

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.

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.
- Without written approval of *Cerpass Technology (Suzhou) Co., Ltd.*, the test report shall not be reproduced exc- ept in full.
- 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*.

Approved by:		Laboratory Accreditation:		
		Cerpass Technology Corpo	oration Test Laborator	'nу
		TAF LAB Code:	1439	
DM. 0//				
1166	<u></u>	Cerpass Technology (SuZh	nou) Co., Ltd.	
Miro Chueh	\boxtimes			
EMC/RF Manager		A2LA LAB Code:	4981.01	

Cerpass Technology (Suzhou) Co., Ltd. Issued Date : Oct. 12, 2019 S-FD-501 V1.0 Page No.

: 1 of 110

Issued Date

Page No.

: Oct. 12, 2019

: 2 of 110



Contents

1. 1	Fest Configuration of Equipment under Test	5
1.1	Feature of Equipment under Test	5
1.2	Description of Antenna	5
1.3	Working Frequencies	6
1.4	Power Parameter Value	7
1.5	The Worst Transmission Mode	8
1.6	Test Manner	9
2. 1	Fechnical Test	.10
2.1	Summary of Test Result	.10
2.2	General Information of Test	.12
2.3	Measuring Equipment	.13
	Measurement Uncertainty	
	AC Conducted Emission Measurement	
	Test Limit	
	Test Procedures	
	Test Setup	
	Test Result	
	Radiated Emission Measurement	
	Test Limit	
	Test Standard	
	Test Procedures	
	Test Setup	
	Test Result	
	20dB Bandwidth Measurement	
	Test Limit	
5.2		
5.3	'	
5.4	'	
	Test Result	
	Channel Carrier Frequencies Separation Measurement	
	Test Limit	
	Test Standard	
	Test Setup	
	Test Setup Layout	
	Test Result	
	Owell Time Measurement	
	Test Limit	
	Test Standard	
	Test Setup	
	Test Setup Layout	
	Test Result	
	Number of Hopping Channels Measurement	
ช.1	Test Limit	.61





8.2 Test Standard	61
8.3 Test Setup	61
8.4 Test Setup Layout	61
8.5 Test Result	62
9. Peak Output Power Measurement	65
9.1 Test Limit	65
9.2 Test Standard	65
9.3 Test Setup	65
9.4 Test Setup Layout	65
9.5 Test Result	66
10. Conducted Spurious Emissions Measurement	75
10.1 Limit	75
10.2 Test Procedure	76
10.3 Test Setup	76
10.4 Test Result	77
11. Radiated Emission Band Edge Measurement	85
11.1 Limit	
11.2 Test Procedure	85
11.3 Test Setup	86

S-FD-501 V1.0

Issued Date : Oct. 12, 2019

Page No. : 3 of 110





History of this Test Report

Report No.	Version	Issue Date	Description
SEFA1907033	Rev 01	Oct. 12, 2019	Original

S-FD-501 V1.0 Page No. : 4 of 110





1. Test Configuration of Equipment under Test

1.1 Feature of Equipment under Test

EUT Type		Tablet		
<u> </u>		****		
		N642		
Wireless Module Qualcomm WCN3660B				
TX Frequency	Range	2.4GHz: 2400MHz ~ 2483.5MHz		
Number of Ch	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 Modul	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	ory	Mobile		
RF Exposure I	Environment	General Population/ Uncontrolled		
Power	Model:	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

 Cerpass Technology (Suzhou) Co., Ltd.
 Issued Date
 : Oct. 12, 2019

 S-FD-501 V1.0
 Page No.
 : 5 of 110



Issued Date : Oct. 12, 2019



1.3 Working Frequencies

Bluetooth Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	01	2403 MHz	02	2404 MHz	03	2405 MHz
04	2406 MHz	05	2407 MHz	06	2408 MHz	07	2409 MHz
08	2410 MHz	09	2411 MHz	10	2412 MHz	11	2413 MHz
12	2414 MHz	13	2415 MHz	14	2416 MHz	15	2417 MHz
16	2418 MHz	17	2419 MHz	18	2420 MHz	19	2421 MHz
20	2422 MHz	21	2423 MHz	22	2424 MHz	23	2425 MHz
24	2426 MHz	25	2427 MHz	26	2428 MHz	27	2429 MHz
28	2430 MHz	29	2431 MHz	30	2432 MHz	31	2433 MHz
32	2434 MHz	33	2435 MHz	34	2436 MHz	35	2437 MHz
36	2438 MHz	37	2439 MHz	38	2440 MHz	39	2441 MHz
40	2442 MHz	41	2443 MHz	42	2444 MHz	43	2445 MHz
44	2446 MHz	45	2447 MHz	46	2448 MHz	47	2449 MHz
48	2450 MHz	49	2451 MHz	50	2452 MHz	51	2453 MHz
52	2454 MHz	53	2455 MHz	54	2456 MHz	55	2457 MHz
56	2458 MHz	57	2459 MHz	58	2460 MHz	59	2461 MHz
60	2462 MHz	61	2463 MHz	62	2464 MHz	63	2465 MHz
64	2466 MHz	65	2467 MHz	66	2468 MHz	67	2469 MHz
68	2470 MHz	69	2471 MHz	70	2472 MHz	71	2473 MHz
72	2474 MHz	73	2475 MHz	74	2476 MHz	75	2477 MHz
76	2478 MHz	77	2479 MHz	78	2480 MHz	N/A	N/A

S-FD-501 V1.0 Page No. : 6 of 110



Issued Date : Oct. 12, 2019



1.4 Power Parameter Value

Mode	Frequency (MHz)	Power Setting
	2402	9
DH5	2441	9
	2480	9
	2402	9
2DH5	2441	9
	2480	9
	2402	9
3DH5	2441	9
	2480	9

S-FD-501 V1.0 Page No. : 7 of 110





1.5 The Worst Transmission Mode

Test Mode
Mode 1: Transmit by DH5(GFSK) 1Mbps
Mode 2: Transmit by 2DH5(π/4-DQPSK) 2Mbps
Mode 3: Transmit by 3DH5(8DPSK) 3Mbps



1.6 Test Manner

Te	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.

S-FD-501 V1.0 Page No. : 9 of 110



Issued Date : Oct. 12, 2019



2. Technical Test

2.1 Summary of Test Result

No deviations from the test stan	indards
----------------------------------	---------

☐ 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	AC Conducted Emission	Compliance	
RSS-Gen Issue 4 November 2014	AC Conducted Emission		
Section 8.8			
FCC CFR Title 47 Part 15 Subpart C: 2019			
Section 15.209	Radiated Emission	Compliance	
RSS-Gen Issue 4 November 2014	nadiated Effission	Compliance	
Section 8.9			
FCC CFR Title 47 Part 15 Subpart C: 2019			
Section 15.247(a)(1);	20dB Bandwidth	Compliance	
RSS-247 Issue 2 February 2017	2006 Baridwidtri	Compliance	
Section 5.1(a)			
FCC CFR Title 47 Part 15 Subpart C: 2019		Compliance	
Section 15.247(a)(1);	Channel Carrier Frequencies		
RSS-247 Issue 2 February 2017	Separation		
Section 5.1(b)			
FCC CFR Title 47 Part 15 Subpart C: 2019			
Section 15.247(a)(1);	Dwell Time	Compliance	
RSS-247 Issue 2 February 2017	Dweii Time		
Section 5.1(c)			
FCC CFR Title 47 Part 15 Subpart C: 2019			
Section 15.247(b);	Number of Hopping Channels	Compliance	
RSS-247 Issue 2 February 2017	Number of Hopping Offamilies		
Section 5.1(b)			
FCC CFR Title 47 Part 15 Subpart C: 2019			
Section 15.247(b);	Peak Output Power	Compliance	
RSS-247 Issue 2 February 2017	reak Output Fower	Compliance	
Section 5.1(b)			
FCC CFR Title 47 Part 15 Subpart C: 2019	Band-edge Compliance &	Compliance	
Section 15.247(d);	Conducted Spurious Emissions	Compliance	

S-FD-501 V1.0 Page No. : 10 of 110



RSS-247 Issue 2 February 2017		
Section 5.5		
FCC CFR Title 47 Part 15 Subpart C: 2019		
Section 15.247(d);	Dadieted Emission Bond Edges	Compliance
RSS-247 Issue 2 February 2017	Radiated Emission Band Edges	Compliance
Section 5.5		

S-FD-501 V1.0 Page No. : 11 of 110

Issued Date

: Oct. 12, 2019





2.2 General Information of Test

		Compace Technology Comparation Test Laborators
		Cerpass Technology Corporation Test Laboratory
	Toot Cito	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
l _□		
		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
	VOOL	C-4663 for Conducted emission test
	VCCI	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
		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



Issued Date : Oct. 12, 2019



2.3 Measuring Equipment

Instrument/Ancillary	Manufacturer	Model No.	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
Bilog Antenna	Sunol Science	JB1	A072414-1	2019.06.26	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

S-FD-501 V1.0 Page No. : 13 of 110

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 ⁻⁷	±1X10 ⁻⁵
RF output power, condu	icted	±0.63dB	±1.5dB
Power density, conducted	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	roltages	±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

 Cerpass Technology (Suzhou) Co., Ltd.
 Issued Date
 : Oct. 12, 2019

 S-FD-501 V1.0
 Page No.
 : 14 of 110



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.

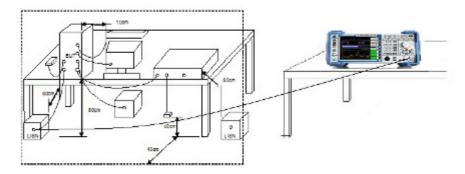
Frequency (MHz)	Quasi Peak (dB μ V)	Average (dB μ V)
0.15 – 0.5	66-56*	56-46*
0.5 - 5.0	56	46
5.0 – 30.0	60	50

^{*}Decreases with the logarithm of the frequency.

3.2 Test Procedures

- a. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- b. Connect EUT to the power mains through a line impedance stabilization network (LISN).
- c. All the support units are connecting to the other LISN.
- d. The LISN provides 50 ohm coupling impedance for the measuring instrument.
- e. The FCC states that a 50 ohm, 50 micro-Henry LISN should be used.
- f. Both sides of AC line were checked for maximum conducted interference.
- g. The frequency range from 150 kHz to 30 MHz was searched.
- h. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

3.3 Test Setup



 Cerpass Technology (Suzhou) Co., Ltd.
 Issued Date
 : Oct. 12, 2019

 S-FD-501 V1.0
 Page No.
 : 15 of 110





3.4 Test Result

Test Standard: FCC_ClassB_QP Probe: L1

Test item: Conduction Emission Test Time: 2019/8/1120:26:26

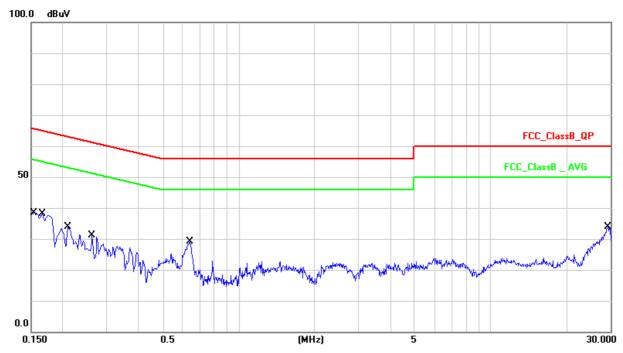
Applicant: Mitac Digital Technology Company Power Rating: AC 120V/60Hz

Product: Tablet Temp.(C)/Hum.(%)/Air p.(hpa): 26(℃)/60%/1000hpa

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0

Remark: Adapter Power



No.	Frequency	Factor	Reading	Level	Limit	Margin	Detector
	(MHz)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dB)	
1	0.1539	10.15	24.47	34.62	65.78	-31.16	QP
2	0.1539	10.15	7.86	18.01	55.78	-37.77	AVG
3	0.1660	10.15	22.99	33.14	65.15	-32.01	QP
4	0.1660	10.15	7.80	17.95	55.15	-37.20	AVG
5	0.2100	10.13	19.23	29.36	63.20	-33.84	QP
6	0.2100	10.13	3.72	13.85	53.20	-39.35	AVG
7	0.2620	10.14	16.17	26.31	61.36	-35.05	QP
8	0.2620	10.14	3.30	13.44	51.36	-37.92	AVG
9	0.6419	10.15	15.86	26.01	56.00	-29.99	QP
10	0.6419	10.15	7.66	17.81	46.00	-28.19	AVG

S-FD-501 V1.0 Page No. : 16 of 110

Issued Date

Oct. 12, 2019



11	29.2420	10.48	16.68	27.16	60.00	-32.84	QP
12	29.2420	10.48	7.97	18.45	50.00	-31.55	AVG

Note: Level = Reading + Factor

Margin = Level - Limit

Factor = (LISN or ISN or PLC or current probe) Factor + Cable Loss + Attenuator

Cerpass Technology (Suzhou) Co., Ltd. Issued Date : Oct. 12, 2019 Page No. : 17 of 110





Test Standard: FCC_ClassB_QP Probe: N

Test item: Conduction Emission Test Time: 2019/8/1120:29:45

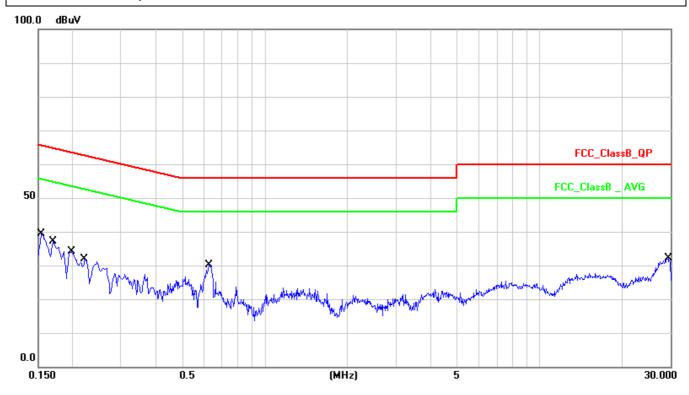
Applicant: Mitac Digital Technology Company Power Rating: AC 120V/60Hz

Product: Tablet Temp.(C)/Hum.(%)/Air p.(hpa): $26(^{\circ}C)/60\%/1000$ hpa

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0

Remark: Adapter Power



No.	Frequency	Factor	Reading	Level	Limit	Margin	Detector
	(MHz)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dB)	
1	0.1539	10.15	24.98	35.13	65.78	-30.65	QP
2	0.1539	10.15	9.11	19.26	55.78	-36.52	AVG
3	0.1700	10.15	22.72	32.87	64.96	-32.09	QP
4	0.1700	10.15	8.90	19.05	54.96	-35.91	AVG
5	0.1980	10.14	20.35	30.49	63.69	-33.20	QP
6	0.1980	10.14	7.09	17.23	53.69	-36.46	AVG
7	0.2220	10.14	18.05	28.19	62.74	-34.55	QP
8	0.2220	10.14	4.89	15.03	52.74	-37.71	AVG
9	0.6300	10.16	16.76	26.92	56.00	-29.08	QP
10	0.6300	10.16	8.33	18.49	46.00	-27.51	AVG

S-FD-501 V1.0 Page No. : 18 of 110

Issued Date

Oct. 12, 2019



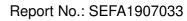
11	29.1900	10.32	15.25	25.57	60.00	-34.43	QP
12	29.1900	10.32	5.45	15.77	50.00	-34.23	AVG

Note: Level = Reading + Factor

Margin = Level - Limit

Factor = (LISN or ISN or PLC or current probe) Factor + Cable Loss + Attenuator

Cerpass Technology (Suzhou) Co., Ltd. Issued Date : Oct. 12, 2019 Page No. : 19 of 110



