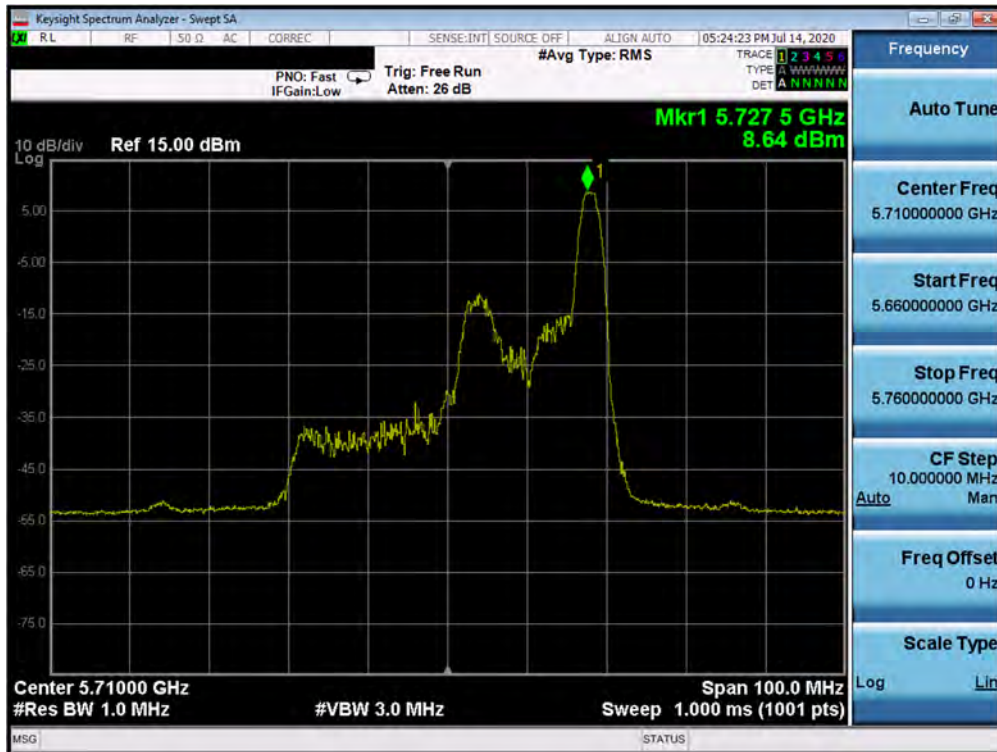


Plot 7-125. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 118)



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

FCC ID: A3LSMN981U	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 109 of 296



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: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 110 of 296



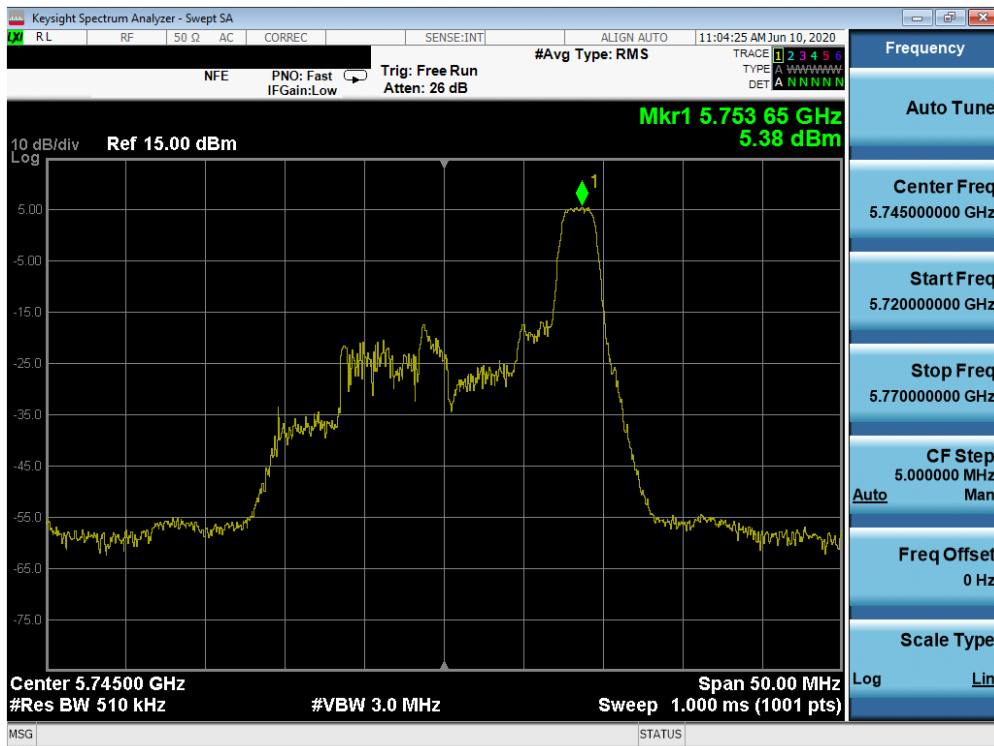
Plot 7-129. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 138)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 111 of 296

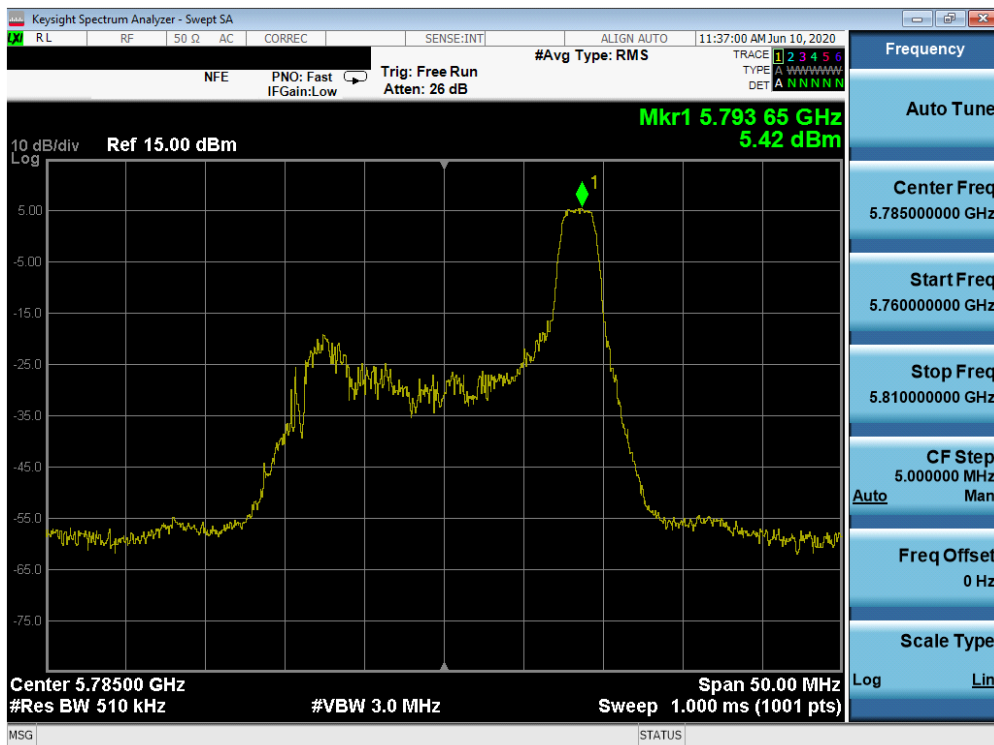
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density	Margin [dB]
Band 3	5745	149	ax (20MHz)	26T	MCS0	5.38	30.00	-24.62
	5785	157	ax (20MHz)	26T	MCS0	5.42	30.00	-24.58
	5825	165	ax (20MHz)	26T	MCS0	5.33	30.00	-24.67
	5755	151	ax (40MHz)	26T	MCS0	9.39	30.00	-20.61
	5795	159	ax (40MHz)	26T	MCS0	9.16	30.00	-20.84
	5775	155	ax (80MHz)	26T	MCS0	9.50	30.00	-20.50

Table 7-56. Band 3 Conducted Power Spectral Density Measurements SISO ANT1 (26 Tones)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 112 of 296

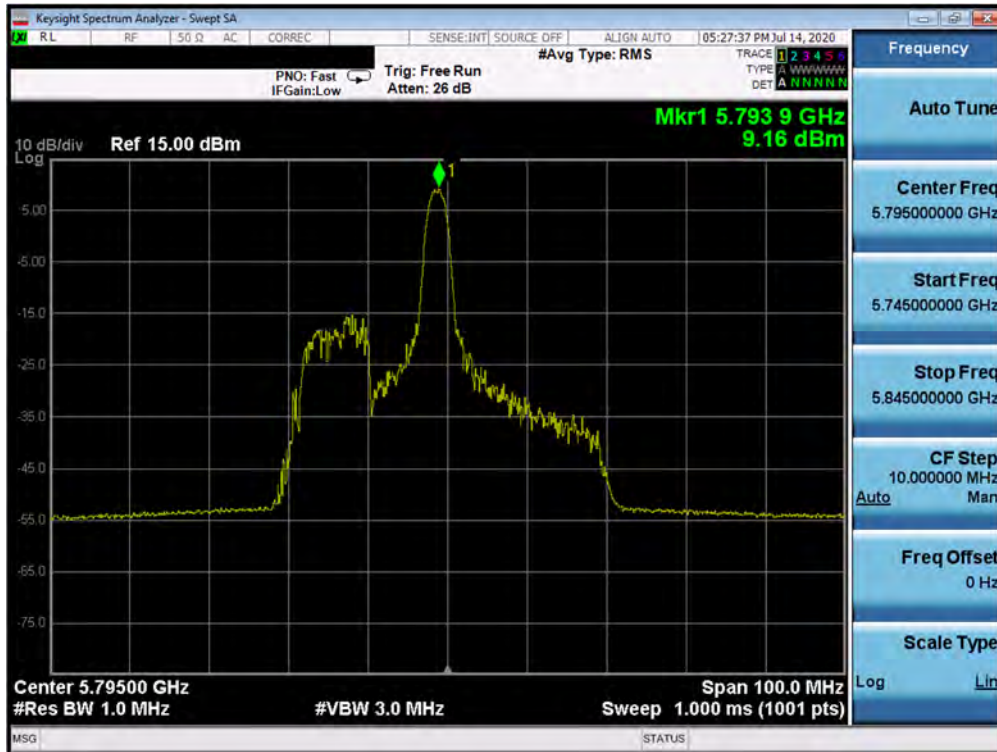


Plot 7-130. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 149)

