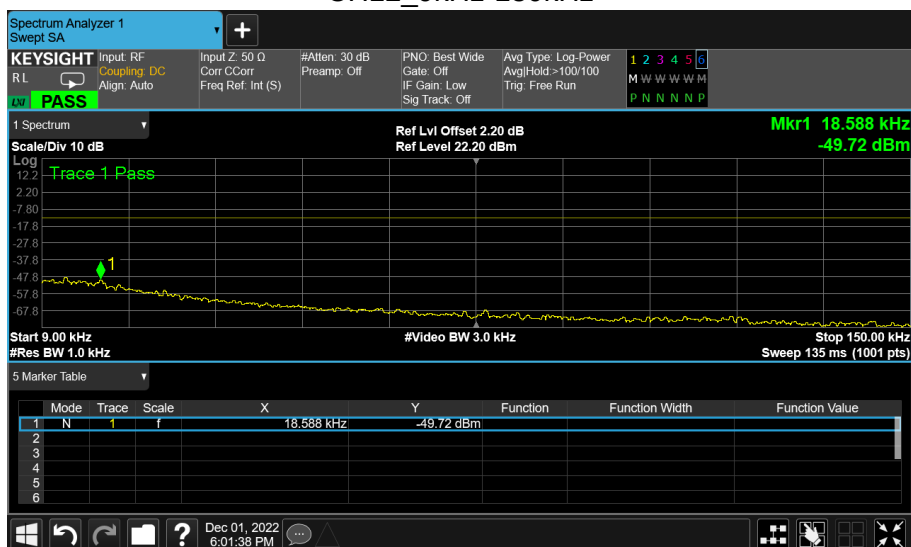
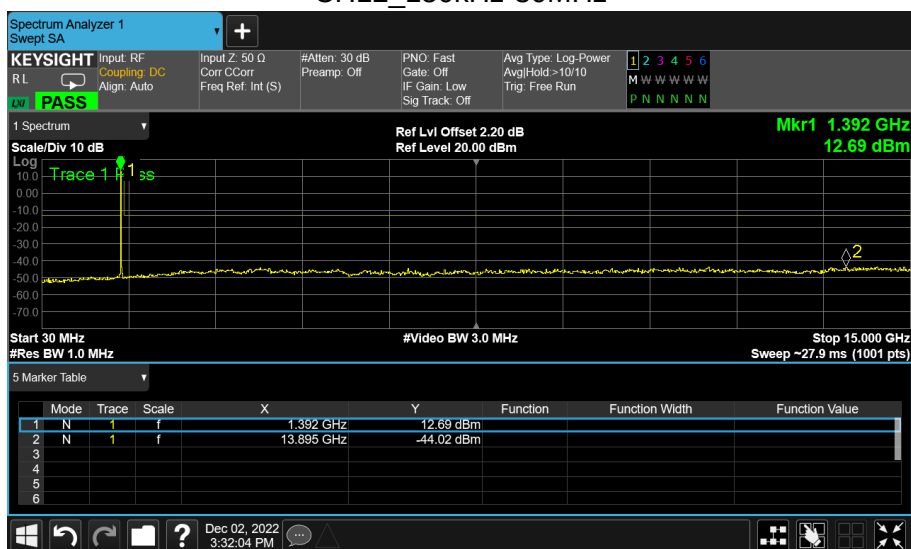




