WCDMA Band 2 Test Data

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1. Conducted Output Power&&EIRP/ERP

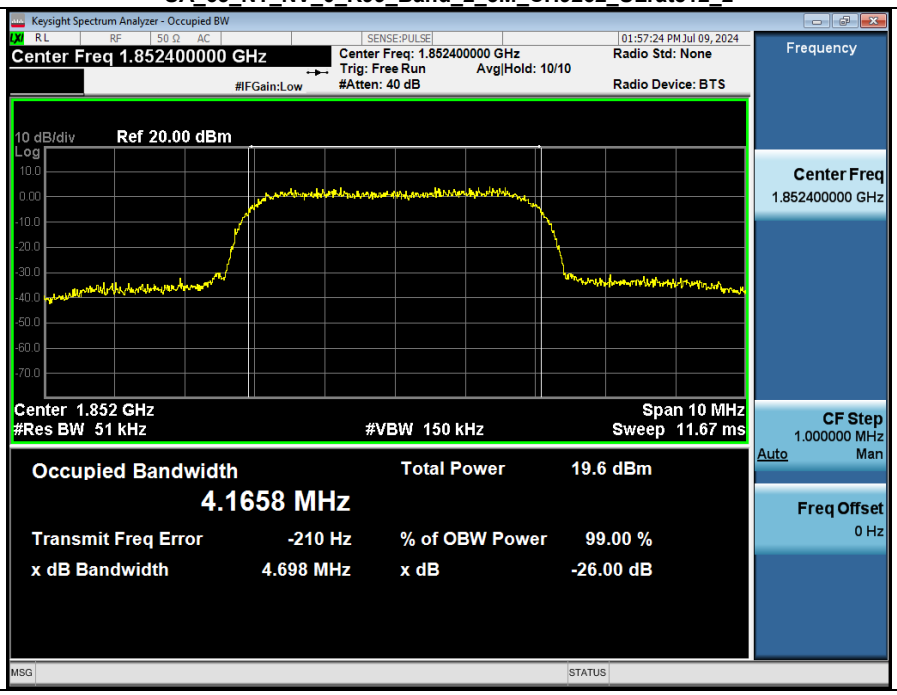
Condition	Mode	Band	Frequency(MHz)	UL Rate(kHz)	Conducted Power(dBm)	ANT Gain(dBi)	EIRP(dBm)	limit(dBm)	Result
NVNT	R99	Band 2	1852.4	12.2	**23.83**	0.6	24.43	33.01	Pass
NVNT	R99	Band 2	1880.0	12.2	23.13	0.6	23.73	33.01	Pass
NVNT	R99	Band 2	1907.6	12.2	23.51	0.6	24.11	33.01	Pass

EIRP = Conducted Power + ANT Gain

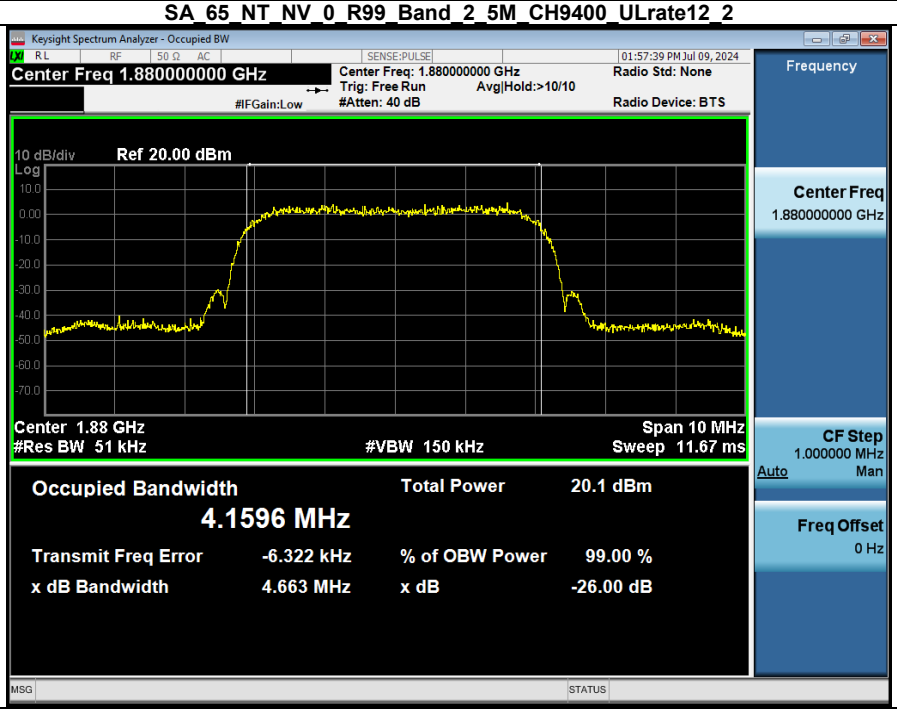
2. Occupied Bandwidth

Condition	Mode	Band	Frequency(MHz)	Data Rate	OBW(MHz)	-26EBW(MHz)
NVNT	R99	Band 2	1852.4	12.2	4.1658	4.6975
NVNT	R99	Band 2	1880.0	12.2	4.1596	4.6630
NVNT	R99	Band 2	1907.6	12.2	4.1532	4.6661

