RADIO TEST REPORT

Test Report No. : 10315698S-G

Applicant	:	**FUJIFILM Corporation**
Type of Equipment	:	**Flat Panel Sensor**
Model No.	:	**DR-ID1201SE**
FCC ID	:	**W2Z-01000006**
Test regulation	:	**FCC Part 15 Subpart E: 2014 (DFS test only)**
Test result	:	**Complied**

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3. This sample tested is in compliance with the limits of the above regulation.
4. The test results in this test report are traceable to the national or international standards.
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6. The opinions and the interpretations to the result of the description in this report are outside scopes where Japan has been accredited.

Date of test : September 22, 2014

Representative test engineer:
Tatsuya Arai
Engineer
Consumer Technology Division

Approved by :
Toyokazu Imamura
Leader
Consumer Technology Division

JAB Testing RTL02610

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☒ There is no testing item of "Non-accreditation".

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REVISION HISTORY

Original Test Report No.: 10315698S-G

Revision	Test report No.	Date	Page revised	Contents
- (Original)	10315698S-G	October 28, 2014	-	-
1	10315698S-G	December 12, 2014	4	Correction of Rating

CONTENTS **PAGE**

SECTION 1: Customer information

Company Name	:	FUJIFILM Corporation
Address	:	2-26-30 Nishiazabu Minatoku Tokyo 106-8620, Japan
Telephone Number	:	81-3-6271-1975
Facsimile Number	:	81-3-6271-1189
Contact Person	:	Mitsuyuki Komiya

SECTION 2: Equipment under test (E.U.T.)

2.1 Identification of E.U.T.

Type of Equipment	:	Flat Panel Sensor
Model Number	:	DR-ID1201SE
Serial Number	:	Refer to Section 5.2
Rating	:	DC 8V(Battery)
Country of Mass-production	:	Japan
Condition of EUT	:	Engineering prototype (Not for Sale: This sample is equivalent to mass-produced items.)
Receipt Date of Sample	:	September 9, 2014
Modification of EUT	:	The test lab did not make the modification to the EUT supplied from the customer to have it pass the tests.

2.2 Product description

Model: DR-ID1201SE (referred to as the EUT in this report) is Flat Panel Sensor.
General specification:
Clock frequency(ies) in the system : 40MHz

Radio specification:
Radio Type : Transceiver
Method of Frequency Generation : Synthesizer
Power Supply (inner) : DC3.3V

	IEEE802.11b	**IEEE802.11g**	**IEEE802.11a**	**IEEE802.11n (20M band)**	**IEEE802.11n (40M band)**
Frequency of operation	2412-2462MHz	2412-2462MHz	5180-5320MHz 5500-5700MHz 5745-5825MHz	2412-2462MHz 5180-5320MHz 5500-5700MHz 5745-5825MHz	2422-2452MHz 5190-5310MHz 5510-5670MHz 5755-5795MHz
Type of modulation	DSSS (CCK, DQPSK, DBPSK)	OFDM-CCK (64QAM, 16QAM, QPSK, BPSK)	OFDM (64QAM, 16QAM, QPSK, BPSK)		
Channel spacing	5MHz		20MHz	2.4GHz band 5MHz 5GHz band 20MHz	2.4GHz band 5MHz 5GHz band 40MHz

Antenna	**Antenna #1 (Bottom)**	**Antenna #0 (Side)**
Antenna quantity	2 pcs. (*. Separation distance between the antenna 1 and the antenna: 417mm) 11b,g,a: One selected Tx antenna operation. 11n(20HT),n(40HT): One selected Tx antenna operation (MCS0~7) / Two Tx antenna operation (MCS8~13)	
Antenna model	113Y120035A (cable length: 300mm)	113Y1200036A (cable length: 575mm)
Antenna type / connector type	Monopole antenna / Connector; PCB side: U.FL, Antenna side: soldered	
Antenna gain (max.peak) (excluding cable loss)	-5.1 dBi (2.4GHz), -1.3 dBi (5GHz)	-6.9 dBi (2.4GHz) -1.8 dBi (5GHz)

FCC 15.31 (e)
The EUT is a battery-operated device and test was performed with the full-charged battery.
Therefore, the EUT complies with the requirement.

FCC 15.203
It is impossible for end users to replace the antenna, because the antenna is mounted inside of the EUT. Therefore the EUT complies with the requirement.

SECTION 3: Scope of Report

The EUT has the channels from 5180 to 5320MHz and 5500 to 5700MHz.
This report only covers DFS requirement subject to 5250-5350MHz and 5500 to 5700MHz bands, as specified by the following referenced procedures.

SECTION 4: Test specification, procedures & results

4.1 Test Specification

Test Specification	:	FCC Part 15 Subpart E: 2014, final revised on August 15, 2014 and effective October 14, 2014
Title	:	FCC 47CFR Part15 Radio Frequency Device Subpart E Unlicensed National Information Infrastructure Devices Section 15.407 General technical requirements

* The revision on August 15, 2014 does not affect the test specification applied to the EUT.

