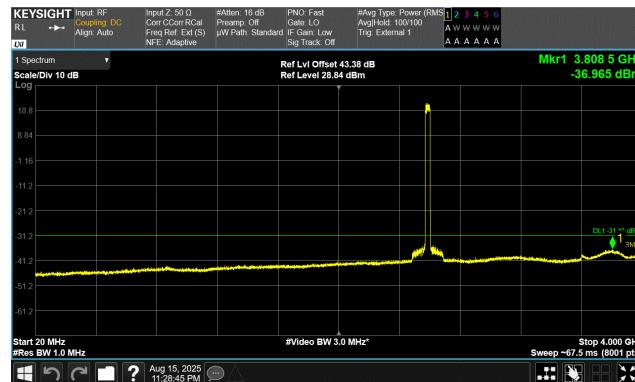


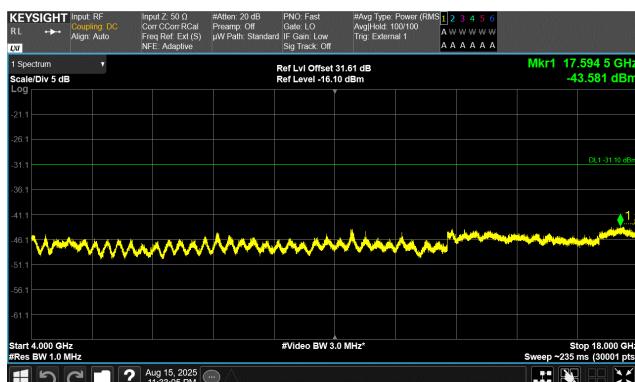
SPURIOUS CONDUCTED EMISSIONS



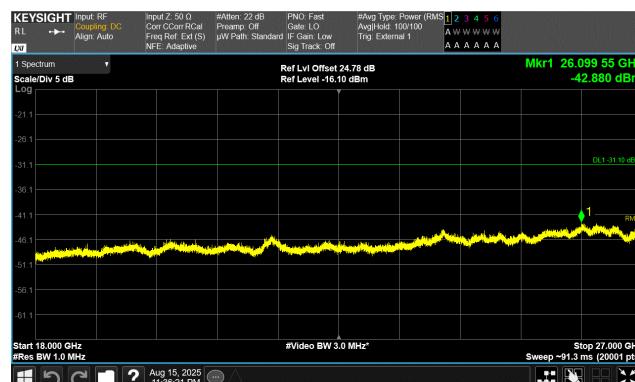
**40 MHz Base Channel Bandwidth
34.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz**



**40 MHz Base Channel Bandwidth
34.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz**



**40 MHz Base Channel Bandwidth
34.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz**



**40 MHz Base Channel Bandwidth
34.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz**



**40 MHz Base Channel Bandwidth
38.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz**

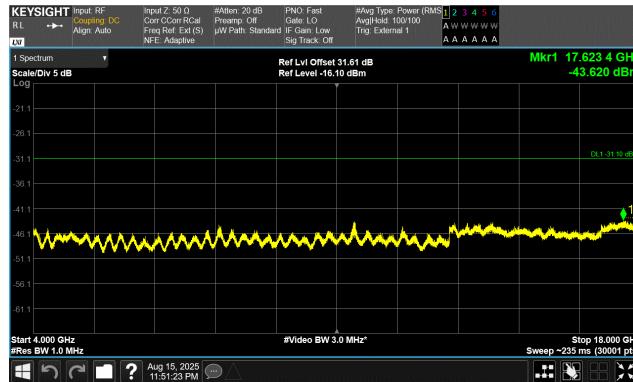


**40 MHz Base Channel Bandwidth
38.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz**

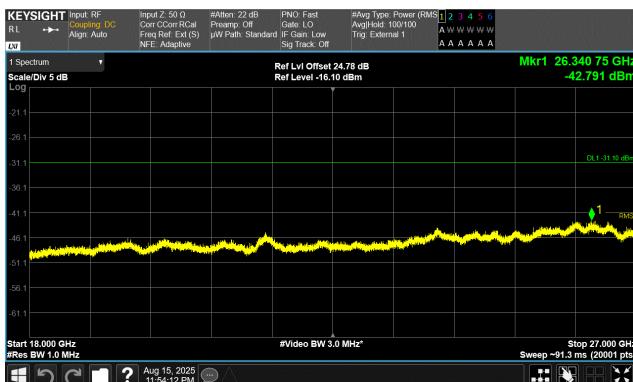
SPURIOUS CONDUCTED EMISSIONS



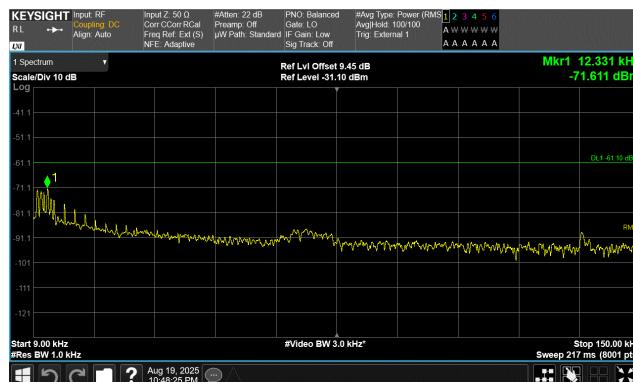
**40 MHz Base Channel Bandwidth
38.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz**



**40 MHz Base Channel Bandwidth
38.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz**



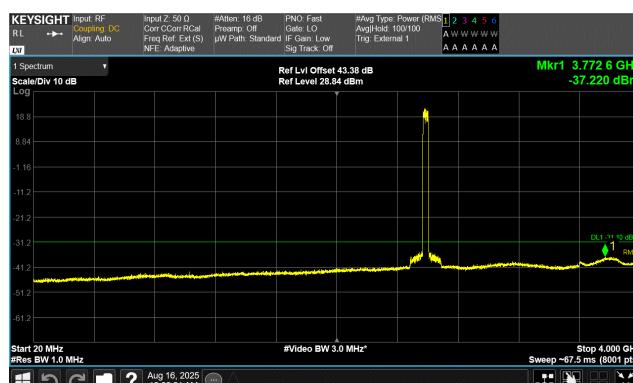
**40 MHz Base Channel Bandwidth
38.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz**



