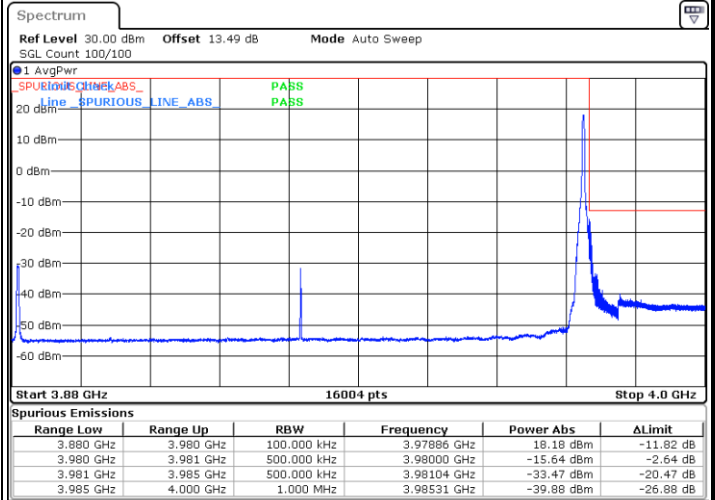
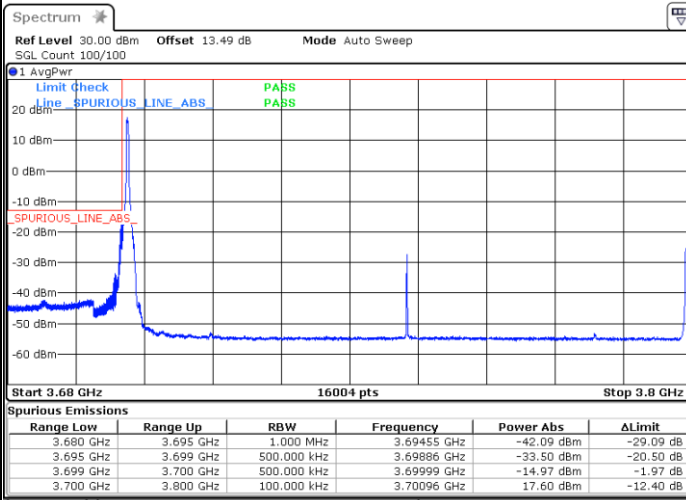




FR1 n77 / 100MHz / DFT-S OFDM / PI/2 QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

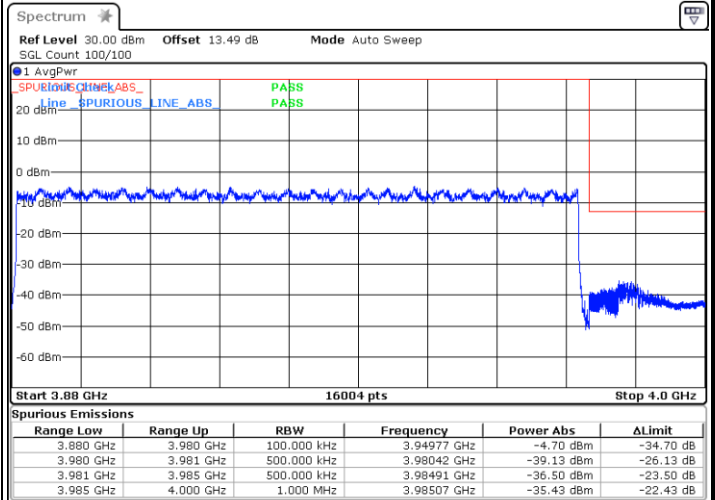
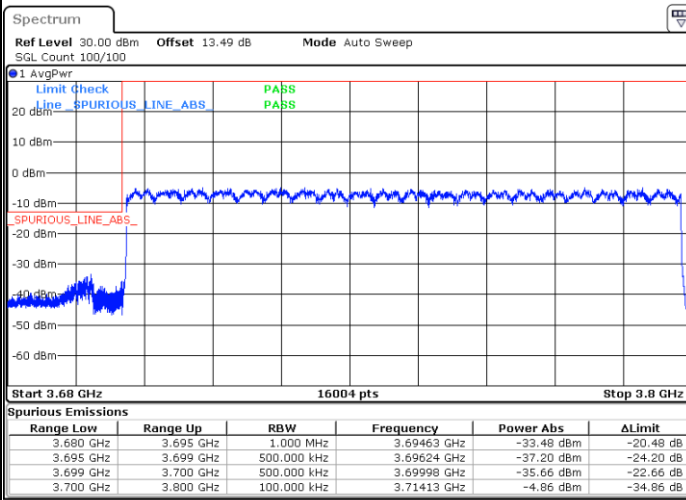


Date: 12.FEB.2021 11:20:27

Date: 12.FEB.2021 11:38:15

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.FEB.2021 11:28:34

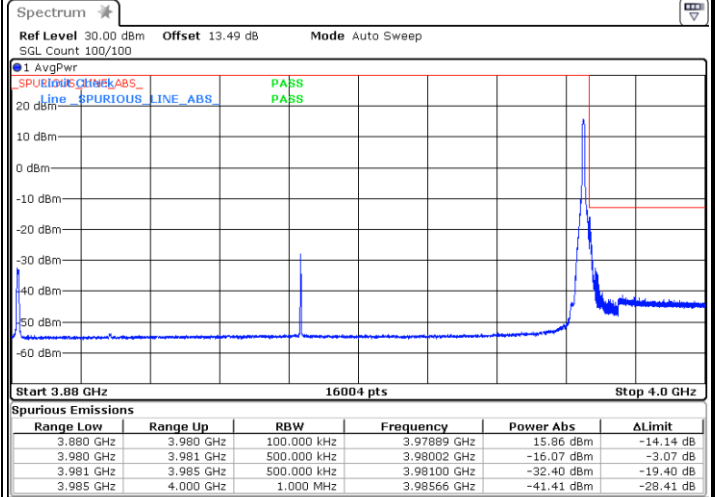
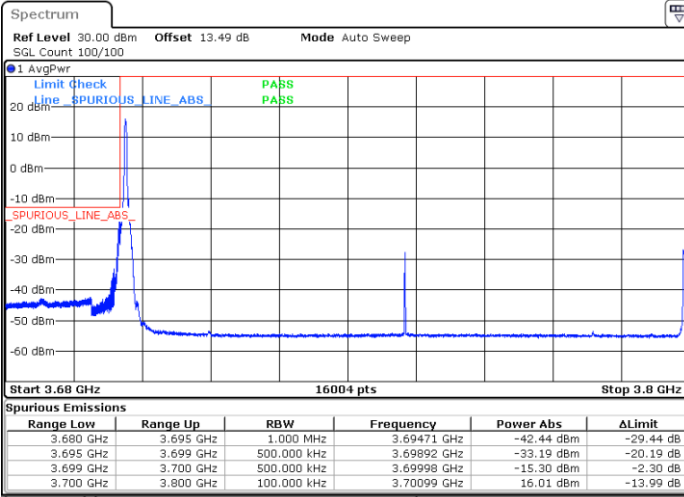
Date: 12.FEB.2021 11:33:10



