

1. RF Exposure Requirements

1.1 General Information

Client Information

Applicant: Global Telecom Corp
Address of applicant: 17901 Von Karman Ave, Suite 600, Irvine, California 92614 United States of America

Manufacturer: Global Telecom Corp
Address of manufacturer: 17901 Von Karman Ave, Suite 600, Irvine, California 92614 United States of America

General Description of EUT:

Product Name: 5G Indoor CPE
Trade Name: Global Telecom, TITAN
Model No.: TITAN 5000
Adding Model(s): /
Rated Voltage: DC12V
Battery: /
RD1202000
Adapter Model: Input:AC100-240 50/60Hz 1.0A
Output:DC12V2.0A
FCC ID: S3K5GCPE1
Equipment Type: Mobile device

Technical Characteristics of EUT:	
3G	
Support Networks:	WCDMA, HSDPA, HSUPA
Support Band:	WCDMA Band 2, WCDMA Band 4, WCDMA Band 5
Uplink Frequency:	WCDMA Band 2: 1850~1910MHz, WCDMA Band 4: 1710~1755MHz, WCDMA Band 5: 824~849MHz
Downlink Frequency:	WCDMA Band 2: 1930~1990MHz, WCDMA Band 4: 2110~2155MHz, WCDMA Band 5: 869~894MHz
RF Output Power:	WCDMA Band 2: 22.48dBm, WCDMA Band 4: 23.15dBm, WCDMA Band 5: 24.13dBm
Type of Emission:	WCDMA Band 2: 4M19F9W, WCDMA Band 4: 4M19F9W WCDMA Band 5: 4M18F9W

Type of Modulation:	BPSK, QPSK, 16QAM
Antenna Type:	FPC Antenna
Antenna Gain:	WCDMA Band 2: 2.94dBi, WCDMA Band 4: 2.60dBi, WCDMA Band 5: 3.36dBi
4G	
Support Networks:	FDD-LTE, TDD-LTE
Support Band:	FDD-LTE Band 2, 4, 5, 7, 12, 13, 14, 17, 25, 26, 30, 71, TDD-LTE Band 38, 41, 42, 43
CA:	2C, 5B, 7B, 7C, 12B, 38C, 41C
Uplink Frequency:	FDD-LTE Band 2: Tx: 1850-1910MHz, FDD-LTE Band 4: Tx: 1710-1755MHz, FDD-LTE Band 5: Tx: 824-849MHz, FDD-LTE Band 7: Tx: 2500-2570MHz, FDD-LTE Band 12: Tx: 699-716MHz, FDD-LTE Band 13: Tx: 777-787MHz, FDD-LTE Band 14: Tx: 788-798MHz, FDD-LTE Band 17: Tx: 704-716MHz FDD-LTE Band 25: Tx: 1850-1915MHz, FDD-LTE Band 26: Tx: 814-824MHz, FDD-LTE Band 26: Tx: 824-849MHz, FDD-LTE Band 30: Tx: 2305-2315MHz, FDD-LTE Band 71: Tx: 663-698MHz, TDD-LTE Band 38: Tx: 2570-2620MHz, TDD-LTE Band 41: Tx: 2496-2690MHz, TDD-LTE Band 42: Tx: 3450-3550MHz, TDD-LTE Band 43: Tx: 3700-3800MHz
Downlink Frequency:	FDD-LTE Band 2: Rx: 1930-1990MHz, FDD-LTE Band 4: Rx: 2110-2155MHz, FDD-LTE Band 5: Rx: 869-894MHz, FDD-LTE Band 7: Rx: 2620-2690MHz, FDD-LTE Band 12: Rx: 729-746MHz, FDD-LTE Band 13: Rx: 746-756MHz, FDD-LTE Band 14: Rx: 758-768MHz, FDD-LTE Band 17: Rx: 734-746MHz, FDD-LTE Band 25: Rx: 1930-1995MHz, FDD-LTE Band 26: Rx: 859-869MHz, FDD-LTE Band 26: Rx: 869-894MHz, FDD-LTE Band 30: Rx: 2350-2360MHz, FDD-LTE Band 71: Rx: 617-652MHz, TDD-LTE Band 38: Rx: 2570-2620MHz, TDD-LTE Band 41: Rx: 2496-2690MHz, TDD-LTE Band 42: Rx: 3450-3550MHz, TDD-LTE Band 43: Rx: 3700-3800MHz