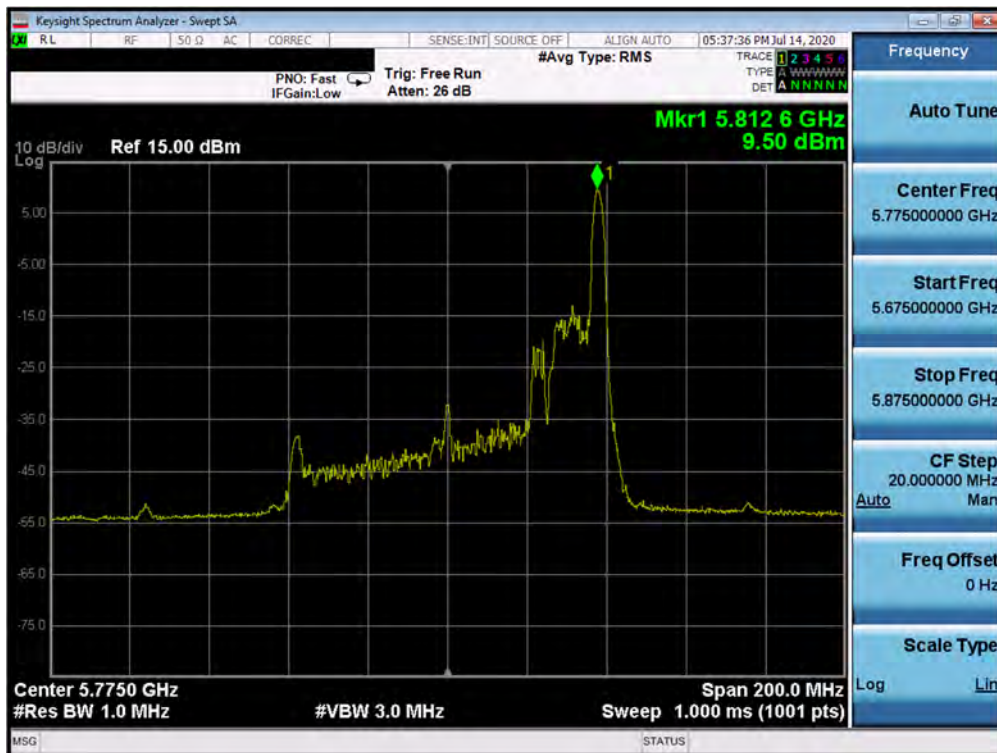


Plot 7-131. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 157)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 113 of 296



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)

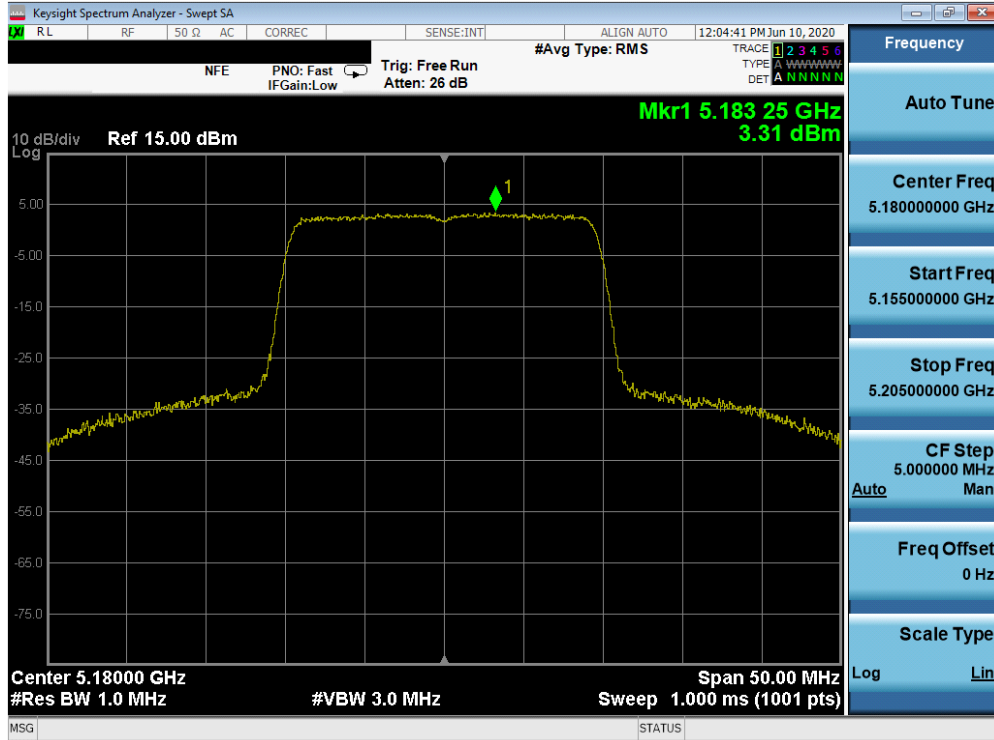
FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 115 of 296

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

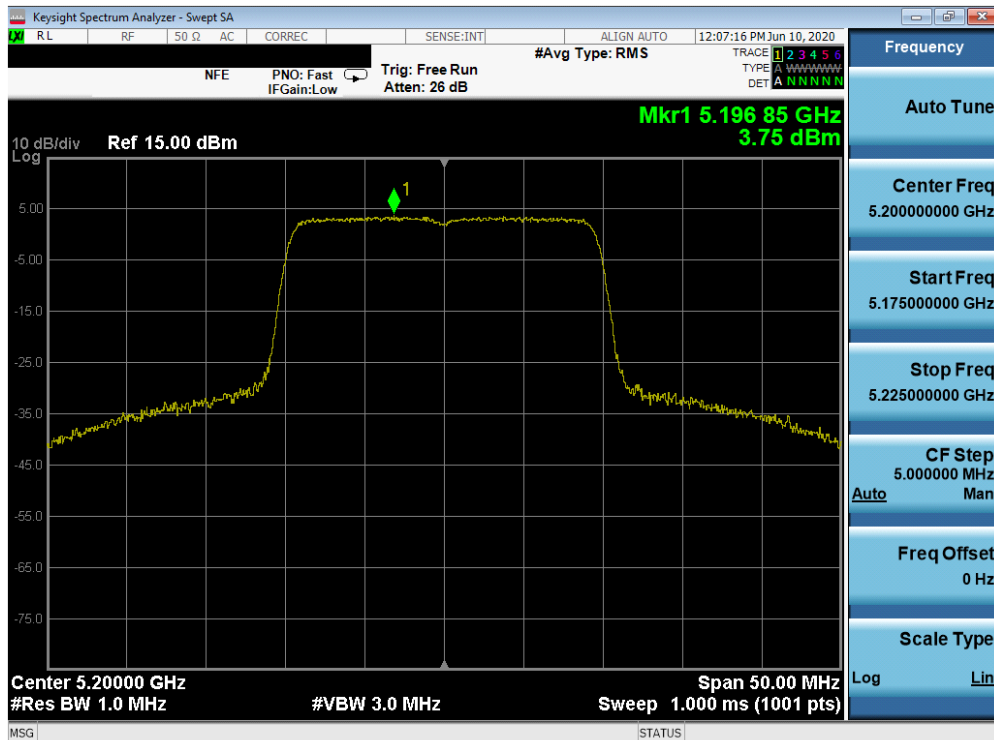
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	ax (20MHz)	242T	MCS0	3.31	11.0	-7.69
	5200	40	ax (20MHz)	242T	MCS0	3.75	11.0	-7.25
	5240	48	ax (20MHz)	242T	MCS0	2.83	11.0	-8.17
	5190	38	ax (40MHz)	484T	MCS0	-2.90	11.0	-13.90
	5230	46	ax (40MHz)	484T	MCS0	-1.55	11.0	-12.55
	5210	42	ax (80MHz)	996T	MCS0	-6.35	11.0	-17.35
Band 2A	5260	52	ax (20MHz)	242T	MCS0	2.21	11.0	-8.79
	5280	56	ax (20MHz)	242T	MCS0	2.18	11.0	-8.82
	5320	64	ax (20MHz)	242T	MCS0	1.20	11.0	-9.80
	5270	54	ax (40MHz)	484T	MCS0	-3.00	11.0	-14.00
	5310	62	ax (40MHz)	484T	MCS0	-3.21	11.0	-14.21
	5290	58	ax (80MHz)	996T	MCS0	-6.65	11.0	-17.65
Band 2C	5500	100	ax (20MHz)	242T	MCS0	2.34	11.0	-8.66
	5600	120	ax (20MHz)	242T	MCS0	1.48	11.0	-9.52
	5720	144	ax (20MHz)	242T	MCS0	2.87	11.0	-8.13
	5510	102	ax (40MHz)	484T	MCS0	-2.00	11.0	-13.00
	5590	118	ax (40MHz)	484T	MCS0	-1.88	11.0	-12.88
	5710	142	ax (40MHz)	484T	MCS0	-1.44	11.0	-12.44
	5530	106	ax (80MHz)	996T	MCS0	-6.65	11.0	-17.65
	5610	122	ax (80MHz)	996T	MCS0	-6.91	11.0	-17.91
	5690	138	ax (80MHz)	996T	MCS0	-9.30	11.0	-20.30

Table 7-57. Bands 1, 2A, 2C Conducted Power Spectral Density Measurements SISO ANT1 (Full Tones)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 116 of 296

