

# **11. UNDESIRABLE RADIATED EMISSION MEASUREMENT1**

# 11.1 Standard Applicable

The maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- 1. For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
- 2. For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
- 3. For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
- 4. For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of −17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of −27 dBm/MHz.

APPLI	CABLE TO	LIMIT		
UNII Test Proc	9033 D02 General cedures New Rules	FIELD STRENGTH AT 3m		
v01r01		ΡΚ: 74 (dBμV/m)	AV 54 (dBμV/m)	
APPLICABLE TO		EIRP LIMIT	FIELD STRENGTH AT 3m	
15.407(b)(1)	RSS-247 §6.2.1 (2)			
15.407(b)(2)	RSS-247 §6.2.2 (2)	PK: -27 (dBm/MHz)	PK: 68.3 (dBµV/m)	
15.407(b)(3)	RSS-247 §6.2.3 (2)			
15.407(b)(4)	RSS-247 §6.2.4 (4)	PK: -27 (dBm/MHz) PK: -17 (dBm/MHz)	PK: 68.3 (dBμV/m) PK: 78.2 (dBμV/m)	

 $EIRP = ((E^*d)^2) / 30$ , where E is the field in V/m, d is the measurement distance (3m), EIRP is the equivalent isotropically radiated power in Watts.

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Unwanted spurious emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table:

Frequency (MHz)	Field strength (microvolts/meter)	Distance (meters)
0.009-0.490	2400/F(KHz)	300
0.490-1.705	24000/F(KHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

### Note:

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

Emission level (dBµV/m) = 20 log Emission level (dBµV/m)

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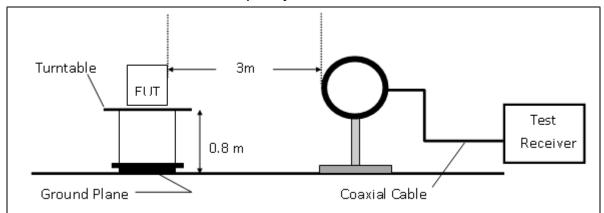
#### **Measurement Equipment Used** 11.2

SGS 966 Chamber No.C								
EQUIPMENT	IPMENT MFR MODEL		SERIAL	LAST	CAL DUE.			
TYPE		NUMBER	NUMBER	CAL.				
EMI Test Receiver	R&S	ESU 40	100363	04/09/2015	04/08/2016			
Loop Antenna	ETS-Lindgren	6502	00143303	12/23/2015	12/22/2016			
Broadband Antenna	TESEQ	CBL 6112D	35240	10/28/2015	10/27/2016			
Horn Antenna	ETS-Lindgren	3117	00143272	12/16/2015	12/15/2016			
Horn Antenna	Schwarzbeck	BBHA9170	185	07/24/2015	07/23/2016			
Pre Amplifier	EMC Instruments	EMC330	980096	12/12/2015	12/11/2016			
Pre Amplifier	EMC Instruments	EMC0011830	980199	12/12/2015	12/11/2016			
Pre Amplifier	R&S	SCU-18	10204	12/12/2015	12/11/2016			
Pre Amplifier	EMC Instruments	EMC184045B	980135	12/12/2015	12/11/2016			
Coaxial Cable	Huber+Suhner	RG 214/U	966Rx 9K-30M	12/12/2015	12/11/2016			
Coaxial Cable	Huber+Suhner	RG 214/U SUCOFLEX 104	966Rx 30M-3G	12/12/2015	12/11/2016			
Coaxial Cable	Huber+Suhner	SUCOFLEX 104	966Rx 1G-18G	12/12/2015	12/11/2016			
Coaxial Cable	Huber+Suhner	mini 141-12 SUCOFLEX 104	966Rx 18G-40G	12/12/2015	12/11/2016			
Coaxial Cable	Huber+Suhner	SUCOFLEX 104	966Tx 30M-18G	12/12/2015	12/11/2016			
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	966Tx 18G-40G	12/12/2015	12/11/2016			
Attenuator	WOKEN	218FS-10	RF27	12/12/2015	12/11/2016			
Site NSA	SGS	966 Chamber C	SAC-C	03/04/2015	03/03/2016			
Site VSWR	SGS	966 Chamber C	SAC-C	03/04/2015	03/03/2016			
DC Power Supply	HOLA	DP-3003	D7070035	05/04/2015	05/03/2016			
Controller	MF	MF-7802	N/A	N.C.R.	N.C.R.			
Antenna Master	MF	N/A	N/A	N.C.R.	N.C.R.			
Turn Table	MF	N/A	N/A	N.C.R.	N.C.R.			
Test Software	World-Pallas	Dr. E	V 3.0 Lite	N.C.R.	N.C.R.			

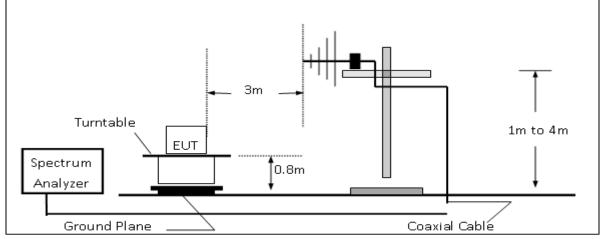


### 11.3 Test SET-UP

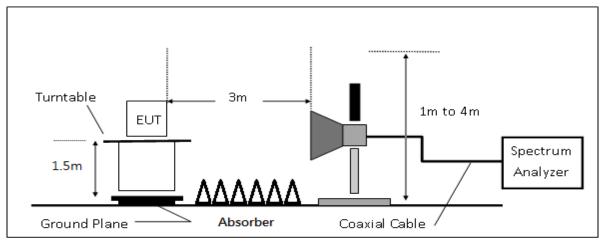
(A) Radiated Emission Test Set-UP Frequency Below 30MHz.



# (B) Radiated Emission Test Set-Up, Frequency form 30MHz to 1000MHz



(C) Radiated Emission Test Set-UP Frequency Over 1 GHz



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### 11.4 Measurement Procedure

- 1. The EUT was placed on a turn table which is 0.8m above ground plane.
- 2. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r01.
- The EUT was placed on a turn table with 0.8m for frequency< 1GHz and 1.5m for frequen-3. cy> 1GHz above ground plane.
- The turn table shall rotate 360 degrees to determine the position of maximum emission 4. level.
- 5. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emissions.
- Set the spectrum analyzer as RBW=120 kHz and VBW=300 kHz for Peak Detector (PK) 6. and Quasi-peak (QP) at frequency below 1 GHz.
- Set the spectrum analyzer as RBW=1 MHz, VBW=3 MHz for Peak Detector at frequency 7. above 1 GHz.
- 8. Set the spectrum analyzer as RBW=1 MHz, VBW=10 Hz (Duty cycle > 98%) or VBW ≥ 1/T (Duty cycle < 98%) for Average Detector at frequency above 1 GHz.
- 9. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 10. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 11. Repeat above procedures until all frequency measured were complete.

## 11.5 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
RA = Reading Amplitude	AG = Amplifier Gain
AF = Antenna Factor	
	RA = Reading Amplitude

### FS = RA + AF + CL - AG

Actual FS(dB $\mu$ V/m) = SPA. Reading level(dB $\mu$ V) + Factor(dB)

Factor(dB) = Antenna Factor(dB $\mu$ V/m) + Cable Loss(dB) – Pre Amplifier Gain(dB)

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### Note :

"F" : denotes Fundamental Frequency. ; "H" : denotes Harmonic Frequency."E" : denotes Band Edge Frequency. ; "S" : denotes Spurious Frequency.

# 11.6 Test Results of Radiated Spurious Emissions form 9 KHz to 30 MHz

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit per 15.31(o) was not reported.

## 11.7 Measurement Result

Refer to attach tabular data sheets.

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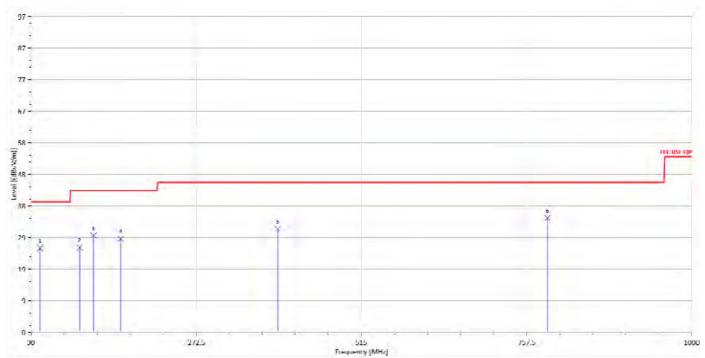
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# **Radiated Spurious Emission Measurement Result Below 1GHz Worst-Case Data:** 802.11a 5150~5250 MHz

Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5220 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



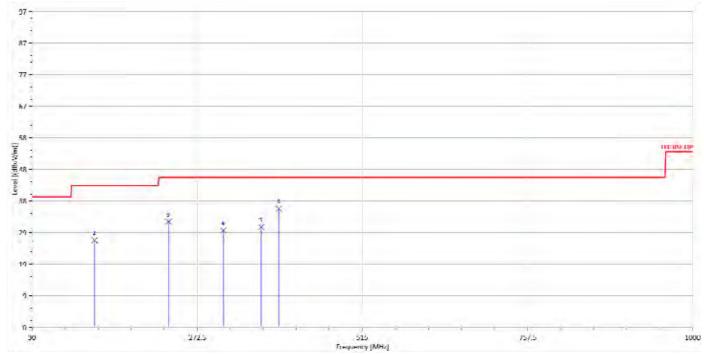
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
43.58	S	QP	47.24	-21.44	25.80	40	-14.20
101.78	S	Peak	49.55	-23.54	26.01	43.5	-17.49
122.15	S	Peak	51.10	-21.40	29.70	43.5	-13.80
161.92	S	Peak	51.86	-23.26	28.60	43.5	-14.90
392.78	S	Peak	47.91	-16.16	31.75	46	-14.25
788.54	S	Peak	44.94	-9.87	35.07	46	-10.93

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Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5220 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal



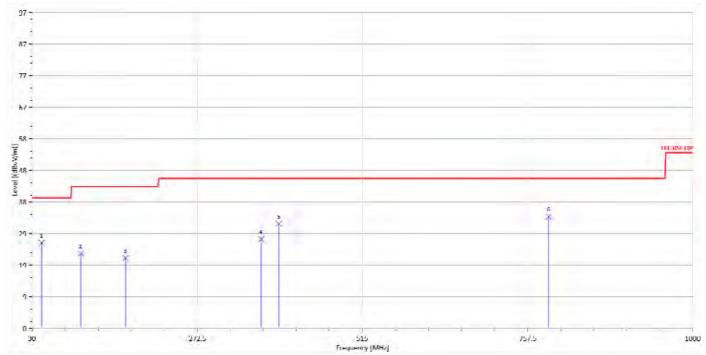
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
30.00	S	Peak	37.73	-13.11	24.62	40	-15.38
122.15	S	Peak	48.07	-21.40	26.67	43.5	-16.83
230.79	S	Peak	54.64	-22.20	32.44	46	-13.56
311.30	S	Peak	48.44	-18.71	29.73	46	-16.27
366.59	S	Peak	47.67	-16.91	30.76	46	-15.24
392.78	S	Peak	52.62	-16.16	36.46	46	-9.54

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#### 802.11a 5250~5350 MHz

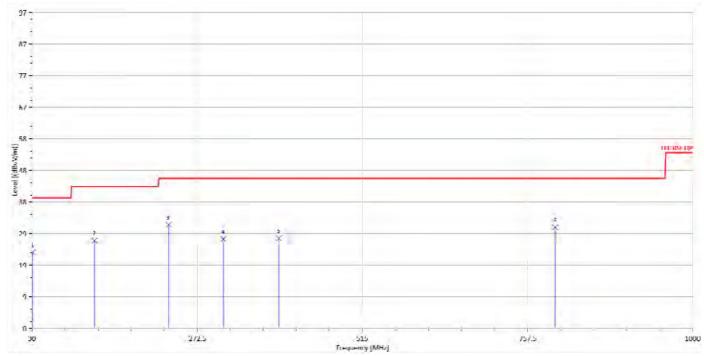
Operation Mode : Fundamental Frequency : Operation Band :	802.11a 5300 MHz Tx CH Mid	Test Date : Temp. / Humi. : Test Engineer : Maaguromont Antonno Bol. :	2016/1/18 22.7deg_C/57RH Pony Vortical
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
44.55	S	QP	48.32	-22.12	26.20	40	-13.80
101.78	S	Peak	46.51	-23.54	22.96	43.5	-20.54
167.74	S	Peak	45.26	-23.65	21.61	43.5	-21.89
366.59	S	Peak	44.21	-16.91	27.30	46	-18.70
392.78	S	Peak	48.21	-16.16	32.05	46	-13.95
788.54	S	Peak	44.15	-9.87	34.28	46	-11.72



Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5300 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

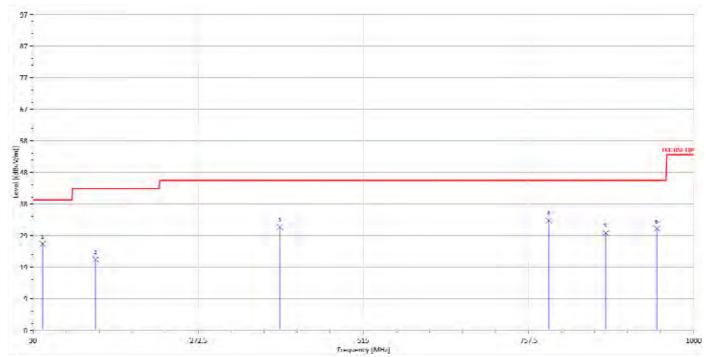


Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
30.97	S	Peak	36.97	-13.64	23.33	40	-16.67
122.15	S	Peak	48.29	-21.40	26.89	43.5	-16.61
230.79	S	Peak	53.99	-22.20	31.79	46	-14.21
311.30	S	Peak	46.07	-18.71	27.36	46	-18.64
392.78	S	Peak	43.78	-16.16	27.62	46	-18.38
798.24	S	Peak	40.53	-9.55	30.98	46	-15.02



#### 802.11a, 5470~5725 MHz

Fundamental Frequency : 5	x CH Mid Test E		2016/1/18 22.7deg_C/57RH Pony Vertical
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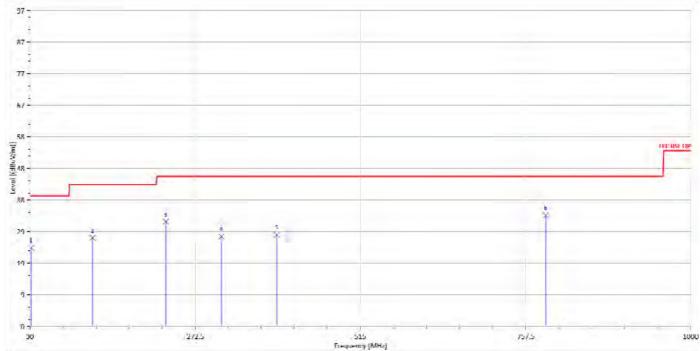
	Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	d BµV/m	dB
-	44.55	S	QP	48.62	-22.12	26.50	40	-13.50
	122.15	S	Peak	43.17	-21.40	21.77	43.5	-21.73
	392.78	S	Peak	47.86	-16.16	31.70	46	-14.30
	787.57	S	Peak	43.65	-9.93	33.72	46	-12.28
	870.99	S	Peak	38.02	-8.21	29.81	46	-16.19
	945.68	S	Peak	38.89	-7.70	31.19	46	-14.81

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Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5580 MHz	Temp. / Humi. :	22.7deg C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

