

FCC PART 15E & RSS-247 TEST REPORT FOR CERTIFICATION On Behalf of

Razer Inc.

Notebook PC

RZ09-0239

FCC ID: RWO-RZ090239

IC: 8092D-RZ090239

Prepared for : Razer Inc. 201 3rd Street, Suite 900, San Francisco, CA 94103

Prepared By : UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch Room 101, Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China

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 Report Number
 :
 4788146393

 Date of Test
 :
 Aug.30~Sep.19, 2017

 Date of Report
 :
 Sep.21, 2017

The results reported herein have been performed in accordance with the laboratory's terms of accreditation. This report shall not be reproduced except in full without the written approval of the Laboratory. The results in this report apply to the test sample(s) mentioned above at the time of the testing period only and are not to be used to indicate applicability to other similar products. This report does not imply that the product(s) has met the criteria for certification



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TEST REPORT CERTIFICATION

Applicant	:	Razer Inc.	
Manufacturer	:	Razer Inc.	
Product	:	Notebook PC	
FCC ID	:	RWO-RZ090239	
IC	:	8092D-RZ090239	
		(B) Serial No. : N	Z09-0239 //A IC 20V From Adaptor Input AC 120V/60Hz

Tested for comply with: FCC CFR47 Part 15 Subpart E RSS-247, ISSUE 2, Feb 2017 RSS-Gen, ISSUE 4, November 2014

Test procedure used: ANSI C63.10: 2013 KDB789033D02

This Report is made under FCC Part 2.1075. No modifications were required during testing to bring this product into compliance.

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Reviewed by :

Date of Test : Aug.30~Sep.19,2017 Report of date:

Prepared by :

Kebo. zhan

Kebo Zhang / Engineer

Sep.21,2017 Shemalien

Shawn Wen/ Laboratory Leader

Approved & Authorized Signer :

Applientio

Stephen Guo / Laboratory Manager

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1. SUMMARY OF STANDARDS AND RESULTS

1.1.Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

EMISSION				
Description of Test Item	Standard	Results		
Power Line Conducted Emission	FCC Part 15: 15.207 RSS-247, ISSUE 2 RSS-Gen, ISSUE 4 ANSI C63.10	PASS		
Radiated Emission	FCC Part 15: 15.209 RSS-247, ISSUE 2 RSS-Gen, ISSUE 4 ANSI C63.10	PASS		
Band Edge Compliance	FCC Part 15: 15.407 RSS-247, ISSUE 2 RSS-Gen, ISSUE 4 ANSI C63.10	PASS		
99%&26Bandwidth Test	FCC Part 15: 15.407(a) RSS-247, ISSUE 2 RSS-Gen, ISSUE 4 ANSI C63.10	PASS		
Output Power Test	FCC Part 15: 15.407(a) RSS-247, ISSUE 2 RSS-Gen, ISSUE 4 ANSI C63.10	PASS		
Equivalent Isotropic Radiated Power Test	RSS-247, ISSUE 2 ANSI C63.10	PASS		
Power Spectral Density Test	FCC Part 15: 15.407(a) RSS-247, ISSUE 2 RSS-Gen, ISSUE 4 ANSI C63.10	PASS		
Frequency Stability	FCC Part 15: 15.407(g) RSS-247, ISSUE 2 RSS-Gen, ISSUE 4 ANSI C63.10	PASS		
Antenna requirement	FCC Part 15: 15.203	PASS		

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2. GENERAL INFORMATION 2.1. Description of Device (EUT) Product : Notebook PC Model No. : RZ09-0239 FCC ID : RWO-RZ090239 IC : 8092D-RZ090239 Radio : IEEE802.11 a/b/g/n/ac; Bluetooth V3.0+EDR; Bluetooth V4.1 Operation : IEEE 802.11a: Frequency 5180MHz—5240MHz; 5260MHz—5320MHz 5500MHz-5700MHz; 5745MHz-5825MHz IEEE 802.11ac VHT20: 5180MHz—5240MHz; 5260MHz—5320MHz 5500MHz-5700MHz; 5745MHz-5825MHz IEEE 802.11ac VHT40: 5190MHz—5230MHz; 5270MHz—5310MHz 5510MHz—5670MHz; 5755MHz—5795MHz IEEE 802.11ac VHT80: 5210MHz, 5290MHz; 5530MHz-5610MHz; 5775MHz IEEE 802.11b: 2412MHz-2462MHz IEEE 802.11g: 2412MHz-2462MHz IEEE802.11nHT20: 2412MHz-2462MHz; 5180MHz—5240MHz; 5260MHz—5320MHz IEEE802.11nHT40: 2422MHz-2452MHz; 5190MHz—5230MHz; 5270MHz—5310MHz 5510MHz—5670MHz; 5755MHz—5795MHz Bluetooth: 2402-2480MHz : IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK) Modulation IEEE 802.11a/g: OFDM(64QAM, 16QAM, QPSK, BPSK) Technology IEEE 802.11ac VHT20, VHT40, VHT80: OFDM(16QAM, 64QAM, 256OAM, OPSK, BPSK) IEEE 802.11n HT20, HT40: OFDM (64QAM, 16QAM, QPSK, BPSK) Bluetooth V3.0+EDR: GFSK, $\pi/4DQPSK$, 8-DPSK Bluetooth V4.1:GFSK

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Antenna Assembly Gain	 Antenna Type: PIFA Bluetooth: 1.89dBi WIFI 2.4GHz:ANT 0: 1.89dBi; ANT 1: 3.08dBi WIFI 5GHz: Band 1: ANT 0: 2.91dBi; ANT 1: 2.96dBi Band 2: ANT 0: 3.08dBi; ANT 1: 2.96dBi Band 3: ANT 0: 1.61dBi; ANT 1: 2.99dBi Band 4: ANT 0: 3.16dBi; ANT 1: 2.88dBi
Applicant	: Razer Inc. 201 3rd Street, Suite 900, San Francisco, CA 94103
Manufacturer	: Razer Inc. 201 3rd Street, Suite 900, San Francisco, CA 94103
Factory	: BYD Precision Manufacture Co., Ltd No.3001, Bao He Road, Baolong Industrial, Longgang Street, Longgang Zone, Shenzhen, 518116, P.R., China
Power Adaptor	: Manufacturer: Razer Inc. M/N: RC30-0239 Input: 100-240Vac; 50/60Hz, 2.0A Output: 20V; 3.25A DC Cable: Shielded, Undetachable, 2.0m
Power Cable	: Unshielded, Detachable, 1.0m
Date of Test	: Aug.30~Sep.19, 2017
Date of Receipt	: Aug.28, 2017
Sample Type	Prototype production

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2.2. Test Information

A special test software was used to control EUT work in Continuous TX mode (nearly 100% duty cycle), and select test channel, wireless mode and data rate.

Tested mode, channel, and	nd data rate information	on	
Mode	data rate (Mbps)(see Note)	Channel	Frequency (MHz)
	6	Low :CH36	5180
	6	Middle: CH40	5200
	6	High: CH48	5240
	6	Low :CH52	5260
	6	Middle: CH60	5300
$\mathbf{U} = \mathbf{P} \mathbf{P} \mathbf{P} \mathbf{P} \mathbf{P} \mathbf{P} \mathbf{P} \mathbf{P}$	6	High: CH64	5320
IEEE 802.11a	6	Low :CH100	5500
	6	Middle: CH120	5600
	6	High: CH140	5700
	6	Low :CH149	5745
	6	Middle: CH157	5785
	6	High: CH165	5825
	MCS0	Low :CH36	5180
	MCS0	Middle: CH40	5200
	MCS0	High: CH48	5240
	MCS0	Low :CH52	5260
	MCS0	Middle: CH60	5300
IEEE 802.11nHT20	MCS0	High: CH64	5320
IEEE 002.11111120	MCS0	Low :CH100	5500
	MCS0	Middle: CH120	5600
	MCS0	High: CH140	5700
	MCS0	Low :CH149	5745
	MCS0	Middle: CH157	5785
	MCS0	High: CH165	5825
	MCS0	Low :CH38	5190
	MCS0	High: CH46	5230
	MCS0	Low :CH54	5270
	MCS0	High: CH62	5310
IEEE 802.11nHT40	MCS0	Low :CH102	5510
	MCS0	Middle: CH118	5590
	MCS0	High: CH134	5670
	MCS0	Low :CH151	5755
	MCS0	High: CH159	5795

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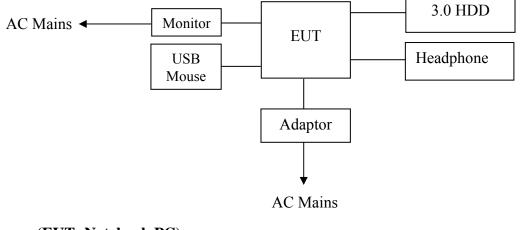
	MCS0	Low :CH36	5180
	MCS0	Middle: CH40	5200
	MCS0	High: CH48	5240
	MCS0	Low :CH52	5260
	MCS0 Middle: CH60		5300
IEEE 802.11acVHT20	MCS0	High: CH64	5320
IEEE 802.11ac vH120	MCS0	Low :CH100	5500
	MCS0	Middle: CH120	5600
	MCS0	High: CH140	5700
	MCS0	Low :CH149	5745
	MCS0	Middle: CH157	5785
	MCS0	High: CH165	5825
	MCS0	Low :CH38	5190
	MCS0	High: CH46	5230
	MCS0	Low :CH54	5270
	MCS0	High: CH62	5310
IEEE 802.11acVHT40	MCS0	Low :CH102	5510
	MCS0	Middle: CH118	5590
	MCS0	High: CH134	5670
	MCS0	Low :CH151	5755
	MCS0	High: CH159	5795
	MCS0	CH42	5210
	MCS0	CH58	5290
IEEE 802.11acVHT80	MCS0	Low :CH106	5530
	MCS0	High:CH122	5610
	MCS0	CH155	5775
Note: 1. According explo	•	will have maximum vere used for all test.	output powe

Note: 2. 11a use SISO Mode. Use ANT1 which has the worst case emission for the Radiated emission and band edge measurement, 11ac/n use MIMO Mode, test with two antenna transmit simultaneously and comply with KDB662911D02.

Note : 3. The channel falling in the frequency range 5600-5640MHz can't be used in Canada in the report (e.g.: Channel 122: 5610MHz, Channel 118: 5590MHz, Channel 120: 5600MHz)

	2.3. Tested Supporting System Details							
No.	Description		Manufacturer	Model	Serial No.			
1			Lenovo	L2264W	N/A			
1.	Monitor	Power Cord: Unshie HDMI Cable: Shield						
2.	Headphone		OVANN	0V-T800V	N/A			
۷.	rreadphone	Data Cable: Shielded, Undetachable, 4.0m						
3.	USB Mouse		M0C5UO	Dell	512022645			
5.	USB Mouse	USB Cable: Shielded, Detachable, 1.0m						
4.			SONY	HD-E	3PDLOT15515005C			
4.	3.0 HDD	USB Cable: Shielded	d, Detachable, 1.0	m				

2.4.Block diagram of connection between the EUT and simulators



(EUT: Notebook PC)

2.3. TESt Fa	
Test Location	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
Address	Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China
Accreditation Certificate	 UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Cali bration Laboratories and any additional program requirements in the identified field of testing. The Certificate Registration Number is 4102.01. UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The Designation Number is CN1187. UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. EMC Laboratory has been registered and fully described in a report filed with the Industry Canada. The Company Number is 21320.

2.5. Test Facility

2.6. Measurement Uncertainty :

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	± 3.52 dB
Radiated Disturbance, 30 to 1000 MHz	± 4.94 dB
Radiated Disturbance, 1 to 6 GHz	± 3.86 dB
Radiated Disturbance, 6 to 18 GHz	± 4.23 dB
Radiated Disturbance, 18 to 26 GHz	± 5.30 dB
Radiated Disturbance, 26 to 40 GHz	± 5.23 dB

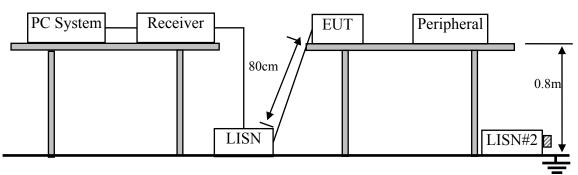
Uncertainty figures are valid to a confidence level of 95%.

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		Con	ducted Emissio	ons						
	Instrument									
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.				
\checkmark	EMI Test Receiver	R&S	ESR3	101961	Dec.20, 2016	Dec.19, 2017				
	Two-Line V-Network	R&S	ENV216	101983	Dec.20, 2016	Dec.19, 2017				
\checkmark	Artificial Mains Networks	Schwarzbeck	NSLK 8126	8126465	Feb.10, 2017	Feb.10, 2018				
		Ra	diated Emission	ıs						
			Instrument							
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.				
	MXE EMI Receiver	KESIGHT	N9038A	MY564000 36	Feb. 24, 2017	Feb. 24, 201				
\checkmark	Hybrid Log Periodic Antenna	TDK	HLP-3003C	130960	Jan.09, 2016	Jan.09, 2019				
	Preamplifier	HP	8447D	2944A090 99	Feb. 13, 2017	Feb. 13, 201				
	EMI Measurement Receiver	R&S	ESR26	101377	Dec. 20, 2016	Dec. 20, 201				
\checkmark	Horn Antenna	TDK	HRN-0118	130939	Jan. 09, 2016	Jan. 09, 201				
	High Gain Horn Antenna	Schwarzbeck	BBHA-9170	691	Jan.06, 2016	Jan.06, 2019				
	Preamplifier	TDK	PA-02-0118	TRS-305-0 0066	Jan. 14, 2017	Jan. 14, 201				
\checkmark	Preamplifier	TDK	PA-02-2	TRS-307-0 0003	Dec. 20, 2016	Dec. 20, 201				
\checkmark	Loop antenna	Schwarzbeck	1519B	00008	Mar. 26, 2016	Mar. 26, 201				
		Ot	her instrument	s						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.				
	Spectrum Analyzer	Keysight	N9030A	MY554105 12	Dec. 20, 2016	Dec. 20, 201				
	Power Meter	Keysight	N9031A	MY554160 24	Feb. 13, 2017	Feb. 13, 201				
\checkmark	Power Sensor	Keysight	N9323A	MY554400 13	Feb. 13, 2017	Feb. 13, 201				
	Power sensor	R&S	OSP120	100921	Dec.20,2016	Dec.19,201				

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4.1.Block Diagram of Test Setup



50Ω Terminator

4.2. Power Line Conducted Emission Test Limits

	Maximum RF Line Voltage				
Frequency	Quasi-Peak Level	Average Level			
	dB(µV)	dB(µV)			
150kHz ~ 500kHz	66 ~ 56*	$56 \sim 46*$			
500kHz ~ 5MHz	56	46			
5MHz ~ 30MHz	60	50			

Notes: 1. * Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

4.3. Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

4.3.1. Notebook PC (EUT)

Model No.	: RZ09-0239
Serial No.	: N/A

4.3.2. Support Equipment: As Tested Supporting System Details, in Section 2.2.

4.4. Operating Condition of EUT

4.4.1. Setup the EUT and simulator as shown as Section 4.1.

4.4.2. Turn on the power of all equipments.

4.4.3. PC run test software to control EUT work in Tx mode.

4.5.Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power Via PC connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs). The AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2013 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESCI) is set at 9kHz.

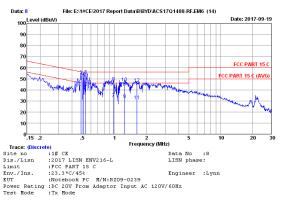
The frequency range from 150kHz to 30MHz is checked.

4.6.Power Line Conducted Emission Test Results

PASS. (All emissions not reported below are too low against the prescribed limits.)

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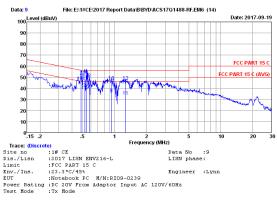
5180-5240MHz Band:



No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.486	9.50	0.03	30.52	40.05	46.23	6.18	Average
2	0.486	9.50	0.03	43.14	52.67	56.23	3.56	QP
3	0.513	9.50	0.03	30.25	39.78	46.00	6.22	Average
4	0.513	9.50	0.03	41.84	51.37	56.00	4.63	QP
5	0.538	9.50	0.03	32.52	42.05	46.00	3.95	Average
6	0.538	9.50	0.03	43.67	53.20	56.00	2.80	QP
7	0.984	9.49	0.05	22.71	32.25	46.00	13.75	Average
8	0.984	9.49	0.05	37.50	47.04	56.00	8.96	QP
9	1.242	9.49	0.06	21.64	31.19	46.00	14.81	Average
10	1.242	9.49	0.06	37.06	46.61	56.00	9.39	QP
11	1.628	9.49	0.06	20.82	30.37	46.00	15.63	Average
12	1.628	9.49	0.06	36.18	45.73	56.00	10.27	QP

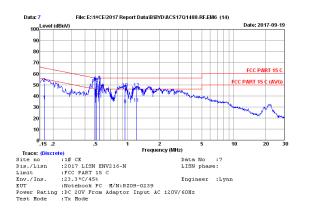
rks: 1.Emission Level=LISN Factor+Cable Loss+Reading. 2.If the average limit is met when using a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

5260-5320MHz Band:



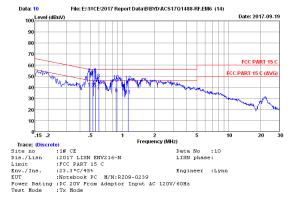
No	Freq (MHZ)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emissio Level (dBuV)	n Limits (dBuV)	Margin (dB)	Remark
1	0.486	9.50	0.03	31.30	40.83	46.23	5.40	Average
2	0.486	9.50	0.03	41.77	51.30	56.23	4.93	QP
3	0.527	9.50	0.03	30.20	39.73	46.00	6.27	Average
4	0.527	9.50	0.03	43.18	52.71	56.00	3.29	QP
5	0.549	9.50	0.03	28.30	37.83	46.00	8.17	Average
6	0.549	9.50	0.03	42.64	52.17	56.00	3.83	QP
7	0.582	9.50	0.03	30.10	39.63	46.00	6.37	Average
8	0.582	9.50	0.03	39.02	48.55	56.00	7.45	QP
9	0.938	9.49	0.05	25.60	35.14	46.00	10.86	Average
10	0.938	9.49	0.05	36.96	46.50	56.00	9.50	QP
11	1.276	9.49	0.06	23.30	32.85	46.00	13.15	Average
12	1.276	9.49	0.06	36.91	46.46	56.00	9.54	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading. 2.If the average limit is met when using a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emissio Level (dBuV)	n Limits (dBuV)	Margin (dB)	Remark
1	0.166	9.47	0.02	26.26	35.75	55.16	19.41	Average
2	0.166	9.47	0.02	41.85	51.34	65.16	13.82	QP
3	0.494	9.32	0.03	30.85	40.20	46.10	5.90	Average
4	0.494	9.32	0.03	43.77	53.12	56.10	2.98	QP
5	0.513	9.31	0.03	29.85	39.19	46.00	6.81	Average
6	0.513	9.31	0.03	42.34	51.68	56.00	4.32	QP
7	0.546	9.31	0.03	29.69	39.03	46.00	6.97	Average
8	0.546	9.31	0.03	44.31	53.65	56.00	2.35	QP
9	0.948	9.34	0.05	22.71	32.10	46.00	13.90	Average
10	0.948	9.34	0.05	37.32	46.71	56.00	9.29	QP
11	1.216	9.35	0.06	23.82	33.23	46.00	12.77	Average
12	1.216	9.35	0.06	37.43	46.84	56.00	9.16	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading. 2.If the average limit is met when using a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

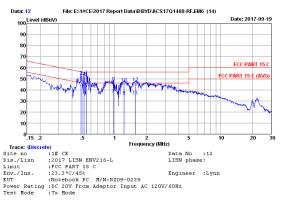


LISN Cable			Emissio	n				
No	Freq (MHz)	Factor (dB)	Loss (dB)	Reading (dBuV)	Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.489	9.32	0.03	30.20	39.55	46.19	6.64	Average
2	0.489	9.32	0.03	43.12	52.47	56.19	3.72	QP
з	0.527	9.31	0.03	30.20	39.54	46.00	6.46	Average
4	0.527	9.31	0.03	42.85	52.19	56.00	3.81	QP
5	0.555	9.31	0.03	29.61	38.95	46.00	7.05	Average
6	0.555	9.31	0.03	42.99	52.33	56.00	3.67	QP
7	0.598	9.31	0.04	27.60	36.95	46.00	9.05	Average
8	0.598	9.31	0.04	38.27	47.62	56.00	8.38	QP
9	0.876	9.34	0.05	25.09	34.48	46.00	11.52	Average
10	0.876	9.34	0.05	37.25	46.64	56.00	9.36	QP
11	1.129	9.35	0.05	23.50	32.90	46.00	13.10	Average
12	1.129	9.35	0.05	36.42	45.82	56.00	10.18	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading. 2.If the average limit is met when using a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

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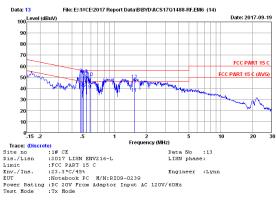
5500-5700MHz Band:



No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.486	9.50	0.03	30.30	39.83	46.23	6.40	Average
2	0.486	9.50	0.03	42.96	52.49	56.23	3.74	QP
3	0.518	9.50	0.03	33.20	42.73	46.00	3.27	Average
4	0.518	9.50	0.03	42.31	51.84	56.00	4.16	QP
5	0.541	9.50	0.03	31.50	41.03	46.00	4.97	Average
6	0.541	9.50	0.03	42.09	51.62	56.00	4.38	QP
7	0.984	9.49	0.05	26.80	36.34	46.00	9.66	Average
8	0.984	9.49	0.05	37.18	46.72	56.00	9.28	QP
9	1.236	9.49	0.06	24.60	34.15	46.00	11.85	Average
10	1.236	9.49	0.06	36.75	46.30	56.00	9.70	QP
11	1.585	9.49	0.06	24.60	34.15	46.00	11.85	Average
12	1.585	9.49	0.06	36.91	46.46	56.00	9.54	QP

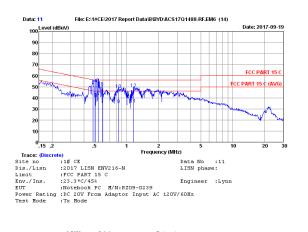
Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading. 2.If the average limit is met when using a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

5745-5825MHz Band:



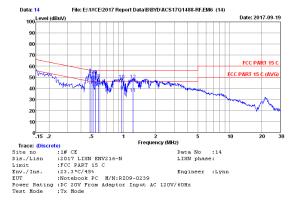
No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emissio: Level (dBuV)	n Limits (dBuV)	Margin (dB)	Remark
1	0.481	9.50	0.03	30.30	39.83	46.32	6.49	Average
2	0.481	9.50	0.03	43.77	53.30	56.32	3.02	QP
3	0.494	9.50	0.03	31.50	41.03	46.10	5.07	Average
4	0.494	9.50	0.03	43.21	52.74	56.10	3.36	QP
5	0.513	9.50	0.03	30.40	39.93	46.00	6.07	Average
6	0.513	9.50	0.03	41.89	51.42	56.00	4.58	QP
7	0.546	9.50	0.03	31.20	40.73	46.00	5.27	Average
8	0.546	9.50	0.03	42.77	52.30	56.00	3.70	QP
9	0.589	9.50	0.03	29.20	38.73	46.00	7.27	Average
10	0.589	9.50	0.03	40.26	49.79	56.00	6.21	QP
11	1.535	9.49	0.06	25.80	35.35	46.00	10.65	Average
12	1.535	9.49	0.06	38.04	47.59	56.00	8.41	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading. 2.If the average limit is met when using a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emissio Level (dBuV)	n Limits (dBuV)	Margin (dB)	Remark
1	0.486	9.33	0.03	30.09	39.45	46.23	6.78	Average
2	0.486	9.33	0.03	42.02	51.38	56.23	4.85	QP
3	0.513	9.31	0.03	30.20	39.54	46.00	6.46	Average
4	0.513	9.31	0.03	43.39	52.73	56.00	3.27	QP
5	0.541	9.31	0.03	31.50	40.84	46.00	5.16	Average
6	0.541	9.31	0.03	43.25	52.59	56.00	3.41	QP
7	0.595	9.31	0.03	30.61	39.95	46.00	6.05	Average
8	0.595	9.31	0.03	40.56	49.90	56.00	6.10	QP
9	0.844	9.33	0.05	24.40	33.78	46.00	12.22	Average
10	0.844	9.33	0.05	38.37	47.75	56.00	8.25	QP
11	1.160	9.35	0.05	24.91	34.31	46.00	11.69	Average
12	1.160	9.35	0.05	38.77	48.17	56.00	7.83	QP

Remarks: 1.Emission Level-LISN Factor+Cable Loss+Reading. 2.If the average limit is met when using a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



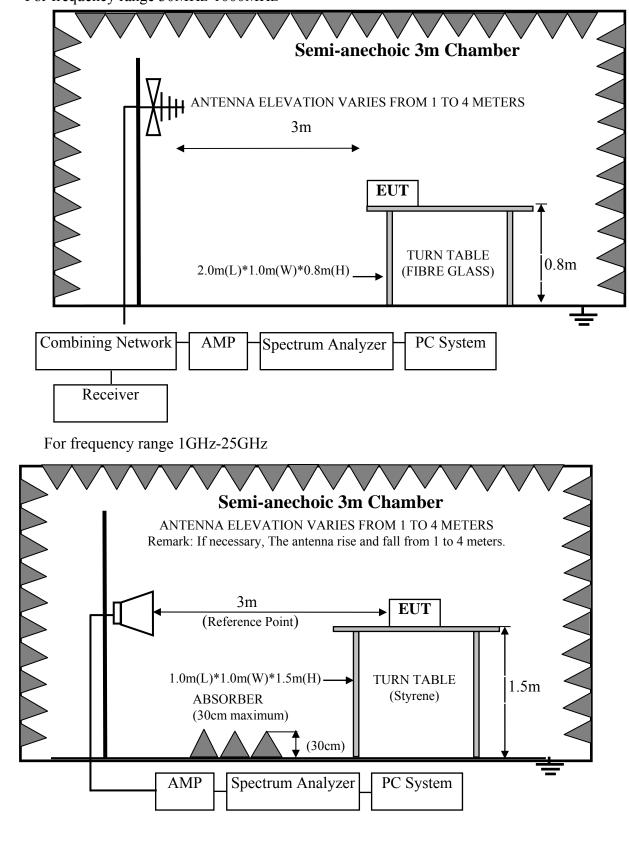
		LISN	Cable		Emissio			
No	Freq (MHz)	factor (dB)	Loss (dB)	Reading (dBuV)	Level (dBuV)	Limits (dBuV)	Margin (dB)	Remar k
1	0.486	9.33	0.03	31.49	40.85	46.23	5.38	Average
2	0.486	9.33	0.03	43.77	53.13	56.23	3.10	QP
3	0.518	9.31	0.03	32.10	41.44	46.00	4.56	Average
4	0.518	9.31	0.03	42.29	51.63	56.00	4.37	QP
5	0.549	9.31	0.03	31.61	40.95	46.00	5.05	Average
6	0.549	9.31	0.03	42.18	51.52	56.00	4.48	QP
7	0.585	9.31	0.03	30.71	40.05	46.00	5.95	Average
8	0.585	9.31	0.03	39.05	48.39	56.00	7.61	QP
9	0.968	9.35	0.05	28.10	37.50	46.00	8.50	Average
10	0.968	9.35	0.05	38.24	47.64	56.00	8.36	QP
11	1.236	9.35	0.06	25.90	35.31	46.00	10.69	Average
12	1.236	9.35	0.06	38.01	47.42	56.00	8.58	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading. 2.If the average limit is met when using a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

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5. RADIATED EMISSION TEST

- 5.1.Block Diagram of Test Setup
 - For frequency range 30MHz-1000MHz



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5.2.Radiated Emission Limit

For transmitters operating in the 5.15-5.25 GHz; 5.25-5.35GHz; 5.47-5.725GHz, 5.725-5.850GHz band: all emissions outside of those band shall not exceed an EIRP of -27 dBm/MHz. Unwanted emissions below 1 GHz and those emissions appearing within 15.205 restricted frequency bands must comply with the general field strength limits set forth in Section 15.209

FREQUENCY	DISTANCE	FIELD STRENGTHS LIMIT		
MHz	Meters	μV/m	dB(µV)/m	
30 ~ 88	3	100	40.0	
88 ~ 216	3	150	43.5	
216 ~ 960	3	200	46.0	
960 ~ 1000	3	500	54.0	
Above 1000	3	74.0 dB(µV)/m (Peak)		
		54.0 dB(μ V)/m (Average)		

5.2.1.15.209 limits

Remarks : (1) Emission level $dB\mu V = 20 \log Emission level \mu V/m$

- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

MHz	MHz MHz		GHz	
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15	
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46	
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75	
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5	
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2	
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5	
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7	
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4	
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5	
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2	
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4	
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12	
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0	
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8	
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5	
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(2)	

5.3.EUT Configuration on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

5.3.1. Notebook PC (EUT)

Model No.	: RZ09-0239
Serial No.	: N/A

5.3.2. Support Equipment: As Tested Supporting System Details, in Section 2.2.

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5.4. Operating Condition of EUT

5.4.1. Setup the EUT and simulator as shown as Section 4.2.

5.4.2. Turn on the power of all equipments.

5.4.3. Let EUT work in Tx mode.

5.5.Test Procedure

Frequency below 30MHz:

The EUT setup on the turn table which has 0.8 m height to the ground. The turn table rotated 360 degrees and antenna fixed to 1 m to find the maximum emission level. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10-2013 regulation.

