

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)		Total Power (dBm)	EIRP (dBm)	Limit (dBm)
					Port 3	Port 0			
256QAM									
646722	3710.01	20	1	0	17.01	16.90	19.97	15.86	< 33.01
			1	1	17.04	16.89	19.98	15.87	< 33.01
			25	12	17.31	17.00	20.17	16.06	< 33.01
			50	0	17.42	16.97	20.21	16.10	< 33.01
656000	3840.00	20	1	0	17.62	16.53	20.12	16.01	< 33.01
			1	1	17.69	16.45	20.12	16.01	< 33.01
			25	12	17.80	16.50	20.21	16.10	< 33.01
			50	0	17.88	16.54	20.27	16.16	< 33.01
664666	3969.99	20	1	0	18.42	16.69	20.65	16.54	< 33.01
			1	1	18.31	16.76	20.61	16.50	< 33.01
			25	12	18.41	16.69	20.64	16.53	< 33.01
			50	0	18.53	16.80	20.76	16.65	< 33.01
648000	3720.00	40	1	0	17.42	17.02	20.23	16.12	< 33.01
			1	1	17.38	17.06	20.23	16.12	< 33.01
			53	26	17.73	17.20	20.48	16.37	< 33.01
			106	0	17.68	17.17	20.44	16.33	< 33.01
656000	3840.00	40	1	0	18.12	16.83	20.53	16.42	< 33.01
			1	1	18.02	16.89	20.50	16.39	< 33.01
			53	26	18.16	16.76	20.53	16.42	< 33.01
			106	0	18.10	16.83	20.52	16.41	< 33.01
664000	3960.00	40	1	0	18.60	17.24	20.98	16.87	< 33.01
			1	1	18.41	17.18	20.85	16.74	< 33.01
			53	26	18.66	16.94	20.89	16.78	< 33.01
			106	0	18.63	17.01	20.91	16.80	< 33.01
Note 1: Total Power (dBm) = 10*log{10^(Port 0 Output Power / 10) + 10^(Port 3 Output Power / 10)}									
Note 2: The EIRP (dBm) = Total Power (dBm) + Antenna Gain (dBi)									

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)		Total Power (dBm)	EIRP (dBm)	Limit (dBm)
					Port 3	Port 0			
256QAM									
648334	3725.01	50	1	0	16.94	16.76	19.86	15.75	< 33.01
			1	1	16.88	16.79	19.85	15.74	< 33.01
			64	32	17.43	17.04	20.25	16.14	< 33.01
			128	0	17.30	16.92	20.12	16.01	< 33.01
656000	3840.00	50	1	0	17.59	16.50	20.09	15.98	< 33.01
			1	1	17.53	16.52	20.06	15.95	< 33.01
			64	32	17.79	16.62	20.25	16.14	< 33.01
			128	0	17.80	16.56	20.23	16.12	< 33.01
664666	3969.99	50	1	0	18.14	16.86	20.56	16.45	< 33.01
			1	1	18.04	16.92	20.53	16.42	< 33.01
			64	32	18.35	16.82	20.66	16.55	< 33.01
			128	0	18.27	16.82	20.62	16.51	< 33.01
648668	3730.02	60	1	0	16.91	16.71	19.82	15.71	< 33.01
			1	1	16.90	16.75	19.84	15.73	< 33.01
			81	40	17.51	16.89	20.22	16.11	< 33.01
			162	0	17.42	16.81	20.14	16.03	< 33.01
656000	3840.00	60	1	0	17.57	16.58	20.11	16.00	< 33.01
			1	1	17.50	16.60	20.08	15.97	< 33.01
			81	40	17.81	16.71	20.31	16.20	< 33.01
			162	0	17.82	16.68	20.30	16.19	< 33.01
663332	3949.98	60	1	0	17.57	16.69	20.16	16.05	< 33.01
			1	1	17.60	16.76	20.21	16.10	< 33.01
			81	40	18.12	16.79	20.52	16.41	< 33.01
			162	0	18.02	16.78	20.45	16.34	< 33.01
Note 1: Total Power (dBm) = 10*log{10^(Port 0 Output Power / 10) + 10^(Port 3 Output Power / 10)}									
Note 2: The EIRP (dBm) = Total Power (dBm) + Antenna Gain (dBi)									

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)		Total Power (dBm)	EIRP (dBm)	Limit (dBm)
					Port 3	Port 0			
256QAM									
649334	3740.01	80	1	0	17.11	16.85	19.99	15.88	< 33.01
			1	1	16.97	16.86	19.93	15.82	< 33.01
			108	54	17.36	16.80	20.10	15.99	< 33.01
			216	0	17.72	16.83	20.31	16.20	< 33.01
656000	3840.00	80	1	0	17.59	16.71	20.18	16.07	< 33.01
			1	1	17.64	16.79	20.25	16.14	< 33.01
			108	54	17.80	16.61	20.26	16.15	< 33.01
			216	0	17.90	16.59	20.30	16.19	< 33.01
662666	3939.99	80	1	0	17.79	16.70	20.29	16.18	< 33.01
			1	1	17.86	16.73	20.34	16.23	< 33.01
			108	54	17.94	16.91	20.47	16.36	< 33.01
			216	0	17.96	16.88	20.46	16.35	< 33.01
649668	3745.02	90	1	0	16.93	16.72	19.84	15.73	< 33.01
			1	1	17.02	16.90	19.97	15.86	< 33.01
			120	60	17.38	16.76	20.09	15.98	< 33.01
			243	0	17.37	16.88	20.14	16.03	< 33.01
656000	3840.00	90	1	0	17.65	16.78	20.25	16.14	< 33.01
			1	1	17.75	16.84	20.33	16.22	< 33.01
			120	60	17.82	16.61	20.27	16.16	< 33.01
			243	0	17.89	16.69	20.34	16.23	< 33.01
662332	3934.98	90	1	0	17.94	16.70	20.37	16.26	< 33.01
			1	1	18.09	16.90	20.55	16.44	< 33.01
			120	60	17.98	16.87	20.47	16.36	< 33.01
			243	0	17.98	16.82	20.45	16.34	< 33.01
Note 1: Total Power (dBm) = 10*log{10^(Port 0 Output Power / 10) + 10^(Port 3 Output Power / 10)}									
Note 2: The EIRP (dBm) = Total Power (dBm) + Antenna Gain (dBi)									

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)		Total Power (dBm)	EIRP (dBm)	Limit (dBm)
					Port 3	Port 0			
256QAM									
650000	3750.00	100	1	0	16.84	16.64	19.75	15.64	< 33.01
			1	1	16.98	16.72	19.86	15.75	< 33.01
			135	67	17.42	16.69	20.08	15.97	< 33.01
			270	0	17.34	16.80	20.09	15.98	< 33.01
656000	3840.00	100	1	0	17.46	16.57	20.05	15.94	< 33.01
			1	1	17.64	16.72	20.21	16.10	< 33.01
			135	67	17.91	16.68	20.35	16.24	< 33.01
			270	0	17.97	16.93	20.49	16.38	< 33.01
662000	3930.00	100	1	0	17.80	16.64	20.27	16.16	< 33.01
			1	1	17.95	16.84	20.44	16.33	< 33.01
			135	67	18.01	16.94	20.52	16.41	< 33.01
			270	0	18.00	16.76	20.43	16.32	< 33.01
Note 1: Total Power (dBm) = 10*log{10 ^{^(Port 0 Output Power / 10)} + 10 ^{^(Port 3 Output Power / 10)} }									
Note 2: The EIRP (dBm) = Total Power (dBm) + Antenna Gain (dBi)									

4.5. Band Edge Measurement

4.5.1. Test Limit

22.917(a), 24.238 (a), 27.53 (g) (h) (l)(2)

The FCC limit is $43 + 10\log_{10}(P_{\text{Watts}})$ dB below the transmitter power P (Watts) in a 1 MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

27.53(m)(4)