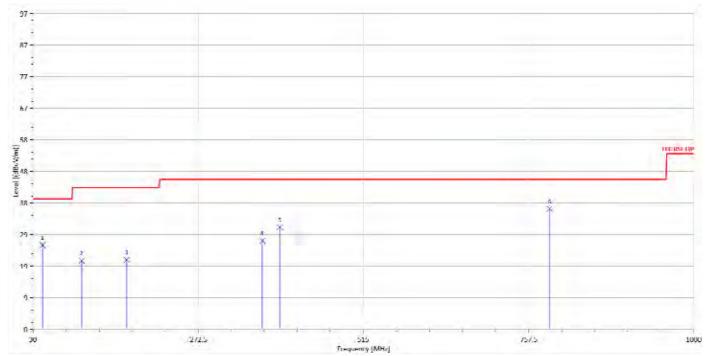


Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
31.94	S	Peak	38.32	-14.17	24.16	40	-15.84
122.15	S	Peak	48.51	-21.40	27.11	43.5	-16.39
229.82	S	Peak	54.41	-22.31	32.10	46	-13.90
311.30	S	Peak	46.24	-18.71	27.53	46	-18.47
392.78	S	Peak	44.16	-16.16	28.00	46	-18.00
787.57	S	Peak	44.05	-9.93	34.12	46	-11.88



#### 802.11a, 5725~5850 MHz

Operation Mode : Fundamental Frequency : Operation Band :	802.11a 5785 MHz Tx CH Mid F2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2016/1/18 22.7deg_C/57RH Pony Vertical
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



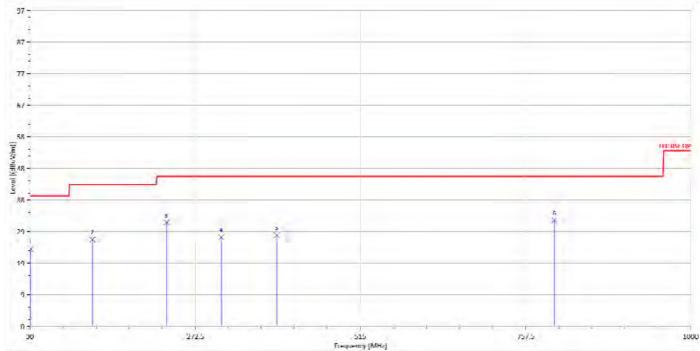
Frec	ą. Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MH:	z F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
44.5	5 S	QP	47.98	-22.12	25.86	40	-14.14
101.7	78 S	Peak	44.59	-23.54	21.05	43.5	-22.45
167.7	74 S	Peak	45.03	-23.65	21.37	43.5	-22.13
366.5	59 S	Peak	44.09	-16.91	27.18	46	-18.82
392.7	78 S	Peak	47.46	-16.16	31.30	46	-14.70
788.5	54 S	Peak	46.91	-9.87	37.04	46	-8.96

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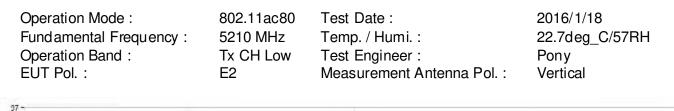
Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5785 MHz	Temp. / Humi. :	22.7deg C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

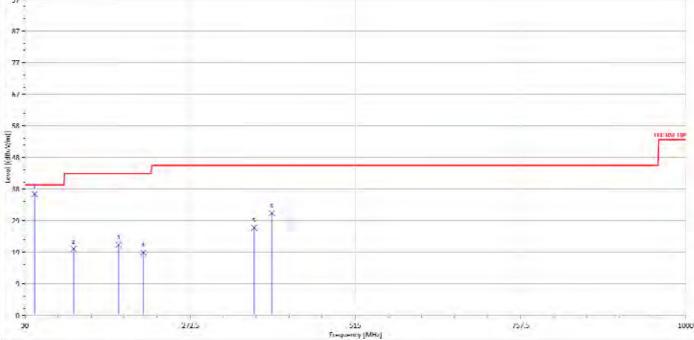


Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
30.97	S	Peak	37.35	-13.64	23.71	40	-16.29
122.15	S	Peak	47.98	-21.40	26.58	43.5	-16.92
230.79	S	Peak	54.06	-22.20	31.86	46	-14.14
311.30	S	Peak	46.00	-18.71	27.29	46	-18.71
392.78	S	Peak	44.09	-16.16	27.93	46	-18.07
800.18	S	Peak	42.09	-9.49	32.60	46	-13.40



#### 802.11ac VHT80, 5150~5250 MHz





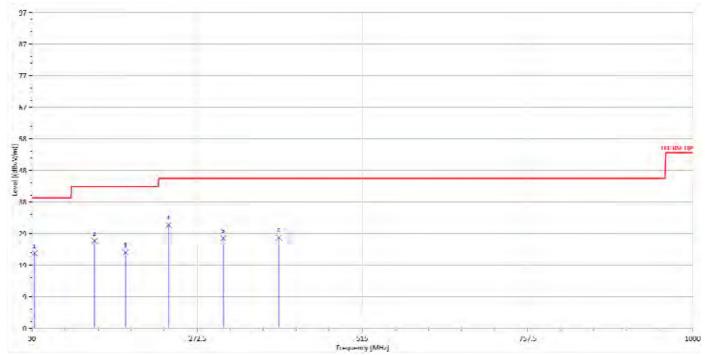
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
44.55	S	QP	48.50	-22.12	37.29	40	-2.71
101.78	S	Peak	43.96	-23.54	20.42	43.5	-23.08
167.74	S	Peak	45.37	-23.65	21.71	43.5	-21.79
203.63	S	Peak	42.37	-23.10	19.27	43.5	-24.23
366.59	S	Peak	43.76	-16.91	26.85	46	-19.15
392.78	S	Peak	47.50	-16.16	31.34	46	-14.66

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Operation Mode :	802.11ac80	Test Date :	2016/1/18
Fundamental Frequency :	5210 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test <sup>'</sup> Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal



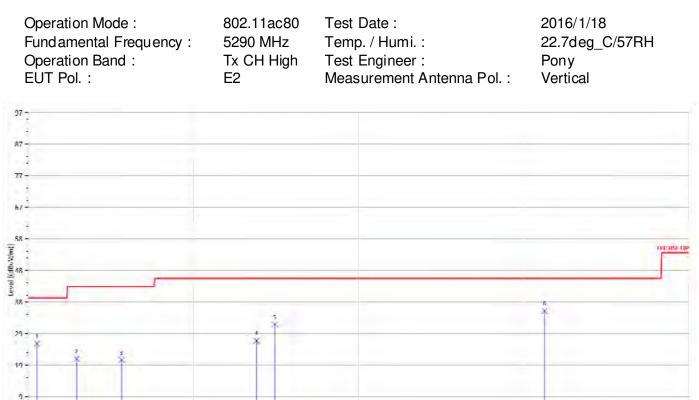
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
33.88	S	Peak	38.30	-15.22	23.08	40	-16.92
122.15	S	Peak	48.19	-21.40	26.79	43.5	-16.71
167.74	S	Peak	46.96	-23.65	23.31	43.5	-20.19
230.79	S	Peak	53.89	-22.20	31.70	46	-14.30
311.30	S	Peak	46.36	-18.71	27.66	46	-18.35
392.78	S	Peak	43.95	-16.16	27.79	46	-18.21



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#### 802.11ac VHT80, 5250~5350 MHz



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Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
43.58	S	QP	47.50	-21.44	26.06	40	-13.94
101.78	S	Peak	44.95	-23.54	21.41	43.5	-22.09
167.74	S	Peak	44.67	-23.65	21.01	43.5	-22.49
365.62	S	Peak	43.75	-16.92	26.83	46	-19.17
392.78	S	Peak	48.06	-16.16	31.90	46	-14.10
788.54	S	Peak	45.95	-9.87	36.09	46	-9.91

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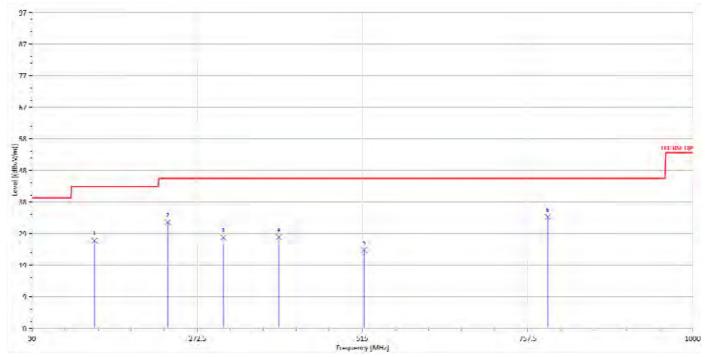
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131.5

1000



Fundamental Frequency :5290 MHzTemp. / Humi. :22.7deg_Operation Band :Tx CH HighTest Engineer :PonyEUT Pol. :E2Measurement Antenna Pol. :Horizonta	_
EUT Pol. : E2 Measurement Antenna Pol. : Horizonta	al

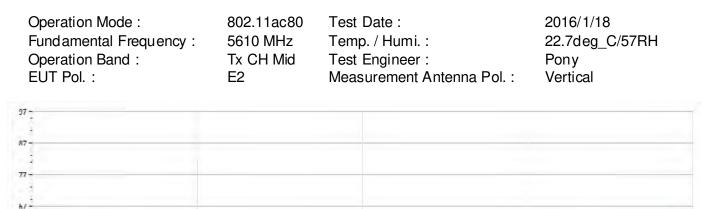


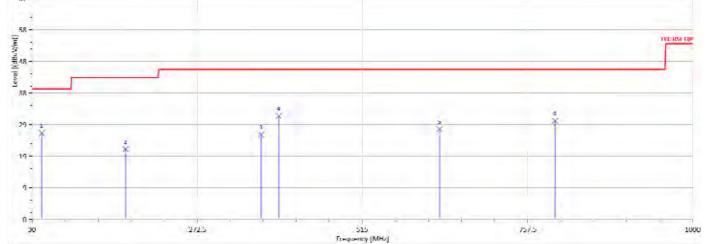
F	<sup>=</sup> req.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
1:	22.15	S	Peak	48.28	-21.40	26.88	43.5	-16.62
2	29.82	S	Peak	54.90	-22.31	32.59	46	-13.41
3	11.30	S	Peak	46.56	-18.71	27.85	46	-18.15
3	92.78	S	Peak	44.12	-16.16	27.96	46	-18.04
5	17.91	S	Peak	37.70	-13.60	24.09	46	-21.91
73	87.57	S	Peak	44.12	-9.93	34.19	46	-11.81

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#### 802.11ac VHT80, 5470~5725 MHz





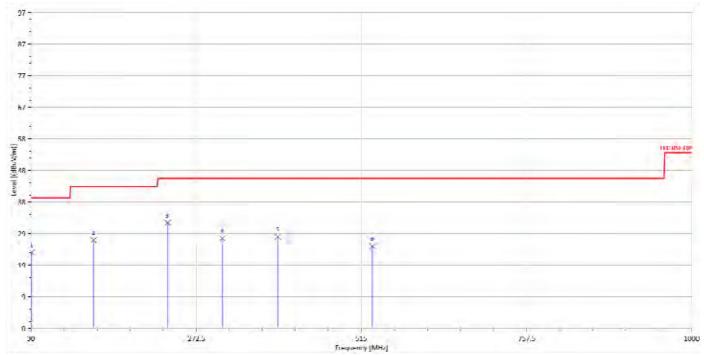
Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
44.55	S	QP	48.52	-22.12	26.40	40	-13.60
167.74	S	Peak	45.23	-23.65	21.58	43.5	-21.92
366.59	S	Peak	42.83	-16.91	25.92	46	-20.08
392.78	S	Peak	47.90	-16.16	31.74	46	-14.26
628.49	S	Peak	39.54	-11.93	27.60	46	-18.40
798.24	S	Peak	39.74	-9.55	30.19	46	-15.81

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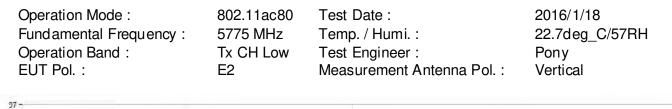
Operation Mode :	802.11ac80	Test Date :	2016/1/18
Fundamental Frequency :	5610 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test <sup>'</sup> Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

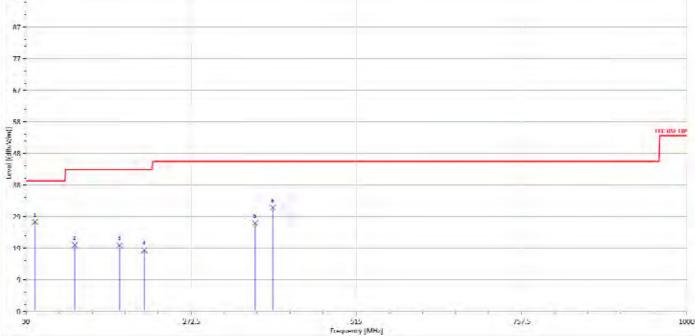


Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
 MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
 30.97	S	Peak	36.97	-13.64	23.33	40	-16.67
122.15	S	Peak	48.43	-21.40	27.03	43.5	-16.47
230.79	S	Peak	54.59	-22.20	32.39	46	-13.61
311.30	S	Peak	46.26	-18.71	27.55	46	-18.45
392.78	S	Peak	44.24	-16.16	28.08	46	-17.92
531.49	S	Peak	38.52	-13.28	25.23	46	-20.77



#### 802.11ac VHT80, 5725~5850 MHz



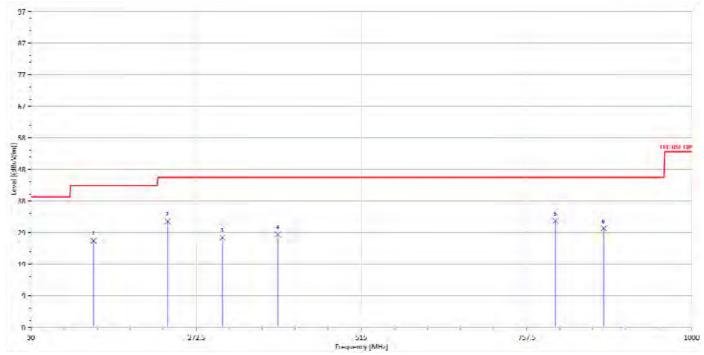


Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
43.58	S	QP	48.82	-21.44	27.38	40	-12.62
101.78	S	Peak	43.88	-23.54	20.34	43.5	-23.16
167.74	S	Peak	43.93	-23.65	20.28	43.5	-23.22
203.63	S	Peak	41.81	-23.10	18.70	43.5	-24.80
366.59	S	Peak	43.93	-16.91	27.02	46	-18.98
392.78	S	Peak	47.98	-16.16	31.82	46	-14.18

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Operation Mode :802.11ac80Test Date :Fundamental Frequency :5775 MHzTemp. / HumiOperation Band :Tx CH LowTest EngineeEUT Pol. :E2Measurement	0=
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Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
122.15	S	Peak	47.94	-21.40	26.54	43.5	-16.96
230.79	S	Peak	54.75	-22.20	32.56	46	-13.44
311.30	S	Peak	46.24	-18.71	27.53	46	-18.47
392.78	S	Peak	44.63	-16.16	28.47	46	-17.53
800.18	S	Peak	42.16	-9.49	32.67	46	-13.33
870.99	S	Peak	38.56	-8.21	30.35	46	-15.65

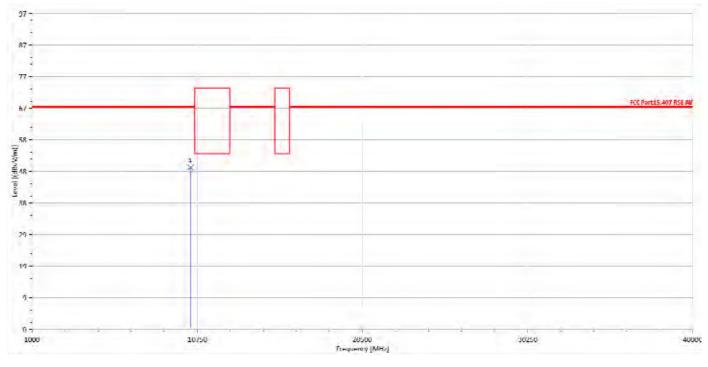
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### Above 1GHz Worst-Case Data:

### Radiated Spurious Emission Measurement Result 802.11a, 5150~5250 MHz

Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5180 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



F	req.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
Ν	/Hz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµ V/m	dBµV/m	dB
103	60.00	Н	Peak	30.81	18.94	49.75	68.3	-18.55