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground for frequency 30MHz~1000MHz, 1.5 meter high above ground for frequency above 1GHz and put the absorbing with 2.4m(L)*2.4m(W)*0.3m(H) on the ground . The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it.EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna for frequency 30MHz~1000MHz, and the Horm antenna is used as receiving antenna for frequency above 1GHz. Both horizontal and vertical polarization of the antenna is set on Test. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.10-2013 on radiated emission Test.

For emissions below 1GHz and those emissions appearing within 15.205 restricted frequency bands use below procedure:

The bandwidth of the EMI test receiver (R&S ESR7) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's VBW is set at 1MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

For the emissions above 1GHz and not appearing within 15.205 restricted frequency bands use below procedure:

- (1). The maximum emission at 3m distance was measured and recorded with receive antenna in both vertical and horizontal by rotating the turntable and by lowering the receive antenna.
- (2). The EUT was then removed and replaced with a substitution antenna in the same position and the substitution antenna must have the same polarization with the receive antenna.
- (3). A signal which have the same frequency obtained in step 2 was fed to the substitution, the receive antenna was raised and lowered to obtain a maximum reading at the test receiver, the level of the signal generator was adjusted until the measured field strength level in step 2 was obtained, recorded the level of the signal generator.
- (4).Repeated step 4 with both antenna polarizations
- (5). The spurious emissions is equal to the power supplied by the signal generator and corrections due to the gain of the substitution antenna and the cable loss between the signal generator and the substitution antenna. or use procedure (6).

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(6). Per KDB789033 clause H 2)d).if the test distance is 3m,the EIRP(dBm)=E(dBuv/m)-95.2 Get the result of all unwanted emission outside the restricted band is less than the -27dBm/MHz.

We had checked frequency range that is 30MHz to 10th harmonic (40GHz) and no any emissions were found from 18GHz to 40GHz, so the radiated emission from 18GHz to 40GHz were not record.

5.6.Radiated Emission Test Results

PASS.

All the emissions from 30MHz to 1 GHz were comply with 15.209 limits. All other emission comply with 15.407 (b)(1) requirements. Note: The emissions (9kHz \sim 30MHz) not reported for there is no emission be found.

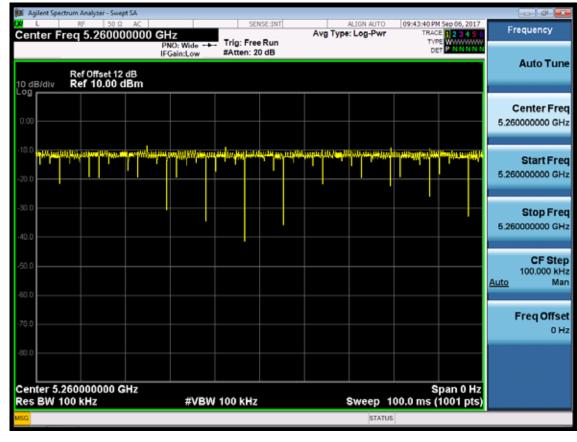
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Duty Cycle 5180-5240MHz Ba

л

Agilent Spe	ctrum Analyzer -									
enter F	⊮ req 5.18	50 Ω AC 0000000	0 GHz PNO: Wide			Avg Type	ALIGN AUTO	TRAC	M Sep 06, 2017	Frequency
0 dB/div	Ref Offse Ref 10.0		IFGain:Low	#Atten. 2						Auto Tur
og 										Center Fre 5.180000000 GF
0.0 <mark>wijnjiwi</mark> 0.0	handigraphic	unindur'.	and we will and		originis quality porter		┉╠┉┈┉╏┉		i till mannen and and a state of the second se	Start Fre 5.180000000 Gi
0.0 0.0										Stop Fr 5.180000000 G
0.0										CF Sto 100.000 k Auto M
0.0										Freq Offs 0
enter 5.	18000000	0 GHz						s	pan 0 Hz	
es BW 1			#VE	W 100 kHz			Sweep 1	00.0 ms (1001 pts)	

5260-5320MHz Band:

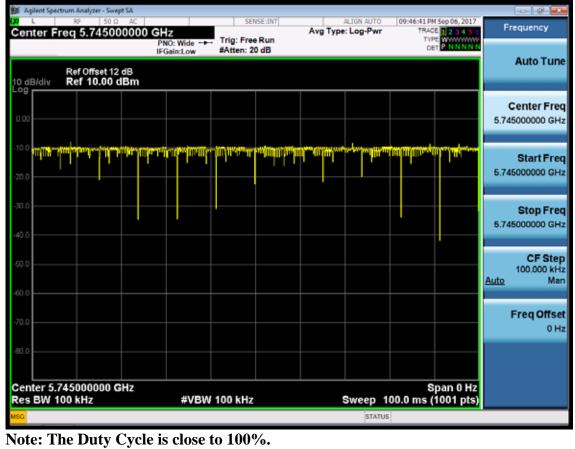


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5500-5700MHz Band:

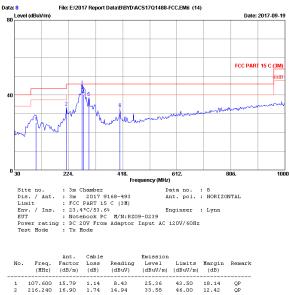
📕 Agilent Spectr	rum Analyzer - Swept SA							
L L	RF 50 Ω AC		SENSE:INT		ALIGN AUTO		4 Sep 06, 2017	Frequency
Center Fre	enter Freq 5.500000000 GHz PNO: Wide IFGein:Low				Avg Type: Log-Pwr		E 1 2 3 4 5 6 E WARMAN T P NNNNN	Auto Tune
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center 5.50	00000000 GHz	#\/D\\/ 100.1	14-			S	pan 0 Hz	
tes BW 10	JU KHZ	#VBW 100 k	n2				1001 pts)	
sa					STATUS			

5745-5825MHz Band:



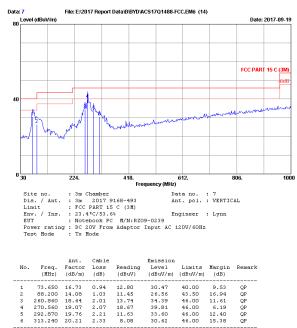
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5180-5240MHz Band: Frequency: 30MHz~1GHz



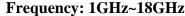
1	107.600	15.79	1.14	8.43	25.36	43.50	18.14	QP	
2	216.240	16.90	1.74	14.94	33.58	46.00	12.42	QP	
3	272.500	19.16	2.08	21.42	42.66	46.00	3.34	QP	
4	277.350	19.37	2.11	18.57	40.05	46.00	5.95	QP	
5	296.750	19.84	2.23	16.67	38.74	46.00	7.26	QP	
6	408.300	22.36	2.91	7.46	32.73	46.00	13.27	QP	
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.									

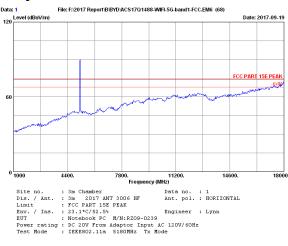
2. The emission levels that are 20dB below the official limit are not reported.

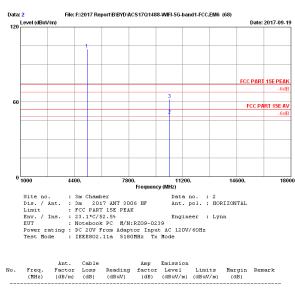


Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading. 2. The emission levels that are 20dB below the official limit are not reported.

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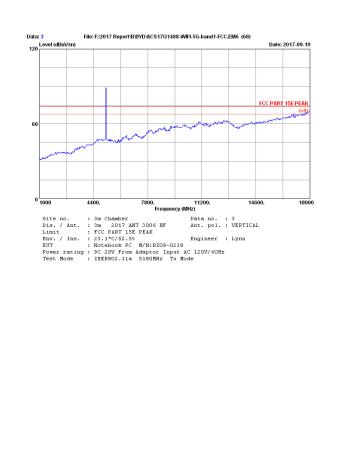


1 5180.00 33.47 2 10360.00 38.29 3 10360.00 38.29 12.76 18.14 18.14 90.03 28.50 41.40 33.91 102.35 35.58 49.35 35.58 62.25 74.00 -28.35 Peak 54.00 74.00 4.65 11.75 Average Peak Remarks: 1. Emission Level- Antenna Factor + Cable Loss + Reading -Amp factor.

 The emission levels that are 20dB below the official limit are not reported.

File: F:\2017 Report\B\BYD\AC\$17Q1488-WIFI-5G-band1-FCC.EM6 (68)

Data: 4



120 Level (dBuV/m) Date: 2017-09-19 FCC PART 15E PEAK 60 FCC PART 15E AV 0 L 4400. 18000 7800. 11200. Frequency (MHz) 14600
 Site no.
 : 3m Chamber
 Data no.
 : 4

 Dis. / Ant.
 : 3m 2017 ANT 3006 HF
 Ant. pol.
 : VERT: Limit

 Limit
 : FCC PART 15E PEAK
 Env. / Ins.
 : 33.1°C/52.5%
 Engineer : Lynn

 EUT
 : Notebook PC M/N:R209-0239
 Power rating: 0 C 20Y From Adaptor Input AC 120V/60Hz
 Test Mode
 : IEEE802.11a 5180MHz Tx Mode
 Data no. : 4 Ant. pol. : VERTICAL Cable Amp Emission Loss Reading factor Level Limits (dB) (dBuV) (dB) (dBuV/m) (dBuV/m) Ant. No. Freq. (MHz) Factor (dB/m) Margin Remark (dB) 5180.00 33.47 10360.00 38.29 10360.00 38.29 12.76 88.13 33.91 100.45 18.14 28.60 35.58 49.45 18.14 41.55 35.58 62.40 74.00 -26.45 Peak 1 Average Peak 54.00 74.00 4.55 11.60

Remarks: 1. Emission Level- Antenna Factor + Cable Loss + Reading -Amp factor. 2. The emission levels that are 20dB below the official limit are not reported.

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<u>Page 5-9</u> Date: 2017-09-19

FCC PART 15E PEAK

FCC PART 15E AV

14600

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-19

FCC PART 15E PEAK

FCC PART 15E AV

18000

14600.

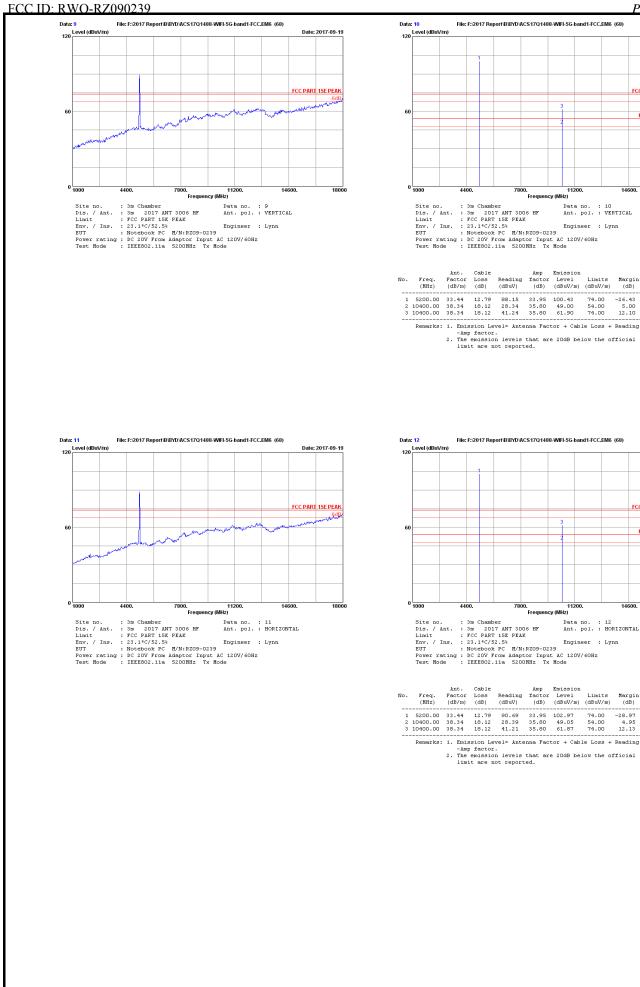
Margin Remark (dB)

Peak Average Peak

-28.97 4.95 12.13

-26.43 5.00 12.10

18000



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<u>Page 5-10</u> Date: 2017-09-19

FCC PART 15E PEAK

FCC PART 15E AV

14600

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-19

FCC PART 15E PEAK

FCC PART 15E AV

18000

14600.

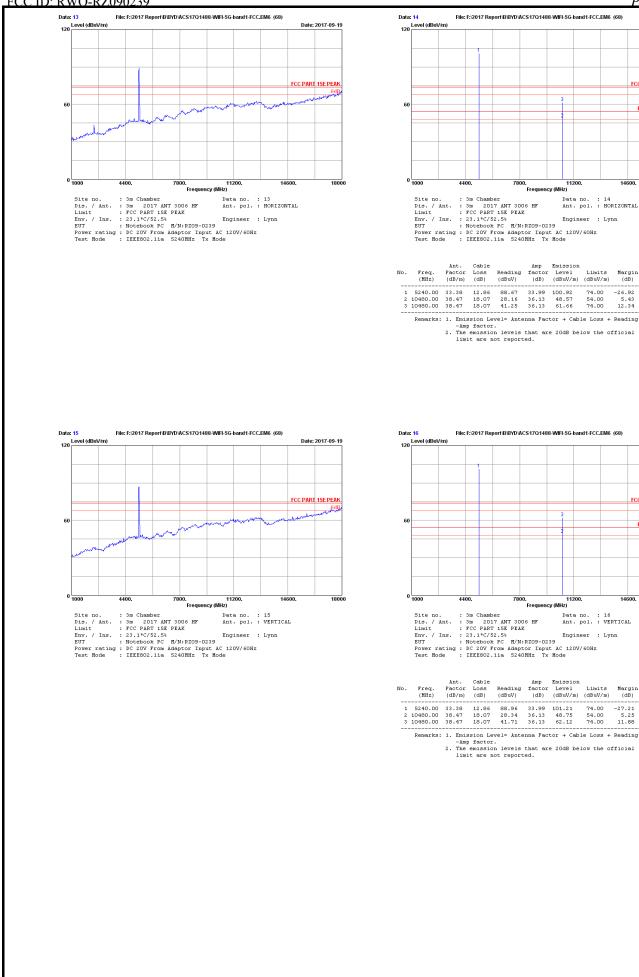
Margin Remark (dB)

Peak Average Peak

-27.21 5.25 11.88

-26.92 5.43 12.34

18000



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<u>Page 5-11</u> Date: 2017-09-19

FCC PART 15E PEAK

FCC PART 15E AV

4600

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-19

FCC PART 15E PEAK

FCC PART 15E AV

18000

14600.

Margin Remark (dB)

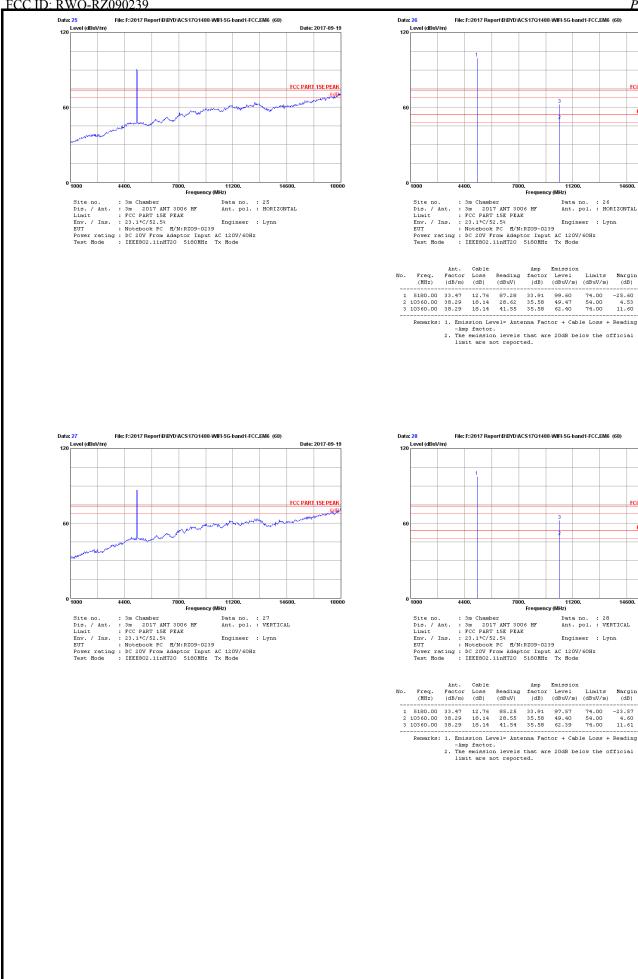
Peak Average Peak

-23.57

4.60 11.61

-25.60 4.53 11.60

18000



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<u>Page 5-12</u> Date: 2017-09-19

FCC PART 15E PEAK

FCC PART 15E AV

14600

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-19

FCC PART 15E PEAK

FCC PART 15E AV

18000

14600.

Margin Remark (dB)

Peak Average Peak

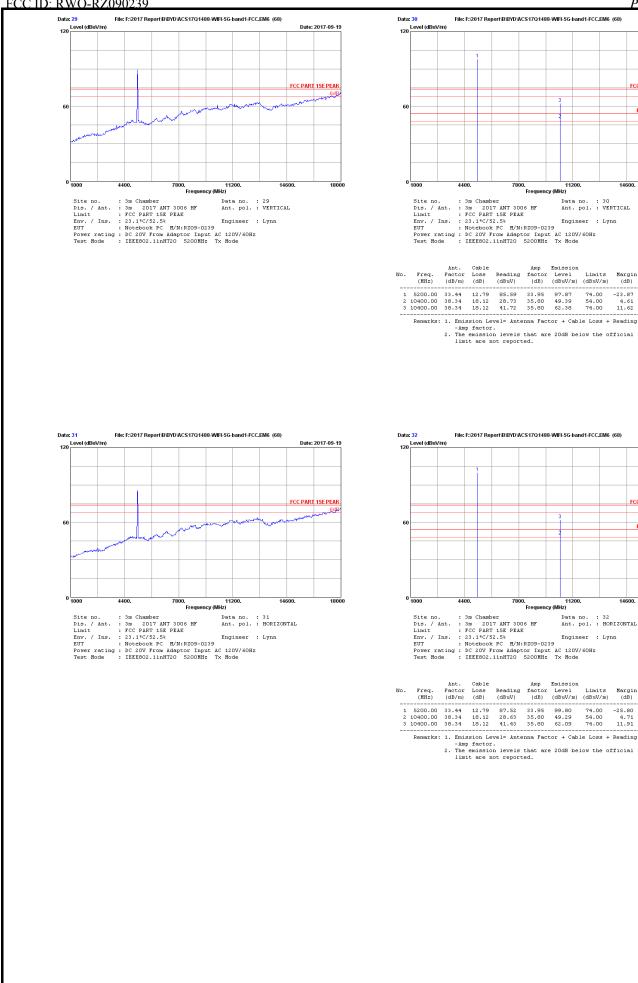
-25.80

4.71 11.91

-23.87

4.61 11.62

18000



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<u>Page 5-13</u> Date: 2017-09-19

FCC PART 15E PEAK

FCC PART 15E AV

4600

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-19

FCC PART 15E PEAK

FCC PART 15E AV

18000

14600.

Margin Remark (dB)

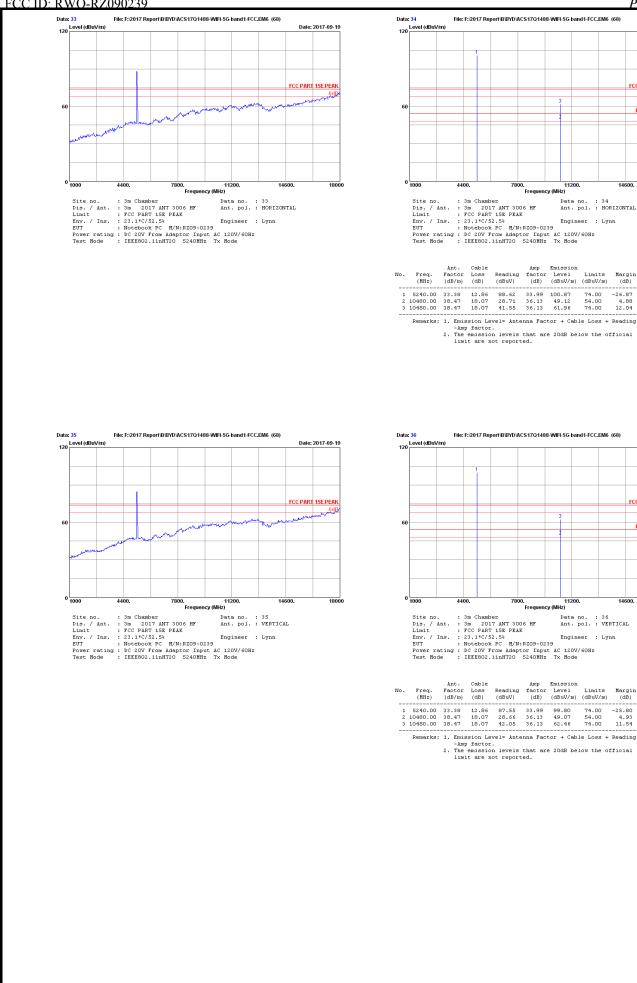
Peak Average Peak

-25.80

4.93 11.54

-26.87 4.88 12.04

18000



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

<u>Page 5-14</u> Date: 2017-09-19

FCC PART 15E PEAK

FCC PART 15E AV

4600

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-19

FCC PART 15E PEAK

FCC PART 15E AV

18000

14600.

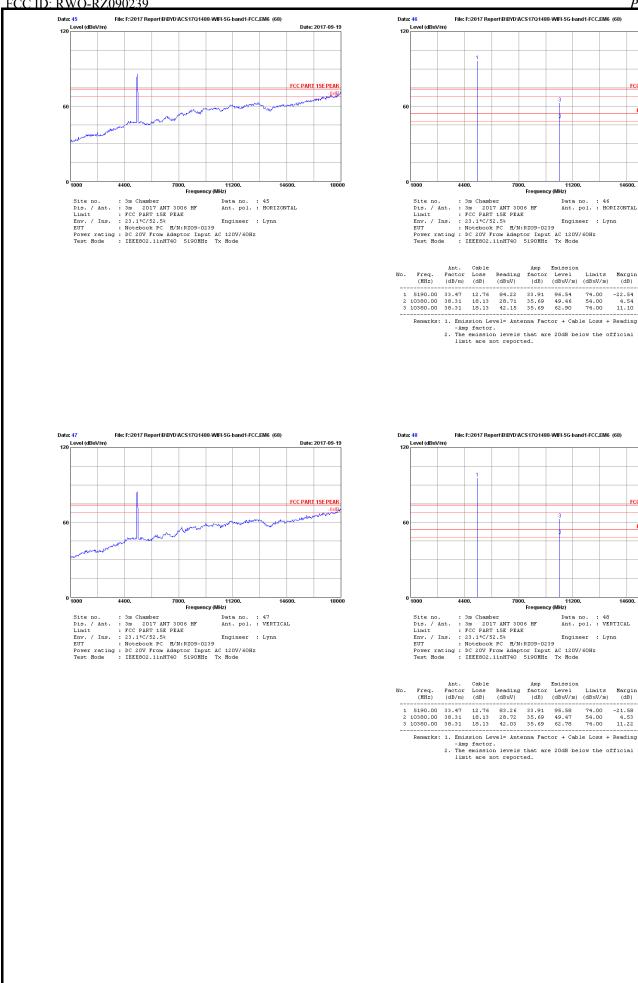
Margin Remark (dB)

Peak Average Peak

-21.58 4.53 11.22

-22.54 4.54 11.10

18000



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

<u>Page 5-15</u> Date: 2017-09-19

FCC PART 15E PEAK

FCC PART 15E AV

4600

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-19

FCC PART 15E PEAK

FCC PART 15E AV

18000

14600.

