

Test report No: 4915190.51

TEST REPORT

Radio Spectrum Matters (RF)

Identification of item tested	Cync Direct Connect Strip
Trademark	GE
Model and /or type reference	CSTR16CBDM, CSTR32CBDM
FCC ID	PUU-STR-CBDM
Features	120Vac, 60Hz
Applicant's name / address	Savant Technologies LLC dba GE Lighting, a Savant company 1975 Noble Road, Cleveland, Ohio, United States, 44112
Test method requested, standard	FCC CFR Title 47 Part15 Subpart C Section 15.247; KDB558074 D01v05r02;
Verdict Summary	COMPLIANCE
Tested by (name & signature)	Johnny Bo
Approved by (name & signature)	Tim Yan Tim/an
Date of issue	2024-04-08
Report template No	TRF_EMC 2017-06- FCC_Part15C_247



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GENERAL CONDITIONS

- 1. This report is only referred to the item that has undergone the test.
- 2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or Competent Authorities.
- 3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA.
- 4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA.
- 5. This report will not be used for social proof function in China market.

UNCERTAINTY

For all measurements where guidance for the calculation of the instrumentation uncertainty of a measurement is specified in EN 55016-4-2 (CISPR 16-4-2), EN/IEC 61000-4 series or a product standard, the measurement instrumentation uncertainty has been calculated and applied in accordance with these standards.

Uncertainties have been calculated according to the DEKRA internal document. The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

ENVIRONMENTAL CONDITIONS

The climatic conditions during the tests are within the limits specified by the manufacturer for the operation of the EUT and the test equipment. The climatic conditions during the tests were within the following limits:

Ambient temperature	-40 °C – 105 °C
Relative Humidity air	30% - 60%
Atmospheric pressure	86 kPa – 106 kPa

If explicitly required in the basic standard or applied product / product family standard the climatic values are recorded and documented separately in this test report.

POSSIBLE TEST CASE VERDICTS

Test case does not apply to test object	N/A
Test object does meet requirement	P (Pass) / PASS
Test object does not meet requirement	F (Fail) / FAIL
Not tested	N/T



DEFINITION OF SYMBOLS USED IN THIS TEST REPORT

Indicates that the listed condition, standard or equipment is applicable for this report/test/EUT.				
Indicates that the listed condition, standard or equipment is not applicable for this report/test/EUT.				
Decimal separator used in this report 🛛 Comma (,) 🔲 Point (.)				

ABBREVIATIONS

For the purposes of the present document, the following abbreviations apply:

EUT	:	Equipment Under Test
QP	:	Quasi-Peak
CAV	:	CISPR Average
AV	:	Average
CDN	:	Coupling Decoupling Network
SAC	:	Semi-Anechoic Chamber
OATS	:	Open Area Test Site
BW	:	Bandwidth
AM	:	Amplitude Modulation
PM	:	Pulse Modulation
HCP	:	Horizontal Coupling Plane
VCP	:	Vertical Coupling Plane
UN	:	Nominal voltage
Тх	:	Transmitter
Rx	:	Receiver
N/A	:	Not Applicable
N/M	:	Not Measured

DOCUMENT HISTORY

Report nr.	Date	Description
4915190.51	2024-04-08	First release.

REMARKS AND COMMENTS

The equipment under test (EUT) does meet the essential requirements of the stated standard(s)/test(s).



1 **GENERAL INFORMATION**

1.1 General Description of the Item(s)

Description of the item:	Cync Direct Connect Strip
Trademark:	GE
Model / Type number	CSTR16CBDM, CSTR32CBDM
FCC ID:	PUU-STR-CBDM
Hardware	N/A
Software:	N/A
Firmware:	N/A
Ratings	120Vac, 60Hz
Manufacturer	Savant Technologies LLC, dba GE Lighting, a Savant company
	1975 Noble Road, Cleveland, OH, 44112-1719, US
Factory 1	Foshan Lighting Chanchang Optoelectronics Co., Ltd.
	Hecheng Street, Cangjiang Industrial Park, Gaoming District, Foshan
	City, Guangdong Province, P. R. China
Factory 2	Foshan Electrical And Lighting Co.,Ltd.Gaoming Fitting Branch
	Fuwan Industrial Zone, Hecheng Street, Gaoming District, Foshan,
	Guangdong, China
Factory 3	Foshan Electrical and Lighting Co., Ltd. Gaoming Branch
	No.19, Hengchang Road, Fuwan Industrial Park, Hecheng Street,
	Gaoming District, Foshan, Guangdong, P.R.China

Rated power supply:	Voltage and Frequency		Reference poles					
	volta	ge and frequency	L1	L2	L3	Ν	PE	
	\square	AC: 120 V, 60Hz	\boxtimes			\square		
		DC:						
		Battery:						
Mounting position:		Table top equipment						
	\square	Wall/Ceiling mounted equipment						
		Floor standing equipment						
		Hand-held equipment						
		Other: Built-in						



According to customer's declaration, the product contains RF module and the characteristics of radio module: BLE

Operating frequency range(s)	2402 MHz – 2480 MHz
Type of Modulation	GFSK
Maximum e.i.r.p	7,7 dBm
Antenna type	Integral Antenna
Operating Temperature Range:	-20 °C – 40 °C
Antenna gain	0.5 dBi

WIFI

Frequency Band	2412 MHz-2462 MHz
	IEEE 802.11b: DSSS(CCK, DQPSK, DBPSK)
Type of Modulation	IEEE 802.11g: OFDM(64-QAM, 16-QAM, QPSK, BPSK)
	IEEE 802.11n-HT20: OFDM(64-QAM, 16-QAM, QPSK, BPSK)
	IEEE 802.11b: Up to 11 Mbps
Data Rate	IEEE 802.11g: Up to 54 Mbps
	IEEE 802.11n-HT20: Up to MCS7
Geo-location Capability	Not Support
Adaptivity	Adaptive
Maximum RF output power(EIRP):	17,0 dBm
Antenna type	Integral Antenna
Antenna gain	0.5 dBi
	IEEE 802.11b: 11
Number of channel	IEEE 802.11g: 11
	IEEE 802.11n-HT20: 11
Operating Temperature Range:	-20 °C – 40 °C

Intended use of the Equipment Under Test (EUT)

The apparatus as supplied for the test is Cync Direct Connect Strip intended for residential use.

Based on customer description: All model are identical except rangting power.

Hence, models CSTR16CBDM was chosen for full test, and the corresponding test data are also representative of the other models as well.

Copy of marking plate:

No provide.



1.2 Test data

Test Location	DEKRA Testing and Certification (Shanghai) Ltd. Guangzhou Branch Block 5, No.3, Qiyun Road, Huangpu District, Guangzhou, Guangdong, China FCC Designation Number: CN1324;
Date of receipt of test item	2024-01-29
Date (s) of performance of tests	2024-01-29 to 2024-02-19
	Normal sample: CSTR16CBDM (lab on.4915190-1)
Test sample	RF conducted sample: CSTR16CBDM (lab on.4915190-3)
	RF radiated sample: CSTR16CBDM (lab on.4915190-2)

1.3 The environment(s) in which the EUT is intended to be used

The equipment under test (EUT) is intended to be used in the following environment(s):

\boxtimes	Residential (domestic) environment.
\boxtimes	Commercial and light-industrial environment.
	Industrial environment.

1.4 Channel List

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	14	2430	28	2458
1	2404	15	2432	29	2460
2	2406	16	2434	30	2462
3	2408	17	2436	31	2464
4	2410	18	2438	32	2466
5	2412	19	2440	33	2468
6	2414	20	2442	34	2470
7	2416	21	2444	35	2472
8	2418	22	2446	36	2474
9	2420	23	2448	37	2476
10	2422	24	2450	38	2478
11	2424	25	2452	39	2480
12	2426	26	2454	-	-
13	2428	27	2456	-	-

The radio module (Bluetooth) operating channels are:



The radio module (WIFI) operating channels are:

Channel	Frequency (MHz)	Channel	Frequency (MHz)		
1	2412	7	2442		
2	2417	8	2447		
3	2422	9	2452		
4	2427	10	2457		
5	2432	11	2462		
6	2437	-	-		



2 DESCRIPTION OF TEST SETUP

2.1 Operating mode(s) used for tests

During the tests the following operating mode(s) has(have) been used.

Operating mode	Operating mode description	Used for methos						
		Conducted	Radiated					
1	Transmitting at WIFI	\boxtimes	\boxtimes					
2								
3								
4	4							
Supplemen	Supplemental information:							

2.2 Support / Auxiliary equipment / unit / software for the EUT

Auxiliary equipment / unit / software	Type / Version	Manufacturer	Supplied by
Laptop	Latitude 5488	DELL	DEKRA
Serial Port Utility (soft ware)	V5.0.1.1117		DEKRA
Supplemental information:			

The EUT has been tested with the following auxiliary equipment / unit / software:

2.3 Test Configuration / Block diagram used for tests

Refer to Annex 3.

2.4 Measurement procedure

The EUT was controlled by a serial PCB(TELINK BDT) which provided by manufacturer which connected to laptop through the com port. After connected, run the software "Serial Port Utility" supplied by manufacturer to control the EUT work in required test mode as below table.

RF Mode	Set_channel(MHz)		
	2402		
BLE_1M	2440		
	2480		
	2412		
IEEE 802.11 b/g/n20	2442		
	2462		



3 VERDICT SUMMARY SECTION

This chapter presents an overview of standards and results. Refer to the next chapters for details of measured test results and applied test levels.

3.1 Standards

Standard	Year	Description
FCC CFR Title 47 Part 15	2024	Operation within the bands 902–928 MHz, 2400–2483.5 MHz, and
Subpart C Section 15.247		5725–5850 MHz.
KDB 558074 D01 v05r02	2019	Guidance for performing compliance measurements on Digital
		Transmission System (DTS) operating under section 15.247
ANSI C63.10	2013	American National Standard of Procedures for Compliance Testing
		of Unlicensed Wireless Devices

3.2 Deviation(s) from the Standard(s) / Test Specification(s)

The following deviation(s) was / were made from the published requirements of the listed standards: N/A.

3.3 Overview of results

Requirement – Test case	Basic standard(s)	Verdict	Remark	
AC Power Line Conducted Emission	FCC 15.207	PASS		
Emissions in non-restricted frequency bands	FCC 15.247(d), FCC 15.209	PASS		
Emissions in restricted frequency bands	FCC 15.247(b)(3)	PASS		
Duty cycle	ANSI C63.10:2013	PASS		
Band Edge	FCC 15.247(d)	PASS		
Fundamental emission output power	FCC 15.247(d), FCC 15.209	PASS		
DTS Bandwidth	FCC 15.247(a)(2)	PASS		
Power Spectral Density	FCC 15.247(e)	PASS		
Antenna Requirement	FCC 15.203	PASS		

The measurement result is considered in conformance with the requirement if it is within the prescribed limit, It is not necessary to calculate the uncertainty associated with the measurement result.



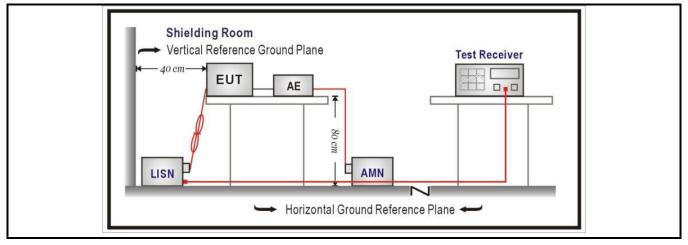
4 TRANSMITTER TEST RESULTS

4.1 AC Power Line Conducted Emission VERDICT: PASS

Limits

FCC Part 15 Subpart C Paragraph 15.207								
Frequency range [MHz] Limit: $QP [dB(\mu V)^{1}]$ Limit: $AV [dB(\mu V)^{1}]$ IF BW Detector								
0,15 - 0,50	66 – 56 ²⁾	56 - 46 ²⁾	9 KHz	QP, AV				
0,50 - 5,0	56	46	9 KHz	QP, AV				
5,0 - 30 60 50 9 KHz QP, AV								
 ¹⁾ At the transition frequency, the lower limit applies. ²⁾ The limit decreases linearly with the logarithm of the frequency. 								

