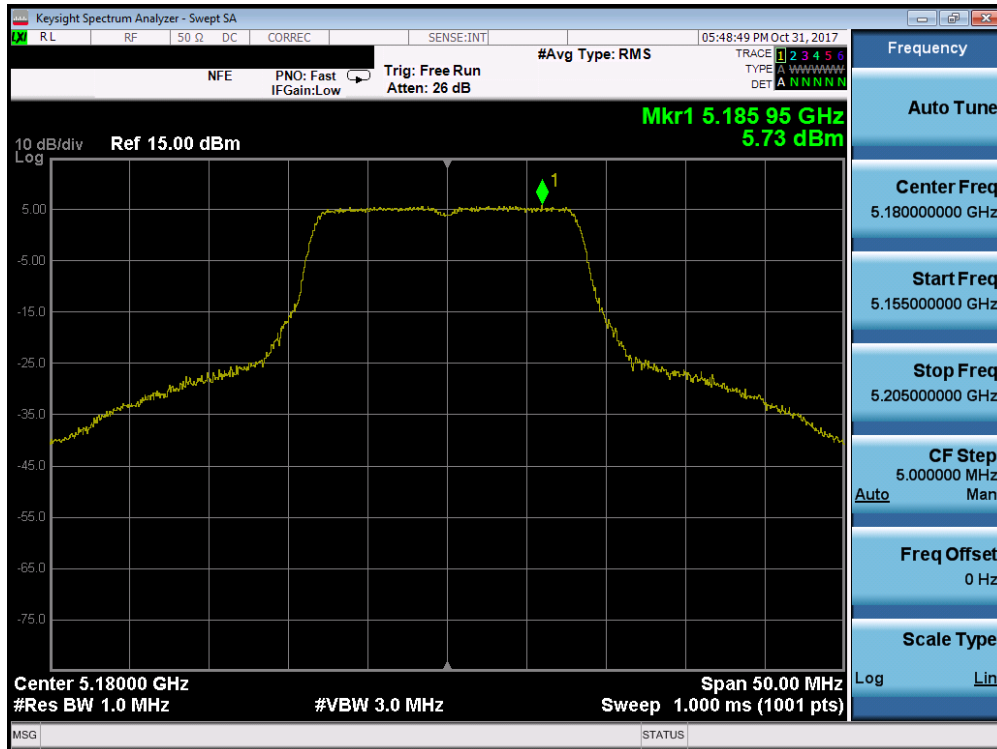


## Antenna-2 Power Spectral Density Measurements

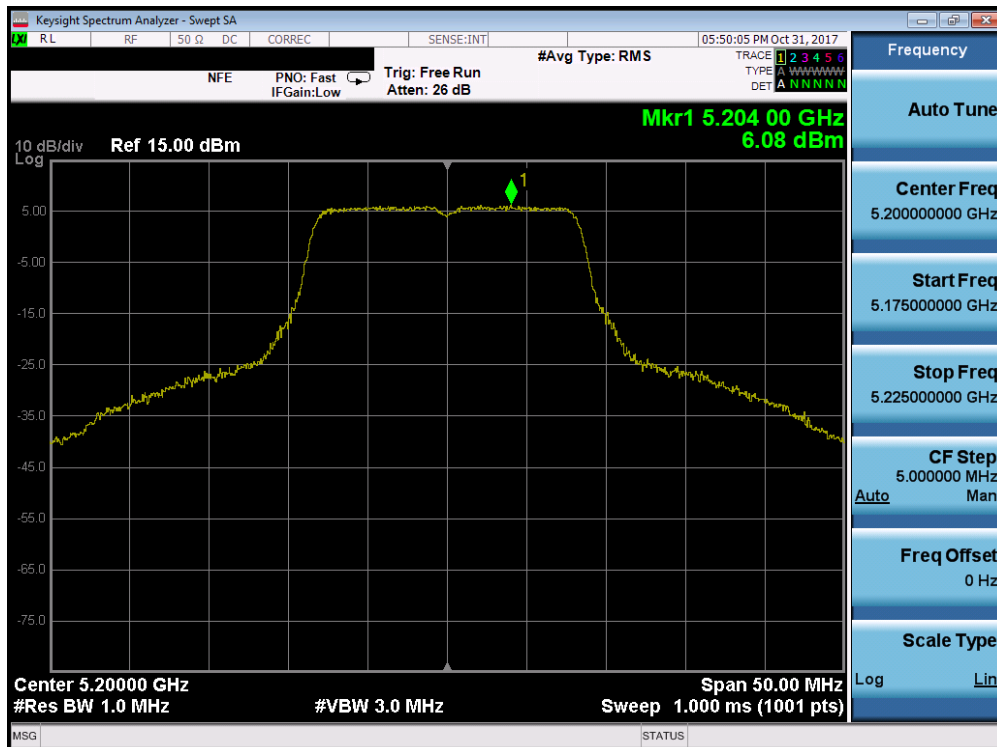
	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	a	6	5.73	11.0	-5.27
	5200	40	a	6	6.08	11.0	-4.92
	5240	48	a	6	6.17	11.0	-4.83
	5180	36	n (20MHz)	6.5/7.2 (MCS0)	4.27	11.0	-6.73
	5200	40	n (20MHz)	6.5/7.2 (MCS0)	4.70	11.0	-6.30
	5240	48	n (20MHz)	6.5/7.2 (MCS0)	4.75	11.0	-6.25
	5190	38	n (40MHz)	13.5/15 (MCS0)	1.47	11.0	-9.53
	5230	46	n (40MHz)	13.5/15 (MCS0)	1.43	11.0	-9.57
	5210	42	ac (80MHz)	29.3/32.5 (MCS0)	-2.96	11.0	-13.96
Band 2A	5260	52	a	6	5.99	11.0	-5.01
	5280	56	a	6	6.07	11.0	-4.93
	5320	64	a	6	6.17	11.0	-4.83
	5260	52	n (20MHz)	6.5/7.2 (MCS0)	4.44	11.0	-6.56
	5280	56	n (20MHz)	6.5/7.2 (MCS0)	4.71	11.0	-6.29
	5320	64	n (20MHz)	6.5/7.2 (MCS0)	4.67	11.0	-6.33
	5270	54	n (40MHz)	13.5/15 (MCS0)	1.41	11.0	-9.59
	5310	62	n (40MHz)	13.5/15 (MCS0)	1.32	11.0	-9.68
5290	58	ac (80MHz)	29.3/32.5 (MCS0)	-2.64	11.0	-13.64	
Band 2C	5500	100	a	6	6.18	11.0	-4.82
	5600	120	a	6	5.45	11.0	-5.55
	5720	144	a	6	5.60	11.0	-5.40
	5500	100	n (20MHz)	6.5/7.2 (MCS0)	4.57	11.0	-6.43
	5600	120	n (20MHz)	6.5/7.2 (MCS0)	4.19	11.0	-6.81
	5720	144	n (20MHz)	6.5/7.2 (MCS0)	4.10	11.0	-6.90
	5510	102	n (40MHz)	13.5/15 (MCS0)	1.27	11.0	-9.74
	5590	118	n (40MHz)	13.5/15 (MCS0)	0.84	11.0	-10.16
	5710	142	n (40MHz)	13.5/15 (MCS0)	0.92	11.0	-10.08
	5530	106	ac (80MHz)	29.3/32.5 (MCS0)	-2.89	11.0	-13.89
	5610	122	ac (80MHz)	29.3/32.5 (MCS0)	-2.76	11.0	-13.76
5690	138	ac (80MHz)	29.3/32.5 (MCS0)	-5.62	11.0	-16.62	

Table 7-20. Conducted Power Spectral Density Measurements

FCC ID: A3LSMG965KOR		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1710200271-06.A3L	Test Dates: 10/20 - 12/5/2017	EUT Type: Portable Handset		Page 85 of 198

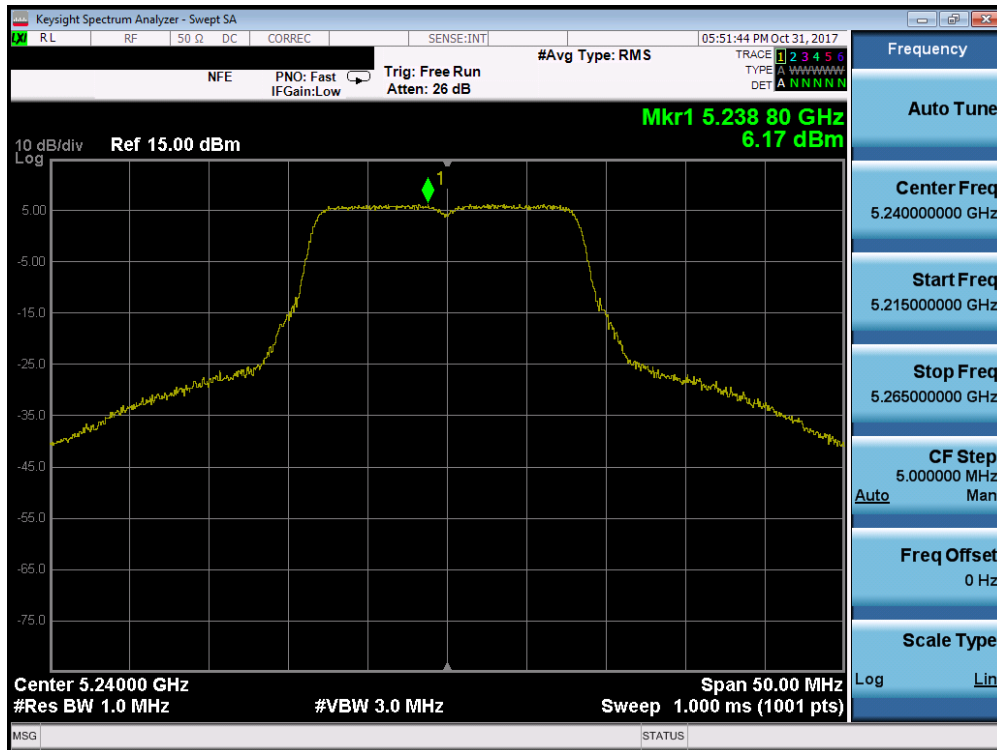


Plot 7-118. Power Spectral Density Plot (802.11a (UNII Band 1) – Ch. 36)

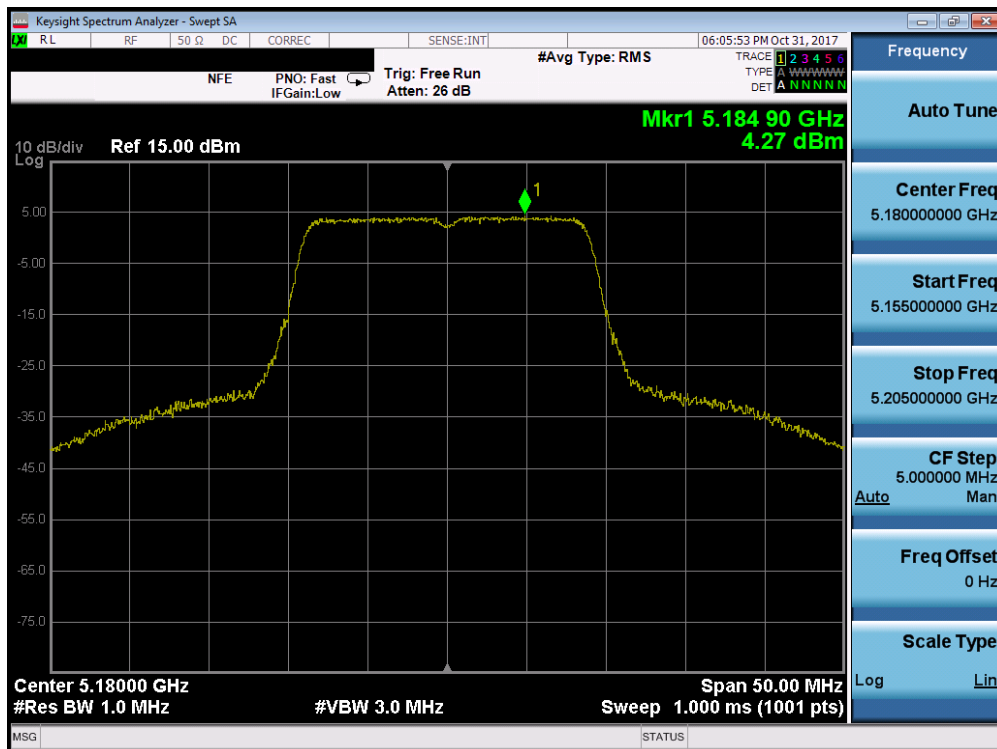


Plot 7-119. Power Spectral Density Plot (802.11a (UNII Band 1) – Ch. 40)

FCC ID: A3LSMG965KOR	 <b>MEASUREMENT REPORT (CERTIFICATION)</b> 		Approved by: Quality Manager
Test Report S/N: 1M1710200271-06.A3L	Test Dates: 10/20 - 12/5/2017	EUT Type: Portable Handset	Page 86 of 198

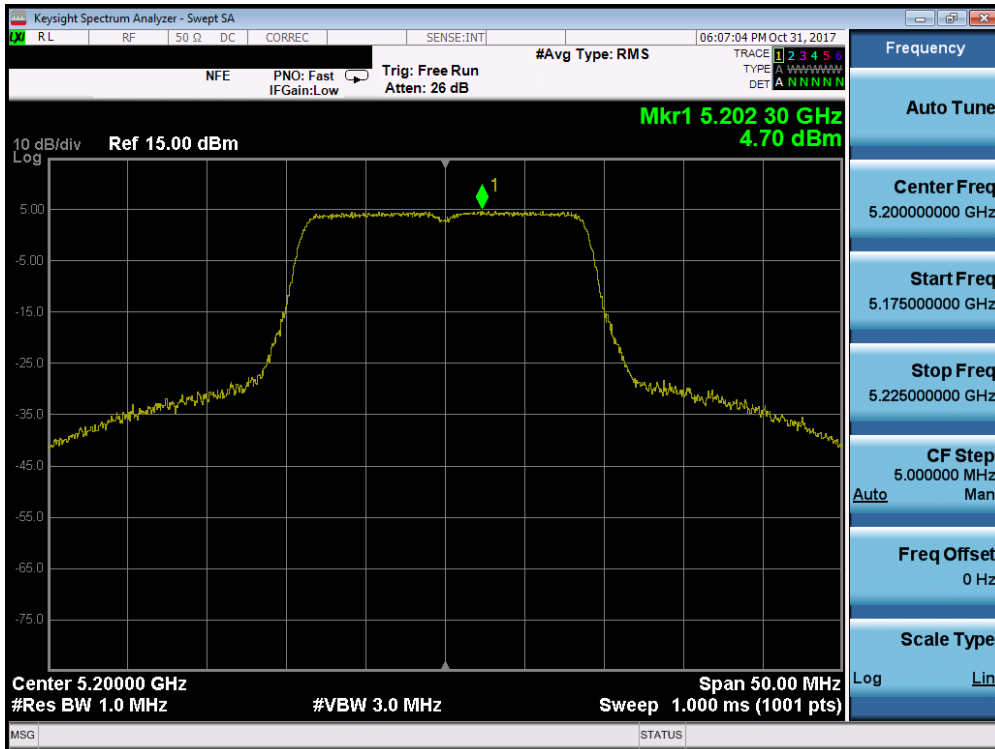


Plot 7-120. Power Spectral Density Plot (802.11a (UNII Band 1) – Ch. 48)

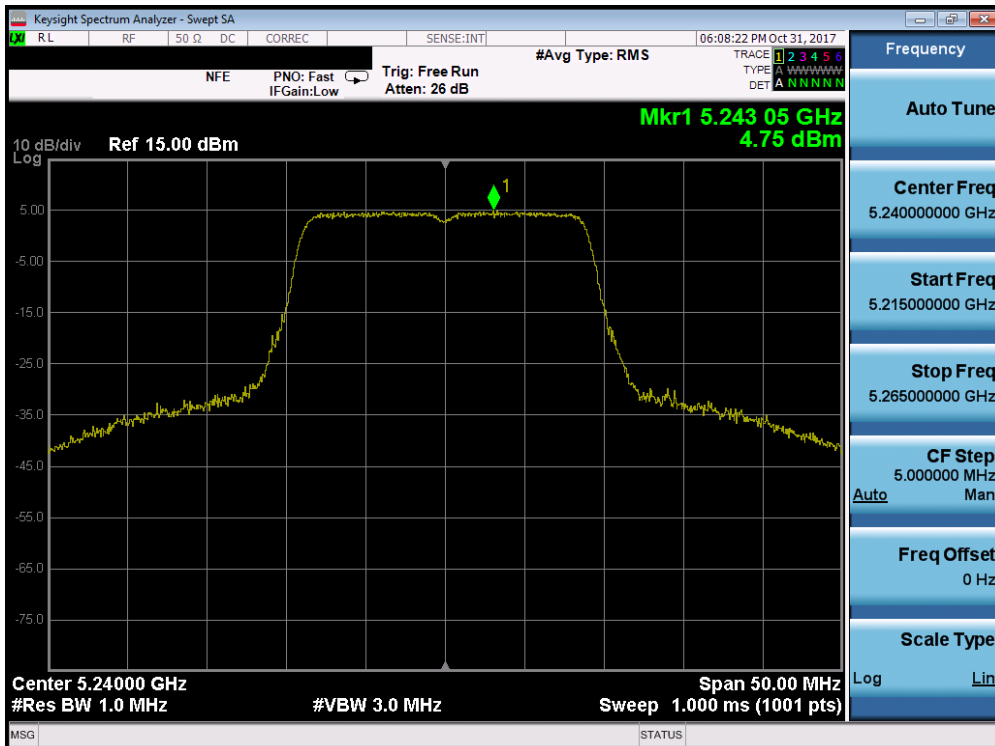


Plot 7-121. Power Spectral Density Plot (20MHz BW 802.11n (UNII Band 1) – Ch. 36)

