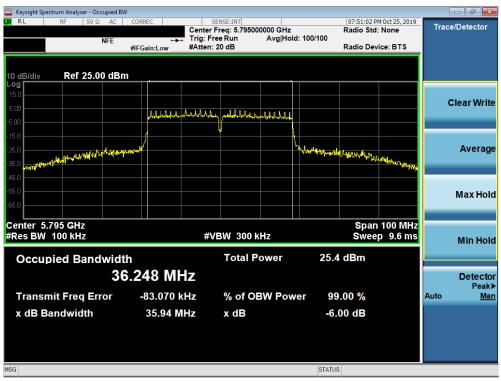


Keysight Spectrum Analyzer - Occupied B	W				
LX/RL RF 50Ω AC	CORREC	SENSE:INT r Freg: 5.755000000 GHz	07:48:19 P Radio Std	M Oct 25, 2019	Trace/Detector
NFE	🛶 Trig: I	Free Run Avg Hold	: 100/100		
	#IFGain:Low #Atter	n: 20 dB	Radio Dev	vice: BTS	
10 dB/div Ref 25.00 dB	m				
15.0					
					Clear Write
5.00	والبالية والمارية والمارية والمراجعة و	Any month lade to be for the f			
-5.00					
-15.0					
-25.0	Martial		With many many many many many many many many		Average
-35.0				the strates and the	
-45.0					
-55.0					Max Hold
-65.0					
Center 5.755 GHz #Res BW 100 kHz	#	VBW 300 kHz		100 MHz p 9.6 ms	
#Res BW 100 KHZ	#	VDVV JUUKHZ	Swee	p a.o ms	Min Hold
Occupied Bandwid	th	Total Power	25.0 dBm		
্ৰ ব	6.217 MHz				Detector Peak►
Transmit Freq Error	-85.553 kHz	% of OBW Powe	er 99.00 %		Auto <u>Man</u>
x dB Bandwidth	36.26 MHz	x dB	-6.00 dB		
MSG			STATUS		
MSG			STATUS		

Plot 7-127. 6dB Bandwidth Plot SISO ANT2 (40MHz BW 802.11n (UNII Band 3) - Ch. 151)



Plot 7-128. 6dB Bandwidth Plot SISO ANT2 (40MHz BW 802.11n (UNII Band 3) - Ch. 159)

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Keysight Spectrum Analyzer - Occo	upied BW									- • <b>•</b>
<b>LXI</b> RL RF 50 Ω	AC CORRE	C	SENSE: Center Freq:		0000 GHz		09:30:44 P	MOct 25, 2019	Trac	e/Detector
	NFE		Trig: Free Ru	in		d: 100/100				
	#IFGa	in:Low	#Atten: 20 dE	3			Radio Dev	ice: BTS		
10 dB/div Ref 20.00	) dBm									
Log 10.0										
0.00										Clear Write
-10.0	î	والمالية المرالي المالي	evilateling and prov	ر ماليوانية (مرارية). مراجع المراجع الم	eshile/whomho					
-20.0	/									
-30.0						\				Average
	/					All an a				Average
-40.0 -50.0 -44,	MW IN A					AND NOT ANY	Mr. Hickory	Witnesseller		
-60.0										Max Hold
-70.0										
Center 5.755 GHz						1	Span	100 MHz		
#Res BW 100 kHz			#VBW	300 k	Hz		Swee	p 9.6 ms		Min Hold
			-	otal P		22.6	dBm			
Occupied Bandy					ower	22.0	авт			
	37.53	60 MH	Ζ							Detector
Transmit Freq Err	or -1	23.71 kl	Hz %	of OE	3W Pow	ver 99	.00 %		Auto	Peak▶ <u>Man</u>
x dB Bandwidth		37.73 MI	Hz x	dB		-6.	00 dB			
MSG						STATUS				

Plot 7-129. 6dB Bandwidth Plot SISO ANT2 (40MHz BW 802.11ax (UNII Band 3) - Ch. 151)



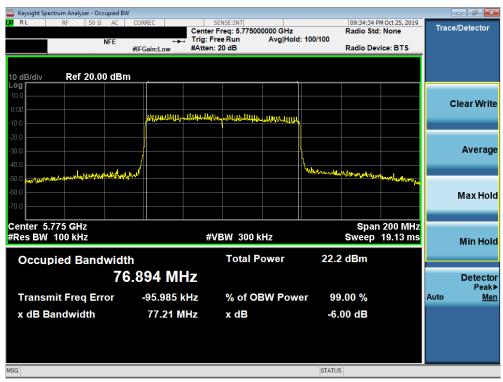
Plot 7-130. 6dB Bandwidth Plot SISO ANT2 (40MHz BW 802.11ax (UNII Band 3) - Ch. 159)

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🔤 Keysight Spectrum Analyzer - O	ccupied BW									
LXI RL RF 50 S	Ω AC COF	RREC		ISE:INT eq: 5.77500	0000 GHz		07:55:13 F Radio Std	M Oct 25, 2019	Trac	e/Detector
	NFE	÷	Trig: Free	Run		d: 100/100				
	#IF	Gain:Low	#Atten: 2	0 dB			Radio De	vice: BTS		
10 dB/div Ref 25.0	00 dBm	_								
Log 15.0										
5.00										Clear Write
		Innin Lindli	Mumph	Inter Inter	Line Inco					
-5.00		MILLA-MINILMP-	SPORTED IN THE	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	∽√₩₩₩₩₩₩₩₩₩					
-15.0										
-25.0						₹				Average
-35.0	un the while the					wood from the state	the share and the	Muhan		_
-45.0 - Add										
-55.0										Max Hold
-65.0										maxmora
Center 5.775 GHz			-49 (15					1 200 MHz		
#Res BW 100 kHz			#VE	W 300 K	HZ		sweep	19.13 ms		Min Hold
Occupied Ban	dwidth			Total P	ower	24.5	5 dBm			
Occupied Ball		07 84								
	/ 5.5	07 MI	ΠZ							Detector Peak►
Transmit Freq E	rror	-170.56	kHz	% of O	3W Pow	ver 99	.00 %		Auto	Peak⊯ <u>Man</u>
x dB Bandwidth		75.72 N	IHz	x dB		-6.	00 dB			
100						OTATIK				
MSG						STATUS				

Plot 7-131. 6dB Bandwidth Plot SISO ANT2 (80MHz BW 802.11ac (UNII Band 3) - Ch. 155)



Plot 7-132. 6dB Bandwidth Plot SISO ANT2 (80MHz BW 802.11ax (UNII Band 3) - Ch. 155)

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## 7.4 UNII Output Power Measurement – 802.11a/n/ac/ax §15.407(a.1.iv) §15.407(a.2) §15.407(a.3); RSS-247 [6.2]

#### Test Overview and Limits

A transmitter antenna terminal of the EUT is connected to the input of an RF pulse power sensor. Measurement is made using a broadband average power meter while the EUT is operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10-2013 and KDB 789033 D02 v02r01, and at the appropriate frequencies.

In the 5.15 – 5.25GHz band, the maximum permissible conducted output power is 250mW (23.98dBm). The maximum e.i.r.p. shall not exceed the lesser of 200 mW or 10 + 10 log10B, dBm.

In the 5.25 – 5.35GHz band, the maximum permissible conducted output power is the lesser of 250mW (23.98dBm) or 11 dBm +  $10\log_{10}(26dB BW) = 11 dBm + 10\log_{10}(29.58) = 25.71dBm$ . The maximum e.i.r.p. shall not exceed the lesser of 1.0 W or 17 + 10 log10B, dBm.

In the 5.47 – 5.725GHz band, the maximum permissible conducted output power is the lesser of 250mW (23.98dBm) or 11 dBm +  $10\log_{10}(26dB BW) = 11 dBm + 10\log_{10}(23.20) = 24.65dBm$ . The maximum e.i.r.p. shall not exceed the lesser of 1.0 W or 17 + 10 log10B, dBm.

In the 5.725 – 5.850GHz band, the maximum permissible conducted output power is 1W (30dBm). The maximum e.i.r.p. is 36 dBm.

#### Test Procedure Used

ANSI C63.10-2013 – Section 12.3.3.2 Method PM-G KDB 789033 D02 v02r01 – Section E)3)b) Method PM-G ANSI C63.10-2013 – Section 14.2 Measure-and-Sum Technique KDB 662911 v02r01 – Section E)1) Measure-and-Sum Technique

#### Test Settings

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power.

#### Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



#### Figure 7-3. Test Instrument & Measurement Setup

#### Test Notes

Per RSS-247 Section 6.2.3, transmission on channels which overlap the 5600-5650 MHz is prohibited. This device operates under these frequencies only under the control of a certified master device and does not support active scanning on these channels. This device does not transmit any beacons or initiate any transmissions in UNII Bands 2A or 2C.

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### SISO Antenna-1 Conducted Output Power Measurements

	Freq [MHz]	Channel	Detector		IEEE Transn	nission Mode		Conducted Power Limit	Conducted Power	Ant. Gain [dBi]	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
Ē				802.11a	802.11n	802.11ac	802.11ax	[dBm]	Margin [dB]	[0.2.]	Land		
width)	5180	36	AVG	16.01	15.93	16.06	15.93	23.98	-7.92	-6.45	9.61	23.01	-13.40
Š	5200	40	AVG	17.64	17.76	17.61	15.99	23.98	-6.22	-6.69	11.07	23.01	-11.94
and	5220	44	AVG	17.72	17.71	17.56	15.92	23.98	-6.26	-6.45	11.27	23.01	-11.74
ar	5240	48	AVG	17.67	17.66	17.51	15.97	23.98	-6.31	-6.45	11.22	23.01	-11.79
B	5260	52	AVG	17.32	17.18	17.25	15.73	23.98	-6.66	-6.45	10.87	30.00	-19.13
Ŧ	5280	56	AVG	17.96	17.96	17.94	15.59	23.98	-6.02	-6.61	11.35	30.00	-18.65
5	5300	60	AVG	17.84	17.77	17.77	15.34	23.98	-6.14	-6.55	11.29	30.00	-18.71
MO	5320	64	AVG	16.14	16.12	16.16	15.97	23.98	-7.82	-6.55	9.61	30.00	-20.39
<u> </u>	5500	100	AVG	16.48	16.34	16.41	15.99	23.98	-7.50	-6.99	9.49	30.00	-20.51
4	5600	120	AVG	17.68	17.76	17.64	15.97	23.98	-6.22	-6.99	10.77	-	-
	5720	144	AVG	17.77	17.75	17.71	15.98	23.98	-6.21	-6.99	10.78	30.00	-19.22
5G	5745	149	AVG	17.98	17.35	17.29	15.48	30.00	-12.02	-6.99	10.99	-	-
	5785	157	AVG	17.73	17.74	17.72	15.98	30.00	-12.26	-6.86	10.88	-	-
	5825	165	AVG	17.74	17.84	17.77	15.97	30.00	-12.16	-6.95	10.89	-	

Table 7-6. SISO ANT1 20MHz BW (UNII) Maximum Conducted Output Power

	Freq [MHz]	Channel	Detector	IEEE	Transmission	Mode	Conducted Power Limit	Conducted Power	Ant. Gain [dBi]	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
				802.11n	802.11ac	802.11ax	[dBm]	Margin [dB]	[abi]	[abiii]	Ennie [GBIII]	
₽ ⊂	5190	38	AVG	13.02	13.05	13.33	23.98	-10.93	-6.69	6.36	23.01	-16.65
두 단	5230	46	AVG	16.49	16.50	13.75	23.98	-7.48	-6.45	10.05	23.01	-12.96
(40M width	5270	54	AVG	16.97	16.99	13.53	23.98	-6.99	-6.61	10.38	30.00	-19.62
4 V	5310	62	AVG	12.51	13.48	13.97	23.98	-10.50	-6.55	6.93	30.00	-23.07
ΡČ	5510	102	AVG	14.35	14.41	13.27	23.98	-9.57	-6.99	7.42	30.00	-22.58
GH Bar	5590	118	AVG	16.73	16.74	13.99	23.98	-7.24	-6.99	9.75	-	-
50	5630	126	AVG	16.61	16.68	13.94	23.98	-7.30	-6.99	9.69	-	-
	5710	142	AVG	16.83	16.83	13.29	23.98	-7.15	-6.86	9.97	30.00	-20.03
	5755	151	AVG	16.46	16.45	13.61	30.00	-13.54	-6.86	9.60	-	-
	5795	159	AVG	16.65	16.64	13.86	30.00	-13.35	-6.95	9.70	-	-

#### Table 7-7. SISO ANT1 40MHz BW (UNII) Maximum Conducted Output Power

	Freq [MHz]	Channel	Detector	IEEE Transn	nission Mode	Conducted Power Limit	Conducted Power	Ant. Gain [dBi]	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
₽ E				802.11ac	802.11ax	[dBm]	Margin [dB]	[abi]	[abiii]	Ennie [GBin]	
d <u>t</u> N	5210	42	AVG	13.02	12.85	23.98	-10.96	-6.45	6.57	23.01	-16.44
<u>≥</u> (%	5290	58	AVG	11.61	12.22	23.98	-12.37	-6.55	5.06	30.00	-24.94
5GHz Band	5530	106	AVG	12.36	12.98	23.98	-11.62	-6.99	5.37	30.00	-24.63
B 2	5610	122	AVG	15.31	12.85	23.98	-8.67	-6.99	8.32	-	-
	5690	138	AVG	15.36	12.92	23.98	-8.62	-6.86	8.50	30.00	-21.50
	5775	155	AVG	15.38	12.73	30.00	-14.62	-6.86	8.52	-	-

Table 7-8. SISO ANT1 80MHz BW (UNII) Maximum Conducted Output Power

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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### SISO Antenna-2 Conducted Output Power Measurements

	Freq [MHz]	Channel	Detector		IEEE Transn	nission Mode		Conducted Power Limit	Conducted Power	Ant. Gain [dBi]	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
Ē				802.11a	802.11n	802.11ac	802.11ax	[dBm]	Margin [dB]	[0.2.]	Land		
width)	5180	36	AVG	16.20	16.16	16.13	15.55	23.98	-7.78	-6.45	9.75	23.01	-13.26
Š	5200	40	AVG	17.25	17.21	17.36	15.54	23.98	-6.62	-6.69	10.67	23.01	-12.34
and	5220	44	AVG	17.26	17.10	17.33	15.48	23.98	-6.65	-6.45	10.88	23.01	-12.13
ar	5240	48	AVG	17.25	17.16	17.39	15.49	23.98	-6.59	-6.45	10.94	23.01	-12.07
B	5260	52	AVG	17.26	17.25	17.44	15.59	23.98	-6.54	-6.45	10.99	30.00	-19.01
Ŧ	5280	56	AVG	17.35	17.37	17.36	15.68	23.98	-6.61	-6.61	10.76	30.00	-19.24
ŧ	5300	60	AVG	17.34	17.49	17.58	15.70	23.98	-6.40	-6.55	11.03	30.00	-18.97
MO	5320	64	AVG	16.31	16.24	16.24	15.69	23.98	-7.67	-6.55	9.76	30.00	-20.24
<u> </u>	5500	100	AVG	16.08	16.02	16.06	15.32	23.98	-7.90	-6.99	9.09	30.00	-20.91
4	5600	120	AVG	17.53	17.16	17.23	15.55	23.98	-6.45	-6.99	10.54	-	-
	5720	144	AVG	17.29	17.91	17.15	15.40	23.98	-6.07	-6.99	10.92	30.00	-19.08
5G	5745	149	AVG	17.13	17.36	17.34	15.55	30.00	-12.64	-6.99	10.37	-	-
	5785	157	AVG	17.25	17.19	17.54	15.69	30.00	-12.46	-6.86	10.68	-	-
	5825	165	AVG	16.98	17.96	17.21	15.42	30.00	-12.04	-6.95	11.01	-	-

Table 7-9. SISO ANT2 20MHz BW (UNII) Maximum Conducted Output Power

	Freq [MHz] Ch	Channel	Detector	IEEE	Transmission	Mode	Conducted Power Limit	Conducted Power	Ant. Gain [dBi]	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
				802.11n	802.11ac	802.11ax	[dBm]	Margin [dB]	[abi]	[abiii]	Linik [dbin]	mai gin [ab]
₽ ⊂	5190	38	AVG	13.09	13.13	13.42	23.98	-10.85	-6.69	6.44	23.01	-16.57
두 푼	5230	46	AVG	16.50	16.49	13.79	23.98	-7.48	-6.45	10.05	23.01	-12.96
(40M width	5270	54	AVG	16.54	16.38	13.58	23.98	-7.44	-6.61	9.93	30.00	-20.07
4 V	5310	62	AVG	13.03	13.09	13.41	23.98	-10.89	-6.55	6.54	30.00	-23.46
NĚ	5510	102	AVG	14.82	14.81	13.49	23.98	-9.16	-6.99	7.83	30.00	-22.17
GH Bar	5590	118	AVG	16.26	16.37	13.56	23.98	-7.61	-6.99	9.38	-	-
50	5630	126	AVG	16.44	16.33	13.53	23.98	-7.54	-6.99	9.45	-	-
	5710	142	AVG	16.19	16.98	13.39	23.98	-7.00	-6.86	10.12	30.00	-19.88
	5755	151	AVG	16.25	16.28	13.70	30.00	-13.72	-6.86	9.42	-	-
	5795	159	AVG	16.98	16.97	13.31	30.00	-13.02	-6.95	10.03	-	-

#### Table 7-10. SISO ANT2 40MHz BW (UNII) Maximum Conducted Output Power

	Freq [MHz]	Channel	Detector	IEEE Transn	nission Mode	Conducted Power Limit	Conducted Power	Ant. Gain [dBi]	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
F (				802.11ac	802.11ax	[dBm]	Margin [dB]	[abi]	[abiii]	Ennie [GB/II]	margin [ab]
idth)	5210	42	AVG	13.45	12.44	23.98	-10.53	-6.45	7.00	23.01	-16.01
8) 2	5290	58	AVG	11.59	12.88	23.98	-12.39	-6.55	5.04	30.00	-24.96
N 🚄	5530	106	AVG	12.28	12.98	23.98	-11.70	-6.99	5.29	30.00	-24.71
5GH Bar	5610	122	AVG	15.65	12.45	23.98	-8.33	-6.99	8.66	-	-
	5690	138	AVG	15.59	12.83	23.98	-8.39	-6.86	8.73	30.00	-21.27
	5775	155	AVG	15.34	12.42	30.00	-14.66	-6.86	8.48	-	-

Table 7-11. SISO ANT2 80MHz BW (UNII) Maximum Conducted Output Power

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## MIMO Maximum Conducted Output Power Measurements

	Freq [MHz]	Channel	Detector	Conc	lucted Power [	dBm]	Conducted Power Limit	Conducted Power	Directional Ant. Gain	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
Ē.				ANT1	ANT2	MIMO	[dBm]	Margin [dB]	[dBi]	[]		
<u>q</u>	5180	36	AVG	16.01	16.20	19.12	23.98	-4.86	-3.44	15.68	23.01	-7.33
3	5200	40	AVG	17.64	17.25	20.46	23.98	-3.52	-3.68	16.78	23.01	-6.23
andwidth	5220	44	AVG	17.72	17.26	20.51	23.98	-3.47	-3.44	17.07	23.01	-5.94
ar	5240	48	AVG	17.67	17.25	20.48	23.98	-3.50	-3.44	17.04	23.01	-5.97
â	5260	52	AVG	17.32	17.26	20.30	23.98	-3.68	-3.44	16.86	30.00	-13.14
Hz	5280	56	AVG	17.96	17.35	20.68	23.98	-3.30	-3.60	17.08	30.00	-12.92
5	5300	60	AVG	17.84	17.34	20.61	23.98	-3.37	-3.54	17.07	30.00	-12.93
(20M	5320	64	AVG	16.14	16.31	19.24	23.98	-4.74	-3.54	15.70	30.00	-14.30
<u>9</u>	5500	100	AVG	16.48	16.08	19.29	23.98	-4.69	-3.98	15.31	30.00	-14.69
N	5600	120	AVG	17.68	17.53	20.62	23.98	-3.36	-3.98	16.64	-	-
Т	5720	144	AVG	17.77	17.29	20.55	23.98	-3.43	-3.98	16.57	30.00	-13.43
5G	5745	149	AVG	17.98	17.13	20.59	30.00	-9.41	-3.98	16.61	-	-
	5785	157	AVG	17.73	17.25	20.51	30.00	-9.49	-3.85	16.66	-	-
	5825	165	AVG	17.74	16.98	20.39	30.00	-9.61	-3.94	16.45	-	-

