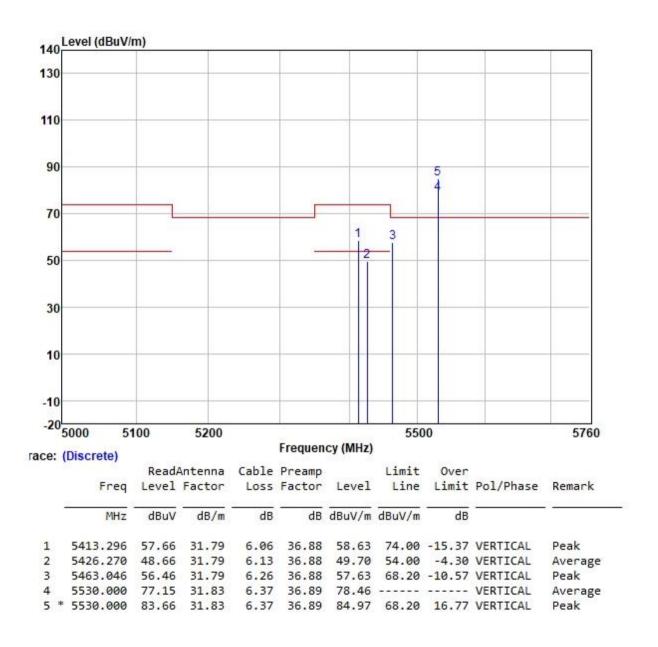


Report No.: GZCR211202146003

Page: 103 of 409

Test Mode: 02; Polarity: Vertical; Modulation:802.11ac; Bandwidth:80MHz; Channel:Low





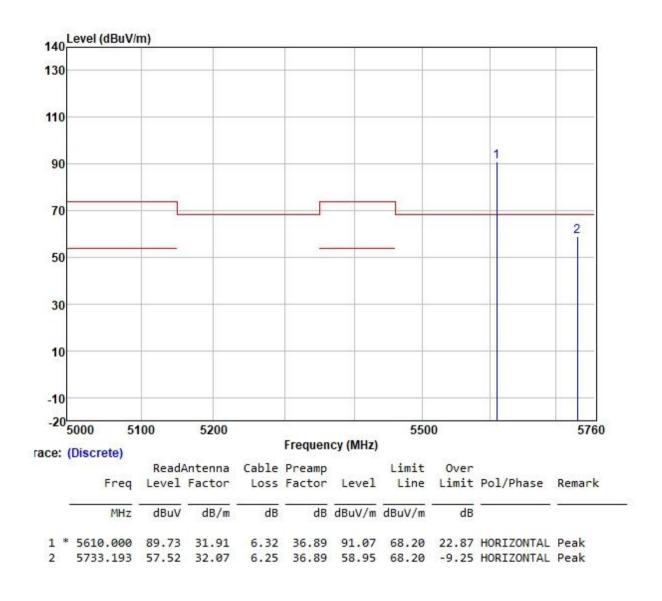
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms



Report No.: GZCR211202146003

Page: 104 of 409

Test Mode: 02; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:80MHz; Channel:High





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms

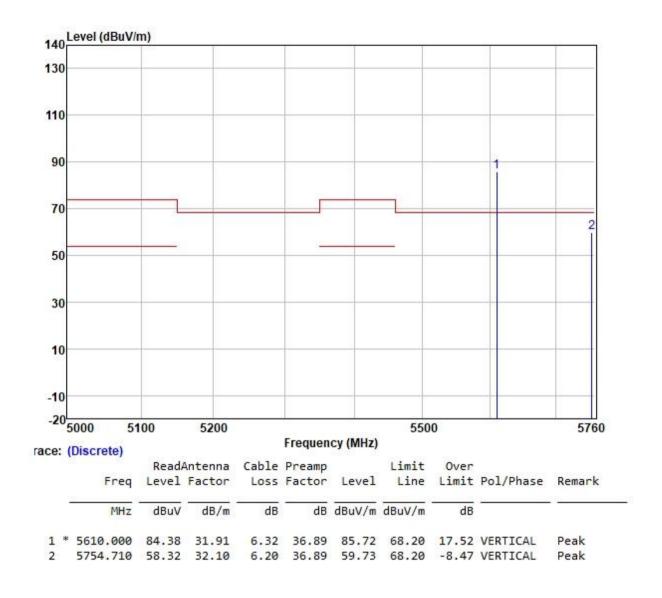
or email: CN.Doccheck@sgs.com No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR211202146003

Page: 105 of 409

Test Mode: 02; Polarity: Vertical; Modulation:802.11ac; Bandwidth:80MHz; Channel:High



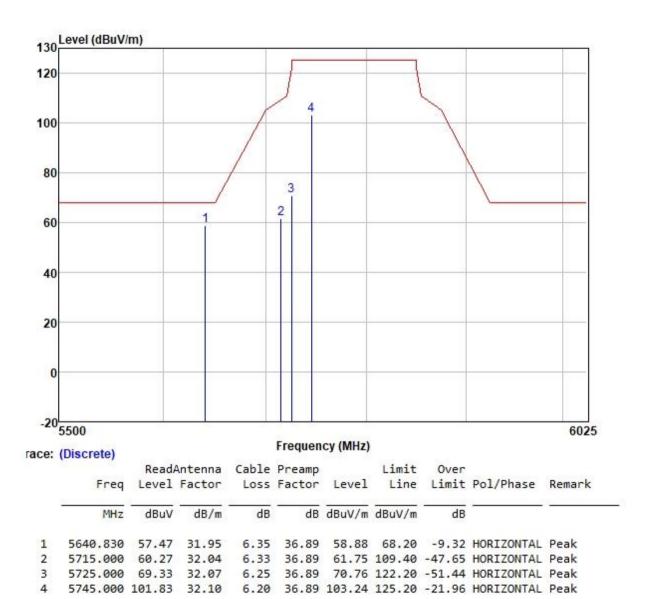




Report No.: GZCR211202146003

Page: 106 of 409

Test Mode: 03; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



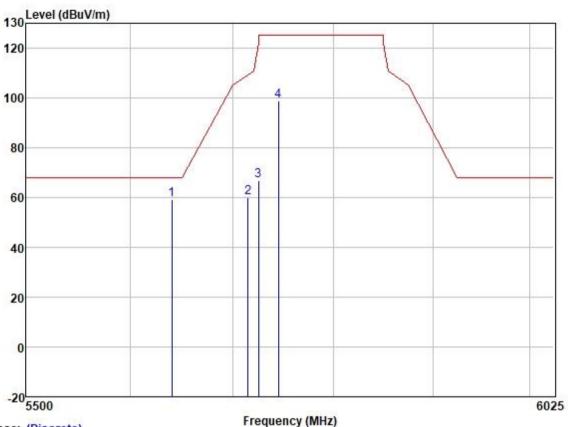




Report No.: GZCR211202146003

Page: 107 of 409

Test Mode: 03; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



rance (Disprets)	Frequency (MHz
race: (Discrete)	

	2) Z	Read	Antenna	Cable	Preamp		Limit	Over		
	Freq								Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		28,1
1	5640.138	57.67	31.95	6.35	36.89	59.08	68.20	-9.12	VERTICAL	Peak
2	5715.000	58.71	32.04	6.33	36.89	60.19	109.40	-49.21	VERTICAL	Peak
3	5725.000	65.49	32.07	6.25	36.89	66.92	122.20	-55.28	VERTICAL	Peak
4	5745.000	97.55	32.10	6.20	36.89	98.96	125.20	-26.24	VERTICAL	Peak



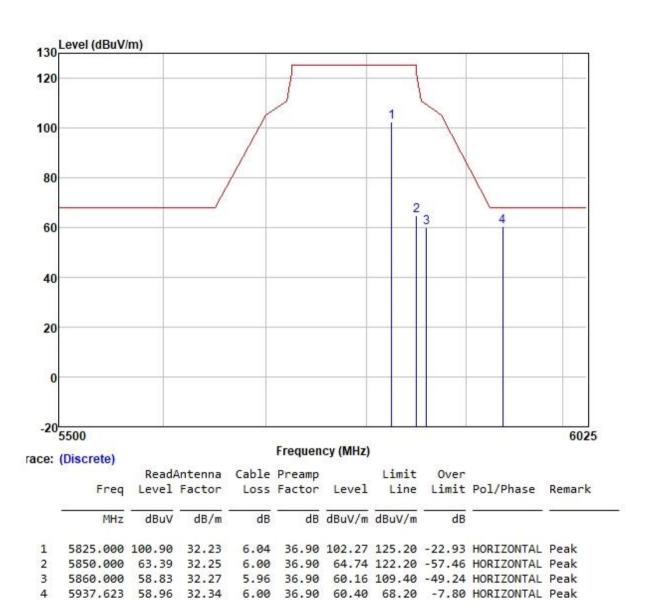
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms



Report No.: GZCR211202146003

Page: 108 of 409

Test Mode: 03; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms

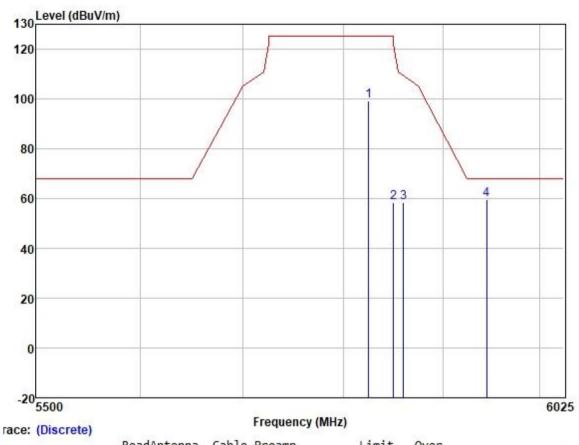
or email: CN.Doccheck@sgs.com No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR211202146003

Page: 109 of 409

Test Mode: 03; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



ice:	(Discrete)									
	Freq		Antenna Factor						Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		3511
1	5825.000	97.74	32.23	6.04	36.90	99.11	125.20	-26.09	VERTICAL	Peak
2	5850.000	57.18	32.25	6.00	36.90	58.53	122.20	-63.67	VERTICAL	Peak
3	5860.000	56.99	32.27	5.96	36.90	58.32	109.40	-51.08	VERTICAL	Peak
4	5944.843	57.91	32.36	6.05	36.90	59.42	68.20	-8.78	VERTICAL	Peak

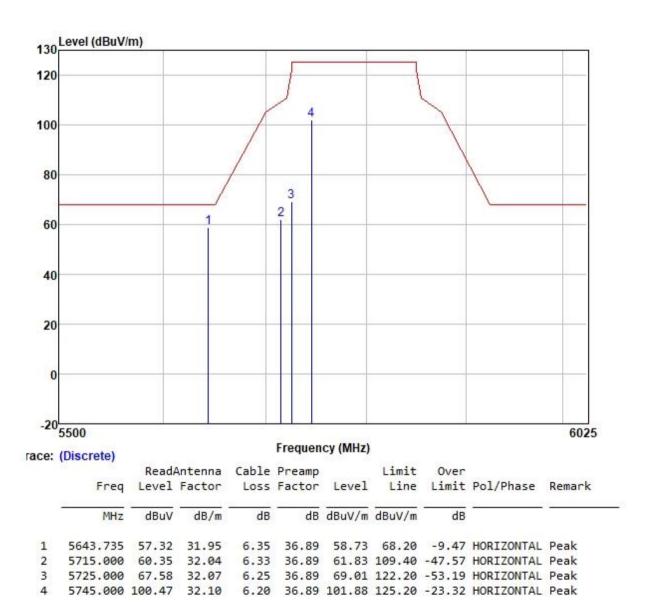




Report No.: GZCR211202146003

Page: 110 of 409

Test Mode: 03; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:Low





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms-Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions

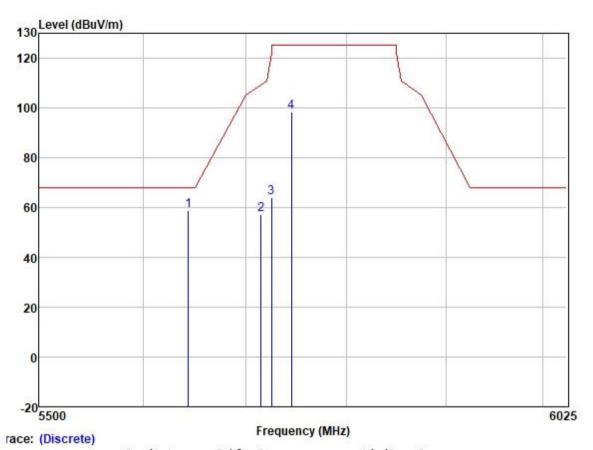
or email: CN.Doccheck@sgs.com No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR211202146003

Page: 111 of 409

Test Mode: 03; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



	Freq		Antenna Factor						Pol/Phase	Remark	
	MHz	dBuV	dB/m	——dB	——dB	dBuV/m	dBuV/m	dB	3	3316	_
1	5643.320	57.47	31.95	6.35	36.89	58.88	68.20	-9.32	VERTICAL	Peak	
2	5715.000	55.84	32.04	6.33	36.89	57.32	109.40	-52.08	VERTICAL	Peak	
3	5725.000	62.43	32.07	6.25	36.89	63.86	122.20	-58.34	VERTICAL	Peak	
4	5745.000	96.90	32.10	6.20	36.89	98.31	125.20	-26.89	VERTICAL	Peak	



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

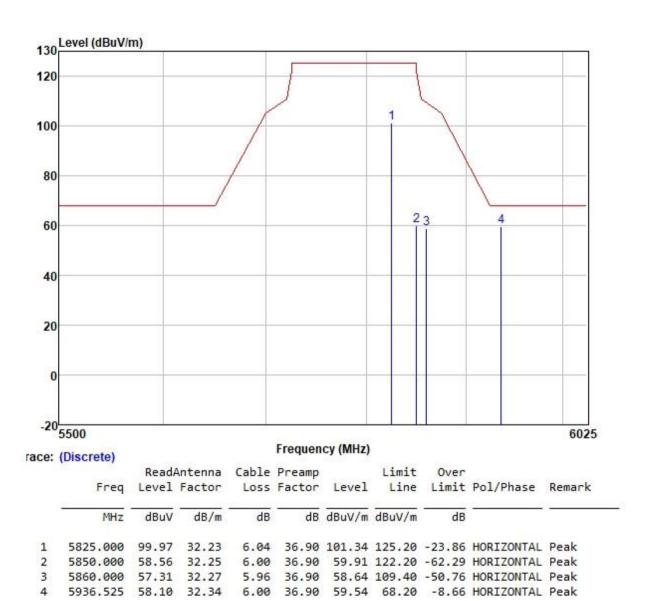
Attention:To the feet the authenticity of testing (inspection report* certificate please contact us at testing inspection report* cert



