FCC Test Report

Report No.: AGC09714170504FE04

FCC ID	:	2AENYDH7061
APPLICATION PURPOSE	:	Original Equipment
PRODUCT DESIGNATION	:	LED Motion Sensor Security Light with Wi-Fi Camera
BRAND NAME	:	Luminex, Vaxcel, Patriot Lighting, dualux
MODEL NAME	:	E7061, E7061W, E7061BZ, E7061GR, E7061BK, DH7061, DH7061W, DH7061BZ, DH7061GR, DH7061BK, 356-9253, DH7062, DH7062W, DH7062BZ, DH7062GR, DH7062BK, E7062, E7062W, E7062BZ, E7062GR, E7062BK
CLIENT	:	Luminex International Co., Ltd.
DATE OF ISSUE	:	June 06, 2017
STANDARD(S) TEST PROCEDURE(S)	:	FCC Part 15.247 KDB 558074 D01 DTS Meas Guidance v04
REPORT VERSION	:	V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd

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Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	June 06, 2017	Valid	Original Report

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Applicant	Luminex International Co., Ltd.
Address	5F, No.30, Yee Shien Rd., Taipei City, Taiwan
Manufacturer	YONGGUAN ELECTRONIC TECHNOLOGY (D.G)LTD
Address	B3,Xinfeng West 3Rd,Mowu Village, Wanjiang District, Dongguan City, GuangDong Prov., China
Product Designation	LED Motion Sensor Security Light with Wi-Fi Camera
Brand Name	Luminex, Vaxcel, Patriot Lighting, dualux
Test Model	DH7061
Serial Model	E7061, E7061W, E7061BZ, E7061GR, E7061BK, DH7061W, DH7061BZ, DH7061GR, DH7061BK, 356-9253, DH7062, DH7062W, DH7062BZ, DH7062GR, DH7062BK, E7062, E7062W, E7062BZ, E7062GR, E7062BK
Difference Description	a) All the same except for brand name, model name and color. b):356-9253 match with the Patriot Lighting, other models match with Luminex, Vaxcel or dualux.
Date of test	June 05, 2017~June 06, 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.

Tested by MON Max Zhang(Zhang Yi) June 06, 2017 over sie Reviewed by Bart Xie(Xie Xiaobin)) June 06, 2017 Approved by Solger Zhang(Zhang Hongyi) June 06, 2017 Authorized Officer

2. GENERAL INFORMATION

2.1. PRODUCT DESCRIPTION

The EUT is designed as "LED Motion Sensor Security Light with Wi-Fi Camera". It is designed by way of utilizing the DSSS and OFDM technology to achieve the system operation.

A major technical description of EOT is described as following			
Operation Frequency	2.412 GHz~2.462GHz		
Output Bower	IEEE 802.11b: 12.71 dBm; IEEE 802.11g: 10.33 dBm;		
Output Power	IEEE 802.11n(20): 9.71 dBm; IEEE 802.11n(40): 4.33 dBm		
Modulation	DSSS(DBPSK/DQPSK/CCK);OFDM(BPSK/QPSK/16-QAM/64-QAM)		
Number of channels	11		
Hardware Version	D304C_SN_H42_DEMO		
Software Version	3.0.0.8		
Antenna Designation	Integrated Antenna (Met 15.203 Antenna requirement)		
Antenna Gain	3.524dBi		
Power Supply	AC 120V		

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 For 40MHZ bandwidth system use Channel 3 to Channel 9

MCS Index	Nss	Modulation	R	NBPSC	NCI	BPS	NDBPS			ata Abps) nsGl
					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	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: 2AENYDH7061** 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: 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 802.11g (20MHz) with Date rate (6.5/13/19.5/26/39/52/58.5/65)				

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

Transmit by 802.11n (40MHz) with Date rate

(13.5/27/40.5/54/81/108/121.5/135)

Note:

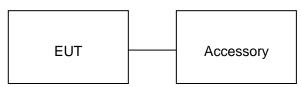
1. The EUT has been set to operate continuously on the lowest, middle and highest operation frequency Individually, and the eut is operating at its maximum duty cycle>or equal 98%

- 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:



5.2. EQUIPMENT USED IN EUT SYSTEM

ltem	Equipment	Model No.	ID or Specification	Remark
1	LED Motion Sensor Security Light with Wi-Fi Camera	DH7061	2AENYDH7061	EUT

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	Line Conduction 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

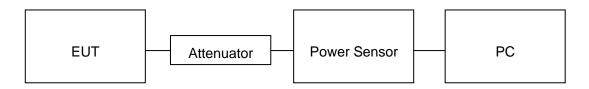
For average power test:

- 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	12.42	30	Pass
2.437	12.36	30	Pass
2.462	12.71	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	10.15	30	Pass
2.437	10.33	30	Pass
2.462	9.84	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	9.64	30	Pass
2.437	9.71	30	Pass
2.462	9.55	30	Pass

TEST ITEM	OUTPUT POWER
TEST MODE	802.11n 40 with data rate 6.5

Frequency (GHz)	Average Power (dBm)	Applicable Limits (dBm)	Pass or Fail
2.422	4.26	30	Pass
2.437	4.33	30	Pass
2.452	4.18	30	Pass

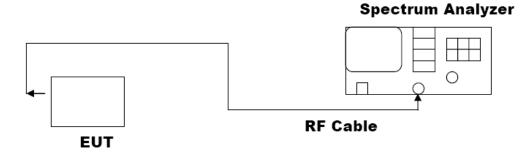
8.6 DB BANDWIDTH

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 MEAS	UREMENT RESULT			
Appliachla Limita	Applicable Limits				
Applicable Limits	Test Da	ta (MHz)	Criteria		
	Low Channel	10.04	PASS		
>500KHZ	Middle Channel	10.04	PASS		
	High Channel	10.05	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	ta (MHz)	Criteria
	Low Channel	16.38	PASS
>500KHZ	Middle Channel	16.37	PASS
	High Channel	16.36	PASS

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

	LIMITS AND MEAS	UREMENT RESULT		
Applicable Limits				
Applicable Limits	Test Da	ta (MHz)	Criteria	
	Low Channel	17.58	PASS	
>500KHZ	Middle Channel	17.58	PASS	
	High Channel	17.59	PASS	

TEST ITEM	6DB BANDWIDTH
TEST MODE	802.11n 40 with data rate 65

	LIMITS AND MEAS	UREMENT RESULT		
Applicable Limits				
Applicable Limits	Test Dat	ta (MHz)	Criteria	
	Low Channel	35.13	PASS	
>500KHZ	Middle Channel	35.49	PASS	
	High Channel	35.18	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





TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL

TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL

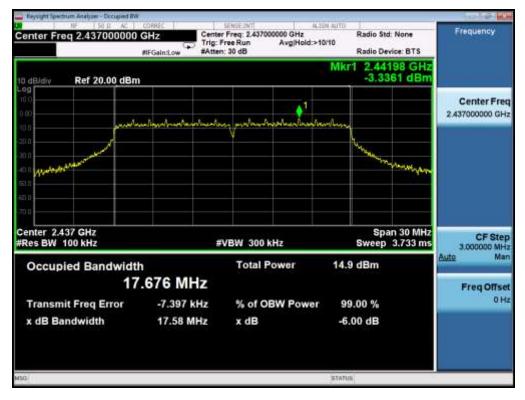




802.11n (20) TEST RESULT

TEST PLOT OF BANDWIDTH FOR LOW CHANNEL

TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL



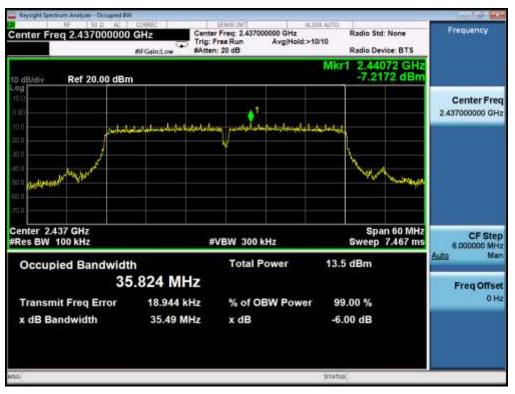


TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL

802.11n (40) TEST RESULT

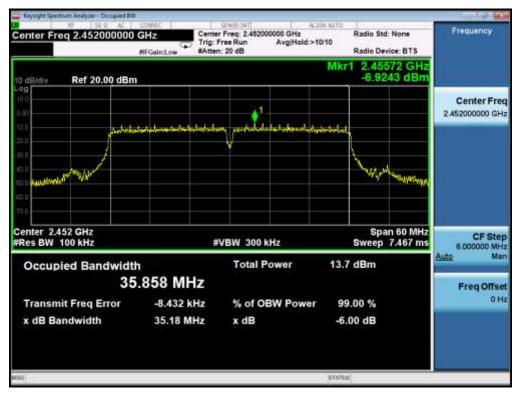
TEST PLOT OF BANDWIDTH FOR LOW CHANNEL





TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL

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)

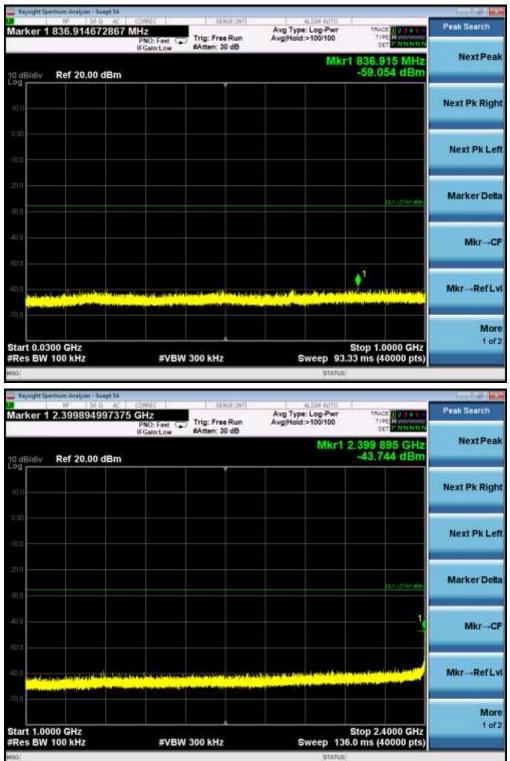
The same as described in section 8.2.

