UN5GHZ – Revision 1					
PAG Item Description	PAG List Item	Equipment Code(s)	TC Number(s)	Exhibit Category	Additional details
U-NII devices authorized in- U-NII-4 band 5.850-5.895 GHz and channels that span U-NII-3 and U-NII-4 Bands under Part 15 Subpart E.	UN5GHZ	NII	XXXXXX	Test Report	EIRP was determined based on a conducted power measurement to which antenna gain was added. Channels straddling the UNII-3 / UNII-4 bands were evaluated against both UNII-3 conducted power and UNII-4 EIRP limits. Refer to tables starting on page 44 ***4790541040-E6V2 FCC Report UNII[a,n,ac,ax] WLAN_Part1***. PSD for channels fully or partially contained in the UNII-4 band was determined based on a conducted power measurement to which the antenna gain was added. For channels straddling the UNII-3 / UNII-4 bands the highest PSD across the entire channel was compared to the limit. Refer to tables starting on page 44 ***4790541040-E6V2 FCC Report UNII[a,n,ac,ax] WLAN_Part1***. Antenna gain values are provided he antenna is shown in the internal photos exhibit but the confidential exhibit ***A3LSMS916B Ant Distance_221110*** is needed to know the location. Antenna gain information can be found in the Test report exhibit ***A3LSMS916B_BT_WLAN Antenna Gain_221122***. The Part 15 test reports use the appropriate values for peak gain (from pages 1,2 of antenna report). **MIMO antenna gain calculations are provided** – refer to page 43 of ***4790541040-E6V2 FCC Report UNII[a,n,ac,ax] WLAN_Part1***
				Attestation Letter	Refer to attestation letter ***A3LSMS916B UNII-4 Attestation letter_221020*** for the grantee attestations as required by **KDB 291704.**
				Grant conditions	The grant conditions will confirm that the listed powers are conducted for UNII 1, 2A, 2C and 3 and EIRP for UNII-4. We will use the grant note EP for those line entries.
				Label and User Manual	As this device is a client device the “Indoor Only” statements in the manual and on the product label are not required.

U-NII devices authorized in U-NII bands 5.925-7.125 GHz (Wi-Fi 6E), PAG ITEM UN6GHZ, Equipment Code 6CD – Revision 2 _____ This is a portable client device requesting approval under equipment code **6CD** for indoor and outdoor operations.	
Label	This is a client-only device, Indoor Use Only warning is not required
Internal Photos Test report	**Antenna Gain information** The antenna is shown in the internal photos exhibit but the confidential exhibit ***A3LSMS916B Ant Distance_221110*** is needed to know the location. Antenna gain information can be found in the Test report exhibit ***A3LSMS916B_BT_WLAN Antenna Gain_221122***. The Part 15 test report uses the appropriate values from the antenna exhibit.
Test Report	Test report exhibit ***4790541040-E7V4 FCC Report UNII[6E] WLAN_Part1*** through ***4790541040-E7V4 FCC Report UNII[6E] WLAN_Part6*** • PSD meets 15.407(b)(6) - ***4790541040-E7V4 FCC Report UNII[6E] WLAN_Part1*** page 33 (802.11a) and pages 40 -41, 48-49, 55-56, 62-63 (802.11ax) table shows measured conducted PSD per chain, total PSD and then adds the antenna gain to determine the eirp. PSD is measured for the smallest RU allocations and full SU. Intermediate RU allocations are lower PSD than the smallest RU for all bandwidths (refer to power data for all the various RUs showing increase in power for wider RUs is consistent with lower PSD). Measurements made at LPI power level in all bands and then repeated in UNII 5 and 7 at the standard power setting. • Mask based on Full RU for 802.11ax / OFDMA. Partial RU also tested. Section 10 of report ***4790541040-E7V4 FCC Report UNII[6E] WLAN_Part1*** with plots continuing into ***4790541040-E7V4 FCC Report UNII[6E] WLAN_Part2***. Top of mask adjusted to top of signal -as shown in all plots. 