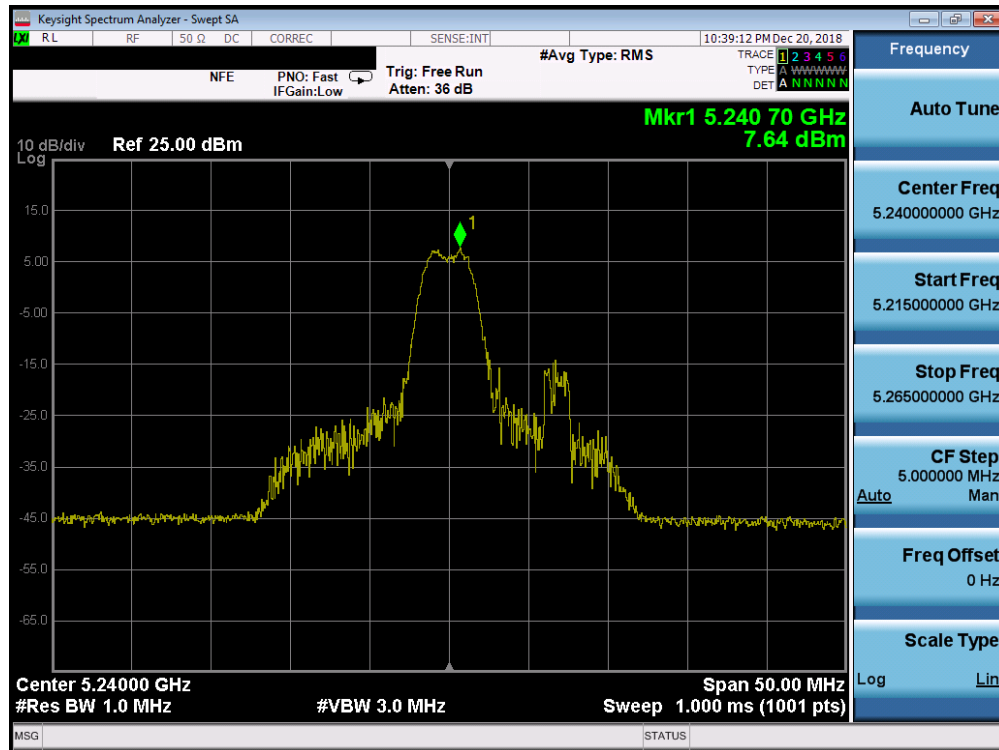
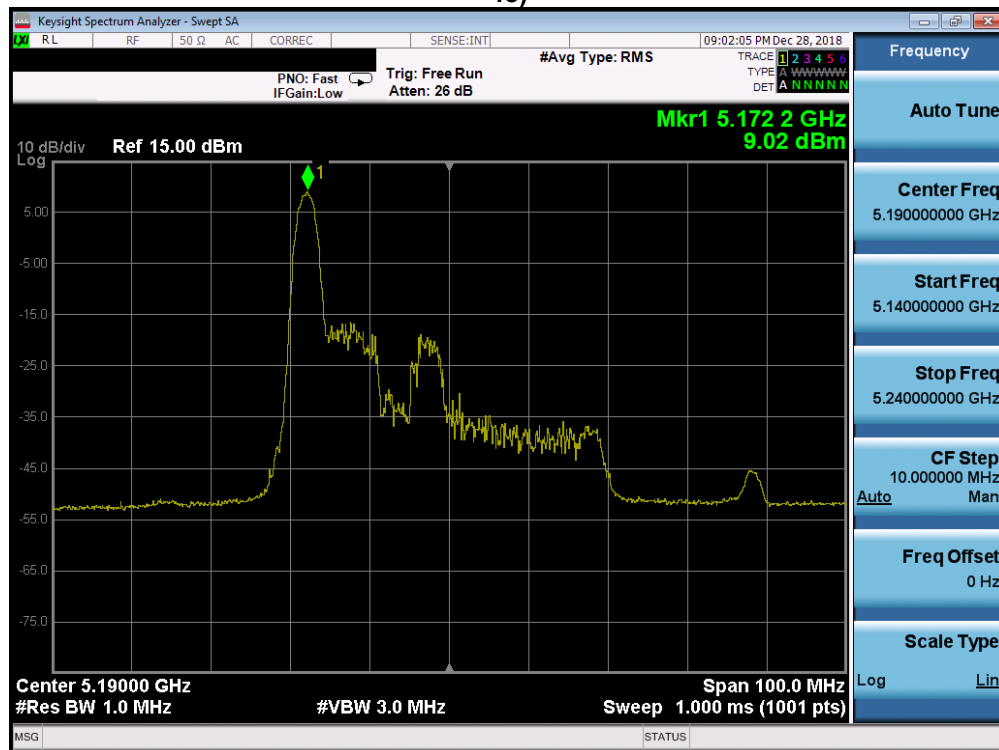


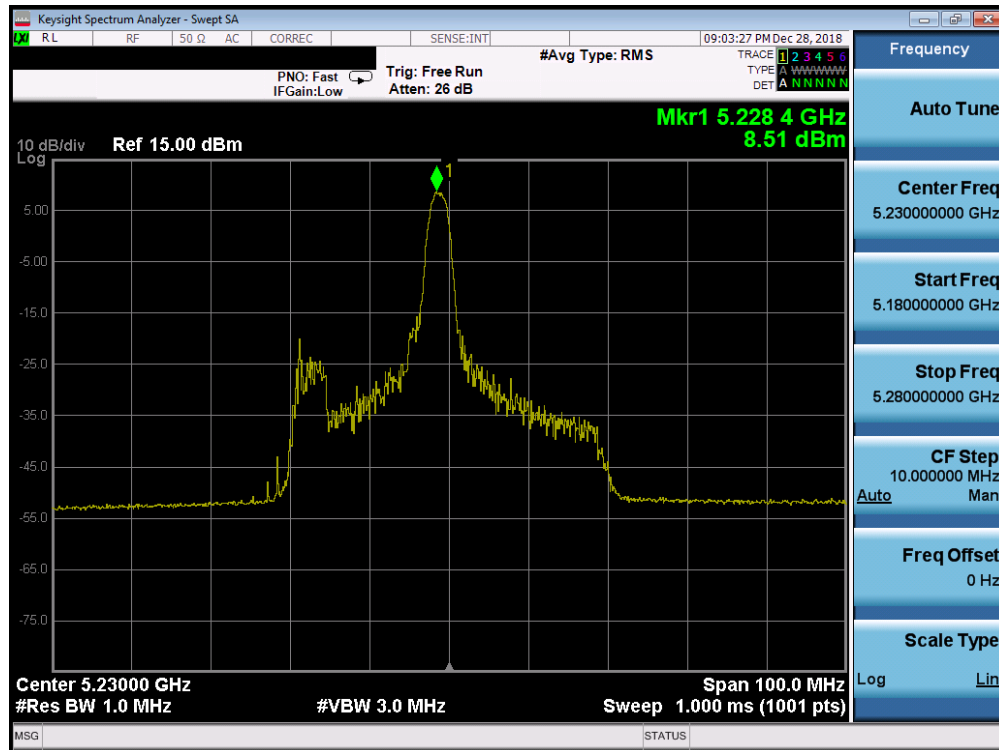


Plot 7-111. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 48)

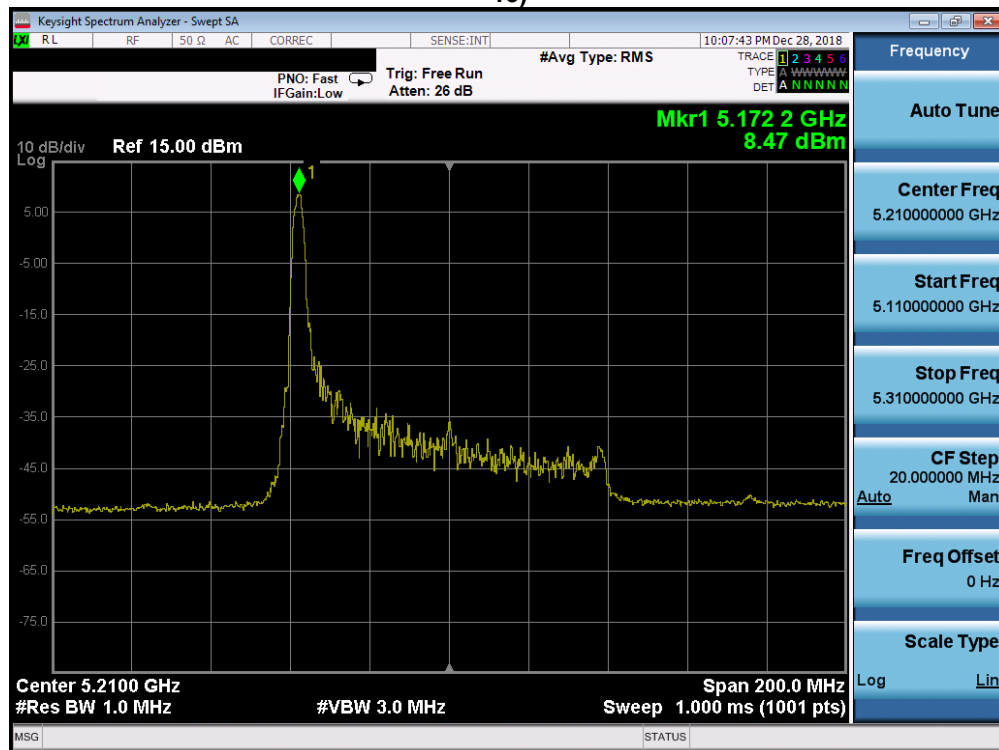


Plot 7-112. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 38)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 108 of 519

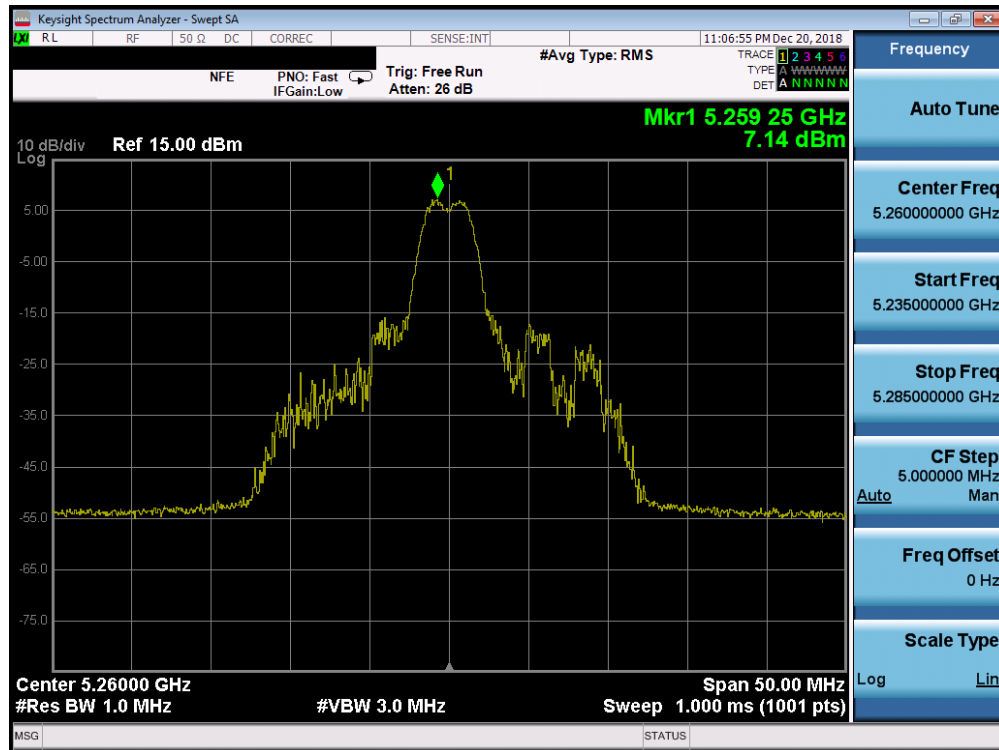


Plot 7-113. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 46)

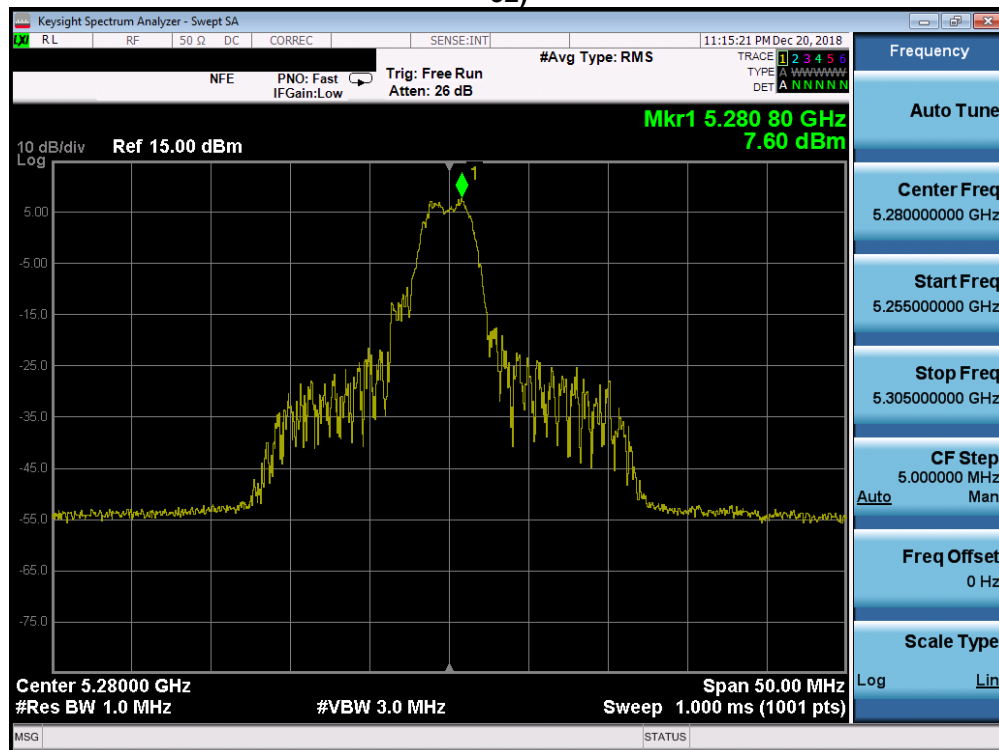


Plot 7-114. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 42)

FCC ID: A3LSMG9700			MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset	Page 109 of 519		

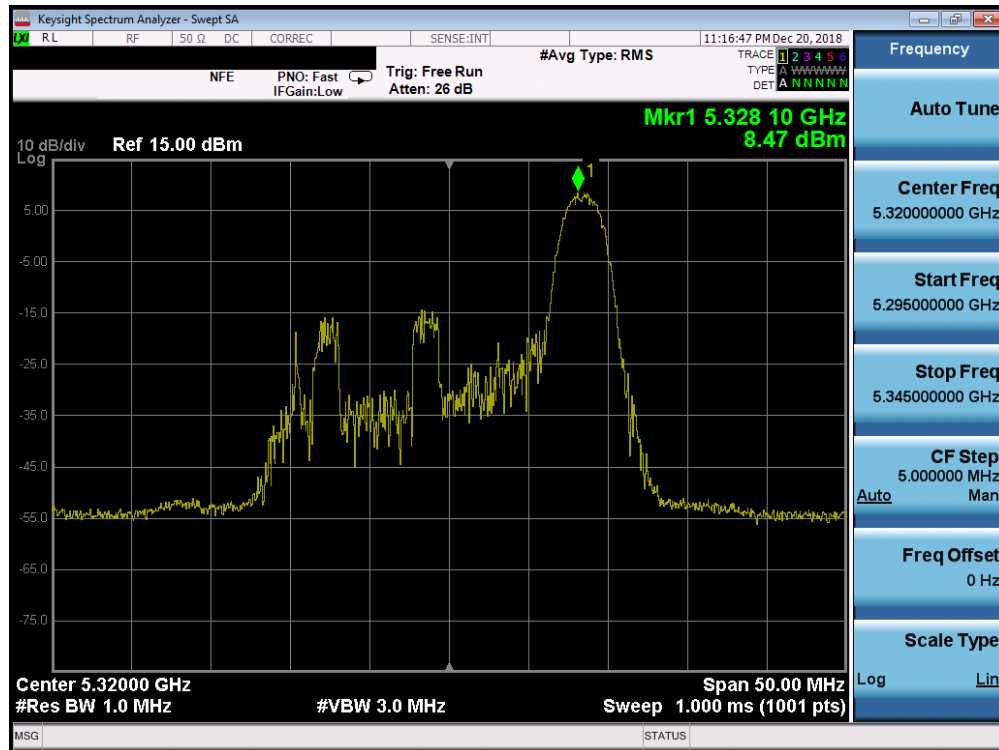


Plot 7-115. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 52)

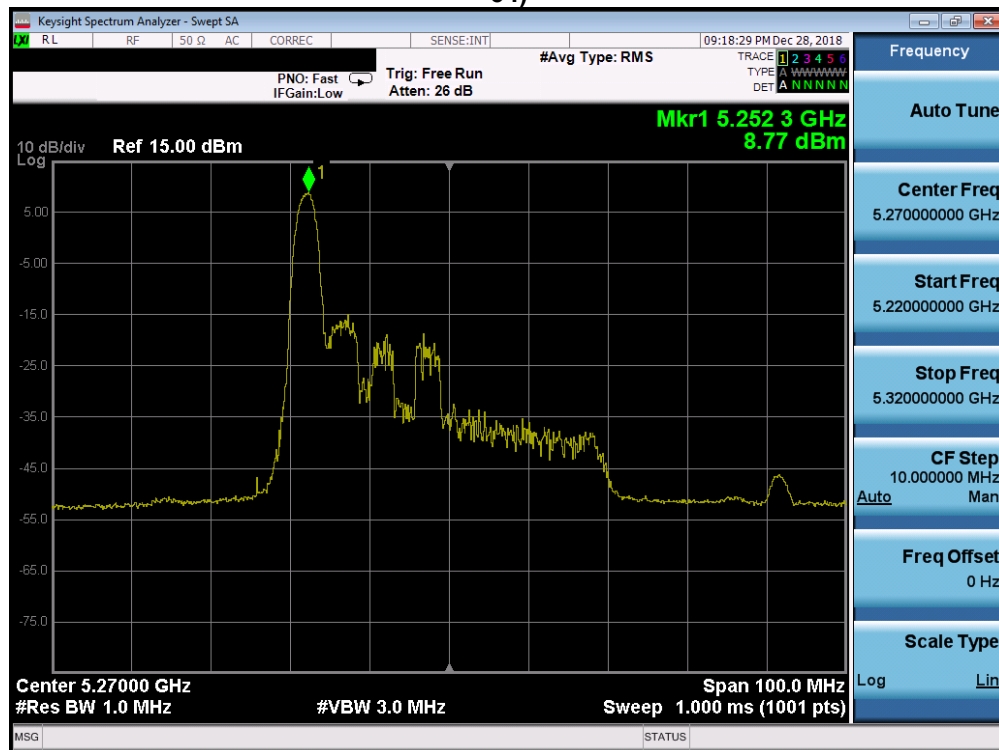


Plot 7-116. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 56)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 110 of 519

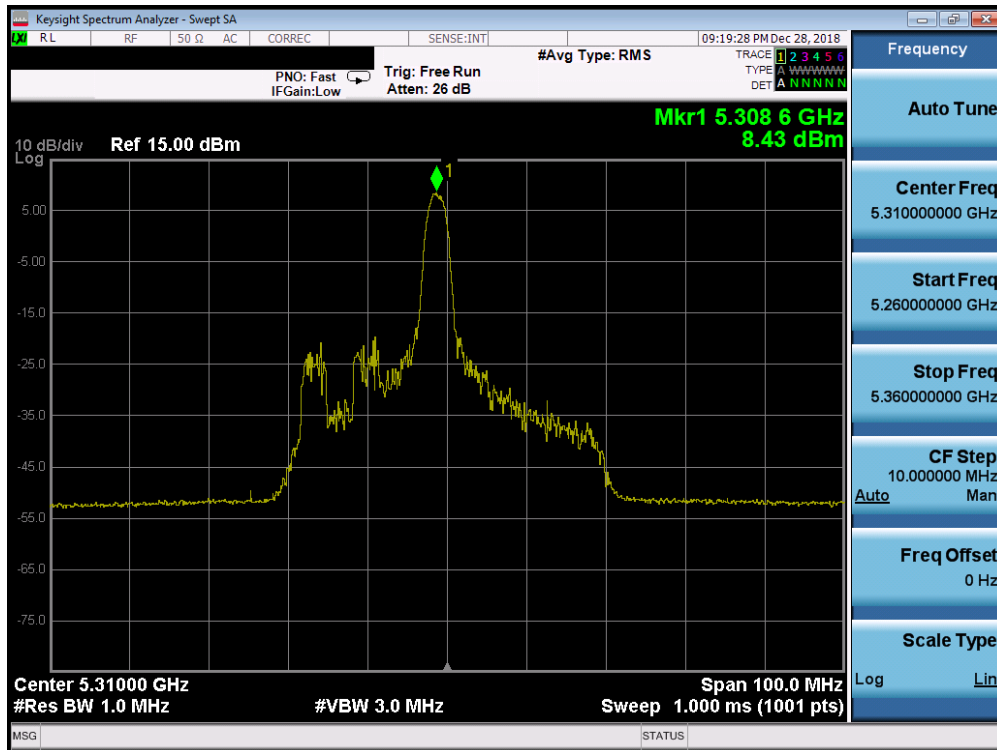


Plot 7-117. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 64)

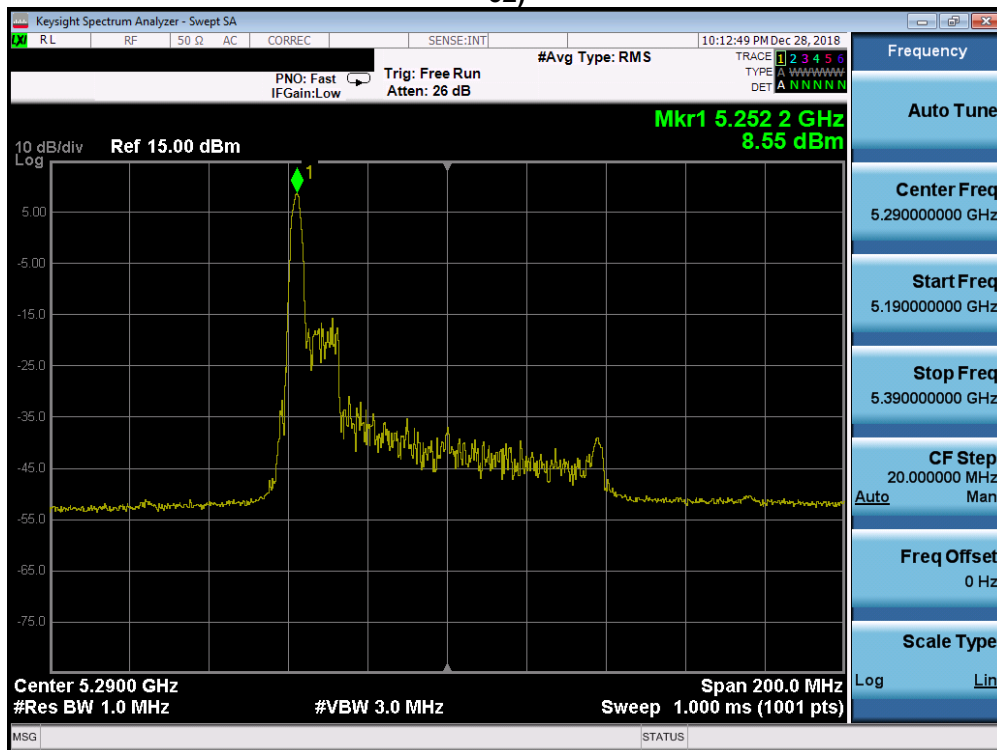


Plot 7-118. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 54)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 111 of 519

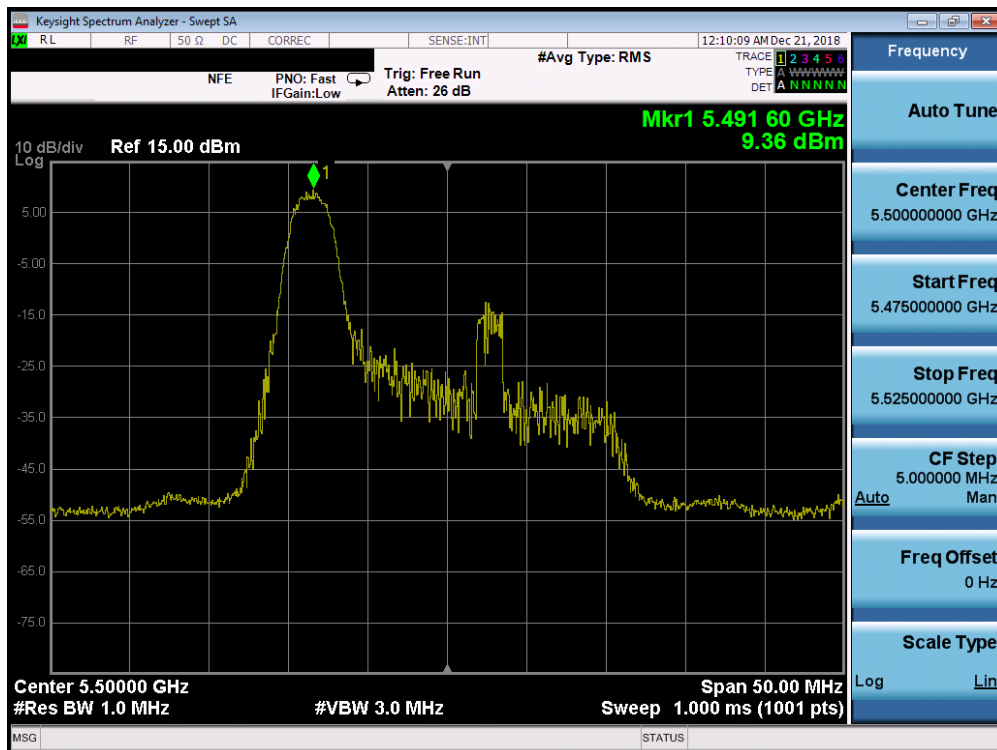


Plot 7-119. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 62)

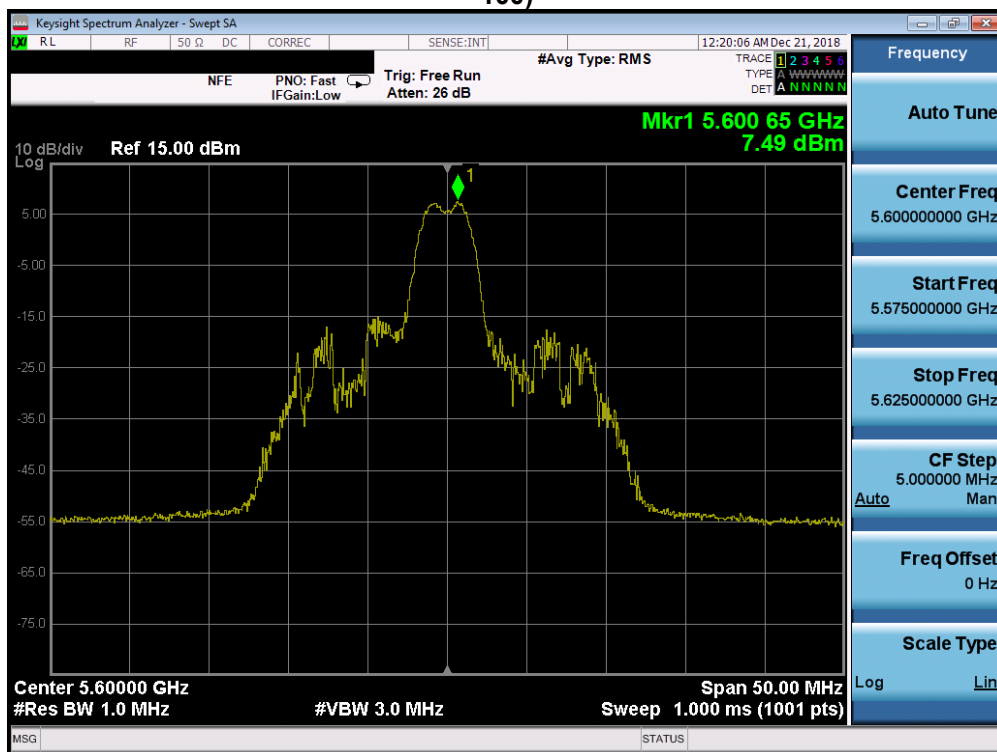


Plot 7-120. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 58)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 112 of 519

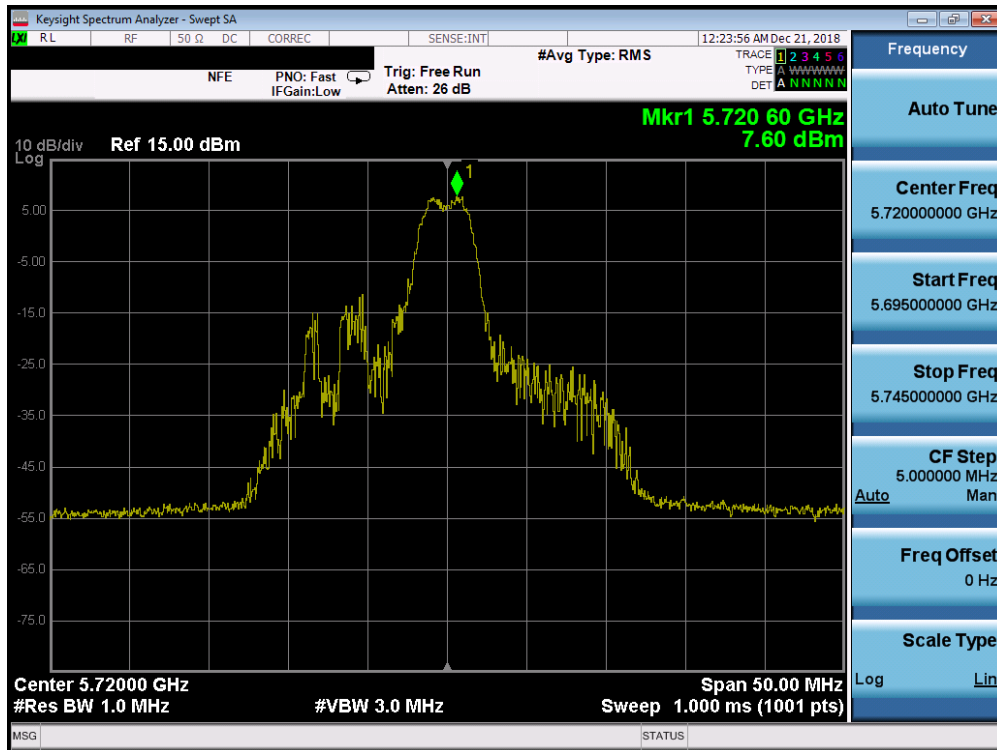


Plot 7-121. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 100)

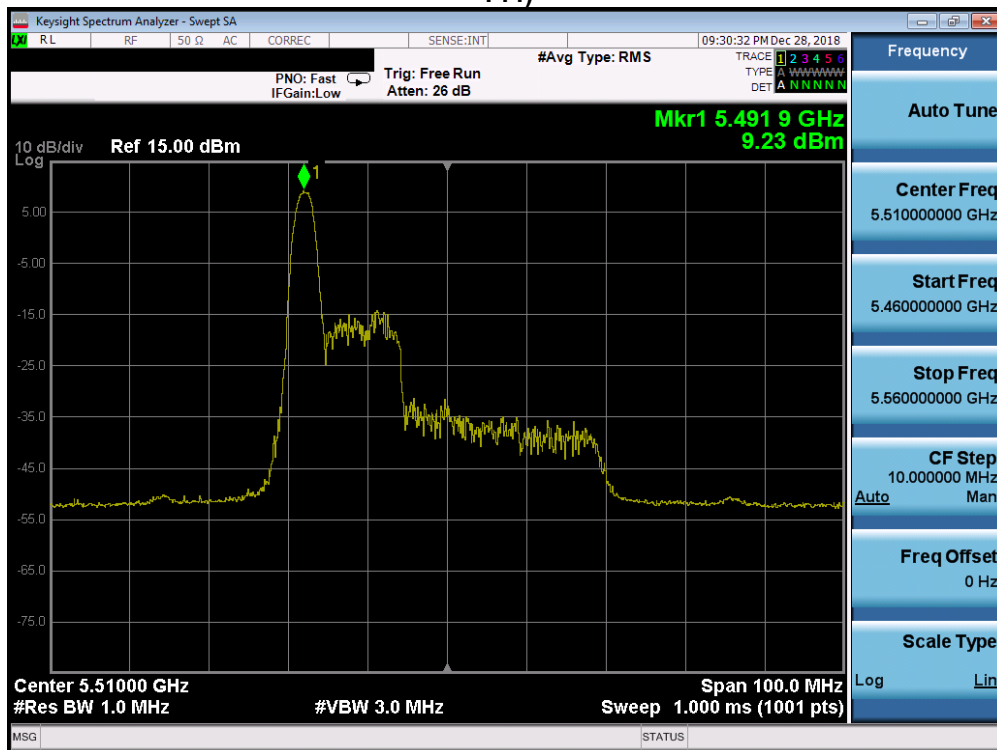


Plot 7-122. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 120)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 113 of 519