9.3. MEASUREMENT EQUIPMENT USED

The same as described in section 6.

9.4. LIMITS AND MEASUREMENT RESULT

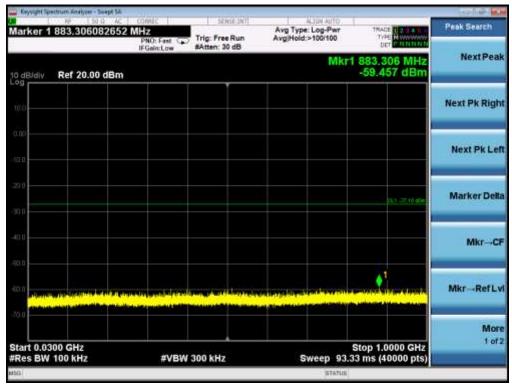
LIMITS AND MEA	SUREMENT RESULT		
Applieghte Limite	Measurement Result		
Applicable Limits	Test Data	Criteria	
In any 100 KHz Bandwidth Outside the	At least -30dBc than the limit		
frequency band in which the spread spectrum	Specified on the BOTTOM	PASS	
intentional radiator is operating, the radio frequency	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	



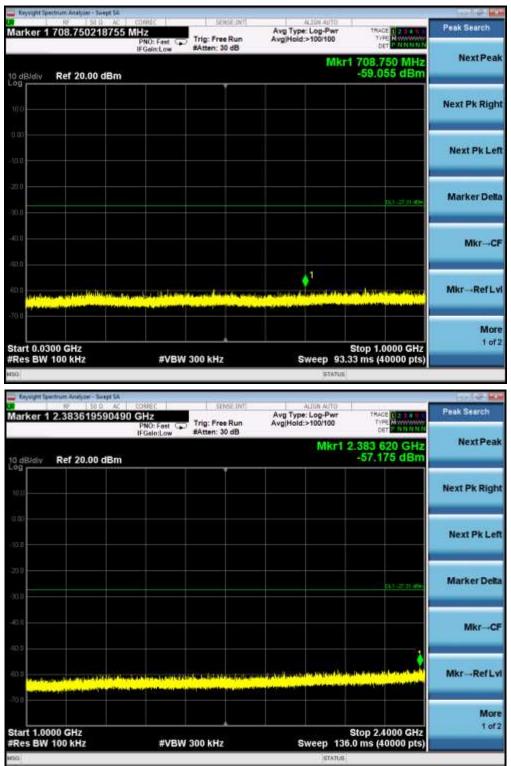
TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE OF 802.11b FOR MODULATION IN LOW CHANNEL



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



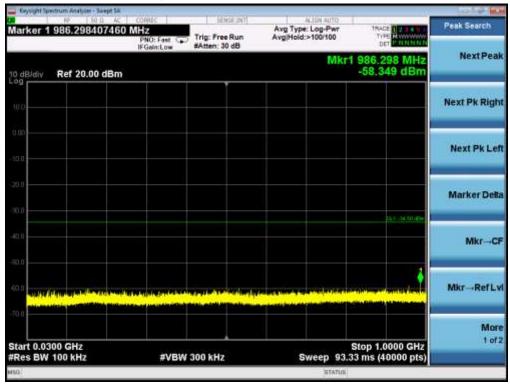
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0 10 </td <td>44 CORREC 291541 GHz PNO: Fast IFGeIntLow</td> <td>SENSE JW/</td> <td>Sweep 93.3 status Autor Autor Avg Type: Log-Pwr Avg Hold:>100/100</td> <td>3 ms (40000 pts)</td> <td>Peak Search Next Pea Next Pk Rig Next Pk Le</td>	44 CORREC 291541 GHz PNO: Fast IFGeIntLow	SENSE JW/	Sweep 93.3 status Autor Autor Avg Type: Log-Pwr Avg Hold:>100/100	3 ms (40000 pts)	Peak Search Next Pea Next Pk Rig Next Pk Le
Bill Image: Second	44 CORREC 291541 GHz PNO: Fast IFGeIntLow	SENSE JW/	Sweep 93.3 status Autor Autor Avg Type: Log-Pwr Avg Hold:>100/100	3 ms (40000 pts)	Peak Search Next Pea Next Pk Rig Next Pk Le
Big Big <td>44 CORREC 291541 GHz PNO: Fast IFGeIntLow</td> <td>SENSE JW/</td> <td>Sweep 93.3 status Autor Autor Avg Type: Log-Pwr Avg Hold:>100/100</td> <td>3 ms (40000 pts)</td> <td>Peak Search Next Pea Next Pk Rig Next Pk Lo Marker De</td>	44 CORREC 291541 GHz PNO: Fast IFGeIntLow	SENSE JW/	Sweep 93.3 status Autor Autor Avg Type: Log-Pwr Avg Hold:>100/100	3 ms (40000 pts)	Peak Search Next Pea Next Pk Rig Next Pk Lo Marker De
e Kessent Seedson Analyse - Sweet 16 50 D arker 1 24.42018562	44 CORREC 291541 GHz PNO: Fast IFGeIntLow	SENSE JW/	Sweep 93.3 status Autor Autor Avg Type: Log-Pwr Avg Hold:>100/100	3 ms (40000 pts)	Peak Search Next Pea Next Pk Rig Next Pk Lo Marker De
Big Big <td>44 CORREC 291541 GHz PNO: Fast IFGeIntLow</td> <td>SENSE JW/</td> <td>Sweep 93.3 status Autor Autor Avg Type: Log-Pwr Avg Hold:>100/100</td> <td>3 ms (40000 pts)</td> <td>Peak Search Next Per Next Pk Rig Next Pk Lo Marker Del MkrO</td>	44 CORREC 291541 GHz PNO: Fast IFGeIntLow	SENSE JW/	Sweep 93.3 status Autor Autor Avg Type: Log-Pwr Avg Hold:>100/100	3 ms (40000 pts)	Peak Search Next Per Next Pk Rig Next Pk Lo Marker Del MkrO
Image: Second	44 CORREC 291541 GHz PNO: Fast IFGeIntLow	SENSE JW/	Sweep 93.3 status Autor Autor Avg Type: Log-Pwr Avg Hold:>100/100	3 ms (40000 pts)	Peak Search Next Per Next Pk Rig Next Pk Lo Marker Del MkrO
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Arry of feether Antion - Lord 1 10 50 0 arker 1 24.42018562 dBidiv Ref 20.00 dB 9 10 10 10 10 10 10 10 10 10 10	44 CORREC 291541 GHz PNO: Fast IFGeIntLow	SENSE JW/	Sweep 93.3 status Autor Autor Avg Type: Log-Pwr Avg Hold:>100/100	3 ms (40000 pts)	Peak Search Next Pea Next Pk Rig Next Pk Lo Marker Del MkrC MkrRef L Mo
Bildiv Ref 20.00 dB 00 0 00 0 00 0 00 0 00 0 00 0 00 0 00 0 00 0 00 0 00 0 00 0	14 19641 GHz PNO: Fast IFGeintLow Im	SENSE JW/	Sweep 93.3: STATUR	3 ms (40000 pts)	Peak Search Next Peak Next Pk Right Next Pk Lea Marker Deb MkrRef L Moi 1 of



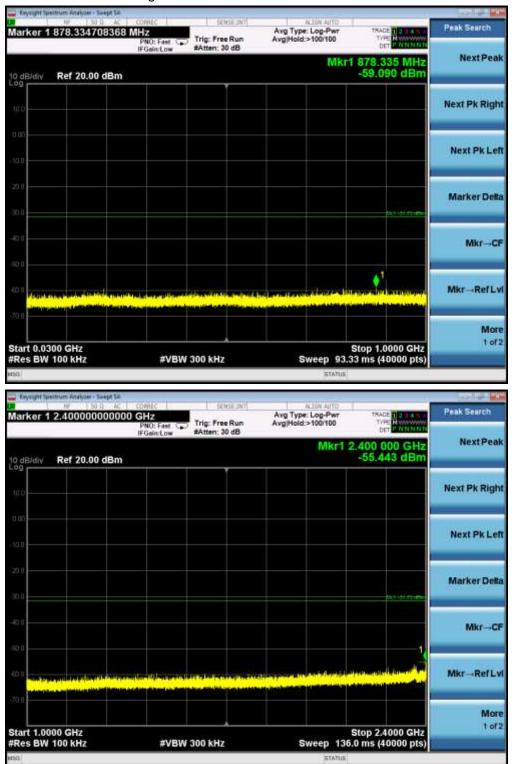
TEST PLOT OF OUT OF BAND EMISSIONS THE WORST CASE OF 802.11b FOR MODULATION IN HIGH CHANNEL



