FCC Test Report

Report No.: AGC10343170501FE04

FCC ID	:	2AL26-D5
APPLICATION PURPOSE	:	Original Equipment
PRODUCT DESIGNATION	:	Body Worn Camera
BRAND NAME	:	Reveal
MODEL NAME	:	D5
CLIENT	:	Reveal Media Limited
DATE OF ISSUE	:	June 30, 2017
STANDARD(S) TEST PROCEDURE(S)	:	FCC Part 15.247 KDB 558074 D01 DTS Meas Guidance v04
REPORT VERSION	:	V1.0



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Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	June 30, 2017	Valid	Original Report

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Applicant	Reveal Media Limited		
Address	Becketts Wharf Lower Teddington Road, Hampton Wick, KT1 4ER, United Kingdom		
Manufacturer	Reveal Media Limited		
Address	Becketts Wharf Lower Teddington Road, Hampton Wick, KT1 4ER, United Kingdom		
Product Designation	Body Worn Camera		
Brand Name	Reveal		
Test Model	D5		
Date of test	June 27, 2017 to June 30, 2017		
Deviation	None		
Condition of Test Sample Normal			
Test Result	Pass		
Report Template	AGCRT-US-BGN/RF		

1. VERIFICATION OF CONFORMITY

We hereby certify that:

The above equipment was tested by Dongguan Precise Testing Service Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC Rules Part 15.247.

Max 2ha Tested by Max Zhang(Zhang Yi) June 30, 2017 Solf xie Reviewed by Bart Xie(Xie Xiaobin)) June 30, 2017 Approved by Solger Zhang(Zhang Hongyi) June 30, 2017 Authorized Officer

2. GENERAL INFORMATION

2.1. PRODUCT DESCRIPTION

The EUT is designed as "Body Worn Camera". It is designed by way of utilizing the DSSS and OFDM technology to achieve the system operation.

Operation Frequency	2.412 GHz~2.462GHz
Output Power	IEEE 802.11b: 15.92 dBm; IEEE 802.11g: 14.99 dBm; IEEE 802.11n(20): 14.29 dBm
Modulation DSSS(DBPSK/DQPSK/CCK);OFDM(BPSK/QPSK/16-QAM/64-QAM)	
Number of channels 11	
Hardware Version	V1.0
Software Version	V1.0
Antenna Designation	Fixed Antenna (Met 15.203 Antenna requirement)
Antenna Gain	0.8dBi
Power Supply	DC 3.7V by battery or DC 5V by Micro-USB

A major technical description of EUT is described as following

2.2. TABLE OF CARRIER FREQUENCYS

Frequency Band	Channel Number	Frequency	
	1	2412 MHZ	
	2	2417 MHZ	
	3	2422 MHZ	
	4	2427 MHZ	
	5	2432 MHZ	
2400~2483.5MHZ	6	2437 MHZ	
	7	2442 MHZ	
	8	2447 MHZ	
	9	2452 MHZ	
	10	2457 MHZ	
	11	2462 MHZ	

Note: For 20MHZ bandwidth system use Channel 1 to Channel 11

MCS Index	Nss	Modulation	R	NBPSC	NCBPS		NDBPS		Data rate(Mbps) 800nsGI	
					20MHz	40MHz	20MHz	40MHz	20MHz	40MHz
0	1	BPSK	1/2	1	52	108	26	54	6.5	13.5
1	1	QPSK	1/2	2	104	216	52	108	13.0	27.0
2	1	QPSK	3/4	2	104	216	78	162	19.5	40.5
3	1	16-QAM	1/2	4	208	432	104	216	26.0	54.0
4	1	16-QAM	3/4	4	208	432	156	324	39.0	81.0
5	1	64-QAM	2/3	6	312	648	208	432	52.0	108.0
6	1	64-QAM	3/4	6	312	648	234	489	58.5	121.5
7	1	64-QAM	5/6	6	312	648	260	540	65.0	135.0

2.3. IEEE 802.11N MODULATION SCHEME

Symbol	Explanation
NSS	Number of spatial streams
R	Code rate
NBPSC	Number of coded bits per single carrier
NCBPS	Number of coded bits per symbol
NDBPS	Number of data bits per symbol
GI Guard interval	

2.4. RELATED SUBMITTAL(S) / GRANT (S)

This submittal(s) (test report) is intended for **FCC ID: 2AL26-D5** filing to comply with the FCC Part 15 requirements.

2.5. TEST METHODOLOGY

Both conducted and radiated testing was performed according to the procedures in ANSI C63.10 (2013). Radiated testing was performed at an antenna to EUT distance 3 meters.

Others testing (listed at item 5.3) was performed according to the procedures in FCC Part 15.247 rules KDB 558074 D01 DTS Meas Guidance v04.

2.6. SPECIAL ACCESSORIES

Refer to section 5.2.

2.7. EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

3. MEASUREMENT UNCERTAINTY

Conducted measurement: +/- 3.18dB Radiated measurement: +/- 3.91dB

4. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION					
1	Low channel TX					
2	Middle channel TX					
3	High channel TX					
4	Normal operating					
Note: Transm	Note: Transmit by 802.11b with Date rate (1/2/5.5/11)					

Transmit by 802.11g with Date rate (6/9/12/18/24/36/48/54)

Transmit by 802.11n (20MHz) with Date rate (6.5/13/19.5/26/39/52/58.5/65)

Note:

1. The EUT has been set to operate continuously on the lowest, middle and highest operation frequency Individually, and the eut is operating at its maximum duty cycle>or equal 98%

- 2. All modes under which configure applicable have been tested and the worst mode test data recording in the test report, if no other mode data.
- 3. For Radiated Emission, 3axis were chosen for testing for each applicable mode.

5. SYSTEM TEST CONFIGURATION

5.1. CONFIGURATION OF EUT SYSTEM

Configure:

EUT	Accessory
-----	-----------

5.2. EQUIPMENT USED IN EUT SYSTEM

ltem	Equipment	Model No. ID or Specification		Remark
1	Body Worn Camera	D5	2AL26-D5	EUT
2	Adapter	WS2U050-200	AC100-240V 50/60Hz DC5V/1A	Support

5.3. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
§15.247	Output Power	Compliant
§15.247	6 dB Bandwidth	Compliant
§15.247	Conducted Spurious Emission	Compliant
§15.247	Maximum Conducted Output Power SPECTRAL Density	Compliant
§15.209	Radiated Emission	Compliant
§15.247	Band Edges	Compliant
§15.207	Conducted Emission	Compliant

6. TEST FACILITY

Site	Dongguan Precise Testing Service Co., Ltd.		
Location Building D, Baoding Technology Park,Guangming Road2, Dongcheng District, Dongguan, Guangdong, China.			
FCC Registration No.	371540		
Description	The test site is constructed and calibrated to meet the FCC requirements in documents ANSI C63.4:2014.		

ALL TEST EQUIPMENT LIST

Radiated Emission Test Site					
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration
EMI Test Receiver	Rohde & Schwarz	ESCI	101417	July 3, 2016	July 2, 2017
Trilog Broadband Antenna (25M-1GHz)	SCHWARZBECK	VULB9160	9160-3355	July 3, 2016	July 2, 2017
Signal Amplifier	SCHWARZBECK	BBV 9475	9745-0013	July 3, 2016	July 2, 2017
RF Cable	SCHWARZBECK	AK9515E	96221	July 3, 2016	July 2, 2017
3m Anechoic Chamber	CHENGYU	966	PTS-001	June 2, 2017	June 1, 2018
MULTI-DEVICE Positioning Controller	Max-Full	MF-7802	MF780208339	N/A	N/A
Active loop antenna (9K-30MHz)	Schwarzbeck	FMZB1519	1519-038	June 2, 2017	June 1, 2018
Spectrum analyzer	Agilent	E4407B	MY46185649	June 2, 2017	June 1, 2018
Power Sensor	Agilent	U2021XA	MY55050474	June 2, 2017	June 1, 2018
Horn Antenna (1G-18GHz)	SCHWARZBECK	BBHA9120D	9120D-1246	June 2, 2017	June 1, 2018
Horn Ant (18G-40GHz)	Schwarzbeck	BBHA 9170	9170-181	June 2, 2017	June 1, 2018

Conducted Emission Test Site					
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration
EMI Test Receiver	Rohde & Schwarz	ESCI	101417	June 2, 2017	June 1, 2018
Artificial Mains Network	Narda	L2-16B	000WX31025	June 2, 2017	June 1, 2018
Artificial Mains Network (AUX)	Narda	L2-16B	000WX31026	June 2, 2017	June 1, 2018
RF Cable	SCHWARZBECK	AK9515E	96222	June 2, 2017	June 1, 2018
Shielded Room	CHENGYU	843	PTS-002	June 2, 2017	June 1, 2018

7. OUTPUT POWER

7.1. MEASUREMENT PROCEDURE

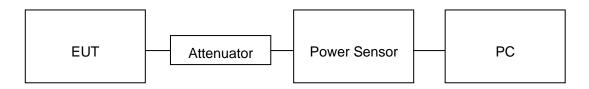
For average power test:

- 1. Connect EUT RF output port to power sensor through an RF attenuator.
- 2. Connect the power sensor to the PC.
- 3. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 4. Record the maximum power from the software.

Note : The EUT was tested according to KDB 558074 for compliance to FCC 47CFR 15.247 requirements.

7.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

AVERAGE POWER SETUP



7.3. LIMITS AND MEASUREMENT RESULT

TEST ITEM	OUTPUT POWER
TEST MODE	802.11b with data rate 1

Frequency (GHz)	Average Power (dBm)	Applicable Limits (dBm)	Pass or Fail
2.412	15.73	30	Pass
2.437	15.75	30	Pass
2.462	15.92	30	Pass

TEST ITEM	OUTPUT POWER
TEST MODE	802.11g with data rate 6

Frequency (GHz)	Average Power (dBm)	Applicable Limits (dBm)	Pass or Fail
2.412	14.82	30	Pass
2.437	14.76	30	Pass
2.462	14.99	30	Pass

TEST ITEM	OUTPUT POWER
TEST MODE	802.11n 20 with data rate 6.5

Frequency (GHz)	Average Power (dBm)	Applicable Limits (dBm)	Pass or Fail
2.412	14.04	30	Pass
2.437	14.16	30	Pass
2.462	14.29	30	Pass

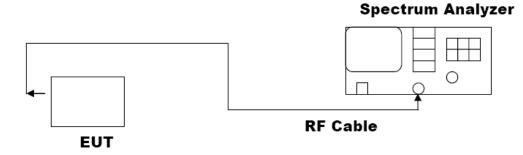
8.6 DB BANDWIDTH

8.1. MEASUREMENT PROCEDURE

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 3. Set SPA Centre Frequency = Operation Frequency, RBW= 100 KHz, VBW \ge 3×RBW.
- 4. Set SPA Trace 1 Max hold, then View.

Note: The EUT was tested according to KDB 558074 for compliance to FCC 47CFR 15.247 requirements.