Margin Remark (dB)

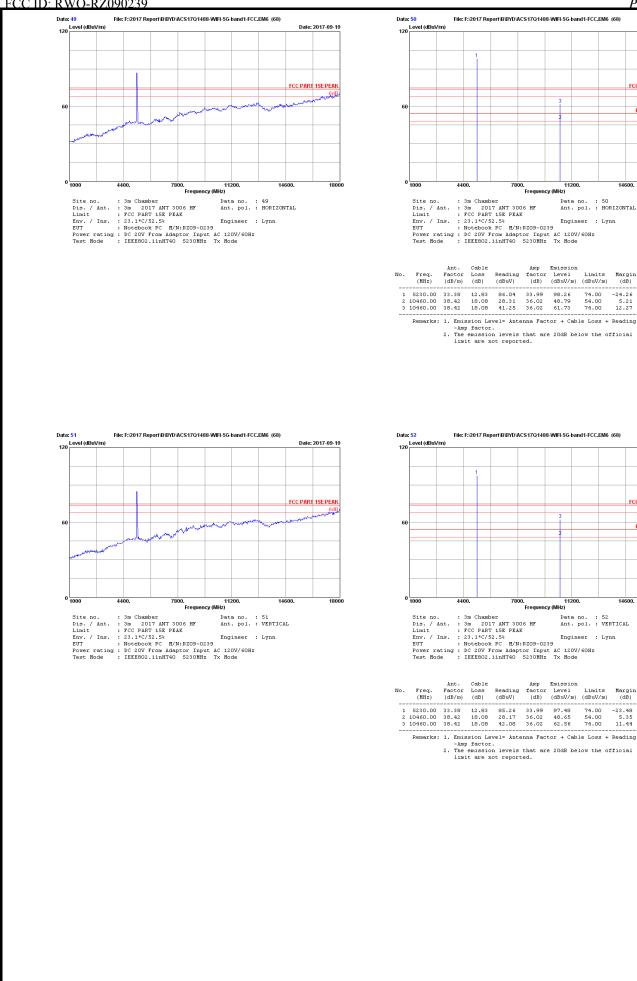
Peak Average Peak

-23.48 5.35 11.44

-24.26

5.21 12.27

18000



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

<u>Page 5-16</u> Date: 2017-09-19

FCC PART 15E PEAK

FCC PART 15E AV

14600

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-19

FCC PART 15E PEAK

FCC PART 15E AV

18000

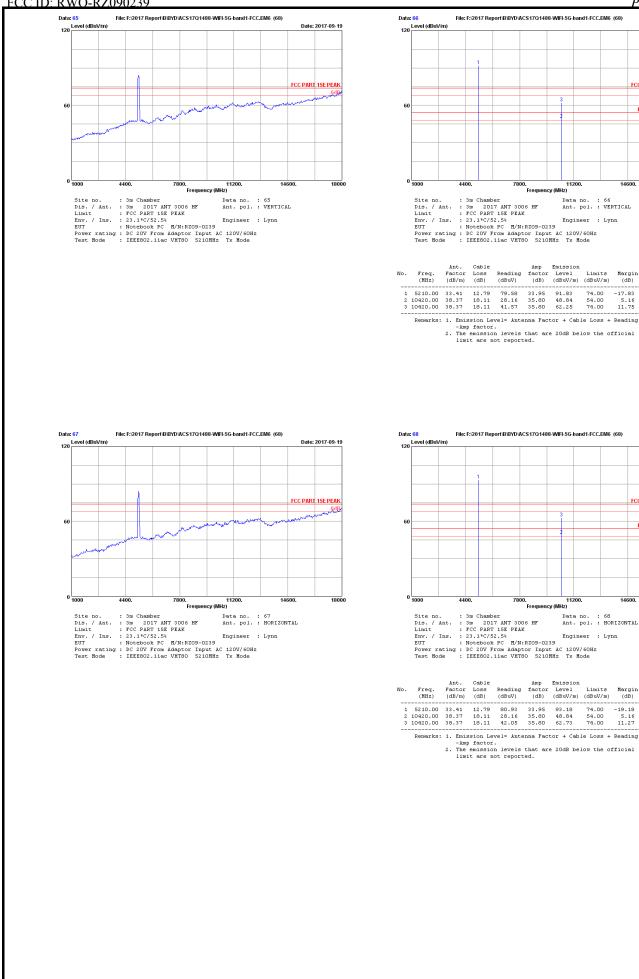
14600.

Margin Remark (dB)

-19.18 5.16 11.27 Peak Average Peak

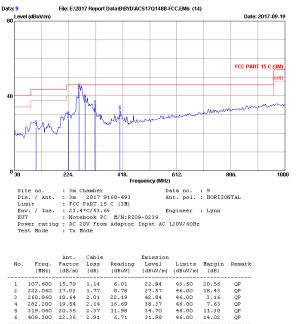
-17.83 5.16 11.75

18000



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

5260-5320MHz Band: Frequency: 30MHz~1GHz

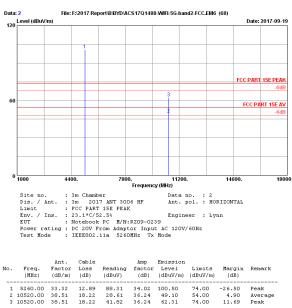


Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading. 2. The emission levels that are 20dB below the official limit are not reported.



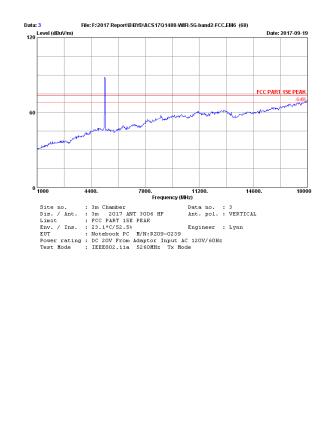
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading. 2. The emission levels that are 20dB below the official limit are not reported.

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch





-Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.



File: F:\2017 Report\B\BYD\ACS17Q1488-WIFI-5G-band2-FCC.EM6 (68) Data: 4 120 Level (dBuV/m) Date: 2017-09-19 CC PART 15E PEA FCC PART 15E AV 0 1000 . 11200 Frequency (MHz) 14600 4400 7800
 Site no.
 : 3m Chamber
 Data no.
 :

 Dis. / Ant.
 : 3m 2017 ANT 3006 HF
 Ant. pol.
 :

 Limit
 : FCC PART 15E PEAK
 Engineer
 :

 Evv. / Ins.
 : 33.1°C/52.5%
 Engineer
 :

 Power rating:
 D 200 FC M/M:R209-0239
 Power rating:
 C 200 FC M/M:R209-1014 C 1200/60Hz

 Test Mode
 :
 IEEE802.11a 5260MHz
 Tx Mode
 Data no. : 4 Ant. pol. : VERTICAL Engineer : Lynn Ant. Factor (dB/m) Cable Amp Emission Loss Reading factor Level Limits (dB) (dBuV) (dB) (dBuV/m) (dBuV/m) Freq. (MHz) Margin Remark (dB) No. 5260.00 33.32 10520.00 38.51 10520.00 38.51 12.89 18.22 18.22 87.31 28.07 41.33 34.02 36.24 36.24 99.50 48.56 61.82 74.00 54.00 74.00 -25.50 5.44 12.18 Peak 1 Average Peak Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.

 The emission levels that are 20dB below the official limit are not reported.

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

<u>Page 5-19</u> Date: 2017-09-19

FCC PAF 15E PEA

14600

Margin Remark (dB)

Peak

Average Peak

Date: 2017-09-19

15E PEA

18000

FCC PART 15E AV

CC PAF

14600

Margin Remark (dB)

-26.15 Peak Average Peak

4.49 11.55

74.00

54.00 74.00

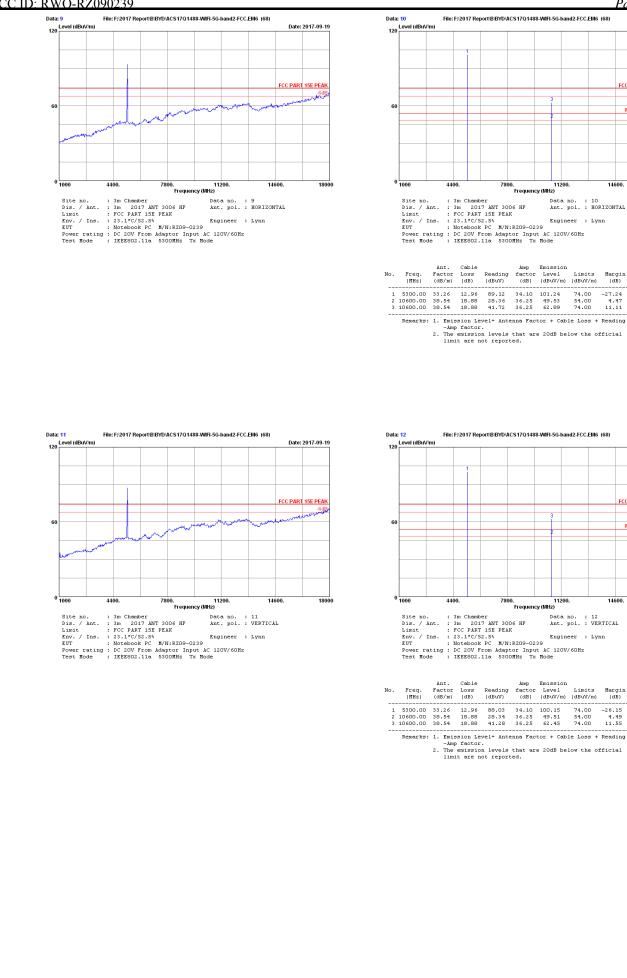
-27.24 4.47 11.11

74.00

54.00 74.00

FCC PART 15E A

1800



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

Page 5-20 Date: 2017-09-19

FCC PAF 15E PEA

14600

Margin Remark (dB)

Peak

Average Peak

Date: 2017-09-19

15E PEA

18000

FCC PART 15E AV

CC PAF

14600

Margin Remark (dB)

Peak Average Peak

-29.17

3.66 10.33

74.00

54.00 74.00

-26.30

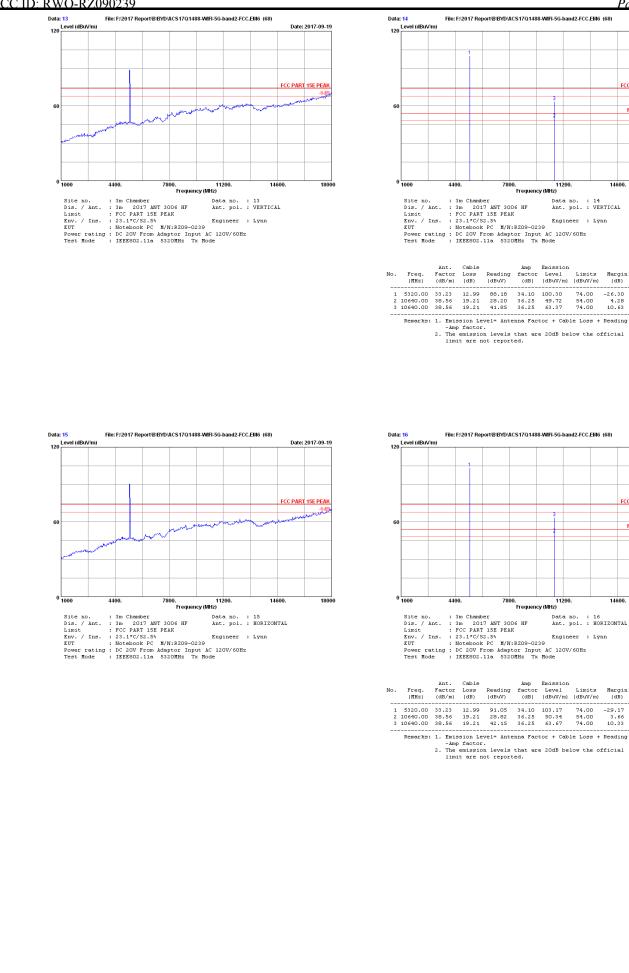
4.28 10.63

74.00

54.00 74.00

FCC PART 15E A

1800



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

<u>Page 5-21</u> Date: 2017-09-19

FCC PAF 15E PEA

14600

Margin Remark (dB)

Peak

Average Peak

Date: 2017-09-19

15E PEA

18000

FCC PART 15E AV

CC PAF

14600

Margin Remark (dB)

-25.45 Peak Average Peak

5.40 11.45

74.00

54.00 74.00

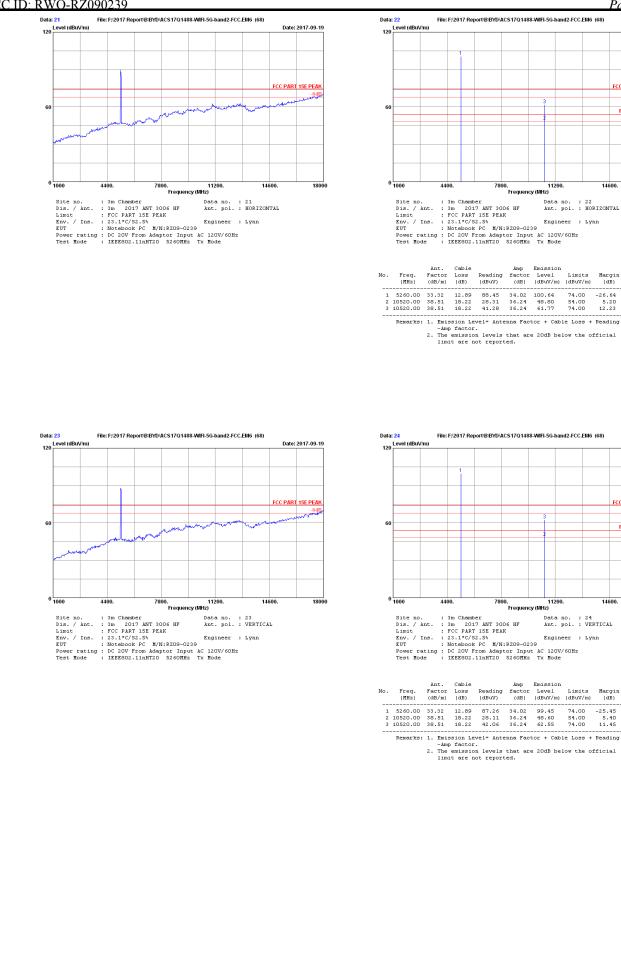
-26.64 5.20 12.23

74.00

54.00 74.00

FCC PART 15E A

1800



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

Page 5-22 Date: 2017-09-19

FCC PAF 15E PEA

14600

Margin Remark (dB)

Peak

Average Peak

Date: 2017-09-19

15E PEA

18000

FCC PART 15E AV

CC PAF

14600

Margin Remark (dB)

Peak Average Peak

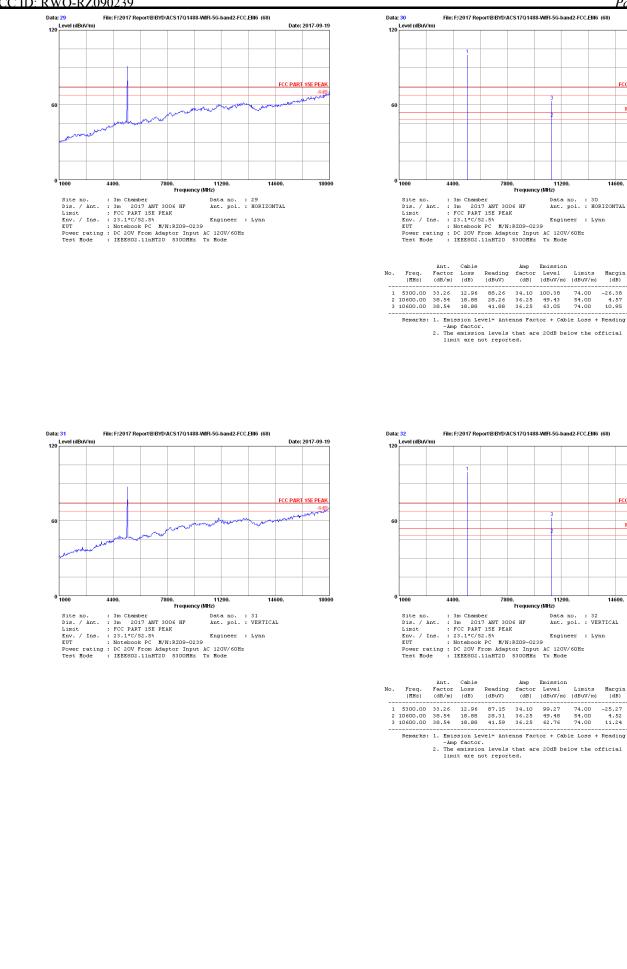
-25.27

4.52 11.24

-26.38 4.57 10.95

FCC PART 15E A

1800



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

Page 5-23 Date: 2017-09-19

FCC PAF 15E PEA

14600

Margin Remark (dB)

Peak

Average Peak

Date: 2017-09-19

15E PEA

18000

FCC PART 15E AV

CC PAF

14600

Margin Remark (dB)

Peak Average Peak

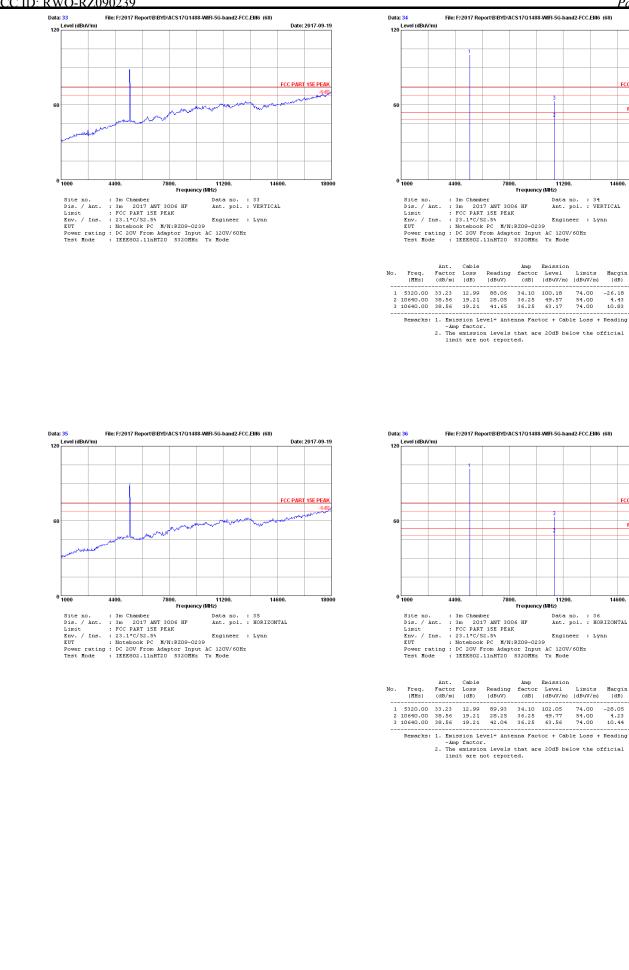
-28.05

4.23 10.44

-26.18 4.43 10.83

FCC PART 15E A

1800



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

Page 5-24 Date: 2017-09-19

FCC PAF 15E PEA

14600

Margin Remark (dB)

Peak

Average Peak

Date: 2017-09-19

15E PEA

18000

FCC PART 15E AV

CC PAF

14600

Margin Remark (dB)

-23.20 Peak Average Peak

4.95 11.27

74.00

54.00 74.00

-24.47

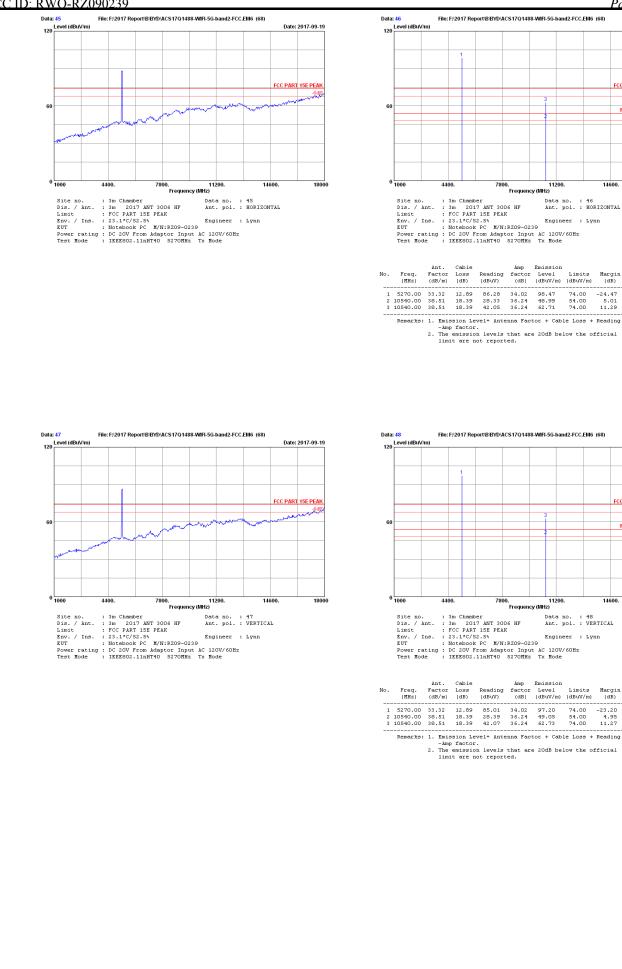
5.01 11.29

74.00

54.00 74.00

FCC PART 15E A

1800



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

Page 5-25 Date: 2017-09-19

FCC PAF 15E PEA

14600

Margin Remark (dB)

Peak

Average Peak

Date: 2017-09-19

15E PEA

18000

FCC PART 15E AV

CC PAF

14600

Margin Remark (dB)

Peak Average Peak

-25.50

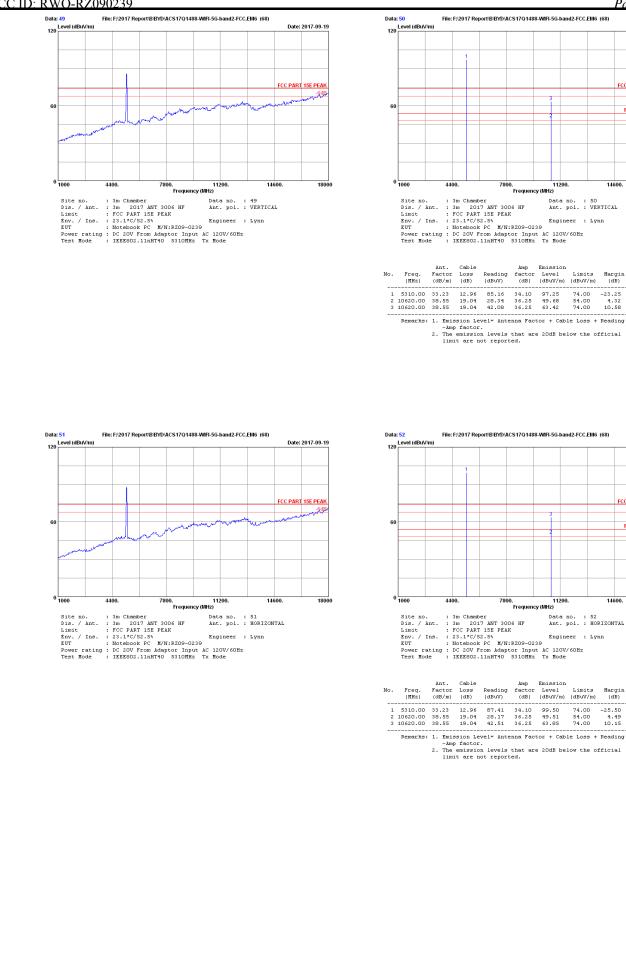
4.49 10.15

-23.25

4.32 10.58

FCC PART 15E A

1800



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

Page 5-26 Date: 2017-09-19

FCC PAF 15E PEA

14600

Margin Remark (dB)

Peak

Average Peak

Date: 2017-09-19

18000

CC PAP 15E PEA

14600

Margin Remark (dB)

-18.31 Peak Average Peak

24.84 11.23

74.00

74.00 74.00

-20.84

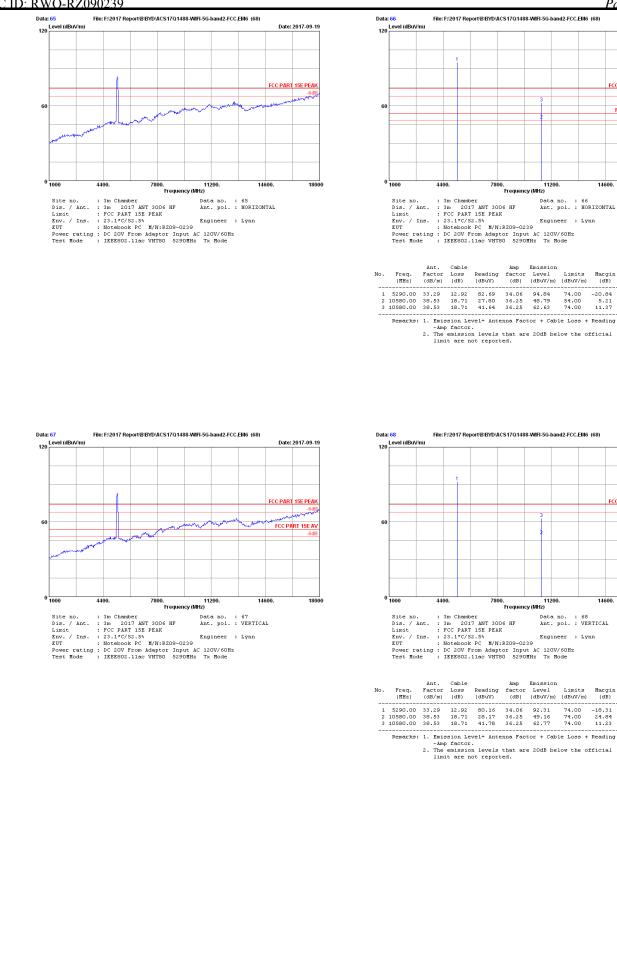
5.21 11.37

74.00

54.00 74.00

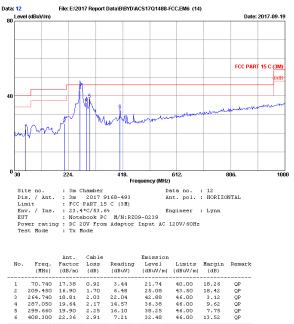
FCC PART 15E A

1800

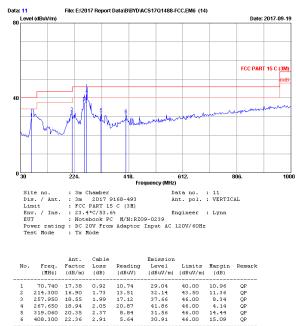


UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

5500-5700MHz Band: Frequency: 30MHz~1GHz



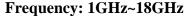
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading. 2. The emission levels that are 2048 below the official limit are not reported.

