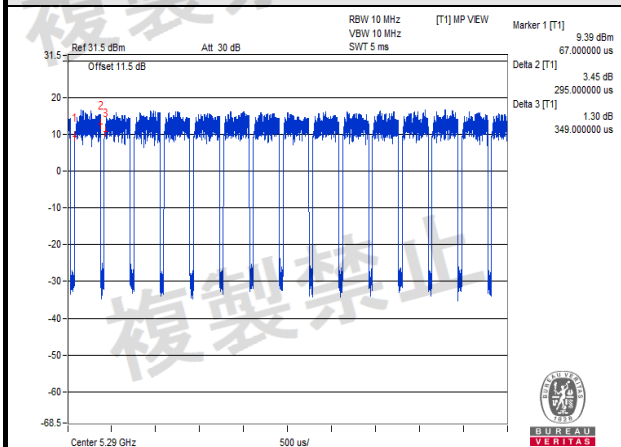




BUREAU
VERITAS

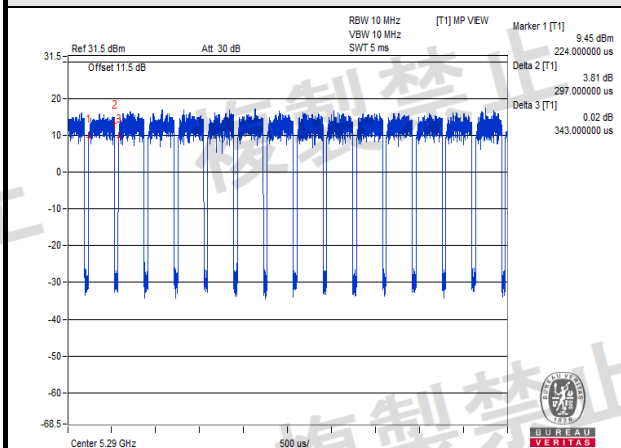
V_{normal}



V_{max.}



V_{min.}

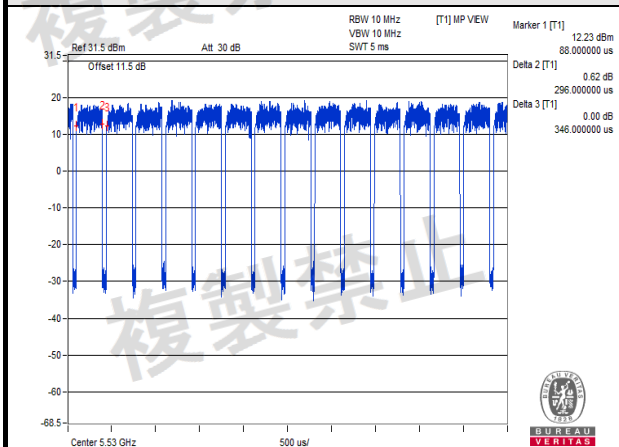


CH 58 (5290MHz)



