

5795MHz by 802.11ax(40MHz):



5210MHz by 802.11ax(80MHz):





5775MHz by 802.11ax(80MHz):





AV-Ant 1+2 with Beam-forming:

Band I AV Limit=54 dBuV/m-95.2-10lg2 (2tx) -9 (Directional Gain) =-53.2dbm 5180MHz by 802.11a:



5180MHz by 802.11n(20MHz):





5190MHz by 802.11n(40MHz):

Esysight Spectrum Analyzer - Swept SA	1	a statut (assa)		
RF 150 D DC Start Freq 4.500000000 G	PNO: Fast C Trig: Free Run IFGain1.ow Atten: 10 dB	Aug Type: Log-Pwr Avg Hold: 14/100	09:53:50 PM Apr21, 2018 TRACE 2 2 1 4 5 TYPE M WHAT	Frequency
o dB/div Ref 0.00 dBm		Mkr	5.150 00 GHz -53.503 dBm	Auto Tune
10.0			hun	Center Freq 4.96000000 GHz
210				Start Freq 4.50000000 GHz
411 811				Stop Free 5 220000000 GH:
60 h				CF Step 72.000000 MH Auto Mar
001				Freq Offset 0 Hz
Start 4.5000 GHz Res BW 1.0 MHz	#VBW 1.1 kHz	Quaan 5	Stop 5.2200 GHz 10.4 ms (1001 pts)	Scale Type
ssi	WIDAT I.I KIIZ	STATUS	rose margino er pray	

5180MHz by 802.11ac(20MHz):





5190MHz by 802.11ac(40MHz):

	A constant of the second second	1	11 WATE CAS	ectrum Analyzer - Skept SA
Frequency	09(57)21 PM Apr 21, 2018 TRACE 2 2 3 4 5 TYPE Mythonomy Det P NNNNN	Aug Type: Log-Pwr Avg Hold: 15/100	Trig: Free Run Atten: 10 dB	47 50 0 00 47 4.5000000000 GH2 PNO: Fast IFGaint.ow
Auto Tun	5.150 00 GHz -53.928 dBm	Mkr		Ref 0.00 dBm
Center Fre 4.85000000 GH	m			
Start Fre 4.50000000 GH				
Stop Fre 5 220000000 GH	A contact			
CF Ste 72.000000 MH Auto Ma				
Freq Offse 0 H				
Scale Typ	Stop 5.2200 GHz 10.4 ms (1001 pts)	Sweep 5	1.1 kHz	000 GHz 1.0 MHz #VBW
		STATUS		

5210MHz by 802.11ac(80MHz)





5180MHz by 802.11ax(20MHz):

Con Maria		1	11 12012-214		Reysight Spectrum Analyze
Frequency	09/46/01 PM Apr 21, 2018 TRACE 1 2 3 4 9 TYPE MUMORAN DET P NNNNN	Aug Type: Log-Pwr Avg Hold: 15/100	Trig: Free Run Atten: 10 dB	4.500000000 GHz PNO: Fast FGain:Low	
Auto Tun	r1 5.150 0 GHz -53.226 dBm	Mk		Ref 0.00 dBm	to dB/div Ref 0.0
Center Fre 4.850000000 GH	M				10.0
Start Fre 4.50000000 GH					210 210
Stop Fre 5 200000000 GH					40:0 60:0 i
CF Ste 70.000000 MH Auto Ma	rad I				00m
Freq Offse 0 H					0)3
Scale Typ	Stop 5.2000 GHz 02.7 ms (1001 pts)	Sween 8	620 H7		Start 4.5000 GHz
	vz.r ma (roor prav	STATUS	000112		SG

5190MHz by 802.11ax(40MHz):





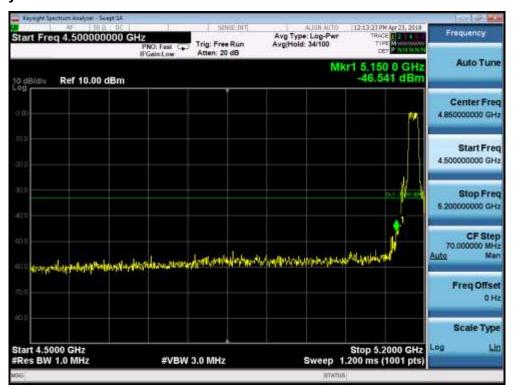
5210MHz by 802.11ax(80MHz)

RF 50 Q DC 1	SENIE DVT	ALIGN AUTO	11:01:49 PM Apr 21, 2018	
art Freq 4.500000000 GHz PNO: Fast C		Avg Type: Log-Pwr Avg Hold: 29/100	TRACE 2 2 3 4 5 TYPE DATA NON N	Frequency
abiaiv Ref 0.00 dBm		Mkrt	5.150 00 GHz -53.765 dBm	Auto Tun
0			from	Center Fre 4.880000000 GH
3				Start Fre 4.50000000 GH
a a				Stop Fre 5 26000000 GH
				CF Ste 76.000000 Mi Auto Ma
2				Freq Offse 0 H
art 4.5000 GHz es BW 1.0 MHz #VBW	/ 3.0 kHz	Sween 1	Stop 5.2600 GHz)7.6 ms (1001 pts)	Scale Typ