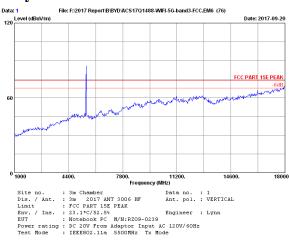


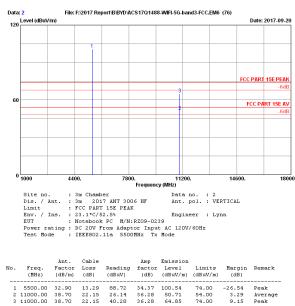
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading. 2. The emission levels that are 20dB below the official limit are not reported.

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

Date: 2017-09-20





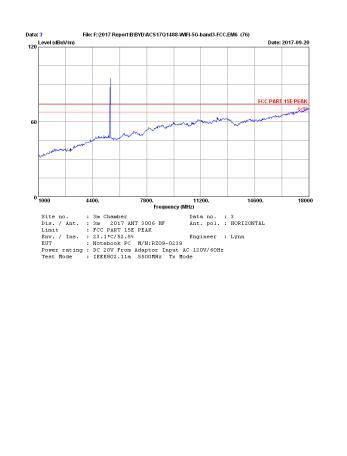




File: F:\2017 Report\B\BYD\AC\$17Q1488-WIFI-5G-band3-FCC.EM6 (76)

Data: 4

120 Level (dBuV/m)



FCC PART 15E PEAK 60 FCC PART 15E AV 0 1000 18000 4400. 7800. 11200. Frequency (MHz) 14600
 Site no.
 : 3m Chamber
 Data no.
 : 4

 Dis. / Ant.
 : 3m 2017 ANT 3006 HF
 Ant. pol.
 : HORIZ

 Limit
 : FCC PART 15E PEAK
 Env. / Ins.
 : 33.1°C/52.5%
 Engineer : Lynn

 EUT
 : Notebook PC M/N:R209-0239
 Power rating: 0 C 20Y From Adaptor Input AC 120V/60Hz
 Test Mode
 : IEEE802.11a SS00MHz Tx Mode
 Data no. : 4 Ant. pol. : HORIZONTAL Ant. Cable Amp Emission

140.	rreq.					Level		Margin	Remark
	(MHz)	(dB/m)	(dB)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	5500.00	32.90	13.29	90.90	34.37	102.72	74.00	-28.72	Peak
2	11000.00	38.70	22.15	26.07	36.28	50.64	54.00	3.36	Average
3	11000.00	38.70	22.15	40.25	36.28	64.82	74.00	9.18	Peak
	Remarks:	1. Emis	sion Le	vel= Ante	nna Fac	tor + Cab	le Loss +	Reading	

Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 The emission levels that are 20dB below the official limit are not reported.

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

<u>Page 5-29</u> Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

14600

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

18000

14600.

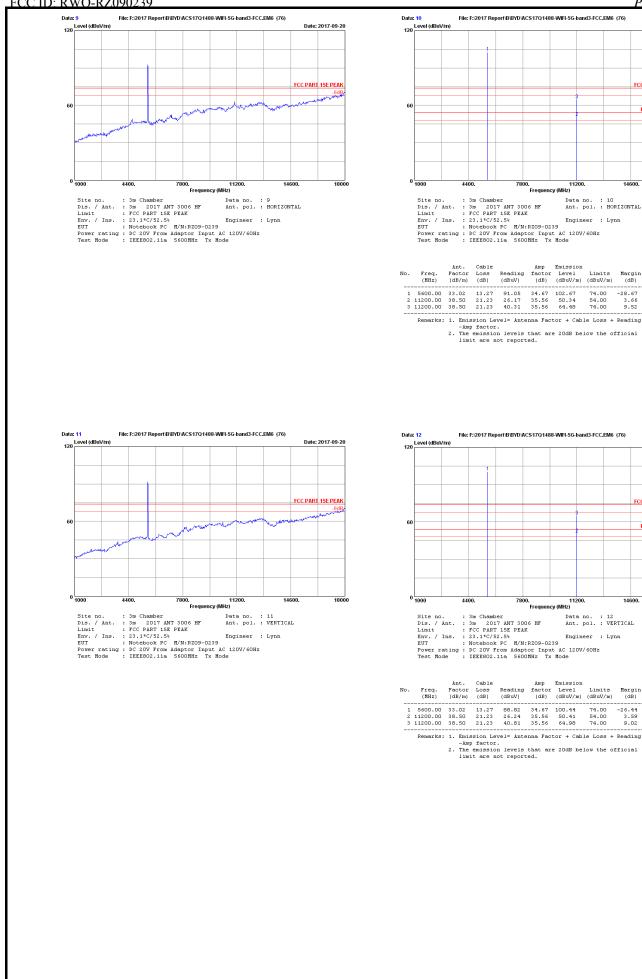
Margin Remark (dB)

Peak Average Peak

-26.44 3.59 9.02

-28.67 3.66 9.52

18000



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

<u>Page 5-30</u> Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

14600

-25.73 4.17 10.17

Peak Average Peak

Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

18000

14600.

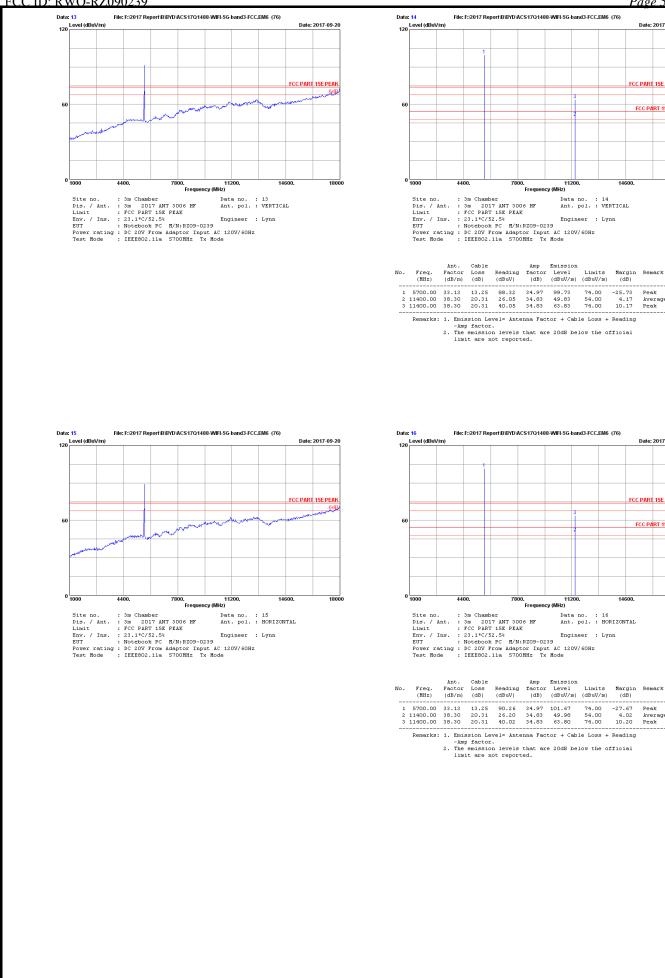
Margin Remark (dB)

Peak Average Peak

-27.67

4.02 10.20

18000



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

<u>Page 5-31</u> Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

14600

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

18000

14600.

Margin Remark (dB)

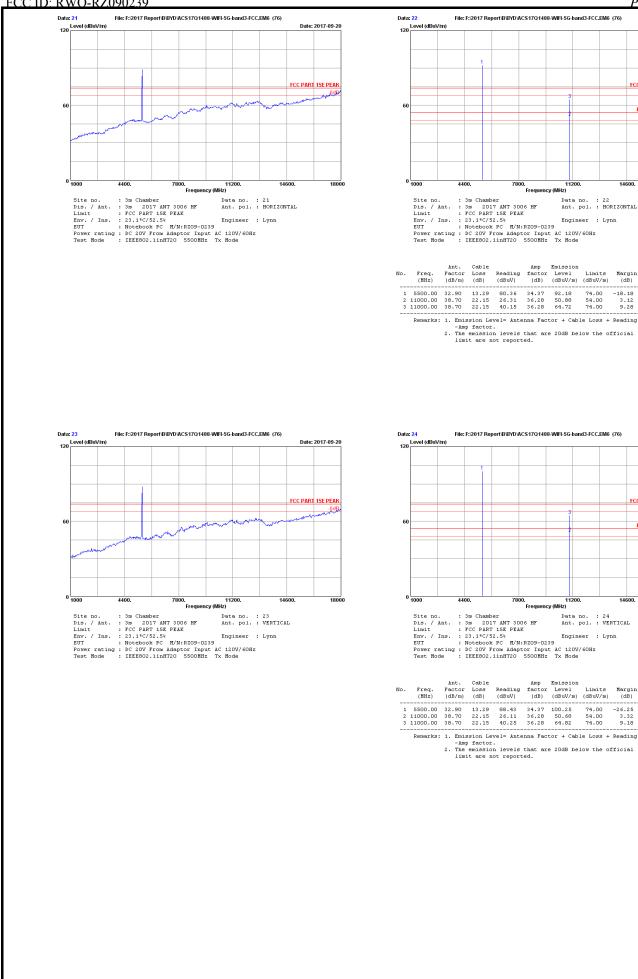
-26.25

3.32 9.18

Peak Average Peak

-18.18 3.12 9.28

18000



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

<u>Page 5-32</u> Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

14600

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

18000

14600.

Margin Remark (dB)

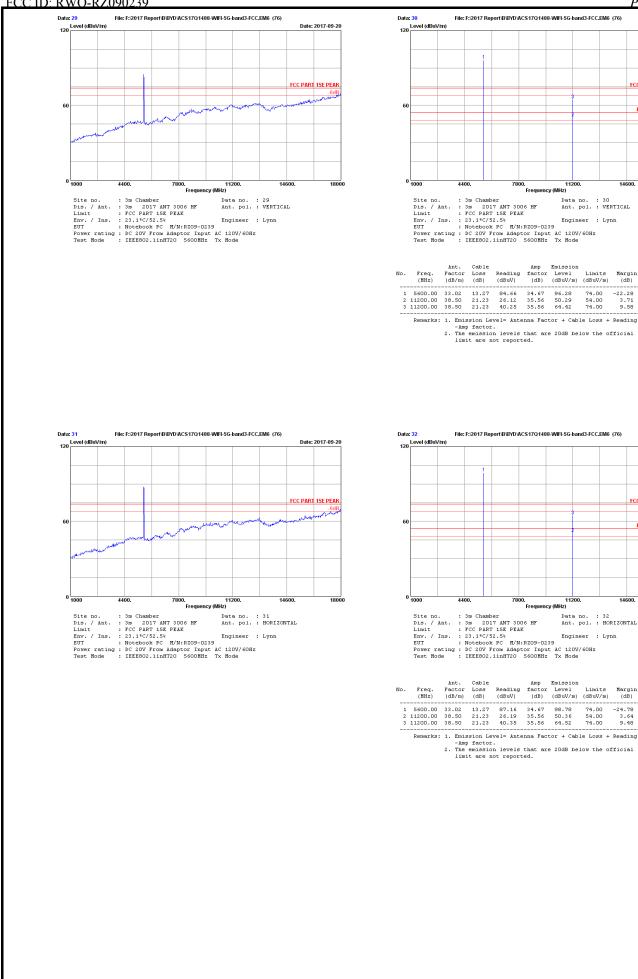
-24.78 3.64 9.48

Peak Average Peak

-22.28

3.71 9.58

18000



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

<u>Page 5-33</u> Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

18000

14600.

Margin Remark (dB)

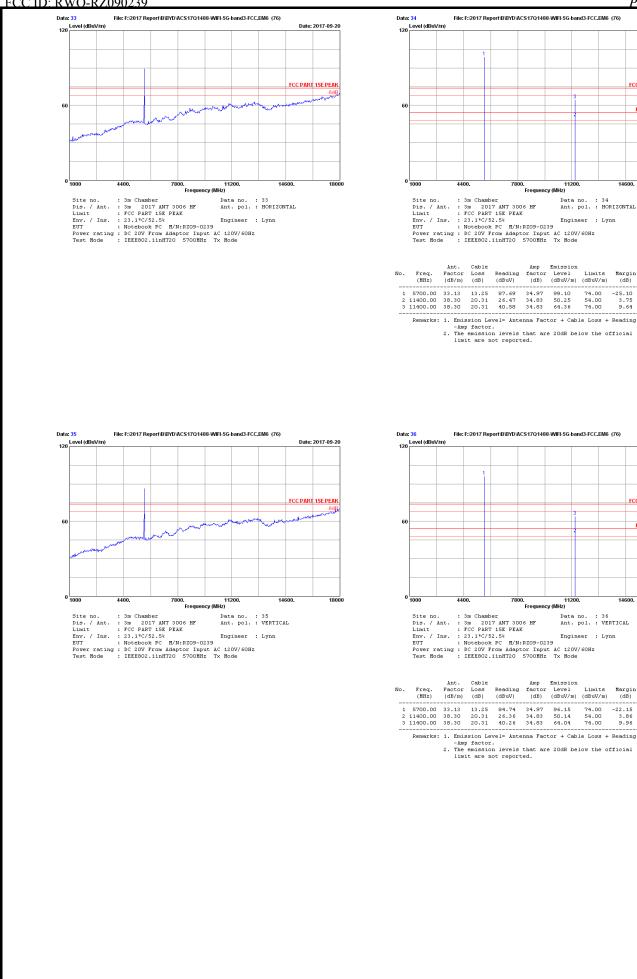
-22.15

3.86 9.96

Peak Average Peak

-25.10 3.75 9.64

18000



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

<u>Page 5-34</u> Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

14600

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

18000

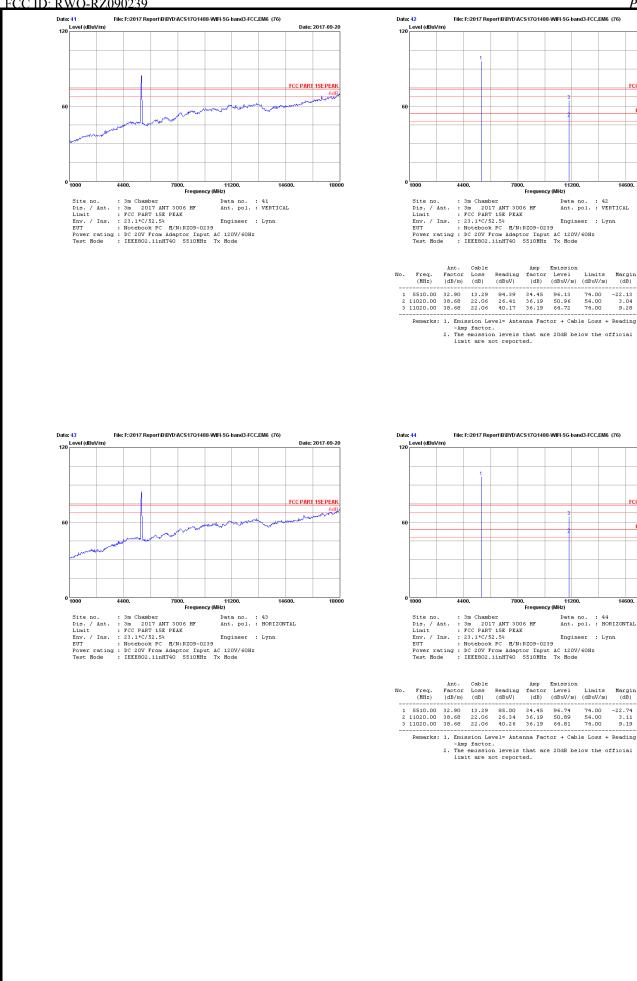
14600.

Margin Remark (dB)

-22.74 3.11 9.19 Peak Average Peak

-22.13 3.04 9.28

18000



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<u>Page 5-35</u> Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

4600

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

18000

14600.

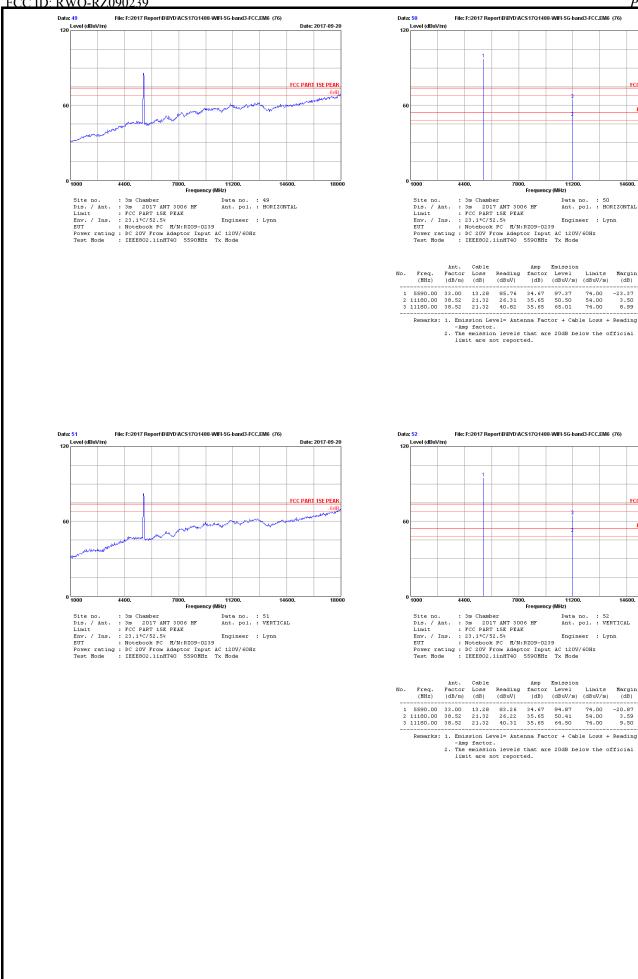
Margin Remark (dB)

Peak Average Peak

-20.87 3.59 9.50

-23.37 3.50 8.99

18000



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

<u>Page 5-36</u> Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

14600

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

18000

14600.

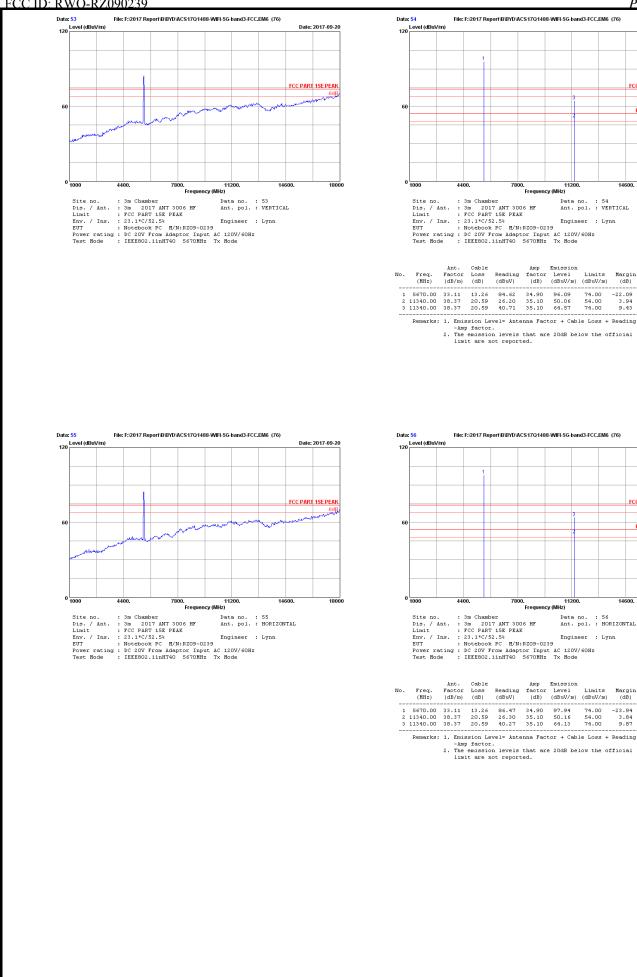
Margin Remark (dB)

Peak Average Peak

-23.94 3.84 9.87

-22.09 3.94 9.43

1800



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

<u>Page 5-37</u> Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

4600

Margin Remark (dB)

Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

18000

14600.

Margin Remark (dB)

-18.31

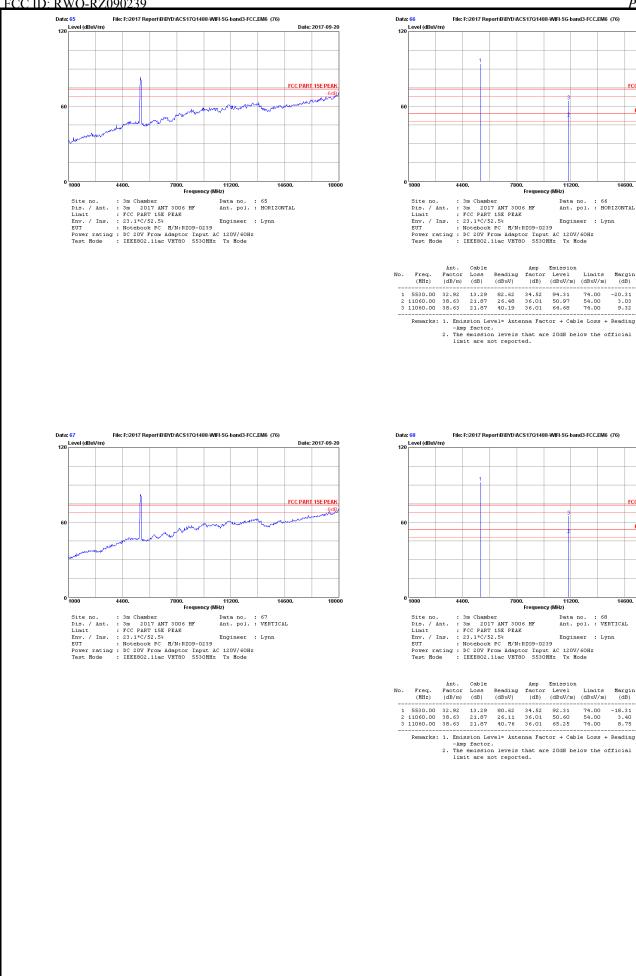
3.40 8.75

Peak Average Peak

-20.31 Peak Average Peak

3.03 9.32

18000



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

<u>Page 5-38</u> Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

14600

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

18000

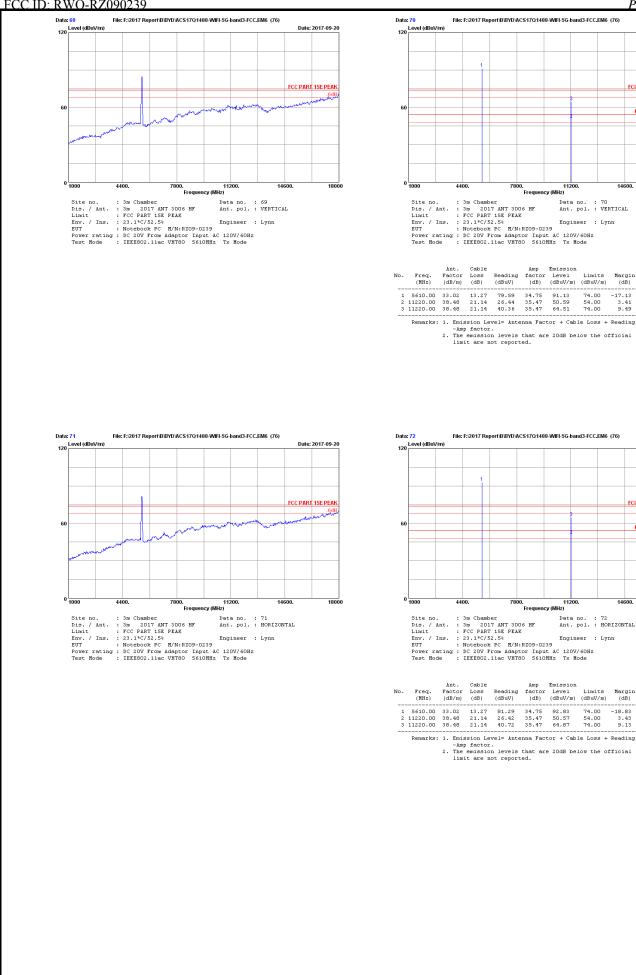
14600.

Margin Remark (dB)

-18.83 3.43 9.13 Peak Average Peak

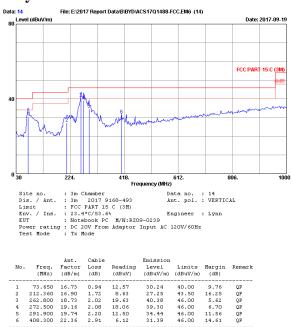
-17.13 3.41 9.49

18000

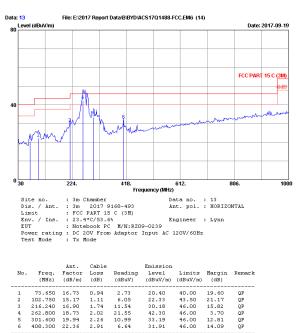


UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

5745-5825MHz Band: Frequency: 30MHz~1GHz



Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading. 2. The emission levels that are 20dB below the official limit are not reported.



Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading. 2. The emission levels that are 20dB below the official limit are not reported.