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



Reyvight Spectrum Analyzer - Swept S RF 50 G 4	C CORREC	SENSE JN7	AL16N AU172	Concerns of the	Contraction of the local distance of the loc
rker 1 2.400000000	000 GHz PNO: Fast CC	Trig: Free Run	Avg Type: Log-Pwr Avg Hold:>100/100	TNACE 1 2 3 4 1 A TVPE NORMANN	Peak Search
	IFGein:Low	#Atten: 30 dB		The second se	NextPe
dBidiv Ref 20.00 dBr			MKr1 2	.400 000 GHz -38.517 dBm	HEALT CO
dBJdiv Ref 20.00 dBr	1				
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					Mkr→C
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and for the bolt of a fille the				- College and Ballet	
0					
					Mo
rt 1.0000 GHz	121020303			stop 2.4000 GHz	10
CS DVV TUU ARIZ	#VBW	300 kHz	Sweep 136.	0 ms (40000 pts)	
es BW 100 kHz Keys git Spectrum Analyse - Swept 5		300 kHz	STATUS ALIGN AUTO	0 ms (40000 pts)	
Keysight Spectrum Analyzer - Swept S	ia ic contec 6153 GHz PN0: Fast CC	SENSE JNT	STATUR	TRACE DESCRIPTION	Peak Search
aysight Spectrum Analyzer - Swept S	ic contec 6153 GHz	SENSE JNT	ALISH AUTO Avg Type: Log-Pwr Avg Hold:>100/100	TRACE DEPENDENT	
rker 1 24.401046120	G153 GHz P40: Fast FGenclow	SENSE JNT	ALISH AUTO Avg Type: Log-Pwr Avg Hold:>100/100	TRACE DESCRIPTION	
rker 1 24.401046120	G153 GHz P40: Fast FGenclow	SENSE JNT	ALISH AUTO Avg Type: Log-Pwr Avg Hold:>100/100	17402 0 2 3 4 0 1 1749 0 2 3 4 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NextPea
rker 1 24.401046120 Ref 20.00 dBr	G153 GHz P40: Fast FGenclow	SENSE JNT	ALISH AUTO Avg Type: Log-Pwr Avg Hold:>100/100	17402 0 2 3 4 0 1 1749 0 2 3 4 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NextPe
rker 1 24.401046120	G153 GHz P40: Fast FGenclow	SENSE JNT	ALISH AUTO Avg Type: Log-Pwr Avg Hold:>100/100	17402 0 2 3 4 0 1 1749 0 2 3 4 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NextPe
rker 1 24.401046120	G153 GHz P40: Fast FGenclow	SENSE JNT	ALISH AUTO Avg Type: Log-Pwr Avg Hold:>100/100	17402 0 2 3 4 0 1 1749 0 2 3 4 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Next Pe
rker 1 24.401046120	G153 GHz P40: Fast FGenclow	SENSE JNT	ALISH AUTO Avg Type: Log-Pwr Avg Hold:>100/100	17402 0 2 3 4 0 1 1749 0 2 3 4 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Next Pe
rker 1 24.401046120	G153 GHz P40: Fast FGenclow	SENSE JNT	ALISH AUTO Avg Type: Log-Pwr Avg Hold:>100/100	17402 0 2 3 4 0 1 1749 0 2 3 4 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Next Pe
rker 1 24.401046120	G153 GHz P40: Fast FGenclow	SENSE JNT	ALISH AUTO Avg Type: Log-Pwr Avg Hold:>100/100	17402 0 2 3 4 0 1 1749 0 2 3 4 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Next Pe Next Pk Rig Next Pk Li
rker 1 24.401045120	G153 GHz P40: Fast FGenclow	SENSE JNT	ALISH AUTO Avg Type: Log-Pwr Avg Hold:>100/100	17402 0 2 3 4 0 1 1749 0 2 3 4 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Next Pe Next Pk Rig Next Pk Li
rker 1 24.401046120	G153 GHz P40: Fast FGenclow	SENSE JNT	ALISH AUTO Avg Type: Log-Pwr Avg Hold:>100/100	17402 0 2 3 4 0 1 1749 0 2 3 4 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Next Pe Next Pk Rig Next Pk Li
200 of Section Andrew Sweet 5 16 150 0 4 Irker 1 24.401046120	G153 GHz P40: Fast FGenclow	SENSE JNT	ALISH AUTO Avg Type: Log-Pwr Avg Hold:>100/100	24.401 0 GHz -38.676 dBm	
rker 1 24.401046120	G153 GHz P40: Fast FGenclow	SENSE JNT	ALISH AUTO Avg Type: Log-Pwr Avg Hold:>100/100	24.401 0 GHz -38.676 dBm	Next Pk Rig Next Pk Rig Next Pk Li Marker De
rker 1 24.401046120	G153 GHz P40: Fast FGenclow	SENSE JNT	ALISH AUTO Avg Type: Log-Pwr Avg Hold:>100/100	24.401 0 GHz -38.676 dBm	Next Pk Rig Next Pk Rig Next Pk Li
disidiry Ref 20.00 dBr	G153 GHz P40: Fast FGenclow	SENSE JNT	ALISH AUTO Avg Type: Log-Pwr Avg Hold:>100/100	24.401 0 GHz -38.676 dBm	Next Pk Rig Next Pk Rig Next Pk Li Marker De
Result Ref 20.00 dB IS IS	G153 GHz P40: Fast FGenclow	SENSE JNT	ALISH AUTO Avg Type: Log-Pwr Avg Hold:>100/100	24.401 0 GHz -38.676 dBm	Next Pk Rig Next Pk Rig Next Pk Li Marker De
rker 1 24.401046120	G153 GHz P40: Fast FGenclow	SENSE JNT	ALISH AUTO Avg Type: Log-Pwr Avg Hold:>100/100	24.401 0 GHz -38.676 dBm	Next Pk Rig Next Pk Rig Next Pk Li Marker De MkrRef L
Ref 20.00 dBr	G153 GHz P40: Fast FGenclow	SENSE JNT	ALISH AUTO Avg Type: Log-Pwr Avg Hold:>100/100	24.401 0 GHz -38.676 dBm	Next Pk Rig Next Pk Rig Next Pk Li Marker De
Ref 20.00 dBr	AL CONSC 6153 GHZ PNO: Fast Con IFGein: Low m	SENSE JNT	STATUR Aug Type: Log-Pwr Avg Hold:>100/100 Mkr1	24.401 0 GHz -38.676 dBm	Next Pk Rig Next Pk Rig Next Pk L Marker De MkrRef L MkrRef L



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

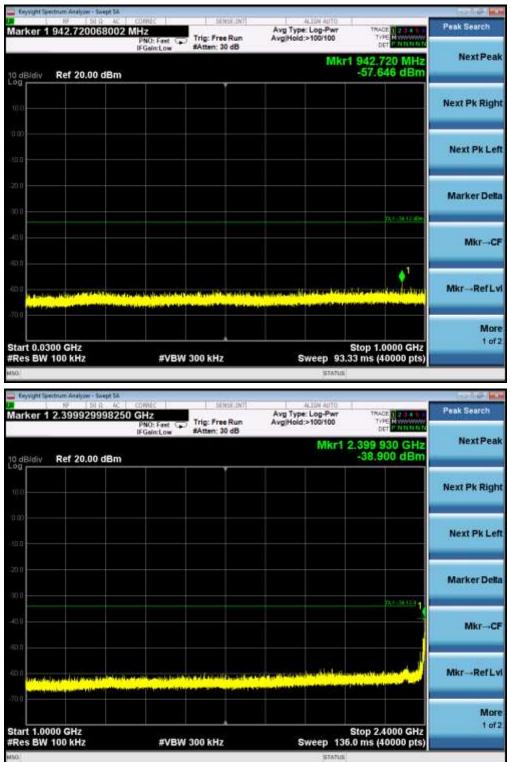


TEST PLOT OF OUT OF BAND EMISSIONS THE WORST CASE

OF 802.11g FOR MODULATION IN HIGH CHANNEL

Keysight Spectrum Analyzer - Swept SA	CORREC SENSE ONT	N 104 AUTO		10-10-1
Marker 1 846.396659916		Avg Type: Log-Pwr AvgiHold:>100/100	TRACE 1 2 3 4 1 4 Type North Common	Peak Search
0 dBidiv Ref 20.00 dBm	IFGERLOW PROBA, W GD	Mkr1	846.397 MHz -59.505 dBm	NextPea
₩D				Next Pk Rigi
80.0.				Next Pk Le
20.0			0.1-15-7 -6 9	Marker Del
411 11				Mkr→C
eo n 60 n	An ille serveritieire erste fiel iste e			Mkr→RefL
10.0 Start 0.0300 GHz			top 1.0000 GHz	Mor 1 of
Res BW 100 kHz	#VBW 300 kHz	Sweep 93.3	3 ms (40000 pts)	i