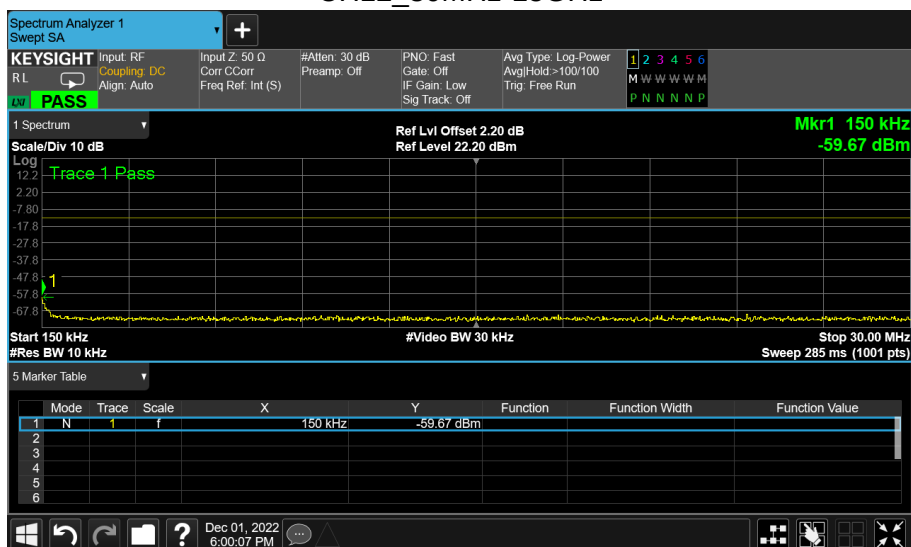
CH12_9kHz-150kHz



CH12_150kHz-30MHz

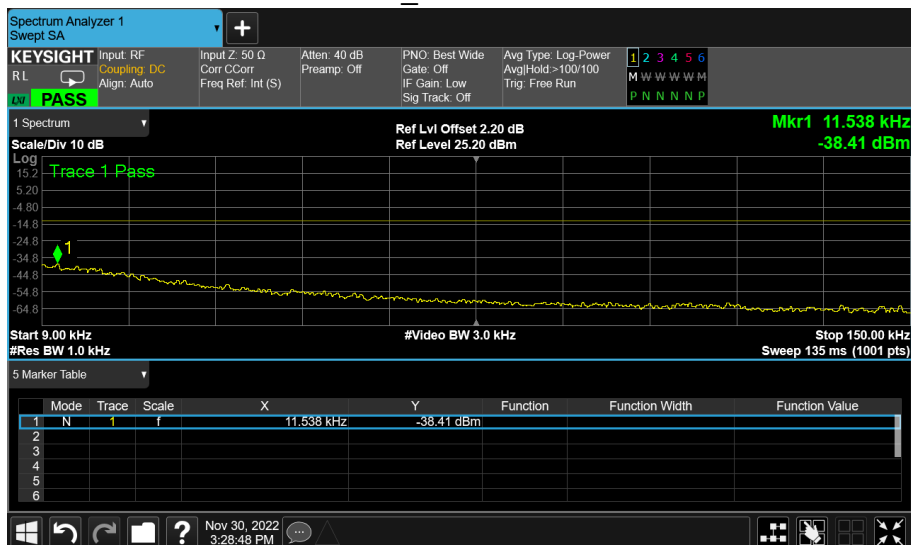


CH12_30MHz-15GHz

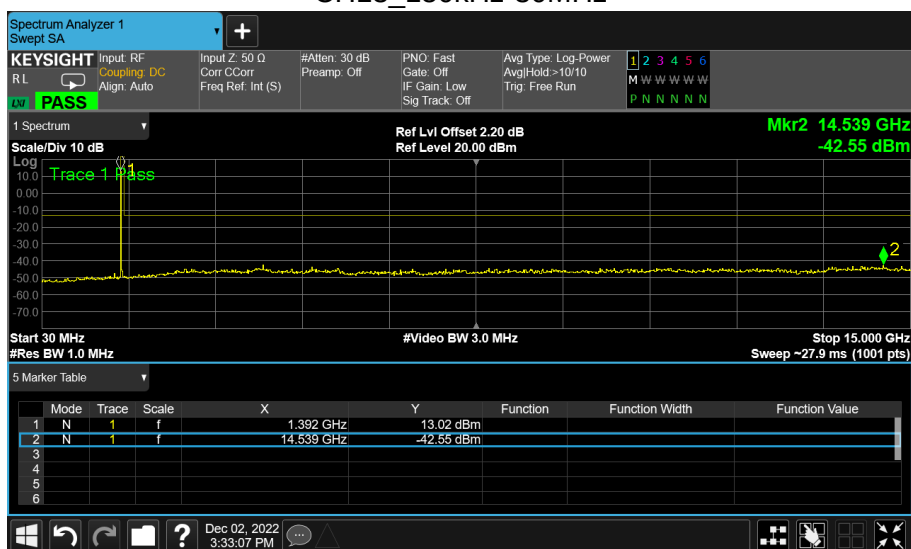




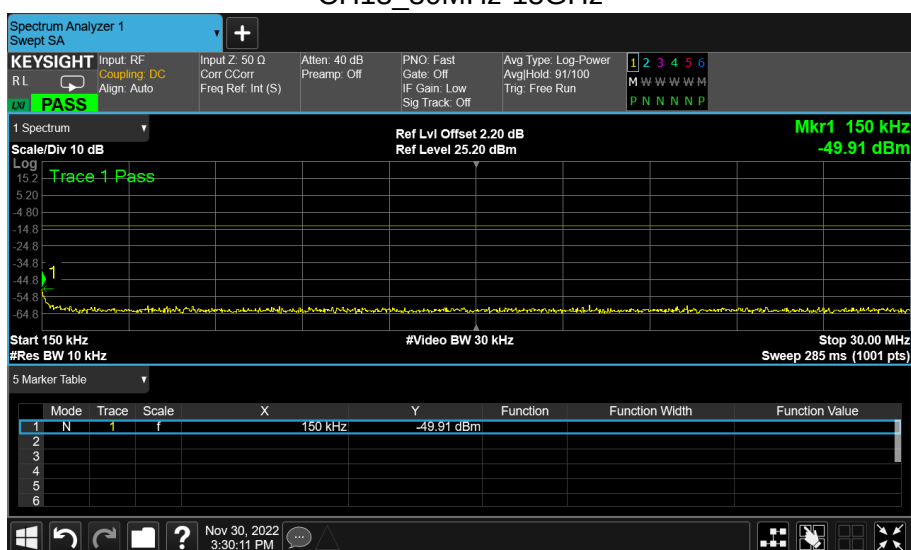
CH13_9kHz-150kHz



CH13_150kHz-30MHz

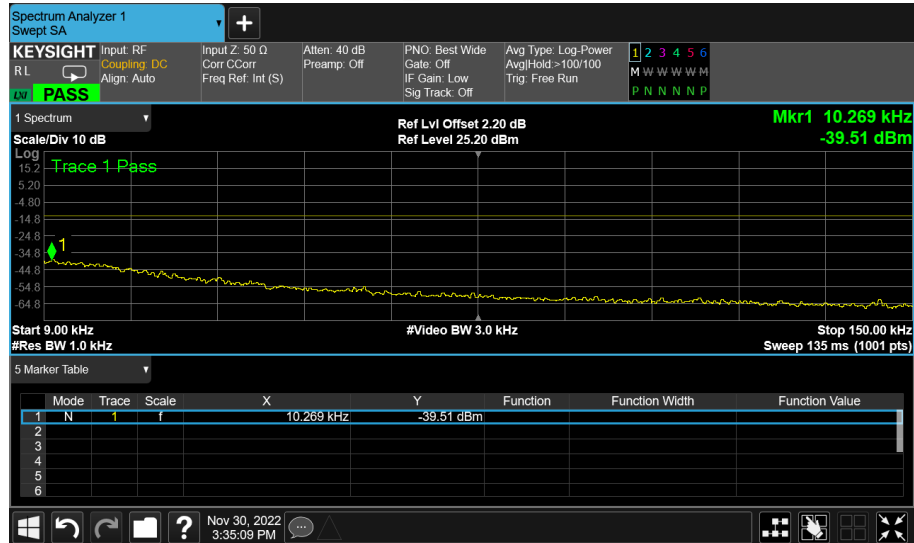


CH13_30MHz-15GHz

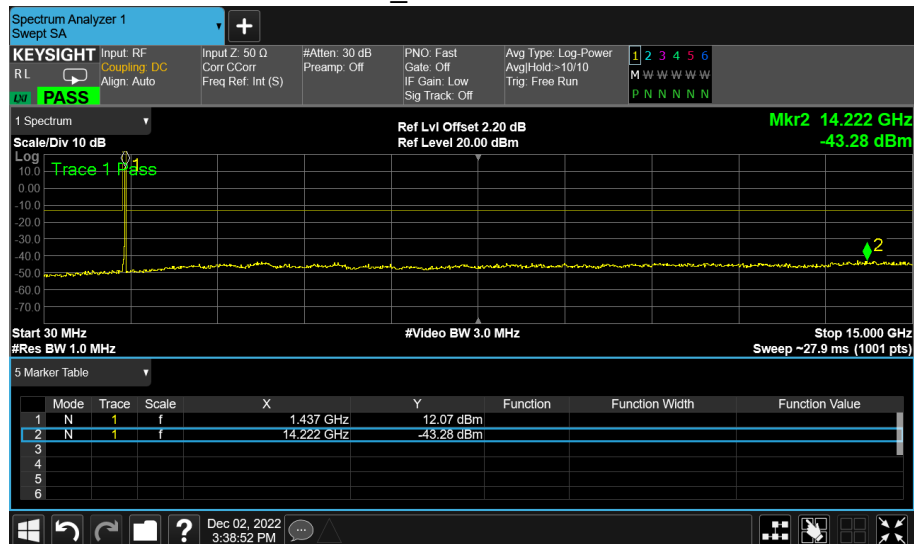




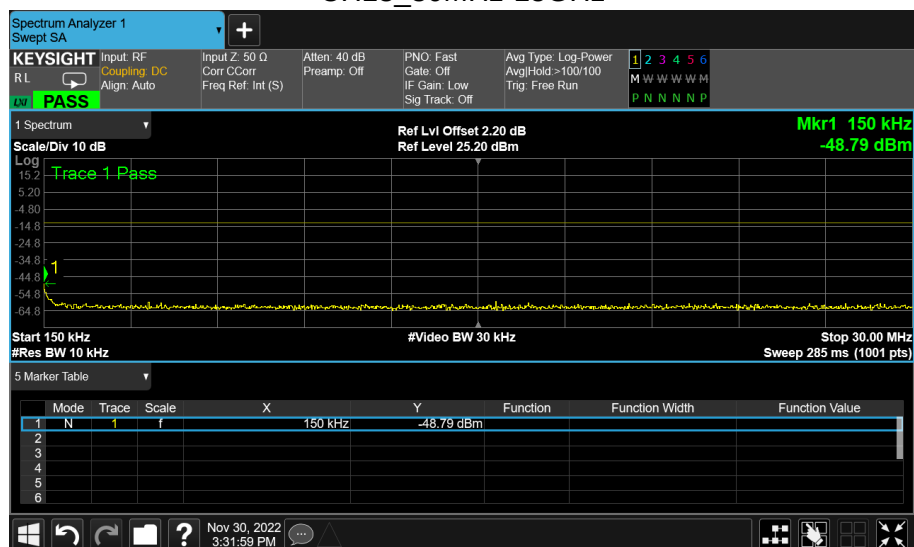
CH18_9kHz-150kHz



CH18_150kHz-30MHz

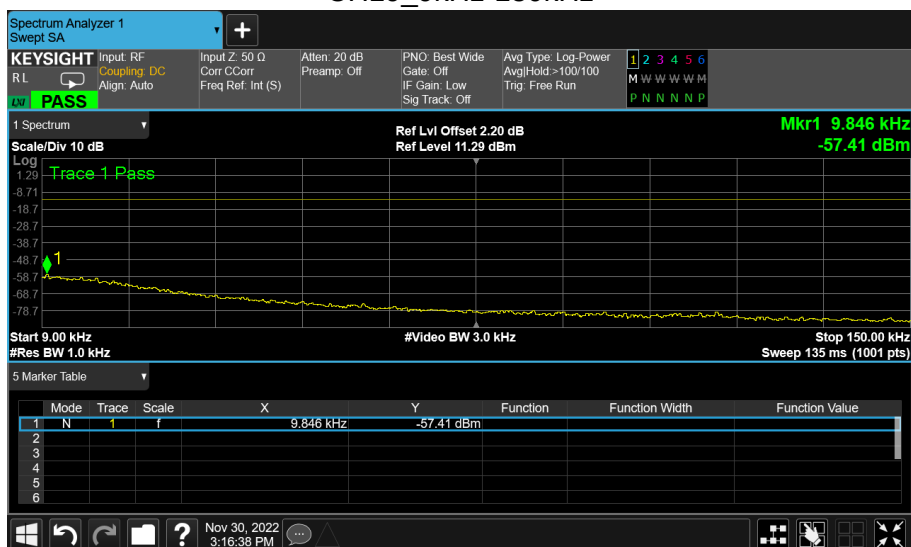


CH18_30MHz-15GHz

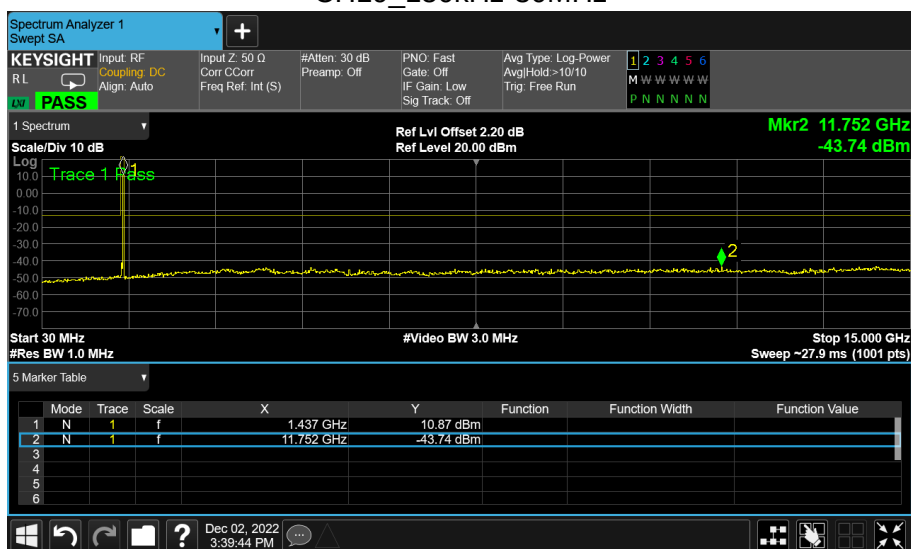




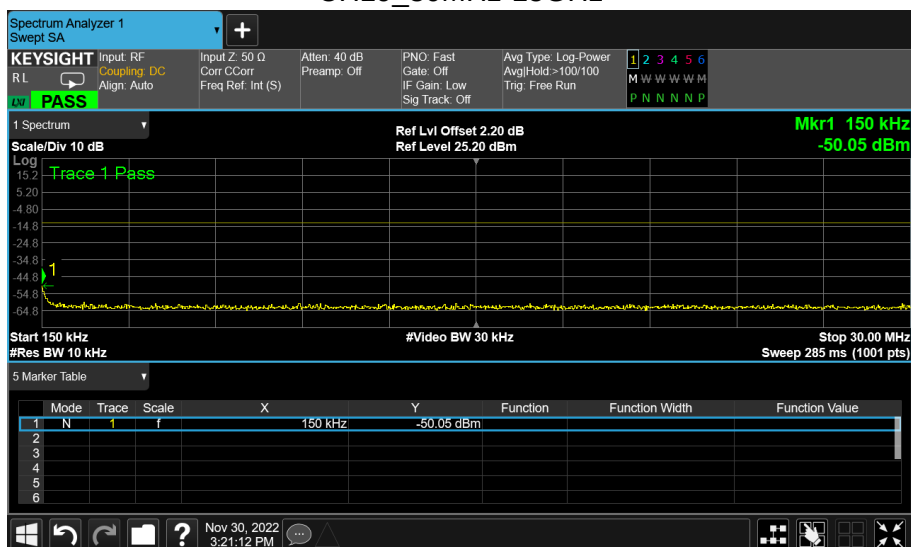
CH19_9kHz-150kHz



CH19_150kHz-30MHz



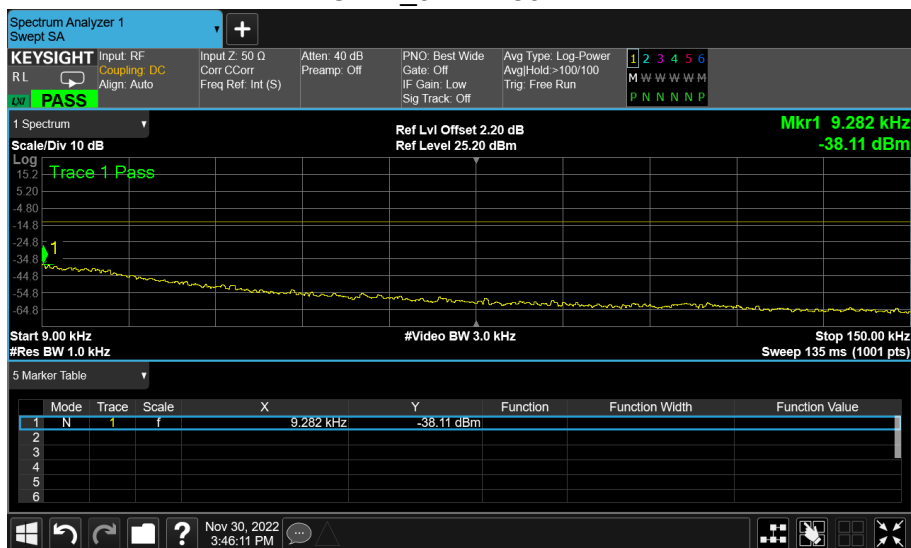
CH19_30MHz-15GHz



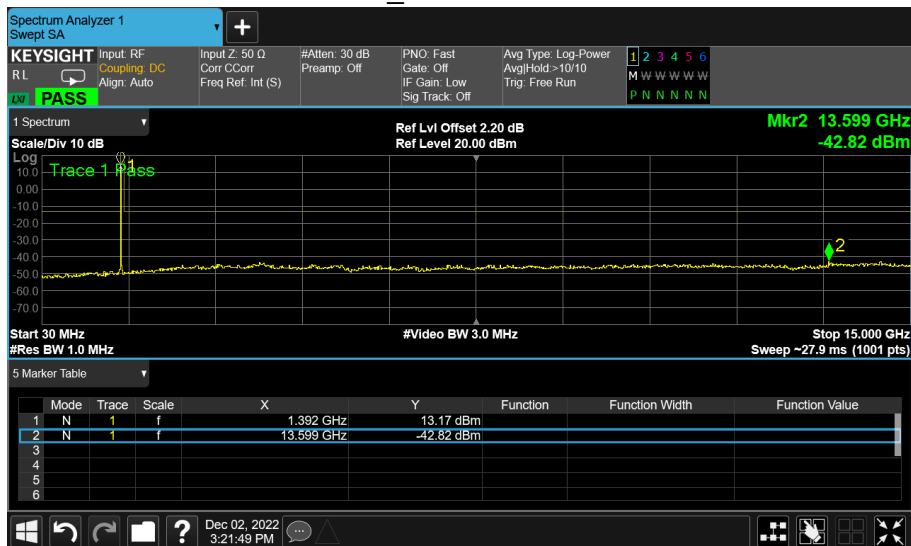


SH 2.0 E-WMTS_DBPSK

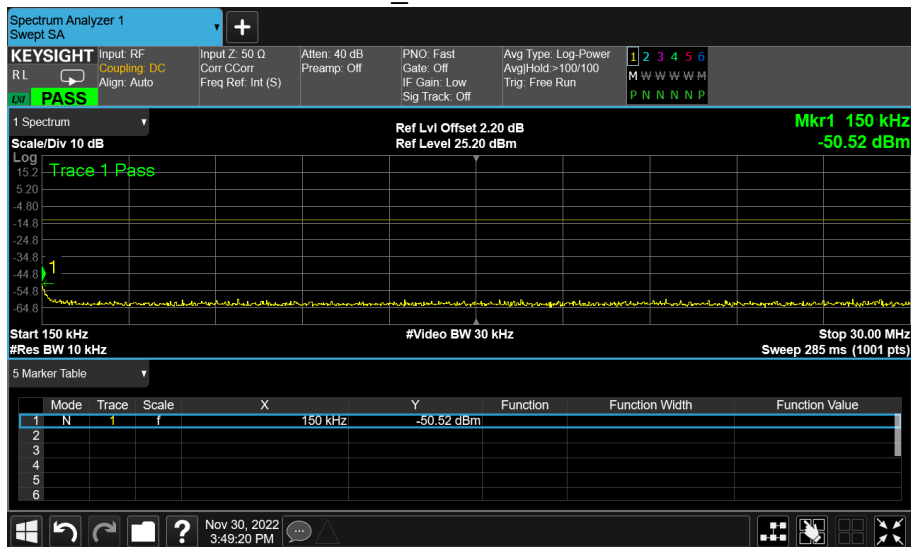
CH11_9kHz-150kHz



CH11_150kHz-30MHz

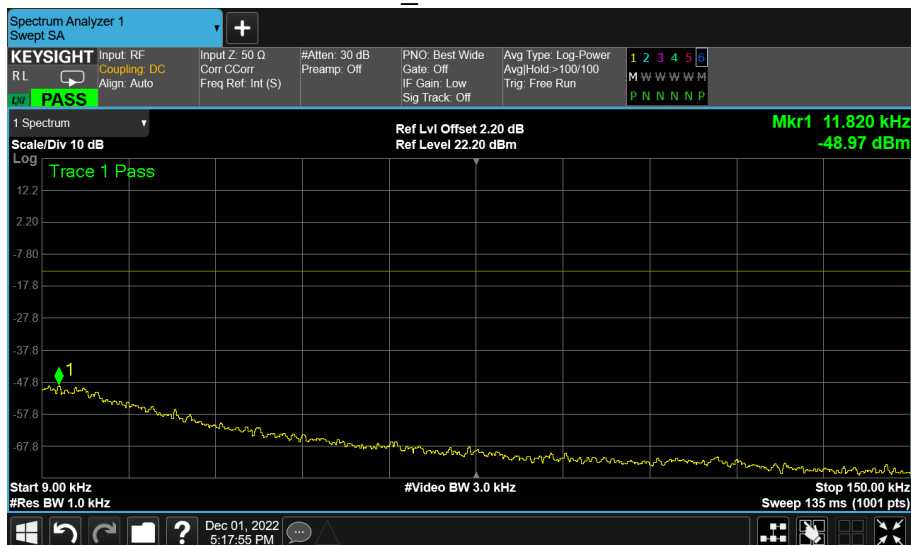


CH11_30MHz-15GHz

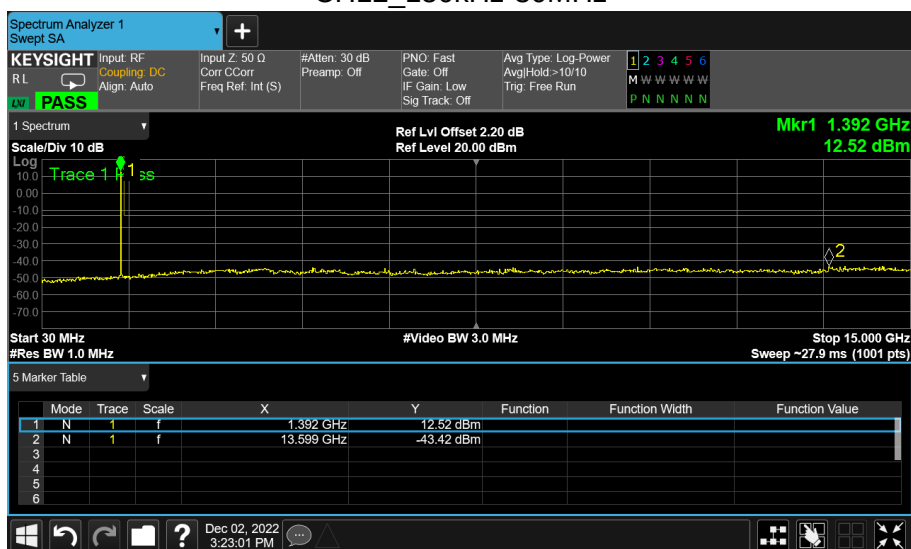




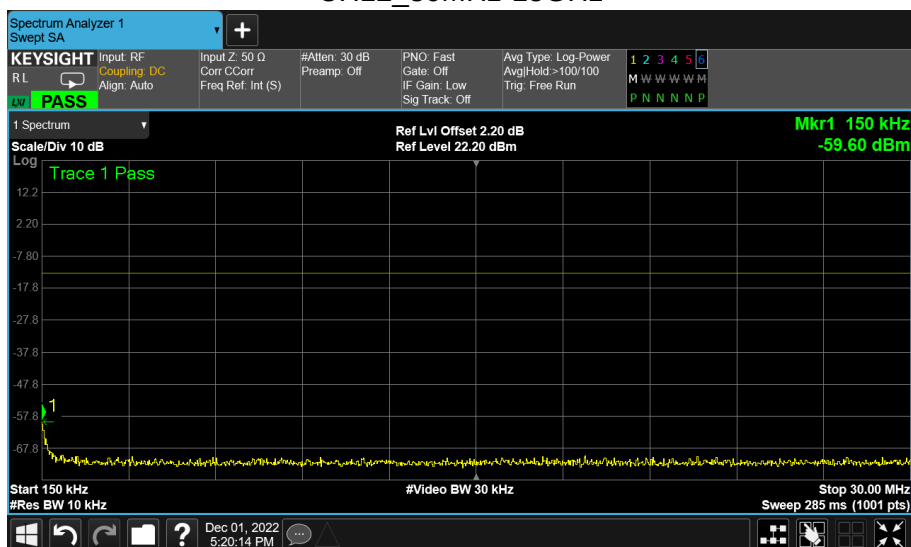
CH12_9kHz-150kHz



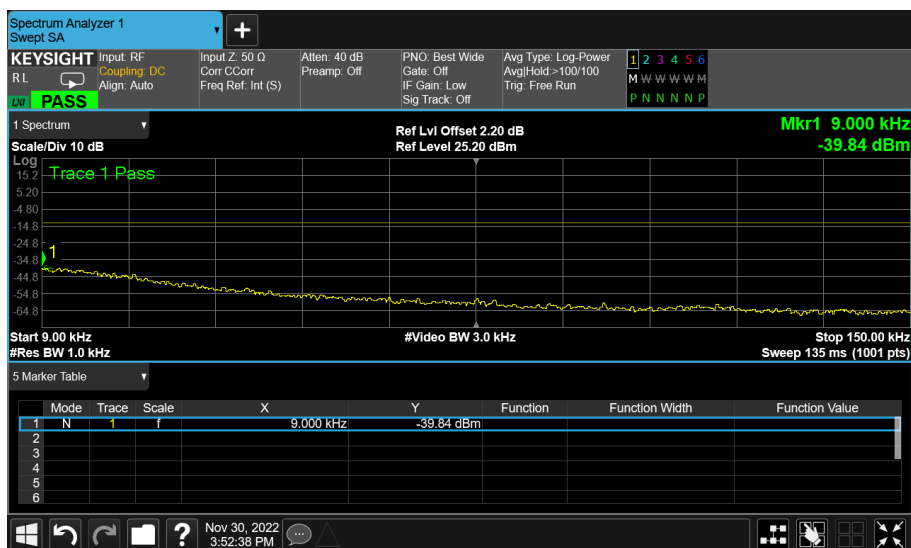
CH12_150kHz-30MHz



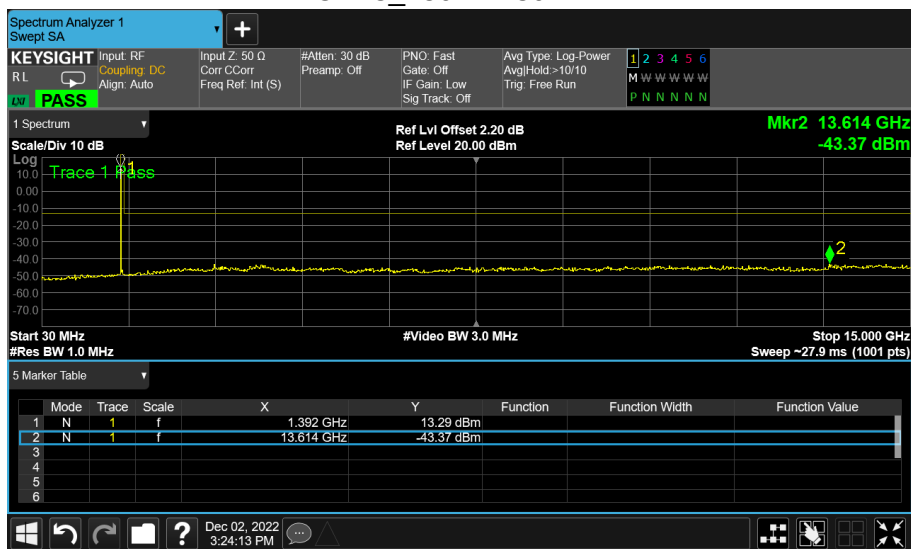
CH12_30MHz-15GHz



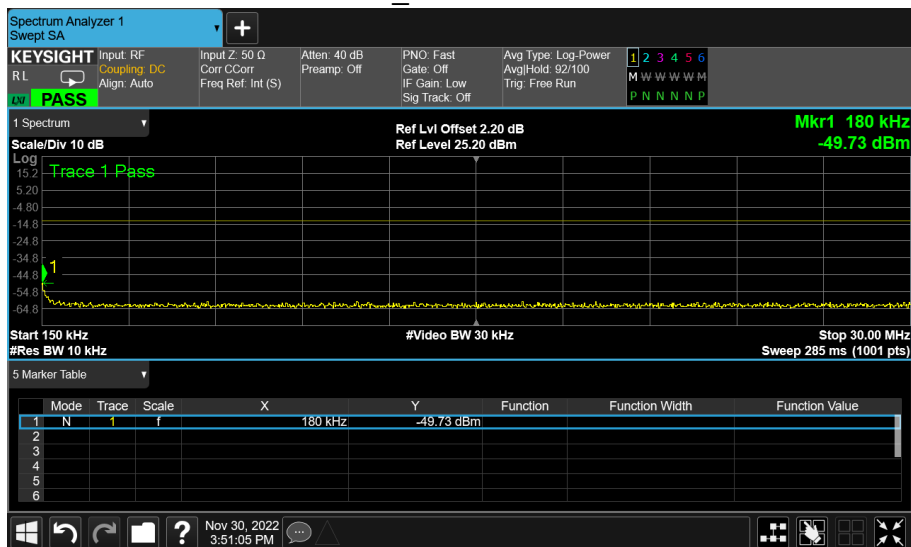
CH13_9kHz-150kHz



CH13_150kHz-30MHz

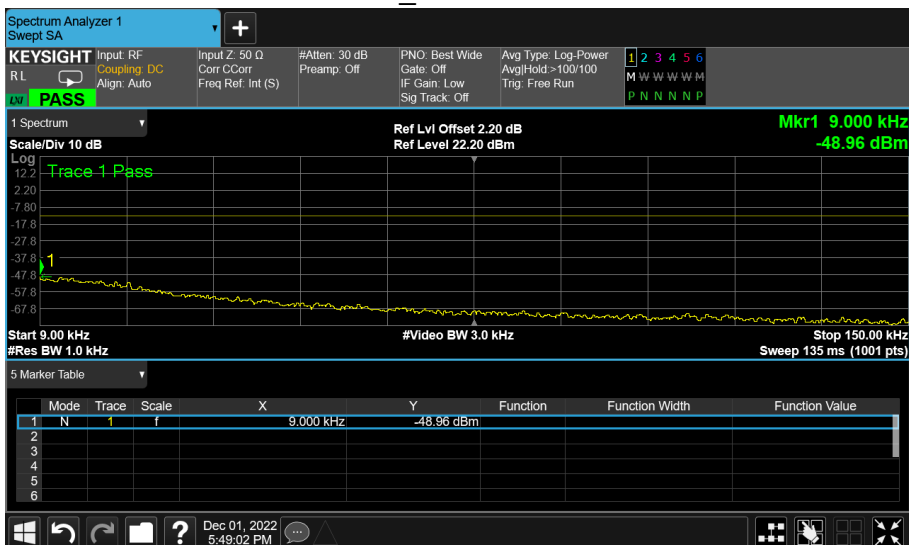


CH13_30MHz-15GHz

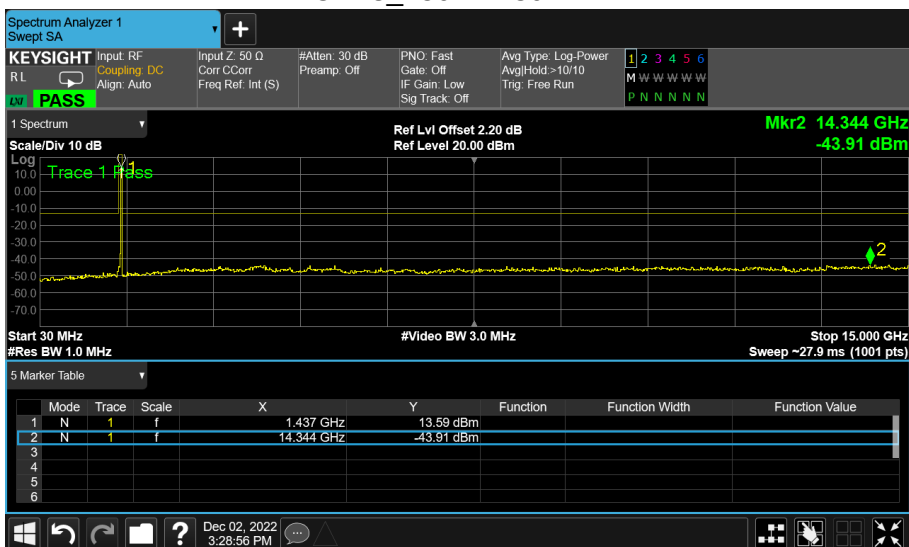




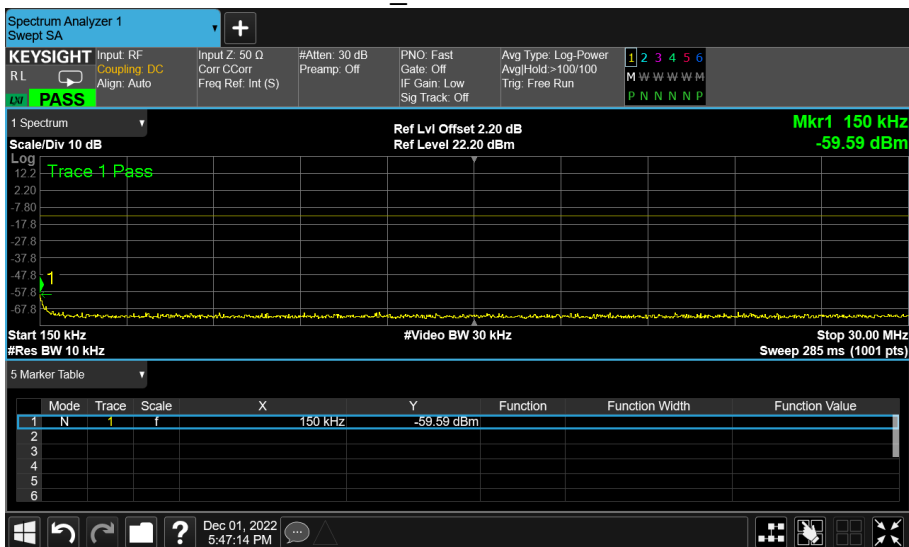