Test Specification	:	KDB905462 D02 UNII DFS Compliance Procedures New Rules v01r01
Title	:	COMPLIANCE MEASUREMENT PROCEDURES FOR UNLICENSED-NATIONAL INFORMATION INFRASTRUCTURE DEVICES OPERATING IN THE 5250-5350MHz AND 5470-5725MHz BANDS INCORPORATING DYNAMIC FREQUENCY SELECTION
Test Specification	:	KDB905462 D03 Client Without DFS New Rules v01r01
Title	:	U-NII CLIENT DEVICES WITHOUT RADAR DETECTION CAPABILITY

4.2 Procedures and results

Table 2: Applicability of DFS Requirements

Requirement	Operating Mode Client without Radar Detection	Test Procedures & Limits	Deviation	Results
U-NII Detection Bandwidth	Not required	FCC, KDB 905462 D02 Section 7.8.1	N/A	N/A
Initial Channel Availability Check Time	Not required	FCC15.407 (h)(2) FCC, KDB 905462 D02 Section 7.8.2.1 RSS-210 A9.3	N/A	N/A
Radar Burst at the Beginning of the Channel Availability Check Time	Not required	FCC15.407 (h)(2) FCC, KDB 905462 D02 Section 7.8.2.2 RSS-210 A9.3	N/A	N/A
Radar Burst at the End of the Channel Availability Check Time	Not required	FCC15.407 (h)(2) FCC, KDB 905462 D02 Section 7.8.2.3 RSS-210 A9.3	N/A	N/A
In-Service Monitoring for Channel Move Time, Channel Closing Transmission Time	Yes	FCC15.407 (h)(2) FCC, KDB 905462 D02 Section 7.8.3 RSS-210 A9.3	N/A	Complied
In-Service Monitoring for Non-Occupancy period	Yes *	FCC15.407 (h)(2) FCC, KDB 905462 D02 Section 7.8.3 RSS-210 A9.3	N/A	Complied
Statistical Performance Check	Not required	FCC15.407 (h)(2) FCC, KDB 905462 D02 Section 7.8.4	N/A	N/A

*Although this test was not required in FCC, KDB 905462 D02, it was performed as additional test.

Table 3: DFS Detection Thresholds for Master Devices and Client Devices With Radar

Maximum Transmit Power	Value (See Notes 1, 2 and 3)
E.I.R.P. ≥ 200 milliwatt	-64 dBm
E.I.R.P. < 200 milliwatt and power spectral density < 10dBm/MHz	-62 dBm
E.I.R.P. < 200 milliwatt that do not meet the power spectral density requirement	-64 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna. Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response. Note 3: E.I.R.P. is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.	

Table 4 DFS Response Requirement Values

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth See Note 3
Note 1: The Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. **Note 2:** The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signal will not count quiet periods in between transmissions. **Note 3:** During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.	

Table 5 Short Pulse Radar Test Waveform

Radar Type	Pulse Width (µsec)	PRI (µsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Traials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a	Roundup ((1 / 360) x ((19 x 10^6) / PRI [micro sec.]))	60%	30
		Test B: 15 unique PRI values randomly selected within the range of 518-3066 micro sec., with a minimum increment of 1 micro sec., excluding PRI values selected in Test A			
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Rader Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.					

Table 5a Pulse Repetition Interval Values for Test A

Pulse Repetition Frequency Number	Pulse Repetition Frequency (Pulses Per Second)	Pulse Repetition Interval (Micro seconds)
1	1930.5	518
2	1858.7	538
3	1792.1	558
4	1730.1	578
5	1672.2	598
6	1618.1	618
7	1567.4	638
8	1519.8	658
9	1474.9	678
10	1432.7	698
11	1392.8	718
12	1355	738
13	1319.3	758
14	1285.3	778
15	1253.1	798
16	1222.5	818
17	1193.3	838
18	1165.6	858
19	1139	878
20	1113.6	898
21	1089.3	918
22	1066.1	938
23	326.2	3066

Table 6 Long Pulse Radar Test Waveform

Radar Type	Pulse Width (µsec)	Chip Width (MHz)	PRI (µsec)	Number of Pulses per *Burst*	Number of *Burst*	Minimum Percentage of Successful Detection	Minimum Number of Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

Table 7 Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulse per Hop (kHz)	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Percentage of Successful Detection	Minimum Number of Trials
6	1	333	9	0.333	300	70%	30

4.3 Test Location

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Telephone number : +81 463 50 6400
Facsimile number : +81 463 50 6401

	IC Registration No.	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Maximum measurement distance
☐ No.1 Semi-anechoic chamber	2973D-1	20.6 x 11.3 x 7.65	20.6 x 11.3	10m
☐ No.2 Semi-anechoic chamber	2973D-2	20.6 x 11.3 x 7.65	20.6 x 11.3	10m
☐ No.3 Semi-anechoic chamber	2973D-3	12.7 x 7.7 x 5.35	12.7 x 7.7	5m
☐ No.4 Semi-anechoic chamber	-	8.1 x 5.1 x 3.55	8.1 x 5.1	-
☐ No.1 Shielded room	-	6.8 x 4.1 x 2.7	6.8 x 4.1	-
☐ No.2 Shielded room	-	6.8 x 4.1 x 2.7	6.8 x 4.1	-
☐ No.3 Shielded room	-	6.3 x 4.7 x 2.7	6.3 x 4.7	-
☐ No.4 Shielded room	-	4.4 x 4.7 x 2.7	4.4 x 4.7	-
☒ No.5 Shielded room	-	7.8 x 6.4 x 2.7	7.8 x 6.4	-
☐ No.6 Shielded room	-	7.8 x 6.4 x 2.7	7.8 x 6.4	-
☐ No.1 Measurement room	-	2.55 x 4.1 x 2.5	-	-

4.4 Uncertainty

The following uncertainties have been calculated to provide a confidence level of 95% using a coverage factor k=2.