**40 MHz Base Channel Bandwidth
38.5 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz**

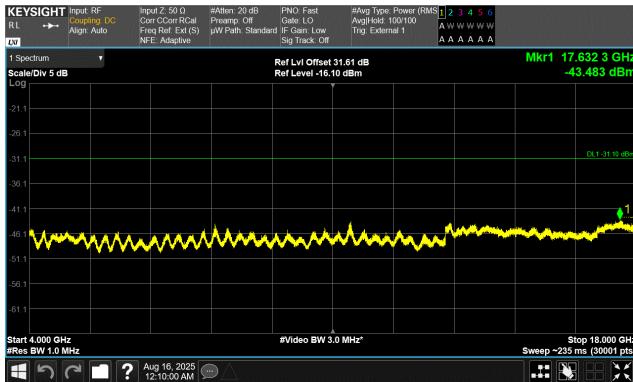


12:03:23 AM
40 MHz Base Channel Bandwidth
38.5 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel: 2592.99 MHz

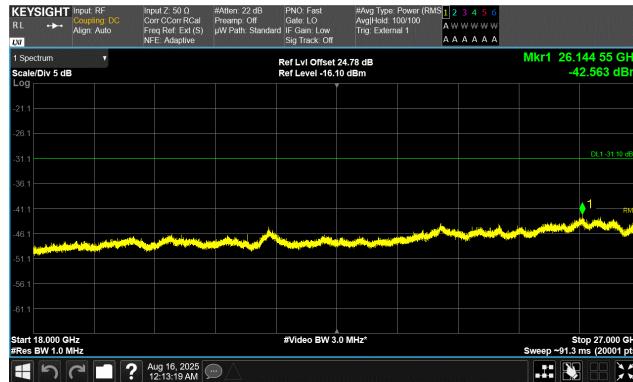


40 MHz Base Channel Bandwidth
38.5 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel: 2592.99 MHz

SPURIOUS CONDUCTED EMISSIONS



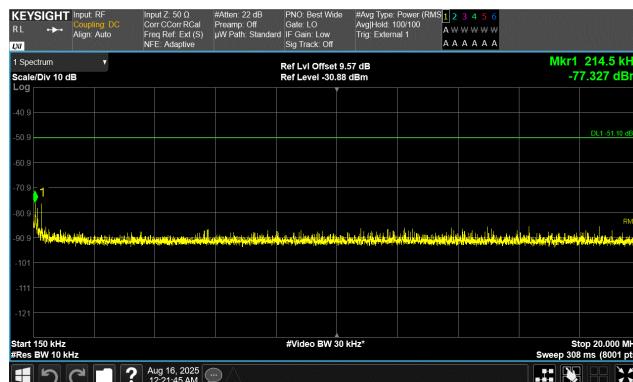
**40 MHz Base Channel Bandwidth
38.5 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz**



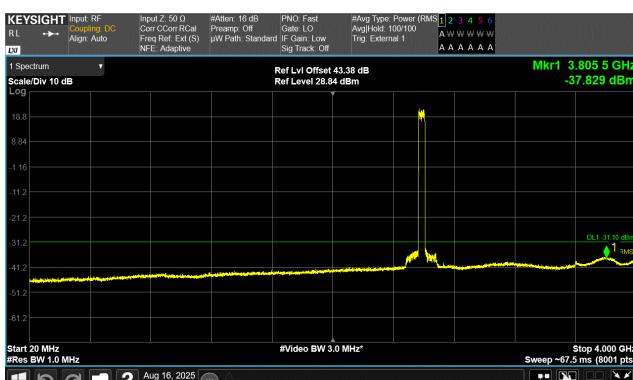
**40 MHz Base Channel Bandwidth
38.5 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz**



**50 MHz Base Channel Bandwidth
44.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz**



**50 MHz Base Channel Bandwidth
44.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz**

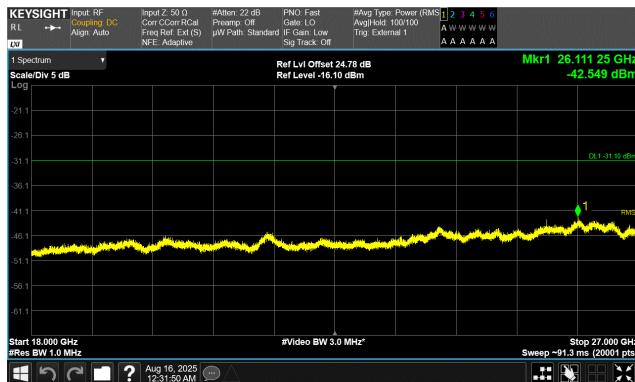


12:24:39 AM
50 MHz Base Channel Bandwidth
44.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel 2592.99 MHz