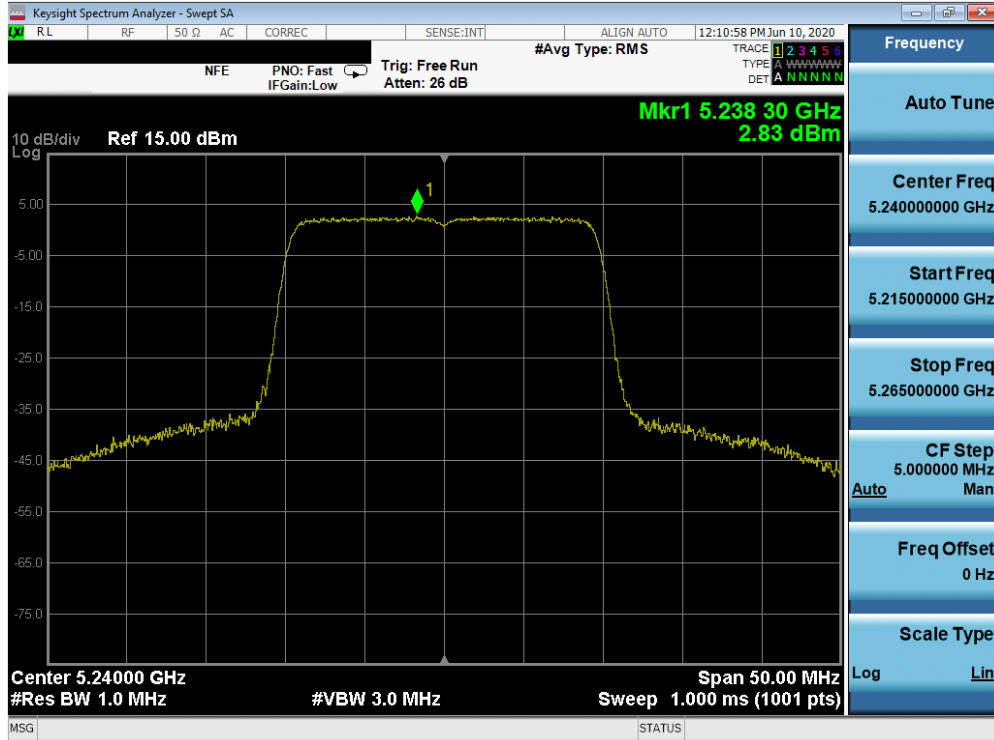


Plot 7-136. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 36)

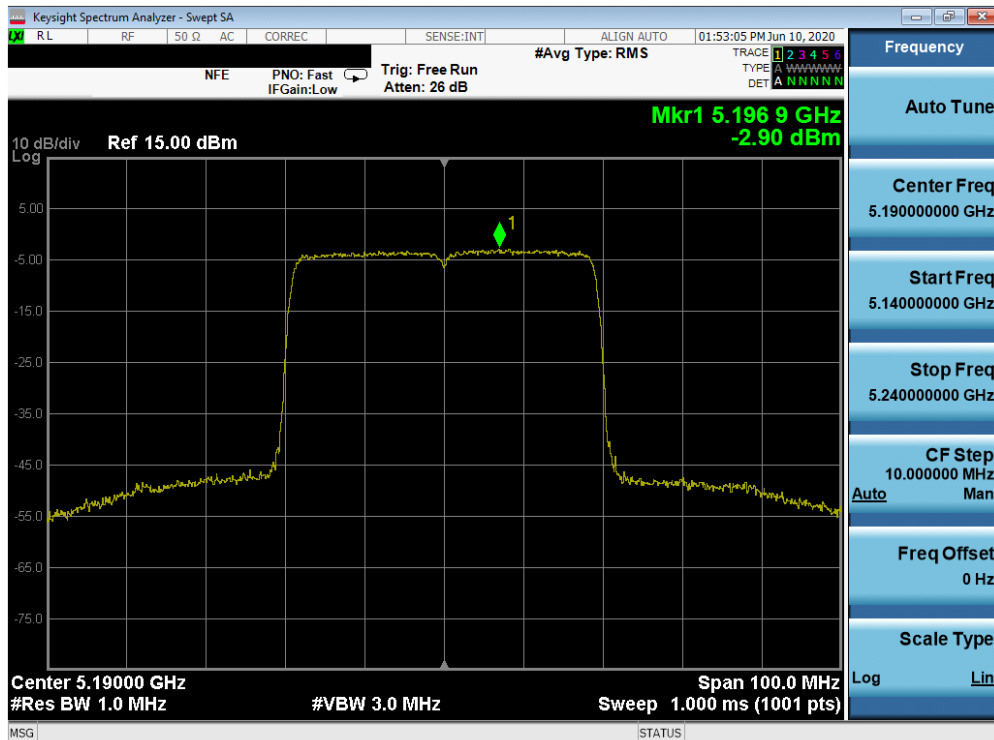


Plot 7-137. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 40)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 117 of 296

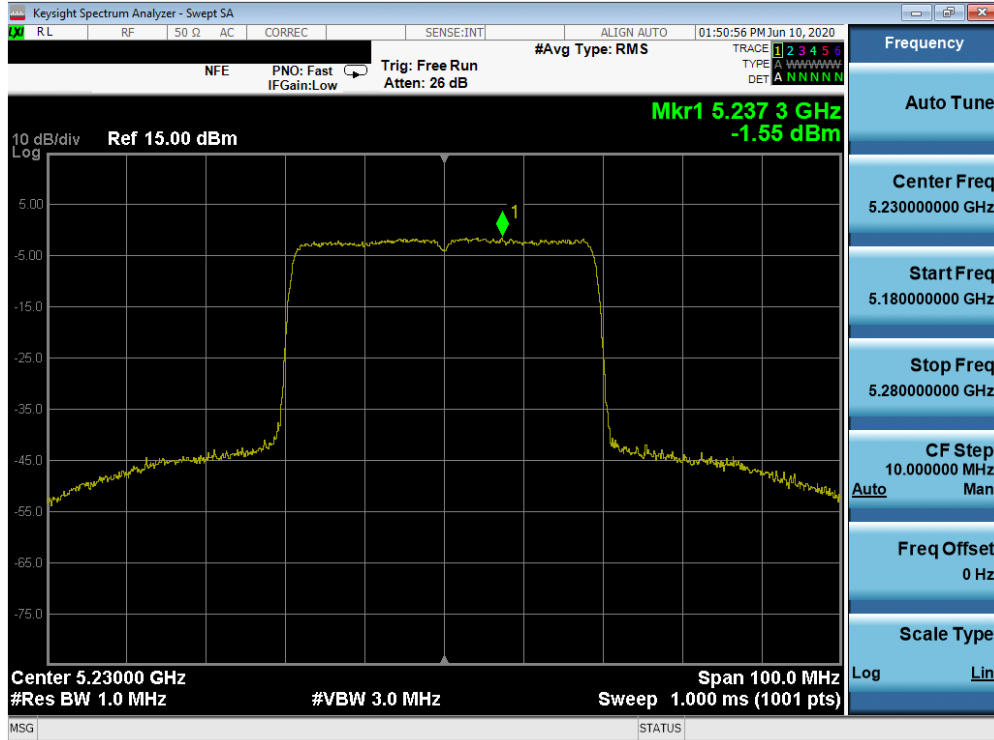


Plot 7-138. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 48)

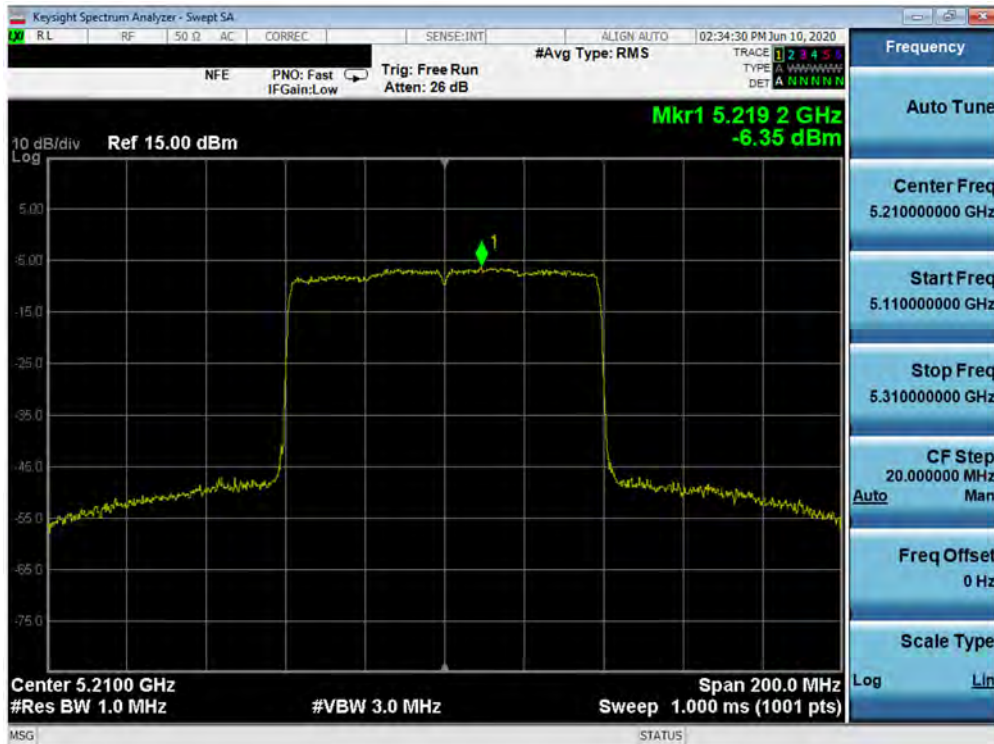


Plot 7-139. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 38)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 118 of 296

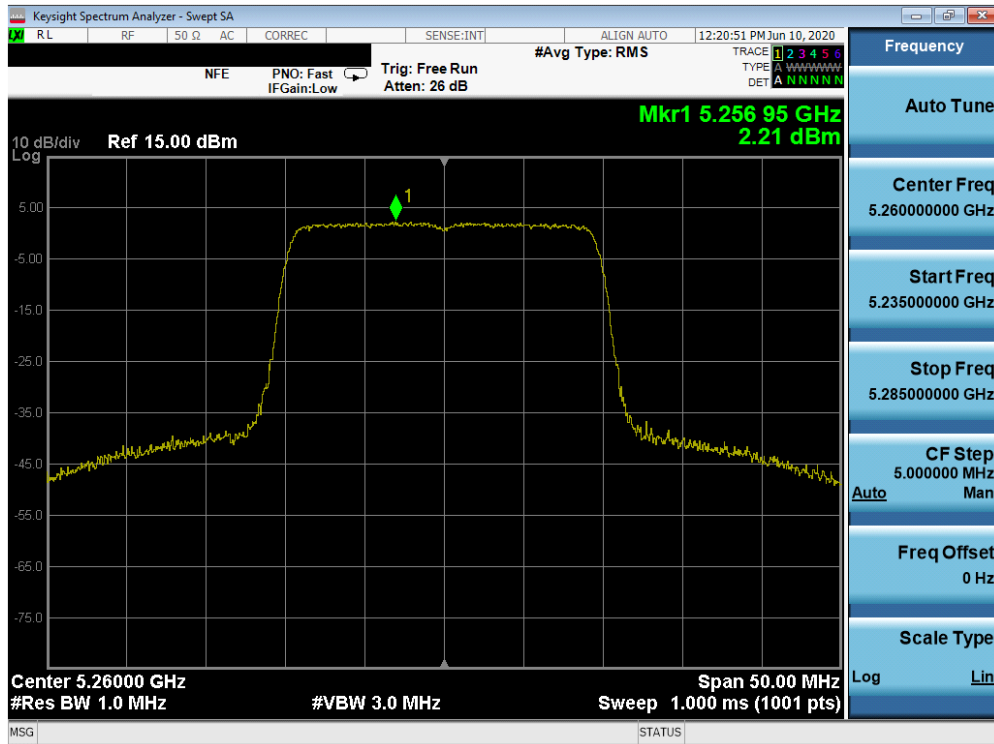


Plot 7-140. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 46)

