

# RF EXPOSURE REPORT

**REPORT NO.:** SA110620E02

MODEL NO.: DAP-2565

FCC ID: KA2AP2565A1

**APPLICANT:** D-Link Corporation

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Taipei City 114, Taiwan, R.O.C.

**ISSUED BY:** Bureau Veritas Consumer Products Services

(H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory

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# **RELEASE CONTROL RECORD**

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA110620E02	Original release	Aug 01, 2011

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#### 1. CERTIFICATION

AIRPREMIER N DUAL BAND, PLENUM-RATED POE PRODUCT:

ACCESS POINT POWERED BY CLOUDCOMMAND

BRAND NAME: D-Link

MODEL NO.: DAP-2565

**TEST SAMPLE:** MASS-PRODUCTION

**APPLICANT:** D-Link Corporation

**STANDARDS:** FCC Part 2 (Section 2.1091)

FCC OET Bulletin 65, Supplement C (01-01)

**IEEE C95.1** 

The above equipment (Model: DAP-2565) 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 EMC characteristics under the conditions specified in this report.

PREPARED BY: \_\_\_\_\_\_ , DATE: \_Aug. 01, 2011 (Claire Kuan, Specialist)

( May Chen, Deputy Manager )



#### 2. RF EXPOSURE LIMIT

#### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY ELECTRIC FIELD MAGNETIC FIELD STRENGTH (V/m) STRENGTH (A/m)		POWER DENSITY (mW/cm²)	AVERAGE TIME (minutes)					
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE								
300-1500			F/1500	30				
1500-100,000			1.0	30				

F = Frequency in MHz

#### 3. MPE CALCULATION FORMULA

Pd = (Pout\*G) / (4\*pi\*r2)

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

#### 4. 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**.

#### 5. ANTENNA GAIN

There are two antennas provided to this EUT, please refer to the following table:

Transmitter Circuit	Brand	Model	Gain (dBi) include cable loss	Antenna Type	Connector
Chain (0)	WHA YU GROUP	C037-511111-A(SSR-10963)	2.4G: 3.5dBi 5G: 6dBi	Dipole	SMA Plug Straight /Reverse
Chain (1)	WHA YU GROUP	C037-511111-A(SSR-10963)	2.4G: 3.5dBi 5G: 6dBi	Dipole	SMA Plug Straight /Reverse

The EUT incorporates CDD function with 802.11a, 802.11b, 802.11g and MIMO function with 802.11n.



#### 6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

#### For 15.247(2.4GHz):

#### 802.11b:

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm <sup>2</sup> )	LIMIT (mW/cm²)
2412-2462	186.7	6.5	20	0.166	1.00

Directional gain = gain of antenna element + 10 log (# of TX antenna elements) Effective Legacy Gain (dBi)=6.5

#### 802.11g:

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm <sup>2</sup> )	LIMIT (mW/cm²)
2412-2462	463.5	6.5	20	0.412	1.00

Directional gain = gain of antenna element + 10 log (# of TX antenna elements) Effective Legacy Gain (dBi)=6.5

#### 802.11n(20MHz):

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm <sup>2</sup> )	LIMIT (mW/cm²)
2412-2462	485.4	3.5	20	0.216	1.00

#### 802.11n(40MHz):

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm²)	LIMIT (mW/cm²)
2422-2452	303.4	3.5	20	0.135	1.00



## For 15.247(5GHz):

#### 802.11a:

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm²)	LIMIT (mW/cm²)
5745 ~ 5825	453.0	9	20	0.716	1.00

Directional gain = gain of antenna element + 10 log (# of TX antenna elements) Effective Legacy Gain (dBi)=9

## 802.11n(20MHz):

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm²)	LIMIT (mW/cm²)
5745 ~ 5825	386.1	6	20	0.306	1.00

## 802.11n(40MHz):

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm²)	LIMIT (mW/cm²)
5755 ~ 5795	405.0	6	20	0.321	1.00



# For 15.407(5GHz): 802.11a:

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm²)	LIMIT (mW/cm²)
5180 ~ 5240	14.5	9	20	0.023	1.00

Directional gain = gain of antenna element + 10 log (# of TX antenna elements) Effective Legacy Gain (dBi)=9

### 802.11n(20MHz):

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm <sup>2</sup> )	LIMIT (mW/cm²)
5180 ~ 5240	25.8	6	20	0.020	1.00

## 802.11n(40MHz):

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm²)	LIMIT (mW/cm²)
5190 ~ 5230	44.3	6	20	0.035	1.00

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