FR1 n77 / 100MHz / DFT-S OFDM / PI/2 16Q

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

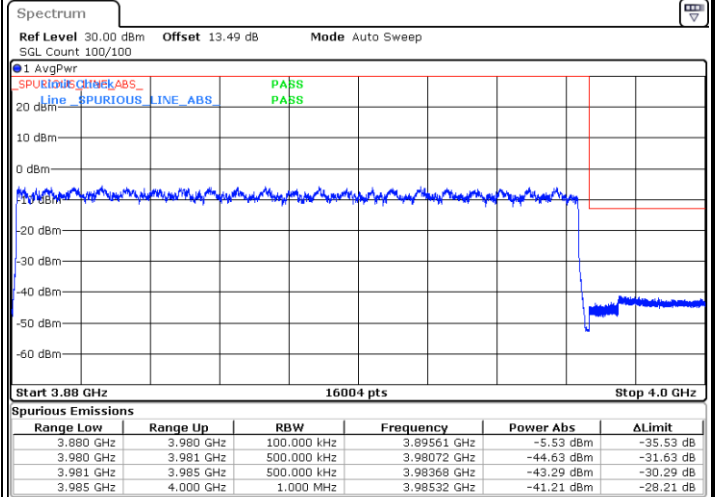
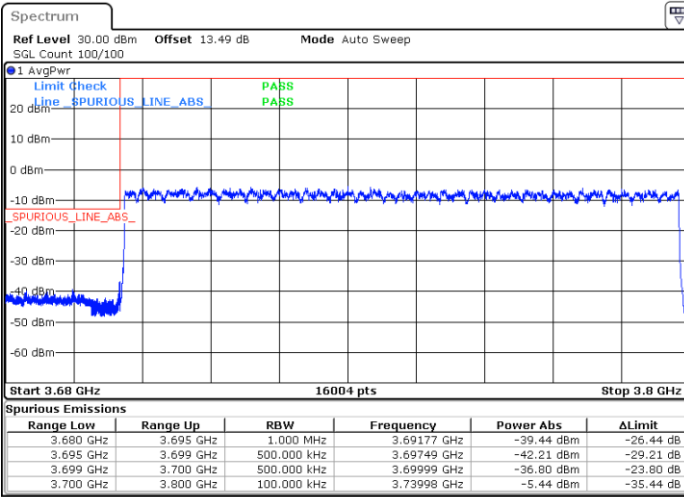


Date: 12.FEB.2021 11:21:12

Date: 12.FEB.2021 11:40:03

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.FEB.2021 11:29:11

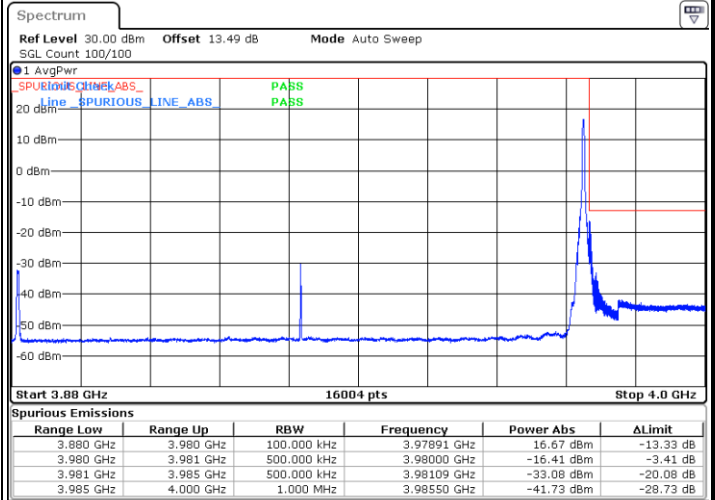
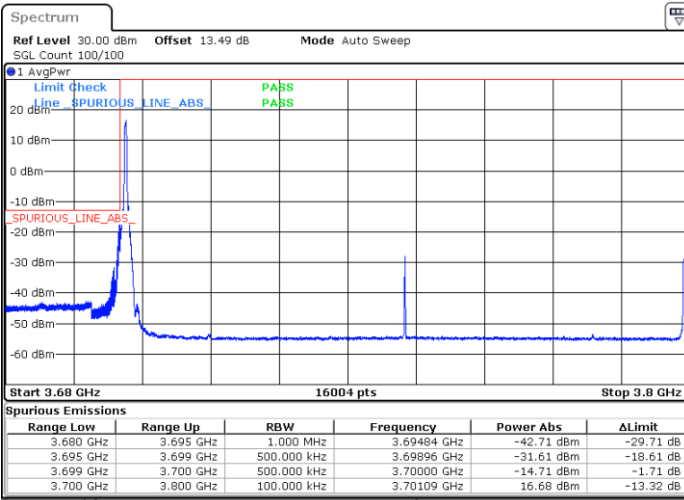
Date: 12.FEB.2021 11:34:43



