

TEST REPORT

Report No.: SHE20090001-02IE

Date: 2020-11-27

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Applicant : Leica Geosystems AG
Address of Applicant : Heinrich-Wild-Strasse, CH-9435 Heerbrugg

Product Name : Rugged Windows Field Controller
Model No. : CS30 LTE
Sample No. : E20090001-01#01
E20090001-01#02
FCC ID : RFD-CS30
ISED Number : 3177A-CS30

Standards : FCC CFR47 Part 15, Subpart E
RSS-Gen (Issue 5, March 2019)
RSS-247 (Issue 2, February 2017)

Date of Receipt : 2020-09-03
Date of Test : 2020-09-22 ~ 2020-11-26
Date of Issue : 2020-11-27

Remark:

This report details the results of the testing carried out on one sample, the results contained in this report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

Prepared by: Jennifer Zhou (Jennifer Zhou) Reviewed by: Oliver Xiang (Oliver Xiang) Approved by: Guoyou Chi (Authorized signatory: Guoyou Chi)

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1 General Information

1.1 Testing Laboratory

Company Name	ICAS Testing Technology Service (Shanghai) Co., Ltd.
Address	No.1298 Pingan Rd, Minhang District, Shanghai, China
Telephone	0086 21-51682999
Fax	0086 21-54711112
Homepage	www.icasiso.com

1.2 Details of Application

Company Name	Leica Geosystems AG
Address	Heinrich-Wild-Strasse, CH-9435 Heerbrugg
Contact Person	Tero Huhtala
Telephone	+41 71 727 3422
Email	tero.huhtala@leica-geosystems.com

1.3 Details of EUT

Product Name	Rugged Windows Field Controller
Brand Name	Leica
Model No.	CS30 LTE
FCC ID	RFD-CS30
ISED Number	3177A-CS30
Mode of Operation	WLAN 802.11a/n(HT20/40)/ac(HT20/40/80)
Frequency Range	Band I: 5150 MHz ~ 5250 MHz Band IV: 5725 MHz ~ 5850 MHz
Modulation Type	256QAM, 64QAM, 16QAM, BPSK, QPSK
Channel Bandwidth	802.11a: 20MHz 802.11n: 20MHz, 40MHz 802.11ac: 20MHz, 40MHz, 80MHz
Antenna Type	Internal Antenna
Antenna Gain	4.95dBi
Extreme Temperature Range	-20°C ~ +60°C
Test Voltage	DC 11.1V
Extreme Voltage	Low Voltage: DC 8.25V High Voltage: DC 12.6V
Product Type	Mobile and portable for FCC standard Indoor for IC standard
Hardware version	PCB V0.4

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Software version	R.ED.00.02.03
Test SW Version	BL410_R
RF power setting in TEST SW	DRTU

1.4 Test Methodology

47 CFR Part 15, Subpart C (10-1-16 Edition)	Miscellaneous Wireless Communications Services
KDB Publication 789033 D02 v02r01	Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E
RSS-Gen (Issue 5, March 2019)	General Requirements for Compliance of Radio Apparatus
RSS-247 (Issue 2, February 2017)	Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices
ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices

Note(s):

All test items were verified and recorded according to the standards and without any addition/deviation/exclusion during the test.

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2 Test Condition

2.1 Environmental conditions

Temperature (°C)	18-25
Humidity (%RH)	40-65
Barometric Pressure (mbar)	960-1060

2.2 Equipment List

Name of Equipment	Manufacturer	Model	Serial No.	Cal. Due Date
Spectrum Analyzer	Keysight	N9020B	MY59260184	2021-08-18
Spectrum Analyzer	Rohde & Schwarz	FSV40N	101450	2021-06-08
EMI Test Receiver	Rohde & Schwarz	ESPI3	100173	2021-06-08
EMI Test Receiver	Rohde & Schwarz	ESR 7	101911	2021-06-08
V-network	SCHWARZBECK	NSLK 8127	8127-902	2021-02-20
Wideband Radio Communication Tester	Rohde & Schwarz	CMW 500	100687	2021-08-18
Broadband Antenna	SCHWARZBECK	VULB9163	9163-1037	2021-06-08
Horn Antenna-18G	SCHWARZBECK	BBHA9120D	9120D-1775	2021-06-08
Loop Antenna	SCHWARZBECK	FMZB 1513	N/A	2021-03-19
Horn Antenna-40G	YINGLIAN	LB-180400-KF	N/A	2021-07-26
EMC chamber 9*6*6 (L*W*H)	CHANGNING	966	N/A	2021-06-08
Shielded Enclosure 8*5*4 (L*W*H)	CHANGNING	854	N/A	2021-06-08
Test Software	BL	BL410_E	N/A	N/A

