

## **5.4. Test Procedure**

Test	est Method								
	Refer	ences Rule	Chapter	Description					
	ANSI	C63.10	12.4	Emission bandwidth and occupied bandwidth					
	☐ ANSI C63.10		12.4.1	Emission bandwidth (26dB)					
		ANSI C63.10	12.4.2	Occupied bandwidth (99%)					
	FCC	KDB 789033	С	Bandwidth Measurement					
	D02v	01r03							
	$\boxtimes$	FCC KDB 789033	C.1	Emission Bandwidth (26dB)					
		D02v01r03							
		FCC KDB 789033	C.2	Minimum Emission Bandwidth for the band					
		D02v01r03		5.725-5.85 GHz (6dB)					
				99 Percent Occupied Bandwidth					
	D02v	01r03							

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## 5.5. EUT test Axis definition

Item			Occupi	ed ba	ndwidth				
		Outdoor AP							
		Indoor AP							
Device Category		Fixed point-to-po	oint AP						
		Outdoor fixed po	oint-to-r	nultip	oint AP				
		Client							
Test mode	Mode	1-12							
		Radiated	Radiated						
		X Axis		Y Axis			Z Axis		
			9						
Test method		Worst Axis	Wo	orst Ax	kis 🗌	W	orst Axis 🗌		
	$\boxtimes$	Conducted							
	$\boxtimes$	Chain 1	Chain	2	Chain 3		Chain 4		
		• • • •							

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## 5.6. Test Result

Product Name	• •	Xiaomi Router HD	Power	:	AC 120V/60Hz
Test Date		2017.09.12	Test Site	:	TR8
Test Mode	:	Mode 1~12			
Test Engineer	:	Adam			

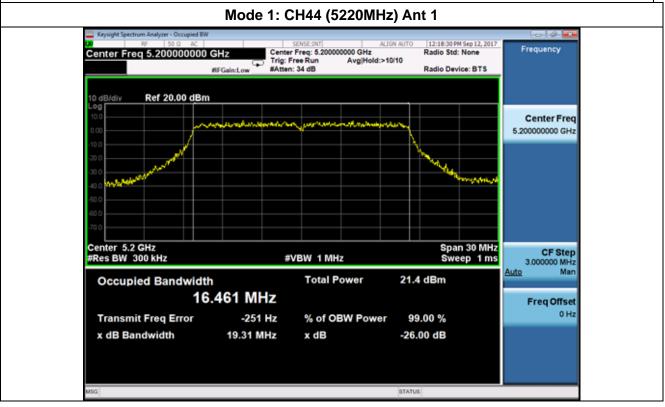
Mode 1: 7	Γransmit b	y 802.11a			
		26dB Occupied	99%	Lower/Higher	Result
No.	y	Bandwidth	Occupied Bandwidth	Frequency	
	(MHz)	(MHz)	(MHz)	(MHz)	
		Ant1(Worst Data)	Ant1(Worst Data)	Ant1(Worst Data)	
36	5180	20.82	16.696	5171.65	Pass
44	5220	19.31	16.461	N/A	Pass
48	5240	19.63	16.467	5248.23	Pass
Mode 2: 1	Transmit b	y 802.11n(20MHz)			
Channel	Frequency	26dB Occupied	99%	Lower/Higher	Result
No.	(MHz)	Bandwidth	Occupied Bandwidth	Frequency	
		(MHz)	(MHz)	(MHz)	
		Ant1(Worst Data)	Ant1(Worst Data)	Ant1(Worst Data)	
36	5180	20.42	17.643	5171.18	Pass
44	5220	20.38	17.634	N/A	Pass
48	5240	20.41	17.646	5248.82	Pass
Mode 3: 1	Transmit by	y 802.11n(40MHz)			
Channel	Frequency	26dB Occupied	99%	Lower/Higher	Result
No.	(MHz)	Bandwidth	Occupied Bandwidth	Frequency	
		(MHz)	(MHz)	(MHz)	
		Ant1(Worst Data)	Ant1(Worst Data)	Ant1(Worst Data)	
38	5190	39.67	35.924	5172.04	Pass
46	5230	39.34	35.925	5247.96	Pass
Mode 4: 7	ransmit b	y 802.11ac(20MHz)			
Channel	Frequency	26dB Occupied	99%	Lower/Higher	Result
No.	(MHz)	Bandwidth	Occupied Bandwidth	Frequency	
		(MHz)	(MHz)	(MHz)	
		Ant1(Worst Data)	Ant1(Worst Data)	Ant1(Worst Data)	
36	5180	20.50	17.650	5171.18	Pass
44	5220	20.52	17.655	N/A	Pass
48	5240	20.47	17.651	5248.83	Pass

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Mode 5: 7	Mode 5: Transmit by 802.11ac(40MHz)									
Channel	Frequenc	26dB Occupied	99%	Lower/Higher	Result					
No.	у	Bandwidth	Occupied Bandwidth	Frequency						
	(MHz)	(MHz)	(MHz)	(MHz)						
		Ant1(Worst Data)	Ant1(Worst Data)	Ant1(Worst Data)						
38	5190	38.96	35.965	5172.02	Pass					
46	5230	39.44	35.895	5247.95	Pass					
Mode 6: 1	ransmit by	y 802.11ac(80MHz)								
Channel	Frequenc	26dB Occupied	99%	Lower/Higher	Result					
No.	у	Bandwidth	Occupied Bandwidth	Frequency						
	(MHz)	(MHz)	(MHz)	(MHz)						
		Ant1(Worst Data)	Ant1(Worst Data)	Ant1(Worst Data)						
42	5210	80.82	75.634	5134.37/5285.63	Pass					

The worst case of Occupied Bandwidth as below:





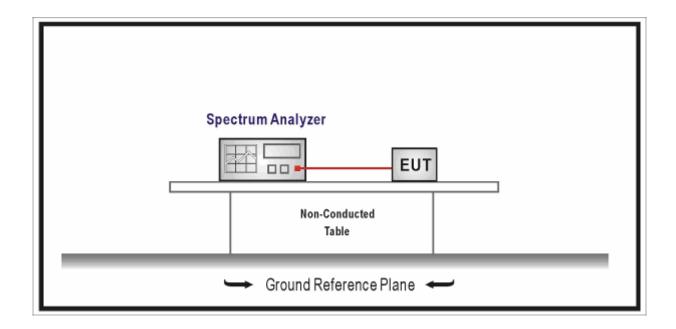
#### 6. 6dB bandwidth

## 6.1. Test Equipment

Emission bandwidth and occupied bandwidth / TR-8								
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date			
Spectrum Analyzer	Agilent	N9010A	MY48030494	2017.02.04	2018.02.03			
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2017.04.09	2018.04.08			
MXA Signal Anlyzer	Keysight	N9020A	MY56060147	2017.04.09	2018.04.08			
Temperature/Humidity	-high on	701.2	TR8-TH	2017.04.10	2019 04 00			
Meter	zhichen	ZC1-2	K0-1	2017.04.10	2018.04.09			

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

#### 6.2. Test Setup



#### 6.3. Limit

>500kHz



## **6.4. Test Procedure**

Test	est Method								
	Refer	eferences Rule Chapter Description							
	ANS	I C63.10	12.4	Emission bandwidth and occupied bandwidth					
	☐ ANSI C63.10		12.4.1	Emission bandwidth (26dB)					
		ANSI C63.10	12.4.2	Occupied bandwidth (99%)					
$\boxtimes$	FCC	KDB 789033	С	Bandwidth Measurement					
	D02v	01r03							
		FCC KDB 789033	C.1	Emission Bandwidth (26dB)					
		D02v01r03							
	$\boxtimes$	FCC KDB 789033	C.2	Minimum Emission Bandwidth for the band					
		D02v01r03		5.725-5.85 GHz (6dB)					
	FCC	KDB 789033	D	99 Percent Occupied Bandwidth					
	D02v	v01r03							

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## 6.5. EUT test Axis definition

Item			6dB band	lwidth						
		Outdoor AP								
		Indoor AP	Indoor AP							
Device Category		Fixed point-to-po	oint AP							
		Outdoor fixed po	oint-to-multip	oint AP						
		Client								
Test mode	Mode	1-12								
		Radiated								
	X Axis		Y	Axis	Z Axis					
Test method		Worst Axis	Worst A	xis 🗌	Worst Axis					
	$\boxtimes$	Conducted	Conducted							
	$\boxtimes$	Chain 1	Chain 2	Chain 3	Chain 4					
			• • •	• •						

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## 6.6. Test Result

Product Name	•	Xiaomi Router HD	Power	:	AC 120V/60Hz
Test Date	• •	2017.08.12	Test Site	• •	TR8
Test Mode	• •	Mode 1~12			
Test Engineer	:	Adam			

Mode 1: Transmi	t by 802.11a			
Channel No.	Frequency	6dB Bandwidth	Limit	Result
	(MHz)	(MHz)	(kHz)	
		Ant1 (Worst Data)		
149	5745	15.68		Pass
157	5785	16.32	>500	Pass
165	5825	16.28		Pass
Mode 2: Transmi	t by 802.11n(20M	Hz)		
Channel No.	Frequency	6dB Bandwidth	Limit	Result
	(MHz)	(MHz)	(kHz)	
		Ant1 (Worst Data)		
149	5745	15.92		Pass
157	5785	17.56	>500	Pass
165	5825	17.55		Pass
Mode 3: Transmit	t by 802.11n(40M	Hz)		
Channel No.	Frequency	6dB Bandwidth	Limit	Result
	(MHz)	(MHz)	(kHz)	
		Ant1 (Worst Data)		
151	5755	32.63	> 500	Pass
159	5795	33.86	>500	Pass
Mode 4: Transmi	t by 802.11ac(20	MHz)		
Channel No.	Frequency	6dB Bandwidth	Limit	Result
	(MHz)	(MHz)	(kHz)	
		Ant1 (Worst Data)		
149	5745	16.78		Pass
157	5785	16.30	>500	Pass
165	5825	17.54		Pass

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Mode 5: Transmit by 802.11ac(40MHz)								
Channel No.	Frequency	6dB Bandwidth	Limit	Result				
	(MHz)	(MHz)	(kHz)					
		Ant1 (Worst Data)						
151	5755	35.48	. 500	Pass				
159	5795	35.10	>500	Pass				
Mode 6: Transmi	t by 802.11ac(80	MHz)						
Channel No.	Frequency	6dB Bandwidth	Limit	Result				
	(MHz)	(MHz)	(kHz)					
		Ant1 (Worst Data)						
155	5775	76.31	>500	Pass				

The worst case of 6dB Bandwidth as below:

## Mode 1: CH149 (5745MHz) Ant 1





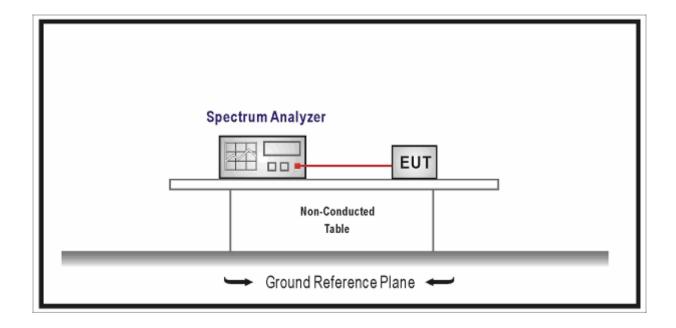
#### 7. Power Output

7.1. Test Equipment

Power Output / TR-8								
Instrument	Manufacturer	Туре No.	Serial No.	Cal. Date	Cal. Due Date			
Spectrum Analyzer	Agilent	E4446A	MY45300103	2017.01.03	2018.01.02			
Spectrum Analyzer	Agilent	N9010A	MY48030494	2017.02.04	2018.02.03			
Wideband Peak Power Meter		ML2495A	0905006	2016.10.14	2017.10.13			
Power Sensor	Anritsu	MA2411B	0846014	2016.10.14	2017.10.13			
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2017.04.10	2018.04.09			

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

#### 7.2. Test Setup





#### **7.3. Limit**

Fund	lame	ental emission output power Limit
$\boxtimes$	For	the band 5.15-5.25 GHz
		Outdoor Xiaomi Router HD: the maximum conducted output power shall not exceed 1 W.
		If $G_{TX} > 6dBi$ , then Pout 30 - ( $G_{TX}$ - 6) and 125mW at any angle above 30 degrees
		Indoor Xiaomi Router HD: the maximum conducted output power shall not exceed 1 W. If
		$G_{TX} > 6dBi$ , then Pout 30 - ( $G_{TX} - 6$ )
		Fixed point-to-point Xiaomi Router HDs: the maximum conducted output power shall not
		exceed 1 W. If $G_{TX} > 23$ dBi, then Pout 30 - ( $G_{TX}$ - 23)
		Mobile and portable client devices: the maximum conducted output power shall not
		exceed 250mW. If $G_{TX} > 6dBi$ , then Pout 24 - ( $G_{TX} - 6$ )
	For	the band 5.25-5.35 GHz:
		the maximum conducted output power shall not exceed 250mW or 11dBm+10 Log B,
		where B is the 26dB emission bandwidth in MHz. If $G_{TX} > 6dBi$ , then Pout (The
		lesser of 24 or 11dBm+10 Log B) - ( GTX - 6)
	For	the 5.47-5.725 GHz:
		the maximum conducted output power shall not exceed 250mW or 11dBm+10 Log B,
		where B is the 26dB emission bandwidth in MHz. If $G_{TX} > 6dBi$ , then Pout (The lesser
		of 24 or 11dBm+10 Log B) - ( G <sub>TX</sub> - 6)
	For	the band 5.725-5.85 GHz:
		Point-to-multipoint systems (P2M): the maximum conducted output power (Pout) shall not
		exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$
	$ _{\Box}$	Point-to-point systems (P2P): the maximum conducted output power (P <sub>Out</sub> ) shall not
		exceed the lesser of 1 W
Note	1:	G⊤x directional gain of transmitting antennas.
Note	2:	P <sub>out</sub> is maximum peak conducted output power .



#### 7.4. Test Procedure

Funda	ament	al em	ission output power 7	Test Method	
		Ref	erences Rule	Chapter	Description
	ANSI	C63.1	10	12.3	Maximum conducted output power
	$\boxtimes$	ANSI C63.10		12.3.2	Maximum conducted output power measurement using a spectrum analyzer (SA) or EMI receiver
			ANSI C63.10	12.3.2.2	Method SA-1
			ANSI C63.10	12.3.2.3	Method SA-1A (alternative)
		$\boxtimes$	ANSI C63.10	12.3.2.4	Method SA-2
		☐ ANSI C63.10 ☐ ANSI C63.10		12.3.2.5	Method SA-2A (alternative)
				12.3.2.6	Method SA-3
			ANSI C63.10	12.3.2.7	Method SA-3A (alternative)
	$\boxtimes$	ANSI	C63.10	12.3.3	Maximum conducted output power using a power meter
			ANSI C63.10	12.3.3.1	Method PM
		$\boxtimes$	ANSI C63.10	12.3.3.2	Method PM-G
$\boxtimes$	KDB	78903	33	Н	Measurement of emission at elevation angle higher than 30° from horizon
	$\boxtimes$	KDB 789033		1	For fixed infrastructure, not electrically or mechanically steerable beam antenna
		$\boxtimes$	KDB 789033	a)	elevation plane radiation pattern is available:
			KDB 789033	b)	elevation plane radiation pattern is not available
		KDB	789033	2	For All Other Types of Antenna

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Direc	tional	Gain Calculations for In-B	and test me	ethod
		References Rule	Chapter	Description
	KDB	662911	F2)a)	Basic methodology with NANT transmit antennas
		KDB 662911	F2)a) (i)	transmit signals are correlated
		KDB 662911	F2)a) (ii)	transmit signals are uncorrelated
	KDB	662911	F2)b)	Sectorized antenna systems.
	KDB	662911	F2)c)	Cross-polarized antennas
		ANSI C63.10	F2)c) (i)	Cross-polarized antennas with NANT = 2.
		ANSI C63.10	F2)c) (ii)	Multiple antennas
	KDB 662911		F2)d)	Sectorized antenna systems.
		KDB 662911	F2)d) (i)	transmit signals are correlated
		KDB 662911	F2)d) (ii)	transmit signals are uncorrelated
$\boxtimes$	KDB	662911	F2)e)	Spatial Multiplexing
	$\boxtimes$	KDB 662911	F2)e) (i)	Antennas have the same gain
		KDB 662911	F2)e) (ii)	Antenna have the different gain with one spatial stream
		KDB 662911	F2)e) (iii)	Antenna have the different gain with more than one spatial stream
$\boxtimes$	KDB	662911	F2)f)	Cyclic Delay Diversity (CDD)
	$\boxtimes$	KDB 662911	F2)f) (i)	Antennas have the same gain
		KDB 662911	F2)f) (ii)	Antenna have the different gain with one spatial stream
		KDB 662911	F2)f) (ii)	Antenna have the different gain with more than one spatial stream

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## 7.5. EUT test Axis definition

Item		Fundamental emission output power							
		Outdoor AP							
		Indoor AP							
Device Category		Fixed point-to-po	oint AP						
		Outdoor fixed po	oint-to-multip	oint AP					
		Client							
Test mode	Mode	: 1-12							
		Radiated							
		X Axis	Y	Axis	Z Axis				
Test method		Worst Axis	Worst A	xis 🗌	Worst Axis				
	$\boxtimes$	Conducted							
	$\boxtimes$	Chain 1	Chain 2	Chain 3	Chain 4				
			• • •	• •					

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## 7.6. Test Result

Product Name	:	Xiaomi Router HD	Power	:	AC 120V/60Hz
Test Date	• •	2017.08.12	Test Site	• •	TR8
Test Mode	• •	Mode 1~12			
Test Engineer	:	Adam		·	

Mode 1: T	ransmit by	802.11a						
Channel	Frequency	M	easureme	ent Power		Total Power	Limit	Result
No.	(MHz)	Ant1	Ant2	Ant3	Ant4	(dBm)	(dBm)	
CH36	5180	16.12	16.23	16.67	15.98	22.28	30.0	Pass
CH40	5200	16.09	16.65	17.14	16.88	22.73	30.0	Pass
CH48	5240	16.54	16.65	17.12	16.32	22.69	30.0	Pass
Channel	Frequency	M	easureme	ent Power	r	Total Power	Limit	Result
No.	(MHz)	Ant1	Ant2	Ant3	Ant4	(dBm)	(dBm)	
CH149	5745	19.88	20.36	19.97	19.99	26.07	30.0	Pass
CH157	5785	19.98	20.22	19.70	19.88	25.97	30.0	Pass
CH165	5825	20.12 20.06 19.99 20.05		26.08	30.0	Pass		
Mode 2: T	ransmit by	802.11n(2	20MHz)					
Channel	Frequency	M	easureme	ent Power	ſ	Total Power	Limit	Result
No.	(MHz)	Ant1	Ant2	Ant3	Ant4	(dBm)	(dBm)	
CH36	5180	15.45	15.67	15.98	15.65	21.71	30.0	Pass
CH40	5200	15.52	15.58	16.12	15.66	21.75	30.0	Pass
CH48	5240	15.58	15.73	16.08	15.62	21.78	30.0	Pass
Channel	Frequency	M	easureme	ent Power	r	Total Power	Limit	Result
No.	(MHz)	Ant1	Ant2	Ant3	Ant4	(dBm)	(dBm)	
CH149	5745	18.03	18.12	18.23	17.98	24.11	30.0	Pass
CH157	5785	17.95	18.01	18.17	17.89	24.03	30.0	Pass
CH165	5825	17.92	17.96	18.08	17.89	23.98	30.0	Pass