For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

4.5.2. Test Procedure

ANSI C63.26-2015 - Section 5.7

4.5.3. Test Setting

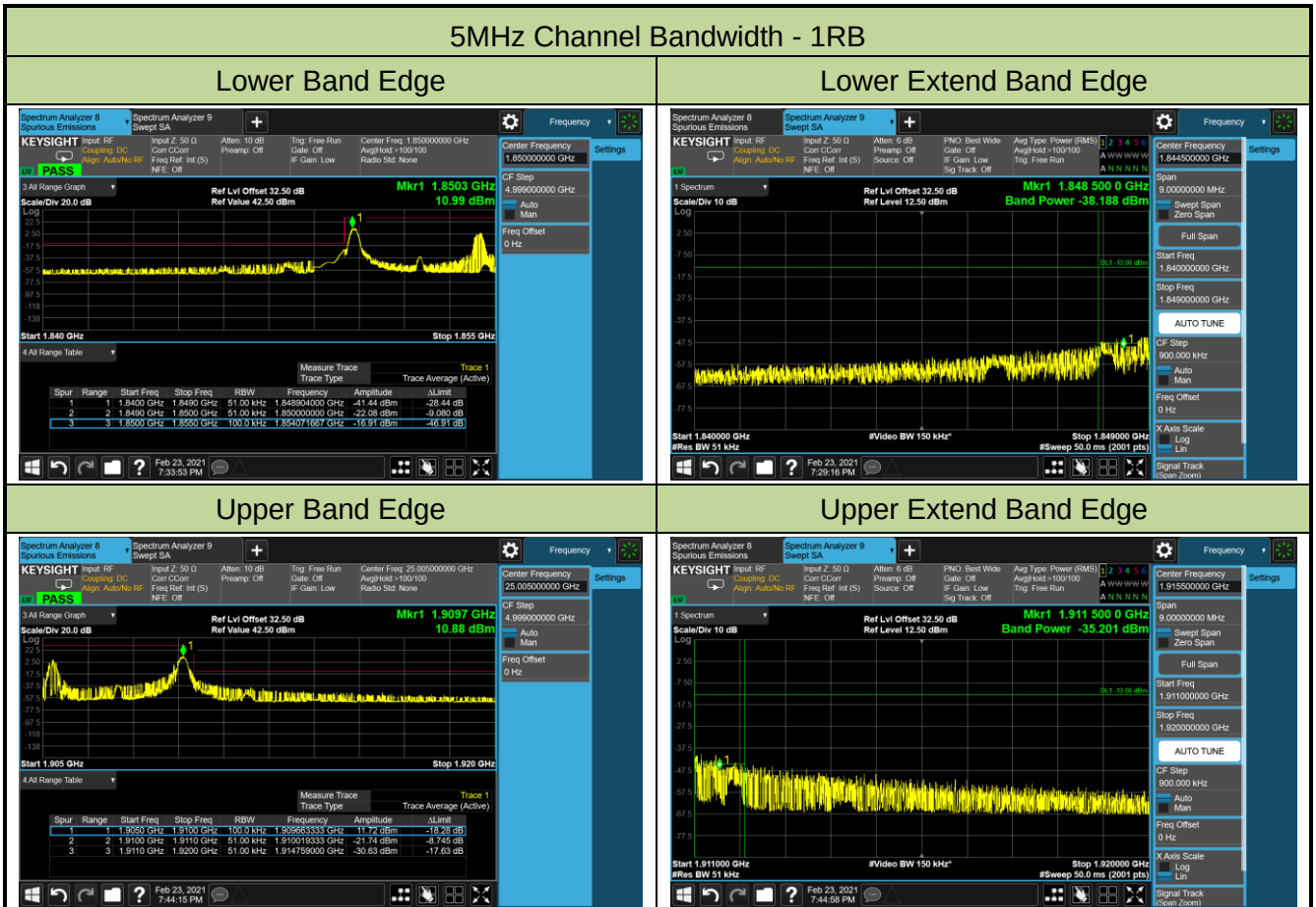
1. Set the analyzer frequency to low or high channel
2. $RBW \geq$ The nominal RBW shall be in the range of 1% of the anticipated OBW (in the 1MHz band immediately outside and adjacent to the band edge). For improvement of the accuracy in the measurement of the average power of a noise-like emission, a RBW narrower than the specified reference bandwidth can be used (generally limited to no less than 1% of the OBW), provided that a subsequent integration is performed over the full required measurement bandwidth. This integration should be performed using the spectrum analyzer's band power functions.
3. $VBW \geq 3 \cdot RBW$
4. Sweep time = auto
5. Detector = power averaging (rms)
6. Set sweep trigger to "free run."
7. User gate triggered such that the analyzer only sweeps when the device is transmitting at full power
8. Trace average at least 100 traces in power averaging (rms) mode if sweep is set to auto-couple.
To accurately determine the average power over the on and off time of the transmitter, it can be necessary to increase the number of traces to be averaged above 100, or if using a manually configured sweep time, increase the sweep time.

4.5.4. Test Setup



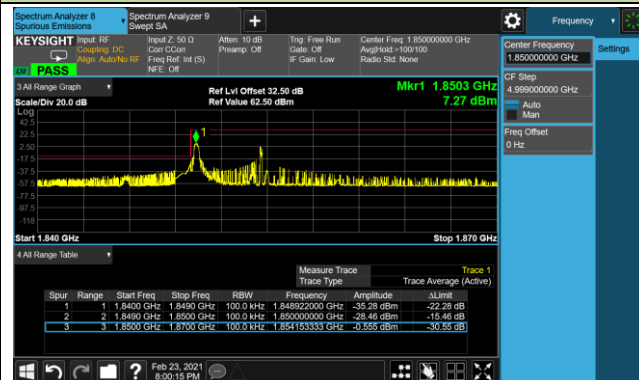
4.5.5. Test Result

Product	5G Sub-6 GHz M.2 Module	Test Site	SIP-SR5
Test Engineer	Gordon Qi	Test Date	2021/02/23 ~ 2021/05/07
Test Band	n2/25_SA		