FR1 n77 / 100MHz / DFT-S OFDM / PI/2 64Q

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

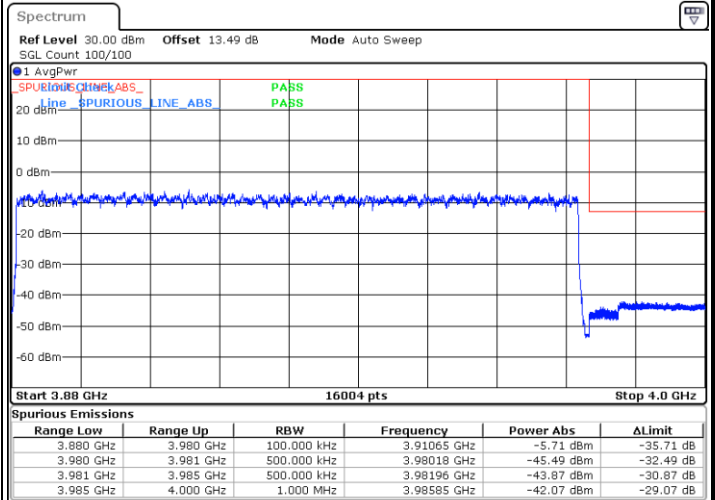
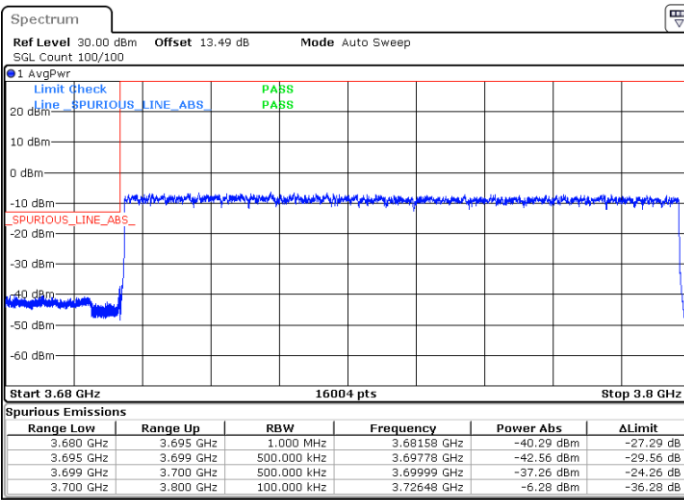


Date: 12.FEB.2021 11:21:59

Date: 12.FEB.2021 11:40:53

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.FEB.2021 11:29:50

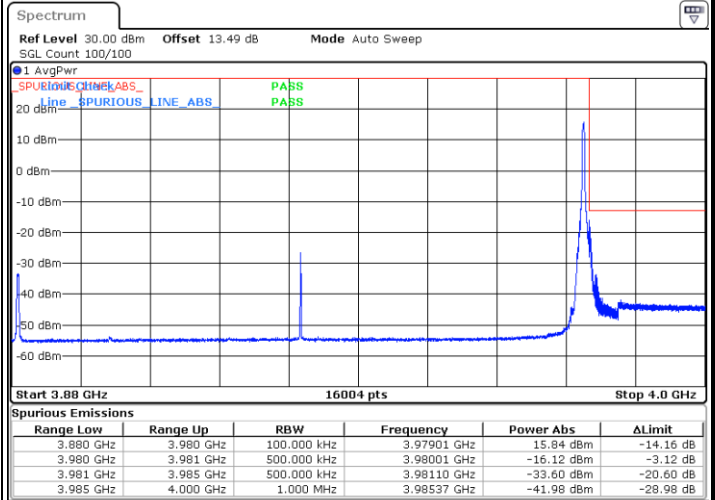
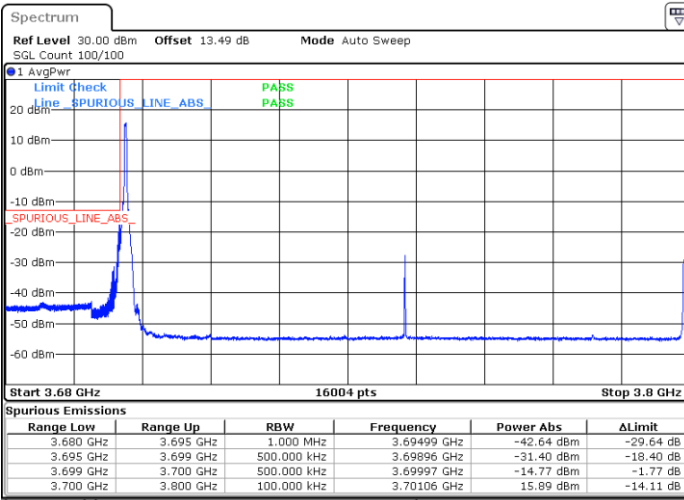
Date: 12.FEB.2021 11:35:32



FR1 n77 / 100MHz / DFT-S OFDM / PI/2 256Q

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

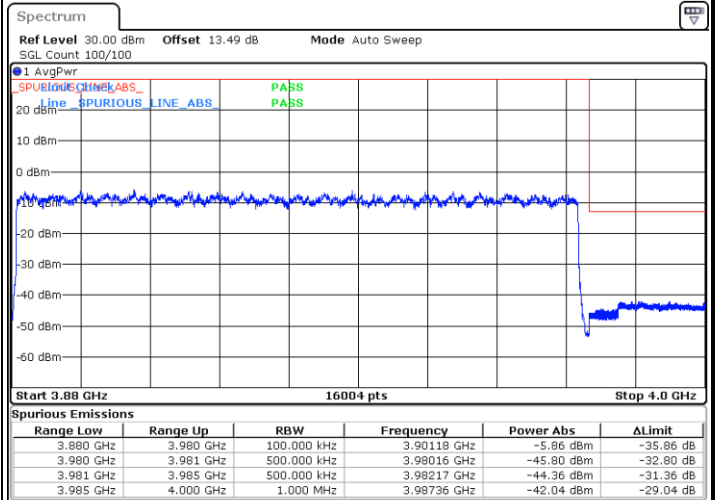
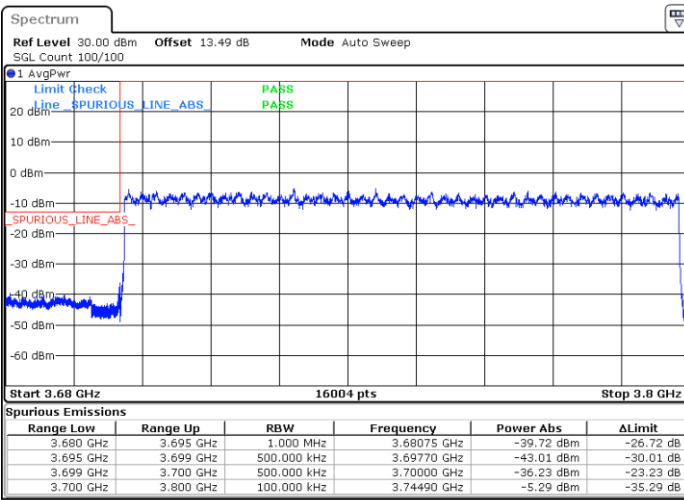