BUREAU
VERITAS

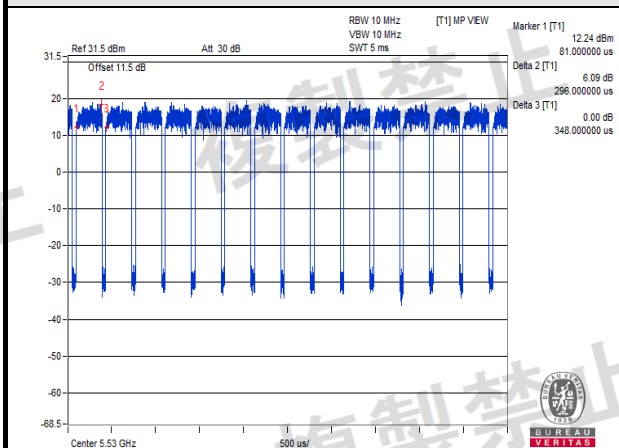
V_{normal}



V_{max.}



V_{min.}

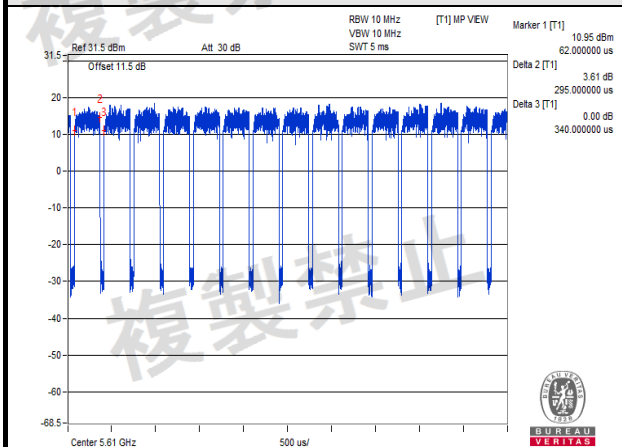


CH 106 (5530MHz)

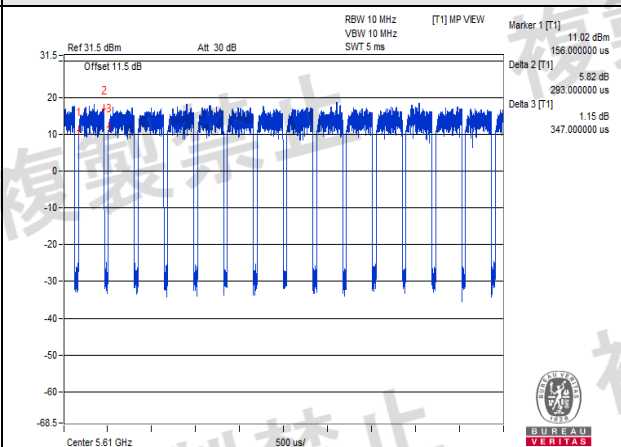


BUREAU
VERITAS

V_{normal}



V_{max.}



V_{min.}



CH 122 (5610MHz)