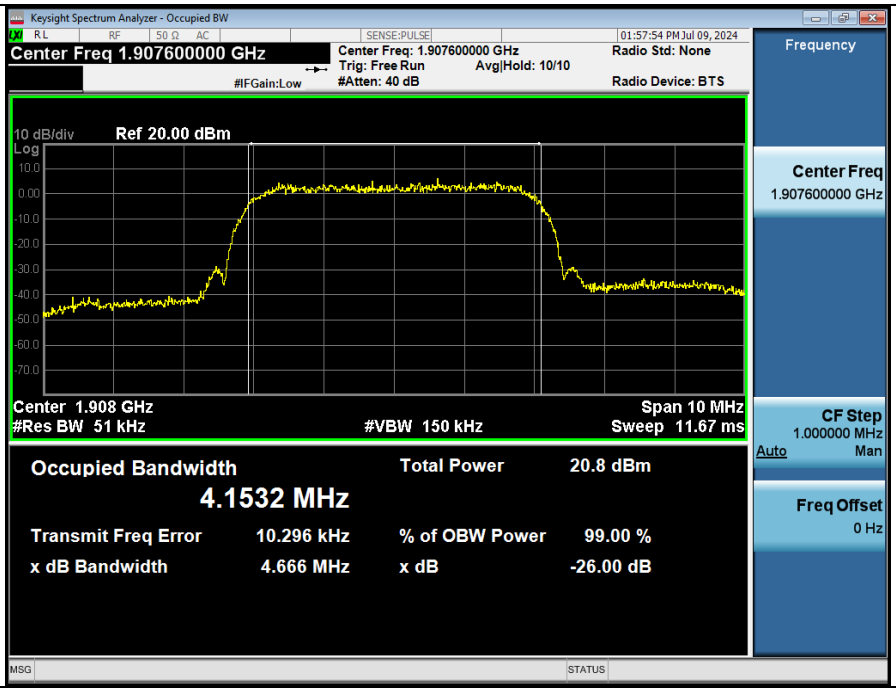
SA_65_NT_NV_0_R99_Band_2_5M_CH9262_ULrate12_2



SA_65_NT_NV_0_R99_Band_2_5M_CH9400_ULrate12_2



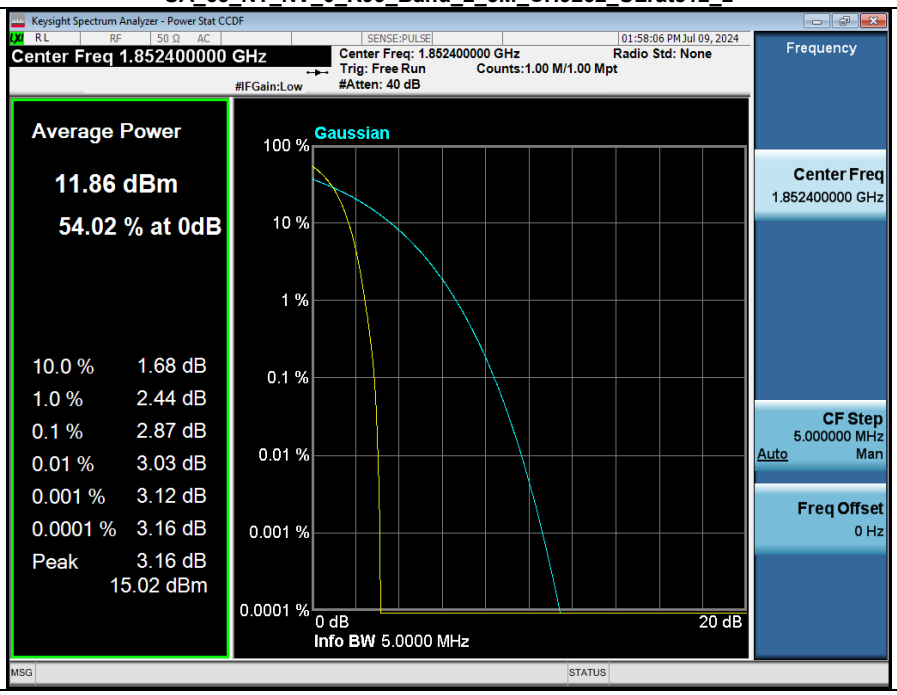
SA_65_NT_NV_0_R99_Band_2_5M_CH9538_ULrate12_2


Keysight Spectrum Analyzer - Occupied BW
RL
RF
50 Ω AC
SENSE:PULSE
01:57:54 PM Jul 09, 2024
Center Freq 1.907600000 GHz
Center Freq: 1.907600000 GHz
Trig: Free Run
Avg|Hold: 10/10
#IFGain:Low
#Atten: 40 dB
Radio Std: None
Radio Device: BTS
10 dB/div
Ref 20.00 dBm
Log
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 1.908 GHz
#Res BW 51 kHz
#VBW 150 kHz
Span 10 MHz
Sweep 11.67 ms
Occupied Bandwidth
4.1532 MHz
Total Power
20.8 dBm
Transmit Freq Error
10.296 kHz
% of OBW Power
99.00 %
x dB Bandwidth
4.666 MHz
x dB
-26.00 dB
MSG
STATUS
Frequency
Center Freq
1.907600000 GHz
CF Step
1.000000 MHz
Auto
Man
Freq Offset
0 Hz