50 MHz Base Channel Bandwidth
44.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz

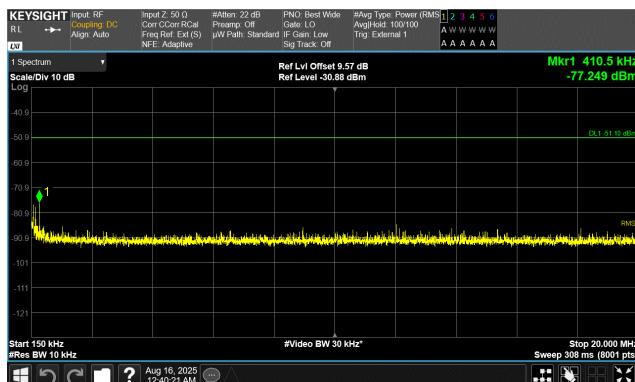
SPURIOUS CONDUCTED EMISSIONS



50 MHz Base Channel Bandwidth
44.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz



50 MHz Base Channel Bandwidth
49.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz



50 MHz Base Channel Bandwidth
49.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz



50 MHz Base Channel Bandwidth
49.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz



50 MHz Base Channel Bandwidth
49.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz

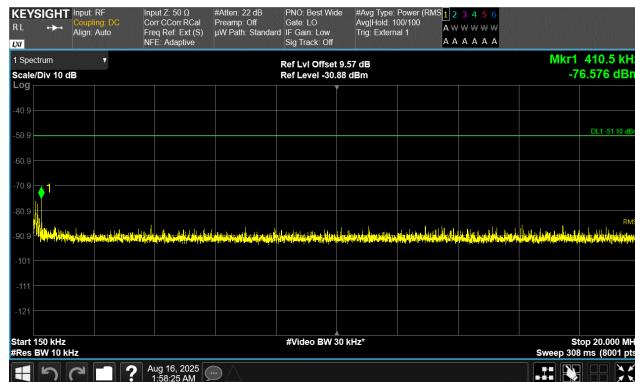


50 MHz Base Channel Bandwidth
49.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz

SPURIOUS CONDUCTED EMISSIONS



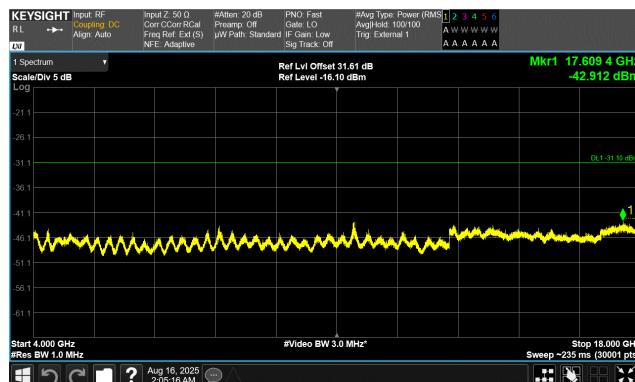
50 MHz Base Channel Bandwidth
49.5 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz



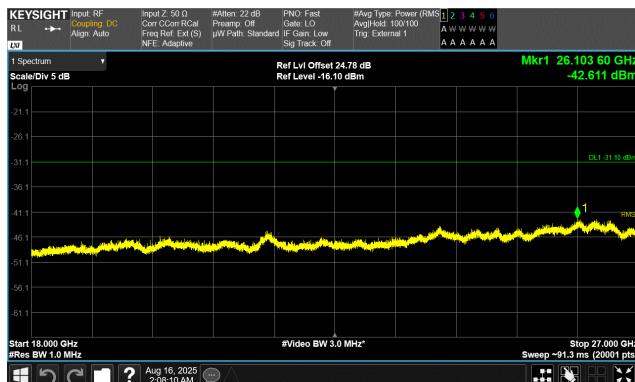
50 MHz Base Channel Bandwidth
49.5 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz



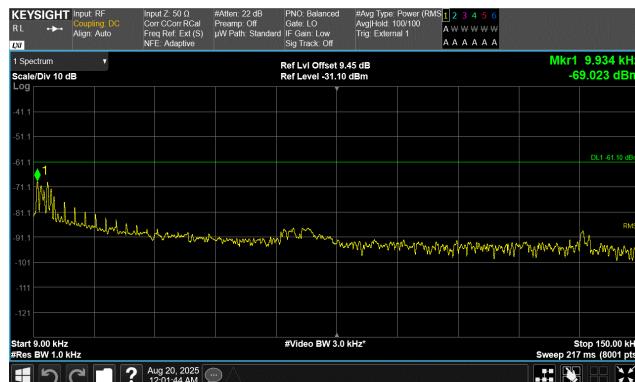
50 MHz Base Channel Bandwidth
49.5 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz



50 MHz Base Channel Bandwidth
49.5 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz

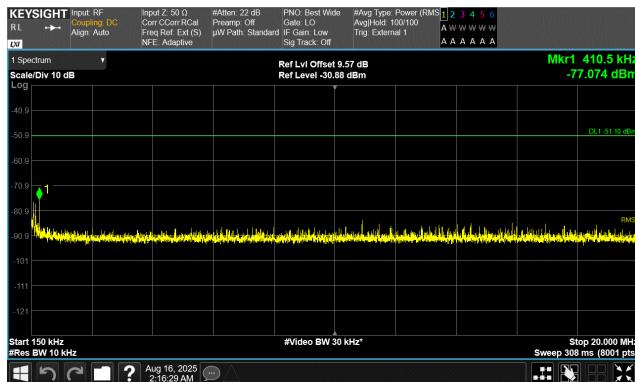


50 MHz Base Channel Bandwidth
49.5 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz

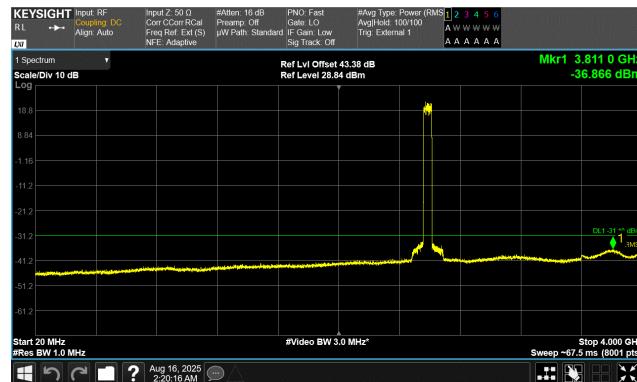


60 MHz Base Channel Bandwidth
55.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz

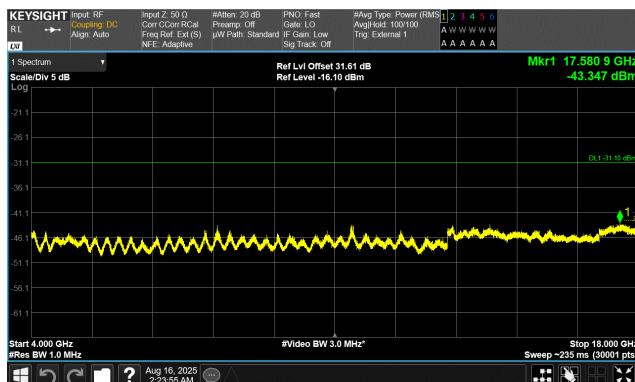
SPURIOUS CONDUCTED EMISSIONS



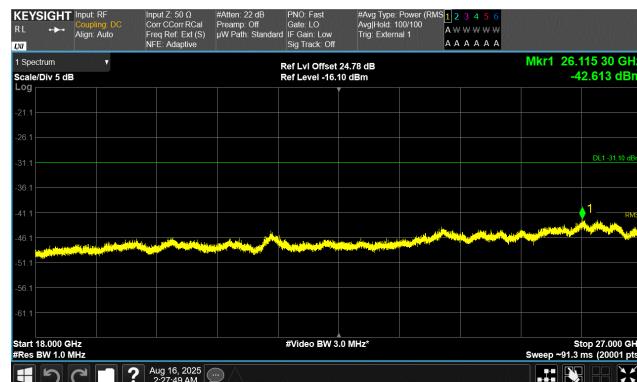
60 MHz Base Channel Bandwidth
55.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz



60 MHz Base Channel Bandwidth
55.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz



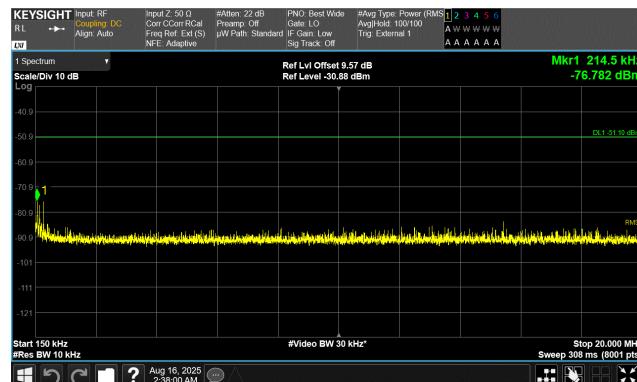
60 MHz Base Channel Bandwidth
55.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz



60 MHz Base Channel Bandwidth
55.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz

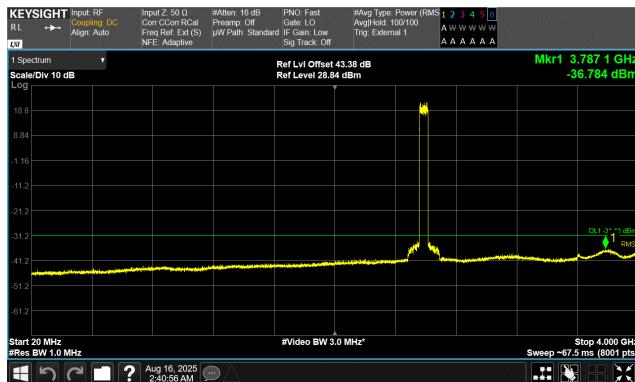


60 MHz Base Channel Bandwidth
57.5 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz

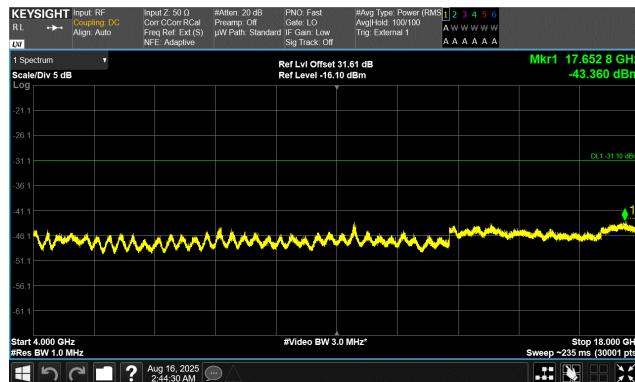


60 MHz Base Channel Bandwidth
57.5 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz

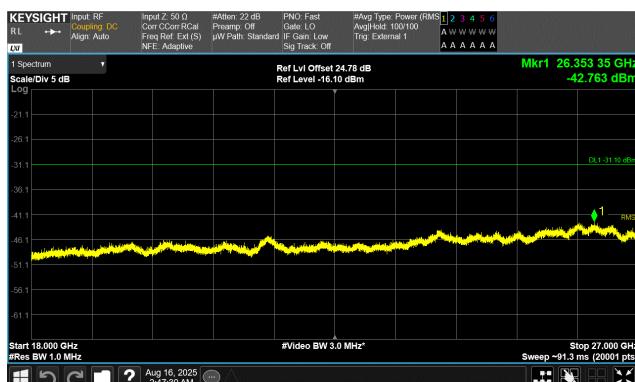
SPURIOUS CONDUCTED EMISSIONS



60 MHz Base Channel Bandwidth
57.5 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz



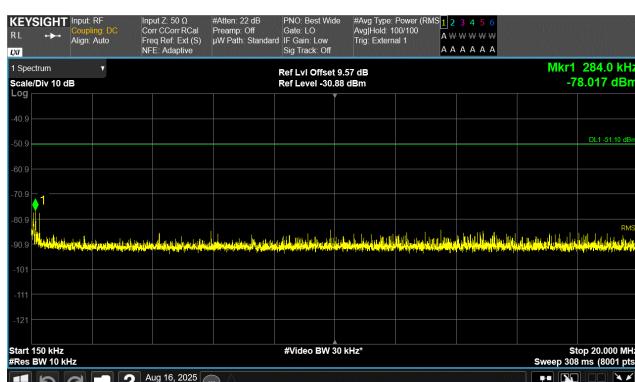
60 MHz Base Channel Bandwidth
57.5 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz



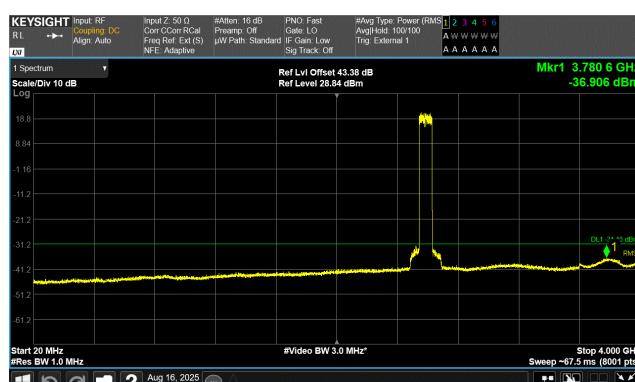
60 MHz Base Channel Bandwidth
57.5 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz



90 MHz Base Channel Bandwidth
86.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz

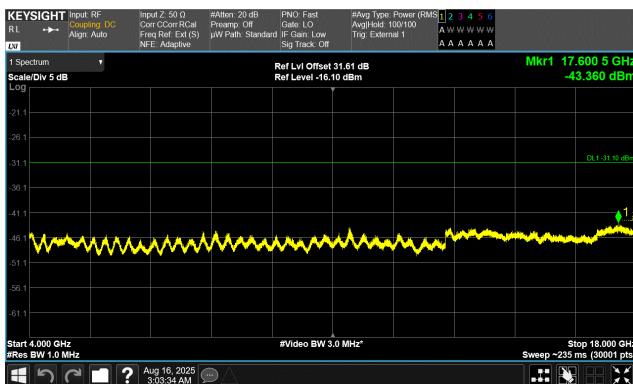


90 MHz Base Channel Bandwidth
86.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz

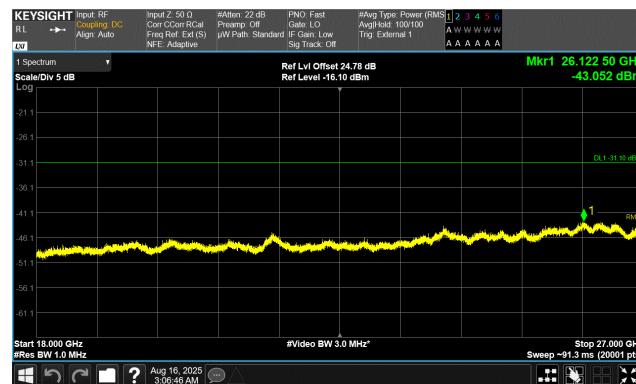


90 MHz Base Channel Bandwidth
86.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz

SPURIOUS CONDUCTED EMISSIONS



90 MHz Base Channel Bandwidth
86.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz



90 MHz Base Channel Bandwidth
86.0 MHz Slim Carrier Bandwidth
QPSK Modulation
Middle Channel, 2592.99 MHz

SPURIOUS CONDUCTED EMISSIONS - MULTICARRIER



TEST DESCRIPTION

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

The antenna port spurious emissions were measured at the RF output terminal of the EUT through four different attenuation configurations which continue through to the RF input of the spectrum analyzer. Analyzer plots utilizing a resolution bandwidth defined by ANSI C63.2 were made from 9 kHz to 27 GHz. The conducted power of spurious emissions, up to the 10th harmonic of the transmit frequency, were investigated.

RF conducted emissions testing was performed only on one port. The AVHA antenna ports are essentially electrically identical (the RF power variation between antenna ports is small as referenced within "Output Power – All Ports" report section of the original NOKI0079.1 certification testing). Antenna port 1 was selected to perform the testing under this effort as allowed by ANSI C63.26-2015 paragraphs 5.2.5.3, 5.7.2i, and 6.4.

Per FCC 2.1057 (a)(1), the upper level of measurement is the 10th harmonic of the highest fundamental frequency. As such, the upper level of measurement is approximately 27 GHz (2685*10) for the n41 frequency band.

Per section 27.53(m)(2), the power of any emission outside of the authorized operating frequency range cannot exceed -13 dBm. The limit is adjusted to -31.1 dBm [-13 dBm -10 log (64)] per FCC KDB 662911D01 v02r01 and ANSI C63.26-2015 section 6.4 because the BTS may operate as a 64 port MIMO transmitter).

The limit for the 9kHz to 150kHz frequency range was adjusted to -61.1dBm to correct for a spectrum analyzer RBW of 1kHz versus required RBW of 1MHz [i.e.: -61.1dBm = -31.1dBm -10log(1MHz/1kHz)]. The limit for the 150kHz to 20MHz frequency range was adjusted to -51.1dBm to correct for a spectrum analyzer RBW of 10kHz versus required RBW of 1MHz [i.e.: -51.1dBm = -31.1dBm -10log(1MHz/10kHz)]. The required limit of -31.1dBm with a RBW of \geq 1MHz was used for all other frequency ranges.

All Measurements were synchronized with the measurement receiver - gated with external trigger input (frame clock (100Hz) provided by the system module. Duty cycle correction is not needed for this testing since the transmit "on" time is synchronized with the measurement receiver.

Multicarrier test cases have been developed as shown below:

- a) *Multicarrier Test Case 1:* Four contiguous Slim 33MHz carriers with minimum spacing between carrier frequencies at the lower band edge (2516.01MHz, 2549.01MHz, 2582.01, 2615.01) (ARFCN=503202,509802,516402,52302). The smallest channel bandwidth is selected to maximize carrier power spectral density. The maximum number of carriers per radio is 4. The carriers are operated at maximum power per Multi Slim carrier [1.29W/ 31.1dBm].
- b) *Multicarrier Test Case 2:* Four contiguous Slim 33MHz carriers with minimum spacing between carrier frequencies at the upper band edge (2571MHz, 2604MHz, 2637MHz, 2670MHz) (ARFCN=514200, 520800, 527400, 534000) The smallest channel bandwidth is selected to maximize carrier power spectral density. The carriers are operated at maximum power per Multi Slim carrier [1.29W/ 31.1dBm].
- c) *Multicarrier Test Case 3:* Two contiguous Slim 33MHz Carriers with minimum spacing between carrier frequencies at the lower band edge (2516.01MHz, 2549.01MHz) (ARFCN=532998, 526398) and two Slim 33MHz carriers at the Upper band edge (2653.5MHz, 2670MHz) (ARFCN=527400, 534000) at the top channel. The carriers are operated at maximum power per Multi Slim carrier [1.29W/ 31.1dBm].

SPURIOUS CONDUCTED EMISSIONS - MULTICARRIER



- d) *Multicarrier Test Case 4:* Two Non-contiguous carriers with one Slim 33MHz Carrier (2516.01MHz) (ARFCN=503202) at the bottom channel and one Slim 33MHz Carrier (2670.0MHz) (ARFCN=534000) at the top channel (maximum spacing between carriers). The carriers are operated at maximum power per Multi Slim carrier [2.58W/ 34.1dBm].
- e) *Multicarrier Test Case 5:* Two Non-contiguous carriers with one Slim 86MHz Carrier (2541MHz) (ARFCN=508200) at the bottom channel and one Slim 86MHz Carrier (2644.98MHz) (ARFCN=528996) at the top channel (maximum spacing between carriers). The carriers are operated at maximum power per Multi Slim carrier [2.99W/ 34.8dBm].

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Analyzer - Spectrum Analyzer	Keysight Technologies	N9030B	AGA	2025-06-09	2026-06-09
Block - DC	Centric RF	C0140	ANJ	NCR	NCR
Generator - Signal	Agilent	N5173B	TIW	2023-08-07	2026-08-07

Note: The RF Test Setup/ Network (RF cables/Attenuators/filter/etc.) is defined in the configurations section for each test. The RF Test Setup/Network is calibrated using the signal generator and spectrum analyzer prior to test. The RF insertion loss of the RF Test Setup/Network is accounted for by the spectrum analyzer's reference level offset during the RF conducted testing.