RF Output Power:	FDD-LTE Band 2: 21.70dBm, FDD-LTE Band 4: 22.61dBm, FDD-LTE Band 5: 22.09dBm, FDD-LTE Band 7: 22.58dBm, FDD-LTE Band 12: 22.06dBm, FDD-LTE Band 13: 22.54dBm, FDD-LTE Band 14: 22.63dBm, FDD-LTE Band 17: 22.73dBm, FDD-LTE Band 25: 22.37dBm, FDD-LTE Band 26(814-824MHz): 22.78dBm, FDD-LTE Band 26(824-849MHz): 22.41dBm, FDD-LTE Band 30: 22.27dBm, FDD-LTE Band 71: 22.85dBm, TDD-LTE Band 38: 22.64dBm, TDD-LTE Band 41: 22.61dBm, TDD-LTE Band 42: 20.58dBm, TDD-LTE Band 43: 20.03dBm, FDD-LTE Band CA 2C: 22.18dBm, FDD-LTE Band CA 5B: 23.09dBm, FDD-LTE Band CA 7B: 22.57dBm, FDD-LTE Band CA 7C: 22.82dBm, FDD-LTE Band CA 12B: 22.19dBm, TDD-LTE Band CA 38C: 22.80dBm, TDD-LTE Band CA 41C: 22.83dBm
Type of Emission:	FDD-LTE Band 2: 18M1G7D, 18M1W7D FDD-LTE Band 4: 18M1G7D, 18M1W7D FDD-LTE Band 5: 9M02G7D, 9M00W7D FDD-LTE Band 7: 18M0G7D, 18M0W7D FDD-LTE Band 12: 9M02G7D, 9M02W7D FDD-LTE Band13: 9M02G7D, 9M00W7D FDD-LTE Band 14: 9M05G7D, 9M02W7D FDD-LTE Band 17: 9M02G7D, 9M02W7D FDD-LTE Band 25: 18M1G7D, 18M1W7D FDD-LTE Band 26(814-824MHz): 8M95G7D, 9M02W7D FDD-LTE Band 26(824-849MHz): 13M5G7D, 13M5W7D FDD-LTE Band 30: 9M02G7D, 9M00W7D FDD-LTE Band 71: 18M0G7D, 18M0W7D TDD-LTE Band 38: 18M1G7D, 18M1W7D TDD-LTE Band 41: 18M1G7D, 18M1W7D TDD-LTE Band 42: 18M0G7D, 18M0W7D TDD-LTE Band 43: 18M0G7D, 18M0W7D FDD-LTE Band CA 2C: 37M8G7D, 37M7W7D FDD-LTE Band CA 5B: 19M0G7D, 19M0W7D FDD-LTE Band CA 7B: 13M7G7D, 13M6W7D FDD-LTE Band CA 7C: 37M8G7D, 37M8W7D

	FDD-LTE Band CA 12B: 4M71G7D, 4M68W7D TDD-LTE Band CA 38C: 38M0G7D, 37M9W7D TDD-LTE Band CA 41C: 37M9G7D, 37M9W7D
Type of Modulation:	QPSK, 16QAM
Antenna Type:	FPC Antenna
Antenna Gain:	FDD-LTE Band 2: 2.94dBi, FDD-LTE Band 4: 2.60dBi, FDD-LTE Band 5: 3.36dBi, FDD-LTE Band 7: 3.26dBi, FDD-LTE Band 12: 5.38dBi, FDD-LTE Band 13: 5.18dBi, FDD-LTE Band 14: 5.18dBi, FDD-LTE Band 17: 5.38dBi FDD-LTE Band 25: 2.94dBi FDD-LTE Band 26(814-824MHz): 3.87dBi, FDD-LTE Band 26(824-849MHz): 3.36dBi FDD-LTE Band 30: 3.39dBi FDD-LTE Band 71: 5.38dBi TDD-LTE Band 38: 3.83dBi TDD-LTE Band 41: 3.83dBi TDD-LTE Band 42: 4.36dBi TDD-LTE Band 43: 3.34dBi
5G NR	
Support Networks:	5G NR
Support Band:	n2, n5, n7, n12, n13, n14, n25, n26, n30, n38, n41, n71, n77, n78
CA DL only:	CA_n2A-n2A; CA_n5A-n5A; CA_n7B; CA_n7A-n7A; CA_n25A-n25A; CA_n71B; CA_n71A-n71A;
EN-DC Mode	DC_12A_n25A; DC_12A_n2A; DC_12A_n2A-n38A; DC_12A_n2A-n41A; DC_12A_n2A-n78A; DC_12A_n30A; DC_12A_n38A; DC_12A_n38A-n78A; DC_12A_n41A; DC_12A_n41A-n78A; DC_12A_n77A; DC_12A_n77A-n77A; DC_12A_n78A; DC_12A_n78A-n78A; DC_12A_n7A; DC_12A_n7A-n78A; DC_12A-30A_n2A; DC_12A-30A_n77A; DC_12A-30A_n77A-n77A; DC_13A_n25A; DC_13A_n2A; DC_13A_n2A-n77A; DC_13A_n77A; DC_13A_n77C; DC_13A_n78A; DC_13A_n78A-n78A; DC_13A_n7A; DC_13A_n7A-n78A; DC_13A-2A_n2A-n77A; DC_13A-46A_n2A; DC_13A-46A_n77A; DC_13A-46A-46A_n77A; DC_14A_n2A; DC_14A_n30A; DC_14A_n77A; DC_14A_n77A-n77A; DC_14A-30A_n2A; DC_14A-30A_n77A; DC_14A-30A_n77A-n77A; DC_1C_n78A; DC_25A_n41A; DC_25A_n77A; DC_25A_n78A; DC_25A-25A_n41A; DC_25A-25A_n77A; DC_25A-25A_n78A; DC_25A-41C_n41A; DC_26A_n25A; DC_26A_n41A; DC_26A_n78A; DC_26A_n78A-n78A; DC_2A_n12A; DC_2A_n14A; DC_2A_n30A; DC_2A_n38A; DC_2A_n38A-n71A; DC_2A_n38A-n78A; DC_2A_n41A;