PK-Ant 1+2 with Beam-forming:

Band I PK Limit=74 dBuV/m-95.2-10lg2 (2tx) -9 (Directional Gain) =-33.2dbm 5180MHz by 802.11a:



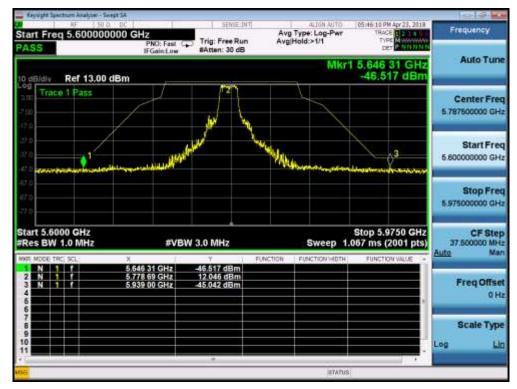
5745MHz by 802.11a:



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5785MHz by 802.11a:



5825MHz by 802.11a:

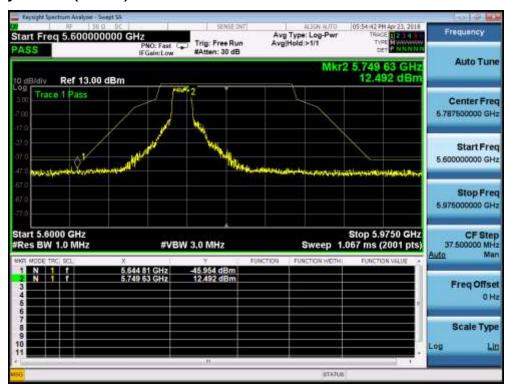




5180MHz by 802.11n(20MHz):

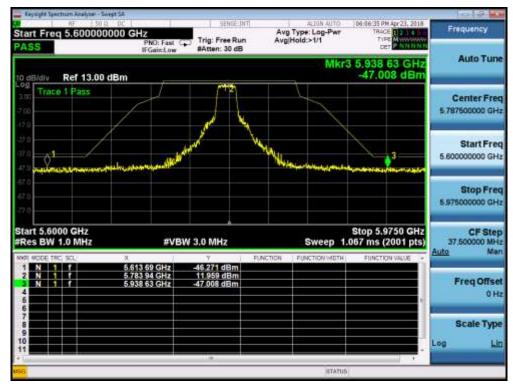
			0.0.000	- 82		ctrum Analyzer - Sw	Reynight Sp
Frequency	12:14 25 PM Apr 23, 2018 TRACE 5 2 1 4 5 T TYPE M WWWWWWW CET P S 14 N N N	g Type: Log-Pwr gHold: 59/100	Free Run n: 20 dB		000 GHz	q 4.500000	Start Fre
Auto Tuno	r1 5.150 0 GHz -46.153 dBm	Mk				Ref 10.00 c	10 dB/div
Center Fred 4.85000000 GH:	M						0.00
Start Free 4.500000000 GH							-10.0 -2011
Stop Free 5.20000000 GH:	E.1-37.00 (Be)						-10.0
CF Step 70.000000 MH Auto Mar	and paint of	usenshipmentaliyu	Ridpartured	the mathematical	e a at a tachtel	and the second second	6511
Freq Offse 0 H						Jost & Cart Charles	-000 (m) (m)
Scale Type	aroh 9.5000 aus			40 (1) (1)			Start 4.50
-	200 ms (1001 pts)	Sweep 1.	Inz	#VBW 3.		1.0 WHZ	#Res BW

5745MHz by 802.11n(20MHz):





5785MHz by 802.11n(20MHz):



5825MHz by 802.11n(20MHz):





5190MHz by 802.11n(40MHz):

10.10		and a line of			ectrum Analyzer - Swept SA	Reysight Spect
Frequency	12:20:05 PM Apr 23, 2018 TRACE 5, 2:14 5 T TYPE M WHAT AND DET P STANING	Avg Type: Log-Pwr Avg[Hold: 64/100	Trig: Free Run Atten: 20 dB		q 4.500000000 G	Start Freq
Auto Tuno	5.150 00 GHz -44.306 dBm	Mkr			Ref 10.00 dBm	10 dB/div
Center Fred 4 86000000 GH:	inte					0.00
Start Free 4.500000000 GH						-10.0
Stop Free 5 220000000 GH:	E.1/2000469					-40.0
CF Step 72.000000 MH Auto Mar	المعليل للعاد	nton stranders berty mistra	alana second and a s	aya, ay layo, straplicage integri		65.1
Freq Offse 0 H				ماريم هو روي يو روي وري روي وري مريد اري وري مريد اري وري مريد وري مريد وري مري وري مريد وري مريد وري مريد وري مريد وري مريد وري مري وري مريد وري	ينوري المدينية ومن المريكي المدينية الموجود الموجود الموجود المريكية ويون	900 - 100 100
Scale Type	Stop 5.2200 GHz					Start 4.500
	200 ms (1001 pts)	Sweep 1	DIO IMIAZ	#VBW 3	1.0 MHZ	#Res BW 1

5755MHz by 802.11n(40MHz):