Report No.: GZCR211202146003

Page: 112 of 409

Test Mode: 03; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:High





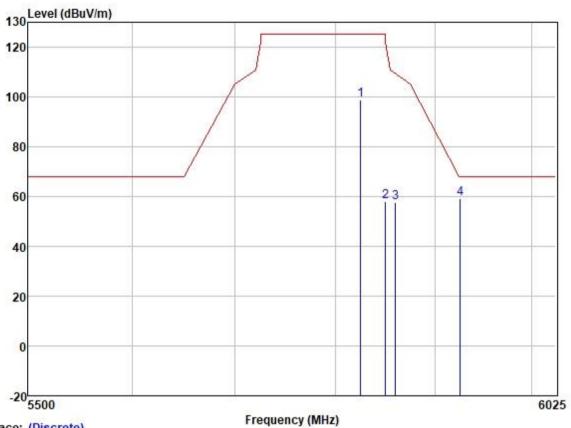
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms



Report No.: GZCR211202146003

Page: 113 of 409

Test Mode: 03; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:High



race: (Discrete)	Frequency (MH	Z
ace. (Discrete)		

	Freq		Antenna Factor						Pol/Phase	Remark	
	MHz	dBuV	dB/m	dB	— dB	dBuV/m	dBuV/m	dB	3	384	
1	5825.000	97.25	32.23	6.04	36.90	98.62	125.20	-26.58	VERTICAL	Peak	
2	5850.000	56.79	32.25	6.00	36.90	58.14	122.20	-64.06	VERTICAL	Peak	
3	5860.000	56.27	32.27	5.96	36.90	57.60	109.40	-51.80	VERTICAL	Peak	
4	5925.870	57.59	32.34	6.00	36.90	59.03	68.20	-9.17	VERTICAL	Peak	



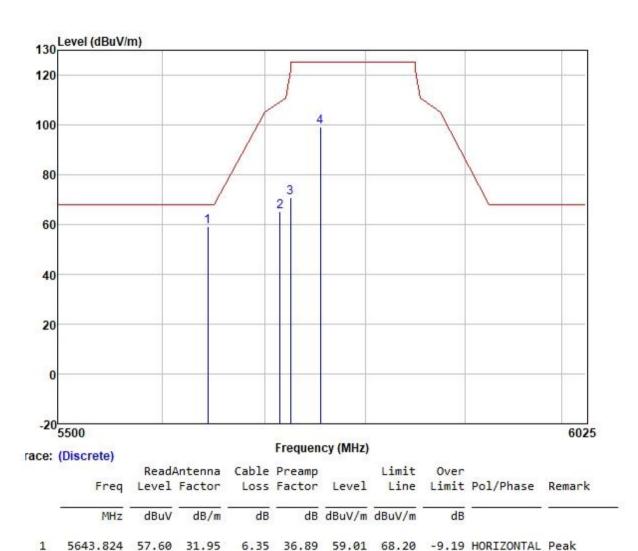
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms



Report No.: GZCR211202146003

Page: 114 of 409

Test Mode: 03; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low





2

3

5715.000 63.91 32.04

5725.000 69.39 32.07

5755.000 97.91 32.10

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms

6.33 36.89 65.39 109.40 -44.01 HORIZONTAL Peak

6.25 36.89 70.82 122.20 -51.38 HORIZONTAL Peak 6.20 36.89 99.32 125.20 -25.88 HORIZONTAL Peak

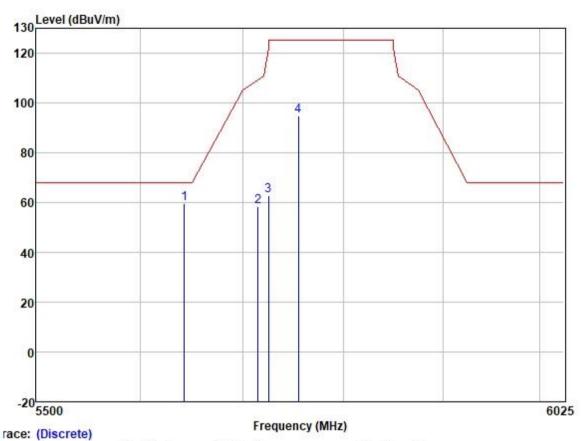
or email: CN.Doccheck@sgs.com No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR211202146003

Page: 115 of 409

Test Mode: 03; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



	20 20	Read	Antenna	Cable	Preamn		Limit	Over		
	Freq								Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	<u> </u>	2824
1	5642.447	58.21	31.95	6.35	36.89	59.62	68.20	-8.58	VERTICAL	Peak
2	5715.000	56.86	32.04	6.33	36.89	58.34	109.40	-51.06	VERTICAL	Peak
3	5725.000	61.37	32.07	6.25	36.89	62.80	122.20	-59.40	VERTICAL	Peak
4	5755.000	93.26	32.10	6.20	36.89	94.67	125.20	-30.53	VERTICAL	Peak

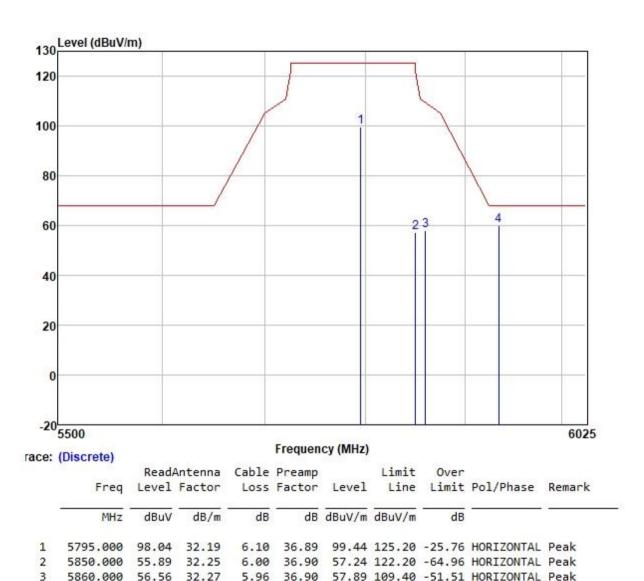




Report No.: GZCR211202146003

Page: 116 of 409

Test Mode: 03; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:High





5934.836 58.61 32.34

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms-Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions

6.00 36.90 60.05 68.20 -8.15 HORIZONTAL Peak

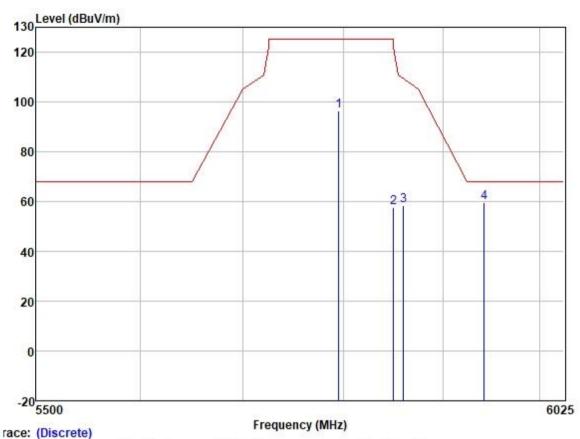
or email: CN.Doccheck@sgs.com No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR211202146003

Page: 117 of 409

Test Mode: 03; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High



	20	Read	Antenna	Cable	Preamp		Limit	Over		
	Freq								Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5795.000	95.13	32.19	6.10	36.89	96.53	125.20	-28.67	VERTICAL	Peak
2	5850.000	56.38	32.25	6.00	36.90	57.73	122.20	-64.47	VERTICAL	Peak
3	5860.000	57.00	32.27	5.96	36.90	58.33	109.40	-51.07	VERTICAL	Peak
4	5942.559	58.25	32.36	6.05	36.90	59.76	68.20	-8.44	VERTICAL	Peak

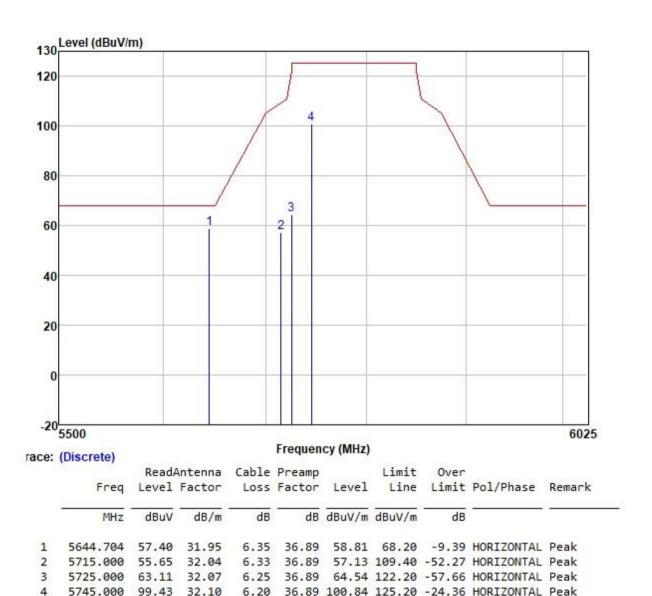




Report No.: GZCR211202146003

Page: 118 of 409

Test Mode: 03; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low





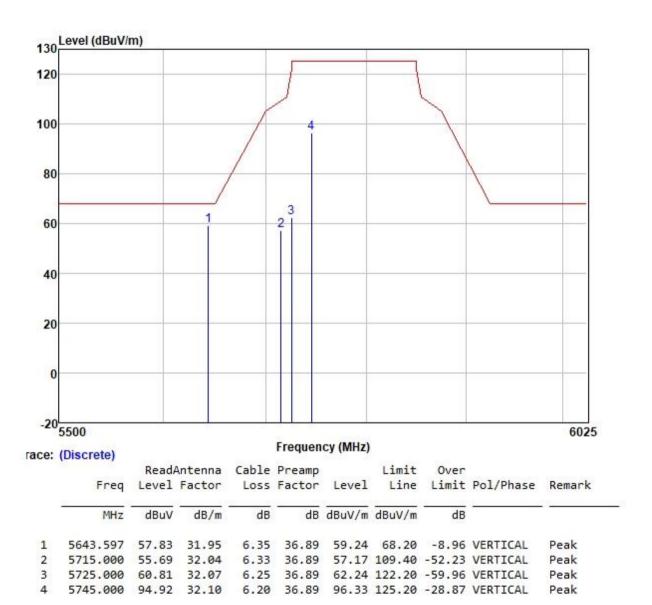
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms



Report No.: GZCR211202146003

Page: 119 of 409

Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



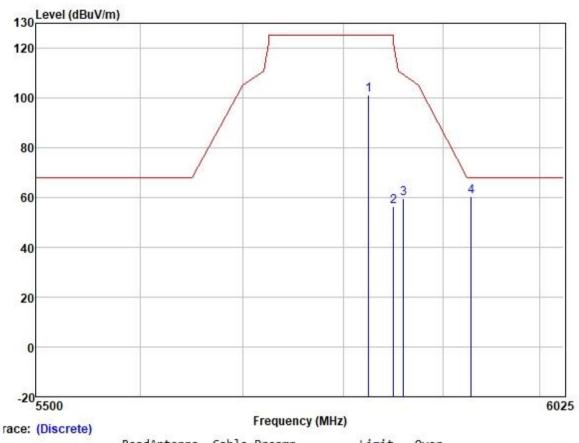




Report No.: GZCR211202146003

Page: 120 of 409

Test Mode: 03; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



	Freq		Antenna Factor						Pol/Phase	Remark	
	MHz	dBuV	dB/m	——dB	——dB	dBuV/m	dBuV/m	dB	<u> </u>	326	
1	5825.000	99.79	32.23	6.04	36.90	101.16	125.20	-24.04	HORIZONTAL	Peak	
2	5850.000	55.24	32.25	6.00	36.90	56.59	122.20	-65.61	HORIZONTAL	Peak	
3	5860.000	58.17	32.27	5.96	36.90	59.50	109.40	-49.90	HORIZONTAL	Peak	
4	5929.158	58.85	32.34	6.00	36.90	60.29	68.20	-7.91	HORIZONTAL	Peak	

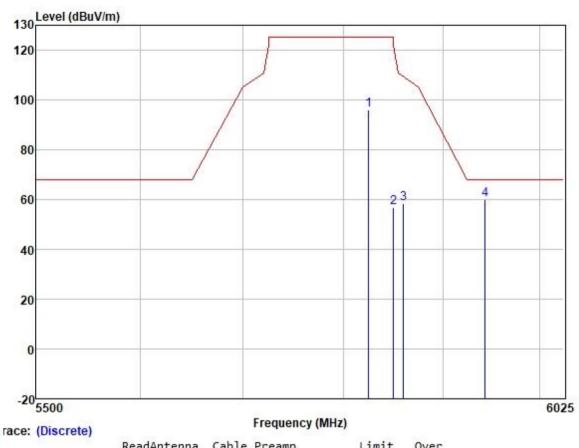




Report No.: GZCR211202146003

Page: 121 of 409

Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



	Freq		Antenna Factor						Pol/Phase	Remark	
	MHz	dBuV	dB/m	dB	——dB	dBuV/m	dBuV/m	dB	3	3316	_
1	5825.000	94.69	32.23	6.04	36.90	96.06	125.20	-29.14	VERTICAL	Peak	
2	5850.000	55.45	32.25	6.00	36.90	56.80	122.20	-65.40	VERTICAL	Peak	
3	5860.000	56.97	32.27	5.96	36.90	58.30	109.40	-51.10	VERTICAL	Peak	
4	5943.586	58.31	32.36	6.05	36.90	59.82	68.20	-8.38	VERTICAL	Peak	

