



Product Service

FCC ID: VBNAHIIIB-01  
 IC ID: 661AI-AHHB

Test Report No:  
D564660096

	$1.0\text{GHz} \leq f < 3.6\text{GHz}$ : $\pm 1.2\text{dB}$ , $3.6\text{GHz} \leq f < 8.0\text{GHz}$ : $\pm 1.6\text{dB}$ , $8.0\text{GHz} \leq f$ : $\pm 1.9\text{dB}$
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**Table 40 Spurious Emissions (15+15MHz CII BW)****Config H Lower band edge:**

Carrier Frequency: 2620 / 2650 MHz			
Frequency Range [MHz]	Emission Frequency [MHz]	Maximum Emission Level [dBm]	Result
QPSK-Modulation ANT1			
	2620	-21.30	compliant
QPSK-Modulation ANT2			
	2620	-21.09	compliant
QPSK-Modulation ANT3			
	2620	-21.62	compliant
QPSK-Modulation ANT4			
	2620	-20.87	compliant
16QAM-Modulation ANT1			
	2620	-21.42	compliant
16QAM-Modulation ANT2			
	2620	-20.84	compliant
16QAM-Modulation ANT3			
	2620	-22.10	compliant
16QAM-Modulation ANT4			
	2620	-22.04	compliant
64QAM-Modulation ANT1			
	2620	-21.25	compliant
64QAM-Modulation ANT2			
	2620	-21.37	compliant
64QAM-Modulation ANT3			
	2620	-22.84	compliant
64QAM-Modulation ANT4			
	2620	-22.14	compliant
256QAM-Modulation ANT1			
	2620	-21.08	compliant



FCC ID: VBNAHIIIB-01  
 IC ID: 661AI-AHHB

Test Report No:  
D564660096

256QAM-Modulation ANT2			
	2620	-21.76	compliant
256QAM-Modulation ANT3			
	2620	-22.72	compliant
256QAM-Modulation ANT4			
	2620	-22.14	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 41 Spurious Emissions (Lower band edge) (20+20MHz CII BW)**

**Config II Upper band edge:**

Carrier Frequency: 2670 / 2680 MHz			
Frequency Range [MHz]	Emission Frequency [MHz]	Maximum Emission Level [dBm]	Result
QPSK-Modulation ANT1			
	2690	-22.55	compliant
QPSK-Modulation ANT2			
	2690	-21.16	compliant
QPSK-Modulation ANT3			
	2690	-22.27	compliant
QPSK-Modulation ANT4			
	2690	-21.45	compliant
16QAM-Modulation ANT1			
	2690	-21.07	compliant
16QAM-Modulation ANT2			
	2690	-21.22	compliant
16QAM-Modulation ANT3			
	2690	-22.22	compliant
16QAM-Modulation ANT4			
	2690	-21.54	compliant
64QAM-Modulation ANT1			
	2690	-21.06	compliant
64QAM-Modulation ANT2			
	2690	-21.43	compliant



Product Service

FCC ID: VBNAHIIIB-01  
 IC ID: 661AI-AHHB

Test Report No:  
D564660096

64QAM-Modulation ANT3			
	2690	-22.67	compliant
64QAM-Modulation ANT4			
	2690	-21.63	compliant
256QAM-Modulation ANT1			
	2690	-21.63	compliant
256QAM-Modulation ANT2			
	2690	-21.10	compliant
256QAM-Modulation ANT3			
	2690	-21.07	compliant
256QAM-Modulation ANT4			
	2690	-21.48	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 42 Spurious Emissions (Upper band edge) (20+20MHz CH BW)****Config H Spurious emissions:**

Carrier Frequency: 2635 / 2675 MHz			
Frequency Range [MHz]	Emission Frequency [MHz]	Maximum Emission Level [dBm]	Result
QPSK-Modulation ANT1			
0.009 – 26900	21624	-24.49	compliant
QPSK-Modulation ANT2			
0.009 – 26900	21625	-24.32	compliant
QPSK-Modulation ANT3			
0.009 – 26900	21624	-24.21	compliant
QPSK-Modulation ANT4			
0.009 – 26900	2676	-24.24	compliant
16QAM-Modulation ANT1			
0.009 – 26900	21624	-24.54	compliant
16QAM-Modulation ANT2			
0.009 – 26900	21625	-24.47	compliant
16QAM-Modulation ANT3			
0.009 – 26900	21625	-24.43	compliant
16QAM-Modulation ANT4			
0.009 – 26900	21629	-24.56	compliant

FCC 47 CFR part 27 (2017)  
 Industry Canada RSS-199  
 (2016)

30. April 2018  
 Page 72 of 301



Product Service

FCC ID: VBNAHIIIB-01  
 IC ID: 661AI-AHHB

Test Report No:  
D564660096

64QAM-Modulation ANT1			
0.009 – 26900	21624	-24.33	compliant
64QAM-Modulation ANT2			
0.009 – 26900	21627	-24.51	compliant
64QAM-Modulation ANT3			
0.009 – 26900	21624	-24.48	compliant
64QAM-Modulation ANT4			
0.009 – 26900	21626	-24.35	compliant
256QAM-Modulation ANT1			
0.009 – 26900	21625	-34.61	compliant
256QAM-Modulation ANT2			
0.009 – 26900	21627	-24.46	compliant
256QAM-Modulation ANT3			
0.009 – 26900	21624	-24.35	compliant
256QAM-Modulation ANT4			
0.009 – 26900	21626	-24.24	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 43 Spurious Emissions (20+20MHz CH BW)**

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



FCC ID: VBNAHHB-01  
 IC ID: 661AI-AHHB

Test Report No:  
D564660096

#### **4.5 Test No. 5: Field Strength of Spurious Radiation (§ 2.1053, § 2.1057, § 27.53, RSS-199)**

##### **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).

RSS-199 clause 4.5 the power of any unwanted emissions from the channel edge of the equipment shall be attenuated below the transmitter output power by at least  $43 + 10 \log P$  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:  $40 + 10 \log P$

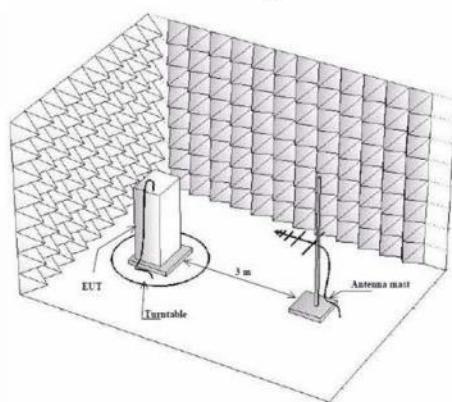
Compliance limit = Transmitter output power – Required attenuation

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

The limit of -10 dBm has been calculated to correspond 84.4 dB( $\mu$ 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**



FCC ID: VBNAHIIIB-01  
 IC ID: 661AI-AHHB

Test Report No:  
D564660096

Photographs of the EUT in the anechoic chamber are shown on page 229 of this measurement report.