FCC ID: A3LSMG965KOR		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1710200271-06.A3L	Test Dates: 10/20 - 12/5/2017	EUT Type: Portable Handset		Page 87 of 198

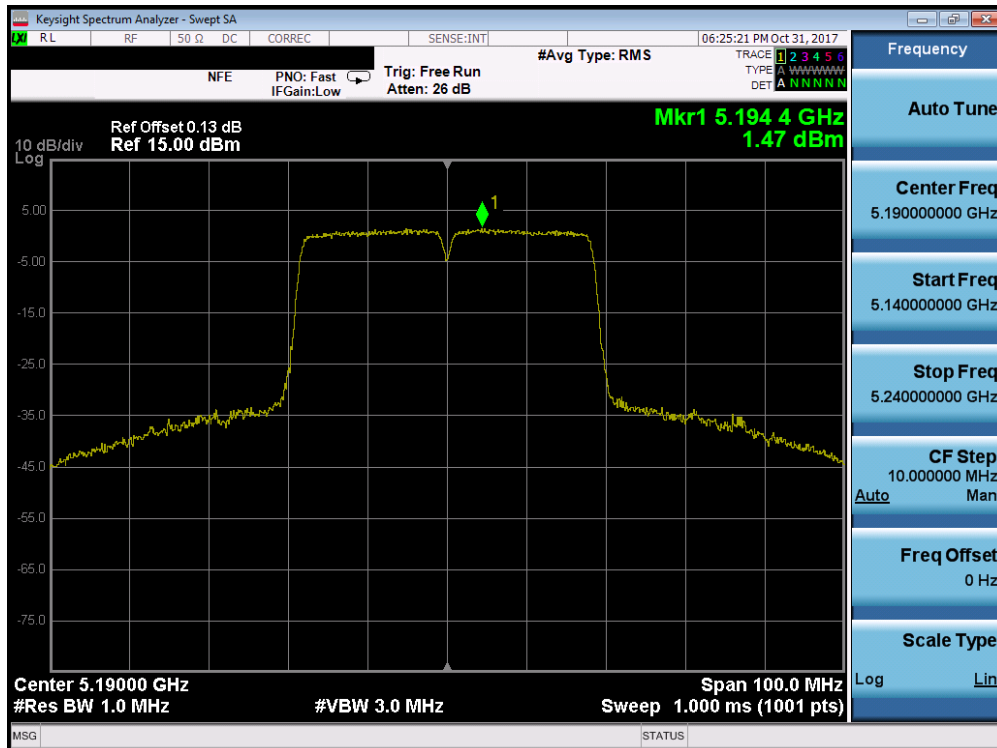


Plot 7-122. Power Spectral Density Plot (20MHz BW 802.11n (UNII Band 1) – Ch. 40)

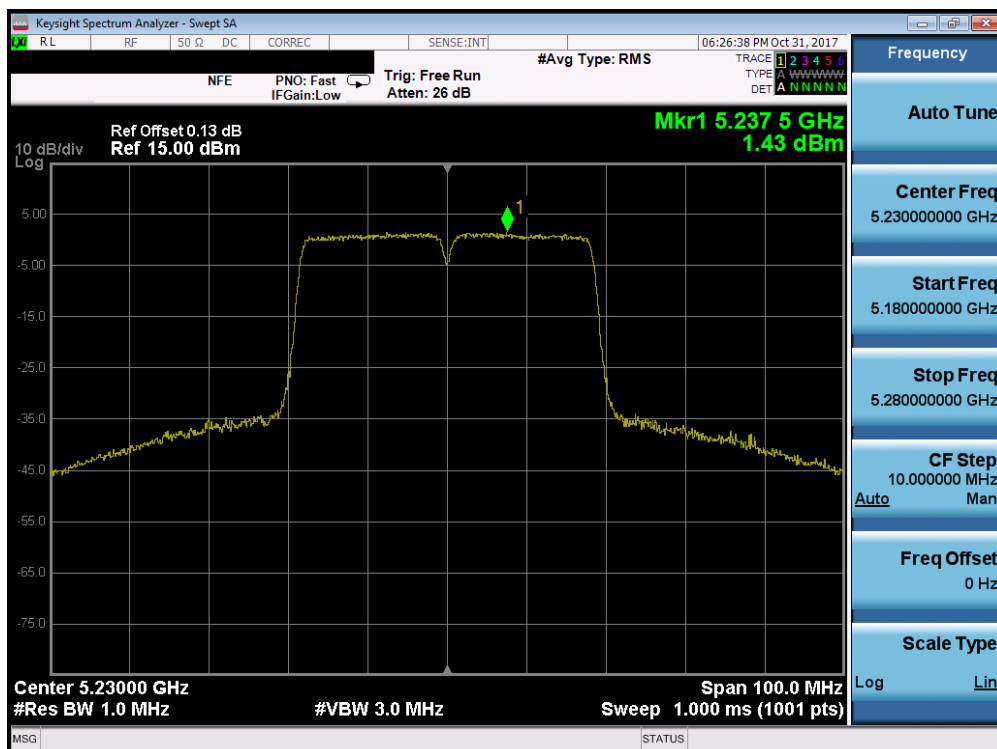


Plot 7-123. Power Spectral Density Plot (20MHz BW 802.11n (UNII Band 1) – Ch. 48)

FCC ID: A3LSMG965KOR		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1710200271-06.A3L	Test Dates: 10/20 - 12/5/2017	EUT Type: Portable Handset		Page 88 of 198



Plot 7-124. Power Spectral Density Plot (40MHz BW 802.11n (UNII Band 1) – Ch. 38)

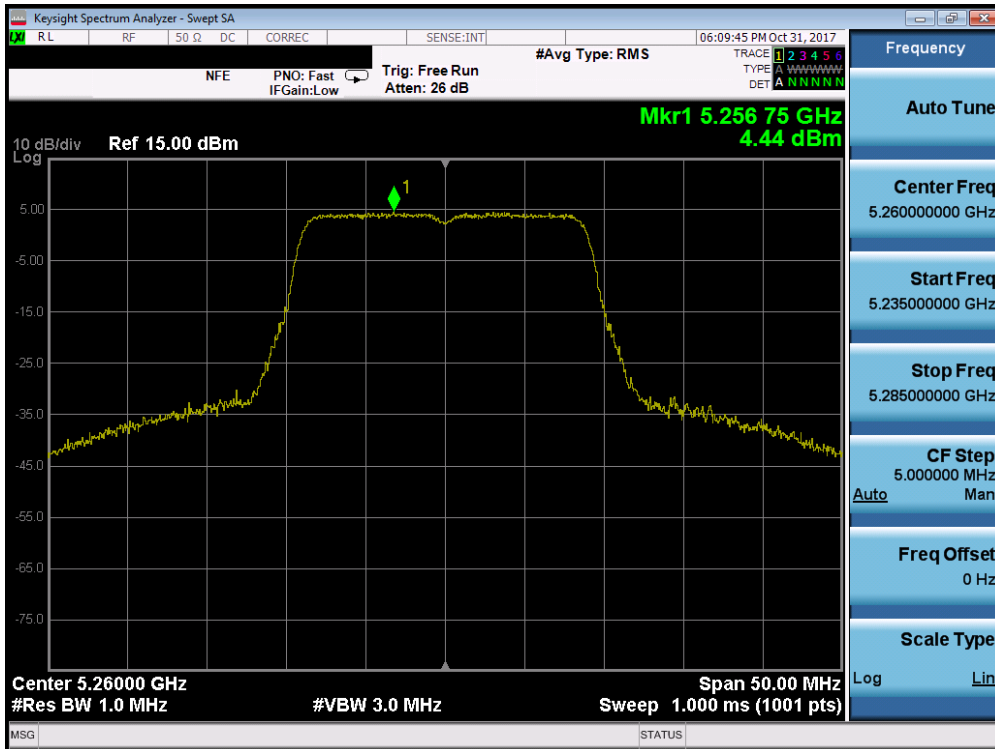


Plot 7-125. Power Spectral Density Plot (40MHz BW 802.11n (UNII Band 1) – Ch. 46)

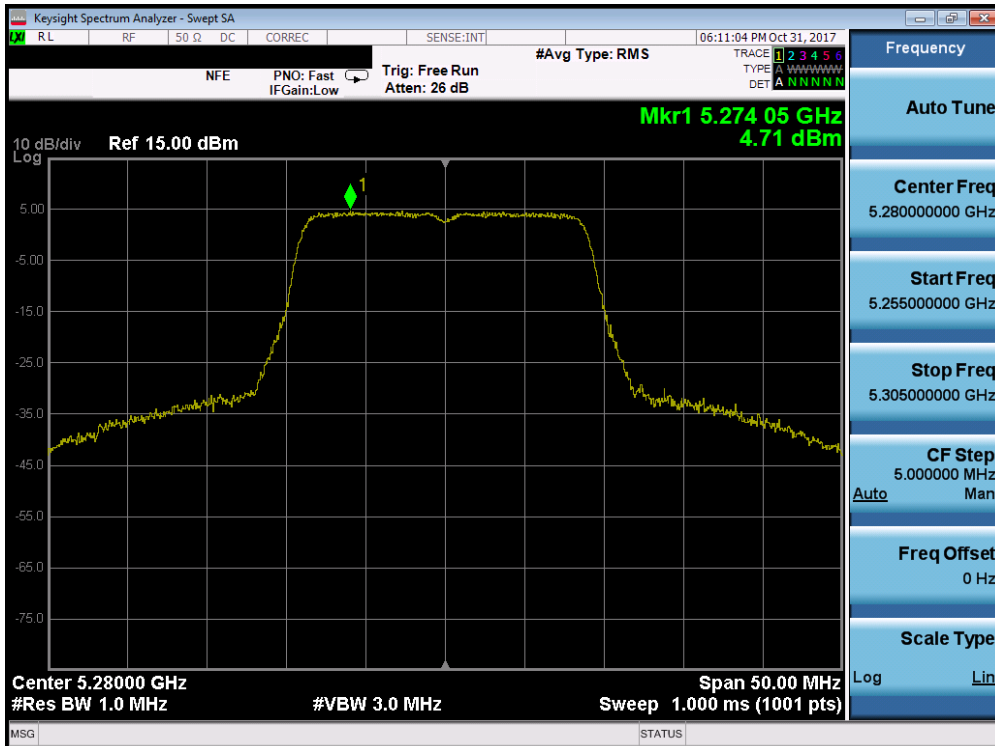
FCC ID: A3LSMG965KOR		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1710200271-06.A3L	Test Dates: 10/20 - 12/5/2017	EUT Type: Portable Handset		Page 89 of 198





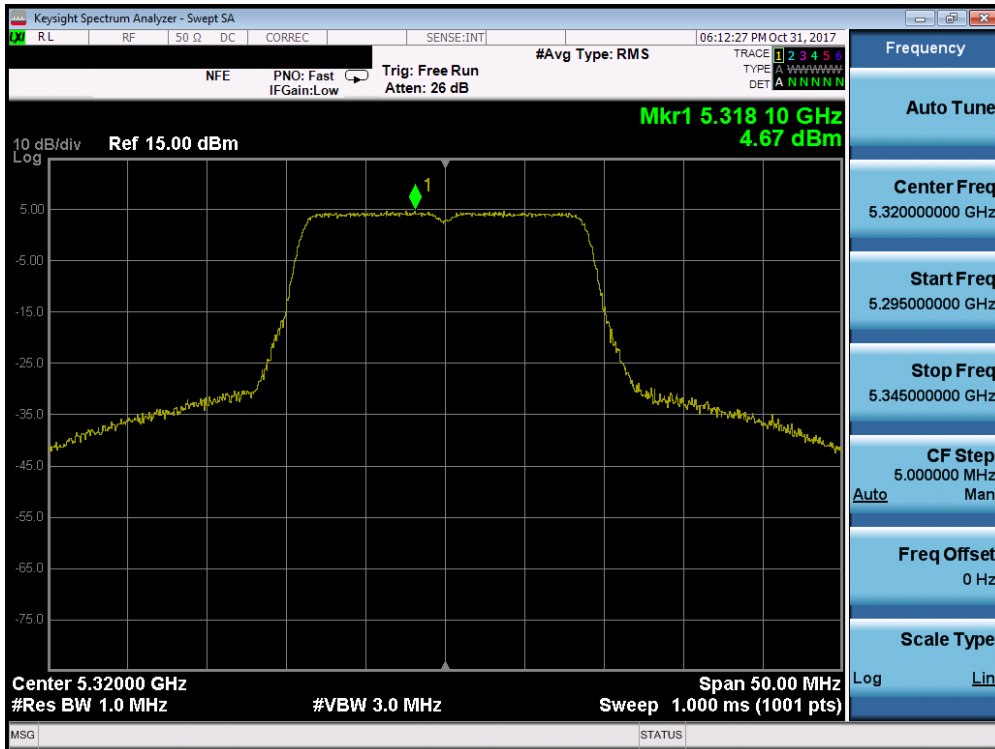


Plot 7-130. Power Spectral Density Plot (20MHz BW 802.11n (UNII Band 2A) – Ch. 52)

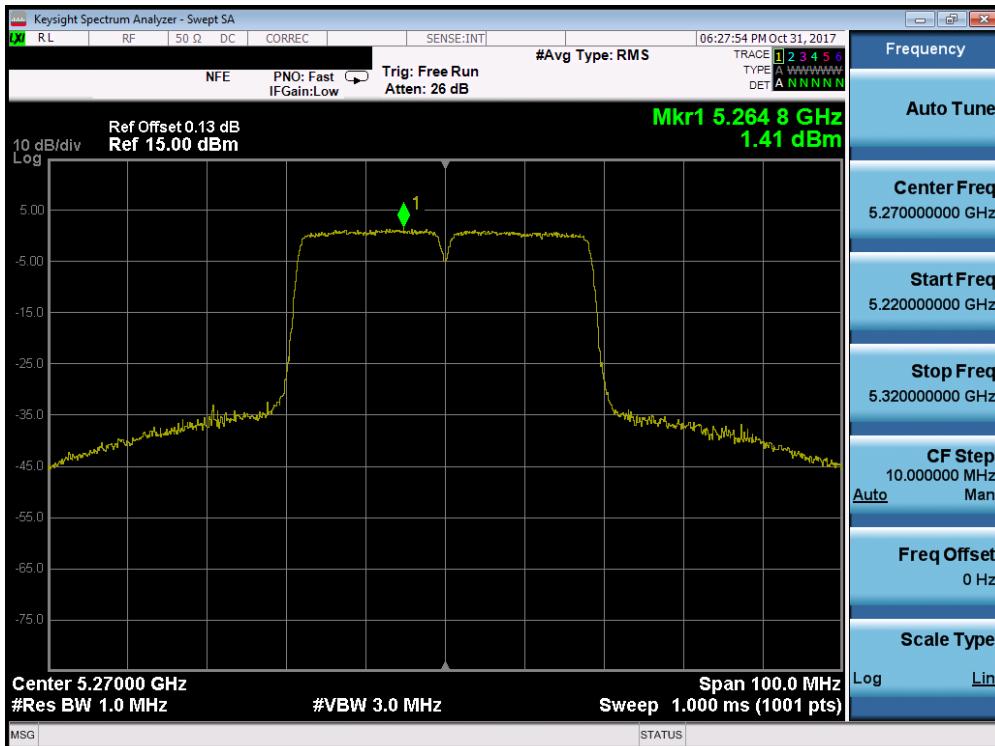


Plot 7-131. Power Spectral Density Plot (20MHz BW 802.11n (UNII Band 2A) – Ch. 56)

FCC ID: A3LSMG965KOR		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1710200271-06.A3L	Test Dates: 10/20 - 12/5/2017	EUT Type: Portable Handset		Page 92 of 198



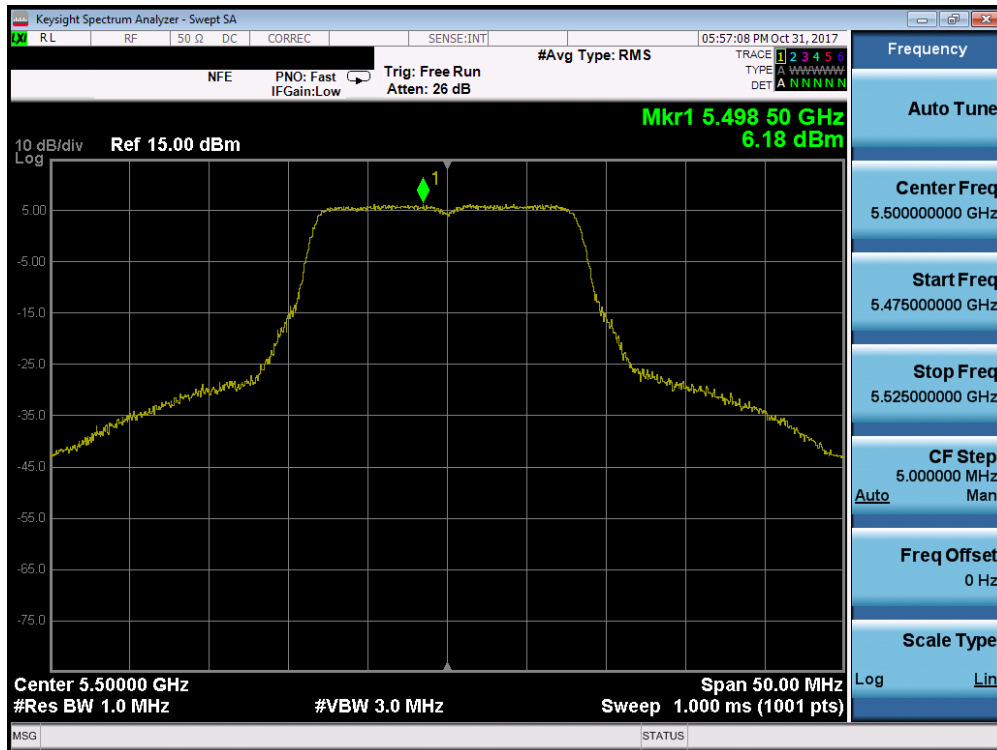
Plot 7-132. Power Spectral Density Plot (20MHz BW 802.11n (UNII Band 2A) – Ch. 64)