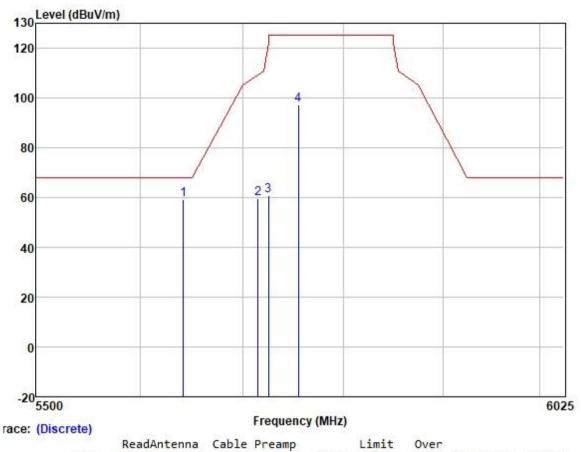




Report No.: GZCR211202146003

Page: 122 of 409

Test Mode: 03; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



	Freq		Antenna Factor		The second secon				Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	12 <u>4 - 12</u> 4	80
1	5641.682	57.86	31.95	6.35	36.89	59.27	68.20	-8.93	HORIZONTAL	Peak
2	5715.000	58.16	32.04	6.33	36.89	59.64	109.40	-49.76	HORIZONTAL	Peak
3	5725.000	59.53	32.07	6.25	36.89	60.96	122.20	-61.24	HORIZONTAL	Peak
4	5755.000	95.93	32.10	6.20	36.89	97.34	125.20	-27.86	HORIZONTAL	Peak

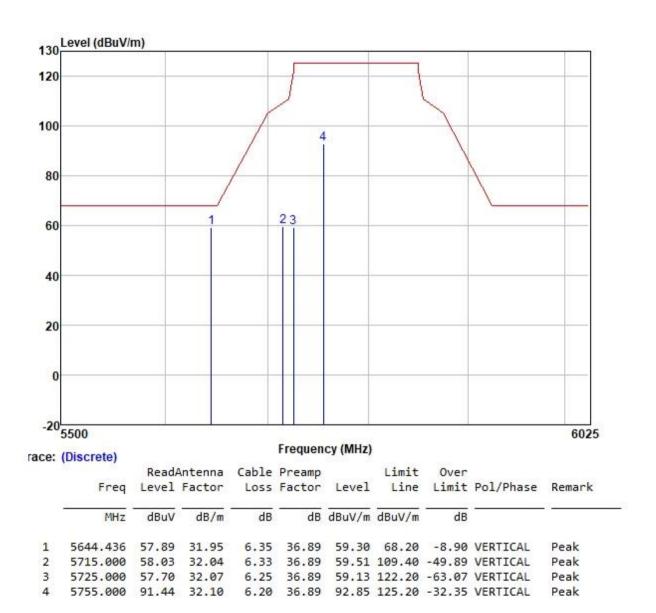




Report No.: GZCR211202146003

Page: 123 of 409

Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms-Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions

or email: CN_Doccheck@sgs.com
No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn
中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com

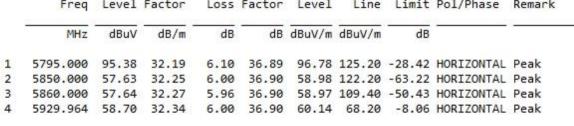


Report No.: GZCR211202146003

Page: 124 of 409

Test Mode: 03; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:High









Report No.: GZCR211202146003

Page: 125 of 409

Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:High





5939.510 58.30 32.34

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms-Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions

6.00 36.90 59.74 68.20 -8.46 VERTICAL

or email: CN.Doccheck@sgs.com No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com

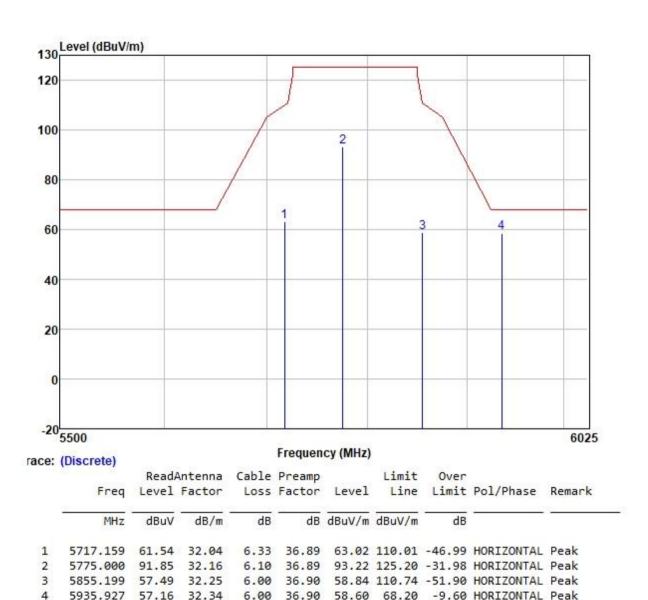
Peak



Report No.: GZCR211202146003

Page: 126 of 409

Test Mode: 03; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:80MHz; Channel:middle





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com
No.198 Kezhu Road, Szientech Park, Guangzhou Exononic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn

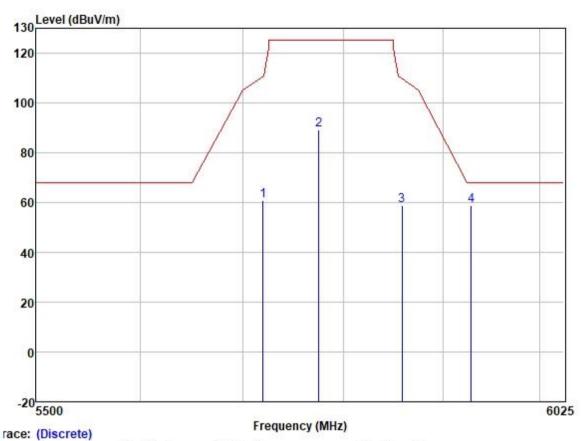
邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR211202146003

Page: 127 of 409

Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:80MHz; Channel:middle



	20 20	Read	Antenna	Cable	Preamp		Limit	Over		
	Freq								Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	¥	
1	5719.870	59.35	32.04	6.33	36.89	60.83	110.76	-49.93	VERTICAL	Peak
2	5775.000	87.92	32.16	6.10	36.89	89.29	125.20	-35.91	VERTICAL	Peak
3	5858.592	57.64	32.27	5.96	36.90	58.97	109.79	-50.82	VERTICAL	Peak
4	5929.053	57.27	32.34	6.00	36.90	58.71	68.20	-9.49	VERTICAL	Peak





Report No.: GZCR211202146003

Page: 128 of 409

7.9 Frequency Stability

Test Requirement 47 CFR Part 15, Subpart C 15.407 (g)
Test Method: ANSI C63.10 (2013) Section 6.8

7.9.1 E.U.T. Operation

Operating Environment:

Temperature: 23.4 °C Humidity: 48.9 % RH Atmospheric Pressure: 1003 mbar

7.9.2 Test Mode Description

Pre-scan / Mode Final test Code

Description

Final test 00

TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

Final test 01

TX mode (U-NII-2A)_Keep the EUT in continuously transmitting mode with all modulation types.All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

Final test 02

TX mode (U-NII-2C)_Keep the EUT in continuously transmitting mode with all modulation types.All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

Final test 03

TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions/Terms-and-Comments advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authericity of testing inspection groups.

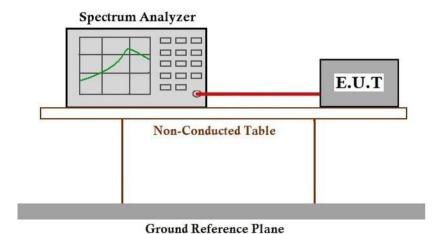
No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR211202146003

Page: 129 of 409

7.9.3 Test Setup Diagram



7.9.4 Measurement Procedure and Data

The applicant declares that the emissions are maintained within the band of operation under all conditions of normal operation as specified in the user's manual and meets Section 15.407(g) requirements.





Report No.: GZCR211202146003

Page: 130 of 409

7.10 Non-occupancy period

Test Requirement KDB 905462 D02 Section 5.1
Test Method: KDB 905462 D02 Section 7.8.3

Limit:

Test item	Limit	Applicability	
		Master Device or client with Radar Detection	Client without Radar Detection
Non-occupancy period	Minimum 30 minutes	Yes	Not required
Channel Availability Check Time	60 seconds	Yes	Not required
Channel Move Time	10 seconds See Note 1.	Yes	Yes
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.	Yes	Yes
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.	Yes	Not required

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.





Report No.: GZCR211202146003

Page: 131 of 409

7.10.1 E.U.T. Operation

Operating Environment:

Temperature: 23.4 °C Humidity: 48.9 % RH Atmospheric Pressure: 1003 mbar

7.10.2 Test Mode Description

Pre-scan / Mode

Description

Final test Code

04

Final test

Normal operating_Keep the EUT communication with the companion

device.

7.10.3 Test Setup Diagram





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention:*To check the authenticity of testing inspection report & certificate, please contact us at testphone: (86-755) 8307 1443.

**Attention:*To check the authenticity of testing inspection report & certificate, please contact us at testphone: (86-755) 8307 1443.

or email: CN_Doccheck@sus_com Mo.198/Earlu Road, Soentech Park, (Quangrou Comonic & Technology Development District, Quangrou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn 中国 · 广州 · 经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR211202146003

Page: 132 of 409

7.10.4 Measurement Procedure and Data

- 1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- 2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- 3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- 4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.
- 5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- 6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- 7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: Dwell (0.3ms) =S (12000ms) / B (4000); where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: C (ms)= N X Dwell (0.3ms); where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.
- 8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

Please Refer to Appendix for Details



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issue defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention:*To be the the authenticity of testing in report securificate, pages contact, and testing the support of the such pages contact, and the support of the such pages contact, and the support of the such pages contact, and the support of the such pages contact and the such pages and the such pages contact and the



Report No.: GZCR211202146003

Page: 133 of 409

7.11 Channel Move Time

Test Requirement KDB 905462 D02 Section 5.1
Test Method: KDB 905462 D02 Section 7.8.3

Limit:

Test item	Limit	Applicability	
		Master Device or client with Radar Detection	Client without Radar Detection
Non-occupancy period	Minimum 30 minutes	Yes	Not required
Channel Availability Check Time	60 seconds	Yes	Not required
Channel Move Time	10 seconds See Note 1.	Yes	Yes
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.	Yes	Yes
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.	Yes	Not required

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

7.11.1 E.U.T. Operation

Operating Environment:

Temperature: 23.4 °C Humidity: 48.9 % RH Atmospheric Pressure: 1003 mbar



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issue defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention:*To be the the authenticity of testing in report securificate, pages contact, and testing the support of the such pages contact, and the support of the such pages contact, and the support of the such pages contact, and the support of the such pages contact and the such pages and the such pages contact and the

No.198Kezhu Noat, Sciented Park, Guargzhou Economic & Technology Development District, Guargzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR211202146003

Page: 134 of 409

7.11.2 Test Mode Description

Pre-scan / Mode

Final test Code

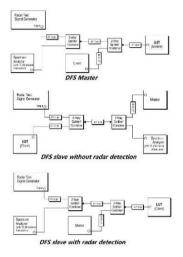
Description

Final test 04

Normal operating_Keep the EUT communication with the companion

device.

7.11.3 Test Setup Diagram





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention:*To check the authenticity of testing inspection report & certificate, please contact us at testphone: (86-755) 8307 1443.

**Attention:*To check the authenticity of testing inspection report & certificate, please contact us at testphone: (86-755) 8307 1443.

of email: CN_Doccheck@sgs.com
Mo.198/kgnl Road, Soentech Park, Guangshou Comonic & Technology Development District, Guangshou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn
中国 ·广州 ·经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR211202146003

Page: 135 of 409

7.11.4 Measurement Procedure and Data

- 1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- 2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- 3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- 4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.
- 5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- 6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- 7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: Dwell (0.3ms) =S (12000ms) / B (4000); where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: C (ms)= N X Dwell (0.3ms); where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.
- 8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

Please Refer to Appendix for Details





Report No.: GZCR211202146003

Page: 136 of 409

7.12 Channel Closing Transmission Time

Test Requirement KDB 905462 D02 Section 5.1
Test Method: KDB 905462 D02 Section 7.8.3

Limit:

Test item	Limit	Applicability	
		Master Device or client with Radar Detection	Client without Radar Detection
Non-occupancy period	Minimum 30 minutes	Yes	Not required
Channel Availability Check Time	60 seconds	Yes	Not required
Channel Move Time	10 seconds See Note 1.	Yes	Yes
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.	Yes	Yes
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.	Yes	Not required

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

7.12.1 E.U.T. Operation

Operating Environment:

Temperature: 23.4 °C Humidity: 48.9 % RH Atmospheric Pressure: 1003 mbar

7.12.2 Test Mode Description

Pre-scan / Mode Final test Code

Description

Final test 04

Normal operating_Keep the EUT communication with the companion



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forger or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing (inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, tested of the contact us at telephone: (86-755) 8307 1443, tested of the authenticity of testing (inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, tested of the authenticity of testing (inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, tested of the contact as at telephone: (86-755) 8307 1443, tested of the contact as at telephone: (86-755) 8307 1443, tested of the contact as at teleph

|Mo.1981Kezhu Road, Szientech Park, Quangzhou Economic & Technology Development District, Quangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn
中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR211202146003

Page: 137 of 409

device.

7.12.3 Test Setup Diagram



7.12.4 Measurement Procedure and Data

- 1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- 2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- 3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- 4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.
- 5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- 6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- 7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: Dwell (0.3ms) =S (12000ms) / B (4000); where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: C (ms)= N X Dwell (0.3ms); where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.
- 8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

Please Refer to Appendix for Details



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issue defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention:*To be the the authenticity of testing in report securificate, pages contact, and testing the support of the such pages contact, and the support of the such pages contact, and the support of the such pages contact, and the support of the such pages contact and the such pages and the such pages contact and the

of email: CN. Doccheck@sgs.com Mc18Kebul Nex Scientel Park, Gaughou Exonnic & Technology Development District, Quangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR211202146003

Page: 138 of 409

7.13 Radiated Emissions (above 1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.407(b)

Test Method: KDB 789033 D02 II G

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

- *(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band:
- (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.





Report No.: GZCR211202146003

Page: 139 of 409

7.13.1 E.U.T. Operation

Operating Environment:

Temperature: 23.4 °C Humidity: 48.9 % RH Atmospheric Pressure: 1003 mbar

7.13.2 Test Mode Description

Pre-scan / Mode Final test Code

Description

Final test 00

TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

TX mode (U-NII-2A)_Keep the EUT in continuously transmitting mode with all modulation types.All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

TX mode (U-NII-2C)_Keep the EUT in continuously transmitting mode with all modulation types.All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with all modulation types.All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

Final test 01

Final test 02

Final test 03



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions/Terms-and-Comments advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authericity of testing inspection groups.