Time Measurement uncertainty for this test was: (±) 0.012%

4.5 Test set up, Data of DFS test, and Test instruments of DFS

Refer to APPENDIX.

SECTION 5: Operation of E.U.T. during testing

5.1 Operating Modes

The EUT, which is a Client Device without Radar detection capability, operates over the 5260-5320MHz and 5500-5700MHz.

Power level of the EUT [dBm]

Antenna	Band	Output Power (Min)	Output Power(Max)
Monopole Antenna *1)	W53	10.77	14.88
	W56	11.56	17.10

*1) Refer to 10315698S-F FCC Part 15E (FCC 15.407) report for other parts than DFS.

WLAN traffic is generated by the software to ping from the Master to the Client. That software has random ping intervals. (Channel loading was over 17%)
Software name & version: ExPing Version 1.33

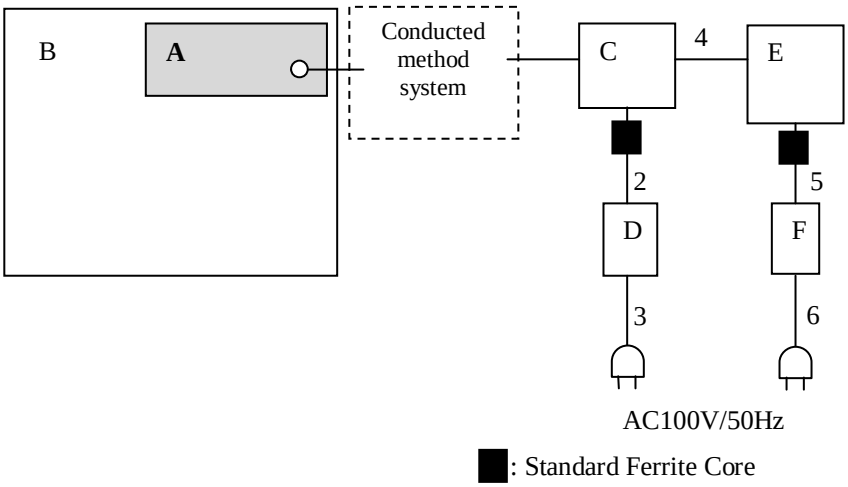
The EUT utilizes the 802.11a and 802.11n architecture, with a nominal channel bandwidth.
The EUT had used IEEE 802.11n (HT40) (widest mode) .

The FCC ID for the Master Device used with EUT for DFS testing is LDK102073.

The rated output power of the Master unit is >200mW(23dBm). Therefore the required interference threshold level is –64 dBm. After correction for antenna gain and procedural adjustments, the required conducted threshold at the antenna port is –64 + 1 + 3.5=-59.5 dBm (threshold level + additional 1dB + antenna gain).

It is impossible for users to change DFS control, because the DFS function is written on the firmware and users cannot access it.

5.2 Configuration and peripherals



Description of EUT and Support equipment

No.	Item	Model number	Serial number	Manufacturer	Remarks
A	Wireless LAN board *1)	SX-PCEAN(FF)	00809261B110	Silex	EUT
B	Flat Panel Sensor	DR-ID 613SE *2)	E321154	Fujifilm	-
C	Wireless LAN access point (Master Device)	AIR-AP1262N-A-K9	FTX1619E5EZ	Cisco Systems	FCC ID: LDK102073
D	AC Adapter	EADP-18MB	DAB1528MANP	Cisco Systems	-
E	Notebook Computer	DELL Vostro V1510	29090510205	Dell	-
F	AC Adaptor	LA65NS1-00	71615-93B-385D	Dell	-

*1) This board is installed DR-ID1201SE.
*2) It was used to operate the Wireless LAN board.

List of cables used

No.	Cable Name	Length (m)	Shield	
			Cable	Connector
2	Access Point DC Power	1.8	Unshielded	Unshielded
3	Access Point AC Power	2.0	Unshielded	Unshielded
4	LAN	3.0	Unshielded	Unshielded
5	DELL PC DC Power	1.8	Unshielded	Unshielded
6	DELL PC AC Power	0.7	Unshielded	Unshielded

5.3 Test and Measurement System

SYSTEM OVERVIEW

The measurement system is based on a conducted test method.