Date: 12.FEB.2021 11:22:58

Date: 12.FEB.2021 11:41:40

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.FEB.2021 11:30:25

Date: 12.FEB.2021 11:36:08

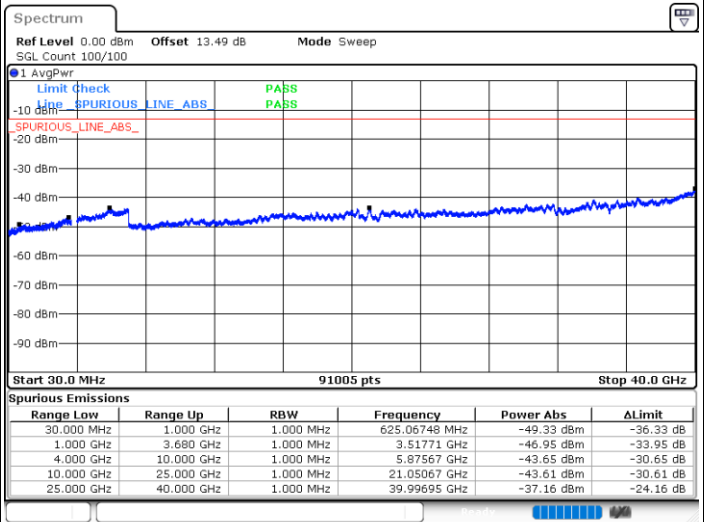
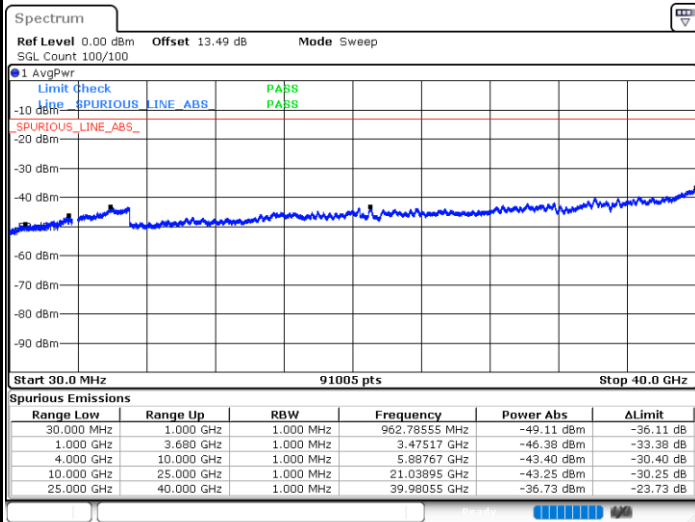


