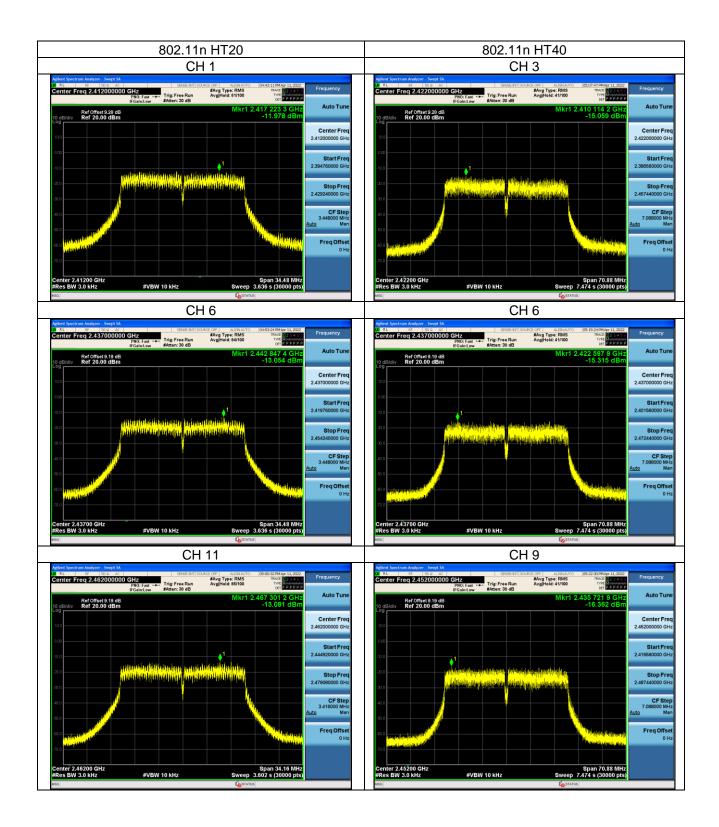


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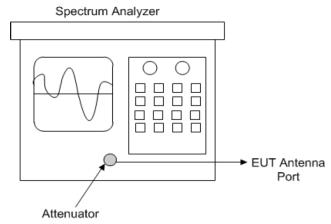


3.7 Conducted Out of Band Emission Measurement

- 3.7.1 Limits of Conducted Out of Band Emission Measurement
- a. If the maximum peak conducted output power procedure was used to determine compliance as described in 11.9.1, then the peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 20 dBc).
- b. If maximum conducted (average) output power was used to determine compliance as described in **11.9.2**. then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 30 dBc).

3.7.2 Test Setup

- DTS emissions in non-restricted frequency bands Subclause 11.11 of ANSI C63.10 is applicable.
- DTS emissions in restricted frequency bands Subclause 11.12 of ANSI C63.10 is applicable



Spectrum analyzer test configuration

3.7.3 Test Instruments

Refer to section 5 to get information of above instrument.

- 3.7.4 Test Procedure
- a. Establish a reference level by using the following procedure:
 - 1) Set instrument center frequency to DTS channel center frequency.
 - 2) Set the span to 21.5 times the DTS bandwidth)
 - 3) Set the RBW= 100 kHz)
 - 4) Set the VBW ≥3 x RBW
 - 5) Detector = peak
 - 6) Sweep time = auto coupling
 - 7) Trace mode =max hold
 - 8) Allow trace to fully stabilize
 - 9) Use the peak marker function to determine the maximum PSD level.