#### 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 - 26900MHz 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 - 26900 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 ( $\mu$ 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 229 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:	
26. – 28. February 18	20.9 °C	22.5 °C	26. – 28. February	20.9 °C



Product Service

FCC ID: VBNAHIIIB-01  
 IC ID: 661AI-AHHB

Test Report No:  
D564660096

**Config A, B, C, D, E, F, G, H:**

Carrier Frequency: 2655MHz			
Frequency Range [MHz]	Frequency Range [MHz]	Frequency Range [MHz]	Frequency Range [MHz]
QPSK-Modulation TX1			
30 - 26900	More than 20dB below limit -13dBm	Compliant	
Measurement Uncertainty:			Measurement Uncertainty:

**Table 44 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.



FCC ID: VBNAHHB-01  
 IC ID: 661AI-AHHB

Test Report No:  
 D564660096

#### 4.6 Test No. 6: Frequency Stability (§ 2.1055, § 27.54, RSS-199, RSS-Gen)

##### 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.

RSS-Gen para. no. 6.11:

- (a) at temperatures of -30°C, +20°C and +50°C, and at the manufacturer's rated supply voltage; and
- (b) at 85% and 115% of the manufacturer's rated supply voltage, when the temperature is at +20°C.

##### 4.6.3. Test Configuration

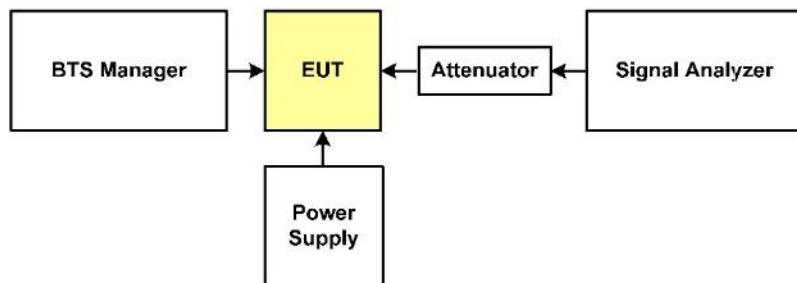


Figure 3 Test Configuration for frequency stability with voltage variation

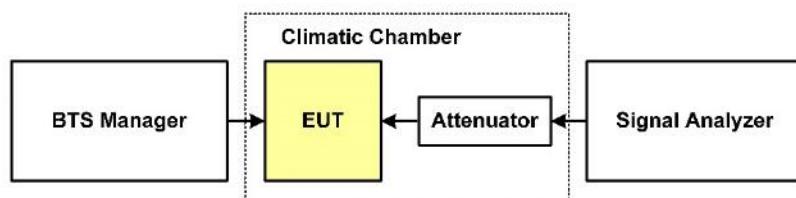


Figure 4 Test Configuration for frequency stability with temperature variation



Product Service

FCC ID: VBNAHIIIB-01  
 IC ID: 661AI-AHHB

Test Report No:  
D564660096

A complete list of the measurement equipment is included on page 1022 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:

Supply Voltage (AC) [V]	Ambient Temperature [°C]	Frequency Deviation		Manufacturer's Specification		Result
		[Hz]	[ppm]	[Hz]	[ppm]	
<b>QPSK Modulation ANT1</b>						
120	-30	-4.37343	-0.002	133	0.05	compliant
120	-20	3.34802	0.001	133	0.05	compliant
120	-10	6.60917	0.002	133	0.05	compliant
120	0	5.59081	0.002	133	0.05	compliant
120	10	-5.44136	-0.002	133	0.05	compliant
120	30	-4.53109	-0.002	133	0.05	compliant
120	40	-4.75610	-0.002	133	0.05	compliant
120	50	-5.20049	-0.002	133	0.05	compliant
<b>QPSK Modulation ANT2</b>						
120	-30	-6.23096	-0.002	133	0.05	compliant
120	-20	-4.39010	-0.002	133	0.05	compliant
120	-10	-5.73776	-0.002	133	0.05	compliant
120	0	-6.58593	-0.002	133	0.05	compliant
120	10	-4.88938	-0.002	133	0.05	compliant
120	30	-5.81250	-0.002	133	0.05	compliant
120	40	-5.60159	-0.002	133	0.05	compliant
120	50	4.64146	0.002	133	0.05	compliant
<b>QPSK Modulation ANT3</b>						
120	-30	-3.62275	-0.001	133	0.05	compliant
120	-20	-5.21259	-0.002	133	0.05	compliant
120	-10	-5.91261	-0.002	133	0.05	compliant
120	0	-8.47899	-0.003	133	0.05	compliant
120	10	5.93617	0.002	133	0.05	compliant
120	30	-6.81515	-0.003	133	0.05	compliant
120	40	-6.06940	-0.002	133	0.05	compliant
120	50	-4.65716	-0.002	133	0.05	compliant
<b>QPSK Modulation ANT4</b>						
120	-30	-7.58204	-0.003	133	0.05	compliant
120	-20	-5.82320	-0.002	133	0.05	compliant



Product Service

FCC ID: VBNAHIIIB-01  
 IC ID: 661AI-AHHB

Test Report No:  
 D564660096

120	-10	-3.57549	-0.001	133	0.05	compliant
120	0	-6.30400	-0.002	133	0.05	compliant
120	10	3.47444	0.001	133	0.05	compliant
120	30	6.67629	0.003	133	0.05	compliant
120	40	-5.75204	-0.002	133	0.05	compliant
120	50	-6.34927	-0.002	133	0.05	compliant
<b>16QAM Modulation ANT1</b>						
120	-30	-6.61509	-0.002	133	0.05	compliant
120	-20	-6.94106	-0.003	133	0.05	compliant
120	-10	-6.54486	-0.002	133	0.05	compliant
120	0	-5.54666	-0.002	133	0.05	compliant
120	10	5.78763	0.002	133	0.05	compliant
120	30	-3.81019	-0.001	133	0.05	compliant
120	40	-5.16722	-0.002	133	0.05	compliant
120	50	-5.30898	-0.002	133	0.05	compliant
<b>16QAM Modulation ANT2</b>						
120	-30	-5.08130	-0.002	133	0.05	compliant
120	-20	-6.89852	-0.003	133	0.05	compliant
120	-10	-4.98119	-0.002	133	0.05	compliant
120	0	-5.68884	-0.002	133	0.05	compliant
120	10	-3.74173	-0.001	133	0.05	compliant
120	30	-5.04656	-0.002	133	0.05	compliant
120	40	-2.55602	-0.001	133	0.05	compliant
120	50	-6.71251	-0.003	133	0.05	compliant
<b>16QAM Modulation ANT3</b>						
120	-30	-5.84951	-0.002	133	0.05	compliant
120	-20	-4.61244	-0.002	133	0.05	compliant
120	-10	-6.18724	-0.002	133	0.05	compliant
120	0	6.07474	0.002	133	0.05	compliant
120	10	-4.24843	-0.002	133	0.05	compliant
120	30	-5.03389	-0.002	133	0.05	compliant
120	40	-6.23956	-0.002	133	0.05	compliant
120	50	-3.82195	-0.001	133	0.05	compliant
<b>16QAM Modulation ANT4</b>						
120	-30	-6.10843	-0.002	133	0.05	compliant
120	-20	-4.68998	-0.002	133	0.05	compliant
120	-10	-7.42265	-0.003	133	0.05	compliant
120	0	-4.46454	-0.002	133	0.05	compliant
120	10	-4.69472	-0.002	133	0.05	compliant
120	30	-7.22604	-0.003	133	0.05	compliant
120	40	-6.68488	-0.003	133	0.05	compliant
120	50	-4.76984	-0.002	133	0.05	compliant
<b>64QAM Modulation ANT1</b>						
120	-30	-5.35951	-0.002	133	0.05	compliant
120	-20	-5.29270	-0.002	133	0.05	compliant
120	-10	-7.72164	-0.003	133	0.05	compliant
120	0	-9.27568	-0.003	133	0.05	compliant
120	10	6.05241	0.002	133	0.05	compliant
120	30	5.26852	0.002	133	0.05	compliant
120	40	7.51417	0.003	133	0.05	compliant

