Testing and Certification for **REFERENCE** (#3)	
	RT WiFi FCC 15.247/RSS-247
15.207/RSS-247 RF Emi AC Mains PL Cond [RT WiFi]	15.207/RSS-247 Conducted RF emissions on AC Mains. Range: 150KHz-30MHz. Leads Tested: L1 & Neut Power: 120VAC, 60Hz. Limits: 15.207/RSS-247 Modes: (2) Tx ON, Tx OFF NOTE: Performed during Simul-Tx & Digital Device
15.247/RSS-247 Ant Port [RT WiFi]	15.247/RSS-247 Measurements at Antenna Port Tests: 6dB BW, 99% BW, PSD, Cond Pwr, CSE Channels: (3) Low / Mid / High Power: 120VAC, 60Hz. Modes: (3) 802.11 b/g/n20
15.247/RSS-247 Spur Emi (Radiated) RT [WiFi]	15.247/RSS-247 Rad Spur EMI, BEC & EIRP Test: Preliminary & final measurements: 30MHz-25GHz Channels: (3) Low / Mid / High Power: 120VAC, 60Hz. Modes: (3) 802.11 b/g/n20
Test Report RT [WiFi]	etr2200527-01 Realtek WiFi
	RT BLE FCC 15.247/RSS-247
15.207/RSS-247 RF Emi AC Mains PL Cond [RT BLE]	15.207/RSS-247 Conducted RF emissions on AC Mains. Range: 150KHz-30MHz. Leads Tested: L1 & Neut Power: 120VAC, 60Hz. Limits: 15.207/RSS-247 Modes: (2) Tx ON, Tx OFF NOTE: Performed during Simul-Tx & Digital Device
15.247/RSS-247 Ant Port [RT BLE]	15.247/RSS-247 Measurements at Antenna Port Tests: 6dB BW, 99% BW, PSD, Cond Pwr, CSE Channels: (3) Low / Mid / High Power: 120VAC, 60Hz. Modes: (1) BLE ONLY
15.247/RSS-247 Spur Emi (Radiated) [RT BLE]	15.247/RSS-247 Rad Spur EMI, BEC & EIRP Test: Preliminary & final measurements: 30MHz-25GHz Channels: (3) Low / Mid / High Power: 120VAC, 60Hz. Modes: (1) BLE ONLY
Test Report [RT BLE]	etr2200527-02 (Realtek BLE)
	Sub-1GHz 900MHz FHSS TX/RX FCC 15.247/RSS-247
15.207/RSS-247 RF Emi AC Mains PL Cond [900MHz Tx/Rx]	15.207/RSS-247 Conducted RF emissions on AC Mains. Range: 150KHz-30MHz. Leads Tested: L1 & Neut Power: 120VAC, 60Hz. Limits: 15.207/RSS-247 Modes: (2) Tx ON, Tx OFF NOTE: Performed during Simul-Tx & Digital Device
15.247/RSS-247 Ant Port [900MHz Tx/Rx]	15.247/RSS-247 Measurements at Antenna Port Tests:20dB BW, 99% BW, Hopping, Cond Pwr, CSE Channels: (3) Low / Mid / High Power: 120VAC, 60Hz. Modes: (1) FHSS
15.247/RSS-247 Spur Emi (Radiated) [900MHz Tx/Rx]	15.247/RSS-247/15.109 Rad Spur EMI, BEC & EIRP Test: Preliminary & final measurements: 30MHz-10GHz Channels: (3) Low / Mid / High Power: 120VAC, 60Hz. Modes: (1) FHSS Tx 15.247 up to 10Ghz Modes: (1) FHSS Rx 15.109 up to 5GHz
Test Report [900MHz Tx/Rx]	etr2200527-03 (FHSS 900 MHz)
	Sub-1GHz 300/400MHz RX FCC 15.109/RSS-GEN
15.109/RSS-GEN Spur Emi (Radiated) [300/400MHz Rx]	15.109/RSS-GEN Rad Spur EMI Test: Preliminary & final measurements: 30MHz-2GHz Channels: (5) 310/315/390, 433.3, 434.5 Power: 120VAC, 60Hz. Modes: (1) Rx at specified channel
Test Report [300/400MHz Rx]	etr2200527-05 (RX)
	Security 3.0 BLE FCC 15.247/RSS-247