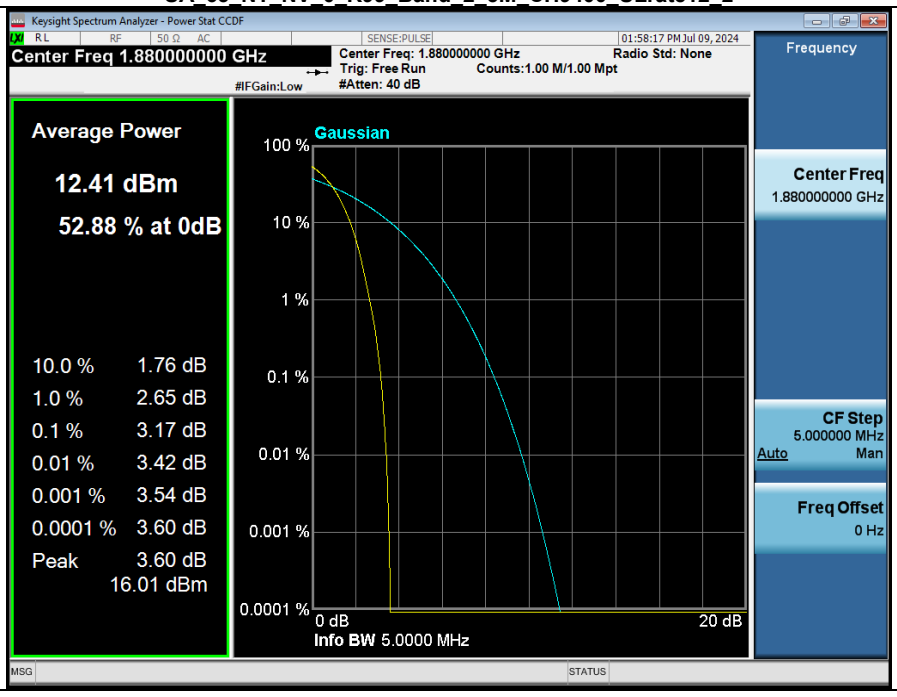
3. Peak to Average Ratio

Condition	Mode	Band	Frequency(MHz)	Data Rate	Peak to AVG Ratio-0.1%(dB)	Limit(dB)	Result
NVNT	R99	Band 2	1852.4	12.2	2.87	13.00	Pass
NVNT	R99	Band 2	1880.0	12.2	3.17	13.00	Pass
NVNT	R99	Band 2	1907.6	12.2	3.06	13.00	Pass

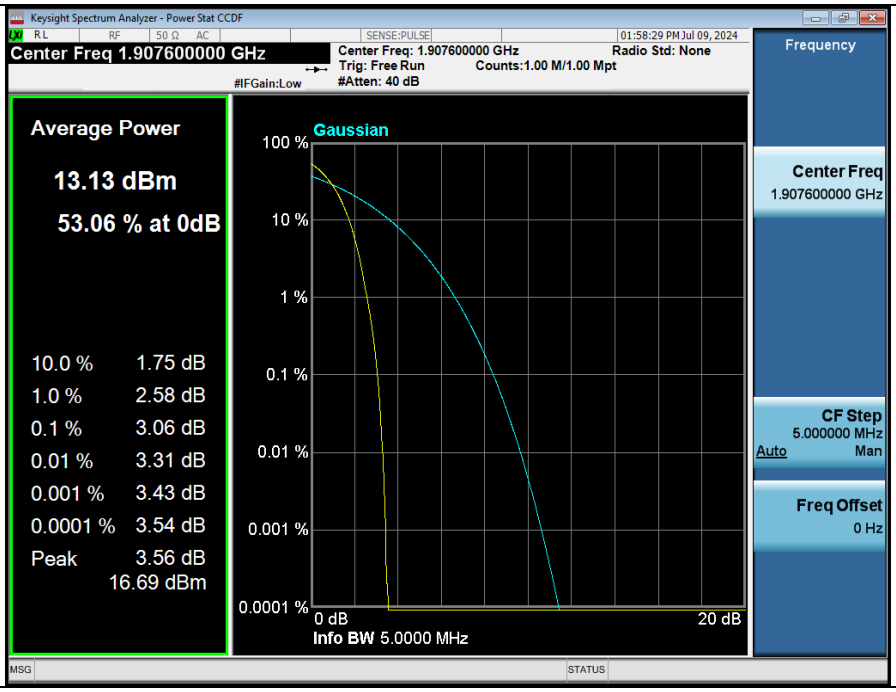
SA_65_NT_NV_0_R99_Band_2_5M_CH9262_ULrate12_2



