

STS  
TESTING  
SOLUTIONS  
LAB



## RADIO TEST REPORT

Report No: STS1807043H02

Issued for

Canon Electronic Business Machines (H.K.) Co., Ltd.

17/F, Tower One, Ever Gain Plaza, 82-100 Container Port  
Road, Kwai Chung, New Territories, Hong Kong

<b>Product Name:</b>	Wireless Receiver
<b>Brand Name:</b>	Canon
<b>Model Name:</b>	D20D
<b>Series Model:</b>	N/A
<b>IC ID:</b>	9472A-D20D
<b>Test Standard:</b>	RSS 102, ISSUE 5

Any reproduction of this document must be done in full. No single part of this document may be reproduced without permission from STS, All Test Data Presented in this report is only applicable to presented Test sample.

Shenzhen STS Test Services Co., Ltd.  
1/F., Building B, Zhuoke Science Park, No.190,Chongqing Road,  
Fuyong Street, Bao'an District, Shenzhen, Guangdong,China  
TEL: +86-755 3688 6288 FAX: +86-755 3688 6277 E-mail:sts@stsapp.com





## Test Report Certification

**Applicant's name** ..... : Canon Electronic Business Machines (H.K.) Co., Ltd.  
**Address** ..... : 17/F, Tower One, Ever Gain Plaza, 82-100 Container Port Road, Kwai Chung, New Territories, Hong Kong

**Manufacturer's Name** ..... : Canon Electronic Business Machines (H.K.) Co., Ltd.  
**Address** ..... : 17/F, Tower One, Ever Gain Plaza, 82-100 Container Port Road, Kwai Chung, New Territories, Hong Kong

### Product description

**Product Name** ..... : Wireless Receiver  
**Brand Name** ..... : Canon  
**Model Name** ..... : D20D  
**Series Model** ..... : N/A

**Standards** ..... : RSS 102, ISSUE 5

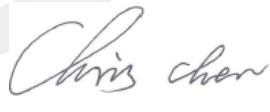
This report shall not be reproduced except in full, without the written approval of STS, this document only be altered or revised by STS, personal only, and shall be noted in the revision of the document.

**Date of Test** ..... :

**Date (s) of performance of tests** ..... : 29 Nov. 2018 ~24 Dec. 2018

**Date of Issue** ..... : 25 Dec. 2018

**Test Result** ..... : **Pass**

Testing Engineer : 

( Chris chen )



Technical Manager : 

( Sean she )

Authorized Signatory : 

( Vita Li )



## TABLE OF CONTENTS

<b>1. GENERAL INFORMATION</b>	<b>5</b>
1.1 GENERAL DESCRIPTION OF THE EUT	5
1.2 TEST FACTORY	5
<b>2. RSS-102 REQUIREMENT</b>	<b>6</b>
2.1 Exemption Limits for Routine Evaluation — SAR Evaluation	6
2.2 Exemption Limits for Routine Evaluation — RF Exposure Evaluation	7
2.3 E.i.r.p. calculation results	7



**Revision History**

Rev.	Issue Date	Report No.	Effect Page	Contents
00	25 Dec. 2018	STS1807043H02	ALL	Initial Issue





## 1. GENERAL INFORMATION

### 1.1 GENERAL DESCRIPTION OF THE EUT

Product Name	Wireless Receiver								
Brand Name	Canon								
Model Name	D20D								
Series Model	N/A								
Model Difference	N/A								
Product Description	<p>The EUT is Wireless Receiver</p> <table border="1"><tr><td>Operation Frequency:</td><td>2405~2460 MHz</td></tr><tr><td>Modulation Type:</td><td>GFSK</td></tr><tr><td>Antenna Type:</td><td>PCB</td></tr><tr><td>Antenna Gain (dBi):</td><td>-2.5 dBi</td></tr></table>	Operation Frequency:	2405~2460 MHz	Modulation Type:	GFSK	Antenna Type:	PCB	Antenna Gain (dBi):	-2.5 dBi
Operation Frequency:	2405~2460 MHz								
Modulation Type:	GFSK								
Antenna Type:	PCB								
Antenna Gain (dBi):	-2.5 dBi								
Power Rating	DC 5V								
Hardware Version	R000								
Software Version	V02								

Note: 1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

### 1.2 TEST FACTORY

Shenzhen STS Test Services Co., Ltd.