Oct. 12, 2019

Issued Date



Test Standard: FCC_ClassB_QP Probe: L1

Test item: Conduction Emission Test Time: 2019/8/1119:22:54

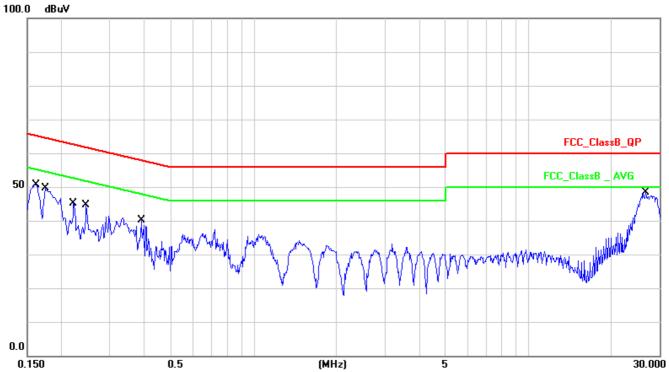
Applicant: Mitac Digital Technology Company Power Rating: AC 120V/60Hz

Product: Tablet Temp.(C)/Hum.(%)/Air p.(hpa): 26(℃)/60%/1000hpa

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0

Remark: POE Power



No.	Frequency	Factor	Reading	Level	Limit	Margin	Detector
	(MHz)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dB)	
1	0.1620	10.15	34.45	44.60	65.36	-20.76	QP
2	0.1620	10.15	12.34	22.49	55.36	-32.87	AVG
3	0.1740	10.15	33.35	43.50	64.76	-21.26	QP
4	0.1740	10.15	11.75	21.90	54.76	-32.86	AVG
5	0.2220	10.13	29.12	39.25	62.74	-23.49	QP
6	0.2220	10.13	11.88	22.01	52.74	-30.73	AVG
7	0.2460	10.13	27.05	37.18	61.89	-24.71	QP
8	0.2460	10.13	10.03	20.16	51.89	-31.73	AVG
9	0.3899	10.15	20.67	30.82	58.06	-27.24	QP
10	0.3899	10.15	6.47	16.62	48.06	-31.44	AVG
11	26.8180	10.46	32.74	43.20	60.00	-16.80	QP

S-FD-501 V1.0 Page No. : 20 of 110



12	26.8180	10.46	25.68	36.14	50.00	-13.86	AVG
----	---------	-------	-------	-------	-------	--------	-----

Note: Level = Reading + Factor

Margin = Level - Limit

Factor = (LISN or ISN or PLC or current probe) Factor + Cable Loss + Attenuator

 Cerpass Technology (Suzhou) Co., Ltd.
 Issued Date
 : Oct. 12, 2019

 S-FD-501 V1.0
 Page No.
 : 21 of 110





Test Standard: FCC_ClassB_QP Probe: N

Test item: Conduction Emission Test Time: 2019/8/1119:34:09

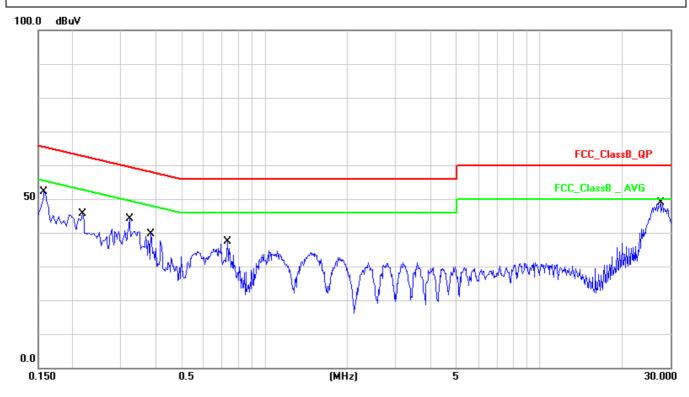
Applicant: Mitac Digital Technology Company Power Rating: AC 120V/60Hz

Product: Tablet Temp.(C)/Hum.(%)/Air p.(hpa): 26(℃)/60%/1000hpa

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0

Remark: POE Power



No.	Frequency	Factor	Reading	Level	Limit	Margin	Detector
	(MHz)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dB)	
1	0.1580	10.15	34.60	44.75	65.56	-20.81	QP
2	0.1580	10.15	11.34	21.49	55.56	-34.07	AVG
3	0.2180	10.14	27.85	37.99	62.89	-24.90	QP
4	0.2180	10.14	12.42	22.56	52.89	-30.33	AVG
5	0.3220	10.14	29.10	39.24	59.65	-20.41	QP
6	0.3220	10.14	15.53	25.67	49.65	-23.98	AVG
7	0.3860	10.15	20.14	30.29	58.15	-27.86	QP
8	0.3860	10.15	6.22	16.37	48.15	-31.78	AVG
9	0.7340	10.16	19.39	29.55	56.00	-26.45	QP
10	0.7340	10.16	6.43	16.59	46.00	-29.41	AVG

S-FD-501 V1.0 Page No. : 22 of 110

Issued Date

: Oct. 12, 2019



11	27.6020	10.34	32.54	42.88	60.00	-17.12	QP
12	27.6020	10.34	24.92	35.26	50.00	-14.74	AVG

Note: Level = Reading + Factor

Margin = Level - Limit

Factor = (LISN or ISN or PLC or current probe) Factor + Cable Loss + Attenuator

 Cerpass Technology (Suzhou) Co., Ltd.
 Issued Date
 : Oct. 12, 2019

 S-FD-501 V1.0
 Page No.
 : 23 of 110

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).

FREQUENCIES (MHz)	FIELD STRENGTH (micro volts/meter)	MEASUREMENT DISTANCE (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

For unintentional device, according to CISPR PUB.22, for Class B digital devices, the general requirement of field strength of radiated emissions from intentional radiators at a distance of 10 meters shall not exceed the above table.

Frequency (MHz)	Distance Meters	Radiated (dB μV/ M)		
30-230	10	30		
230-1000	10	37		

Cerpass Technology (Suzhou) Co., Ltd. Issued Date : Oct. 12, 2019 Page No. 24 of 110





4.2 Test Standard

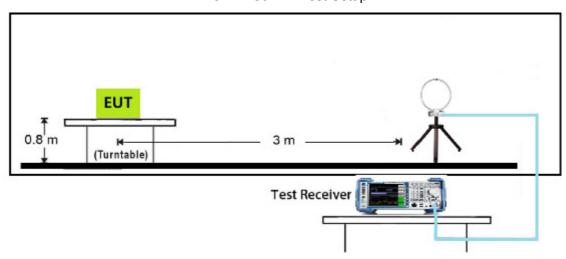
ANSI C63.10-2013-Section 6.10.5

4.3 Test Procedures

- a. The EUT was placed on a rotatable table top 0.8 meter for frequency below 1GHz and 1.5meter for frequency above 1GHz above ground.
- b. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
- c. The table was rotated 360 degrees to determine the position of the highest radiation.
- d. The antenna is a broadband antenna and its height is varied between one meter and four meters above ground to find the maximum value of the field strength both horizontal polarization and vertical polarization of the antenna are set to make the measurement.
- e. For each suspected emission the EUT was arranged to its worst case and then tune the antenna tower (from 1 M to 4 M) and turn table (from 0 degree to 360 degrees) to find the maximum reading.
- f. Set the test-receiver system to Peak or CISPR guasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method and reported.
- h. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

4.4 Test Setup

9kHz~30MHz Test Setup



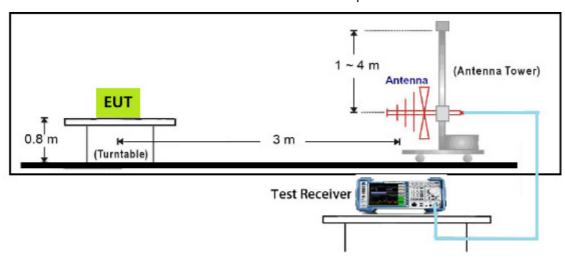
Cerpass Technology (Suzhou) Co., Ltd. Issued Date Oct. 12, 2019 25 of 110

S-FD-501 V1.0 Page No.

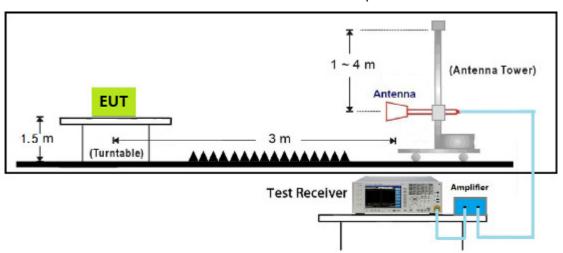




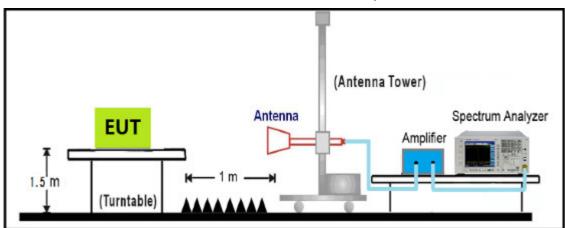
Below 1GHz Test Setup



1GHz~18GHz Test Setup



18GHz~40GHz Test Setup



S-FD-501 V1.0 Page No. : 26 of 110

Issued Date

Oct. 12, 2019





4.5 Test Result

The worst case of Radiated Emission below 1GHz:

Test Distance: 3M

Test Standard: FCC Class B 3M Radiation Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2019-7-2916:42:48

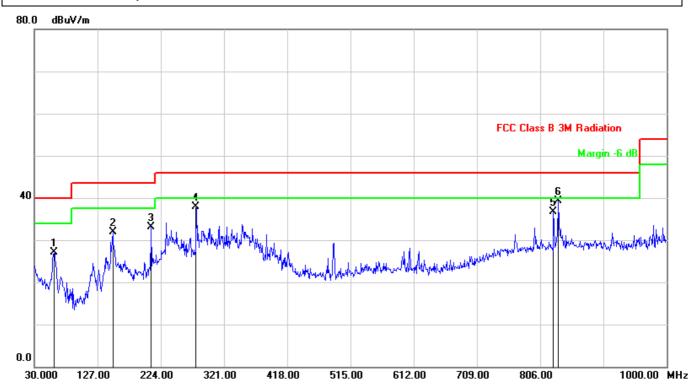
Applicant: Mitac Digital Technology Company Power Rating: AC 120V/60Hz

 $\label{eq:product:Tablet} Product: \qquad \qquad \text{Temp.(C)/Hum.(\%)/Air p.(hpa):} \qquad 26(^{\circ}\text{C})/60\%/983hpa$

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0

Remark: Adapter Power



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	61.0399	-15.03	42.12	27.09	40.00	-12.91	peak
2	150.2800	-12.57	44.46	31.89	43.50	-11.61	peak
3	209.4499	-11.50	44.67	33.17	43.50	-10.33	peak
4	278.3199	-8.38	46.38	38.00	46.00	-8.00	peak
5	826.3700	2.14	34.53	36.67	46.00	-9.33	peak
6	834.1299	2.23	37.13	39.36	46.00	-6.64	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)

S-FD-501 V1.0 Page No. : 27 of 110

Issued Date

Oct. 12, 2019



Test Distance: 3M

Test Standard: FCC Class B 3M Radiation Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2019-7-2916:46:01

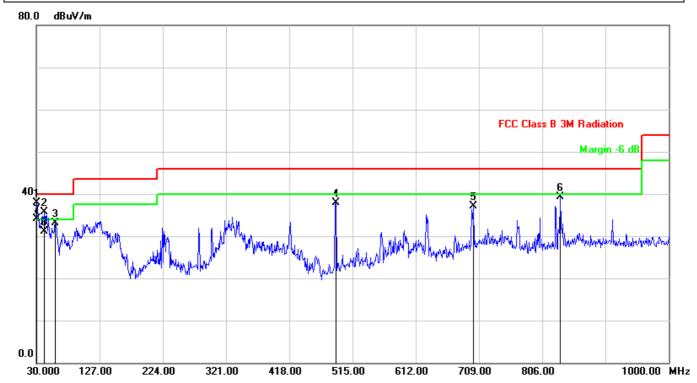
Applicant: Mitac Digital Technology Company Power Rating: AC 120V/60Hz

Product: Tablet Temp.(C)/Hum.(%)/Air p.(hpa): 26(℃)/60%/983hpa

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0

Remark: Adapter Power



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	30.0000	-2.48	40.37	37.89	40.00	-2.11	peak
2	42.6099	-7.48	43.28	35.80	40.00	-4.20	peak
3	59.1000	-12.51	45.66	33.15	40.00	-6.85	peak
4	489.7798	-5.54	43.46	37.92	46.00	-8.08	peak
5	700.2698	1.13	36.02	37.15	46.00	-8.85	peak
6	834.1299	1.31	37.96	39.27	46.00	-6.73	peak
7	30.0000	-2.48	36.51	34.03	40.00	-5.97	QP
8	42.6099	-7.48	38.54	31.06	40.00	-8.94	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)

 Cerpass Technology (Suzhou) Co., Ltd.
 Issued Date
 : Oct. 12, 2019

 S-FD-501 V1.0
 Page No.
 : 28 of 110



Test Distance: 3M

Test Standard: FCC Class B 3M Radiation Ant. Polarization: Horizontal

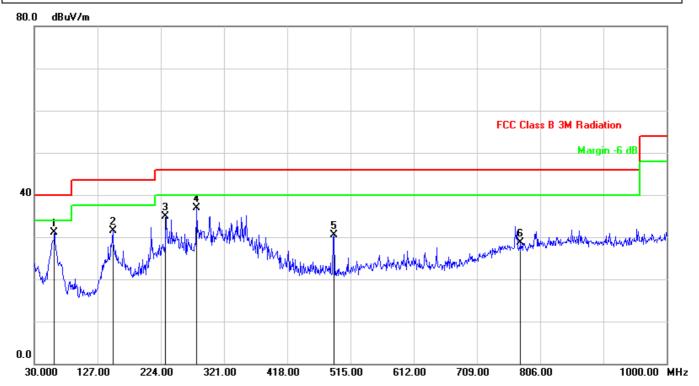
Test item: Radiation Emission Test Time: 2019-7-2917:48:02

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: BT3.0
Remark: POE Power



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	61.0399	-15.03	46.17	31.14	40.00	-8.86	peak
2	150.2800	-12.57	44.10	31.53	43.50	-11.97	peak
3	231.7598	-10.96	45.96	35.00	46.00	-11.00	peak
4	279.2900	-8.29	45.25	36.96	46.00	-9.04	peak
5	489.7798	-5.49	36.07	30.58	46.00	-15.42	peak
6	775.9298	1.50	27.25	28.75	46.00	-17.25	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)

 Cerpass Technology (Suzhou) Co., Ltd.
 Issued Date
 : Oct. 12, 2019

 S-FD-501 V1.0
 Page No.
 : 29 of 110



Test Distance: 3M

Test Standard: FCC Class B 3M Radiation Ant. Polarization: Vertical

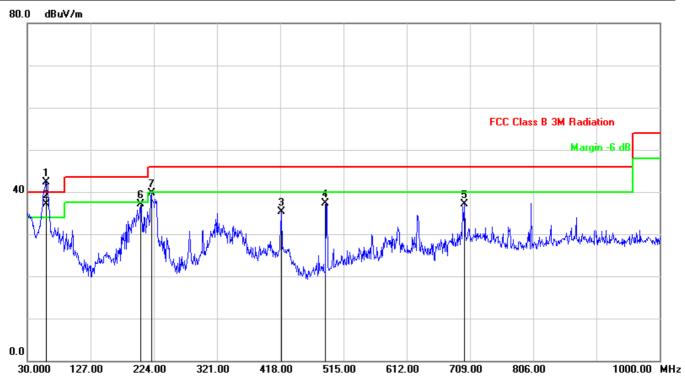
Test item: Radiation Emission Test Time: 2019-7-2917:51:15

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: BT3.0
Remark: POE Power



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	59.1000	-12.51	54.85	42.34	40.00	2.34	peak
2	59.1000	-12.51	49.54	37.03	40.00	-2.97	QP
3	419.9399	-3.29	38.52	35.23	46.00	-10.77	peak
4	487.8399	-5.67	42.99	37.32	46.00	-8.68	peak
5	700.2698	1.13	35.97	37.10	46.00	-8.90	peak
6	204.5999	-12.37	49.45	37.08	43.50	-6.42	peak
7	220.1200	-12.19	51.86	39.67	46.00	-6.33	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)

 Cerpass Technology (Suzhou) Co., Ltd.
 Issued Date
 : Oct. 12, 2019

 S-FD-501 V1.0
 Page No.
 : 30 of 110



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: 2019-8-515:48:21

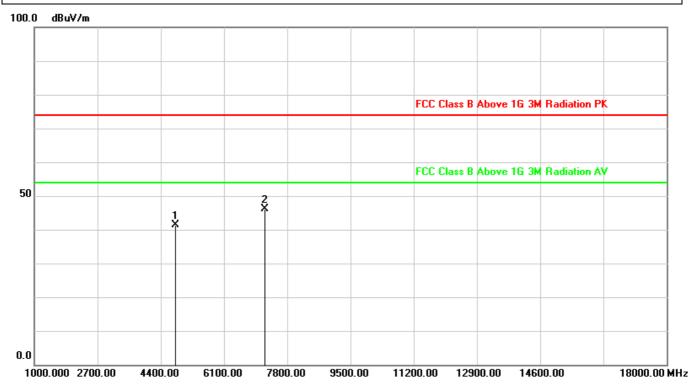
Applicant: Mitac Digital Technology Company Power Rating: AC 120V/60Hz

Product: Tablet Temp.(C)/Hum.(%)/Air p.(hpa): 26(℃)/60%/983hpa

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0-DH5 2402MHz

Remark: POE Power



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4804.000	3.28	38.23	41.51	74.00	-32.49	peak
2	7206.000	8.19	38.01	46.20	74.00	-27.80	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.

