

Operation Ba Fundamental Operation Mc EUT Pol.	Frequency	:802.11aB1 :5220 MHz :Tx CH MID :H Plane		Test Date Temp./Hu Engineer Measurer		:Tin	_C / 62 RH
97	BuV/m)						
90							
80							
70					FCC	RSE PEAK15.407	
60	FCC RSI	E-AV 15.407		·			
50			· · · · · · · · · · · · · · · · · · ·	·			
40			· · · · · · · · · · · · · · · · · · ·	·			
30			· · · · · · · · · · · · · · · · · · ·	1 1 1 1		 	
20				·			
10				· +		· · · · · · · · · · · · · · · · · · ·	
0 <mark></mark>	880	0.	16600.	24400.	32200.	4000	0
			Frequency (MHz)			
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10440.00	н	Peak	31.53	20.75	52.28	68.30	-16.02



Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11aB1 :5220 MHz :Tx CH MID :H Plane		Test Date Temp./Hu Engineer Measurer		:Tin	03-28 _C / 62 RH CONTAL
97 Eevel (dE	BuV/m)						
90			· · · · · · · · · · · · · · · · · · ·				
80							
70					FCC	RSE PEAK15.407	
60	FCC DSE	-AV15.407					
50							
40							
30		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·				
20							
10							
0	880	0	16600.	24400.	32200.	4000	0
1000	000	0.	Frequency (MHz		52200.	4000	0
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV∕m	dBµV∕m	dB
			·				
10440.00	Н	Peak	31.60	20.75	52.35	68.30	-15.95



Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11aB1 :5240 MHz :Tx CH HIG :H Plane	Н	Test Date Temp./Hu Engineer Measurer	ımi.	:Tin	J_C / 62 RH
97	BuV/m)						
90			· · · · · · · · · · · · · · · · · · ·				
80				 			
70					FCC	RSE PEAK15.407	
60	FCC RSF	-AV15.407					
50			·	 			
40							
30			·				
20							
10							
0	880	0	16600.	24400.	32200.	4000	0
1000	000	0.	Frequency (MHz		52200.	4000	
Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Safe
MHz	F/H/E/S	Mode PK/QP/AV	Reading Level dBµV	dB	FS dBµV∕m	@3m dBµV∕m	Margin dB
			•			I	
10480.00	Н	Peak	31.29	20.79	52.08	68.30	-16.22



Operation Ba Fundamental Operation Mc EUT Pol.	Frequency	:802.11aB1 :5240 MHz :Tx CH HIG :H Plane	Н	Test Date Temp./Hu Engineer Measurer		:Tin	03-28 _C / 62 RH CONTAL
97	BuV/m)						
90							
80							
70					FCC	RSE PEAK15.407	
60	FCC RSF	-AV15.407					
50							
40			· · · · · · · · · · · · · · · · · · ·				
30				1 1 1 1			
20							
10							
0	880	0.	16600.	24400.	32200.	4000	0
			Frequency (MHz)			
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10480.00	н	Peak	31.09	20.79	51.88	68.30	-16.42

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30 20 10 :VERTICAL

Radiated Spurious Emission Measurement Result 802.11a, 5250MHz-5350MHz **Operation Band** :802.11aB2 Test Date :2018-03-28 Fundamental Frequency :5260 MHz Temp./Humi. :23 deg_C / 62 RH

Operation Mode EUT Pol.	:Tx CH LOW :H Plane	Engineer Measurement Antenna Pol.	:Tin :VERTI
97			
90			
80			
70		FCC RSE F	EAK15.407
60	FCC RSE-AV15.407		
50	FCC KSE-AV1 <u>5.407</u>		
40			

°1000	880)0.	16600.	24400.	32200.	400	00	
			Frequency (MH	z)				
Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Safe	
		Mode	Reading Level		FS	@3m	Margin	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
10520.00	н	Peak	31.60	20.78	52.38	68.30	-15.92	

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Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11aB2 :5260 MHz :Tx CH LO\ :H Plane		Test Date Temp./Hu Engineer Measurei	umi.	:Tin	03-28 9_C / 62 RH ZONTAL
97	BuV/m)						1
90		·					
80							
70					FC(C RSE PEAK15.407	
60	FCC RS	E-AV15.407				 	
50							
40							
30							
20						,	
10		·				·	
0 1000	880) 0.	16600. Frequency (MH	24400. z)	32200.	4000	0
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10520.00	н	Peak	31.86	20.78	52.64	68.30	-15.66

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10600.00

Н

Peak

32.44

Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11aB2 :5300 MHz :Tx CH MIE :H Plane		Test Date Temp./Hu Engineer Measurer	ımi.	:Tin	_C / 62 RH
97	BuV/m)						
90							
80							
70	· · · · · · · · · · · · · · · · · · ·				FCC	RSE PEAK15.407	
60	FCC RS	E-AV25.407					
50						 	
40	· · · · · · · · · · · · · · · · · · ·						
30	· · · · · · · · · · · · · · · · · · ·						
20	1 1 1 1 1 1 1 1						
10				 		 	
0 <mark></mark>	880	0.	16600.	24400.	32200.	4000	0
			Frequency (MH)				
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10600.00	Н	Average	22.22	21.18	43.40	54.00	-10.60

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21.18

53.62

74.00



10600.00

Н

Peak

30.87

Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11aB2 :5300 MHz :Tx CH MIE :H Plane		Test Date Temp./Hu Engineer Measurer	ımi.	:Tin	03-28 C / 62 RH CONTAL
97	BuV/m)						
90	· · · · · · · · · · · · · · · · · · ·						
80							
70	J				FC(CRSE PEAK15.407	
60	FCC RS	E-AV15.407					
50							
40							
30							
20							
10							
0 <mark></mark>	880) 0.	16600.	24400.	32200.	4000	0
			Frequency (MH)	Z)			
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10600.00	Н	Average	21.66	21.18	42.84	54.00	-11.16

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21.18

52.05

74.00

-21.95



10640.00

Н

Peak

32.39

Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11aB2 :5320 MHz :Tx CH HIG :H Plane		Test Date Temp./Hu Engineer Measurer	umi.	:Tin	_C / 62 RH
97	BuV/m)				- <u>-</u>		
90							
80							
70	· · · · · · · · · · · · · · · · · · ·			·	FCC	RSE PEAK15.407	
60	FCC RS	E-AV25.407		·			
50							
40	· · · · · · · · · · · · · · · · · · ·			·			
30	· · · · · · · · · · · · · · · · · · ·						
20				 			
10							
0 <mark>0</mark>	880	0.	16600.	24400.	32200.	4000	0
			Frequency (MH				
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10640.00	Н	Average	22.09	21.24	43.33	54.00	-10.67

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21.24

53.63

74.00



Н

Peak

31.66

Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11aB2 :5320 MHz :Tx CH HIG :H Plane		Test Date Temp./Hu Engineer Measurer	ımi.	:Tin	03-28 _C / 62 RH CONTAL
97	BuV/m)						
90							
80							
70					FCC	CRSE PEAK15.407	
60	FCC RSI	E-AV\$5.407					
50							
40	· · · · · · · · · · · · · · · · · · ·						
30	· · · · · · · · · · · · · · · · · · ·						
20							
10				 		 	
0 <mark></mark>	880	0.	16600.	24400.	32200.	4000	0
			Frequency (MH				-
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10640.00	Н	Average	22.11	21.24	43.35	54.00	-10.65

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21.24

52.90

74.00

-21.10

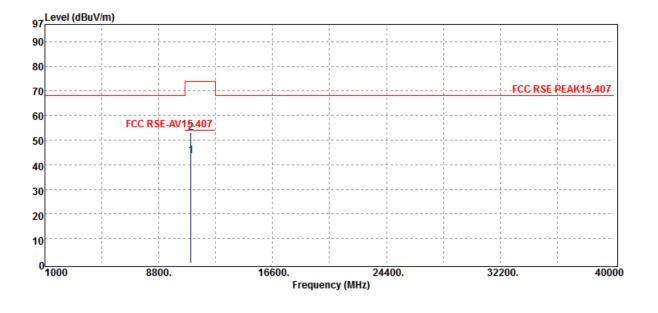


Radiated Spurious Emission Measurement Result 802.11a, 5470~5725 MHz

LOW

Operation Band	:802.11aB3
Fundamental Frequency	:5500 MHz
Operation Mode	:Tx CH LOV
EUT Pol.	:H Plane

Test Date :2018-03-28 Temp./Humi. :23 deg_C / 62 RH Engineer :Tin :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV∕m	dB
11000.00	Н	Average	21.49	22.17	43.66	54.00	-10.34
11000.00	Н	Peak	30.78	22.17	52.95	74.00	-21.05

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11000.00

Н

Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11aB3 :5500 MHz :Tx CH LO\ :H Plane		Test Date Temp./Hu Engineer Measure	umi.	:Tin	03-28 g_C / 62 RH ZONTAL
97	BuV/m)						_
90							
80							
70					FC	C RSE PEAK15.407	
60	ECC DS	E-AV12.407					
50	FCC N3	L-AV 12407					
40							
30				·			
20				·		 	
10						 	
0 <mark>0</mark>	880	0	16600.	24400.	32200.	4000	
1000	000		Frequency (MH		52200.	4000	
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11000.00	Н	Average	21.77	22.17	43.94	54.00	-10.06

Peak

31.48

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22.17

53.65

74.00



11160.00

Н

Peak

Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11aB3 :5580 MHz :Tx CH MIE :H Plane		Test Date Temp./Hu Engineer Measure	umi.	:Tin	J_C / 62 RH
97	BuV/m)						
90							
80							
70					FC	C RSE PEAK15.407	
60	ECC DS	E-AV152407					
50	FUC NG	E-AV 132407					
40				·			
30	·			· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	
20						 	
10				1 1 1 1		 	
0 <mark>0</mark>	880	0	16600.	24400.	32200.	4000	0
1000	000		Frequency (MH		52200.	4000	0
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11160.00	Н	Average	20.61	22.31	42.92	54.00	-11.08

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31.07

22.31

53.38

74.00



11160.00

Н

Peak

Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11aB3 :5580 MHz :Tx CH MIE :H Plane		Test Date Temp./Hu Engineer Measure	umi.	:Tin	03-28 _C / 62 RH CONTAL
97	BuV/m)						
90							
80							
70					FC	C RSE PEAK15.407	
60	ECC DS	E-AV15 ₂ 407					
50	FCC N3	L-AV 1 <u>32401</u>		· · · · · · · · · · · · · · · · · · ·			
40				· · · · · · · · · · · · · · · · · · ·			
30							
20						 	
10							
0 <mark></mark>	880		16600.	24400.	32200.	4000	0
1000	000		Frequency (MH		52200.	4000	0
Freq.	Note	Detector	Spectrum	Factor	Actual FS	Limit	Safe
MHz	F/H/E/S	Mode PK/QP/AV	Reading Level dBµV	dB	FS dBµV∕m	@3m dBµV∕m	Margin dB
11160.00	Н	Average	20.40	22.31	42.71	54.00	-11.29

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22.31

52.99

74.00

-21.01



11400.00

Н

Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11aB3 :5700 MHz :Tx CH HIG :H Plane		Test Date Temp./Hu Engineer Measurer	umi.	:Tin	J_C / 62 RH
97	BuV/m)						1
90							
80							
70					FC(CRSE PEAK15.407	
60	FCC RS	E-AV15.407				 	
50	J					 	
40				 			
30							
20							
10				·			
0 <mark></mark>	880	0.	16600.	24400.	32200.	4000	0
			Frequency (MH	Z)			
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11400.00	Н	Average	21.19	22.42	43.61	54.00	-10.39

Peak

33.84

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22.42

56.26

74.00

-17.74



11400.00

Н

Peak

Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11aB3 :5700 MHz :Tx CH HIG :H Plane		Test Date Temp./Hu Engineer Measurer	ımi.	:Tin)3-28 J_C / 62 RH CONTAL
97	BuV/m)						1
90							
80				 			
70	J		L		FC(RSE PEAK15.407	
60	FCC RS	E-AV15,407		·			
50							
40							
30				·			
20						 	
10						 	
0 <mark></mark> 1000	880	I : I 0.	16600. Frequency (MH	24400. z)	32200.	4000	0
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11400.00	Н	Average	20.88	22.42	43.30	54.00	-10.70

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31.10

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22.42

53.52

74.00



Н

Peak

30.75

Operation Band :802.11n20B1 Test Date :2018-03-28 **Fundamental Frequency** :5180 MHz Temp./Humi. :23 deg_C / 62 RH **Operation Mode** :Tx CH LOW Engineer :Tin EUT Pol. :H Plane :VERTICAL Measurement Antenna Pol. 97 Level (dBuV/m) 90 80 FCC RSE PEAK15 70 60 FCC RSE-AV15.407 50 40 30 20 10 0^L 1000 8800 16600. 24400. 32200. 40000 Frequency (MHz) Freq. Note Detector Spectrum Factor Actual Limit Safe Mode Reading Level @3m Margin FS F/H/E/S PK/QP/AV dBµV dBµV/m dBµV/m dB MHz dB

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

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20.41

51.16

68.30

-17.14



Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11n20 :5180 MHz :Tx CH LO\ :H Plane		Test Date Temp./Hu Engineer Measurer	ımi.	:Tin	03-28 9_C / 62 RH ZONTAL
97 Level (d	BuV/m)						
90							
80				<u> </u>			
70	· · · · · · · · · · · · · · · · · · ·			·	FC(C RSE PEAK15.407	
60		E-AV <u>15.407</u>		·			
50	FCC N3	L-AV15.407					
40							
30				·			
20	· · · · · · · · · · · · · · · · · · ·			·			
10				 		 	
0	880	0	16600.	24400.	32200.	4000	0
1000	000		Frequency (MH		52200.	4000	
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10360.00	Н	Peak	30.72	20.41	51.13	68.30	-17.17



Operation I Fundament Operation I EUT Pol.	tal Frequency	:802.11n20 :5220 MHz :Tx CH MID :H Plane		Te E	est Date emp./Hur ngineer easurem	mi. nent Anter	nna Pol.	:2018-0 :23 deg :Tin :VERTI	_C / 62 RH
97	(dBuV/m)								
90									
80									
70							FCC RSE P	EAK15.407	
60	ECC PSI	-AV15.407							
50									
40						· · · · · · · · · · · · · · · · · · ·			
30	· · · · · · · · · · · · · · · · · · ·								
20	I I I I I I I I I I I I I I I I I I I I					1 1 1 1 1 1 1 1 1			
10							 		
0	880	0.	16600.	244	100.	322	00.	4000	0
			Frequenc	y (MHz)					
Freq.	Note	Detector Mode	Spectrum Reading Lev		actor	Actual FS	Q	imit)3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV		dB	dBµV/r	n dBµ	uV/m	dB
10440.00	н	Peak	31.23	2	0.75	51.98	68	3.30	-16.32



Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11n20 :5220 MHz :Tx CH MIE :H Plane		Test Date Temp./Hu Engineer Measure	umi.	:23 c :Tin	8-03-28 deg_C / 62 RH RIZONTAL
97	BuV/m)						
90							
80							
70					FC	C RSE PEAK15.4	<u>07</u> .
60	FCC RS	E-AV15.407		·			
50		1					
40							
30							
20				 			·
10				·		 	
0 1000	880) 0.	16600. Frequency (MH	24400. z)	32200.	4	0000
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10440.00	Н	Peak	30.53	20.75	51.28	68.30	-17.02

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Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11n20 :5240 MHz :Tx CH HIG :H Plane		Test Date Temp./Hu Engineer Measurer		:Tin	_C / 62 RH
97	BuV/m)						
90							
80							
70					FCC	RSE PEAK15.407	
60	FCC DC	E-AV15.407					
50	FUCKS	E-AV <u>15.407</u>					
40							
30							
20						 	
10						 	
0							
1000	880	0.	16600. Frequency (MHz	24400. .)	32200.	4000	0
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV∕m	dBµV∕m	Margin dB
10480.00	Н	Peak	31.11	20.79	51.90	68.30	-16.40

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Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11n20 :5240 MHz :Tx CH HIG :H Plane		Test Date Temp./Hu Engineer Measure	ımi.	:Tin	03-28 _C / 62 RH CONTAL
97 <mark>Level (dl</mark> 90	BuV/m)						
80							
70					FC(C RSE PEAK15.407	
60	FCC RS	E-AV <u>15.407</u>					
50							
40							
30		·	JJ I I I I I I I I I I	 I I I		· · · · · · · · · · · · · · · · · · ·	
20							
10							
0 ^L 1000	880)0.	16600. Frequency (MH:	24400. z)	32200.	4000	0
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10480.00	Н	Peak	29.84	20.79	50.63	68.30	-17.67



0^L 1000

FCC RSE-AV15.407

8800

Radiated Spurious Emission Measurement Result 802.11n HT20, 5250~5350 MHz **Operation Band** :802.11n20B2 Test Date :2018-03-28 Fundamental Frequency :5260 MHz Temp./Humi. :23 deg_C / 62 RH **Operation Mode** :Tx CH LOW Engineer :Tin EUT Pol. :H Plane :VERTICAL Measurement Antenna Pol. 97 Level (dBuV/m) 90 80 FCC RSE PEAK15.407 70 60

Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV∕m	dB
10520.00	Н	Peak	29.47	20.78	50.25	68.30	-18.05
10020.00		r car	20.47	20.70	00.20	00.00	10.00

Frequency (MHz)

24400.

32200.

40000

16600.

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Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11n20 :5260 MHz :Tx CH LOV :H Plane		Test Date Temp./Humi. Engineer Measurement Antenna Pol.			93-28 _C / 62 RH CONTAL
97 Level (d	BuV/m)						
90	· · · · · · · · · · · · · · · · · · ·						
80				 			
70					FCC	RSE PEAK15.407	
60		-AV15.407					
50							
40							
30	· · · · · · · · · · · · · · · · · · ·						
20							
10							
0 ^L 1000	880	0.	16600. Frequency (MHz	24400.)	32200.	4000	0
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10520.00	Н	Peak	31.79	20.78	52.57	68.30	-15.73



10600.00

Н

Н

Average

Peak

20.09

32.08

Operation Bar Fundamental Operation Mo EUT Pol.	Frequency	:802.11n20l :5300 MHz :Tx CH MID :H Plane		Test Date Temp./Humi. Engineer Measurement Antenna Pol.		:23 de :Tin	-03-28 eg_C / 62 RH TICAL
97	uV/m)						_
90					<mark>1</mark>		
80							
70					FCC	RSE PEAK15.40	<u>7.</u>
<mark>60</mark>	FCC RS	E-AV <u>\$</u> 5.407					
50							
40							
30							- ·
20							
10							
0 1000	880) 0.	16600. Frequency (MH	24400. z)	32200.	40	000
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB

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21.18

21.18

41.27

53.26

54.00

74.00

-12.73



Н

Peak

32.19

Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11n20 :5300 MHz :Tx CH MIE :H Plane		Test Date Temp./Hu Engineer Measure	ımi.	:Tin	03-28 g_C / 62 RH ZONTAL
97 Level (dl	BuV/m)						-
90							
80							
70	J		L		FC	C RSE PEAK15.407	
60	FCC RS	E-AV \$ 5.407					
50							
40				· · · · · · · · · · · · · · · · · · ·		·	
30		· · · · · · · · · · · · · · · · · · ·		1 			
20							
10				 		 	
0 <mark></mark> 1000	880	00.	16600. Frequency (MH	24400. z)	32200.	4000]]0
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10600.00	Н	Average	20.91	21.18	42.09	54.00	-11.91

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21.18

53.37

74.00



Н

Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11n20 :5320 MHz :Tx CH HIG :H Plane		Test Date Temp./Humi. Engineer Measurement Antenna Pol.		:Tin	_C / 62 RH
97	BuV/m)						
90							
80							
70					FCC	RSE PEAK15.407	
60	FCC RSI	E-AV\$5.407		·			
50							
40							
30	· · · · · · · · · · · · · · · · · · ·			·			
20						 	
10				1 1 1 1		 	
0 <mark>1000</mark>	880	0.	16600. Frequency (MH	24400. z)	32200.	4000	0
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10640.00	Н	Average	20.34	21.24	41.58	54.00	-12.42

Peak

31.56

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21.24

52.80

74.00

-21.20



Н

Operation Band Fundamental Frequency Operation Mode EUT Pol.	:802.11n20l :5320 MHz :Tx CH HIG :H Plane		Test Date Temp./Hu Engineer Measure	umi.	:23 :Tin	18-03-28 deg_C / 62 RH DRIZONTAL
97 Level (dBuV/m)						
90						
80						
70				FC	C RSE PEAK15	407
60 ECC PSE	-AV\$5.407					
50						
40						
30						
20						
10	· · · · · · · · · · · · · · · · · · ·					
0		16600.	24400.	32200.		40000
1000 8800		Frequency (MHz		JZ200.		40000
Freq. Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz F/H/E/S	PK/QP/AV	dBµV	dB	dBµV∕m	dBµV∕n	
10640.00 H	Average	20.78	21.24	42.02	54.00	-11.98

Peak

31.82

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21.24

53.06

74.00

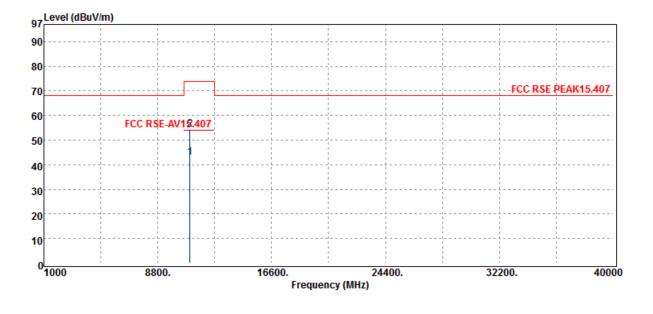


Radiated Spurious Emission Measurement Result 802.11n HT20, 5470~5725 MHz

:80
:55
:Tx
:H F

2.11n20B3 500 MHz CH LOW Plane

Test Date :2018-03-28 Temp./Humi. :23 deg_C / 62 RH Engineer :Tin :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11000.00	Н	Average	20.79	22.17	42.96	54.00	-11.04
11000.00	Н	Peak	32.31	22.17	54.48	74.00	-19.52

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Н

Peak

31.41

Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11n20 :5500 MHz :Tx CH LO :H Plane		Test Date Temp./Humi. Engineer Measurement Antenna Pol.		:Tin	03-28 J_C / 62 RH CONTAL
97 Level (d	BuV/m)						
90							
80	·						
70	· · · · · · · · · · · · · · · · · · ·				FCC	RSE PEAK15.407	
60	FCC DS	E-AV12.407					
50	FUC NO	E-AV 12407					
40							
30							
20	1 1 1 1 1 1			 		 	
10	·					 	
0							
0 ^L 1000	880)0.	16600. Frequency (MH	24400. z)	32200.	4000	0
Freq.	Note	Detector Mode	Spectrum Reading Lovel	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	Reading Level dBµV	dB	rs dBµV∕m	dBµV∕m	Margin dB
11000.00	Н	Average	21.44	22.17	43.61	54.00	-10.39
11000.00		/ woruge	2		10.01	51.00	10.00

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22.17

53.58

74.00



11160.00

Н

Н

Average

Peak

20.75

30.75

22.31

22.31

43.06

53.06

54.00

74.00

-10.94

-20.94

peration Band Indamental Frequer peration Mode JT Pol.	:802.11n20 ncy :5580 MHz :Tx CH MII :H Plane	<u>.</u>	Engineer	emp./Humi.		:2018-03-28 :23 deg_C / 62 R :Tin :VERTICAL	
97 Level (dBuV/m)							
90			·				
80							
70				FC(C RSE PEAK15.407		
60	C RSE-AV15,407						
50			·				
40			·				
30			·		 		
20			·		 		
10					 		
0 <mark></mark> 1000	8800.	16600. Frequency (MH	24400. z)	32200.	40000)	
Freq. Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin	
MHz F/H/E/	S PK/QP/AV	•	dB	dBµV/m	dBµV/m	dB	

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11160.00

11160.00

Н

Н

Average

Peak

21.18

29.36

peration Band ndamental Fre peration Mode JT Pol.	quency	:802.11n20 :5580 MHz :Tx CH MIE :H Plane		Test Date Temp./Humi. Engineer Measurement Antenna Pol.		:23 de :Tin		
97 Level (dBuV/n	1)						_	
90								
80								
70					FC	C RSE PEAK15.407		
60	FCC RS	E-AV15,407		·				
50								
40						 		
30				1 1 1 1 1		 		
20	 					 		
10	 							
01000	880) 0.	16600. Frequency (MH	24400. z)	32200.	400	000	
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin	
MHz F/	H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	

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22.31

22.31

43.49

51.67

54.00

74.00

-10.51

-22.33



Н

Peak

30.74

Operation Ba Fundamenta Operation Mo EUT Pol.	I Frequency	:802.11n20 :5700 MHz :Tx CH HIG :H Plane		Test Date Temp./Hu Engineer Measure	umi.	:Tin	<u>_</u> C / 62 RH
97 Level (d	BuV/m)						1
90				·			
80				·			
70					FC	C RSE PEAK15.407	
60	FCC RS	E-AV15,407					
50							
40	· · · · · · · · · · · · · · · · · · ·			·			
30	I I I I I I I I I I I I I I I I I I I	· · · · · · · · · · · · · · · · · · ·		·		 	
20				·		 	
10				1 1 1 1		 	
0 1000	880	00.	16600. Frequency (MH	24400. z)	32200.	4000	0
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11400.00	Н	Average	20.65	22.42	43.07	54.00	-10.93

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22.42

53.16

74.00



Н

Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11n20 :5700 MHz :Tx CH HIC :H Plane		Test Date Temp./Humi. Engineer Measurement Antenna Pol.			03-28 g_C / 62 RH ZONTAL
97 Level (d	BuV/m)						_
90							
80	·		·				
70					FC	C RSE PEAK15.407	
60	FCC RS	E-AV15/407					
50							
40	·						
30		·				 	
20							
10							
0 <mark></mark> 1000	880) 0.	16600. Frequency (MI	24400. Iz)	32200.	400	_ 00
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11400.00	Н	Average	21.51	22.42	43.93	54.00	-10.07

Peak

31.29

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22.42

53.71

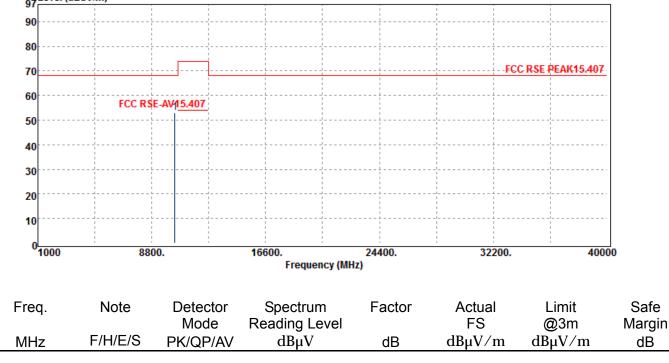
74.00



Н

Peak

Radiated Spurious Emission Measurement Result 802.11n HT40, 5150~5250 MHz **Operation Band** :802.11n40B1 Test Date :2018-03-28 Fundamental Frequency :5190 MHz Temp./Humi. :23 deg_C / 62 RH **Operation Mode** :Tx CH LOW Engineer :Tin EUT Pol. :H Plane :VERTICAL Measurement Antenna Pol. 97 Level (dBuV/m)



32.44

20.48

52.92

68.30

-15.38

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Operation Band Fundamental Frequency Operation Mode EUT Pol.		:802.11n40B1 :5190 MHz :Tx CH LOW :H Plane		Test Date Temp./Humi. Engineer Measurement Antenna Pol.			018-03-28 3 deg_C / 62 RH ïn IORIZONTAL
97	BuV/m)						
90	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			·			
80				·			
70					FC	C RSE PEAK	15.407
60	FCC RS	E-AV15.407		·			
50	J			·			
40				1 1 1 1		 	
30							
20							
10				·			
0 <mark>0</mark>	880	0.	16600.	24400.	32200.	1	40000
Frequency (MHz)							
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV∕	
10380.00	Н	Peak	32.19	20.48	52.67	68.30) -15.63



Operation Ba Fundamental Operation Mc EUT Pol.	Frequency	:802.11n40l :5230 MHz :Tx CH HIG :H Plane		Test Date Temp./Hu Engineer Measurer		:Tin	_C / 62 RH
97	BuV/m)						
90 							
80							
70					FCC	RSE PEAK15.407	
60		-AV15.407					
50	ru na	-401					
40							
30							
20				· + +			
10		· · · · · · · · · · · · · · · · · · ·		I 		 	
0	880		16600.	24400.	32200.	4000	n
1000	000		Frequency (MHz		JZ200.	4000	
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV∕m	dBµV/m	dB
10460.00	<u> </u>	Deel	20.75	20.77	E1 E 2	69.20	16 79
10460.00	Н	Peak	30.75	20.77	51.52	68.30	-16.78

