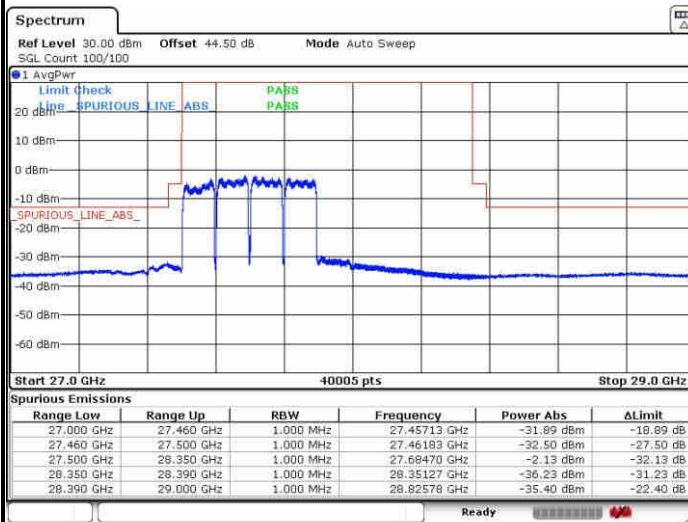
Date: 11.FEB.2020 22:59:51



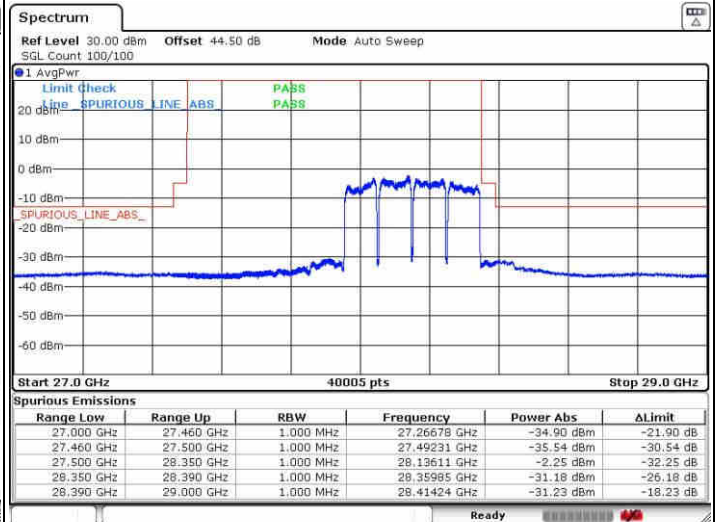
Module 2

NR Band n261 / 400MHz / QPSK

Lowest Band Edge / Full RB

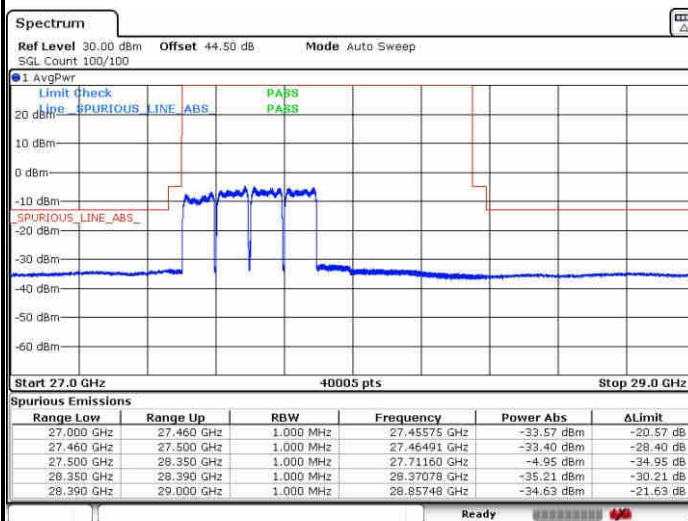


Highest Band Edge / Full RB

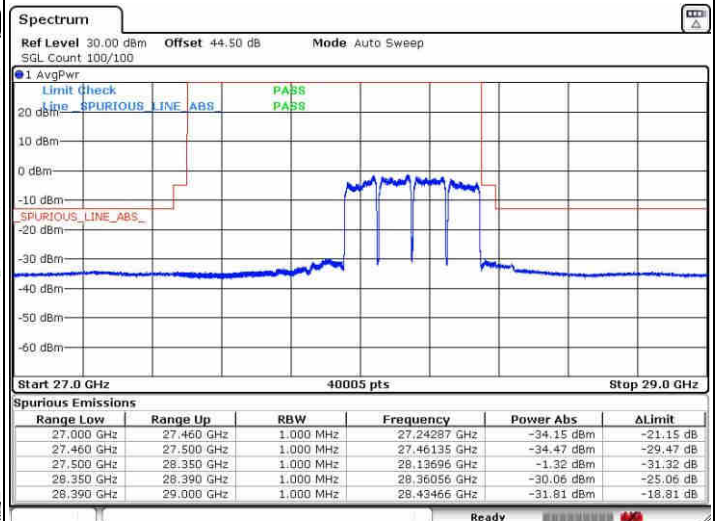


NR Band n261 / 400MHz / 16QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB



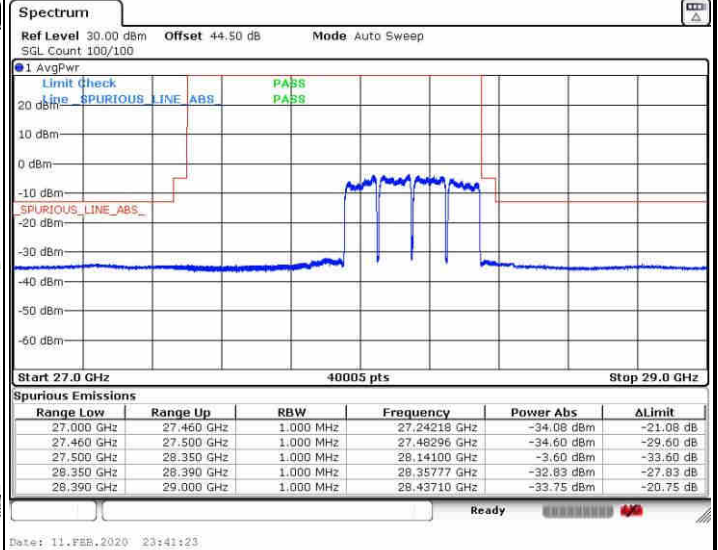
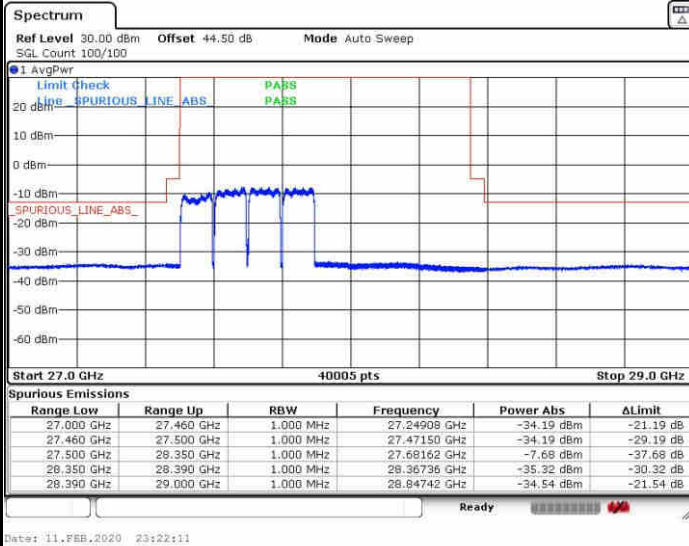


Module 2

NR Band n261 / 400MHz / 64QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



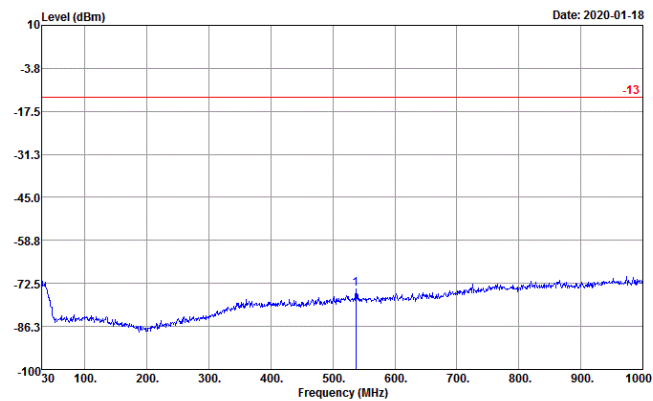
Spurious Emission

There is no significant spurious emission signal found for frequency started from 30MHz up to 18GHz.