yvight Spectrum Juralyzer - Swept SA 1 KF 1 S0 O 40	C CORREC	SENSE ONT	AL164 AUTO	Contracting to contract the	Peak Search
ker 1 2.3819745493	PNO: Fast Co	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold:>100/100	TRACE TO A TANK TYPE RUMANIAN DET PINKINAN	P GAR SOULC
	IFGeIn:Low	HALDEN, JU GD	Mkr1	2.381 975 GHz	NextPe
Bidiv Ref 20.00 dBn	n			-55.024 dBm	
					CON SEAMAN
					Next Pk Rig
					6
					Next Pk Lo
					Marker De
				11.1 - N-27-@w	
					Mkr→
					Mkr-RefL
an air an Ruissainte Arthur				and the second second	THE PARTY
					Mc 1 o
t 1.0000 GHz s BW 100 kHz	10000000			Stop 2.4000 GHz	
	#VBW	300 kHz		6.0 ms (40000 pts)	
	#VBW	300 kHz	Sweep 13		
ysight Spectrum Analyzer - Swept SA			STA711		0.0
	72969 GHz	SENSE JWT	ALISH AUTO Avg Type: Log-Pwr		Peak Search
ysight Spectrum Analyzer - Swept SA		SENSE JWT	Autor Autor Avg Type: Log-Pwr Avg[Hold:>100/100	TRACE D 2 1 4 100 TYPE CONTRACTOR	
water 19 59 0 ac ker 1 ∆ 24,4804187	72969 GHz PM0: Fast IFGeinLow	SENSE JWT	Autor Autor Avg Type: Log-Pwr Avg[Hold:>100/100	17400 0 2 3 4 10 779 000 000000000000000000000000000000	
ysight Spectrum Analyzer - Swept SA	72969 GHz PM0: Fast IFGeinLow	SENSE JWT	Autor Autor Avg Type: Log-Pwr Avg[Hold:>100/100	TRACE D 2 1 4 100 TYPE CONTRACTOR	
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water 19 59 0 ac ker 1 ∆ 24,4804187	72969 GHz PM0: Fast IFGeinLow	SENSE JWT	Autor Autor Avg Type: Log-Pwr Avg[Hold:>100/100	TRACE D 2 3 4 11 TYPE DET CRIMININ 1 24.480 4 GHz	Next Per Next Pk Rig Next Pk Lo
water 19 59 0 ac ker 1 ∆ 24,4804187	72969 GHz PM0: Fast IFGeinLow	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr AvgiHold:>100/100	TRACE D 2 3 4 11 TYPE DET CRIMININ 1 24.480 4 GHz	Next Pk Rig Next Pk Rig Next Pk Li Marker De
water 19 59 0 ac ker 1 ∆ 24,4804187	72969 GHz PM0: Fast IFGeinLow	SENSE JWT	Avg Type: Log-Pwr AvgiHold:>100/100	TRACE 0 2 2 4 TO 7/96 DET 0 KINNON 1 24,480 4 GHz -38.311 dBm	Next Pk Rig Next Pk Rig Next Pk Li Marker De
water 19 59 0 ac ker 1 ∆ 24,4804187	72969 GHz PM0: Fast IFGeinLow	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr AvgiHold:>100/100	TRACE 0 2 2 4 TO 7/96 DET 0 KINNON 1 24,480 4 GHz -38.311 dBm	Next Pk Rig Next Pk Rig Next Pk Li Marker De
water 19 59 0 ac ker 1 ∆ 24,4804187	72969 GHz PM0: Fast IFGeinLow	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr AvgiHold:>100/100	TRACE 0 2 2 4 TO 7/96 DET 0 KINNON 1 24,480 4 GHz -38.311 dBm	Next Pk Rig Next Pk Rig Next Pk Li Marker De
water 19 59 0 ac ker 1 ∆ 24,4804187	72969 GHz PM0: Fast IFGeinLow	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr AvgiHold:>100/100	TRACE 0 2 2 4 TO 7/96 DET 0 KINNON 1 24,480 4 GHz -38.311 dBm	Next Pk Rig Next Pk Rig Next Pk Li Marker De
water 19 59 0 ac ker 1 ∆ 24,4804187	72969 GHz PM0: Fast IFGeinLow	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr AvgiHold:>100/100	TRACE 0 2 2 4 TO 7/96 DET 0 KINNON 1 24,480 4 GHz -38.311 dBm	Next Pk Rig Next Pk Rig Next Pk Li Marker De Mkr-4 Mkr-4
North Sector Markover - Boograph IN 50 G M ker 1 Δ 24.4804187 Bidity Ref 20.00 dBn In In Bidity Ref 20.00 dBn In In In In <td>772969 GHz PNO: Fast IFGein: Low</td> <td>SERSE (M)</td> <td>Avg Type: Log-Pwr AvgiHold:>100/100</td> <td>TRACE D 2 3 4 TO OTT TYPE -38.311 dBm -38.311 dBm -38.311 dBm -38.311 dBm -38.311 dBm -38.311 dBm -38.311 dBm -38.311 dBm</td> <td>Next Pk Rig Next Pk Rig Next Pk Li Marker De Mkr-4 Mkr-4</td>	772969 GHz PNO: Fast IFGein: Low	SERSE (M)	Avg Type: Log-Pwr AvgiHold:>100/100	TRACE D 2 3 4 TO OTT TYPE -38.311 dBm -38.311 dBm -38.311 dBm -38.311 dBm -38.311 dBm -38.311 dBm -38.311 dBm -38.311 dBm	Next Pk Rig Next Pk Rig Next Pk Li Marker De Mkr-4 Mkr-4
Number No.11 20 ± 30 ± 30 ker 1 Δ 24.4804187 30 ± 30 30 Bidiv Ref 20.00 dBn 1	772969 GHz PNO: Fast IFGein: Low	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr AvgiHold:>100/100	124.490 4 GHz -38.311 dBm	Next Pk Rig Next Pk Lo Marker Del MkrRef L Mo
North Sector Markover - Boograph IN 50 G M ker 1 Δ 24.4804187 Bidity Ref 20.00 dBn In In Bidity Ref 20.00 dBn In In In In <td>772969 GHz PNO: Fast IFGein: Low</td> <td>SERSE (M)</td> <td>Avg Type: Log-Pwr AvgiHold:>100/100</td> <td>1 24.480 4 GHz -38.311 dBm</td> <td>Peak Search Next Peak Next Pk Rig Next Pk Lo Marker Del MkrC MkrRef L Mo</td>	772969 GHz PNO: Fast IFGein: Low	SERSE (M)	Avg Type: Log-Pwr AvgiHold:>100/100	1 24.480 4 GHz -38.311 dBm	Peak Search Next Peak Next Pk Rig Next Pk Lo Marker Del MkrC MkrRef L Mo



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

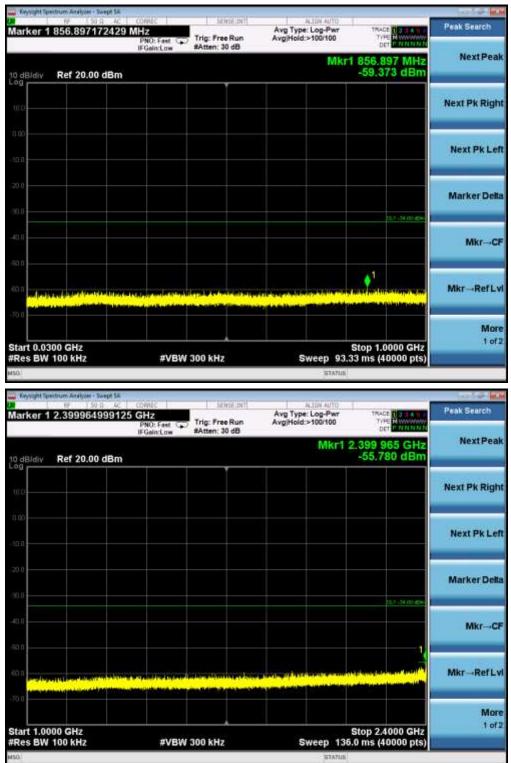


TEST PLOT OF OUT OF BAND EMISSIONS THE WORST CASE

OF 802.11n20 FOR MODULATION IN MIDDLE CHANNEL

Keyvight Spectrum Analyzer - Swept SA	no data in transcourse	10 10000000 1		101 B
Marker 1 769.061476537	CORREC SERSE OVT	Avg Type: Log-Pwr Avg[Hold:>100/100	TRACE D 2 3 4 1 4 TYPE N WARMANN DET P NINNINN	Peak Search
IO dBidiv Ref 20.00 dBm		Mkr1	769.061 MHz -59.585 dBm	NextPea
₩ <i>Δ</i>				Next Pk Righ
10.00				Next Pk Le
29.0			0.1.3531-694	Marker Del
				Mkr→C
eo n		↓1 Ne de la statistica de la s		Mkr→RefL
To a Start 0.0300 GHz #Res BW 100 kHz	#VBW 300 kHz	Suinan 02 9	top 1.0000 GHz 3 ms (40000 pts)	Moi 1 of
50 SOL	#VBW 300 KHZ	Sweep 95.5.	mis (40000 prs)	1

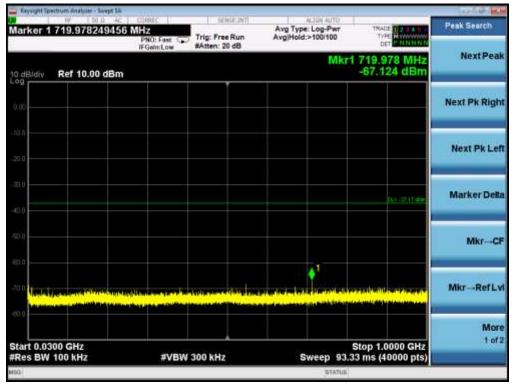
arker 1 2.3960099002	48 GHz	Avg Type: Log-Pwr	TRACE TO 3 4 1 4	Peak Search
	PNO: Fast Trig: Free R IFGein:Low #Atten: 30 d	18	DETPANNNN	NextPea
dBldiv Ref 20.00 dBn	n	MKr	1 2.396 010 GHz -54.126 dBm	THE ALT CO
				March Physics
η0				Next Pk Rig
				NAME AND ADDRESS OF
				Next Pk Le
où				Marker De
			0.1 33.01 6 9	
G U				Mkr→C
20			1	
on vellevite de come attrive de	um dat telle latin and the date		- mental advantation in the	Mkr-RefL
	n na state a s			4
				Mo 1 o
art 1.0000 GHz			Stop 2.4000 GHz Sweep 136.0 ms (40000 pts)	
	#VBW 300 kHz		136.0 ms (40000 pts)	6
	#VBW 300 kHz	Sweep 1	136.0 ms (40000 pts)	
0 Keysight Spectrum Analyzes - Swept SP	CORREC SERIES	1478 AUTO	136.0 ms (40000 pts)	
0 Keysight Spectrum Analyzes - Swept SP	CORREC SENSE SPG6 GHz PND: Fast C	atar Avg Type: Log-Pwr tun Avg[Hold:>100/100	136.0 ms (40000 pts) us	Peak Search
s Less at lectrum and the NF 58 9 40 arker 1 24.945959048	CORREC SERIES SPG6 GHz PNO: Fast Trig: Free R IFGeIn: Low #Atten: 30 d	atar Avg Type: Log-Pwr tun Avg[Hold:>100/100	136.0 ms (40000 pts)	Peak Search
a Brought Section Andrew Sweet In BF 50.0 A arker 1 24.945959048 I dBJdly Ref 20.00 dBm	CORREC SERIES SPG6 GHz PNO: Fast Trig: Free R IFGeIn: Low #Atten: 30 d	anti Autor Autor Avg Type: Log-Pwr Avg Hold:>100/100 IB	136.0 ms (40000 pts)	Peak Search Next Pea
arker 1 24.945959048	CORREC SERIES SPG6 GHz PNO: Fast Trig: Free R IFGeIn: Low #Atten: 30 d	anti Autor Autor Avg Type: Log-Pwr Avg Hold:>100/100 IB	136.0 ms (40000 pts)	Peak Search Next Pea
a Kovart Sector Anton - Sover 1 10 50 9 40 arker 1 24.945959048 dBldiv Ref 20.00 dBn	CORREC SERIES SPG6 GHz PNO: Fast Trig: Free R IFGeIn: Low #Atten: 30 d	anti Autor Autor Avg Type: Log-Pwr Avg Hold:>100/100 IB	136.0 ms (40000 pts)	Peak Search Next Pea
arker 1 24.945959048	CORREC SERIES SPG6 GHz PNO: Fast Trig: Free R IFGeIn: Low #Atten: 30 d	anti Autor Autor Avg Type: Log-Pwr Avg Hold:>100/100 IB	136.0 ms (40000 pts)	Peak Search Next Pea
arker 1 24.945959048	CORREC SERIES SPG6 GHz PNO: Fast Trig: Free R IFGeIn: Low #Atten: 30 d	anti Autor Autor Avg Type: Log-Pwr Avg Hold:>100/100 IB	136.0 ms (40000 pts)	Peak Search Next Pea
arker 1 24.945959048	CORREC SERIES SPG6 GHz PNO: Fast Trig: Free R IFGeIn: Low #Atten: 30 d	anti Autor Autor Avg Type: Log-Pwr Avg Hold:>100/100 IB	136.0 ms (40000 pts)	Peak Search Next Pea Next Pk Rig Next Pk Lo
a Lover 1 Sector Andrew Sweet 12 arker 1 24.945959048 0 dB/div Ref 20.00 dBn	CORREC SERIES SPG6 GHz PNO: Fast Trig: Free R IFGeIn: Low #Atten: 30 d	anti Autor Autor Avg Type: Log-Pwr Avg Hold:>100/100 IB	136.0 ms (40000 pts)	Peak Search Next Pea Next Pk Rig Next Pk Lo
Result Net 50 0 Ac arker 1 24.945959048 dBJdiv Ref 20.00 dBn 9 00 00 00	CORREC SERIES SPG6 GHz PNO: Fast Trig: Free R IFGeIn: Low #Atten: 30 d	anti Autor Autor Avg Type: Log-Pwr Avg Hold:>100/100 IB	136.0 ms (40000 pts)	Peak Search Next Per Next Pk Rig Next Pk Lo Marker De
Association Analysis See 12 Starker 1 24.945959048 arker 1 24.945959048 addition Ref 20.00 dBm 29 00 00 01 02	CORREC SERIES SPG6 GHz PNO: Fast Trig: Free R IFGeIn: Low #Atten: 30 d	anti Autor Autor Avg Type: Log-Pwr Avg Hold:>100/100 IB	136.0 ms (40000 pts)	Peak Search Next Per Next Pk Rig Next Pk Lo Marker De
arker 1 24.945959048	CORREC SERIES SPG6 GHz PNO: Fast Trig: Free R IFGeIn: Low #Atten: 30 d	Avg Type: Log-Pw AvgHold:>100/100 B	136.0 ms (40000 pts)	Peak Search Next Pea Next Pk Rig Next Pk Lo Marker Del
arker 1 24.945959048	CORREC SERIES SPG6 GHz PNO: Fast Trig: Free R IFGeIn: Low #Atten: 30 d	Avg Type: Log-Pw AvgHold:>100/100 B	136.0 ms (40000 pts)	Peak Search Next Pea Next Pk Rig Next Pk Le
Easy of Sector Andrew Sector Solution Andrew Sector arker 1 24.945959048 30 0 40 dBldiv Ref 20.00 dBn 9 9 10 9 10 9 10 9 10 9 10 9 10 9 10 9 10 9 10 9 10 9 10 9 10 9 10 9 10 9 10 9 10 9 11 9	CORREC SERIES SPG6 GHz PNO: Fast Trig: Free R IFGeIn: Low #Atten: 30 d	Avg Type: Log-Pw AvgHold:>100/100 B	136.0 ms (40000 pts)	Peak Search Next Per Next Pk Rig Next Pk Lo Marker Del
Signature Source 1 Source 1	CORREC SERIES SPG6 GHz PNO: Fast Trig: Free R IFGeIn: Low #Atten: 30 d	CMVT ALIAN AUTO Avg Type: Log-Pwr AvgHold:>100/100 BB	136.0 ms (40000 pts)	Peak Search Next Pea Next Pk Rig Next Pk Lo Marker De Mkr-C



