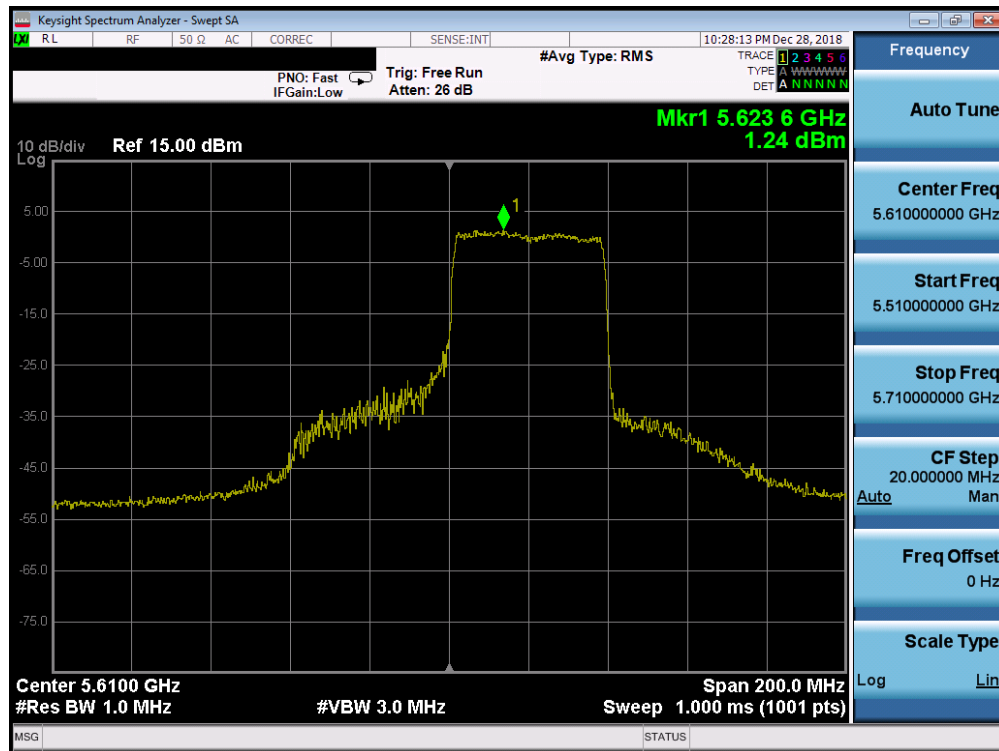
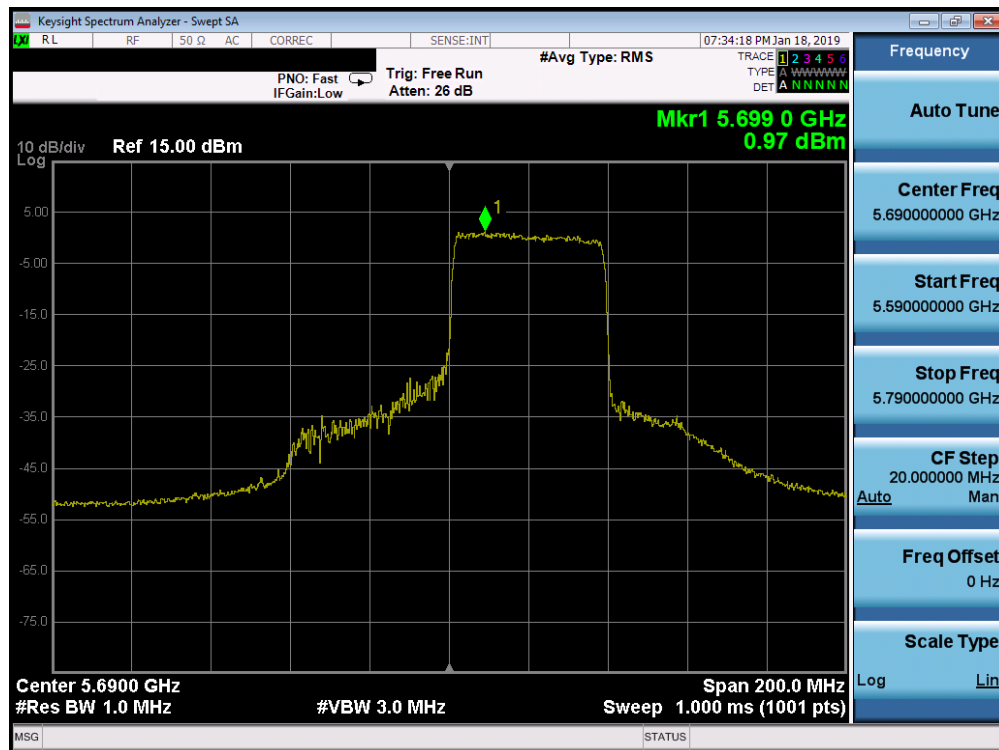




Plot 7-227. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 484 Tones (UNII Band 2C) – Ch. 122)

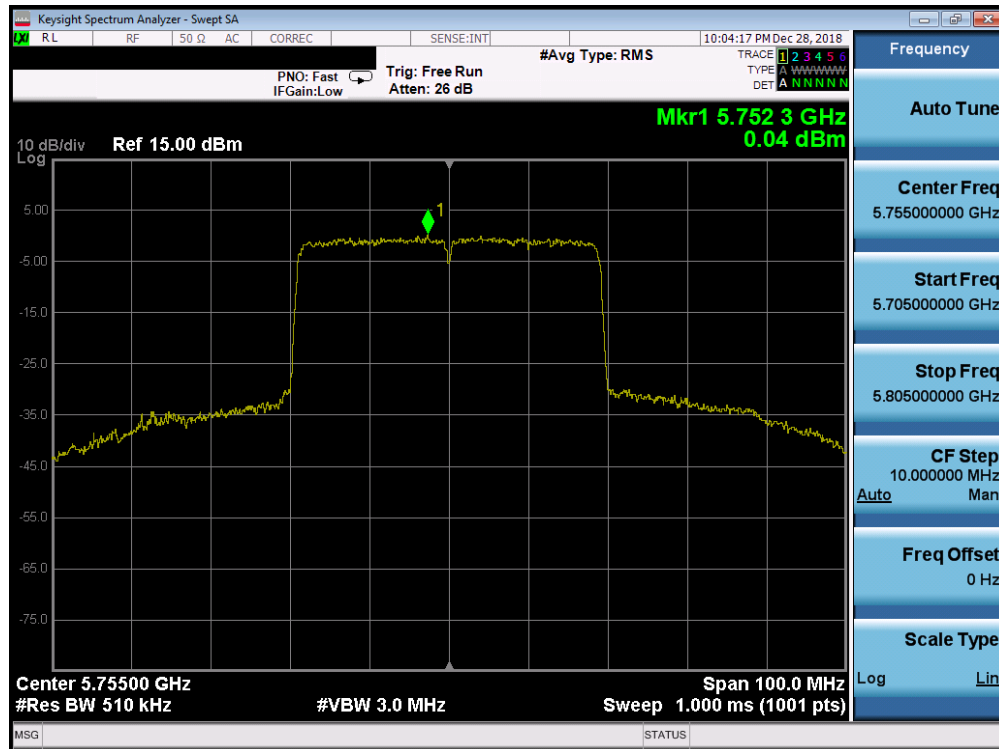


Plot 7-228. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 484 Tones (UNII Band 2C) – Ch. 138)

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 175 of 519

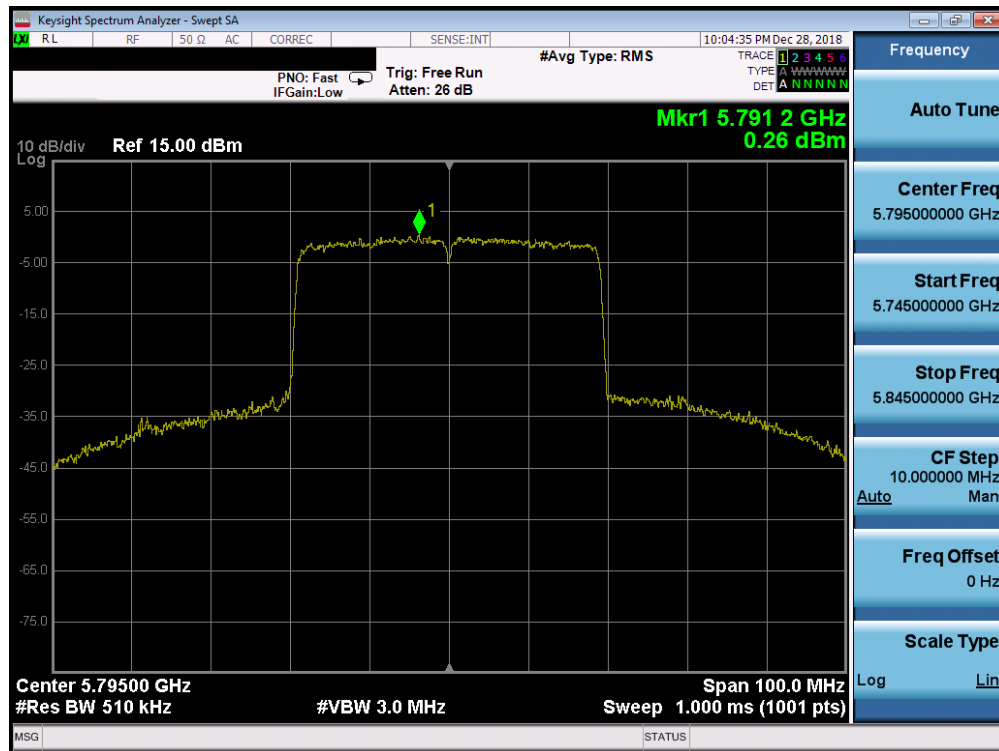
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
Band 3	5755	151	ax (40MHz)	484T	MCS0	0.04	30.00	-29.96
	5795	159	ax (40MHz)	484T	MCS0	0.26	30.00	-29.74
	5775	155	ax (80MHz)	484T	MCS0	2.05	30.00	-27.95

Table 7-77. Band 3 Conducted Power Spectral Density Measurements SISO ANT1 (484 Tones)

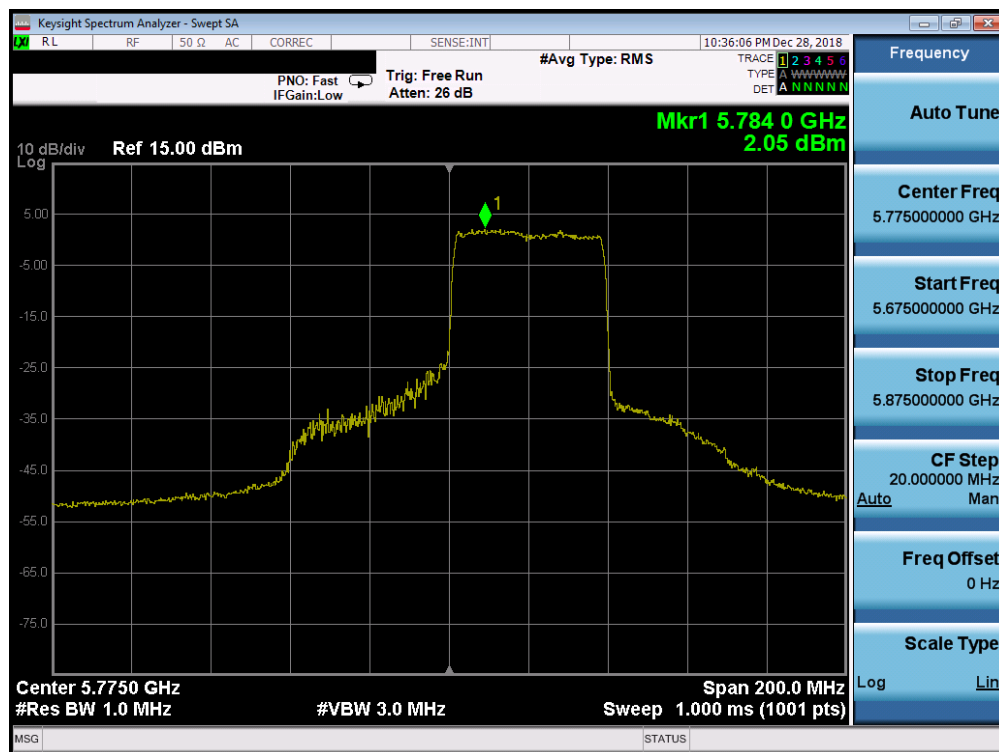


Plot 7-229. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 484 Tones (UNII Band 3) – Ch. 151)

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 176 of 519



Plot 7-230. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 484 Tones (UNII Band 3) – Ch. 159)



Plot 7-231. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 484 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 177 of 519		

SISO Antenna-1 Power Spectral Density Measurements (996 Tones)

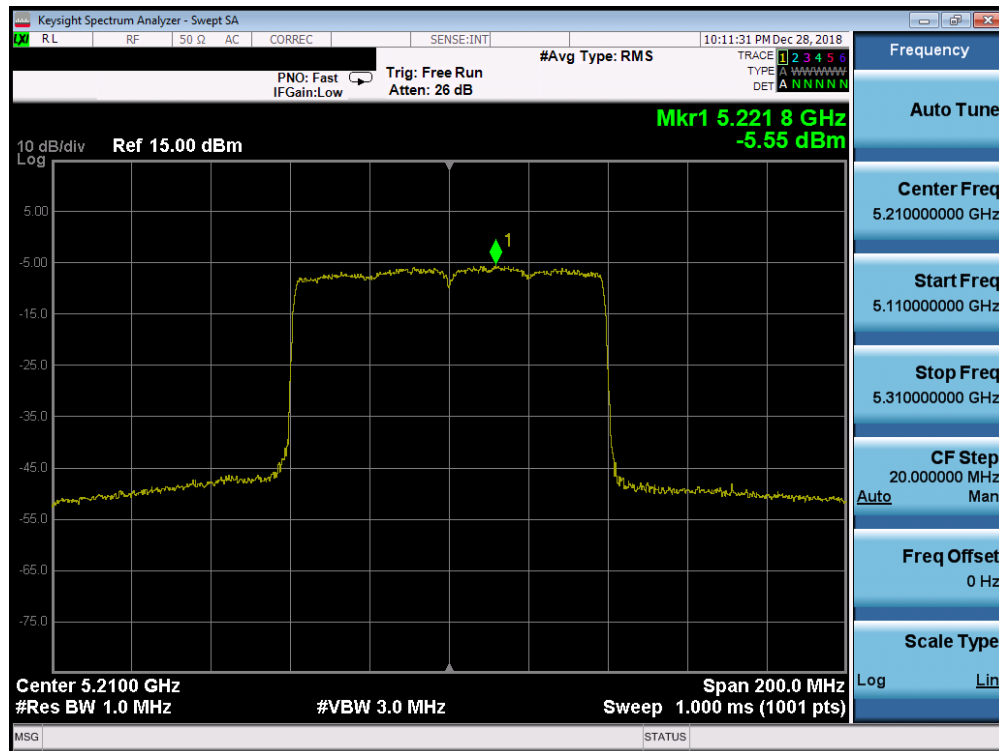
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
Band 1	5210	42	ax (80MHz)	996T	MCS0	-5.55	11.00	-16.55
Band 2A	5290	58	ax (80MHz)	996T	MCS0	-4.34	11.00	-15.34
Band 2C	5530	106	ax (80MHz)	996T	MCS0	-5.80	11.00	-16.80
	5610	122	ax (80MHz)	996T	MCS0	-2.18	11.00	-13.18
	5690	138	ax (80MHz)	996T	MCS0	-2.34	11.00	-13.34

Table 7-78. Bands 1, 2A, 2C Conducted Power Spectral Density Measurements SISO ANT1 (996 Tones)

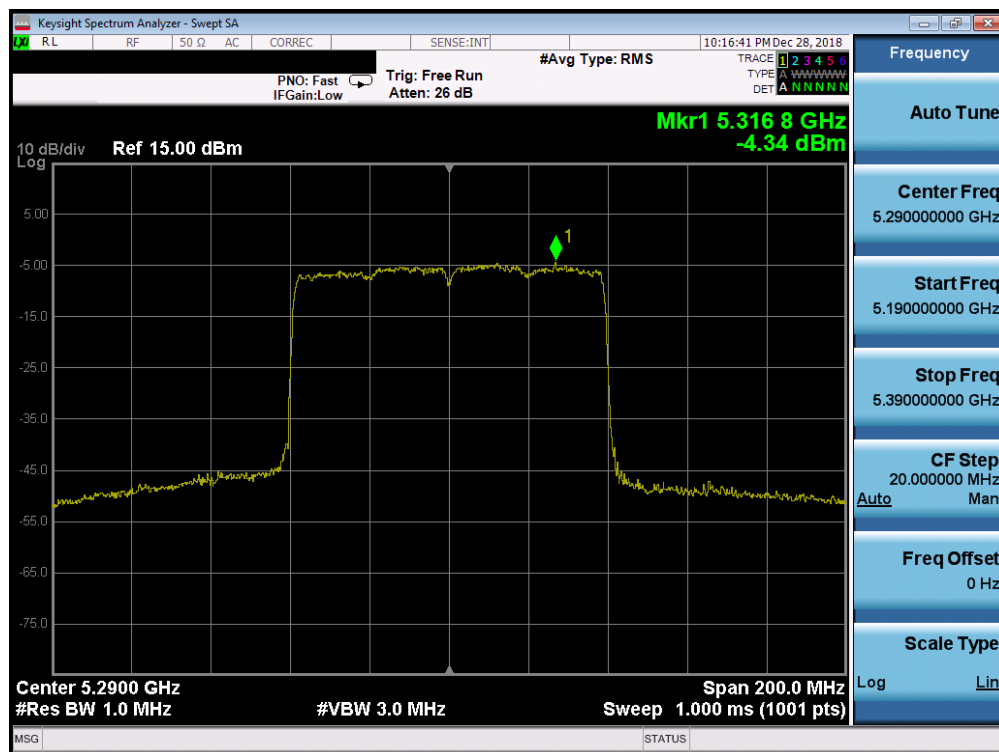
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Antenna Gain [dBi]	e.i.r.p. Power Density [dBm/MHz]	ISED Max e.i.r.p. Power Density	Margin [dB]
Band 1	5210	42	ax (80MHz)	996T	MCS0	-5.55	-7.66	-13.21	10.0	-23.21

Table 7-79. Bands 1 e.r.i.p Conducted Power Spectral Density Measurements (ISED 996 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 178 of 519

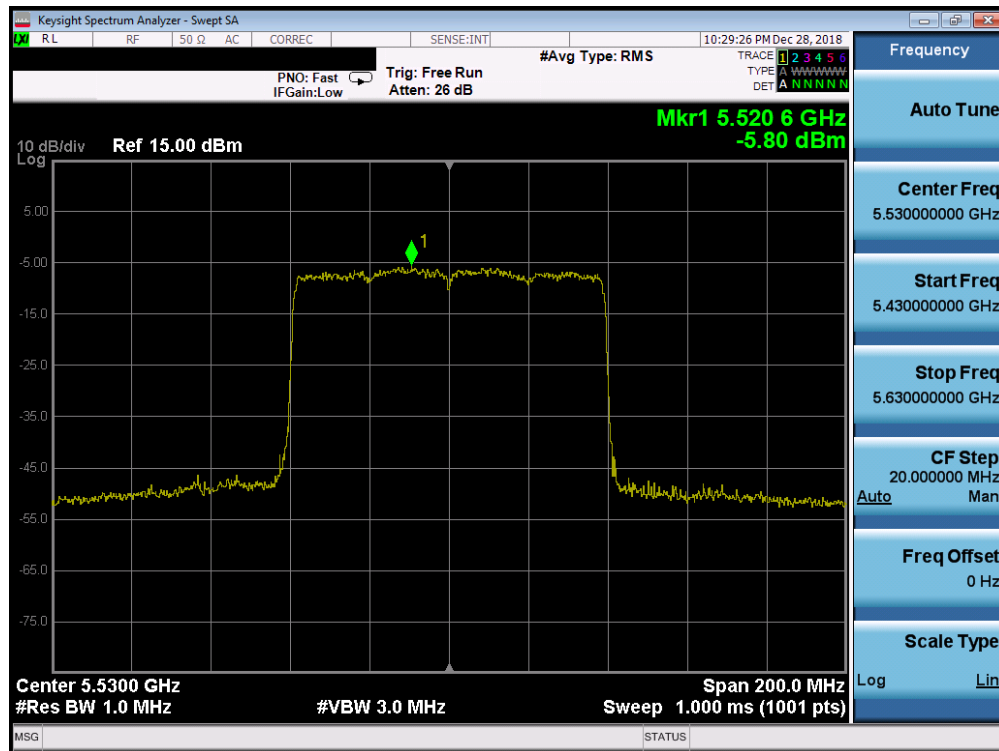


Plot 7-232. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 996 Tones (UNII Band 1) – Ch. 42)

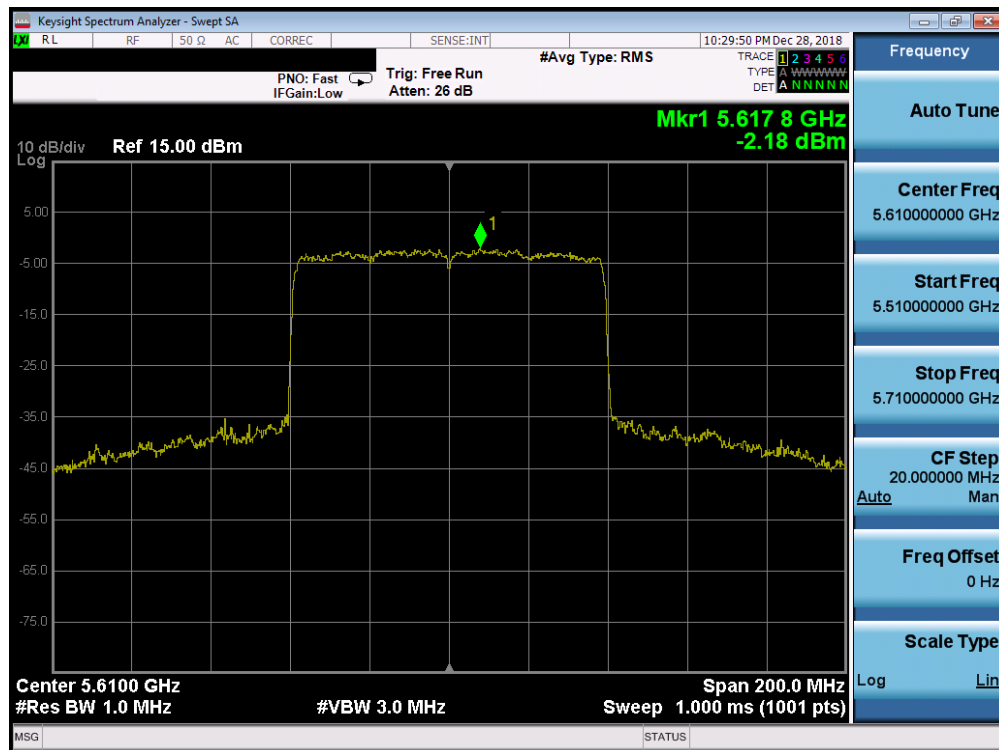


Plot 7-233. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 996 Tones (UNII Band 2A) – Ch. 58)

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 179 of 519

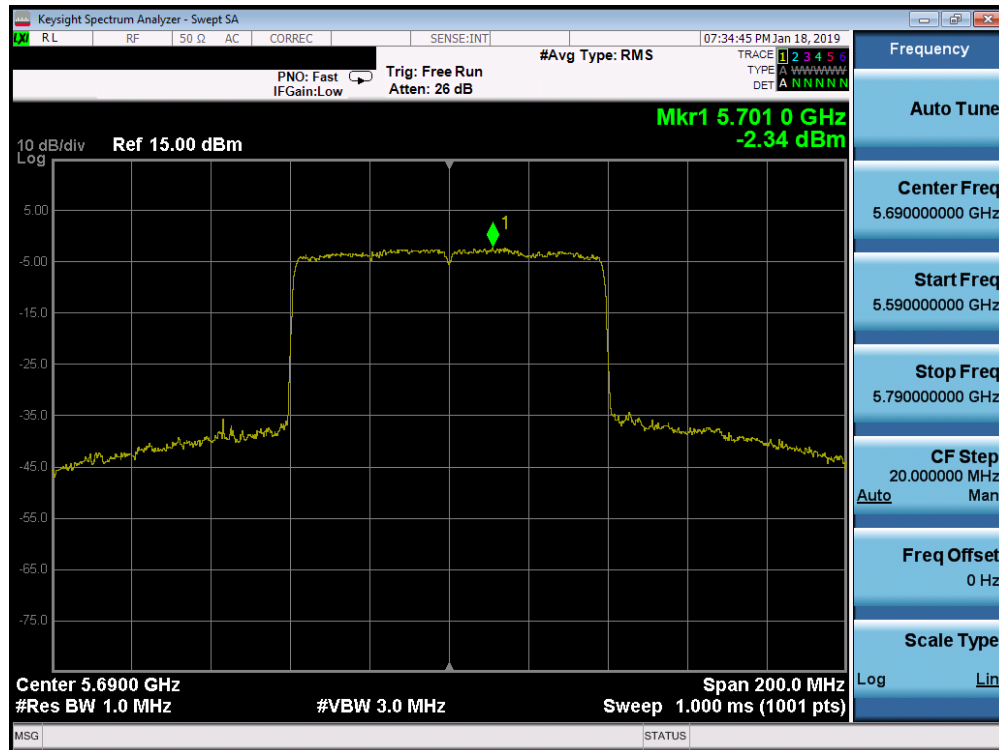


Plot 7-234. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 996 Tones (UNII Band 2C) – Ch. 106)



Plot 7-235. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 996 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 180 of 519



Plot 7-236. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 996 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 181 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	5775	155	ax (80MHz)	996T	MCS0	-1.35	30.00	-31.35

Table 7-80. Band 3 Conducted Power Spectral Density Measurements SISO ANT1 (996 Tones)



Plot 7-237. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 996 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 182 of 519

SISO Antenna-2 Power Spectral Density Measurements (26 Tones)

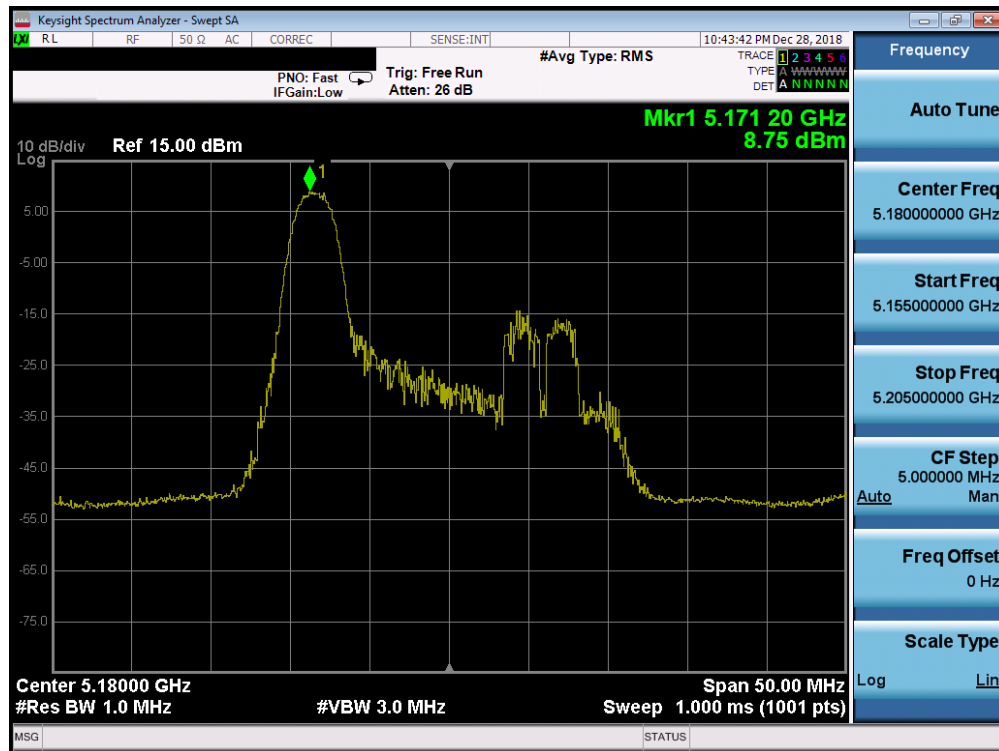
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	ax (20MHz)	26T	MCS0	8.75	11.00	-2.25
	5200	40	ax (20MHz)	26T	MCS0	9.16	11.00	-1.84
	5240	48	ax (20MHz)	26T	MCS0	8.04	11.00	-2.96
	5190	38	ax (40MHz)	26T	MCS0	7.99	11.00	-3.01
	5230	46	ax (40MHz)	26T	MCS0	8.18	11.00	-2.82
	5210	42	ax (80MHz)	26T	MCS0	8.30	11.00	-2.70
Band 2A	5260	52	ax (20MHz)	26T	MCS0	8.96	11.00	-2.04
	5280	56	ax (20MHz)	26T	MCS0	7.76	11.00	-3.24
	5320	64	ax (20MHz)	26T	MCS0	8.06	11.00	-2.94
	5270	54	ax (40MHz)	26T	MCS0	8.17	11.00	-2.83
	5310	62	ax (40MHz)	26T	MCS0	8.31	11.00	-2.69
	5290	58	ax (80MHz)	26T	MCS0	8.76	11.00	-2.24
Band 2C	5500	100	ax (20MHz)	26T	MCS0	8.69	11.00	-2.31
	5600	120	ax (20MHz)	26T	MCS0	8.51	11.00	-2.49
	5720	144	ax (20MHz)	26T	MCS0	8.91	11.00	-2.09
	5510	102	ax (40MHz)	26T	MCS0	8.21	11.00	-2.79
	5590	118	ax (40MHz)	26T	MCS0	8.60	11.00	-2.40
	5710	142	ax (40MHz)	26T	MCS0	6.48	11.00	-4.52
	5530	106	ax (80MHz)	26T	MCS0	7.54	11.00	-3.46
	5610	122	ax (80MHz)	26T	MCS0	8.07	11.00	-2.93
	5690	138	ax (80MHz)	26T	MCS0	6.30	11.00	-4.70

Table 7-81. Bands 1, 2A, 2C Conducted Power Spectral Density Measurements SISO ANT2 (26 Tones)

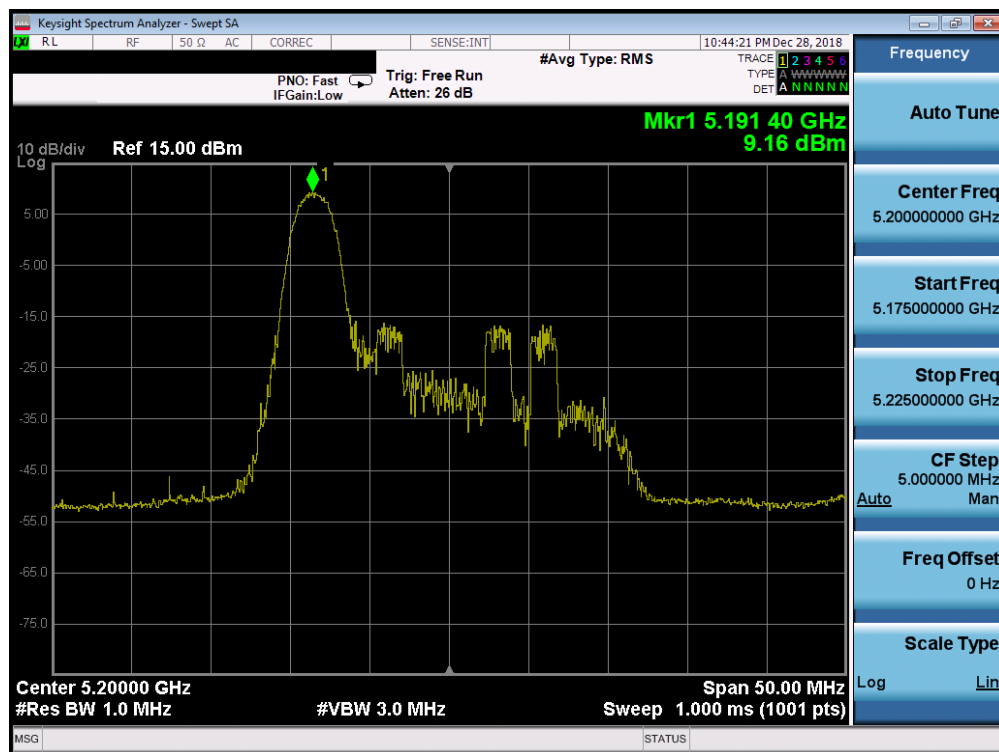
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Antenna Gain [dBi]	e.i.r.p. Power Density [dBm/MHz]	ISED Max e.i.r.p. Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	ax (20MHz)	26T	MCS0	8.75	-7.68	1.07	10.0	-8.93
	5200	40	ax (20MHz)	26T	MCS0	9.16	-7.68	1.48	10.0	-8.52
	5240	48	ax (20MHz)	26T	MCS0	8.04	-7.38	0.66	10.0	-9.34
	5190	38	ax (40MHz)	26T	MCS0	7.99	-7.68	0.31	10.0	-9.69
	5230	46	ax (40MHz)	26T	MCS0	8.18	-7.38	0.80	10.0	-9.20
	5210	42	ax (80MHz)	26T	MCS0	8.30	-7.68	0.62	10.0	-9.38

Table 7-82. Bands 1 e.i.r.p Conducted Power Spectral Density Measurements (ISED 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 183 of 519



Plot 7-238. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 36)