Note that the channel found to contain the maximum PSD level can be used to establish the reference level. b. Establish an emission level by using the following procedure:

- 1) Set the center frequency and span to encompass frequency range to be measured.
- 2) Set the RBW = 100 kHz
- 3) Set the VBW \geq 300 kHz.
- 4) Detector = peak.
- 5) Sweep time = auto couple.
- 6) Trace mode = max hold.
- 7) Allow trace to fully stabilize.
- 8) Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

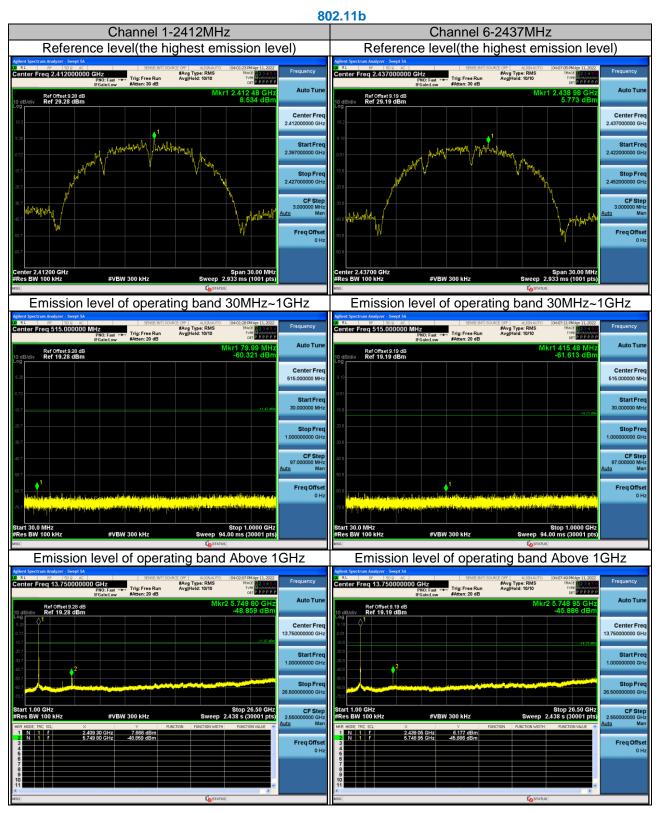
3.7.5 Deviation from Test Standard

No deviation.

3.7.6 EUT Operating Condition

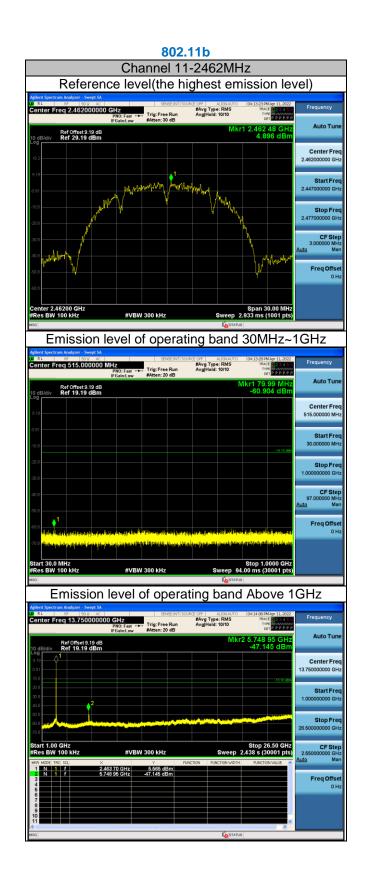
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