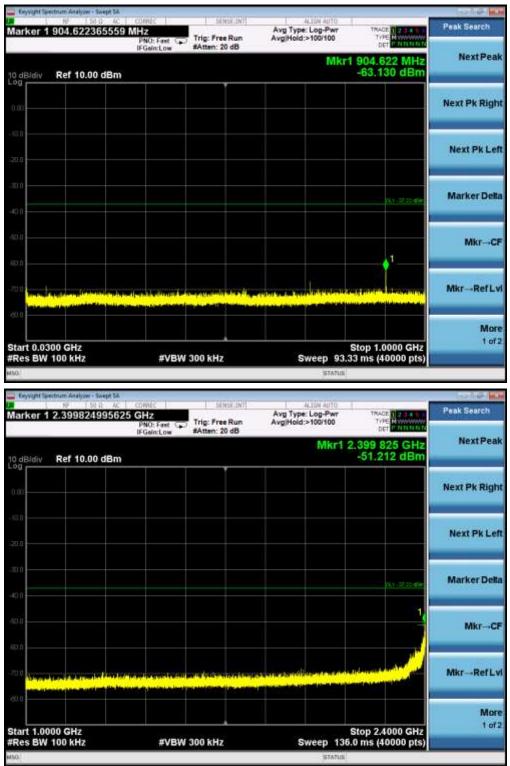
TEST PLOT OF OUT OF BAND EMISSIONS THE WORST CASE OF 802.11n20 FOR MODULATION IN HIGH CHANNEL



TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE OF 802.11n40 FOR MODULATION IN LOW CHANNEL



arker 1 2.39821495537	CORREC 74 GHz	SENSE 3N7	Avg Type: Log-Pwr	TRACE DIS BARRIES	Peak Search
INCI 1 2.0002 1400001	PNO: Fast GC IFGeIn:Low	Trig: Free Run #Atten: 20 dB	Avg Hold:>100/100	TRACE 1 2 3 4 11 1 TYPE NORMANN DET 2 NINNIN	
			Mkr1 2	398 215 GHz	NextPea
dB/div Ref 10.00 dBm				-44.050 dBm	
					Next Pk Rig
10					
n					A NUMBER OF TAXABLE PARTY.
α					Next Pk Lo
				TA.1 - 37 17-45+	Marker De
0					
u'					
					Mkr→0
1	And Line and Proceedings		a designation of the state of the	A REAL PROPERTY OF	Mkr-Ref L
					Mo
art 1.0000 GHz		A			1 0
III 1.0000 GHZ			the task of the task of the task of the task of the	top 2.4000 GHz	
es BW 100 kHz	#VBW	300 kHz	Sweep 136.	stop 2.4000 GHz 0 ms (40000 pts)	
es BW 100 kHz Keyvant Spectrum Analyzer - Swept SA 1 RF 50 St Ac.	CONNEC	300 KHz Sensejwij	Sweep 136. STATUS ALISH AUTO	0 ms (40000 pts)	Peak Search
es BW 100 kHz Keyvant Spectrum Analyzer - Swept SA 1 RF 50 St Ac.	CONNEC	SENSE (WT)	Sweep 136.	TMACE 1 2 1 4 1000	Peak Search
es BW 100 kHz Annual Gestion Antivers Swep 14 86 50 G Ac Irker 1 2.49250682517	TI GHZ PNO: Fast IFGen:Low	SENSE (MT	Sweep 136. status Autor Auto Avg Type: Log-Pwr Avg Hold:>100/100	7 ms (40000 pts)	Peak Search
es BW 100 kHz keyset pectum Antiper-Swept M 1 8 50 0 Ac arker 1 2.49250682517 dBJdny Ref 10.00 dBm	TI GHZ PNO: Fast IFGen:Low	SENSE (MT	Sweep 136. status Autor Auto Avg Type: Log-Pwr Avg Hold:>100/100	D ms (40000 pts)	
es BW 100 kHz Revent Sector Active - Swept Se Revent 1 2.49250682517 dBldrv Ref 10.00 dBm	TI GHZ PNO: Fast IFGen:Low	SENSE (MT	Sweep 136. status Autor Auto Avg Type: Log-Pwr Avg Hold:>100/100	7 ms (40000 pts)	Peak Search NextPe
es BW 100 kHz Revent Sector Active - Swept Se Revent 1 2.49250682517 dBldrv Ref 10.00 dBm	TI GHZ PNO: Fast IFGen:Low	SENSE (MT	Sweep 136. status Autor Auto Avg Type: Log-Pwr Avg Hold:>100/100	7 ms (40000 pts)	Peak Search
es BW 100 kHz keyvet Spectrum Analyse - Swept BA 150 G AC arker 1 2.49250682517 dBldtv Ref 10.00 dBm	TI GHZ PNO: Fast IFGen:Low	SENSE (MT	Sweep 136. status Autor Auto Avg Type: Log-Pwr Avg Hold:>100/100	7 ms (40000 pts)	Peak Search Next Pe Next Pk Rig
es BW 100 kHz	TI GHZ PNO: Fast IFGen:Low	SENSE (MT	Sweep 136. status Autor Auto Avg Type: Log-Pwr Avg Hold:>100/100	7 ms (40000 pts)	Peak Search NextPe
es BW 100 kHz Keyent Spectrum Antricer - Swept BA BE 50 G AC arker 1 2.49250682517 dBJdiv Ref 10.00 dBm	TI GHZ PNO: Fast IFGen:Low	SENSE (MT	Sweep 136. status Autor Auto Avg Type: Log-Pwr Avg Hold:>100/100	7 ms (40000 pts)	Peak Search Next Pe Next Pk Rig
es BW 100 kHz	TI GHZ PNO: Fast IFGen:Low	SENSE (MT	Sweep 136. status Autor Auto Avg Type: Log-Pwr Avg Hold:>100/100	7 ms (40000 pts)	Peak Search Next Pe Next Pk Rig
es BW 100 kHz	TI GHZ PNO: Fast IFGen:Low	SENSE (MT	Sweep 136. status Autor Auto Avg Type: Log-Pwr Avg Hold:>100/100	2.492 5 GHz -46.392 dBm	Peak Search Next Pe Next Pk Rig Next Pk Li
es BW 100 kHz	TI GHZ PNO: Fast IFGen:Low	SENSE (MT	Sweep 136.	2.492 5 GHz -46.392 dBm	Peak Search Next Pe Next Pk Rig Next Pk Li Marker De
es BW 100 kHz	TI GHZ PNO: Fast IFGen:Low	SENSE (MT	Sweep 136.	2.492 5 GHz -46.392 dBm	Peak Search Next Pe Next Pk Rig Next Pk Li Marker De
es BW 100 kHz	TI GHZ PNO: Fast IFGen:Low	SENSE (MT	Sweep 136.	2.492 5 GHz -46.392 dBm	Peak Search Next Pe Next Pk Rig Next Pk Li Marker De
es BW 100 kHz	TI GHZ PNO: Fast IFGen:Low	SENSE (MT	Sweep 136.	2.492 5 GHz -46.392 dBm	Peak Search Next Pe Next Pk Rig Next Pk Li Marker De Mkr-4
es BW 100 kHz	TI GHZ PNO: Fast IFGen:Low	SENSE (MT	Sweep 136.	2.492 5 GHz -46.392 dBm	Peak Search Next Pe Next Pk Rig Next Pk Li
es BW 100 kHz	TI GHZ PNO: Fast IFGen:Low	SENSE (MT	Sweep 136.	2.492 5 GHz -46.392 dBm	Peak Search Next Pe Next Pk Rig Next Pk Li Marker De Mkr-i Mkr-i Mkr-i Mkr-i Mkr-i Mkr-i Mkr-i
es BW 100 kHz	CONNEC PNO: Fast IFGein:Low	SENSE (MT	Sweep 136.	2.492 5 GHz -46.392 dBm	Peak Search Next Pe Next Pk Rig Next Pk Li Marker De Mkr-i