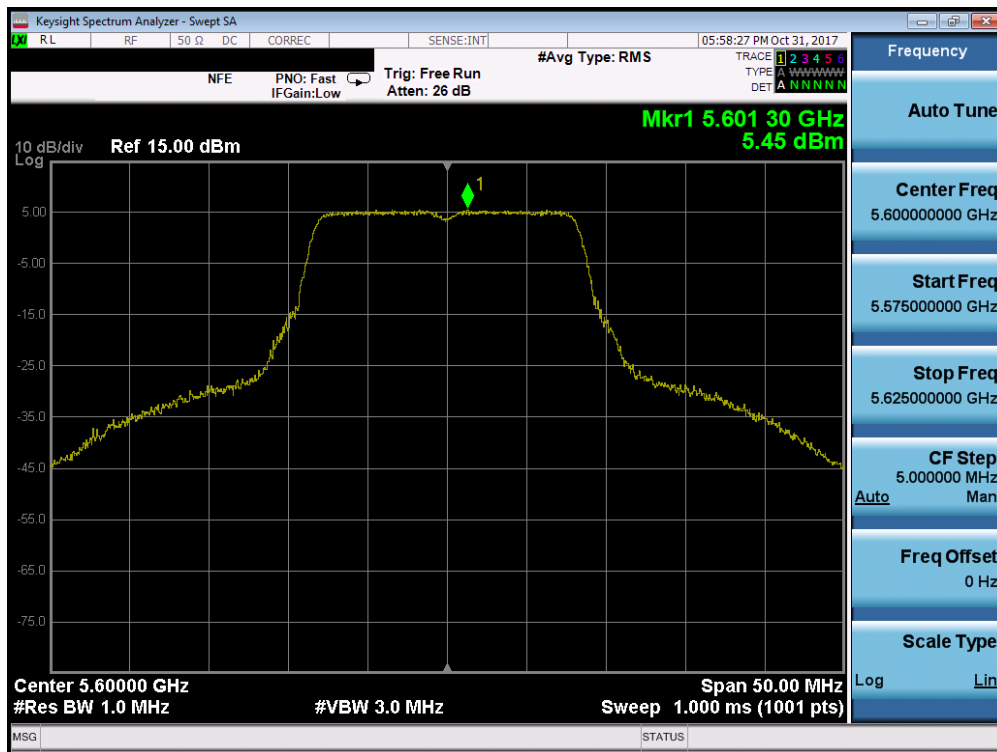
Plot 7-133. Power Spectral Density Plot (40MHz BW 802.11n (UNII Band 2A) – Ch. 54)

FCC ID: A3LSMG965KOR		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1710200271-06.A3L	Test Dates: 10/20 - 12/5/2017	EUT Type: Portable Handset		Page 93 of 198



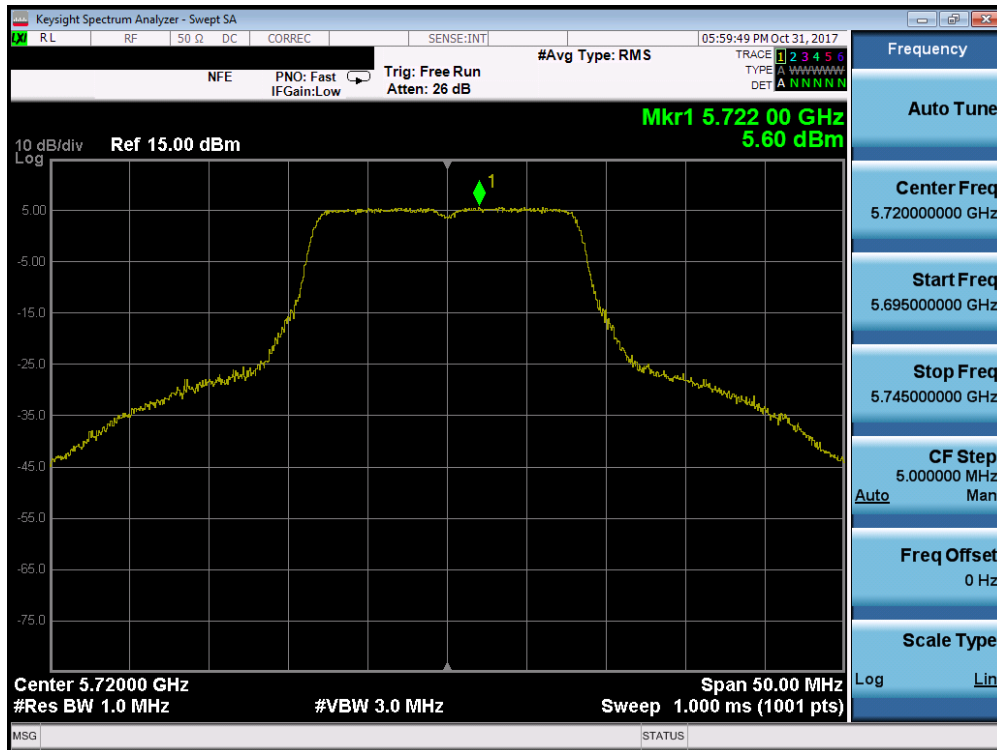


Plot 7-136. Power Spectral Density Plot (802.11a (UNII Band 2C) – Ch. 100)

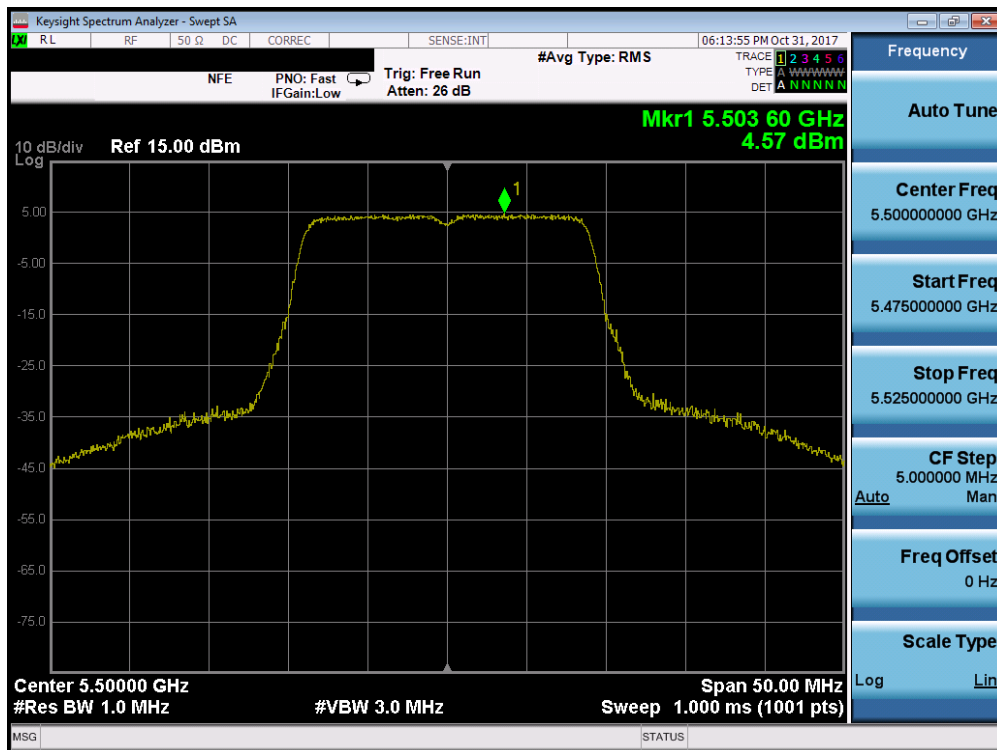


Plot 7-137. Power Spectral Density Plot (802.11a (UNII Band 2C) – Ch. 120)

FCC ID: A3LSMG965KOR	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1710200271-06.A3L	Test Dates: 10/20 - 12/5/2017	EUT Type: Portable Handset		Page 95 of 198

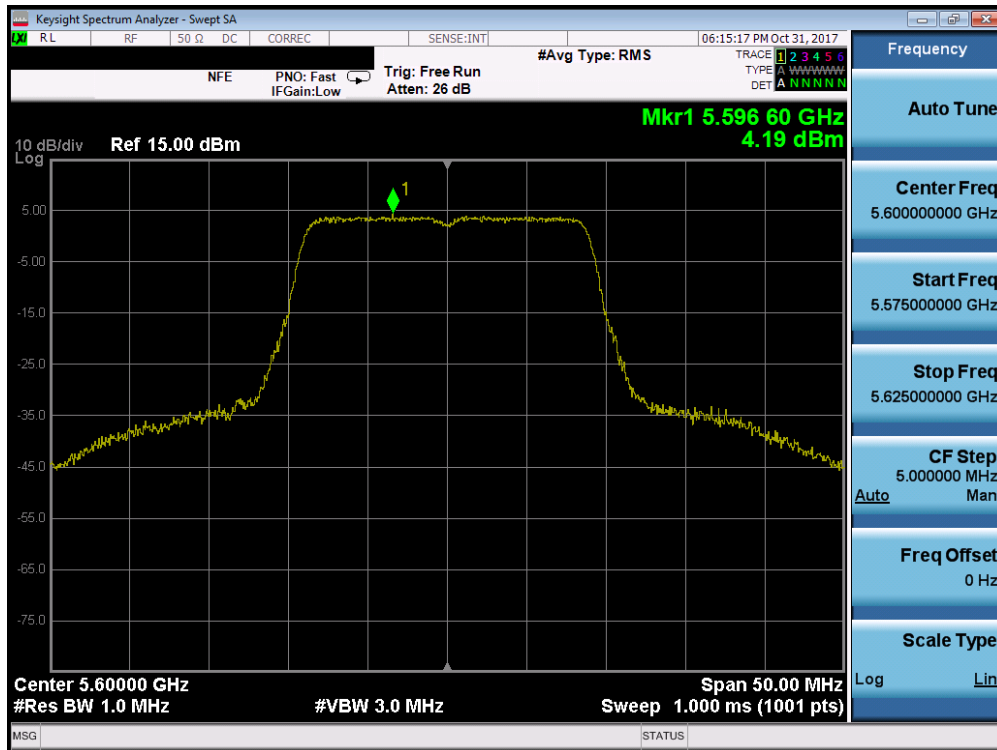


Plot 7-138. Power Spectral Density Plot (802.11a (UNII Band 2C) – Ch. 144)

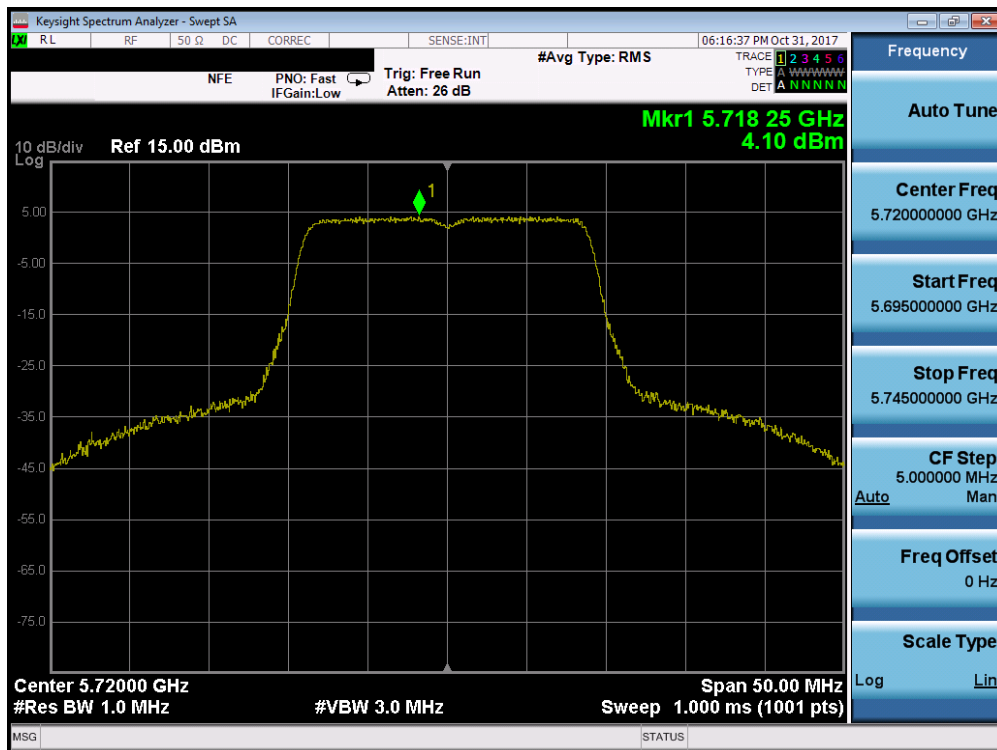


Plot 7-139. Power Spectral Density Plot (20MHz BW 802.11n (UNII Band 2C) – Ch. 100)

FCC ID: A3LSMG965KOR	 <b>MEASUREMENT REPORT (CERTIFICATION)</b>			Approved by: Quality Manager
Test Report S/N: 1M1710200271-06.A3L	Test Dates: 10/20 - 12/5/2017	EUT Type: Portable Handset	Page 96 of 198	

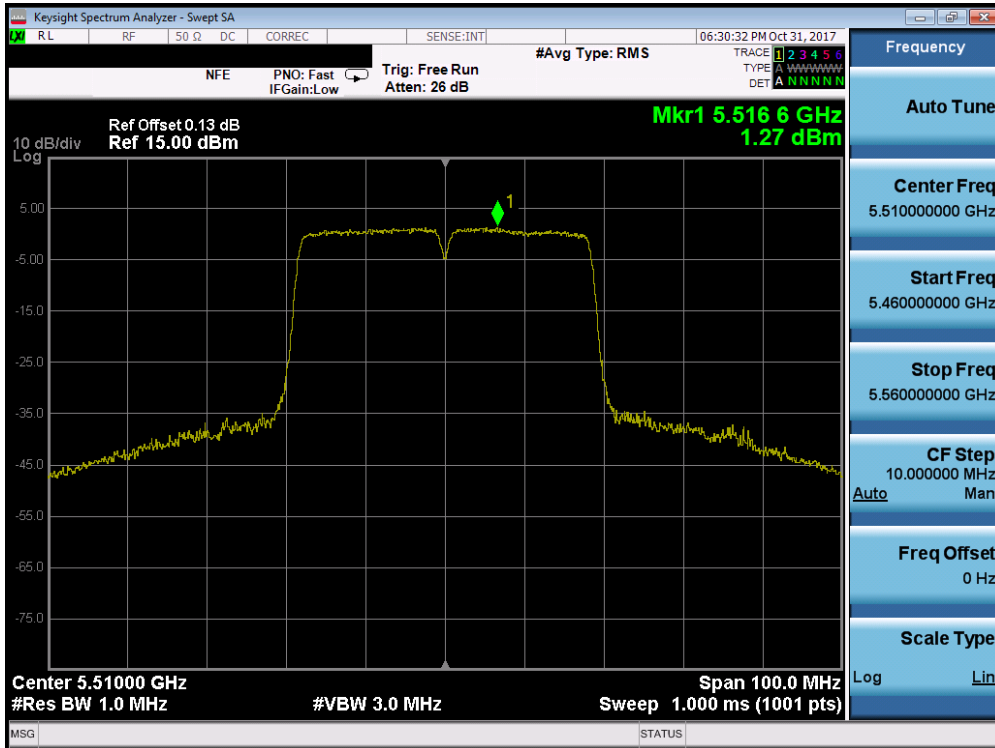


Plot 7-140. Power Spectral Density Plot (20MHz BW 802.11n (UNII Band 2C) – Ch. 120)

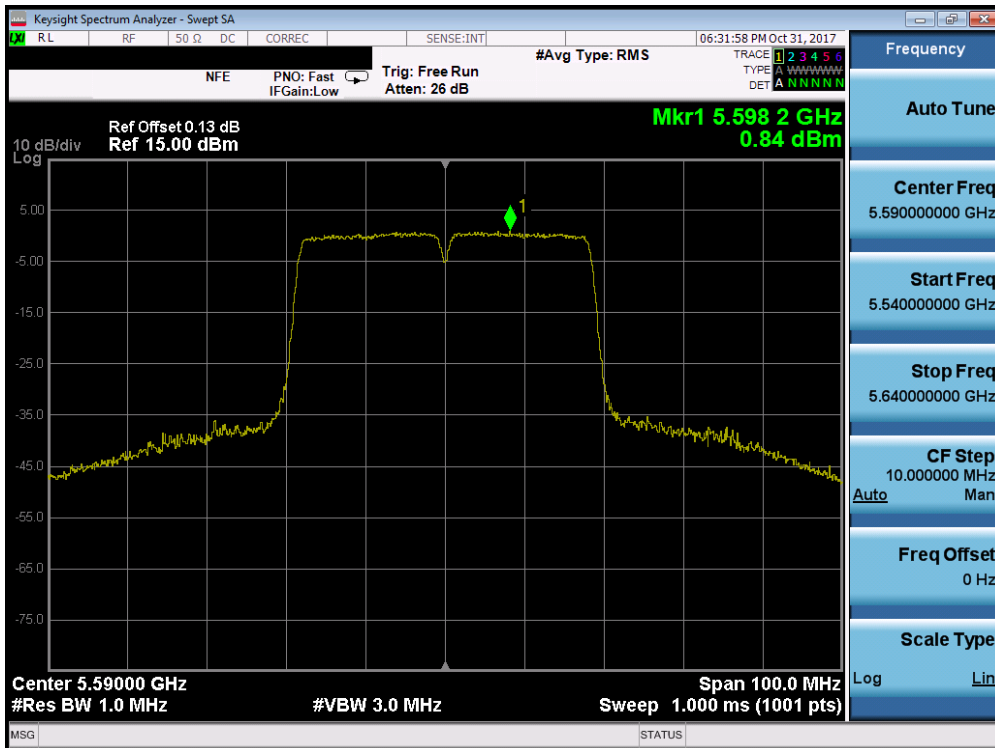


Plot 7-141. Power Spectral Density Plot (20MHz BW 802.11n (UNII Band 2C) – Ch. 144)

