





# **FCC C2PC Test Report**

FCC ID : HDC-17600074

Equipment : WiFi 7 10G Router

Model No. : SDG-8733, SDG-8734, SDG-8733v, SDG-8734v

(Please refer to section 1.1.1 for more details)

Brand Name : Adtran

Applicant : Adtran

Address : 901 Explorer Boulevard, Huntsville, Alabama,

United States, 35806-2807

Standard : 47 CFR FCC Part 15.247

Received Date : May 30, 2024

Tested Date : Jun. 03 ~ Jun. 11, 2024

We, International Certification Corporation, would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by: Approved by:

Along Chen/ Assistant Manager Gary Chang / Manag

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Appendix A. Unwanted Emissions into Restricted Frequency Bands Appendix B. AC Power Line Conducted Emissions



## **Release Record**

Report No.	Version	Description	Issued Date
FR431301-01AC	Rev. 01	Initial issue	Oct. 08, 2024

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## **Summary of Test Results**

FCC Rules	Test Items	Measured	Result
15.207	AC Power Line Conducted Emission	[dBuV]: 0.383MHz 44.25 (Margin -3.96dB) - AV	Pass
15.247(d) 15.209	Unwanted Emissions	[dBuV/m at 3m]: 2390.00MHz 53.88 (Margin -0.12dB) – AV	Pass

#### **Declaration of Conformity:**

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

### **Comments and Explanations:**

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

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## 1 General Description

### 1.1 Information

This report is prepared for FCC class II change.

This report is issued as a supplementary report to the original project no. FR431301AC. The difference is concerned with following items:

- Adding two models for configurations with VoIP function
- ♦ Version of I/O board is changed from V02 to V03.

Conducted emission and radiated emission tests had been re-tested and only its data was presented in the following sections.

## 1.1.1 Product Details (Adding models were marked in boldface.)

The following models are provided to this EUT.

Brand Name	Model Name	Product Name	Description
	SDG-8733	WiFi 7 10G Router	W/O VOIP, With 10G RJ45 WAN Port
Adtran	SDG-8734	WiFi 7 10G Router	W/O VOIP, With 10G SFP WAN Port
Adiran	SDG-8733v	WiFi 7 10G Router	W/ VOIP, With 10G RJ45 WAN Port
	SDG-8734v	WiFi 7 10G Router	W/ VOIP, With 10G SFP WAN Port

## 1.1.2 Specification of the Equipment under Test (EUT)

RF General Information								
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N⊤x)	Data Rate / MCS			
2400-2483.5	b	2412-2462	1-11 [11]	4	1-11 Mbps			
2400-2483.5	g	2412-2462	1-11 [11]	4	6-54 Mbps			
2400-2483.5	n (HT20)	2412-2462	1-11 [11]	4	MCS 0-31			
2400-2483.5	n (HT40)	2422-2452	3-9 [7]	4	MCS 0-31			
2400-2483.5	ax (HE20)	2412-2462	1-11 [11]	4	MCS 0-11			
2400-2483.5	ax (HE40)	2422-2452	3-9 [7]	4	MCS 0-11			
2400-2483.5	be (EHT20)	2412-2462	1-11 [11]	4	MCS 0-13			
2400-2483.5	be (EHT40)	2422-2452	3-9 [7]	4	MCS 0-13			

Note 1: RF output power specifies that Maximum Conducted (Average) Output Power.

Note 2: DSSS-DBPSK, DQPSK, CCK modulation

OFDM / OFDMA- BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM and 4096QAM modulation.

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## 1.1.3 Antenna Details

Ant.	Model	Туре	Connector	Operat	ing Frequenc	ies (MHz) / A	ntenna Gain	(dBi)
No.	o. Wodel Type	Connector	2400~2483.5	5150~5250	5250~5350	5470~5725	5725 ~ 5850	
1	DB1	Dipole	UFL	3.948	5.688	5.607	5.316	4.309
2	DB2	Dipole	UFL	4.92	4.627	4.569	5.03	5.17
3	DB3	Dipole	UFL	3.842	4.597	5.481	6.018	4.796
4	DB4	Dipole	UFL	5.006	6.346	6.51	5.997	5.982
5	SM-DFS	Dipole	UFL	4.092	5.909	5.909	5.159	5.526

## 1.1.4 Configuration of Equipment under Test (EUT)

Power Supply Type	15Vdc from adapter		
Beamforming			
RU Configuration		☐ Partial RU	

## 1.1.5 Accessories

	Accessories					
No.	Equipment	Description				
1	AC adapter	Brand: LUCENT TRANS Model: 1A78 I/P: 100-240Vac, 50/60Hz, 1.2A O/P: 15V= 3.0A, 45.0W Power Line: USB 1.8m non-shielded without core				
2	AC adapter	Brand: PHIHONG Model: AA45A-59FKD I/P: 100-240Vac, 50/60Hz, 1.2A O/P: 15V=3.0A, 45.0W Power Line: USB 1.8m non-shielded without core				
3	RJ45	2m non-shielded without core				

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## 1.1.6 Channel List

Frequenc	y band (MHz)	2400~	2483.5
802.11 b / g / n HT2	0 / ax HE20 / be EHT20	802.11n HT40 / ax	( HE40 / be EHT40
Channel	Channel Frequency(MHz)		Frequency(MHz)
1	2412	3	2422
2	2417	4	2427
3	2422	5	2432
4	2427	6	2437
5	2432	7	2442
6	2437	8	2447
7	2442	9	2452
8	2447		
9	2452		
10	2457		
11	2462		

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## 1.2 Local Support Equipment List

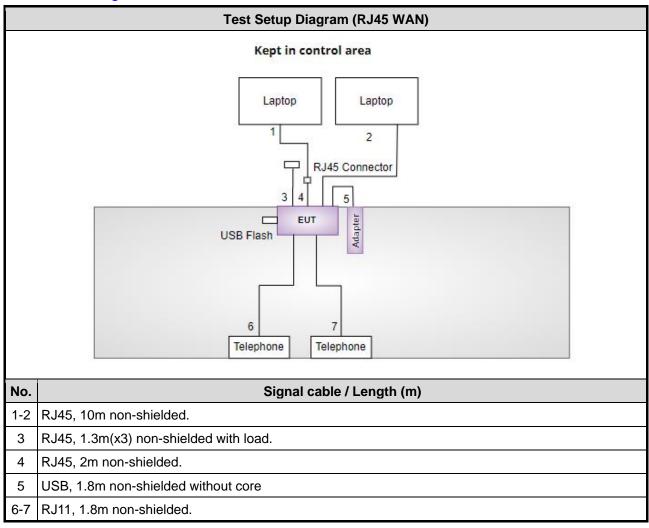
		Sı	ipport Equipment	List	
No.	Equipment	Brand	Model	FCC ID	Remarks
Non-	beamforming mod	le - RJ45 WAN			
1	Laptop	DELL	Latitude 5400	DoC	
2	Laptop	DELL	Latitude 5400	DoC	
3	USB Flash	Transcend(USB 3.0)	JetFlash 700		
4	RJ45 Connector	ICC			
5	RJ45 Load	ICC			
6	Laptop	DELL	Latitude 3440	DoC	Beamforming mode
7	WiFi 7 10G Router	Adtran	SDG-8733v		Beamforming mode (Provided by applicant)
8	Telephone	ISITO	IS-333		
9	Telephone	ISITO	IS-333		
Non-	beamforming mod	le - SFP WAN			
1	Laptop	DELL	Latitude 5400	DoC	
2	USB Flash	Transcend(USB 3.0)	JetFlash 700		
3	RJ45 Connector	ICC			
4	RJ45 Load	ICC			
5	Fiber module	MikroTik	S+RJ10		Provided by applicant
6	Laptop	DELL	Latitude 3440	DoC	Beamforming mode
7	WiFi 7 10G Router	Adtran	SDG-8733		Beamforming mode (Provided by applicant)
8	Telephone	ISITO	IS-333		
9	Telephone	ISITO	IS-333		

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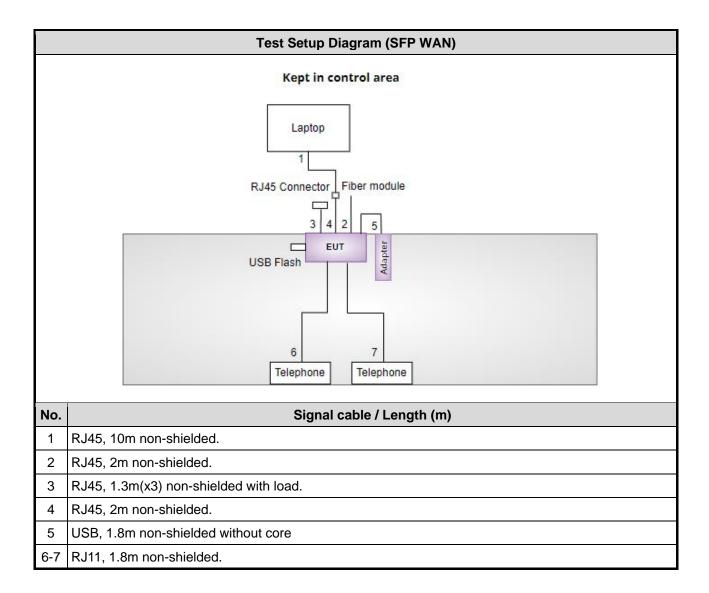
## 1.3 Test Setup Chart

### Non-beamforming mode



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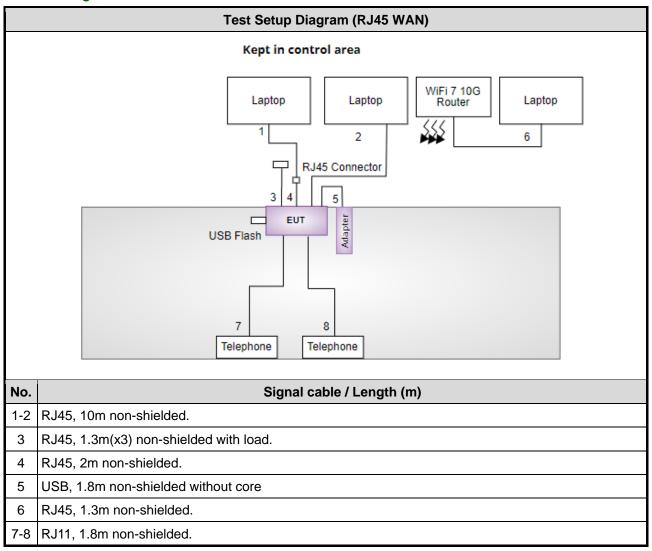




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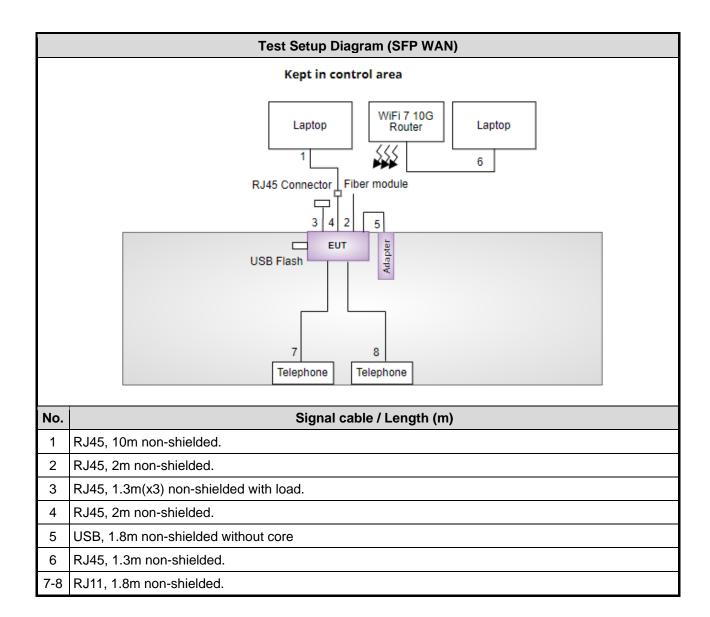