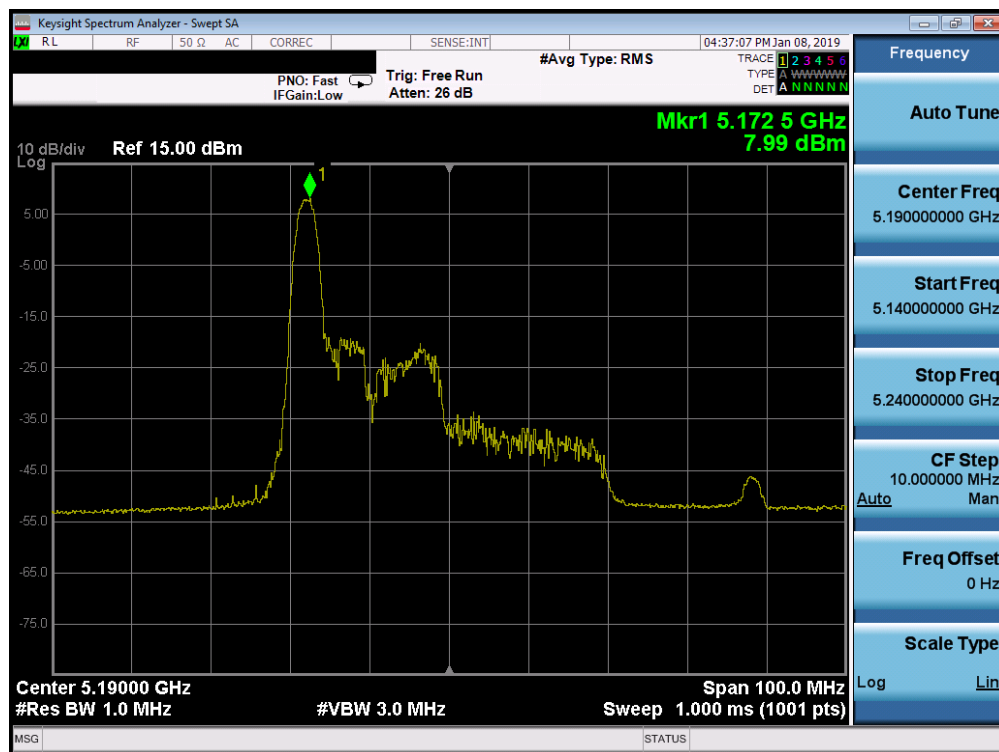


Plot 7-239. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 40)

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 184 of 519

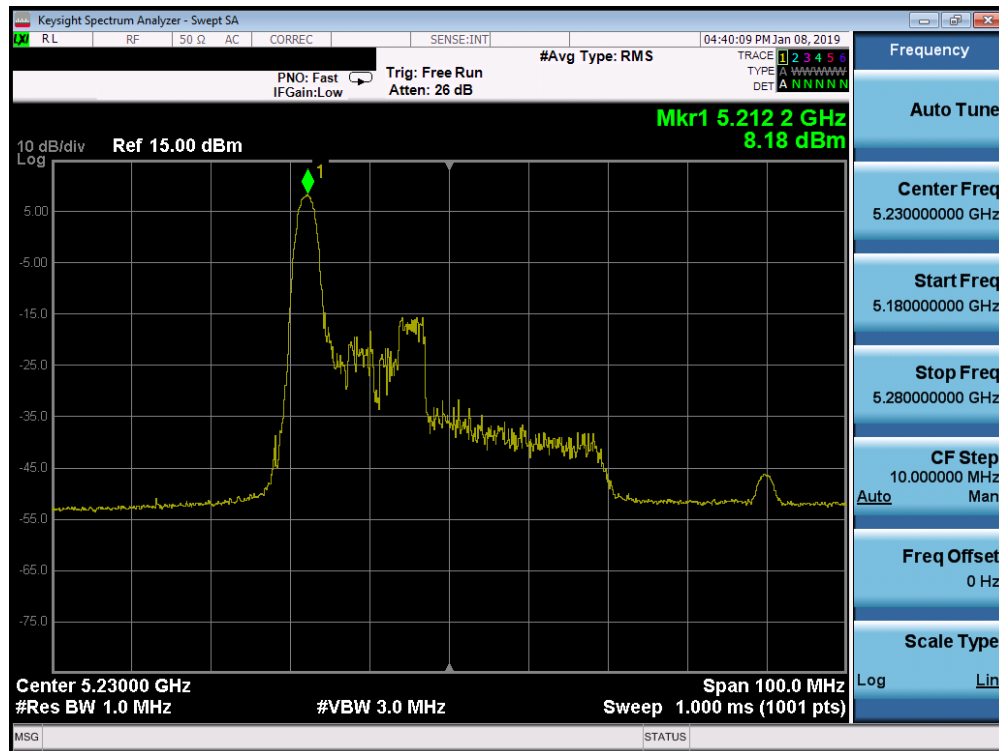


Plot 7-240. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 48)

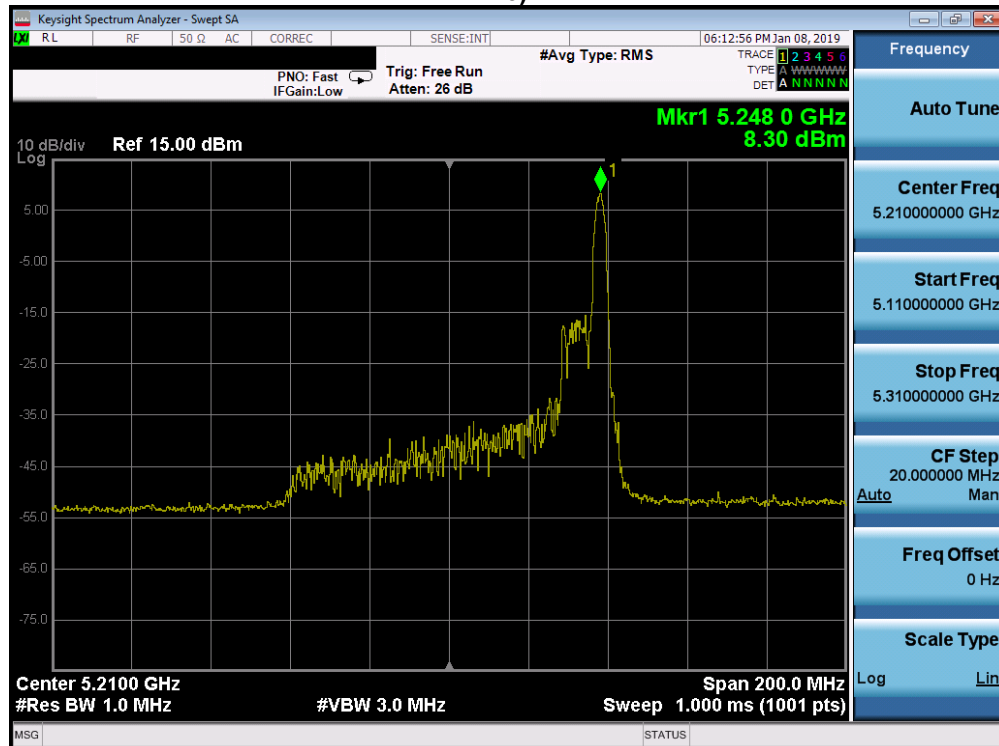


Plot 7-241. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 38)

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 185 of 519



Plot 7-242. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 46)

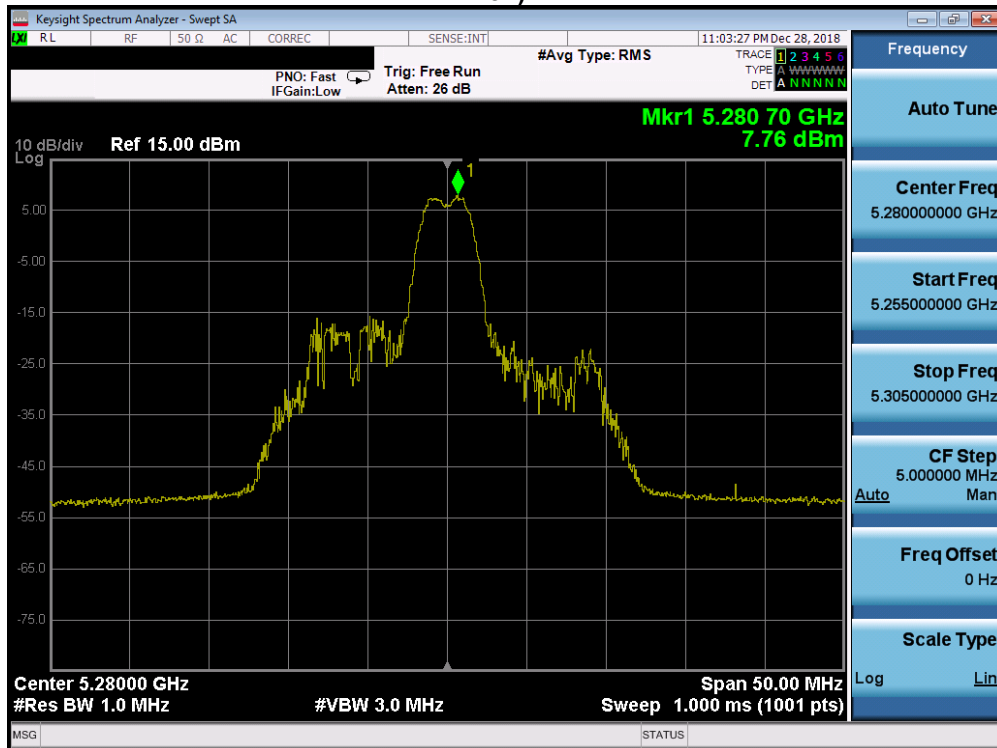


Plot 7-243. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 42)

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 186 of 519



Plot 7-244. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 52)

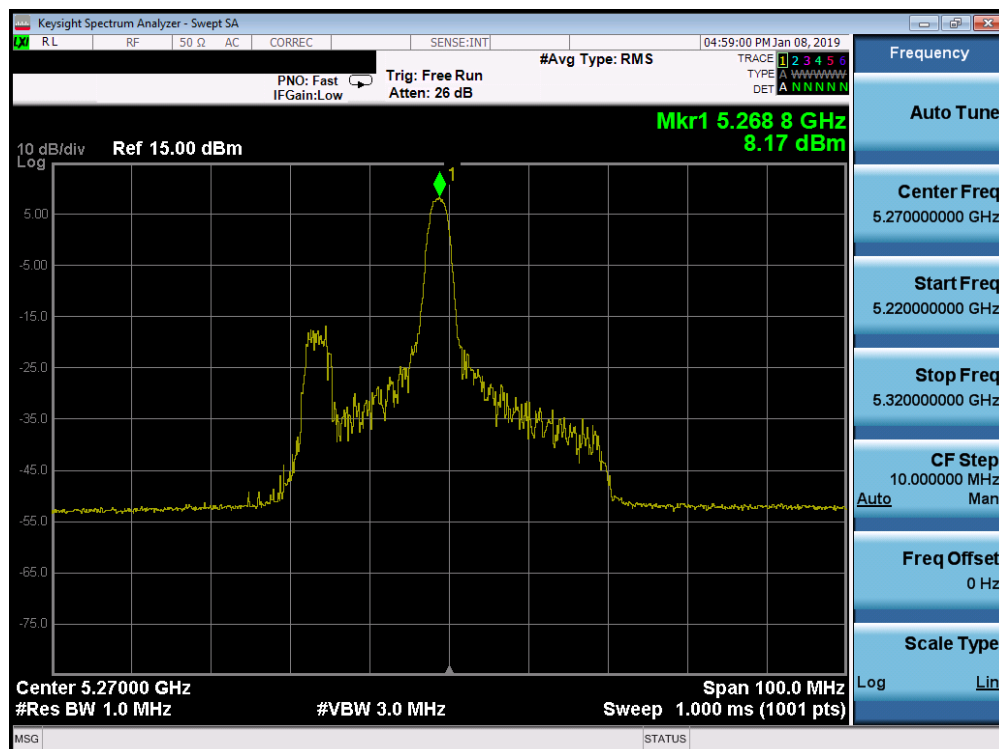


Plot 7-245. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 56)

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 187 of 519

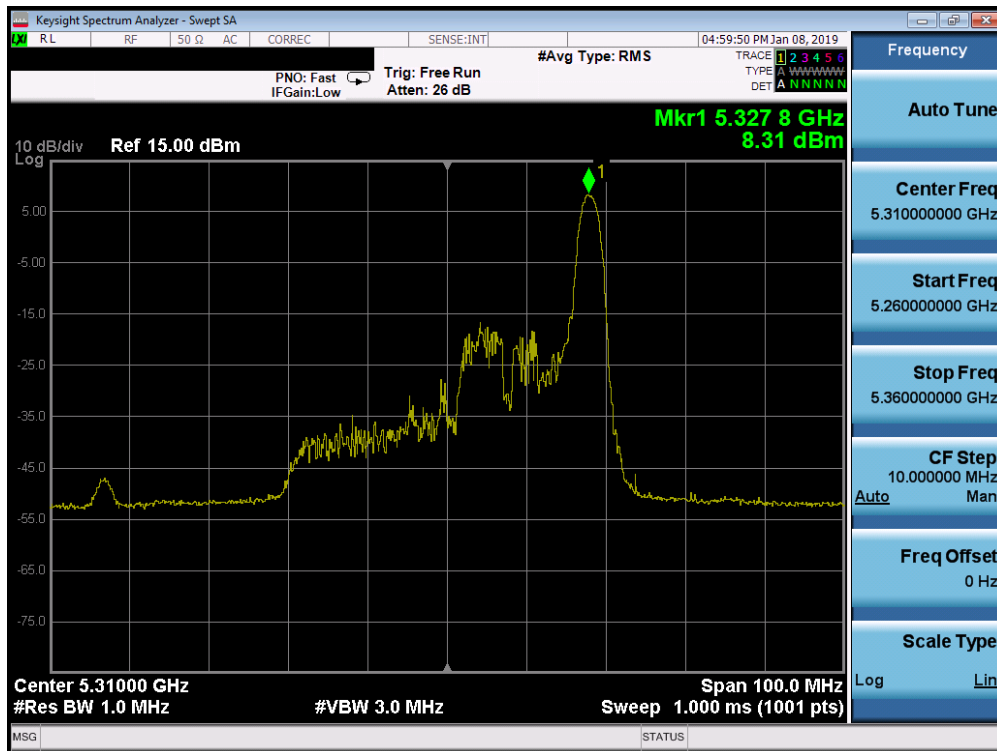


Plot 7-246. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 64)

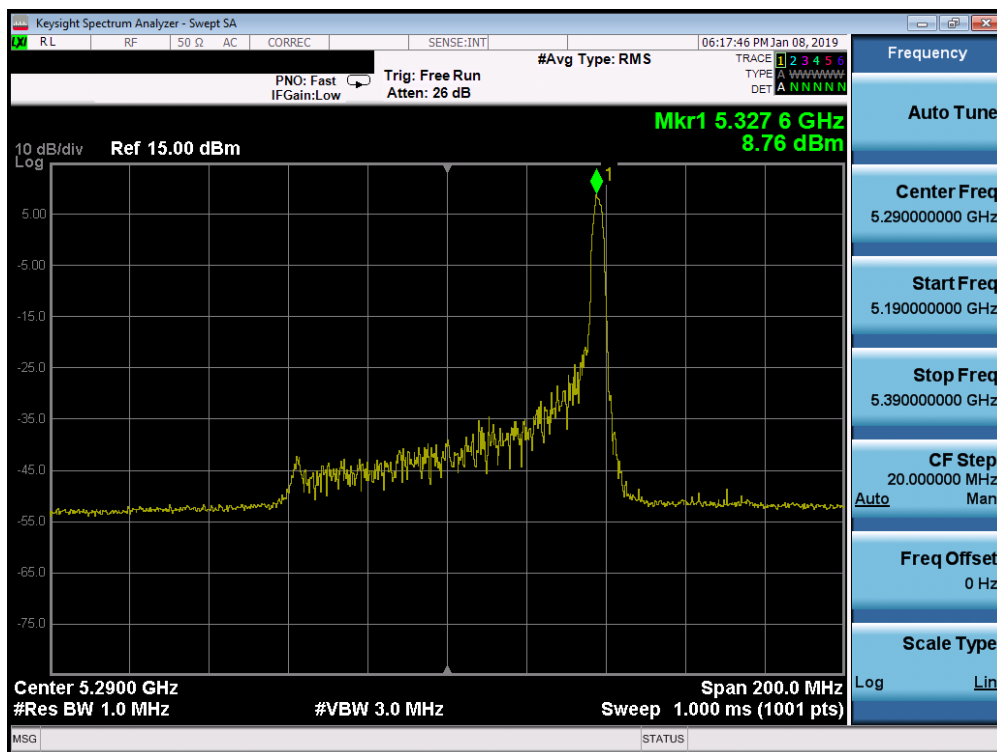


Plot 7-247. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 54)

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 188 of 519

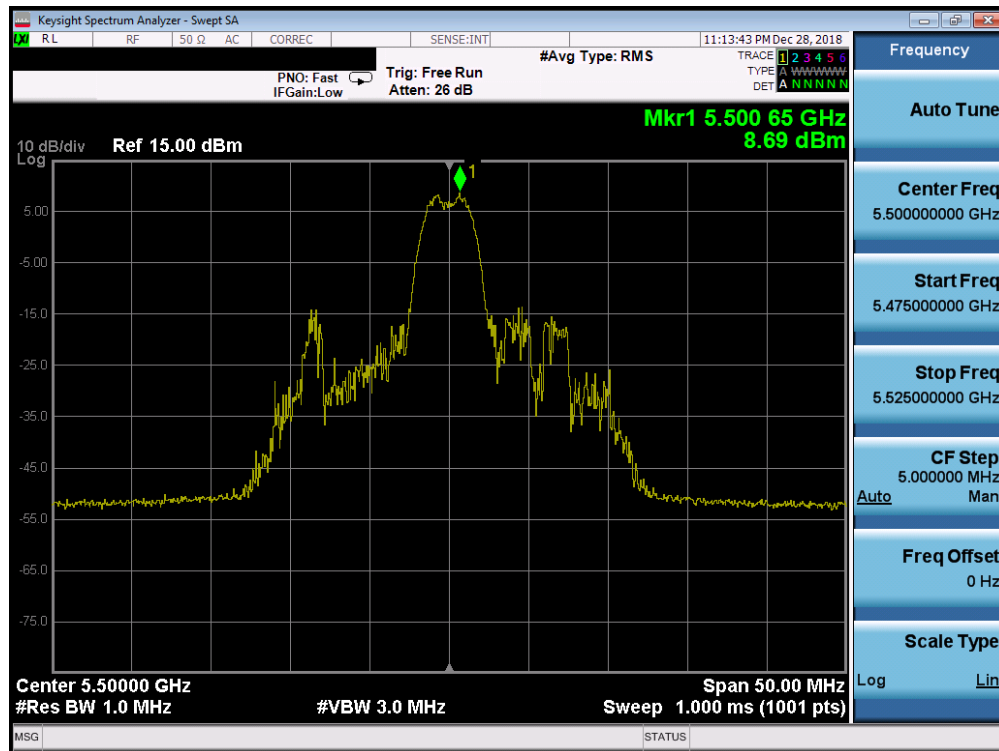


Plot 7-248. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 62)

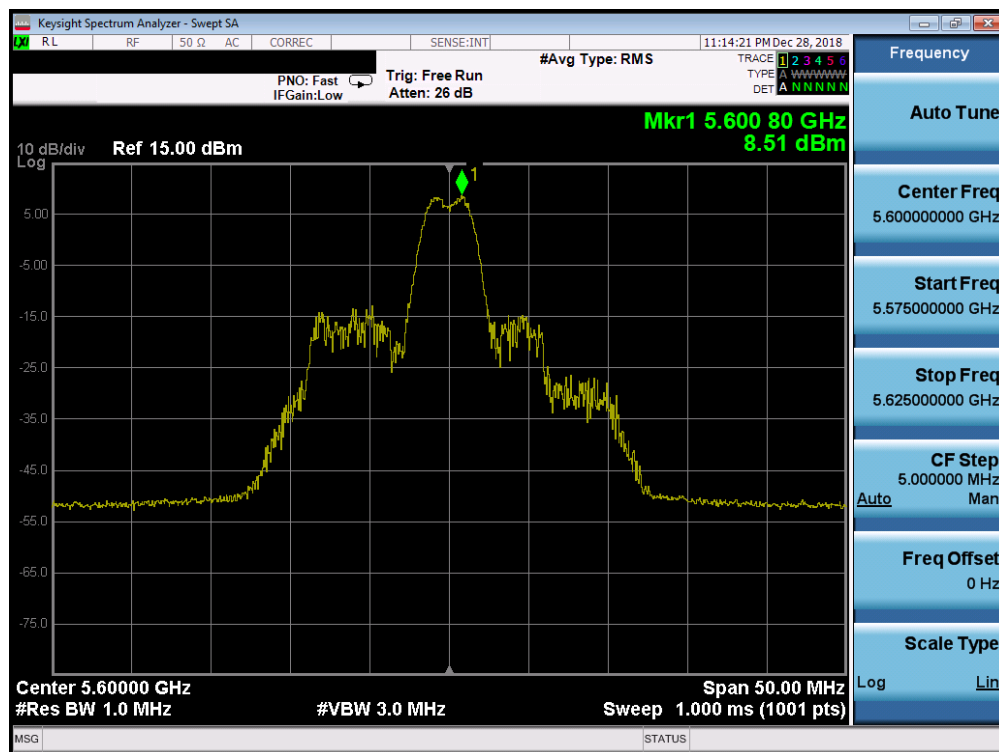


Plot 7-249. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 58)

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 189 of 519

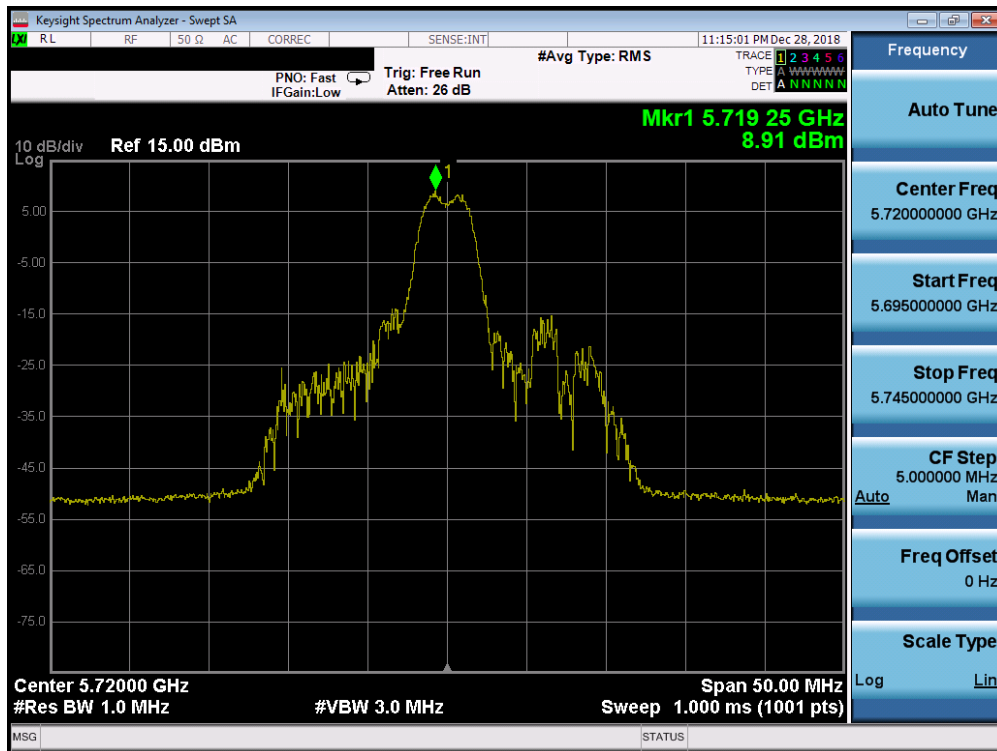


Plot 7-250. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 100)

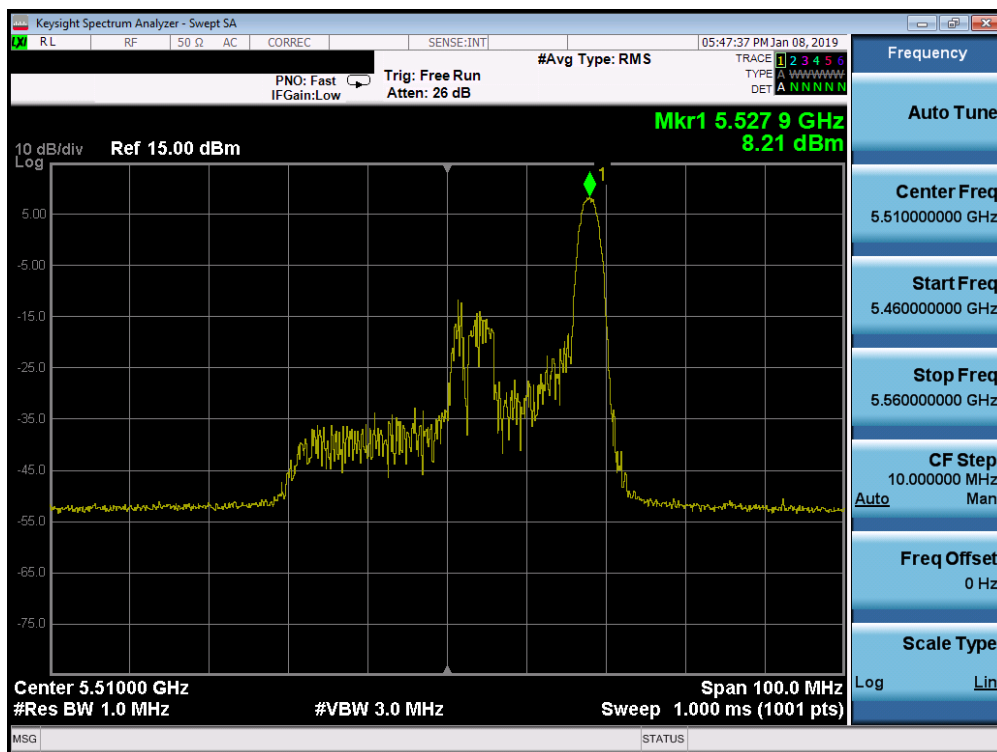


Plot 7-251. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 120)

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 190 of 519

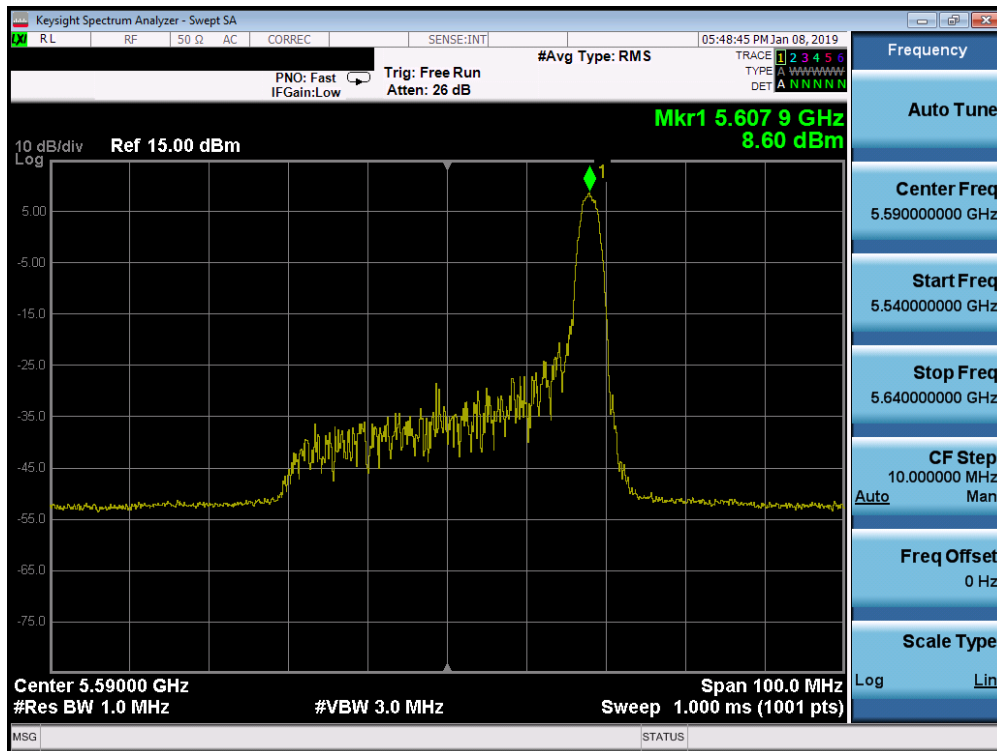


Plot 7-252. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 144)

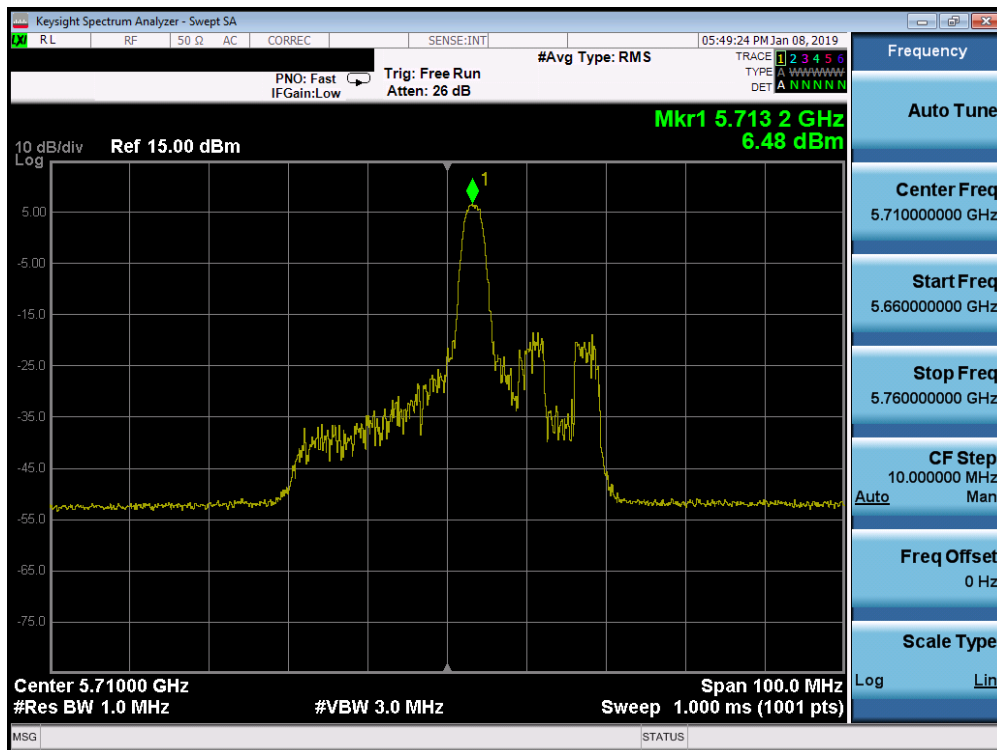


Plot 7-253. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 102)

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 191 of 519		

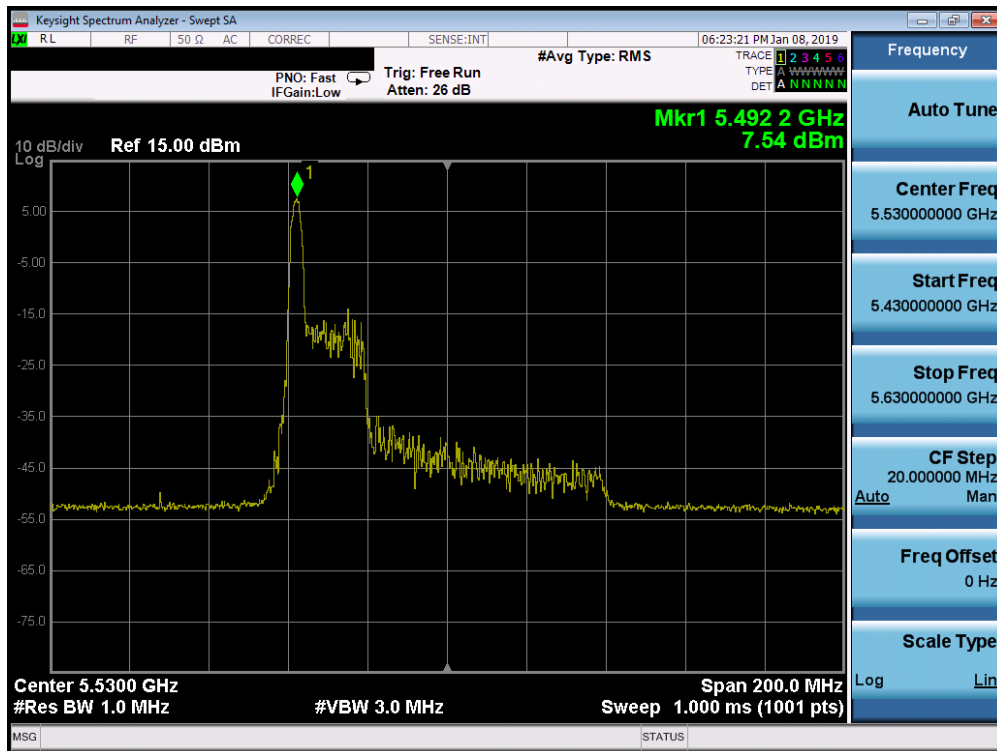


Plot 7-254. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 118)

