

## FCC RF Exposure Report

**Report No.:** SA190530C17C

**FCC ID:** H8NCDR8011

**Test Model:** CDR8010-DBB1

**Series Model:** CDR8011-DBA1, CDR8011-DDA1, CDR8011-DDB1, CDR8011-SBA1,  
CDR8011-SBB1, CDR8011-SDA1, CDR8011-SDB1

**Received Date:** Feb. 25, 2019

**Test Date:** Apr. 12 ~ Aug. 28, 2019

**Issued Date:** Oct. 03, 2019

**Applicant:** ASKEY COMPUTER CORP.

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**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
Lin Kou Laboratories

**Lab Address:** No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

**Test Location:** No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City  
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**FCC Registration /  
Designation Number:** 788550 / TW0003



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## Table of Contents

<b>Release Control Record</b> .....	<b>3</b>
<b>1 Certificate of Conformity</b> .....	<b>4</b>
<b>2 RF Exposure</b> .....	<b>5</b>
3.1 Limits for Maximum Permissible Exposure (MPE).....	5
3.2 MPE Calculation Formula .....	5
3.3 Classification .....	5
<b>3 Calculation Result of Maximum Density Power</b> .....	<b>6</b>

### Release Control Record

Issue No.	Description	Date Issued
SA190530C17C	Original release	Oct. 03, 2019

## 1 Certificate of Conformity

**Product:** iDVR800

**Brand:** ASKEY

**Test Model:** CDR8010-DBB1

**Series Model:** CDR8011-DBA1, CDR8011-DDA1, CDR8011-DDB1, CDR8011-SBA1,  
CDR8011-SBB1, CDR8011-SDA1, CDR8011-SDB1

**Sample Status:** Engineering sample

**Applicant:** ASKEY COMPUTER CORP.

**Test Date:** Apr. 12 ~ Aug. 28, 2019

**Standards:** FCC Part 2 (Section 2.1091)  
KDB 447498 D01 General RF Exposure Guidance v06  
IEEE C95.3-2002

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

**Prepared by :** Pettie Chen , **Date:** Oct. 03, 2019  
Pettie Chen / Senior Specialist

**Approved by :** Bruce Chen , **Date:** Oct. 03, 2019  
Bruce Chen / Senior Project Engineer

## 2 RF Exposure

### 3.1 Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (minutes)
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 <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1500	...	...	f/1500	30
1500-100,000	...	...	1.0	30

f = Frequency in MHz; \*Plane-wave equivalent power density

### 3.2 MPE Calculation Formula

$$Pd = (Pout * G) / (4 * \pi * r^2)$$

where

Pd = power density in mW/cm<sup>2</sup>

Pout = output power to antenna in mW

G = gain of antenna in linear scale

pi = 3.1416

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

### 3.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user.

So, this device is classified as **Mobile Device**.

### 3 Calculation Result of Maximum Density Power

Function	Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
WLAN	2412-2462	21.73	1.32	20	0.040	1
	5180-5240	19.41	3.44	20	0.038	1
	5260-5320	20.04	3.44	20	0.044	1
	5500-5700	20.19	3.44	20	0.046	1
	5745-5825	20.61	3.44	20	0.051	1
BT EDR	2402-2480	2.98	1.32	20	0.001	1
BT LE	2402-2480	3.57	1.32	20	0.001	1

Function	Frequency Band (MHz)	EIRP (dBm)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
LTE Band 2	1850.7-1909.3	25.5	20	0.071	1
LTE Band 4	1710.7-1754.3	27.5	20	0.112	1

Function	Frequency Band (MHz)	ERP (dBm)	EIRP (dBm)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
LTE Band 5	824.7-848.3	19.8	21.95	20	0.031	0.550
LTE Band 26	825.5-847.5	19.5	21.65	20	0.029	0.550
LTE Band 12	699.7-715.3	21.3	23.45	20	0.044	0.466
LTE Band 13	779.5-784.5	25.0	27.15	20	0.103	0.520
LTE Band 17	706.5-713.5	23.1	25.25	20	0.067	0.471
LTE Band 26	814.7-823.3	22.6	24.75	20	0.059	0.543

LTE 12/13/17/26 EIRP = ERP + 2.15dB

\*Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

**Conclusion:**

The formula of calculated the MPE is:

$CPD1 / LPD1 + CPD2 / LPD2 + \dots \text{etc.} < 1$

CPD = Calculation power density

LPD = Limit of power density

1. WWAN+WLAN 2.4GHz =  $0.103/0.52+0.040/1 = 0.238$
2. WWAN+WLAN 5.0GHz =  $0.103/0.52+0.051/1 = 0.249$
3. WWAN+BT =  $0.103/0.52+0.001/1 = 0.199$

**Therefore the maximum calculations of above situations are less than the “1” limit.**

**--- END ---**