

associated with non-EUT equipment in the overall system), the one configuration and arrangement and mode of operation that produces the emission closest to the limit over all of the 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: UT26a

Bluetooth (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Result (dB μ V)		Conclusion	
		With charger			
		bluetooth	Idle		
0.15 to 0.5	66 to 56	Fig.B.11.1	Fig.B.11.2	P	
0.5 to 5	56				
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)

Frequency range (MHz)	Average Limit (dB μ V)	Result (dB μ V)		Conclusion	
		With charger			
		bluetooth	Idle		
0.15 to 0.5	56 to 46	Fig.B.11.1	Fig.B.11.2	P	
0.5 to 5	46				
5 to 30	50				

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

Conclusion: Pass

Test graphs as below:

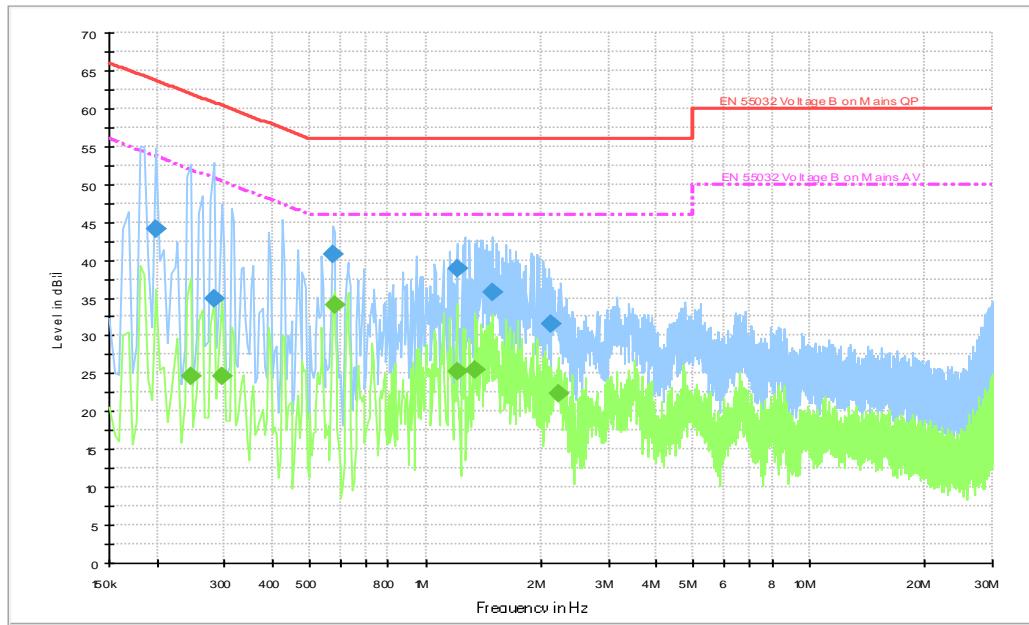


Fig.B.11.1 AC Powerline Conducted Emission- bluetooth

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

Final Result 1

Frequency (MHz)	QuasiPeak (dB μ V)	Line	Margin (dB)	Limit (dB μ V)
0.199500	44.1	L1	19.5	63.6
0.280500	34.9	N	25.9	60.8
0.573000	40.8	L1	15.2	56.0
1.207500	38.8	L1	17.2	56.0
1.491000	35.8	L1	20.2	56.0
2.130000	31.5	N	24.5	56.0

Final Result 2

Frequency (MHz)	Average (dB μ V)	Line	Margin (dB)	Limit (dB μ V)
0.244500	24.7	N	27.3	51.9
0.294000	24.6	L1	25.8	50.4
0.577500	34.0	N	12.0	46.0
1.207500	25.4	L1	20.6	46.0
1.342500	25.6	N	20.4	46.0
2.211000	22.4	N	23.6	46.0

