

FCC Test Report (WLAN)

Report No.: RF170816E06F-1

FCC ID: 2AMAF-DPE109A104A

Test Model: DPE109A

Series Model: DPE104A

Received Date: Feb. 06, 2015

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FCC Registration / 723255 / TW2022 for Test Location (1) **Designation Number:** 736135 / TW0004 for Test Location (2)





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Release Control Record

Issue No.	Description	Date Issued
RF170816E06F-1	Original release.	Aug. 31, 2018

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1 Certificate of Conformity

Product: 802.11 abgn/AC+BT4.2, 2T2R, mini PCle Card

Brand: BOINTEC

Test Model: DPE109A

Series Model: DPE104A

Sample Status: ENGINEERING SAMPLE

Applicant: TAIJET BOINTEC CORPORATION LIMITED

Test Date: Feb. 06 to Oct. 05, 2015; May 16 to 17, 2018

Standard: 47 CFR FCC Part 15, Subpart E (Section 15.407)

ANSI C63.10: 2013

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

:

Prepared by

Phoeis Huang

Date:

Aug. 31, 2018

Approved by:

May Chen / Manager

Date:

Aug. 31, 2018

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2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)									
FCC Clause	Test Item	Result	Remarks						
15.407(b)(6)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -16.90dB at 1.94141MHz.						
15.407(b) (1/2/3/4(i/ii)/6)	Radiated Emissions & Band Edge Measurement*	Pass	Meet the requirement of limit. Minimum passing margin is -1.9dB at 5470.00MHz.						
15.407(a)(1/2/ 3)	I Max Average Transmit Power		Meet the requirement of limit.						
	Occupied Bandwidth Measurement	-	Reference only.						
15.407(a)(1/2/ 3)	. Peak Power Spectral Density		Meet the requirement of limit.						
15.407(e)	6dB bandwidth	Pass	Meet the requirement of limit. (U-NII-3 Band only)						
15.407(g)	15.407(g) Frequency Stability		Meet the requirement of limit.						
15.203	Antenna Requirement	Pass	Antenna connector is IPEX, SMA RP Plug and I-PEX MH4 not a standard connector.						

^{*}For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOBE test plots were recorded in Annex A.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Expanded Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.86 dB
Radiated Emissions up to 1 GHz	30MHz ~ 1GHz	5.43 dB
	1GHz ~ 6GHz	3.65 dB
Radiated Emissions above 1 GHz	6GHz ~ 18GHz	3.88 dB
	18GHz ~ 40GHz	4.11 dB

2.2 Modification Record

There were no modifications required for compliance.



3 General Information

3.1 General Description of EUT (WLAN)

Product	802.11 abgn/AC+BT4.2, 2T2R, mini PCle Card
Brand	BOINTEC
Test Model	DPE109A
Series Model	DPE104A
Status of EUT	ENGINEERING SAMPLE
Power Supply Rating	3.3Vdc from host equipment
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode and VHT (20/40) mode in 2.4GHz
Modulation Technology	DSSS,OFDM
Transfer Rate	802.11b: up to 11Mbps 802.11a/g: up to 54Mbps 802.11n : up to 300Mbps 802.11ac: up to 866.7Mbps
Operating Frequency	2.4GHz: 2.412 ~ 2.472GHz 5GHz: 5.18 ~ 5.24GHz, 5.26 ~ 5.32GHz, 5.50 ~ 5.72GHz, 5.745 ~ 5.825GHz
Number of Channel	2.4GHz: 802.11b, 802.11g, 802.11n (HT20): 13 802.11n (HT40): 9 5GHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 25 802.11n (HT40), 802.11ac (VHT40): 12 802.11ac (VHT80): 6
Output Power	2.4GHz: 509.97mW 5GHz: 5.18 ~ 5.24GHz: 114.377mW 5.26 ~ 5.32GHz: 113.137mW 5.50 ~ 5.72GHz: 104.278mW 5.745 ~ 5.825GHz: 157.439mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	NA
Data Cable Supplied	NA



Note:

- 1. There are Bluetooth technology and WLAN technology used for the EUT.
- 2. The EUT has two model names which are identical to each other in all aspects except for the following table:

Model No.	Description		
DPE109A	lust for marketing number		
DPE104A	Just for marketing purpose		

Note: From the above models, model: DPE109A was selected as representative model for the test and its data was recorded in this report.

3. The EUT incorporates a MIMO function.

5. The EUT incorporate		4GHz Band			
MODULATION MODE	DATA RATE (MCS)	TX & RX CON	FIGURATION		
802.11b	1 ~ 11Mbps	2TX	2RX		
802.11g	6 ~ 54Mbps	2TX	2RX		
000 44 (UT00)	MCS 0~7	2TX	2RX		
802.11n (HT20)	MCS 8~15	2TX	2RX		
000 44 (UT 40)	MCS 0~7	2TX	2RX		
802.11n (HT40)	MCS 8~15	2TX	2RX		
VIITOO	MCS 0~8 Nss=1	2TX	2RX		
VHT20	MCS 0~8 Nss=2	2TX	2RX		
\/UIT.40	MCS 0~9 Nss=1	2TX	2RX		
VHT40	MCS 0~9 Nss=2	2TX	2RX		
	50	GHz Band			
MODULATION MODE	DATA RATE (MCS)	TX & RX CONFIGURATION			
802.11a	6 ~ 54Mbps	2TX	2RX		
802.11n (HT20)	MCS 0~7	2TX	2RX		
002.1111 (П120)	MCS 8~15	2TX	2RX		
802.11n (HT40)	MCS 0~7	2TX	2RX		
002.1111 (H140)	MCS 8~15	2TX	2RX		
902 44ee (VUT20)	MCS 0~8 Nss=1	2TX	2RX		
802.11ac (VHT20)	MCS 0~8 Nss=2	2TX	2RX		
902 44aa (\/UT40\	MCS 0~9 Nss=1	2TX	2RX		
802.11ac (VHT40)	MCS 0~9 Nss=2	2TX	2RX		
	140000011	OTV	ODV		
802.11ac (VHT80)	MCS 0~9 Nss=1	2TX	2RX		

Note: The modulation and bandwidth are similar for 802.11n mode for 20MHz (40MHz) and 802.11ac mode for 20MHz (40MHz), therefore investigated worst case to representative mode in test report. (Final test mode refer section 3.2.1)



4. The antenna gain was declared by client; please refer to the following table:

							Antenna	Set 1									
Transmitter Circuit	Bran	d		Model		Ant. Type	2.4GHz G with cable (dBi)		5GHz G with cable (dBi)	loss	2.4GHz Cable Loss (dBi)	5G Cable Lo (dBi)	ss C	onnector Type	Cable Length h (mm)		
						Band 1&2:	: 2.56		Band 1&2: 1.70								
Chain (0)	WNO		81-	EBJ15.005		PIFA	3.00	ļ	Band 3: 4	4.76	1.15	Band 3: 1.7	4	IPEX	300		
									Band 4: 4			Band 4: 1.7					
								-	Band 1&2:			Band 1&2: 1.	_				
Chain (1)	WNO		81-	EBJ15.005		PIFA	3.62	-	Band 3: 3		1.15	Band 3: 1.7	_	IPEX	300		
							Autous	C-4 O	Band 4: 2	2.42		Band 4: 1.7	9				
							Antenna	Set 2			2.4GHz				Cable		
Transmitter Circuit	Brand		I	Model		Ant. Type	2.4GHz G with cabl loss (dB	le	GHz Gair cable loss	n with	Cable Loss (dBi)	5G Cable Lo	SS C	Ant. onnector Type	Leng h (mm)		
								E	3and 1&2:	1.33				MA DD			
Chain (0)	INPAC	ù D	AM-I6-H	I-DB-800-1	0-17	Dipole	1.13		Band 3: -0	0.63	2.0±0.5	4.0±0.5	3	SMA RP Plug	900		
									Band 4: -0	0.97							
								E	Band 1&2:					SMA RP			
Chain (1)	INPAQ	INPAQ	n (1) INPAQ) D	AM-I6-H	I-DB-800-1	0-17	Dipole	1.29		Band 3: -0	0.49	2.0±0.5	4.0±0.5	`	Plug	900
									Band 4: -(0.93							
The RF cab	le is use	with a	antenna	set 2			Cable S	200									
				1	2.4	GHz cab	عوما ها			(15.1)	(Cable	Ca	ble Conne	ector		
Brar			Mod			(dBi)	50	GHZ (able loss	(aBi)		gth (mm)		Type EX to SMA RP Plug			
INPA	AQ.	1	4012-00	040100		-0.35	A 1	0-10	-0.39			42	IPEX	to SMA R	P Plu		
							Antenna		Hz Gain								
Transmitte Circuit	er	Bran	id	Model		Ant.	Туре	٧	vith oss (dBi)		Gain wi loss (dB	Connector	Туре	Cable L (mr	_		
Chain (0)		Mole	ex	4795040	12	Dip	ole	2	2.13 2.81 I-P		I-PEX M	ИH4 30		0			
Chain (1)		Mole	ex	4795040	12	Dip	ole	e 2.13 2.81 I-PEX MI		H4	300						
	-			1			Antenna	Set 4									
Transmitte Circuit	r	Brar	nd	N	1odel				5GHz Gain with Ant. Conn cable loss (dBi)								
Chain (0)		BOIN	TEC	TWRN-9	1612	202-101	Dipole	Dipole 2.0 2.0			RP SMA						
Chain (1)	ı	BOIN	TEC	TWRN-9	1612	202-101	Dipole		2.0 2.0			RP SMA					
The RF cab	le is use	with a	antenna	set 4							'"		·				
Cable Spec.																	
Bran	d		Мо	odel			cable loss IBi)	50	GHz cable (dBi)	IOSS	Lei	Cable ngth (mm)	Ca	ble Conn Type	ector		
Bointec		T۱	WRB-00	3EQ01-210)		.27		0.21			210	IP	EX to RP	SMA		
Antenna Set 5																	
Transmitter Brand		N	/lodel	I	Ant. Ty	pe	2.4GHz cable lo			GHz Gain with able loss (dBi		Ant. Conn Type					
Chain (0) BOINTEC TWRN-9		1612	201-102	Dipol	е	3	.17		2.61		RP SM	1A					
Chain (1)		BOIN	TEC	TWRN-9	91612	201-102	Dipol	е	3	.17		2.61		RP SM	1A		
The RF cab	le is use	with a	antenna	set 5			<u> </u>		_								
						2 404-	Cable S _l	·	GHz cable	loss		Cable	Co	ble Conn	ector		
Bran	d		Mo	odel			IBi)	30	(dBi)	1035	Lei	ngth (mm)	Ce	Type	CCIOI		
Boint	ec	T۱	WRB-00	3EQ01-30)	().3		0.24			300	ΙP	EX to RP	SMA		

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Note:

- 1. Above antenna gains of antenna are Total (H+V).
- For Testing, we select the highest gain on each frequency band for calculation and testing. (except for Radiated emission test)
- 3. The Bluetooth technology will fix transmission on Chain (0)
- 5. For Testing, we select the highest gain on each frequency band for calculation and testing and the detail information as below:

Transmitter Circuit	Brand	Model	Ant. Type	2.4GHz Gain with cable loss (dBi)	5GHz Gain with cable loss (dBi)	2.4GHz Cable Loss (dBi)	5G Cable Loss (dBi)
					Band 1&2: 3.08		Band 1&2: 1.70
Chain (0)+(1)	WNC	81-EBJ15.005	PIFA	3.62	Band 3: 4.76	1.15	Band 3: 1.74
					Band 4: 4.76		Band 4: 1.79

- 6. For radiated emission test, PIFA antenna (Antenna Set 1) and Dipole (Antenna Set 5) was selected as representative adapter for the test and its data was recorded in this report.
- 7. The EUT was pre-tested under the following modes:

Test Mode	Guard Interval
Mode A	400ns GI
Mode B	800ns GI

From the above modes, the worst case was found in **Mode B**. Therefore only the test data of the mode was recorded in this report.

- 8. WLAN/BT coexistence mode:
 - ◆ 2x2 WLAN + BT:
 - > 5GHz 802.11a/an (or 11ac) transmit concurrent with BT.
 - ➤ 2.4GHz: timely shared coexistence.
- 9. The emission (conducted & radiated emission) of the simultaneous operation (WiFi <5GHz> & Bluetooth) have been evaluated and no non-compliance found. The detail combinations of transmitters / frequencies / modes as below table

Mode	Available Channel	Modulation Technology		
5 GHz (802.11ac (VHT40))	38 to 159	159	OFDM	
+ Bluetooth (EDR)	0 to 78	0	GFSK	

10. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.



3.2 Description of Test Modes

FOR 5180 ~ 5240MHz

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Channel	Frequency	Channel	Frequency
36	5180 MHz	44	5220 MHz
40	5200 MHz	48	5240 MHz

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency	
42	5210MHz	

FOR 5260 ~ 5320MHz

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Channel	Frequency	Channel	Frequency
52	5260 MHz	60	5300 MHz
56	5280 MHz	64	5320 MHz

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
58	5290MHz

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FOR 5500 ~ 5720MHz

12 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Channel	Frequency	Channel	Frequency
100	5500 MHz	124	5620 MHz
104	5520 MHz	128	5640 MHz
108	5540 MHz	132	5660 MHz
112	5560 MHz	136	5680 MHz
116	5580 MHz	140	5700 MHz
120	5600 MHz	144	5720 MHz

6 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

Channel	Frequency	Channel	Frequency
102	5510 MHz	126	5630 MHz
110	5550 MHz	134	5670 MHz
118	5590 MHz	142	5710 MHz

3 channels are provided for 802.11ac (VHT80):

Channel	Frequency	Channel	Frequency
106	5530 MHz	138	5690 MHz
122	5610 MHz		

FOR 5745 ~ 5825MHz:

5 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Channel	Frequency	Channel	Frequency
149	5745 MHz	161	5805 MHz
153	5765 MHz	165	5825 MHz
157	5785 MHz		

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

Channel	Frequency	Channel	Frequency
151	5755 MHz	159	5795 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency	
155	5775 MHz	

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3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure		Applic	able To		Description		
Mode	UE≥1G	UE<1G	PLC	APCM	Description		
-	V	√	V	√	-		

Where

UE≥1G: Unwanted Emission above 1GHz

UE<1G: Unwanted Emission below 1GHz

PLC: Power Line Conducted Emission APCM: Antenna Port Conducted Measurement

Unwabted Emission Test (Above 1GHz):

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

Following channel(s) was (were) selected for the final test as listed below.

Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a		36 to 48	36, 40, 48	OFDM	BPSK	6
802.11ac (VHT20)	5400 5040	36 to 48	36, 40, 48	OFDM	BPSK	6.5
802.11ac (VHT40)	5180-5240	38 to 46	38, 46	OFDM	BPSK	13.5
802.11ac (VHT80)		42	42	OFDM	BPSK	29.3
802.11a		52 to 64	52, 60, 64	OFDM	BPSK	6
802.11ac (VHT20)	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.5
802.11ac (VHT40)		54 to 62	54, 62	OFDM	BPSK	13.5
802.11ac (VHT80)		58	58	OFDM	BPSK	29.3
802.11a		100 to 144	100, 116, 140, 144	OFDM	BPSK	6
802.11ac (VHT20)	5500 5700	100 to 144	100, 116, 140, 144	OFDM	BPSK	6.5
802.11ac (VHT40)	5500-5720	102 to 142	102, 110, 134, 142	OFDM	BPSK	13.5
802.11ac (VHT80)		106 to 138	106, 122, 138	OFDM	BPSK	29.3
802.11a		149 to 165	149, 157, 165	OFDM	BPSK	6
802.11ac (VHT20)	5745 5005	149 to 165	149, 157, 165	OFDM	BPSK	6.5
802.11ac (VHT40)	5745-5825	151 to 159	151, 159	OFDM	BPSK	13.5
802.11ac (VHT80)		155	155	OFDM	BPSK	29.3

Unwabted Emission Test (Below 1GHz):

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

Following channel(s) was (were) selected for the final test as listed below.

Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
	5180-5320,	38 to 62,				
802.11ac (VHT40)	5500-5720,	102 to 142,	159	OFDM	BPSK	13.5
	5745-5825	151 to 159				

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Power Line Conducted Emission Test:

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

Following channel(s) was (were) selected for the final test as listed below.

Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
	5180-5320,	38 to 62,				
802.11ac (VHT40)	5500-5720,	102 to 142,	159	OFDM	BPSK	13.5
	5745-5825	151 to 159				

Antenna Port Conducted Measurement:

This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

Following channel(s) was (were) selected for the final test as listed below.

Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a		36 to 48	36, 40, 48	OFDM	BPSK	6
802.11ac (VHT20)	5400 5040	36 to 48	36, 40, 48	OFDM	BPSK	6.5
802.11ac (VHT40)	5180-5240	38 to 46	38, 46	OFDM	BPSK	13.5
802.11ac (VHT80)		42	42	OFDM	BPSK	29.3
802.11a		52 to 64	52, 60, 64	OFDM	BPSK	6
802.11ac (VHT20)	5000 5000	52 to 64	52, 60, 64	OFDM	BPSK	6.5
802.11ac (VHT40)	5260-5320	54 to 62	54, 62	OFDM	BPSK	13.5
802.11ac (VHT80)		58	58	OFDM	BPSK	29.3
802.11a		100 to 144	100, 116, 140, 144	OFDM	BPSK	6
802.11ac (VHT20)	5500 5700	100 to 144	100, 116, 140, 144	OFDM	BPSK	6.5
802.11ac (VHT40)	5500-5720	102 to 142	102, 110, 134, 142	OFDM	BPSK	13.5
802.11ac (VHT80)		106 to 138	106, 122, 138	OFDM	BPSK	29.3
802.11a		149 to 165	149, 157, 165	OFDM	BPSK	6
802.11ac (VHT20)	5745 5005	149 to 165	149, 157, 165	OFDM	BPSK	6.5
802.11ac (VHT40)	5745-5825	151 to 159	151, 159	OFDM	BPSK	13.5
802.11ac (VHT80)		155	155	OFDM	BPSK	29.3

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Test Condition:

Applicable To	Environmental Conditions	Input Power (System)	Tested By
	22deg. C, 67%RH	120Vac, 60Hz	Robert Cheng
UE>1G	24deg. C, 67%RH	120Vac, 60Hz	Gary Cheng
0E≥IG	25deg. C, 71%RH	120Vac, 60Hz	Alex Ku
	25deg. C, 69%RH	120Vac, 60Hz	Weiwei Lo
UE<1G	24deg. C, 66%RH	120Vac, 60Hz	Weiwei Lo
PLC	20deg. C, 60%RH	120Vac, 60Hz	Barry Lee
APCM	15deg. C, 57%RH	120Vac, 60Hz	Anderson Chen

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3.3 Duty Cycle of Test Signal

If duty cycle of test signal is \geq 98 %, duty factor is not required.