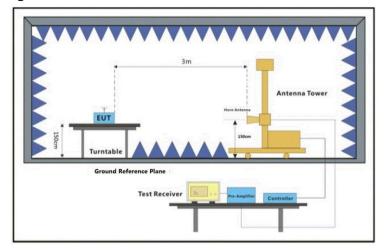
No.198 Kezhu Road, Scientech Park, Guangzhou Exonomic & Technology Development District, Guangzhou, China 510663 tt (86-20) 82155555 ft (86-20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 tt (86-20) 82155555 ft (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR211202146003

140 of 409

7.13.3 Test Setup Diagram





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information ocntained hereon reflects the Company's findings at the ine of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 83071443,

No. 198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn

中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR211202146003

Page: 141 of 409

7.13.4 Measurement Procedure and Data

- a. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- i. Repeat above procedures until all frequencies measured was complete.

Remark:

- 1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
- 2. Scan from 1GHz to 40GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- 4. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issue defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

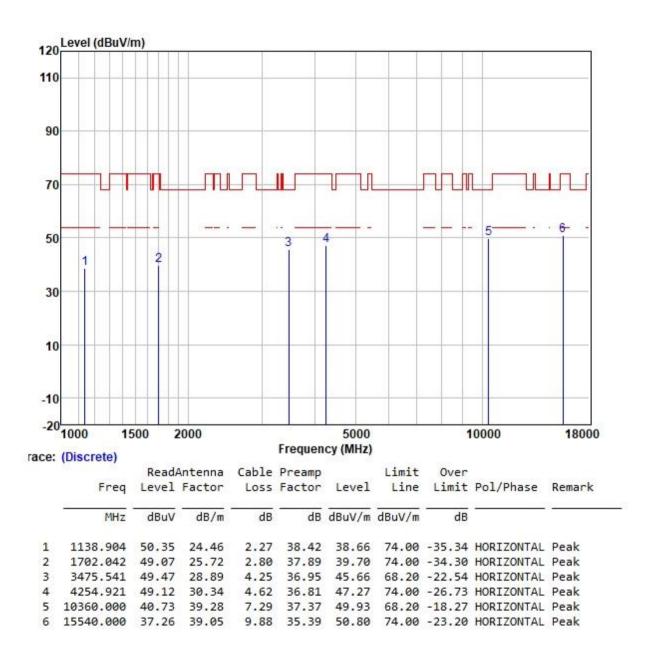
**Attention:*To others the authenticity of testing in report securificate, pages contact, and testing the support of the such pages contact, and the support of the such pages contact and the such pages contact and the such pages and the such pages contact and the such pages and the such pages contact and the such pages and t



Report No.: GZCR211202146003

Page: 142 of 409

Test Mode: 00; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



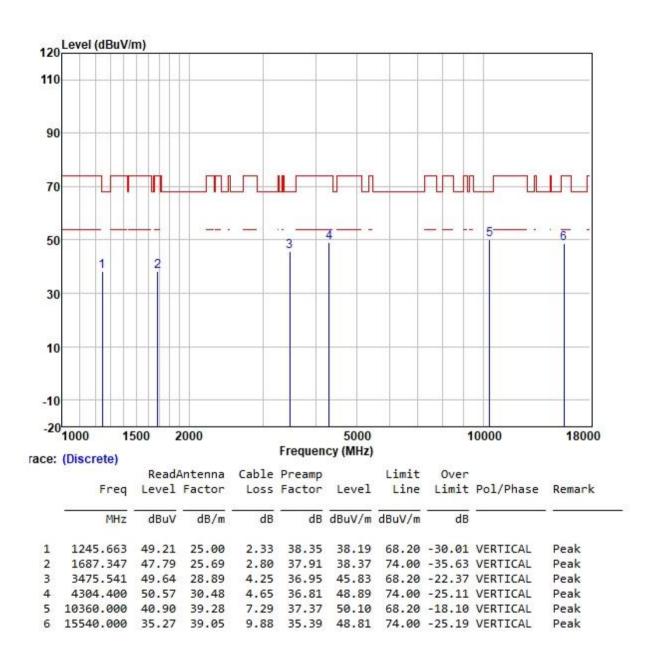




Report No.: GZCR211202146003

Page: 143 of 409

Test Mode: 00; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



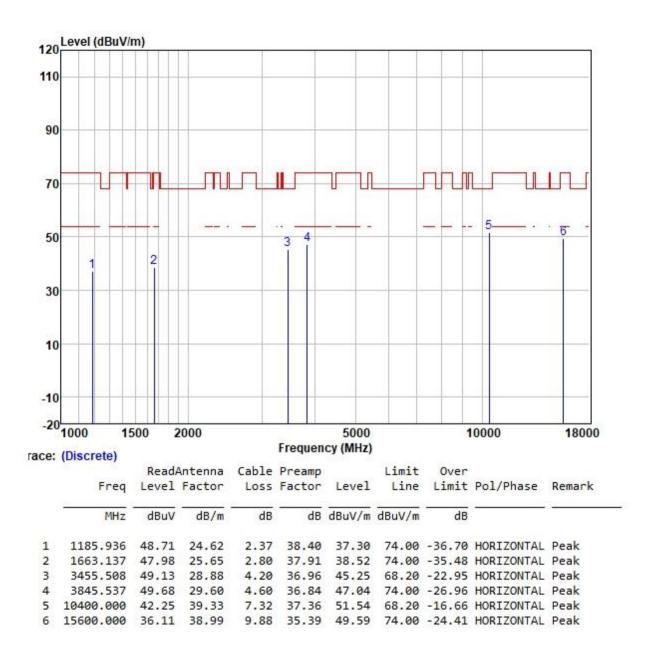




Report No.: GZCR211202146003

Page: 144 of 409

Test Mode: 00; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:middle





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention:*To check the authenticity of testing inspection report & certificate, please contact us at testphone: (86-755) 8307 1443.

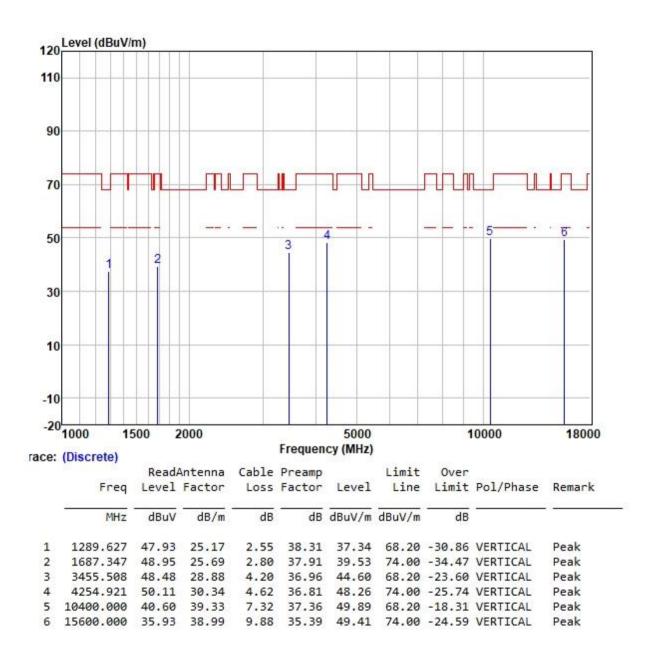
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com
|No.198/kethuk Red, Stentech Park, Quanghou Exonomic & Technology Development District, Quangrhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn



Report No.: GZCR211202146003

Page: 145 of 409

Test Mode: 00; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



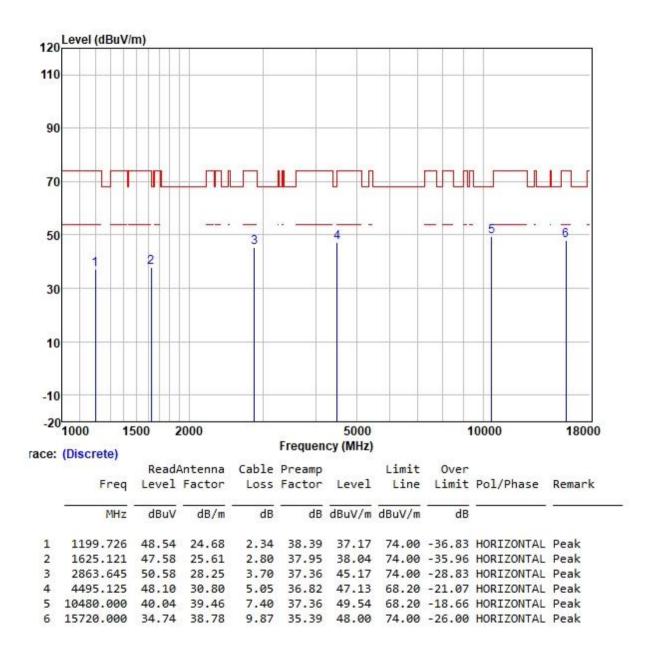




Report No.: GZCR211202146003

Page: 146 of 409

Test Mode: 00; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention:*To check the authenticity of testing inspection report & certificate, please contact us at testphone: (86-755) 8307 1443.

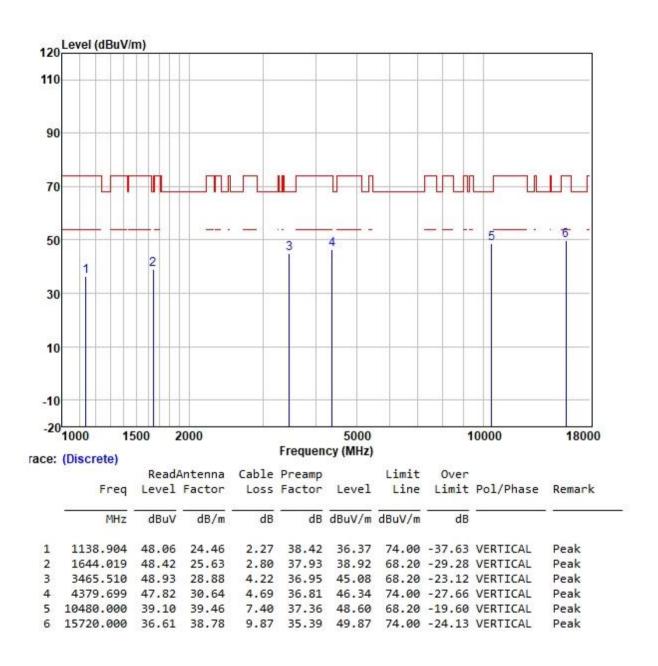
No.198 Kezhu Road, Scientech Park, Guargahou Economic & Technology Development District, Guargahou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR211202146003

Page: 147 of 409

Test Mode: 00; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention:*To check the authenticity of testing inspection report & certificate, please contact us at testphone: (86-755) 8307 1443.

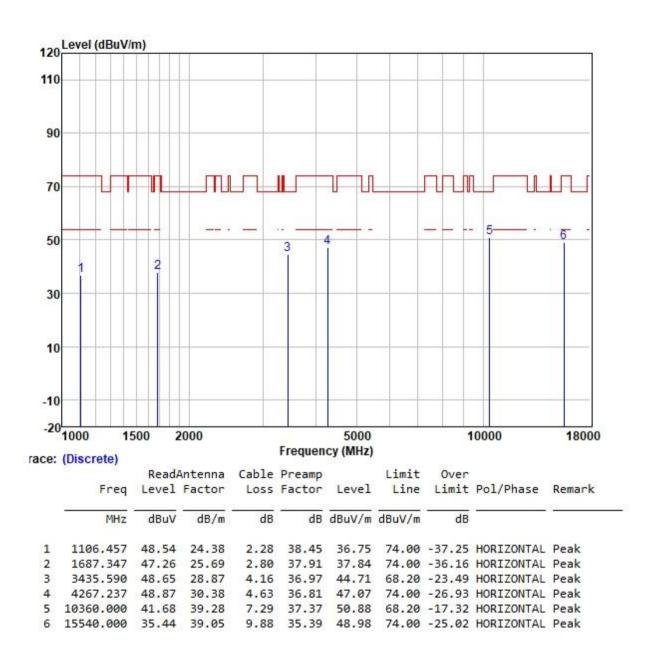
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com
No.198 Kezhu Road, Szientech Park, Guangzhou Extornole & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn



Report No.: GZCR211202146003

Page: 148 of 409

Test Mode: 00; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



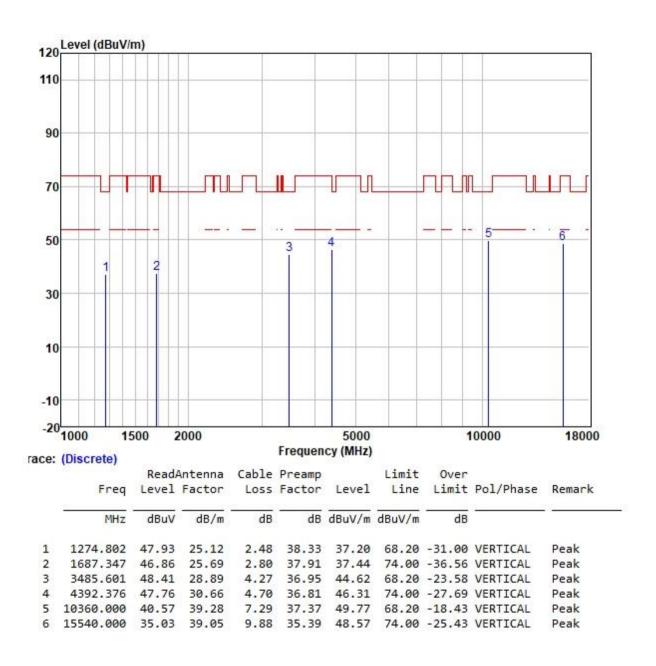




Report No.: GZCR211202146003

Page: 149 of 409

Test Mode: 00; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:Low





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention:To Check the authenticity of testing inspection report & certificate place contact us at testphone: (86-755) 8307 1443.

Attention:To Check the authenticity of testing inspection report & certificate place contact us at testphone: (86-755) 8307 1443.