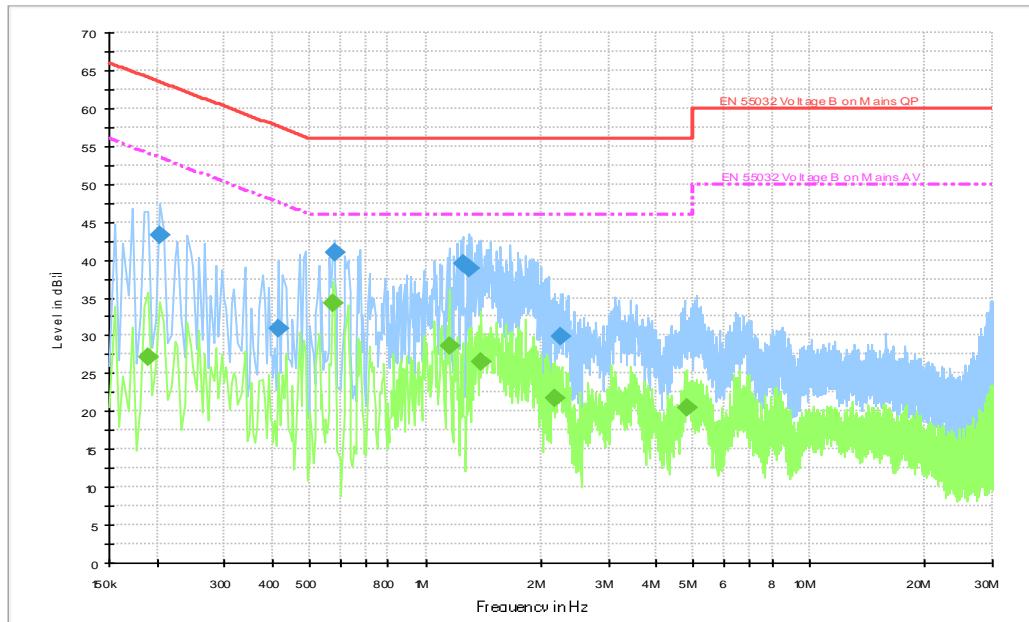


Fig.B.11.2 AC Powerline Conducted Emission-Idle

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

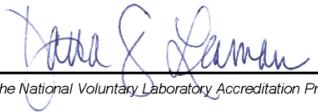
Final Result 1

Frequency (MHz)	QuasiPeak (dB μ V)	Line	Margin (dB)	Limit (dB μ V)
0.204000	43.4	L1	20.1	63.4
0.415500	31.0	N	26.5	57.5
0.577500	41.0	L1	15.0	56.0
1.248000	39.6	L1	16.4	56.0
1.306500	39.0	N	17.0	56.0
2.260500	29.9	L1	26.1	56.0

Final Result 2

Frequency (MHz)	Average (dB μ V)	Line	Margin (dB)	Limit (dB μ V)
0.190500	27.2	N	26.8	54.0
0.573000	34.3	L1	11.7	46.0
1.153500	28.7	L1	17.3	46.0
1.401000	26.6	L1	19.4	46.0
2.166000	21.7	N	24.3	46.0
4.776000	20.4	N	25.6	46.0

ANNEX C: Accreditation Certificate

<p>United States Department of Commerce National Institute of Standards and Technology</p> <p>NVLAP[®] </p>	
<h3>Certificate of Accreditation to ISO/IEC 17025:2017</h3>	
<p>NVLAP LAB CODE: 600118-0</p>	
<p>Telecommunication Technology Labs, CAICT Beijing China</p>	
<p><i>is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:</i></p>	
<p>Electromagnetic Compatibility & Telecommunications</p>	
<p><i>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 Communiqué dated January 2009).</i></p>	
<p>2021-09-29 through 2022-09-30</p> <hr/> <p>Effective Dates</p>	<p>DEPARTMENT OF COMMERCE UNITED STATES OF AMERICA </p> <p> For the National Voluntary Laboratory Accreditation Program</p>

END OF REPORT