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QPSK-Modulation ANT3			
	2200	-28.83	compliant
QPSK-Modulation ANT4			
	2200	-28.74	compliant
64QAM-Modulation ANT1			
	2200	-28.70	compliant
64QAM-Modulation ANT2			
	2200	-28.67	compliant
64QAM-Modulation ANT3			
	2200	-28.70	compliant
64QAM-Modulation ANT4			
	2200	-28.12	compliant
16QAM-Modulation ANT1			
	2200	-29.35	compliant
16QAM-Modulation ANT2			
	2200	-28.52	compliant
16QAM-Modulation ANT3			
	2200	-28.50	compliant
16QAM-Modulation ANT4			
	2200	-28.76	compliant
256QAM-Modulation ANT1			
	2200	-28.80	compliant
256QAM-Modulation ANT2			
	2200	-28.59	compliant
256QAM-Modulation ANT3			
	2200	-28.56	compliant
256QAM-Modulation ANT4			
	2200	-28.73	compliant
Measurement Uncertainty:		$f < 1.0\text{GHz}$: $\pm 1.1\text{dB}$, $1.0\text{GHz} \leq f < 3.6\text{GHz}$: $\pm 1.2\text{dB}$, $3.6\text{GHz} \leq f < 8.0\text{GHz}$: $\pm 1.6\text{dB}$, $8.0\text{GHz} \leq f$: $\pm 1.9\text{dB}$	

Table 89 Spurious Emissions (Upper band edge) (15 MHz CH BW)

Config C Spurious emissions:



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Carrier Frequency: 2115 MHz			
Frequency Range [MHz]	Emission Frequency [MHz]	Maximum Emission Level [dBm]	Result
QPSK-Modulation ANT1			
0.009 – 22000	21838	-20.92	compliant
QPSK-Modulation ANT2			
0.009 – 22000	21836	-20.36	compliant
QPSK-Modulation ANT3			
0.009 – 22000	21845	-20.15	compliant
QPSK-Modulation ANT4			
0.009 – 22000	21836	-20.73	compliant
64QAM-Modulation ANT1			
0.009 – 22000	21844	-20.68	compliant
64QAM-Modulation ANT2			
0.009 – 22000	21836	-20.12	compliant
64QAM-Modulation ANT3			
0.009 – 22000	21839	-20.31	compliant
64QAM-Modulation ANT4			
0.009 – 22000	21837	-20.61	compliant
16QAM-Modulation ANT1			
0.009 – 22000	21825	-20.89	compliant
16QAM-Modulation ANT2			
0.009 – 22000	21838	-20.42	compliant
16QAM-Modulation ANT3			
0.009 – 22000	21832	-20.32	compliant
16QAM-Modulation ANT4			
0.009 – 22000	21837	-20.61	compliant
256QAM-Modulation ANT1			
0.009 – 22000	21835	-20.60	compliant
256QAM-Modulation ANT2			
0.009 – 22000	21846	-20.5	compliant
256QAM-Modulation ANT3			
0.009 – 22000	21841	-20.61	compliant
256QAM-Modulation ANT4			
0.009 – 22000	21823	-20.78	compliant
Measurement Uncertainty:		$f < 1.0\text{GHz}$: $\pm 1.1\text{dB}$, $1.0\text{GHz} \leq f < 3.6\text{GHz}$: $\pm 1.2\text{dB}$, $3.6\text{GHz} \leq f < 8.0\text{GHz}$: $\pm 1.6\text{dB}$,	



