

## FCC/IC TEST REPORT

# According to CFR47 §15.247 & RSS-247 Issue 2

Applicant	: Mitac Digital Technology Corporation
Address	: No. 200, Wen Hwa 2nd Rd., Kuei Shan Dist. 33383 Taoyuan City,TAIWAN
Manufacturer	: Mitac Computer (Kunshan) Co., Ltd.
Addroop	No. 269, 2nd Avenue, District A, Comprehensive Free Trade Zone, 215300
Address	Kunshan, Jiangsu, PEOPLES REPUBLIC OF CHINA
Equipment	: Tablet
Model No.	: N642
FCC ID	: P4Q-N642-M1000
IC	: 2420C-N642-M1000
Test Period	: July 25, 2019~ October 11, 2019

■ The test result refers exclusively to the test presented test model / sample.

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■ The test report must not be used by the clients to claim product certification approval by any agency of the Government.

#### I HEREBY CERTIFY THAT :

The measurements shown in this test report were made in accordance with the procedures given in **ANSI C63.10 – 2013 & FCC Part15.247 & RSS-247 Issue 2** and the energy emitted by this equipment was *passed.* 

TAF LAB Code:

Approved by:

Laboratory Accreditation: Cerpass Technology Corporation Test Laboratory

1439

Miro Chueh EMC/RF Manager

 $Cerpass \; \mbox{Technology} \; (SuZhou) \; Co., \; \mbox{Ltd}.$ 

A2LA LAB Code: 4981.01



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## History of this Test Report

Report No.	Version	Issue Date	Description
SEFC1907033	Rev 01	Oct.12, 2019	Original





## 1. Test Configuration of Equipment under Test

#### 1.1 Feature of Equipment under Test

ЕИТ Туре		Tablet		
Model Name		N642		
Wireless Modu	ıle	Qualcomm WCN3660B		
TX Frequency	Range	2.4GHz: 2400MHz ~ 2483.5MHz		
Number of Cha	annel	2.4GHz		
		BT-BDR(GFSK): 79, BT-EDR(Pi/4 DQPSK): 79, BT-EDR(8DPSK): 79		
		BT-LE(GFSK): 40		
		802.11b/g, 802.11n-HT20:13		
		802.11n-HT40: 9		
Type of Modula	ation	BT-BDR(GFSK), BT-EDR(Pi/4 DQPSK), BT-EDR(8DPSK) for FHSS		
		BT-LE (GFSK) for DTS		
		DBPSK, DQPSK, CCK for DSSS in 802.11b mode		
		BPSK, QPSK, 16-QAM, 64-QAM for OFDM in 802.11g/n mode		
Data Rate		BT-BDR(GFSK): 1Mbps, BT-EDR(Pi/4 DQPSK): 2Mbps, BT-EDR(8DPSK) :		
		3Mbps, BT-LE(GFSK): 1Mbps		
		802.11b: up to 11Mbps, 802.11g: up to 54Mbps, 802.11n: up to MCS7		
Antenna Type		IFA		
Antenna Peak	Gain	2.4~2.4835GHz: 4.35dBi		
Device Catego	ry	Mobile		
RF Exposure E	Environment	General Population/ Uncontrolled		
Power	<b>Yower Model:</b> CVW120200			
supply1	Input:	100-240V~1.2A 50-60Hz 0.75A		
	Output:	DC 12V2.0A		
Power	Model:	POE-GTI-3556ND4		
supply2	Input:	100-240V		
	Output:	DC 56V0.625A		

#### **1.2 Description of Antenna**

Manufacturer	Model	Specification
Awan	MIC-N642 Locking WIFI	IFA Antenna for WIFI 802.11a/b/g application



## **1.3 Working Frequencies**

302.11b, 802.11g, 802.11n(20MHz)				
Channel	Frequency(MHz)	Channel	Frequency(MHz)	
01	2412	08	2447	
02	2417	09	2452	
03	2422	10	2457	
04	2427	11	2462	
05	2432			
06	2437			
07	2442			

## 802.11n(40MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
01		08	2447
02		09	2452
03	2422		
04	2427		
05	2432		
06	2437		
07	2442		



#### **1.4 Power Parameter Value**

Ch.	Freq(MHz)	802.11b	802.11g	802.11n HT20	802.11n HT40
1	2412	21	21	21	
3	2422				21
6	2437	21	21	21	21
9	2452				21
11	2462	21	21	21	



#### 1.5 The Worst Transmission Mode

#### Test Mode

Mode 1: Transmit by 802.11b 1Mbps

Mode 2: Transmit by 802.11g 6Mbps

Mode 3: Transmit by 802.11n (20MHz) 6.5Mbps

Mode 4: Transmit by 802.11n (40MHz) 13.5Mbps



## 1.6 Duty Cycle

Test Item	Duty cycle

Mode	Frequency (MHz)	Measurement (%)
802.11b	2437	100
802.11g	2437	100
802.11n(20MHz)	2437	100
802.11n(40MHz)	2437	100





#### 1.7 Test Manner

Те	Test Manner		
а	Setup the EUT and simulators according to ANSI C63.10		
b	Turn on the power of equipment.		
с	Access the test software, set the test mode and test channel, then start to test.		

Note: Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.



## 2. Technical Test

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#### 2.1 Summary of Test Result

 $\boxtimes$  No deviations from the test standards

Deviations from the test standards as below description:

FCC/IC Part Section(s)	Test Description	Test Result	
FCC CFR Title 47 Part 15 Subpart C: 2019 Section 15 207			
BSS-Gen Issue 4 November 2014	Conducted Emission	Compliance	
Section 8.8			
FCC CFR Title 47 Part 15 Subpart C: 2019			
Section 15.209			
RSS-Gen Issue 4 November 2014	Radiated Emission	Compliance	
Section 8.9			
FCC CFR Title 47 Part 15 Subpart C: 2019			
Section 15.247(d)		Compliance	
RSS-247 Issue 2 February 2017	RF Antenna Conducted Spurious	Compliance	
Section 5.5			
FCC CFR Title 47 Part 15 Subpart C: 2019			
15.247(d)	Padiated Emission Pand Edge	Compliance	
RSS-247 Issue 2 February 2017	hadiated Emission Band Edge		
Section 5.5			
FCC CFR Title 47 Part 15 Subpart C: 2019	Operation Frequency Range of	Compliance	
15.215(c)	20dB Bandwidth	Compliance	
FCC CFR Title 47 Part 15 Subpart C: 2019			
Section 15.247(a)(2)	Occupied Bandwidth	Compliance	
RSS-247 Issue 2 February 2017	Occupied Bandwidth	Compliance	
Section 5.2(a)			
FCC CFR Title 47 Part 15 Subpart C: 2019			
Section 15.247(b)(3)	Output Rowor	Compliance	
RSS-247 Issue 2 February 2017	Output Fower	Compliance	
Section 5.4(d)			
FCC CFR Title 47 Part 15 Subpart C: 2019			
Section 15.247(e)	Power Spectral Depaity	Compliance	
RSS-247 Issue 2 February 2017	Fower Spectral Density	Compliance	
Section 5.2(b)			