2.3 Measurement Uncertainty

Parameter	Frequency	Uncertainty
Antenna Port Conducted Emission	< 1GHz	± 1.5 dB
	> 1GHz	± 1.5 dB
Radiated Emission	30 MHz – 1 GHz	± 3 dB
	> 1GHz	± 3 dB

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3 Test Set-up and Operation Modes

3.1 Details of Test Mode

Using test software was control EUT work in continuous transmitter and receiver mode. Select test channel as below:
For 802.11a/n(HT20), 802.11ac(VHT20)

Band I (5150 – 5250 MHz)		Band IV (5725 – 5850 MHz)	
Channel	Frequency	Channel	Frequency
The lowest channel(CH36)	5180MHz	The lowest channel(CH149)	5745MHz
The middle channel(CH44)	5220MHz	The middle channel(CH157)	5785MHz
The highest channel(CH48)	5240MHz	The highest channel(CH165)	5825MHz

For 802.11n(HT40), 802.11ac(VHT40)

Band I (5150 – 5250 MHz)		Band IV (5725 – 5850 MHz)	
Channel	Frequency	Channel	Frequency
The lowest channel(CH38)	5190MHz	The lowest channel(CH151)	5755MHz
The highest channel(CH46)	5230MHz	The highest channel(CH159)	5795MHz

For 802.11ac(VHT80)

Band I (5150 – 5250 MHz)		Band IV (5725 – 5850 MHz)	
Channel	Frequency	Channel	Frequency
The lowest channel(CH42)	5210MHz	The lowest channel(CH155)	5775MHz

Through Pre-scan under all rate at lowest channel, the data rate as below table described is the worst case, so we choose these data rate for test.

Type	Data rate
802.11a	24Mbps
802.11n(HT20), 802.11ac(VHT20)	MCS3
802.11n(HT40), 802.11ac(VHT40)	MCS3
802.11ac(VHT80)	MCS3

The basic operation modes are:

- A. On
 - 1. WLAN mode
 - a. Transmitting
 - b. Receiving
- B. Standby

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C. Off

3.2 Special Accessories and Auxiliary Equipment

Description	Manufacturer	Model No.	Serial No.
Laptop	Lenovo	TP00083A	N/A

3.3 Support Software

Description	Manufacturer	Software Name
Software	Intel	DRTU

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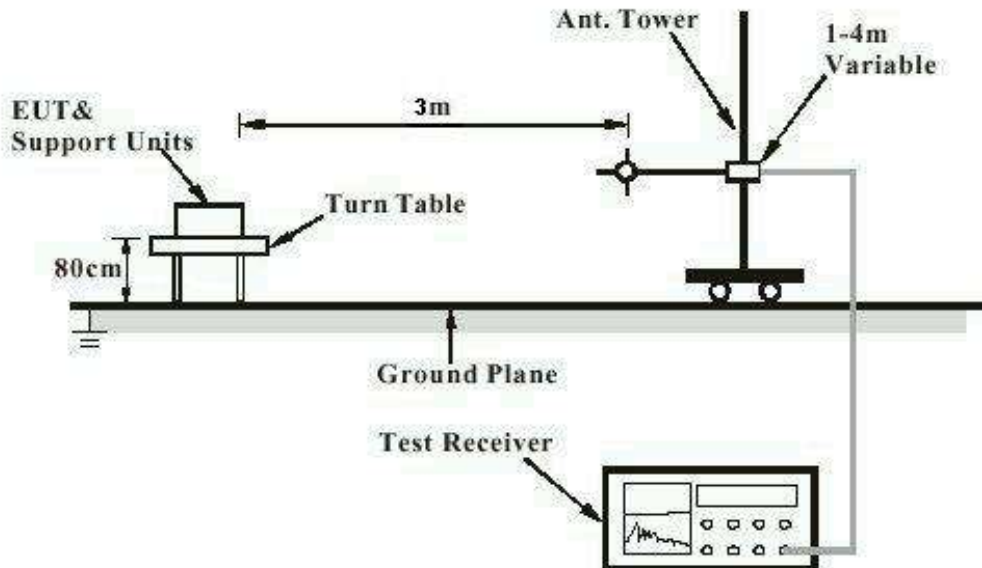
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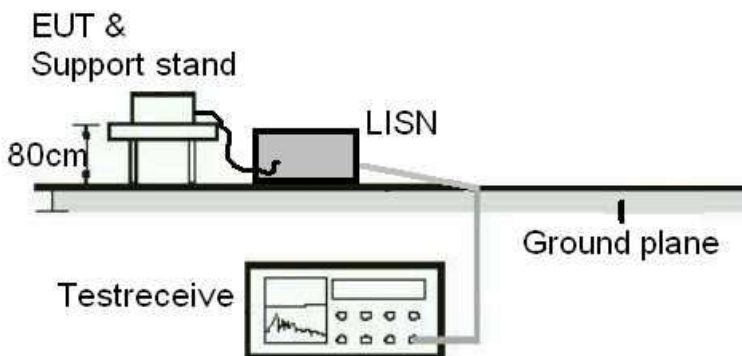
3.4 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test