FCC 47 CFR part 27 (2017)  
 Industry Canada RSS-199  
 (2016)

30. April 2018  
 Page 79 of 301



Product Service

FCC ID: VBNAHIIIB-01  
 IC ID: 661AI-AHHB

Test Report No:  
 D564660096

120	50	-4.38395	-0.002	133	0.05	compliant
<b>64QAM Modulation ANT2</b>						
120	-30	-7.91944	-0.003	133	0.05	compliant
120	-20	5.17241	0.002	133	0.05	compliant
120	-10	-5.43761	-0.002	133	0.05	compliant
120	0	6.59560	0.002	133	0.05	compliant
120	10	-8.18723	-0.003	133	0.05	compliant
120	30	6.15550	0.002	133	0.05	compliant
120	40	5.65139	0.002	133	0.05	compliant
120	50	5.93558	0.002	133	0.05	compliant
<b>64QAM Modulation ANT3</b>						
120	-30	-6.13473	-0.002	133	0.05	compliant
120	-20	6.55492	0.002	133	0.05	compliant
120	-10	-4.61393	-0.002	133	0.05	compliant
120	0	-7.22237	-0.003	133	0.05	compliant
120	10	5.14076	0.002	133	0.05	compliant
120	30	5.51902	0.002	133	0.05	compliant
120	40	4.74833	0.002	133	0.05	compliant
120	50	5.69882	0.002	133	0.05	compliant
<b>64QAM Modulation ANT4</b>						
120	-30	-5.13055	-0.002	133	0.05	compliant
120	-20	-5.86790	-0.002	133	0.05	compliant
120	-10	-4.99460	-0.002	133	0.05	compliant
120	0	-4.92136	-0.002	133	0.05	compliant
120	10	-6.05755	-0.002	133	0.05	compliant
120	30	-6.21518	-0.002	133	0.05	compliant
120	40	6.82437	0.003	133	0.05	compliant
120	50	-5.94113	-0.002	133	0.05	compliant
<b>256QAM Modulation ANT1</b>						
120	-30	-5.04397	-0.002	133	0.05	compliant
120	-20	6.90459	0.003	133	0.05	compliant
120	-10	-4.27954	-0.002	133	0.05	compliant
120	0	-5.67403	-0.002	133	0.05	compliant
120	10	-4.99922	-0.002	133	0.05	compliant
120	30	-3.74390	-0.001	133	0.05	compliant
120	40	-4.82548	-0.002	133	0.05	compliant
120	50	-7.91549	-0.003	133	0.05	compliant
<b>256QAM Modulation ANT2</b>						
120	-30	-3.40179	-0.001	133	0.05	compliant
120	-20	-5.62268	-0.002	133	0.05	compliant
120	-10	-6.63509	-0.002	133	0.05	compliant
120	0	-5.84252	-0.002	133	0.05	compliant
120	10	-3.88120	-0.001	133	0.05	compliant
120	30	-5.12545	-0.002	133	0.05	compliant
120	40	4.07290	0.002	133	0.05	compliant
120	50	-2.72460	-0.001	133	0.05	compliant
<b>256QAM Modulation ANT3</b>						
120	-30	-3.21871	-0.001	133	0.05	compliant
120	-20	-3.69337	-0.001	133	0.05	compliant
120	-10	3.96389	0.001	133	0.05	compliant



Product Service

FCC ID: VBNAHIIIB-01  
 IC ID: 661AI-AHHB

Test Report No:  
 D564660096

120	0	-5.22173	-0.002	133	0.05	compliant
120	10	-4.23356	-0.002	133	0.05	compliant
120	30	-5.18217	-0.002	133	0.05	compliant
120	40	-5.26932	-0.002	133	0.05	compliant
120	50	3.21288	0.001	133	0.05	compliant
<b>256QAM Modulation ANT4</b>						
120	-30	4.90541	0.002	133	0.05	compliant
120	-20	-4.09237	-0.002	133	0.05	compliant
120	-10	-6.57471	-0.002	133	0.05	compliant
120	0	-4.32966	-0.002	133	0.05	compliant
120	10	3.91247	0.001	133	0.05	compliant
120	30	-5.05478	-0.002	133	0.05	compliant
120	40	-5.28331	-0.002	133	0.05	compliant
120	50	-3.18261	-0.001	133	0.05	compliant

**Table 45 Frequency stability with temp. var. (5 MHz Channel BW)****Config B:**

Supply Voltage (AC) [V]	Ambient Temperature [°C]	Carrier Frequency: 2655 MHz		Manufacturer's Specification		Result
		[Hz]	[ppm]	[Hz]	[ppm]	
<b>QPSK Modulation ANT1</b>						
120	-30	-5.06107	-0.002	133	0.05	compliant
120	-20	-6.90211	-0.003	133	0.05	compliant
120	-10	-4.33752	-0.002	133	0.05	compliant
120	0	-8.36740	-0.003	133	0.05	compliant
120	10	-4.29348	-0.002	133	0.05	compliant
120	30	-4.42240	-0.002	133	0.05	compliant
120	40	4.01418	0.002	133	0.05	compliant
120	50	-5.11551	-0.002	133	0.05	compliant
<b>QPSK Modulation ANT2</b>						
120	-30	-6.11238	-0.002	133	0.05	compliant
120	-20	-6.20369	-0.002	133	0.05	compliant
120	-10	-7.23447	-0.003	133	0.05	compliant
120	0	-7.21428	-0.003	133	0.05	compliant
120	10	-4.20329	-0.002	133	0.05	compliant
120	30	-2.95630	-0.001	133	0.05	compliant
120	40	-5.73141	-0.002	133	0.05	compliant
120	50	-3.92736	-0.001	133	0.05	compliant
<b>QPSK Modulation ANT3</b>						
120	-30	4.12518	0.002	133	0.05	compliant
120	-20	-4.71249	-0.002	133	0.05	compliant
120	-10	-4.22539	-0.002	133	0.05	compliant
120	0	-3.96486	-0.001	133	0.05	compliant
120	10	-6.13894	-0.002	133	0.05	compliant
120	30	-6.30747	-0.002	133	0.05	compliant
120	40	-9.29780	-0.004	133	0.05	compliant
120	50	-3.51727	-0.001	133	0.05	compliant
<b>QPSK Modulation ANT4</b>						