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Mode 3: 1	ransmit by	802.11n(4	IOMHz)					
Channel	Frequency	Mea	surement	Power (d	Bm)	Total Power	Limit	Result
No.	(MHz)					(dBm)	(dBm)	
		Ant1	Ant2	Ant3	Ant4			
38	5190	14.83	14.85	14.98	14.86	20.90	30.0	Pass
46	5230	14.98	15.07	15.15	15.06	21.09	30.0	Pass
Channel	Frequency	Mea	surement	Power (d	Bm)	Total Power	Limit	Result
No.	(MHz)					(dBm)	(dBm)	
		Ant1	Ant2	Ant3	Ant4			
151	5755	18.21	18.19	18.45	18.24	24.29	30.0	Pass
159	5795	18.19	18.15	18.35	18.26	24.26	30.0	Pass
Mode 4: 1	ransmit by	802.11ac	(20MHz)					
Channel	Frequency	N	/leasureme	ent Powe	r	Total Power	Limit	Result
No.	(MHz)	Ant1	Ant2	Ant3	Ant4	(dBm)	(dBm)	
CH36	5180	15.52	15.66	15.72	15.45	21.70	30.0	Pass
CH40	5200	15.61	15.56	15.79	15.51	21.73 30.0		Pass
CH48	5240	15.55	15.68	15.84	15.67	21.80	21.80 30.0	
Channel	Frequency	N	/leasureme	ent Powe	r	Total Power	Limit	Result
No.	(MHz)	Ant1	Ant2	Ant3	Ant4	(dBm)	(dBm)	
CH149	5745	18.36	18.27	18.55	18.32	24.49	30.0	Pass
CH157	5785	18.36	18.47	18.65	18.54	24.62	30.0	Pass
CH165	5825	18.43	18.37	18.69	18.55	24.62	30.0	Pass
Mode 5: 1	ransmit by	802.11ac	(40MHz)					
Channel	Frequency	Mea	surement	Power (d	Bm)	Total Power	Limit	Result
No.	(MHz)					(dBm)	(dBm)	
		Ant1	Ant2	Ant3	Ant4			
38	5190	15.58	15.53	15.64	15.62	21.70	30.0	Pass
46	5230	15.62	15.54	15.76	15.65	21.75	30.0	Pass
Channel	Frequency	Mea	surement	Power (d	Bm)	Total Power	Limit	Result
No.	(MHz)					(dBm)	(dBm)	
		Ant1	Ant2	Ant3	Ant4			
151	5755	17.92	17.89	18.02	17.88	24.04	30.0	Pass
159	5795	17.87	17.85	17.98	17.92	24.02	30.0	Pass

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Mode 6: 7	ransmit by	802.11ac	(80MHz)					
Channel No.	hannel Frequency No. (MHz)		surement	t Power (d	Bm)	Total Power (dBm)	Limit (dBm)	Result
		Ant1	Ant2	Ant3	Ant4			
CH42	5210	12.38	12.43	12.56	12.45	18.70	30.0	Pass
Channel No.	Frequency (MHz)	Measurement Power (dBm)		Total Power (dBm)	Limit (dBm)	Result		
		Ant1	Ant2	Ant3	Ant4			
CH155	5775	14.42   14.49   14.56   14.37   20.		20.70	30.0	Pass		
Mode 7: 1	ransmit by	802.11a v	vith Bear	nforming				
Channel	Frequency	M	easurem	ent Power		Total Power	Limit	Result
No.	(MHz)	Ant1	Ant2	Ant3	Ant4	(dBm)	(dBm)	
CH36	5180	16.01	16.12	16.50	15.81	22.31	27.98	Pass
CH42	5220	15.97	16.53	16.96	16.70	22.75	27.98	Pass
CH48	5240	16.30	16.41	16.91	16.11	22.63	27.98	Pass
Channel	Frequency	M	easurem	ent Power	•	Total Power	Limit	Result
No.	(MHz)	Ant1	Ant2	Ant3	Ant4	(dBm)	(dBm)	
CH149	5745	19.72	20.20	19.78	19.80	26.07	27.98	Pass
CH157	5785	19.81	20.05	19.52	19.70	25.96	27.98	Pass
CH165	5825	19.94	19.88	19.80	19.86	26.06	27.98	Pass
Mode 8: 1	ransmit by	802.11n(2	20MHz) w	ith Beam	forming			
	Frequency	M	easurem	ent Power		Total Power	Limit	Result
No.	(MHz)	Ant1	Ant2	Ant3	Ant4	(dBm)	(dBm)	
CH36	5180	15.26	15.48	15.76	15.43	21.51	27.98	Pass
CH42	5220	15.30	15.36	15.89	15.43	21.52	27.98	Pass
CH48	5240	15.35	15.50	15.94	15.48	21.59	27.98	Pass
Channel	Frequency			Total Power	Limit	Result		
No.	(MHz)	Ant1	Ant2	Ant3	Ant4	(dBm)	(dBm)	
CH149	5745	17.89	17.98	18.06	17.81	23.96	27.98	Pass
CH157	5785	17.78	17.84	18.00	17.72	23.86	27.98	Pass
CH165	5825	17.74	17.78	17.90	17.71	23.80	27.98	Pass



Mode 9: T	ransmit by	802.11n(4	0MHz) wi	th Beam	forming			
	Frequency	Mea	surement	Power (d	Bm)	Total Power	Limit	Result
No.	(MHz)					(dBm)	(dBm)	
		Ant1	Ant2	Ant3	Ant4			
38	5190	14.62	14.64	14.77	14.65	20.87	27.98	Pass
46	5230	14.79	14.88	14.96	14.87	21.08	27.98	Pass
Channel No.	Frequency (MHz)	Mea	surement	Power (d	Bm)	Total Power (dBm)	Limit (dBm)	Result
		Ant1 Ant2 Ant3 Ant4				, ,		
151	5755	18.03	18.01	18.27	18.06	24.29	27.98	Pass
159	5795	18.00	17.96	18.16	18.07	24.25	27.98	Pass
Mode 10:	Transmit by	y 802.11ac	(20MHz)	with Bea	mforming			
Channel	Frequency	N	/leasureme	ent Powe	r	Total Power	Limit	Result
No.	(MHz)	Ant1	Ant2	Ant3	Ant4	(dBm)	(dBm)	
CH36	5180	15.30	15.44	15.50	15.23	21.39	27.98	Pass
CH42	5220	15.38	15.33	15.56	15.28	21.41 27.98		Pass
CH48	5240	15.41	15.54	15.70	15.53	21.57	27.98	Pass
Channel	Frequency	N	/leasureme	ent Powe	r	Total Power	Limit	Result
No.	(MHz)	Ant1	Ant2	Ant3	Ant4	(dBm)	(dBm)	
CH149	5745	18.19	18.10	18.38	18.15	24.23	27.98	Pass
CH157	5785	18.12	18.23	18.41	18.30	24.29	27.98	Pass
CH165	5825	18.27	18.21	18.53	18.39	24.37	27.98	Pass
Mode 11:	Transmit by	y 802.11ac	(40MHz)	with Bea	mforming	l		
	Frequency	Mea	surement	Power (d	Bm)	Total Power	Limit	Result
No.	(MHz)					(dBm)	(dBm)	
		Ant1	Ant2	Ant3	Ant4			
38	5190	15.41	15.36	15.47	15.45	21.62	27.98	Pass
46	5230	15.44	15.36	15.58	15.47	21.66	27.98	Pass
Channel No.	Frequency (MHz)	Measurement Power (dBm)				Total Power (dBm)	Limit (dBm)	Result
	,	Ant1	Ant2	Ant3	Ant4	,	,	
151	5755	17.73	17.70	17.83	17.69	23.94	27.98	Pass
159	5795	17.75	17.73	17.82	17.76	23.97	27.98	Pass



Mode 12:	Mode 12: Transmit by 802.11ac(80MHz) with Beamforming								
Channel	Frequency	Mea	suremen	t Power (d	Bm)	Total Power	Limit	Result	
No.	(MHz)					(dBm)	(dBm)		
		Ant1	Ant2	Ant3	Ant4				
CH42	5210	12.14	12.19	12.39	12.28	18.72	27.98	Pass	
Channel	Frequency	Mea	suremen	t Power (d	Bm)	Total Power	Limit	Result	
No.	(MHz)					(dBm)	(dBm)		
		Ant1	Ant2	Ant3	Ant4				
CH155	5775	14.26	14.33	14.38	14.19	20.76	27.98	Pass	

Note 1: Limit = Power Limit – (Directional gain – 6dBi)

Note 2: Regarding Mode4,5,6,7,9,11and12,Total Power = Measured Power + 10log(1/D)

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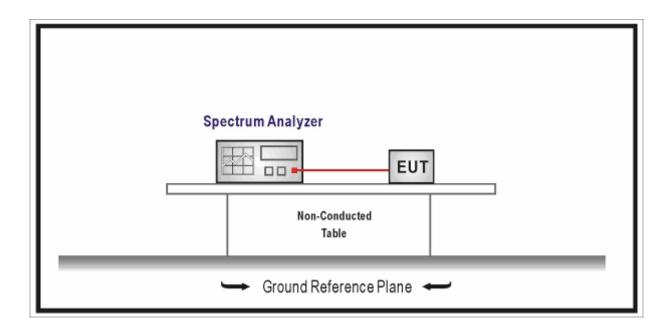
## 8. Peak Power Spectral Density

## 8.1. Test Equipment

Peak Power Spectral Density / TR-8					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2017.02.04	2018.02.03
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2017.04.09	2018.04.08
MXA Signal Anlyzer	Keysight	N9020A	MY56060147	2017.04.09	2018.04.08
Temperature/Humidity	zhichen	ZC1-2	TR8-TH	2017.04.10	2018.04.09
Meter	Znichen	201-2	IRO-IN	2017.04.10	2016.04.09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

## 8.2. Test Setup





## 8.3. Limit

Ро	wer Spectral Density Limit
For	the band 5.15-5.25 GHz
	Outdoor Xiaomi Router HD: the maximum power spectral density shall not exceed 17
	dBm/MHz. If $G_{TX} > 6$ dBi, then Pout 17 - ( $G_{TX} - 6$ )
	Indoor Xiaomi Router HD: the maximum power spectral density shall not exceed 17
	dBm/MHz. If $G_{TX} > 6$ dBi, then Pout 17 - ( $G_{TX} - 6$ )
	Fixed point-to-point Xiaomi Router HDs: the maximum power spectral density shall not
	exceed 17 dBm/MHz. If $G_{TX} > 23$ dBi, then Pout 17 - ( $G_{TX} - 23$ )
	Mobile and portable client devices: the maximum power spectral density shall not exceed
	11 dBm/MHz. If $G_{TX} > 6$ dBi, then Pout 11 - ( $G_{TX}$ - 6)
For	the 5.25-5.35 GHz:
	the maximum power spectral density shall not exceed 11 dBm/MHz. If $G_{TX} > 6$ dBi, then
	Pout 11 - ( G <sub>TX</sub> - 6)
For	the 5.47-5.725 GHz:
	the maximum power spectral density shall not exceed 11 dBm/MHz.lf $G_{TX} > 6dBi$ , then
	Pout 11 - ( G <sub>TX</sub> - 6)
For	the band 5.725-5.85 GHz:
	the maximum power spectral density shall not exceed 30 dBm/500KHz. If $G_{TX}$ > 6dBi, then
	Pout 30 - ( G <sub>TX</sub> - 6)
1:	Gτx directional gain of transmitting antennas.
2:	Pout is maximum peak conducted output power.
	For For 1:

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## 8.4. Test Procedure

Fund	Fundamental emission output power Test Method								
	References Rule	Chapter	Description						
	ANSI C63.10 12.5		Peak power spectral density						
	FCC KDB 789033 D02v01r03	F	Maximum Power Spectral Density (PSD)						

Direc	tional Gain Calculations for In-B	and test me	ethod
	References Rule	Chapter	Description
	KDB 662911	F2)a)	Basic methodology with NANT transmit antennas
	☐ KDB 662911	F2)a) (i)	transmit signals are correlated
	☐ KDB 662911	F2)a) (ii)	transmit signals are uncorrelated
	KDB 662911	F2)b)	Sectorized antenna systems.
	KDB 662911	F2)c)	Cross-polarized antennas
	☐ ANSI C63.10	F2)c) (i)	Cross-polarized antennas with NANT = 2.
	☐ ANSI C63.10	F2)c) (ii)	Multiple antennas
	KDB 662911	F2)d)	Sectorized antenna systems.
	☐ KDB 662911	F2)d) (i)	transmit signals are correlated
	☐ KDB 662911	F2)d) (ii)	transmit signals are uncorrelated
$\boxtimes$	KDB 662911	F2)e)	Spatial Multiplexing
		F2)e) (i)	Antennas have the same gain
	☐ KDB 662911	F2)e) (ii)	Antenna have the different gain with one spatial stream
	☐ KDB 662911	F2)e) (iii)	Antenna have the different gain with more than one spatial stream
$\boxtimes$	KDB 662911	F2)f)	Cyclic Delay Diversity (CDD)
		F2)f) (i)	Antennas have the same gain
	☐ KDB 662911	F2)f) (ii)	Antenna have the different gain with one spatial stream
	☐ KDB 662911	F2)f) (ii)	Antenna have the different gain with more than one spatial stream

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## 8.5. EUT test Axis definition

Item		Peak power spectral density							
		Outdoor AP							
		Indoor AP	Indoor AP						
Device Category		Fixed point-to-p	ooint	: AP					
		Outdoor fixed p	oint	-to-multip	oint AP				
		Client							
Test mode	Mode 1-12								
		Radiated							
		X Axis			Y Axis		Z Axis		
Test method		Worst Axis	]	Worst A	xis 🗌	W	orst Axis 🗌		
	$\boxtimes$	Conducted							
	$\boxtimes$	Chain 1	Cl	hain 2	Chain 3		Chain 4		
				• • •	• •				

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## 8.6. Test Result

Product Name	• •	Xiaomi Router HD	Power	• •	AC 120V/60Hz
Test Date	• •	2017.08.12	Test Site	• •	TR8
Test Mode		Mode 1~12			
Test Engineer	:	Adam			

Mode 1: Transmit by 802.11a									
Channel	Frequency	Measu	urement	Power S <sub>l</sub>	oectral	Total PPSD	Limit	Result	
No.	(MHz)	Density (dBm/MHz)			<u>z</u> )	(dBm/MHz)	(dBm/MHz)		
		Ant1	Ant2	Ant3	Ant4				
CH36	5180	5.445	5.488	5.422	5.478	11.48	14.98	Pass	
CH40	5200	5.493	5.541	5.500	5.366	11.50	14.98	Pass	
CH48	5240	5.525	5.678	5.768	5.557	11.65	14.98	Pass	
Channel	Frequency	Measu	urement	Power Sp	oectral	Total PPSD	Limit	Result	
No.	(MHz)	De	nsity (dE	3m/500KI	Hz)	(dBm/500KHz)	(dBm/500KHz)		
		Ant1	Ant2	Ant3	Ant4				
CH149	5745	5.075	4.811	5.225	5.124	11.08	27.98	Pass	
CH157	5785	4.695	4.732	4.810	4.549	10.72	27.98	Pass	
CH165	5825	4.301	4.474	4.285	4.313	10.36	27.98	Pass	
Mode 2:	Transmit	by 802.1	1n(20Ml	Hz)					
Channel	Frequency	Measu	urement	Power S <sub>l</sub>	oectral	Total PPSD	Limit	Result	
No.	(MHz)		ensity (	dBm/MHz	<u>z</u> )	(dBm/MHz)	(dBm/MHz)		
		Ant1	Ant2	Ant3	Ant4				
CH36	5180	5.012	5.114	5.142	5.134	11.12	14.98	Pass	
CH40	5200	5.131	5.174	5.145	5.097	11.16	14.98	Pass	
CH48	5240	5.297	5.102	5.302	5.207	11.25	14.98	Pass	
Channel	Frequency	Measu	urement	Power Sp	oectral	Total PPSD	Limit	Result	
No.	(MHz)	De	nsity (dE	3m/500KI	Hz)	(dBm/500KHz)	(dBm/500KHz)		
		Ant1	Ant2	Ant3	Ant4				
CH149	5745	4.759	5.309	4.674	4.834	10.92	27.98	Pass	
CH157	5785	4.970	4.574	4.467	4.475	10.65	27.98	Pass	
CH165	5825	4.684	4.393	4.429	4.274	10.47	27.98	Pass	

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Mode 3: 1	Mode 3: Transmit by 802.11n(40MHz)								
	Frequency	Measur	•			Total PPSD	Limit	Result	
No.	(MHz)			Bm/MH	•	(dBm/MHz)	(dBm/MHz)		
	, ,	Ant1	Ant2	Ant3	Ant4		, ,		
CH38	5190	1.202	1.101	1.400	1.404	7.30	14.98	Pass	
CH46	5230	1.336	1.311	1.233	1.489	7.36	14.98	Pass	
Channel	Frequency	Measur	ement F	Power S	pectral	Total PPSD	Limit	Result	
No.	(MHz)	Dens	sity (dB	m/500K	Hz)	(dBm/500KHz)	(dBm/500KHz)		
		Ant1	Ant2	Ant3	Ant4				
CH151	5755	2.201	1.906	1.792	1.747	7.94	27.98	Pass	
CH159	5795	1.848	1.928	1.768	1.694	7.83	27.98	Pass	
Mode 4: Transmit by 802.11ac(20MHz)									
Channel	Frequency	Measur	ement F	Power S	Spectral	Total PPSD	Limit	Result	
No.	(MHz)	De	nsity (d	Bm/MH	z)	(dBm/MHz)	(dBm/MHz)		
		Ant1	Ant2	Ant3	Ant4				
CH36	5180	4.943	5.097	5.171	5.068	11.18	14.98	Pass	
CH40	5200	5.311	5.175	4.995	4.974	11.23	14.98	Pass	
CH48	5240	5.491	5.125	5.312	5.147	11.38	14.98	Pass	
Channel	Frequency	Measur	ement F	Power S	Spectral	Total PPSD	Limit	Result	
No.	(MHz)	Den	sity (dB	m/500K	(Hz)	(dBm/500KHz)	(dBm/500KHz)		
		Ant1	Ant2	Ant3	Ant4				
CH149	5745	5.042	5.095	5.010	4.950	11.14	27.98	Pass	
CH157	5785	4.591	4.482	4.293	4.472	10.57	27.98	Pass	
CH165	5825	4.581	4.443	4.302	4.943	10.68	27.98	Pass	
Mode 5: 7	ransmit by	/ 802.11a	c(40MF	łz)					
Channel	Frequenc	Measure	ement F	Power S	pectral	Total PPSD	Limit	Result	
No.	У	De	nsity (d	Bm/MH	z)	(dBm/MHz)	(dBm/MHz)		
	(MHz)	Ant1	Ant2	Ant3	Ant4				
CH38	5190	2.145	2.146	2.123	2.169	8.26	14.98	Pass	
CH46	5230	2.140	2.341	2.158	2.217	8.33	14.98	Pass	
Channel	Frequenc	Measure	ement F	Power S	pectral	Total PPSD	Limit	Result	
No.	У	Density (dBm/500KHz)		(dBm/500KHz)	(dBm/500KHz)				
	(MHz)	Ant1	Ant2	Ant3	Ant4				
CH151	5755	1.962	2.308	1.815	2.000	8.14	27.98	Pass	