	DC_2A_n41A-n41A; DC_2A_n41A-n71A; DC_2A_n41A-n78A; DC_2A_n41C; DC_2A_n5A; DC_2A_n5A-n77A; DC_2A_n71A; DC_2A_n71A-n78A; DC_2A_n77A; DC_2A_n77A-n77A; DC_2A_n77C; DC_2A_n78A; DC_2A_n78A-n78A; DC_2A_n7A; DC_2A_n7A-n78A; DC_2A-12A_n25A; DC_2A-12A_n2A; DC_2A-12A_n30A; DC_2A-12A_n41A; DC_2A-12A_n77A; DC_2A-12A_n78A; DC_2A-12A_n78A-n78A; DC_2A-12A_n7A; DC_2A-12A-30A_n2A; DC_2A-12A-30A_n77A; DC_2A-13A_n25A; DC_2A-13A_n2A; DC_2A-13A_n77A; DC_2A-13A_n77C; DC_2A-14A_n2A; DC_2A-14A_n30A; DC_2A-14A_n77A; DC_2A-14A-30A_n2A; DC_2A-14A-30A_n77A; DC_2A-2A_n12A; DC_2A-2A_n14A; DC_2A-2A_n30A; DC_2A-2A_n38A; DC_2A-2A_n41A; DC_2A-2A_n5A; DC_2A-2A_n5A-n77A; DC_2A-2A_n71A; DC_2A-2A_n77A; DC_2A-2A_n77C; DC_2A-2A_n78A; DC_2A-2A_n7A; DC_2A-2A-12A_n30A; DC_2A-2A-12A_n38A; DC_2A-2A-12A_n41A; DC_2A-2A-12A_n77A; DC_2A-2A-12A_n78A; DC_2A-2A-12A_n7A; DC_2A-2A-12A-30A_n77A; DC_2A-2A-13A_n77A; DC_2A-2A-13A_n77C; DC_2A-2A-14A_n30A; DC_2A-2A-14A_n77A; DC_2A-2A-2A_n14A; DC_2A-2A-30A_n12A; DC_2A-2A-30A_n14A; DC_2A-2A-30A_n5A; DC_2A-2A-30A_n77A; DC_2A-2A-46A_n5A; DC_2A-2A-46C_n5A; DC_2A-2A-46D_n5A; DC_2A-2A-5A_n30A; DC_2A-2A-5A_n41A; DC_2A-2A-5A_n5A; DC_2A-2A-5A_n77A; DC_2A-2A-5A_n77C; DC_2A-2A-5A_n78A; DC_2A-2A-5A_n7A; DC_2A-2A-5A-30A_n5A; DC_2A-2A-5A-30A_n77A; DC_2A-2A-5A-7A_n78A; DC_2A-2A-71A_n38A; DC_2A-2A-71A_n41A; DC_2A-2A-71A_n78A; DC_2A-2A-71A_n7A; DC_2A-2A-7A_n12A; DC_2A-2A-7A_n71A; DC_2A-2A-7A_n78A; DC_2A-2A-7A-12A_n78A; DC_2A-2A-7A-71A_n78A; DC_2A-30A_n12A; DC_2A-30A_n14A; DC_2A-30A_n2A; DC_2A-30A_n5A; DC_2A-30A_n77A; DC_2A-46A_n41A; DC_2A-46A_n41A-n41A; DC_2A-46A_n5A; DC_2A-46A_n71A; DC_2A-46A_n71A-n41A; DC_2A-46A_n77A; DC_2A-46A-46A_n77A; DC_2A-46C_n41A; DC_2A-46C_n41A-n41A; DC_2A-46C_n5A; DC_2A-46C_n71A; DC_2A-46D_n41A; DC_2A-46D_n41A-n41A; DC_2A-46D_n5A; DC_2A-46D_n71A; DC_2A-46E_n5A; DC_2A-4A_n38A; DC_2A-4A_n41A; DC_2A-4A-7A-7A_n5A; DC_2A-4A-7A-7A_n71A; DC_2A-4A-7A-7A_n78A; DC_2A-5A_n25A; DC_2A-5A_n2A; DC_2A-5A_n30A; DC_2A-5A_n38A; DC_2A-5A_n41A; DC_2A-5A_n5A; DC_2A-5A_n77A; DC_2A-5A_n77C; DC_2A-5A_n78A; DC_2A-5A_n78A-n78A; DC_2A-5A_n7A; DC_2A-5A-30A_n2A; DC_2A-5A-30A_n5A; DC_2A-5A-30A_n77A; DC_2A-5A-5A_n2A; DC_2A-5A-7A_n25A; DC_2A-5A-7A_n2A; DC_2A-5A-7A_n78A; DC_2A-5B_n2A; DC_2A-71A_n25A; DC_2A-71A_n2A; DC_2A-71A_n38A; DC_2A-71A_n41A; DC_2A-71A_n71A; DC_2A-71A_n77A; DC_2A-71A_n78A; DC_2A-71A_n7A;
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	DC_2A-7A_n12A; DC_2A-7A_n25A; DC_2A-7A_n2A; DC_2A-7A_n5A; DC_2A-7A_n71A; DC_2A-7A_n78A; DC_2A-7A_n78A-n78A; DC_2A-7A_n7A; DC_2A-7A-12A_n25A; DC_2A-7A-12A_n2A; DC_2A-7A-12A_n78A; DC_2A-7A-71A_n25A; DC_2A-7A-71A_n2A; DC_2A-7A-71A_n78A; DC_2A-7A-7A_n25A; DC_2A-7A-7A_n5A; DC_2A-7A-7A_n78A-n78A; DC_2A-7C_n25A; DC_2A-7C_n5A; DC_2A-7C_n78A; DC_2A-7C_n78A-n78A; DC_2C_n41A; DC_2C_n71A; DC_30A_n12A; DC_30A_n14A; DC_30A_n2A; DC_30A_n5A; DC_30A_n5A-n77A; DC_30A_n77A; DC_30A_n77A-n77A; DC_38A_n78A; DC_41A_n77A; DC_41A_n77A-n77A; DC_41A_n78A; DC_41A_n78A-n78A; DC_41A-41A_n78A; DC_41A-42A_n77A; DC_41A-42A_n77A-n77A; DC_41A-42A_n78A; DC_41A-42C_n77A; DC_41A-42C_n77A-n77A; DC_41A-42C_n78A; DC_41C_n77A; DC_41C_n77A-n77A; DC_41C_n78A; DC_41C_n78A-n78A; DC_41C-42A_n77A; DC_41C-42A_n77A-n77A; DC_41C-42A_n78A; DC_41C-42C_n77A; DC_41C-42C_n77A-n77A; DC_41C-42C_n78A; DC_41D_n78A; DC_4A_n2A; DC_4A_n38A; DC_4A_n41A; DC_4A_n78A; DC_4A_n78A-n78A; DC_4A_n7A; DC_5A_n25A; DC_5A_n2A; DC_5A_n2A-n38A; DC_5A_n2A-n41A; DC_5A_n2A-n77A; DC_5A_n2A-n78A; DC_5A_n30A; DC_5A_n38A; DC_5A_n38A-n78A; DC_5A_n41A; DC_5A_n41A-n78A; DC_5A_n77A; DC_5A_n77A-n77A; DC_5A_n77C; DC_5A_n78A; DC_5A_n78A-n78A; DC_5A_n7A; DC_5A_n7A-n78A; DC_5A-2A_n2A-n77A; DC_5A-30A_n2A; DC_5A-30A_n5A; DC_5A-30A_n77A; DC_5A-30A_n77A-n77A; DC_5A-5A_n2A; DC_5A-7A_n25A; DC_5A-7A_n2A; DC_5A-7A_n77A; DC_5A-7A_n78A; DC_5A-7A_n7A; DC_5A-7A-7A_n78A; DC_5A-7C_n78A; DC_5A-7C_n7A; DC_5B_n2A; DC_71A_n25A; DC_71A_n2A; DC_71A_n2A-n38A; DC_71A_n2A-n41A; DC_71A_n2A-n78A; DC_71A_n38A; DC_71A_n38A-n78A; DC_71A_n41A; DC_71A_n41A-n78A; DC_71A_n77A; DC_71A_n78A; DC_71A_n7A; DC_71A_n7A-n78A; DC_7A_n12A; DC_7A_n25A; DC_7A_n2A; DC_7A_n2A-n78A; DC_7A_n5A; DC_7A_n5A-n78A; DC_7A_n71A; DC_7A_n71A-n78A; DC_7A_n77A; DC_7A_n77A-n77A; DC_7A_n78A; DC_7A_n78A-n78A; DC_7A_n78C; DC_7A-12A_n25A; DC_7A-12A_n2A; DC_7A-12A_n77A; DC_7A-12A_n78A; DC_7A-12A_n7A; DC_7A-25A_n77A; DC_7A-25A_n78A; DC_7A-25A-25A_n77A; DC_7A-25A-25A_n78A; DC_7A-26A_n78A; DC_7A-46A_n78A; DC_7A-46C_n78A; DC_7A-46D_n78A; DC_7A-46E_n78A; DC_7A-71A_n25A; DC_7A-71A_n2A; DC_7A-71A_n77A; DC_7A-71A_n78A; DC_7A-71A_n7A; DC_7A-7A_n25A; DC_7A-7A_n5A; DC_7A-7A_n77A; DC_7A-7A_n77A-n77A; DC_7A-7A_n78A; DC_7A-7A_n78A-n78A; DC_7A-7A-25A_n77A; DC_7A-7A-25A_n78A; DC_7A-7A-25A-25A_n77A; DC_7A-7A-25A-25A_n78A; DC_7A-7A-26A_n78A; DC_7C_n25A; DC_7C_n2A; DC_7C_n5A; DC_7C_n77A; DC_7C_n77A-n77A;
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	DC_7C_n78A; DC_7C_n78A-n78A; DC_7C-25A_n77A; DC_7C-25A_n78A; DC_7C-25A-25A_n77A; DC_7C-25A-25A_n78A
Uplink Frequency:	5G NR n2: Tx: 1850-1910MHz, 5G NR n5: Tx: 824-849MHz, 5G NR n7: Tx: 2500-2570MHz, 5G NR n12: Tx: 699-716MHz, 5G NR n13: Tx: 777-787MHz, 5G NR n14: Tx: 788-798MHz, 5G NR n25: Tx: 1850-1915MHz, 5G NR n26: Tx: 814-824MHz, 5G NR n26: Tx: 824-849MHz, 5G NR n30: Tx: 2305-2315MHz, 5G NR n38: Tx: 2570-2620MHz, 5G NR n41: Tx: 2496-2690MHz, 5G NR n71: Tx: 663-698MHz, 5G NR n77: Tx: 3450-3550MHz, 5G NR n77: Tx: 3700-3980MHz, 5G NR n78: Tx: 3450-3550MHz, 5G NR n78: Tx: 3700-3800MHz
Downlink Frequency:	5G NR n2: Rx: 1930-1990MHz 5G NR n5: Rx: 869-894MHz, 5G NR n7: Rx: 2620-2690MHz, 5G NR n12: Rx: 729-746MHz, 5G NR n13: Rx: 746-756MHz, 5G NR n14: Rx: 758-768MHz, 5G NR n25: Rx: 1930-1995MHz, 5G NR n26: Rx: 859-869MHz, 5G NR n26: Rx: 869-894MHz, 5G NR n30: Rx: 2350-2360MHz, 5G NR n38: Rx: 2570-2620MHz, 5G NR n41: Rx: 2496-2690MHz, 5G NR n71: Rx: 617-652MHz, 5G NR n77: Rx: 3450-3550MHz, 5G NR n77: Rx: 3700-3980MHz, 5G NR n78: Rx: 3450-3550MHz, 5G NR n78: Rx: 3700-3800MHz
RF Output Power:	5G NR n2: 22.49dBm 5G NR n5: 23.80dBm 5G NR n7: 24.24dBm 5G NR n12: 23.84dBm 5G NR n13: 23.26dBm 5G NR n14: 23.42dBm 5G NR n25: 22.67dBm 5G NR n26(814-824MHz): 22.96dBm 5G NR n26(824-849MHz): 23.60dBm