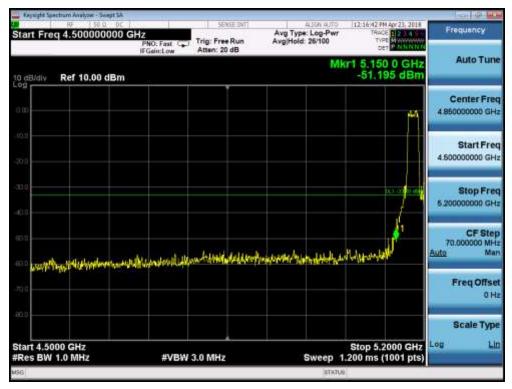




5795MHz by 802.11n(40MHz):



5180MHz by 802.11ac(20MHz):

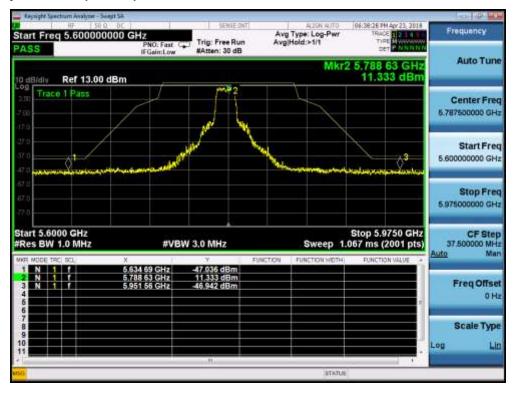




5745MHz by 802.11ac(20MHz):



5785MHz by 802.11ac(20MHz):





5825MHz by 802.11ac(20MHz):



5190MHz by 802.11ac(40MHz):





5755MHz by 802.11ac(40MHz):



5795MHz by 802.11ac(40MHz):





5210MHz by 802.11ac(80MHz):

	participation and the second		IN CONTROLLS		Reysight Spectrum Analyzer - So
Frequency	12:29:23 PM Apr 23, 2018 TRACE 2 3, 4 5 TRACE 2 3, 4 5 TIPE MONOMOUNT DET P N N N N N	Avg Type: Log-Pwr Avg Hold: 48/100	Trig: Free Run Atten: 20 dB	PNO: Fast	Start Freq 4.500000
Auto Tune	5.150 00 GHz -45.673 dBm	Mkr	Atten: 20 db	IFGein:Low	0 dB/dlv Ref 10.00 d
Center Freq 4.875000000 GHz					0.00
Start Freq 4.50000000 GHz	anthrough a start				2018
Stop Freq 5.250000000 GHz	11.1-33-00 48%				30.0 AD 0
CF Step 75.000000 MHz Auto Man	anthe Aria	energy of the state of the	ود الجريدان أوريد	1.231.41	000 000
Freq Offse 0 Ha					7031
Scale Type	Stop 5.2500 GHz 267 ms (1001 pts)	Sweep 1	3.0 MHz		Start 4.5000 GHz Res BW 1.0 MHz
		STATUS			56

5775MHz by 802.11ac(80MHz):

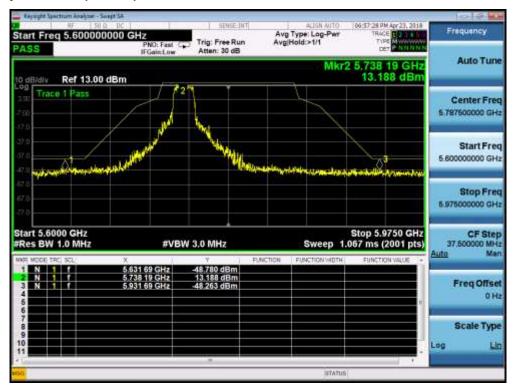




5180MHz by 802.11ax(20MHz):

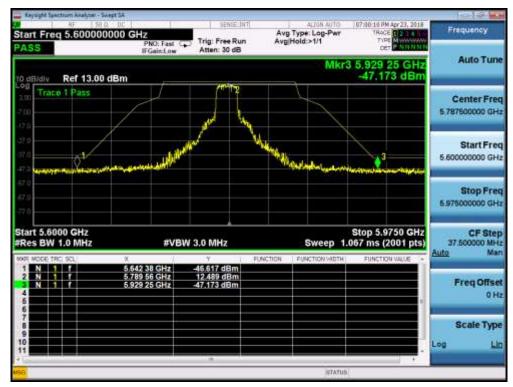
	a na na gala da ang san an ang	Wath Wath	al annealt		ctrum Analyzer - Swept SA	Reysipte Spe
Frequency	12:17:35 PH Apr 23, 2018 TRACE 2 2 3 4 5 TIPE HWWWWWW DET P NNNNN	Aug Type: Log-Pwr Avg Hold: 25/100	Trig: Free Run Atten: 20 dB		q 4.500000000 G	Start Free
Auto Tune	r1 5.150 0 GHz -45.549 dBm	Mk		IF GBHLLOW	Ref 10.00 dBm	10 dB/div
Center Fred 4.850000000 GH:	M					0.00
Start Free 4.500000000 GH						-10.0 -2010
Stop Fred 5 200000000 GH;	11.1-31.92 (8)					-40.0
CF Step 70.000000 MH: Auto Mar	an satisfier	walterstreams	andos natamad l	and the second second		60.0
Freq Offse 0 H			desibilit de les auxes	han da had	energian (Alicenter Action)	72.1
Scale Type	Stop 5.2000 GHz .200 ms (1001 pts)	Courses of	2.0.844+	#VBW 3		Start 4.50
		STATUS	5.0 MHZ	#4D44.	LV MH2	SG BW