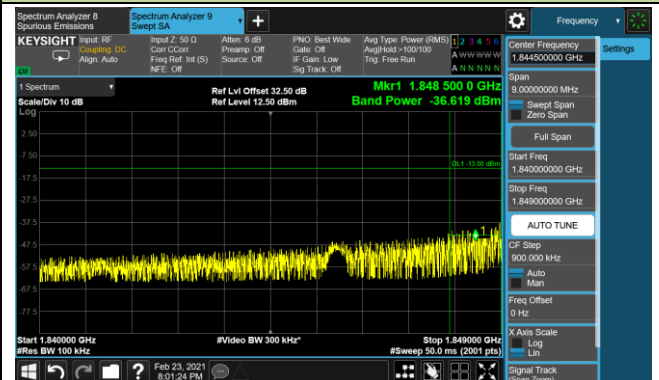


10MHz Channel Bandwidth - 1RB

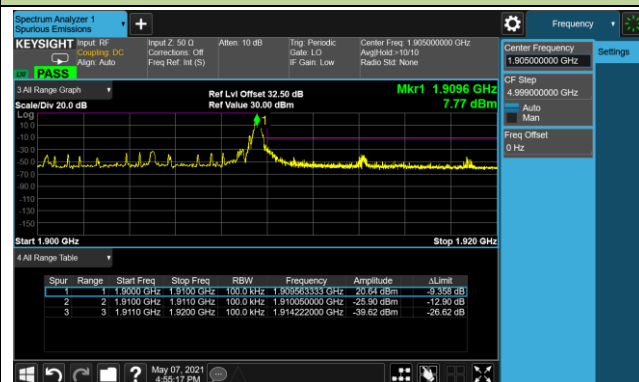
Lower Band Edge



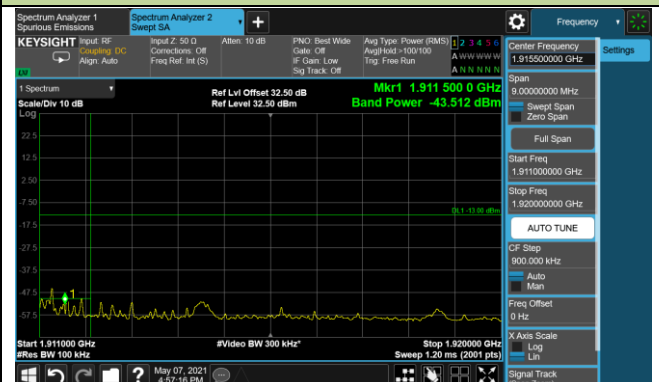
Lower Extend Band Edge



Upper Band Edge

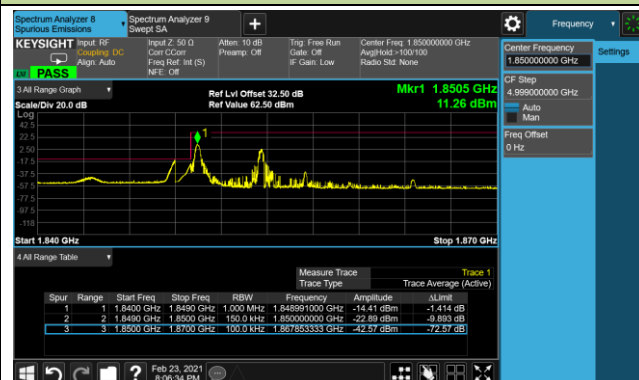


Upper Extend Band Edge



15MHz Channel Bandwidth - 1RB

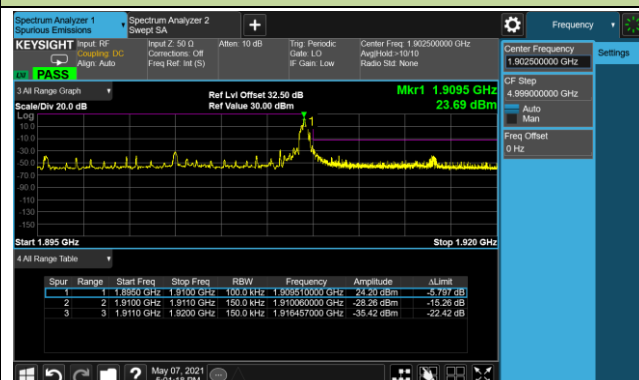
Lower Band Edge



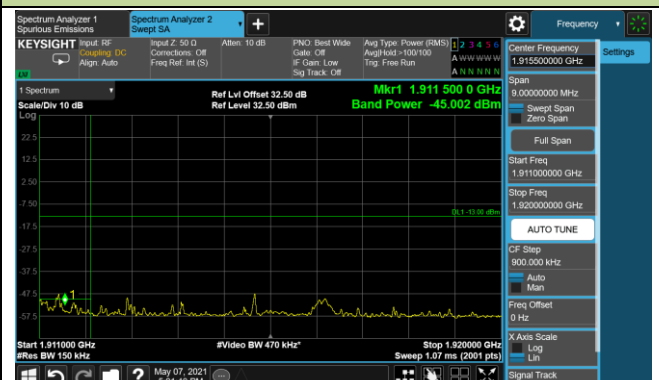
Lower Extend Band Edge



Upper Band Edge

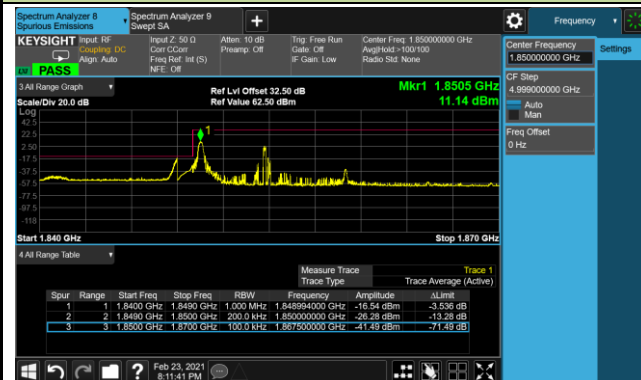


Upper Extend Band Edge

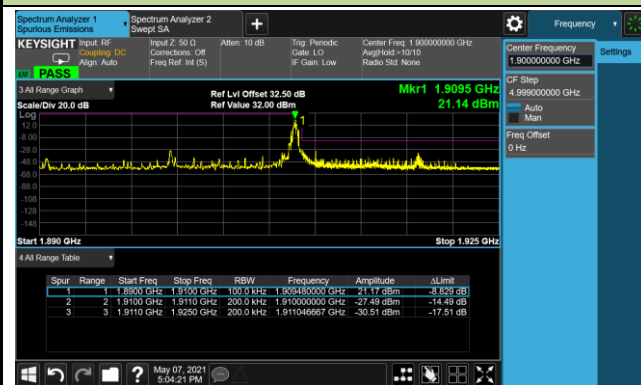


20MHz Channel Bandwidth - 1RB

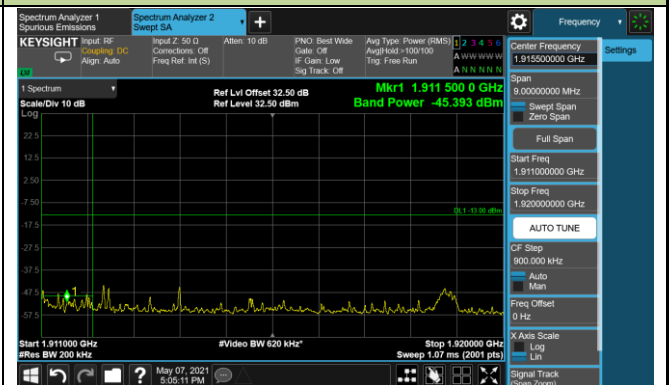
Lower Band Edge



Upper Band Edge

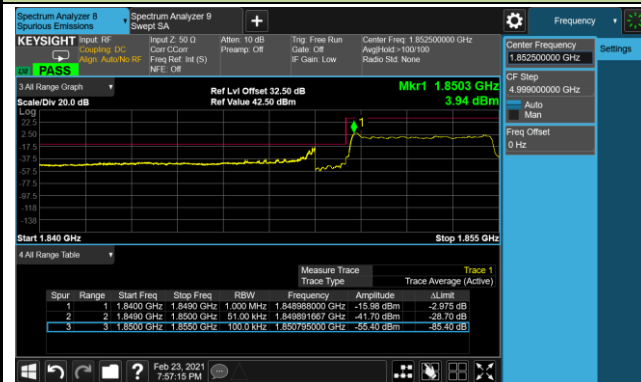


Upper Extend Band Edge