15.207/RSS-247 RF Emi AC Mains PL Cond [Sec-3.0 BLE]	15.207/RSS-247 Conducted RF emissions on AC Mains. Range: 150KHz-30MHz. Leads Tested: L1 & Neut Power: 120VAC, 60Hz. Limits: 15.207/RSS-247 Modes: (2) Tx ON, Tx OFF NOTE: Performed during Simul-Tx & Digital Device
15.247/RSS-247 Ant Port [Sec-3.0 BLE]	15.247/RSS-247 Measurements at Antenna Port Tests: 6dB BW, 99% BW, PSD, Cond Pwr, CSE Channels: (3) Low / Mid / High Power: 120VAC, 60Hz. Modes: (1) BLE ONLY
15.247/RSS-247 Spur Emi (Radiated) [Sec-3.0 BLE]	15.247/RSS-247 Rad Spur EMI, BEC & EIRP Test: Preliminary & final measurements: 30MHz-25GHz Channels: (3) Low / Mid / High Power: 120VAC, 60Hz. Modes: (1) BLE ONLY
Test Report [Sec-3.0 BLE]	etr2200527-04 (Sec 3.0 BT)
	Simultaneous Multi-Tx Testing Digital Device EMC Testing
15.207/RSS-247 RF Emi AC Mains PL Cond	15.207/RSS-247/15.107 Cond RF EMI on AC Mains. Range: 150KHz-30MHz. Leads Tested: L1 & Neut Power: 120VAC, 60Hz. Limits: 15.207/RSS-247 Modes: (1) All Tx ON, use for all CERT PL-CE Data [w/ 1 GDO type] Modes: (1) All Tx OFF for Digital Device 15.109/ICES-003 [w/ 3 GDOs] NOTE: Digital Device Cond EMI testing per 15.109/ICES-003 performed on 3 GDO types having most full-featured configuration: (1) Liftmaster Model [TBD] (1) Raynor Model [TBD] (1) Chamberlain Model [TBD]
15.247/RSS-247 Spur Emi (Radiated) [Multi-Tx] [Dig Device]	15.247/RSS-247/15.109 Rad Spur EMI, BEC & EIRP Test: Preliminary & final measurements: 30MHz-25GHz Power: 120VAC, 60Hz. Modes: (1) RT-WiFi/Sec3.0 BLE/FHSS [w/ 1 GDO type] Modes: (1) RT-BLE/FHSS [w/ 1 GDO type] Modes: (1) All Tx OFF, Limits 15.109 & ICES-003 [w/ 3 GDOs] NOTE: Digital Device Cond EMI testing per 15.109/ICES-003 performed on 3 GDO types having most full-featured configuration: (1) Liftmaster Model [TBD] (1) Raynor Model [TBD] (1) Chamberlain Model [TBD]
Test Report [Multi-Tx] RE & CE	etr2200527-07 (Multi-Tx)
Test Report [Digital Device] RE & CE	etr2200527-06 (FCC 15B)
	USA & Canada Certifications
FCC Certification	(1) 15.247 Cert for RT WiFi, RT BLE, Sec 3.0 BLE (1) 15.247 Cert for 900MHz FHSS FCC ID: HBW0454X3 for all FCC Certs Board Variants: 003-0454-3, 003-0454-5, 003-0454-6, 003-0454-7, 003-0454-8
ISED Canada Certification	(1) RSS-247 Cert for RT WiFi, RT BLE, Sec 3.0 BLE (1) RSS-247 Cert for 900MHz FHSS IC ID: 2666A-0454X3 Board Variants: 003-0454-3, 003-0454-5, 003-0454-6, 003-0454-7, 003-0454-8

Testing and Certification for **Variant** (#1)	
	RT WiFi FCC 15.247/RSS-247
15.207/RSS-247 RF Emi AC Mains PL Cond [RT WiFi]	No testing, reference existing data
15.247/RSS-247 Ant Port [RT WiFi]	No testing, reference existing data
15.247/RSS-247 Spur Emi (Radiated) RT [WiFi]	15.247/RSS-247 Rad Spur EMI, BEC & EIRP Test: Preliminary & final measurements: 30MHz-25GHz Channels: (2) Low & High ONLY Power: 120VAC, 60Hz. Modes: (1) 802.11 n20 ONLY (assumed worst-case) SPOT CHECK Tx Spurious Emissions upto 4th harmonic Reference existing data for other modes/channels