5745MHz by 802.11ax(20MHz):

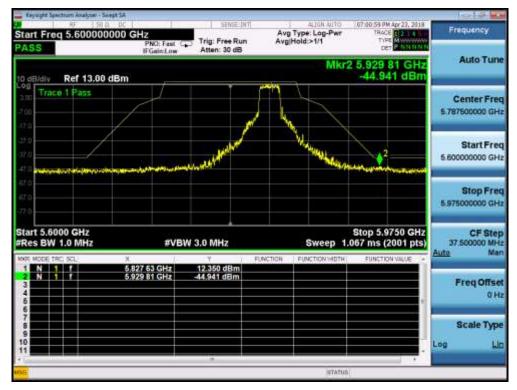




5785MHz by 802.11ax(20MHz):



5825MHz by 802.11ax(20MHz):





5190MHz by 802.11ax(40MHz):

	1. Constant of the second of	11 Mar 11 M	THE CONTROLL		sectrum Analyzer - Swept SA	
Frequency	12:23:50 PM Apr 23, 2018 TRACE 2, 3, 4, 5 TYPE M MMMMMMM TYPE M MMMMMMMM	Avg Type: Log-Pwr Avg Hold: 29/100	SENSE ONT	00 GHz PNO; Fast	eq 4.500000000 C	Start Fre
Auto Tune	1 5.150 00 GHz -43.910 dBm	Mkr	Atten: 20 dB	IFGain:Low	Ref 10.00 dBm	10 dB/div
Center Freq 4.86000000 GHz	allahu,					0.00
Start Freq 4.50000000 GHz						-101
Stop Freq 5 220000000 GHz	10.1 27.0 494					-40.0
CF Step 72.000000 MHz Auto Man	sinders W	n was a sense of the server	Morrielduser.et	ericherturgionalisterie		60.5 -60.5 h i
Freq Offset 0 Hz					llinkuski, svakan kornet	-101 -101
Scale Type	Stop 5.2200 GHz 200 ms (1001 pts)	Sween 1	3.0 MHz	#VBW 3	000 GHz / 1.0 MHz	Start 4.50
	Loo mo (100 mpro)	STATUS		#1017.		MSG

5755MHz by 802.11ax(40MHz):





5795MHz by 802.11ax(40MHz):



5210MHz by 802.11ax(80MHz):





5775MHz by 802.11ax(80MHz):





AV-Ant 1+2+3+4 with Beam-forming:

Band I AV Limit=54 dBuV/m-95.2-10lg4 (4tx) -12 (Directional Gain) =-59.3dbm 5180MHz by 802.11a:



5180MHz by 802.11n(20MHz):





5190MHz by 802.11n(40MHz):

Agilant Spectrum A								
	4.860000000	GHz PNO: Fast	SBREINT	Avg Type: Avg[Hold: ;		TITE	Apy 21, 2018	Frequency
10 dB/div R	ef 0.00 dBm				Mkr	1 5.150 (00 GHz 0 dBm	Auto Tune
							m	Center Freq 4.86000000 GHz
3011								Start Freq 4.50000000 GHz
-403								Stop Freq 5.22000000 GHz
000						~	-seiner	CF Step 72.000000 MHz Auto Man
40.0								Freq Offset 0 Hz
Center 4.860							0.0 MHz	
#Res BW 1.0	MHZ	#VBW	1.1 kHz	5	sweep 5	10.4 ms (1	001 pts)	
1997 ()					Territore			

5180MHz by 802.11ac(20MHz):





5190MHz by 802.11ac(40MHz):

Agilent Spectr	um Analyzer – Swept SA						
Center Fr	req 4.86000000	PNO: Fast	Trig: Free Run #Atten: 10 dB	Avg Type: Lo Avg Held: 12/	g-Pwr	SACE 12 1018	Frequency
10 dB/div	Ref 0.00 dBm	I GREET			Mkr1 5.1 -5	50 00 GHz 9.674 dBm	Auto Tune
-10.1						m	Center Freq 4.85000000 GHz
-2011							Start Freq 4,50000000 GHz
-404							Stop Freq 5.22000000 GHz
60 D							CF Step 72.000000 MHz Auto Man
40.5							Freq Offset 0 Hz
Center 4.8	8600 GH7				Spi	an 720.0 MHz	
#Res BW		#VBW	1.1 kHz	Sw	eep 510.4	ns (1001 pts)	
MSG					STATUS		

5210MHz by 802.11ac(80MHz)





5180MHz by 802.11ax(20MHz):