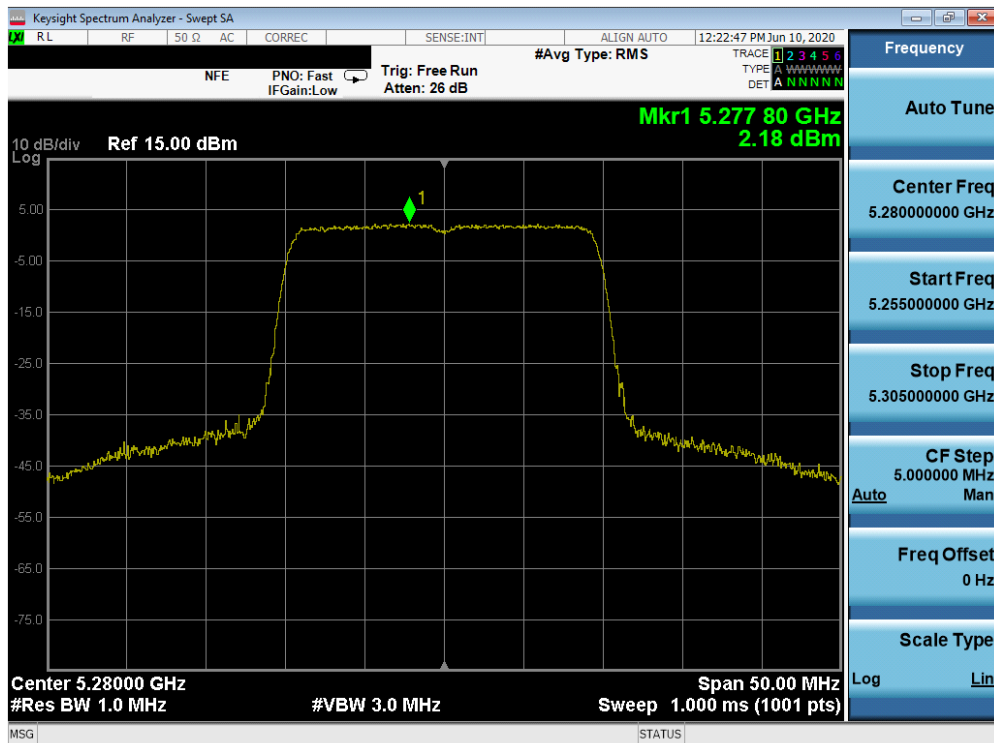


Plot 7-141. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 42)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 119 of 296

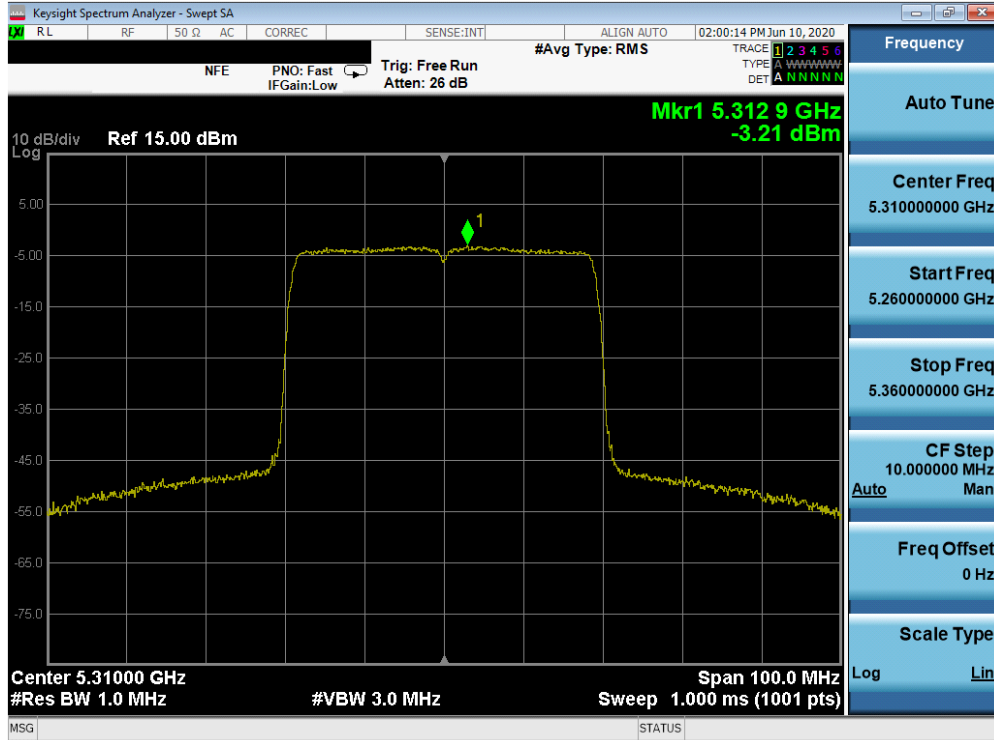


Plot 7-142. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 52)

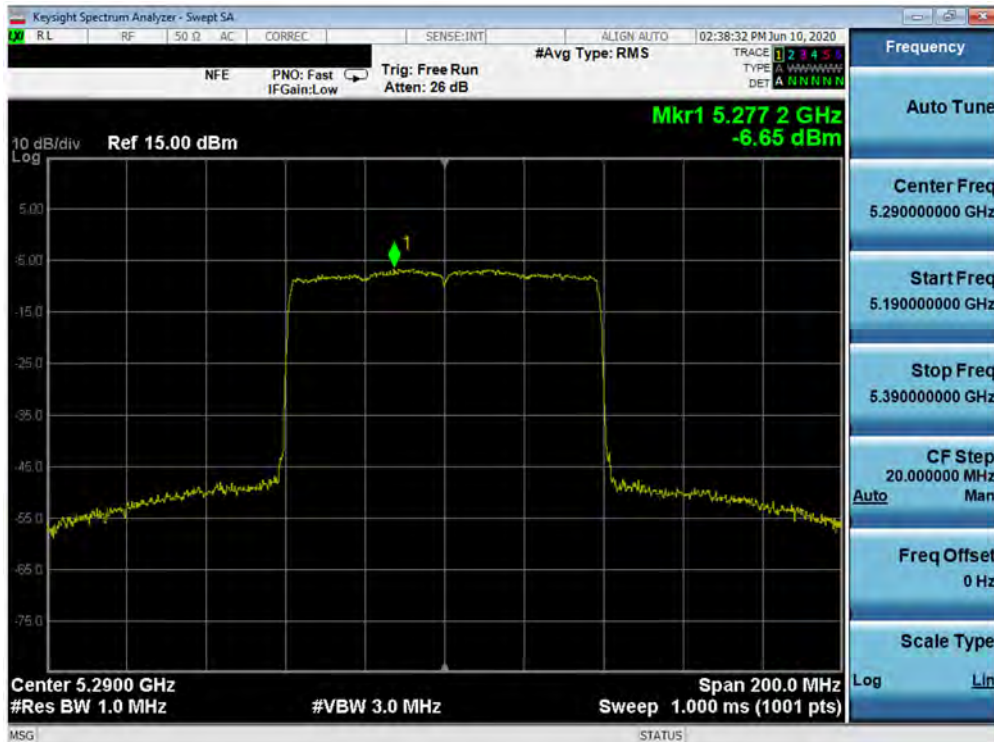


Plot 7-143. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 56)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 120 of 296

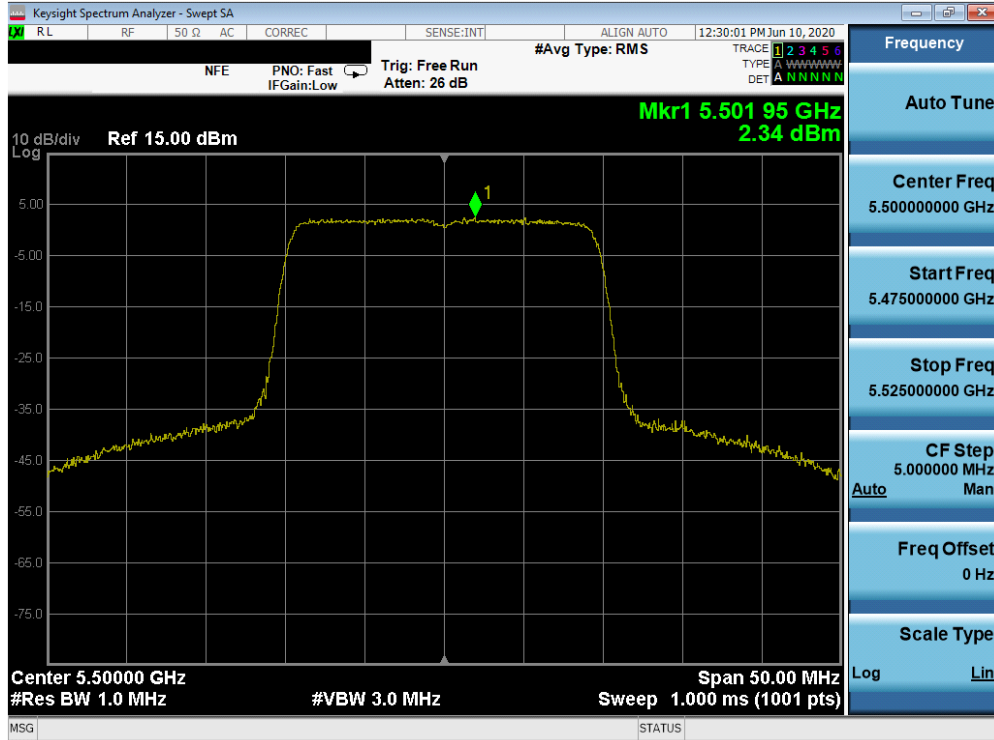


Plot 7-146. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 62)