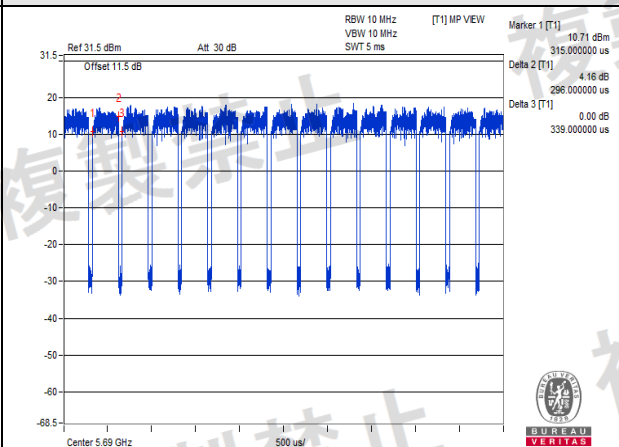


BUREAU
VERITAS

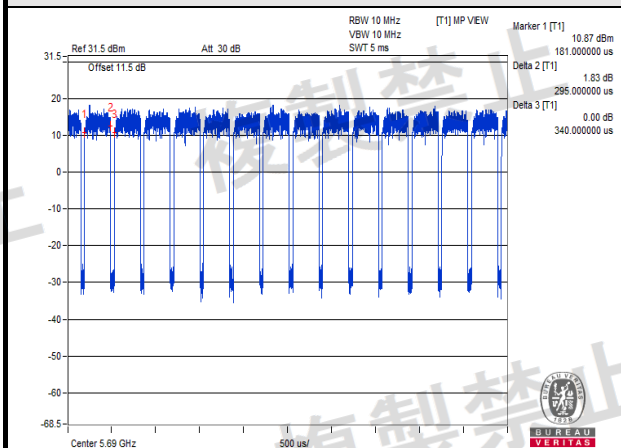
V_{normal}