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8.0GHz ≤ f: ±1.9dB

Table 20 Spurious Emissions (15 MHz CH BW)**Config D Lower band edge:**

Carrier Frequency: 2120 MHz			
Frequency Range [MHz]	Emission Frequency [MHz]	Maximum Emission Level [dBm]	Result
QPSK-Modulation ANT1	2110	-32.23	compliant
QPSK-Modulation ANT2	2110	-31.76	compliant
QPSK-Modulation ANT3	2110	-31.60	compliant
QPSK-Modulation ANT4	2110	-31.43	compliant
64QAM-Modulation ANT1	2110	-31.82	compliant
64QAM-Modulation ANT2	2110	-31.71	compliant
64QAM-Modulation ANT3	2110	-31.81	compliant
64QAM-Modulation ANT4	2110	-31.25	compliant
16QAM-Modulation ANT1	2110	-31.76	compliant
16QAM-Modulation ANT2	2110	-31.51	compliant
16QAM-Modulation ANT3	2110	-31.54	compliant
16QAM-Modulation ANT4	2110	-31.50	compliant
256QAM-Modulation ANT1	2110	-31.71	compliant
256QAM-Modulation ANT2	2110	-31.59	compliant
256QAM-Modulation ANT3			



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	2110	-31.41	compliant
256QAM-Modulation ANT4			
	2110	-31.28	compliant
Measurement Uncertainty: $f < 1.0\text{GHz}$: $\pm 1.1\text{dB}$, $1.0\text{GHz} \leq f < 3.6\text{GHz}$: $\pm 1.2\text{dB}$, $3.6\text{GHz} \leq f < 8.0\text{GHz}$: $\pm 1.6\text{dB}$, $8.0\text{GHz} \leq f$: $\pm 1.9\text{dB}$			

Table 21 Spurious Emissions (Lower band edge) (20 MHz CH BW)**Config D Upper band edge:**

Carrier Frequency: 2190 MHz			
Frequency Range [MHz]	Emission Frequency [MHz]	Maximum Emission Level [dBm]	Result
QPSK-Modulation ANT1			
	2200	-31.59	compliant
QPSK-Modulation ANT2			
	2200	-31.11	compliant
QPSK-Modulation ANT3			
	2200	-30.93	compliant
QPSK-Modulation ANT4			
	2200	-30.77	compliant
64QAM-Modulation ANT1			
	2200	-31.52	compliant
64QAM-Modulation ANT2			
	2200	-31.08	compliant
64QAM-Modulation ANT3			
	2200	-31.06	compliant
64QAM-Modulation ANT4			
	2200	-30.80	compliant
16QAM-Modulation ANT1			
	2200	-31.66	compliant
16QAM-Modulation ANT2			
	2200	-31.11	compliant
16QAM-Modulation ANT3			
	2200	-30.86	compliant
16QAM-Modulation ANT4			
	2200	-30.88	compliant



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256QAM-Modulation ANT1			
	2200	-31.63	compliant
256QAM-Modulation ANT2			
	2200	-31.73	compliant
256QAM-Modulation ANT3			
	2200	-31.06	compliant
256QAM-Modulation ANT4			
	2200	-30.75	compliant
Measurement Uncertainty:		$f < 1.0\text{GHz}$: $\pm 1.1\text{dB}$, $1.0\text{GHz} \leq f < 3.6\text{GHz}$: $\pm 1.2\text{dB}$, $3.6\text{GHz} \leq f < 8.0\text{GHz}$: $\pm 1.6\text{dB}$, $8.0\text{GHz} \leq f$: $\pm 1.9\text{dB}$	

Table 22 Spurious Emissions (Upper band edge) (20 MHz CH BW)**Config D Spurious emissions:**

Carrier Frequency: 2155 MHz			
Frequency Range [MHz]	Emission Frequency [MHz]	Maximum Emission Level [dBm]	Result
QPSK-Modulation ANT1			
0.009 – 22000	21831	-20.67	compliant
QPSK-Modulation ANT2			
0.009 – 22000	21840	-20.37	compliant
QPSK-Modulation ANT3			
0.009 – 22000	21832	-20.39	compliant
QPSK-Modulation ANT4			
0.009 – 22000	21839	-20.17	compliant
64QAM-Modulation ANT1			
0.009 – 22000	21836	-20.95	compliant
64QAM-Modulation ANT2			
0.009 – 22000	21830	-20.61	compliant
64QAM-Modulation ANT3			
0.009 – 22000	21843	-20.36	compliant
64QAM-Modulation ANT4			
0.009 – 22000	21843	-20.42	compliant
16QAM-Modulation ANT1			
0.009 – 22000	21848	-20.83	compliant
16QAM-Modulation ANT2			
0.009 – 22000	21829	-20.57	compliant