Product Service

FCC ID: VBNAHIIIB-01  
 IC ID: 661AI-AHHB

Test Report No:  
 D564660096

120	-30	-5.49216	-0.002	133	0.05	compliant
120	-20	-4.27311	-0.002	133	0.05	compliant
120	-10	-4.95779	-0.002	133	0.05	compliant
120	0	-3.92165	-0.001	133	0.05	compliant
120	10	-2.50476	-0.001	133	0.05	compliant
120	30	-2.94193	-0.001	133	0.05	compliant
120	40	-6.49056	-0.002	133	0.05	compliant
120	50	-4.42112	-0.002	133	0.05	compliant
<b>16QAM Modulation ANT1</b>						
120	-30	-7.11530	-0.003	133	0.05	compliant
120	-20	-6.33081	-0.002	133	0.05	compliant
120	-10	-5.21084	-0.002	133	0.05	compliant
120	0	-4.45826	-0.002	133	0.05	compliant
120	10	-2.87656	-0.001	133	0.05	compliant
120	30	-4.76454	-0.002	133	0.05	compliant
120	40	-3.19815	-0.001	133	0.05	compliant
120	50	-3.86030	-0.001	133	0.05	compliant
<b>16QAM Modulation ANT2</b>						
120	-30	-6.25480	-0.002	133	0.05	compliant
120	-20	-5.26893	-0.002	133	0.05	compliant
120	-10	-4.28090	-0.002	133	0.05	compliant
120	0	2.88067	0.001	133	0.05	compliant
120	10	-5.36995	-0.002	133	0.05	compliant
120	30	-4.36930	-0.002	133	0.05	compliant
120	40	-2.87683	-0.001	133	0.05	compliant
120	50	-3.39719	-0.001	133	0.05	compliant
<b>16QAM Modulation ANT3</b>						
120	-30	2.18388	0.001	133	0.05	compliant
120	-20	-5.21224	-0.002	133	0.05	compliant
120	-10	-3.74335	-0.001	133	0.05	compliant
120	0	-4.37942	-0.002	133	0.05	compliant
120	10	-4.00309	-0.002	133	0.05	compliant
120	30	-4.86824	-0.002	133	0.05	compliant
120	40	-3.17151	-0.001	133	0.05	compliant
120	50	-5.31150	-0.002	133	0.05	compliant
<b>16QAM Modulation ANT4</b>						
120	-30	-4.24565	-0.002	133	0.05	compliant
120	-20	-6.39501	-0.002	133	0.05	compliant
120	-10	7.07673	0.003	133	0.05	compliant
120	0	-7.21526	-0.003	133	0.05	compliant
120	10	-3.27099	-0.001	133	0.05	compliant
120	30	-5.47167	-0.002	133	0.05	compliant
120	40	-5.53411	-0.002	133	0.05	compliant
120	50	-2.89028	-0.001	133	0.05	compliant
<b>64QAM Modulation ANT1</b>						
120	-30	-3.96874	-0.001	133	0.05	compliant
120	-20	-5.87096	-0.002	133	0.05	compliant
120	-10	-7.05977	-0.003	133	0.05	compliant
120	0	-4.04605	-0.002	133	0.05	compliant
120	10	-6.26538	-0.002	133	0.05	compliant



Product Service

FCC ID: VBNAHIIIB-01  
 IC ID: 661AI-AHHB

Test Report No:  
 D564660096

120	30	-4.86684	-0.002	133	0.05	compliant
120	40	-4.98909	-0.002	133	0.05	compliant
120	50	-3.77009	-0.001	133	0.05	compliant
<b>64QAM Modulation ANT2</b>						
120	-30	-7.48548	-0.003	133	0.05	compliant
120	-20	-6.34158	-0.002	133	0.05	compliant
120	-10	-5.00679	-0.002	133	0.05	compliant
120	0	-3.77016	-0.001	133	0.05	compliant
120	10	-4.46263	-0.002	133	0.05	compliant
120	30	-3.54319	-0.001	133	0.05	compliant
120	40	-7.10354	-0.003	133	0.05	compliant
120	50	-3.90430	-0.001	133	0.05	compliant
<b>64QAM Modulation ANT3</b>						
120	-30	-5.34486	-0.002	133	0.05	compliant
120	-20	-4.57795	-0.002	133	0.05	compliant
120	-10	-7.61686	-0.003	133	0.05	compliant
120	0	-5.89984	-0.002	133	0.05	compliant
120	10	-4.29840	-0.002	133	0.05	compliant
120	30	-4.48082	-0.002	133	0.05	compliant
120	40	-3.91448	-0.001	133	0.05	compliant
120	50	-2.08559	-0.001	133	0.05	compliant
<b>64QAM Modulation ANT4</b>						
120	-30	-2.87483	-0.001	133	0.05	compliant
120	-20	-4.75127	-0.002	133	0.05	compliant
120	-10	-4.84627	-0.002	133	0.05	compliant
120	0	-4.85254	-0.002	133	0.05	compliant
120	10	-5.60470	-0.002	133	0.05	compliant
120	30	-4.53682	-0.002	133	0.05	compliant
120	40	-4.35833	-0.002	133	0.05	compliant
120	50	-4.19915	-0.002	133	0.05	compliant
<b>256QAM Modulation ANT1</b>						
120	-30	-5.48178	-0.002	133	0.05	compliant
120	-20	-5.71401	-0.002	133	0.05	compliant
120	-10	-5.45115	-0.002	133	0.05	compliant
120	0	-5.69804	-0.002	133	0.05	compliant
120	10	-3.87056	-0.001	133	0.05	compliant
120	30	-5.99687	-0.002	133	0.05	compliant
120	40	-4.23013	-0.002	133	0.05	compliant
120	50	-4.56744	-0.002	133	0.05	compliant
<b>256QAM Modulation ANT2</b>						
120	-30	-5.41741	-0.002	133	0.05	compliant
120	-20	-6.08651	-0.002	133	0.05	compliant
120	-10	-3.28950	-0.001	133	0.05	compliant
120	0	4.54336	0.002	133	0.05	compliant
120	10	-4.48294	-0.002	133	0.05	compliant
120	30	-3.46562	-0.001	133	0.05	compliant
120	40	-3.46660	-0.001	133	0.05	compliant
120	50	-4.22141	-0.002	133	0.05	compliant
<b>256QAM Modulation ANT3</b>						
120	-30	-4.38754	-0.002	133	0.05	compliant



Product Service

FCC ID: VBNAHIIIB-01  
 IC ID: 661AI-AHHB

Test Report No:  
 D564660096

120	-20	-4.99623	-0.002	133	0.05	compliant
120	-10	-7.27762	-0.003	133	0.05	compliant
120	0	3.78771	0.001	133	0.05	compliant
120	10	-4.67631	-0.002	133	0.05	compliant
120	30	-5.98686	-0.002	133	0.05	compliant
120	40	2.96003	0.001	133	0.05	compliant
120	50	-5.30558	-0.002	133	0.05	compliant
256QAM Modulation ANT4						
120	-30	2.64696	0.001	133	0.05	compliant
120	-20	-4.19158	-0.002	133	0.05	compliant
120	-10	-5.74963	-0.002	133	0.05	compliant
120	0	-3.79834	-0.001	133	0.05	compliant
120	10	-5.83079	-0.002	133	0.05	compliant
120	30	-6.06415	-0.002	133	0.05	compliant
120	40	-4.22579	-0.002	133	0.05	compliant
120	50	-5.80650	-0.002	133	0.05	compliant

**Table 46 Frequency stability with temp. var. (10 MHz Channel BW)****Config C:**

Supply Voltage (AC) [V]	Ambient Temperature [°C]	Carrier Frequency: 2655 MHz		Manufacturer's Specification		Result
		[Hz]	[ppm]	[Hz]	[ppm]	
QPSK Modulation ANT1						
120	-30	15.38511	-0.002	133	0.05	compliant
120	-20	-6.61907	-0.002	133	0.05	compliant
120	-10	-5.22171	-0.002	133	0.05	compliant
120	0	-5.00321	-0.002	133	0.05	compliant
120	10	-6.43579	-0.002	133	0.05	compliant
120	30	-5.15586	-0.002	133	0.05	compliant
120	40	-5.21915	-0.001	133	0.05	compliant
120	50	-3.98193	-0.002	133	0.05	compliant
QPSK Modulation ANT2						
120	-30	12.25812	0.005	133	0.05	compliant
120	-20	-5.51865	-0.002	133	0.05	compliant
120	-10	-6.40458	-0.002	133	0.05	compliant
120	0	-6.85138	-0.003	133	0.05	compliant
120	10	-4.93962	-0.002	133	0.05	compliant
120	30	-4.27046	-0.002	133	0.05	compliant
120	40	-3.64180	-0.001	133	0.05	compliant
120	50	-5.74636	-0.002	133	0.05	compliant
QPSK Modulation ANT3						
120	-30	-5.61053	-0.002	133	0.05	compliant
120	-20	-3.03314	-0.001	133	0.05	compliant
120	-10	-4.43354	-0.002	133	0.05	compliant
120	0	-4.98097	-0.002	133	0.05	compliant
120	10	-5.72954	-0.002	133	0.05	compliant
120	30	-4.08821	-0.002	133	0.05	compliant
120	40	-3.98117	-0.001	133	0.05	compliant