Conducted Spurious Emission

FR1 n77 / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

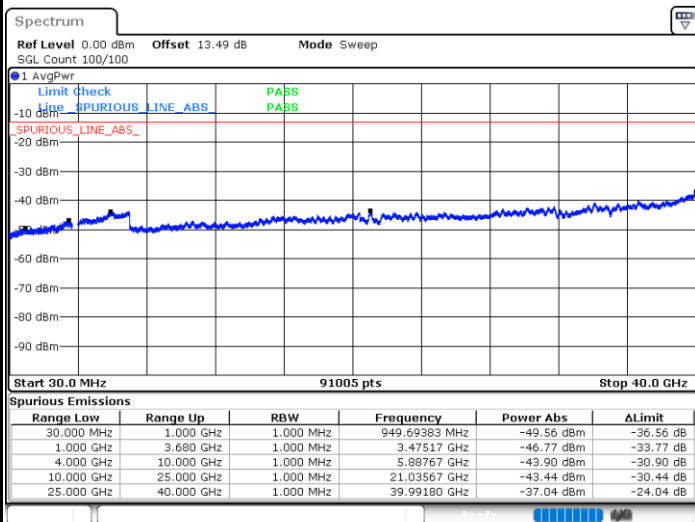
Middle Channel / 1RB1



Date: 12.FEB.2021 05:29:21

Date: 12.FEB.2021 05:30:30

Highest Channel / 1RB1



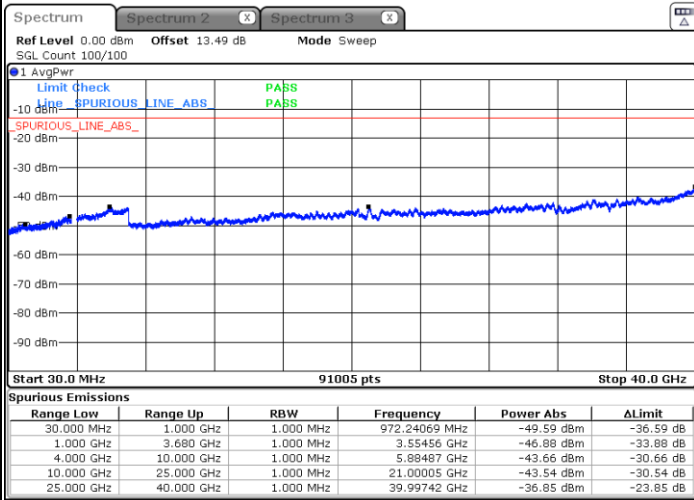
Date: 12.FEB.2021 05:31:36



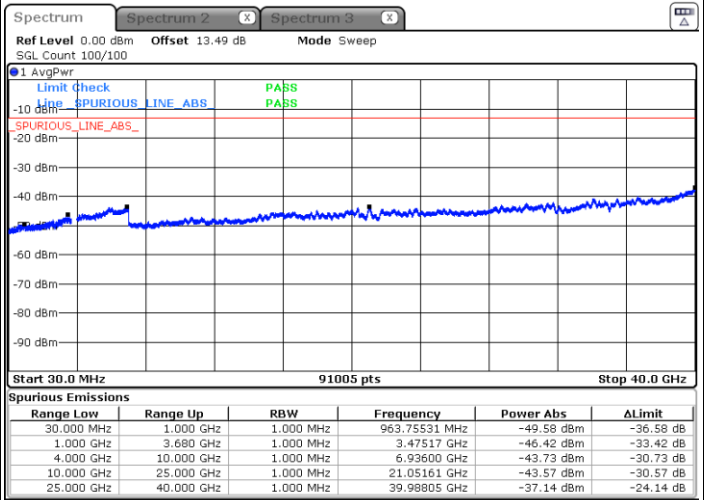
FR1 n77 / 30MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

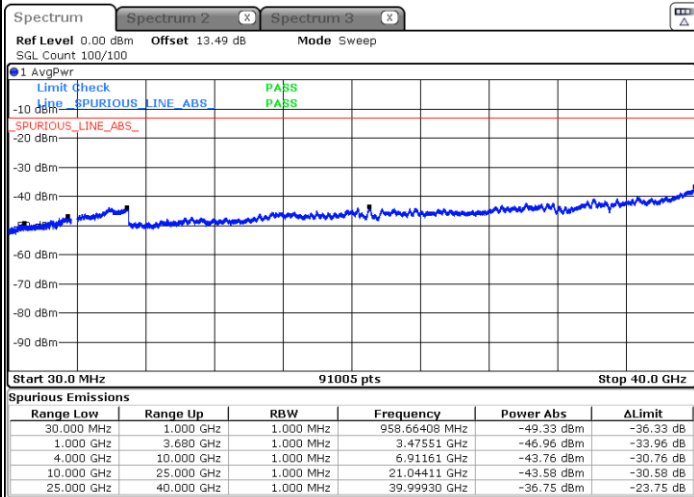


Date: 12.FEB.2021 07:58:47



Date: 12.FEB.2021 07:59:53

Highest Channel / 1RB1



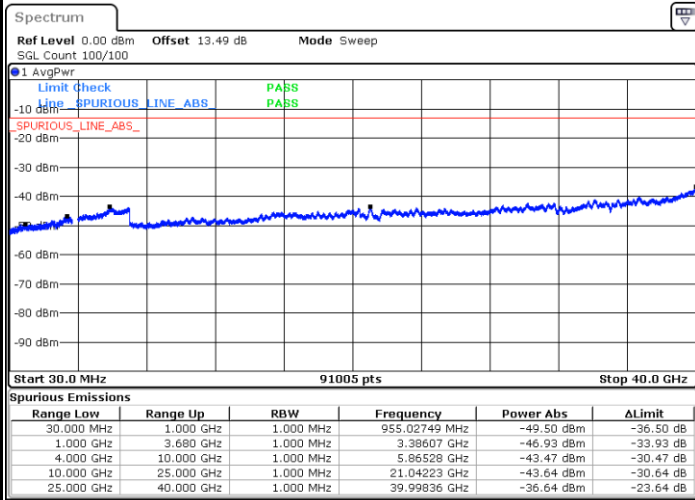
Date: 12.FEB.2021 08:02:57



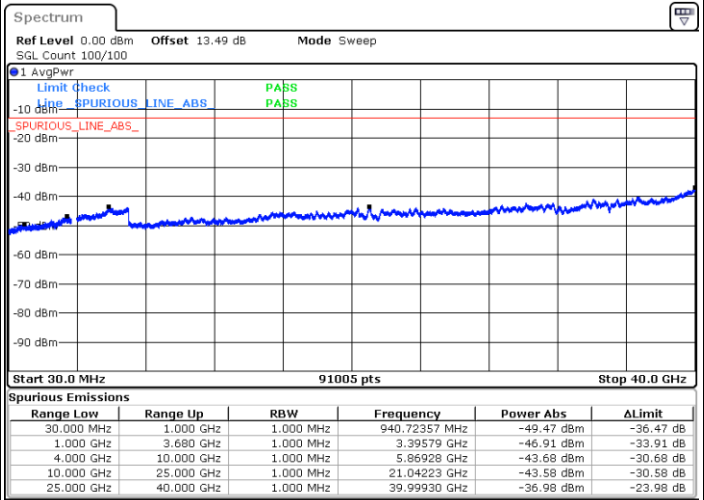
FR1 n77 / 40MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