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011450	T	T	1	T			T	_
CH159	5795	2.119		-1	1.933	8.06	27.98	Pass
	Transmit I	Ť	1ac(80M	Hz)		1	1	
Channe	Frequenc	y Meas	urement	Power S	Spectral	Total PPSD	Limit	Result
No.	(MHz)	ı	Density (dBm/MHz)		lz)	(dBm/MHz)	(dBm/MHz)	
		Ant1	Ant2	Ant3	Ant4			
CH42	5210	-5.144	4 -5.128	-5.322	-5.083	1.07	14.98	Pass
Channe	Frequenc	y Meas	urement	Power S	Spectral	Total PPSD	Limit	Result
No.	(MHz)	De	ensity (dE	3m/500K	(Hz)	(dBm/500KHz)	(dBm/500KHz)	
		Ant1	Ant2	Ant3	Ant4	-		
CH155	5775	-4.934	1 -4.948	3 -4.944		1.30	27.98	Pass
	Transmit I	ov 802.1	<u> </u>	_				
	Frequency		rement F			Total PPSD	Limit	Result
No.	(MHz)		ensity (d	•		(dBm/MHz)	(dBm/MHz)	
	,		Ant2	Ant3	, 	,	(- /	
01.100	5400	Ant1			Ant4	44.05	44.00	
CH36	5180	5.445	5.488	5.422	5.478	11.65	14.98	Pass
CH40	5200	5.493	5.541	5.500	5.366	11.67	14.98	Pass
CH48	5240	5.525	5.678	5.768	5.557	11.82	14.98	Pass
	Frequency		Measurement Power Spectral			Total PPSD	Limit	Result
No.	(MHz)	De	nsity (dB	m/500KI	Hz)	(dBm/500KHz)	(dBm/500KHz)	
		Ant1	Ant2	Ant3	Ant4			
CH149	5745	5.075	4.811	5.225	5.124	11.25	27.98	Pass
CH157	5785	4.695	4.732	4.810	4.549	10.89	27.98	Pass
CH165	5825	4.301	4.474	4.285	4.313	10.53	27.98	Pass
Mode 8:	Transmit I	оу 802.1	1n(20MF	lz) with	Beamfo	rming		
Channel	Frequency	Measu	ırement F	Power Sp	oectral	Total PPSD	Limit	Result
No.	(MHz)	D	ensity (d	Bm/MHz	z)	(dBm/MHz)	(dBm/MHz)	
	-	Ant1	Ant2	Ant3	Ant4			
CH36	5180	5.012	5.114	5.142	5.134	11.12	14.98	Pass
CH40	5200	5.131	5.174	5.145	5.097	11.16	14.98	Pass
CH48	5240	5.297	5.102	5.302	5.207	11.25	14.98	Pass
Channel	Frequency	Measu	rement F	Power S	pectral	Total PPSD	Limit	Result
No.	(MHz)	Density (dBm/500KHz)				(dBm/500KHz)		
		Ant1	Ant2	Ant3	Ant4	,	ĺ	
CH149	5745	4.759	5.309	4.674	4.834	10.92	27.98	Pass
CH157	5785	4.759	4.574	4.467	4.475	10.92	27.98	Pass
0.1107	3700	4.570	4.074	4.407	4.473	10.00	۵۲.50	r a > >

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CH165	5825	4.684	4.393	4.429	4.274	10.47	27.98	Pass
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Mode 9: 1	Γransmit by	/ 802.11n	(40MH	z) with	Beamfo	ming			
Channel	Frequency	Measur	ement F	Power S	pectral	Total PPSD	Limit	Result	
No.	(MHz)	Density (dBm/MHz)			z)	(dBm/MHz)	(dBm/MHz)		
		Ant1	Ant2	Ant3	Ant4				
CH38	5190	1.202	1.101	1.400	1.404	7.48	14.98	Pass	
CH46	5230	1.336	1.311	1.233	1.489	7.54	14.98	Pass	
Channel	Frequency	Measur	ement F	Power S	pectral	Total PPSD	Limit	Result	
No.	(MHz)	Dens	sity (dB	m/500K	Hz)	(dBm/500KHz)	(dBm/500KHz)		
		Ant1	Ant2	Ant3	Ant4				
CH151	5755	2.201	1.906	1.792	1.747	8.12	27.98	Pass	
CH159	5795	1.848	1.928	1.768	1.694	8.01	27.98	Pass	
Mode 10: Transmit by 802.11ac(20MHz) with Beamforming									
Channel	Frequency	Measur	ement F	Power S	Spectral	Total PPSD	Limit	Result	
No.	(MHz)	Density (dBm/MHz)			z)	(dBm/MHz)	(dBm/MHz)		
		Ant1	Ant2	Ant3	Ant4				
CH36	5180	4.943	5.097	5.171	5.068	11.09	14.98	Pass	
CH40	5200	5.311	5.175	4.995	4.974	11.14	14.98	Pass	
CH48	5240	5.491	5.125	5.312	5.147	11.29	14.98	Pass	
Channel	Frequency	Measur	ement F	Power S	Spectral	Total PPSD	Limit	Result	
No.	(MHz)	Den	sity (dB	m/500K	(Hz)	(dBm/500KHz)	(dBm/500KHz)		
		Ant1	Ant2	Ant3	Ant4				
CH149	5745	5.042	5.095	5.010	4.950	11.05	27.98	Pass	
CH157	5785	4.591	4.482	4.293	4.472	10.48	27.98	Pass	
CH165	5825	4.581	4.443	4.302	4.943	10.59	27.98	Pass	
Mode 11:	Transmit k	y 802.11	ac(40M	Hz)					
Channel	Frequenc	Measurement Power Spectral			pectral	Total PPSD	Limit	Result	
No.	У	Density (dBm/MHz)			z)	(dBm/MHz)	(dBm/MHz)		
	(MHz)	Ant1	Ant2	Ant3	Ant4				
CH38	5190	2.145	2.146	2.123	2.169	8.17	14.98	Pass	

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CH46	5230	2.140	2.341	2.158	2.217	8.24	14.98	Pass
Channel	Frequenc	Measure	ement F	Power S	Spectral	Total PPSD	Limit	Result
No.	у	Dens	sity (dB	m/500K	(Hz)	(dBm/500KHz)	(dBm/500KHz)	
	(MHz)	Ant1	Ant2	Ant3	Ant4			
CH151	5755	1.962	2.308	1.815	2.000	8.05	27.98	Pass
CH159	5795	2.119	1.949	1.793	1.933	7.97	27.98	Pass
Mode 12:	Transmit	by 802.11	ac(80N	lHz)				
Channel	Frequency	Measur	ement F	Power S	Spectral	Total PPSD	Limit	Result
No.	(MHz)	De	nsity (d	Bm/MH	z)	(dBm/MHz)	(dBm/MHz)	
		Ant1	Ant2	Ant3	Ant4			
CH42	5210	-5.144	-5.128	-5.322	-5.083	1.30	14.98	Pass
Channel	Frequency	Measurement Power Spectral			Spectral	Total PPSD	Limit	Result
No.	(MHz)	Den	sity (dB	m/500K	(Hz)	(dBm/500KHz)	(dBm/500KHz)	

Note1: Limit = Power Density Limit – (Antenna Gain – 6dBi)

Ant1

-4.934

CH155

5775

Ant2

-4.948 -4.944

Ant3

Note2: Regarding Mode4,5,6,7,9,11and12,Total PPSD = Measured Power Spectral Density + 10log(1/D)

The worst case of Peak Power Spectral Density as below:

#### Mode 1 CH48 (5240MHz) Ant 1

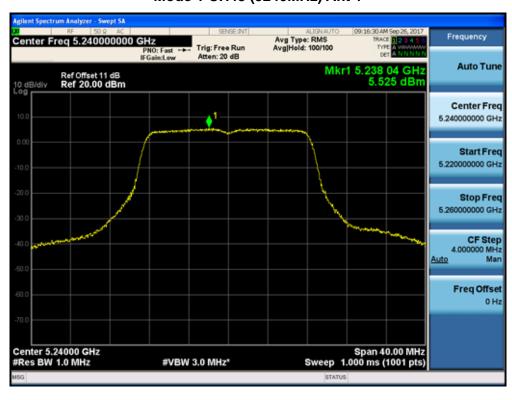
Ant4

-4.919

1.53

27.98

**Pass** 



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Center 5.24000 GHz #Res BW 1.0 MHz

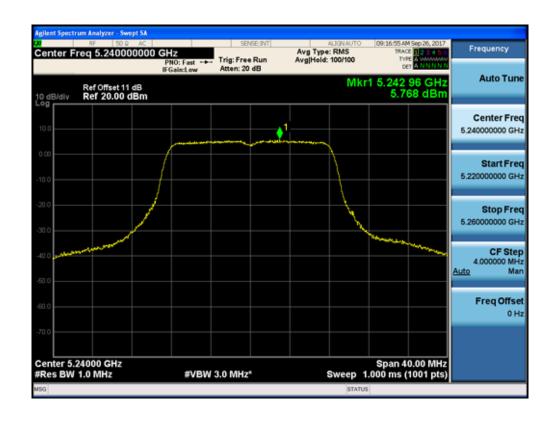




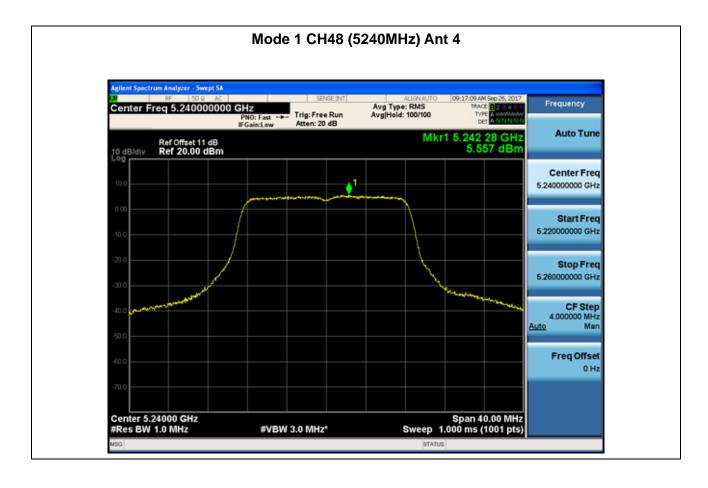
#### Mode 1 CH48 (5240MHz) Ant 3

#VBW 3.0 MHz\*

Span 40.00 MHz Sweep 1.000 ms (1001 pts)









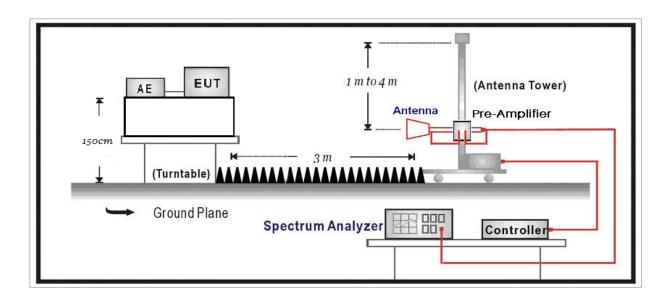
#### 9. Radiated Emission Band Edge

## 9.1. Test Equipment

Radiated Emission Band Edge / AC-5									
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date				
EMI Receiver	Agilent	N9038A	MY51210196	2017.07.16	2018.07.15				
Pre-Amplifier	Miteq	NSP1800-25	1364185	2017.05.03	2018.05.02				
DRG Horn Antenna	ETS-Lindgren	3117	00167055	2017.07.12	2018.07.11				
Broad-Band Horn	Schwarzbeck	BBHA9170	294						
Antenna	Scriwarzbeck	BBI IA9 170		2017.12.12	2018.09.17				
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2017.02.28	2018.02.27				
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2017.02.28	2018.02.27				
Temperature/Humidity									
Meter	Zhichen	ZC1-2	AC5-TH	2017.01.04	2018.01.03				

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

## 9.2. Test Setup





#### 9.3. Limit

FCC Part 15 Subpart C Paragraph 15.209 (Restricted Band Emissions Limit)									
Frequency (MHz)	Distance (m)	Level (dBµV/m)							
0.009-0.490	300	2400/F(kHz)							
0.490-1.705	30	24000/F(kHz)							
1.705-30.0	30	30							
30-88	3	100**							
88-216	3	150**							
216-960	3	200**							
Above 960	3	500							

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

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

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FCC Part 15 Subpart C Paragraph 15.205 (Restricted Band)								
Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (MHz)					
0.090 – 0.110	16.42 – 16.423	399.9 – 410	4.5 – 5.15					
0.495 - 0.505	16.69475 –16.69525	608 – 614	5.35 – 5.46					
2.1735 – 2.1905	16.80425 – 16.80475	960 – 1240	7.25 – 7.75					
4.125 – 4.128	25.5 – 25.67	1300 – 1427	8.025 – 8.5					
4.17725 – 4.17775 37.5 – 38.25		1435 – 1626.5	9.0 – 9.2					
4.20725 – 4.20775 73 – 74.6		1645.5 – 1646.5	9.3 – 9.5					
6.215 – 6.218	6.215 – 6.218 74.8 – 75.2		10.6 – 12.7					
6.26775 – 6.26825	775 – 6.26825 108 – 121.94		13.25 – 13.4					
6.31175 – 6.31225 123 – 138		2200 – 2300	14.47 – 14.5					
8.291 – 8.294	149.9 – 150.05	2310 – 2390	15.35 – 16.2					
8.362 – 8.366	156.52475 – 156.52525	2483.5 – 2500	17.7 – 21.4					
8.37625 – 8.38675		2690 – 2900	22.01 – 23.12					
8.81425 – 8.81475	8.81425 – 8.81475 162.0125 – 167.17		23.6 – 24.0					
12.29 – 12.293 167.72 – 173.2		3332 – 3339	31.2 – 31.8					
12.51975–12.52025 240 – 285		3345.8 – 3358 36.43 – 36.5						
12.57675–12.57725	322 – 335.4	3600 – 4400						
13.36 – 13.41								

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Operating Frequency Band (MHz)	EIRP Limit (dBm/MHz)	Equivalent Field Strength at 3m (dB $\mu$ V/m)	
5150 - 5250	-27	68.3	
5250 - 5350	-27	68.3	
5470 - 5725	-27	68.3	
CC Part 15 Subpart C Paragi	raph 15.407(b)(4)(i)		
Operating Frequency Band (MHz)	EIRP Limit (dBm/MHz)		
5725 - 5825		NII-3 band 5-5850 MHz)	



## 9.4. Test Procedure

Test	Test Method						
	References Rule		Chapter	Description			
	ANSI C63.10		12.7.3	Emissions in non-restricted frequency bands			
$\boxtimes$	ANSI C63.10		12.7.2	Emissions in restricted frequency bands			
			12.7.5	Radiated emission measurements			
	$\boxtimes$	ANSI C63.10	12.7.6	Procedure for peak unwanted emissions			
				measurements above 1000 MHz			
	$\boxtimes$	ANSI C63.10	12.7.7	Procedures for average unwanted emissions			
				measurements above 1000 MHz			
		☐ ANSI C63.10	12.7.7.2	Method AD (average detection)—primary method			
			12.7.7.3	Method VB-A (Alternative)			
	$\boxtimes$	ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices			
	✓ ANSI C63.10			below 30 MHz			
			6.5	Radiated emissions from unlicensed wireless devices			
				in the frequency range			
				of 30 MHz to 1000 MHz			
			6.6	Radiated emissions from unlicensed wireless devices			
				above 1 GHz			
	FCC KDB 789033		G.2	Unwanted Emissions that fall Outside of the			
	D02v01r03			Restricted Bands			
	FCC KDB 789033		G.1	Unwanted Emissions in the Restricted Bands			
	D02v01r03						
	☐ FCC KDB 789033		G.4	Procedure for Unwanted Emissions Measurement			
	D02v01r03			below 1000 MHz			
	☐ FCC KDB 789033		G.5	Procedure for Unwanted Maximum Emissions			
	D02v01r03			Measurements above 1000 MHz			
	☐ FCC KDB 789033		G.6	Procedures for Average Unwanted Emissions			
	D02v01r03			Measurements above 1000 MHz			
		D02v01r03	G.6.c	Method AD (Average detection)—primary method			
		☐ FCC KDB 789033	G.6.d	Method VB (Averaging using reduced video			
		D02v01r03		bandwidth): Alternative method.			