Table 7-12. MIMO 20MHz BW 802.11a (UNII) Maximum Conducted Output Power

	Freq [MHz]	Channel	Detector	Cond	lucted Power [	dBm]	Conducted Power Limit	Conducted Power	Directional Ant. Gain	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
Ē				ANT1	ANT2	MIMO	[dBm]	Margin [dB]	[dBi]	[abiii]	Ennie [GB/II]	margin [ab]
<u>e</u>	5180	36	AVG	15.93	16.16	19.06	23.98	-4.92	-3.44	15.62	23.01	-7.39
Š	5200	40	AVG	17.76	17.21	20.50	23.98	-3.48	-3.68	16.82	23.01	-6.19
andwidth	5220	44	AVG	17.71	17.10	20.43	23.98	-3.55	-3.44	16.99	23.01	-6.02
	5240	48	AVG	17.66	17.16	20.43	23.98	-3.55	-3.44	16.99	23.01	-6.02
B	5260	52	AVG	17.18	17.25	20.23	23.98	-3.75	-3.44	16.79	30.00	-13.21
μ	5280	56	AVG	17.96	17.37	20.69	23.98	-3.29	-3.60	17.09	30.00	-12.91
⇒	5300	60	AVG	17.77	17.49	20.64	23.98	-3.34	-3.54	17.10	30.00	-12.90
(20M	5320	64	AVG	16.12	16.24	19.19	23.98	-4.79	-3.54	15.65	30.00	-14.35
2	5500	100	AVG	16.34	16.02	19.19	23.98	-4.79	-3.98	15.21	30.00	-14.79
N	5600	120	AVG	17.76	17.16	20.48	23.98	-3.50	-3.98	16.50	-	-
В	5720	144	AVG	17.75	17.91	20.84	23.98	-3.14	-3.98	16.86	30.00	-13.14
50	5745	149	AVG	17.35	17.36	20.37	30.00	-9.63	-3.98	16.39	-	-
	5785	157	AVG	17.74	17.19	20.48	30.00	-9.52	-3.85	16.63	-	-
	5825	165	AVG	17.84	17.96	20.91	30.00	-9.09	-3.94	16.97	-	-

Table 7-13. MIMO 20MHz BW 802.11n (UNII) Maximum Conducted Output Power

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	Freq [MHz]	Channel	Detector	Cond	lucted Power [	dBm]	Conducted Power Limit	Conducted Power	Directional Ant. Gain	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
Ē				ANT1	ANT2	MIMO	[dBm]	Margin [dB]	[dBi]	[]		
<u>d</u>	5180	36	AVG	16.06	16.13	19.11	23.98	-4.87	-3.44	15.67	23.01	-7.34
ž	5200	40	AVG	17.61	17.36	20.50	23.98	-3.48	-3.68	16.82	23.01	-6.19
Bandwidth)	5220	44	AVG	17.56	17.33	20.46	23.98	-3.52	-3.44	17.02	23.01	-5.99
ar	5240	48	AVG	17.51	17.39	20.46	23.98	-3.52	-3.44	17.02	23.01	-5.99
	5260	52	AVG	17.25	17.44	20.36	23.98	-3.62	-3.44	16.92	30.00	-13.08
Hz	5280	56	AVG	17.94	17.36	20.67	23.98	-3.31	-3.60	17.07	30.00	-12.93
⇒	5300	60	AVG	17.77	17.58	20.69	23.98	-3.29	-3.54	17.15	30.00	-12.85
20M	5320	64	AVG	16.16	16.24	19.21	23.98	-4.77	-3.54	15.67	30.00	-14.33
3	5500	100	AVG	16.41	16.06	19.25	23.98	-4.73	-3.98	15.27	30.00	-14.73
N	5600	120	AVG	17.64	17.23	20.45	23.98	-3.53	-3.98	16.47	-	-
GHS	5720	144	AVG	17.71	17.15	20.45	23.98	-3.53	-3.98	16.47	30.00	-13.53
20	5745	149	AVG	17.29	17.34	20.33	30.00	-9.67	-3.98	16.35	-	-
	5785	157	AVG	17.72	17.54	20.64	30.00	-9.36	-3.85	16.79	-	-
	5825	165	AVG	17.77	17.21	20.51	30.00	-9.49	-3.94	16.57	-	-

Table 7-14. MIMO 20MHz BW 802.11ac (UNII) Maximum Conducted Output Power

	Freq [MHz]	Channel	Detector	Conc	lucted Power [	dBm]	Conducted Power Limit	Conducted Power	Directional Ant. Gain	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
Ē				ANT1	ANT2	MIMO	[dBm]	Margin [dB]	[dBi]	[]		
width)	5180	36	AVG	11.91	12.54	15.25	23.98	-8.73	-3.44	11.81	23.01	-11.20
3	5200	40	AVG	11.94	12.56	15.27	23.98	-8.71	-3.68	11.59	23.01	-11.42
and	5220	44	AVG	11.97	12.69	15.36	23.98	-8.62	-3.44	11.92	23.01	-11.09
ar	5240	48	AVG	12.01	12.73	15.40	23.98	-8.58	-3.44	11.96	23.01	-11.05
В	5260	52	AVG	12.91	12.57	15.75	23.98	-8.23	-3.60	12.15	30.00	-17.85
μZ	5280	56	AVG	13.03	12.65	15.85	23.98	-8.13	-3.60	12.25	30.00	-17.75
⇒	5300	60	AVG	12.85	12.71	15.79	23.98	-8.19	-3.54	12.25	30.00	-17.75
(20M	5320	64	AVG	12.81	12.70	15.77	23.98	-8.21	-3.54	12.23	30.00	-17.77
5	5500	100	AVG	13.23	12.51	15.90	23.98	-8.08	-3.98	11.92	30.00	-18.08
<u>N</u>	5600	120	AVG	12.87	11.61	15.30	23.98	-8.68	-3.98	11.32	-	
ЧЭ	5720	144	AVG	12.76	11.37	15.13	23.98	-8.85	-3.85	11.28	30.00	-18.72
20	5745	149	AVG	12.81	12.76	15.80	30.00	-14.20	-3.85	11.95	-	-
	5785	157	AVG	13.09	12.74	15.93	30.00	-14.07	-3.85	12.08	-	-
	5825	165	AVG	12.34	11.78	15.08	30.00	-14.92	-3.94	11.14	-	-

Table 7-15. MIMO 20MHz BW 802.11ax (UNII) Maximum Conducted Output Power

	Freq [MHz]	Channel	Detector	Conc	lucted Power [	dBm]	Conducted Power Limit	Conducted Power	Directional Ant. Gain	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
				ANT1	ANT2	MIMO	[dBm]	Margin [dB]	[dBi]	[abiii]	Ennie [GBIII]	margin [ab]
P C	5190	38	AVG	13.02	13.09	16.07	23.98	-7.91	-3.68	12.39	23.01	-10.62
oMH	5230	46	AVG	16.49	16.50	19.51	23.98	-4.47	-3.68	15.83	23.01	-7.18
	5270	54	AVG	16.97	16.54	19.77	23.98	-4.21	-3.68	16.09	30.00	-13.91
4 2 2	5310	62	AVG	12.51	13.03	15.79	23.98	-8.19	-3.68	12.11	30.00	-17.89
Ρč	5510	102	AVG	14.35	14.82	17.60	23.98	-6.38	-3.68	13.92	30.00	-16.08
ъ В	5590	118	AVG	16.73	16.26	19.51	23.98	-4.47	-3.68	15.83	-	
50	5630	126	AVG	16.61	16.44	19.54	23.98	-4.44	-3.68	15.86	-	
	5710	142	AVG	16.83	16.19	19.53	23.98	-4.45	-3.68	15.85	30.00	-14.15
	5755	151	AVG	16.46	16.25	19.37	30.00	-10.63	-3.68	15.69	-	-
	5795	159	AVG	16.65	16.98	19.83	30.00	-10.17	-3.68	16.15	-	-

Table 7-16. MIMO 40MHz BW 802.11n (UNII) Maximum Conducted Output Power

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	Freq [MHz]	Channel	Detector	Cond	lucted Power [	[dBm]	Conducted Power Limit	Conducted Power	Directional Ant. Gain	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
				ANT1	ANT2	MIMO	[dBm]	Margin [dB]	[dBi]	[abiii]	Ennie [GBIII]	margin [ab]
₽ ⊂	5190	38	AVG	13.05	13.13	16.10	23.98	-7.88	-3.68	12.42	23.01	-10.59
북북	5230	46	AVG	16.50	16.49	19.51	23.98	-4.47	-3.68	15.83	23.01	-7.18
⊂.≃	5270	54	AVG	16.99	16.38	19.71	23.98	-4.27	-3.68	16.03	30.00	-13.97
4 8	5310	62	AVG	13.48	13.09	16.30	23.98	-7.68	-3.68	12.62	30.00	-17.38
Hz	5510	102	AVG	14.41	14.81	17.62	23.98	-6.36	-3.68	13.94	30.00	-16.06
Ва Ва	5590	118	AVG	16.74	16.37	19.57	23.98	-4.41	-3.68	15.89	-	
50	5630	126	AVG	16.68	16.33	19.52	23.98	-4.46	-3.68	15.84	-	-
	5710	142	AVG	16.83	16.98	19.92	23.98	-4.06	-3.68	16.24	30.00	-13.76
	5755	151	AVG	16.45	16.28	19.38	30.00	-10.62	-3.68	15.70	-	-
	5795	159	AVG	16.64	16.97	19.82	30.00	-10.18	-3.68	16.14	-	-

Table 7-17. MIMO 40MHz BW 802.11ac (UNII) Maximum Conducted Output Power

	Freq [MHz]	Channel	Detector	Cond	lucted Power [	dBm]	Conducted Power Limit	Conducted Power	Directional Ant. Gain	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
				ANT1	ANT2	MIMO	[dBm]	Margin [dB]	[dBi]	Lapud	Ennie [GB/1]	margin [ab]
Ϋ́Ξ	5190	38	AVG	10.14	10.49	13.33	23.98	-10.65	-3.68	9.65	23.01	-13.36
dt N	5230	46	AVG	9.75	10.60	13.21	23.98	-10.77	-3.68	9.53	23.01	-13.48
	5270	54	AVG	10.41	10.37	13.40	23.98	-10.58	-3.60	9.80	30.00	-20.20
4) dv	5310	62	AVG	10.55	10.48	13.53	23.98	-10.45	-3.54	9.99	30.00	-20.01
ΡĆ	5510	102	AVG	11.22	10.33	13.81	23.98	-10.17	-3.98	9.83	30.00	-20.17
GH Bar	5590	118	AVG	11.47	10.29	13.93	23.98	-10.05	-3.98	9.95	-	-
<u>г</u> 2	5630	126	AVG	11.48	10.37	13.97	23.98	-10.01	-3.98	9.99	-	-
	5710	142	AVG	10.73	9.30	13.08	23.98	-10.90	-3.85	9.23	30.00	-20.77
	5755	151	AVG	10.75	11.06	13.92	30.00	-16.08	-3.85	10.07	-	-
	5795	159	AVG	10.97	10.93	13.96	30.00	-16.04	-3.94	10.02	-	-

Table 7-18. MIMO 40MHz BW 802.11ax (UNII) Maximum Conducted Output Power

	Freq [MHz]	Channel	Detector	Cond	lucted Power [	dBm]	Conducted Power Limit	Conducted Power	Directional Ant. Gain	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
FT (c				ANT1	ANT2	MIMO	[dBm]	Margin [dB]	[dBi]	Lapud	Ennie [GB/1]	margin [ab]
(80MH: width)	5210	42	AVG	13.02	13.45	16.25	23.98	-7.73	-3.44	12.81	23.01	-10.20
<u>∞ ≥</u>	5290	58	AVG	11.61	11.59	14.61	23.98	-9.37	-3.54	11.07	30.00	-18.93
5GHz Band	5530	106	AVG	12.36	12.28	15.33	23.98	-8.65	-3.98	11.35	30.00	-18.65
B 3G	5610	122	AVG	15.31	15.65	18.49	23.98	-5.49	-3.98	14.51	-	-
	5690	138	AVG	15.36	15.59	18.49	23.98	-5.49	-3.85	14.64	30.00	-15.36
	5775	155	AVG	15.38	15.34	18.37	30.00	-11.63	-3.85	14.52	-	-

Table 7-19. MIMO 80MHz BW 802.11ac (UNII) Maximum Conducted Output Power

	Freq [MHz]	Channel	Detector	Cond	lucted Power [	dBm]	Conducted Power Limit	Conducted Power	Directional Ant. Gain	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
Ϋ́ Ξ				ANT1	ANT2	MIMO	[dBm]	Margin [dB]	[dBi]	Lapud	Ennic [GB/1]	margin [ab]
OMH; idth)	5210	42	AVG	9.56	9.73	12.66	23.98	-11.32	-3.44	9.22	23.01	-13.79
<u>×</u> (9	5290	58	AVG	9.71	9.34	12.54	23.98	-11.44	-3.54	9.00	30.00	-21.00
GHz Banc	5530	106	AVG	10.07	9.20	12.67	23.98	-11.31	-3.98	8.69	30.00	-21.31
5GI Ba	5610	122	AVG	10.32	9.30	12.85	23.98	-11.13	-3.98	8.87	-	-
	5690	138	AVG	10.18	9.41	12.82	23.98	-11.16	-3.85	8.97	30.00	-21.03
	5775	155	AVG	9.92	9.41	12.68	30.00	-17.32	-3.85	8.83	-	-

Table 7-20. MIMO 80MHz BW 802.11ax (UNII) Maximum Conducted Output Power

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#### Note:

Per ANSI C63.10-2013 and KDB 662911 v02r01 Section E)1), the conducted powers at Antenna 1 and Antenna 2 were first measured separately during MIMO transmission as shown in the section above. The measured values were then summed in linear power units then converted back to dBm.

Per ANSI C63.10-2013 Section 14.4.3, the directional gain is calculated using the following formula, where  $G_N$  is the gain of the nth antenna and  $N_{ANT}$ , the total number of antennas used.

Directional gain =  $10 \log[(10^{G_{1/20}} + 10^{G_{2/20}} + ... + 10^{G_{N/20}})^2 / N_{ANT}] dBi$ 

#### Sample MIMO Calculation:

At 5180MHz in 802.11n (20MHz BW) mode, the average conducted output power was measured to be 15.93 dBm for Antenna-1 and 16.16 dBm for Antenna-2.

Antenna 1 + Antenna 2 = MIMO

(15.93 dBm + 16.16 dBm) = (39.17 mW + 41.30 mW) = 80.48 mW = 19.06 dBm

#### Sample e.i.r.p. Calculation:

At 5180MHz in 802.11n (20MHz BW) mode, the average MIMO conducted power was calculated to be 19.06 dBm with directional gain of -3.44 dBi.

e.i.r.p. (dBm) = Conducted Power (dBm) + Ant gain (dBi)

19.06 dBm + -3.44 dBi = 15.62 dBm

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# 7.5 Maximum Power Spectral Density – 802.11a/n/ac/ax §15.407(a.1.iv) §15.407(a.2) §15.407(a.3); RSS-247 [6.2]

#### **Test Overview and Limit**

The spectrum analyzer was connected to the antenna terminal while the EUT was operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10-2013 and KDB 789033 D02 v02r01, and at the appropriate frequencies. Method SA-1, as defined in ANSI C63.10-2013 and KDB 789033 D02 v02r01, was used to measure the power spectral density.

## In the 5.15 – 5.25GHz, 5.25 – 5.35GHz, 5.47 – 5.725GHz bands, the maximum permissible power spectral density is 11dBm/MHz.

In the 5.725 – 5.850GHz band, the maximum permissible power spectral density is 30dBm/500kHz.

#### Test Procedure Used

ANSI C63.10-2013 – Section 12.3.2.2 KDB 789033 D02 v02r01 – Section F ANSI C63.10-2013 – Section 14.3.2.2 Measure-and-Sum Technique KDB 662911 v02r01 – Section E)2) Measure-and-Sum Technique

#### Test Settings

- 1. Analyzer was set to the center frequency of the UNII channel under investigation
- 2. Span was set to encompass the entire emission bandwidth of the signal
- 3. RBW = 1MHz
- 4. VBW = 3MHz
- 5. Number of sweep points  $\geq 2 \times (\text{span/RBW})$
- 6. Sweep time = auto
- 7. Detector = power averaging (RMS)
- 8. Trigger was set to free run for all modes
- 9. Trace was averaged over 100 sweeps
- 10. The peak search function of the spectrum analyzer was used to find the peak of the spectrum.

#### Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



Figure 7-4. Test Instrument & Measurement Setup

#### Test Notes

#### None

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## SISO Antenna-1 Power Spectral Density Measurements

	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
	5180	36	а	6	4.84	11.0	-6.16
	5200	40	а	6	7.15	11.0	-3.85
	5240	48	а	6	7.49	11.0	-3.51
	5180	36	n (20MHz)	6.5/7.2 (MCS0)	5.57	11.0	-5.43
	5200	40	n (20MHz)	6.5/7.2 (MCS0)	6.88	11.0	-4.12
	5240	48	n (20MHz)	6.5/7.2 (MCS0)	7.16	11.0	-3.84
<del></del>	5180	36	ax (20MHz)	6.5/7.2 (MCS0)	5.51	11.0	-5.49
Band 1	5200	40	ax (20MHz)	6.5/7.2 (MCS0)	5.13	11.0	-5.87
ä	5240	48	ax (20MHz)	6.5/7.2 (MCS0)	5.59	11.0	-5.41
	5190	38	n (40MHz)	13.5/15 (MCS0)	4.18	11.0	-6.82
	5230	46	n (40MHz)	13.5/15 (MCS0)	3.29	11.0	-7.71
	5190	38	ax (40MHz)	13.5/15 (MCS0)	-0.03	11.0	-11.03
	5230	46	ax (40MHz)	13.5/15 (MCS0)	0.64	11.0	-10.36
	5210	42	ac (80MHz)	29.3/32.5 (MCS0)	0.04	11.0	-10.96
	5210	42	ax (80MHz)	29.3/32.5 (MCS0)	-3.73	11.0	-14.73
	5260	52	a	6	7.37	11.0	-3.63
	5280	56	a	6	8.16	11.0	-2.84
	5320	64	a	6	6.09	11.0	-4.91
	5260	52	n (20MHz)	6.5/7.2 (MCS0)	7.08	11.0	-3.92
	5280	56	n (20MHz)	6.5/7.2 (MCS0)	7.81	11.0	-3.19
	5320	64	n (20MHz)	6.5/7.2 (MCS0)	5.67	11.0	-5.33
∢	5260	52	ax (20MHz)	6.5/7.2 (MCS0)	5.36	11.0	-5.64
Band 2A	5280	56	ax (20MHz)	6.5/7.2 (MCS0)	4.98	11.0	-6.02
Ban			· · · ·	. ,	4.90 5.87	11.0	
ш	5320	64 54	ax (20MHz)	6.5/7.2 (MCS0)	3.98	11.0	-5.13 -7.02
	5270		n (40MHz)	13.5/15 (MCS0)			
	5310	62	n (40MHz)	13.5/15 (MCS0)	4.61	11.0	-6.39
	5270	54	ax (40MHz)	13.5/15 (MCS0)	0.33	11.0	-10.67
	5310 5300	62	ax (40MHz)	13.5/15 (MCS0)	1.12 0.48	11.0 11.0	-9.88
	5290	58	ac (80MHz)	29.3/32.5 (MCS0)		-	-10.52
	5290	58	ax (80MHz)	29.3/32.5 (MCS0)	-4.29	11.0	-15.29
	5500	100	a	6	6.17	11.0	-4.83
	5600	120	а	6	7.35	11.0	-3.65
	5720	144	a	6	7.82	11.0	-3.18
	5500	100	n (20MHz)	6.5/7.2 (MCS0)	5.69	11.0	-5.31
	5600	120	n (20MHz)	6.5/7.2 (MCS0)	7.06	11.0	-3.94
	5720	144	n (20MHz)	6.5/7.2 (MCS0)	7.54	11.0	-3.46
	5500	100	ax (20MHz)	6.5/7.2 (MCS0)	4.98	11.0	-6.02
	5600	120	ax (20MHz)	6.5/7.2 (MCS0)	5.08	11.0	-5.92
	5720	144	ax (20MHz)	6.5/7.2 (MCS0)	5.67	11.0	-5.33
	5510	102	n (40MHz)	13.5/15 (MCS0)	4.17	11.0	-6.83
2C	5590	118	n (40MHz)	13.5/15 (MCS0)	3.20	11.0	-7.80
Band	5670	134	n (40MHz)	13.5/15 (MCS0)	3.20	11.0	-7.80
ä	5710	142	n (40MHz)	13.5/15 (MCS0)	3.70	11.0	-7.30
	5510	102	ax (40MHz)	13.5/15 (MCS0)	-0.61	11.0	-11.61
	5550	110	ax (40MHz)	13.5/15 (MCS0)	-0.61	11.0	-11.61
	5590	118	ax (40MHz)	13.5/15 (MCS0)	0.75	11.0	-10.25
	5710	142	ax (40MHz)	13.5/15 (MCS0)	0.06	11.0	-10.94
	5530	106	ac (80MHz)	29.3/32.5 (MCS0)	-0.47	11.0	-11.47
	5610	122	ac (80MHz)	29.3/32.5 (MCS0)	-1.61	11.0	-12.61
	5690	138	ac (80MHz)	29.3/32.5 (MCS0)	-3.61	11.0	-14.61
	5530	106	ax (80MHz)	29.3/32.5 (MCS0)	-4.26	11.0	-15.26
	5610	122	ax (80MHz)	29.3/32.5 (MCS0)	-4.21	11.0	-15.21
	5690	138	ax (80MHz)	29.3/32.5 (MCS0)	-6.20	11.0	-17.20

Table 7-21. Bands 1, 2A, 2C Conducted Power Spectral Density Measurements SISO ANT1

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	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured Power Density [dBm]	Antenna Gain [dBi]	e.i.r.p. Power Density [dBm/MHz]	ISED Max e.i.r.p. Power Density [dBm/MHz]	Margin [dB]
	5180	36	а	6	4.84	-6.45	-1.61	10.0	-11.61
	5200	40	а	6	7.15	-6.69	0.46	10.0	-9.54
	5240	48	а	6	7.49	-6.45	1.04	10.0	-8.96
	5180	36	n (20MHz)	6.5/7.2 (MCS0)	5.57	-6.45	-0.88	10.0	-10.88
	5200	40	n (20MHz)	6.5/7.2 (MCS0)	6.88	-6.69	0.19	10.0	-9.81
	5240	48	n (20MHz)	6.5/7.2 (MCS0)	7.16	-6.45	0.71	10.0	-9.29
Ξ	5180	36	ax (20MHz)	6.5/7.2 (MCS0)	5.51	-6.45	-0.94	10.0	-10.94
Band	5200	40	ax (20MHz)	6.5/7.2 (MCS0)	5.13	-6.69	-1.56	10.0	-11.56
ä	5240	48	ax (20MHz)	6.5/7.2 (MCS0)	5.59	-6.45	-0.86	10.0	-10.86
	5190	38	n (40MHz)	13.5/15 (MCS0)	4.18	-6.45	-2.27	10.0	-12.27
	5230	46	n (40MHz)	13.5/15 (MCS0)	3.29	-6.45	-3.16	10.0	-13.16
	5190	38	ax (40MHz)	13.5/15 (MCS0)	-0.03	-6.45	-6.48	10.0	-16.48
	5230	46	ax (40MHz)	13.5/15 (MCS0)	0.64	-6.45	-5.81	10.0	-15.81
	5210	42	ac (80MHz)	29.3/32.5 (MCS0)	0.04	-6.45	-6.41	10.0	-16.41
	5210	42	ax (80MHz)	29.3/32.5 (MCS0)	-3.73	-6.45	-10.18	10.0	-20.18

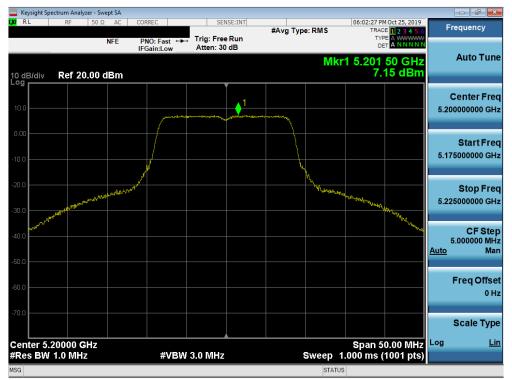
Table 7-22. Band 1 e.i.r.p. Conducted Power Spectral Density Measurements (ISED) SISO ANT1



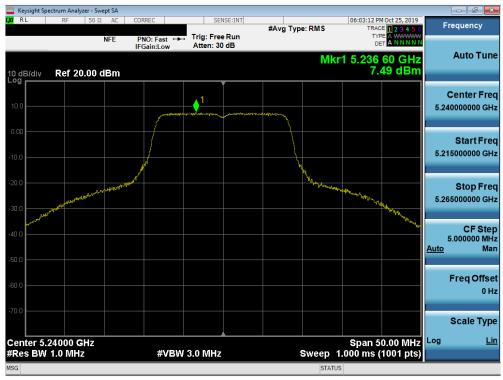
Plot 7-133. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 1) - Ch. 36)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager		
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Plot 7-134. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 1) - Ch. 40)



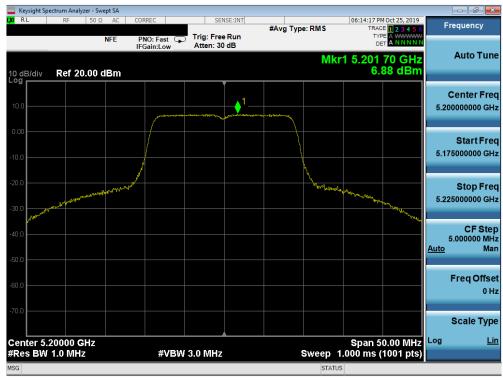
Plot 7-135. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 1) - Ch. 48)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager			
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Plot 7-136. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 1) - Ch. 36)



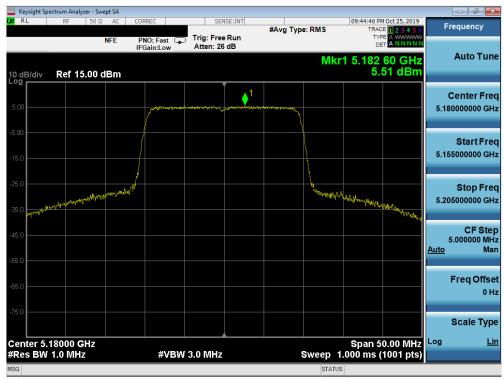
Plot 7-137. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 1) - Ch. 40)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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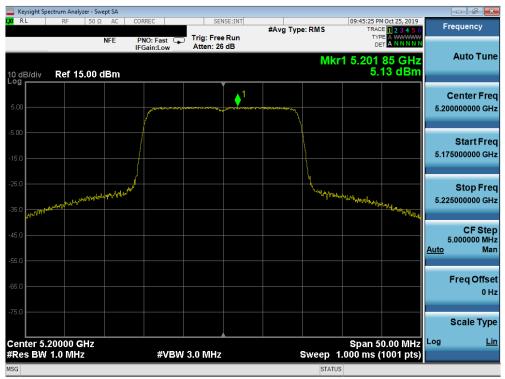
Plot 7-138. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 1) - Ch. 48)



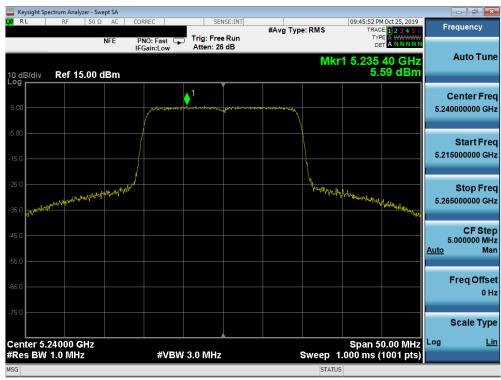
Plot 7-139. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 1) - Ch. 36)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Plot 7-140. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 1) - Ch. 40)



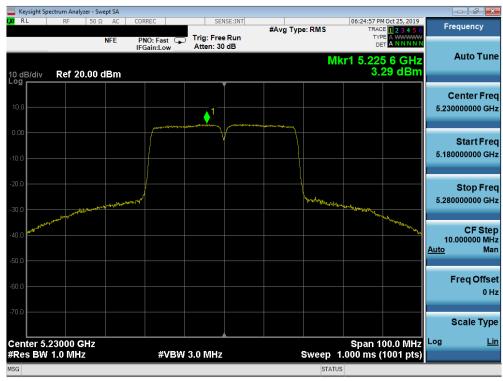
Plot 7-141. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 1) - Ch. 48)

FCC ID: A3LSMG986U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager			
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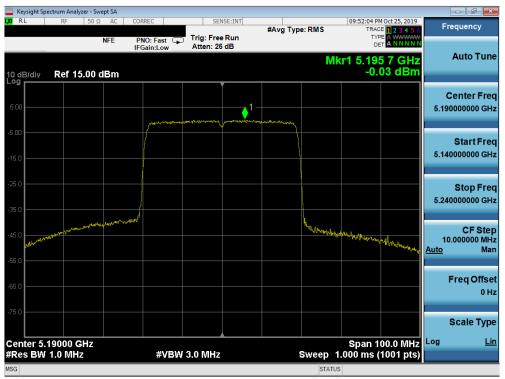
Plot 7-142. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 1) - Ch. 38)



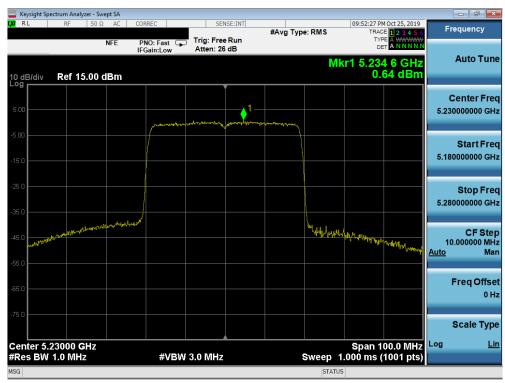
Plot 7-143. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 1) - Ch. 46)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager			
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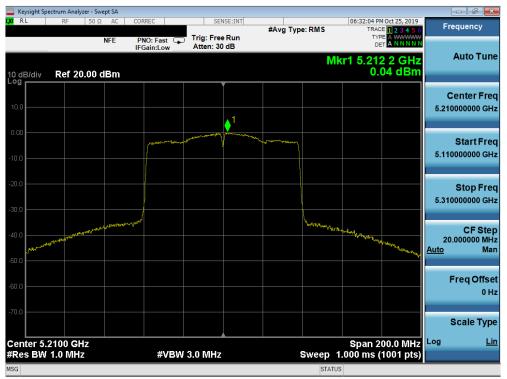
Plot 7-144. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax (UNII Band 1) - Ch. 38)



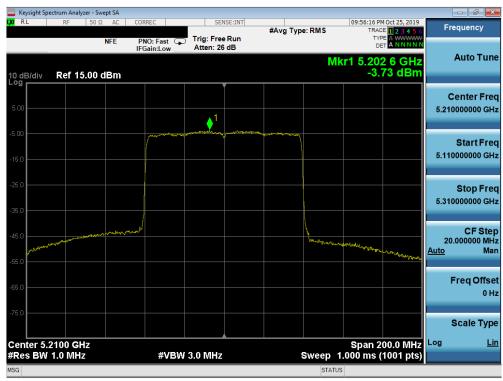
Plot 7-145. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax (UNII Band 1) - Ch. 46)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager			
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Plot 7-146. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ac (UNII Band 1) - Ch. 42)



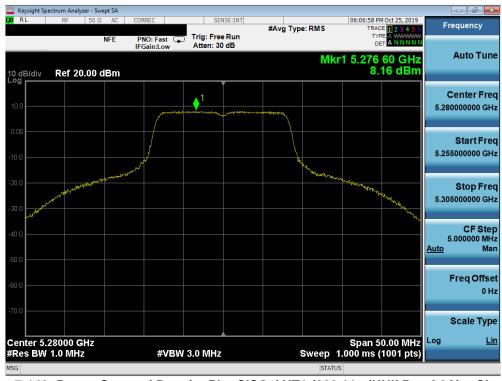
Plot 7-147. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax (UNII Band 1) - Ch. 42)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager			
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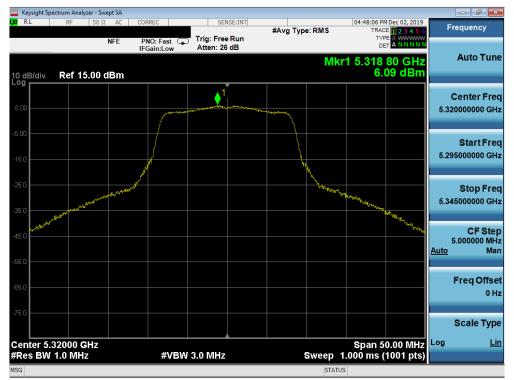
Plot 7-148. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 2A) - Ch. 52)



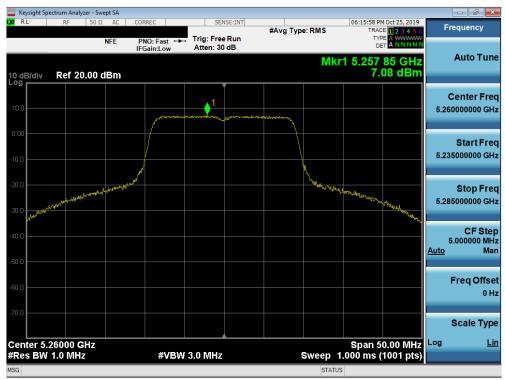
Plot 7-149. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 2A) – Ch. 56)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Plot 7-150. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 2A) - Ch. 64)



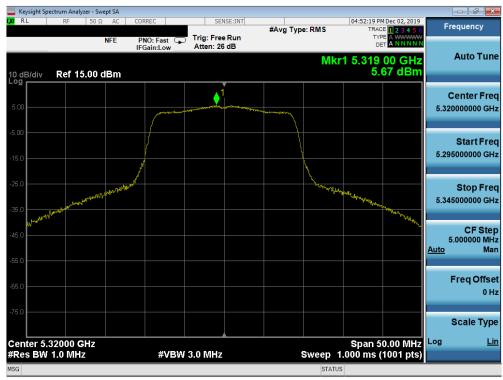
Plot 7-151. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 2A) - Ch. 52)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager			
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Plot 7-152. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 2A) - Ch. 56)



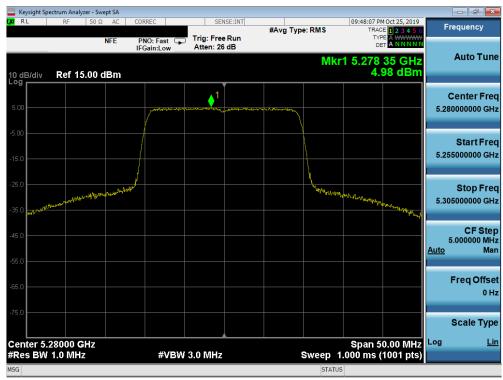
Plot 7-153. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 2A) - Ch. 64)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager			
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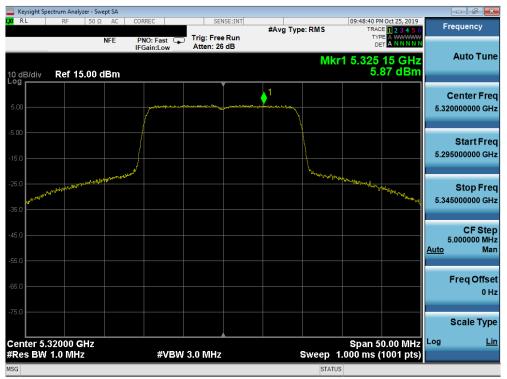
Plot 7-154. Power Spectral Density Plot SISO ANT1 (20MHz 802.11ax (UNII Band 2A) - Ch. 52)



Plot 7-155. Power Spectral Density Plot SISO ANT1 (20MHz 802.11ax (UNII Band 2A) - Ch. 56)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager			
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Plot 7-156. Power Spectral Density Plot SISO ANT1 (20MHz 802.11ax (UNII Band 2A) - Ch. 64)



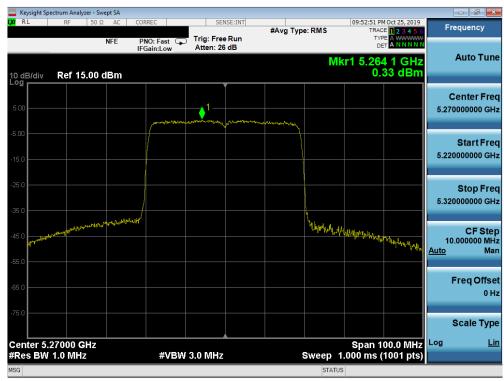
Plot 7-157. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 2A) - Ch. 54)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager			
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Plot 7-158. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 2A) - Ch. 62)



Plot 7-159. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax (UNII Band 2A) - Ch. 54)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-160. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax (UNII Band 2A) - Ch. 62)



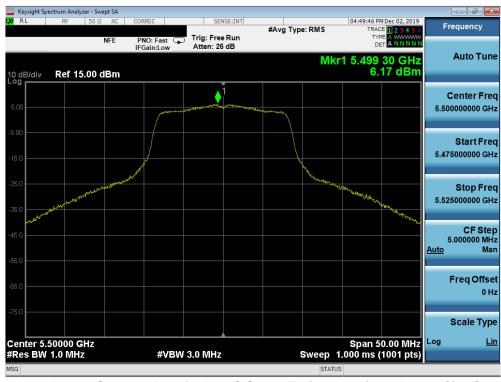
Plot 7-161. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ac (UNII Band 2A) - Ch. 58)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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	Spectrum Analy										
LXI RL	RF	50 Ω AC	CORREC	SEI	NSE:INT	#Avg Typ	e: RMS		M Oct 25, 2019	Freq	uency
	_	NFE	PNO: Fast C IFGain:Low	Trig: Free Atten: 26				TYF De			
10 dB/div Log	Ref 15	5.00 dBm					Mk	r1 5.27 -4.	8 2 GHz 29 dBm	A	uto Tune
					Í						nter Freq
5.00				▲1						5.2900	00000 GHz
-5.00			The set of	A	and the second s	mannen				s	tart Freq
-15.0											00000 GHz
-25.0											top Freq
-35.0			1							5.3900	00000 GHz
15.0			1.110								CF Step
	Jon for population	August and a second and					Weenerghad	Hallweight	aller Miller	20.00 <u>Auto</u>	00000 MHz Man
-55.0											
-65.0										Fr	eq Offset 0 Hz
75.0											0 H2
-75.0										So	ale Type
Center 5	5.2900 GH	lz						Span 2	00.0 MHz	Log	<u>Lin</u>
#Res BV	V 1.0 MH:	z	#VB	W 3.0 MHz			Sweep 1	.000 ms (	1001 pts)		
MSG							STATUS				