Issued Date

: Oct. 12, 2019

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.

S-FD-501 V1.0 Page No. : 31 of 110



Test Distance: 3M

Test Standard: FCC Class B Above 1G 3M Ant. Polarization: Vertical

Radiation PK

Test item: Radiation Emission Test Time: 2019-8-515:50:49

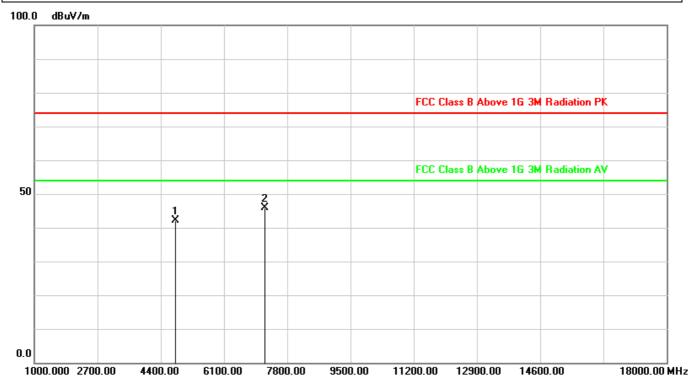
Applicant: Mitac Digital Technology Company Power Rating: AC 120V/60Hz

Product: Tablet Temp.(C)/Hum.(%)/Air p.(hpa): 26(℃)/60%/983hpa

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0-DH5 2402MHz

Remark: POE Power



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4804.000	3.28	38.90	42.18	74.00	-31.82	peak
2	7206.000	8.19	37.76	45.95	74.00	-28.05	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.

S-FD-501 V1.0 Page No. : 32 of 110

Issued Date

: Oct. 12, 2019



Test Distance: 3M

Test Standard: FCC Class B Above 1G 3M Ant. Polarization: Horizontal

Radiation PK

Test item: **Radiation Emission Test Time:** 2019-8-515:53:42

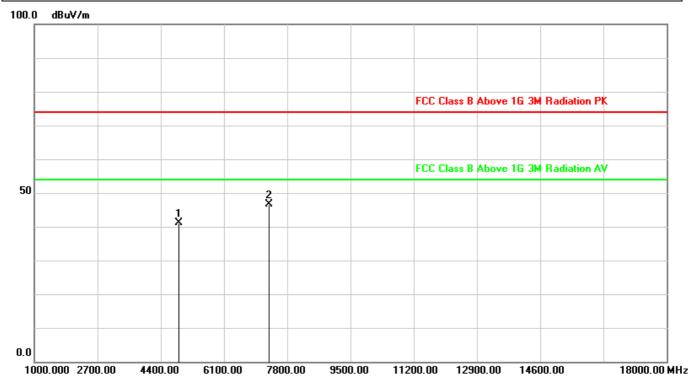
Applicant: **Mitac Digital Technology Company Power Rating:** AC 120V/60Hz

Product: 26(°C)/60%/983hpa Temp.(C)/Hum.(%)/Air p.(hpa): **Tablet**

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0-DH5 2441MHz

Remark: **POE Power**



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4882.000	3.44	37.86	41.30	74.00	-32.70	peak
2	7323.000	8.28	38.33	46.61	74.00	-27.39	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.

Issued Date : Oct. 12, 2019 S-FD-501 V1.0 Page No. 33 of 110



Test Distance: 3M

Test Standard: FCC Class B Above 1G 3M Ant. Polarization: Vertical

Radiation PK

Test item: Radiation Emission Test Time: 2019-8-515:56:12

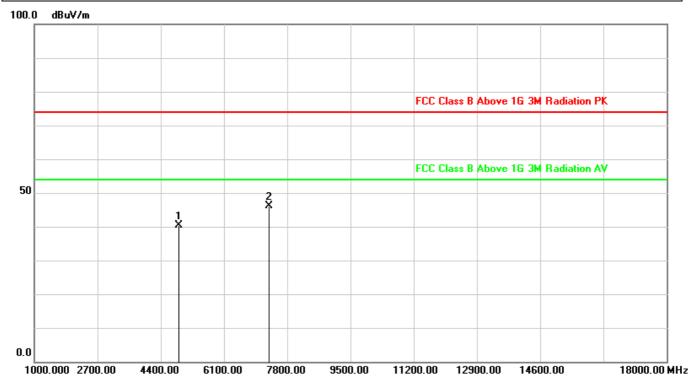
Applicant: Mitac Digital Technology Company Power Rating: AC 120V/60Hz

Product: Tablet Temp.(C)/Hum.(%)/Air p.(hpa): 26(℃)/60%/983hpa

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0-DH5 2441MHz

Remark: POE Power



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4882.000	3.44	36.74	40.18	74.00	-33.82	peak
2	7323.000	8.28	37.98	46.26	74.00	-27.74	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.

S-FD-501 V1.0 Page No. : 34 of 110

Issued Date

: Oct. 12, 2019



Test Distance: 3M

Test Standard: FCC Class B Above 1G 3M Ant. Polarization: Horizontal

Radiation PK

Test item: Radiation Emission Test Time: 2019-8-515:59:32

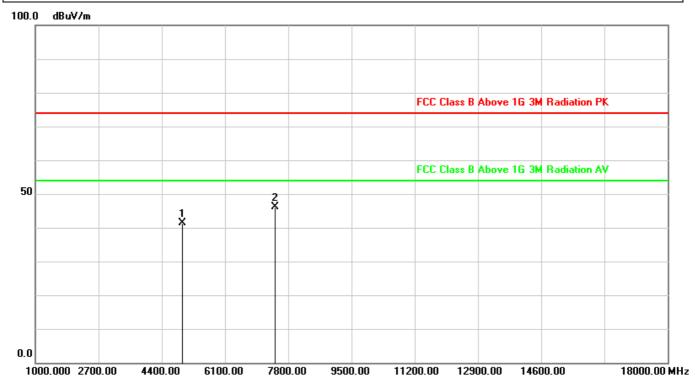
Applicant: Mitac Digital Technology Company Power Rating: AC 120V/60Hz

Product: Tablet Temp.(C)/Hum.(%)/Air p.(hpa): 26(°C)/60%/983hpa

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0-DH5 2480MHz

Remark: POE Power



No	' '	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4960.000	3.59	37.76	41.35	74.00	-32.65	peak
2	7440.000	8.36	37.47	45.83	74.00	-28.17	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.

S-FD-501 V1.0 Page No. : 35 of 110

Issued Date

: Oct. 12, 2019



Test Distance: 3M

Test Standard: FCC Class B Above 1G 3M Ant. Polarization: Vertical

Radiation PK

Test item: **Radiation Emission Test Time:** 2019-8-516:02:28

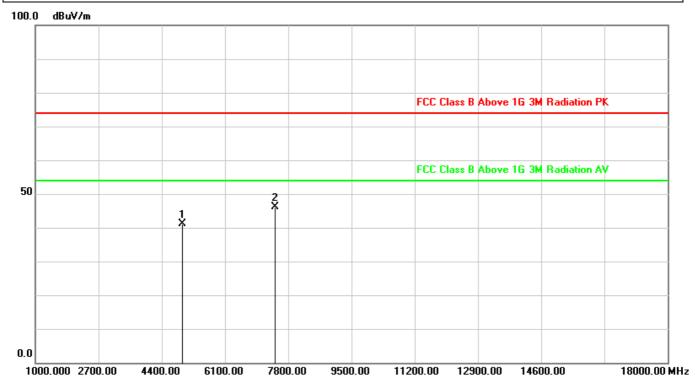
Applicant: **Mitac Digital Technology Company Power Rating:** AC 120V/60Hz

Product: Temp.(C)/Hum.(%)/Air p.(hpa): 26(°C)/60%/983hpa **Tablet**

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0-DH5 2480MHz

Remark: **POE Power**



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4960.000	3.59	37.69	41.28	74.00	-32.72	peak
2	7440.000	8.36	37.70	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.

Issued Date : Oct. 12, 2019 S-FD-501 V1.0 Page No. 36 of 110



Test Distance: 3M

Test Standard: FCC Class B Above 1G 3M Ant. Polarization: Horizontal

Radiation PK

Test item: Radiation Emission Test Time: 2019-8-516:04:44

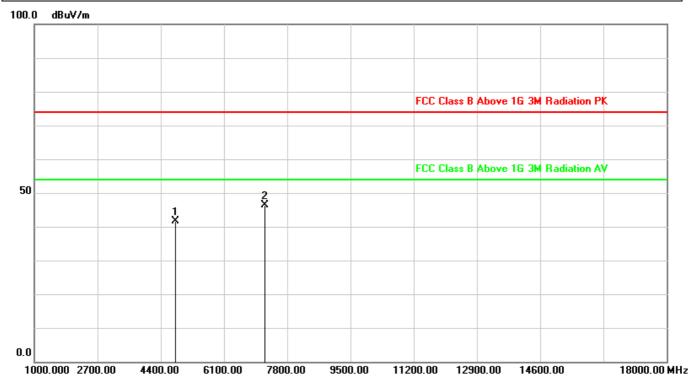
Applicant: Mitac Digital Technology Company Power Rating: AC 120V/60Hz

Product: Tablet Temp.(C)/Hum.(%)/Air p.(hpa): 26(℃)/60%/983hpa

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0-2DH5 2402MHz

Remark: POE Power



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4804.000	3.28	38.02	41.30	74.00	-32.70	peak
2	7206.000	8.19	38.43	46.62	74.00	-27.38	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.

S-FD-501 V1.0 Page No. : 37 of 110

Issued Date



Test Distance: 3M

Test Standard: FCC Class B Above 1G 3M Ant. Polarization: Vertical

Radiation PK

Test item: Radiation Emission Test Time: 2019-8-516:07:15

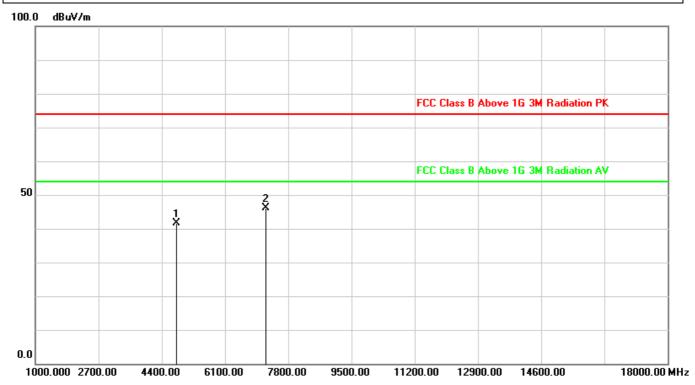
Applicant: Mitac Digital Technology Company Power Rating: AC 120V/60Hz

Product: Tablet Temp.(C)/Hum.(%)/Air p.(hpa): 26(°C)/60%/983hpa

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0-2DH5 2402MHz

Remark: POE Power



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	4804.000	3.28	38.42	41.70	74.00	-32.30	peak
2	7206.000	8.19	38.04	46.23	74.00	-27.77	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.

S-FD-501 V1.0 Page No. : 38 of 110

Issued Date



Test Distance: 3M

Test Standard: FCC Class B Above 1G 3M Ant. Polarization: Horizontal

Radiation PK

Test item: Radiation Emission Test Time: 2019-8-516:11:36

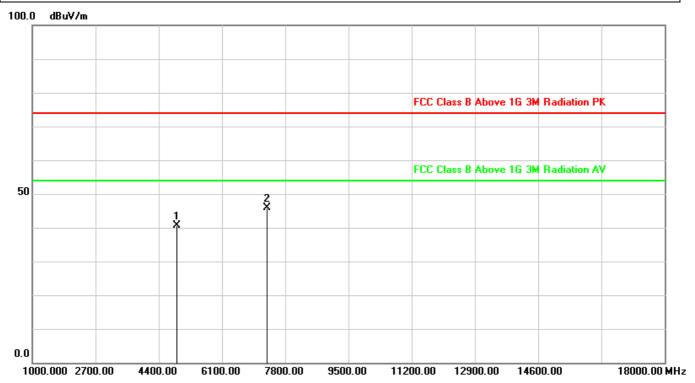
Applicant: Mitac Digital Technology Company Power Rating: AC 120V/60Hz

Product: Tablet Temp.(C)/Hum.(%)/Air p.(hpa): 26(℃)/60%/983hpa

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0-2DH5 2441MHz

Remark: POE Power



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4882.000	3.44	37.14	40.58	74.00	-33.42	peak
2	7323.000	8.28	37.64	45.92	74.00	-28.08	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.

S-FD-501 V1.0 Page No. : 39 of 110

Issued Date



Test Distance: 3M

Test Standard: FCC Class B Above 1G 3M Ant. Polarization: Vertical

Radiation PK

Test item: Radiation Emission Test Time: 2019-8-516:15:00

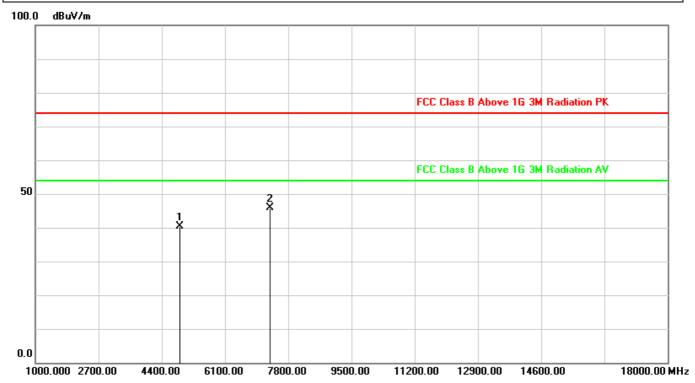
Applicant: Mitac Digital Technology Company Power Rating: AC 120V/60Hz

Product: Tablet Temp.(C)/Hum.(%)/Air p.(hpa): 26(°C)/60%/983hpa

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0-2DH5 2441MHz

Remark: POE Power



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4882.000	3.44	36.71	40.15	74.00	-33.85	peak
2	7323.000	8.28	37.87	46.15	74.00	-27.85	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.