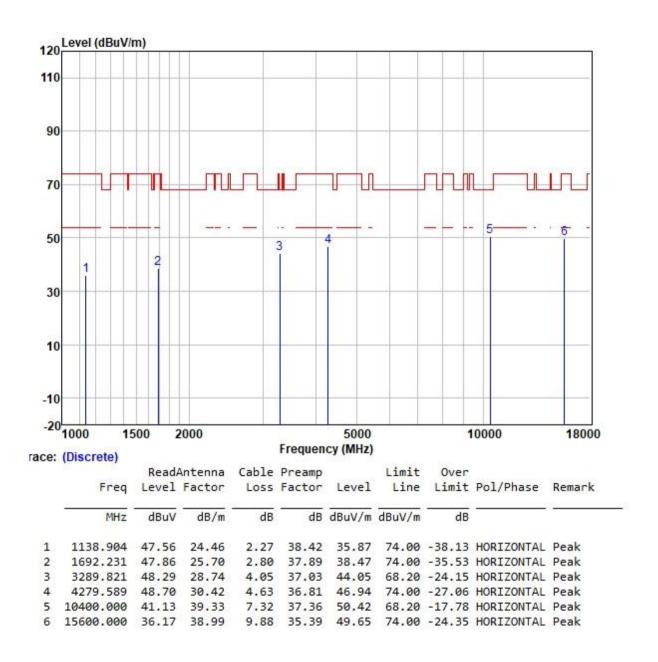
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com
|No.198/kethuk Red, Stentech Park, Quanghou Exonomic & Technology Development District, Quangrhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn



Report No.: GZCR211202146003

Page: 150 of 409

Test Mode: 00; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:middle



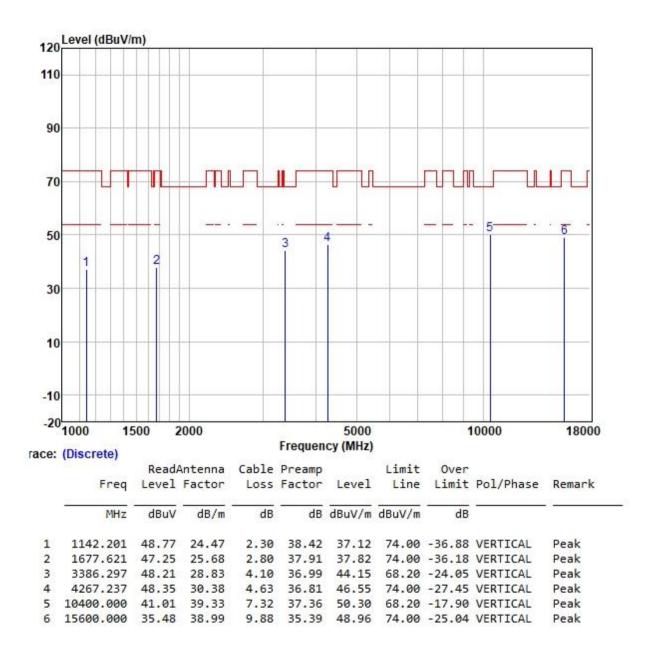




Report No.: GZCR211202146003

Page: 151 of 409

Test Mode: 00; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:middle



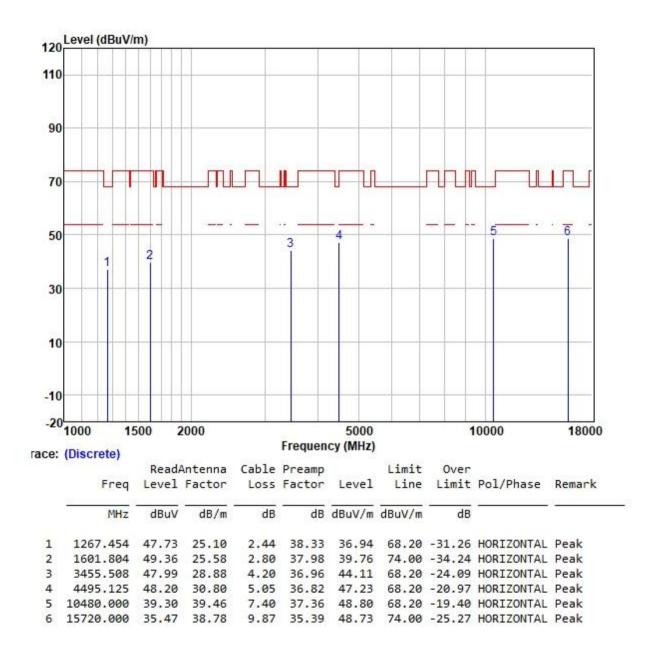




Report No.: GZCR211202146003

Page: 152 of 409

Test Mode: 00; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:High



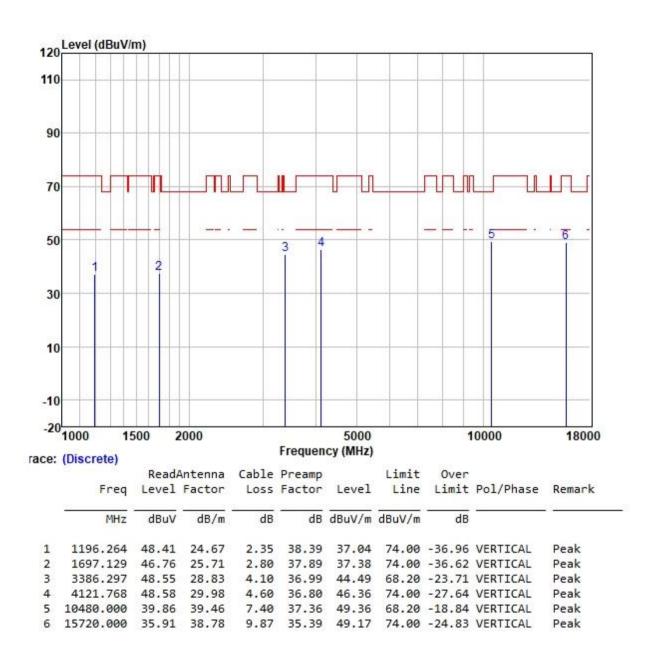




Report No.: GZCR211202146003

Page: 153 of 409

Test Mode: 00; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:High



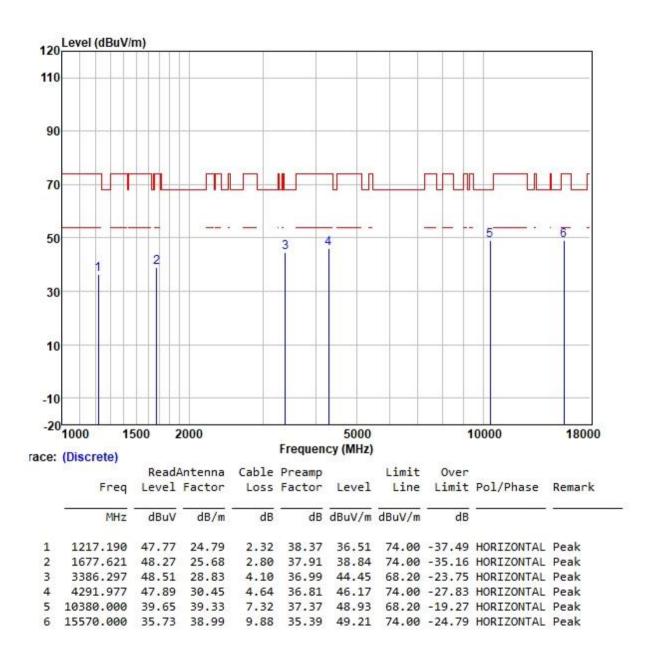




Report No.: GZCR211202146003

Page: 154 of 409

Test Mode: 00; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention:*To check the authenticity of testing inspection report & certificate, please contact us at testphone: (86-755) 8307 1443.

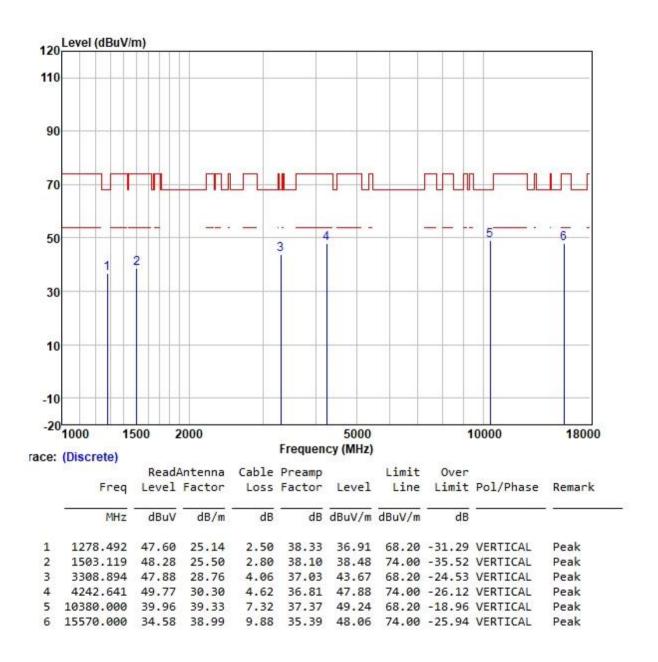
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com
|No.198/kethuk Red, Stentech Park, Quanghou Exonomic & Technology Development District, Quangrhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn



Report No.: GZCR211202146003

Page: 155 of 409

Test Mode: 00; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention:*To check the authenticity of testing inspection report & certificate, please contact us at testphone: (86-755) 8307 1443.

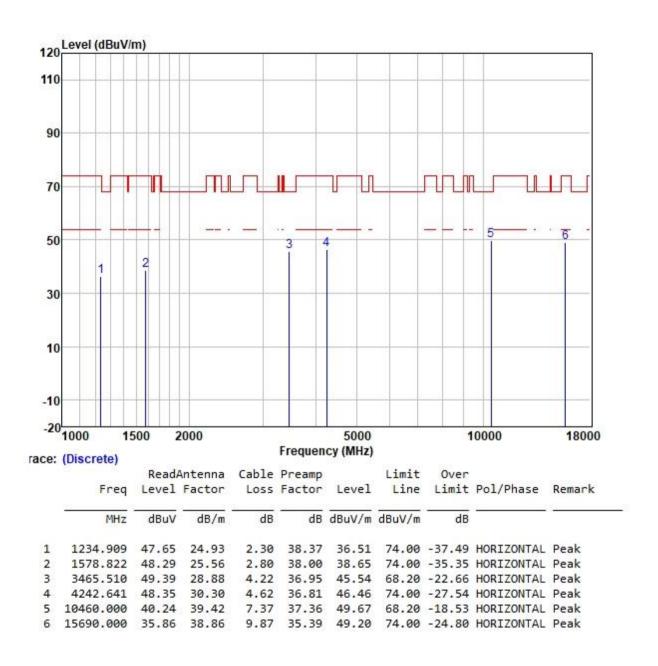
|Mo.1981Kezhu Road, Szientech Park, Quangzhou Economic & Technology Development District, Quangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn
中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR211202146003

Page: 156 of 409

Test Mode: 00; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:High





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention:To Check the authenticity of testing inspection report & certificate place contact us at testphone: (86-755) 8307 1443.

Attention:To Check the authenticity of testing inspection report & certificate place contact us at testphone: (86-755) 8307 1443.

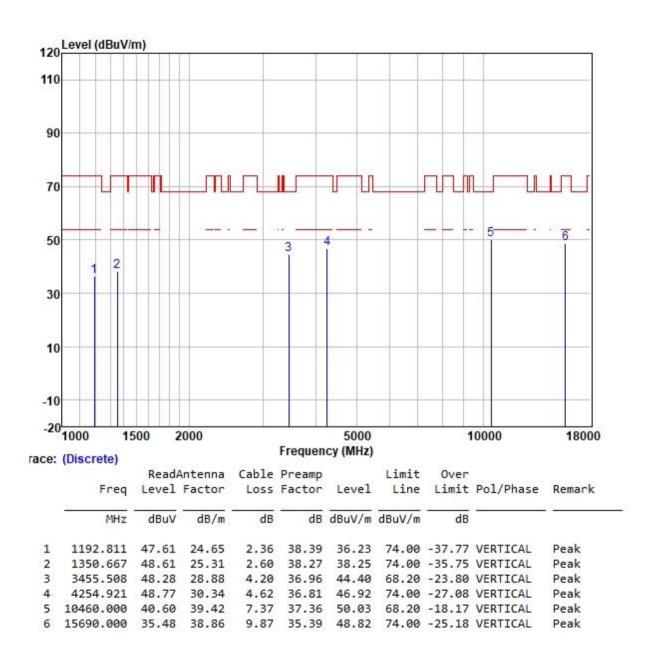
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com
|No.198/kethuk Red, Stentech Park, Quanghou Exonomic & Technology Development District, Quangrhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn



Report No.: GZCR211202146003

Page: 157 of 409

Test Mode: 00; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High



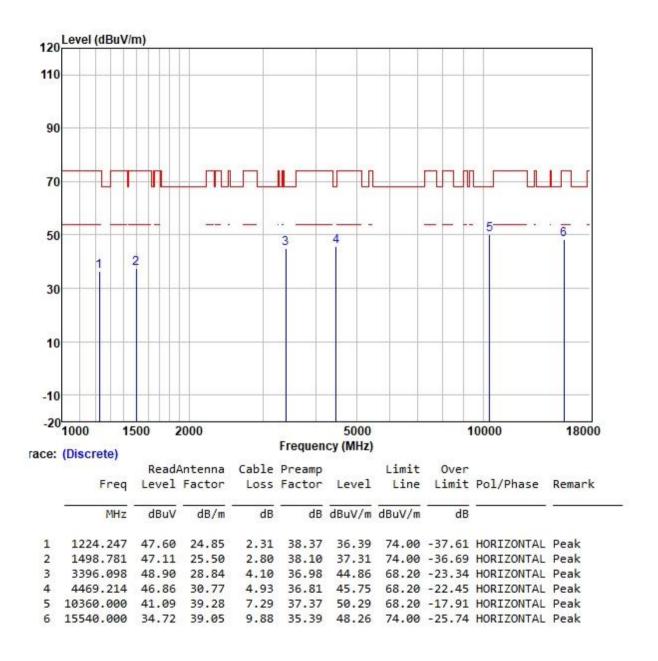




Report No.: GZCR211202146003

Page: 158 of 409

Test Mode: 00; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



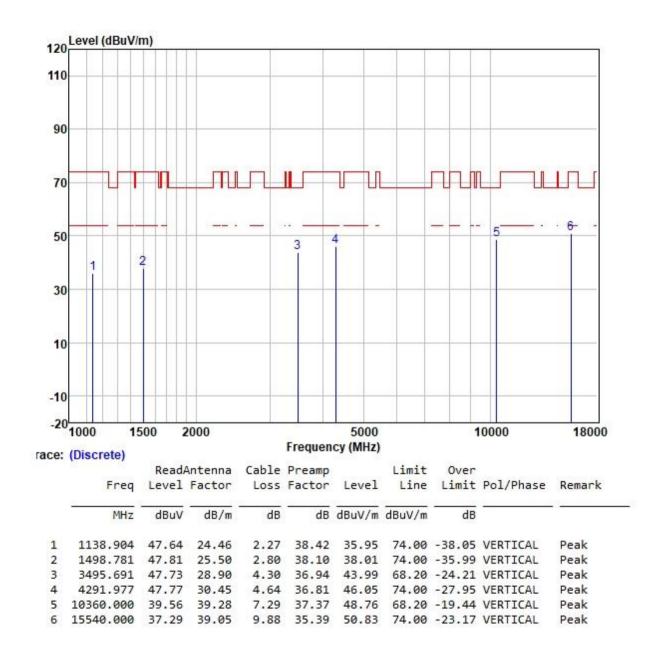




Report No.: GZCR211202146003

Page: 159 of 409

Test Mode: 00; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



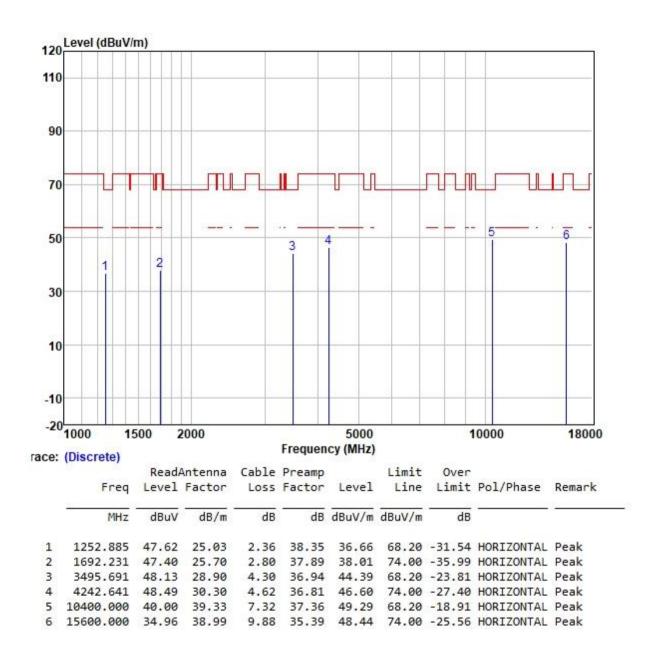




Report No.: GZCR211202146003

Page: 160 of 409

Test Mode: 00; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:middle





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention:To Check the authenticity of testing inspection report & certificate place contact us at testphone: (86-755) 8307 1443.

Attention:To Check the authenticity of testing inspection report & certificate place contact us at testphone: (86-755) 8307 1443.

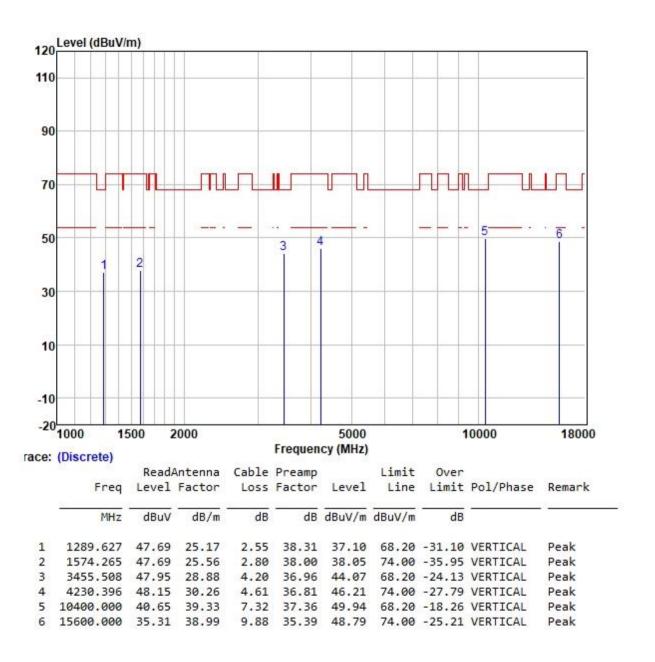
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com
|No.198/kethuk Red, Stentech Park, Quanghou Exonomic & Technology Development District, Quangrhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn



Report No.: GZCR211202146003

Page: 161 of 409

Test Mode: 00; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:middle





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention:*To check the authenticity of testing inspection report & certificate, please contact us at testphone: (86-755) 8307 1443.

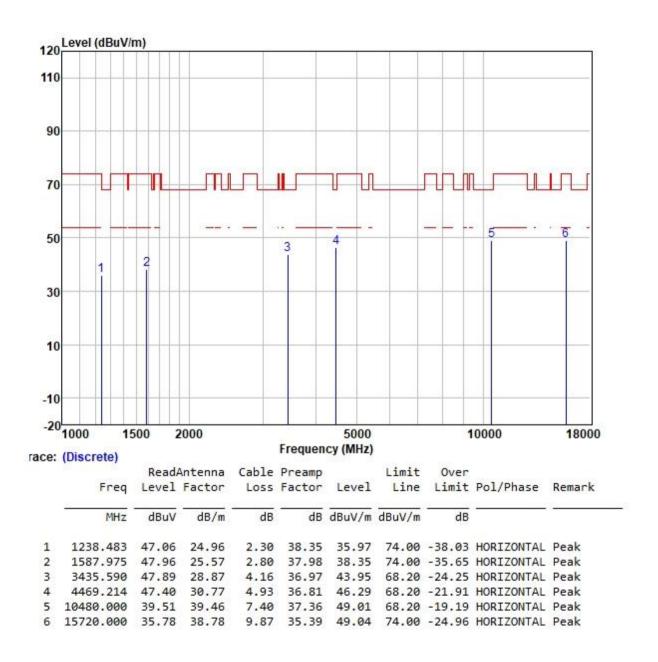
or email: CN.Doccheck@sgs.com No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR211202146003

Page: 162 of 409

Test Mode: 00; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



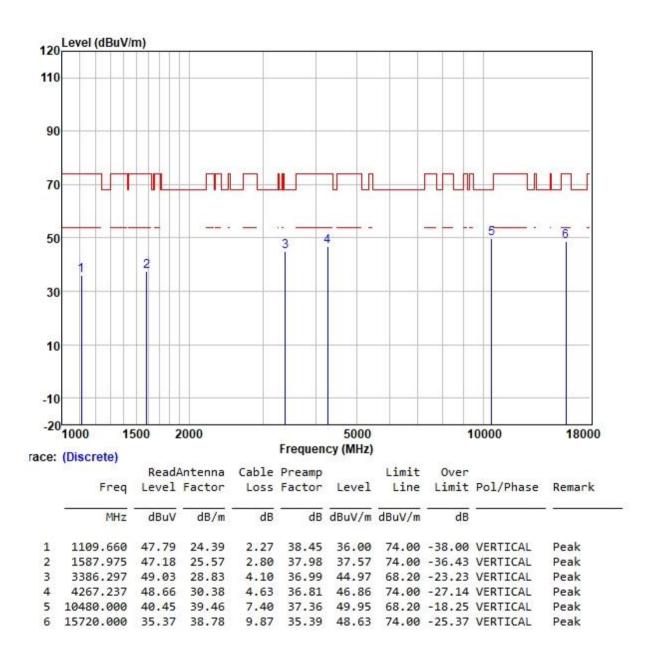




Report No.: GZCR211202146003

Page: 163 of 409

Test Mode: 00; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:High





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at https://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the auther(it) of festing (inspection report & certificate please contact us at testphone: (86-755) 8307 1443.

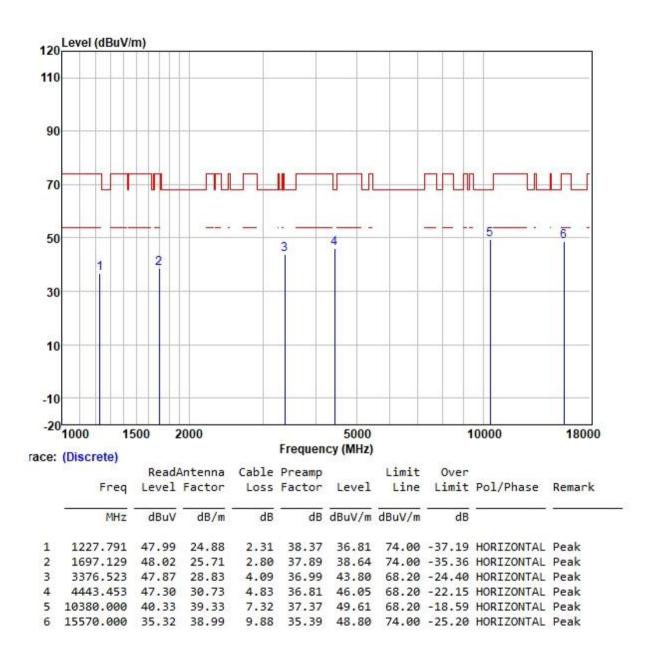
of email: CN_Doccheck@sgs.com
Mo.198/kgnl Road, Soentech Park, (Quanghou Comonic & Technology Development District, Quanghou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn
中国 ·广州 ·经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR211202146003

Page: 164 of 409

Test Mode: 00; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



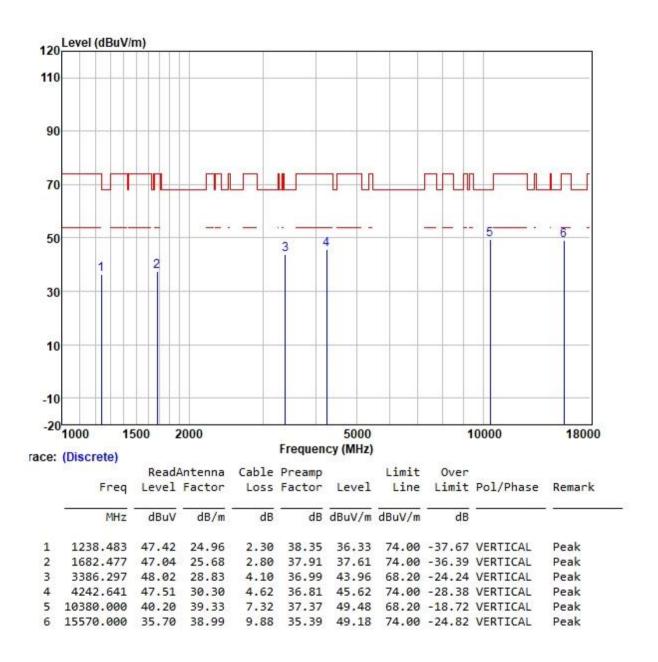




Report No.: GZCR211202146003

Page: 165 of 409

Test Mode: 00; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



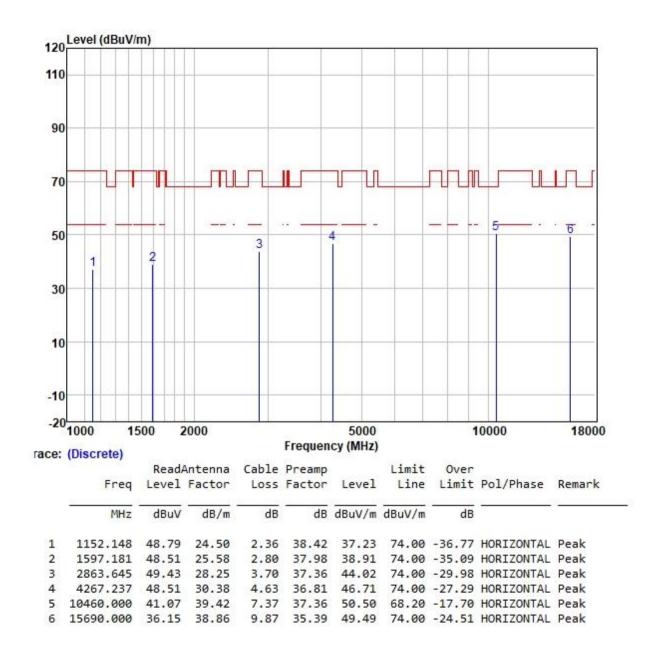




Report No.: GZCR211202146003

Page: 166 of 409

Test Mode: 00; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



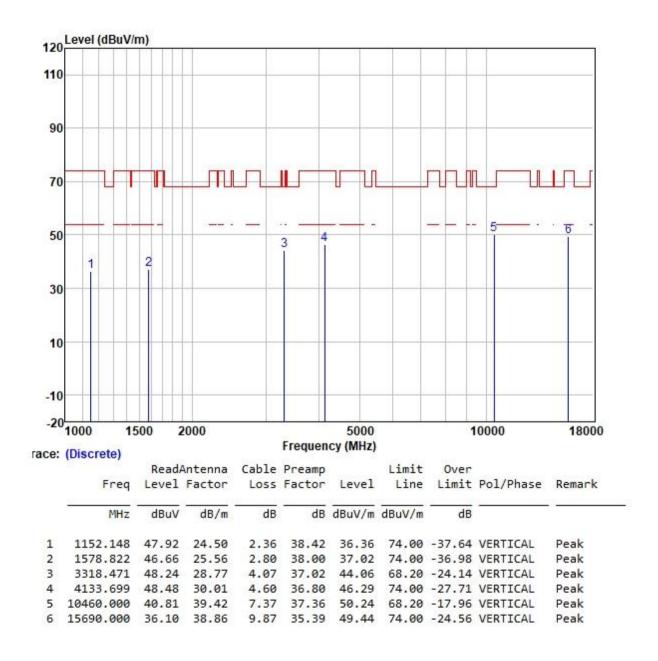




Report No.: GZCR211202146003

Page: 167 of 409

Test Mode: 00; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



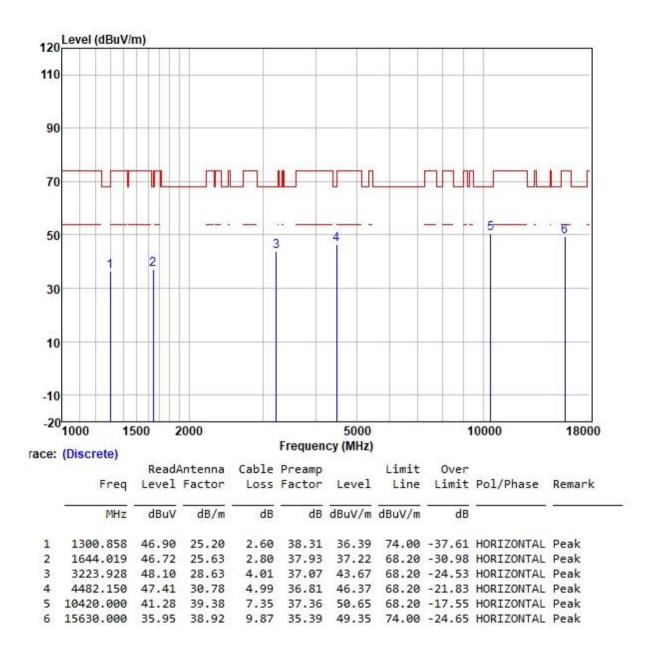




Report No.: GZCR211202146003

Page: 168 of 409

Test Mode: 00; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:80MHz; Channel:middle