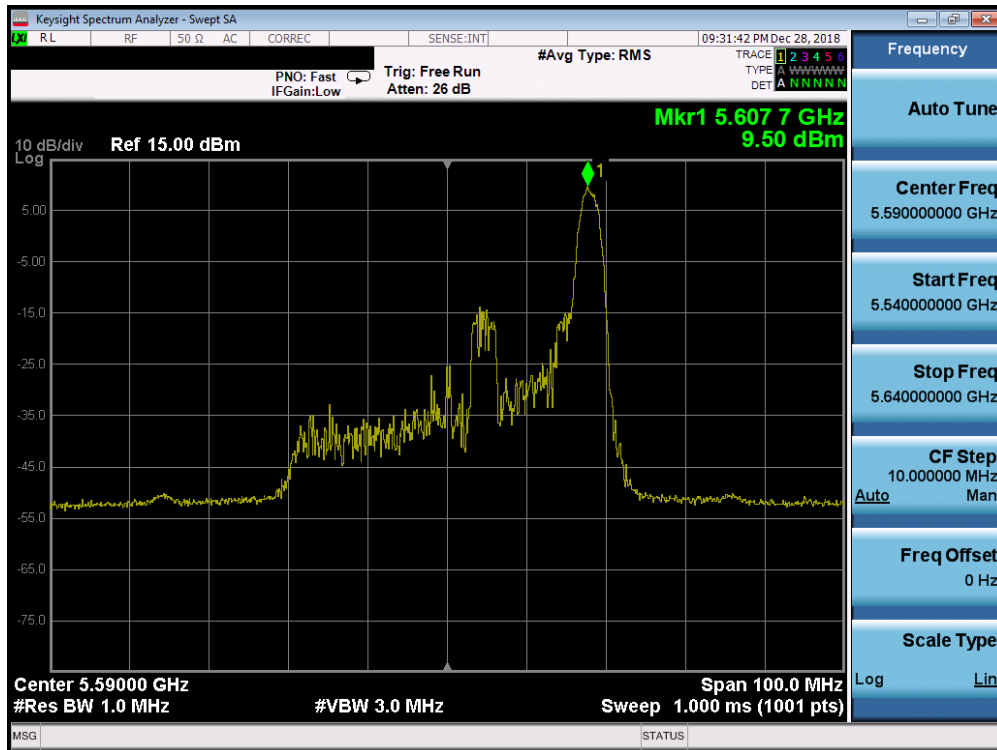


Plot 7-123. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 144)

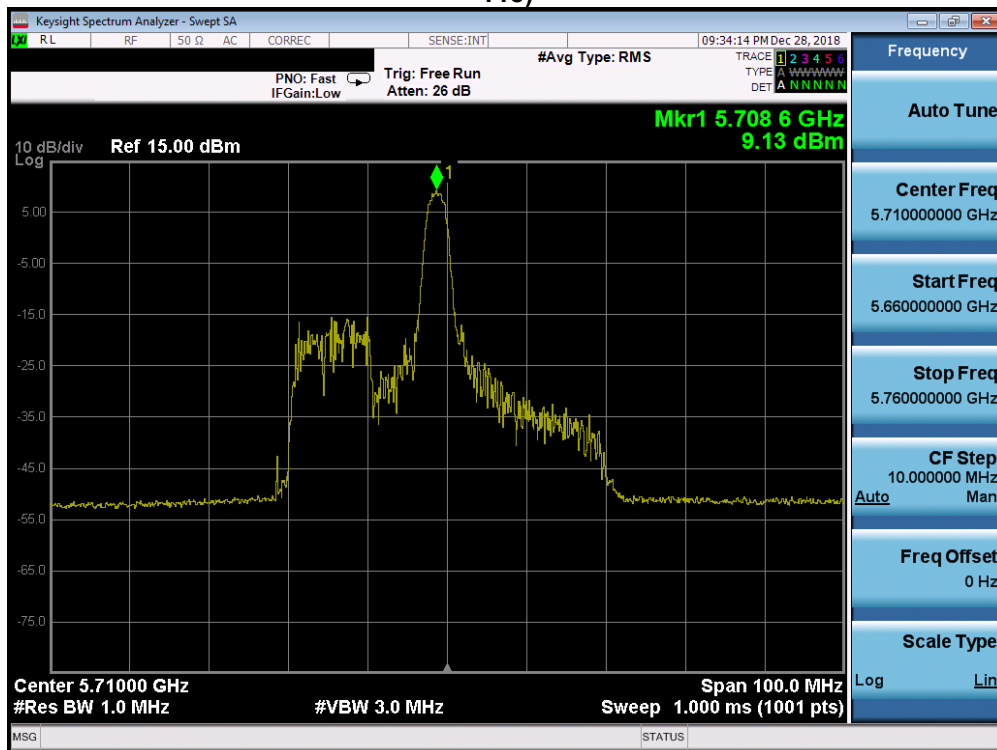


Plot 7-124. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 102)

FCC ID: A3LSMG9700			MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 114 of 519	

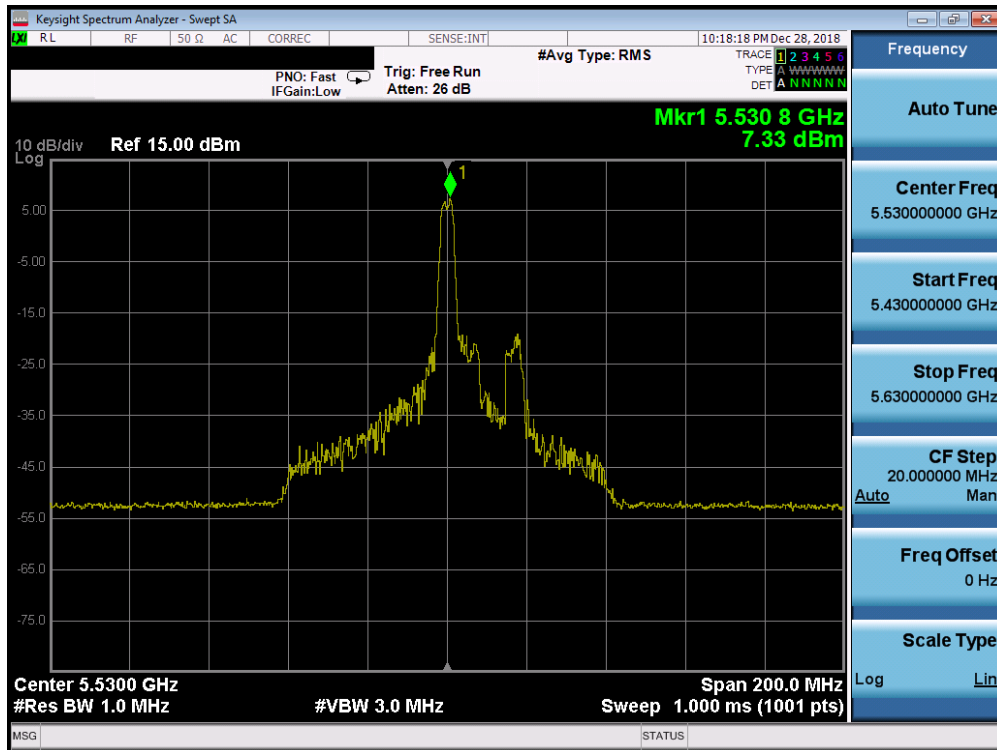


Plot 7-125. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 118)

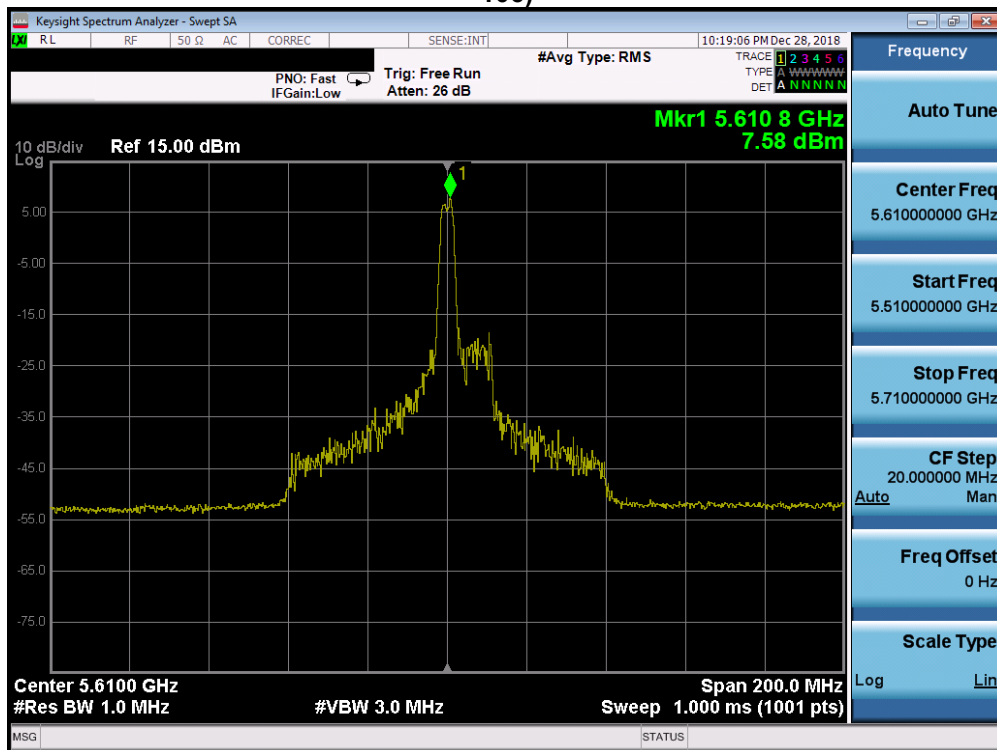


Plot 7-126. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 142)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 115 of 519



Plot 7-127. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 106)



Plot 7-128. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 122)

FCC ID: A3LSMG9700	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset	Page 116 of 519

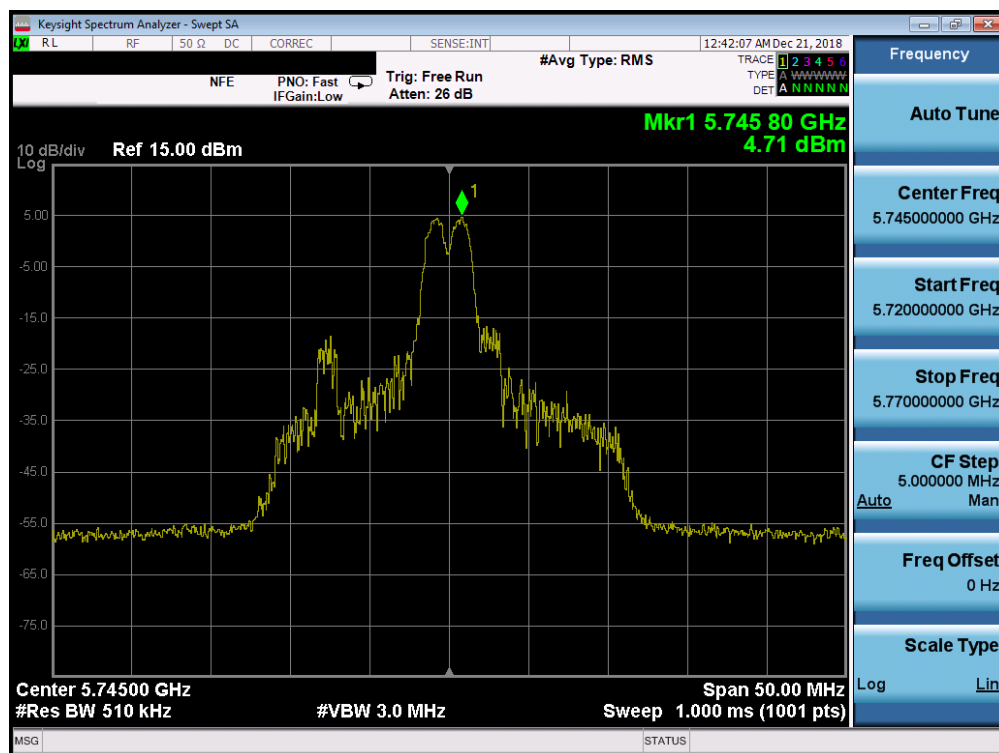


Plot 7-129. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 138)

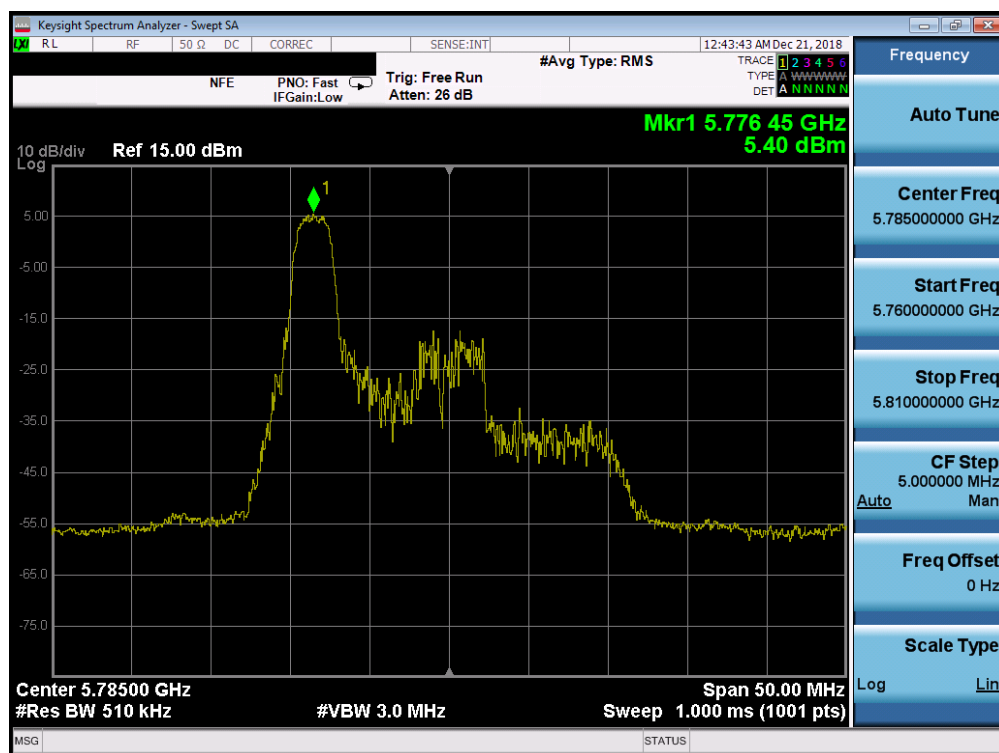
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
Band 3	5745	149	ax (20MHz)	26T	MCS0	4.71	30.00	-25.29
	5785	157	ax (20MHz)	26T	MCS0	5.40	30.00	-24.60
	5825	165	ax (20MHz)	26T	MCS0	4.43	30.00	-25.57
	5755	151	ax (40MHz)	26T	MCS0	6.31	30.00	-23.69
	5795	159	ax (40MHz)	26T	MCS0	5.99	30.00	-24.01
	5775	155	ax (80MHz)	26T	MCS0	9.40	30.00	-20.60

Table 7-65. Band 3 Conducted Power Spectral Density Measurements SISO ANT1 (26 Tones)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 117 of 519

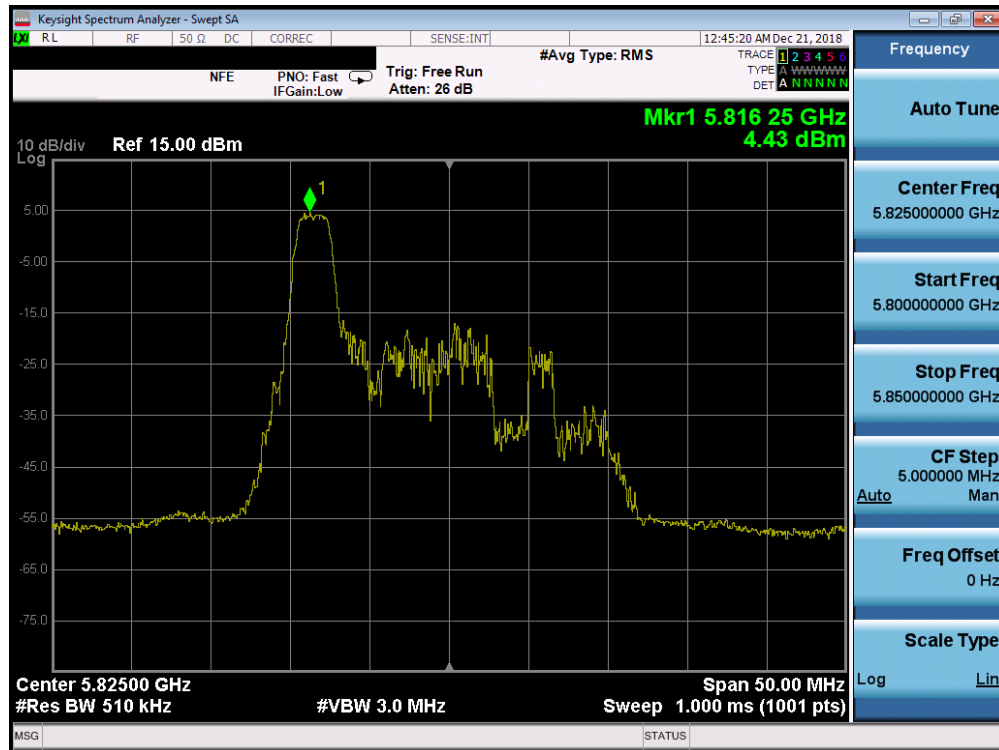


Plot 7-130. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 149)

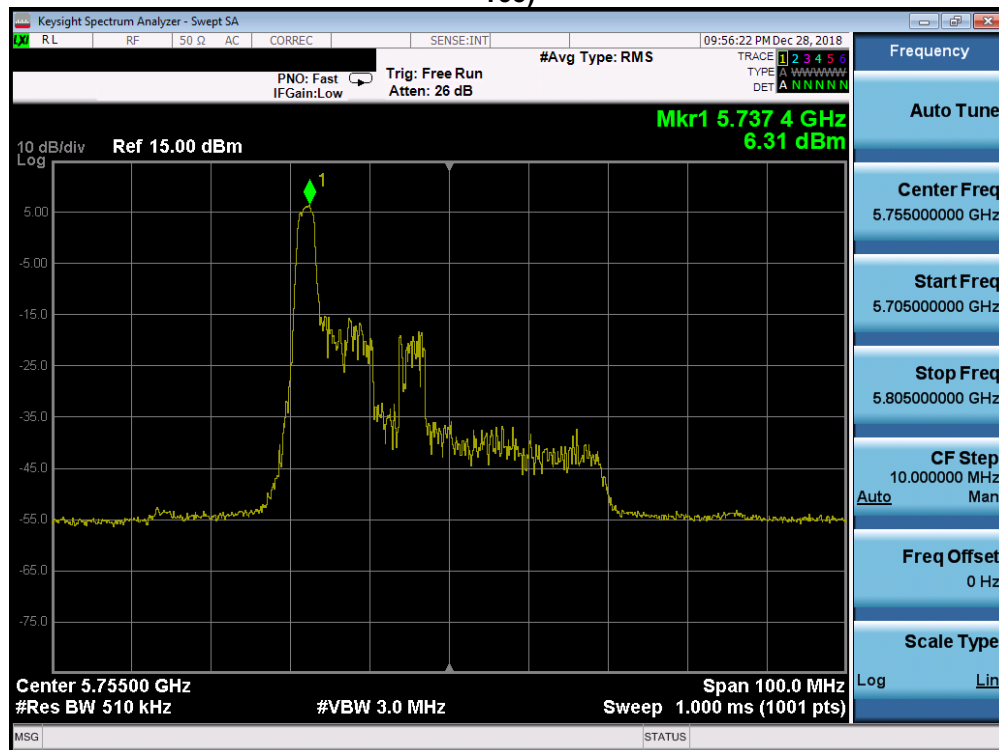


Plot 7-131. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 157)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 118 of 519

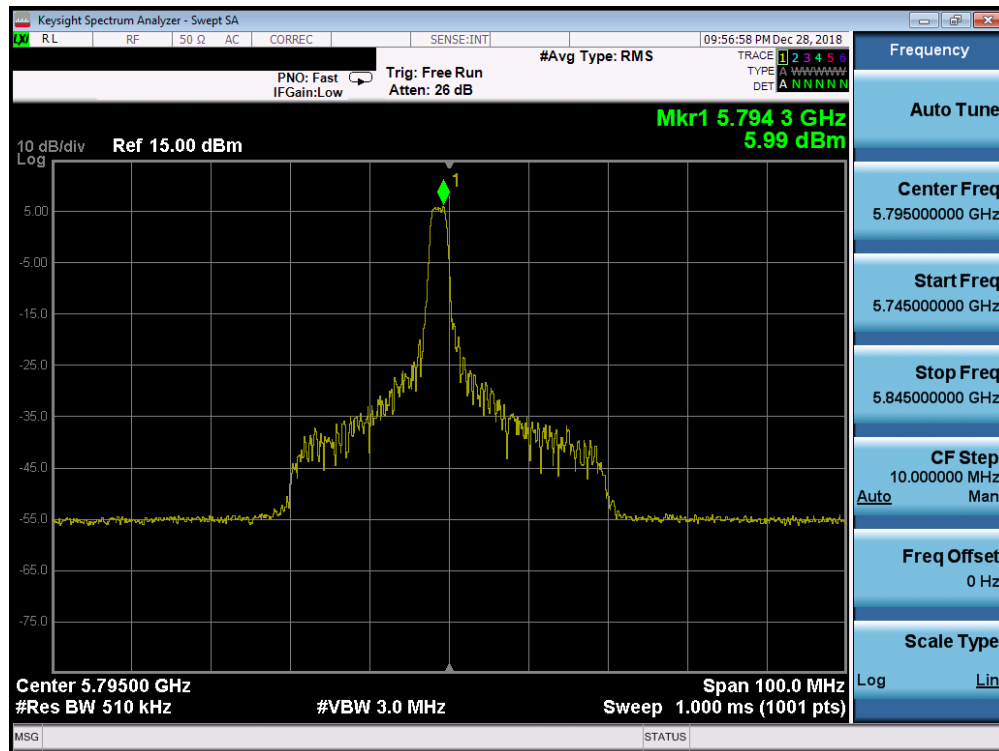


Plot 7-132. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 165)

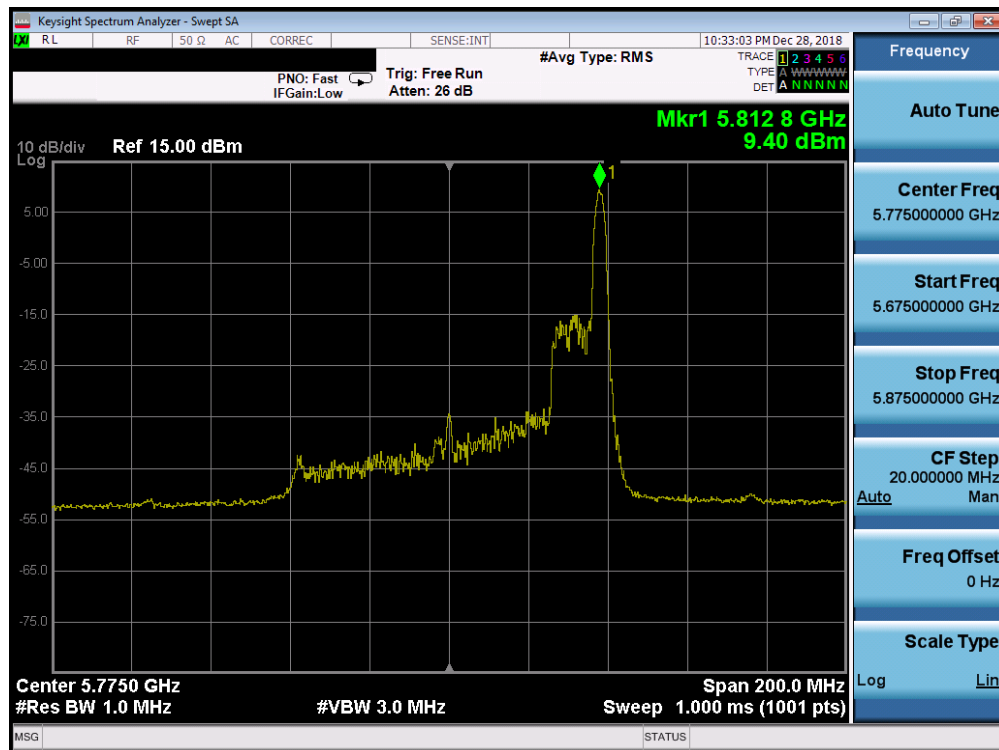


Plot 7-133. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 151)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 119 of 519



Plot 7-134. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 159)



Plot 7-135. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 155)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 120 of 519

SISO Antenna-1 Power Spectral Density Measurements (52 Tones)

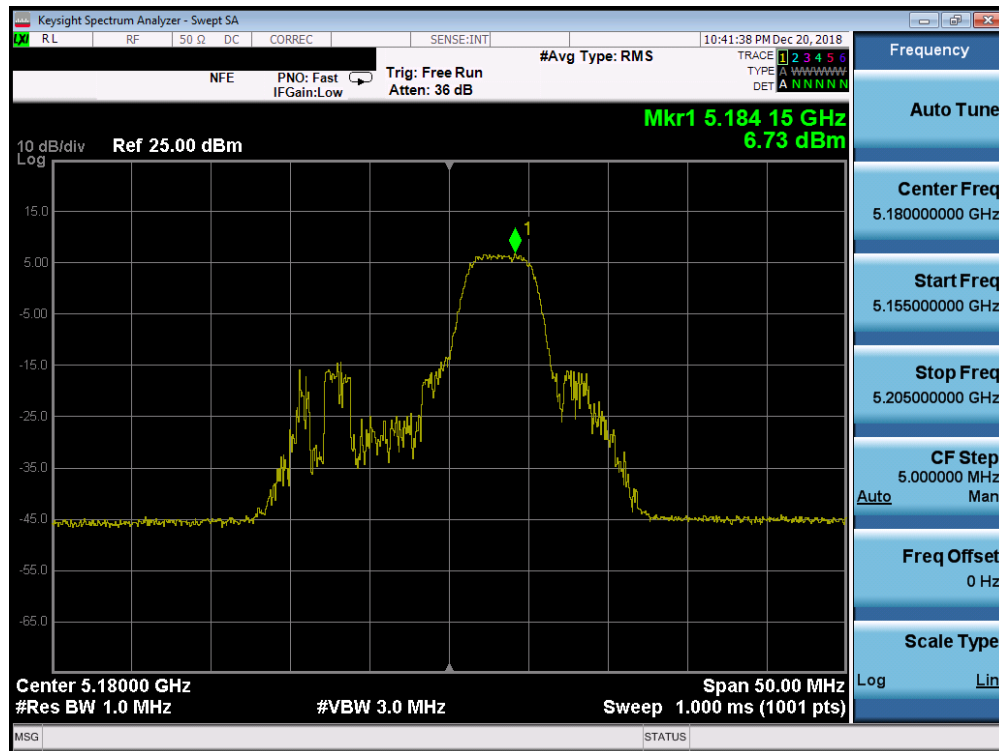
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	ax (20MHz)	52T	MCS0	6.73	11.00	-4.27
	5200	40	ax (20MHz)	52T	MCS0	6.56	11.00	-4.44
	5240	48	ax (20MHz)	52T	MCS0	7.26	11.00	-3.74
	5190	38	ax (40MHz)	52T	MCS0	7.73	11.00	-3.27
	5230	46	ax (40MHz)	52T	MCS0	7.49	11.00	-3.51
	5210	42	ax (80MHz)	52T	MCS0	7.51	11.00	-3.49
Band 2A	5260	52	ax (20MHz)	52T	MCS0	7.40	11.00	-3.60
	5280	56	ax (20MHz)	52T	MCS0	7.51	11.00	-3.49
	5320	64	ax (20MHz)	52T	MCS0	7.36	11.00	-3.64
	5270	54	ax (40MHz)	52T	MCS0	7.70	11.00	-3.30
	5310	62	ax (40MHz)	52T	MCS0	8.20	11.00	-2.80
	5290	58	ax (80MHz)	52T	MCS0	7.76	11.00	-3.24
Band 2C	5500	100	ax (20MHz)	52T	MCS0	7.91	11.00	-3.09
	5600	120	ax (20MHz)	52T	MCS0	7.13	11.00	-3.87
	5720	144	ax (20MHz)	52T	MCS0	7.77	11.00	-3.23
	5510	102	ax (40MHz)	52T	MCS0	7.69	11.00	-3.31
	5590	118	ax (40MHz)	52T	MCS0	7.78	11.00	-3.22
	5710	142	ax (40MHz)	52T	MCS0	8.03	11.00	-2.97
	5530	106	ax (80MHz)	52T	MCS0	7.11	11.00	-3.89
	5610	122	ax (80MHz)	52T	MCS0	7.28	11.00	-3.72
	5690	138	ax (80MHz)	52T	MCS0	6.04	11.00	-4.96

Table 7-66. Bands 1, 2A, 2C Conducted Power Spectral Density Measurements SISO ANT1 (52 Tones)

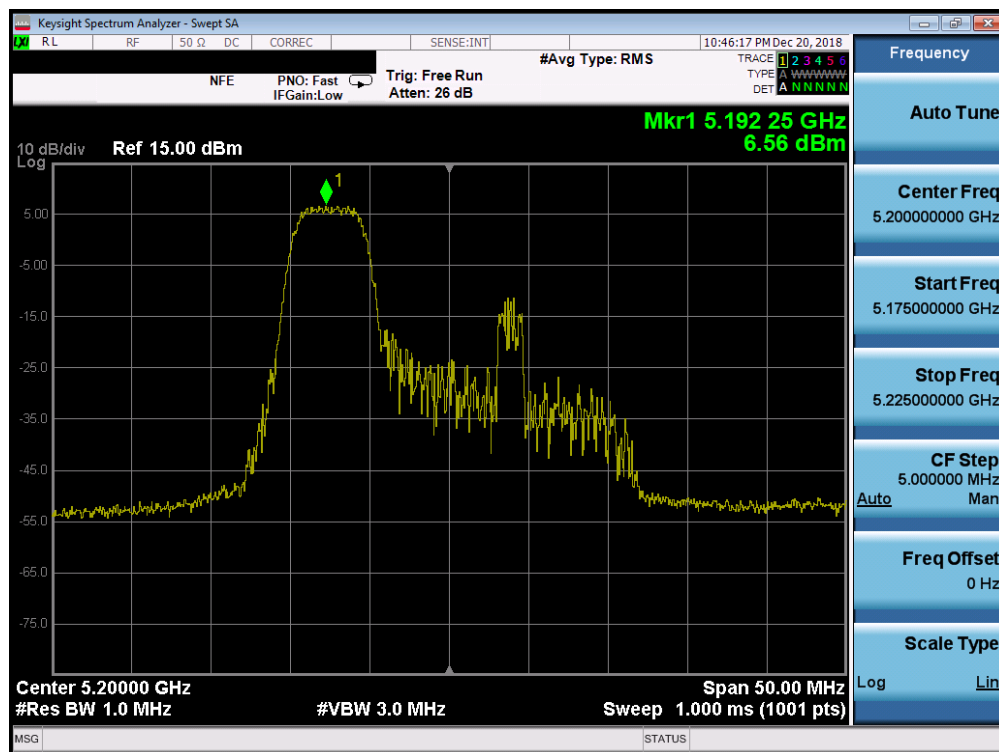
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Antenna Gain [dBi]	e.i.r.p. Power Density [dBm/MHz]	ISED Max e.i.r.p. Power Density	Margin [dB]
Band 1	5180	36	ax (20MHz)	52T	MCS0	6.73	-8.61	-1.88	10.0	-11.88
	5200	40	ax (20MHz)	52T	MCS0	6.56	-8.61	-2.05	10.0	-12.05
	5240	48	ax (20MHz)	52T	MCS0	7.26	-7.66	-0.40	10.0	-10.40
	5190	38	ax (40MHz)	52T	MCS0	7.73	-8.61	-0.88	10.0	-10.88
	5230	46	ax (40MHz)	52T	MCS0	7.49	-7.66	-0.17	10.0	-10.17
	5210	42	ax (80MHz)	52T	MCS0	7.51	-7.66	-0.15	10.0	-10.15

Table 7-67. Bands 1 e.i.r.p Conducted Power Spectral Density Measurements (ISED 52 Tones)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 121 of 519

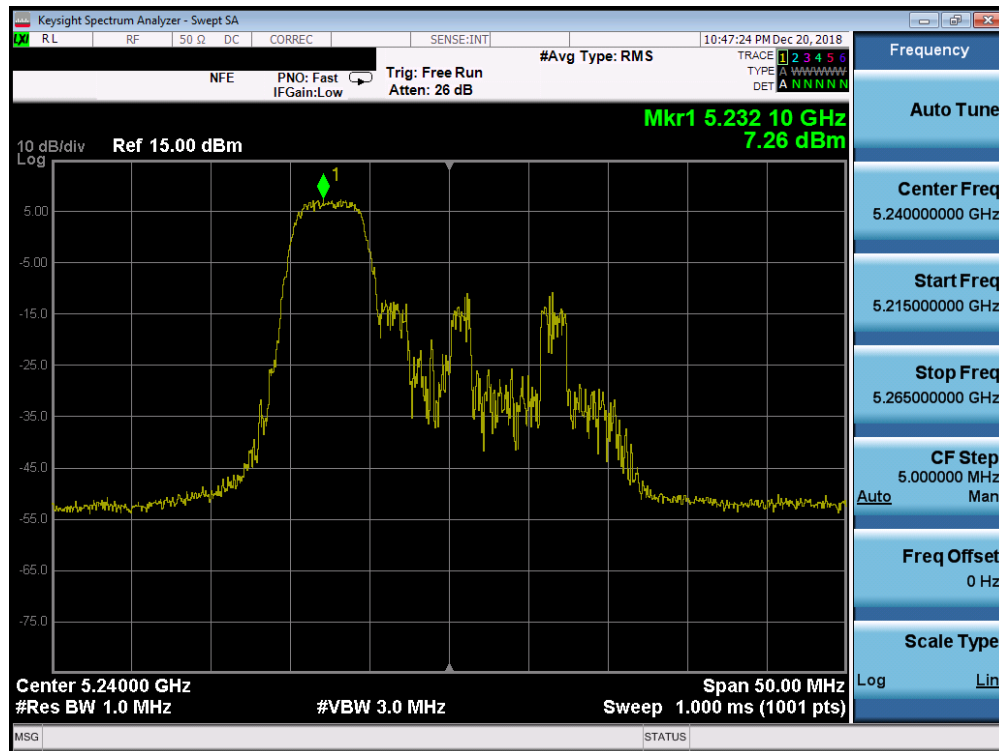


Plot 7-136. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 36)