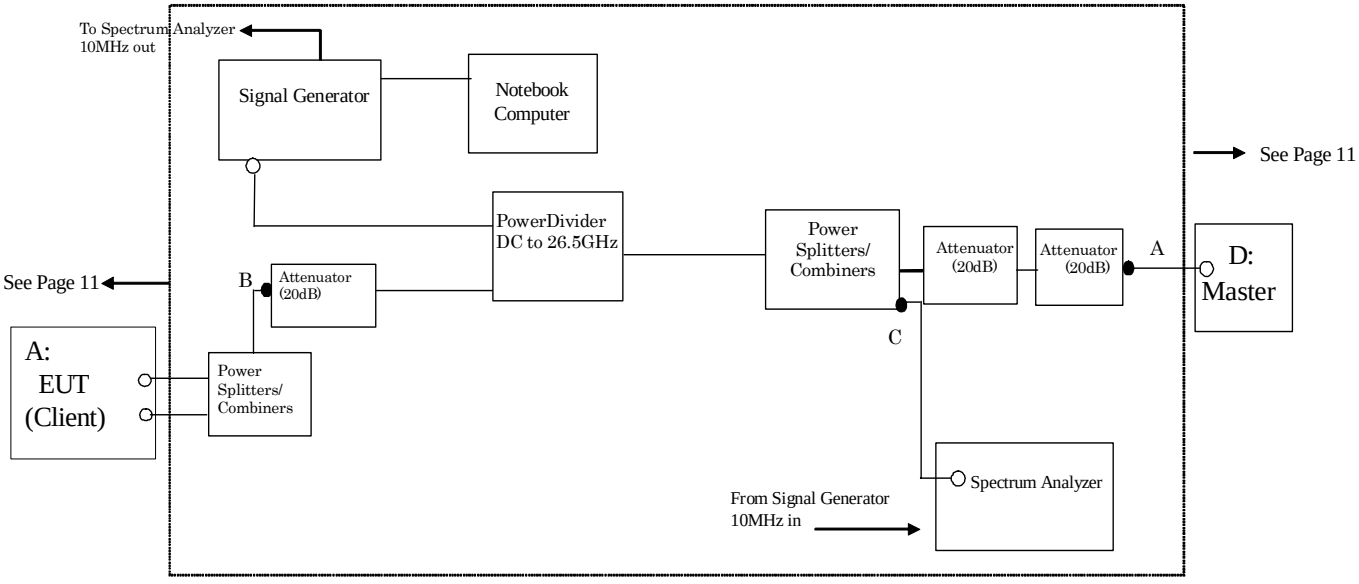
The software selects waveform parameters from within the bounds of the signal type on a random basis using uniform distribution. The short pulse types 2, 3, and 4, the long pulse type 5, and the frequency hopping type 6 parameters are randomized at run-time.

The signal monitoring equipment consists of a spectrum analyzer with the capacity to display 8001 bins on the horizontal axis. A time-domain resolution of 2 msec/bin is achievable with a 16 second sweep time, meeting the 10 seconds short pulse reporting criteria. The aggregate ON time is calculated by multiplying the number of bins above a threshold during a particular observation period by the dwell time per bin, with the analyzer set to peak detection. A time-domain resolution of 3 msec/bin is achievable with a 24 second sweep time, meeting the 22 second long pulse reporting criteria and allowing a minimum of 10 seconds after the end of the long pulse waveform.

FREQUENCY HOPPING RADAR WAVEFORM GENERATING SUBSYSTEM

The first 100 frequencies are selected out of the hopping sequence of the randomized 475 hop frequencies.
Only a *Burst* that has the frequency falling within the receiver bandwidth of the tested U-NII device is selected among those frequencies. (Frequency-domain simulation). The radar waveform generated at the start time of the selected *Burst* (Time-domain simulation) is download to the Signal Generator.
If all of the randomly selected 100 frequencies do not fall within the receiver bandwidth of the U-NII device, the radar waveform is not used for the test.

CONDUCTED METHODS SYSTEM BLOCK DIAGRM



MEASUREMENT SYSTEM FREQUENCY REFERENCE

Lock the signal generator and the spectrum analyzer to the same reference sources as follows: Connect the 10MHz OUT on the signal generator to the 10MHz IN on the spectrum analyzer and set the spectrum analyzer 10MHz In to On.

SYSTEM CALIBRATION

Step 1: Set the system as shown in Figure 3 of FCC, KDB 905462 Section 7.2.2.

Step 2: Adjust each attenuator to fulfill the following three conditions:
- WLAN can be communicated, and
- Rader detection threshold level is bigger than Client Device traffic level on the spectrum analyzer, and
- Master Device traffic level is not displayed on the spectrum analyzer.

Step 3: Terminate 50 ohm at B and C points, and connect the spectrum analyzer to the point A.
(See the figure on page 12)
At the point A, adjust the signal generator and spectrum analyzer to the center frequency of the channel to be measured. Download the applicable radar waveforms to the signal generator. Select the radar waveform, trigger a burst manually and measure the amplitude on the spectrum analyzer. Readjust the amplitude of the signal generator as required so that the peak level of the waveform is at a displayed level equal to the required or desired interference detection threshold. Separate signal generator amplitude settings are determined as required for each radar type.

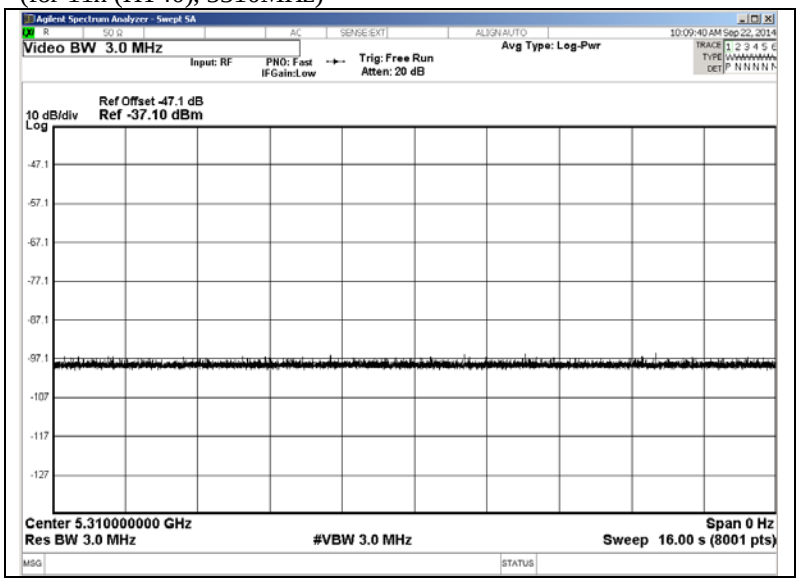
Step 4: Without changing any of the instrument settings, restore the system setting to Step 2 and adjust the Reference Level Offset of the spectrum analyzer to the level at Step 3.