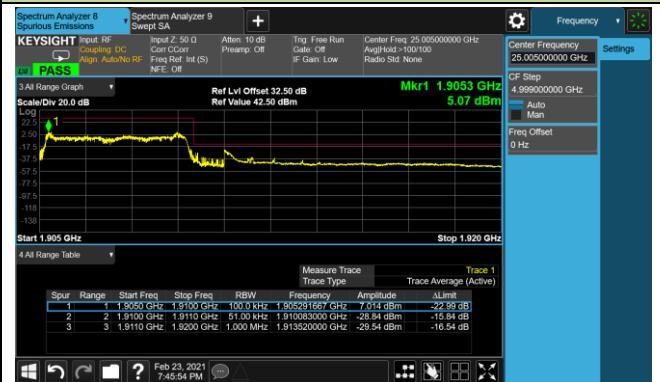


5MHz Channel Bandwidth - Full RB

Lower Band Edge

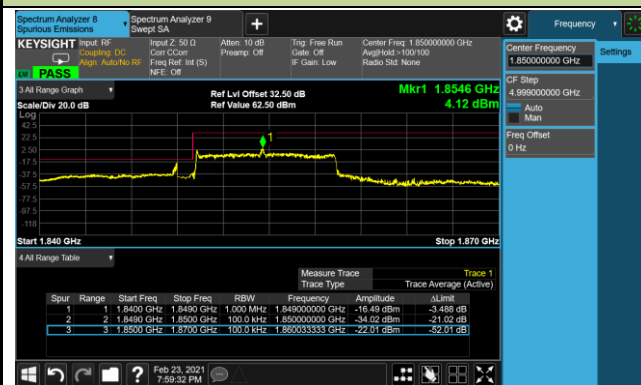


Upper Band Edge

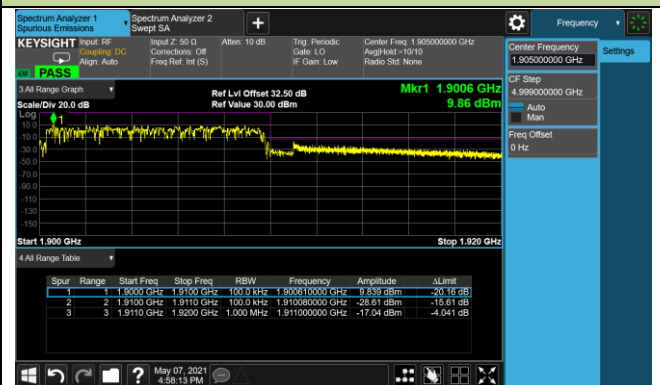


10MHz Channel Bandwidth - Full RB

Lower Band Edge

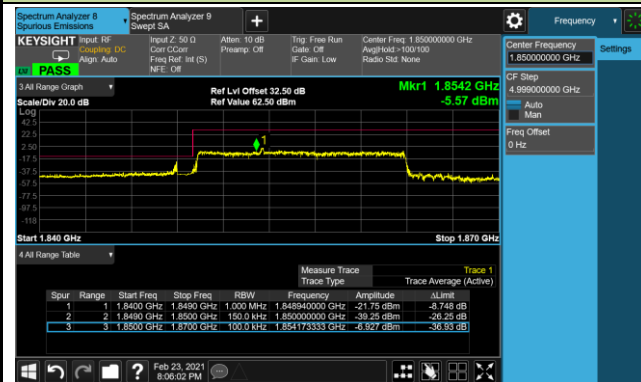


Upper Band Edge

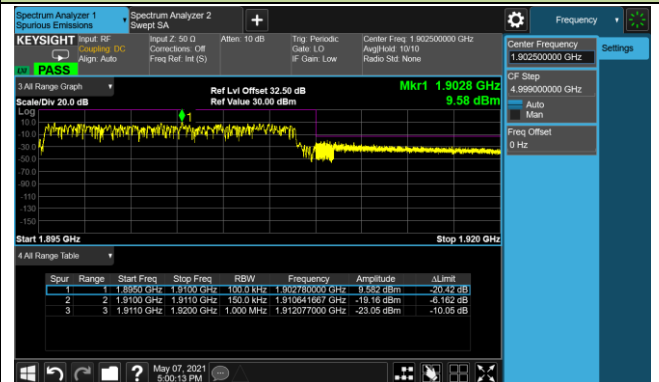


15MHz Channel Bandwidth - Full RB

Lower Band Edge

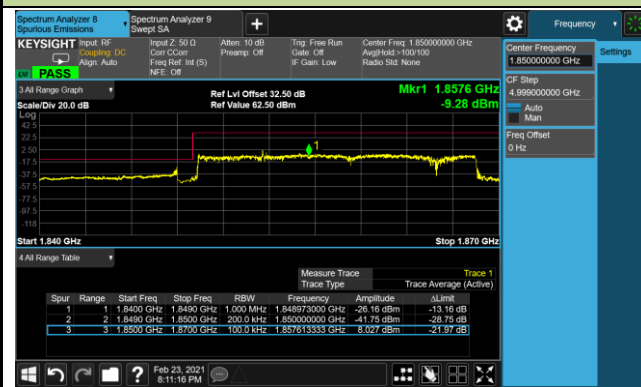


Upper Band Edge

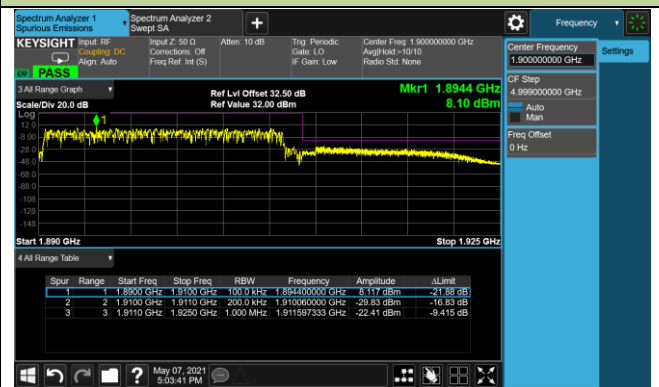


20MHz Channel Bandwidth - Full RB

Lower Band Edge



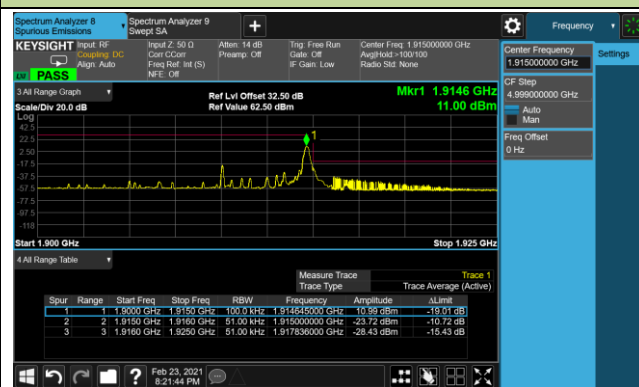
Upper Band Edge



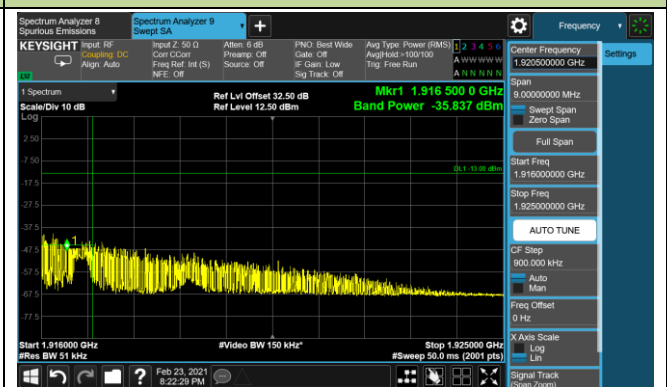
Product	5G Sub-6 GHz M.2 Module	Test Site	SIP-SR5
Test Engineer	Gordon Qi	Test Date	2021/02/23 ~ 2021/05/07
Test Band	n25_SA		

