RF Exposure Report

Report No.:	SA121227E01E
FCC ID:	NKR-DTVDWVB
Test Model:	WVBR0-01
Series Model:	WVBR0-25
Received Date:	Dec. 03, 2015
Test Date:	Mar. 05, 2016
Issued Date:	Apr. 14, 2016
Applicant:	Wistron NeWeb Corp.
Address:	20 Park Avenue II, Hsinchu Science Park,Hsinchu 308, Taiwan, R.O.C.
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
Lab Address:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.
Test Location (1):	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.
Test Location (2):	No. 49, Ln. 206, Wende Rd., Shangshan Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan R.O.C.

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Table of Contents

Release Control Record

Issue No.	Description	Date Issued
SA121227E01E	Original release.	Apr. 14, 2016

1 Certificate of Conformity

Product:	Wireless Video Bridge
Brand:	DIRECTV
Test Model:	WVBR0-01
Series Model:	WVBR0-25
Sample Status:	ENGINEERING SAMPLE
Applicant:	Wistron NeWeb Corp.
Test Date:	Mar. 05, 2016
Standards:	FCC Part 2 (Section 2.1091) KDB 447498 D01 General RF Exposure Guidance v06 IEEE C95.1-2005

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 EMC characteristics under the conditions specified in this report.

Prepared by : Wendy Wu , **Date:** Apr. 14, 2016

Wendy Wu / Specialist

Approved by : , **Date:** Apr. 14, 2016

May Chen / Manager

2 RF Exposure

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				
300-1500	…	…	F/1500	30
1500-100,000	…	…	1.0	30

F = Frequency in MHz

2.2 MPE Calculation Formula

$Pd = (Pout*G) / (4*pi*r^2)$

where

Pd = power density in mW/cm^2

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**.

2.4 Antenna Gain

The antennas provided to the EUT, please refer to the following table:

Transmitter Circuit	Antenna Type	Gain (dBi)	Frequency range (MHz to MHz)	Connector type
Chain (0)	Dipole	4.77	5150 ~ 5250	i-pex
		4.46	5250 ~ 5350	
		5.19	5470 ~ 5725	
		5.07	5745 ~ 5825	
Chain (1)	Dipole	4.11	5150 ~ 5250	i-pex
		3.46	5250 ~ 5350	
		3.96	5470 ~ 5725	
		4.09	5745 ~ 5825	
Chain (2)	Dipole	4.86	5150 ~ 5250	i-pex
		5.14	5250 ~ 5350	
		4.83	5470 ~ 5725	
		4.50	5745 ~ 5825	
Chain (3)	Dipole	5.12	5150 ~ 5250	i-pex
		5.01	5250 ~ 5350	
		4.57	5470 ~ 5725	
		4.65	5745 ~ 5825	

2.5 Calculation Result of Maximum Conducted Power

Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
5180-5240	414.775	10.74	20	0.97846	1
5745-5825	394.703	10.61	20	0.90365	1

NOTE:
For U-NII-1 Band: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2$ / 4] = 10.74dBi
For U-NII-3 Band: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2$ / 4] = 10.61dBi

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