802.11ax data starts on page 3 of ***4790541040-E7V4 FCC Report UNII[6E] WLAN_Part2*** and plots show partial RU and SU. • RBW used for mask was >= required measurement bandwidth (bandwidth used for 26dB bandwidth measurement); • Width of mask based on <= 26dB bandwidth; • 99% bandwidth contained within the allocated band for indoor operations ***4790541040-E7V4 FCC Report UNII[6E] WLAN_Part1*** page 28 onwards shows the 99% bandwidth < nominal channel bandwidth and therefore contained within the UNII 5 – 8 bands; • 99% bandwidth contained within the allocated band for outdoor operations ***4790541040-E7V4 FCC Report UNII[6E] WLAN_Part1*** page 28 onwards shows the 99% bandwidth for the outdoor < nominal channel bandwidth and therefore contained within the UNII 5 and UNII 7 bands (channels are fully contained within the sub-band with highest and lowest channels separated by at least ½ the channel bandwidth from the band edges); • Spurious emissions: o Correct antenna height range used per ANSI C63.10 - page 8 of ***4790541040-E7V4 FCC Report UNII[6E] WLAN_Part6*** o Tested in X/Y/Z orientations consistent with intended installation / use - page 13 of the test report ***4790541040-E7V4 FCC Report UNII[6E] WLAN_Part1*** and also test set up photos exhibit ***A3LSMS916B_Appendix - Test Setup Photo(Unlicensed Band)*** pages 8 and 9 • MIMO devices – the antenna gain calculations to determine aggregate gain are in ***4790541040-E7V4 FCC Report UNII[6E] WLAN_Part1*** section 5.2 (page 12). The report includes the formula used and a sample calculation. Same section and table also includes the minimum gain values within each sub-band for reference when reviewing the CBP tests.
Test Report	**CBP -** test report exhibit ***4790541040-E7V4 FCC Report UNII[6E] WLAN_Part6*** • Performed on one channel in each sub-band of operation for both narrowest and widest bandwidths - section 14.2.3 on page 29 shows testing performed on 160MHz and 20 MHz bandwidths • 10 MHz wide AWGN signal is used - page 28 o 160MHz channel tested with three different AWGN signals at lower, upper and center of channel – section 14.2.3 on page 29 shows incumbent signal applied at 3 different frequencies • **Detection threshold adjusted to consider lowest gain antenna** – values of gain in the table on page 29 are lowest within each UNII band. o MIMO device – detection threshold is evaluated based on lowest gain antenna value for all chains o Report includes calculation showing the Required Detection Level = Injected AWGN Power (dBm) – Antenna Gain (dBi) + Path Loss (dB) on page 157 • Lowest detection level is reported for each test – see table on page 29 showing minimum incumbent level for 100% detection and level at which detection rates are 0% and 50%. • Test is performed by starting at a level much lower than required detection level and then increased - page 26 step 5 and 6. • Plots showing device stopped transmitting - page 28 shows the EUT transmitting then stopping for the ten trials they tested with the incumbent set at 6110 MHz. • Channel puncturing / bandwidth reduction: Not supported
Attestation Letter	**Client Device** Refer to attestation letters ***A3LSMS916B 6CD FCC Attestation Letter_221109*** and ***A3LSMS916B_WiFi6e_Power adjustment letter*** for the grantee attestations, including: • confirming that the device will not connect directly to other clients and does not have its own direct internet connection; • device can only operate under the control of a low-power indoor access point and subordinate in all bands • DCD Dual Client only operating at standard power levels when connected to an outdoor AP. Limitations explaining that client-to-client operations are not supported in the 6GHz bands and for operations as a dual client regarding output power settings when connected to a standard AP versus an indoor AP / subordinate device are included in the letters. User manual statements regarding limitations for use in vehicles and aircrafts are not applicable as this is a client device, not an AP or subordinate AP.
External Photos and Operational Description	Client device – enclosure form factor and labeling requirements do not apply.
RF Exposure exhibit	**RF Exposure -** Classification is portable and rf exposure is addressed via PAG code OVER6G
SDR / Software Description	Exhibit ***A3LSMS916B_U-NII Device SW Security Statement_221020*** contains the 15.407(i) security information.