Only the noise floor is reported.

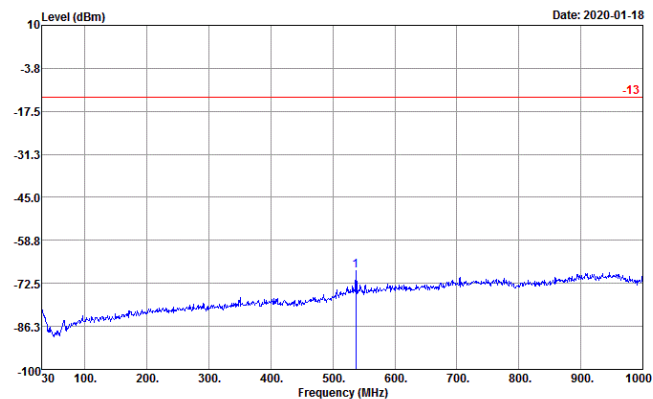
NR Band n261 (30MHz-1GHz)

Horizontal



Site	: 03CH10-HY				
Condition	: -13 EIRP_WO HORIZONTAL				
Project	: 9N2705				
	: MO_B162-100M-M-30-16RSE-1RB0-PUSCH-DFT-S				
Freq	Level	Over	Limit	Read	
MHz	dBm	Limit	Line	Level	
1	537.31	-74.17	-61.17	-13.00	-75.29

Vertical

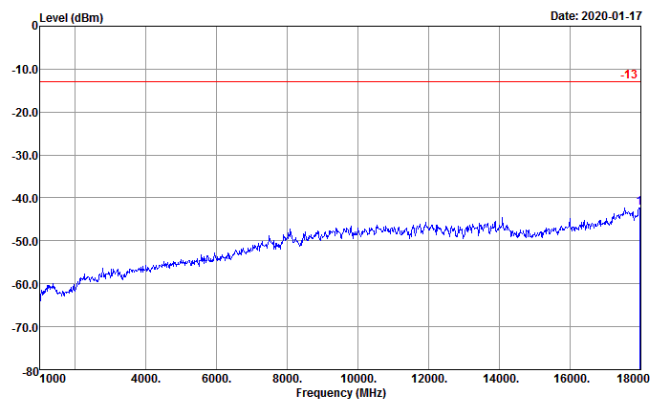


Site	: 03CH10-HY				
Condition	: -13 EIRP_WO VERTICAL				
Project	: 9N2705				
	: MO_B162-100M-M-30-16RSE-1RB0-PUSCH-DFT-S				
Freq	Level	Over	Limit	Read	
MHz	dBm	Limit	Line	Level	
1	537.31	-68.30	-55.30	-13.00	-71.74



NR Band n261 (1GHz-18GHz)

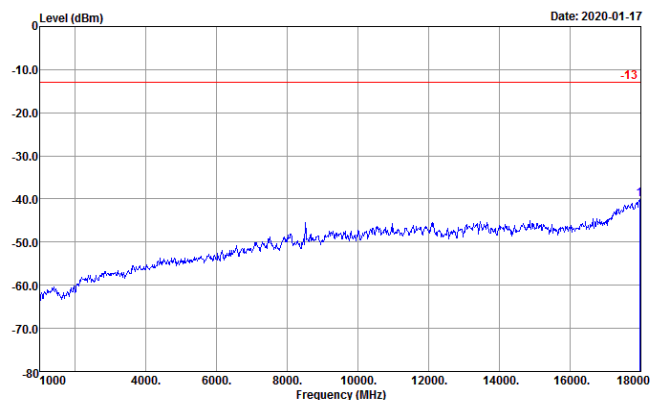
Horizontal



Site : 03CH10-HY
Condition : -13 EIRP_WO HORIZONTAL
Project : 9N2705
: MQ_B162-100M-M-1-18GRSE-1R80-PUSCH-DFT-S

Freq	Level	Over	Limit	Read
MHz	dBm	dB	dBm	dBm
1	17966.00	-42.29	-29.29	-13.00 -53.90

Vertical



Site : 03CH10-HY
Condition : -13 EIRP_WO VERTICAL
Project : 9N2705
: MQ_B162-100M-M-1-18GRSE-1R80-PUSCH-DFT-S

Freq	Level	Over	Limit	Read
MHz	dBm	dB	dBm	dBm
1	17966.00	-40.01	-27.01	-13.00 -54.60

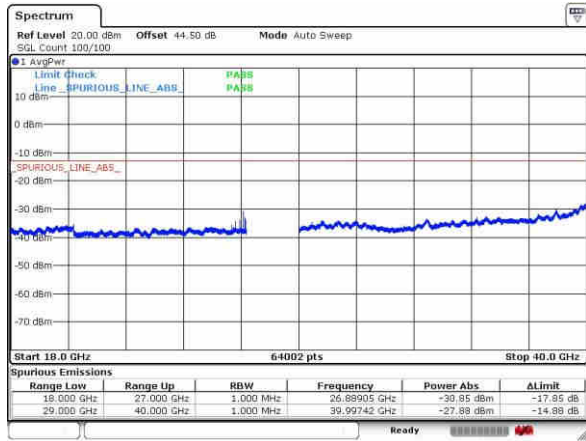


Spurious emission between 18GHz to 40GHz worst case plot is reported as following.

Module 0

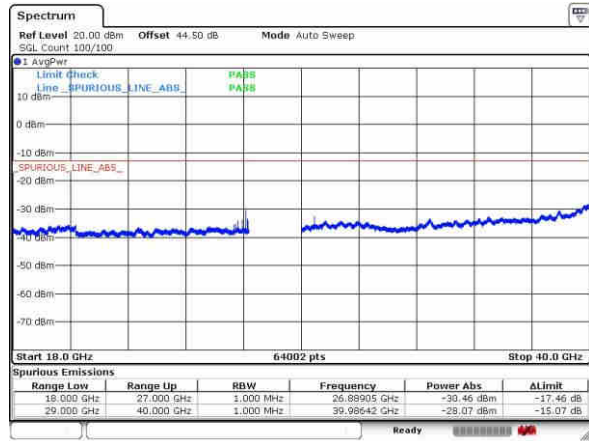
NR Band n261 QPSK (18-40GHz)