Test Report RT [WiFi]	etr2200529-01 (Realtek WiFi)
	RT BLE FCC 15.247/RSS-247
15.207/RSS-247 RF Emi AC Mains PL Cond [RT BLE]	No testing, reference existing data
15.247/RSS-247 Ant Port [RT BLE]	No testing, reference existing data
15.247/RSS-247 Spur Emi (Radiated) [RT BLE]	15.247/RSS-247 Rad Spur EMI, BEC & EIRP Test: Preliminary & final measurements: 30MHz-25GHz Channels: (2) Low & High ONLY Power: 120VAC, 60Hz. Modes: (1) BLE ONLY SPOT CHECK Tx Spurious Emissions upto 4th harmonic Reference existing data for other modes/channels
Test Report [RT BLE]	etr2200529-02 (Realtek BLE)
	Sub-1GHz 900MHz FHSS TX/RX FCC 15.247/RSS-247
15.207/RSS-247 RF Emi AC Mains PL Cond [900MHz Tx/Rx]	No testing, reference existing data
15.247/RSS-247 Ant Port [900MHz Tx/Rx]	No testing, reference existing data
15.247/RSS-247 Spur Emi (Radiated) [900MHz Tx/Rx]	15.247/RSS-247/15.109 Rad Spur EMI, BEC & EIRP Test: Prelim & final measurements: 30MHz-10GHz Channels: (2) Low & High ONLY Power: 120VAC, 60Hz. Modes: (1) FHSS Tx 15.247 up to 10Ghz Modes: (1) FHSS Rx 15.109 up to 5GHz [NO TESTING] SPOT CHECK Tx Spurious Emissions upto 4th harmonic NO SPOT CHECK TESTS ON FHSS Rx. Reference existing data for other modes/channels
Test Report [900MHz Tx/Rx]	etr2200529-02 (FHSS)
	Sub-1GHz 300/400MHz RX FCC 15.109/RSS-GEN
15.109/RSS-GEN Spur Emi (Radiated) [300/400MHz Rx]	No testing, reference existing data
	Security 3.0 BLE FCC 15.247/RSS-247
15.207/RSS-247 RF Emi AC Mains PL Cond [Sec-3.0 BLE]	No Testing, Radio is Depopulated
15.247/RSS-247 Spur Emi (Radiated) [Sec-3.0 BLE]	
	Simultaneous Multi-Tx Testing Digital Device EMC Testing
15.207/RSS-247 RF Emi AC Mains PL Cond	No testing, reference existing data
15.247/RSS-247 Spur Emi (Radiated) [Multi-Tx] [Dig Device]	No testing, reference existing data
	USA & Canada Certifications
FCC Certification	(1) 15.247 Cert RT WiFi & RT BLE (1) 15.247 Cert for 900MHz FHSS FCC ID: HBW0454X1 for all FCC Certs
ISED Canada Certification	(1) RSS-247 Cert RT WiFi & RT BLE (1) RSS-247 Cert for 900MHz FHSS IC ID: 2666A-0454X1 for all CAN Certs

Testing and Certification for **Variant** (#2)	
	RT WiFi FCC 15.247/RSS-247
[RT WiFi]	No Testing, Radio is Depopulated
[RT BLE]	No Testing, Radio is Depopulated
	Sub-1GHz 900MHz FHSS TX/RX FCC 15.247/RSS-247
15.207/RSS-247 RF Emi AC Mains PL Cond [900MHz Tx/Rx]	No testing, reference existing data
15.247/RSS-247 Ant Port [900MHz Tx/Rx]	No testing, reference existing data