FCC ID: A3LSMG965KOR		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1710200271-06.A3L	Test Dates: 10/20 - 12/5/2017	EUT Type: Portable Handset		Page 97 of 198

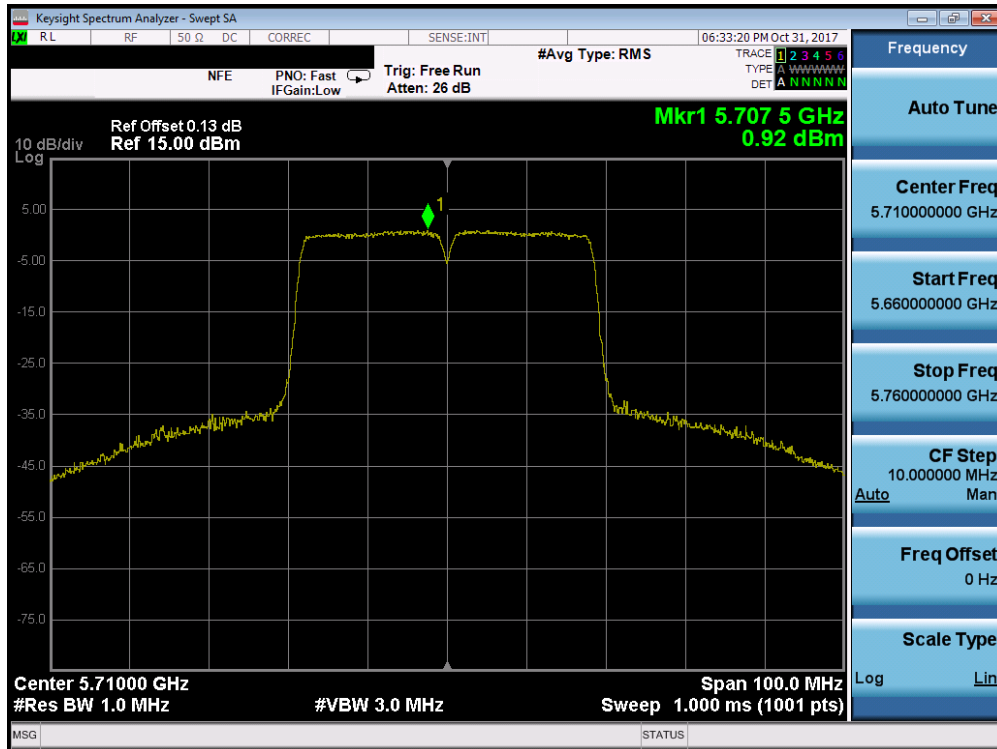


Plot 7-142. Power Spectral Density Plot (40MHz BW 802.11n (UNII Band 2C) – Ch. 102)

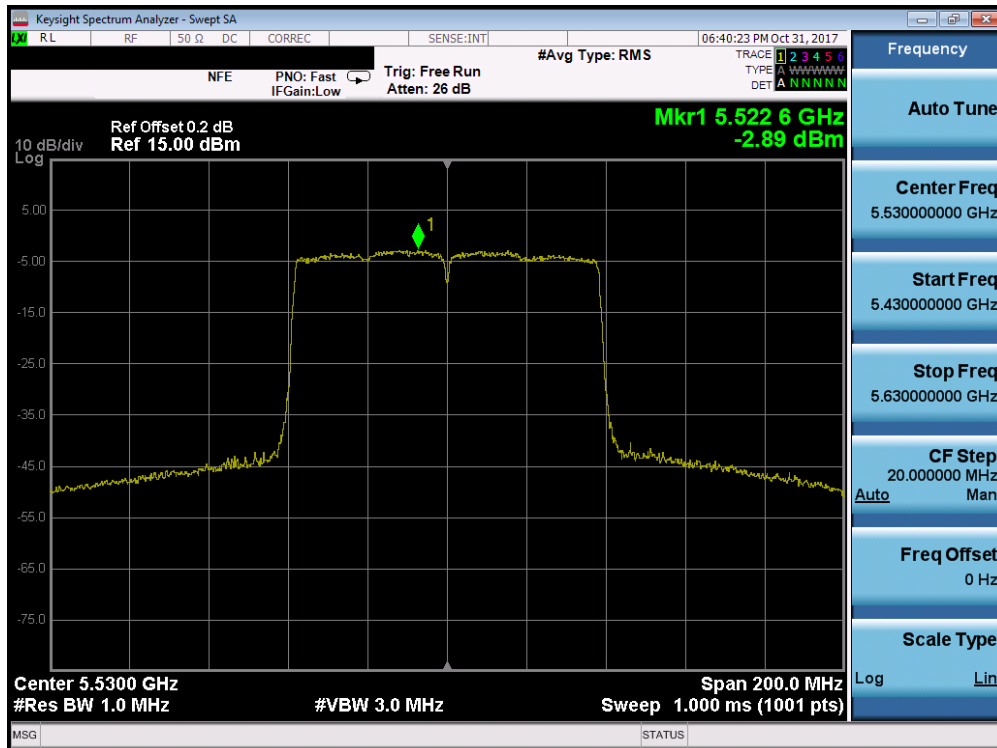


Plot 7-143. Power Spectral Density Plot (40MHz BW 802.11n (UNII Band 2C) – Ch. 118)

FCC ID: A3LSMG965KOR		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1710200271-06.A3L	Test Dates: 10/20 - 12/5/2017	EUT Type: Portable Handset		Page 98 of 198

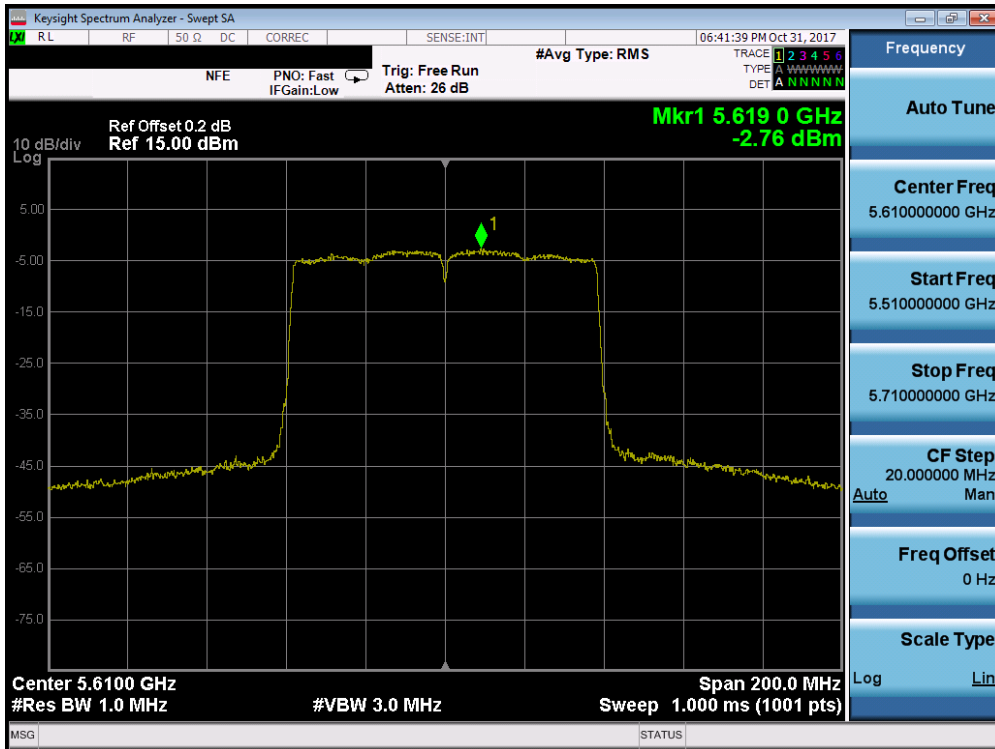


Plot 7-144. Power Spectral Density Plot (40MHz BW 802.11n (UNII Band 2C) – Ch. 142)

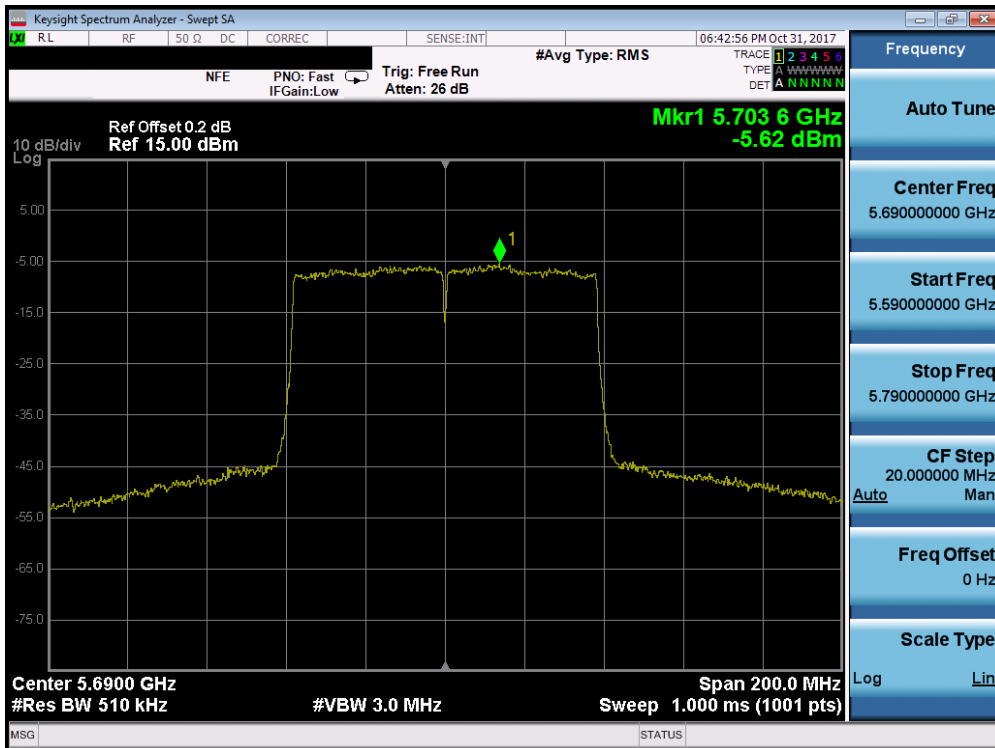


Plot 7-145. Power Spectral Density Plot (80MHz BW 802.11ac (UNII Band 2C) – Ch. 106)

FCC ID: A3LSMG965KOR	 <b>MEASUREMENT REPORT (CERTIFICATION)</b>			Approved by: Quality Manager
Test Report S/N: 1M1710200271-06.A3L	Test Dates: 10/20 - 12/5/2017	EUT Type: Portable Handset	Page 99 of 198	



Plot 7-146. Power Spectral Density Plot (80MHz BW 802.11ac (UNII Band 2C) – Ch. 122)

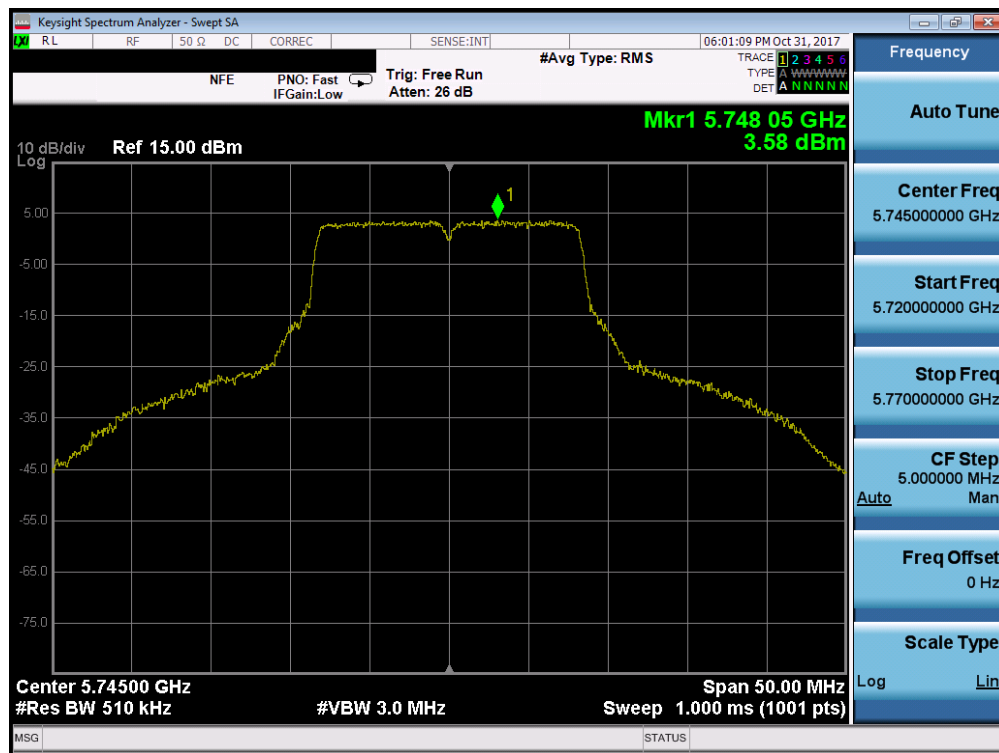


Plot 7-147. Power Spectral Density Plot (80MHz BW 802.11ac (UNII Band 2C) – Ch. 138)

FCC ID: A3LSMG965KOR		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1710200271-06.A3L	Test Dates: 10/20 - 12/5/2017	EUT Type: Portable Handset		Page 100 of 198

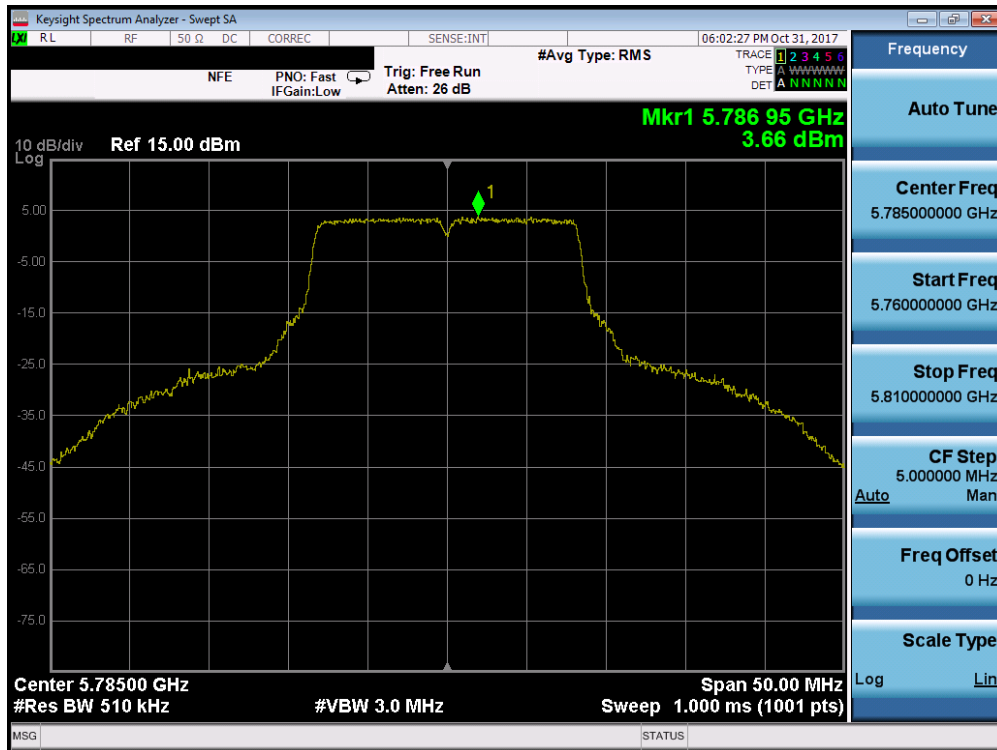
	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
<b>Band 3</b>	5745	149	a	6	3.58	30.0	-26.42
	5785	157	a	6	3.66	30.0	-26.34
	5825	165	a	6	3.26	30.0	-26.74
	5745	149	n (20MHz)	6.5/7.2 (MCS0)	2.27	30.0	-27.73
	5785	157	n (20MHz)	6.5/7.2 (MCS0)	2.07	30.0	-27.93
	5825	165	n (20MHz)	6.5/7.2 (MCS0)	1.85	30.0	-28.15
	5755	151	n (40MHz)	13.5/15 (MCS0)	-1.35	30.0	-31.35
	5795	159	n (40MHz)	13.5/15 (MCS0)	-1.12	30.0	-31.12
	5775	155	ac (80MHz)	29.3/32.5 (MCS0)	-2.48	30.0	-32.48