5MHz Channel Bandwidth - 1RB

Upper Band Edge

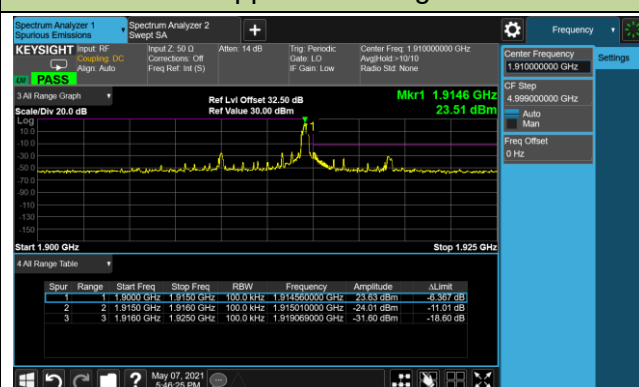


Upper Extend Band Edge

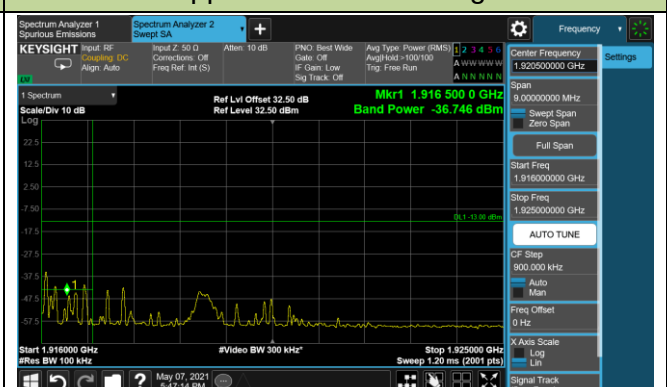


10MHz Channel Bandwidth - 1RB

Upper Band Edge

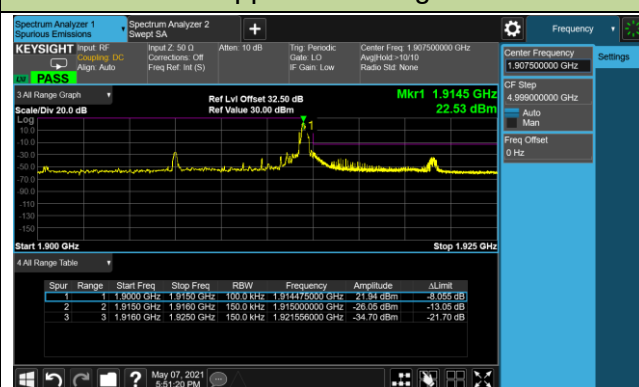


Upper Extend Band Edge

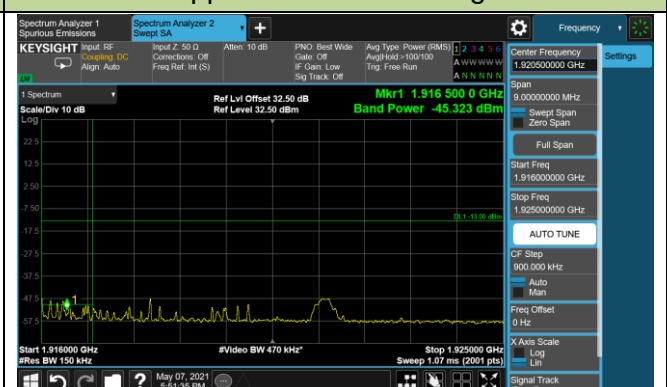


15MHz Channel Bandwidth - 1RB

Upper Band Edge

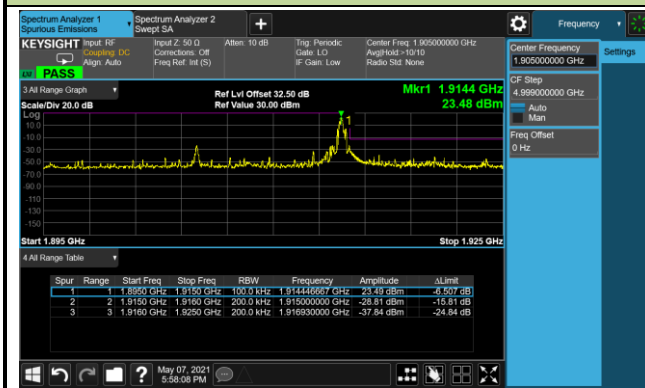


Upper Extend Band Edge

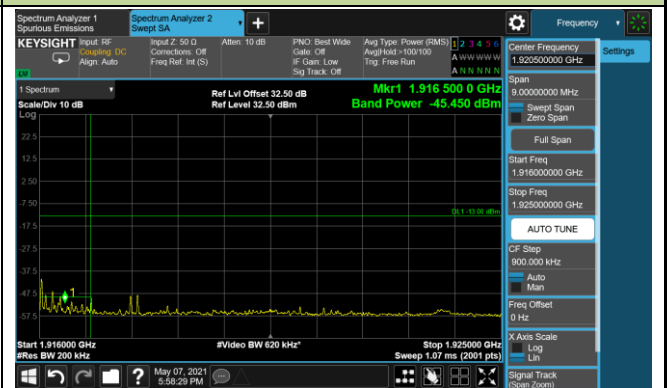


20MHz Channel Bandwidth - 1RB

Upper Band Edge

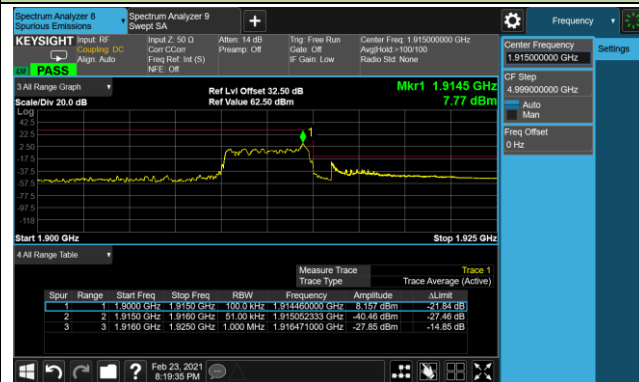


Upper Extend Band Edge



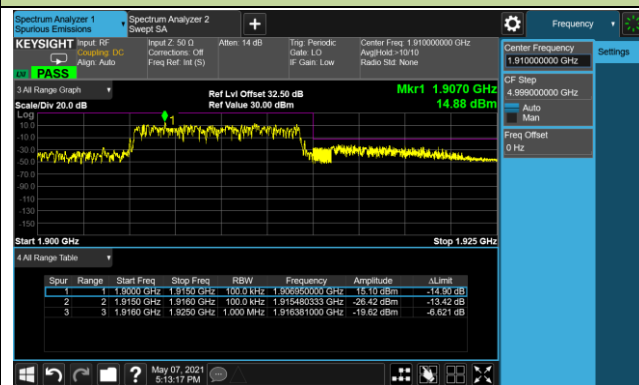
5MHz Channel Bandwidth - Full RB

Upper Band Edge



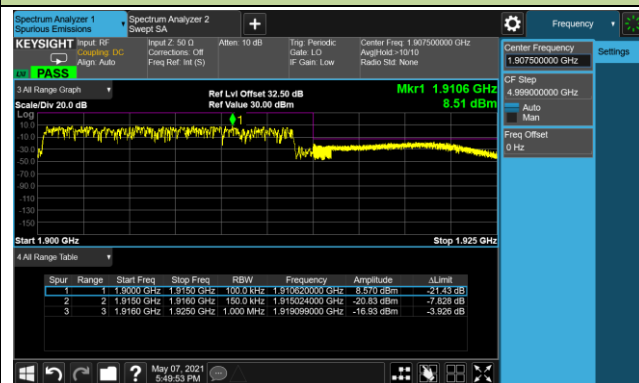
10MHz Channel Bandwidth - Full RB

Upper Band Edge



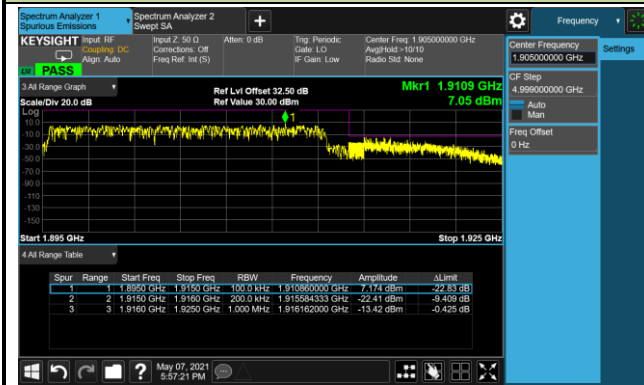
15MHz Channel Bandwidth - Full RB

Upper Band Edge



20MHz Channel Bandwidth - Full RB

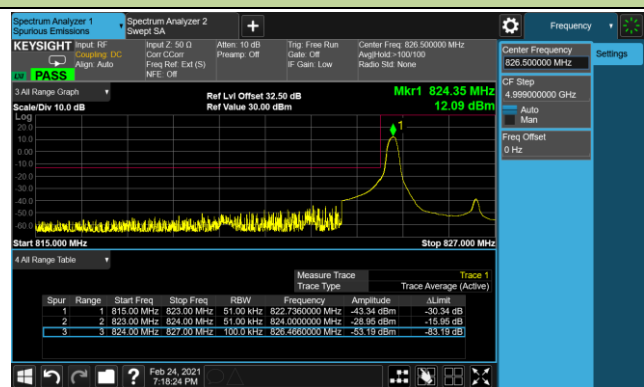
Upper Band Edge



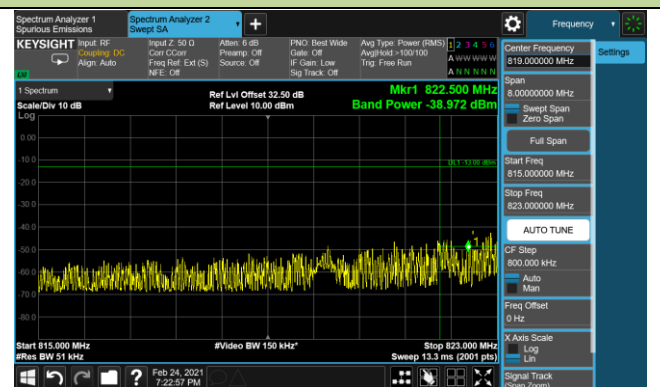
Product	5G Sub-6 GHz M.2 Module	Test Site	SIP-SR5
Test Engineer	Gordon Qi	Test Date	2021/02/23
Test Band	n5_SA		