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Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5180 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
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		Mode	Reading Level		FS	@3m		
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
10360.00	Н	Peak	30.97	18.94	49.91	68.3	-18.39	



Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5220 MHz	Temp. / Humi. :	22.7deg C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

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		Mode	Reading Level		FS	@3m		
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµ V/m	dBµV/m	dB	
10440.00	Н	Peak	31.42	18.96	50.38	68.3	-17.92	
	MHz	MHz F/H/E/S	Mode MHz F/H/E/S PK/QP/AV	Mode Reading Level MHz F/H/E/S PK/QP/AV dBµV	Mode Reading Level MHz F/H/E/S PK/QP/AV dBµV dB	Mode Reading Level FS MHz F/H/E/S PK/QP/AV dBµV dB dBµV/m	Mode Reading Level FS @3m MHz F/H/E/S PK/QP/AV dBµV dB dBµV/m dBµV/m	Mode Reading Level FS @3m MHz F/H/E/S PK/QP/AV dBµV dB dBµV/m dBµV/m dB



Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5220 MHz	Temp. / Humi. :	22.7deg C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

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_	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµ V/m	dBµV/m	dB
_	10440.00	H	Peak	30.80	18.96	49.77	68.3	-18.53



Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5240 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

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	Freq.	note	Delector	Specium	Factor	Actual		margin	
			Mode	Reading Level		FS	@3m		
_	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµ V/m	dBµV/m	dB	
	10480.00	Н	Peak	30.94	19.13	50.07	68.3	-18.23	



07-

Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5240 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

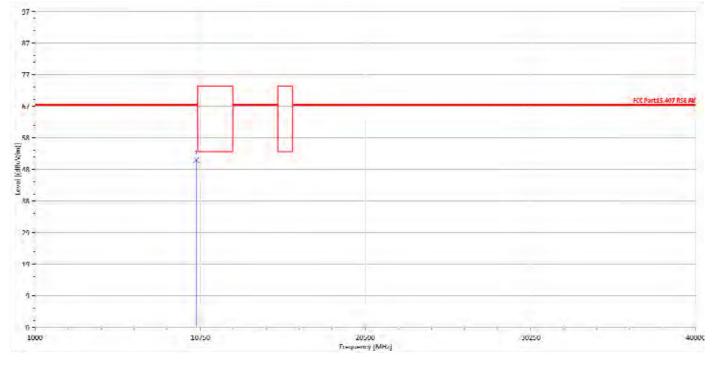
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	rieq.	NOLE	Delector	Specium	Facilli	Actual		iviargin	
			Mode	Reading Level		FS	@3m		
	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµ V/m	dBµV/m	dB	
-	10480.00	Н	Peak	32.12	19.13	51.25	68.3	-17.05	



#### Radiated Spurious Emission Measurement Result 802.11a, 5250MHz-5350MHz

Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5260 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



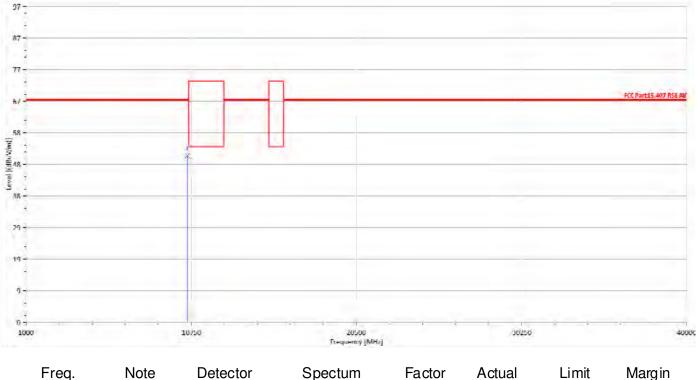
	Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin	
			Mode	Reading Level		FS	@3m		
	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµ V/m	dBµV/m	dB	
-	10520.00	Н	Peak	32.15	19.25	51.40	68.3	-16.90	

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Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5260 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal



			Mode	Reading Level		FS	@3m	Ũ
_	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
_	10520.00	Н	Peak	31.88	19.25	51.13	68.3	-17.17

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Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5300 MHz	Temp. / Humi. :	22.7deg C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

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Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
			_	٦L			
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10600.00	Н	Peak	30.84	19.38	50.22	74	-23.78
10600.00	Н	Average	21.27	19.38	40.65	54	-13.35



10600.00

Н

Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5300 MHz	Temp. / Humi. :	22.7deg C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

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Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
1104.	11010						Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10600.00	Н	Peak	30.87	19.38	50.24	74	-23.76
		_					

21.27

Average

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19.38

40.65

54

-13.35



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1000		10/50	20500 Frequency (MHz)		30250		4000
Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10640.00	Н	Peak	31.07	19.28	50.35	74	-23.65

21.47

Average

Н

10640.00

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19.28

40.75

54

-13.25



10640.00

10640.00

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Н

Peak

Average

-23.54

-13.14

74

54

Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5320 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

Freq. MHz	Note F/H/E/S	Detector Mode PK/QP/AV	Spectum Reading Level dBµV	Factor dB	Actual FS dBµV/m	Limit @3m dBµV/m	Marg in dB
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31.18

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19.28

19.28

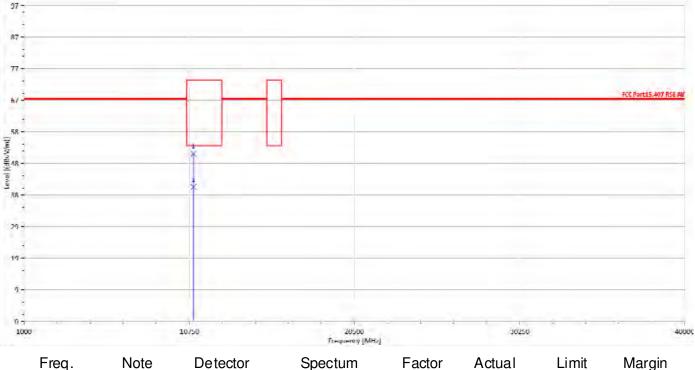
50.46

40.86



### Radiated Spurious Emission Measurement Result 802.11a, 5470~5725 MHz

Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5500 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



			Mode	Reading Level		FS	@3m	0
_	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
-	11000.00	Н	Peak	31.46	20.02	51.48	74	-22.52
	11000.00	Н	Average	21.20	20.02	41.22	54	-12.78

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Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency : Operation Band :	5500 MHz Tx CH Low	Temp. / Humi. : Test Engineer :	22.7deg_C/57RH Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

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		Mode	Reading Level		FS	@3m	
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MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11000.00	Н	Peak	30.71	20.02	50.73	74	-23.27
11000.00	Н	Average	21.23	20.02	41.25	54	-12.75



Operation Mode :	802.11a	Test Date :	2016/1/19
Fundamental Frequency :	5580 MHz	Temp. / Humi. :	22.7deg C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

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Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	-
MHz	F/H/E/S	PK/QP/AV	-	dB			dB
			dBµV		dBµV/m	dBµV/m	
11160.00	Н	Peak	30.84	20.38	51.22	74	-22.78
11160.00	Н	Average	21.32	20.38	41.70	54	-12.30
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Fundamental Frequency : 5 Operation Band :	Tx CH Mid	Temp. / Humi. : Test Engineer :	2016/1/19 22.7deg_C/57RH Pony Horizontal
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Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
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		Mode	Reading Level			@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11160.00	Н	Peak	31.74	20.38	52.12	74	-21.88
		_					

21.30

Average

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20.38

41.68

54

-12.32



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Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5700 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

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Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
		Mode	Reading Leve		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11400.00	H	Peak	31.44	20.81	52.25	74	-21.75
11100.00	• •	, our	0	20.01	02.20		21.70

21.50

Average

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20.81

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Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5700 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

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Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
•		Mode			ES		-
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11400.00	Н	Peak	30.93	20.81	51.74	74	-22.26
MHz 11400.00	F/H/E/S	Mode PK/QP/AV Peak	Reading Level dBµV 30.93		FS dBµV/m 51.74	@3m <u>dBµV/m</u> 74	dB

21.48

Average

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20.81

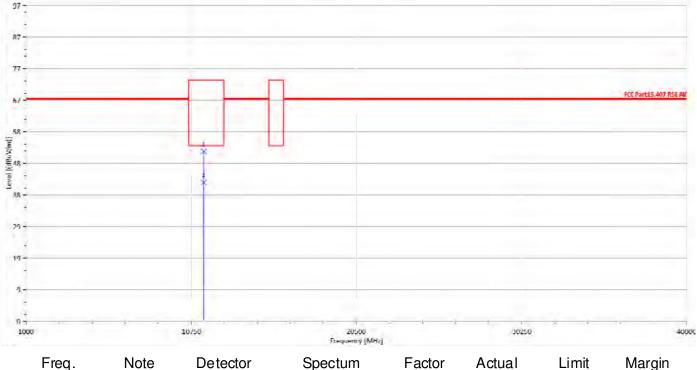
42.29

54



## Radiated Spurious Emission Measurement Result 802.11a, 5725~5850 MHz

Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5745 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



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			Mode	Reading Level		FS	@3m	
	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
-	11490.00	Н	Peak	31.13	21.08	52.21	74	-21.79
	11490.00	Н	Average	21.50	21.08	42.58	54	-11.42

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Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5745 MHz	Temp. / Humi. :	22.7deg C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

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1000		10/50	20500 Frequency		36250		400
Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
-		Mode	Reading Lev	el	FS	@3m	-
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11490.00	Н	Peak	31.98	21.08	53.06	74	-20.94
11490.00	Н	Average	21.50	21.08	42.58	54	-11.42

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Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5785 MHz	Temp. / Humi. :	22.7deg C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

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Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11570.00	Н	Peak	32.24	21.14	53.37	74	-20.63
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21.52

Average

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21.14

42.66

54



Н

Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5785 MHz	Temp. / Humi. :	22.7deg C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

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Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
			-				
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11570.00	Н	Peak	31.05	21.14	52.19	74	-21.81

21.52

Average

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Operation Mode :802.11aFundamental Frequency :5825 MHzOperation Band :Tx CH HighEUT Pol. :E2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2016/1/18 22.7deg_C/57RH Pony Vertical
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Freq.	Note	Detector	Spectum		Factor	Actual	Limit	Margin
		Mode	Reading Lev	vel		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	-	dB	dBµV/m	dBµV/m	dB
11650.00	H	Peak	31.56		21.27	52.83	74	-21.17
11030.00	П	i ean	31.50		21.21	JZ.03	74	-21.17

21.46

Average

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21.27

42.73

54



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11650.00

Operation Mode :	802.11a	Test Date :	2016/1/18
Fundamental Frequency :	5825 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

<u>MHz</u> 11650.00	F/H/E/S H	PK/QP/AV Peak	dBµV 30.91	dB 21.27	<u>dBµV/m</u> 52.18	<u>dBµV/m</u> 74	dB -21.82
Freq.	Note	Detector Mode	Spectum Reading Level		Actual FS	Limit @3m	Margin
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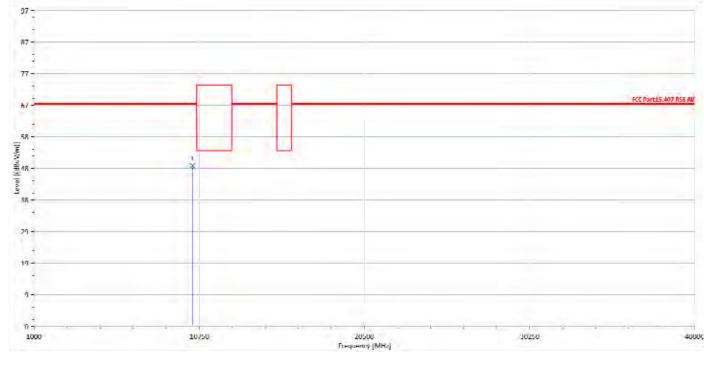
Average

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#### Radiated Spurious Emission Measurement Result 802.11n HT20, 5150~5250 MHz

Operation Mode :	802.11n20	Test Date :	2016/1/18
Fundamental Frequency :	5180 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

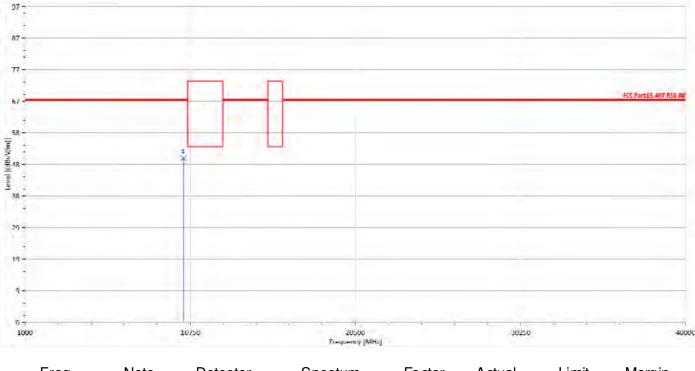


	Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin	
			Mode	Reading Level		FS	@3m		
	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµ V/m	dBµV/m	dB	
-	10360.00	Н	Peak	30.40	18.94	49.33	68.3	-18.97	

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Operation Mode :	802.11n20	Test Date :	2016/1/18
Fundamental Frequency :	5180 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

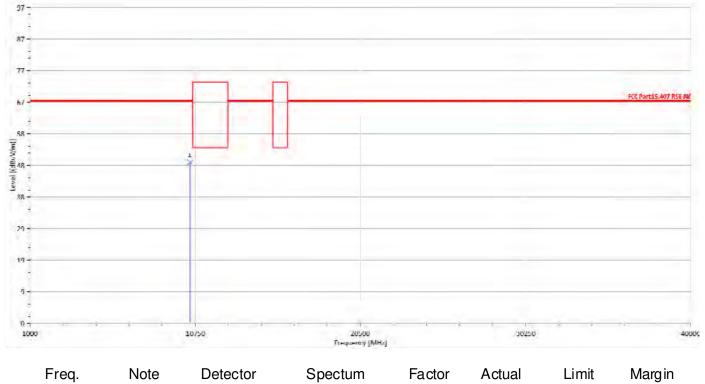


	⊢req.	Note	Detector	Spectum	Factor	Actual	Limit	Margin	
			Mode	Reading Level		FS	@3m		
_	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
	10360.00	Н	Peak	31.44	18.94	50.38	68.3	-17.92	

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/57RH



		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10440.00	Н	Peak	30.40	19.03	49.43	68.3	-18.87

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Operation Mode :	802.11n20	Test Date :	2016/1/18
Fundamental Frequency :	5220 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

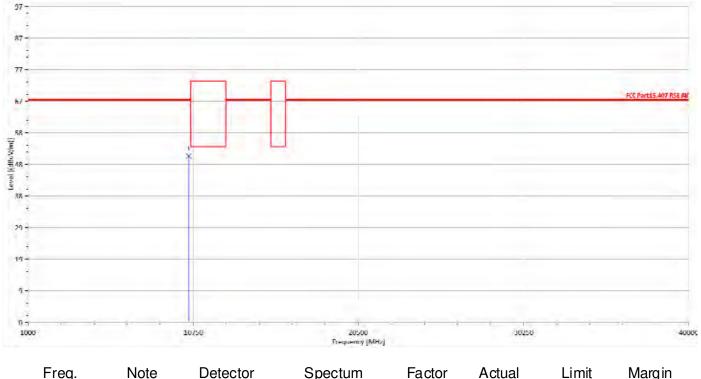
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		Mode	Reading Level		FS	@3m		
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµ V/m	dBµV/m	dB	_
10440.00	Н	Peak	31.31	19.03	50.34	68.3	-17.96	
	MHz	MHz F/H/E/S	Mode MHz F/H/E/S PK/QP/AV	Mode Reading Level MHz F/H/E/S PK/QP/AV dBµV	Mode Reading Level MHz F/H/E/S PK/QP/AV dBµV dB	Mode Reading Level FS MHz F/H/E/S PK/QP/AV dBµV dB dBµV/m	Mode Reading Level FS @3m MHz F/H/E/S PK/QP/AV dBµV dB dBµV/m dBµV/m	Mode Reading Level FS @3m MHz F/H/E/S PK/QP/AV dBµV dB dBµV/m dBµV/m dB