Note: Measurements above 1GHz are done with a table height of 1.5m. In addition, there is RF absorbing material on the floor of the test site for above 1GHz measurement.

Diagram of Measurement Equipment Configuration for Conduction Measurement



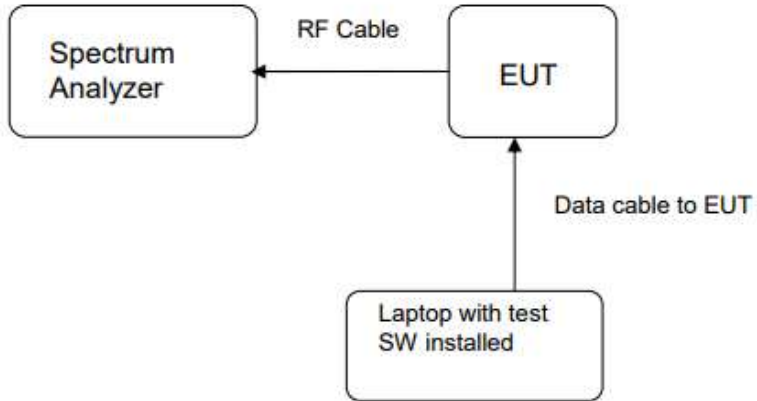
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Diagram of Measurement Equipment Configuration for Transmitter Measurement



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4 Test Results

4.1 Transmitter Requirement & Test Suites

4.1.1 Antenna Requirement

RESULT:

PASS

Test standard : FCC Part 15.407(a), 15.203
RSS-247 6.2

Requirement : The use of approved antennas only with directional gains that do not exceed 6dBi

According to the manufacturer declaration, the EUT has an antenna with a directional gain of 4.95dBi. The antenna is an internal antenna with no possibility of replacement with a non-approved antenna by the end-user.

Therefore, the EUT is considered to comply with this provision.

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4.1.2 Peak Output Power and E.I.R.P

RESULT:

PASS

Test standard : FCC Part 15.407(a)
 RSS-247 6.2
 Requirement : ANSI C63.10-2013, KDB 789033
 Kind of test site : Shielded room

Test setup

Test Channel : Low/Middle/High
 Operation Mode : A.1.a
 Ambient temperature : 23°C
 Relative humidity : 52%

Table 1: Peak Output Power
 Band I (5150 – 5250 MHz)

Test Mode	Test Channel (MHz)	Measured Peak Output Power		FCC Limit (mW)
		(dBm)	(mW)	
802.11a	5180	13.99	25.06	250
	5220	14.18	26.18	
	5240	13.87	24.38	
802.11n(HT20)	5180	13.91	24.60	
	5220	14.30	26.92	
	5240	14.29	26.85	
802.11ac(VHT20)	5180	13.86	24.32	
	5220	14.23	26.49	
	5240	14.16	26.06	
802.11n(HT40)	5190	13.47	22.23	
	5230	13.86	24.32	
802.11ac(VHT40)	5190	13.49	22.34	
	5230	13.41	21.93	
802.11ac(VHT80)	5210	13.13	20.56	

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Band IV (5725 – 5850 MHz)