5MHz Channel Bandwidth - 1RB

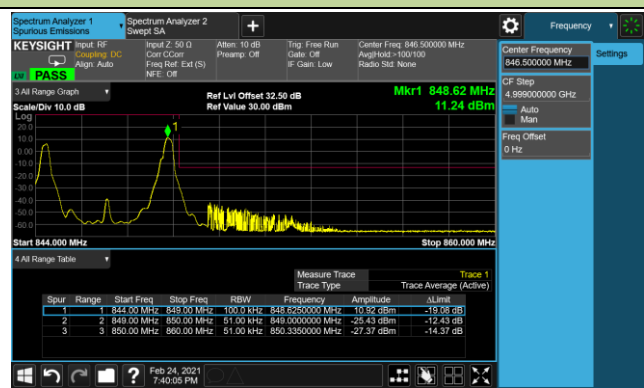
Lower Band Edge



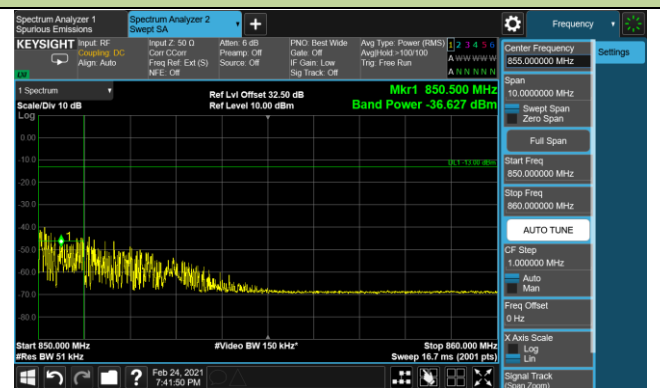
Lower Extend Band Edge



Upper Band Edge

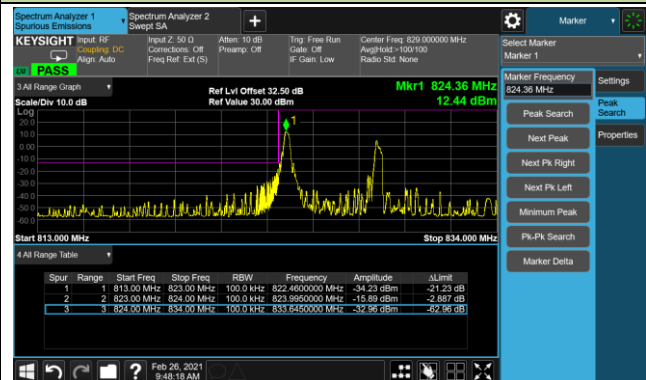


Upper Extend Band Edge

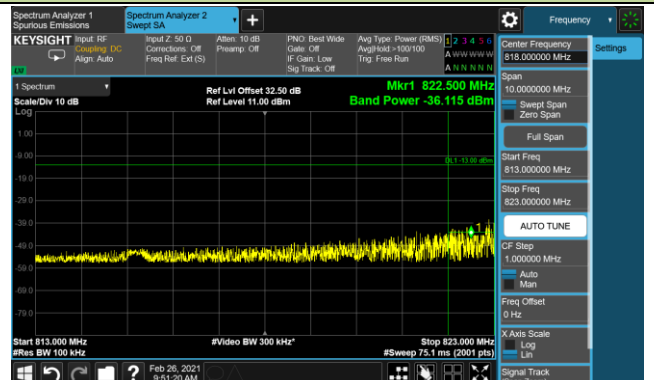


10MHz Channel Bandwidth - 1RB

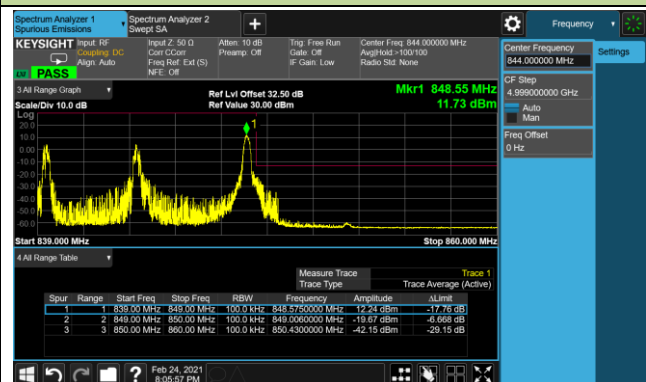
Lower Band Edge



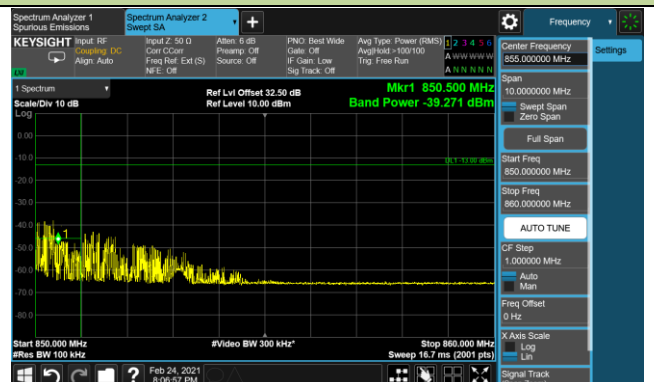
Lower Extend Band Edge



Upper Band Edge

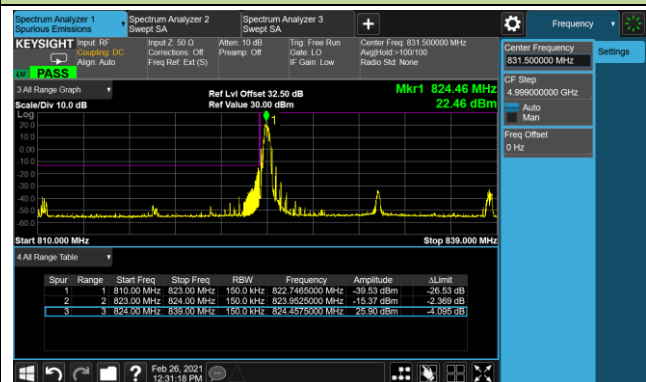


Upper Extend Band Edge

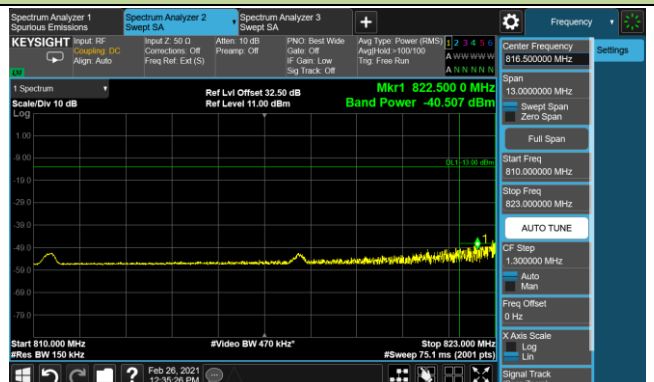


15MHz Channel Bandwidth - 1RB

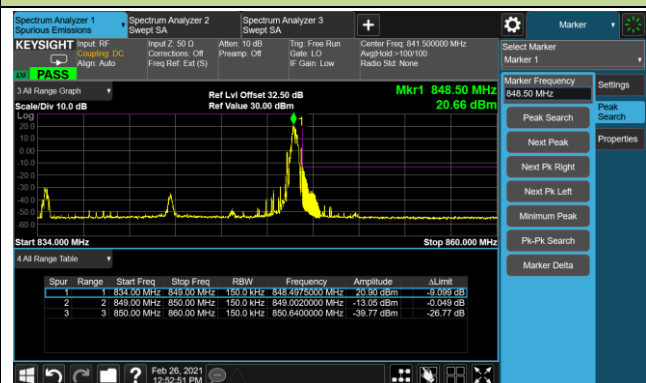
Lower Band Edge



Lower Extend Band Edge



Upper Band Edge

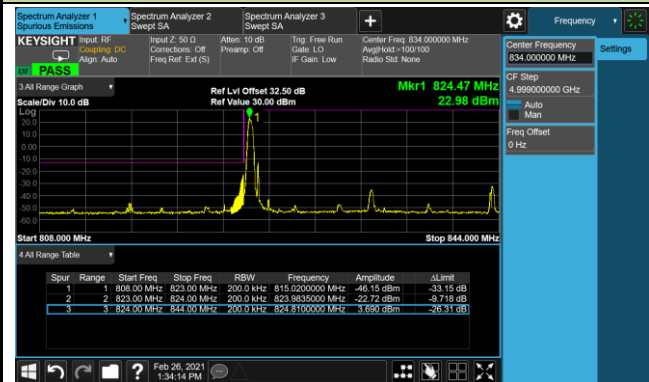


Upper Extend Band Edge

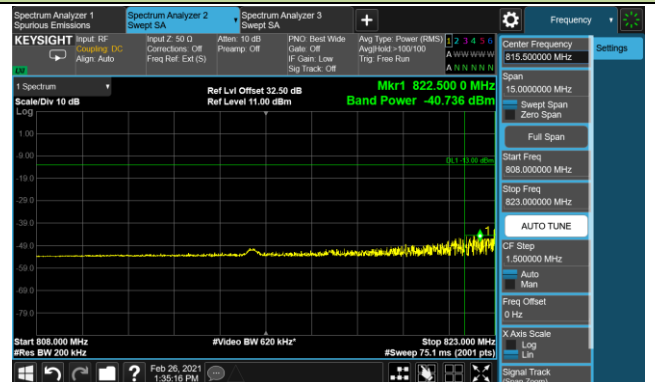


20MHz Channel Bandwidth - 1RB