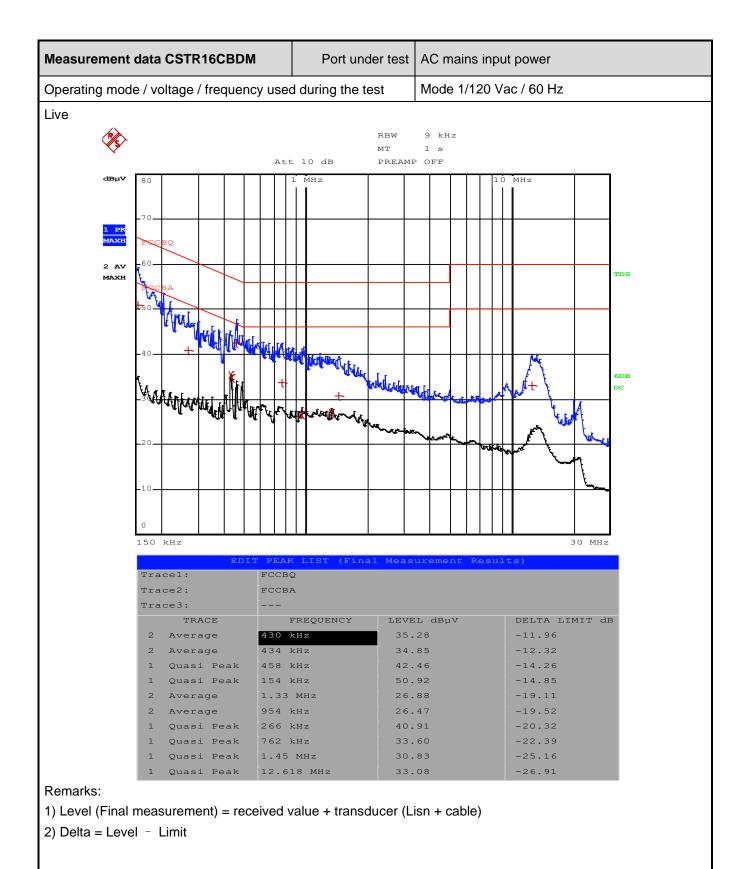
Test Configuration



Performed measurements

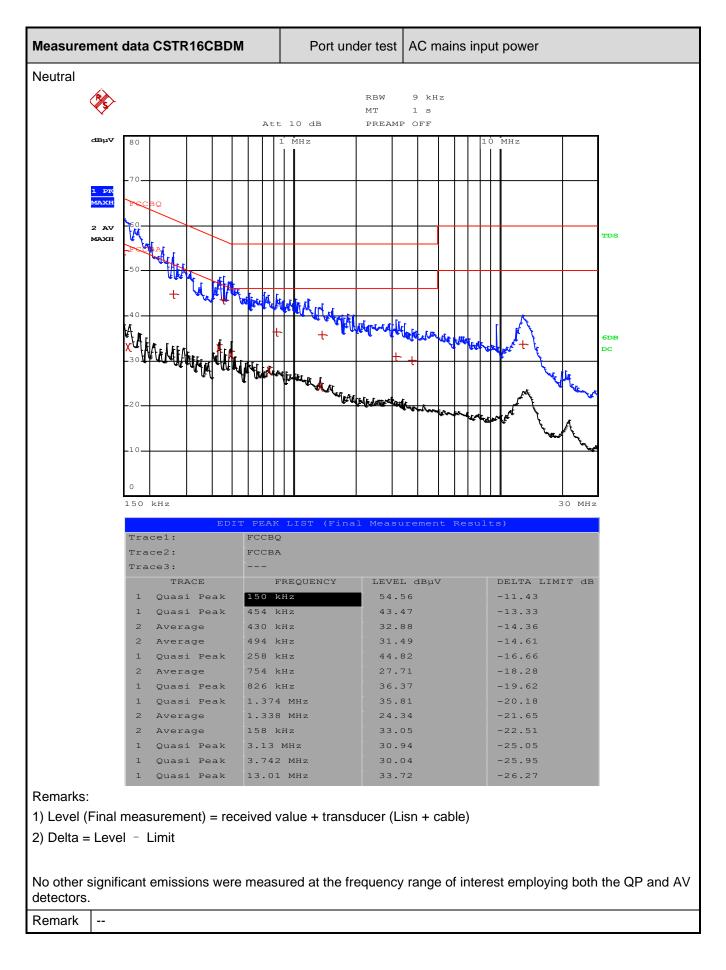
Port under test				Terminal						
AC mains input power			\square	N	\square	L1		L2		L3
DC input power			Positive (+) Negative (-)			1				
Test method applied Artificial mains net			twork							
Test setup		Table top	Artificial hand applied							
		Floor standing	Other:							
Refer to the Annex 2 for		test se	etup photo	o(s).						
Operating mode(s) used Mode 1		e 1								
Envirment condition (temperature; humidiry) 23,0 °C; 45,0 %										
Remark										





Block 5, No.3, Qiyun Road, Huangpu District, Guangzhou, Guangdong, China Tel +86 20 6661 2000 Fax +86 20 6661 2001 https://www.dekra.com







4.2 Emissions in non-restricted frequency bands

VERDICT: PASS

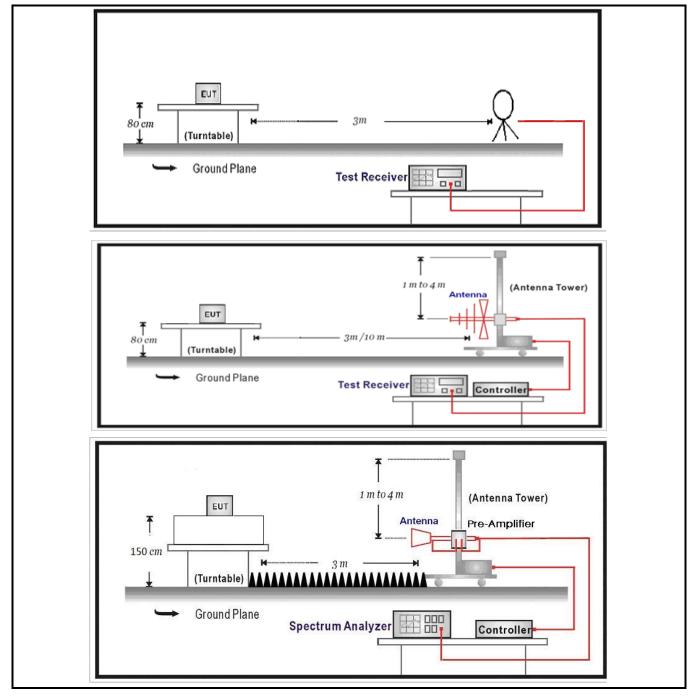
Frequency	Field strength	Field strength	Measurement distance
(MHz)	(µV/m)	(dBµV/m)	(m)
0.009 - 0.49	2400/F(kHz)	48.5 – 13.8	300 _(Note 1)
0.49 - 1.705	24000/F(kHz)	33.8 - 23	30 (Note 1)
1.705 - 30	30	29.5	30(Note 1)
30 - 88	100	40	3(Note 2)
88 - 216	150	43.5	3(Note 2)
216 - 960	200	46	3(Note 2)
Above 960	500	54	3 (Note 2)

Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade).

Note 2: At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).



Test Configuration





Performed measurements

Enclosure port					
Conducted measurement					
	Radiated measurement				
Refer to the Annex 3 for test setup photo(s).					
Mode 1					
1)The test frequency range, 9kHz~30MHz, 18GHz~26GHz, both of the					
case	are at least 20dB below the limits, therefore no data appear in the report.				
Remark 2)The EUT are tested in three orientations. The record is the wors which refer to the Annex 3 for test setup photo(s).					
	Refer Mode 1)The case 2)The				



Results of 30 – 1000 MHz

easuremen	t data CSTR160	BDM				
perating mod	de / voltage / fre	quency used	during the test	Mode 1 / 120) Vac / 60 Hz	
orizontal						
80 Level (di	BuV/m)					
70						
60						FCC CLASS-B
50						
40						water and the former of the
30	with beaution to be writer and		www.herester.com.	A	Wathater water 4 5	
20		Marine Marine T	www.Newson 3	- Charles		
10						
0 30	50	100	20 Frequency (M		500	1000
Freq	Reading	C.F	Result	Limit	Margin	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
46.50	8.32	14.46	22.78	40.00	17.22	QP
96.44	16.22	9.55	25.77	43.50	17.73	QP
158.67	8.93	14.96	23.89	43.50	19.61	QP
468.88	8.59	20.04	28.63	46.00	17.37	QP
539.48	8.03	21.82	29.85	46.00	16.15	QP
955.44	9.83	27.95	37.78	46.00	8.22	QP
986.07	8.64	28.51	37.15	54.00	16.85	QP

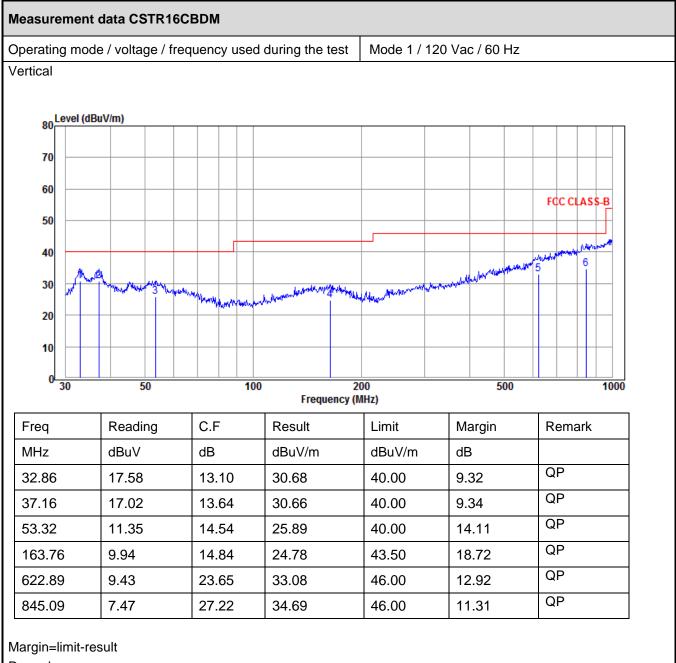
Margin=limit-result

Remarks:

1) C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain

2) Result = Reading + C.F (Correction Factor)





Remarks:

1) C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain

2) Result = Reading + C.F (Correction Factor)

No other significant emissions were measured at the frequency range of interest employing the QP detector.

Remark



Results of 1 – 18 GHz

Model	CSTR16CBDM
Operation Mode (worst case)	Mode 1 @2412 MHz, IEEE 802.11 b
Test voltage	3.3 Vdc

Results

Horizontal

Spect	rum										
Ref Le	vel 9	0.00 dB	μV	RBW	1 MHz						
Att		0	dB SWT 68 ms	VBW	3 MHz M	ode Auto S	Sweep				
TDF											
●1Pk M	axe2/	Av Max									
-						M	1[1]			5	1.45 dBµ'
80 dBµ\	7										56800 GH
			_			M	2[2]			4	4.28 dBµ'
fcc-pk3µ\	1									17.9	72110 GH
, o dop,											
60 dBµ\	1										
											1
fcc-av _{3µ} \	1									a altad	maldal
			MB		1.0000000000	indefail and	abo abasal	Maines Lale	ALLIE	Se dillolo	the first we have
40 dBµ\	/	the second s	Indiate Internet	HUNDER HUNDER			MANORA	THE PART OF A	Contract of the second	WALLAN	din nii - n
	. and a	MARKAN A	<mark>, </mark>				an Alexandrea	ALL	Leafar		
SPude <mark>h (</mark> Muydad) Mai Giby	MA T		Mithilitistist				-		-		
Alit	and parts										
ieo ashr				2					-		
10 dBµ\	/										
TO GDD/								52			
O dBµV-											
o dopv											
Start 1	.0 GH	z			32000	pts				Stop	18.0 GHz
Marker											
Type	Ref	Trc	X-value	1	Y-value	Func	tion		Function	Result	
M1		1	17.9668	GHz	51.45 dBµ'						
M2		2	17.97211		44.28 dBµ'						
MЗ		1	4.82261	GHz	40.46 dBµ'						
M4		2	4.82473	GHz	35.53 dBµ'	V					

Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



Vertical

Spectr	um														
Ref Lev	vel 9	0.00 de	ЗμV		RBW	1 MHz									
Att		0	dB SWT 68	ms 👄 ۷	/BW	3 MHz 🛛 🛚	/lod	e Auto S	Sweep						
TDF															
😑 1Pk Ma	ax e 2/	v Max													
								M	4[2]						7.81 dBµ
80 dBµV							-								24730 GH
fee al.							-	IVI	1[1]						9.14 dBµ 27200 GH
fçc-pk _{3µV}							-		1			1			27200 GH
60 dBµV											- 1				
f <u>cc-av</u> 3µV			NAC											du.	M
	°		M3 M4					Alathurdi.		addites.	ALL AND ALL	Mar	Hulli	Alle U	War Harris of V
40 dBµV			1044	THURSDAY			Ur		W. Labora	hinner				district in	adia adia at
	HAPLE	MALASHY	adates an transferration	11111111111	WWW		11	ant Males	فيففقا لنفا	119911	ind lade				
A STATE OF	Y1477197	DAN APP	********			·					4				15
20 dBuV															
10 dBµV	<u></u>					;	-				1	-			3
1000 - 12 M - 18 M															
0 dBµV–							1				<u>.</u>	_			3
Start 1.	.0 GH	z				3200	0 pt	5						Stop	18.0 GHz
Marker		1000				NW 12			0121 74		200		1850 (Jack)	12240	
	Ref	Trc	X-value			Y-value		Func	tion		F	unc	tion Re	sult	
M1 M2		1	17.727	COLAR MICHAELER	1	49.14 dBj 44.24 dBj									
M2 M3		1	4.8247	and a second second		43.37 dB				-					
M4		2	4.8247			37.81 dB				-					

Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



Model	CSTR16CBDM
Operation Mode (worst case)	Mode 1 @2412 MHz, IEEE 802.11 g
Test voltage	3.3 Vdc

Results Horizontal

Spect	rum											E
Ref Le	vel 9	0.00 di	ЗμV	👄 R	BW 1 MHz							
Att		0	dB SWT 68	ms 👄 V	BW 3 MHz	Mod	e Auto	Sweep				
TDF												
●1Pk M	axe2/	Av Max										
					8		M	4[2]				34.18 dBµ\
80 dBµ\	/										4	.824200 GH;
	_					-	M	1[1]				51.30 dBµ\
fcc-pk _{3µ\}											. 17	.478050 GH
60 dBµ\	1					_		-				-
6						_					_	M1
cc-av3h/			2.22								القاراءان بطبر	ALL ALL DE LAND ALL ALL ALL ALL ALL ALL ALL ALL ALL AL
			M3		Luitter Hand	July	وفيقو والققار	Huston	differen	illinite the	Water Latin A	and stated and the state
40 dBµ\		math			White the second second	"Yabi	(WALLAND	Mr. Art	11 11 11		No. MARSH	difference in a
an daul	A CONTRACT	WWWWWWW	YEANYATA ANTARA ANY ANY ANY ANY ANY ANY ANY ANY ANY AN		NAMES OF STREET, STREET, ST.	ann.	****	a harre	1 8 1 8 7 I	H 1111		
30-40	NTS TO A	forden h.										0
20 dBuy	/											
LO GDP.					-							
10 dBµ\						_						
0 dBµV-						_					-	
Start 1	.0 GH	lz			320)00 pt	s				Sto	op 18.0 GHz
Marker												
Type	Ref	Trc	X-value		Y-value	· · · · ·	Func	tion		Fur	nction Resu	ılt
M1		1	17.4780)5 GHz	51.30 c	IBμV						
M2		2	17.964:		46.87 c							
М3		1		26 GHz	40.42 c							
M4		2	4.824	12 GHz	34.18 c	IBµV						

Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



Vertical

Spect	rum											Ē
Ref Le	vel 9	0.00 de	νuγ	👄 RE	W 1 MHz							<u> </u>
Att		0	dB SWT 68	ms 👄 VE	SW 3 MHz	Mode	e Auto	Sweep				
TDF												
⊖1Pk M	axe2/	Av Max										
							M	4[2]				36.50 dBµV
80 dBµ\	v—					-	5.0	1[1]			4.	824200 GHz 48.85 dBµV
fee pk						-	141	T[T]			17	966800 GHz
fcc-pk3µV	v——							1			1	
60 dBµ\					<i>2</i>							×
fcc-av _{3µ} v	V				8	-					ALL LA MA	
			M3		ili anitimati		Desidented	ia naha	Linklik	Laborat Milling		With the second state
40 dBµ\	v—		ALL		Sector States and	1 A U	^{hai} ris culut duite	di di din	Section of the			A MARKET CALL
an daili	ALL PROPERTY	Aristrat	1991 (1991) - 1997 (1997) 1997 - 1997 (1997) - 1997 (1997) 1997 - 1997 (1997) - 1997 (1997) - 1997 (1997) - 1997			ditta.	LEAD BRACK	an la trata	dhidi .a	111111		
SONG THE	MAYIT Y	MILLION										
20 dBu						_					_	
	2											
10 dBµ\	V					-				0.	-	-
0 dBµV-												
<i></i>												8
Start 1		z			320	00 pt	5				Sto	p 18.0 GHz
Marker					200010 D.S		Marca Sta					
Туре	Ref		X-valu		Y-value		Func	tion		Fu	nction Resu	lt
M1		1		68 GHz	48.85 de							
M2 M3		2		11 GHz 42 GHz	44.88 de 41.69 de				-			
M3		2		42 GH2 42 GH2	36.50 dB				-			
			1102		55,50 at	ΥΥ						

Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



Model	CSTR16CBDM
Operation Mode (worst case)	Mode 1 @2412 MHz, IEEE 802.11 n20
Test voltage	3.3 Vdc

Results Horizontal

•	um vel 9	0.00 dBp	N 🖷 RE	3W 1 MHz				Į,
Att		0 c			e Auto Swee	n		
TDF				on onne mou		P		
●1Pk M	axe24	v Max						
-					M4[2]			33.89 dB
80 dBµV							4.	847040 G
ou uphr					M1[1]			49.96 dB
fcc-pk3µV						1.6	17.	662390 G
, o oop i								
60 dBµ\								
Children and Child								N
icc-av _{3μ} ν							a colana	is also hunder
			M3		الادلعاني بلمدر وبالم	اللها فلو ومؤ الاواذ ورفاه	Later and the second	WALLAND AND
40 dBµ\	_	1	AND THE REAL PROPERTY OF THE R		Webbo Webbo Web	AWINDOWNIN		A A A A A A A A A A A A A A A A A A A
	aller	ALL ADDIN	A AND A ANY DRAW MANY AND A RANGE		and the second states	and the state of the second	·# / • • •	
30.40	1117 141	10110-10	A MARTINE TRANSPORTATION OF A STREET					-
ASW/MAN								
20 dBµV			-	2				8
10 dBµ\								
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0 dBuV-								
o uppv-								
		1897.:			5.85K			
Start 1	.0 GH	z		32000 pt	5		Sto	p 18.0 GF
Marker	March Yesterla		Anna-2 million		W 222Y - 1		*5244 01 2014 50240 01 1	
Туре	Ref		X-value	Y-value	Function	_	Function Resu	lt
M1		1	17.66239 GHz	49.96 dBµV				
M2		2	17.39092 GHz	43.70 dBµV				
M3		1	4.84758 GHz	38.19 dBµV				
M4		2	4.84704 GHz	33.89 dBµV				

Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



Vertical

Spect	rum												E
Ref Le	evel 9	0.00 dB	μ٧	👄 RBV	V 1 MHz								<u> </u>
Att		0	dB SWT 68 m	s 👄 VBV	VI 3 MHz N	Node	Auto :	Sweep					
TDF													
⊖1Pk M	lax 🛛 2/	Av Max											
							M	2[2]					17.53 dBµV
80 dBµ	v—					<u> </u>	D						90920 GHz
Control and the second second	201 				2		M	1[1]					51.62 dBµV
fcc-pk3u	v—				-	-					1	17.6	62390 GHz
60 dBµ\	v—				-	-				4	-		
	115		_		1			-			_		M1
fcc-av _{3µ} v	v——		100		2 	-			1			1.1.1.1.1.1.1.1	Justine .
			M3		Selaresel ensured	Juni	Marian.	Hum	pil-tilly	Like Star		A. Yiele	LUNE WAY TO T
40 dBµነ	v—	man		AND	and standards	L. S. WINK		ALC: ALC: ALC: ALC: ALC: ALC: ALC: ALC:	N ALLAN		ALL STATE	humu	
30 det	-	L. States all				all south	a hiki a	an faisse i	la barra				
1145 MAD	C C C C C C C C C C C C C C C C C C C	Manada an			25							-	6.5
20 GBU	V—										_		
					ř								
10 dBµ	v—										_		0
	16												
0 dBµV-					-					×	_		
Start 1	L.0 GH	lz			3200	0 pts						Stop	18.0 GHz
Marker													
Type	Ref	Trc	X-value	1	Y-value	1	Func	tion	1	Fu	Inction F	Result	
M1		1	17.66239	GHz	51.62 dB	μV							
M2		2	17.39092	GHz	47.53 dB								
MЗ		1	4.84704	GHz	40.22 dB	μV							
M4		2	4.84651	GHz	35.90 dBj	μV							
-	-	27				2			_				

Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



Model	CSTR16CBDM
Operation Mode (worst case)	Mode 1 @2462 MHz, IEEE 802.11 b
Test voltage	3.3 Vdc

Results Horizontal

Spect	um							₽
Ref Le	vel 90).00 dBµ	V 🖷 R	BW 1 MHz				
Att		0 d	B SWT 68 ms 👄 V	BW 3 MHz Mod	e Auto Sweep			
TDF								
⊜1Pk Ma	∃X●2A	v Max						
					M4[2]			38.33 dBµV 24610 GHz
80 dBµV					M1[1]			50.56 dBµV
fcc-pk _{3µV}				1	mit[1]			66800 GHz
70-63µV								
60 dBµV								×
								N
cc-av3µV			M3				u t Minde	LIAN BURNER
			N4	بواد المراجع والمحد الم	Made a factor in the addition to		STATISTICS	Property and the
40 dBµV		And a state of		a service a state of the set of the	****			mineral and a second
DO. HITL	us line	Winderich		a an	and the state of the second	Unit contractor of the	1	
ALATANN'	WHH.	ATABLE						
20 dBµV	(
10 dBµV	r							5
0 dBµV-						~	+	
Start 1	.0 GH:	z	· ·	32000 pt	ts		Stop	18.0 GHz
Marker					_			
Type	Ref	Trc	X-value	Y-value	Function	Fur	iction Result	
M1		1	17.9668 GHz	50.56 dBµV				
M2		2	17.97211 GHz	44.58 dBµV				
M3		1	4.92461 GHz	43.39 dBµV				
M4		2	4.92461 GHz	38.33 dBµV				

Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



Vertical

Spect	rum								
Att TDF		0.00 dBµ 0 c		W 1 MHz W 3 MHz Mod	le Auto S	weep			
∎1Pk M	axe2A	v Max			MS	[1]			47.26 dBµ
					ITIL	1 + 1			24080 GF
80 dBµ\	/			N. Contraction of the second s	M1	[1]			51.37 dBµ
cc-pk _{3µ\}							~		66800 GH
, d. doh /							Ĩ.		
60 dBµ\	/								-
			M3						2.000
cc-av _{3µ\}							The second second	المالية والدور والمراجع	abella bella
			The second	And and and and and and	ALLAL STALLA	in a stand and a stand of the		Methoday with the	A CASE OF CALLS IN T
40 dBµ\	/		and the barrent the state of th	with the statute on the bard in the	Service de la b	P. BELLEVILLE	Number 1	ALL ARRITED IN COM	ATT IN THE P
2.65	Lines and	LILL LAND	A CARLEY AND A CARD AND A		TANK TANKS	in the states and the second se	And while and a second	5 E	
	withit					etheore.		+	2
A SHARE A	West and a								
ad dBuy	1								8
65									
10 dBµ\	1								
to dop.									
0 dBuV-									
о ивру-									28
Start 1	0.011			32000 p				01	18.0 GH
	.0 GH	2		32000 p	is			Stot	18.0 GH
Marker	n (- 1	w				-		
Type M1	Ref		X-value 17.9668 GHz	Y-value	Funct	ion	Fun	ction Result	
M1 M2		1	17.9008 GH2	51.37 dBµV 44.03 dBµV					
M3		1	4.92408 GHz	44.03 UBUV 47.26 dBUV					
		2							
M4		2	4.92408 GHz	42.94 dBµV					

Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



Model	CSTR16CBDM
Operation Mode (worst case)	Mode 1 @2462 MHz, IEEE 802.11 g
Test voltage	3.3 Vdc

Results Horizontal

Spectru	m										
Ref Leve Att TDF				W 1 MHz W 3 MHz I	Mode	Auto S	weep				<u>x</u>
●1Pk Max	●2Av Ma	x	3		1						
						MA	H [2]				36.43 dBµ 935760 GH
80 dBµV—			-			MI	[1]				49.93 dBµ'
cc-pk _{3μV} _											78050 GH
-νησαρν-								1			1
60 dBµV—	-			24	-						
and specific and a	_										M1
cc-av _{3µV} -			-	0	-					Land Land Land	A LA BARREN LA
		MB	e a aith	14 mariaterial	LIALLA		Haddeld .	ALL LALL		stability according to the third	ALVIN YALVIN
40 dBµV—	المراجع الم	winter Manual P	HANNELD		e de tres	4414969	n Marthan			A CONTRACTOR	a star and see a
30.0 ⁻¹⁰	WWWW			ALL HANTENPERTON	and a second	and the second	. harran				
WWWWWWW	AND ALL DAY										8
20 dBµV—								0.2			
10 dBµV—				8	-						
201 1 20 120											
0 dBµV								Ĩ			
Start 1.0	GHz			3200	0 pts					Stop	0 18.0 GHz
Marker											
	ef Trc	X-valu		Y-value		Funct	ion		Fund	ction Result	
M1	1		05 GHz	49.93 dB							
M2 M3	2		14 GHz 76 GHz	44.95 dB							
M3 M4	2		76 GHz	41.32 dB 36.43 dB							
1414	2	4.935		30,43 UB	H.		11				

Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



Vertical

Spect	um								
Ref Le Att TDF	vel 9	0.00 dBµ 0 ¢		3W 1 MHz 3W 3 MHz Moo	le Auto 9	Sweep			are a
●1Pk Ma	axe2/	Av Max			M	4[2]			36.16 dBµ
80 dBµV						1[2]			29920 GH
ао авру					M	1[1]			50.41 dBµ
cc-pk _{3µ\}					*		i.	17.4	78050 GF
60 dBµ∖									M1
cc-av _{3UV}									
	8		M3		a di second		. Income Mildell	HALILLI HAN	AUNHALIMAN
40 dBµ\	-			all and a standard a	ari nyana na Nyana sarata		an and the		A CONTRACTOR OF
. La	(Ashiel	LALLAVIA				An MANAGARIAN AN	and the state of t	and a	62
30. HP	WANT PHY	THE REAL PROPERTY.					2		
201 dBµV									
20 0000									
10 dBµ\			-				8		
0 dBµV-	-								
Start 1	.0 GH	z		32000 p	its			Stop	18.0 GHz
/larker									
Type	Ref	Trc	X-value	Y-value	Funct	tion	Fund	ction Result	
M1		1	17.47805 GHz	50.41 dBµV					
M2		2	17.96414 GHz	45.32 dBµV					
M3 M4		2	4.92886 GHz 4.92992 GHz	41.96 dBμV 36.16 dBμV					
1914		2	4,92992 GH2	30,10 uphA					

Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



Model	CSTR16CBDM
Operation Mode (worst case)	Mode 1 @2462 MHz, IEEE 802.11 n20
Test voltage	3.3 Vdc

Results Horizontal

Spect	um											E
Ref Le	vel 9	0.00 di	ЗμV	👄 R	BW 1 MHz							
Att		C	dB SWT 68	ms 👄 V	BW 3 MHz	Mode	e Auto :	Sweep				
TDF												
⊖1Pk Ma	axe2/	v Max										
							M	3[1]				44.05 dBµ\
80 dBµV	·											217490 GH
00 000							M	1[1]				51.81 dBµ\
fcc-pk3µV											17.9	992300 GH
60 dBµV				-						4		
						_					-	I eM
fcc-av3µV				M	3	-					والأرال الدرور والعدري	ALL DALL
				M	tun manual	11.11	ald selenter	history	hillin	WWW WWW	workshow 2011	
40 dBμV	-	anne	C. C. M. D. M.	MANMAN		Y 1/1	NATION	TT APPERTY	ta bla i		And all the second	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
DOL HALL	NUM N	WAY AN	<u>\}}\</u>	WHITE BOARD	and the second	Adding.	****	as laterat				
Lunian' 1	WINN	Arrent.								X		
20 dBuV												
20 000												
10 dBµV	r					_				N)	_	
0 dBµV-				-		-				2		
Start 1	.0 GH	z	1	1	320	00 pt	s	1		ŝ	Sto	p 18.0 GHz
Marker												
Type	Ref	Trc	X-valu	e 1	Y-value	1	Func	tion		Fur	nction Resul	t
M1		1	17.99	23 GHz	51.81 d	ВμУ						
M2		2		23 GHz	47.61 d							
MЗ		1		49 GHz	44.05 d							
M4		2	7.219	61 GHz	37.90 d	ВμУ						

Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



Vertical

Spect	rum								Ę
Att TDF		0.00 dBµ 0 d		BW 1 MHz BW 3 MHz Moo	de Auto Sw	/еер			Also.
●1Pk M	axe2/	Av Max	1		M6[01			35.64 dBL
80 dBµ\					MOL	2]			924080 Gł
					M1[1]			51.20 dBj
cc-pk₃µ∖	/						le le	17.9	951390 GF
60 dBµ\							3	2	a
cc-av₃µ∖	7		NACE NACE						La La La La La La
			M5 M3			mandante	a had a state of the state of t	and the second second	WWWWWWW
40 dBµ\		A SALE AND A SALES		er weiten eine eine eine eine eine eine eine	TT CIDEN COUNT			the states in rat	
30. 481	WHAT I	White		Maxian Water States and	and the state of the	W. Chinese			
au dBuv		antiate							
20 dBµ\	/						<i></i>		2
10 dBµ\									
то авру							57		
0 dBµV-	-						2)		1
Start 1	.0 GH	z		32000 p	ots			Stop	18.0 GH
1arker									
Type	Ref	Trc	X-value	Y-value	Functio	on	Fun	ction Resul	t
M1		1	17.95139 GHz	51.20 dBµV					
M2		2	17.67248 GHz	47.33 dBµV					
MЗ		1	7.22067 GHz	42.65 dBµV					
M4		2	7.22014 GHz	37.05 dBµV					
M5		1	4.92408 GHz	41.89 dBµV					
1.10				35.64 dBµV					

Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



4.3 Emissions in restricted frequency bands VEF

VERDICT: PASS

Restricted Bands of oper	ation of FCC		
Frequency	Frequency	Frequency	Frequency
(MHz)	(MHz)	(MHz)	(GHz)
0.090 – 0.110	16.42 – 16.423	399.9 – 410	4.5 – 5.15
0.495 - 0.505	16.69475 –16.69525	608 – 614	5.35 - 5.46
2.1735 – 2.1905	16.80425 – 16.80475	960 – 1240	7.25 – 7.75
4.125 - 4.128	25.5 – 25.67	1300 – 1427	8.025 - 8.5
4.17725 – 4.17775	37.5 – 38.25	1435 – 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 – 74.6	1645.5 – 1646.5	9.3 – 9.5
6.215 – 6.218	74.8 – 75.2	1660 – 1710	10.6 – 12.7
6.26775 - 6.26825	108 – 121.94	1718.8 – 1722.2	13.25 – 13.4
6.31175 – 6.31225	123 – 138	2200 – 2300	14.47 – 14.5
8.291 – 8.294	149.9 – 150.05	2310 – 2390	15.35 – 16.2
8.362 - 8.366	156.52475 – 156.52525	2483.5 – 2500	17.7 – 21.4
8.37625 - 8.38675	156.7 – 156.9	2690 – 2900	22.01 – 23.12
8.81425 - 8.81475	162.0125 – 167.17	3260 - 3267	23.6 - 24.0
12.29 – 12.293	167.72 – 173.2	3332 - 3339	31.2 – 31.8
12.51975-12.52025	240 – 285	3345.8 - 3358	36.43 - 36.5
12.57675-12.57725	322 – 335.4	3600 - 4400	
13.36 – 13.41			
Restricted Bands of oper	ation for IC		
0.090 - 0.110	13.36 - 13.41	960 - 1427	9.0 - 9.2
0.495 - 0.505	16.42 - 16.423	1435 - 1626.5	9.3 - 9.5
2.1735 - 2.1905	16.69475 - 16.69525	1645.5 - 1646.5	10.6 - 12.7
3.020 - 3.026	16.80425 - 16.80475	1660 - 1710	13.25 - 13.4
4.125 - 4.128	25.5 - 25.67	1718.8 - 1722.2	14.47 - 14.5
4.17725 - 4.17775	37.5 - 38.25	2200 - 2300	15.35 - 16.2
4.20725 - 4.20775	73 - 74.6	2310 - 2390	17.7 - 21.4
5.677 - 5.683	74.8 - 75.2	2483.5 - 2500	22.01 - 23.12
6.215 - 6.218	108 - 138	2655 - 2900	23.6 - 24.0
6.26775 - 6.26825	149.9 - 150.05	3260 - 3267	31.2 - 31.8
6.31175 - 6.31225	156.52475 - 156.52525	3332 - 3339	36.43 - 36.5
8.291 - 8.294	156.7 - 156.9	3345.8 - 3358	Above 38.6
8.362 - 8.366	162.0125 - 167.17	3500 - 4400	
8.37625 - 8.38675	167.72 - 173.2	4500 - 5150	
8.41425 - 8.41475	240 - 285	5350 - 5460	
12.29 - 12.293	322 - 335.4	7250 - 7750	
12.51975 - 12.52025	399.9 - 410	8025 - 8500	
12.57675 - 12.57725	608 - 614		

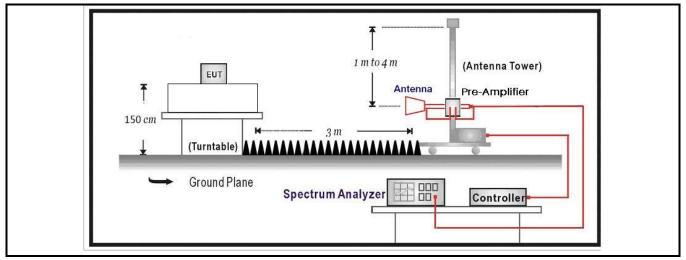


Restricted Band Emissions Limit									
Frequency (MHz)	Field strength (μV/m)	Field strength (dBµV/m)	Measurement distance (m)						
0.009 - 0.49	2400/F(kHz)	48.5 – 13.8	300(Note 1)						
0.49 - 1.705	24000/F(kHz)	33.8 - 23	30 _(Note 1)						
1.705 - 30	30	29.5	30 (Note 1)						
30 - 88	100	40	3(Note 2)						
88 - 216	150	43.5	3 (Note 2)						
216 - 960	200	46	3 (Note 2)						
Above 960	500	54	3 (Note 2)						

Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade).

Note 2: At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

Test Configuration





Performed measurements

Port under test	Enclo	osure port
Test method applied		Conducted measurement
		Radiated measurement
Test setup	Refe	to the Annex 3 for test setup photo(s).
Operating mode(s) used	Mode 1	
Remark	· · · · · · · · · · · · · · · · · · ·	



Model	CSTR16CBDM
Operation Mode (worst case)	Mode 1 @2412 MHz, IEEE 802.11 b
Test voltage	3.3 Vdc

Results Horizontal

Spectrum						E.
Ref Level : Att SGL Count :	30 0		BW 1 MHz BW 3 MHz Mod	le Auto Sweep		die -
●1Pk Max●2	Av AvgLog	3				
				M2[1]		60.24 dBµ
110 dBµV-						2.39000700 GF
100 dBµV				M1[1]		100.08 dBµ 2,41 <u>1638</u> 30 GF
					I I	2/41103030 GF
90 dBµV		-				
80 dBµV						/ · · ·
CC RB 2310	PK				+ M	()
, o opp.					M2	
60 dBuV						
CC RB 2310 /	AV				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
50 dBµV	utin the state of a local		used the product of all while	A DESCRIPTION OF THE OWNER OWN		
40 dBµV		and the second	ne pie pie a la se de século de século de la secolo de la secolo de secolo de secolo de secolo de secolo de se	The second se	\sim	
40 UBUV	بەر			and the second sec		8
30 dBµV						
20 dBµV						
Start 2.31 (SHz		32000 pt	s		Stop 2.422 GHz
Marker				2 242		
Type Ref		X-value	Y-value	Function	Function	n Result
M1 M2	1	2.4116383 GHz 2.390007 GHz	106.98 dBµV 60.24 dBµV			
M3	2	2.390007 GHz	50.70 dBµV			
1913	2	2.390007 GH2	50.70 ubpv			

Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



Vertical

Spectrum							
Ref Level	117.00 dB	µV 👄 R	BW 1 MHz				
Att	30	dB 🛛 SWT 32 ms 👄 🗸	BW 3 MHz Mod	le Auto Sweep	8		
TDF	AV Mav						
	or mun			M3[2]			43.74 dBμV
110 dBµV—						2.39000000 GHz	
				M1[1]		100.50 dBµV	
100 dBµV						2.411	4480 GHz
00 10.44							
90 dBµV							
80 dBµV							1
1470-1782.000-188 1 0.025							1
FCC RB 2310	PK					+	
							1
60 dBuV	۵V	61	0			3.0	
					M2		
50.dBµV	din Ka Malalatan d	in the second	داره، رابع <mark>م 1 مر الرائدي بالارتسان الريسي</mark>	and the first state of the second state of the	damas M Stor		
40 dBµV							-
30 dBµV							
20 dBµV			00000	_		Otau	0.400.00
Marker	JHZ		32000 pt	5		stop	2.422 GHz
Contraction of the second s	Trc	X-value	Y-value	Function	Euro	ction Result	
Type Ref	1	2.4118448 GHz	100.50 dBµV			LUON Kesun	
M2	1	2.3900035 GHz	47.67 dBµV				
M3	2	2.39 GHz	43.74 dBµV				

Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



Model	CSTR16CBDM
Operation Mode (worst case)	Mode 1 @2462 MHz, IEEE 802.11 b
Test voltage	3.3 Vdc

Horizontal

Spectru	ım	٦										
Ref Leve Att SGL Cou		35 c			BW 1 MHz BW 3 MHz	Mod	le Auto	Sweep	8			
⊖1Pk Max			3									
							M	3[2]				49.29 dBµV
4 1 0 dΒμν								1[1]				350000 GHz .06.85 dBµV
							171	1[1]				234260 GHz
100 dBµV						+						
90 dBµV-		The			6							
90 GDHA		And a state of the										
80 dBµV-	_					+						-
70 dBµV-						FCC	RB 250	D PK_				
70 ubµv-							M2					
60 dBµV-						-		a as a line		1		
50 dBµV-						FLU	KB 200		A State of the local distance	all distant in an all and a second	<mark>hin had de bin da</mark>	and provident the second
50 UDHV								-	-		1.11.11.11.11.11.11.11.11.11.11.11.11.1	
40 dBµV-	_											
20 40.44												
30 dBµV-									~			
Start 2.4	162 GH	z			3200)0 pt:	5				St	op 2.5 GHz
Marker												
	Ref T		X-value		Y-value		Func	tion		Func	tion Resu	lt
M1		1	2.462342		106.85 dB							
M2 M3		1	2.483609		59.81 dB 49.29 dB							
IMI3		2	2,48.	85 GHz	49.29 OB	РА						

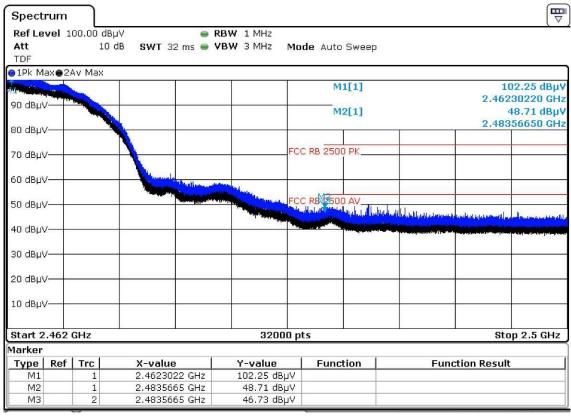
Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



Vertical



Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



Model	CSTR16CBDM
Operation Mode (worst case)	Mode 1 @2412 MHz, IEEE 802.11 g
Test voltage	3.3 Vdc

Results Horizontal

Spect	rum						
Att TDF		00.00 dB 10		RBW 1 MHz VBW 3 MHz Moo	le Auto Sweep		
⊖1Pk M	axe2/	V Max			M1[1]		97,87/dBu
90 dBµ\	7						2:41221980 81
эо авру	0				M2[1]		49.30 dBµ 2.39000700 GH
80 dBµ\	/						2.39000700 GF
FCC RB 2	2310 P	к					
, e eep.							/
60 dBµ\	/					La contraction	
FCC RB 2	2310 A	V				Mandana	
	an an Ind	dha dhua fu tar	مىلالەتدارىلى غاربىرلى ^ل ىغى ئەلم <mark>ار</mark> ىچى يارىيۇرىي رايدىيە بەركى	and the state of the	فعاميهم والانتجارين مالوانين وي		
40 dBµ∖	/						
30 dBµ\							
30 UDH1							
20 dBµ\							
10 dBµ\							2
Start 2	.31 G	Hz		32000 pt	s		Stop 2.422 GHz
Marker					18775 - 18 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 -	1973	
Type	Ref		2.4122193 GHz	Y-value	Function	Functi	on Result
M1 M2		1	2.4122193 GHz 2.390007 GHz	97.87 dBµV 49.30 dBµV			
M3		2	2.390028 GHz	48.56 dBµV			

Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



Vertical

Spectrum								
Ref Level 1 Att TDF		8µV	RBW 1 MHz VBW 3 MHz Mc	o de Auto S ^a	weep			and a
●1Pk Max●2/	Av Max							
90 dBµV				M1[2.412	32.86 dBµV 09680 GHz 16191 dBµV
80 dBµV——							2.861	dingon GHz
FCC RB 2310 F	РК							There is a second second
60 dBµV								
FCC RB 2310 A	w					M2		
trada da da da da da da da da	is it is not a set	ورجوع بالمراجع والمراجع والمراجع والمراجع والمراجع	يوريد <mark>ا مستواريدين ويدرو استوال الريسي</mark> ويريدا	المارية والمحمدة والمحمدة المحمد والم	فلللغ فبالمعاد والمع	and and here in the second		
40 dBµV	المرابع مع المرابع ا			dan seren Interativ kan				
30 dBµV								
20 dBµV								y
10 dBµV								
Start 2.31 G	Hz		32000 p	its			Stop 2	2.422 GHz
Marker								
Type Ref	Trc	X-value	Y-value	Functio	n	Fun	ction Result	
M1	1	2.4120968 GHz	82.86 dBµV					
M2	1	2.39 GHz	46.91 dBµV					
M3	2	2.3900175 GHz	43.58 dBµV					

Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



Model	CSTR16CBDM				
Operation Mode (worst case)	Mode 1 @2462 MHz, IEEE 802.11 g				
Test voltage	3.3 Vdc				