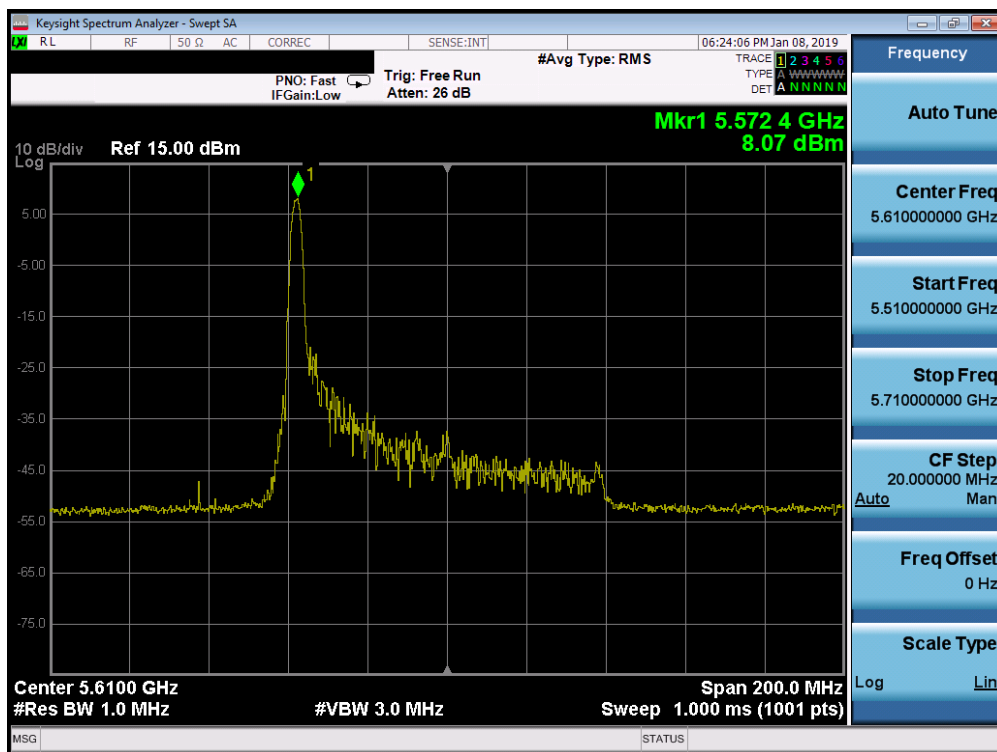


Plot 7-255. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 142)

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 192 of 519



Plot 7-256. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 106)



Plot 7-257. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 26 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 193 of 519

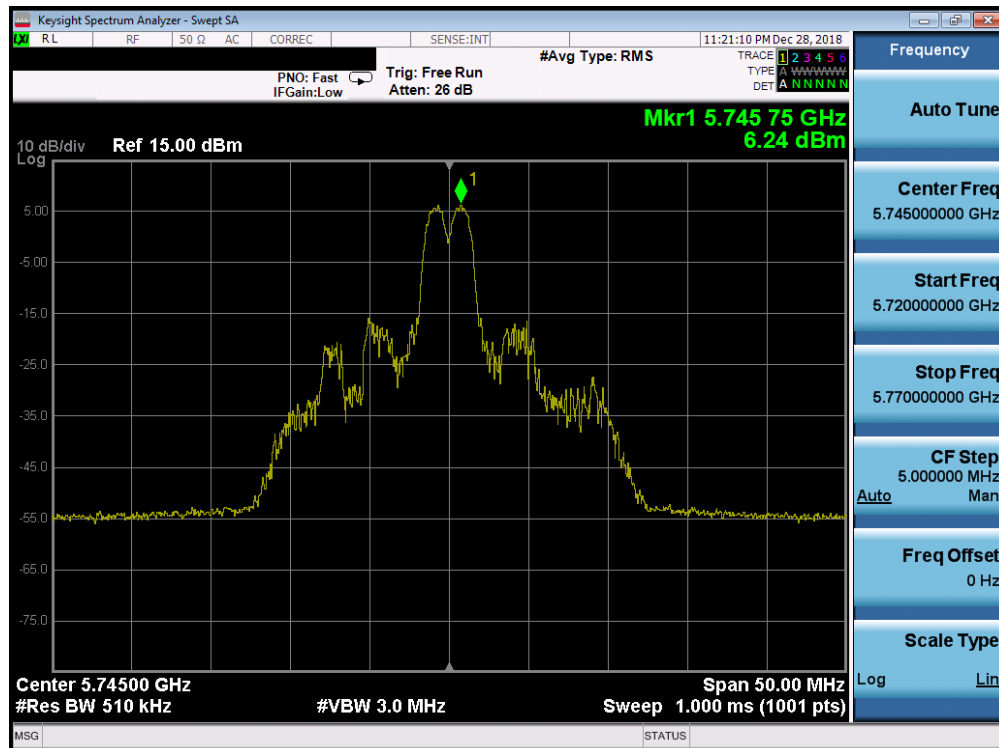


Plot 7-258. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 138)

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 194 of 519

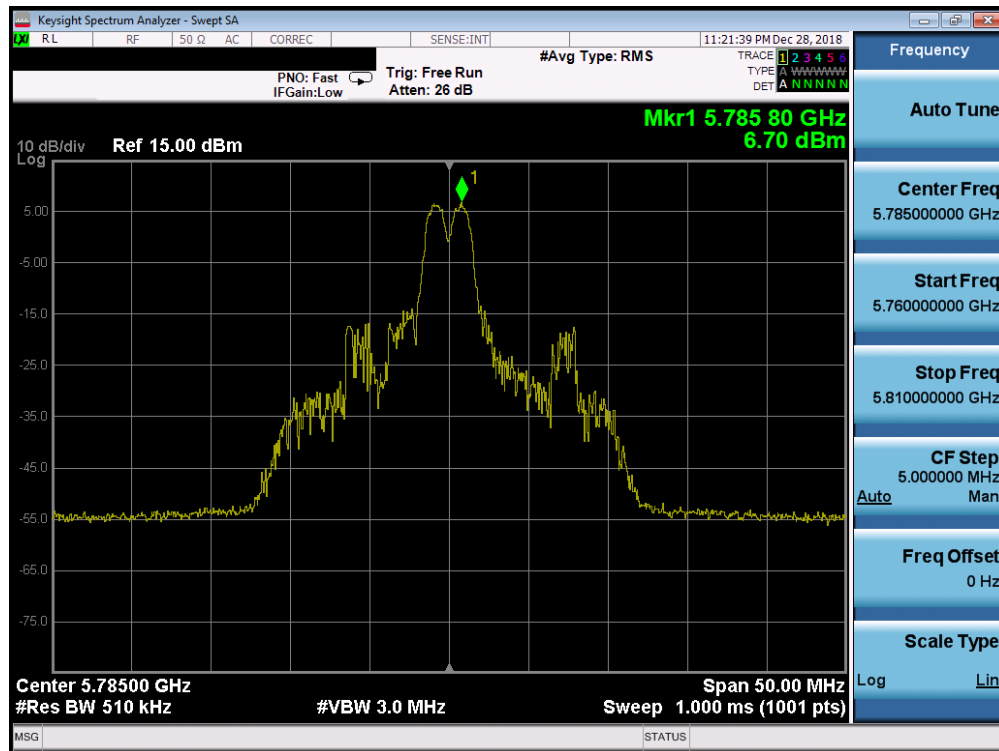
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
Band 3	5745	149	ax (20MHz)	26T	MCS0	6.24	30.00	-23.76
	5785	157	ax (20MHz)	26T	MCS0	6.70	30.00	-23.30
	5825	165	ax (20MHz)	26T	MCS0	6.45	30.00	-23.55
	5755	151	ax (40MHz)	26T	MCS0	5.88	30.00	-24.12
	5795	159	ax (40MHz)	26T	MCS0	6.34	30.00	-23.66
	5775	155	ax (80MHz)	26T	MCS0	8.91	30.00	-21.09

Table 7-83. Band 3 Conducted Power Spectral Density Measurements SISO ANT2 (26 Tones)

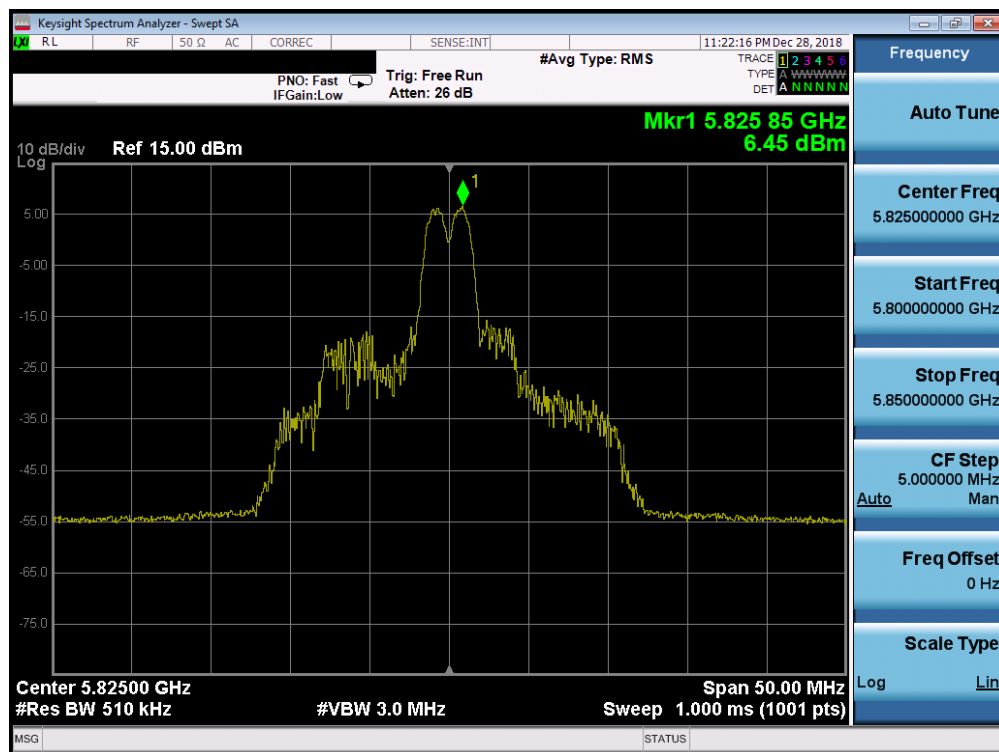


Plot 7-259. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 149)

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 195 of 519

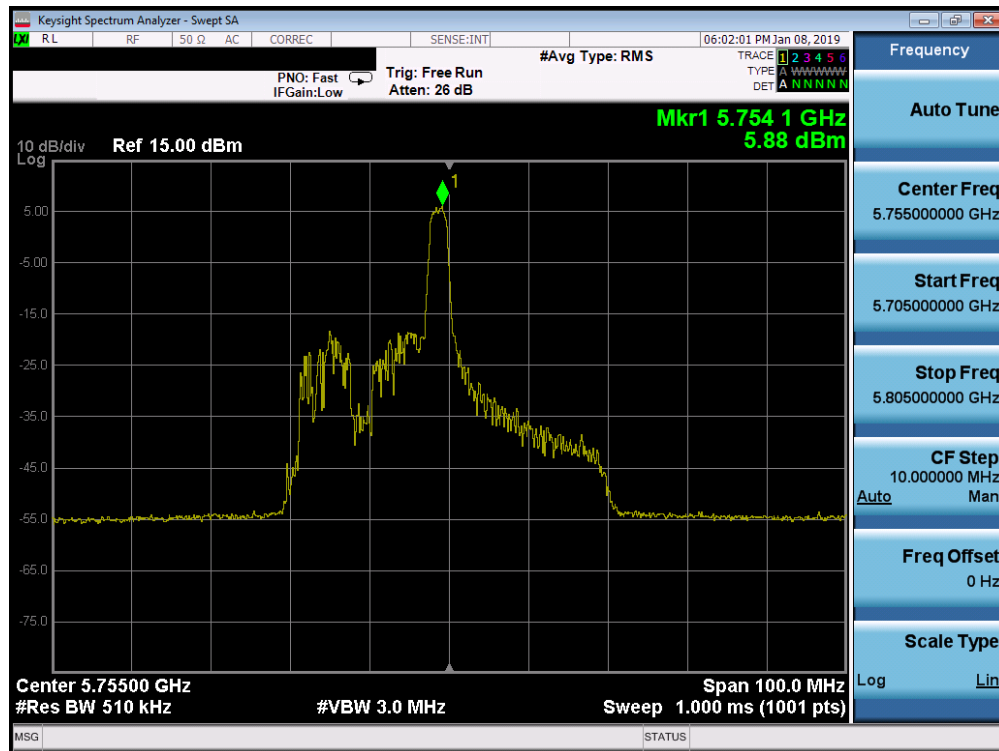


Plot 7-260. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 157)

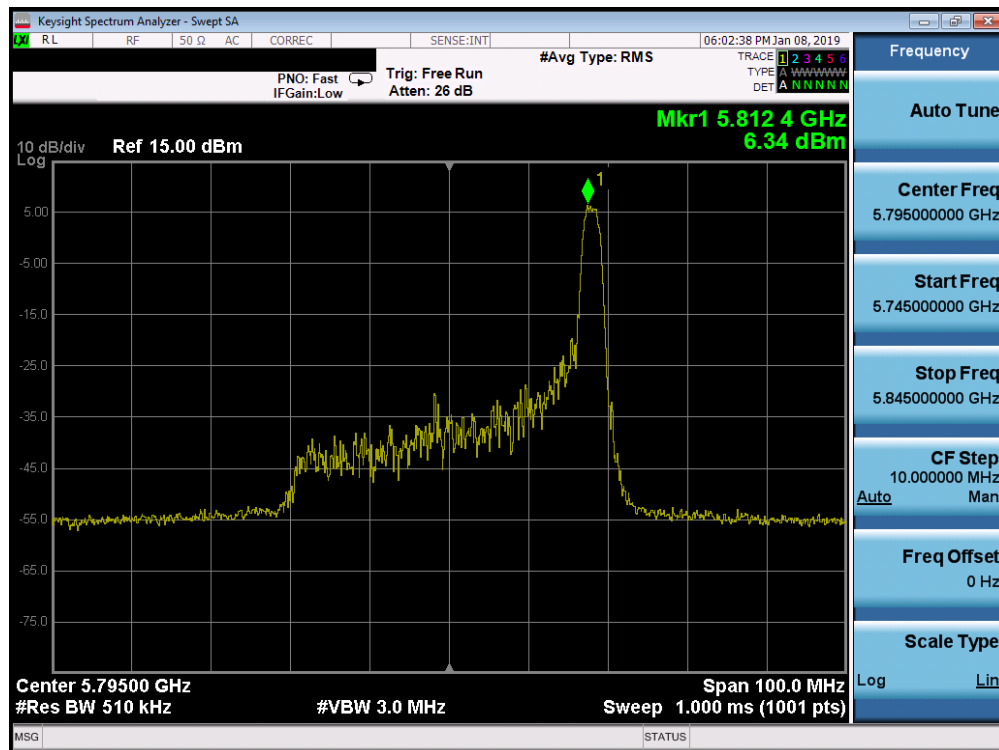


Plot 7-261. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 165)

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 196 of 519

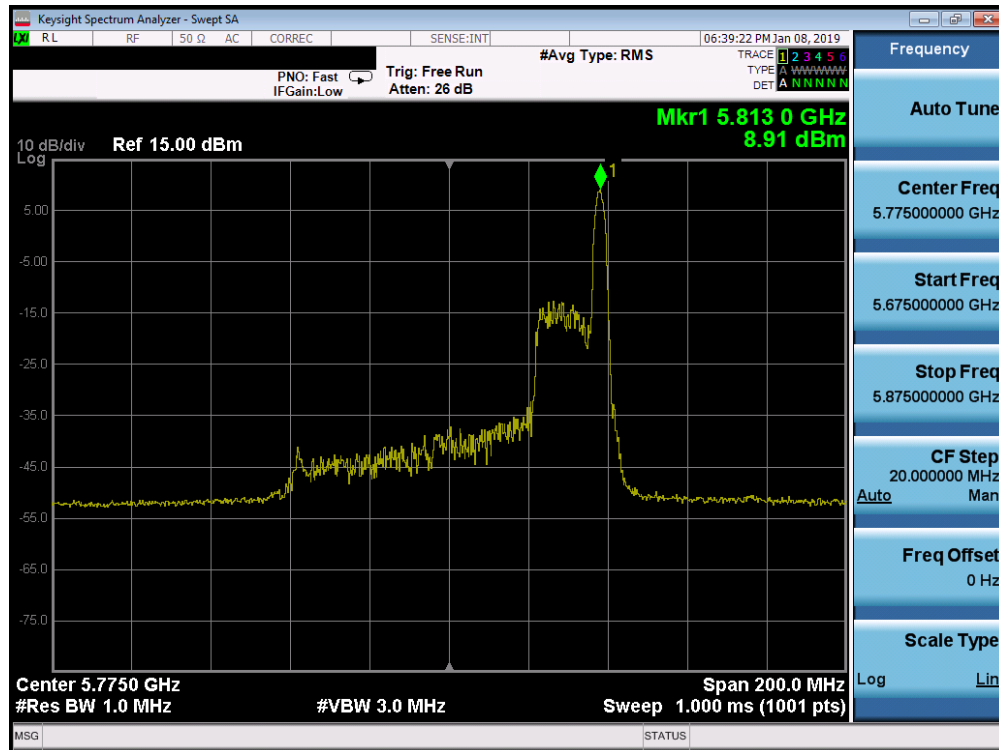


Plot 7-262. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 151)



Plot 7-263. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 26 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 197 of 519



Plot 7-264. Power Spectral Density Plot SISO ANT2 (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 198 of 519

SISO Antenna-2 Power Spectral Density Measurements (52 Tones)

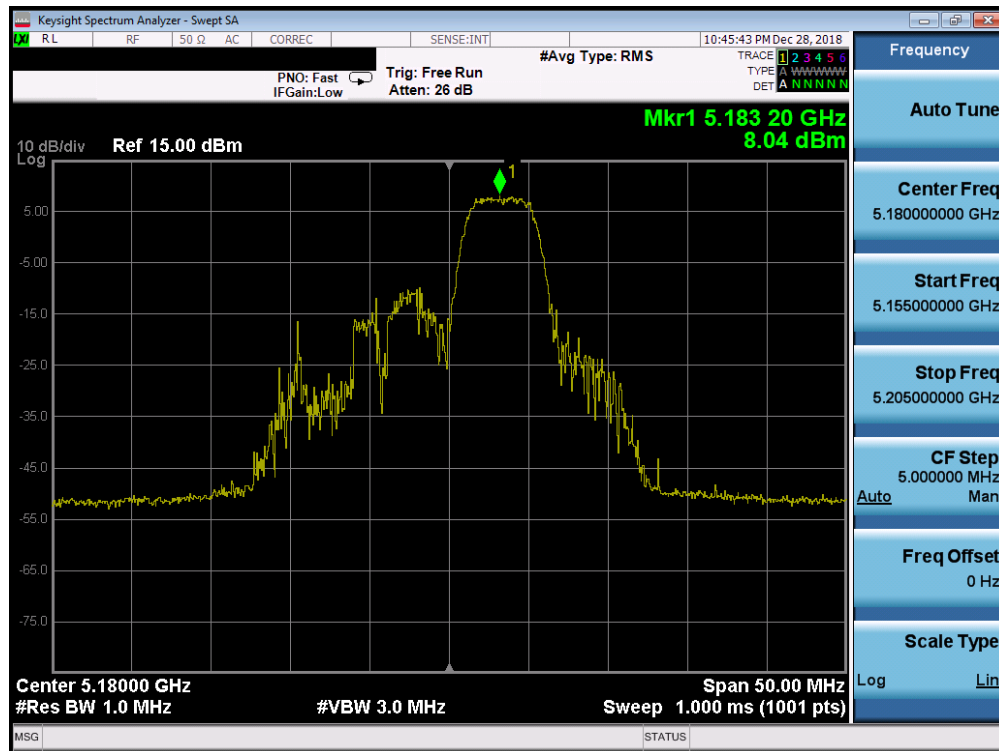
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	ax (20MHz)	52T	MCS0	8.04	11.00	-2.96
	5200	40	ax (20MHz)	52T	MCS0	8.04	11.00	-2.96
	5240	48	ax (20MHz)	52T	MCS0	7.91	11.00	-3.09
	5190	38	ax (40MHz)	52T	MCS0	7.75	11.00	-3.25
	5230	46	ax (40MHz)	52T	MCS0	8.09	11.00	-2.91
	5210	42	ax (80MHz)	52T	MCS0	8.16	11.00	-2.84
Band 2A	5260	52	ax (20MHz)	52T	MCS0	8.04	11.00	-2.96
	5280	56	ax (20MHz)	52T	MCS0	7.68	11.00	-3.32
	5320	64	ax (20MHz)	52T	MCS0	8.34	11.00	-2.66
	5270	54	ax (40MHz)	52T	MCS0	7.98	11.00	-3.02
	5310	62	ax (40MHz)	52T	MCS0	7.94	11.00	-3.06
	5290	58	ax (80MHz)	52T	MCS0	8.17	11.00	-2.83
Band 2C	5500	100	ax (20MHz)	52T	MCS0	8.32	11.00	-2.68
	5600	120	ax (20MHz)	52T	MCS0	8.74	11.00	-2.26
	5720	144	ax (20MHz)	52T	MCS0	8.63	11.00	-2.37
	5510	102	ax (40MHz)	52T	MCS0	8.39	11.00	-2.61
	5590	118	ax (40MHz)	52T	MCS0	8.33	11.00	-2.67
	5710	142	ax (40MHz)	52T	MCS0	8.06	11.00	-2.94
	5530	106	ax (80MHz)	52T	MCS0	7.91	11.00	-3.09
	5610	122	ax (80MHz)	52T	MCS0	7.87	11.00	-3.13
	5690	138	ax (80MHz)	52T	MCS0	8.21	11.00	-2.79

Table 7-84. Bands 1, 2A, 2C Conducted Power Spectral Density Measurements SISO ANT2 (52 Tones)

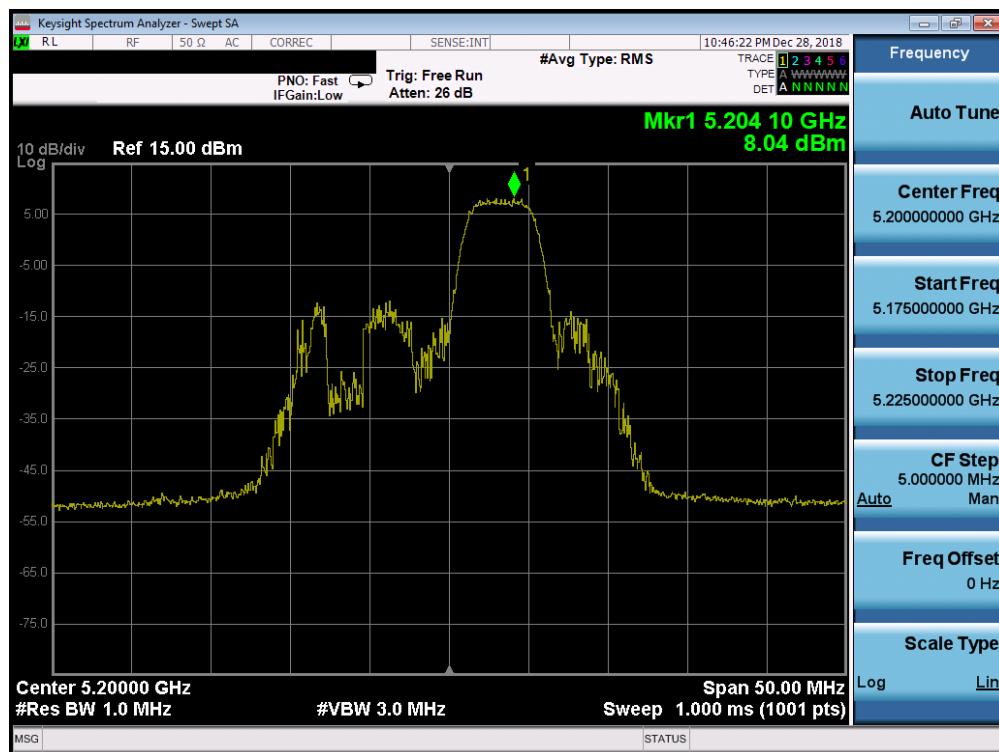
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Antenna Gain [dBi]	e.i.r.p. Power Density [dBm/MHz]	ISED Max e.i.r.p. Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	ax (20MHz)	52T	MCS0	8.04	-7.68	0.36	10.0	-9.64
	5200	40	ax (20MHz)	52T	MCS0	8.04	-7.68	0.36	10.0	-9.64
	5240	48	ax (20MHz)	52T	MCS0	7.91	-7.38	0.53	10.0	-9.47
	5190	38	ax (40MHz)	52T	MCS0	7.75	-7.68	0.07	10.0	-9.93
	5230	46	ax (40MHz)	52T	MCS0	8.09	-7.38	0.71	10.0	-9.29
	5210	42	ax (80MHz)	52T	MCS0	8.16	-7.68	0.48	10.0	-9.52

Table 7-85. 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 199 of 519

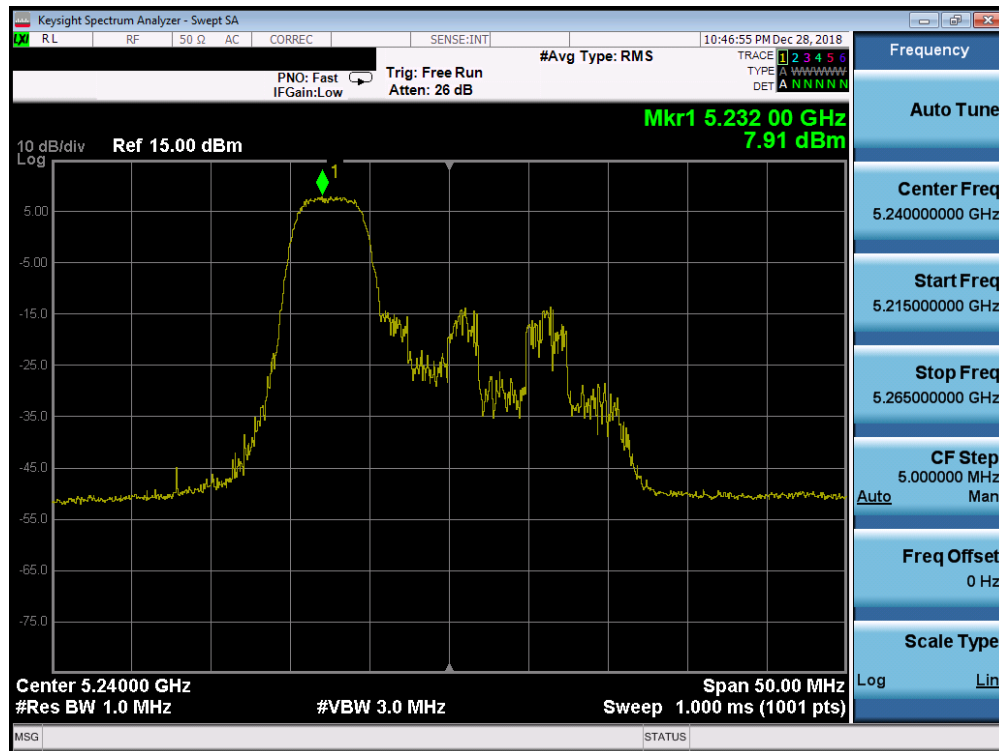


Plot 7-265. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 36)

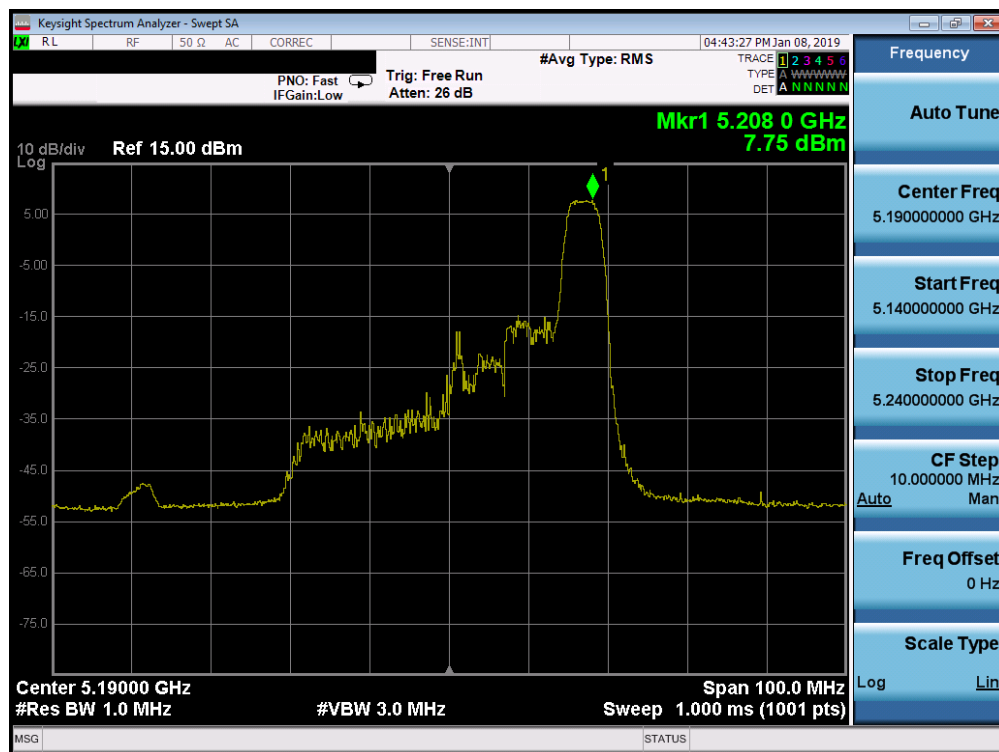


Plot 7-266. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 40)

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 200 of 519

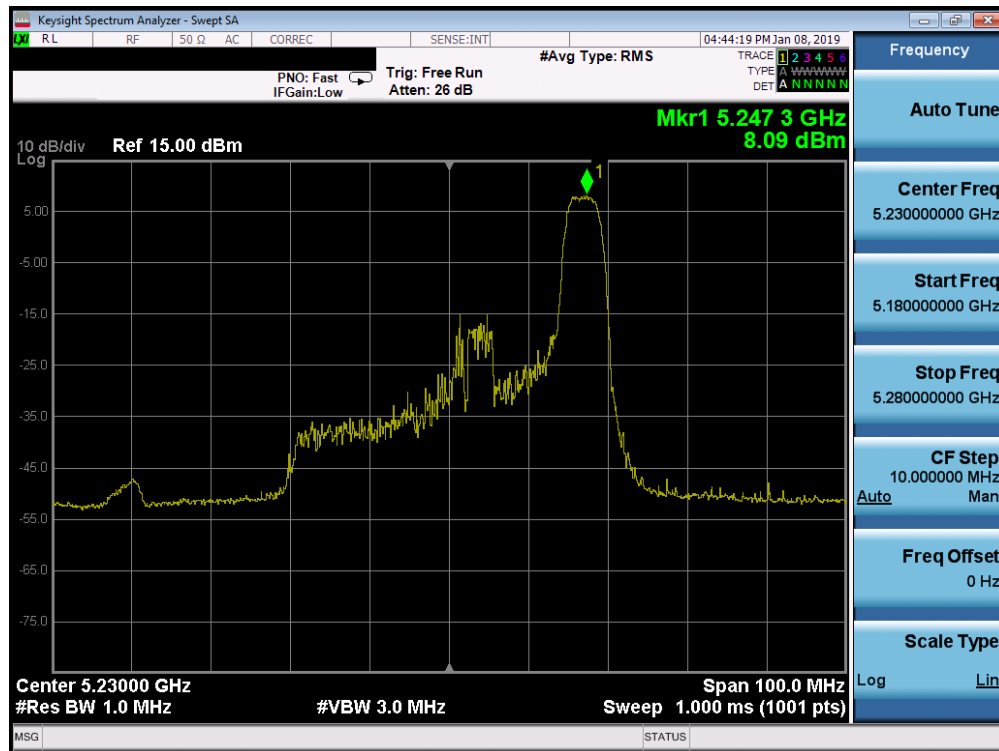


Plot 7-267. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 48)

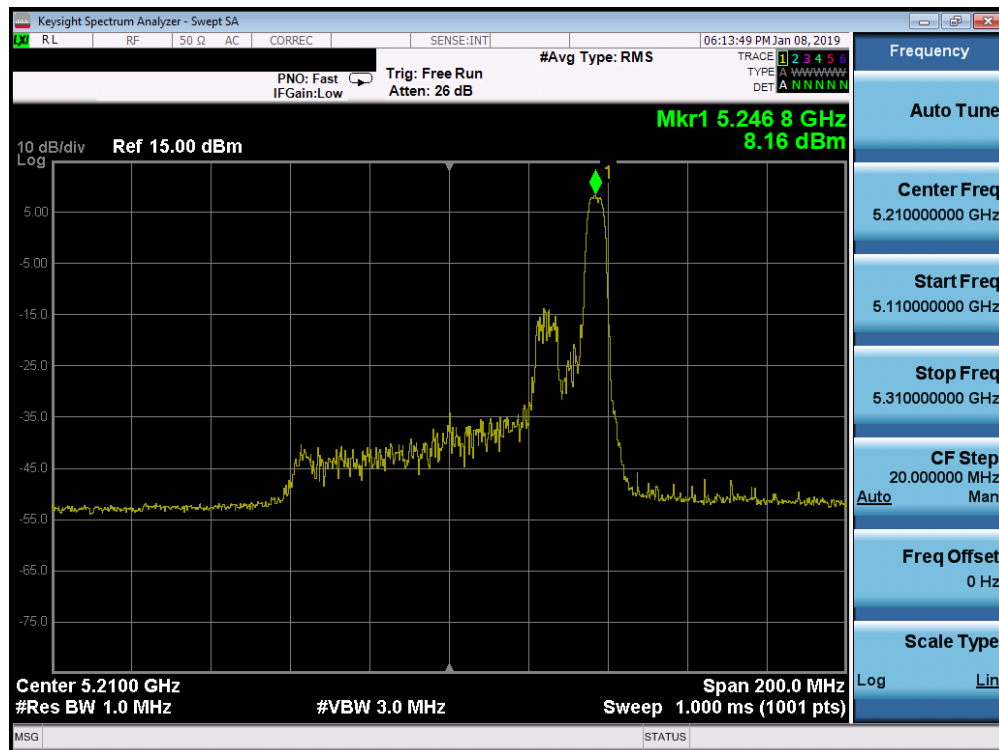


Plot 7-268. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 38)