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# 9.5. EUT test Axis definition

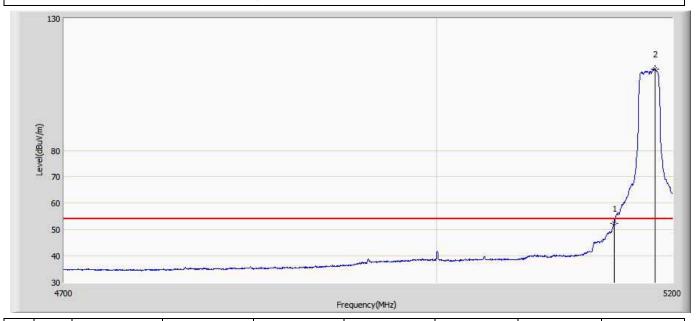
Item		Radiated Emission Band Edge			
Device Category		Outdoor AP			
		Indoor AP			
		Fixed point-to-point AP			
		Outdoor fixed point-to-multipoint AP			
		Client			
Test mode	Mode 1-12				
		Radiated			
		X Axis	Y Axis	Z Axis	
Test method		Worst Axis 🖂	Worst Axis	Worst Axis	
		Conducted			
		Chain 1 C	hain 2 Chain 3	Chain 4	
			• • • •		

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## 9.6. Test Result

Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 14:26			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 1:Transmit at channel 5180MHz by 11A				

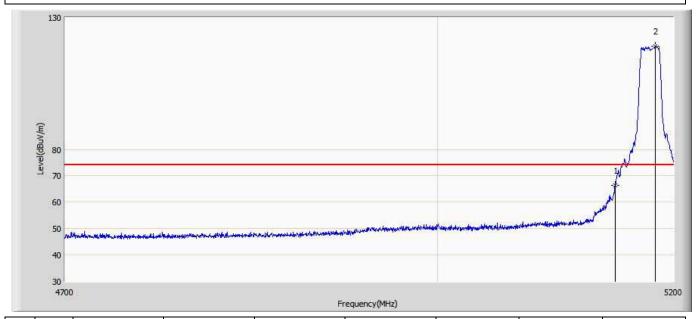


No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	52.412	15.747	-1.588	54.000	36.665	AV
2	*	5185.000	110.725	74.160	56.725	54.000	36.565	AV



Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 14:37			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 1:Transmit at channel 5180MHz by 11A				

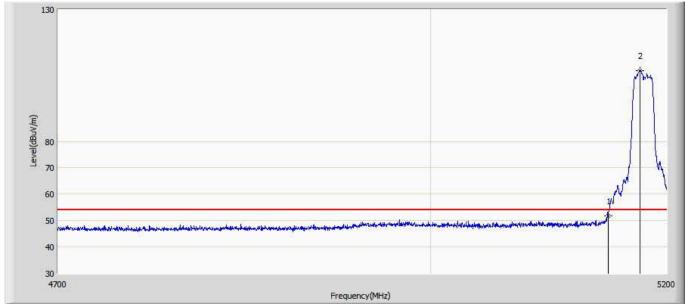
Note: Mode 1:Transmit at channel 5180MHz by 11A



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	66.488	29.823	-7.512	74.000	36.665	PK
2	*	5184.250	119.099	82.533	45.099	74.000	36.566	PK



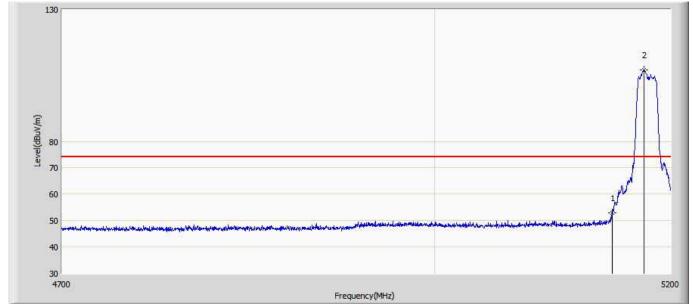
Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 14:41			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 1:Transmit at channel 5180MHz by 11A				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	51.691	15.026	-2.309	54.000	36.665	AV
2	*	5177.000	106.887	70.270	52.887	54.000	36.617	AV



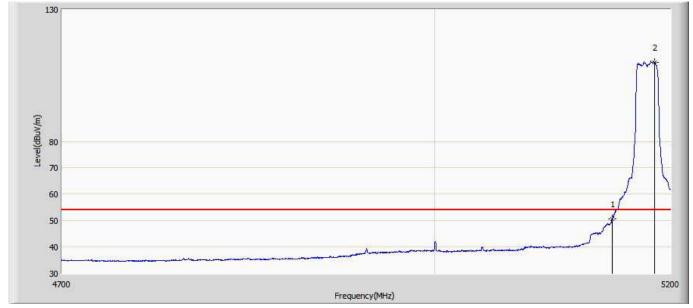
Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 14:45			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 1:Transmit at channel 5180MHz by 11A				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	53.049	16.384	-20.951	74.000	36.665	PK
2	*	5177.500	107.039	70.427	33.039	74.000	36.612	PK



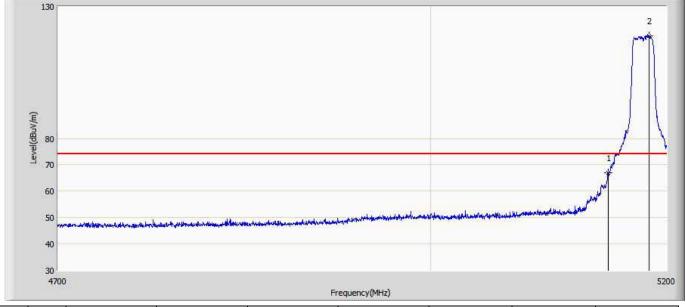
Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 14:51			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 2:Transmit at channel 5180MHz by 11N20				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	50.583	13.918	-3.417	54.000	36.665	AV
2	*	5186.500	110.061	73.498	56.061	54.000	36.563	AV



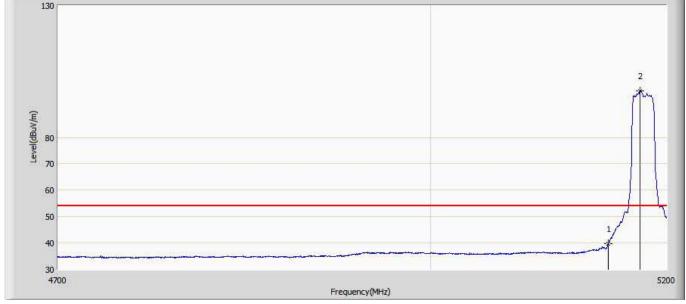
Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 14:59			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 2:Transmit at channel 5180MHz by 11N20				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	66.871	30.206	-7.129	74.000	36.665	PK
2	*	5185.000	118.952	82.387	44.952	74.000	36.565	PK



Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 15:02			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 2:Transmit at channel 5180MHz by 11N20				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	39.676	3.011	-14.324	54.000	36.665	AV
2	*	5177.000	97.717	61.100	43.717	54.000	36.617	AV



Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 15:05			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 2:Transmit at channel 5180MHz by 11N20				

No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	54.046	17.381	-19.954	74.000	36.665	PK
2	*	5178.250	107.609	71.004	33.609	74.000	36.605	PK



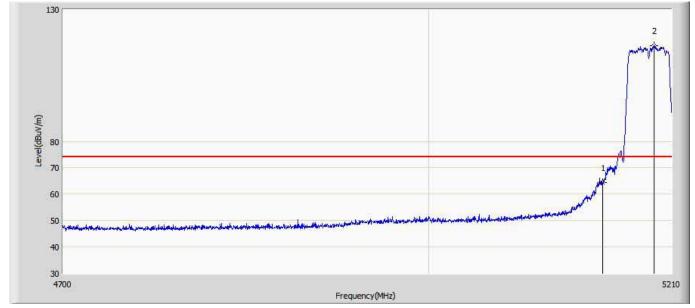
Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 15:19			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 3:Transmit at channel 5190MHz by 11N40				

130 (W) 88 80 40 50 40 50 Frequency(MHz)

No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	52.252	15.587	-1.748	54.000	36.665	AV
2	*	5195.465	106.457	69.906	52.457	54.000	36.551	AV



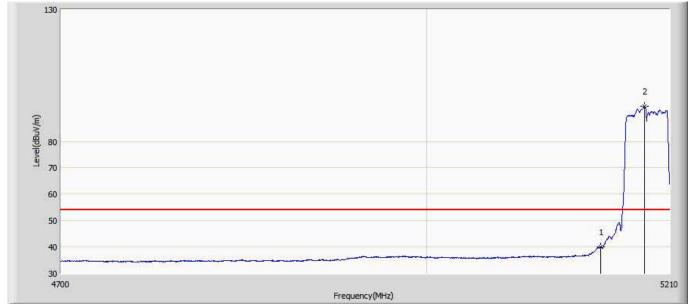
Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 15:24			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 3:Transmit at channel 5190MHz by 11N40				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	64.450	27.785	-9.550	74.000	36.665	PK
2	*	5194.955	116.190	79.639	42.190	74.000	36.551	PK



Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 15:27			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 3:Transmit at channel 5190MHz by 11N40				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	39.910	3.245	-14.090	54.000	36.665	AV
2	*	5188.070	93.244	56.683	39.244	54.000	36.561	AV



Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 15:30			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 3:Transmit at channel 5190MHz by 11N40				

No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	51.898	15.233	-22.102	74.000	36.665	PK
2	*	5186.540	102.599	66.036	28.599	74.000	36.563	PK

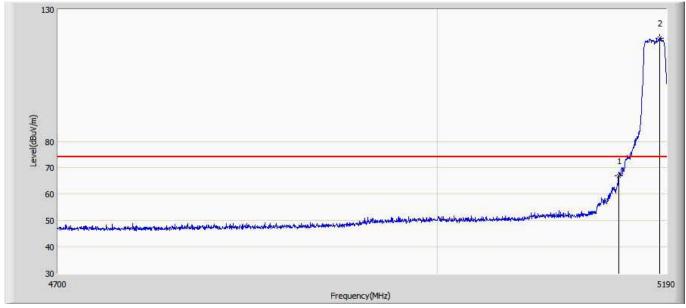


Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 15:36			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 4:Transmit at channel 5180MHz by 11AC20				

No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	50.291	13.626	-3.709	54.000	36.665	AV
2	*	5186.570	109.699	73.136	55.699	54.000	36.563	AV



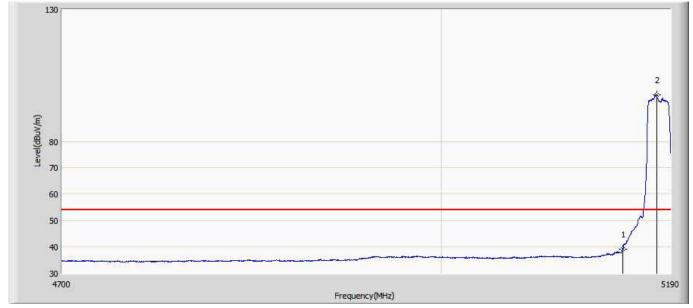
Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 15:50			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 4:Transmit at channel 5180MHz by 11AC20				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	66.912	30.247	-7.088	74.000	36.665	PK
2	*	5184.120	119.141	82.575	45.141	74.000	36.566	PK



Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 15:54			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 4:Transmit at channel 5180MHz by 11AC20				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	39.091	2.426	-14.909	54.000	36.665	AV
2	*	5178.240	97.562	60.957	43.562	54.000	36.605	AV

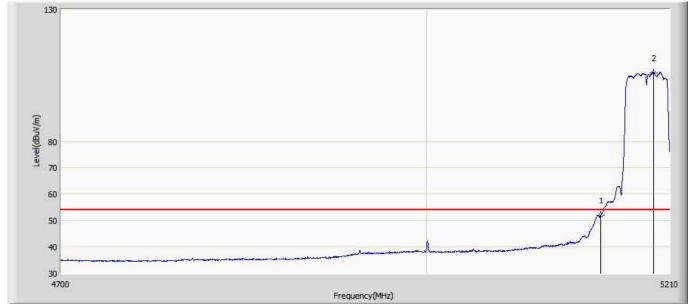


Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 15:59			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 4:Transmit at channel 5180MHz by 11AC20				

No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	54.055	17.390	-19.945	74.000	36.665	PK
2	*	5176.770	107.356	70.737	33.356	74.000	36.619	PK



Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 16:04			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 5:Transmit at channel 5190MHz by 11AC40				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	52.184	15.519	-1.816	54.000	36.665	AV
2	*	5196.230	106.030	69.480	52.030	54.000	36.550	AV

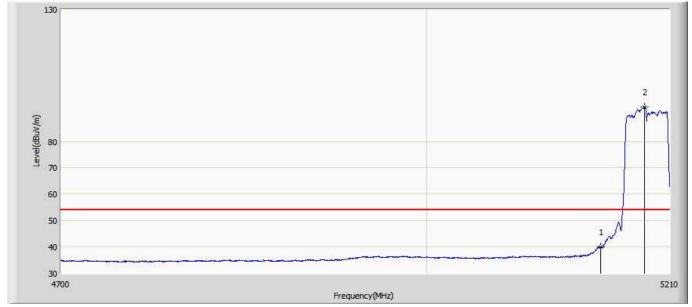


Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 16:14			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 5:Transmit at channel 5190MHz by 11AC40				

No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	65.146	28.481	-8.854	74.000	36.665	PK
2	*	5196.230	115.529	78.979	41.529	74.000	36.550	PK



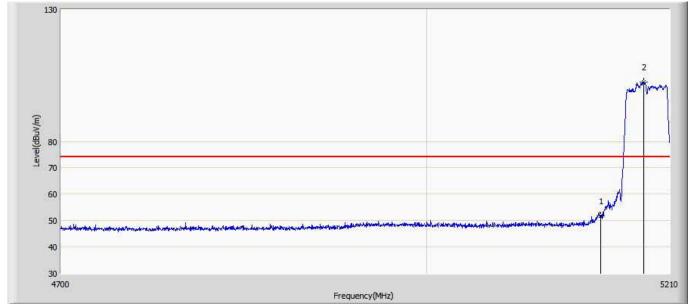
Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 16:18			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 5:Transmit at channel 5190MHz by 11AC40				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	40.131	3.466	-13.869	54.000	36.665	AV
2	*	5187.815	93.111	56.550	39.111	54.000	36.561	AV



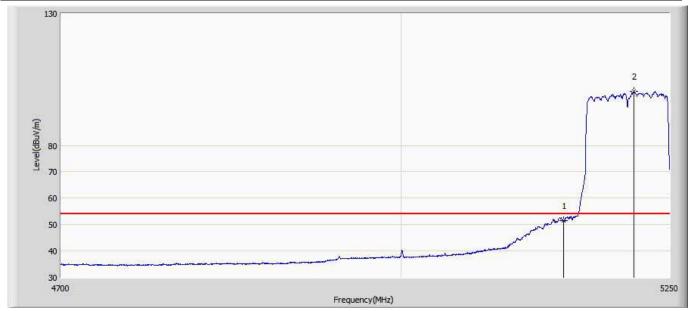
Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 16:23			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 5:Transmit at channel 5190MHz by 11AC40				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	51.774	15.109	-22.226	74.000	36.665	PK
2	*	5187.050	102.481	65.919	28.481	74.000	36.562	PK



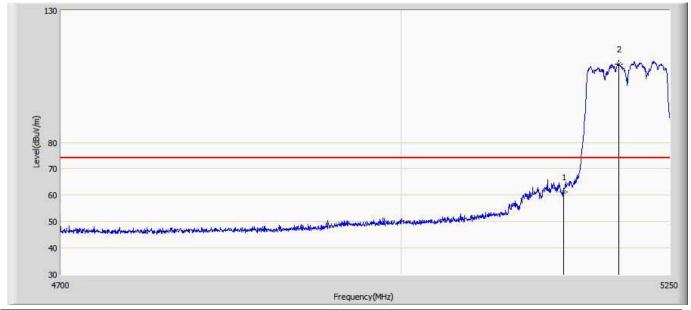
Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 16:27			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 6:Transmit at channel 5210MHz by 11AC80				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	51.375	14.710	-2.625	54.000	36.665	AV
2	*	5216.175	100.382	63.643	46.382	54.000	36.739	AV



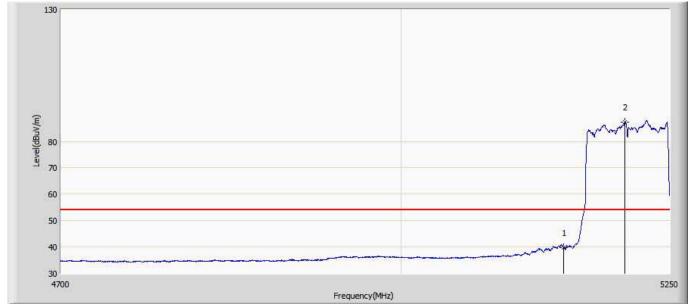
Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 16:30			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 6:Transmit at channel 5210MHz by 11AC80				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	61.194	24.529	-12.806	74.000	36.665	PK
2	*	5201.600	109.740	73.164	35.740	74.000	36.576	PK



Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 16:31			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 6:Transmit at channel 5210MHz by 11AC80				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	39.812	3.147	-14.188	54.000	36.665	AV
2	*	5207.650	87.356	50.712	33.356	54.000	36.644	AV



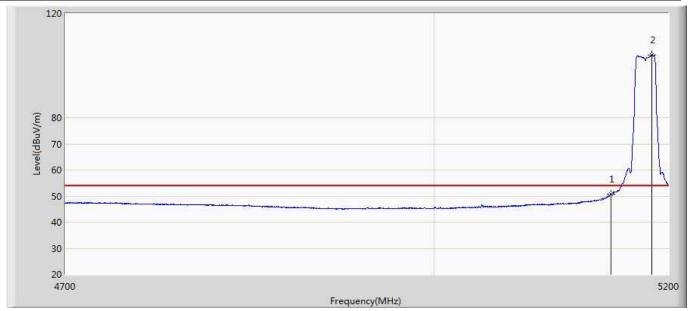
Engineer:Damon				
Site: AC5	Time: 2017/07/21 - 16:33			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 6:Transmit at channel 5210MHz by 11AC80				

No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	51.187	14.522	-22.813	74.000	36.665	PK
2	*	5207.925	97.265	60.618	23.265	74.000	36.647	PK



## With Beamforming

Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 15:23			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 7:Transmit at channel 5180MHz by 11A with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	50.712	10.658	-3.288	54.000	40.054	AV
2	*	5185.250	104.047	63.923	50.047	54.000	40.124	AV

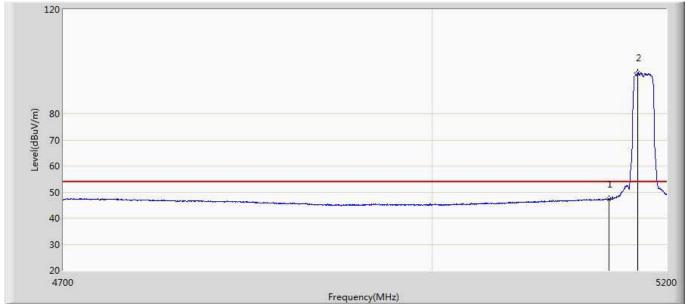


Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 15:28			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 7:Transmit at channel 5180MHz by 11A with Reamforming				

	Frequency(MHz)							
No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	64.754	24.700	-9.246	74.000	40.054	PK
2	*	5184.750	114.291	74.167	40.291	74.000	40.124	PK



Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 15:30			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 7:Transmit at channel 5180MHz by 11A with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	47.339	7.285	-6.661	54.000	40.054	AV
2	*	5175.250	95.727	55.615	41.727	54.000	40.111	AV



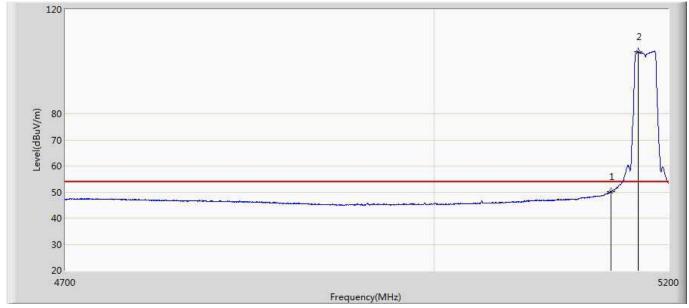
Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 15:31			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 7:Transmit at channel 5180MHz by 11A with Beamforming				

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No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	59.733	19.679	-14.267	74.000	40.054	PK
2	*	5177.750	105.477	65.362	31.477	74.000	40.116	PK