V_{max.}



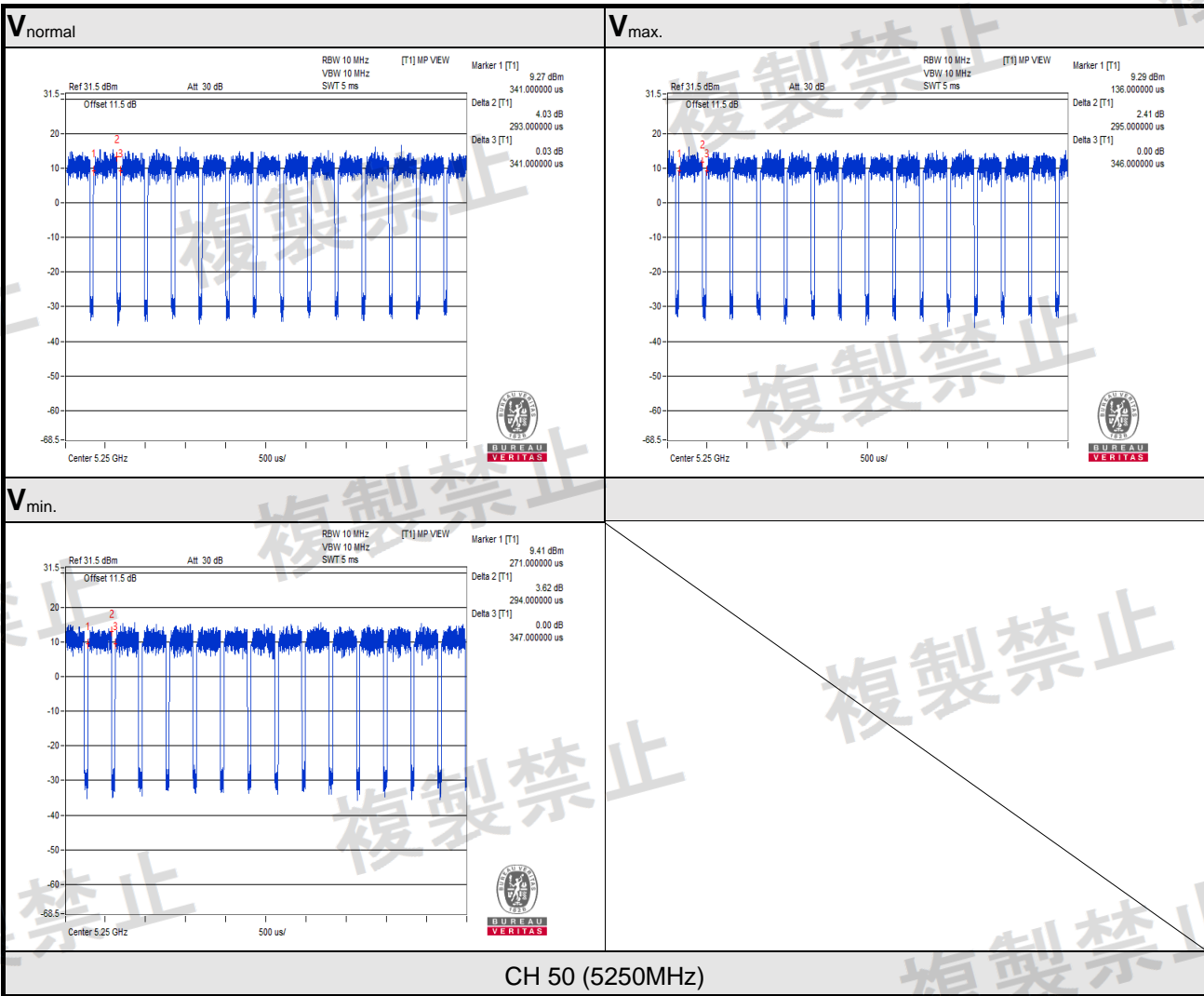
V_{min.}

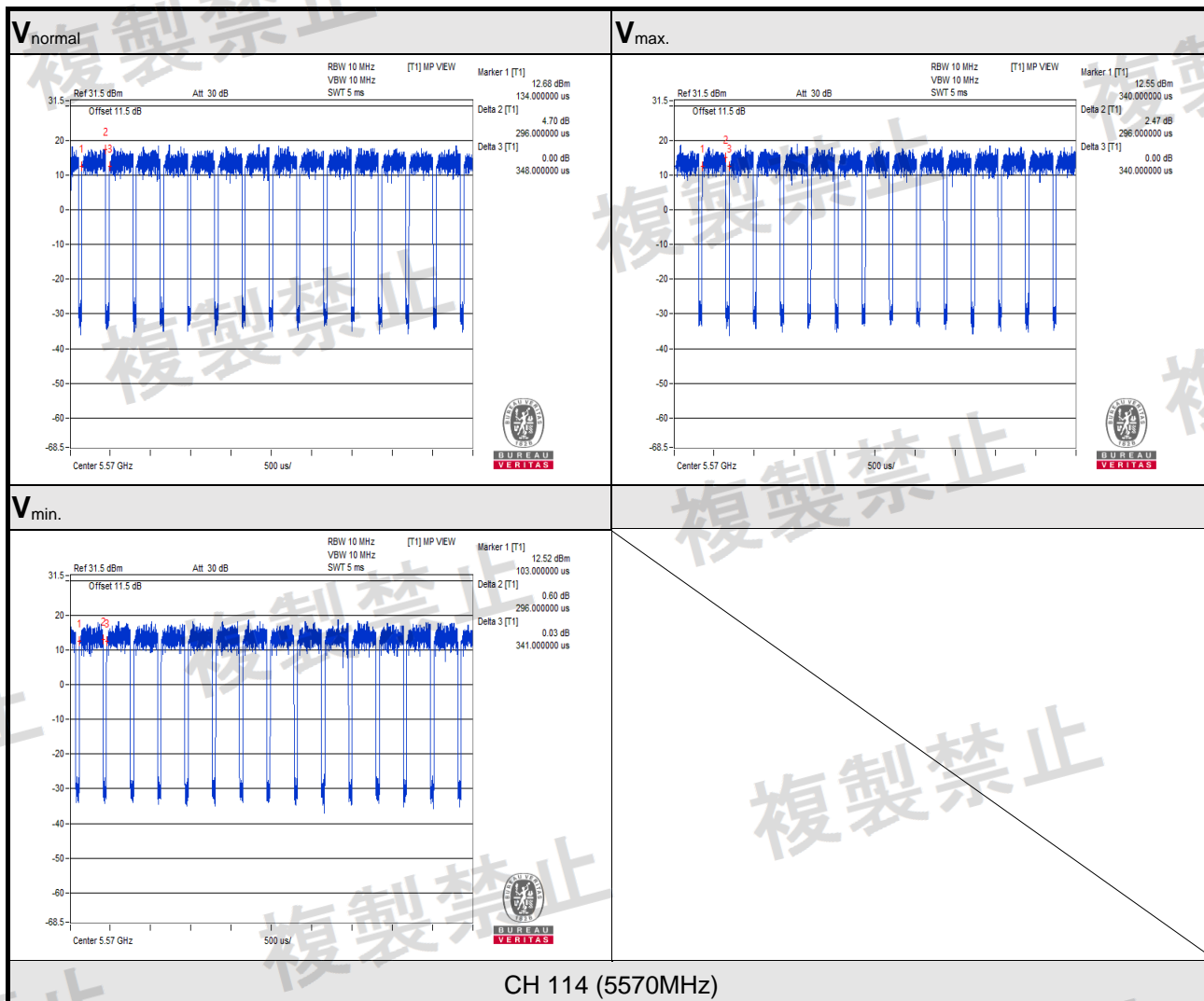


CH 138 (5690MHz)