8.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)



8.3. LIMITS AND MEASUREMENT RESULTS

TEST ITEM	6DB BANDWIDTH
TEST MODE	802.11b with data rate 11

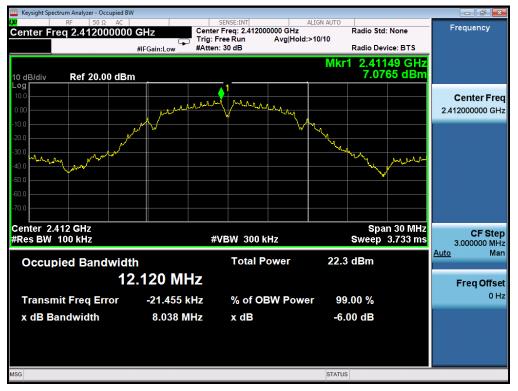
LIMITS AND MEASUREMENT RESULT				
	Applicable Limits			
Applicable Limits	Test Data (MHz)		Criteria	
>500KHZ	Low Channel	8.038	PASS	
	Middle Channel	8.030	PASS	
	High Channel	8.048	PASS	

TEST ITEM	6DB BANDWIDTH
TEST MODE	802.11g with data rate 54

	LIMITS AND MEAS	UREMENT RESULT	
Annlinghla Limita		Applicable Limits	
Applicable Limits	Test Da	ita (MHz)	Criteria
	Low Channel	16.02	PASS
>500KHZ	Middle Channel	16.27	PASS
	High Channel	15.41	PASS

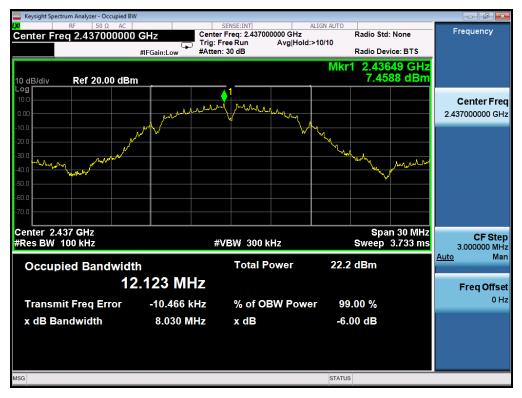
TEST ITEM	6DB BANDWIDTH
TEST MODE	802.11n 20 with data rate 65

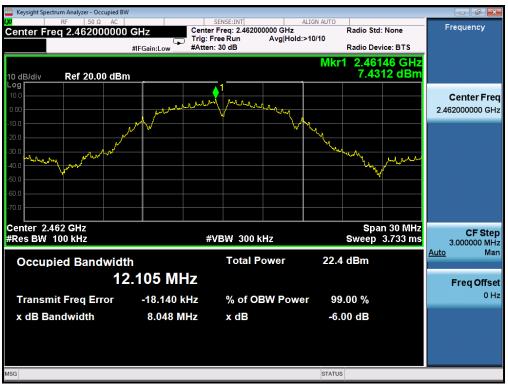
	LIMITS AND MEAS	UREMENT RESULT	
Applicable Limite		Applicable Limits	
Applicable Limits	Test Da	ita (MHz)	Criteria
	Low Channel	15.11	PASS
>500KHZ	Middle Channel	15.10	PASS
	High Channel	15.10	PASS



802.11b TEST RESULT TEST PLOT OF BANDWIDTH FOR LOW CHANNEL

TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL



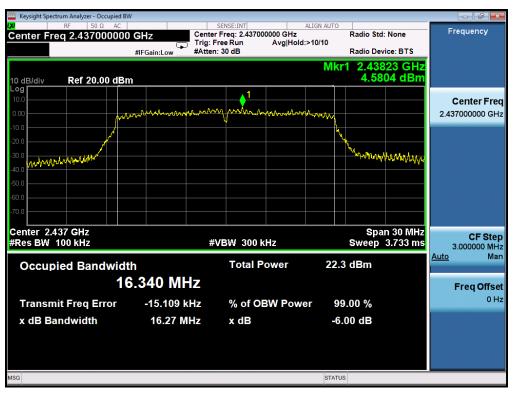


TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL

802.11g TEST RESULT

TEST PLOT OF BANDWIDTH FOR LOW CHANNEL

Keysight Spectrum Analyzer - Occupied B\					
Center Freq 2.41200000		INSE:INT reg: 2.412000000 GHz	ALIGN AUTO Radio Std	: None	Frequency
	#IEGain:Low #Atten:		>10/10 Radio Dev	vice: BTS	
	#IFGain:Low #Attent				
10 dB/div Ref 20.00 dBr	n		Mkr1 2.413 4.58	28 dBm	
Log		<u>↓</u> 1			0
0.00	. Brachanger and and	man Agentaman	A		Center Freq 2.412000000 GHz
-10.0		V	ment for		2.412000000 GH2
-20.0			Sort A		
-30.0 havelow Markellow			June Contraction of the Contract	www.volumby	
-40.0				AN NAMORANA	
-50.0					
-60.0					
-70.0					
			0	- 00 MU-	
Center 2.412 GHz #Res BW 100 kHz	#V	BW 300 kHz		n 30 MHz 3.733 ms	CF Step
			-		3.000000 MHz Auto Man
Occupied Bandwidt	th	Total Power	22.4 dBm		
10	6.347 MHz				Freq Offset
Transmit Freq Error	-18.998 kHz	% of OBW Powe	er 99.00 %		0 Hz
x dB Bandwidth	16.02 MHz	x dB	-6.00 dB		
MSG			STATUS		



TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL

TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL

Keysight Spectrum Analyzer - Occupied B	N				
W RF 50 Ω AC Center Freq 2.462000000	Trig: F	SENSE:INT r Freq: 2.462000000 GH: Free Run Avg Ho n: 30 dB	old:>10/10	lio Std: None lio Device: BTS	Frequency
10 dB/div Ref 20.00 dBr	n			46323 GHz 4.7847 dBm	
10.0	nt have been been been been been been been be	1 My million and marked	~~~~~~~		Center Freq 2.462000000 GHz
-20.0				White the work	
-40.0					
-70.0 Center 2.462 GHz				Span 30 MHz	
#Res BW 100 kHz	#	VBW 300 kHz	Sw	reep 3.733 ms	CF Step 3.000000 MHz
Occupied Bandwid	th	Total Power	22.4 dE	lm	<u>Auto</u> Man
10	6.330 MHz				Freq Offset
Transmit Freq Error	-16.507 kHz	% of OBW Po	wer 99.00	%	0 Hz
x dB Bandwidth	15.41 MHz	x dB	-6.00 d	iΒ	
MSG			STATUS		

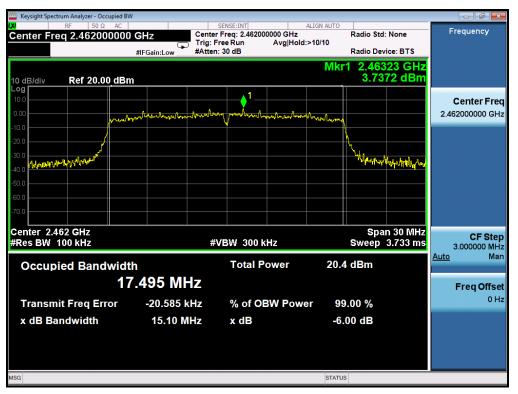


802.11n (20) TEST RESULT

TEST PLOT OF BANDWIDTH FOR LOW CHANNEL

TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL

Keysight Spectrum Analyzer - Occupied BW				1	
Center Freg 2.437000000 GHz		2.437000000 GHz		Radio Std: None	Frequency
#IEGa	Trig: Free Ru #Atten: 30 dB			Radio Device: BTS	
#irGa	II.LOW WITCH. OF GE	-	-	2.43823 GI	
10 dB/div Ref 20.00 dBm				3.3605 dB	
10.0		▲ 1			Center Freq
0.00	Marshand me	And mark mark	Martin		2.437000000 GHz
-10.0					
-20.0			ــــــــــــــــــــــــــــــــــــــ		-
-30.0				When by the hope where	
40.0					
-50.0					
-60.0					
-70.0					
Center 2.437 GHz		ŀ		Span 30 M	
#Res BW 100 kHz	#VBW	300 kHz	,	Sweep 3.733 r	15 3.000000 MHz
Occupied Bandwidth	Т	otal Power	20.3 (dBm	<u>Auto</u> Man
	0 MHz				
17.45					Freq Offset
Transmit Freq Error -1	9.495 kHz %	of OBW Powe	er 99.0	00 %	0 Hz
x dB Bandwidth	5.10 MHz x	dB	-6.00	0 dB	
MSG			STATUS		



TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL

9. CONDUCTED SPURIOUS EMISSION

9.1. MEASUREMENT PROCEDURE

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2, Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 3. Set SPA Trace 1 Max hold, then View.
- Note: The EUT was tested according to KDB 558074 for compliance to FCC 47CFR 15.247 requirements. Owing to satisfy the requirements of the number of measurement points, we set the RBW=1MHz, VBW > RBW, scan up through 10th harmonic, and consider the tested results as the worst case, if the tested results conform to the requirement, we can deem that the real tested results(set the RBW=100KHz, VBW > RBW) are conform to the requirement.

9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

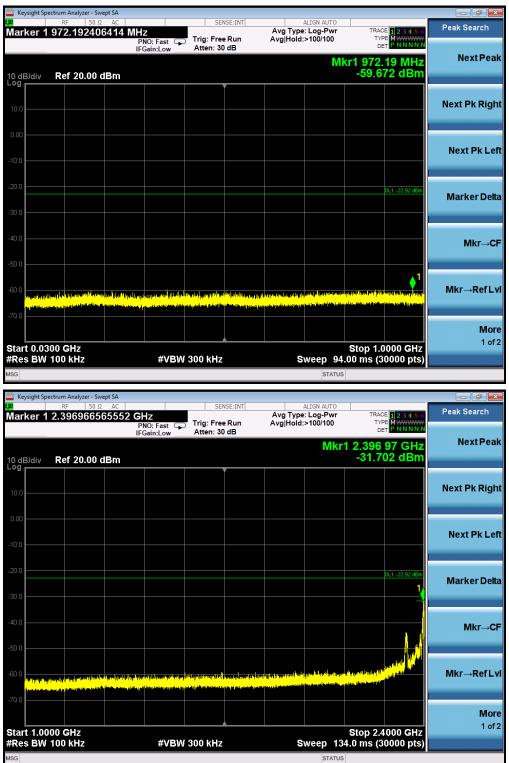
The same as described in section 8.2.

9.3. MEASUREMENT EQUIPMENT USED

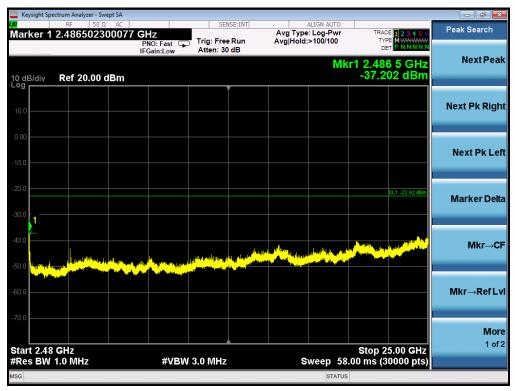
The same as described in section 6.

9.4. LIMITS AND MEASUREMENT RESULT

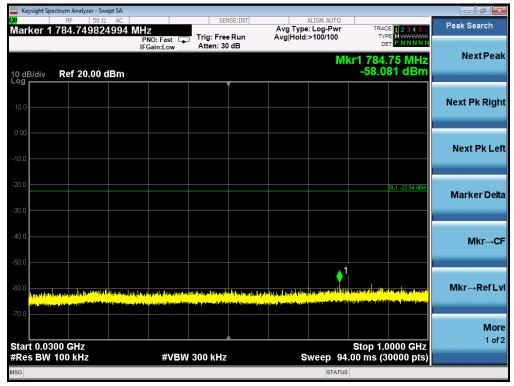
LIMITS AND MEA	SUREMENT RESULT	
Applieghte Limite	Measurement Re	sult
Applicable Limits	Test Data	Criteria
In any 100 KHz Bandwidth Outside the	At least -30dBc than the limit	
frequency band in which the spread spectrum	Specified on the BOTTOM	PASS
intentional radiator is operating, the radio frequency	Channel	
power that is produce by the intentional radiator shall be at least 30 dB below that in 100KHz bandwidth within the band that contains the highest level of the desired power. In addition, radiation emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in§15.209(a))	At least -30dBc than the limit Specified on the TOP Channel	PASS



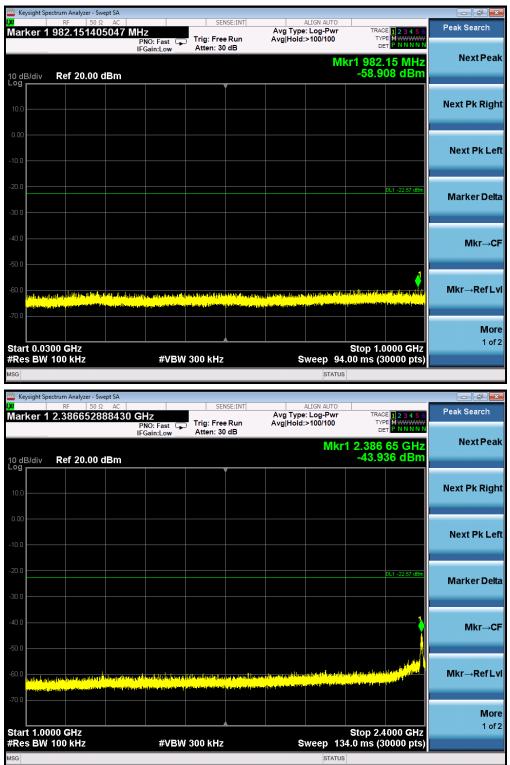
TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE OF 802.11b FOR MODULATION IN LOW CHANNEL



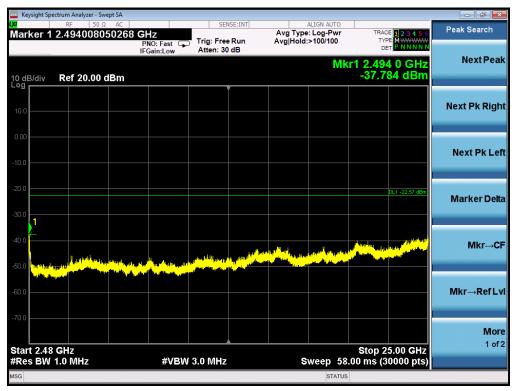
TEST PLOT OF OUT OF BAND EMISSIONS THE WORST CASE OF 802.11b FOR MODULATION IN MIDDLE CHANNEL