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Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11n40 :5230 MHz :Tx CH HIG :H Plane		Test Date Temp./Humi. Engineer Measurement Antenna Pol.			03-28 g_C / 62 RH ZONTAL
97 Level (d	BuV/m)						_
90							
80							
70					FCC	CRSE PEAK15.407	
60	FCC DE	E-AV15.407					
50	FUC KS	E-AV1 <u>3.407</u>					
40							
30				·			
20						 	
10						 	
0 ^L 1000	880	0.	16600. Frequency (MH	24400. z)	32200.	400	00
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV∕m	dBµV/m	dB
10460.00	Ш	Poak	20.91	20.77	51 59	68 30	16 72
MHz 10460.00	F/H/E/S H		-	dB 20.77	-		-



Operation Ba Fundamental Operation Mc EUT Pol.	Frequency	:802.11n40 :5270 MHz :Tx CH LO\ :H Plane		Test Date Temp./Humi. Engineer Measurement Antenna Pol.)3-28 g_C / 62 RH CAL
97	BuV/m)						_
90					<mark>-</mark>		
80							
70					FC(C RSE PEAK15.407	
60						,	
50	FCC RSI	-AV1 <u>5.407</u>					
40						 	
30					· · · · · · · · · · · · · · · · · · ·		
20							
10							
0 ^L 1000	880	0.	16600. Frequency (MHz	24400. !)	32200.	4000	ĨO
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10540.00	Н	Peak	32.44	20.82	53.26	68.30	-15.04



Operation Ba Fundamental Operation Mc EUT Pol.	Frequency	:802.11n40l :5270 MHz :Tx CH LOV :H Plane		Test Date Temp./Humi. Engineer Measurement Antenna Pol.)3-28 J_C / 62 RH CONTAL
97 Level (df	BuV/m)						
90 90							
80				 			
70					FCC	RSE PEAK15.407	
60		-AV15.407					
50	ree ka	-401					
40							
30							
20							
10							
0		0	16600.	24400.	22200	4000	
01000	880	υ.	Frequency (MHz		32200.	4000	U
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV∕m	dBµV∕m	dB
10540.00	Н	Peak	31.49	20.82	52.31	68.30	-15.99



Н

Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11n40 :5310 MHz :Tx CH HIG :H Plane		Test Date Temp./Humi. Engineer Measurement Antenna Pol.			2018-03-2 23 deg_C Tin VERTICAL	/ 62 RH
97	BuV/m)							
90								
80								
70	· · · · · · · · · · · · · · · · · · ·			·	FC	C RSE PEAK	(15.407	
60	FCC DO							
50	FUCKS	E-AV25.407						
40								
30								
20								
10								
0	880		16600.	24400.	22200		40000	
1000	880		Frequency (MH		32200.		40000	
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Lim @3r		Safe argin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV∕m	dBµV		dB
10620.00	Н	Average	19.79	21.21	41.00	54.0	0 -1	3.00

Peak

32.61

21.21

53.82

74.00

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Н

Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11n40 :5310 MHz :Tx CH HIG :H Plane		Test Date Temp./Humi. Engineer Measurement Antenna Pol.			8-03-28 eg_C / 62 RH RIZONTAL
97	BuV/m)						
90							
80							
70	J				FC	C RSE PEAK15.40	<u>17.</u>
60	FCC RS	E-AV15.407					
50							
40				·			
30				·			
20				 		 	
10							
0 <mark></mark>	880	0	16600.	24400.	32200.	A(0000
1000	000		Frequency (MH		52200.	-	
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV∕m	dBµV/m	dB
10620.00	Н	Average	20.19	21.21	41.40	54.00	-12.60

Peak

31.31

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21.21

52.52

74.00

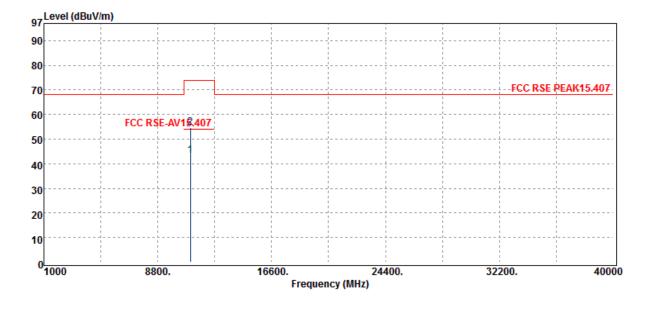
-21.48



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

Operation Band	:802.11n40B3
Fundamental Frequency	:5510 MHz
Operation Mode	:Tx CH LOW
EUT Pol.	:H Plane

Test Date :2018-03-28 Temp./Humi. :23 deg_C / 62 RH Engineer :Tin :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11020.00	Н	Average	21.01	22.28	43.29	54.00	-10.71
11020.00	Н	Peak	32.30	22.28	54.58	74.00	-19.42



Н

Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11n40 :5510 MHz :Tx CH LO :H Plane		Test Date Temp./Hu Engineer Measurer	ımi.	:Tin	03-28 J_C / 62 RH ZONTAL
97 Level (d	BuV/m)						
90							
80	 					 	
70					FCC	RSE PEAK15.407	
60	FCC PS	E-AV12.407		1 1 1 1 1			
50	Teens						
40							
30	J					 	
20						 	
10							
0 <mark>0</mark>	880	0.	16600.	24400.	32200.	4000	0
			Frequency (MH	Z)			
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11020.00	Н	Average	21.06	22.28	43.34	54.00	-10.66

Peak

31.28

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22.28

53.56

74.00



Н

Peak

32.81

Operation Ba Fundamenta Operation Me EUT Pol.	I Frequency	:802.11n40 :5550 MHz :Tx CH MIE :H Plane		Test Date Temp./Hu Engineer Measure	umi.	:Tin	_C / 62 RH
97	IBuV/m)						1
90							
80				· · · · · · · · · · · · · · · · · · ·			
70					FC(C RSE PEAK15.407	
60	FCC RS	E-AV1\$407					
50							
40							
30							
20							
10				· · · · · · · · · · · · · · · · · · ·		 	
0 <mark>1000</mark>	88(0 0.	16600. Frequency (MH	24400. z)	32200.	4000	0
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11100.00	Н	Average	20.22	22.38	42.60	54.00	-11.40

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22.38

55.19

74.00

-18.81



Н

Peak

30.79

Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11n40 :5550 MHz :Tx CH MID :H Plane		Test Date Temp./Hu Engineer Measure	umi.	:Tin	03-28 J_C / 62 RH ZONTAL
97 Level (d	BuV/m)						
90							
80							
70					FC(RSE PEAK15.407	
60	FCC DS	E-AV152407					
50	ruc na	E-AV 1 <u>32407</u>					
40							
30							
20							
10	·			·		 	
0 <mark></mark>	880	0.	16600.	24400.	32200.	4000	0
			Frequency (MH				-
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11100.00	Н	Average	20.66	22.38	43.04	54.00	-10.96

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22.38

53.17

74.00



Н

Peak

31.80

Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11n408 :5670 MHz :Tx CH HIG :H Plane		Test Date Temp./Humi. Engineer Measurement Antenna Pol.			03-28 g_C / 62 RH ICAL
97 Level (d	BuV/m)						
90			· · · · · · · · · · · · · · · · · · ·				
80							
70					FCC	RSE PEAK15.407	
60	FCC DEF	-AV152407					
50		-AV1 <u>5407</u>					
40							
30				· · · · · · · · · · · · · · · · · · ·		 	
20							
10			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		 	
0	880	0	16600.	24400.	32200.	4000	0
1000	000	0.	Frequency (MHz		52200.	4000	
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV∕m	dBµV∕m	dB
11340.00	Н	Average	20.48	22.34	42.82	54.00	-11.18

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22.34

54.14

74.00

-19.86



Н

Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11n40 :5670 MHz :Tx CH HI0 :H Plane		Test Date Temp./Hu Engineer Measure	ımi.	:Tin	03-28 g_C / 62 RH ZONTAL
97 Level (d	BuV/m)						_
90							
80							
70					FC	C RSE PEAK15.407	
60	ECC DS	E-AV152407					
50	FUC N3	E-AV 13407					
40							
30							
20	·			 		 	
10	·					 	
0			10000			100	
0 <mark>1000</mark>	880	J U .	16600. Frequency (MI	24400. Iz)	32200.	400	00
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	-	dB	dBµV/m	dBµV/m	dB
11340.00	Н	Average	21.32	22.34	43.66	54.00	-10.34

Peak

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32.12

22.34

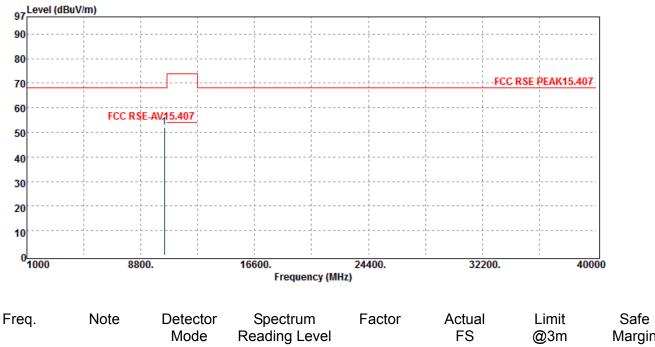
54.46

74.00

-19.54



Radiated Spurious Emission Measurement Result 802.11ac VHT80, 5150~5250 MHz **Operation Band** :802.11ac80B1 Test Date :2018-03-28 Fundamental Frequency Temp./Humi. :5210 MHz :23 deg_C / 62 RH **Operation Mode** :Tx CH LOW Engineer :Tin EUT Pol. :H Plane Measurement Antenna Pol. :VERTICAL



MHz	F/H/E/S	PK/QP/AV	dBµV	dB	FS dBµV∕m	dBµV∕m	dB	
10420.00	Н	Peak	31.31	20.69	52.00	68.30	-16.30	_

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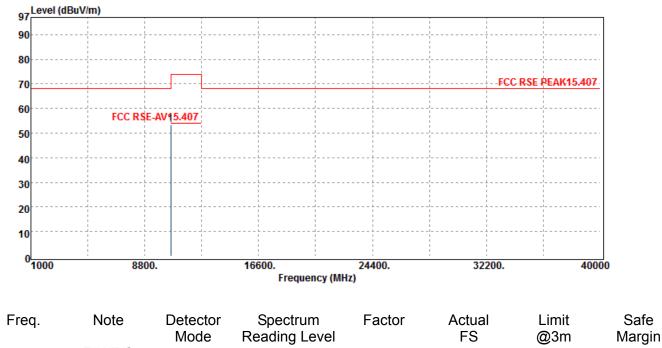
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Operation Ba Fundamental Operation Mc EUT Pol.	Frequency	:802.11ac8(:5210 MHz :Tx CH LOV :H Plane		Test Date Temp./Hu Engineer Measure	umi.	:23 deg :Tin	:2018-03-28 :23 deg_C / 62 RH :Tin :HORIZONTAL	
97 Level (dl	BuV/m)							
90								
80								
70					FC(C RSE PEAK15.407		
60	FCC RSI	-AV,15.407						
50								
40								
30								
20								
10						 		
0 <mark>0</mark>	880	0	16600.	24400.	32200.	4000	0	
1000	000	0.	Frequency (MHz		52200.	4000	0	
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	
10420.00	н	Peak	31.43	20.69	52.12	68.30	-16.18	



Radiated Spurious Emission Measurement Result 802.11ac VHT80, 5250~5350 MHz **Operation Band** :802.11ac80B2 Test Date :2018-03-28 Fundamental Frequency :5290 MHz Temp./Humi. :23 deg_C / 62 RH **Operation Mode** :Tx CH HIGH Engineer :Tin :VERTICAL EUT Pol. :H Plane Measurement Antenna Pol.



MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
10580.00	Н	Peak	32.41	21.03	53.44	68.30	-14.86

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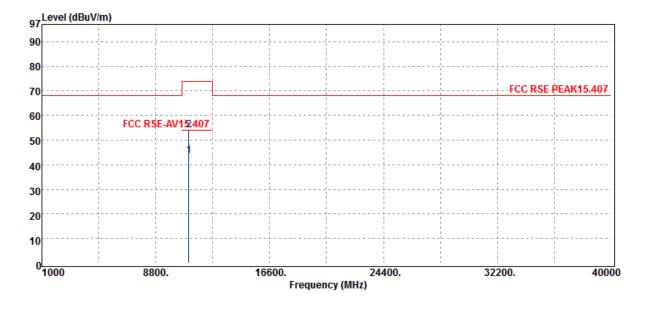
Operation Band Fundamental Freque Operation Mode EUT Pol.	:802.11ac ency :5290 MH :Tx CH H :H Plane	lz	Test Date Temp./Hu Engineer Measure	umi.	:Tin	03-28 g_C / 62 RH ZONTAL
97 						
90]
80						
70				FC	C RSE PEAK15.407	
60						
50	CC RSE-AV1 <u>5.407</u>					
40						
30						
20						
10						
0						
0 <mark>1000</mark>	8800.	16600. Frequency (M	24400. Hz)	32200.	400	00
Freq. Not	e Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz F/H/E		•	dB	r3 dBµV∕m	dBµV∕m	Margin dB
10580.00 H	Peak	31.22	21.03	52.25	68.30	-16.05



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

Operation Band	:802.11ac80B3
Fundamental Frequency	:5530 MHz
Operation Mode	:Tx CH LOW
EUT Pol.	:H Plane

Test Date :2018-03-28 Temp./Humi. :23 deg_C / 62 RH Engineer :Tin :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11060.00	Н	Average	21.07	22.41	43.48	54.00	-10.52
11060.00	Н	Peak	31.71	22.41	54.12	74.00	-19.88
11060.00	Н	Peak	31.71	22.41	54.12	74.00	-19.88



Н

Peak

31.51

Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11ac8 :5530 MHz :Tx CH LO\ :H Plane		Test Date Temp./Hu Engineer Measure	umi.	:Tin	03-28 9_C / 62 RH ZONTAL
97 Level (d	BuV/m)						
90							
80							
70	· · · · · · · · · · · · · · · · · · ·				FC(C RSE PEAK15.407	
60	FCC DS						
50	FUCKS	E-AV1 <u>2407</u>					
40							
30							
20							
10	· · · · · · · · · · · · · · · · · · ·					 	
0 1000			16600.	24400.	22200	4000	
1000	880	<i>.</i>	Frequency (MH		32200.	4000	0
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
11060.00	Н	Average	21.19	22.41	43.60	54.00	-10.40