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 201 of 519

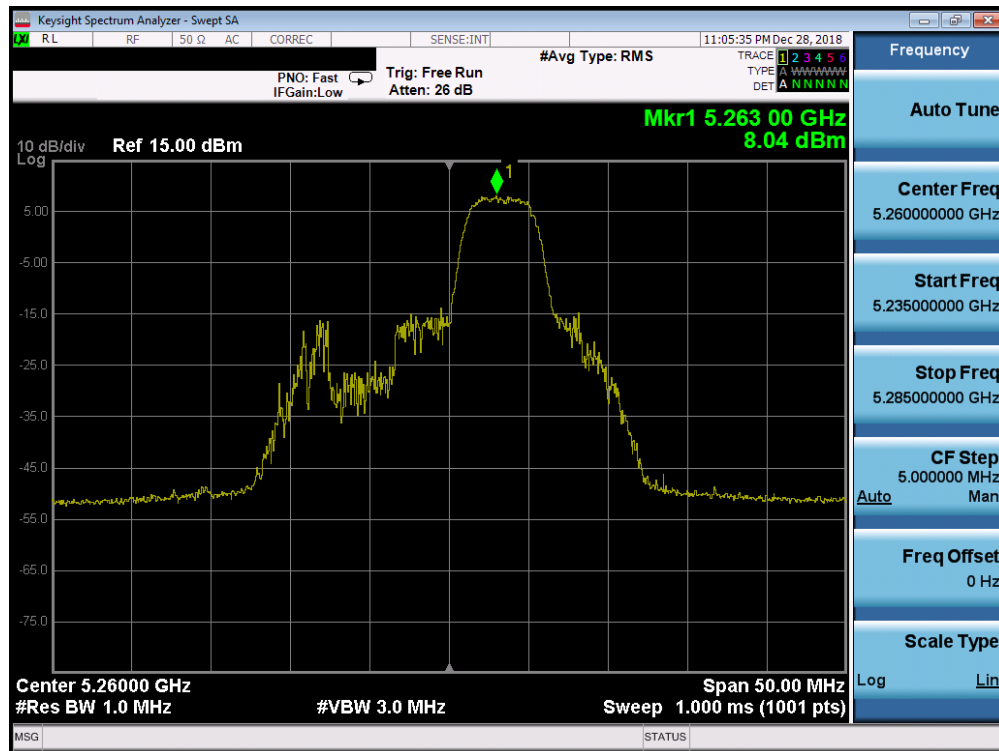


Plot 7-269. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 46)

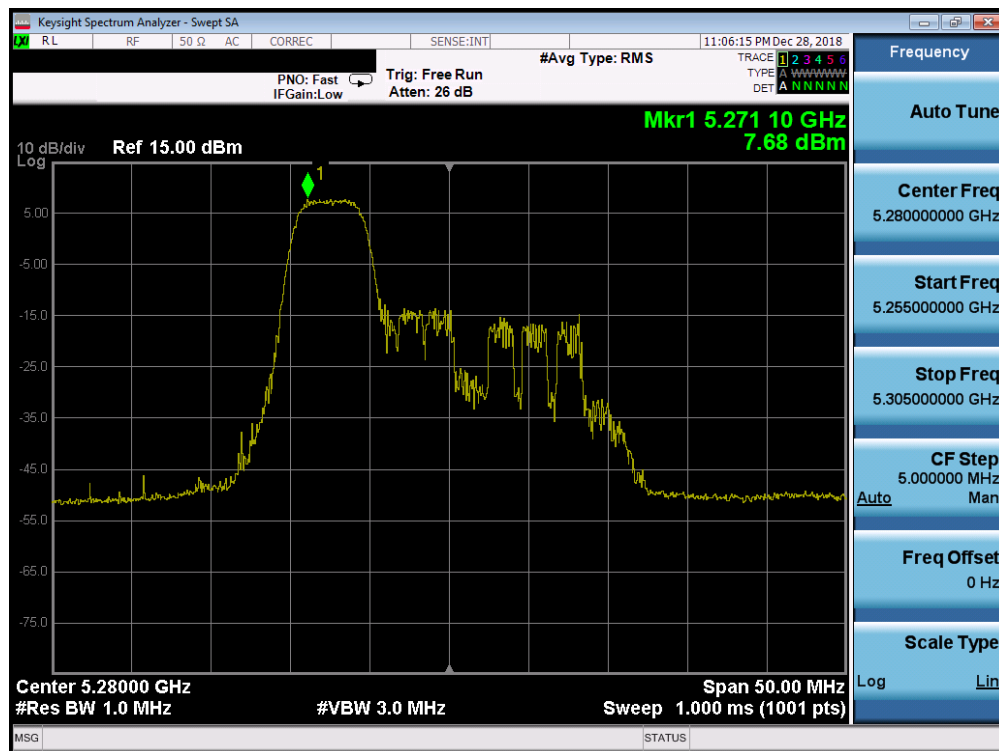


Plot 7-270. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 42)

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 202 of 519

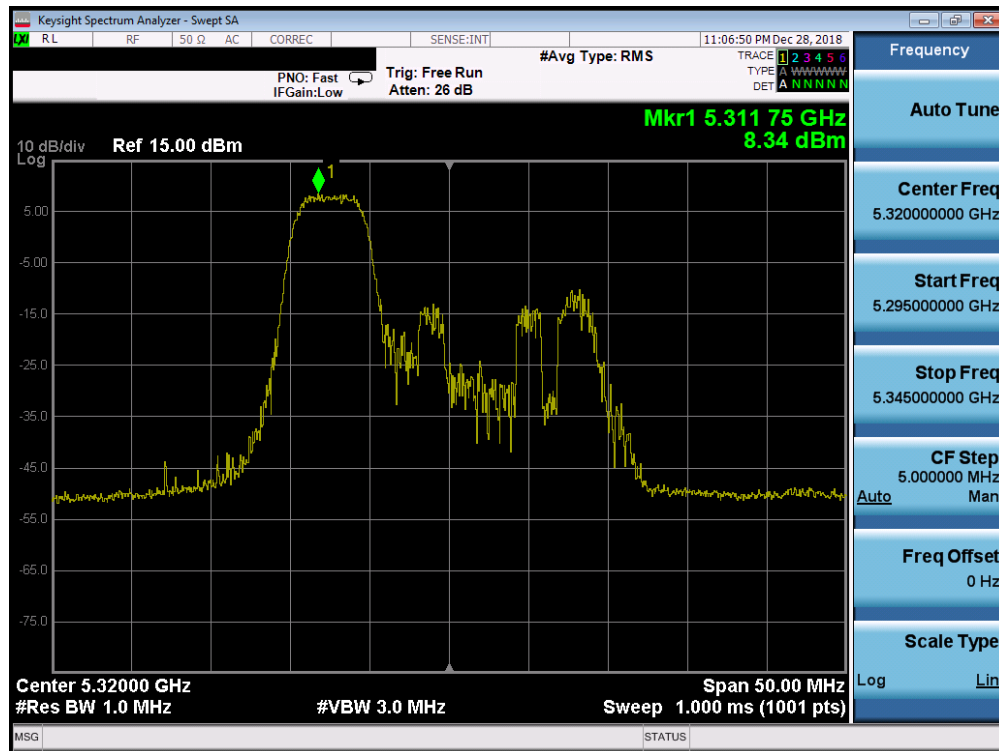


Plot 7-271. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 52)

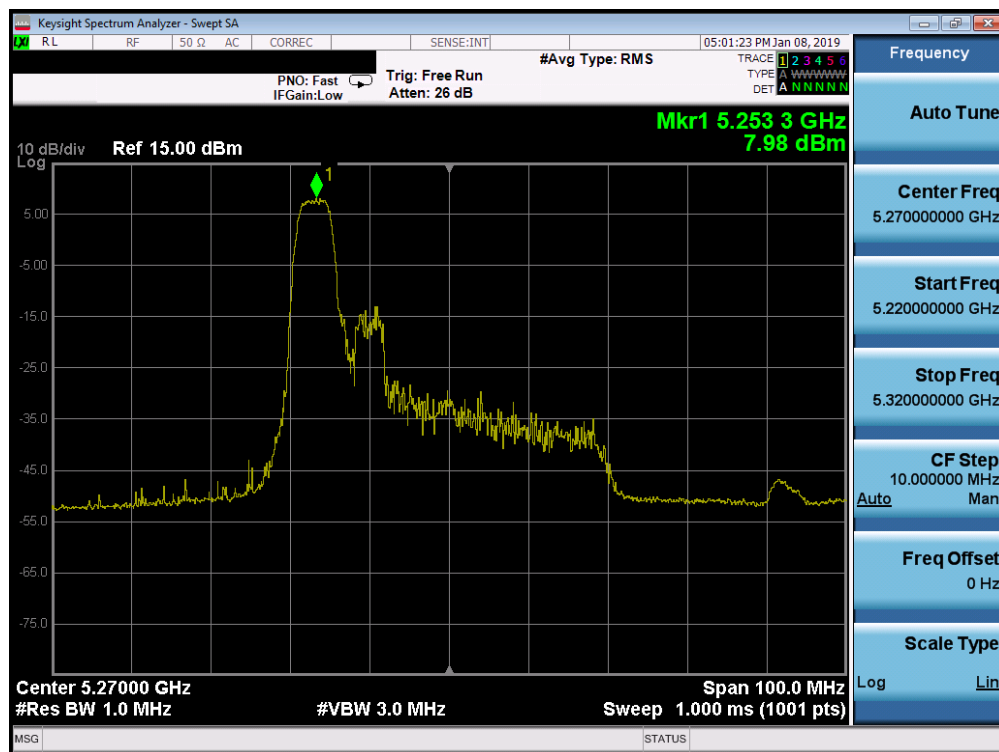


Plot 7-272. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 56)

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 203 of 519

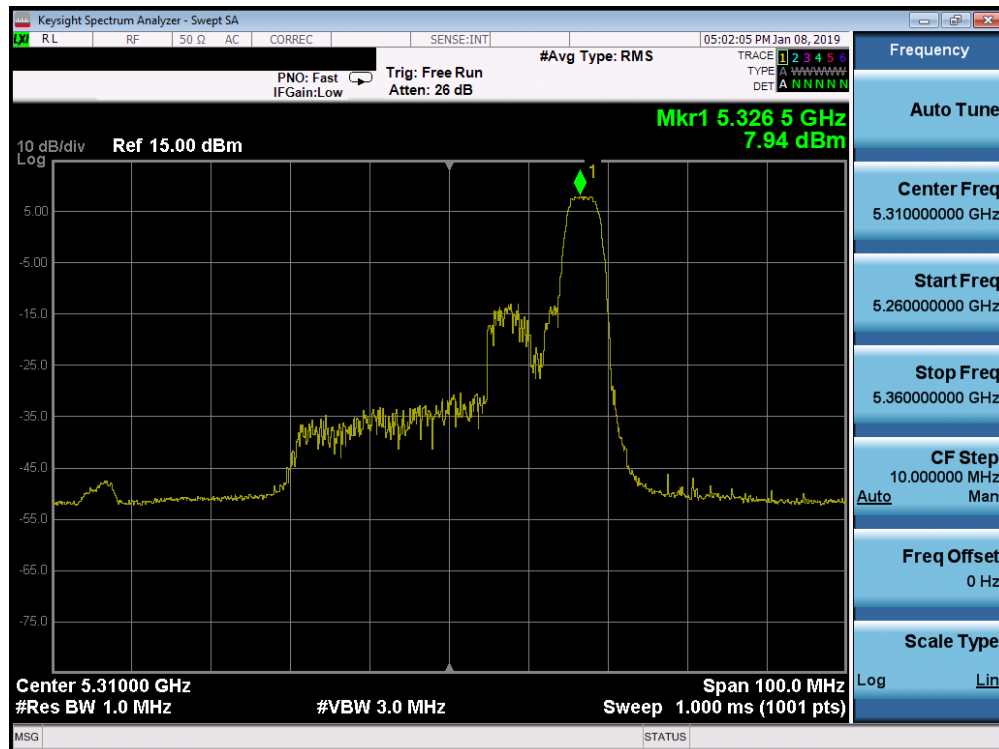


Plot 7-273. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 64)

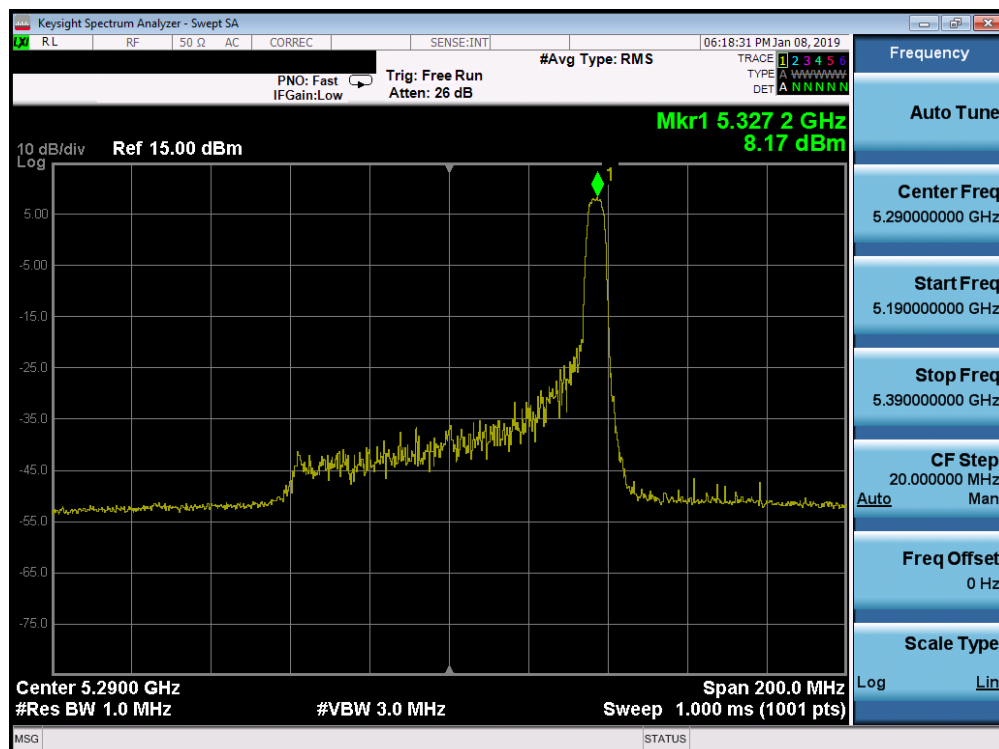


Plot 7-274. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 54)

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 204 of 519

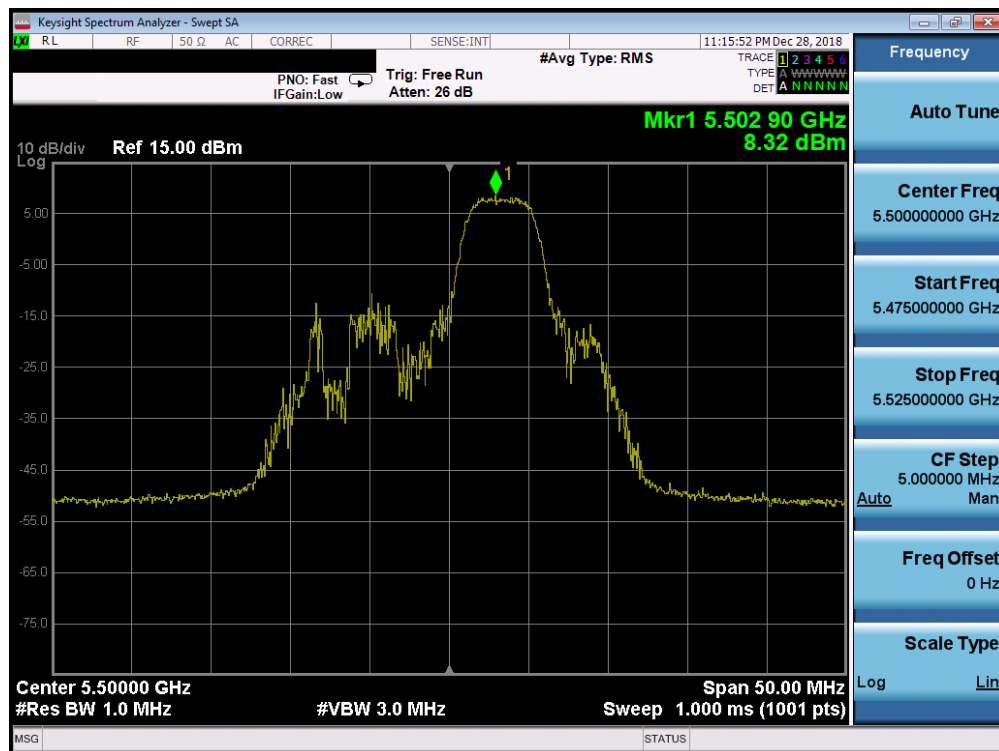


Plot 7-275. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 62)

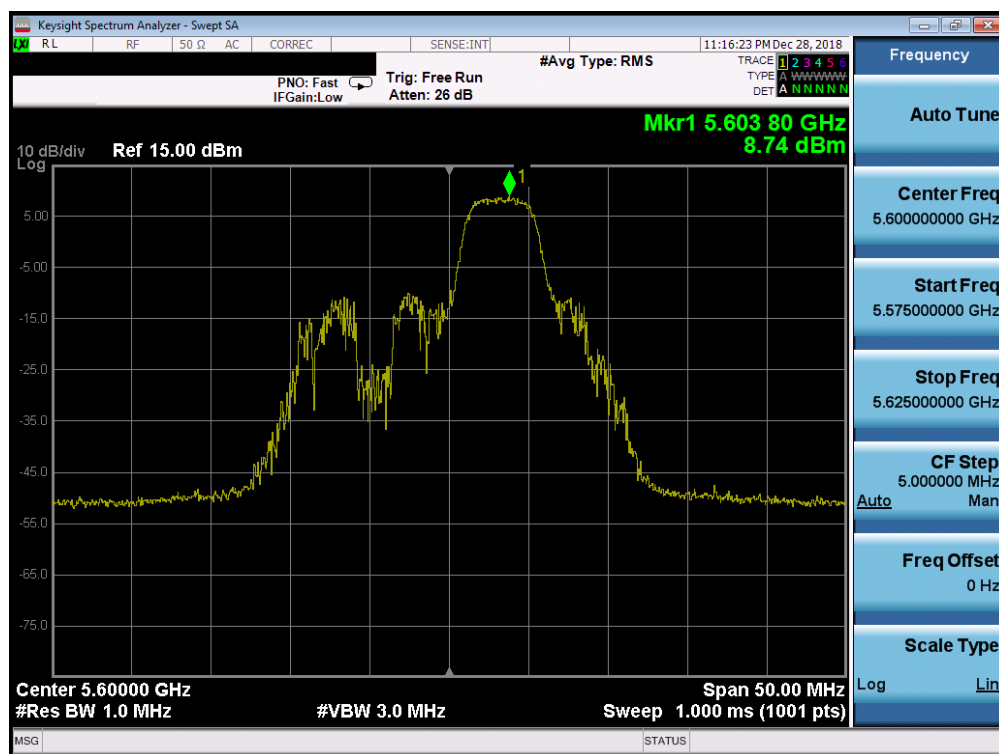


Plot 7-276. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 58)

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 205 of 519

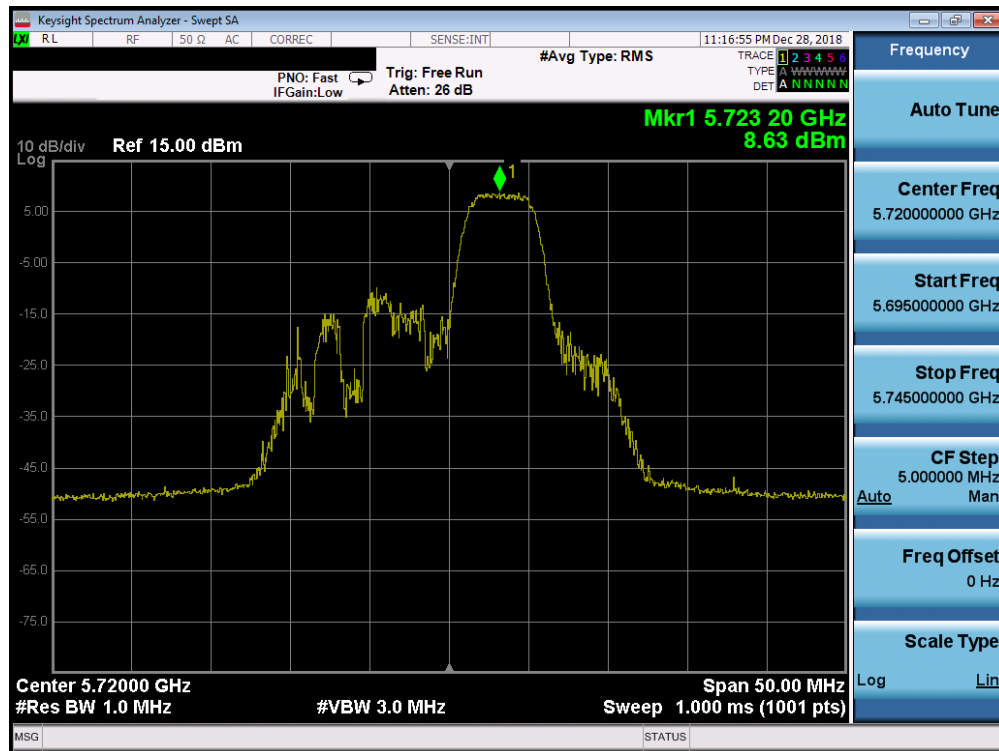


Plot 7-277. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 100)

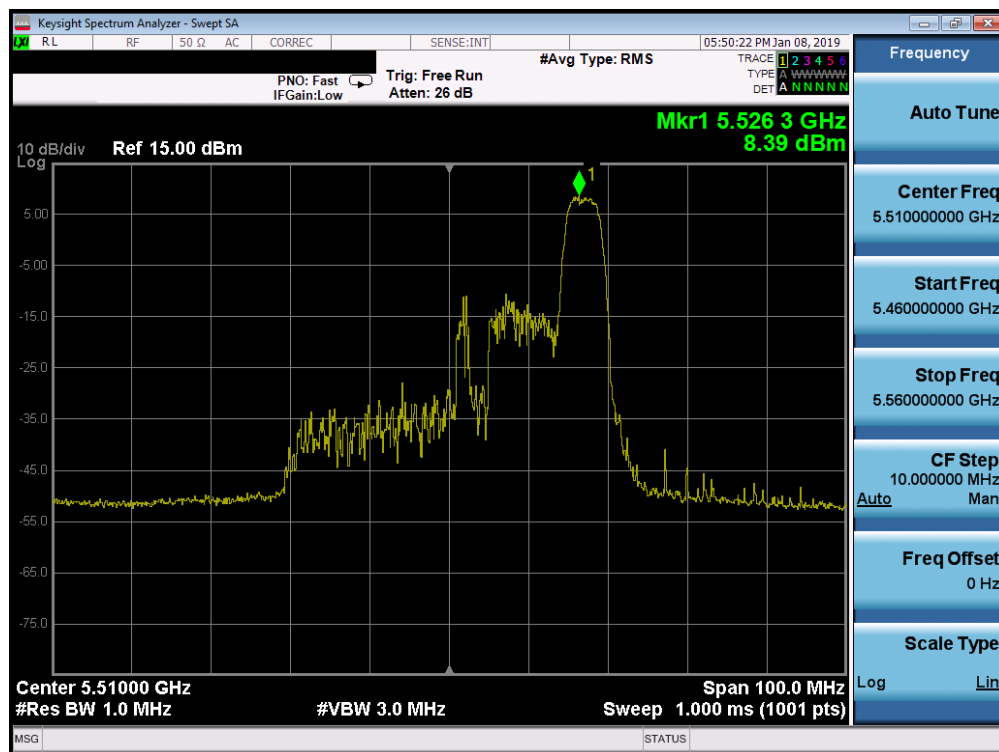


Plot 7-278. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 120)

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 206 of 519

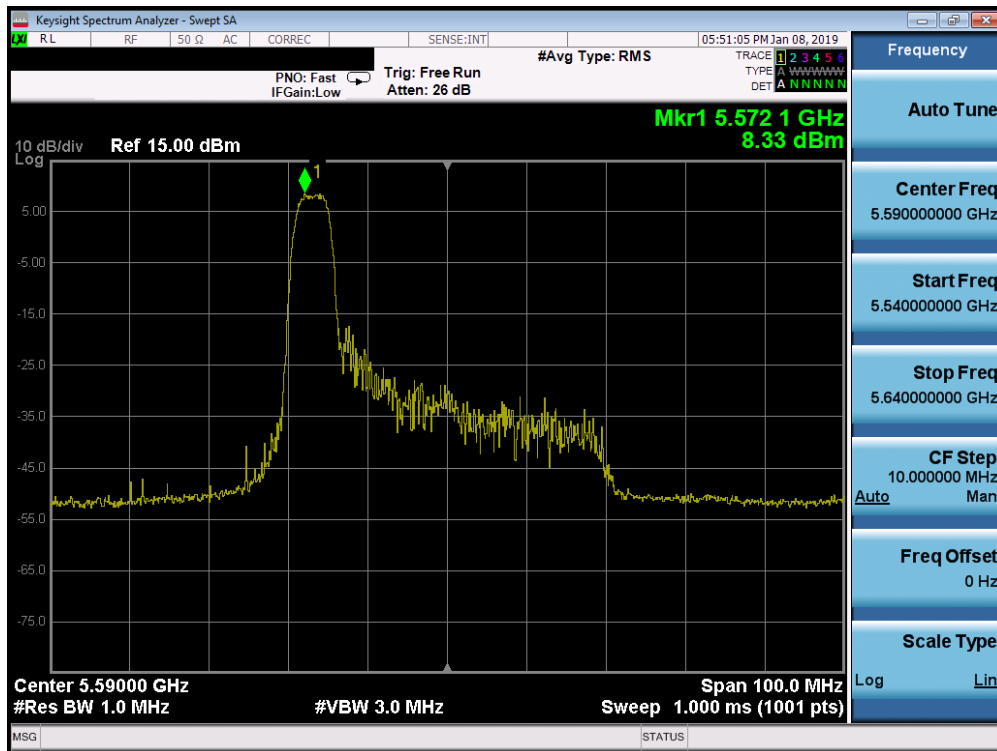


Plot 7-279. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 144)

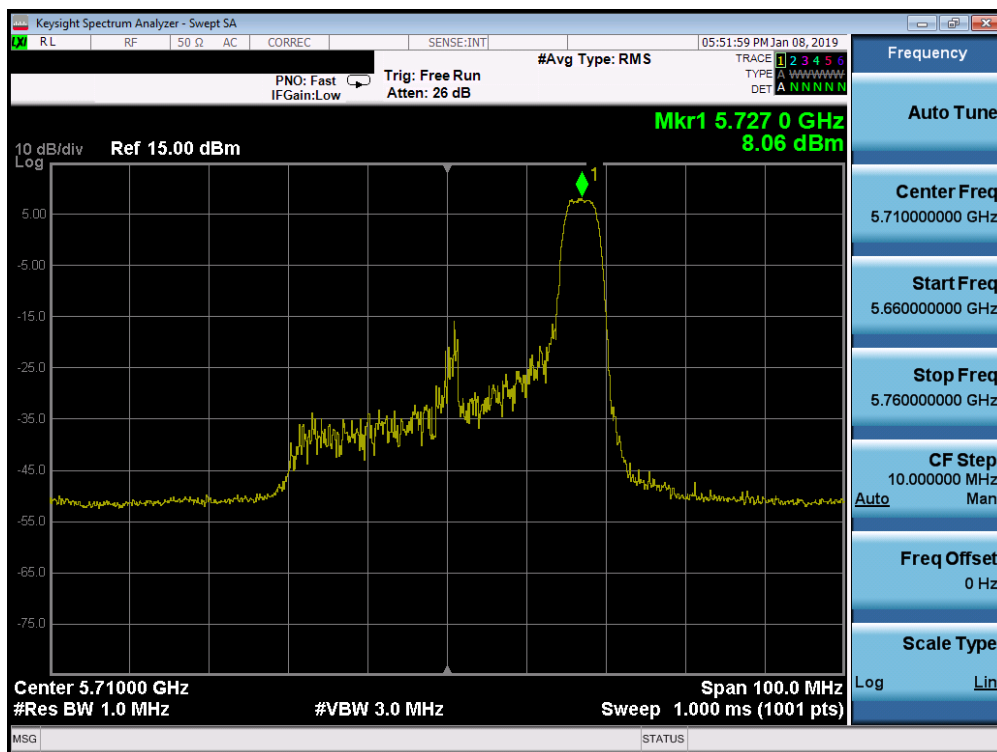


Plot 7-280. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 102)

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 207 of 519

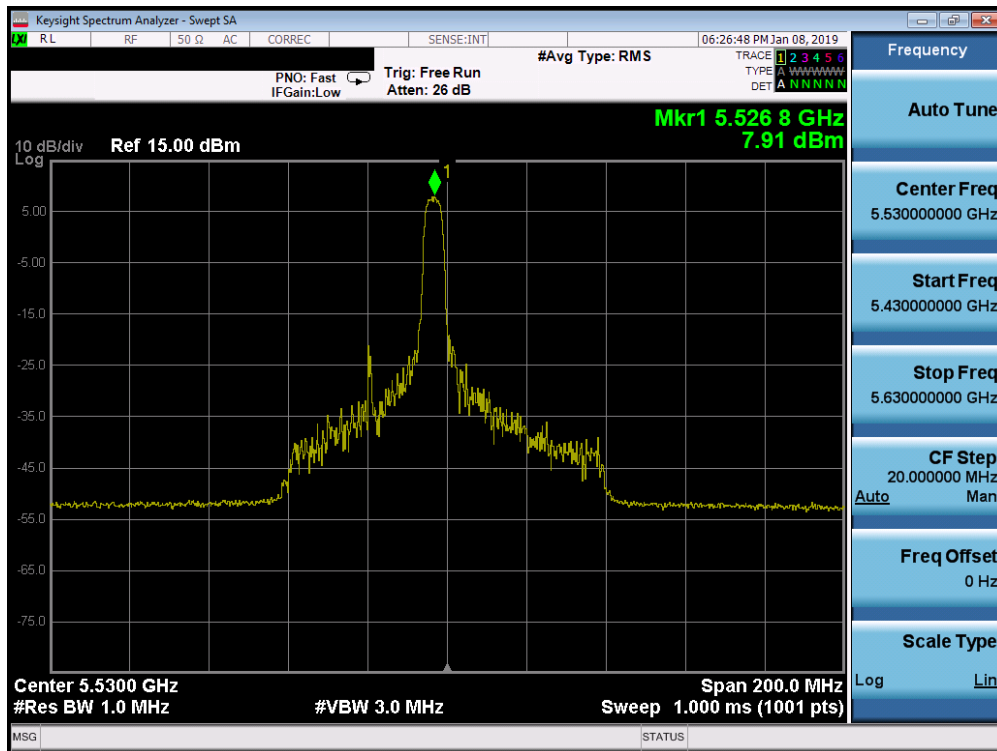


Plot 7-281. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 118)

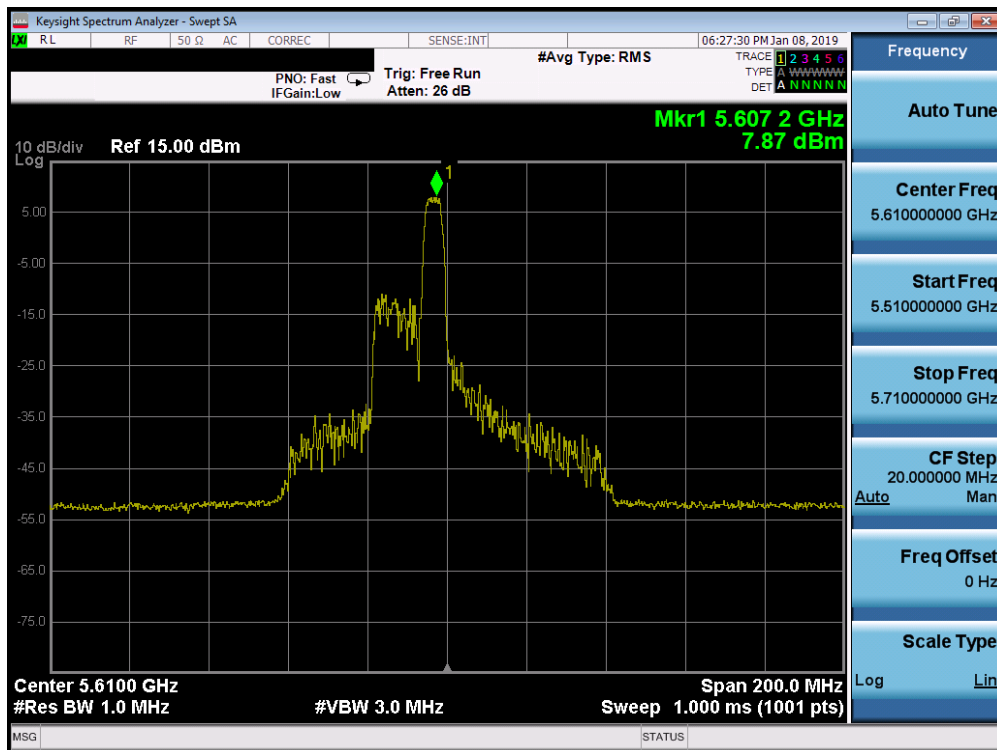


Plot 7-282. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 142)