#### 2.2 General Information of Test

		Cerpass Technology Corporation Test Laboratory
		Address: No.10, Ln. 2, Lianfu St., Luzhu Dist., Taoyuan City 33848,
	Test Site	Taiwan (R.O.C.)
		Tel:+886-3-3226-888
		Fax:+886-3-3226-881
		Address: No.68-1, Shihbachongsi, Shihding Township,
		New Taipei City 223, Taiwan, R.O.C.
		Tel: +886-2-2663-8582
	TAF	1439
	FCC	TW1079, TW1061
	IC	4934E-1, 4934E-2
		T-2205 for Telecommunication Test
	VCCI	C-4663 for Conducted emission test
	1001	R-4399, R-4218 for Radiated emission test
		G-812, G-813 for radiated disturbance above 1GHz
		Cerpass Technology (Suzhou) Co.,Ltd
		Address: No.66, Tangzhuang Road, Suzhou Industrial Park, Jiangsu
	Test Site	215006, China
		Tel: +86-512-6917-5888
$\boxtimes$		Fax: +86-512-6917-5666
	CNAS	L5515
	FCC	CN1243
	A2LA	4981.01
	IC	7290A-1, 7290A-2
		T-1945 for Telecommunication Test
	VCCI	C-12919 for Conducted emission test
		R-12670 for Radiated emission test
		G-227 for radiated disturbance above 1GHz



## 2.3 Measuring Equipment

Instrument/Ancillary	Manufacturer Model No. Se		Serial No.	Calibration Date	Due Date.	
EMI Test Receiver	R&S	ESCI	101183	2019.06.28	2020.06.27	
Preamplifier	HP	8447F	3113A05915	2019.02.25	2020. 02.24	
Preamplifier	FIELD	AFS44-00101800 -25-10P-44	1579008	2018.10.14	2019.10.13	
Rilog Antonna	Sunol	IR1	A070414 1	2010 06 26	2020 06 26	
bilog Antenna	Science	561	A072414-1	2019.00.20	2020.06.26	
Spectrum Analyzer	Agilent	N9010A	MY45118947	2019.10.10	2020.10.09	
Temperature/ Humidity Meter	mingle	ETH529	N/A	2019.02.25	2020. 02.24	
Spectrum Analyzer	R&S	FSP40	100047	2019.03.07	2020.03.06	
PREAMPLIFIER	AGILENT	8449B	3008A01954	2019.03.05	2020.03.04	
HORN ANTENNA	EMCO	3115	31589	2019.03.09	2020.03.08	
HIGH PASS FILTER	HP	84300-80038	002	2019.03.05	2020.03.04	
SERIES POWER METER	ANRITSU	ML2495A	1224005	2019.03.05	2020.03.04	
POWER SENSOR	ANRITSU	MA2411B	1207295	2019.03.05	2020.03.04	
Bluetooth Tester	R&S	CBT	101133	2019.03.12	2020.03.11	





#### 2.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2).

#### **RF Conducted Measurement**

Test Item		Uncertainty	Limit
Radio Frequency		±8.7X10 <sup>-7</sup>	±1X10 <sup>-5</sup>
RF output power, condu	cted	±0.63dB	±1.5dB
Power density, conducte	ed	±1.21dB	±3dB
Unwanted emissions,	30-1000MHz	±0.51dB	±3dB
conducted	1-25GHz	±0.67dB	±3dB
All emissions, radiated	30-1000MHz	±2.28dB	±6dB
	1-25GHz	±2.59dB	±6dB
Temperature		±0.8°C	±1°C
Humidity		±3%	±5%
DC and low frequency v	oltages	±3%	±3%

#### **AC Conducted Measurement**

Measurement	Frequency	Uncertainty		
Conducted emissions(LINE)	9KHz-30MHz	+/- 0.7738 dB		
Conducted emissions(NEUTRAL)	9KHz-30MHz	+/- 0.7886 dB		
Conducted emissions(10Mbps)	150KHz-30MHz	+/- 1.3013dB		
Conducted emissions(100Mbps)	150KHz-30MHz	+/- 1.3197 dB		
Conducted emissions(1000Mbps)	150KHz-30MHz	+/- 1.2987 dB		

#### **Radiated Measurement**

Measurement	Polarity	Frequency	Uncertainty
	Horizontal	below 1GHz	+/- 3.8936 dB
Radiated	Vertical	below 1GHz	+/- 3.8928 dB
emissions	Horizontal	above 1GHz	+/- 5.18858dB
	Vertical	above 1GHz	+/- 5.18928 dB



## 3. AC Conducted Emission Measurement

#### 3.1 Test Limit

Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 KHz on the 120 VAC power and return leads of the EUT according to the methods defined in ANSI C63.10-2013 Section 6.2. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane as shown in section 6.2.2. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

FCC Part 15 Subpart C Paragraph 15.207 Limits								
Frequency (MHz)Quasi Peak (dB $\mu$ V)Average (dB $\mu$ V)								
0.15 – 0.5	66-56*	56-46*						
0.5 - 5.0	56	46						
5.0 - 30.0	60	50						

\*Decreases with the logarithm of the frequency.

#### 3.2 Test Standard

Tested according to ANSI C63.10: 2013 Section 6.2 for compliance to FCC 47CFR 15.247 Part15.207 (a) requirements.

#### 3.3 Test Procedures

The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs) Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.



### 3.4 Test Setup Layout





#### 3.5 Test Result

Test Standard:	FCC_ClassB_QP	Probe:	L1
Test item:	Conduction Emission	Test Time:	2019/8/1120:16:44
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(°C)/60%/1000hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G		
Remark:	Adapter Power		

100.0 dBuV



No.	Frequency	Factor Reading Level Limit		Margin	Detector		
	(MHz)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dB)	
1	0.1500	10.15	24.94	35.09	65.99	-30.90	QP
2	0.1500	10.15	8.24	18.39	55.99	-37.60	AVG
3	0.1819	10.13	23.32	33.45	64.39	-30.94	QP
4	0.1819	10.13	6.56	16.69	54.39	-37.70	AVG
5	0.2860	10.14	15.04	25.18	60.64	-35.46	QP
6	0.2860	10.14	3.13	13.27	50.64	-37.37	AVG
7	0.6419	10.15	15.91	26.06	56.00	-29.94	QP
8	0.6419	10.15	7.69	17.84	46.00	-28.16	AVG
9	2.1420	10.18	8.77	18.95	56.00	-37.05	QP
10	2.1420	10.18	2.50	12.68	46.00	-33.32	AVG
11	29.8340	10.48	17.13	27.61	60.00	-32.39	QP



	12	29.8340	10.48	8.53	19.01	50.00	-30.99	AVG
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Margin = Level – Limit