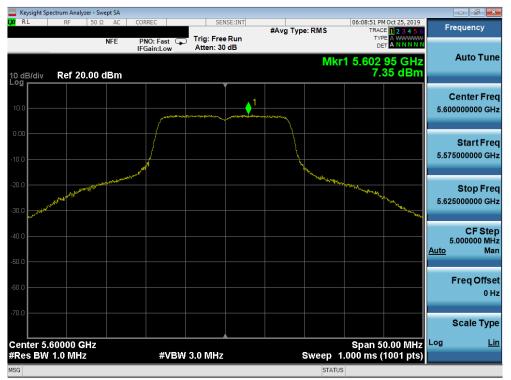
Plot 7-162. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax (UNII Band 2A) - Ch. 58)



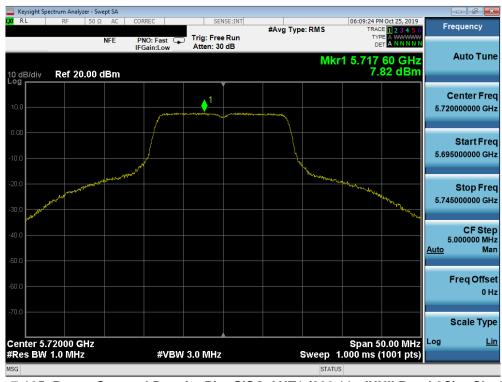
Plot 7-163. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 2C) - Ch. 100)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SUNG	Approved by: Quality Manager
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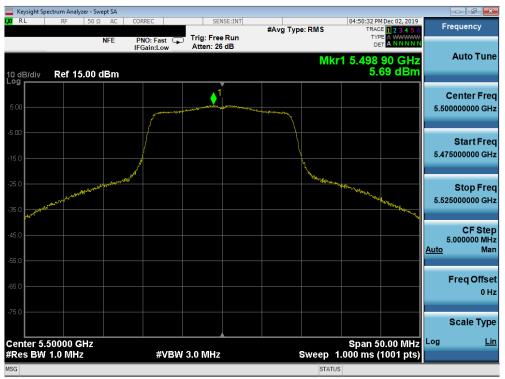
Plot 7-164. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 2C) - Ch. 120)



Plot 7-165. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 2C) - Ch. 144)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	ISUNG	Approved by: Quality Manager
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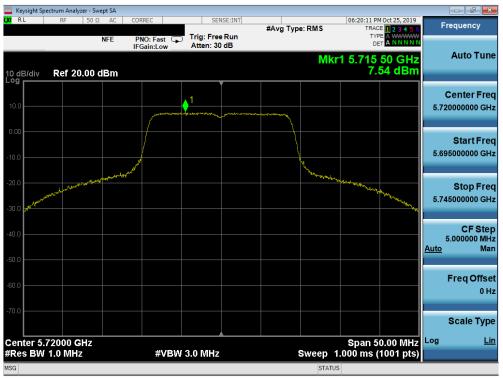
Plot 7-166. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 2C) - Ch. 100)



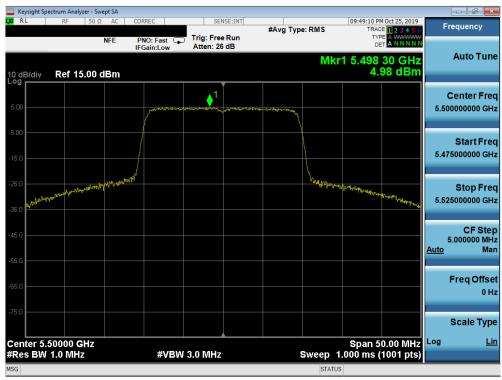
Plot 7-167. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 2C) - Ch. 120)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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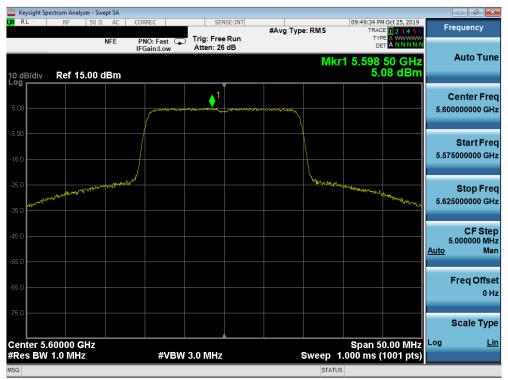
Plot 7-168. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 2C) - Ch. 144)



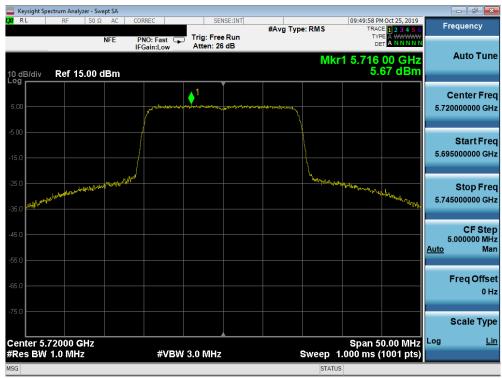
Plot 7-169. Power Spectral Density Plot SISO ANT1 (20MHz 802.11ax (UNII Band 2C) - Ch. 100)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Plot 7-170. Power Spectral Density Plot SISO ANT1 (20MHz 802.11ax (UNII Band 2C) - Ch. 120)



Plot 7-171. Power Spectral Density Plot SISO ANT1 (20MHz 802.11ax (UNII Band 2C) - Ch. 144)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	MSUNG	Approved by: Quality Manager
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Plot 7-172. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 2C) - Ch. 102)



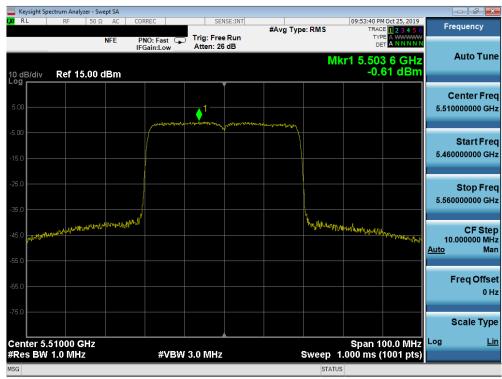
Plot 7-173. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 2C) - Ch. 118)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Plot 7-174. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 2C) - Ch. 142)



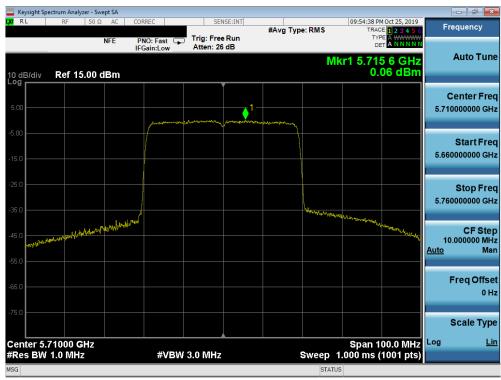
Plot 7-175. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax (UNII Band 2C) - Ch. 102)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	UNG	Approved by: Quality Manager
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Plot 7-176. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax (UNII Band 2C) - Ch. 118)



Plot 7-177. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax (UNII Band 2C) - Ch. 142)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Plot 7-178. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ac (UNII Band 2C) - Ch. 106)



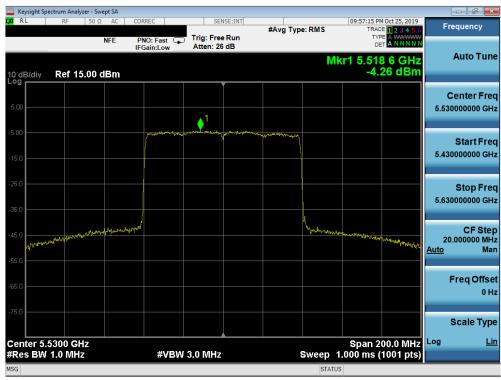
Plot 7-179. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 122)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-180. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ac (UNII Band 2C) - Ch. 138)



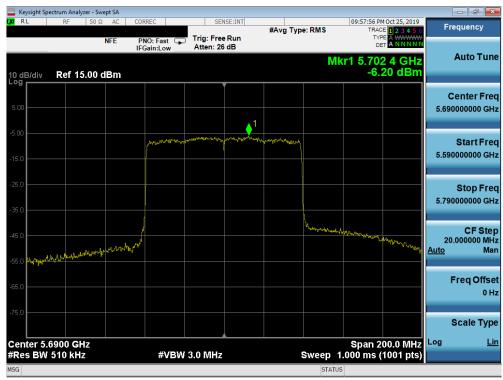
Plot 7-181. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax (UNII Band 2C) - Ch. 106)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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	ectrum Analyzer									
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10 dB/div Log	Ref 15.0	0 dBm					Mk	(r1 5.60 -4.	1 8 GHz 21 dBm	Auto Tune
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-5.00			water	and a state of the	-	and the second second				
-15.0										Start Freq 5.510000000 GHz
-25.0										Stop Freq
-35.0										5.710000000 GHz
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-45.0	and a support of the support	¢Ω <sub>N</sub> <sup>12</sup> Nevder™V	-						and the state of t	20.000000 MHz <u>Auto</u> Man
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-65.0										Freq Offset
										0 Hz
-75.0										Scale Type
O a m t a m E								0		Log <u>Lin</u>
Center 5.0 #Res BW			#VE	3W 3.0 MHz			Sweep 1	span 2 .000 ms (	00.0 MHz (1001 pts)	
MSG							STATUS	· · · · · · · · · · · · · · · · · · ·		

Plot 7-182. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax (UNII Band 2C) - Ch. 122)



Plot 7-183. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax (UNII Band 2C) - Ch. 138)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
	5745	149	а	6	5.01	30.0	-24.99
	5785	157	а	6	4.06	30.0	-25.94
	5825	165	а	6	3.95	30.0	-26.05
	5745	149	n (20MHz)	6.5/7.2 (MCS0)	4.02	30.0	-25.98
	5785	157	n (20MHz)	6.5/7.2 (MCS0)	3.97	30.0	-26.03
	5825	165	n (20MHz)	6.5/7.2 (MCS0)	3.67	30.0	-26.33
e	5745	149	ax (20MHz)	6.5/7.2 (MCS0)	1.90	30.0	-28.10
Band	5785	157	ax (20MHz)	6.5/7.2 (MCS0)	2.00	30.0	-28.00
ä	5825	165	ax (20MHz)	6.5/7.2 (MCS0)	1.92	30.0	-28.08
	5755	151	n (40MHz)	13.5/15 (MCS0)	-0.20	30.0	-30.20
	5795	159	n (40MHz)	13.5/15 (MCS0)	0.16	30.0	-29.84
	5755	151	ax (40MHz)	13.5/15 (MCS0)	-2.89	30.0	-32.89
	5795	159	ax (40MHz)	13.5/15 (MCS0)	-2.87	30.0	-32.87
	5775	155	ac (80MHz)	29.3/32.5 (MCS0)	-1.49	30.0	-31.49
	5775	155	ax (80MHz)	29.3/32.5 (MCS0)	-4.16	30.0	-34.16

Table 7-23. Band 3 Conducted Power Spectral Density Measurements SISO ANT1



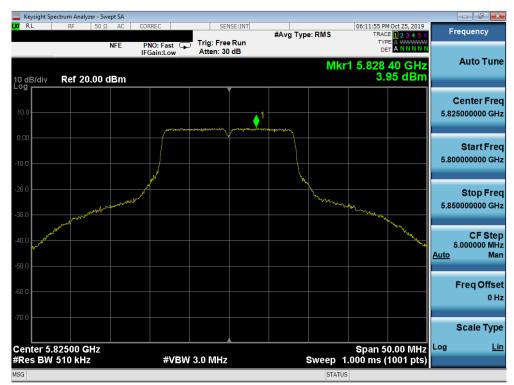
Plot 7-184. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 3) – Ch. 149)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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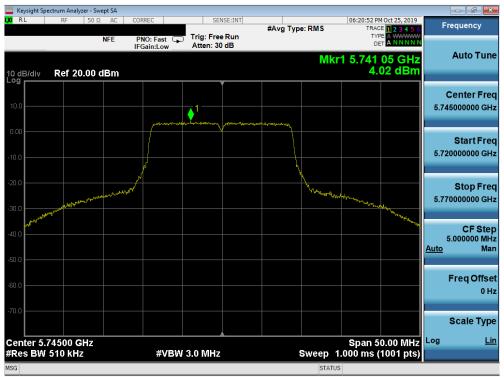
Plot 7-185. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 3) - Ch. 157)



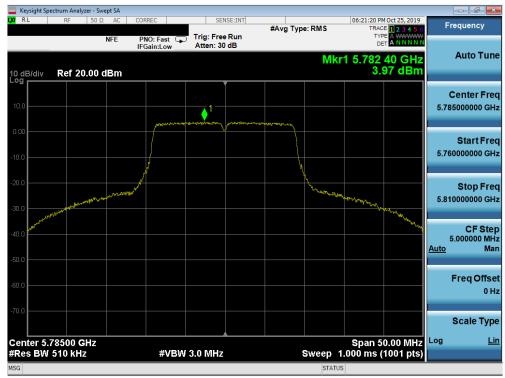
Plot 7-186. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 3) - Ch. 165)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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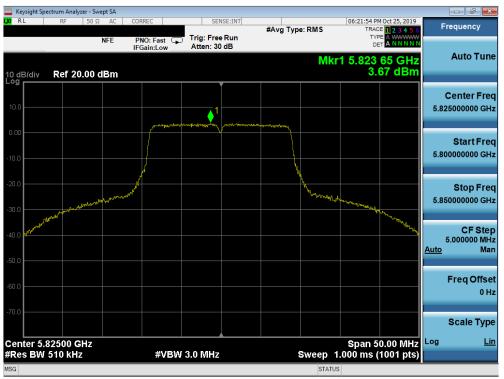
Plot 7-187. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 3) - Ch. 149)



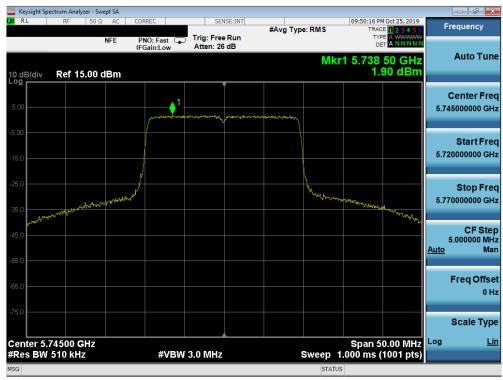
Plot 7-188. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 3) - Ch. 157)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Plot 7-189. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 3) - Ch. 165)



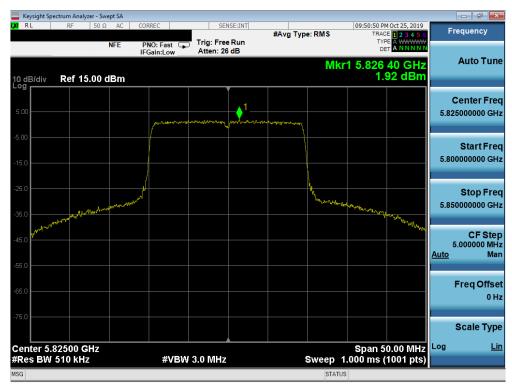
Plot 7-190. Power Spectral Density Plot SISO ANT1 (20MHz 802.11ax (UNII Band 3) - Ch. 149)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Plot 7-191. Power Spectral Density Plot SISO ANT1 (20MHz 802.11ax (UNII Band 3) - Ch. 157)



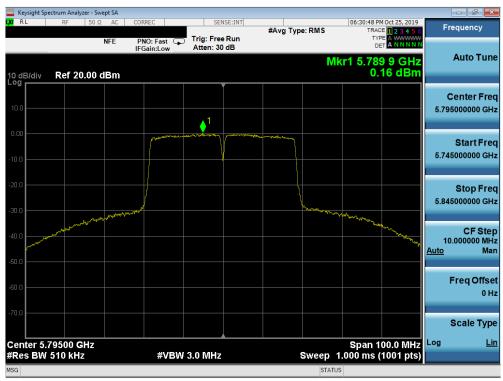
Plot 7-192. Power Spectral Density Plot SISO ANT1 (20MHz 802.11ax (UNII Band 3) - Ch. 165)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	MSUNG	Approved by: Quality Manager
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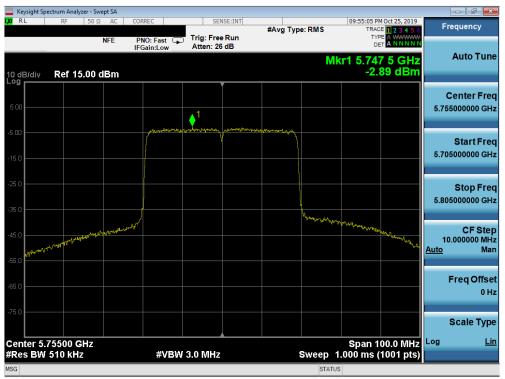
Plot 7-193. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 3) - Ch. 151)



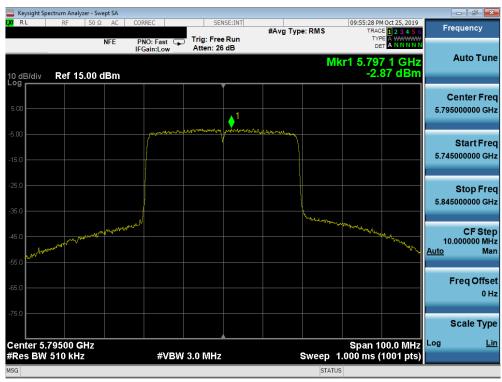
Plot 7-194. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 3) - Ch. 159)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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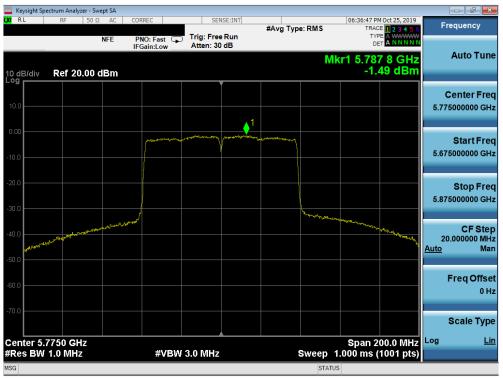
Plot 7-195. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax (UNII Band 3) - Ch. 151)



Plot 7-196. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax (UNII Band 3) - Ch. 159)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Plot 7-197. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ac (UNII Band 3) - Ch. 155)



Plot 7-198. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax (UNII Band 3) - Ch. 155)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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## SISO Antenna-2 Power Spectral Density Measurements