3.7.7 Test results



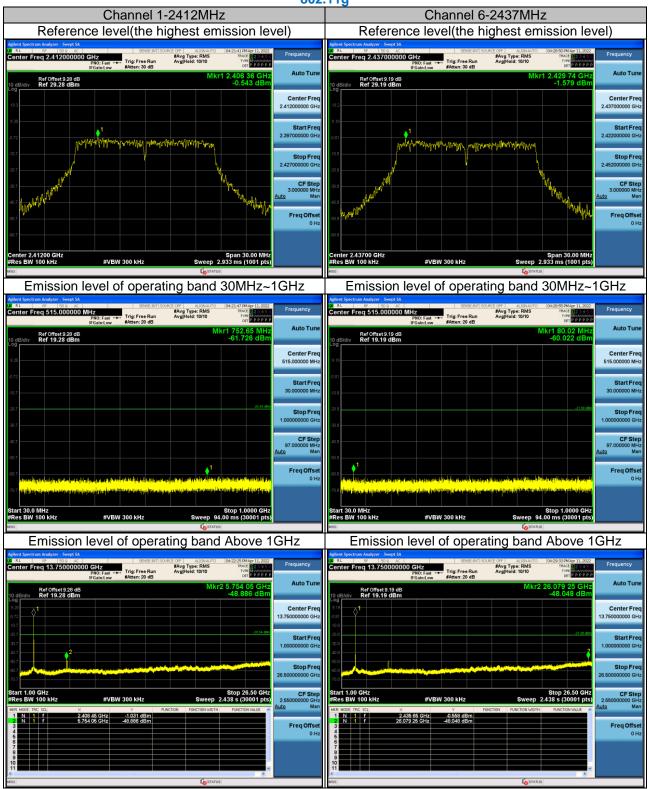
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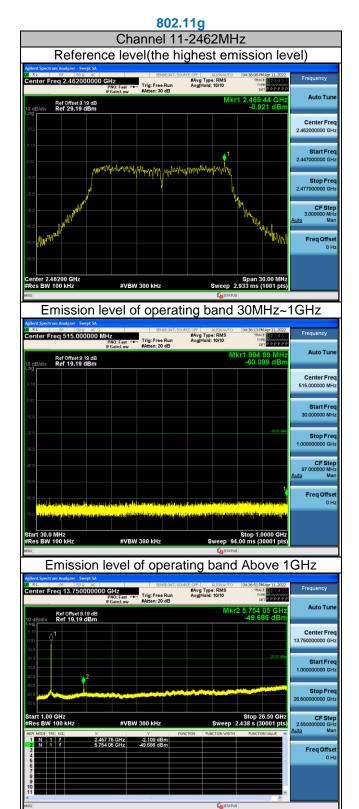