22.41

53.92

74.00

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Н

Peak

31.34

Operation Band Fundamental Frequency Operation Mode EUT Pol.			:802.11ac80B3 :5610 MHz :Tx CH HIGH :H Plane			Ter En	Test Date Temp./Humi. Engineer Measurement Antenna Pol.				:2018-03-28 :23 deg_C / 62 RH :Tin :VERTICAL	
معلو	evel (dBuV/m)										
90	·											
80												
70									FCC RSE	PEAK15.407		
60		FCC DEF	AV/4 F0407									
50		FUC KSE	-AV1 <u>52407</u>									
40					· · · · · · · · · · · · · · · · · · ·							
30								· · · · · · · · · · · · · · · · · · ·				
20					 					1 1 1 1 		
10												
										1		
°1(000	8800).	166	600. Frequency (M	2440 Hz)	0.	322	200.	4000	0	
Freq.	. N	Note	Detect Mode		Spectrum ading Level	Fa	ctor	Actua FS		_imit ⊉3m	Safe Margin	
MHz	F/I	H/E/S	PK/QP/	/AV	dBµV	C	IB	dBµV/1	m dB	µV/m	dB	
11220.0	00	Н	Avera	ge	21.19	22		43.55	5	4.00	-10.45	

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22.36

53.70

74.00



Н

Operation Ba Fundamental Operation Mo EUT Pol.	Frequency	:802.11ac80 :5610 MHz :Tx CH HIG :H Plane		Test Date Temp./Humi. Engineer Measurement Antenna Pol.			03-28 g_C / 62 RH ZONTAL
97 Level (d	BuV/m)						_
90							
80		· · · · · · · · · · · · · · · · · · ·					
70					FC(RSE PEAK15.407	
60		A145 407					
50	FUL KSE	-AV1 <u>5₂407</u>					
40							
30							
20							
10							
0	880		16600.	24400.	32200.	400	
1000	080	0.	Frequency (MHz		32200.	400	00
Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Safe Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV∕m	dBµV/m	dB
11220.00	Н	Average	21.46	22.36	43.82	54.00	-10.18

Peak

30.77

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22.36

53.13

74.00



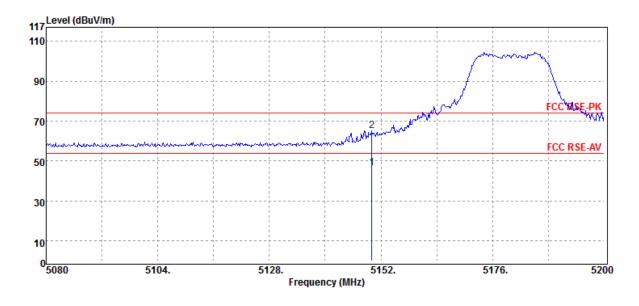
Band Edge falling to restricted band

802.11a mode

:802.11aB1 **Operation Band** Fundamental Frequency :5180 MHz **Operation Mode** :Bandedge CH LOW EUT Pol. :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :Tin :VERTICAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5150.00	E	Average	38.35	8.32	46.67	54.00	-7.33
5150.00	E	Peak	56.80	8.32	65.12	74.00	-8.88

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Report No.: ER/2018/30033 Page: 122 of 181



Operation Band :802.11aB1 Test Date :2018-03-27 Fundamental Frequency :5180 MHz Temp./Humi. :23 deg_C / 62 RH **Operation Mode** :Bandedge CH LOW Engineer :Tin EUT Pol. :H Plane :HORIZONTAL Measurement Antenna Pol. .evel (dBuV/m) 117 110 90 70 FCC RSE-AV 50 30 10 0 5080 5104 5128 5152. 5176. 5200 Frequency (MHz) Frea Note Detector Spectrum Factor Actual Limit Margin

Mode Reading Level FS @3m	
MHz F/H/E/S PK/QP/AV $dB\mu V$ dB $dB\mu V/m$ $dB\mu V/m$	dB
5150.00 E Average 38.91 8.32 47.23 54.00	-6.77
5150.00 E Peak 56.80 8.32 65.12 74.00	-8.88

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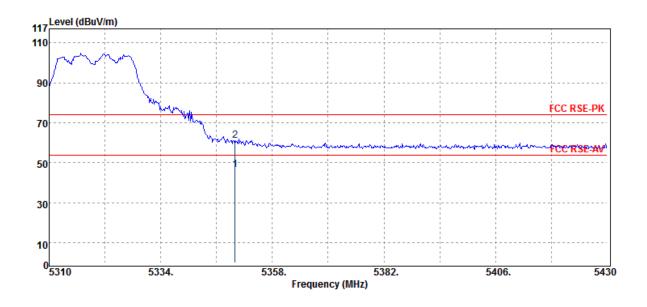
pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

Report No.: ER/2018/30033 Page: 123 of 181



Operation Band :802.11aB2 Fundamental Frequency :5320 MHz **Operation Mode** :Bandedge CH HIGH EUT Pol. :H Plane

Test Date :2018-03-27 Temp./Humi. :23 deg_C / 62 RH Engineer :Tin :VERTICAL Measurement Antenna Pol.



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBμV	dB	dBµV∕m	dBµV/m	dB
5350.00	E	Average	38.04	8.63	46.67	54.00	-7.33
5350.00	E	Peak	52.56	8.63	61.19	74.00	-12.81

Report No.: ER/2018/30033 Page: 124 of 181

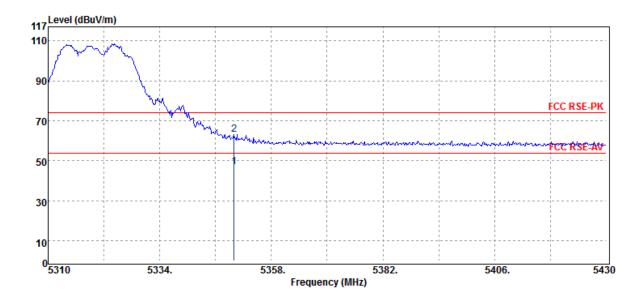


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11aB2 :5320 MHz :Bandedge CH HIGH :H Plane

Test Date Temp./Humi. Engineer :Tin Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :HORIZONTAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5350.00	E	Average	38.51	8.63	47.14	54.00	-6.86
5350.00	E	Peak	54.57	8.63	63.20	74.00	-10.80
5350.00	F/H/E/S E E	PK/QP/AV Average	dBμV 38.51	8.63	dBμV/m 47.14	<u>dBμV/m</u> 54.00	-6.86

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Report No.: ER/2018/30033 Page: 125 of 181

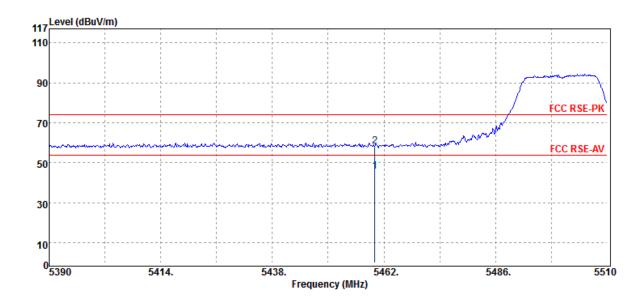


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11aB3 :5500 MHz :Bandedge CH LOW :H Plane

Test Date Temp./Humi. Engineer :Tin Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :VERTICAL



Margin
dB
-8.23
-15.65
-

Report No.: ER/2018/30033 Page: 126 of 181

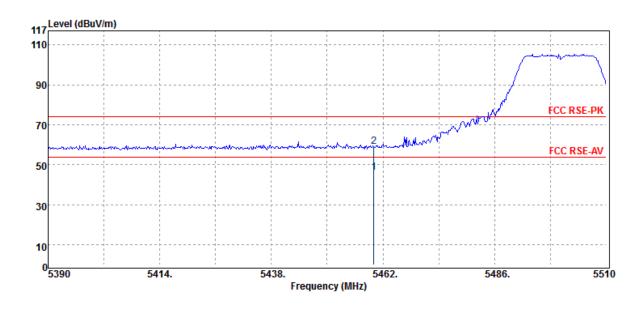


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11aB3 :5500 MHz :Bandedge CH LOW :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :Tin :HORIZONTAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5460.00	E	Average	37.51	8.75	46.26	54.00	-7.74
5460.00	E	Peak	50.25	8.75	59.00	74.00	-15.00

Report No.: ER/2018/30033 Page: 127 of 181

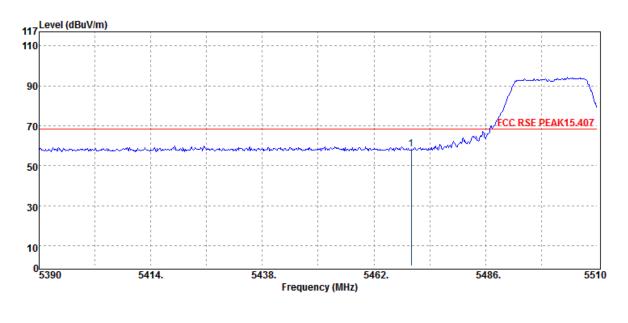


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11aB3 :5500 MHz :Bandedge CH LOW RSE :H Plane

Test Date Temp./Humi. Engineer :Tin Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :VERTICAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV∕m	dBµV∕m	dB
5470.00	E	Peak	49.48	8.74	58.22	68.30	-10.08

Report No.: ER/2018/30033 Page: 128 of 181

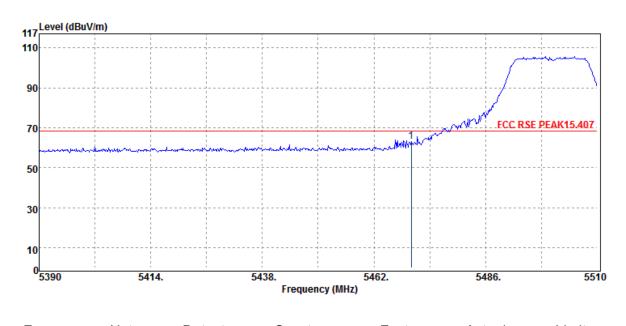


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11aB3 :5500 MHz :Bandedge CH LOW RSE :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :Tin :HORIZONTAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
 MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
 5470.00	Е	Peak	54.26	8.74	63.00	68.30	-5.30

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Report No.: ER/2018/30033 Page: 129 of 181

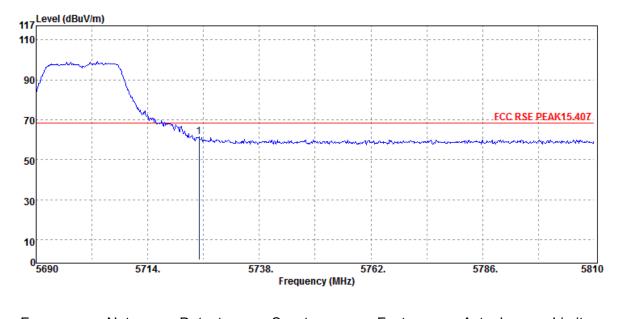


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11aB3 :5700 MHz :Bandedge CH HIGH RSE :H Plane

Test Date Temp./Humi. Engineer :Tin Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :VERTICAL



Fre	eq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin	
			Mode	Reading Level		FS	@3m		
M	Ηz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	_
572	5.00	E	Peak	52.07	9.44	61.51	68.30	-6.79	-

Report No.: ER/2018/30033 Page: 130 of 181

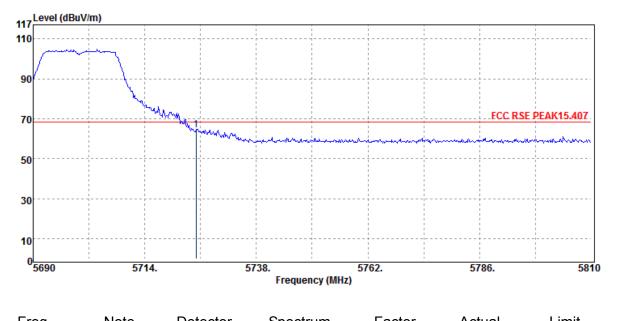


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11aB3 :5700 MHz :Bandedge CH HIGH RSE :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :Tin :HORIZONTAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5725.00	Е	Peak	54.86	9.44	64.30	68.30	-4.00

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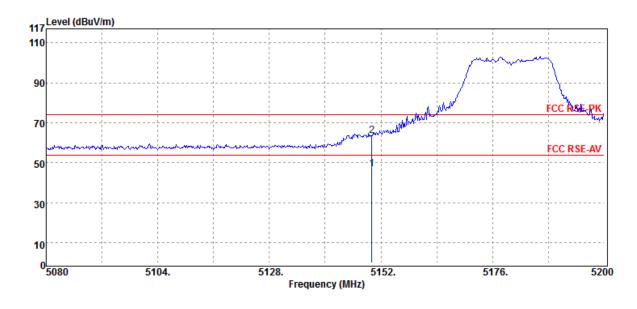
802.11n20 HT mode

Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11n20B1 :5180 MHz :Bandedge CH LOW :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :Tin :VERTICAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5150.00	E	Average	38.79	8.32	47.11	54.00	-6.89
5150.00	E	Peak	55.19	8.32	63.51	74.00	-10.49

Report No.: ER/2018/30033 Page: 132 of 181

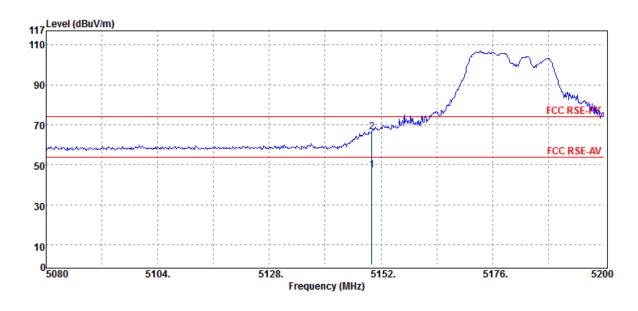


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11n20B1 :5180 MHz :Bandedge CH LOW :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :Tin :HORIZONTAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5150.00	E	Average	39.19	8.32	47.51	54.00	-6.49
5150.00	Е	Peak	58.16	8.32	66.48	74.00	-7.52

Report No.: ER/2018/30033 Page: 133 of 181

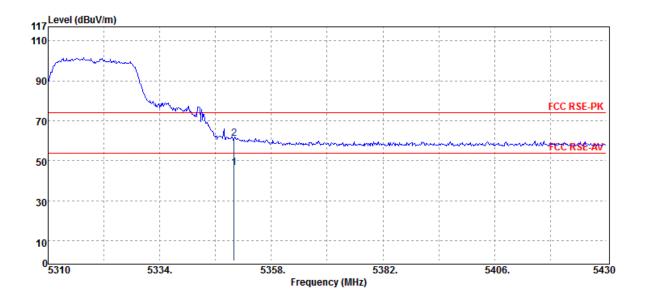


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11n20B2 :5320 MHz :Bandedge CH HIGH :H Plane

Test Date Temp./Humi. Engineer :Tin Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :VERTICAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5350.00	E	Average	38.08	8.63	46.71	54.00	-7.29
5350.00	E	Peak	52.32	8.63	60.95	74.00	-13.05