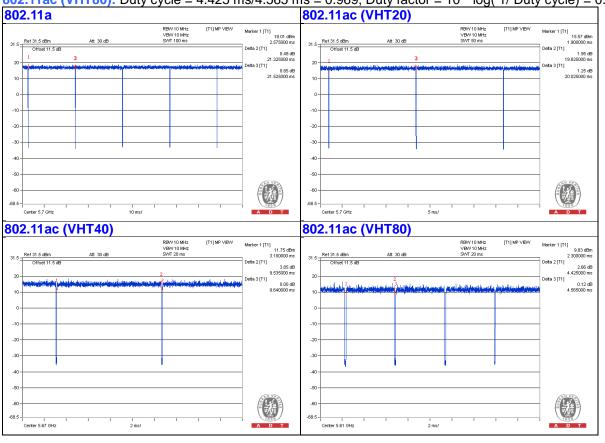
If duty cycle of test signal is < 98%, duty factor shall be considered.

802.11a: Duty cycle = 21.325 ms/21.525 ms = 0.991

802.11ac (VHT20): Duty cycle = 19.825 ms/20.025 ms = 0.99

802.11ac (VHT40): Duty cycle = 9.535 ms/9.64 ms = 0.989

802.11ac (VHT80): Duty cycle = 4.425 ms/4.565 ms = 0.969, Duty factor = 10 * log(1/ Duty cycle) = 0.14





3.4 Description of Support Units

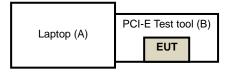
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
Α.	Laptop	DELL	E5430	4YV4VY1	FCC DoC	Provided by Lab
B.	PCI-E Test tool	Qualcomm Atheros	NA	NA	NA	Supplied by Client

Note:

1. All power cords of the above support units are non-shielded (1.8m).

3.4.1 Configuration of System under Test





3.5 General Description of Applied Standard

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart E (15.407)
KDB 789033 D02 General UNII Test Procedure New Rules v02r01
KDB 662911 D01 Multiple Transmitter Output v02r01
ANSI C63.10-2013

All test items have been performed and recorded as per the above standards.

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4 Test Types and Results

4.1 Unwanted Emission and Bandedge Measurement (Radiated Versus Conducted)

4.1.1 Limits of Unwanted Emission and Bandedge Measurement

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits

specified as below table.

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

NOTE:

- 1. The lower limit shall apply at the transition frequencies.
- 2. Emission level $(dBuV/m) = 20 \log Emission level (uV/m)$.
- 3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

Limits of unwanted emission out of the restricted bands

Applicable To			Limit		
789033 D02 General UNII Test Procedure			Field Strength at 3m		
New Rul	es v0)2r01	PK:74 (dBμV/m)	AV:54 (dBμV/m)	
Frequency Band	Applicable To		EIRP Limit	Equivalent Field Strength at 3m	
5150~5250 MHz	15.407(b)(1)				
5250~5350 MHz	15.407(b)(2)		PK:-27 (dBm/MHz)	PK:68.2(dBµV/m)	
5470~5725 MHz		15.407(b)(3)			
5725~5850 MHz	\boxtimes	15.407(b)(4)(i)	PK:-27 (dBm/MHz) *1 PK:10 (dBm/MHz) *2 PK:15.6 (dBm/MHz) *3 PK:27 (dBm/MHz) *4	PK: 68.2(dBµV/m) *1 PK:105.2 (dBµV/m) *2 PK: 110.8(dBµV/m) *3 PK:122.2 (dBµV/m) *4	
	15.407(b)(4)(ii)		Emission limits in section 15.247(d)		

¹ beyond 75 MHz or more above of the band edge.

Note:

The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3}$$
 µV/m, where P is the eirp (Watts).

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^{*2} below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.

^{*3} below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.

^{*4} from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.



4.1.2 Test Instruments

For 5GHz U-NII-1, U-NII-2A & U-NII-2C band

For Above 1GHz:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
MXE EMI Receiver Agilent	N9038A	MY51210105	July 21,2014	July 20,2015
Horn_Antenna AISI	AIH.8018	0000320091110	Aug. 27, 2014	Aug. 26, 2015
Pre-Amplifier Agilent	8449B	3008A02578	June 24, 2014	June 23, 2015
RF Cable	NA	131205 131214 SNMY23684/4	Jan. 16, 2015	Jan. 15, 2016
Spectrum Analyzer R&S	FSV40	100964	July 05, 2014	July 04, 2015
Pre-Amplifier EMCI	EMC184045	980143	Jan. 16, 2015	Jan. 15, 2016
Horn_Antenna SCHWARZBECK	BBHA 9170	9170-424	Aug. 26, 2014	Aug. 25, 2015
RF Cable	NA	RF104-121 RF104-204	Dec. 11, 2014	Dec. 10, 2015
Antenna Tower & Turn Table CT	NA	NA	NA	NA
SPECTRUM ANALYZER R&S	FSP 40	100060	May 08, 2014	May 07, 2015
Power Meter Anritsu	ML2495A	1014008	Apr. 30, 2014	Apr. 29, 2015
Power Sensor Anritsu	MA2411B	0917122	Apr. 30, 2014	Apr. 29, 2015

- 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
- 2. The test was performed in 966 Chamber No. G.
- 3 The CANADA Site Registration No. is IC 7450H-2.
- 4. Tested Date: Feb. 06 to 11, 2015



For 5GHz U-NII-3 band For OOBE test item:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Keysight	N9038A	MY54450088	July 08, 2017	July 07, 2018
Horn_Antenna SCHWARZBECK	BBHA 9120D	9120D-783	Dec. 12, 2017	Dec. 11, 2018
Pre-Amplifier EMCI	EMC12630SE	980385	Jan. 29, 2018	Jan. 28, 2019
RF Cable	EMC104-SM- SM-1200 EMC104-SM- SM-2000 EMC104-SM- SM-5000	160923 150318 150321	Jan. 29, 2018	Jan. 28, 2019
Pre-Amplifier EMCI	EMC184045S E	980387	Jan. 29, 2018	Jan. 28, 2019
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170608	Dec. 14, 2017	Dec. 13, 2018
RF Cable	EMC102-KM- KM-1200	160925	Jan. 29, 2018	Jan. 28, 2019
Software	ADT_Radiated _V8.7.08	NA	NA	NA
Antenna Tower & Turn Table Max-Full	MF-7802	MF780208410	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP02	NA	NA

- 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
- 2. The test was performed in 966 Chamber No. 4.
- 3. The CANADA Site Registration No. is 20331-2
- 4. Tested Date: May 16, 2018



For other test item: (Above 1GHz test)

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Agilent	N9038A	MY51210105	July 24, 2015	July 23, 2016
Horn_Antenna AISI	AIH.8018	000032009111 0	Feb. 09, 2015	Feb. 08, 2016
Pre-Amplifier Agilent	8449B	3008A02578	June 23, 2015	June 22, 2016
RF Cable	NA	131205 131216 131217 SNMY23684/ 4	Jan. 16, 2015	Jan. 15, 2016
Spectrum Analyzer R&S	FSV40	100964	June 26, 2015	June 25, 2016
Pre-Amplifier SPACEK LABS	SLKKa-48-6	9K16	Dec. 12, 2014	Dec. 11, 2015
Horn_Antenna SCHWARZBECK	BBHA 9170	9170-424	Feb. 05, 2015	Feb. 04, 2016
RF Cable	NA	329751/4 RF104-204	Dec. 11, 2014	Dec. 10, 2015
Software	ADT_Radiated _V8.7.07	NA	NA	NA
Antenna Tower & Turn Table CT	NA	NA	NA	NA
Spectrum Analyzer R&S	FSP40	100060	May 08, 2015	May 07, 2016
Power Meter Anritsu	ML2495A	1014008	Apr. 28, 2015	Apr. 27, 2016
Power Sensor Anritsu	MA2411B	0917122	Apr. 28, 2015	Apr. 27, 2016
AC Power Source EXTECH Electronics	6205	1440452	NA	NA
Temperature & Humidity Chamber GIANTFORCE	GTH-150-40-S P-AR	MAA0812-00 8	Jan. 12, 2015	Jan. 11, 2016

- 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
- 2. The test was performed in 966 Chamber No. G.
- 3. The CANADA Site Registration No. is IC 7450H-2.
- 4. Tested Date: Sep. 23, 2015



For Below 1GHz:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL	
Test Receiver Agilent	N9038A	MY51210202	Dec. 12, 2014	Dec. 11, 2015	
Pre-Amplifier(*) EMCI	EMC001340	980142	Jan. 13, 2014	Jan. 12, 2016	
Loop Antenna(*) Electro-Metrics	EM-6879	264	Dec. 16, 2014	Dec. 15, 2016	
RF Cable	NA	LOOPCAB-00 1 LOOPCAB-00 2	Jan. 18, 2015	Jan. 17, 2016	
Pre-Amplifier Mini-Circuits	ZFL-1000VH2 B	AMP-ZFL-04	Nov. 12, 2014	Nov. 11, 2015	
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-361	Feb. 09, 2015	Feb. 08, 2016	
RF Cable	8D-FB	CHHCAB-001- 1 CHHCAB-001- 2	Oct. 05, 2014	Oct. 04, 2015	
	RF-141	CHHCAB-004	Oct. 05, 2014	Oct. 04, 2015	
Software	ADT_Radiated _V8.7.07	NA	NA	NA	
Antenna Tower & Turn Table CT	NA	NA	NA	NA	

- 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
- 2. *The calibration interval of the above test instruments is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
- 3. The test was performed in 966 Chamber No. H.
- 4. The CANADA Site Registration No. is IC 7450H-3.
- 5. Loop antenna was used for all emissions below 30 MHz.
- 6. Tested Date: Sep. 23, 2015



4.1.3 Test Procedure

Following FCC KDB 789033 D02 General UNII Test Procedures:

Radiated versus Conducted Measurements.

The unwanted emission limits in both the restricted and non-restricted bands are based on antenna-port conducted measurements in conjunction with cabinet emissions tests are permitted to demonstrate compliance.

The following steps was performed:

- a. Cabinet emissions measurements. Radiated measurement was performed to ensure that cabinet emissions are below the emission limits. For the cabinet-emission measurements the antenna was replaced by a termination matching the nominal impedance of the antenna.
- b. Conducted tests was performed using equipment that matches the nominal impedance of the antenna assembly used with the EUT
- c. EIRP calculation. A value representative of an upper bound on out-of-band antenna gain (in dBi) shall be added to the measured antenna-port conducted emission power to compute EIRP within the specified measurement bandwidth. (For emissions in the restricted bands, additional calculations are required to convert EIRP to field strength at the specified distance.) The upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands or 2 dBi, whichever is greater
- d. EIRP adjustments for multiple outputs. (Follow the procedures specified in FCC KDB Publication 662911)

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e. For all of Radiation emission test

For Radiated emission below 30MHz

- e-1.1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- e-1.2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- e-1.3. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- e-1.4. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e-1.5. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

Note:

- 1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.
- 2. KDB 414788 OATS and Chamber Correlation Justification
 - -Based on FCC 15.31(f)(2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempts should be made to avoid making measurements in the near field.
 - -OATs and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

For Radiated emission above 30MHz

- e-2.1. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- e-2.2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- e-2.3. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e-2.4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e-2.5. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- e-2.6. The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

- 1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
- 2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
- 3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98%) or 10Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1GHz.
- 4. All modes of operation were investigated and the worst-case emissions are reported.

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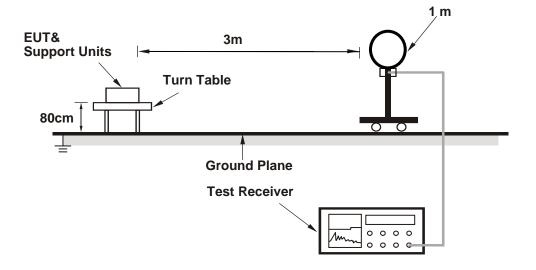
4.1.4 Deviation from Test Standard

No deviation.

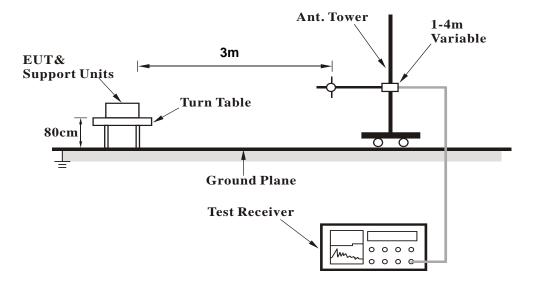
4.1.5 Test Setup

For Radiated configuration:

For Radiated emission below 30MHz



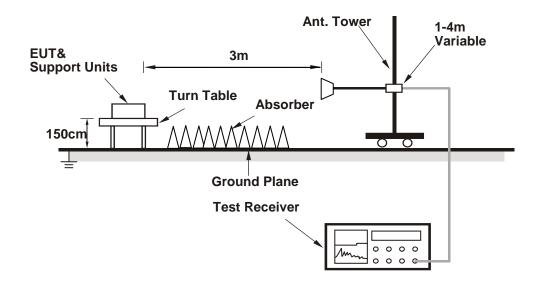
For Radiated emission 30MHz to 1GHz



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For Radiated emission above 1GHz



For Conducted configuration:



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.6 EUT Operating Condition

- a. Connected the EUT with the Laptop which is placed on on the testing table.
- b. Controlling software (QRCT Version 3.0 33.0) has been activated to set the EUT on specific status.



4.1.7 Test Results (Radiated Measurement)

Radiated versus Cond	lucted Measurement
☐ Conducted measurement	□ Radiated measurement
For Radiated measurement:	
The level of unwanted emissions was measured the equipment with the antenna connector(s) term	
For Conducted measurement:	
The level of unwanted emissions was measured spurious emissions).	as their power in a specified load (conducted

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Radiated test was done with 50ohm terminator on antenna port

Above 1GHz Data:

802.11a

CHANNEL	TX Channel 36	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	#10360.00	56.7 PK	74.0	-17.3	1.00 H	215	43.59	13.11	
2	#10360.00	42.7 AV	54.0	-11.3	1.00 H	215	29.59	13.11	
3	15540.00	60.8 PK	74.0	-13.2	1.00 H	65	42.11	18.69	
4	15540.00	47.8 AV	54.0	-6.2	1.00 H	65	29.11	18.69	
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ.	EMISSION LEVEL	LIMIT	MARGIN	ANTENNA HEIGHT	TABLE ANGLE	RAW VALUE	CORRECTION FACTOR	

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10360.00	55.8 PK	74.0	-18.2	1.00 V	98	42.69	13.11
2	#10360.00	42.5 AV	54.0	-11.5	1.00 V	98	29.39	13.11
3	15540.00	61.2 PK	74.0	-12.8	1.00 V	100	42.51	18.69
4	15540.00	47.8 AV	54.0	-6.2	1.00 V	100	29.11	18.69

REMARKS:

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 40	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	#10400.00	57.1 PK	74.0	-16.9	1.00 H	206	43.88	13.22	
2	#10400.00	42.8 AV	54.0	-11.2	1.00 H	206	29.58	13.22	
3	15600.00	60.3 PK	74.0	-13.7	1.02 H	55	41.60	18.70	
4	15600.00	47.5 AV	54.0	-6.5	1.02 H	55	28.80	18.70	
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	T 3 M		
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	

-18.0

-11.4

-12.9

-6.4

REMARKS:

#10400.00

#10400.00

15600.00

15600.00

1

4

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)

1.00 V

1.00 V

1.00 V

1.00 V

87

87

87

87

42.78

29.38

42.40

28.90

13.22

13.22

18.70

18.70

3. The other emission levels were very low against the limit.

74.0

54.0

74.0

54.0

4. Margin value = Emission Level - Limit value

56.0 PK

42.6 AV

61.1 PK

47.6 AV

5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 48	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	#10480.00	56.3 PK	74.0	-17.7	1.00 H	213	43.14	13.16	
2	#10480.00	42.5 AV	54.0	-11.5	1.00 H	213	29.34	13.16	
3	15720.00	60.8 PK	74.0	-13.2	1.00 H	50	42.40	18.40	
4	15720.00	47.5 AV	54.0	-6.5	1.00 H	50	29.10	18.40	
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
	FREO	EMISSION	LINAIT	MADOIN	ANTENNA	TABLE	RAW	CORRECTION	

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10480.00	55.7 PK	74.0	-18.3	1.05 V	111	42.54	13.16
2	#10480.00	42.7 AV	54.0	-11.3	1.05 V	111	29.54	13.16
3	15720.00	61.3 PK	74.0	-12.7	1.04 V	99	42.90	18.40
4	15720.00	48.2 AV	54.0	-5.8	1.04 V	99	29.80	18.40

REMARKS:

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 52	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	#10520.00	56.3 PK	74.0	-17.7	1.04 H	228	43.08	13.22		
2	#10520.00	42.3 AV	54.0	-11.7	1.04 H	228	29.08	13.22		
3	15780.00	60.7 PK	74.0	-13.3	1.02 H	56	42.19	18.51		
4	15780.00	47.9 AV	54.0	-6.1	1.02 H	56	29.39	18.51		
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
	FREQ.	EMISSION	LIMIT	MARGIN	ANTENNA	TABLE	RAW	CORRECTION		

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10520.00	56.1 PK	74.0	-17.9	1.05 V	95	42.88	13.22
2	#10520.00	42.9 AV	54.0	-11.1	1.05 V	95	29.68	13.22
3	15780.00	61.6 PK	74.0	-12.4	1.04 V	97	43.09	18.51
4	15780.00	48.3 AV	54.0	-5.7	1.04 V	97	29.79	18.51

REMARKS:

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 60	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	10600.00	56.4 PK	74.0	-17.6	1.00 H	221	42.87	13.53		
2	10600.00	42.4 AV	54.0	-11.6	1.00 H	221	28.87	13.53		
3	15900.00	61.0 PK	74.0	-13.0	1.03 H	51	42.35	18.65		
4	15900.00	48.3 AV	54.0	-5.7	1.03 H	51	29.65	18.65		
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	T 3 M			
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		

-18.4

-11.7

-12.4

-5.8

4 15900.00 **REMARKS**:

10600.00

10600.00

15900.00

1

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)

1.00 V

1.00 V

1.00 V

1.00 V

110

110

109

109

42.07

28.77

42.95

29.55

13.53

13.53

18.65

18.65

3. The other emission levels were very low against the limit.

74.0

54.0

74.0

54.0

4. Margin value = Emission Level - Limit value

55.6 PK

42.3 AV

61.6 PK

48.2 AV

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CHANNEL	TX Channel 64	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	10640.00	56.7 PK	74.0	-17.3	1.01 H	219	43.07	13.63	
2	10640.00	42.8 AV	54.0	-11.2	1.01 H	219	29.17	13.63	
3	15960.00	60.8 PK	74.0	-13.2	1.04 H	80	42.19	18.61	
4	15960.00	47.7 AV	54.0	-6.3	1.04 H	80	29.09	18.61	
		ANTENNA	POLARITY	' & TEST DI	STANCE: V	ERTICAL A	T 3 M		
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	10640.00	56.3 PK	74.0	-17.7	1.00 V	91	42.67	13.63	