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

Date: 2017-09-20

FCC PART 15E PEAP

FCC PART 15E AV

14600

-24.68 3.95 9.82

Peak

Average Peak

Date: 2017-09-20

FCC PART 15E PEAP

FCC PART 15E AV

14600

Margin Remark (dB)

Peak

Average Peak

-27.13

3.64 9.88

Data no. : 4 Ant. pol. : HORIZONTAL

74.00

54.00 74.00

18000

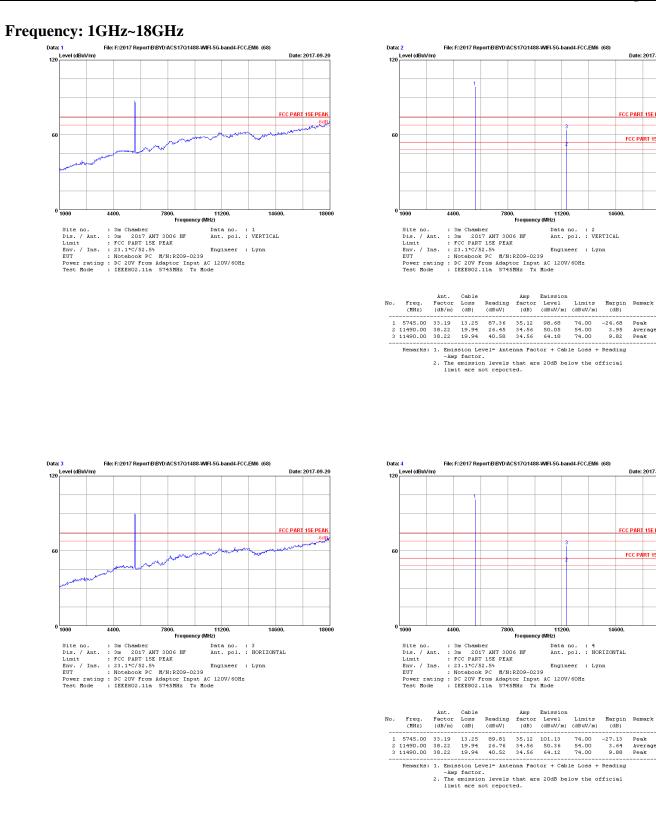
Data no. : 2 Ant. pol. : VERTICAL

74.00

54.00 74.00

98.68 50.05 64.18

18000



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

<u>Page 5-41</u> Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

4600

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

18000

14600.

Margin Remark (dB)

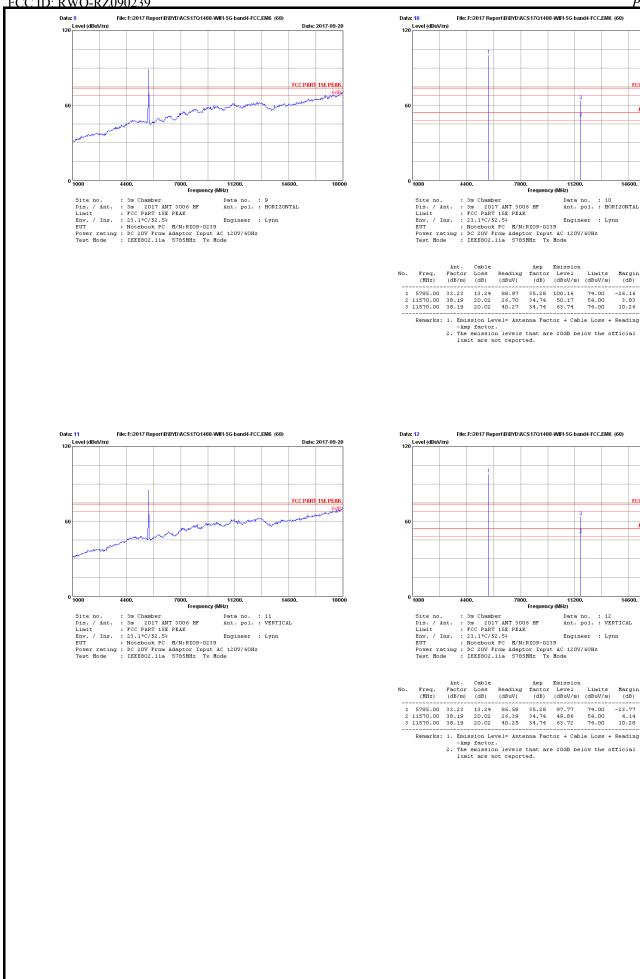
Peak Average Peak

-23.77 4.14 10.28

-26.16

3.83 10.26

18000



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

<u>Page 5-42</u> Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

14600

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

18000

14600.

Margin Remark (dB)

Peak Average Peak

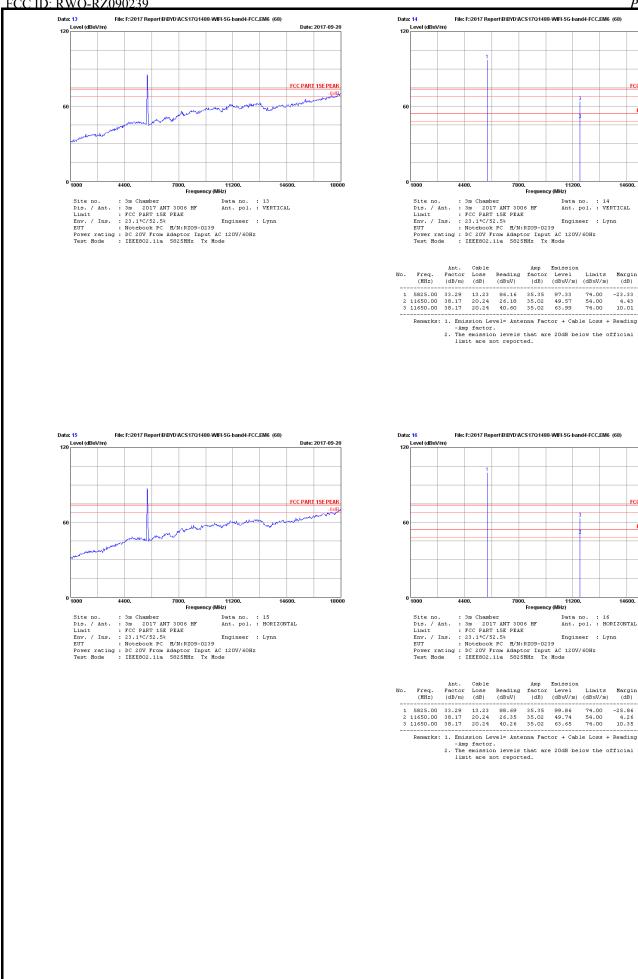
-25.86

4.26

-23.33

4.43 10.01

18000



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<u>Page 5-43</u> Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

18000

14600.

Margin Remark (dB)

-24.14

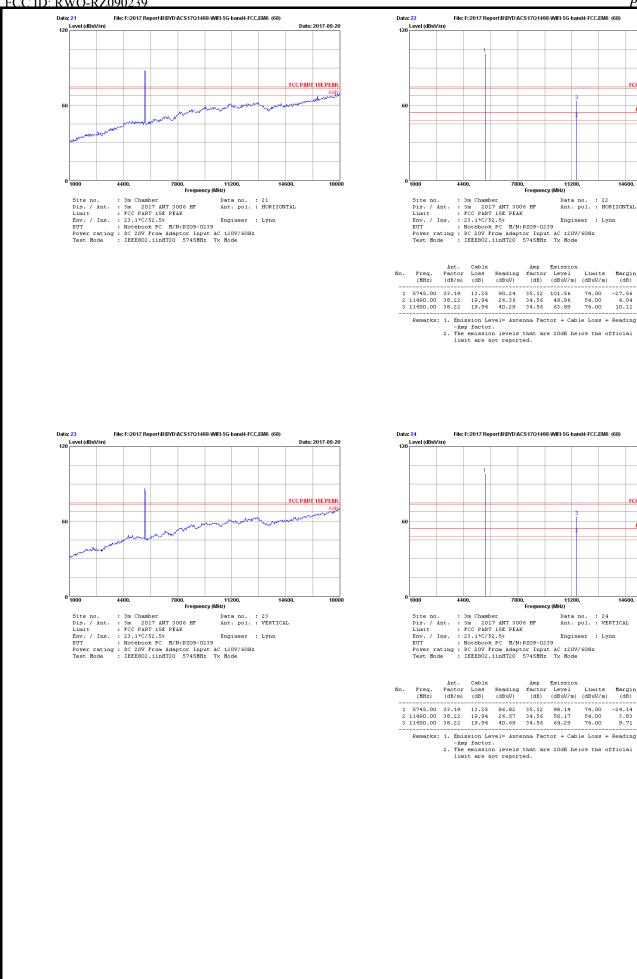
3.83 9.71

Peak Average Peak

-27.56

4.04 10.11

18000



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

<u>Page 5-44</u> Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

14600

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

18000

14600.

Margin Remark (dB)

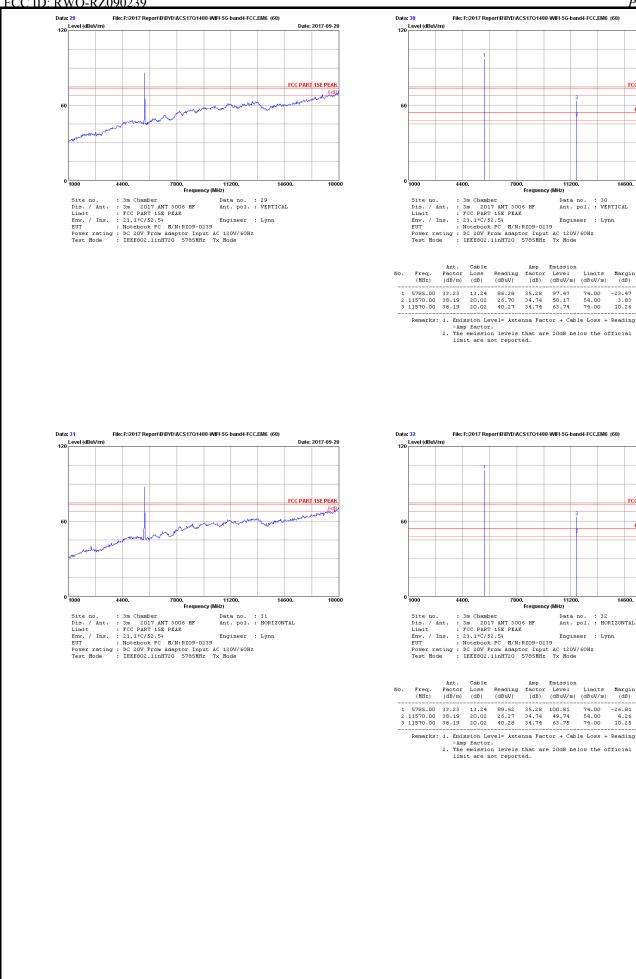
Peak Average Peak

-26.81

4.26

-23.47 3.83 10.26

18000



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

<u>Page 5-45</u> Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

4600

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

18000

14600.

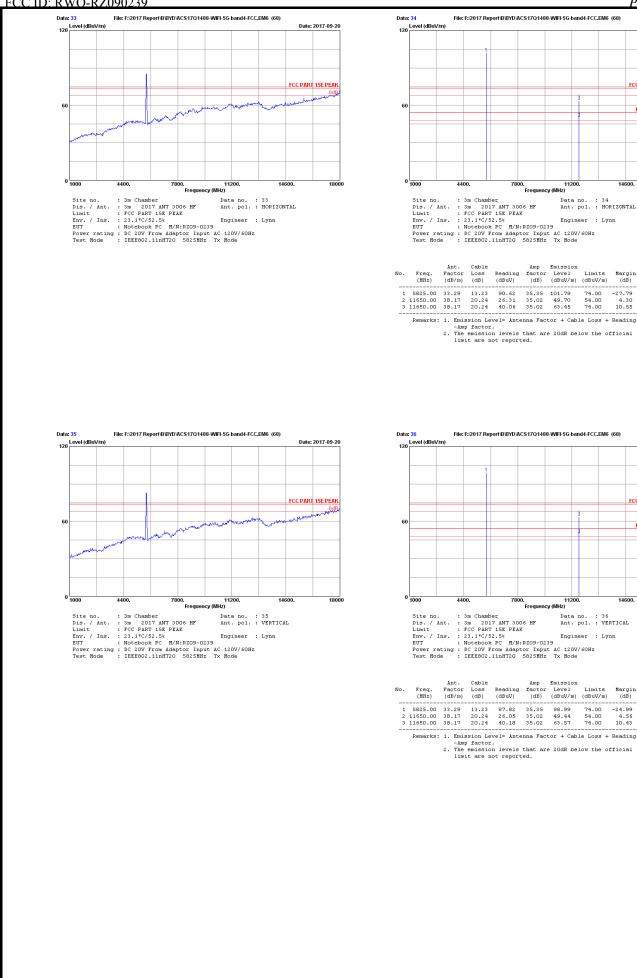
Margin Remark (dB)

Peak Average Peak

-24.99 4.56 10.43

-27.79 4.30 10.55

18000



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

<u>Page 5-46</u> Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

14600

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

18000

14600.

Margin Remark (dB)

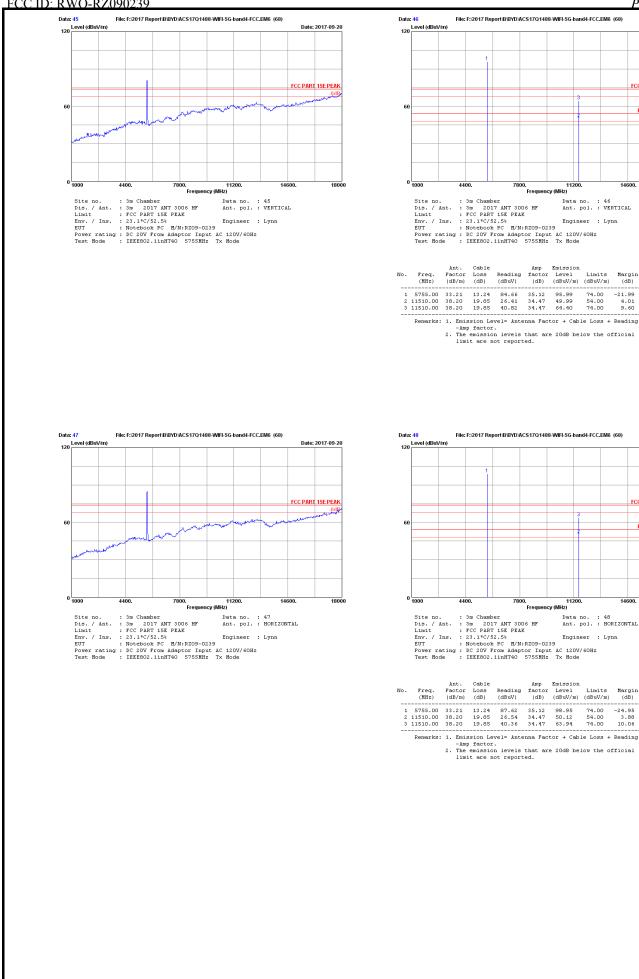
Peak Average Peak

-24.95

3.88 10.06

-21.99 4.01 9.60

18000



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

<u>Page 5-47</u> Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

4600

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

18000

14600.

Margin Remark (dB)

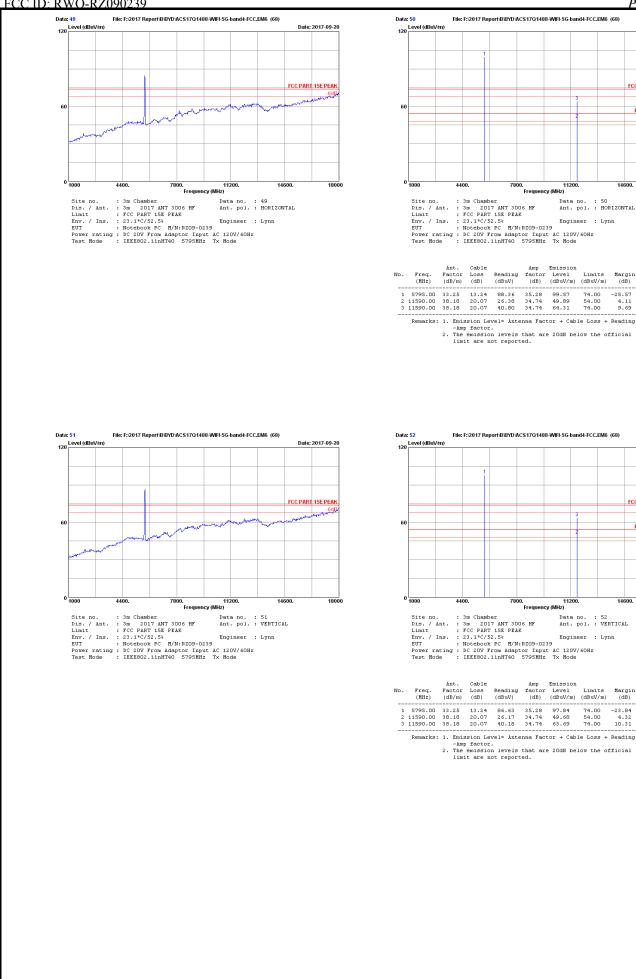
Peak Average Peak

-23.84

4.32 10.31

-25.57 4.11 9.69

18000



UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

<u>Page 5-48</u> Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

14600

Margin Remark (dB)

Peak Average Peak

Date: 2017-09-20

FCC PART 15E PEAK

FCC PART 15E AV

18000

14600.

Margin Remark (dB)

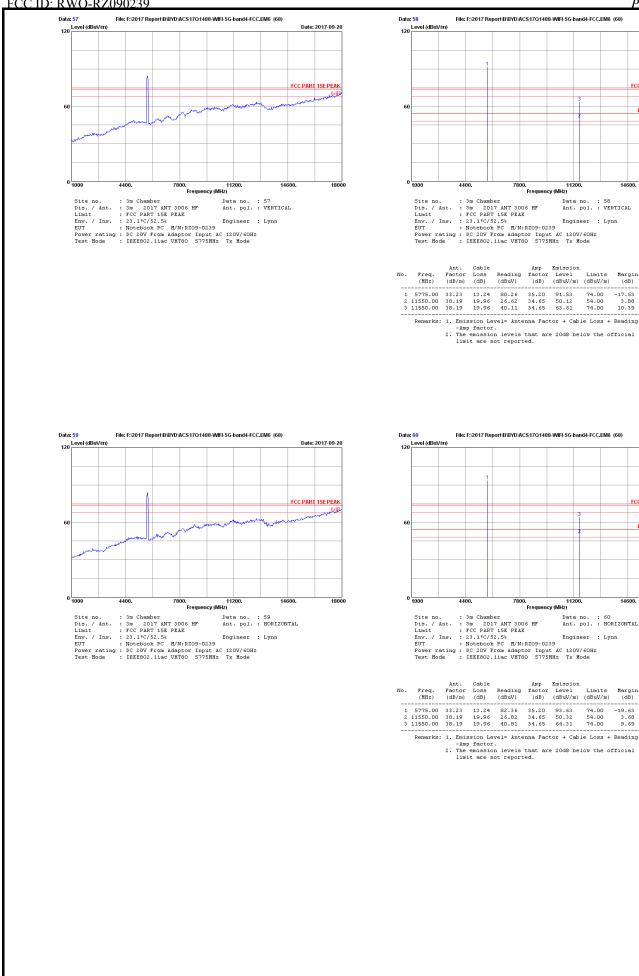
-19.63

3.68 9.69

Peak Average Peak

-17.53 3.88 10.39

18000



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6. BAND EDGE COMPLIANCE TEST

6.1.Limit

For transmitters operating in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p.

For devices with both operating frequencies and channel bandwidths contained within the band 5250-5350 MHz,

All emissions outside the band 5250-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. For transmitters operating in the band 5470-5725MHz,Emissions outside the band 5470-5725 MHz shall not exceed -27 dBm/MHz e.i.r.p.

For the band 5725-5850 MHz, emissions at frequencies from the band edges to 10 MHz above or below the band edges shall not exceed -17 dBm/MHz e.i.r.p.

For emissions at frequencies more than 10 MHz above or below the band edges, the emissions power shall not exceed -27 dBm/MHz.

6.2. Test Procedure

- 1. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.
- 2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
- 4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:

(a) PEAK: RBW=1MHz; VBW=3MHz; Sweep=AUTO

(b) AVERAGE: RBW=1MHz; VBW=10Hz; Sweep=AUTO

5. Per KDB789033 clause H 2)d).if the test distance is 3m,the EIRP(dBm)=E(dBuv/m)-95.2 Get the final compare with limit.

6.3.Test Results

Pass (The testing data was attached in the next pages.)

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Date: 2017-09-19

520

FCC P#

5060

Margin Remark (dB)

Peak Peak Peak

Date: 2017-09-19

FCC PART 15

5060

Margin Remark (dB)

Average Average

9.54 -34.75

16.05 17.98 -27.32

4920

33.64 57.95 33.87 56.02 33.91 101.32

Data no. : 6 Ant. pol. : HORIZONTAL

74.00 74.00 74.00

4920

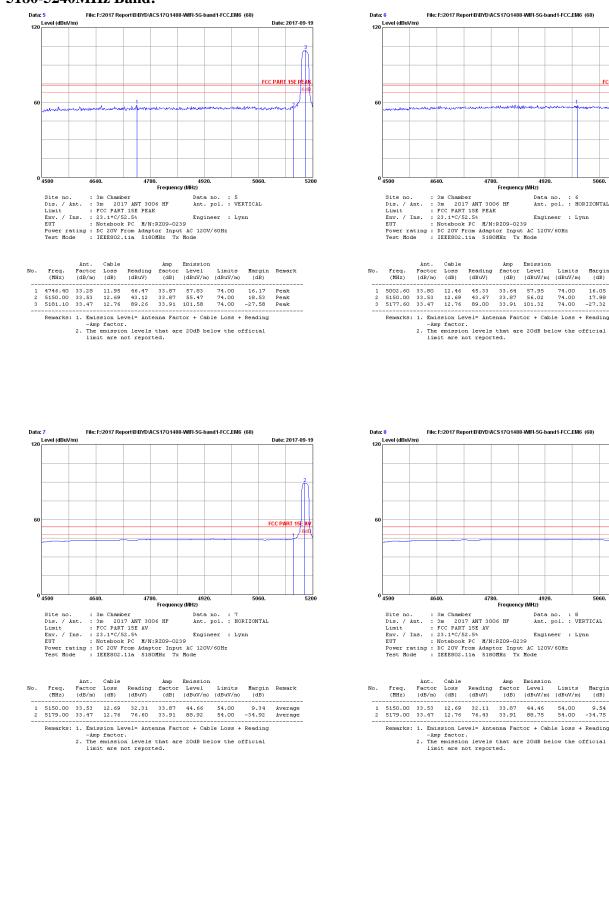
Data no. : 8 Ant. pol. : VERTICAL Engineer : Lynn

54.00 54.00

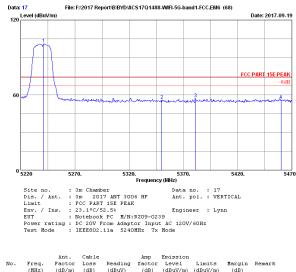
Frequency (MHz)

33.87 44.46 33.91 88.75



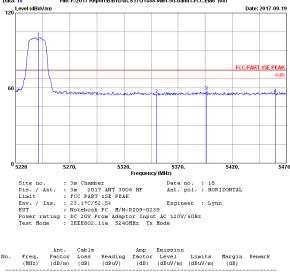


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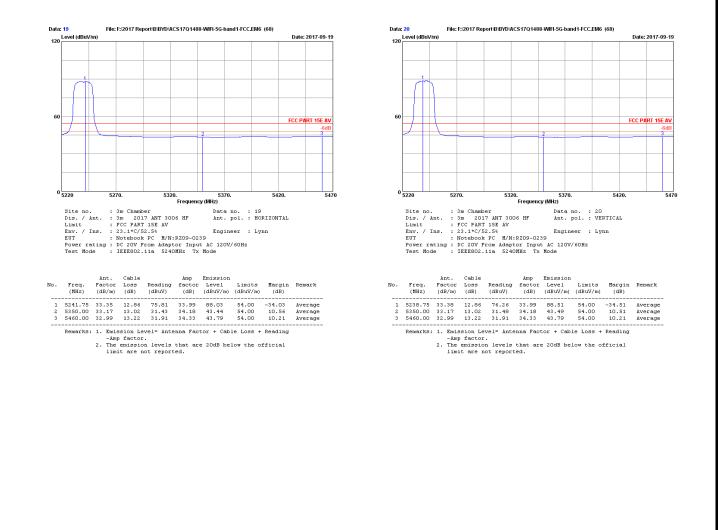
No.	Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	factor (dB)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
1	5241.25	33.38	12.86	88.70	33.99	100.95	74.00	-26.95	Peak	
2	5350.00	33.17	13.02	43.76	34.18	55.77	74.00	18.23	Peak	
3	5381.25	33.11	13.09	45.26	34.22	57.24	74.00	16.76	Peak	
4	5460.00	32.99	13.22	43.88	34.33	55.76	74.00	18.24	Peak	
										-
	Remarks:	1. Emis	sion Le	vel= Ante	nna Fac	tor + Cab	le Loss +	Reading		

Ampfactor.
 The emission levels that are 20dB below the official limit are not reported.



5241.25 33.38 5350.00 33.17 5396.25 33.08 5460.00 32.99 87.97 42.75 45.15 43.35 1 2 12.86 13.02 33.99 34.18 100.22 54.76 74.00 74.00 -26.22 Peak Peak 3 4 13.12 13.22 34.22 34.33 57.13 55.23 74.00 74.00 16.87 18.77 Peak Peak Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.

 The emission levels that are 20dB below the official limit are not reported.



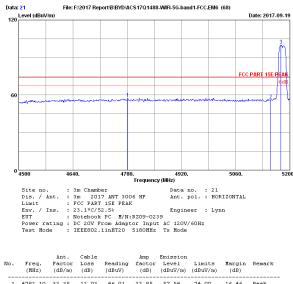
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File: F:\2017 Report\B\BYD\AC\$17Q1488-WIFI-5G-band1-FCC.EM6 (68)

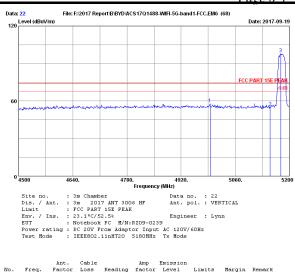
Data: 18





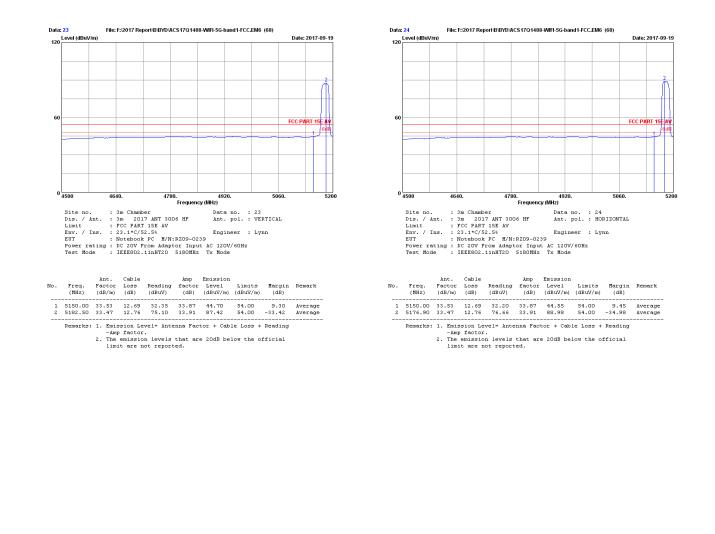
NO.	(MHz)	(dB/m)	(dB)	(dBuV)	(dB)		(dBuV/m)	dB) (dB)	Remark	
1 2 3	4782.10 5150.00 5176.90	33.35 33.53 33.47	12.03 12.69 12.76	46.01 43.73 87.68	33.85 33.87 33.91	57.54 56.08 100.00	74.00 74.00 74.00	16.46 17.92 -26.00	Peak Peak Peak	
	Remarks:		sion Le factor	vel= Ånte	nna Fact	or + Cab	le Loss +	Reading		-

 The emission levels that are 20dB below the official limit are not reported.