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 208 of 519		



Plot 7-283. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 106)

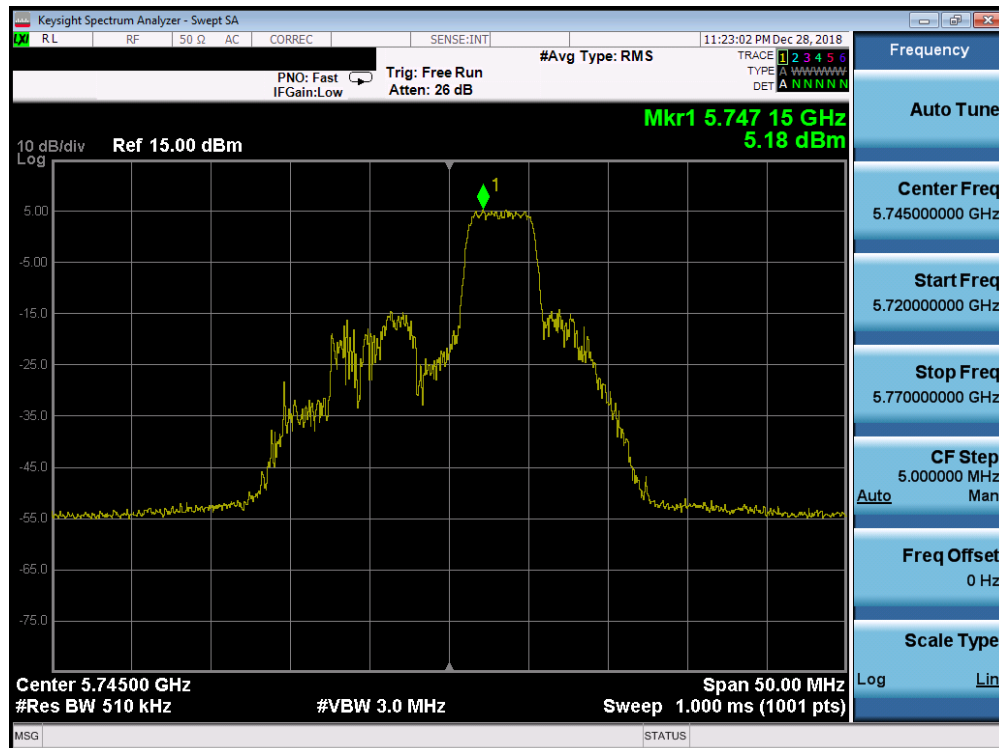


Plot 7-284. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 122)

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 209 of 519

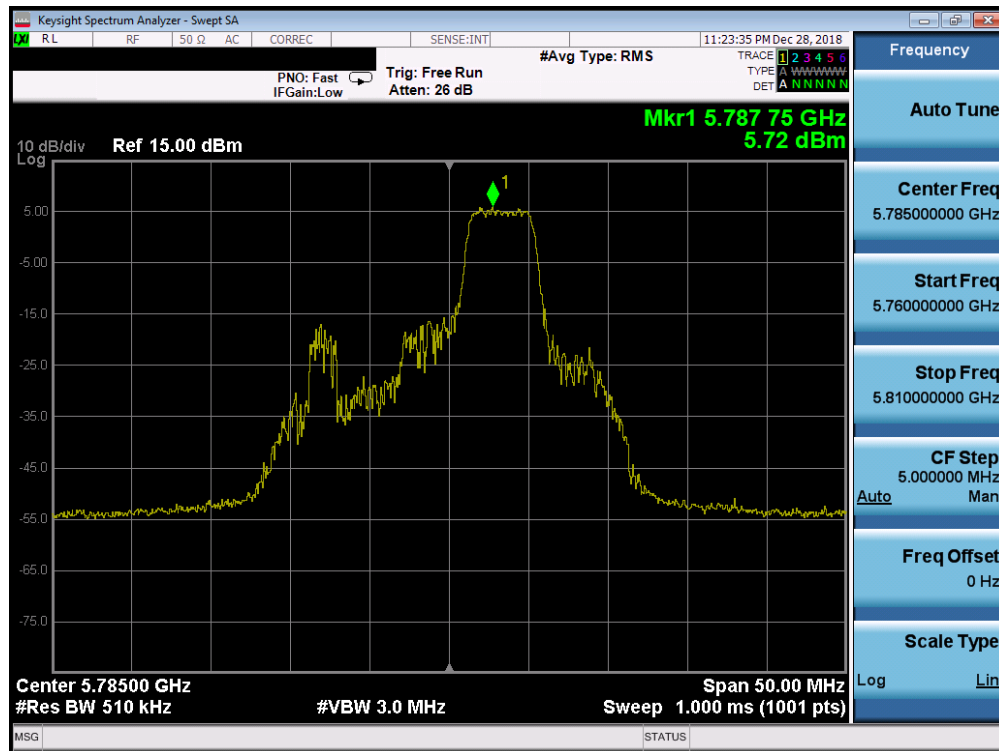
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
Band 3	5745	149	ax (20MHz)	52T	MCS0	5.18	30.00	-24.82
	5785	157	ax (20MHz)	52T	MCS0	5.72	30.00	-24.28
	5825	165	ax (20MHz)	52T	MCS0	5.49	30.00	-24.51
	5755	151	ax (40MHz)	52T	MCS0	4.85	30.00	-25.15
	5795	159	ax (40MHz)	52T	MCS0	5.87	30.00	-24.13
	5775	155	ax (80MHz)	52T	MCS0	9.00	30.00	-21.00

Table 7-86. Band 3 Conducted Power Spectral Density Measurements SISO ANT2 (52 Tones)

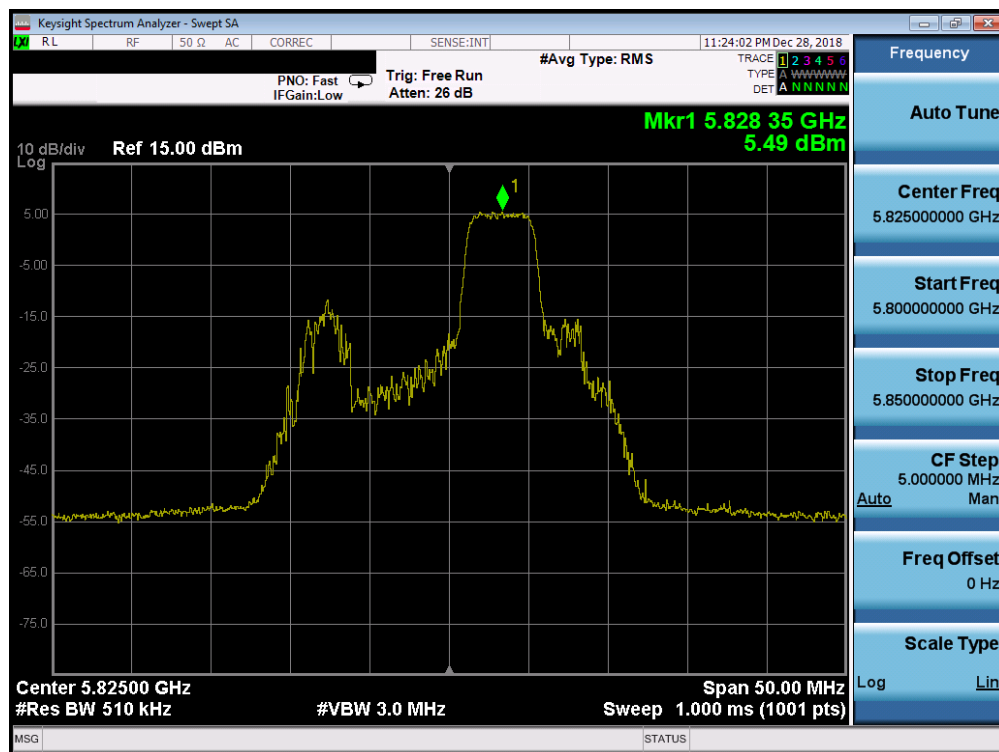


Plot 7-286. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 3) – Ch. 149)

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 211 of 519

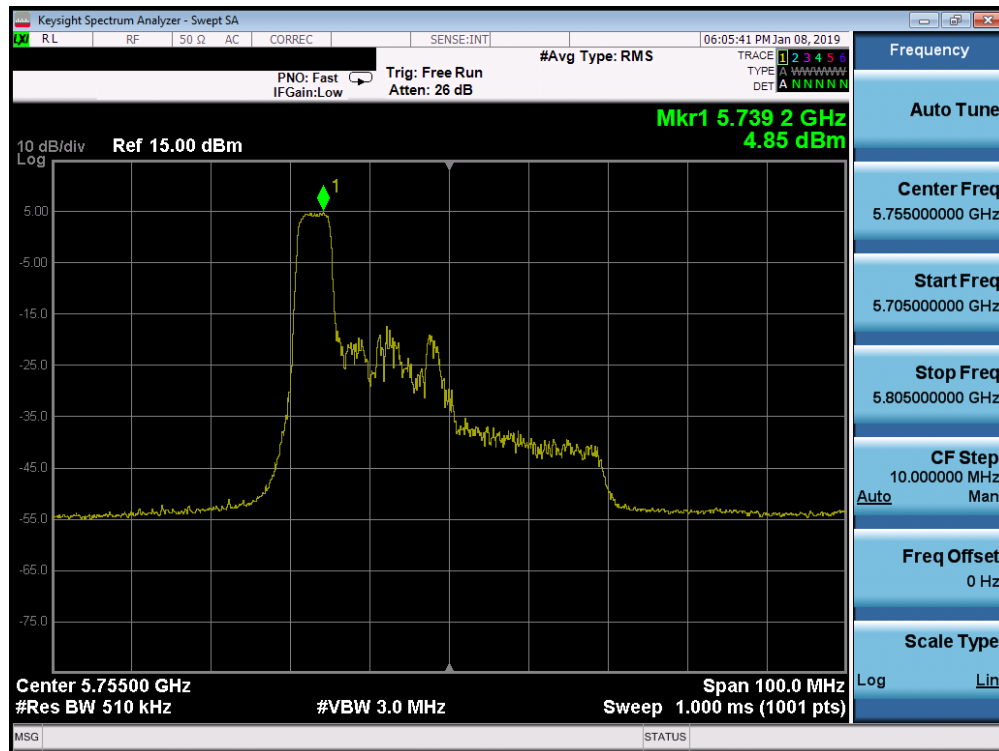


Plot 7-287. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 3) – Ch. 157)

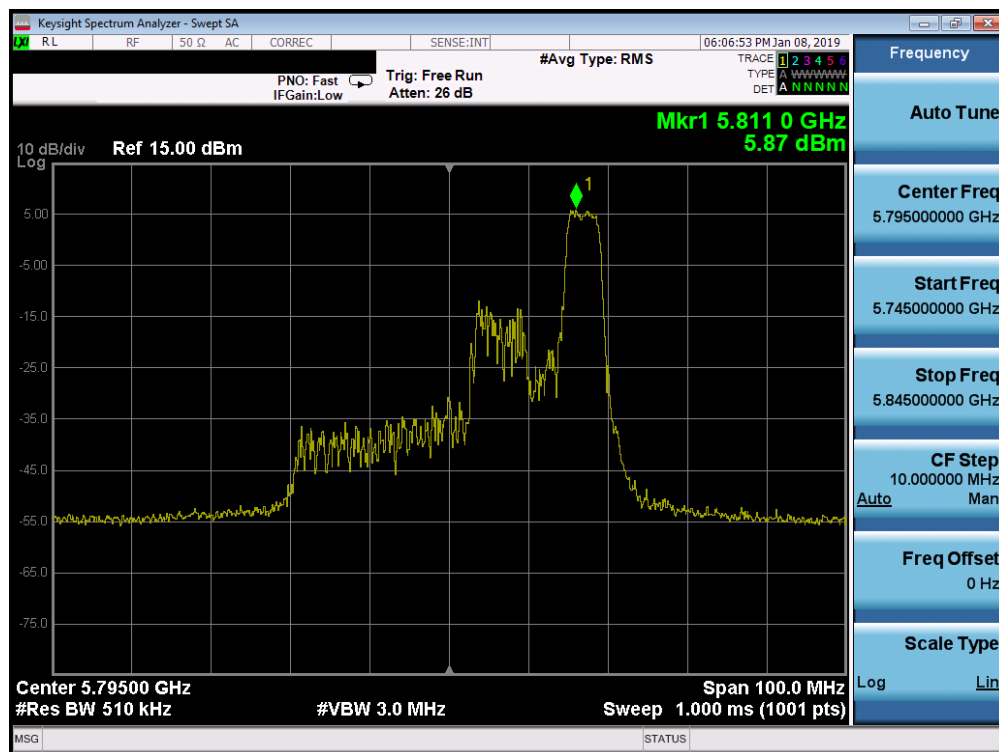


Plot 7-288. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 52 Tones (UNII Band 3) – Ch. 165)

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 212 of 519

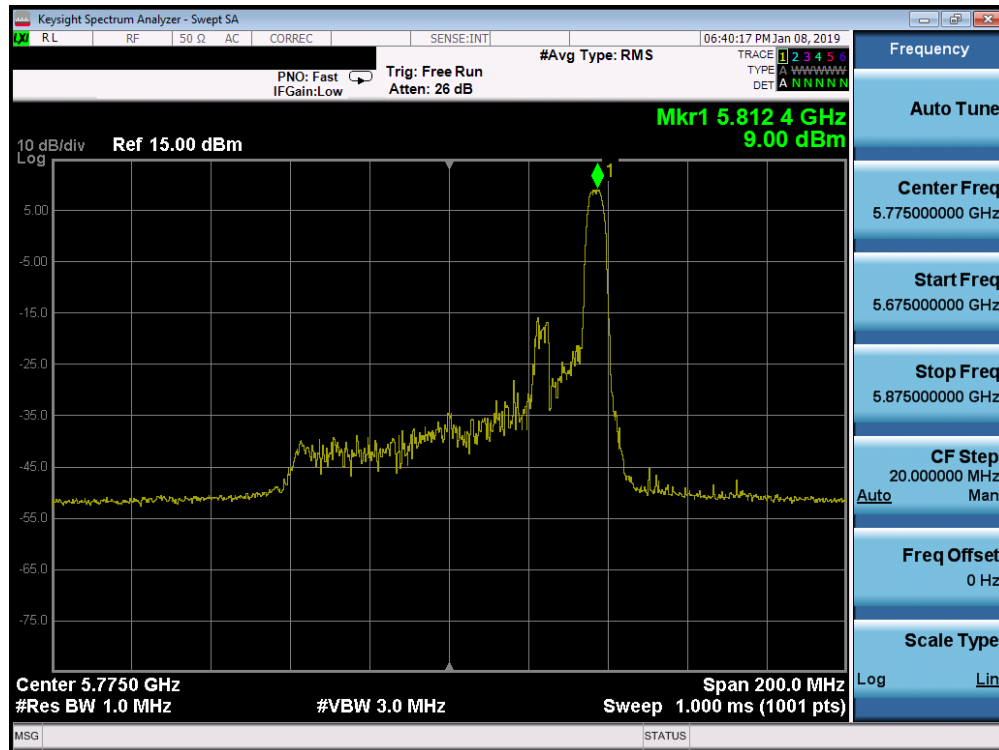


Plot 7-289. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 52 Tones (UNII Band 3) – Ch. 151)



Plot 7-290. Power Spectral Density Plot SISO ANT2 (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 213 of 519



Plot 7-291. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 52 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 214 of 519

SISO Antenna-2 Power Spectral Density Measurements (106 Tones)

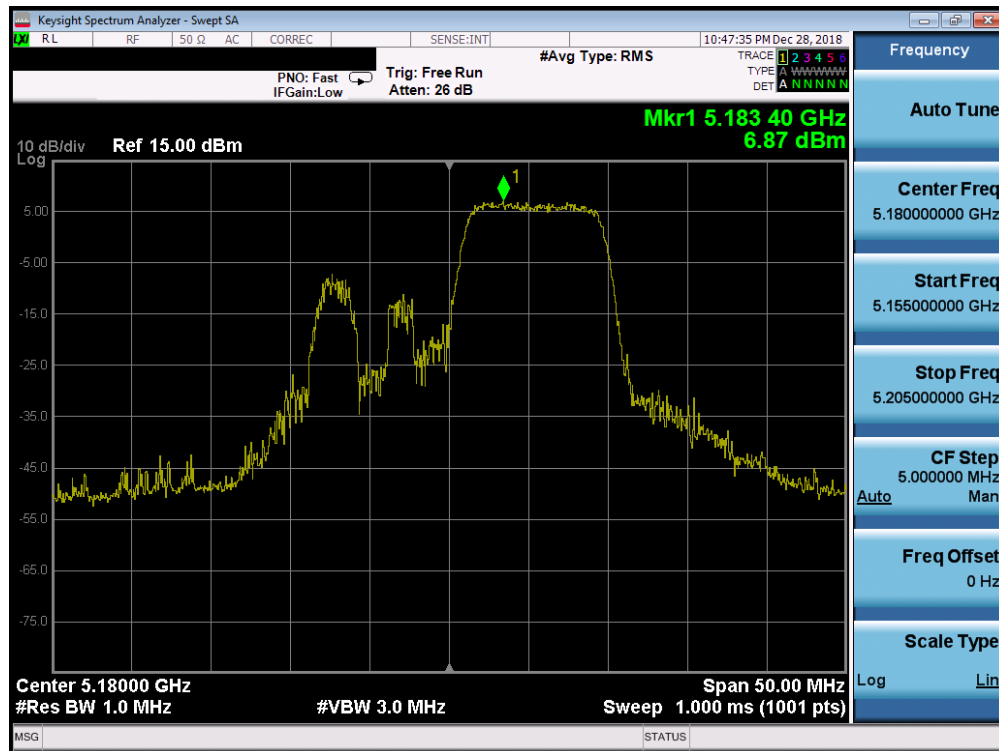
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	ax (20MHz)	106T	MCS0	6.87	11.00	-4.13
	5200	40	ax (20MHz)	106T	MCS0	7.20	11.00	-3.80
	5240	48	ax (20MHz)	106T	MCS0	7.05	11.00	-3.95
	5190	38	ax (40MHz)	106T	MCS0	6.89	11.00	-4.11
	5230	46	ax (40MHz)	106T	MCS0	6.76	11.00	-4.24
	5210	42	ax (80MHz)	106T	MCS0	7.23	11.00	-3.77
Band 2A	5260	52	ax (20MHz)	106T	MCS0	7.03	11.00	-3.97
	5280	56	ax (20MHz)	106T	MCS0	7.14	11.00	-3.86
	5320	64	ax (20MHz)	106T	MCS0	7.26	11.00	-3.74
	5270	54	ax (40MHz)	106T	MCS0	6.87	11.00	-4.13
	5310	62	ax (40MHz)	106T	MCS0	7.06	11.00	-3.94
	5290	58	ax (80MHz)	106T	MCS0	7.25	11.00	-3.75
Band 2C	5500	100	ax (20MHz)	106T	MCS0	7.16	11.00	-3.84
	5600	120	ax (20MHz)	106T	MCS0	7.58	11.00	-3.42
	5720	144	ax (20MHz)	106T	MCS0	6.78	11.00	-4.22
	5510	102	ax (40MHz)	106T	MCS0	7.06	11.00	-3.94
	5590	118	ax (40MHz)	106T	MCS0	7.68	11.00	-3.32
	5710	142	ax (40MHz)	106T	MCS0	7.62	11.00	-3.38
	5530	106	ax (80MHz)	106T	MCS0	7.19	11.00	-3.81
	5610	122	ax (80MHz)	106T	MCS0	7.41	11.00	-3.59
	5690	138	ax (80MHz)	106T	MCS0	7.50	11.00	-3.50

Table 7-87. Bands 1, 2A, 2C Conducted Power Spectral Density Measurements SISO ANT2 (106 Tones)

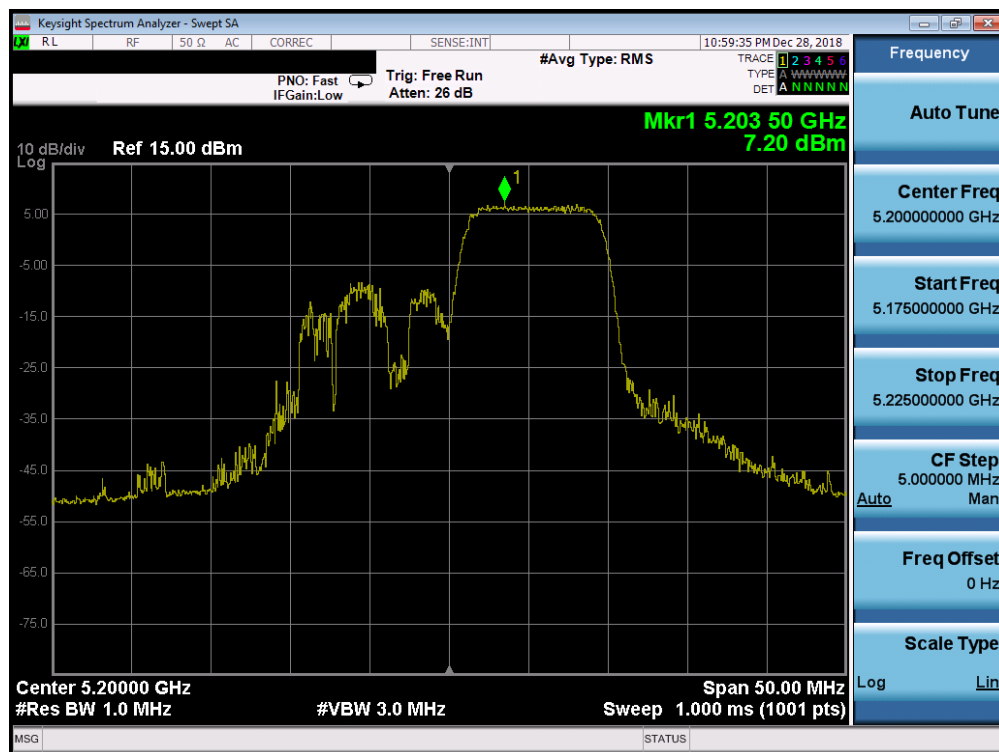
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Antenna Gain [dBi]	e.i.r.p. Power Density [dBm/MHz]	ISED Max e.i.r.p. Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	ax (20MHz)	106T	MCS0	6.87	-7.68	-0.81	10.0	-10.81
	5200	40	ax (20MHz)	106T	MCS0	7.20	-7.68	-0.48	10.0	-10.48
	5240	48	ax (20MHz)	106T	MCS0	7.05	-7.38	-0.33	10.0	-10.33
	5190	38	ax (40MHz)	106T	MCS0	6.89	-7.68	-0.79	10.0	-10.79
	5230	46	ax (40MHz)	106T	MCS0	6.76	-7.38	-0.62	10.0	-10.62
	5210	42	ax (80MHz)	106T	MCS0	7.23	-7.68	-0.45	10.0	-10.45

Table 7-88. 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 215 of 519

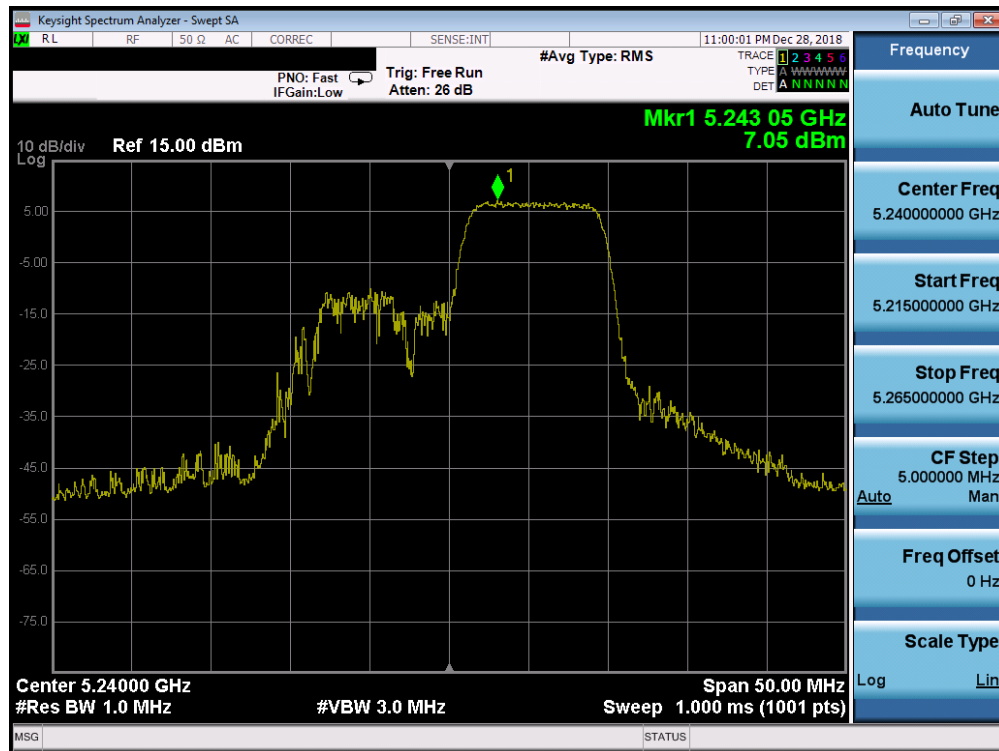


Plot 7-292. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 36)

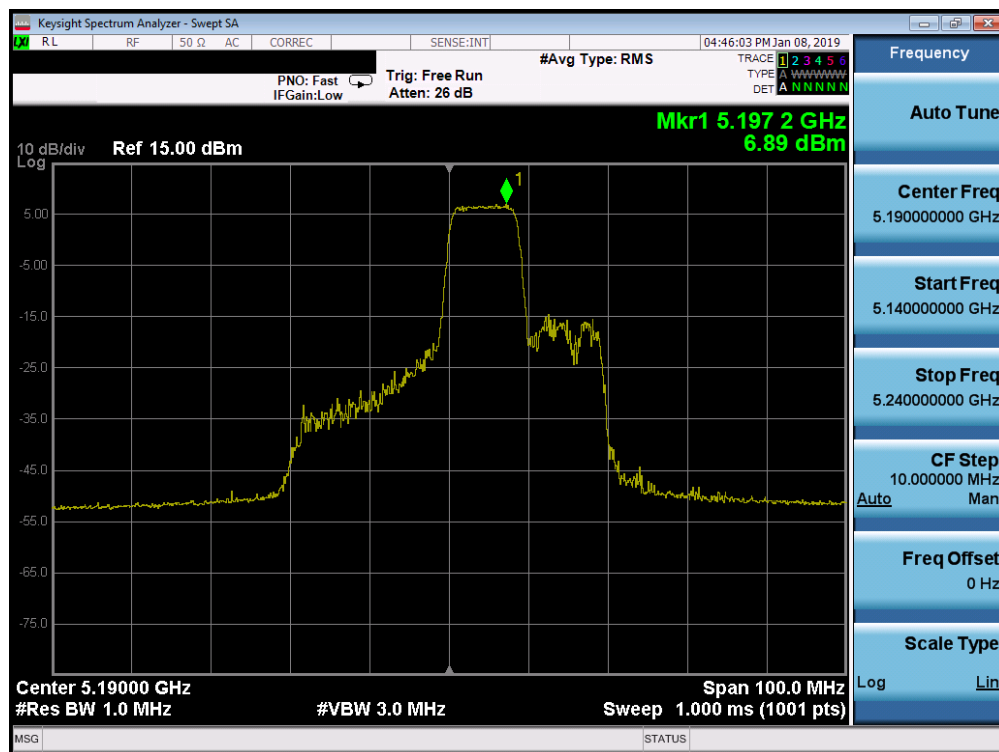


Plot 7-293. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 40)

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 216 of 519

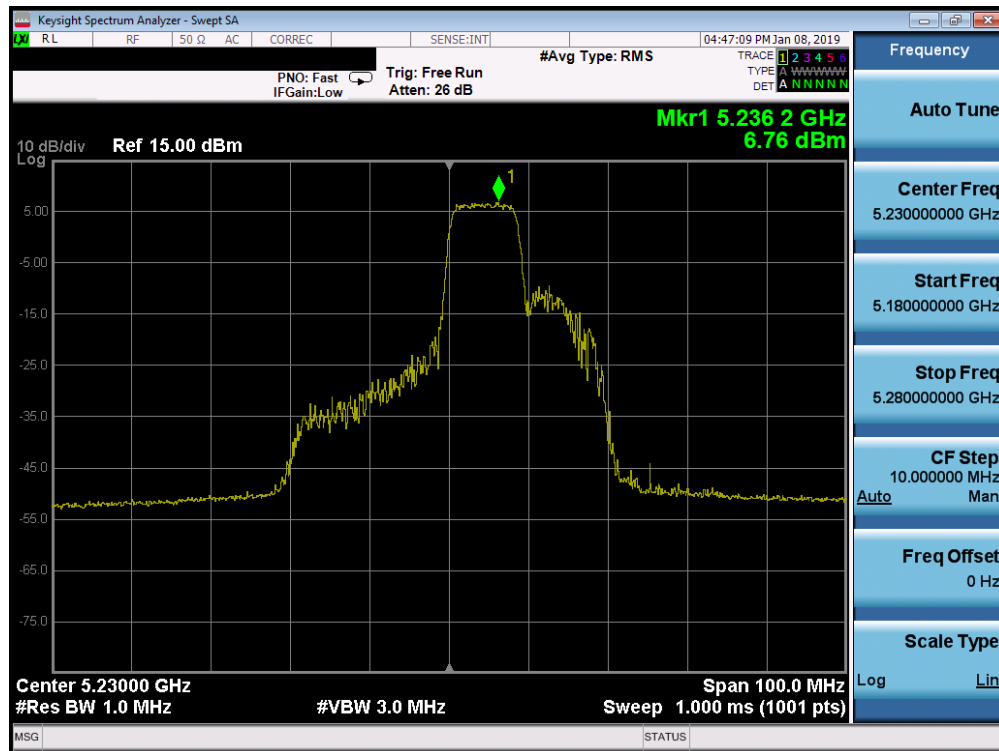


Plot 7-294. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 48)

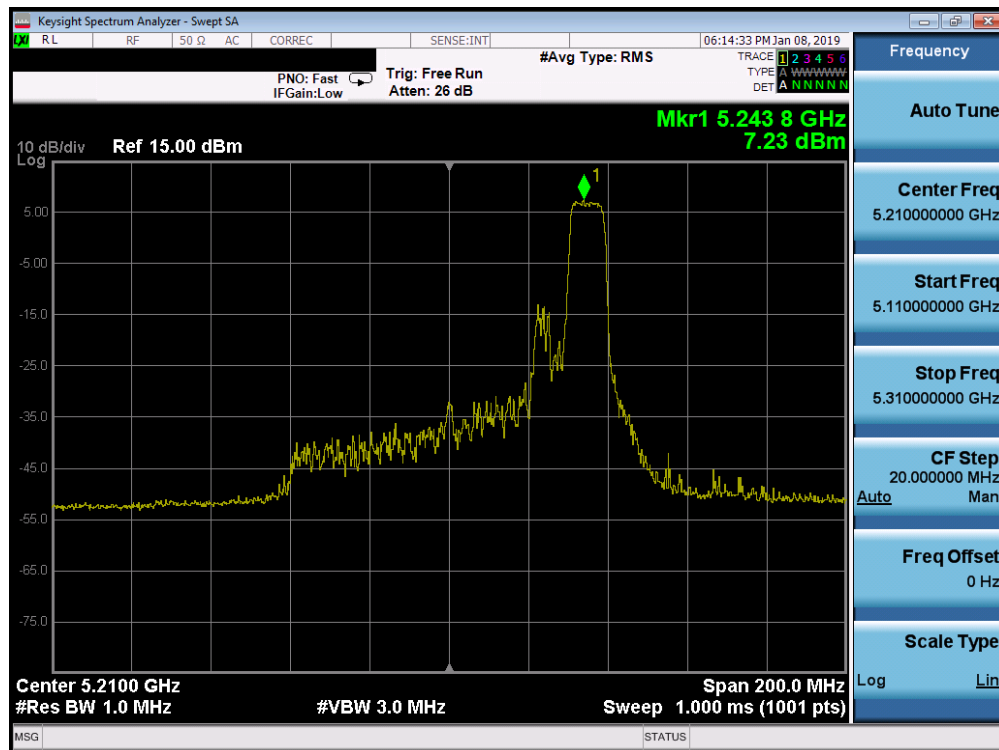


Plot 7-295. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 38)

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 217 of 519

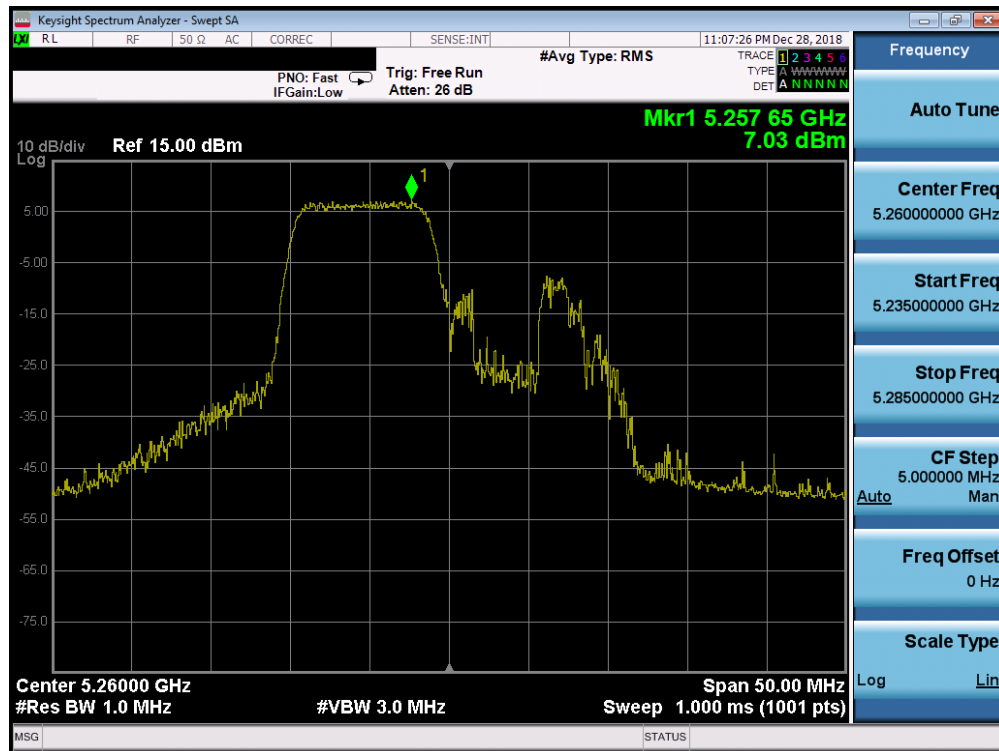


Plot 7-296. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 46)