Test Mode	Test Channel (MHz)	Measured Peak Output Power		FCC/IC Limit (W)
		(dBm)	(mW)	
802.11a	5745	13.26	21.18	1
	5785	12.78	18.97	
	5825	12.17	16.48	
802.11n(HT20)	5745	12.89	19.45	
	5785	12.77	18.92	
	5825	12.39	17.34	
802.11ac(VHT20)	5745	13.26	21.18	
	5785	12.75	18.84	
	5825	12.52	17.86	
802.11n(HT40)	5755	12.73	18.75	
	5795	12.37	17.26	
802.11ac(VHT40)	5755	12.65	18.41	
	5795	12.54	17.95	
802.11ac(VHT80)	5775	12.42	17.46	

Table 2: E.I.R.P

Band I (5150 – 5250 MHz)

Test Mode	Test Channel (MHz)	E.I.R.P		IC Limit (mW)
		(dBm)	(mW)	
802.11a	5180	18.94	78.34	200 mW or 10 dBm + 10log B, which is less
	5220	19.13	81.85	
	5240	18.82	76.21	
802.11n(HT20)	5180	18.86	76.91	
	5220	19.25	84.14	
	5240	19.24	83.95	
802.11ac(VHT20)	5180	18.81	76.03	
	5220	19.18	82.79	
	5240	19.11	81.47	
802.11n(HT40)	5190	18.42	69.50	
	5230	18.81	76.03	
802.11ac(VHT40)	5190	18.44	69.82	
	5230	18.36	68.55	
802.11ac(VHT80)	5210	18.08	64.27	

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Band IV (5725 - 5850 MHz)

Test Mode	Test Channel (MHz)	E.I.R.P		FCC Limit (mW)
		(dBm)	(mW)	
802.11a	5745	18.21	66.22	200 mW or 10 dBm + 10log B, which is less
	5785	17.73	59.29	
	5825	17.12	51.52	
802.11n(HT20)	5745	17.84	60.81	
	5785	17.72	59.16	
	5825	17.34	54.20	
802.11ac(VHT20)	5745	18.21	66.22	
	5785	17.70	58.88	
	5825	17.47	55.85	
802.11n(HT40)	5755	17.68	58.61	
	5795	17.32	53.95	
802.11ac(VHT40)	5755	17.60	57.54	
	5795	17.49	56.10	
802.11ac(VHT80)	5775	17.37	66.22	

Note:

5G antenna peak gain is 4.95dBi

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4.1.3 26dB Bandwidth and 99% Bandwidth

RESULT:

PASS

Test standard : FCC Part 15.407(a)
RSS-247 6.2
Requirement : ANSI C63.10-2013, KDB 789033
Kind of test site : Shielded room

Test setup

Test Channel : Low/Middle/High
Operation Mode : A.1.a
Ambient temperature : 23°C
Relative humidity : 52%

Notes

Test plots please refer to the annex document "WIFI5G EXHIBIT A of SHE20090001-01IE".

Table 3: 26dB Bandwidth and 99% Bandwidth

Band I (5150 – 5250 MHz)

Test Mode	Test Channel (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
802.11a	5180	20.430	16.405
	5220	19.821	16.369
	5240	20.110	16.384
802.11n(HT20)	5180	21.017	17.627
	5220	21.079	17.594
	5240	20.755	17.659
802.11ac(VHT20)	5180	20.901	17.630
	5220	20.969	17.628
	5240	21.151	17.676
802.11n(HT40)	5190	39.765	36.058
	5230	40.091	36.191
802.11ac(VHT40)	5190	41.415	36.091
	5230	40.569	36.106
802.11ac(VHT80)	5210	80.053	75.298

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Band IV (5725 – 5850 MHz)

Test Mode	Test Channel (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
802.11a	5745	19.752	16.415
	5785	19.762	16.402
	5825	20.027	16.448
802.11n(HT20)	5745	21.293	17.585
	5785	20.857	17.624
	5825	21.423	17.614
802.11ac(VHT20)	5745	21.394	17.642
	5785	21.160	17.640
	5825	20.763	17.597
802.11n(HT40)	5755	40.430	36.094
	5795	40.057	36.040
802.11ac(VHT40)	5755	40.220	36.164
	5795	41.203	36.094
802.11ac(VHT80)	5775	80.647	75.253

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4.1.4 6dB Bandwidth

RESULT:

PASS

Test standard : FCC Part 15.407(e)
RSS-247 6.2
Requirement : ANSI C63.10-2013, KDB 789033
Kind of test site : Shielded room

