



# TEST REPORT

**REGULATION : FCC Part 1.1310 , RSS-102 Issue5 2015  
(General Population/Uncontrolled Exposure)**

Applicant	Testing Laboratory
JVC KENWOOD Corporation 1-16-2, Hakusan, Midori-ku, Yokohama-shi Kanagawa, 226-8525 Japan Tel.: +81 45 939 6254 Fax.: +81 45 939 6261	Intertek Japan K.K. Kashima Laboratory (No.12 Test site) 298-6 Sada, Kashima, Ibaraki 314-0027 Japan Tel. +81 299 82 8464 URL: <a href="http://www.japan.intertek-etlsemko.com">http://www.japan.intertek-etlsemko.com</a>

<b>Equipment type</b>	UHF DIGITAL TRANSCEIVER
<b>Trademark</b>	KENWOOD
<b>FCC Model(s)</b>	NX-800H-K, NX-800-K, TK-5820-K
<b>IC Model(s)</b>	NX-800H-K, NX-800-K, TK-5820-K (HVIN: NX-800H-K-17, NX-800-K-17, TK-5820-K-17)
<b>Serial No.</b>	20
<b>FCC ID</b>	K44378704
<b>IC CN and UPN</b>	282F-378704
<b>Test Result</b>	Complied
<b>Report Number</b>	17030289JKA-002
<b>Report issue date</b>	June 05, 2017

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

Approved by

Hideaki Kosemura

[Technical Manager]

Tested by

Koichi Wagatsuma

[Engineer]

**TABLE OF CONTENTS**

---

	Page
SECTION 1. INFORMATION	3
SECTION 2. TEST DATA	4
SECTION 3. TEST CONFIGURATION	8
SECTION 4. MEASUREMENT UNCERTAINTY	9
SECTION 5. LIST OF MEASURING INSTRUMENTS	9

---

**SECTION 1. INFORMATION****APPLICANT**

Company	JVC KENWOOD Corporation
Address	1-16-2, Hakusan, Midori-ku, Yokohama-shi Kanagawa, 226-8525 Japan
Contact Person	Tamaki Shimamura

**MANUFACTURER**

Company	JVC KENWOOD Corporation
Address	1-16-2, Hakusan, Midori-ku, Yokohama-shi Kanagawa, 226-8525 Japan

**EQUIPMENT UNDER TEST**

FCC Model(s)	NX-800H-K, NX-800-K, TK-5820-K	
IC Model(s)	NX-800H-K, NX-800-K, TK-5820-K (HVIN: NX-800H-K-17, NX-800-K-17, TK-5820-K-17)	
Serial No.	20	
Frequency range	FCC: 450 to 512 MHz IC: 450 to 470 MHz	
FCC ID	K44378704	
IC CN and UPN	282F-378704	
Maximum Power Rating	45	W
Duty cycle	50	%
Collector Current, A	13.0	amps (Maximum)
Collector Voltage, Vdc	13.6	Vdc
Supply Voltage, Vdc	13.6	Vdc

**TEST DATE OF ISSUE AND TEST ENGINEER**

Date of Issue	May 02, 2017		
temperature	22	to	24 [degree C]
Humidity Variation	45	to	55 [%]
Atmospheric Pressure	101	to	101 [kPa]
Test Engineer	Koichi Wagatsuma		
Test Location	Kashima No.12 Test Site		
Regulations	FCC Part 1.1310 , RSS-102 Issue5 2015		
Test method/Guide	KDB 447498 D01 General RF Exposure Guidance v05r02		
Test Procedure	LEN-RJP-TE103		

**Revision Summary**

Revised Date	Section	Description of Changes

## SECTION 2. TEST DATA

The TX antenna place was inside a semi anechoic chamber at height of 0.8 m from the Ground reference plane to simulate being mounted on a vehicle.

The isotropic probe position was a distance of 0.4 m from the TX antenna and the power density was measured from 0.1 m to 2.0 m (at 0.1 m increments) with the peak value.

The EUT is a PTT radio for mobile application with a peak power of 45 W. By allowing for an operational 50 % factor the power was reduced to 22.5 W for testing purposes yet transmitted continuously during the test. The 1/4 wave antenna (0 dBd gain) was utilized for testing.  
(Model No : QWFT120 / Manufacturer : Laird Technologies)

### Measurement Result

TX frequency (MHz)	Output Power W	Measurement distance (m)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )		Result
				RSS	FCC	
450.05	45	0.4	0.095	0.170	0.300	PASS
481.05	45	0.4	0.107	0.178	0.321	PASS
511.95	45	0.4	0.067	0.186	0.341	PASS
460.05	45	0.4	0.129	0.173	0.307	PASS
469.95	45	0.4	0.083	0.175	0.313	PASS

Power Density = 20 measurements data (0.1m - 2.0m) has been averaged.

