



CHANNEL	TX Channel 19	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390.000	49.31	56.88	74.00	-24.69	30.80	7.74	46.11	100	55	Peak
2390.000	41.50	49.07	54.00	-12.50	30.80	7.74	46.11	100	55	Average
2440.000	87.75	93.76	/	/	32.28	7.81	46.10	100	55	Peak
2440.000	86.41	92.42	/	/	32.28	7.81	46.10	100	55	Average
2483.500	50.71	56.45	74.00	-23.29	32.47	7.88	46.09	100	55	Peak
2483.500	43.54	49.28	54.00	-10.46	32.47	7.88	46.09	100	55	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390.000	50.69	56.70	74.00	-23.31	32.36	7.74	46.11	100	90	Peak
2390.000	43.04	49.05	54.00	-10.96	32.36	7.74	46.11	100	90	Average
2440.000	89.32	96.37	/	/	31.24	7.81	46.10	100	90	Peak
2440.000	87.70	94.75	/	/	31.24	7.81	46.10	100	90	Average
2483.500	50.19	57.07	74.00	-23.81	31.33	7.88	46.09	100	90	Peak
2483.500	42.05	48.93	54.00	-11.95	31.33	7.88	46.09	100	90	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 2440MHz: Fundamental frequency.



CHANNEL	TX Channel 39	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390.000	48.74	56.31	74.00	-25.26	30.80	7.74	46.11	100	60	Peak
2390.000	42.30	49.87	54.00	-11.70	30.80	7.74	46.11	100	60	Average
2480.000	86.13	91.87	/	/	32.48	7.87	46.09	100	60	Peak
2480.000	84.21	89.95	/	/	32.48	7.87	46.09	100	60	Average
2483.500	50.96	56.70	74.00	-23.04	32.47	7.88	46.09	100	60	Peak
2483.500	44.01	49.75	54.00	-9.99	32.47	7.88	46.09	100	60	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390.000	50.29	56.30	74.00	-23.71	32.36	7.74	46.11	100	90	Peak
2390.000	43.37	49.38	54.00	-10.63	32.36	7.74	46.11	100	90	Average
2480.000	87.22	94.14	/	/	31.30	7.87	46.09	100	90	Peak
2480.000	86.43	93.35	/	/	31.30	7.87	46.09	100	90	Average
2483.500	49.87	56.75	74.00	-24.13	31.33	7.88	46.09	100	90	Peak
2483.500	42.58	49.46	54.00	-11.42	31.33	7.88	46.09	100	90	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 2480MHz: Fundamental frequency.



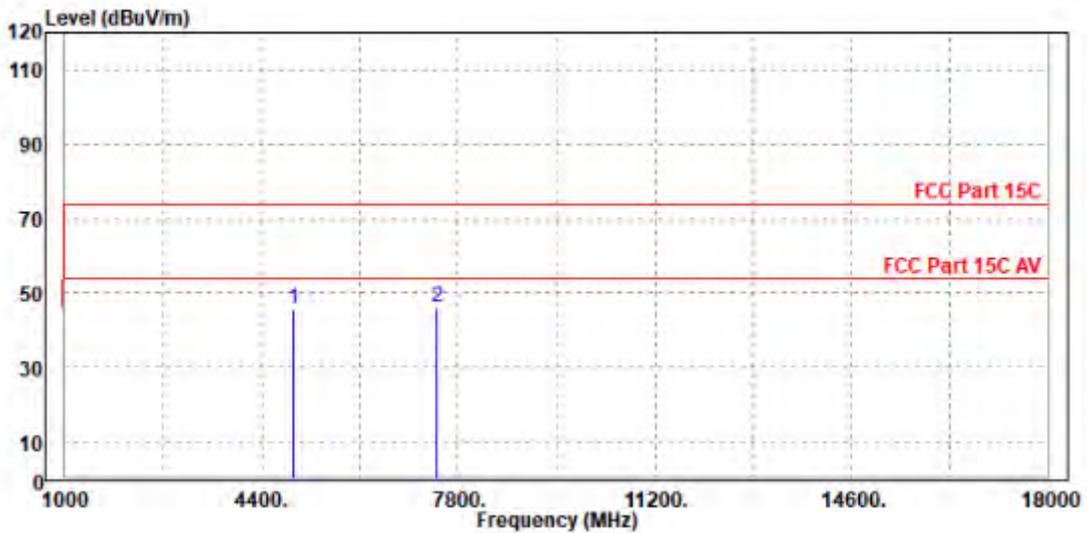
BUREAU VERITAS Test Report No.: PSU-NQN2407300316RF02

Worst case harmonic:

CHANNEL	TX Channel 39	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

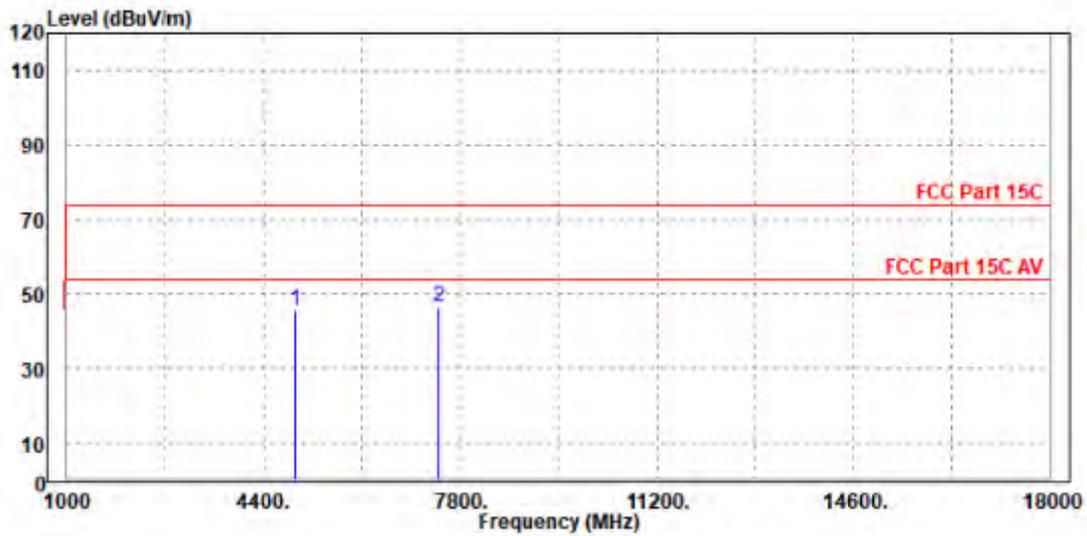
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	4960.000	45.83	47.56	74.00	-28.17	-1.73	Peak	Horizontal
2 PP	7443.000	45.97	43.54	74.00	-28.03	2.43	Peak	Horizontal





ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	4961.000	45.69	47.66	74.00	-28.31	-1.97	Peak	Vertical
2 PP	7440.000	46.63	44.25	74.00	-27.37	2.38	Peak	Vertical



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 2480MHz: Fundamental frequency.
3. For frequency above 18GHz, the emission was tested 20db below the limit so the data not recorded in the sheet



3.3 6 dB BANDWIDTH MEASUREMENT

3.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

3.3.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Power Meter	ANRITSU	ML2495A	1506002	Feb. 14,24	Feb. 13,25
EXA Signal Analyzer	KEYSIGHT	N9010A-526	MY54510523	Feb. 14,24	Feb. 13,25
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	May.10,24	May.09,25
Power Sensor	ANRITSU	MA2411B	1339352	Feb. 14,24	Feb. 13,25

NOTE:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in RF Oven room.