802.11ax (HE160)

TEST CONDITION	Burst Length (ms)	
	CH 50 (5250MHz)	CH 114 (5570MHz)
V_{normal}	0.29	0.29
$V_{max.}$	0.29	0.29
$V_{min.}$	0.29	0.29
Limit	$\leq 8ms$	



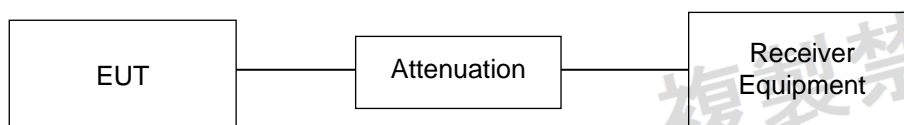


4.8 Interference Prevention Function

4.8.1 Limits of Interference Prevention Function

Radio equipment used mainly on the same premises and automatically transmits or receives identification code.

4.8.2 Test Setup

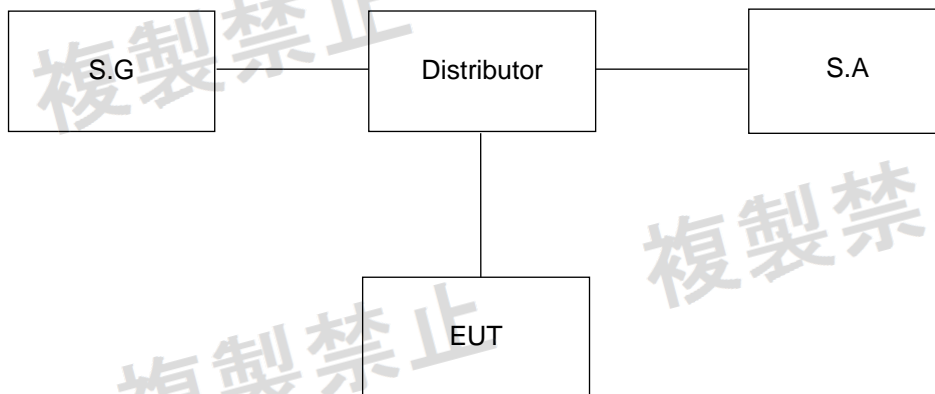


4.8.3 Test Results

Link Mode	Test Result
WiFi	Pass

4.9 Carrier Sense Capability

4.9.1 Measuring System Block Diagram



4.9.2 Measuring Operation Procedures

- Turn the standard signal generator output OFF. Leave the equipment under test to be ready for transmission and verify the transmission with the spectrum analyzer.
- Set the equipment under test to the receiving state.
- Turn the standard signal generator ON and leave the equipment under test to be ready for transmission and verify with the spectrum analyzer that no transmission is being made.

4.9.3 Level of the Ambient Carrier

802.11a

Frequency (MHz)	Pcs (dBm)	C.F (dB)	S.G Level
5180	-46.68	15.88	-30.80
5240	-46.78	15.84	-30.94
5260	-46.81	15.86	-30.95
5320	-46.91	15.82	-31.09
5500	-47.20	15.83	-31.37
5600	-47.35	15.88	-31.47
5720	-47.54	15.84	-31.70

Note:

Pcs (dBm) = 22.79 + Gr - 20log(F).

Gr: Antenna gain (4.82dBi).

F: Transmission frequency (MHz).

C.F = Distributor loss + cable loss.

802.11n (HT20)/802.11ac (VHT20)

Frequency (MHz)	Pcs (dBm)	C.F (dB)	S.G Level
5180	-46.68	15.77	-30.91
5240	-46.78	15.76	-31.02
5260	-46.81	15.79	-31.02
5320	-46.91	15.75	-31.16
5500	-47.20	15.72	-31.48
5600	-47.35	15.71	-31.64
5720	-47.54	15.73	-31.81

Note:

Pcs (dBm) = 22.79 + Gr - 20log(F).

