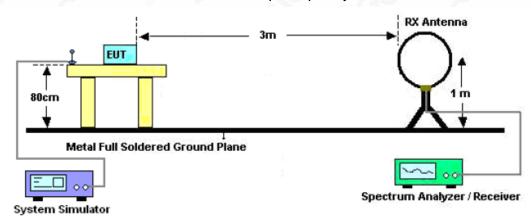
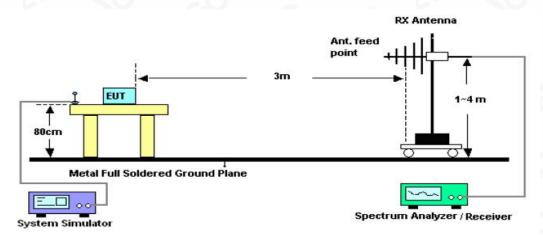


11.2. TEST SETUP

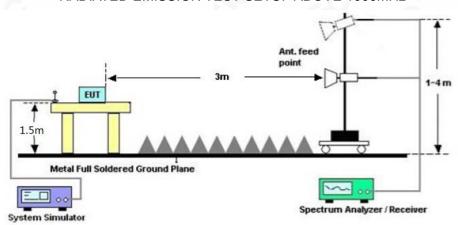
Radiated Emission Test-Setup Frequency Below 30MHz



RADIATED EMISSION TEST SETUP 30MHz-1000MHz



RADIATED EMISSION TEST SETUP ABOVE 1000MHz



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the coefficient of stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter pathorization of AGC, the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Report No.: AGC10625220203FE05

Page 48 of 70

11.3. LIMITS AND MEASUREMENT RESULT

15.209(a) Limit in the below table has to be followed

Frequencies (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		

Note: All modes were tested for restricted band radiated emission, the test records reported below are the worst result compared to other modes.

11.4. TEST RESULT

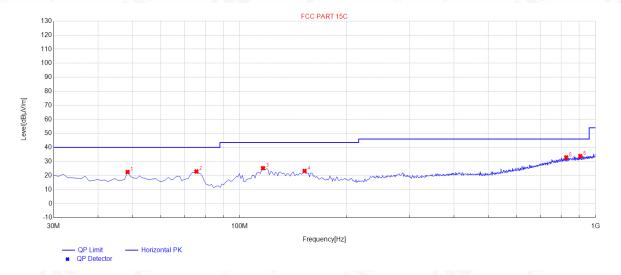
Radiated emission below 30MHz

The amplitude of spurious emissions from 9kHz to 30MHz which are attenuated more than 20 dB below the permissible value need not be reported.



Radiated emission from 30MHz to 1000MHz

EUT	Smart bulb	Model Name	LB1
Temperature	25°C	Relative Humidity	58%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n20 with date rate 1 2462MHz	Antenna	Horizontal

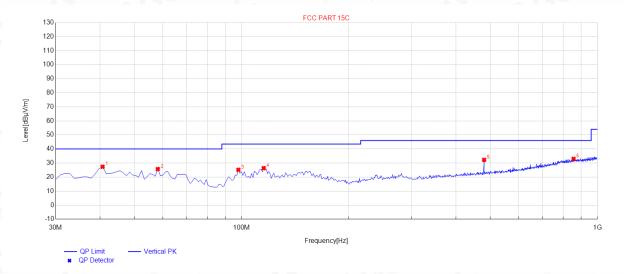


NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	48.43	22.53	11.53	40.00	17.47	100	156	Horizontal
2	75.59	22.93	8.07	40.00	17.07	100	201	Horizontal
3	116.33	25.26	11.46	43.50	18.24	100	159	Horizontal
4	152.22	23.28	14.90	43.50	20.22	100	15	Horizontal
5	827.34	32.90	26.78	46.00	13.10	100	325	Horizontal
6	905.91	33.89	27.69	46.00	12.11	100	136	Horizontal

RESULT: PASS



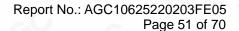
EUT	Smart bulb	Model Name	LB1
Temperature	25°C	Relative Humidity	58%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n20 with date rate 1 2462MHz	Antenna	Vertical



NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	40.67	27.35	10.79	40.00	12.65	100	3	Vertical
2	58.13	25.70	11.05	40.00	14.30	100	54	Vertical
3	97.9	25.16	10.51	43.50	18.34	100	132	Vertical
4	115.36	26.37	12.99	43.50	17.13	100	132	Vertical
5	480.08	32.26	18.58	46.00	13.74	100	308	Vertical
6	856.44	32.97	27.16	46.00	13.03	100	355	Vertical

Note: 1. Factor=Antenna Factor + Cable loss, Margin=Measurement-Limit.