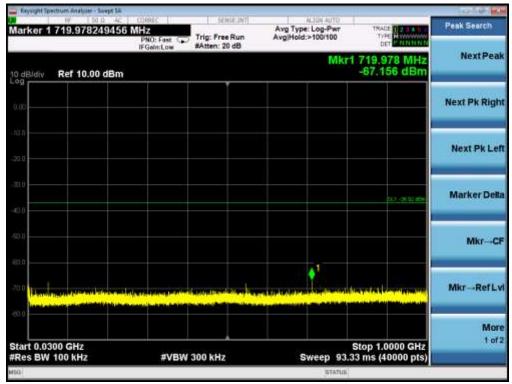


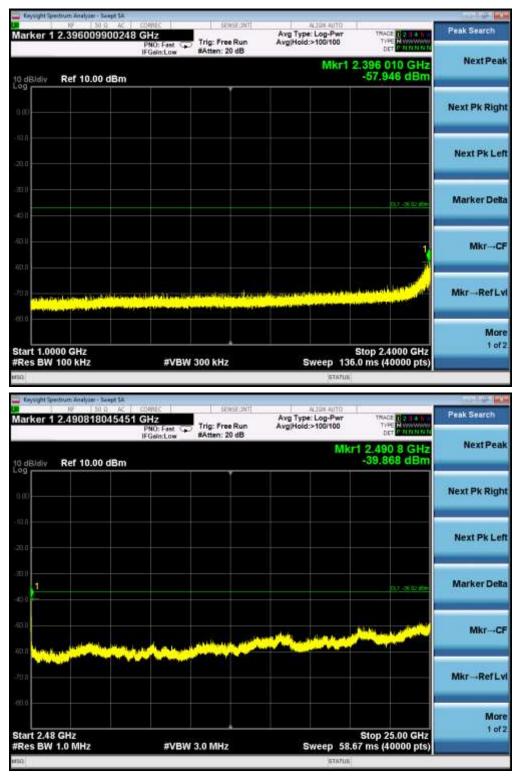
TEST PLOT OF OUT OF BAND EMISSIONS THE WORST CASE OF 802.11n40 FOR MODULATION IN MIDDLE CHANNEL



TEST PLOT OF OUT OF BAND EMISSIONS THE WORST CASE

OF 802.11n40 FOR MODULATION IN HIGH CHANNEL





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 PKPSD in the KDB 558074 item 10.2 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	-2.793	8	Pass
Middle Channel	-2.469	8	Pass
High Channel	-1.997	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	-8.756	8	Pass
Middle Channel	-6.126	8	Pass
High Channel	-7.749	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	-9.149	8	Pass
Middle Channel	-7.397	8	Pass
High Channel	-8.670	8	Pass

TEST ITEM	POWER PECTRAL DENSITY
TEST MODE	802.11n 40 with data rate 6.5

Channel No.	PSD (dBm/20kHz)	Limit (dBm/3kHz)	Result
Low Channel	-11.992	8	Pass
Middle Channel	-12.146	8	Pass
High Channel	-11.807	8	Pass



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

TEST PLOT OF SPECTRAL DENSITY FOR MIDDLE CHANNEL

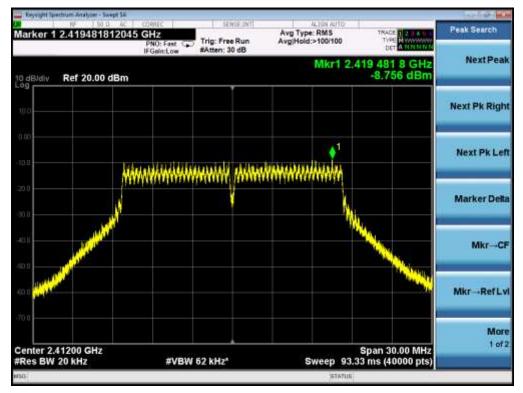


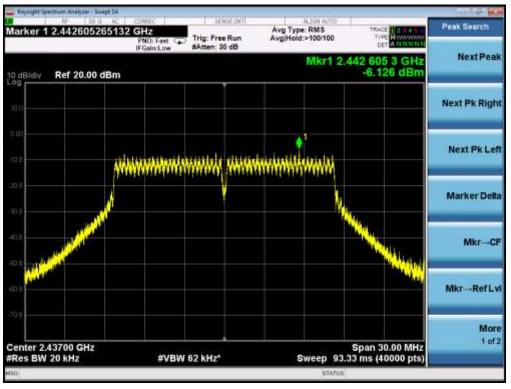


TEST PLOT OF SPECTRAL DENSITY FOR HIGH CHANNEL

802.11g TEST RESULT

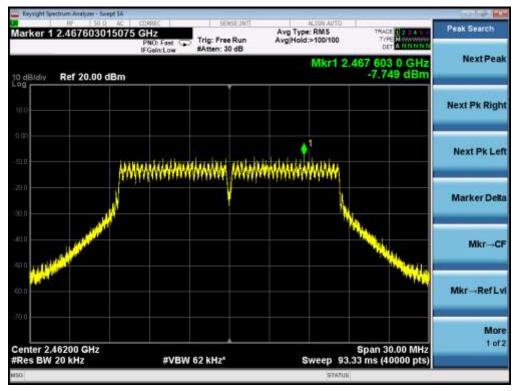
TEST PLOT OF SPECTRAL DENSITY FOR LOW CHANNEL

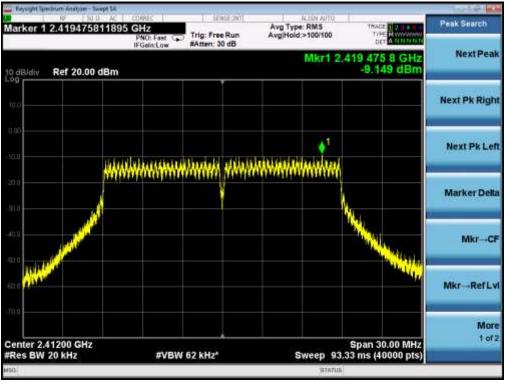




TEST PLOT OF SPECTRAL DENSITY FOR MIDDLE CHANNEL

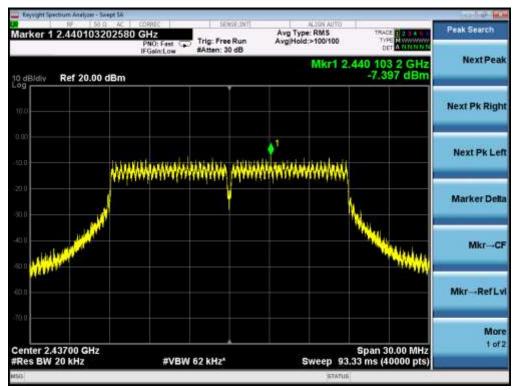
TEST PLOT OF SPECTRAL DENSITY FOR HIGH CHANNEL

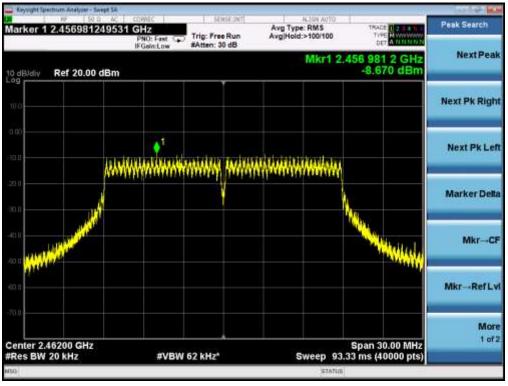




802.11n 20 TEST RESULT TEST PLOT OF SPECTRAL DENSITY FOR LOW CHANNEL

TEST PLOT OF SPECTRAL DENSITY FOR MIDDLE CHANNEL

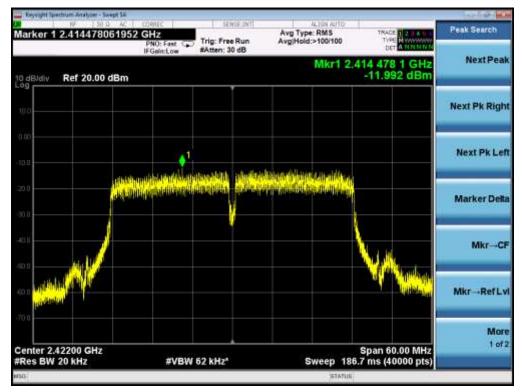


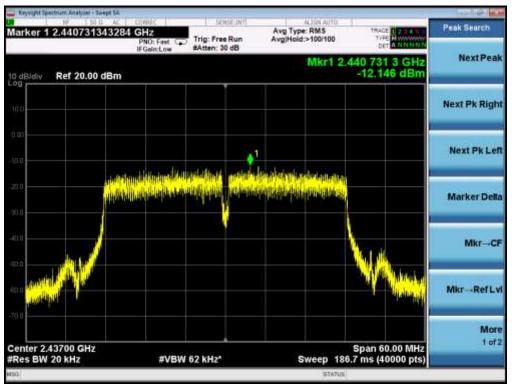


TEST PLOT OF SPECTRAL DENSITY FOR HIGH CHANNEL

802.11n 40 TEST RESULT

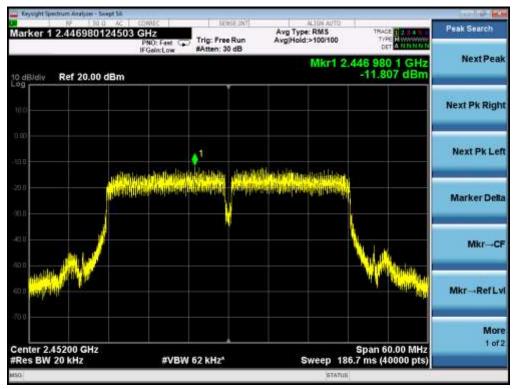
TEST PLOT OF SPECTRAL DENSITY FOR LOW CHANNEL