Limit : General Population/Uncontrolled Exposure

**Measurement data**

450.05 MHz

Probe Height (m)	Reading Power Density (mW/cm <sup>2</sup> )	Probe Factor	Power Density (mW/cm <sup>2</sup> )
0.1	0.010	1.20	0.012
0.2	0.009	1.20	0.011
0.3	0.022	1.20	0.026
0.4	0.025	1.20	0.030
0.5	0.020	1.20	0.024
0.6	0.030	1.20	0.036
0.7	0.060	1.20	0.072
0.8	0.134	1.20	0.160
0.9	0.168	1.20	0.202
1.0	0.162	1.20	0.193
1.1	0.146	1.20	0.175
1.2	0.118	1.20	0.142
1.3	0.114	1.20	0.137
1.4	0.137	1.20	0.164
1.5	0.134	1.20	0.160
1.6	0.102	1.20	0.122
1.7	0.076	1.20	0.091
1.8	0.055	1.20	0.065
1.9	0.039	1.20	0.047
2.0	0.026	1.20	0.031

Power Density = Reading Power Density x Probe Factor

481.05 MHz

Probe Height (m)	Reading Power Density (mW/cm <sup>2</sup> )	Probe Factor	Power Density (mW/cm <sup>2</sup> )
0.1	0.010	1.19	0.011
0.2	0.012	1.19	0.014
0.3	0.014	1.19	0.016
0.4	0.016	1.19	0.019
0.5	0.022	1.19	0.025
0.6	0.040	1.19	0.048
0.7	0.072	1.19	0.085
0.8	0.168	1.19	0.199
0.9	0.186	1.19	0.220
1.0	0.159	1.19	0.188
1.1	0.151	1.19	0.179
1.2	0.141	1.19	0.167
1.3	0.156	1.19	0.185
1.4	0.182	1.19	0.216
1.5	0.167	1.19	0.198
1.6	0.120	1.19	0.142
1.7	0.079	1.19	0.094
1.8	0.050	1.19	0.059
1.9	0.033	1.19	0.039
2.0	0.022	1.19	0.026

Power Density = Reading Power Density x Probe Factor

## 511.95 MHz

Probe Height (m)	Reading Power Density (mW/cm <sup>2</sup> )	Probe Factor	Power Density (mW/cm <sup>2</sup> )
0.1	0.004	1.17	0.005
0.2	0.005	1.17	0.006
0.3	0.007	1.17	0.008
0.4	0.013	1.17	0.015
0.5	0.019	1.17	0.022
0.6	0.031	1.17	0.036
0.7	0.048	1.17	0.056
0.8	0.144	1.17	0.169
0.9	0.160	1.17	0.187
1.0	0.108	1.17	0.127
1.1	0.061	1.17	0.071
1.2	0.066	1.17	0.077
1.3	0.101	1.17	0.118
1.4	0.121	1.17	0.142
1.5	0.103	1.17	0.121
1.6	0.070	1.17	0.083
1.7	0.043	1.17	0.051
1.8	0.023	1.17	0.027
1.9	0.014	1.17	0.016
2.0	0.008	1.17	0.010

Power Density = Reading Power Density x Probe Factor

## 460.05 MHz

Probe Height (m)	Reading Power Density (mW/cm <sup>2</sup> )	Probe Factor	Power Density (mW/cm <sup>2</sup> )
0.1	0.012	1.19	0.014
0.2	0.016	1.19	0.019
0.3	0.027	1.19	0.032
0.4	0.028	1.19	0.033
0.5	0.025	1.19	0.029
0.6	0.045	1.19	0.054
0.7	0.086	1.19	0.102
0.8	0.182	1.19	0.217
0.9	0.219	1.19	0.262
1.0	0.209	1.19	0.249
1.1	0.192	1.19	0.229
1.2	0.161	1.19	0.193
1.3	0.160	1.19	0.191
1.4	0.185	1.19	0.220
1.5	0.188	1.19	0.224
1.6	0.152	1.19	0.181
1.7	0.112	1.19	0.134
1.8	0.077	1.19	0.092
1.9	0.054	1.19	0.065
2.0	0.040	1.19	0.047