S-FD-501 V1.0 Page No. : 40 of 110

Issued Date



Test Distance: 3M

Test Standard: FCC Class B Above 1G 3M Ant. Polarization: Horizontal

Radiation PK

Test item: Radiation Emission Test Time: 2019-8-516:17:48

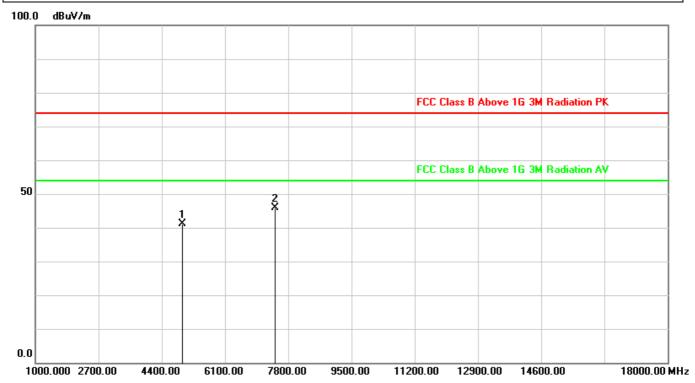
Applicant: Mitac Digital Technology Company Power Rating: AC 120V/60Hz

Product: Tablet Temp.(C)/Hum.(%)/Air p.(hpa): 26(℃)/60%/983hpa

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0-2DH5 2480MHz

Remark: POE Power



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4960.000	3.59	37.27	40.86	74.00	-33.14	peak
2	7440.000	8.36	37.48	45.84	74.00	-28.16	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.

S-FD-501 V1.0 Page No. : 41 of 110

Issued Date



Test Distance: 3M

Test Standard: FCC Class B Above 1G 3M Ant. Polarization: Vertical

Radiation PK

Test item: Radiation Emission Test Time: 2019-8-516:20:36

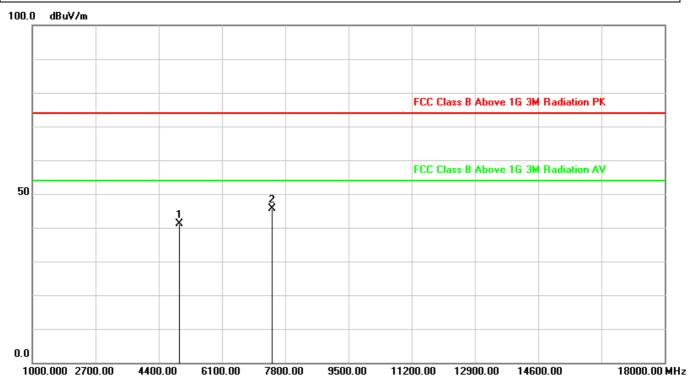
Applicant: Mitac Digital Technology Company Power Rating: AC 120V/60Hz

Product: Tablet Temp.(C)/Hum.(%)/Air p.(hpa): 26(°C)/60%/983hpa

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0-2DH5 2480MHz

Remark: POE Power



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4960.000	3.59	37.63	41.22	74.00	-32.78	peak
2	7440.000	8.36	37.41	45.77	74.00	-28.23	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.
- 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.

S-FD-501 V1.0 Page No. : 42 of 110

Issued Date



Test Distance: 3M

Test Standard: FCC Class B Above 1G 3M Ant. Polarization: Horizontal

Radiation PK

Test item: Radiation Emission Test Time: 2019-8-516:24:03

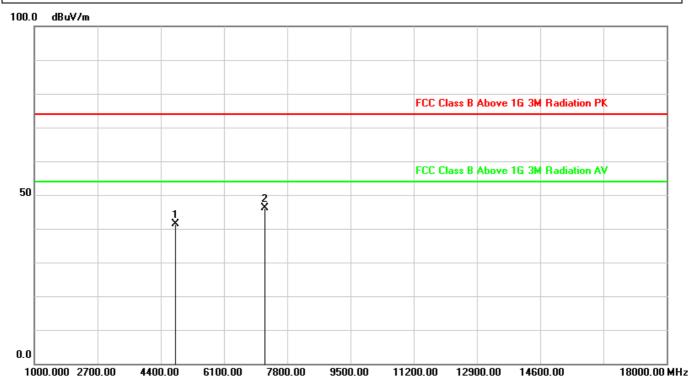
Applicant: Mitac Digital Technology Company Power Rating: AC 120V/60Hz

Product: Tablet Temp.(C)/Hum.(%)/Air p.(hpa): 26(°C)/60%/983hpa

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0-3DH5 2402MHz

Remark: POE Power



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	4804.000	3.28	37.97	41.25	74.00	-32.75	peak
2	7206.000	8.19	37.87	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.

S-FD-501 V1.0 Page No. : 43 of 110

Issued Date



Test Distance: 3M

Test Standard: FCC Class B Above 1G 3M Ant. Polarization: Vertical

Radiation PK

Test item: Radiation Emission Test Time: 2019-8-516:27:08

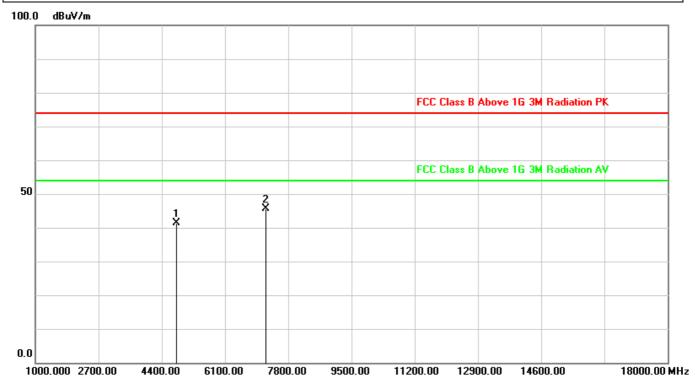
Applicant: Mitac Digital Technology Company Power Rating: AC 120V/60Hz

Product: Tablet Temp.(C)/Hum.(%)/Air p.(hpa): 26(°C)/60%/983hpa

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0-3DH5 2402MHz

Remark: POE Power



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4804.000	3.28	37.77	41.05	74.00	-32.95	peak
2	7206.000	8.19	37.66	45.85	74.00	-28.15	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.

S-FD-501 V1.0 Page No. : 44 of 110

Issued Date



Test Distance: 3M

Test Standard: FCC Class B Above 1G 3M Ant. Polarization: Horizontal

Radiation PK

Test item: Radiation Emission Test Time: 2019-8-516:29:43

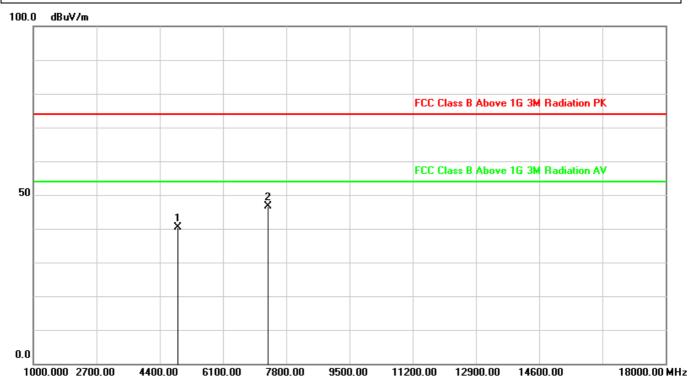
Applicant: Mitac Digital Technology Company Power Rating: AC 120V/60Hz

Product: Tablet Temp.(C)/Hum.(%)/Air p.(hpa): 26(°C)/60%/983hpa

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0-3DH5 2441MHz

Remark: POE Power



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	4882.000	3.44	36.91	40.35	74.00	-33.65	peak
2	7323.000	8.28	38.62	46.90	74.00	-27.10	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.

S-FD-501 V1.0 Page No. : 45 of 110

Issued Date



Test Distance: 3M

Test Standard: FCC Class B Above 1G 3M Ant. Polarization: Vertical

Radiation PK

Test item: Radiation Emission Test Time: 2019-8-516:32:23

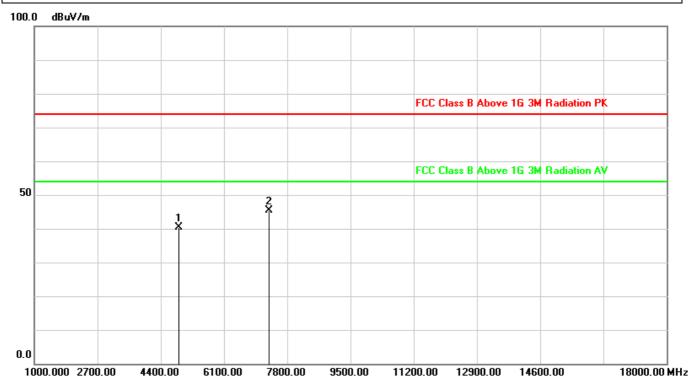
Applicant: Mitac Digital Technology Company Power Rating: AC 120V/60Hz

Product: Tablet Temp.(C)/Hum.(%)/Air p.(hpa): 26(℃)/60%/983hpa

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0-3DH5 2441MHz

Remark: POE Power



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	4882.000	3.44	36.88	40.32	74.00	-33.68	peak
2	7323.000	8.28	36.79	45.07	74.00	-28.93	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.

S-FD-501 V1.0 Page No. : 46 of 110

Issued Date



Test Distance: 3M

Test Standard: FCC Class B Above 1G 3M Ant. Polarization: Horizontal

Radiation PK

Test item: **Radiation Emission Test Time:** 2019-8-516:35:28

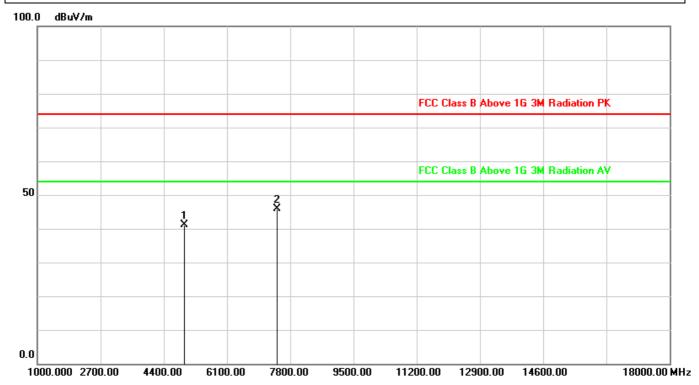
Applicant: **Mitac Digital Technology Company Power Rating:** AC 120V/60Hz

Product: 26(°C)/60%/983hpa Temp.(C)/Hum.(%)/Air p.(hpa): **Tablet**

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0-3DH5 2480MHz

Remark: **POE Power**



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	4960.000	3.59	37.28	40.87	74.00	-33.13	peak
2	7440.000	8.36	37.62	45.98	74.00	-28.02	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.

Issued Date : Oct. 12, 2019 S-FD-501 V1.0 Page No. 47 of 110



Test Distance: 3M

Test Standard: FCC Class B Above 1G 3M Ant. Polarization: Vertical

Radiation PK

Test item: Radiation Emission Test Time: 2019-8-516:38:07

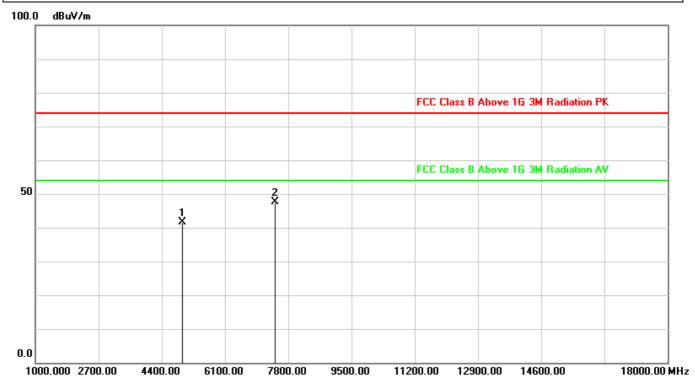
Applicant: Mitac Digital Technology Company Power Rating: AC 120V/60Hz

Product: Tablet Temp.(C)/Hum.(%)/Air p.(hpa): 26(℃)/60%/983hpa

Model No.: N642 Test Engineer: Chris

Test Mode: BT3.0-3DH5 2480MHz

Remark: POE Power



No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4960.000	3.59	37.79	41.38	74.00	-32.62	peak
2	7440.000	8.36	39.29	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.
- 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.

Issued Date

: Oct. 12, 2019

S-FD-501 V1.0 Page No. : 48 of 110

20dB Bandwidth Measurement

5.1 Test Limit

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125mW.

5.2 Test Standard

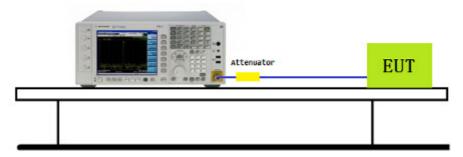
ANSI C63.10-2013- Section 7.8.7

5.3 Test Setup

- 1. Set RBW ≥ 1% of the 20dB bandwidth
- 2. VBW ≥ 3 ×RBW
- 3. Span = approximately 2 to 3 times the 20dB bandwidth, centered on a hopping channel
- 4. Detector = Peak
- 5. Trace mode = max hold
- 6. Sweep = auto couple
- 7. Allow the trace to stabilize
- 8. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 20dB relative to the maximum level measured in the fundamental emission

5.4 Test Setup Layout

Spectrum Analyzer



Cerpass Technology (Suzhou) Co., Ltd. Issued Date Oct. 12, 2019 S-FD-501 V1.0 Page No. 49 of 110



: Oct. 12, 2019

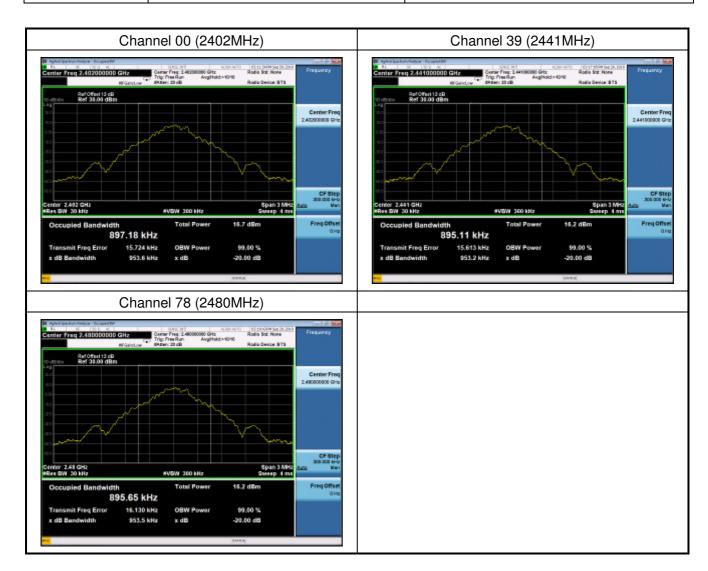
: 50 of 110



5.5 Test Result

Test Item	20dB Bandwidth Measurement	
Test Engineer:	Chris	
Test Date	2019-09-29	
Test Mode	Transmitting by DH5	

Channel No.	Frequency	20dB Occupied Bandwidth	
	(MHz)	(kHz)	
00	2402	953.6	
39	2441	953.2	
78	2480	953.5	

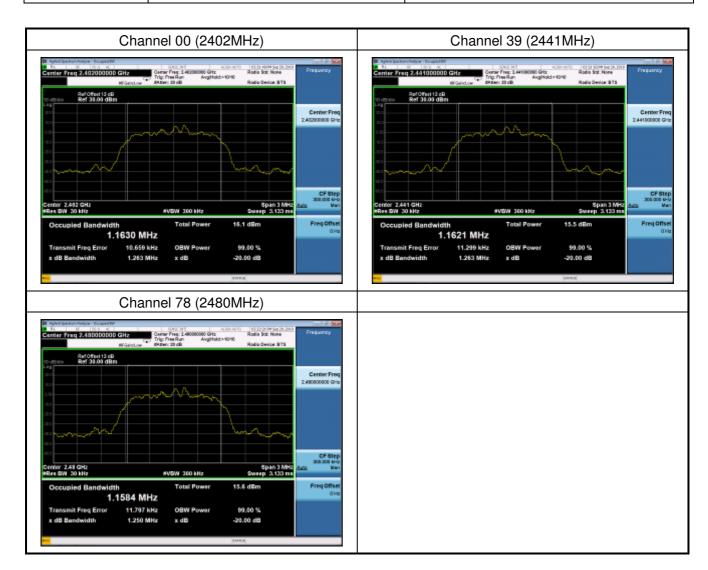






Test Item	20dB Bandwidth Measurement	
Test Engineer:	Chris	
Test Date	2019-09-29	
Test Mode	Transmitting by 2DH5	