Test S	tandard:	FCC_C	lassB_	QP			Probe:				Ν		
Test it	em:	Condu	ction E	mission			Test Time:				2019/8/1120:21:33		
Applic	cant:	Mitac I	Digital T	echnolog	gy C	ompany	Power Rat	ing:			AC 1	20V/60Hz	
Produ	ict:	Tablet					Temp.(C)/H	lum.(%	5)/Air p.	(hpa):	<b>26(℃</b>	;)/60%/100	0hpa
Model	No.:	N642					Test Engin	eer:			Chris	S	
Test M	lode:	Wi-Fi 2	.4G										
Rema	rk:	Adapte	r Power										
100.0	dBuV												
-					_								
-												FCC_	ClassB_QP
50												FCC_Clas	sB_AVG
	VA Xun												×
	r)	MAN	wanty	Á,		what have be	LI .	an anatala	W Man	Hand	minery	manunderstand	marmin
			Ň	"hark	n/M	an and	Hunt Martin Martin	Sar Alassa.	*******				
0.0													
0.0	50		0.5				(MHz)		5				30.000
No.	Frequ	ency	Fa	ctor		Reading	Leve	el	Lin	nit	Ма	irgin	Detector

No.	Frequency	Factor	Factor Reading Level Limit		Margin	Detector	
	(MHz)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dB)	
1	0.1500	10.15	25.64	35.79	65.99	-30.20	QP
2	0.1500	10.15	9.15	19.30	55.99	-36.69	AVG
3	0.1860	10.14	21.18	31.32	64.21	-32.89	QP
4	0.1860	10.14	6.55	16.69	54.21	-37.52	AVG
5	0.2220	10.14	18.95	29.09	62.74	-33.65	QP
6	0.2220	10.14	5.53	15.67	52.74	-37.07	AVG
7	0.3379	10.14	12.57	22.71	59.25	-36.54	QP
8	0.3379	10.14	4.65	14.79	49.25	-34.46	AVG
9	0.6340	10.16	16.83	26.99	56.00	-29.01	QP
10	0.6340	10.16	8.34	18.50	46.00	-27.50	AVG
11	28.6740	10.33	15.19	25.52	60.00	-34.48	QP



12 28.6740 10.33 6.59 16.92 50.00 -33.08 AVG	
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Margin = Level – Limit





Test S	tandard:	FCC_C	lassB_QP		Probe:		L1	
Test ite	em:	Condu	ction Emission		Test Time:		2019/8/1119:	38:16
Applic	ant:	Mitac I	Digital Technology	y Company	Power Rating:		AC 120V/60H	Iz
Produ	ct:	Tablet			Temp.(C)/Hum.(%)/Air p.(hpa): 26(℃)/60%/1000hpa			000hpa
Model	No.:	N642			Test Engineer: Chris			
Test M	lode:	Wi-Fi 2	2.4G					
Remar	k:	POE P	ower					
100.0	dBuV							
50×	× ×	M. M.						ClassB_QP
0.0			0.5					20.000
0.15			0.5	l	MHZJ	5		30.000
No.	Freque	ency	Factor	Reading	Level	Limit	Margin	Detector
	(MH	z)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dB)	

No.	Frequency	Factor	Reading	Level	Limit	Margin	Detector
	(MHz)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dB)	
1	0.1500	10.15	36.53	46.68	65.99	-19.31	QP
2	0.1500	10.15	14.10	24.25	55.99	-31.74	AVG
3	0.1740	10.15	34.12	44.27	64.76	-20.49	QP
4	0.1740	10.15	12.57	22.72	54.76	-32.04	AVG
5	0.2140	10.13	30.82	40.95	63.04	-22.09	QP
6	0.2140	10.13	13.95	24.08	53.04	-28.96	AVG
7	0.3140	10.14	27.55	37.69	59.86	-22.17	QP
8	0.3140	10.14	14.47	24.61	49.86	-25.25	AVG
9	0.6060	10.15	19.73	29.88	56.00	-26.12	QP
10	0.6060	10.15	6.73	16.88	46.00	-29.12	AVG
11	26.8380	10.46	31.32	41.78	60.00	-18.22	QP



	12 26.8380 10.46 19.30 29.76 50.00 -20.24 AVG
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Margin = Level – Limit



Test Standard:	FCC_ClassB_QP	Probe:	Ν
Test item:	Conduction Emission	Test Time:	2019/8/1119:41:08
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(°C)/60%/1000hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G		
Remark:	POE Power		

100.0 dBuV



No.	Frequency	Factor	Reading	Level	Limit	Margin	Detector
	(MHz)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dB)	
1	0.1700	10.15	34.05	44.20	64.96	-20.76	QP
2	0.1700	10.15	13.36	23.51	54.96	-31.45	AVG
3	0.2140	10.14	30.22	40.36	63.04	-22.68	QP
4	0.2140	10.14	13.43	23.57	53.04	-29.47	AVG
5	0.2940	10.14	26.71	36.85	60.41	-23.56	QP
6	0.2940	10.14	13.53	23.67	50.41	-26.74	AVG
7	0.3234	10.14	28.81	38.95	59.62	-20.67	QP
8	0.3234	10.14	15.55	25.69	49.62	-23.93	AVG
9	1.0460	10.19	21.43	31.62	56.00	-24.38	QP
10	1.0460	10.19	8.44	18.63	46.00	-27.37	AVG



11	28.3980	10.33	33.30	43.63	60.00	-16.37	QP
12	28.3980	10.33	26.24	36.57	50.00	-13.43	AVG

Margin = Level – Limit





## 4. Radiated Emission Measurement

#### 4.1 Test Limit

In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. If the transmitter measurement is based on the maximum conducted output power, the attenuation required under this paragraph shall be 30dB instead of 20dB. In addition, radiated emissions which fall in section 15.205(a) the restricted bands must also comply with the radiated emission limit specified in section 15.209(a).

FCC Part 15 Subpart C Paragraph 15.209							
FREQUENCIES	FIELD STRENGTH	MEASUREMENT DISTANCE					
(MHz)	(micro volts/meter)	(meters)					
0.009~0.490	2400/F(kHz)	300					
0.490~1.705	24000/F(kHz)	30					
1.705~30.0	30	30					
30~88	100	3					
88~216	150	3					
216~960	200	3					
Above 960	500	3					

Note 1: The lower limit shall apply at the transition frequency.

Note 2: Distance refers to the distance in meters between the measuring instrument Antenna and the closed point of any part of the device or system.

Note 3: E field strength (dBuV/m) = 20 log E field strength (uV/m)

Note 4: \*\*Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permItted under other sections of this part, e.g., §§15.231 and 15.241.

#### 4.2 Test Standard

KDB 558074 D01v05r02 - Section 8.5 & Section 8.6



#### 4.3 Test Procedures

#### **Quasi-Peak Field Strength Measurements:**

The specifications for measurements using the CISPR quasi-peak detector can be found in Publication 16 of the International Special Committee on Radio Frequency Interference (CISPR) of the International Electrotechnical Commission.