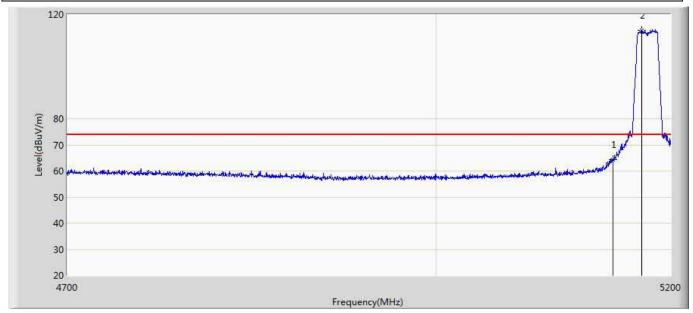
Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 15:38			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 8:Transmit at channel 5180MHz by 11N20 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	50.004	9.950	-3.996	54.000	40.054	AV
2	*	5173.500	103.750	63.641	49.750	54.000	40.110	AV



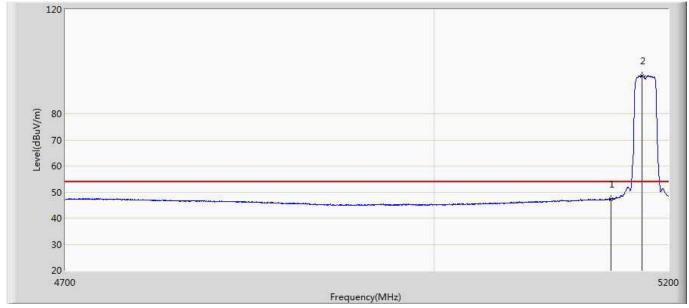
Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 15:39			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 8:Transmit at channel 5180MHz by 11N20 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	64.249	24.195	-9.751	74.000	40.054	PK
2	*	5175.250	114.008	73.896	40.008	74.000	40.111	PK



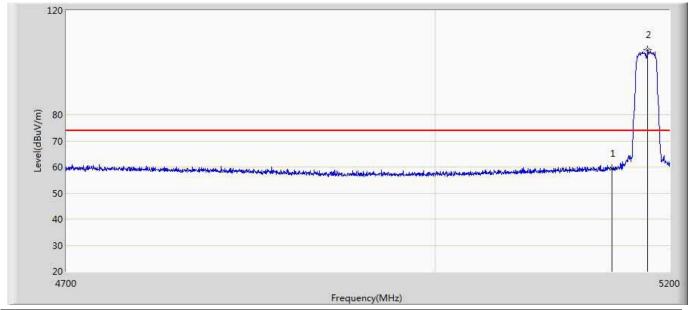
Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 15:41			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 8:Transmit at channel 5180MHz by 11N20 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	47.320	7.266	-6.680	54.000	40.054	AV
2	*	5176.750	94.482	54.368	40.482	54.000	40.114	AV



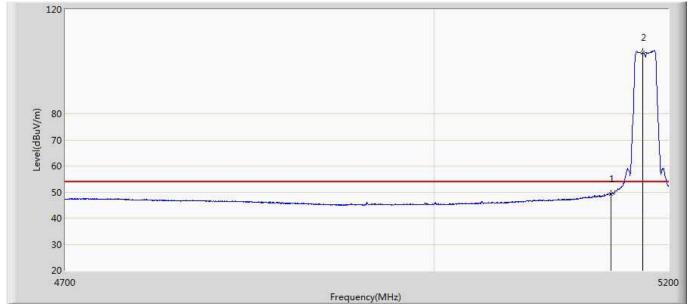
Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 15:42			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 8:Transmit at channel 5180MHz by 11N20 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	59.349	19.295	-14.651	74.000	40.054	PK
2	*	5181.250	105.066	64.945	31.066	74.000	40.121	PK



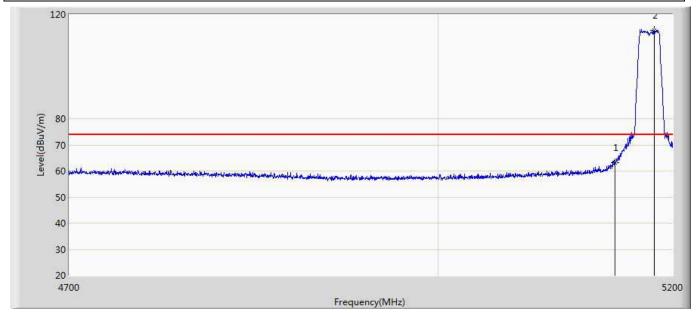
Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 15:44			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 9:Transmit at channel 5180MHz by 11AC20 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	49.246	9.192	-4.754	54.000	40.054	AV
2	*	5177.500	103.425	63.310	49.425	54.000	40.116	AV



Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 15:46			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 9:Transmit at channel 5180MHz by 11AC20 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	63.253	23.199	-10.747	74.000	40.054	PK
2	*	5184.000	113.992	73.868	39.992	74.000	40.124	PK



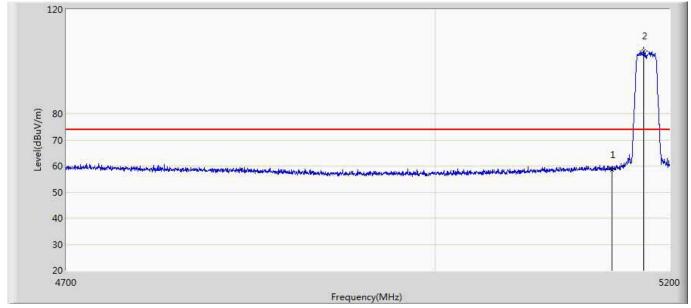
Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 15:48			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 9:Transmit at channel 5180MHz by 11AC20 with Beamforming				

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No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	47.104	7.050	-6.896	54.000	40.054	AV
2	*	5178.500	94.707	54.590	40.707	54.000	40.116	AV



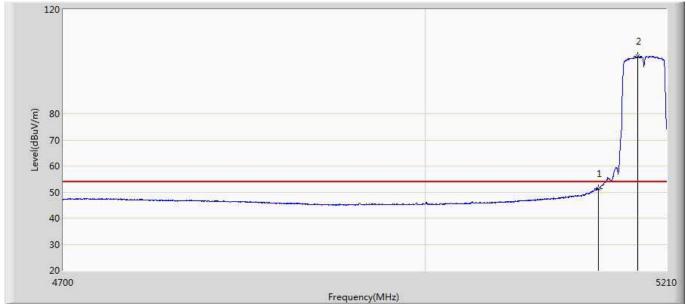
Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 15:49			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 9:Transmit at channel 5180MHz by 11AC20 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	58.525	18.471	-15.475	74.000	40.054	PK
2	*	5177.750	103.933	63.817	29.933	74.000	40.116	PK



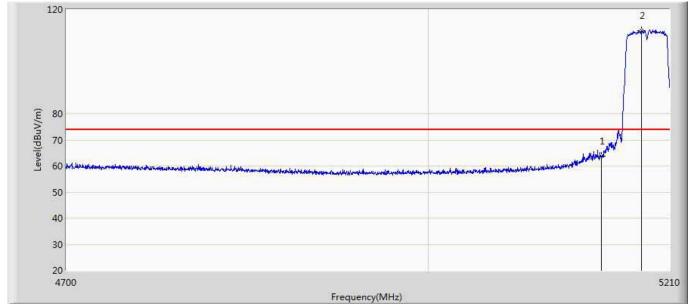
Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 15:52			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 10:Transmit at channel 5190MHz by 11N40 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	51.327	11.273	-2.673	54.000	40.054	AV
2	*	5184.755	101.896	61.772	47.896	54.000	40.124	AV



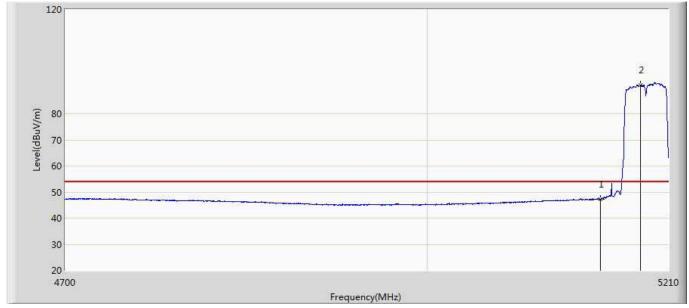
Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 15:54			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 10:Transmit at channel 5190MHz by 11N40 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	63.689	23.635	-10.311	74.000	40.054	PK
2	*	5185.265	112.025	71.901	38.025	74.000	40.124	PK



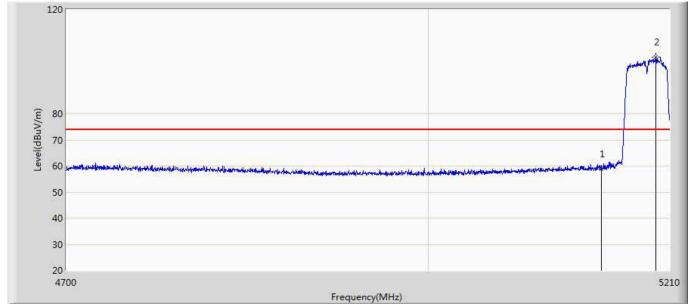
Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 15:56			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 10:Transmit at channel 5190MHz by 11N40 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	47.320	7.266	-6.680	54.000	40.054	AV
2	*	5185.010	91.107	50.983	37.107	54.000	40.124	AV



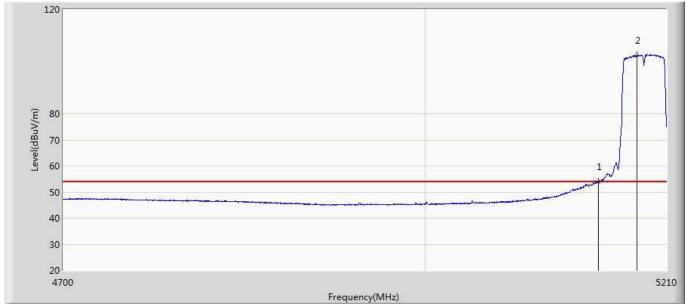
Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 15:59			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 10:Transmit at channel 5190MHz by 11N40 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	58.871	18.817	-15.129	74.000	40.054	PK
2	*	5198.015	101.625	61.491	27.625	74.000	40.134	PK



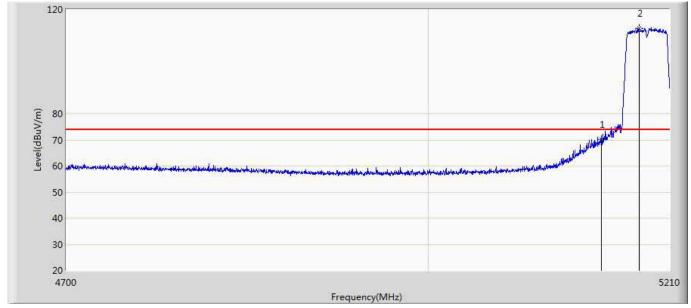
Engineer: Damon					
Site: AC5	Time: 2017/09/24 - 16:00				
Limit: FCC_Part15.209_RE(3m)	Margin: 0				
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical				
EUT: Xiaomi Router HD	Power: AC 120V/60Hz				
Note: Mode 11:Transmit at channel 5190MHz by 11AC40 with Beamforming					



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	53.928	13.874	-0.072	54.000	40.054	AV
2	*	5183.735	102.295	62.172	48.295	54.000	40.124	AV



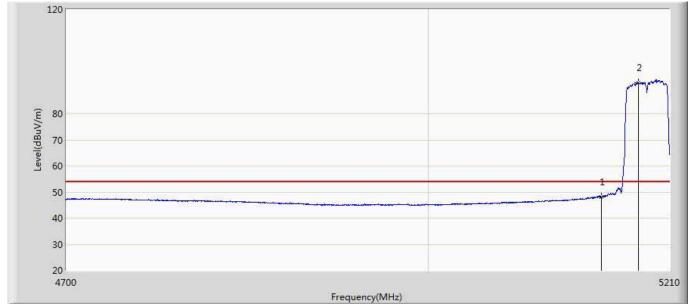
Engineer: Damon					
Site: AC5	Time: 2017/09/24 - 16:02				
Limit: FCC_Part15.209_RE(3m)	Margin: 0				
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical				
EUT: Xiaomi Router HD	Power: AC 120V/60Hz				
Note: Mode 11:Transmit at channel 5190MHz by 11AC40 with Beamforming					



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	70.252	30.198	-3.748	74.000	40.054	PK
2	*	5182.970	112.708	72.585	38.708	74.000	40.123	PK



Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:04			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 11:Transmit at channel 5190MHz by 11AC40 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	48.099	8.045	-5.901	54.000	40.054	AV
2	*	5182.205	91.936	51.814	37.936	54.000	40.122	AV



Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:05			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 11:Transmit at channel 5190MHz by 11AC40 with Beamforming				

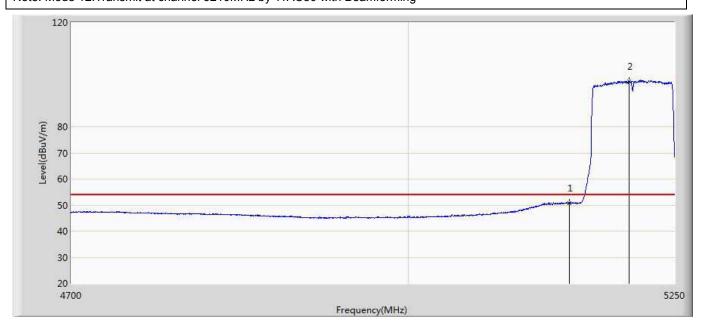
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No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	59.537	19.483	-14.463	74.000	40.054	PK
2	*	5193.935	101.989	61.858	27.989	74.000	40.131	PK

Frequency(MHz)



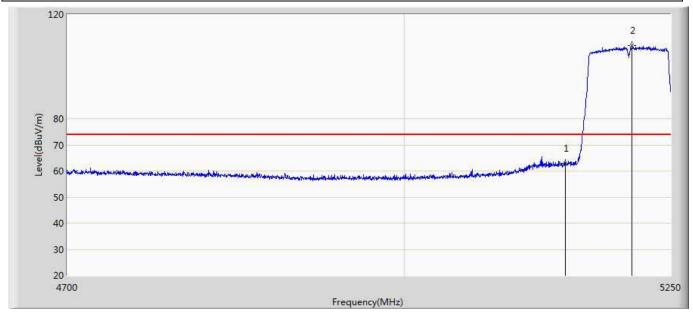
Frairra Damas				
Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:06			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 12:Transmit at channel 5210MHz by 11AC80 with Reamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	50.830	10.776	-3.170	54.000	40.054	AV
2	*	5206.825	97.527	57.386	43.527	54.000	40.142	AV



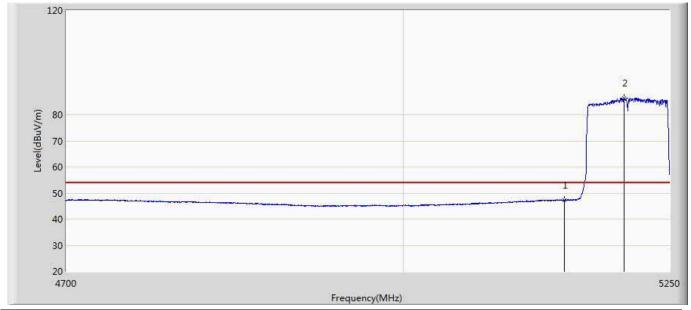
Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:08			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 12:Transmit at channel 5210MHz by 11AC80 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	62.873	22.819	-11.127	74.000	40.054	PK
2	*	5213.150	108.033	67.886	34.033	74.000	40.147	PK



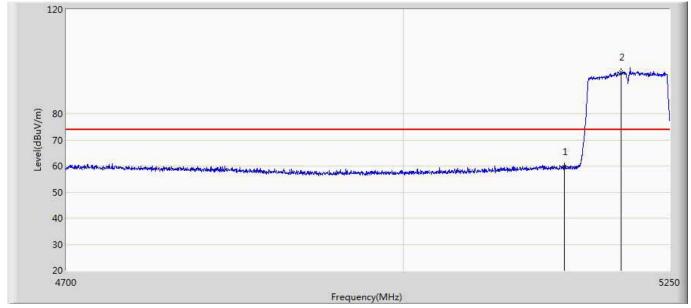
Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:10			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 12:Transmit at channel 5210MHz by 11AC80 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	47.350	7.296	-6.650	54.000	40.054	AV
2	*	5206.275	86.459	46.318	32.459	54.000	40.141	AV



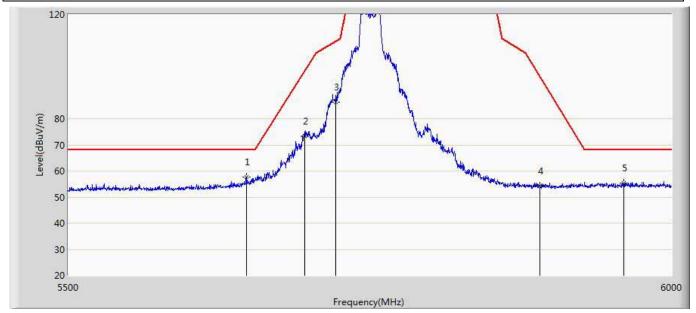
Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:11			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 12:Transmit at channel 5210MHz by 11AC80 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5150.000	59.611	19.557	-14.389	74.000	40.054	PK
2	*	5203.250	95.946	55.808	21.946	74.000	40.138	PK



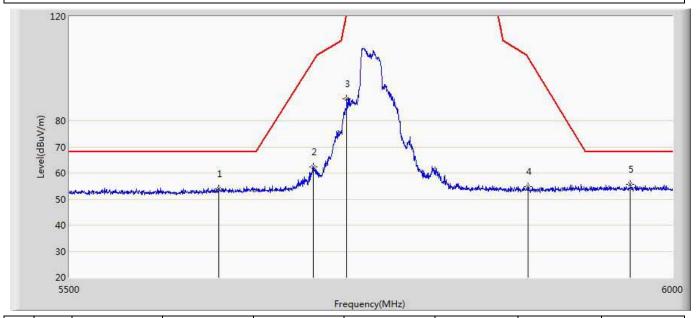
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 19:11			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 1:Transmit at channel 5745MHz by 11A				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	5643.250	57.562	16.567	-10.638	68.200	40.995	PK
2		5691.000	73.442	32.449	-25.098	98.540	40.994	PK
3		5716.250	86.303	45.168	-23.447	109.750	41.135	PK
4		5887.250	54.069	12.693	-42.066	96.135	41.376	PK
5		5959.000	55.409	13.821	-12.791	68.200	41.588	PK



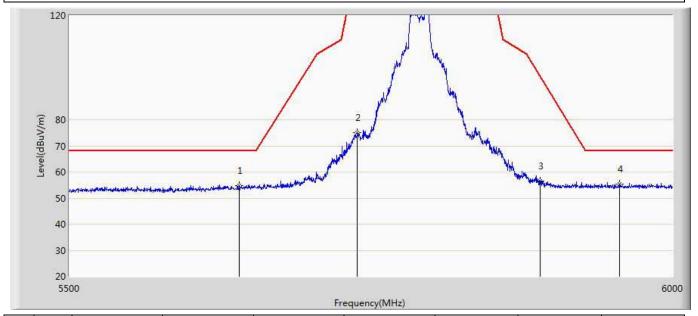
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 19:33			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 1:Transmit at channel 5745MHz by 11A				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5620.000	54.025	13.051	-14.175	68.200	40.974	PK
2		5697.000	62.234	21.186	-40.746	102.980	41.048	PK
3		5724.750	88.458	47.372	-33.172	121.630	41.086	PK
4		5876.250	54.737	13.363	-49.538	104.275	41.374	PK
5	*	5963.500	55.632	14.041	-12.568	68.200	41.590	PK