	5G NR n30: 22.69dBm 5G NR n38: 23.97dBm 5G NR n41: 26.33dBm 5G NR n71: 24.18dBm 5G NR n77(3450-3550MHz): 25.52dBm 5G NR n77(3700-3980MHz): 27.00dBm 5G NR n78(3450-3550MHz): 25.69dBm 5G NR n78(3700-3800MHz): 26.11dBm DC_2A_n14A: 23.62dBm DC_2A_n41A: 25.14dBm DC_4A_n71A: 24.37dBm DC_5A_n38A: 22.58dBm DC_5A_n77A(3450-3550MHz): 24.53dBm DC_5A_n77A(3700-3980MHz): 25.99dBm DC_7A_n12A: 23.33dBm DC_13A_n7A: 23.26dBm DC_14A_n30A: 22.86dBm DC_26A_n25A: 20.93dBm DC_30A_n5A: 23.85dBm DC_71A_n2A: 21.69dBm DC_71A_n78A(3450-3550MHz): 23.35dBm DC_71A_n78A(3700-3800MHz): 25.46dBm
Type of Emission:	5G NR n2: 17M9G7D, 17M9W7D 5G NR n5: 17M9G7D, 17M9W7D 5G NR n7: 17M9G7D, 17M9W7D 5G NR n12: 13M4G7D, 13M4W7D 5G NR n13: 8M95G7D, 8M96W7D 5G NR n14: 9M72G7D, 9M66W7D 5G NR n25: 17M9G7D, 17M9W7D 5G NR n26(814-824MHz): 8M94G7D, 8M94W7D 5G NR n26(824-849MHz): 17M9G7D, 17M9W7D 5G NR n30: 8M95G7D, 8M94W7D 5G NR n38: 35M8G7D, 35M8W7D 5G NR n41: 96M3G7D, 96M5W7D 5G NR n71: 17M9G7D, 17M9W7D 5G NR n77(3450-3550MHz): 96M3G7D, 96M4W7D 5G NR n77(3700-3980MHz): 96M3G7D, 96M4W7D 5G NR n78(3450-3550MHz): 96M3G7D, 96M4W7D 5G NR n78(3700-3800MHz): 96M3G7D, 96M4W7D DC_2A_n14A: 8M96G7D, 8M95W7D DC_2A_n41A: 96M0G7D, 96M1W7D DC_4A_n71A: 17M9G7D, 17M9W7D DC_5A_n38A: 35M8G7D, 35M8W7D DC_5A_n77A(3450-3550MHz): 96M4G7D, 96M4W7D DC_5A_n77A(3700-3980MHz): 96M6G7D, 96M7W7D