SA_65_NT_NV_0_R99_Band_2_5M_CH9400_ULrate12_2



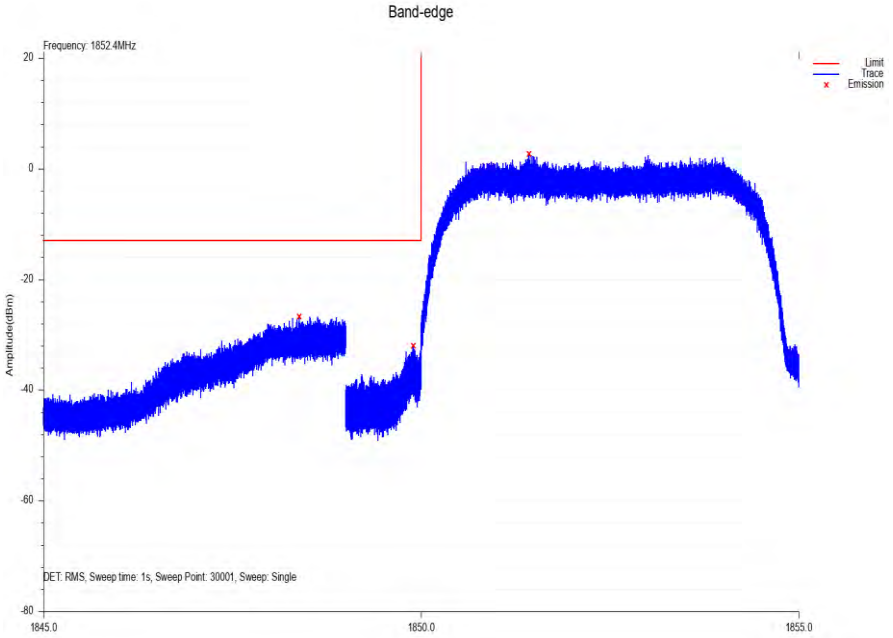
SA_65_NT_NV_0_R99_Band_2_5M_CH9538_ULrate12_2


Keysight Spectrum Analyzer - Power Stat CCDF
RL
RF
50 Ω AC
SENSE:PULSE
01:58:29 PM Jul 09, 2024
Center Freq 1.907600000 GHz
Center Freq: 1.907600000 GHz
Trig: Free Run
#Atten: 40 dB
Counts:1.00 M/1.00 Mpt
Radio Std: None
#IFGain:Low
Frequency
Average Power
13.13 dBm
53.06 % at 0dB
10.0 % 1.75 dB
1.0 % 2.58 dB
0.1 % 3.06 dB
0.01 % 3.31 dB
0.001 % 3.43 dB
0.0001 % 3.54 dB
Peak 3.56 dB
16.69 dBm
Gaussian
100 %
10 %
1 %
0.1 %
0.01 %
0.001 %
0.0001 %
0 dB
20 dB
Info BW 5.0000 MHz
Center Freq
1.907600000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