As an alternative to CISPR quasi-peak measurement, compliance can be demonstrated to the applicable emission limits using a peak detector.

#### Peak Field Strength Measurements:

Analyzer center frequency was set to the frequency of the radiated spurious emission of interest

- 1. RBW=As specified in Table 1
- 2. VBW=3×RBW
- 3. Detector=Peak
- 4. Trace mode=Max hold
- 5. Sweep time=Auto couple
- 6. Allow the trace to stabilize

Table 1-RBW as a function of frequency

Frequency	RBW
9 ~ 150kHz	200 ~ 300Hz
0.15 ~ 30MHz	9 ~ 10kHz
30 ~ 1000MHz	100 ~ 120kHz
> 1000MHz	1MHz

#### **AVE Field Strength Measurements:**

Analyzer center frequency was set to the frequency of the radiated spurious emission of interest

- 1. RBW= 1MHz
- 2. VBW≥1/T
- 3. Detector=Peak
- 4. Trace mode=Max hold
- 5. Sweep time=Auto couple
- 6. Allow max hold to run for at least 50 times(1/duty cycle) trace

As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode



#### 4.4 Test Setup Layout



30MHz~1GHz Test Setup





#### 1GHz~18GHz Test Setup



18GHz~40GHz Test Setup





#### 4.5 Test Result

The worst case of Radiated Emission below 1GHz:

Test Distance:	ЗМ		
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2019-7-2914:37:34
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(°C)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G		
Remark:	Adapter Power		

80.0 dBuV/m



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	30.0000	-4.25	38.21	33.96	40.00	-6.04	QP
2	30.0000	-4.25	38.59	34.34	40.00	-5.66	peak
3	139.6100	-12.01	40.40	28.39	43.50	-15.11	peak
4	279.2900	-8.29	43.88	35.59	46.00	-10.41	peak
5	489.7798	-5.49	39.37	33.88	46.00	-12.12	peak
6	797.2698	1.78	31.59	33.37	46.00	-12.63	peak
7	950.5298	3.03	29.84	32.87	46.00	-13.13	peak

Note: Measure Level  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ 

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)



Test Distance:	3M		
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2019-7-2915:22:29
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(°C)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G		
Remark:	Adapter Power		



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	30.0000	-4.25	36.89	32.64	40.00	-7.36	QP
2	30.0000	-4.25	41.74	37.49	40.00	-2.51	peak
3	41.6400	-9.28	43.27	33.99	40.00	-6.01	peak
4	139.6100	-12.01	40.41	28.40	43.50	-15.10	peak
5	322.9399	-7.89	39.74	31.85	46.00	-14.15	peak
6	524.7000	-4.76	37.53	32.77	46.00	-13.23	peak
7	800.1799	1.82	30.38	32.20	46.00	-13.80	peak

Note: Measure Level  $(dB\mu V/m)$  = Reading Level  $(dB\mu V)$  + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)







No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	58.1300	-14.55	45.41	30.86	40.00	-9.14	peak
2	149.3100	-12.52	44.83	32.31	43.50	-11.19	peak
3	231.7599	-10.96	46.99	36.03	46.00	-9.97	peak
4	278.3199	-8.38	46.65	38.27	46.00	-7.73	peak
5	366.5899	-7.65	44.98	37.33	46.00	-8.67	peak
6	770.1100	1.42	32.20	33.62	46.00	-12.38	peak

Note: Measure Level  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)







No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	30.9699	-2.85	41.81	38.96	40.00	-1.04	peak
2	59.1000	-12.51	54.35	41.84	40.00	1.84	peak
3	203.6299	-12.39	53.13	40.74	43.50	-2.76	peak
4	220.1200	-12.19	51.51	39.32	46.00	-6.68	peak
5	489.7799	-5.54	43.42	37.88	46.00	-8.12	peak
6	700.2698	1.13	34.40	35.53	46.00	-10.47	peak
7	30.9699	-2.85	35.22	32.37	40.00	-7.63	QP
8	59.1000	-12.51	49.29	36.78	40.00	-3.22	QP
9	203.6299	-12.39	47.27	34.88	43.50	-8.62	QP

Note: Measure Level  $(dB\mu V/m) = Reading Level (dB\mu V) + Factor (dB)$ 

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

#### Radiated Emission above 1GHz:

Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Horizontal
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-514:06:17
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(°C)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11b 2412MHz		
Remark:	POE Power		

100.0 dBuV/m

2



Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

49.32

74.00

41.10

2. Measurement Level = Reading Level + Correct Factor.

8.22

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.

4. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

7236.000

-24.68

peak





Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Vertical
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-514:10:58
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(℃)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11b 2412MHz		
Remark:	POE Power		



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	4824.000	3.32	46.72	50.04	74.00	-23.96	peak
2	7236.000	8.22	39.94	48.16	74.00	-25.84	peak

Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

2. Measurement Level = Reading Level + Correct Factor.

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.

4. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.





Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Horizontal
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-514:13:46
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(℃)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11b 2437MHz		
Remark:	POE Power		



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	4874.000	3.42	41.16	44.58	74.00	-29.42	peak
2	7311.000	8.27	37.79	46.06	74.00	-27.94	peak

Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

2. Measurement Level = Reading Level + Correct Factor.

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.

4. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.





Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Vertical
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-514:16:16
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(℃)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11b 2437MHz		
Remark:	POE Power		



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	4874.000	3.42	43.55	46.97	74.00	-27.03	peak
2	7311.000	8.27	38.10	46.37	74.00	-27.63	peak

Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

2. Measurement Level = Reading Level + Correct Factor.

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.

4. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.




Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Horizontal
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-514:19:04
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(℃)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11b 2462MHz		
Remark:	POE Power		



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	4924.000	3.52	41.16	44.68	74.00	-29.32	peak
2	7386.000	8.32	39.97	48.29	74.00	-25.71	peak

Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

2. Measurement Level = Reading Level + Correct Factor.

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.





Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Vertical
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-514:22:18
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(℃)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11b 2462MHz		
Remark:	POE Power		



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4924.000	3.52	43.02	46.54	74.00	-27.46	peak
2	7386.000	8.32	39.45	47.77	74.00	-26.23	peak

Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

2. Measurement Level = Reading Level + Correct Factor.

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.





Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Horizontal
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-514:25:23
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(℃)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11g 2412MHz		
Remark:	POE Power		



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4824.000	3.32	40.95	44.27	74.00	-29.73	peak
2	7236.000	8.22	41.98	50.20	74.00	-23.80	peak

Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

2. Measurement Level = Reading Level + Correct Factor.

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.





Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Vertical
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-514:27:01
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(℃)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11g 2412MHz		
Remark:	POE Power		



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	4824.000	3.32	42.23	45.55	74.00	-28.45	peak
2	7236.000	8.22	42.22	50.44	74.00	-23.56	peak

Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

2. Measurement Level = Reading Level + Correct Factor.

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.





Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Horizontal
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-514:29:26
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(℃)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11g 2437MHz		
Remark:	POE Power		



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4874.000	3.42	39.48	42.90	74.00	-31.10	peak
2	7311.000	8.27	39.52	47.79	74.00	-26.21	peak

Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

2. Measurement Level = Reading Level + Correct Factor.

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.





Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Vertical
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-514:31:24
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(℃)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11g 2437MHz		
Remark:	POE Power		



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
		(ab/m)	(abuv)	(abuv/m)	(abuv/m)	(ab)	
1	4874.000	3.42	42.54	45.96	74.00	-28.04	peak
2	7311.000	8.27	39.64	47.91	74.00	-26.09	peak

Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

2. Measurement Level = Reading Level + Correct Factor.

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.





Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Horizontal
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-514:34:56
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(℃)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11g 2462MHz		
Remark:	POE Power		



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	4924.000	3.52	38.75	42.27	74.00	-31.73	peak
2	7386.000	8.32	40.68	49.00	74.00	-25.00	peak

Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

2. Measurement Level = Reading Level + Correct Factor.

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.





Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Vertical
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-514:37:47
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(°C)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11g 2462MHz		
Remark:	POE Power		



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	4924.000	3.52	40.12	43.64	74.00	-30.36	peak
2	7386.000	8.32	42.26	50.58	74.00	-23.42	peak

Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

2. Measurement Level = Reading Level + Correct Factor.

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.





Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Horizontal
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-514:41:52
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(°C)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11n-HT20 2412MHz		
Remark:	POE Power		



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	4824.000	3.32	40.35	43.67	74.00	-30.33	peak
2	7236.000	8.22	41.64	49.86	74.00	-24.14	peak

Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

2. Measurement Level = Reading Level + Correct Factor.

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.





Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Vertical
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-514:44:29
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(°C)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11n-HT20 2412MHz		
Remark:	POE Power		



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	4824.000	3.32	42.91	46.23	74.00	-27.77	peak
2	7236.000	8.22	41.54	49.76	74.00	-24.24	peak

Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

2. Measurement Level = Reading Level + Correct Factor.

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.





Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Horizontal
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-514:47:04
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(℃)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11n-HT20 2437MHz		
Remark:	POE Power		



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	4874.000	3.42	39.03	42.45	74.00	-31.55	peak
2	7311.000	8.27	40.83	49.10	74.00	-24.90	peak

Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

2. Measurement Level = Reading Level + Correct Factor.

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.





Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Vertical
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-514:52:58
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(°C)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11n-HT20 2437MHz		
Remark:	POE Power		



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	4874.000	3.42	41.95	45.37	74.00	-28.63	peak
2	7311.000	8.27	39.47	47.74	74.00	-26.26	peak

Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

2. Measurement Level = Reading Level + Correct Factor.

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.





Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Horizontal
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-514:57:33
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(°C)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11n-HT20 2462MHz		
Remark:	POE Power		



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4924.000	3.52	39.23	42.75	74.00	-31.25	peak
2	7386.000	8.32	40.27	48.59	74.00	-25.41	peak

Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

2. Measurement Level = Reading Level + Correct Factor.

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.





Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Vertical
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-515:00:13
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(°C)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11n-HT20 2462MHz		
Remark:	POE Power		



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	4924.000	3.52	39.41	42.93	74.00	-31.07	peak
2	7386.000	8.32	40.73	49.05	74.00	-24.95	peak

Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

2. Measurement Level = Reading Level + Correct Factor.

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.





Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Horizontal
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-515:03:14
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(°C)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11n-HT40 2422MHz		
Remark:	POE Power		



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4844.000	3.36	38.60	41.96	74.00	-32.04	peak
2	7266.000	8.24	39.73	47.97	74.00	-26.03	peak

Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

2. Measurement Level = Reading Level + Correct Factor.

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.





Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Vertical
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-515:06:53
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(°C)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11n-HT40 2422MHz		
Remark:	POE Power		



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	4844.000	3.36	39.43	42.79	74.00	-31.21	peak
2	7266.000	8.24	40.18	48.42	74.00	-25.58	peak

Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

2. Measurement Level = Reading Level + Correct Factor.

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.





Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Horizontal
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-515:10:20
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(℃)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11n-HT40 2437MHz		
Remark:	POE Power		



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	4874.000	3.42	38.34	41.76	74.00	-32.24	peak
2	7311.000	8.27	39.53	47.80	74.00	-26.20	peak

Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

2. Measurement Level = Reading Level + Correct Factor.

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.





Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Vertical
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-515:14:12
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(℃)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11n-HT40 2437MHz		
Remark:	POE Power		



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	4874.000	3.42	39.53	42.95	74.00	-31.05	peak
2	7311.000	8.27	39.38	47.65	74.00	-26.35	peak

Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

2. Measurement Level = Reading Level + Correct Factor.

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.





Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Horizontal
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-515:18:03
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(°C)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11n-HT40 2452MHz		
Remark:	POE Power		



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	4904.000	3.48	38.38	41.86	74.00	-32.14	peak
2	7356.000	8.30	39.92	48.22	74.00	-25.78	peak

Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

2. Measurement Level = Reading Level + Correct Factor.

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.





Test Distance:	3M		
Test Standard:	FCC Class B Above 1G 3M	Ant. Polarization:	Vertical
	Radiation PK		
Test item:	Radiation Emission	Test Time:	2019-8-515:20:42
Applicant:	Mitac Digital Technology Company	Power Rating:	AC 120V/60Hz
Product:	Tablet	Temp.(C)/Hum.(%)/Air p.(hpa):	26(℃)/60%/983hpa
Model No.:	N642	Test Engineer:	Chris
Test Mode:	Wi-Fi 2.4G-802.11n-HT40 2452MHz		
Remark:	POE Power		



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	4904.000	3.48	38.97	42.45	74.00	-31.55	peak
2	7356.000	8.30	39.10	47.40	74.00	-26.60	peak

Note: 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or AVG measurements as necessary.

2. Measurement Level = Reading Level + Correct Factor.

3. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~40GHz), therefore no data appear in the report.



# 5. 6dB Bandwidth Measurement

#### 5.1 Test Limit

According to FCC part15.247 - Section (a)(2), the minimum 6dB bandwidth shall be at least 500 kHz.

### 5.2 Test Standard

KDB 558074 D01v05r02- Section 8.2

### 5.3 Test Procedures

- 1. Set RBW=100KHz
- 2. VBW≥3×RBW
- 3. Detector=Peak
- 4. Trace mode=Max hold
- 5. Sweep time=Auto couple
- 6. Allow the trace to stabilize
- 7. The Spectrum's automatic bandwidth measurement capability was used to perform the 6dB bandwidth measurement. The "X" dB bandwidth parameter was set to X = -6. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.