802.11g

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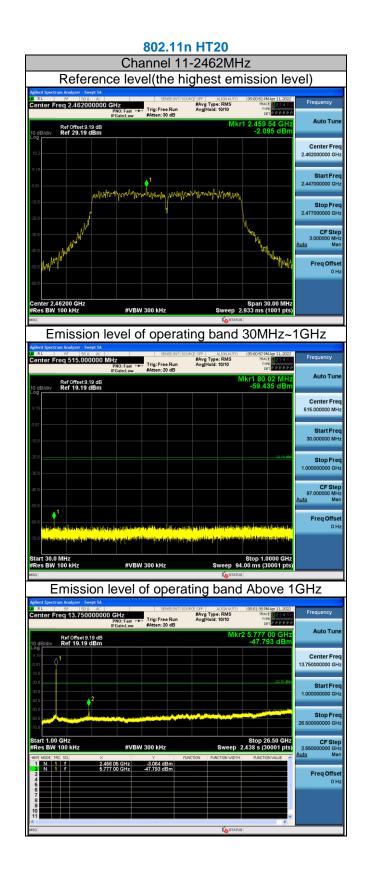
Channel 1-2412MHz Channel 6-2437MHz Reference level(the highest emission level) Reference level(the highest emission level) RL RF 502 AC enter Freq 2.412000000 GHz PN0: Fast ++ Trig: Free Run 44tton: 30 dB #Avg Type: RMS AvgiHold: 10/10 uency ter Freq 2.437000000 GHz #Avg Type: RMS AvgiHold: 10/10 Trig: Free Run Auto Tur Auto Tur Ref Offset 9.28 dB Ref 29.28 dBm Ref Offset 9.19 dB Ref 29.19 dBm -1.418 0 Center Fre Center Fr Start Fre Start Fr **•**¹ <mark>ا</mark> and the second second second Stop Fr 2000000 Gi Stop Fre 2 427 2 45 CF St 3.000000 CF Step 3.000000 ML Ma uto luto Freq Offs Freq Offs 0 H nter 2.43700 GH es BW 100 kHz Span 30.00 MHz Sweep 2.933 ms (1001 pts ter 2.41200 GHz s BW 100 kHz Span 30.00 MH: Sweep 2.933 ms (1001 pts #VBW 300 kHz #VBW 300 kHz Emission level of operating band 30MHz~1GHz Emission level of operating band 30MHz~1GHz enter Freq 515.000000 MHz Frequency Frequency #Avg Type: RMS AvgIHold: 10/10 nter Freq 515.000000 MHz #Avg Type: RMS AvgiHold: 10/10 Trig: Free Run Trig: Free Run Auto Tur Auto Tur r1 80.02 MI -59.591 dB r1 79.99 | -59.837 c Ref Offset 9.28 dB Ref 19.28 dBm Ref Offset 9.19 dB Ref 19.19 dBm Center Fre Center Fr 515.000000 M 515.000000 M Start Fre Start Fr Stop Fr Stop Fr CF S CF Step 97.000000 MI Ma ٠ **Freq Offs** Freq Offse Stop 1.0000 GHz Sweep 94.00 ms (30001 pts t 30.0 MHz s BW 100 kHz art 30.0 MHz es BW 100 kHz Stop 1.0000 GHz Sweep 94.00 ms (30001 pts #VBW 300 kHz #VBW 300 kHz Emission level of operating band Above 1GHz Emission level of operating band Above 1GHz RL RF 50 x AC nter Freq 13.750000000 GHz PNO: Fast →→ Trig: Free Run #Attan: 20 dB #Avg Type: RMS Avg|Hold: 10/10 Frequency nter Freq 13.750000000 GHz PN0: Fast ---- Trig: Free Run #Avg Type: RMS Avg|Hold: 10/10 Frequency Auto Tur Auto Tur Ref Offset 9.19 dB Ref 19.19 dBm .096 25 G 49.848 de Ref Offset 9.28 dB Ref 19.28 dBm Center Fre Center Fre 13.750000000 G 13.750 00 G Start Fr Start Fr Stop F Stop Fr Stop 26.50 GHz ep 2.438 s (30001 pts) Stop 26.50 GHz Sweep 2.438 s (30001 pts tart 1.00 GHz Res BW 100 kHz art 1.00 GHz Res BW 100 kH CF St CF Ste #VBW 300 kHz 2.5500 #VBW 300 kHz 2.55 2.417 80 GHz 5.771 05 GHz 1.964 dBr -47.599 dBr 2.440 75 GHz 26.096 25 GHz -1.318 dB Freq Offs Freq Offse 0 H

802.11n HT20

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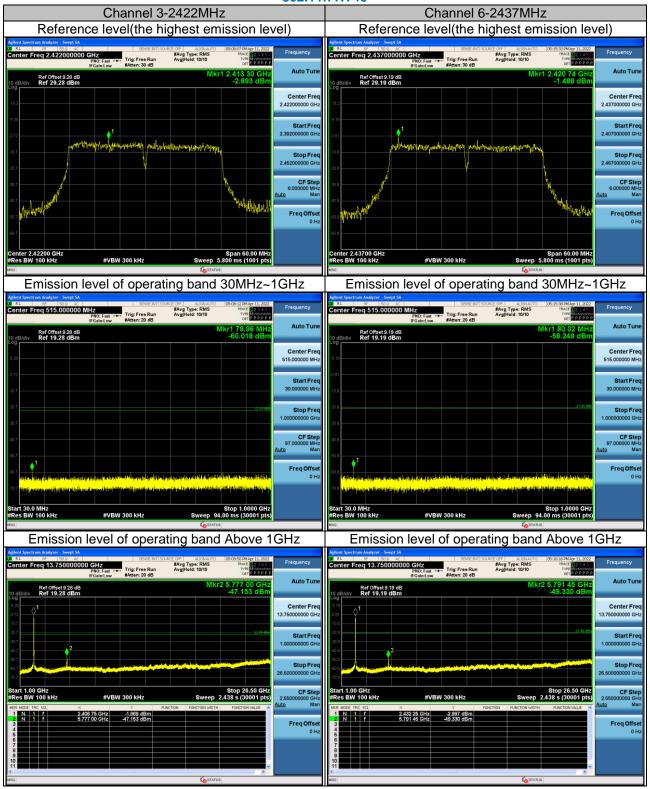
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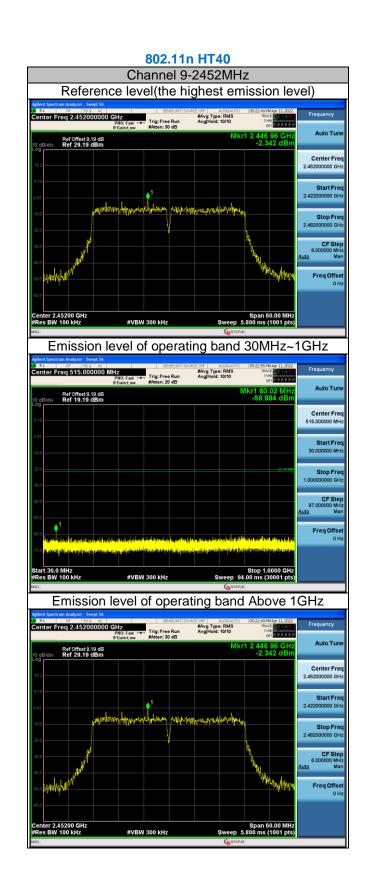