FCC 47 CFR part 27 (2017)  
 Industry Canada RSS-199  
 (2016)

30. April 2018  
 Page 84 of 301



Product Service

FCC ID: VBNAHIIIB-01  
 IC ID: 661AI-AHHB

Test Report No:  
 D564660096

120	50	-3.67505	-0.001	133	0.05	compliant
<b>QPSK Modulation ANT4</b>						
120	-30	-11.44500	-0.004	133	0.05	compliant
120	-20	-3.06209	-0.001	133	0.05	compliant
120	-10	-4.17514	-0.002	133	0.05	compliant
120	0	-5.05691	-0.002	133	0.05	compliant
120	10	-6.14552	-0.002	133	0.05	compliant
120	30	-6.05843	-0.002	133	0.05	compliant
120	40	-11.44500	-0.001	133	0.05	compliant
120	50	-3.06209	-0.002	133	0.05	compliant
<b>16QAM Modulation ANT1</b>						
120	-30	-6.65948	-0.003	133	0.05	compliant
120	-20	-4.69258	-0.002	133	0.05	compliant
120	-10	-8.36349	-0.003	133	0.05	compliant
120	0	-6.59021	-0.002	133	0.05	compliant
120	10	-4.75975	-0.002	133	0.05	compliant
120	30	-4.94138	-0.002	133	0.05	compliant
120	40	-4.87845	-0.002	133	0.05	compliant
120	50	-6.20557	-0.002	133	0.05	compliant
<b>16QAM Modulation ANT2</b>						
120	-30	-5.76430	-0.002	133	0.05	compliant
120	-20	-3.66204	-0.001	133	0.05	compliant
120	-10	-4.82192	-0.002	133	0.05	compliant
120	0	-6.07814	-0.002	133	0.05	compliant
120	10	-6.21295	-0.002	133	0.05	compliant
120	30	-4.89868	-0.002	133	0.05	compliant
120	40	-4.54842	-0.002	133	0.05	compliant
120	50	-3.81167	-0.001	133	0.05	compliant
<b>16QAM Modulation ANT3</b>						
120	-30	-4.96376	-0.002	133	0.05	compliant
120	-20	-3.31030	-0.001	133	0.05	compliant
120	-10	-4.30503	-0.002	133	0.05	compliant
120	0	-5.90073	-0.002	133	0.05	compliant
120	10	-4.15867	-0.002	133	0.05	compliant
120	30	-5.13171	-0.002	133	0.05	compliant
120	40	-9.50891	-0.004	133	0.05	compliant
120	50	-3.77695	-0.001	133	0.05	compliant
<b>16QAM Modulation ANT4</b>						
120	-30	-4.04029	-0.002	133	0.05	compliant
120	-20	-6.52340	-0.002	133	0.05	compliant
120	-10	-4.88881	-0.002	133	0.05	compliant
120	0	-6.21536	-0.002	133	0.05	compliant
120	10	-5.22891	-0.002	133	0.05	compliant
120	30	-4.80572	-0.002	133	0.05	compliant
120	40	-4.44069	-0.002	133	0.05	compliant
120	50	-5.57983	-0.002	133	0.05	compliant
<b>64QAM Modulation ANT1</b>						
120	-30	-6.82139	-0.003	133	0.05	compliant
120	-20	-4.06377	-0.002	133	0.05	compliant
120	-10	-4.82008	-0.002	133	0.05	compliant



Product Service

FCC ID: VBNAHIIIB-01  
 IC ID: 661AI-AHHB

Test Report No:  
 D564660096

120	0	-4.28133	-0.002	133	0.05	compliant
120	10	-4.74490	-0.002	133	0.05	compliant
120	30	-3.19674	-0.001	133	0.05	compliant
120	40	-4.41610	-0.002	133	0.05	compliant
120	50	-3.75062	-0.001	133	0.05	compliant
<b>64QAM Modulation ANT2</b>						
120	-30	-7.23111	-0.003	133	0.05	compliant
120	-20	-6.39836	-0.002	133	0.05	compliant
120	-10	-7.40222	-0.003	133	0.05	compliant
120	0	-8.47441	-0.003	133	0.05	compliant
120	10	-4.03765	-0.002	133	0.05	compliant
120	30	-6.79767	-0.003	133	0.05	compliant
120	40	-6.15441	-0.002	133	0.05	compliant
120	50	5.25575	0.002	133	0.05	compliant
<b>64QAM Modulation ANT3</b>						
120	-30	-6.14367	-0.002	133	0.05	compliant
120	-20	-5.20267	-0.002	133	0.05	compliant
120	-10	-5.33997	-0.002	133	0.05	compliant
120	0	-3.32755	-0.001	133	0.05	compliant
120	10	-3.80993	-0.001	133	0.05	compliant
120	30	-6.56441	-0.002	133	0.05	compliant
120	40	-2.90694	-0.001	133	0.05	compliant
120	50	-4.45835	-0.002	133	0.05	compliant
<b>64QAM Modulation ANT4</b>						
120	-30	-5.30798	-0.002	133	0.05	compliant
120	-20	-4.95866	-0.002	133	0.05	compliant
120	-10	-4.96579	-0.002	133	0.05	compliant
120	0	-5.36883	-0.002	133	0.05	compliant
120	10	3.45703	0.001	133	0.05	compliant
120	30	-6.04031	-0.002	133	0.05	compliant
120	40	-5.39135	-0.002	133	0.05	compliant
120	50	-5.16670	-0.002	133	0.05	compliant
<b>256QAM Modulation ANT1</b>						
120	-30	-9.60678	-0.004	133	0.05	compliant
120	-20	-2.39220	-0.001	133	0.05	compliant
120	-10	-4.70181	-0.002	133	0.05	compliant
120	0	-3.39727	-0.001	133	0.05	compliant
120	10	-5.91411	-0.002	133	0.05	compliant
120	30	-5.43111	-0.002	133	0.05	compliant
120	40	-7.92789	-0.003	133	0.05	compliant
120	50	-3.07596	-0.001	133	0.05	compliant
<b>256QAM Modulation ANT2</b>						
120	-30	4.34062	0.002	133	0.05	compliant
120	-20	-4.74382	-0.002	133	0.05	compliant
120	-10	-3.93199	-0.001	133	0.05	compliant
120	0	-5.00044	-0.002	133	0.05	compliant
120	10	-2.85126	-0.001	133	0.05	compliant
120	30	-5.09971	-0.002	133	0.05	compliant
120	40	-5.36402	-0.002	133	0.05	compliant
120	50	-5.15819	-0.002	133	0.05	compliant