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16QAM-Modulation ANT3			
0.009 – 22000	21848	-20.57	compliant
16QAM-Modulation ANT4			
0.009 – 22000	21839	-20.54	compliant
256QAM-Modulation ANT1			
0.009 – 22000	21834	-20.83	compliant
256QAM-Modulation ANT2			
0.009 – 22000	21839	-20.28	compliant
256QAM-Modulation ANT3			
0.009 – 22000	21847	-20.05	compliant
256QAM-Modulation ANT4			
0.009 – 22000	21830	-20.18	compliant
Measurement Uncertainty:		$f < 1.0\text{GHz}$: $\pm 1.1\text{dB}$, $1.0\text{GHz} \leq f < 3.6\text{GHz}$: $\pm 1.2\text{dB}$, $3.6\text{GHz} \leq f < 8.0\text{GHz}$: $\pm 1.6\text{dB}$, $8.0\text{GHz} \leq f$: $\pm 1.9\text{dB}$	

Table 23 Spurious Emissions (20 MHz CH BW)

The measured conducted emission levels were found to be compliant with the manufacturer's specifications and with all requirements of the FCC rules.



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4.5 Test No. 5: Field Strength of Spurious Radiation (§ 2.1053, § 2.1057, § 27.53)

4.5.1. Limits

§27.53 para. No. 27.53(m) For BRS and EBS stations, the power of any emissions outside the licensee's frequency bands of operation shall be attenuated below the transmitter power (P) measured in watts.

(m)(2) For digital base stations, the attenuation shall be not less than $43 + 10 \log (P)$ dB (P = transmitter power in Watts).

The compliance limit was calculated in the following way:

Transmitter output power [W]: P

Transmitter output power [dBm]: $30 + 10 \log P$ (conversion from W to dBm)

Required attenuation: $40 + 10 \log P$

Compliance limit = Transmitter output power – Required attenuation

$$= 30 + 10 \log P - (40 + 10 \log P) = -10 \log P = -13 \text{ dBm}$$

The limit of -13 dBm has been calculated to correspond 84.4 dB(μ V/m).

4.5.2. Test Configuration

The measurements were performed in an anechoic chamber. The radiated test site complies with the site attenuation requirements listed in ANSI C63.4 2014 and is listed with the FCC and registered with the IC.

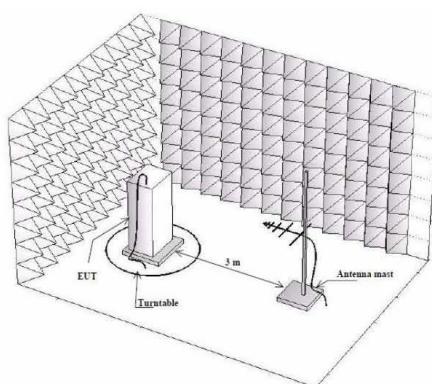


Figure 2 Test Configuration

Photographs of the EUT in the anechoic chamber are shown on page 120 of this measurement report.



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4.5.3. Test Procedure and Results

TIA-603-D-2010, Section 2.2.6

The test was performed in a semi-anechoic shielded room. The EUT was placed on a non-conductive 0.8 m high table standing on the turntable. During the test in the frequency range 30 - 22000MHz the distance from the EUT to the measuring antenna was 3 m. In order to find the maximum levels of the disturbance radiation the angle of the turntable, the height of the measuring antenna were varied during the tests. The test was performed with the measuring antenna being both in horizontal and vertical polarizations.

Vertical and horizontal polarizations in the frequency range 30 - 22000 MHz was first measured by using the peak detector. During the peak detector scan the turntable was rotated from 0° to 360° with 30° step with the antenna heights 1.0 m and 2.5 m.