By taking the above steps 1 to 4, the spectrum analyzer displays the level of the signal generator as received at the antenna ports of the Master Device.

See Clause 5.4 for Plots of Noise, Rader Waveforms, and WLAN signals.

5.4 Plots of Noise, Rader Waveforms, and WLAN signals

Plots of System Noise Floor
(for 11n (HT40), 5310MHz)

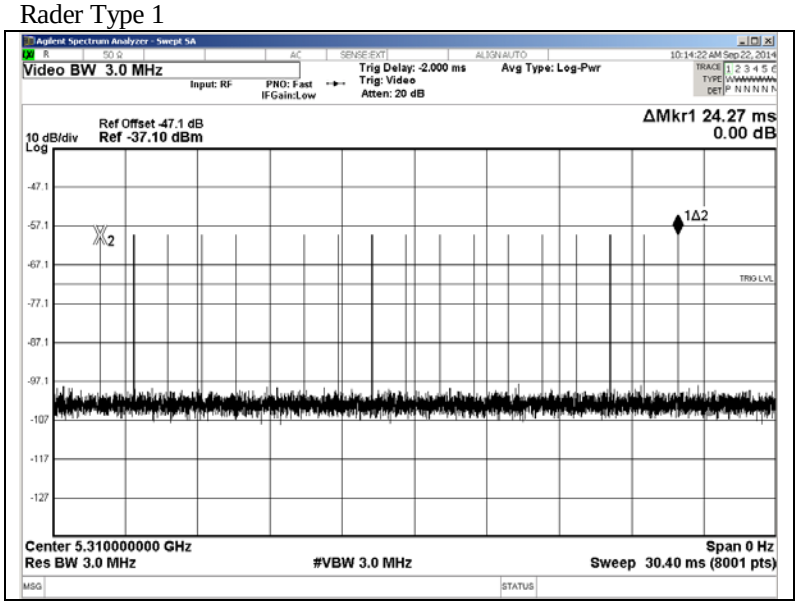


It was confirmed that the EUT did not transmit before having received appropriate control signals from a Master Device.

Plots of Radar Waveforms

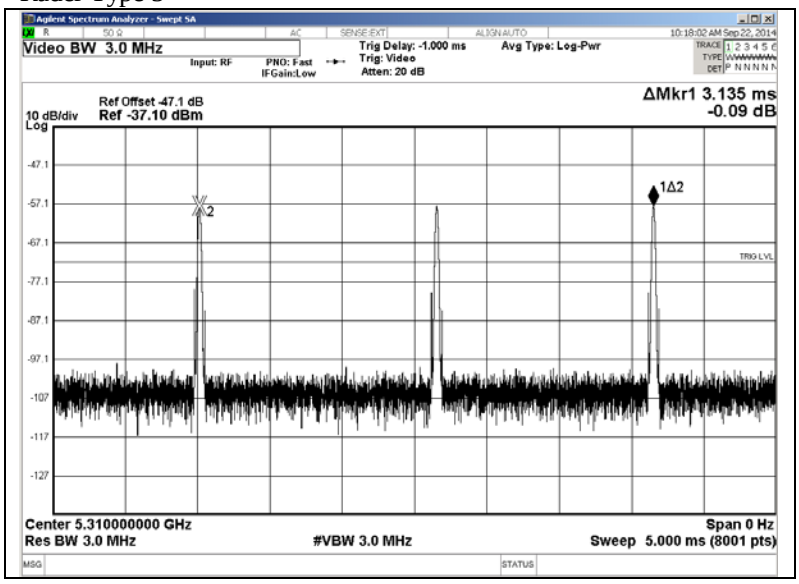
(for 11n (HT40), 5310MHz)

Rader Type 1



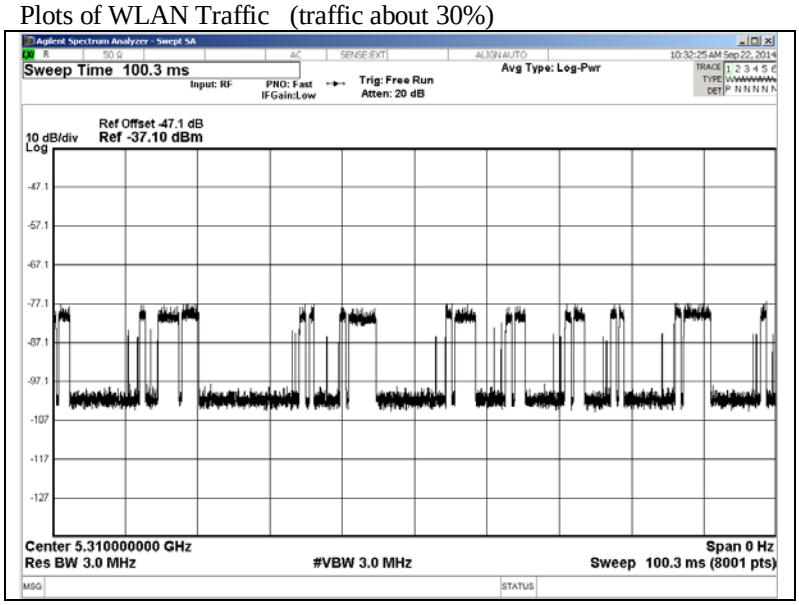
(for 11n (HT40), 5310MHz)