#### Beamforming mode



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## 1.4 The Equipment List

Test Item	Radiated Emission				
Test Site	966 chamber1 / (03C	H01-WS)			
Tested Date	Jun. 03 ~ Jun. 07, 202	24			
Instrument	Brand	Model No.	Serial No.	Calibration Date	Calibration Until
Receiver	R&S	ESR3	101657	Mar. 05, 2024	Mar. 04, 2025
Spectrum Analyzer	R&S	FSV40	101498	Nov. 23, 2023	Nov. 22, 2024
Loop Antenna	R&S	HFH2-Z2	100330	Oct. 31, 2023	Oct. 30, 2024
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jul. 31, 2023	Jul. 30, 2024
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Nov. 27, 2023	Nov. 26, 2024
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Oct. 30, 2023	Oct. 29, 2024
Preamplifier	EMC	EMC02325	980225	Jun. 28, 2023	Jun. 27, 2024
Preamplifier	EMC	EMC118A45SE	980898	Jul. 14, 2023	Jul. 13, 2024
Preamplifier	EMC	EMC184045SE	980903	Jul. 17, 2023	Jul. 16, 2024
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 03, 2023	Oct. 02, 2024
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Oct. 03, 2023	Oct. 02, 2024
LF cable 11M	EMC	EMCCFD400-NW-N W-11000	200801	Oct. 03, 2023	Oct. 02, 2024
LF cable 1M	EMC	EMCCFD400-NM-N M-1000	160502	Oct. 03, 2023	Oct. 02, 2024
RF Cable	EMC	EMC104-35M-35M- 8000	210920	Oct. 03, 2023	Oct. 02, 2024
RF Cable	EMC	EMC104-35M-35M- 3000	210922	Oct. 03, 2023	Oct. 02, 2024
Attenuator	Pasternack	PE7005-10	10-1	Oct. 05, 2023	Oct. 04, 2024
HIGHPASS FILTER 3.1-18G	WHK	WHK3.1/18G-10SS	39	Oct. 05, 2023	Oct. 04, 2024
Measurement Software	AUDIX	e3	6.120210g	NA	NA

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Test Item	Conducted Emission	Conducted Emission							
Test Site	Conduction room 1 / (	Conduction room 1 / (CO01-WS)							
Tested Date	Jun. 11, 2024								
Instrument	Brand	Model No.	Serial No.	Calibration Date	Calibration Until				
Receiver	R&S	ESR3	101658	Feb. 23, 2024	Feb. 22, 2025				
LISN	R&S	ENV216	101579	May 09, 2024	May 08, 2025				
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 11, 2023	Oct. 10, 2024				
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127667	Jan. 10, 2024	Jan. 09, 2025				
50 ohm terminal (Support Unit)	NA	50	01	Jun. 14, 2023	Jun. 13, 2024				
Measurement Software AUDIX e3 6.120210k NA NA									
Note: Calibration Inter	val of instruments liste	d above is one year.			•				

### 1.5 Test Standards

47 CFR FCC Part 15.247 ANSI C63.10-2013

### 1.6 Reference Guidance

FCC KDB 558074 D01 15.247 Meas Guidance v05r02 FCC KDB 662911 D01 Multiple Transmitter Output v02r01

## 1.7 Deviation from Test Standard and Measurement Procedure

None

## 1.8 Measurement Uncertainty

The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)).

Measurement Uncertainty				
Parameters	Uncertainty			
Bandwidth	±34.130 Hz			
Conducted power	±0.808 dB			
Power density	±0.583 dB			
Conducted emission	±2.715 dB			
AC conducted emission	±2.92 dB			
Unwanted Emission ≤ 1GHz	±3.41 dB			
Unwanted Emission > 1GHz	±4.59 dB			

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## 2 Test Configuration

## 2.1 Testing Facility

Test Laboratory	International Certification Corporation
Test Site	CO01-WS, 03CH01-WS
Address of Test Site	No.3-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)

FCC Designation No.: TW2732FCC site registration No.: 181692

➤ ISED#: 10807A

➤ CAB identifier: TW2732

## 2.2 The Worst Test Modes and Channel Details

Test item	Modulation Mode	Test Frequency (MHz)	Data Rate	Test Configuration	
Non-beamforming mode					
AC Power Line Conducted Emission	11b	2437	1 Mbps	1, 2	
Unwanted Emissions ≤ 1GHz	11b	2437	1 Mbps	1, 2	
Unwanted Emissions >1GHz	11b 11g be EHT20 be EHT40	2412 / 2437 / 2462 2412 / 2437 / 2462 2412 / 2437 / 2462 2422 / 2437 / 2452	1 Mbps 6 Mbps MCS 0 MCS 0	1	
Beamforming mode					
AC Power Line Conducted Emission	be EHT20	2437	MCS 0	1, 2	
Unwanted Emissions ≤1GHz	be EHT20	2437	MCS 0	1, 2	
Unwanted Emissions >1GHz	be EHT20 be EHT40	2412 / 2437 / 2462 2422 / 2437 / 2452	MCS 0 MCS 0	1	

#### NOTE:

- Two adapters (LUCENT TRANS & PHIHONG) had been covered during the pretest and found that PHIHONG adapter was the worst case for radiated emission test and LUCENT TRANS adapter was the worst case for conducted emission test.
- 2. 4 configurations were assessed and found Model: SDG-8733v is worst of configurations with 10G RJ45 Wan port and Model: SDG-8734v is worst of configurations with 10G SFP Wan port.
- 3. The EUT had been tested by following test configurations.

Configuration 1: Model: SDG-8733v
 Configuration 2: Model: SDG-8734v

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## 3 Transmitter Test Results

## 3.1 Unwanted Emissions into Restricted Frequency Bands

### 3.1.1 Limit of Unwanted Emissions into Restricted Frequency Bands

Restricted Band Emissions Limit					
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)		
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300		
0.490~1.705	24000/F(kHz)	33.8 - 23	30		
1.705~30.0	30	29	30		
30~88	100	40	3		
88~216	150	43.5	3		
216~960	200	46	3		
Above 960	500	54	3		

#### Note 1:

Qusai-Peak value is measured for frequency below 1GHz except for 9–90 kHz, 110–490 kHz frequency band. Peak and average value are measured for frequency above 1GHz. The limit on average radio frequency emission is as above table. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit **Note 2:** 

Measurements may be performed at a distance other than what is specified provided. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor as below, Frequency at or above 30 MHz: 20 dB/decade Frequency below 30 MHz: 40 dB/decade.

### 3.1.2 Test Procedures

- Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at test table. For emissions testing at or below 1 GHz, the table height is 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height is 1.5 m
- 2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
- 3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.

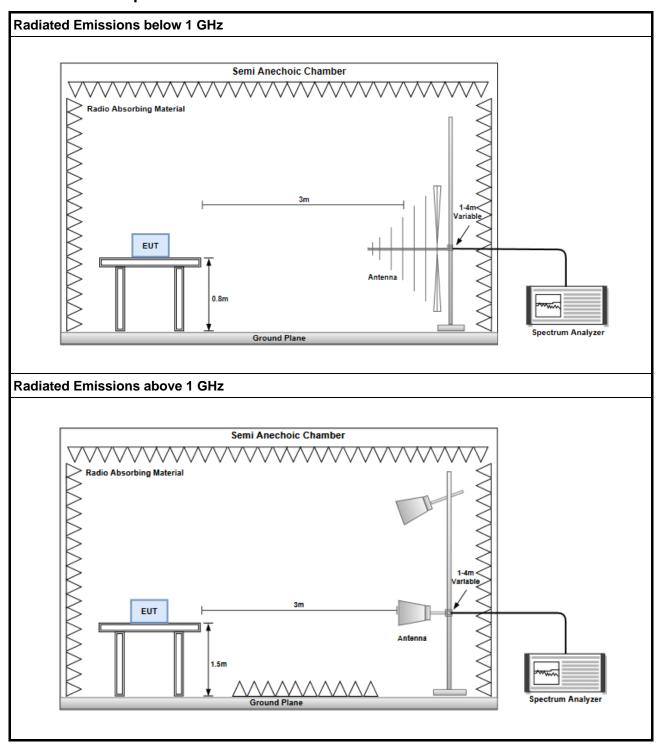
#### Note:

- 1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
- 2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
- 3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above 1GHz.

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## 3.1.3 Test Setup



## 3.1.4 Test Results

Refer to Appendix A.

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### 3.2 AC Power Line Conducted Emissions

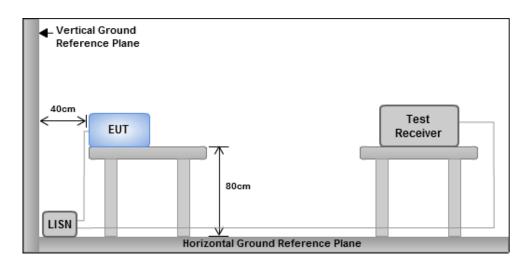
#### 3.2.1 Limit of AC Power Line Conducted Emissions

Conducted Emissions Limit				
Frequency Emission (MHz)	Quasi-Peak	Average		
0.15-0.5	66 - 56 *	56 - 46 *		
0.5-5	56	46		
5-30	60	50		
Note 1: * Decreases with the logarithm of the frequency.				

#### 3.2.2 Test Procedures

- 1. The device is placed on a test table, raised 80 cm above the reference ground plane. The vertical conducting plane is located 40 cm to the rear of the device.
- 2. The device is connected to line impedance stabilization network (LISN) and other accessories are connected to other LISN. Measured levels of AC power line conducted emission are across the 50  $\Omega$  LISN port.
- 3. AC conducted emission measurements is made over frequency range from 150 kHz to 30 MHz.
- 4. This measurement was performed with AC 120V / 60Hz.

#### 3.2.3 Test Setup



Note: 1. Support units were connected to second LISN.

Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

#### 3.2.4 Test Results

Refer to Appendix B.

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## 4 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corporation (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website <a href="http://www.icertifi.com.tw">http://www.icertifi.com.tw</a>.

#### Linkou

Tel: 886-2-2601-1640 No.30-2, Ding Fwu Tsuen, Lin Kou District, New Taipei City, Taiwan (R.O.C.)

#### Kwei Shan

Tel: 886-3-271-8666
No.3-1, Lane 6, Wen San 3rd
St., Kwei Shan Dist., Tao Yuan
City 33381, Taiwan (R.O.C.)
No.2-1, Lane 6, Wen San 3rd
St., Kwei Shan Dist., Tao Yuan
City 33381, Taiwan (R.O.C.)

#### Kwei Shan Site II

Tel: 886-3-271-8640 No.14-1, Lane 19, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)

If you have any suggestion, please feel free to contact us as below information.

Tel: 886-3-271-8666 Fax: 886-3-318-0345

Email: ICC\_Service@icertifi.com.tw

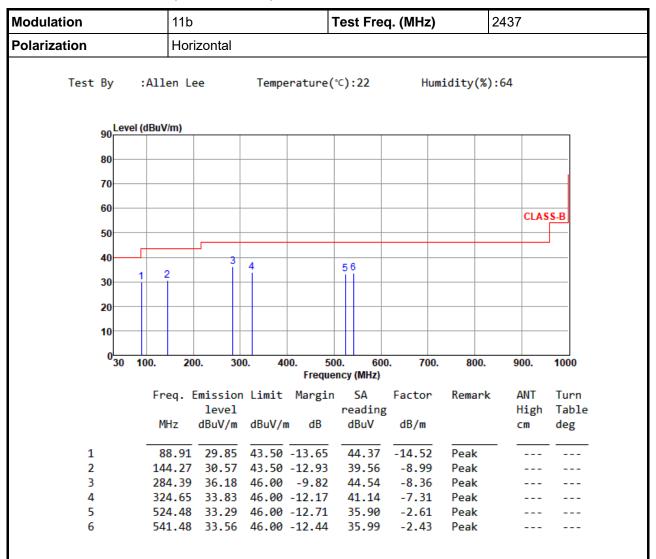
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### Non-beamforming mode

Configuration 1: Model: SDG-8733v Unwanted Emissions (Below 1GHz)



Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

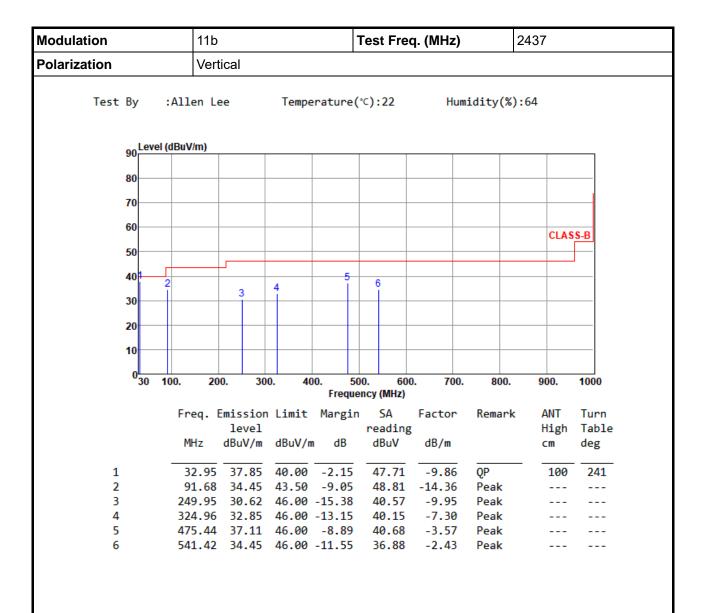
\*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