-11.1

-12.8

-6.3

REMARKS:

4

10640.00

15960.00

15960.00

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)

1.00 V

1.00 V

1.00 V

29.27

42.59

29.09

91

91

91

13.63

18.61

18.61

3. The other emission levels were very low against the limit.

54.0

74.0

54.0

4. Margin value = Emission Level - Limit value

42.9 AV

61.2 PK

47.7 AV

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CHANNEL	TX Channel 100	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	11000.00	56.1 PK	74.0	-17.9	1.00 H	217	41.68	14.42		
2	11000.00	42.3 AV	54.0	-11.7	1.00 H	217	27.88	14.42		
3	#16500.00	60.2 PK	74.0	-13.8	1.00 H	75	39.26	20.94		
4	#16500.00	47.3 AV	54.0	-6.7	1.00 H	75	26.36	20.94		
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
	FREQ.	EMISSION	LIMIT	MARGIN	ANTENNA	TABLE	RAW	CORRECTION		

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11000.00	55.8 PK	74.0	-18.2	1.05 V	100	41.38	14.42
2	11000.00	42.2 AV	54.0	-11.8	1.05 V	100	27.78	14.42
3	#16500.00	60.6 PK	74.0	-13.4	1.00 V	105	39.66	20.94
4	#16500.00	47.3 AV	54.0	-6.7	1.00 V	105	26.36	20.94

REMARKS:

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 116	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	11160.00	56.5 PK	74.0	-17.5	1.08 H	205	42.27	14.23		
2	11160.00	42.6 AV	54.0	-11.4	1.08 H	205	28.37	14.23		
3	#16740.00	61.2 PK	74.0	-12.8	1.08 H	97	40.09	21.11		
4	#16740.00	48.1 AV	54.0	-5.9	1.08 H	97	26.99	21.11		
		ANTENNA	POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 3 M			

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11160.00	55.9 PK	74.0	-18.1	1.05 V	110	41.67	14.23
2	11160.00	42.9 AV	54.0	-11.1	1.05 V	110	28.67	14.23
3	#16740.00	61.6 PK	74.0	-12.4	1.05 V	101	40.49	21.11
4	#16740.00	48.3 AV	54.0	-5.7	1.05 V	101	27.19	21.11

REMARKS:

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 140	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)			
1	11400.00	56.8 PK	74.0	-17.2	1.00 H	228	42.38	14.42			
2	11400.00	42.7 AV	54.0	-11.3	1.00 H	228	28.28	14.42			
3	#17100.00	60.5 PK	74.0	-13.5	1.05 H	78	38.73	21.77			
4	#17100.00	47.7 AV	54.0	-6.3	1.05 H	78	25.93	21.77			
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
	EMISSION ANTENNA TABLE RAW CORRECTION										

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11400.00	55.8 PK	74.0	-18.2	1.03 V	97	41.38	14.42
2	11400.00	42.8 AV	54.0	-11.2	1.03 V	97	28.38	14.42
3	#17100.00	61.7 PK	74.0	-12.3	1.00 V	114	39.93	21.77
4	#17100.00	48.1 AV	54.0	-5.9	1.00 V	114	26.33	21.77

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 144 DETECTOR		Peak (PK)	
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)	

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)			
1	11440.00	56.3 PK	74.0	-17.7	1.00 H	207	41.91	14.39			
2	11440.00	42.4 AV	54.0	-11.6	1.00 H	207	28.01	14.39			
3	#17160.00	60.7 PK	74.0	-13.3	1.00 H	56	38.69	22.01			
4	#17160.00	47.9 AV	54.0	-6.1	1.00 H	56	25.89	22.01			
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M											
		EMISSION			ANTENNA	TABLE	RAW	CORRECTION			

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11440.00	56.1 PK	74.0	-17.9	1.04 V	83	41.71	14.39
2	11440.00	42.5 AV	54.0	-11.5	1.04 V	83	28.11	14.39
3	#17160.00	61.1 PK	74.0	-12.9	1.00 V	98	39.09	22.01
4	#17160.00	47.5 AV	54.0	-6.5	1.00 V	98	25.49	22.01

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 149	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)			
1	11490.00	56.3 PK	74.0	-17.7	1.05 H	211	39.58	16.72			
2	11490.00	42.8 AV	54.0	-11.2	1.05 H	211	26.08	16.72			
3	#17235.00	60.2 PK	74.0	-13.8	1.01 H	58	34.35	25.85			
4	#17235.00	47.3 AV	54.0	-6.7	1.01 H	58	21.45	25.85			
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
							- A111/	0000000000			

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11490.00	55.5 PK	74.0	-18.5	1.02 V	94	38.78	16.72
2	11490.00	42.3 AV	54.0	-11.7	1.02 V	94	25.58	16.72
3	#17235.00	61.1 PK	74.0	-12.9	1.04 V	99	35.25	25.85
4	#17235.00	47.7 AV	54.0	-6.3	1.04 V	99	21.85	25.85

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 157	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M												
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)					
1	11570.00	57.8 PK	74.0	-16.2	1.01 H	209	40.58	17.22					
2	11570.00	43.4 AV	54.0	-10.6	1.01 H	209	26.18	17.22					
3	#17355.00	60.9 PK	74.0	-13.1	1.03 H	56	34.75	26.15					
4	#17355.00	48.1 AV	54.0	-5.9	1.03 H	56	21.95	26.15					
		ANTENNA	POLARITY	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									

		AITIEITIT	VI OLAKIII	G I LOI DI	OTAILOE. V	ENTIONE A	1 0 101	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11570.00	56.5 PK	74.0	-17.5	1.05 V	107	39.28	17.22
2	11570.00	42.9 AV	54.0	-11.1	1.05 V	107	25.68	17.22
3	#17355.00	61.4 PK	74.0	-12.6	1.10 V	93	35.25	26.15
4	#17355.00	47.6 AV	54.0	-6.4	1.10 V	93	21.45	26.15

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 165	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	11650.00	56.2 PK	74.0	-17.8	1.06 H	214	38.73	17.47	
2	11650.00	42.4 AV	54.0	-11.6	1.06 H	214	24.93	17.47	
3	#17475.00	60.2 PK	74.0	-13.8	1.05 H	48	33.31	26.89	
4	#17475.00	47.3 AV	54.0	-6.7	1.05 H	48	20.41	26.89	
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
	FREO	EMISSION	LIMIT	MARGIN	ANTENNA	TABLE	RAW	CORRECTION	

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11650.00	55.8 PK	74.0	-18.2	1.02 V	124	38.33	17.47
2	11650.00	42.7 AV	54.0	-11.3	1.02 V	124	25.23	17.47
3	#17475.00	61.0 PK	74.0	-13.0	1.00 V	88	34.11	26.89
4	#17475.00	47.6 AV	54.0	-6.4	1.00 V	88	20.71	26.89

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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802.11ac (VHT20)

CHANNEL	TX Channel 36	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	#10360.00	56.9 PK	74.0	-17.1	1.05 H	225	43.79	13.11	
2	#10360.00	43.1 AV	54.0	-10.9	1.05 H	225	29.99	13.11	
3	15540.00	61.3 PK	74.0	-12.7	1.00 H	67	42.61	18.69	
4	15540.00	48.1 AV	54.0	-5.9	1.00 H	67	29.41	18.69	
		ANTENNA	POLARITY	4 & TEST DI	STANCE: V	ERTICAL A	T 3 M		
NO.	NO. FREQ. (MHz) EMISSION LEVEL (dBuV/m) (dB) ANTENNA TABLE RAW CORRECT HEIGHT ANGLE VALUE FACTOR							CORRECTION FACTOR (dB/m)	
1	#10360.00	55.9 PK	74.0	-18.1	1.00 V	107	42.79	13.11	
2	#10360.00	42.5 AV	54.0	-11.5	1.00 V	107	29.39	13.11	
3	15540.00	61.1 PK	74.0	-12.9	1.02 V	91	42.41	18.69	
4	15540.00	47.8 AV	54.0	-6.2	1.02 V	91	29.11	18.69	

REMARKS:

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.



CHANNEL	TX Channel 40	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	#10400.00	56.8 PK	74.0	-17.2	1.06 H	226	43.58	13.22	
2	#10400.00	42.7 AV	54.0	-11.3	1.06 H	226	29.48	13.22	
3	15600.00	61.2 PK	74.0	-12.8	1.00 H	61	42.50	18.70	
4	15600.00	48.1 AV	54.0	-5.9	1.00 H	61	29.40	18.70	
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
	FRFQ.	EMISSION	LIMIT	MARGIN	ANTENNA	TABLE	RAW	CORRECTION	

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10400.00	56.3 PK	74.0	-17.7	1.00 V	98	43.08	13.22
2	#10400.00	42.8 AV	54.0	-11.2	1.00 V	98	29.58	13.22
3	15600.00	61.0 PK	74.0	-13.0	1.01 V	116	42.30	18.70
4	15600.00	47.5 AV	54.0	-6.5	1.01 V	116	28.80	18.70

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 48	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	#10480.00	56.7 PK	74.0	-17.3	1.01 H	212	43.54	13.16	
2	#10480.00	42.8 AV	54.0	-11.2	1.01 H	212	29.64	13.16	
3	15720.00	60.7 PK	74.0	-13.3	1.00 H	72	42.30	18.40	
4	15720.00	47.7 AV	54.0	-6.3	1.00 H	72	29.30	18.40	
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
	FREQ.	EMISSION	LIMIT	MARGIN	ANTENNA	TABLE	RAW	CORRECTION	

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10480.00	56.0 PK	74.0	-18.0	1.00 V	90	42.84	13.16
2	#10480.00	42.6 AV	54.0	-11.4	1.00 V	90	29.44	13.16
3	15720.00	61.1 PK	74.0	-12.9	1.01 V	102	42.70	18.40
4	15720.00	47.6 AV	54.0	-6.4	1.01 V	102	29.20	18.40

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 52	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	#10520.00	56.8 PK	74.0	-17.2	1.00 H	221	43.58	13.22		
2	#10520.00	42.8 AV	54.0	-11.2	1.00 H	221	29.58	13.22		
3	15780.00	60.8 PK	74.0	-13.2	1.00 H	65	42.29	18.51		
4	15780.00	47.7 AV	54.0	-6.3	1.00 H	65	29.19	18.51		
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
		FMISSION			ΔΝΤΕΝΝΔ	TARI F	RΔW	CORRECTION		

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10520.00	55.9 PK	74.0	-18.1	1.01 V	108	42.68	13.22
2	#10520.00	42.7 AV	54.0	-11.3	1.01 V	108	29.48	13.22
3	15780.00	61.8 PK	74.0	-12.2	1.00 V	93	43.29	18.51
4	15780.00	48.2 AV	54.0	-5.8	1.00 V	93	29.69	18.51

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

Report No.: RF170816E06F-1 Pag Reference No.: 180410E06



CHANNEL	TX Channel 60	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	10600.00	56.1 PK	74.0	-17.9	1.00 H	223	42.57	13.53		
2	10600.00	42.2 AV	54.0	-11.8	1.00 H	223	28.67	13.53		
3	15900.00	61.1 PK	74.0	-12.9	1.02 H	80	42.45	18.65		
4	15900.00	48.1 AV	54.0	-5.9	1.02 H	80	29.45	18.65		
		ANTENNA	POLARITY	' & TEST DI	STANCE: V	ERTICAL A	T 3 M			
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	10600.00	56.1 PK	74.0	-17.9	1.05 V	121	42.57	13.53		

-10.8

-12.1

-5.4

REMARKS:

10600.00

15900.00

15900.00

2

4

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)

1.05 V

1.00 V

1.00 V

121

107

107

29.67

43.25

29.95

13.53

18.65

18.65

3. The other emission levels were very low against the limit.

54.0

74.0

54.0

4. Margin value = Emission Level - Limit value

43.2 AV

61.9 PK

48.6 AV

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CHANNEL	TX Channel 64	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	10640.00	56.7 PK	74.0	-17.3	1.00 H	214	43.07	13.63		
2	10640.00	42.6 AV	54.0	-11.4	1.00 H	214	28.97	13.63		
3	15960.00	60.6 PK	74.0	-13.4	1.00 H	67	41.99	18.61		
4	15960.00	47.4 AV	54.0	-6.6	1.00 H	67	28.79	18.61		
		ANTENNA	POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 3 M			
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	10640.00	55.2 PK	74.0	-18.8	1.01 V	108	41.57	13.63		

-11.8

-12.1

-5.7

REMARKS:

4

10640.00

15960.00

15960.00

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)

1.01 V

1.00 V

1.00 V

108

85

85

28.57

43.29

29.69

13.63

18.61

18.61

3. The other emission levels were very low against the limit.

54.0

74.0

54.0

4. Margin value = Emission Level - Limit value

42.2 AV

61.9 PK

48.3 AV

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CHANNEL	TX Channel 100	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	11000.00	56.1 PK	74.0	-17.9	1.02 H	230	41.68	14.42		
2	11000.00	42.4 AV	54.0	-11.6	1.02 H	230	27.98	14.42		
3	#16500.00	60.9 PK	74.0	-13.1	1.00 H	73	39.96	20.94		
4	#16500.00	47.8 AV	54.0	-6.2	1.00 H	73	26.86	20.94		
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
	EREO	EMISSION	LIMIT	MARGIN	ANTENNA	TABLE	RAW	CORRECTION		

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11000.00	56.4 PK	74.0	-17.6	1.01 V	98	41.98	14.42
2	11000.00	43.1 AV	54.0	-10.9	1.01 V	98	28.68	14.42
3	#16500.00	61.7 PK	74.0	-12.3	1.00 V	96	40.76	20.94
4	#16500.00	48.0 AV	54.0	-6.0	1.00 V	96	27.06	20.94

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 116	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	11160.00	56.5 PK	74.0	-17.5	1.01 H	209	42.27	14.23		
2	11160.00	42.8 AV	54.0	-11.2	1.01 H	209	28.57	14.23		
3	#16740.00	60.7 PK	74.0	-13.3	1.07 H	104	39.59	21.11		
4	#16740.00	47.4 AV	54.0	-6.6	1.07 H	104	26.29	21.11		
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
		FMISSION			ΔΝΤΕΝΝΔ	TARI F	RAW	CORRECTION		

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11160.00	55.5 PK	74.0	-18.5	1.08 V	125	41.27	14.23
2	11160.00	42.3 AV	54.0	-11.7	1.08 V	125	28.07	14.23
3	#16740.00	62.0 PK	74.0	-12.0	1.09 V	101	40.89	21.11
4	#16740.00	48.5 AV	54.0	-5.5	1.09 V	101	27.39	21.11

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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Reference No.: 180410E06



CHANNEL	TX Channel 140	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)			
1	11400.00	56.4 PK	74.0	-17.6	1.02 H	201	41.98	14.42			
2	11400.00	42.4 AV	54.0	-11.6	1.02 H	201	27.98	14.42			
3	#17100.00	61.4 PK	74.0	-12.6	1.04 H	59	39.63	21.77			
4	#17100.00	48.3 AV	54.0	-5.7	1.04 H	59	26.53	21.77			
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
		FMISSION			ANTENNA	TABI F	RAW	CORRECTION			

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11400.00	56.0 PK	74.0	-18.0	1.06 V	109	41.58	14.42
2	11400.00	42.9 AV	54.0	-11.1	1.06 V	109	28.48	14.42
3	#17100.00	62.0 PK	74.0	-12.0	1.00 V	92	40.23	21.77
4	#17100.00	48.4 AV	54.0	-5.6	1.00 V	92	26.63	21.77

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 144	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)			
1	11440.00	56.9 PK	74.0	-17.1	1.00 H	201	42.51	14.39			
2	11440.00	42.8 AV	54.0	-11.2	1.00 H	201	28.41	14.39			
3	#17160.00	60.5 PK	74.0	-13.5	1.04 H	54	38.49	22.01			
4	#17160.00	47.6 AV	54.0	-6.4	1.04 H	54	25.59	22.01			
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
		FMISSION			ΔΝΤΕΝΝΔ	TARI F	RAW	CORRECTION			

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11440.00	56.5 PK	74.0	-17.5	1.03 V	123	42.11	14.39
2	11440.00	43.2 AV	54.0	-10.8	1.03 V	123	28.81	14.39
3	#17160.00	61.7 PK	74.0	-12.3	1.00 V	98	39.69	22.01
4	#17160.00	47.8 AV	54.0	-6.2	1.00 V	98	25.79	22.01

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 149	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)			
1	11490.00	56.5 PK	74.0	-17.5	1.06 H	212	39.78	16.72			
2	11490.00	42.9 AV	54.0	-11.1	1.06 H	212	26.18	16.72			
3	#17235.00	61.4 PK	74.0	-12.6	1.04 H	83	35.55	25.85			
4	#17235.00	48.0 AV	54.0	-6.0	1.04 H	83	22.15	25.85			
		ANTENNA	POLARITY	' & TEST DI	STANCE: V	ERTICAL A	T 3 M				

		AITIEITIT	VI OLAKIII	G I LOI DI	OTANOL. I	ENTIONE A	1 0 111	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11490.00	56.5 PK	74.0	-17.5	1.10 V	83	39.78	16.72
2	11490.00	42.7 AV	54.0	-11.3	1.10 V	83	25.98	16.72
3	#17235.00	61.2 PK	74.0	-12.8	1.01 V	82	35.35	25.85
4	#17235.00	48.0 AV	54.0	-6.0	1.01 V	82	22.15	25.85

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 157	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)			
1	11570.00	57.2 PK	74.0	-16.8	1.05 H	202	39.98	17.22			
2	11570.00	43.0 AV	54.0	-11.0	1.05 H	202	25.78	17.22			
3	#17355.00	60.3 PK	74.0	-13.7	1.04 H	68	34.15	26.15			
4	#17355.00	47.3 AV	54.0	-6.7	1.04 H	68	21.15	26.15			
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
						·					

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11570.00	55.5 PK	74.0	-18.5	1.05 V	88	38.28	17.22
2	11570.00	42.7 AV	54.0	-11.3	1.05 V	88	25.48	17.22
3	#17355.00	60.7 PK	74.0	-13.3	1.06 V	112	34.55	26.15
4	#17355.00	47.4 AV	54.0	-6.6	1.06 V	112	21.25	26.15

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 165	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	11650.00	57.0 PK	74.0	-17.0	1.06 H	222	39.53	17.47		
2	11650.00	43.5 AV	54.0	-10.5	1.06 H	222	26.03	17.47		
3	#17475.00	60.4 PK	74.0	-13.6	1.01 H	49	33.51	26.89		
4	#17475.00	47.5 AV	54.0	-6.5	1.01 H	49	20.61	26.89		
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	T 3 M			

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11650.00	55.9 PK	74.0	-18.1	1.05 V	90	38.43	17.47
2	11650.00	43.0 AV	54.0	-11.0	1.05 V	90	25.53	17.47
3	#17475.00	61.4 PK	74.0	-12.6	1.07 V	111	34.51	26.89
4	#17475.00	47.8 AV	54.0	-6.2	1.07 V	111	20.91	26.89

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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802.11ac (VHT40)

CHANNEL	TX Channel 38	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	#10380.00	56.6 PK	74.0	-17.4	1.00 H	223	43.43	13.17	
2	#10380.00	42.8 AV	54.0	-11.2	1.00 H	223	29.63	13.17	
3	15570.00	61.1 PK	74.0	-12.9	1.00 H	49	42.41	18.69	
4	15570.00	48.0 AV	54.0	-6.0	1.00 H	49	29.31	18.69	
		ANTENNA	POLARITY	' & TEST DI	STANCE: V	ERTICAL A	T 3 M		
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	#10380.00	56.1 PK	74.0	-17.9	1.00 V	95	42.93	13.17	
2	#10380.00	43.0 AV	54.0	-11.0	1.00 V	95	29.83	13.17	
3	15570.00	61.6 PK	74.0	-12.4	1.00 V	98	42.91	18.69	
4	15570.00	48.3 AV	54.0	-5.7	1.00 V	98	29.61	18.69	

REMARKS:

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.