Lowest Channel / 50MHz



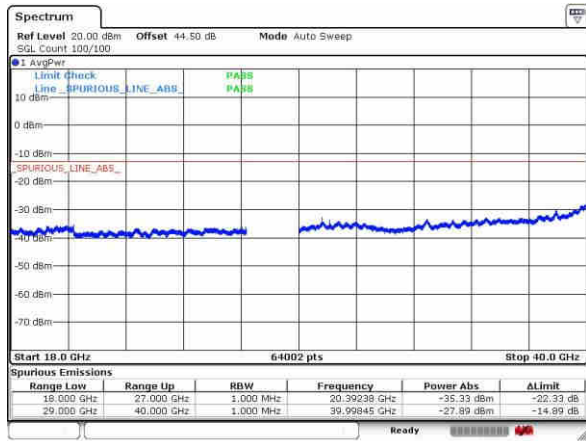
Date: 6/30/2020 07:27:15

Lowest Channel / 100MHz



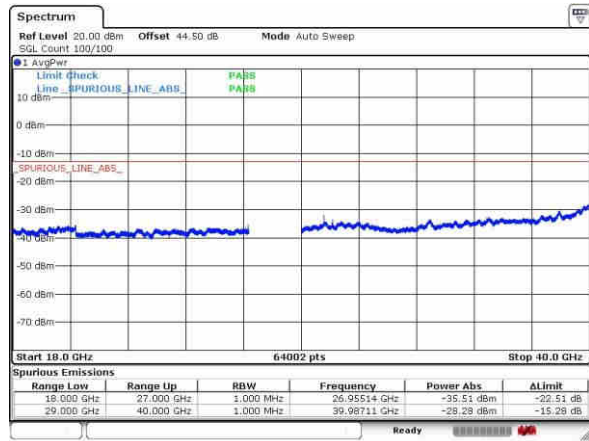
Date: 6/30/2020 06:18:05

Middle Channel / 50MHz



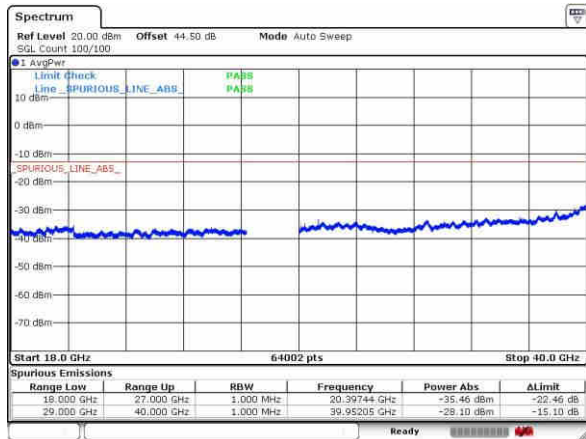
Date: 6/30/2020 07:28:10

Middle Channel / 100MHz



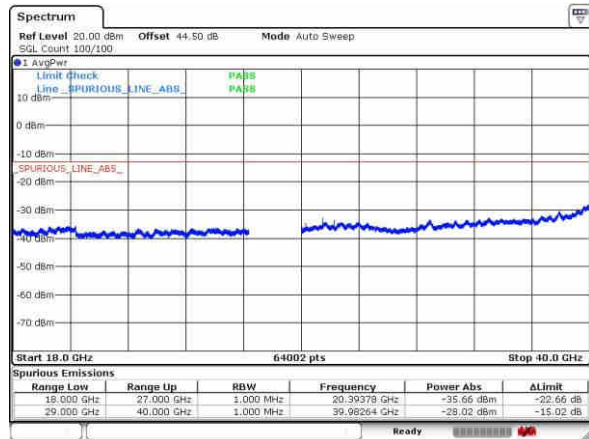
Date: 6/30/2020 06:18:30

Highest Channel / 50MHz



Date: 6/30/2020 07:29:16

Highest Channel / 100MHz



Date: 6/30/2020 06:11:51

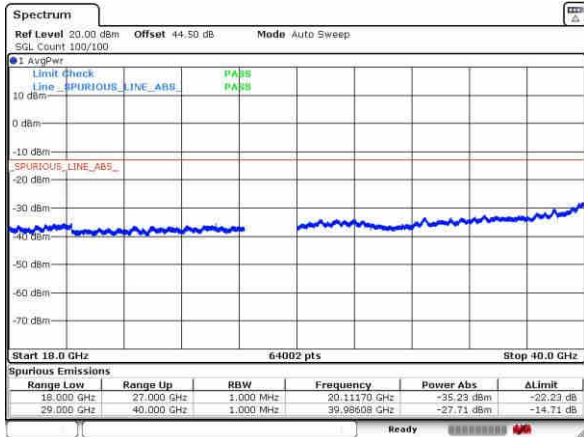
Remark: In band and out of band frequencies are omitted.



Module 0

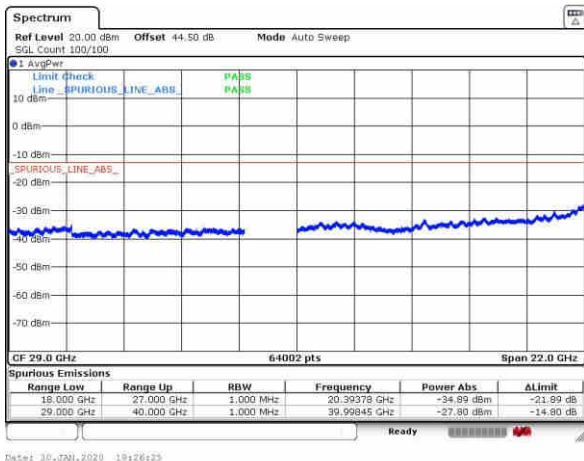
NR Band n261 QPSK (18-40GHz)

Lowest Channel / 400MHz



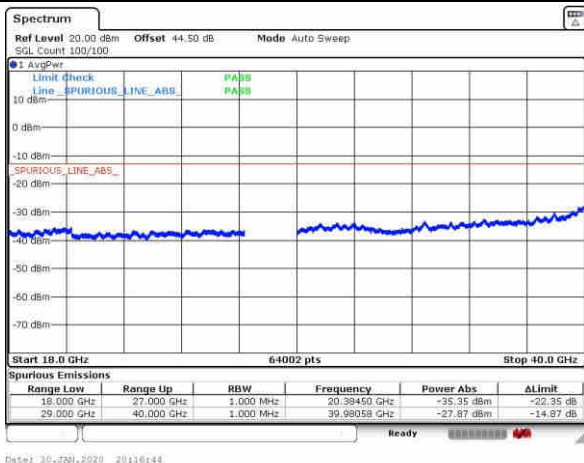
intentionally blank

Middle Channel / 400MHz



intentionally blank

Highest Channel / 400MHz



intentionally blank

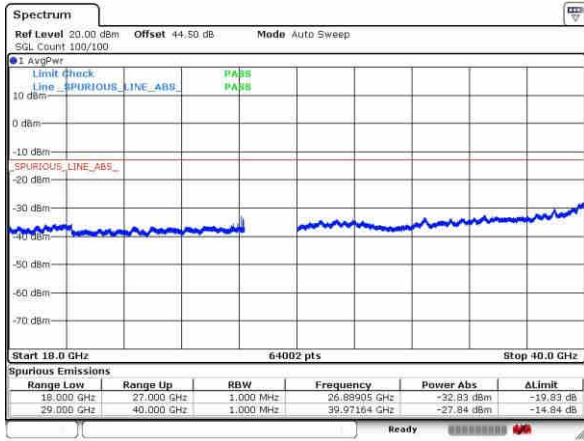
Remark: In band and out of band frequencies are omitted.



