

RF EXPOSURE EVALUATION REPORT

FCC ID : 2AQ68T99W696
Equipment : 5G WWAN Module
Brand Name : Foxconn
Model Name : T99W696
Applicant : Hon Lin Technology Co., Ltd
11F, No.32, Jihu Rd., Neihu Dist., Taipei City 114, Taiwan R.O.C.
Manufacturer : Hon Lin Technology Co., Ltd
11F, No.32, Jihu Rd., Neihu Dist., Taipei City 114, Taiwan R.O.C.
Standard : 47 CFR Part 2.1091

We, SPORTON INTERNATIONAL INC has been evaluated this product in accordance with 47 CFR Part2.1091 and it complies with applicable limit.

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Approved by: Cona Huang / Deputy Manager



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Table of Contents

1. DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)	4
2. MAXIMUM RF AVERAGE OUTPUT POWER AMONG PRODUCTION UNITS	5
3. RF EXPOSURE LIMIT INTRODUCTION	6
4. RADIO FREQUENCY RADIATION EXPOSURE EVALUATION	7
4.1. Standalone Power Density Calculation	7



History of this test report

Report No.	Version	Description	Issued Date
FA550916	Rev. 01	Initial issue of report	Aug. 11, 2025



1. Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT Type	5G WWAN Module
Brand Name	Foxconn
Model Name	T99W696
FCC ID	2AQ68T99W696
Wireless Technology and Frequency Range	WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3450 MHz ~ 2550 MHz, 3550 MHz ~ 3600 MHz LTE Band 43: 3600 MHz ~ 3700MHz, 3700 MHz ~ 3800 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz 5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5 : 824 MHz ~ 849 MHz 5G NR n7 : 2500 MHz ~ 2570 MHz 5G NR n12 : 699 MHz ~ 716 MHz 5G NR n13: 777 MHz ~ 787 MHz 5G NR n14 : 788 MHz ~ 798 MHz 5G NR n25 : 1850 MHz ~ 1915 MHz 5G NR n26 : 814 MHz ~ 849 MHz 5G NR n30 : 2305 MHz ~ 2315 MHz 5G NR n38 : 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n48 : 3550 MHz ~ 3700 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n70 : 1695 MHz ~ 1710 MHz 5G NR n71 : 663 MHz ~ 698 MHz 5G NR n77: 3450MHz ~ 3550MHz, 3500 MHz ~ 3700MHz, 3700 MHz ~ 3980 MHz 5G NR n78: 3450MHz ~ 3550MHz, 3500 MHz ~ 3700MHz, 3700 MHz ~ 3800 MHz
Mode	RMC 12.2Kbps HSDPA HSUPA DC-HSDPA HSPA+ (16QAM uplink) LTE: QPSK, 16QAM, 64QAM, 256QAM 5G NR: DFT-s-OFDM/CP-OFDM, Pi/2 BPSK/QPSK/16QAM/64QAM/256QAM

Reviewed by: Jason Wang

Report Producer: Daisy Peng

2. Maximum RF average output power among production units

Technology	Band	Maximum Conducted Power (dBm)
UMTS	WCDMA Band 2	24.5
	WCDMA Band 4	24.5
	WCDMA Band 5	24.5
LTE	LTE Band 2	24.0
	LTE Band 4	24.0
	LTE Band 5	24.5
	LTE Band 7	24.0
	LTE Band 12	24.5
	LTE Band 13	24.5
	LTE Band 14	24.5
	LTE Band 17	24.5
	LTE Band 25	24.0
	LTE Band 26	24.5
	LTE Band 30	23.0
	LTE Band 38	24.0
	LTE Band 41_PC3	24.0
	LTE Band 41_PC2	27.0
	LTE Band 42_Part27	24.0
	LTE Band 42_Part96	22.0
	LTE Band 43_Part27	24.0
	LTE Band 43_Part96	22.0
	LTE Band 48	22.0
	LTE Band 66	24.0
	LTE Band 71	24.5
NR	NR Band 2	24.0
	NR Band 5	24.5
	NR Band 7	24.0
	NR Band 12	24.5
	NR Band 13	24.5
	NR Band 14	24.5
	NR Band 25	24.0
	NR Band 26	24.5
	NR Band 30	23.0
	NR Band 38	24.0
	NR Band 41_PC3	24.0
	NR Band 41_PC2	27.0
	NR Band 41_PC1.5	29.0
	NR Band 48	22.0
	NR Band 66	24.0
	NR Band 71	24.5
	NR Band 77_PC3_Part27	24.0
	NR Band 77_PC2_Part27	27.0
	NR Band 77_PC1.5_Part27	29.0
	NR Band 77_PC3_Part96	22.0
	NR Band 78_PC3_Part27	24.0
	NR Band 78_PC2_Part27	27.0
	NR Band 78_PC1.5_Part27	29.0
	NR Band 78_PC3_Part96	22.0

3. RF Exposure Limit Introduction

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f ²)	6
30-300	61.4	0.163	1.0	6
300-1500			f/300	6
1500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