	•	
Channel No.	Frequency	20dB Occupied Bandwidth
	(MHz)	(kHz)
00	2402	1263
39	2441	1263
78	2480	1250

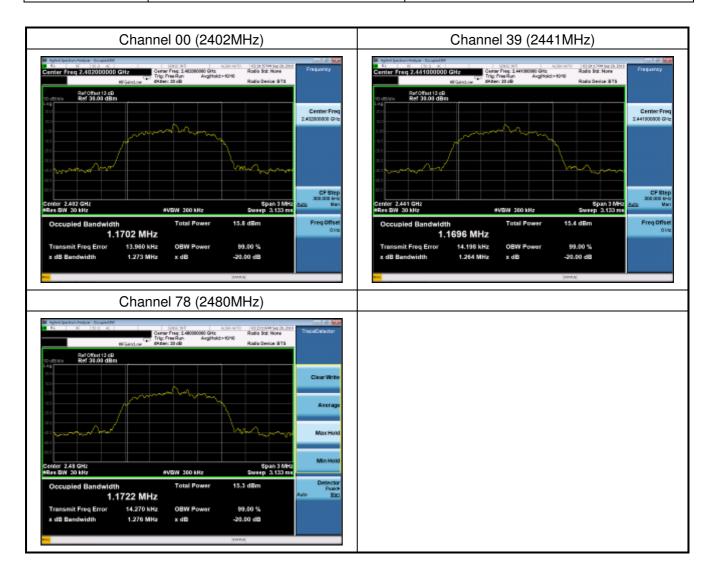






Test Item	20dB Bandwidth Measurement	
Test Engineer:	Chris	
Test Date	2019-09-29	
Test Mode	Transmitting by 3DH5	

Channel No.	Frequency	20dB Occupied Bandwidth	
	(MHz) (kHz)		
00	2402	1273	
39	2441	1264	
78	2480	1276	



S-FD-501 V1.0 Page No. : 52 of 110

Issued Date





6. Channel Carrier Frequencies Separation Measurement

6.1 Test Limit

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

6.2 Test Standard

ANSI C63.10-2013- Section 7.8.2

6.3 Test Setup

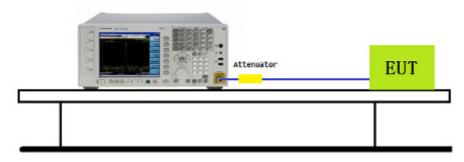
The EUT shall have its hopping function enabled. Use the following spectrum analyzer settings:

- a) Span: Wide enough to capture the peaks of two adjacent channels.
- b) RBW: Start with the RBW set to approximately 30% of the channel spacing; adjust as necessary to best identify the center of each individual channel.
- c) Video (or average) bandwidth (VBW) ≥ RBW
- d) Sweep: Auto
- e) Detector function: Peak
- f) Trace: Max hold
- g) Allow the trace to stabilize

Use the marker-delta function to determine the separation between the peaks of the adjacent channels. Compliance of an EUT with the appropriate regulatory limit shall be determined. A plot of the data shall be included in the test report.

6.4 Test Setup Layout

Spectrum Analyzer



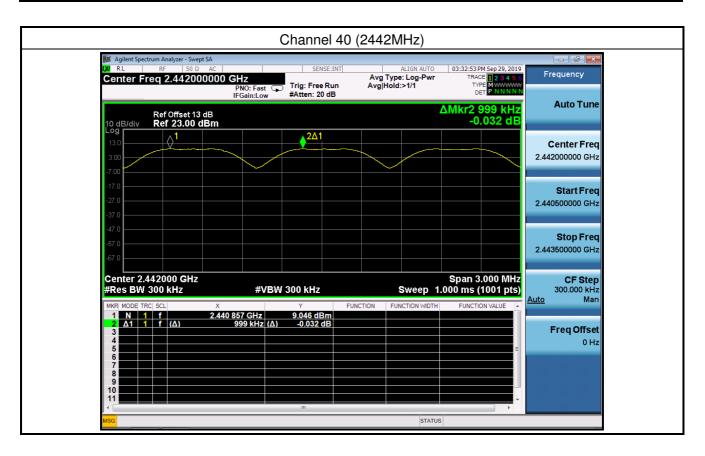




6.5 Test Result

Test Item	Channel Carrier Frequencies Separation Measurement
Test Engineer:	Chris
Test Date	2019-09-29
Test Mode	Transmitting by DH5

Channel No.	Frequency (MHz)	Carrier Frequency Separation (kHz)	Limit (kHz)	Result
40	2442	999	>25 kHz or 2/3 of 20 dB BW	Pass



S-FD-501 V1.0 Page No. : 54 of 110

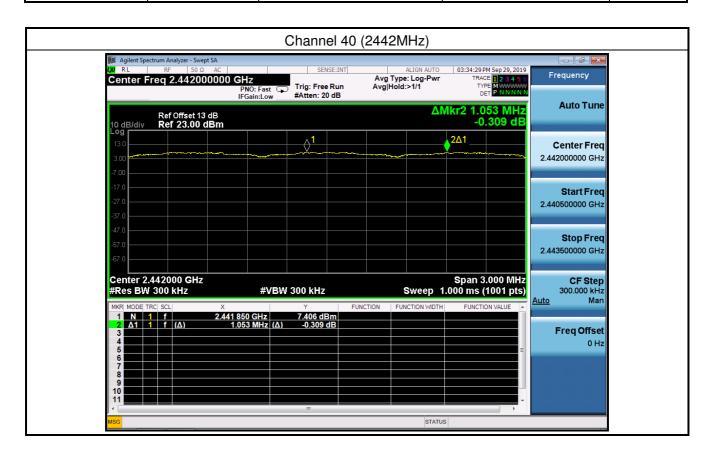
Issued Date





Test Item	Channel Carrier Frequencies Separation Measurement	
Test Engineer:	Chris	
Test Date	2019-09-29	
Test Mode	Transmitting by 2DH5	

Channel No.	Frequency (MHz)	Carrier Frequency Separation(kHz)	Limit (kHz)	Result
40	2442	1053	>25 kHz or 2/3 of 20 dB BW	Pass



S-FD-501 V1.0 Page No. : 55 of 110

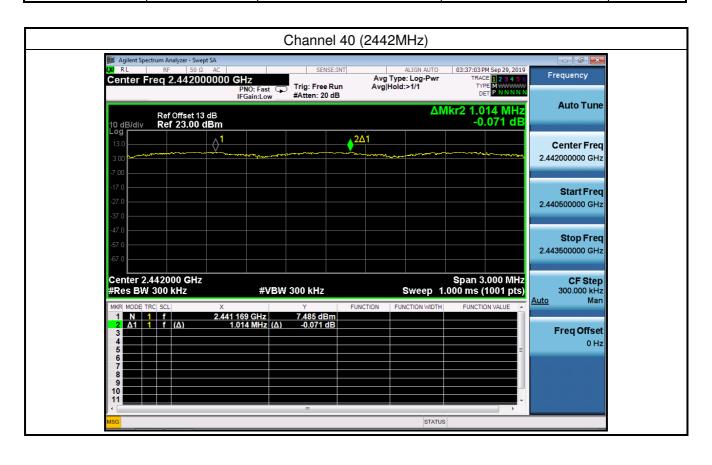
Issued Date





Test Item	Channel Carrier Frequencies Separation Measurement	
Test Engineer:	Chris	
Test Date	2019-09-29	
Test Mode	Transmitting by 3DH5	

Channel No.	Frequency (MHz)	Carrier Frequency Separation (kHz)	Limit (kHz)	Result
40	2442	1014	>25 kHz or 2/3 of 20 dB BW	Pass







Dwell Time Measurement

7.1 Test Limit

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

7.2 Test Standard

ANSI C63.10-2013- Section 7.8.3

7.3 Test Setup

The EUT shall have its hopping function enabled. Use the following spectrum analyzer settings:

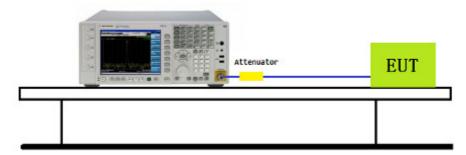
- Span: Zero span, centered on a hopping channel.
- b) RBW shall be \leq channel spacing and where possible RBW should be set >> 1 / T, where T is the expected dwell time per channel.
- c) Sweep: As necessary to capture the entire dwell time per hopping channel; where possible use a video trigger and trigger delay so that the transmitted signal starts a little to the right of the start of the plot. The trigger level might need slight adjustment to prevent triggering when the system hops on an adjacent channel; a second plot might be needed with a longer sweep time to show two successive hops on a channel.

d) Detector function: Peak

e) Trace: Max hold

7.4 Test Setup Layout

Spectrum Analyzer



Issued Date : Oct. 12, 2019 S-FD-501 V1.0 Page No. 57 of 110

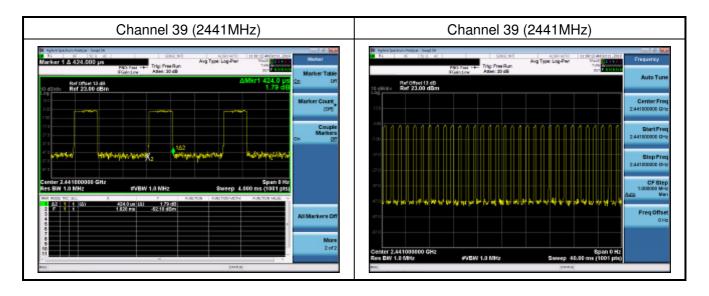


7.5 Test Result

Test Item	Dwell Time Measurement	
Test Engineer:	Chris	
Test Date	2019-10-11	
Test Mode	Transmitting by 3DH1	

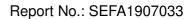
Channel No.	Frequency (MHz)	Time of Occupancy (ms)	Limit (ms)	Result
39	2441	135.68	< 400	Pass

Test Time Period: 0.4*79=31.6sec, Hopping Times Within 1sec: 32/40msec = 800 hops/sec. 2441MHz, The Maximum Occupancy Time Within 31.6sec: [(0.424ms*800)/79]*31.6 =135.68msec



S-FD-501 V1.0 Page No. : 58 of 110

Issued Date

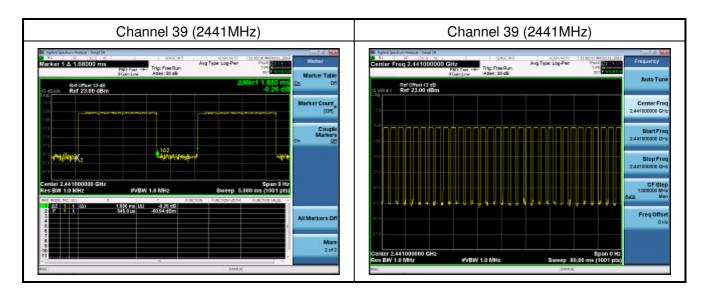




Test Item	Dwell Time Measurement
Test Engineer:	Chris
Test Date	2019-10-11
Test Mode	Transmitting by 3DH3

Channel No.	Frequency (MHz)	Time of Occupancy (ms)	Limit (ms)	Result
39	2441	268.8	< 400	Pass

Test Time Period: 0.4*79=31.6sec, Hopping Times Within 1sec: 20/50msec=400hops/sec. 2441MHz, The Maximum Occupancy Time Within 31.6sec: [(1.680ms*400)/79]*31.6=268.8msec



S-FD-501 V1.0 Page No. : 59 of 110

Issued Date

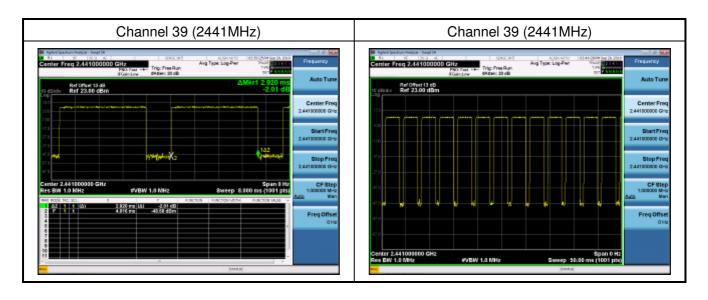




Test Item	Dwell Time Measurement
Test Engineer:	Chris
Test Date	2019-09-29
Test Mode	Transmitting by 3DH5

Channel No.	Frequency (MHz)	Time of Occupancy (ms)	Limit (ms)	Result
39	2441	306.6	< 400	Pass

Test Time Period: 0.4*79=31.6sec, Hopping Times Within 1sec: 21/80msec=262.5 hops/sec. 2441MHz, The Maximum Occupancy Time Within 31.6sec: [(2.92ms*262.5)/79]*31.6= 306.6msec



S-FD-501 V1.0 Page No. : 60 of 110

Issued Date





8. Number of Hopping Channels Measurement

8.1 Test Limit

Frequency hopping systems in the 2400 ~ 2483.5 MHz band shall use at least 15 channels.

8.2 Test Standard

ANSI C63.10-2013- Section 7.8.3

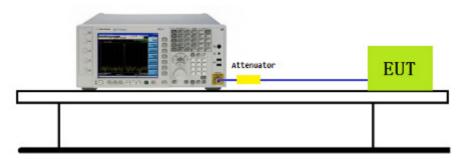
8.3 Test Setup

The EUT shall have its hopping function enabled. Use the following spectrum analyzer settings:

- Span: The frequency band of operation. Depending on the number of channels the device supports, it may be necessary to divide the frequency range of operation across multiple spans, to allow the individual channels to be clearly seen.
- RBW: To identify clearly the individual channels, set the RBW to less than 30% of the channel spacing or the 20 dB bandwidth, whichever is smaller.
- VBW ≥ RBW c)
- Sweep: Auto d)
- Detector function: Peak e)
- Trace: Max hold f)
- Allow the trace to stabilize

8.4 Test Setup Layout

Spectrum Analyzer



Cerpass Technology (Suzhou) Co., Ltd. Issued Date : Oct. 12, 2019 S-FD-501 V1.0 Page No. 61 of 110



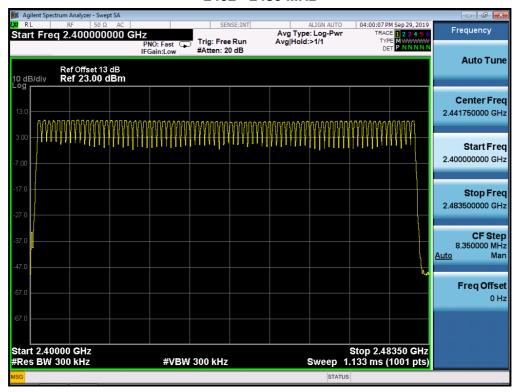


8.5 Test Result

Test Item	Number of Hopping Channels Measurement	
Test Engineer:	Chris	
Test Date	2019-09-29	
Test Mode	Transmitting by DH5	

Frequency Band (MHz)	Number of Hopping Frequencies	Limit	Result
2400 - 2483.5	79	>15	Pass

2402 - 2480 MHz



S-FD-501 V1.0 Page No. : 62 of 110

Issued Date

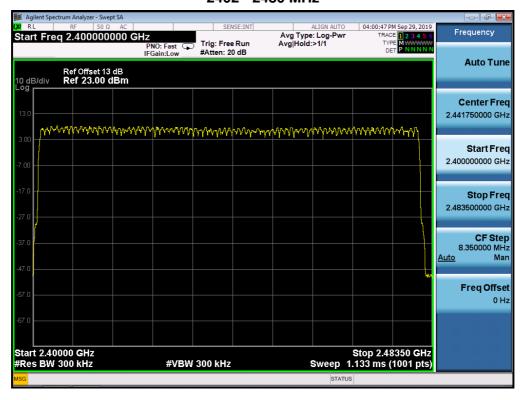




Test Item	Number of Hopping Channels Measurement	
Test Engineer:	Chris	
Test Date	2019-09-29	
Test Mode	Transmitting by 2DH5	

Frequency Band (MHz)	Number of Hopping Frequencies	Limit	Result
2400 - 2483.5	79	>15	Pass

2402 - 2480 MHz



S-FD-501 V1.0 Page No. : 63 of 110

Issued Date

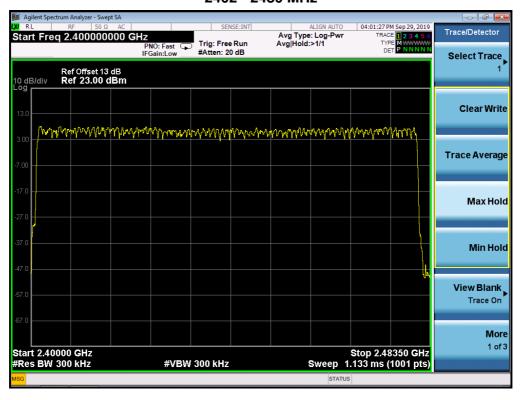




Test Item	Number of Hopping Channels Measurement
Test Engineer:	Chris
Test Date	2019-09-29
Test Mode	Transmitting by 3DH5

Frequency Band (MHz)	Number of Hopping Frequencies	Limit	Result
2400 - 2483.5	79	>15	Pass

2402 - 2480 MHz



S-FD-501 V1.0 Page No. : 64 of 110

Issued Date



9. Peak Output Power Measurement

9.1 Test Limit

The Maximum Peak Output Power Measurement is 125mW (20.97dBm).