Fund     5200     40     a     6     7.12     11.0     -4       5180     36     n (20MHz)     6.57.2 (MCS0)     6.57     11.0     -5       5200     40     n (20MHz)     6.57.2 (MCS0)     6.57     11.0     -4       5200     40     n (20MHz)     6.57.2 (MCS0)     4.63     11.0     -4       5200     40     ax (20MHz)     6.57.2 (MCS0)     4.46     11.0     -6       5200     40     ax (20MHz)     6.57.2 (MCS0)     4.43     11.0     -6       5200     40     ax (20MHz)     13.5715 (MCS0)     2.85     11.0     -7       5230     46     n (40MHz)     13.5715 (MCS0)     0.36     11.0     -1       5210     42     ac (80MHz)     23.32.5 (MCS0)     0.40     11.0     -1       5210     42     ac (80MHz)     23.32.5 (MCS0)     0.40     11.0     -1       5220     52     a     6     6.96     11.0     -4       5280     <	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
State     State <th< th=""><td>5180</td><td>36</td><td>а</td><td>6</td><td>5.66</td><td>11.0</td><td>-5.34</td></th<>	5180	36	а	6	5.66	11.0	-5.34
FTE     5180     36     n (20MHz)     6.5/7.2 (MCS0)     5.54     11.0     -4       5200     40     n (20MHz)     6.5/7.2 (MCS0)     6.79     11.0     -4       5240     48     n (20MHz)     6.5/7.2 (MCS0)     4.46     11.0     -6       5200     40     ax (20MHz)     6.5/7.2 (MCS0)     4.46     11.0     -6       5200     40     ax (20MHz)     6.5/7.2 (MCS0)     4.73     11.0     -6       5230     46     n (40MHz)     13.5/15 (MCS0)     -3.73     11.0     -7       5230     46     n (40MHz)     13.5/15 (MCS0)     -0.37     11.0     -1       5210     42     ac (80MHz)     23.3/2.5 (MCS0)     0.40     11.0     -1       5280     56     a     6     6.968     11.0     -4       5280     52     n (20MHz)     6.5/7.2 (MCS0)     6.47     11.0     -4       5280     56     a     6     6.565     11.0     -4       5280 <td>5200</td> <td>40</td> <td>а</td> <td>6</td> <td>6.98</td> <td>11.0</td> <td>-4.02</td>	5200	40	а	6	6.98	11.0	-4.02
Second     40     n (20MHz)     6.577.2 (MCS0)     6.57     11.0     -4       5240     48     n (20MHz)     6.577.2 (MCS0)     4.46     11.0     -6       5200     40     ax (20MHz)     6.577.2 (MCS0)     4.463     11.0     -6       5200     40     ax (20MHz)     6.577.2 (MCS0)     4.463     11.0     -6       5200     40     ax (20MHz)     6.577.2 (MCS0)     4.73     11.0     -6       5230     46     n (40MHz)     13.5715 (MCS0)     2.85     11.0     -7       5230     46     ax (40MHz)     13.5715 (MCS0)     0.37     11.0     -1       5230     46     ax (80MHz)     29.3/32.5 (MCS0)     0.40     11.0     -1       5240     56     a     6     7.07     11.0     -4       5280     52     a     6     6.066     11.0     -4       5280     56     a     6     7.07     11.0     -4       5280     56     a	5240	48	а	6	7.12	11.0	-3.88
State     State <th< th=""><td>5180</td><td>36</td><td>n (20MHz)</td><td>6.5/7.2 (MCS0)</td><td>5.54</td><td>11.0</td><td>-5.46</td></th<>	5180	36	n (20MHz)	6.5/7.2 (MCS0)	5.54	11.0	-5.46
Tegs     5180     36     ax (20MHz)     6.5/7.2 (MCS0)     4.46     11.0     -C       5200     40     ax (20MHz)     6.5/7.2 (MCS0)     4.63     11.0     -C       5240     48     ax (20MHz)     6.5/7.2 (MCS0)     4.73     11.0     -C       5240     48     ax (20MHz)     13.5/15 (MCS0)     2.85     11.0     -F       5230     46     n (40MHz)     13.5/15 (MCS0)     0.37     11.0     -1       5210     42     ac (80MHz)     29.3/32.5 (MCS0)     0.40     11.0     -1       5210     42     ac (80MHz)     29.3/32.5 (MCS0)     -4.49     11.0     -1       5220     56     a     6     7.07     11.0     -4       5280     56     a     6     7.07     11.0     -4       5280     56     a     6     7.07     11.0     -4       5280     56     a     6     6.577.2 (MCS0)     6.05     11.0     -4       5280	5200	40	n (20MHz)	6.5/7.2 (MCS0)	6.57	11.0	-4.43
Sec     5200     40     ax (20M+b2)     6.5/7.2 (MCS0)     4.63     11.0     -6       5240     48     ax (20M+b2)     6.5/7.2 (MCS0)     3.73     11.0     -7       5230     46     n (40M+b2)     13.5/15 (MCS0)     2.85     11.0     -7       5230     46     n (40M+b2)     13.5/15 (MCS0)     0.37     11.0     -1       5230     46     ax (40M+b2)     13.5/15 (MCS0)     0.26     11.0     -1       5210     42     ac (80M+b2)     33.25 (MCS0)     0.40     11.0     -1       5210     42     ax (80M+b2)     29.3/32.5 (MCS0)     0.40     11.0     -4       5220     64     a     6     6.05     11.0     -4       5220     64     a     6     6.05     11.0     -4       5280     56     n (20M+b2)     6.5/7.2 (MCS0)     6.05     11.0     -4       5280     56     ax (20M+b2)     6.5/7.2 (MCS0)     4.87     11.0     -6       5280<	5240	48	n (20MHz)	6.5/7.2 (MCS0)	6.79	11.0	-4.21
Total     Total     Total     Total     Total     Total       5200     46     n (400Hz)     13.5/15 (MCS0)     2.85     11.0     -5       5230     46     n (400Hz)     13.5/15 (MCS0)     0.373     11.0     -1       5230     46     ax (400Hz)     13.5/15 (MCS0)     0.26     11.0     -1       5210     42     ax (800Hz)     29.3/32.5 (MCS0)     0.40     11.0     -1       5210     42     ax (800Hz)     29.3/32.5 (MCS0)     -4.49     11.0     -1       5220     64     a     6     6.665     11.0     -4       5280     56     a     6     6.655     11.0     -4       5280     56     n (200Hz)     6.57.2 (MCS0)     6.76     11.0     -4       5280     56     ax (200Hz)     6.57.2 (MCS0)     6.77     11.0     -6       5280     56     ax (200Hz)     6.57.2 (MCS0)     4.87     11.0     -6       5270     54     ax (400Hz)	<del>~</del> 5180	36	ax (20MHz)	6.5/7.2 (MCS0)	4.46	11.0	-6.54
Total     Total     Total     Total     Total     Total       5200     46     n (400Hz)     13.5/15 (MCS0)     2.85     11.0     -5       5230     46     n (400Hz)     13.5/15 (MCS0)     0.373     11.0     -1       5230     46     ax (400Hz)     13.5/15 (MCS0)     0.26     11.0     -1       5210     42     ax (800Hz)     29.3/32.5 (MCS0)     0.40     11.0     -1       5210     42     ax (800Hz)     29.3/32.5 (MCS0)     -4.49     11.0     -1       5220     64     a     6     6.665     11.0     -4       5280     56     a     6     6.655     11.0     -4       5280     56     n (200Hz)     6.57.2 (MCS0)     6.76     11.0     -4       5280     56     ax (200Hz)     6.57.2 (MCS0)     6.77     11.0     -6       5280     56     ax (200Hz)     6.57.2 (MCS0)     4.87     11.0     -6       5270     54     ax (400Hz)	5200	40	ax (20MHz)	6.5/7.2 (MCS0)	4.63	11.0	-6.37
5230     46     n (40MHz)     13.5/15 (MCS0)     2.85     11.0     -5       5190     38     ax (40MHz)     13.5/15 (MCS0)     -0.37     11.0     -1       5230     46     ax (40MHz)     13.5/15 (MCS0)     -0.26     11.0     -1       5210     42     ac (80MHz)     29.3/32.5 (MCS0)     -4.49     11.0     -1       5210     42     ax (80MHz)     29.3/32.5 (MCS0)     -4.49     11.0     -1       5210     42     ax (80MHz)     29.3/32.5 (MCS0)     -4.49     11.0     -4       5280     56     a     6     7.07     11.0     -4       5280     56     n (20MHz)     6.5/7.2 (MCS0)     6.05     11.0     -4       5280     56     ax (20MHz)     6.5/7.2 (MCS0)     4.87     11.0     -6       5280     56     ax (20MHz)     6.5/7.2 (MCS0)     4.87     11.0     -6       5280     56     ax (20MHz)     13.5/15 (MCS0)     2.81     11.0     -7       5	<b>ö</b> 5240	48	ax (20MHz)	6.5/7.2 (MCS0)	4.73	11.0	-6.27
5190     38     ax (40MHz)     13.5/15 (MCS0)     -0.37     11.0     -1       5230     46     ax (40MHz)     13.5/15 (MCS0)     0.26     11.0     -1       5210     42     ax (80MHz)     29.3/32.5 (MCS0)     0.40     11.0     -1       5210     42     ax (80MHz)     29.3/32.5 (MCS0)     -4.49     11.0     -4       5260     52     a     6     6.96     11.0     -4       5280     56     a     6     7.07     11.0     -3       5320     64     a     6     6.655     11.0     -4       5280     56     n (20MHz)     6.5/7.2 (MCS0)     6.77     11.0     -4       5320     64     n (20MHz)     6.5/7.2 (MCS0)     4.87     11.0     -6       5280     56     ax (20MHz)     6.5/7.2 (MCS0)     4.87     11.0     -6       5270     54     n (40MHz)     13.5/15 (MCS0)     0.00     11.0     -1       5310     62     ax (40MH	5190	38	n (40MHz)	13.5/15 (MCS0)	3.73	11.0	-7.27
5230     46     ax (40MHz)     13.5/15 (MCS0)     0.26     11.0     -1       5210     42     ac (80MHz)     29.3/32.5 (MCS0)     0.40     11.0     -1       5210     42     ac (80MHz)     29.3/32.5 (MCS0)     -4.49     11.0     -1       5210     42     ax (80MHz)     29.3/32.5 (MCS0)     -4.49     11.0     -1       5210     42     ax (80MHz)     29.3/32.5 (MCS0)     -4.49     11.0     -4       5280     56     a     6     6.56     11.0     -4       5280     56     n (20MHz)     6.5/7.2 (MCS0)     6.76     11.0     -4       5280     56     n (20MHz)     6.5/7.2 (MCS0)     6.77     11.0     -4       5280     56     ax (20MHz)     6.5/7.2 (MCS0)     4.87     11.0     -6       5280     56     ax (20MHz)     6.5/7.2 (MCS0)     4.87     11.0     -6       5270     54     n (40MHz)     13.5/15 (MCS0)     0.00     11.0     -1       52	5230	46	n (40MHz)	13.5/15 (MCS0)	2.85	11.0	-8.15
S210     42     ac (80MHz)     29.3/32.5 (MCS0)     0.40     11.0     -1       5210     42     ax (80MHz)     29.3/32.5 (MCS0)     -4.49     11.0     -1       5260     52     a     6     6.96     11.0     -4       5280     56     a     6     6.655     11.0     -4       5320     64     a     6     6.655     11.0     -4       5280     56     n (20MHz)     6.5/7.2 (MCS0)     6.05     11.0     -4       5280     56     n (20MHz)     6.5/7.2 (MCS0)     4.87     11.0     -6       5280     56     ax (20MHz)     6.5/7.2 (MCS0)     4.87     11.0     -6       5280     56     ax (20MHz)     13.5/15 (MCS0)     2.81     11.0     -7       5270     54     n (40MHz)     13.5/15 (MCS0)     3.80     11.0     -7       5270     54     ax (40MHz)     29.3/32.5 (MCS0)     -0.18     11.0     -1       5290     58     ac (8	5190	38	ax (40MHz)	13.5/15 (MCS0)	-0.37	11.0	-11.37
S210     42     ax (80MHz)     29.3/32.5 (MCS0)     -4.49     11.0     -1.1       5260     52     a     6     6.96     11.0     -4       5280     56     a     6     7.07     11.0     -2       5320     64     a     6     6.655     11.0     -4       5280     52     n (20MHz)     6.5/7.2 (MCS0)     6.76     11.0     -4       5280     56     n (20MHz)     6.5/7.2 (MCS0)     6.05     11.0     -4       5280     56     ax (20MHz)     6.5/7.2 (MCS0)     4.87     11.0     -6       5280     56     ax (20MHz)     6.5/7.2 (MCS0)     4.87     11.0     -6       5320     64     ax (20MHz)     13.5/15 (MCS0)     2.81     11.0     -6       5320     54     n (40MHz)     13.5/15 (MCS0)     0.00     11.0     -7       5310     62     n (40MHz)     13.5/15 (MCS0)     0.27     11.0     -1       5290     58     ac (80MHz)	5230	46	ax (40MHz)	13.5/15 (MCS0)	0.26	11.0	-10.74
S260     52     a     6     6.96     11.0     .4       5280     56     a     6     7.07     11.0     -3       5320     64     a     6     6.655     11.0     -4       5280     56     n (20MHz)     6.577.2 (MCS0)     6.76     11.0     -4       5280     56     n (20MHz)     6.577.2 (MCS0)     6.05     11.0     -4       5320     64     n (20MHz)     6.577.2 (MCS0)     4.87     11.0     -6       5280     56     ax (20MHz)     6.577.2 (MCS0)     4.87     11.0     -6       5280     56     ax (20MHz)     6.577.2 (MCS0)     4.87     11.0     -6       5270     54     n (40MHz)     13.5/15 (MCS0)     2.81     11.0     -7       5310     62     n (40MHz)     13.5/15 (MCS0)     0.00     11.0     -1       5280     58     ax (40MHz)     13.5/15 (MCS0)     -0.27     11.0     -4       5290     58     ax (40MHz)	5210	42	ac (80MHz)	29.3/32.5 (MCS0)	0.40	11.0	-10.60
5280     56     a     6     7.07     11.0     -3       5320     64     a     6     6.665     11.0     -4       5280     52     n (20MHz)     6.5/7.2 (MCS0)     6.76     11.0     -4       5280     56     n (20MHz)     6.5/7.2 (MCS0)     6.05     11.0     -4       5280     56     ax (20MHz)     6.5/7.2 (MCS0)     6.77     11.0     -4       5280     56     ax (20MHz)     6.5/7.2 (MCS0)     4.87     11.0     -6       5280     56     ax (20MHz)     6.5/7.2 (MCS0)     4.87     11.0     -6       5270     54     n (40MHz)     13.5/15 (MCS0)     2.81     11.0     -7       5270     54     ax (40MHz)     13.5/15 (MCS0)     0.00     11.0     -7       5270     54     ax (40MHz)     13.5/15 (MCS0)     0.00     11.0     -1       5310     62     ax (40MHz)     13.5/15 (MCS0)     -0.27     11.0     -1       5290     58	5210	42	ax (80MHz)	29.3/32.5 (MCS0)	-4.49	11.0	-15.49
5320     64     a     6     6.665     11.0     .4       5260     52     n (20MHz)     6.577.2 (MCS0)     6.76     11.0     .4       5280     56     n (20MHz)     6.577.2 (MCS0)     6.05     11.0     .4       5320     64     n (20MHz)     6.577.2 (MCS0)     6.77     11.0     .4       5280     56     ax (20MHz)     6.577.2 (MCS0)     4.87     11.0     .6       5280     56     ax (20MHz)     6.577.2 (MCS0)     4.87     11.0     .6       5280     64     ax (20MHz)     6.577.2 (MCS0)     4.87     11.0     .6       5280     64     ax (20MHz)     6.577.2 (MCS0)     4.77     11.0     .6       5270     54     n (40MHz)     13.5/15 (MCS0)     0.00     11.0     .7       5310     62     ax (40MHz)     13.5/15 (MCS0)     0.027     11.0     .1       5290     58     ac (80MHz)     29.3/32.5 (MCS0)     -0.18     11.0     .1       5200	5260	52	а	6	6.96	11.0	-4.04
Signal     5260     52     n (20MHz)     6.5/7.2 (MCS0)     6.76     11.0     -4       5280     56     n (20MHz)     6.5/7.2 (MCS0)     6.05     11.0     -4       5320     64     n (20MHz)     6.5/7.2 (MCS0)     6.77     11.0     -4       5280     56     ax (20MHz)     6.5/7.2 (MCS0)     4.87     11.0     -6       5280     56     ax (20MHz)     6.5/7.2 (MCS0)     4.98     11.0     -6       5200     64     ax (20MHz)     6.5/7.2 (MCS0)     4.77     11.0     -6       5210     54     n (40MHz)     13.5/15 (MCS0)     2.81     11.0     -7       5210     54     ax (40MHz)     13.5/15 (MCS0)     0.00     11.0     -1       5310     62     ax (40MHz)     13.5/15 (MCS0)     -0.27     11.0     -1       5310     62     ax (40MHz)     29.3/32.5 (MCS0)     -0.18     11.0     -1       5200     58     ax (60MHz)     29.3/32.5 (MCS0)     -0.393     11.0 <td< th=""><td>5280</td><td>56</td><td>а</td><td>6</td><td>7.07</td><td>11.0</td><td>-3.93</td></td<>	5280	56	а	6	7.07	11.0	-3.93
Signed     5280     56     n (20MHz)     6.5/7.2 (MCS0)     6.05     11.0     -4       5320     64     n (20MHz)     6.5/7.2 (MCS0)     6.77     11.0     -4       5280     56     ax (20MHz)     6.5/7.2 (MCS0)     4.87     11.0     -6       5280     56     ax (20MHz)     6.5/7.2 (MCS0)     4.98     11.0     -6       5320     64     ax (20MHz)     6.5/7.2 (MCS0)     4.77     11.0     -6       5320     64     ax (20MHz)     13.5/15 (MCS0)     2.81     11.0     -7       5310     62     n (40MHz)     13.5/15 (MCS0)     0.00     11.0     -1       5310     62     ax (40MHz)     13.5/15 (MCS0)     -0.27     11.0     -1       5310     62     ax (40MHz)     29.3/32.5 (MCS0)     -0.18     11.0     -1       5290     58     ac (80MHz)     29.3/32.5 (MCS0)     -3.93     11.0     -4       5500     100     a     6     5.72     11.0     -4	5320	64	а	6	6.65	11.0	-4.35
Signed     5320     64     n (20MHz)     6.5/7.2 (MCS0)     6.77     11.0     -4       5260     52     ax (20MHz)     6.5/7.2 (MCS0)     4.87     11.0     -6       5280     56     ax (20MHz)     6.5/7.2 (MCS0)     4.98     11.0     -6       5320     64     ax (20MHz)     6.5/7.2 (MCS0)     4.77     11.0     -6       5320     64     ax (20MHz)     13.5/15 (MCS0)     2.81     11.0     -6       5310     62     n (40MHz)     13.5/15 (MCS0)     3.80     11.0     -7       5310     62     ax (40MHz)     13.5/15 (MCS0)     0.00     11.0     -1       5270     54     ax (40MHz)     13.5/15 (MCS0)     -0.27     11.0     -1       5290     58     ac (80MHz)     29.3/32.5 (MCS0)     -0.18     11.0     -1       5290     58     ax (80MHz)     29.3/32.5 (MCS0)     -3.93     11.0     -4       5500     100     a     6     5.72     11.0     -3	5260	52	n (20MHz)	6.5/7.2 (MCS0)	6.76	11.0	-4.24
Solution     5260     52     ax (20MHz)     6.5/7.2 (MCS0)     4.87     11.0     -6       5280     56     ax (20MHz)     6.5/7.2 (MCS0)     4.98     11.0     -6       5320     64     ax (20MHz)     6.5/7.2 (MCS0)     4.77     11.0     -6       5320     64     ax (20MHz)     6.5/7.2 (MCS0)     2.81     11.0     -6       5270     54     n (40MHz)     13.5/15 (MCS0)     2.81     11.0     -7       5270     54     ax (40MHz)     13.5/15 (MCS0)     0.00     11.0     -1       5310     62     ax (40MHz)     13.5/15 (MCS0)     -0.18     11.0     -1       5310     62     ax (40MHz)     29.3/32.5 (MCS0)     -0.18     11.0     -1       5290     58     ax (80MHz)     29.3/32.5 (MCS0)     -3.93     11.0     -1       5500     100     a     6     5.88     11.0     -2       5600     120     n (20MHz)     6.5/7.2 (MCS0)     5.53     11.0     -4 <td>5280</td> <td>56</td> <td>n (20MHz)</td> <td></td> <td>6.05</td> <td>11.0</td> <td>-4.95</td>	5280	56	n (20MHz)		6.05	11.0	-4.95
State     State <th< th=""><td>5320</td><td>64</td><td>n (20MHz)</td><td>6.5/7.2 (MCS0)</td><td>6.77</td><td>11.0</td><td>-4.23</td></th<>	5320	64	n (20MHz)	6.5/7.2 (MCS0)	6.77	11.0	-4.23
Open     Open <th< th=""><td>5260</td><td>52</td><td>ax (20MHz)</td><td>6.5/7.2 (MCS0)</td><td>4.87</td><td>11.0</td><td>-6.13</td></th<>	5260	52	ax (20MHz)	6.5/7.2 (MCS0)	4.87	11.0	-6.13
Open     Open <th< th=""><td>5280</td><td>56</td><td>ax (20MHz)</td><td>6.5/7.2 (MCS0)</td><td>4.98</td><td>11.0</td><td>-6.02</td></th<>	5280	56	ax (20MHz)	6.5/7.2 (MCS0)	4.98	11.0	-6.02