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Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor, cable loss and amplifier gain

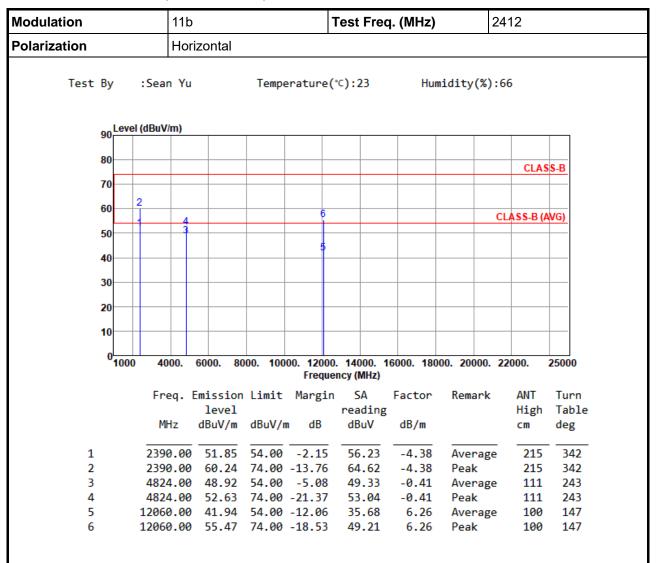
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

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## **Unwanted Emission (Above 1GHz) for 11b**



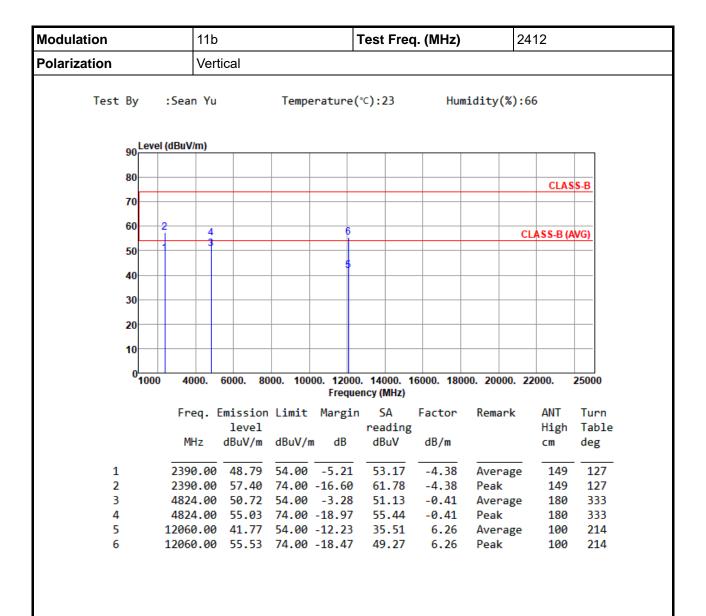
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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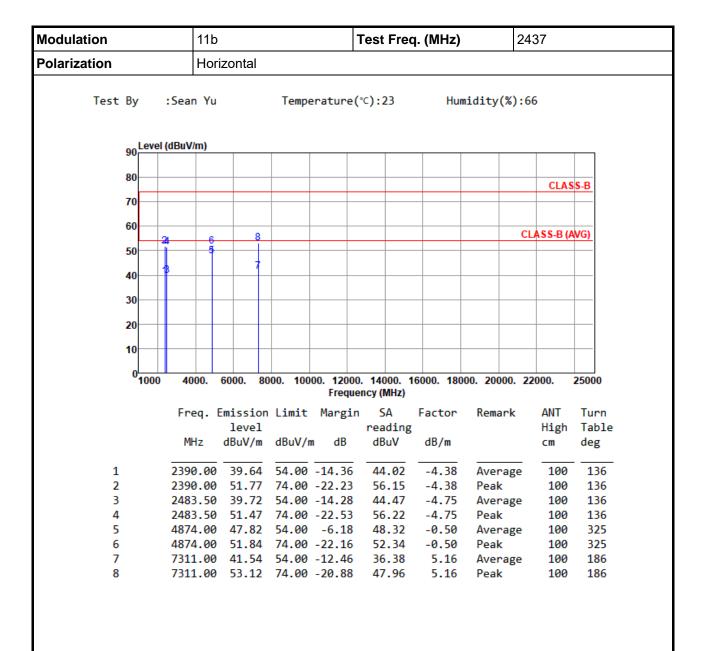




Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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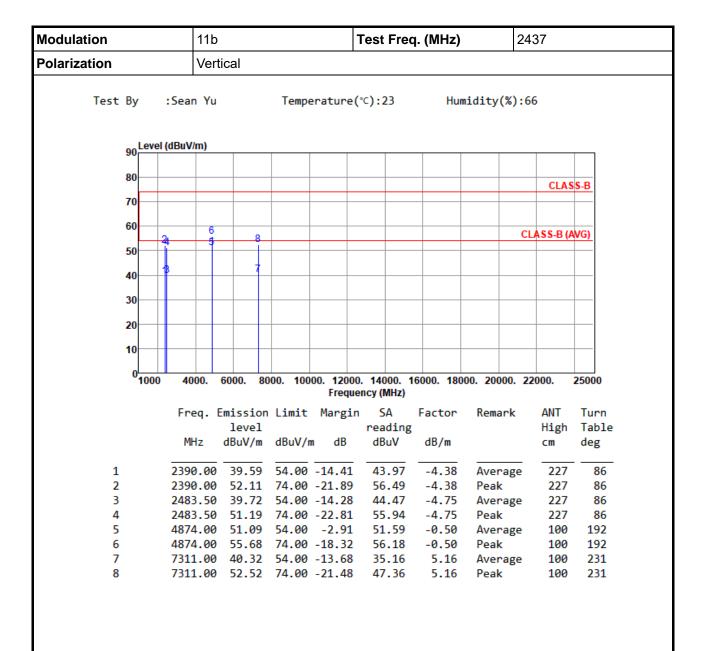




Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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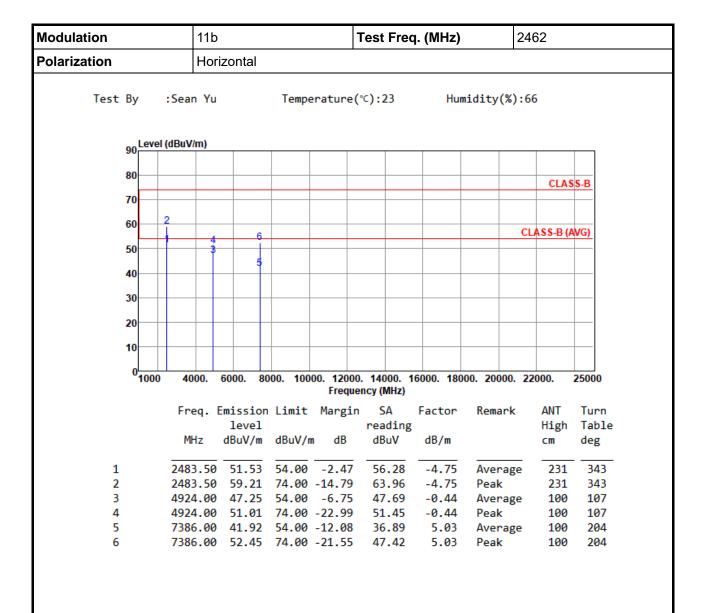




Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

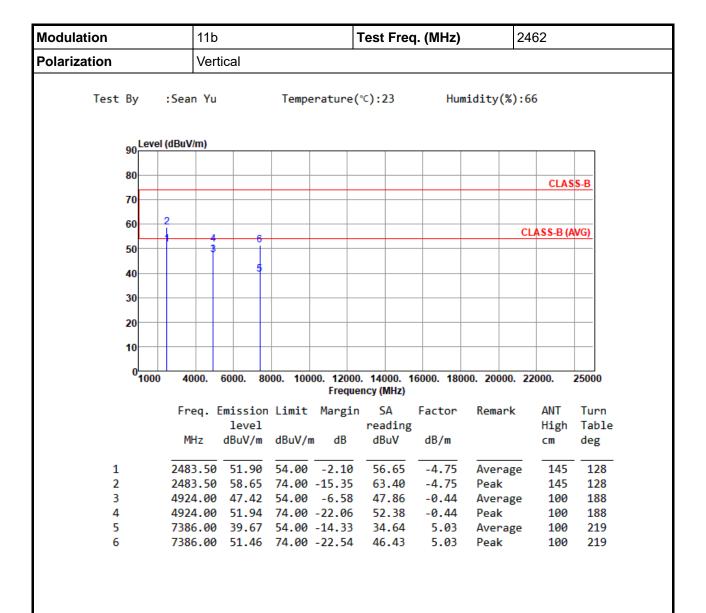
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Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



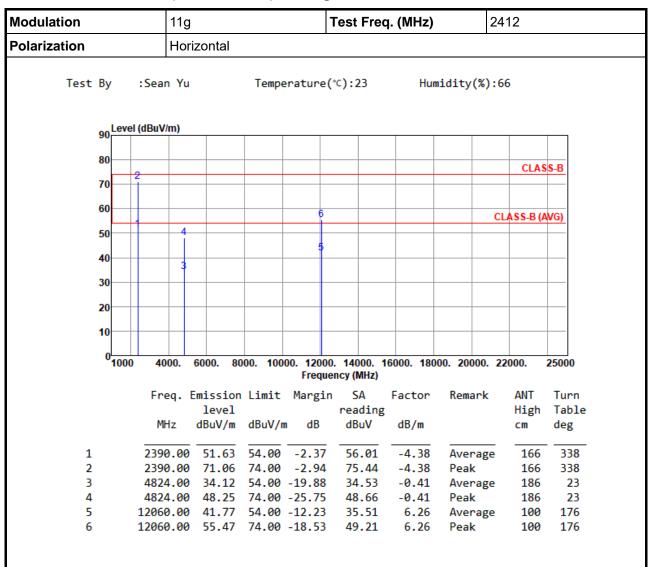


Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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## **Unwanted Emissions (Above 1GHz) for 11g**



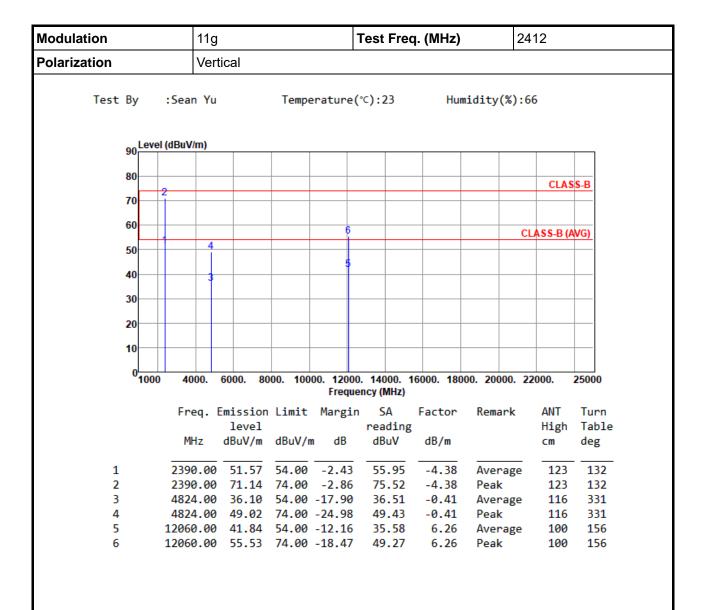
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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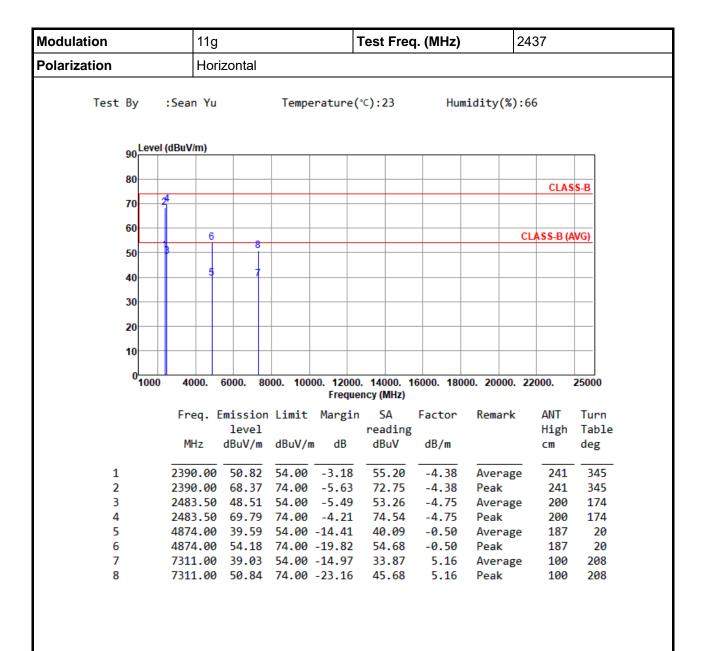




Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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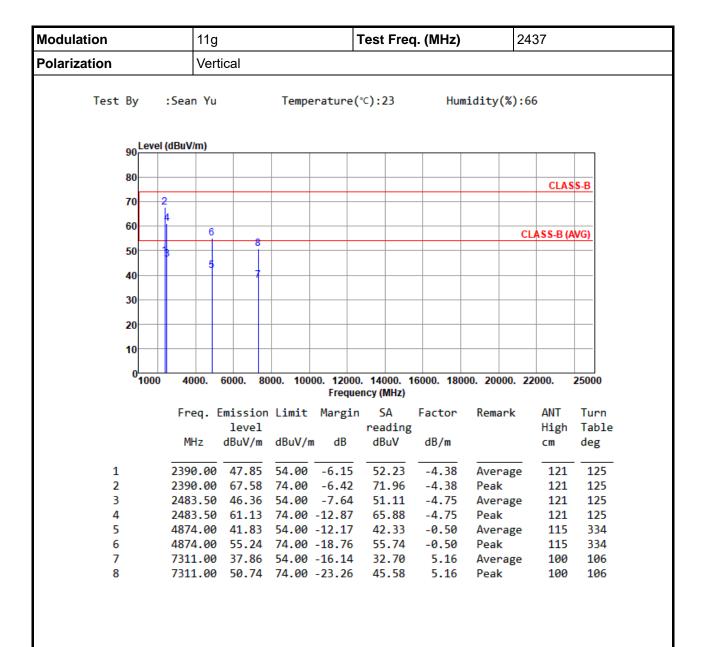




Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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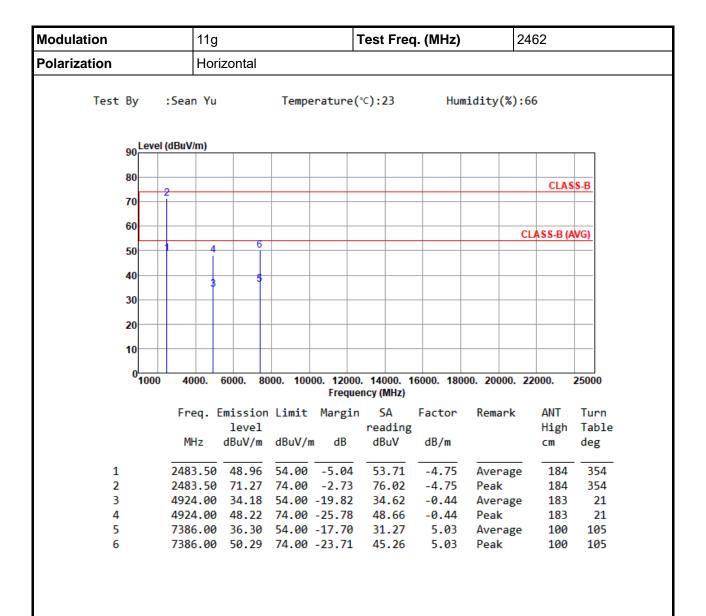




Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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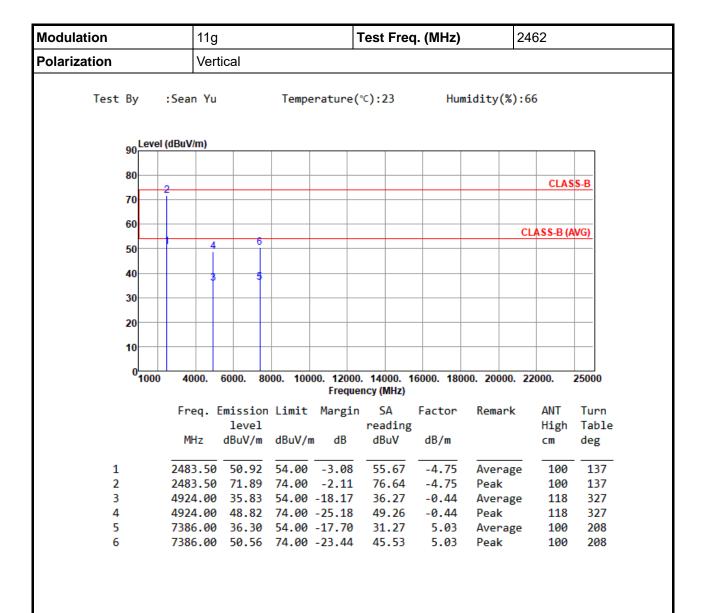




Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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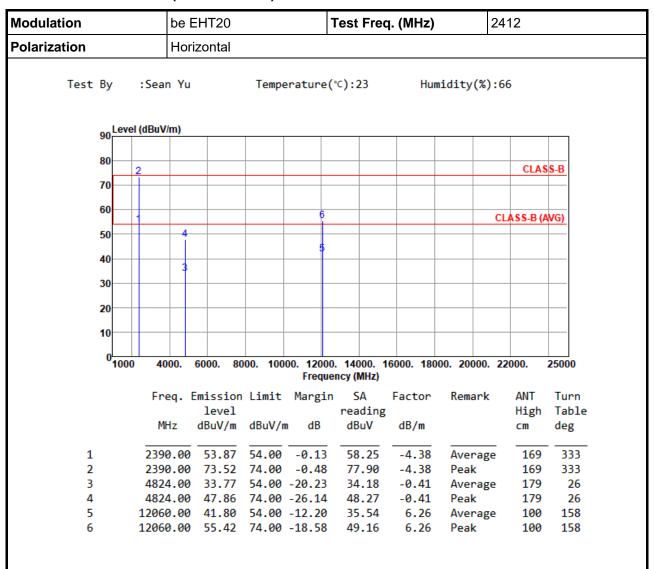


Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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## **Unwanted Emissions (Above 1GHz) for be EHT20**



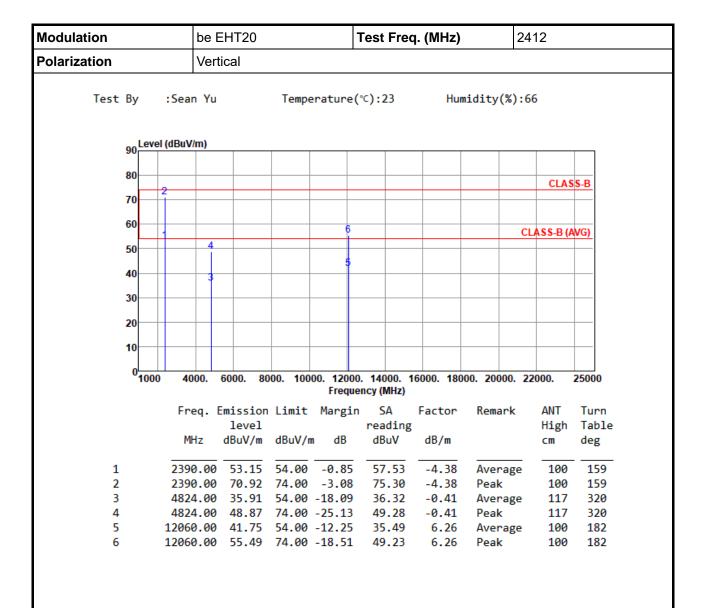
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

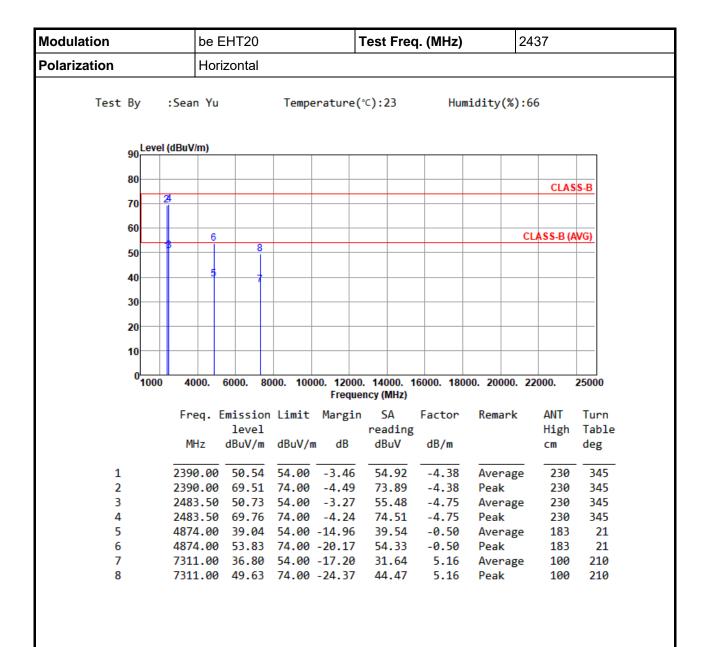
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Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

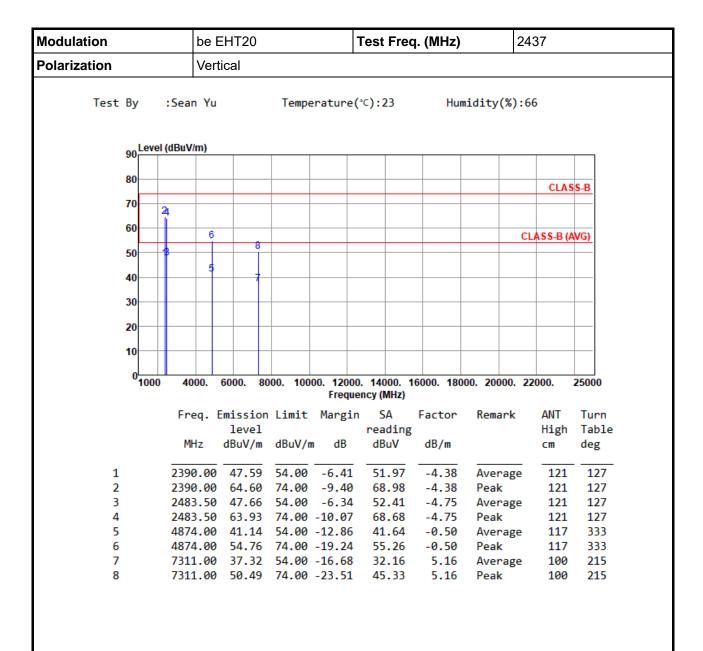




Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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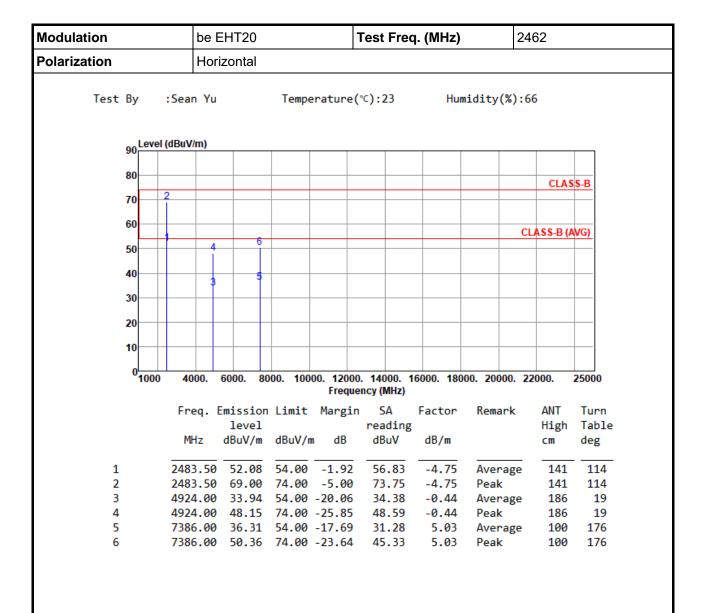




Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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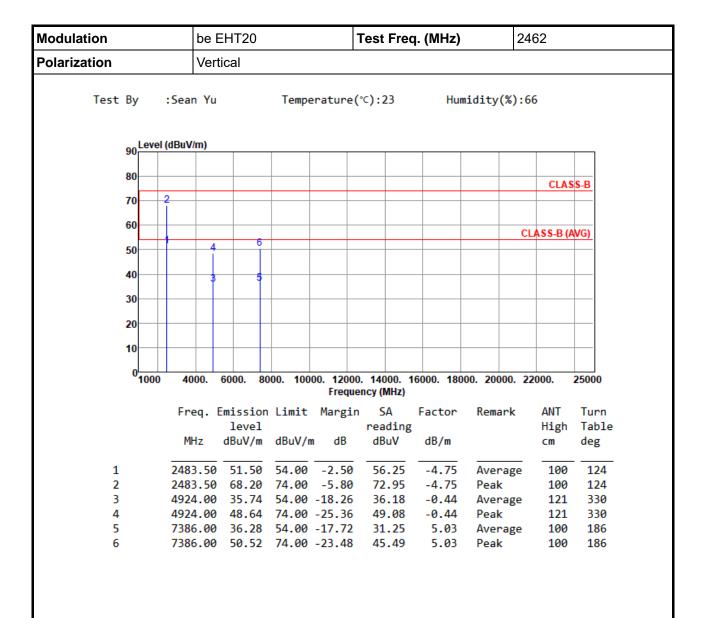




Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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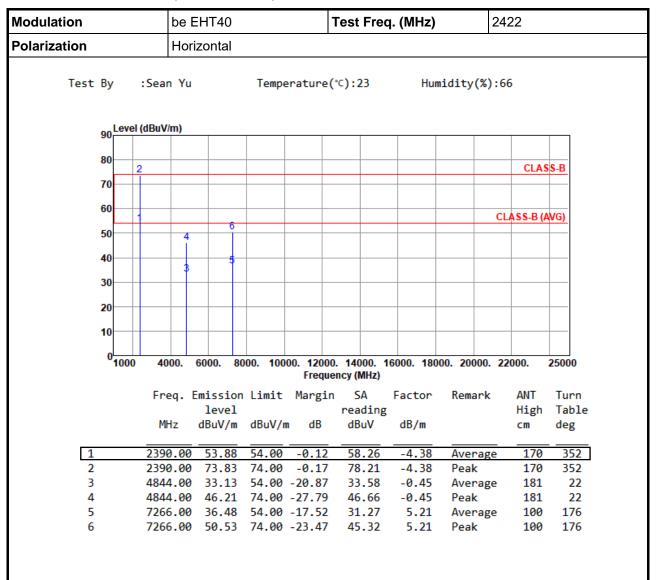


Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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# Unwanted Emissions (Above 1GHz) for be EHT40



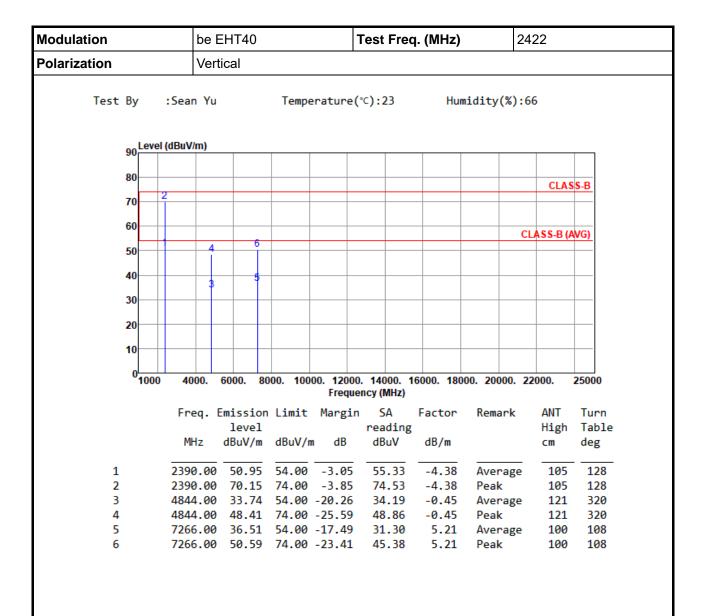
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor, cable loss and amplifier gain

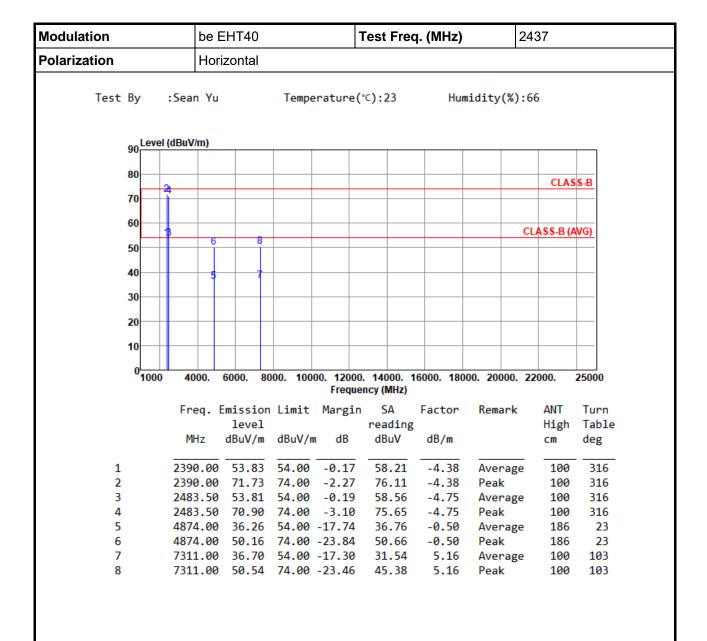
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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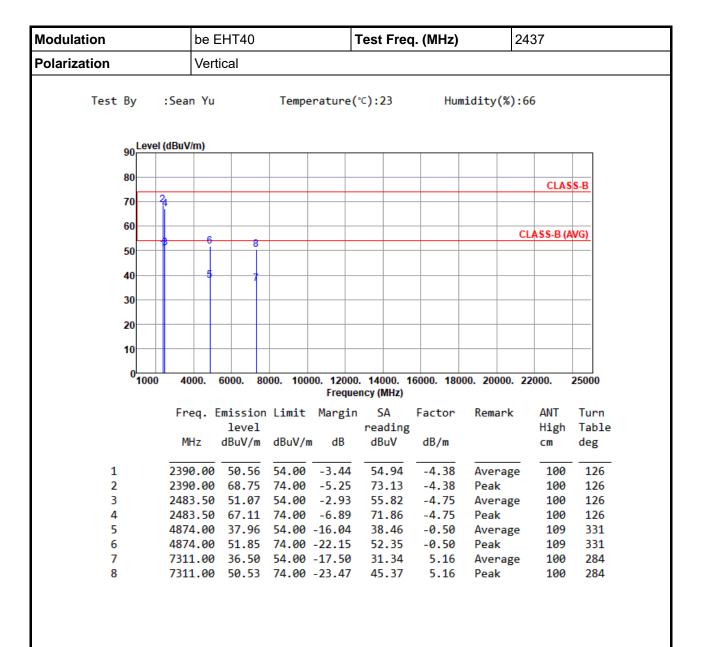




Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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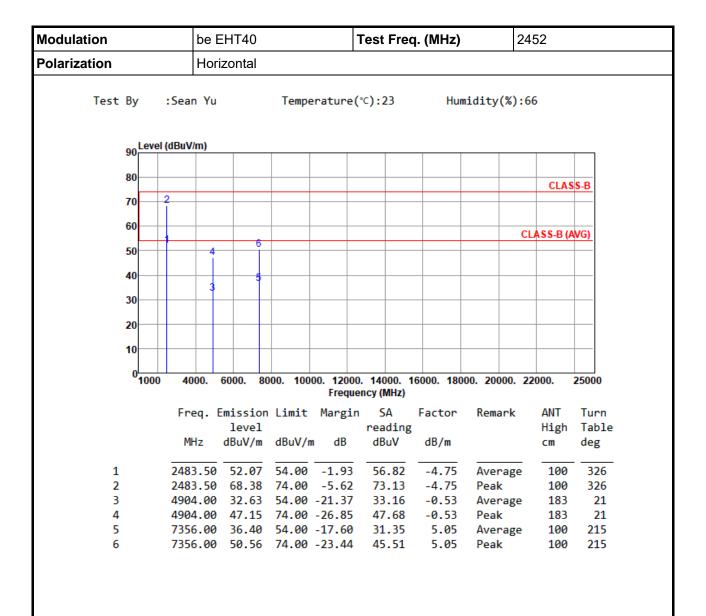




Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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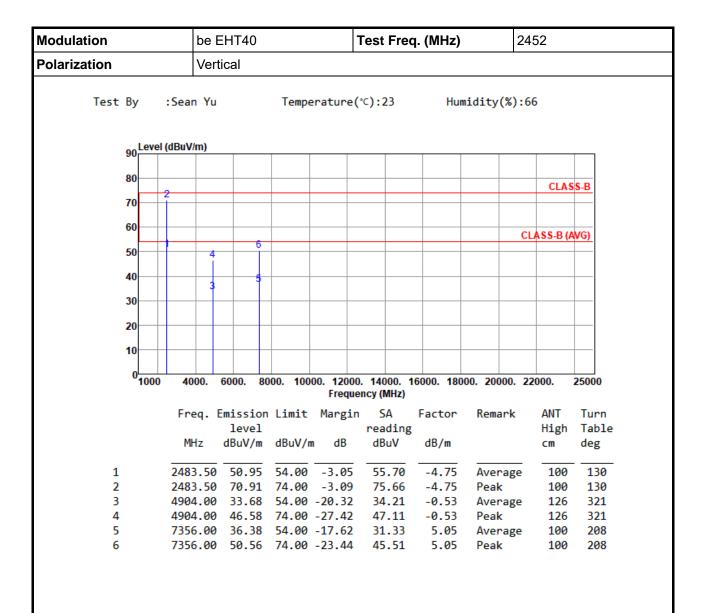




Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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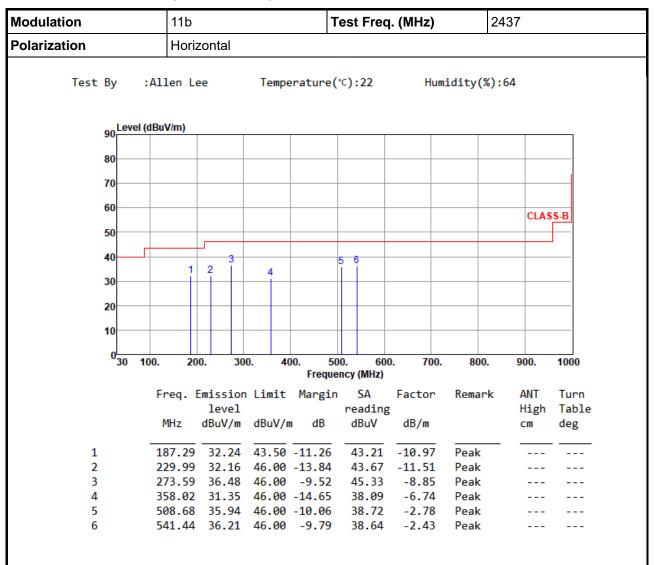


Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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## Configuration 2: Model: SDG-8734v Unwanted Emissions (Below 1GHz)



Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

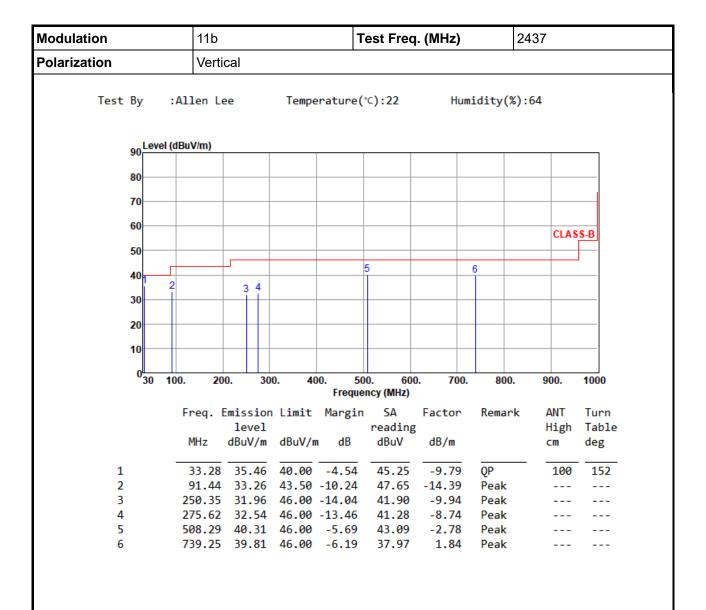
\*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