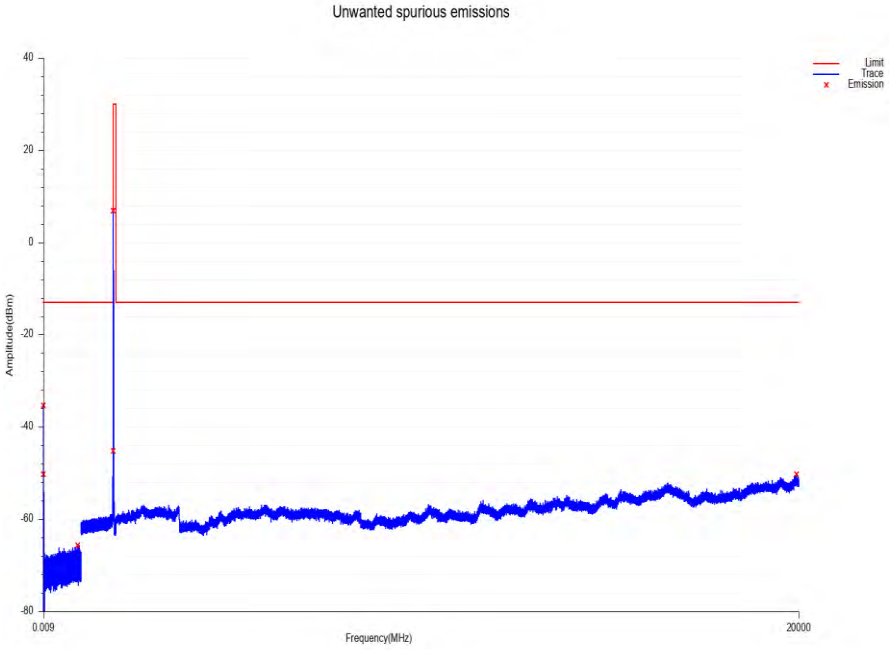
4. Unwanted Spurious Emission

Condition	Mode	Band	Frequency(MHz)	Data Rate	RBW(kHz)	Test Freq Range(MHz)	Spur Freq (MHz)	Spur Level(dBm)	Limit(dBm)	Result
NVNT	R99	Band 2	1852.40	12.2	1000	1845.0~1849.0	1848.385	-26.68	-13	Pass
NVNT	R99	Band 2	1852.40	12.2	50.0	1849.0~1850.0	1849.901	-32.04	-13	Pass
NVNT	R99	Band 2	1852.40	12.2	1	0.009~0.150	0.098	-50.32	-13	Pass
NVNT	R99	Band 2	1852.40	12.2	10	0.150~30.000	3.728	-35.31	-13	Pass
NVNT	R99	Band 2	1852.40	12.2	100	30.000~1000.000	903.744	-65.72	-13	Pass
NVNT	R99	Band 2	1852.40	12.2	1000	1000.000~1845.000	1844.916	-45.16	-13	Pass
NVNT	R99	Band 2	1852.40	12.2	1000	1915.000~20000.000	19939.114	-50.24	-13	Pass
NVNT	R99	Band 2	1880.00	12.2	1	0.009~0.150	0.098	-53.09	-13	Pass
NVNT	R99	Band 2	1880.00	12.2	10	0.150~30.000	3.733	-43.30	-13	Pass
NVNT	R99	Band 2	1880.00	12.2	100	30.000~1000.000	890.067	-65.55	-13	Pass
NVNT	R99	Band 2	1880.00	12.2	1000	1000.000~1845.000	1796.441	-58.82	-13	Pass
NVNT	R99	Band 2	1880.00	12.2	1000	1915.000~20000.000	2612.478	-50.54	-13	Pass
NVNT	R99	Band 2	1907.60	12.2	50.0	1910.0~1911.0	1910.114	-30.88	-13	Pass
NVNT	R99	Band 2	1907.60	12.2	1000	1911.0~1915.0	1911.187	-24.79	-13	Pass
NVNT	R99	Band 2	1907.60	12.2	1	0.009~0.150	0.099	-52.02	-13	Pass
NVNT	R99	Band 2	1907.60	12.2	10	0.150~30.000	3.665	-41.49	-13	Pass
NVNT	R99	Band 2	1907.60	12.2	100	30.000~1000.000	862.680	-65.21	-13	Pass
NVNT	R99	Band 2	1907.60	12.2	1000	1000.000~1845.000	1840.296	-58.91	-13	Pass
NVNT	R99	Band 2	1907.60	12.2	1000	1915.000~20000.000	1915.000	-45.34	-13	Pass

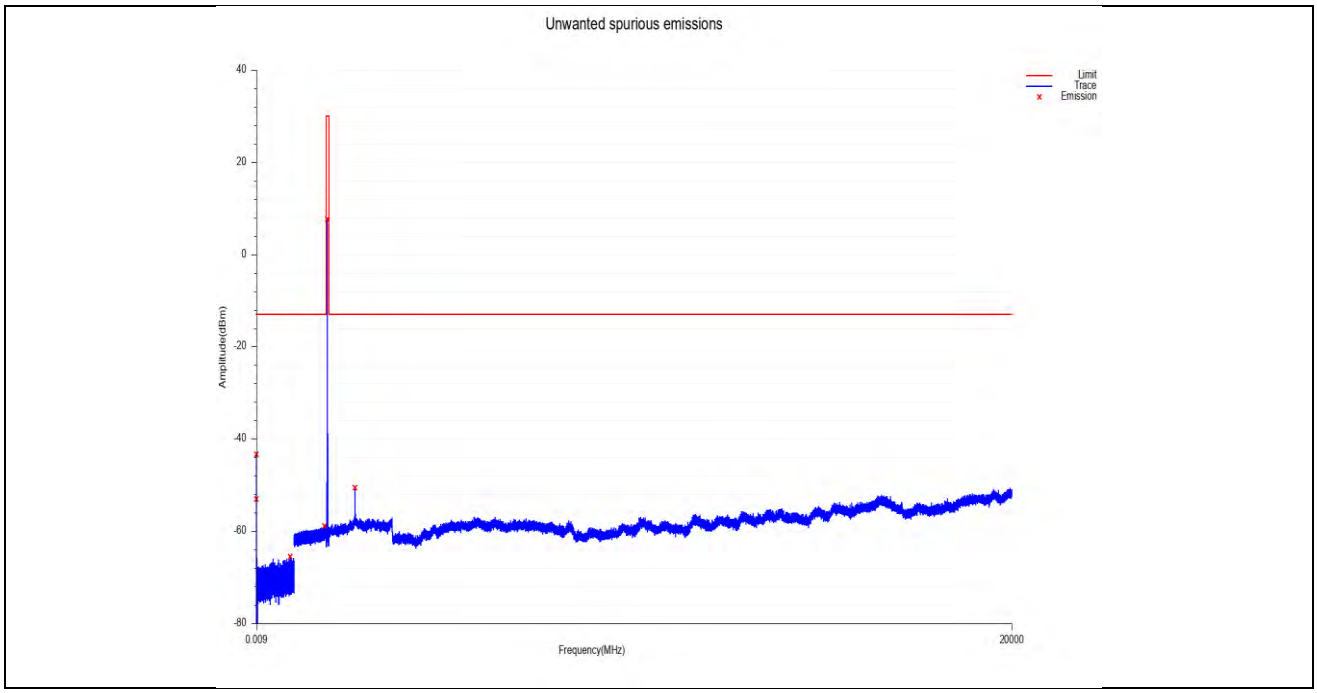
LOW_EDGE_65_NT_NV_0_R99_Band_2_5M_CH9262_ULRate12_2