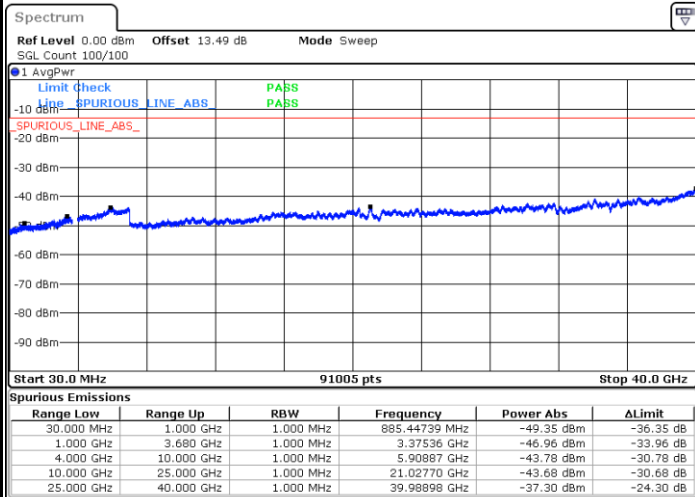


Date: 12.FEB.2021 05:46:51



Date: 12.FEB.2021 05:48:15

Highest Channel / 1RB1



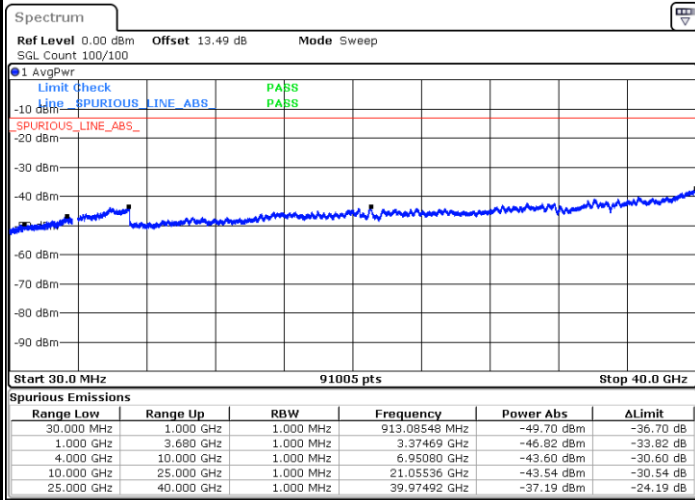
Date: 12.FEB.2021 05:49:20



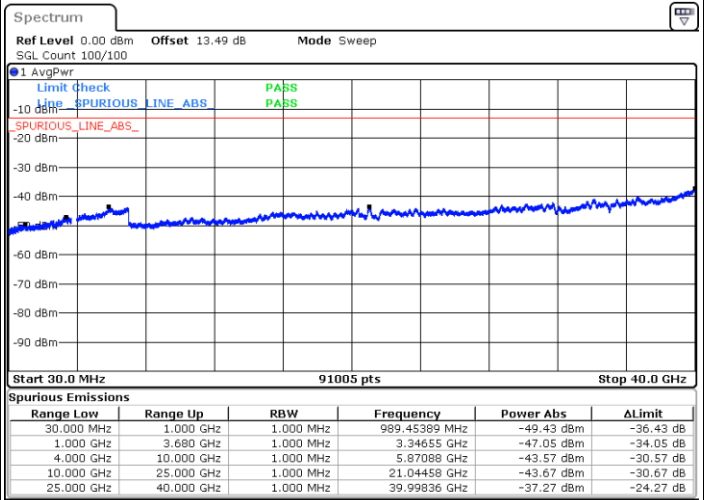
FR1 n77 / 60MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

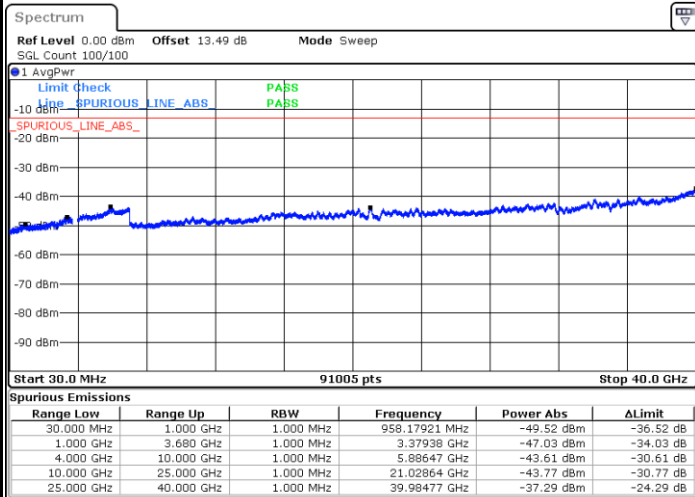


Date: 12.FEB.2021 05:50:35



Date: 12.FEB.2021 05:51:42

Highest Channel / 1RB1



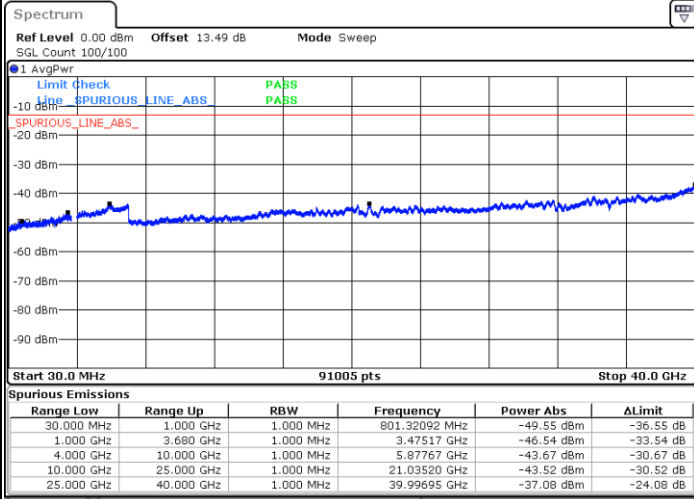
Date: 12.FEB.2021 05:52:48



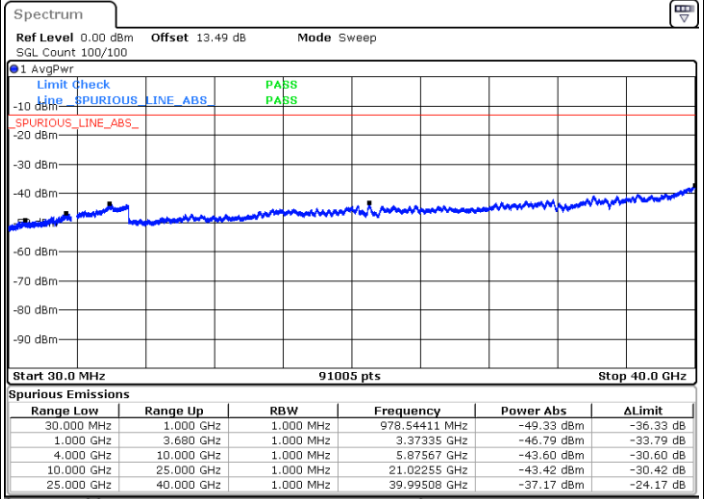
FR1 n77 / 80MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