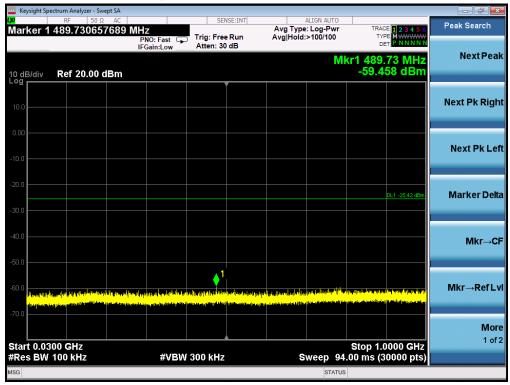
Keysight Sp		Ω AC		SENS	SE:INT		ALIGN AUTO			
arker 1	2.363692					Avg Type	e: Log-Pwr	TRAC	E 1 2 3 4 5 6	Peak Search
			PNO: Fast IFGain:Low	Trig: Free Atten: 30		Avg Hold:	.>100/100	DE		
							Mkr1	2.363	69 GHz	NextPea
) dB/div	Ref 20.00	dBm						-44.3	06 dBm	
				ľ						
10.0										Next Pk Rig
10.0										_
).00										
										Next Pk Le
0.0										Next I K Et
0.0									DL1 -22.54 dBm	Mandalan
										Marker De
0.0										
0.0									.1	
										Mkr→C
0.0										
0.0	bet when a state of the state	and dimension	laker of a statement of the		in the second	a sala na famina sina		tene bener bereite		Mkr→RefL
and to did.	and the state of t	and a line line of a star	. Alter of the Line of the	alitar, instalation of the second	interior in the later	and a second second second	and a line of a	an an general a block of the		
0.0										
										Мо
tart 1.00	000 GHz	I					<u> </u>	Stop 2.4	000 GHz	1 of
Dec BW										
Res DW	100 kHz		#VBW	300 kHz		S	weep 134	1.0 ms (3	0000 pts)	
	100 kHz		#VBW	300 kHz		s	status	1.0 ms (3	0000 pts)	
G		Swent SA	#VBW	300 kHz		S		1.0 ms (3	0000 pts)	
iG Keysight Sp	ectrum Analyzer - 1 RF 50	Ω AC			SE:INT		STATUS ALIGN AUTO			
iG Keysight Sp	ectrum Analyzer - 1	Ω AC	GHz) Trig: Free	Run		STATUS	TRAC	E 1 2 3 4 5 6	Peak Search
G Keysight Sp	ectrum Analyzer - 1 RF 50	Ω AC		SEN	Run	Avg Type	ALIGN AUTO 2: Log-Pwr 2:>100/100	TRAC TYP DE	E 1 2 3 4 5 6 E M WWWW T P N N N N N	
G Keysight Sp arker 1	RF 50 2.512021	Ω AC 850728	GHz PNO: Fast 😱) Trig: Free	Run	Avg Type	ALIGN AUTO 2: Log-Pwr 2:>100/100	ткас тур DE r1 2.51	E 123456 E MWWWW T P NNNN 2 0 GHz	
G Keysight Sp arker 1	ectrum Analyzer - 1 RF 50	Ω AC 850728	GHz PNO: Fast 😱) Trig: Free	Run	Avg Type	ALIGN AUTO 2: Log-Pwr 2:>100/100	ткас тур DE r1 2.51	E 1 2 3 4 5 6 E M WWWW T P N N N N N	Peak Search
G Keysight Sp arker 1	RF 50 2.512021	Ω AC 850728	GHz PNO: Fast 😱) Trig: Free	Run	Avg Type	ALIGN AUTO 2: Log-Pwr 2:>100/100	ткас тур DE r1 2.51	E 123456 E MWWWW T P NNNN 2 0 GHz	Peak Search Next Pea
G Keysight Sp arker 1 OdB/div	RF 50 2.512021	Ω AC 850728	GHz PNO: Fast 😱) Trig: Free	Run	Avg Type	ALIGN AUTO 2: Log-Pwr 2:>100/100	ткас тур DE r1 2.51	E 123456 E MWWWW T P NNNN 2 0 GHz	Peak Search Next Pea
G Keysight Sp arker 1 0 dB/div 9 9 0.0	RF 50 2.512021	Ω AC 850728	GHz PNO: Fast 😱) Trig: Free	Run	Avg Type	ALIGN AUTO 2: Log-Pwr 2:>100/100	ткас тур DE r1 2.51	E 123456 E MWWWW T P NNNN 2 0 GHz	Peak Search Next Pea
is Keysight Sp larker 1 0 dB/div 9 g	RF 50 2.512021	Ω AC 850728	GHz PNO: Fast 😱) Trig: Free	Run	Avg Type	ALIGN AUTO 2: Log-Pwr 2:>100/100	ткас тур DE r1 2.51	E 123456 E MWWWW T P NNNN 2 0 GHz	Peak Search Next Pea Next Pk Rig
is keysight Spo arker 1 adB/div 0 dB/div 0 0 0 0	RF 50 2.512021	Ω AC 850728	GHz PNO: Fast 😱) Trig: Free	Run	Avg Type	ALIGN AUTO 2: Log-Pwr 2:>100/100	ткас тур DE r1 2.51	E 123456 E MWWWW T P NNNN 2 0 GHz	Peak Search Next Pea Next Pk Rig
G Keysight Sp. arker 1 0 dB/div 0 0 0.0	RF 50 2.512021	Ω AC 850728	GHz PNO: Fast 😱) Trig: Free	Run	Avg Type	ALIGN AUTO 2: Log-Pwr 2:>100/100	ткас тур DE r1 2.51	E 123456 E MWWWW T P NNNN 2 0 GHz	Peak Search Next Pea Next Pk Rig
G Keysight Sp	RF 50 2.512021	Ω AC 850728	GHz PNO: Fast 😱) Trig: Free	Run	Avg Type	ALIGN AUTO 2: Log-Pwr 2:>100/100	ткас тур DE r1 2.51	E 123456 E MINININ P NINININ 2 0 GHz 36 dBm	Peak Search Next Pea Next Pk Rig
G Keysight Sp	RF 50 2.512021	Ω AC 850728	GHz PNO: Fast 😱) Trig: Free	Run	Avg Type	ALIGN AUTO 2: Log-Pwr 2:>100/100	ткас тур DE r1 2.51	E 123456 E MWWWW T P NNNN 2 0 GHz	Peak Search
G G G G G G G G G G G G G G G G G G G	RF 50 2.512021	Ω AC 850728	GHz PNO: Fast 😱) Trig: Free	Run	Avg Type	ALIGN AUTO 2: Log-Pwr 2:>100/100	ткас тур DE r1 2.51	E 123456 E MINININ P NINININ 2 0 GHz 36 dBm	Peak Search Next Pea Next Pk Rig Next Pk Le
G Keysight Sp arker 1 arker 1 0 dB/div 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	RF 50 2.512021	Ω AC 850728	GHz PNO: Fast 😱	SEN:	Run	Avg Type	ALIGN AUTO 2: Log-Pwr 2:>100/100	ткас тур DE r1 2.51	E 123456 E MINININ P NINININ 2 0 GHz 36 dBm	Peak Search Next Pea Next Pk Rig Next Pk Le
arker 1	RF 50 2.512021	Ω AC 850728	GHz PNO: Fast 😱	SEN:	Run	Avg Type Avg Hold	ALIGN AUTO :: Log-Pwr :>100/100 MK	TRAC TYF DR 71 2.51: -37.6	E 123456 E MINININ P NINININ 2 0 GHz 36 dBm	Peak Search Next Pea Next Pk Rig Next Pk Le
Image: second	ectrum Analyzer - RF 50 2.512021 Ref 20.00	Ω AC 850728 0 850728 0 0 dBm	GHz PNO: Fast 😱	SEN:	Run dB	Avg Type Avg Hold:	ALIGN AUTO :: Log-Pwr :>100/100	ткас тур DE r1 2.51	E 123456 E MINININ P NINININ 2 0 GHz 36 dBm	Peak Search Next Pea Next Pk Rig Next Pk Le Marker De
Image: second	ectrum Analyzer - RF 50 2.512021 Ref 20.00	Ω AC 850728	GHz PNO: Fast 😱	SEN:	Run	Avg Type Avg Hold:	ALIGN AUTO :: Log-Pwr :>100/100 MK	TRAC TYF DR 71 2.51: -37.6	E 123456 E MINININ P NINININ 2 0 GHz 36 dBm	Peak Search Next Pea Next Pk Rig Next Pk Le Marker De
Image: second	ectrum Analyzer - RF 50 2.512021 Ref 20.00	Ω AC 850728 0 850728 0 0 dBm	GHz PNO: Fast 😱	SEN:	Run dB	Avg Type Avg Hold:	ALIGN AUTO :: Log-Pwr :>100/100	TRAC TYF DR 71 2.51: -37.6	E 123456 E MINININ P NINININ 2 0 GHz 36 dBm	Peak Search Next Per Next Pk Rig Next Pk Lo Marker De Mkr→0
G dB/div g d dB/div g d	ectrum Analyzer - RF 50 2.512021 Ref 20.00	Ω AC 850728 0 850728 0 0 dBm	GHz PNO: Fast 😱	SEN:	Run dB	Avg Type Avg Hold:	ALIGN AUTO :: Log-Pwr :>100/100	TRAC TYF DR 71 2.51: -37.6	E 123456 E MINININ P NINININ 2 0 GHz 36 dBm	Peak Search Next Per Next Pk Rig Next Pk Le Marker De Mkr→C
Image: second	ectrum Analyzer - RF 50 2.512021 Ref 20.00	Ω AC 850728 0 850728 0 0 dBm	GHz PNO: Fast 😱	SEN:	Run dB	Avg Type Avg Hold:	ALIGN AUTO :: Log-Pwr :>100/100	TRAC TYF DR 71 2.51: -37.6	E 123456 E MINININ P NINININ 2 0 GHz 36 dBm	Peak Search Next Per Next Pk Rig Next Pk Le Marker De Mkr→C
Image: second	ectrum Analyzer - RF 50 2.512021 Ref 20.00	Ω AC 850728 0 850728 0 0 dBm	GHz PNO: Fast 😱	SEN:	Run dB	Avg Type Avg Hold:	ALIGN AUTO :: Log-Pwr :>100/100	TRAC TYF DR 71 2.51: -37.6	E 123456 E MINININ P NINININ 2 0 GHz 36 dBm	Peak Search Next Per Next Pk Rig Next Pk Le Marker De Mkr→C
G Keysight Sp. arker 1 0 dB/div 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Ref 20.00	Ω AC 850728 0 850728 0 0 dBm	GHz PNO: Fast 😱	SEN:	Run dB	Avg Type Avg Hold:	ALIGN AUTO :: Log-Pwr :>100/100	TRAC TYF DF 1 2.51: -37.6	E 1 2 3 4 5 6 E MWWWW T P NNNN 2 0 GHz 36 dBm	Peak Search Next Pea Next Pk Rig Next Pk Le Marker De Mkr→C
G Keysight Sp arker 1 0 dB/div 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Ref 20.00	Ω AC 850728 0 850728 0 0 dBm	GHz PNO: Fast IFGain:Low	SEN:	Run dB	Avg Type Avg Hold:	ALIGN AUTO :: Log-Pwr :>100/100	TRAC TVF pr 1 2.51; -37.6	E 1 2 3 4 5 6 E MINIMIN 2 0 GHz 36 dBm	Peak Search Next Pea Next Pk Rig Next Pk Le Marker De



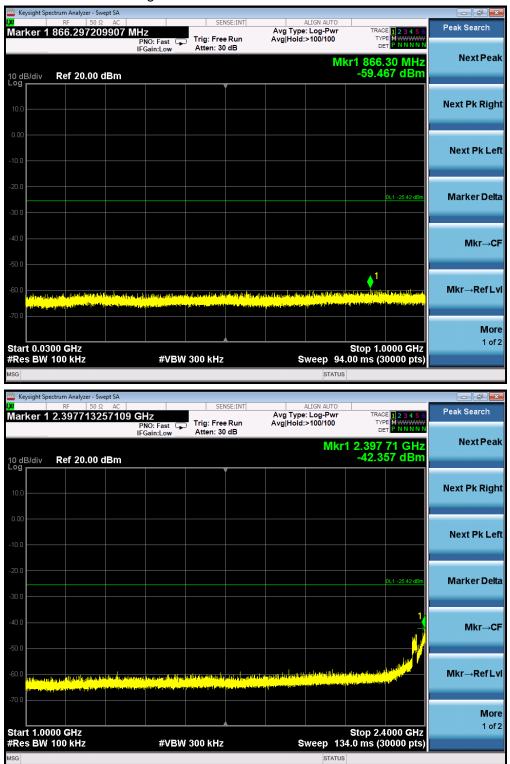
TEST PLOT OF OUT OF BAND EMISSIONS THE WORST CASE OF 802.11b FOR MODULATION IN HIGH CHANNEL



TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE OF 802.11g FOR MODULATION IN LOW CHANNEL



Keysight Spectrum Analyzer - Swept SA RF 50 Ω AC		SENSE:INT	ALIGN AUT	0		Peak Search
Aarker 1 2.39943998133	PNO: Fast 💭 Trig:	Free Run	Avg Type: Log-Pv Avg Hold:>100/100		123456 MWWWW PNNNNN	Feak Search
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		ľ				Next Pk Rigi
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10.0						Next Pk Le
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ISG	<i>"•</i> 211 0001			134.0 ms (30	000 pts)	
ISG					000 pts)	
	00 GHz	SENSE:INT	ALIGN AUT		123456	Peak Search
SG Keysight Spectrum Analyzer - Swept SA RF 50 Ω AC	00 GHz PNO: Fast Trig:		ALIGN AUT Avg Type: Log-Pv Avg Hold:>100/100	O Vr TRACE O TYPE DET	123456 M wwww PNNNN	Peak Search
sg Keysight Spectrum Analyzer - Swept SA RF 50 Ω AC Iarker 1 2.48350000000	00 GHz PNO: Fast IFGain:Low Atter	SENSE:INT	ALIGN AUT Avg Type: Log-Pv Avg Hold:>100/100	TUS VIT TRACE D TYPE DET VIKIT 2.483		Peak Search
SG Keysight Spectrum Analyzer - Swept SA RF 50 Ω AC Aarker 1 2.48350000000	00 GHz PNO: Fast IFGain:Low Atter	SENSE:INT	ALIGN AUT Avg Type: Log-Pv Avg Hold:>100/100	TUS VIT TRACE D TYPE DET VIKIT 2.483	123456 M wwww PNNNN	
sa keysight Spectrum Analyzer - Swept SA RF 50 Ω AC Aarker 1 2.483550000000 0 dB/div Ref 20.00 dBm	00 GHz PNO: Fast IFGain:Low Atter	SENSE:INT	ALIGN AUT Avg Type: Log-Pv Avg Hold:>100/100	TUS VIT TRACE D TYPE DET VIKIT 2.483		Peak Search Next Pea
sa keysight Spectrum Analyzer - Swept SA RF 50 Ω AC Marker 1 2.483500000000 0 dB/div Ref 20.00 dBm	00 GHz PNO: Fast IFGain:Low Atter	SENSE:INT	ALIGN AUT Avg Type: Log-Pv Avg Hold:>100/100	TUS VIT TRACE D TYPE DET VIKIT 2.483		Peak Search Next Pea
sg keysight Spectrum Analyzer - Swept SA RF 50 Ω AC larker 1 2.483500000000 0 dB/div Ref 20.00 dBm	00 GHz PNO: Fast IFGain:Low Atter	SENSE:INT	ALIGN AUT Avg Type: Log-Pv Avg Hold:>100/100	TUS VIT TRACE D TYPE DET VIKIT 2.483		Peak Search Next Pea Next Pk Rig
SG	00 GHz PNO: Fast IFGain:Low Atter	SENSE:INT	ALIGN AUT Avg Type: Log-Pv Avg Hold:>100/100	TUS VIT TRACE D TYPE DET VIKIT 2.483		Peak Search Next Pea Next Pk Rig
SG	00 GHz PNO: Fast IFGain:Low Atter	SENSE:INT	ALIGN AUT Avg Type: Log-Pv Avg Hold:>100/100	NTUS Vr TRACE D TYPE DET Wkr1 2.483 -36.49	123456 M PNNNN 5 GHz 6 dBm	Peak Search Next Pea Next Pk Rig Next Pk Le
SG	00 GHz PNO: Fast IFGain:Low Atter	SENSE:INT	ALIGN AUT Avg Type: Log-Pv Avg Hold:>100/100	NTUS Vr TRACE D TYPE DET Wkr1 2.483 -36.49		Peak Search Next Pea Next Pk Rig Next Pk Le
SG Keysight Spectrum Analyzer - Swept SA RF 50Ω AC Aarker 1 2.483500000000 0 dB/div Ref 20.00 dBm 99 10 0 0.00	00 GHz PNO: Fast IFGain:Low Atter	SENSE:INT	ALIGN AUT Avg Type: Log-Pv Avg Hold:>100/100	NTUS Vr TRACE D TYPE DET Wkr1 2.483 -36.49	123456 M PNNNN 5 GHz 6 dBm	Peak Search Next Pea Next Pk Rig Next Pk Le
SG Keysight Spectrum Analyzer - Swept SA RF 50 Ω AC Arker 1 2.483500000000 0 dB/div Ref 20.00 dBm 0 00 0 00 10 0 10	00 GHz PNO: Fast IFGain:Low Atter	SENSE:INT	ALIGN AUT Avg Type: Log-Pv Avg Hold:>100/100	NTUS VIT TRACE DET VIKIT 2.483 -36.49	123456 M PNNNN 5 GHz 6 dBm	Peak Search Next Pea Next Pk Rig Next Pk Le Marker De
SG Keysight Spectrum Analyzer - Swept SA RF 50 Ω AC Aarker 1 2.483500000000 0 dB/div Ref 20.00 dBm 0 dB/div Ref 20.00 dBm 0 000 10 0 10	00 GHz PNO: Fast IFGain:Low Atter	SENSE:INT	ALIGN AUT Avg Type: Log-Pv Avg Hold:>100/100	NTUS VIT TRACE DET VIKIT 2.483 -36.49	1 2 3 4 5 6 M WWWWW 5 GHz 6 dBm	Peak Search Next Pea Next Pk Rig Next Pk Le Marker De
SG Keysight Spectrum Analyzer - Swept SA RF 50 Ω AC Aarker 1 2.483500000000 0 dB/div Ref 20.00 dBm 0 dB/div Ref 20.00 dBm 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	00 GHz PNO: Fast IFGain:Low Atter	SENSE:INT	ALIGN AUT Avg Type: Log-Pv Avg Hold:>100/100	NTUS VIT TRACE DET VIKIT 2.483 -36.49	1 2 3 4 5 6 M WWWWW 5 GHz 6 dBm	Peak Search Next Per Next Pk Rig Next Pk Lo Marker De Mkr→0
SG SG SG Keysight Spectrum Analyzer - Swept SA RF S0 Ω AC Aarker 1 2.48350000000 OdB/div Ref 20.00 dBm SG OdB/div Ref 20	00 GHz PNO: Fast IFGain:Low Atter	SENSE:INT	ALIGN AUT Avg Type: Log-Pv Avg Hold:>100/100	NTUS VIT TRACE DET VIKIT 2.483 -36.49	1 2 3 4 5 6 M WWWWW 5 GHz 6 dBm	Peak Search Next Pea Next Pk Rig Next Pk Le Marker Del MkrC
SG Keysight Spectrum Analyzer - Swept SA RF 50 Ω AC Aarker 1 2.483500000000 0 dB/div Ref 20.00 dBm 0 dB/div Ref 20.00 dBm 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	00 GHz PNO: Fast IFGain:Low Atter	SENSE:INT	ALIGN AUT Avg Type: Log-Pv Avg Hold:>100/100	NTUS VIT TRACE DET VIKIT 2.483 -36.49	1 2 3 4 5 6 M WWWWW 5 GHz 6 dBm	Peak Search Next Pea Next Pk Rig Next Pk Le Marker Del Mkr→C
SG Keysight Spectrum Analyzer - Swept SA RF 50 Ω AC Iarker 1 2.483500000000 0 dB/div Ref 20.00 dBm 0 dB/div Ref 20.00 dB	00 GHz PNO: Fast IFGain:Low Atter	SENSE:INT	ALIGN AUT Avg Type: Log-Pv Avg Hold:>100/100	NTUS VIT TRACE DET VIKIT 2.483 -36.49	2 3 4 5 6 M WINNIN 5 GHz 6 dBm	Peak Search