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\*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

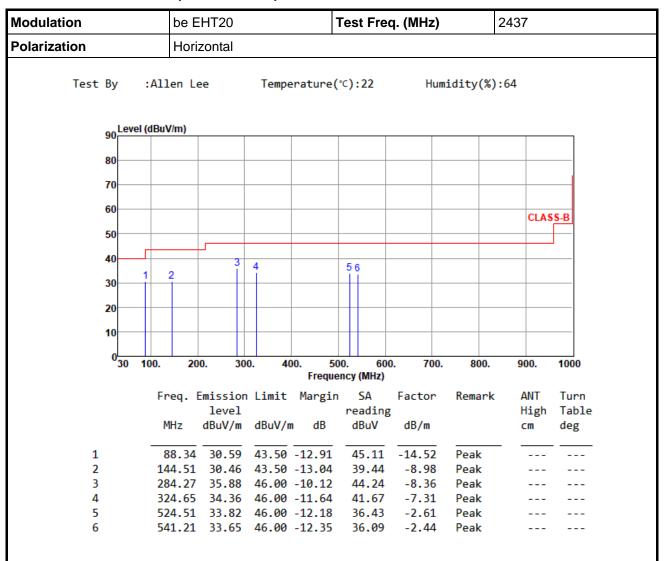
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

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Beamforming mode

Configuration 1: Model: SDG-8733v Unwanted Emissions (Below 1GHz)



Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

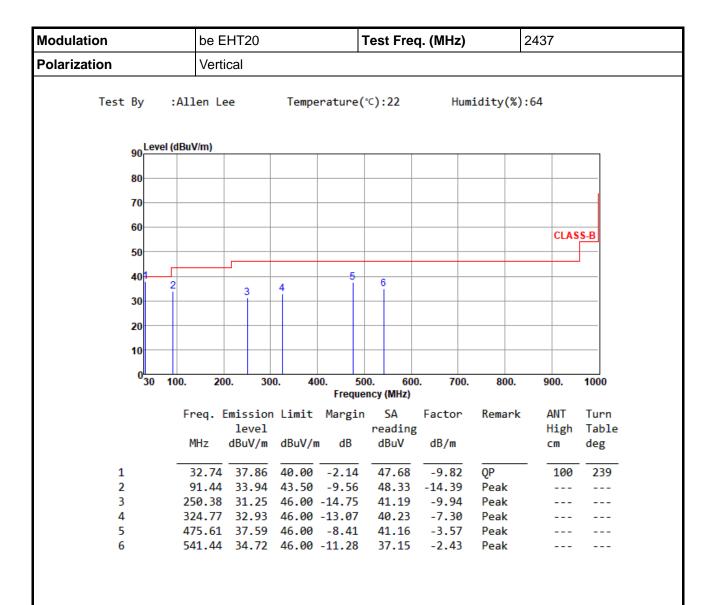
\*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

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\*Factor includes antenna factor , cable loss and amplifier gain

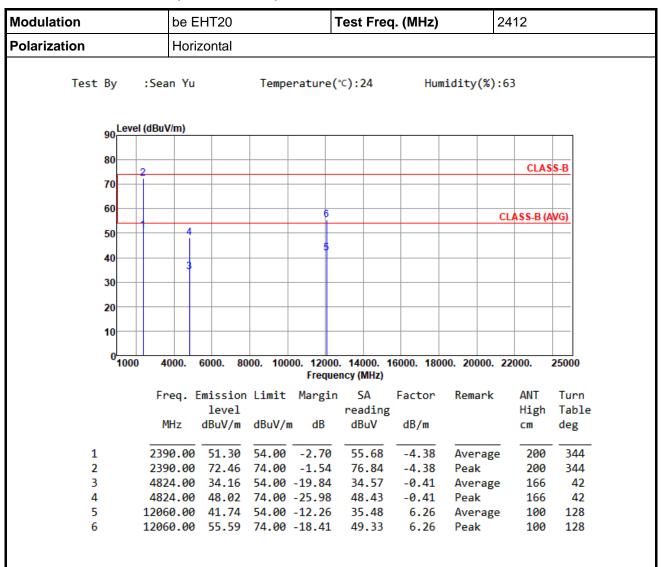
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

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# **Unwanted Emissions (Above 1GHz) for be EHT20**



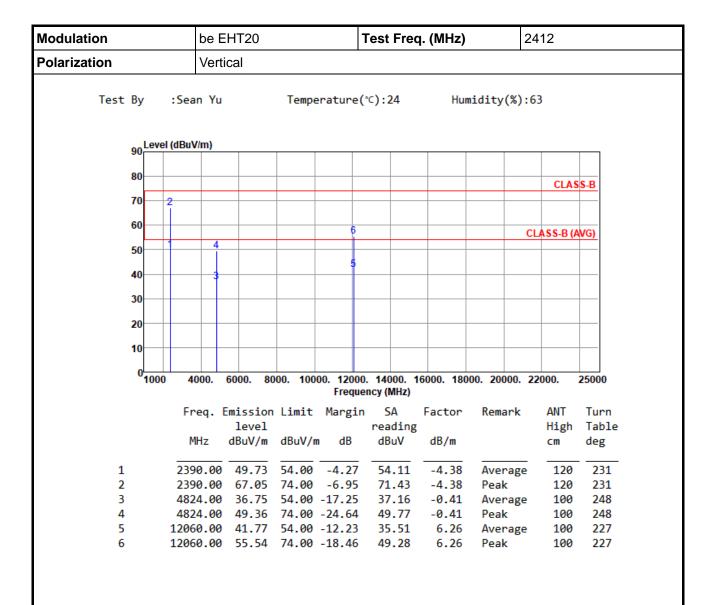
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

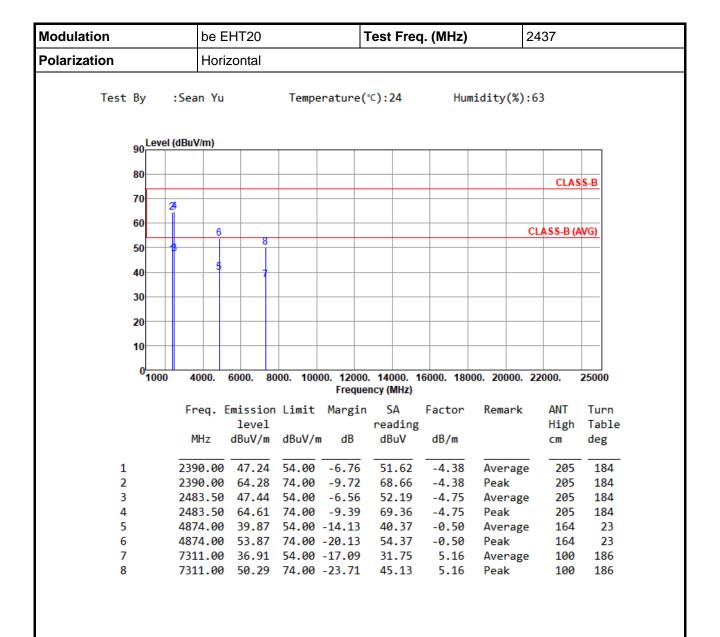
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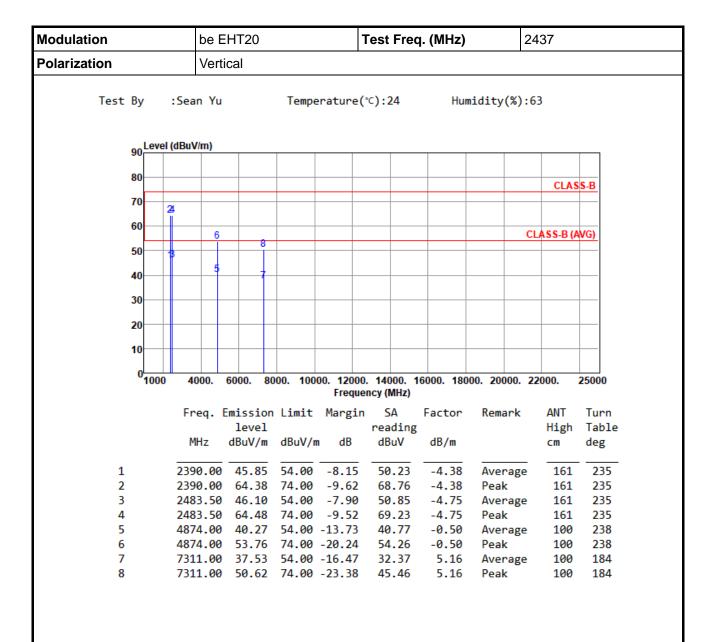
\*Factor includes antenna factor, cable loss and amplifier gain





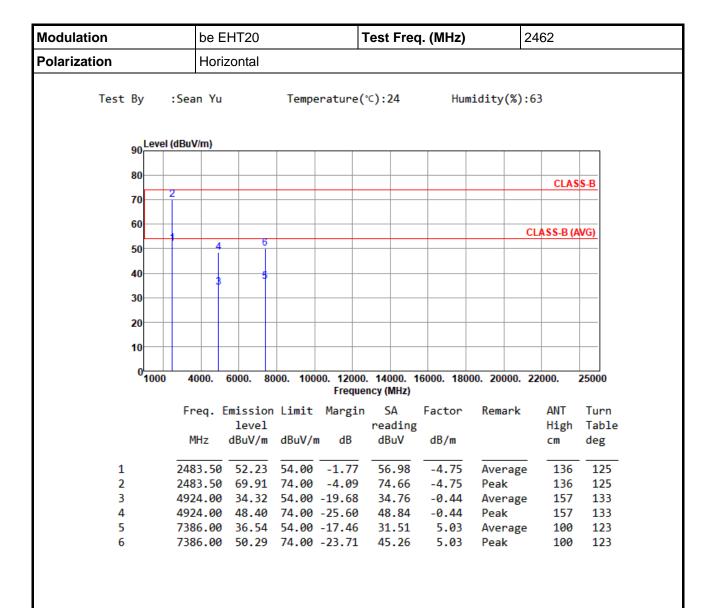
\*Factor includes antenna factor, cable loss and amplifier gain





\*Factor includes antenna factor, cable loss and amplifier gain



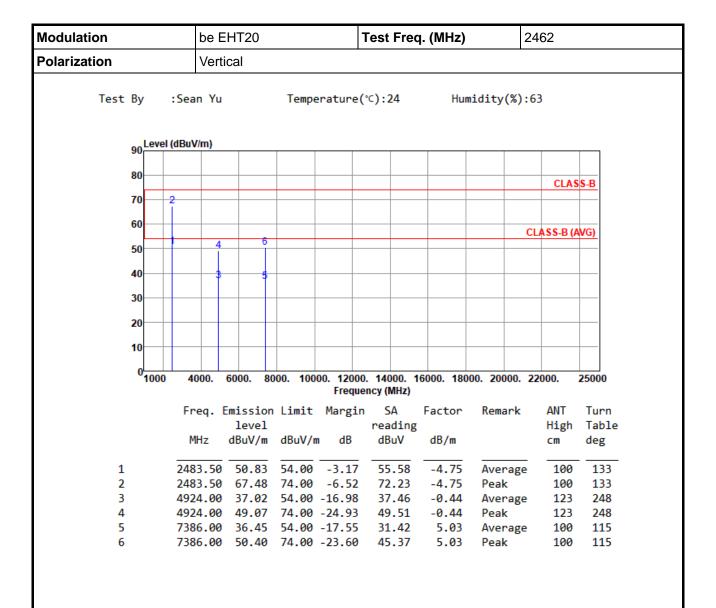


\*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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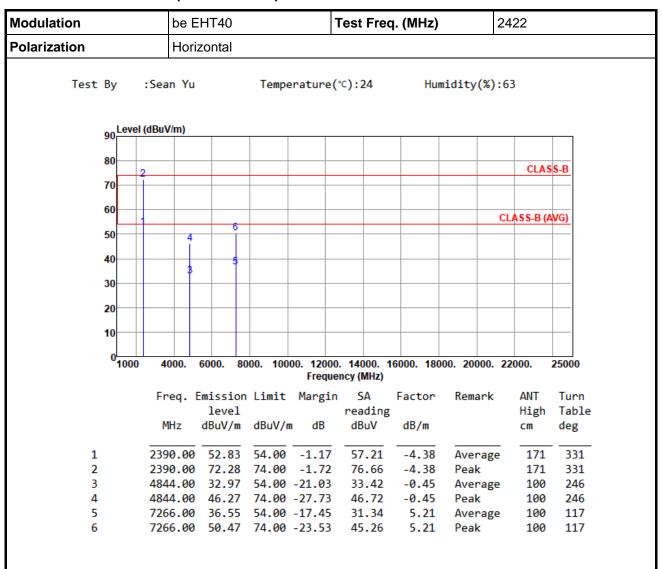