Test setup

Test Channel : Low/Middle/High
Operation Mode : A.1.a
Ambient temperature : 23°C
Relative humidity : 52%

Table 4: 6dB Bandwidth

Band IV (5725 – 5850 MHz)

Test Mode	Test Channel (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
802.11a	5745	15.820	0.5
	5785	15.520	
	5825	15.820	
802.11n(HT20)	5745	17.670	
	5785	17.620	
	5825	13.920	
802.11ac(VHT20)	5745	16.870	
	5785	15.970	
	5825	15.420	
802.11n(HT40)	5755	32.720	
	5795	35.170	
802.11ac(VHT40)	5755	35.172	
	5795	35.420	
802.11ac(VHT80)	5775	75.220	

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Figure 1: 6dB Bandwidth, 802.11a, 5745MHz



Figure 2: 6dB Bandwidth, 802.11a, 5785MHz



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Figure 3: 6dB Bandwidth, 802.11a, 5825MHz



Figure 4: 6dB Bandwidth, 802.11n(HT20), 5745MHz



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Figure 7: 6dB Bandwidth, 802.11ac(VHT20), 5745MHz



Figure 8: 6dB Bandwidth, 802.11ac(VHT20), 5785MHz



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Figure 9: 6dB Bandwidth, 802.11ac(VHT20), 5825MHz



Figure 10: 6dB Bandwidth, 802.11n(HT40), 5755MHz



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Figure 13: 6dB Bandwidth, 802.11ac(VHT40), 5795MHz



Figure 14: 6dB Bandwidth, 802.11ac(VHT80), 5775MHz



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4.1.5 Power Spectral Density

RESULT:

PASS

Test standard : FCC Part 15.407(a)
 RSS-247 6.2
 Requirement : ANSI C63.10-2013, KDB 789033
 Kind of test site : Shielded room

Test setup

Test Channel : Low/Middle/High
 Operation Mode : A.1.a
 Ambient temperature : 23°C
 Relative humidity : 52%

Notes

Test plots please refer to the annex document "WIFI5G PSD EXHIBIT A of SHE20090001-02IE".

Table 5: Power Spectral Density

Band I (5150 – 5250 MHz)

Test Mode	Test Channel (MHz)	PSD (dBm/MHz)	FCC Limit (dBm/MHz)
802.11a	5180	3.63	11
	5220	4.22	
	5240	3.53	
802.11n(HT20)	5180	3.16	
	5220	2.29	
	5240	3.15	
802.11ac(VHT20)	5180	2.67	
	5220	2.76	
	5240	3.59	
802.11n(HT40)	5190	-0.59	
	5230	-0.44	
802.11ac(VHT40)	5190	2.08	
	5230	1.87	
802.11ac(VHT80)	5210	1.17	

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Band IV (5725 – 5850 MHz)

Test Mode	Test Channel (MHz)	PSD (dBm/500KHz)	FCC/IC Limit (dBm/500KHz)
802.11a	5745	5.02	30
	5785	5.21	
	5825	4.24	
802.11n(HT20)	5745	4.31	
	5785	3.77	
	5825	3.38	
802.11ac(VHT20)	5745	4.65	
	5785	4.35	
	5825	4.18	
802.11n(HT40)	5755	1.43	
	5795	0.36	
802.11ac(VHT40)	5755	0.91	
	5795	0.12	
802.11ac(VHT80)	5775	-2.97	

Band I (5150 – 5250 MHz)

Test Mode	Test Channel (MHz)	EIRP PSD (dBm/MHz)	IC Limit (dBm/MHz)
802.11a	5180	8.58	10
	5220	9.17	
	5240	8.48	
802.11n(HT20)	5180	8.11	
	5220	7.24	
	5240	8.1	
802.11ac(VHT20)	5180	7.62	
	5220	7.71	
	5240	8.54	
802.11n(HT40)	5190	4.36	
	5230	4.51	
802.11ac(VHT40)	5190	7.03	
	5230	6.82	

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802.11ac(VHT80)	5210	6.12	
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4.1.6 Undesirable Emission

RESULT:

PASS

Test standard : FCC Part 15.407(b), 15.209
RSS-247 6.2
Requirement : ANSI C63.10-2013, KDB 789033
Kind of test site : Shielded room

Test setup

Test Channel : Low/Middle/High
Operation Mode : A.1.a
Ambient temperature : 23°C
Relative humidity : 52%

Notes:

Test plots please refer to the annex document "WLAN 5GHz-TX CSE EXHIBIT A of SHE20090001-02IE".