3.3.3 TEST PROCEDURE

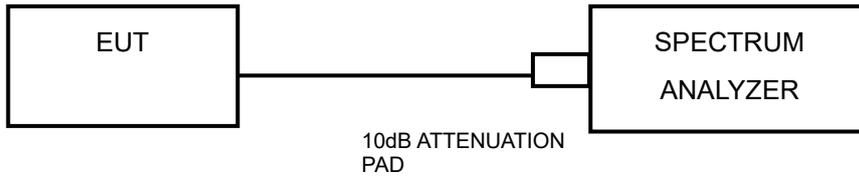
1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.



3.3.4 DEVIATION FROM TEST STANDARD

No deviation.

3.3.5 TEST SETUP



3.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.



BUREAU VERITAS Test Report No.: PSU-NQN2407300316RF02

3.3.7 TEST RESULTS

Please Refer to Appendix Of this test report.

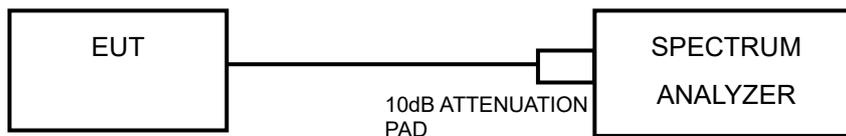


3.4 CONDUCTED OUTPUT POWER

3.4.1 LIMITS OF CONDUCTED OUTPUT POWER MEASUREMENT

For systems using digital modulation in the 2400–2483.5 MHz band: 1 Watt (30dBm)

3.4.2 TEST SETUP



3.4.3 TEST INSTRUMENTS

Refer to section 3.3.2 to get information of above instrument.

3.4.4 TEST PROCEDURES

For 2.4G WIFI:

- a) Measure the duty cycle D of the transmitter output signal as described in 11.6.
- b) Set span to >1.5 times the OBW.
- c) Set RBW = 1% to 5% of the OBW, but do not exceed 1 MHz.
- d) Set VBW $\geq [3 \times \text{RBW}]$.
- e) Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing $\leq \text{RBW} / 2$, so that narrowband signals are not lost between frequency bins.)
- f) Sweep time = auto.
- g) Detector = Power averaging (rms), if available. Otherwise, use the sample detector mode.
- h) Do not use sweep triggering. Allow the sweep to “free run.”
- i) Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 until trace is stabilized



so that the average accurately represents the true average over the ON and OFF periods of the transmitter.

j) Compute power by integrating the spectrum across the OBW of the signal using the instrument's band-power measurement function with band limits set equal to the OBW band-edges. If the instrument does not have a band-power function, then sum the spectrum levels (in power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.

k) Add $[10 \log (1 / D)]$, where D is the duty cycle, to the measured power to compute the average power during the actual transmission times (because the measurement represents an average over both the ON and OFF times of the transmission). For example, add $[10 \log (1/0.25)] = 6 \text{ dB}$ if the duty cycle is 25%.

For BLE:

- a) Set the RBW \geq DTS bandwidth.
- b) Set VBW \geq $[3 \times \text{RBW}]$.
- c) Set span \geq $[3 \times \text{RBW}]$.
- d) Sweep time = No faster than coupled (auto) time.
- e) Detector = peak.
- f) Trace mode = max-hold.
- g) Allow trace to fully stabilize.
- h) Use peak marker function to determine the peak amplitude level.

3.4.5 DEVIATION FROM TEST STANDARD

No deviation.

3.4.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.



**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02

3.4.7 TEST RESULTS

Please Refer to Appendix Of this test report.

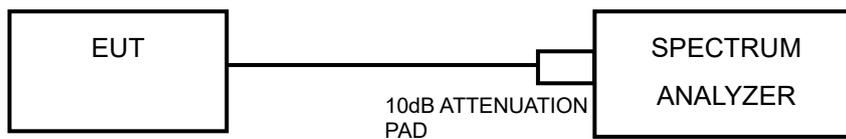


3.5 POWER SPECTRAL DENSITY MEASUREMENT

3.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm/3KHz.

3.5.2 TEST SETUP



3.5.3 TEST INSTRUMENTS

Refer to section 3.3.2 to get information of above instrument.

3.5.4 TEST PROCEDURE

1. Set the span to 1.5 times the DTS bandwidth
2. Set the RBW = 3 kHz, VBW \geq 3 x RBW, Detector = peak.
3. Sweep time = auto couple, Trace mode = max hold, allow trace to fully stabilize.
4. Use the peak marker function to determine the maximum amplitude level.

3.5.5 DEVIATION FROM TEST STANDARD

No deviation.

3.5.6 EUT OPERATING CONDITION

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.



BUREAU VERITAS Test Report No.: PSU-NQN2407300316RF02

3.5.7 TEST RESULTS

Please Refer to Appendix Of this test report.

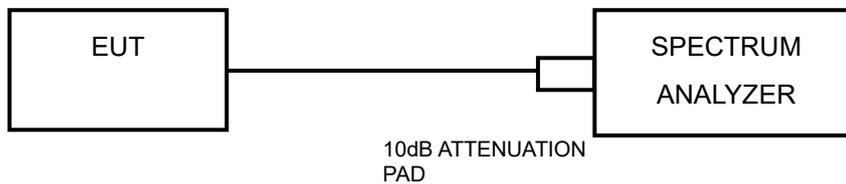


3.6 OUT OF BAND EMISSION MEASUREMENT

3.6.1 LIMITS OF OUT OF BAND EMISSION MEASUREMENT

Below -20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth). (Based on peak power limits, If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required for test shall be 30 dB instead of 20 dB .)

3.6.2 TEST SETUP



3.6.3 TEST INSTRUMENTS

Refer to section 3.3.2 to get information of above instrument.

3.6.4 TEST PROCEDURE

MEASUREMENT PROCEDURE REF

1. Set the RBW = 100 kHz .
2. Set the VBW $\geq 300\text{ kHz}$.
3. Detector = peak.
4. Sweep time = auto couple.
5. Trace mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.



MEASUREMENT PROCEDURE OOB

1. Set RBW = 100 kHz.
2. Set VBW \geq 300 kHz.
3. Set span to encompass the spectrum to be examined
4. Detector = peak.
5. Trace Mode = max hold.
6. Sweep = auto couple.

3.6.5 DEVIATION FROM TEST STANDARD

No deviation.

3.6.6 EUT OPERATING CONDITION

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

3.6.7 TEST RESULTS

The spectrum plots are attached on the following images. D1 line indicates the highest level. D2 line indicates the 20dB/30db offset below D1. It shows compliance to the requirement.

Please Refer to Appendix Of this test report.



3.7 ANTENNA REQUIREMENTS

3.7.1 STANDARD APPLICABLE

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.7.2 ANTENNA CONNECTED CONSTRUCTION

An embedded-in antenna design is used.

3.7.3 ANTENNA GAIN

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit and PSD limit.