Gr: Antenna gain (4.82dBi).

F: Transmission frequency (MHz).

C.F = Distributor loss + cable loss.

802.11n (HT40)/802.11ac (VHT40)

Frequency (MHz)	Pcs (dBm)	C.F (dB)	S.G Level
5190	-46.69	15.88	-30.81
5230	-46.76	15.85	-30.91
5270	-46.83	15.86	-30.97
5310	-46.89	15.83	-31.06
5510	-47.21	15.84	-31.37
5590	-47.34	15.77	-31.57
5710	-47.52	15.89	-31.63

Note:

Pcs (dBm) = 22.79 + Gr - 20log(F).

Gr: Antenna gain (4.82dBi).

F: Transmission frequency (MHz).

C.F = Distributor loss + cable loss.

802.11ac (VHT80)

Frequency (MHz)	Pcs (dBm)	C.F (dB)	S.G Level
5210	-46.73	11.16	-35.57
5290	-46.86	11.22	-35.64
5530	-47.24	11.54	-35.70
5610	-47.37	11.55	-35.82
5690	-47.49	11.53	-35.96

Note:

Pcs (dBm) = 22.79 + Gr - 20log(F).

Gr: Antenna gain (4.82dBi).

F: Transmission frequency (MHz).

C.F = Distributor loss + cable loss.

802.11ac (VHT160)

Frequency (MHz)	Pcs (dBm)	C.F (dB)	S.G Level
5250	-46.79	11.13	-35.66
5570	-52.13	11.22	-40.91

Note:

Pcs (dBm) = 22.79 + Gr - 20log(F).

Gr: Antenna gain (4.82dBi).

F: Transmission frequency (MHz).

C.F = Distributor loss + cable loss.

802.11ax (HE20)

Frequency (MHz)	Pcs (dBm)	C.F (dB)	S.G Level
5180	-46.68	15.77	-30.91
5240	-46.78	15.73	-31.05
5260	-46.81	15.76	-31.05
5320	-46.91	15.71	-31.20
5500	-47.20	15.74	-31.46
5600	-47.35	15.75	-31.60
5720	-47.54	15.78	-31.76

Note:

Pcs (dBm) = 22.79 + Gr - 20log(F).

Gr: Antenna gain (4.82dBi).

F: Transmission frequency (MHz).

C.F = Distributor loss + cable loss.

802.11ax (HE40)

Frequency (MHz)	Pcs (dBm)	C.F (dB)	S.G Level
5190	-46.69	15.86	-30.83
5230	-46.76	15.84	-30.92
5270	-46.83	15.85	-30.98
5310	-46.89	15.86	-31.03
5510	-47.21	15.83	-31.38
5590	-47.34	15.81	-31.53
5710	-47.52	15.88	-31.64

Note:

Pcs (dBm) = 22.79 + Gr - 20log(F).

Gr: Antenna gain (4.82dBi).

F: Transmission frequency (MHz).

C.F = Distributor loss + cable loss.

802.11ax (HE80)

Frequency (MHz)	Pcs (dBm)	C.F (dB)	S.G Level
5210	-46.73	11.25	-35.48
5290	-46.86	11.24	-35.62
5530	-47.24	11.62	-35.62
5610	-47.37	11.54	-35.83
5690	-47.49	11.56	-35.93

Note:

Pcs (dBm) = 22.79 + Gr - 20log(F).

Gr: Antenna gain (4.82dBi).

F: Transmission frequency (MHz).

C.F = Distributor loss + cable loss.

802.11ax (HE160)

Frequency (MHz)	Pcs (dBm)	C.F (dB)	S.G Level
5250	-46.79	11.29	-35.50
5570	-52.13	11.32	-40.81

Note:

Pcs (dBm) = 22.79 + Gr - 20log(F).

Gr: Antenna gain (4.82dBi).

F: Transmission frequency (MHz).