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4.1.7 Spurious Emission

RESULT:

PASS

Test standard : FCC Part 15.407(b)
RSS-247 6.2
Requirement : ANSI C63.10-2013
Kind of test site : 3m Semi-Anechoic Chamber

Test setup

Test Channel : Low/Middle/High
Operation Mode : A
Ambient temperature : 23°C
Relative humidity : 52%

Notes:

Test plots please refer to the annex document "WIFI5GHz-TX EXHIBIT A of SHE20090001-02IE"

1. For 9 kHz ~ 30 MHz, the amplitude of spurious emissions that are attenuated by more than 20dB below the permissible. The value has no need to be reported.
2. The spurious above 18GHz is noise only and 20dB below the limit. The value has no need to be reported.
3. The EUT is working in the Normal link mode below 1 GHz.

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4.1.8 Band Edge (Restricted-band band-edge)

RESULT:

PASS

Test standard : FCC Part 15.407(b)
RSS-247 6.2
Requirement : ANSI C63.10-2013, KDB 789033
Kind of test site : 3m Semi-Anechoic Chamber

Test setup

Test Channel : Low/Middle/High
Operation Mode : A.1
Ambient temperature : 23°C
Relative humidity : 52%

Notes:

Test plots please refer to the annex document "WIFI5GHz-TX EXHIBIT A of SHE20090001-02IE"

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4.1.9 Frequency Stability

RESULT:

PASS

Test standard : FCC Part 15.407(g)
 Kind of test site : Shielded room

Test setup

Test Channel : Low/Middle/High
 Operation Mode : A.1
 Ambient temperature : 23°C
 Relative humidity : 52%

Table 6: Frequency Stability

Band I (5150 – 5250 MHz):

Voltage vs. Frequency Stability (5180MHz)

Test Conditions		Frequency (MHz)	Max. Deviation (ppm)	Limit (ppm)
Temp (°C)	Voltage (V)			
23	8.25 V	5179.9769	4.459	±20
	11.10 V	5179.9768	4.479	
	12.60 V	5179.9769	4.730	

Temperature vs. Frequency Stability (5180MHz)

Test Conditions		Frequency (MHz)	Max. Deviation (ppm)	Limit (ppm)
Voltage (V)	Temp (°C)			
11.1 V	-30	--	--	±20
	-20	5179.9767	4.498	
	-10	5179.9763	4.575	
	0	5179.9775	4.344	
	10	5179.9773	4.382	
	20	5179.9783	4.189	
	30	5179.9756	4.710	
	40	5179.9746	4.903	
	50	5179.9752	4.788	

Note:

The all configurations were tested respectively, but only the worst channel shown here.

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Band IV (5725 – 5850 MHz):

Voltage vs. Frequency Stability (5745MHz)

Test Conditions		Frequency (MHz)	Max. Deviation (ppm)	Limit (ppm)
Temp (°C)	Voltage (V)			
23	8.25 V	5744.9739	4.543	±20
	11.10 V	5744.9754	4.282	
	12.60 V	5744.9745	4.439	

Temperature vs. Frequency Stability (5745MHz)

Test Conditions		Frequency (MHz)	Max. Deviation (ppm)	Limit (ppm)
Voltage (V)	Temp (°C)			
11.1 V	-30	--	--	±20
	-20	5744.9733	4.648	
	-10	5744.9748	4.386	
	0	5744.9764	4.108	
	10	5744.9757	4.230	
	20	5744.9731	4.682	
	30	5744.9744	4.456	
	40	5744.9756	4.247	
	50	5744.9739	4.543	

Note:

The all configurations were tested respectively, but only the worst channel shown here.

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4.2 Mains Emissions

4.2.1 Conducted Emission on AC Mains

RESULT:

PASS

Test standard : FCC Part 15.207

RSS-Gen 8.8

Requirement : ANSI C63.10-2013

Kind of test site : Shielded room

Test setup

Input Voltage : AC 120V, 60Hz; AC 240V, 50Hz

Operation Mode : Normal Link

Earthing : Not Connected

Ambient temperature : 23°C

Relative humidity : 52%

For details refer to following test plot.