SPURIOUS CONDUCTED EMISSIONS - MULTICARRIER



EUT:	Airscale Base Transceiver Station Radio Unit Model AVHA	Work Order:	NOKI0087
Serial Number:	L1252500217	Date:	2025-08-19
Customer:	Nokia Solutions and Networks	Temperature:	27.8°C
Attendees:	Mitch Hill, John Rattanavong	Relative Humidity:	45%
Customer Project:	None	Bar. Pressure (PMSL):	1015 mbar
Tested By:	Jarrod Brenden	Job Site:	PT14
Power:	54VDC	Configuration:	NOKI0087-1 NOKI0087-2 NOKI0087-3 NOKI0087-4

COMMENTS

All losses in the measurement path were accounted for in the reference level offset; attenuators, filters, cables, and DC blocks.

DEVIATIONS FROM TEST STANDARD

None

CONCLUSION

Pass

Tested By

TEST RESULTS

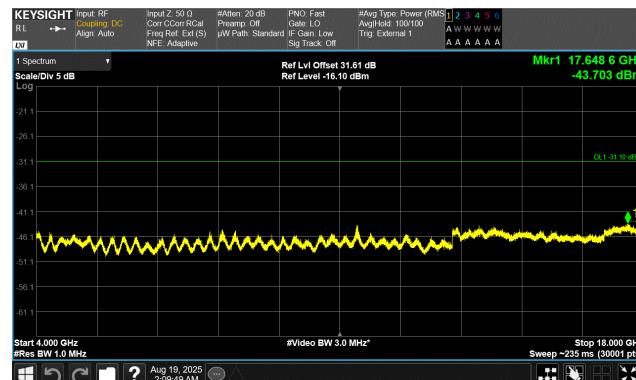
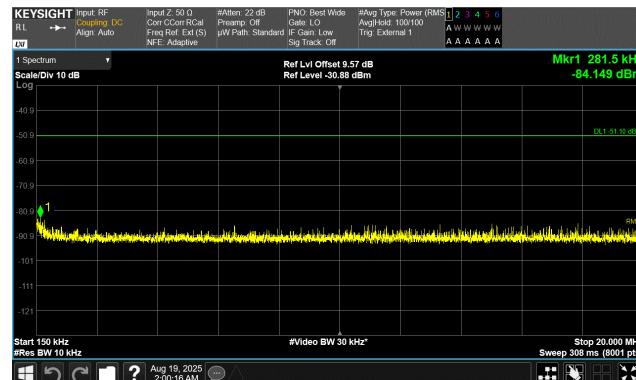
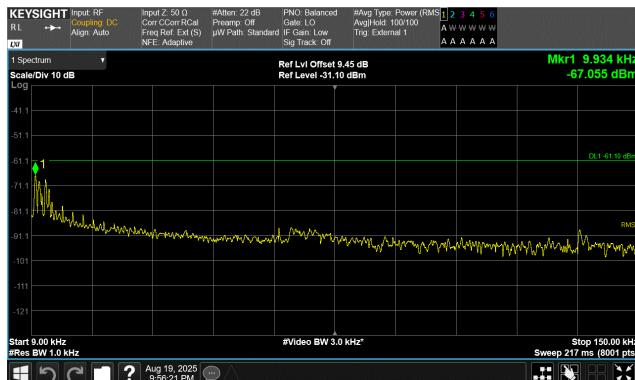
	Frequency Range	Measured Freq (MHz)	Max Value (dBm)	Limit < (dBm)	Result
Port 1					
QPSK Modulation					
Multicarrier Test Case 1					
Group 1	9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 4 GHz 4 GHz - 18 GHz 18 GHz - 27 GHz	0.01 0.28 3793.54 17648.60 26132.85	-67.06 -84.15 -36.85 -43.70 -42.62	-61.1 -51.1 -31.1 -31.1 -31.1	Pass Pass Pass Pass Pass
Multicarrier Test Case 2					
Group 2	9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 4 GHz 4 GHz - 18 GHz 18 GHz - 27 GHz	0.01 0.17 3801 11390.6 26123.85	-67.38 -83.89 -37.12 -43.67 -42.85	-61.1 -51.1 -31.1 -31.1 -31.1	Pass Pass Pass Pass Pass
Multicarrier Test Case 3					
Group 3	9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 4 GHz 4 GHz - 18 GHz 18 GHz - 27 GHz	0.01 0.16 3814.43 17645.33 26343.00	-67.2 -83.71 -36.79 -43.06 -42.30	-61.1 -51.1 -31.1 -31.1 -31.1	Pass Pass Pass Pass Pass

SPURIOUS CONDUCTED EMISSIONS - MULTICARRIER

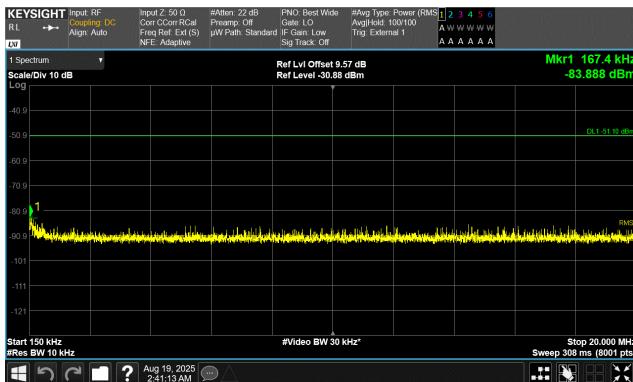


	Frequency Range	Measured Freq (MHz)	Max Value (dBm)	Limit < (dBm)	Result
Multicarrier Test Case 4					
Group 4	9 kHz - 150 kHz	0.01	-67.18	-61.1	Pass
	150 kHz - 20 MHz	0.2	-84.40	-51.1	Pass
	20 MHz - 4 GHz	3832.8	-36.72	-31.1	Pass
	4 GHz - 18 GHz	11393.9	-42.83	-31.1	Pass
	18 GHz - 27 GHz	26152.2	-42.20	-31.1	Pass
Multicarrier Test Case 5					
Group 5	9 kHz - 150 kHz	0.01	-67.4	-61.1	Pass
	150 kHz - 20 MHz	0.16	-84.01	-51.1	Pass
	20 MHz - 4 GHz	3834.33	-36.71	-31.1	Pass
	4 GHz - 18 GHz	17663.07	-43.15	-31.1	Pass
	18 GHz - 27 GHz	26085.6	-42.35	-31.1	Pass