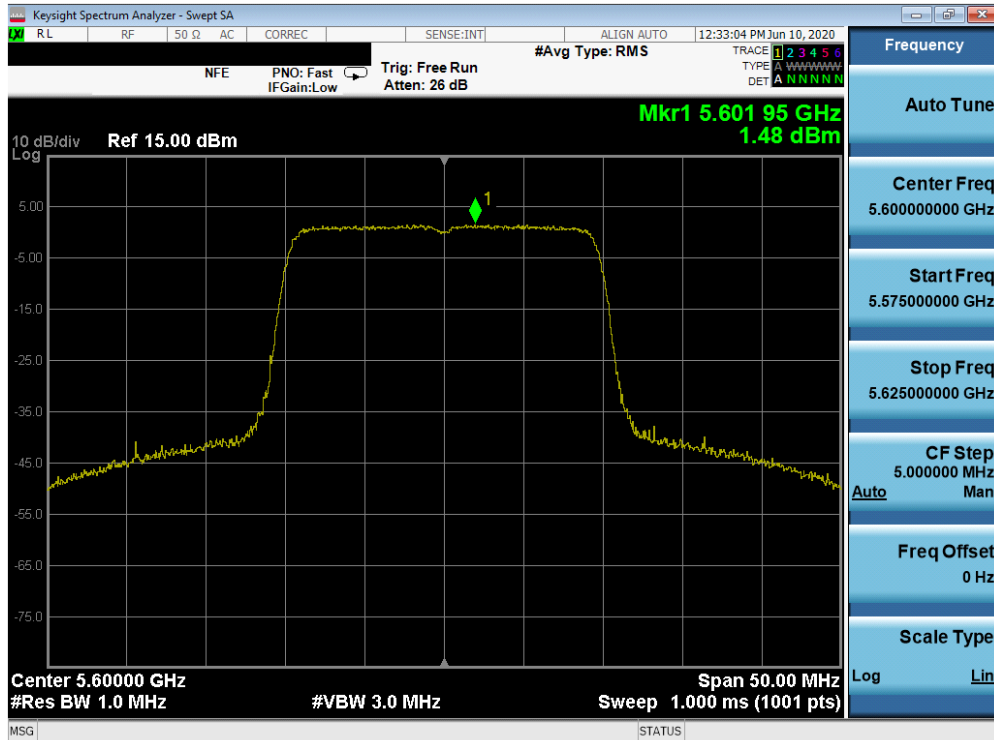


Plot 7-147. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 58)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 122 of 296

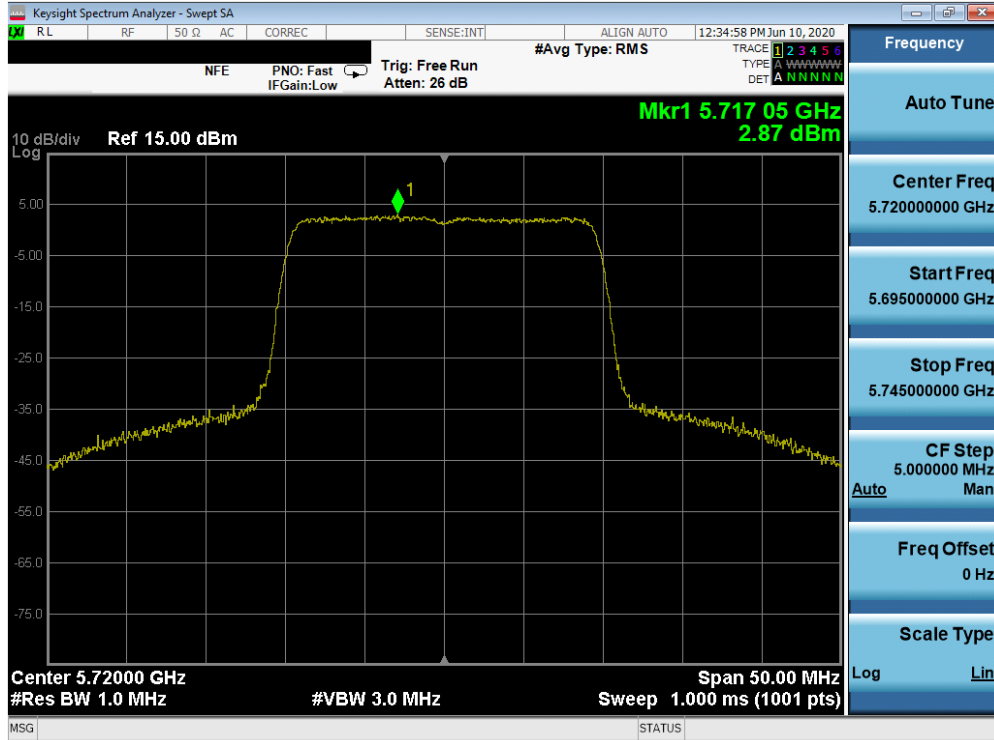


Plot 7-148. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 100)

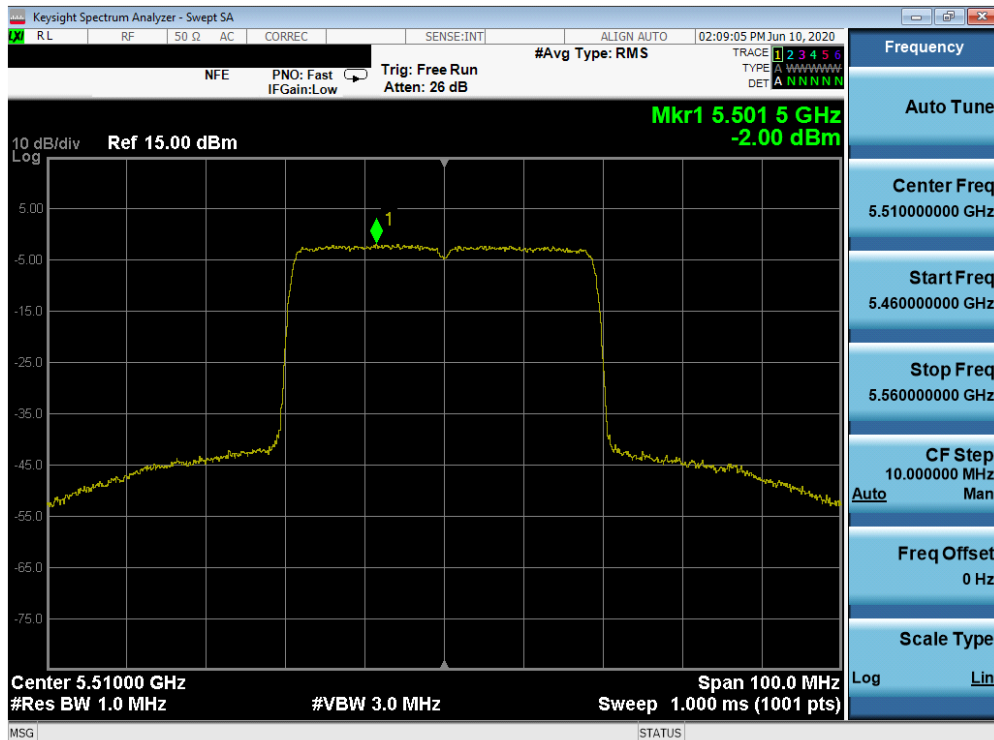


Plot 7-149. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 120)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 123 of 296

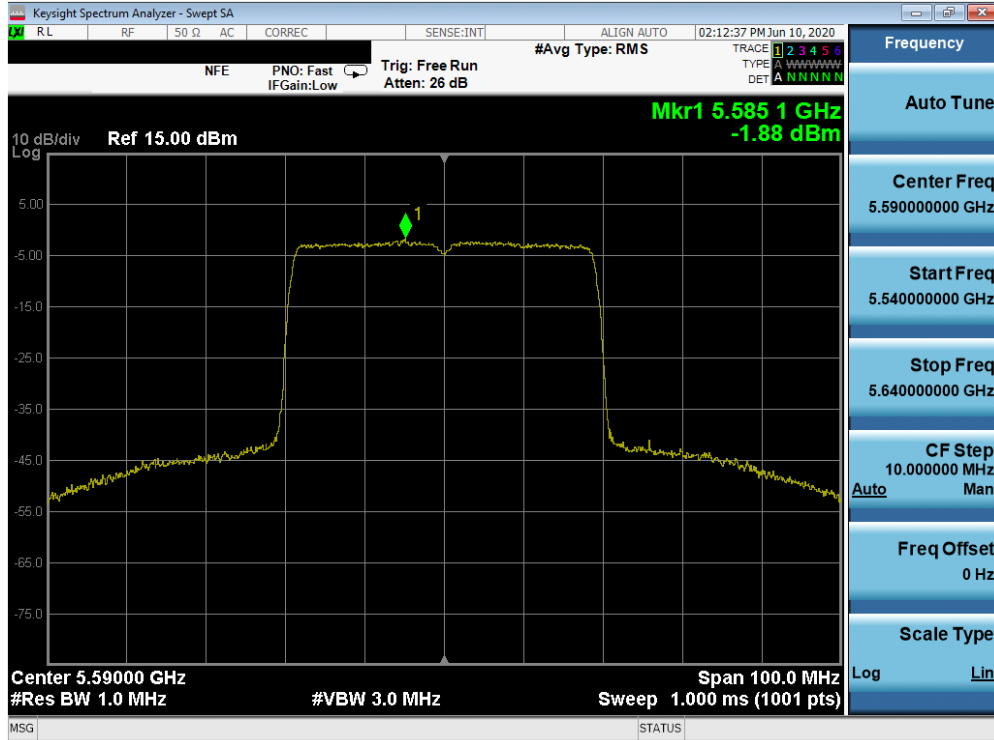


Plot 7-150. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 144)