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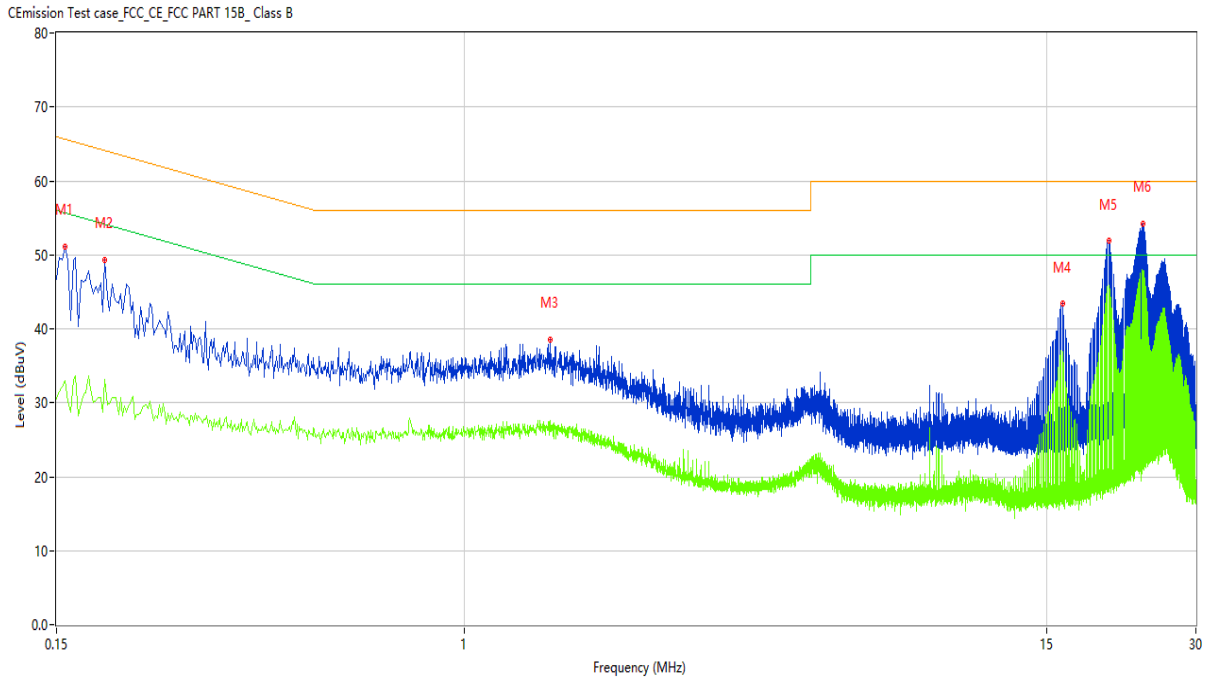
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Note:

The all configurations were tested respectively, but only the worst configuration shown here.

Figure 1: Conducted Emission on AC Mains, L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.150	54.54	10.15	66.00	-11.46	Peak	L	Pass
1*	0.150	47.45	10.15	66.00	-18.55	QP	L	Pass
1**	0.150	30.53	10.15	56.00	-25.47	AV	L	Pass
2	0.188	50.45	10.15	64.12	-13.67	Peak	L	Pass
2*	0.188	42.41	10.15	64.12	-21.71	QP	L	Pass
2**	0.188	33.19	10.15	54.12	-20.93	AV	L	Pass
3	1.488	33.58	10.16	56.00	-22.42	Peak	L	Pass
3*	1.488	23.91	10.16	56.00	-32.09	QP	L	Pass
3**	1.488	27.57	10.16	46.00	-18.43	AV	L	Pass
4	16.140	37.34	10.44	60.00	-22.66	Peak	L	Pass
4*	16.140	26.39	10.44	60.00	-33.61	QP	L	Pass
4**	16.140	33.21	10.44	50.00	-16.79	AV	L	Pass
5	20.002	50.34	10.43	60.00	-9.66	Peak	L	Pass
5*	20.002	40.25	10.43	60.00	-19.75	QP	L	Pass
5**	20.002	45.30	10.43	50.00	-4.70	AV	L	Pass
6	23.422	54.55	10.46	60.00	-5.45	Peak	L	Pass
6*	23.422	44.56	10.46	60.00	-15.44	QP	L	Pass