The limit of -13 dBm has been calculated to correspond 84.4 dB (μ V/m). Spurious emissions closer than 20 dB to the limit was measured with average detector.

According to § 2.1057, all emissions from the lowest radio frequency generated in the equipment, without going below 9 kHz, up to the 10th harmonic were investigated.

The antenna substitution method was used to determine the equivalent radiated power at spurious frequencies. The EUT was replaced with a reference substitution antenna with a known gain referenced to an isotropic radiator $G_{Antenna[dBi]}$. This antenna was fed with a signal at the spurious frequency $P_{Gen[dBm]}$. The level of the signal was adjusted to repeat the previously measured level. The resulting

EIRP is the signal level fed to the reference antenna corrected for gain referenced to an isotropic.

The formula below was used to calculate the EIRP of the EUT.

$$P_{EIRP[dBm]} = P_{Gen[dBm]} - L_{Cable[dB]} + G_{Antenna[dBi]}$$

Worst case detected emission levels are reported in the following table (refer to spectral plots included on pages 120 for details). The antenna factor and cable loss is according to the manufacturer's specification.

Measured laboratory room temperature and humidity during the tests				
Date	Temperature Min-Max:		Humidity Min-Max:	
28. – 31. March 19	21.7 °C	24.1 °C	16.2 RH%	22.1 RH%

Config A, B, C, D:

Carrier Frequency: 2155MHz			
Frequency Range [MHz]	Frequency Range [MHz]	Frequency Range [MHz]	Frequency Range [MHz]
QPSK-Modulation TX1			
30 - 22000	More than 20dB below limit -13dBm		Compliant



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Measurement Uncertainty:	±5.4dB
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Table 24 Field Strength of Spurious Radiation (5 MHz Channel BW)

The measured emission levels were found to be compliant with the manufacturer's specifications and with all requirements of the FCC rules.

4.6 Test No. 6: Frequency Stability (§ 2.1055, § 27.54)

4.6.1. Purpose

Frequency stability measurements were performed to verify that the frequency deviation of the emission stays within the licensee's frequency block under extreme temperature and voltage.

4.6.2. Limits

Para. No. 27.54 (-30 °C to +50 °C) and supply voltage conditions according to § 2.1055.

4.6.3. Test Configuration

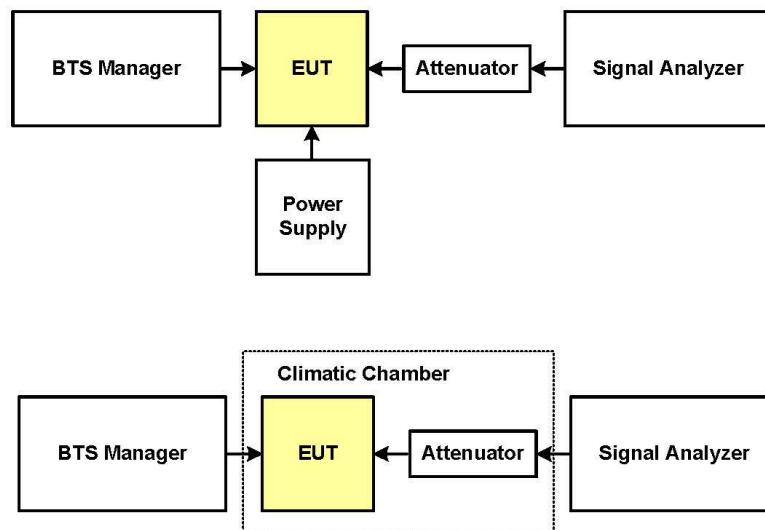


Figure 3 Test Configuration for voltage- and frequency stability with temperature variation



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A complete list of the measurement equipment is included on page 62 of this measurement report.