CHANNEL	TX Channel 46	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	#10460.00	56.5 PK	74.0	-17.5	1.06 H	219	43.32	13.18	
2	#10460.00	42.6 AV	54.0	-11.4	1.06 H	219	29.42	13.18	
3	15690.00	60.9 PK	74.0	-13.1	1.00 H	64	42.52	18.38	
4	15690.00	48.0 AV	54.0	-6.0	1.00 H	64	29.62	18.38	
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
	FREQ.	EMISSION	LIMIT	MARGIN	ANTENNA	TABLE	RAW	CORRECTION	

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#10460.00	55.6 PK	74.0	-18.4	1.04 V	108	42.42	13.18
2	#10460.00	42.5 AV	54.0	-11.5	1.04 V	108	29.32	13.18
3	15690.00	62.1 PK	74.0	-11.9	1.00 V	84	43.72	18.38
4	15690.00	48.5 AV	54.0	-5.5	1.00 V	84	30.12	18.38

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 54	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	#10540.00	57.0 PK	74.0	-17.0	1.00 H	202	43.71	13.29		
2	#10540.00	42.7 AV	54.0	-11.3	1.00 H	202	29.41	13.29		
3	15810.00	61.1 PK	74.0	-12.9	1.00 H	64	42.53	18.57		
4	15810.00	47.9 AV	54.0	-6.1	1.00 H	64	29.33	18.57		
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	T 3 M			
NO.	FREQ.	EMISSION LEVEL	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT	TABLE ANGLE	RAW VALUE	CORRECTION FACTOR		

		(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(m)	(Degree)	(dBuV)	(dB/m)
	1	#10540.00	56.5 PK	74.0	-17.5	1.01 V	123	43.21	13.29
	2	#10540.00	43.1 AV	54.0	-10.9	1.01 V	123	29.81	13.29
Ī	3	15810.00	61.9 PK	74.0	-12.1	1.00 V	82	43.33	18.57
Ī	4	15810.00	48 2 A\/	54.0	-5.8	1.00 V	82	29.63	18 57

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 62	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	10620.00	56.7 PK	74.0	-17.3	1.06 H	201	43.11	13.59		
2	10620.00	42.5 AV	54.0	-11.5	1.06 H	201	28.91	13.59		
3	15930.00	60.9 PK	74.0	-13.1	1.00 H	71	42.26	18.64		
4	15930.00	48.0 AV	54.0	-6.0	1.00 H	71	29.36	18.64		
		ANTENNA	POLARITY	4 & TEST DI	STANCE: V	ERTICAL A	T 3 M			
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	10620.00	56.2 PK	74.0	-17.8	1.04 V	108	42.61	13.59		

-10.9

-12.8

-6.2

REMARKS:

10620.00

15930.00

15930.00

2

4

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)

1.04 V

1.02 V

1.02 V

108

106

106

29.51

42.56

29.16

13.59

18.64

18.64

3. The other emission levels were very low against the limit.

54.0

74.0

54.0

4. Margin value = Emission Level - Limit value

43.1 AV

61.2 PK

47.8 AV

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CHANNEL	TX Channel 102	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	11020.00	57.3 PK	74.0	-16.7	1.01 H	200	42.93	14.37		
2	11020.00	43.1 AV	54.0	-10.9	1.01 H	200	28.73	14.37		
3	#16530.00	60.2 PK	74.0	-13.8	1.05 H	57	39.28	20.92		
4	#16530.00	47.5 AV	54.0	-6.5	1.05 H	57	26.58	20.92		
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
		EMISSION			ANTENNA	TABLE	RAW	CORRECTION		

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11020.00	55.7 PK	74.0	-18.3	1.00 V	112	41.33	14.37
2	11020.00	42.6 AV	54.0	-11.4	1.00 V	112	28.23	14.37
3	#16530.00	61.7 PK	74.0	-12.3	1.00 V	99	40.78	20.92
4	#16530.00	48.3 AV	54.0	-5.7	1.00 V	99	27.38	20.92

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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Reference No.: 180410E06



CHANNEL	TX Channel 110	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)			
1	11100.00	56.8 PK	74.0	-17.2	1.10 H	187	42.58	14.22			
2	11100.00	42.9 AV	54.0	-11.1	1.10 H	187	28.68	14.22			
3	#16650.00	60.6 PK	74.0	-13.4	1.09 H	99	39.66	20.94			
4	#16650.00	47.5 AV	54.0	-6.5	1.09 H	99	26.56	20.94			
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
	FREQ.	EMISSION	LIMIT	MARGIN	ANTENNA	TABLE	RAW	CORRECTION			

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11100.00	55.5 PK	74.0	-18.5	1.05 V	118	41.28	14.22
2	11100.00	42.6 AV	54.0	-11.4	1.05 V	118	28.38	14.22
3	#16650.00	61.9 PK	74.0	-12.1	1.06 V	79	40.96	20.94
4	#16650.00	48.1 AV	54.0	-5.9	1.06 V	79	27.16	20.94

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 134	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	11340.00	56.3 PK	74.0	-17.7	1.00 H	218	41.98	14.32		
2	11340.00	42.3 AV	54.0	-11.7	1.00 H	218	27.98	14.32		
3	#17010.00	61.3 PK	74.0	-12.7	1.05 H	54	39.77	21.53		
4	#17010.00	48.2 AV	54.0	-5.8	1.05 H	54	26.67	21.53		
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11340.00	55.2 PK	74.0	-18.8	1.01 V	102	40.88	14.32
2	11340.00	42.3 AV	54.0	-11.7	1.01 V	102	27.98	14.32
3	#17010.00	61.6 PK	74.0	-12.4	1.00 V	86	40.07	21.53
4	#17010.00	48.2 AV	54.0	-5.8	1.00 V	86	26.67	21.53

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 142	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	11420.00	56.6 PK	74.0	-17.4	1.03 H	209	42.19	14.41		
2	11420.00	42.6 AV	54.0	-11.4	1.03 H	209	28.19	14.41		
3	#17130.00	61.1 PK	74.0	-12.9	1.01 H	78	39.21	21.89		
4	#17130.00	48.0 AV	54.0	-6.0	1.01 H	78	26.11	21.89		
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11420.00	56.0 PK	74.0	-18.0	1.00 V	96	41.59	14.41
2	11420.00	43.1 AV	54.0	-10.9	1.00 V	96	28.69	14.41
3	#17130.00	61.4 PK	74.0	-12.6	1.00 V	78	39.51	21.89
4	#17130.00	47.7 AV	54.0	-6.3	1.00 V	78	25.81	21.89

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 151	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	11510.00	56.5 PK	74.0	-17.5	1.00 H	183	39.77	16.73	
2	11510.00	42.8 AV	54.0	-11.2	1.00 H	183	26.07	16.73	
3	#17265.00	60.0 PK	74.0	-14.0	1.09 H	53	34.25	25.75	
4	#17265.00	47.1 AV	54.0	-6.9	1.09 H	53	21.35	25.75	
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	T 3 M		

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NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11510.00	56.0 PK	74.0	-18.0	1.00 V	104	39.27	16.73
2	11510.00	42.4 AV	54.0	-11.6	1.00 V	104	25.67	16.73
3	#17265.00	60.2 PK	74.0	-13.8	1.03 V	106	34.45	25.75
4	#17265.00	47.1 AV	54.0	-6.9	1.03 V	106	21.35	25.75

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 159	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	11590.00	57.3 PK	74.0	-16.7	1.03 H	207	39.93	17.37	
2	11590.00	43.1 AV	54.0	-10.9	1.03 H	207	25.73	17.37	
3	#17385.00	60.6 PK	74.0	-13.4	1.05 H	45	34.16	26.44	
4	#17385.00	47.7 AV	54.0	-6.3	1.05 H	45	21.26	26.44	
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
		EMISSION			ANTENNA	TABLE	D AW	CORRECTION	

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11590.00	55.7 PK	74.0	-18.3	1.00 V	94	38.33	17.37
2	11590.00	42.5 AV	54.0	-11.5	1.00 V	94	25.13	17.37
3	#17385.00	61.3 PK	74.0	-12.7	1.06 V	100	34.86	26.44
4	#17385.00	48.1 AV	54.0	-5.9	1.06 V	100	21.66	26.44

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

Report No.: RF170816E06F-1 Page No. 64 / 275 Reference No.: 180410E06 Report Format Version:6.1.2



802.11ac (VHT80)

CHANNEL	TX Channel 42	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	#10420.00	56.8 PK	74.0	-17.2	1.00 H	204	43.60	13.20	
2	#10420.00	42.9 AV	54.0	-11.1	1.00 H	204	29.70	13.20	
3	15630.00	61.2 PK	74.0	-12.8	1.01 H	83	42.60	18.60	
4	15630.00	47.9 AV	54.0	-6.1	1.01 H	83	29.30	18.60	
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	Т 3 М		
NO. FREQ. (MHz) EMISSION LEVEL (dBuV/m) (dB) ANTENNA TABLE RAW CORRE							CORRECTION FACTOR (dB/m)		
1	#10420.00	56.3 PK	74.0	-17.7	1.00 V	109	43.10	13.20	
2	#10420.00	43.1 AV	54.0	-10.9	1.00 V	109	29.90	13.20	
3	15630.00	61.4 PK	74.0	-12.6	1.00 V	94	42.80	18.60	
4	15630.00	48.0 AV	54.0	-6.0	1.00 V	94	29.40	18.60	

REMARKS:

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.



CHANNEL	TX Channel 58	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	#10580.00	56.7 PK	74.0	-17.3	1.01 H	216	43.25	13.45	
2	#10580.00	42.9 AV	54.0	-11.1	1.01 H	216	29.45	13.45	
3	15870.00	60.8 PK	74.0	-13.2	1.02 H	79	42.18	18.62	
4	15870.00	48.0 AV	54.0	-6.0	1.02 H	79	29.38	18.62	
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	T 3 M		
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	

-17.6

-11.0

-12.1

-5.8

REMARKS:

4

#10580.00

#10580.00

15870.00

15870.00

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)

1.05 V

1.05 V

1.00 V

1.00 V

123

123

106

106

42.95

29.55

43.28

29.58

13.45

13.45

18.62

18.62

3. The other emission levels were very low against the limit.

74.0

54.0

74.0

54.0

4. Margin value = Emission Level - Limit value

56.4 PK

43.0 AV

61.9 PK

48.2 AV

5. " # ": The radiated frequency is out of the restricted band.

Report No.: RF170816E06F-1 Page No. 66 / 275 Report Format Version:6.1.2

Reference No.: 180410E06



CHANNEL	TX Channel 106	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	11060.00	57.3 PK	74.0	-16.7	1.00 H	207	43.00	14.30		
2	11060.00	43.0 AV	54.0	-11.0	1.00 H	207	28.70	14.30		
3	#16590.00	60.8 PK	74.0	-13.2	1.00 H	72	39.90	20.90		
4	#16590.00	47.6 AV	54.0	-6.4	1.00 H	72	26.70	20.90		
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
NO.	FREQ.	EMISSION	LIMIT	MARGIN	ANTENNA	TABLE ANGLE	RAW VALUE	CORRECTION		

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11060.00	55.5 PK	74.0	-18.5	1.05 V	107	41.20	14.30
2	11060.00	42.5 AV	54.0	-11.5	1.05 V	107	28.20	14.30
3	#16590.00	61.7 PK	74.0	-12.3	1.00 V	92	40.80	20.90
4	#16590.00	48.0 AV	54.0	-6.0	1.00 V	92	27.10	20.90

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

Report No.: RF170816E06F-1 Page No. 67 / 275 Report Format Version:6.1.2 Reference No.: 180410E06



Report Format Version:6.1.2

CHANNEL	TX Channel 122	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	11220.00	56.9 PK	74.0	-17.1	1.01 H	219	42.64	14.26		
2	11220.00	42.8 AV	54.0	-11.2	1.01 H	219	28.54	14.26		
3	#16830.00	60.2 PK	74.0	-13.8	1.03 H	88	38.85	21.35		
4	#16830.00	47.3 AV	54.0	-6.7	1.03 H	88	25.95	21.35		
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
-		EMISSION			ANTENNA	TABLE	RAW	CORRECTION		

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11220.00	55.7 PK	74.0	-18.3	1.01 V	123	41.44	14.26
2	11220.00	42.6 AV	54.0	-11.4	1.01 V	123	28.34	14.26
3	#16830.00	62.1 PK	74.0	-11.9	1.00 V	86	40.75	21.35
4	#16830.00	48.5 AV	54.0	-5.5	1.00 V	86	27.15	21.35

REMARKS:

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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Reference No.: 180410E06



CHANNEL	TX Channel 138	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	11380.00	57.1 PK	74.0	-16.9	1.00 H	194	42.71	14.39		
2	11380.00	42.6 AV	54.0	-11.4	1.00 H	194	28.21	14.39		
3	#17070.00	60.8 PK	74.0	-13.2	1.00 H	58	39.11	21.69		
4	#17070.00	47.4 AV	54.0	-6.6	1.00 H	58	25.71	21.69		
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
		EMISSION			ANTENNA	TABLE	D AW	COPPECTION		

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11380.00	55.3 PK	74.0	-18.7	1.01 V	116	40.91	14.39
2	11380.00	42.3 AV	54.0	-11.7	1.01 V	116	27.91	14.39
3	#17070.00	61.7 PK	74.0	-12.3	1.00 V	107	40.01	21.69
4	#17070.00	47.8 AV	54.0	-6.2	1.00 V	107	26.11	21.69

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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CHANNEL	TX Channel 155	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	11550.00	56.9 PK	74.0	-17.1	1.01 H	197	39.84	17.06		
2	11550.00	42.9 AV	54.0	-11.1	1.01 H	197	25.84	17.06		
3	#17325.00	60.2 PK	74.0	-13.8	1.06 H	75	34.33	25.87		
4	#17325.00	47.5 AV	54.0	-6.5	1.06 H	75	21.63	25.87		
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
NO.	FREQ.	EMISSION LEVEL	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT	TABLE ANGLE	RAW VALUE	CORRECTION FACTOR		

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	11550.00	56.1 PK	74.0	-17.9	1.01 V	93	39.04	17.06
2	11550.00	42.7 AV	54.0	-11.3	1.01 V	93	25.64	17.06
3	#17325.00	62.0 PK	74.0	-12.0	1.05 V	95	36.13	25.87
4	#17325.00	48.6 AV	54.0	-5.4	1.05 V	95	22.73	25.87

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value
- 5. " # ": The radiated frequency is out of the restricted band.

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Below 1GHz Data

802.11ac (VHT40)

CHANNEL	TX Channel 159	DETECTOR	Ougai Back (OD)
FREQUENCY RANGE	Below 1GHz	FUNCTION	Quasi-Peak (QP)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	78.93	34.4 QP	40.0	-5.6	2.00 H	353	52.00	-17.59	
2	166.02	40.4 QP	43.5	-3.1	1.73 H	74	53.63	-13.23	
3	333.22	35.3 QP	46.0	-10.7	1.00 H	357	46.04	-10.77	
4	473.53	38.0 QP	46.0	-8.0	1.00 H	33	45.80	-7.76	
5	624.70	36.7 QP	46.0	-9.3	1.50 H	0	41.02	-4.34	
6	797.12	37.7 QP	46.0	-8.3	1.00 H	46	39.20	-1.53	
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	31.60	32.5 QP	40.0	-7.5	1.00 V	56	47.43	-14.89	
2	81.13	30.9 QP	40.0	-9.1	1.00 V	334	48.99	-18.06	
3	99.66	31.8 QP	43.5	-11.8	1.00 V	336	49.11	-17.36	
4	266.63	33.7 QP	46.0	-12.3	1.00 V	34	46.95	-13.29	
				44.0	4.00.17	0.40	40.47	7 77	
5	473.38	34.7 QP	46.0	-11.3	1.00 V	340	42.47	-7.77	

REMARKS:

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value



4.1.8 Test Results (Conducted Measurement)

Radiated versus Conducted Measurement							
□ Conducted measurement	☐ Radiated measurement						
For Radiated measurement:							
The level of unwanted emissions was measured when radiated by the cabinet or structure of							
the equipment with the antenna connector(s) terminated by a specified load (cabinet radiation)							
For Conducted measurement:							
The level of unwanted emissions was measured as their power in a specified load (conducted							
spurious emissions).							

Conducted Measurement Factor

- a. The composite gain will be used when signal support the correlated signal.
 (Composite gain = 3.08dBi + 10log(2) = 6.09dBi
 Composite gain = 4.76dBi + 10log(2) = 7.77dBi)
- For the out of band spurious the gain for the specific band may have been used rather than the highest gain across all bands.
- c. For the band edge the gain for the specific band may have been used.
- d. In restricted bands below 1000 MHz, add upper bound on ground plane reflection:

For f = 30 - 1000 MHz, add 4.7 dB.

Note: The conducted emission test was considered some factor to compute test result.