Agilent Spec	trum Analyzer - Swept S					- 11
Start Fr	eq 4.50000000		SBISEINT	Avg Type: Log-Pwr Avg[Hold: 12/100	TYPE MUMANANA	Frequency
10.0000	Ref 0.00 dBm	IFGain:Low	#Atten: 10 dB	M	kr1 5.150 0 GHz -59.772 dBm	Auto Tune
10 dB/div	Rei 0.00 aBm				UCT I L COM	
-10.1					Μ	Center Freq 4.95000000 GHz
-2015						<u></u>
-30.0						Start Freq 4.50000000 GHz
-42(0						Stop Freq
60.9						5.20000000 GHz
-000	- In-				r- fine	CF Step 70.000000 MHz Auto Man
-80.0						Freq Offset 0 Hz
-90.0						
Start 4.5 #Res BM	000 GHz V 1.0 MHz	#VBW	680 Hz	Sweep	Stop 5.2000 GHz 802.7 ms (1001 pts)	
M\$6				STAD		

5190MHz by 802.11ax(40MHz):





5210MHz by 802.11ax(80MHz)

Start Freq 4.50000000 GHz	10: Fast Trig: Free Run Adden: 10 dB	Avg Type: Log-Pwr Avg Hold: 29/100	05:41:21 PMApr 21, 2018 TRACE 1 2 = TYPE NUMBER OF DET PINNER OF	Frequency
o dB/dly Ref 0.00 dBm		Mkr	1 5.150 00 GHz -59.976 dBm	Auto Tuni
			السبيا	Center Fre 4 88000000 GH
30.0 10.0			أكأك	Start Fre 4.500000000 GH
eon				Stop Free 5.250000000 GH
0.0			-510.02	CF Step 76.000000 MH Auto Ma
90.1				Freq Offse 0 H
Start 4.5000 GHz Res BW 1.0 MHz	#VBW 3.0 kHz	Sween 1	Stop 5.2600 GHz 97.6 ms (1001 pts)	

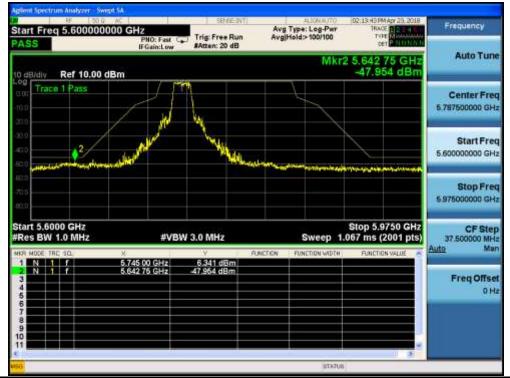


PK-Ant 1+2+3+4 with Beam-forming:

Band I PK Limit=74 dBuV/m-95.2-10lg4 (4tx) -12 (Directional Gain) =-39.2dbm 5180MHz by 802.11a:



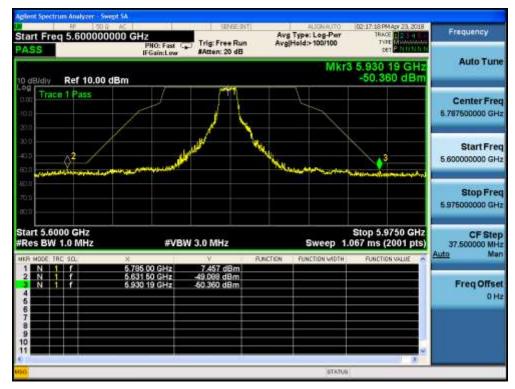
5745MHz by 802.11a:



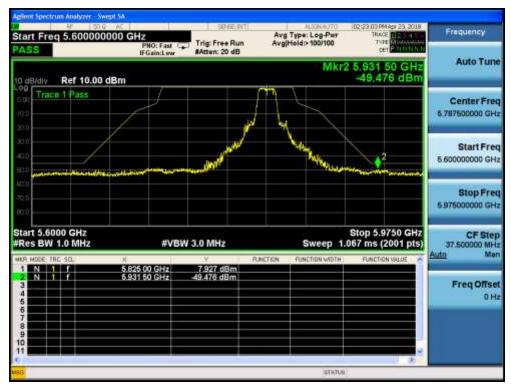
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5785MHz by 802.11a:



5825MHz by 802.11a:

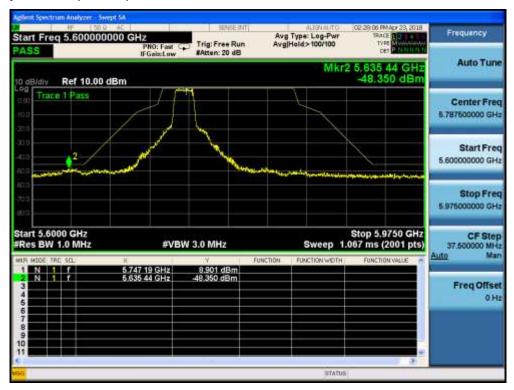




5180MHz by 802.11n(20MHz):

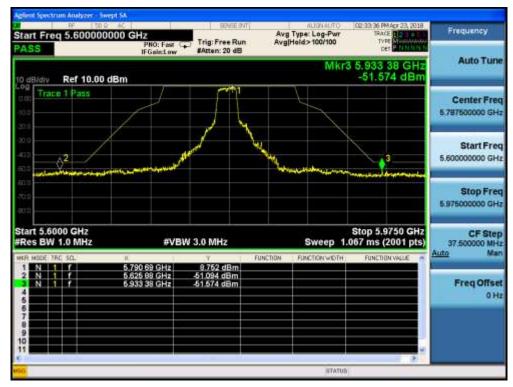


5745MHz by 802.11n(20MHz):