Results Horizontal

Spectr	um						
Att SGL Co	unt 10	and Real Accession and	dB SWT 32 ms 👄 🕅 TDF	RBW 1 MHz /BW 3 MHz Mo	o de Auto Sw	/еер	
о 1Рк Ма 110 dBµ 100 dBµ	v	v AvgLo					61.87 dBµV 2.48364730 GHz 97.83 dBµV 2.46246730 GHz
90 dBµV 80 dBµV		ر بر این					
70 dBµV 60 dBµV				FC			a natular, dan sahar shara da ara da sa a
50 dBµV 40 dBµV					M3		
30 dBµV Start 2. Marker		Hz		32000 p	ts		Stop 2.5 GHz
Туре	Ref	Trc	X-value	Y-value	Function	n	Function Result
M1 M2 M3		1 1 2	2.4624673 GHz 2.4836473 GHz 2.4835 GHz	97.83 dBμV 61.87 dBμV 46.92 dBμV			

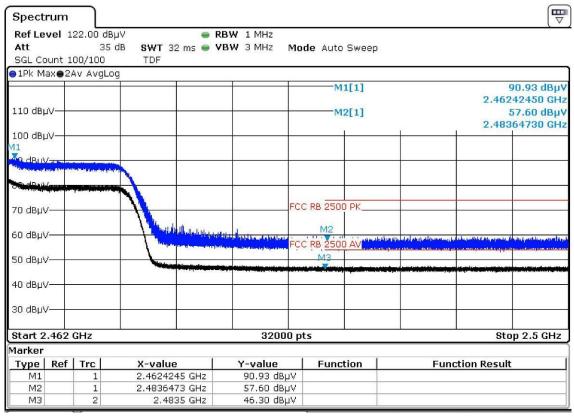
Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



Vertical



Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



Model	JXC8720-18
Operation Mode (worst case)	Mode 1 @2412 MHz, IEEE 802.11 n20
Test voltage	3.3 Vdc

Results Horizontal

Spect	rum						H ۲
	vel 1	00.00 dB	20.	RBW 1 MHz			10.00 10.00
Att		10	dB 🛛 SWT 32 ms 👄 '	VBW 3 MHz Mo	de Auto Sweep		
TDF							
∋1Pk M	∃X ● 24	v Max	1 1				
					M3[2]		45.43 dBµ
90 dBµ\				· · · · · ·	M1[1]		2.3900 Million 9504000
					wittil		2.41222280 GH
80 dBµ\							
CC RB 2	310 P	K					
70 10p	.5101	N					
60 dBµ\							
оо авру	-						
CC RB 2	310 A	V	Local May position Local Additional Local Addition and March and Local Additional Additiona Additional Additional Ad				
ALL DE LAND THE PARTY OF	A ALCARDON		territer out the last set has a sense of a second barrier	رقى 193 <mark>مى يەركى 1</mark> 4 (تىر 199 مىڭ يەركى 199 مىڭ يەركى 199 م	and a set of the set o		
40 dBjjV	7						
30 dBµ\							
20 dBµ\							
10 40.0	,						
10 dBµ\							
							1
Start 2	.31 G	Hz		32000 p	ts		Stop 2.422 GHz
Marker							
Туре	Ref		X-value	Y-value	Function	Funct	ion Result
M1		1	2.4122228 GHz	95.04 dBµV		8	
M2		1	2.39 GHz	48.16 dBµV			
M3		2	2.390014 GHz	45.43 dBµV			

Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



Vertical

Spectru	m						
Ref Leve Att	ען 1 100.00 מ 1	івµ∨	RBW 1 MHz VBW 3 MHz Mod	de Auto Sweep	L)		
TDF							
😑 1 Pk Maxi	2Av Max						
				M1[1]			37.29 dBµV
90 dBµV—				-			QQ530 GHz
Jo dop.				M2[1]			5.93 dBuV
80 dBµV—				1	1	-2,390	00000 GHz
	_						1
FCC RB 231	.0 PK						
60 dBµV—		-					
FCC RB 231	.U AV	a she was the state of the stat	Carl Carl Laboration	and Linear Carl South of the	M2	all	2
'40 аврv		a daar ay aa dhaa ahaadaa ahaa dah i Mabdad daa					
30 dBµV—					0		8
00 40.47							
20 dBµV—					1		
10 dBµV—							
то арру-							
Start 2.3	1 GHz		32000 pt	:s		Stop 2	2.422 GHz
Marker							
	ef Trc	X-value	Y-value	Function	Fu	nction Result	
M1	1	2.4122053 GHz	87.29 dBµV				
M2	1	2.39 GHz	45.93 dBµV				
M3	2	2.390014 GHz	42.58 dBµV				

Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



Model	JXC8720-18
Operation Mode (worst case)	Mode 1 @2462 MHz, IEEE 802.11 n20
Test voltage	3.3 Vdc

Results Horizontal

Spectrum						E
Ref Level 1	.22.00 dE	ίμV 👄 R	BW 1 MHz			No. 1
Att	35	dB 🛛 SWT 32 ms 👄 V	BW 3 MHz Mo	de Auto Sweep		
SGL Count 1	.00/100	TDF				
●1Pk Max●2	Av AvgLo)g				
				M1[1]		96.10 dBµ\
						2.46225470 GH
110 dBµV			-	M2[1]		57.81 dBµ\
						2.48366860 GH
100 dBµV						
The same second s	all comprising the					
90 dBµV						
80 dBµV						
70 dBµV			FCC	RB 2500 PK		
70 ubµv						
60 dBµV		La Manual Hant of	FCC	M2		
00 00 00		The particular sector	FCC	RB 2500 AV	a dhan bhulat th huar li packin	
50 dBuV				M3		
					un de maxima de la celer provins est	an fan se stan an stan y fan se si y stan ste y stan ste
40 dBuV						
30 dBµV						
Start 2.462	GHz	· ·	32000 pt	s		Stop 2.5 GHz
Marker						
Type Ref	Trc	X-value	Y-value	Function	Fur	nction Result
M1	1	2.4622547 GHz	96.10 dBµV			
M2	1	2.4836686 GHz	57.81 dBµV			
MЗ	2	2.4835 GHz	45.99 dBµV			

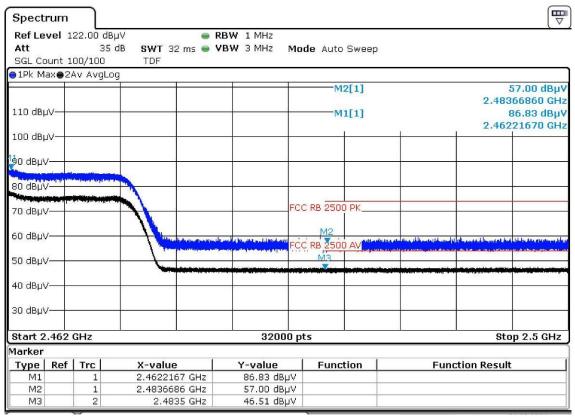
Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



Vertical



Remarks:

1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.

2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))



4.4 Band Edge

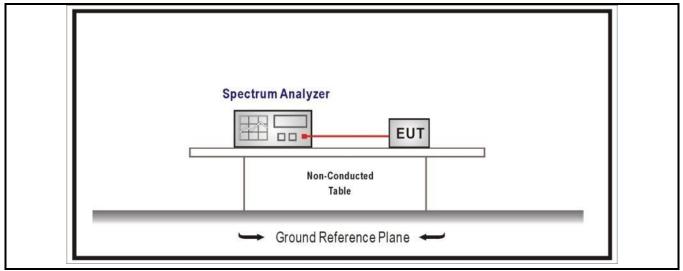
VERDICT: PASS

Standard	FCC Part 15 Subpart C Para	FCC Part 15 Subpart C Paragraph 15.247(d)			
RF Output power (Detection methods)		Limit(dB)			
RF Output power(Average detector)		30dBc(Note1)			
RF Output power(PK detector)		20dBc(Note2)			
Note 1: If maximum conducted (average) output power was used to demonstrate compliance as described in 9.2,					

then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at by LEast 30 dB relative to the maximum in-band peak PSD by LEvel in 100 kHz (i.e., 30 dBc).

Note 2: If the maximum peak conducted output power procedure was used, then the peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at by least 20 dB relative to the maximum in-band peak PSD by level in 100 kHz (i.e., 20 dBc).

Test Configuration

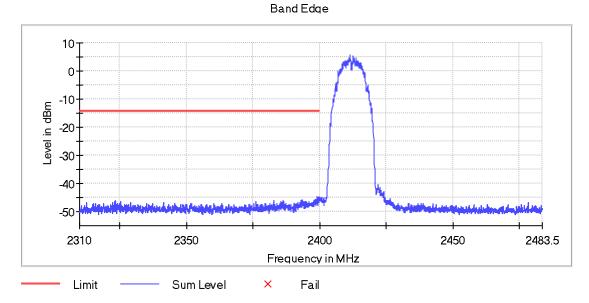


Performed measurements

Port under test	Antenna port		
Test method applied	Conducted measurement		
	Radiated measurement		
Test setup	Refer to the Annex 3 for test setup photo(s).		
Operating mode(s) used	Mode 1		
Remark			



IEEE 802.11 b Results @2412 MHz



Inband Peak

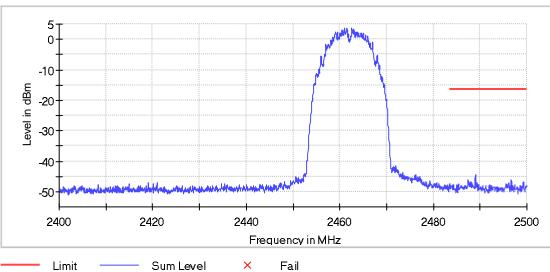
Frequency	Level
(MHz)	(dBm)
2412.0000	5,767

Frequency	Level	Margin	Limit	Result
(MHz)	(dBm)	(dB)	(dBm)	
2399.925000	-44.5	30.2	-14.3	PASS
2398.875000	-44.7	30.4	-14.3	PASS
2399.875000	-44.8	30.5	-14.3	PASS
2399.325000	-44.9	30.6	-14.3	PASS
2399.375000	-45.0	30.7	-14.3	PASS
2399.575000	-45.2	30.9	-14.3	PASS
2399.825000	-45.2	30.9	-14.3	PASS
2398.925000	-45.4	31.1	-14.3	PASS
2399.975000	-45.5	31.2	-14.3	PASS
2398.275000	-45.6	31.3	-14.3	PASS
2393.525000	-45.6	31.3	-14.3	PASS
2398.325000	-45.6	31.3	-14.3	PASS
2393.475000	-45.6	31.3	-14.3	PASS
2398.525000	-45.7	31.4	-14.3	PASS
2399.625000	-45.8	31.5	-14.3	PASS



IEEE 802.11 b Results @2462 MHz

Band Edge



Limit Sum Level ×

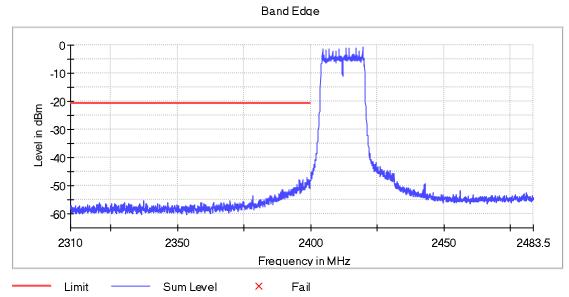
Inband Peak

Frequency	Level
(MHz)	(dBm)
2462.0000	4,470

Frequency	Level	Margin	Limit	Result
(MHz)	(dBm)	(dB)	(dBm)	
2488.975000	-44.4	28.1	-16.3	PASS
2489.025000	-44.5	28.2	-16.3	PASS
2488.925000	-45.6	29.3	-16.3	PASS
2487.425000	-46.0	29.7	-16.3	PASS
2496.675000	-46.1	29.8	-16.3	PASS
2487.375000	-46.3	30.0	-16.3	PASS
2489.075000	-46.4	30.1	-16.3	PASS
2496.725000	-46.7	30.4	-16.3	PASS
2487.525000	-46.8	30.5	-16.3	PASS
2499.275000	-46.8	30.5	-16.3	PASS
2487.475000	-46.9	30.6	-16.3	PASS
2487.975000	-46.9	30.6	-16.3	PASS
2496.625000	-46.9	30.6	-16.3	PASS
2487.575000	-47.1	30.7	-16.3	PASS
2496.075000	-47.1	30.8	-16.3	PASS



IEEE 802.11 g Results @2412 MHz



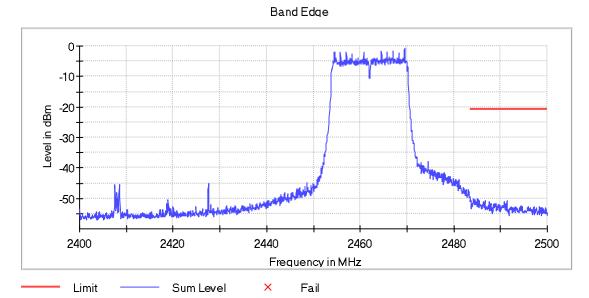
Inband Peak

Frequency	Level
(MHz)	(dBm)
2412.0000	-2,987

Frequency	Level	Margin	Limit	Result
(MHz)	(dBm)	(dB)	(dBm)	
2398.725000	-47.2	26.6	-20.7	PASS
2398.625000	-47.5	26.8	-20.7	PASS
2398.675000	-47.6	26.9	-20.7	PASS
2398.575000	-47.6	26.9	-20.7	PASS
2397.025000	-47.7	27.0	-20.7	PASS
2395.775000	-47.9	27.2	-20.7	PASS
2399.175000	-47.9	27.2	-20.7	PASS
2399.475000	-48.0	27.3	-20.7	PASS
2399.575000	-48.1	27.4	-20.7	PASS
2396.025000	-48.1	27.4	-20.7	PASS
2399.525000	-48.1	27.4	-20.7	PASS
2399.925000	-48.1	27.4	-20.7	PASS
2399.425000	-48.2	27.5	-20.7	PASS
2399.125000	-48.2	27.5	-20.7	PASS
2396.975000	-48.3	27.6	-20.7	PASS



