

RF EXPOSURE EVALUATION

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency(RF) Radiation as specified in §1.1307(b)

FCC ID: 2A3XD-TAB-002

EUT Specification

EUT	Tablet
Frequency band (Operating)	☒ WLAN: 2.412GHz ~ 2.462GHz ☒ WLAN: 5.18GHz ~ 5.24GHz ☒ WLAN: 5.745GHz ~ 5.825GHz ☒ Others: BLE: 2402-2480MHz ☒ Others:GSM 850: 824.2MHz~848.8 MHz ☒ Others:PCS 1900: 1850.2MHz~1909.8 MHz ☒ Others:FDD Band II: 1852.40MHz~1907.60MHz ☒ Others:FDD Band V: 826.40MHz~846.60MHz ☒ Others:FDD Band 2: 1850.7 MHz – 1909.3 MHz ☒ Others:FDD Band 4: 1710.7 MHz – 1754.3 MHz ☒ Others:FDD Band 5: 824.7 MHz – 848.3 MHz ☒ Others:FDD Band 7: 2502.5 MHz – 2567.5 MHz ☒ Others:FDD Band 17: 706.5 MHz – 713.5 MHz
Device category	☐ Portable (<20cm separation) ☒ Mobile (>20cm separation) ☐ Others ____
Exposure classification	☐ Occupational/Controlled exposure (S = 5mW/cm2) ☒ General Population/Uncontrolled exposure (S=1mW/cm2)
Antenna diversity	☐ Single antenna ☒ Multiple antennas ☐ Tx diversity ☐ Rx diversity ☐ Tx/Rx diversity
Antenna gain (Max)	BLE: 1.25 dBi WiFi 2.4G : 1.25 dBi WiFi 5G :1.25 dBi GSM 850: 1.1 dBi (Provided by customer) PCS 1900: 1.1 dBi (Provided by customer) FDD Band II: 0.8 dBi (Provided by customer) FDD Band V: 0.8 dBi (Provided by customer) FDD Band 2: 1dBi (Provided by customer) FDD Band 4: 1dBi (Provided by customer) FDD Band 5: 1dBi (Provided by customer) FDD Band 7: 1dBi (Provided by customer)

	FDD Band 17: 1dBi (Provided by customer)
Evaluation applied	☒ MPE Evaluation ☐ SAR Evaluation

Limits for Maximum Permissible Exposure(MPE)

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density(mW/cm ²)	Average Time
(A) Limits for Occupational/Control Exposures				
300-1500	--	--	F/300	6
1500-100000	--	--	5	6
(B) Limits for General Population/Uncontrol Exposures				
300-1500	--	--	F/1500	6
1500-100000	--	--	1	30

Friis transmission formula: $P_d = (P_{out} * G) / (4 * \pi * R^2)$

Where

P_d = Power density in mW/cm²

P_{out} =output power to antenna in Mw

G= gain of antenna in linear scale

π =3.1416

R= distance between observation point and center of the radiator in cm

P_d the limit of MPE, 1mW/cm². If we know the maximum gain of the antenna and total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

Max Measurement Result

Operating Mode	Measured Power	Tune up tolerance		Max. Tune up Power	Antenna Gain	Power density at 20cm	Power density Limits (mW/cm ²)
	(dBm)	(dBm)		(dBm)	(dBi)	(mW/ cm ²)	
BLE	0.29	0.29	±1	1.29	1.25	0.0004	1
2.4G WIFI	15.61	15.61	±1	16.61	1.25	0.0122	1
5.2G WIFI	12.36	12.36	±1	13.36	1.25	0.0058	1
5.8WIFI	13.58	13.58	±1	14.58	1.25	0.0076	1
GSM 850	33.77	33.77	±1	34.770	1.1	0.7690	0.549
PCS 1900	29.11	29.11	±1	30.11	1.1	0.2629	1
WCDMA Band2	22.52	22.52	±1	23.52	0.8	0.0538	1
WCDMA Band5	24.01	24.01	±1	25.010	0.8	0.0758	0.549
LYE Band 2	21.9	21.9	±1	22.9	1	0.0488	1

LYE Band 4	23.05	23.05 ±1	24.05	1	0.0636	1
LYE Band 5	25.84	25.84 ±1	26.84	1	0.1210	0.549
LYE Band 7	22.21	22.21 ±1	23.21	1	0.0524	1
LYE Band 17	23.36	23.36 ±1	24.36	1	0.0683	0.469

Result: No Standalone SAR test is required.