Report No.: ER/2018/30033 Page: 134 of 181

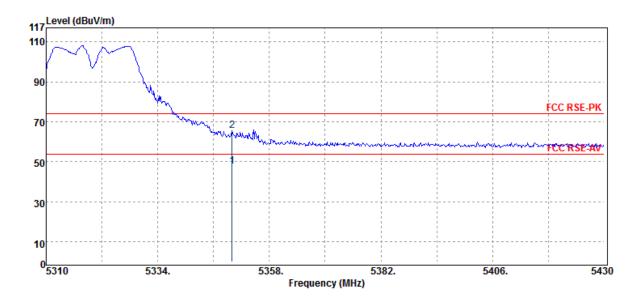


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11n20B2 :5320 MHz :Bandedge CH HIGH :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :Tin :HORIZONTAL



Note	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
E	Average	39.02	8.63	47.65	54.00	-6.35
Е	Peak	56.78	8.63	65.41	74.00	-8.59
		Mode F/H/E/S PK/QP/AV E Average	ModeReading Level/H/E/SPK/QP/AVdBµVEAverage39.02	ModeReading Level/H/E/SPK/QP/AVdBμVdBEAverage39.028.63	ModeReading LevelFS/H/E/SPK/QP/AVdBµVdBdBµV/mEAverage39.028.6347.65	$\begin{tabular}{c c c c c c c c c c c c c c c c c c c $

Report No.: ER/2018/30033 Page: 135 of 181

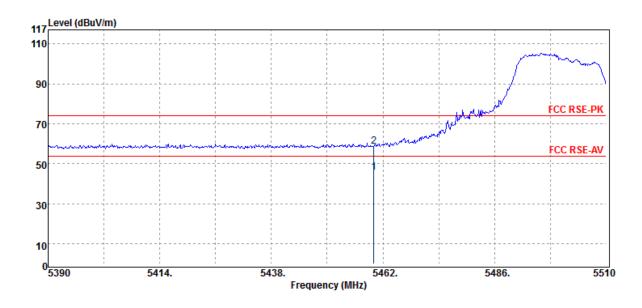


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11n20B3 :5500 MHz :Bandedge CH LOW :H Plane

Test Date Temp./Humi. Engineer :Tin Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :VERTICAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5460.00	E	Average	37.17	8.75	45.92	54.00	-8.08
5460.00	E	Peak	49.85	8.75	58.60	74.00	-15.40

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Report No.: ER/2018/30033 Page: 136 of 181

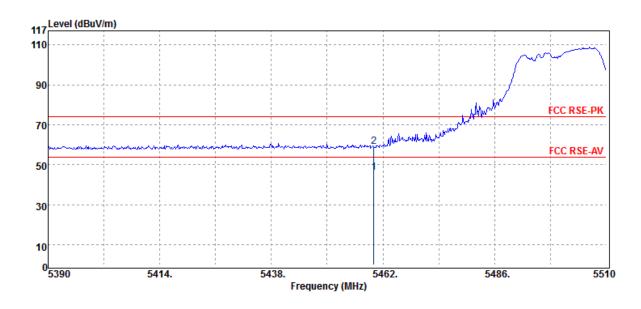


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11n20B3 :5500 MHz :Bandedge CH LOW :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :Tin :HORIZONTAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5460.00	E	Average	37.49	8.75	46.24	54.00	-7.76
5460.00	Е	Peak	50.47	8.75	59.22	74.00	-14.78

Report No.: ER/2018/30033 Page: 137 of 181

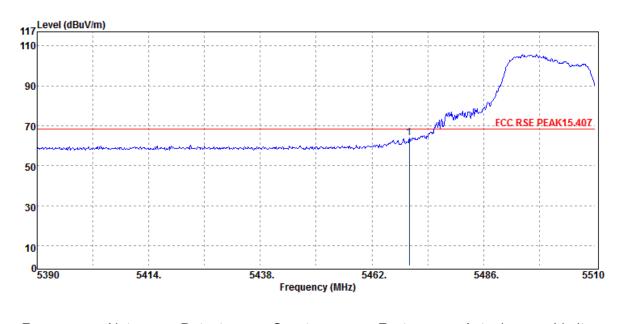


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11n20B3 :5500 MHz :Bandedge CH LOW RSE :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :Tin :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
 MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV∕m	dB
 5470.00	E	Peak	55.22	8.74	63.96	68.30	-4.34

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Report No.: ER/2018/30033 Page: 138 of 181

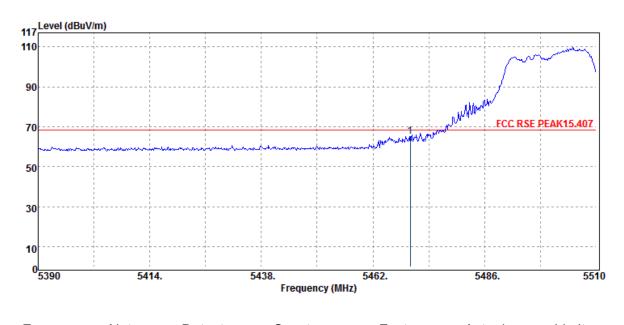


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11n20B3 :5500 MHz :Bandedge CH LOW RSE :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-29 :23 deg_C / 62 RH :Tin :HORIZONTAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
 MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV∕m	dBµV/m	dB
 5470.00	Е	Peak	56.64	8.74	65.38	68.30	-2.92

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Report No.: ER/2018/30033 Page: 139 of 181

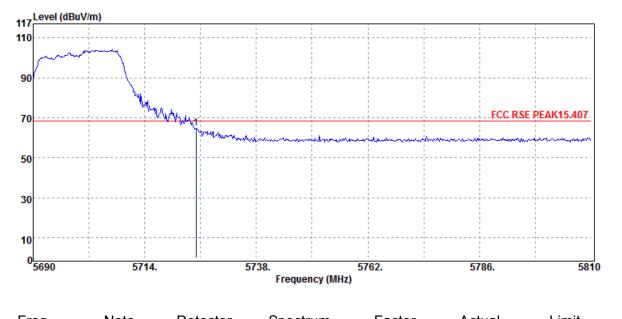


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11n20B3 :5700 MHz :Bandedge CH HIGH RSE :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :Tin :VERTICAL



⊢req.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5725.00	E	Peak	55.30	9.44	64.74	68.30	-3.56

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Report No.: ER/2018/30033 Page: 140 of 181

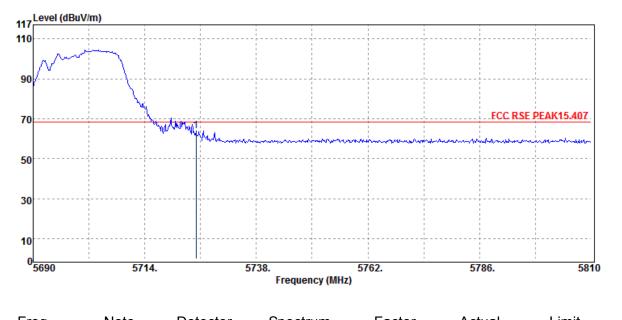


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n20B3 :5700 MHz :Bandedge CH HIGH RSE :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :Tin :HORIZONTAL



⊢req.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5725.00	E	Peak	54.49	9.44	63.93	68.30	-4.37

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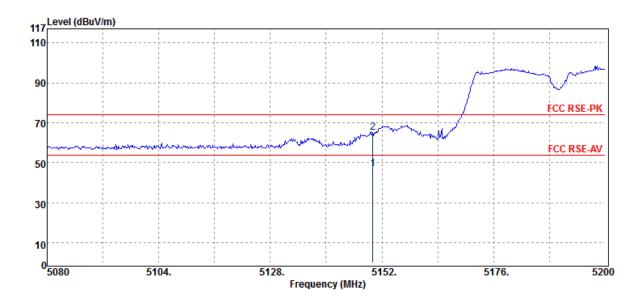
802.11n40 HT mode

Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11n40B1 :5190 MHz :Bandedge CH LOW :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :Tin :VERTICAL



Note	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
E	Average	38.52	8.32	46.84	54.00	-7.16
Е	Peak	56.91	8.32	65.23	74.00	-8.77
		ModeF/H/E/SPK/QP/AVEAverage	ModeReading LevelF/H/E/SPK/QP/AVdBμVEAverage38.52	ModeReading LevelF/H/E/SPK/QP/AVdBµVdBEAverage38.528.32	ModeReading LevelFSF/H/E/SPK/QP/AVdBµVdBdBµV/mEAverage38.528.3246.84	$\begin{tabular}{cccc} Mode & Reading Level & FS & @3m \\ \hline F/H/E/S & PK/QP/AV & dB\mu V & dB & dB\mu V/m & dB\mu V/m \\ \hline E & Average & 38.52 & 8.32 & 46.84 & 54.00 \end{tabular}$

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Report No.: ER/2018/30033 Page: 142 of 181

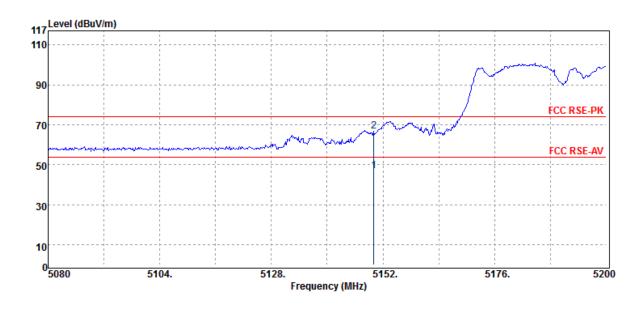


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11n40B1 :5190 MHz :Bandedge CH LOW :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :Tin :HORIZONTAL



e Detector	Spectrum	Factor	Actual	Limit	Margin	
Mode	Reading Level		FS	@3m		
E/S PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	_
Average	38.78	8.32	47.10	54.00	-6.90	
Peak	58.37	8.32	66.69	74.00	-7.31	
	Mode E/S PK/QP/AV Average	Mode Reading Level E/S PK/QP/AV dBμV Average 38.78	ModeReading LevelE/SPK/QP/AVdBµVdBAverage38.788.32	ModeReading LevelFSE/SPK/QP/AVdBμVdBdBμV/mAverage38.788.3247.10	$\begin{tabular}{cccc} Mode & Reading Level & FS & @3m \\ \hline E/S & PK/QP/AV & dB\mu V & dB & dB\mu V/m & dB\mu V/m \\ \hline Average & 38.78 & 8.32 & 47.10 & 54.00 \end{tabular}$	$\begin{tabular}{cccc} Mode & Reading Level & FS & @3m \\ \hline E/S & PK/QP/AV & dB\mu V & dB & dB\mu V/m & dB\mu V/m & dB \\ \hline Average & 38.78 & 8.32 & 47.10 & 54.00 & -6.90 \\ \hline \end{tabular}$

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Report No.: ER/2018/30033 Page: 143 of 181

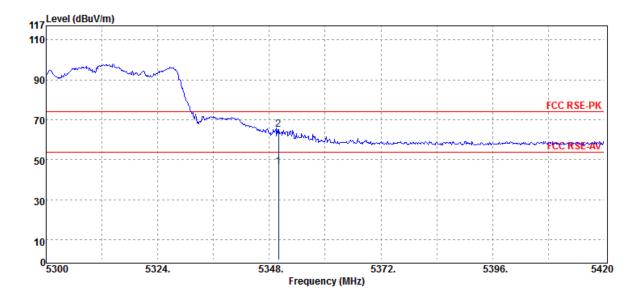


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11n40B2 :5310 MHz :Bandedge CH HIGH :H Plane

Test Date Temp./Humi. Engineer :Tin Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :VERTICAL



Note	Detector	Spectrum	Factor	Actual	Limit	Margin	
	Mode	Reading Level		FS	@3m		
F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	_
E	Average	38.10	8.63	46.73	54.00	-7.27	
E	Peak	56.50	8.63	65.13	74.00	-8.87	
	F/H/E/S	ModeF/H/E/SPK/QP/AVEAverage	ModeReading LevelF/H/E/SPK/QP/AVdBµVEAverage38.10	ModeReading LevelF/H/E/SPK/QP/AVdBµVdBEAverage38.108.63	ModeReading LevelFSF/H/E/SPK/QP/AVdBμVdBEAverage38.108.6346.73	Mode Reading Level FS @3m F/H/E/S PK/QP/AV dBμV dB dBμV/m dBμV/m E Average 38.10 8.63 46.73 54.00	Mode Reading Level FS @3m F/H/E/S PK/QP/AV dBμV dB dBμV/m dBμV/m dB E Average 38.10 8.63 46.73 54.00 -7.27

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Report No.: ER/2018/30033 Page: 144 of 181

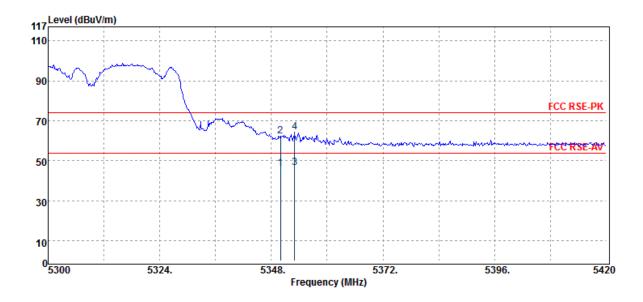


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11n40B2 :5310 MHz :Bandedge CH HIGH :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :Tin :HORIZONTAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5350.00	E	Average	37.64	8.63	46.27	54.00	-7.73
5350.00	E	Peak	53.73	8.63	62.36	74.00	-11.64
5353.04	E	Average	37.71	8.65	46.36	54.00	-7.64
5353.04	Е	Peak	55.67	8.65	64.32	74.00	-9.68

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Report No.: ER/2018/30033 Page: 145 of 181

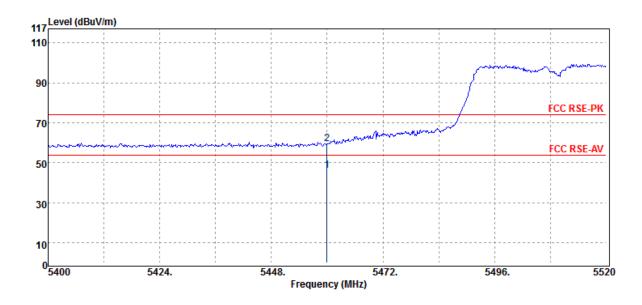


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11n40B3 :5510 MHz :Bandedge CH LOW :H Plane

Test Date Temp./Humi. Engineer :Tin Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :VERTICAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5460.00	E	Average	37.27	8.75	46.02	54.00	-7.98
5460.00	E	Peak	50.78	8.75	59.53	74.00	-14.47