The MPE was calculated at 20 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = Power Density

P = Output Power at Antenna Terminals

G = Gain of Transmit Antenna (linear gain)

R = Distance from Transmitting Antenna

4. Radio Frequency Radiation Exposure Evaluation

4.1. Standalone Power Density Calculation

Note:

- The device implanted DPS (Dynamic Power Share) function to achieve higher uplink data rate keeping the total power unchanged in 5G NR NSA EN-DC mode according to 3GPP 38.213, when the equipment has a dynamic power sharing capability, it adjusts the LTE or NR transmission power so that the instantaneous total power does not exceed the specified value, when the maximum transmission power of NR (P_{LTE}, P_{NR}) and the specified total power (P_{total}) have been set and the instantaneous calculated total transmission power exceeds P_{total}, the NR transmission power is reduced so that the actual transmission power of the user equipment will not exceed P_{total} power.

Band	Antenna Gain (dBi)	Maximum Power (dBm)	Maximum ERP (dBm)	Maximum ERP (W)	Maximum EIRP (dBm)	Maximum EIRP (W)	Maximum RSE ERP/EIRP Limit (W)	Maximum PG (mW)	Power Density at 20cm (mW/cm ²)	Limit (mW/cm ²)
WCDMA Band 2	8.5	24.50	30.850	1.216	33.000	1.995	2.00	1995.262	0.397	1.000
WCDMA Band 4	5.5	24.50	27.850	0.610	30.000	1.000	1.00	1000.000	0.199	1.000
WCDMA Band 5	9.9	24.50	32.250	1.679	34.400	2.754	7.00	2754.229	0.548	0.549
LTE Band 2	8.5	24.00	30.350	1.084	32.500	1.778	2.00	1778.279	0.354	1.000
LTE Band 4	5.5	24.00	27.350	0.543	29.500	0.891	1.00	891.251	0.177	1.000
LTE Band 5	9.9	24.50	32.250	1.679	34.400	2.754	7.00	2754.229	0.548	0.549
LTE Band 7	9.0	24.00	30.850	1.216	33.000	1.995	2.00	1995.262	0.397	1.000
LTE Band 12	9.1	24.50	31.450	1.396	33.600	2.291	3.00	2290.868	0.456	0.466
LTE Band 13	9.6	24.50	31.950	1.567	34.100	2.570	3.00	2570.396	0.512	0.518
LTE Band 14	9.7	24.50	32.050	1.603	34.200	2.630	3.00	2630.268	0.524	0.525
LTE Band 17	9.1	24.50	31.450	1.396	33.600	2.291	3.00	2290.868	0.456	0.469
LTE Band 25	8.5	24.00	30.350	1.084	32.500	1.778	2.00	1778.279	0.354	1.000
LTE Band 26	9.9	24.50	32.250	1.679	34.400	2.754	7.00	2754.229	0.548	0.549
LTE Band 30	0.9	23.00	21.750	0.150	23.900	0.245	0.25	245.471	0.049	1.000
LTE Band 38	9.0	24.00	30.850	1.216	33.000	1.995	2.00	1995.262	0.397	1.000
LTE Band 41_PC3	9.0	24.00	30.850	1.216	33.000	1.995	2.00	1995.262	0.397	1.000
LTE Band 41_PC2	6.0	27.00	30.850	1.216	33.000	1.995	2.00	1995.262	0.397	1.000
LTE Band 42_Part27	6.0	24.00	27.850	0.610	30.000	1.000	1.00	1000.000	0.199	1.000
LTE Band 42_Part96	1.0	22.00	20.850	0.122	23.000	0.200	0.20	199.526	0.040	1.000
LTE Band 43_Part27	6.0	24.00	27.850	0.610	30.000	1.000	1.00	1000.000	0.199	1.000
LTE Band 43_Part96	1.0	22.00	20.850	0.122	23.000	0.200	0.20	199.526	0.040	1.000
LTE Band 48	1.0	22.00	20.850	0.122	23.000	0.200	0.20	199.526	0.040	1.000
LTE Band 66	5.5	24.00	27.350	0.543	29.500	0.891	1.00	891.251	0.177	1.000
LTE Band 71	8.9	24.50	31.250	1.334	33.400	2.188	3.00	2187.762	0.435	0.442
NR Band 2	8.5	24.00	30.350	1.084	32.500	1.778	2.00	1778.279	0.354	1.000
NR Band 5	9.9	24.50	32.250	1.679	34.400	2.754	7.00	2754.229	0.548	0.549
NR Band 7	9.0	24.00	30.850	1.216	33.000	1.995	2.00	1995.262	0.397	1.000
NR Band 12	9.1	24.50	31.450	1.396	33.600	2.291	3.00	2290.868	0.456	0.466
NR Band 13	9.6	24.50	31.950	1.567	34.100	2.570	3.00	2570.396	0.512	0.518
NR Band 14	9.7	24.50	32.050	1.603	34.200	2.630	3.00	2630.268	0.524	0.525
NR Band 25	8.5	24.00	30.350	1.084	32.500	1.778	2.00	1778.279	0.354	1.000
NR Band 26	9.9	24.50	32.250	1.679	34.400	2.754	7.00	2754.229	0.548	0.549
NR Band 30	0.9	23.00	21.750	0.150	23.900	0.245	0.25	245.471	0.049	1.000
NR Band 38	9.0	24.00	30.850	1.216	33.000	1.995	2.00	1995.262	0.397	1.000
NR Band 41_PC3	9.0	24.00	30.850	1.216	33.000	1.995	2.00	1995.262	0.397	1.000
NR Band 41_PC2	6.0	27.00	30.850	1.216	33.000	1.995	2.00	1995.262	0.397	1.000
NR Band 41_PC1.5	4.0	29.00	30.850	1.216	33.000	1.995	2.00	1995.262	0.397	1.000
NR Band 48	1.0	22.00	20.850	0.122	23.000	0.200	0.20	199.526	0.040	1.000
NR Band 66	5.5	24.00	27.350	0.543	29.500	0.891	1.00	891.251	0.177	1.000
NR Band 71	8.9	24.50	31.250	1.334	33.400	2.188	3.00	2187.762	0.435	0.442
NR Band 77_PC3_Part27	6.0	24.00	27.850	0.610	30.000	1.000	1.00	1000.000	0.199	1.000
NR Band 77_PC2_Part27	3.0	27.00	27.850	0.610	30.000	1.000	1.00	1000.000	0.199	1.000
NR Band 77_PC1.5_Part27	1.0	29.00	27.850	0.610	30.000	1.000	1.00	1000.000	0.199	1.000
NR Band 77_PC3_Part96	1.0	22.00	20.850	0.122	23.000	0.200	0.20	199.526	0.040	1.000
NR Band 78_PC3_Part27	6.0	24.00	27.850	0.610	30.000	1.000	1.00	1000.000	0.199	1.000
NR Band 78_PC2_Part27	3.0	27.00	27.850	0.610	30.000	1.000	1.00	1000.000	0.199	1.000
NR Band 78_PC1.5_Part27	1.0	29.00	27.850	0.610	30.000	1.000	1.00	1000.000	0.199	1.000
NR Band 78_PC3_Part96	1.0	22.00	20.850	0.122	23.000	0.200	0.20	199.526	0.040	1.000