SPURIOUS CONDUCTED EMISSIONS - MULTICARRIER



SPURIOUS CONDUCTED EMISSIONS - MULTICARRIER



Port 1

QPSK Modulation

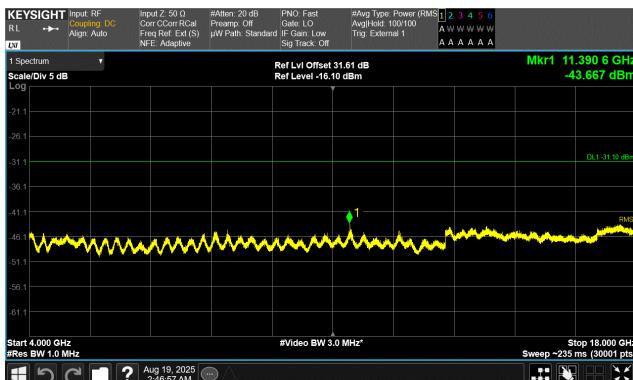
Multicarrier Test Case 2



Port 1

QPSK Modulation

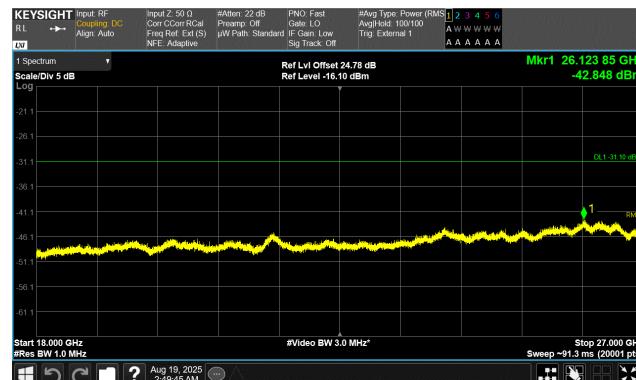
Multicarrier Test Case 2



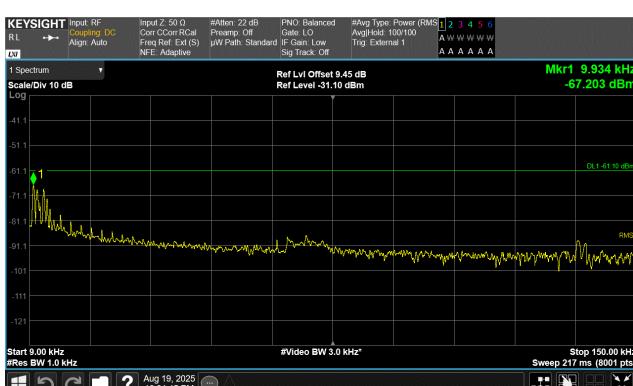
Port 1

QPSK Modulation

Multicarrier Test Case 2



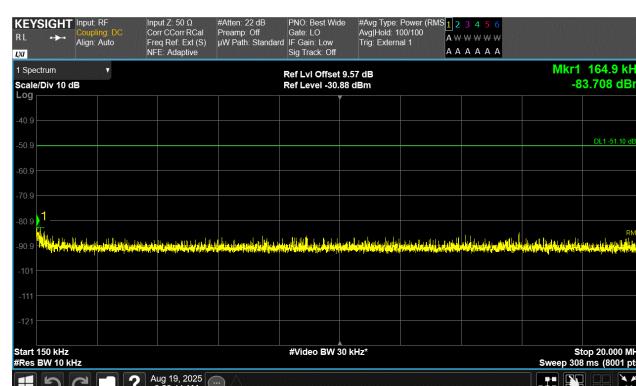
Port 1
QPSK Modulation
Multicarrier Test Case 2



Port 1

QPSK Modulation

Multicarrier Test Case 3

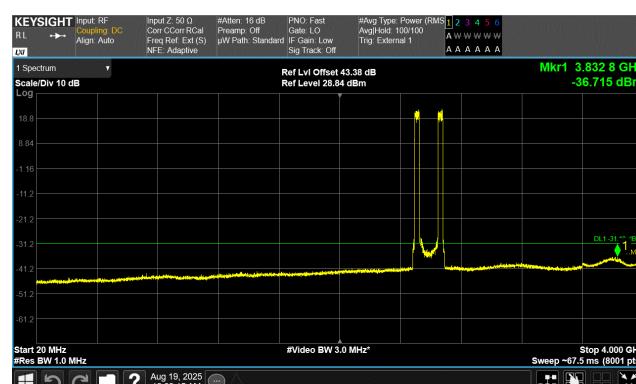
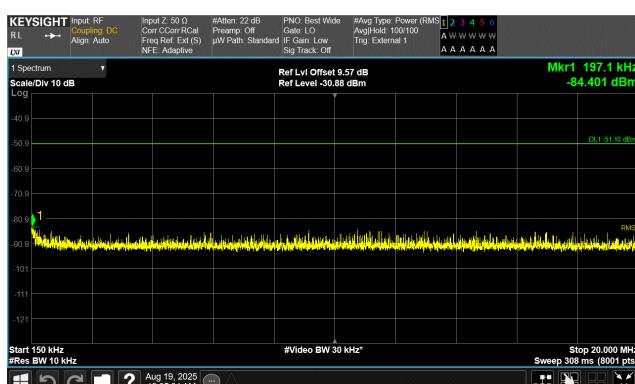
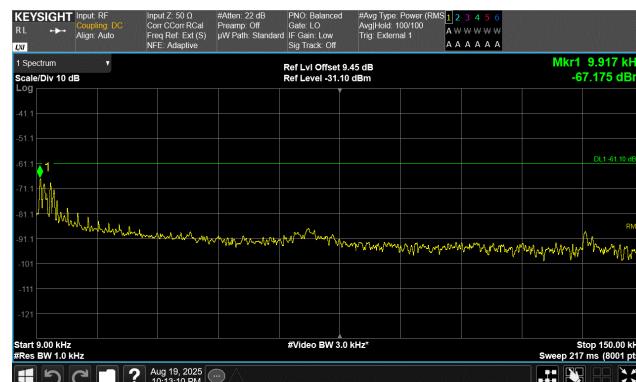
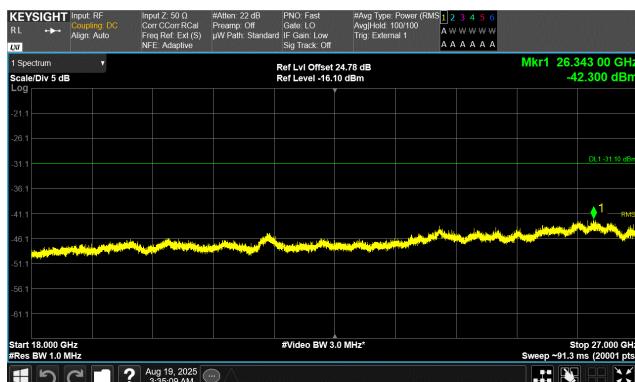
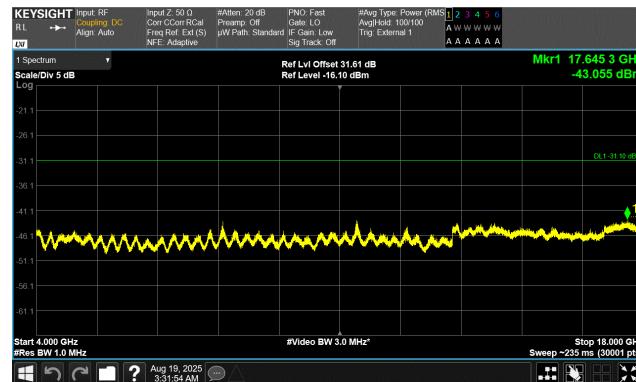