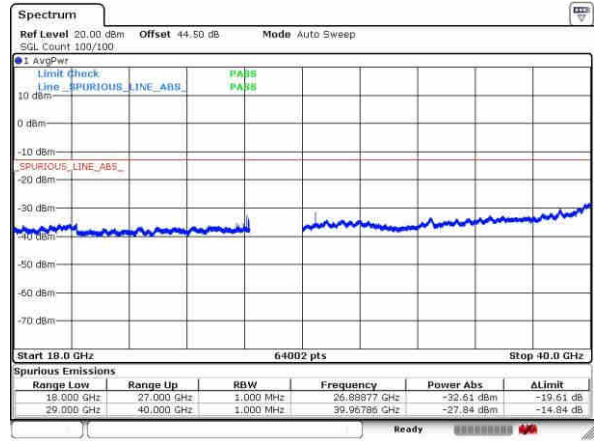
Module 1

NR Band n261 QPSK (18-40GHz)

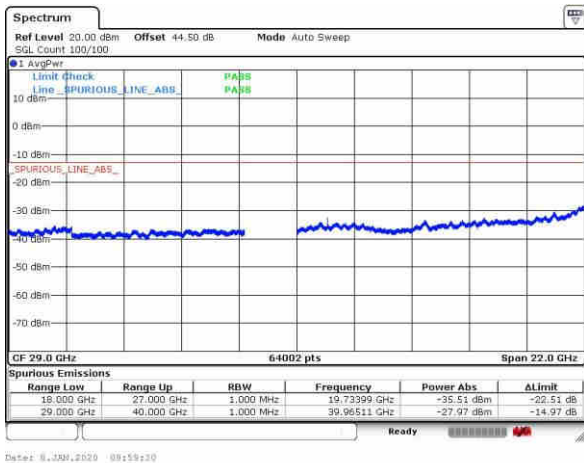
Lowest Channel / 50MHz



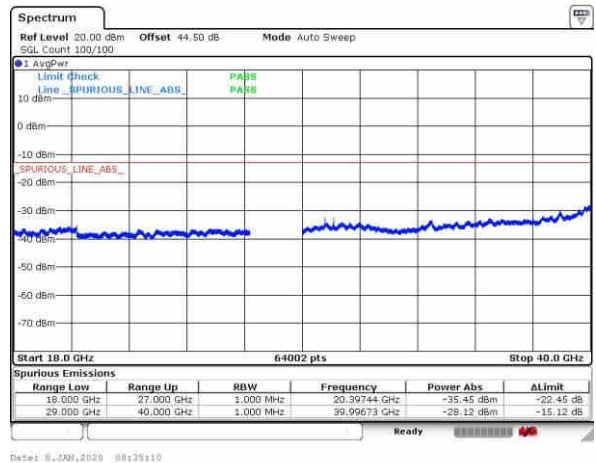
Lowest Channel / 100MHz



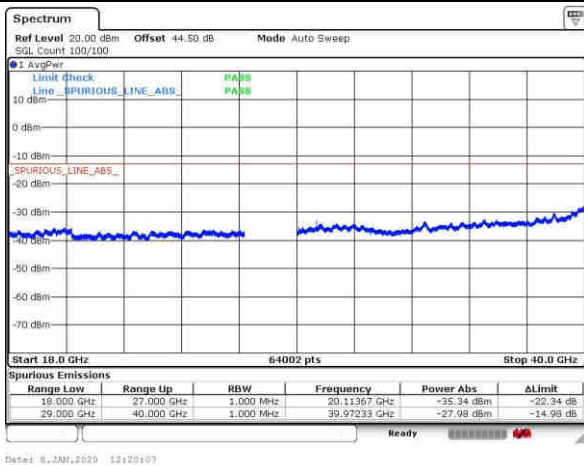
Middle Channel / 50MHz



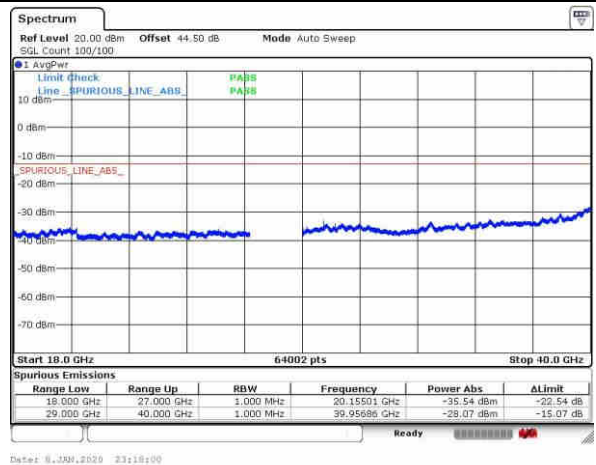
Middle Channel / 100MHz



Highest Channel / 50MHz



Highest Channel / 100MHz

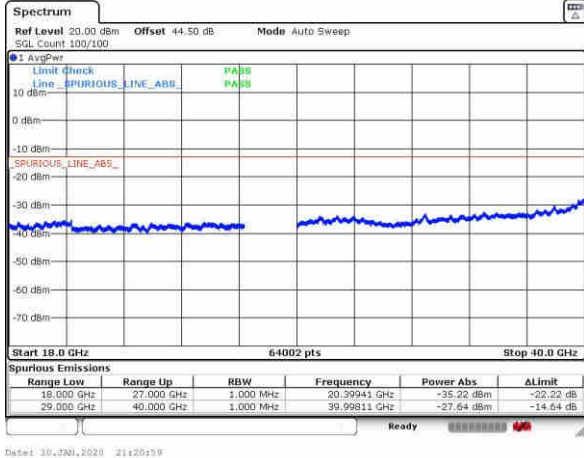


Remark: In band and out of band frequencies are omitted.

Module 1

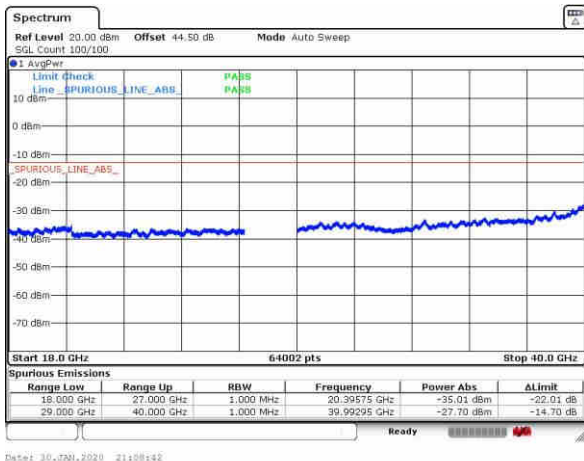
NR Band n261 QPSK (18-40GHz)

Lowest Channel / 400MHz



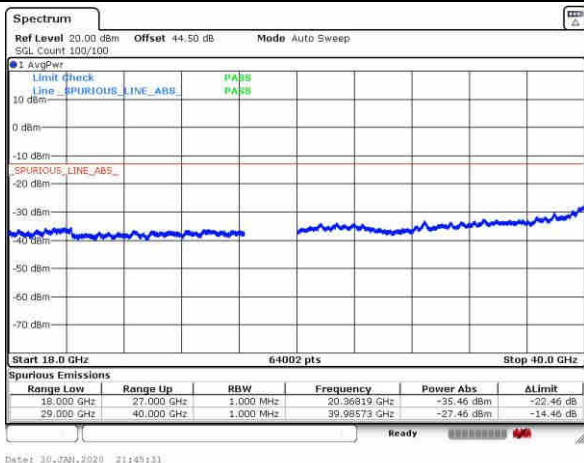
intentionally blank

Middle Channel / 400MHz



intentionally blank

Highest Channel / 400MHz



intentionally blank

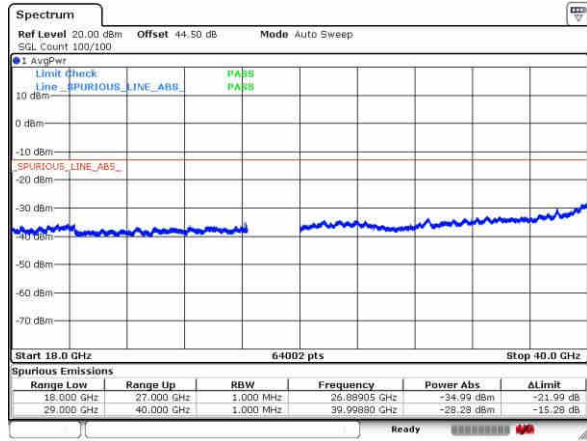
Remark: In band and out of band frequencies are omitted.