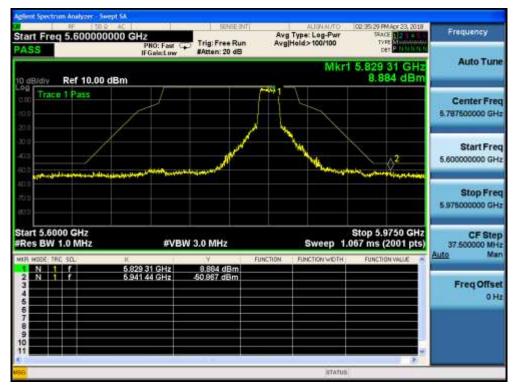




5785MHz by 802.11n(20MHz):



5825MHz by 802.11n(20MHz):





5190MHz by 802.11n(40MHz):

Start Freq 4.500000		Trig: Free Run #Atten: 10 dB	Avg Type: Log-Pwr Avg Held>100/100	07:43:05 PMApr 21, 2018 TRACE 1 2 F TYPE MUSEUM	Frequency
10 dB/div Ref 0.00 dE		and it is	Mkr	1 5.150 00 GHz -50.647 dBm	Auto Tune
10.1				ANA A	Center Freq 4.86000000 GHz
30.0 30.0					Start Freq 4.50000000 GHz
40.0				-36 60 velke 	Stop Freq 5.22000000 GHz
1000 1000 1000	ويعرانه كماكير مداري والمعاري والعراقي والمعاري	redukerkurrenne	september of the second second		CF Step 72.000000 MHz Auto Man
40.5 90.3					Freq Offset 0 Hz
Start 4.5000 GHz #Res BW 1.0 MHz	#VBW	3.0 MHz	Sweep 1	Stop 5.2200 GHz .200 ms (1001 pts)	

5755MHz by 802.11n(40MHz):





5795MHz by 802.11n(40MHz):

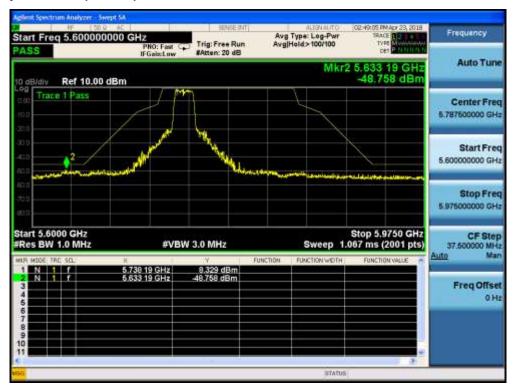




5180MHz by 802.11ac(20MHz):

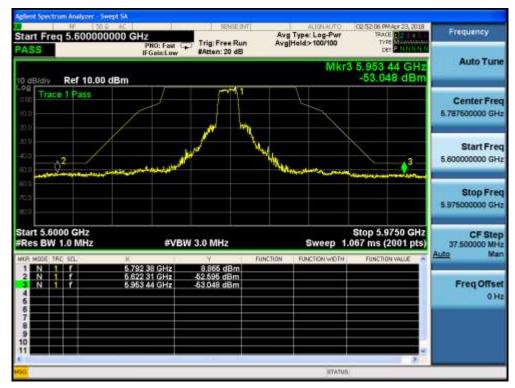
Start Freq 4.500000000		Trig: Free Run #Atten: 10 dB	Avg Type: Log-Pwr Avg Held>100/100	07/38/31 PMApr 21, 2018 TRACE A 2 4 5 TYPE NUMBER OF PLN NUMBER	Frequency
10 dB/diy Ref 0.00 dBm			M	r1 5.150 0 GHz -51.458 dBm	Auto Tune
-10.1				- M	Center Freq 4.85000000 GHz
30.0					Start Freq 4.50000000 GHz
42.0				and the second s	Stop Freq 5.20000000 GHz
000	hanger and a stand of the stand	Waterrithersonals	Mahile ang bahile saganat bises put	كمعسالوسم	CF Step 70.000000 MHz Auto Man
eon					Freq Offset 0 Hz
Start 4.5000 GHz #Res BW 1.0 MHz		3.0 MHz		Stop 5.2000 GHz .200 ms (1001 pts)	

5745MHz by 802.11ac(20MHz):





5785MHz by 802.11ac(20MHz):



5825MHz by 802.11ac(20MHz):





5190MHz by 802.11ac(40MHz):

Start Freq 4.5000000		SENSE INT	ALIGN AUTO Avg Type: Log-Pwr	07:44:17 PMApr 21, 2018 TRACE 1	Frequency
Start Freq 4.5000000	PKO: Fast	Trig: Free Run #Atten: 10 dB	Avg Hold>100/100	DET DELLATION	
10 dB/div Ref 0.00 dBm			Mkr	1 5,150 00 GHz -51.082 dBm	Auto Tune
-10.1				m	Center Freq 4.86000000 GHz
30.0					Start Freq 4.50000000 GHz
424				25 20 400	Stop Freq 5.22000000 GHz
000 ToLogon, physics and an and an	al and the second s	apple to design and the second	hadire alexine generated to		CF Step 72.000000 MHz <u>Auto</u> Man
40:0					Freq Offset 0 Hz
Start 4.5000 GHz #Res BW 1.0 MHz		3.0 MHz	Swaan 1	Stop 5.2200 GHz .200 ms (1001 pts)	