## 5.4 Test Setup Layout

## Spectrum Analyzer





#### 5.5 Test Result

Test Item	6dB Bandwidth Measurement
Test Engineer:	Chris
Test Date	2019-09-28
Test Mode	Transmitting by 802.11b

Channel No.	Frequency(MHz)	6dB Bandwidth(MHz)	Limit(≥500KHz)
1	2412	8.086	Pass
6	2437	8.070	Pass
11	2462	8.082	Pass







Test Item	6dB Bandwidth Measurement
Test Engineer:	Chris
Test Date	2019-09-28
Test Mode	Transmitting by 802.11g

Channel No.	Frequency(MHz)	6dB Bandwidth(MHz)	Limit(≥500KHz)
1	2412	16.41	Pass
6	2437	16.39	Pass
11	2462	16.38	Pass







Test Item	6dB Bandwidth Measurement
Test Engineer:	Chris
Test Date	2019-09-28
Test Mode	Transmitting by 802.11n-HT20

Channel No.	Frequency(MHz)	6dB Bandwidth(MHz)	Limit(≥500KHz)
1	2412	17.59	Pass
6	2437	17.60	Pass
11	2462	17.61	Pass







Test Item	6dB Bandwidth Measurement
Test Engineer:	Chris
Test Date	2019-09-28
Test Mode	Transmitting by 802.11n-HT40

Channel No.	Frequency(MHz)	6dB Bandwidth(MHz)	Limit(≥500KHz)
3	2422	35.70	Pass
6	2437	35.88	Pass
9	2452	36.02	Pass







# 6. Conducted Output Power Measurement

### 6.1 Test Limit

According to FCC part15.247 (b) (3), for systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode. Per RSS247 Issue 2 Section 5.4(d), for DTSs employing digital modulation techniques operating in the bands 902-928 MHz and 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1W.

#### 6.2 Test Standard

KDB 558074 D01v05r02 - Section 9.3.1.3 & Section 9.3.2.3

#### 6.3 Test Procedures

Out power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The pulse sensor employs a VBW = 50MHz so this method was only used for signals whose DTS bandwidth was less than or equal to 50MHz.

#### 6.4 Test Setup Layout





## 6.5 Test Result

Test Item	Conducted Output Power Measurement
Test Engineer:	Chris
Test Date	2019-09-28
Test Mode	Transmitting by 802.11b/g/n

Test Mode	Channel No.	Frequency	Peak Output Power (dBm)	Limit (dBm)	Result
		(MHz)			
	1	2412	18.22	30	Pass
802.11b	6	2437	18.49	30	Pass
	11	2462	18.86	30	Pass
	1	2412	25.28	30	Pass
802.11g	6	2437	25.15	30	Pass
	11	2462	24.17	30	Pass
802.11n(20MHz)	1	2412	24.80	30	Pass
	6	2437	24.85	30	Pass
	11	2462	23.98	30	Pass
802.11n(40MHz)	3	2422	24.41	30	Pass
	6	2437	25.09	30	Pass
	9	2452	24.25	30	Pass

Test Mode	Channel No.	Frequency	Average Output Power (dBm)	Limit (dBm)	Result
		(MHz)			
	1	2412	15.69	30	Pass
802.11b	6	2437	15.95	30	Pass
	11	2462	14.68	30	Pass
	1	2412	16.83	30	Pass
802.11g	6	2437	16.98	30	Pass
	11	2462	15.68	30	Pass
802.11n(20MHz)	1	2412	16.53	30	Pass
	6	2437	16.66	30	Pass
	11	2462	16.36	30	Pass
802.11n(40MHz)	3	2422	17.27	30	Pass
	6	2437	17.44	30	Pass
	9	2452	17.28	30	Pass



# 7. Power Spectral Density Measurement

### 7.1 Test Limit

According to FCC part15.247 - Section (e), for digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

### 7.2 Test Standard

KDB 558074 D01v05r02- Section 8.4

#### 7.3 Test Procedures

- 1. Set RBW=3kHz
- 2. Set RBW=10kHz
- 3. Span = 1.5 times the DTS channel bandwidth
- 4. Detector=Peak
- 5. Trace mode=Max hold
- 6. Sweep time=Auto couple
- 7. Allow the trace to stabilize
- 8. Analyzer was set to the center frequency of the DTS channel under investigation.

### 7.4 Test Setup Layout

#### Spectrum Analyzer





## 7.5 Test Result

Test Item	Power Spectral Density Measurement
Test Engineer:	Chris
Test Date	2019-09-29
Test Mode	Transmitting by 802.11b/g/n

Test Mode	Channel No.	Frequency(MHz)	Power Spectral Density	Limit	Popult
			(dBm/3kHz)	(dBm/3kHz)	nesuit
802.11b	1	2412	-3.119	8	Pass
	6	2437	-2.424	8	Pass
	11	2462	-1.277	8	Pass
802.11g	1	2412	-3.090	8	Pass
	6	2437	-5.343	8	Pass
	11	2462	-5.161	8	Pass
802.11n(20M Hz)	1	2412	-4.659	8	Pass
	6	2437	-5.983	8	Pass
	11	2462	-5.251	8	Pass
802.11n(40M Hz)	3	2422	-6.287	8	Pass
	6	2437	-5.033	8	Pass
	9	2452	-5.194	8	Pass





Mode 1: Transmit by 802.11b





Mode 2: Transmit by 802.11g





Mode 3: Transmit by 802.11n-HT20





Mode 4: Transmit by 802.11n-HT40



# 8. Conducted Band Edge and Out-of-Band Emissions Measurement

#### 8.1 Test Limit

According to FCC part 15.247(d), in any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) of FCC part 15 is not required.

### 8.2 Test Standard

KDB 558074 D01v05r02 - Section 8.6 & Section 8.7



#### 8.3 Test Procedures

#### **Reference level measurement:**

- 1. Set the RBW = 100 kHz
- 2. Set the VBW  $\ge$  3 x RBW
- 3. Set the span to  $\geq$  1.5 times the DTS bandwidth
- 4. Detector = peak
- 5. Trace mode = max hold
- 6. Sweep time = auto couple
- 7. Allow trace to fully stabilize
- 8. Set instrument center frequency to DTS channel center frequency

#### **Emission level measurement:**

- 1. RBW = 100kHz
- 2. VBW = 300kHz
- 3. Detector = Peak
- 4. Trace mode = max hold
- 5. Sweep time = auto couple
- 6. The trace was allowed to stabilize
- 7. Set the center frequency and span to encompass frequency range to be measured

#### 8.4 Test Setup Layout

## Spectrum Analyzer





### 8.5 Test Result

Test Item	Conducted Band Edge and Out-of-Band Emissions Measurement
Test Engineer:	Chris
Test Date	2019-09-29
Test Mode	Transmitting by 802.11b/g/n

Test Mode	Channel No.	Frequency (MHz)	Limit	Result
	1	2412	20dBc	Pass
802.11b	6	2437	20dBc	Pass
	11	2462	20dBc	Pass
802.11g	1	2412	20dBc	Pass
	6	2437	20dBc	Pass
	11	2462	20dBc	Pass
802.11n(20MHz)	1	2412	20dBc	Pass
	6	2437	20dBc	Pass
	11	2462	20dBc	Pass
802.11n(40MHz)	3	2422	20dBc	Pass
	6	2437	20dBc	Pass
	9	2452	20dBc	Pass


## Mode 1: Transmit by 802.11b (2412MHz)



Mode 1: Transmit by 802.11b (2437MHz)

#### Mode 1: Transmit by 802.11b (2462MHz)





#### Mode 2: Transmit by 802.11g (2412MHz)





## Mode 2: Transmit by 802.11g (2437MHz)

## Mode 2: Transmit by 802.11g (2462MHz)





#### Mode 3: Transmit by 802.11n-HT20 (2412MHz)





#### Mode 3: Transmit by 802.11n-HT20 (2437MHz)







#### Mode 4: Transmit by 802.11n-HT40 (2422MHz)





#### Mode 4: Transmit by 802.11n-HT40 (2437MHz)

Mode 4: Transmit by 802.11n-HT40 (2452MHz)





# 9. Radiated Emission Band Edge Measurement

## 9.1 Test Limit

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a) of FCC part 15.