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Operation Mode : 802.11	n20 Test Date :	2016/1/18
Fundamental Frequency : 5240 M	IHz Temp. / Humi. :	22.7deg_C/57RH
Operation Band : Tx CH	High Test Engineer :	Pony
EUT Pol. : E2	Measurement Antenna Pol. :	Vertical



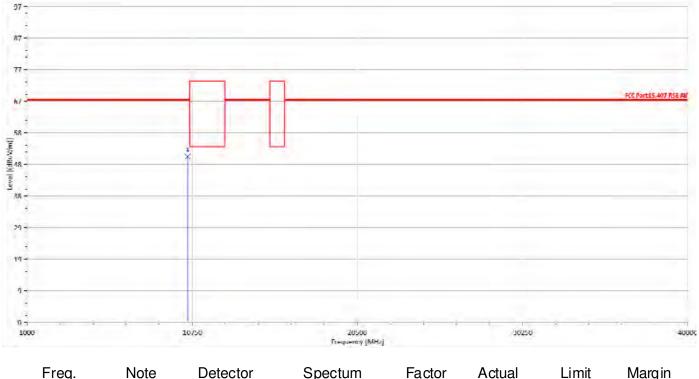
			Mode	Reading Level		FS	@3m		
_	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
-	10480.00	Н	Peak	31.94	19.13	51.07	68.3	-17.23	

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Operation Mode :	802.11n20	Test Date :	2016/1/18
Fundamental Frequency :	5240 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal



			Mode	Reading Level		FS	@3m		
_	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
-	10480.00	Н	Peak	31.82	19.13	50.94	68.3	-17.36	

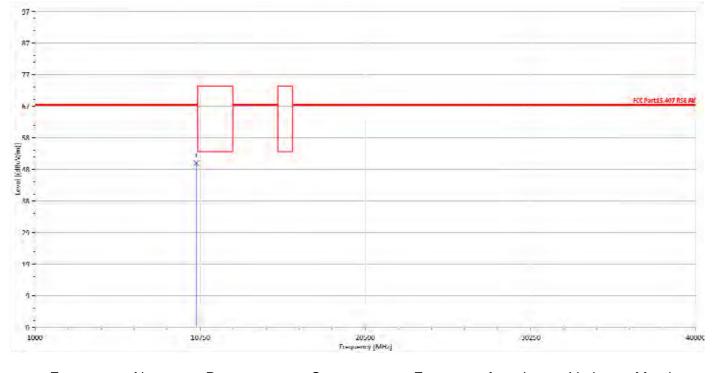
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#### Radiated Spurious Emission Measurement Result 802.11n HT20, 5250~5350 MHz

Operation Mode :	802.11n20	Test Date :	2016/1/18
Fundamental Frequency :	5260 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



	Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin	
			Mode	Reading Level		FS	@3m		
_	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
	10520.00	Н	Peak	31.18	19.25	50.43	68.3	-17.87	

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Fundamental Frequency: 5260 MHz Temp. / Humi.: 22.7deg_C/57	RH
Operation Band : Tx CH Low Test Engineer : Pony	
EUT Pol. : E2 Measurement Antenna Pol. : Horizontal	

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			Mode Reading Level			FS	@3m	U
_	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµ V/m	dBµV/m	dB
-	10520.00	Н	Peak	31.37	19.25	50.62	68.3	-17.68

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Operation Mode :	802.11n20	Test Date :	2016/1/18
Fundamental Frequency :	5300 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

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Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
	11010	Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10600.00	Н	Peak	30.73	19.38	50.11	74	-23.89
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21.38

Average

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19.38

40.76

54



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Operation Mode :	802.11n20	Test Date :	2016/1/18
Fundamental Frequency :	5300 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

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Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10600.00	<u> </u>	Peak	30.98	19.38	50.35	<u>- ubµv/m</u> 74	-23.65
10000.00	П	r ean	30.90	19.00	50.55	/4	-23.00

21.39

Average

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19.38

40.77

54



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Operation Mode :	802.11n20	Test Date :	2016/1/18
Fundamental Frequency :	5320 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

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Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
1		Mode	Reading Level		FS	@3m	5
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10640.00	Н	Peak	31.05	19.28	50.33	74	-23.67
		•	<u> </u>	10.00	10.00		

21.40

Average

19.28

40.68

54

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Operation Mode :	802.11n20	Test Date:	2016/1/18
Fundamental Frequency :	5320 MHz	Temp. / Humi.:	22.7deg C/57RH
Operation Band :	Tx CH High	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

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Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10640.00	H	Peak	31.50	19.28	50.78	74	-23.22
100-0.00	11	i can	51.50	13.20	50.70	/ 4	20.22

21.40

Average

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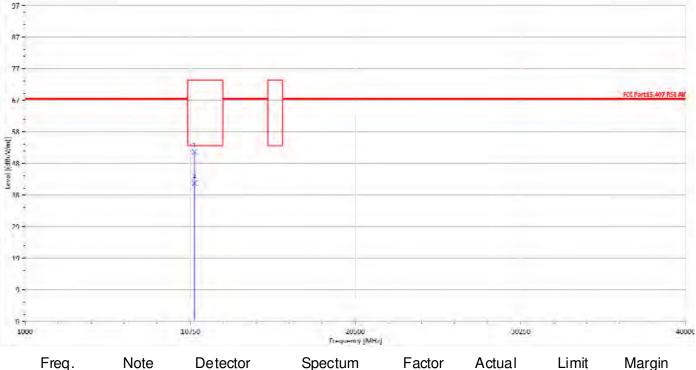
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## Radiated Spurious Emission Measurement Result 802.11n HT20, 5470~5725 MHz

Operation Mode :	802.11n20	Test Date :	2016/1/18
Fundamental Frequency :	5500 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



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			Mode	Reading Level		FS	@3m		
_	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	_
	11000.00	Н	Peak	31.25	20.81	52.06	74	-21.94	
	11000.00	Н	Average	21.56	20.81	42.37	54	-11.63	

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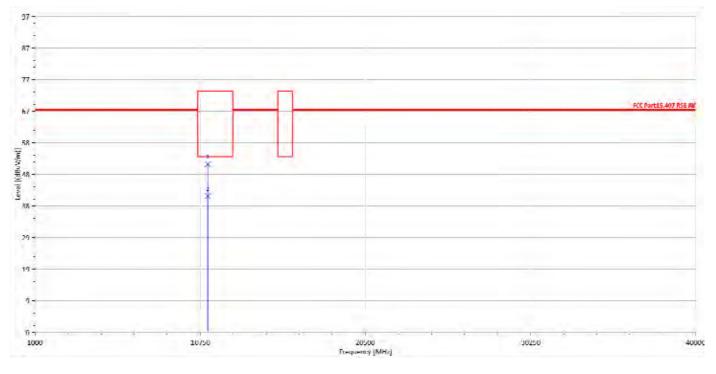
Operation Mode :	802.11n20	Test Date :	2016/1/18
Fundamental Frequency :	5500 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

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MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11000.00	Н	Peak	30.91	20.81	51.72	74	-22.28
11000.00	Н	Average	21.56	20.81	42.37	54	-11.63

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Operation Mode :	802.11n20	Test Date :	2016/1/19
Fundamental Frequency :	5580 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical
Operation Mode :	802.11ac20	Test Date:	2016/3/22
Fundamental Frequency :	5720 MHz	Temp. / Humi.:	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer:	Pony
EUT Pol. :	E2	Measurement Antenna Pol.:	Vertical



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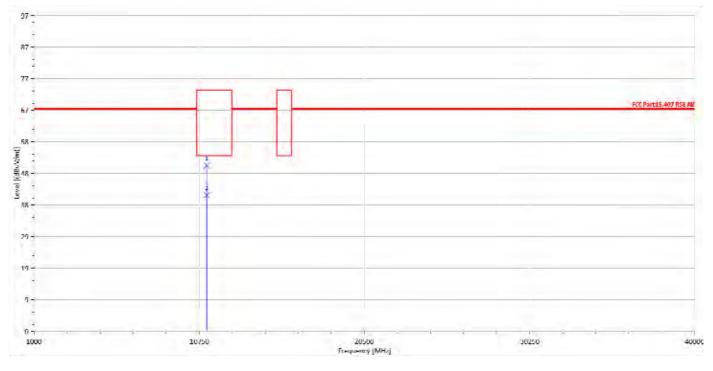
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Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11160.00	Н	Peak	31.26	20.38	51.64	74	-22.36
11160.00	Н	Average	21.39	20.38	41.77	54	-12.23
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11440.00	Н	Peak	32.05	20.87	52.91	74	-21.09
11440.00	Н	Average	21.14	20.87	42.01	54	-11.99

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Operation Mode :	802.11n20	Test Date :	2016/1/19
Fundamental Frequency :	5580 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal
Operation Mode :	802.11ac20	Test Date :	2016/3/22
Fundamental Frequency :	5720 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal



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Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11160.00	Н	Peak	30.54	20.38	50.92	74	-23.08
11160.00	Н	Average	21.37	20.38	41.75	54	-12.25
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11440.00	Н	Peak	30.61	20.87	51.48	74	-22.52
11440.00	Н	Average	21.41	20.87	42.28	54	-11.72

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Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
•		Mode	Reading Level		FS	@3m	-
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11400.00	Н	Peak	31.59	20.81	52.40	74	-21.60
11400.00	Н	Average	21.59	20.81	42.40	54	-11.60
11100.00		/ (i o.u.g.o	21.00	20.01		0.	11.00

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Operation Mode :	802.11n20	Test Date:	2016/1/18
Fundamental Frequency :	5700 MHz	Temp. / Humi.:	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

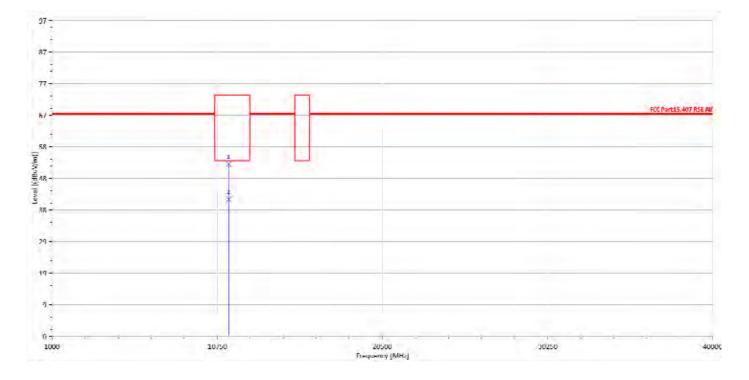
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Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	-
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11400.00	Н	Peak	31.67	20.81	52.48	74	-21.52
11400.00	Н	Average	21.56	20.81	42.37	54	-11.63
11100.00		/ Worugo	21.00	20.01	12.07	01	11.00

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# Radiated Spurious Emission Measurement Result 802.11ac VHT20, 5470~5725 MHz

Operation Mode :	802.11ac20	Test Date :	2016/3/22
Fundamental Frequency :	5720 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



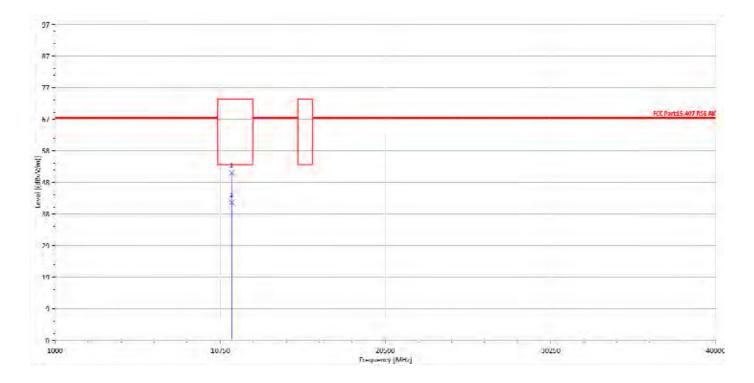
	Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
_	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
-	11440.00	Н	Peak	32.05	20.87	52.91	74	-21.09
	11440.00	Н	Average	21.14	20.87	42.01	54	-11.99

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Operation Mode :	802.11ac20	Test Date :	2016/3/22
Fundamental Frequency :	5720 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal



Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11440.00	Н	Peak	30.61	20.87	51.48	74	-22.52
11440.00	Н	Average	21.41	20.87	42.28	54	-11.72

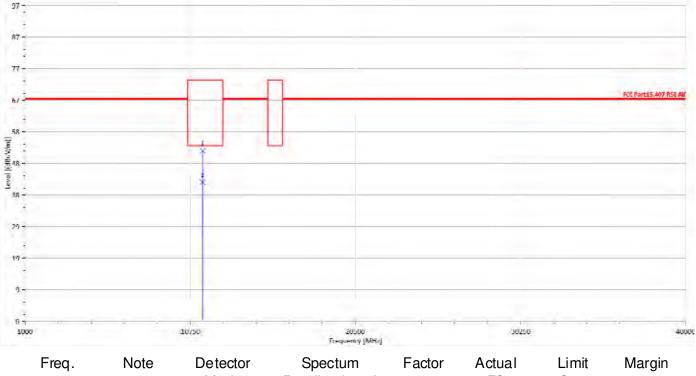
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## Radiated Spurious Emission Measurement Result 802.11n HT20, 5725~5850 MHz

Operation Mode :	802.11n20	Test Date :	2016/1/18
Fundamental Frequency :	5745 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



		Mode	Reading Level		FS	@3m	-
 MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11490.00	Н	Peak	31.30	21.08	52.38	74	-21.62
11490.00	Н	Average	21.58	21.08	42.66	54	-11.34

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Operation Mode : 80	2.11n20 Test Date :	2016/1/18
Fundamental Frequency: 57	745 MHz Temp. / Humi	.: 22.7deg_C/57RH
Operation Band : Tx	CH Low Test Enginee	r: Pony
EUT Pol. : E2	2 Measurement	Antenna Pol. : Horizontal

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Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	Ũ
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11490.00	Н	Peak	31.66	21.08	52.74	74	-21.26
11490.00	н	Average	21.59	21.08	42.67	54	-11.33
11100.00		/ Wordgo	21.00	21.00	12.07	01	11.00

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Operation Mode :	802.11n20	Test Date :	2016/1/18
Fundamental Frequency :	5785 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

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1000		10750	20500 Frequency (MHz)		36256		-400
Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
1		Mode	Reading Level		FS	@3m	5
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
			<u>авру</u> 31.22	21.14		<u>ubµv/m</u> 74	-21.64
11570.00	Н	Peak	31.22	21.14	52.36	74	-21.64

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Average

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Operation Mode :	802.11n20	Test Date :	2016/1/18
Fundamental Frequency : Operation Band :	5785 MHz Tx CH Mid	Temp. / Humi. : Test Engineer :	22.7deg_C/57RH Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

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Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
•		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11650.00	Н	Peak	31.45	21.27	52.72	74	-21.28
11650.00	Н	Average	21.57	21.27	42.84	54	-11.16
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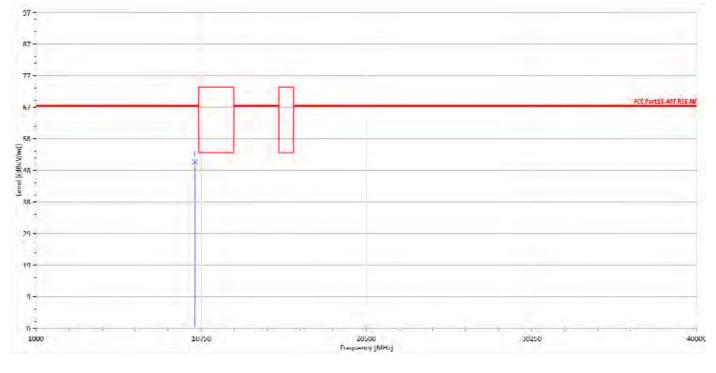
Operation Mode :	802.11n20	Test Date:	2016/1/18
Fundamental Frequency :	5825 MHz	Temp. / Humi.:	22.7deg C/57RH
Operation Band :	Tx CH High	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