9.2 Test Standard

ANSI C63.10-2013- Section 7.8.5

9.3 Test Setup

Spectrum analyzer method

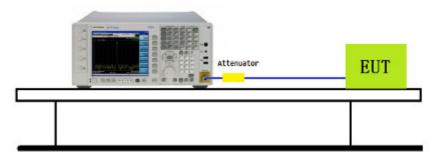
- a) Use the following spectrum analyzer settings:
- 1) Span: Approximately five times the 20 dB bandwidth, centered on a hopping channel.
- 2) RBW > 20 dB bandwidth of the emission being measured.
- 3) VBW ≥ RBW.
- 4) Sweep: Auto.
- 5) Detector function: Peak.
- 6) Trace: Max hold.
- b) Allow trace to stabilize.
- c) Use the marker-to-peak function to set the marker to the peak of the emission.
- d) The indicated level is the peak output power, after any corrections for external attenuators and cables.
- e) A plot of the test results and setup description shall be included in the test report

Peak power meter method

The antenna port (RF output) of the EUT was connected to the input (RF input) of a power meter. Power was read directly from the meter and cable loss connection was added to the reading to obtain power at the EUT antenna terminal. The EUT Output Power was set to maximum to produce the worse case test result.

9.4 Test Setup Layout

Spectrum Analyzer







9.5 Test Result

Test Item	Peak Output Power Measurement		
Test Engineer:	Chris		
Test Date	2019-10-11		
Test Mode	Transmitting by DH5		

Hopping	Frequency	Measurement Power Output	Limit	Result
Channel	(MHz)	(dBm)	(dBm)	
Worst	2439	0.521	20.97	Pass
Low	2402	-0.254	20.97	Pass
Middle	2441	0.441	20.97	Pass
High	2480	-0.570	20.97	Pass











S-FD-501 V1.0 Page No. : 67 of 110

Issued Date









S-FD-501 V1.0 Page No. : 68 of 110

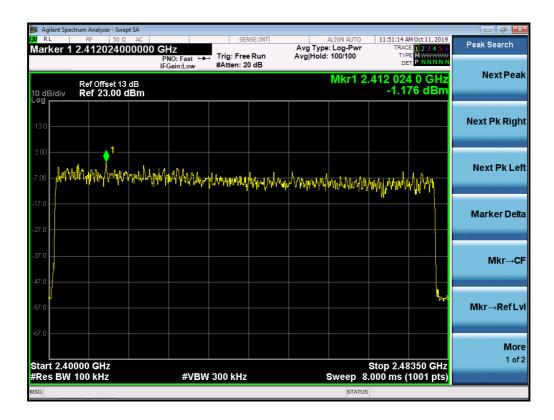
Issued Date





Test Item	Peak Output Power Measurement		
Test Engineer:	Chris		
Test Date	2019-10-11		
Test Mode	Transmitting by 2DH5		

Hopping	Frequency	Measurement Power Output	Limit	Result
Channel	(MHz)	(dBm)	(dBm)	
Worst	2441	0.392	20.97	Pass
Low	2402	0.278	20.97	Pass
Middle	2441	0.392	20.97	Pass
High	2480	0.329	20.97	Pass



S-FD-501 V1.0 Page No. : 69 of 110

Issued Date









Page No. : 70 of 110

: Oct. 12, 2019

Issued Date







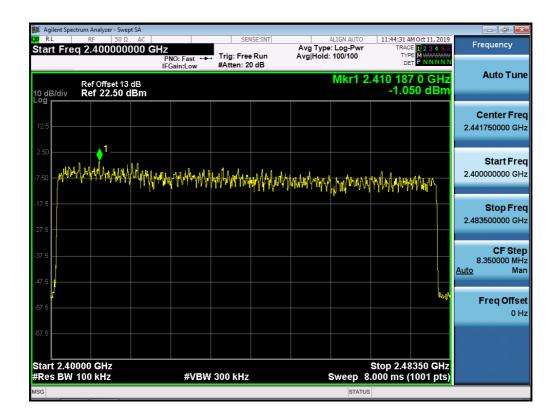






Test Item	Peak Output Power Measurement		
Test Engineer:	Chris		
Test Date	2019-10-11		
Test Mode	Transmitting by 3DH5		

Hopping Channel	Frequency (MHz)	Measurement Power Output (dBm)	Limit (dBm)	Result
Worst	2441	1.583	20.97	Pass
Low	2402	0.206	20.97	Pass
Middle	2441	1.583	20.97	Pass
High	2480	0.043	20.97	Pass



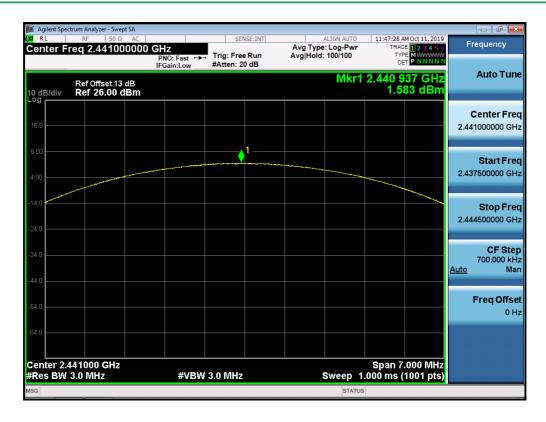
Page No. : 72 of 110

: Oct. 12, 2019

Issued Date

















S-FD-501 V1.0 Page No. : 74 of 110

Issued Date





10. Conducted Spurious Emissions Measurement

10.1 Limit

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 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.

S-FD-501 V1.0 Page No. : 75 of 110

Issued Date





10.2 Test Procedure

According to ANSI C63.10: 2013.

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic. Typically, several plots are required to cover this entire span.

RBW = 100 kHz

VBW ≥ RBW

Sweep = auto

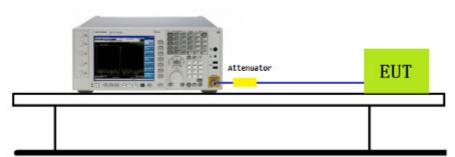
Detector function = peak

Trace = max hold

Allow the trace to stabilize. Set the marker on the peak of any spurious emission recorded. The level displayed must comply with the limit specified in this section.

10.3 Test Setup

Spectrum Analyzer



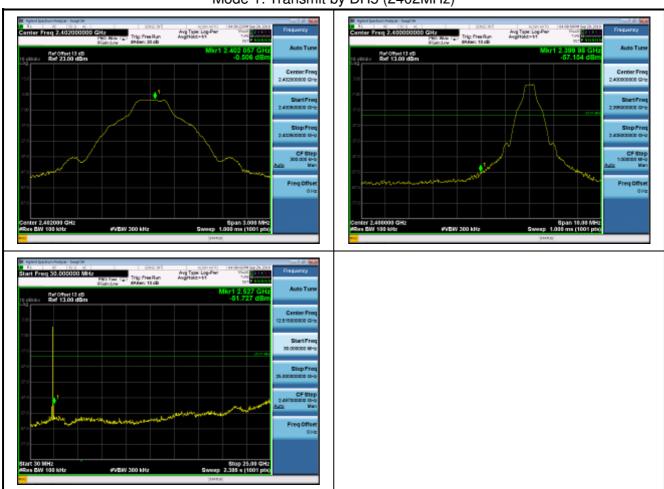




10.4 Test Result

Test Item	Conducted Spurious Emissions Measurement
Test Engineer:	Chris
Test Date	2019-09-29
Test Mode	Transmitting by DH5

Mode 1: Transmit by DH5 (2402MHz)



S-FD-501 V1.0 Page No. : 77 of 110

Issued Date





Mode 1: Transmit by DH5 (2441MHz)





Mode 1: Transmit by DH5 (2480MHz)









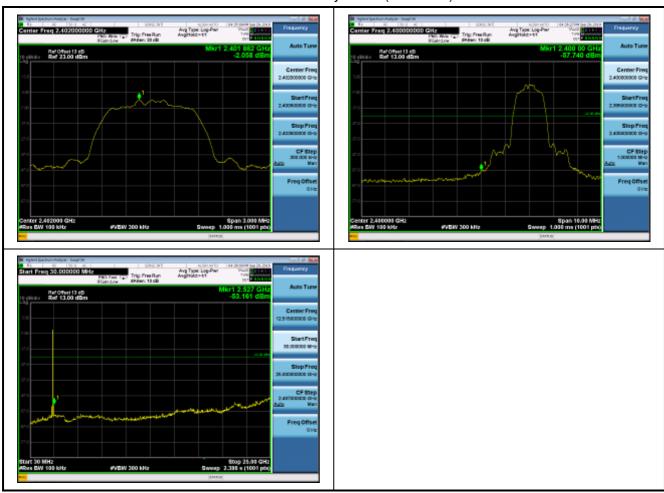
Cerpass Technology (Suzhou) Co., Ltd. Issued Date : Oct. 12, 2019 S-FD-501 V1.0 Page No. : 78 of 110





Test Item	Conducted Spurious Emissions Measurement
Test Engineer:	Chris
Test Date	2019-09-29
Test Mode	Transmitting by 2DH5

Mode 2: Transmit by 2DH5 (2402MHz)



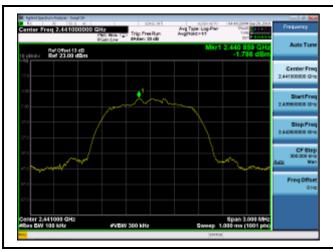
S-FD-501 V1.0 Page No. : 79 of 110

Issued Date





Mode 2: Transmit by 2DH5 (2441MHz)





Mode 2: Transmit by 2DH5 (2480MHz)









Cerpass Technology (Suzhou) Co., Ltd. S-FD-501 V1.0 Page No. : 80 of 110





Test Item	Conducted Spurious Emissions Measurement
Test Engineer:	Chris
Test Date	2019-09-29
Test Mode	Transmitting by 3DH5

Mode 3: Transmit by 3DH5 (2402MHz)



S-FD-501 V1.0 Page No. : 81 of 110

Issued Date





Mode 3: Transmit by 3DH5 (2441MHz)





Mode 3: Transmit by 3DH5 (2480MHz)





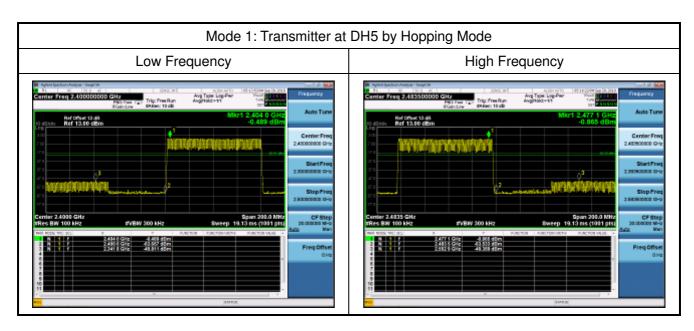




Issued Date : Oct. 12, 2019 S-FD-501 V1.0 Page No. : 82 of 110







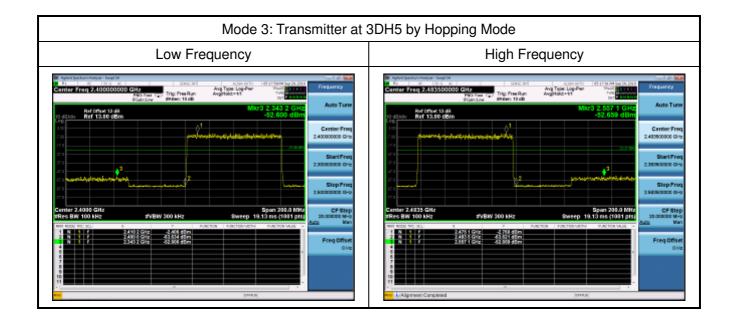


S-FD-501 V1.0 Page No. : 83 of 110

Issued Date







S-FD-501 V1.0 Page No. : 84 of 110

Issued Date



Report No.: SEFA1907033

11. Radiated Emission Band Edge Measurement

11.1 **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.

11.2 Test Procedure

According to ANSI C63.10: 2013.

This test is required for any spurious emission or modulation product that falls in a Restricted Band, as defined in Section 15.205 of FCC part 15. It must be performed with the highest gain of each type of antenna proposed for use with the EUT. Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured

RBW = 1 MHz for $f \ge 1$ GHz, 100 kHz for f < 1GHz

VBW ≥ RBW

Sweep = auto

Detector function = peak

Trace = max hold

Follow the guidelines in ANSI C63.10 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization, etc. A pre-amp and a high pass filter are required for this test, in order to provide the measuring system with sufficient sensitivity. Allow the trace to stabilize. The peak reading of the emission, after being corrected by the antenna factor, cable loss, pre-amp gain, etc., is the peak field strength, which must comply with the limit specified in Section 15.35(b) of FCC part 15.

Now set the VBW to 10 Hz, while maintaining all of the other instrument settings. This peak level, once corrected, must comply with the limit specified in Section 15.209 of FCC Part 15. If the dwell time per channel of the hopping signal is less than 100 ms, then the reading obtained with the 10 Hz VBW may be further adjusted by a "duty cycle correction factor", derived from 20log (dwell time/100 ms), in an effort to demonstrate compliance with the 15.209 limit of FCC part 15.

If the emission on which a radiated measurement must be made is located at the edge of the authorized band of operation, then the alternative "marker-delta" method may be employed.