4 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).



**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02

5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.



6 APPENDIX

WLAN

DTS BANDWIDTH

TEST RESULT

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.680	2407.880	2416.560	0.5	PASS
		2437	8.600	2432.880	2441.480	0.5	PASS
		2462	8.720	2457.440	2466.160	0.5	PASS
11G	Ant1	2412	16.120	2404.040	2420.160	0.5	PASS
		2437	16.240	2428.920	2445.160	0.5	PASS
		2462	16.000	2453.920	2469.920	0.5	PASS
11N20SISO	Ant1	2412	17.080	2403.480	2420.560	0.5	PASS
		2437	17.200	2428.440	2445.640	0.5	PASS
		2462	17.560	2453.240	2470.800	0.5	PASS
11N40SISO	Ant1	2422	35.760	2404.320	2440.080	0.5	PASS
		2437	33.760	2420.440	2454.200	0.5	PASS
		2452	32.800	2434.240	2467.040	0.5	PASS



TEST GRAPHS

11B_Ant1_2412



11B_Ant1_2437



11B_Ant1_2462



BUREAU VERITAS

Test Report No.: PSU-NQN2407300316RF02



11G_Ant1_2412



11G_Ant1_2437

BV 7Layers Communications Technology (Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen, Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



11G_Ant1_2462



11N20SISO_Ant1_2412

BV 7Layers Communications Technology
(Shenzhen) Co., Ltd

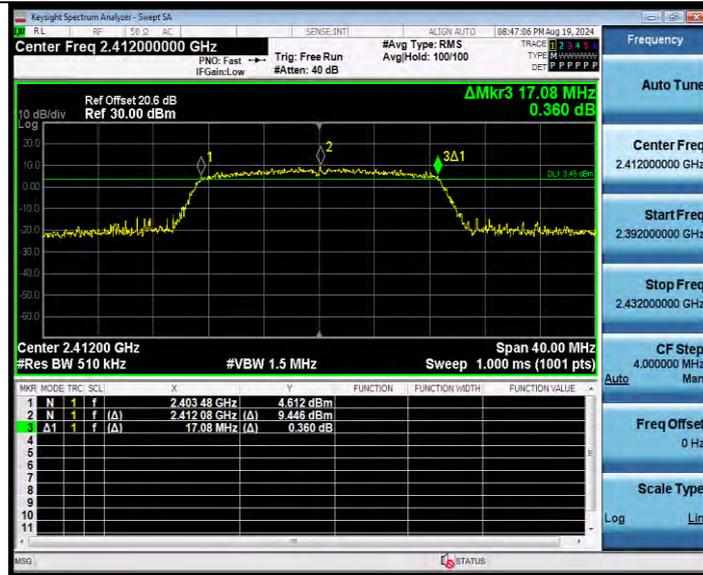
Room B37, Warehouse A5, No.3 Chiwan 4th Road,
Zhaoshang Street, Nanshan District Shenzhen,
Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462

BV 7Layers Communications Technology
(Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road,
Zhaoshang Street, Nanshan District Shenzhen,
Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



BUREAU VERITAS

Test Report No.: PSU-NQN2407300316RF02



11N40SISO_Ant1_2452



BV 7Layers Communications Technology (Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen, Guangdong, People's Republic of China

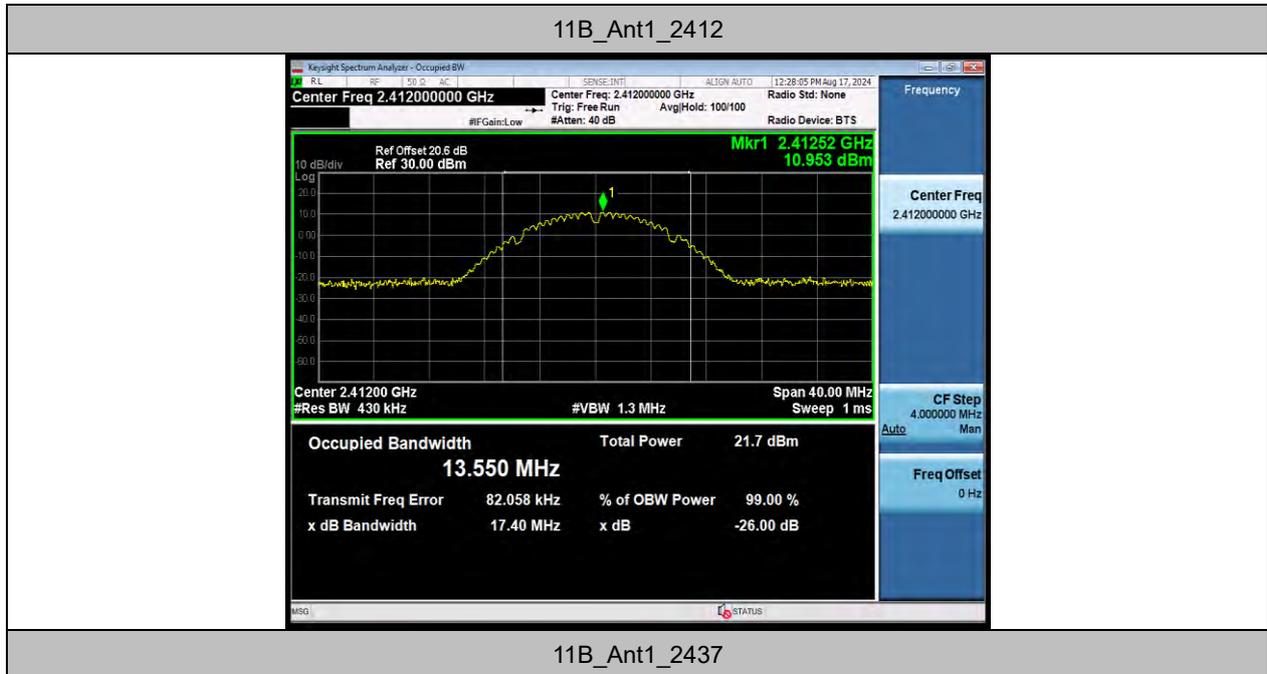
Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



OCCUPIED CHANNEL BANDWIDTH TEST RESULT

TestMode	Antenna	Channel Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	13.550	2405.3071	2418.8571	---	---
		2437	13.599	2430.3178	2443.9168	---	---
		2462	13.791	2455.0250	2468.8160	---	---
11G	Ant1	2412	17.335	2403.4256	2420.7606	---	---
		2437	16.976	2428.6010	2445.5770	---	---
		2462	17.061	2453.3819	2470.4429	---	---
11N20SISO	Ant1	2412	18.007	2403.0428	2421.0498	---	---
		2437	17.962	2428.0896	2446.0516	---	---
		2462	18.055	2452.9090	2470.9640	---	---
11N40SISO	Ant1	2422	36.675	2403.9055	2440.5805	---	---
		2437	36.358	2418.9591	2455.3171	---	---
		2452	36.431	2433.6988	2470.1298	---	---