	(MHz)	(dB/m)	(dB)	(dBuV)	(dB)		(dBuV/m)	(dB)	Kelliar K
1	4994.90	33.80	12.46	45.21	33.64	57.83	74.00	16.17	Peak
2		33.53	12.69	42.96	33.87	55.31	74.00	18.69	Peak
3	5177.60	33.47	12.76	85.51	33.91	97.83	74.00	-23.83	Peak
	Remarks:			vel= Ante	nna Fact	tor + Cab	le Loss +	Reading	
			factor	n levels	that are	20dB be	low the o	fficial	

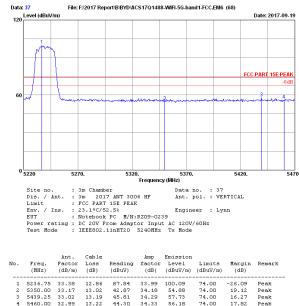
 The emission levels that are 20dB below the official limit are not reported.



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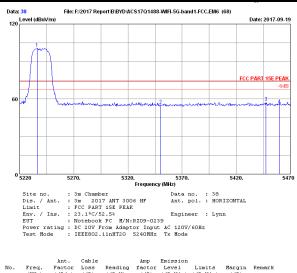
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Page 6-4



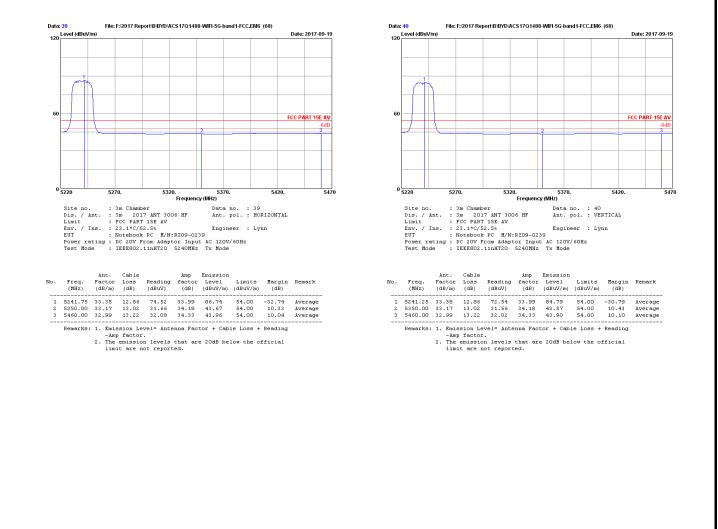
(MHZ)	(dB/m)	(aB)	(dBuV)	(aB)	(dBuV/m)	(dBuV/m)	(dB)		
									-
5236.75	33.38	12.86	87.84	33.99	100.09	74.00	-26.09	Peak	
5350.00	33.17	13.02	42.87	34.18	54.88	74.00	19.12	Peak	
5439.25	33.02	13.19	45.81	34.29	57.73	74.00	16.27	Peak	
5460.00	32.99	13.22	44.30	34.33	56.18	74.00	17.82	Peak	
									-

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading Lmission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 The emission levels that are 20dB below the official limit are not reported.

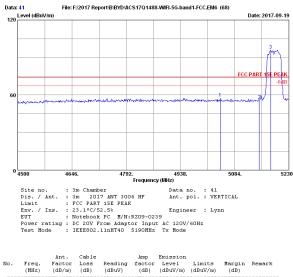


(MHz)	(dB/m)	(dB)	(dBuV)	(dB)		(dBuV/m)	(dB)	I CLINCL R	
									1
5236.25	33.38	12.86	88.40	33.99	100.65	74.00	-26.65	Peak	
5350.00	33.17	13.02	43.25	34.18	55.26	74.00	18.74	Peak	
5447.50	32.99	13.19	45.46	34.29	57.35	74.00	16.65	Peak	
5460.00	32.99	13.22	43.65	34.33	55.53	74.00	18.47	Peak	
Remarks:				nna Fact	tor + Cab	le Loss +	Reading		
	(MHz) 5236.25 5350.00 5447.50 5460.00	(MHz) (dB/m) 5236.25 33.38 5350.00 33.17 5447.50 32.99 5460.00 32.99 Remarks: 1. Emis	(MHz) (dB/m) (dB) 5236.25 33.38 12.86 5350.00 33.17 13.02 5447.50 32.99 13.19 5460.00 32.99 13.22 Remarks: 1. Emission Le	(HHz) (dB/m) (dB) (dBuv) 5236.25 33.38 12.86 88.40 5350.00 33.17 13.02 43.25 5447.50 32.99 13.19 45.46 5460.00 32.99 13.22 43.65	(MHz) (dB/m) (dB) (dB/m) (dB) 5236.25 33.38 12.86 68.40 33.99 5530.00 33.17 13.02 43.25 34.18 5447.50 32.99 13.19 45.46 34.29 5447.50 32.99 13.22 43.65 34.33 Remarks: 1. Emission Level= Antenna Factoria Factoria Factoria	(MHz) (dB) (dB) </th <th>(MHz) (dB/m) (dB) (dB/m) (dB/m)<th>(MHz) (dB)/m (dB)/m (dB)/m (dB)/m/m (dB/m/m) (dB/</th><th>(MHz) (dB/m) (dB) (dB)</th></th>	(MHz) (dB/m) (dB) (dB/m) (dB/m) <th>(MHz) (dB)/m (dB)/m (dB)/m (dB)/m/m (dB/m/m) (dB/</th> <th>(MHz) (dB/m) (dB) (dB)</th>	(MHz) (dB)/m (dB)/m (dB)/m (dB)/m/m (dB/m/m) (dB/	(MHz) (dB/m) (dB) (dB)

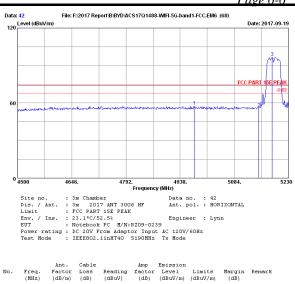
-Amp factor. 2. The emission levels that are 20dB below the official limit are not reported.



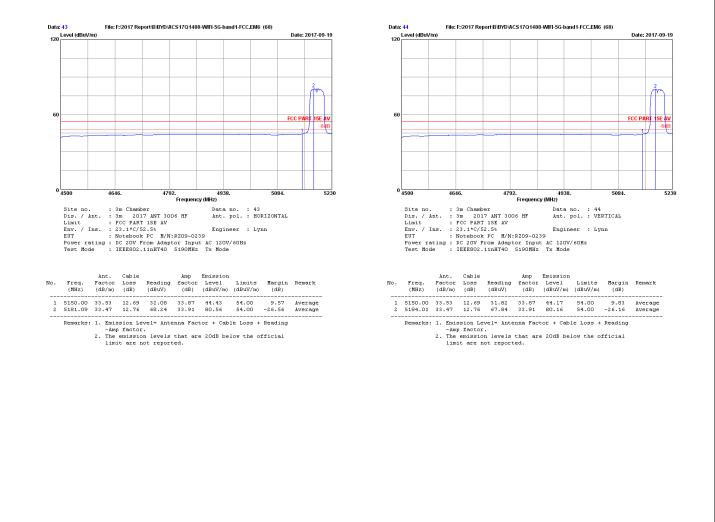
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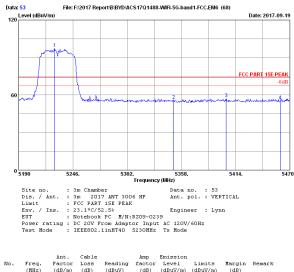
12.53 12.69 12.76 45.10 43.62 83.57 57.62 55.97 95.89 74.00 74.00 74.00 16.38 18.03 -21.89 5045.31 33.71 33.53 33.72 33.87 1 5150.00 5181.09 33.47 33.91 Peak Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor. 2. The emission levels that are 20dB below the official limit are not reported.



4975.96 5150.00 5186.20 33.77 33.53 33.47 12.42 12.69 12.76 74.00 74.00 74.00 16.37 18.11 -22.44 1 2 3 45.10 43.54 33.66 33.87 57.63 55.89 Peak Peak 84.12 33.91 96.44 Peak Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor. 2. The emission levels that are 20dB below the official limit are not reported.

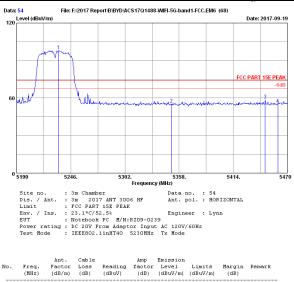


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No.	Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	factor (dB)	Level (dBuV/m)	Limits (dBuV/m)	Hargin (dB)	Remark				
1	5226.96	33.38	12.83	85.21	33.99	97.43	74.00	-23.43	Peak				
2	5350.00	33.17	13.02	43.66	34.18	55.67	74.00	18.33	Peak				
3	5404.20	33.08	13.12	45.17	34.25	57.12	74.00	16.88	Peak				
4	5460.00	32.99	13.22	43.66	34.33	55.54	74.00	18.46	Peak				
	Dowording (1 Fred	aion to	molt into	nno Foot	or I Coh	lo Togo I	Dooding					

Linision tevel Antenna Factor + Cable 1055 + Reading -Amp factor.
 The emission levels that are 20dB below the official limit are not reported.



5233.40 33.38 5350.00 33.17 5447.04 32.99 5460.00 32.99 1 2 12.86 13.02 85.82 43.13 33.99 34.18 98.07 55.14 74.00 74.00 -24.07 Peak Peak 3 4 74.00 13.19 13.22 46.50 43.41 34.29 34.33 58.39 55.29 15.61 18.71 Peak Peak Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.

 The emission levels that are 20dB below the official limit are not reported.

Data: 55 File: F:\2017 Report\B\BYD\AC\$17Q1488-WIFI-5G-band1-FCC.EM6 (68) Data: 56 File: F:\2017 Report\B\BYD\AC\$17Q1488-WIFI-5G-band1-FCC.EM6 (68) 120 Level (dBuV/m) 120 Level (dBuV/m) Date: 2017-09-19 Date: 2017-09-19 FCC PART 15E A FCC PART 15E A 5302. Frequency (MHz) 0 5190 5246. 5358 5414. 0 5190 5358 5414. 5302 5470 5246 547 . Frequency (MHz)
 Site no.
 : 3m Chamber
 Data no.
 : 55

 Dis. / Ant.
 : 3m 2017 ANT 3006 HF
 Ant. pol.
 : HORIZ

 Limit
 : FCC PART 15E AV
 Engineer : Lynn

 Euv. / Ins.
 : 23.1*C/52.5%
 Engineer : Lynn

 EUT
 : Notebook PC M/N:RZ09-0239
 Engineer : Lynn

 Power rating : D 220 From Adaptor Input AC 120V/60Hz
 Test Mode
 : IEEE802.1inHT40 5230MHz Tx Mode

 Site no.
 : 3m Chamber
 Data no.
 :

 Dis. / Ant.
 : 3m 2017 ANT 3006 HF
 Ant. pol.
 :

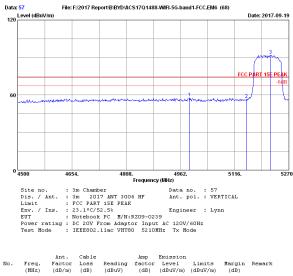
 Limit
 : FCC PART 15E AV
 Env. / Ins.
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 Env. / Ins.
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 : Data no. : 55 Ant. pol. : HORIZONTAL Data no. : 56 Ant. pol. : VERTICAL Engineer : Lynn Amp Emission Reading factor Level Limits (dBuV) (dB)(dBuV/m) -------Amp Emission Reading factor Level Limits (dBuV) (dB) (dBuV/m) (dBuV/m) Ant. Factor (dB/m) Cable Loss (dB) Ant. Factor (dB/m) Cable Loss (dB) Margin (dB) Remark Margin Remark (dB) Freq. (MHz) Freq. (MHz) 33.99 34.18 34.33 1 5223.60 33.41 2 5350.00 33.17 3 5460.00 32.99 5224.44 5350.00 5460.00 33.41 33.17 32.99 69.90 31.39 31.86 82.15 43.40 43.74 54.00 54.00 54.00 12.83 13.02 13.22 68.90 31.40 31.84 33.99 34.18 34.33 81.15 43.41 43.72 12.83 13.02 13.22 54.00 54.00 54.00 -28.15 10.60 10.26 Average Average Average -27.15 10.59 10.28 Average Average Average 1 2 2 Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.

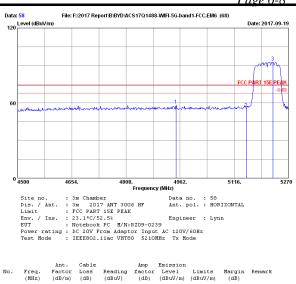
 The emission levels that are 20dB below the official limit are not reported. Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.

 The emission levels that are 20dB below the official limit are not reported.

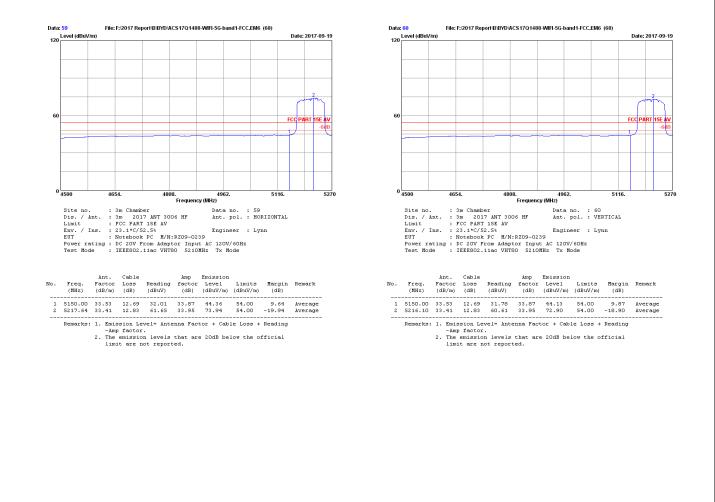
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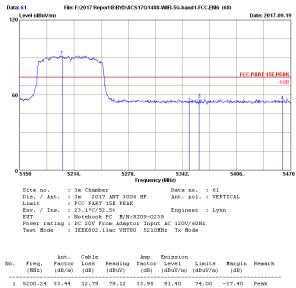
4987.41 33.80 5150.00 33.53 5217.64 33.41 45.23 43.99 79.75 74.00 74.00 74.00 12.42 12.69 33.66 33.87 57.79 56.34 16.21 17.66 33.95 12.83 92.04 -18.04 Peak Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor. 2. The emission levels that are 20dB below the official limit are not reported.



4950.45 33.70 5150.00 33.53 5225.34 33.38 46.08 43.44 80.75 33.69 33.87 33.99 74.00 74.00 74.00 15.53 18.21 -18.97 1 2 3 12.38 12.69 58.47 55.79 Peak Peak 12.83 92.97 Peak Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor. 2. The emission levels that are 20dB below the official limit are not reported.

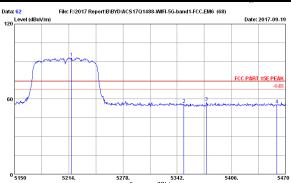


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	(MI	Hz)	(dB/	(dB)) (dBuV) (dB	(dBuV/	m) (dBuV/r	n) (dB)		
-											
	1 5200	0.24	33.4	44 12.	79 79.1	2 33.9	5 91.40	74.00	-17.40	Peak	
1	2 5350	0.00	33.3	17 13.0	02 41.2	6 34.1	3 53.27	74.00	20.73	Peak	
- 3	3 536	1.84	33.3	14 13.0	06 44.9	4 34.1	3 56.96	74.00	17.04	Peak	
	4 5460	0.00	32.9	99 13.3	22 43.1	2 34.3	55.00	74.00	19.00	Peak	
-											
	Rem	arks:	1. 1	Emission	Level= A	ntenna F	actor + C	able Loss	+ Reading	1	

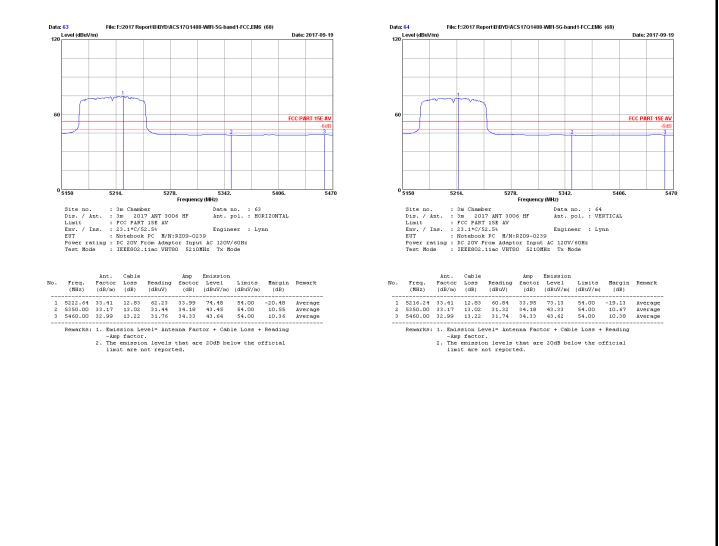
Amission levels Antenna ractor + capie hoss + Realing -Amp factor.
 The emission levels that are 20dB below the official limit are not reported.





No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5217.20	33.41	12.83	80.74	33.95	93.03	74.00	-19.03	Peak
2	5350.00	33.17	13.02	43.88	34.18	55.89	74.00	18.11	Peak
3	5376.56	33.14	13.09	45.32	34.22	57.33	74.00	16.67	Peak
4	5460.00	32.99	13.22	43.69	34.33	55.57	74.00	18.43	Peak
	Remarks:	- Amp	factor	•		tor + Cab.			

The emission levels that are 20dB below the official limit are not reported.



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Date: 2017-09-19

528

FCC PA

5124.

16.36 19.28 -26.09

Peak Peak Peak

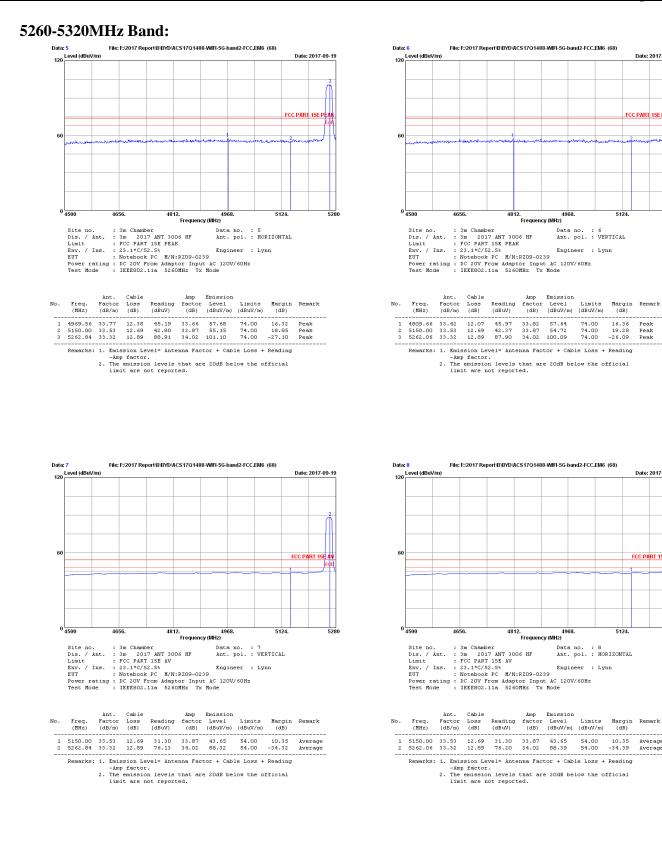
Date: 2017-09-19

FCC PART 1

5124

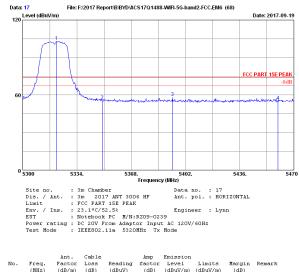
10.35 -34.39

Average Average



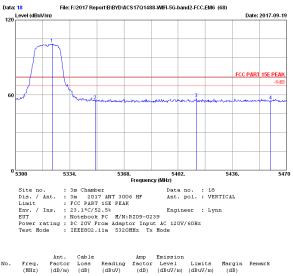
UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

FCC ID: RWO-RZ090239



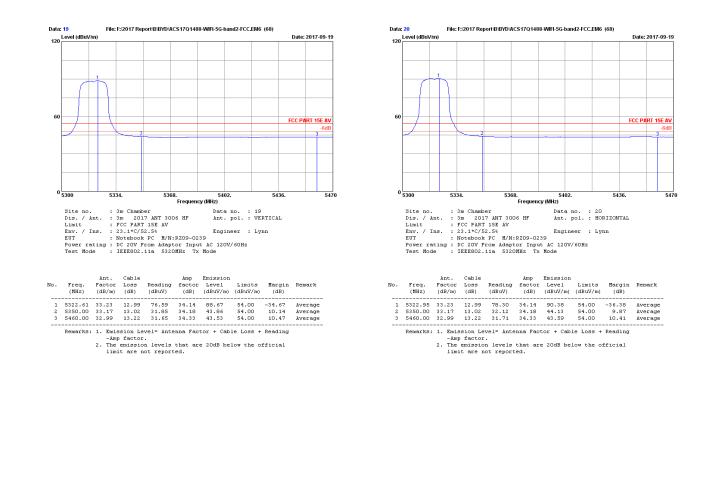
No.	Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	factor (dB)	Level (dBuV/m)	Limits (dBuV/m)	Hargin (dB)	Remark	
										-
1	5321.25	33.23	12.99	90.76	34.10	102.88	74.00	-28.88	Peak	
2	5350.00	33.17	13.02	43.62	34.18	55.63	74.00	18.37	Peak	
3	5394.01	33.11	13.12	46.15	34.22	58.16	74.00	15.84	Peak	
4	5460.00	32.99	13.22	43.32	34.33	55.20	74.00	18.80	Peak	
										-
	Remarks:	1. Emis	sion Le	vel= Ante	nna Fac	tor + Cab	le Loss +	Reading		

Amp factor.
 The emission levels that are 20dB below the official limit are not reported.



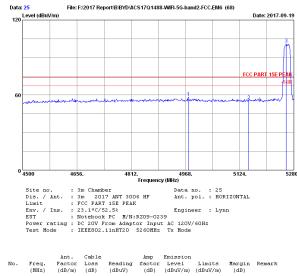
5322.95 33.23 5350.00 33.17 5413.39 33.05 5460.00 32.99 1 2 3 4 12.99 13.02 88.80 43.47 34.14 34.18 100.88 55.48 74.00 74.00 -26.88 18.52 Peak Peak 45.33 43.46 13.16 13.22 34.25 34.33 57.29 55.34 74.00 74.00 16.71 18.66 Peak Peak Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.

 The emission levels that are 20dB below the official limit are not reported.

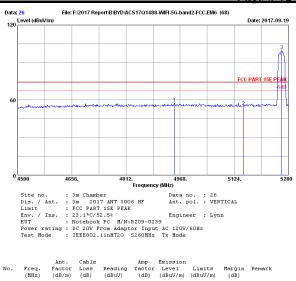


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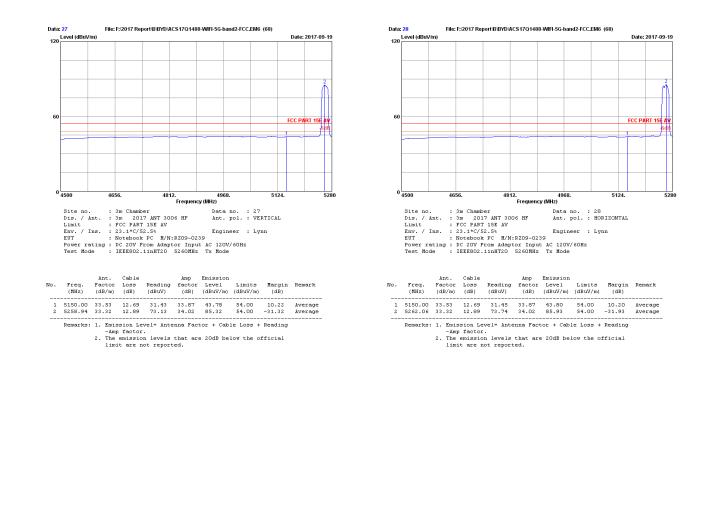
1



12.42 12.69 12.89 33.66 58.17 33.87 55.61 34.02 101.03 74.00 74.00 74.00 4977.36 33.77 33.53 45.64 43.26 15.83 18.39 5150.00 33.53 5258.16 33.35 88.81 -27.03 Peak Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor. 2. The emission levels that are 20dB below the official limit are not reported.

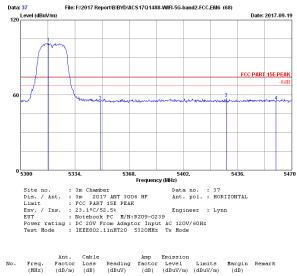


1 2 3 4952.40 5150.00 5260.50 33.70 33.53 33.32 45.24 42.63 87.41 74.00 74.00 74.00 16.37 19.02 -25.60 12.38 12.69 33.69 33.87 57.63 54.98 Peak Peak 12.89 34.02 99.60 Peak Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor. 2. The emission levels that are 20dB below the official limit are not reported.



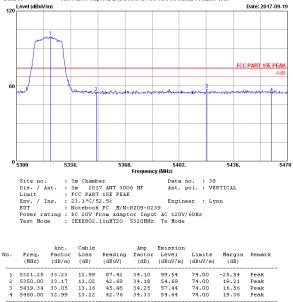
UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

FCC ID: RWO-RZ090239



	(MHz)	(dB/m)	(dB)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	5317.34	33.23	12.99	89.41	34.10	101.53	74.00	-27.53	Peak
2	5350.00	33.17	13.02	43.31	34.18	55.32	74.00	18.68	Peak
3	5428.86	33.02	13.16	45.44	34.29	57.33	74.00	16.67	Peak
4	5460.00	32.99	13.22	43.18	34.33	55.06	74.00	18.94	Peak
	Remarks:	1. Emis	sion Le	vel= inte	nna Faci	tor + Cab	le Loss +	Reading	

Amp factor.
 The emission levels that are 20dB below the official limit are not reported.