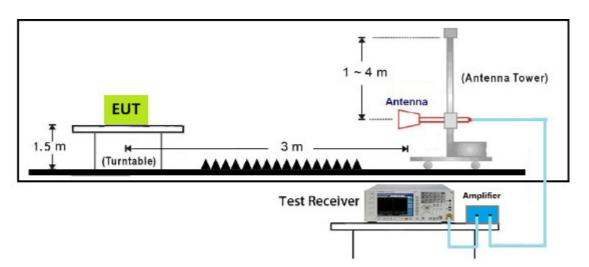
Cerpass Technology (Suzhou) Co., Ltd. Issued Date : Oct. 12, 2019

S-FD-501 V1.0 Page No. : 85 of 110





11.3 Test Setup



S-FD-501 V1.0 Page No. : 86 of 110

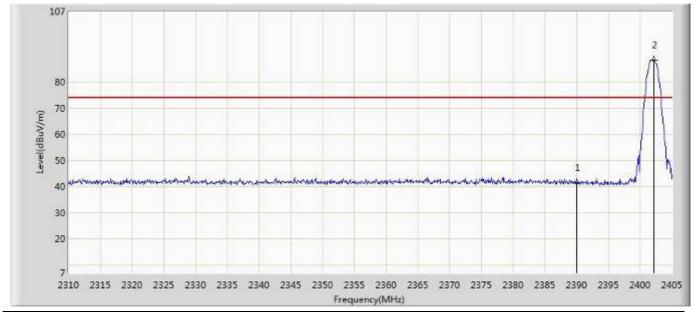
Issued Date





11.4 Test Result

Engineer: Chris				
Site: AC102	Time: 2019/10/10 - 15:42			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: N/A	Polarity: Horizontal			
EUT: Tablet	Power: AC 120V/60Hz			
Note: BT-DH5 2402MHz	·			



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		2390.000	41.416	43.093	-32.584	74.000	-1.677	PK
2	*	2402.150	88.486	90.118	N/A	N/A	-1.632	PK

Note:

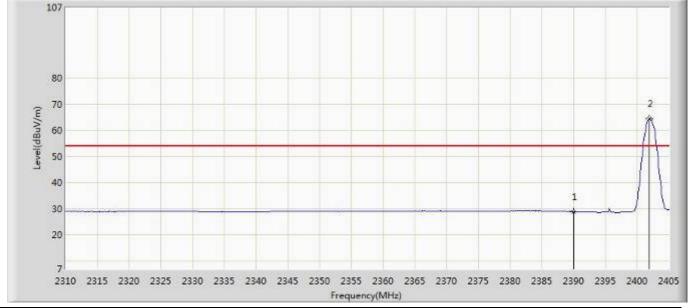
- 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
- 2. " * ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Cerpass Technology (Suzhou) Co., Ltd. Issued Date : Oct. 12, 2019 Page No. : 87 of 110





Engineer: Chris		
Site: AC102	Time: 2019/10/10 - 15:49	
Limit: FCC_Part15.209_RE(3m)	Margin: 0	
Probe: N/A	Polarity: Horizontal	
EUT: Tablet	Power: AC 120V/60Hz	
Note: BT-DH5 2402MHz		



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		2390.000	28.846	30.523	-25.154	54.000	-1.677	AV
2	*	2401.960	64.444	66.077	N/A	N/A	-1.633	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.
- 3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

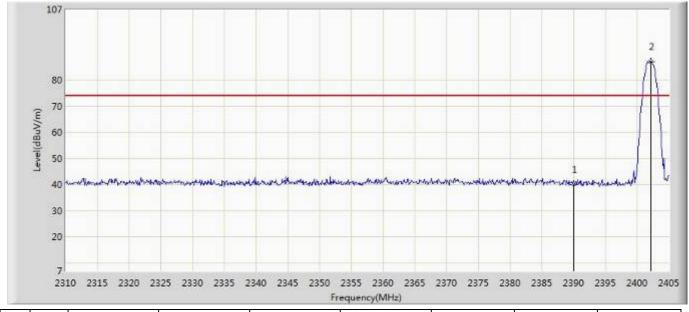
Cerpass Technology (Suzhou) Co., Ltd. Issued Date : Oct. 12, 2019 Page No. : 88 of 110

S-FD-501 V1.0





Engineer: Chris			
Site: AC102	Time: 2019/10/10 - 15:53		
Limit: FCC_Part15.209_RE(3m)	Margin: 0		
Probe: N/A	Polarity: Vertical		
EUT: Tablet	Power: AC 120V/60Hz		
Note: BT-DH5 2402MHz			



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		2390.000	40.037	41.714	-33.963	74.000	-1.677	PK
2	*	2402.150	87.125	88.757	N/A	N/A	-1.632	PK

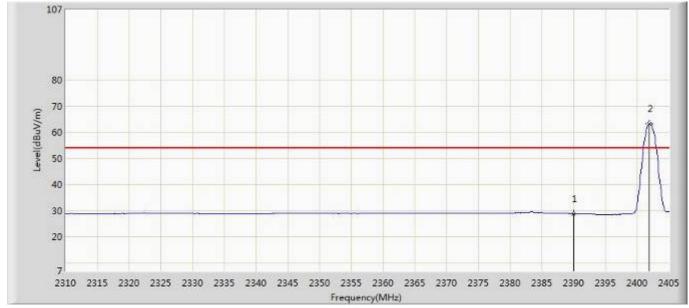
- 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
- 2. " * ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Cerpass Technology (Suzhou) Co., Ltd. Issued Date : Oct. 12, 2019 Page No. : 89 of 110





Engineer: Chris			
Site: AC102	Time: 2019/10/10 - 16:01		
Limit: FCC_Part15.209_RE(3m)	Margin: 0		
Probe: N/A	Polarity: Vertical		
EUT: Tablet	Power: AC 120V/60Hz		
Note: BT-DH5 2402MHz			

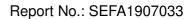


No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		2390.000	28.853	30.530	-25.147	54.000	-1.677	AV
2	*	2401.960	63.374	65.007	N/A	N/A	-1.633	AV

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

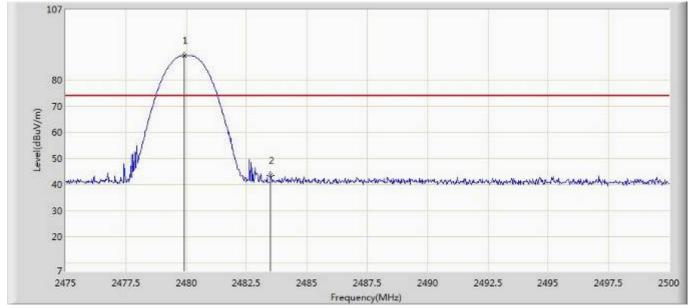
Cerpass Technology (Suzhou) Co., Ltd. Issued Date : Oct. 12, 2019

S-FD-501 V1.0 Page No. : 90 of 110





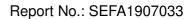
Engineer: Chris				
Site: AC102	Time: 2019/10/10 - 16:06			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: N/A	Polarity: Horizontal			
EUT: Tablet	Power: AC 120V/60Hz			
Note: BT-DH5 2480MHz	•			



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	2479.925	89.260	90.604	N/A	N/A	-1.344	PK
2		2483.500	43.406	44.737	-30.594	74.000	-1.331	PK

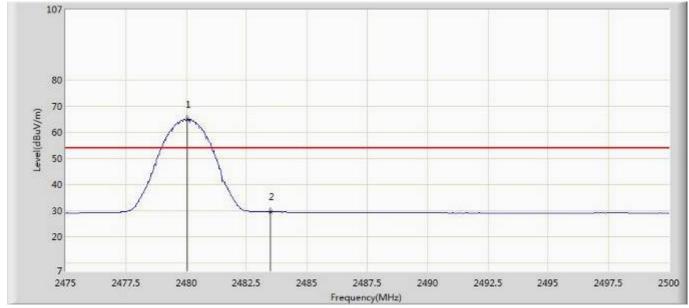
- 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
- 2. " * ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Cerpass Technology (Suzhou) Co., Ltd. Issued Date : Oct. 12, 2019 Page No. : 91 of 110





Engineer: Chris				
Site: AC102	Time: 2019/10/10 - 16:09			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: N/A	Polarity: Horizontal			
EUT: Tablet	Power: AC 120V/60Hz			
Note: BT-DH5 2480MHz				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	2480.050	64.981	66.324	N/A	N/A	-1.343	AV
2		2483.500	29.498	30.829	-24.502	54.000	-1.331	AV

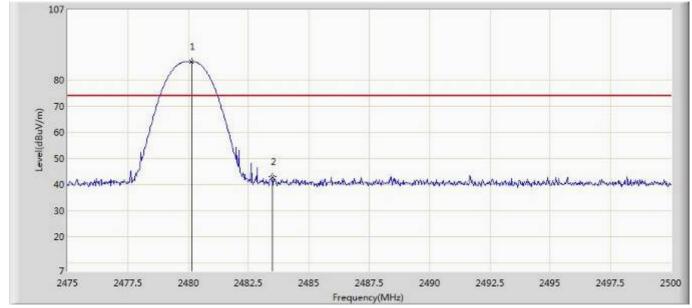
- 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
- 2. " * ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Cerpass Technology (Suzhou) Co., Ltd. Issued Date : Oct. 12, 2019 92 of 110





Engineer: Chris				
Site: AC102	Time: 2019/10/10 - 16:11			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: N/A	Polarity: Vertical			
EUT: Tablet	Power: AC 120V/60Hz			
Note: BT-DH5 2480MHz				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	2480.150	87.099	88.442	N/A	N/A	-1.343	PK
2		2483.500	42.968	44.299	-31.032	74.000	-1.331	PK

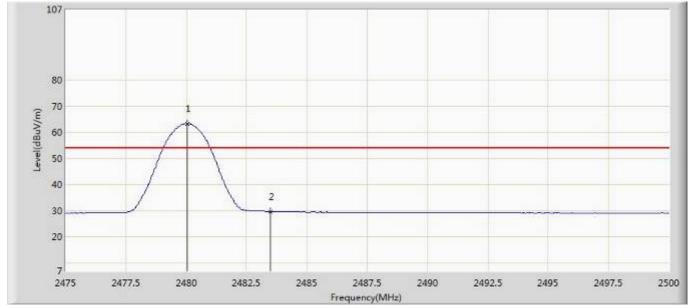
- 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
- 2. " * ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Cerpass Technology (Suzhou) Co., Ltd. Issued Date : Oct. 12, 2019 Page No. 93 of 110





Engineer: Chris				
Site: AC102	Time: 2019/10/10 - 16:18			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: N/A	Polarity: Vertical			
EUT: Tablet	Power: AC 120V/60Hz			
Note: BT-DH5 2480MHz				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	2480.050	63.270	64.613	N/A	N/A	-1.343	AV
2		2483.500	29.606	30.937	-24.394	54.000	-1.331	AV

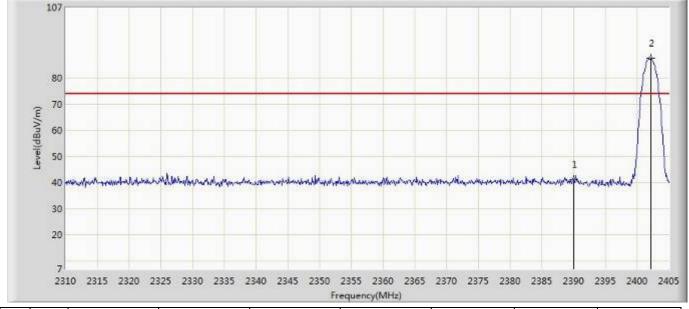
- 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
- 2. " * ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Cerpass Technology (Suzhou) Co., Ltd. Issued Date : Oct. 12, 2019 S-FD-501 V1.0 Page No. 94 of 110





Engineer: Chris				
Site: AC102	Time: 2019/10/10 - 16:21			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: N/A	Polarity: Horizontal			
EUT: Tablet	Power: AC 120V/60Hz			
Note: BT-2DH5 2402MHz				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		2390.000	41.205	42.882	-32.795	74.000	-1.677	PK
2	*	2402.150	87.573	89.205	N/A	N/A	-1.632	PK

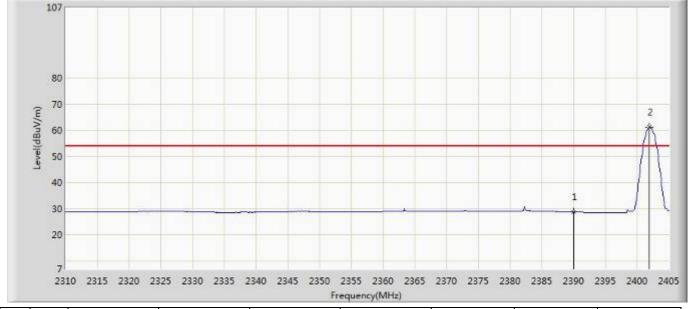
- 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
- 2. " * ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Cerpass Technology (Suzhou) Co., Ltd. Issued Date : Oct. 12, 2019 S-FD-501 V1.0 Page No. : 95 of 110





Engineer: Chris				
Site: AC102	Time: 2019/10/10 - 16:25			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: N/A	Polarity: Horizontal			
EUT: Tablet	Power: AC 120V/60Hz			
Note: BT-2DH5 2402MHz				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		2390.000	28.728	30.405	-25.272	54.000	-1.677	AV
2	*	2401.960	61.199	62.832	N/A	N/A	-1.633	AV

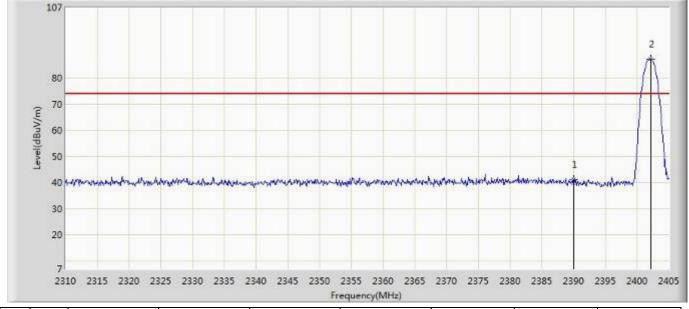
- 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
- 2. " * ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Cerpass Technology (Suzhou) Co., Ltd. Issued Date : Oct. 12, 2019 S-FD-501 V1.0 Page No. : 96 of 110





Engineer: Chris				
Site: AC102	Time: 2019/10/10 - 16:28			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: N/A	Polarity: Vertical			
EUT: Tablet	Power: AC 120V/60Hz			
Note: BT-2DH5 2402MHz				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		2390.000	41.251	42.928	-32.749	74.000	-1.677	PK
2	*	2402.150	87.231	88.863	N/A	N/A	-1.632	PK

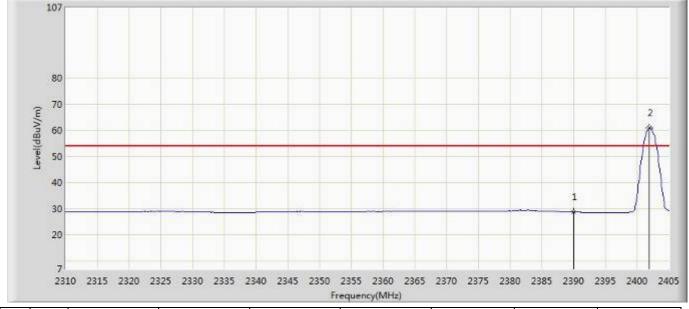
- 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
- 2. " * ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Cerpass Technology (Suzhou) Co., Ltd. Issued Date : Oct. 12, 2019 S-FD-501 V1.0 Page No. : 97 of 110





Engineer: Chris			
Site: AC102	Time: 2019/10/10 - 16:31		
Limit: FCC_Part15.209_RE(3m)	Margin: 0		
Probe: N/A	Polarity: Vertical		
EUT: Tablet	Power: AC 120V/60Hz		
Note: BT-2DH5 2402MHz	·		



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		2390.000	28.719	30.396	-25.281	54.000	-1.677	AV
2	*	2401.960	61.020	62.653	N/A	N/A	-1.633	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.
- 3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