Product Service

FCC ID: VBNAHIIIB-01  
 IC ID: 661AI-AHHB

Test Report No:  
 D564660096

256QAM Modulation ANT3						
120	-30	-5.78386	-0.002	133	0.05	compliant
120	-20	-4.23833	-0.002	133	0.05	compliant
120	-10	-7.78036	-0.003	133	0.05	compliant
120	0	-5.50642	-0.002	133	0.05	compliant
120	10	-4.92430	-0.002	133	0.05	compliant
120	30	2.98484	0.001	133	0.05	compliant
120	40	-4.66419	-0.002	133	0.05	compliant
120	50	-5.70882	-0.002	133	0.05	compliant
256QAM Modulation ANT4						
120	-30	-4.51150	-0.002	133	0.05	compliant
120	-20	-3.86941	-0.001	133	0.05	compliant
120	-10	-8.29713	-0.003	133	0.05	compliant
120	0	-4.81229	-0.002	133	0.05	compliant
120	10	3.16303	0.001	133	0.05	compliant
120	30	-5.42228	-0.002	133	0.05	compliant
120	40	5.74222	0.002	133	0.05	compliant
120	50	-4.05623	-0.002	133	0.05	compliant

Table 47 Frequency stability with temp. var. (15MHz Channel BW)

**Config D:**

Supply Voltage (AC) [V]	Ambient Temperature [°C]	Carrier Frequency: 2655 MHz		Manufacturer's Specification		Result
		[Hz]	[ppm]	[Hz]	[ppm]	
QPSK Modulation ANT1						
120	-30	-6.44487	-0.002	133	0.05	compliant
120	-20	-3.14217	-0.001	133	0.05	compliant
120	-10	-8.09780	-0.003	133	0.05	compliant
120	0	-7.00327	-0.003	133	0.05	compliant
120	10	-2.12846	-0.001	133	0.05	compliant
120	30	-2.69000	-0.001	133	0.05	compliant
120	40	-4.95071	-0.002	133	0.05	compliant
120	50	1.49882	0.001	133	0.05	compliant
QPSK Modulation ANT2						
120	-30	-4.88163	-0.002	133	0.05	compliant
120	-20	-3.54822	-0.001	133	0.05	compliant
120	-10	-6.08472	-0.002	133	0.05	compliant
120	0	-5.46647	-0.002	133	0.05	compliant
120	10	-2.09095	-0.001	133	0.05	compliant
120	30	-1.73176	-0.001	133	0.05	compliant
120	40	-3.84361	-0.001	133	0.05	compliant
120	50	-3.70026	-0.001	133	0.05	compliant
QPSK Modulation ANT3						
120	-30	-5.45319	-0.002	133	0.05	compliant
120	-20	-5.21301	-0.002	133	0.05	compliant
120	-10	-4.18467	-0.002	133	0.05	compliant
120	0	4.72963	0.002	133	0.05	compliant
120	10	-4.24427	-0.002	133	0.05	compliant

FCC 47 CFR part 27 (2017)  
 Industry Canada RSS-199  
 (2016)

30. April 2018  
 Page 87 of 301



Product Service

FCC ID: VBNAHIIIB-01  
 IC ID: 661AI-AHHB

Test Report No:  
 D564660096

120	30	-6.35650	-0.002	133	0.05	compliant
120	40	-4.75836	-0.002	133	0.05	compliant
120	50	-4.91960	-0.002	133	0.05	compliant
<b>QPSK Modulation ANT4</b>						
120	-30	-4.02814	-0.002	133	0.05	compliant
120	-20	-6.60242	-0.002	133	0.05	compliant
120	-10	-5.44673	-0.002	133	0.05	compliant
120	0	-5.01522	-0.002	133	0.05	compliant
120	10	-3.82143	-0.001	133	0.05	compliant
120	30	-4.70009	-0.002	133	0.05	compliant
120	40	-5.05091	-0.002	133	0.05	compliant
120	50	4.72279	0.002	133	0.05	compliant
<b>16QAM Modulation ANT1</b>						
120	-30	-7.16483	-0.003	133	0.05	compliant
120	-20	-3.92271	-0.001	133	0.05	compliant
120	-10	-4.59172	-0.002	133	0.05	compliant
120	0	-5.78511	-0.002	133	0.05	compliant
120	10	-4.67761	-0.002	133	0.05	compliant
120	30	-4.55191	-0.002	133	0.05	compliant
120	40	-5.19240	-0.002	133	0.05	compliant
120	50	-3.61082	-0.001	133	0.05	compliant
<b>16QAM Modulation ANT2</b>						
120	-30	-4.81457	-0.002	133	0.05	compliant
120	-20	-6.74209	-0.003	133	0.05	compliant
120	-10	-6.72249	-0.003	133	0.05	compliant
120	0	-7.74885	-0.003	133	0.05	compliant
120	10	-4.19383	-0.002	133	0.05	compliant
120	30	-5.67221	-0.002	133	0.05	compliant
120	40	-4.05590	-0.002	133	0.05	compliant
120	50	-2.24277	-0.001	133	0.05	compliant
<b>16QAM Modulation ANT3</b>						
120	-30	-4.08521	-0.002	133	0.05	compliant
120	-20	-4.24162	-0.002	133	0.05	compliant
120	-10	-5.91112	-0.002	133	0.05	compliant
120	0	-3.94031	-0.001	133	0.05	compliant
120	10	-3.76657	-0.001	133	0.05	compliant
120	30	-4.12027	-0.002	133	0.05	compliant
120	40	-3.14817	-0.001	133	0.05	compliant
120	50	-4.36715	-0.002	133	0.05	compliant
<b>16QAM Modulation ANT4</b>						
120	-30	-3.65846	-0.001	133	0.05	compliant
120	-20	-2.32764	-0.001	133	0.05	compliant
120	-10	-4.28067	-0.002	133	0.05	compliant
120	0	3.58990	0.001	133	0.05	compliant
120	10	-4.19437	-0.002	133	0.05	compliant
120	30	-4.54018	-0.002	133	0.05	compliant
120	40	-5.03236	-0.002	133	0.05	compliant
120	50	3.31107	0.001	133	0.05	compliant
<b>64QAM Modulation ANT1</b>						
120	-30	-4.59548	-0.002	133	0.05	compliant