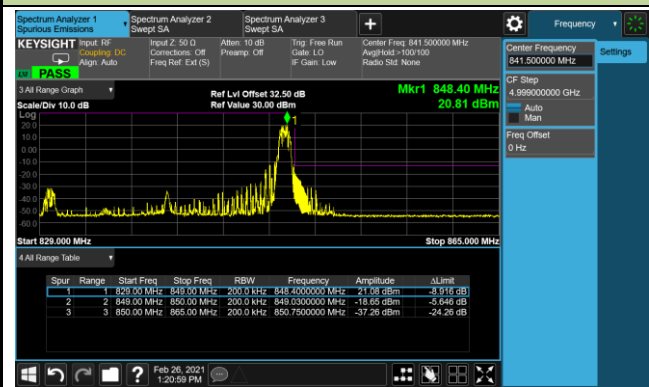
Lower Band Edge



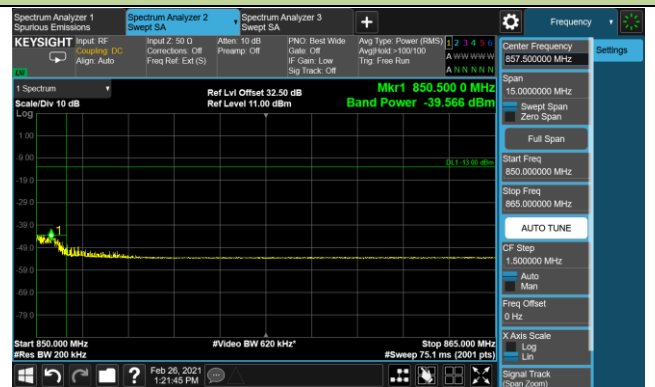
Lower Extend Band Edge



Upper Band Edge

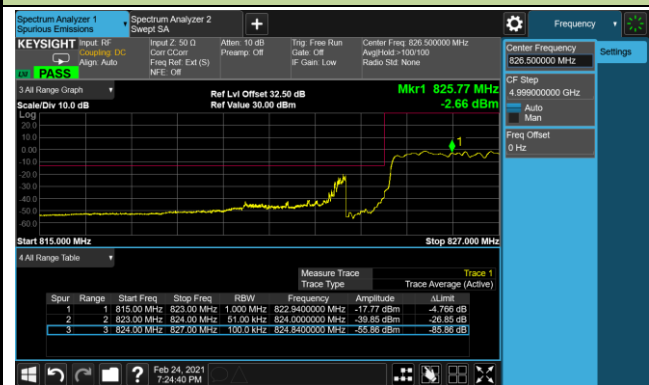


Upper Extend Band Edge

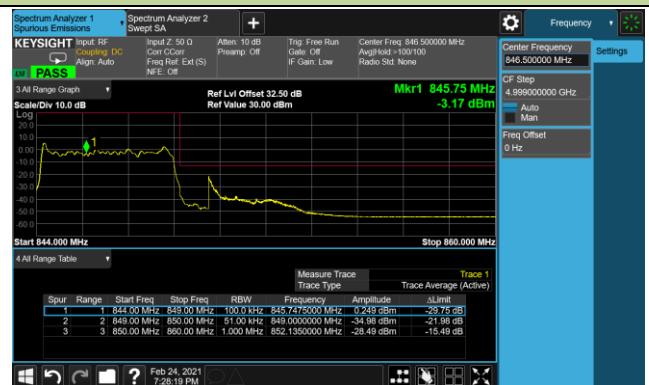


5MHz Channel Bandwidth - Full RB

Lower Band Edge

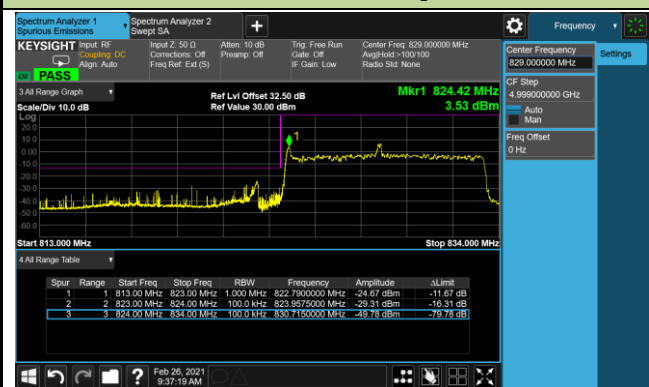


Upper Band Edge



10MHz Channel Bandwidth - Full RB

Lower Band Edge

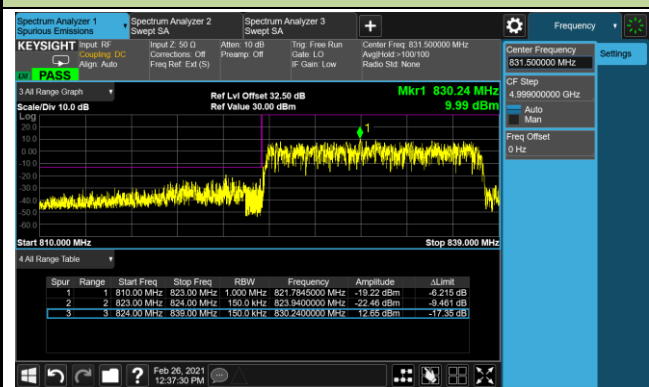


Upper Band Edge

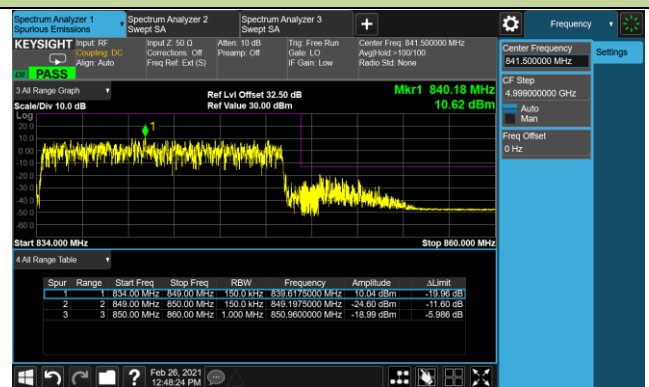


15MHz Channel Bandwidth - Full RB

Lower Band Edge

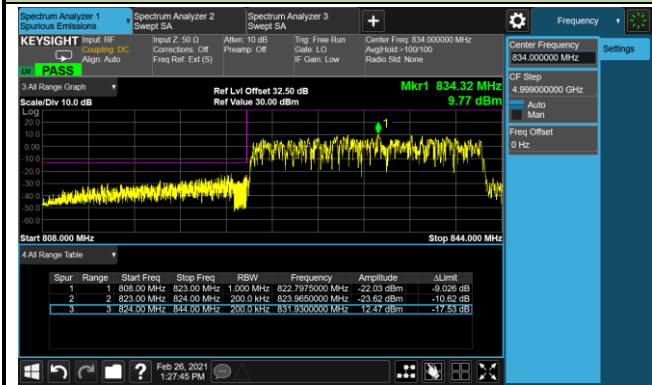


Upper Band Edge

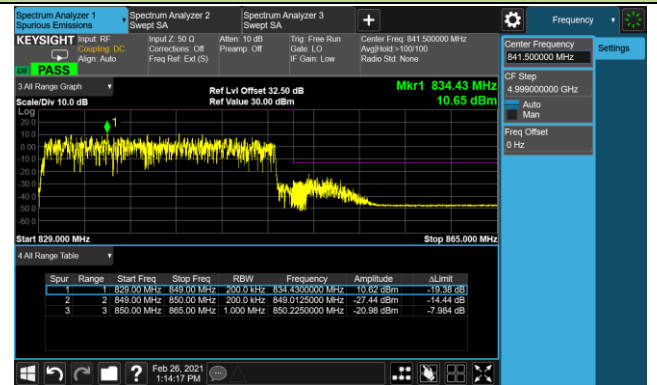


20MHz Channel Bandwidth - Full RB

Lower Band Edge



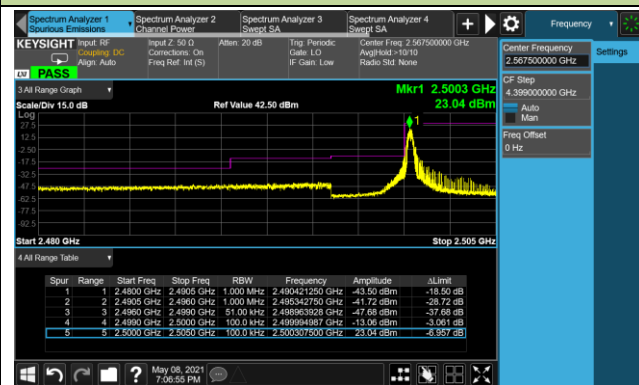
Upper Band Edge



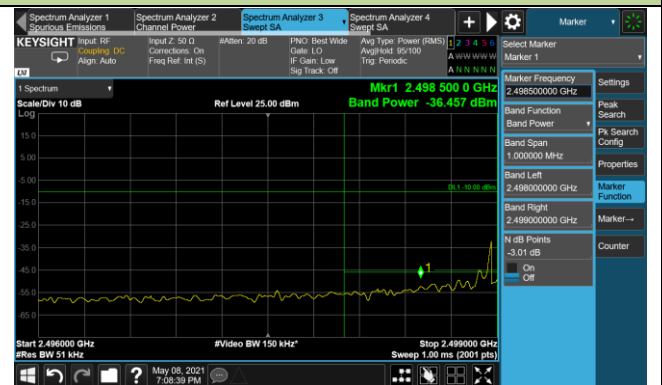