\*Factor includes antenna factor, cable loss and amplifier gain



### **Unwanted Emissions (Above 1GHz) for be EHT40**



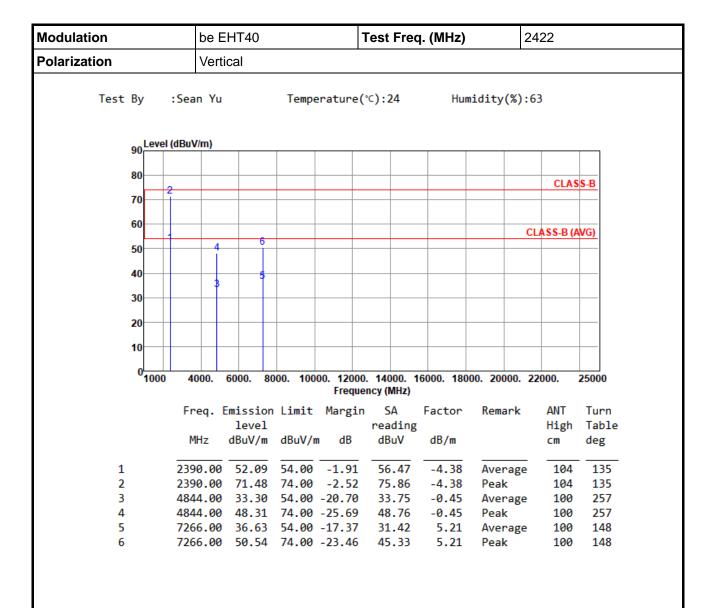
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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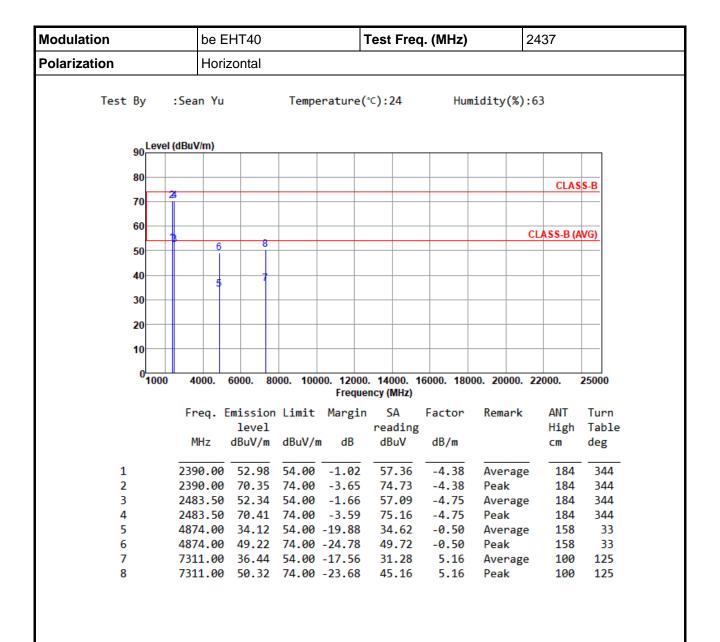


\*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

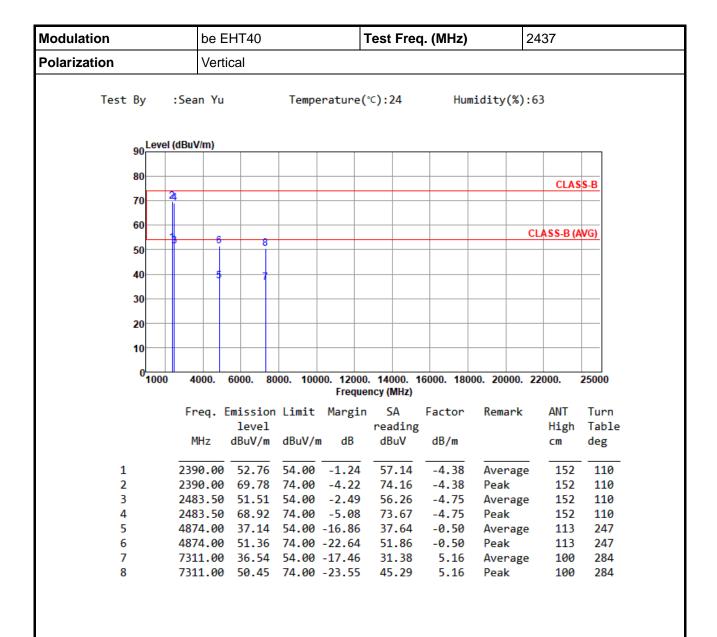
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\*Factor includes antenna factor, cable loss and amplifier gain



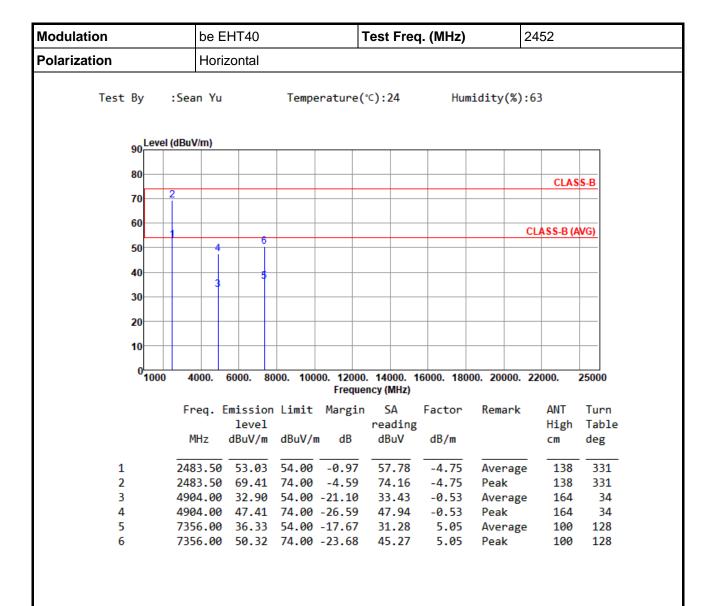


\*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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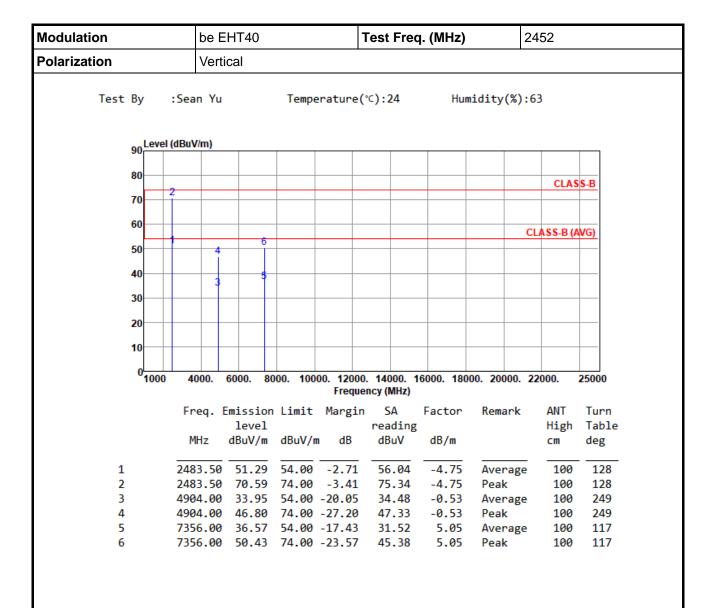


\*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) - Limit (dBuV/m).

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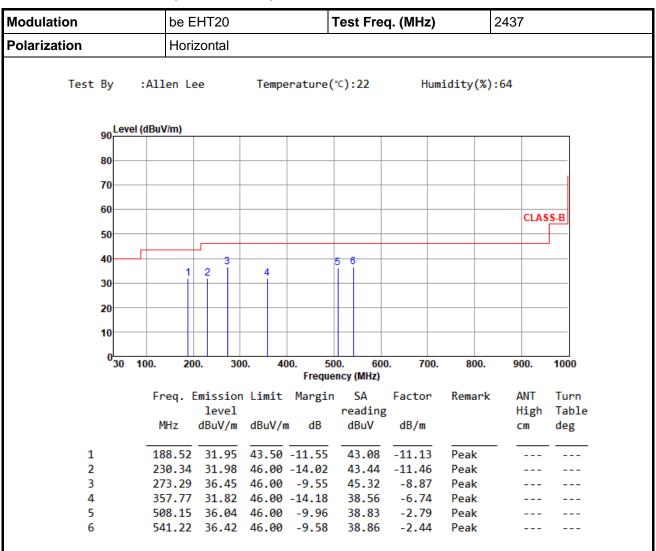
\*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) - Limit (dBuV/m).

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### Configuration 2: Model: SDG-8734v Unwanted Emissions (Below 1GHz)



Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

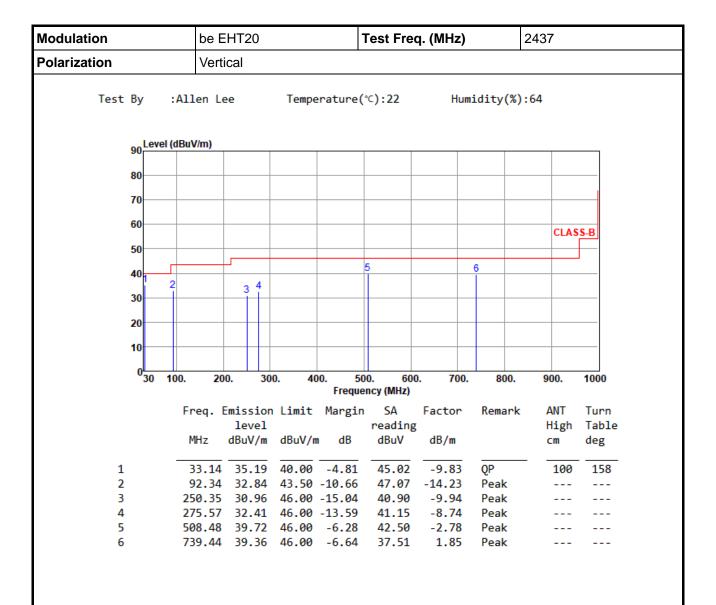
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

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\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

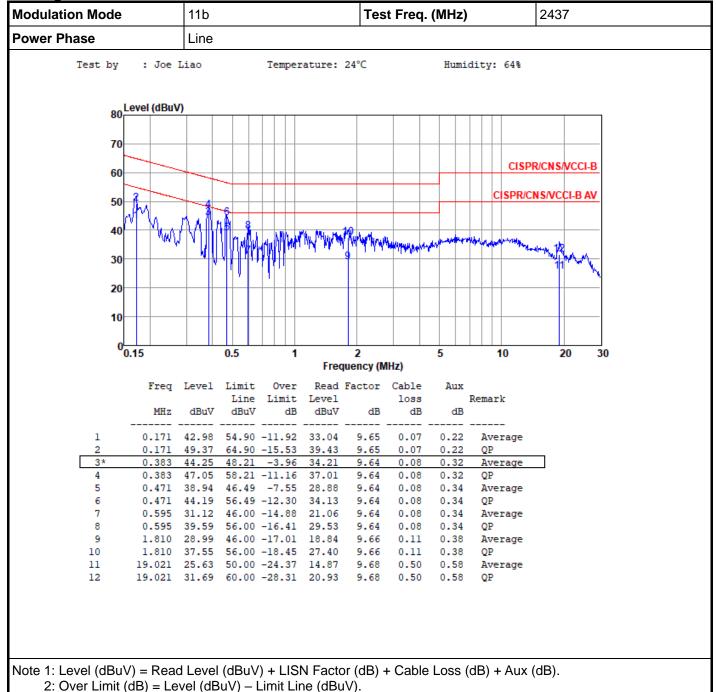
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