Product Service

FCC ID: VBNAHIIIB-01  
 IC ID: 661AI-AHHB

Test Report No:  
 D564660096

120	-20	3.94824	0.001	133	0.05	compliant
120	-10	-4.65841	-0.002	133	0.05	compliant
120	0	-5.69337	-0.002	133	0.05	compliant
120	10	-3.78701	-0.001	133	0.05	compliant
120	30	-3.99811	-0.002	133	0.05	compliant
120	40	-4.67457	-0.002	133	0.05	compliant
120	50	-3.71499	-0.001	133	0.05	compliant
<b>64QAM Modulation ANT2</b>						
120	-30	-4.99000	-0.002	133	0.05	compliant
120	-20	-5.40431	-0.002	133	0.05	compliant
120	-10	-5.22912	-0.002	133	0.05	compliant
120	0	-8.70663	-0.003	133	0.05	compliant
120	10	-4.41736	-0.002	133	0.05	compliant
120	30	-4.45842	-0.002	133	0.05	compliant
120	40	-6.86524	-0.003	133	0.05	compliant
120	50	-3.60009	-0.001	133	0.05	compliant
<b>64QAM Modulation ANT3</b>						
120	-30	-7.10420	-0.003	133	0.05	compliant
120	-20	-4.30357	-0.002	133	0.05	compliant
120	-10	-4.93931	-0.002	133	0.05	compliant
120	0	-2.47004	-0.001	133	0.05	compliant
120	10	-6.86480	-0.003	133	0.05	compliant
120	30	-4.82029	-0.002	133	0.05	compliant
120	40	-6.22099	-0.002	133	0.05	compliant
120	50	-3.85979	-0.001	133	0.05	compliant
<b>64QAM Modulation ANT4</b>						
120	-30	-3.27860	-0.001	133	0.05	compliant
120	-20	-2.27399	-0.001	133	0.05	compliant
120	-10	-4.47107	-0.002	133	0.05	compliant
120	0	-3.54930	-0.001	133	0.05	compliant
120	10	-5.18276	-0.002	133	0.05	compliant
120	30	-4.79923	-0.002	133	0.05	compliant
120	40	-3.96519	-0.001	133	0.05	compliant
120	50	-3.65311	-0.001	133	0.05	compliant
<b>256QAM Modulation ANT1</b>						
120	-30	-5.84184	-0.002	133	0.05	compliant
120	-20	-6.79787	-0.003	133	0.05	compliant
120	-10	-6.58659	-0.002	133	0.05	compliant
120	0	-7.21912	-0.003	133	0.05	compliant
120	10	-3.73578	-0.001	133	0.05	compliant
120	30	-5.39299	-0.002	133	0.05	compliant
120	40	-4.28160	-0.002	133	0.05	compliant
120	50	-3.94971	-0.001	133	0.05	compliant
<b>256QAM Modulation ANT2</b>						
120	-30	-3.94528	-0.001	133	0.05	compliant
120	-20	-4.95257	-0.002	133	0.05	compliant
120	-10	-3.60589	-0.001	133	0.05	compliant
120	0	3.50301	0.001	133	0.05	compliant
120	10	4.54728	0.002	133	0.05	compliant
120	30	-3.44427	-0.001	133	0.05	compliant

FCC 47 CFR part 27 (2017)  
 Industry Canada RSS-199  
 (2016)

30. April 2018  
 Page 89 of 301



Product Service

FCC ID: VBNAHIIIB-01  
 IC ID: 661AI-AHHB

Test Report No:  
D564660096

120	40	-6.62056	-0.002	133	0.05	compliant
120	50	-3.01985	-0.001	133	0.05	compliant
<b>256QAM Modulation ANT3</b>						
120	-30	-2.45425	-0.001	133	0.05	compliant
120	-20	-3.75897	-0.001	133	0.05	compliant
120	-10	-5.05102	-0.002	133	0.05	compliant
120	0	4.05136	0.002	133	0.05	compliant
120	10	-3.50692	-0.001	133	0.05	compliant
120	30	-4.76965	-0.002	133	0.05	compliant
120	40	-4.22646	-0.002	133	0.05	compliant
120	50	-5.46886	-0.002	133	0.05	compliant
<b>256QAM Modulation ANT4</b>						
120	-30	3.16982	0.001	133	0.05	compliant
120	-20	-3.07611	-0.001	133	0.05	compliant
120	-10	-5.54239	-0.002	133	0.05	compliant
120	0	-3.07721	-0.001	133	0.05	compliant
120	10	-5.91880	-0.002	133	0.05	compliant
120	30	-4.54650	-0.002	133	0.05	compliant
120	40	-5.33374	-0.002	133	0.05	compliant
120	50	-3.28608	-0.001	133	0.05	compliant

**Table 48 Frequency stability with temp. var. (20MHz Channel BW)**



Product Service

FCC ID: VBNAHIIIB-01  
 IC ID: 661AI-AHHB

Test Report No:  
 D564660096

**Frequency Stability with Voltage Variation:**

The EUT was placed in a climatic chamber and allowed to stabilize at +20 degrees Celsius for at least 60 minutes. With the supply voltage of the EUT set to 85% of the nominal value, the frequency error was measured. This procedure was repeated at 100% and 115% of the nominal supply voltage value.

**Config A:**

Carrier Frequency: 2655 MHz						
Supply Voltage (AC) [V]	Ambient Temperature [°C]	Frequency Deviation		Manufacturer's Specification		Result
		[Hz]	[ppm]	[Hz]	[ppm]	
QPSK Modulation ANT1						
102	20	4.91291	0.002	133	0.05	compliant
120	20	-4.65767	-0.002	133	0.05	compliant
138	20	-5.83068	-0.002	133	0.05	compliant
QPSK Modulation ANT2						
102	20	-4.23570	-0.002	133	0.05	compliant
120	20	-3.36231	-0.001	133	0.05	compliant
138	20	-5.65524	-0.002	133	0.05	compliant
QPSK Modulation ANT3						
102	20	5.21348	0.002	133	0.05	compliant
120	20	-6.35923	-0.002	133	0.05	compliant
138	20	-6.45150	-0.002	133	0.05	compliant
QPSK Modulation ANT4						
102	20	5.74149	0.002	133	0.05	compliant
120	20	-3.28308	-0.001	133	0.05	compliant
138	20	-5.54609	-0.002	133	0.05	compliant
16QAM Modulation ANT1						
102	20	-5.87962	-0.002	133	0.05	compliant
120	20	-7.09043	-0.003	133	0.05	compliant
138	20	7.10813	0.003	133	0.05	compliant
16QAM Modulation ANT2						
102	20	-5.12019	-0.002	133	0.05	compliant
120	20	5.28944	0.002	133	0.05	compliant
138	20	-3.50697	-0.001	133	0.05	compliant
16QAM Modulation ANT3						
102	20	-6.02365	-0.002	133	0.05	compliant
120	20	-4.09249	-0.002	133	0.05	compliant
138	20	5.98292	0.002	133	0.05	compliant
16QAM Modulation ANT4						
102	20	-5.55270	-0.002	133	0.05	compliant
120	20	-4.67047	-0.002	133	0.05	compliant
138	20	-7.63476	-0.003	133	0.05	compliant
64QAM Modulation ANT1						
102	20	-5.47800	-0.002	133	0.05	compliant
120	20	-6.56726	-0.002	133	0.05	compliant
138	20	-6.35795	-0.002	133	0.05	compliant
64QAM Modulation ANT2						



Product Service

FCC ID: VBNAHIIIB-01  
 IC ID: 661AI-AHHB

Test Report No:  
 D564660096

102	20	-3.94986	-0.001	133	0.05	compliant
120	20	5.55402	0.002	133	0.05	compliant
138	20	-3.80844	-0.001	133	0.05	compliant
<b>64QAM Modulation ANT3</b>						
102	20	-5.95196	-0.002	133	0.05	compliant
120	20	-4.65156	-0.002	133	0.05	compliant
138	20	-4.96701	-0.002	133	0.05	compliant
<b>64QAM Modulation ANT4</b>						
102	20	-6.83628	-0.003	133	0.05	compliant
120	20	6.10485	0.002	133	0.05	compliant
138	20	6.85636	0.003	133	0.05	compliant
<b>256QAM Modulation ANT1</b>						
102	20	4.29477	0.002	133	0.05	compliant
120	20	-3.10670	-0.001	133	0.05	compliant
138	20	-3.39280	-0.001	133	0.05	compliant
<b>256QAM Modulation ANT2</b>						
102	20	-2.12486	-0.001	133	0.05	compliant
120	20	-3.29346	-0.001	133	0.05	compliant
138	20	-4.90306	-0.002	133	0.05	compliant
<b>256QAM Modulation ANT3</b>						
102	20	-4.81354	-0.002	133	0.05	compliant
120	20	-2.62510	-0.001	133	0.05	compliant
138	20	3.43564	0.001	133	0.05	compliant
<b>256QAM Modulation ANT4</b>						
102	20	-5.92904	-0.002	133	0.05	compliant
120	20	2.82800	0.001	133	0.05	compliant
138	20	-6.08666	-0.002	133	0.05	compliant