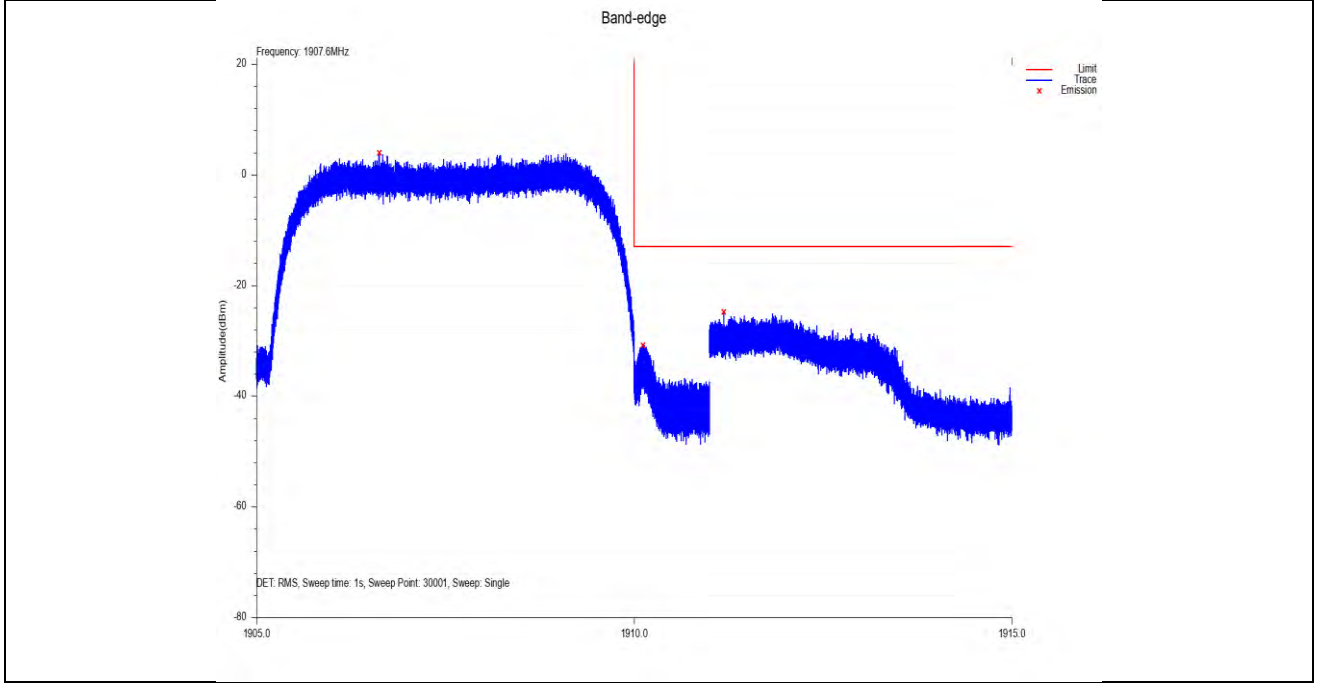
SA_65_NT_NV_0_R99_Band_2_5M_CH9262_ULRate12_2



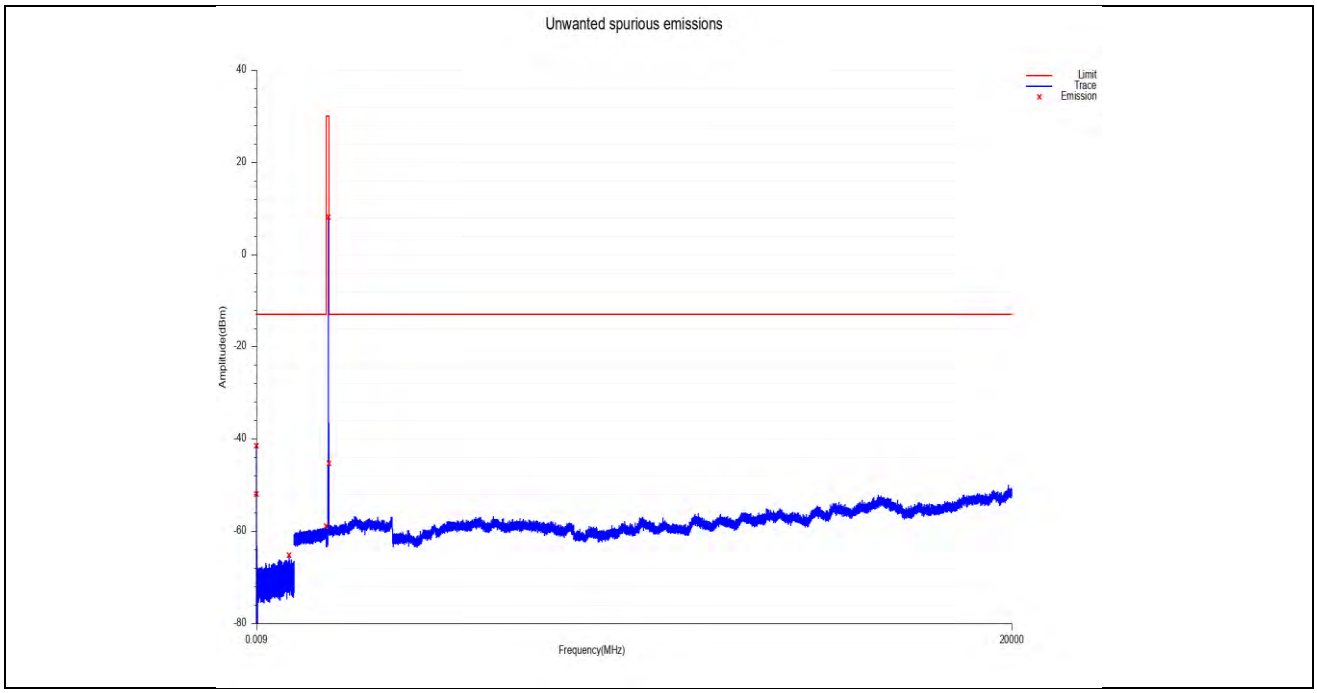
SA_65_NT_NV_0_R99_Band_2_5M_CH9400_ULRate12_2