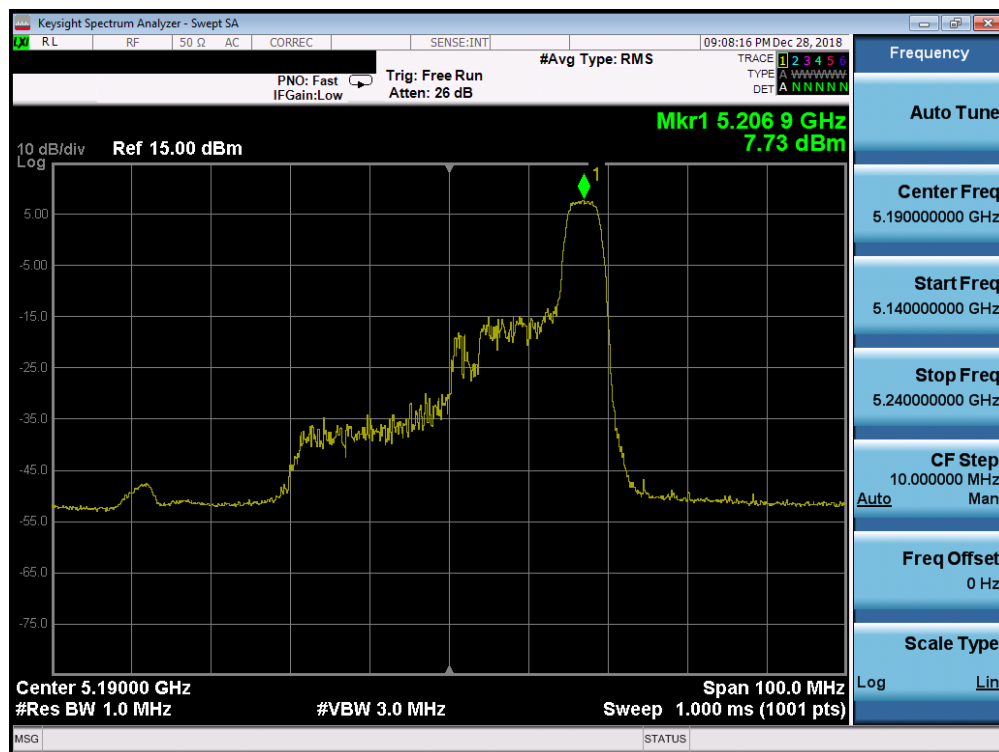


Plot 7-137. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 40)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 122 of 519

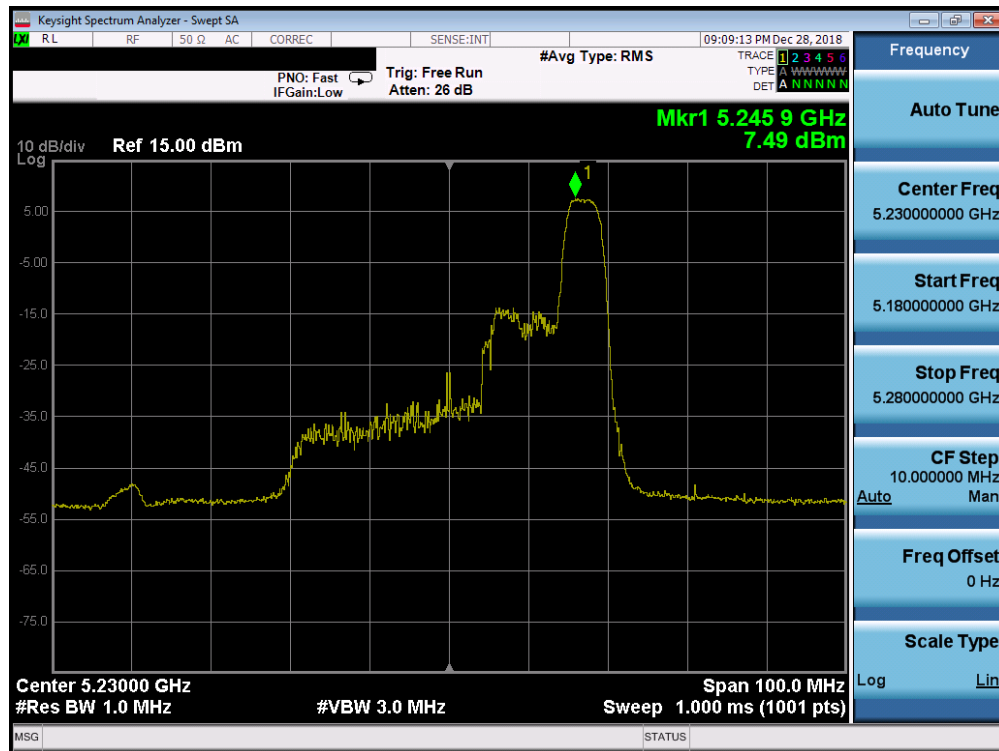


Plot 7-138. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 48)



Plot 7-139. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 38)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 123 of 519

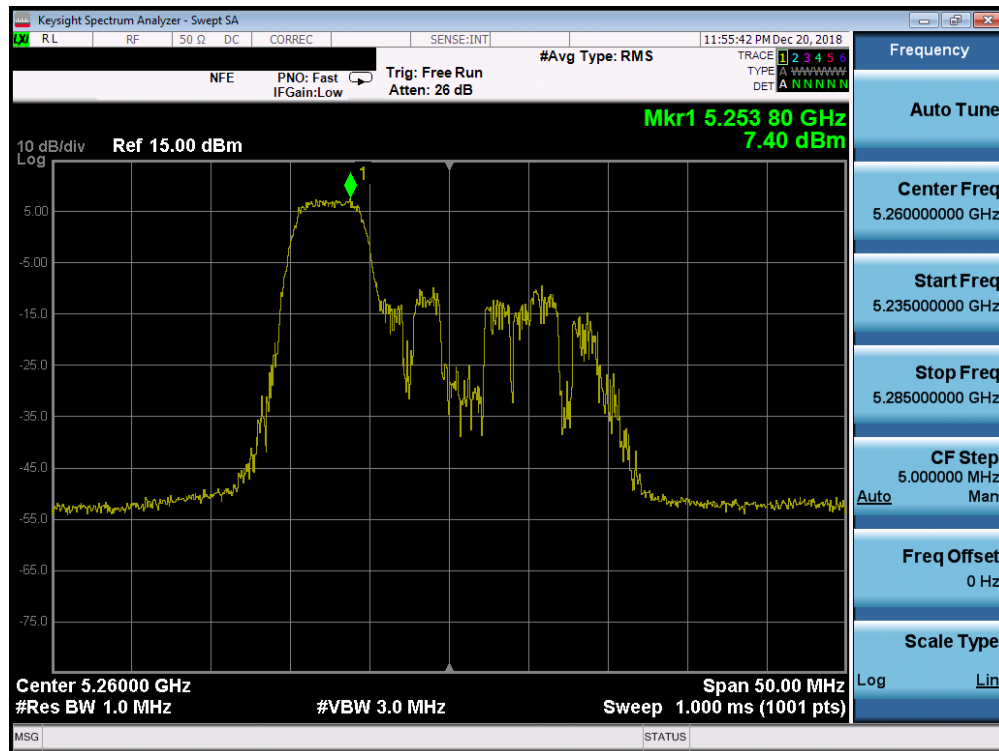


Plot 7-140. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 46)

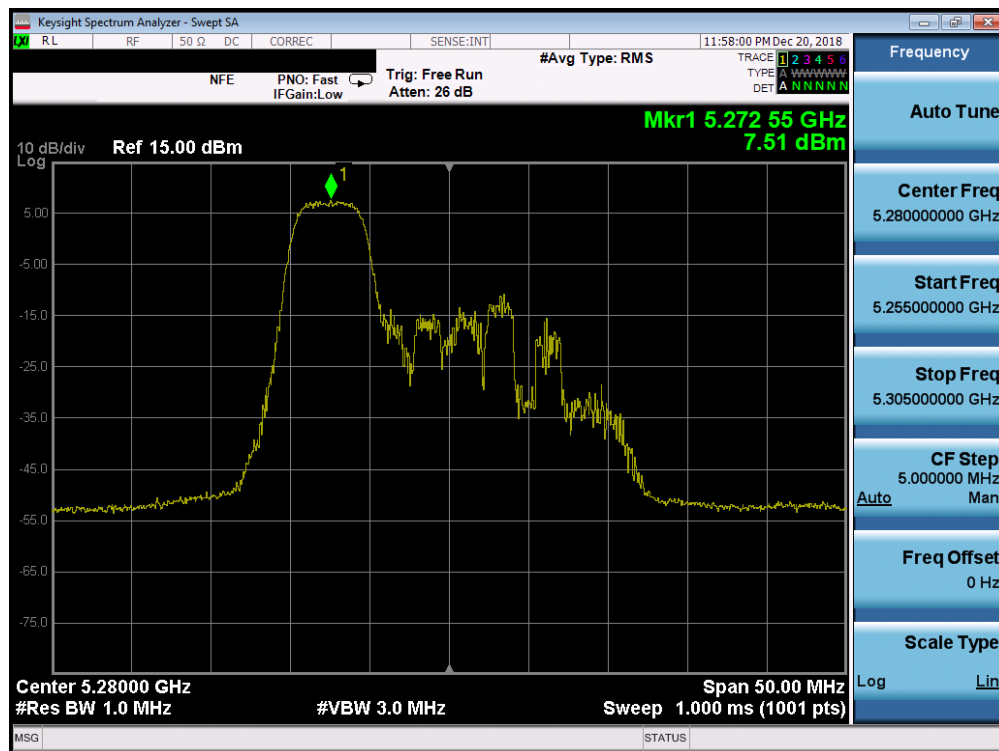


Plot 7-141. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 42)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 124 of 519

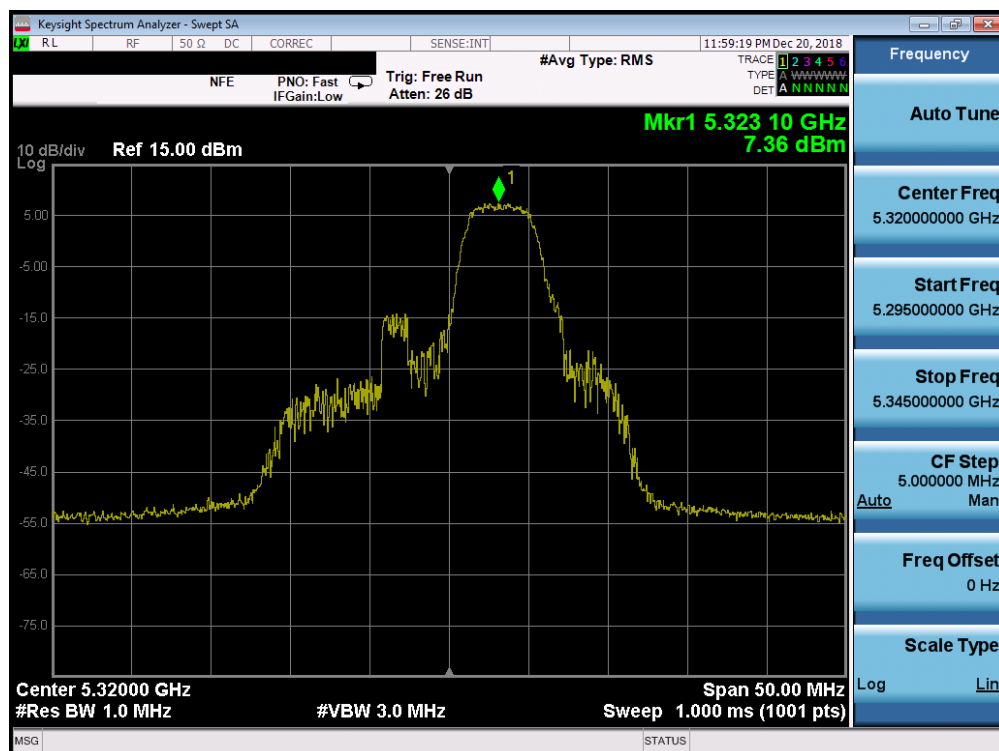


Plot 7-142. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 52)

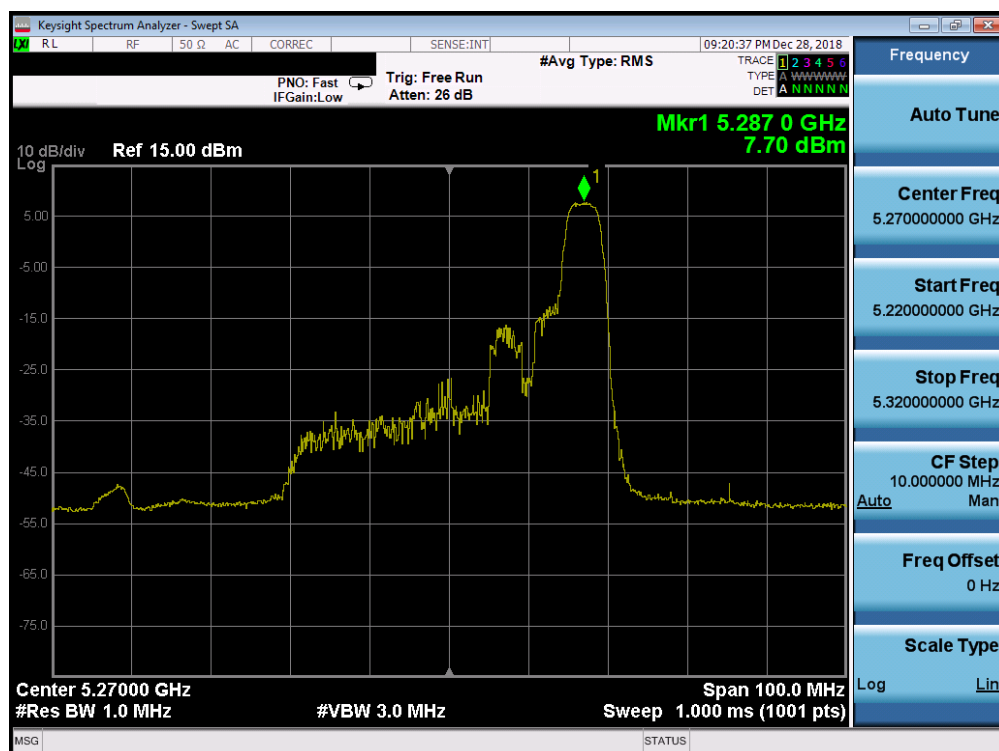


Plot 7-143. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 56)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 125 of 519

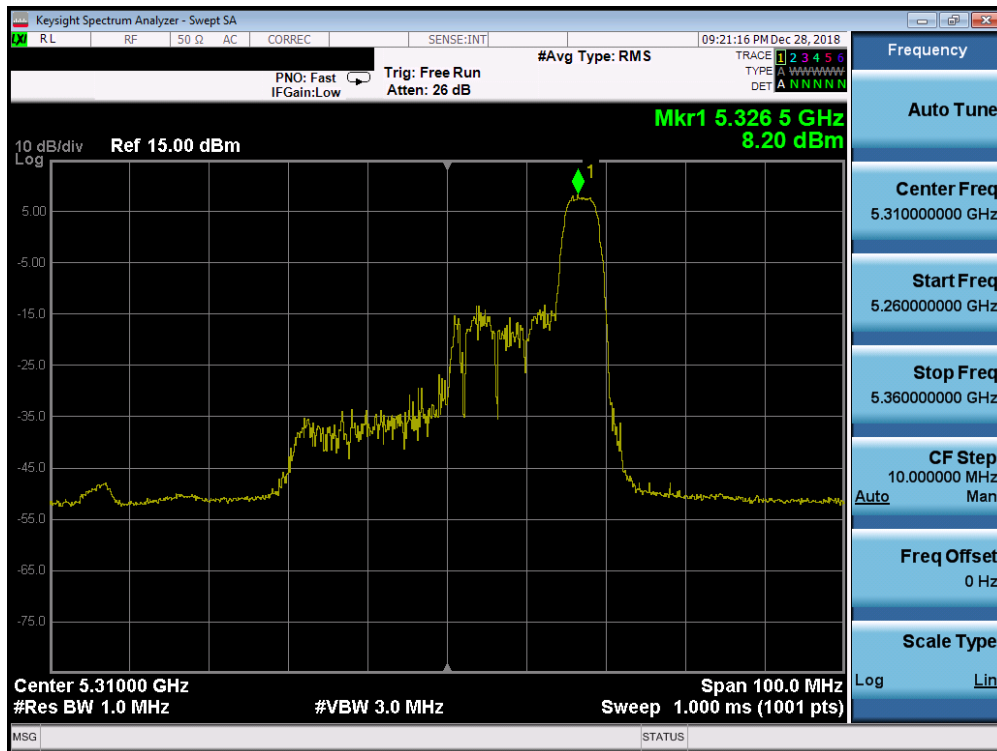


Plot 7-144. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 64)

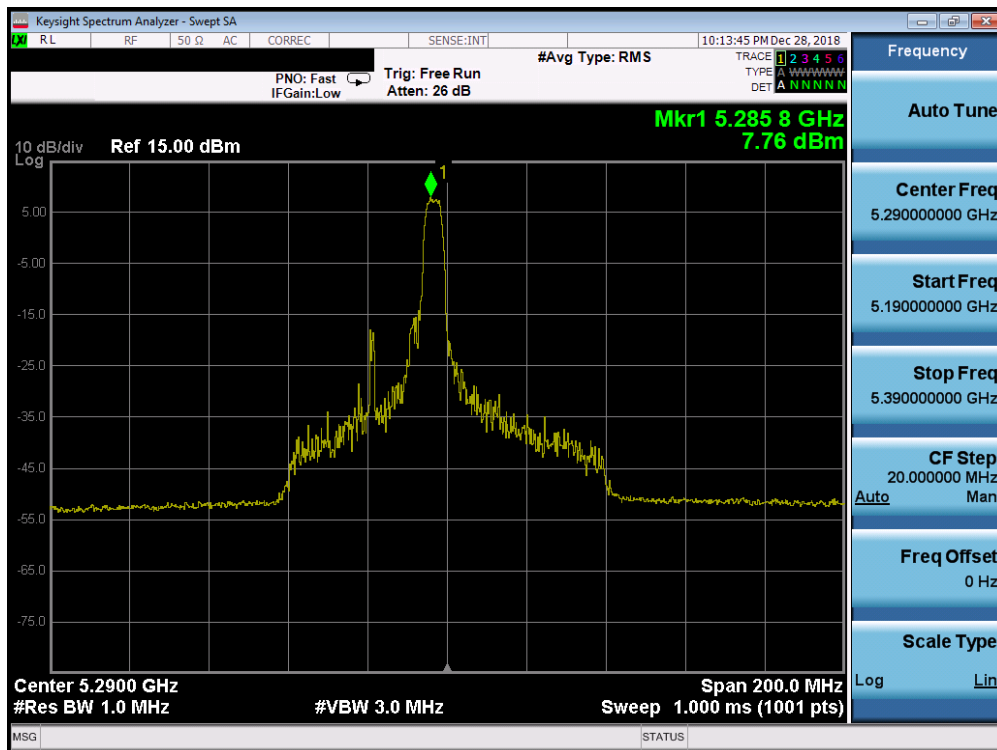


Plot 7-145. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 54)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 126 of 519

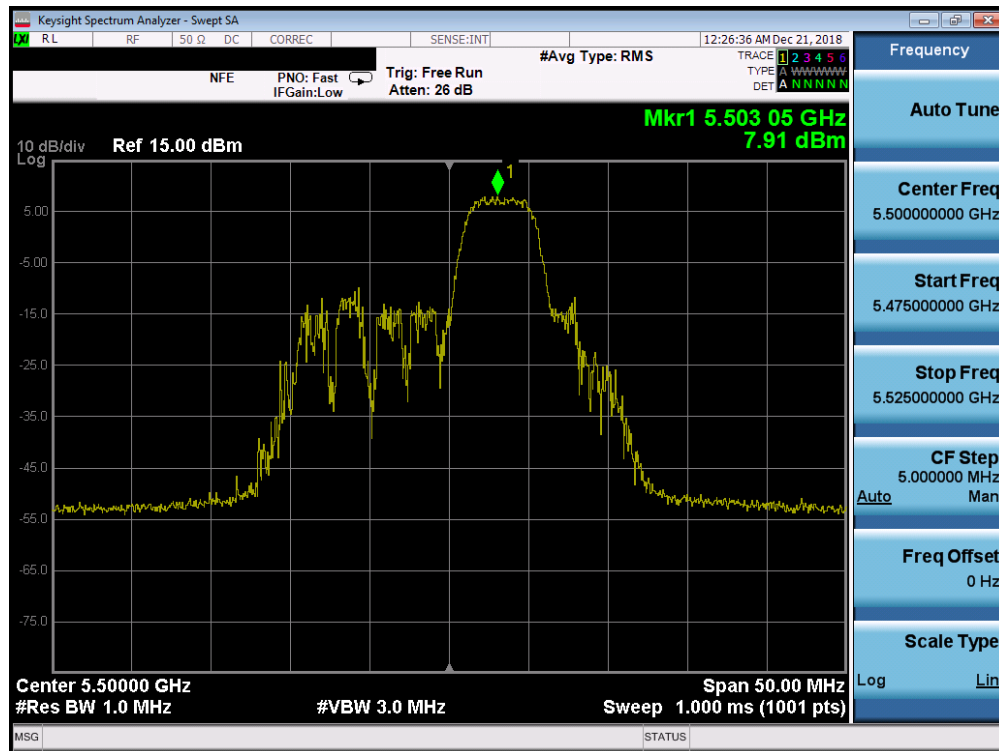


Plot 7-146. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 62)

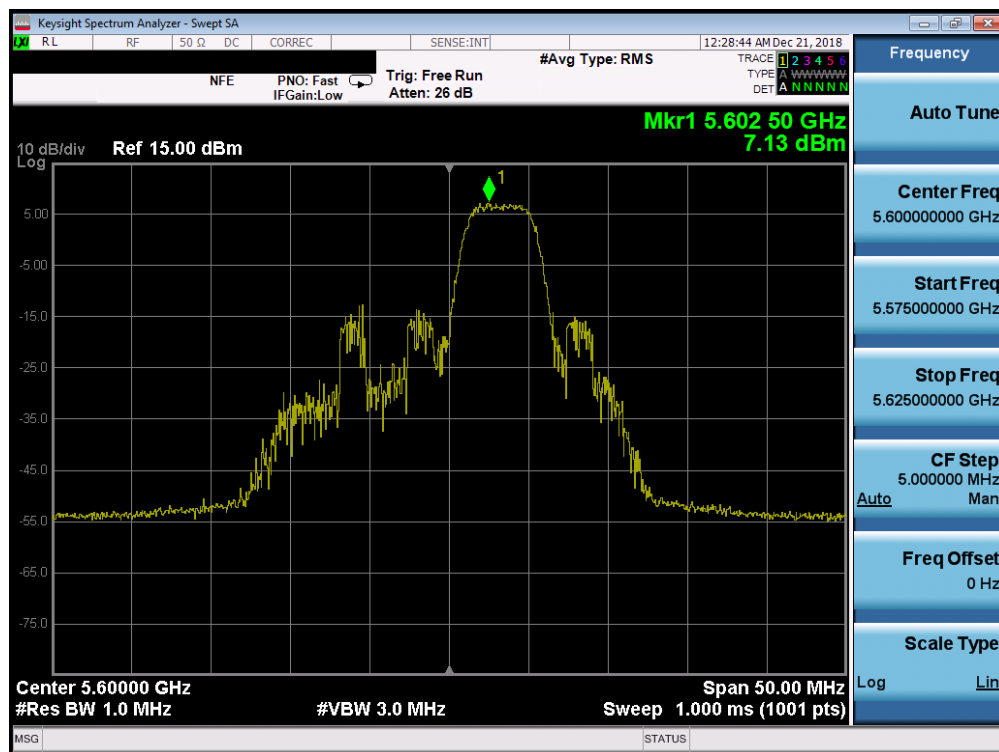


Plot 7-147. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 58)

FCC ID: A3LSMG9700			MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset	Page 127 of 519		

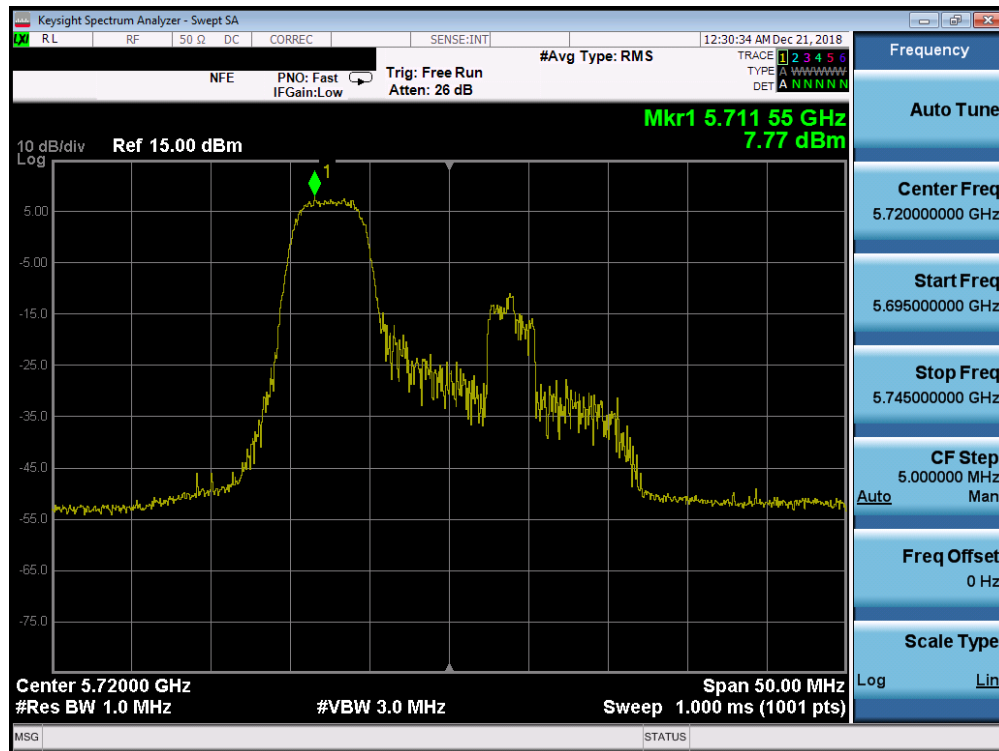


Plot 7-148. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 100)

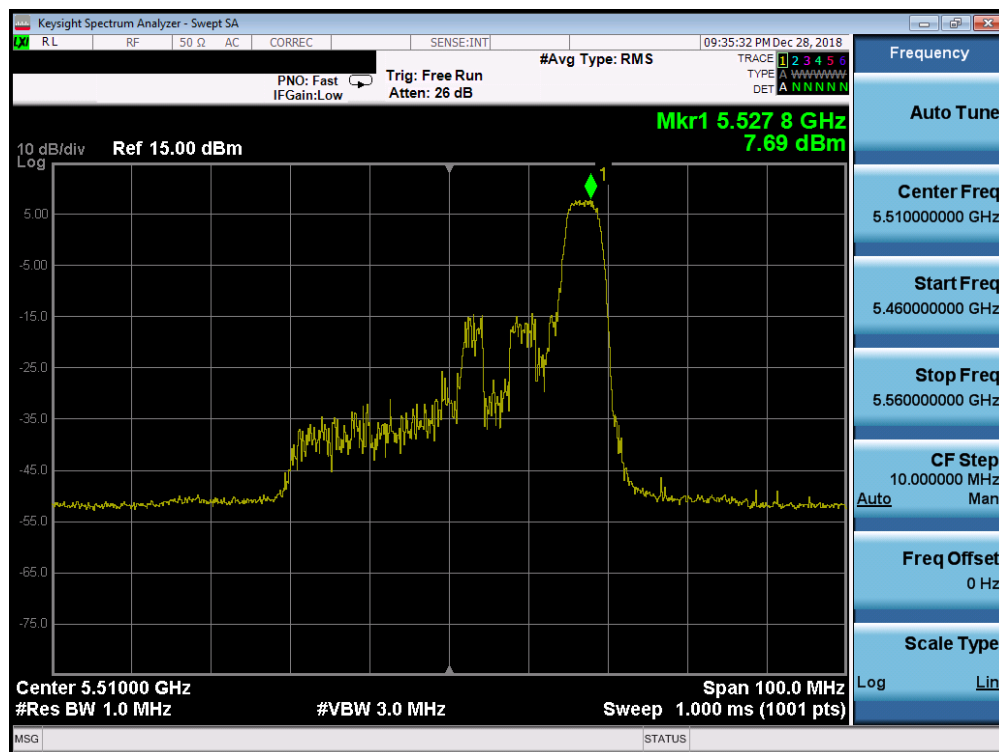


Plot 7-149. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 120)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 128 of 519

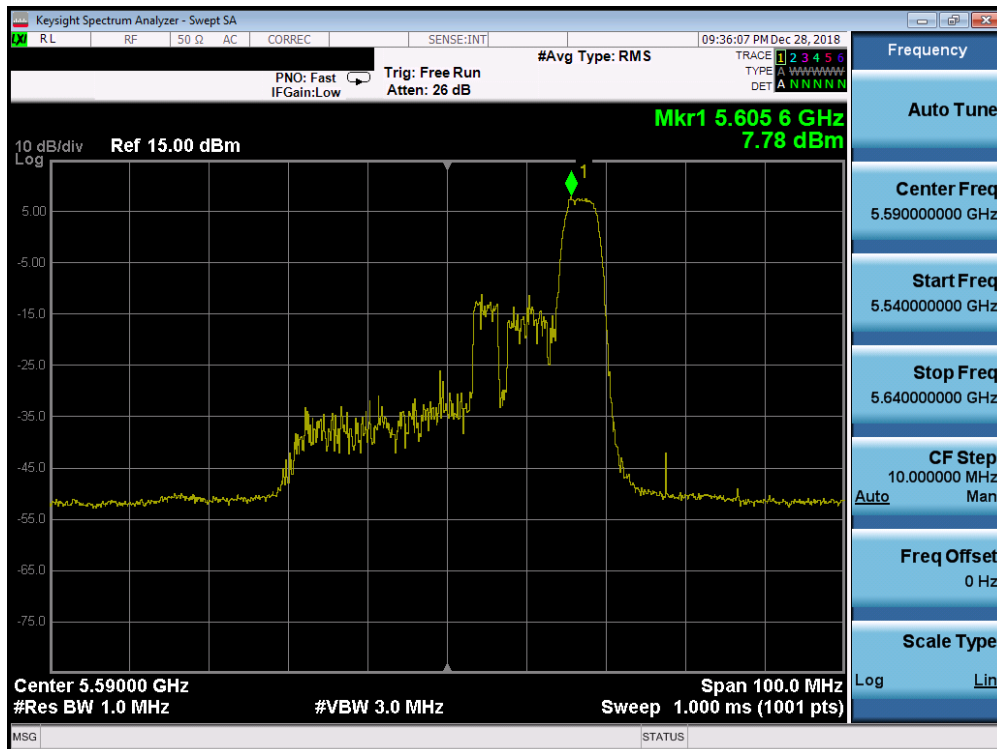


Plot 7-150. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 144)

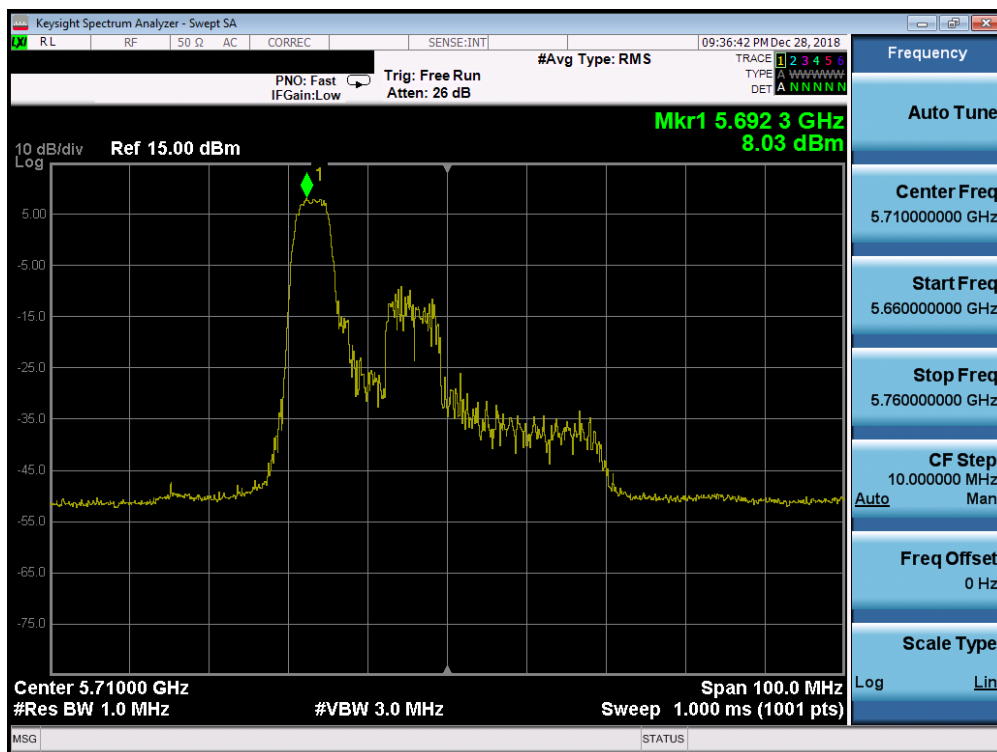


Plot 7-151. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 102)

FCC ID: A3LSMG9700			MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset	Page 129 of 519		