5755MHz by 802.11ac(40MHz):





5795MHz by 802.11ac(40MHz):





5210MHz by 802.11ac(80MHz):

Agiint Spect	Firm Analyzer - Swept		SBV	E-INT(ALIGNMATO	07:46:44	MADY 21, 2018	-
Start Fre	q 4.50000000		Trig: Free #Atten: 10	Run	Avg Type Avg[Hold	e: Log-Pur	THI T		Frequency
10 dB/div	Ref 0.00 dBm		articent in	40		Mk	r1 5.150 -50.5	00 GHz 503 dBm	Auto Tune
Log								monthing	Center Freq 4.88000000 GHz
3010 3010									Start Freq 4.50000000 GHz
-40:6 60:8							\$]	-36100 40	Stop Freq 5.26000000 GHz
000 1000	water the state of	alt de la calandadad	larahshooya	Maria	64-04161,844	the frequency	umint ^{er}		CF Step 76.000000 MHz Auto Man
405									Freq Offset 0 Hz
Start 4.50			2.0.844					2600 GHz	
#Res BW	1.0 MHz	#VB44	3.0 MHz			Sweep		(1001 pts)	

5775MHz by 802.11ac(80MHz):





5180MHz by 802.11ax(20MHz):

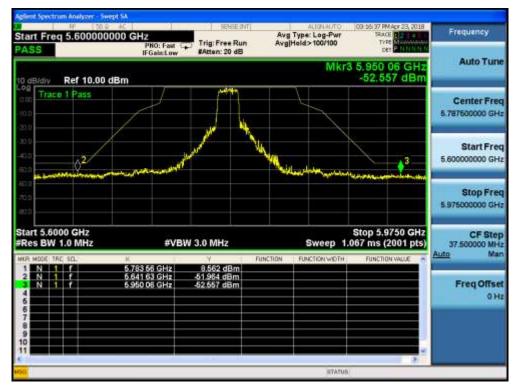


5745MHz by 802.11ax(20MHz):





5785MHz by 802.11ax(20MHz):



5825MHz by 802.11ax(20MHz):





5190MHz by 802.11ax(40MHz):

Start Freq	4.500000000		Trig: Free Run #Atten: 10 dB	Avg Type: Log-Pwr Avg Held>100/100	07-45:19 PMApr 21, 2018 TRACE 1 2 4 5 TYPE MONTHANNING CET P N M I N 1	Frequency
	Ref 0.00 dBm			Mkr	1 5.150 00 GHz -52.933 dBm	Auto Tune
					4078.	Center Freq 4.86000000 GHz
-2018 -2018						Start Freq 4.50000000 GHz
-011 -011					. 93 (8) 40 1	Stop Freq 5.220000000 GHz
000 1000 1000	فعسلم وروادهم والماجه والمعاجل	يعدرونها للمجلور وروار	sensettivel relevale	teapoings ใหม่งสุดรักสิ่งจุษศรี	Madangate	CF Step 72.000000 MHz Auto Man
40.5						Freq Offset 0 Hz
Start 4.5000 #Res BW 1.		#VBM	3.0 MHz	Sweep 1	Stop 5.2200 GHz .200 ms (1001 pts)	

5755MHz by 802.11ax(40MHz):





5795MHz by 802.11ax(40MHz):

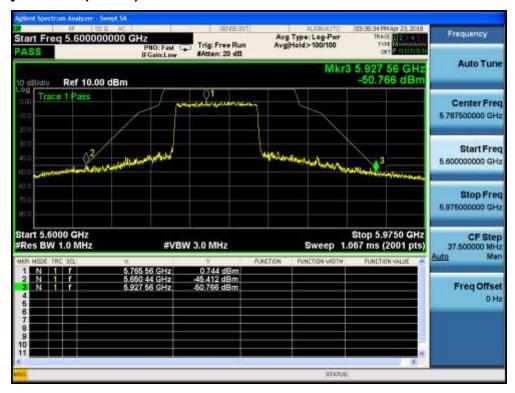




5210MHz by 802.11ax(80MHz):

	PHO: Fast	Trig: Free Run #Atten: 10 dB	Avg Type: Log-Pwr Avg Held>100/100	TRACE 1 2	Frequency
ef 0.00 dBm	IF Gale:Low	RACTION: NO DES	Mki	r1 5.150 00 GHz -51.994 dBm	Auto Tune
				all the areas	Center Freq 4.88000000 GHz
					Start Freq 4.50000000 GHz
					Stop Freq 5.26000000 GHz
co-made phase	Barban Albert Auch	nesettionshipsingheder	My yound we want the the	(frage of	CF Step 76.000000 MHz Auto Man
					Freq Offset 0 Hz
GHz MHz	#VBW	3.0 MHz	Sweep	Stop 5.2600 GHz 1.267 ms (1001 pts)	
	GHz	GHz	GHz	ef 0.00 dBm	ef 0.00 dBm -51.994 dBm