- 2. The "Factor" value can be calculated automatically by software of measurement system.
- 3. All test modes had been pre-tested. The 802.11n20 at high channel is the worst case and recorded in the report.





Radiated emission above 1GHz

EUT	Smart bulb	Model Name	LB1
Temperature	25°C	Relative Humidity	58%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n20 with date rate 1 2412MHz	Antenna	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4824.000	55.49	0.08	55.57	74	-18.43	peak
4824.000	46.27	0.08	46.35	54	-7.65	AVG
7236.000	51.26	2.21	53.47	74	-20.53	peak
7236.000	40.37	2.21	42.58	54	-11.42	AVG
		<u> </u>	<u> </u>	(8)		6
emark:					<u> </u>	

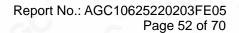
Factor = Antenna Factor + Cable Loss - Pre-amplifier.

EUT	Smart bulb	Model Name	LB1
Temperature	25°C	Relative Humidity	58%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n20 with date rate 1 2412MHz	Antenna	Vertical

(dB) 0.08 0.08	(dBµV/m) 56.56 45.99	(dBμV/m) 74 54	(dB) -17.44	Value Type peak
0.08	45.99	5.4	0.04	
		J 4	-8.01	AVG
2.21	53.26	74	-20.74	peak
2.21	43.88	54	-10.12	AVG
®	· ·			8
	<u>,</u>			

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the specificated resting/inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter pathorization of AGC, the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

Factor = Antenna Factor + Cable Loss - Pre-amplifier.



c/Inspection
The test results
the test report.

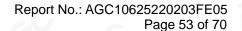


EUT	Smart bulb	Model Name	LB1		
Temperature	25°C	Relative Humidity	58%		
Pressure	960hPa	Test Voltage	Normal Voltage		
Test Mode	802.11n20 with date rate 1 2437MHz	Antenna	Horizontal		

eter Reading	Factor	Emission Level	Limits	Margin	
				Margin	Value Type
(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
57.14	0.14	57.28	74	-16.72	peak
46.98	0.14	47.12	54	-6.88	AVG
52.33	2.36	54.69	74	-19.31	peak
43.48	2.36	45.84	54	-8.16	AVG
8			- 6	8	
					8
	57.14 46.98 52.33	57.14 0.14 46.98 0.14 52.33 2.36	57.14 0.14 57.28 46.98 0.14 47.12 52.33 2.36 54.69	57.14 0.14 57.28 74 46.98 0.14 47.12 54 52.33 2.36 54.69 74	57.14 0.14 57.28 74 -16.72 46.98 0.14 47.12 54 -6.88 52.33 2.36 54.69 74 -19.31

EUT	Smart bulb	Model Name	LB1
Temperature	25°C	Relative Humidity	58%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n20 with date rate 1 2437MHz	Antenna	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4874.000	56.61	0.14	56.75	74	-17.25	peak
4874.000	45.97	0.14	46.11	54	-7.89	AVG
7311.000	50.16	2.36	52.52	74	-21.48	peak
7311.000	40.26	2.36	42.62	54	-11.38	AVG
	@			G	©	
emark:			0			
$actor = \Delta nter$	na Factor + Cable	I nes - Pre-a	mnlifier			





EUT	Smart bulb	Model Name	LB1
Temperature	25°C	Relative Humidity	58%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n20 with date rate 1 2462MHz	Antenna	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Time
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4924.000	55.34	0.22	55.56	74	-18.44	peak
4924.000	46.29	0.22	46.51	54	-7.49	AVG
7386.000	49.37	2.64	52.01	74	-21.99	peak
7386.000	40.13	2.64	42.77	54	-11.23	AVG
8				<u> </u>		
C	8			- C	(8)	
emark:						
actor = Anter	na Factor + Cabl	e Loss – Pre-	amplifier.			

EUT	Smart bulb	Model Name	LB1
Temperature	25°C	Relative Humidity	58%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n20 with date rate 1 2462MHz	Antenna	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin 💮	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4924.000	56.87	0.22	57.09	74	-16.91	peak
4924.000	46.15	0.22	46.37	54	-7.63	AVG
7386.000	51.97	2.64	54.61	74	-19.39	peak
7386.000	42.55	2.64	45.19	54	-8.81	AVG
	0	8			6	- 6
			(8)			
emark:			G	(

Note:

The amplitude of other spurious emissions from 1G to 25 GHz which are attenuated more than 20 dB below the permissible value need not be reported.