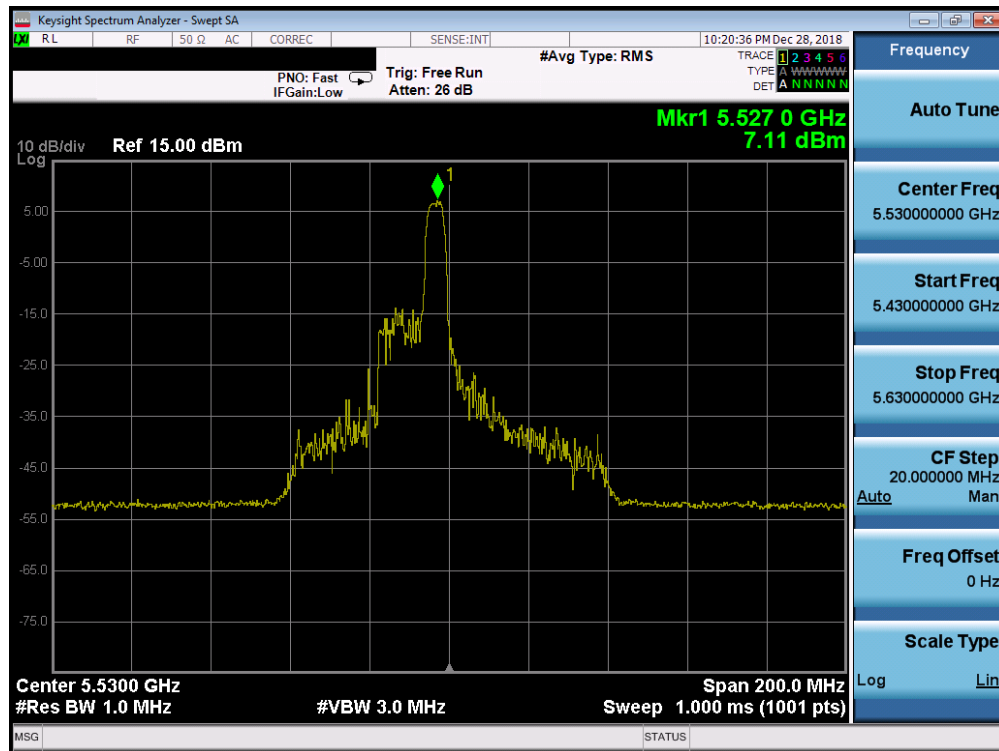


Plot 7-152. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 118)

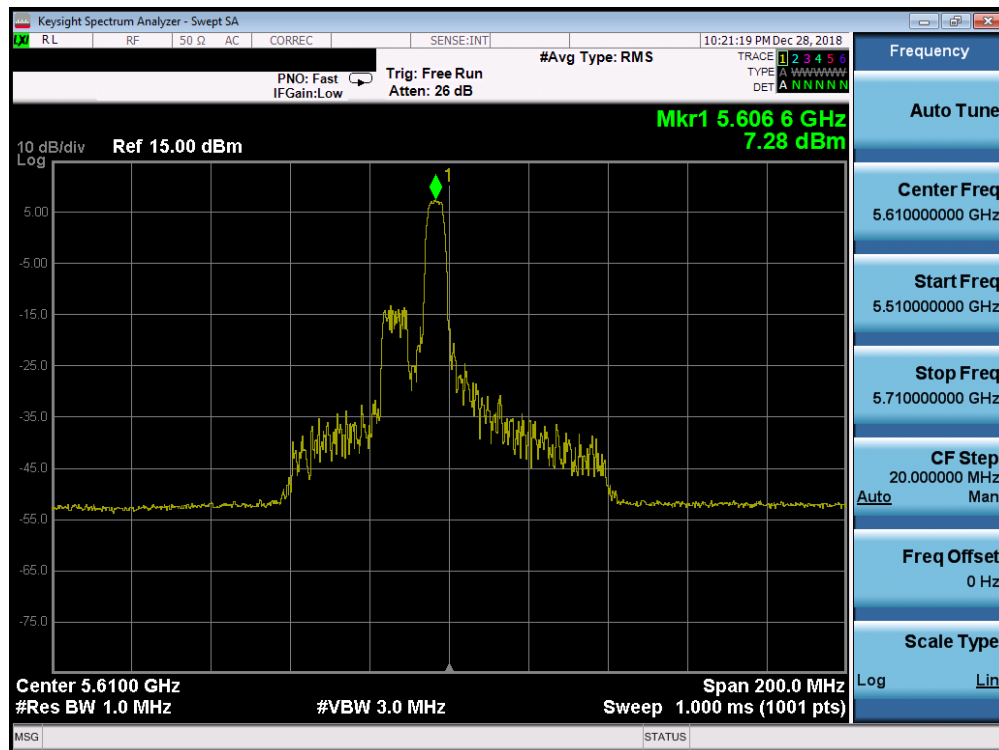


Plot 7-153. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 142)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 130 of 519

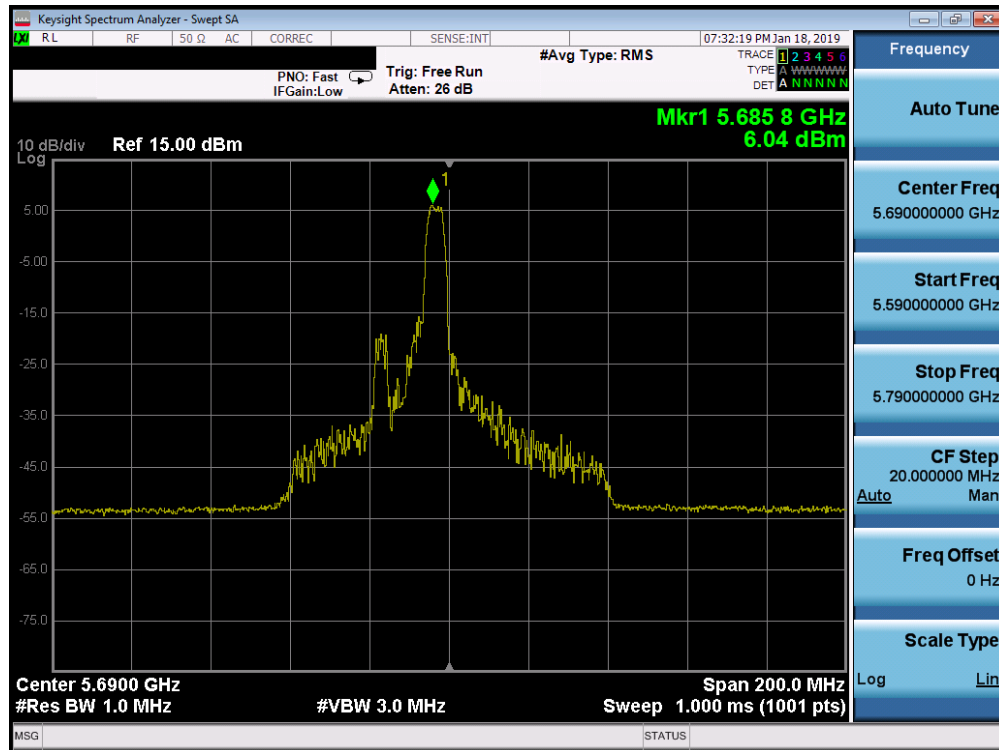


Plot 7-154. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 106)



Plot 7-155. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 122)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 131 of 519

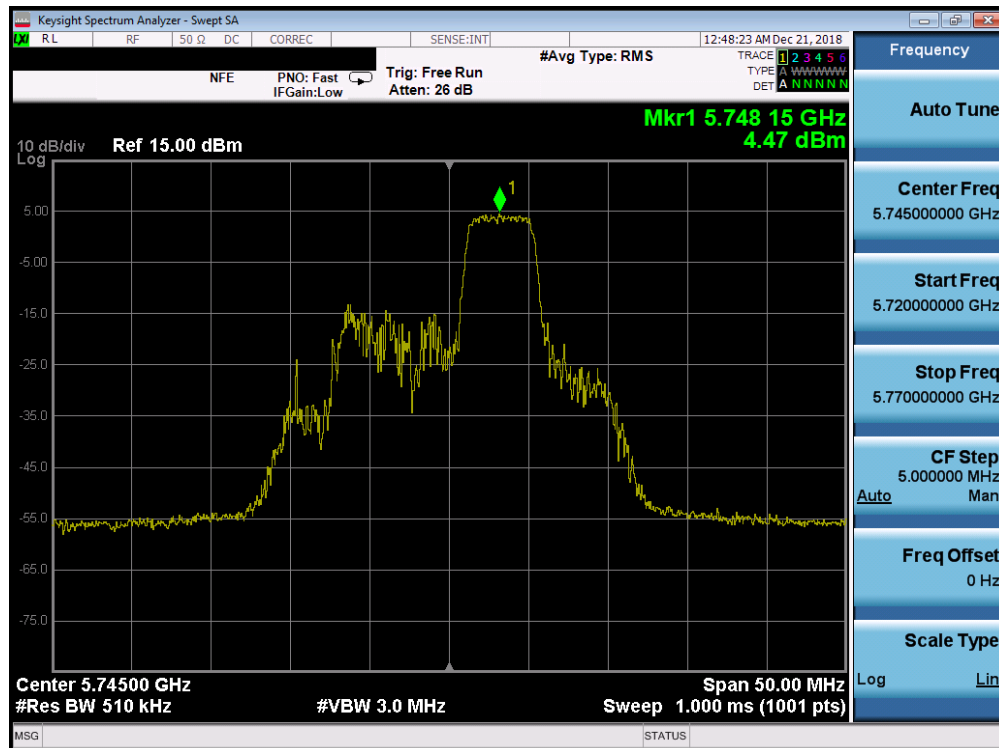


Plot 7-156. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 138)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 132 of 519

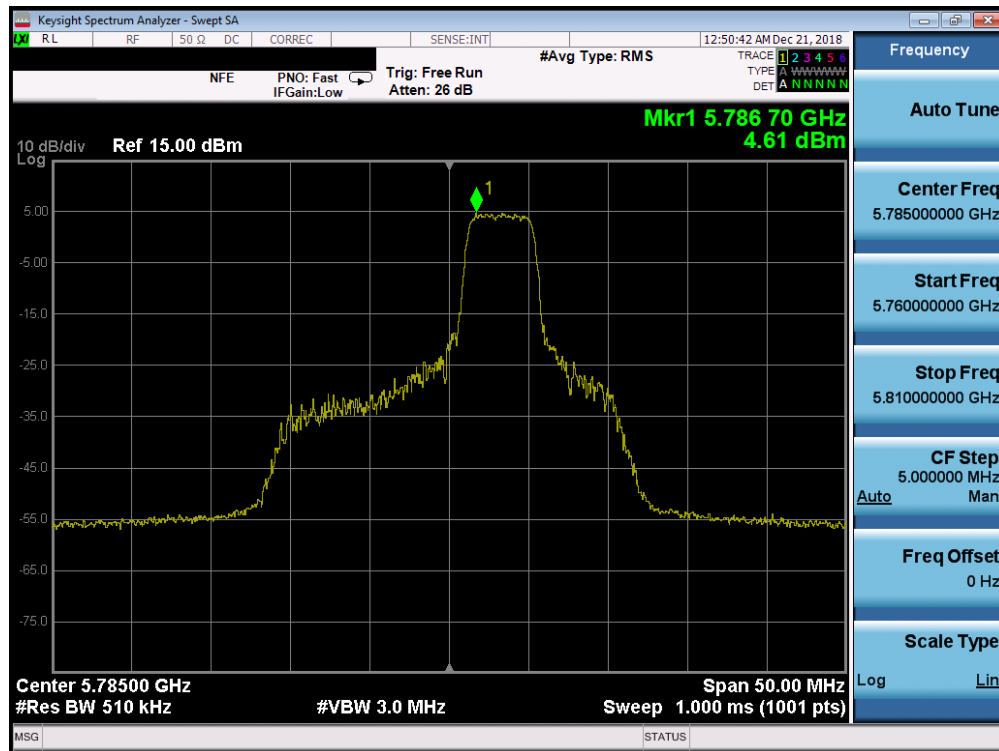
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
Band 3	5745	149	ax (20MHz)	52T	MCS0	4.47	30.00	-25.53
	5785	157	ax (20MHz)	52T	MCS0	4.61	30.00	-25.39
	5825	165	ax (20MHz)	52T	MCS0	4.51	30.00	-25.49
	5755	151	ax (40MHz)	52T	MCS0	5.25	30.00	-24.75
	5795	159	ax (40MHz)	52T	MCS0	5.05	30.00	-24.95
	5775	155	ax (80MHz)	52T	MCS0	8.40	30.00	-21.60

Table 7-68. Band 3 Conducted Power Spectral Density Measurements SISO ANT1 (52 Tones)

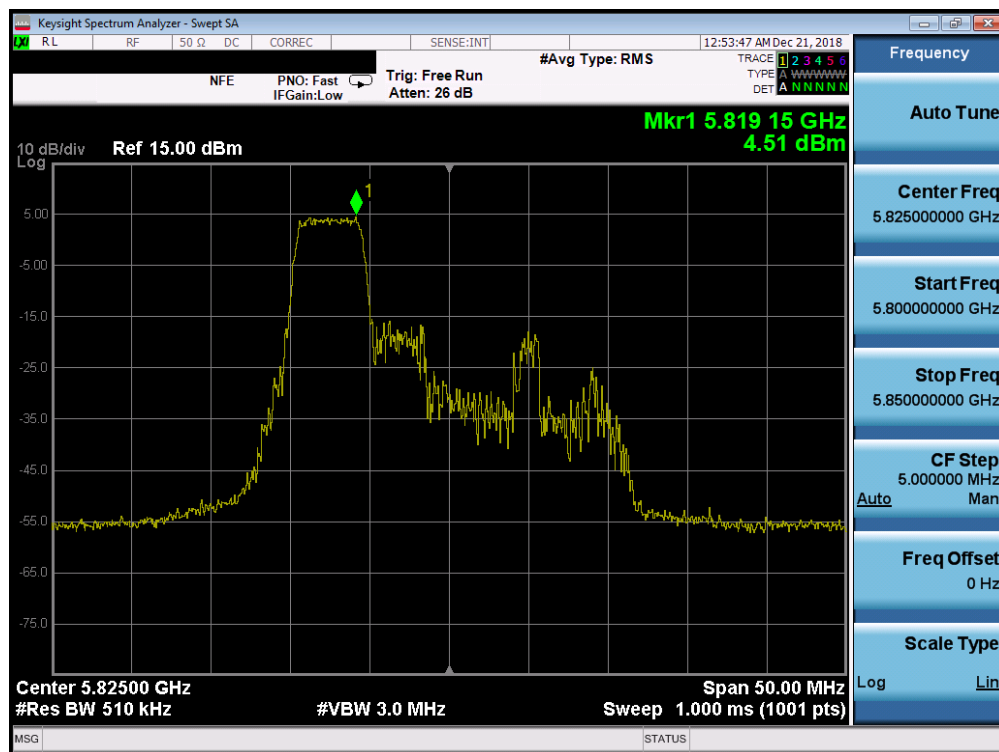


Plot 7-157. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 52 Tones (UNII Band 3) – Ch. 149)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 133 of 519

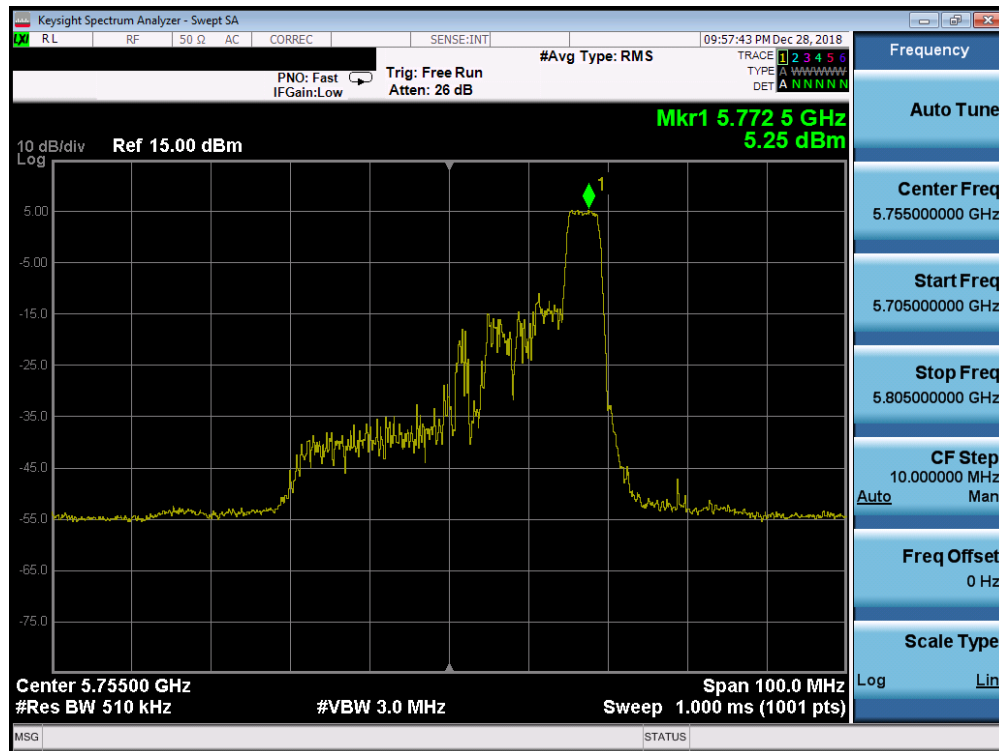


Plot 7-158. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 52 Tones (UNII Band 3) – Ch. 157)

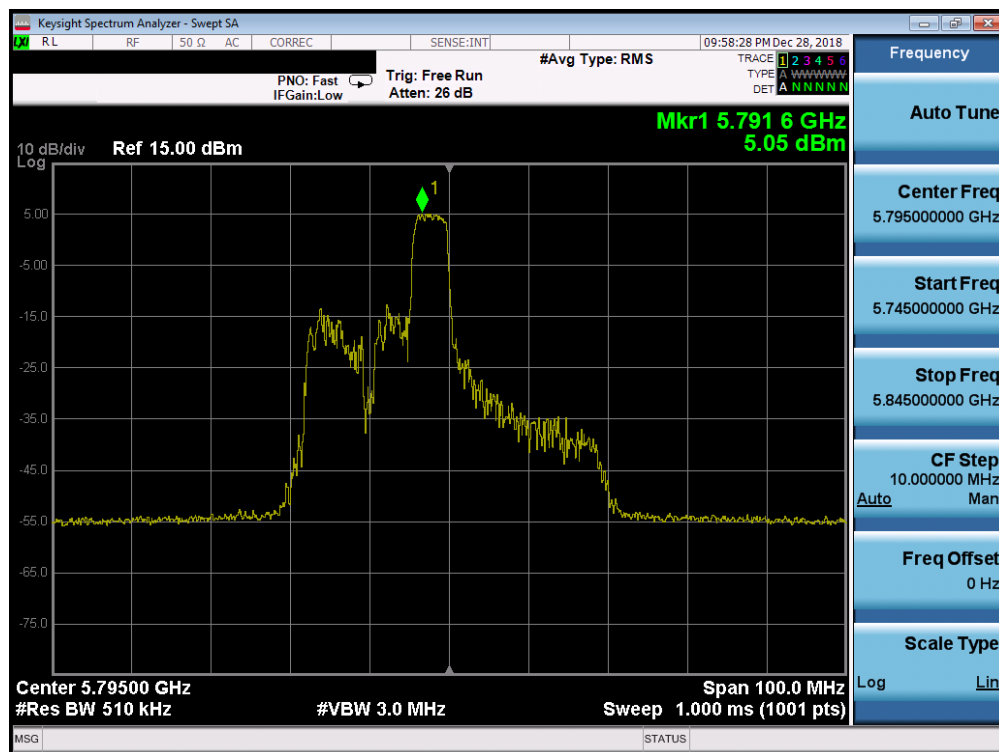


Plot 7-159. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 52 Tones (UNII Band 3) – Ch. 165)

FCC ID: A3LSMG9700	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset	Page 134 of 519

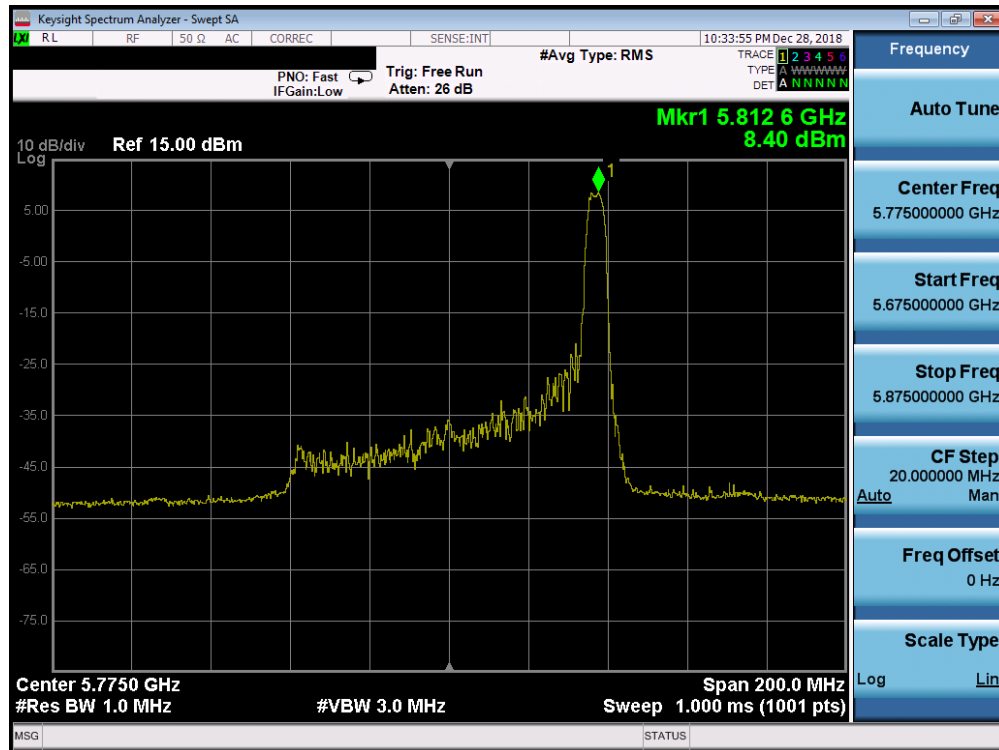


Plot 7-160. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 52 Tones (UNII Band 3) – Ch. 151)



Plot 7-161. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 52 Tones (UNII Band 3) – Ch. 159)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 135 of 519



Plot 7-162. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 52 Tones (UNII Band 3) – Ch. 155)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 136 of 519

SISO Antenna-1 Power Spectral Density Measurements (106 Tones)

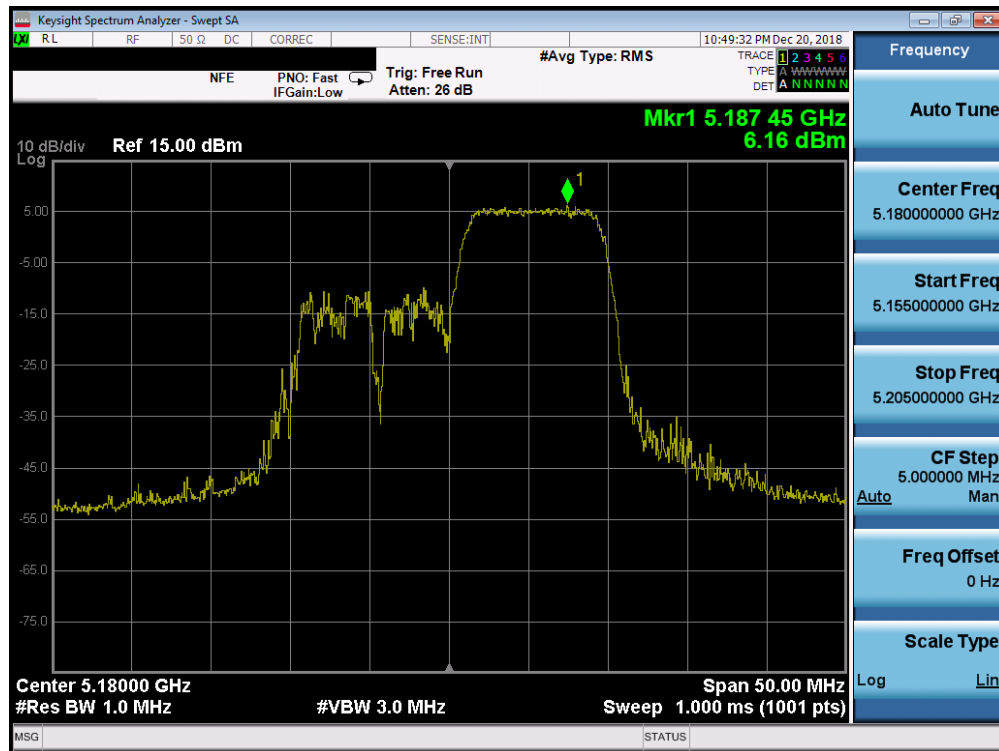
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	ax (20MHz)	106T	MCS0	6.16	11.00	-4.84
	5200	40	ax (20MHz)	106T	MCS0	6.43	11.00	-4.57
	5240	48	ax (20MHz)	106T	MCS0	6.81	11.00	-4.19
	5190	38	ax (40MHz)	106T	MCS0	6.59	11.00	-4.41
	5230	46	ax (40MHz)	106T	MCS0	6.92	11.00	-4.08
	5210	42	ax (80MHz)	106T	MCS0	6.76	11.00	-4.24
Band 2A	5260	52	ax (20MHz)	106T	MCS0	7.02	11.00	-3.98
	5280	56	ax (20MHz)	106T	MCS0	6.95	11.00	-4.05
	5320	64	ax (20MHz)	106T	MCS0	6.39	11.00	-4.61
	5270	54	ax (40MHz)	106T	MCS0	6.61	11.00	-4.39
	5310	62	ax (40MHz)	106T	MCS0	6.81	11.00	-4.19
	5290	58	ax (80MHz)	106T	MCS0	7.06	11.00	-3.94
Band 2C	5500	100	ax (20MHz)	106T	MCS0	7.09	11.00	-3.91
	5600	120	ax (20MHz)	106T	MCS0	6.33	11.00	-4.67
	5720	144	ax (20MHz)	106T	MCS0	6.73	11.00	-4.27
	5510	102	ax (40MHz)	106T	MCS0	6.72	11.00	-4.28
	5590	118	ax (40MHz)	106T	MCS0	7.19	11.00	-3.81
	5710	142	ax (40MHz)	106T	MCS0	7.26	11.00	-3.74
	5530	106	ax (80MHz)	106T	MCS0	6.21	11.00	-4.79
	5610	122	ax (80MHz)	106T	MCS0	6.21	11.00	-4.79
	5690	138	ax (80MHz)	106T	MCS0	6.34	11.00	-4.66

Table 7-69. Bands 1, 2A, 2C Conducted Power Spectral Density Measurements SISO ANT1 (106 Tones)

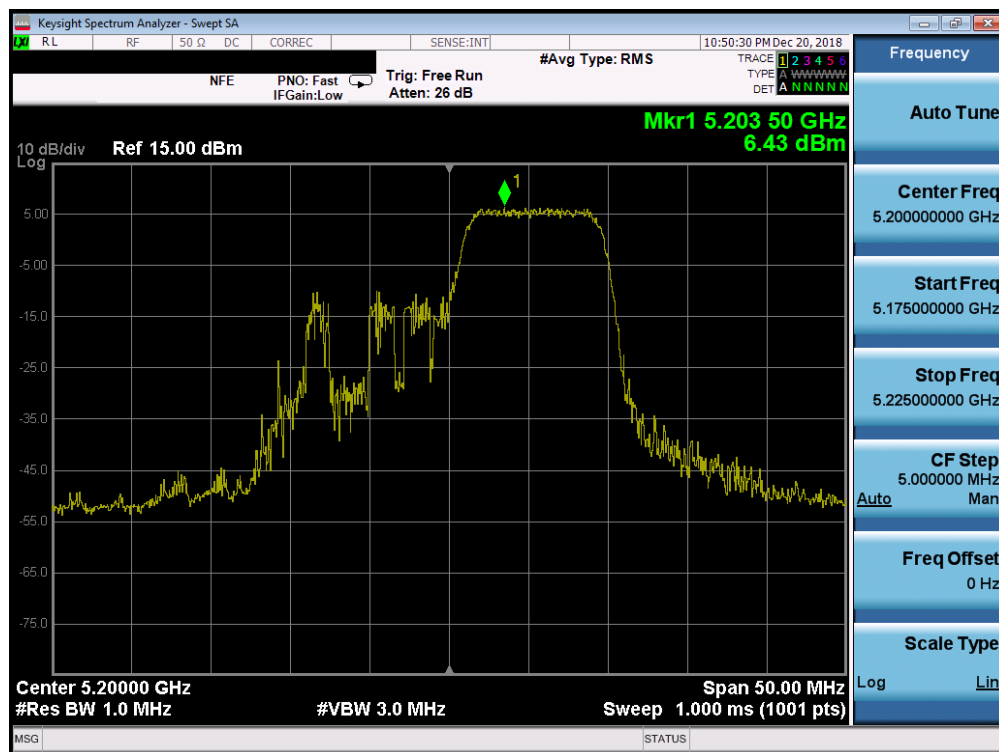
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Antenna Gain [dBi]	e.i.r.p. Power Density [dBm/MHz]	ISED Max e.i.r.p. Power Density	Margin [dB]
Band 1	5180	36	ax (20MHz)	106T	MCS0	6.16	-8.61	-2.45	10.0	-12.45
	5200	40	ax (20MHz)	106T	MCS0	6.43	-8.61	-2.18	10.0	-12.18
	5240	48	ax (20MHz)	106T	MCS0	6.81	-7.66	-0.85	10.0	-10.85
	5190	38	ax (40MHz)	106T	MCS0	6.59	-8.61	-2.02	10.0	-12.02
	5230	46	ax (40MHz)	106T	MCS0	6.92	-7.66	-0.74	10.0	-10.74
	5210	42	ax (80MHz)	106T	MCS0	6.76	-7.66	-0.90	10.0	-10.90

Table 7-70. Bands 1 e.i.r.p Conducted Power Spectral Density Measurements (ISED 106 Tones)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 137 of 519

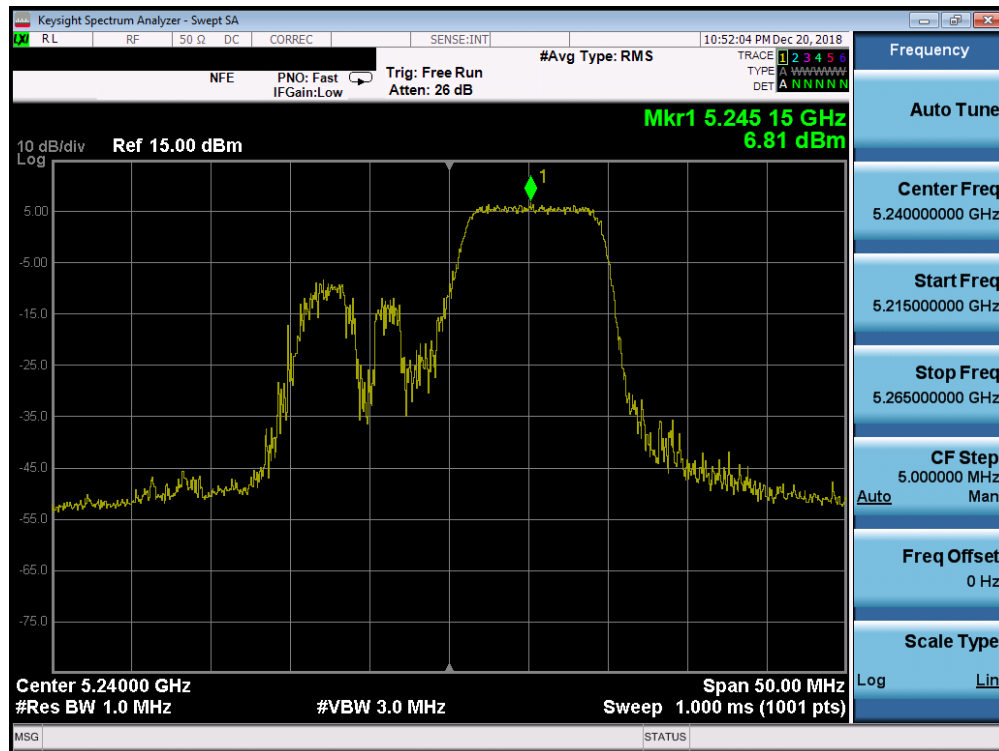


Plot 7-163. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 36)

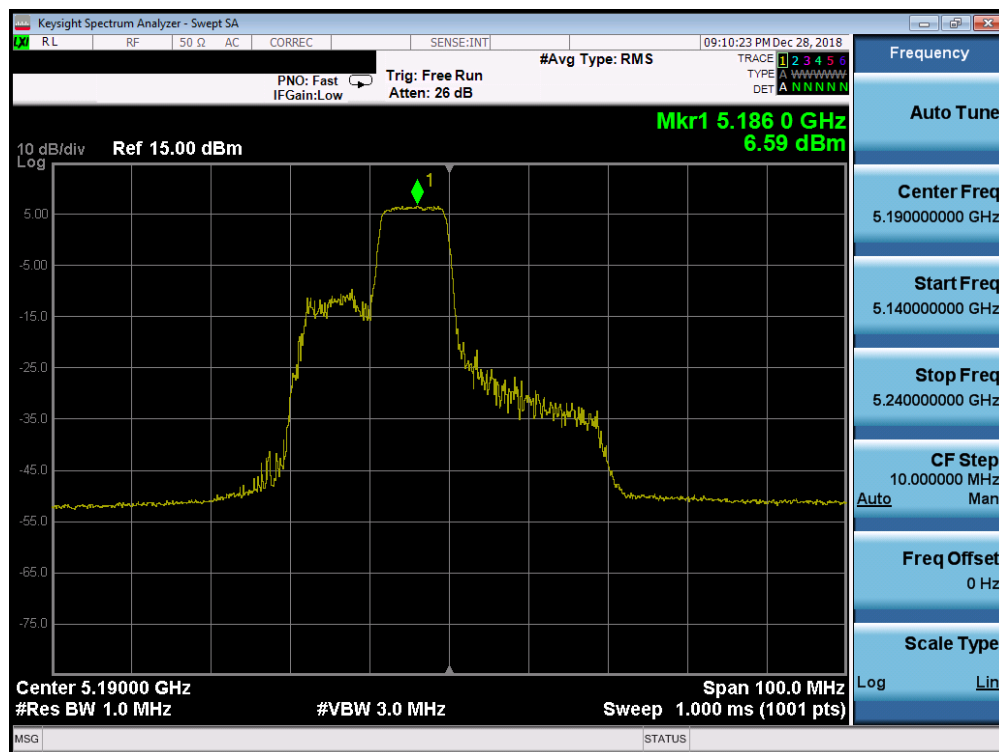


Plot 7-164. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 40)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 138 of 519