**Conclusion:**

Based on FCC 47 CFR §2.1901, the analysis concludes that this product when transmitting in standalone within a host device, is compliant with the FCC RF exposure requirements in mobile exposure condition, provided the conducted power and antenna gain do not exceed the limits for each given frequency band per wireless technology as follow table:

Device	Technology	Band	Maximum Conducted Power (dBm)	Standalone Maximum Antenna Gain (dBi)
T99W696	UMTS	WCDMA Band 2	24.5	8.5
		WCDMA Band 4	24.5	5.5
		WCDMA Band 5	24.5	9.9
	LTE	LTE Band 2	24.0	8.5
		LTE Band 4	24.0	5.5
		LTE Band 5	24.5	9.9
		LTE Band 7	24.0	9.0
		LTE Band 12	24.5	9.1
		LTE Band 13	24.5	9.6
		LTE Band 14	24.5	9.7
		LTE Band 17	24.5	9.1
		LTE Band 25	24.0	8.5
		LTE Band 26	24.5	9.9
		LTE Band 30	23.0	0.9
		LTE Band 38	24.0	9.0
		LTE Band 41_PC3	24.0	9.0
		LTE Band 41_PC2	27.0	6.0
		LTE Band 42_Part27	24.0	6.0
		LTE Band 42_Part96	22.0	1.0
		LTE Band 43_Part27	24.0	6.0
		LTE Band 43_Part96	22.0	1.0
		LTE Band 48	22.0	1.0
		LTE Band 66	24.0	5.5
		LTE Band 71	24.5	8.9
	NR	NR Band 2	24.0	8.5
		NR Band 5	24.5	9.9
		NR Band 7	24.0	9.0
		NR Band 12	24.5	9.1
		NR Band 13	24.5	9.6
		NR Band 14	24.5	9.7
		NR Band 25	24.0	8.5
		NR Band 26	24.5	9.9
		NR Band 30	23.0	0.9
		NR Band 38	24.0	9.0
		NR Band 41_PC3	24.0	9.0
		NR Band 41_PC2	27.0	6.0
		NR Band 41_PC1.5	29.0	4.0
		NR Band 48	22.0	1.0
		NR Band 66	24.0	5.5
		NR Band 71	24.5	8.9
		NR Band 77_PC3_Part27	24.0	6.0
		NR Band 77_PC2_Part27	27.0	3.0
		NR Band 77_PC1.5_Part27	29.0	1.0
		NR Band 77_PC3_Part96	22.0	1.0
		NR Band 78_PC3_Part27	24.0	6.0
		NR Band 78_PC2_Part27	27.0	3.0
		NR Band 78_PC1.5_Part27	29.0	1.0
		NR Band 78_PC3_Part96	22.0	1.0