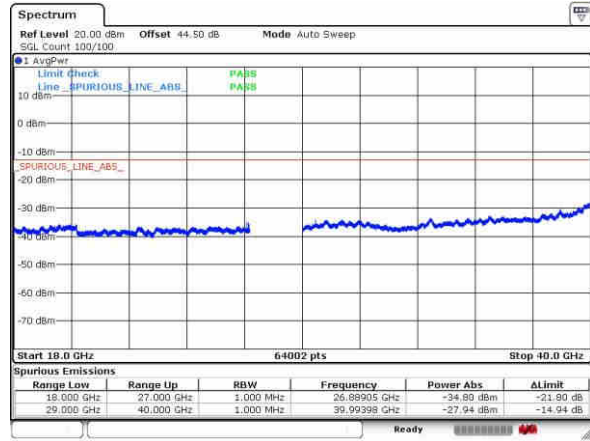
Module 2

NR Band n261 QPSK (18-40GHz)

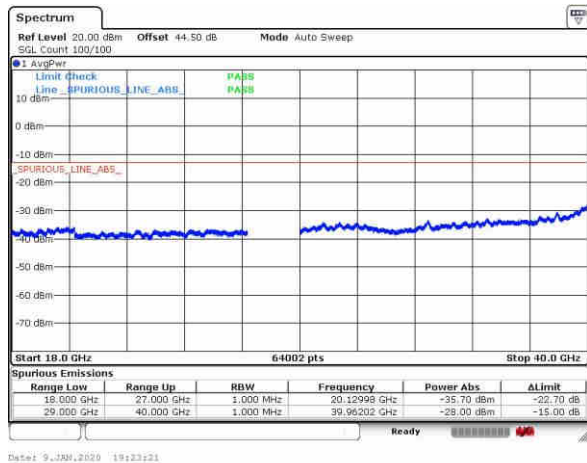
Lowest Channel / 50MHz



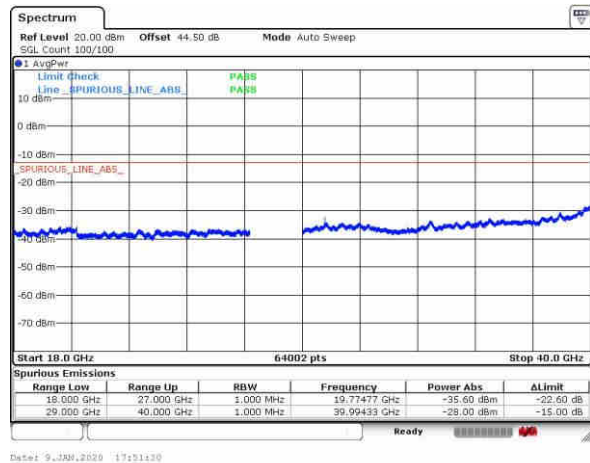
Lowest Channel / 100MHz



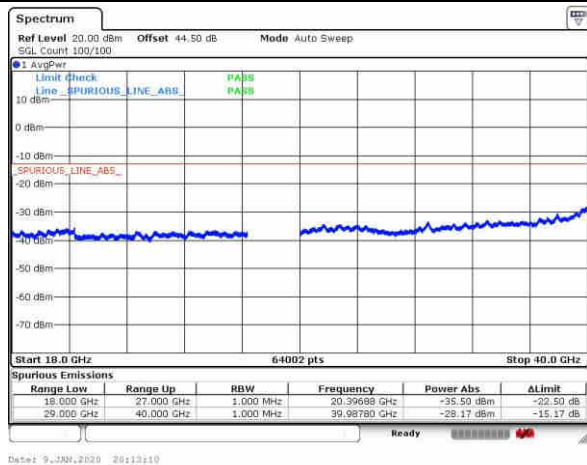
Middle Channel / 50MHz



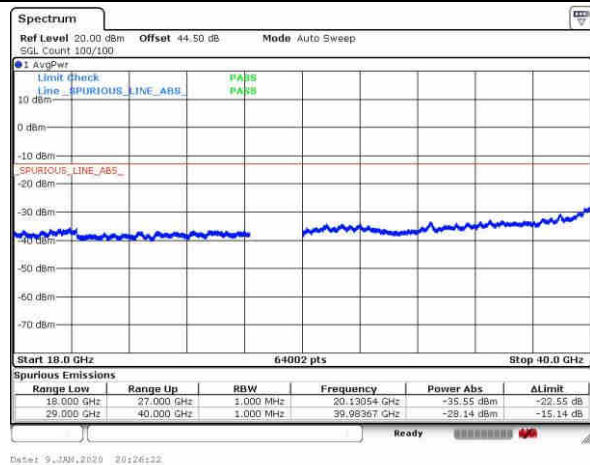
Middle Channel / 100MHz



Highest Channel / 50MHz



Highest Channel / 100MHz



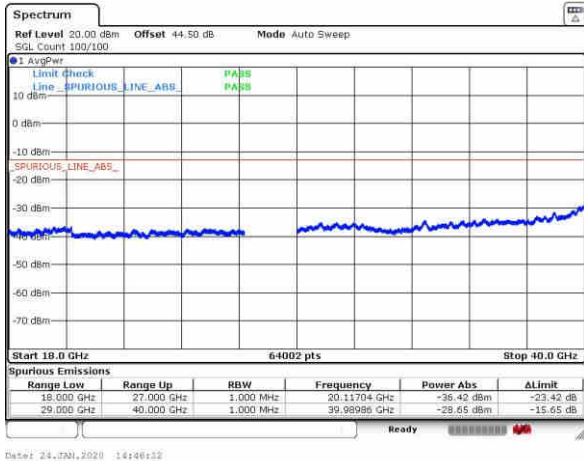
Remark: In band and out of band frequencies are omitted.



Module 2

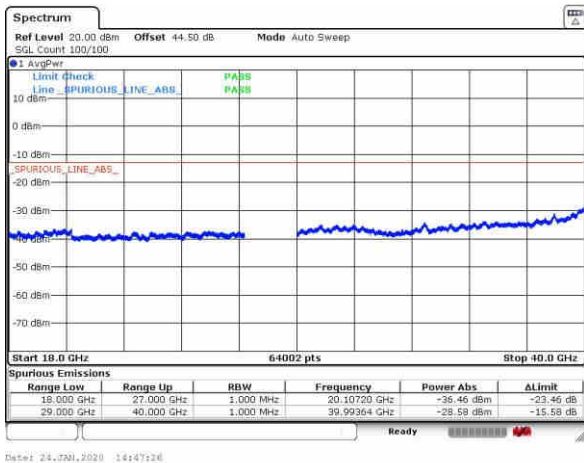
NR Band n261 QPSK (18-40GHz)