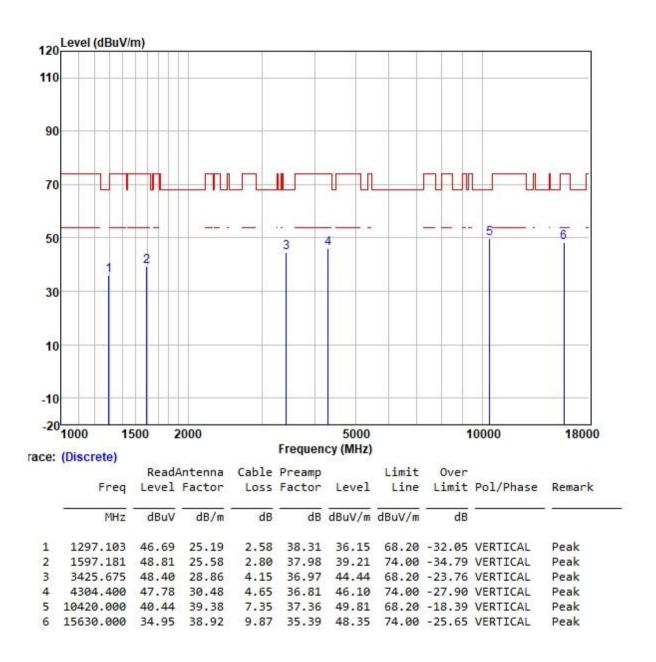




Report No.: GZCR211202146003

Page: 169 of 409

Test Mode: 00; Polarity: Vertical; Modulation:802.11ac; Bandwidth:80MHz; Channel:middle





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention:*To check the authenticity of testing inspection report & certificate, please contact us at testphone: (86-755) 8307 1443.

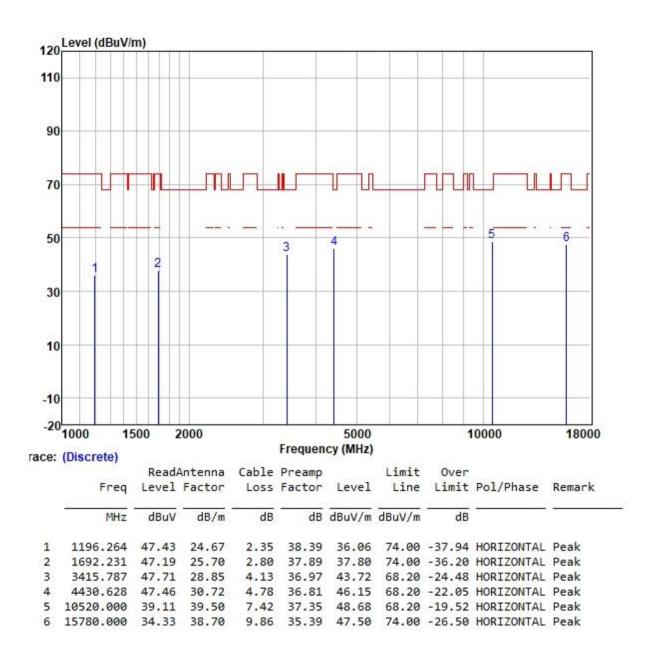
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com
No.198 Kezhu Road, Szientech Park, Guangzhou Extornole & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn



Report No.: GZCR211202146003

Page: 170 of 409

Test Mode: 01; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



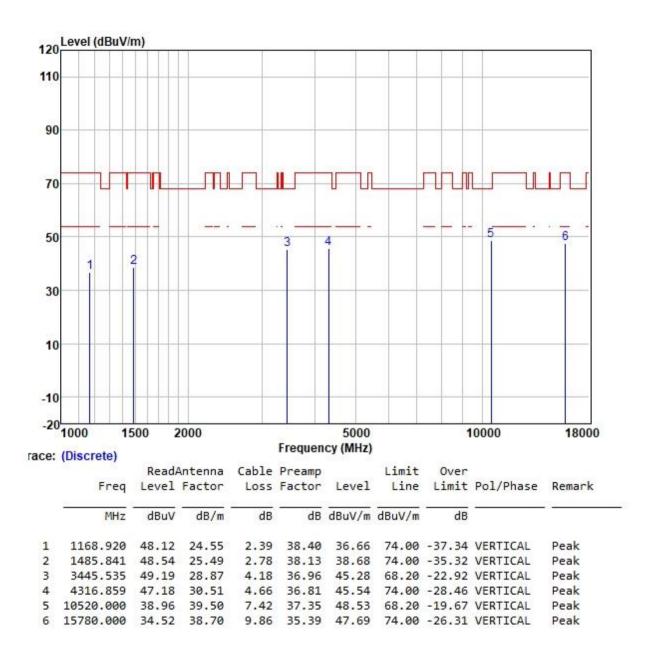




Report No.: GZCR211202146003

Page: 171 of 409

Test Mode: 01; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention:*To check the authenticity of testing inspection report & certificate, please contact us at testphone: (86-755) 8307 1443.

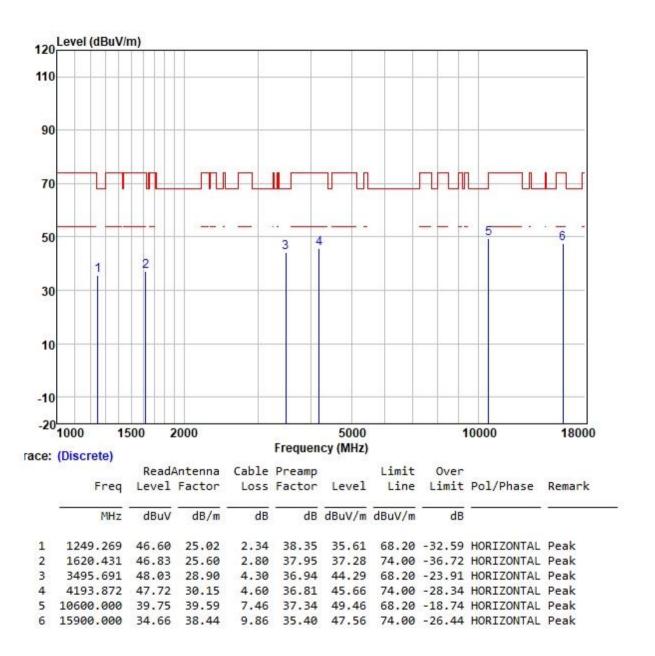
or email: CN_Doccheck@sgs.com
No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn
中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR211202146003

Page: 172 of 409

Test Mode: 01; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:middle





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention:To Check the authenticity of testing inspection report & certificate place contact us at testphone: (86-755) 8307 1443.

Attention:To Check the authenticity of testing inspection report & certificate place contact us at testphone: (86-755) 8307 1443.

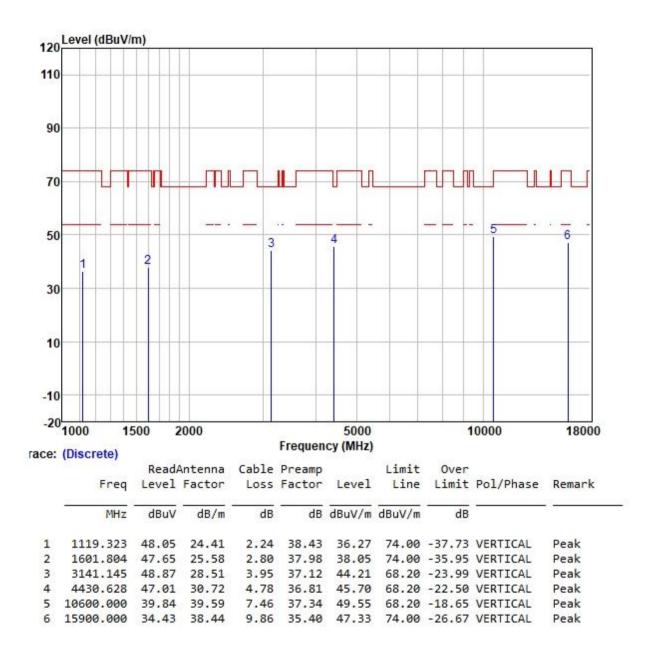
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com
No.198 Kezhu Road, Szientech Park, Guangzhou Extornole & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn



Report No.: GZCR211202146003

Page: 173 of 409

Test Mode: 01; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



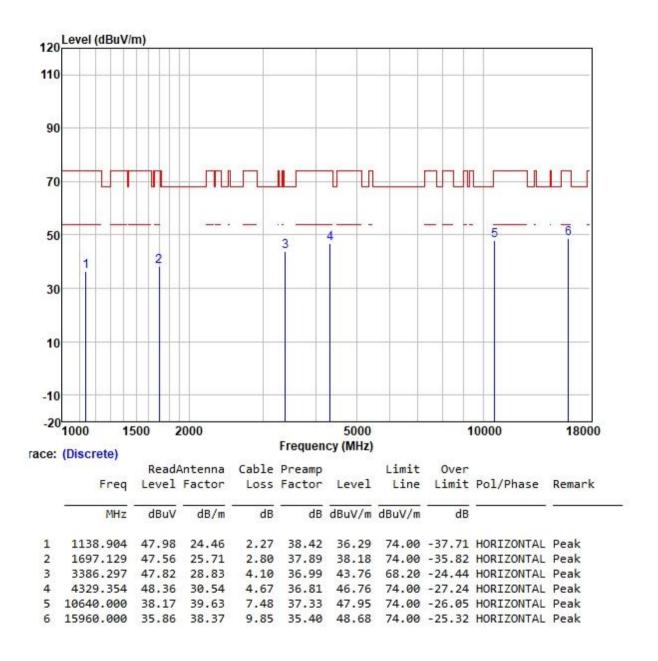




Report No.: GZCR211202146003

Page: 174 of 409

Test Mode: 01; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention:*To check the authenticity of testing inspection report & certificate, please contact us at testphone: (86-755) 8307 1443.

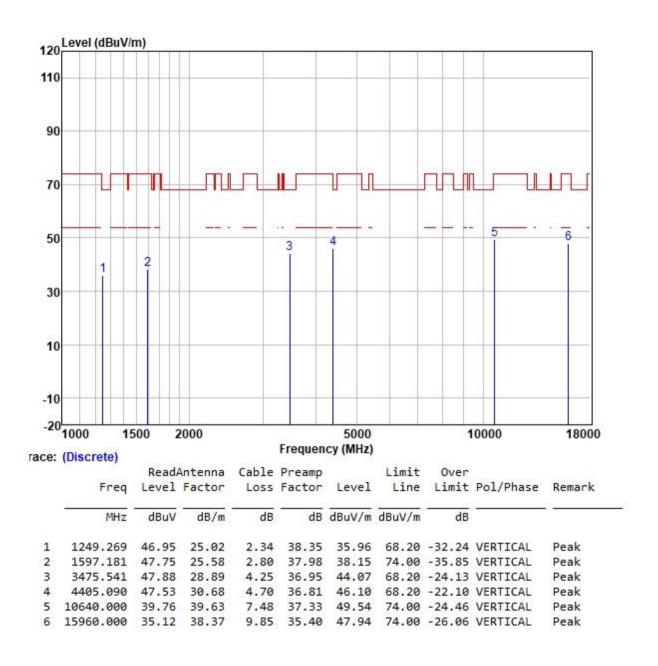
No.198 Kezhu Road, Scientech Park, Guargahou Economic & Technology Development District, Guargahou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR211202146003

Page: 175 of 409

Test Mode: 01; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention:To Check the authenticity of testing inspection report & certificate place contact us at testphone: (86-755) 8307 1443.

Attention:To Check the authenticity of testing inspection report & certificate place contact us at testphone: (86-755) 8307 1443.