**Table 7-21. Band 3 Conducted Power Spectral Density Measurements**

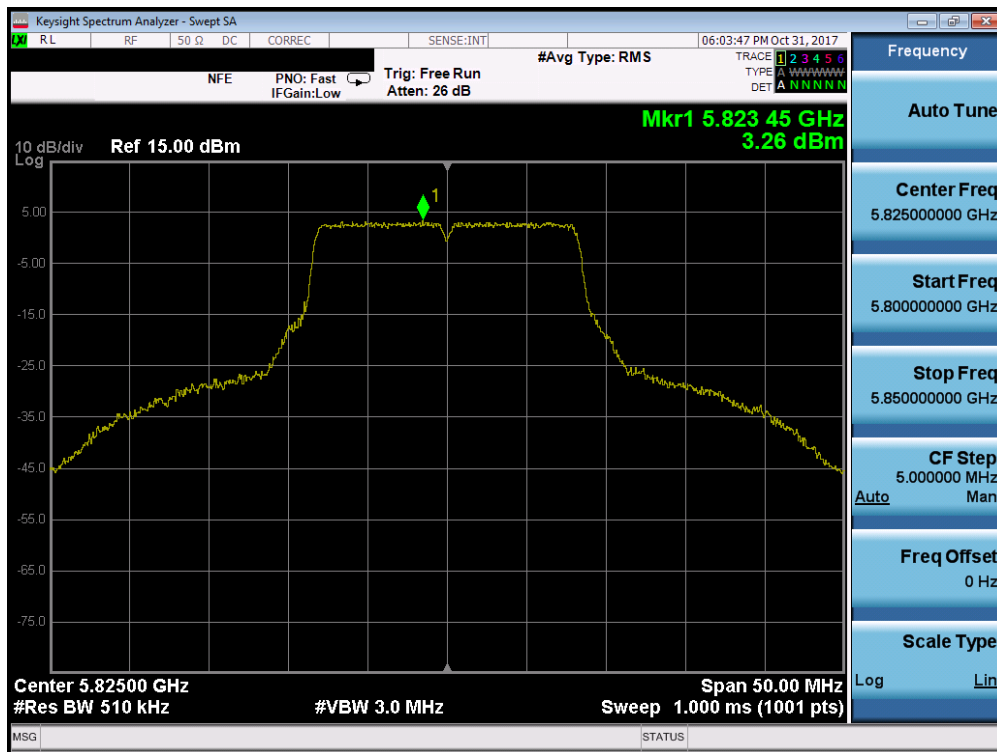


**Plot 7-148. Power Spectral Density Plot (802.11a (UNII Band 3) – Ch. 149)**

FCC ID: A3LSMG965KOR	 <b>MEASUREMENT REPORT (CERTIFICATION)</b>			Approved by: Quality Manager
Test Report S/N: 1M1710200271-06.A3L	Test Dates: 10/20 - 12/5/2017	EUT Type: Portable Handset	Page 101 of 198	



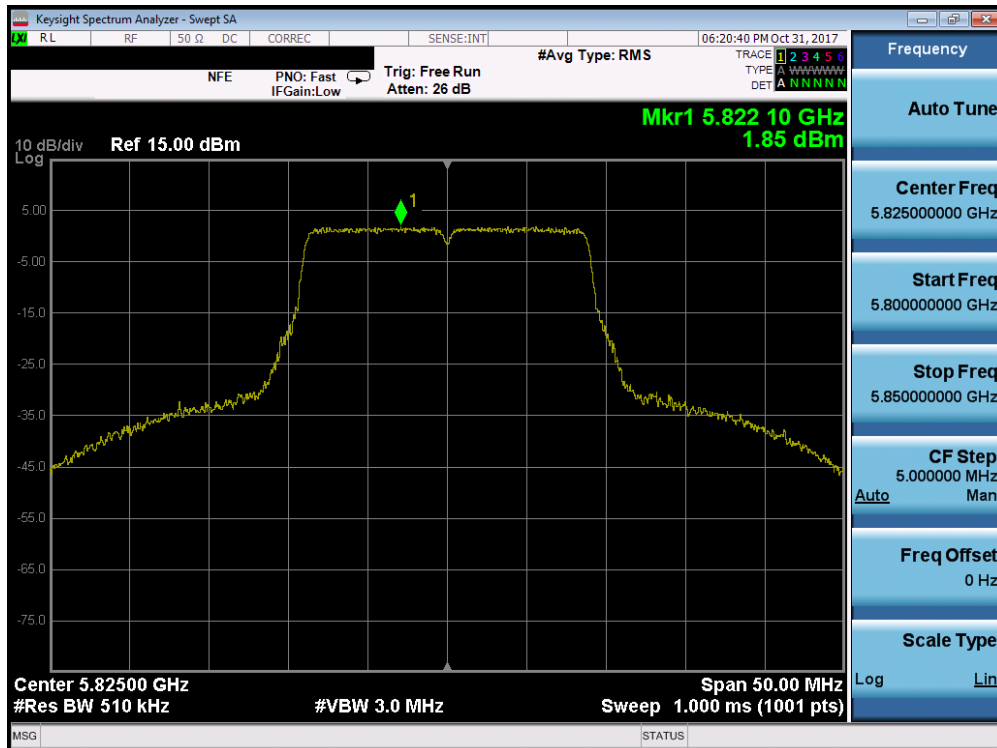
Plot 7-149. Power Spectral Density Plot (802.11a (UNII Band 3) – Ch. 157)



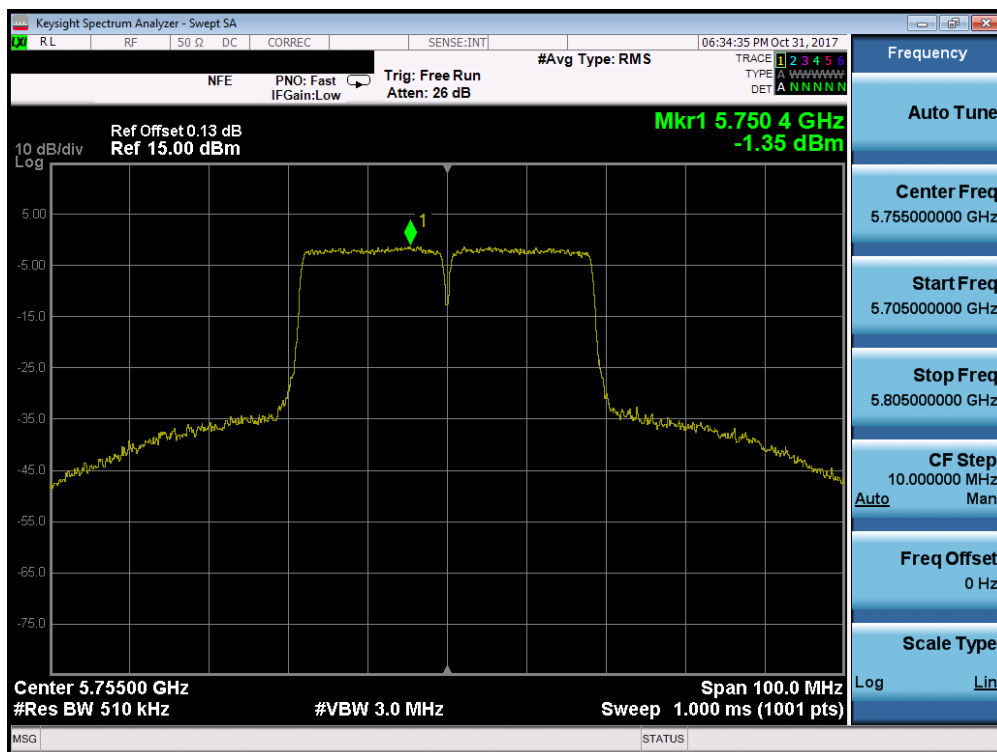
Plot 7-150. Power Spectral Density Plot (802.11a (UNII Band 3) – Ch. 165)

FCC ID: A3LSMG965KOR	 <b>MEASUREMENT REPORT (CERTIFICATION)</b>			Approved by: Quality Manager
Test Report S/N: 1M1710200271-06.A3L	Test Dates: 10/20 - 12/5/2017	EUT Type: Portable Handset		Page 102 of 198



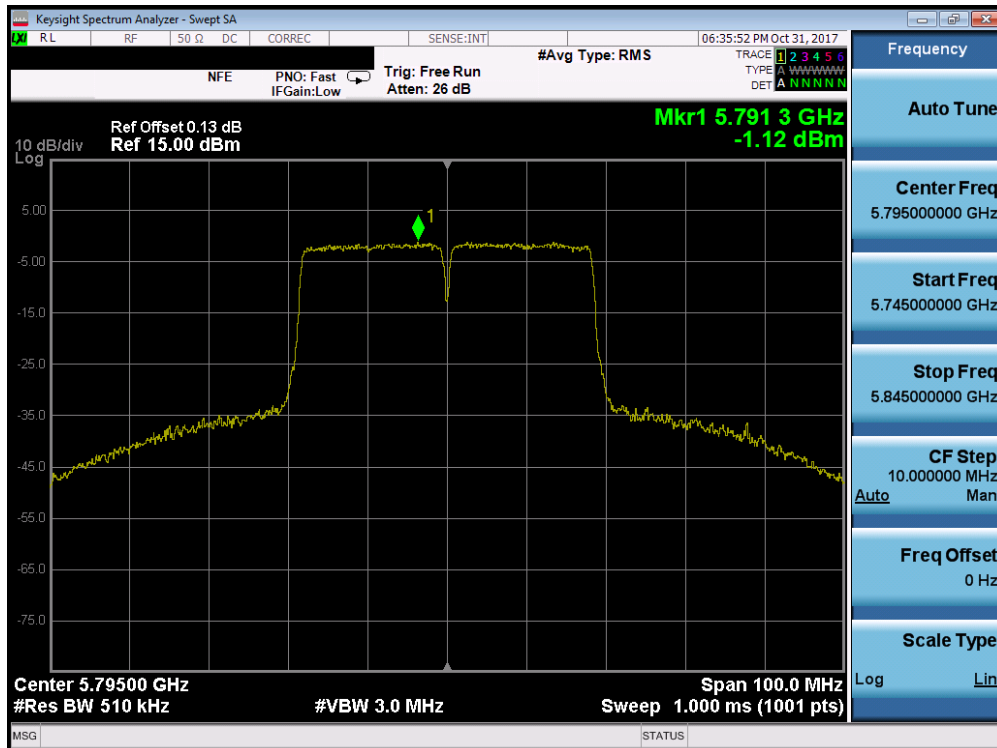


Plot 7-153. Power Spectral Density Plot (20MHz BW 802.11n (UNII Band 3) – Ch. 165)

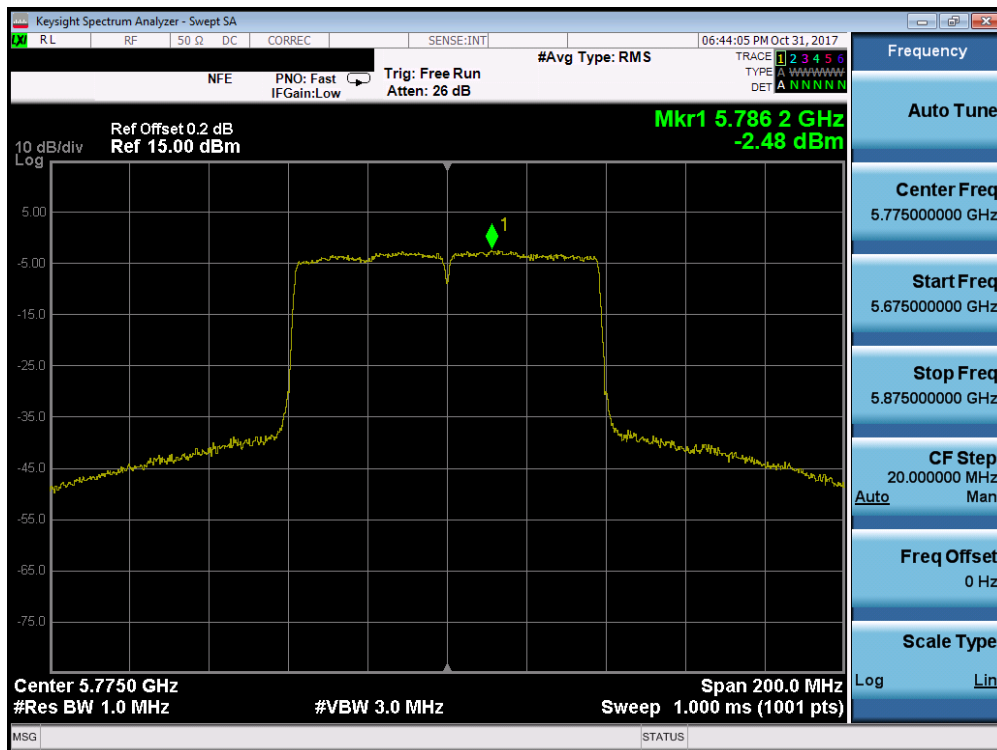


Plot 7-154. Power Spectral Density Plot (40MHz BW 802.11n (UNII Band 3) – Ch. 151)

FCC ID: A3LSMG965KOR	 <b>MEASUREMENT REPORT (CERTIFICATION)</b>			Approved by: Quality Manager
Test Report S/N: 1M1710200271-06.A3L	Test Dates: 10/20 - 12/5/2017	EUT Type: Portable Handset		Page 104 of 198



Plot 7-155. Power Spectral Density Plot (40MHz BW 802.11n (UNII Band 3) – Ch. 159)



Plot 7-156. Power Spectral Density Plot (80MHz BW 802.11ac (UNII Band 3) – Ch. 155)

FCC ID: A3LSMG965KOR		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1710200271-06.A3L	Test Dates: 10/20 - 12/5/2017	EUT Type: Portable Handset		Page 105 of 198

## Summed MIMO Power Spectral Density Measurements

	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Antenn-1 Power Density [dBm]	Antenn-2 Power Density [dBm]	Summed MIMO Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	a	6.5/7.2 (MCS0)	4.07	5.73	7.99	11.0	-3.01
	5200	40	a	6.5/7.2 (MCS0)	4.06	6.08	8.20	11.0	-2.80
	5240	48	a	6.5/7.2 (MCS0)	4.38	6.17	8.38	11.0	-2.62
	5180	36	n (20MHz)	6.5/7.2 (MCS0)	2.24	4.27	6.38	11.0	-4.62
	5200	40	n (20MHz)	6.5/7.2 (MCS0)	2.98	4.70	6.93	11.0	-4.07
	5240	48	n (20MHz)	6.5/7.2 (MCS0)	3.11	4.75	7.02	11.0	-3.98
	5190	38	n (40MHz)	13.5/15 (MCS0)	0.07	1.47	3.84	11.0	-7.16
	5230	46	n (40MHz)	13.5/15 (MCS0)	0.31	1.43	3.91	11.0	-7.09
5210	42	ac (80MHz)	29.3/32.5 (MCS0)	-3.85	-2.96	-0.37	11.0	-11.37	
Band 2A	5260	52	a	6.5/7.2 (MCS0)	4.07	5.99	8.14	11.0	-2.86
	5280	56	a	6.5/7.2 (MCS0)	4.28	6.07	8.28	11.0	-2.72
	5320	64	a	6.5/7.2 (MCS0)	4.45	6.17	8.41	11.0	-2.59
	5260	52	n (20MHz)	6.5/7.2 (MCS0)	2.96	4.44	6.77	11.0	-4.23
	5280	56	n (20MHz)	6.5/7.2 (MCS0)	2.81	4.71	6.87	11.0	-4.13
	5320	64	n (20MHz)	6.5/7.2 (MCS0)	3.09	4.67	6.96	11.0	-4.04
	5270	54	n (40MHz)	13.5/15 (MCS0)	0.17	1.41	3.85	11.0	-7.15
	5310	62	n (40MHz)	13.5/15 (MCS0)	0.24	1.32	3.83	11.0	-7.17
5290	58	ac (80MHz)	29.3/32.5 (MCS0)	-4.15	-2.64	-0.32	11.0	-11.32	
Band 2C	5500	100	a	6.5/7.2 (MCS0)	4.34	6.18	8.37	11.0	-2.63
	5600	120	a	6.5/7.2 (MCS0)	3.64	5.45	7.65	11.0	-3.35
	5720	144	a	6.5/7.2 (MCS0)	4.12	5.60	7.93	11.0	-3.07
	5500	100	n (20MHz)	6.5/7.2 (MCS0)	2.84	4.57	6.80	11.0	-4.20
	5600	120	n (20MHz)	6.5/7.2 (MCS0)	2.67	4.19	6.51	11.0	-4.49
	5720	144	n (20MHz)	6.5/7.2 (MCS0)	2.73	4.10	6.48	11.0	-4.52
	5510	102	n (40MHz)	13.5/15 (MCS0)	0.26	1.27	3.80	11.0	-7.20
	5590	118	n (40MHz)	13.5/15 (MCS0)	0.17	0.84	3.53	11.0	-7.47
	5710	142	n (40MHz)	13.5/15 (MCS0)	0.04	0.92	3.52	11.0	-7.48
	5530	106	ac (80MHz)	29.3/32.5 (MCS0)	-3.95	-2.89	-0.38	11.0	-11.38
5610	122	ac (80MHz)	29.3/32.5 (MCS0)	-3.73	-2.76	-0.21	11.0	-11.21	
5690	138	ac (80MHz)	29.3/32.5 (MCS0)	-6.28	-5.62	-2.92	11.0	-13.92	

Table 7-22. Bands 1, 2A, 2C MIMO Conducted Power Spectral Density Measurements

	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Antenn-1 Power Density [dBm]	Antenn-2 Power Density [dBm]	Summed MIMO Power Density [dBm]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
Band 3	5745	149	a	6.5/7.2 (MCS0)	1.51	3.58	5.68	30.0	-24.32
	5785	157	a	6.5/7.2 (MCS0)	1.69	3.66	5.80	30.0	-24.20
	5825	165	a	6.5/7.2 (MCS0)	1.45	3.26	5.46	30.0	-24.54
	5745	149	n (20MHz)	6.5/7.2 (MCS0)	0.50	2.27	4.48	30.0	-25.52
	5785	157	n (20MHz)	6.5/7.2 (MCS0)	0.40	2.07	4.32	30.0	-25.68
	5825	165	n (20MHz)	6.5/7.2 (MCS0)	0.07	1.85	4.06	30.0	-25.94
	5755	151	n (40MHz)	13.5/15 (MCS0)	-2.65	-1.35	1.06	30.0	-28.94
	5795	159	n (40MHz)	13.5/15 (MCS0)	-2.48	-1.12	1.27	30.0	-28.73
	5775	155	ac (80MHz)	29.3/32.5 (MCS0)	-3.82	-2.48	-0.09	30.0	-30.09

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

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**Note:**

Per ANSI C63.10-2013 Section 14.3.2.2 and KDB 662911 v02r01 Section E)2), the power spectral density at Antenna 1 and Antenna 2 were first measured separately as shown in the section above. The measured values were then summed in linear power units then converted back to dBm.