## 9.2 Test Standard

ANSI C63.10-2013 Section 6.10.5

### 9.3 Test Procedure

Peak Field Strength Measurements:

Analyzer center frequency was set to the frequency of the radiated spurious emission of interest

- 7. RBW=As specified in Table 1
- 8. VBW=3×RBW
- 9. Detector=Peak
- 10. Trace mode=Max hold
- 11. Sweep time=Auto couple
- 12. Allow the trace to stabilize

Table 1-RBW as a function of frequency

Frequency	RBW
9 ~ 150kHz	200 ~ 300Hz
0.15 ~ 30MHz	9 ~ 10kHz
30 ~ 1000MHz	100 ~ 120kHz
> 1000MHz	1MHz



AVE Field Strength Measurements:

Analyzer center frequency was set to the frequency of the radiated spurious emission of interest

- 7. RBW= 1MHz
- 8. VBW≥1/T
- 9. Detector=Peak
- 10. Trace mode=Max hold
- 11. Sweep time=Auto couple
- 12. Allow max hold to run for at least 50 times(1/duty cycle) trace

As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode

## 9.4 Test Setup Layout





## 9.5 Test Result

Engineer: Chris	
Site: AC102	Time: 2019/10/09 - 14:15
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: N/A	Polarity: Horizontal
EUT: Tablet	Power: AC 120V/60Hz

Note: 802.11b 2412MHz



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		2340.016	51.219	53.081	-22.781	74.000	-1.862	РК
2		2390.000	47.081	48.758	-26.919	74.000	-1.677	РК
3	*	2410.912	98.177	99.777	N/A	N/A	-1.600	РК

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average

measurements as necessary.

- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).



Engineer: Chris	
Site: AC102	Time: 2019/10/09 - 14:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: N/A	Polarity: Horizontal
EUT: Tablet	Power: AC 120V/60Hz

Note: 802.11b 2412MHz



-19.785

N/A

54.000

N/A

Note:

2

3

\*

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average

35.892

95.208

measurements as necessary.

2390.000

2411.248

2. " \* ", means this data is the worst emission level.

3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

34.215

93.610

-1.677

-1.598

AV

AV



Engineer: Chris		
Site: AC102	Time: 2019/10/09 - 13:39	
Limit: FCC_Part15.209_RE(3m)	Margin: 0	
Probe: N/A	Polarity: Vertical	
EUT: Tablet	Power: AC 120V/60Hz	
1		

Note: 802.11b 2412MHz



-27.529

N/A

74.000

N/A

Note:

2

3

\*

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average

48.148

98.732

measurements as necessary.

2390.000

2413.040

2. " \* ", means this data is the worst emission level.

3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

46.471

97.140

-1.677

-1.592

РΚ

РΚ



Engineer: Chris	
Site: AC102	Time: 2019/10/09 - 14:13
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: N/A	Polarity: Vertical
EUT: Tablet	Power: AC 120V/60Hz





3

\*

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average

92.417

N/A

N/A

measurements as necessary.

2412.704

2. " \* ", means this data is the worst emission level.

3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

90.824

-1.593

AV



Engineer: Chris	
Site: AC102	Time: 2019/10/09 - 14:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: N/A	Polarity: Horizontal
EUT: Tablet	Power: AC 120V/60Hz





1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.

2. " \* ", means this data is the worst emission level.



Engineer: Chris	
Site: AC102	Time: 2019/10/09 - 14:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: N/A	Polarity: Horizontal
EUT: Tablet	Power: AC 120V/60Hz





1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.

2. " \* ", means this data is the worst emission level.



Engineer: Chris		
Site: AC102	Time: 2019/10/09 - 14:34	
Limit: FCC_Part15.209_RE(3m)	Margin: 0	
Probe: N/A	Polarity: Vertical	
EUT: Tablet	Power: AC 120V/60Hz	





2

3

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average

48.189

50.345

measurements as necessary.

2483.500

2487.328

2. " \* ", means this data is the worst emission level.

3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

46.858

49.028

-1.331

-1.317

РΚ

РΚ

74.000

74.000

-27.142

-24.972



Engineer: Chris	
Site: AC102	Time: 2019/10/09 - 14:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: N/A	Polarity: Vertical
EUT: Tablet	Power: AC 120V/60Hz





1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.

2. " \* ", means this data is the worst emission level.





Note: 802.11g 2412MHz



Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.

2. " \* ", means this data is the worst emission level.



Engineer: Chris	
Site: AC102	Time: 2019/10/09 - 14:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: N/A	Polarity: Horizontal
EUT: Tablet	Power: AC 120V/60Hz

Note: 802.11g 2412MHz



Note:

3

\*

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average

86.846

N/A

N/A

measurements as necessary.

2415.280

2. " \* ", means this data is the worst emission level.

3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

85.263

-1.583

AV





Note: 802.11g 2412MHz



Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.

2. " \* ", means this data is the worst emission level.



Engineer: Chris	
Site: AC102	Time: 2019/10/09 - 14:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: N/A	Polarity: Vertical
EUT: Tablet	Power: AC 120V/60Hz
Note: 802.11g 2412MHz	



-17.253

N/A

54.000

N/A

Note:

2

3

\*

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average

38.424

82.714

measurements as necessary.

2390.000

2410.688

2. "  $^{\ast}$  ", means this data is the worst emission level.

3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

36.747

81.114

-1.677

-1.600

AV

AV



Engineer: Chris		
Site: AC102	Time: 2019/10/09 - 14:53	
Limit: FCC_Part15.209_RE(3m)	Margin: 0	
Probe: N/A	Polarity: Horizontal	
EUT: Tablet	Power: AC 120V/60Hz	

Note: 802.11g 2462MHz



Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average

measurements as necessary.

2. "  $^{\ast}$  ", means this data is the worst emission level.





1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.

2. " \* ", means this data is the worst emission level.



Engineer: Chris		
Site: AC102	Time: 2019/10/09 - 14:58	
Limit: FCC_Part15.209_RE(3m)	Margin: 0	
Probe: N/A	Polarity: Vertical	
EUT: Tablet	Power: AC 120V/60Hz	

Note: 802.11g 2462MHz



Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average

measurements as necessary.

