

RF EXPOSURE REPORT

REPORT NO.: SA110617E04

MODEL NO.: DWA-566

FCC ID: KA2WA566A1

APPLICANT: D-Link Corporation

ADDRESS: No.289, Sinhu 3rd Rd., Neihu District,

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

ISSUED BY: Bureau Veritas Consumer Products Services

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

LAB ADDRESS: No. 81-1, Lu Liao Keng, 9th Ling, Wu Lung Tsuen,

Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan

This test report consists of 8 pages in total. It may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product certification, approval, or endorsement. The test results in the report only apply to the tested sample.

Report No.: SA110617E04 1 Report Format Version 4.0.0



TABLE OF CONTENTS

REL	EASE CONTROL RECORD	. 3
	CERTIFICATION	
	RF EXPOSURE LIMIT	
3.	MPE CALCULATION FORMULA	5
4.	CLASSIFICATION	5
5.	ANTENNA GAIN	5
6.	CALCULATION RESULT OF MAXIMUM CONDUCTED POWER	6



RELEASE CONTROL RECORD

ISSUE NO.	ISSUE NO. REASON FOR CHANGE	
SA110617E04	Original release	Aug. 26, 2011

Report No.: SA110617E04 3 Report Format Version 4.0.0



1. CERTIFICATION

PRODUCT: WIRELESS N 300 PCIe

BRAND NAME: D-Link

MODEL NO.: DWA-566

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: DWA-566) 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: Midol- Per , DATE: Aug. 26, 2011

(Midoli Peng, Specialist)

APPROVED BY

, DATE: Aug. 26, 2011

(May Chen, Deputy Manager)



2. RF EXPOSURE LIMIT

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD 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	C037-511105-A (SSR-02561)	2	Dipole	SMA Plug Straight / Reverse
Chain (1)	WHA YU GROUP	C037-511105-A (SSR-02561)	2	Dipole	SMA Plug Straight / Reverse

The EUT incorporates CDD function with 802.11a, 802.11b, 802.11g



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 ²)	LIMIT (mW/cm²)
2412-2462	221.0	5	20	0.139	1.00

Directional gain = gain of antenna element + 10 log (# of TX antenna elements) Effective Legacy Gain (dBi)=5

802.11g:

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm²)	LIMIT (mW/cm²)
2412-2462	442.6	5	20	0.278	1.00

Directional gain = gain of antenna element + 10 log (# of TX antenna elements) Effective Legacy Gain (dBi)=5

802.11n(20MHz):

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm ²)	LIMIT (mW/cm²)
2412-2462	502.5	2	20	0.158	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	347.7	2	20	0.110	1.00



For 15.247(5GHz):

802.11a:

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm ²)	LIMIT (mW/cm²)
5745 ~ 5825	302.7	5	20	0.190	1.00

Directional gain = gain of antenna element + 10 log (# of TX antenna elements) Effective Legacy Gain (dBi)=5

802.11n(20MHz):

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm ²)	LIMIT (mW/cm²)
5745 ~ 5825	306.7	2	20	0.097	1.00

802.11n(40MHz):

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm ²)	LIMIT (mW/cm²)
5755 ~ 5795	355.8	2	20	0.112	1.00



For 15.407(5GHz):

802.11a:

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm ²)	LIMIT (mW/cm²)
5180-5240,					
5260-5320,	109.3	5	20	0.069	1.00
5500-5700					

Directional gain = gain of antenna element + 10 log (# of TX antenna elements) Effective Legacy Gain (dBi)=5

802.11n(20MHz):

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm²)	LIMIT (mW/cm²)
5180-5240,					
5260-5320,	102.4	2	20	0.032	1.00
5500-5700					

802.11n(40MHz):

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm ²)	LIMIT (mW/cm²)
5190-5230,					
5270-5310,	74.4	2	20	0.023	1.00
5510-5670					

--- END ---