CH18_9kHz-150kHz



CH18_150kHz-30MHz

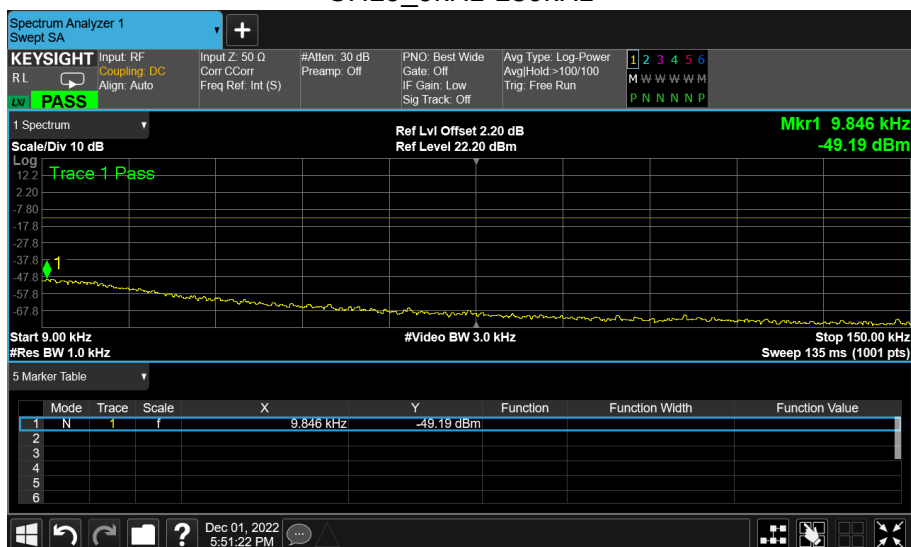


CH18_30MHz-15GHz

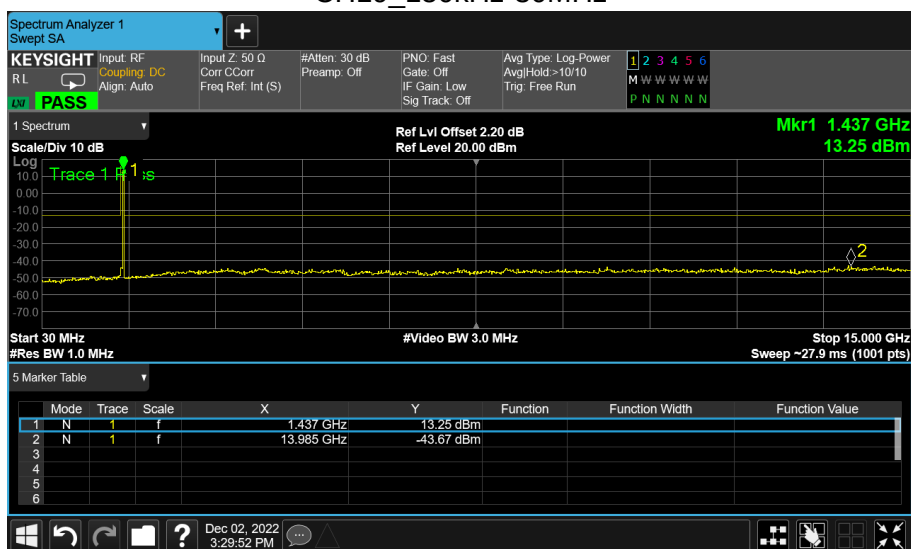




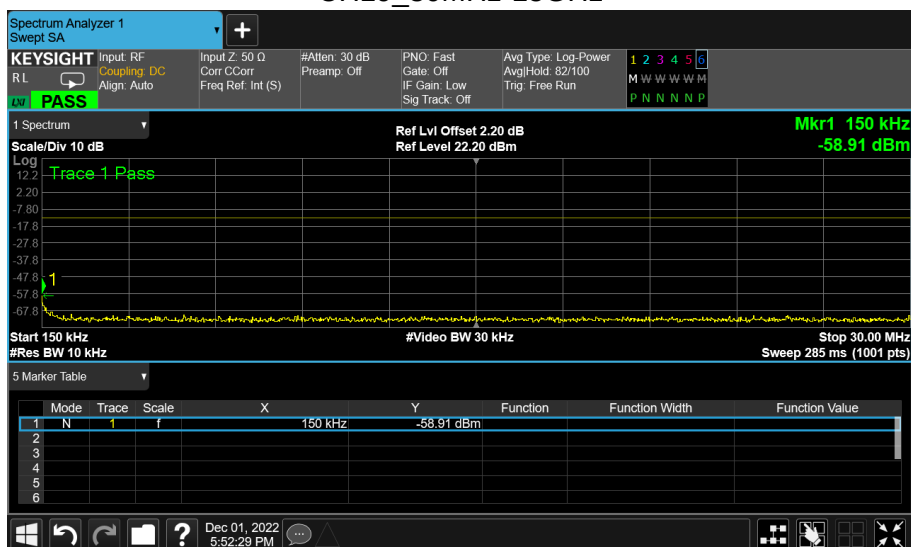
CH19_9kHz-150kHz



CH19_150kHz-30MHz



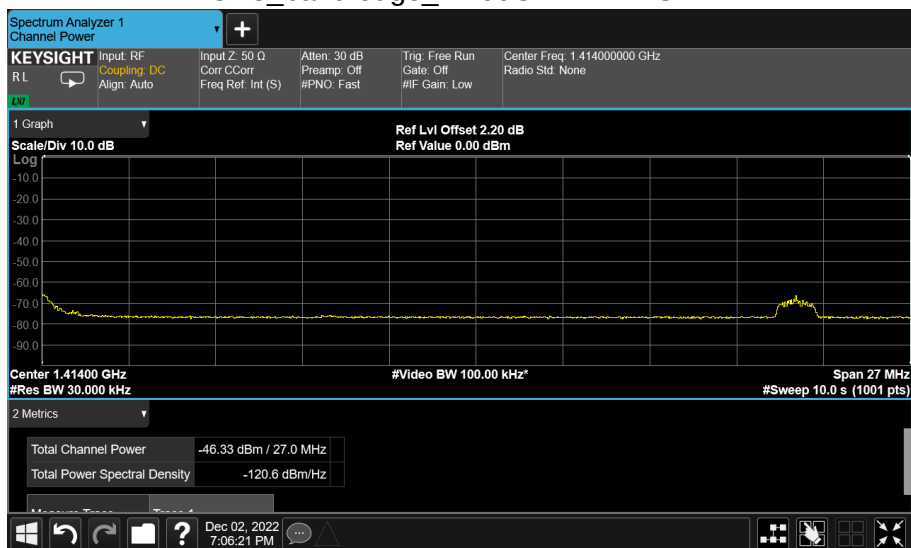
CH19_30MHz-15GHz



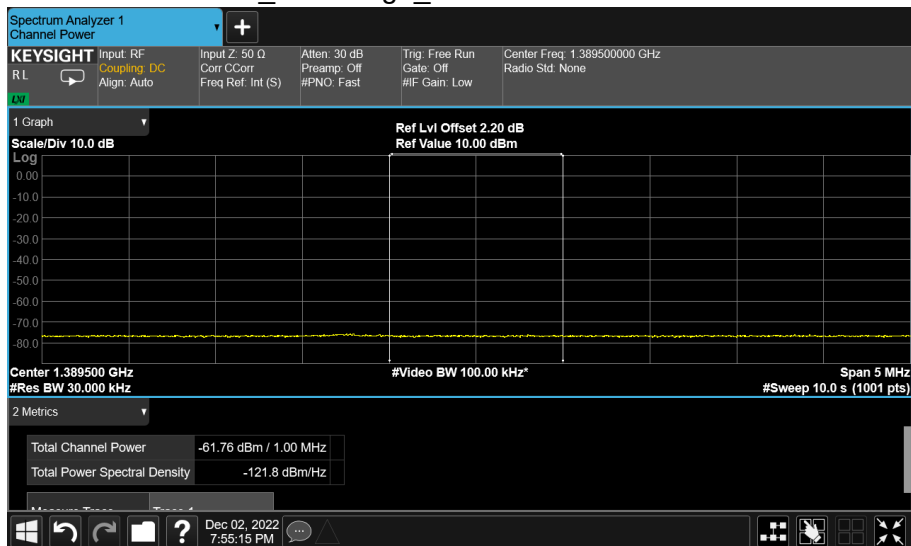


SH 1.0 WMTS_GFSK

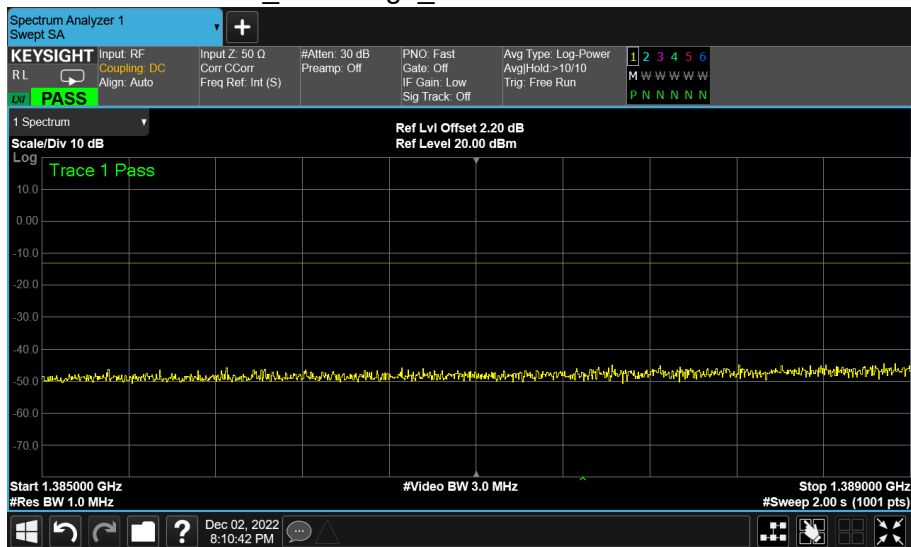
CH3_band edge_1.400GHz-1.427GHz



CH3_band edge_1.387 GHz-1.392 GHz

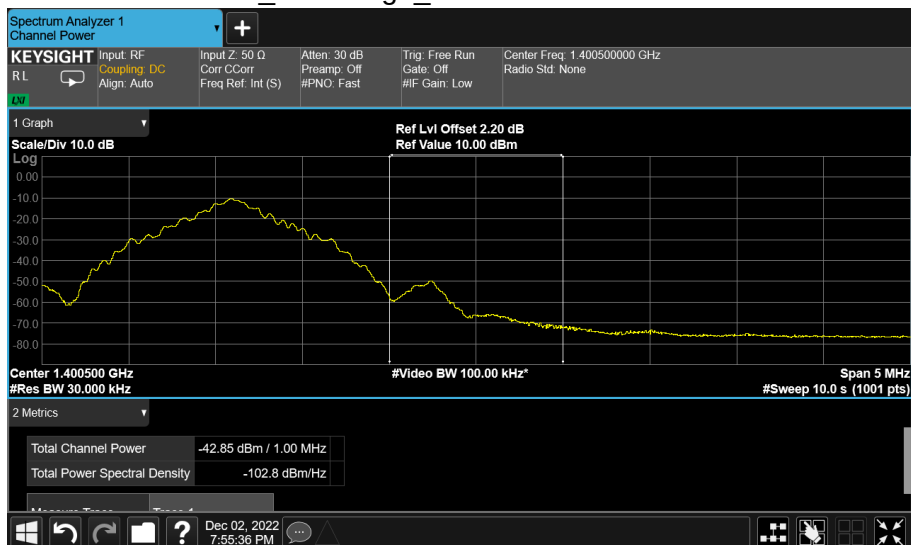


CH3_band edge_1.385 GHz-1.389GHz

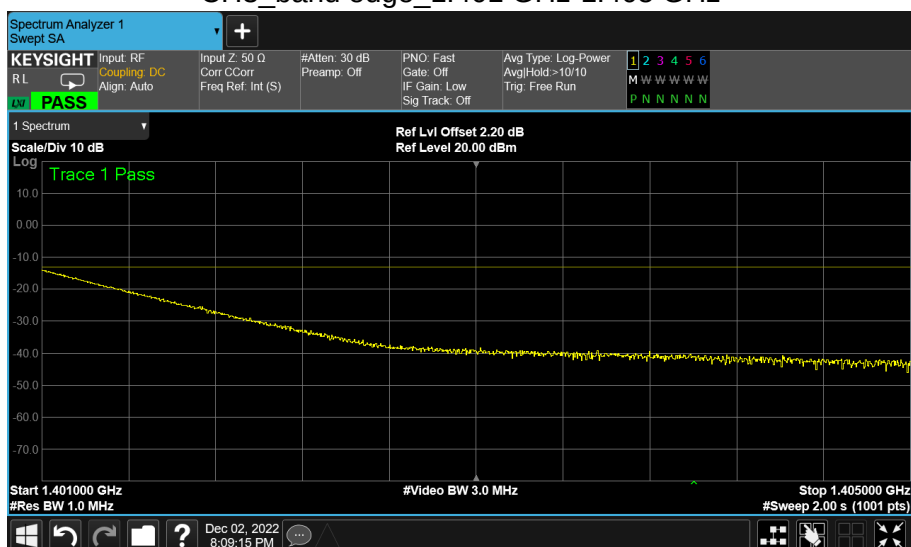




CH3_band edge_1.398 GHz-1.403 GHz

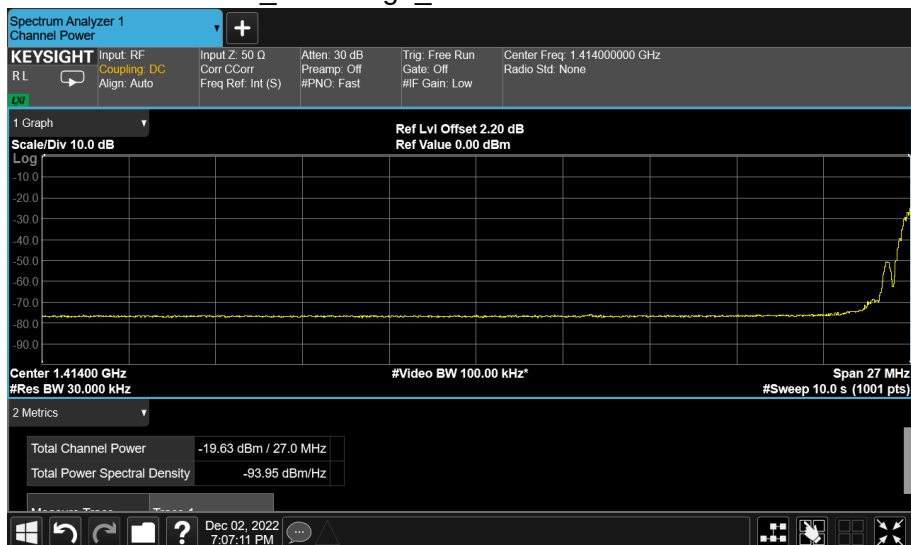


CH3_band edge_1.401 GHz-1.405 GHz





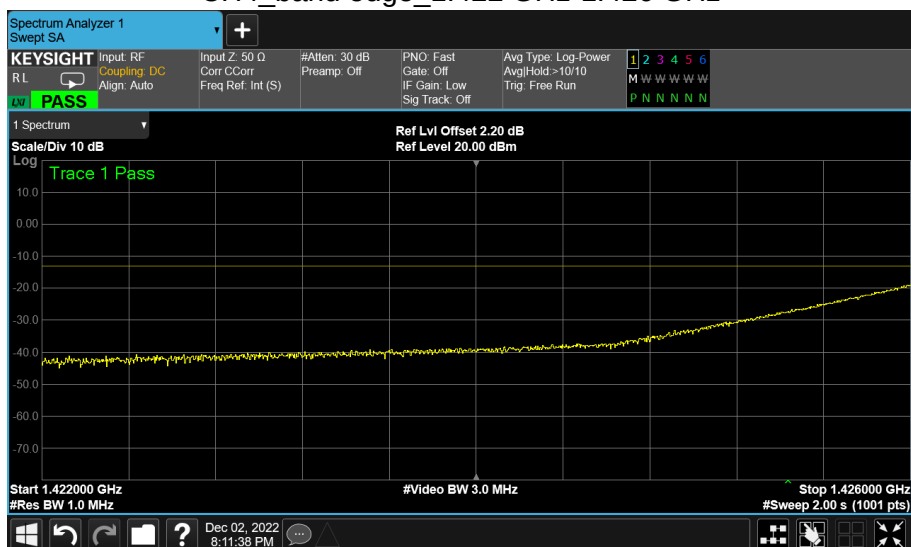
CH4_band edge_1.411 GHz-1.416 GHz



CH4_band edge_1.424 GHz-1.429 GHz

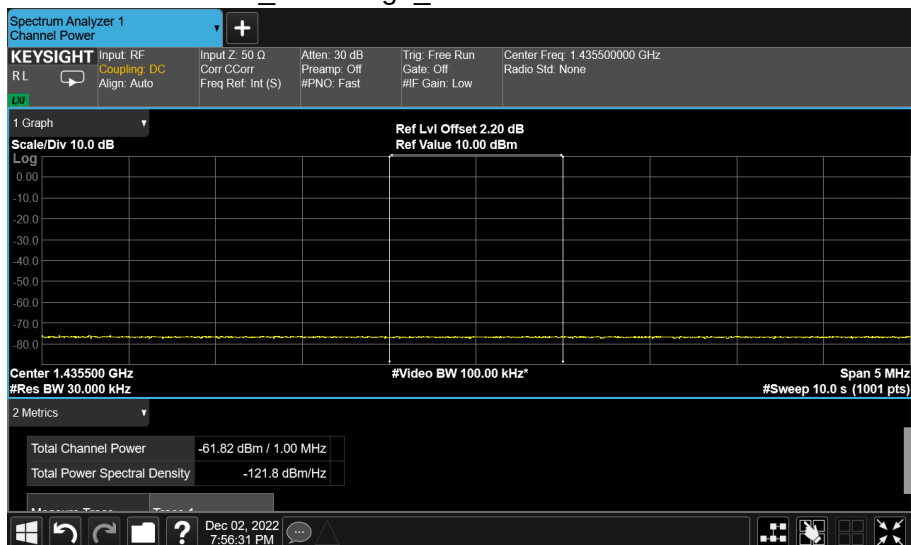


CH4_band edge_1.422 GHz-1.426 GHz

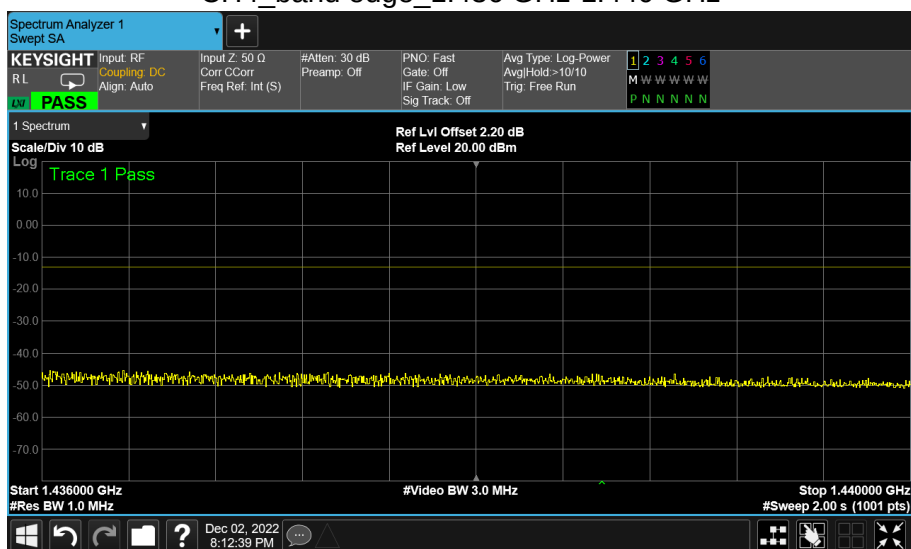




CH4_band edge_1.433 GHz-1.438 GHz



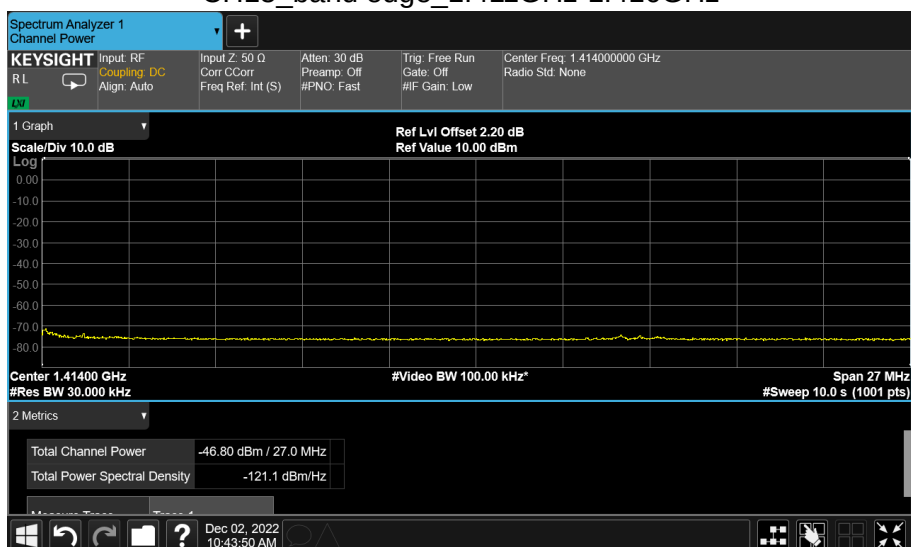
CH4_band edge_1.436 GHz-1.440 GHz



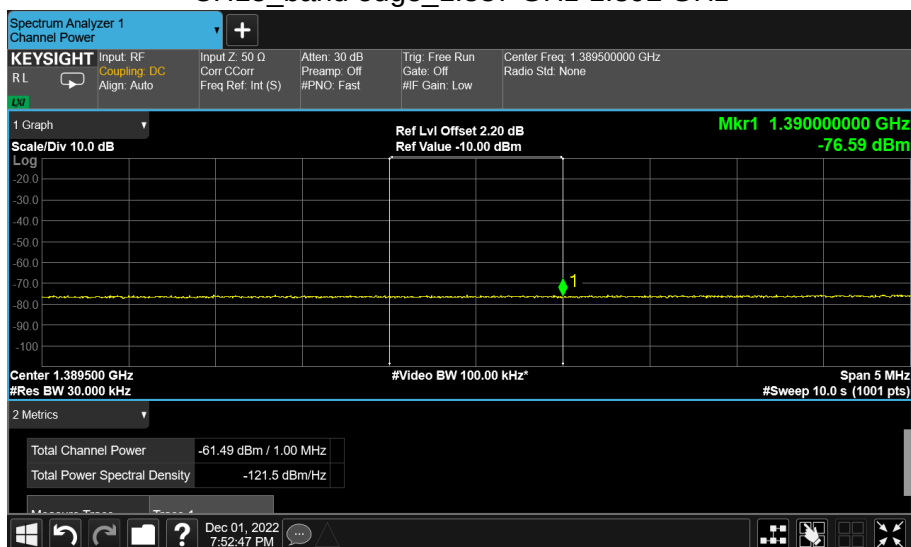


SH 2.0 WMTS_DBPSK

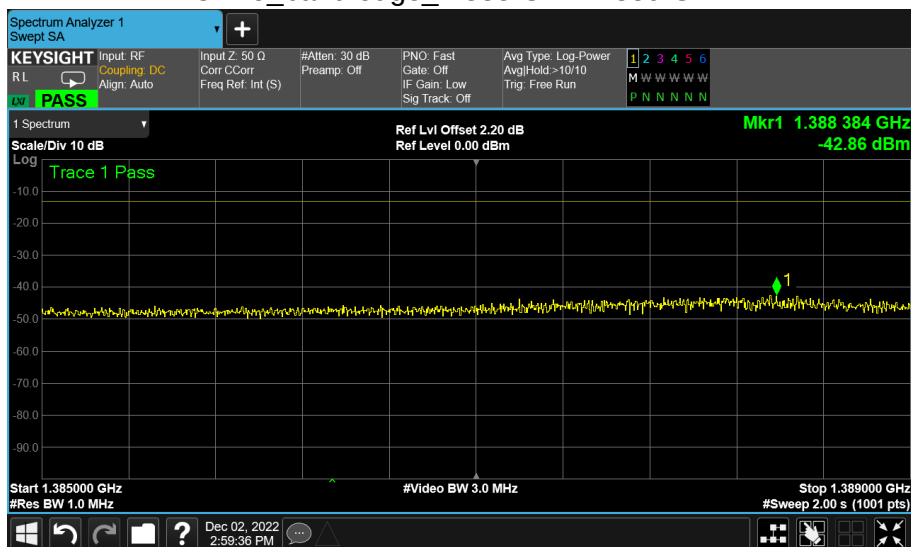
CH15_band edge_1.411GHz-1.416GHz



CH15_band edge_1.387 GHz-1.392 GHz



CH15_band edge_1.385 GHz-1.389 GHz

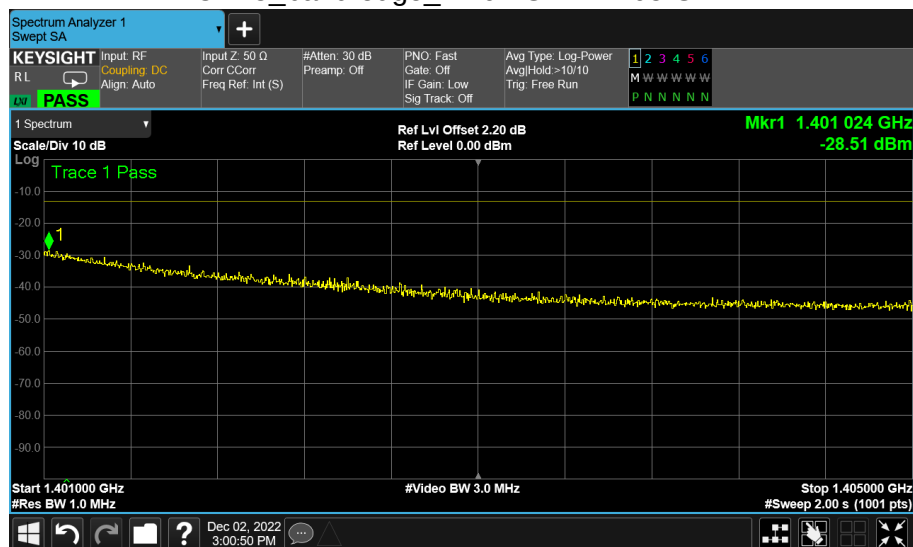




CH15_band edge_1.389 GHz-1.403 GHz