Figure 72: Conducted Emission on AC Mains, N Phase

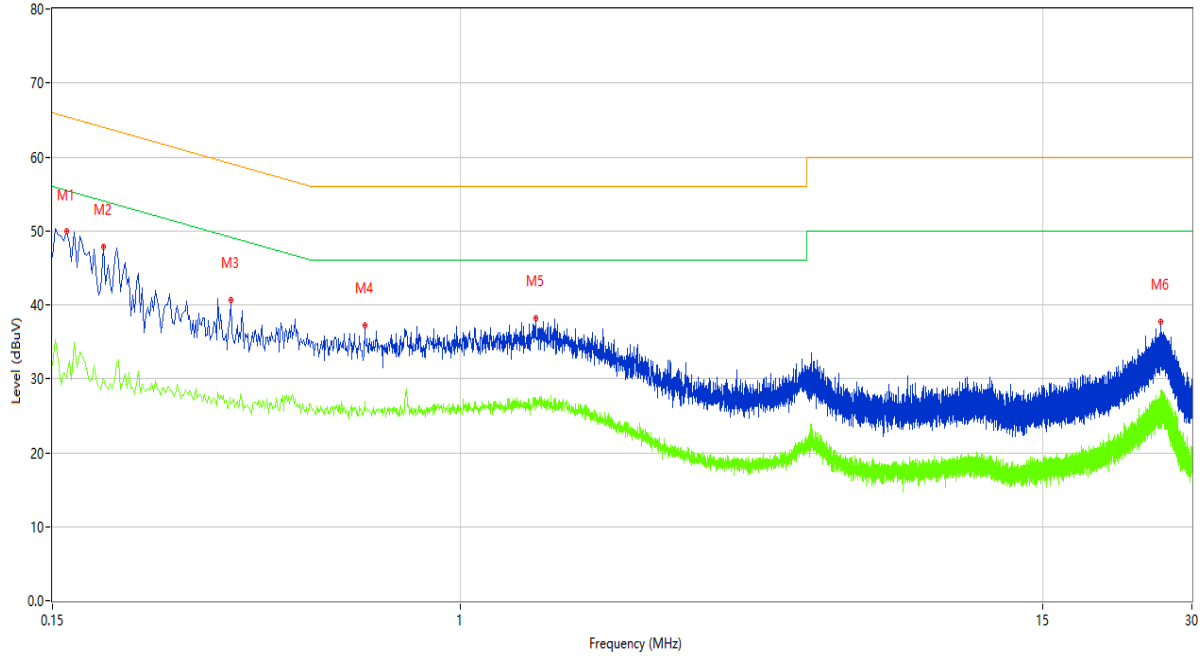
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CEmission Test case_FCC_CE_FCC PART 15B_Class B



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.160	53.88	10.15	65.46	-11.58	Peak	N	Pass
1*	0.160	47.04	10.15	65.46	-18.42	QP	N	Pass
1**	0.160	30.17	10.15	55.46	-25.29	AV	N	Pass
2	0.190	49.15	10.15	64.04	-14.89	Peak	N	Pass
2*	0.190	41.83	10.15	64.04	-22.21	QP	N	Pass
2**	0.190	30.07	10.15	54.04	-23.97	AV	N	Pass
3	0.344	37.12	10.14	59.11	-21.99	Peak	N	Pass
3*	0.344	27.01	10.14	59.11	-32.10	QP	N	Pass
3**	0.344	26.64	10.14	49.11	-22.47	AV	N	Pass
4	0.640	31.86	10.15	56.00	-24.14	Peak	N	Pass
4*	0.640	22.63	10.15	56.00	-33.37	QP	N	Pass
4**	0.640	26.86	10.15	46.00	-19.14	AV	N	Pass
5	1.418	33.96	10.16	56.00	-22.04	Peak	N	Pass
5*	1.418	24.34	10.16	56.00	-31.66	QP	N	Pass
5**	1.418	27.40	10.16	46.00	-18.60	AV	N	Pass
6	25.990	36.99	10.51	60.00	-23.01	Peak	N	Pass
6*	25.990	31.32	10.51	60.00	-28.68	QP	N	Pass
6**	25.990	28.38	10.51	50.00	-21.62	AV	N	Pass

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5 Appendixes

5.1 Photographs of the Sample



Front of the sample



Rear of the sample

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5.2 Set-up for Conducted Emissions



5.3 Set-up for Conducted RF test at Antenna Port



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5.4 Set-up for Spurious Emissions below 1GHz



Below 1 GHz

5.5 Set-up for Spurious Emissions above 1GHz



Above 1GHz

End of the report