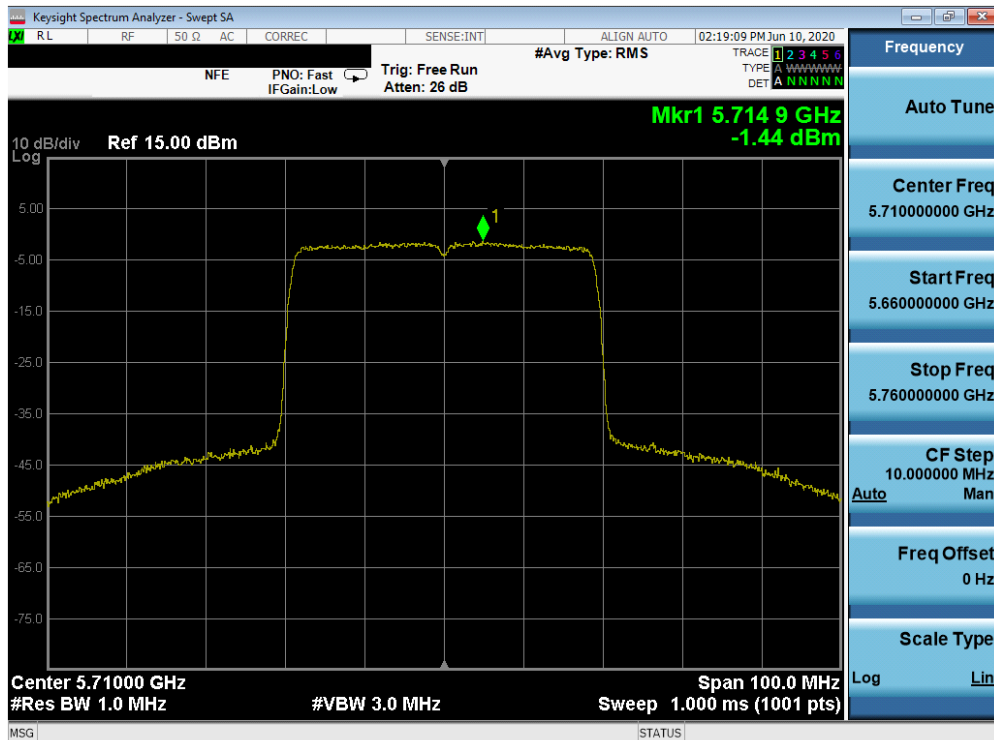


Plot 7-151. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 102)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 124 of 296

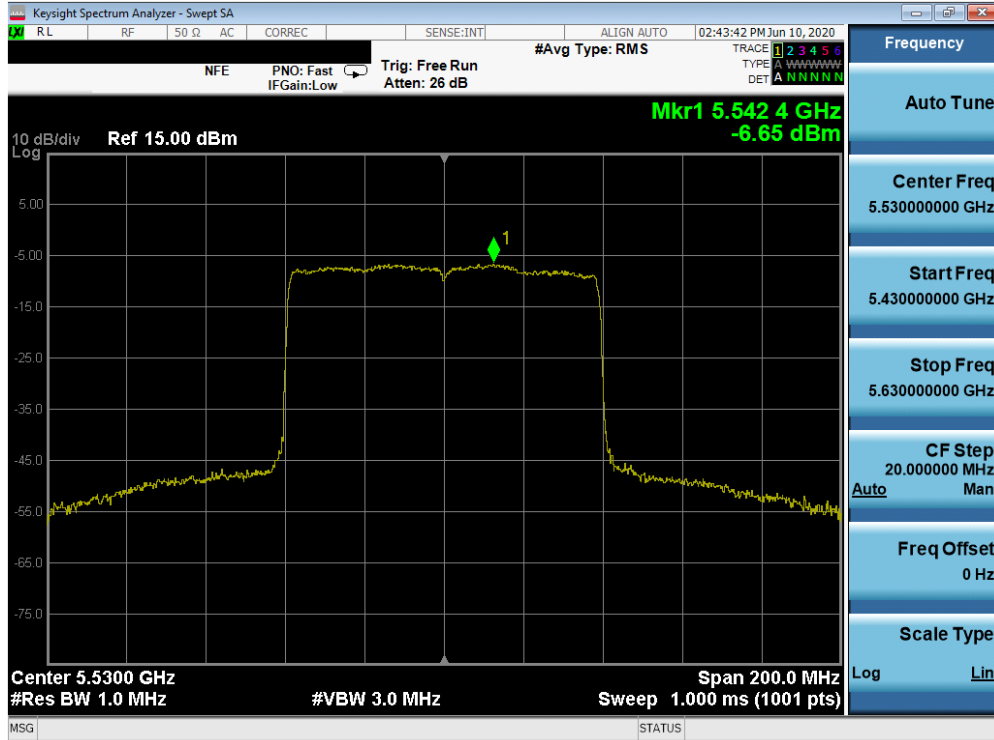


Plot 7-152. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 118)

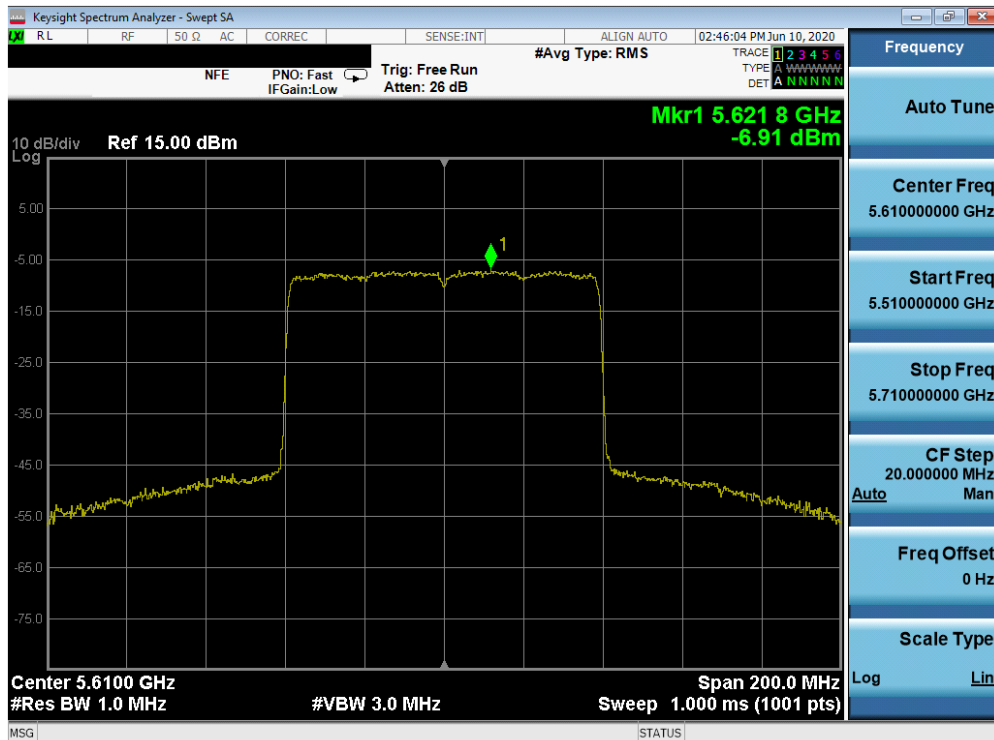


Plot 7-153. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 142)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 125 of 296

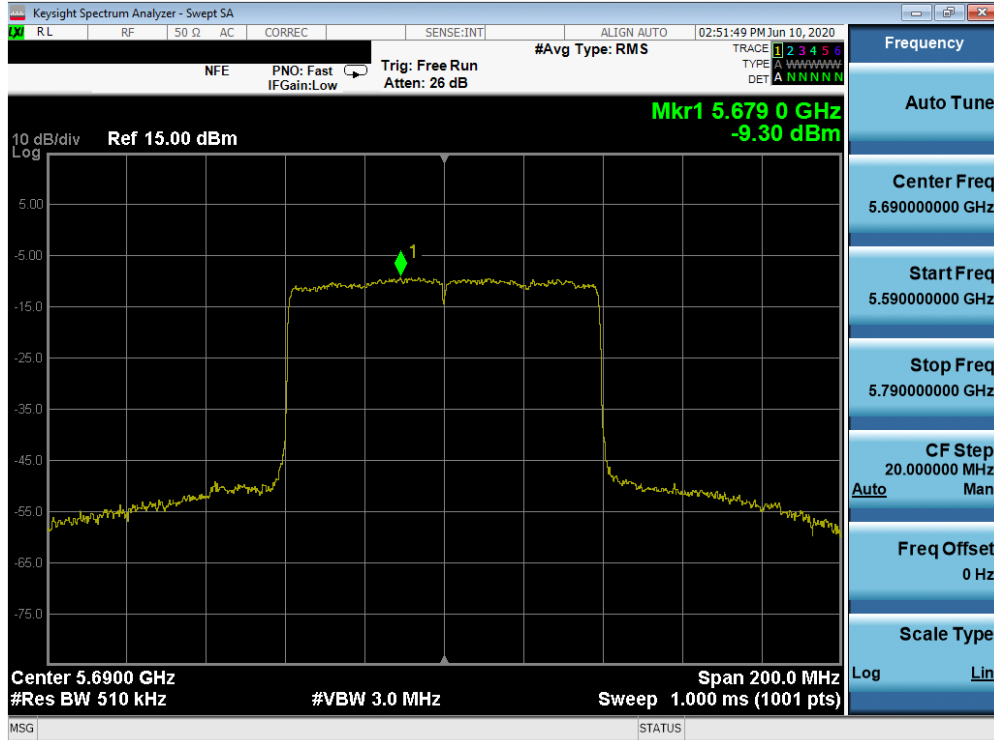


Plot 7-154. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 106)



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

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 126 of 296



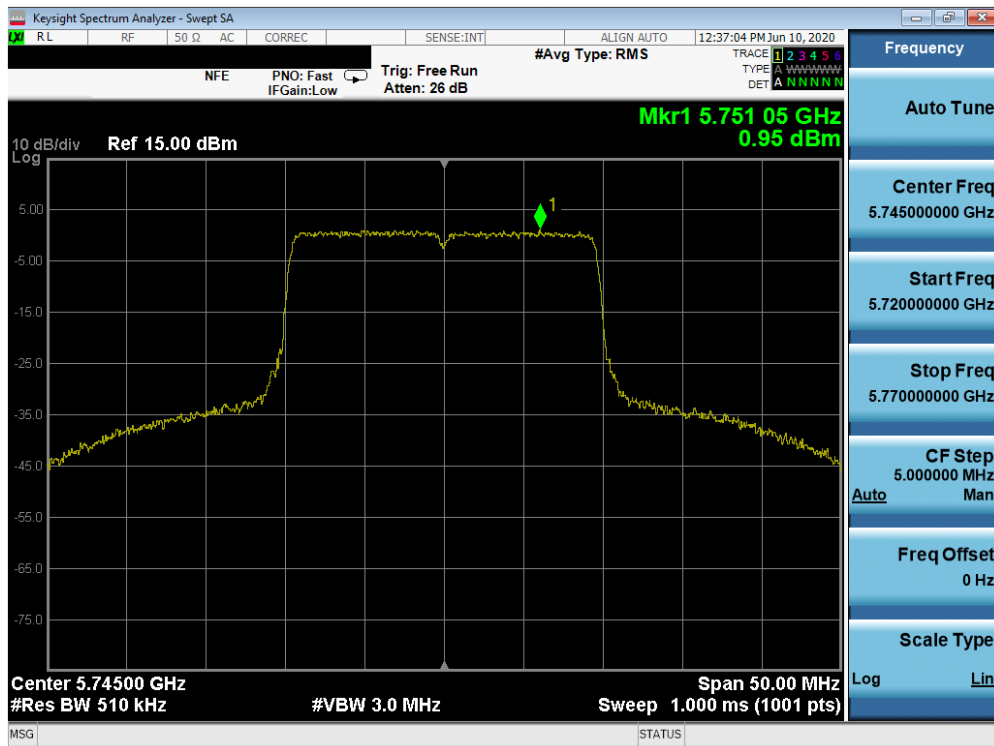
Plot 7-156. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 138)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 127 of 296