Lowest Channel / 400MHz



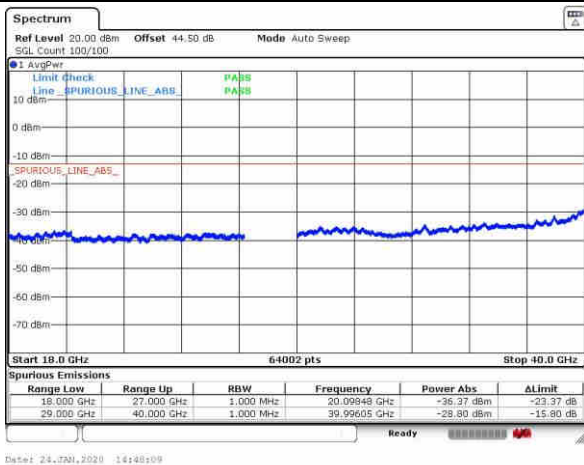
intentionally blank

Middle Channel / 400MHz



intentionally blank

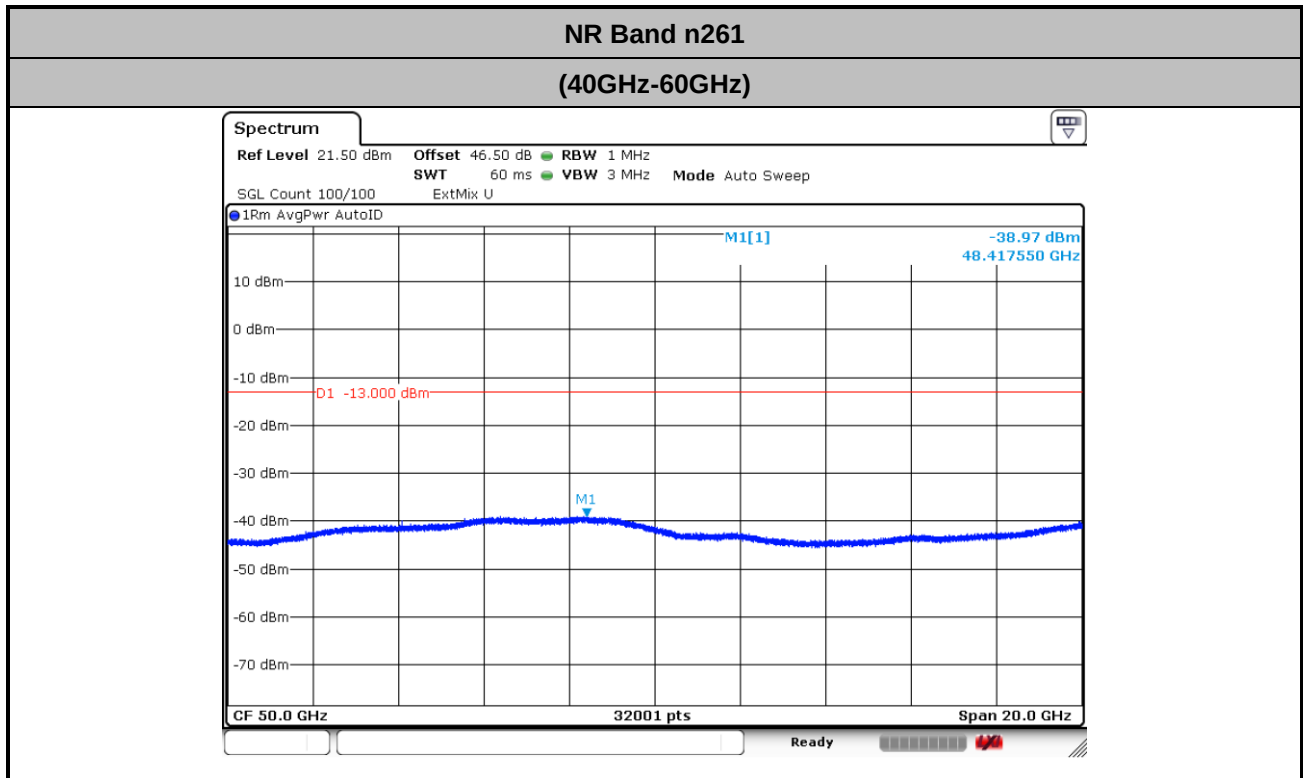
Highest Channel / 400MHz



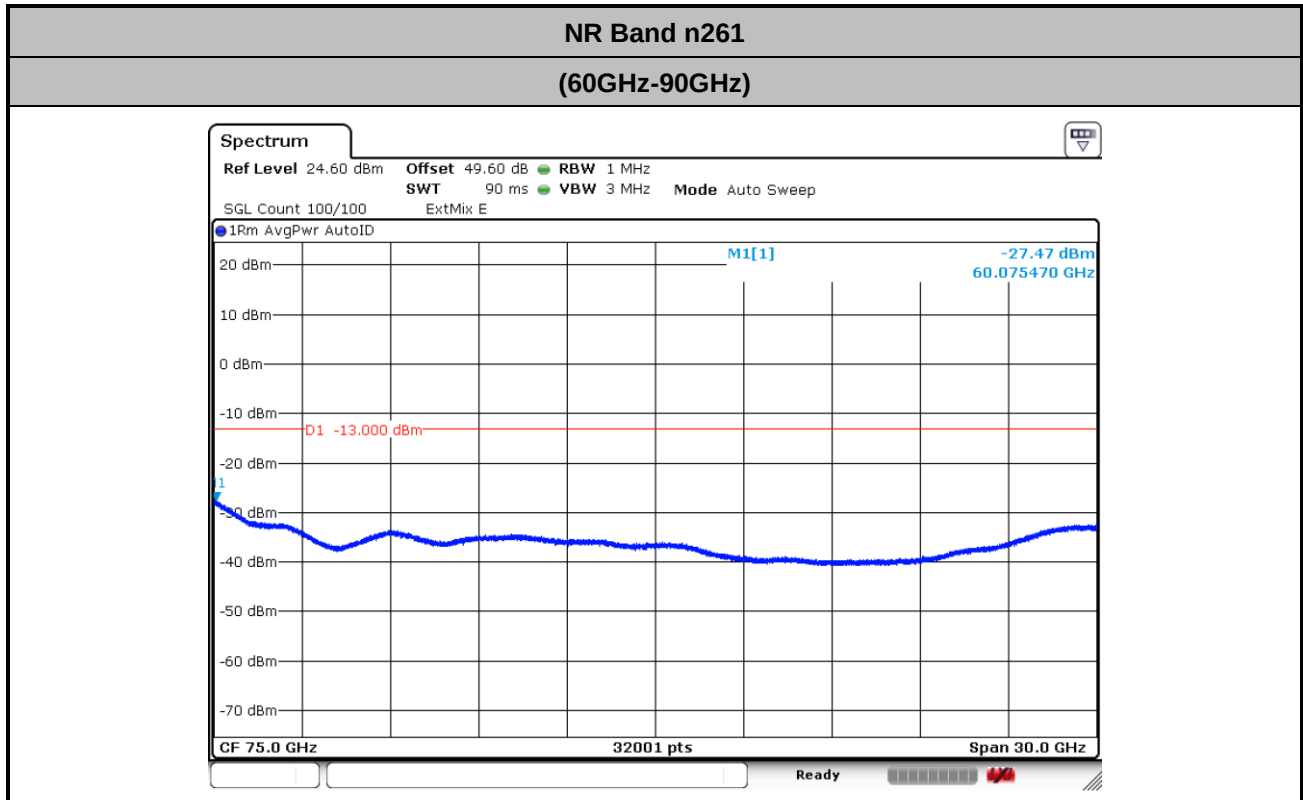
intentionally blank

Remark: In band and out of band frequencies are omitted.