UPPER_EDGE_65_NT_NV_0_R99_Band_2_5M_CH9538_ULRate12_2



SA_65_NT_NV_0_R99_Band_2_5M_CH9538_ULRate12_2


Unwanted spurious emissions
Limit
Trace
Emission
40
20
0
-20
-40
-60
-80
Amplitude(dBm)
0.009
20000
Frequency(MHz)

5. Frequency Stability

Temperature (℃)	Voltage (V)	Modulation	Band	Frequency (MHz)	Data Rate(kHz)	Frequency Stabilization (ppm)	Limit_Low (ppm)	Limit_Up (ppm)	Result
-30	3.3	R99	Band 2	1852.4	12.2	0.0071	-2.50	2.50	Pass
-30	3.3	R99	Band 2	1880.0	12.2	0.0076	-2.50	2.50	Pass
-30	3.3	R99	Band 2	1907.6	12.2	0.0103	-2.50	2.50	Pass
-30	3.8	R99	Band 2	1852.4	12.2	0.0094	-2.50	2.50	Pass
-30	3.8	R99	Band 2	1880.0	12.2	0.0033	-2.50	2.50	Pass
-30	3.8	R99	Band 2	1907.6	12.2	0.0065	-2.50	2.50	Pass
-30	4.2	R99	Band 2	1852.4	12.2	0.0083	-2.50	2.50	Pass
-30	4.2	R99	Band 2	1880.0	12.2	0.0048	-2.50	2.50	Pass
-30	4.2	R99	Band 2	1907.6	12.2	0.0077	-2.50	2.50	Pass
-20	3.3	R99	Band 2	1852.4	12.2	0.0063	-2.50	2.50	Pass
-20	3.3	R99	Band 2	1880.0	12.2	0.0072	-2.50	2.50	Pass
-20	3.3	R99	Band 2	1907.6	12.2	0.0093	-2.50	2.50	Pass
-20	3.8	R99	Band 2	1852.4	12.2	0.0056	-2.50	2.50	Pass
-20	3.8	R99	Band 2	1880.0	12.2	0.0048	-2.50	2.50	Pass
-20	3.8	R99	Band 2	1907.6	12.2	0.0071	-2.50	2.50	Pass
-20	4.2	R99	Band 2	1852.4	12.2	0.0092	-2.50	2.50	Pass
-20	4.2	R99	Band 2	1880.0	12.2	0.0066	-2.50	2.50	Pass
-20	4.2	R99	Band 2	1907.6	12.2	0.0074	-2.50	2.50	Pass
-10	3.3	R99	Band 2	1852.4	12.2	0.0064	-2.50	2.50	Pass
-10	3.3	R99	Band 2	1880.0	12.2	0.0060	-2.50	2.50	Pass
-10	3.3	R99	Band 2	1907.6	12.2	0.0064	-2.50	2.50	Pass
-10	3.8	R99	Band 2	1852.4	12.2	0.0085	-2.50	2.50	Pass
-10	3.8	R99	Band 2	1880.0	12.2	0.0019	-2.50	2.50	Pass
-10	3.8	R99	Band 2	1907.6	12.2	0.0098	-2.50	2.50	Pass
-10	4.2	R99	Band 2	1852.4	12.2	0.0056	-2.50	2.50	Pass
-10	4.2	R99	Band 2	1880.0	12.2	0.0047	-2.50	2.50	Pass
-10	4.2	R99	Band 2	1907.6	12.2	0.0054	-2.50	2.50	Pass
0	3.3	R99	Band 2	1852.4	12.2	0.0038	-2.50	2.50	Pass
0	3.3	R99	Band 2	1880.0	12.2	0.0080	-2.50	2.50	Pass
0	3.3	R99	Band 2	1907.6	12.2	0.0081	-2.50	2.50	Pass
0	3.8	R99	Band 2	1852.4	12.2	0.0051	-2.50	2.50	Pass
0	3.8	R99	Band 2	1880.0	12.2	0.0089	-2.50	2.50	Pass
0	3.8	R99	Band 2	1907.6	12.2	0.0070	-2.50	2.50	Pass
0	4.2	R99	Band	1852.4	12.2	0.0037	-2.50	2.50	Pass