**Sample MIMO Calculation:**

At 5180MHz the average conducted power spectral density was measured to be 2.24 dBm for Antenna-1 and 4.27 dBm for Antenna-2.

Antenna 1 + Antenna 2 = MIMO

$$(2.24 \text{ dBm} + 4.27 \text{ dBm}) = (1.67 \text{ mW} + 2.67 \text{ mW}) = 4.35 \text{ mW} = 6.38 \text{ dBm}$$

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## 7.6 Frequency Stability

§15.407(g); RSS-Gen [6.11]

The EUT was placed inside of an environmental chamber as the temperature in the chamber was varied between -30°C and +50°C. The temperature was incremented by 10° intervals and the unit was allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded. Data for the worst case channel is shown below.

OPERATING FREQUENCY: 5,180,000,000 Hz  
 CHANNEL: 36  
 REFERENCE VOLTAGE: 3.85 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.85	+ 20 (Ref)	5,180,000,188	188	0.0000036
100 %		- 30	5,180,000,046	46	0.0000009
100 %		- 20	5,180,000,358	358	0.0000069
100 %		- 10	5,179,999,729	-271	-0.0000052
100 %		0	5,180,000,040	40	0.0000008
100 %		+ 10	5,179,999,734	-266	-0.0000051
100 %		+ 20	5,179,999,947	-53	-0.0000010
100 %		+ 30	5,180,000,028	28	0.0000005
100 %		+ 40	5,179,999,638	-362	-0.0000070
100 %		+ 50	5,179,999,996	-4	-0.0000001
BATT. ENDPOINT	3.45	+ 20	5,180,000,140	140	0.0000027

**Table 7-24. Frequency Stability Measurements for UNII Band 1 (Ch. 36)**

**Note:**

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

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**Frequency Stability**  
**§15.407(g); RSS-Gen [6.11]**

The EUT was placed inside of an environmental chamber as the temperature in the chamber was varied between -30°C and +50°C. The temperature was incremented by 10° intervals and the unit was allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded. Data for the worst case channel is shown below.

OPERATING FREQUENCY: 5,260,000,000 Hz  
 CHANNEL: 52  
 REFERENCE VOLTAGE: 3.85 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.85	+ 20 (Ref)	5,260,000,006	6	0.0000001
100 %		- 30	5,260,000,035	35	0.0000007
100 %		- 20	5,260,000,308	308	0.0000059
100 %		- 10	5,259,999,689	-311	-0.0000059
100 %		0	5,259,999,969	-31	-0.0000006
100 %		+ 10	5,259,999,843	-157	-0.0000030
100 %		+ 20	5,260,000,295	295	0.0000056
100 %		+ 30	5,260,000,180	180	0.0000034
100 %		+ 40	5,260,000,017	17	0.0000003
100 %		+ 50	5,260,000,033	33	0.0000006
BATT. ENDPOINT	3.45	+ 20	5,259,999,837	-163	-0.0000031

**Table 7-25. Frequency Stability Measurements for UNII Band 2A (Ch. 52)**

**Note:**

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

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**Frequency Stability**  
**§15.407(g); RSS-Gen [6.11]**

The EUT was placed inside of an environmental chamber as the temperature in the chamber was varied between -30°C and +50°C. The temperature was incremented by 10° intervals and the unit was allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded. Data for the worst case channel is shown below.

OPERATING FREQUENCY: 5,500,000,000 Hz  
 CHANNEL: 100  
 REFERENCE VOLTAGE: 3.85 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.85	+ 20 (Ref)	5,499,999,831	-169	-0.0000031
100 %		- 30	5,500,000,381	381	0.0000069
100 %		- 20	5,499,999,787	-213	-0.0000039
100 %		- 10	5,499,999,577	-423	-0.0000077
100 %		0	5,499,999,763	-237	-0.0000043
100 %		+ 10	5,500,000,266	266	0.0000048
100 %		+ 20	5,500,000,053	53	0.0000010
100 %		+ 30	5,500,000,227	227	0.0000041
100 %		+ 40	5,500,000,152	152	0.0000028
100 %		+ 50	5,500,000,023	23	0.0000004
BATT. ENDPOINT	3.45	+ 20	5,500,000,019	19	0.0000003

**Table 7-26. Frequency Stability Measurements for UNII Band 2C (Ch. 100)**

**Note:**

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

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**Frequency Stability**  
**§15.407(g); RSS-Gen [6.11]**

The EUT was placed inside of an environmental chamber as the temperature in the chamber was varied between -30°C and +50°C. The temperature was incremented by 10° intervals and the unit was allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded. Data for the worst case channel is shown below.

OPERATING FREQUENCY: 5,745,000,000 Hz  
 CHANNEL: 149  
 REFERENCE VOLTAGE: 3.85 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.85	+ 20 (Ref)	5,745,000,043	43	0.0000007
100 %		- 30	5,745,000,145	145	0.0000025
100 %		- 20	5,745,000,098	98	0.0000017
100 %		- 10	5,745,000,056	56	0.0000010
100 %		0	5,744,999,863	-137	-0.0000024
100 %		+ 10	5,745,000,021	21	0.0000004
100 %		+ 20	5,745,000,131	131	0.0000023
100 %		+ 30	5,744,999,986	-14	-0.0000002
100 %		+ 40	5,745,000,059	59	0.0000010
100 %		+ 50	5,744,999,915	-85	-0.0000015
BATT. ENDPOINT	3.45	+ 20	5,745,000,036	36	0.0000006

**Table 7-27. Frequency Stability Measurements for UNII Band 3 (Ch. 149)**

**Note:**

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

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## 7.7 Radiated Spurious Emission Measurements – Above 1GHz

§15.407(b) §15.205 §15.209; RSS-Gen [8.9]

### Test Overview and Limit

All out of band radiated spurious emissions are measured with a spectrum analyzer connected to a receive antenna 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 v01r04, and at the appropriate frequencies. All channels, modes (e.g. 802.11a, 802.11n (20MHz BW), 802.11n (40MHz BW), and 802.11ac (80MHz)), and modulations/data rates were investigated among all UNII bands. Only the radiated emissions of the configuration that produced the worst case emissions are reported in this section.

***For transmitters operating in the 5.15-5.25 GHz and 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz.***

***For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz.***

***For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.***

***All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR and Table 6 of RSS-Gen (8.10) must not exceed the limits shown in Table 7-28 per Section 15.209 and RSS-Gen (8.9).***

Frequency	Field Strength [ $\mu\text{V/m}$ ]	Measured Distance [Meters]
Above 960.0 MHz	500	3

Table 7-28. Radiated Limits

### Test Procedures Used

ANSI C63.10-2013 – Sections 12.7.7.2, 12.7.6, 12.7.5  
KDB 789033 D02 v01r04 – Section G

### Test Settings

#### Average Measurements above 1GHz (Method AD)

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = power average (RMS)
5. Number of measurement points = 1001 (Number of points must be  $\geq 2 \times \text{span/RBW}$ )
6. Averaging type = power (RMS)
7. Sweep time = auto couple
8. Trace was averaged over 100 sweeps

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**Peak Measurements above 1GHz**

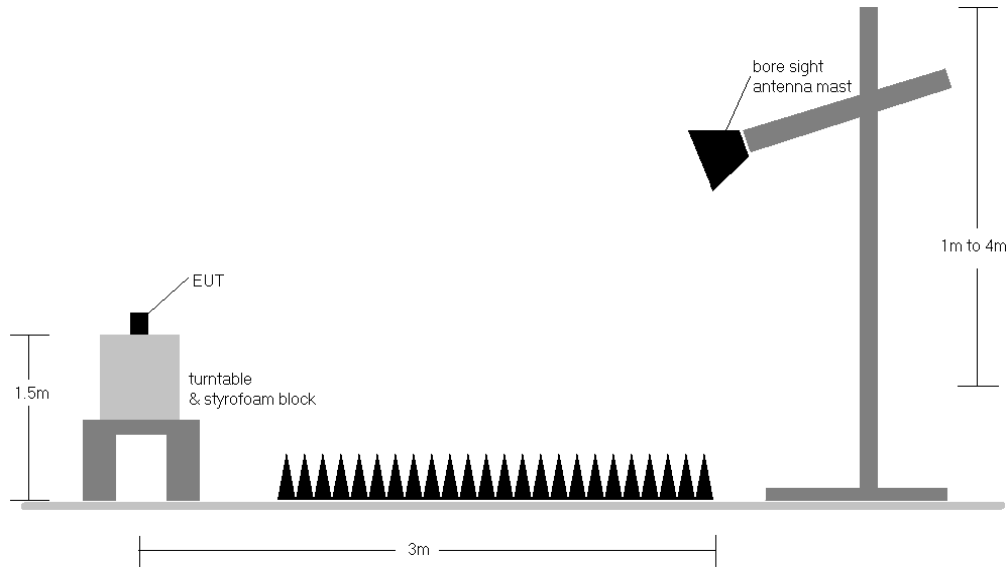
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

**Peak Measurements below 1GHz**

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = 120kHz
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

**Test Setup**

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



**Figure 7-5. Test Instrument & Measurement Setup**

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**Test Notes**

1. All emissions that lie in the restricted bands (denoted by a \* next to the frequency) specified in §15.205 and Section 8.10 of RSS-Gen are below the limit shown in Table 7-28.
2. All spurious emissions lying in restricted bands specified in §15.205 and Section 8.10 of RSS-Gen are below the limit shown in Table 7-28. All spurious emissions that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBµV/m.
3. The antenna is manipulated through typical positions, polarity and length during the tests. The EUT is manipulated through three orthogonal planes.
4. This unit was tested with its standard battery.
5. The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter using CISPR quasi peak detector below 1GHz. Above 1 GHz, average and peak measurements were taken using linearly polarized horn antennas. The worst-case emissions are reported however emissions whose levels were not within 20dB of the respective limits were not reported.
6. Emissions below 18GHz were measured at a 3 meter test distance while emissions above 18GHz were measured at a 1 meter test distance with the application of a distance correction factor.
7. Radiated spurious emissions were investigated while operating in MIMO mode, however, it was determined that single antenna operation produced the worst case emissions. Since the emissions produced from MIMO operation were found to be more than 20dB below the limit, the MIMO emissions are not reported.
8. The wide spectrum spurious emissions plots shown on the following pages are used only for the purpose of emission identification. Any emissions found to be within 20dB of the limit are fully investigated and the results are shown in this section. Rohde & Schwarz EMC32, Version 9.15.00 automated test software was used to perform the Radiated Spurious Emissions Pre-Scan testing.
9. The "-" shown in the following RSE tables are used to denote a noise floor measurement.

**Sample Calculations**

**Determining Spurious Emissions Levels**

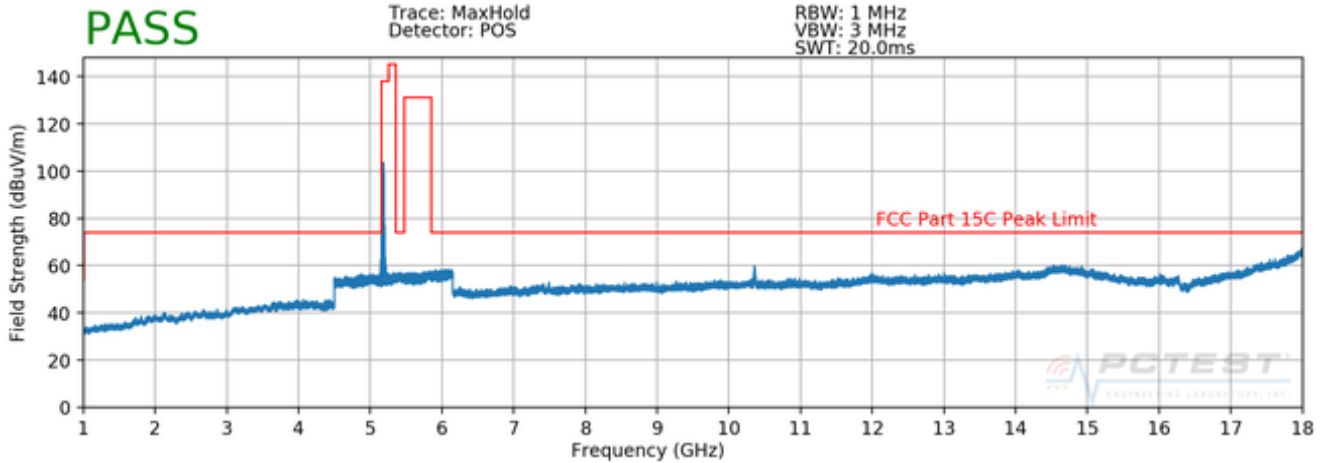
- Field Strength Level [dBµV/m] = Analyzer Level [dBm] + 107 + AFCL [dB/m]
- AFCL [dB/m] = Antenna Factor [dB/m] + Cable Loss [dB]
- Margin [dB] = Field Strength Level [dBµV/m] – Limit [dBµV/m]

**Radiated Band Edge Measurement Offset**

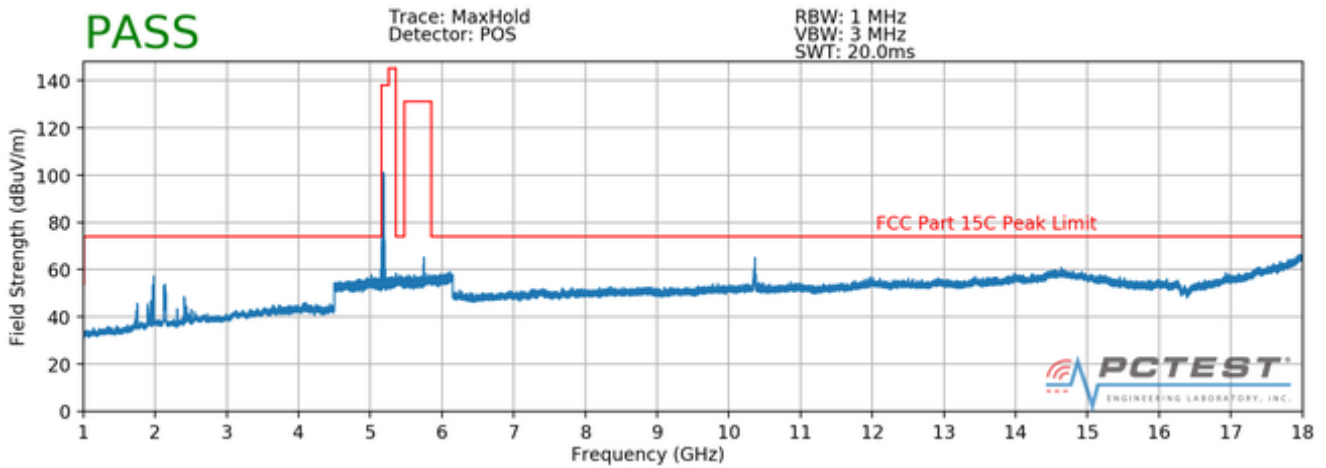
- The amplitude offset shown in the radiated restricted band edge plots in Section 7.7 was calculated using the formula:  
Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

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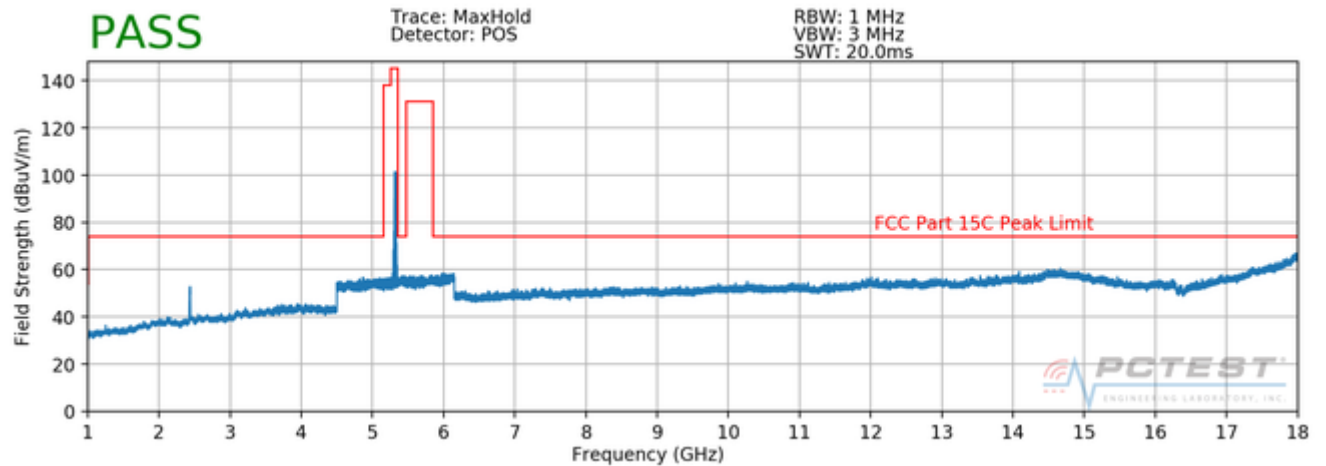
### 7.7.1 Antenna-1 Radiated Spurious Emission Measurements