Add. : 1/F., Building B, Zhuoke Science Park, No.190, Chongqing Road, Fuyong Street, Bao'an District, Shenzhen, Guangdong,China

FCC Registration No.: 625569

IC Registration No.: 12108A; A2LA Certificate No.: 4338.01;

## 2. RSS-102 REQUIREMENT

### 2.1 Exemption Limits for Routine Evaluation — SAR Evaluation

SAR evaluation is required if the separation distance between the user and/or bystander and the antenna and/or radiating element of the device is less than or equal to 20 cm, except when the device operates at or below the applicable output power level (adjusted for tune-up tolerance) for the specified separation distance defined in [Table 1](#).

**Table 1: SAR evaluation — Exemption limits for routine evaluation based on frequency and separation distance<sup>4,5</sup>**

Frequency (MHz)	Exemption Limits (mW)				
	At separation distance of ≤5 mm	At separation distance of 10 mm	At separation distance of 15 mm	At separation distance of 20 mm	At separation distance of 25 mm
≤300	71 mW	101 mW	132 mW	162 mW	193 mW
450	52 mW	70 mW	88 mW	106 mW	123 mW
835	17 mW	30 mW	42 mW	55 mW	67 mW
1900	7 mW	10 mW	18 mW	34 mW	60 mW
2450	4 mW	7 mW	15 mW	30 mW	52 mW
3500	2 mW	6 mW	16 mW	32 mW	55 mW
5800	1 mW	6 mW	15 mW	27 mW	41 mW

Frequency (MHz)	Exemption Limits (mW)				
	At separation distance of 30 mm	At separation distance of 35 mm	At separation distance of 40 mm	At separation distance of 45 mm	At separation distance of ≥50 mm
≤300	223 mW	254 mW	284 mW	315 mW	345 mW
450	141 mW	159 mW	177 mW	195 mW	213 mW
835	80 mW	92 mW	105 mW	117 mW	130 mW
1900	99 mW	153 mW	225 mW	316 mW	431 mW
2450	83 mW	123 mW	173 mW	235 mW	309 mW
3500	86 mW	124 mW	170 mW	225 mW	290 mW
5800	56 mW	71 mW	85 mW	97 mW	106 mW



## 2.2 Exemption Limits for Routine Evaluation — RF Exposure Evaluation

RF exposure evaluation is required if the separation distance between the user and/or bystander and the device's radiating element is greater than 20 cm, except when the device operates as follows:

- below 20 MHz<sup>6</sup> and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 1 W (adjusted for tune-up tolerance);
- at or above 20 MHz and below 48 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than  $22.48/f^{0.5}$  W (adjusted for tune-up tolerance), where  $f$  is in MHz;
- at or above 48 MHz and below 300 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 0.6 W (adjusted for tune-up tolerance);
- at or above 300 MHz and below 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than  $1.31 \times 10^{-2} f^{0.6834}$  W (adjusted for tune-up tolerance), where  $f$  is in MHz;
- at or above 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 5 W (adjusted for tune-up tolerance).

In these cases, the information contained in the RF exposure technical brief may be limited to information that demonstrates how the e.i.r.p. was derived.

## 2.3 E.i.r.p. calculation results

Worse case is as below:

2.4G Low channel CH01

80.59 dB $\mu$ V/m -95.3=-14.71 dBm-2.5dBi(antenna gain) EIRP @2405 MHz

EIRP=-14.71 dBm-2.5Bi =-17.21dBm

$10^{-17.21/10}=0.019W < 2.68W$ , According to 2.5.2 SAR evaluation.

Conclusion: RF exposure evaluation is exempted

\*\*\*\*\*END OF THE REPORT\*\*\*\*\*