802.11n HT40

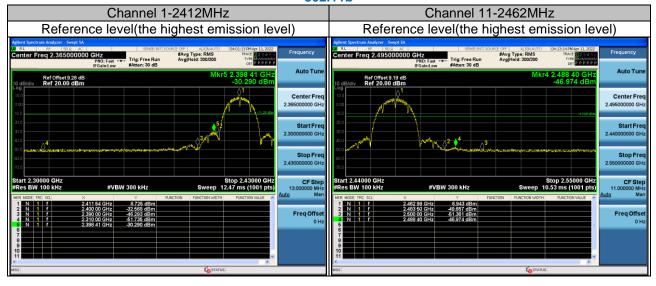
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Band-edge 802.11b

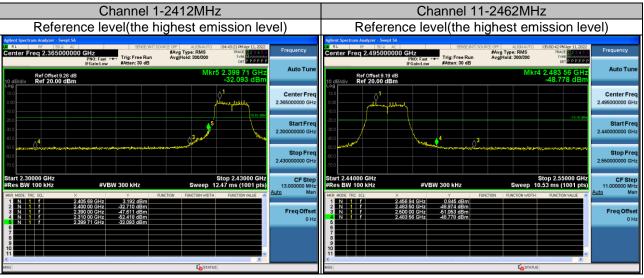
802.11g

Channel 1-2412MHz	Channel 11-2462MHz			
Reference level(the highest emission level)	Reference level(the highest emission level)			
Agilant Spectrum Analyzer - Swept SA. Agilant Spectrum Analyzer - Swept SA. QR RL FF 150 p. Ac. Street.Intf.SOURCE.0FF AUGNAUTO. 104:21:32 PMArc 11, 2022				
Center Freq 2.365000000 GHz Frequency Fre	Center Freq 2.495000000 GHz PR0: Fast +++ Trig: Free Run ArgiHold: 300/300 TVPE Movement IFGain: 00 dB			
Ref Offset9 28 dB Mkr5 2.399 97 GHz Auto Tune 10 dBlaiv Ref 20.00 dBm -34.138 dBm	Ref Offset 9.19 dB 10 dB/div Ref 20.00 dBm -48.298 dBm			
Leg 100 000 100 100 100 100 100 10	Center Freq 2.495000000 GHz 2.495000000 GHz			
200 (17 6.56) 300 (20000000 GHz 2000 (17 6.56) 300 (2000000 GHz 2.30000000 GHz	300			
Stop Freq Stop Freq 700 2.43000000 GHz	Stop Freq Stop Freq 700 2.56000000 GHz			
Start 2.30000 GHz Stop 2.43000 GHz CF Step 1.43000 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 12.47 ms (1001 pts) 13.00000 MHz MIR MORE TRC SCL X Y Runction Runction worth Runction wort	Start 2.44000 GHz Stop 2.55000 GHz CF Step 1100000 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 10.53 ms (1001 pts) HRF Mode TRC SCI X Y READE TRC SCI X Y IN 1 1 2466 95 GHz 0.721 dBm 0.721 dBm			
1 N 1 f 2404 52 0Hz 2550 dBm	1 N 1 f 2.46695 GHz 0.741 dBm 3 N 1 f 2.4850 GHz 4.800 GBm 3 N 1 f 2.4800 GHz 4.800 GBm 0Hz 6 1 r 2.49753 GHz 4.8298 GBm 0Hz 0Hz 7 1 1 r 2.49753 GHz 4.8298 GBm 0Hz 0Hz 9 1 1 1 1 1.917 GHz 0Hz 0Hz 0Hz 0Hz			
aso to status				