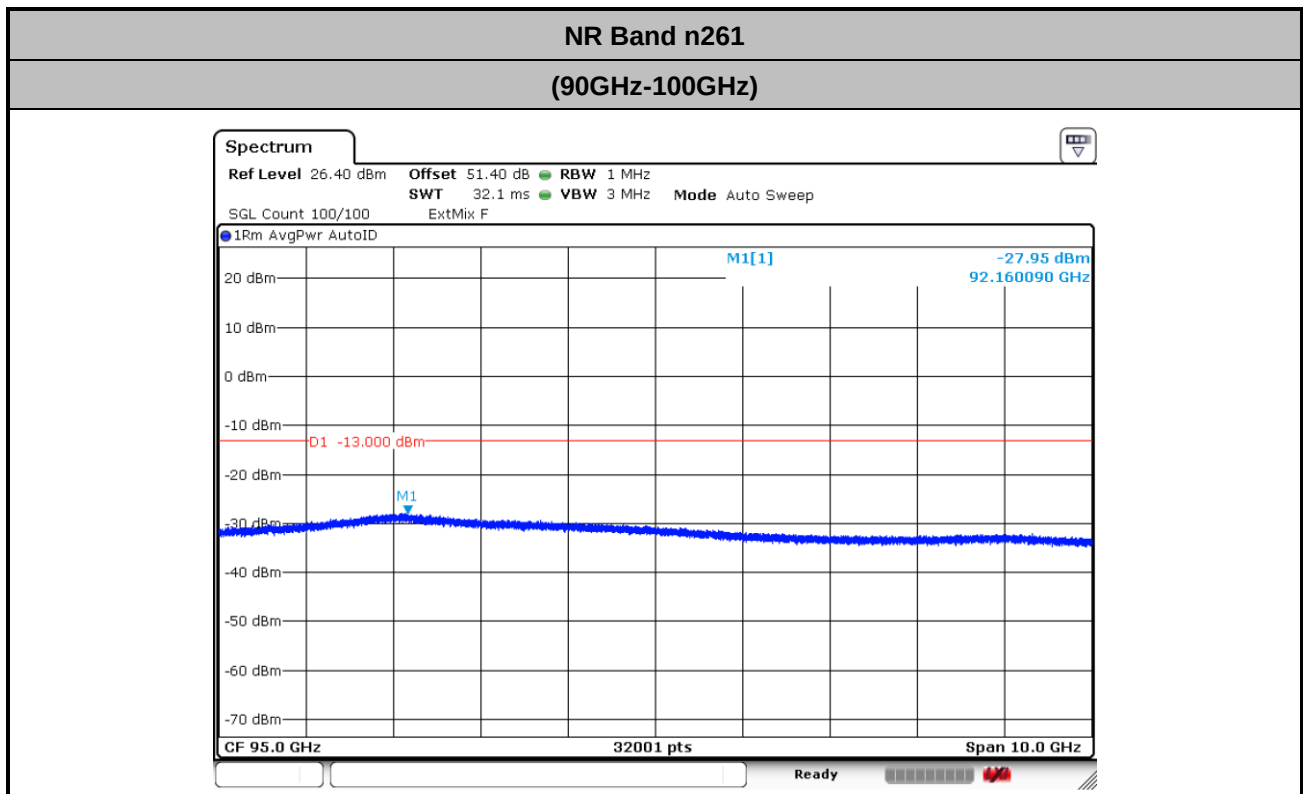
There is no significant spurious emission signal found for frequency started from 40GHz up to 100GHz.
Only the noise floor is reported.



$$\begin{aligned} \text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 42.3 + 2 + 107 + 20\log(1) - 104.8 = 46.5 \text{ (dB)} \end{aligned}$$



$$\begin{aligned} \text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 45.4 + 2 + 107 + 20\log(1) - 104.8 = 49.6 \text{ (dB)} \end{aligned}$$



$$\begin{aligned} \text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 47.2 + 2 + 107 + 20\log(1) - 104.8 = 51.4 \text{ (dB)} \end{aligned}$$

Frequency Stability

Test Conditions		NR Band n261 / Middle Channel			Limit
Temperature (°C)	Voltage (Volt)	CW tone			Note 2.
		Frequency (GHz)	Deviation (kHz)	Deviation (ppm)	Result
50	Normal Voltage	27.92496188	-0.29	-0.01	PASS
40	Normal Voltage	27.92496232	0.15	0.01	
30	Normal Voltage	27.9249626	0.43	0.02	
20(Ref.)	Normal Voltage	27.92496217	0.00	0.00	
10	Normal Voltage	27.92496217	0.00	0.00	
0	Normal Voltage	27.92496275	0.58	0.02	
-10	Normal Voltage	27.92496289	0.72	0.03	
-20	Normal Voltage	27.92496304	0.87	0.03	
-30	Normal Voltage	27.92496391	1.74	0.06	
20	Maximum Voltage	27.92496203	-0.14	-0.01	
20	Normal Voltage	27.92496217	0.00	0.00	
20	Battery End Point	27.92496188	-0.29	-0.01	

Note:

1. Normal Voltage =7.7 V. ; Battery End Point (BEP) =6.9 V. ; Maximum Voltage =8.5 V.
2. The frequency fundamental emissions stay within the operation band.
3. The test result at the next page provides confidence that the maximum frequency deviation will not lead to out of band operation during normal and extreme condition.



NR Band n261 CP-OFDM

Occupied Bandwidth

Mode	Module 0 NR Band n261 : 99%OBW(MHz)								
BW	50MHz			100MHz			400MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	45.08	45.24	45.12	92.92	92.96	92.84	386.24	386.08	386.08
Middle CH	45.16	45.30	45.16	92.68	92.80	92.88	386.08	385.92	386.24
Highest CH	45.06	45.22	45.10	92.52	92.56	92.68	385.76	385.44	386.08

Mode	Module 1 NR Band n261 : 99%OBW(MHz)								
BW	50MHz			100MHz			400MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	45.14	45.20	45.20	92.80	92.72	92.64	385.76	385.92	385.76
Middle CH	45.28	45.24	45.24	92.64	92.48	92.56	385.92	386.08	385.76
Highest CH	45.30	45.20	45.18	92.48	92.36	92.36	385.76	385.92	385.60

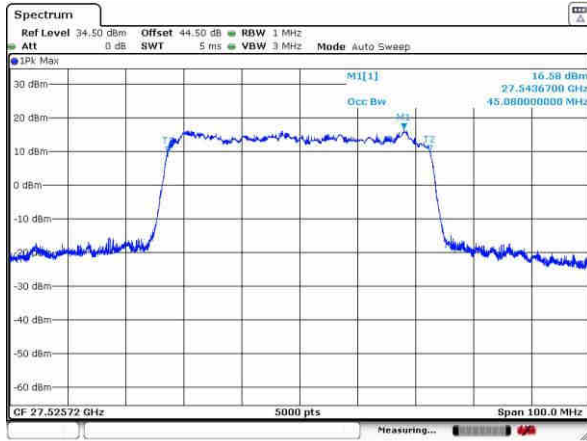
Mode	Module 2 NR Band n261 : 99%OBW(MHz)								
BW	50MHz			100MHz			400MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	45.28	45.04	46.16	92.96	92.72	93.16	387.04	386.88	387.68
Middle CH	45.38	45.10	45.20	92.92	92.64	92.96	386.40	386.40	386.72
Highest CH	45.24	45.18	45.22	92.80	92.60	92.72	385.92	385.60	385.76



Module 0

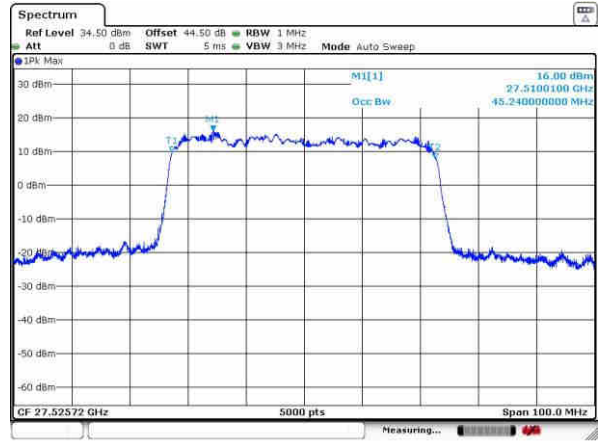
NR Band n261

Lowest Channel / 50MHz / QPSK



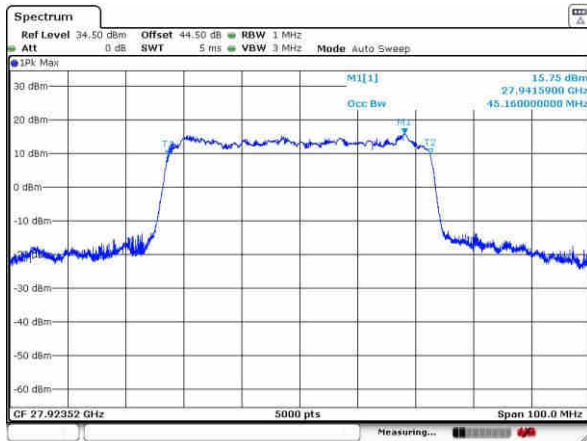
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Lowest Channel / 50MHz / 16QAM