34.25 34.33 Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.

 The emission levels that are 20dB below the official limit are not reported.

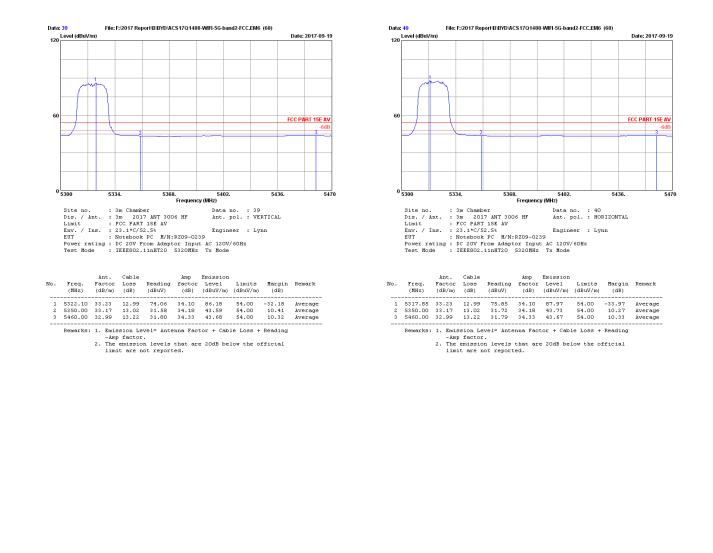
57.44 54.64

74.00 74.00

16.56 19.36 Peak Peak

45.48 42.76

13.16 13.22

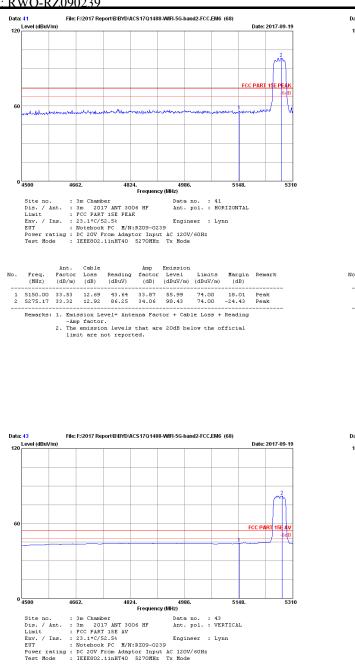


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File: F:\2017 Report\B\BYD\AC\$17Q1488-WIFI-5G-band2-FCC.EM6 (68) Data: 30 120 Level (dBuV/m)

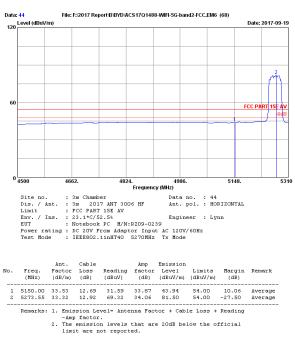




Amp Emission Reading factor Level Limits Margin Remark (dBuV) (dB) (dBuV/m) (dBuV/m) (dB) Ant. Cable Factor Loss (dB/m) (dB) Freq. (MHz) 33.87 43.98 54.00 34.06 81.97 54.00 5150.00 33.53 12.69 5277.60 33.29 12.92 31.63 69.82 1 2 10.02 -27.97 åverage åverage

- Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.

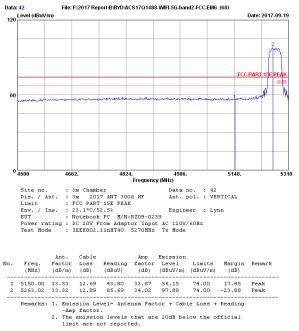
 The emission levels that are 20dB below the official limit are not reported.



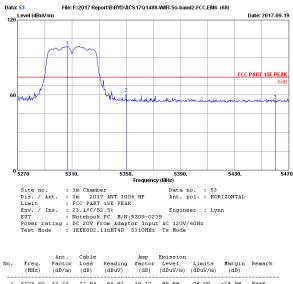
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<u>Page 6-14</u>

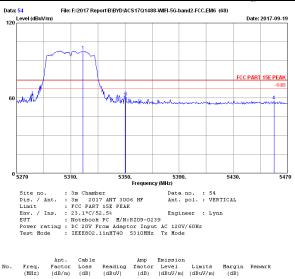


FCC ID: RWO-RZ090239



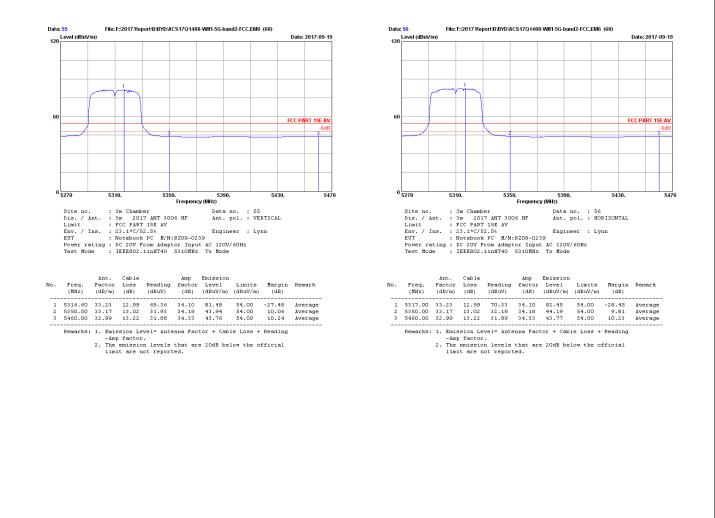
	(nnz)	(ab/m)	(as)	(abuv)	(as)	(dBuv/m)	(dBuv/m)	(ab)	
1	5306.60		12.96	86.82	34.10	98.94	74.00	-24.94	Peak
_	5350.00 5460.00	33.17 32.99	13.02 13.22	49.51 43.82	34.18 34.33	61.52 55.70	74.00 74.00	12.48 18.30	Peak Peak
	Remarks:		sion Lev factor		enna Fact	or + Cabi	le Loss +	Reading	

The emission levels that are 20dB below the official limit are not reported.



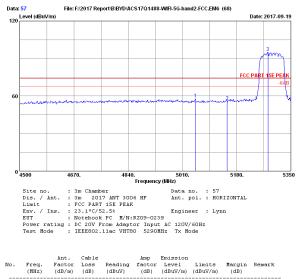
1 5319.00 33.23 2 5350.00 33.17 3 5350.60 33.17 4 5460.00 32.99 12.99 13.02 85.48 47.96 34.10 34.18 97.60 59.97 74.00 74.00 -23.60 14.03 Peak Peak 13.06 13.22 48.68 45.81 34.18 34.33 60.73 57.69 74.00 74.00 13.27 16.31 Peak Peak Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.

 The emission levels that are 20dB below the official limit are not reported.

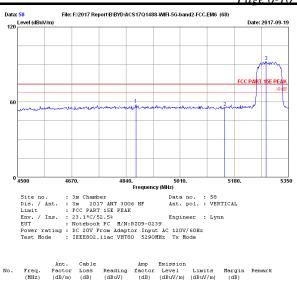


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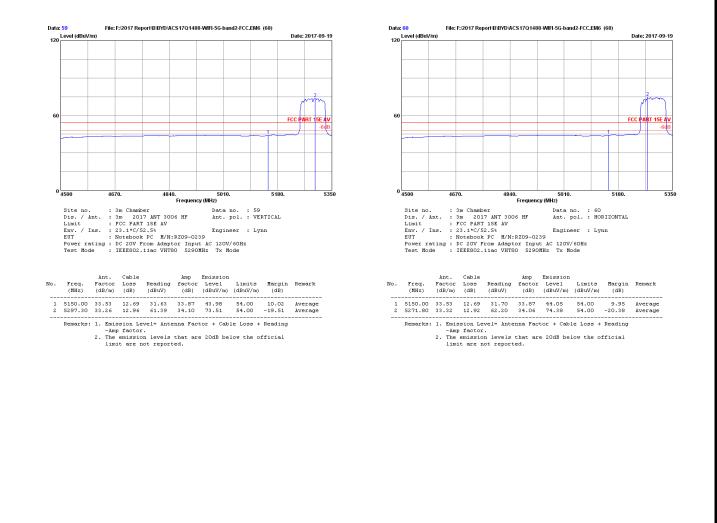
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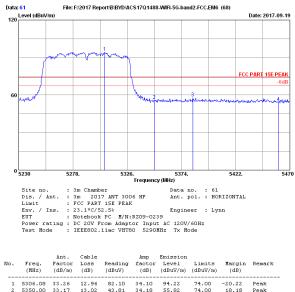
45.30 43.43 82.70 74.00 74.00 74.00 57.85 55.78 94.85 5050.80 33.71 33.53 12.56 12.69 33.72 33.87 16.15 18.22 5150.00 33.53 5277.75 33.29 12.92 -20.85 34.06 Peak Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor. 2. The emission levels that are 20dB below the official limit are not reported.



4871.45 5150.00 5280.30 33.56 33.53 33.29 46.20 43.32 80.36 74.00 74.00 74.00 1 2 3 12.22 33.75 33.87 58.23 55.67 15.77 18.33 Peak Peak 12.92 34.06 92.51 -18.51 Peak Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor. 2. The emission levels that are 20dB below the official limit are not reported.

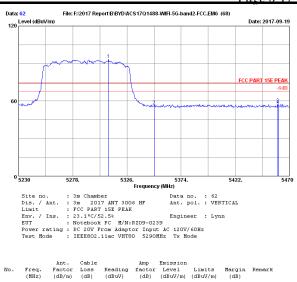


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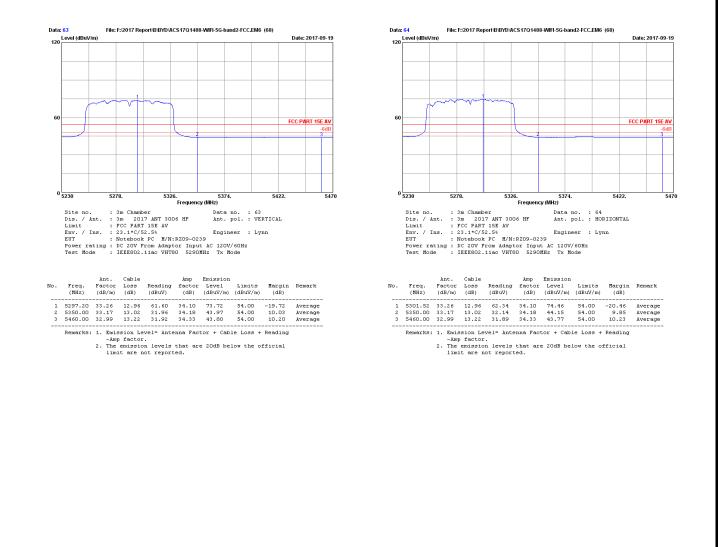
	Remarks:	1.	Emiss	ion	Leve	1=	Anten	na	Facto	r +	Cable	Loss	+)	Reading	
4	5460.00	32.	99	13.2	22	42.	34	34.	33	54.	22	74.00		19.78	Peak
3	5384.08	33.	11	13.0	9	46.	.00	34.	22	57.	98	74.00		16.02	Peak
2	5350.00	33.	17	13.0	02	43.	81	34.	18	55.	82	74.00		18.18	Peak

Immission beveat which is the control of the second second



1 5309.68 33.23 2 5350.00 33.17 3 5459.68 32.99 4 5460.00 32.99 12.96 13.02 81.12 44.15 34.10 34.18 93.21 56.16 74.00 74.00 -19.21 17.84 Peak Peak 45.85 44.81 13.22 13.22 34.33 34.33 57.73 56.69 74.00 74.00 16.27 17.31 Peak Peak Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.

 The emission levels that are 20dB below the official limit are not reported.

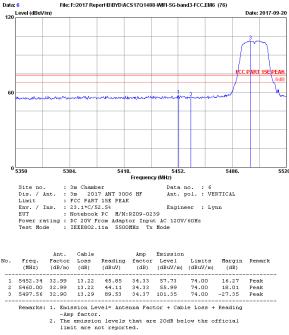


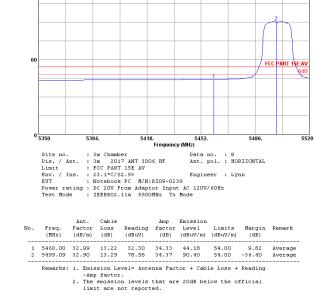
UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

Date: 2017-09-20



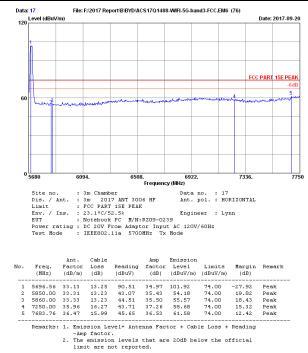




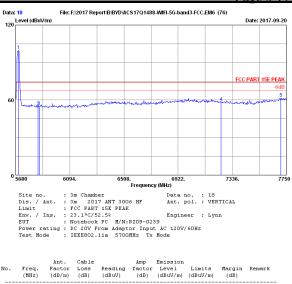


File: F:\2017 Report B\BYD\ACS17Q1488-WIFI-5G-band3-FCC.EM6 (76)

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

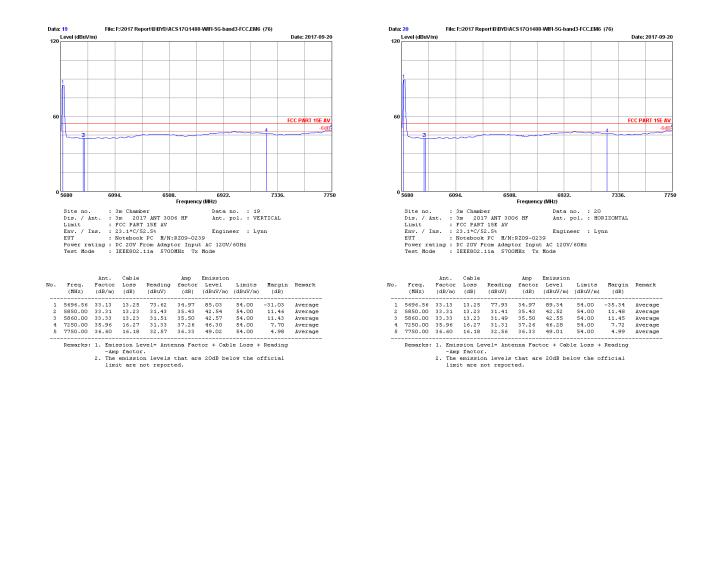




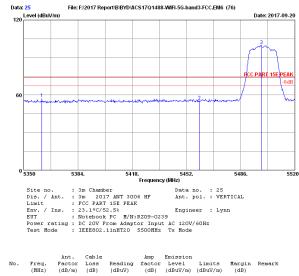


5700.70 5850.00 5860.00 7250.00 7708.60 -25.73 19.38 19.24 15.75 12.40 88.30 43.51 43.70 43.28 45.48 34.97 35.43 35.50 74.00 74.00 74.00 1 2 3 4 5 33.15 33.31 13.25 13.23 99.73 54.62 Peak Peak 33.33 35.96 36.53 13.23 13.23 16.27 16.06 Peak Peak Peak Peak 54.76 37.26 36.47 58.25 61.60 74.00 74.00 Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -kmp factor.

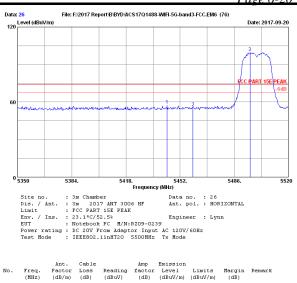
 The emission levels that are 20dB below the official limit are not reported.



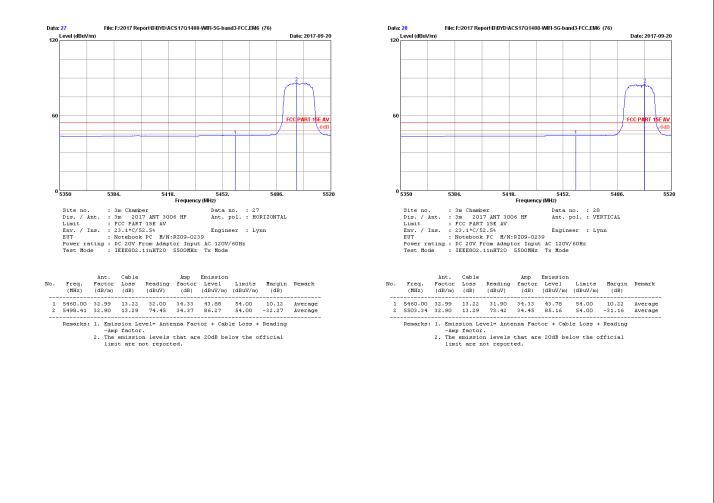
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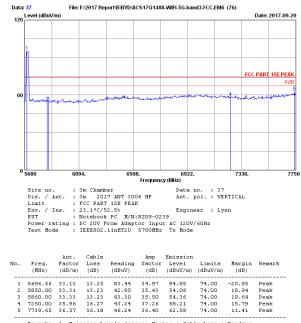
Factor Loss (dB/m) (dB) Freq. (MHz) 5361.39 5460.00 5499.09 33.14 32.99 32.90 44.97 43.43 87.70 34.18 34.33 34.37 13.06 13.22 56.99 55.31 74.00 74.00 17.01 18.69 1 74.00 13.29 99.52 -25.52 Peak Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor. 2. The emission levels that are 20dB below the official limit are not reported.

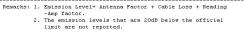


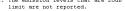
5443.84 5460.00 5495.86 33.02 32.99 32.93 34.29 34.33 34.37 74.00 74.00 74.00 1 2 3 16.37 18.67 -25.71 13.19 13.22 45.71 43.45 57.63 55.33 Peak Peak 13.29 87.86 99.71 Peak Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor. 2. The emission levels that are 20dB below the official limit are not reported.

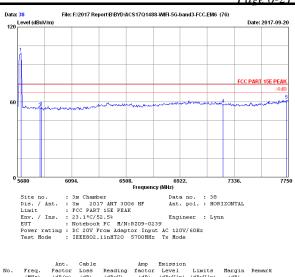


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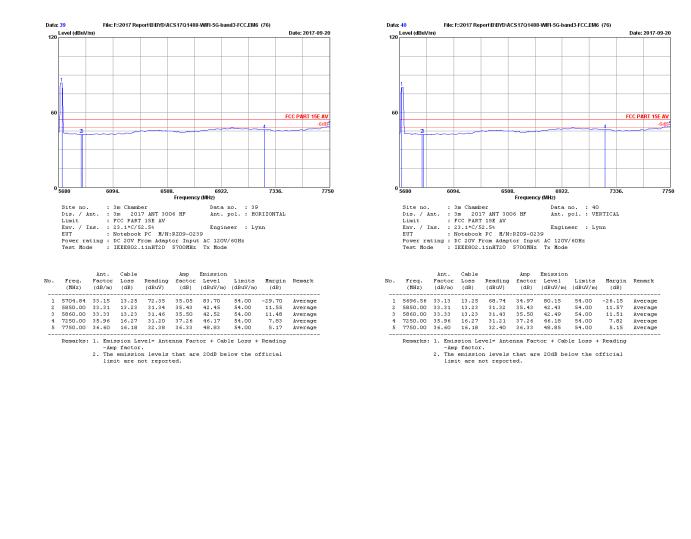




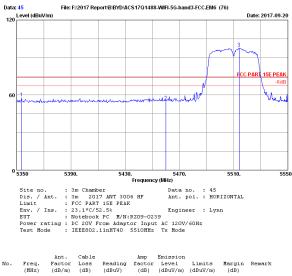


	(MHz)	(dB/m)	(dB)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)		
	5704.84	33.15	13.25	87.86	35.05	99.21	74.00	-25.21	Peak	
2	5850.00	33.31	13.23	43.61	35.43	54.72	74.00	19.28	Peak	
3	5860.00	33.33	13.23	44.62	35.50	55.68	74.00	18.32	Peak	
4	7250.00	35.96	16.27	43.10	37.26	58.07	74.00	15.93	Peak	
5	7735.51	36.57	16.18	45.31	36.40	61.66	74.00	12.34	Peak	
										-
	Remarks:		sion Le		enna Fac	tor + Cab.	le Loss +	Reading		

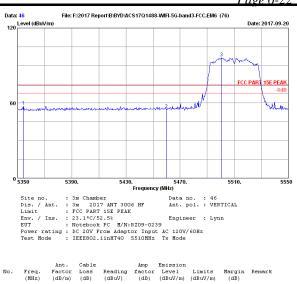
-Amp factor. 2. The emission levels that are 20dB below the official limit are not reported.



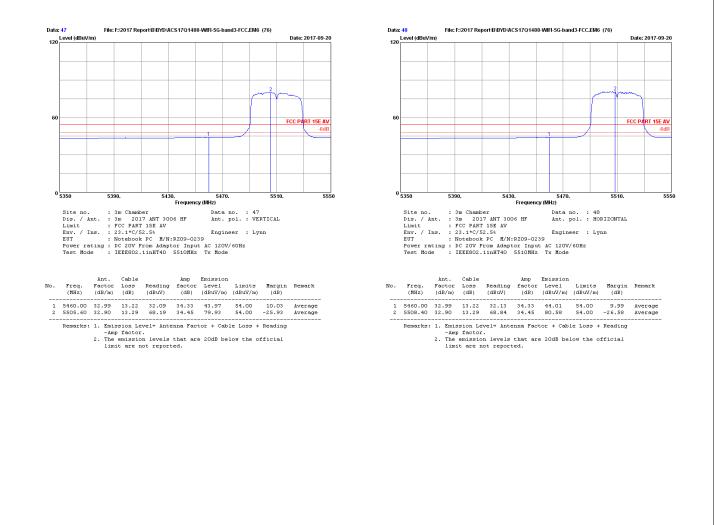
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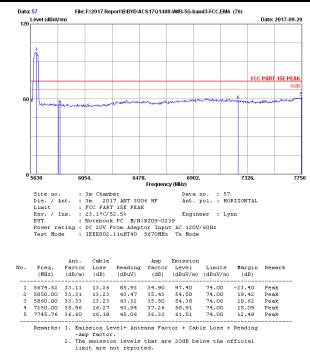
45.78 43.27 85.74 34.18 34.33 34.45 74.00 74.00 74.00 5353.60 33.17 32.99 13.06 13.22 57.83 55.15 16.17 18.85 1 5460.00 5514.00 32.92 -23.50 13.29 97.50 Peak Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor. 2. The emission levels that are 20dB below the official limit are not reported.

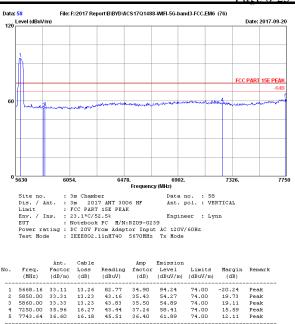


5354.40 5460.00 5500.60 33.17 32.99 32.90 45.40 42.97 84.38 34.18 34.33 34.37 74.00 74.00 74.00 1 2 3 13.06 13.22 57.45 54.85 16.55 19.15 Peak Peak 13.29 96.20 -22.20 Peak Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor. 2. The emission levels that are 20dB below the official limit are not reported.



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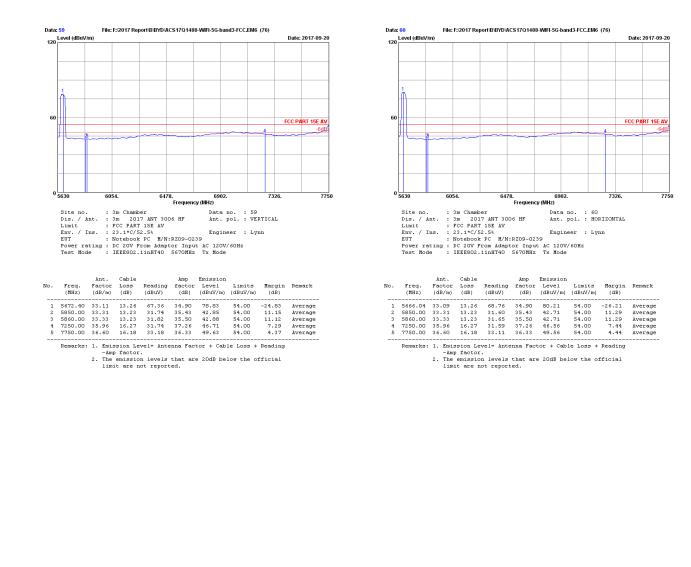


43.83 43.44 45.51 Peak Peak Peak Peak 16.27 16.18 37.26 36.40 58.41 61.89 74.00 74.00 Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -kmp factor.

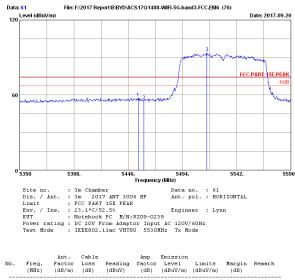
 The emission levels that are 20dB below the official limit are not reported.

54.89

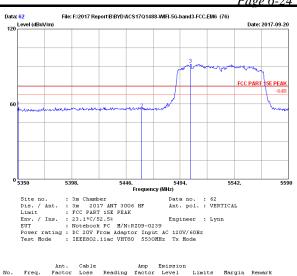
13.23



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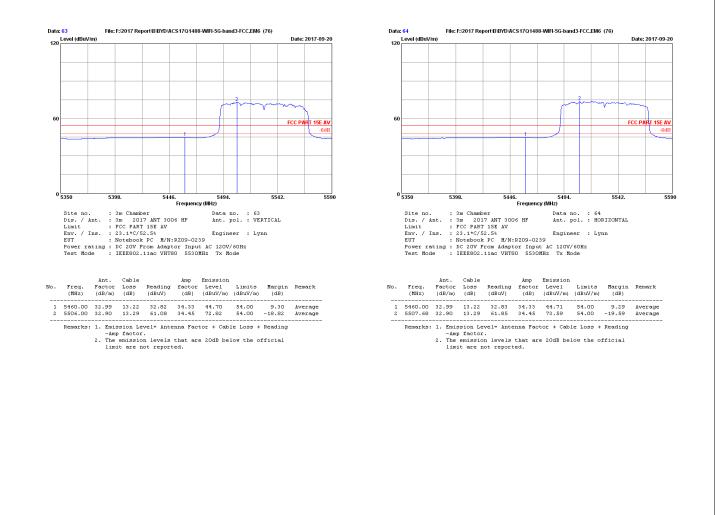




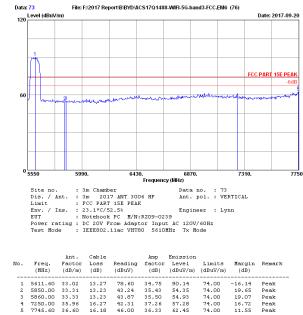


	Remarks:	- Amp	factor	vel= Ante				-	
	5503.12	32.90	13.29	80.19	34.45	91.93	74.00	-17.93	геак
-							74.00	-17.93	Peak
2	5460.00	32 99	13.22	44.33	34.33	56.21	74.00	17.79	Peak
1	5350.72	33.17	13.06	45.87	34.18	57.92	74.00	16.08	Peak
	(MHz)	(dB/m)	(dB)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	

The emission levels that are 20dB below the official limit are not reported.