4.6.4. Test Procedure and Results

Frequency Stability with Temperature Variation:

The supply voltage of the EUT was set to the nominal value and the temperature of the environmental chamber was varied in 10 degree steps from -30 degrees Celsius to +50 degrees Celsius. The EUT was allowed to stabilize 60 min. at each temperature and the frequency error was measured.

Config A:

Table 25 Frequency stability with temp. var. (5 MHz Channel BW)

Supply Voltage (DC) [V]	Ambient Temperature [°C]	Carrier Frequency: 2155 MHz		Manufacturer's Specification		Result
		[Hz]	[ppm]	[Hz]	[ppm]	
QPSK Modulation ANT1						
-48	-30	-5.510364863	-0.003	107	0.05	compliant
-48	-20	-2.768169361	-0.001	107	0.05	compliant
-48	-10	-3.454106336	-0.002	107	0.05	compliant
-48	0	-2.910135881	-0.001	107	0.05	compliant
-48	10	-3.483940018	-0.002	107	0.05	compliant
-48	30	3.348223036	0.002	107	0.05	compliant
-48	40	3.932747932	0.002	107	0.05	compliant
-48	50	-3.682951501	-0.002	107	0.05	compliant
QPSK Modulation ANT2						
-48	-30	3.380753333	0.002	107	0.05	compliant
-48	-20	-3.715701168	-0.002	107	0.05	compliant
-48	-10	-2.169241343	-0.001	107	0.05	compliant
-48	0	-3.582949284	-0.002	107	0.05	compliant
-48	10	2.396498312	0.001	107	0.05	compliant
-48	30	-4.288897617	-0.002	107	0.05	compliant
-48	40	1.772826217	0.001	107	0.05	compliant
-48	50	1.831148111	0.001	107	0.05	compliant
QPSK Modulation ANT3						
-48	-30	-3.593544534	-0.002	107	0.05	compliant
-48	-20	-4.123782855	-0.002	107	0.05	compliant
-48	-10	-3.839270939	-0.002	107	0.05	compliant
-48	0	-4.080446233	-0.002	107	0.05	compliant
-48	10	-4.790978419	-0.002	107	0.05	compliant
-48	30	-3.07881448	-0.001	107	0.05	compliant
-48	40	-2.128356209	-0.001	107	0.05	compliant
-48	50	-3.807481698	-0.002	107	0.05	compliant