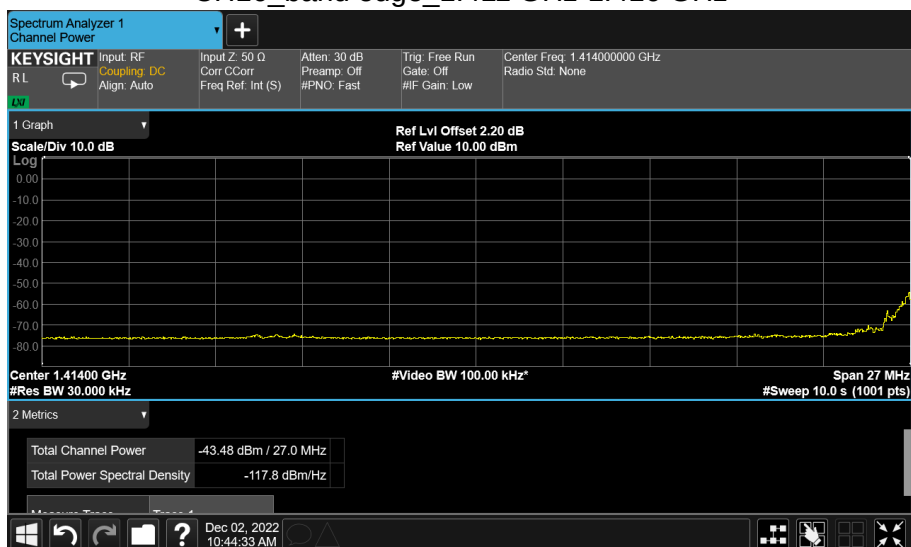


CH15_band edge_1.401 GHz-1.405 GHz

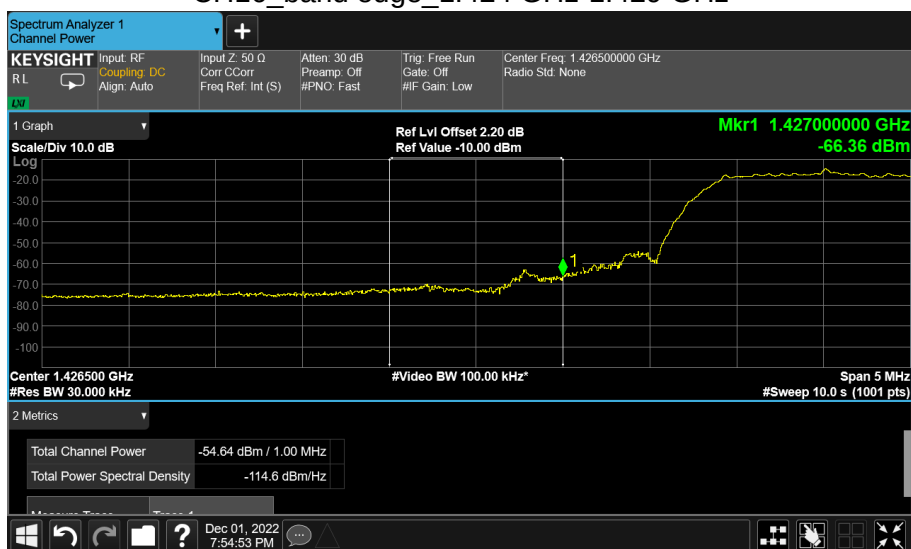




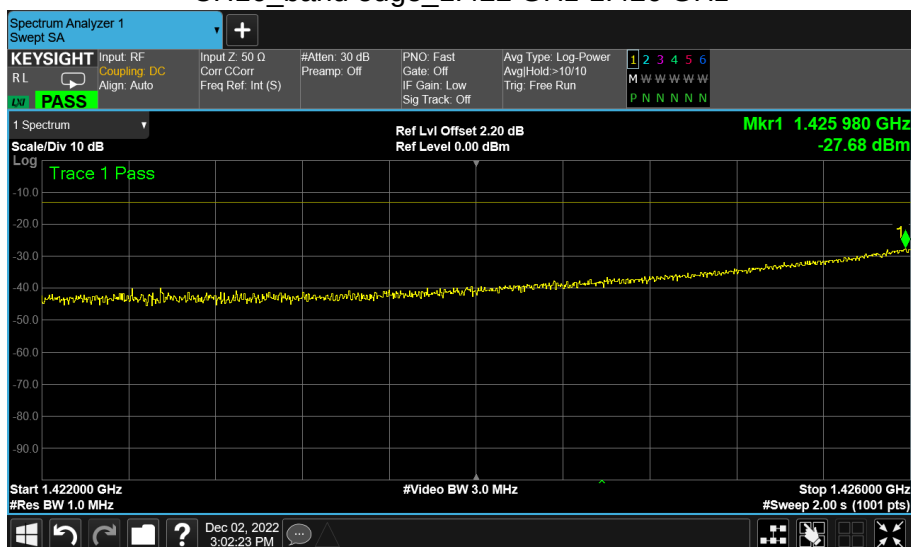
CH16_band edge_1.411 GHz-1.416 GHz



CH16_band edge_1.424 GHz-1.429 GHz

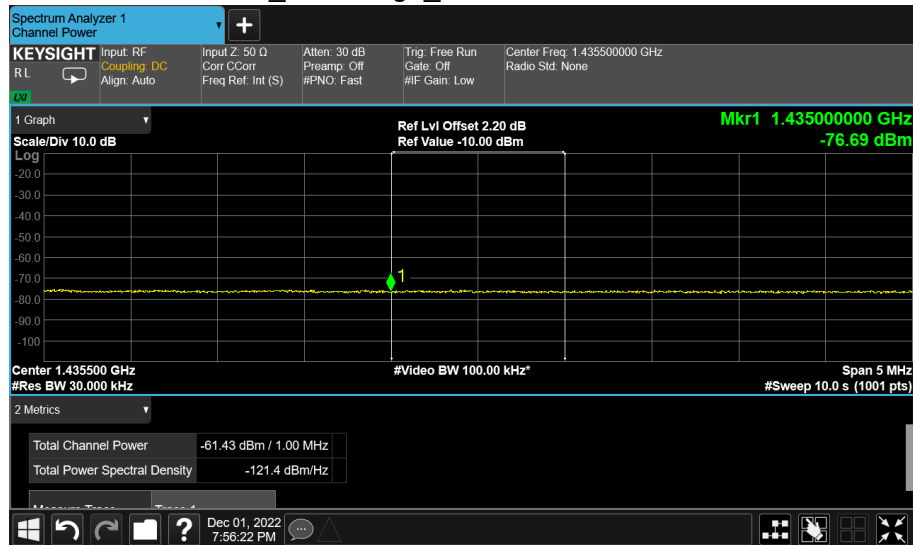


CH16_band edge_1.422 GHz-1.426 GHz

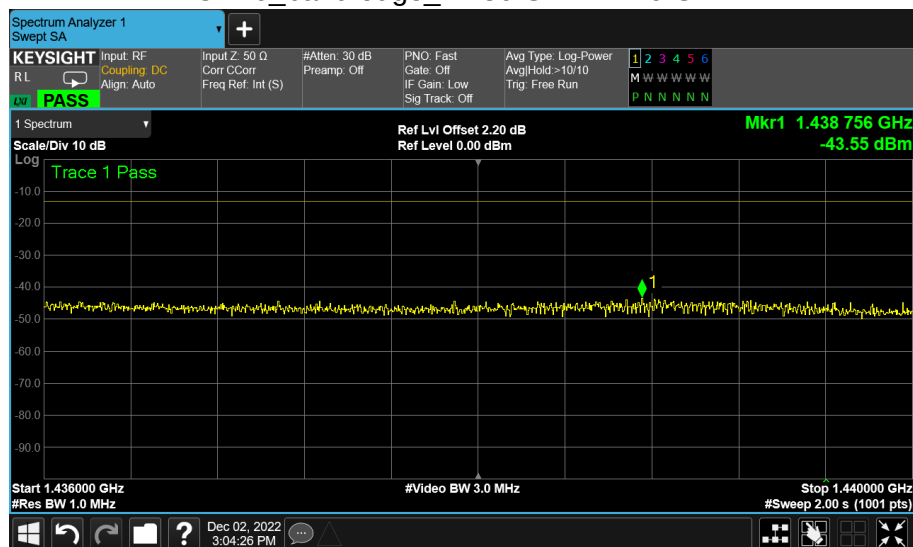




CH16_band edge_1.433 GHz-1.438 GHz



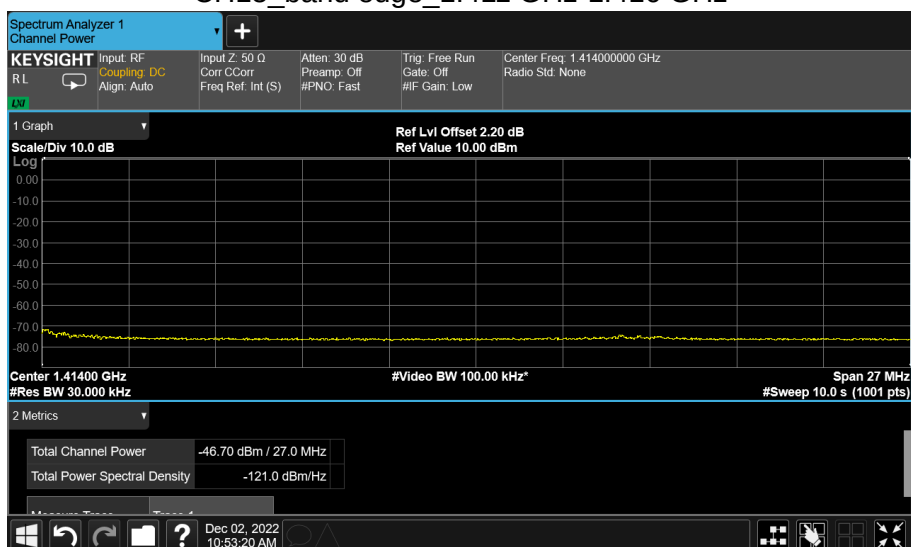
CH16_band edge_1.436 GHz-1.440 GHz



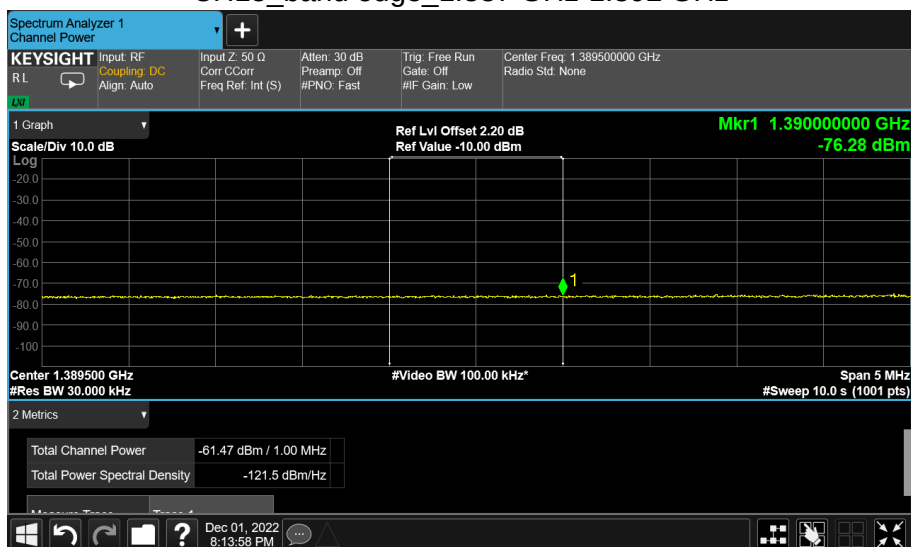


SH 2.0 WMTS_D8PSK

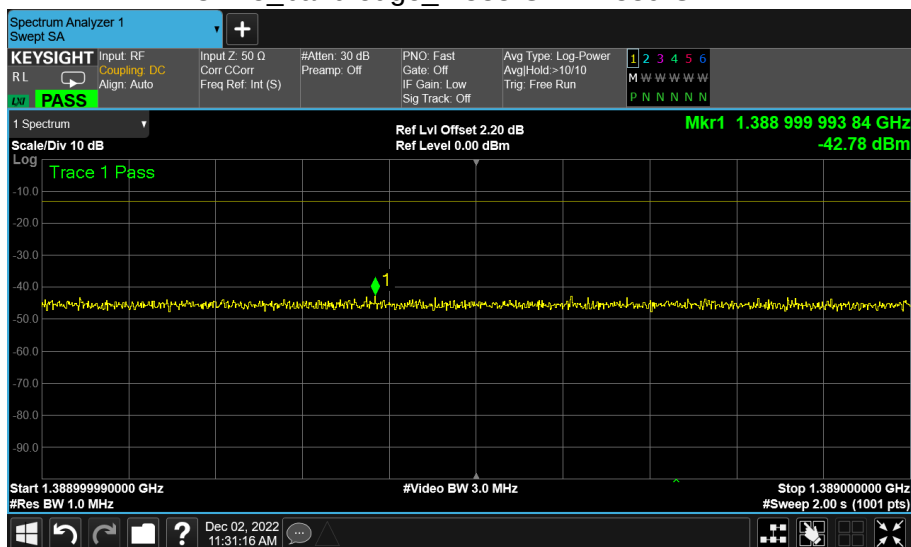
CH15_band edge_1.411 GHz-1.416 GHz



CH15_band edge_1.387 GHz-1.392 GHz



CH15_band edge_1.388 GHz-1.389 GHz

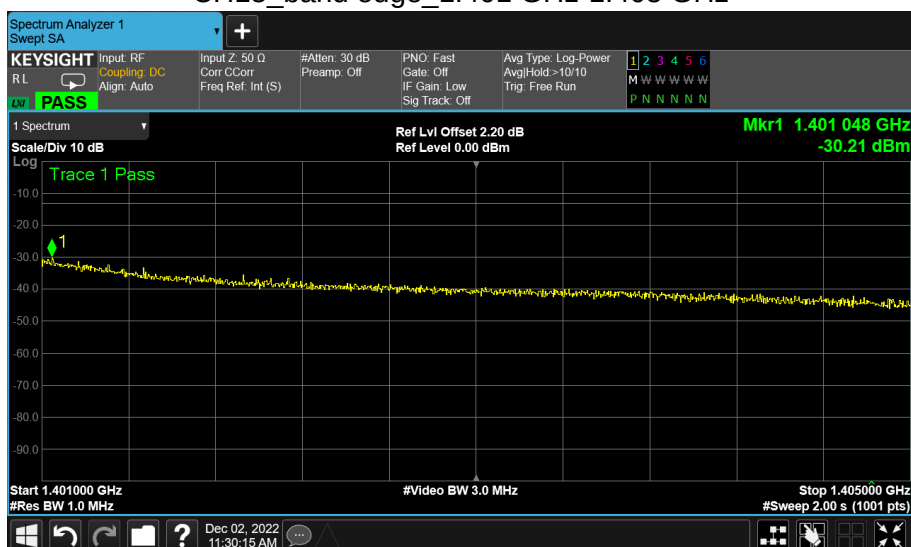




CH15_band edge_1.398 GHz-1.403 GHz

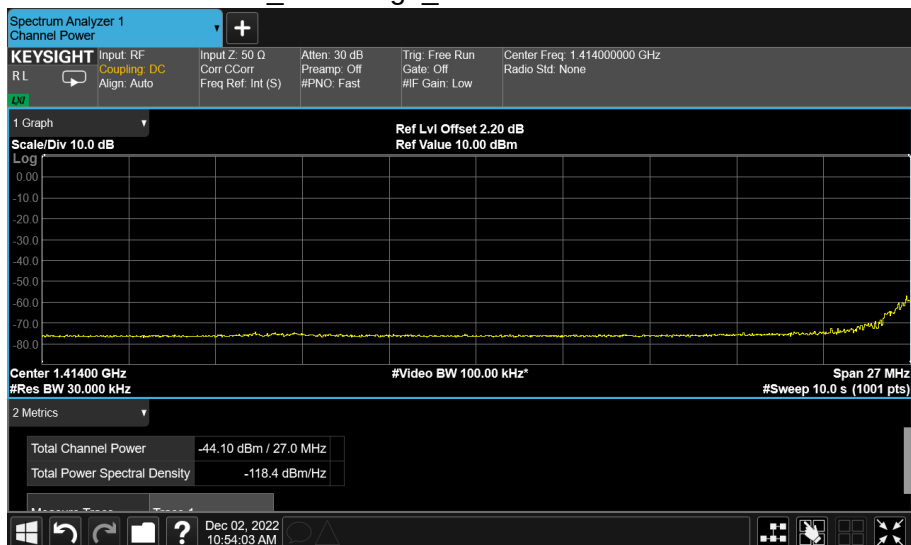


CH15_band edge_1.401 GHz-1.405 GHz

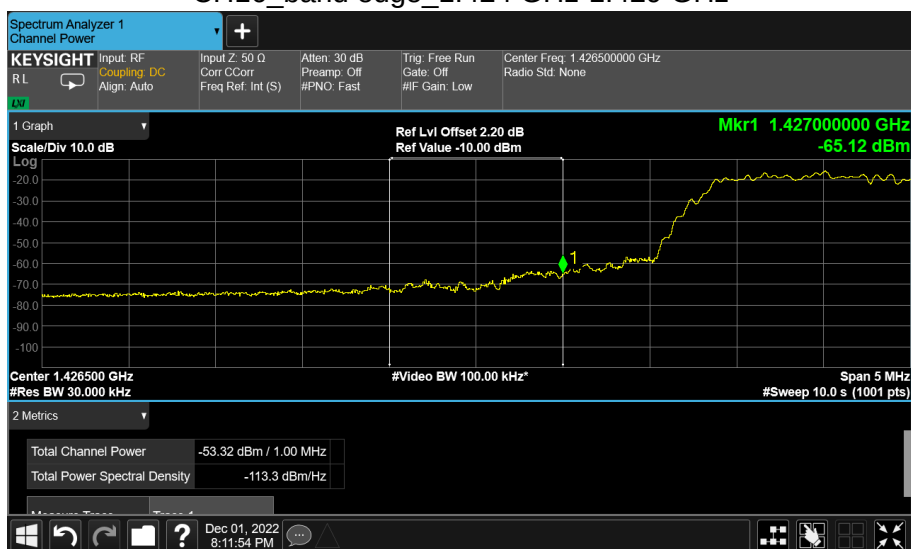




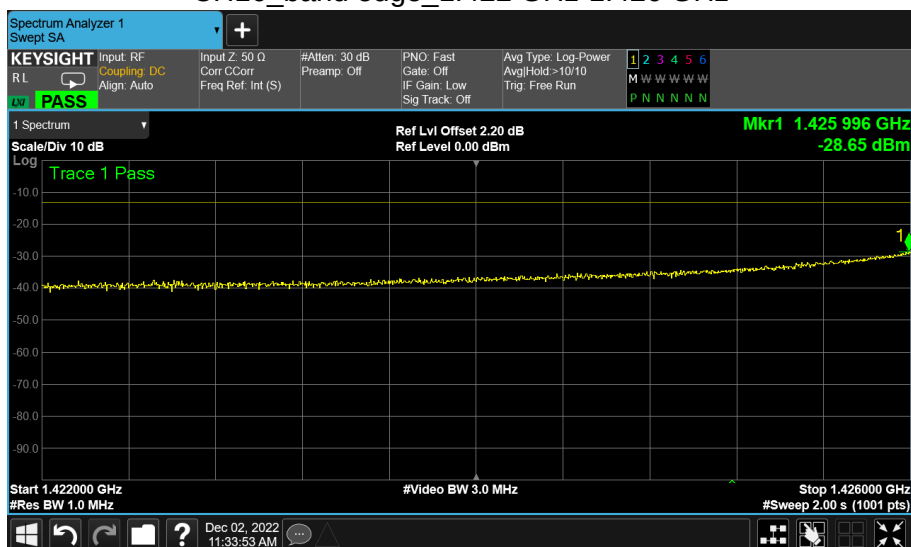
CH16_band edge_1.414 GHz-1.416 GHz



CH16_band edge_1.424 GHz-1.429 GHz

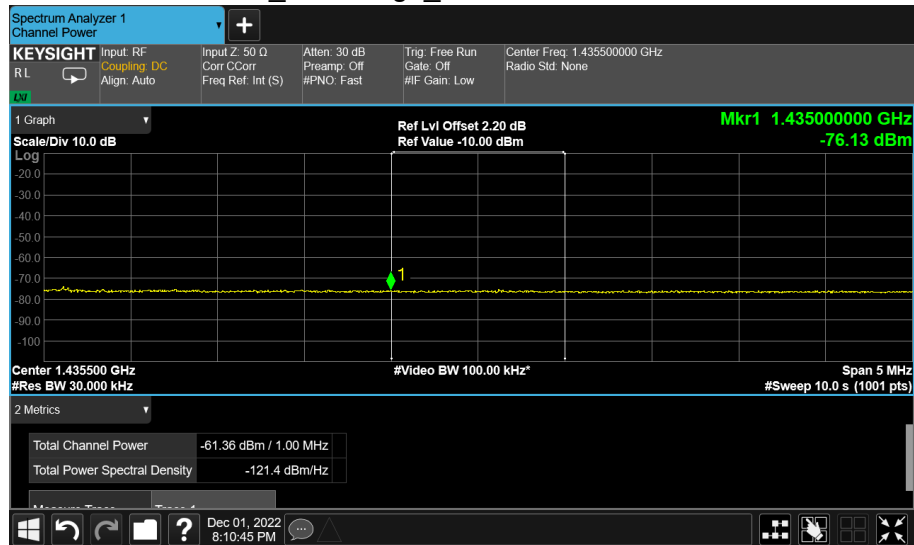


CH16_band edge_1.422 GHz-1.426 GHz

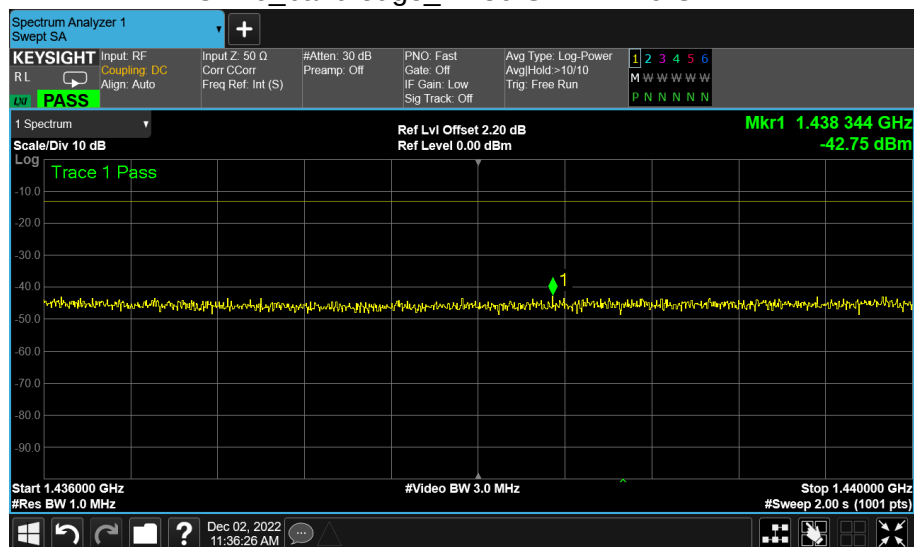




CH16_band edge_1.433 GHz-1.438 GHz



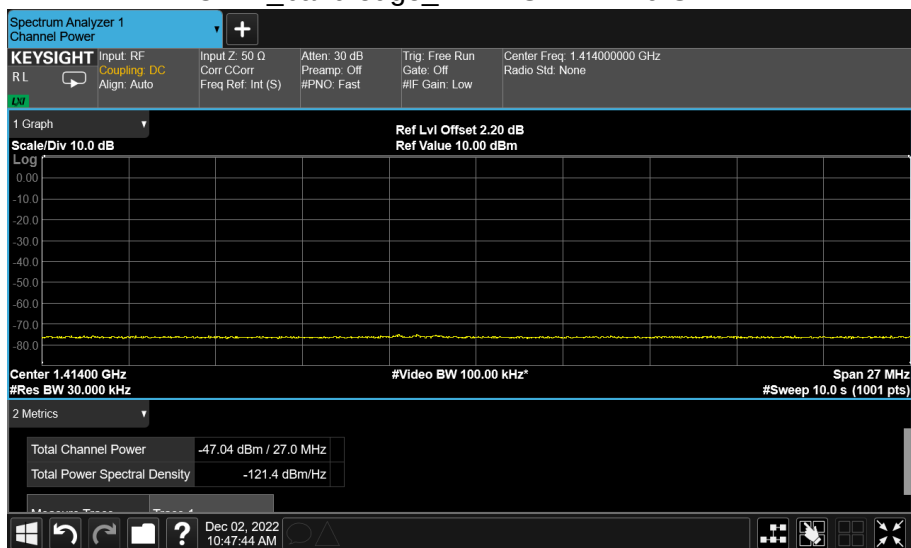
CH16_band edge_1.436 GHz-1.440 GHz



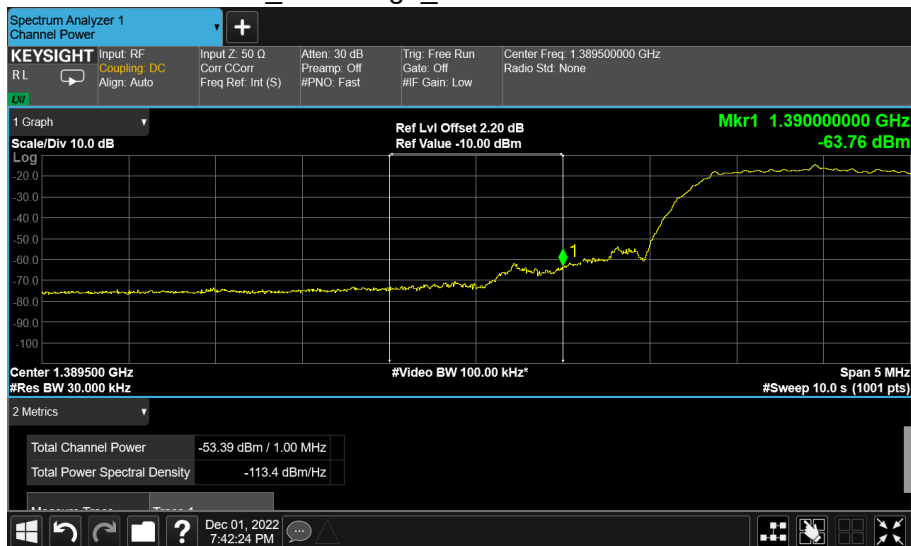


SH 2.0 E-WMTS_DBPSK

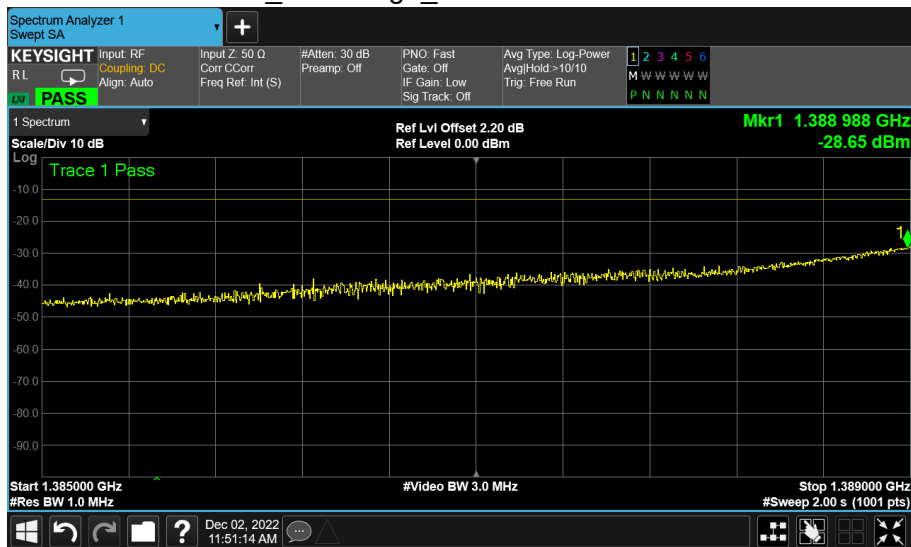
CH11_band edge_1.411 GHz-1.416 GHz