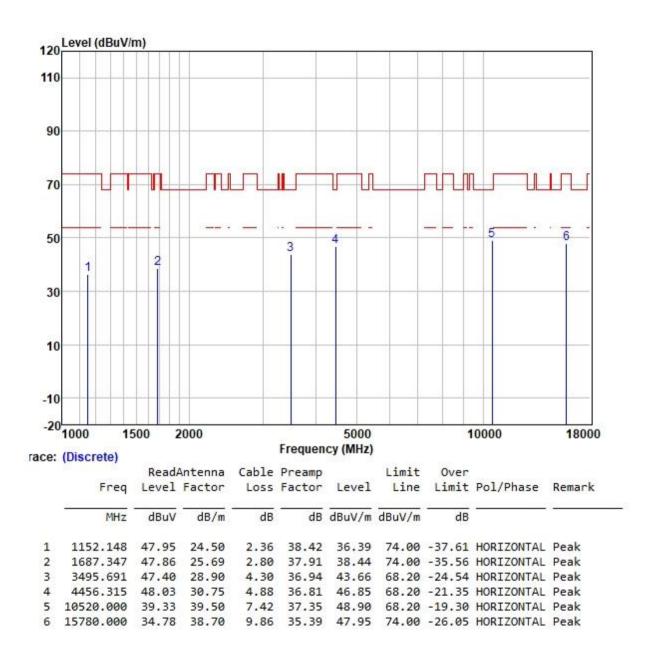
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com
|No.198/kethuk Red, Stentech Park, Quanghou Exonomic & Technology Development District, Quangrhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn



Report No.: GZCR211202146003

Page: 176 of 409

Test Mode: 01; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



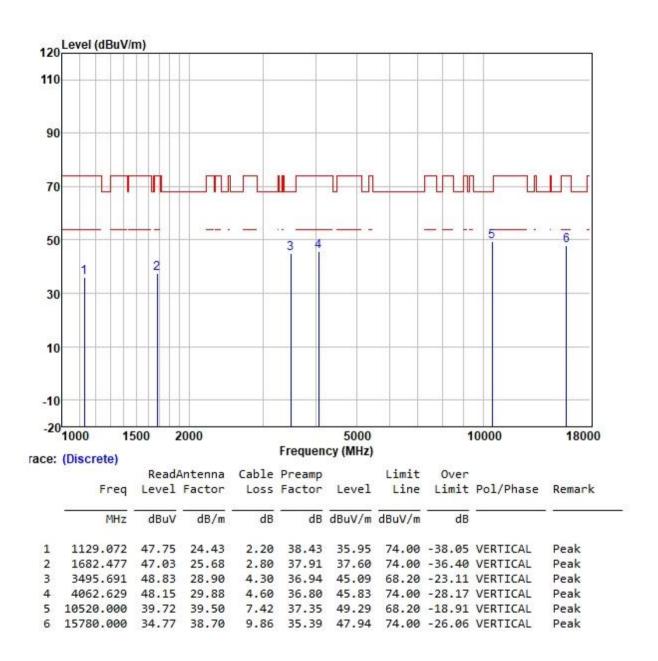




Report No.: GZCR211202146003

Page: 177 of 409

Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



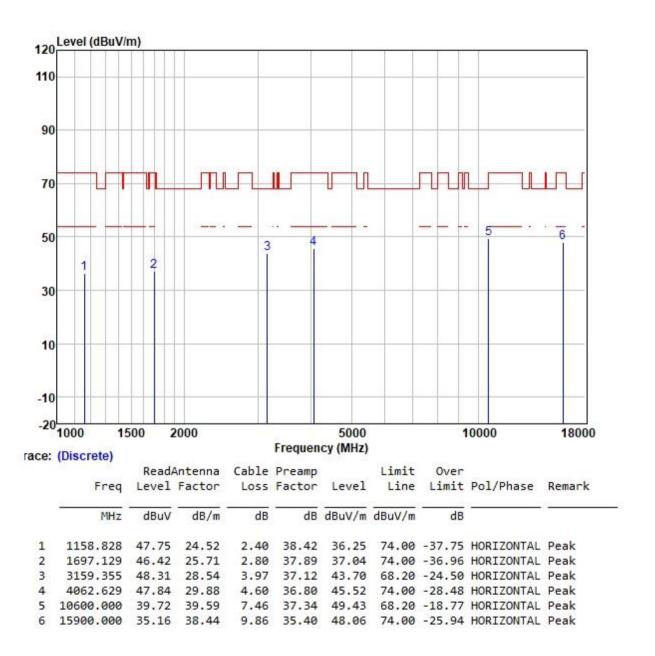




Report No.: GZCR211202146003

Page: 178 of 409

Test Mode: 01; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:middle





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention:*To check the authenticity of testing inspection report & certificate, please contact us at testphone: (86-755) 8307 1443.

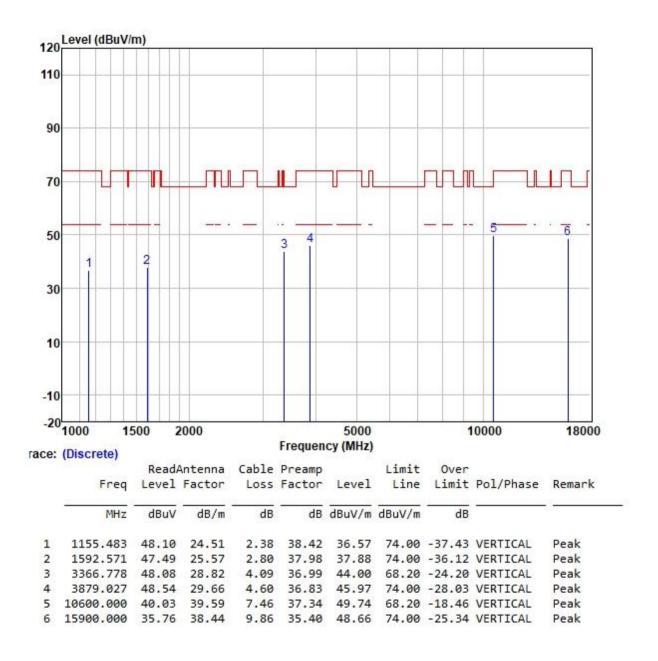
or email: CN.Doccheck@sgs.com No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR211202146003

Page: 179 of 409

Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:middle



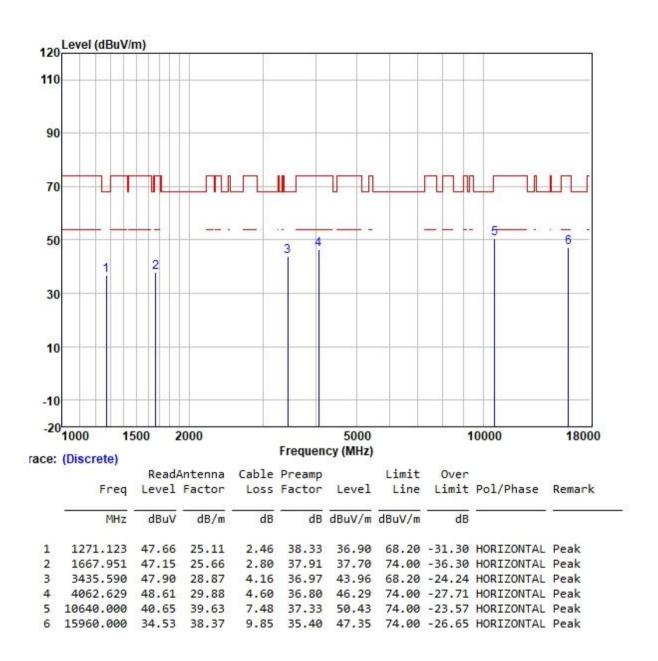




Report No.: GZCR211202146003

Page: 180 of 409

Test Mode: 01; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:High





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention:*To check the authenticity of testing inspection report & certificate, please contact us at testphone: (86-755) 8307 1443.

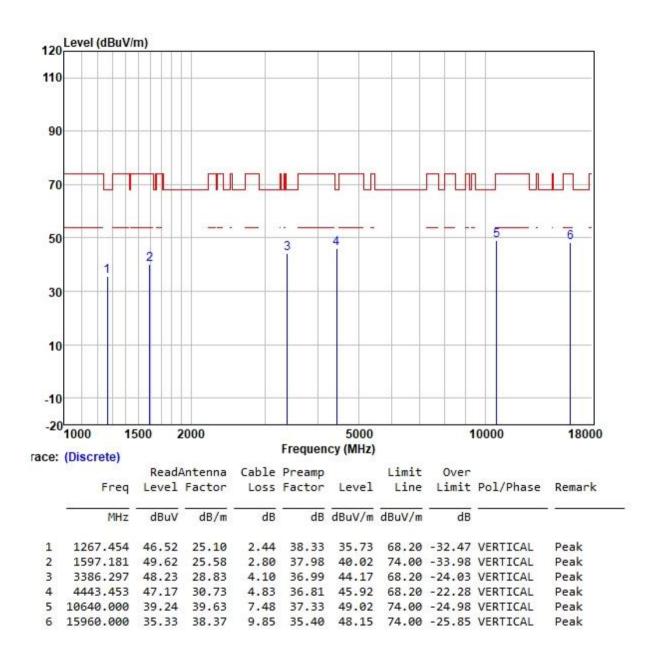
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com
|No.198/kethuk Red, Stentech Park, Quanghou Exonomic & Technology Development District, Quangrhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn



Report No.: GZCR211202146003

Page: 181 of 409

Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:High





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention:*To check the authenticity of testing inspection report & certificate, please contact us at testphone: (86-755) 8307 1443.

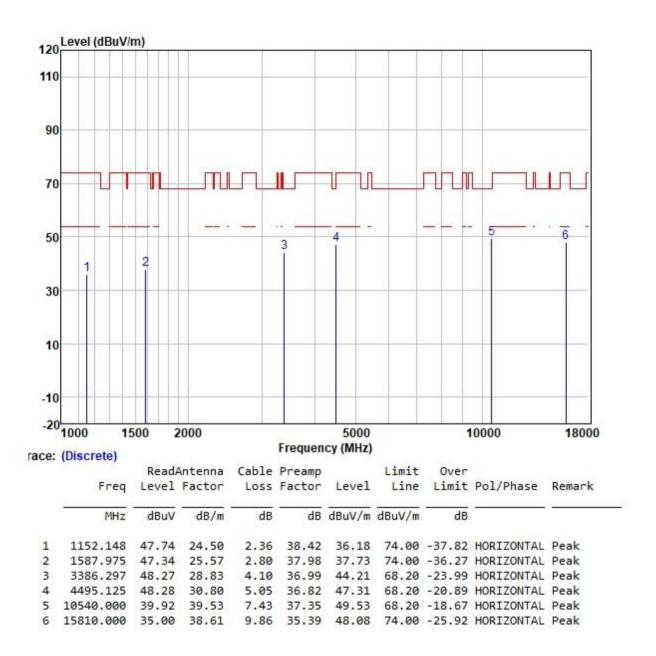
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com
No.198 Kezhu Road, Szientech Park, Guangzhou Extornole & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn



Report No.: GZCR211202146003

Page: 182 of 409

Test Mode: 01; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention:*To check the authenticity of testing inspection report & certificate, please contact us at testphone: (86-755) 8307 1443.

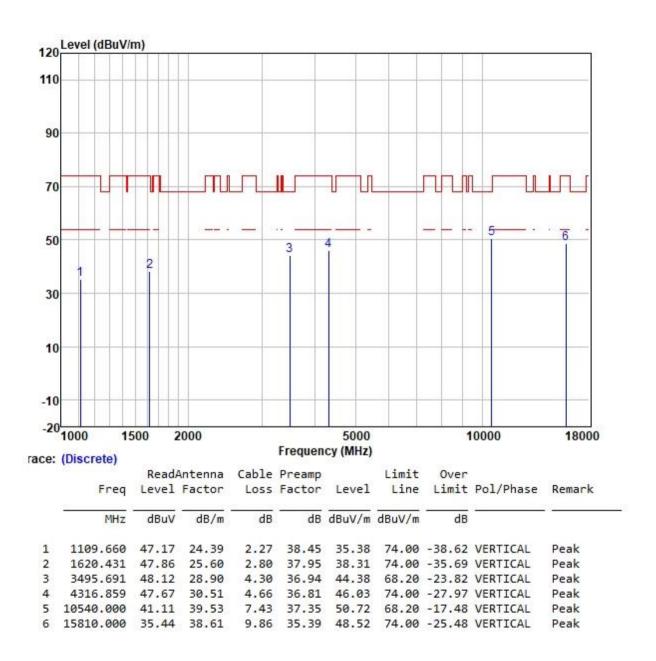
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com
No.198 Kezhu Road, Szientech Park, Guangzhou Extornole & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn



Report No.: GZCR211202146003

Page: 183 of 409

Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention:*To check the authenticity of testing inspection report & certificate, please contact us at telephone: (86-755) 8307 1443.

**Attention:*To check the authenticity of testing inspection report & certificate, please contact us at telephone: (86-755) 8307 1443.

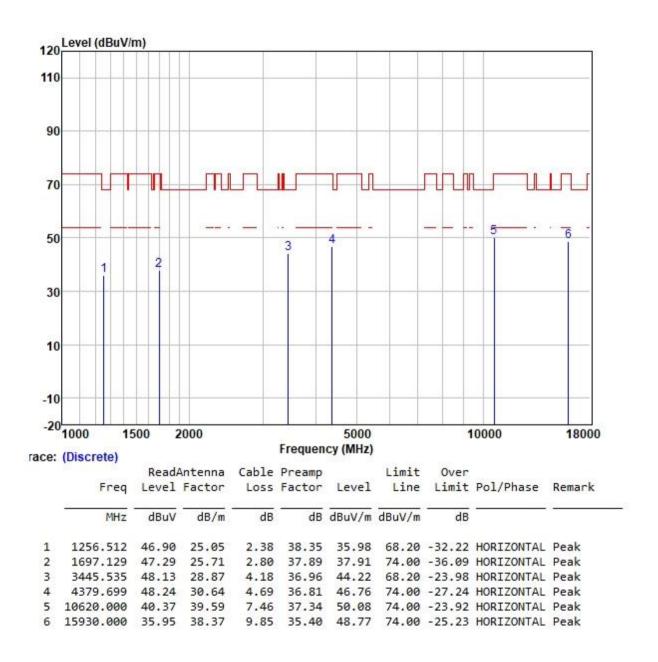
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com
|No.198/kethuk Red, Stentech Park, Quanghou Exonomic & Technology Development District, Quangrhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn



Report No.: GZCR211202146003

Page: 184 of 409

Test Mode: 01; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:High



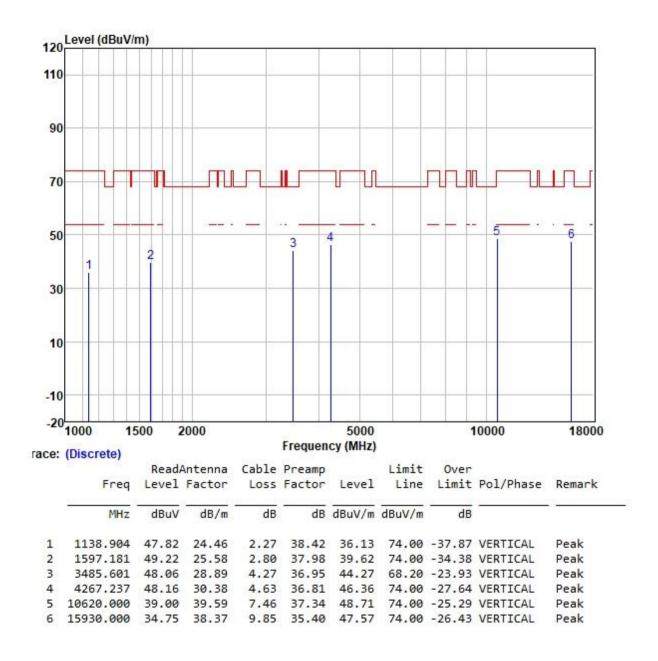




Report No.: GZCR211202146003

Page: 185 of 409

Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention:To Check the authenticity of testing inspection report & certificate place contact us at testphone: (86-755) 8307 1443.

Attention:To Check the authenticity of testing inspection report & certificate place contact us at testphone: (86-755) 8307 1443.

or email: CN_Doccheck@sgs.com
No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn
中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com