TEST PLOT OF SPECTRAL DENSITY FOR MIDDLE CHANNEL

TEST PLOT OF SPECTRAL DENSITY FOR HIGH CHANNEL



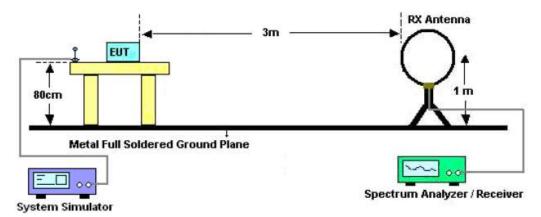
11. RADIATED EMISSION

11.1. MEASUREMENT PROCEDURE

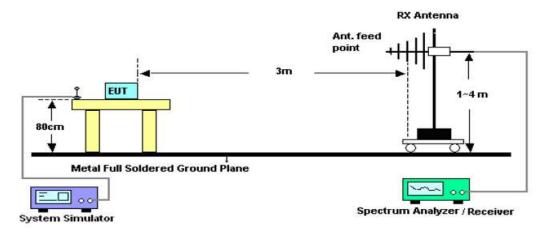
- 1. The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
- 2. Power on the EUT and all the supporting units. The turntable was rotated 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 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

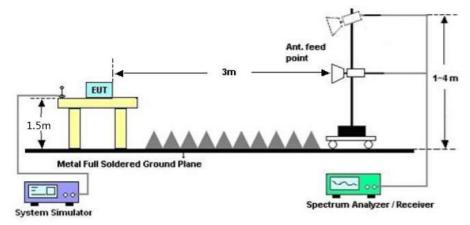
Radiated Emission Test-Setup Frequency Below 30MHz



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

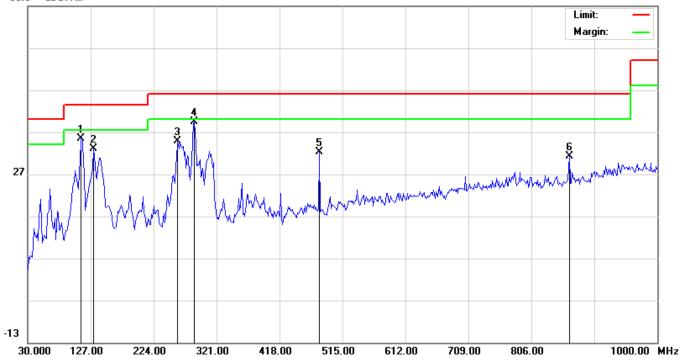
RADIATED EMISSION BELOW 30MHZ

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

RADIATED EMISSION BELOW 1GHZ

EUT	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061
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

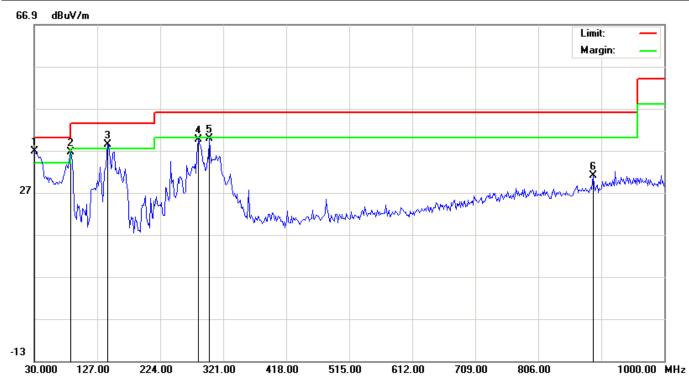


No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		112.4500	27.73	7.60	35.33	43.50	-8.17	peak			
2		131.8500	21.58	11.39	32.97	43.50	-10.53	peak			
3		261.1832	26.02	8.80	34.82	46.00	-11.18	peak			
4	*	287.0500	26.24	13.21	39.45	46.00	-6.55	peak			
5		479.4333	11.32	20.91	32.23	46.00	-13.77	peak			
6		864.2000	3.62	27.68	31.30	46.00	-14.70	peak			

RESULT: PASS

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EUT	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061
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	1 1	Antenna Height		Comment
	-	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree		
1	*	30.0000	40.94	-4.20	36.74	40.00	-3.26	peak				
2	Ţ	86.5832	32.39	4.16	36.55	40.00	-3.45	peak				
3	İ	143.1667	23.24	15.22	38.46	43.50	-5.04	peak				
4		282.2000	24.77	14.87	39.64	46.00	-6.36	peak				
5		299.9833	24.44	15.41	39.85	46.00	-6.15	peak				
6		890.0667	2.74	28.35	31.09	46.00	-14.91	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.

RADIATED EMISSION ABOVE 1GHZ

EUT	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061
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					
4824.067	46.86	3.72	50.58	74	-23.42	peak					
4824.053	42.24	3.72	45.96	54	-8.04	AVG					
7236.061	40.79	8.15	48.94	74	-25.06	peak					
7236.099	34.68	8.15	42.83	54	-11.17	AVG					
Remark:											
Factor = Ante	enna Factor + Ca	able Loss – P	re-amplifier.								

EUT	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061
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				
4824.024	45.65	3.72	49.37	74	-24.63	peak				
4824.039	40.47	3.72	44.19	54	-9.81	AVG				
7236.045	39.39	8.15	47.54	74	-26.46	peak				
7236.049	34.84	8.15	42.99	54	-11.01	AVG				
Remark:										
Factor = Ante	enna Factor + Ca	able Loss – Pr	e-amplifier.							

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EUT	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061
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		
4874.102	45.16	3.75	48.91	74	-25.09	peak		
4874.101	40.42	3.75	44.17	54	-9.83	AVG		
7311.096	40.98	8.16	49.14	74	-24.86	peak		
7311.099	35.38	8.16	43.54	54	-10.46	AVG		
Remark:								
Factor = Ante	enna Factor + Ca	able Loss – P	re-amplifier.					

EUT	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061
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 rype				
4874.060	45.36	3.75	49.11	74	-24.89	peak				
4874.067	40.21	3.75	43.96	54	-10.04	AVG				
7311.029	40.74	8.16	48.9	74	-25.1	peak				
7311.059	36.05	8.16	44.21	54	-9.79	AVG				
Remark:										
actor = Ante	enna Factor + Ca	able Loss – F	Pre-amplifier.							

Report No.: AGC09714170504FE04 Page 58 of 91

EUT	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061
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
4924.087	46.98	3.81	50.79	74	-23.21	peak
4924.111	41.74	3.81	45.55	54	-8.45	AVG
7386.117	39.54	8.19	47.73	74	-26.27	peak
7386.084	34.68	8.19	42.87	54	-11.13	AVG
Remark:						
actor = Ante	enna Factor + Ca	able Loss – F	Pre-amplifier.			

EUT	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061
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
4924.034	45.38	3.81	49.19	74	-24.81	peak
4924.026	40.24	3.81	44.05	54	-9.95	AVG
7386.092	39.79	8.19	47.98	74	-26.02	peak
7386.078	34.16	8.19	42.35	54	-11.65	AVG
Remark:						
-actor = Ante	enna Factor + Ca	able Loss – F	Pre-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	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061
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



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EUT	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2412MHZ	Antenna	Vertical



AV



Report No.: AGC09714170504FE04 Page 62 of 91

EUT	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061
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



Report No.: AGC09714170504FE04 Page 63 of 91

EUT	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2462MHZ	Antenna	Vertical

Peak Search tker 1 2.461911911912 GHz Avg Type: Log-Pwr Avg Hold >100/100 FoaterLove AAtten: 10 dB NextPea 1 2.461 91 GH 101.351 dBp Ref 106.99 dBuV Next Pk Righ Next Pk Left Marker Delta Start 2.45000 GHz #Res BW 1.0 MHz Stop 2.50000 GHz 1.066 ms (1000 pts) #VBW 3.0 MHz Sweep Mkr-CF 2 461 91 GHz 101,351 dBuV 2 483 60 GHz 45,191 dBuV N 1 1 N 1 1 Mkr-RefLv More 1 of 2





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EUT	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061
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	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2412MHZ	Antenna	Vertical



AV



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EUT	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2462MHZ	Antenna	Horizontal



AV



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EUT	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2462MHZ	Antenna	Vertical



AV



Report No.: AGC09714170504FE04 Page 68 of 91

EUT	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061
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



AV



Report No.: AGC09714170504FE04 Page 69 of 91

EUT	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061
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



AV



Report No.: AGC09714170504FE04 Page 70 of 91

EUT	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061	
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	



AV



Report No.: AGC09714170504FE04 Page 71 of 91

EUT	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061	
Temperature	25°C	Relative Humidity		
Pressure	960hPa	Test Voltage	Normal Voltage	
Test Mode	802.11n 20 with data rate 6.5 2462MHZ	Antenna	Vertical	



AV



EUT	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061	
Temperature	25°C	Relative Humidity	55.4%	
Pressure	960hPa	Test Voltage	Normal Voltage	
Test Mode	802.11n 40 with data rate 6.5 2422MHZ	Antenna	Horizontal	



AV



EUT	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061	
Temperature	25°C	Relative Humidity	55.4%	
Pressure	960hPa	Test Voltage	Normal Voltage	
Test Mode	802.11n 40 with data rate 6.5 2422MHZ	Antenna	Vertical	