Rader Type 5



(for 11n (HT40), 5310MHz)

Plots of WLAN Traffic (traffic about 30%)



SECTION 6: In-Service Monitoring for Channel Move Time, Channel Closing Transmission Time

6.1 Operating environment

Test place : No.5 Shielded Room
Temperature : 26 deg.C
Humidity : 43 %RH

6.2 Test Procedure

Transfer files from the Master Device to the Client Device on the tested channel during the entire period of the test.
The Radar Waveform generator sends a Burst of pulses for one of the Short Pulse Radar Types 0-4 at levels defined , on the Operating Channel. An additional 1 dB is added to the radar test signal to ensure it is at or above the DFS Detection Threshold, accounting for equipment variations/errors.
Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds.

6.3 Test data

(for 11n (HT40), 5310MHz)

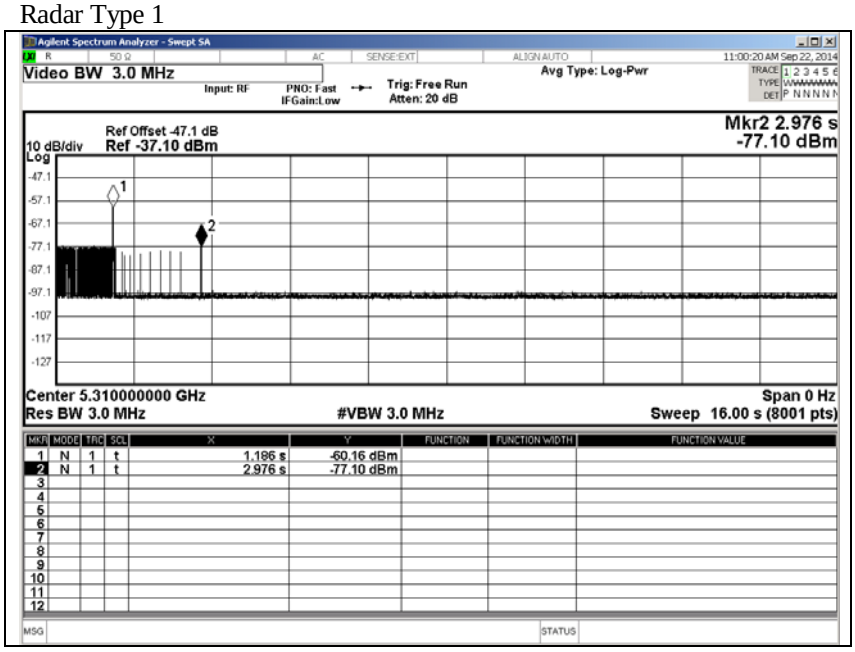
Test Item	Unit	Measurement Time	Limit	Results
Channel Move Time *1)	[sec]	1.790	10.000	Pass
Channel Closing Transmission Time *2)	[msec]	20	60	Pass

*1) Channel Move Time is calculated as follows:
(Channel Move Time) = (End of Transmission) - (End of Burst) = 2.976 – 1.186

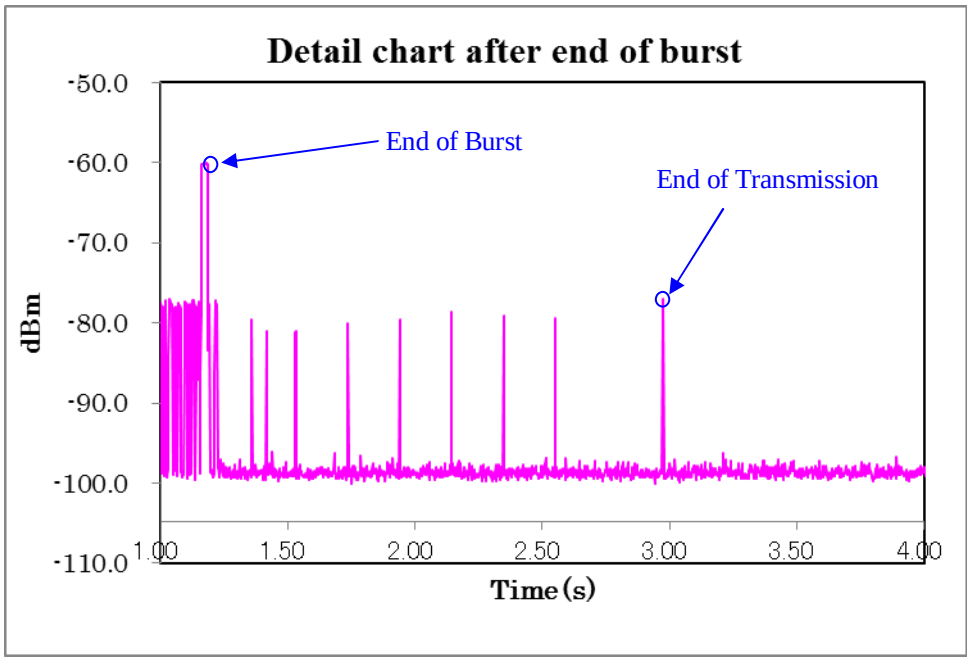
*2) Channel Closing Transmission Time is calculated from (End of Burst + 200msec) to (End of Burst + 10sec)
(Channel Closing Transmission Time) = (Number of analyzer bins showing transmission) * (dwell time per bin)
= 10 x 2 (msec)

