

FCC Exclusion Report

Report No.: SA200616C24

FCC ID: TYM-K175

Contains module FCC ID: 2AC23-WCT0Y

Test Model: K175

Received Date: Jun. 23, 2020

Test Date: Jul. 11 ~ Jul. 20, 2020

Issued Date: Jul. 22, 2020

Applicant: AVAYA

Address: 250 Sidney Street, Bellevilla, Ontario, K8P 3Z3, Canada

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
33383, TAIWAN

FCC Registration / 788550 / TW0003
Designation Number:



This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification.

Table of Contents

Release Control Record	3
1 Certificate of Conformity	4
2 Evaluation Result	5
2.1 Limits for Maximum Permissible Exposure (MPE).....	5
2.2 MPE Calculation Formula	5
2.3 Classification	5
3 Calculation Result of Maximum Conducted Power	6

Release Control Record

Issue No.	Description	Date Issued
SA200616C24	Original release	Jul. 22, 2020

1 Certificate of Conformity

Product: IP Phone

Brand: Avaya

Test Model: K175

Sample Status: Engineering sample

Applicant: AVAYA

Test Date: Jul. 11 ~ Jul. 20, 2020

Standards: FCC Part 2 (Section 2.1091)

References Test KDB 447498 D01 General RF Exposure Guidance v06

Guidance: 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 : Polly Chien , **Date:** Jul. 22, 2020
Polly Chien / Specialist

Approved by : Bruce Chen , **Date:** Jul. 22, 2020
Bruce Chen / Senior Project Engineer

2 Evaluation Result

2.1 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 (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 ²)*	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

2.2 MPE Calculation Formula

$$Pd = (P_{out} * G) / (4 * \pi * r^2)$$

where

Pd = power density in mW/cm²

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

2.3 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 Conducted Power

Maximum measured transmitter power:

For module (Model: WCT0YR2201, FCC ID: 2AC23-WCT0Y)

Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
WLAN 2412~2462	23.76	-0.75	20	0.040	1
WLAN 5180~5240	16.44	-0.27	20	0.008	1
WLAN 5260~5320	16.14	-0.27	20	0.008	1
WLAN 5500~5720	16.09	-0.27	20	0.008	1
WLAN 5745~5825	16.38	-0.27	20	0.008	1
BT EDR 2402~2480	7.216	-0.75	20	0.001	1
BT LE 2402~2480	6.269	-0.75	20	0.001	1

Note:

1. The antennas information are listed as below.

Antenna	Ant. Type	Frequency Range (GHz)	Gain (dBi)
Vantsge 3_DP (K175) Main antenna	PIFA	2.40-2.50GHz	-0.75
		5.15-5.85GHz	-0.27
Vantsge 3_Entry (K155+K175) AUX antenna	PIFA	2.40-2.50GHz	-1.13
		5.15-5.85GHz	-1.95

*The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

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

Mode	Field Strength (dBuV/m) @30m	Field Strength (dBuV/m) @3m	Max. Power EIRP (dBm)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
NFC	24.0	64.0	-31.23	20	0.00000015	0.978

Note:

- Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
- Max Power (dBm) = Field Strength of Fundamental (dBuV/m@3m) – 95.23,
Max Power (mW) = 10(Max power (dBm)/10)
- The measured field strength was extrapolated to distance 30 meters, using the formula that the limit of field strength varies as the inverse distance square (40dB per decade of distance)

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

* The BT could not transmit with WLAN at the same time.

1. $NFC + 2.4GHz = 0.00000015/0.978 + 0.040/1 = 0.040$
2. $NFC + 5GHz = 0.00000015/0.978 + 0.008/1 = 0.008$
3. $NFC + BT = 0.00000015/0.978 + 0.001/1 = 0.001$
4. $NFC + BT LE = 0.00000015/0.978 + 0.001/1 = 0.001$

Therefore the maximum calculations of above situations are less than the "1" limit.

---END---