C.F = Distributor loss + cable loss.

4.9.4 Test Result

Pass

4.10 Number of Carriers within 1 MHz Bandwidth in OFDM

4.10.1 Limit of Number of Carriers

For each 1MHz bandwidth in OFDM, there should be at least 1 carrier.

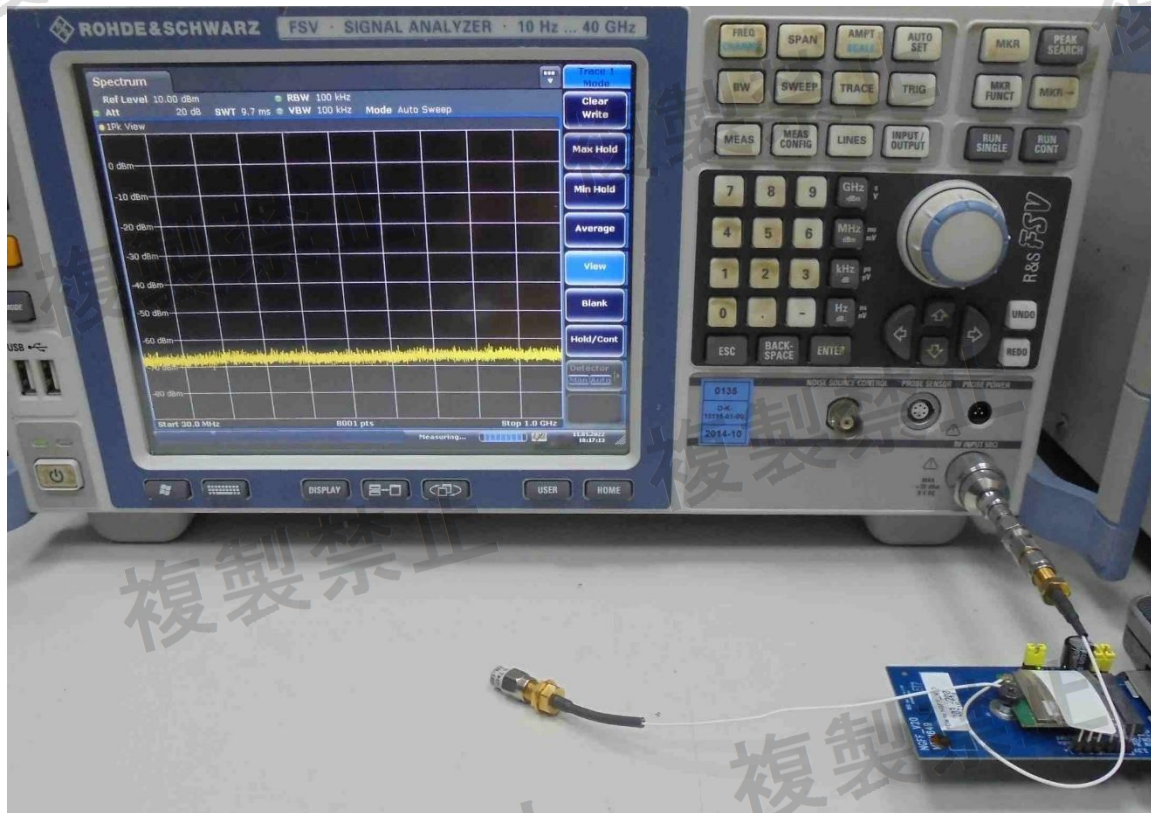
4.10.2 Test Setup



4.10.3 Test Results

About OFDM Technical, one OFDM Channel will have 52 sub-carriers. At present, we observe this product via the spectrum, and we know that there are 3 carriers in 1 MHz bandwidth in OFDM.

5 Photographs of the Test Configuration



Appendix - Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are 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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Fax: 886-2-26051924

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Web Site: www.bureauveritas-adt.com

The address and road map of all our labs can be found in our web site also.

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