

FCC RF EXPOSURE REPORT

FCC ID: ACJ-SC-C70MK2

Project No. : 2006C136
Equipment : COMPACT STEREO SYSTEM
Brand Name : Technics
Test Model : SC-C70MK2
Series Model : N/A
Applicant : Panasonic Corporation of North America
Address : Two Riverfront Plaza, 9th Floor Newark, New Jersey 07102-5490
United States
Manufacturer : Panasonic Corporation of North America
Address : Two Riverfront Plaza, 9th Floor Newark, New Jersey 07102-5490
United States
Factory : Panasonic AVC Networks Johor Malaysia
Address : IE,PLO 460, Jalan Bandar, 81700 Pasir Gudang, Johor, Malaysia
Date of Receipt : Jun. 15, 2020
Date of Test : Jun. 19, 2020 ~ Jul. 24, 2020
Issued Date : Aug. 06, 2020
Report Version : R00
Test Sample : Engineering Sample No.: DG2020061872
Standard(s) : FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091
FCC Title 47 Part 2.1091, OET Bulletin 65 Supplement C

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

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Certificate #5123.02

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REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue	Aug. 06, 2020

1. TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3,Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

BTL's Test Firm Registration Number for FCC: 357015

BTL's Designation Number for FCC: CN1240

2. MPE CALCULATION METHOD

Calculation Method of RF Safety Distance:

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

where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Table for Filed Antenna:

For BT/LE:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	PCB	N/A	1

For 2.4GHz:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	PCB	N/A	1
2	N/A	N/A	PCB	N/A	1

Note:

This EUT supports MIMO 2X2, any transmit signals are correlated with each other, so Directional gain = $G_{ANT} + 10\log(N)\text{dBi}$, that is Directional gain = $1 + 10\log(2)\text{dBi} = 4.01$.

For 5GHz:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	PCB	N/A	2.5
2	N/A	N/A	PCB	N/A	2.5

Note:

This EUT supports MIMO 2X2, any transmit signals are correlated with each other, so Directional gain = $G_{ANT} + 10\log(N)\text{dBi}$, that is Directional gain = $2.5 + 10\log(2)\text{dBi} = 5.51$

Table for Antenna Configuration:

For 2.4GHz:

Operating Mode TX Mode	1TX	2TX
802.11b	V (Ant. 1)	-
802.11g	V (Ant. 1)	-
802.11n(20 MHz)	-	V (Ant. 1 + Ant. 2)
802.11n(40 MHz)	-	V (Ant. 1 + Ant. 2)

For 5GHz:

Operating Mode TX Mode	1TX	2TX
IEEE 802.11a	V (Ant. 1)	-
IEEE 802.11n (HT20)	-	V (Ant. 1 + Ant. 2)
IEEE 802.11n (HT40)	-	V (Ant. 1 + Ant. 2)
IEEE 802.11ac (VHT20)	-	V (Ant. 1 + Ant. 2)
IEEE 802.11ac (VHT40)	-	V (Ant. 1 + Ant. 2)
IEEE 802.11ac (VHT80)	-	V (Ant. 1 + Ant. 2)

3. TEST RESULTS

For BT:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Max. Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
1	1.2589	2.56	1.8030	0.00045	1	Complies

For LE:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Max. Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
1	1.2589	2.92	1.9588	0.00049	1	Complies

For 2.4GHz:

Directional Gain (dBi)	Directional Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
4.01	2.5177	29.69	931.1079	0.46661	1	Complies

For 5GHz UNII-1:

Directional Gain (dBi)	Directional Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
5.51	3.5563	16.91	49.0908	0.03475	1	Complies

For 5GHz UNII-2A:

Directional Gain (dBi)	Directional Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
5.51	3.5563	16.83	48.1948	0.03412	1	Complies

For 5GHz UNII-2C:

Directional Gain (dBi)	Directional Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
5.51	3.5563	16.93	49.3174	0.03491	1	Complies

For 5GHz UNII-3:

Directional Gain (dBi)	Directional Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
5.51	3.5563	16.97	49.7737	0.03523	1	Complies

For the max simultaneous transmission MPE:

Power Density (S) (mW/cm ²)	Power Density (S) (mW/cm ²)	Total	Limit of Power Density (S) (mW/cm ²)	Test Result
LE	2.4GHz			
0.00049	0.46661	0.4671	1	Complies

Note: The calculated distance is 20 cm.

End of Test Report