IEEE 802.11 g Results @2462 MHz



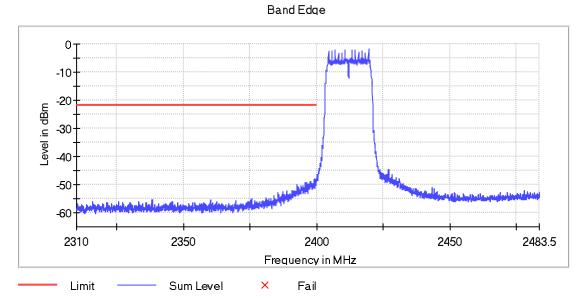
Inband Peak

Frequency	Level
(MHz)	(dBm)
2462.0000	-3,248

Frequency	Level	Margin	Limit	Result
(MHz)	(dBm)	(dB)	(dBm)	
2485.075000	-50.1	29.3	-20.8	PASS
2484.125000	-50.1	29.4	-20.8	PASS
2484.225000	-50.2	29.4	-20.8	PASS
2484.175000	-50.3	29.5	-20.8	PASS
2485.275000	-50.3	29.6	-20.8	PASS
2484.275000	-50.3	29.6	-20.8	PASS
2485.225000	-50.3	29.6	-20.8	PASS
2484.525000	-50.4	29.7	-20.8	PASS
2485.125000	-50.5	29.8	-20.8	PASS
2483.575000	-50.6	29.8	-20.8	PASS
2484.475000	-50.6	29.9	-20.8	PASS
2485.475000	-50.6	29.9	-20.8	PASS
2491.425000	-50.7	29.9	-20.8	PASS
2491.375000	-50.7	29.9	-20.8	PASS
2483.625000	-50.7	29.9	-20.8	PASS



IEEE 802.11 n20 Results @2412 MHz



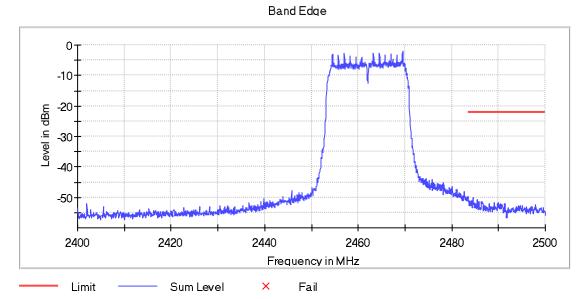
Inband Peak

Frequency	Level
(MHz)	(dBm)
2412.0000	-4,047

Frequency	Level	Margin	Limit	Result
(MHz)	(dBm)	(dB)	(dBm)	
2399.975000	-47.2	25.5	-21.7	PASS
2399.225000	-48.0	26.3	-21.7	PASS
2399.775000	-48.1	26.4	-21.7	PASS
2399.175000	-48.3	26.6	-21.7	PASS
2399.125000	-48.3	26.6	-21.7	PASS
2399.725000	-48.5	26.8	-21.7	PASS
2399.475000	-48.7	27.0	-21.7	PASS
2397.625000	-48.8	27.1	-21.7	PASS
2399.525000	-48.9	27.2	-21.7	PASS
2397.675000	-48.9	27.2	-21.7	PASS
2397.975000	-48.9	27.2	-21.7	PASS
2395.775000	-49.1	27.5	-21.7	PASS
2399.825000	-49.2	27.5	-21.7	PASS
2399.275000	-49.2	27.5	-21.7	PASS
2396.425000	-49.2	27.5	-21.7	PASS



IEEE 802.11 n20 Results @2462 MHz



Inband Peak

Frequency	Level
(MHz)	(dBm)
2462.0000	-4,4168

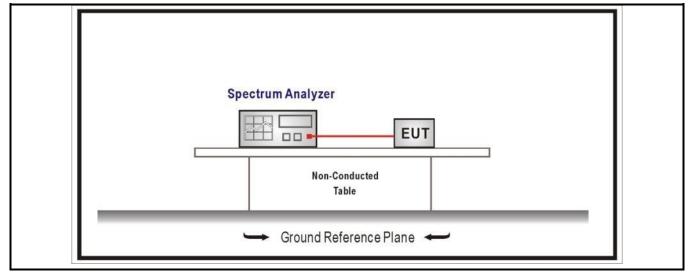
Frequency	Level	Margin	Limit	Result
(MHz)	(dBm)	(dB)	(dBm)	
2484.575000	-50.1	28.1	-22.0	PASS
2484.525000	-50.5	28.5	-22.0	PASS
2485.475000	-50.8	28.8	-22.0	PASS
2484.125000	-51.0	29.0	-22.0	PASS
2483.525000	-51.0	29.1	-22.0	PASS
2483.625000	-51.1	29.1	-22.0	PASS
2484.175000	-51.1	29.1	-22.0	PASS
2483.575000	-51.3	29.3	-22.0	PASS
2483.825000	-51.3	29.3	-22.0	PASS
2483.875000	-51.3	29.3	-22.0	PASS
2486.325000	-51.4	29.4	-22.0	PASS
2485.675000	-51.4	29.4	-22.0	PASS
2484.475000	-51.5	29.5	-22.0	PASS
2485.725000	-51.5	29.5	-22.0	PASS
2485.775000	-51.5	29.5	-22.0	PASS



4.5 Duty cycle

VERDICT: PASS

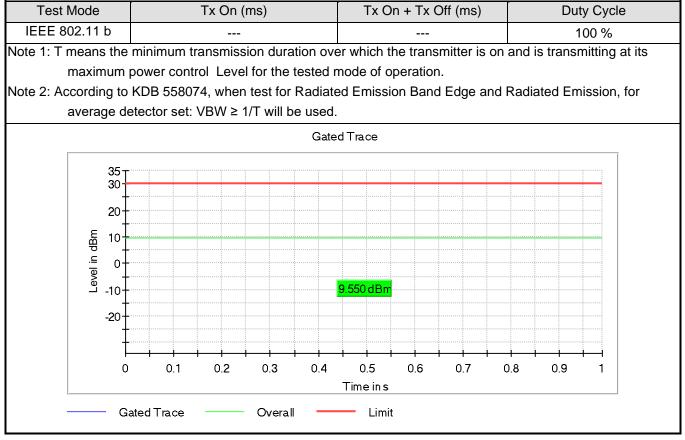
Test Configuration



Performed measurements

Port under test	Anter	Antenna port		
Test method applied	\square	Conducted measurement		
	Radiated measurement			
Test setup	Refer to the Annex 3 for test setup photo(s).			
Operating mode(s) used	Mode 1			
Remark				

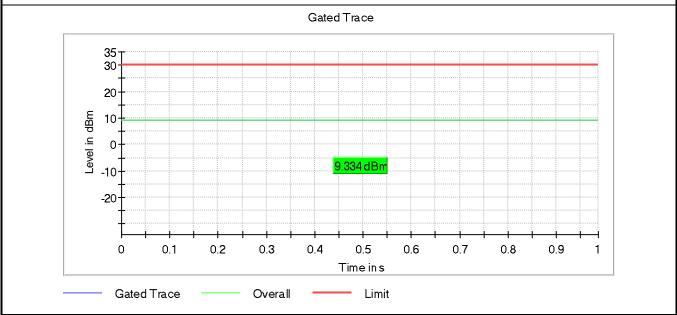




Test Mode	Tx On (ms)	Tx On + Tx Off (ms)	Duty Cycle			
IEEE 802.11 g			100 %			
Note 1. T means the minimum transmission duration over which the transmitter is on and is transmitting at its						

Note 1: T means the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control Level for the tested mode of operation.

Note 2: According to KDB 558074, when test for Radiated Emission Band Edge and Radiated Emission, for average detector set: VBW ≥ 1/T will be used.







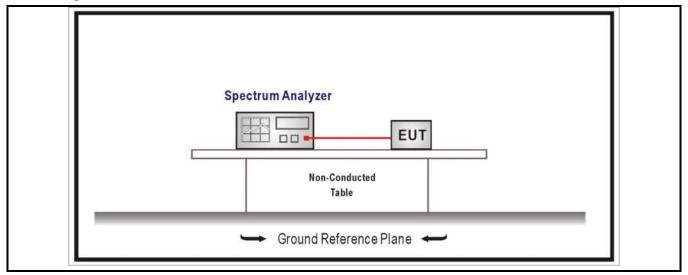


4.6 DTS Bandwidth

Standard	FCC Part 15 Subpart C Paragraph 15.247 (a)(2)			
Systems using digital modulat	ion techniques operate in the 2400-2483.5 MHz .The minimum 6 dB bandwidth			

Test Configuration

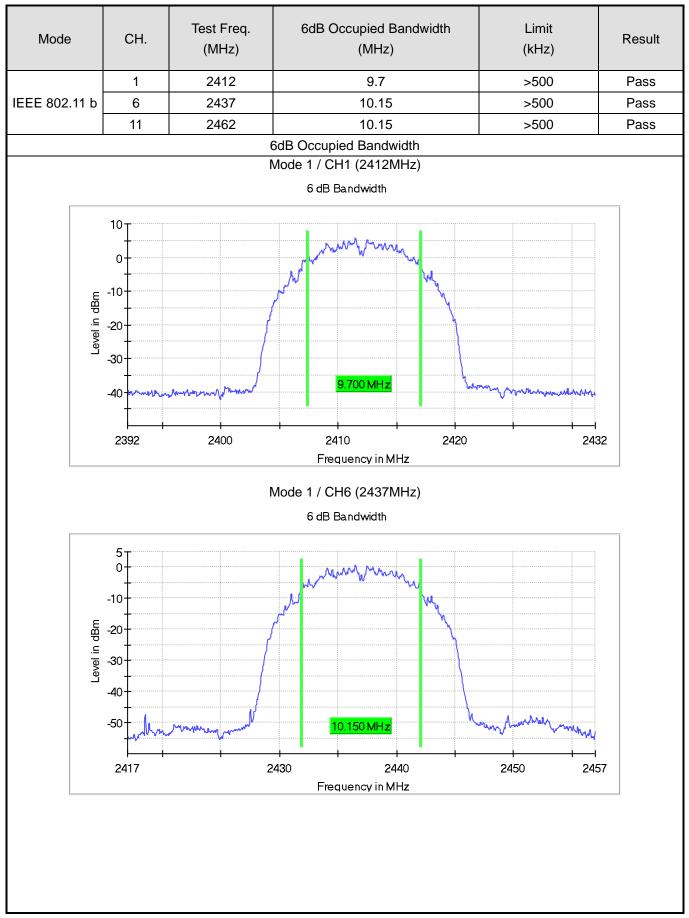
shall be at by least 500 kHz



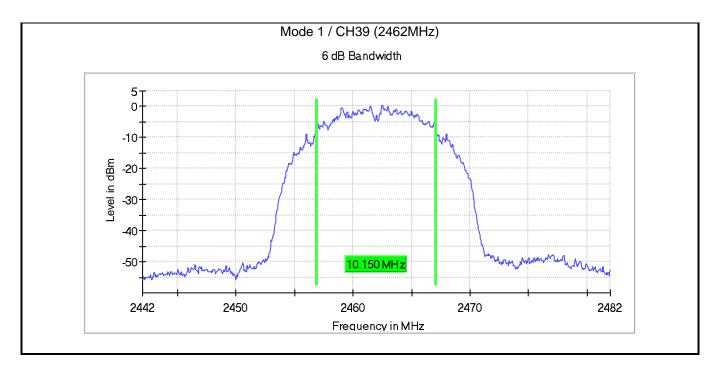
Performed measurements

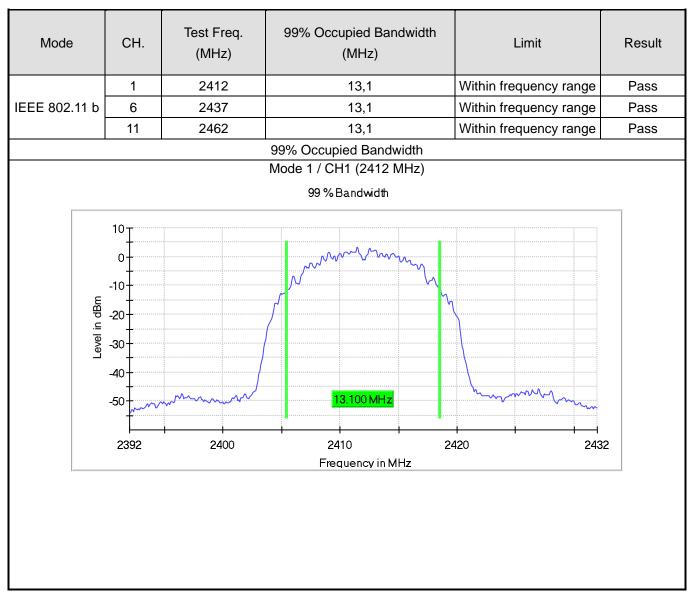
Port under test	Antenna port		
Test method applied	Conducted measurement		
	Radiated measurement		
Test setup	Refer to the Annex 3 for test setup photo(s).		
Operating mode(s) used	Mode 1		
Remark			