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QPSK Modulation ANT4						
-48	-30	-4.016613675	-0.002	107	0.05	compliant
-48	-20	-3.6157258	-0.002	107	0.05	compliant
-48	-10	-3.589550033	-0.002	107	0.05	compliant
-48	0	-3.800779232	-0.002	107	0.05	compliant
-48	10	-3.588649852	-0.002	107	0.05	compliant
-48	30	3.514870768	0.002	107	0.05	compliant
-48	40	4.387276713	0.002	107	0.05	compliant
-48	50	-4.014150181	-0.002	107	0.05	compliant
64QAM Modulation ANT1						
-48	-30	-3.644307435	-0.002	107	0.05	compliant
-48	-20	4.748009378	0.002	107	0.05	compliant
-48	-10	2.441444522	0.001	107	0.05	compliant
-48	0	5.881198158	0.003	107	0.05	compliant
-48	10	1.956623892	0.001	107	0.05	compliant
-48	30	2.5423849	0.001	107	0.05	compliant
-48	40	1.788788832	0.001	107	0.05	compliant
-48	50	4.138982476	0.002	107	0.05	compliant
64QAM Modulation ANT2						
-48	-30	5.352465087	0.002	107	0.05	compliant
-48	-20	3.606045575	0.002	107	0.05	compliant
-48	-10	3.756642836	0.002	107	0.05	compliant
-48	0	3.225021064	0.001	107	0.05	compliant
-48	10	-2.612310927	-0.001	107	0.05	compliant
-48	30	4.747792409	0.002	107	0.05	compliant
-48	40	4.252635408	0.002	107	0.05	compliant
-48	50	3.038665382	0.001	107	0.05	compliant
64QAM Modulation ANT3						
-48	-30	4.543670366	0.002	107	0.05	compliant
-48	-20	2.378646604	0.001	107	0.05	compliant
-48	-10	4.648909962	0.002	107	0.05	compliant
-48	0	-4.011269775	-0.002	107	0.05	compliant
-48	10	4.310030927	0.002	107	0.05	compliant
-48	30	3.11088661	0.001	107	0.05	compliant
-48	40	2.628861257	0.001	107	0.05	compliant
-48	50	3.823646548	0.002	107	0.05	compliant
64QAM Modulation ANT4						
-48	-30	3.087011064	0.001	107	0.05	compliant
-48	-20	4.323474714	0.002	107	0.05	compliant
-48	-10	5.426091811	0.003	107	0.05	compliant
-48	0	3.002874655	0.001	107	0.05	compliant
-48	10	3.525852153	0.002	107	0.05	compliant
-48	30	3.743473208	0.002	107	0.05	compliant
-48	40	-3.757038357	-0.002	107	0.05	compliant
-48	50	-4.002502392	-0.002	107	0.05	compliant
16QAM Modulation ANT1						
-48	-30	3.219309147	0.001	107	0.05	compliant
-48	-20	-3.332064516	-0.002	107	0.05	compliant
-48	-10	-2.457718074	-0.001	107	0.05	compliant
-48	0	5.160284636	0.002	107	0.05	compliant
-48	10	-3.154224105	-0.001	107	0.05	compliant
-48	30	3.17627113	0.001	107	0.05	compliant
-48	40	-3.768958559	-0.002	107	0.05	compliant
-48	50	-4.781509488	-0.002	107	0.05	compliant
16QAM Modulation ANT2						
-48	-30	-4.328755313	-0.002	107	0.05	compliant



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-48	-20	-4.34875139	-0.002	107	0.05	compliant
-48	-10	-2.762364675	-0.001	107	0.05	compliant
-48	0	-2.663475025	-0.001	107	0.05	compliant
-48	10	-3.302229743	-0.002	107	0.05	compliant
-48	30	-3.876966366	-0.002	107	0.05	compliant
-48	40	-2.906020236	-0.001	107	0.05	compliant
-48	50	-4.002502392	-0.002	107	0.05	compliant
16QAM Modulation ANT3						
-48	-30	2.635588608	0.001	107	0.05	compliant
-48	-20	-3.687823482	-0.002	107	0.05	compliant
-48	-10	-2.3006626	-0.001	107	0.05	compliant
-48	0	-3.104937205	-0.001	107	0.05	compliant
-48	10	-3.553940041	-0.002	107	0.05	compliant
-48	30	-4.109490837	-0.002	107	0.05	compliant
-48	40	-2.807604906	-0.001	107	0.05	compliant
-48	50	2.832512255	0.001	107	0.05	compliant
16QAM Modulation ANT4						
-48	-30	-5.248354864	-0.002	107	0.05	compliant
-48	-20	-4.629601899	-0.002	107	0.05	compliant
-48	-10	-3.640264476	-0.002	107	0.05	compliant
-48	0	-3.400733694	-0.002	107	0.05	compliant
-48	10	-3.456007544	-0.002	107	0.05	compliant
-48	30	-3.747550654	-0.002	107	0.05	compliant
-48	40	2.601441083	0.001	107	0.05	compliant
-48	50	-3.764373832	-0.002	107	0.05	compliant
256QAM Modulation ANT1						
-48	-30	3.559545439	0.002	107	0.05	compliant
-48	-20	-3.73121904	-0.002	107	0.05	compliant
-48	-10	-2.457718074	-0.001	107	0.05	compliant
-48	0	-5.854813062	-0.003	107	0.05	compliant
-48	10	4.962944076	0.002	107	0.05	compliant
-48	30	-6.395967066	-0.003	107	0.05	compliant
-48	40	4.324291949	0.002	107	0.05	compliant
-48	50	-3.81147096	-0.002	107	0.05	compliant
256QAM Modulation ANT2						
-48	-30	3.751721961	0.002	107	0.05	compliant
-48	-20	2.528253535	0.001	107	0.05	compliant
-48	-10	3.118613677	0.001	107	0.05	compliant
-48	0	1.733035751	0.001	107	0.05	compliant
-48	10	-2.41913207	-0.001	107	0.05	compliant
-48	30	4.211110936	0.002	107	0.05	compliant
-48	40	2.949115005	0.001	107	0.05	compliant
-48	50	-3.663497191	-0.002	107	0.05	compliant
256QAM Modulation ANT3						
-48	-30	-5.155253311	-0.002	107	0.05	compliant
-48	-20	4.42221266	0.002	107	0.05	compliant
-48	-10	2.930420305	0.001	107	0.05	compliant
-48	0	-3.746187722	-0.002	107	0.05	compliant
-48	10	-5.441375688	-0.003	107	0.05	compliant
-48	30	-3.726941213	-0.002	107	0.05	compliant
-48	40	-2.810996957	-0.001	107	0.05	compliant
-48	50	-1.280811121	-0.001	107	0.05	compliant
256QAM Modulation ANT4						
-48	-30	-3.504604465	-0.002	107	0.05	compliant
-48	-20	-3.932686814	-0.002	107	0.05	compliant
-48	-10	-2.073346041	-0.001	107	0.05	compliant