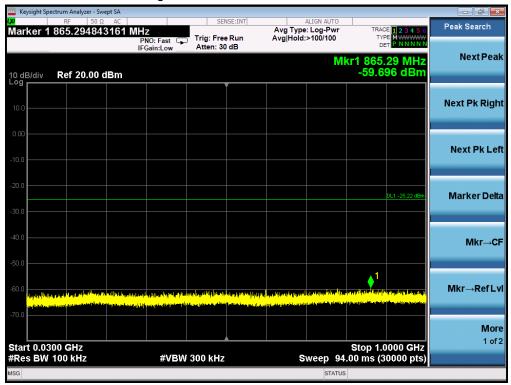


TEST PLOT OF OUT OF BAND EMISSIONS THE WORST CASE OF 802.11g FOR MODULATION IN MIDDLE CHANNEL

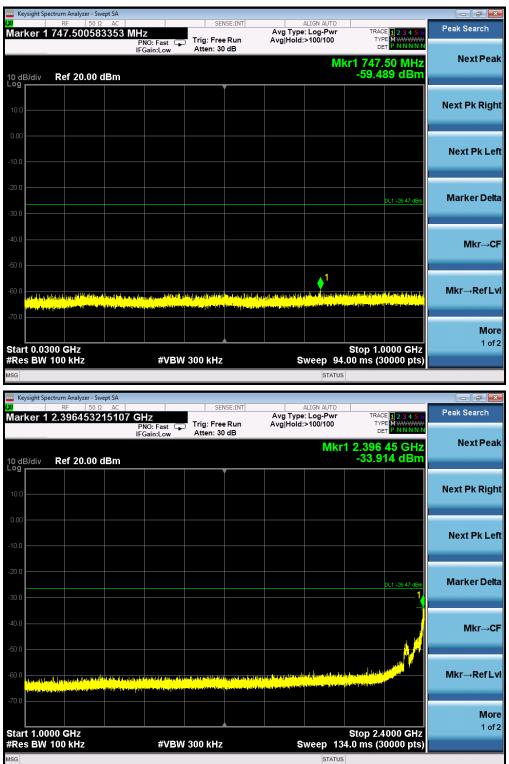


TEST PLOT OF OUT OF BAND EMISSIONS THE WORST CASE

OF 802.11g FOR MODULATION IN HIGH CHANNEL



Keysight Sp		Ω AC		SEN	ISE:INT		ALIGN AUTO			
Aarker 1	2.392159		BHZ PNO: Fast 🕞	Trig: Free		Avg Type Avg Hold	e: Log-Pwr :>100/100	TYF	E 1 2 3 4 5 6 E MWWWW	Peak Search
			IFGain:Low	Atten: 30	dB		Mkrd		16 GHz	NextPea
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. ^{og}				· · · · · · · · · · · · · · · · · · ·						
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0.00										Next Pk Le
10.0										NCALL
20.0										
20.0									DL1 -25.22 dBm	Marker De
30.0										
40.0									1	
										Mkr→C
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60.0	والمحمد والمستحد والمحاد والأوري			da d	the last of the last		h da en ha di kan sta en de	landar talah s	te also also also also also also also also	Mkr→RefL
distribution and			and a second		in the second second		e provinci della francia dalla di	a statistica, alter salad	Contraction of the second s	
70.0										Мо
				<u> </u>				-		1 0
Start 1.00								Stop 2.4	000 GHz	
Res BW	100 kHz		#VBW	/ 300 kHz		\$	weep 134	.0 ms (3	0000 pts)	
Res BW	100 kHz		#VBN	/ 300 kHz		S	status	.0 ms (3	0000 pts)	
SG	100 kHz ectrum Analyzer -	Swept SA	#VBW	/ 300 kHz		8		.0 ms (3	0000 pts)	
SG Keysight Sp	ectrum Analyzer - RF 50	Ω AC		SEN	ISE:INT	Avg Type	STATUS ALIGN AUTO e: Log-Pwr	TRAC	E 123456	Peak Search
SG Keysight Sp 0	ectrum Analyzer -	Ω AC 000000 C		SEN	Run	Avg Type	STATUS ALIGN AUTO	TRAC	0000 pts)	Peak Search
sg Keysight Sp Marker 1	ectrum Analyzer - RF 50 2.483500	Ω AC 000000 (GHZ PNO: Fast C	SEM Trig: Free	Run	Avg Type	ALIGN AUTO e: Log-Pwr :>100/100	TRAC TY DE 1 2.48		
SG Keysight Sp Iarker 1 0 dB/div	ectrum Analyzer - RF 50	Ω AC 000000 (GHZ PNO: Fast C	SEM Trig: Free	Run	Avg Type	ALIGN AUTO e: Log-Pwr :>100/100	TRAC TY DE 1 2.48	E] 2 3 4 5 6 E M WWWW T P N N N N N	Peak Search
Keysight Sp Aarker 1 0 dB/div	ectrum Analyzer - RF 50 2.483500	Ω AC 000000 (GHZ PNO: Fast C	SEM Trig: Free	Run	Avg Type	ALIGN AUTO e: Log-Pwr :>100/100	TRAC TY DE 1 2.48		Peak Search Next Pea
Keysight Sp Aarker 1 0 dB/div	ectrum Analyzer - RF 50 2.483500	Ω AC 000000 (GHZ PNO: Fast C	SEM Trig: Free	Run	Avg Type	ALIGN AUTO e: Log-Pwr :>100/100	TRAC TY DE 1 2.48		Peak Search Next Pea
sg keysight Sp Aarker 1 Narker 1	ectrum Analyzer - RF 50 2.483500	Ω AC 000000 (GHZ PNO: Fast C	SEM Trig: Free	Run	Avg Type	ALIGN AUTO e: Log-Pwr :>100/100	TRAC TY DE 1 2.48		Peak Search Next Pea
sg keysight Sp d Aarker 1 0 dB/div 0 g 10 0 0 00	ectrum Analyzer - RF 50 2.483500	Ω AC 000000 (GHZ PNO: Fast C	SEM Trig: Free	Run	Avg Type	ALIGN AUTO e: Log-Pwr :>100/100	TRAC TY DE 1 2.48		Peak Search Next Pea Next Pk Rig
sg keysight Sp d Aarker 1 0 dB/div 0 g 10 0 0 00	ectrum Analyzer - RF 50 2.483500	Ω AC 000000 (GHZ PNO: Fast C	SEM Trig: Free	Run	Avg Type	ALIGN AUTO e: Log-Pwr :>100/100	TRAC TY DE 1 2.48		Peak Search Next Pea Next Pk Rig
sa Keysight Sp Aarker 1 0 dB/div 9 10.0 10.0 10.0 10.0	ectrum Analyzer - RF 50 2.483500	Ω AC 000000 (GHZ PNO: Fast C	SEM Trig: Free	Run	Avg Type	ALIGN AUTO e: Log-Pwr :>100/100	TRAC TY DE 1 2.48	E 123456 E MWWWWW T P NNNN 3 5 GHz 73 dBm	Peak Search Next Pea Next Pk Rig Next Pk Le
sa Keysight Sp Aarker 1 Aarker 1 10.0 0.00 10.0	ectrum Analyzer - RF 50 2.483500	Ω AC 000000 (GHZ PNO: Fast C	SEM Trig: Free	Run	Avg Type	ALIGN AUTO e: Log-Pwr :>100/100	TRAC TY DE 1 2.48		Peak Search Next Pea Next Pk Rig Next Pk Le
sg Keysight Sp Aarker 1 0 dB/div 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ectrum Analyzer - RF 50 2.483500	Ω AC 000000 (GHZ PNO: Fast C	SEM Trig: Free	Run	Avg Type	ALIGN AUTO e: Log-Pwr :>100/100	TRAC TY DE 1 2.48	E 123456 E MWWWWW T P NNNN 3 5 GHz 73 dBm	Peak Search Next Pea Next Pk Rig Next Pk Le
sg Keysight Sp Aarker 1 0 dB/div 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ectrum Analyzer - RF 50 2.483500	Ω AC 000000 (GHZ PNO: Fast C	SEM Trig: Free	Run dB	Avg Type Avg Hold	ALIGN AUTO E: Log-Pwr :>100/100 MK1	TRAC TY DE 1 2.48	E 1 2 3 4 5 6 E MWWWW T P NNNN 3 5 GHz 73 dBm	Peak Search Next Pea Next Pk Rig Next Pk Le Marker De
sg Keysight Sp Aarker 1 0 dB/div 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ectrum Analyzer - RF 50 2.483500	Ω AC 000000 (GHZ PNO: Fast C	SEM Trig: Free		Avg Type	ALIGN AUTO E: Log-Pwr :>100/100 MK1	TRAC TYF DR -1 2.48: -26.9	E 1 2 3 4 5 6 E MWWWW T P NNNN 3 5 GHz 73 dBm	Peak Search Next Pea Next Pk Rig Next Pk Lo Marker De
sg Keysight Sp Aarker 1 0 dB/div 0 g 10.0 20.0 10.0	ectrum Analyzer - RF 50 2.483500	Ω AC 000000 (GHZ PNO: Fast C	Trig: Free Atten: 30		Avg Type Avg Hold	STATUS	TRAC TYF DR -1 2.48: -26.9	E 1 2 3 4 5 6 E MWWWW T P NNNN 3 5 GHz 73 dBm	Peak Search Next Pea Next Pk Rig Next Pk Le Marker De Mkr→C
ISG Keysight Sp 4	ectrum Analyzer - RF 50 2.483500	Ω AC 000000 (GHZ PNO: Fast C	Trig: Free Atten: 30		Avg Type Avg Hold	STATUS	TRAC TYF DR -1 2.48: -26.9	E 1 2 3 4 5 6 E MWWWW T P NNNN 3 5 GHz 73 dBm	Peak Search Next Pea Next Pk Rig Next Pk Le Marker De
sg Keysight Sp Aarker 1 0 dB/div 0 g 10.0 20.0 10.0	ectrum Analyzer - RF 50 2.483500	Ω AC 000000 (GHZ PNO: Fast C	Trig: Free Atten: 30		Avg Type Avg Hold	STATUS	TRAC TYF DR -1 2.48: -26.9	E 1 2 3 4 5 6 E MWWWW T P NNNN 3 5 GHz 73 dBm	Peak Search Next Pea Next Pk Rig Next Pk Lo Marker De Mkr→0
SG Keysight Sp Aarker 1 0 dB/div 0 g 10.0	ectrum Analyzer - RF 50 2.483500	Ω AC 000000 (GHZ PNO: Fast C	Trig: Free Atten: 30		Avg Type Avg Hold	STATUS	TRAC TYF DR -1 2.48: -26.9	E 1 2 3 4 5 6 E MWWWW T P NNNN 3 5 GHz 73 dBm	Peak Search Next Pea Next Pk Rig Next Pk Lo Marker De Mkr→C Mkr→Ref L
G Keysight Sp Iarker 1 0 dB/div	ectrum Analyzer - RF 50 2.483500 Ref 20.00	Ω AC 000000 (SHZ PNO: Fast FGain:Low	Trig: Free Atten: 30		Avg Type Avg Hold	STATUS	TRAC TYF D T1 2.48: -26.9	E 1 2 3 4 5 6 E M WWWWW 3 5 GHz 73 dBm	Peak Search Next Pea Next Pk Rig Next Pk Le Marker De Mkr→C

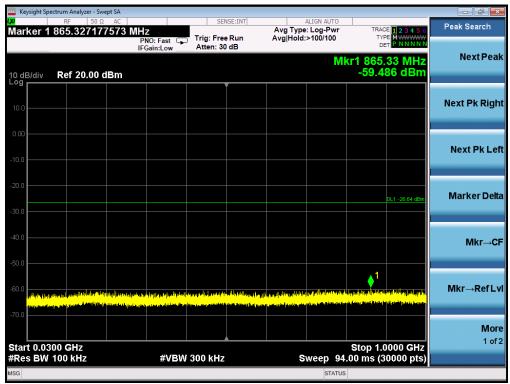


TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE OF 802.11n20 FOR MODULATION IN LOW CHANNEL