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Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
•		Mode	Reading Level		FS	@3m	U U
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11650.00	Н	Peak	32.00	21.27	53.27	74	-20.73
11650.00	Н	Average	21.58	21.27	42.85	54	-11.15
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## Radiated Spurious Emission Measurement Result 802.11n HT40, 5150~5250 MHz

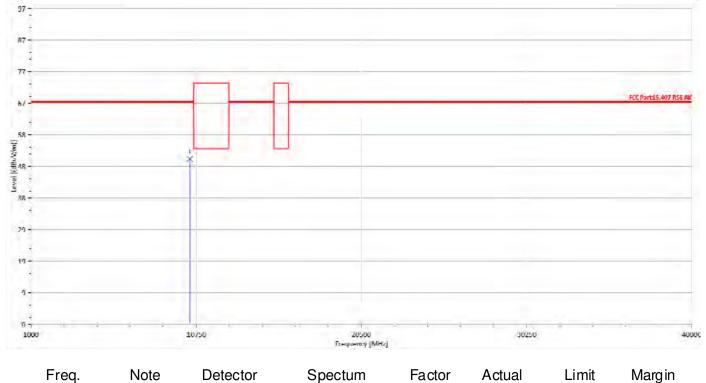
Operation Mode :	802.11n40	Test Date :	2016/1/19
Fundamental Frequency :	5190 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



	Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin	
			Mode	Reading Level		FS	@3m		
	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµ V/m	dBµV/m	dB	
-	10380.00	Н	Peak	32.12	19.01	51.13	68.3	-17.17	



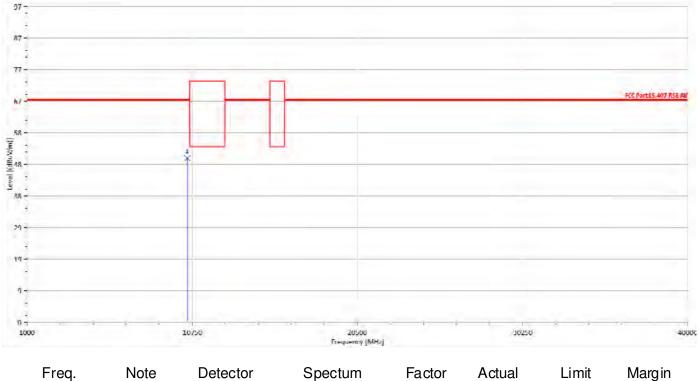
Operation Mode : 8	02.11n40 Test D	ate :	2016/1/19
Fundamental Frequency : 5	190 MHz Temp.	/ Humi. :	22.7deg_C/57RH
Operation Band : T	x CH Low Test E	ngineer:	Pony
EUT Pol. : E	2 Measu	rement Antenna Pol. :	Horizontal



			Mode	Reading Level		FS	@3m	-
	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
-	10380.00	Н	Peak	31.80	19.01	50.81	68.3	-17.49



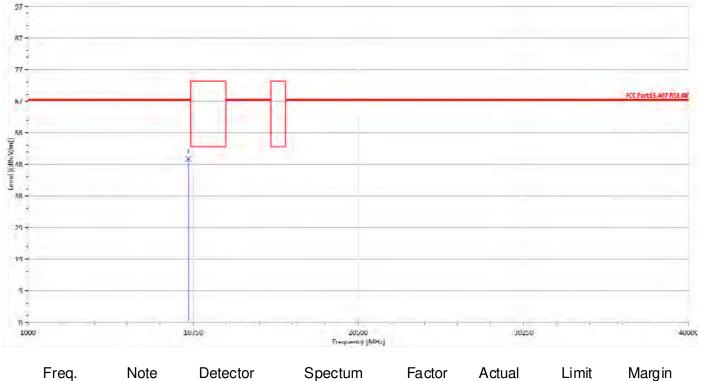
Operation Mode : 8	02.11n40 Test [	Date :	2016/1/19
Fundamental Frequency: 5	230 MHz Temp	o. / Humi. :	22.7deg_C/57RH
Operation Band : T	x CH High Test B	Engineer:	Pony
EUT Pol. : E	2 Meas	urement Antenna Pol. :	Vertical



	-		Mode	Reading Level		FS	@3m	-
_	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
-	10460.00	Н	Peak	31.28	19.11	50.39	68.3	-17.91



Operation Mode :	802.11n40	Test Date:	2016/1/19
Fundamental Frequency :	5230 MHz	Temp. / Humi.:	22.7deg C/57RH
Operation Band :	Tx CH High	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

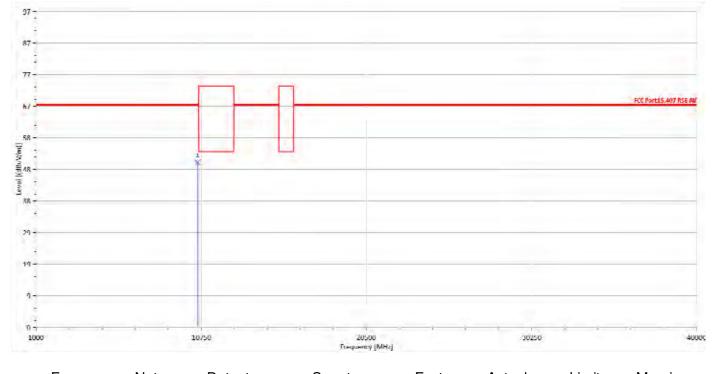


	-		Mode	Reading Level		FS	@3m	-
	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
-	10460.00	Н	Peak	31.11	19.11	50.23	68.3	-18.07



## Radiated Spurious Emission Measurement Result 802.11n HT40, 5250~5350 MHz

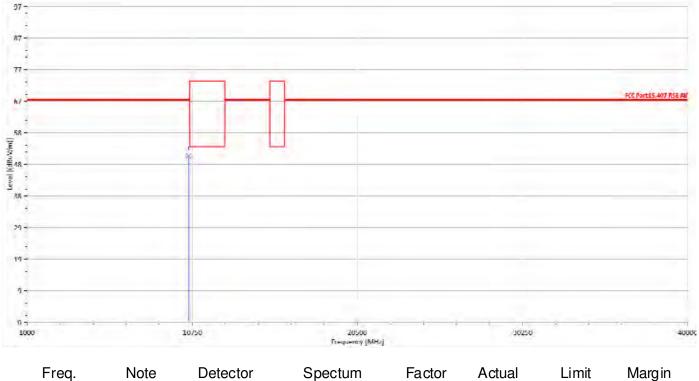
Operation Mode :	802.11n40	Test Date :	2016/1/19
Fundamental Frequency :	5270 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



	Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin	
			Mode	Reading Level		FS	@3m		
	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
_	10540.00	Н	Peak	31.57	19.13	50.70	68.3	-17.60	



Operation Mode :	802.11n40	Test Date :	2016/1/19
Fundamental Frequency :	5270 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal



			Mode	Reading Level		FS	@3m	-
_	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
-	10540.00	Н	Peak	32.00	19.13	51.13	68.3	-17.17



Operation Mode :	802.11n40	Test Date :	2016/1/19
Fundamental Frequency :	5310 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

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1		Mode	Reading Level		FS	@3m	3
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµ V/m	dBµV/m	dB
10620.00	Н	Peak	31.58	19.38	50.95	74	-23.05
10620.00	Н	Average	21.44	19.38	40.82	54	-13.18
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Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
•		Mode	Reading Level		FS	@3m	-
			-	ЧD			٩D
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10620.00	Н	Peak	31.38	19.38	50.76	74	-23.24

19.38

40.80

Average

Н

10620.00

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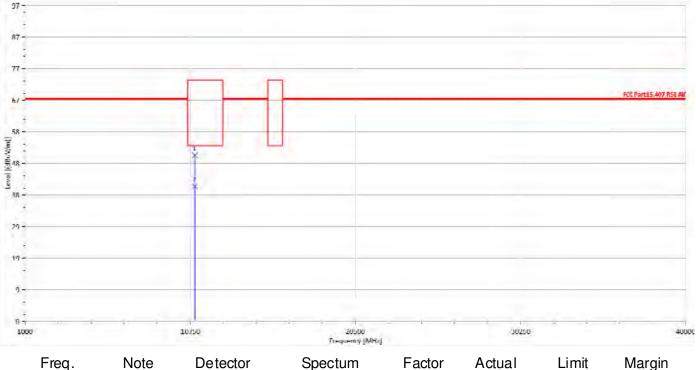
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## Radiated Spurious Emission Measurement Result 802.11n HT40, 5470~5725 MHz

Operation Mode :	802.11n40	Test Date :	2016/1/19
Fundamental Frequency :	5510 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11020.00	Н	Peak	30.95	20.04	50.99	74	-23.01
11020.00	Н	Average	21.31	20.04	41.35	54	-12.65

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Operation Mode :	802.11n40	Test Date :	2016/1/19
Fundamental Frequency :	5510 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal
Operation Band :	Tx CH Low	Test Engineer :	Pony

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Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11020.00	Н	Peak	31.05	20.04	51.09	74	-22.91

21.31

Average

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20.04

41.35

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Average

Operation Mode :	802.11n40	Test Date :	2016/1/19
Fundamental Frequency :	5550 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

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1000		10750	20500 Frequency (MHz)		30250		4000
Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
-		Mode	Reading Level		FS	@3m	-
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MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11100.00	Н	Peak	30.64	20.21	50.85	74	-23.15

21.37

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20.21

41.58

54



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Operation Mode :	802.11n40	Test Date :	2016/1/19
Fundamental Frequency :	5550 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

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1000		10/50	20500 Frequency (MHz)		30250		400
Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
•		Mode	Reading Level		FS	@3m	Ũ
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11100.00	H	Peak	30.40	20.21	50.60	74	-23.40

21.38

Average

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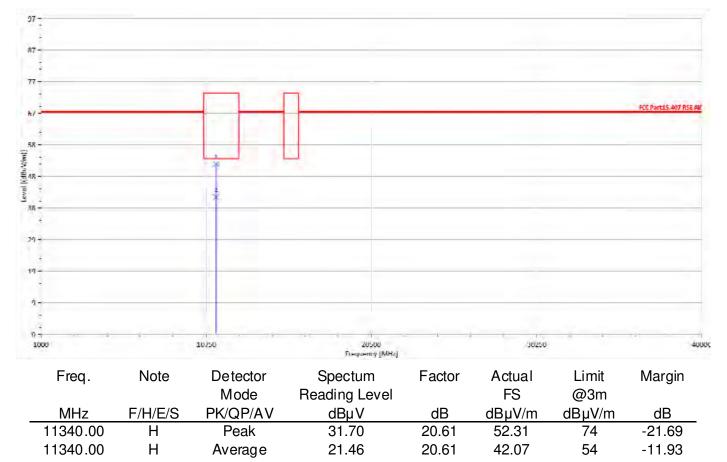


Operation Mode :	802.11n40	Test Date :	2016/1/19
Fundamental Frequency :	5670 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

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Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	Ũ
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MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11340.00	Н	Peak	30.87	20.61	51.48	74	-22.52
11340.00	Н	Average	21.47	20.61	42.08	54	-11.92
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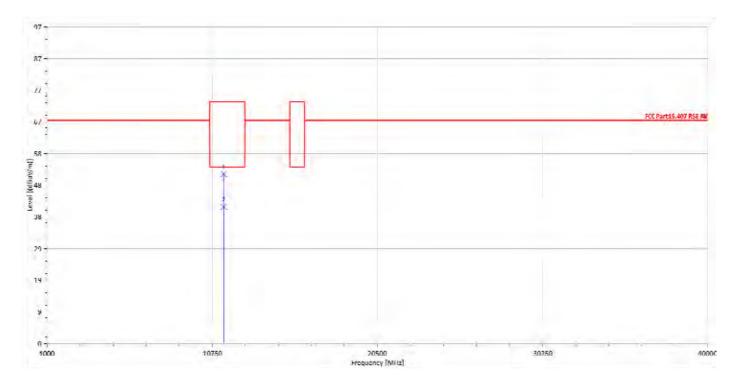
Operation Mode :	802.11n40	Test Date :	2016/1/19
Fundamental Frequency :	5670 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal





#### Radiated Spurious Emission Measurement Result 802.11ac VHT40, 5470~5725 MHz

Operation Mode :	802.11ac40	Test Date :	2016/3/22
Fundamental Frequency :	5710 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

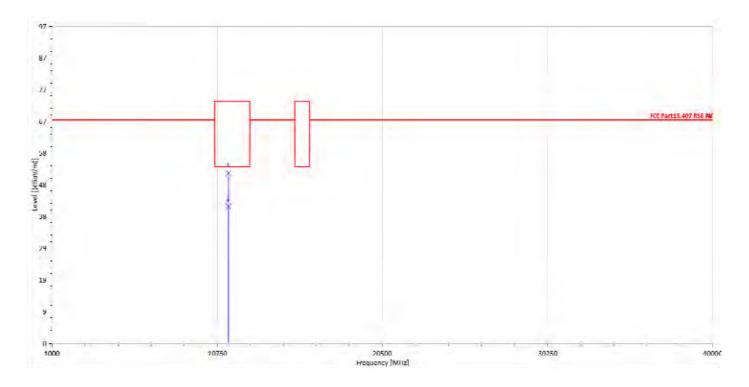


	Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
			Mode	Reading Level		FS	@3m	
_	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
	11440.00	Н	Peak	30.94	20.87	51.81	74	-22.19
	11440.00	Н	Average	20.97	20.87	41.84	54	-12.16

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Operation Mode :	802.11ac40	Test Date :	2016/3/22
Fundamental Frequency :	5710 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

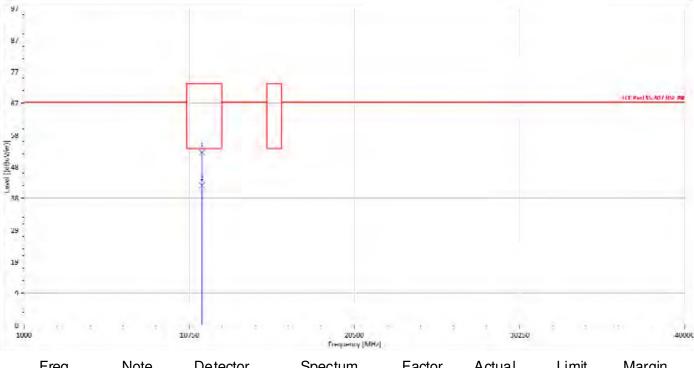


	Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
1	1420.00	Н	Peak	31.40	20.73	52.13	74	-21.87
1	1420.00	Н	Average	21.14	20.73	41.87	54	-12.13



## Radiated Spurious Emission Measurement Result 802.11n HT40, 5725~5850 MHz

Operation Mode :	802.11n40	Test Date :	2016/1/19
Fundamental Frequency :	5755 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



	⊢req.	Note	Detector	Spectum	Factor	Actual	Limit	Margin	
			Mode	Reading Level		FS	@3m		
_	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
-	11510.00	Н	Peak	31.65	21.17	52.82	74	-21.18	-
	11510.00	Н	Average	21.59	21.17	42.76	54	-11.24	

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2.11n40 Test Date :	2016/1/19
55 MHz Temp. / Humi. :	22.7deg_C/57RH
CH Low Test Engineer :	Pony
Measurement Antenna	Pol.: Horizontal
	55 MHz Temp. / Humi. : CH Low Test Engineer :

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Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
-		Mode	Reading Level		FS	@3m	-
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11510.00	Н	Peak	31.19	21.17	52.36	74	-21.64
11510.00	н	Average	21.58	21.17	42.75	54	-11.25
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Operation Mode :	802.11n40	Test Date :	2016/1/19
Fundamental Frequency :	5795 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

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0 <del>7</del> 1000		10/50	20500 Frequency (MHz)		30250	8 .	4000
Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11590.00	H	Peak	31.59	21.28	52.87	74	-21.13
11590.00	Н	Average	21.65	21.28	42.93	54	-11.07