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-48	0	1.535971096	0.001	107	0.05	compliant
-48	10	-3.687272983	-0.002	107	0.05	compliant
-48	30	3.916763817	0.002	107	0.05	compliant
-48	40	2.991699876	0.001	107	0.05	compliant
-48	50	2.89080228	0.001	107	0.05	compliant

Config B:**Table 26 Frequency stability with temp. var. (10 MHz Channel BW)**

Supply Voltage (DC) [V]	Ambient Temperature [°C]	Frequency Deviation		Manufacturer's Specification		Result
		[Hz]	[ppm]	[Hz]	[ppm]	
QPSK Modulation ANT1						
-48	-30	-4.649276671	-0.002	107	0.05	compliant
-48	-20	-3.817910183	-0.002	107	0.05	compliant
-48	-10	-2.93814519	-0.001	107	0.05	compliant
-48	0	-1.791475952	-0.001	107	0.05	compliant
-48	10	6.89137727	0.003	107	0.05	compliant
-48	30	2.027463852	0.001	107	0.05	compliant
-48	40	3.140825502	0.001	107	0.05	compliant
-48	50	2.479552495	0.001	107	0.05	compliant
QPSK Modulation ANT2						
-48	-30	-3.464493129	-0.002	107	0.05	compliant
-48	-20	-2.136219482	-0.001	107	0.05	compliant
-48	-10	-3.944797791	-0.002	107	0.05	compliant
-48	0	-4.436767049	-0.002	107	0.05	compliant
-48	10	-3.133395076	-0.001	107	0.05	compliant
-48	30	-4.572416365	-0.002	107	0.05	compliant
-48	40	2.369073991	0.001	107	0.05	compliant
-48	50	3.149622789	0.001	107	0.05	compliant
QPSK Modulation ANT3						
-48	-30	4.222150601	0.002	107	0.05	compliant
-48	-20	-3.41045321	-0.002	107	0.05	compliant
-48	-10	4.191020125	0.002	107	0.05	compliant
-48	0	-3.618915289	-0.002	107	0.05	compliant
-48	10	-3.182162254	-0.001	107	0.05	compliant
-48	30	-2.635185665	-0.001	107	0.05	compliant
-48	40	4.034051963	0.002	107	0.05	compliant
-48	50	-1.999599917	-0.001	107	0.05	compliant
QPSK Modulation ANT4						
-48	-30	-4.547612043	-0.002	107	0.05	compliant
-48	-20	-3.252579627	-0.002	107	0.05	compliant
-48	-10	4.719327553	0.002	107	0.05	compliant
-48	0	3.753913043	0.002	107	0.05	compliant
-48	10	-3.700195957	-0.002	107	0.05	compliant
-48	30	-2.71324694	-0.001	107	0.05	compliant
-48	40	-2.581579029	-0.001	107	0.05	compliant
-48	50	-3.942534677	-0.002	107	0.05	compliant
64QAM Modulation ANT1						