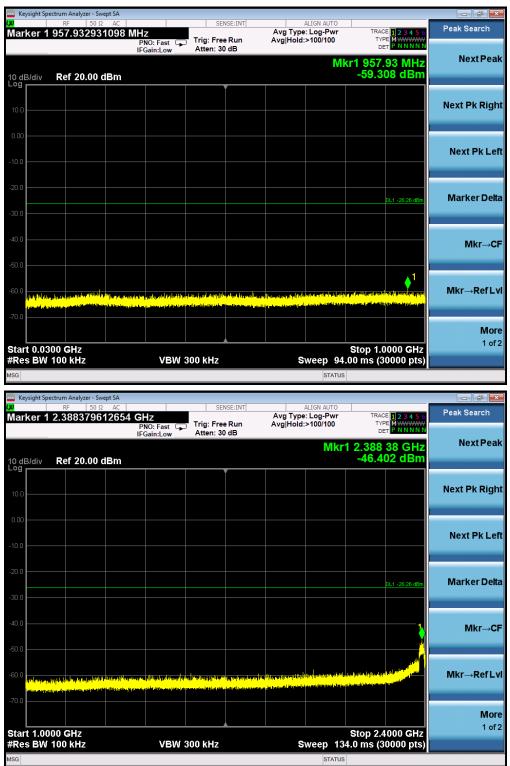


TEST PLOT OF OUT OF BAND EMISSIONS THE WORST CASE

OF 802.11n20 FOR MODULATION IN MIDDLE CHANNEL



X		Ω AC		SEN	ISE:INT		ALIGN AUTO			Peak Search
Aarker 1	2.399159		PNO: Fast	Trig: Free		Avg Type Avg Hold	e: Log-Pwr :>100/100		E 1 2 3 4 5 6 E M	Peak Search
			IFGain:Low	Atten: 30	dB		Mkr1		16 GHz	Next Pea
0 dB/div .og	Ref 20.0	0 dBm				_		-44.6	77 dBm	
										Next Pk Rig
10.0										NEAL FK KIG
0.00										
10.0										Next Pk Le
20.0									DL1 -26.64 dBm	Marker De
30.0										
40.0									1	
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										Мо
Start 1.00	000 GHz							Stop 2.4	1000 GHz	1 of
Start 1.00 Res BW	000 GHz 100 kHz		#VBV	V 300 kHz		s	weep 134	Stop 2.4 .0 ms (3	1000 GHz 10000 pts)	1 of
Res BW	100 kHz	Swent SA	#VBV	V 300 kHz		S	weep 134	Stop 2.4 .0 ms (3	1000 GHz 10000 pts)	1 of
Res BW SG Keysight Sp	100 kHz ectrum Analyzer - RF 5	DΩ AC			ISE:INT		STATUS	.0 ms (3	:0000 pts)	
Res BW SG Keysight Sp	100 kHz	Ω AC 150038		SEN	Run		ALIGN AUTO	.0 ms (3	1000 GHz 10000 pts) 10000 pts 10000 pts	Peak Search
Res BW sg Keysight Sp Arker 1	100 kHz ectrum Analyzer RF 5 2.485001	Ω AC 150038 (GHz PNO: Fast G	SEN	Run	Avg Type	ALIGN AUTO 2: Log-Pwr 2: 100/100	.0 ms (3	20000 pts)	Peak Search
Res BW sg Keysight Sp Aarker 1	100 kHz ectrum Analyzer - RF 5	Ω AC 150038 (GHz PNO: Fast G	SEN	Run	Avg Type	ALIGN AUTO 2: Log-Pwr 2: 100/100	.0 ms (3	20000 pts)	Peak Search
Res BW sg Keysight Sp Jarker 1 larker 1	100 kHz ectrum Analyzer RF 5 2.485001	Ω AC 150038 (GHz PNO: Fast G	SEN	Run	Avg Type	ALIGN AUTO 2: Log-Pwr 2: 100/100	.0 ms (3	20000 pts)	Peak Search Next Pea
Res BW	100 kHz ectrum Analyzer RF 5 2.485001	Ω AC 150038 (GHz PNO: Fast G	SEN	Run	Avg Type	ALIGN AUTO 2: Log-Pwr 2: 100/100	.0 ms (3	20000 pts)	Peak Search Next Pea
Res BW sg keysight Sp Aarker 1 0 dB/div	100 kHz ectrum Analyzer RF 5 2.485001	Ω AC 150038 (GHz PNO: Fast G	SEN	Run	Avg Type	ALIGN AUTO 2: Log-Pwr 2: 100/100	.0 ms (3	20000 pts)	Peak Search Next Pea Next Pk Rig
Res BW sa a Keysight Sp a Keys	100 kHz ectrum Analyzer RF 5 2.485001	Ω AC 150038 (GHz PNO: Fast G	SEN	Run	Avg Type	ALIGN AUTO 2: Log-Pwr 2: 100/100	.0 ms (3	20000 pts)	Peak Search Next Pea Next Pk Rig
Res BW sa a Keysight Sp a Keys	100 kHz ectrum Analyzer RF 5 2.485001	Ω AC 150038 (GHz PNO: Fast G	SEN	Run	Avg Type	ALIGN AUTO 2: Log-Pwr 2: 100/100	.0 ms (3	20000 pts)	Peak Search Next Pea Next Pk Rig
Res BW sa a Keysight Sp a Keys	100 kHz ectrum Analyzer RF 5 2.485001	Ω AC 150038 (GHz PNO: Fast G	SEN	Run	Avg Type	ALIGN AUTO 2: Log-Pwr 2: 100/100	.0 ms (3	20000 pts)	Peak Search Next Pea Next Pk Rig
Res BW sa a Keysight Sp a Keys	100 kHz ectrum Analyzer RF 5 2.485001	Ω AC 150038 (GHz PNO: Fast G	SEN	Run	Avg Type	ALIGN AUTO 2: Log-Pwr 2: 100/100	.0 ms (3	E 2 3 4 5 6 E 2 3 4 5 6 E P NNNNN 5 0 GHz 51 dBm	Peak Search Next Pea Next Pk Rig Next Pk La
Res BW s c keysight Sp Ararker 1 c c d B/div g c c c c c c c c c c c c c c c c c c	100 kHz ectrum Analyzer RF 5 2.485001	Ω AC 150038 (GHz PNO: Fast G	SEN	Run	Avg Type	weep 134 STATUS	.0 ms (3	E 2 3 4 5 6 E 2 3 4 5 6 E P NNNNN 5 0 GHz 51 dBm	Peak Search Next Pea Next Pk Rig Next Pk Le
Res BW SG Keysight Sp Iarker 1 0 dB/div 9 10.0 20.00 20.00 20.00 40.0	100 kHz RF 5 Ref 20.00	Ω AC 150038 (GHz PNO: Fast G IFGain:Low	SEN	RundB	Avg Type Avg Hold	weep 134 STATUS	.0 ms (3	2 3 4 5 6 2 4 5 6 2 3 4 5 6 2 9 9 2 9 2	Peak Search Next Pea Next Pk Rig Next Pk Lo Marker De
Res BW SG	100 kHz RF 5 Ref 20.00	0 0 AC 150038 (0 dBm	GHz PNO: Fast G IFGain:Low	Trig: Free Atten: 30		Avg Type Avg Hold	ALIGN AUTO :: Log-Pwr :> 100/100 MIKr	.0 ms (3	2 3 4 5 6 2 4 5 6 2 3 4 5 6 2 9 9 2 9 2	Peak Search Next Pea Next Pk Rig Next Pk Lo Marker De Mkr-o
Res BW SG Keysight Sp	100 kHz RF 5 Ref 20.00	0 0 AC 150038 (0 dBm	GHz PNO: Fast G IFGain:Low	Trig: Free Atten: 30		Avg Type Avg Hold	ALIGN AUTO :: Log-Pwr :> 100/100 MIKr	.0 ms (3	2 3 4 5 6 2 4 5 6 2 3 4 5 6 2 9 9 2 9 2	Peak Search Next Pea Next Pk Rig Next Pk Lo Marker De Mkr-o
Res BW SG Keysight Sp Marker 1 0 <tr< td=""><td>100 kHz RF 5 2.485001 Ref 20.00</td><td>0 0 AC 150038 (0 dBm</td><td>GHz PNO: Fast G IFGain:Low</td><td>Trig: Free Atten: 30</td><td></td><td>Avg Type Avg Hold</td><td>ALIGN AUTO :: Log-Pwr :> 100/100 MIKr</td><td>.0 ms (3</td><td>2 3 4 5 6 2 4 5 6 2 3 4 5 6 2 9 9 2 9 2</td><td>Peak Search Next Pea Next Pk Rig Next Pk Le Marker De Mkr→C</td></tr<>	100 kHz RF 5 2.485001 Ref 20.00	0 0 AC 150038 (0 dBm	GHz PNO: Fast G IFGain:Low	Trig: Free Atten: 30		Avg Type Avg Hold	ALIGN AUTO :: Log-Pwr :> 100/100 MIKr	.0 ms (3	2 3 4 5 6 2 4 5 6 2 3 4 5 6 2 9 9 2 9 2	Peak Search Next Pea Next Pk Rig Next Pk Le Marker De Mkr→C
Res BW G Keysight Sp Iarker 1 Iarker 1 0 dB/div 9 10.0	100 kHz	0 0 AC 150038 (0 dBm	GHz PNO: Fast G IFGain:Low	Trig: Free Atten: 30		Avg Type Avg Hold	ALIGN AUTO :: Log-Pwr :> 100/100 MIKr	.0 ms (3	2 1 2 3 4 5 6 M WWWWW T P NNNN 5 0 GHz 51 dBm 0.1-26 64 dbm 10-1-26 64 dbm	Peak Search Next Pea Next Pk Rig Next Pk Le Marker De Mkr→C
Res BW a keysight Sp larker 1 0 dB/div 9 0 dB/div 9 0 dB/div 9 0 d 0 dB/div 9 10 0 10 0	100 kHz	0 0 AC 150038 (0 dBm	GHZ PNO: Fast G IFGain:Low	Trig: Free Atten: 30		Avg Type Avg Hold	ALIGN AUTO :: Log-Pwr :> 100/100 MIKr	.0 ms (3	00000 pts)	Peak Search Next Pea Next Pk Rig Next Pk Le Marker Del Mkr→Ref L Mor 1 of



TEST PLOT OF OUT OF BAND EMISSIONS THE WORST CASE OF 802.11n20 FOR MODULATION IN HIGH CHANNEL

Keysight Sp	ectrum Analyzer - Swo									
<mark>w</mark> Marker 1	RF 50 Ω	75096 GI	NO: Fast 🗔	Trig: Free			LIGN AUTO Log-Pwr >100/100	TY	DE 1 2 3 4 5 6 PE M WWWWW T P N N N N N	Peak Search
10 dB/div	Ref 20.00 c		Gain:Low	Atten: 30	dB		М	kr1 2.48		Next Peak
10.0										Next Pk Righ
-10.0										Next Pk Lef
-20.0									DL1 -26.26 dBm	Marker Delta
-40.0	a state of the sta	Mandu and para	. States and second	in a state of the st			and the state of the			Mkr→CF
60.0										Mkr→RefLv
-70.0			<i>4</i> (5.4)	0.0.00				Stop 2	5.00 GHz	More 1 of 2
FRES BW	1.0 MHz		#VBW	3.0 MHz		S	STATL	8.00 ms (3 ^{JS}	ouuu pts)	

Note: The 100kHz RBW used in the conducted spurious test from 2.4835GHz to 25GHz may result in long measuring times, To avoid such long measuring times, the 1MHz RBW can be used for pre-test. If the emission level exceeded the limit at one or more frequencies, the 100kHz RBW would be used for final test at the special frequency.

10. MAXIMUM CONDUCTED OUTPUT POWER SPECTRAL DENSITY

10.1 MEASUREMENT PROCEDURE

- (1). Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- (2). Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- (3). Set SPA Trace 1 Max hold, then View.

Note: The method of AVPSD in the KDB 558074 item 10.3 was used in this testing.

10.2 TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

Refer To Section 8.2.

10.3 MEASUREMENT EQUIPMENT USED

Refer To Section 6.

10.4 LIMITS AND MEASUREMENT RESULT

TEST ITEM	POWER PECTRAL DENSITY	
TEST MODE	802.11b with data rate 1	

Channel No.	PSD (dBm/20kHz)	Limit (dBm/3kHz)	Result	
Low Channel	1.886	8	Pass	
Middle Channel	2.061	8	Pass	
High Channel	3.461	8	Pass	

TEST ITEM	POWER PECTRAL DENSITY		
TEST MODE	802.11g with data rate 6		

Channel No.	PSD (dBm/20kHz)	Limit (dBm/3kHz)	Result
Low Channel	-1.897	8	Pass
Middle Channel	-1.259	8	Pass
High Channel	-0.075	8	Pass

TEST ITEM	POWER PECTRAL DENSITY
TEST MODE	802.11n 20 with data rate 6.5

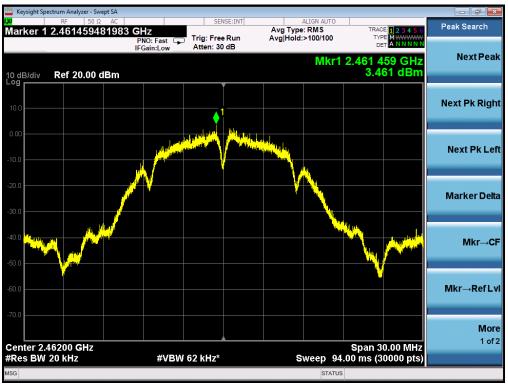
Channel No.	PSD (dBm/20kHz)	Limit (dBm/3kHz)	Result
Low Channel	-2.741	8	Pass
Middle Channel	-2.182	8	Pass
High Channel	-1.992	8	Pass



802.11b TEST RESULT TEST PLOT OF SPECTRAL DENSITY FOR LOW CHANNEL

TEST PLOT OF SPECTRAL DENSITY FOR MIDDLE CHANNEL

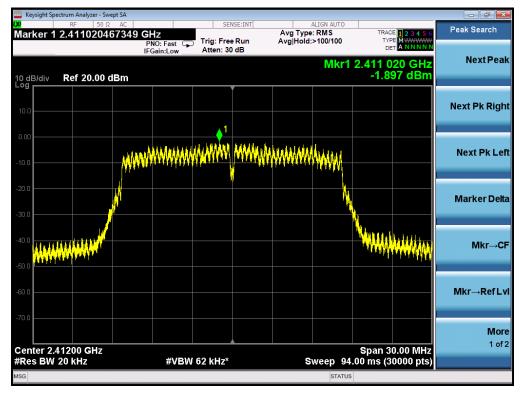


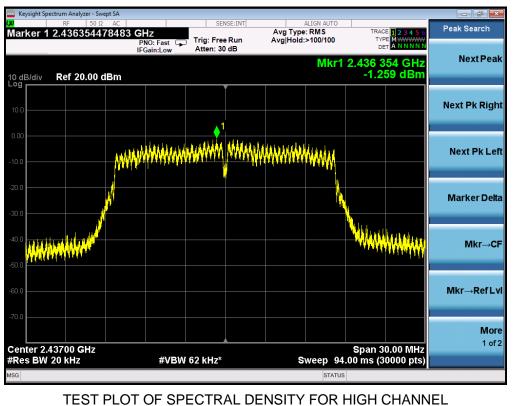


TEST PLOT OF SPECTRAL DENSITY FOR HIGH CHANNEL

802.11g TEST RESULT

TEST PLOT OF SPECTRAL DENSITY FOR LOW CHANNEL

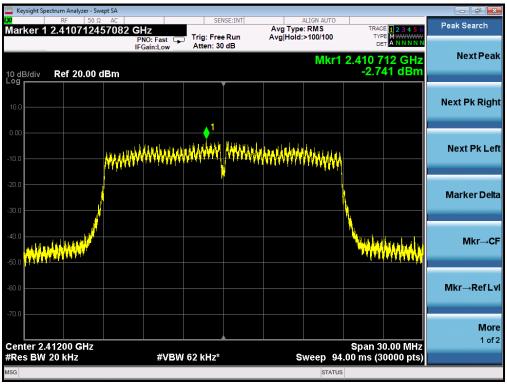




TEST PLOT OF SPECTRAL DENSITY FOR MIDDLE CHANNEL

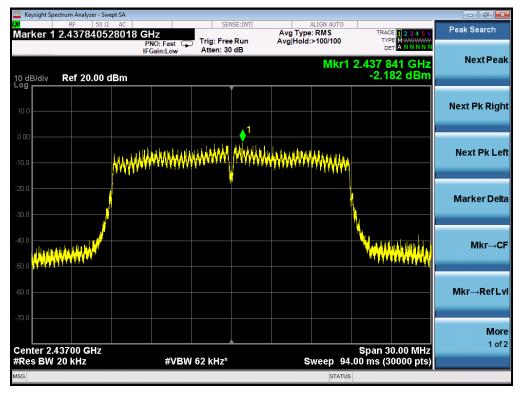
Keysight Spectrum Analyzer - Swept SA RF 50 Ω AC SENSE:INT ALIGN AUTO Pack Search Marker 1 2.462906530218 GHz Frig: Free Run Avg Type: RMS Trace Peak Search PNO: Fast PNO: Fast Trig: Free Run Avg/Hold:>100/100 Tree Peak Search Mkr1 2.462 9076 GHz Next Peak Mkr1 2.462 9076 GHz Next Peak

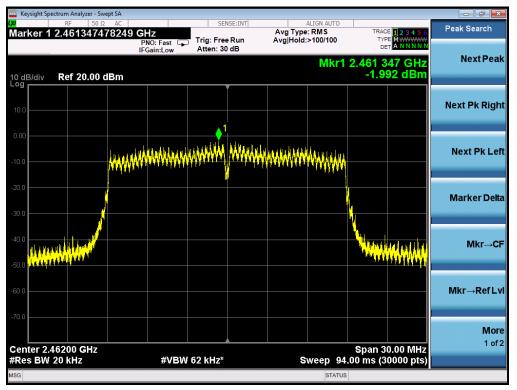




802.11n 20 TEST RESULT TEST PLOT OF SPECTRAL DENSITY FOR LOW CHANNEL

TEST PLOT OF SPECTRAL DENSITY FOR MIDDLE CHANNEL





TEST PLOT OF SPECTRAL DENSITY FOR HIGH CHANNEL

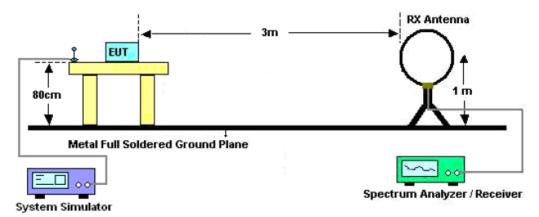
11. RADIATED EMISSION

11.1. MEASUREMENT PROCEDURE

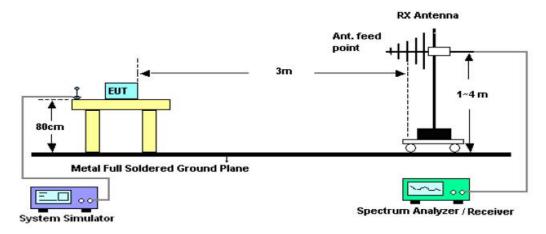
- 1. The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
- 2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- 3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
- 4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
- 5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
- 6. For emissions above 1GHz, use 1MHz VBW and 3MHz RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- 7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
- 8.If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
- 9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High Low scan is not required in this case.