CH11_band edge_1.387 GHz-1.392 GHz

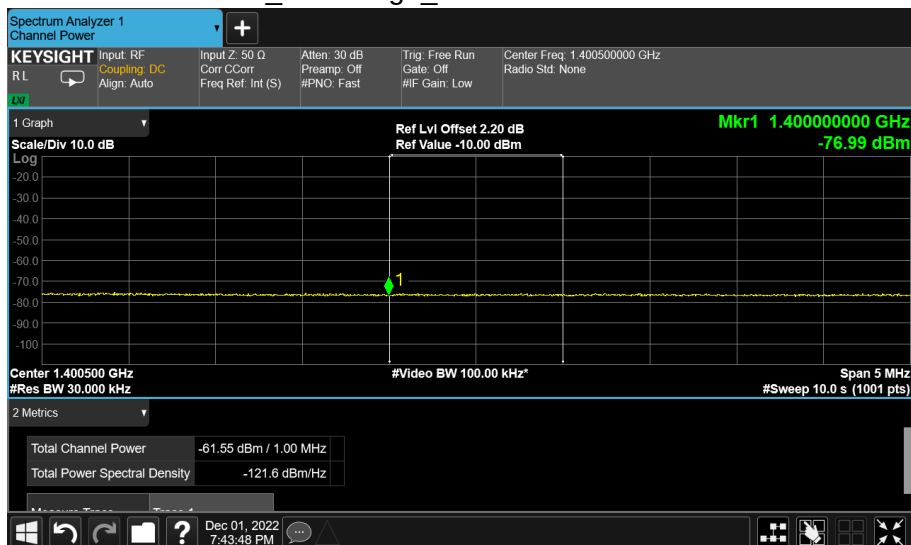


CH11_band edge_1.385 GHz-1.389 GHz

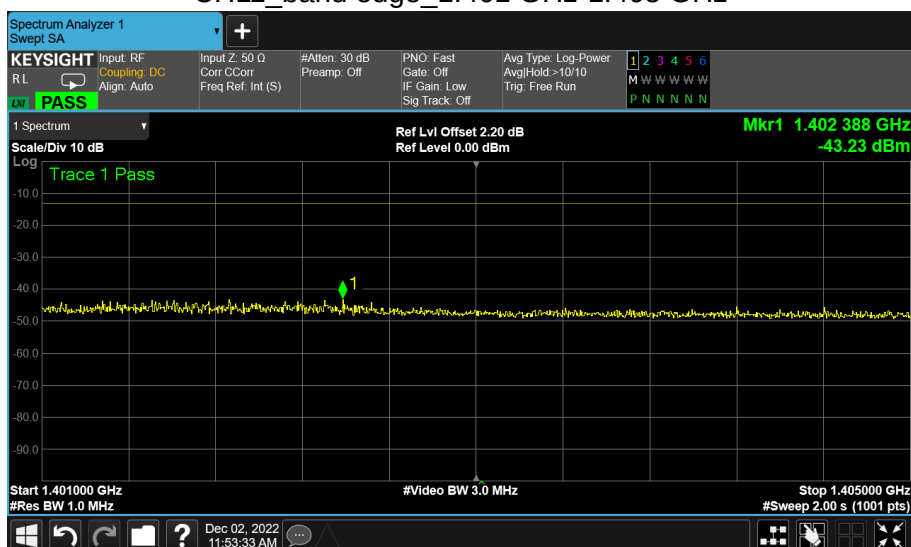




CH11_band edge_1.398 GHz-1.403 GHz

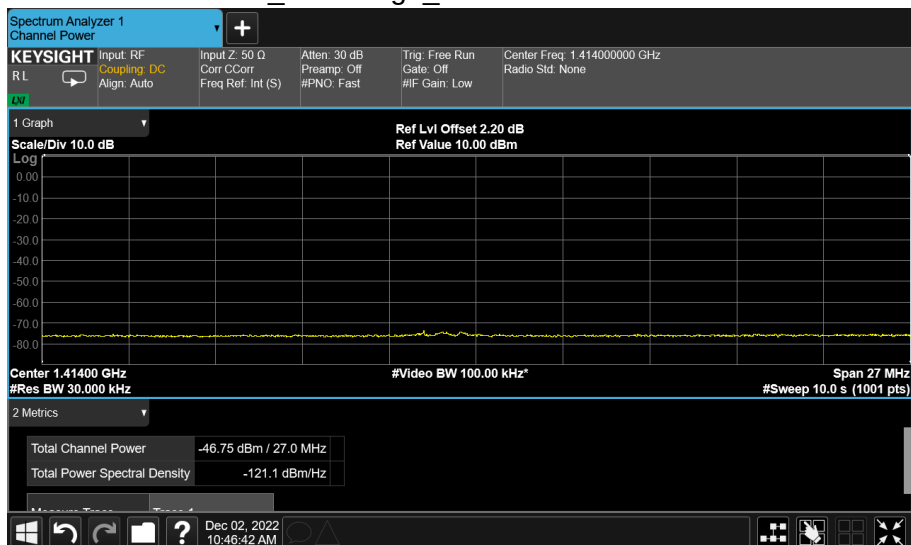


CH11_band edge_1.401 GHz-1.405 GHz





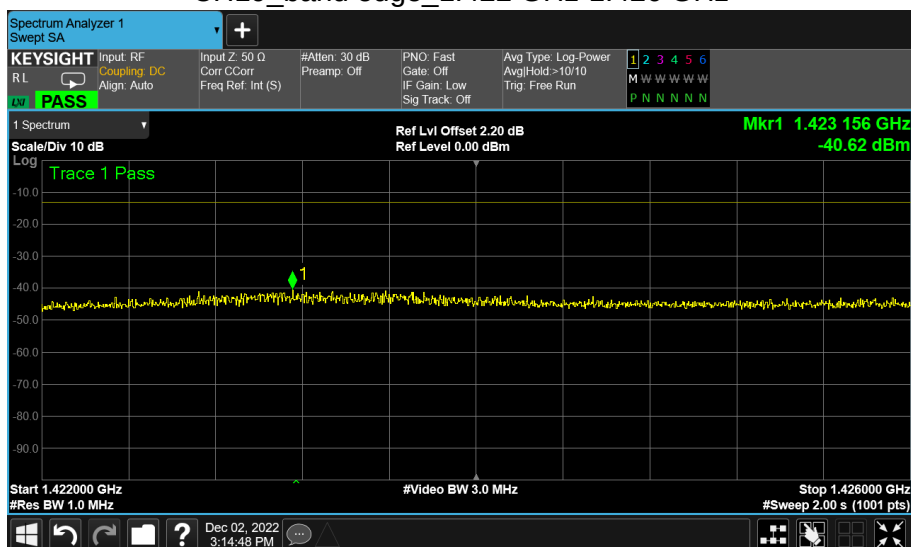
CH19_band edge_1.411 GHz-1.416 GHz



CH19_band edge_1.424 GHz-1.429 GHz

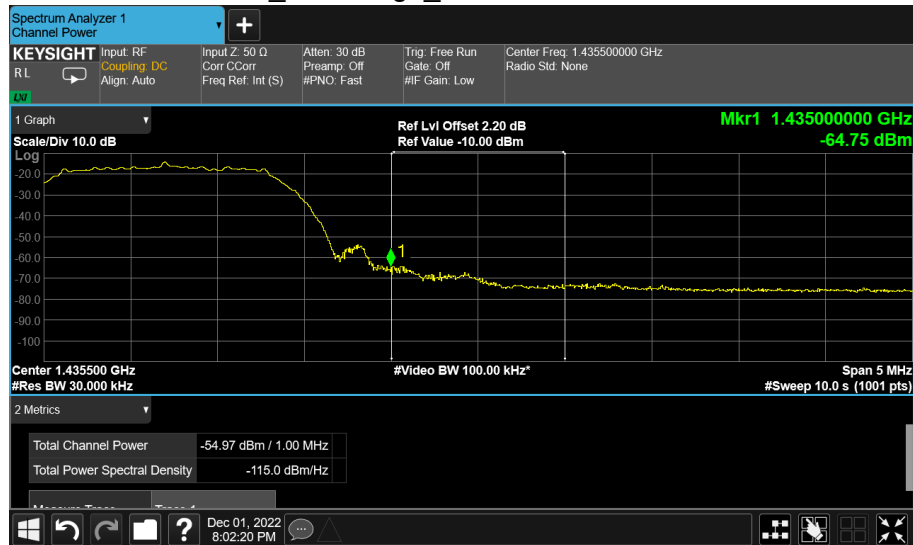


CH19_band edge_1.422 GHz-1.426 GHz

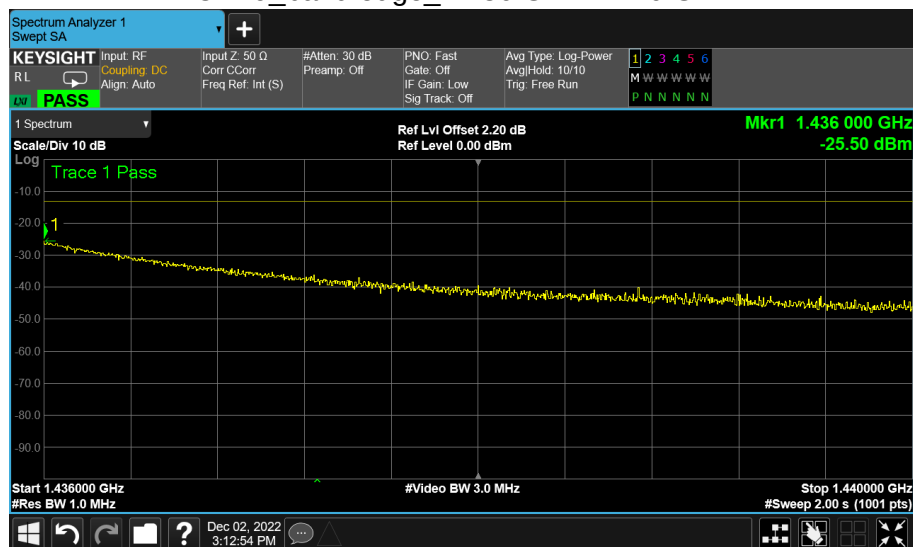




CH19_band edge_1.433 GHz-1.438 GHz



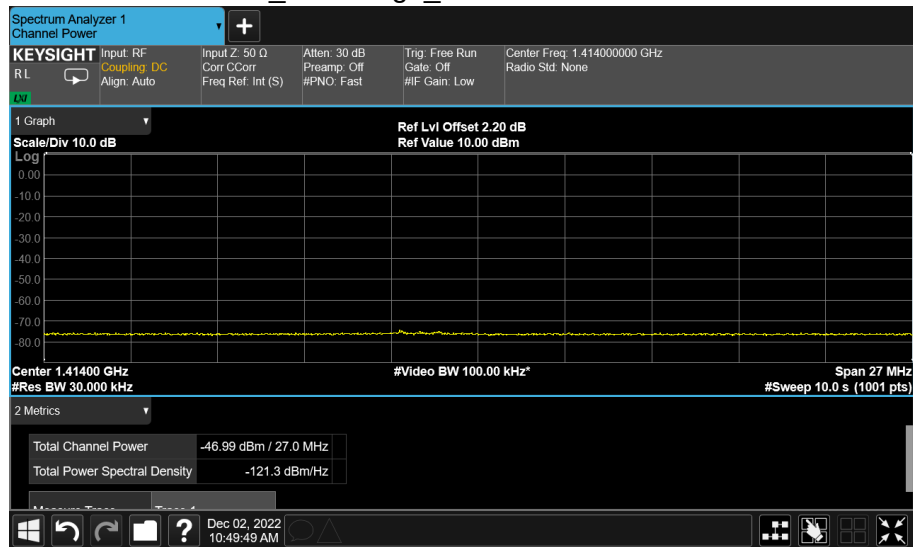
CH19_band edge_1.436 GHz-1.440 GHz



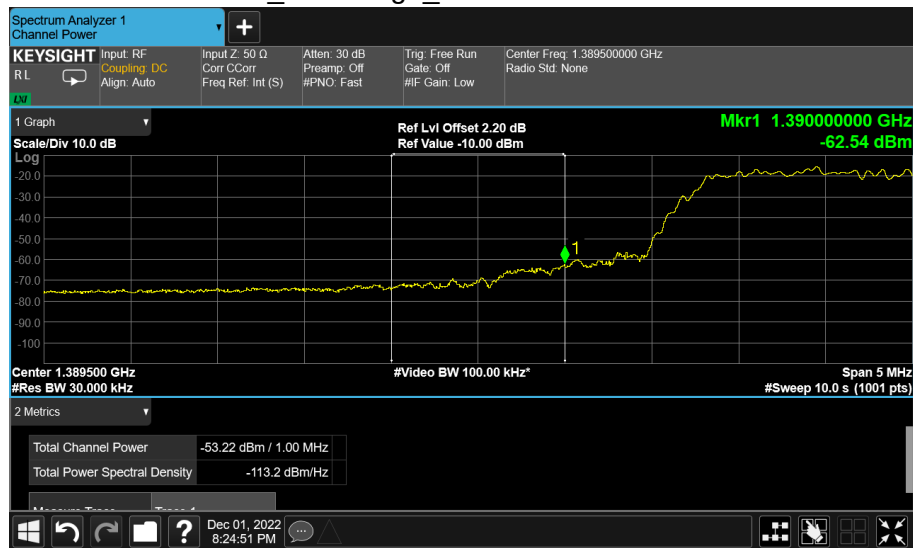


SH 2.0 E-WMTS_D8PSK

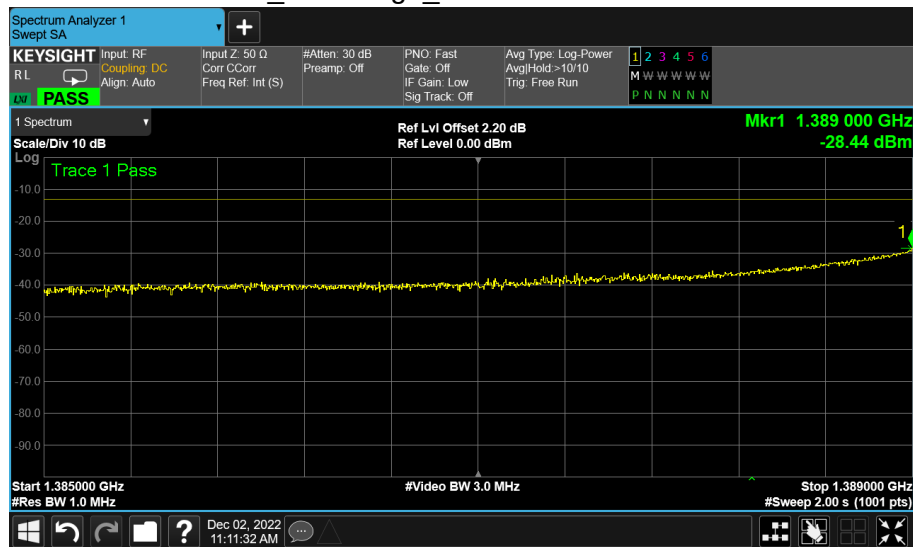
CH11_band edge_1.411 GHz-1.416 GHz



CH11_band edge_1.387 GHz-1.392 GHz

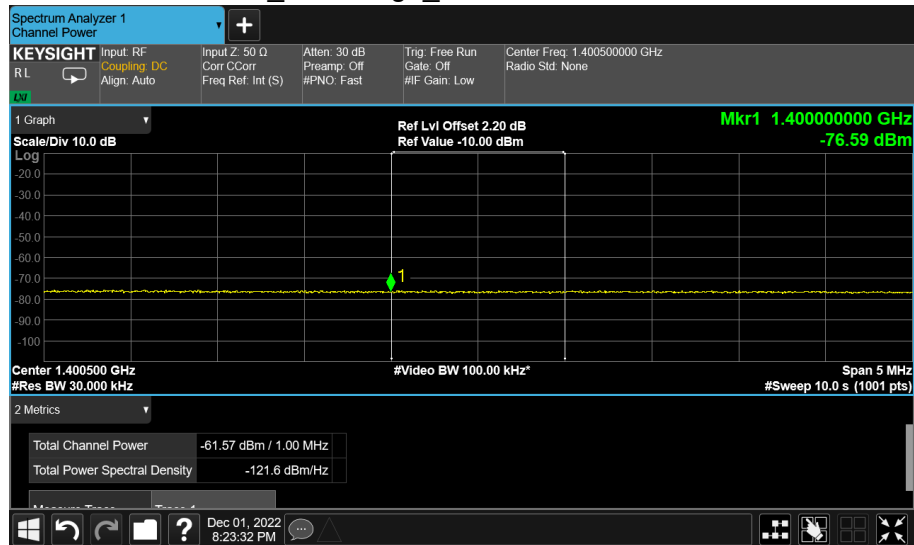


CH11_band edge_1.385 GHz-1.389 GHz

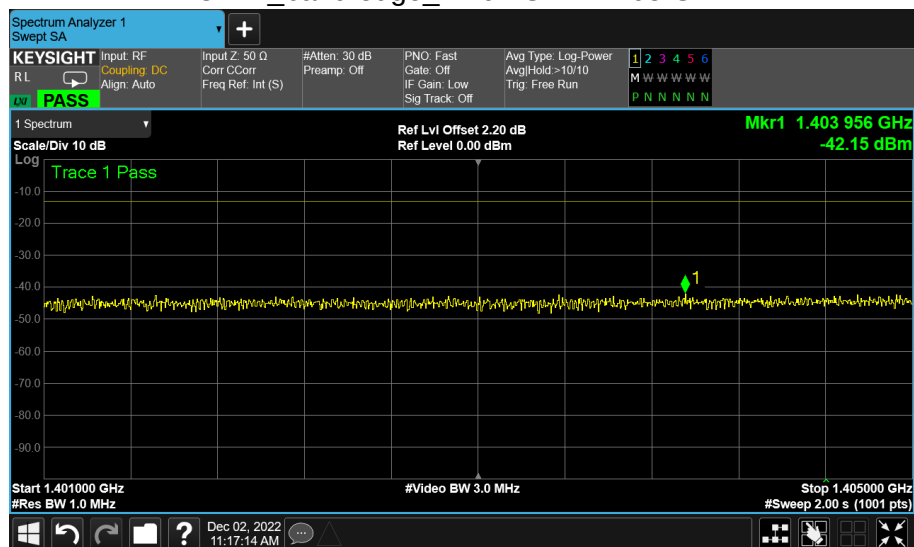




CH11_band edge_1.398 GHz-1.403 GHz

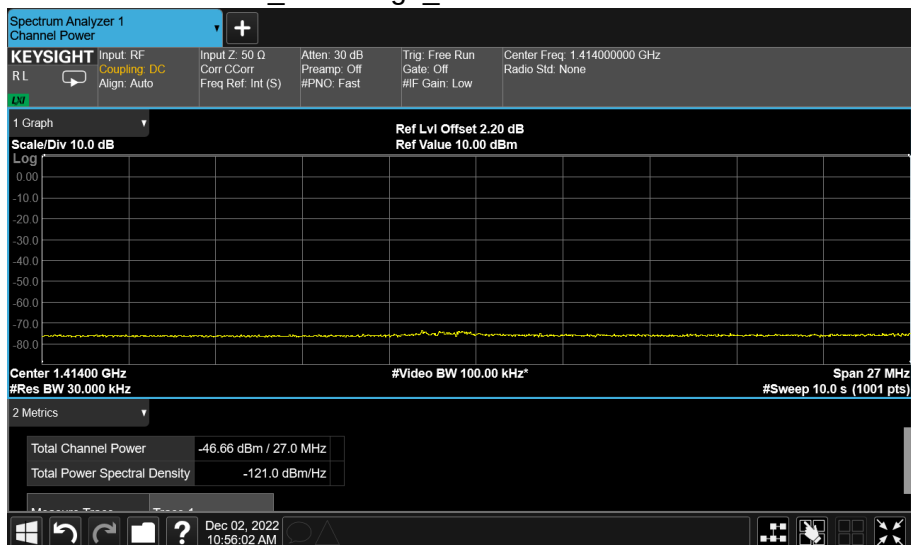


CH11_band edge_1.401 GHz-1.405 GHz

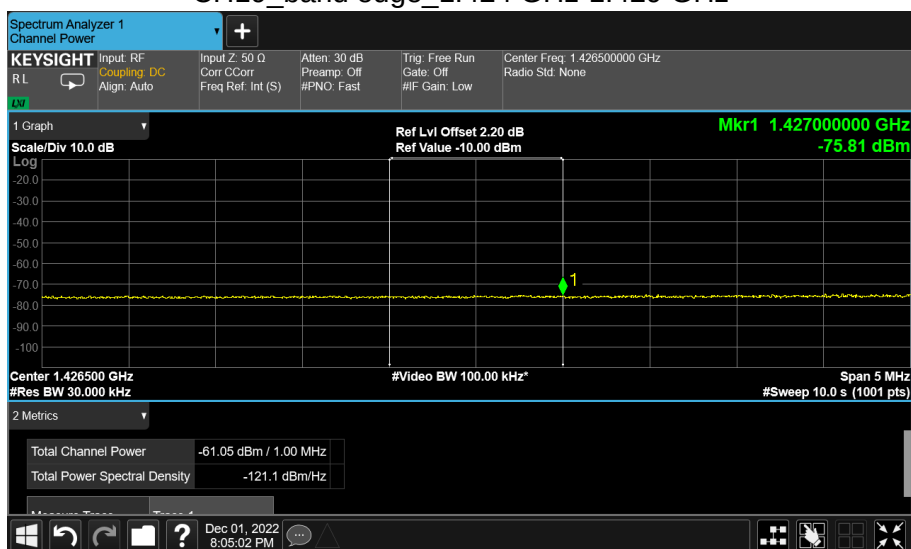




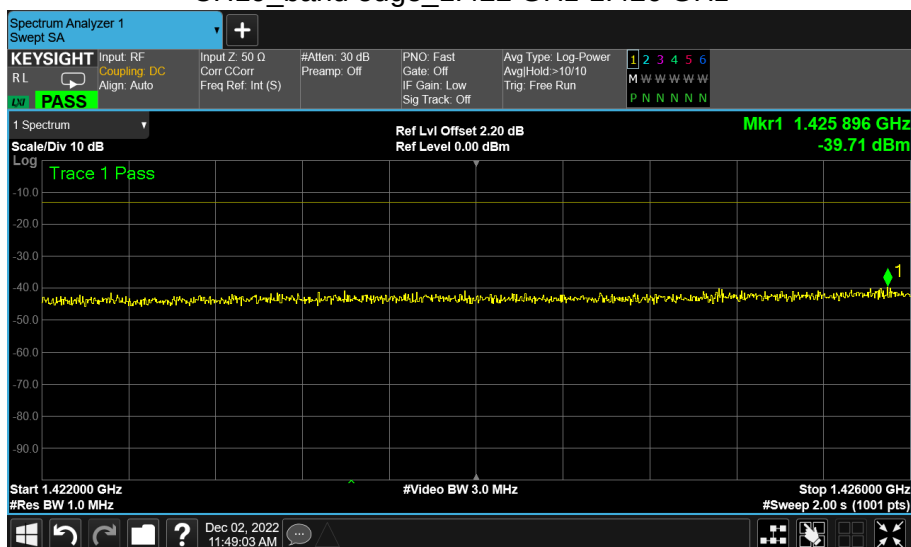
CH19_band edge_1.411 GHz-1.416 GHz



CH19_band edge_1.424 GHz-1.429 GHz



CH19_band edge_1.422 GHz-1.426 GHz

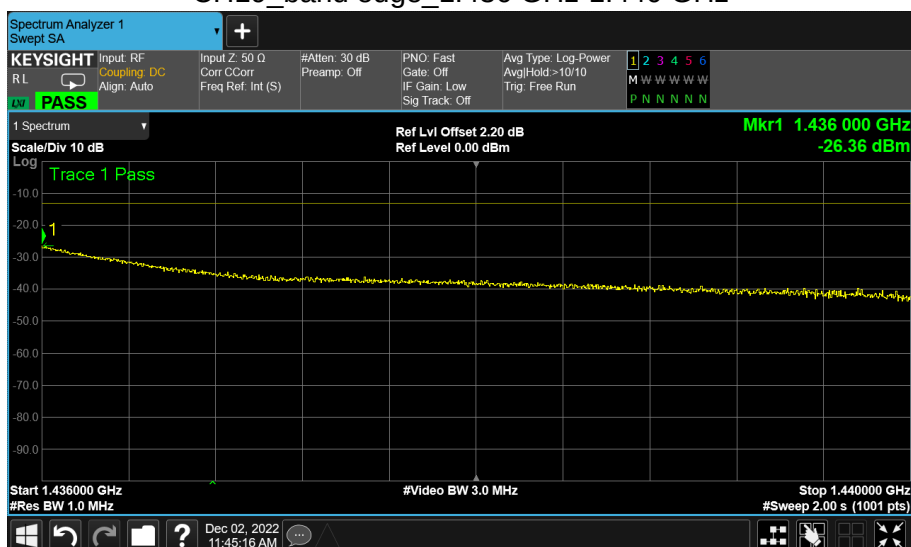




CH19_band edge_1.433 GHz-1.438 GHz