			2						
0	4.2	R99	Band 2	1880.0	12.2	0.0074	-2.50	2.50	Pass
0	4.2	R99	Band 2	1907.6	12.2	0.0084	-2.50	2.50	Pass
10	3.3	R99	Band 2	1852.4	12.2	0.0051	-2.50	2.50	Pass
10	3.3	R99	Band 2	1880.0	12.2	0.0069	-2.50	2.50	Pass
10	3.3	R99	Band 2	1907.6	12.2	0.0089	-2.50	2.50	Pass
10	3.8	R99	Band 2	1852.4	12.2	0.0108	-2.50	2.50	Pass
10	3.8	R99	Band 2	1880.0	12.2	0.0039	-2.50	2.50	Pass
10	3.8	R99	Band 2	1907.6	12.2	0.0071	-2.50	2.50	Pass
10	4.2	R99	Band 2	1852.4	12.2	0.0068	-2.50	2.50	Pass
10	4.2	R99	Band 2	1880.0	12.2	0.0063	-2.50	2.50	Pass
10	4.2	R99	Band 2	1907.6	12.2	0.0056	-2.50	2.50	Pass
20	3.3	R99	Band 2	1852.4	12.2	0.0051	-2.50	2.50	Pass
20	3.3	R99	Band 2	1880.0	12.2	0.0099	-2.50	2.50	Pass
20	3.3	R99	Band 2	1907.6	12.2	0.0089	-2.50	2.50	Pass
20	3.8	R99	Band 2	1852.4	12.2	0.0058	-2.50	2.50	Pass
20	3.8	R99	Band 2	1880.0	12.2	0.0054	-2.50	2.50	Pass
20	3.8	R99	Band 2	1907.6	12.2	0.0042	-2.50	2.50	Pass
20	4.2	R99	Band 2	1852.4	12.2	0.0058	-2.50	2.50	Pass
20	4.2	R99	Band 2	1880.0	12.2	0.0087	-2.50	2.50	Pass
20	4.2	R99	Band 2	1907.6	12.2	0.0057	-2.50	2.50	Pass
30	3.3	R99	Band 2	1852.4	12.2	0.0052	-2.50	2.50	Pass
30	3.3	R99	Band 2	1880.0	12.2	0.0060	-2.50	2.50	Pass
30	3.3	R99	Band 2	1907.6	12.2	0.0063	-2.50	2.50	Pass
30	3.8	R99	Band 2	1852.4	12.2	0.0073	-2.50	2.50	Pass
30	3.8	R99	Band 2	1880.0	12.2	0.0042	-2.50	2.50	Pass
30	3.8	R99	Band 2	1907.6	12.2	0.0092	-2.50	2.50	Pass
30	4.2	R99	Band 2	1852.4	12.2	0.0056	-2.50	2.50	Pass
30	4.2	R99	Band 2	1880.0	12.2	0.0083	-2.50	2.50	Pass
30	4.2	R99	Band 2	1907.6	12.2	0.0110	-2.50	2.50	Pass
40	3.3	R99	Band 2	1852.4	12.2	0.0065	-2.50	2.50	Pass
40	3.3	R99	Band 2	1880.0	12.2	0.0075	-2.50	2.50	Pass
40	3.3	R99	Band 2	1907.6	12.2	0.0070	-2.50	2.50	Pass
40	3.8	R99	Band 2	1852.4	12.2	0.0057	-2.50	2.50	Pass
40	3.8	R99	Band 2	1880.0	12.2	0.0054	-2.50	2.50	Pass
40	3.8	R99	Band 2	1907.6	12.2	0.0076	-2.50	2.50	Pass
40	4.2	R99	Band 2	1852.4	12.2	0.0028	-2.50	2.50	Pass
40	4.2	R99	Band 2	1880.0	12.2	0.0077	-2.50	2.50	Pass
40	4.2	R99	Band 2	1907.6	12.2	0.0079	-2.50	2.50	Pass

50	3.3	R99	Band 2	1852.4	12.2	0.0065	-2.50	2.50	Pass
50	3.3	R99	Band 2	1880.0	12.2	0.0086	-2.50	2.50	Pass
50	3.3	R99	Band 2	1907.6	12.2	0.0092	-2.50	2.50	Pass
50	3.8	R99	Band 2	1852.4	12.2	0.0078	-2.50	2.50	Pass
50	3.8	R99	Band 2	1880.0	12.2	0.0075	-2.50	2.50	Pass
50	3.8	R99	Band 2	1907.6	12.2	0.0082	-2.50	2.50	Pass
50	4.2	R99	Band 2	1852.4	12.2	0.0042	-2.50	2.50	Pass
50	4.2	R99	Band 2	1880.0	12.2	0.0097	-2.50	2.50	Pass
50	4.2	R99	Band 2	1907.6	12.2	0.0080	-2.50	2.50	Pass