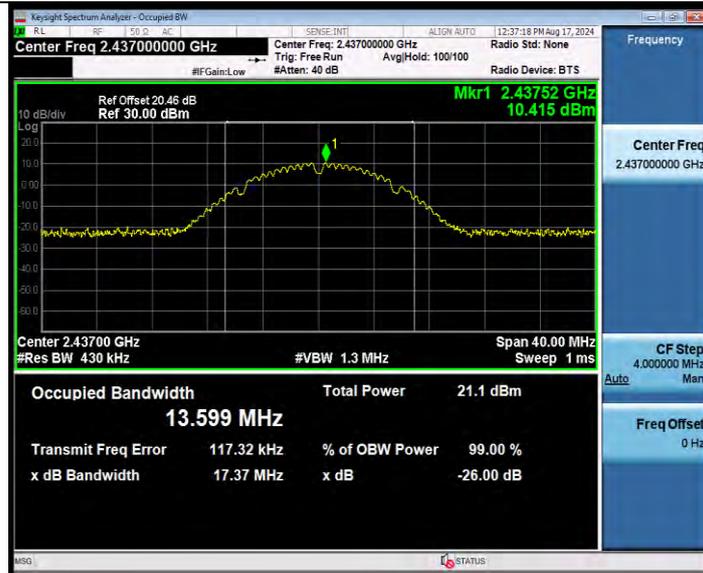
TEST GRAPHS





**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



11B_Ant1_2462



11G_Ant1_2412

BV 7Layers Communications Technology
(Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road,
Zhaoshang Street, Nanshan District Shenzhen,
Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com

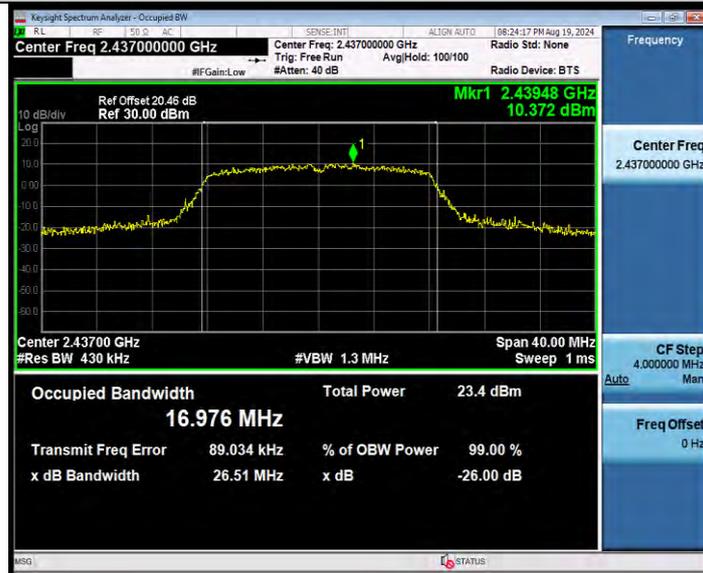


**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



11G_Ant1_2437



11G_Ant1_2462

BV 7Layers Communications Technology
(Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road,
Zhaoshang Street, Nanshan District Shenzhen,
Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



11N20SISO_Ant1_2462



11N40SISO_Ant1_2422

BV 7Layers Communications Technology
(Shenzhen) Co., Ltd

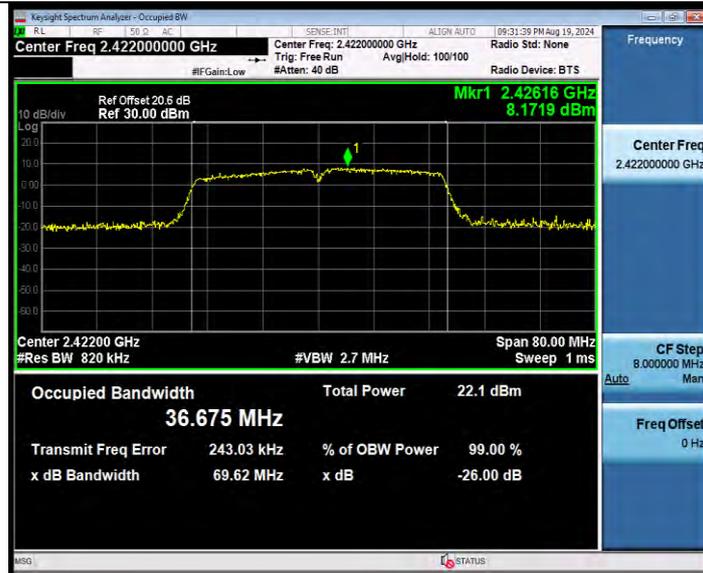
Room B37, Warehouse A5, No.3 Chiwan 4th Road,
Zhaoshang Street, Nanshan District Shenzhen,
Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com

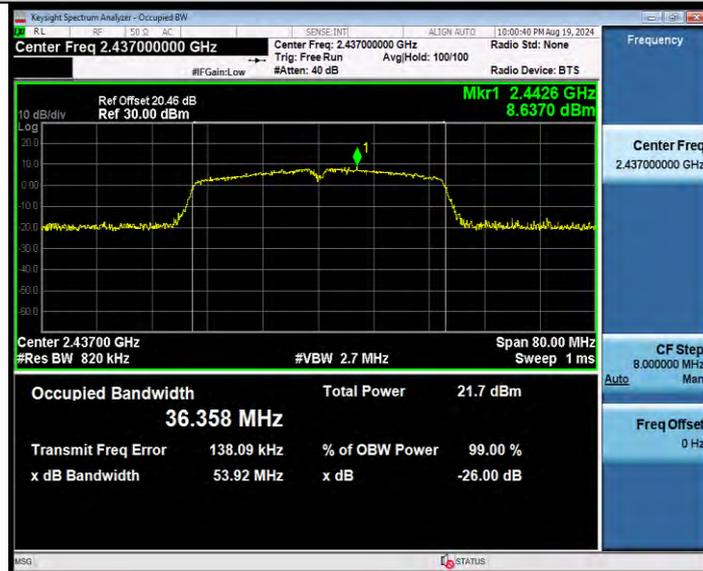


**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



BV 7Layers Communications Technology
(Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road,
Zhaoshang Street, Nanshan District Shenzhen,
Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



MAXIMUM CONDUCTED OUTPUT POWER TEST RESULT

Test Mode	TX Mod.	Freq. [MHz]	Ant.	Average power [dBm]	Peak power [dBm]	Peak power [mw]	Conducted Power Limit [dBm]	EIRP power [dBm]	EIRP power [mw]	EIRP Limit [dBm]	Verdict	Power Setting
11B	SISO	2412	ANT1	18.89	21.26	133.66	≤30.00	21.02	126.47	≤36.00	PASS	19.5
		2437	ANT1	18.90	21.26	133.66	≤30.00	21.02	126.47	≤36.00	PASS	19.5
		2462	ANT1	18.54	20.84	121.34	≤30.00	20.60	114.82	≤36.00	PASS	19.5
11G	SISO	2412	ANT1	18.04	24.98	314.77	≤30.00	24.74	297.85	≤36.00	PASS	19.0
		2437	ANT1	18.26	25.10	323.59	≤30.00	24.86	306.20	≤36.00	PASS	19.0
		2462	ANT1	17.94	25.13	325.84	≤30.00	24.89	308.32	≤36.00	PASS	18
11N20	SISO	2412	ANT1	15.27	24.82	303.39	≤30.00	24.58	287.08	≤36.00	PASS	16
		2437	ANT1	15.26	24.84	304.79	≤30.00	24.60	288.40	≤36.00	PASS	16
		2462	ANT1	14.98	24.85	305.49	≤30.00	24.61	289.07	≤36.00	PASS	15
11N40	SISO	2422	ANT1	15.30	24.85	305.49	≤30.00	24.61	289.07	≤36.00	PASS	15.5
		2437	ANT1	15.10	24.78	300.61	≤30.00	24.54	284.45	≤36.00	PASS	15.5
		2452	ANT1	15.28	24.88	307.61	≤30.00	24.64	291.07	≤36.00	PASS	15

Note: The Average power with duty cycle factor.