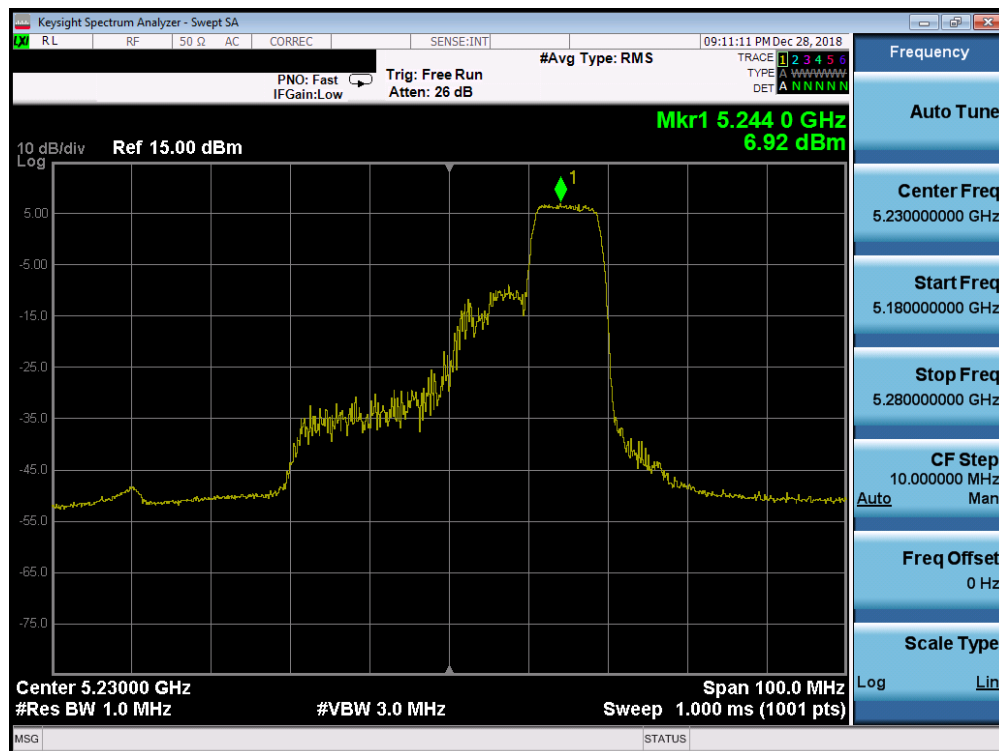


Plot 7-165. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 48)

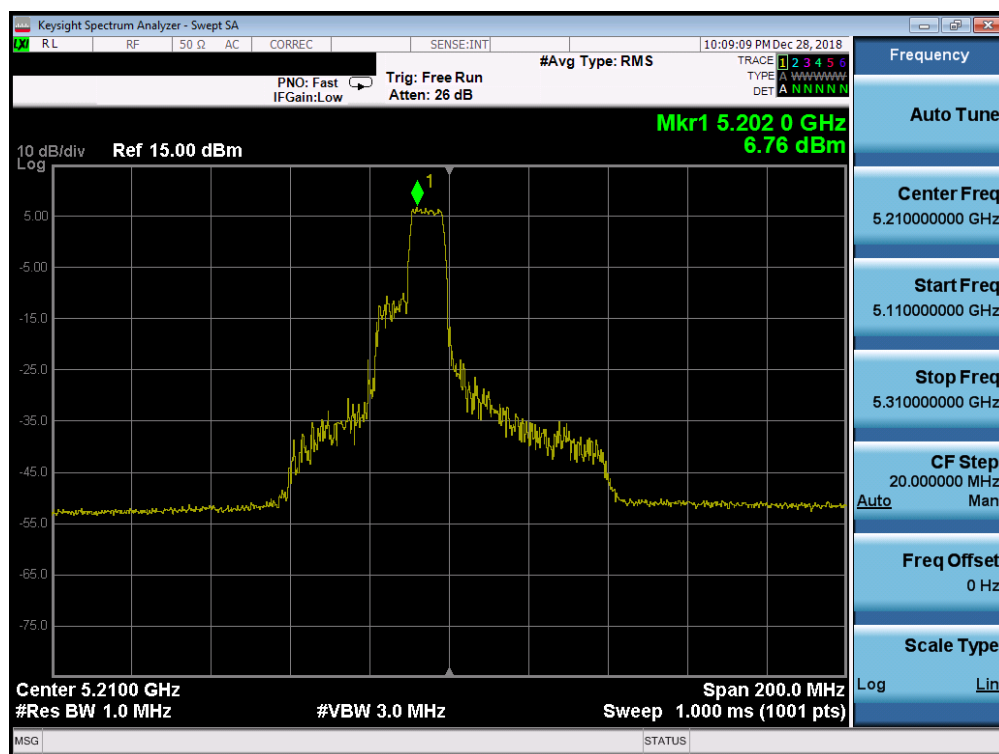


Plot 7-166. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 38)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 139 of 519

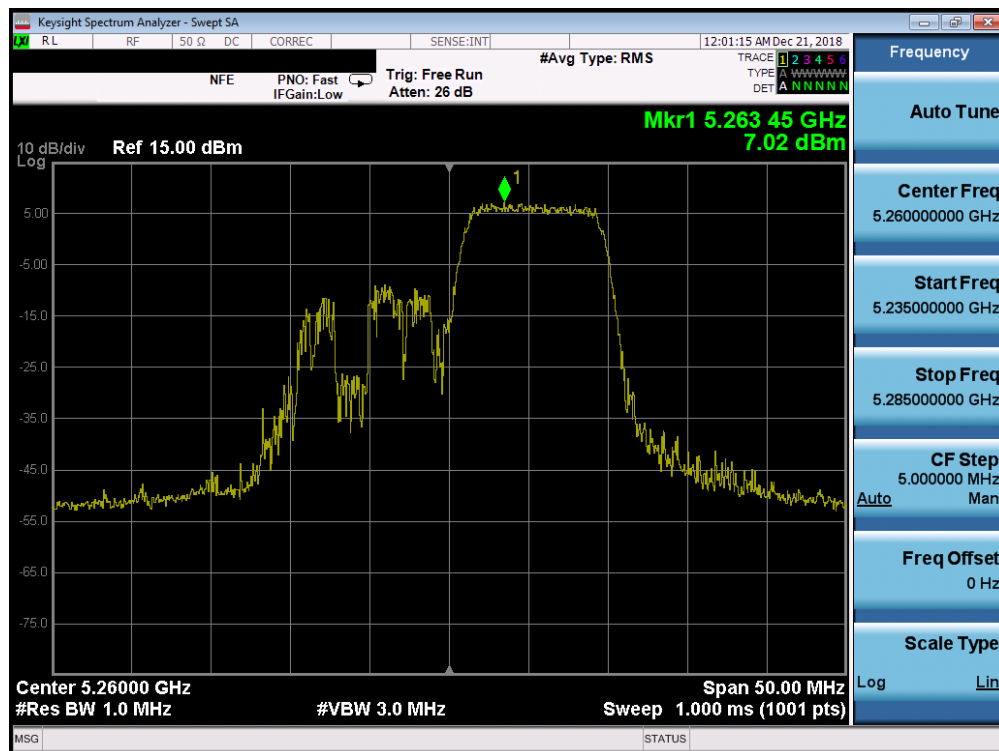


Plot 7-167. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 46)

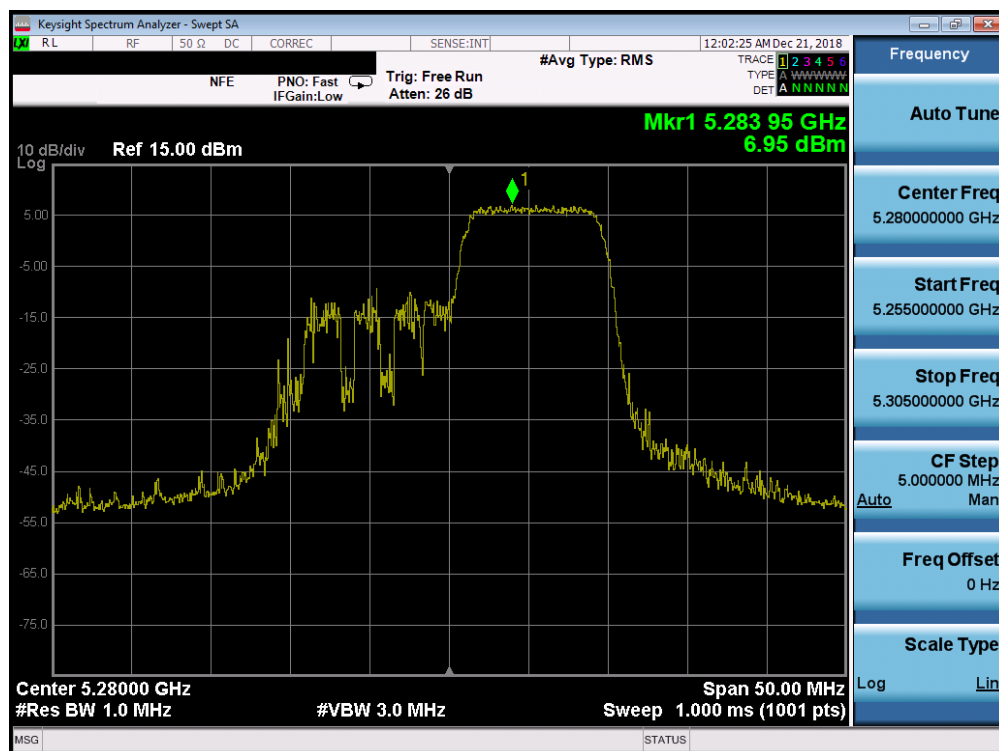


Plot 7-168. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 42)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 140 of 519

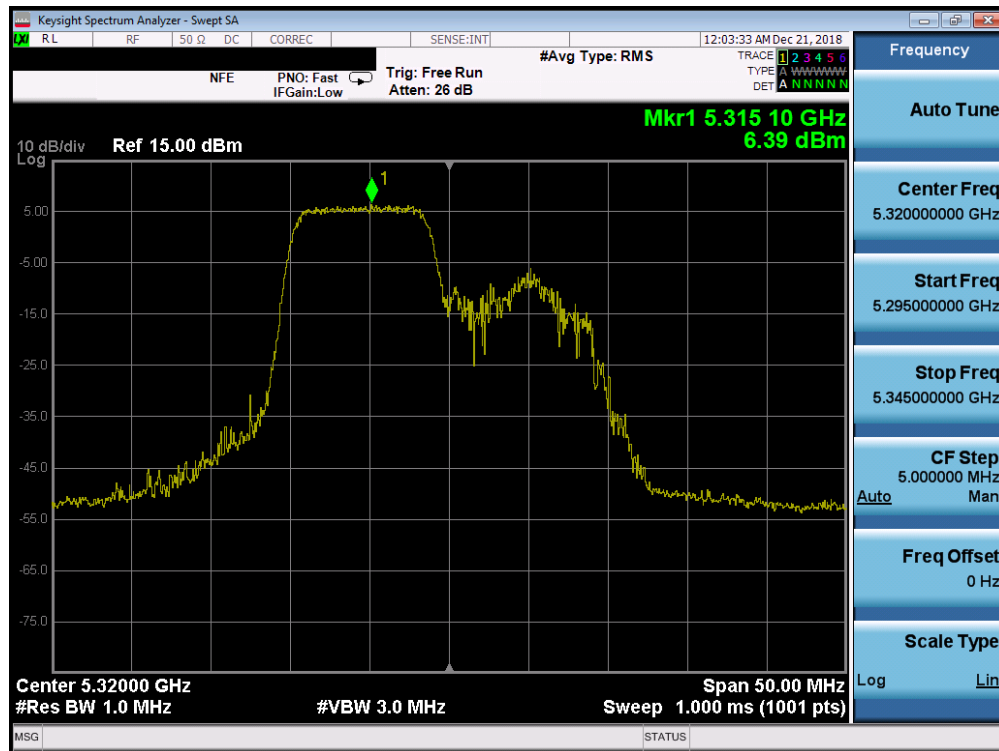


Plot 7-169. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 52)

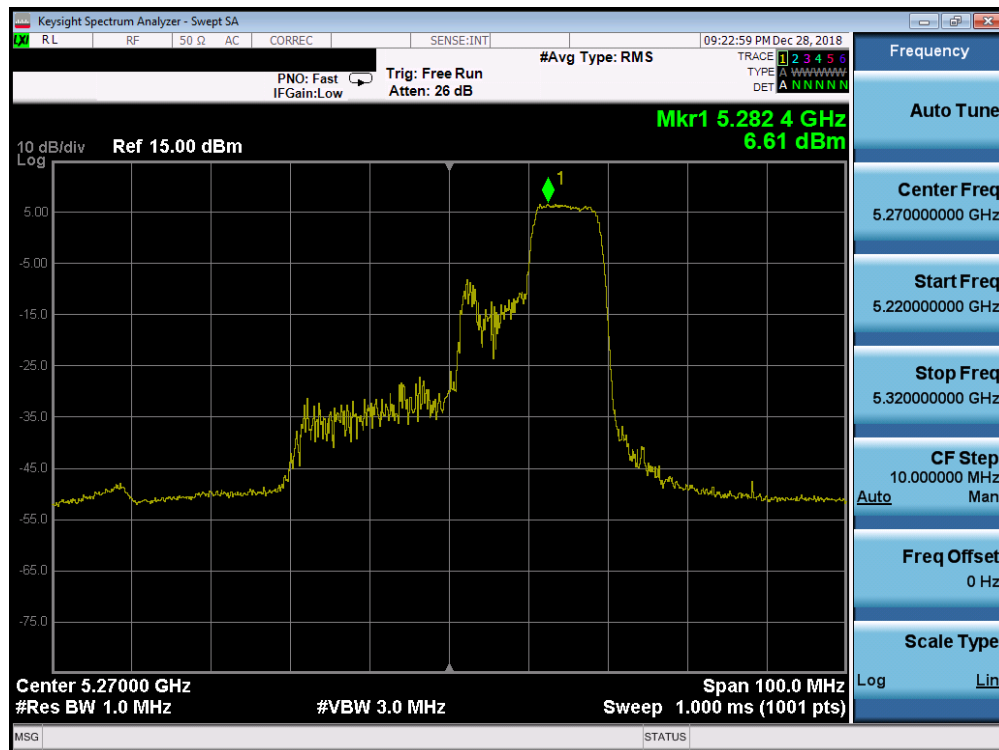


Plot 7-170. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 56)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 141 of 519

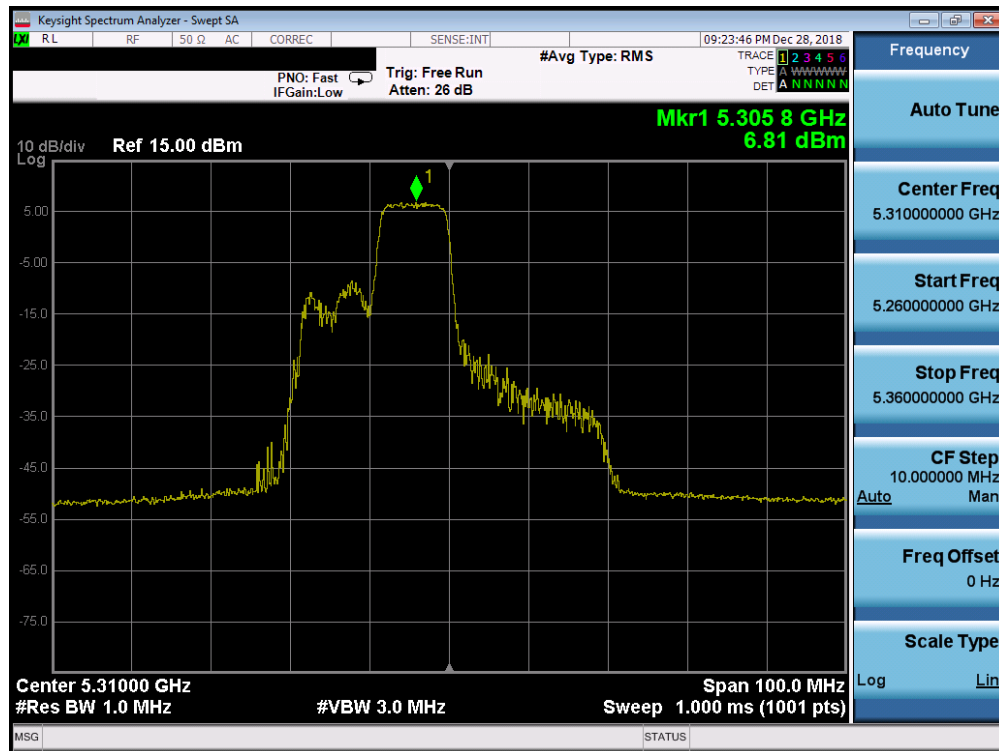


Plot 7-171. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 64)

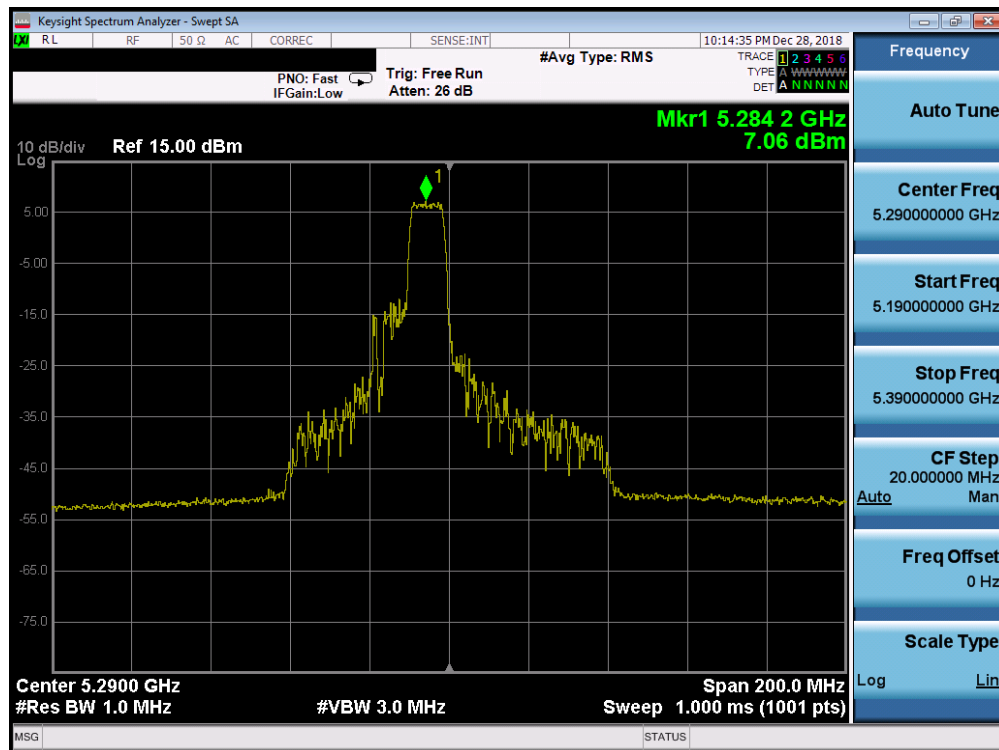


Plot 7-172. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 54)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 142 of 519

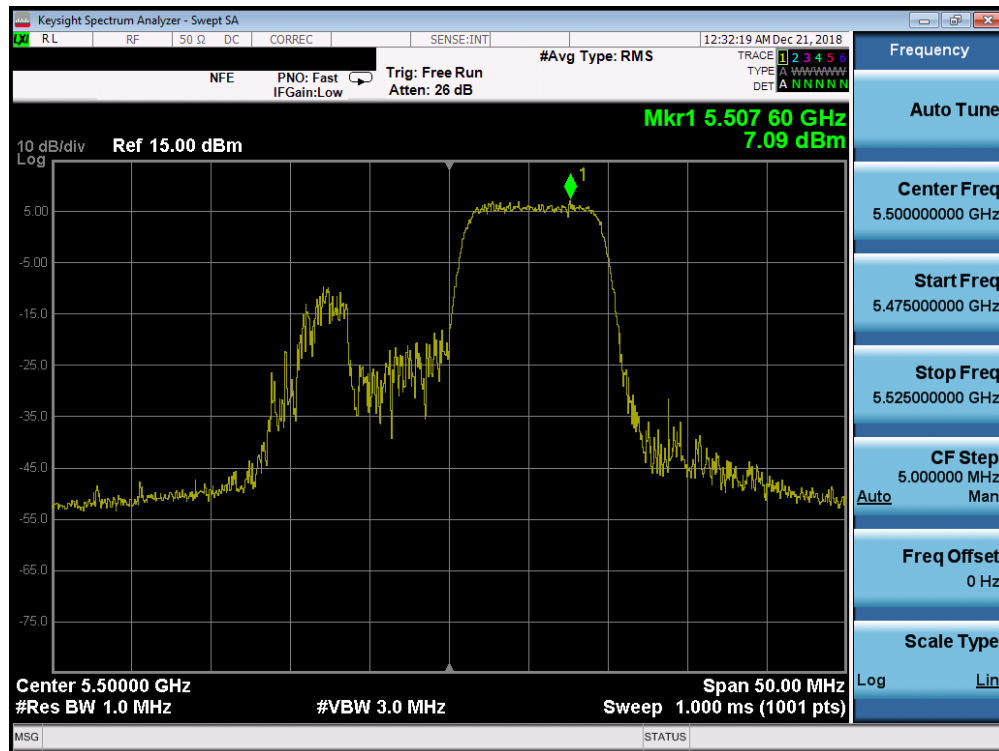


Plot 7-173. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 62)

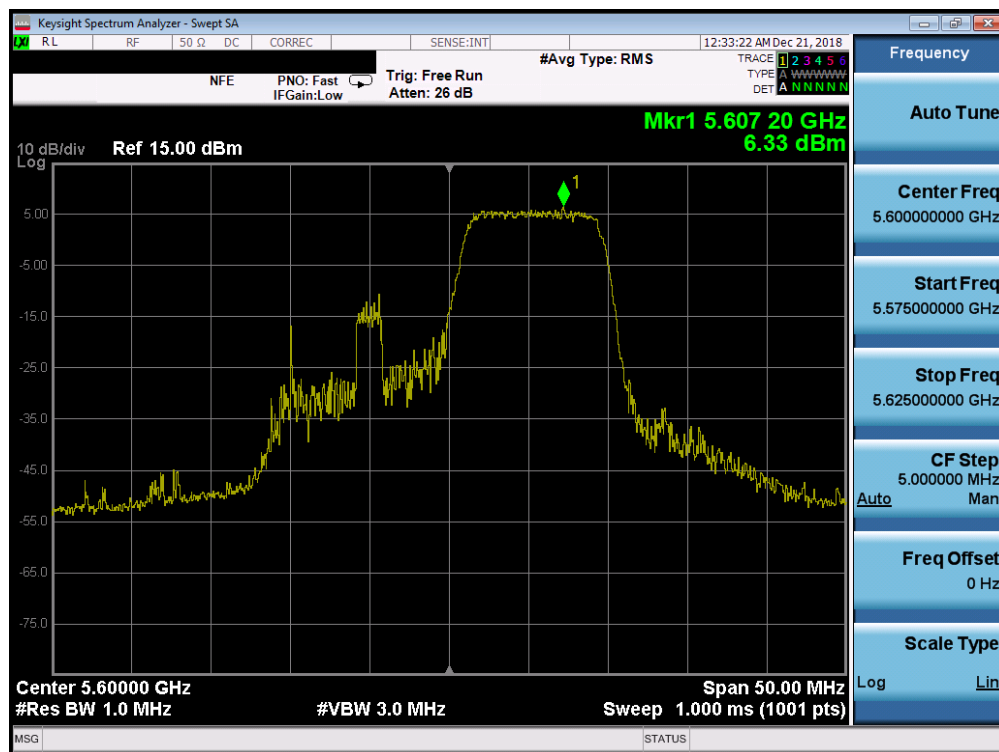


Plot 7-174. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 58)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 143 of 519

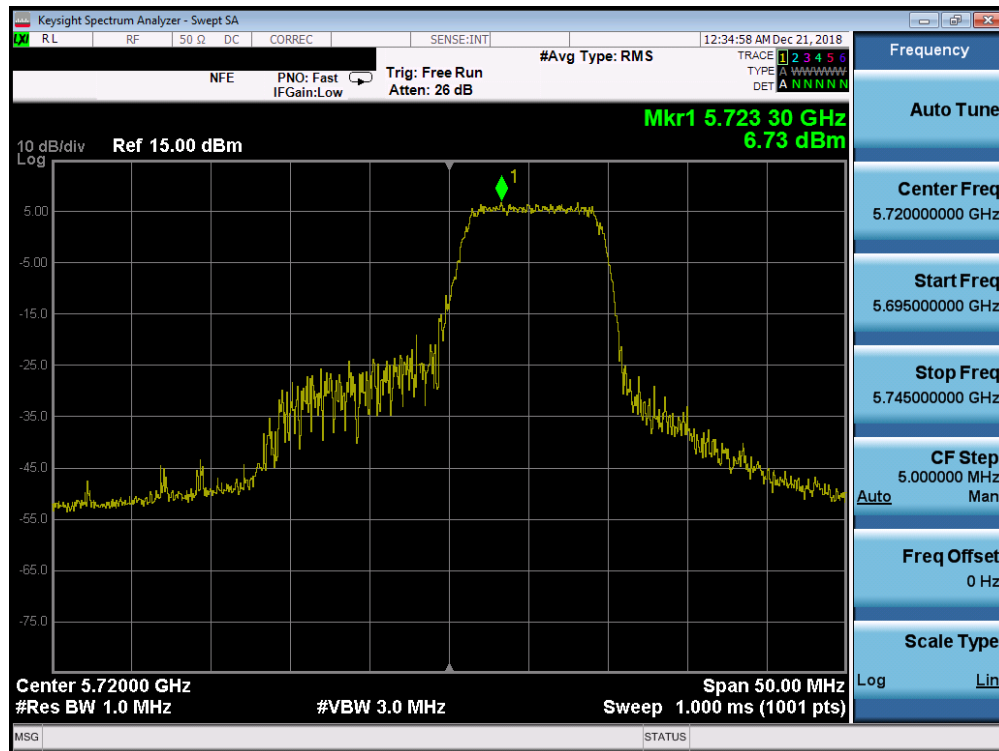


Plot 7-175. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 100)

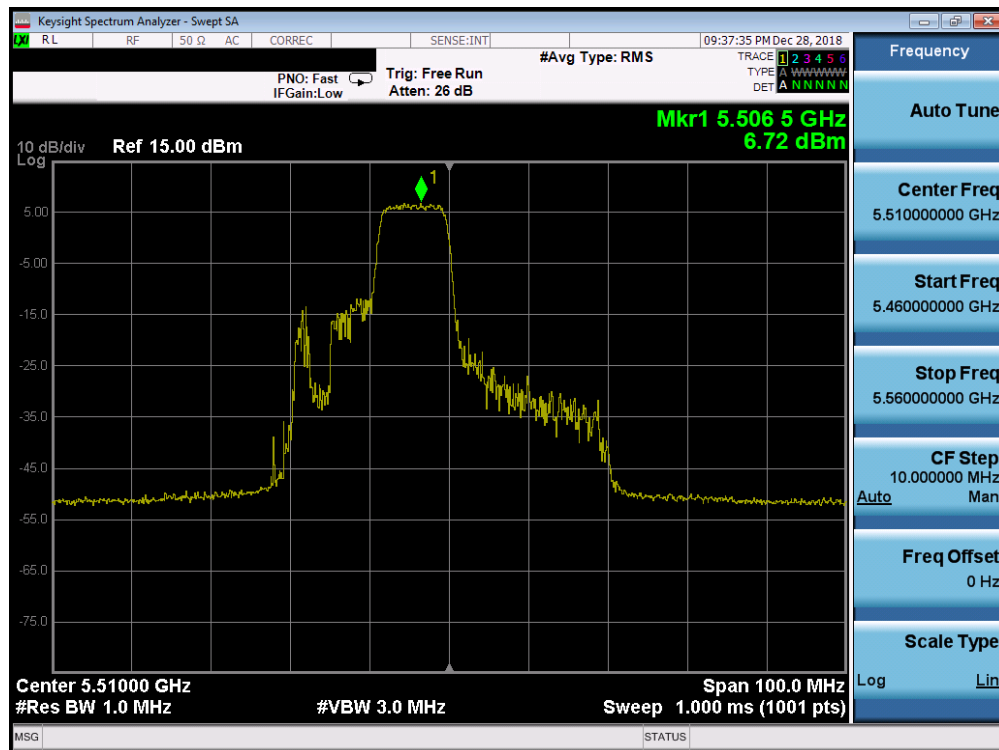


Plot 7-176. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 120)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 144 of 519

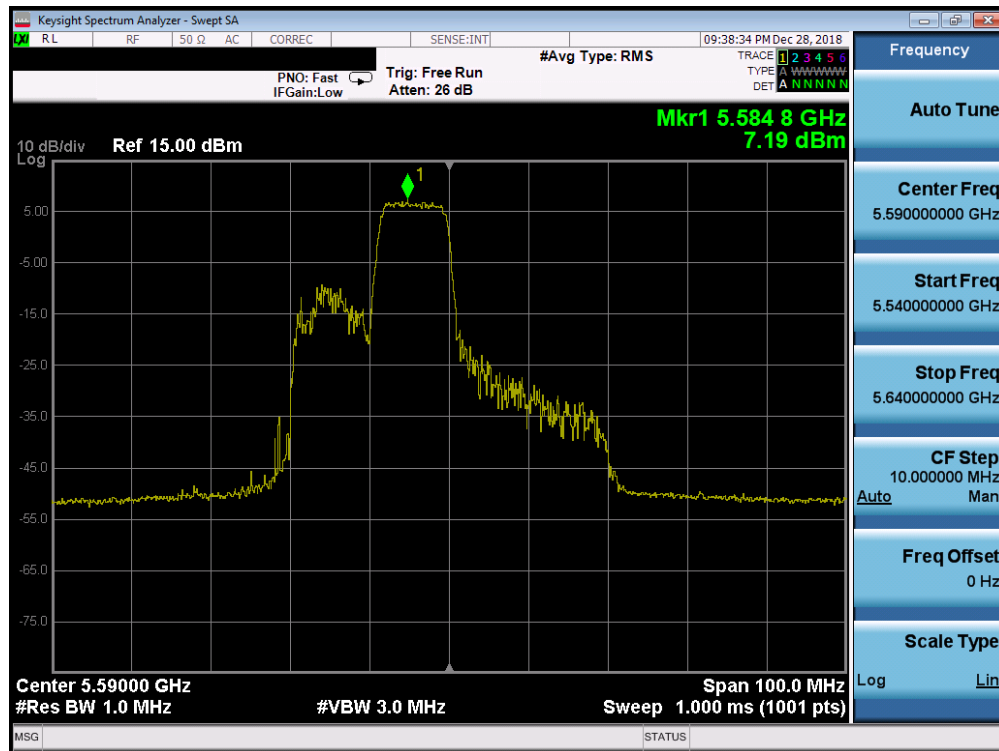


Plot 7-177. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 144)

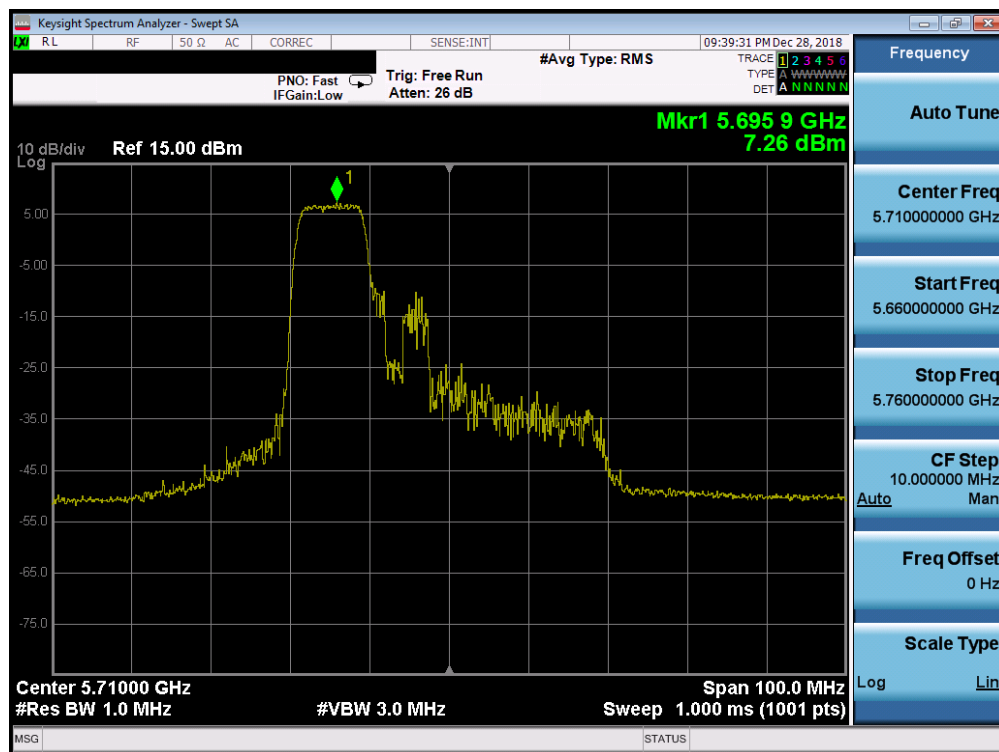


Plot 7-178. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 102)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 145 of 519

