

KDB Publication 987594 D04 U-NII 6GHz Pre-Approval Guidance Checklist

Item	Source
1 Antennas	
1.1 Information for all the antennas	AGC12060230401FE10 P10
1.2 Show how the (aggregate, if applicable) antenna gain was computed/measured (as in TCB Workshop Presentation Aggregate Antenna Gain Review, April 2021)	WIFI6E ANTENNA spec
1.3 For conducted test in MIMO cases, show that the testing was done for that path that has the lowest antenna gain.	AGC12060230401FE10
2 Contention Based Protocol (CBP)	
2.1 CBP testing shall be performed on one channel in each sub-band of operation for both narrowest and widest bandwidths	Reference Module Report: 201120-03.TR38 P27-28
2.2 Use three separate 10 MHz AWGN signals when testing a 160 MHz channel. The simulated incumbent signal must be a 10 MHz wide AWGN signal	Reference Module Report: 201120-03.TR38 P27-28
2.3 Report lowest AWGN signal detectable by EUT	Reference Module Report: 201120-03.TR38 P27-28
2.4 Verify that the testing was performed with the AWGN signal set to lowest level (for example, -100 dBm) and increased until the EUT detects and stops transmitting. For instance a table like the following (or similar) shall be reported:	Reference Module Report: 201120-03.TR38 P27-28
2.5 If conducted measurements are used, the detection threshold needs to be corrected to refer to a 0 dBi gain antenna and include all the applicable losses (cables, etc.). For instance, the report should show (at least): Detection Level = Injected AWGN Power (dBm) – Antenna Gain (dBi) + Path Loss (dB)	Reference Module Report: 201120-03.TR38 P27-28
2.6 Include plots showing EUT has stopped transmitting after detection of AWGN signal	Reference Module Report: 201120-03.TR38 P27-28
2.7 Describe whether channel puncturing and/or bandwidth reduction mechanisms supported. The report needs to include a plot as an example for at least one of the AWGN signals used.	Reference Module Report: 201120-03.TR38 P27-28

2.8 If radiated testing is used, show that spot- checks were done to identify which side of the EUT has the lowest sensitivity to the incumbent signal detection, and that side was indeed chosen for the test.	N/A
3 Client Device Limitations	
3.1 Client device (per definition in 47 CFR § 15.202) is limited to indoor locations, does not connect directly to the internet nor to other clients	Meet the requirements
3.2 Requires attestation (as a Form 731 exhibit) stating that the device can only operate under the control of a low-power indoor access point and subordinate.	Meet the requirements
3.3 No vehicular use, except large aircrafts above 10000 ft.	Meet the requirements
3.4 Transmit Power Control (TPC) required for client devices connected to Standard Power Access Points, excluding Fixed Client devices	Not application
3.5 Show/justify enclosure is not weatherized for Subordinate and APs.	Not application
4. Emission Mask	
4.1 Power spectral density suppression complies with 47 CFR § 15.407(b)(6).	Reference Module Report: 201120-03.TR38 P39
4.2 If EUT supports OFDMA discuss testing of partial Resource Unit (RU) configurations. In any case the shape of the mask shall be based on full RU.	Not Support
4.3 OOB limits only apply outside of the 5.925-7.125 GHz band. All in-band emissions need to meet the channel mask. In case a higher RBW for the in-Band Emissions Mask is used (i.e., a more conservative case) that should be noted	Not Support
5. Filing: 99% of the occupied bandwidth must be contained within all the U-NII sub bands authorized for that equipment class	
5. Filing: 99% of the occupied bandwidth must be contained within all the U-NII sub bands authorized for that equipment class	Reference Module Report: 201120-03.TR38 P30
6. Hearing Aid Compatibility (HAC)	
6.1 Confirm that VoLTE cannot be transported over 5G NR sub 6 GHz. If so, must state that in the OTT declaration of pre-install of OTT voice service and test report.	Not support
6.2 Manufacture must provide an attestation (cover letter) confirming that the results using ABM1 values obtained from VoLTE connections over LTE bands and ABM2 values for 5G NR sub 6 GHz connections over the same bands provide a reasonable representation of the HAC rating over the 5G NR sub 6 GHz connections.	Not support
7. Labelling	
7.1 Label showing indoor only for Subordinate and APs.	Please see product label
7.2 E-labelling may be acceptable if proper justification is provided	Not applicable

8. Modular Certifications (when applicable)	
8.1 Modular approval letter to be uploaded with the application	N/A
8.2 No subordinate devices can be modules	N/A
8.3 Show notification for the host manufacturer about referencing KDB Publication 996369 D04 Module Integration Guide	N/A
9. RF Exposure	
9.1 Demonstrate applicable classification (portable/mobile/fixed) in reference to worst-case scenario use cases	See MPE report:
9.2 Address f > 6 GHz RF exposure via most recent applicable KDB or TCB Workshop procedures	Not support
9.3 Address all applicable simultaneous transmission conditions using the compliance condition $TER \leq 1$, where TER (total exposure ratio) in this context is defined as: $TER = \sum_{k=1}^{N_s} \left(\frac{SAR_k}{SAR_{lim}} \right) + \sum_{k=1}^{N_f} \left(\frac{MPE_{field, k}}{MPE_{field, lim}} \right)^2 + \sum_{k=1}^{N_{PD}} \left(\frac{MPE_{PD, k}}{MPE_{PD, lim}} \right)^2$ with N_s , N_f , and N_{PD} referring to sources requiring SAR, field-MPE, or PD-MPE, respectively, k referring to measured or estimated values for the source k, and "lim" to the corresponding applicable compliance limit Simultaneous transmit evaluations and test exemption analyses may use SPLSR per KDB Publication 447498.	See MPE report
10. Security: Provide specific exhibit with device security description is required (complying with 47 CFR § 15.407(i))	
10. Security: Provide specific exhibit with device security description is required (complying with 47 CFR § 15.407(i))	See SOFTWARE SECURITY REQUIREMENTS FOR U-NII DEVICES letter
11. Spurious Emissions: Show that measurements are made at the prescribed antenna heights, per KDB Publication 987594 D01, including measurements along all three axes, as per ANSI C63.10	Meet