11.2. TEST SETUP

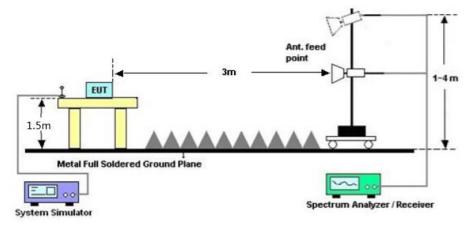
Radiated Emission Test-Setup Frequency Below 30MHz



RADIATED EMISSION TEST SETUP 30MHz-1000MHz



RADIATED EMISSION TEST SETUP ABOVE 1000MHz



11.3. LIMITS AND MEASUREMENT RESULT

15.209(a) Limit in the below table has to be followed

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

Note: All modes were tested For restricted band radiated emission,

the test records reported below are the worst result compared to other modes.

11.4. TEST RESULT

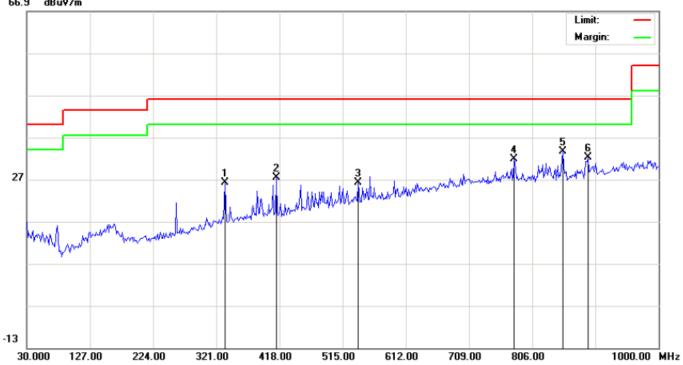
RADIATED EMISSION BELOW 30MHZ

No emission found between lowest internal used/generated frequencies to 30MHz.

RADIATED EMISSION BELOW 1GHZ

EUT	BODY WORN CAMERA	Model Name	D5
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2412MHZ	Antenna	Horizontal

66.9 dBuV/m

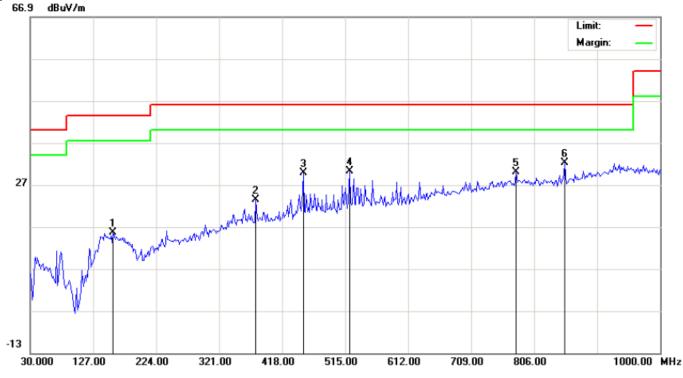


No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		333.9333	8.83	17.43	26.26	46.00	-19.74	peak			
2		413.1500	7.98	19.48	27.46	46.00	-18.54	peak			
3		539.2500	3.90	22.31	26.21	46.00	-19.79	peak			
4		778.5167	4.42	27.33	31.75	46.00	-14.25	peak			
5	*	852.8833	6.17	27.53	33.70	46.00	-12.30	peak			
6		891.6833	4.02	28.25	32.27	46.00	-13.73	peak			

RESULT: PASS

Report No.: AGC10343170501FE04 Page 47 of 69

EUT	BODY WORN CAMERA	Model Name	D5
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2412MHZ	Antenna	Vertical



No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height		Comment
	•	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		157.7167	0.26	15.32	15.58	43.50	-27.92	peak			
2		377.5833	4.51	18.92	23.43	46.00	-22.57	peak			
3		450.3333	9.17	20.59	29.76	46.00	-16.24	peak			
4		521.4667	8.41	21.71	30.12	46.00	-15.88	peak			
5		778.5167	2.99	27.02	30.01	46.00	-15.99	peak			
6	*	852.8833	4.83	27.38	32.21	46.00	-13.79	peak			

RESULT: PASS

Note:

1. Factor=Antenna Factor + Cable loss, Margin=Measurement-Limit.

2. The "Factor" value can be calculated automatically by software of measurement system.

3. All test modes had been pre-tested. The 802.11b at low channel is the worst case and recorded in the report.

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RADIATED EMISSION ABOVE 1GHZ

EUT	BODY WORN CAMERA	Model Name	D5
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2412MHZ	Antenna	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type			
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type			
4824.049	48.24	3.72	51.96	74	-22.04	peak			
4824.075	41.86	3.72	45.58	54	-8.42	AVG			
7236.023	40.75	8.15	48.9	74	-25.1	peak			
7236.057	36.54	8.15	44.69	54	-9.31	AVG			
Remark:									
Factor = Antenna Factor + Cable Loss – Pre-amplifier.									

EUT	BODY WORN CAMERA	Model Name	D5
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2412MHZ	Antenna	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type	
4824.112	47.52	3.72	51.24	74	-22.76	peak	
4824.089	42.94	3.72	46.66	54	-7.34	AVG	
7236.028	42.51	8.15	50.66	74	-23.34	peak	
7236.081	37.48	8.15	45.63	54	-8.37	AVG	
Remark:							
actor = Ante	enna Factor + Ca	ble Loss – F	Pre-amplifier.				

Report No.: AGC10343170501FE04 Page 49 of 69

EUT	BODY WORN CAMERA	Model Name	D5
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2437MHZ	Antenna	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4874.025	47.72	3.75	51.47	74	-22.53	peak
4874.021	43.05	3.75	46.8	54	-7.2	AVG
7311.036	41.78	8.16	49.94	74	-24.06	peak
7311.118	37.03	8.16	45.19	54	-8.81	AVG
Remark:						
Factor = Ante	enna Factor + Ca	able Loss – F	Pre-amplifier.			

EUT	BODY WORN CAMERA	Model Name	D5
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2437MHZ	Antenna	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4874.097	46.79	3.75	50.54	74	-23.46	peak
4874.082	41.24	3.75	44.99	54	-9.01	AVG
7311.046	40.95	8.16	49.11	74	-24.89	peak
7311.070	35.71	8.16	43.87	54	-10.13	AVG
Domorki						
Remark:						
-actor = Ante	enna Factor + Ca	able Loss – F	Pre-amplifier.			

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EUT	BODY WORN CAMERA	Model Name	D5
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2462MHZ	Antenna	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4924.025	48.05	3.81	51.86	74	-22.14	peak
4924.101	42.87	3.81	46.68	54	-7.32	AVG
7386.021	41.25	8.19	49.44	74	-24.56	peak
7386.101	36.37	8.19	44.56	54	-9.44	AVG
Remark:						
actor = Ante	enna Factor + Ca	able Loss – I	Pre-amplifier.			

EUT	BODY WORN CAMERA	Model Name	D5
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2462MHZ	Antenna	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4924.055	47.54	3.81	51.35	74	-22.65	peak
4924.031	42.31	3.81	46.12	54	-7.88	AVG
7386.065	41.64	8.19	49.83	74	-24.17	peak
7386.119	35.79	8.19	43.98	54	-10.02	AVG
Remark:						
Factor = Ante	enna Factor + Ca	able Loss – F	re-amplifier.			

RESULT: PASS

Note:

Other emissions from 1G to 25 GHz are considered as ambient noise. No recording in the test report. Factor = Antenna Factor + Cable loss - Amplifier gain, Over=Measure-Limit.

The "Factor" value can be calculated automatically by software of measurement system.

All test modes had been pre-tested. The 802.11b mode is the worst case and recorded in the report.

12. BAND EDGE EMISSION

12.1. MEASUREMENT PROCEDURE

Radiated restricted band edge measurements

The radiated restricted band edge measurements are measured with an EMI test receiver connected to the receive antenna while the EUT is transmitting

12.2. TEST SET-UP

same as 11.2

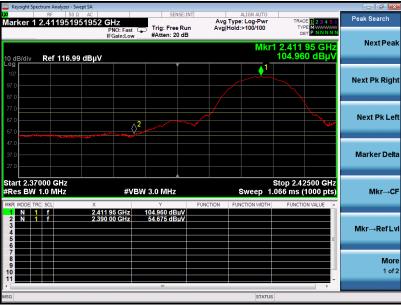
Note:

1. Factor=Antenna Factor + Cable loss - Amplifier gain. Field Strength=Factor + Reading level

2. The factor had been edited in the "Input Correction" of the Spectrum Analyzer. So the Amplitude of test plots is equal to Reading level plus the Factor in dB. Use the A dB(μ V) to represent the Amplitude. Use the F dB(μ V/m) to represent the Field Strength. So A=F.

12.3. TEST RESULT

EUT	BODY WORN CAMERA	Model Name	D5
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2412MHZ	Antenna	Horizontal



AV

	960961 GHz	ast 🕞 Trig: Free	Avg T Run Avg H		TRACE 1 2 3 4 5 6 TYPE A WWWW DET A NNNNN	Peak Search
Ref 116.	99 dBµV			Mkr1	2.410 96 GHz 101.739 dBµV	Next Pea
				1		Next Pk Rig
						Next Pk Lo
		\$ ²				Marker De
1.0 MHz		¥VBW 3.0 MHz*	FUNCTION	Sweep 1.0	top 2.42500 GHz 66 ms (1000 pts)	Mkr→
f	2.410 96 GH	z 101.734 dBı z 45.673 dBı			E	Mkr→Refl
						М с 1 с
	Ref 116.	2.410960960961 GHz PN0:F IFGaint Ref 116.99 dBµV 2.4109 dBµV 2.41	Ref 510 AC SEM 2.410960960961 CH2 Trig: Free If GainLow If GainLow Ref 116.99 dBµV If GainLow If GainLow If GainLow 000 GH2 If GainLow If GainLow If GainLow If GainLow 10 If GainLow If GainLow If GainLow If GainLow If GainLow	Ref 10.0 Acc Hz Avg H 2.410960960961GHz Frig: Free Run Avg H IfGainLow Trig: Free Run Avg H Ref 116.99 dBµV If If	BF S0 0 Action Auto 2.410960960961 GHZ IFGain:Low Trig: Free Run #Atten: 20 dB Avg Type: RMS Avg Hold:>100/100 Ref 116.99 dBµV Image: Ref 116.99 dBµV Image: Ref 116.99 dBµV 000 GHz #VEW 3.0 MHz* Sweep 1.0 1.00 MHz #VEW 3.0 MHz* Sweep 1.0	Ref 100 AC SENSE INT AUTO MUTO 2.410960960961GHz (FGaintow Trig: Free Run #Atten: 20 dB Aug Type: RMS Avg Hold:>100/100 Treact Type: RMS Avg Hold:>100/100

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EUT	BODY WORN CAMERA	Model Name	D5
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2412MHZ	Antenna	Vertical







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EUT	BODY WORN CAMERA	Model Name	D5
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2462MHZ	Antenna	Horizontal