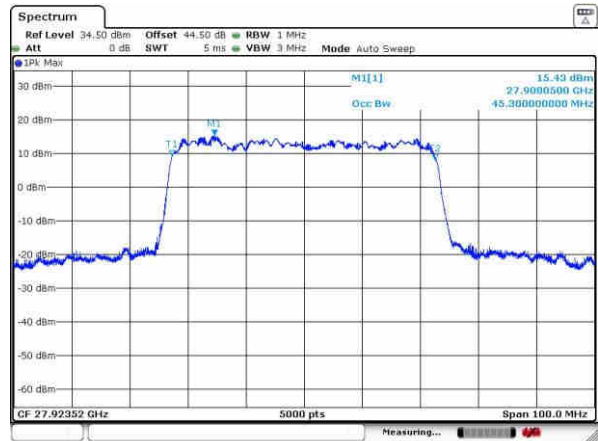
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Middle Channel / 50MHz / QPSK



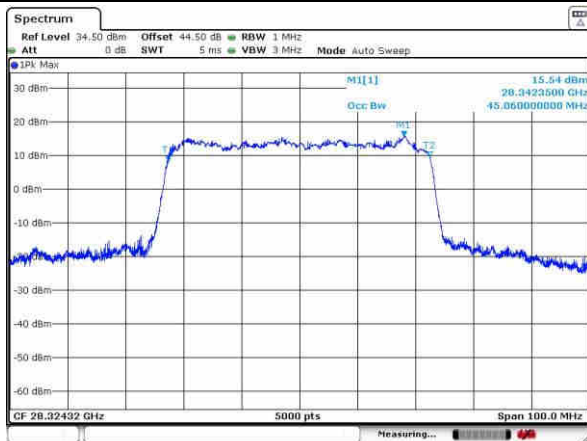
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Middle Channel / 50MHz / 16QAM



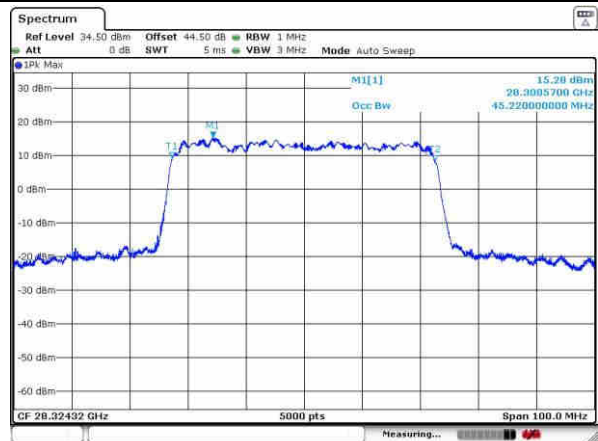
Date: 10/08/2020 14:09:44

Highest Channel / 50MHz / QPSK

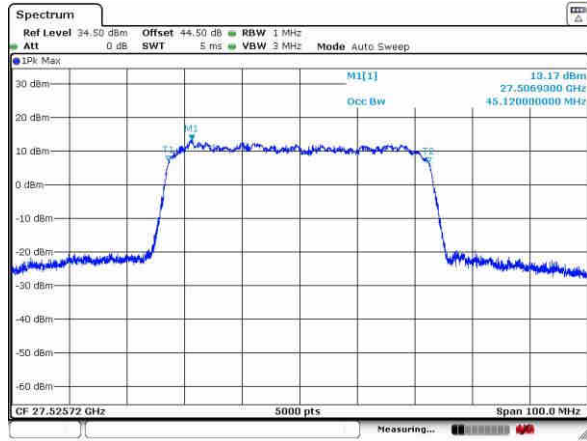
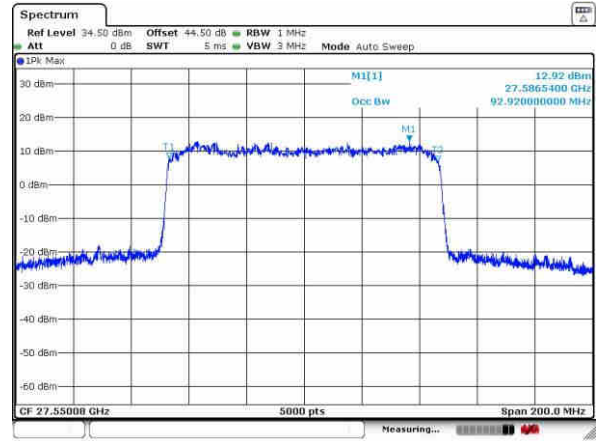
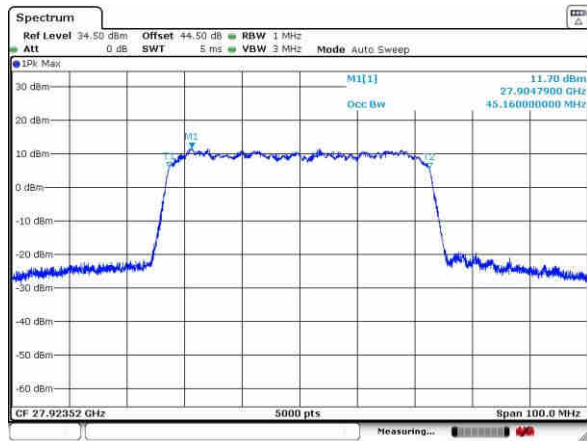
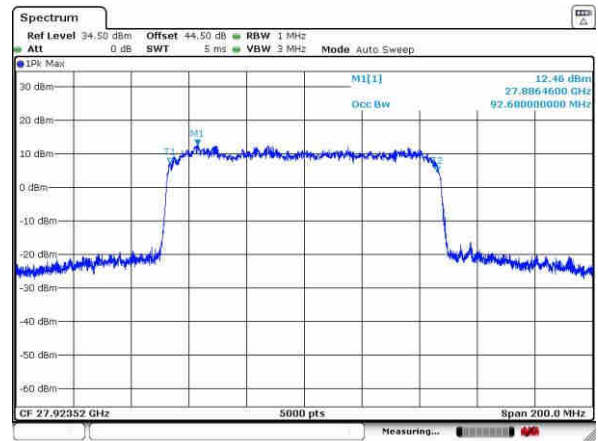
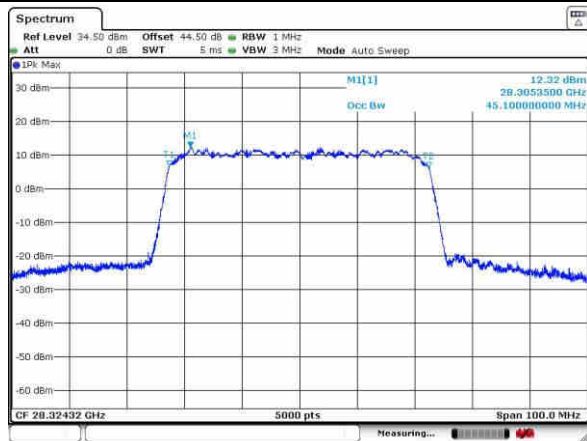


Date: 10/08/2020 14:46:41

Highest Channel / 50MHz / 16QAM



Date: 10/08/2020 14:46:19

Module 0
NR Band n261
Lowest Channel / 50MHz / 64QAM

Lowest Channel / 100MHz / QPSK

Middle Channel / 50MHz / 64QAM

Middle Channel / 100MHz / QPSK

Highest Channel / 50MHz / 64QAM

Highest Channel / 100MHz / QPSK