Factor = Antenna Factor + Cable loss - Amplifier gain, Over=Measure-Limit.

The "Factor" value can be calculated automatically by software of measurement system.

All test modes had been pre-tested. The 802.11n20 mode is the worst case and recorded in the report.



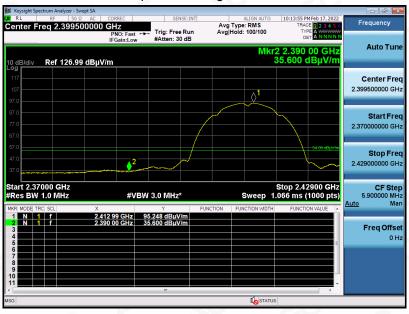
Test result for band edge emission at restricted bands

EUT	Smart bulb	Model Name	LB1
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2412MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement

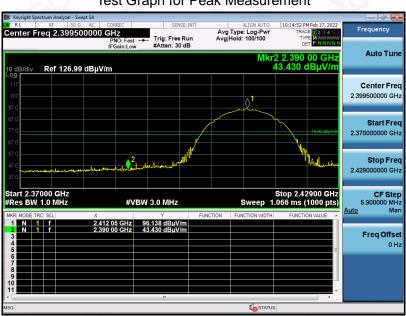


RESULT: PASS



EUT	Smart bulb	Model Name	LB1
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2412MHz	Antenna	Vertical

Test Graph for Peak Measurement



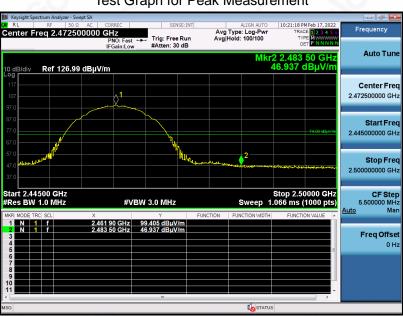
Test Graph for Average Measurement



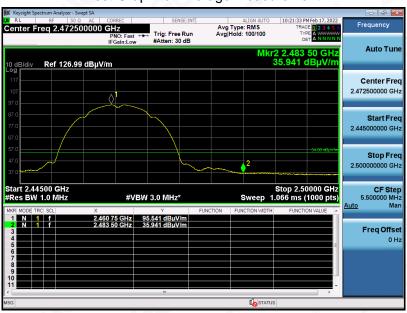


EUT	Smart bulb	Model Name	LB1
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2462MHz	Antenna	Horizontal

Test Graph for Peak Measurement



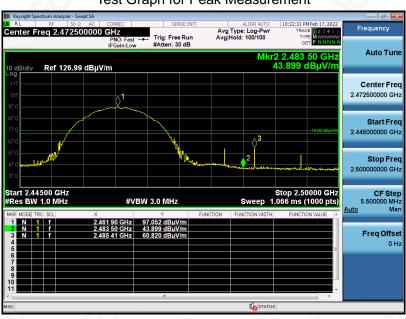
Test Graph for Average Measurement





EUT	Smart bulb	Model Name	LB1
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2462MHz	Antenna	Vertical

Test Graph for Peak Measurement



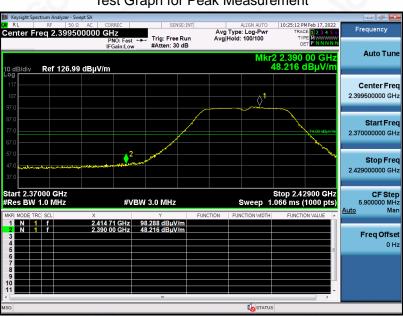
Test Graph for Average Measurement



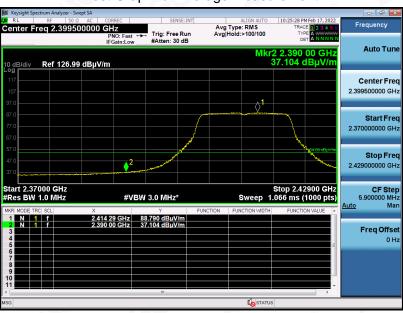


EUT	Smart bulb	Model Name	LB1
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2412MHz	Antenna	Horizontal