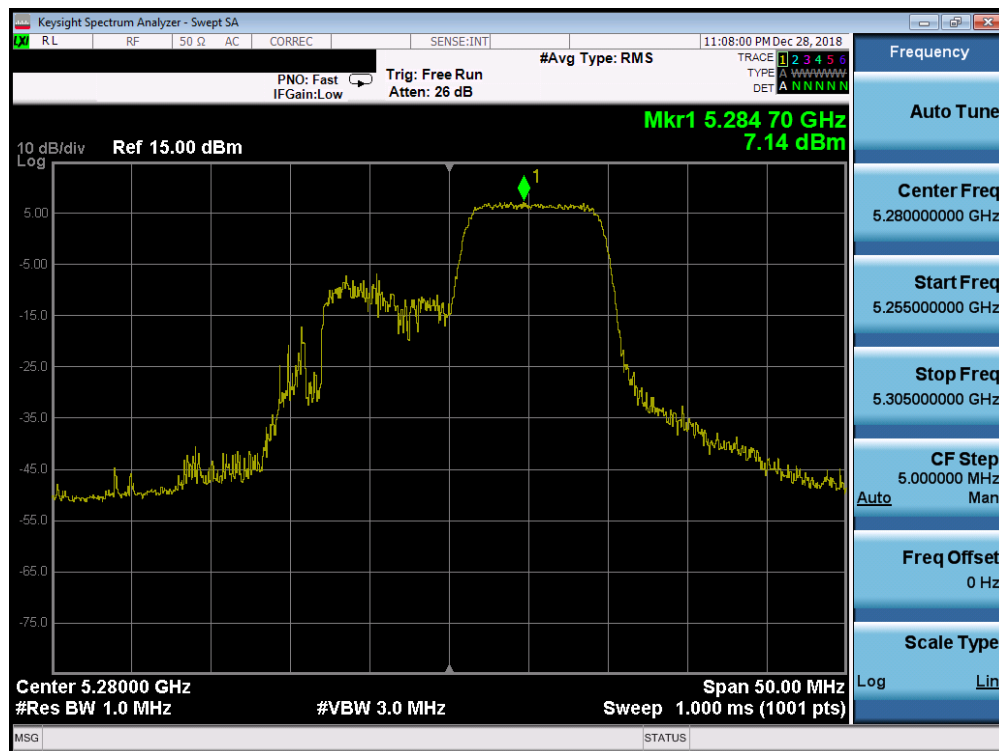


Plot 7-297. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 42)

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 218 of 519

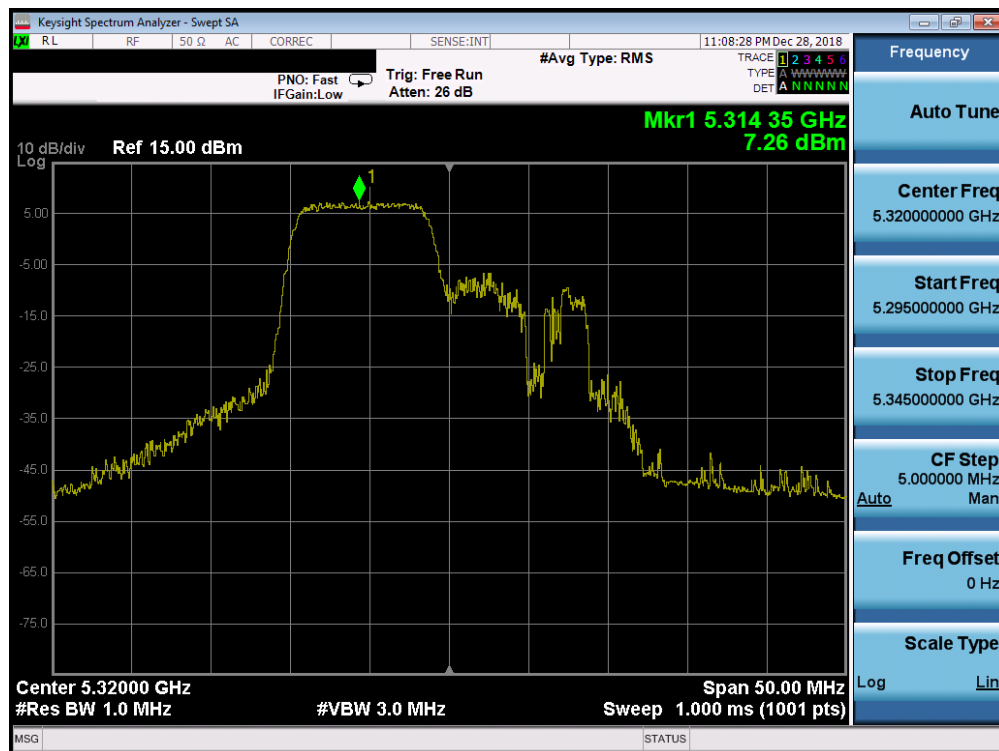


Plot 7-298. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 52)

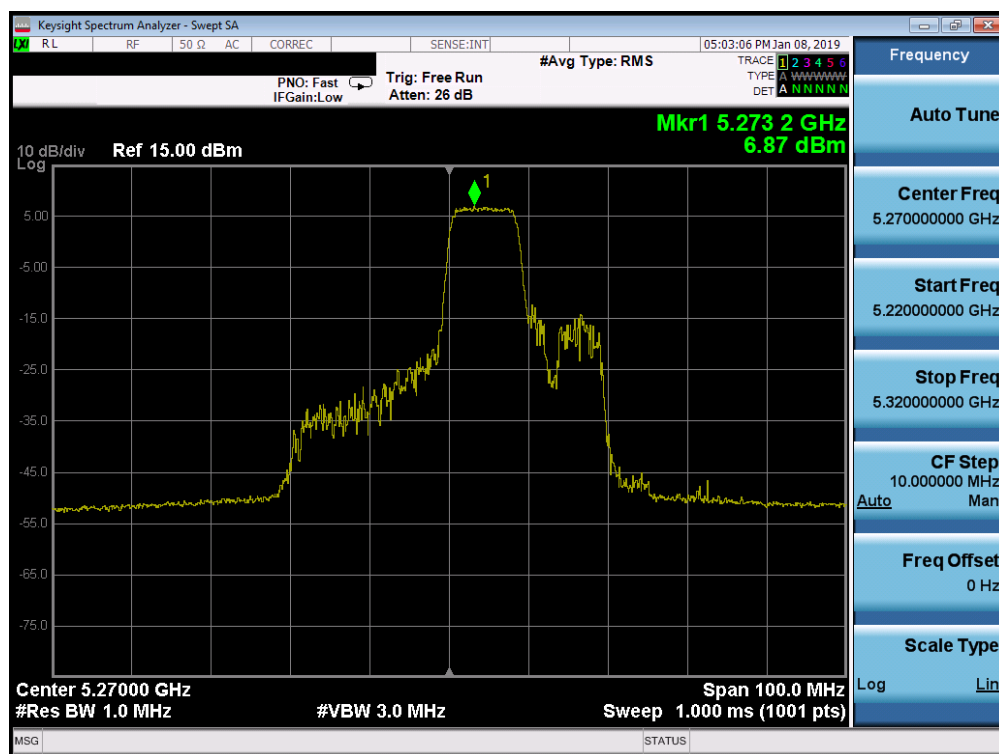


Plot 7-299. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 56)

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 219 of 519

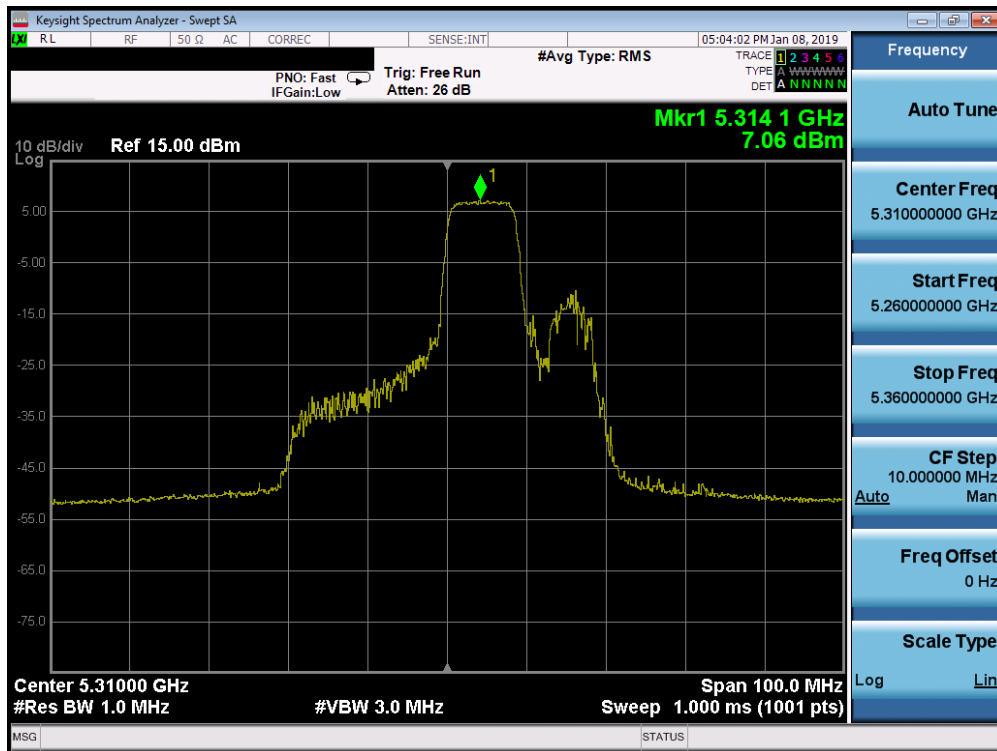


Plot 7-300. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 64)

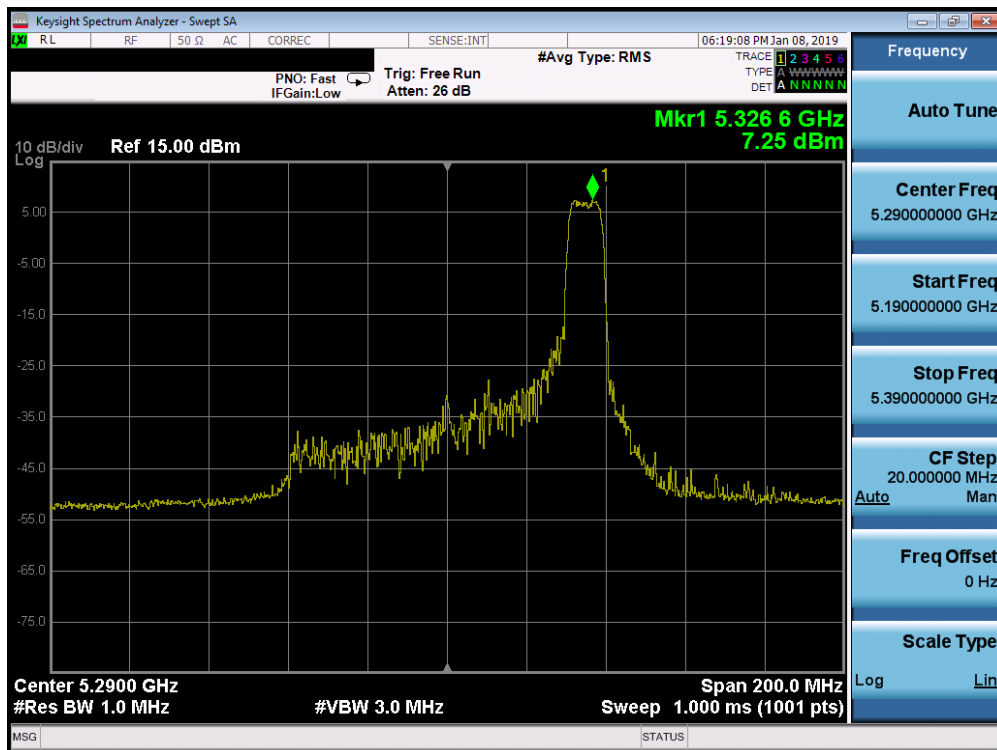


Plot 7-301. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 54)

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 220 of 519

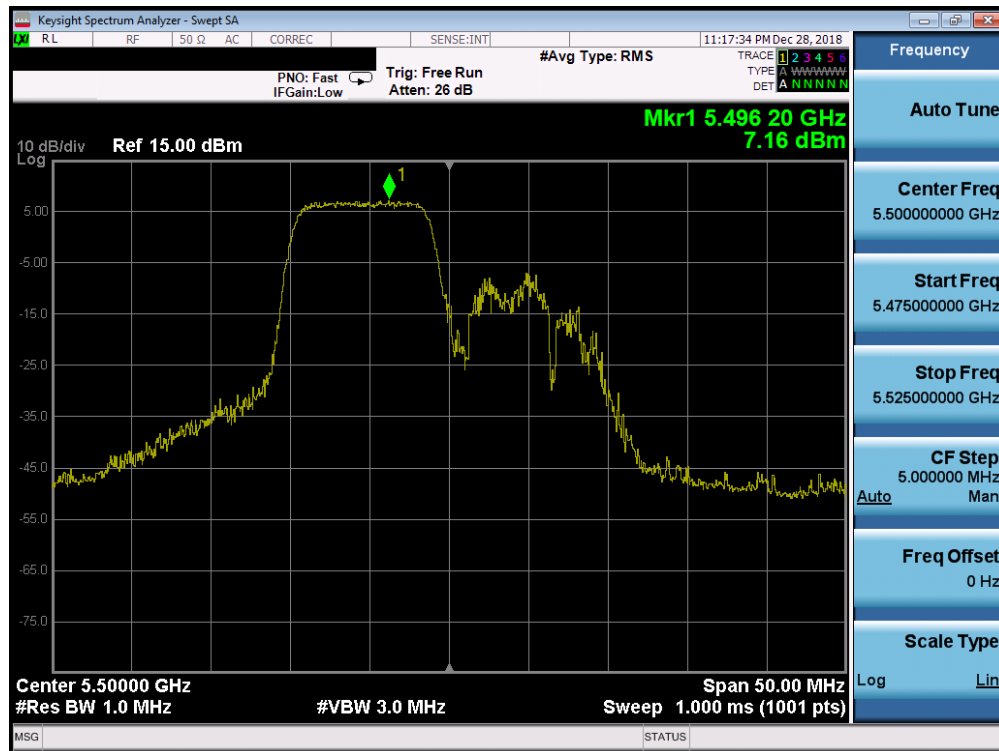


Plot 7-302. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 62)

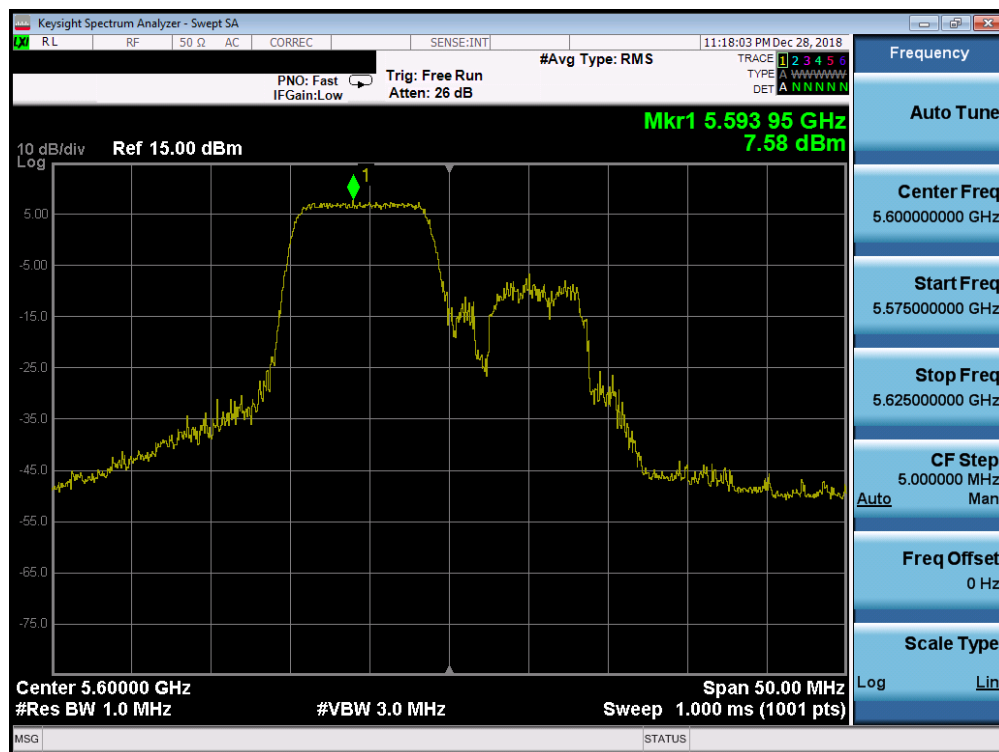


Plot 7-303. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 58)

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 221 of 519

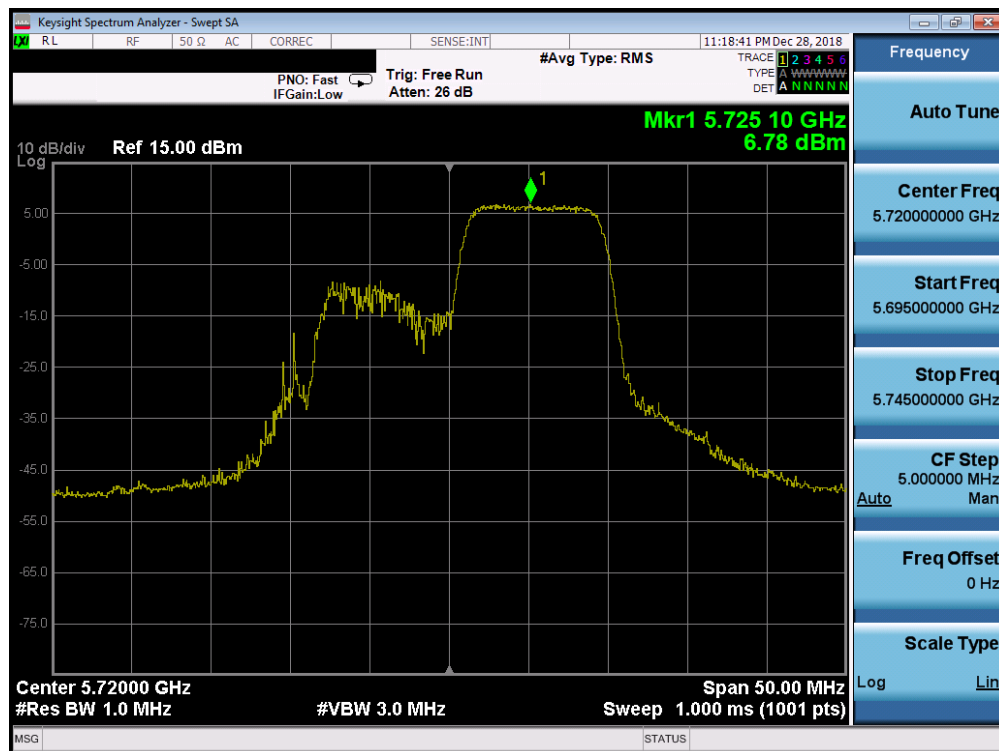


Plot 7-304. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 100)



Plot 7-305. Power Spectral Density Plot SISO ANT2 (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 222 of 519

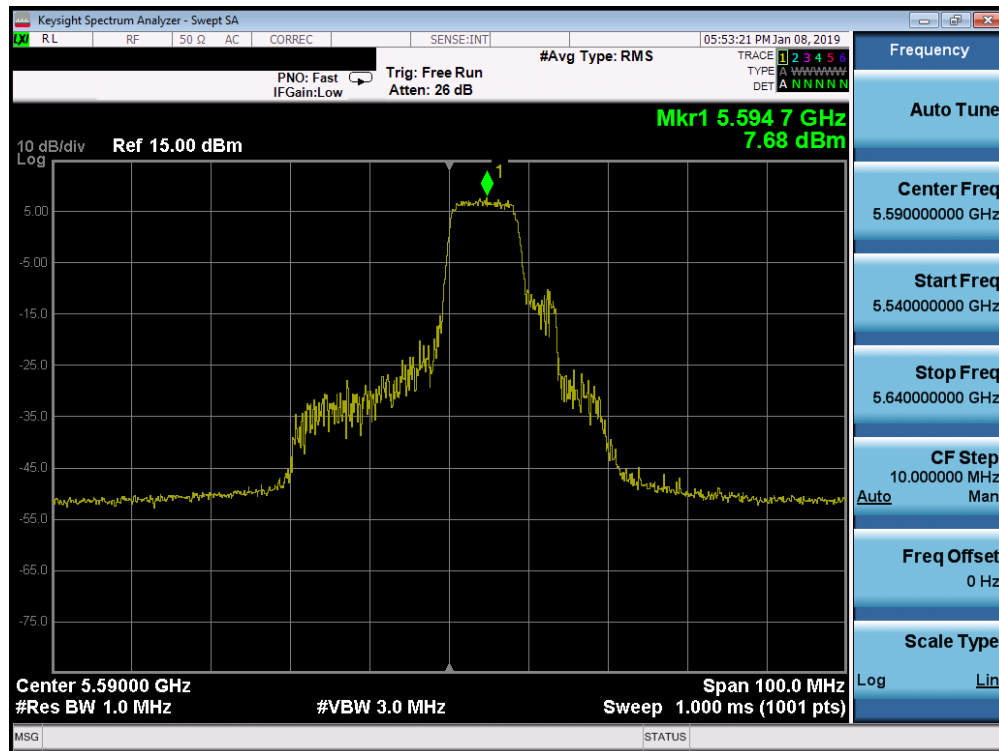


Plot 7-306. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 144)

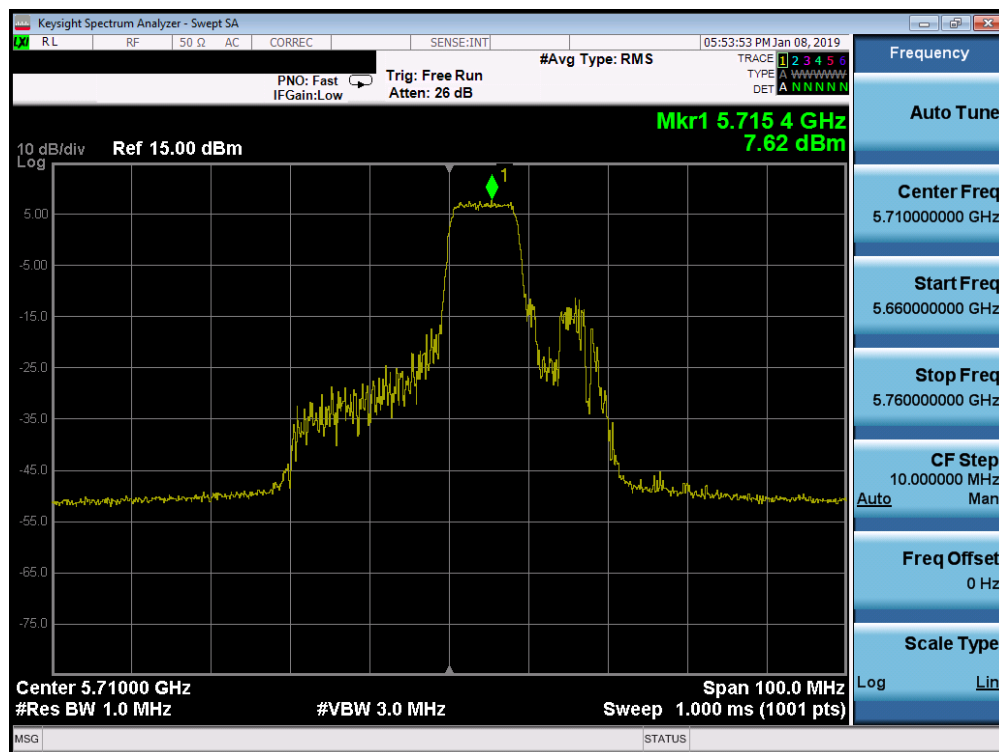


Plot 7-307. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 102)

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 223 of 519

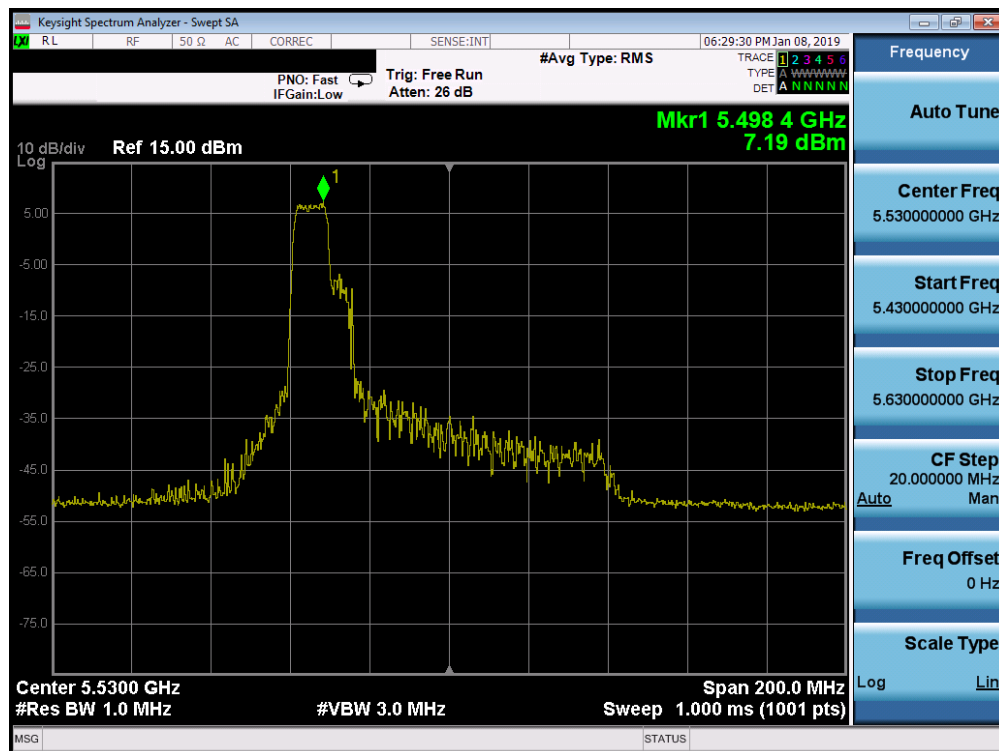


Plot 7-308. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 118)

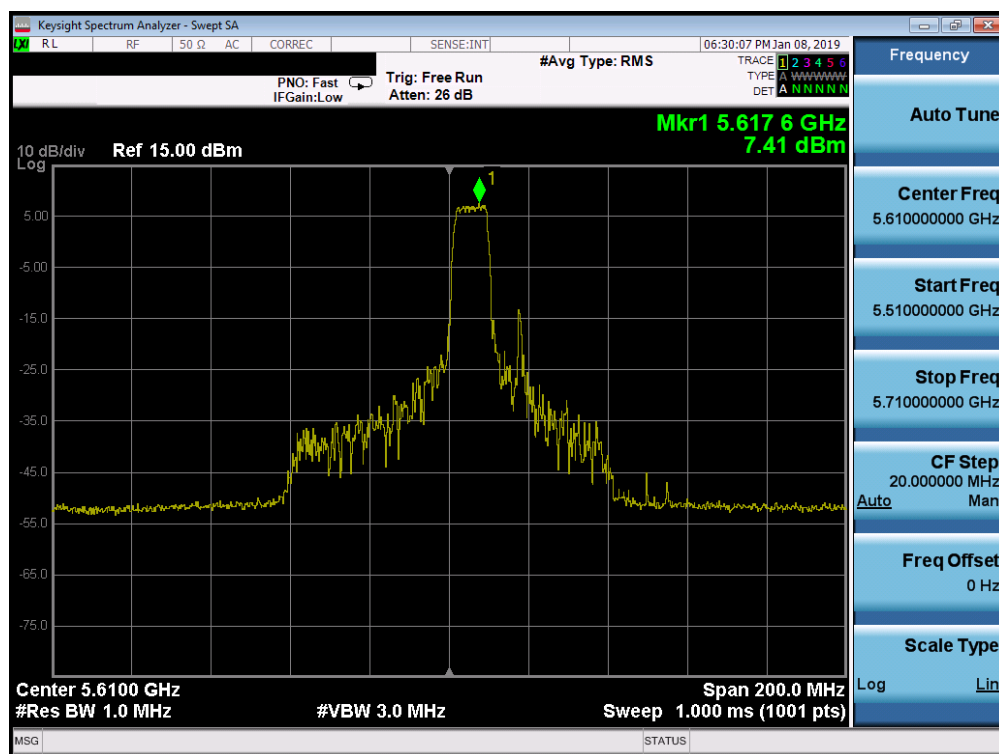


Plot 7-309. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 142)

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 224 of 519



Plot 7-310. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 106)



Plot 7-311. Power Spectral Density Plot SISO ANT2 (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 225 of 519

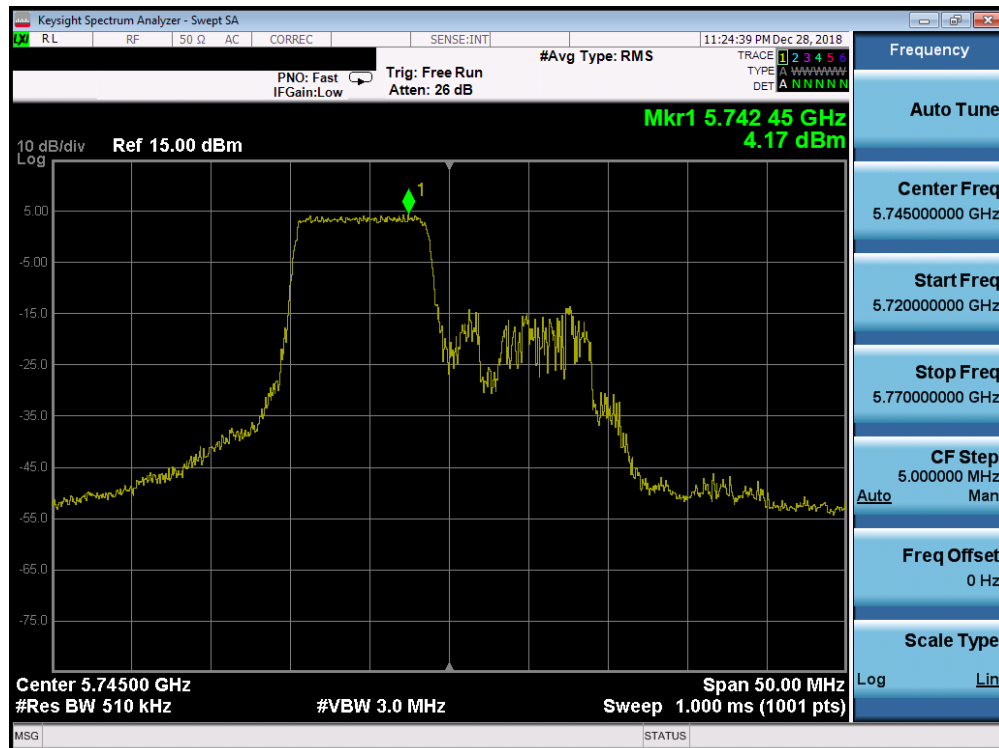


Plot 7-312. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 138)

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 226 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	4.17	30.00	-25.83
	5785	157	ax (20MHz)	106T	MCS0	4.24	30.00	-25.76
	5825	165	ax (20MHz)	106T	MCS0	4.15	30.00	-25.85
	5755	151	ax (40MHz)	106T	MCS0	4.78	30.00	-25.22
	5795	159	ax (40MHz)	106T	MCS0	4.54	30.00	-25.46
	5775	155	ax (80MHz)	106T	MCS0	7.63	30.00	-22.37

Table 7-89. Band 3 Conducted Power Spectral Density Measurements SISO ANT2 (106 Tones)



Plot 7-313. Power Spectral Density Plot SISO ANT2 (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 227 of 519