15.247/RSS-247 Spur Emi (Radiated) [900MHz Tx/Rx]	15.247/RSS-247/15.109 Rad Spur EMI, BEC & EIRP Test: Preliminary & final measurements: 30MHz-10GHz Channels: (2) Low & High ONLY Power: 120VAC, 60Hz. Modes: (1) FHSS Tx 15.247 up to 10Ghz SPOT CHECK Tx Spurious Emissions upto 4th harmonic Modes: (1) FHSS Rx 15.109 up to 5GHz [NO TESTING] NO SPOT CHECK TESTS ON FHSS Rx. Reference existing data for other modes/channels
Test Report [900MHz Tx/Rx]	etr2200530-01 (FHSS)
	Sub-1GHz 300/400MHz RX FCC 15.109/RSS-GEN
15.109/RSS-GEN Spur Emi (Radiated) [300/400MHz Rx]	No testing, reference existing data
	Security 3.0 BLE FCC 15.247/RSS-247
[Sec-3.0 BLE]	No Testing, Radio is Depopulated
	Simultaneous Multi-Tx
15.247/RSS-247 Spur Emi [Multi-Tx]	No Testing, Only 1 Radio
	USA & Canada Certifications
FCC Certification	FCC ID: HBW0454X2
ISED Canada Certification	(1) RSS-247 Cert for 900MHz FHSS IC ID: 2666A-0454X2

Testing and Certification for **Variant** (#4)	
	RT WiFi FCC 15.247/RSS-247
[RT WiFi]	No Testing, Radio is Depopulated
[RT BLE]	No Testing, Radio is Depopulated
	Sub-1GHz 900MHz FHSS TX/RX FCC 15.247/RSS-247
15.207/RSS-247 RF Emi AC Mains PL Cond [900MHz Tx/Rx]	No testing, reference existing data
15.247/RSS-247 Ant Port [900MHz Tx/Rx]	No testing, reference existing data
15.247/RSS-247 Spur Emi (Radiated) [900MHz Tx/Rx]	15.247/RSS-247/15.109 Rad Spur EMI, BEC & EIRP Test: Preliminary & final measurements: 30MHz-10GHz Channels: (2) Low & High ONLY Power: 120VAC, 60Hz. Modes: (1) FHSS Tx 15.247 up to 10Ghz SPOT CHECK Tx Spurious Emissions upto 4th harmonic Modes: (1) FHSS Rx 15.109 up to 5GHz [NO TESTING] NO SPOT CHECK TESTS ON FHSS Rx. Reference existing data for other modes/channels
Test Report [900MHz Tx/Rx]	etr2200531-01 (FHSS)
Header Break	Sub-1GHz 300/400MHz RX FCC 15.109/RSS-GEN
15.109/RSS-GEN Spur Emi (Radiated) [300/400MHz Rx]	No testing, reference existing data
	Security 3.0 BLE FCC 15.247/RSS-247
15.207/RSS-247 RF Emi AC Mains PL Cond [Sec-3.0 BLE]	No testing, reference existing data
15.247/RSS-247 Ant Port [Sec-3.0 BLE]	No testing, reference existing data
15.247/RSS-247 Spur Emi (Radiated) [Sec-3.0 BLE]	15.247/RSS-247 Rad Spur EMI, BEC & EIRP Test: Preliminary & final measurements: 30MHz-25GHz Channels: (2) Low & High ONLY Power: 120VAC, 60Hz. Modes: (1) 802.11 n20 ONLY (assumed worst-case) SPOT CHECK Tx Spurious Emissions upto 4th harmonic Reference existing data for other modes/channels
Test Report [Sec-3.0 BLE]	etr2200531-02 (Sec 3.0 BT)
Header Break	Simultaneous Multi-Tx Testing Digital Device EMC Testing
15.207/RSS-247 RF Emi AC Mains PL Cond	No testing, reference existing data
15.247/RSS-247 Spur Emi (Radiated) [Multi-Tx] [Dig Device]	No testing, reference existing data
	USA & Canada Certifications
FCC Certification	(1) 15.247 Cert for 900MHz FHSS (1) 15.247 Cert for Security 3.0 BLE FCC ID: HHBW0454X4
ISED Canada Certification	(1) RSS-247 Cert for 900MHz FHSS (1) RSS-247 Cert for Security 3.0 BLE IC ID: 2666A-0454X4