MAXIMUM POWER SPECTRAL DENSITY

TEST RESULT

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-12.06	≤8.00	PASS
		2437	-12.52	≤8.00	PASS
		2462	-12.65	≤8.00	PASS
11G	Ant1	2412	-15.17	≤8.00	PASS
		2437	-16.07	≤8.00	PASS
		2462	-15.43	≤8.00	PASS
11N20SISO	Ant1	2412	-16.95	≤8.00	PASS
		2437	-17.82	≤8.00	PASS
		2462	-17.29	≤8.00	PASS
11N40SISO	Ant1	2422	-19.43	≤8.00	PASS
		2437	-18.75	≤8.00	PASS
		2452	-17.81	≤8.00	PASS

TEST GRAPHS





**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



11B_Ant1_2462



11G_Ant1_2412

BV 7Layers Communications Technology
(Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road,
Zhaoshang Street, Nanshan District Shenzhen,
Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



BUREAU VERITAS Test Report No.: PSU-NQN2407300316RF02



11G_Ant1_2437



11G_Ant1_2462

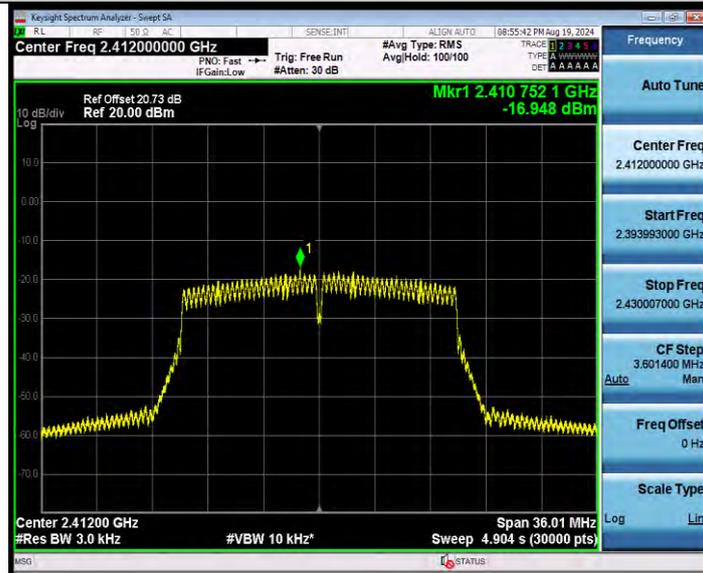


**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



11N20SISO_Ant1_2412

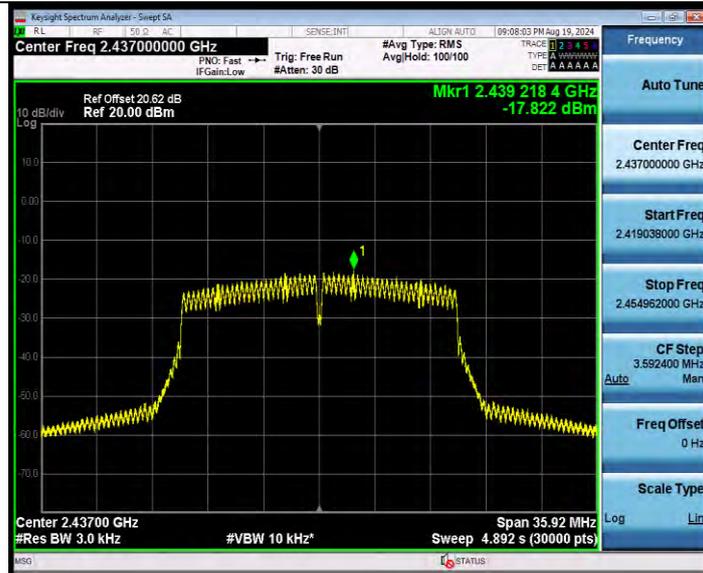


11N20SISO_Ant1_2437



**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



11N20SISO_Ant1_2462



11N40SISO_Ant1_2422

BV 7Layers Communications Technology
(Shenzhen) Co., Ltd

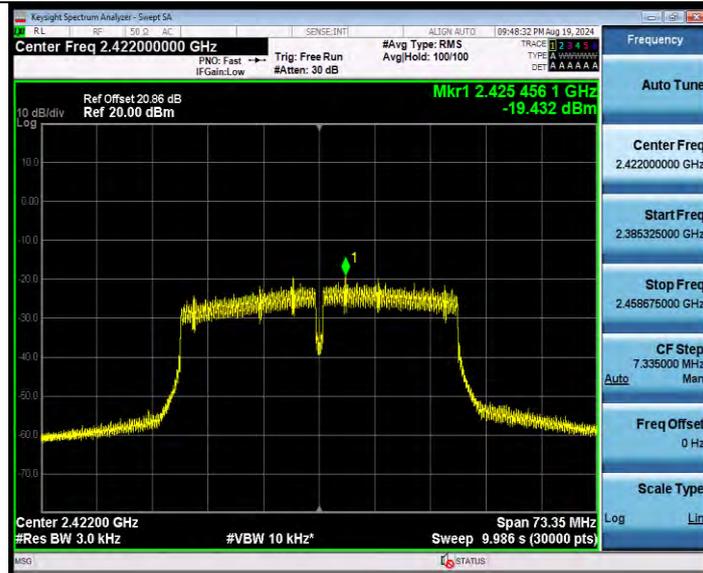
Room B37, Warehouse A5, No.3 Chiwan 4th Road,
Zhaoshang Street, Nanshan District Shenzhen,
Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com