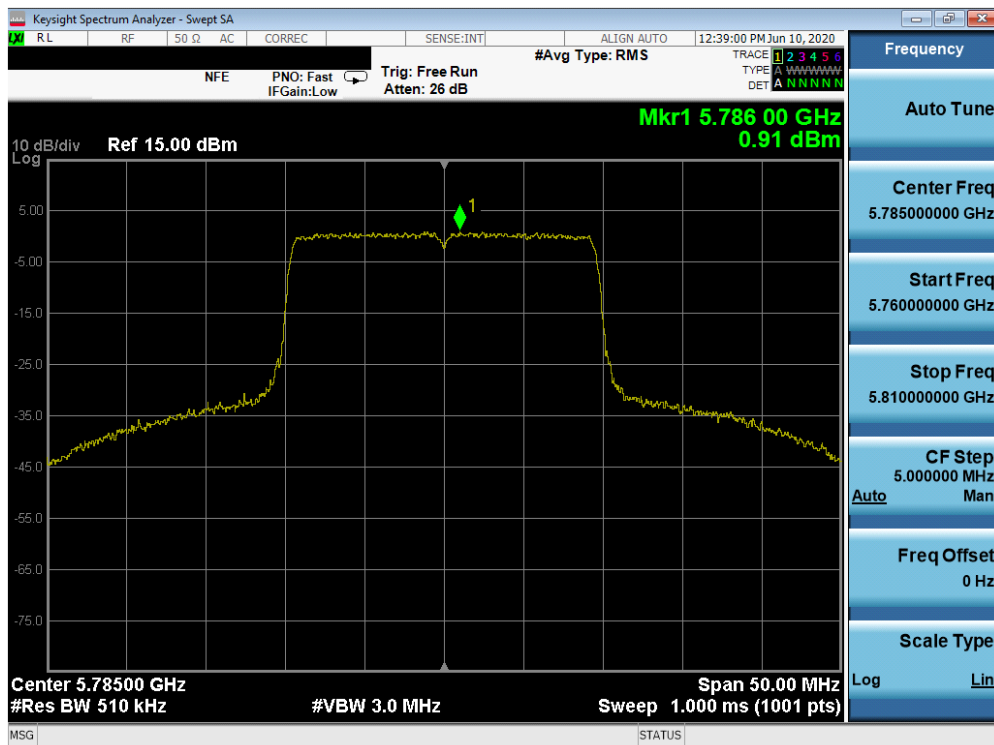
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density	Margin [dB]
Band 3	5745	149	ax (20MHz)	242T	MCS0	0.95	30.00	-29.05
	5785	157	ax (20MHz)	242T	MCS0	0.91	30.00	-29.09
	5825	165	ax (20MHz)	242T	MCS0	0.75	30.00	-29.25
	5755	151	ax (40MHz)	484T	MCS0	-4.99	30.00	-34.99
	5795	159	ax (40MHz)	484T	MCS0	-8.68	30.00	-38.68
	5775	155	ax (80MHz)	996T	MCS0	-5.97	30.00	-35.97

Table 7-58. Band 3 Conducted Power Spectral Density Measurements SISO ANT1 (Full Tones)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset			Page 128 of 296

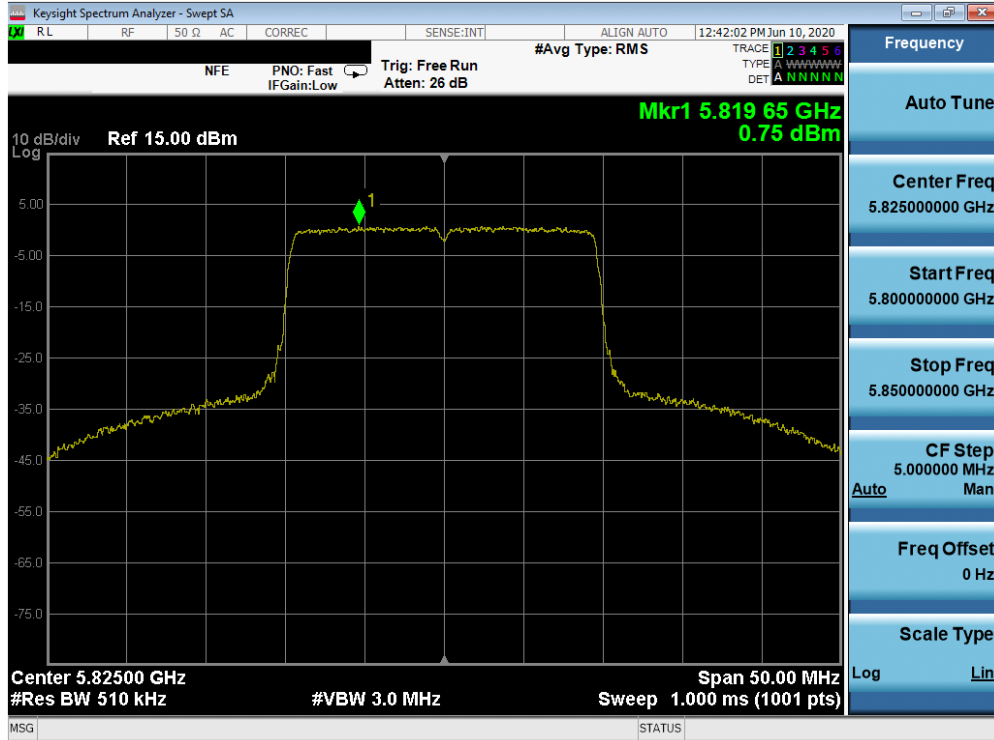


Plot 7-157. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 149)

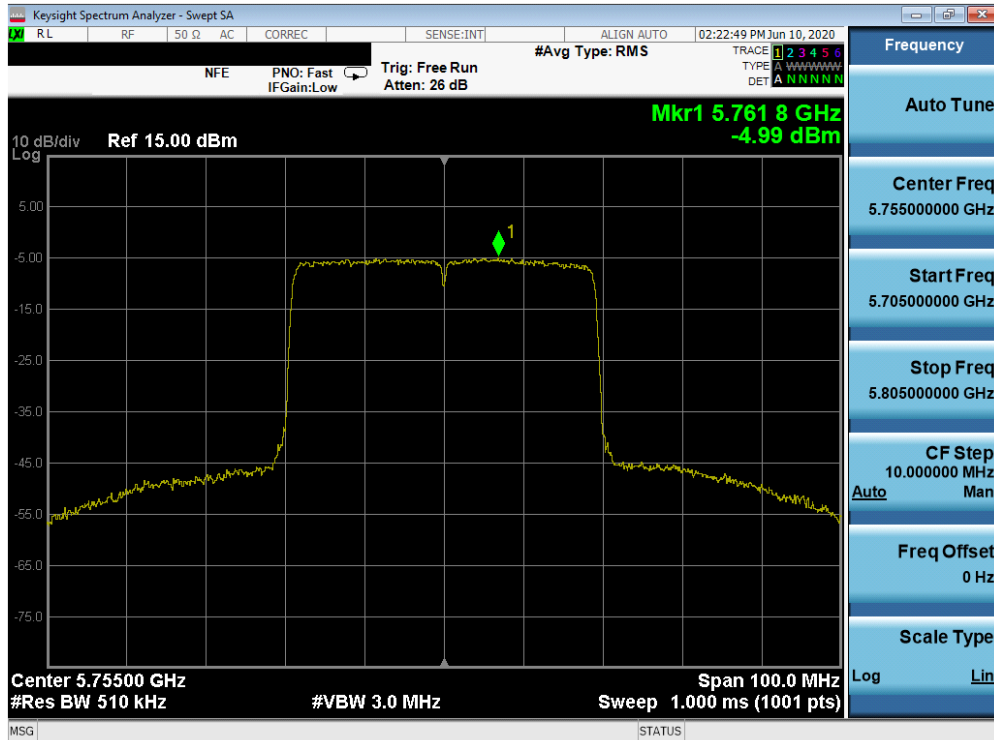


Plot 7-158. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 157)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 129 of 296

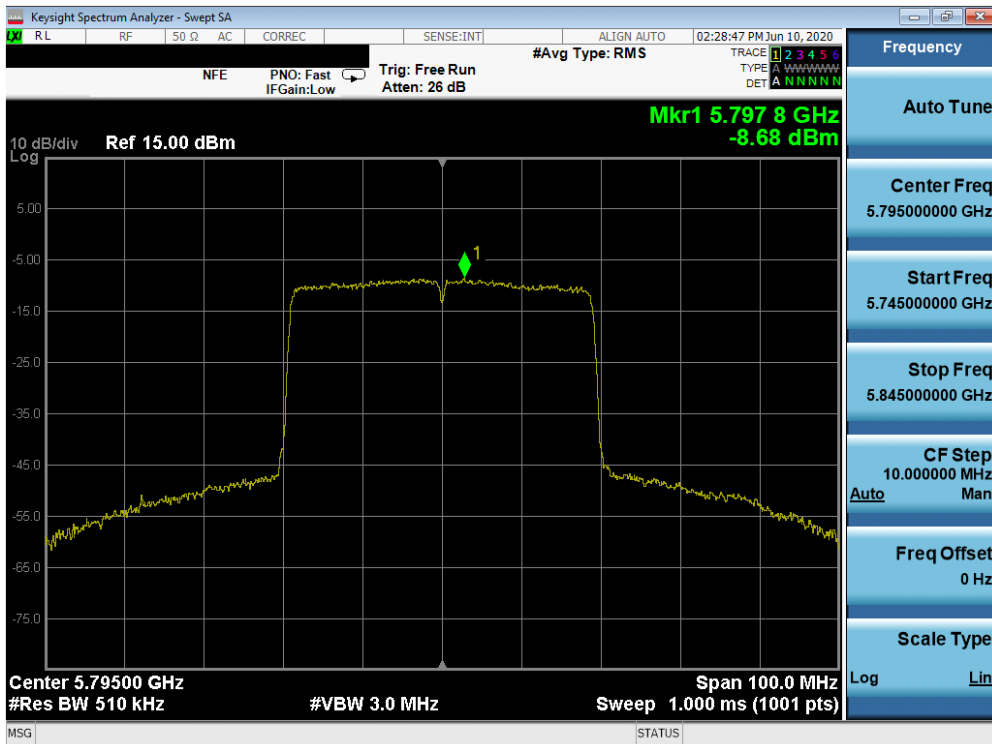


Plot 7-159. Power Spectral Density Plot SISO ANT1 (20 MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 165)