	DC_7A_n12A: 13M4G7D, 13M4W7D DC_13A_n7A: 17M9G7D, 17M9W7D DC_14A_n30A: 8M95G7D, 8M95W7D DC_26A_n25A: 17M9G7D, 17M9W7D DC_30A_n5A: 17M8G7D, 17M8W7D DC_71A_n2A: 17M9G7D, 17M9W7D DC_71A_n78A(3450-3550MHz): 96M5G7D, 96M3W7D DC_71A_n78A(3700-3800MHz): 96M2G7D, 96M2W7D
Type of Modulation:	DFT-s-OFDM: PI/2 BPSK QPSK / 16QAM / 64QAM / 256QAM CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM
Antenna Type:	FPC Antenna
Antenna Gain:	5G NR n2: 2.94dBi 5G NR n5: 3.36dBi 5G NR n7: 3.26dBi 5G NR n12: 5.38dBi 5G NR n13: 5.18dBi 5G NR n14: 5.18dBi 5G NR n25: 2.94dBi 5G NR n26(814-824MHz): 3.87dBi 5G NR n26(824-849MHz): 3.36dBi 5G NR n30: 3.39dBi 5G NR n38: 3.83dBi 5G NR n41: 3.83dBi 5G NR n71: 5.38dBi 5G NR n77(3450-3550): 4.36dBi 5G NR n77(3700-3980): 3.66dBi 5G NR n78(3450-3550): 4.36dBi 5G NR n78(3700-3800): 3.34dBi
Wi-Fi (5GHz)	
Support Standards:	802.11a, 802.11n(HT20) , 802.11n-HT40, 802.11ac-VHT20/40/80, 802.11ax-HE20/40/80
Frequency Range:	5180-5240MHz, 5260-5320MHz 5500-5700MHz, 5745-5825MHz
Max. RF Output Power:	Antenna 0: 17.15dBm (Conducted) Antenna 1: 16.99dBm (Conducted)
Type of Modulation:	QPSK, 16QAM, 64QAM, 256QAM, 1024QAM
Type of Antenna:	FPC Antenna
Antenna Gain:	3.95dBi
Wi-Fi (2.4GHz)	
Support Standards:	802.11b, 802.11g, 802.11n
Frequency Range:	2412-2462MHz for 802.11b/g/n/ax(HT/HE20) 2422-2452MHz for 802.11n/ax(HT/HE40)
RF Output Power:	Antenna 0: 18.71dBm (Conducted) Antenna 1: 18.99dBm (Conducted)

Type of Modulation:	CCK, OFDM, QPSK, BPSK, 16QAM, 64QAM
Quantity of Channels:	11 for 802.11b/g/n/ax(HT/HE20); 7 for 802.11n/ax(HT/HE40)
Channel Separation:	5MHz
Type of Antenna:	FPC Antenna
Antenna Gain:	3.77dBi

1.2 RF Exposure Exemption

According to §1.1307(b)(3) and KDB 447498 D04 Interim General RF Exposure Guidance v01, system operating under the provisions of this section shall be operating in a manner that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure.

Option A: FCC Rule Part 1.1307 (b)(3)(i)(A): The available maximum time-averaged power is no more than 1mW, regardless of separation distance.