CH19_band edge_1.436 GHz-1.440 GHz





6. RADIATED SPURIOUS EMISSION (PART 27)

6.1 LIMIT

According to FCC PART 27.53 (j)

(1) For operations in the unpaired 1390-1392 MHz band and the paired 1392-1395 MHz and 1432-1435 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) by at least $43 + 10 \log (P)$ dB.

6.2 MEASUREMENT METHOD

The radiated spurious emission was measured by substitution method according to ANSI C63.26 2015. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

6.3 TEST SETUP

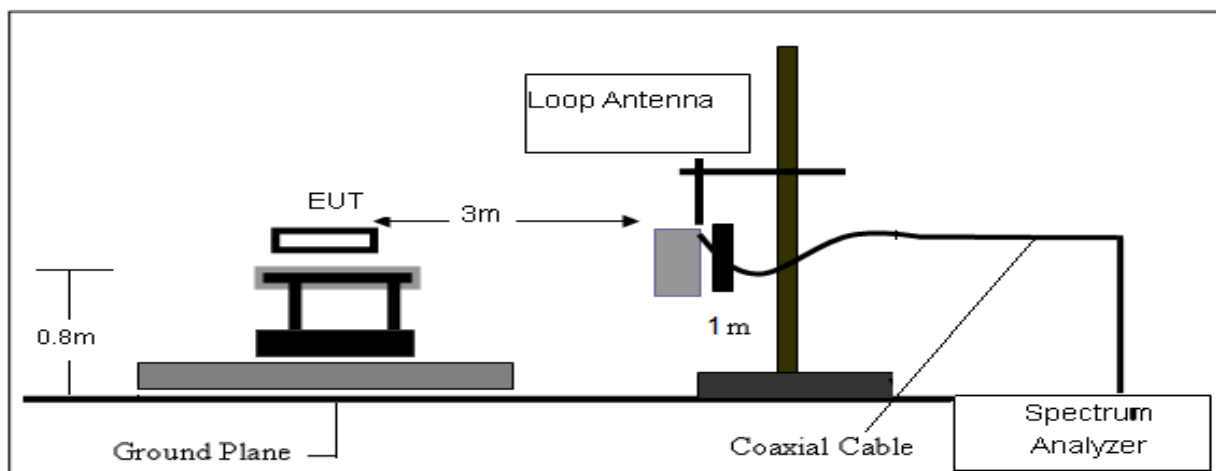
The procedure of radiated spurious emissions is as follows:

a) Pre-calibration With pre-calibration method, the Radiated Spurious Emissions(RSE) is calculated as, $RSE = Rx(dBuV) + CL(dB) + SA(dB) + Gain(dBi) - 95.2(dBuV/m \text{ to } dBm)$ The SA is calibrated using following setup.

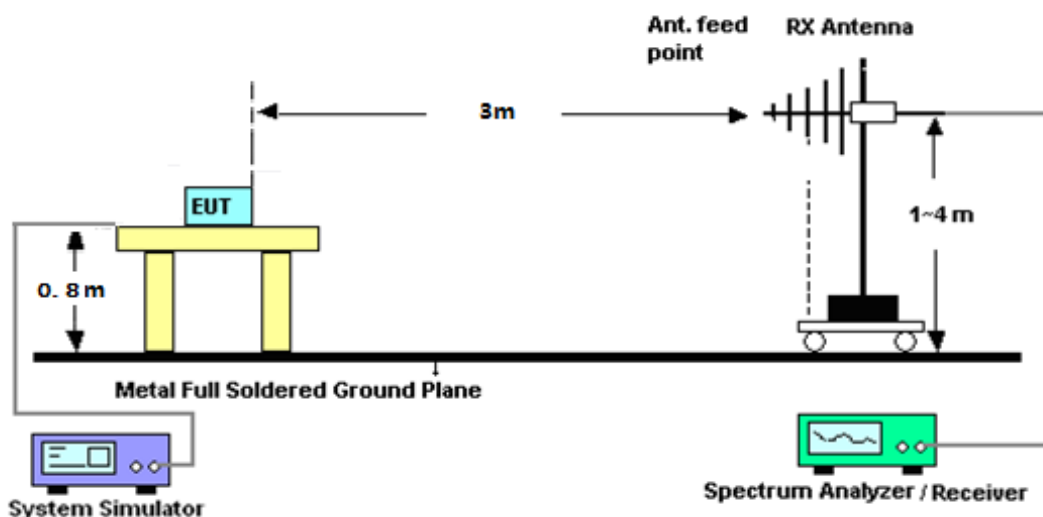
b) EUT was placed on 1.5 m non-conductive stand at a 3 m test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 m from the test item for emission measurements. The height of receiving antenna is 0.8m. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the test item and adjusting the receiving antenna polarization. The radiated emission measurements of all non-harmonic and harmonics of the transmit frequency through the 10th harmonic measured with peak detector and 1MHz bandwidth.