Product	5G Sub-6 GHz M.2 Module	Test Site	SIP-SR5
Test Engineer	Candy Luo	Test Date	2021/05/08
Test Band	n7_SA		

5MHz Channel Bandwidth - 1RB

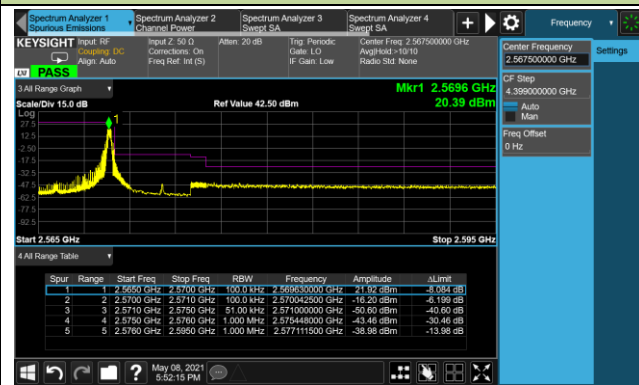
Lower Band Edge



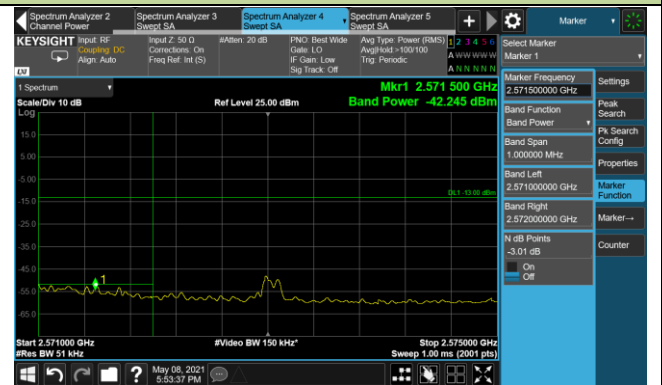
Lower Extend Band Edge



Upper Band Edge

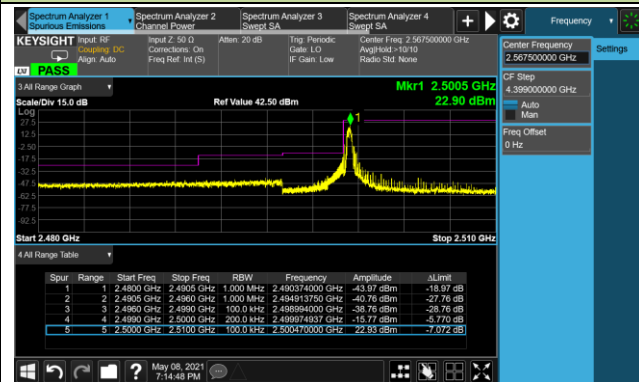


Upper Extend Band Edge



10MHz Channel Bandwidth - 1RB

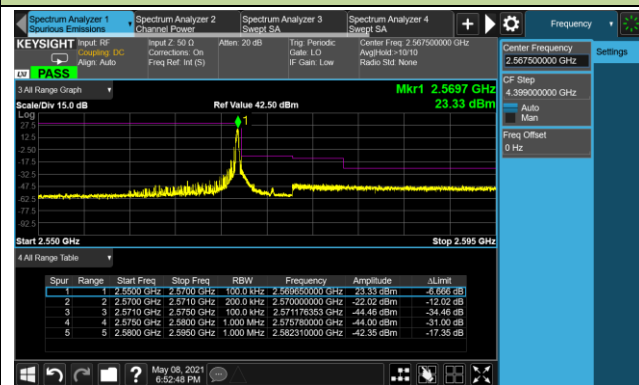
Lower Band Edge



Lower Extend Band Edge



Upper Band Edge

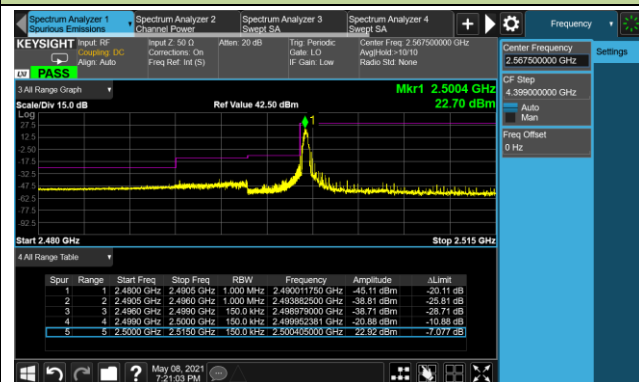


Upper Extend Band Edge

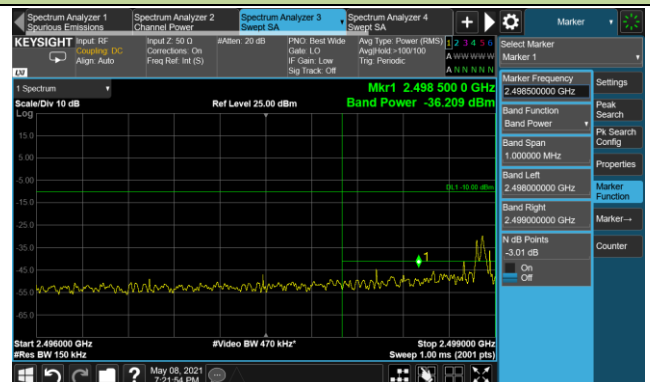


15MHz Channel Bandwidth - 1RB

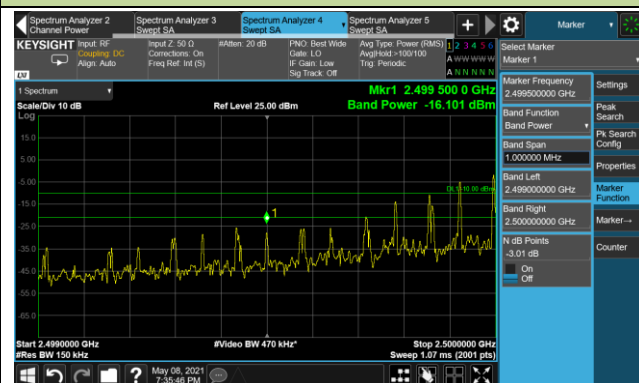
Lower Band Edge



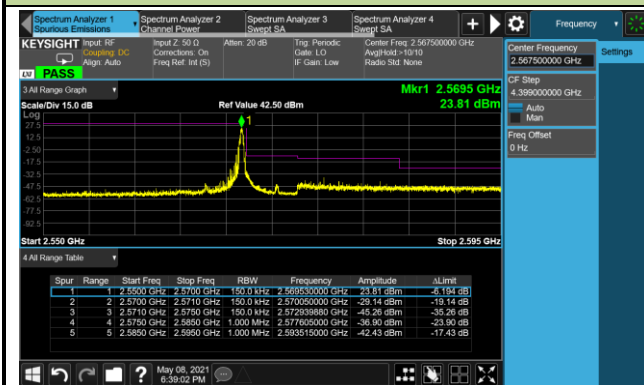
Lower Extend Band Edge



Lower Extend Band Edge



Upper Band Edge



Upper Extend Band Edge



Upper Extend Band Edge