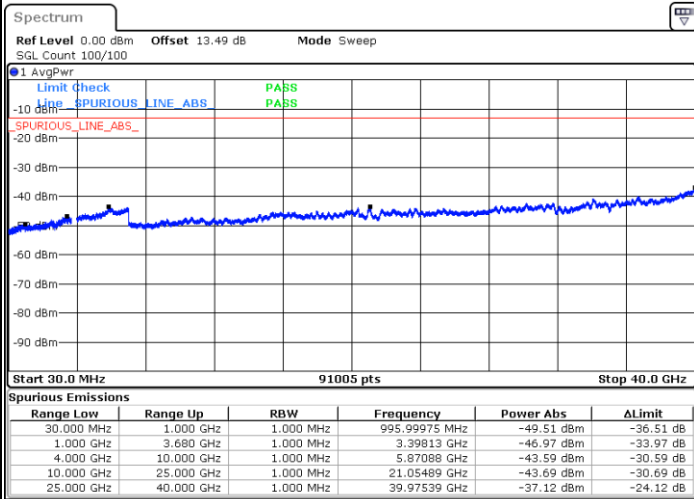


Date: 12.FEB.2021 05:54:10



Date: 12.FEB.2021 05:55:18

Highest Channel / 1RB1



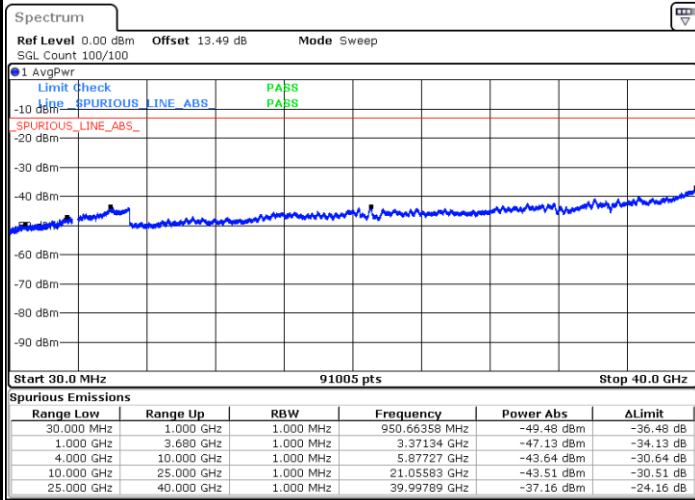
Date: 12.FEB.2021 05:56:26



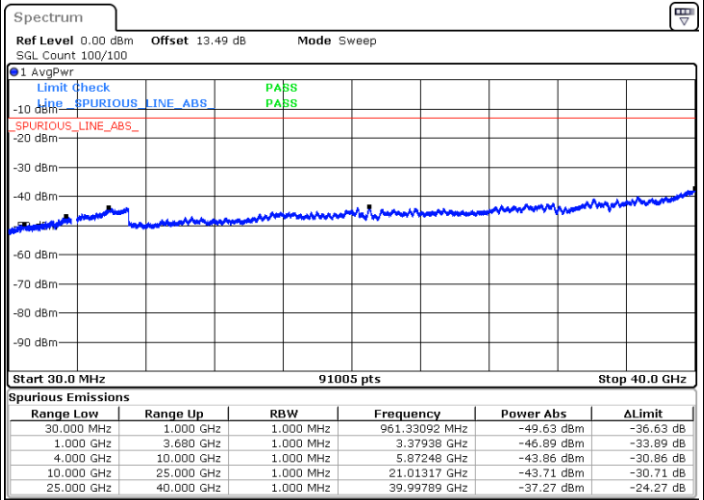
FR1 n77 / 100MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

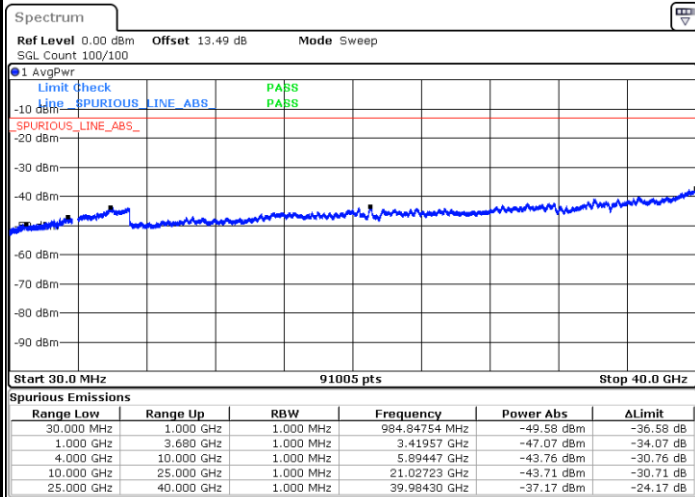


Date: 12.FEB.2021 05:57:38



Date: 12.FEB.2021 05:58:46

Highest Channel / 1RB1



Date: 12.FEB.2021 05:59:53



Frequency Stability

Test Conditions		FR1 n77 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 100MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0015	PASS
40	Normal Voltage	0.0019	
30	Normal Voltage	0.0006	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0012	
0	Normal Voltage	0.0027	
-10	Normal Voltage	0.0006	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0022	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0026	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.4V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission_SA Mode

5G NR n41 / 100MHz / DFTs OFDM-QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5088.00	-61.87	-25	-36.87	-81.18	-67.43	7.14	12.70	H
	7632.00	-55.85	-25	-30.85	-79.93	-59.15	8.30	11.60	H
	10176.00	-52.66	-25	-27.66	-81.51	-54.18	10.48	12.00	H
	5088.00	-61.97	-25	-36.97	-81.11	-67.53	7.14	12.70	V
	7632.00	-52.42	-25	-27.42	-77.03	-55.72	8.30	11.60	V
	10176.00	-53.70	-25	-28.70	-81.32	-55.22	10.48	12.00	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