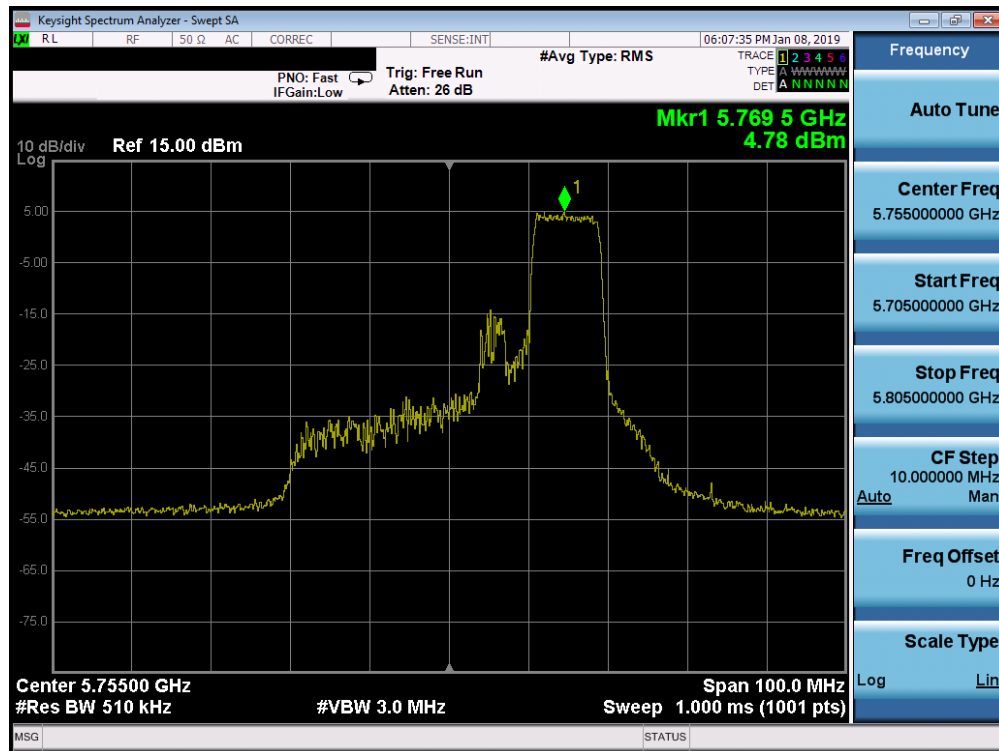


Plot 7-314. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 157)

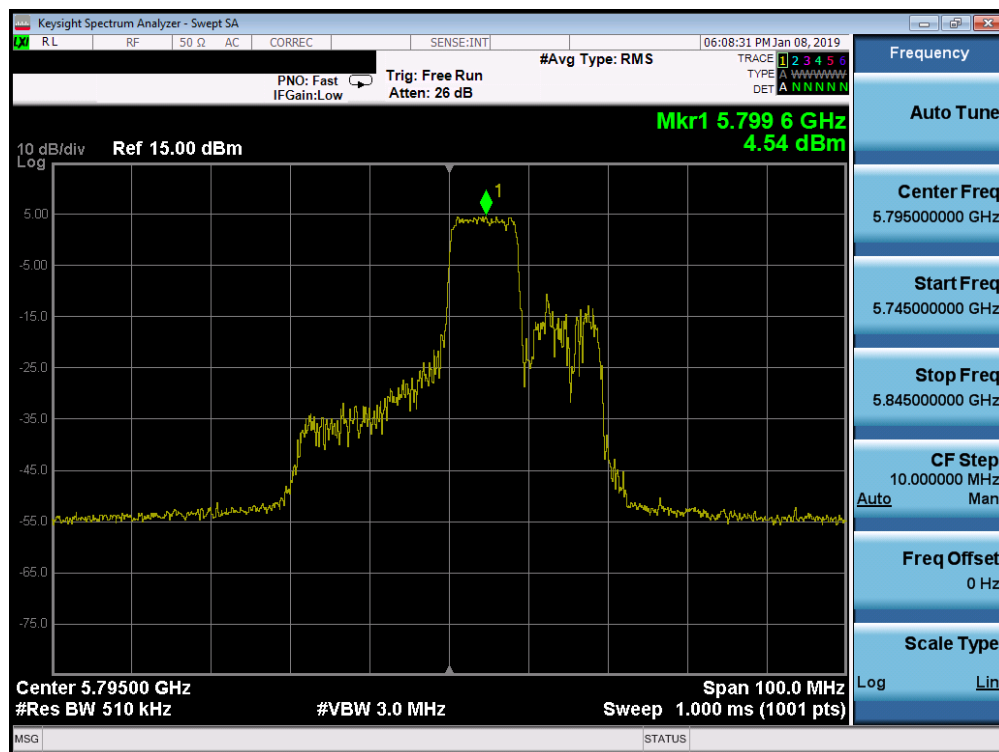


Plot 7-315. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 165)

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 228 of 519

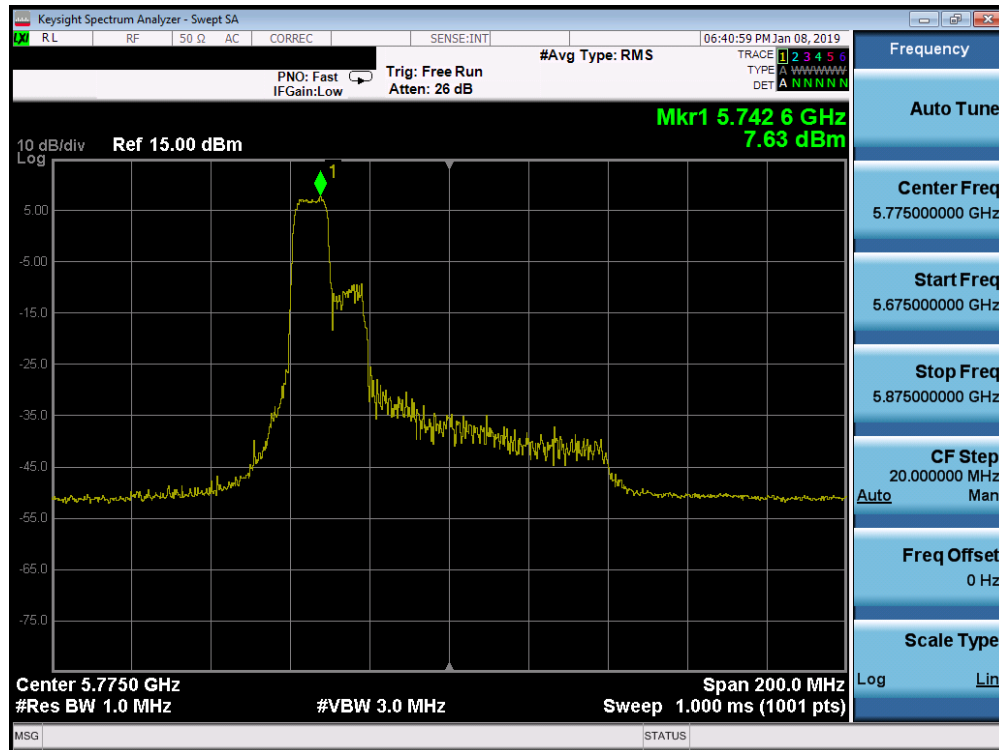


Plot 7-316. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 151)



Plot 7-317. Power Spectral Density Plot SISO ANT2 (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 229 of 519



Plot 7-318. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 106 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 230 of 519

SISO Antenna-2 Power Spectral Density Measurements (242 Tones)

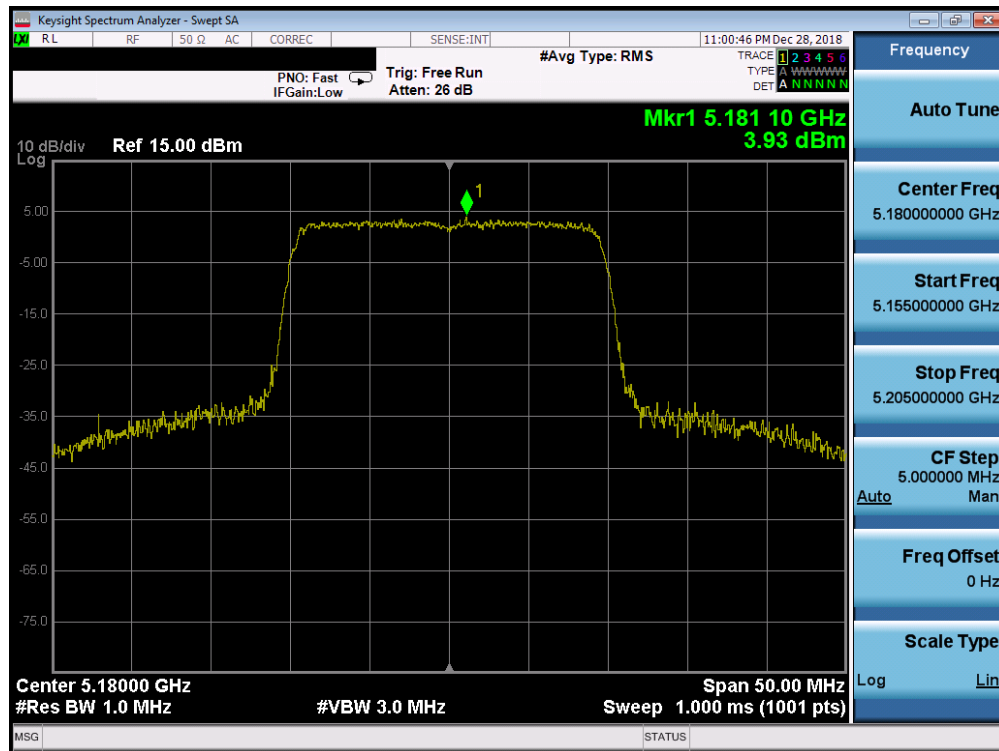
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	ax (20MHz)	242T	MCS0	3.93	11.00	-7.07
	5200	40	ax (20MHz)	242T	MCS0	6.45	11.00	-4.55
	5240	48	ax (20MHz)	242T	MCS0	6.33	11.00	-4.67
	5190	38	ax (40MHz)	242T	MCS0	1.36	11.00	-9.64
	5230	46	ax (40MHz)	242T	MCS0	5.44	11.00	-5.56
	5210	42	ax (80MHz)	242T	MCS0	0.93	11.00	-10.07
Band 2A	5260	52	ax (20MHz)	242T	MCS0	6.29	11.00	-4.71
	5280	56	ax (20MHz)	242T	MCS0	6.33	11.00	-4.67
	5320	64	ax (20MHz)	242T	MCS0	4.67	11.00	-6.33
	5270	54	ax (40MHz)	242T	MCS0	5.51	11.00	-5.49
	5310	62	ax (40MHz)	242T	MCS0	3.18	11.00	-7.82
	5290	58	ax (80MHz)	242T	MCS0	1.23	11.00	-9.77
Band 2C	5500	100	ax (20MHz)	242T	MCS0	6.65	11.00	-4.35
	5600	120	ax (20MHz)	242T	MCS0	6.78	11.00	-4.22
	5720	144	ax (20MHz)	242T	MCS0	6.96	11.00	-4.04
	5510	102	ax (40MHz)	242T	MCS0	4.04	11.00	-6.96
	5590	118	ax (40MHz)	242T	MCS0	6.04	11.00	-4.96
	5710	142	ax (40MHz)	242T	MCS0	6.23	11.00	-4.77
	5530	106	ax (80MHz)	242T	MCS0	3.32	11.00	-7.68
	5610	122	ax (80MHz)	242T	MCS0	5.17	11.00	-5.83
	5690	138	ax (80MHz)	242T	MCS0	4.70	11.00	-6.30

Table 7-90. Bands 1, 2A, 2C Conducted Power Spectral Density Measurements SISO ANT2 (242 Tones)

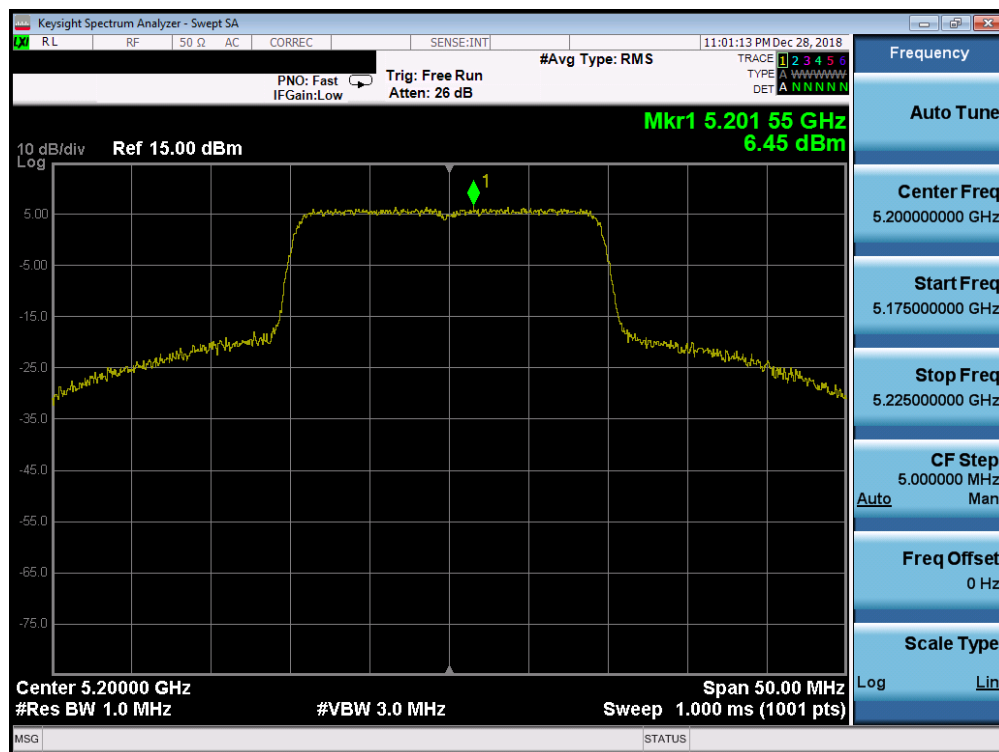
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Antenna Gain [dBi]	e.i.r.p. Power Density [dBm/MHz]	ISED Max e.i.r.p. Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	ax (20MHz)	242T	MCS0	3.93	-7.68	-3.75	10.0	-13.75
	5200	40	ax (20MHz)	242T	MCS0	6.45	-7.68	-1.23	10.0	-11.23
	5240	48	ax (20MHz)	242T	MCS0	6.33	-7.38	-1.05	10.0	-11.05
	5190	38	ax (40MHz)	242T	MCS0	1.36	-7.68	-6.32	10.0	-16.32
	5230	46	ax (40MHz)	242T	MCS0	5.44	-7.38	-1.94	10.0	-11.94
	5210	42	ax (80MHz)	242T	MCS0	0.93	-7.68	-6.75	10.0	-16.75

Table 7-91. 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 231 of 519

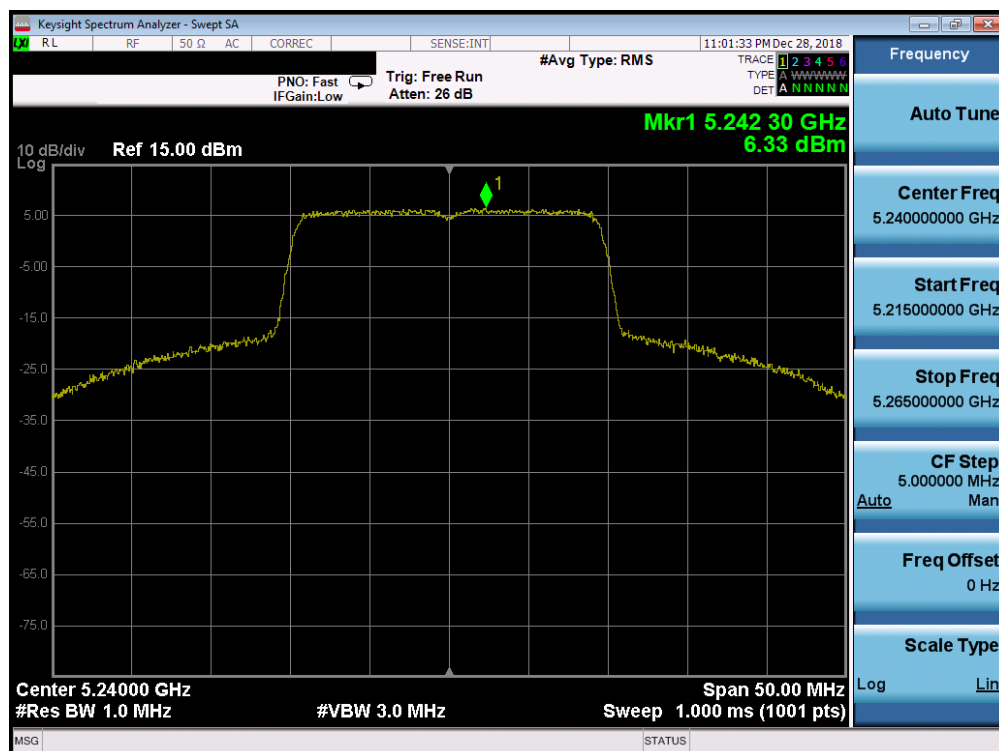


Plot 7-319. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 36)

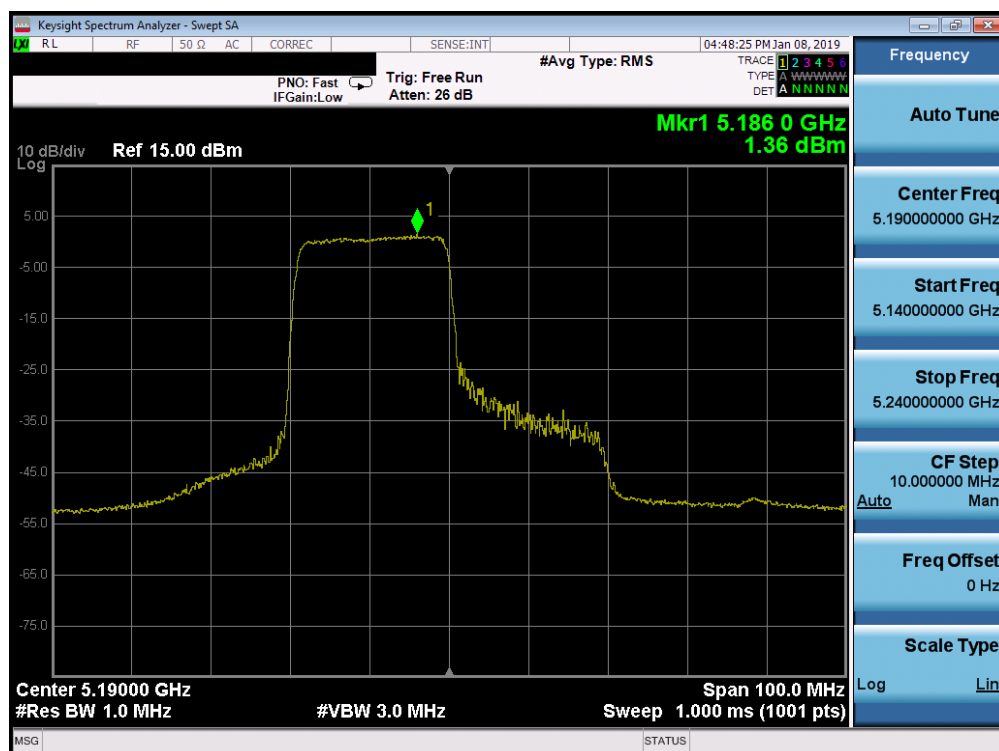


Plot 7-320. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 40)

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 232 of 519

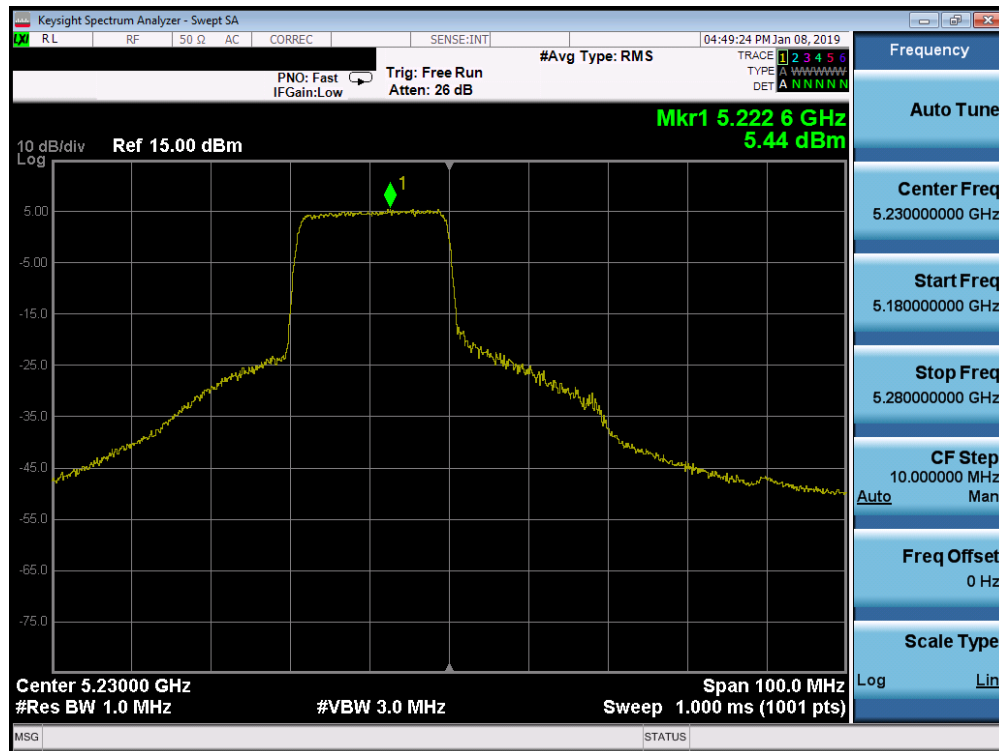


Plot 7-321. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 48)

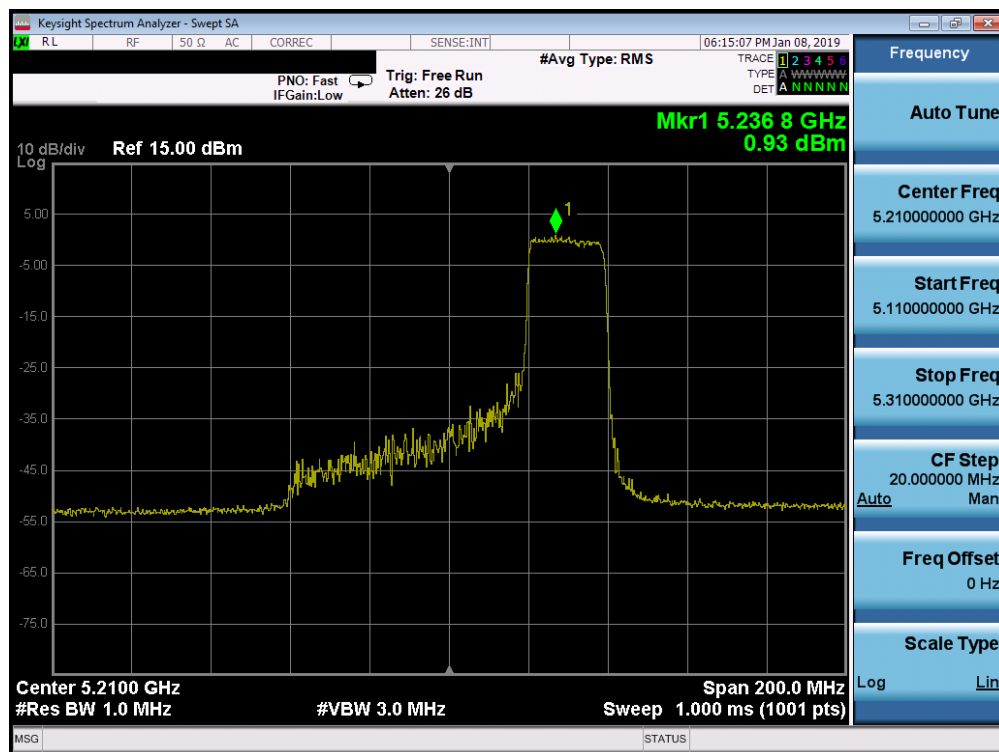


Plot 7-322. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 38)

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 233 of 519

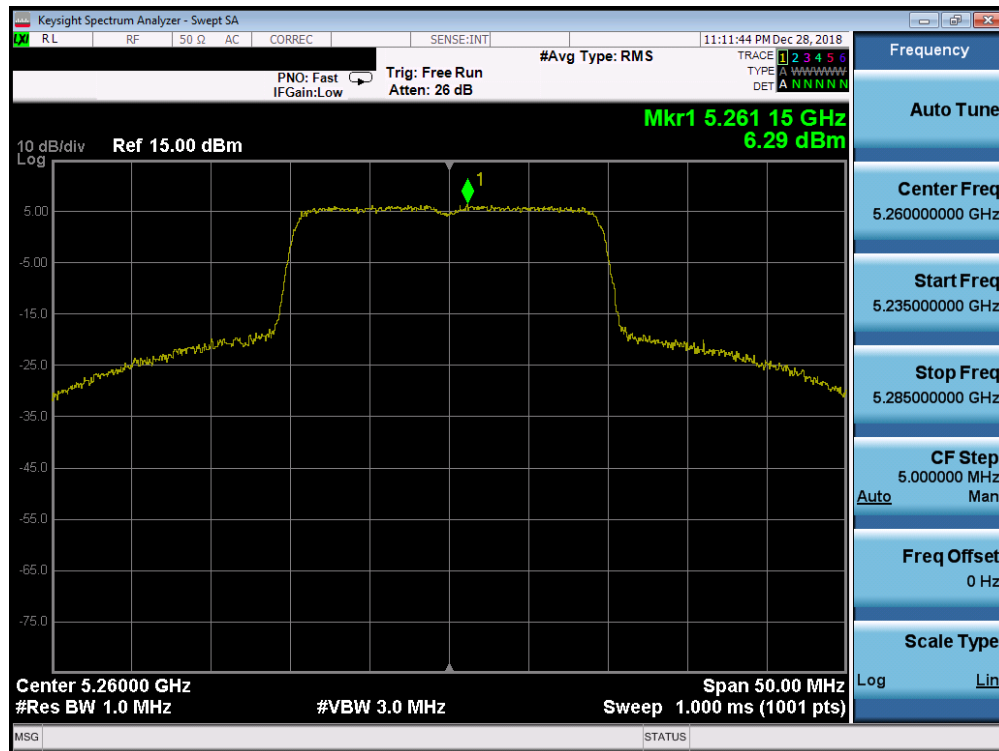


Plot 7-323. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 46)

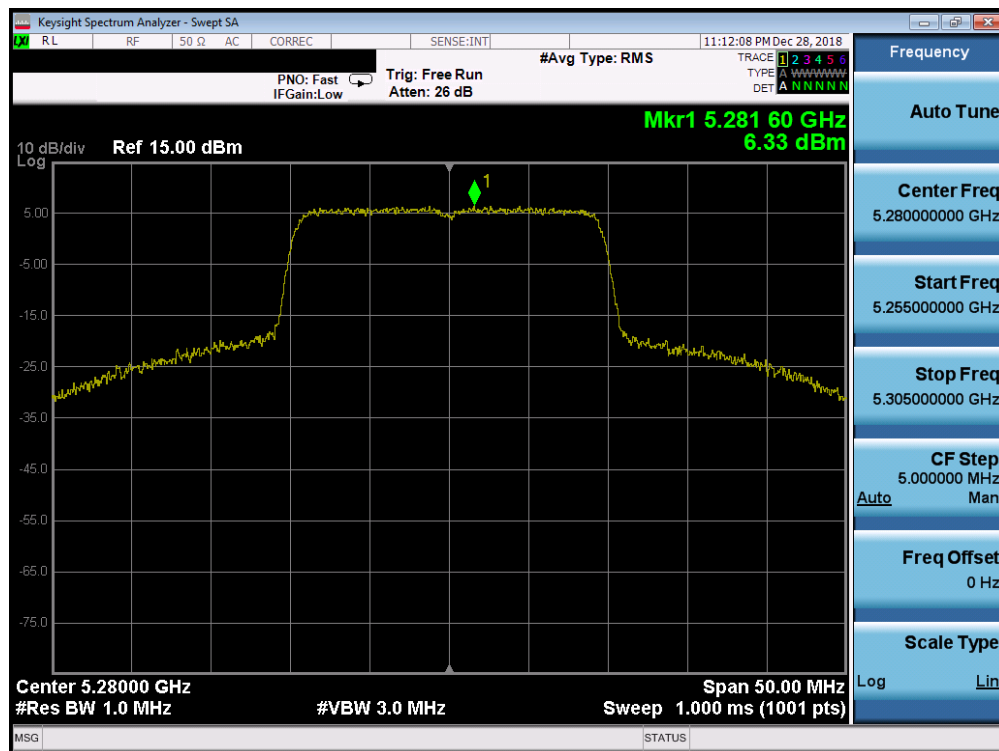


Plot 7-324. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 42)

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 234 of 519

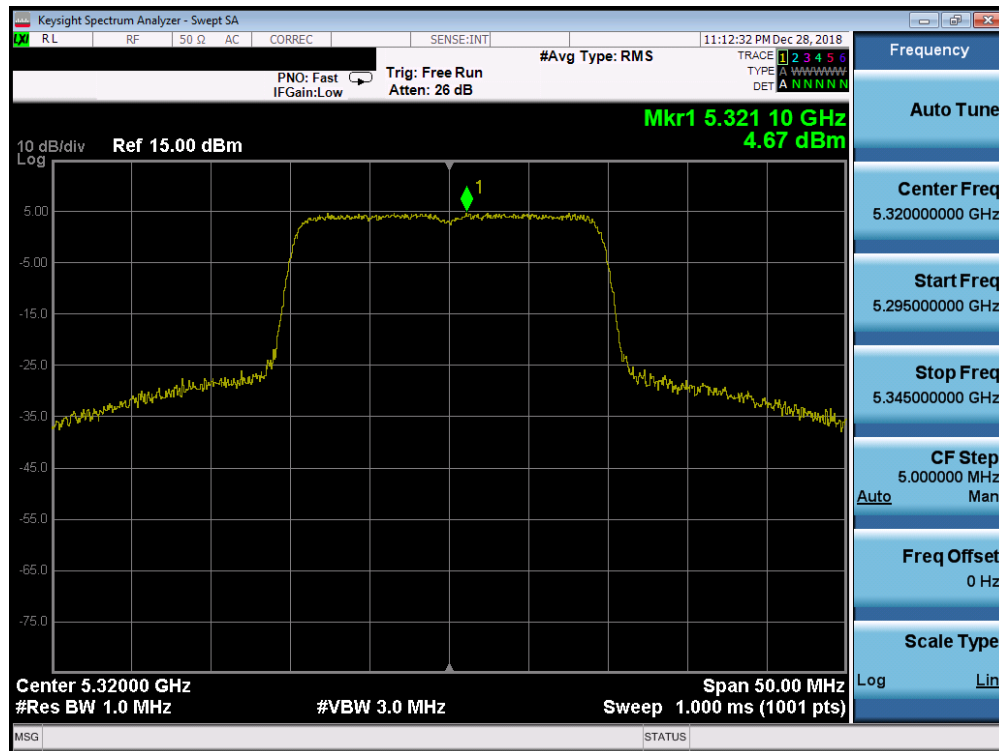


Plot 7-325. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 52)

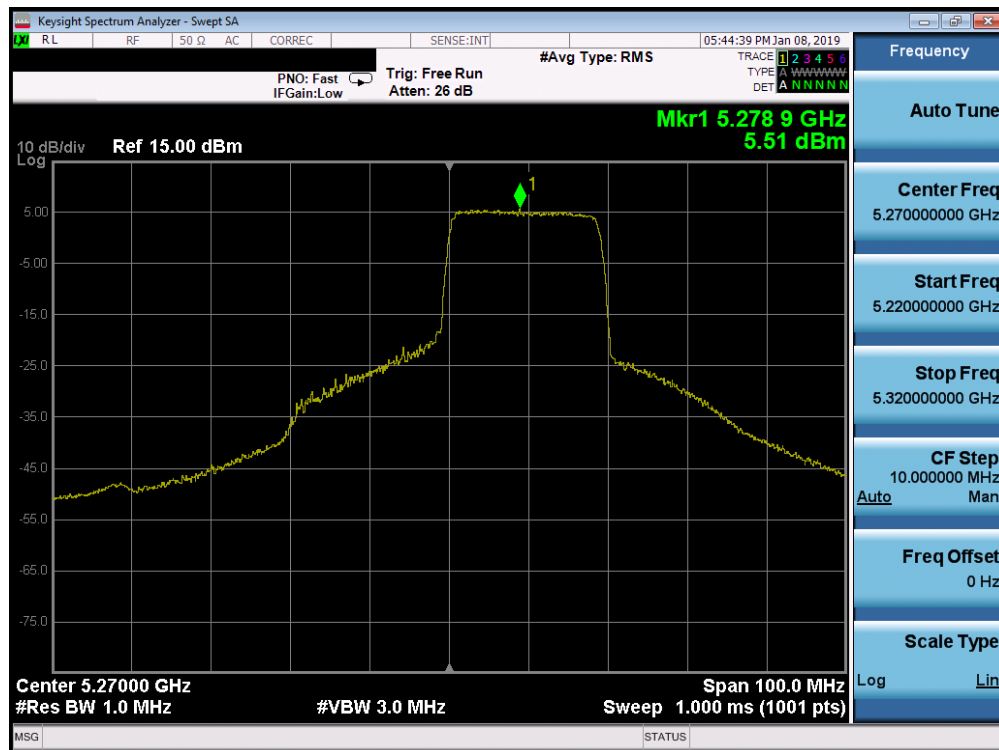


Plot 7-326. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 56)