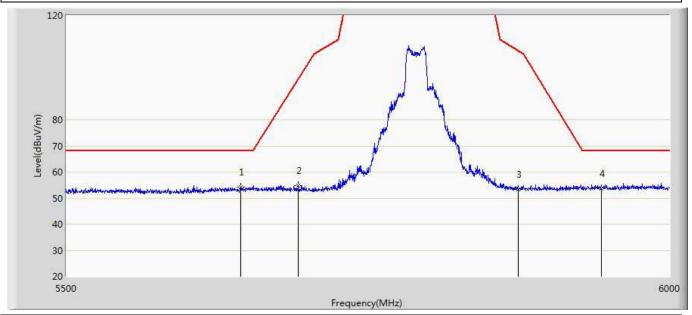
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 19:37			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 1:Transmit at channel 5785MHz by 11A				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5636.750	54.643	13.648	-13.557	68.200	40.995	PK
2		5733.250	74.982	33.863	-47.218	122.200	41.118	PK
3		5886.500	56.552	15.176	-40.138	96.690	41.376	PK
4	*	5954.500	55.461	13.876	-12.739	68.200	41.585	PK



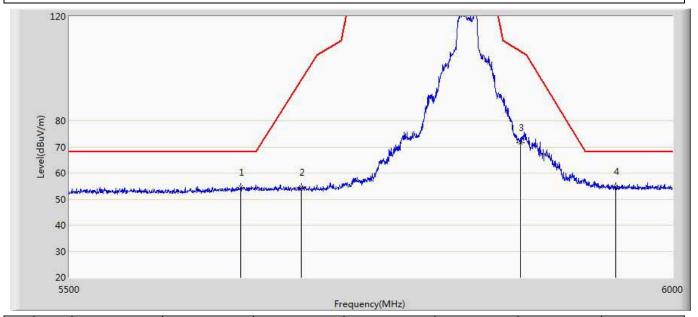
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 19:41			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 1:Transmit at channel 5785MHz by 11A				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	5640.000	54.093	13.097	-14.107	68.200	40.996	PK
2		5687.250	54.846	13.855	-40.919	95.765	40.991	PK
3		5870.500	53.248	11.886	-53.211	106.460	41.363	PK
4		5941.250	53.594	12.018	-14.606	68.200	41.576	PK



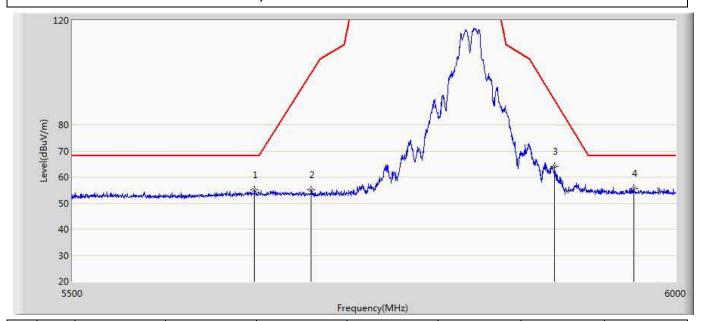
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 19:43			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 1:Transmit at channel 5825MHz by 11A				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5638.000	54.491	13.496	-13.709	68.200	40.995	PK
2		5687.250	54.522	13.531	-41.243	95.765	40.991	PK
3		5869.750	71.520	30.159	-35.150	106.670	41.361	PK
4	*	5951.000	54.661	13.078	-13.539	68.200	41.583	PK



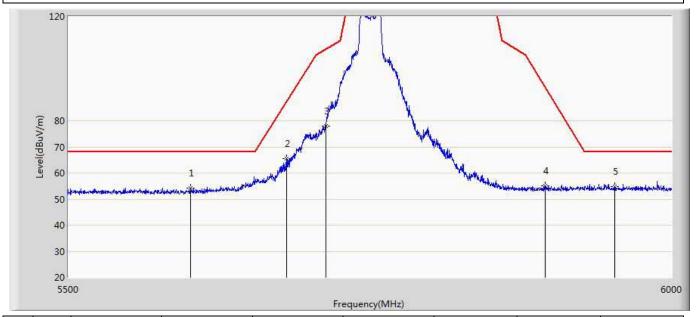
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 19:46			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 1:Transmit at channel 5825MHz by 11A				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5646.750	54.954	13.961	-13.246	68.200	40.993	PK
2		5692.750	54.965	13.963	-44.870	99.835	41.002	PK
3		5896.250	64.004	22.631	-25.471	89.475	41.373	PK
4	*	5964.000	55.650	14.059	-12.550	68.200	41.591	PK



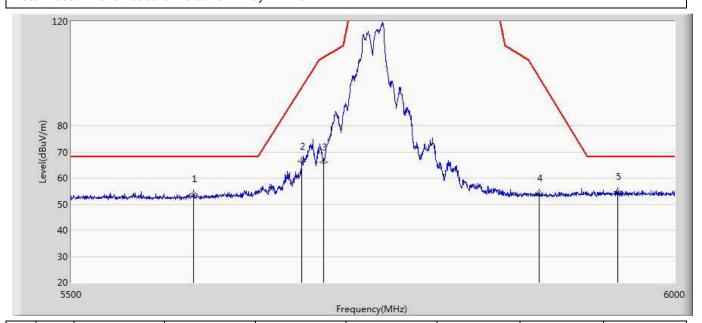
Engineer:Damon					
Site: AC5	Time: 2017/09/05 - 19:49				
Limit: FCC_Part15.209_RE(3m)	Margin: 0				
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical				
EUT: Xiaomi Router HD	Power: AC 120V/60Hz				
Note: Mode 2:Transmit at channel 5745MHz by 11N 20					



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5597.750	54.125	13.266	-14.075	68.200	40.859	PK
2		5676.000	65.537	24.552	-21.903	87.440	40.984	PK
3		5708.250	77.905	36.736	-29.605	107.510	41.169	PK
4		5891.500	55.161	13.787	-37.829	92.990	41.374	PK
5	*	5951.000	54.704	13.121	-13.496	68.200	41.583	PK



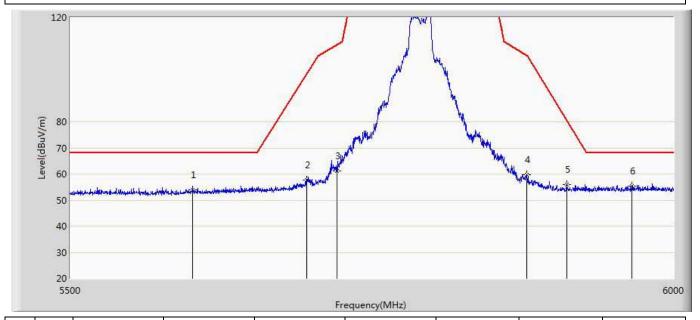
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 19:50			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 2:Transmit at channel 5745MHz by 11N 20				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5598.250	53.838	12.976	-14.362	68.200	40.862	PK
2		5686.000	66.244	25.254	-28.596	94.840	40.991	PK
3		5703.750	65.988	24.868	-40.262	106.250	41.121	PK
4		5884.250	54.168	12.790	-44.187	98.355	41.377	PK
5	*	5951.000	54.704	13.121	-13.496	68.200	41.583	PK



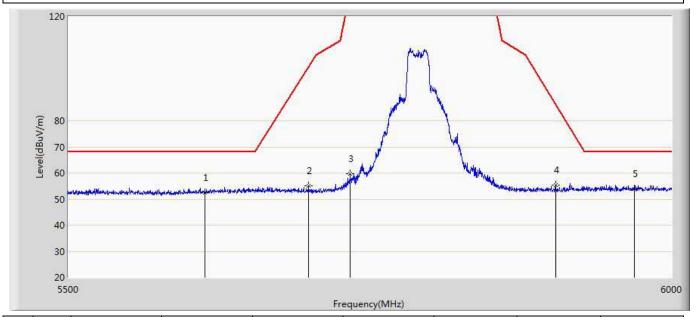
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 19:52			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 2:Transmit at channel 5785MHz by 11N 20				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5598.250	53.838	12.976	-14.362	68.200	40.862	PK
2		5690.750	57.812	16.819	-40.543	98.355	40.993	PK
3		5716.000	61.150	20.013	-48.530	109.680	41.136	PK
4		5874.250	59.714	18.344	-45.696	105.410	41.370	PK
5		5908.250	55.936	14.517	-24.659	80.595	41.419	PK
6	*	5964.000	55.239	13.648	-12.961	68.200	41.591	PK



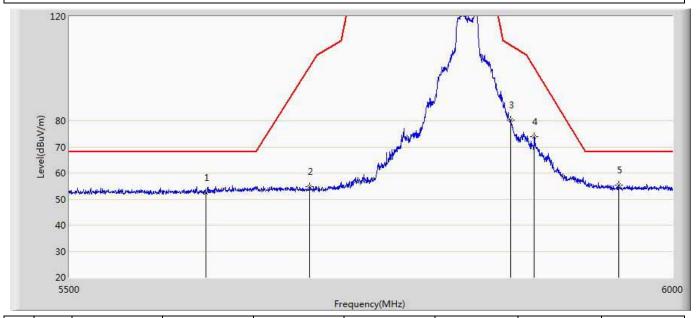
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 19:54			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 2:Transmit at channel 5785MHz by 11N 20				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5609.500	52.342	11.412	-15.858	68.200	40.930	PK
2		5694.250	54.945	13.927	-46.000	100.945	41.018	PK
3		5728.250	59.641	18.550	-62.559	122.200	41.091	PK
4		5900.500	55.247	13.858	-31.083	86.330	41.389	PK
5	*	5968.250	53.836	12.240	-14.364	68.200	41.596	PK



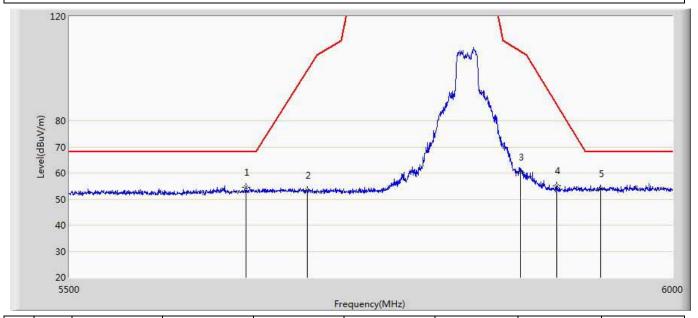
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 19:55			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 2:Transmit at channel 5825MHz by 11N 20				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5609.500	52.342	11.412	-15.858	68.200	40.930	PK
2		5694.250	54.743	13.725	-46.202	100.945	41.018	PK
3		5861.750	80.422	39.076	-28.488	108.910	41.346	PK
4		5881.500	74.026	32.647	-26.364	100.390	41.378	PK
5	*	5953.500	55.494	13.910	-12.706	68.200	41.584	PK



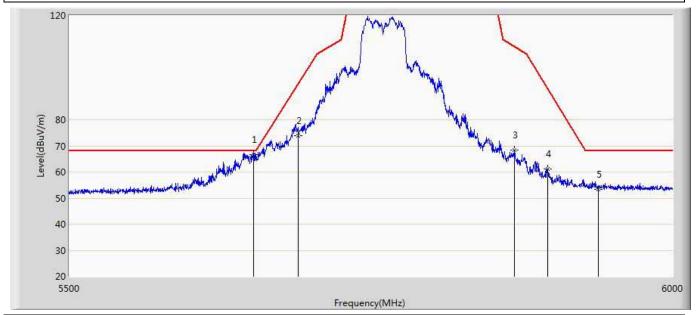
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 19:58			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 2:Transmit at channel 5825MHz by 11N 20				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	5642.000	54.365	13.369	-13.835	68.200	40.995	PK
2		5692.000	53.407	12.413	-45.873	99.280	40.994	PK
3		5870.000	60.369	19.008	-46.231	106.600	41.361	PK
4		5900.750	54.934	13.544	-31.211	86.145	41.390	PK
5		5938.000	53.921	12.347	-14.279	68.200	41.573	PK



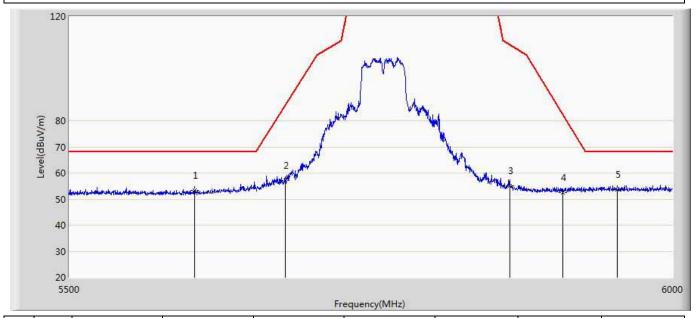
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 20:26			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 3:Transmit at channel 5755MHz by 11N 40				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	5648.250	66.552	25.559	-1.648	68.200	40.992	PK
2		5685.000	74.022	33.032	-20.078	94.100	40.990	PK
3		5864.500	68.310	26.960	-39.830	108.140	41.351	PK
4		5893.250	61.183	19.810	-30.512	91.695	41.373	PK
5		5936.250	53.347	11.775	-14.853	68.200	41.573	PK



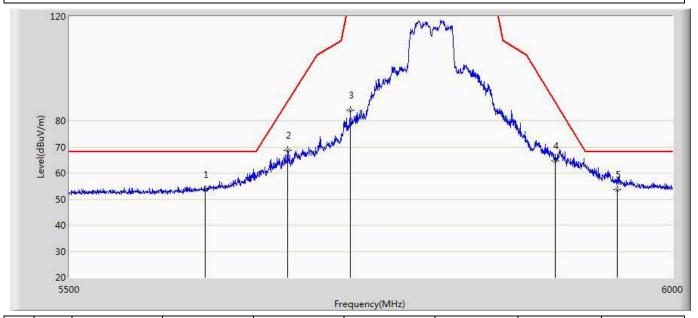
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 20:27			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 3:Transmit at channel 5755MHz by 11N 40				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5600.500	53.425	12.548	-14.775	68.200	40.877	PK
2		5674.000	56.981	15.997	-28.979	85.960	40.985	PK
3		5860.750	55.150	13.801	-54.040	109.190	41.348	PK
4		5905.750	52.590	11.181	-29.855	82.445	41.410	PK
5	*	5952.500	53.669	12.085	-14.531	68.200	41.584	PK



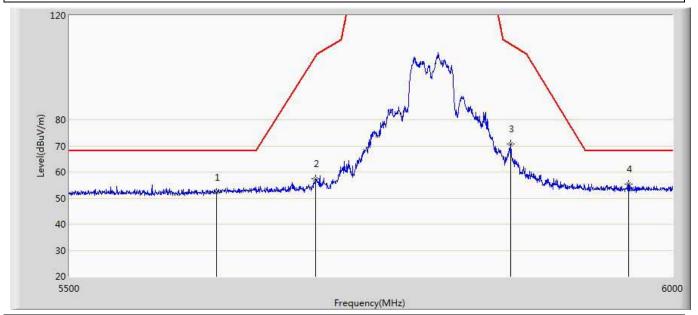
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 20:29			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 3:Transmit at channel 5795MHz by 11N 40				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5608.750	53.547	12.621	-14.653	68.200	40.926	PK
2		5676.000	68.616	27.631	-18.824	87.440	40.984	PK
3		5727.500	84.018	42.931	-38.182	122.200	41.087	PK
4		5899.250	64.736	23.352	-22.519	87.255	41.385	PK
5	*	5952.500	53.669	12.085	-14.531	68.200	41.584	PK



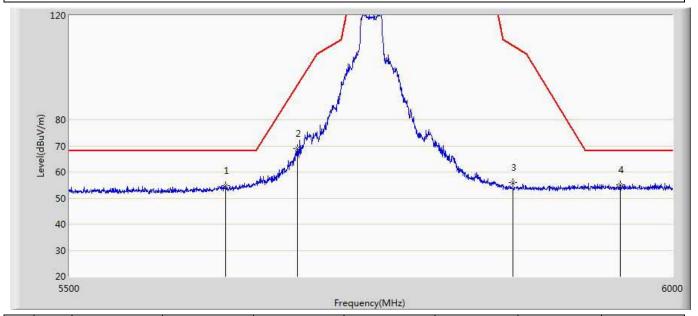
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 20:30			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 3:Transmit at channel 5795MHz by 11N 40				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5618.500	52.288	11.320	-15.912	68.200	40.967	PK
2		5699.250	57.535	16.463	-47.110	104.645	41.072	PK
3		5861.750	70.818	29.472	-38.092	108.910	41.346	PK
4	*	5962.000	55.439	13.849	-12.761	68.200	41.590	PK



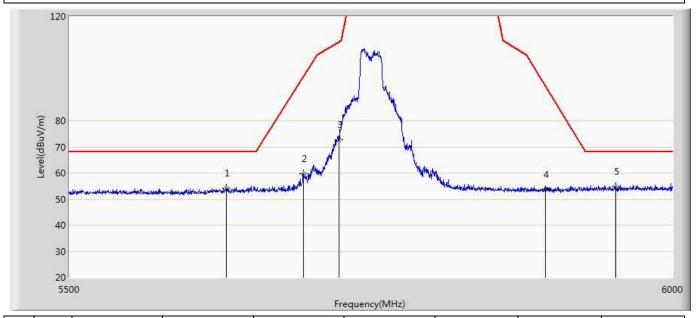
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 20:00			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 4:Transmit at channel 5745MHz by 11AC 20				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5625.500	54.749	13.758	-13.451	68.200	40.991	PK
2		5684.250	68.930	27.941	-24.615	93.545	40.989	PK
3		5863.500	55.930	14.582	-52.490	108.420	41.348	PK
4	*	5954.750	55.034	13.449	-13.166	68.200	41.585	PK



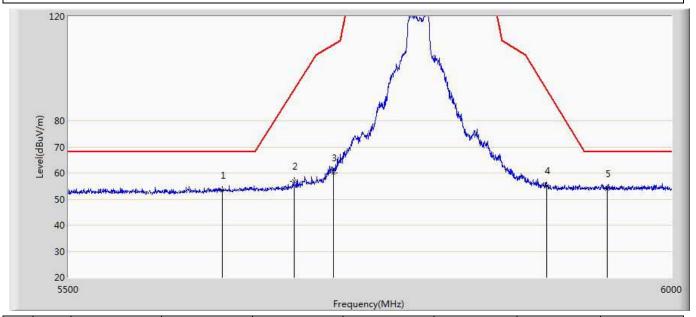
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 20:02			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 4:Transmit at channel 5745MHz by 11AC 20				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5626.250	54.135	13.143	-14.065	68.200	40.992	PK
2		5689.000	59.635	18.643	-37.425	97.060	40.992	PK
3		5718.250	72.634	31.510	-37.676	110.310	41.124	PK
4		5891.250	53.709	12.335	-39.466	93.175	41.375	PK
5	*	5951.000	54.927	13.344	-13.273	68.200	41.583	PK