AV



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EUT	BODY WORN CAMERA	Model Name	D5
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2462MHZ	Antenna	Vertical

ΡK



	RF 50			SENSE:INT		ALIGN AUTO		Peak Search
larker '	1 2.460960		P: East	Trig: Free Run #Atten: 20 dB		Type: RMS lold:>100/100	TRACE 1 2 3 4 5 TYPE A WWW DET A NNN	
0 dB/div	Ref 116.9	99 dBµV				Mkr	1 2.460 96 GH 99.955 dBµ'	Z NextPea V
.og 107 97.0 87.0								Next Pk Rig
37.0 77.0 57.0								Next Pk Le
17.0 37.0 27.0						¢ ²		Marker De
	5000 GHz						Stop 2.50000 GH	7
Res BW	V 1.0 MHz		#VBW 3.	0 MHz*		Sweep 1	.066 ms (1000 pt	
Res BW	V 1.0 MHz	× 2.460 96 2.483 50	GHz 99	0 MHz* 9.956 dBµV 4.373 dBµV	FUNCTION	Sweep 1.		s) Mkr→(
Res BW	V 1.0 MHz	2.460 96	GHz 99	γ 9.956 dBμV	FUNCTION		.066 ms (1000 pt	

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EUT	BODY WORN CAMERA	Model Name	D5
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2412MHZ	Antenna	Horizontal





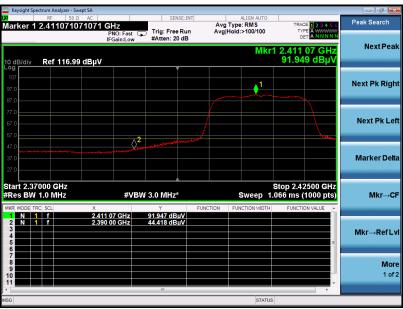
AV

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EUT	BODY WORN CAMERA	Model Name	D5
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2412MHZ	Antenna	Vertical







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EUT	BODY WORN CAMERA	Model Name	D5
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2462MHZ	Antenna	Horizontal



ΡK

RF 50 larker 1 2.460860		SENSE:INT Trig: Free Run #Atten: 20 dB	ALIGN AUTO Avg Type: RMS Avg Hold:>100/100	TRACE 1 2 3 4 5 6 TYPE A WWWWW DET A NNNNN	Peak Search
0 dB/div Ref 116.9	99 dBµV		Mkr1	2.460 86 GHz 94.524 dBµV	Next Pea
og 107 37.0					Next Pk Righ
37.0 77.0 57.0		hoad manung	2		Next Pk Le
47.0					Marker Del
tart 2.45000 GHz Res BW 1.0 MHz		BW 3.0 MHz*	Sweep 1.	Stop 2.50000 GHz 066 ms (1000 pts)	Mkr→C
N 1 f 2 N 1 f 3 - - - 4 - - - 5 - - - 6 - - - -	× 2.460 86 GHz 2.483 50 GHz	Υ F 94.481 dBμV 49.118 dBμV	FUNCTION WIDTH	FUNCTION VALUE	Mkr→RefL
7 8 9 0 1				-	Mo 1 of
		III		Þ	

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EUT	BODY WORN CAMERA	Model Name	D5
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2462MHZ	Antenna	Vertical

ΡK



larker 1 2	RF 50 Ω .46251251	12513 GHz	ast Trig: Free Ru ow #Atten: 20 dB	Avg Ty	ALIGN AUTO /pe: RMS id:>100/100	TRACE 123456 TYPE A WWWWW DET A NNNNN	Peak Search
0 dB/div	Ref 116.99	dBµV			Mkr	1 2.462 51 GHz 91.805 dBµV	NextPea
107 97.0 87.0							Next Pk Rig
77.0 67.0 57.0					2		Next Pk Le
47.0 37.0 27.0							Marker De
tart 2.4500 Res BW 1.	0 MHz	х	¢VBW 3.0 MHz*	FUNCTION F	Sweep 1.	Stop 2.50000 GHz 066 ms (1000 pts) FUNCTION VALUE	Mkr→0
1 N 1 2 N 1 3 4 5 6	f	2.462 51 GH 2.483 50 GH				E	Mkr→RefL
7 8 9 0							Мо 1 о
G			m		STATUS	•	

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EUT	BODY WORN CAMERA	Model Name	D5
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 20 with data rate 6.5 2412MHZ	Antenna	Horizontal







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EUT	BODY WORN CAMERA	Model Name	D5
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 20 with data rate 6.5 2412MHZ	Antenna	Vertical









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EUT	BODY WORN CAMERA	Model Name	D5
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 20with data rate 6.5 2462MHZ	Antenna	Horizontal







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EUT	BODY WORN CAMERA	Model Name	D5
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 20 with data rate 6.5 2462MHZ	Antenna	Vertical



AV

a	ctrum Analyzer - Sw RF 50 Ω 2.4613613	AC 61361 GH PN	Z O: Fast G			Avg Typ Avg Hold		T)	CE 1 2 3 4 5 6 PE A WWWW ET A N N N N N	Peak Search
l0 dB/div	Ref 116.99		ain:Low	#Atten: 20			Mkr		36 GHz 59 dBµV	Next Pea
107 97.0		1								Next Pk Righ
87.0 77.0 67.0										Next Pk Le
47.0 37.0 27.0					and and a strong	~~^2	Annen			Marker Del
	000 GHz 1.0 MHz	×	#VBW	/ 3.0 MHz*	FUNC		Sweep 1	.066 ms	0000 GHz (1000 pts)	Mkr→C
1 N 1 2 N 1 3 4 5 6	f	Â 2.461 36 2.483 50		91.434 dBµ 45.771 dBµ	V		ICTION WIDTH	FUNCT		Mkr→RefL
7 8 9 0										Mo 1 of
G				m			STATU	s	۱.	

13. FCC LINE CONDUCTED EMISSION TEST

13.1. LIMITS OF LINE CONDUCTED EMISSION TEST

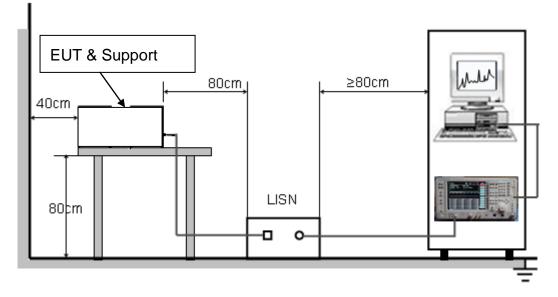
Frequency	Maximum RF Line Voltage							
Frequency	Q.P.(dBuV)	Average(dBuV)						
150kHz~500kHz	66-56	56-46						
500kHz~5MHz	56	46						
5MHz~30MHz	60	50						

Note:

1. The lower limit shall apply at the transition frequency.

2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50MHz.

13.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST



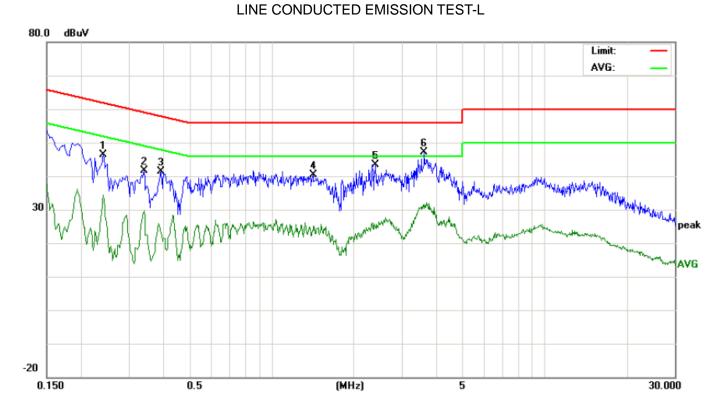
13.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST

- The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2. Support equipment, if needed, was placed as per ANSI C63.10.
- 3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.
- 4. All support equipments received AC120V/60Hz power from a LISN, if any.
- 5. The EUT received charging voltage by adapter which received 120V/60Hzpower by a LISN..
- 6. The test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7. Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
- 8. During the above scans, the emissions were maximized by cable manipulation.
- 9. The test mode(s) were scanned during the preliminary test.

Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

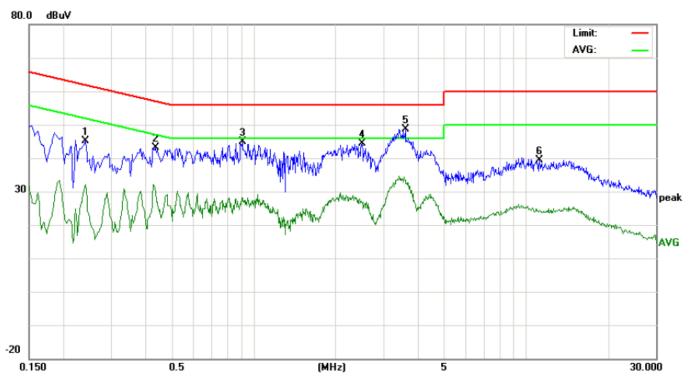
13.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST

- 1. EUT and support equipment was set up on the test bench as per step 2 of the preliminary test.
- A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less –2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.
- 3. The test data of the worst case condition(s) was reported on the Summary Data page.



13.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST

No. Freq.	Reading_Level (dBuV)			Correct Factor	Measurement (dBuV)			Limit (dBuV)		Margin (dB)		P/F	Comment	
	(MHz)	Peak	QP	AVG	dB	Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.2420	36.02		24.00	10.26	46.28		34.26	62.02	52.02	-15.74	-17.76	Р	
2	0.3420	31.41		19.35	10.31	41.72		29.66	59.15	49.15	-17.43	-19.49	Р	
3	0.3940	30.97		12.96	10.33	41.30		23.29	57.98	47.98	-16.68	-24.69	Р	
4	1.4220	30.05		13.61	10.38	40.43		23.99	56.00	46.00	-15.57	-22.01	Р	
5	2.3980	33.01		14.53	10.39	43.40		24.92	56.00	46.00	-12.60	-21.08	Р	
6	3.6340	36.67		21.18	10.49	47.16		31.67	56.00	46.00	-8.84	-14.33	Р	



LINE CONDUCTED EMISSION TEST-N

No. Freq.	Reading_Level (dBuV)			Correct Factor	Measurement (dBuV)			Limit (dBuV)		Margin (dB)		P/F	Comment	
	(MHz)	Peak	QP	AVG	dB	Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.2420	34.89		21.95	10.26	45.15		32.21	62.02	52.02	-16.87	-19.81	Р	
2	0.4380	32.76		19.76	10.36	43.12		30.12	57.10	47.10	-13.98	-16.98	Р	
3	0.9100	34.37		17.64	10.41	44.78		28.05	56.00	46.00	-11.22	-17.95	Р	
4	2.5059	33.90		16.31	10.43	44.33		26.74	56.00	46.00	-11.67	-19.26	Р	
5	3.6220	38.08		22.82	10.49	48.57		33.31	56.00	46.00	-7.43	-12.69	Р	
6	11.2380	29.34		14.26	10.11	39.45		24.37	60.00	50.00	-20.55	-25.63	Р	

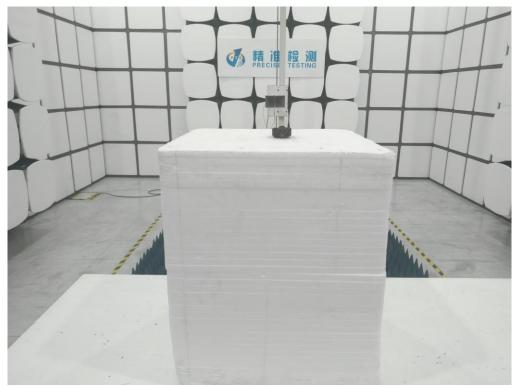
RESULT: PASS

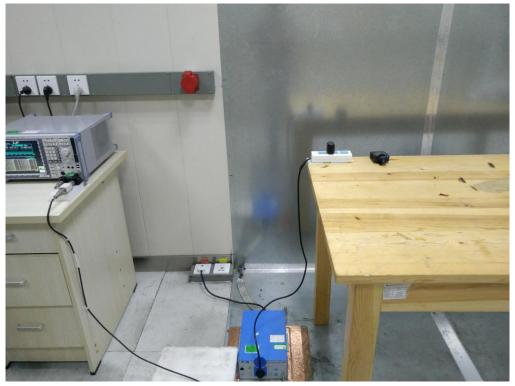


APPENDIX A: PHOTOGRAPHS OF TEST SETUP

FCC RADIATED EMISSION TEST SETUP BELOW 1GHZ

FCC RADIATED EMISSION TEST SETUP ABOVE 1GHZ





FCC LINE CONDUCTED EMISSION TEST SETUP

----END OF REPORT----