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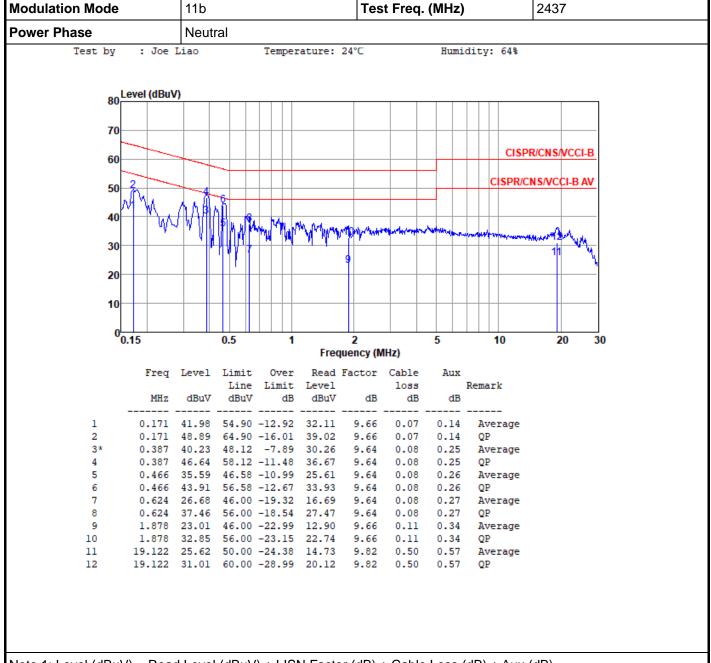
### Non-beamforming mode

Configuration 1: Model: SDG-8733v



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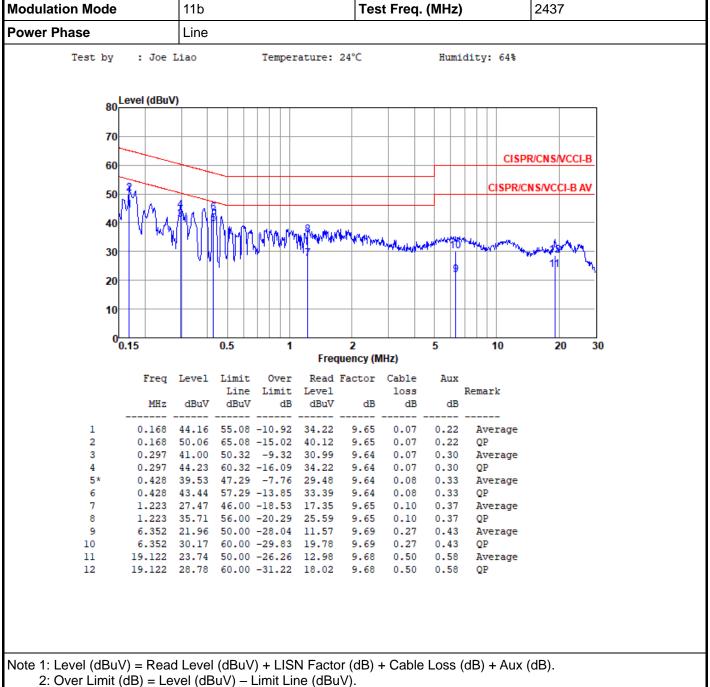


Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).

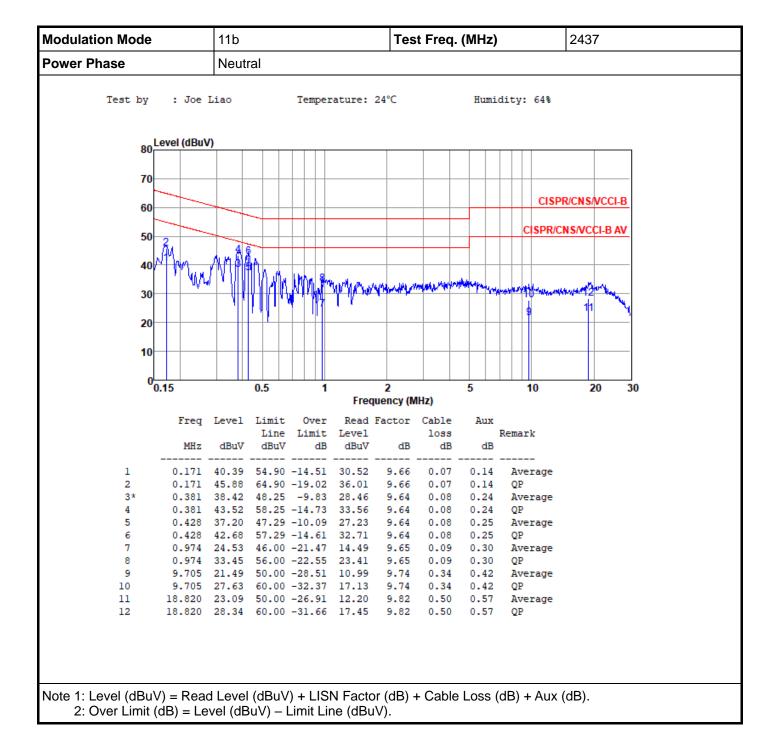
2: Over Limit (dB) = Level (dBuV) - Limit Line (dBuV).



Configuration 2: Model: SDG-8734v





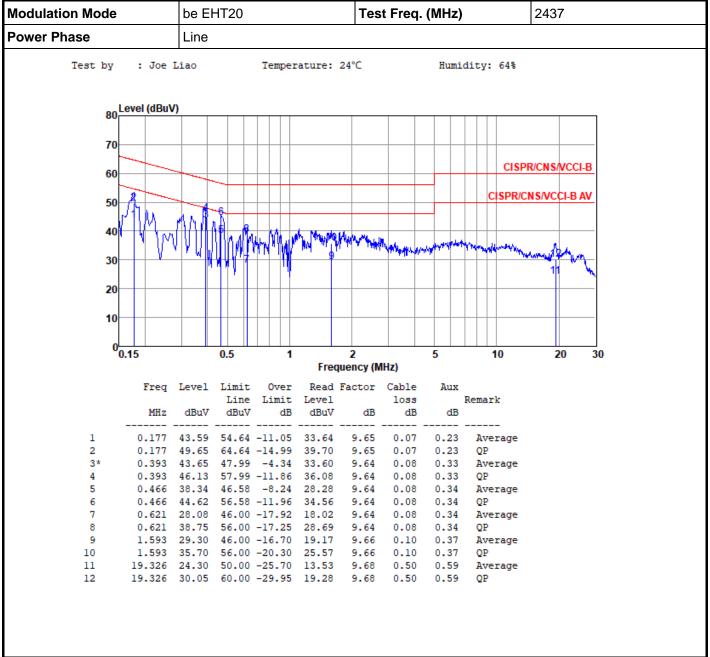


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### Beamforming mode

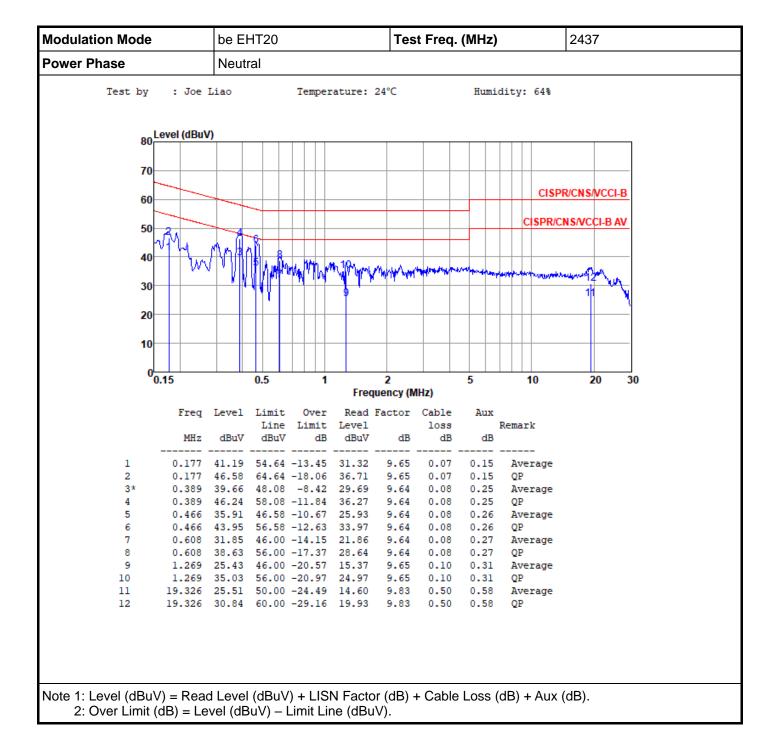
Configuration 1: Model: SDG-8733v



Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).

2: Over Limit (dB) = Level (dBuV) - Limit Line (dBuV).

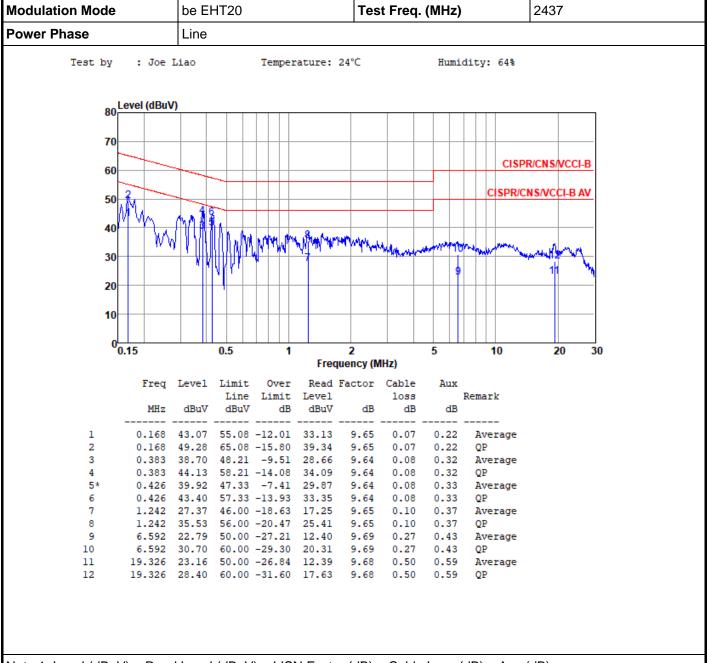




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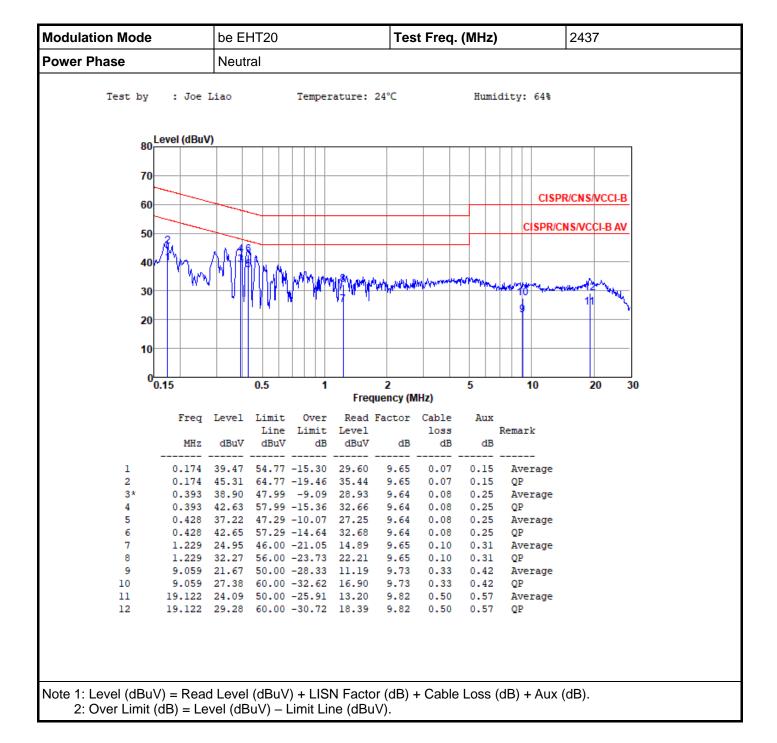
#### Configuration 2: Model: SDG-8734v



Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).

2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).





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