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-48	-30	4.604182905	0.002	107	0.05	compliant
-48	-20	-3.940680617	-0.002	107	0.05	compliant
-48	-10	2.75236991	0.001	107	0.05	compliant
-48	0	-3.782909189	-0.002	107	0.05	compliant
-48	10	-3.036527778	-0.001	107	0.05	compliant
-48	30	2.567693227	0.001	107	0.05	compliant
-48	40	-4.508051643	-0.002	107	0.05	compliant
-48	50	-2.625313355	-0.001	107	0.05	compliant
64QAM Modulation ANT2						
-48	-30	4.26728453	0.002	107	0.05	compliant
-48	-20	-1.940413204	-0.001	107	0.05	compliant
-48	-10	-1.536359196	-0.001	107	0.05	compliant
-48	0	-2.523598305	-0.001	107	0.05	compliant
-48	10	-3.193121811	-0.001	107	0.05	compliant
-48	30	-2.608415525	-0.001	107	0.05	compliant
-48	40	-3.303487465	-0.002	107	0.05	compliant
-48	50	5.443510454	0.003	107	0.05	compliant
64QAM Modulation ANT3						
-48	-30	2.76774088	0.001	107	0.05	compliant
-48	-20	-2.607702627	-0.001	107	0.05	compliant
-48	-10	-3.747005394	-0.002	107	0.05	compliant
-48	0	-2.876860381	-0.001	107	0.05	compliant
-48	10	-2.370006259	-0.001	107	0.05	compliant
-48	30	-6.130119727	-0.003	107	0.05	compliant
-48	40	1.870341584	0.001	107	0.05	compliant
-48	50	2.985877509	0.001	107	0.05	compliant
64QAM Modulation ANT4						
-48	-30	-2.340782448	-0.001	107	0.05	compliant
-48	-20	2.655366625	-0.001	107	0.05	compliant
-48	-10	4.874607112	0.002	107	0.05	compliant
-48	0	-2.684822248	-0.001	107	0.05	compliant
-48	10	-2.837376378	-0.001	107	0.05	compliant
-48	30	-2.393018949	-0.001	107	0.05	compliant
-48	40	-2.738397015	-0.001	107	0.05	compliant
-48	50	1.741825181	0.001	107	0.05	compliant
16QAM Modulation ANT1						
-48	-30	2.980773279	0.001	107	0.05	compliant
-48	-20	-4.892989236	-0.002	107	0.05	compliant
-48	-10	3.510575043	0.002	107	0.05	compliant
-48	0	-4.291409568	-0.002	107	0.05	compliant
-48	10	-2.47997421	-0.001	107	0.05	compliant
-48	30	2.018618106	0.001	107	0.05	compliant
-48	40	3.844359453	0.002	107	0.05	compliant
-48	50	-2.95998354	-0.001	107	0.05	compliant
16QAM Modulation ANT2						
-48	-30	-2.602563472	-0.001	107	0.05	compliant
-48	-20	2.249734898	0.001	107	0.05	compliant
-48	-10	-3.11169817	-0.001	107	0.05	compliant
-48	0	-2.684163919	-0.001	107	0.05	compliant
-48	10	3.914918489	0.002	107	0.05	compliant
-48	30	1.680060814	0.001	107	0.05	compliant
-48	40	3.499065206	-0.002	107	0.05	compliant
-48	50	-2.201865282	-0.001	107	0.05	compliant
16QAM Modulation ANT3						
-48	-30	4.754174442	0.002	107	0.05	compliant
-48	-20	5.90048614	0.003	107	0.05	compliant