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Report No.: ER/2018/30033 Page: 146 of 181

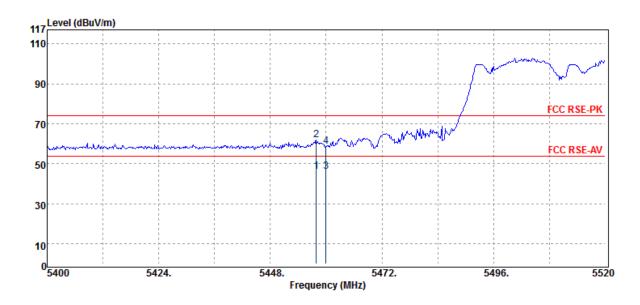


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11n40B3 :5510 MHz :Bandedge CH LOW :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :Tin :HORIZONTAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5457.84	E	Average	37.37	8.75	46.12	54.00	-7.88
5457.84	E	Peak	53.02	8.75	61.77	74.00	-12.23
5460.00	E	Average	37.45	8.75	46.20	54.00	-7.80
5460.00	Е	Peak	49.76	8.75	58.51	74.00	-15.49

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Report No.: ER/2018/30033 Page: 147 of 181

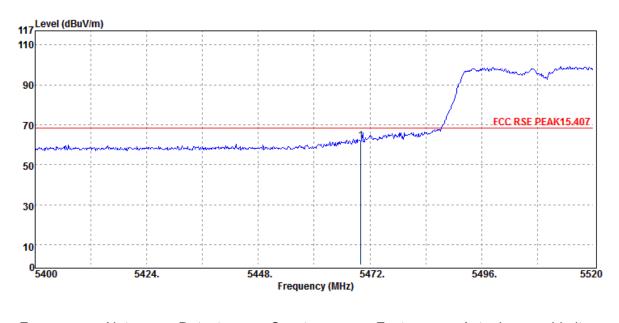


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11n40B3 :5510 MHz :Bandedge CH LOW RSE :H Plane

Test Date Temp./Humi. Engineer :Tin Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
 MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
 5470.00	E	Peak	53.27	8.74	62.01	68.30	-6.29

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Report No.: ER/2018/30033 Page: 148 of 181

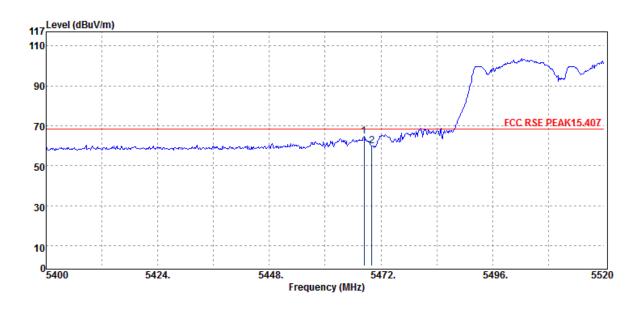


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11n40B3 :5510 MHz :Bandedge CH LOW RSE :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :Tin :HORIZONTAL



Note	Detector	Spectrum	Factor	Actual	Limit	Margin	
	Mode	Reading Level		FS	@3m		
F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	_
E	Peak	56.09	8.74	64.83	68.30	-3.47	
Е	Peak	51.03	8.74	59.77	68.30	-8.53	
	F/H/E/S E	ModeF/H/E/SPK/QP/AVEPeak	ModeReading LevelF/H/E/SPK/QP/AVdBµVEPeak56.09	ModeReading LevelF/H/E/SPK/QP/AVdBμVdBEPeak56.098.74	ModeReading LevelFSF/H/E/SPK/QP/AVdBµVdBdBµV/mEPeak56.098.7464.83	Mode Reading Level FS @3m F/H/E/S PK/QP/AV dBμV dB dBμV/m dBμV/m E Peak 56.09 8.74 64.83 68.30	Mode Reading Level FS @3m F/H/E/S PK/QP/AV dBμV dB dBμV/m dBμV/m dB E Peak 56.09 8.74 64.83 68.30 -3.47

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Report No.: ER/2018/30033 Page: 149 of 181

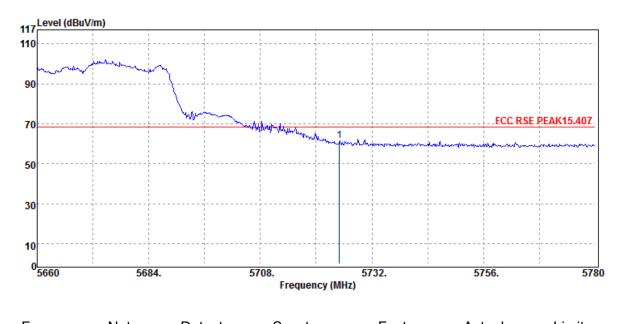


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40B3 :5670 MHz :Bandedge CH HIGH RSE :H Plane

Test Date Temp./Humi. Engineer :Tin Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :VERTICAL



⊢req.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5725.00	E	Peak	52.05	9.44	61.49	68.30	-6.81

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Report No.: ER/2018/30033 Page: 150 of 181

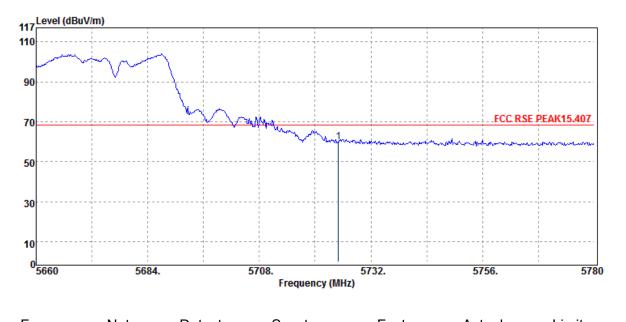


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40B3 :5670 MHz :Bandedge CH HIGH RSE :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :Tin :HORIZONTAL



⊢r	eq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
			Mode	Reading Level		FS	@3m	
M	Hz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV∕m	dBµV/m	dB
572	5.00	E	Peak	50.67	9.44	60.11	68.30	-8.19

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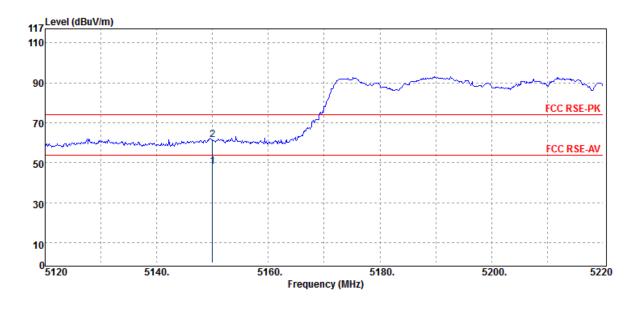
802.11ac VHT80 mode

Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11ac80B1 :5210 MHz :Bandedge CH LOW :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :Tin :VERTICAL



Note	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
E	Average	39.82	8.32	48.14	54.00	-5.86
E	Peak	53.16	8.32	61.48	74.00	-12.52
	F/H/E/S E	ModeF/H/E/SPK/QP/AVEAverage	ModeReading LevelF/H/E/SPK/QP/AVdBµVEAverage39.82	ModeReading LevelF/H/E/SPK/QP/AVdBμVdBEAverage39.828.32	ModeReading LevelFSF/H/E/SPK/QP/AVdBµVdBdBµV/mEAverage39.828.3248.14	Mode Reading Level FS @3m F/H/E/S PK/QP/AV dBμV dB dBμV/m dBμV/m E Average 39.82 8.32 48.14 54.00

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Report No.: ER/2018/30033 Page: 152 of 181

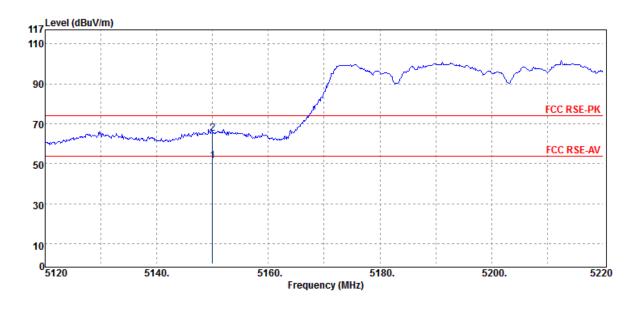


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11ac80B1 :5210 MHz :Bandedge CH LOW :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :Tin :HORIZONTAL



Note	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
E	Average	43.09	8.32	51.41	54.00	-2.59
Е	Peak	57.02	8.32	65.34	74.00	-8.66
		Mode F/H/E/S PK/QP/AV E Average	ModeReading Level/H/E/SPK/QP/AVdBμVEAverage43.09	Mode Reading Level F/H/E/S PK/QP/AV dBμV dB E Average 43.09 8.32	ModeReading LevelFSF/H/E/SPK/QP/AVdBµVdBdBµV/mEAverage43.098.3251.41	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$

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Report No.: ER/2018/30033 Page: 153 of 181

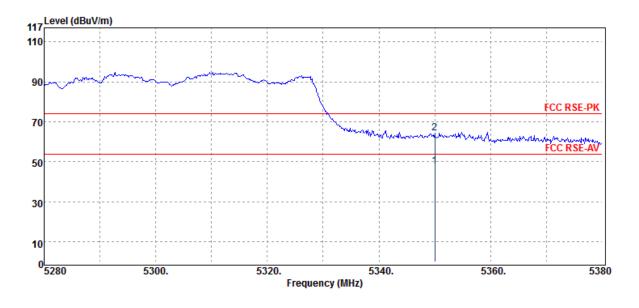


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11ac80B2 :5290 MHz :Bandedge CH HIGH :H Plane

Test Date Temp./Humi. Engineer :Tin Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :VERTICAL



e Detector	Spectrum	Factor	Actual	Limit	Margin
Mode	Reading Level		FS	@3m	
E/S PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
Average	39.00	8.63	47.63	54.00	-6.37
Peak	55.80	8.63	64.43	74.00	-9.57
	Mode E/S PK/QP/AV Average	Mode Reading Level E/S PK/QP/AV dBμV Average 39.00	ModeReading LevelE/SPK/QP/AVdBμVdBAverage39.008.63	ModeReading LevelFSE/SPK/QP/AVdBμVdBAverage39.008.6347.63	ModeReading LevelFS@3mE/SPK/QP/AVdBμVdBdBμV/mdBμV/mAverage39.008.6347.6354.00

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Report No.: ER/2018/30033 Page: 154 of 181

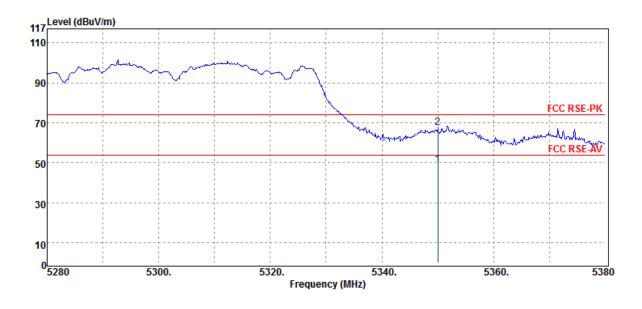


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11ac80B2 :5290 MHz :Bandedge CH HIGH :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-27 :23 deg_C / 62 RH :Tin :HORIZONTAL



	Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
			Mode	Reading Level		FS	@3m	
_	MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
_	5350.00	E	Average	40.31	8.63	48.94	54.00	-5.06
	5350.00	E	Peak	58.79	8.63	67.42	74.00	-6.58

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Report No.: ER/2018/30033 Page: 155 of 181

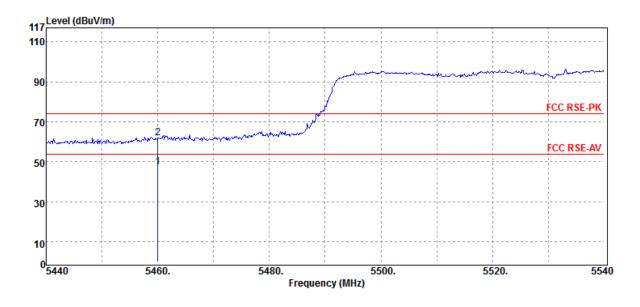


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11ac80B3 :5530 MHz :Bandedge CH LOW :H Plane

Test Date Temp./Humi. Engineer :Tin Measurement Antenna Pol.

:2018-03-29 :23 deg_C / 62 RH :VERTICAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5460.00	E	Average	38.74	8.75	47.49	54.00	-6.51
5460.00	E	Peak	53.11	8.75	61.86	74.00	-12.14

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Report No.: ER/2018/30033 Page: 156 of 181

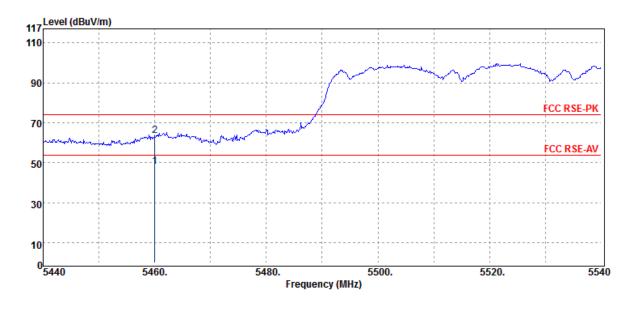


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11ac80B3 :5530 MHz :Bandedge CH LOW :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-29 :23 deg_C / 62 RH :Tin :HORIZONTAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5460.00	E	Average	39.55	8.75	48.30	54.00	-5.70
5460.00	E	Peak	54.97	8.75	63.72	74.00	-10.28

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Report No.: ER/2018/30033 Page: 157 of 181

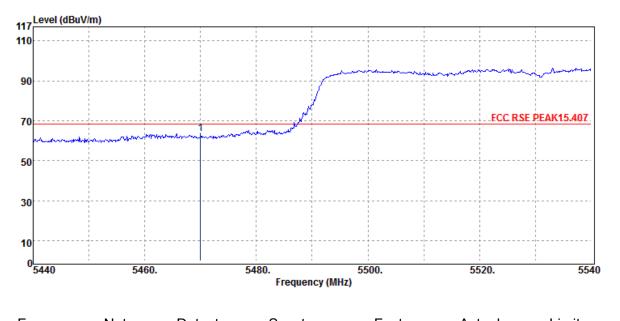


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11ac80B3 :5530 MHz :Bandedge CH LOW RSE :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-29 :23 deg_C / 62 RH :Tin :VERTICAL



Freq.	Note	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV∕m	dB
5470.00	Ē	Peak	54.84	8.74	63.58	68.30	-4.72