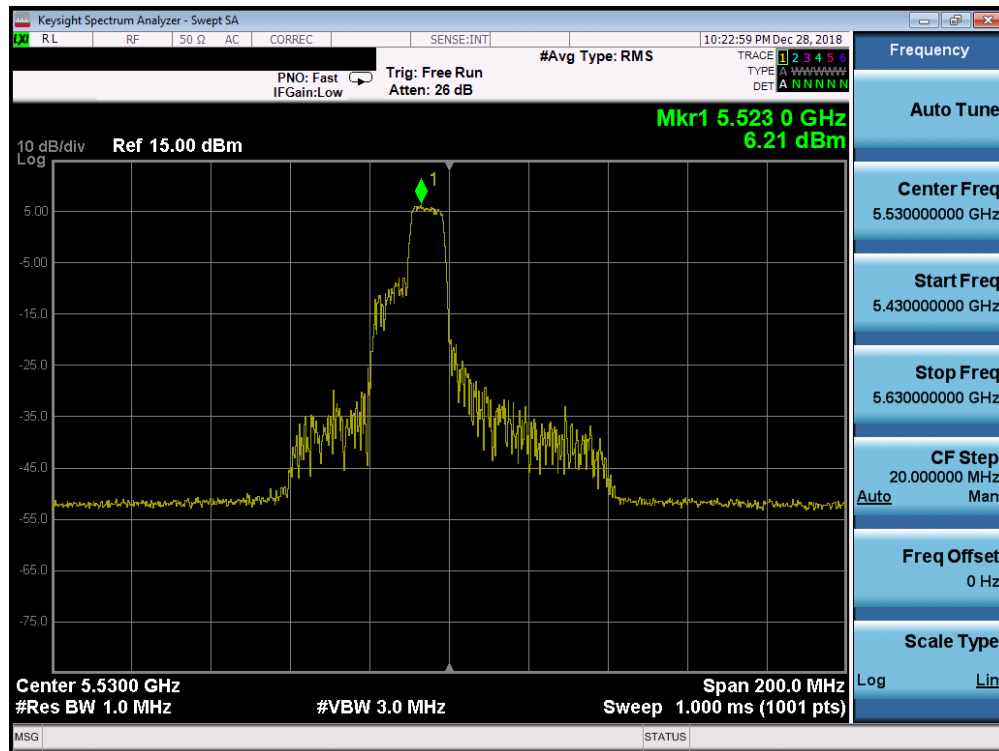


Plot 7-179. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 118)

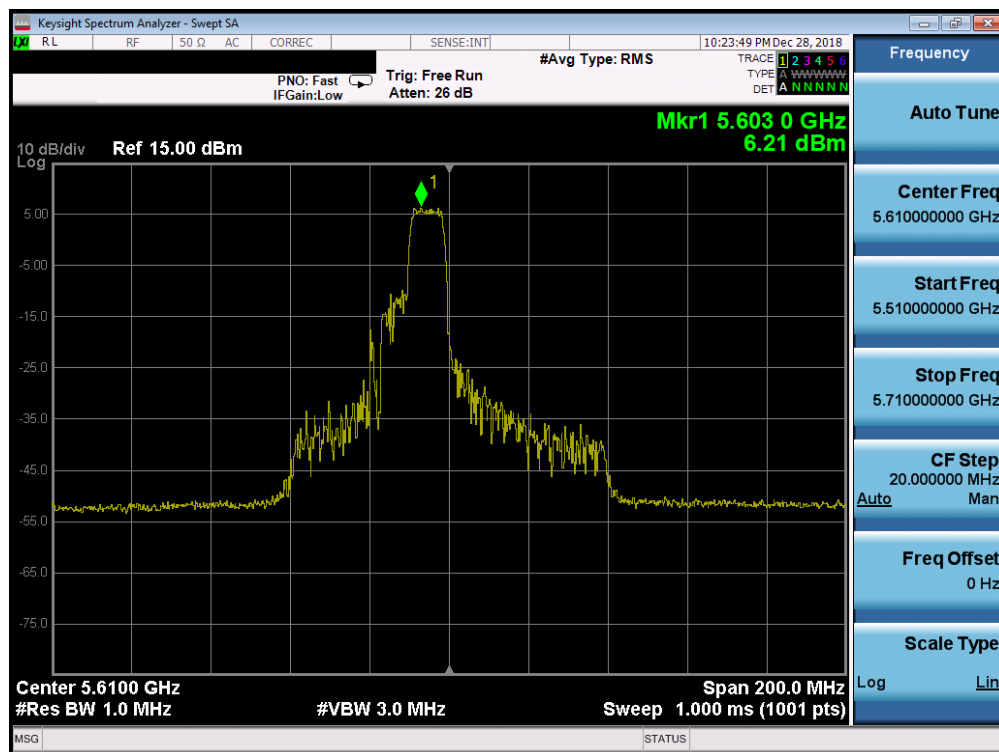


Plot 7-180. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 142)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 146 of 519

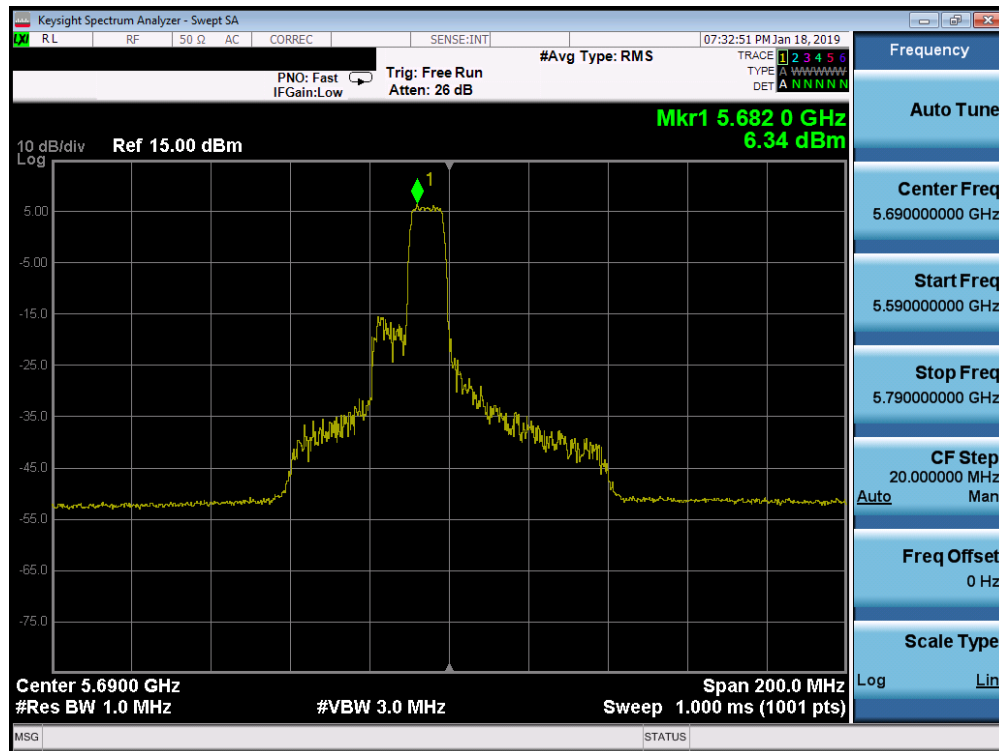


Plot 7-181. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 106)



Plot 7-182. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 122)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 147 of 519



Plot 7-183. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 138)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 148 of 519

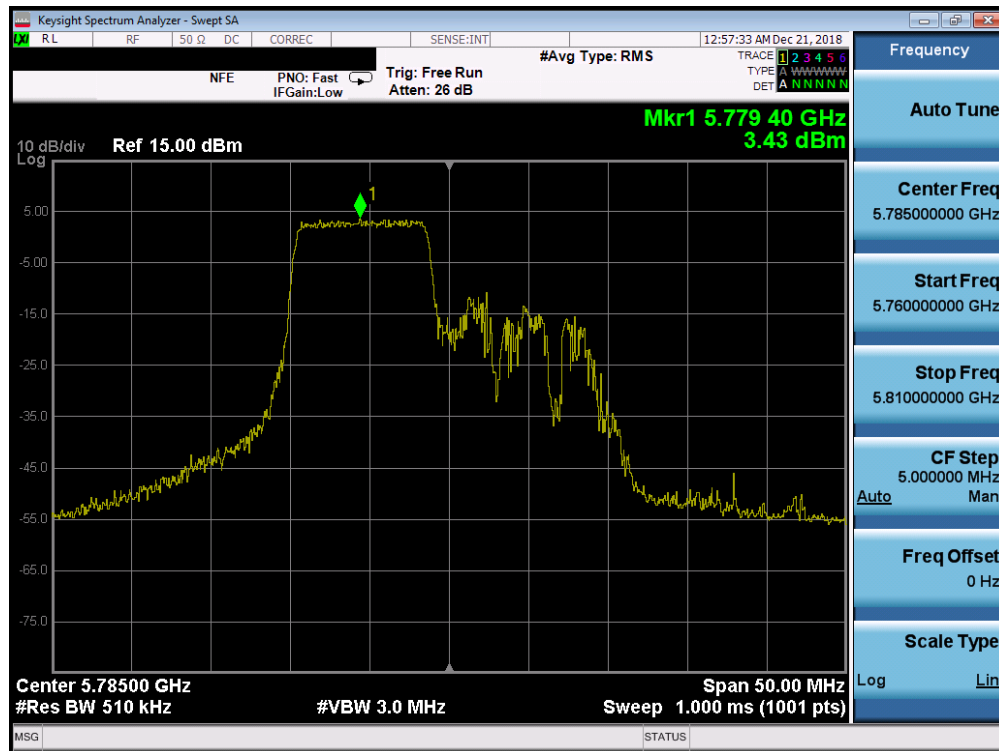
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
Band 3	5745	149	ax (20MHz)	106T	MCS0	3.18	30.00	-26.82
	5785	157	ax (20MHz)	106T	MCS0	3.43	30.00	-26.57
	5825	165	ax (20MHz)	106T	MCS0	3.01	30.00	-26.99
	5755	151	ax (40MHz)	106T	MCS0	4.21	30.00	-25.79
	5795	159	ax (40MHz)	106T	MCS0	3.90	30.00	-26.10
	5775	155	ax (80MHz)	106T	MCS0	7.15	30.00	-22.85

Table 7-71. Band 3 Conducted Power Spectral Density Measurements SISO ANT1 (106 Tones)



Plot 7-184. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 149)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 149 of 519

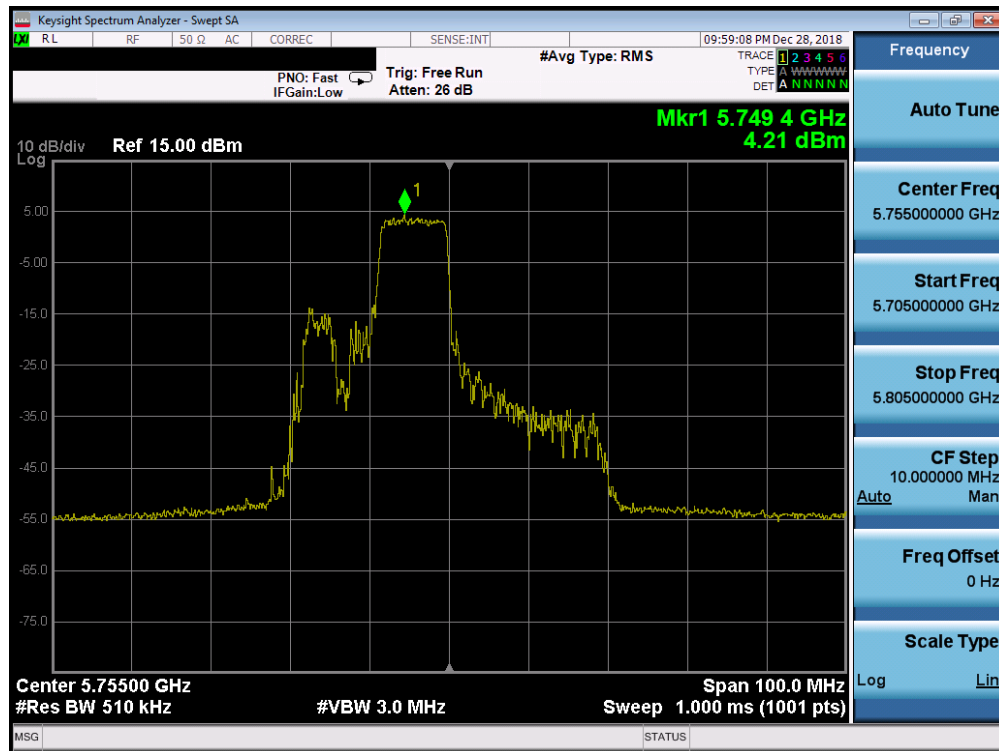


Plot 7-185. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 157)



Plot 7-186. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 165)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 150 of 519

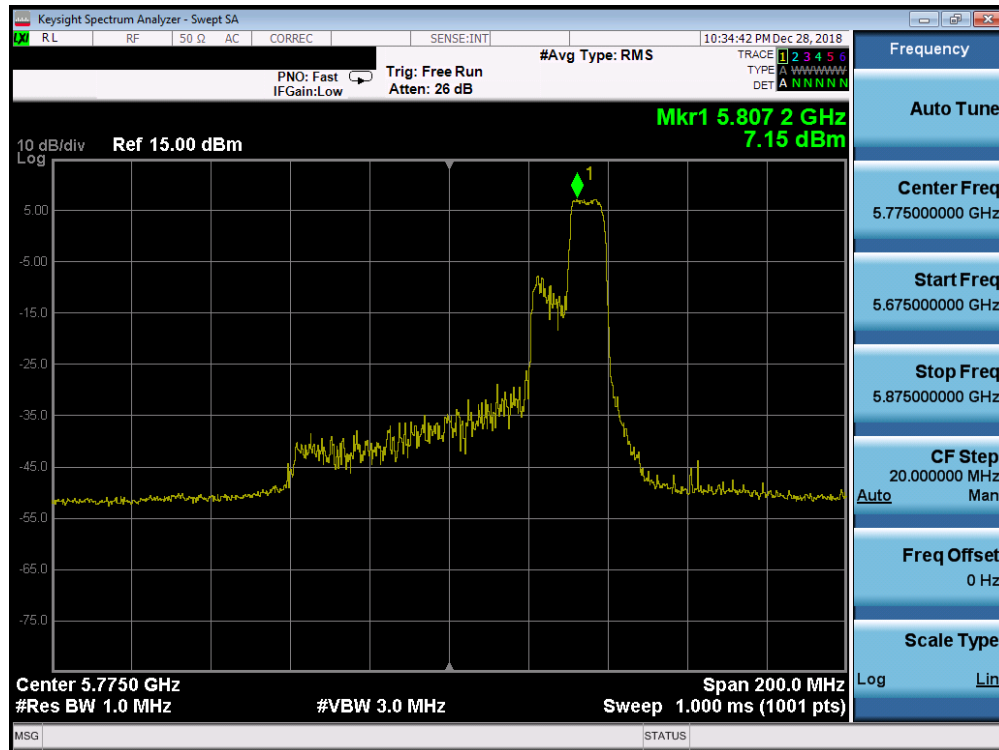


Plot 7-187. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 151)



Plot 7-188. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 159)

FCC ID: A3LSMG9700			MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset	Page 151 of 519		



Plot 7-189. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 155)

FCC ID: A3LSMG9700	 MEASUREMENT REPORT (CERTIFICATION) 		Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset	Page 152 of 519

SISO Antenna-1 Power Spectral Density Measurements (242 Tones)

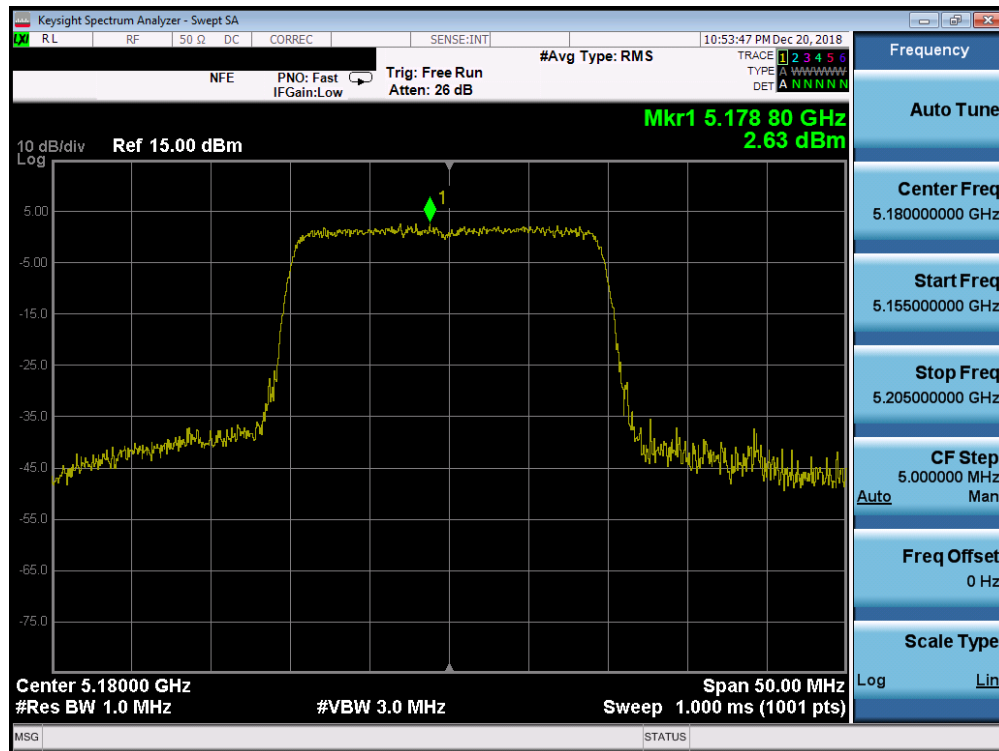
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	ax (20MHz)	242T	MCS0	2.63	11.00	-8.37
	5200	40	ax (20MHz)	242T	MCS0	5.79	11.00	-5.21
	5240	48	ax (20MHz)	242T	MCS0	6.26	11.00	-4.74
	5190	38	ax (40MHz)	242T	MCS0	1.27	11.00	-9.73
	5230	46	ax (40MHz)	242T	MCS0	5.22	11.00	-5.78
	5210	42	ax (80MHz)	242T	MCS0	1.08	11.00	-9.92
Band 2A	5260	52	ax (20MHz)	242T	MCS0	6.69	11.00	-4.31
	5280	56	ax (20MHz)	242T	MCS0	6.73	11.00	-4.27
	5320	64	ax (20MHz)	242T	MCS0	4.01	11.00	-6.99
	5270	54	ax (40MHz)	242T	MCS0	5.42	11.00	-5.58
	5310	62	ax (40MHz)	242T	MCS0	2.15	11.00	-8.85
	5290	58	ax (80MHz)	242T	MCS0	0.81	11.00	-10.19
Band 2C	5500	100	ax (20MHz)	242T	MCS0	5.94	11.00	-5.06
	5600	120	ax (20MHz)	242T	MCS0	5.64	11.00	-5.36
	5720	144	ax (20MHz)	242T	MCS0	5.81	11.00	-5.19
	5510	102	ax (40MHz)	242T	MCS0	3.30	11.00	-7.70
	5590	118	ax (40MHz)	242T	MCS0	5.87	11.00	-5.13
	5710	142	ax (40MHz)	242T	MCS0	5.59	11.00	-5.41
	5530	106	ax (80MHz)	242T	MCS0	0.15	11.00	-10.85
	5610	122	ax (80MHz)	242T	MCS0	3.81	11.00	-7.19
	5690	138	ax (80MHz)	242T	MCS0	3.30	11.00	-7.70

Table 7-72. Bands 1, 2A, 2C Conducted Power Spectral Density Measurements SISO ANT1 (242 Tones)

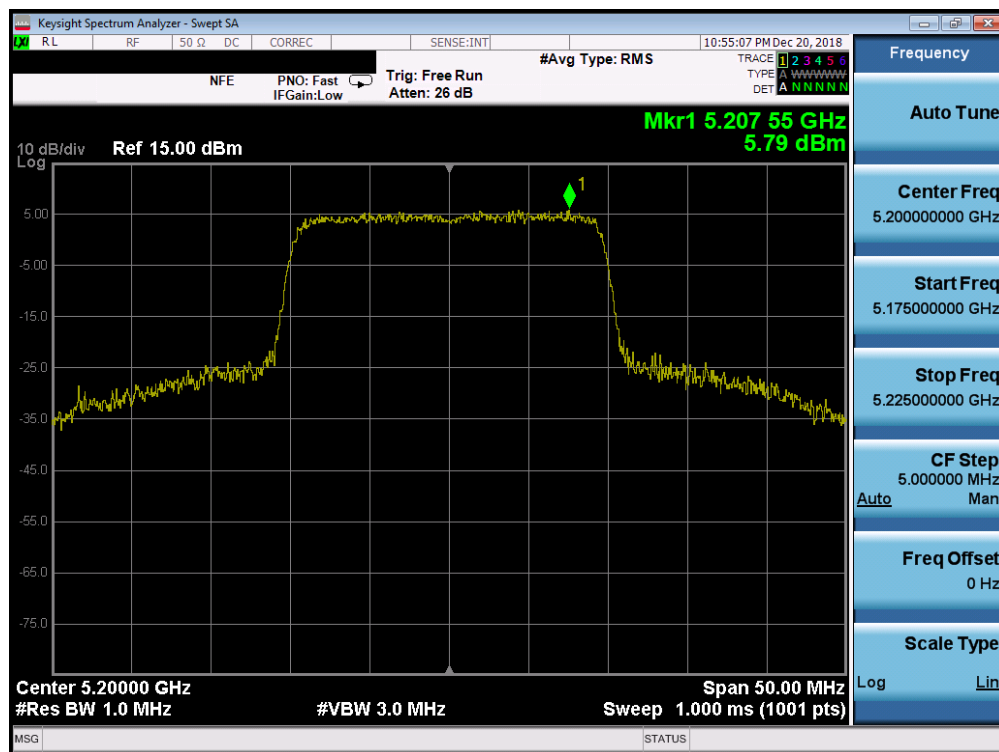
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Antenna Gain [dBi]	e.i.r.p. Power Density [dBm/MHz]	ISED Max e.i.r.p. Power Density	Margin [dB]
Band 1	5180	36	ax (20MHz)	242T	MCS0	2.63	-8.61	-5.98	10.0	-15.98
	5200	40	ax (20MHz)	242T	MCS0	5.79	-8.61	-2.82	10.0	-12.82
	5240	48	ax (20MHz)	242T	MCS0	6.26	-7.66	-1.40	10.0	-11.40
	5190	38	ax (40MHz)	242T	MCS0	1.27	-8.61	-7.34	10.0	-17.34
	5230	46	ax (40MHz)	242T	MCS0	5.22	-7.66	-2.44	10.0	-12.44
	5210	42	ax (80MHz)	242T	MCS0	1.08	-7.66	-6.58	10.0	-16.58

Table 7-73. Bands 1 e.i.r.p Conducted Power Spectral Density Measurements (ISED 242 Tones)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 153 of 519

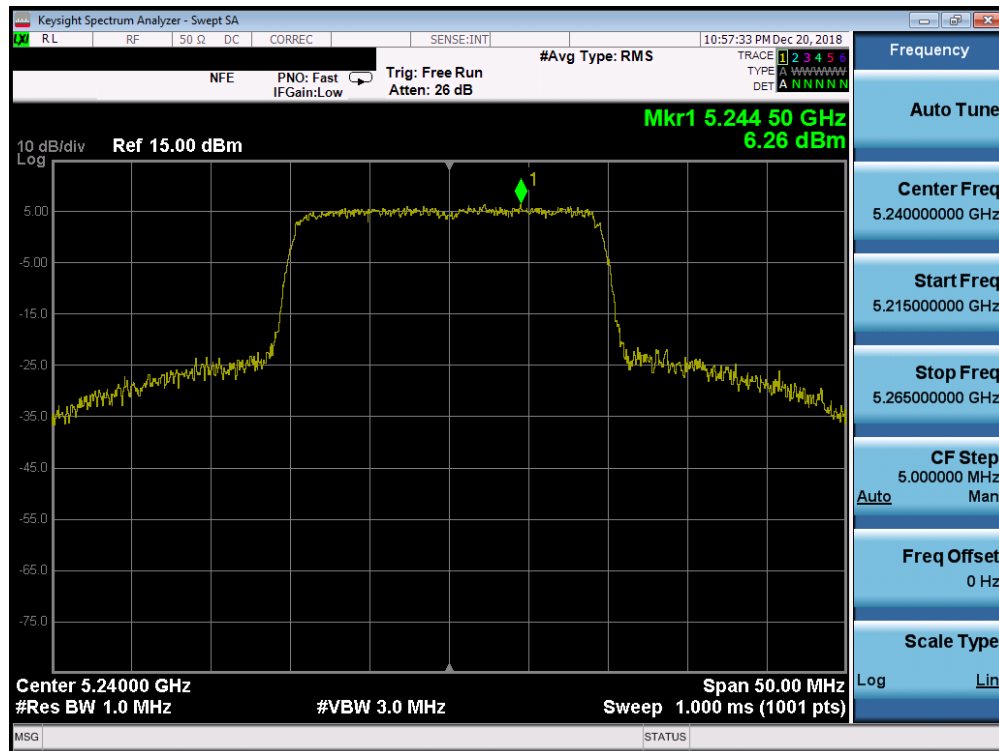


Plot 7-190. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 36)

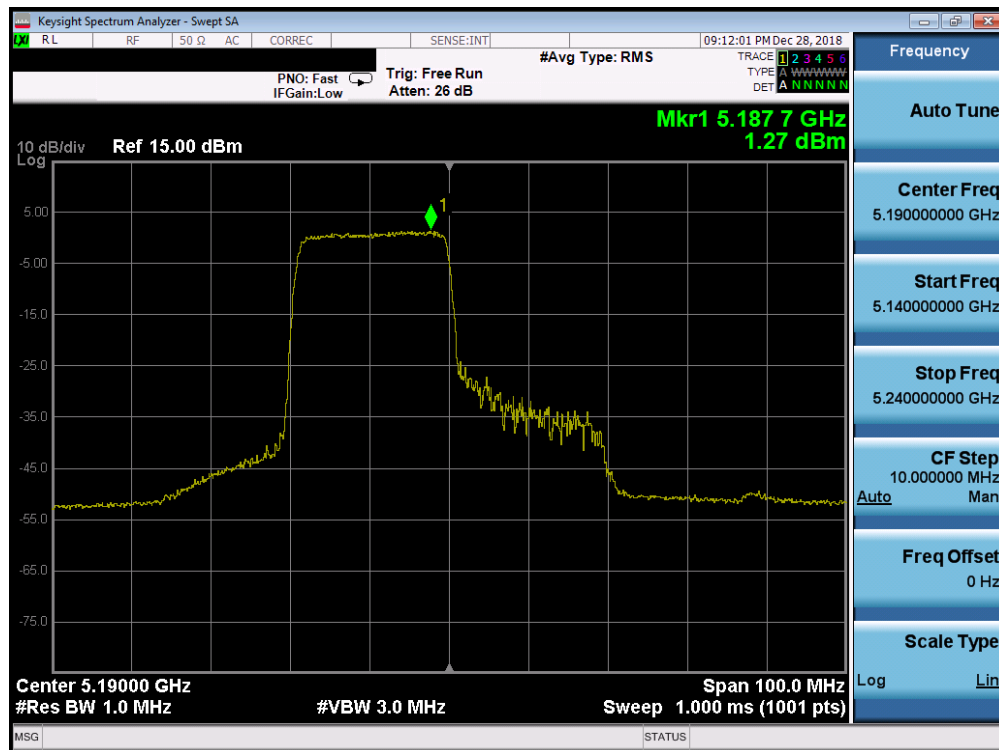


Plot 7-191. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 40)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 154 of 519

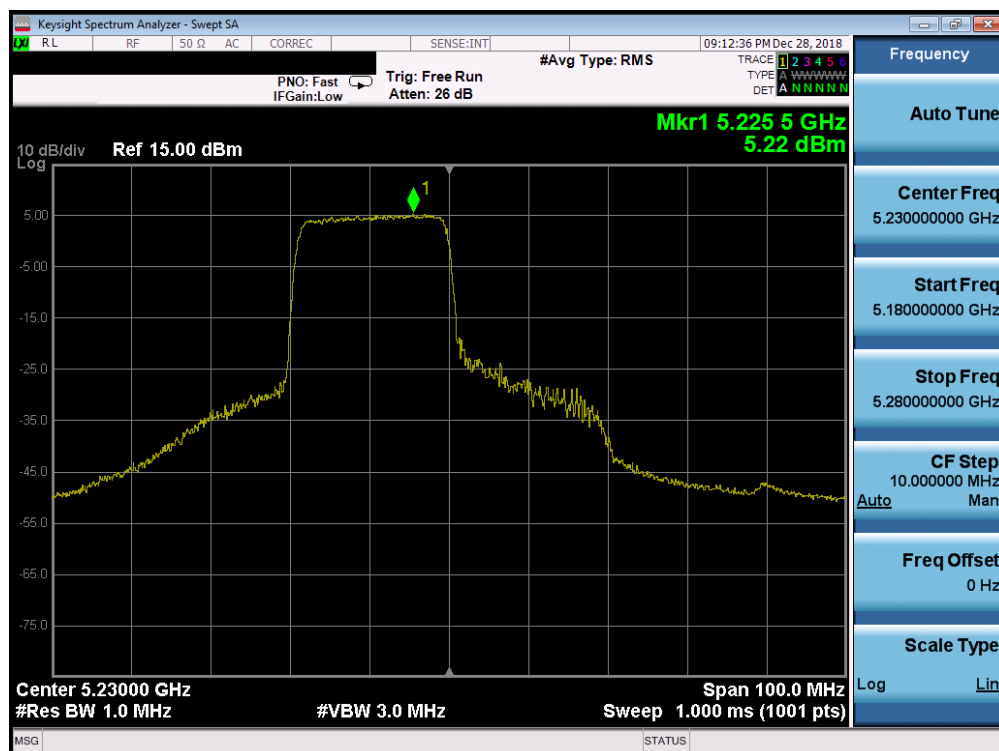


Plot 7-192. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 48)

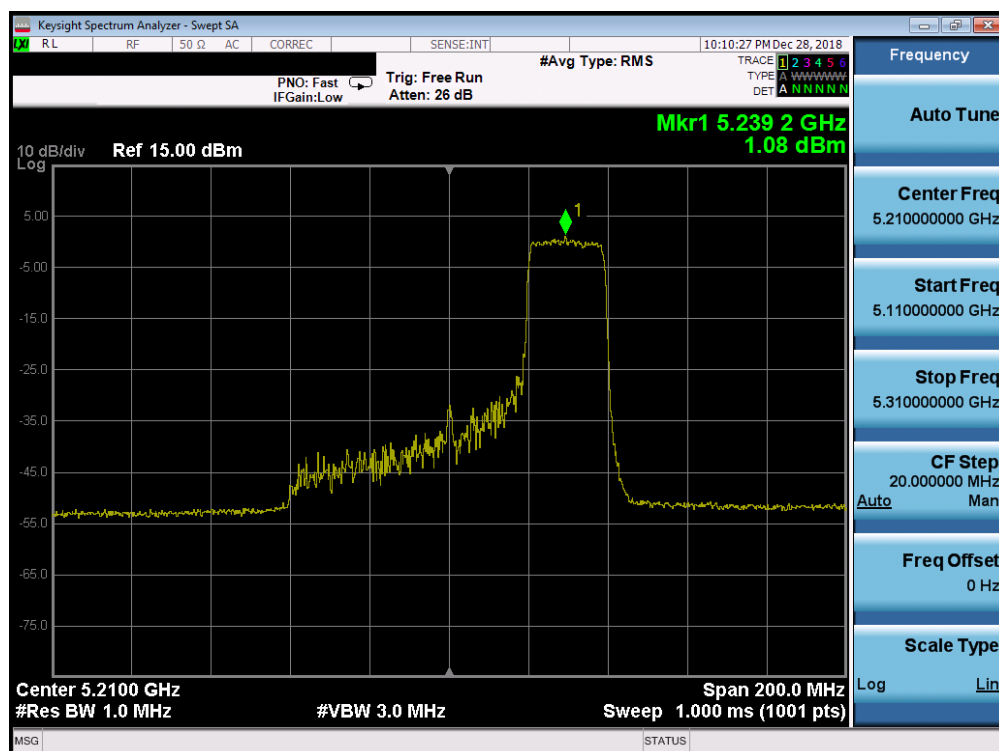


Plot 7-193. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 38)

FCC ID: A3LSMG9700			MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset	Page 155 of 519		

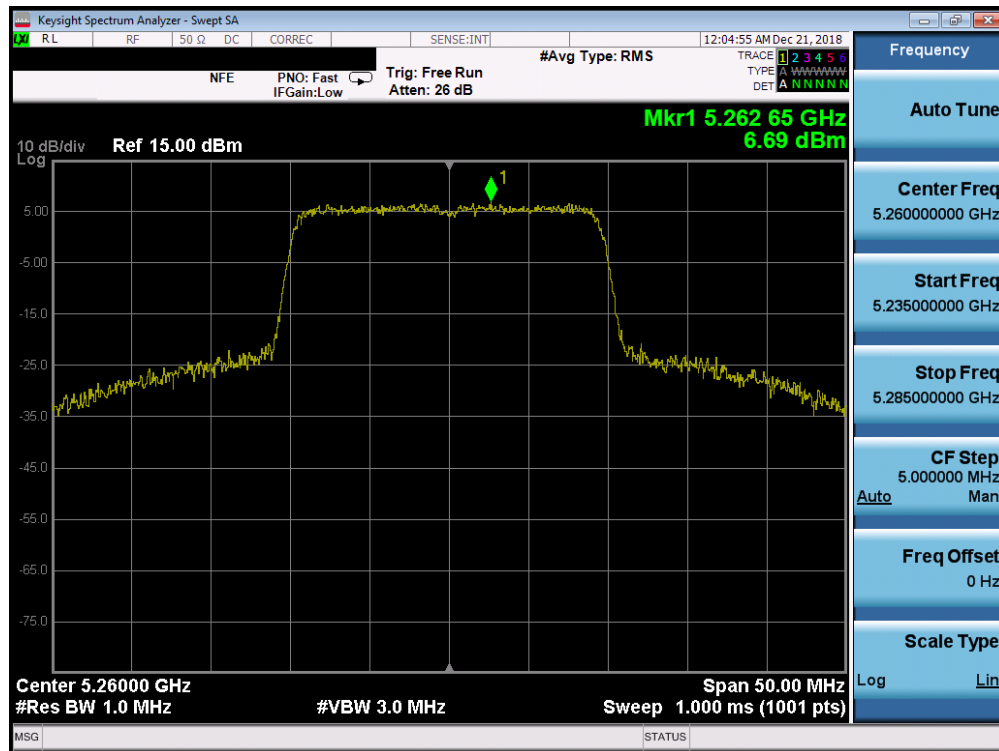


Plot 7-194. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 46)