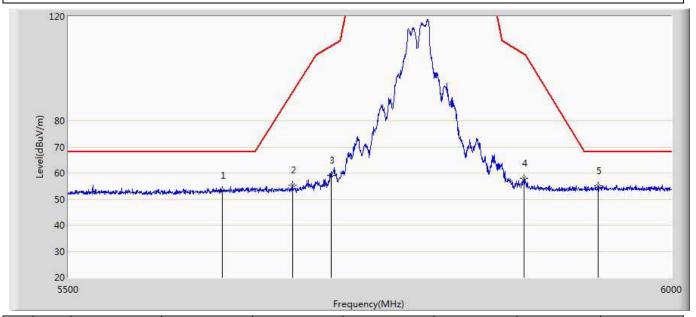
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 20:04			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 4:Transmit at channel 5785MHz by 11AC 20				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5624.000	53.434	12.443	-14.766	68.200	40.991	PK
2		5682.000	56.699	15.711	-35.181	91.880	40.988	PK
3		5714.750	59.869	18.725	-49.461	109.330	41.144	PK
4		5892.750	55.042	13.668	-37.023	92.065	41.374	PK
5	*	5944.750	54.042	12.464	-14.158	68.200	41.579	PK



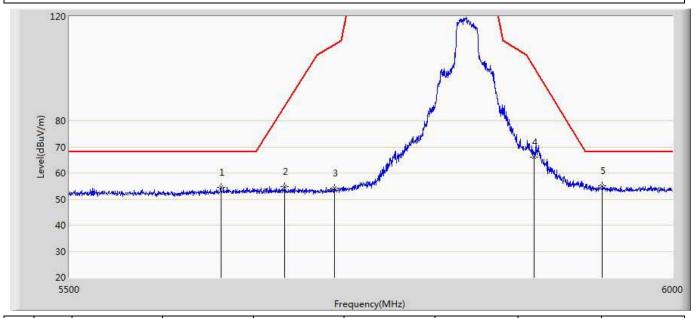
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 20:06			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 4:Transmit at channel 5785MHz by 11AC 20				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5624.000	53.434	12.443	-14.766	68.200	40.991	PK
2		5681.000	55.271	14.283	-35.869	91.140	40.987	PK
3		5713.000	59.240	18.086	-49.600	108.840	41.154	PK
4		5874.000	57.917	16.547	-47.563	105.480	41.370	PK
5	*	5936.750	55.043	13.470	-13.157	68.200	41.573	PK



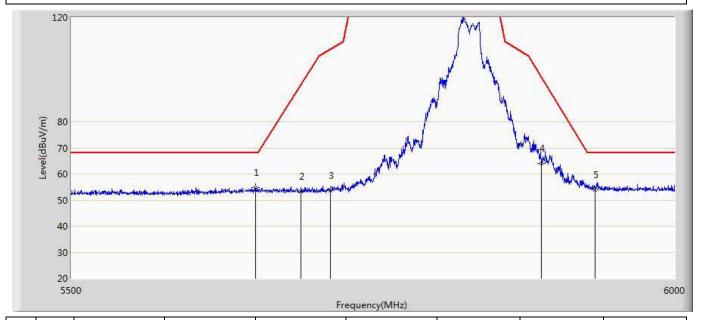
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 20:08			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 4:Transmit at channel 5825MHz by 11AC 20				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5621.750	54.451	13.470	-13.749	68.200	40.982	PK
2		5673.750	54.895	13.911	-30.880	85.775	40.984	PK
3		5714.500	54.080	12.935	-55.180	109.260	41.145	PK
4		5881.250	66.223	24.844	-34.352	100.575	41.379	PK
5	*	5939.750	55.126	13.551	-13.074	68.200	41.575	PK



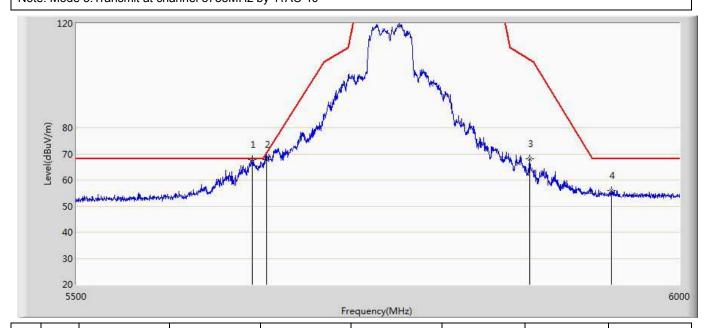
Engineer:Damon					
Site: AC5	Time: 2017/09/05 - 20:09				
Limit: FCC_Part15.209_RE(3m)	Margin: 0				
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal				
EUT: Xiaomi Router HD	Power: AC 120V/60Hz				
Note: Mode 4:Transmit at channel 5825MHz by 11AC 20					



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	5648.000	54.662	13.669	-13.538	68.200	40.993	PK
2		5685.500	53.412	12.422	-41.058	94.470	40.990	PK
3		5709.500	53.720	12.546	-54.140	107.860	41.174	PK
4		5886.000	64.052	22.675	-33.008	97.060	41.376	PK
5		5931.500	53.866	12.297	-14.334	68.200	41.569	PK



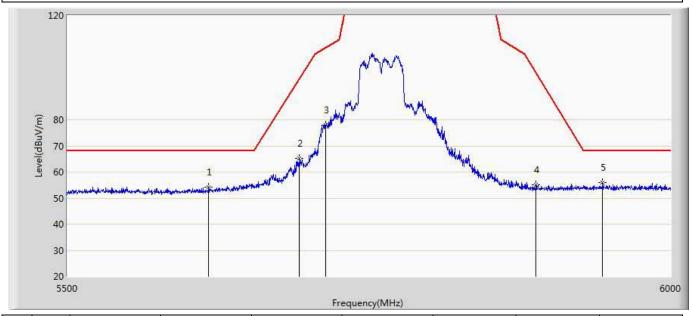
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 20:32			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 5:Transmit at channel 5755MHz by 11AC 40				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Type
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	5641.750	67.900	26.904	-0.300	68.200	40.996	PK
2		5653.000	67.846	26.856	-2.574	70.420	40.990	PK
3		5872.000	68.205	26.839	-37.835	106.040	41.365	PK
4		5941.500	56.056	14.480	-12.144	68.200	41.576	PK



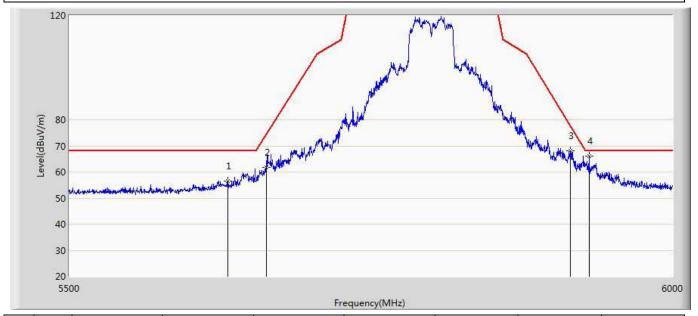
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 20:34			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 5:Transmit at channel 5755MHz by 11AC 40				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5613.500	54.070	13.123	-14.130	68.200	40.946	PK
2		5687.500	65.326	24.335	-30.624	95.950	40.992	PK
3		5708.750	78.112	36.938	-29.538	107.650	41.175	PK
4		5884.750	54.974	13.597	-43.011	97.985	41.378	PK
5	*	5941.500	56.056	14.480	-12.144	68.200	41.576	PK



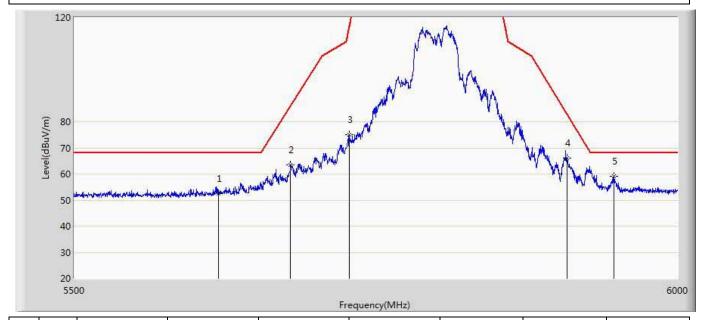
Engineer:Damon					
Site: AC5	Time: 2017/09/05 - 20:35				
Limit: FCC_Part15.209_RE(3m)	Margin: 0				
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical				
EUT: Xiaomi Router HD	Power: AC 120V/60Hz				
Note: Mode 5:Transmit at channel 5795MHz by 11AC 40					



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5627.250	56.530	15.538	-11.670	68.200	40.992	PK
2		5658.500	61.865	20.877	-12.625	74.490	40.988	PK
3		5912.500	68.018	26.583	-9.432	77.450	41.435	PK
4	*	5928.250	66.089	24.534	-2.111	68.200	41.555	PK



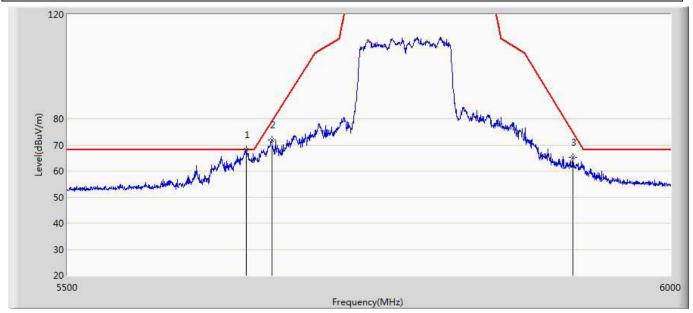
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 20:36			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 5:Transmit at channel 5795MHz by 11AC 40				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5615.500	52.562	11.607	-15.638	68.200	40.955	PK
2		5674.500	63.404	22.420	-22.926	86.330	40.984	PK
3		5722.500	75.215	34.116	-41.285	116.500	41.099	PK
4		5905.000	66.124	24.718	-16.876	83.000	41.407	PK
5	*	5945.250	59.157	17.578	-9.043	68.200	41.579	PK



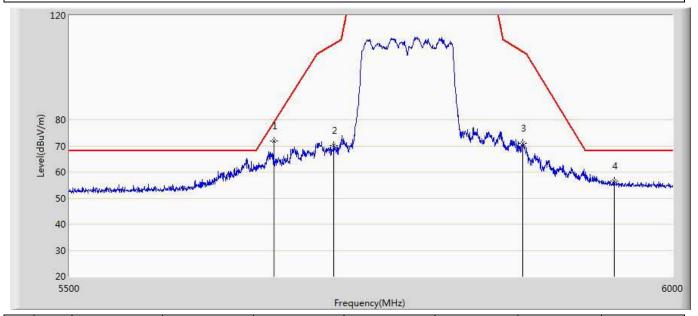
Engineer:Damon					
Site: AC5	Time: 2017/09/05 - 20:37				
Limit: FCC_Part15.209_RE(3m)	Margin: 0				
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical				
EUT: Xiaomi Router HD	Power: AC 120V/60Hz				
Note: Mode 6:Transmit at channel 5775MHz by 11AC 80					



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	5643.750	68.014	27.019	-0.186	68.200	40.995	PK
2		5665.000	71.761	30.775	-7.539	79.300	40.986	PK
3		5916.000	65.252	23.792	-9.608	74.860	41.460	PK



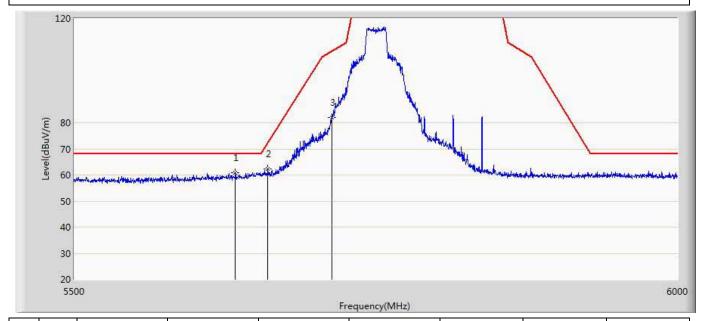
Engineer:Damon				
Site: AC5	Time: 2017/09/05 - 20:42			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 6:Transmit at channel 5775MHz by 11AC 80				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	5665.000	71.761	30.775	-7.539	79.300	40.986	PK
2		5714.000	70.197	29.049	-38.923	109.120	41.148	PK
3		5872.000	71.120	29.754	-34.920	106.040	41.365	PK
4		5950.000	56.553	14.971	-11.647	68.200	41.582	PK



Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:13			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 7:Transmit at channel 5745MHz by 11A with Beamforming				

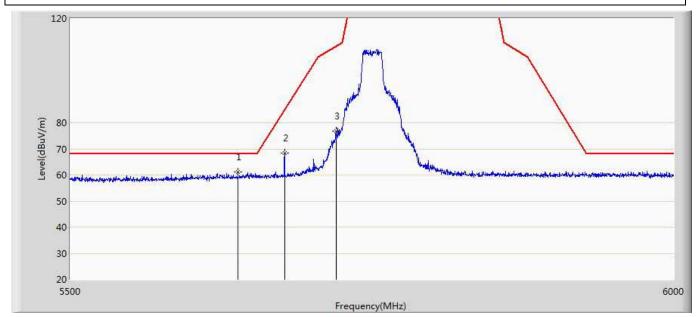


No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	5629.250	60.973	19.980	-7.227	68.200	40.992	PK
2		5655.750	62.391	21.402	-10.064	72.455	40.989	PK
3		5708.250	82.086	40.917	-25.424	107.510	41.169	PK



Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:17			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 7:Transmit et channel E74EMUE by 414 with Deamforming				

Note: Mode 7:Transmit at channel 5745MHz by 11A with Beamforming



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	5634.750	61.145	20.151	-7.055	68.200	40.995	PK
2		5672.750	68.546	27.561	-16.489	85.035	40.985	PK
3		5715.000	76.863	35.721	-32.537	109.400	41.142	PK



Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:18			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 7:Transmit at channel 5785MHz by 11A with Beamforming				

120 (a) 80 70 1 2 3 4 5 6 50 40 30 20 5500

No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5637.000	60.145	19.150	-8.055	68.200	40.995	PK
2		5669.250	60.459	19.474	-21.986	82.445	40.985	PK
3		5709.000	62.701	21.524	-45.019	107.720	41.177	PK
4		5874.500	61.176	19.805	-44.164	105.340	41.371	PK
5		5884.750	62.196	20.819	-35.789	97.985	41.378	PK
6	*	5944.750	60.531	18.953	-7.669	68.200	41.579	PK



Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:19			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 7:Transmit at channel 5785MHz by 11A with Beamforming				

120 1 2 3 4 5 6 50 40 30 20 5500 Frequency(MHz)

No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5629.250	60.056	19.063	-8.144	68.200	40.992	PK
2		5656.500	59.953	18.964	-13.057	73.010	40.989	PK
3		5706.500	60.660	19.510	-46.360	107.020	41.150	PK
4		5866.250	61.277	19.923	-46.373	107.650	41.354	PK
5		5888.750	60.039	18.664	-34.986	95.025	41.375	PK
6	*	5941.500	60.542	18.966	-7.658	68.200	41.576	PK



Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:20			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 7:Transmit at channel 5825MHz by 11A with Beamforming				

(W) 80 

No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5870.750	73.394	32.031	-32.996	106.390	41.363	PK
2		5901.500	65.176	23.783	-20.414	85.590	41.393	PK
3	*	5940.000	60.848	19.273	-7.352	68.200	41.575	PK

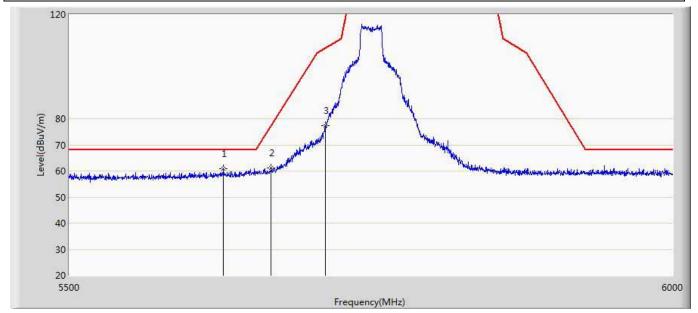


Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:21			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 7:Transmit at channel 5825MHz by 11A with Beamforming				

No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5859.750	69.009	27.658	-40.461	109.470	41.352	PK
2		5905.000	60.464	19.058	-22.536	83.000	41.407	PK
3	*	5934.750	60.843	19.272	-7.357	68.200	41.572	PK



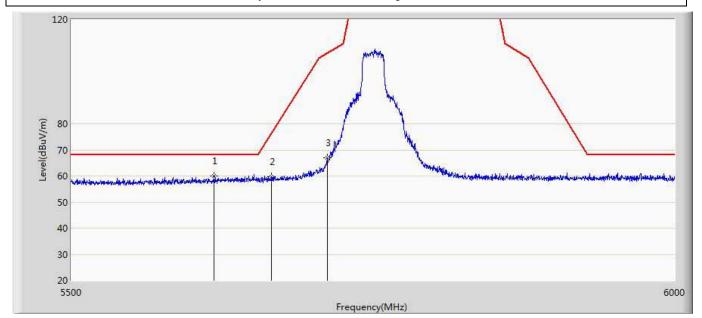
Engineer: Damon					
Site: AC5	Time: 2017/09/24 - 16:21				
Limit: FCC-15.407 new new	Margin: 0				
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical				
EUT: Xiaomi Router HD	Power: AC 120V/60Hz				
Note: Mode 8:Transmit at channel 5745MHz by 11N20 with Beamforming					



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	5623.750	60.880	19.890	-7.320	68.200	40.990	PK
2		5662.750	61.024	20.037	-16.611	77.635	40.987	PK
3		5707.000	77.318	36.163	-29.842	107.160	41.155	PK



Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:24			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 8:Transmit at channel 5745MHz by 11N20 with Reamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	5614.500	59.979	19.028	-8.221	68.200	40.951	PK
2		5661.000	59.684	18.697	-16.656	76.340	40.987	PK
3		5707.000	67.086	25.931	-40.074	107.160	41.155	PK

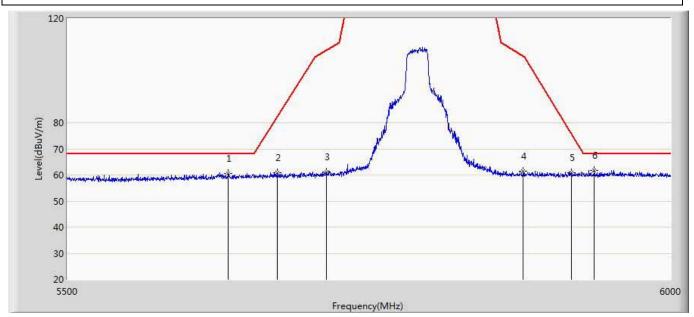


Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:24			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 8:Transmit at channel 5785MHz by 11N20 with Beamforming				