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 235 of 519	

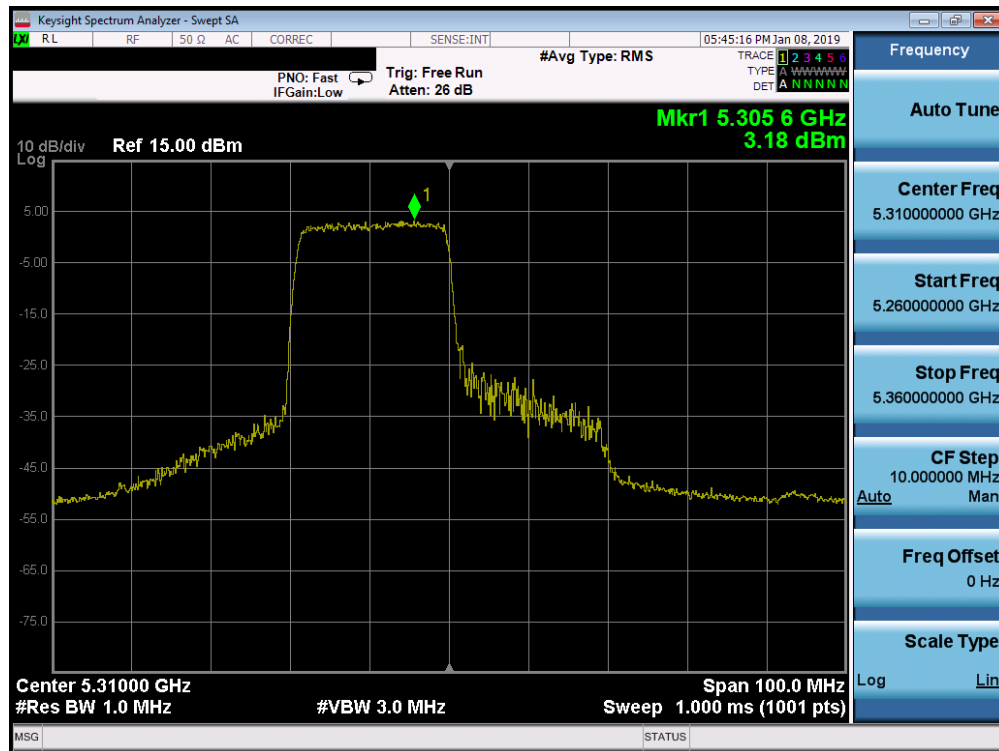


Plot 7-327. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 64)

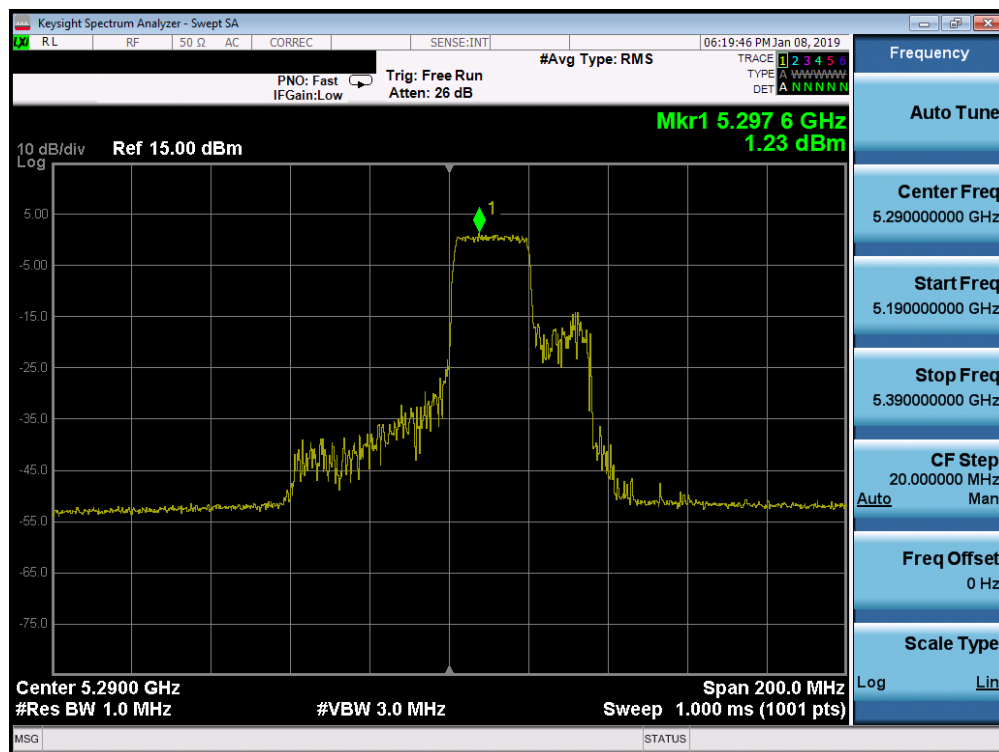


Plot 7-328. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 54)

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 236 of 519

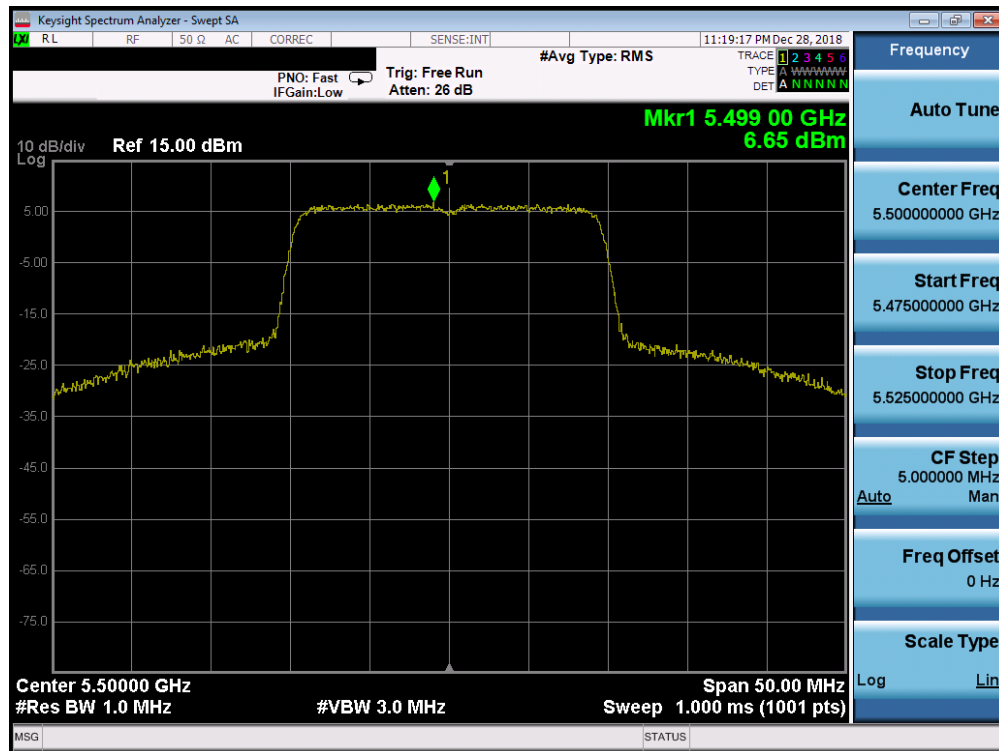


Plot 7-329. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 62)

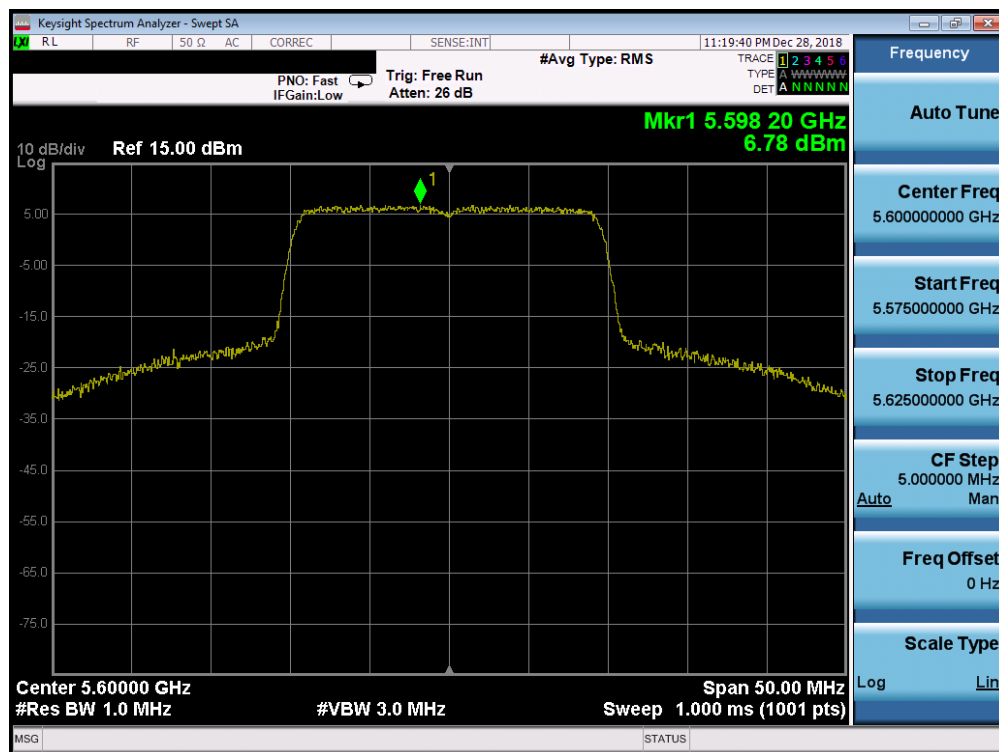


Plot 7-330. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 58)

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 237 of 519

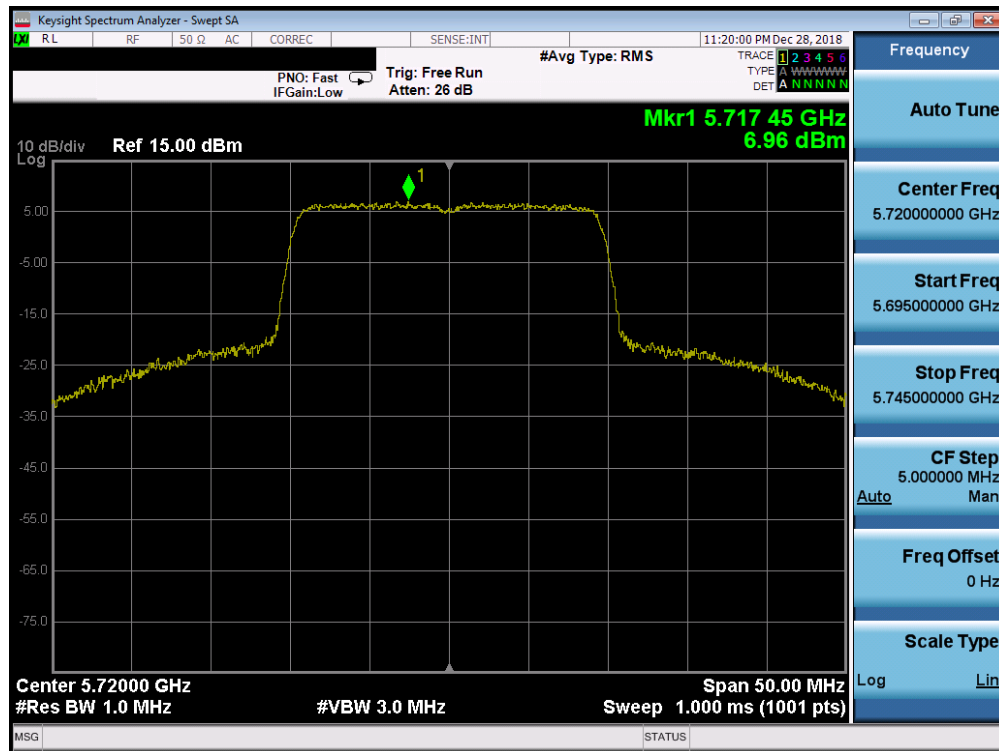


Plot 7-331. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 100)

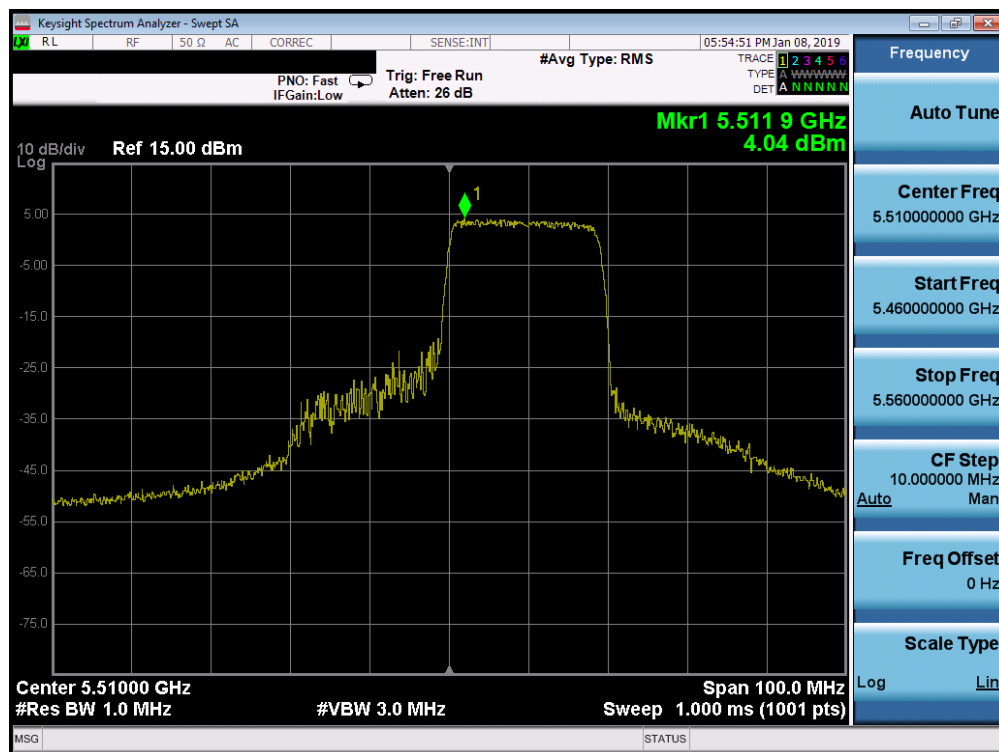


Plot 7-332. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 120)

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 238 of 519

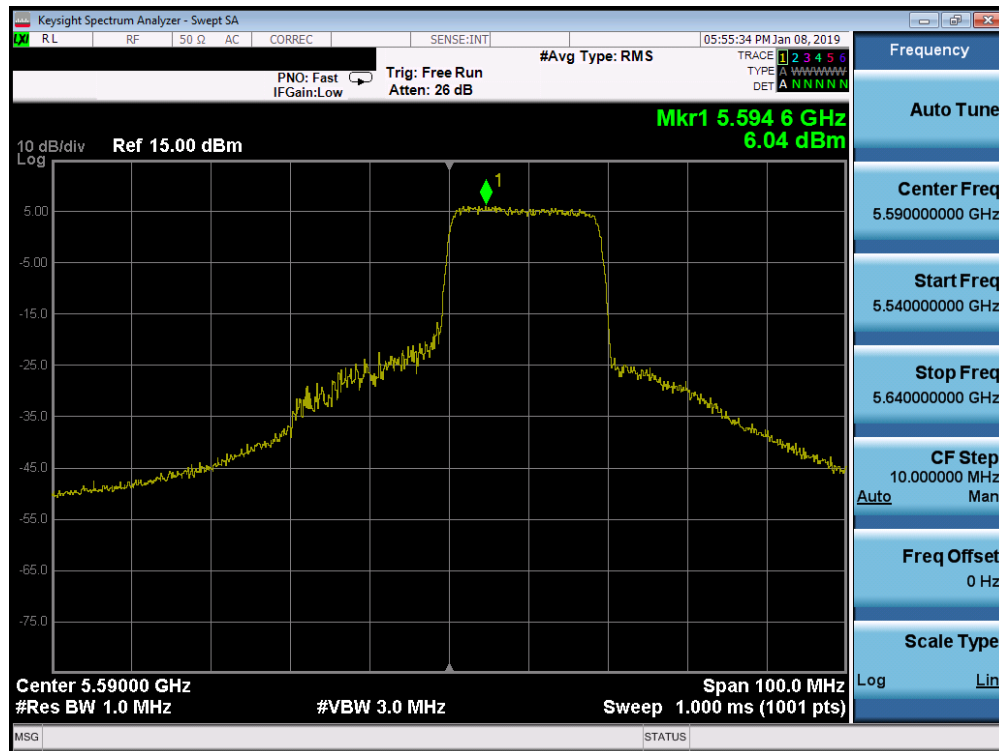


Plot 7-333. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 144)

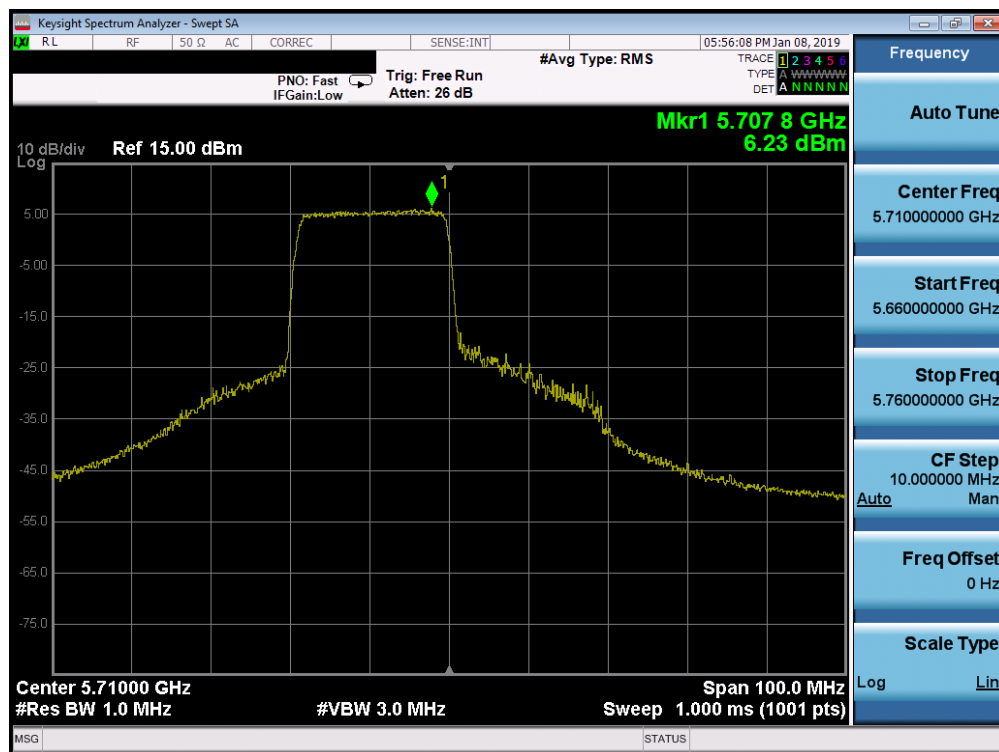


Plot 7-334. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 102)

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 239 of 519

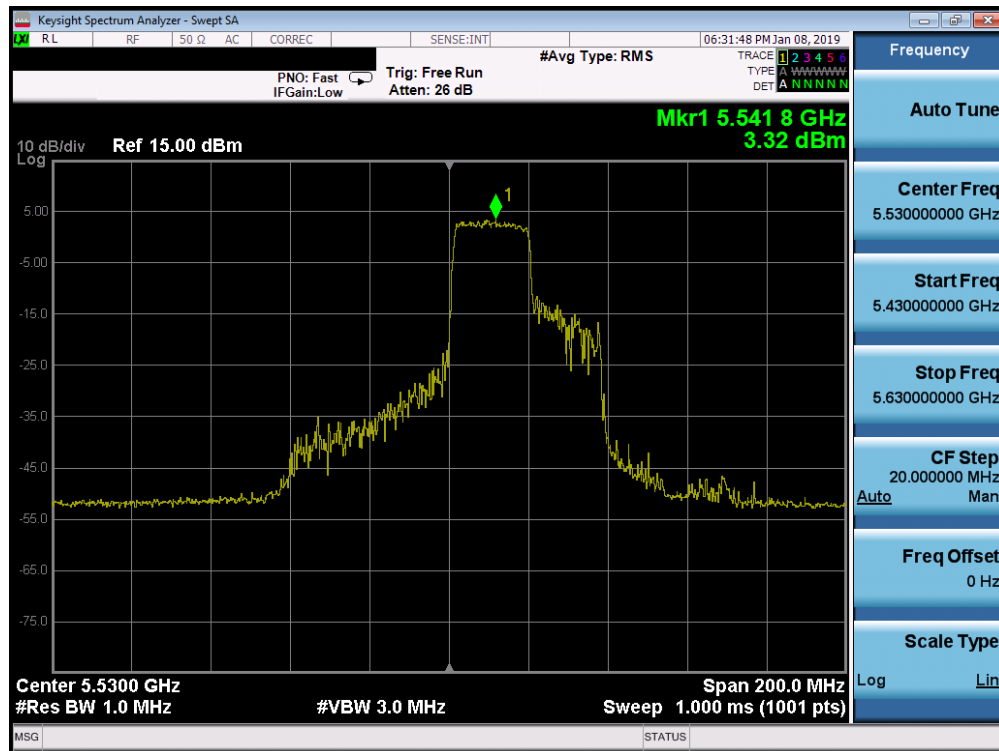


Plot 7-335. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 118)

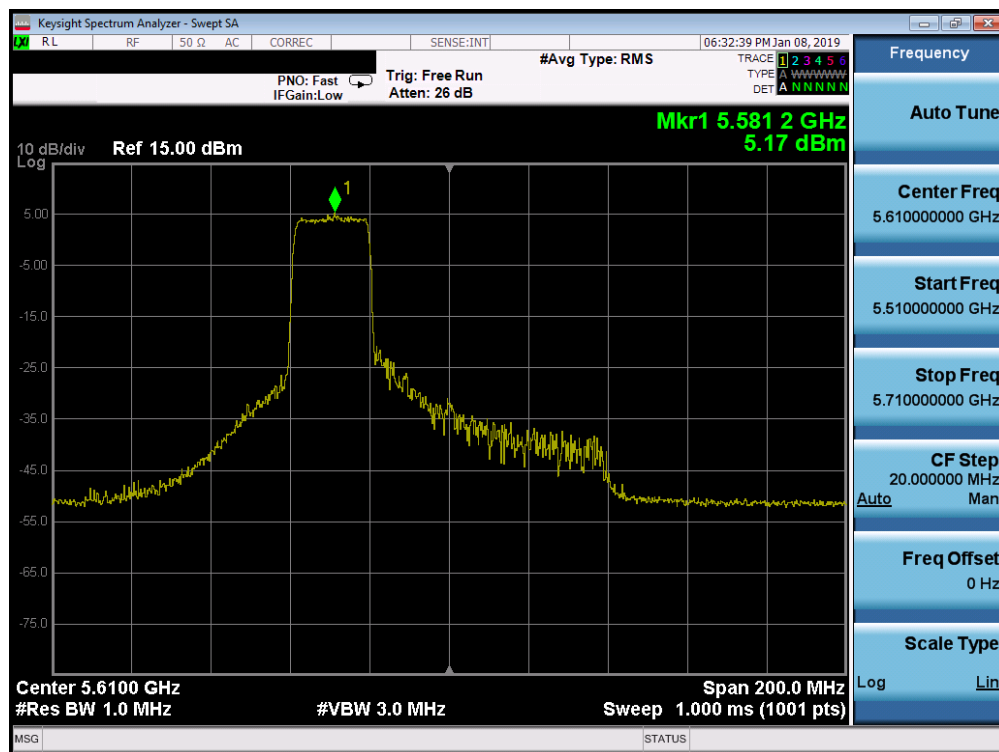


Plot 7-336. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 142)

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 240 of 519

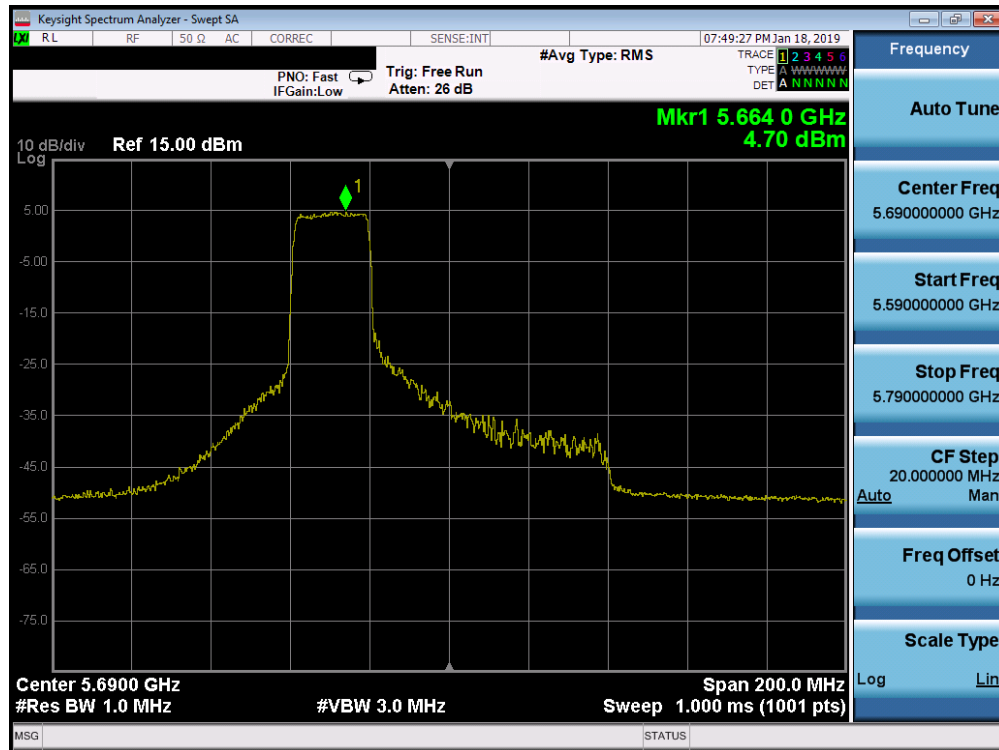


Plot 7-337. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 106)



Plot 7-338. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 242 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 241 of 519

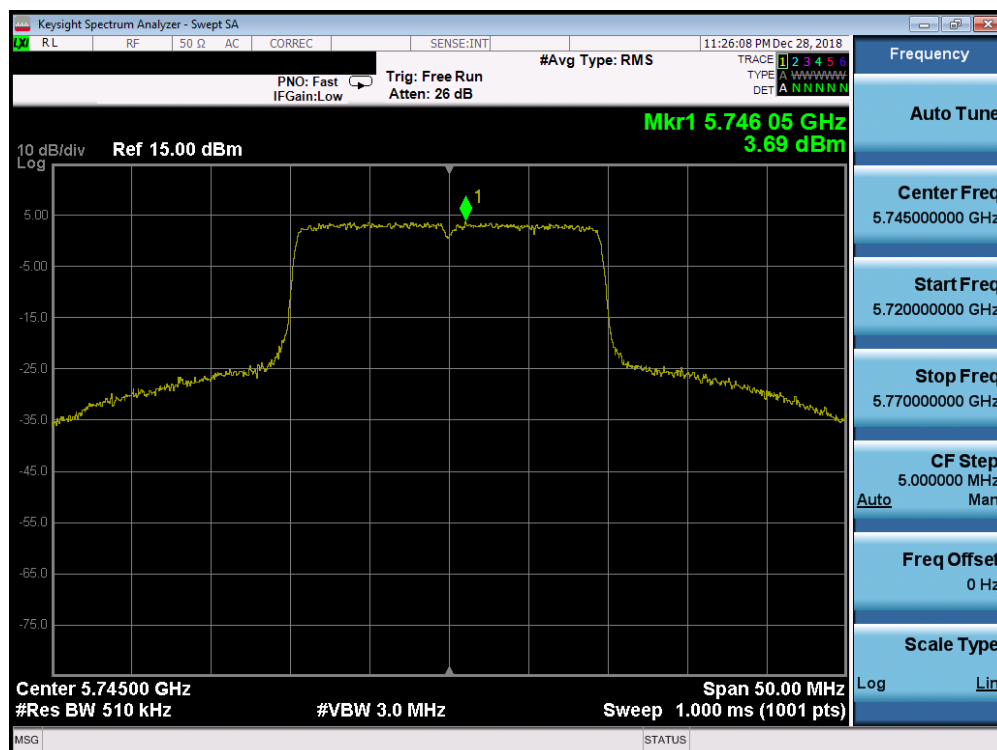


Plot 7-339. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 138)

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 242 of 519

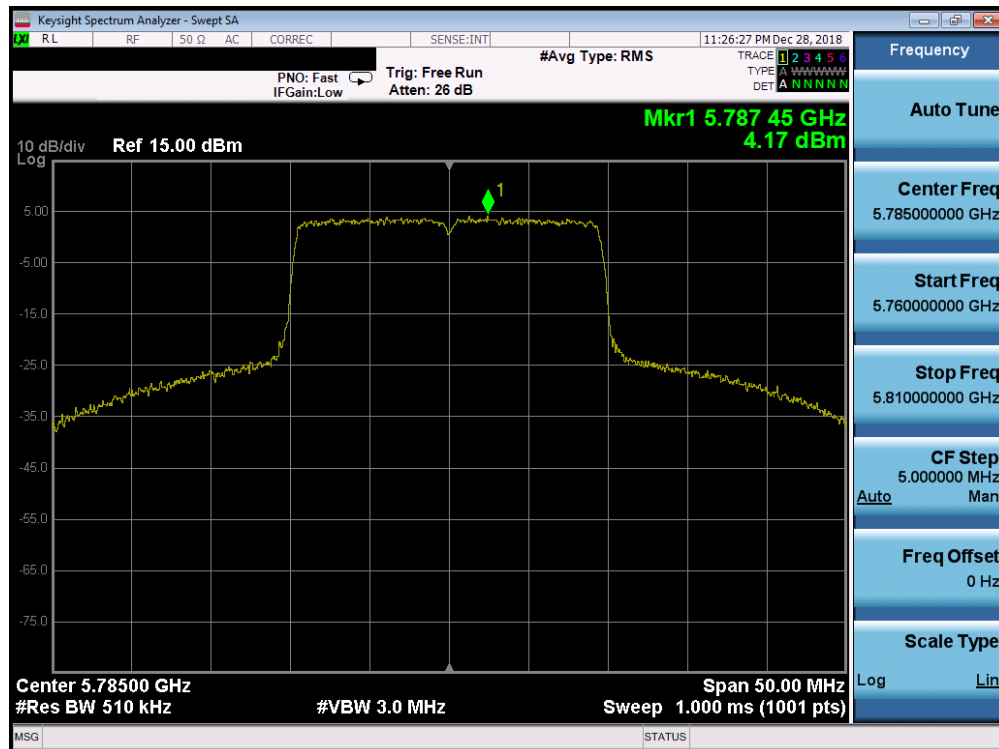
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
Band 3	5745	149	ax (20MHz)	242T	MCS0	3.69	30.00	-26.31
	5785	157	ax (20MHz)	242T	MCS0	4.17	30.00	-25.83
	5825	165	ax (20MHz)	242T	MCS0	4.22	30.00	-25.78
	5755	151	ax (40MHz)	242T	MCS0	3.66	30.00	-26.34
	5795	159	ax (40MHz)	242T	MCS0	3.71	30.00	-26.29
	5775	155	ax (80MHz)	242T	MCS0	5.37	30.00	-24.63

Table 7-92. Band 3 Conducted Power Spectral Density Measurements SISO ANT2 (242 Tones)

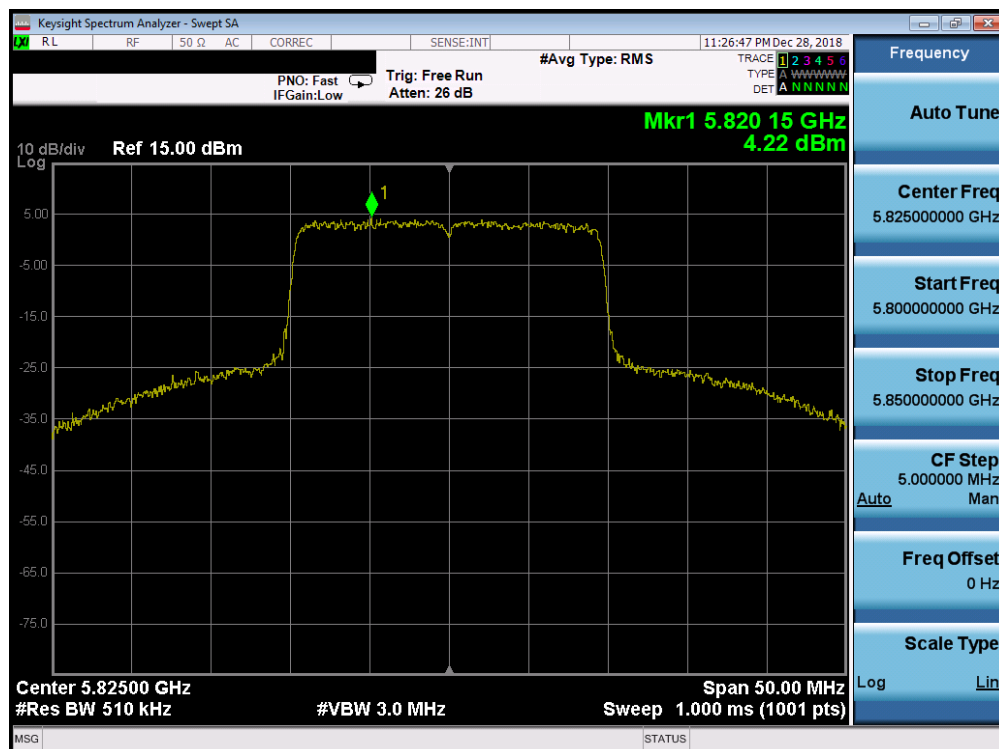


Plot 7-340. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 149)

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 243 of 519



Plot 7-341. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 157)



Plot 7-342. Power Spectral Density Plot SISO ANT2 (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 244 of 519