Test Graph for Peak Measurement



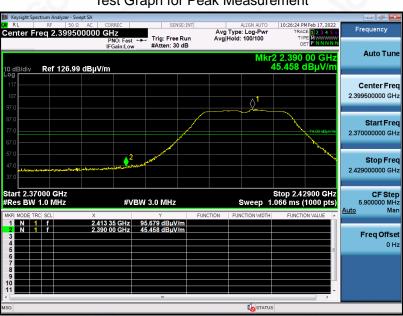
Test Graph for Average Measurement



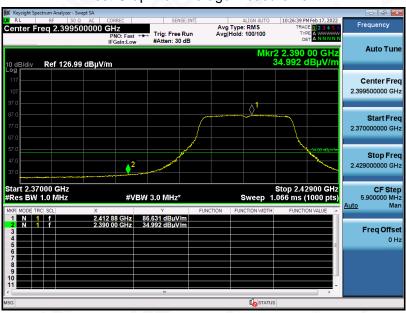


EUT	Smart bulb	Model Name	LB1
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2412MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement





EUT	Smart bulb	Model Name	LB1
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2462MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement





EUT	Smart bulb	Model Name	LB1
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2462MHz	Antenna	Vertical

Test Graph for Peak Measurement



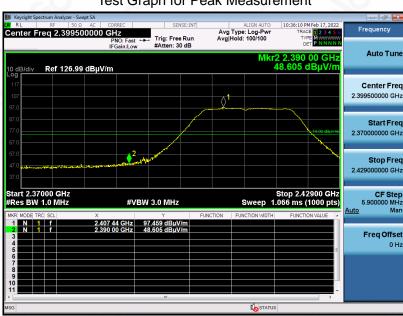
Test Graph for Average Measurement



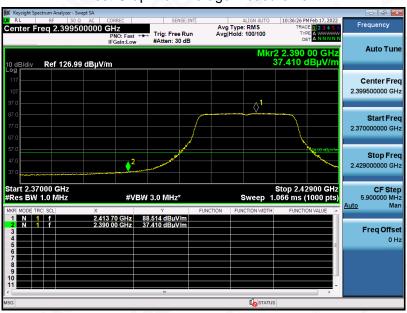


EUT	Smart bulb	Model Name	LB1
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n20 with data rate 6.5 2412MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement



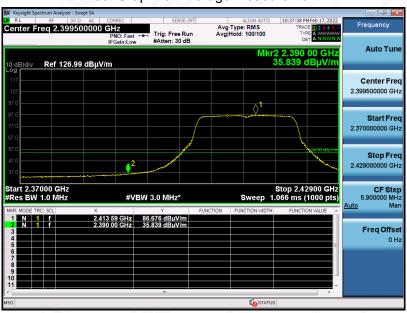


EUT	Smart bulb	Model Name	LB1
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n20 with data rate 6.5 2412MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement





EUT	Smart bulb	Model Name	LB1
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n20 with data rate 6.5 2462MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement





EUT	Smart bulb	Model Name	LB1
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n20 with data rate 6.5 2462MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement





12. LINE CONDUCTED EMISSION TEST

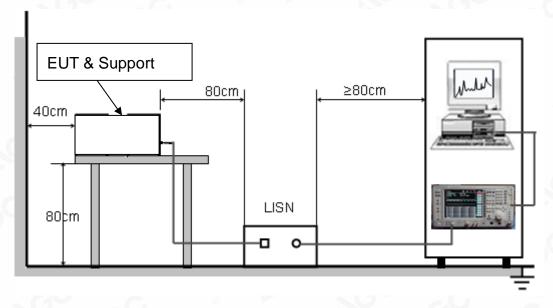
12.1. LIMITS OF LINE CONDUCTED EMISSION TEST

F	Maximum RF Line Voltage			
Frequency	Q.P (dBμV)	Average (dBμV)		
150kHz~500kHz	66-56	56-46		
500kHz~5MHz	56	46		
5MHz~30MHz	60	50		

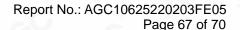
Note:

- 1. The lower limit shall apply at the transition frequency.
- 2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

12.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the conditional description of the test report is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written perhorization of AGC, where the test represented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report and in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report apply only to the test report should be addressed to AGC by agc@agc-cert.com.





12.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST

- 1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2. Support equipment, if needed, was placed as per ANSI C63.10.
- 3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.
- 4. All support equipment received AC120V/60Hz power from a LISN, if any.
- 5. The EUT received AC120V/60Hz power from a LISN.
- 6. The test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 Ohm load; the second scan had Line 1 connected to a 50 Ohm load and Line 2 connected to the Analyzer / Receiver.
- 7. Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
- 8. During the above scans, the emissions were maximized by cable manipulation.
- 9. The test mode(s) were scanned during the preliminary test.

Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

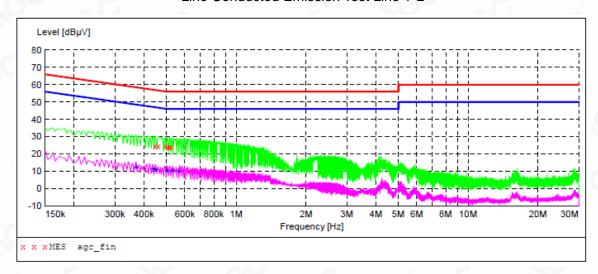
12.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST

- 1. EUT and support equipment was set up on the test bench as per step 2 of the preliminary test.
- 2. A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less – 2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.
- 3. The test data of the worst case was reported on the Summary Data page.



12.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST

Line Conducted Emission Test Line 1-L



MEASUREMENT RESULT: "agc fin"

2022/2/18 15 Frequency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line
0.446000	24.40	5.5	57	32.5	OP	L1
	24.30	5.5	57		_	L1
0.494000	24.30	5.4	56	31.8	QP	L1
0.506000	23.90	5.4	56	32.1	QP	L1
0.514000	23.90	5.4	56	32.1	QP	L1
0.526000	23.80	5.4	56	32.2	QP	L1

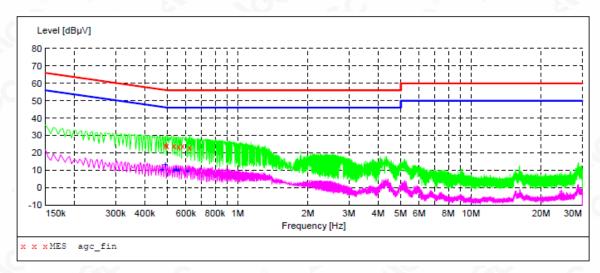
MEASUREMENT RESULT: "agc fin2"

2022/2/18 15: Frequency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line
0.370000	12.30	5.8	49	36.2	AV	L1
0.438000	11.40	5.6	47	35.7	AV	L1
0.450000	11.30	5.5	47	35.6	AV	L1
0.502000	10.80	5.4	46	35.2	AV	L1
0.530000	10.60	5.4	46	35.4	AV	L1
0.570000	10.20	5.4	46	35.8	AV	L1

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the specificated resting/inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter pathorization of AGC, the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Line Conducted Emission Test Line 2-N



MEASUREMENT RESULT: "agc_fin"

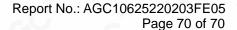
2022/2/18 15:30							
	Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line
	0.490000	24.50	5.4	56	31.7	QP	N
	0.498000	24.10	5.4	56	31.9	QP	N
	0.534000	23.80	5.4	56	32.2	QP	N
	0.558000	23.60	5.4	56	32.4	QP	N
	0.582000	23.90	5.4	56	32.1	QP	N
	0.622000	23.20	5.4	56	32.8	QP	N

MEASUREMENT RESULT: "agc fin2"

2022/2/18 15 Frequency	Level			_	Detector	Line
MHz	dΒμV	dB	dΒμV	dB		
0.474000	10.70	5.5	46		AV	N
0.490000	13.30	5.4	46	32.9	AV	N
0.534000	10.30	5.4	46	35.7	AV	N
0.546000	10.40	5.4	46	35.6	AV	N
0.558000	10.10	5.4	46	35.9	AV	N
0.610000	9.80	5.4	46	36.2	AV	N

RESULT: PASS

Note: All test modes had been pre-tested. The 802.11n20 at high channel is the worst case and recorded in the report.





APPENDIX A: PHOTOGRAPHS OF TEST SETUP

Refer to the Report No.: AGC10625220203AP01

APPENDIX B: PHOTOGRAPHS OF EUT

Refer to the Report No.: AGC10625220203AP02

----END OF REPORT----



Conditions of Issuance of Test Reports

- 1. All samples and goods are accepted by the Attestation of Global Compliance (Shenzhen) Co., Ltd (the "Company") solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on the basis that such terms and conditions constitute express agreement between the company and any person, firm or company requesting its services (the "Clients").
- 2. Any report issued by Company as a result of this application for testing services (the "Report") shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to its customer, supplier or other persons directly concerned. The Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders.
- 3. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
- 4. In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
- 5. Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
- 6. The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.
- 7. Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.
- 8. The Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The Client assumes the responsibility to providing the revised version to any interested party who uses them.
- 9. Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.