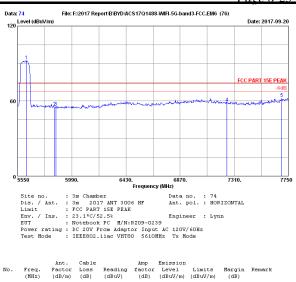


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Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.

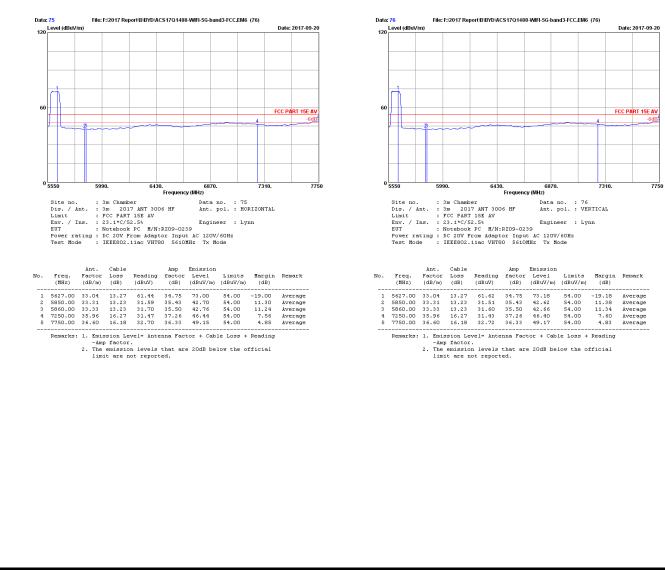
 The emission levels that are 20dB below the official limit are not reported.



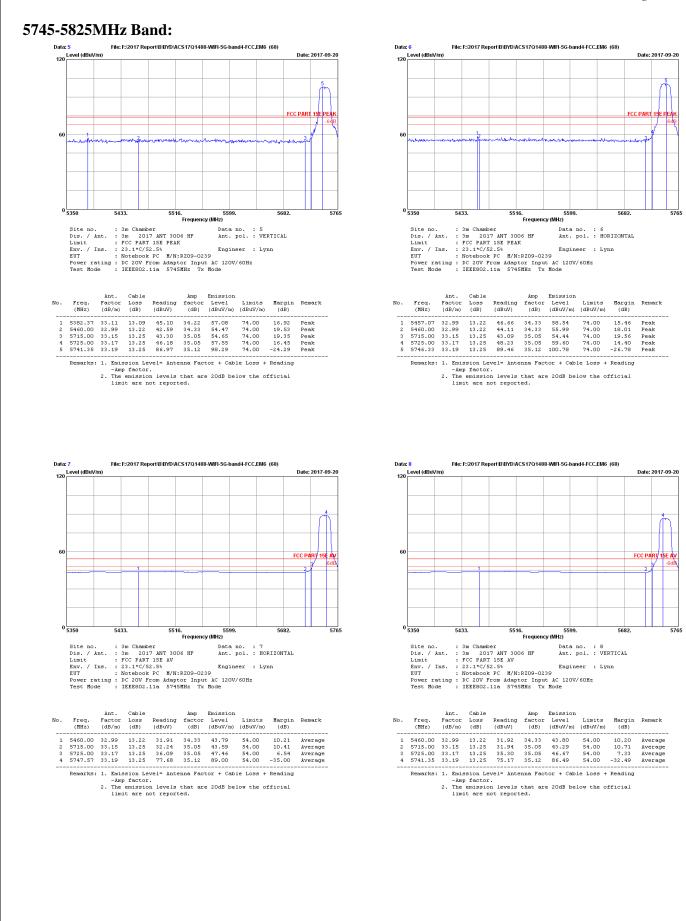
1 5620.40 2 5850.00 3 5860.00 4 7250.00 5 7695.00 34.75 35.43 35.50 74.00 74.00 74.00 -18.34 19.14 18.90 15.52 11.92 33.04 33.31 13.27 13.23 80.78 43.75 92.34 54.86 Peak Peak 33.33 35.96 36.50 13.23 13.23 16.27 16.06 43.73 44.04 43.51 45.99 Peak Peak Peak Peak 55.10 37.26 36.47 58.48 62.08 74.00 74.00

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -kmp factor.

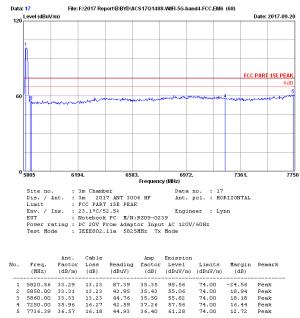
 The emission levels that are 20dB below the official limit are not reported.



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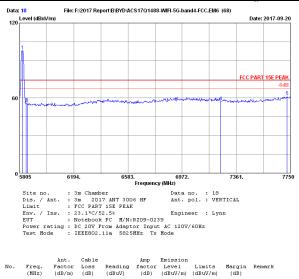


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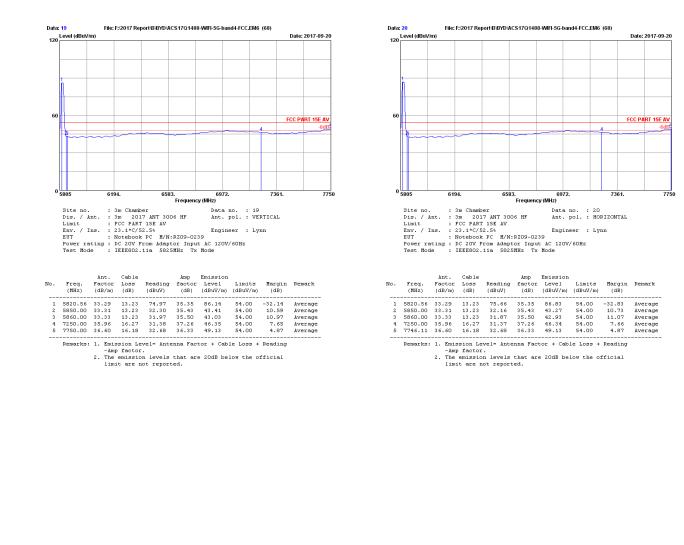
16.27 16.18 Remarks: 1. Emission Level* Antenna Factor + Cable Loss + Reading -Amp factor.

 The emission levels that are 20dB below the official limit are not reported.

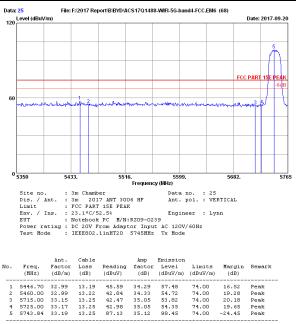


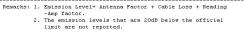
1 5824.45 33.29 2 5850.00 33.31 3 5860.00 33.33 4 7250.00 35.96 5 7726.66 36.57 86.78 44.39 44.43 42.30 45.04 35.35 35.43 35.50 37.26 36.40 -23.95 18.50 18.51 16.73 12.67 74.00 74.00 74.00 13.23 13.23 97.95 55.50 Peak Peak Peak Peak Peak Peak 13.23 55.49 16.27 16.12 57.27 61.33 74.00 74.00 Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -kmp factor.

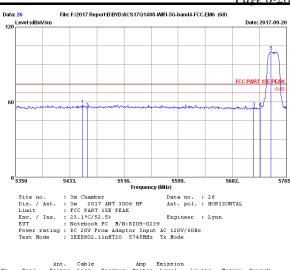
 The emission levels that are 20dB below the official limit are not reported.



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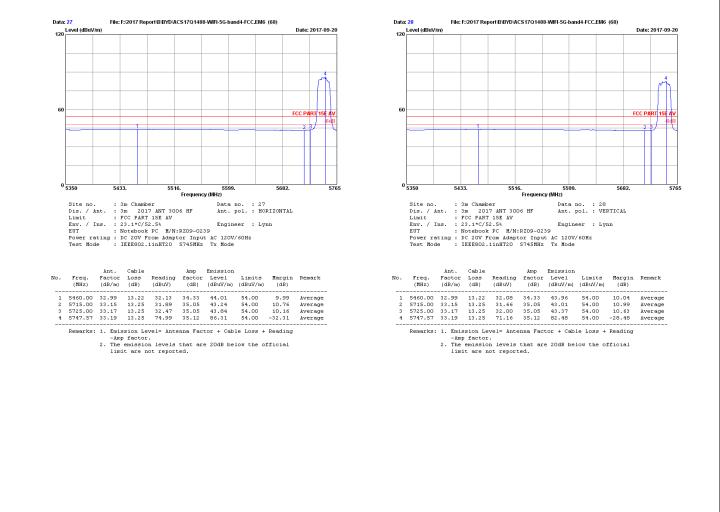




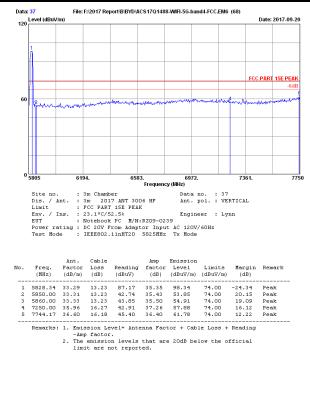


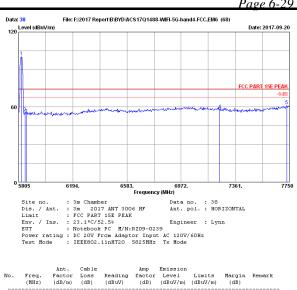
No.	Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	factor (dB)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
										1
1	5452.92	32.99	13.22	45.89	34.33	57.77	74.00	16.23	Peak	
2	5460.00	32.99	13.22	43.39	34.33	55.27	74.00	18.73	Peak	
3	5715.00	33.15	13.25	44.20	35.05	55.55	74.00	18.45	Peak	
4	5725.00	33.17	13.25	44.06	35.05	55.43	74.00	18.57	Peak	
5	5741.35	33.19	13.25	89.27	35.12	100.59	74.00	-26.59	Peak	
										-
	Remarks:		sion Le factor	vel= Ante	nna Fact	tor + Cab	le Loss +	Reading		

The emission levels that are 20dB below the official limit are not reported.



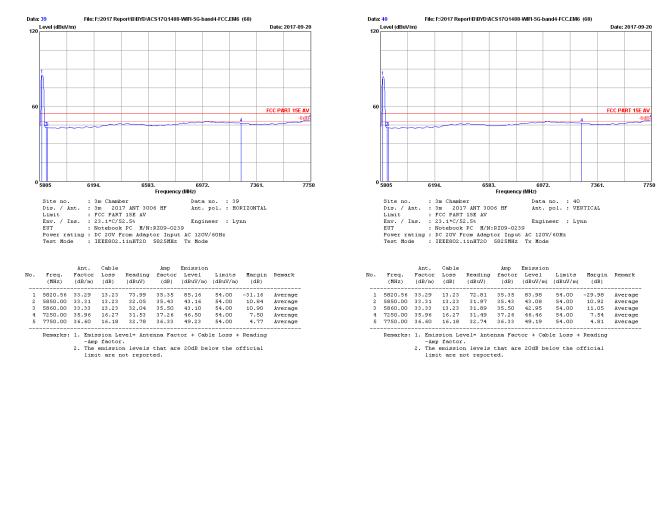
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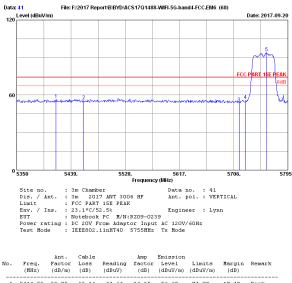


1 5824.45 33.29 2 5850.00 33.31 3 5860.00 33.33 4 7250.00 35.96 5 7730.55 36.57 89.00 44.44 43.17 42.83 44.87 35.35 35.43 35.50 37.26 36.40 74.00 74.00 74.00 -26.17 18.45 19.77 16.20 12.78 13.23 13.23 100.17 55.55 Peak Peak Peak Peak Peak Peak 13.23 54.23 16.27 16.18 57.80 61.22 74.00 74.00 Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -kmp factor.

 The emission levels that are 20dB below the official limit are not reported.



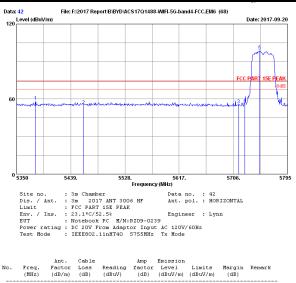
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3 5715.00 33.15 13.25 42.56 35.05 53.91 74.00 20.09 Peak 4 5725.00 33.17 13.25 44.42 35.05 55.79 74.00 18.21 Peak 5 5760.29 33.21 13.24 82.80 35.20 94.05 74.00 -20.05 Peak

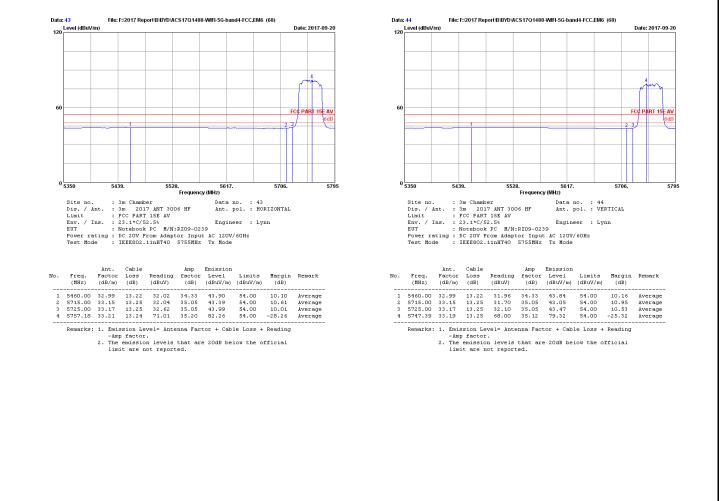
Remarks: 1. Emission Level* Antenna Factor + Cable Loss + Reading -Amp factor.

 The emission levels that are 20dB below the official limit are not reported.

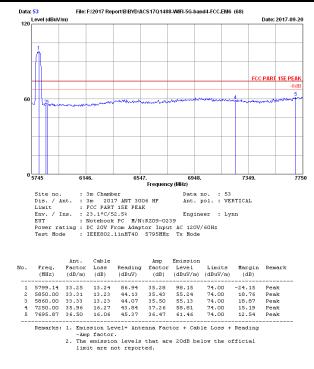


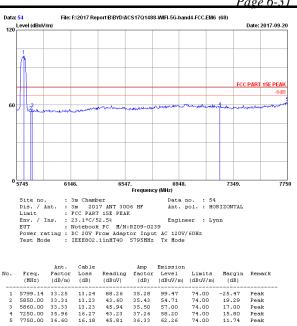
1 5381.15 33.11 2 5460.00 32.99 3 5715.00 33.15 4 5725.00 33.17 5 5749.17 33.19 74.00 74.00 74.00 15.86 19.18 18.38 17.51 -24.54 13.09 13.22 46.16 42.94 34.22 34.33 58.14 54.82 Peak Peak 44.27 45.12 87.22 35.05 35.05 35.12 Peak Peak Peak 13.25 55.62 13.25 13.25 56.49 98.54 74.00 74.00 Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -kmp factor.

 The emission levels that are 20dB below the official limit are not reported.



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37.26 36.33 Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -kmp factor.

 The emission levels that are 20dB below the official limit are not reported.

57.00

58.20 62.26

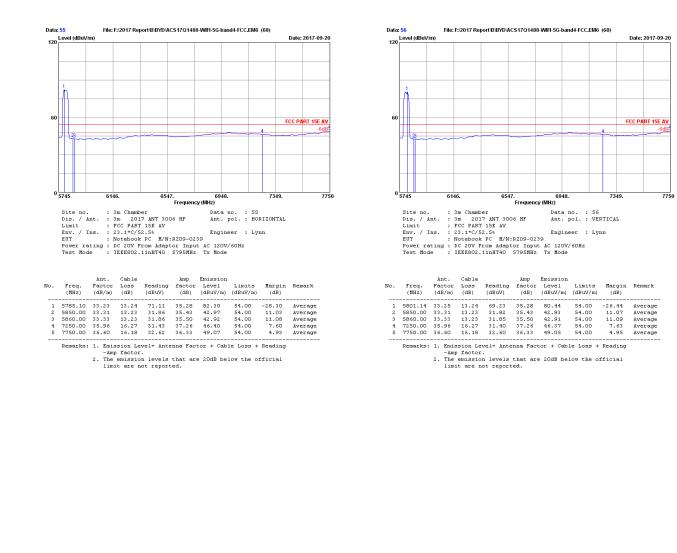
74.00 74.00

43.23 45.81

33.33 35.96 36.60

13.23

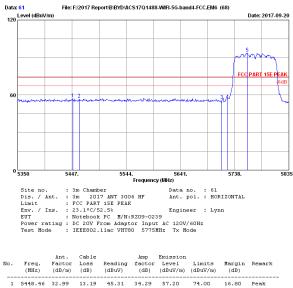
16.27 16.18



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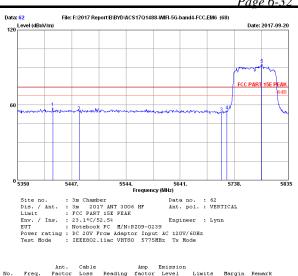
Peak Peak Peak Peak



5	5760.80	33.21	13.24	82.45	35.20	93.70	74.00	-19.70	Peak	
4	5725.00	33.17	13.25	44.88	35.05	56.25	74.00	17.75	Peak	
3	5715.00	33.15	13.25	44.51	35.05	55.86	74.00	18.14	Peak	
2	5460.00	32.99	13.22	45.03	34.33	56.91	74.00	17.09	Peak	

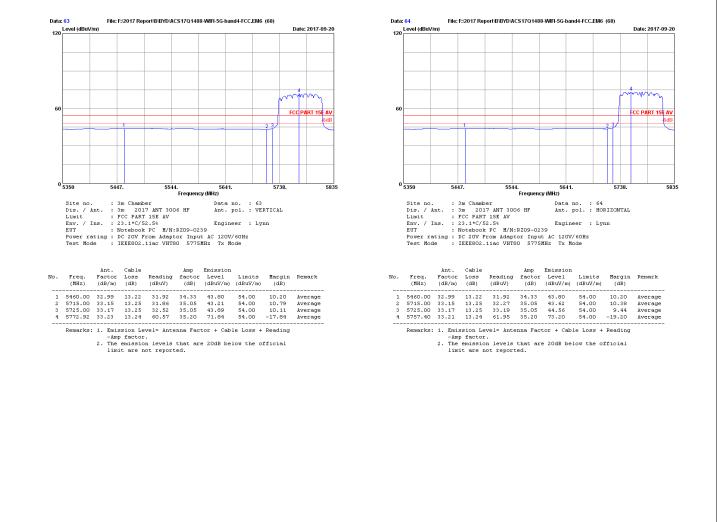
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.

 The emission levels that are 20dB below the official limit are not reported.

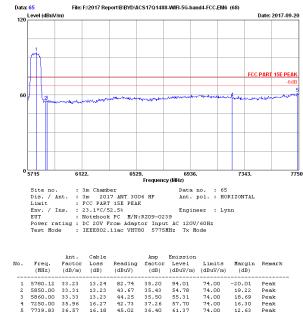


110.	(MHz)	(dB/m)	(dB)	(dBuV)	(dB)		(dBuV/m)	(dB)	Renark
1	5413.05	33.05	13.16	45.80	34.25	57.76	74.00	16.24	Peak
2	5460.00	32.99	13.22	42.94	34.33	54.82	74.00	19.18	Peak
3	5715.00	33.15	13.25	42.33	35.05	53.68	74.00	20.32	Peak
4	5725.00	33.17	13.25	44.00	35.05	55.37	74.00	18.63	Peak
5	5787.47	33.25	13.24	81.47	35.28	92.68	74.00	-18.68	Peak
	Remarks:		sion Le	vel= Ante	nna Fact	tor + Cab	le Loss +	Reading	

Amp factor.
The emission levels that are 20dB below the official limit are not reported.



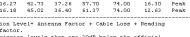
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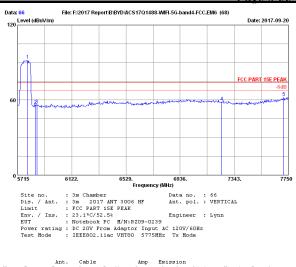


82.74 43.67 44.25 42.73 45.02 5860.00 5860.00 7250.00 7739.83 74.00 74.00 74.00 74.00 33.33 35.96 36.57 35.43 35.50 37.26 36.40 13.23 Peak 16.27 16.18 16.30 12.63 Peak Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.

 The emission levels that are 20dB below the official limit are not reported.





No.	Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	factor (dB)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5790.30	33.25	13.24	80.67	35.28	91.88	74.00	-17.88	Peak
2	5850.00	33.31	13.23	44.55	35.43	55.66	74.00	18.34	Peak
3	5860.00	33.33	13.23	45.05	35.50	56.11	74.00	17.89	Peak
4	7250.00	35.96	16.27	43.50	37.26	58.47	74.00	15.53	Peak
5	7715.41	36.53	16.12	46.14	36.47	62.32	74.00	11.68	Peak
	Remarks:		sion Le factor	vel= Ante	nna Fact	tor + Cab	le Loss +	Reading	

The emission levels that are 20dB below the official limit are not reported.

File: F:\2017 Report\B\BYD\AC\$17Q1488-WIFI-5G-band4-FCC.EM6 (68)

6529

6936.

Data no. : 68 Ant. pol. : HORIZONTAL

Engineer : Lynn

Limits

(dBuV/m)

54.00 54.00 54.00 54.00 54.00

. Frequency (MHz)

Amp Emission Reading factor Level (dBuV) (dB) (dBuV/m)

35.20 35.43 35.50

37.26 36.33

Amession level- Antenna ractor + Capie Loss + Readin -Amp factor.
 The emission levels that are 20dB below the official limit are not reported.

73.33 43.04 43.07 46.41 49.11

6122

Cable Loss (dB)

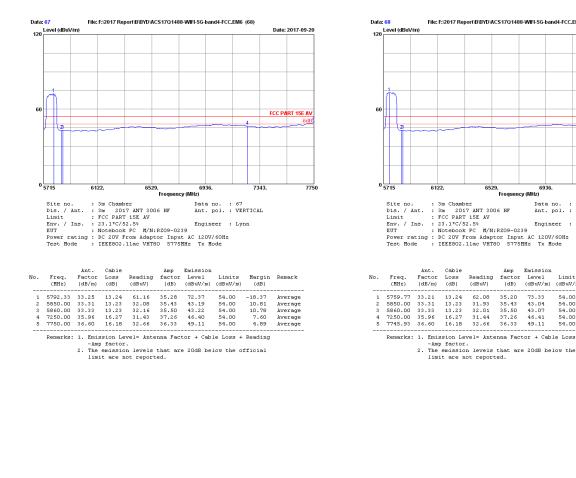
13.24 13.23 13.23 16.27 16.18

62.08 31.93 32.01 31.44 32.66

Ant. Factor (dB/m)

33.21 33.31 33.33

35.96 36.60



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Date: 2017-09-20

FCC PART 15E A

775

7343

Margin Remark (dB)

Average Average Average Average Average

-19.33 10.96 10.93 7.59 4.89

+ Reading

7. 6dB & 99% &26dB Bandwidth Test

7.1.Limit

6dB Bandwidth should be not less than 500kHz

7.2.Test Procedure

6dB Bandwidth:

The transmitter output was connected to a spectrum analyzer, The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 300 KHz VBW for signal width below 20MHz and 300KHz RBW ,1MHz VBW for Above 20MHz signal Bandwidth.

26dB Bandwidth:

The transmitter output was connected to a spectrum analyzer, The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 300 KHz VBW The 26dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 26dB.

7.3.Test Results

EUT: Notebook PC

M/N: RZ09-0239

Test date: 2017-08-30~09-07	Pressure: 102.5±1.0 kpa	Humidity: 53.1±3.0%
Tested by: Kebo	Test site: RF site	Temperature:22.6±0.6 ℃

Test Mode	Frequency	6dB bandw	Limit	
l est Mode	(MHz)	ANT0	ANT1	(KHz)
	5180	15.27	15.07	≥500
11a	5200	15.15	15.17	≥500
	5240	15.35	15.16	≥500
	5180	15.15	15.16	≥500
11n HT20	5200	15.09	15.45	≥500
	5240	15.17	15.14	≥500
11n	5190	35.12	35.16	≥500
HT40	5230	35.15	35.17	≥500
	5180	15.09	15.45	≥500
11ac VHT20	5200	15.11	15.86	≥500
	5240	15.11	15.15	≥500
11ac	5190	35.14	35.15	≥500
VHT40	5230	35.14	35.10	≥500
11ac VHT80	5210	75.24	75.23	≥500
Conclusion: PA	ASS			

99% bandwidth

EUT: Notebook PC		
M/N: RZ09-0239		
Test date: 2017-08-30~09-07	Pressure: 102.5±1.0 kpa	Humidity: 53.1±3.0%
Tested by: Kebo	Test site: RF site	Temperature:22.6±0.6 ℃

Test Mode	Frequency	99% bandy	width (MHz)	Limit
	(MHz)	ANT0	ANT1	(MHz)
	5180	16.235	16.224	N/A
11a	5200	16.216	16.236	N/A
	5240	16.227	16.220	N/A
	5180	17.364	17.369	N/A
11n HT20	5200	17.393	17.392	N/A
	5240	17.363	17.369	N/A
11n	5190	35.654	35.668	N/A
HT40	5230	35.648	35.654	N/A
	5180	17.380	17.391	N/A
11ac VHT20	5200	17.399	17.379	N/A
	5240	17.399	17.374	N/A
11ac	5190	35.652	35.671	N/A
VHT40	5230	35.629	35.681	N/A
11ac VHT80	5210	75.014	75.021	N/A

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