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802.11n HT20

802.11n HT40

Channel 3-2422MHz	Channel 9-2452MHz	
Reference level(the highest emission level)	Reference level(the highest emission level)	
PR0: Fast → Trig: Free Run Avg Hold: 300/300 TVP	Addent Spectrum Analyzer - Swept SA Spectrum Analyzer - Swept SA UP RL HP SSG & AC SPECENT SOURCE OFF ALIONATIO 0522:50 PM/or 11, 2022 Center Freq 2.495000000 GHz PR0: Fast ->> Trig: Free Run AvgHold: 300000 Trig: Pree Run Frequency Auto Tune Frequency Auto Tune MKr4 2.489 50 GHz Auto Tune	
10 dBraiv Ref 20.00 dBm -34.916 dBm 10 0	enter Freq 000000 GHz 00 00 00 00 00 00 00 00 00 0	
	Start Freq 300 318.00 Start Freq 300 2.44000000 GHz 2.44000000 GHz 2.44000000 GHz Stop Freq 300 550 Freq 550 Freq	
Start 2.30000 GHz Stop 2.43000 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 12.47 ms (1001 pts)	00000 GHz 2.55000000 GHz 2.55000000 GHz CF Step Start 2.44000 GHz \$top 2.55000 GHz CF Step Man #Res BW 100 kHz #VBW 300 kHz \$top 2.55000 GHz CF Step Man	
MR NULE INC. SLL 2 405 69 GHz -0.199 dBm 2 N 1 f 2405 69 GHz -0.199 dBm 2 N 1 f 2400.00 GHz -34 916 dBm	Main Main Main Main V Y PARCION PARCINC PARCINC PARCINC PARCINC PARCINC PARCINC PARCINA PARCINA PARCINA <	

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4. Pictures of Test Arrangements

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

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5. Test Instruments

Description & Manufacturer	Model No.	Serial No.	Due Date of Calibration
Spectrum Keysight	N9020A	MY51240612	2021/09/16
Spectrum Analyzer Rohde&Schwarz	FSV-40N	101783	2021/09/16
Power Meter 10Hz~18GHz Tonscend	JS0806-2	188060126	2021/09/16
Signal generator Keysight	E4421B	GB40051020	2021/09/16
Signal generator Keysight	N5182A	MY47420944	2021/09/16
Test Software Tonscend	JS0806-2	NA	NA
Hygrothermograph Yuhuaze	HTC-1	NA	2021/09/16

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA.

2. The test was performed in Chamber 1.



Appendix – Information on The Testing Laboratories

We, <u>Hwa-Hsing (Dongguan) Co., Ltd.</u>, A global provider of TESTING and CERTIFICATION services for consumer products, electronic products and wireless information technology products. Adhering to the core values "HONEST and TRUSTWORTHY, OBJECTIVE and IMPARTIALITY, RIGOROUS and AFFICIENT", commitment to provide professional, perfect and efficient comprehensive ONE-STOP solution of TESTING and CERTIFICATION services for Manufacturers, Buyers, Traders, Brands, Retailers. Assist client to better manage risk, protect their brands, reduce costs and cut time to over 150 markets in global. Our laboratories are FCC recognized accredited test firms and accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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---- END ----