2. " \* ", means this data is the worst emission level.



Engineer: Chris		
Site: AC102	Time: 2019/10/09 - 15:00	
Limit: FCC_Part15.209_RE(3m)	Margin: 0	
Probe: N/A	Polarity: Vertical	
EUT: Tablet	Power: AC 120V/60Hz	
Note: 802.11g 2462MHz		
107		

	Frequency(MHz)							
No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	2454.592	80.642	82.080	N/A	N/A	-1.438	AV
2		2483.500	39.804	41.135	-14.196	54.000	-1.331	AV

2455 2457.5 2460 2462.5 2465 2467.5 2470 2472.5 2475 2477.5 2480 2482.5 2485 2487.5 2490 2492.5 2495 2497.5 2500

2

Note:

60

40 30 20

7

2452

evel(dBu 50

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.

2. " \* ", means this data is the worst emission level.



Engineer: Chris		
Site: AC102	Time: 2019/10/09 - 15:11	
Limit: FCC_Part15.209_RE(3m)	Margin: 0	
Probe: N/A	Polarity: Horizontal	
EUT: Tablet	Power: AC 120V/60Hz	

0



Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.

2. " \* ", means this data is the worst emission level.



Engineer: Chris		
Site: AC102	Time: 2019/10/09 - 15:20	
Limit: FCC_Part15.209_RE(3m)	Margin: 0	
Probe: N/A	Polarity: Horizontal	
EUT: Tablet	Power: AC 120V/60Hz	



Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.

2. " \* ", means this data is the worst emission level.



Engineer: Chris		
Site: AC102	Time: 2019/10/09 - 15:03	
Limit: FCC_Part15.209_RE(3m)	Margin: 0	
Probe: N/A	Polarity: Vertical	
EUT: Tablet	Power: AC 120V/60Hz	
EUI: lablet	Power: AC 120V/60Hz	

0



Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.

2. " \* ", means this data is the worst emission level.



Engineer: Chris		
Site: AC102	Time: 2019/10/09 - 15:06	
Limit: FCC_Part15.209_RE(3m)	Margin: 0	
Probe: N/A	Polarity: Vertical	
EUT: Tablet	Power: AC 120V/60Hz	



Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.

2. " \* ", means this data is the worst emission level.



Engineer: Chris		
Site: AC102	Time: 2019/10/09 - 15:22	
Limit: FCC_Part15.209_RE(3m)	Margin: 0	
Probe: N/A	Polarity: Horizontal	
EUT: Tablet	Power: AC 120V/60Hz	

0



Note:

3

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average

measurements as necessary.

2. " \* ", means this data is the worst emission level.



Engineer: Chris		
Site: AC102	Time: 2019/10/09 - 15:27	
Limit: FCC_Part15.209_RE(3m)	Margin: 0	
Probe: N/A	Polarity: Horizontal	
EUT: Tablet	Power: AC 120V/60Hz	
Note: 802.11n-HT20 2462MHz		



1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.

2. " \* ", means this data is the worst emission level.



Engineer: Chris		
Site: AC102	Time: 2019/10/09 - 15:29	
Limit: FCC_Part15.209_RE(3m)	Margin: 0	
Probe: N/A	Polarity: Vertical	
EUT: Tablet	Power: AC 120V/60Hz	

0



Note:

3

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average

measurements as necessary.

2. " \* ", means this data is the worst emission level.



Engineer: Chris	
Site: AC102	Time: 2019/10/09 - 15:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: N/A	Polarity: Vertical
EUT: Tablet	Power: AC 120V/60Hz
Note: 802.11n-HT20 2462MHz	
107	



1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.

2. " \* ", means this data is the worst emission level.



Engineer: Chris						
Time: 2019/10/09 - 15:59						
Margin: 0						
Polarity: Horizontal						
Power: AC 120V/60Hz						



Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average

measurements as necessary.

2. " \* ", means this data is the worst emission level.



Engi	neer: C	Chris							
Site: AC102				Time: 2019/10/09 - 16:04					
Limit: FCC_Part15.209_RE(3m)				Margin: 0					
Probe: N/A				Polarity: Horizontal					
EUT: Tablet				Power: AC 120V/60Hz					
Note: 802.11n-HT40 2422MHz									
	107 80 70 60 50 40 30					ſ		2	
	20 7 23	10 2320 233	30 2340 233	50 2360 23 Fre	70 2380 239 equency(MHz)	90 2400 .	2410 2420	2430 2442	
No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре	
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)		
1		2390.000	44.805	46.482	-9.195	54.000	-1.677	AV	
2	*	2435.400	76.752	78.261	N/A	N/A	-1.509	AV	

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.

2. " \* ", means this data is the worst emission level.


Engineer: Chris				
Time: 2019/10/09 - 15:33				
Margin: 0				
Polarity: Vertical				
Power: AC 120V/60Hz				

Note: 802.11n-HT40 2422MHz



Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average

measurements as necessary.

2. " \* ", means this data is the worst emission level.



Engi	neer: C	Chris						
Site: AC102				Time: 2019/10/09 - 15:57				
Limit: FCC_Part15.209_RE(3m) Probe: N/A EUT: Tablet				Margin: 0 Polarity: Vertical				
								Power: AC 120
				Note	: 802.1	1n-HT40 2422M⊦	Ηz	
	107 80 70 60 50 40 30 20						2	
	7 23	10 2320 233	30 2340 233	50 2360 23 Fre	70 2380 23 equency(MHz)	90 2400 .	2410 2420	2430 2442
No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		2390.000	44.969	46.646	-9.031	54.000	-1.677	AV
2	*	2414.412	75.506	77.093	N/A	N/A	-1.587	AV

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.

2. " \* ", means this data is the worst emission level.



Engineer: Chris				
Time: 2019/10/09 - 16:06				
Margin: 0				
Polarity: Horizontal				
Power: AC 120V/60Hz				

Note: 802.11n-HT40 2452MHz

0



Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average

measurements as necessary.

2. " \* ", means this data is the worst emission level.



/10/09 - 16:17
prizontal
120V/60Hz
-

Note: 802.11n-HT40 2452MHz



Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.

2. " \* ", means this data is the worst emission level.



Engineer: Chris				
Site: AC102	Time: 2019/10/09 - 16:18			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: N/A	Polarity: Vertical			
EUT: Tablet	Power: AC 120V/60Hz			

Note: 802.11n-HT40 2452MHz



Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average

measurements as necessary.

2. " \* ", means this data is the worst emission level.



Engineer: Chris				
Site: AC102	Time: 2019/10/09 - 16:19			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: N/A	Polarity: Vertical			
EUT: Tablet	Power: AC 120V/60Hz			
Note: 802.11n-HT40 2452MHz				



Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.

2. " \* ", means this data is the worst emission level.

3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

## \*\*\*\*\* END OF REPORT \*\*\*\*\*