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Report No.: ER/2018/30033 Page: 158 of 181

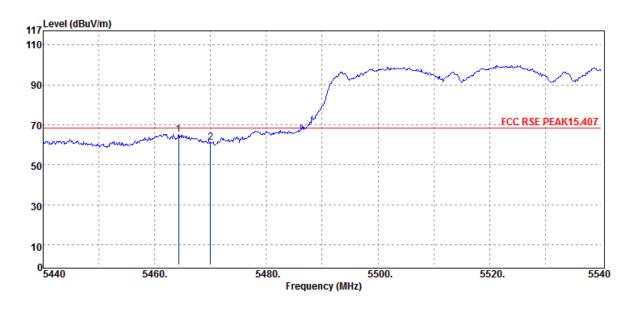


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11ac80B3 :5530 MHz :Bandedge CH LOW RSE :H Plane

Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-03-29 :23 deg_C / 62 RH :Tin :HORIZONTAL



Freq.	Note	Detector	Spectrum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
5464.30	E	Peak	56.62	8.74	65.36	68.30	-2.94
5470.00	E	Peak	52.58	8.74	61.32	68.30	-6.98

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12. TRANSMISSION IN THE ABSENCE OF DATA

12.1 Standard Applicable

According to §15.407(c)

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

12.2Result

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ASK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

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13. FREQUENCY STABILITY

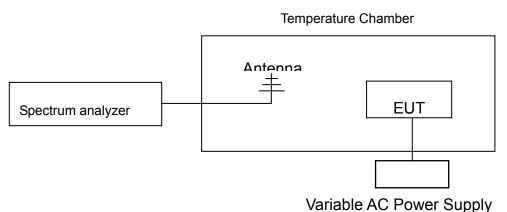
13.1 Standard Applicable

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

13.2Measurement Procedure

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

13.3Test SET-UP



13.4Measurement Equipment Used:

EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
EXA Spectrum Analyzer	Agilent	N9010A	MY54200716	2017/10/16	2018/10/15
DC Power Supply	Anritsu	E3640A	MY52410006	2017/11/28	2018/11/27
Attenuator	Mini-Circuit	BW-S10W2+	2	2018/01/02	2019/01/01
Notebook	Lenovo	T440	P0000564	N/A	N/A
Temperature Chamber	TERCHY	MHG-120LF	911009	2017/05/19	2018/5/18

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13.5Measurement Result

Startup:

Operation Mode	802.11 a	Test Date	2018.03.26
Temperature	:23	Test By	Mike
Humidity	:68 %		

Test Temp.	Test Voltage	Channel	Measured Frequency (MHz)	Spectrum Frequency (MHz)	ΔFrequency (MHz)
		36	5180	5,180.00000	0.00000000
		44	5220	5,219.98486	0.00000290
		48	5240	5,239.98486	0.00000289
		52	5260	5,259.98486	0.00000288
		60	5300	5,299.98486	0.00000286
	4.43V	64	5320	5,319.98486	0.00000285
		100	5500	5,500.00000	0.00000000
		116	5580	5,580.00000	0.00000000
		140	5700	5,699.98486	0.00000266
		149	5745		1.00000000
		157	5785		1.00000000
		165	5825		1.00000000
-10		36	5180	5,179.98486	0.00000292
		44	5220	5,219.98486	0.00000290
		48	5240	5,239.98486	0.00000289
		52	5260	5,259.98486	0.00000288
		60	5300	5,299.98486	0.00000286
	3.27V	64	5320	5,320.00000	0.00000000
		100	5500	5,499.98486	0.00000275
		116	5580	5,579.98486	0.00000271
		140	5700	5,699.98486	0.00000266
		149	5745		1.00000000
		157	5785		1.00000000
		165	5825		1.00000000

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-					
		36	5180	5,179.98486	0.00000292
		44	5220	5,219.98486	0.00000290
		48	5240	5,239.98486	0.00000289
		52	5260	5,259.98486	0.00000288
		60	5300	5,300.00000	0.00000000
25	3.85V	64	5320	5,320.00000	0.00000000
		100	5500	5,500.00000	0.00000000
		116	5580	5,579.98486	0.00000271
		140	5700	5,699.98486	0.00000266
		149	5745		1.00000000
		157	5785		1.00000000
		165	5825		1.00000000
		36	5180	5,179.98486	0.00000292
		44	5220	5,179.98480	0.00000292
		44	5240	5,239.98486	0.00000289
		52	5260	5,260.00000	0.00000289
		60	5300	5,200.00000	0.00000286
		64	5320	5,279.98486	0.00000285
	4.43V	100	5500	5,499.98486	0.00000285
	4.43 V	116	5580	5,579.98486	0.00000273
		140	5700	5,700.00000	0.00000000
		140	5745	3,700.00000	1.00000000
		147	5785		1.00000000
		165	5825		1.00000000
55		36	5180	5,180.00000	0.00000000
55		44	5220	5,220.00000	0.00000000
		44	5240	5,240.00000	0.00000000
		52	5260	5,260.01514	-0.00000288
		60	5300	5,300.00000	0.00000000
	3.27V	64	5320	5,319.98486	0.00000285
	0.271	100	5500	5,499.98486	0.00000275
		116	5580	5,579.98486	0.00000271
		140	5700	5,699.98486	0.00000266
		149	5745		1.00000000
		157	5785		1.00000000
		165	5825		1.00000000



Operation Mode	802.11 n_HT40	Test Date	2018.03.26
Temperature	:23	Test By	Mike
Humidity	:68 %		

Test Temp.	Test Voltage	Channel	Measured Frequency (MHz)	Spectrum Frequency (MHz)	ΔFrequency (MHz)
		38	5190	5,189.97510	0.00000480
		46	5230	5,230.00000	0.00000000
		54	5270	5,270.00000	0.00000000
		62	5310	5,310.00000	0.00000000
	4.43V	102	5510	5,510.00000	0.00000000
		110	5550	5,549.97510	0.00000449
		134	5670	5,669.97510	0.00000439
		151	5755		1.00000000
-10		159	5795		1.00000000
		38	5190	5,189.97510	0.00000480
		46	5230	5,229.97510	0.00000476
		54	5270	5,269.97510	0.00000473
		62	5310	5,309.97510	0.00000469
	3.27V	102	5510	5,509.97510	0.00000452
		110	5550	5,550.00000	0.00000000
		134	5670	5,669.97510	0.00000439
		151	5755		1.00000000
		159	5795		1.00000000

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		38	5190	5,190.00000	0.00000000
		46	5230	5,230.00000	0.00000000
		54	5270	5,270.00000	0.00000000
		62	5310	5,309.97510	0.00000469
25	3.85V	102	5510	5,510.00000	0.00000000
		110	5550	5,549.97510	0.00000449
		134	5670	5,670.00000	0.00000000
		151	5755		1.00000000
		159	5795		1.00000000
		38	5190	5,189.97510	0.00000480
		46	5230	5,229.97510	0.00000476
		54	5270	5,270.00000	0.00000000
		62	5310	5,310.00000	0.00000000
	4.43V	102	5510	5,509.97510	0.00000452
		110	5550	5,549.97510	0.00000449
		134	5670	5,669.97510	0.00000439
		151	5755		1.00000000
		159	5795		1.00000000
55		38	5190	5,190.00000	0.00000000
		46	5230	5,230.00000	0.00000000
		54	5270	5,269.97510	0.00000473
		62	5310	5,309.97510	0.00000469
	3.27V	102	5510	5,510.00000	0.00000000
		110	5550	5,549.97510	0.00000449
		134	5670	5,669.97510	0.00000439
		151	5755		1.00000000
		159	5795		1.00000000



Operation Mode	802.11 ac_VHT80	Test Date	2018.03.26
Temperature	:23	Test By	Mike
Humidity	:68 %		

Test Temp.	Test Voltage	Channel	Measured Frequency (MHz)	Spectrum Frequency (MHz)	ΔFrequency (MHz)
		42	5210	5,210.00000	0.00000000
		58	5290	5,290.00000	0.00000000
	4.43V	106	5530	5,530.00000	0.00000000
		122	5610	5,610.00000	0.00000000
-10		155	5775		1.00000000
		42	5210	5,209.95020	0.00000956
		58	5290	5,290.00000	0.00000000
	3.27V	106	5530	5,529.95020	0.00000901
		122	5610	5,610.00000	0.00000000
		155	5775		1.00000000
		42	5210	5,210.04981	-0.00000956
		58	5290	5,290.00000	0.00000000
25	3.85V	106	5530	5,530.00000	0.00000000
		122	5610	5,610.00000	0.00000000
		155	5775		1.00000000
		42	5210	5,209.95020	0.00000956
		58	5290	5,290.00000	0.00000000
	4.43V	106	5530	5,530.00000	0.00000000
		122	5610	5,610.00000	0.00000000
55		155	5775		1.00000000
		42	5210	5,210.00000	0.00000000
		58	5290	5,290.04981	-0.00000941
	3.27V	106	5530	5,529.95020	0.00000901
	-	122	5610	5,610.00000	0.00000000
		155	5775		1.00000000



2 Minutes:

Operation Mode	802.11 a	Test Date	2018.03.26
Temperature	:23	Test By	Mike
Humidity	:68 %		

			Measured	Spectrum	ΔFrequency
Test Temp.	Test Voltage	Channel	Frequency	Frequency	(MHz)
			(MHz)	(MHz)	(1112)
		36	5180	5,179.99866	0.00000026
		44	5220	5,219.97505	0.00000478
		48	5240	5,239.98210	0.00000342
		52	5260	5,259.97677	0.00000442
		60	5300	5,299.98295	0.00000322
	4.43V	64	5320	5,319.99233	0.00000144
		100	5500	5,500.00728	-0.00000132
		116	5580	5,579.99535	0.0000083
		140	5700	5,699.98072	0.00000338
		149	5745		1.00000000
		157	5785		1.00000000
		165	5825		1.00000000
-10		36	5180	5,179.99339	0.00000128
		44	5220	5,219.98525	0.00000283
	3.27V	48	5240	5,239.99115	0.00000169
		52	5260	5,259.99368	0.00000120
		60	5300	5,299.98195	0.00000341
		64	5320	5,319.99377	0.00000117
		100	5500	5,499.97929	0.00000377
		116	5580	5,579.98749	0.00000224
		140	5700	5,699.97541	0.00000431
		149	5745		1.00000000
		157	5785		1.00000000
		165	5825		1.00000000

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		36	5180	5,179.98633	0.00000264
		44	5220	5,219.98500	0.00000287
		48	5240	5,239.97782	0.00000423
		52	5260	5,259.98776	0.00000233
		60	5300	5,299.99945	0.00000010
25	3.85V	64	5320	5,319.99465	0.00000101
		100	5500	5,499.99657	0.00000062
		116	5580	5,579.98389	0.00000289
		140	5700	5,699.97983	0.00000354
		149	5745		1.00000000
		157	5785		1.00000000
		165	5825		1.00000000
		36	5180	5,179.98921	0.0000208
		44	5220	5,219.99787	0.00000041
		48	5240	5,239.99479	0.00000100
		52	5260	5,259.99440	0.00000107
		60	5300	5,299.98500	0.0000283
		64	5320	5,319.97640	0.00000444
	4.43V	100	5500	5,499.99469	0.00000097
		116	5580	5,579.98180	0.00000326
		140	5700	5,700.00464	-0.00000081
		149	5745		1.00000000
		157	5785		1.00000000
		165	5825		1.00000000
55		36	5180	5,179.99164	0.00000161
		44	5220	5,220.00213	-0.00000041
		48	5240	5,239.99440	0.00000107
		52	5260	5,260.01151	-0.00000219
		60	5300	5,300.00362	-0.00000068
	3.27V	64	5320	5,319.97495	0.00000471
		100	5500	5,499.98314	0.00000306
		116	5580	5,579.98065	0.00000347
		140	5700	5,699.98741	0.00000221
		149	5745		1.00000000
		157	5785		1.00000000
		165	5825		1.00000000



Operation Mode	802.11 n_HT40	Test Date	2018.03.26
Temperature	:23	Test By	Mike
Humidity	:68 %	-	

Test Temp.	Test Voltage	Channel	Measured Frequency (MHz)	Spectrum Frequency (MHz)	ΔFrequency (MHz)
		38	5190	5,189.97698	0.00000444
		46	5230	5,229.99771	0.00000044
		54	5270	5,269.99468	0.00000101
		62	5310	5,309.99716	0.00000053
	4.43V	102	5510	5,510.00926	-0.00000168
		110	5550	5,549.97606	0.00000431
		134	5670	5,669.97989	0.00000355
		151	5755		1.00000000
-10		159	5795		1.00000000
		38	5190	5,189.97466	0.00000488
		46	5230	5,229.98368	0.00000312
		54	5270	5,269.98431	0.00000298
		62	5310	5,309.97880	0.00000399
	3.27V	102	5510	5,509.97258	0.00000498
		110	5550	5,550.00584	-0.00000105
		134	5670	5,669.96985	0.00000532
		151	5755		1.00000000
		159	5795		1.00000000



		38	5190	5,190.00017	-0.0000003
		46	5230	5,229.99020	0.00000187
		54	5270	5,269.99165	0.00000158
		62	5310	5,309.98330	0.00000315
25	3.85V	102	5510	5,510.00790	-0.00000143
		110	5550	5,549.97886	0.00000381
		134	5670	5,670.00634	-0.00000112
		151	5755		1.00000000
		159	5795		1.00000000
		38	5190	5,189.97924	0.00000400
		46	5230	5,229.97411	0.00000495
		54	5270	5,269.99580	0.00000080
		62	5310	5,310.00635	-0.00000120
	4.43V	102	5510	5,509.96834	0.00000575
		110	5550	5,549.96523	0.00000626
		134	5670	5,669.97927	0.00000366
		151	5755		1.00000000
		159	5795		1.00000000
55		38	5190	5,189.99216	0.00000151
		46	5230	5,229.99668	0.00000063
		54	5270	5,269.98457	0.00000293
		62	5310	5,309.98184	0.00000342
	3.27V	102	5510	5,509.99152	0.00000154
		110	5550	5,549.97234	0.00000498
		134	5670	5,669.97864	0.00000377
		151	5755		1.00000000
		159	5795		1.00000000



Operation Mode	802.11 ac_VHT80	Test Date	2018.03.26
Temperature	:23	Test By	Mike
Humidity	:68 %	-	

