



measured conductors shall be recorded.

#### Final ac power-line conducted emission measurements

Based on the exploratory tests of the EUT, the one EUT cable configuration and arrangement and mode of operation that produced the emission with the highest amplitude relative to the limit is selected for the final measurement, while applying the appropriate modulating signal to the EUT. If the EUT is relocated from an exploratory test site to a final test site, the highest emissions shall be remaximized at the final test location before final ac power-line conducted emission measurements are performed. The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment in the system) is then performed for the full frequency range for which the EUT is being tested for compliance without further variation of the EUT arrangement, cable positions, or EUT mode of operation. If the EUT is composed of equipment units that have their own separate ac power connections (e.g., floor-standing equipment with independent power cords for each shelf that are able to connect directly to the ac power network), then each current-carrying conductor of one unit is measured while the other units are connected to a second (or more) LISN(s). All units shall be measured separately. If a power strip is provided by the manufacturer, to supply all of the units making up the EUT, only the conductors in the power cord of the power strip shall be measured.

#### **Test Condition:**

Voltage (V)	Frequency (Hz)
120	60

#### Measurement Result and limit:

**EUT ID: EUT1** 

Bluetooth (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dB <sub>µ</sub> V)	Result (dBμV) With charger		Conclusion	
(111112)	(MH2) Lillit (dbµv)		ldle		
0.15 to 0.5	66 to 56				
0.5 to 5	56	Fig.B.11.1	Fig.B.11.2	Р	
5 to 30	60				

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

#### Bluetooth (Average Limit)

Eroguanay ranga Ayaraga Limit		Result				
Frequency range	Average Limit	With charger		With charger		Conclusion
(MHz) (dBμV)		bluetooth	ldle			
0.15 to 0.5	56 to 46					
0.5 to 5	46	Fig.B.11.1	Fig.B.11.2	Р		
5 to 30	50					

NOTE: The limit decreases linearly with the logarithm of the frequency in the range  $0.15\,\mathrm{MHz}$  to  $0.5\,\mathrm{MHz}$ .

**Conclusion: Pass** 





## Test graphs as below:

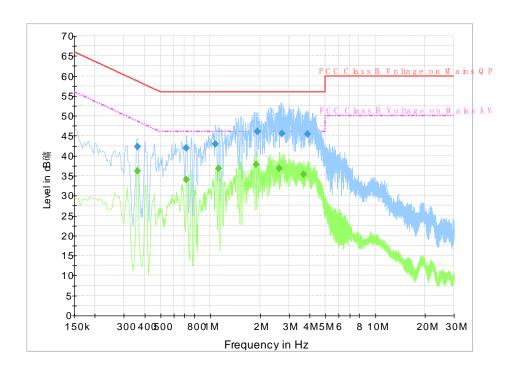


Fig.B.11.1 AC Powerline Conducted Emission- bluetooth

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

## Final Result 1

Frequency	QuasiPeak	Meas.	Bandwidth	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	Time	(kHz)		(dB)	(dB)	(dBµV)
		(ms)					
0.361500	42.2	1000.	9.000	L1	19.6	16.5	58.7
0.717000	41.9	1000.	9.000	L1	19.6	14.1	56.0
1.077000	42.9	1000.	9.000	L1	19.6	13.1	56.0
1.941000	46.0	1000.	9.000	L1	19.5	10.0	56.0
2.710500	45.5	1000.	9.000	L1	19.6	10.5	56.0
3.876000	45.5	1000.	9.000	N	19.7	10.5	56.0

## Final Result 2

Frequency	Average	Meas.	Bandwidth	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	Time	(kHz)		(dB)	(dB)	(dBµV)
		(ms)					
0.361500	36.2	1000.0	9.000	N	19.6	12.5	48.7
0.717000	34.1	1000.0	9.000	L1	19.6	11.9	46.0
1.122000	36.8	1000.0	9.000	L1	19.6	9.2	46.0
1.891500	37.7	1000.0	9.000	L1	19.5	8.3	46.0
2.616000	36.7	1000.0	9.000	L1	19.6	9.3	46.0
3.691500	35.3	1000.0	9.000	N	19.6	10.7	46.0





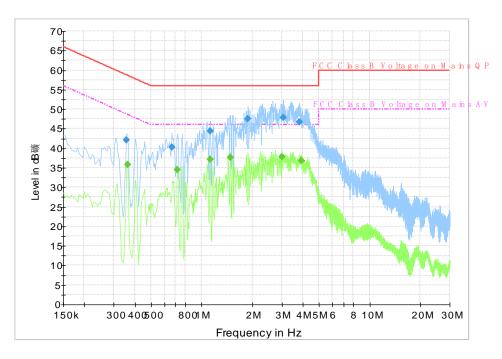


Fig.B.11.2 AC Powerline Conducted Emission-Idle

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

## Final Result 1

Frequency	QuasiPeak	Meas.	Bandwidth	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	Time	(kHz)		(dB)	(dB)	(dBµV)
		(ms)					
0.357000	42.2	1000.	9.000	L1	19.6	16.6	58.8
0.663000	40.4	1000.	9.000	L1	19.6	15.6	56.0
1.122000	44.4	1000.	9.000	N	19.6	11.6	56.0
1.887000	47.6	1000.	9.000	L1	19.5	8.4	56.0
3.061500	47.9	1000.	9.000	L1	19.6	8.1	56.0
3.826500	46.7	1000.	9.000	L1	19.7	9.3	56.0

# Final Result 2

Frequency	Average	Meas.	Bandwidth	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	Time	(kHz)		(dB)	(dB)	(dBµV)
		(ms)					
0.361500	35.8	1000.0	9.000	N	19.6	12.9	48.7
0.717000	34.5	1000.0	9.000	N	19.4	11.5	46.0
1.122000	37.2	1000.0	9.000	N	19.6	8.8	46.0
1.482000	37.7	1000.0	9.000	L1	19.6	8.3	46.0
3.012000	37.9	1000.0	9.000	L1	19.6	8.1	46.0
3.930000	36.8	1000.0	9.000	L1	19.7	9.2	46.0





## **ANNEX C: Accreditation Certificate**

United States Department of Commerce National Institute of Standards and Technology



# Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 600118-0

## Telecommunication Technology Labs, CAICT

Beijing China

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

#### **Electromagnetic Compatibility & Telecommunications**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2020-09-29 through 2021-09-30

Effective Dates

AND THE REST OF CO.

For the National Voluntary Laboratory Accreditation Program

\*\*\*END OF REPORT\*\*\*