(for 11n (HT40), 5310MHz)

Radar Type 1

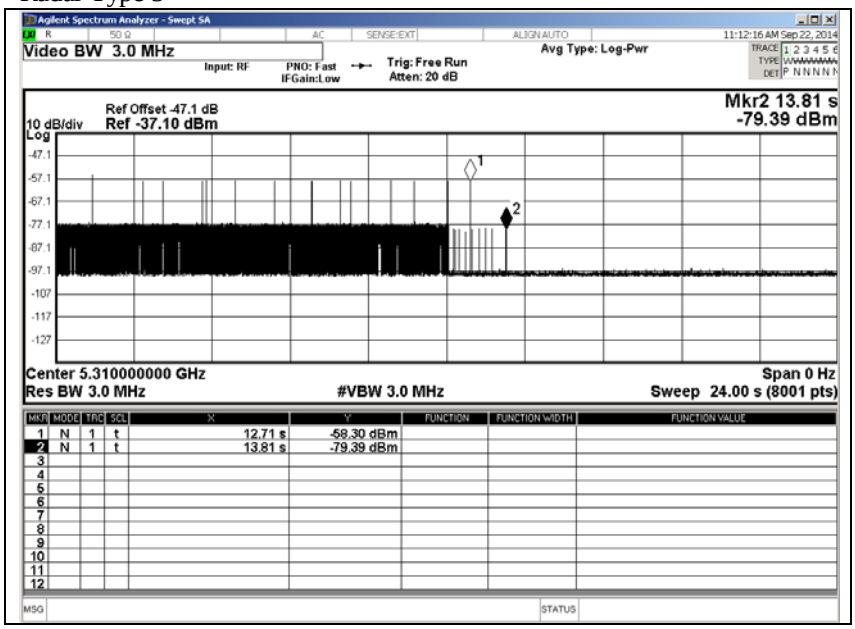


Marker 1: - End of Burst : 1.186 s
Marker 2: - End of Transmission : 2.976 s



(for 11n (HT40), 5310MHz)

Radar Type 5



Marker 1 : End of Burst **: 12710 ms**
Marker 2 : End of Transmission **: 13810ms**

6.4 Test result

Test result: Pass

Date : September 22, 2014 Test engineer : Tatsuya Arai

SECTION 7: In-Service Monitoring for Non-Occupancy Period

7.1 Operating environment

Test place : No.5 Shielded Room
Temperature : 26 deg.C
Humidity : 43 %RH

7.2 Test Procedure

The following two tests are performed:

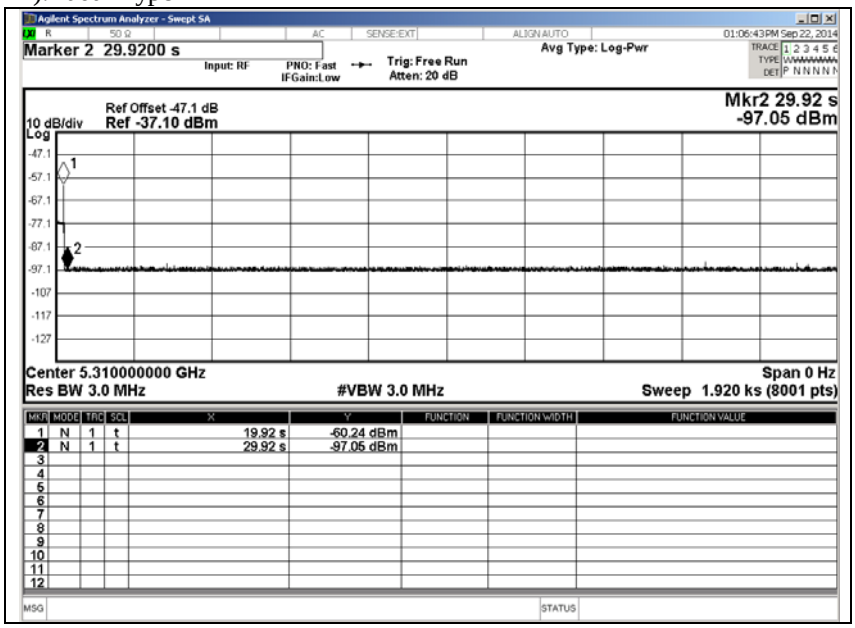
1). Transfer files from the Master Device to the Client Device on the tested channel during the entire period of the test. The Radar Waveform generator sends a Burst of pulses for one of the Radar Types 0-6 at levels defined on the Operating Channel. An additional 1 dB is added to the radar test signal to ensure it is at or above the DFS Detection Threshold, accounting for equipment variations/errors.
Observe the transmissions of the EUT after the Channel Move Time on the Operating Channel for duration greater than 30 minutes.

2). Transfer files from the Master Device to the Client Device on the tested channel during the entire period of the test. Observe the transmissions of the EUT on the Operating Channel for duration greater than 30 minutes after the Master Device is shut off.