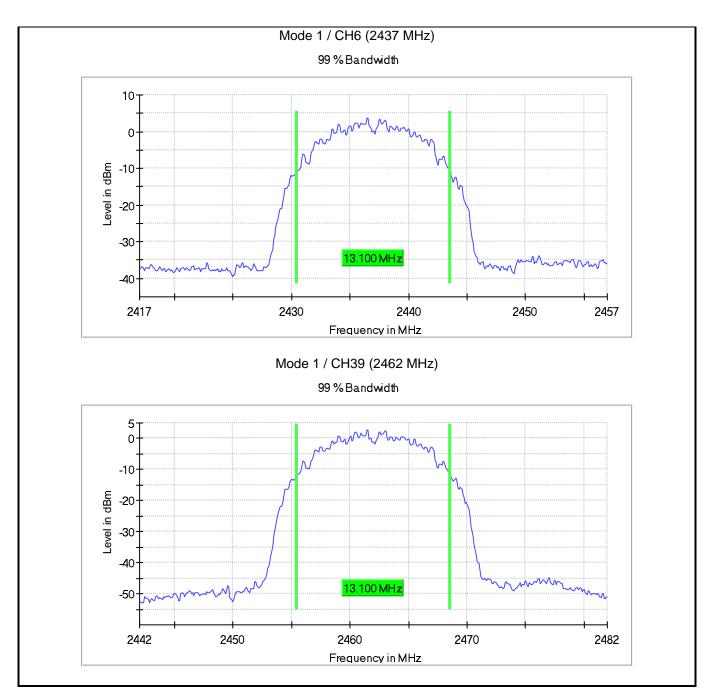




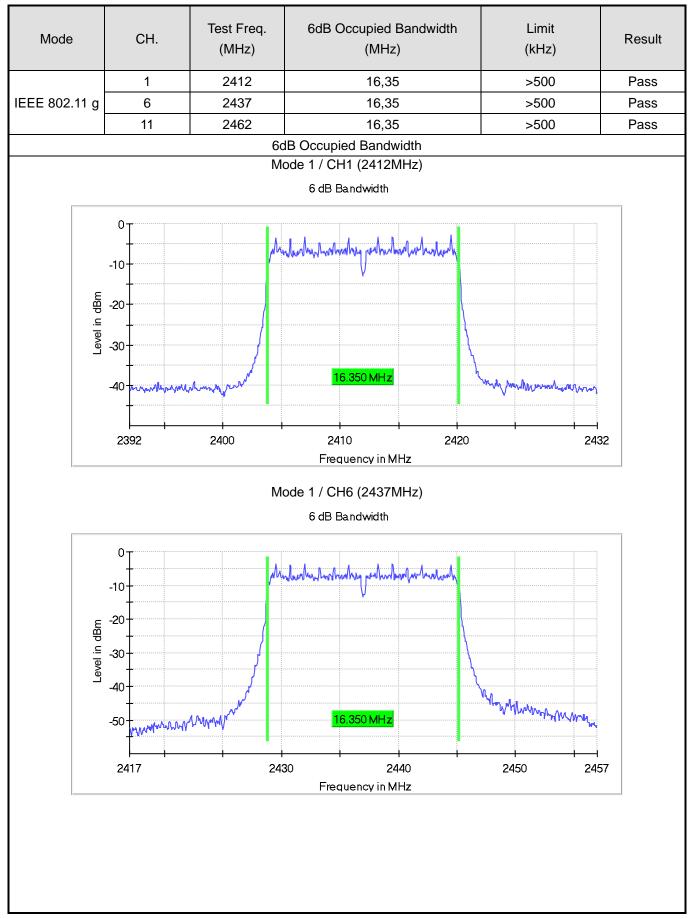




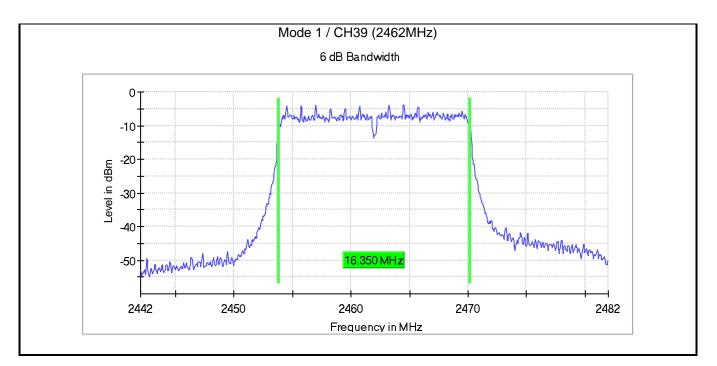


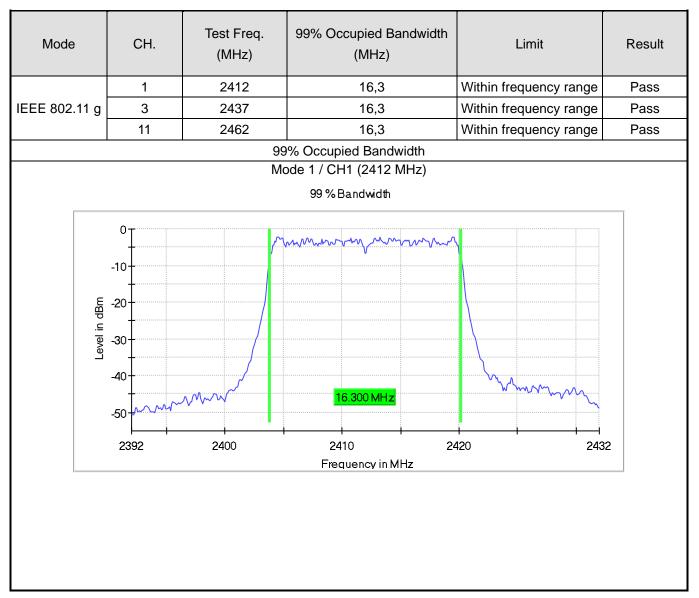




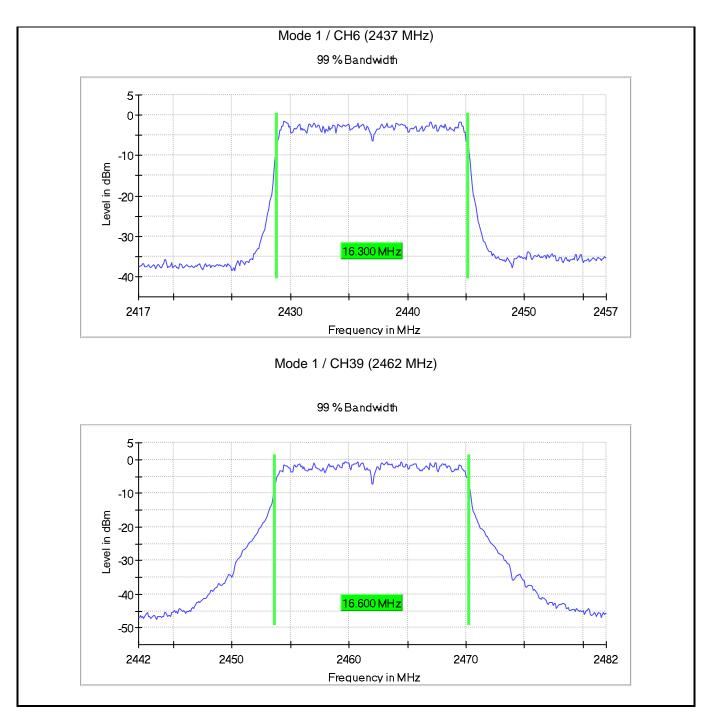




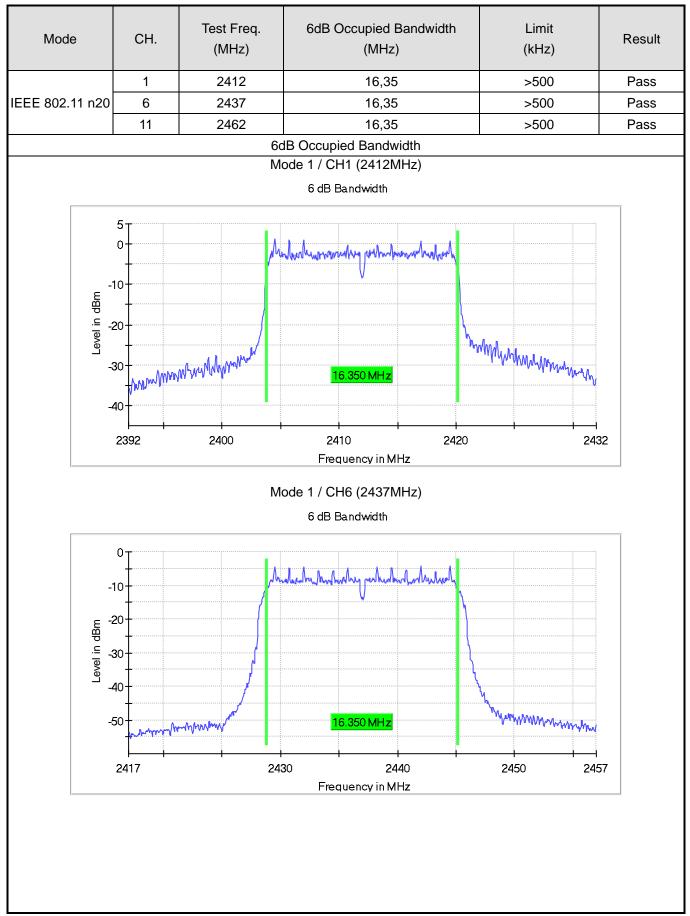




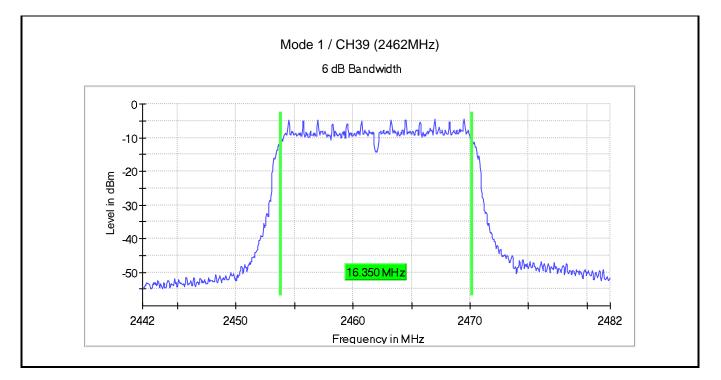


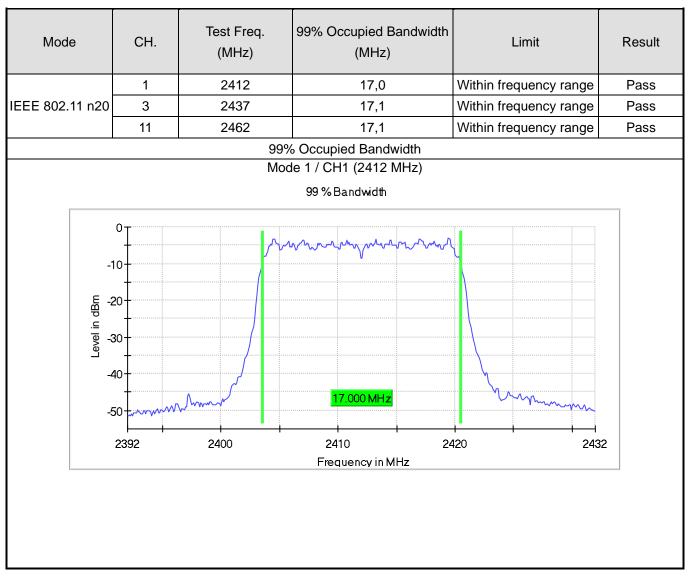




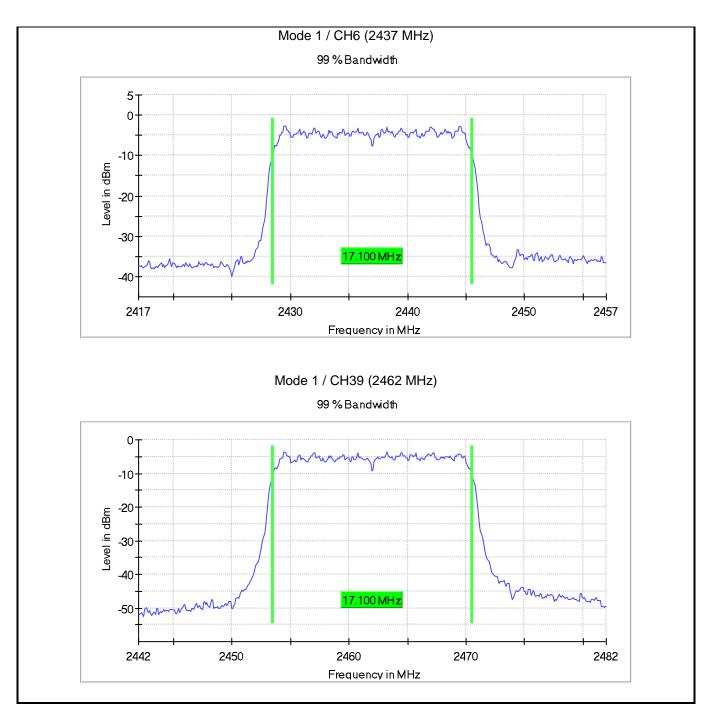










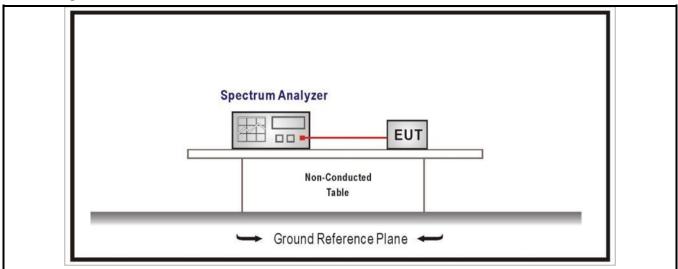




4.7 Fundamental emission output power VERDICT: PASS

StandardFCC Part 15 Subpart C Paragraph 15.247 (b)(3)					
\boxtimes	GTX ·	<6dBi	Pout≤30dB	m	
	GTX 🗆	>6dBi	·		
		Non-Fix point-point	Pout≤30-((GTX -6)	
		Fix point-point	Pout≤30-[((GTX-6)]/3	
		Point-to-multipoint	Pout≤30-(G	GTX-6)	
		Overlap Beams	Pout≤30-[((GTX-6)]/3	
	Aggregate power transmitted simultaneously on all beams		usly Pout≤30-[(GTX-6)]/3	
	singby LE directional beam			GTX-6)]/3+8dB	
	Note 1 : GTX directional gain of transmitting antennas. Note 2 : Pout is maximum peak conducted output power .				