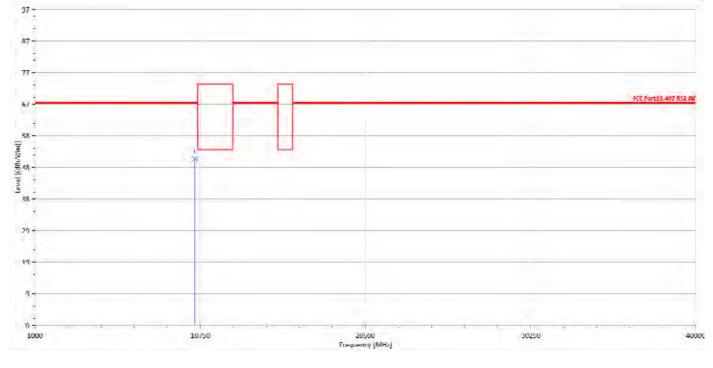
Operation Mode :	802.11n40	Test Date :	2016/1/19
Fundamental Frequency :	5795 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal
EUT POI. :	E2	Measurement Antenna Pol. :	Horizontal

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1000		10/50	20500 Гонцинтар (МНа)		30250		
Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
•		Mode	Reading Level		FS	@3m	0
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11590.00	Н	Peak	31.95	21.28	53.22	74	-20.78
				21.28	42.88	54	



# Radiated Spurious Emission Measurement Result 802.11ac VHT80, 5150~5250 MHz

Operation Mode :	802.11ac80	Test Date :	2016/1/18
Fundamental Frequency :	5210 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

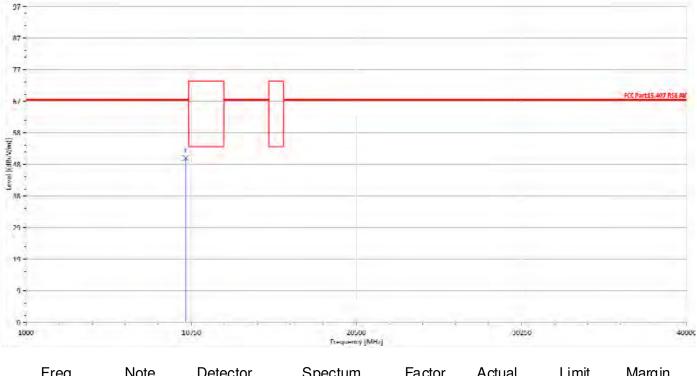


Freq	. Note	Detector	Spectum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10420.	00 H	Peak	32.15	18.96	51.10	68.3	-17.20

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Operation Mode :	802.11ac80	Test Date :	2016/1/18
Fundamental Frequency :	5210 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

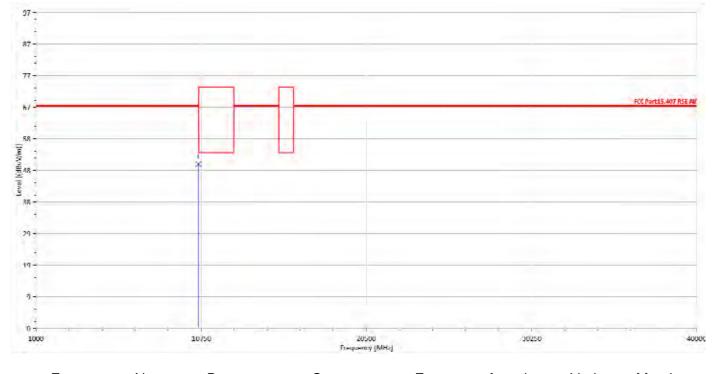


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			Mode	Reading Level		FS	@3m		
_	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
	10420.00	Н	Peak	31.51	18.96	50.47	68.3	-17.83	



## Radiated Spurious Emission Measurement Result 802.11ac VHT80, 5250~5350 MHz

Operation Mode :	802.11ac80	Test Date :	2016/1/18
Fundamental Frequency :	5290 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



	Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin	
			Mode	Reading Level		FS	@3m		
	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
_	10580.00	Н	Peak	31.17	19.29	50.46	68.3	-17.84	

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Operation Mode :	802.11ac80	Test Date :	2016/1/18
Fundamental Frequency :	5290 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

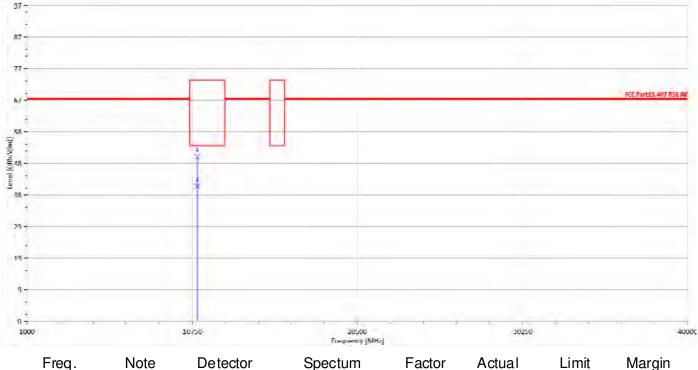
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			Mode	Reading Level		FS	@3m		
	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
-	10580.00	Н	Peak	30.80	19.29	50.09	68.3	-18.21	



## Radiated Spurious Emission Measurement Result 802.11ac VHT80, 5470~5725 MHz

Operation Mode :	802.11ac80	Test Date :	2016/1/18
Fundamental Frequency :	5530 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



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		Mode	Reading Level		FS	@3m		
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	_
11060.00	Н	Peak	30.46	20.14	50.60	74	-23.40	-
11060.00	Н	Average	21.28	20.14	41.42	54	-12.58	

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Operation Mode :	802.11ac80	Test Date :	2016/1/18
Fundamental Frequency :	5530 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

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Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
			-	dD			٩D
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11060.00	Н	Peak	32.04	20.14	52.18	74	-21.82

21.27

20.14

41.41

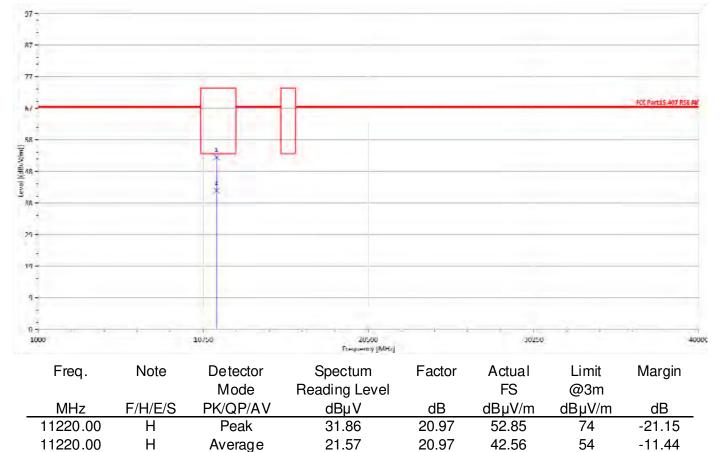
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54



Operation Mode :	802.11ac80	Test Date :	2016/1/19
Fundamental Frequency :	5610 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



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Operation Mode :	802.11ac80	Test Date :	2016/1/19
Fundamental Frequency :	5610 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

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1000		10750	20500 Frequency (MHz)		30250		400
Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
		Mode			FS		
			Reading Level			@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11220.00	Н	Peak	31.20	20.97	52.18	74	-21.82

21.61

Average

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20.97

42.58

54

-11.42



Operation Mode :	802.11ac80	Test Date :	2016/1/18
Fundamental Frequency :	5690 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

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			Frequency [MHz]				
Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	0
			-				
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11380.00	Н	Peak	31.58	20.84	52.42	74	-21.58
11380.00	Н	Average	21.53	20.84	42.37	54	-11.63
11000.00		/ Wordge	21.00	20.04	72.07	0-	11.00



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Operation Mode :	802.11ac80	Test Date :	2016/1/18
Fundamental Frequency :	5690 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

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87-							
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		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11380.00	<u> </u>	Peak	31.84	20.84	52.68	74	-21.32
			0.101	_0.01	02.00		

21.53

Average

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42.37

20.84

54

-11.63



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#### Radiated Spurious Emission Measurement Result 802.11ac VHT80, 5725~5850 MHz

Operation Mode :	802.11ac80	Test Date :	2016/1/18
Fundamental Frequency :	5775 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical
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22 52 58 10 10 10 10 10 10 10 10 10 10 10 10 10							FCC Part15.407 RSE NK
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Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11550.00	Н	Peak	31.88	20.97	52.85	74	-21.15

21.64

Average

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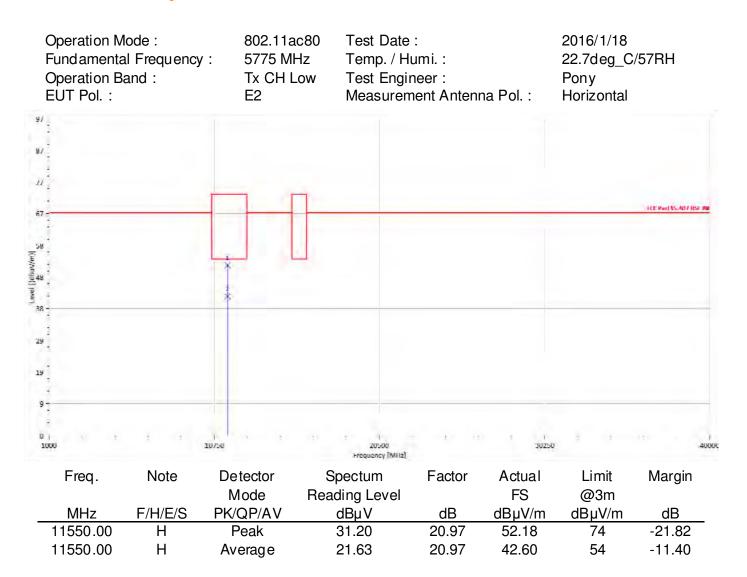
20.97

42.61

54

-11.39







# Band edge falling to restricted band

## 802.11a mode

Operation M Fundament	al Frequenc	•	Hz Tem	Date : p. / Humi. :	2016/1/16 22.7deg_C/57RH		
Operation E	sand :	BE CH		Engineer :	Pony		
EUT Pol. :		E2	E2 Measurement Antenna Pol. :		Vertical		
Freq.	Note	Detector Mode	Spectum Reading Le		Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5150.00	E	Peak	41.85	11.14	52.99	74	-21.01
5150.00	Е	Average	31.56	11.14	42.70	54	-11.30

Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :		802.11a / : 5180 M BE CH E2	Hz Temp. Low Test E	Date : . / Humi. : Engineer : urement Anten	ına Pol. :	2016/1/16 22.7deg_C/57RH Pony Horizontal	
Freq.	Note	Detector Mode	Spectum Reading Leve	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5150.00	Е	Peak	43.83	11.14	54.97	74	-19.03
5150.00	Е	Average	32.31	11.14	43.45	54	-10.55

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Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :		802.11a / : 5320 M BE CH E2	Hz Temp.// High Test Eng	Humi. :	ina Pol. :	2016/1/16 22.7deg_C/57RH Pony Vertical	
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5350.00	E	Peak	45.67	11.30	56.97	74	-17.03
5350.00	Е	Average	32.52	11.30	43.82	54	-10.18

Operation Mode :		802.11a	a Test Da	Test Date :			2016/1/16	
Fundamental Frequency :		/: 5320 M	Hz Temp.	Temp. / Humi.:			22.7deg_C/57RH	
Operation Band :		BE CH	High Test Er	Test Engineer :			Pony	
EUT Pol. :		E2	E2 Measurement Antenna Pol. :		Horizontal			
Freq.	Note	Detector Mode	Spectum Reading Leve	Factor	Actual FS	Limit @3m	Margin	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
5350.00	E	Peak	48.67	11.30	59.97	74	-14.03	
5350.00	Е	Average	33.24	11.30	44.54	54	-9.46	



Operation Mode : 802.11a				Test Date :			2016/1/16	
Fundamental Frequency : 5500 MHz				Temp. / Humi. :			22.7deg_C/57RH	
Operation Band : BE CH			Low	Low Test Engineer :			Pony	
EUT Pol. : E2				Measurement Antenna Pol. :			Vertical	
Freq.	Note	Detector Mode	•		Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dE	ΒµV	dB	dBµV/m	dBµV/m	dB
5460.00	E	Peak	42	2.24	11.46	53.70	74	-20.30
5460.00 E Average 3			32	2.03	11.46	43.49	54	-10.51

EUT Pol. : E2					na Pol. :	2016/1/16 22.7deg_C/57RH Pony N Pol. : Horizontal		
Freq.	Note	Detector Mode	Spectum Reading Leve	Factor I	Actual FS	Limit @3m	Margin	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
5460.00	E	Peak	44.15	11.46	55.61	74	-18.39	
5460.00	E	Average	32.54	11.46	44.00	54	-10.00	



Operation Mode : Fundamental Frequency : Operation Band :			5500 MHz Tem BE CH Low RSE Test		Test E	p. / Humi. : Engineer :		2016/1/16 22.7deg_C/57RH Pony	
EUT Pol. :		E2 Measu		urement Antenna Pol. :		Vertical			
	Freq.	Note	Detector Mode	Spec Reading		Factor	Actual FS	Limit @3m	Margin
_	MHz	F/H/E/S	PK/QP/AV	dBµ	١V	dB	dBµV/m	dBµV/m	dB
-	5470.00	E	Peak	42.7	79	11.46	54.25	68.3	-14.05

Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :		requency :	5500 MHz Ter BE CH Low RSE Tes		Temp. Test E	Test Date: Temp. / Humi.: Test Engineer: Measurement Antenna Pol.:		2016/1/16 22.7deg_C/57RH Pony Horizontal	
	Freq.	Note	Detector Mode	Spect Reading		Factor	Actual FS	Limit @3m	Margin
	MHz	F/H/E/S	PK/QP/AV	dBµ	V	dB	dBµV/m	dBµV/m	dB
-	5461.64	S	Peak	47.2	1	11.46	58.67	68.3	-9.63
	5470.00	E	Peak	45.0	2	11.46	56.48	68.3	-11.82



Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :		y: 5700 M	802.11aTest Dat5700 MHzTemp. /BE CH HighTest EngE2Measure		ına Pol. :	2016/1/16 22.7deg_C/57RH Pony Vertical	
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5725.00			51.34	12.27	63.61	68.3	-4.69

Operation M	a .	Test Date	:		2016/1/16			
Fundamenta	y: 5700 M	5700 MHz Temp. / H		-lumi. :		22.7deg_C/57RH		
Operation B	and :	BE CH	BE CH High Test I		est Engineer :		Pony	
EUT Pol. :	E2	E2 Measurem		ment Antenna Pol. :		Horizontal		
Freq.	Note	Detector	Spe	ctum	Factor	Actual	Limit	Margin
·		Mode	Readin	g Level		FS	@3m	Ū.
MHz	F/H/E/S	PK/QP/AV	dB	μV	dB	dBµV/m	dBµV/m	dB
5725.00	E	Peak	52	.10	12.27	64.37	68.3	-3.93



Operation N	/lode :	802.11a	a Test Da	te:		2016/1/16		
Fundament	al Frequenc	y: 5745 M	Hz Temp. /	Temp. / Humi. :			22.7deg_C/57RH	
Operation E	Band :	BE CH	Low Test En	Test Engineer :			Pony	
EUT Pol. :		E2	Measure	Measurement Antenna Pol. : Vertical				
Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin	
		Mode	Reading Level		FS	@3m		
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
5711.00	S	Peak	43.15	12.32	55.46	68.3	-12.84	
5724.00	S	Peak	47.44	12.27	59.72	78.2	-18.48	
			47.28	12.27	59.55	78.2	-18.65	

Operation Mode :802.11aFundamental Frequency :5745 MHOperation Band :BE CH LoEUT Pol. :E2			Hz Temp. / H Low Test Engi	lumi. :	na Pol. :	2016/1/16 22.7deg_C Pony Horizontal	)/57RH
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5713.10	S	Peak	44.78	12.31	57.08	68.3	-11.22
5722.90	S	Peak	49.13	12.28	61.41	78.2	-16.79
			48.03	12.27	60.30	78.2	-17.90