Plot 7-157. Radiated Spurious Plot above 1GHz (802.11a – U1 Ch. 40, Ant. Pol. H)

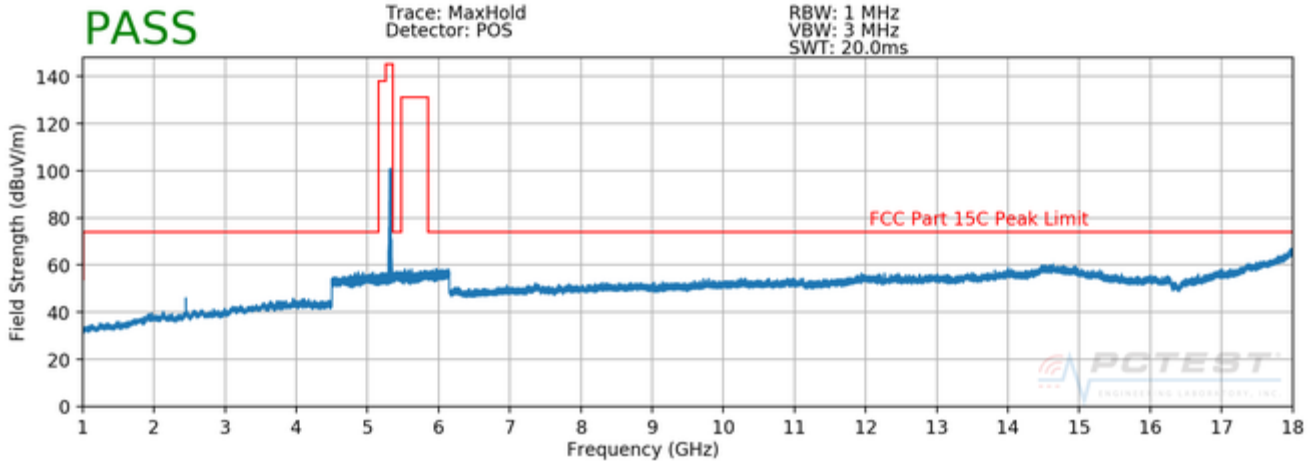


Plot 7-158. Radiated Spurious Plot above 1GHz (802.11a – U1 Ch. 40, Ant. Pol. V)

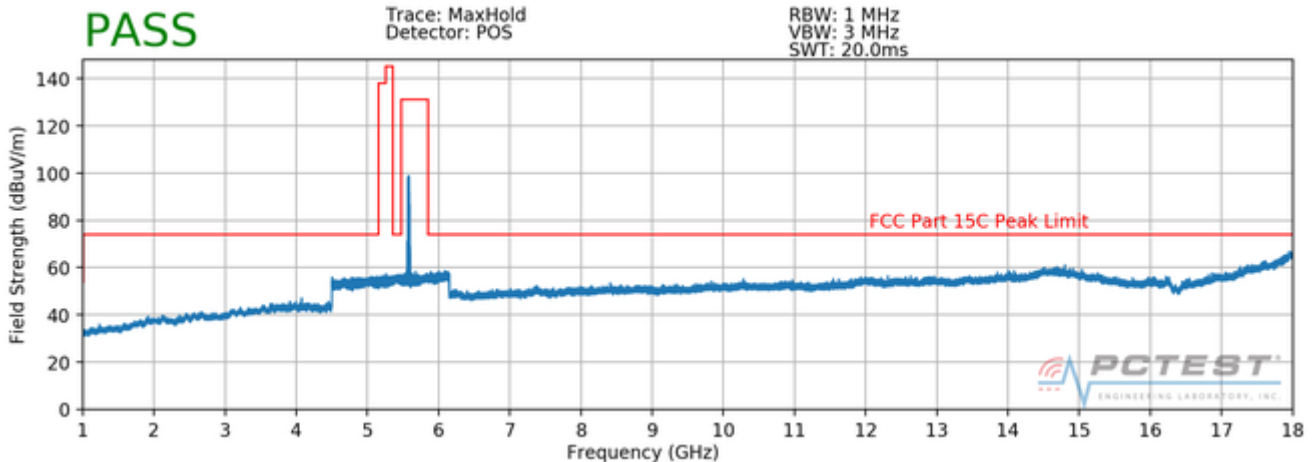


Plot 7-159. Radiated Spurious Plot above 1GHz (802.11a – U2A Ch. 56, Ant. Pol. H)

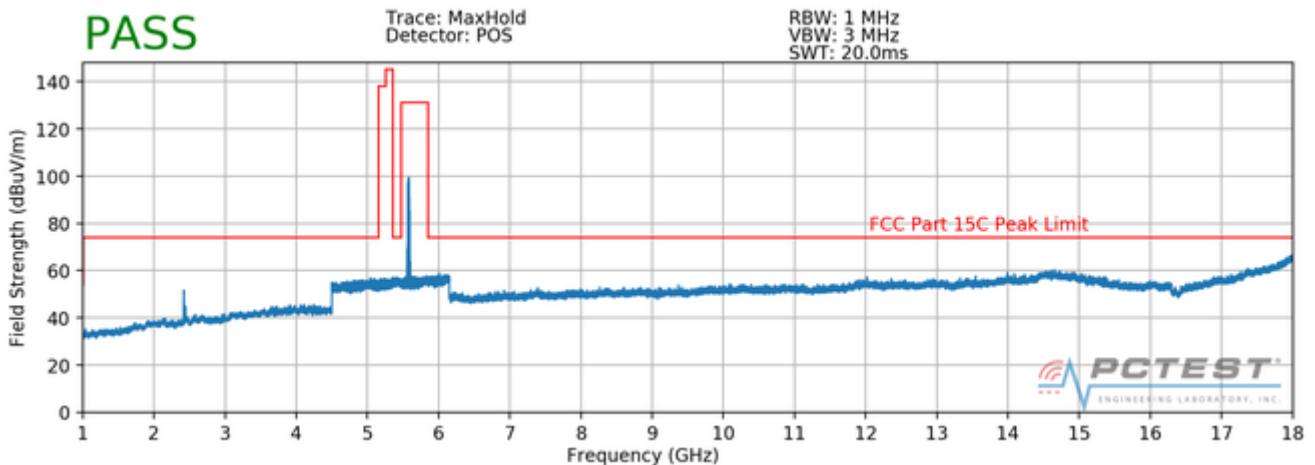
FCC ID: A3LSMG965KOR		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Plot 7-160. Radiated Spurious Plot above 1GHz (802.11a – U2A Ch. 56, Ant. Pol. V)

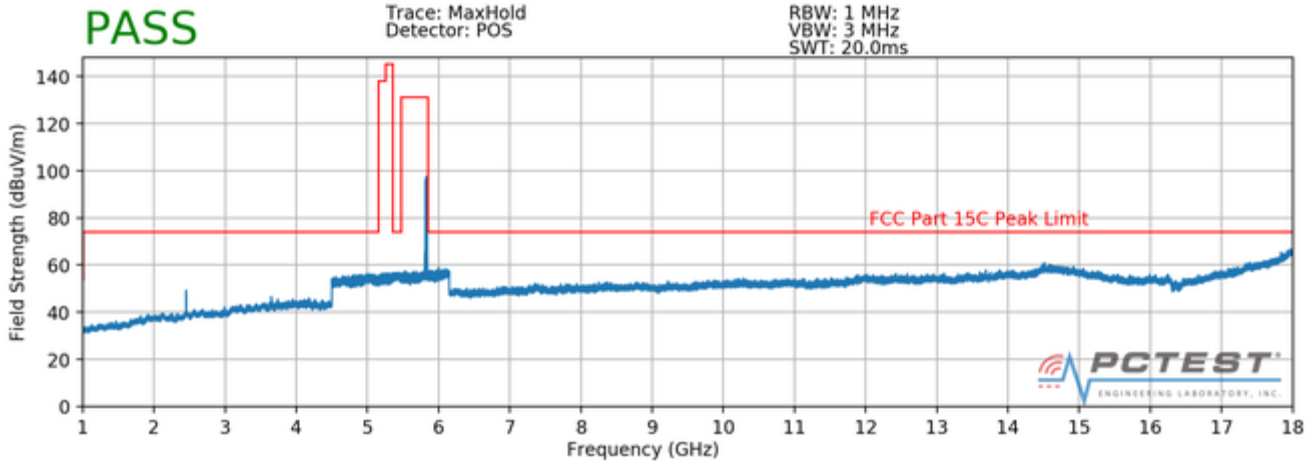


Plot 7-161. Radiated Spurious Plot above 1GHz (802.11a – U2C Ch. 120, Ant. Pol. H)

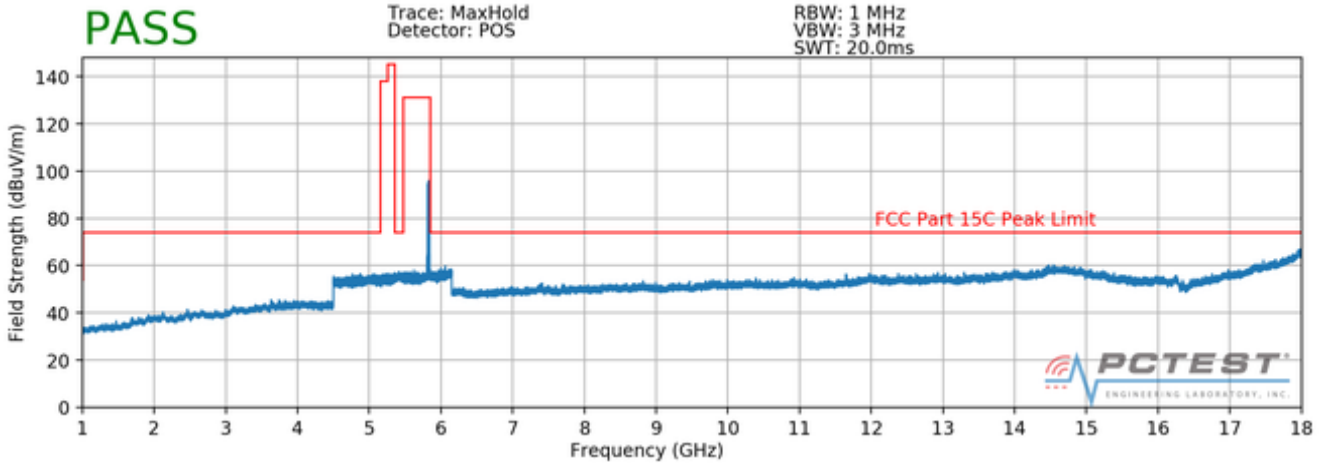


Plot 7-162. Radiated Spurious Plot above 1GHz (802.11a – U2C Ch. 120, Ant. Pol. V)

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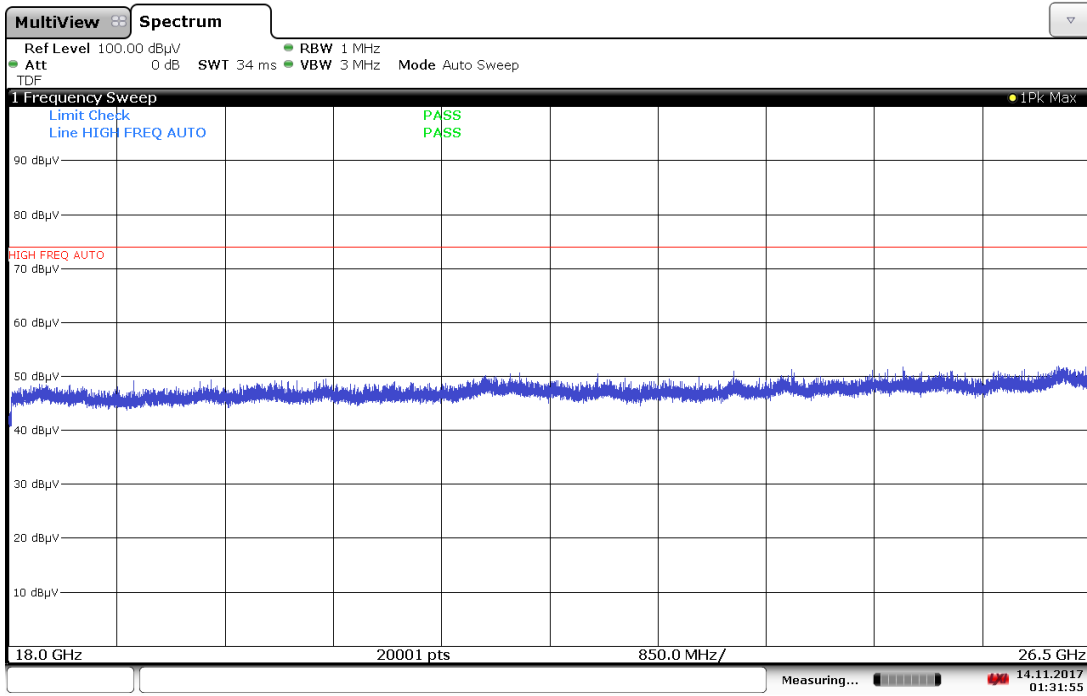
Plot 7-163. Radiated Spurious Plot above 1GHz (802.11a – U3 Ch. 157, Ant. Pol. H)



Plot 7-164. Radiated Spurious Plot above 1GHz (802.11a – U3 Ch. 157, Ant. Pol. V)

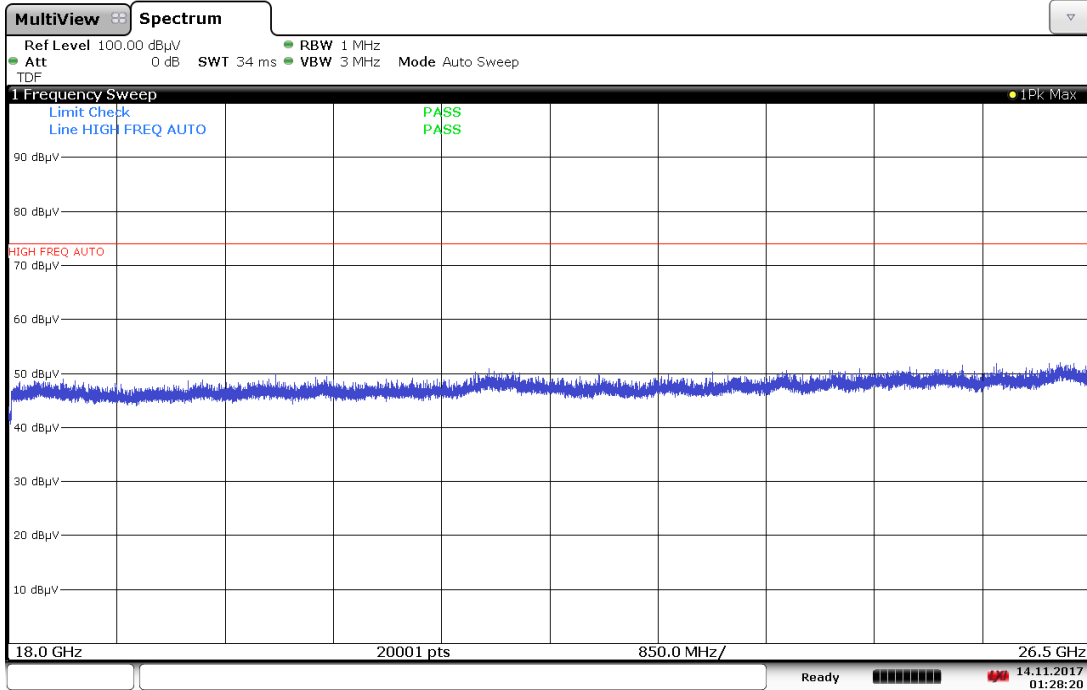
FCC ID: A3LSMG965KOR		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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## Antenna-1 Radiated Spurious Emissions Measurements (Above 18GHz)