Report No.: RF170816E06F-1 Reference No.: 180410E06



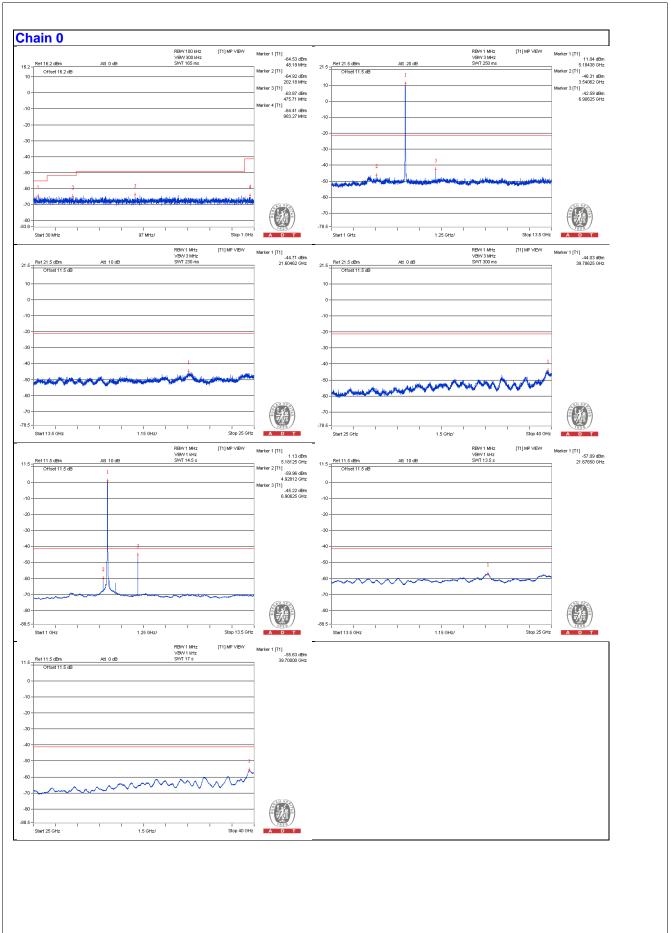
Above 1GHz Data 802.11a - Channel 36

Conducted spurious emission table

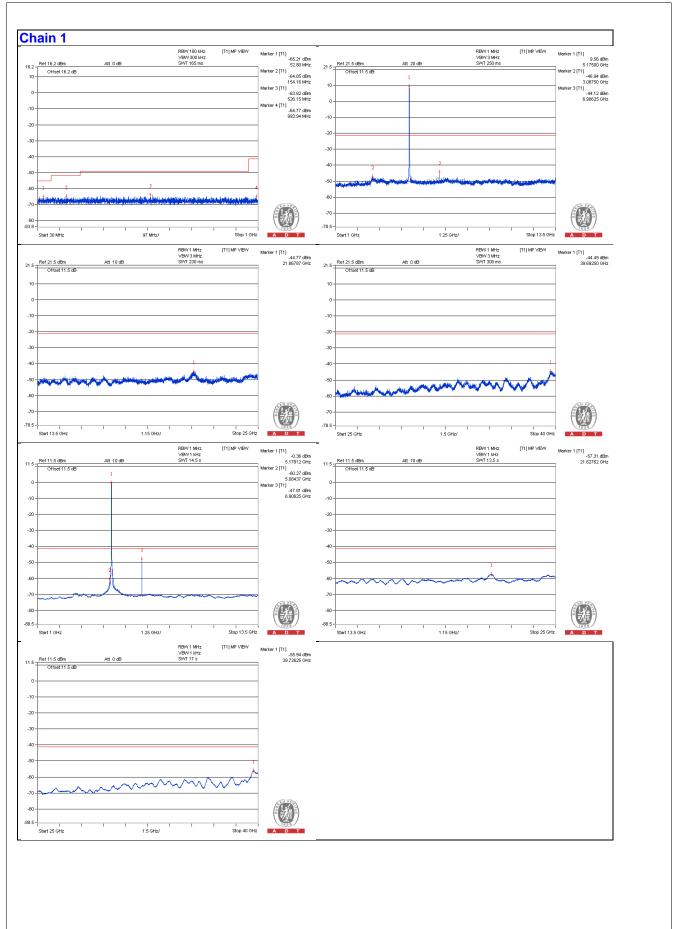
Na	Frequency	Emission	Limit	Margin Raw Value (dBm)		Correction	EIRP	
No.	(MHz)	Level (dBuV/m)	(dBuV/m)	(dB)	Chain0	Chain1	Factor (dB)	Level (dBm)
1	3468.75 PK	55.06	74	-18.94	-48.43	-50.38	6.09	-40.2
2	3434.375 AV	33.74	54	-20.26	-70.58	-70.66	6.09	-61.52
3	6906.25 PK	61.07	68.2	-7.13	-42.59	-44.12	6.09	-34.19
4	10362.5 PK	54.81	74	-19.19	-49.67	-49.44	6.09	-40.45
5	10362.5 AV	34.42	54	-19.58	-69.6	-70.31	6.09	-60.84
6	15532.625 PK	54.69	74	-19.31	-49.31	-50.06	6.09	-40.57
7	15521.125 AV	43.17	54	-10.83	-61.16	-61.23	6.09	-52.09

Note:





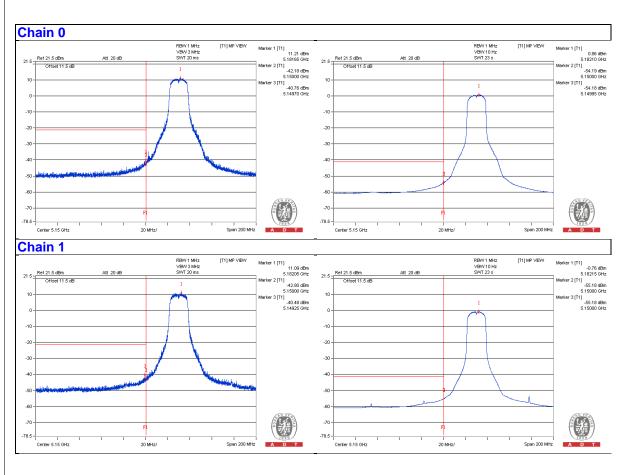






No.	Frequency	Emission	Limit	Margin	Raw Value (dBm)		Correction Factor	EIRP Level
	(MHz)	Level (dBuV/m)	(dBuV/m)	(dB)	Chain0	Chain1	(dB)	(dBm)
1	5149.25 PK	63.63	74	-10.37	-41	-40.48	6.09	-31.63
2	5149.95 AV	49.7	54	-4.3	-54.18	-55.19	6.09	-45.56

Note:



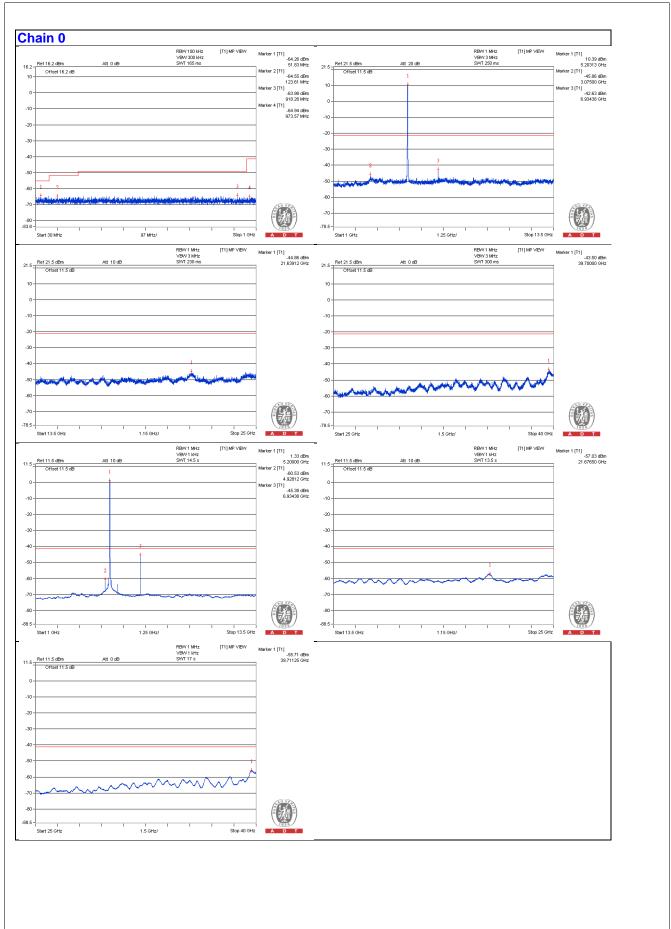


Conducted spurious emission table

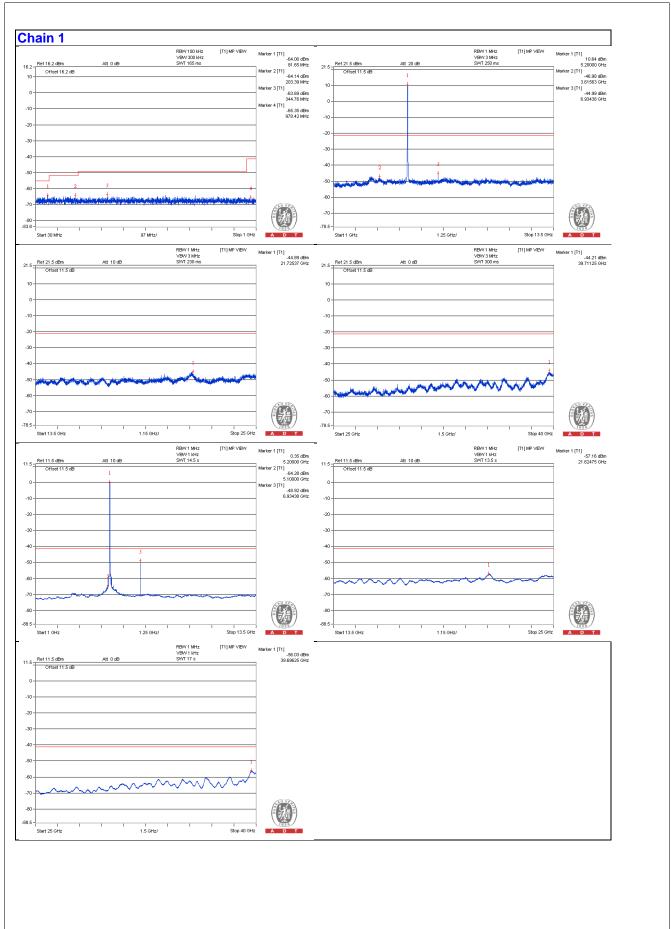
Na	Frequency	Emission	Limit	Margin Raw Value (dBm)		Correction	EIRP	
No.	(MHz)	Level (dBuV/m)	(dBuV/m)	(dB)	Chain0	Chain1	Factor (dB)	Level (dBm)
1	3446.875 PK	54.9	74	-19.1	-48.31	-51.04	6.09	-40.36
2	3450 AV	33.68	54	-20.32	-70.62	-70.74	6.09	-61.58
3	6934.375 PK	60.71	68.2	-7.49	-42.63	-44.99	6.09	-34.55
4	10387.5 PK	54.26	74	-19.74	-49.2	-51.24	6.09	-41
5	10400 AV	34.06	54	-19.94	-70.17	-70.44	6.09	-61.2
6	15610.25 PK	53.92	74	-20.08	-50.73	-50.16	6.09	-41.34
7	15581.5 AV	42.28	54	-11.72	-62.19	-61.98	6.09	-52.98

Note:









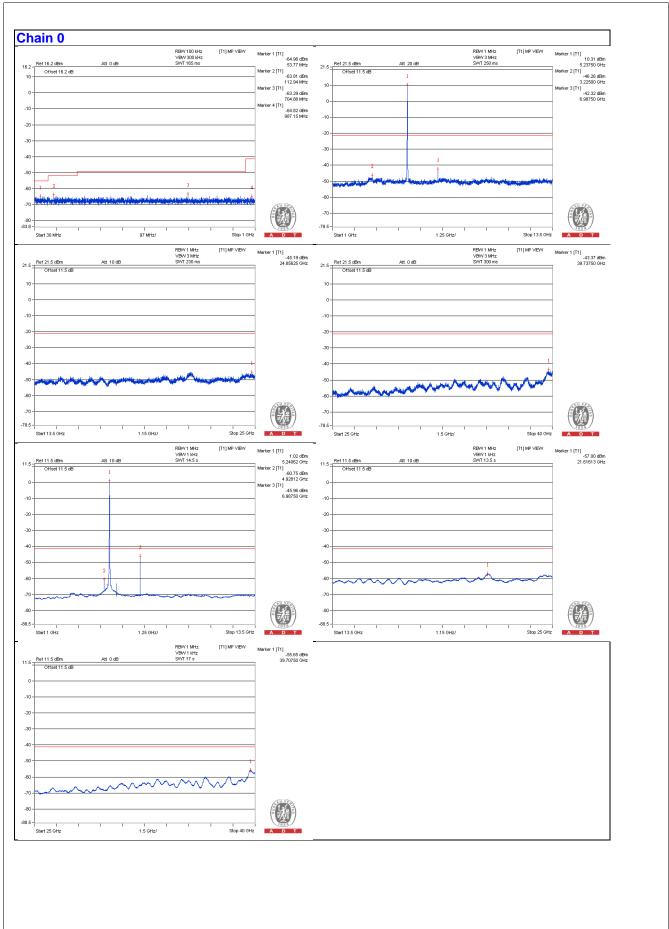


Conducted spurious emission table

Na	Frequency	Emission	Limit	Margin (all all all all all all all all all al		Correction	EIRP	
No.	(MHz)	Level (dBuV/m)	(dBuV/m)	(dB)	Chain0	Chain1	Factor (dB)	Level (dBm)
1	3484.375 PK	55.13	74	-18.87	-48.06	-50.83	6.09	-40.13
2	3512.5 AV	33.92	54	-20.08	-70.21	-70.68	6.09	-61.34
3	6987.5 PK	60.66	68.2	-7.54	-42.32	-45.72	6.09	-34.6
4	10490.625 PK	53.7	74	-20.3	-50.3	-51.06	6.09	-41.56
5	10481.25 AV	33.72	54	-20.28	-70.67	-70.61	6.09	-61.54
6	15731 PK	53.5	74	-20.5	-50.36	-51.43	6.09	-41.76
7	15731 AV	42.24	54	-11.76	-62.3	-61.95	6.09	-53.02

Note:









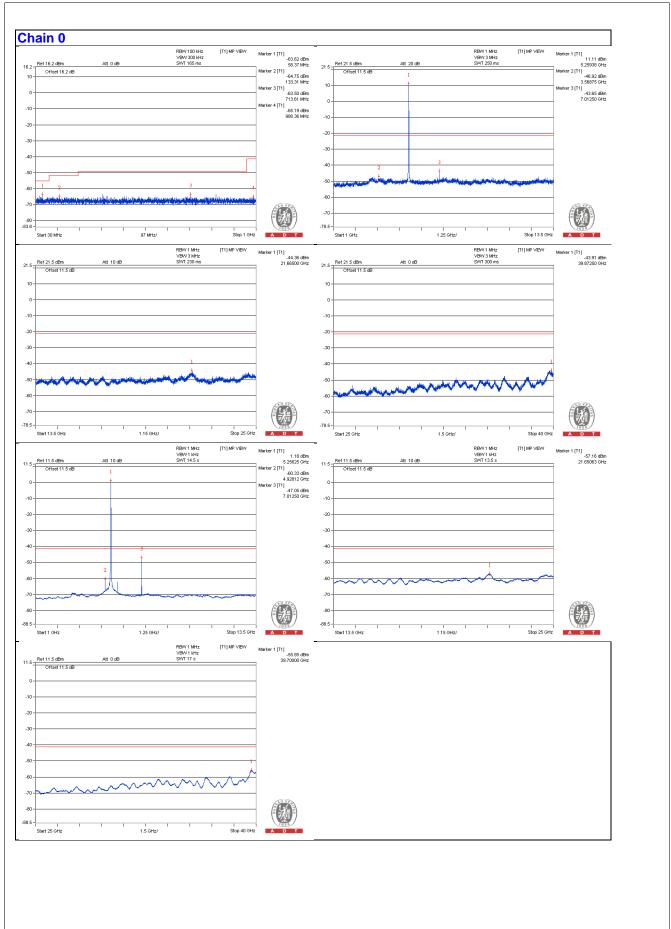


Conducted spurious emission table

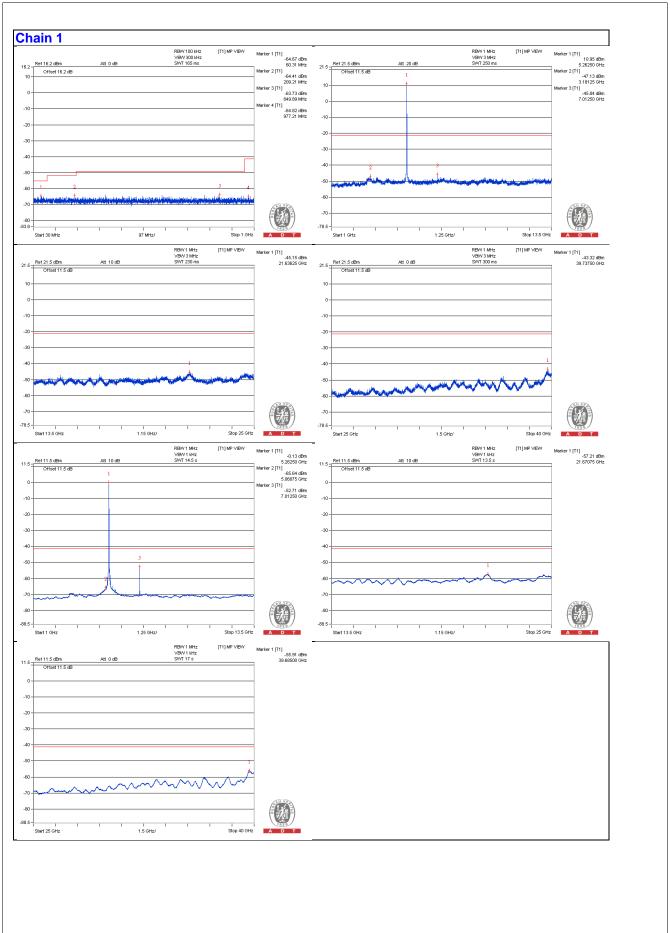
Na	Frequency	Emission	Limit	Margin Raw Value		ue (dBm)	Correction	EIRP
No.	(MHz)	Level (dBuV/m)	(dBuV/m)	(dB)	Chain0	Chain1	Factor (dB)	Level (dBm)
1	3515.625 PK	55.39	74	-18.61	-49	-48.95	6.09	-39.87
2	3521.875 AV	34.22	54	-19.78	-70.11	-70.18	6.09	-61.04
3	7012.5 PK	59.75	68.2	-8.45	-43.65	-45.84	6.09	-35.51
4	10531.25 PK	54.58	74	-19.42	-49.34	-50.27	6.09	-40.68
5	10525 AV	33.96	54	-20.04	-70.1	-70.72	6.09	-61.3
6	15788.5 PK	54.17	74	-19.83	-49.73	-50.7	6.09	-41.09
7	15791.375 AV	42.99	54	-11.01	-61.34	-61.41	6.09	-52.27

Note:









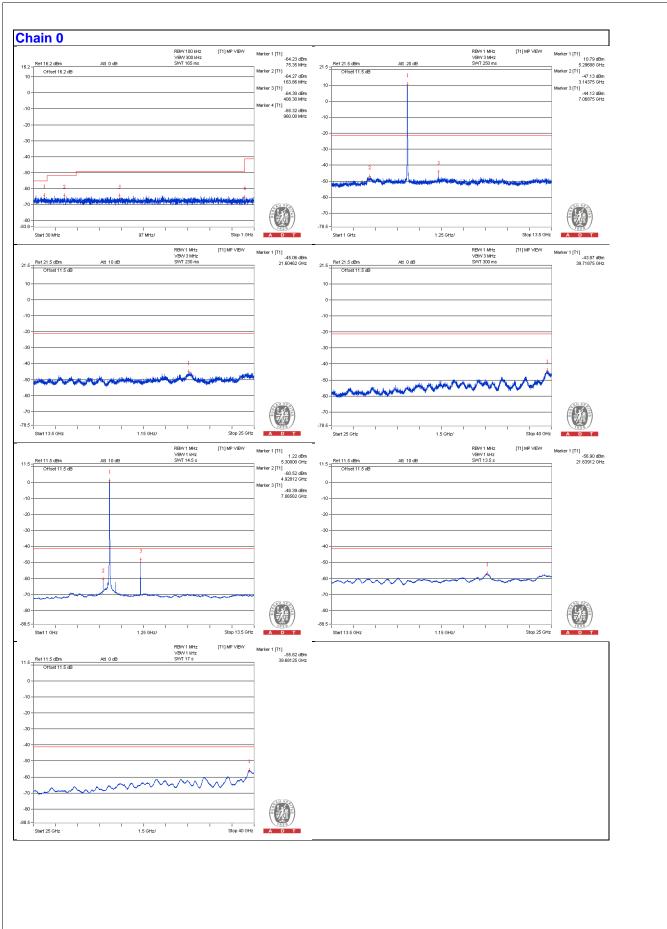


Conducted spurious emission table

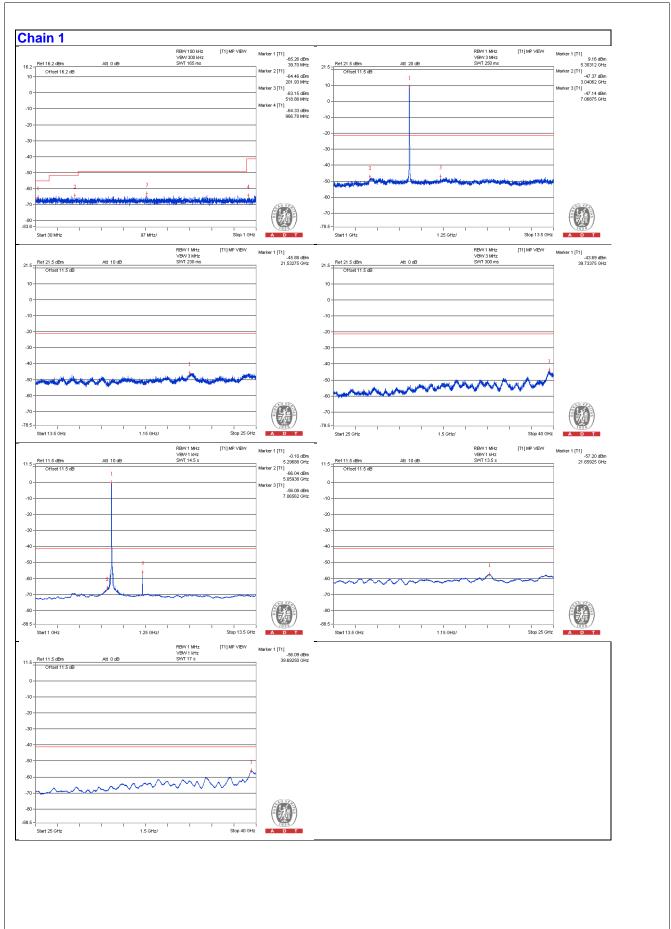
Na	Frequency	Emission	Limit	Margin Raw Value (dBm)		Correction	EIRP	
No.	(MHz)	Level (dBuV/m)	(dBuV/m)	(dB)	Chain0	Chain1	Factor (dB)	Level (dBm)
1	3550 PK	55.57	74	-18.43	-49.21	-48.4	6.09	-39.69
2	3550 AV	34.38	54	-19.62	-69.96	-70.01	6.09	-60.88
3	7068.75 PK	58.99	68.2	-9.21	-44.12	-47.14	6.09	-36.27
4	10584.375 PK	54.63	74	-19.37	-49.22	-50.31	6.09	-40.63
5	10600 AV	33.73	54	-20.27	-70.45	-70.81	6.09	-61.53
6	15892 PK	54.58	74	-19.42	-49.27	-50.37	6.09	-40.68
7	15897.75 AV	43.1	54	-10.9	-61.23	-61.29	6.09	-52.16

Note:









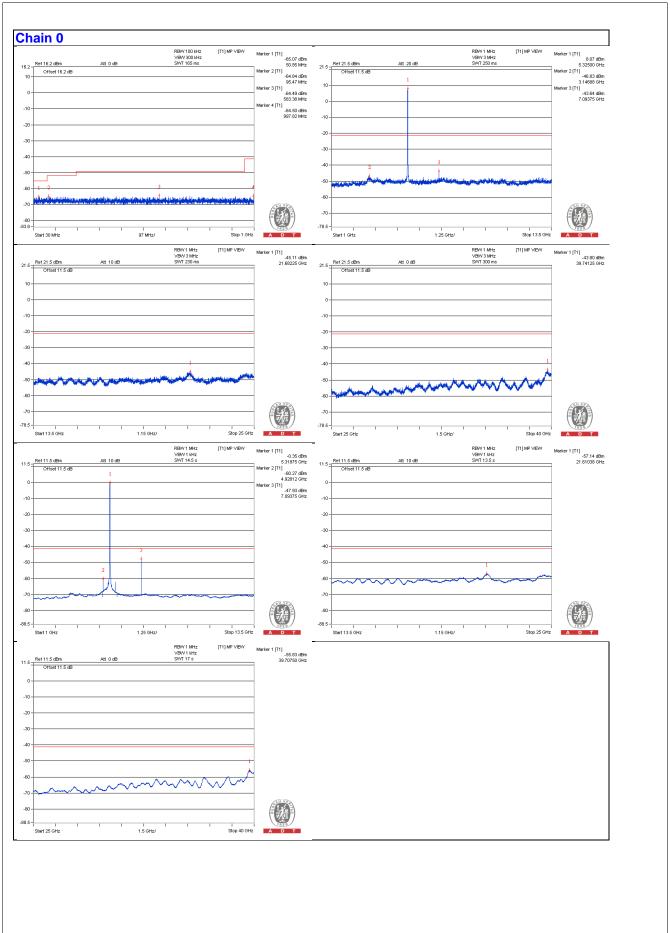


Conducted spurious emission table

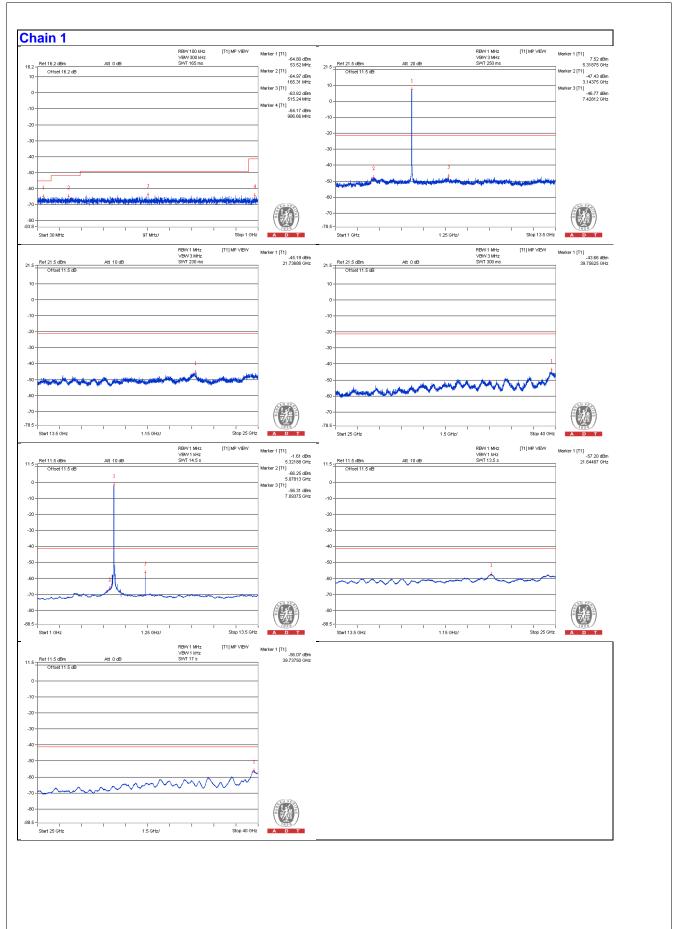
Na	Frequency	Emission	Limit	Margin	Raw Value (dBm)		Correction	EIRP
No.	(MHz)	Level (dBuV/m)	(dBuV/m)	(dB)	Chain0	Chain1	Factor (dB)	Level (dBm)
1	3553.125 PK	55.58	74	-18.42	-47.91	-49.86	6.09	-39.68
2	3546.875 AV	34.62	54	-19.38	-69.73	-69.75	6.09	-60.64
3	7093.75 PK	58.85	68.2	-9.35	-43.64	-48.85	6.09	-36.41
4	10631.25 PK	54.56	74	-19.44	-48.34	-52	6.09	-40.7
5	10628.125 AV	33.7	54	-20.3	-70.69	-70.64	6.09	-61.56
6	15963.875 PK	53.3	74	-20.7	-50.73	-51.42	6.09	-41.96
7	15940.875 AV	42.37	54	-11.63	-61.98	-62.01	6.09	-52.89

Note:





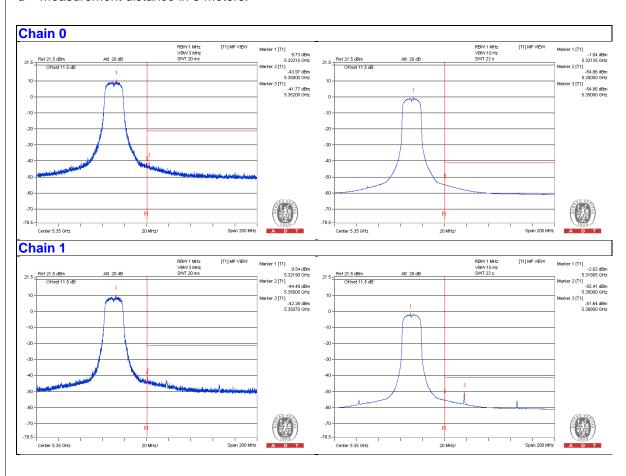






No.	Frequency	Emission Level	Limit	Margin	Raw Valu	aw Value (dBm) Corre		EIRP Level
NO.	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	Chain0	Chain1	Factor (dB)	(dBm)
1	5350.15 PK	61.5	74	-12.5	-42.39	-43.39	6.09	-33.76
2	5368 AV	50.6	54	-3.4	-58.06	-51.64	6.09	-44.66

Note:



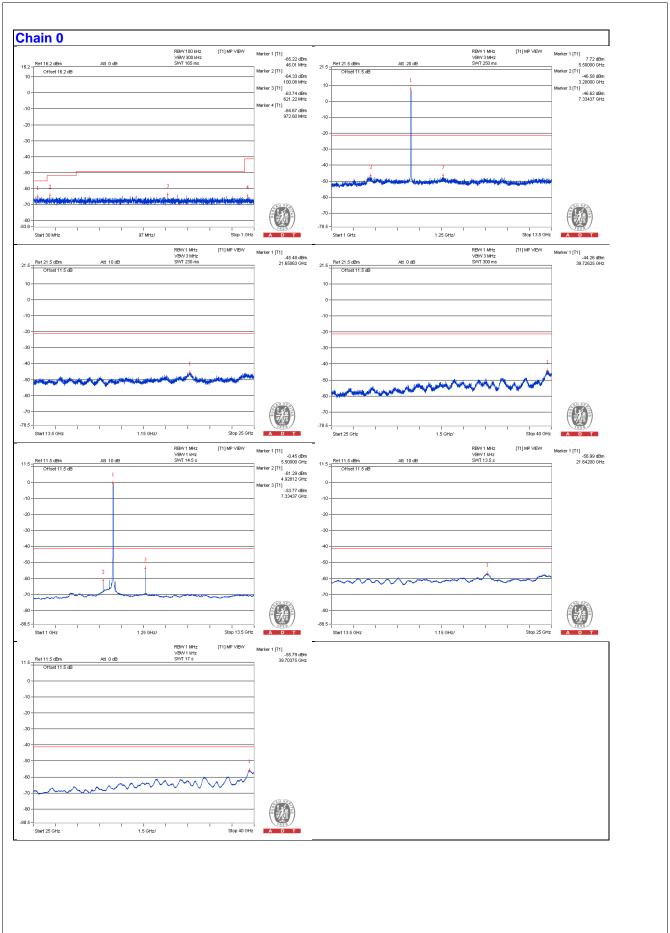


Conducted spurious emission table

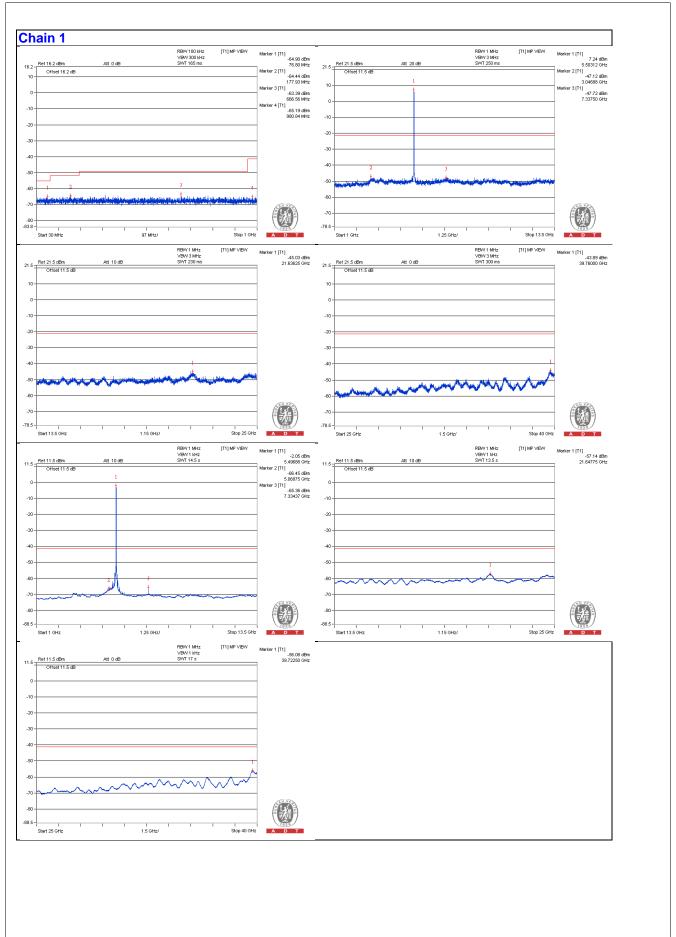
Na	Frequency	Emission	Limit	Margin	Raw Valu	ue (dBm)	Correction	EIRP
No.	(MHz)	Level (dBuV/m)	(dBuV/m)	(dB)	Chain0	Chain1	Factor (dB)	Level (dBm)
1	3662.5 PK	56.81	74	-17.19	-49.27	-49.19	7.77	-38.45
2	3650 AV	36.02	54	-17.98	-69.91	-70.14	7.77	-59.24
3	7334.375 PK	58.29	74	-15.71	-46.62	-49.28	7.77	-36.97
4	7334.375 AV	49.55	54	-4.45	-53.77	-65.36	7.77	-45.71
5	10990.625 PK	55.08	74	-18.92	-50.5	-51.47	7.77	-40.18
6	10984.375 AV	34.44	54	-19.56	-71.43	-71.78	7.77	-60.82
7	16504.375 PK	56.46	74	-17.54	-50	-49.19	7.77	-38.8
8	16481.375 AV	45.16	54	-8.84	-60.8	-60.97	7.77	-50.1

Note:





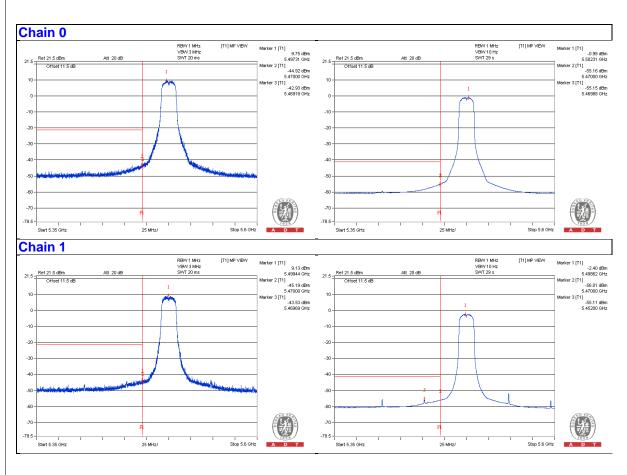






No.	Frequency	Emission Level	Limit	Margin	Raw Value (dBm)		Correction Factor	EIRP Level
NO.	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	Chain0	Chain1	(dB)	(dBm)
1	5469.375 PK	62.2	74	-11.8	-43.52	-44.18	7.77	-33.06
2	5470 AV	50.48	54	-3.52	-55.16	-56.01	7.77	-44.78

Note:



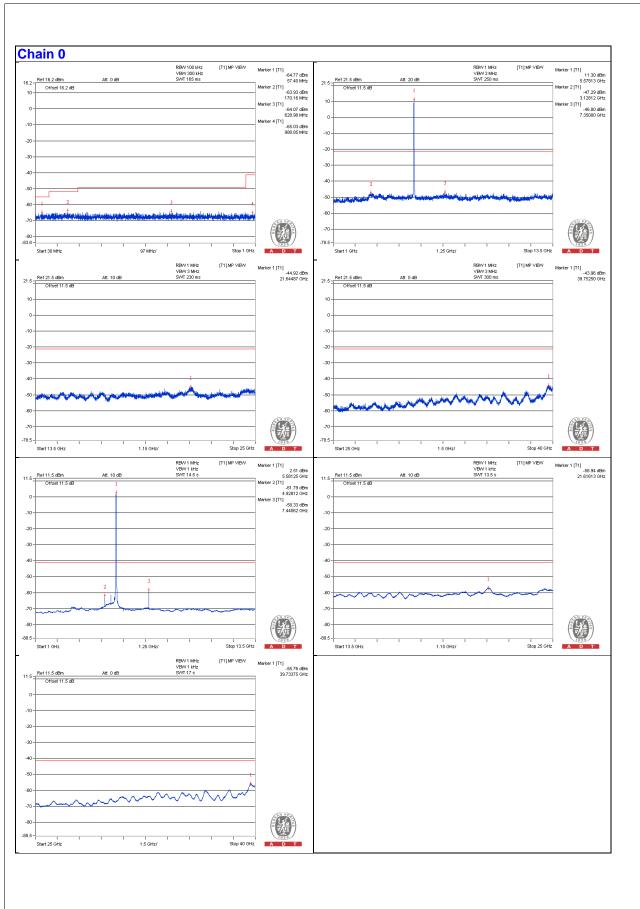


Conducted spurious emission table

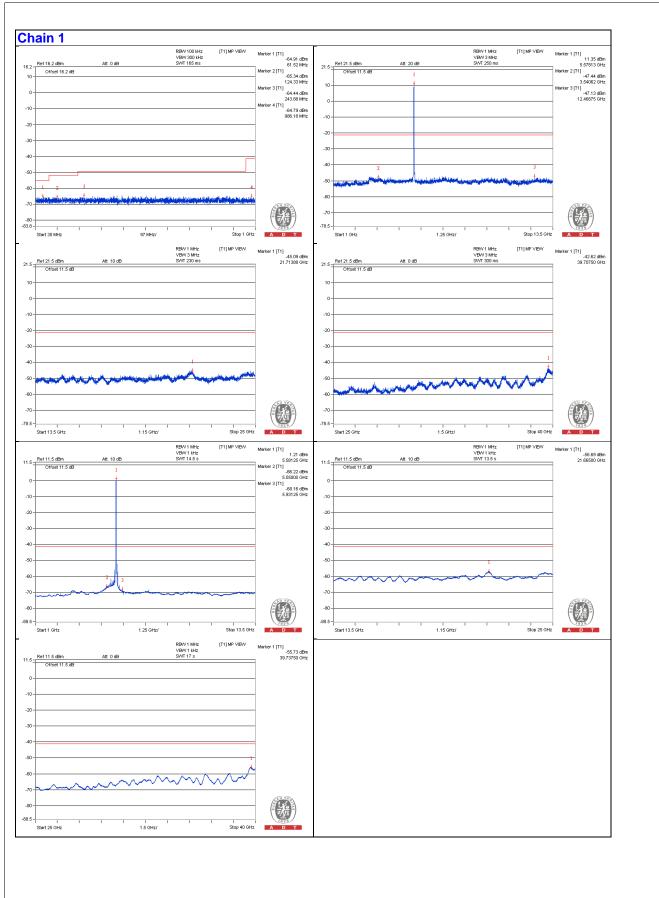
Na	Frequency	Emission	Limit	Margin	Raw Valu	ue (dBm)	Correction	EIRP
No.	(MHz)	Level (dBuV/m)	(dBuV/m)	(dB)	Chain0	Chain1	Factor (dB)	Level (dBm)
1	3734.375 PK	56.76	74	-17.24	-49.49	-49.08	7.77	-38.5
2	3721.875 AV	35.93	54	-18.07	-70.17	-70.06	7.77	-59.33
3	7421.875 PK	57.66	74	-16.34	-48.1	-48.68	7.77	-37.6
4	7440.625 AV	45.1	54	-8.9	-58.33	-68.5	7.77	-50.16
5	11168.75 PK	56.01	74	-17.99	-50.65	-49.49	7.77	-39.25
6	11168.75 AV	34.74	54	-19.26	-71.37	-71.23	7.77	-60.52
7	16751.625 PK	55.05	74	-18.95	-50.88	-51.11	7.77	-40.21
8	16748.75 AV	43.92	54	-10.08	-61.93	-62.32	7.77	-51.34

Note:





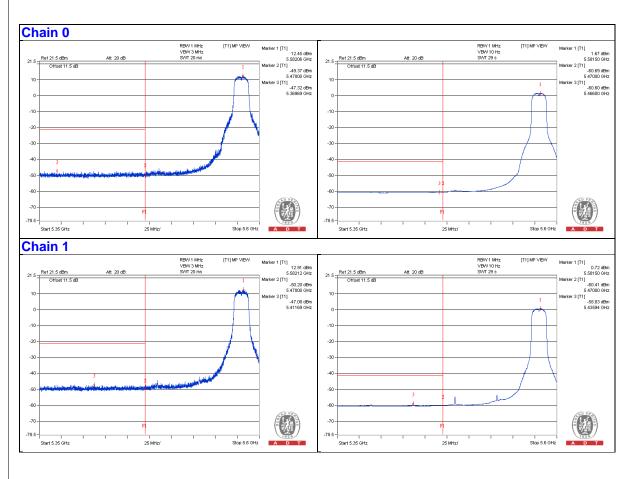






No.	Frequency	Emission	Limit	Margin	Raw Value (dBm)		Correction	_
NO.	(MHz)	Level (dBuV/m)	(dBuV/m)	(dB)	Chain0	Chain1	Factor (dB)	Level (dBm)
1	5410.875 PK	58.43	74	-15.57	-47.52	-47.71	7.77	-36.83
2	5435.9375 AV	46.31	54	-7.69	-60.86	-58.83	7.77	-48.95

Note:





Conducted spurious emission table

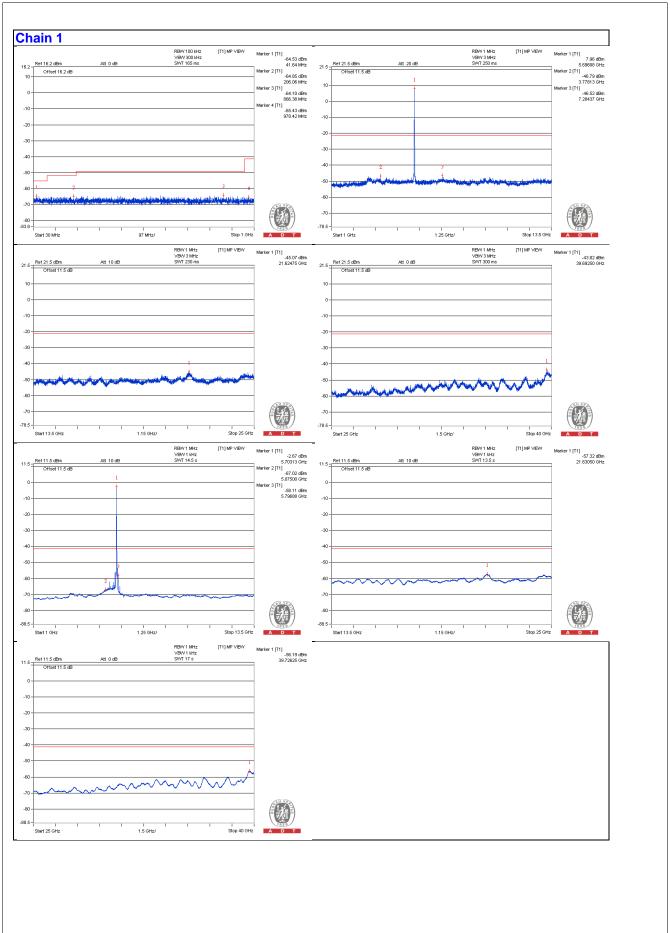
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction	EIRP
No.					Chain0	Chain1	Factor (dB)	Level (dBm)
1	3809.375 PK	55.92	74	-18.08	-49.57	-50.75	7.77	-39.34
2	3781.25 AV	35.33	54	-18.67	-70.56	-70.86	7.77	-59.93
3	7590.625 PK	56.55	74	-17.45	-49.17	-49.83	7.77	-38.71
4	7600 AV	40.16	54	-13.84	-63.63	-70.81	7.77	-55.1
5	11396.875 PK	56.05	74	-17.95	-50.22	-49.77	7.77	-39.21
6	11390.625 AV	34.49	54	-19.51	-71.6	-71.5	7.77	-60.77
7	17085.125 PK	56.7	74	-17.3	-49.95	-48.8	7.77	-38.56
8	17096.625 AV	44.72	54	-9.28	-61.08	-61.58	7.77	-50.54

Note:





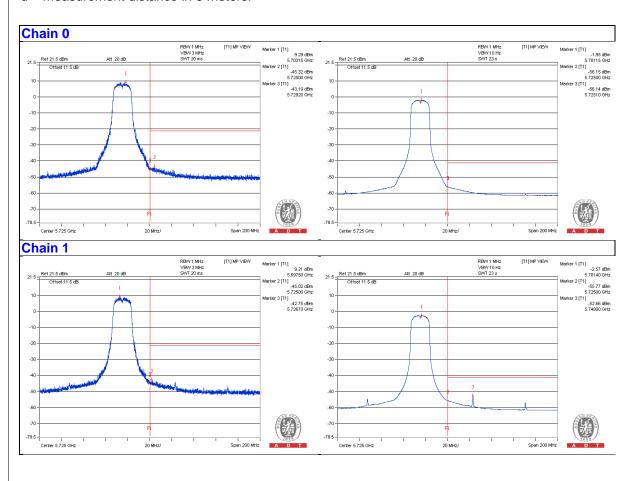






No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor	EIRP Level
					Chain0	Chain1	(dB)	(dBm)
1	5726.9 PK	62.22	74	-11.78	-44.87	-42.97	7.77	-33.04
2	5748 AV	51.14	54	-2.86	-59.81	-52.66	7.77	-44.12

Note:



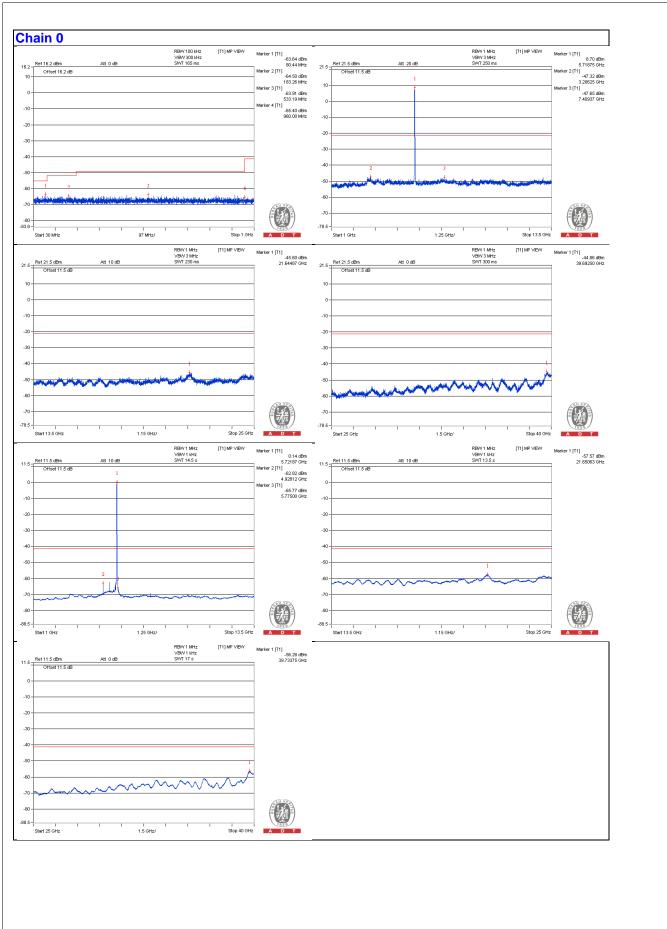


Conducted spurious emission table

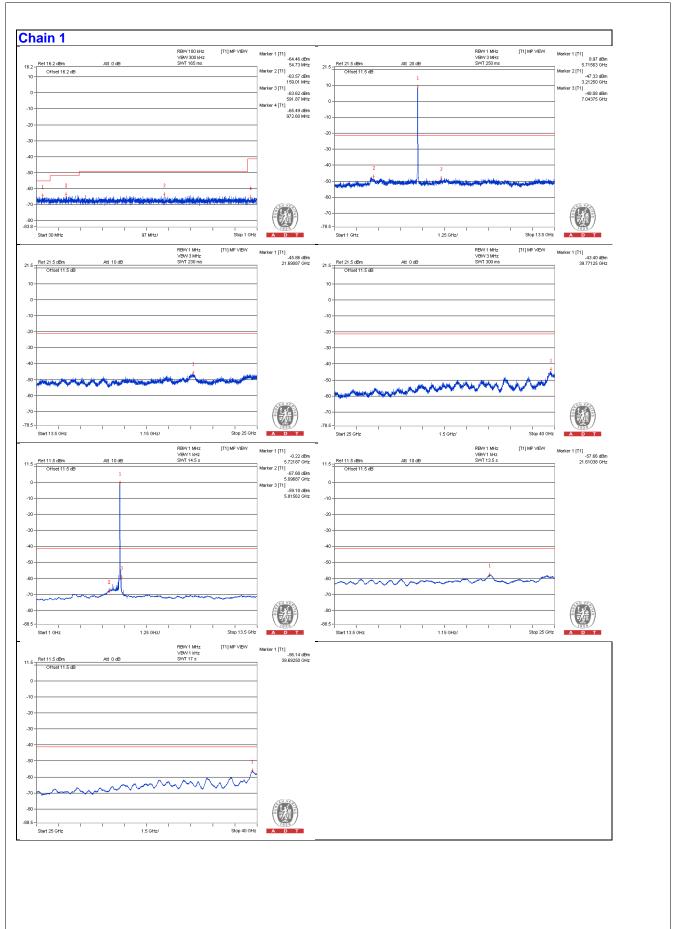
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction	EIRP
No.					Chain0	Chain1	Factor (dB)	Level (dBm)
1	3800 PK	56.06	74	-17.94	-50.74	-49.33	7.77	-39.2
2	3796.875 AV	34.6	54	-19.4	-71.38	-71.5	7.77	-60.66
3	7618.75 PK	55.83	74	-18.17	-50.52	-49.93	7.77	-39.43
4	7628.125 AV	35.9	54	-18.1	-69.22	-71.32	7.77	-59.36
5	11450 PK	54.77	74	-19.23	-51.83	-50.78	7.77	-40.49
6	11446.875 AV	33.83	54	-20.17	-72.34	-72.08	7.77	-61.43
7	17154.125 PK	54.48	74	-19.52	-51.74	-51.39	7.77	-40.78
8	17145.5 AV	43.4	54	-10.6	-62.62	-62.67	7.77	-51.86

Note:





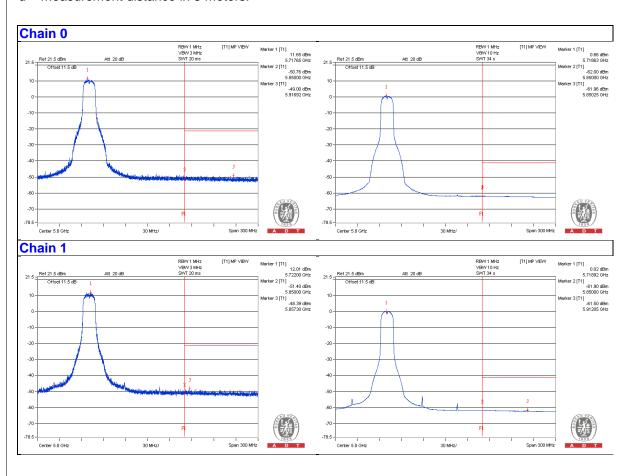






No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor	EIRP Level
					Chain0	Chain1	(dB)	(dBm)
1	5848.075 PK	56.7	74	-17.3	-49.14	-49.55	7.77	-38.56
2	5912.05 AV	44.15	54	-9.85	-62.31	-61.5	7.77	-51.11

Note:





802.11a - Channel 149

Conducted spurious emission table

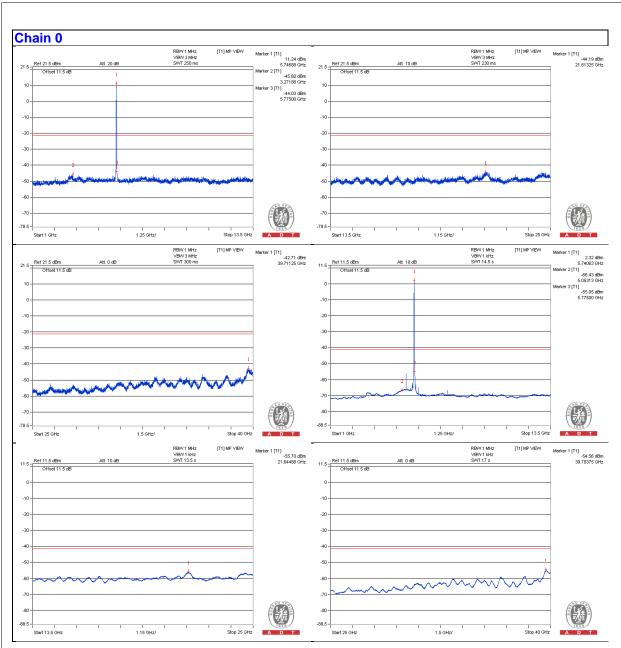
No.	Frequency	Emission	Limit	Margin	argin Raw Value (dBi		Correction	EIRP
NO.	(MHz)	Level (dBuV/m)	(dBuV/m)	(dB)	Chain0	Chain1	Factor (dB)	Level (dBm)
1	3831.25 PK	56.39	74	-17.61	-50.69	-48.81	7.77	-38.87
2	3828.125 AV	35.68	54	-18.32	-70.25	-70.48	7.77	-59.58
3	7659.375 PK	56.39	74	-17.61	-49.83	-49.47	7.77	-38.87
4	7659.375 AV	38.28	54	-15.72	-66.47	-69.61	7.77	-56.98
5	11490.625 PK	55.68	74	-18.32	-51.39	-49.53	7.77	-39.58
6	11490.625 AV	35.36	54	-18.64	-71.16	-70.24	7.77	-59.9
7	17234.625 PK	54.67	74	-19.33	-50.43	-52.57	7.77	-40.59
8	17234.625 AV	43.73	54	-10.27	-62.11	-62.51	7.77	-51.53

Note:

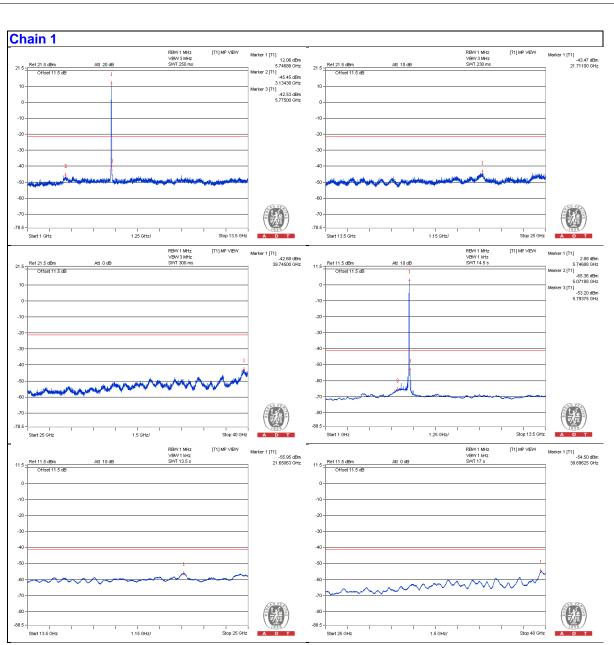
Emission Level (dBuV/m) = EIRP Level (dBm) - 20log(d) + 104.8 d = measurement distance in 3 meters.