5310     62     n (40MHz)     13.5/15 (MCS0)     3.80     11.0     -7       5270     54     ax (40MHz)     13.5/15 (MCS0)     0.00     11.0     -1       5310     62     ax (40MHz)     13.5/15 (MCS0)     -0.27     11.0     -1       5290     58     ac (80MHz)     29.3/32.5 (MCS0)     -0.18     11.0     -1       5290     58     ax (80MHz)     29.3/32.5 (MCS0)     -3.93     11.0     -1       5290     58     ax (80MHz)     29.3/32.5 (MCS0)     -3.93     11.0     -1       5500     100     a     6     5.88     11.0     -5       5600     120     a     6     6.72     11.0     -3       5500     100     n (20MHz)     6.5/7.2 (MCS0)     5.53     11.0     -4       5720     144     n (20MHz)     6.5/7.2 (MCS0)     7.49     11.0     -3       5500     100     ax (20MHz)     6.5/7.2 (MCS0)     4.62     11.0     -6       5720 <t< th=""><td>5320</td><td>64</td><td>ax (20MHz)</td><td>6.5/7.2 (MCS0)</td><td>4.77</td><td>11.0</td><td>-6.23</td></t<>	5320	64	ax (20MHz)	6.5/7.2 (MCS0)	4.77	11.0	-6.23
S270     54     ax (40MHz)     13.5/15 (MCS0)     0.00     11.0     -1       5310     62     ax (40MHz)     13.5/15 (MCS0)     -0.27     11.0     -1       5290     58     ac (80MHz)     29.3/32.5 (MCS0)     -0.18     11.0     -1       5290     58     ax (80MHz)     29.3/32.5 (MCS0)     -3.93     11.0     -1       5290     58     ax (80MHz)     29.3/32.5 (MCS0)     -3.93     11.0     -1       5500     100     a     6     5.88     11.0     -5       5600     120     a     6     6.72     11.0     -4       5720     144     a     6     7.22     11.0     -3       5500     100     n (20MHz)     6.5/7.2 (MCS0)     5.53     11.0     -4       5720     144     n (20MHz)     6.5/7.2 (MCS0)     7.49     11.0     -3       5500     100     ax (20MHz)     6.5/7.2 (MCS0)     4.62     11.0     -6       5510     102     <	5270	54	n (40MHz)	13.5/15 (MCS0)	2.81	11.0	-8.19
Single     62     ax (40MHz)     13.5/15 (MCS0)     -0.27     11.0     -1       5290     58     ac (80MHz)     29.3/32.5 (MCS0)     -0.18     11.0     -1       5290     58     ax (80MHz)     29.3/32.5 (MCS0)     -3.93     11.0     -1       5290     58     ax (80MHz)     29.3/32.5 (MCS0)     -3.93     11.0     -1       5500     100     a     6     5.88     11.0     -5       5600     120     a     6     6.72     11.0     -4       5720     144     a     6     7.22     11.0     -3       5500     100     n (20MHz)     6.5/7.2 (MCS0)     5.53     11.0     -4       5720     144     n (20MHz)     6.5/7.2 (MCS0)     7.49     11.0     -3       5500     100     ax (20MHz)     6.5/7.2 (MCS0)     4.42     11.0     -6       5500     100     ax (20MHz)     6.5/7.2 (MCS0)     4.42     11.0     -7       5510     102	5310	62	n (40MHz)	13.5/15 (MCS0)	3.80	11.0	-7.20
5290     58     ac (80MHz)     29.3/32.5 (MCS0)     -0.18     11.0     -1       5290     58     ax (80MHz)     29.3/32.5 (MCS0)     -3.93     11.0     -1       5500     100     a     6     5.88     11.0     -5       5600     120     a     6     6.72     11.0     -4       5720     144     a     6     7.22     11.0     -3       5500     100     n (20MHz)     6.5/7.2 (MCS0)     5.53     11.0     -4       5720     144     a     6     7.22     11.0     -3       5500     100     n (20MHz)     6.5/7.2 (MCS0)     6.95     11.0     -4       5720     144     n (20MHz)     6.5/7.2 (MCS0)     7.49     11.0     -3       5500     100     ax (20MHz)     6.5/7.2 (MCS0)     4.62     11.0     -6       5720     144     ax (20MHz)     6.5/7.2 (MCS0)     4.92     11.0     -6       5510     102     n (40MHz)	5270	54	ax (40MHz)	13.5/15 (MCS0)	0.00	11.0	-11.00
S290     58     ax (80MHz)     29.3/32.5 (MCS0)     -3.93     11.0     -1.       5500     100     a     6     5.88     11.0     -5       5600     120     a     6     6.72     11.0     -4       5720     144     a     6     7.22     11.0     -5       5500     100     n (20MHz)     6.5/7.2 (MCS0)     5.53     11.0     -4       5500     100     n (20MHz)     6.5/7.2 (MCS0)     5.53     11.0     -4       5600     120     n (20MHz)     6.5/7.2 (MCS0)     6.95     11.0     -4       5720     144     n (20MHz)     6.5/7.2 (MCS0)     7.49     11.0     -3       5500     100     ax (20MHz)     6.5/7.2 (MCS0)     4.62     11.0     -6       5510     102     n (40MHz)     13.5/15 (MCS0)     3.86     11.0     -7       5590     118     n (40MHz)     13.5/15 (MCS0)     2.43     11.0     -4       5510     102     ax	5310	62	ax (40MHz)	13.5/15 (MCS0)	-0.27	11.0	-11.27
Stop     100     a     6     5.88     11.0     -5       5600     120     a     6     6.72     11.0     -4       5720     144     a     6     7.22     11.0     -3       5500     100     n (20MHz)     6.5/7.2 (MCS0)     5.53     11.0     -5       5600     120     n (20MHz)     6.5/7.2 (MCS0)     6.95     11.0     -4       5720     144     n (20MHz)     6.5/7.2 (MCS0)     7.49     11.0     -4       5720     144     n (20MHz)     6.5/7.2 (MCS0)     7.49     11.0     -6       5720     144     n (20MHz)     6.5/7.2 (MCS0)     4.45     11.0     -6       5500     100     ax (20MHz)     6.5/7.2 (MCS0)     4.62     11.0     -6       5510     102     n (40MHz)     13.5/15 (MCS0)     2.43     11.0     -7       5590     118     n (40MHz)     13.5/15 (MCS0)     2.69     11.0     -1       5510     102     ax (40M	5290	58	ac (80MHz)	29.3/32.5 (MCS0)	-0.18	11.0	-11.18
5600     120     a     6     6.72     11.0     -4       5720     144     a     6     7.22     11.0     -3       5500     100     n (20MHz)     6.5/7.2 (MCS0)     5.53     11.0     -5       5600     120     n (20MHz)     6.5/7.2 (MCS0)     6.95     11.0     -4       5720     144     n (20MHz)     6.5/7.2 (MCS0)     7.49     11.0     -3       5500     100     ax (20MHz)     6.5/7.2 (MCS0)     7.49     11.0     -6       5500     100     ax (20MHz)     6.5/7.2 (MCS0)     4.45     11.0     -6       5500     100     ax (20MHz)     6.5/7.2 (MCS0)     4.62     11.0     -6       5500     120     ax (20MHz)     6.5/7.2 (MCS0)     4.92     11.0     -6       5510     102     n (40MHz)     13.5/15 (MCS0)     2.43     11.0     -7       5590     118     n (40MHz)     13.5/15 (MCS0)     -0.47     11.0     -1       5510     102	5290	58	ax (80MHz)	29.3/32.5 (MCS0)	-3.93	11.0	-14.93
5720     144     a     6     7.22     11.0     -3       5500     100     n (20MHz)     6.5/7.2 (MCS0)     5.53     11.0     -5       5600     120     n (20MHz)     6.5/7.2 (MCS0)     6.95     11.0     -4       5720     144     n (20MHz)     6.5/7.2 (MCS0)     7.49     11.0     -3       5500     100     ax (20MHz)     6.5/7.2 (MCS0)     4.45     11.0     -6       5500     100     ax (20MHz)     6.5/7.2 (MCS0)     4.62     11.0     -6       5600     120     ax (20MHz)     6.5/7.2 (MCS0)     4.62     11.0     -6       5720     144     ax (20MHz)     6.5/7.2 (MCS0)     4.92     11.0     -6       5720     144     ax (20MHz)     13.5/15 (MCS0)     4.92     11.0     -6       5510     102     n (40MHz)     13.5/15 (MCS0)     2.43     11.0     -7       5590     118     n (40MHz)     13.5/15 (MCS0)     -0.47     11.0     -1       551	5500	100	а	6	5.88	11.0	-5.12
5500     100     n (20MHz)     6.5/7.2 (MCS0)     5.53     11.0     -5       5600     120     n (20MHz)     6.5/7.2 (MCS0)     6.95     11.0     -4       5720     144     n (20MHz)     6.5/7.2 (MCS0)     7.49     11.0     -5       5500     100     ax (20MHz)     6.5/7.2 (MCS0)     4.45     11.0     -6       5500     100     ax (20MHz)     6.5/7.2 (MCS0)     4.62     11.0     -6       5600     120     ax (20MHz)     6.5/7.2 (MCS0)     4.62     11.0     -6       5720     144     ax (20MHz)     6.5/7.2 (MCS0)     4.92     11.0     -6       5720     144     ax (20MHz)     6.5/7.2 (MCS0)     4.92     11.0     -6       5510     102     n (40MHz)     13.5/15 (MCS0)     2.43     11.0     -7       5590     118     n (40MHz)     13.5/15 (MCS0)     -0.47     11.0     -1       5510     102     ax (40MHz)     13.5/15 (MCS0)     -0.45     11.0     -1	5600	120	а	6	6.72	11.0	-4.28
5600     120     n (20MHz)     6.5/7.2 (MCS0)     6.95     11.0     -4       5720     144     n (20MHz)     6.5/7.2 (MCS0)     7.49     11.0     -3       5500     100     ax (20MHz)     6.5/7.2 (MCS0)     4.45     11.0     -6       5600     120     ax (20MHz)     6.5/7.2 (MCS0)     4.62     11.0     -6       5600     120     ax (20MHz)     6.5/7.2 (MCS0)     4.62     11.0     -6       5720     144     ax (20MHz)     6.5/7.2 (MCS0)     4.92     11.0     -6       5720     144     ax (20MHz)     6.5/7.2 (MCS0)     4.92     11.0     -6       5710     102     n (40MHz)     13.5/15 (MCS0)     3.86     11.0     -7       5590     118     n (40MHz)     13.5/15 (MCS0)     2.69     11.0     -6       5510     102     ax (40MHz)     13.5/15 (MCS0)     -0.47     11.0     -1       5590     118     ax (40MHz)     13.5/15 (MCS0)     -0.45     11.0     -1	5720	144	а	6	7.22	11.0	-3.78
5720     144     n (20MHz)     6.5/7.2 (MCS0)     7.49     11.0     -3       5500     100     ax (20MHz)     6.5/7.2 (MCS0)     4.45     11.0     -6       5600     120     ax (20MHz)     6.5/7.2 (MCS0)     4.62     11.0     -6       5720     144     ax (20MHz)     6.5/7.2 (MCS0)     4.62     11.0     -6       5720     144     ax (20MHz)     6.5/7.2 (MCS0)     4.92     11.0     -6       5720     144     ax (20MHz)     6.5/7.2 (MCS0)     4.92     11.0     -6       5510     102     n (40MHz)     13.5/15 (MCS0)     3.86     11.0     -7       5590     118     n (40MHz)     13.5/15 (MCS0)     2.69     11.0     -6       5510     102     ax (40MHz)     13.5/15 (MCS0)     -0.47     11.0     -1       5590     118     ax (40MHz)     13.5/15 (MCS0)     -0.45     11.0     -1       5590     118     ax (40MHz)     13.5/15 (MCS0)     0.08     11.0     -1	5500	100	n (20MHz)	6.5/7.2 (MCS0)	5.53	11.0	-5.47
S500     100     ax (20MHz)     6.5/7.2 (MCS0)     4.45     11.0     -6       5600     120     ax (20MHz)     6.5/7.2 (MCS0)     4.62     11.0     -6       5600     120     ax (20MHz)     6.5/7.2 (MCS0)     4.62     11.0     -6       5720     144     ax (20MHz)     6.5/7.2 (MCS0)     4.92     11.0     -6       5710     102     n (40MHz)     13.5/15 (MCS0)     3.86     11.0     -7       5590     118     n (40MHz)     13.5/15 (MCS0)     2.43     11.0     -8       5710     142     n (40MHz)     13.5/15 (MCS0)     2.69     11.0     -7       5590     118     ax (40MHz)     13.5/15 (MCS0)     -0.47     11.0     -1       5510     102     ax (40MHz)     13.5/15 (MCS0)     -0.47     11.0     -1       5590     118     ax (40MHz)     13.5/15 (MCS0)     0.08     11.0     -1       5510     102     ax (40MHz)     13.5/15 (MCS0)     0.08     11.0     -1	5600	120	n (20MHz)	6.5/7.2 (MCS0)	6.95	11.0	-4.05
Second     120     ax (20MHz)     6.5/7.2 (MCS0)     4.62     11.0     -6       5720     144     ax (20MHz)     6.5/7.2 (MCS0)     4.92     11.0     -6       5720     144     ax (20MHz)     6.5/7.2 (MCS0)     4.92     11.0     -6       5510     102     n (40MHz)     13.5/15 (MCS0)     3.86     11.0     -7       5590     118     n (40MHz)     13.5/15 (MCS0)     2.43     11.0     -8       5710     142     n (40MHz)     13.5/15 (MCS0)     2.69     11.0     -7       5510     102     ax (40MHz)     13.5/15 (MCS0)     2.69     11.0     -8       5510     102     ax (40MHz)     13.5/15 (MCS0)     -0.47     11.0     -1       5590     118     ax (40MHz)     13.5/15 (MCS0)     -0.45     11.0     -1       5590     118     ax (40MHz)     13.5/15 (MCS0)     0.08     11.0     -1       5530     106     ac (80MHz)     29.3/32.5 (MCS0)     -0.68     11.0     -1	5720	144	n (20MHz)	6.5/7.2 (MCS0)	7.49	11.0	-3.51
S720     144     ax (20MHz)     6.5/7.2 (MCS0)     4.92     11.0     -6       5510     102     n (40MHz)     13.5/15 (MCS0)     3.86     11.0     -7       5590     118     n (40MHz)     13.5/15 (MCS0)     2.43     11.0     -6       5710     142     n (40MHz)     13.5/15 (MCS0)     2.69     11.0     -6       5710     142     n (40MHz)     13.5/15 (MCS0)     2.69     11.0     -6       5510     102     ax (40MHz)     13.5/15 (MCS0)     -0.47     11.0     -1       5590     118     ax (40MHz)     13.5/15 (MCS0)     -0.45     11.0     -1       5590     118     ax (40MHz)     13.5/15 (MCS0)     -0.45     11.0     -1       5590     118     ax (40MHz)     13.5/15 (MCS0)     0.08     11.0     -1       5530     106     ac (80MHz)     29.3/32.5 (MCS0)     0.77     11.0     -1       5690     138     ac (80MHz)     29.3/32.5 (MCS0)     -4.09     11.0     -1	5500	100	ax (20MHz)	6.5/7.2 (MCS0)	4.45	11.0	-6.55
Spin     5510     102     n (40MHz)     13.5/15 (MCS0)     3.86     11.0     -7       5590     118     n (40MHz)     13.5/15 (MCS0)     2.43     11.0     -8       5710     142     n (40MHz)     13.5/15 (MCS0)     2.69     11.0     -8       5510     102     ax (40MHz)     13.5/15 (MCS0)     -0.47     11.0     -1       5590     118     ax (40MHz)     13.5/15 (MCS0)     -0.45     11.0     -1       5590     118     ax (40MHz)     13.5/15 (MCS0)     -0.45     11.0     -1       5590     118     ax (40MHz)     13.5/15 (MCS0)     -0.45     11.0     -1       5510     102     ax (40MHz)     13.5/15 (MCS0)     -0.45     11.0     -1       5530     116     ac (80MHz)     29.3/32.5 (MCS0)     0.77     11.0     -1       5690     138     ac (80MHz)     29.3/32.5 (MCS0)     -4.09     11.0     -1       5530     106     ax (80MHz)     29.3/32.5 (MCS0)     -4.11     11.0 </th <td>5600</td> <td>120</td> <td>ax (20MHz)</td> <td>6.5/7.2 (MCS0)</td> <td>4.62</td> <td>11.0</td> <td>-6.38</td>	5600	120	ax (20MHz)	6.5/7.2 (MCS0)	4.62	11.0	-6.38
5510     102     ax (40MHz)     13.5/15 (MCS0)     -0.47     11.0     -1       5590     118     ax (40MHz)     13.5/15 (MCS0)     -0.45     11.0     -1       5710     142     ax (40MHz)     13.5/15 (MCS0)     0.08     11.0     -1       5710     142     ax (40MHz)     13.5/15 (MCS0)     0.08     11.0     -1       5530     106     ac (80MHz)     29.3/32.5 (MCS0)     0.77     11.0     -1       5610     122     ac (80MHz)     29.3/32.5 (MCS0)     -0.68     11.0     -1       5690     138     ac (80MHz)     29.3/32.5 (MCS0)     -4.09     11.0     -1       5530     106     ax (80MHz)     29.3/32.5 (MCS0)     -4.11     11.0     -1	5720	144	ax (20MHz)	6.5/7.2 (MCS0)	4.92	11.0	-6.08
5510     102     ax (40MHz)     13.5/15 (MCS0)     -0.47     11.0     -1       5590     118     ax (40MHz)     13.5/15 (MCS0)     -0.45     11.0     -1       5710     142     ax (40MHz)     13.5/15 (MCS0)     0.08     11.0     -1       5710     142     ax (40MHz)     13.5/15 (MCS0)     0.08     11.0     -1       5530     106     ac (80MHz)     29.3/32.5 (MCS0)     0.77     11.0     -1       5610     122     ac (80MHz)     29.3/32.5 (MCS0)     -0.68     11.0     -1       5690     138     ac (80MHz)     29.3/32.5 (MCS0)     -4.09     11.0     -1       5530     106     ax (80MHz)     29.3/32.5 (MCS0)     -4.11     11.0     -1	<b>X</b> 5510	102	n (40MHz)	13.5/15 (MCS0)	3.86	11.0	-7.14
5510     102     ax (40MHz)     13.5/15 (MCS0)     -0.47     11.0     -1       5590     118     ax (40MHz)     13.5/15 (MCS0)     -0.45     11.0     -1       5710     142     ax (40MHz)     13.5/15 (MCS0)     0.08     11.0     -1       5710     142     ax (40MHz)     13.5/15 (MCS0)     0.08     11.0     -1       5530     106     ac (80MHz)     29.3/32.5 (MCS0)     0.77     11.0     -1       5610     122     ac (80MHz)     29.3/32.5 (MCS0)     -0.68     11.0     -1       5690     138     ac (80MHz)     29.3/32.5 (MCS0)     -4.09     11.0     -1       5530     106     ax (80MHz)     29.3/32.5 (MCS0)     -4.09     11.0     -1       5530     106     ax (80MHz)     29.3/32.5 (MCS0)     -4.11     11.0     -1	<b>2</b> 5590	118	n (40MHz)	13.5/15 (MCS0)	2.43	11.0	-8.57
5590     118     ax (40MHz)     13.5/15 (MCS0)     -0.45     11.0     -1       5710     142     ax (40MHz)     13.5/15 (MCS0)     0.08     11.0     -1       5530     106     ac (80MHz)     29.3/32.5 (MCS0)     0.77     11.0     -1       5610     122     ac (80MHz)     29.3/32.5 (MCS0)     -0.68     11.0     -1       5690     138     ac (80MHz)     29.3/32.5 (MCS0)     -4.09     11.0     -1       5530     106     ax (80MHz)     29.3/32.5 (MCS0)     -4.11     11.0     -1	<b>6</b> 5710	142	n (40MHz)	13.5/15 (MCS0)	2.69	11.0	-8.31
5710     142     ax (40MHz)     13.5/15 (MCS0)     0.08     11.0     -1       5530     106     ac (80MHz)     29.3/32.5 (MCS0)     0.77     11.0     -1       5610     122     ac (80MHz)     29.3/32.5 (MCS0)     -0.68     11.0     -1       5690     138     ac (80MHz)     29.3/32.5 (MCS0)     -4.09     11.0     -1       5530     106     ax (80MHz)     29.3/32.5 (MCS0)     -4.10     11.0     -1	5510	102	ax (40MHz)	13.5/15 (MCS0)	-0.47	11.0	-11.47
5530     106     ac (80MHz)     29.3/32.5 (MCS0)     0.77     11.0     -1       5610     122     ac (80MHz)     29.3/32.5 (MCS0)     -0.68     11.0     -1       5690     138     ac (80MHz)     29.3/32.5 (MCS0)     -4.09     11.0     -1       5530     106     ax (80MHz)     29.3/32.5 (MCS0)     -4.11     11.0     -1	5590	118	ax (40MHz)	13.5/15 (MCS0)	-0.45	11.0	-11.45
5610     122     ac (80MHz)     29.3/32.5 (MCS0)     -0.68     11.0     -1       5690     138     ac (80MHz)     29.3/32.5 (MCS0)     -4.09     11.0     -1       5530     106     ax (80MHz)     29.3/32.5 (MCS0)     -4.11     11.0     -1	5710	142	ax (40MHz)	13.5/15 (MCS0)	0.08	11.0	-10.92
5690     138     ac (80MHz)     29.3/32.5 (MCS0)     -4.09     11.0     -1.1       5530     106     ax (80MHz)     29.3/32.5 (MCS0)     -4.11     11.0     -1.1	5530	106	ac (80MHz)	29.3/32.5 (MCS0)	0.77	11.0	-10.23
5530 106 ax (80MHz) 29.3/32.5 (MCS0) -4.11 11.0 -1	5610	122	ac (80MHz)	29.3/32.5 (MCS0)	-0.68	11.0	-11.68
	5690	138	ac (80MHz)	29.3/32.5 (MCS0)	-4.09	11.0	-15.09
	5530	106	ax (80MHz)	29.3/32.5 (MCS0)	-4.11	11.0	-15.11
5610 122 ax (8010Hz) 29.3/32.5 (MCS0) -4.23 11.0 -15	5610	122	ax (80MHz)	29.3/32.5 (MCS0)	-4.23	11.0	-15.23
	5690	138			-6.97	11.0	-17.97