01:31:56 14.11.2017

**Plot 7-165. Radiated Spurious Plot 18GHz - 26.5GHz (802.11a – Ant. Pol. H)**

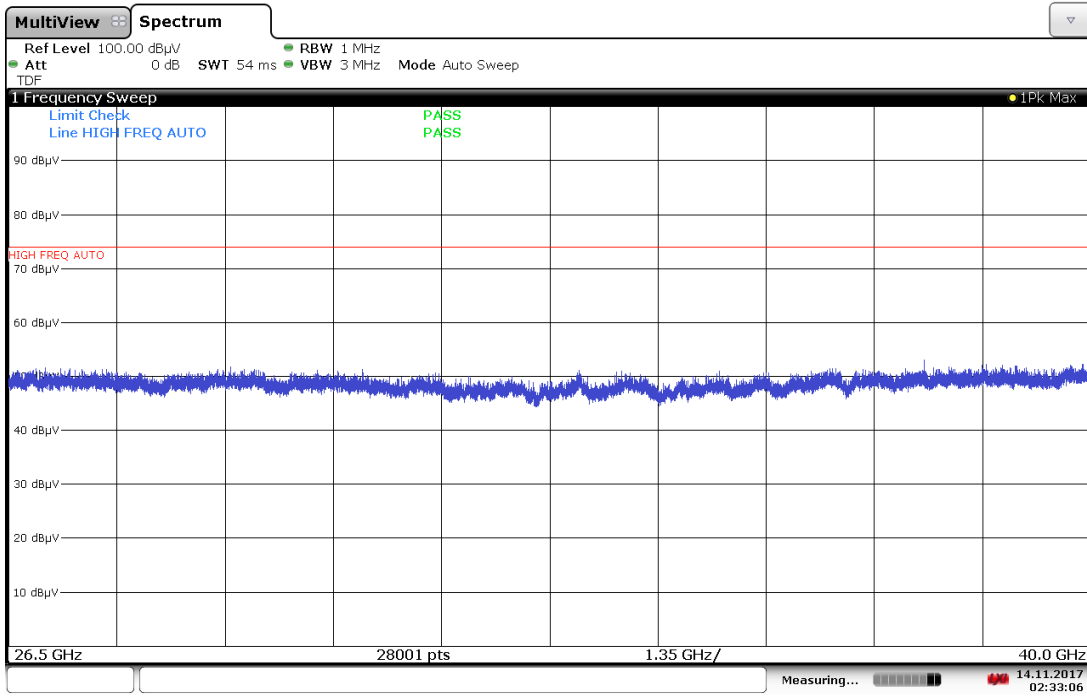


01:28:20 14.11.2017

**Plot 7-166. Radiated Spurious Plot above 18GHz - 26.5GHz (802.11a – Ant. Pol. V)**

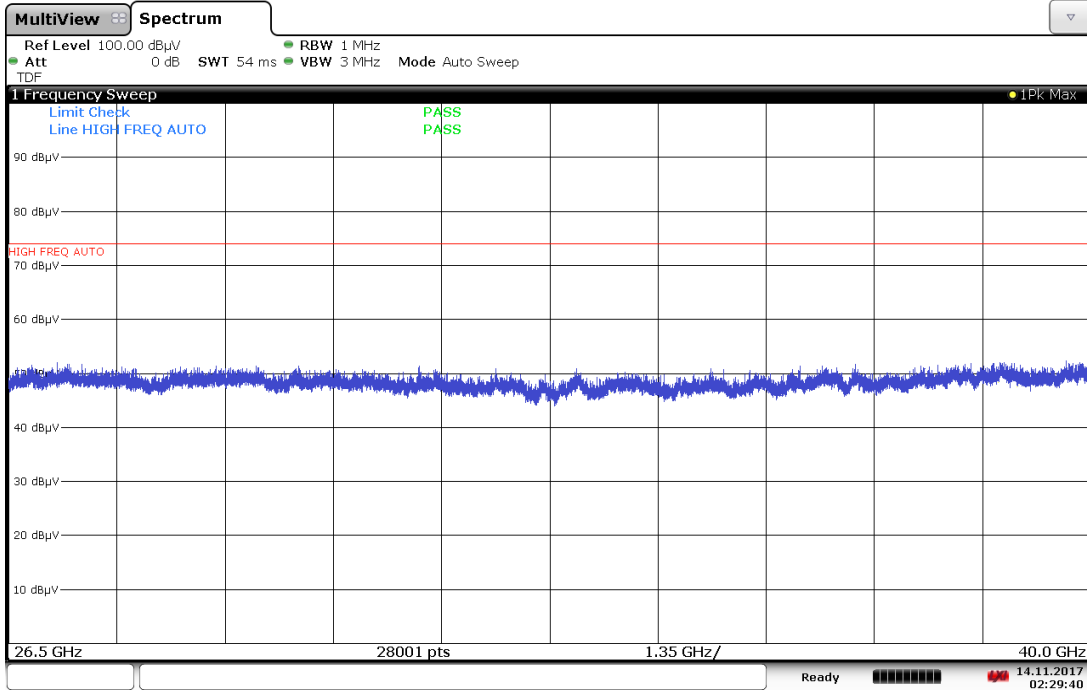
FCC ID: A3LSMG965KOR		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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## Antenna-1 Radiated Spurious Emissions Measurements (Above 18GHz)



02:33:07 14.11.2017

Plot 7-167. Radiated Spurious Plot 26.5GHz - 40GHz (802.11a – Ant. Pol. H)



02:29:40 14.11.2017

Plot 7-168. Radiated Spurious Plot above 26.5GHz - 40GHz (802.11a – Ant. Pol. V)

FCC ID: A3LSMG965KOR		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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## Antenna-1 Radiated Spurious Emission Measurements

§15.247(d) §15.205 & §15.209; RSS-Gen [8.9]

Worst Case Mode: 802.11a  
 Worst Case Transfer Rate: 6Mbps  
 Distance of Measurements: 1 & 3 Meters  
 Operating Frequency: 5180MHz  
 Channel: 36

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
10360.00	Peak	V	104	173	-62.11	13.95	0.00	58.84	68.20	-9.36
* 15540.00	Average	V	114	93	-79.89	16.13	0.00	43.24	53.98	-10.74
* 15540.00	Peak	V	114	93	-66.50	16.13	0.00	56.63	73.98	-17.35
* 20720.00	Average	H	100	267	-70.29	7.94	-9.54	35.11	53.98	-18.87
* 20720.00	Peak	H	100	267	-58.67	7.94	-9.54	46.73	73.98	-27.25
25900.00	Peak	H	-	-	-57.39	8.46	-9.54	48.53	68.20	-19.67

Table 7-29. Radiated Measurements

Worst Case Mode: 802.11a  
 Worst Case Transfer Rate: 6Mbps  
 Distance of Measurements: 1 & 3 Meters  
 Operating Frequency: 5200MHz  
 Channel: 40

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
10400.00	Peak	V	104	168	-62.78	15.30	0.00	59.52	68.20	-8.68
* 15600.00	Average	V	120	90	-80.28	15.91	0.00	42.63	53.98	-11.35
* 15600.00	Peak	V	120	90	-68.64	15.91	0.00	54.27	73.98	-19.71
* 20800.00	Average	H	100	267	-70.79	7.95	-9.54	34.62	53.98	-19.36
* 20800.00	Peak	H	100	267	-60.24	7.95	-9.54	45.17	73.98	-28.81
26000.00	Peak	H	-	-	-57.99	8.60	-9.54	48.07	68.20	-20.13

Table 7-30. Radiated Measurements

FCC ID: A3LSMG965KOR		MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
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Worst Case Mode: 802.11a  
 Worst Case Transfer Rate: 6Mbps  
 Distance of Measurements: 1 & 3 Meters  
 Operating Frequency: 5240MHz  
 Channel: 48

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10480.00	Peak	V	104	175	-63.15	12.66	0.00	56.51	68.20	-11.69
* 15720.00	Average	V	106	82	-79.67	16.42	0.00	43.75	53.98	-10.23
* 15720.00	Peak	V	106	82	-66.39	16.42	0.00	57.03	73.98	-16.95
* 20960.00	Average	H	100	264	-70.77	7.91	-9.54	34.60	53.98	-19.38
* 20960.00	Peak	H	100	264	-60.18	7.91	-9.54	45.19	73.98	-28.79
26200.00	Peak	H	-	-	-57.51	8.62	-9.54	48.57	68.20	-19.63

**Table 7-31. Radiated Measurements**

Worst Case Mode: 802.11a  
 Worst Case Transfer Rate: 6Mbps  
 Distance of Measurements: 1 & 3 Meters  
 Operating Frequency: 5200MHz  
 Channel: 40

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10400.00	Peak	V	104	177	-63.01	15.30	0.00	59.29	68.20	-8.91
* 15600.00	Average	V	104	96	-79.95	15.91	0.00	42.96	53.98	-11.02
* 15600.00	Peak	V	104	96	-67.00	15.91	0.00	55.91	73.98	-18.07
* 20800.00	Average	V	100	255	-71.12	7.95	-9.54	34.29	53.98	-19.69
* 20800.00	Peak	V	100	255	-61.34	7.95	-9.54	44.07	73.98	-29.91
26000.00	Peak	V	-	-	-58.68	8.60	-9.54	47.38	68.20	-20.82

**Table 7-32. Radiated Measurements with WCP**

FCC ID: A3LSMG965KOR			MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Worst Case Mode: 802.11a  
 Worst Case Transfer Rate: 6Mbps  
 Distance of Measurements: 1 & 3 Meters  
 Operating Frequency: 5260MHz  
 Channel: 52

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10520.00	Peak	V	105	166	-62.44	14.73	0.00	59.29	68.20	-8.91
* 15780.00	Average	V	110	91	-79.60	15.69	0.00	43.09	53.98	-10.89
* 15780.00	Peak	V	110	91	-66.83	15.69	0.00	55.86	73.98	-18.12
* 21040.00	Average	H	100	264	-70.21	7.92	-9.54	35.17	53.98	-18.81
* 21040.00	Peak	H	100	264	-58.81	7.92	-9.54	46.57	73.98	-27.41
26300.00	Peak	H	-	-	-55.85	8.73	-9.54	50.34	68.20	-17.86

**Table 7-33. Radiated Measurements**

Worst Case Mode: 802.11a  
 Worst Case Transfer Rate: 6Mbps  
 Distance of Measurements: 1 & 3 Meters  
 Operating Frequency: 5280MHz  
 Channel: 56

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10560.00	Peak	V	104	170	-62.12	13.71	0.00	58.59	68.20	-9.61
* 15840.00	Average	V	117	96	-79.55	15.84	0.00	43.29	53.98	-10.69
* 15840.00	Peak	V	117	96	-66.74	15.84	0.00	56.10	73.98	-17.88
* 21120.00	Average	H	100	282	-70.37	7.96	-9.54	35.05	53.98	-18.93
* 21120.00	Peak	H	100	282	-59.78	7.96	-9.54	45.64	73.98	-28.34
26400.00	Peak	H	-	-	-56.89	8.94	-9.54	49.51	68.20	-18.69

**Table 7-34. Radiated Measurements**

FCC ID: A3LSMG965KOR	 <b>MEASUREMENT REPORT (CERTIFICATION)</b> 		Approved by: Quality Manager
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Worst Case Mode: 802.11a  
 Worst Case Transfer Rate: 6Mbps  
 Distance of Measurements: 1 & 3 Meters  
 Operating Frequency: 5320MHz  
 Channel: 64

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 10640.00	Average	V	104	173	-76.52	13.18	0.00	43.66	53.98	-10.32
* 10640.00	Peak	V	104	173	-61.90	13.18	0.00	58.28	73.98	-15.70
* 15960.00	Average	V	114	93	-79.67	16.72	0.00	44.05	53.98	-9.93
* 15960.00	Peak	V	114	93	-66.62	16.72	0.00	57.10	73.98	-16.88
* 21280.00	Average	H	-	-	-70.19	8.04	-9.54	35.31	53.98	-18.67
* 21280.00	Peak	H	-	-	-58.76	8.04	-9.54	46.74	73.98	-27.24
26600.00	Peak	H	-	-	-59.43	-8.30	-9.54	29.72	68.20	-38.48

**Table 7-35. Radiated Measurements**

Worst Case Mode: 802.11a  
 Worst Case Transfer Rate: 6Mbps  
 Distance of Measurements: 1 & 3 Meters  
 Operating Frequency: 5260MHz  
 Channel: 52

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10520.00	Peak	V	106	177	-63.62	14.73	0.00	58.11	68.20	-10.09
* 15780.00	Average	V	109	90	-79.33	15.69	0.00	43.36	53.98	-10.62
* 15780.00	Peak	V	109	90	-66.80	15.69	0.00	55.89	73.98	-18.09
* 21040.00	Average	V	100	249	-70.48	7.92	0.00	44.44	53.98	-9.54
* 21040.00	Peak	V	100	249	-59.38	7.92	-9.54	46.00	73.98	-27.98
26300.00	Peak	V	-	-	-57.15	8.73	-9.54	49.04	68.20	-19.16

**Table 7-36. Radiated Measurements with WCP**

FCC ID: A3LSMG965KOR		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Worst Case Mode: 802.11a  
 Worst Case Transfer Rate: 6Mbps  
 Distance of Measurements: 1 & 3 Meters  
 Operating Frequency: 5500MHz  
 Channel: 100

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11000.00	Average	V	104	219	-72.21	13.09	0.00	47.88	53.98	-6.10
* 11000.00	Peak	V	104	219	-56.80	13.09	0.00	63.29	73.98	-10.69
16500.00	Peak	V	-	-	-68.22	15.73	0.00	54.51	68.20	-13.69
22000.00	Peak	H	-	-	-58.46	8.43	-9.54	47.42	68.20	-20.78
27500.00	Peak	H	-	-	-48.09	-8.80	-9.54	40.57	68.20	-27.63

**Table 7-37. Radiated Measurements**

Worst Case Mode: 802.11a  
 Worst Case Transfer Rate: 6Mbps  
 Distance of Measurements: 1 & 3 Meters  
 Operating Frequency: 5600MHz  
 Channel: 120

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11200.00	Average	V	104	233	-72.12	13.92	0.00	48.80	53.98	-5.18
* 11200.00	Peak	V	104	233	-55.92	13.92	0.00	65.00	73.98	-8.98
16800.00	Peak	V	-	-	-68.54	16.88	0.00	55.34	68.20	-12.86
* 22400.00	Average	H	-	-	-70.03	8.08	-9.54	35.51	53.98	-18.47
* 22400.00	Peak	H	-	-	-58.73	8.08	-9.54	46.81	73.98	-27.17
28000.00	Peak	H	-	-	-48.72	-9.08	-9.54	39.66	68.20	-28.54

**Table 7-38. Radiated Measurements**

FCC ID: A3LSMG965KOR		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Worst Case Mode: 802.11a  
Worst Case Transfer Rate: 6Mbps  
Distance of Measurements: 1 & 3 Meters  
Operating Frequency: 5720MHz  
Channel: 144

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11440.00	Average	V	104	203	-71.96	14.79	0.00	49.83	53.98	-4.15
* 11440.00	Peak	V	104	203	-56.15	14.79	0.00	65.64	73.98	-8.34
17160.00	Peak	V	-	-	-69.32	18.13	0.00	55.81	68.20	-12.39
* 22880.00	Average	H	-	-	-70.17	8.37	-9.54	35.66	53.98	-18.32
* 22880.00	Peak	H	-	-	-59.65	8.37	-9.54	46.18	73.98	-27.80
28600.00	Peak	H	-	-	-48.82	-8.95	-9.54	39.69	68.20	-28.51

**Table 7-39. Radiated Measurements**

Worst Case Mode: 802.11a  
Worst Case Transfer Rate: 6Mbps  
Distance of Measurements: 1 & 3 Meters  
Operating Frequency: 5720MHz  
Channel: 144

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11440.00	Average	V	104	217	-72.15	14.79	0.00	49.64	53.98	-4.34
* 11440.00	Peak	V	104	217	-56.56	14.79	0.00	65.23	73.98	-8.75
17160.00	Peak	V	-	-	-70.12	18.13	0.00	55.01	68.20	-13.19
* 22880.00	Average	V	-	-	-71.32	8.37	-9.54	34.51	53.98	-19.47
* 22880.00	Peak	V	-	-	-59.84	8.37	-9.54	45.99	73.98	-27.99
28600.00	Peak	V	-	-	-49.15	-8.95	-9.54	39.36	68.20	-28.84

**Table 7-40. Radiated Measurements with WCP**

FCC ID: A3LSMG965KOR		MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
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Worst Case Mode: 802.11a  
 Worst Case Transfer Rate: 6Mbps  
 Distance of Measurements: 1 & 3 Meters  
 Operating Frequency: 5745MHz  
 Channel: 149

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11490.00	Average	V	113	184	-71.87	13.85	0.00	48.98	53.98	-5.00
* 11490.00	Peak	V	113	184	-59.64	13.85	0.00	61.21	73.98	-12.77
17235.00	Peak	V	-	-	-68.17	20.24	0.00	59.07	68.20	-9.13
* 22980.00	Average	V	-	-	-71.19	8.16	-9.54	34.43	53.98	-19.55
* 22980.00	Peak	V	-	-	-60.59	8.16	-9.54	45.03	73.98	-28.95
28725.00	Peak	V	-	-	-47.57	-9.24	-9.54	40.65	68.20	-27.55

**Table 7-41. Radiated Measurements**

Worst Case Mode: 802.11a  
 Worst Case Transfer Rate: 6Mbps  
 Distance of Measurements: 1 & 3 Meters  
 Operating Frequency: 5785MHz  
 Channel: 157

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11570.00	Average	V	104	200	-72.37	14.70	0.00	49.33	53.98	-4.65
* 11570.00	Peak	V	104	200	-58.85	14.70	0.00	62.85	73.98	-11.13
17355.00	Peak	V	-	-	-68.44	23.37	0.00	61.93	68.20	-6.27
23140.00	Peak	V	-	-	-59.98	8.37	-9.54	45.85	68.20	-22.35
28925.00	Peak	V	-	-	-47.98	-9.65	-9.54	39.83	68.20	-28.37

**Table 7-42. Radiated Measurements**

FCC ID: A3LSMG965KOR		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Worst Case Mode: 802.11a  
Worst Case Transfer Rate: 6Mbps  
Distance of Measurements: 1 & 3 Meters  
Operating Frequency: 5825MHz  
Channel: 165

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11650.00	Average	V	104	225	-72.22	16.07	0.00	50.85	53.98	-3.13
* 11650.00	Peak	V	104	225	-58.14	16.07	0.00	64.93	73.98	-9.05
17475.00	Peak	V	-	-	-68.68	22.25	0.00	60.57	68.20	-7.63
23300.00	Peak	V	-	-	-59.51	8.50	-9.54	46.44	68.20	-21.76
29125.00	Peak	V	-	-	-47.62	-9.87	-9.54	39.97	68.20	-28.23

**Table 7-43. Radiated Measurements**

Worst Case Mode: 802.11a  
Worst Case Transfer Rate: 6Mbps  
Distance of Measurements: 1 & 3 Meters  
Operating Frequency: 5825MHz  
Channel: 165

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11650.00	Average	V	122	205	-72.97	16.07	0.00	50.10	53.98	-3.88
* 11650.00	Peak	V	122	205	-58.34	16.07	0.00	64.73	73.98	-9.25
17475.00	Peak	V	-	-	-68.13	22.25	0.00	61.12	68.20	-7.08
23300.00	Peak	V	-	-	-60.12	8.50	-9.54	45.83	68.20	-22.37
29125.00	Peak	V	-	-	-48.20	-9.87	-9.54	39.39	68.20	-28.81

**Table 7-44. Radiated Measurements with WCP**

FCC ID: A3LSMG965KOR			MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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