**Table 49 Frequency stability with voltage var. (5 MHz Channel BW)****Config B:**

Supply Voltage (AC) [V]	Ambient Temperature [°C]	Carrier Frequency: 2655 MHz		Manufacturer's Specification		Result
		[Hz]	[ppm]	[Hz]	[ppm]	
<b>QPSK Modulation ANT1</b>						
102	20	-5.02387	-0.002	133	0.05	compliant
120	20	-4.64190	-0.002	133	0.05	compliant
138	20	-3.71553	-0.001	133	0.05	compliant
<b>QPSK Modulation ANT2</b>						
102	20	-4.38908	-0.002	133	0.05	compliant
120	20	4.01599	0.002	133	0.05	compliant
138	20	-2.72938	-0.001	133	0.05	compliant
<b>QPSK Modulation ANT3</b>						
102	20	-3.55582	-0.001	133	0.05	compliant
120	20	3.56727	0.001	133	0.05	compliant
138	20	-5.51006	-0.002	133	0.05	compliant
<b>QPSK Modulation ANT4</b>						
102	20	-4.21679	-0.002	133	0.05	compliant



Product Service

FCC ID: VBNAHIIIB-01  
 IC ID: 661AI-AHHB

Test Report No:  
 D564660096

120	20	-4.03259	-0.002	133	0.05	compliant
138	20	-3.82064	-0.001	133	0.05	compliant
<b>16QAM Modulation ANT1</b>						
102	20	-4.01019	-0.002	133	0.05	compliant
120	20	-3.33261	-0.001	133	0.05	compliant
138	20	-8.53173	-0.003	133	0.05	compliant
<b>16QAM Modulation ANT2</b>						
102	20	-3.41724	-0.001	133	0.05	compliant
120	20	-3.19306	-0.001	133	0.05	compliant
138	20	-5.88759	-0.002	133	0.05	compliant
<b>16QAM Modulation ANT3</b>						
102	20	-3.11067	-0.001	133	0.05	compliant
120	20	-3.40752	-0.001	133	0.05	compliant
138	20	-4.12435	-0.002	133	0.05	compliant
<b>16QAM Modulation ANT4</b>						
102	20	-7.35188	-0.003	133	0.05	compliant
120	20	-6.14016	-0.002	133	0.05	compliant
138	20	-4.86272	-0.002	133	0.05	compliant
<b>64QAM Modulation ANT1</b>						
102	20	-4.13740	-0.002	133	0.05	compliant
120	20	-4.68921	-0.002	133	0.05	compliant
138	20	-4.71138	-0.002	133	0.05	compliant
<b>64QAM Modulation ANT2</b>						
102	20	-4.31237	-0.002	133	0.05	compliant
120	20	-3.74554	-0.001	133	0.05	compliant
138	20	-2.71994	-0.001	133	0.05	compliant
<b>64QAM Modulation ANT3</b>						
102	20	-3.58518	-0.001	133	0.05	compliant
120	20	-8.98488	-0.003	133	0.05	compliant
138	20	-5.22131	-0.002	133	0.05	compliant
<b>64QAM Modulation ANT4</b>						
102	20	-6.33667	-0.002	133	0.05	compliant
120	20	-5.00064	-0.002	133	0.05	compliant
138	20	-4.15760	-0.002	133	0.05	compliant
<b>256QAM Modulation ANT1</b>						
102	20	5.96099	0.002	133	0.05	compliant
120	20	-4.50022	-0.002	133	0.05	compliant
138	20	-7.94452	-0.003	133	0.05	compliant
<b>256QAM Modulation ANT2</b>						
102	20	-3.78851	-0.001	133	0.05	compliant
120	20	-5.16915	-0.002	133	0.05	compliant
138	20	2.62395	0.001	133	0.05	compliant
<b>256QAM Modulation ANT3</b>						
102	20	-5.83307	-0.002	133	0.05	compliant
120	20	-4.21927	-0.002	133	0.05	compliant
138	20	-4.29158	-0.002	133	0.05	compliant
<b>256QAM Modulation ANT4</b>						
102	20	-7.06706	-0.003	133	0.05	compliant
120	20	-4.36070	-0.002	133	0.05	compliant
138	20	-4.78381	-0.002	133	0.05	compliant



Product Service

FCC ID: VBNAHIIIB-01  
 IC ID: 661AI-AHHB

Test Report No:  
 D564660096

**Table 50 Frequency stability with voltage var. (10 MHz Channel BW)****Config C:**

Supply Voltage (AC) [V]	Ambient Temperature [°C]	Carrier Frequency: 2655 MHz		Manufacturer's Specification		Result
		[Hz]	[ppm]	[Hz]	[ppm]	
<b>QPSK Modulation ANT1</b>						
102	20	-5.87545	-0.002	133	0.05	compliant
120	20	-3.52312	-0.001	133	0.05	compliant
138	20	-2.40834	-0.001	133	0.05	compliant
<b>QPSK Modulation ANT2</b>						
102	20	-5.46386	-0.002	133	0.05	compliant
120	20	-4.00191	-0.002	133	0.05	compliant
138	20	3.89470	0.001	133	0.05	compliant
<b>QPSK Modulation ANT3</b>						
102	20	-4.10822	-0.002	133	0.05	compliant
120	20	-5.53004	-0.002	133	0.05	compliant
138	20	-3.86395	-0.001	133	0.05	compliant
<b>QPSK Modulation ANT4</b>						
102	20	-9.86174	-0.004	133	0.05	compliant
120	20	-3.41797	-0.001	133	0.05	compliant
138	20	-7.24878	-0.003	133	0.05	compliant
<b>16QAM Modulation ANT1</b>						
102	20	-4.21943	-0.002	133	0.05	compliant
120	20	-2.97735	-0.001	133	0.05	compliant
138	20	-3.12995	-0.001	133	0.05	compliant
<b>16QAM Modulation ANT2</b>						
102	20	-6.50583	-0.002	133	0.05	compliant
120	20	-2.78194	-0.001	133	0.05	compliant
138	20	-4.02436	-0.002	133	0.05	compliant
<b>16QAM Modulation ANT3</b>						
102	20	-4.90505	-0.002	133	0.05	compliant
120	20	-4.51036	-0.002	133	0.05	compliant
138	20	-5.06502	-0.002	133	0.05	compliant
<b>16QAM Modulation ANT4</b>						
102	20	-5.15240	-0.002	133	0.05	compliant
120	20	-6.21698	-0.002	133	0.05	compliant
138	20	-4.62917	-0.002	133	0.05	compliant
<b>64QAM Modulation ANT1</b>						
102	20	-6.29686	-0.002	133	0.05	compliant
120	20	-3.87912	-0.001	133	0.05	compliant
138	20	-3.18516	-0.001	133	0.05	compliant
<b>64QAM Modulation ANT2</b>						
102	20	-6.54787	-0.002	133	0.05	compliant
120	20	-3.66504	-0.001	133	0.05	compliant
138	20	-5.05196	-0.002	133	0.05	compliant
<b>64QAM Modulation ANT3</b>						
102	20	-5.36663	-0.002	133	0.05	compliant