5775MHz by 802.11ax(80MHz):



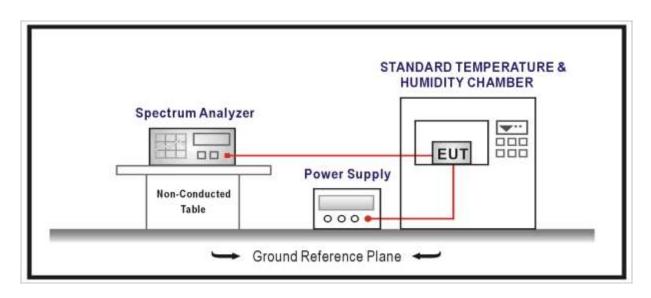


10. Frequency Stability

10.1. Test Equipment

Frequency Stability / TR-8							
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date		
Spectrum Analyzer	Agilent	N9010A	MY48030494	2018.02.04	2019.02.03		
AC Power Supply	IDRC	CF-500TP	979422	2017.09.16	2018.09.15		
DC Power Supply	IDRC	CD-035-020PR	977272	2017.09.16	2018.09.15		
Programmable	Gaoyu	TH-1P-B	WIT-05121302	2018.01.03	2019.01.02		
Temperature & Humidity							
Chamber							
Temperature/Humidity		704.0		2010 04 40	2010 04 00		
Meter	zhichen	ZC1-2	TR8-TH	2018.04.10	2019.04.09		
Note: All equipment are calibrated with traceable calibrations. Each calibration is traceable to the national or							
international standards.							

10.2. Test Setup





10.3. Limit

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



10.4. Test Procedure

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

10.5. Uncertainty

The measurement uncertainty is defined as \pm 100 Hz



10.6. EUT test Axis definition

Item		Fr	Frequency Stability			
-		Outdoor AP				
		Indoor AP				
Device Category		Fixed point-to-poin	nt AP			
		Outdoor fixed poin	t-to-multi	point AP		
		Client(Peer-to-pee	r)			
Test mode	Carrier Wave					
	Conducted					
			Cł	nain 1		
	\square	Chain 1		C	Chain 2	
			•	•		
		Chain 1	Cł	nain 2	Chain 3	
			•	• •		



10.7. Test Result

Product Name	•••	Wireless Access point	Power	:	AC 120V/60Hz
Test Mode	•••	Carrier Wave	Test Site	:	TR8
Test Date	•••	2018.05.20	Test Engineer	:	Eric

Frequency Stability under Temperature at Omin

Temperature Interval (℃)	Test Frequency (MHz)	Deviation (Hz)	ppm	Limit
-30	5220.000	79	0.015	±20
-20	5220.000	215	0.041	±20
-10	5220.000	137	0.026	±20
0	5220.000	-10	-0.002	±20
10	5220.000	33	0.006	±20
20	5220.000	-70	-0.013	±20
30	5220.000	-74	-0.014	±20
40	5220.000	49	0.009	±20
50	5220.000	-3	-0.001	±20



Temperature Interval (℃)	Test Frequency (MHz)	Deviation (Hz)	ppm	Limit
-30	5220.000	-210	-0.040	±20
-20	5220.000	-156	-0.030	±20
-10	5220.000	-37	-0.007	±20
0	5220.000	90	0.017	±20
10	5220.000	-90	-0.017	±20
20	5220.000	-119	-0.023	±20
30	5220.000	107	0.020	±20
40	5220.000	-86	-0.016	±20
50	5220.000	-94	-0.018	±20

Frequency Stability under Temperature at 2min



Temperature Interval (℃)	Test Frequency (MHz)	Deviation (Hz)	ppm	Limit
-30	5220.000	-129	-0.025	±20
-20	5220.000	-122	-0.023	±20
-10	5220.000	107	0.020	±20
0	5220.000	-88	-0.017	±20
10	5220.000	113	0.022	±20
20	5220.000	179	0.034	±20
30	5220.000	161	0.031	±20
40	5220.000	-95	-0.018	±20
50	5220.000	-91	-0.017	±20

Frequency Stability under Temperature at 5min



		, <u>,</u>		
Temperature Interval (℃)	Test Frequency (MHz)	Deviation (Hz)	ppm	Limit
-30	5220.000	123	0.024	±20
-20	5220.000	105	0.020	±20
-10	5220.000	94	0.018	±20
0	5220.000	99	0.019	±20
10	5220.000	-100	-0.019	±20
20	5220.000	148	0.028	±20
30	5220.000	-123	-0.024	±20
40	5220.000	118	0.023	±20
50	5220.000	-94	-0.018	±20

Frequency Stability under Temperature at 10min

Frequency Stability under Voltage

AC Voltage (V)	Test Frequency (MHz)	Deviation (Hz)	ppm	Limit
102	5220.000	114	0.022	±20
120	5220.000	-105	-0.020	±20
138	5220.000	163	0.031	±20



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

Antenna 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

Please refer to the attached document "Internal Photograph" to show the antenna connector.

The End