Test Configuration



Performed measurements

Port under test	Anter	Antenna port		
Test method applied		Conducted measurement		
		Radiated measurement		
Test setup	Refe	Refer to the Annex 3 for test setup photo(s).		
Operating mode(s) used	Mode	Mode 1		
Remark				



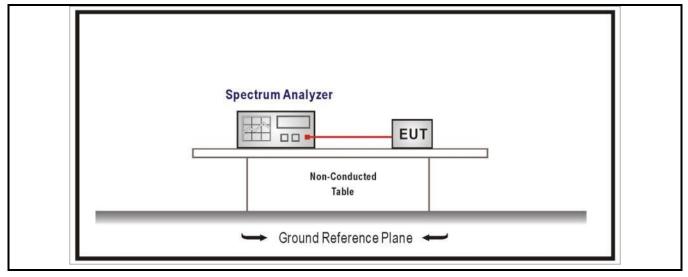
Mode	Channel	Test Frequency (MHz)	Power Output (dBm)	Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)	Result
	1	2412	16,1	≤30	16,6	≤36	Pass
IEEE 802.11 b	6	2437	16,2	≤30	16,7	≤36	Pass
002.110	11	2462	15,8	≤30	16,3	≤36	Pass
	1	2412	16,5	≤30	17,0	≤36	Pass
IEEE 802.11 g	6	2437	16,3	≤30	16,8	≤36	Pass
002.11 g	11	2462	15,9	≤30	16,4	≤36	Pass
	1	2412	13,8	≤30	14,3	≤36	Pass
IEEE 802.11 n20-	6	2437	13,6	≤30	14,1	≤36	Pass
	11	2462	13,6	≤30	14,1	≤36	Pass



4.8 Power Density VERDICT: PASS

Standard	FCC Part 15 Subpart C Paragraph 15.247 (b)(3)			
Power Spectral Density≤8dBm/3kHz				

Test Configuration



Performed measurements

Port under test	Anter	Antenna port		
Test method applied	\square	Conducted measurement		
		Radiated measurement		
Test setup	Refer to the Annex 3 for test setup photo(s).			
Operating mode(s) used	Mode 1			
Remark				

Mode	Channel	Test Frequency (MHz)	Power Output (dBm)	Limit (dBm/3kHz)	Result
	1	2412	5,767	≤8	Pass
IEEE 802.11 b	6	2437	4,926	≤8	Pass
	11	2462	4,470	≤8	Pass
	1	2412	-2,987	≤8	Pass
IEEE 802.11 g	6	2437	-3,275	≤8	Pass
	11	2462	-3,248	≤8	Pass
	1	2412	-4,047	≤8	Pass
IEEE 802.11 n20	6	2437	-4,360	≤8	Pass
	11	2462	-4,168	≤8	Pass

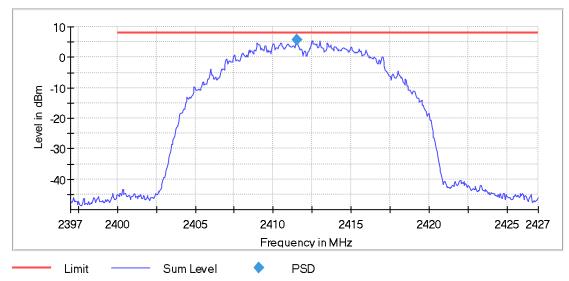


Data of IEEE 802.11 b

Result

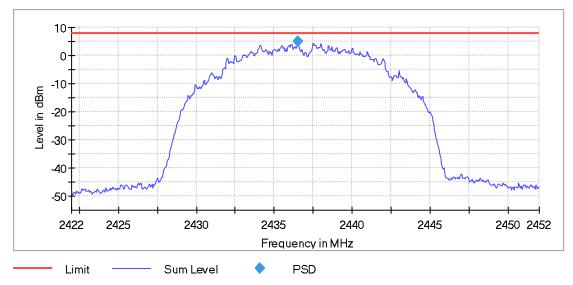
DUT Frequency	Frequency	PSD	Limit	Result
(MHz)	(MHz)	(dBm)	Max	
			(dBm)	
2412.000000	2411.525000	5.767	8.0	PASS

Peak Power Spectral Density



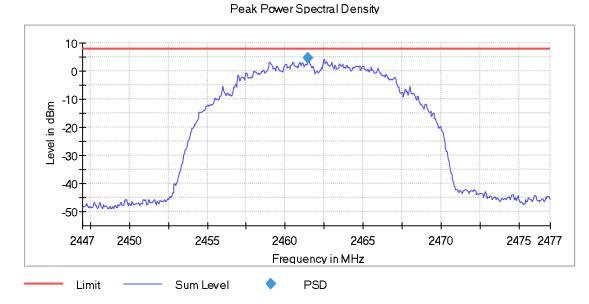
DUT Frequency	Frequency	PSD	Limit	Result
(MHz)	(MHz)	(dBm)	Max	
			(dBm)	
2437.000000	2436.525000	4.926	8.0	PASS

Peak Power Spectral Density



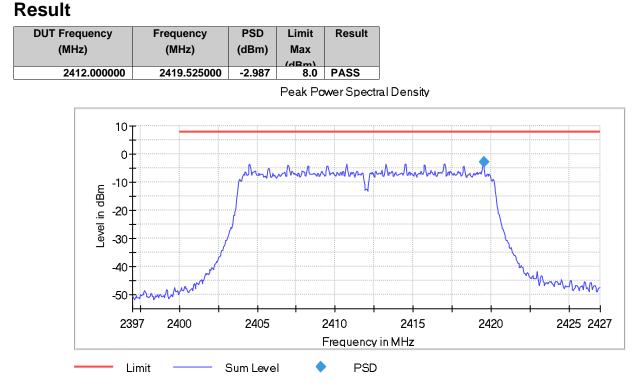


DUT Frequency	Frequency	PSD	Limit	Result
(MHz)	(MHz)	(dBm)	Max	
			(dBm)	
2462.000000	2461.475000	4.470	8.0	PASS



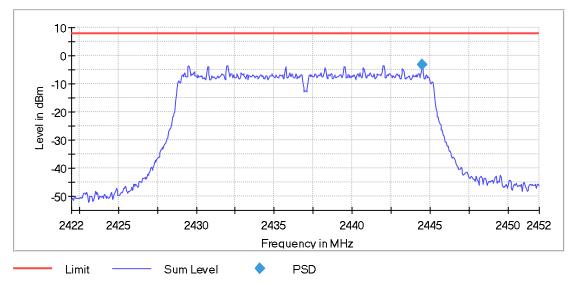


Data of IEEE 802.11 g



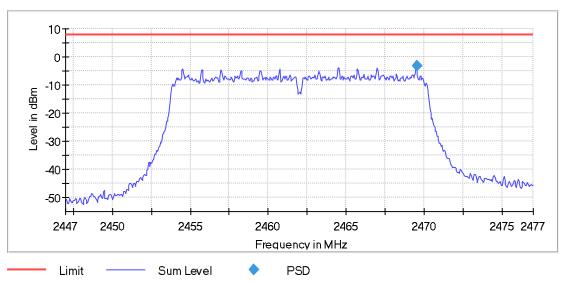
DUT Frequency	Frequency	PSD	Limit	Result
(MHz)	(MHz)	(dBm)	Max	
2437.000000	2444.475000	-3.275	(dBm) 8.0	PASS

Peak Power Spectral Density





DUT Frequency	Frequency	PSD	Limit	Result
(MHz)	(MHz)	(dBm)	Max	
			(dBm)	
2462.000000	2469.525000	-3.248	8.0	PASS



Peak Power Spectral Density

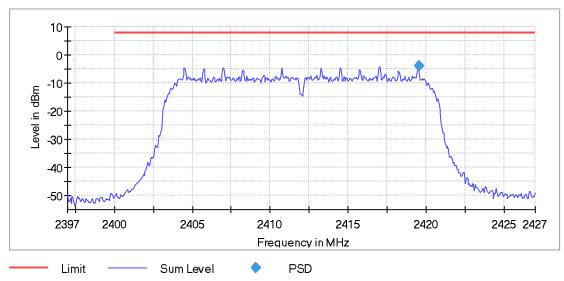


Data of IEEE 802.11 n20

Result

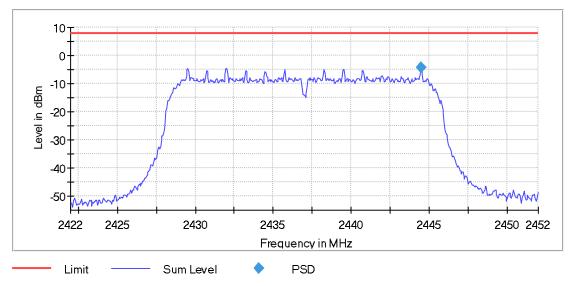
DUT Frequency	Frequency	PSD	Limit	Result
(MHz)	(MHz)	(dBm)	Max	
			(dBm)	
2412.000000	2419.525000	-4.047	8.0	PASS

Peak Power Spectral Density



DUT Frequency	Frequency	PSD	Limit	Result
(MHz)	(MHz)	(dBm)	Max	
			(dBm)	
2437.000000	2444.475000	-4.360	8.0	PASS

Peak Power Spectral Density





DUT Frequency	Frequency	PSD	Limit Resul	t		
(MHz)	(MHz)	(dBm)	Max			
2462.000000	2469.525000	-4.168	(dBm) 8.0 PASS			
			Peak Power Spe	ectral Density		
10 T						
+						
0+						
10+		hund	monterstanding	montant	mauty	
dB +		1		٨	· · · · · · · · · · · · · · · · · · ·	
. <u>⊆</u> -20						
E -10 E -20 I -20 I -20 I -20 I -20 I -20 I -20 I - I -20 I - I -20 I - I -20 I - I - 20 I - I - 20 I - I - 20 I - I - 20 I - 2		/				
					\u	
-40	/				<u>مر</u>	4
-50-	Mannan					man
4	+ + +		- 1 - 1	+ +	1	⊢ → →
244	47 2450	2455	2460	2465	2470	2475 2477
			Frequen	cy in MHz		



5 **IDENTIFICATION OF THE EQUIPMENT UNDER TEST**

The photographs show the tested device.

Refer to documents External photo and Internal photo.



ANNEX 1 – MEASUREMENT UNCERTAINTY

Test Item	Uncertainty
Radiated EM field emission (30 MHz– 1000 MHz)	±4,88 dB
Mains disturbance voltage (150 kHz – 30 MHz)	±2,82 dB
Occupied Channel Bandwidth	±0,7%
RF Output power, conducted	±0,6dB
Power Spectral Density, Conducted	±0,6dB
Unwanted Emissions, Conducted	±0.7dB
Spurious (30-1000MHz)	±4,4dB
Spurious (1-18GHz)	±4,4dB



ANNEX 2 - USED EQUIPMENT

For Conducted emission :

Instrumentation	Manufacturer	Model No.	Serial No.	DEKRA No.	Cal. Due date
Shielding Room	Changzhou Feite	/	/	G/L861	2024/05/31
EMI Receiver	R&S	ESCI	101206	G/L857	2024/07/02
LISN	R&S	ENV216	101337	G/L859	2024/07/02

For Radiated Emission (30MHz-1000MHz)

Instrumentation	Manufacturer	Model No.	Serial No.	DEKRA No.	Cal. Due date
3m Chamber	ETS	FACT3-2.0	CT000344-1100	G/L856	2024/06/04
EMI receiver	R&S	ESCI	101205	G/L858	2024/07/02
Antenna (30MHz-3GHz)	SCHWARZBECK	VULB9163	506	G/L864	2024/06/04
Test software	AUDIX	e3	Version 6.130520		

For Radiated Emission (1GHz-18GHz)

Instrumentation	Manufacturer	Model No.	Serial No.	DEKRA No.	Cal. Due date
3m Chamber	ETS	FACT3-2.0	CT000344-1100	G/L856	2024/06/04
Antenna (1GHz-18GHz)	R&S	HF907	102306	G/L1236	2024/04/10
Horn antenna preamplifier	Schwarzbeek	SCU-18	102234	G/L1236-1	2025/02/03
Spectrum analyzer	R&S	FSV	SN101012	G/L1235	2025/01/09

FOR RF

Instrumentation	Manufacturer	Model	Serial no.	DEKRA No.	Cal Due date
Spectrum analyzer	R&S	FSV	SN101012	G/L1235	2025/01/09
Chamber	ETS	/	/	G/L856	2024/06/04
Horn antenna (1GHz-18GHz)	R&S	HF907	102306	G/L1236	2024/04/10
Horn antenna preamplifier	Schwarzbeek	SCU-18	102234	G/L1236-1	2025/02/03
EMI receiver	R&S	ESCI	101205	G/L857	2024/07/02
Antenna	SCHWARZBE	VULB9163	506	G/L864	2024/06/04
(30MHz-3GHz)	СК				
OSP	R&S	OSP 150	101907	GZ1894	2025/02/01
Signal generator	R&S	SMB 100A	181317	GZ1895	2025/02/01
Vector signal	R&S	SMBV100A	263671	GZ1896	2025/02/01
generator					
Wireless connectivity	R&S	CMW 270	100990	GZ1893	2025/02/01
tester					



Manual step	Keysight	8494B	TH60074118	GZ2086	2024/07/07
attenuator					
(11dB)					
Manual step	Keysight	8495D	TH60074471	GZ2087	2024/07/07
attenuator					
(70dB)					
Band filter	HX Microwave	HXLBQ-	23110101-2	GZ2540	2024-11-26
		DZA118			
Band filter	HX Microwave	HXLBQ-	23110101-1	GZ2541	2024-11-26
		DZA104			
Band filter	HX Microwave	HXLBQ-	23080804-1	GZ2464	2024-08-29
		DZA219			
RMI artificial antenna	/	/	/	GZ1988	2024-05-14
Programmable	ASTUOD	TT-5166	52689	GZ2209	2024/05/08
Temperature &					
Humidity Chamber					
Test software	R&S	EMC32			Version
					11.30.00



ANNEX 3 - TEST PHOTOS

Refer to document Test setup.

--- END ---