Option B: FCC Rule Part 1.1307 (b)(3)(i)(B): The available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P_{th} (mW) described in the following formula. P_{th} is given by:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right) \text{ and } f \text{ is in GHz;}$$

and

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

d = the separation distance (cm);

Option C: FCC Rule Part 1.1307 (b)(3)(i)(C): The minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. R must be at least $\lambda/2\pi$, where λ is the free-space operating wavelength in meters.

Single RF Sources Subject to Routine Environmental Evaluation	
RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	$1,920 R^2$
1.34-30	$3,450 R^2/f^2$

30-300	3.83 R ²
300-1,500	0.0128 R ^{2f}
1,500-100,000	19.2R ²

For Multiple RF sources: FCC Rule Part 1.1307(b)(3)(ii):

- (A) The available maximum time-averaged power of each source is no more than 1 mW and there is a separation distance of two centimeters between any portion of a radiating structure operating and the nearest portion of any other radiating structure in the same device, except if the sum of multiple sources is less than 1 mW during the time-averaging period, in which case they may be treated as a single source (separation is not required).
- (B) In the case of fixed RF sources operating in the same time-averaging period, or of multiple mobile or portable RF sources within a device operating in the same time averaging period, if the sum of the fractional contributions to the applicable thresholds is less than or equal to 1 as indicated in the following equation.

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure Limit_k} \leq 1$$

1.3 Calculated Result

Radio Access Technology	Prediction Frequency	Output Power	Antenna Gain	Tune-up Power	ERP
	(MHz)	(dBm)	(dBi)	(dBm)	(dBm)
WCDMA Band 2	1850	22.48	2.94	25.00	25.79
WCDMA Band 4	1710	23.15	2.60	25.00	25.45
WCDMA Band 5	824	24.13	3.36	25.00	26.21
LTE Band 2	1850	21.70	2.94	25.00	25.79
LTE Band CA 2C	1850	22.18	2.94	25.00	25.79
LTE Band 4	1710	22.61	2.60	25.00	25.45
LTE Band 5	824	22.09	3.36	25.00	26.21
LTE Band CA 5B	824	23.09	3.36	25.00	26.21
LTE Band 7	2500	22.58	3.26	25.00	26.11
LTE Band CA 7B	2500	22.57	3.26	25.00	26.11
LTE Band CA 7C	2500	22.82	3.26	25.00	26.11
LTE Band 12	699	22.06	5.38	25.00	28.23
LTE Band CA 12B	699	22.19	5.38	25.00	28.23
LTE Band 13	777	22.54	5.18	25.00	28.03
LTE Band 14	788	22.63	5.18	25.00	28.03
LTE Band 17	704	22.73	5.38	25.00	28.23
LTE Band 25	1850	22.37	2.94	25.00	25.79
LTE Band 26	814	22.78	3.87	25.00	26.72
LTE Band 30	2305	22.27	3.39	25.00	26.24
LTE Band 71	663	22.85	5.38	25.00	28.23
LTE Band 38	2570	22.64	3.83	25.00	26.68
LTE Band CA 38C	2570	22.80	3.83	25.00	26.68
LTE Band 41	2496	22.61	3.83	25.00	26.68

LTE Band CA 41C	2496	22.83	3.83	25.00	26.68
LTE Band 42	3450	20.58	4.36	25.00	27.21
LTE Band 43	3700	20.03	3.34	25.00	26.19
5G NR n2	1850	22.49	2.94	25.00	25.79
5G NR n5	824	23.80	3.36	25.00	26.21
5G NR n7	2500	24.24	3.26	25.00	26.11
5G NR n12	699	23.84	5.38	25.00	28.23
5G NR n13	777	23.26	5.18	25.00	28.03
5G NR n14	788	23.42	5.18	25.00	28.03
5G NR n25	1850	22.67	2.94	25.00	25.79
5G NR n26	814	22.96	3.87	25.00	26.72
5G NR n30	2305	22.69	3.39	25.00	26.24
5G NR n38	2570	23.97	3.83	25.00	26.68
5G NR n41	2496	26.33	3.83	28.00	29.68
5G NR n71	663	24.18	5.38	25.00	28.23
5G NR n77	3450	25.52	4.36	28.00	30.21
5G NR n78	3450	25.69	4.36	28.00	30.21
DC_2A_n14A	788	23.62	4.36	25.00	27.21
DC_2A_n41A	1850	25.14	2.94	28.00	28.79
DC_4A_n71A	663	24.37	5.38	25.00	28.23
DC_5A_n38A	824	22.58	3.36	25.00	26.21
DC_5A_n77A	824	24.53	3.36	25.00	26.21
DC_7A_n12A	699	23.33	5.38	25.00	28.23
DC_13A_n7A	777	23.26	5.38	25.00	28.23
DC_14A_n30A	788	22.86	4.36	25.00	27.21
DC_26A_n25A	814	20.93	3.87	25.00	26.72
DC_30A_n5A	824	23.85	3.87	25.00	26.72
DC_71A_n2A	663	21.69	3.87	25.00	26.72
DC_71A_n78A	663	23.35	3.87	25.00	26.72
Wi-Fi (5GHz) Ant 0	5180	17.15	3.95	18.00	19.80
Wi-Fi (5GHz) Ant 1	5180	16.99	3.95	18.00	19.80
Wi-Fi (2.4GHz) Ant 0	2412	18.71	3.77	20.00	21.62
Wi-Fi (2.4GHz) Ant 1	2412	18.99	3.77	20.00	21.62