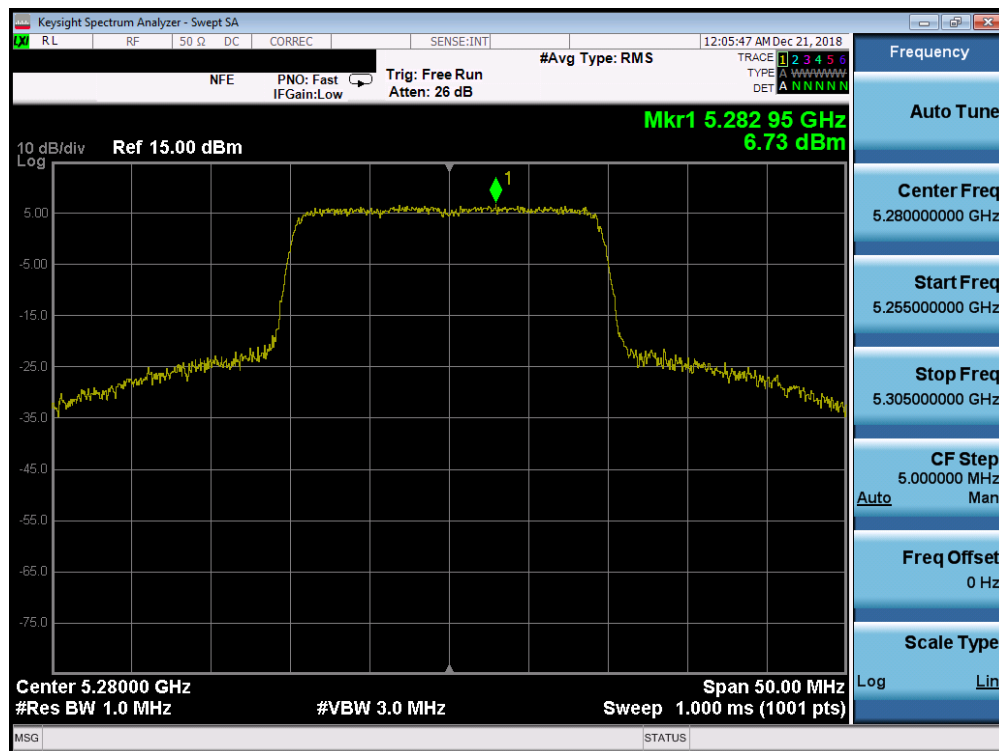


Plot 7-195. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 42)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 156 of 519

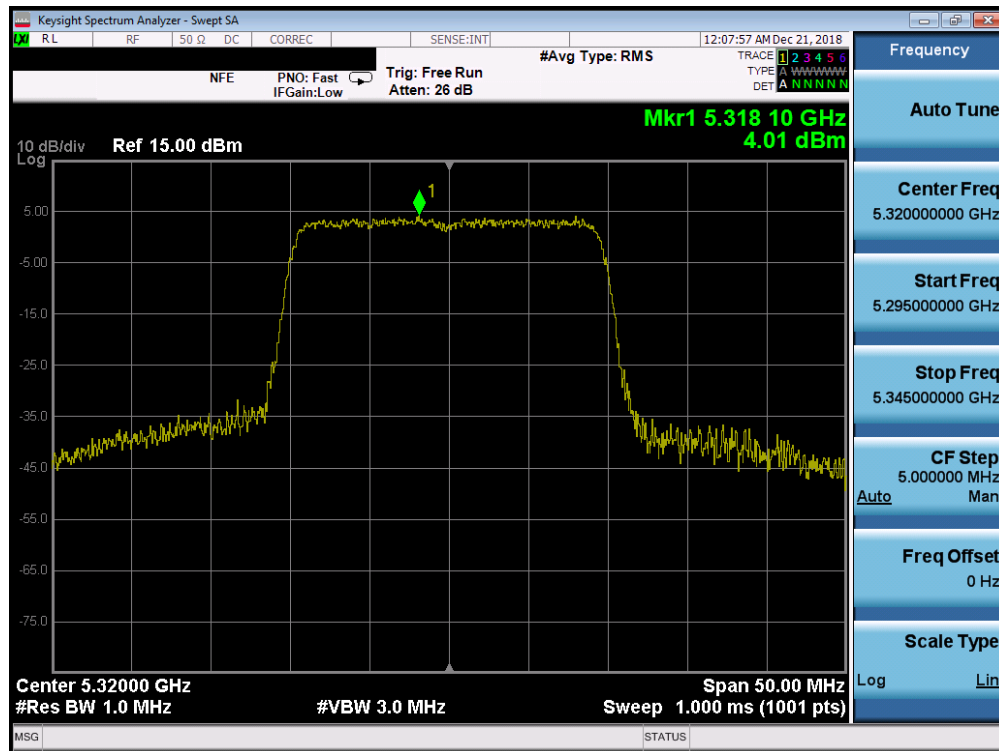


Plot 7-196. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 52)

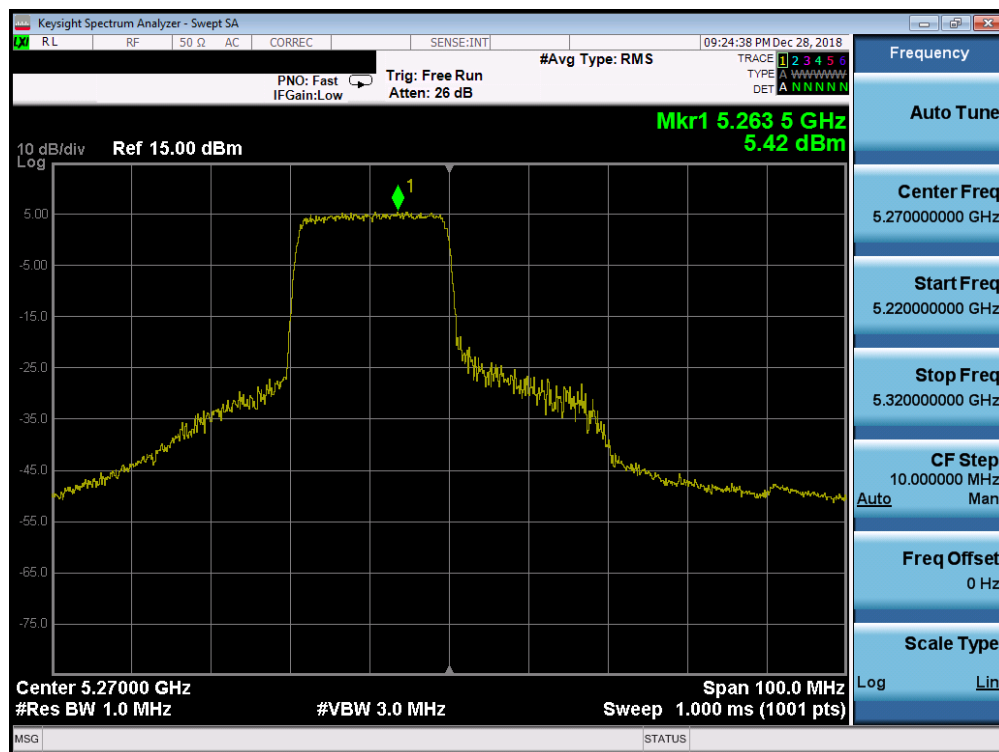


Plot 7-197. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 56)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 157 of 519

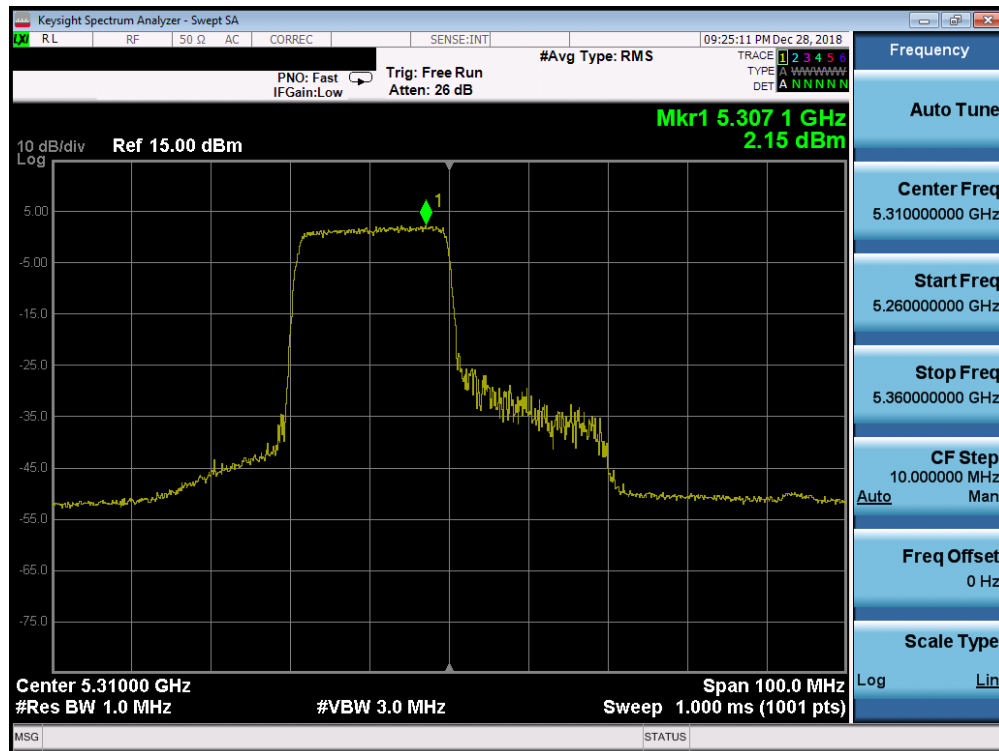


Plot 7-198. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 64)

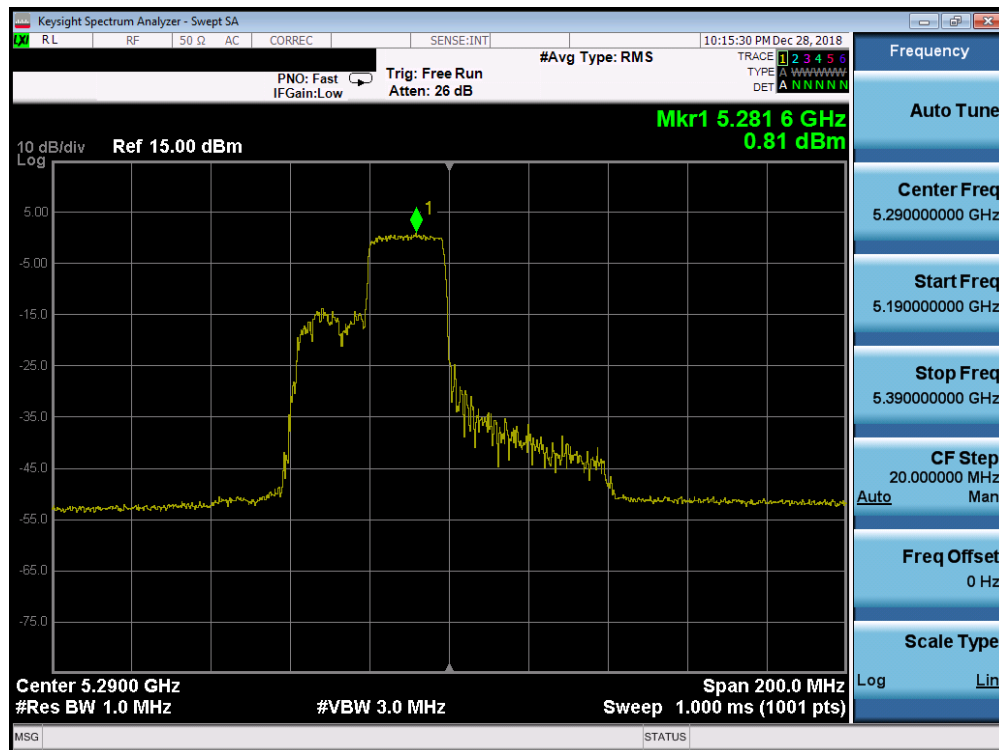


Plot 7-199. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 54)

FCC ID: A3LSMG9700	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset	Page 158 of 519

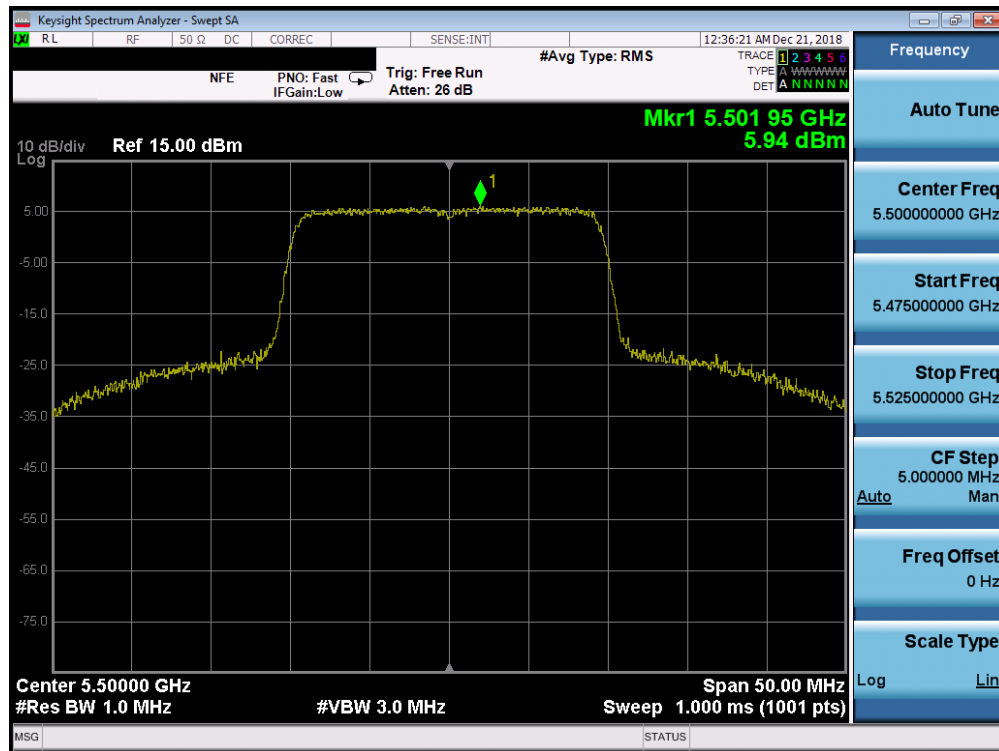


Plot 7-200. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 62)

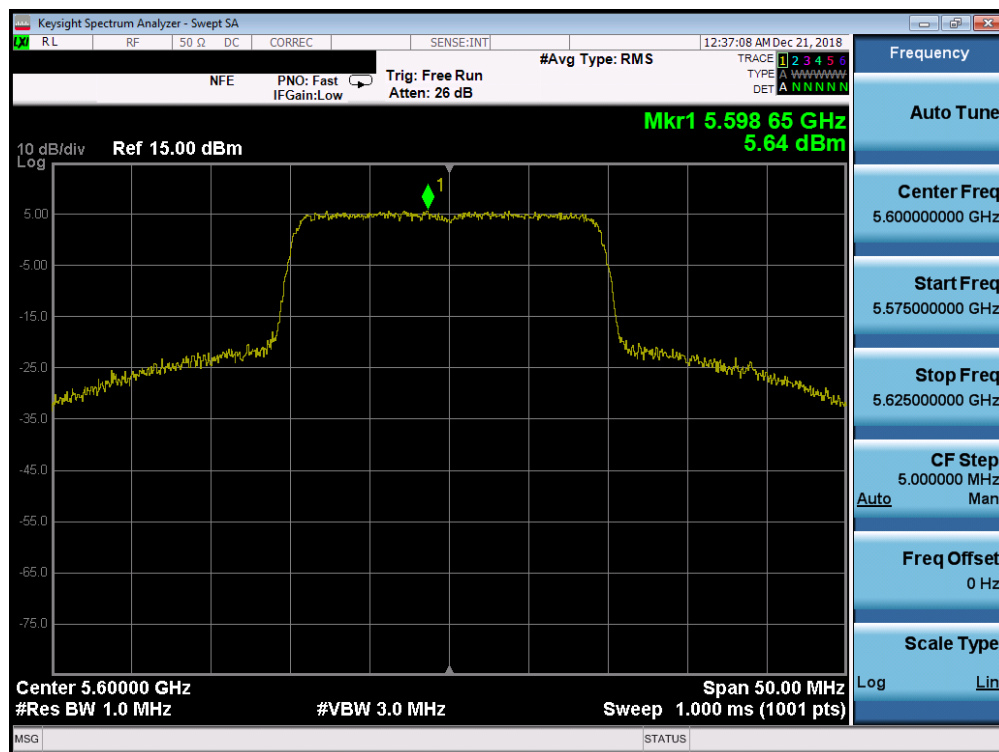


Plot 7-201. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 58)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 159 of 519

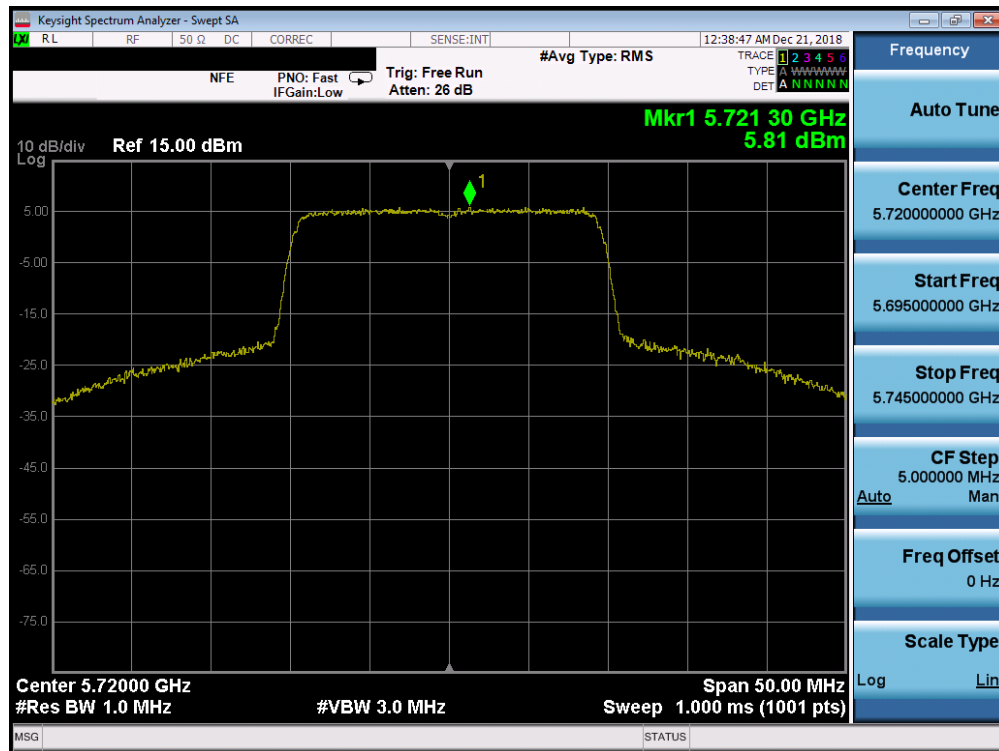


Plot 7-202. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 100)

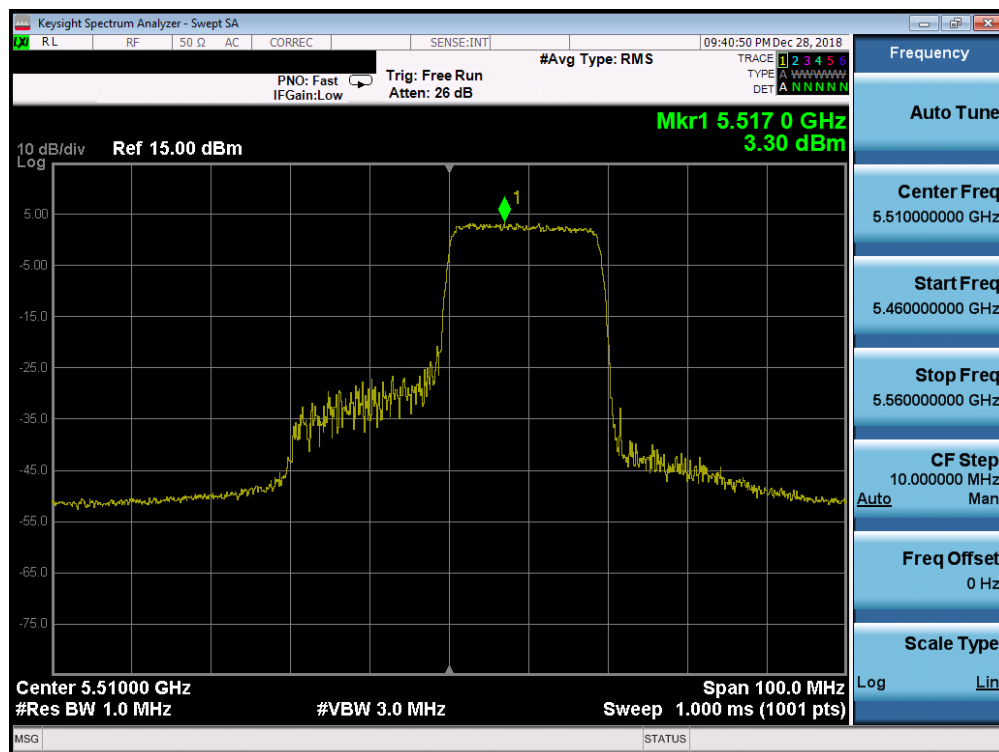


Plot 7-203. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 120)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 160 of 519

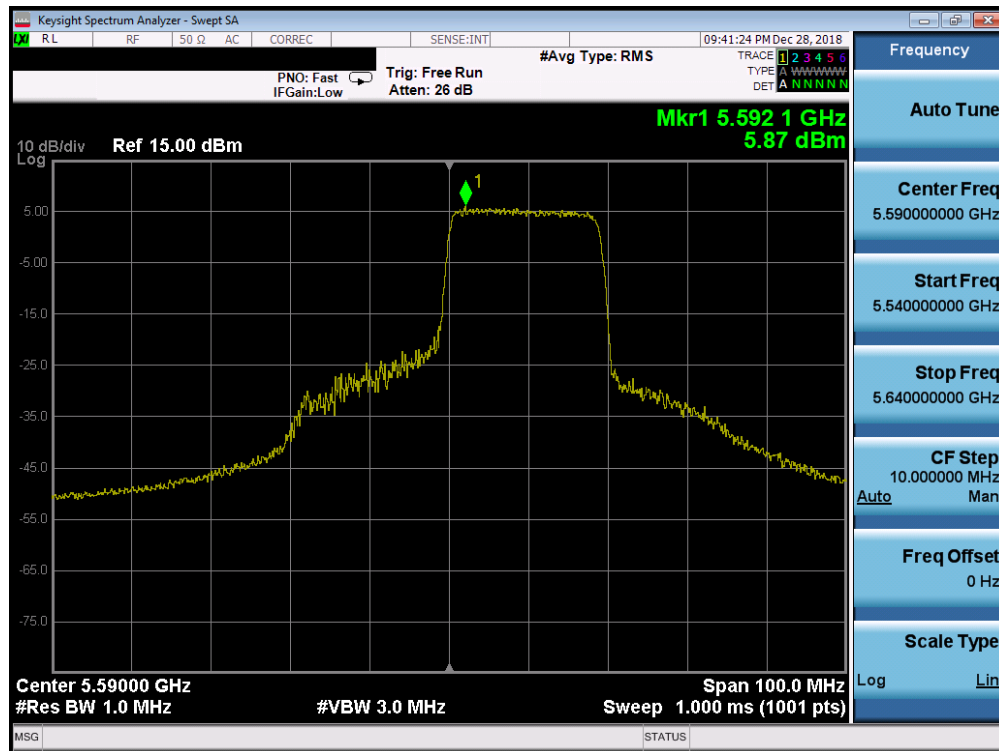


Plot 7-204. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 144)

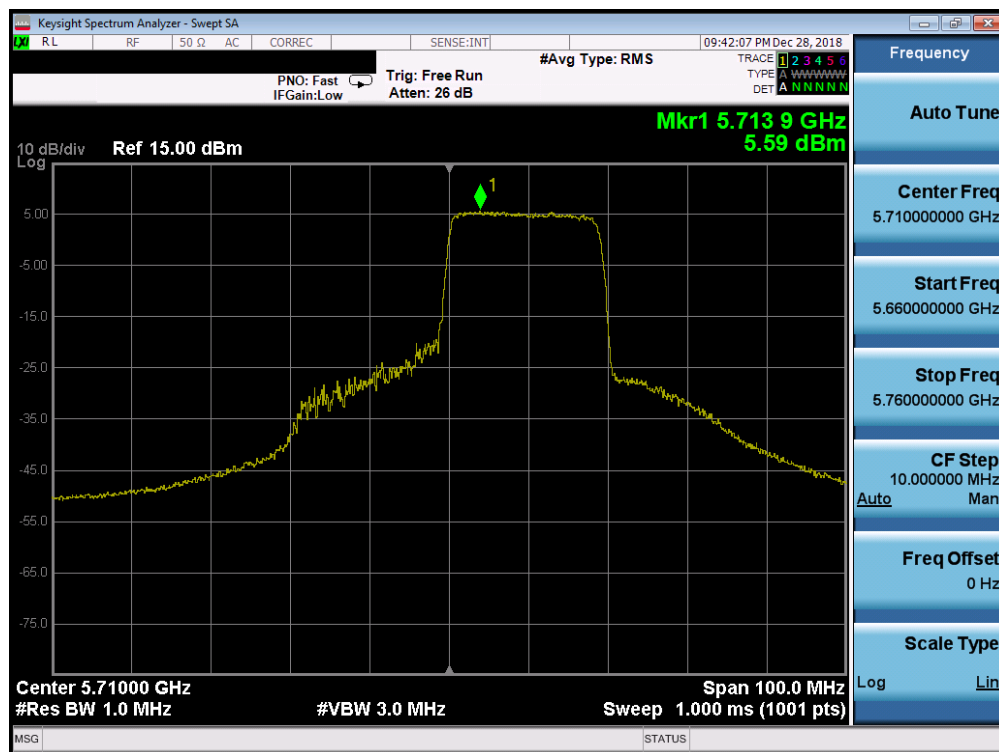


Plot 7-205. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 102)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 161 of 519

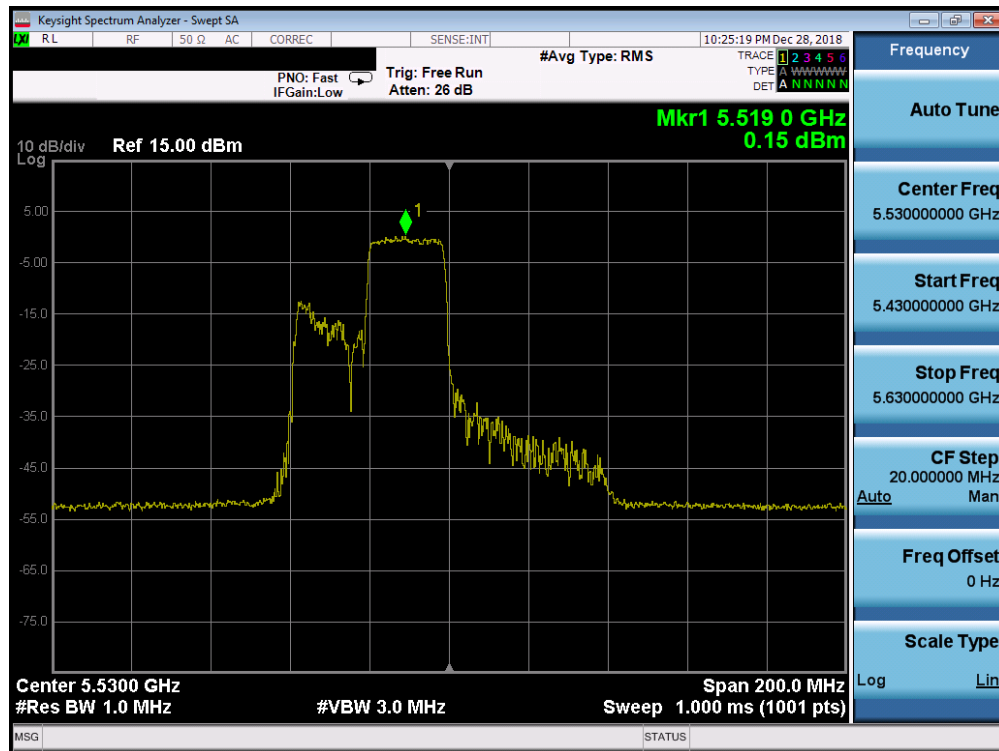


Plot 7-206. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 118)



Plot 7-207. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 142)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 162 of 519



Plot 7-208. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 106)



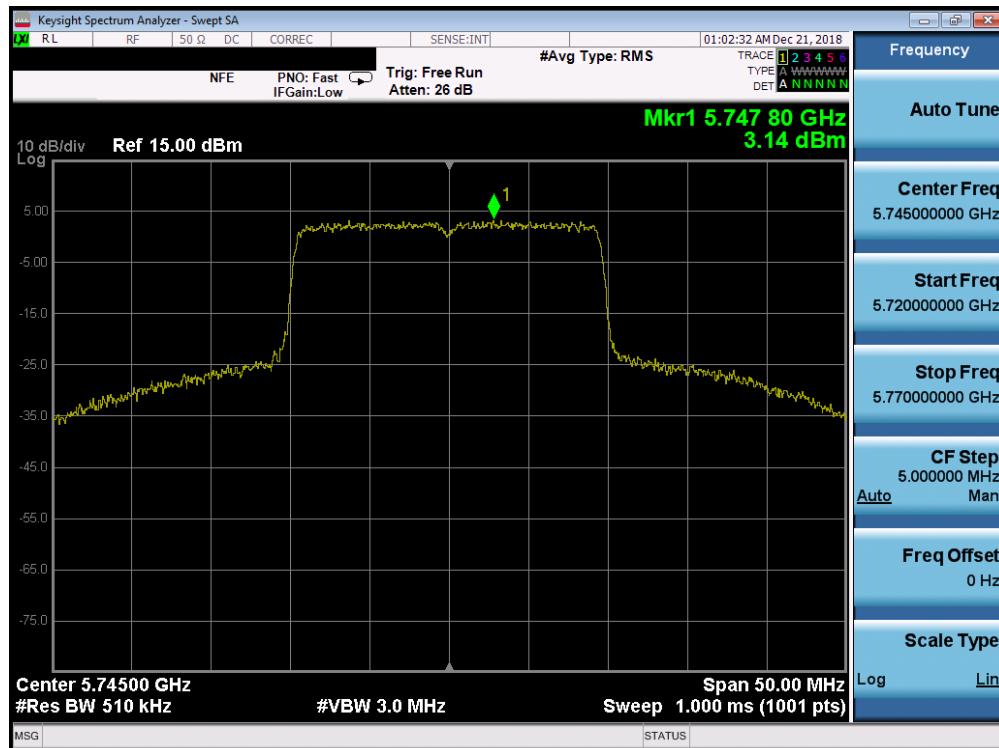
Plot 7-209. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 122)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 163 of 519



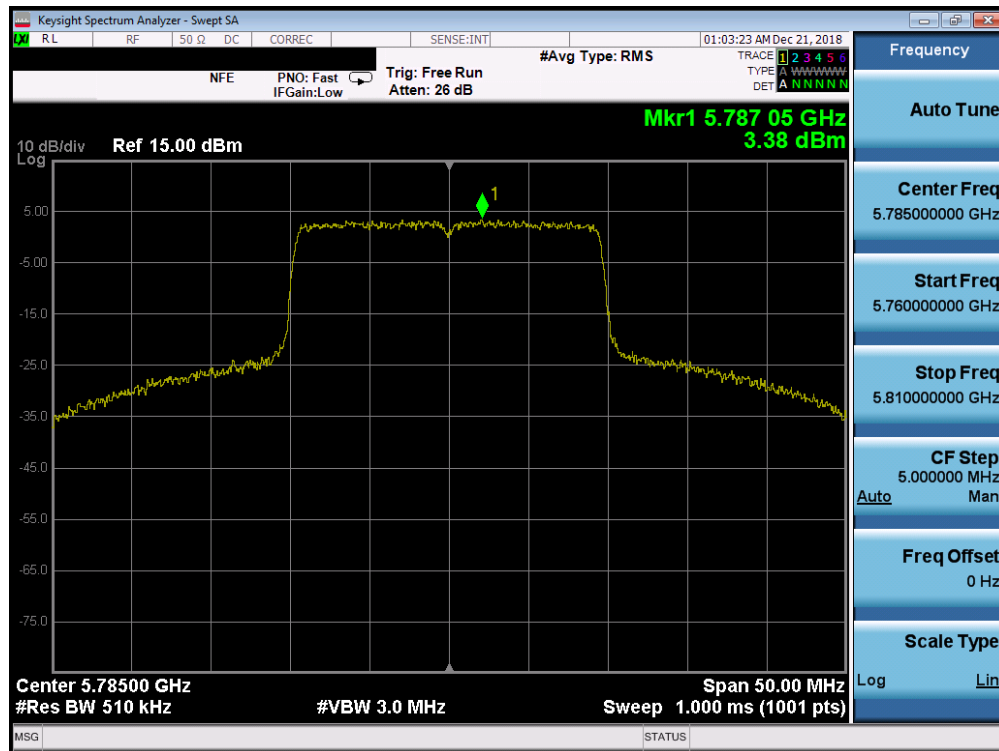
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
Band 3	5745	149	ax (20MHz)	242T	MCS0	3.14	30.00	-26.86
	5785	157	ax (20MHz)	242T	MCS0	3.58	30.00	-26.42
	5825	165	ax (20MHz)	242T	MCS0	3.30	30.00	-26.70
	5755	151	ax (40MHz)	242T	MCS0	2.64	30.00	-27.36
	5795	159	ax (40MHz)	242T	MCS0	2.73	30.00	-27.27
	5775	155	ax (80MHz)	242T	MCS0	4.37	30.00	-25.63