7.3 Test data

(for 11n (HT40), 5310MHz)

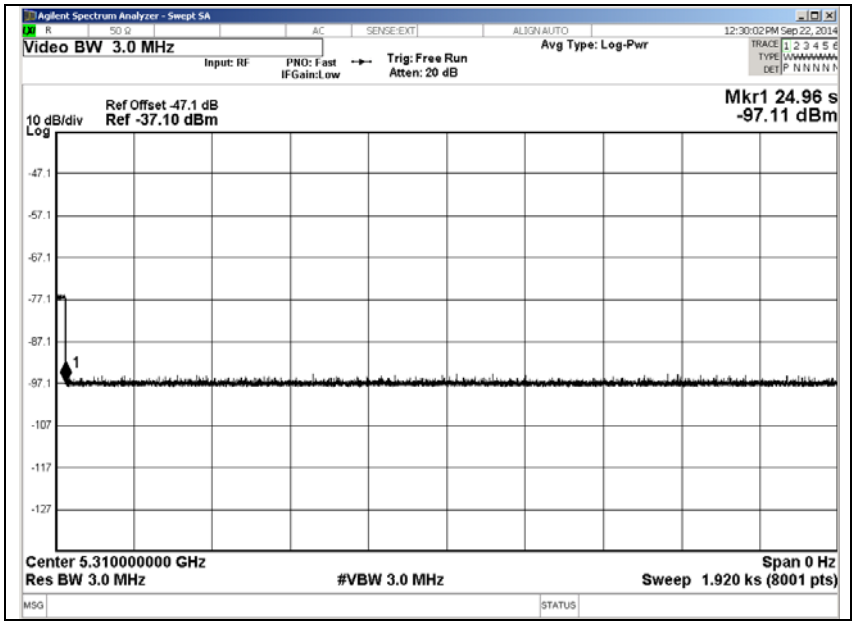
1).Radar Type 1



Marker 1 : End of Burst : 19.92 sec
Marker 2 : End of Burst +10sec : 29.92 sec

2).Master is shut off

(for 11n (HT40), 5310MHz)



Marker 1 : End of transmission : 24.96 sec

7.4 Test result

Test result: Pass

Date : September 22, 2014 Test engineer : Tatsuya Arai

APPENDIX 1: Data of DFS test

Parameter Data for Radar Type 5

Trial Number	Burst	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1-to-2 Spacing (usec)	Pulse 2-to-3 Spacing (usec)	Starting Location Within Interval (usec)
1	1	1	52	8			64
1	2	2	94	7	1535		680793
1	3	3	67	8	1851	1146	452538
1	4	1	50	18			791967
1	5	3	82	14	1511	1064	61930
1	6	2	98	12	1125		95345
1	7	1	76	6			434356
1	8	1	64	16			720311
1	9	1	79	13			728383
1	10	1	61	15			194181
1	11	3	73	16	1638	1497	569650
1	12	2	95	11	1811		434312
1	13	2	50	19	1491		613325
1	14	3	58	13	1254	1098	431579

APPENDIX 2: Test instruments

EMI Test Equipment

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
SSG-01	Signal Generator	Agilent	E4438C	MY47271584	DFS	2014/03/03 * 12
SSA-01	Spectrum Analyzer	Agilent	N9010A-526	MY48031482	DFS	2014/04/07 * 12
SCC-G14	Coaxial Cable	Suhner	SUCOFLEX 102	31600/2	DFS	2014/03/13 * 12
SCC-G32	Coaxial Cable	Junkosha	MWX241-02000KM SKMS	OCT-09-13-005	DFS	2013/10/21 * 12
SCC-G28	Coaxial Cable	Junkosha	MWX241-01000KM SKMS	SEP-20-12-002	DFS	2014/09/16 * 12
SCC-G24	Coaxial Cable	Suhner	141PE	-	DFS	2014/07/10 * 12
SCC-G25	Coaxial Cable	Suhner	141PE	-	DFS	2014/07/10 * 12
SCC-G26	Coaxial Cable	Suhner	141PE	-	DFS	2014/07/10 * 12
SPD-01	Power Divider	Agilent	11636B	56998	DFS	2014/04/22 * 12
SPSC-02	Power Splitters/Combiners	Mini-Circuits	ZFSC-2-10G+	-	DFS	2014/04/22 * 12
SPSC-03	Power Splitters/Combiners	Mini-Circuits	ZFSC-2-10G+	-	DFS	2014/04/22 * 12
SPSC-04	Power Splitters/Combiners	Mini-Circuits	ZN4PD1-63-S+	-	DFS	2014/07/31 * 12
SAT20-03	Attenuator	Agilent	8493C-020	74891	DFS	2014/03/13 * 12
SAT20-06	Attenuator	Weinschel Corp.	54A-20	31506	DFS	2014/04/22 * 12
SAT20-07	Attenuator	Weinschel Corp.	54A-20	31484	DFS	2014/04/22 * 12
STM-G3	Terminator	Weinschel	M1459A	U6569	DFS	2014/07/10 * 12
SOS-09	Humidity Indicator	A&D	AD-5681	4061484	DFS	2014/03/07 * 12

The expiration date of the calibration is the end of the expired month.
As for some calibrations performed after the tested dates, those test equipment have been controlled by means of an unbroken chains of calibrations.

All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or international standards.

Test Item:

DFS: Dynamic Frequency Selection