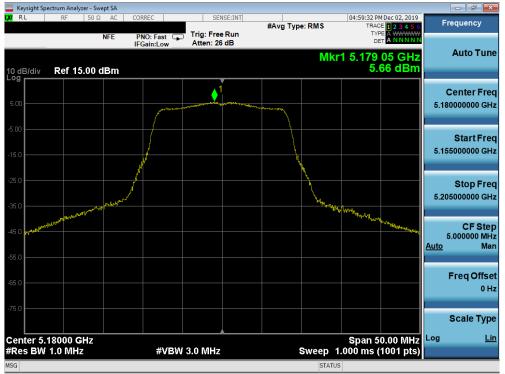
Table 7-24. Conducted Power Spectral Density Measurements SISO ANT2

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 120 of 244
1M1910220166-09.A3L	10/11/19 - 01/15/20	Portable Handset		Page 129 of 241
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	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured Power Density [dBm]	Antenna Gain [dBi]	e.i.r.p. Power Density [dBm/MHz]	ISED Max e.i.r.p. Power Density [dBm/MHz]	Margin [dB]
	5180	36	а	6	5.66	-6.45	-0.79	10.0	-10.79
	5200	40	а	6	6.98	-6.69	0.29	10.0	-9.71
	5240	48	а	6	7.12	-6.45	0.67	10.0	-9.33
	5180	36	n (20MHz)	6.5/7.2 (MCS0)	5.54	-6.45	-0.91	10.0	-10.91
	5200	40	n (20MHz)	6.5/7.2 (MCS0)	6.57	-6.69	-0.12	10.0	-10.12
	5240	48	n (20MHz)	6.5/7.2 (MCS0)	6.79	-6.45	0.34	10.0	-9.66
-	5180	36	ax (20MHz)	6.5/7.2 (MCS0)	4.46	-6.45	-1.99	10.0	-11.99
Band	5200	40	ax (20MHz)	6.5/7.2 (MCS0)	4.63	-6.69	-2.06	10.0	-12.06
ä	5240	48	ax (20MHz)	6.5/7.2 (MCS0)	4.73	-6.45	-1.72	10.0	-11.72
	5190	38	n (40MHz)	13.5/15 (MCS0)	3.73	-6.45	-2.72	10.0	-12.72
	5230	46	n (40MHz)	13.5/15 (MCS0)	2.85	-6.45	-3.60	10.0	-13.60
	5190	38	ax (40MHz)	13.5/15 (MCS0)	-0.37	-6.45	-6.82	10.0	-16.82
	5230	46	ax (40MHz)	13.5/15 (MCS0)	0.26	-6.45	-6.19	10.0	-16.19
	5210	42	ac (80MHz)	29.3/32.5 (MCS0)	0.40	-6.45	-6.05	10.0	-16.05
	5210	42	ax (80MHz)	29.3/32.5 (MCS0)	-4.49	-6.45	-10.94	10.0	-20.94

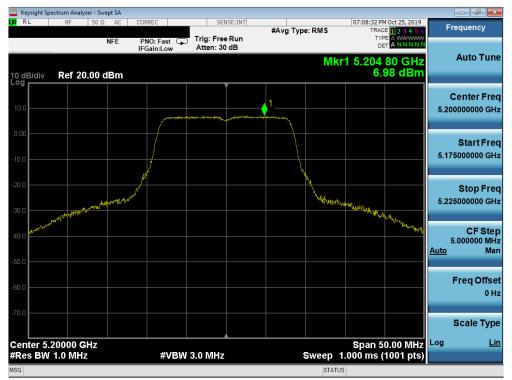
Table 7-25. Band 1 e.i.r.p. Conducted Power Spectral Density Measurements (ISED) SISO ANT2



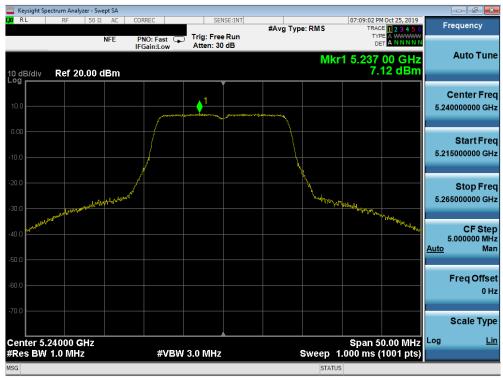
Plot 7-199. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 1) - Ch. 36)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 120 of 244
1M1910220166-09.A3L	10/11/19 - 01/15/20	Portable Handset		Page 130 of 241
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Plot 7-200. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 1) - Ch. 40)



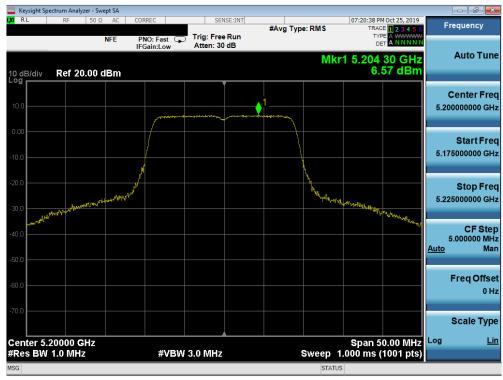
Plot 7-201. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 1) - Ch. 48)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 121 of 244
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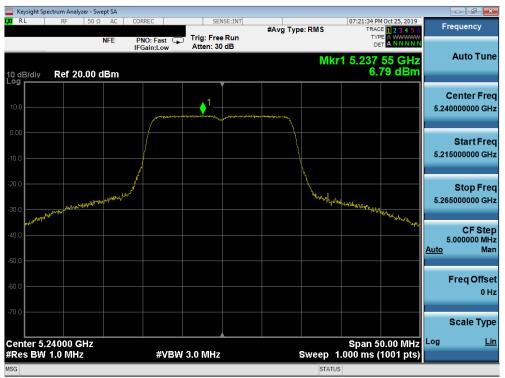
Plot 7-202. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 1) - Ch. 36)



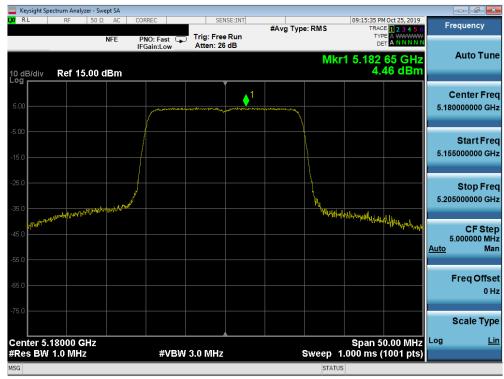
Plot 7-203. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 1) - Ch. 40)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 122 of 244
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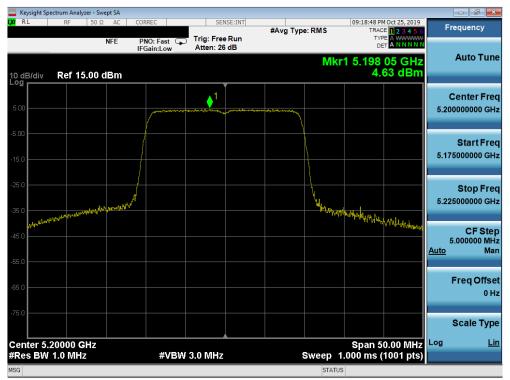
Plot 7-204. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 1) - Ch. 48)



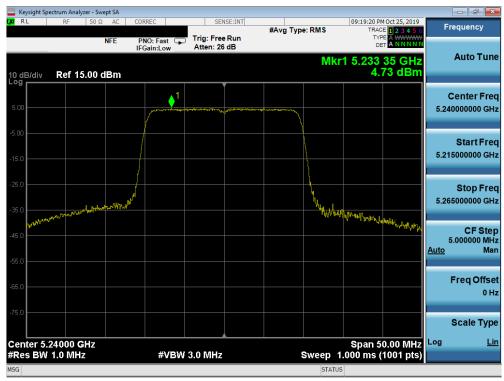
Plot 7-205. Power Spectral Density Plot SISO ANT2 (20MHz 802.11ax (UNII Band 1) - Ch. 36)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 122 of 244	
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Plot 7-206. Power Spectral Density Plot SISO ANT2 (20MHz 802.11ax (UNII Band 1) - Ch. 40)



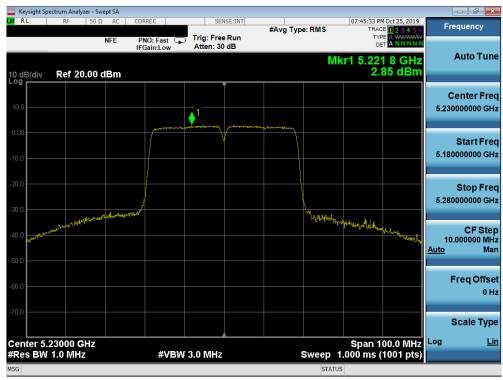
Plot 7-207. Power Spectral Density Plot SISO ANT2 (20MHz 802.11ax (UNII Band 1) - Ch. 48)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 124 of 244
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Plot 7-208. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11n (UNII Band 1) - Ch. 38)



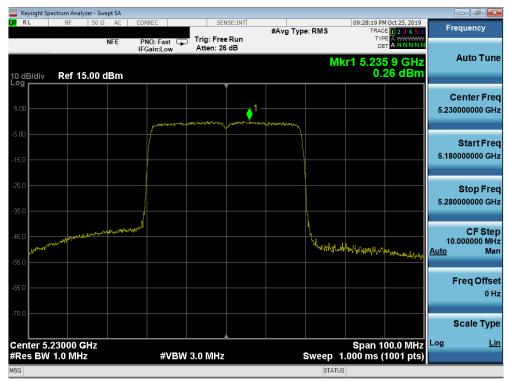
Plot 7-209. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11n (UNII Band 1) - Ch. 46)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 125 of 241
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	pectrum Analyzer -										
X/RL	RF 50	Ω AC	CORREC PNO: Fast	Trig: Free		#Avg Typ	e: RMS	TRAC	E 1 2 3 4 5 6 A WWWWW T A N N N N N	Fr	equency
10 dB/div Log	Ref 15.00	) dBm	IFGain:Low	Atten: 26	dB		Mk	(r1 5.180	-		Auto Tune
5.00				1-	representation	anglo-manufactor					Center Freq 0000000 GHz
-5.00										5.14	Start Freq 0000000 GHz
-25.0										5.24	Stop Freq 0000000 GHz
-45.0	performant for the second second second	ebymp new hythur	two				hy hyberstwy.lph	Vistorytality	Marian ally	10 <u>Auto</u>	CF Step .000000 MHz Man
-65.0											Freq Offset 0 Hz
-75.0											Scale Type
	.19000 GHz / 1.0 MHz		#VB	W 3.0 MHz			Sweep_1	Span 1 .000 ms (	00.0 MHz 1001 pts)	Log	<u>Lin</u>
MSG							STATUS				

Plot 7-210. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax (UNII Band 1) - Ch. 38)



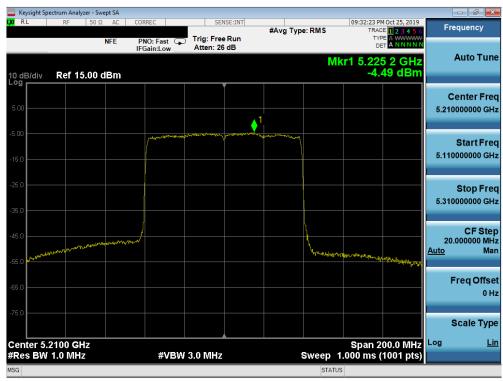
Plot 7-211. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax (UNII Band 1) - Ch. 46)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 126 of 244	
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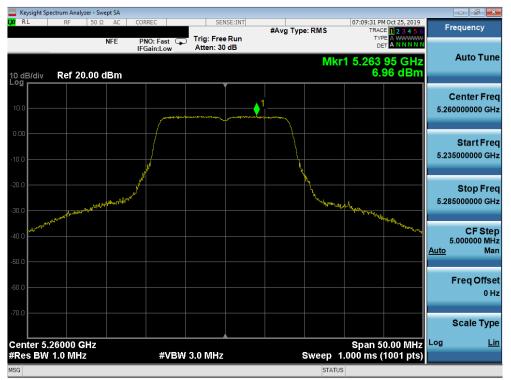
Plot 7-212. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ac (UNII Band 1) - Ch. 42)



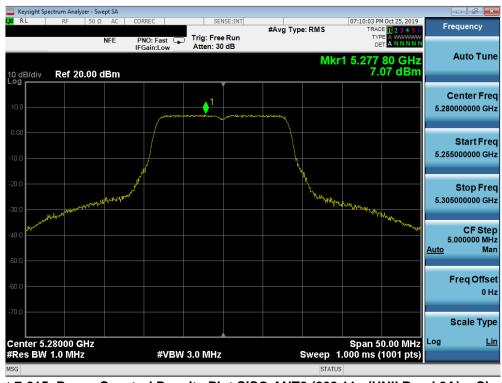
Plot 7-213. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax (UNII Band 1) - Ch. 42)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 127 of 244
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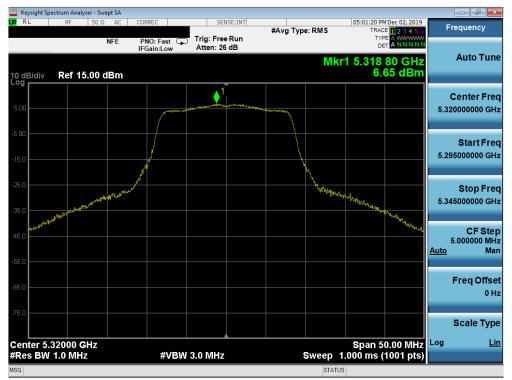
Plot 7-214. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 2A) - Ch. 52)



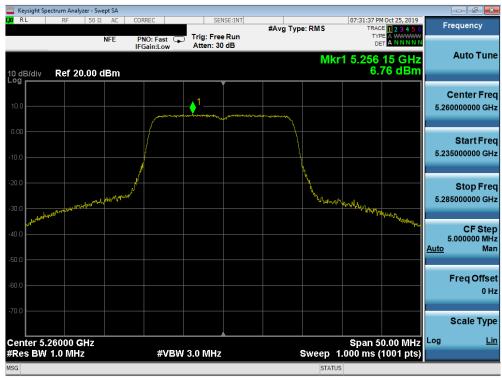
Plot 7-215. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 2A) – Ch. 56)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 129 of 244
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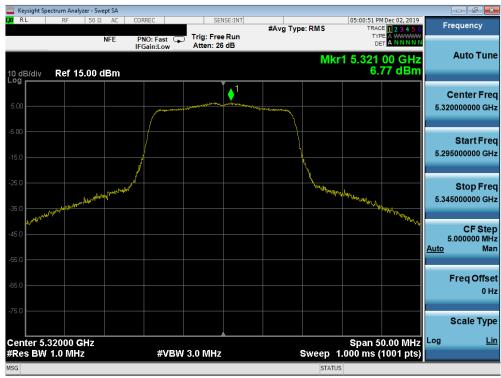
Plot 7-217. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 2A) - Ch. 52)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 120 of 244
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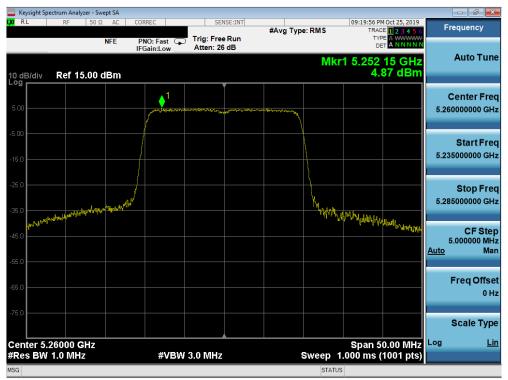
Plot 7-218. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 2A) - Ch. 56)



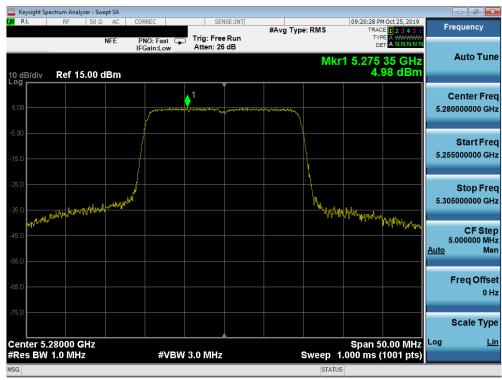
Plot 7-219. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 2A) - Ch. 64)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 140 of 241
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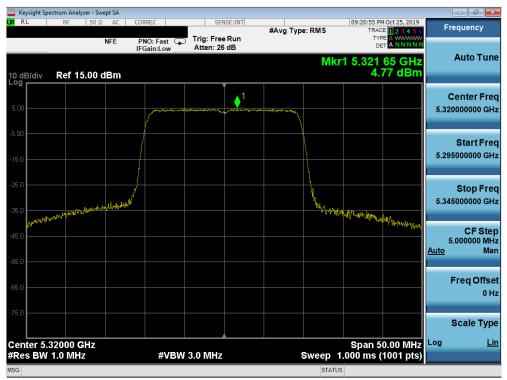
Plot 7-220. Power Spectral Density Plot SISO ANT2 (20MHz 802.11ax (UNII Band 2A) - Ch. 52)