Radio Access Technology	Option	Min. Distance	Max. Power		Exposure Limit	Ratio	Result
		(cm)	(dBm)	(mW)	(mW)		Pass/Fail
WCDMA Band 2	B	20	25.79	379.31	3060.00	0.12	Pass
WCDMA Band 4	B	20	25.45	350.75	3060.00	0.11	Pass
WCDMA Band 5	B	20	26.21	417.83	1680.96	0.25	Pass
LTE Band 2	B	20	25.79	379.31	3060.00	0.12	Pass
LTE Band CA 2C	B	20	25.79	379.31	3060.00	0.12	Pass
LTE Band 4	B	20	25.45	350.75	3060.00	0.11	Pass
LTE Band 5	B	20	26.21	417.83	1680.96	0.25	Pass

LTE Band CA 5B	B	20	26.21	417.83	1680.96	0.25	Pass
LTE Band 7	B	20	26.11	408.32	3060.00	0.13	Pass
LTE Band CA 7B	B	20	26.11	408.32	3060.00	0.13	Pass
LTE Band CA 7C	B	20	26.11	408.32	3060.00	0.13	Pass
LTE Band 12	B	20	28.23	665.27	1425.96	0.47	Pass
LTE Band CA 12B	B	20	28.23	665.27	1425.96	0.47	Pass
LTE Band 13	B	20	28.03	635.33	1585.08	0.40	Pass
LTE Band 14	B	20	28.03	635.33	1607.52	0.40	Pass
LTE Band 17	B	20	28.23	665.27	1436.16	0.46	Pass
LTE Band 25	B	20	25.79	379.31	3060.00	0.12	Pass
LTE Band 26	B	20	26.72	469.89	1660.56	0.28	Pass
LTE Band 30	B	20	26.24	420.73	3060.00	0.14	Pass
LTE Band 71	B	20	28.23	665.27	1352.52	0.49	Pass
LTE Band 38	B	20	26.68	465.59	3060.00	0.15	Pass
LTE Band CA 38C	B	20	26.68	465.59	3060.00	0.15	Pass
LTE Band 41	B	20	26.68	465.59	3060.00	0.15	Pass
LTE Band CA 41C	B	20	26.68	465.59	3060.00	0.15	Pass
LTE Band 42	B	20	27.21	526.02	3060.00	0.17	Pass
LTE Band 43	B	20	26.19	415.91	3060.00	0.14	Pass
5G NR n2	B	20	25.79	379.31	3060.00	0.12	Pass
5G NR n5	B	20	26.21	417.83	1680.96	0.25	Pass
5G NR n7	B	20	26.11	408.32	3060.00	0.13	Pass
5G NR n12	B	20	28.23	665.27	1425.96	0.47	Pass
5G NR n13	B	20	28.03	635.33	1585.08	0.40	Pass
5G NR n14	B	20	28.03	635.33	1607.52	0.40	Pass
5G NR n25	B	20	25.79	379.31	3060.00	0.12	Pass
5G NR n26	B	20	26.72	469.89	1660.56	0.28	Pass
5G NR n30	B	20	26.24	420.73	3060.00	0.14	Pass
5G NR n38	B	20	26.68	465.59	3060.00	0.15	Pass
5G NR n41	B	20	29.68	928.97	3060.00	0.30	Pass
5G NR n71	B	20	28.23	665.27	1352.52	0.49	Pass
5G NR n77	B	20	30.21	1049.54	3060.00	0.34	Pass
5G NR n78	B	20	30.21	1049.54	3060.00	0.34	Pass
DC_2A_n14A	B	20	27.21	526.02	1607.52	0.33	Pass
DC_2A_n41A	B	20	28.79	756.83	3060.00	0.25	Pass
DC_4A_n71A	B	20	28.23	665.27	1352.52	0.49	Pass
DC_5A_n38A	B	20	26.21	417.83	1680.96	0.25	Pass
DC_5A_n77A	B	20	26.21	417.83	1680.96	0.25	Pass
DC_7A_n12A	B	20	28.23	665.27	1425.96	0.47	Pass
DC_13A_n7A	B	20	28.23	665.27	1585.08	0.42	Pass
DC_14A_n30A	B	20	27.21	526.02	1607.52	0.33	Pass
DC_26A_n25A	B	20	26.72	469.89	1660.56	0.28	Pass
DC_30A_n5A	B	20	26.72	469.89	1680.96	0.28	Pass

DC_71A_n2A	B	20	26.72	469.89	1352.52	0.35	Pass
DC_71A_n78A	B	20	26.72	469.89	1352.52	0.35	Pass
Wi-Fi (5GHz) Ant 0	B	20	19.80	95.50	3060.00	0.03	Pass
Wi-Fi (5GHz) Ant 1	B	20	19.80	95.50	3060.00	0.03	Pass
Wi-Fi (2.4GHz) Ant 0	B	20	21.62	145.21	3060.00	0.05	Pass
Wi-Fi (2.4GHz) Ant 1	B	20	21.62	145.21	3060.00	0.05	Pass

Note: 1. Tune-up time-average power = Tune-up Power - Duty cycle factor in dB

2. Output Power=EIRP- Antenna Gain; ERP=EIRP-2.15dB

3. Option A, B and C refers as clause 1.2.

4. For option B, Max (time-averaged power, effective radiated power (ERP)) converts to Max. Power. For option C, ERP converts to Max. Power;

5. For option B, P_{th} (mW) converts to Exposure Limit (mW); For option C, ERP (W) converts to Exposure Limit (mW).

6. Ratio= Tune-up ERP (mW)/ Exposure Limit (mW)

Mode for Simultaneous Multi-band Transmission:

Radio Access Technology	Ratio 1	Ratio 2	Ratio 3	Simultaneous Ratio	Limit	Result
						Pass/Fail
WCDMA Band 2+Wi-Fi Ant 0&1	0.12	0.05	0.05	0.22	1	Pass
WCDMA Band 4+Wi-Fi Ant 0&1	0.11	0.05	0.05	0.21	1	Pass
WCDMA Band 5+Wi-Fi Ant 0&1	0.25	0.05	0.05	0.35	1	Pass
LTE Band 2+Wi-Fi Ant 0&1	0.12	0.05	0.05	0.22	1	Pass
LTE Band CA 2C+Wi-Fi Ant 0&1	0.12	0.05	0.05	0.22	1	Pass
LTE Band 4+Wi-Fi Ant 0&1	0.11	0.05	0.05	0.21	1	Pass
LTE Band 5+Wi-Fi Ant 0&1	0.25	0.05	0.05	0.35	1	Pass
LTE Band CA 5B+Wi-Fi Ant 0&1	0.25	0.05	0.05	0.35	1	Pass
LTE Band 7+Wi-Fi Ant 0&1	0.13	0.05	0.05	0.23	1	Pass
LTE Band CA 7B+Wi-Fi Ant 0&1	0.13	0.05	0.05	0.23	1	Pass
LTE Band CA 7C+Wi-Fi Ant 0&1	0.13	0.05	0.05	0.23	1	Pass
LTE Band 12+Wi-Fi Ant 0&1	0.47	0.05	0.05	0.57	1	Pass
LTE Band CA 12B+Wi-Fi Ant 0&1	0.47	0.05	0.05	0.57	1	Pass
LTE Band 13+Wi-Fi Ant 0&1	0.40	0.05	0.05	0.50	1	Pass
LTE Band 14+Wi-Fi Ant 0&1	0.40	0.05	0.05	0.50	1	Pass
LTE Band 17+Wi-Fi Ant 0&1	0.46	0.05	0.05	0.56	1	Pass
LTE Band 25+Wi-Fi Ant 0&1	0.12	0.05	0.05	0.22	1	Pass
LTE Band 26+Wi-Fi Ant 0&1	0.28	0.05	0.05	0.38	1	Pass
LTE Band 30+Wi-Fi Ant 0&1	0.14	0.05	0.05	0.24	1	Pass
LTE Band 71+Wi-Fi Ant 0&1	0.49	0.05	0.05	0.59	1	Pass
LTE Band 38+Wi-Fi Ant 0&1	0.15	0.05	0.05	0.25	1	Pass
LTE Band CA 38C+Wi-Fi Ant 0&1	0.15	0.05	0.05	0.25	1	Pass

LTE Band 41+Wi-Fi Ant 0&1	0.15	0.05	0.05	0.25	1	Pass
LTE Band CA 41C+Wi-Fi Ant 0&1	0.15	0.05	0.05	0.25	1	Pass
LTE Band 42+Wi-Fi Ant 0&1	0.17	0.05	0.05	0.27	1	Pass
LTE Band 43+Wi-Fi Ant 0&1	0.14	0.05	0.05	0.24	1	Pass
5G NR n2+Wi-Fi Ant 0&1	0.12	0.05	0.05	0.22	1	Pass
5G NR n5+Wi-Fi Ant 0&1	0.25	0.05	0.05	0.35	1	Pass
5G NR n7+Wi-Fi Ant 0&1	0.13	0.05	0.05	0.23	1	Pass
5G NR n12+Wi-Fi Ant 0&1	0.47	0.05	0.05	0.57	1	Pass
5G NR n13+Wi-Fi Ant 0&1	0.40	0.05	0.05	0.50	1	Pass
5G NR n14+Wi-Fi Ant 0&1	0.40	0.05	0.05	0.50	1	Pass
5G NR n25+Wi-Fi Ant 0&1	0.12	0.05	0.05	0.22	1	Pass
5G NR n26+Wi-Fi Ant 0&1	0.28	0.05	0.05	0.38	1	Pass
5G NR n30+Wi-Fi Ant 0&1	0.14	0.05	0.05	0.24	1	Pass
5G NR n38+Wi-Fi Ant 0&1	0.15	0.05	0.05	0.25	1	Pass
5G NR n41+Wi-Fi Ant 0&1	0.30	0.05	0.05	0.40	1	Pass
5G NR n71+Wi-Fi Ant 0&1	0.49	0.05	0.05	0.59	1	Pass
5G NR n77+Wi-Fi Ant 0&1	0.34	0.05	0.05	0.44	1	Pass
5G NR n78+Wi-Fi Ant 0&1	0.34	0.05	0.05	0.44	1	Pass
DC_2A_n14A+Wi-Fi Ant 0&1	0.33	0.05	0.05	0.43	1	Pass
DC_2A_n41A+Wi-Fi Ant 0&1	0.25	0.05	0.05	0.35	1	Pass
DC_4A_n71A+Wi-Fi Ant 0&1	0.49	0.05	0.05	0.59	1	Pass
DC_5A_n38A+Wi-Fi Ant 0&1	0.25	0.05	0.05	0.35	1	Pass
DC_5A_n77A+Wi-Fi Ant 0&1	0.25	0.05	0.05	0.35	1	Pass
DC_7A_n12A+Wi-Fi Ant 0&1	0.47	0.05	0.05	0.57	1	Pass
DC_13A_n7A+Wi-Fi Ant 0&1	0.42	0.05	0.05	0.52	1	Pass
DC_14A_n30A+Wi-Fi Ant 0&1	0.33	0.05	0.05	0.43	1	Pass
DC_26A_n25A+Wi-Fi Ant 0&1	0.28	0.05	0.05	0.38	1	Pass
DC_30A_n5A+Wi-Fi Ant 0&1	0.28	0.05	0.05	0.38	1	Pass
DC_71A_n2A+Wi-Fi Ant 0&1	0.35	0.05	0.05	0.45	1	Pass
DC_71A_n78A+Wi-Fi Ant 0&1	0.35	0.05	0.05	0.45	1	Pass

Result: Pass