Operation Mode :802.1Fundamental Frequency :5825Operation Band :BE CEUT Pol. :E2			Hz	Hz Temp. / Humi. :		2016/1/16 22.7deg_C/57RH Pony Vertical		
Freq.	Note	Detector Mode	Spectum Reading Level		Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dE	BμV	dB	dBµV/m	dBµ V/m	dB
5850.00	E	Peak	50	).85	12.61	63.46	78.2	-14.74
5851.30 5860.70	S S	Peak Peak	-	).79 I.89	12.62 12.71	62.41 57.60	78.2 68.3	-15.79 -10.70

Operation Mode :802.11Fundamental Frequency :5825 MOperation Band :BE CHEUT Pol. :E2			Hz	Test Date Temp. / H Test Engi Measuren	lumi. :	na Pol. :	2016/1/16 22.7deg_C Pony Horizontal	:/57RH
Freq.	Note	Detector Mode	•	ectum ng Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dE	ΒµV	dB	dBµV/m	dBµV/m	dB
5850.00	Е	Peak	53	3.35	12.61	65.96	78.2	-12.24
5850.60	S	Peak	52	2.98	12.62	65.59	78.2	-12.61
5860.30			46	6.60	12.71	59.31	68.3	-8.99



#### 802.11n20 HT mode

Operation Mode :802.11n20Fundamental Frequency :5180 MHzOperation Band :BE CH LowEUT Pol. :E2			Hz Temp. / H Low Test Eng	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :			2016/1/16 22.7deg_C/57RH Pony Vertical	
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
5150.00	E	Peak	41.89	11.14	53.03	74	-20.97	
5150.00	I50.00 E Average 3		31.66	11.14	42.80	54	-11.20	

Operation Mode :802.11n20Fundamental Frequency :5180 MHzOperation Band :BE CH LowEUT Pol. :E2			Hz Temp. / H Low Test Eng	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :		2016/1/16 22.7deg_C/57RH Pony Horizontal	
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5150.00	E	Peak	43.95	11.14	55.10	74	-18.90
5150.00	E	Average	32.28	11.14	43.42	54	-10.58



Operation Mode :		802.11n20		Test Date :			2016/1/16	
Fundamental Frequency :		: 5320 MHz		Temp. / Humi. :		22.7deg_C/57RH		
Operation Band :		BE CH High		Test Engineer :		Pony		
EUT Pol. :		E2		Measurer	nent Anten	na Pol. :	Vertical	
Freq.	Note	Detector	•	ectum	Factor	Actual	Limit	Margin

1109.	14010	Deteotor	opoolum	i uotoi	notuui	<b>_</b>	ivia giii
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5350.00	E	Peak	44.83	11.30	56.14	74	-17.86
5350.00	Е	Average	32.59	11.30	43.89	54	-10.11

Operation M	lode :	802.11r	802.11n20		Test Date :			2016/1/16	
Fundamenta	al Frequency	/: 5320 M	5320 MHz		Temp. / Humi. :		22.7deg_C/57RH		
•		BE CH	BE CH High Test En		Engineer :		Pony		
EUT Pol. : E2			Measurement Antenna Pol.:			Horizontal			
Freq.	Note	Detector	Sp	ectum	Factor	Actual	Limit	Margin	
		Mode	Read	ing Level		FS	@3m		
N 41 1			-1						

MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5350.00	Е	Peak	46.73	11.30	58.03	74	-15.97
5350.00	Е	Average	32.45	11.30	43.75	54	-10.25



Operation Mode : 802.11n20			า20	Test Date :			2016/1/16	
Fundamental Frequency : 5500 MHz			lHz	Temp. / Humi. :			22.7deg_C/57RH	
Operation B	BE CH	BE CH Low Test Engine		neer:		Pony		
EUT Pol. : E2		E2	Measurement Antenna Pol. :			Vertical		
Freq.	Note	Detector Mode	Spectum Reading Level		Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	d	ΒµV	dB	dBµV/m	dBµV/m	dB
5460.00	E	Peak	4	2.90	11.46	54.36	74	-19.64
5460.00	E	Average	3	2.32	11.46	43.78	54	-10.22

Operation Mode :802.11n20Fundamental Frequency :5500 MHzOperation Band :BE CH LowEUT Pol. :E2		Hz Temp. / H Low Test Eng	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :		2016/1/16 22.7deg_C/57RH Pony Horizontal		
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5460.00	Е	Peak	43.71	11.46	55.17	74	-18.83
5460.00	Е	Average	32.46	11.46	43.92	54	-10.08



Fu Op	peration Mod ndamental F peration Band JT Pol. :	requency :	5500 MHz	5500 MHz T BE CH Low RSE T		Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :			2016/1/16 22.7deg_C/57RH Pony Vertical	
	Freq.	Note	Detector Mode	Spect Reading		Factor	Actual FS	Limit @3m	Margin	
	MHz	F/H/E/S	PK/QP/AV	dBµ		dB	dBµV/m	dBµV/m	dB	
-	5470.00	E	Peak	43.7	72	11.46	55.18	68.3	-13.12	

Operation Mode :			802.11n20		Test Date :			2016/1/16	
Fu	ndamental F	= requency :	5500 MHz		Temp. / Humi. :			22.7deg_C/57RH	
Ор	eration Ban	d :	BE CH Low RSE		Test Engineer :			Pony	
ΕU	IT Pol. :		E2 Measurement Antenna			tenna Pol. :	Horizon	tal	
	Freq.	Note	Detector	Spect	um	Factor	Actual	Limit	Margin
			Mode	Reading	Level		FS	@3m	-
_	MHz	F/H/E/S	PK/QP/AV	dBµ	V	dB	dBµV/m	dBµV/m	dB
	5470.00	E	Peak	44.2	3	11.46	55.68	68.3	-12.62



Operation Mode :802.11n20Fundamental Frequency :5700 MHzOperation Band :BE CH HighEUT Pol. :E2			Hz Te High Te	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :		2016/1/21 22.7deg_ Pony Vertical	
Freq.	Note	Detector Mode	Spectu Reading		ctor Actua FS	l Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµ\		B dBµV/	-	dB
5725.00	E	Peak	54.1	5 12	.27 66.42	. 68.3	-1.88

Operation M	lode :	802.11r	120 Tes	st Date :	2016/1/21		
Fundamenta	al Frequency	/: 5700 M	Hz Ter	np. / Humi.:	22.7deg_C/57RH		
Operation Band :		BE CH	High Tes	st Engineer :	Pony		
EUT Pol. :		E2	E2 Measuren		ment Antenna Pol. :		
Freq.	Note	Detector Mode	Spectu Reading L		Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5725.00	E	Peak	55.94	12.27	68.21	68.3	-0.09
5725.88	S	Peak	55.64	12.27	67.91	68.3	-0.39



Operation M	lode :	802.11n	20 Test Date	Test Date :			2016/1/16	
Fundamenta	al Frequenc	y: 5745 MI	Hz Temp. / H	Temp. / Humi. :			22.7deg_C/57RH	
Operation Band : BE CH Low			Low Test Eng	Test Engineer :				
EUT Pol. : E2			Measure	Measurement Antenna Pol. : Vertical				
Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin	
		Mode	Reading Level		FS	@3m	-	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
5712.80	S	Peak	43.24	12.31	55.55	68.3	-12.75	
5724.50	S	Peak	48.44	12.27	60.71	78.2	-17.49	
5725.00	E	Peak	49.02	12.27	61.29	78.2	-16.91	

Operation M Fundamenta Operation B EUT Pol. :	al Frequenc	802.11r y : 5745 M BE CH E2	Hz Temp. / Humi. :		na Pol. :	2016/1/16 22.7deg_C/57RH Pony Horizontal	
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5706.60	S	Peak	45.60	12.32	57.92	68.3	-10.38
5723.50	S	Peak	47.52	12.27	59.79	78.2	-18.41
5725.00	Е	Peak	49.90	12.27	62.17	78.2	-16.03



Operation Mode :802.11n20Fundamental Frequency :5825 MHzOperation Band :BE CH High				Test Date Temp. / H	lumi. :		2016/1/16 22.7deg_C	/57RH
	BE CH	5		Pony				
EUT Pol. :		E2	Measurement Antenna Pol. :			Vertical		
Freq.	Note	Detector Mode	Spectum Reading Level		Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dE	3μV	dB	dBµV/m	dBµ V/m	dB
5850.00	E	Peak	49	9.38	12.61	61.99	78.2	-16.21
5850.40	S	Peak	49	9.59	12.62	62.20	78.2	-16.00
5861.10	S	Peak	42	2.87	12.72	55.59	68.3	-12.71

Operation Mode :802.11n2Fundamental Frequency :5825 MHOperation Band :BE CH HEUT Pol. :E2			Hz T High T	Test Date Temp. / H Test Engi Measuren	lumi. :	na Pol. :	2016/1/16 22.7deg_C Pony Horizontal	:/57RH
Freq.	Note	Detector Mode	Spectum Reading Level		Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dB	μV	dB	dBµV/m	dBµV/m	dB
5850.00	Е	Peak	52.	76	12.61	65.37	78.2	-12.83
5850.90	S	Peak	53.	03	12.62	65.65	78.2	-12.55
5860.30	S	Peak	46.	44	12.71	59.15	68.3	-9.15



#### 802.11n40 HT mode

Operation Mode :802.11n4Fundamental Frequency :5190 MHzOperation Band :BE CH LcEUT Pol. :E2			Hz Temp. / H Low Test Eng	Humi. :	ına Pol. :	2016/1/19 22.7deg_C Pony Vertical	)/57RH
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5150.00	E	Peak	42.92	11.14	54.06	74	-19.94
5150.00	Е	Average	31.70	11.14	42.84	54	-11.16

Operation Mode :802.11n40Fundamental Frequency :5190 MHzOperation Band :BE CH LowEUT Pol. :E2				t Date : np. / Humi. : t Engineer : asurement Anter	nna Pol. :	2016/1/19 22.7deg_0 Pony Horizontal	
Freq.	Note	Detector Mode	Spectur Reading L		Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5149.24	S	Peak	45.14	11.14	56.29	74	-17.71
5149.24	S	Average	32.81	11.14	43.95	54	-10.05
5150.00	Е	Peak	44.12	11.14	55.26	74	-18.74
5150.00	E	Average	32.84	11.14	43.98	54	-10.02



Operation N	802.11r	802.11n40		Test Date :			2016/1/19	
Fundamenta	Fundamental Frequency :			Temp. / Humi. :			22.7deg_C/57RH	
Operation B	and :	BE CH	BE CH High Test Engineer :			Pony		
EUT Pol. :		E2	E2 Measurem		ment Antenna Pol. :		Vertical	
Freq.	Note	Detector Mode	Spectum Reading Leve		Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV		dB	dBµV/m	dBµV/m	dB
5350.00	E	Peak	46	6.89	11.30	58.19	74	-15.81
5350.00	E	Average	33	3.04	11.30	44.34	54	-9.66

Operation N Fundamenta Operation B EUT Pol. :	al Frequency	/: 5320 M	802.11n40Test Date5320 MHzTemp. / HBE CH HighTest EngineE2Measuren		ına Pol. :	2016/1/19 22.7deg_C/57RH Pony Horizontal	
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5350.00	E	Peak	47.46	11.30	58.76	74	-15.24
5350.00	Е	Average	32.80	11.30	44.10	54	-9.90



Operation N	lode :	802.11n	40 Test Dat	Test Date :			2016/1/19	
Fundamenta	al Frequenc	y: 5510 Mł	Hz Temp. / H	Temp. / Humi. :			22.7deg_C/57RH	
Operation B	and :	BE CH L	_ow Test Eng	Test Engineer :				
EUT Pol. :		E2	E2 Measurement Antenna Pol. :			Vertical		
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
5460.00	E	Peak	45.71	11.46	57.17	74	-16.83	
5460.00	Е	Average	33.13	11.46	44.59	54	-9.41	

Operation M	lode :	802.11r	n40 Test Date	Test Date :			2016/1/19	
Fundamental Frequency : 5510 M			Hz Temp. / ł	Iz Temp. / Humi. :			22.7deg_C/57RH	
Operation B	and :	BE CH	BE CH Low Test Engineer :		Pony			
EUT Pol. :		E2 Measureme		ment Anten	ent Antenna Pol. :			
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
5460.00	E	Peak	46.76	11.46	58.22	74	-15.78	
5460.00	Е	Average	33.03	11.46	44.49	54	-9.51	



Operation Mode :		le :	802.11n40		Test Date :			2016/1/19	
Fu	ndamental F	requency :	5510 MHz		Temp. / Humi. :			22.7deg_C/57RH	
Ор	eration Ban	d :	BE CH Low RSE		Test Engineer :			Pony	
ΕL	JT Pol. :	E2 Measurement Antenna Pol. :			Vertical				
	Freq.	Note	Detector	Spectum		Factor	Actual	Limit	Margin
			Mode	Reading Level			FS	@3m	
_	MHz	F/H/E/S	PK/QP/AV	dBµV		dB	dBµV/m	dBµV/m	dB
	5469.60	S	Peak	51.89		11.46	63.34	68.3	-4.96
	5470.00	Е	Peak	51.0	)1	11.46	62.47	68.3	-5.83

Fundamental Frequency : Operation Band :			5510 MHz Te BE CH Low RSE Te		Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :			2016/1/19 22.7deg_C/57RH Pony Horizontal	
	Freq.	Note	Detector Mode	Spect Reading		Factor	Actual FS	Limit @3m	Margin
	MHz	F/H/E/S	PK/QP/AV	dBµ	V	dB	dBµV/m	dBµV/m	dB
	5470.00	E	Peak	53.1	6	11.46	64.62	68.3	-3.68



Operation Mode :802.11n4Fundamental Frequency :5670 MHOperation Band :BE CH HEUT Pol. :E2			Hz Temp. High Test E	eate : / Humi. : ingineer : rement Anten	ına Pol. :	2016/1/19 22.7deg_C Pony Vertical	C/57RH
Freq.	Note	Detector Mode	Spectum Reading Leve	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5725.00	E	Peak	41.18	12.27	53.45	68.3	-14.85

Operation M	lode :	802.11r	802.11n40 Test Date :				2016/1/19		
Fundamenta	al Frequency	/: 5670 M	Hz 7	Temp. / Humi. :			22.7deg_C/57RH		
Operation B	and :	BE CH	BE CH High Te		Test Engineer :			Pony	
EUT Pol. :		E2	E2 Measuren		ent Anten	na Pol. :	Horizontal		
Freq.	Note	Detector	Spectum		Factor	Actual	Limit	Margin	
		Mode	Reading Level			FS	@3m	-	
MHz	F/H/E/S	PK/QP/AV	dB	μV	dB	dBµV/m	dBµV/m	dB	
5725.00	E	Peak	43.	89	12.27	56.16	68.3	-12.14	



Operation Mode :802.11n40Fundamental Frequency :5755 MHzOperation Band :BE CH LowEUT Pol. :E2		lHz Te Low Te	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :			2016/1/19 22.7deg_C/57RH Pony Vertical		
Freq.	Note	Detector	Spectum		Factor	Actual	Limit	Margin
MHz	F/H/E/S	Mode PK/QP/AV	Reading Level		dB	FS dBµV/m	@3m dBµV/m	dB
5725.00	E	Peak	<u>dBµV</u> 41.28		12.27	53.55	<u>- ubµ v/m</u> 78.2	-24.65
0720.00	<b>–</b>	reak	71.6	0	1 /	00.00	10.2	21.00

Operation Mode :802.11n40Fundamental Frequency :5755 MHzOperation Band :BE CH LowEUT Pol. :E2			Hz Temp. Low Test Er	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :			2016/1/19 22.7deg_C/57RH Pony Horizontal	
Freq.	Note	Detector Mode	Spectum Reading Leve	Factor	Actual FS	Limit @3m	Margin	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
5725.00 5725.90	E S	Peak Peak	44.44 45.74	12.27 12.27	56.71 58.01	78.2 68.3	-21.49 -10.29	



Operation M Fundamenta	al Frequency	n40 Hz	Test Date Temp. / H	lumi. :		2016/1/19 22.7deg_C	/57RH	
Operation B	BE CH	<b>e</b>			Pony			
EUT Pol. :		E2	Measurement Antenna Pol. :			Vertical		
Freq.	Note	Detector Mode	Spectum Reading Level		Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	d	ΒµV	dB	dBµV/m	dBµV/m	dB
5850.00	E	Peak	43	3.81	12.61	56.42	78.2	-21.78
5851.30	S	Peak	45	5.53	12.62	58.16	78.2	-20.04
5862.30	S	Peak	43	3.54	12.73	56.27	68.3	-12.03