AV



Report No.: AGC09714170504FE04 Page 74 of 91

EUT	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061	
Temperature	25°C	Relative Humidity	55.4%	
Pressure	960hPa	Test Voltage	Normal Voltage	
Test Mode	802.11n 40with data rate 6.5 2452MHZ	Antenna	Horizontal	

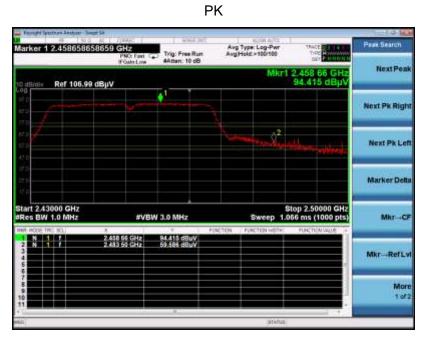
arker 1 2.4650730730730730745 CH2 PMC free Cur Foet Low Atten: 10 eB Peak Search Avg Type: Log-Pwr Avg Hold >100/100 Rad Tri NextPeat 2.463 07 GH 95.724 dBp Ref 106.99 dBµV ¢t' Next Pk Right <u>(</u>)2 Next Pk Left Marker Delta Start 2.43000 GHz #Res BW 1.0 MHz Stop 2.50000 GHz Sweep 1.066 ms (1000 pts) #VBW 3.0 MHz Mkr--CF 2 463 07 GHz 2 483 60 GHz 95,724 dBuy 60,824 dBuy Mkr-RefLv More

AV



Report No.: AGC09714170504FE04 Page 75 of 91

EUT	LED MOTION SENSOR SECURITY LIGHT WITH WI-FI CAMERA	Model Name	DH7061	
Temperature	25°C	Relative Humidity	55.4%	
Pressure	960hPa	Test Voltage	Normal Voltage	
Test Mode	802.11n 40 with data rate 6.5 2452MHZ	Antenna	Vertical	





THE REAL	Type: RMS Hold >100/100	n Å		PRO: East 1	2.4607607	farker 1
The supervised in the supervis	Mkr1		#Atten: 10 cR		Ref 106.9	O dB/dly
			•1			60 W D
						17 D 14 D 14 D
	n l'					
66 ms (1000 pts)	Sweep 1.0		W 3.0 MHz*	#VB	3000 GHz 1.0 MHz	Res BW
FUNCTION VALUE	PLACTER WET	POLICITION	80.201 dBuV 39.393 dBuV	2.460 76 GHz 2.483 60 GHz		N HOLE T
						67.89
	2.460 76 GHz 80.244 dBpV	en Type: RNS gHoke > 100/ros Mkr1 2.460 76 GHz 80.244 dBjV	Areg Typer RNAS Avg/Held=>100100 Mkr1 2.460 76 GHz 80.244 dBµV 2 Stop 2.50000 GHz Sweep 1.066 ms (1000 pts)	Avg Type RMS Avg Type RMS Avg Hold - 180100 Mkr1 2.450 76 GHz 80.244 dByV Mkr1 2.50000 GHz Stop 2.50000 GHz W 3.0 MHz ⁴ Pactor work Pactor Pactor P	760761 GHz PRO Train Trig: Free Rum Addan: 10 68 Avg Hyde: >100100 MKF1 2.450 76 GHz 80.244 dBµV 9 dBµV Stop 2.50000 GHz #VEW 3.0 MHz* Stop 2.50000 GHz Stop 2.50000 GHz	2.460760760761 GHz PRO: TestTrig: Free Run Adtan: 10 dB Adtan: 10 dB Mrc 12.460 76 GHz Ref 106.99 dBµV 80.244 dBµV 9000 GHz 1.0 MHz #VEW 3.0 MHz* Steep 1.066 ms (1000 pts)

RESULT: PASS

13. FCC LINE CONDUCTED EMISSION TEST

13.1. LIMITS OF LINE CONDUCTED EMISSION TEST

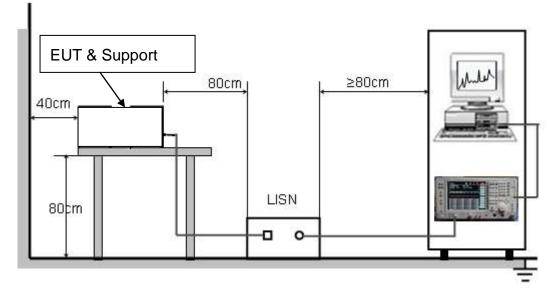
Frequency	Maximum RF Line Voltage						
Frequency	Q.P.(dBuV)	Average(dBuV)					
150kHz~500kHz	66-56	56-46					
500kHz~5MHz	56	46					
5MHz~30MHz	60	50					

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 0.50 MHz.

13.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST



13.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST

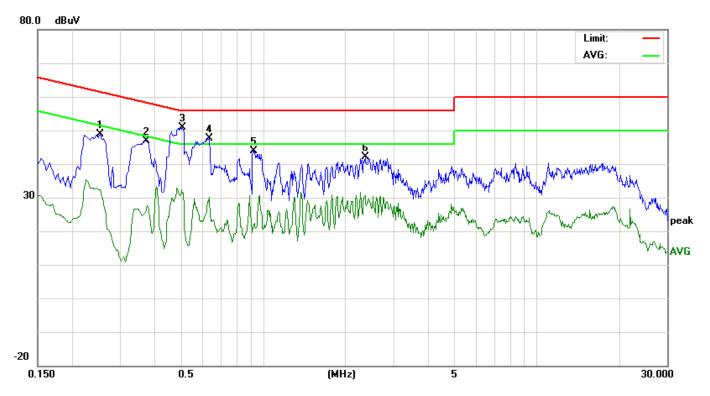
- The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10 (see Test Facility for the dimensions of the ground 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 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.

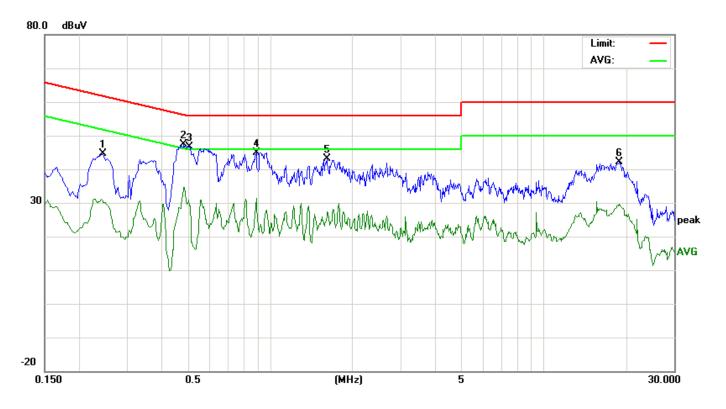
13.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST



Line Conducted Emission Test Line 1-L

No.	Freq.	Reading_Level (dBuV)		Correct Factor		easuren (dBuV)			nit uV)	1	rgin IB)	P/F	Comment	
	(MHz)	Peak	QP	AVG	dB	Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.2540	38.58		22.01	10.27	48.85		32.28	61.62	51.62	-12.77	-19.34	Р	
2	0.3738	36.64		16.01	10.32	46.96		26.33	58.41	48.41	-11.45	-22.08	Р	
3	0.5100	40.50		21.10	10.39	50.89		31.49	56.00	46.00	-5.11	-14.51	Р	
4	0.6340	37.20		19.85	10.32	47.52		30.17	56.00	46.00	-8.48	-15.83	Р	
5	0.9260	33.59		11.84	10.40	43.99		22.24	56.00	46.00	-12.01	-23.76	Р	
6	2.3620	31.78		20.32	10.37	42.15		30.69	56.00	46.00	-13.85	-15.31	Р	

RESULT: PASS



Line Conducted Emission Test Line 2-N

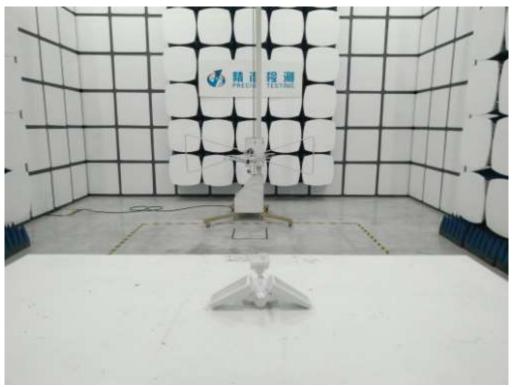
No.	Freq.	(abat)		Correct Factor	Me	easuren (dBuV)			nit uV)		rgin IB)	P/F	Comment	
	(MHz)	Peak	QP	AVG	dB	Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.2460	34.26		19.85	10.27	44.53		30.12	61.89	51.89	-17.36	-21.77	Ρ	
2	0.4860	37.01		24.34	10.39	47.40		34.73	56.24	46.24	-8.84	-11.51	Р	
3	0.5100	36.34		18.77	10.39	46.73		29.16	<u>56.00</u>	46.00	-9.27	-16.84	Р	
4	0.8900	34.52		20.93	10.40	44.92		31.33	56.00	46.00	-11.08	-14.67	Р	
5	1.6180	32.72		16.05	10.34	43.06		26.39	56.00	46.00	-12.94	-19.61	Р	
6	18.9939	32.11		19.24	10.12	42.23		29.36	60.00	50.00	-17.77	-20.64	Р	

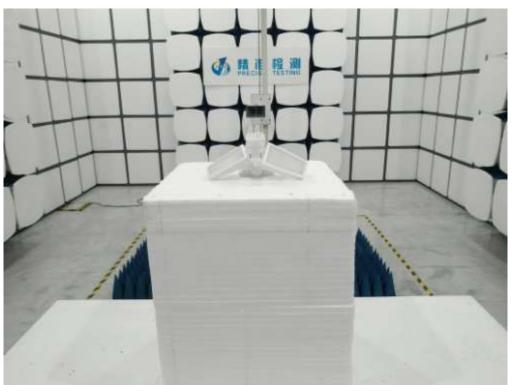
RESULT: PASS

APPENDIX A: PHOTOGRAPHS OF TEST SETUP FCC LINE CONDUCTED EMISSION TEST SETUP



FCC RADIATED EMISSION TEST SETUP BELOW 1GHZ





FCC RADIATED EMISSION TEST SETUP ABOVE 1GHZ