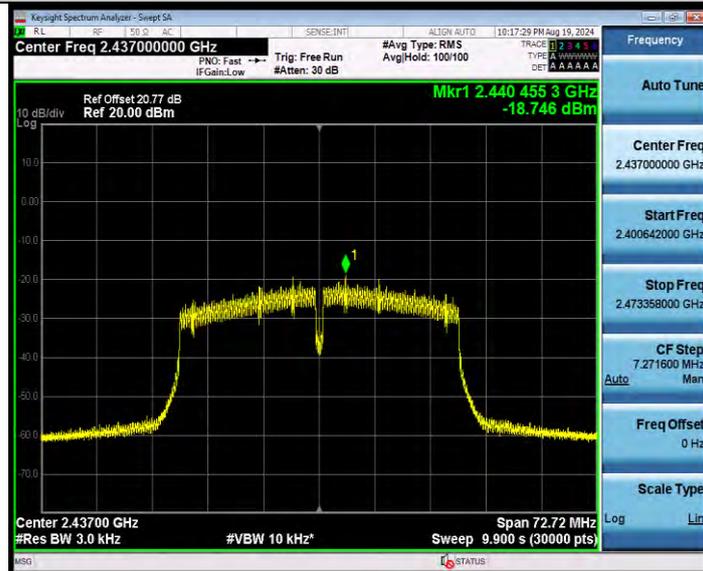


**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



11N40SISO_Ant1_2437

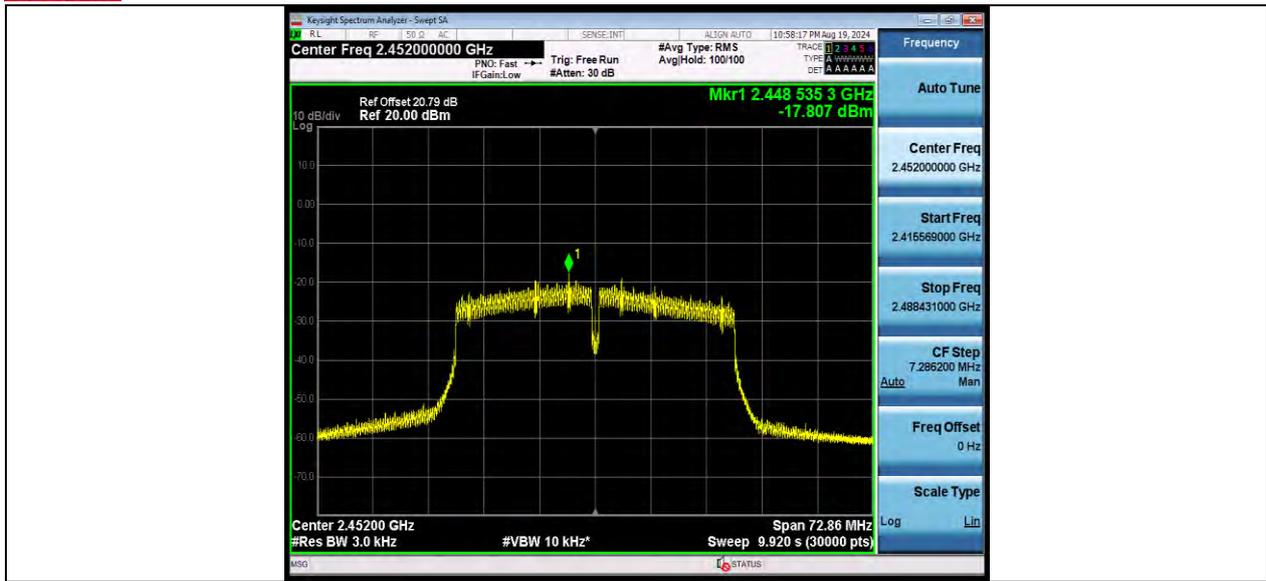


11N40SISO_Ant1_2452



**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



BV 7Layers Communications Technology
(Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road,
Zhaoshang Street, Nanshan District Shenzhen,
Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com

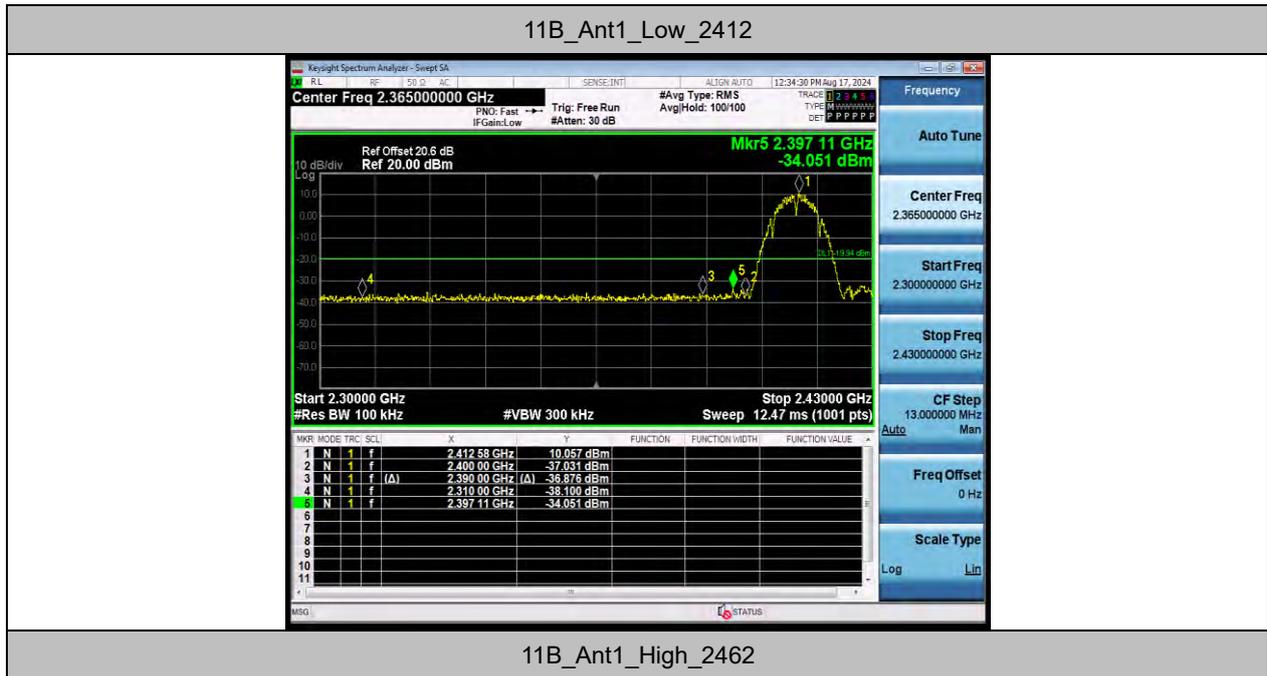


BAND EDGE MEASUREMENTS

TEST RESULT

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	10.06	-34.05	≤-19.94	PASS
		High	2462	9.94	-33.89	≤-20.06	PASS
11G	Ant1	Low	2412	8.23	-22.56	≤-21.78	PASS
		High	2462	7.79	-34.28	≤-22.21	PASS
11N20SISO	Ant1	Low	2412	5.11	-27.96	≤-24.89	PASS
		High	2462	5.07	-34.59	≤-24.93	PASS
11N40SISO	Ant1	Low	2422	1.52	-31.03	≤-28.48	PASS
		High	2452	2.67	-33.17	≤-27.33	PASS

TEST GRAPHS





BUREAU VERITAS Test Report No.: PSU-NQN2407300316RF02



11G_Ant1_Low_2412



11G_Ant1_High_2462



BUREAU VERITAS

Test Report No.: PSU-NQN2407300316RF02



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462

BV 7Layers Communications Technology (Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen, Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



BUREAU VERITAS

Test Report No.: PSU-NQN2407300316RF02



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452

BV 7Layers Communications Technology (Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen, Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



BV 7Layers Communications Technology
(Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road,
Zhaoshang Street, Nanshan District Shenzhen,
Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