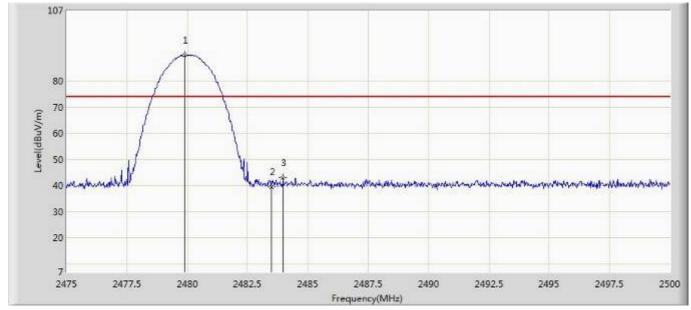
Cerpass Technology (Suzhou) Co., Ltd. Issued Date : Oct. 12, 2019 Page No. : 98 of 110

S-FD-501 V1.0





Engineer: Chris			
Site: AC102	Time: 2019/10/10 - 16:33		
Limit: FCC_Part15.209_RE(3m)	Margin: 0		
Probe: N/A	Polarity: Horizontal		
EUT: Tablet	Power: AC 120V/60Hz		
Note: BT-2DH5 2480MHz	·		



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	2479.875	89.800	91.144	N/A	N/A	-1.344	PK
2		2483.500	39.529	40.860	-34.471	74.000	-1.331	PK
3		2483.975	43.011	44.340	-30.989	74.000	-1.329	PK

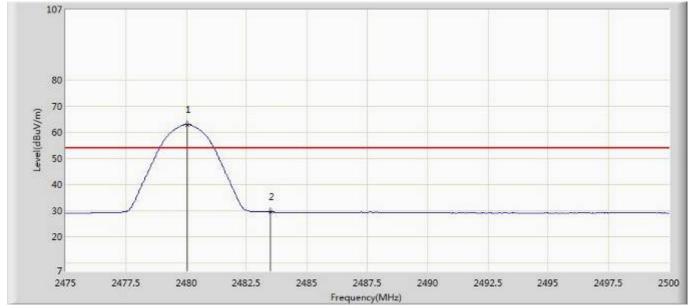
- 1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
- 2. " * ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Cerpass Technology (Suzhou) Co., Ltd. Issued Date : Oct. 12, 2019 S-FD-501 V1.0 Page No. : 99 of 110





Engineer: Chris			
Site: AC102	Time: 2019/10/10 - 16:38		
Limit: FCC_Part15.209_RE(3m)	Margin: 0		
Probe: N/A	Polarity: Horizontal		
EUT: Tablet	Power: AC 120V/60Hz		
Note: BT-2DH5 2480MHz	·		



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	2480.050	62.982	64.325	N/A	N/A	-1.343	AV
2		2483.500	29.472	30.803	-24.528	54.000	-1.331	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.
- 3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

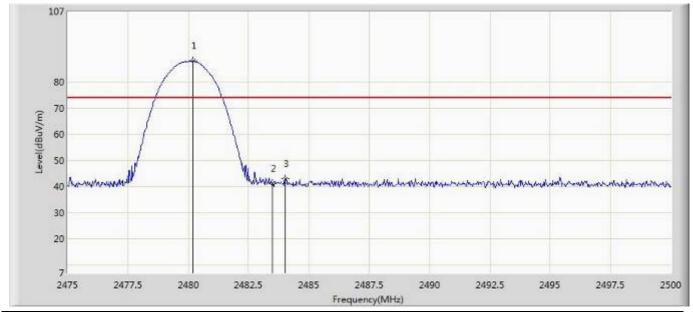
 Cerpass Technology (Suzhou) Co., Ltd.
 Issued Date
 : Oct. 12, 2019

 S-FD-501 V1.0
 Page No.
 : 100 of 110





Engineer: Chris			
Site: AC102	Time: 2019/10/10 - 16:39		
Limit: FCC_Part15.209_RE(3m)	Margin: 0		
Probe: N/A	Polarity: Vertical		
EUT: Tablet	Power: AC 120V/60Hz		
Note: BT-2DH5 2480MHz	·		



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	2480.200	88.047	89.390	N/A	N/A	-1.343	PK
2		2483.500	41.208	42.539	-32.792	74.000	-1.331	PK
3		2484.025	42.898	44.227	-31.102	74.000	-1.329	PK

- 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).

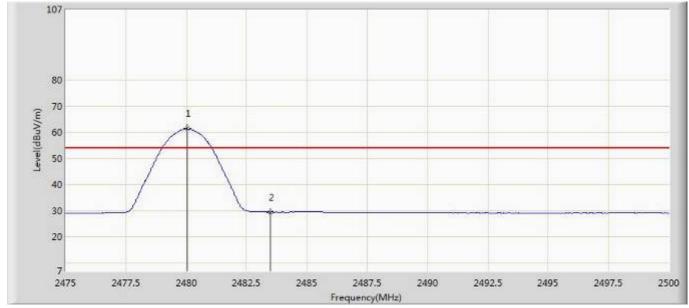
 Cerpass Technology (Suzhou) Co., Ltd.
 Issued Date
 : Oct. 12, 2019

 S-FD-501 V1.0
 Page No.
 : 101 of 110





Engineer: Chris		
Site: AC102	Time: 2019/10/10 - 16:43	
Limit: FCC_Part15.209_RE(3m)	Margin: 0	
Probe: N/A	Polarity: Vertical	
EUT: Tablet	Power: AC 120V/60Hz	
Note: BT-2DH5 2480MHz		



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	2480.050	61.369	62.712	N/A	N/A	-1.343	AV
2		2483.500	29.457	30.788	-24.543	54.000	-1.331	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.
- 3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

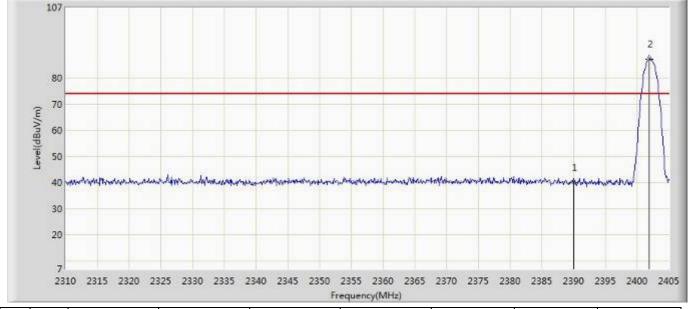
 Cerpass Technology (Suzhou) Co., Ltd.
 Issued Date
 : Oct. 12, 2019

 S-FD-501 V1.0
 Page No.
 : 102 of 110





Engineer: Chris		
Site: AC102	Time: 2019/10/10 - 16:46	
Limit: FCC_Part15.209_RE(3m)	Margin: 0	
Probe: N/A	Polarity: Horizontal	
EUT: Tablet	Power: AC 120V/60Hz	
Note: BT-3DH5 2402MHz		



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		2390.000	40.099	41.776	-33.901	74.000	-1.677	PK
2	*	2401.960	87.370	89.003	N/A	N/A	-1.633	PK

- 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).

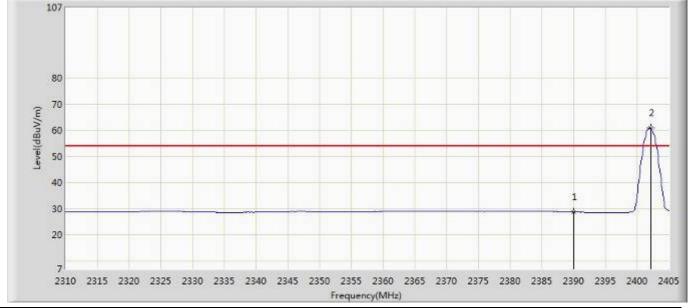
 Cerpass Technology (Suzhou) Co., Ltd.
 Issued Date
 : Oct. 12, 2019

 S-FD-501 V1.0
 Page No.
 : 103 of 110





Engineer: Chris				
Site: AC102	Time: 2019/10/10 - 16:50			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: N/A	Polarity: Horizontal			
EUT: Tablet	Power: AC 120V/60Hz			
Note: BT-3DH5 2402MHz				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		2390.000	28.754	30.431	-25.246	54.000	-1.677	AV
2	*	2402.150	60.853	62.485	N/A	N/A	-1.632	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.
- 3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

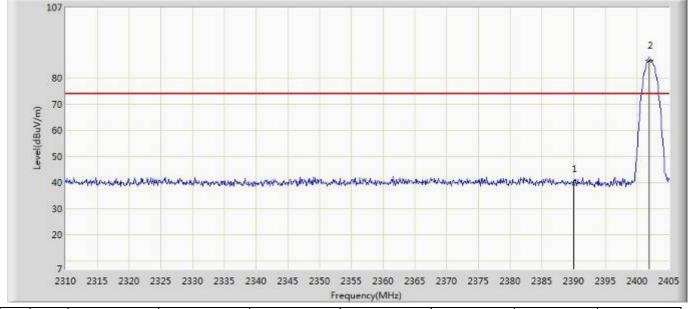
 Cerpass Technology (Suzhou) Co., Ltd.
 Issued Date
 : Oct. 12, 2019

 S-FD-501 V1.0
 Page No.
 : 104 of 110





Engineer: Chris				
Site: AC102	Time: 2019/10/10 - 16:51			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: N/A	Polarity: Vertical			
EUT: Tablet	Power: AC 120V/60Hz			
Note: BT-3DH5 2402MHz	·			



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		2390.000	39.546	41.223	-34.454	74.000	-1.677	PK
2	*	2401.960	86.726	88.359	N/A	N/A	-1.633	PK

- 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).

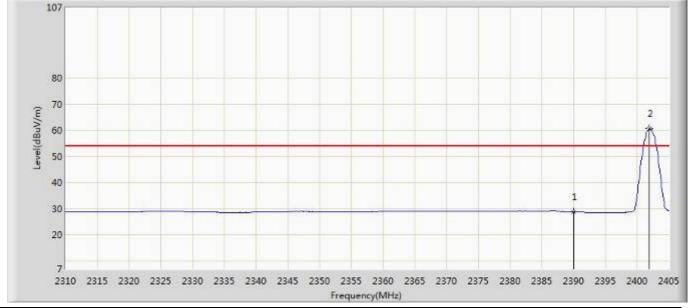
 Cerpass Technology (Suzhou) Co., Ltd.
 Issued Date
 : Oct. 12, 2019

 S-FD-501 V1.0
 Page No.
 : 105 of 110





Engineer: Chris			
Site: AC102	Time: 2019/10/10 - 16:54		
Limit: FCC_Part15.209_RE(3m)	Margin: 0		
Probe: N/A	Polarity: Vertical		
EUT: Tablet	Power: AC 120V/60Hz		
Note: BT-3DH5 2402MHz			



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		2390.000	28.727	30.404	-25.273	54.000	-1.677	AV
2	*	2401.960	60.504	62.137	N/A	N/A	-1.633	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.
- 3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

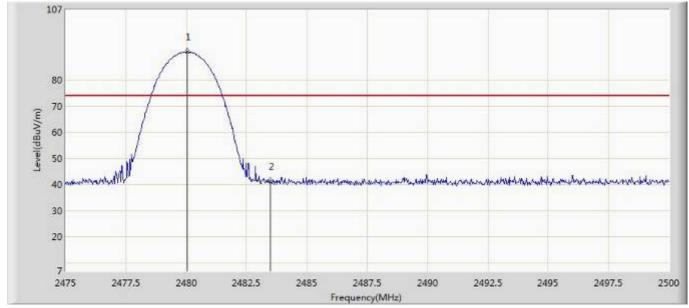
 Cerpass Technology (Suzhou) Co., Ltd.
 Issued Date
 : Oct. 12, 2019

 S-FD-501 V1.0
 Page No.
 : 106 of 110





Engineer: Chris				
Site: AC102	Time: 2019/10/10 - 16:56			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: N/A	Polarity: Horizontal			
EUT: Tablet	Power: AC 120V/60Hz			
Note: BT-3DH5 2480MHz				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	2480.050	90.733	92.076	N/A	N/A	-1.343	PK
2		2483.500	41.090	42.421	-32.910	74.000	-1.331	PK

- 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).

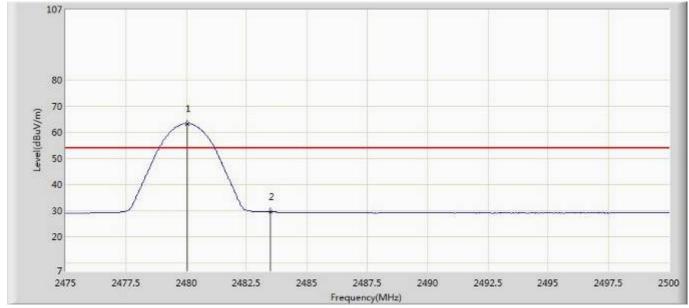
 Cerpass Technology (Suzhou) Co., Ltd.
 Issued Date
 : Oct. 12, 2019

 S-FD-501 V1.0
 Page No.
 : 107 of 110





Engineer: Chris				
Site: AC102	Time: 2019/10/10 - 17:00			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: N/A	Polarity: Horizontal			
EUT: Tablet	Power: AC 120V/60Hz			
Note: BT-3DH5 2480MHz				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	2480.050	63.280	64.623	N/A	N/A	-1.343	AV
2		2483.500	29.511	30.842	-24.489	54.000	-1.331	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.
- 3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

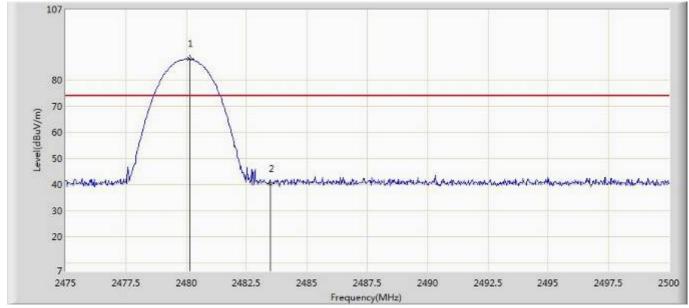
 Cerpass Technology (Suzhou) Co., Ltd.
 Issued Date
 : Oct. 12, 2019

 S-FD-501 V1.0
 Page No.
 : 108 of 110





Engineer: Chris				
Site: AC102	Time: 2019/10/10 - 17:01			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: N/A	Polarity: Vertical			
EUT: Tablet	Power: AC 120V/60Hz			
Note: BT-3DH5 2480MHz	·			



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	2480.125	88.057	89.400	N/A	N/A	-1.343	PK
2		2483.500	40.456	41.787	-33.544	74.000	-1.331	PK

- 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).

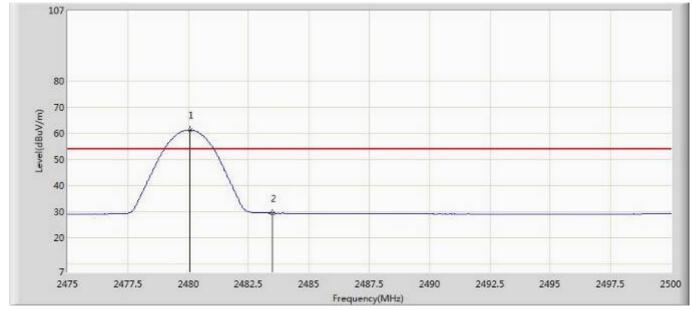
 Cerpass Technology (Suzhou) Co., Ltd.
 Issued Date
 : Oct. 12, 2019

 S-FD-501 V1.0
 Page No.
 : 109 of 110





Engineer: Chris	er: Chris				
Site: AC102	Time: 2019/10/10 - 17:05				
Limit: FCC_Part15.209_RE(3m)	Margin: 0				
Probe: N/A	Polarity: Vertical				
EUT: Tablet	Power: AC 120V/60Hz				
Note: BT-3DH5 2480MHz					



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	2480.075	61.279	62.622	N/A	N/A	-1.343	AV
2		2483.500	29.448	30.779	-24.552	54.000	-1.331	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.
- 3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

***** END OF REPORT *****