## FCC ID: 2ADQN-TM116W

#### Portable device

According to §15.247(e)(i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to KDB447498 D01 General RF Exposure Guidance V06

The 1-g SAR and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]- $[\sqrt{f(GHZ)}] \le 3.0$  for 1-g SAR and  $\le 7.5$  for 10-g extremity SAR, where:

- f(GHZ) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

## BT:

Modulation	Channel Freq. (GHz)	Conduct ed power (dBm)		Tune-up power (dBm)	Max tune-up power (dBm)	Max tune-up power (mW)	Distance (mm)	Result calculatio n	SAR Exclusion threshold	SAR test exclusion
GFSK	2.402	2.57	1.81	3±1	4.00	2.51	<5	0.77860	3.00	YES
	2.441	3.52	2.25	3±1	4.00	2.51	<5	0.78490	3.00	YES
	2.480	3.8	2.40	3±1	4.00	2.51	<5	0.79114	3.00	YES
π/4- DQPSK	2.402	2.35	1.72	2.6±1	3.60	2.29	<5	0.71010	3.00	YES
	2.441	3.31	2.14	2.6±1	3.60	2.29	<5	0.71584	3.00	YES
	2.480	3.55	2.26	2.6±1	3.60	2.29	<5	0.72153	3.00	YES
8DPSK	2.402	2.36	1.72	2.5±1	3.50	2.24	<5	0.69393	3.00	YES
	2.441	2.85	1.93	2.5±1	3.50	2.24	<5	0.69954	3.00	YES
	2.480	3.32	2.15	2.5±1	3.50	2.24	<5	0.70511	3.00	YES

# BLE:

Modulation	Channel Freq. (GHz)	Conduct ed power (dBm)		Tune-up power (dBm)	Max tune-up power (dBm)	Max tune-up power (mW)	Distance (mm)	calculatio	SAR Exclusion threshold	SAR test exclusion
GFSK	2.402	-3.65	0.43	-4±1	-3.00	0.50	<5	0.15535	3.00	YES
	2.44	-3.33	0.46	-4±1	-3.00	0.50	<5	0.15658	3.00	YES
	2.480	-3.01	0.50	-4±1	-3.00	0.50	<5	0.15785	3.00	YES

#### WIFI:

Modulation	Channel Freq. (GHz)	Conduct ed power (dBm)	Conducte d power (mW)	Tune-up power (dBm)	Max tune-up power (dBm)	Max tune-up power (mW)	Distance (mm)	Result calculation	SAR Exclusion threshold	SAR test exclusion
802.11b	2.412	9.1	8.13	8.5±1	9.50	8.91	<5	2.76834	3.00	YES
	2.437	9.4	8.71	8.5±1	9.50	8.91	<b>&lt;</b> 5	2.78264	3.00	YES
	2.462	9.3	8.51	8.5±1	9.50	8.91	<5	2.79688	3.00	YES
	2.412	8.8	7.59	8±1	9.00	7.94	<5	2.46728	3.00	YES
802.11g	2.437	8.5	7.08	8±1	9.00	7.94	<5	2.48003	3.00	YES
	2.462	8.2	6.61	8±1	9.00	7.94	<b>&lt;</b> 5	2.49272	3.00	YES
802.11n20	2.412	7.6	5.75	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	7.4	5.50	7±1	8.00	6.31	<5	1.96996	3.00	YES
	2.462	7.8	6.03	7±1	8.00	6.31	<5	1.98004	3.00	YES
802.11n40	2.422	7.2	5.25	6.5±1	7.50	5.62	<5	1.75032	3.00	YES
	2.437	7	5.01	6.5±1	7.50	5.62	<5	1.75573	3.00	YES
	2.452	7.4	5.50	6.5±1	7.50	5.62	<5	1.76113	3.00	YES

Conclusion:

For the max result :  $2.79688 \le 3.0$  for 1g SAR, No SAR is required.

Signature: Date: 2017-05-19

NAME AND TITLE (Please print or type): Jason Chen /Manager

**COMPANY** (Please print or type): Shenzhen NTEK Testing Technology Co., Ltd./ 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street Bao'an District, Shenzhen P.R. China.