No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5618.750	59.633	18.664	-8.567	68.200	40.969	PK
2		5665.500	60.041	19.055	-19.629	79.670	40.987	PK
3		5712.250	63.944	22.786	-44.686	108.630	41.158	PK
4		5862.750	64.346	22.999	-44.284	108.630	41.346	PK
5		5912.500	60.890	19.455	-16.560	77.450	41.435	PK
6	*	5930.000	61.091	19.523	-7.109	68.200	41.568	PK



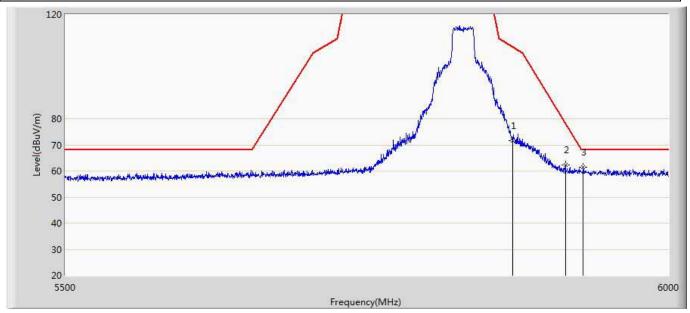
Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:26			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 8:Transmit at channel 5785MHz by 11N20 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5629.500	60.588	19.595	-7.612	68.200	40.992	PK
2		5669.250	60.869	19.884	-21.576	82.445	40.985	PK
3		5709.500	61.179	20.005	-46.681	107.860	41.174	PK
4		5874.000	61.371	20.001	-44.109	105.480	41.370	PK
5		5914.750	60.866	19.416	-14.919	75.785	41.450	PK
6	*	5934.500	61.599	20.028	-6.601	68.200	41.571	PK



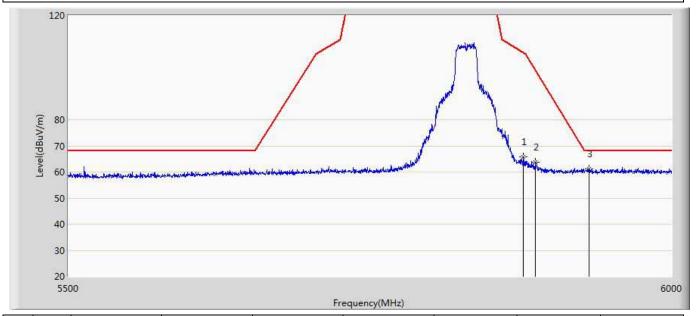
Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:29			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 8:Transmit at channel 5825MHz by 11N20 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5866.500	71.727	30.373	-35.853	107.580	41.354	PK
2		5911.500	62.280	20.849	-15.910	78.190	41.431	PK
3	*	5926.750	61.382	19.839	-6.818	68.200	41.543	PK



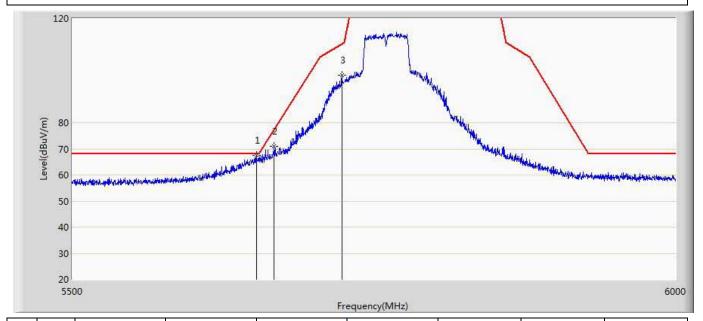
Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:30			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 8:Transmit at channel 5825MHz by 11N20 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5873.000	65.834	24.466	-39.926	105.760	41.368	PK
2		5883.500	63.714	22.336	-35.196	98.910	41.378	PK
3	*	5929.000	61.187	19.627	-7.013	68.200	41.561	PK



Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:38			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 9:Transmit at channel 5755MHz by 11N40 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	5648.000	67.451	26.458	-0.749	68.200	40.993	PK
2		5662.750	71.001	30.014	-6.634	77.635	40.987	PK
3		5718.250	98.138	57.014	-12.172	110.310	41.124	PK



Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:40			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 9:Transmit at channel 5755MHz by 11N40 with Reamforming				

No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	5642.750	61.298	20.303	-6.902	68.200	40.995	PK
2		5670.750	63.437	22.452	-20.118	83.555	40.985	PK
3		5709.250	81.633	40.457	-26.157	107.790	41.175	PK

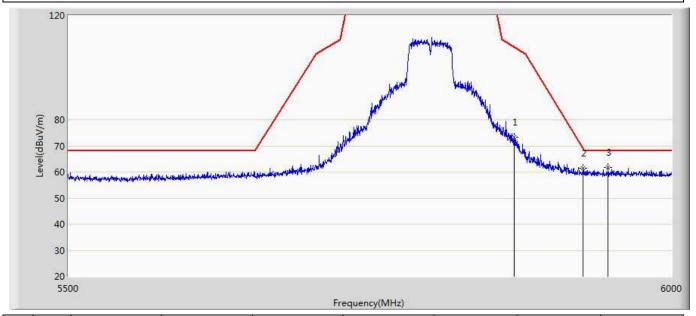


Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:41			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 9:Transmit at channel 5795MHz by 11N40 with Beamforming				

No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5860.000	81.998	40.647	-27.402	109.400	41.350	PK
2		5914.750	65.838	24.388	-9.947	75.785	41.450	PK
3	*	5934.500	64.234	22.663	-3.966	68.200	41.571	PK



Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:42			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 9:Transmit at channel 5795MHz by 11N40 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5865.500	73.307	31.955	-34.553	107.860	41.352	PK
2		5924.250	61.582	20.058	-7.173	68.755	41.524	PK
3	*	5945.500	61.805	20.226	-6.395	68.200	41.579	PK



Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:31			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 10:Transmit at channel 5745MHz by 11AC20 with Beamforming				

120 (E) 80 50 40 30 20 5500 Frequency(MHz)

No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	5636.750	60.310	19.315	-7.890	68.200	40.995	PK
2		5669.000	63.019	22.034	-19.241	82.260	40.986	PK
3		5706.250	75.572	34.425	-31.378	106.950	41.147	PK



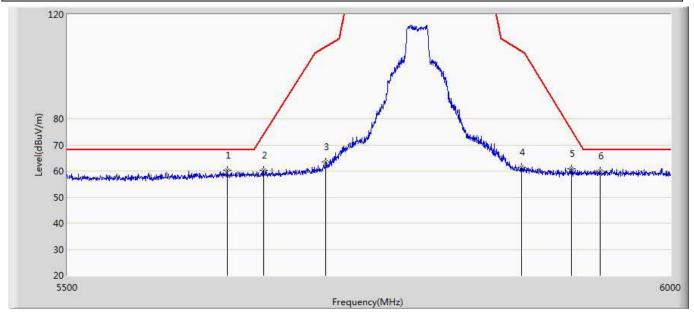
Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:32			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 10:Transmit at channel 5745MHz by 11AC20 with Reamforming				

1 2 Frequency(MHz)

No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	5626.250	60.291	19.299	-7.909	68.200	40.992	PK
2		5667.500	61.067	20.081	-20.083	81.150	40.985	PK
3		5707.500	67.720	26.559	-39.580	107.300	41.161	PK



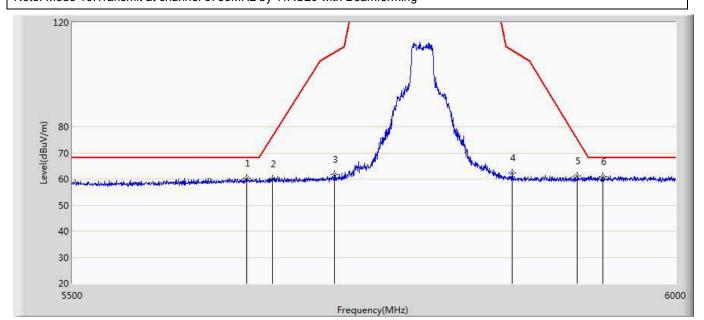
Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:34			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 10:Transmit at channel 5785MHz by 11AC20 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	5628.750	60.373	19.381	-7.827	68.200	40.992	PK
2		5658.000	60.368	19.380	-13.752	74.120	40.988	PK
3		5709.250	63.481	22.305	-44.309	107.790	41.175	PK
4		5872.250	61.521	20.155	-44.449	105.970	41.366	PK
5		5915.000	60.831	19.379	-14.769	75.600	41.453	PK
6		5939.250	59.950	18.375	-8.250	68.200	41.574	PK



Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:35			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 10:Transmit at channel 5785MHz by 11AC20 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5640.000	60.219	19.223	-7.981	68.200	40.996	PK
2		5661.250	60.035	19.048	-16.490	76.525	40.988	PK
3		5712.250	61.688	20.530	-46.942	108.630	41.158	PK
4		5860.250	62.231	20.881	-47.099	109.330	41.350	PK
5		5915.500	61.069	19.613	-14.161	75.230	41.457	PK
6	*	5937.750	60.945	19.372	-7.255	68.200	41.574	PK



Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:36			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 10:Transmit at channel 5825MHz by 11AC20 with Beamforming				

No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5861.250	80.167	38.820	-28.883	109.050	41.347	PK
2		5900.250	63.725	22.337	-22.790	86.515	41.388	PK
3	*	5926.250	61.838	20.299	-6.362	68.200	41.539	PK



Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:36			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 10:Transmit at channel 5825MHz by 11AC20 with Beamforming				

No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5861.500	67.796	26.450	-41.184	108.980	41.346	PK
2		5899.000	60.842	19.459	-26.598	87.440	41.383	PK
3	*	5930.500	61.266	19.698	-6.934	68.200	41.569	PK



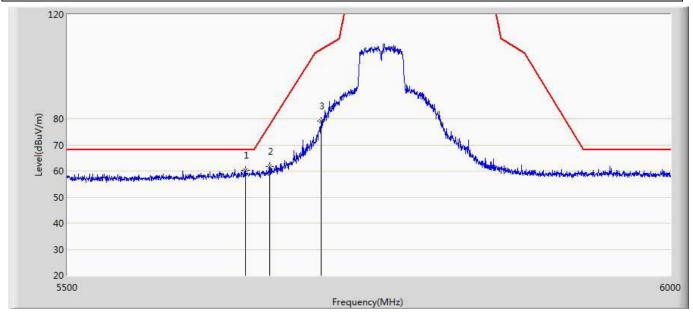
Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:42			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 11:Transmit at channel 5755MHz by 11AC40 with Reamforming				

(W) 80 

No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	5648.500	65.449	24.457	-2.751	68.200	40.993	PK
2		5653.000	66.837	25.847	-3.583	70.420	40.990	PK
3		5713.500	95.561	54.410	-13.419	108.980	41.151	PK



Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:43			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 11:Transmit at channel 5755MHz by 11AC40 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	5643.250	60.377	19.382	-7.823	68.200	40.995	PK
2		5663.000	61.629	20.642	-16.191	77.820	40.987	PK
3		5705.500	79.106	37.967	-27.634	106.740	41.139	PK

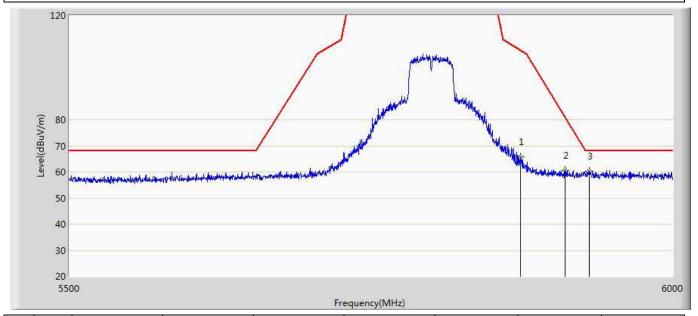


Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:44			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 11:Transmit at channel 5795MHz by 11ΔC40 with Reamforming				

No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5859.500	81.479	40.127	-28.061	109.540	41.352	PK
2		5887.250	71.158	29.782	-24.977	96.135	41.376	PK
3	*	5928.000	64.300	22.747	-3.900	68.200	41.552	PK



Engineer: Damon				
Site: AC5	Time: 2017/09/24 - 16:45			
Limit: FCC-15.407 new new	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Xiaomi Router HD	Power: AC 120V/60Hz			
Note: Mode 11:Transmit at channel 5795MHz by 11AC40 with Beamforming				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		5870.250	65.885	24.523	-40.645	106.530	41.362	PK
2		5907.750	60.452	19.035	-20.513	80.965	41.417	PK
3	*	5928.500	60.301	18.745	-7.899	68.200	41.557	PK



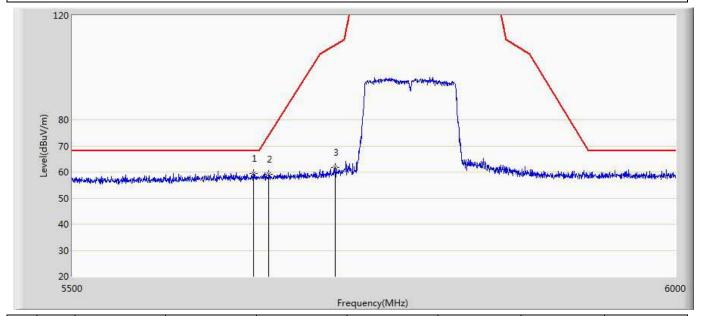
Engineer: Damon	
Site: AC5	Time: 2017/09/24 - 16:45
Limit: FCC-15.407 new new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Xiaomi Router HD	Power: AC 120V/60Hz
Note: Mode 12:Transmit at channel 5775MHz by 11AC80 v	with Reamforming

(W) 80 

No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	5645.500	63.124	22.130	-5.076	68.200	40.994	PK
2		5665.500	66.108	25.122	-13.562	79.670	40.987	PK
3		5704.750	70.196	29.065	-36.334	106.530	41.131	PK



Engineer: Damon		
Site: AC5	Time: 2017/09/24 - 16:47	
Limit: FCC-15.407 new new	Margin: 0	
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal	
EUT: Xiaomi Router HD	Power: AC 120V/60Hz	
Note: Mode 12:Transmit at channel 5775MHz by 11AC80 with Beamforming		



1	*	5646.000	59.518	18.524	-8.682	68.200	40.994	PK
2		5658.250	59.127	18.139	-15.178	74.305	40.988	PK
3		5712.500	61.804	20.647	-46.896	108.700	41.157	PK



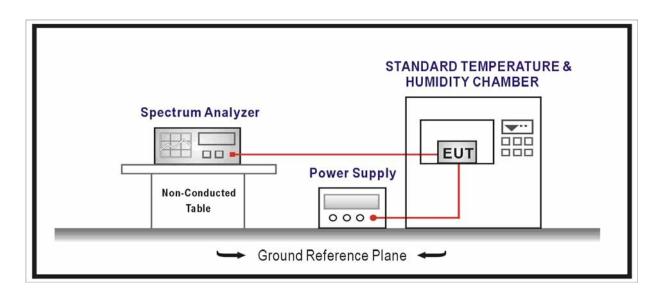
## 10. Frequency Stability

## 10.1. Test Equipment

Frequency Stability / TR-7					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2017.02.04	2018.02.04
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2017.04.09	2018.04.09
MXA Signal Anlyzer	Keysight	N9020A	MY56060147	2017.04.09	2018.04.09
AC Power Supply	IDRC	CF-500TP	979422	2017.09.16	2018.09.16
DC Power Supply	IDRC	CD-035-020PR	977272	2017.09.16	2018.09.16
Programmable	Gaoyu	TH-1P-B	WIT-05121302	2017.01.04	2018.01.03
Temperature & Humidity					
Chamber					
Temperature/Humidity	zhiohon	ZC1-2	TD7 TU	2017.04.10	2018.04.10
Meter	zhichen	201-2	TR7-TH	2017.04.10	2010.04.10

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

## 10.2. Test Setup





## 10.3. Limit

Frequ	Frequency Stability Limit					
UNII Devices						
$\square$	In-band emission is maintained within the band of operation under all conditions of normal					
	operation as specified in the user's manual.					
IEEE Std. 802.11n-2009						
$\square$	The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz band					
	and ± 25ppm maximum for the 2.4 GHz band.					

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## 10.4. Test Procedure

Frequ	ency S	tability Test Method		
	References Rule		Chapter	Description
	ANSI	C63.10	6.8	Frequency stability tests
	$\boxtimes$	ANSI C63.10	6.8.1	Frequency stability with respect to ambient temperature
	$\boxtimes$	ANSI C63.10	6.8.2	Frequency stability when varying supply voltage

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## 10.5. EUT test Axis definition

Item	Frequency Stability								
		Outdoor AP							
		Indoor AP							
Device Category		☐ Fixed point-to-point AP							
		Outdoor fixed po	oint-to-r	multipe	oint AP				
		Client							
Test mode	Mode	Mode 1-12							
		Radiated							
		X Axis		Y Axis			Z Axis		
			7						
Test method		Worst Axis	Wo	orst Ax	kis 🗌	Wo	orst Axis 🗌		
	$\boxtimes$	Conducted							
	$\boxtimes$	Chain 1	Chain	12	Chain 3		Chain 4		
			•	• •	•				

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## 10.6. Test Result

Product Name	:	Xiaomi Router HD	Power	:	AC 120V/60Hz
Test Date	:	2017.08.12	Test Site	:	TR7
Test Mode	:	Mode1			
Test Engineer	:	Adam			

# Frequency Stability under Temperature

Temperature Interval	Test Frequency (MHz)	Deviation (Hz)	Deviation (ppm)
0	5180.000	108	0.0208
10	5180.000	-90	-0.0173
20	5180.000	-105	-0.0202
30	5180.000	115	0.0222
40	5180.000	97	0.0187
0	5785.000	-113	-0.0195
10	5785.000	93	0.0161
20	5785.000	-110	-0.0190
30	5785.000	205	0.0354
40	5785.000	178	0.0307

# Frequency Stability under Voltage

AC Voltage	Test Frequency	Deviation	Deviation
(V)	(MHz)	(Hz)	(ppm)
102	5180.000	106	0.0200
120	5180.000	-91	-0.0176
138	5180.000	105	0.0203
102	5785.000	-112	-0.0193
120	5785.000	158	0.0273
138	5785.000	-202	-0.0349

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### 11. Antenna Requirement

#### 11.1. Limit

### Antenna Requirement Limit

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

#### 11.2. Antenna Connector Construction

Anter	Intenna Connector Construction					
$\boxtimes$	The use of a permanently attached antenna					
	The antenna use of a unique coupling to the intentional radiator					
	The use of a nonstandard antenna jack or electrical connector					
Pleas	se refer to the attached document "Internal Photograph" to show the antenna connector.					
	The End					

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