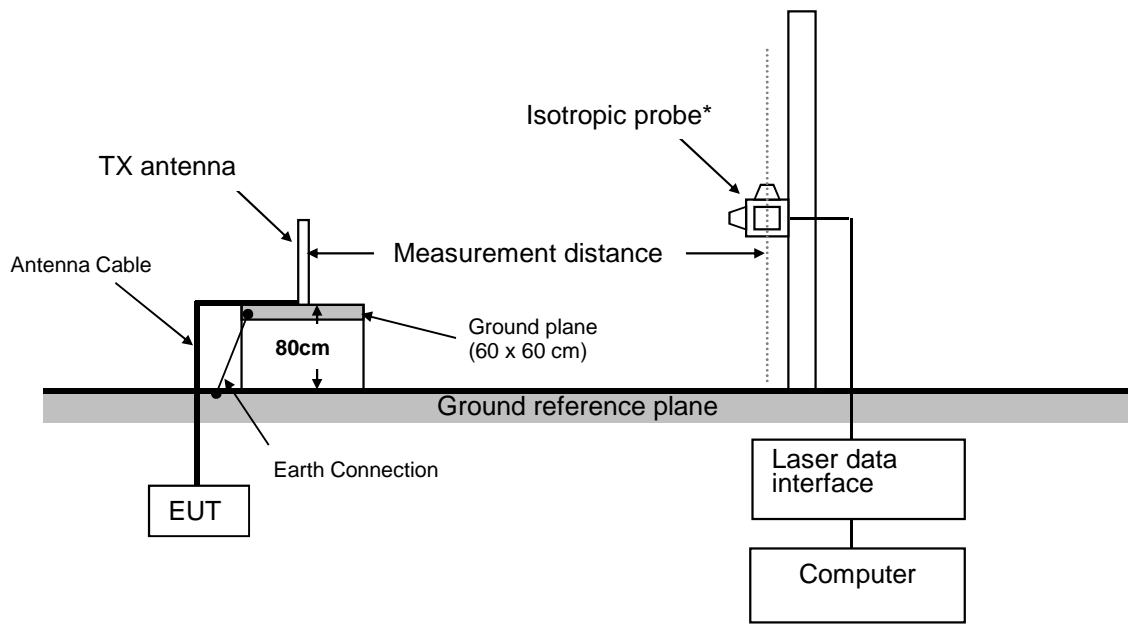
Power Density = Reading Power Density x Probe Factor

469.95 MHz

Probe Height (m)	Reading Power Density (mW/cm <sup>2</sup> )	Probe Factor	Power Density (mW/cm <sup>2</sup> )
0.1	0.009	1.19	0.011
0.2	0.011	1.19	0.013
0.3	0.014	1.19	0.016
0.4	0.014	1.19	0.017
0.5	0.016	1.19	0.019
0.6	0.031	1.19	0.037
0.7	0.055	1.19	0.065
0.8	0.126	1.19	0.150
0.9	0.139	1.19	0.165
1.0	0.127	1.19	0.150
1.1	0.118	1.19	0.140
1.2	0.106	1.19	0.126
1.3	0.112	1.19	0.134
1.4	0.132	1.19	0.157
1.5	0.126	1.19	0.150
1.6	0.096	1.19	0.114
1.7	0.068	1.19	0.081
1.8	0.046	1.19	0.055
1.9	0.033	1.19	0.039
2.0	0.023	1.19	0.028

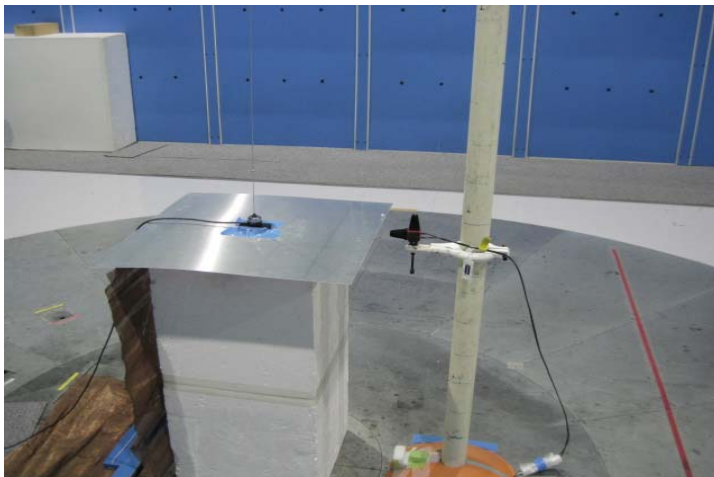
Power Density = Reading Power Density x Probe Factor

**SECTION 3. TEST CONFIGURATION**



\* : The Isotropic probe position was Vertical orientation from the Ground reference plane from 0.1m to 2m (10cm increments) .

**Setup Photos**





**SECTION 4. MEASUREMENT UNCERTAINTY**

30 MHz – 1000 MHz	17.7 % (k=2)
-------------------	--------------

**SECTION 5. LIST OF MEASURING INSTRUMENTS**

Instrument	Model No.	Serial No.	Manufacturer	Cal Date	Cal Due Date
Isotropic probe	HI-6105	00130665	ETS Lindgren	2017/3/24	2018/3/31
Laser data interface	HI 6113	00130903	ETS Lindgren	N/A	N/A
Testing software	ProbeView™ Laser	Version 2.0.8	ETS Lindgren	N/A	N/A