→ Bandedge spurious emission refer to Annex A - Conducted Out of Band Emission (OOBE) Measurement (For U-NII-3 band) item.











802.11a - Channel 157

Conducted spurious emission table

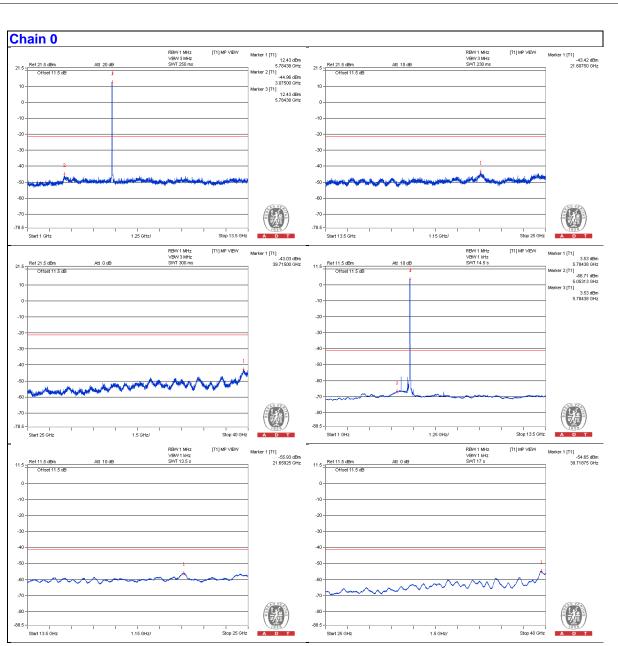
Na	Frequency	Emission	Limit	Margin	Raw Value (dBm)		Correction	EIRP
No.	(MHz)	Level (dBuV/m)	(dBuV/m)	(dB)	Chain0	Chain1	Factor (dB)	(dBm)
1	3856.25 PK	55.41	74	-18.59	-50.9	-50.37	7.77	-39.85
2	3856.25 AV	35.57	54	-18.43	-70.24	-70.72	7.77	-59.69
3	7712.5 PK	56.38	74	-17.62	-49.2	-50.18	7.77	-38.88
4	7712.5 AV	37.98	54	-16.02	-67.02	-69.43	7.77	-57.28
5	11568.75 PK	55.44	74	-18.56	-49.69	-51.75	7.77	-39.82
6	11571.875 AV	35.35	54	-18.65	-71.27	-70.18	7.77	-59.91
7	17355.375 PK	54.44	74	-19.56	-52	-51.23	7.77	-40.82
8	17355.375 AV	44.12	54	-9.88	-61.83	-62.02	7.77	-51.14

Note:

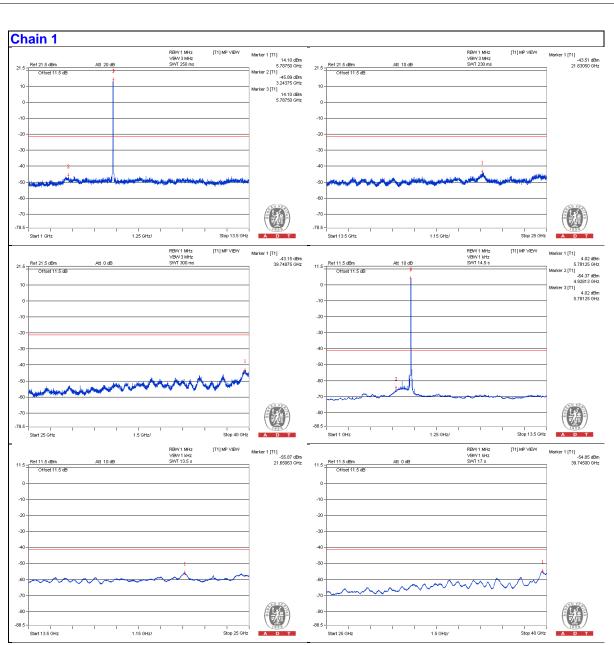
Emission Level (dBuV/m) = EIRP Level (dBm) - 20log(d) + 104.8 d = measurement distance in 3 meters.

[♦] Bandedge spurious emission refer to *Annex A - Conducted Out of Band Emission (OOBE) Measurement (For U-NII-3 band)* item.











802.11a - Channel 165

Conducted spurious emission table

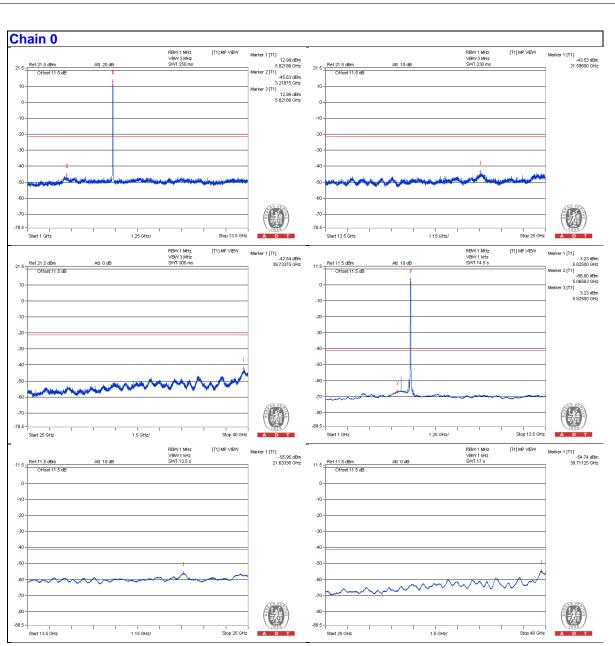
No.	Frequency	Emission	Limit	Margin	Raw Value (dB		Correction Factor	EIRP Level
NO.	(MHz)	Level (dBuV/m)	(dBuV/m)	(dB)	Chain0	Chain1	(dB)	(dBm)
1	3884.375 PK	56.57	74	-17.43	-49.52	-49.43	7.77	-38.69
2	3884.375 AV	35.65	54	-18.35	-70.26	-70.52	7.77	-59.61
3	7765.625 PK	56.62	74	-17.38	-49.85	-49.03	7.77	-38.64
4	7765.625 AV	37.22	54	-16.78	-68.48	-69.2	7.77	-58.04
5	11650 PK	54.3	74	-19.7	-52.05	-51.46	7.77	-40.96
6	11650 AV	35.64	54	-18.36	-71.13	-69.77	7.77	-59.62
7	17476.125 PK	56.41	74	-17.59	-50.52	-48.9	7.77	-38.85
8	17473.25 AV	45.87	54	-8.13	-60.34	-60.01	7.77	-49.39

Note:

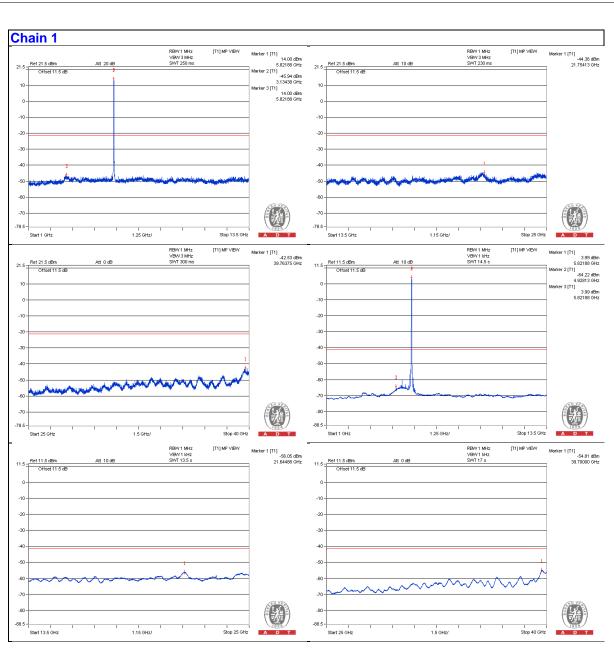
Emission Level (dBuV/m) = EIRP Level (dBm) - 20log(d) + 104.8 d = measurement distance in 3 meters.

♦ Bandedge spurious emission refer to *Annex A - Conducted Out of Band Emission (OOBE) Measurement (For U-NII-3 band)* item.











802.11ac (VHT20) - Channel 36

Conducted spurious emission table

No.	Frequency	Emission	Limit	Margin	Raw Valu	ue (dBm)	Correction	EIRP Level (dBm)
	(MHz)	Level (dBuV/m)	(dBuV/m)	(dB)	Chain0	Chain1	Factor (dB)	
1	3446.875 PK	54.84	74	-19.16	-49.27	-49.78	6.09	-40.42
2	3434.375 AV	33.68	54	-20.32	-70.69	-70.67	6.09	-61.58
3	6906.25 PK	61.28	68.2	-6.92	-42.29	-44.04	6.09	-33.98
4	10356.25 PK	54.92	74	-19.08	-48.96	-49.99	6.09	-40.34
5	10365.625 AV	34.34	54	-19.66	-69.7	-70.37	6.09	-60.92
6	15541.25 PK	54.38	74	-19.62	-48.98	-51.29	6.09	-40.88
7	15521.125 AV	43.18	54	-10.82	-60.96	-61.41	6.09	-52.08

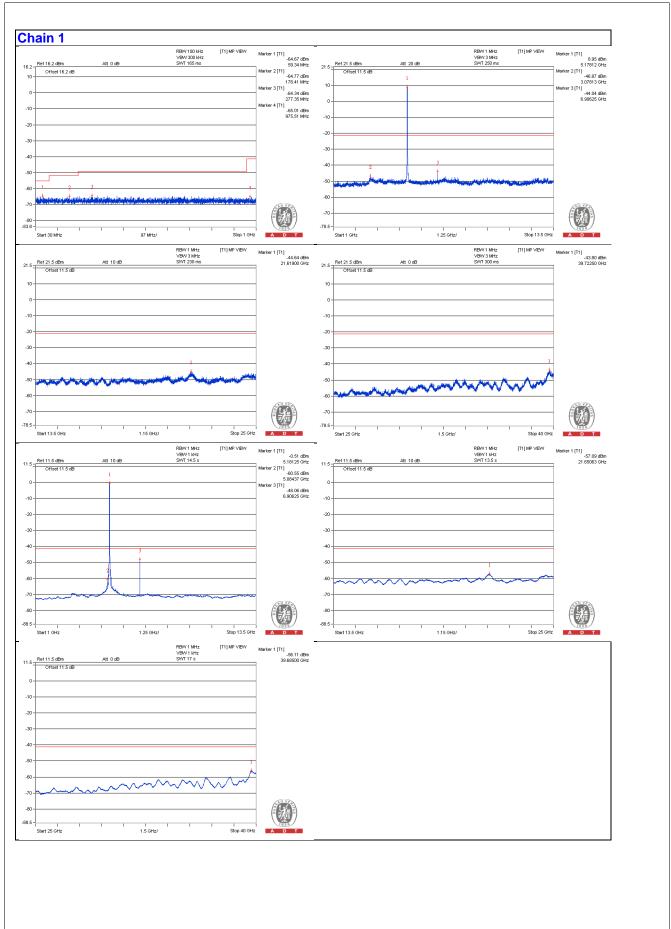
Note:

Emission Level (dBuV/m) = EIRP Level (dBm) $- 20\log(d) + 104.8$ d = measurement distance in 3 meters.









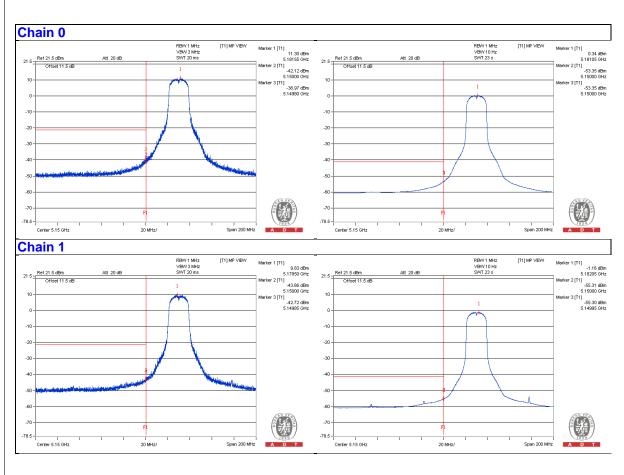


Bandedge table

No.	Frequency	Emission	Limit	Margin	Raw Valu	ue (dBm)	Factor L	EIRP Level
	(MHz)	Level (dBuV/m)	(dBuV/m)	(dB)	Chain0	Chain1		(dBm)
1	5149.8 PK	63.89	74	-10.11	-38.97	-42.79	6.09	-31.37
2	5150 AV	50.14	54	-3.86	-53.35	-55.31	6.09	-45.12

Note:

Emission Level (dBuV/m) = EIRP Level (dBm) - 20log(d) + 104.8 d = measurement distance in 3 meters.





802.11ac (VHT20) - Channel 40

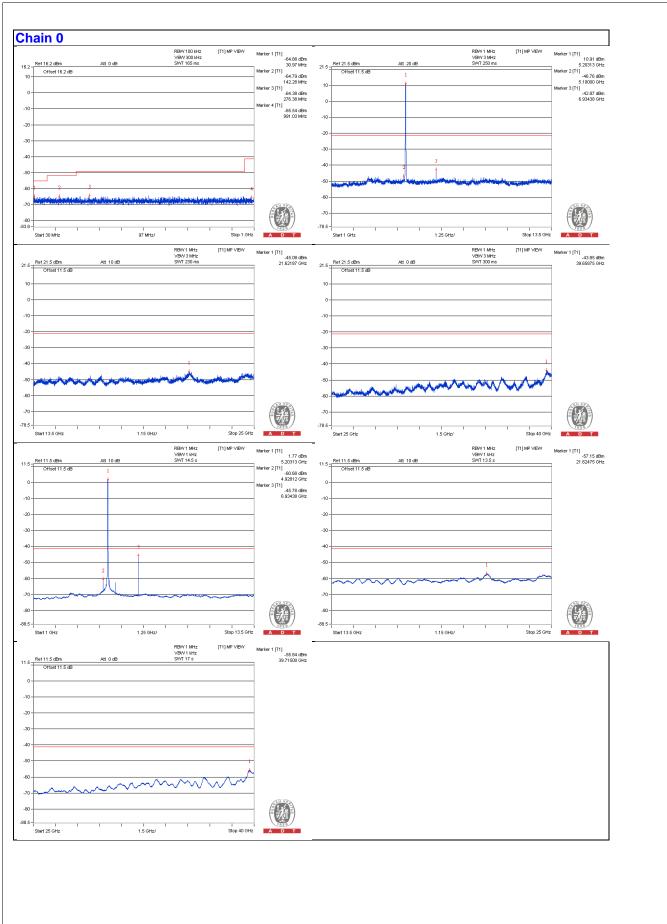
Conducted spurious emission table

Na	Frequency	Emission	Limit	Margin	Raw Valu	ue (dBm)	Correction	EIRP Level (dBm)
No.	(MHz)	Level (dBuV/m)	(dBuV/m)	(dB)	Chain0	Chain1	Factor (dB)	
1	3475 PK	55.43	74	-18.57	-47.64	-50.78	6.09	-39.83
2	3459.375 AV	33.6	54	-20.4	-70.6	-70.93	6.09	-61.66
3	6934.375 PK	60.46	68.2	-7.74	-42.87	-45.25	6.09	-34.8
4	10384.375 PK	54.53	74	-19.47	-49.99	-49.67	6.09	-40.73
5	10403.125 AV	34.13	54	-19.87	-70.1	-70.36	6.09	-61.13
6	15613.125 PK	54.31	74	-19.69	-51.82	-48.8	6.09	-40.95
7	15587.25 AV	42.14	54	-11.86	-62.25	-62.19	6.09	-53.12

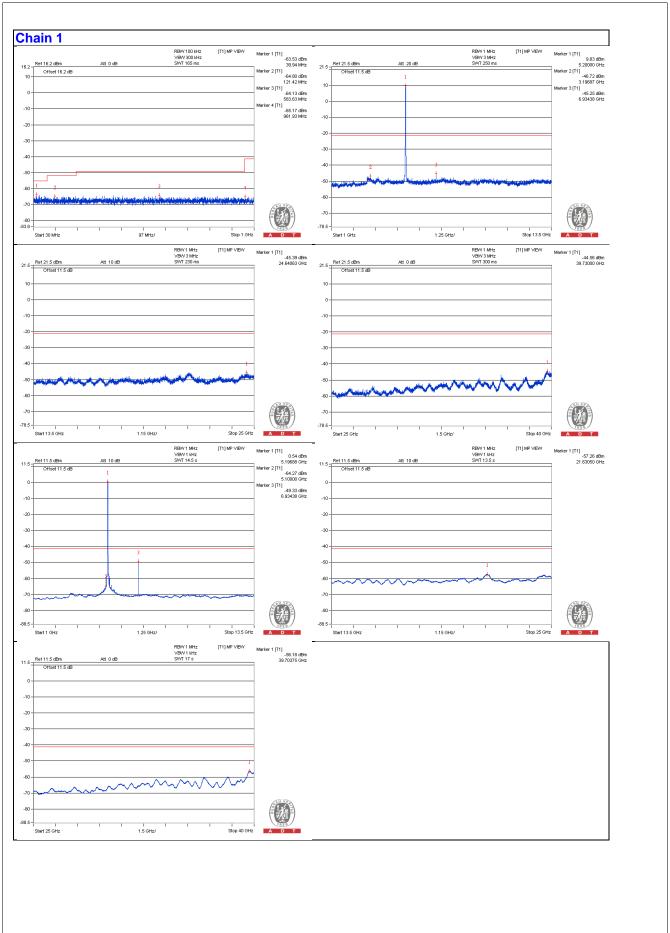
Note:

Emission Level (dBuV/m) = EIRP Level (dBm) - 20log(d) + 104.8 d = measurement distance in 3 meters.











802.11ac (VHT20) - Channel 48

Conducted spurious emission table

Na	Frequency	Emission	Limit	Margin	Raw Value (dBm		Correction	EIRP
No.	(MHz)	Level (dBuV/m)	(dBuV/m)	(dB)	Chain0	Chain1	Factor (dB)	Level (dBm)
1	3478.125 PK	54.86	74	-19.14	-49.46	-49.55	6.09	-40.4
2	3509.375 AV	33.99	54	-20.01	-70.33	-70.41	6.09	-61.27
3	6987.5 PK	59.48	68.2	-8.72	-43.38	-47.2	6.09	-35.78
4	10487.5 PK	54.07	74	-19.93	-50.19	-50.4	6.09	-41.19
5	10484.375 AV	33.7	54	-20.3	-70.46	-70.87	6.09	-61.56
6	15736.75 PK	53.46	74	-20.54	-51	-50.8	6.09	-41.8
7	15736.75 AV	42.08	54	-11.92	-62.34	-62.23	6.09	-53.18

Note:

Emission Level (dBuV/m) = EIRP Level (dBm) - 20log(d) + 104.8 d = measurement distance in 3 meters.