Radiated emissions measurements were made only at the upper, middle, and lower carrier frequencies It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of any band into any of the other blocks.

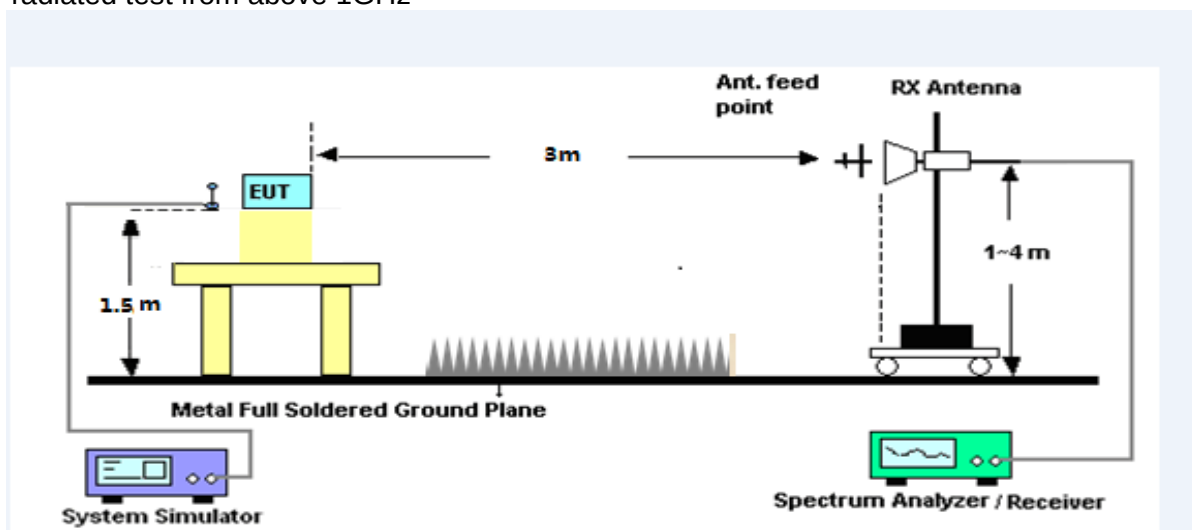
For radiated test from below 30MHz



For radiated test from 30MHz to 1GHz



For radiated test from above 1GHz



6.4 TEST PROCEDURES

1. The testing follows C63.26:2015 Section 5.5.
 2. The EUT was placed on a rotatable wooden table with 1.5 meter above ground.
 3. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
 4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
 5. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations
 6. Repeat step 2 to step 5 for another polarization.
 7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
- The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)
- $$= P(W) - [43 + 10\log(P)] \text{ (dB)}$$
- $$= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$$
- $$= -13\text{dBm}$$



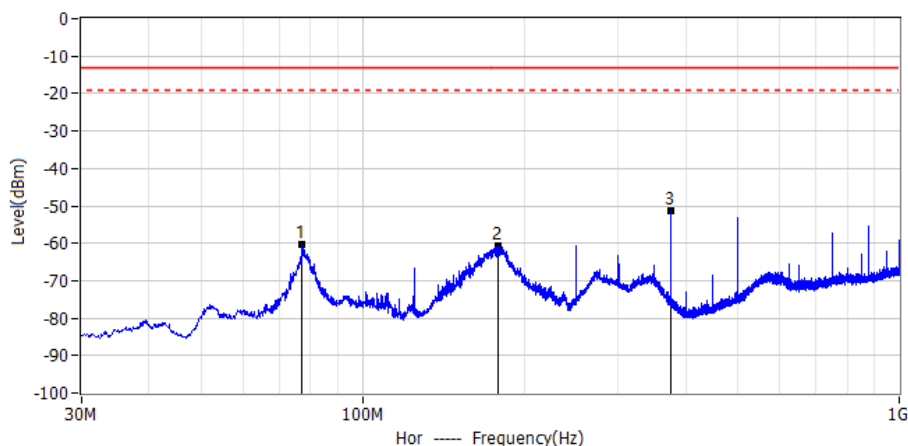
6.5 TEST RESULTS

Note:

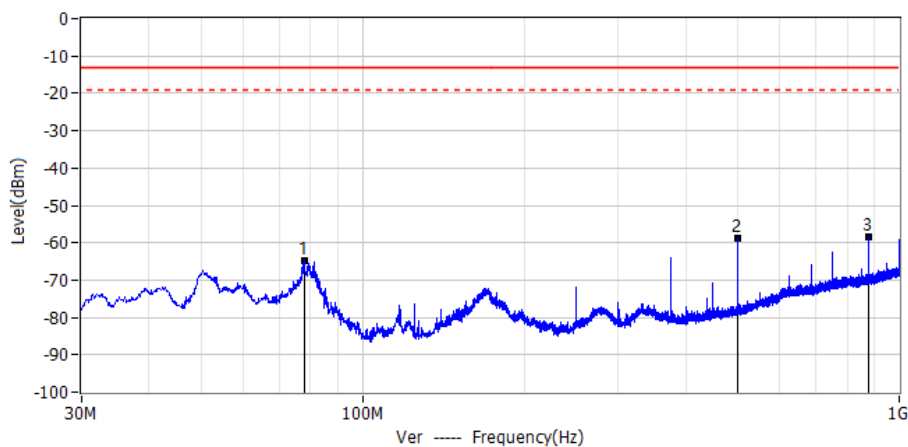
1. 9KHz-30MHz amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
2. Test is divided into three directions, X/Y/Z. X pattern is the worst.
3. Pre-test with remote antenna and without remote antenna modes, find the worst case is with remote antenna mode and recorded in this report.