5G NR n66 / 40MHz / DFTs OFDM-QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3471	-60.03	-13	-47.03	-74.88	-66.88	5.65	12.50	H
	5206.5	-52.57	-13	-39.57	-71.97	-58.24	7.13	12.80	H
	6942	-57.60	-13	-44.60	-80.65	-61.00	8.40	11.80	H
	3471	-59.25	-13	-46.25	-74.13	-66.10	5.65	12.50	V
	5206.5	-49.99	-13	-36.99	-69	-55.66	7.13	12.80	V
	6942	-57.59	-13	-44.59	-80.91	-60.99	8.40	11.80	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

5G NR n71 / 20MHz / DFTs OFDM-QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1342.50	-66.37	-13	-53.37	-74.83	-69.62	4.00	9.40	H
	2013.75	-64.36	-13	-51.36	-74.56	-67.93	4.88	10.60	H
	2685.00	-62.25	-13	-49.25	-75.45	-67.18	5.52	12.60	H
	1342.50	-66.78	-13	-53.78	-75.17	-70.03	4.00	9.40	V
	2013.75	-63.86	-13	-50.86	-74.17	-67.43	4.88	10.60	V
	2685.00	-62.40	-13	-49.40	-75.48	-67.33	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



5G NR n77 / 100MHz / DFTs OFDM-QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7582.60	-59.70	-13	-46.70	-65.68	-65.26	7.14	12.70	H
	11373.90	-53.40	-13	-40.40	-65.08	-56.70	8.30	11.60	H
	15165.20	-52.83	-13	-39.83	-67.21	-54.35	10.48	12.00	H
	7582.60	-59.16	-13	-46.16	-65.62	-64.72	7.14	12.70	V
	11373.90	-54.82	-13	-41.82	-66.46	-58.12	8.30	11.60	V
	15165.20	-51.44	-13	-38.44	-67.4	-52.96	10.48	12.00	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

5G NR n78 / 100MHz / DFTs OFDM-QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7003.00	-60.34	-13	-47.34	-65.47	-65.90	7.14	12.70	H
	10504.50	-56.48	-13	-43.48	-67.05	-59.78	8.30	11.60	H
	14006.00	-55.51	-13	-42.51	-66.48	-57.03	10.48	12.00	H
	7003.00	-60.08	-13	-47.08	-65.4	-65.64	7.14	12.70	V
	10504.50	-57.36	-13	-44.36	-67.17	-60.66	8.30	11.60	V
	14006.00	-55.10	-13	-42.10	-66.9	-56.62	10.48	12.00	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



Radiated Spurious Emission_NSA mode

Table with 10 columns: Channel, Frequency (MHz), EIRP (dBm), Limit (dBm), Over Limit (dB), SPA Reading (dBm), S.G. Power (dBm), TX Cable loss (dB), TX Antenna Gain (dBi), Polarization (H/V). Rows include NR n41 Middle and LTE Band2 Middle.

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Table with 10 columns: Channel, Frequency (MHz), EIRP (dBm), Limit (dBm), Over Limit (dB), SPA Reading (dBm), S.G. Power (dBm), TX Cable loss (dB), TX Antenna Gain (dBi), Polarization (H/V). Rows include NR n66 Middle and LTE Band2 Middle.

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



EN-DC_2A_n71A / LTE 20MHz + NR 20MHz / QPSK DFT-s-OFDM									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
NR n71 Middle	1342.50	-66.11	-13	-53.11	-74.57	-69.36	4.00	9.40	H
	2013.75	-63.84	-13	-50.84	-74.04	-67.41	4.88	10.60	H
	2685.00	-61.68	-13	-48.68	-74.88	-66.61	5.52	12.60	H
	1342.50	-66.61	-13	-53.61	-75	-69.86	4.00	9.40	V
	2013.75	-63.78	-13	-50.78	-74.09	-67.35	4.88	10.60	V
	2685.00	-61.75	-13	-48.75	-74.83	-66.68	5.52	12.60	V
LTE Band2 Middle	3742.18	-63.01	-13	-50.01	-79.08	-69.76	5.85	12.60	H
	5613.27	-60.30	-13	-47.30	-79.81	-66.10	7.30	13.10	H
	7484.36	-56.28	-13	-43.28	-80.60	-59.43	8.35	11.50	H
	3742.18	-63.21	-13	-50.21	-78.9	-69.96	5.85	12.60	V
	5613.27	-60.56	-13	-47.56	-79.55	-66.36	7.30	13.10	V
	7484.36	-55.99	-13	-42.99	-80.7	-59.14	8.35	11.50	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EN-DC_2A_n77A / LTE 20MHz + NR 100MHz / QPSK DFT-s-OFDM									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
NR n77 Middle	7582.60	-25.72	-13	-12.72	-49.88	-29.02	8.30	11.60	H
	11373.90	-32.31	-13	-19.31	-63.41	-33.83	10.48	12.00	H
	15165.20	-45.38	-13	-32.38	-78.62	-47.08	11.80	13.50	H
	7582.60	-31.16	-13	-18.16	-55.8	-34.46	8.30	11.60	V
	11373.90	-49.89	-13	-36.89	-80.95	-51.41	10.48	12.00	V
	15165.20	-44.09	-13	-31.09	-78.91	-45.79	11.80	13.50	V
LTE Band2 Middle	3742.18	-55.14	-13	-42.14	-71.21	-61.89	5.85	12.60	H
	5613.27	-59.72	-13	-46.72	-79.23	-65.52	7.30	13.10	H
	7484.36	-55.95	-13	-42.95	-80.27	-59.10	8.35	11.50	H
	3742.18	-58.64	-13	-45.64	-74.33	-65.39	5.85	12.60	V
	5613.27	-60.42	-13	-47.42	-79.41	-66.22	7.30	13.10	V
	7484.36	-55.61	-13	-42.61	-80.32	-58.76	8.35	11.50	V