CONDUCTED SPURIOUS EMISSION

TEST RESULT

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	9.33	9.33	---	PASS
			30~1000	9.33	-53.78	≤-20.67	PASS
			1000~26500	9.33	-34.09	≤-20.67	PASS
		2437	Reference	9.87	9.87	---	PASS
			30~1000	9.87	-54.37	≤-20.13	PASS
			1000~26500	9.87	-34.66	≤-20.13	PASS
		2462	Reference	8.44	8.44	---	PASS
			30~1000	8.44	-53.86	≤-21.56	PASS
			1000~26500	8.44	-34.29	≤-21.56	PASS
11G	Ant1	2412	Reference	4.04	4.04	---	PASS
			30~1000	4.04	-53.4	≤-25.96	PASS
			1000~26500	4.04	-34.88	≤-25.96	PASS
		2437	Reference	4.41	4.41	---	PASS
			30~1000	4.41	-54.16	≤-25.59	PASS
			1000~26500	4.41	-33.49	≤-25.59	PASS
		2462	Reference	3.23	3.23	---	PASS
			30~1000	3.23	-53.29	≤-26.77	PASS
			1000~26500	3.23	-35.15	≤-26.77	PASS
11N20SISO	Ant1	2412	Reference	3.65	3.65	---	PASS
			30~1000	3.65	-54.19	≤-26.35	PASS
			1000~26500	3.65	-35.09	≤-26.35	PASS
		2437	Reference	3.98	3.98	---	PASS
			30~1000	3.98	-54.38	≤-26.02	PASS
			1000~26500	3.98	-35.52	≤-26.02	PASS
		2462	Reference	3.43	3.43	---	PASS
			30~1000	3.43	-54.31	≤-26.57	PASS
			1000~26500	3.43	-34.88	≤-26.57	PASS
11N40SISO	Ant1	2422	Reference	1.06	1.06	---	PASS
			30~1000	1.06	-54.39	≤-28.94	PASS



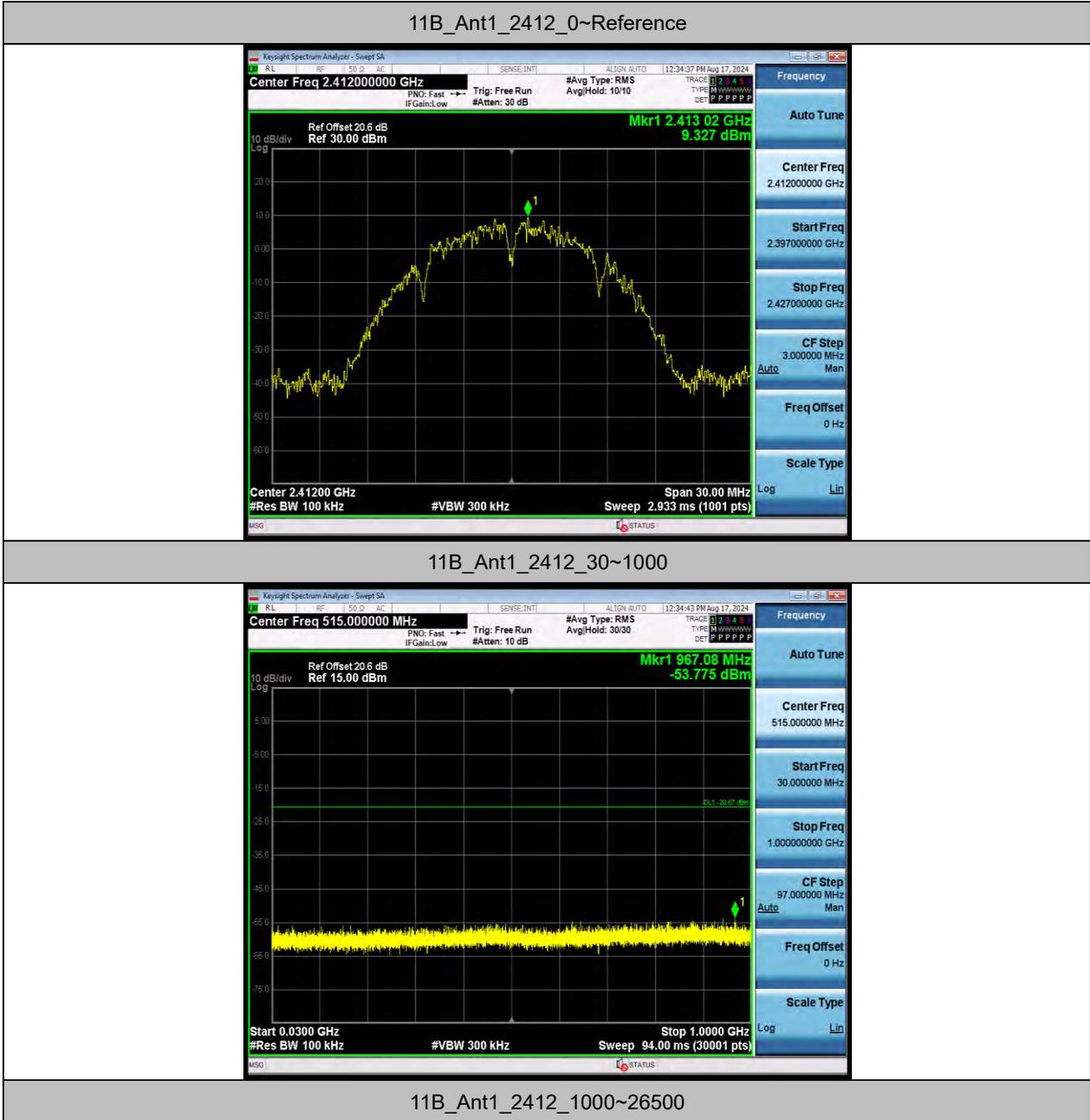
**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02

			1000~26500	1.06	-35.37	≤-28.94	PASS
		2437	Reference	-0.84	-0.84	---	PASS
			30~1000	-0.84	-54.43	≤-30.84	PASS
			1000~26500	-0.84	-34.84	≤-30.84	PASS
		2452	Reference	0.88	0.88	---	PASS
			30~1000	0.88	-54.61	≤-29.12	PASS
			1000~26500	0.88	-35.55	≤-29.12	PASS



TEST GRAPHS





**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000

BV 7Layers Communications Technology
(Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road,
Zhaoshang Street, Nanshan District Shenzhen,
Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



11B_Ant1_2437_1000~26500



11B_Ant1_2462_0~Reference

BV 7Layers Communications Technology
(Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road,
Zhaoshang Street, Nanshan District Shenzhen,
Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



11B_Ant1_2462_30~1000



11B_Ant1_2462_1000~26500

BV 7Layers Communications Technology
(Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road,
Zhaoshang Street, Nanshan District Shenzhen,
Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000

BV 7Layers Communications Technology
(Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road,
Zhaoshang Street, Nanshan District Shenzhen,
Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



11G_Ant1_2412_1000~26500



11G_Ant1_2437_0~Reference

BV 7Layers Communications Technology
(Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road,
Zhaoshang Street, Nanshan District Shenzhen,
Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com