Below 1GHz

Project: LGT22K037	Test Engineer: Dylan.shi
EUT: Access Point	Temperature: 22.1°C
M/N: ITS867216A	Humidity: 42%RH
Test Voltage: AC 120V/60Hz	Test Data: 2022-12-03
Test Mode: SH 2.0 E-WMTS_DBPSK_CH11_1391.452 (worst case)	
Note:	



No.	Frequency	Level dBm	Limit dBm	Margin dB	Detector	Polar
1*	77.166MHz	-60.29	-13.00	-47.29	PK	Hor
2*	178.653MHz	-60.56	-13.00	-47.56	PK	Hor
3*	374.956MHz	-51.19	-13.00	-38.19	PK	Hor



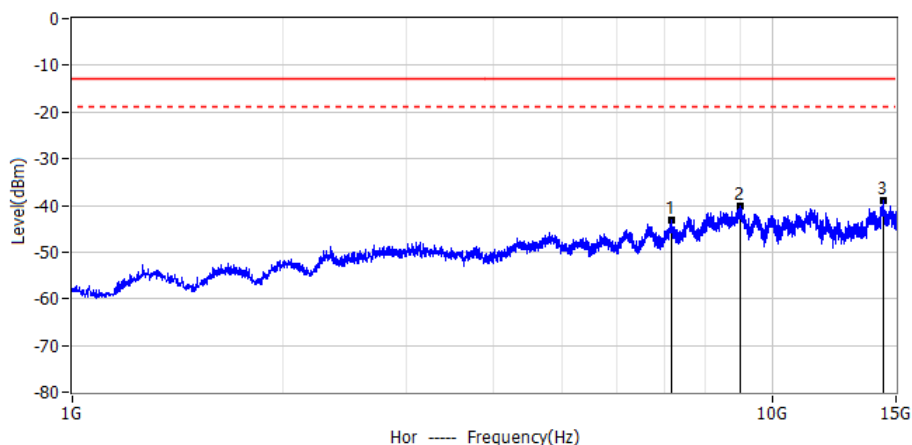
No.	Frequency	Level dBm	Limit dBm	Margin dB	Detector	Polar
1*	77.894MHz	-64.64	-13.00	-51.64	PK	Ver
2*	499.965MHz	-58.83	-13.00	-45.83	PK	Ver
3*	875.113MHz	-58.26	-13.00	-45.26	PK	Ver



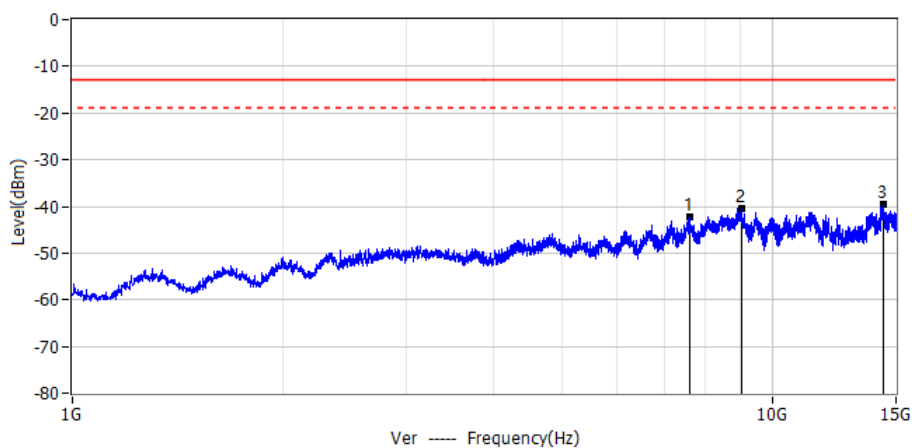
Above 1GHz

SH 2.0 E-WMTS_DBPSK

Project: LGT22K037	Test Engineer: Dylan.shi
EUT: Access Point	Temperature: 22.1°C
M/N: ITS867216A	Humidity: 42%RH
Test Voltage: AC 120V/60Hz	Test Data: 2022-12-03
Test Mode: SH 2.0 E-WMTS_DBPSK_CH11_1391.452	
Note: with remote antenna	



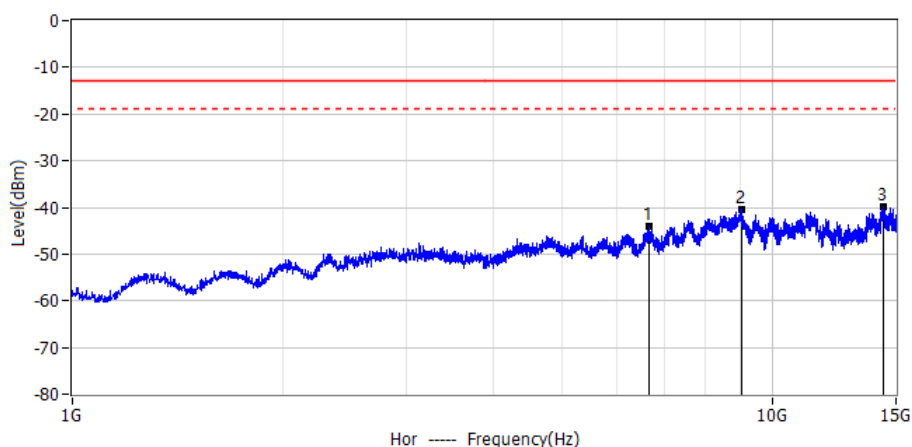
No.	Frequency	Level dBm	Limit dBm	Margin dB	Detector	Polar
1*	7.176GHz	-43.17	-13.00	-30.17	PK	Hor
2*	8.989GHz	-40.13	-13.00	-27.13	PK	Hor
3*	14.400GHz	-39.07	-13.00	-26.07	PK	Hor



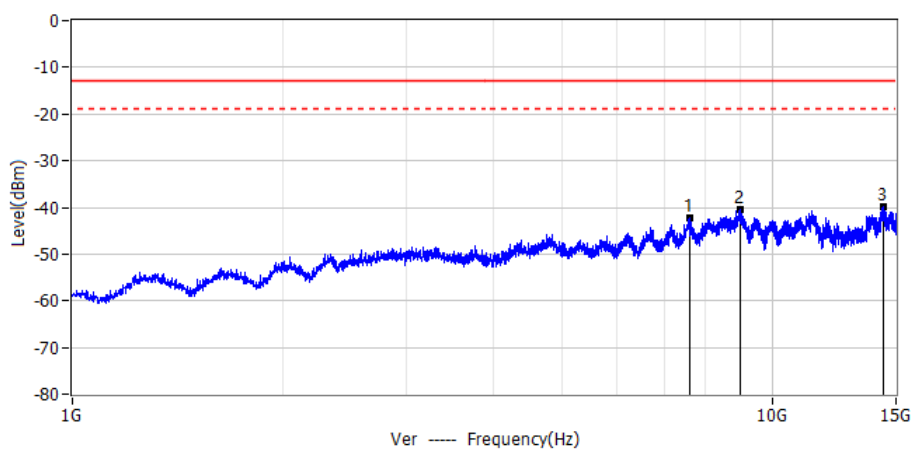
No.	Frequency	Level dBm	Limit dBm	Margin dB	Detector	Polar
1*	7.601GHz	-42.34	-13.00	-29.34	PK	Ver
2*	9.010GHz	-40.49	-13.00	-27.49	PK	Ver
3*	14.402GHz	-39.47	-13.00	-26.47	PK	Ver



Project: LGT22K037	Test Engineer: Dylan.shi
EUT: Access Point	Temperature: 22.1°C
M/N: ITS867216A	Humidity: 42%RH
Test Voltage: AC 120V/60Hz	Test Data: 2022-12-03
Test Mode: SH 2.0 E-WMTS_DBPSK_CH13_1394.908	
Note: with remote antenna	



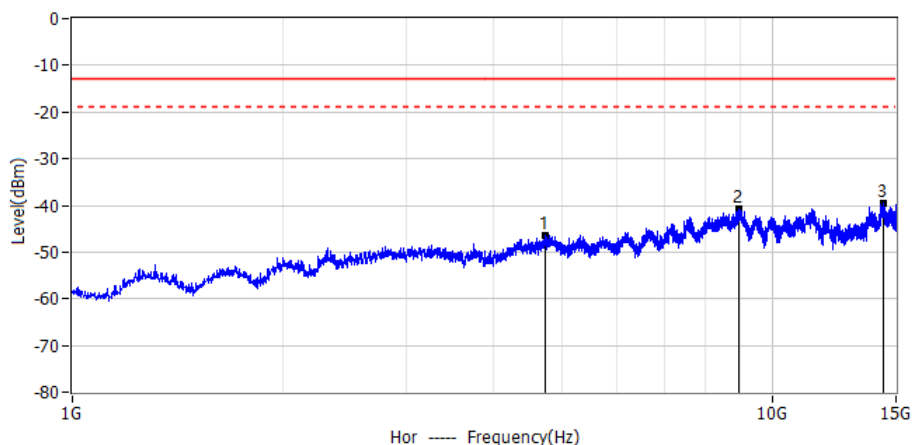
No.	Frequency	Level dBm	Limit dBm	Margin dB	Detector	Polar
1*	6.656GHz	-43.97	-13.00	-30.97	PK	Hor
2*	9.010GHz	-40.32	-13.00	-27.32	PK	Hor
3*	14.363GHz	-39.75	-13.00	-26.75	PK	Hor



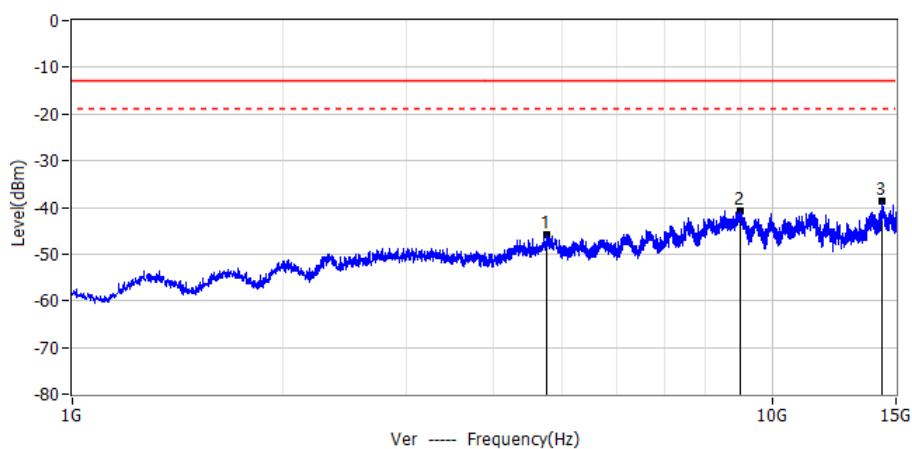
No.	Frequency	Level dBm	Limit dBm	Margin dB	Detector	Polar
1*	7.601GHz	-42.22	-13.00	-29.22	PK	Ver
2*	8.994GHz	-40.34	-13.00	-27.34	PK	Ver
3*	14.409GHz	-39.91	-13.00	-26.91	PK	Ver



Project: LGT22K037	Test Engineer: Dylan.shi
EUT: Access Point	Temperature: 22.1°C
M/N: ITS867216A	Humidity: 42%RH
Test Voltage: AC 120V/60Hz	Test Data: 2022-12-03
Test Mode: SH 2.0 E-WMTS_DBPSK_CH18_1431.969	
Note: with remote antenna	



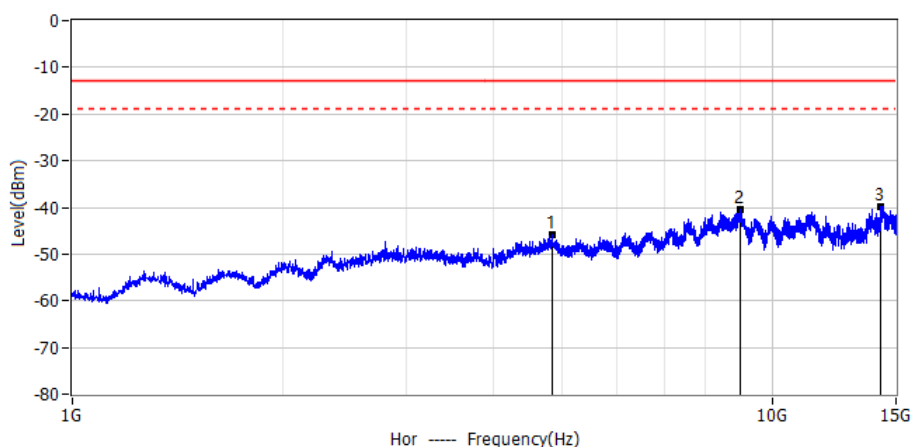
No.	Frequency	Level dBm	Limit dBm	Margin dB	Detector	Polar
1*	4.731GHz	-46.42	-13.00	-33.42	PK	Hor
2*	8.936GHz	-40.74	-13.00	-27.74	PK	Hor
3*	14.414GHz	-39.51	-13.00	-26.51	PK	Hor



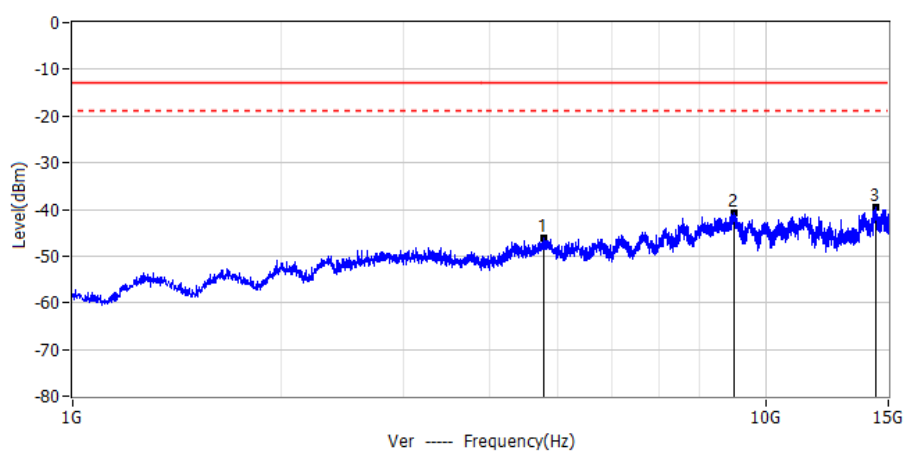
No.	Frequency	Level dBm	Limit dBm	Margin dB	Detector	Polar
1*	4.763GHz	-45.85	-13.00	-32.85	PK	Ver
2*	8.996GHz	-40.60	-13.00	-27.60	PK	Ver
3*	14.304GHz	-38.55	-13.00	-25.55	PK	Ver



Project: LGT22K037	Test Engineer: Dylan.shi
EUT: Access Point	Temperature: 22.1°C
M/N: ITS867216A	Humidity: 42%RH
Test Voltage: AC 120V/60Hz	Test Data: 2022-12-03
Test Mode: SH 2.0 E-WMTS_DBPSK_CH19_1433.697	
Note: with remote antenna	



No.	Frequency	Level dBm	Limit dBm	Margin dB	Detector	Polar
1*	4.843GHz	-45.95	-13.00	-32.95	PK	Hor
2*	9.006GHz	-40.54	-13.00	-27.54	PK	Hor
3*	14.290GHz	-39.83	-13.00	-26.83	PK	Hor



No.	Frequency	Level dBm	Limit dBm	Margin dB	Detector	Polar
1*	4.784GHz	-46.05	-13.00	-33.05	PK	Ver
2*	9.008GHz	-40.64	-13.00	-27.64	PK	Ver
3*	14.410GHz	-39.41	-13.00	-26.41	PK	Ver