Operation Mode :802Fundamental Frequency :579Operation Band :BEEUT Pol. :E2				Hz Temp. / Humi. :			2016/1/19 22.7deg_C/57RH Pony Horizontal		
Freq.	Note	Detector Mode	Spectum Reading Leve		Factor	Actual FS	Limit @3m	Margin	
MHz	F/H/E/S	PK/QP/AV	dE	BμV	dB	dBµV/m	dBµV/m	dB	
5850.00	E	Peak	45	5.46	12.61	58.07	78.2	-20.13	
5851.10	S	Peak	46	6.86	12.62	59.48	78.2	-18.72	
5871.30	S	Peak	44	.96	12.77	57.73	68.3	-10.57	



#### 802.11ac80 VHT mode

Operation Mode :802.11ac80Fundamental Frequency :5210 MHzOperation Band :BE CH LowEUT Pol. :E2			Hz Temp Low Test B	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :			2016/1/16 22.7deg_C/57RH Pony Vertical	
Freq.	Note	Detector Mode	Spectum Reading Lev	Factor /el	Actual FS	Limit @3m	Margin	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
5150.00	E	Peak	42.41	11.14	53.55	74	-20.45	
5150.00	Е	Average	31.74	11.14	42.88	54	-11.12	

Operation Mode :802.11ac80Fundamental Frequency :5210 MHzOperation Band :BE CH LowEUT Pol. :E2			Hz Temp. / Low Test En	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :			2016/1/16 22.7deg_C/57RH Pony Horizontal	
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
5150.00 5150.00	E	Peak Average	48.96 32.86	11.14 11.14	60.11 44.00	74 54	-13.89 -10.00	
0100.00	L	, werage	02.00	11.17	00	57	10.00	



Е

S

S

Average

Peak

Average

5350.00

5352.20

5352.20

Operation M Fundamenta		802.11a v : 5290 M		Test Date : Temp. / Humi. :			2016/1/19 22.7deg_C/57RH		
	•	•		•			-		
Operation B		BE CH High Test Engineer : E2 Measurement Antenna Pol. :		Pony					
EUT Pol. : E2				Measuren	na Pol. :	Vertical			
Freq.	Note	Detector	Spectum		Factor	Actual	Limit	Margin	
		Mode	Reading Level			FS	@3m		
MHz	F/H/E/S	PK/QP/AV	dE	βµV	dB	dBµV/m	dBµV/m	dB	
5350.00	E	Peak	43	.54	11.30	54.84	74	-19.16	
5350.00	E	Average	32	.18	11.30	43.48	54	-10.52	
5351.20	S	Peak	45	.75	11.31	57.07	74	-16.93	
5351.20	S	Average	32	.22	11.31	43.53	54	-10.47	

•		802.11a	802.11ac80 Test Date :			2016/1/16			
Fundamenta	al Frequenc	y: 5290 M	Hz	Temp. / Humi. :			22.7deg_C/57RH		
Operation B	Band :	BE CH	BE CH High Test B		est Engineer :			Pony	
EUT Pol. :		E2	E2 Measuren		nent Anten	na Pol. :	Horizontal		
Freq.	Note	Detector	Sp	ectum	Factor	Actual	Limit	Margin	
		Mode	Read	ling Level		FS	@3m		
MHz	F/H/E/S	PK/QP/AV	c	lBμV	dB	dBµV/m	dBµV/m	dB	
			4.56	11.30	55.86	74	-18.14		

32.54

46.53

32.65

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11.30

11.32

11.32

43.84

57.86

43.97

54

74

54

-10.16

-16.14

-10.03



Operation Mode :802.11ac80Fundamental Frequency :5530 MHzOperation Band :BE CH LowEUT Pol. :E2			Hz Temp. / H Low Test Eng	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :			2016/1/16 22.7deg_C/57RH Pony Vertical	
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
5445.50	S	Peak	49.09	11.38	60.47	74	-13.53	
5445.50	S	Average	33.55	11.38	44.93	54	-9.07	
5460.00	Е	Peak	45.40	11.46	56.86	74	-17.14	
5460.00	Е	Average	33.21	11.46	44.67	54	-9.33	

Operation Mode :802.11acFundamental Frequency :5530 MHOperation Band :BE CH LoEUT Pol. :E2			Hz Temp. Low Test E	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :			2016/1/16 22.7deg_C/57RH Pony Horizontal	
Freq.	Note	Detector Mode	Spectum Reading Lev	Factor	Actual FS	Limit @3m	Margin	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
5460.00	Е	Peak	47.99	11.46	59.45	74	-14.55	
5460.00	E	Average	33.40	11.46	44.86	54	-9.14	



Operation Mode :		e:	802.11ac80		Test Date:			2016/1/16		
Fundam	ental F	requency :	5530 MHz		Temp. / Humi. :			22.7deg_C/57RH		
Operation Band :			BE CH Low RSE		Test E	Test Engineer :			Pony	
EUT Pol	UT Pol. : E2 Measurement Antenna Pol. :			Vertical						
Fr	eq.	Note	Detector	Spectum		Factor	Actual	Limit	Margin	
			Mode	Reading Level			FS	@3m		
M	Hz	F/H/E/S	PK/QP/AV	dBµV		dB	dBµV/m	dBµV/m	dB	
544	5.50	S	Peak	49.09		11.38	60.47	68.3	-7.83	
547	0.00	Е	Peak	46.51		11.46	57.97	68.3	-10.33	

Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :			5530 MHz Ten BE CH Low RSE Tes		ate: / Humi.: ngineer: irement An	tenna Pol. :	2016/1/16 22.7deg_C/57RH Pony Horizontal		
	Freq.	Note	Detector Mode	Spectum Reading Level		Factor	Actual FS	Limit @3m	Margin
	MHz	F/H/E/S	PK/QP/AV	dBµV		dB	dBµV/m	dBµV/m	dB
-	5470.00	E	Peak	48.74		11.46	60.19	68.3	-8.11



Operation Mode :802.11ac80Fundamental Frequency :5775 MHzOperation Band :BE CH LowEUT Pol. :E2		Hz Temp. / H Low Test Eng	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :		2016/1/21 22.7deg_C/57RH Pony Vertical		
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5696.50	S	Peak	52.39	12.28	64.68	68.3	-3.62
5724.00	S	Peak	51.71	12.27	63.99	78.2	-14.21
5725.00	Е	Peak	53.68	12.27	65.95	78.2	-12.25

Fundamental Frequency :5775 MHzOperation Band :BE CH Low		Hz Temp. / I Low Test Eng	Test Date :2016/1/21Temp. / Humi. :22.7deg_C/57RHTest Engineer :PonyMeasurement Antenna Pol. :Horizontal				
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5703.70	S	Peak	54.50	12.31	66.80	68.3	-1.50
5724.60	S	Peak	55.96	12.27	68.23	78.2	-9.97
5725.00	Е	Peak	55.99	12.27	68.26	78.2	-9.94



Operation Mode : 802.11ac80			ac80 Te	est Date	:		2016/1/21	
Fundamental Frequency: 5775 MHz			Hz Te	Temp. / Humi. :			22.7deg_C/57RH	
Operation E	Band :	BE CH	High Test Engineer :		Pony			
EUT Pol. :			na Pol. :	: Vertical				
Frog	Noto	Detector	Spect	m	Factor	Actual	Limit	Morgin
Freq.	Note	Detector	Spect		Factor	Actual	Limit	Margin
		Mode	Reading	Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµ	V	dB	dBµV/m	dBµV/m	dB
5850.00	E	Peak	48.3	5	12.61	60.96	78.2	-17.24
5854.68	S	Peak	50.2	8	12.66	62.93	78.2	-15.27
5862.72	S	Peak	49.9	9	12.73	62.72	68.3	-5.58

Operation Mode :802Fundamental Frequency :577			ac80 Test Date Hz Temp. / H			2016/1/21 22.7deg_C	/57RH
Operation B	Band :	BE CH	BE CH High Test Engineer :		Pony		
EUT Pol. :	EUT Pol. : E2 Measurement Antenna Pol. :			Horizontal			
Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5850.00	E	Peak	50.87	12.61	63.48	78.2	-14.72
5858.28	S	Peak	52.44	12.69	65.13	78.2	-13.07
5864.16	S	Peak	52.35	12.74	65.09	68.3	-3.21



# 12. TRANSMISSION IN THE ABSENCE OF DATA

## 12.1 Standard Applicable

According to §15.407(c)

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

#### 12.2 Result

No non-compliance noted: Refer to the theory of operation.

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# **13. FREQUENCY STABILITY**

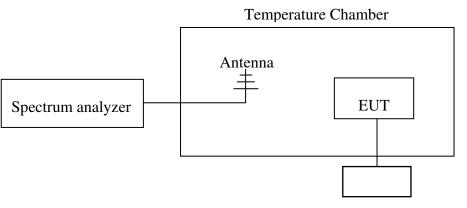
## 13.1 Standard Applicable

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

## **13.2 Measurement Procedure**

- 1. The EUT was placed inside temperature chamber and powered and powered by nominal DC voltage.
- 2. Set EUT as normal operation.
- 3. Turn the EUT on and couple its output to spectrum.
- 4. Turn the EUT off and set the chamber to the highest temperature specified.
- 5. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT and measure the operating frequency.
- 6. Repeat step with the temperature chamber set to the lowest temperature.

## 13.3 Test SET-UP



Variable AC Power Supply

#### 13.4 Measurement Equipment Used

Conducted Emission Test Site							
EQUIPMENT	MED	MODEL	SERIAL	LAST			
ТҮРЕ	MFR	NUMBER	NUMBER	CAL.	CAL DUE.		
Spectrum Analyzer	KEYSIGHT	N9010A	MY54510568	04/14/2015	04/13/2016		
Temperature Chamber	TERCHY	MHK-120LK	1020582	06/23/2015	06/22/2016		
DC Power Supply	Agilent	E3640A	MY53140006	05/04/2015	05/03/2016		

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#### 13.5 **Measurement Result**

Test Date 2015.12.21 Test By Tank

36	5180	5,180.00691	-0.00000133
44	5220	5,219.97078	0.00000560
48	5240	5,239.97175	0.00000539
52	5260	5,259.97160	0.00000540
60	5300	5,299.97045	0.00000558
64	5320	5,319.97173	0.00000531
100	5500	5,499.96883	0.00000567
116	5580	5,580.00819	-0.00000147
140	5700	5,699.96933	0.00000538
149	5745	5,744.96966	0.00000528
157	5785	5,785.00744	-0.00000129
165	5825	5,825.00854	-0.00000147
36	5180	5,180.00746	-0.00000144
44	5220	5,219.96947	0.00000585
48	5240	5,239.97084	0.00000556
52	5260	5,259.97146	0.00000543
60	5300	5,299.97119	0.00000544
64	5320	5,319.97003	0.00000563
100	5500	5,499.97005	0.00000545
116	5580	5,580.00785	-0.00000141
140	5700	5,699.96774	0.00000566
149	5745	5,744.96900	0.00000540
157	5785	5,785.00792	-0.00000137
165	5825	5,825.00907	-0.00000156

0



25

36	5180	5,180.00621	-0.00000120
44	5220	5,219.96898	0.00000594
48	5240	5,239.97061	0.00000561
52	5260	5,259.96997	0.00000571
60	5300	5,299.96984	0.00000569
64	5320	5,319.96975	0.00000569
100	5500	5,499.96875	0.00000568
116	5580	5,580.00630	-0.00000113
140	5700	5,699.96758	0.00000569
149	5745	5,744.96767	0.00000563
157	5785	5,785.00709	-0.00000123
165	5825	5,825.00721	-0.00000124



			Test Date	2015.12.21
			Test By	Tank
				ΔFrequency (MHz)
	38	5190	5 189 9713	5 0.00000552
	46	5230	5 230 0085	9 -0.00000164
	54	5270	5 269 9711	0 0 00000548
	62	5310	5 309 9707	5 0.00000551
	102	5510	5 509 9710	8 0.00000525
	110	5550	5 550 0086	0 -0.00000155
	134	5670	5.670.0076	5 -0.00000135
	151	5/55	5 / 54 96 / /	0 0 00000561
<u>^</u>	159	5/95	5 /95 00 / 1	9 -0.00000124
0	38	5190	5 189 9720	1 0.00000539
	46	5230	5 230 0081	5 -0.00000156
	54	5270	5 269 9720	9 0.00000530
	62	5310	5 309 9703	6 0.00000558
	102	5510	5 509 9710	4 0.00000526
	110	5550	5 550 0078	4 -0 00000141
	1:34	5670	56/0.00/5	3 -0.00000133
	151	5/55	5 / 54 9684	0 0 00000549
	159	5/95	5 /95 00/5	/ -0.00000131



5190	5,189.97126	0.00000554
5230	5,230.00673	-0.00000129
5270	5,269.97053	0.00000559
5310	5,309.97016	0.00000562
5510	5,509.96909	0.00000561
5550	5,550.00683	-0.00000123
5670	5,670.00683	-0.00000120
5755	5,754.96748	0.00000565
5795	5,795.00684	-0.00000118
5190	5,189.97021	0.00000574
5230	5,230.00565	-0.00000108
5270	5,269.96874	0.00000593
5310	5,309.96848	0.00000594
5510	5,509.96773	0.00000586
5550	5,550.00528	-0.00000095
5670	,	-0.0000098
5755		0.00000576
5795	5,795.00597	-0.00000103
5190	5,189.97003	0.00000577
5230	5,230.00477	-0.00000091
5270	5,269.96988	0.00000572
5310	5,309.96870	0.00000589
5510	5,509.96737	0.00000592
5550	5,550.00570	-0.00000103
5670	5,670.00570	-0.00000101
5755	5,754.96593	0.00000592
5795	5,795.00648	-0.00000112
	5230 5270 5310 5510 5550 5670 5755 5795 5190 5230 5270 5310 5510 5550 5670 5755 5795 5190 5230 5275 5795 5190 5550 5670 5755 5795 5190 5550 5670 5755 5795 5750 5755 5755 57755 57755 5755 57755 5	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

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Test Date	2015.12.21
Test By	Tank

42	5210	5,209.97093	0.00000558
58	5290	5,289.96999	0.00000567
106	5530	5,529.97080	0.00000528
122	5610	5,609.97901	0.00000374
138	5690	5,689.97382	0.00000460
155	5775	5,775.00748	-0.00000130
42	5210	5,209.97115	0.00000554
58	5290	5,289.97126	0.00000543
106	5530	5,529.96964	0.00000549
122	5610	5,609.97847	0.0000384
138	5690	5,689.97335	0.00000468
155	5775	5,775.00788	-0.00000136
42	5210	5,209.97065	0.00000563
58	5290	5,289.96998	0.00000567
106	5530	5,529.96882	0.00000564
122	5610	5,609.97751	0.00000401
138	5690	5,689.97203	0.00000492
155	5775	5,775.00720	-0.00000125
42	5210	5,209.96867	0.00000601
58	5290	5,289.96861	0.00000593
106	5530	5,529.96754	0.00000587
122	5610	5,609.97670	0.00000415
138	5690	5,689.97177	0.00000496
155	5775	5,775.00586	-0.00000101
42	5210	5,209.97033	0.00000569
58	5290	5,289.96874	0.00000591
106	5530	5,529.96718	0.00000593
122	5610	5,609.97713	0.00000408
138	5690	5,689.97127	0.00000505
155	5775	5,775.00706	-0.00000122
	0.70	0,0100700	0.00000 IEE

8.74V

0

6.84



# **14. ANTENNA REQUIREMENT**

# 14.1 Standard Applicable

According to §15.203, an intentional radiator shall be designed to ensure that no antenna other than furnished by the responsible party shall be used with the device.

According to §15.407, If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

# 14.2 Antenna Connected Construction

A PIFA antenna design is used.

The antenna is designed with permanent attached and no consideration of replacement. Please see EUT photo and antenna spec. for details.

The antenna gain is less than 6dBi. Therefore, it is not necessary to reduce maximum output power limit.

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