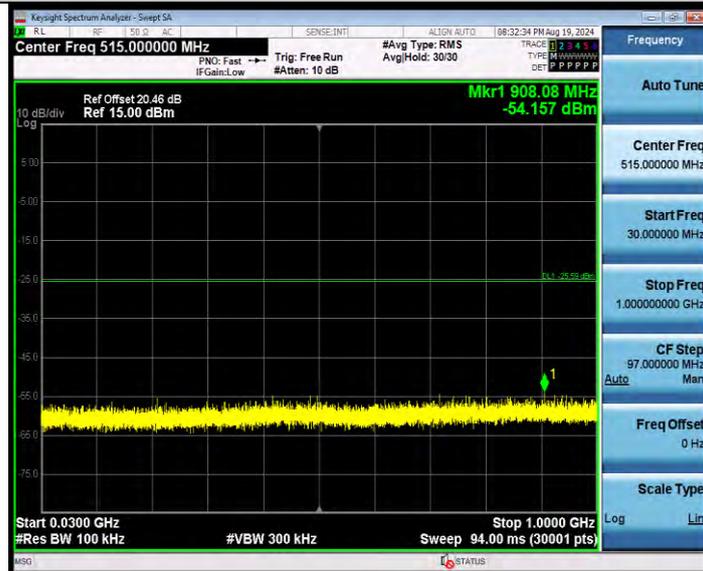


**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



11G_Ant1_2437_30~1000



11G_Ant1_2437_1000~26500

BV 7Layers Communications Technology
(Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road,
Zhaoshang Street, Nanshan District Shenzhen,
Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



BUREAU VERITAS Test Report No.: PSU-NQN2407300316RF02



11G_Ant1_2462_0~Reference

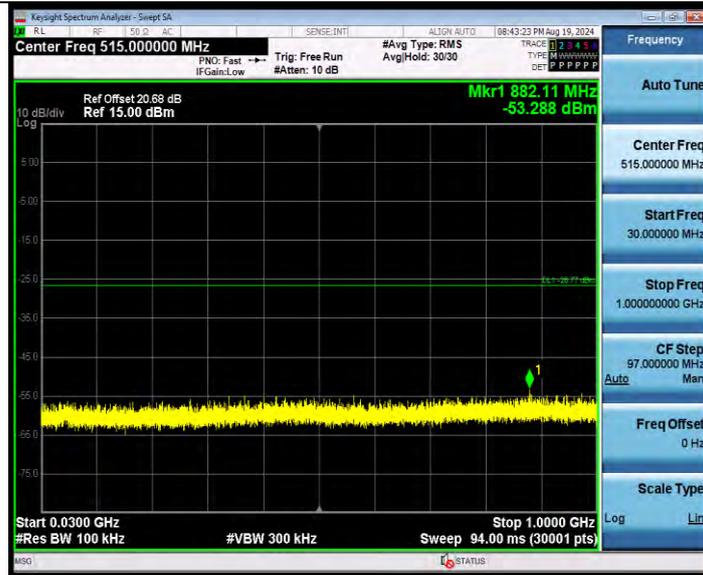


11G_Ant1_2462_30~1000



**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference

BV 7Layers Communications Technology
(Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road,
Zhaoshang Street, Nanshan District Shenzhen,
Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com

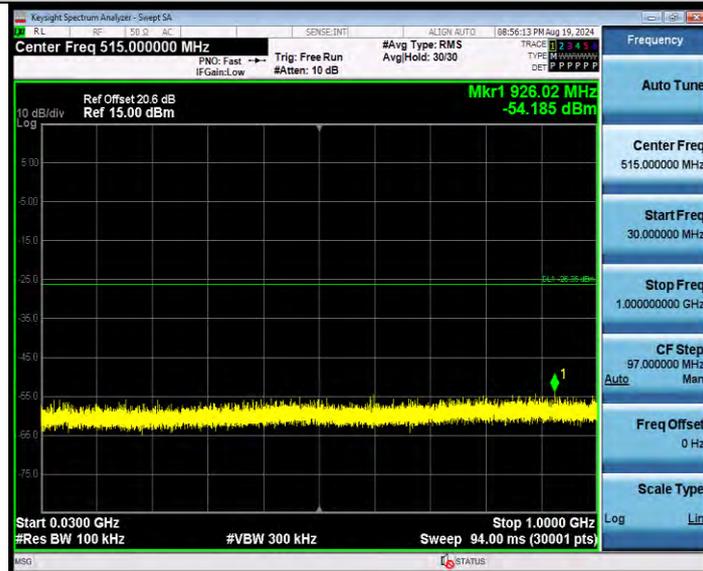


**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



11N20SISO_Ant1_2412_30~1000



11N20SISO_Ant1_2412_1000~26500



BUREAU VERITAS Test Report No.: PSU-NQN2407300316RF02



11N20SISO_Ant1_2437_0~Reference



11N20SISO_Ant1_2437_30~1000

BV 7Layers Communications Technology (Shenzhen) Co., Ltd

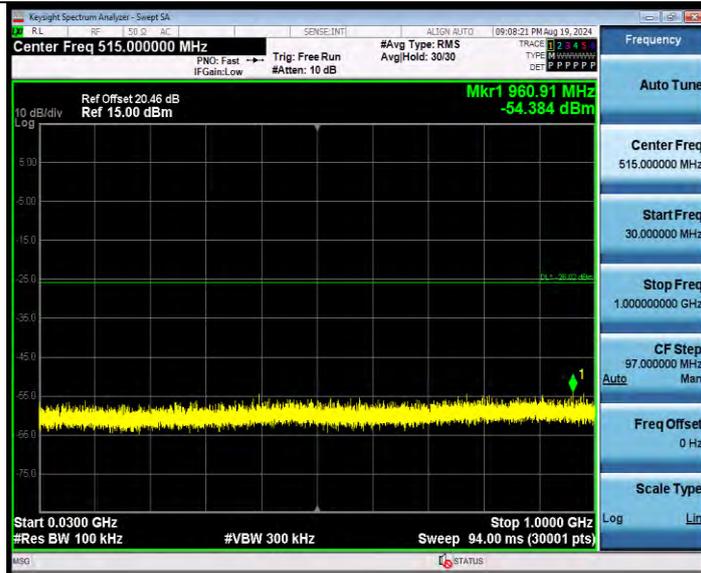
Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen, Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



BUREAU VERITAS

Test Report No.: PSU-NQN2407300316RF02



11N20SISO_Ant1_2437_1000~26500



11N20SISO_Ant1_2462_0~Reference

BV 7Layers Communications Technology (Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen, Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



11N20SISO_Ant1_2462_30~1000



11N20SISO_Ant1_2462_1000~26500

BV 7Layers Communications Technology
(Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road,
Zhaoshang Street, Nanshan District Shenzhen,
Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



BUREAU VERITAS

Test Report No.: PSU-NQN2407300316RF02



11N40SISO_Ant1_2422_0~Reference



11N40SISO_Ant1_2422_30~1000

BV 7Layers Communications Technology (Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road, Zhaoshang Street, Nanshan District Shenzhen, Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com



**BUREAU
VERITAS**

Test Report No.: PSU-NQN2407300316RF02



11N40SISO_Ant1_2422_1000~26500



11N40SISO_Ant1_2437_0~Reference

BV 7Layers Communications Technology
(Shenzhen) Co., Ltd

Room B37, Warehouse A5, No.3 Chiwan 4th Road,
Zhaoshang Street, Nanshan District Shenzhen,
Guangdong, People's Republic of China

Tel: +86 755 8869 6566
Fax: +86 755 8869 6577
Email: customerservice.sw@bureauveritas.com