Test Temp.	Test Voltage	Channel	Measured Frequency (MHz)	Spectrum Frequency (MHz)	ΔFrequency (MHz)
		42	5210	5,209.99770	0.00000044
		58	5290	5,290.00902	-0.00000171
	4.43V	106	5530	5,529.99824	0.0000032
		122	5610	5,609.99937	0.00000011
-10		155	5775		1.00000000
		42	5210	5,209.95337	0.00000895
		58	5290	5,290.00680	-0.00000128
	3.27V	106	5530	5,529.94030	0.00001079
		122	5610	5,610.00591	-0.00000105
		155	5775		1.00000000
		42	5210	5,210.05603	-0.00001075
		58	5290	5,289.99432	0.00000107
25	3.85V	106	5530	5,530.00362	-0.00000065
		122	5610	5,609.99320	0.00000121
		155	5775		1.00000000
		42	5210	5,209.96012	0.00000766
		58	5290	5,289.99471	0.00000100
	4.43V	106	5530	5,529.99097	0.00000163
		122	5610	5,610.00170	-0.00000030
55		155	5775		1.00000000
		42	5210	5,209.99348	0.00000125
		58	5290	5,290.05761	-0.00001089
	3.27V	106	5530	5,529.94488	0.00000997
		122	5610	5,609.99486	0.00000092
		155	5775		1.00000000



5 Minutes:

Operation Mode	802.11 a	Test Date	2018.03.26
Temperature	:23	Test By	Mike
Humidity	:68 %		

			Measured	Spectrum	ΔFrequency
Test Temp.	Test Voltage	Channel	Frequency	Frequency	(MHz)
			(MHz)	(MHz)	(1112)
		36	5180	5,179.99540	0.0000089
		44	5220	5,219.98415	0.00000304
		48	5240	5,239.98364	0.00000312
		52	5260	5,259.97489	0.00000477
		60	5300	5,299.98185	0.00000342
	4.43V	64	5320	5,319.99051	0.00000178
		100	5500	5,500.00688	-0.00000125
		116	5580	5,579.99707	0.0000053
		140	5700	5,699.98819	0.00000207
		149	5745		1.00000000
		157	5785		1.00000000
		165	5825		1.00000000
-10		36	5180	5,179.97699	0.00000444
		44	5220	5,219.99443	0.00000107
		48	5240	5,239.98871	0.00000215
		52	5260	5,259.99484	0.0000098
		60	5300	5,299.98836	0.00000220
	3.27V	64	5320	5,320.00152	-0.0000029
		100	5500	5,499.99325	0.00000123
		116	5580	5,579.97954	0.00000367
		140	5700	5,699.98665	0.00000234
		149	5745		1.00000000
		157	5785		1.00000000
		165	5825		1.00000000

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		36	5180	5,179.98800	0.00000232
		44	5220	5,219.97889	0.00000404
		48	5240	5,239.98617	0.00000264
		52	5260	5,259.98230	0.00000336
		60	5300	5,300.00346	-0.00000065
25	3.85V	64	5320	5,320.00970	-0.00000182
		100	5500	5,499.99172	0.00000151
		116	5580	5,579.98215	0.00000320
		140	5700	5,699.98387	0.00000283
		149	5745		1.00000000
		157	5785		1.00000000
		165	5825		1.00000000
		36	5180	5,179.98607	0.00000269
		44	5220	5,219.99029	0.00000186
		48	5240	5,239.97891	0.00000402
		52	5260	5,260.00061	-0.00000012
		60	5300	5,299.97582	0.00000456
		64	5320	5,319.98912	0.00000205
	4.43V	100	5500	5,499.98664	0.00000243
		116	5580	5,579.98547	0.00000260
		140	5700	5,700.00818	-0.00000144
		149	5745		1.00000000
		157	5785		1.00000000
		165	5825		1.00000000
55		36	5180	5,179.99770	0.00000044
		44	5220	5,219.99091	0.00000174
		48	5240	5,240.00598	-0.00000114
		52	5260	5,260.00782	-0.00000149
		60	5300	5,300.00027	-0.00000005
	3.27V	64	5320	5,319.97652	0.00000441
		100	5500	5,499.98416	0.00000288
		116	5580	5,579.98852	0.00000206
		140	5700	5,699.97859	0.00000376
		149	5745		1.00000000
		157	5785		1.00000000
		165	5825		1.00000000



Operation Mode	802.11 n_HT40	Test Date	2018.03.26
Temperature	:23	Test By	Mike
Humidity	:68 %	-	

Test Temp.	Test Voltage	Channel	Measured Frequency (MHz)	Spectrum Frequency (MHz)	ΔFrequency (MHz)
		38	5190	5,189.96803	0.00000616
		46	5230	5,229.99042	0.00000183
		54	5270	5,270.00965	-0.00000183
		62	5310	5,310.00755	-0.00000142
	4.43V	102	5510	5,510.00117	-0.00000021
		110	5550	5,549.97046	0.00000532
		134	5670	5,669.98002	0.00000352
		151	5755		1.00000000
-10		159	5795		1.00000000
		38	5190	5,189.96711	0.00000634
		46	5230	5,229.97422	0.00000493
		54	5270	5,269.97004	0.00000569
		62	5310	5,309.98216	0.00000336
	3.27V	102	5510	5,509.96773	0.00000586
		110	5550	5,550.00118	-0.00000021
		134	5670	5,669.96763	0.00000571
		151	5755		1.00000000
		159	5795		1.00000000



		38	5190	5,190.00039	-0.0000008
		46	5230	5,229.99115	0.00000169
		54	5270	5,270.00826	-0.00000157
		62	5310	5,309.96717	0.00000618
25	3.85V	102	5510	5,509.99943	0.00000010
		110	5550	5,549.98132	0.00000337
		134	5670	5,670.00706	-0.00000124
		151	5755		1.00000000
		159	5795		1.00000000
		38	5190	5,189.97043	0.00000570
		46	5230	5,229.97408	0.00000496
		54	5270	5,269.99360	0.00000121
		62	5310	5,310.00608	-0.00000115
	4.43V	102	5510	5,509.97573	0.00000440
		110	5550	5,549.97537	0.00000444
		134	5670	5,669.98269	0.00000305
		151	5755		1.00000000
		159	5795		1.00000000
55		38	5190	5,189.99364	0.00000123
		46	5230	5,229.99561	0.0000084
		54	5270	5,269.96559	0.00000653
		62	5310	5,309.97576	0.00000456
	3.27V	102	5510	5,509.99435	0.00000102
		110	5550	5,549.97327	0.00000482
		134	5670	5,669.97532	0.00000435
		151	5755		1.00000000
		159	5795		1.00000000



Operation Mode	802.11 ac_VHT80	Test Date	2018.03.26
Temperature	:23	Test By	Mike
Humidity	:68 %	-	

Test Temp.	Test Voltage	Channel	Measured Frequency (MHz)	Spectrum Frequency (MHz)	ΔFrequency (MHz)
		42	5210	5,209.99434	0.00000109
		58	5290	5,290.00203	-0.0000038
	4.43V	106	5530	5,530.00813	-0.00000147
		122	5610	5,610.00299	-0.00000053
-10		155	5775		1.00000000
		42	5210	5,209.95831	0.00000800
		58	5290	5,290.00232	-0.00000044
	3.27V	106	5530	5,529.95796	0.00000760
		122	5610	5,610.00133	-0.0000024
		155	5775		1.00000000
		42	5210	5,210.04185	-0.00000803
		58	5290	5,289.99917	0.00000016
25	3.85V	106	5530	5,530.00978	-0.00000177
		122	5610	5,609.99599	0.00000072
		155	5775		1.00000000
		42	5210	5,209.95734	0.00000819
		58	5290	5,289.99040	0.00000181
	4.43V	106	5530	5,530.00073	-0.00000013
		122	5610	5,610.00885	-0.00000158
55		155	5775		1.00000000
		42	5210	5,210.00333	-0.00000064
		58	5290	5,290.05915	-0.00001118
	3.27V	106	5530	5,529.95519	0.00000810
		122	5610	5,610.00282	-0.00000050
		155	5775		1.00000000



10 Minutes:

Operation Mode	802.11 a	Test Date	2018.03.26
Temperature	:23	Test By	Mike
Humidity	:68 %		

			Measured	Spectrum	ΔFrequency
Test Temp.	Test Voltage	Channel	Frequency	Frequency	(MHz)
			(MHz)	(MHz)	. ,
		36	5180	5,179.99464	0.00000104
		44	5220	5,219.97806	0.00000420
		48	5240	5,239.98782	0.00000233
		52	5260	5,259.97606	0.00000455
		60	5300	5,299.97812	0.00000413
	4.43V	64	5320	5,319.98235	0.00000332
		100	5500	5,499.99508	0.0000089
		116	5580	5,580.00941	-0.00000169
		140	5700	5,699.98297	0.00000299
		149	5745		1.00000000
		157	5785		1.00000000
		165	5825		1.00000000
-10	3.27V	36	5180	5,179.97614	0.00000461
		44	5220	5,219.97684	0.00000444
		48	5240	5,239.98723	0.00000244
		52	5260	5,259.97558	0.00000464
		60	5300	5,299.98249	0.00000330
		64	5320	5,320.00811	-0.00000152
		100	5500	5,499.99023	0.00000178
		116	5580	5,579.98323	0.00000301
		140	5700	5,699.98761	0.00000217
		149	5745		1.00000000
		157	5785		1.00000000
		165	5825		1.00000000

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		36	5180	5,179.99182	0.00000158
		44	5220	5,219.98613	0.00000266
		48	5240	5,239.99242	0.00000145
		52	5260	5,259.99128	0.00000166
		60	5300	5,300.00295	-0.00000056
25	3.85V	64	5320	5,319.99946	0.00000010
		100	5500	5,499.99220	0.00000142
		116	5580	5,579.98860	0.00000204
		140	5700	5,699.99466	0.00000094
		149	5745		1.00000000
		157	5785		1.00000000
		165	5825		1.00000000
		36	5180	5,179.99260	0.00000143
		44	5220	5,219.99692	0.00000059
		48	5240	5,239.98494	0.00000287
		52	5260	5,260.00243	-0.00000046
	4.43V	60	5300	5,299.98934	0.00000201
		64	5320	5,319.97661	0.00000440
		100	5500	5,499.99041	0.00000174
		116	5580	5,579.98688	0.00000235
		140	5700	5,700.00674	-0.00000118
		149	5745		1.00000000
		157	5785		1.00000000
		165	5825		1.00000000
55		36	5180	5,180.00432	-0.0000083
		44	5220	5,220.00605	-0.00000116
		48	5240	5,239.99418	0.00000111
		52	5260	5,260.02125	-0.00000404
		60	5300	5,300.00916	-0.00000173
	3.27V	64	5320	5,319.99406	0.00000112
		100	5500	5,499.98279	0.00000313
		116	5580	5,579.97898	0.00000377
		140	5700	5,699.97672	0.00000408
		149	5745		1.00000000
		157	5785		1.00000000
		165	5825		1.00000000



Operation Mode	802.11 n_HT40	Test Date	2018.03.26
Temperature	:23	Test By	Mike
Humidity	:68 %	-	

Test Temp.	Test Voltage	Channel	Measured Frequency (MHz)	Spectrum Frequency (MHz)	ΔFrequency (MHz)
		38	5190	5,189.97821	0.00000420
		46	5230	5,230.00230	-0.00000044
		54	5270	5,270.00703	-0.00000133
		62	5310	5,310.00257	-0.00000048
	4.43V	102	5510	5,510.00797	-0.00000145
		110	5550	5,549.98148	0.00000334
		134	5670	5,669.98261	0.00000307
-10		151	5755		1.00000000
		159	5795		1.00000000
	3.27V	38	5190	5,189.97909	0.00000403
		46	5230	5,229.98483	0.00000290
		54	5270	5,269.98402	0.00000303
		62	5310	5,309.96931	0.00000578
		102	5510	5,509.98277	0.00000313
		110	5550	5,550.00385	-0.00000069
		134	5670	5,669.97354	0.00000467
		151	5755		1.00000000
		159	5795		1.00000000



		38	5190	5,190.00729	-0.00000140
		46	5230	5,230.00801	-0.00000153
		54	5270	5,270.00422	-0.00000080
		62	5310	5,309.96713	0.00000619
25	3.85V	102	5510	5,510.00178	-0.0000032
		110	5550	5,549.97323	0.00000482
		134	5670	5,670.00937	-0.00000165
		151	5755		1.00000000
		159	5795		1.00000000
		38	5190	5,189.97375	0.00000506
		46	5230	5,229.96915	0.00000590
		54	5270	5,269.99399	0.00000114
	4.43V	62	5310	5,310.00216	-0.00000041
		102	5510	5,509.96734	0.00000593
		110	5550	5,549.96789	0.00000579
		134	5670	5,669.97765	0.00000394
		151	5755		1.00000000
		159	5795		1.00000000
55	3.27V	38	5190	5,189.99017	0.00000189
		46	5230	5,229.99263	0.00000141
		54	5270	5,269.97732	0.00000430
		62	5310	5,309.97744	0.00000425
		102	5510	5,510.00825	-0.00000150
		110	5550	5,549.97600	0.00000432
		134	5670	5,669.98373	0.00000287
		151	5755		1.00000000
		159	5795		1.00000000



Operation Mode	802.11 ac_VHT80	Test Date	2018.03.26
Temperature	:23	Test By	Mike
Humidity	:68 %	-	

Test Temp.	Test Voltage	Channel	Measured Frequency (MHz)	Spectrum Frequency (MHz)	ΔFrequency (MHz)
		42	5210	5,210.00731	-0.00000140
		58	5290	5,289.99126	0.00000165
	4.43V	106	5530	5,529.99025	0.00000176
		122	5610	5,609.99991	0.00000002
-10		155	5775		1.00000000
		42	5210	5,209.94995	0.00000961
		58	5290	5,289.99085	0.00000173
	3.27V	106	5530	5,529.95373	0.00000837
		122	5610	5,609.99378	0.00000111
		155	5775		1.00000000
	3.85V	42	5210	5,210.05479	-0.00001052
		58	5290	5,289.99453	0.00000103
25		106	5530	5,530.00864	-0.00000156
		122	5610	5,609.99749	0.00000045
		155	5775		1.00000000
	4.43V	42	5210	5,209.94695	0.00001018
		58	5290	5,290.00222	-0.00000042
		106	5530	5,529.99879	0.00000022
55		122	5610	5,609.99528	0.0000084
		155	5775		1.00000000
	3.27V	42	5210	5,209.99430	0.00000109
		58	5290	5,290.04938	-0.00000933
		106	5530	5,529.94778	0.00000944
		122	5610	5,610.00990	-0.00000176
		155	5775		1.00000000



14. ANTENNA REQUIREMENT

14.1 Standard Applicable

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

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

14.2Antenna Connected Construction

An embedded-in antenna design is used.

The antenna is designed with unique type RF connector and no consideration of replacement. Please see EUT photo and antenna spec. for details.

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

~ End of Report ~

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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