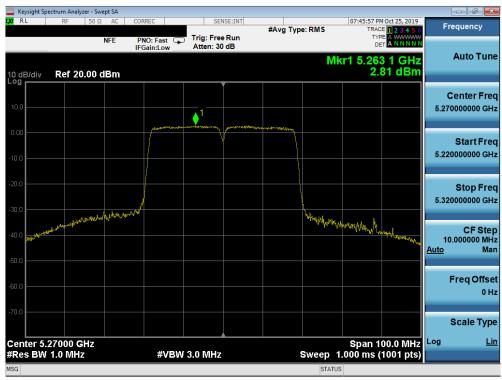
Plot 7-221. Power Spectral Density Plot SISO ANT2 (20MHz 802.11ax (20MHz UNII Band 2A) - Ch. 56)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Plot 7-222. Power Spectral Density Plot SISO ANT2 (20MHz 802.11ax (20MHz UNII Band 2A) - Ch. 64)



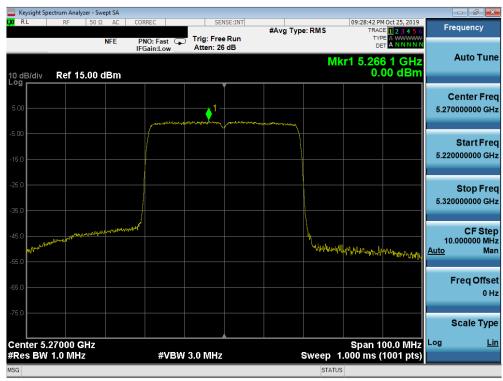
Plot 7-223. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11n (UNII Band 2A) - Ch. 54)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 112 of 211
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Plot 7-224. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11n (UNII Band 2A) - Ch. 62)



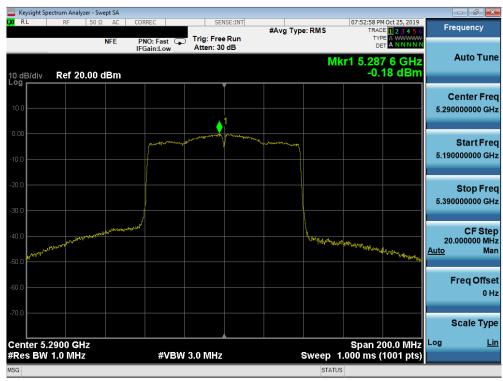
Plot 7-225. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax (UNII Band 2A) - Ch. 54)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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	ctrum Analyzer										ar 🗙
LX/RL	RF 5	OΩ AC	CORREC	SENS	E:INT	#Avg Type	DMS		1 Oct 25, 2019 E 1 2 3 4 5 6	Frequen	icy
		NFE	PNO: Fast ⊂ IFGain:Low	Trig: Free Atten: 26 d	Run	word i Abr		TYP			
10 dB/div Log	Ref 15.0	0 dBm					Mk	r1 5.30 -0.:	7 4 GHz 27 dBm	Auto	Tune
5.00				↓ 1						Cente 5.3100000	
-5.00				-	- Martin - Labor					Star 5.2600000	t Freq
-15.0											o Freq
-35.0										5.3600000	
-45.0	white and a second s	and and a second se					h hopeallhapph	nuhuhahhuhu	WWWWWWWWWW	CF 10.00000 <u>Auto</u>	Step 00 MHz Man
-65.0										Freq	Offset 0 Hz
-75.0											е Туре
Center 5.3 #Res BW		z	#VB	W 3.0 MHz			Sween_1	Span 1	00.0 MHz 1001 pts)	Log	Lin
MSG							STATUS	· · · ·			

Plot 7-226. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax (UNII Band 2A) - Ch. 62)



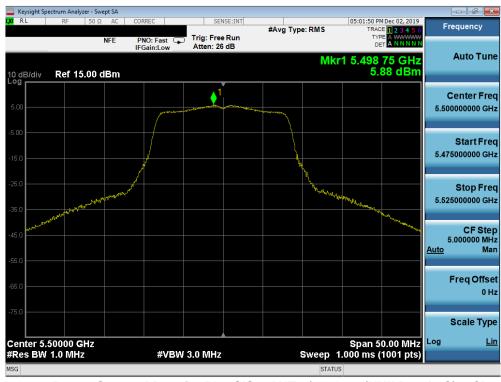
Plot 7-227. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ac (UNII Band 2A) - Ch. 58)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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	ectrum Analyzer - Sv										d X
L <mark>XI</mark> RL	RF 50 9	Ω AC	CORREC	SEN	ISE:INT	#Avg Typ	e: RMS		HOct 25, 2019	Freque	ncy
		NFE	PNO: Fast IFGain:Low	Trig: Free Atten: 26		•		TYP			
10 dB/div Log	Ref 15.00	dBm					Mk	r1 5.27 -3.	7 2 GHz 93 dBm	Aut	o Tune
5.00				<u>1</u>						Cent 5.290000	er Freq 000 GHz
-5.00			/United and an and a second	, and the second se	,	and the second second				Sta 5.190000	irt Freq 000 GHz
-25.0										Sto 5,390000	op Freq
-35.0	freeder restance and a series of the	all and and an and and an	<i>"</i>				     			c	F Step
-55.0	for the second s						Monegene	nutraintypan	when the works	<u>Auto</u>	Man
-65.0										Frec	Offset 0 Hz
-75.0								<b>0</b>		Sca Log	le Type <u>Lin</u>
Center 5.2 #Res BW			#VBW	3.0 MHz			Sweep 1		00.0 MHz 1001 pts)		<u> - 11</u>
MSG							STATUS				

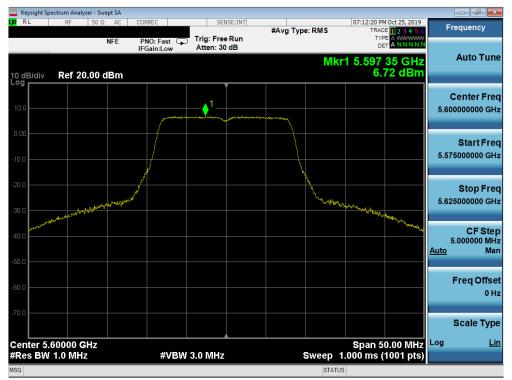
Plot 7-228. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax (UNII Band 2A) - Ch. 58)



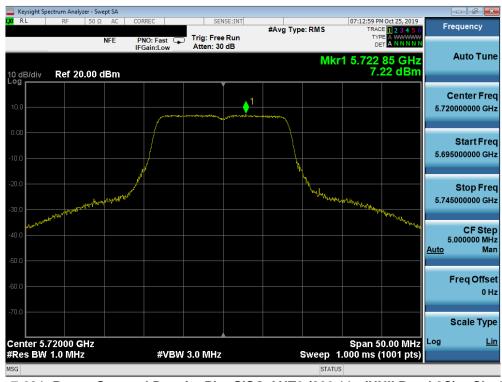
Plot 7-229. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 2C) - Ch. 100)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-230. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 2C) - Ch. 120)



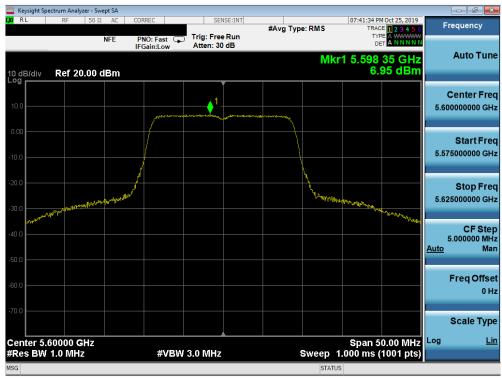
Plot 7-231. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 2C) - Ch. 144)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Plot 7-232. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 2C) - Ch. 100)



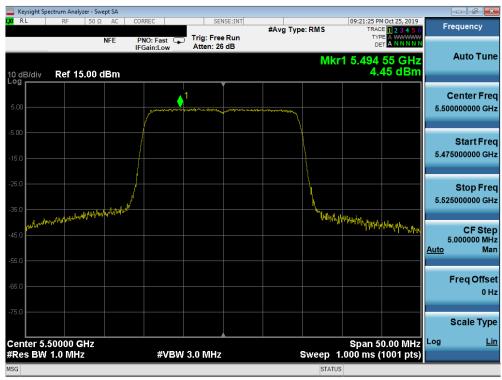
Plot 7-233. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 2C) - Ch. 120)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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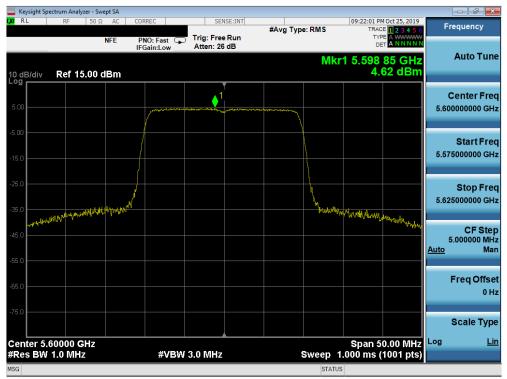
Plot 7-234. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 2C) - Ch. 144)



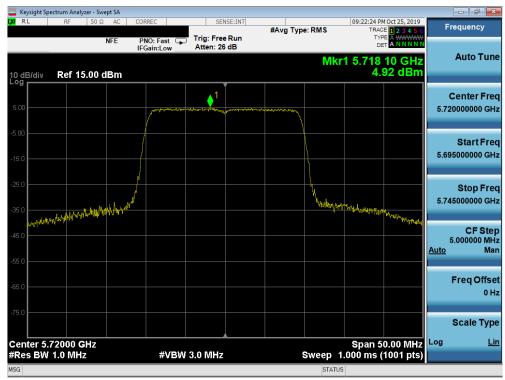
Plot 7-235. Power Spectral Density Plot SISO ANT2 (20MHz 802.11ax (UNII Band 2C) - Ch. 100)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Plot 7-236. Power Spectral Density Plot SISO ANT2 (20MHz 802.11ax (UNII Band 2C) - Ch. 120)



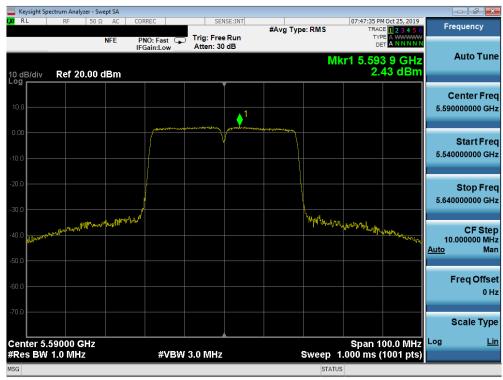
Plot 7-237. Power Spectral Density Plot SISO ANT2 (20MHz 802.11ax (UNII Band 2C) - Ch. 144)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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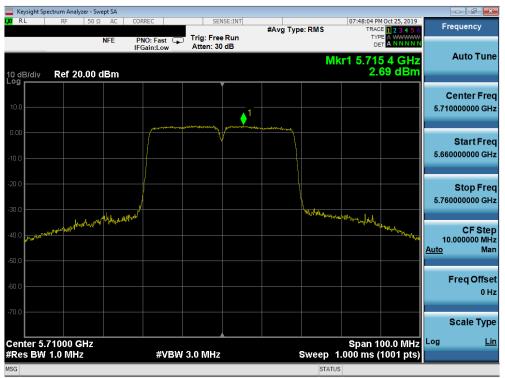
Plot 7-238. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11n (UNII Band 2C) - Ch. 102)



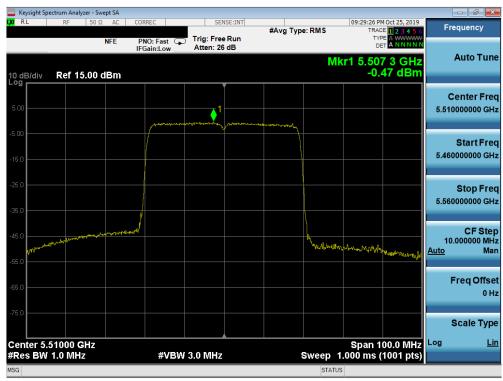
Plot 7-239. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11n (UNII Band 2C) - Ch. 118)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)		SAMSUNG		Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 150 of 244		
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Plot 7-240. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11n (UNII Band 2C) - Ch. 142)



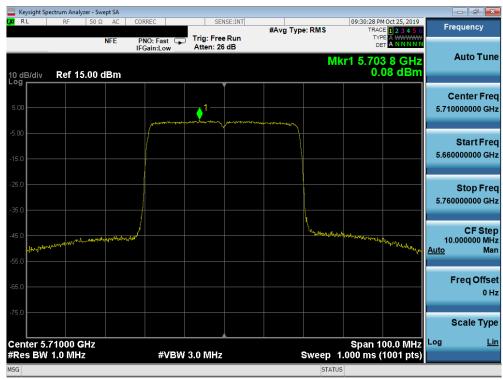
Plot 7-241. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax (UNII Band 2C) - Ch. 102)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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	pectrum Analyz										
LXI RL	RF	50 Ω AC	CORREC	SEN	SE:INT	#Avg Typ	e RMS		Oct 25, 2019	Fre	quency
	_	NFE	PNO: Fast 🕞 IFGain:Low	Trig: Free Atten: 26		"a)P		TYP			
10 dB/div Log	Ref 15	.00 dBm					Mł	(r1 5.58) -0.4	3 9 GHz 45 dBm		Auto Tune
5.00				1_							enter Freq 000000 GHz
-5.00				and a second and a second and a second	and the second						
-15.0											Start Freq 000000 GHz
-25.0											Stop Freq
-35.0										5.6400	000000 GHz
-45.0	All Hornes Halensteine	and a start of the	للمربط المربع				Awardershipe	(utvten, normani	Varant Jardal ( some	10.0 <u>Auto</u>	CF Step 000000 MHz Man
-55.0											
-65.0										F	req Offset 0 Hz
-75.0										S	cale Type
Center 5	.59000 G	Hz						Span 1	00.0 MHz	Log	Lin
	1.0 MHz		#VBV	V 3.0 MHz			Sweep 1	.000 ms (	1001 pts)		
MSG							STATUS	5			

Plot 7-242. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax (UNII Band 2C) - Ch. 118)



Plot 7-243. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax (UNII Band 2C) - Ch. 142)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager	
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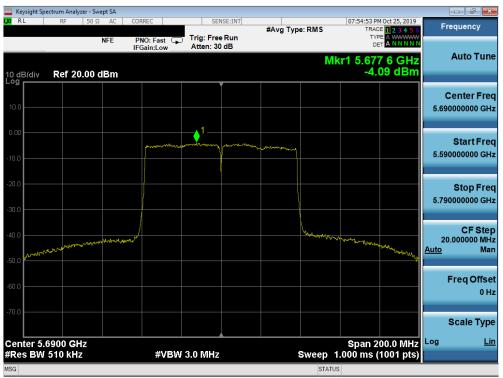
Plot 7-244. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ac (UNII Band 2C) - Ch. 106)



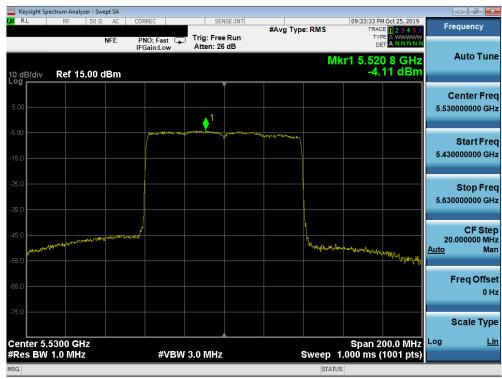
Plot 7-245. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 122)

FCC ID: A3LSMG986U	MEASUREMENT REPORT (CERTIFICATION)		AMSUNG	Approved by: Quality Manager	
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Plot 7-246. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ac (UNII Band 2C) - Ch. 138)



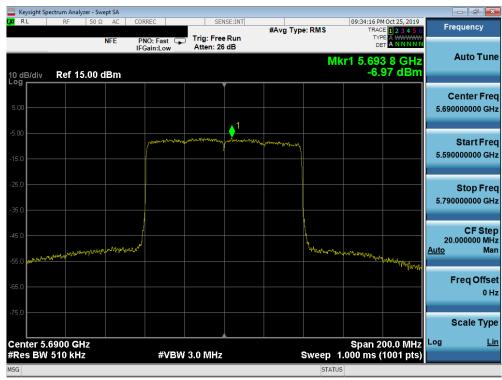
Plot 7-247. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax (UNII Band 2C) - Ch. 106)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager	
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Plot 7-248. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax (UNII Band 2C) - Ch. 122)



Plot 7-249. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax (UNII Band 2C) - Ch. 138)

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	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
	5745	149	а	6	4.18	30.0	-25.82
	5785	157	а	6	4.01	30.0	-25.99
	5825	165	а	6	3.87	30.0	-26.13
	5745	149	n (20MHz)	6.5/7.2 (MCS0)	3.96	30.0	-26.04
	5785	157	n (20MHz)	6.5/7.2 (MCS0)	3.67	30.0	-26.33
	5825	165	n (20MHz)	6.5/7.2 (MCS0)	4.37	30.0	-25.63
e	5745	149	ax (20MHz)	6.5/7.2 (MCS0)	2.37	30.0	-27.63
Band	5785	157	ax (20MHz)	6.5/7.2 (MCS0)	1.88	30.0	-28.12
ä	5825	165	ax (20MHz)	6.5/7.2 (MCS0)	1.79	30.0	-28.21
	5755	151	n (40MHz)	13.5/15 (MCS0)	0.21	30.0	-29.79
	5795	159	n (40MHz)	13.5/15 (MCS0)	0.95	30.0	-29.05
	5755	151	ax (40MHz)	13.5/15 (MCS0)	-2.34	30.0	-32.34
	5795	159	ax (40MHz)	13.5/15 (MCS0)	-2.72	30.0	-32.72
	5775	155	ac (80MHz)	29.3/32.5 (MCS0)	-0.88	30.0	-30.88
	5775	155	ax (80MHz)	29.3/32.5 (MCS0)	-3.48	30.0	-33.48

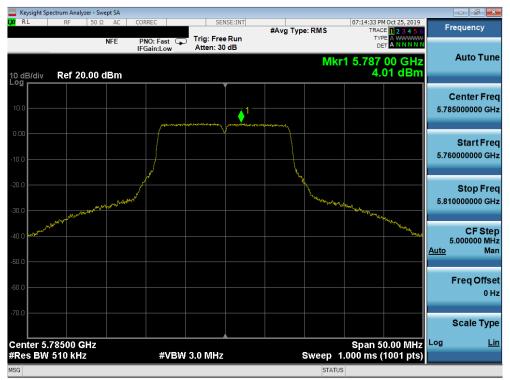
Table 7-26. Band 3 Conducted Power Spectral Density Measurements SISO ANT2



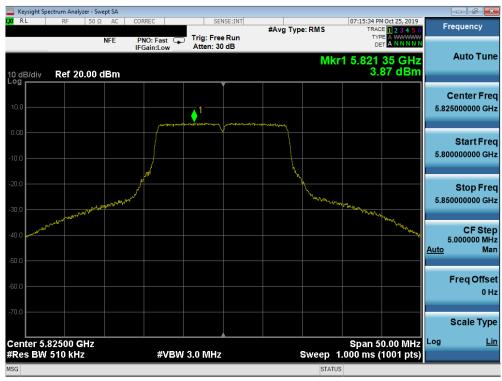
Plot 7-250. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 3) – Ch. 149)

FCC ID: A3LSMG986U		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-251. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 3) - Ch. 157)



Plot 7-252. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 3) - Ch. 165)

FCC ID: A3LSMG986U	INGINEERINE LANDRATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager	
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