Port 1

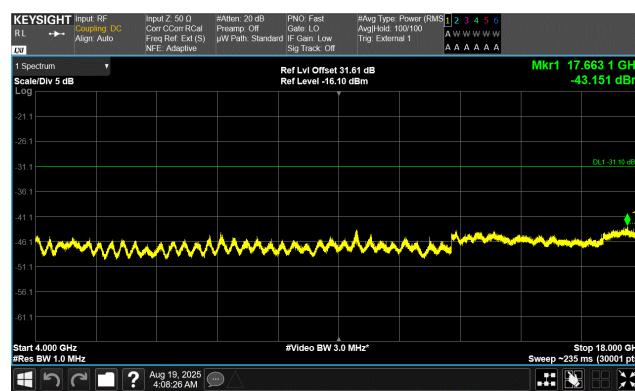
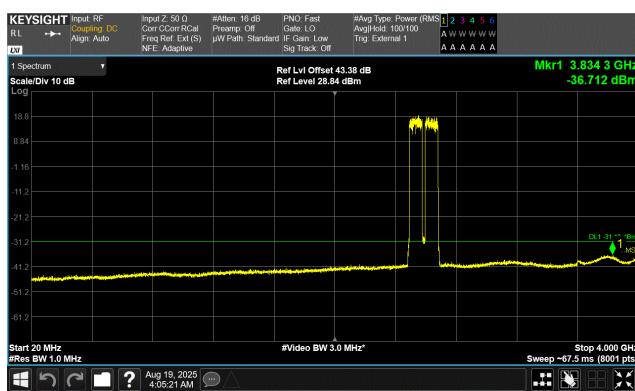
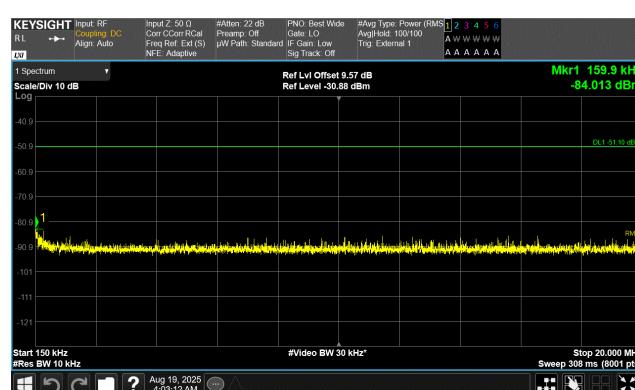
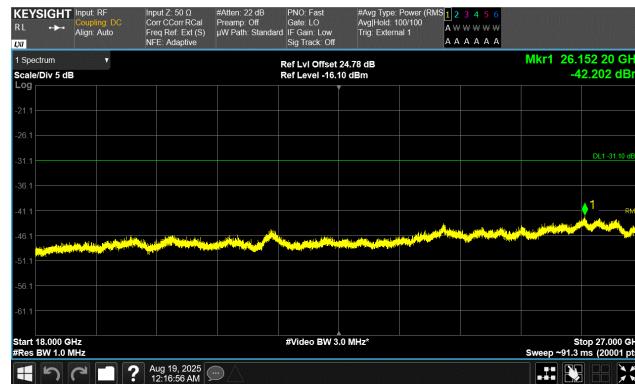
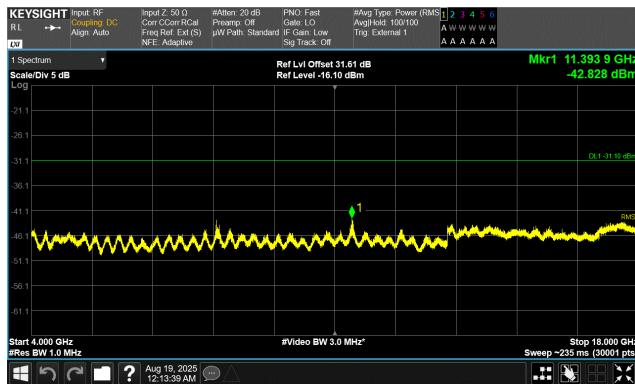
QPSK Modulation

Multicarrier Test Case 3

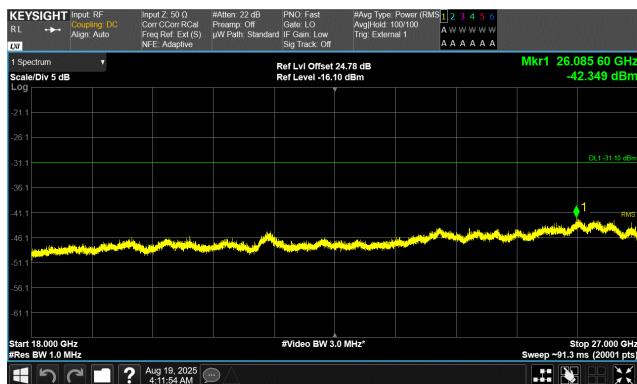
SPURIOUS CONDUCTED EMISSIONS - MULTICARRIER



SPURIOUS CONDUCTED EMISSIONS - MULTICARRIER



SPURIOUS CONDUCTED EMISSIONS - MULTICARRIER



End of Test Report