Table 7-74. Band 3 Conducted Power Spectral Density Measurements SISO ANT1 (242 Tones)

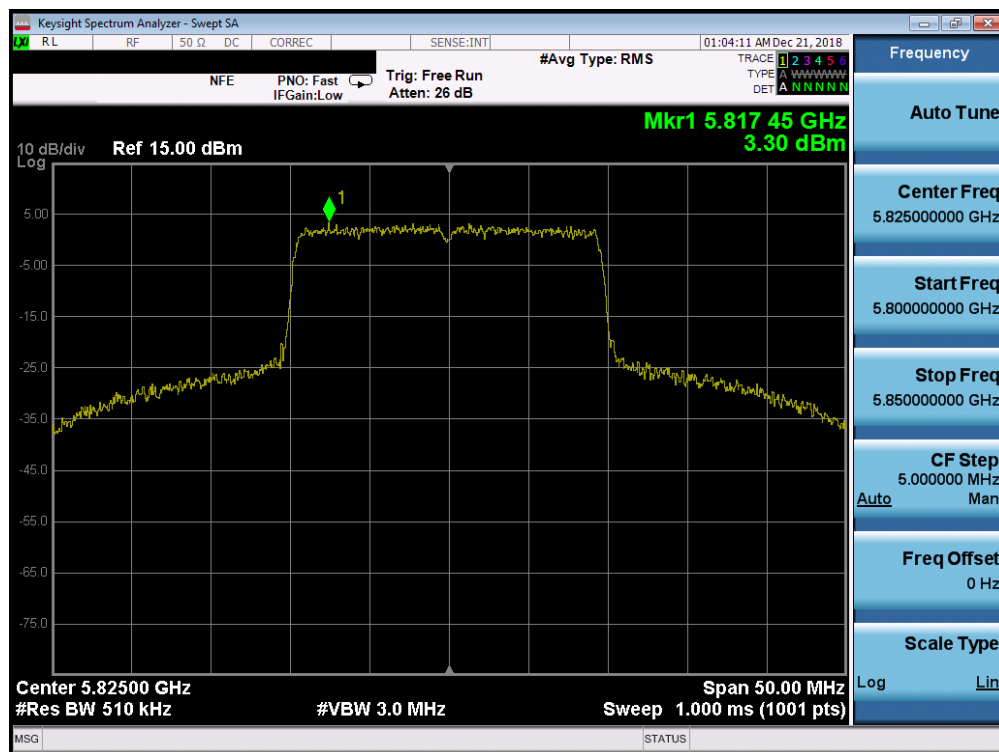


Plot 7-211. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 149)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 165 of 519

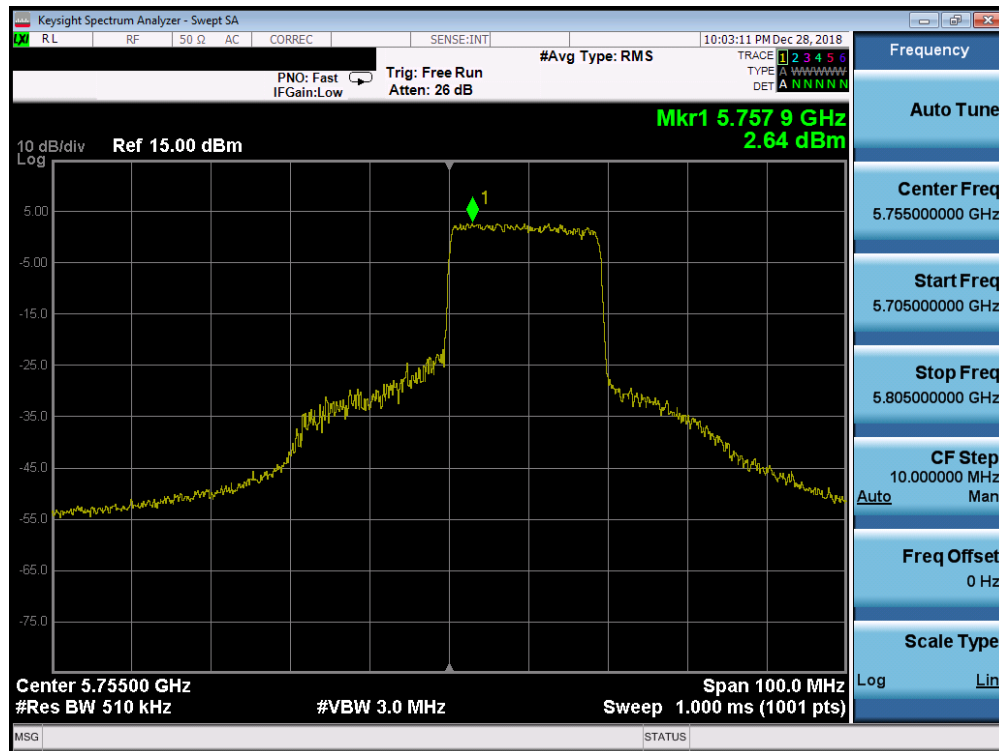


Plot 7-212. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 157)

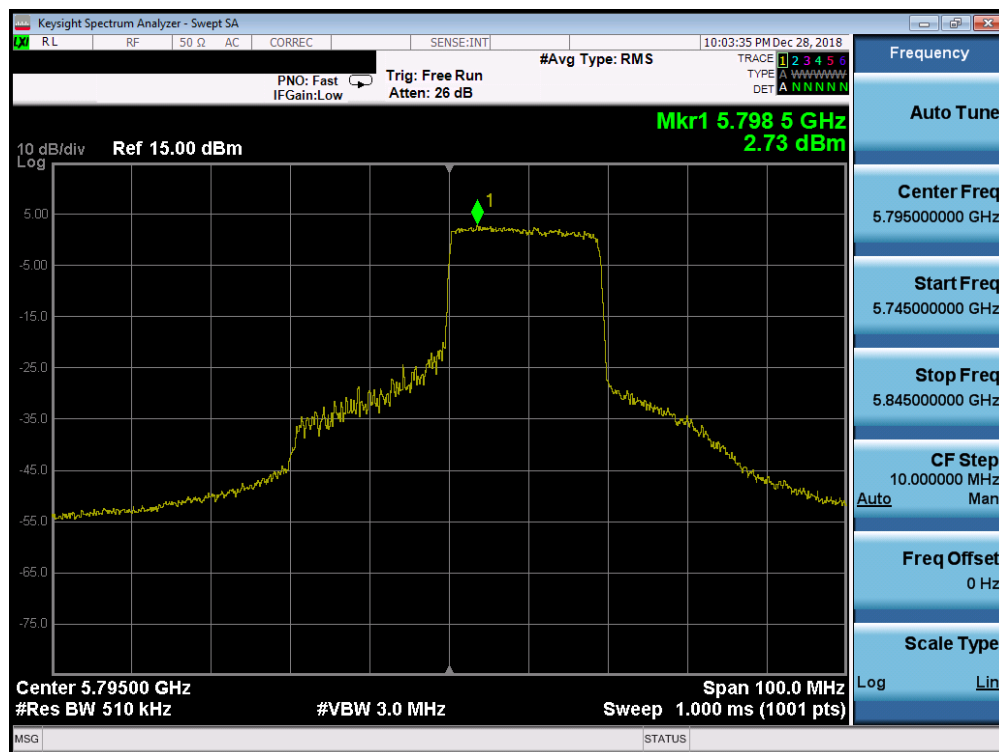


Plot 7-213. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 165)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 166 of 519

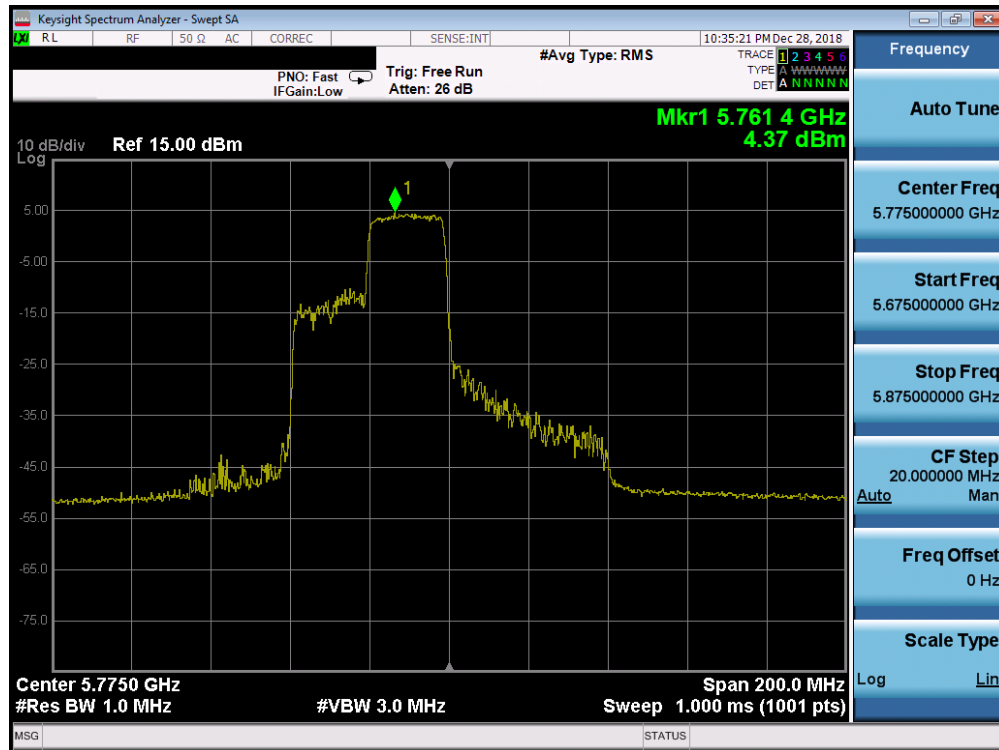


Plot 7-214. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 151)



Plot 7-215. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 159)

FCC ID: A3LSMG9700	 MEASUREMENT REPORT (CERTIFICATION) 		Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset	Page 167 of 519



Plot 7-216. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 155)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 168 of 519

SISO Antenna-1 Power Spectral Density Measurements (484 Tones)

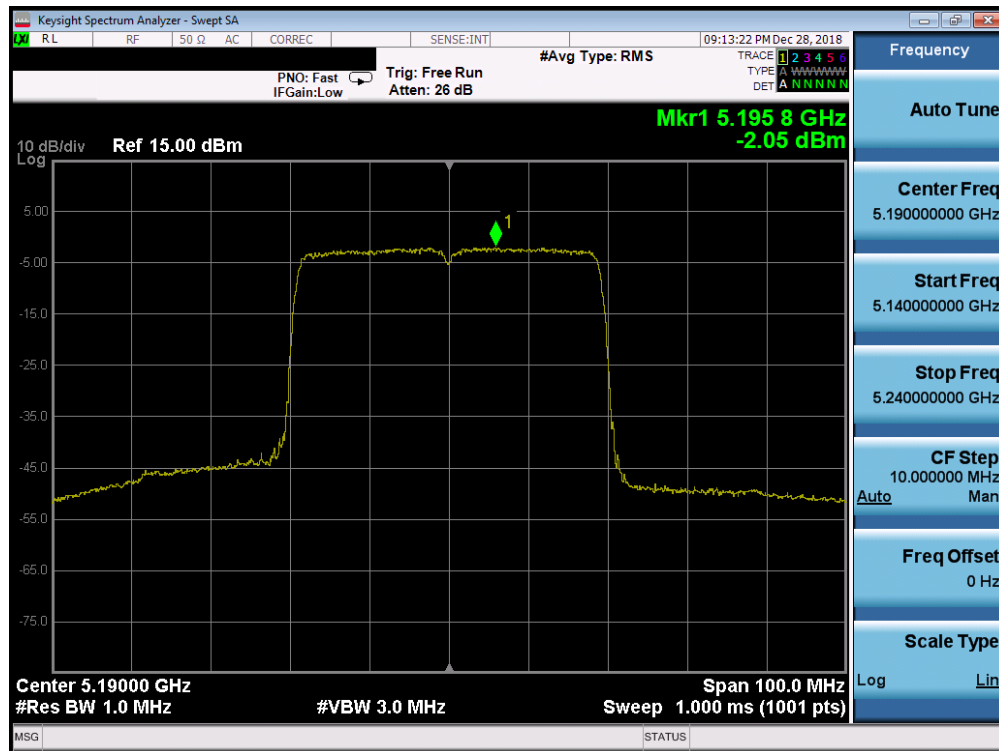
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
Band 1	5190	38	ax (40MHz)	484T	MCS0	-2.05	11.00	-13.05
	5230	46	ax (40MHz)	484T	MCS0	2.28	11.00	-8.72
	5210	42	ax (80MHz)	484T	MCS0	-2.64	11.00	-13.64
Band 2A	5270	54	ax (40MHz)	484T	MCS0	2.17	11.00	-8.83
	5310	62	ax (40MHz)	484T	MCS0	-0.73	11.00	-11.73
	5290	58	ax (80MHz)	484T	MCS0	-1.73	11.00	-12.73
Band 2C	5510	102	ax (40MHz)	484T	MCS0	0.32	11.00	-10.68
	5590	118	ax (40MHz)	484T	MCS0	2.52	11.00	-8.48
	5710	142	ax (40MHz)	484T	MCS0	2.55	11.00	-8.45
	5530	106	ax (80MHz)	484T	MCS0	-2.50	11.00	-13.50
	5610	122	ax (80MHz)	484T	MCS0	1.24	11.00	-9.76
	5690	138	ax (80MHz)	484T	MCS0	0.97	11.00	-10.03

Table 7-75. Bands 1, 2A, 2C Conducted Power Spectral Density Measurements SISO ANT1 (484 Tones)

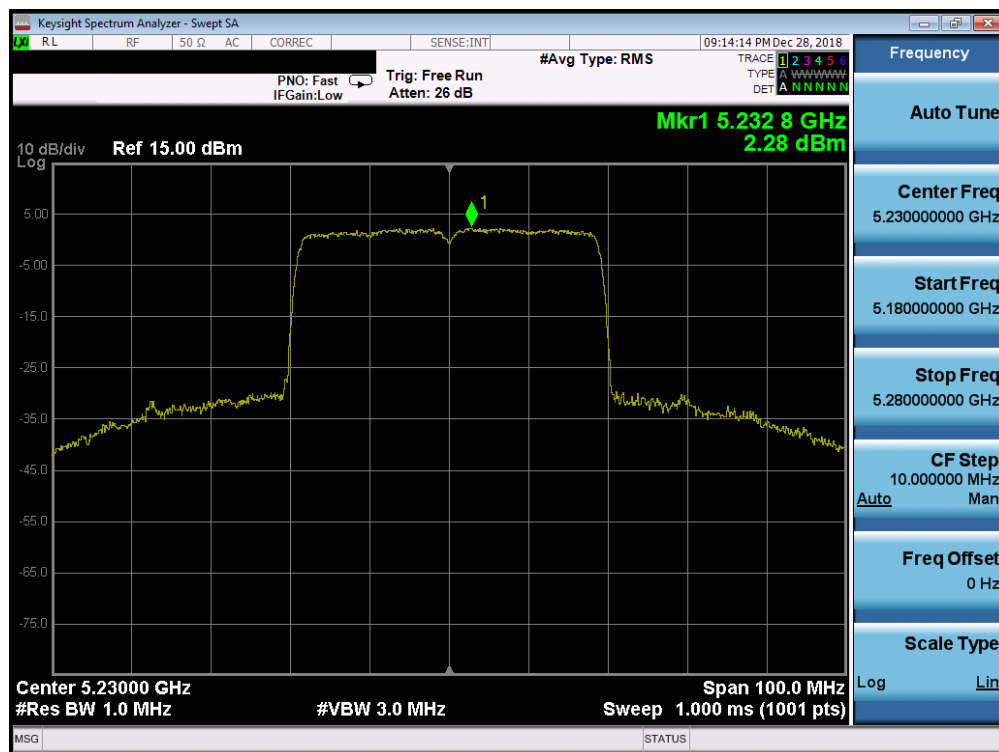
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Antenna Gain [dBi]	e.i.r.p. Power Density [dBm/MHz]	ISED Max e.i.r.p. Power Density	Margin [dB]
Band 1	5190	38	ax (40MHz)	484T	MCS0	-2.05	-8.61	-10.66	10.0	-20.66
	5230	46	ax (40MHz)	484T	MCS0	2.28	-7.66	-5.38	10.0	-15.38
	5210	42	ax (80MHz)	484T	MCS0	-2.64	-7.66	-10.30	10.0	-20.30

Table 7-76. Bands 1 e.i.r.p Conducted Power Spectral Density Measurements (ISED 484 Tones)

FCC ID: A3LSMG9700	 MEASUREMENT REPORT (CERTIFICATION) 		Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset	
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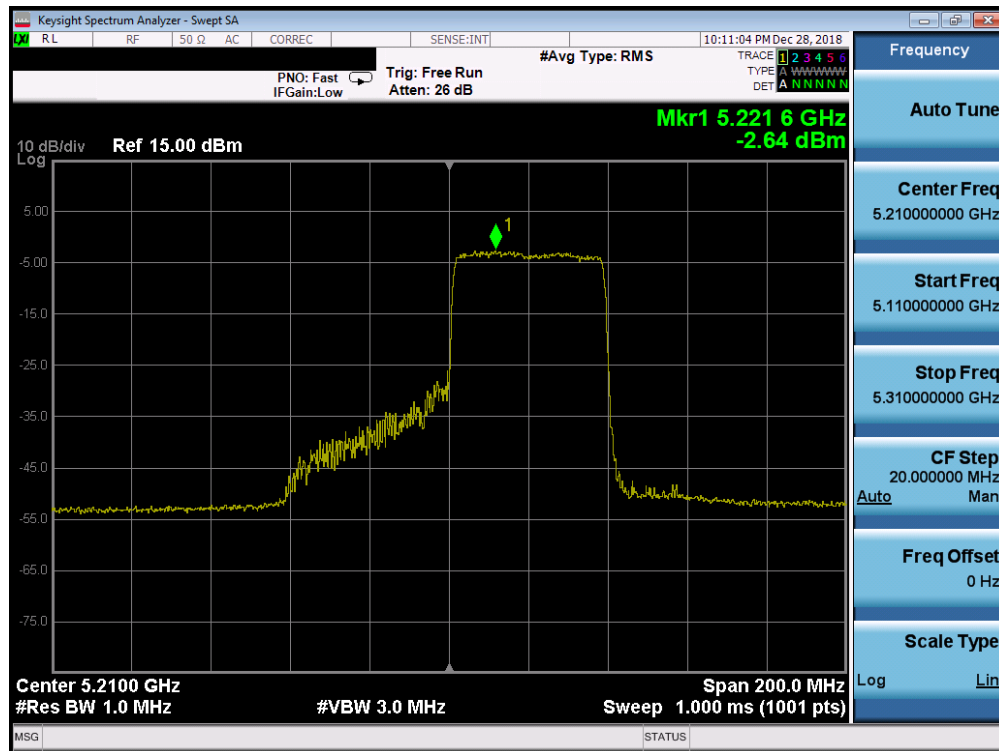


Plot 7-217. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 484 Tones (UNII Band 1) – Ch. 38)



Plot 7-218. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 484 Tones (UNII Band 1) – Ch. 46)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 170 of 519

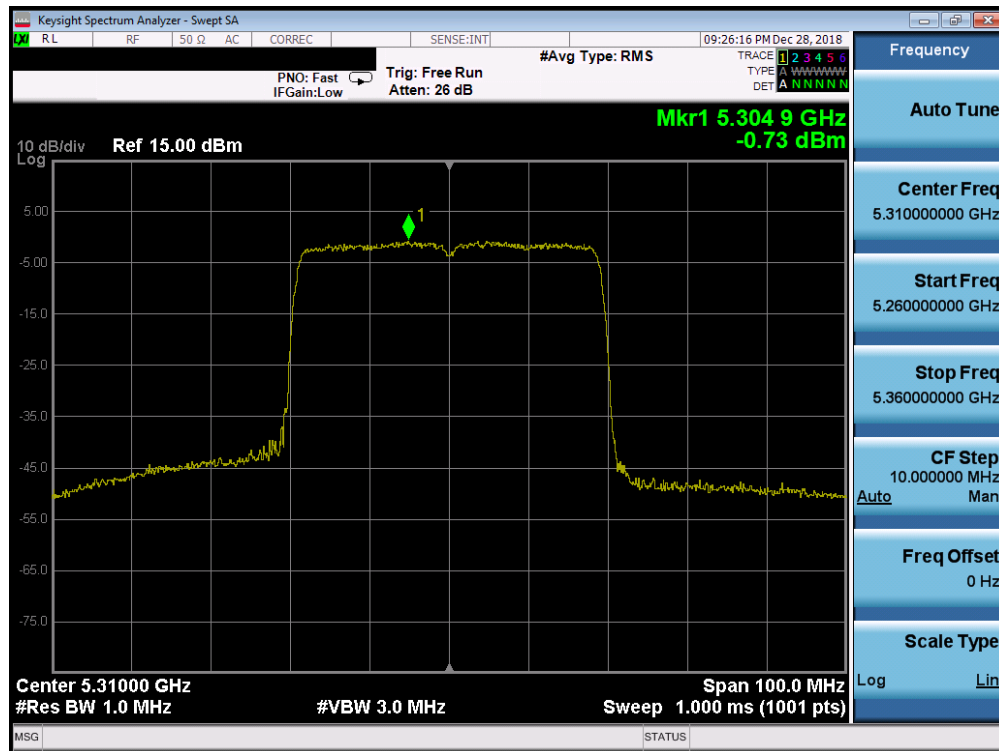


Plot 7-219. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 484 Tones (UNII Band 1) – Ch. 42)

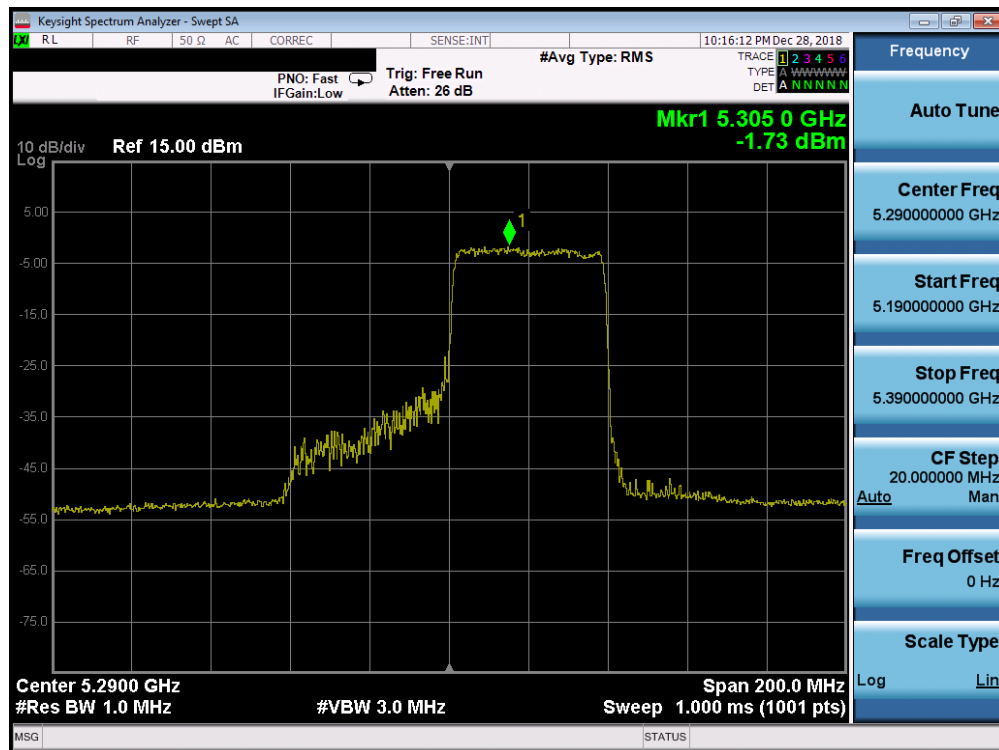


Plot 7-220. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 484 Tones (UNII Band 2A) – Ch. 54)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 171 of 519

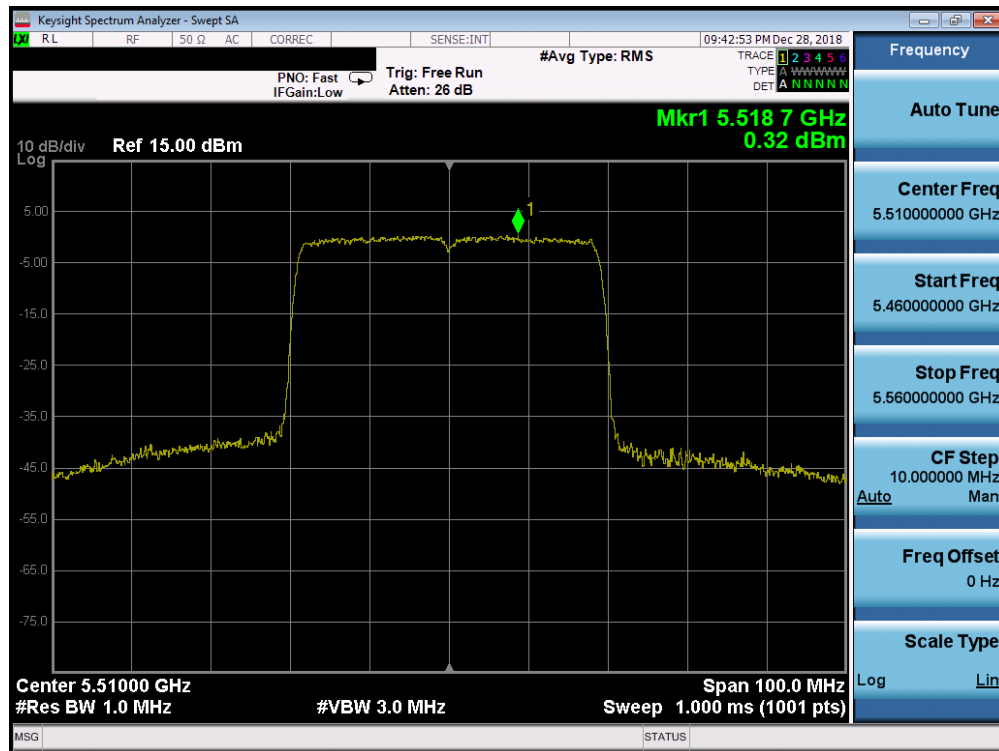


Plot 7-221. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 484 Tones (UNII Band 2A) – Ch. 62)

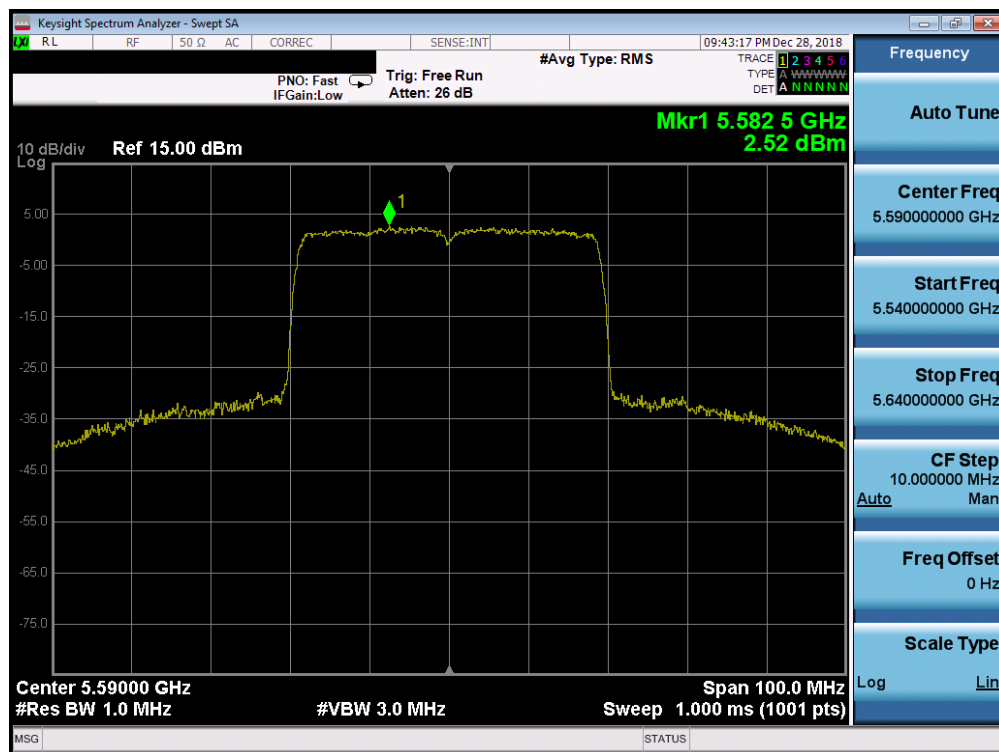


Plot 7-222. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 484 Tones (UNII Band 2A) – Ch. 58)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 172 of 519

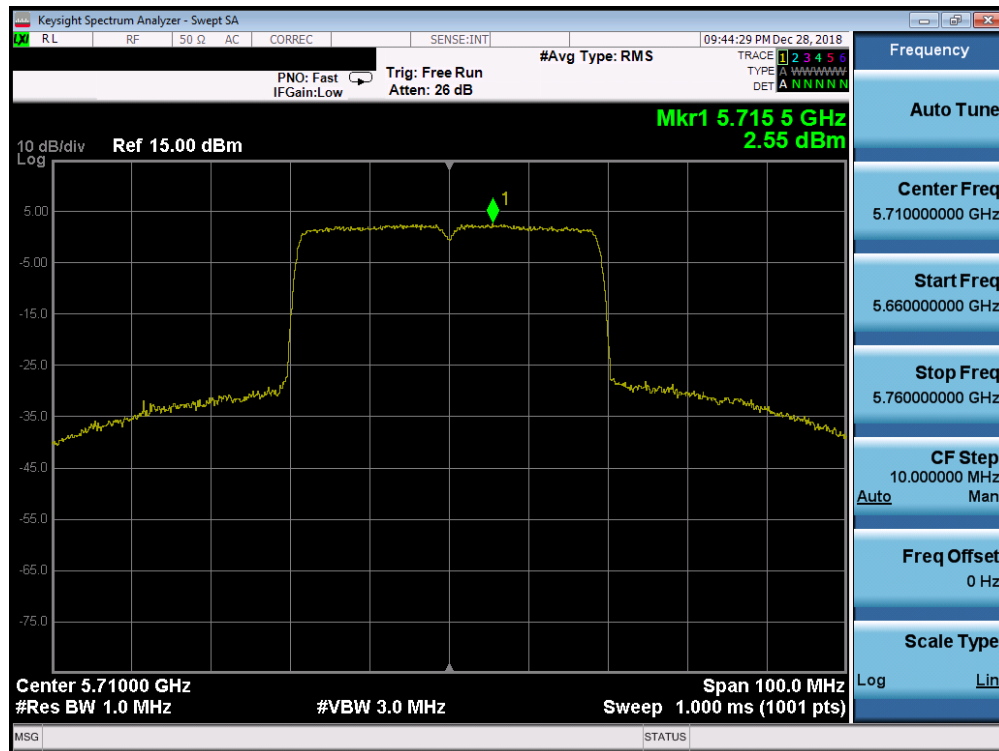


Plot 7-223. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 484 Tones (UNII Band 2C) – Ch. 102)

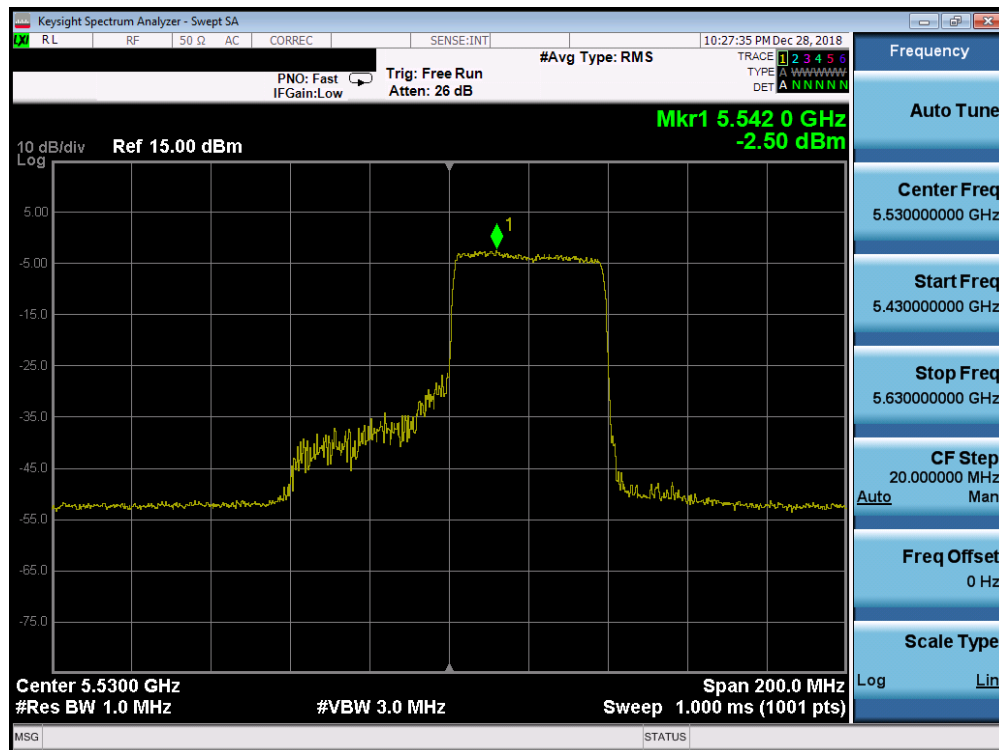


Plot 7-224. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 484 Tones (UNII Band 2C) – Ch. 118)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 173 of 519



Plot 7-225. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 484 Tones (UNII Band 2C) – Ch. 142)



Plot 7-226. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 484 Tones (UNII Band 2C) – Ch. 106)

FCC ID: A3LSMG9700	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1811260212-15.A3L	Test Dates: 11/9/2018 - 1/22/2019	EUT Type: Portable Handset		Page 174 of 519