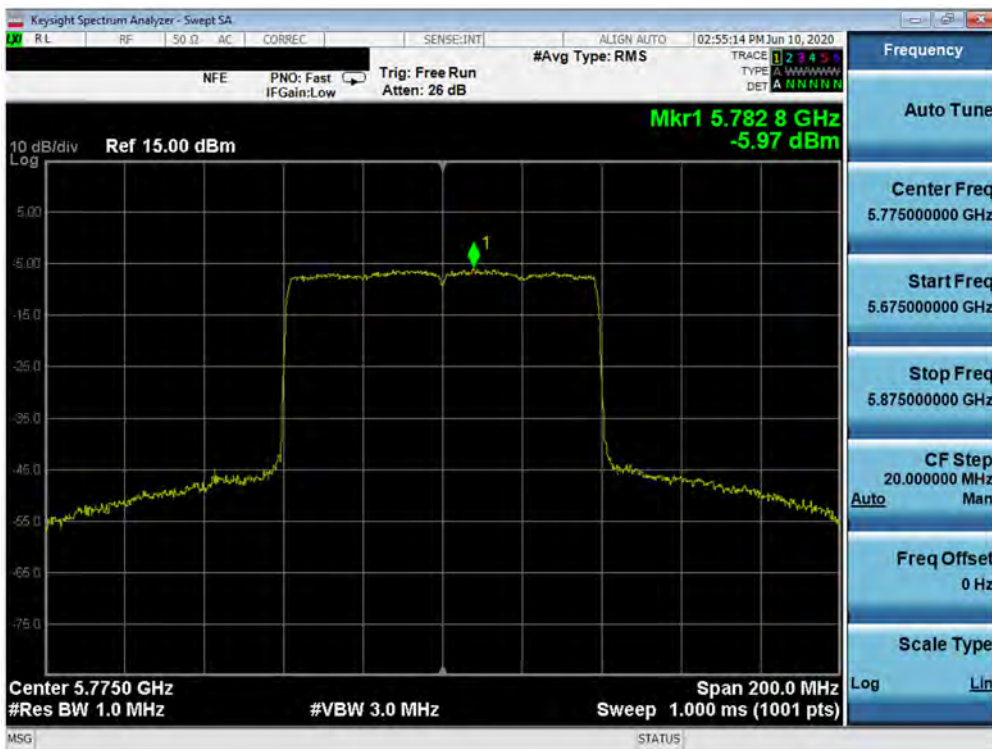


Plot 7-160. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 151)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 130 of 296



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



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

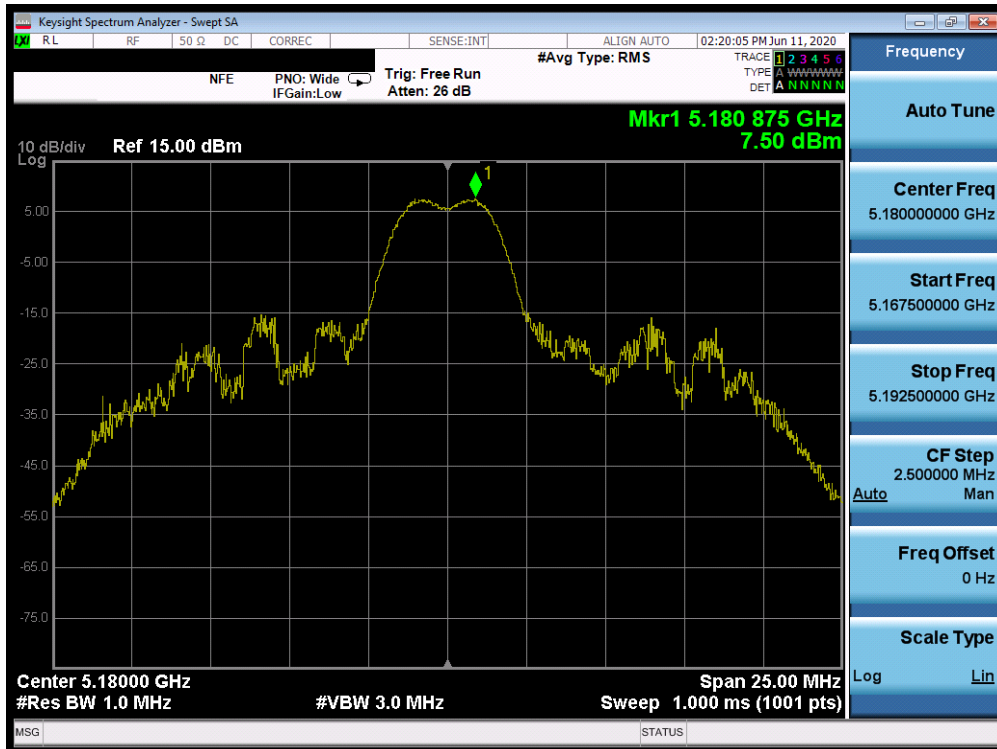
FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 131 of 296

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

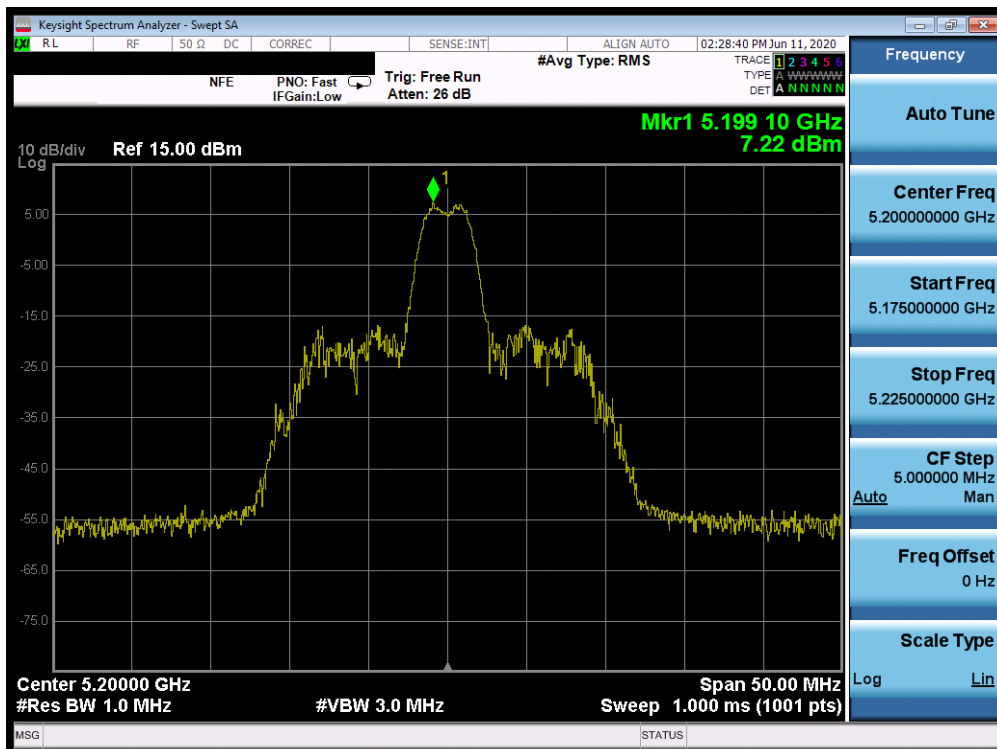
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	ax (20MHz)	26T	MCS0	7.50	11.0	-3.50
	5200	40	ax (20MHz)	26T	MCS0	7.22	11.0	-3.78
	5240	48	ax (20MHz)	26T	MCS0	7.44	11.0	-3.56
	5190	38	ax (40MHz)	26T	MCS0	8.43	11.0	-2.57
	5230	46	ax (40MHz)	26T	MCS0	8.50	11.0	-2.50
	5210	42	ax (80MHz)	26T	MCS0	8.98	11.0	-2.02
Band 2A	5260	52	ax (20MHz)	26T	MCS0	7.22	11.0	-3.78
	5280	56	ax (20MHz)	26T	MCS0	7.49	11.0	-3.51
	5320	64	ax (20MHz)	26T	MCS0	7.30	11.0	-3.70
	5270	54	ax (40MHz)	26T	MCS0	8.94	11.0	-2.06
	5310	62	ax (40MHz)	26T	MCS0	8.49	11.0	-2.51
Band 2C	5290	58	ax (80MHz)	26T	MCS0	7.90	11.0	-3.10
	5500	100	ax (20MHz)	26T	MCS0	7.71	11.0	-3.29
	5600	120	ax (20MHz)	26T	MCS0	7.38	11.0	-3.62
	5720	144	ax (20MHz)	26T	MCS0	9.09	11.0	-1.91
	5510	102	ax (40MHz)	26T	MCS0	9.17	11.0	-1.83
	5590	118	ax (40MHz)	26T	MCS0	8.83	11.0	-2.17
	5710	142	ax (40MHz)	26T	MCS0	8.16	11.0	-2.84
	5530	106	ax (80MHz)	26T	MCS0	9.22	11.0	-1.78
	5610	122	ax (80MHz)	26T	MCS0	9.12	11.0	-1.88
5690	138	ax (80MHz)	26T	MCS0	7.34	11.0	-3.66	

Table 7-59. Conducted Power Spectral Density Measurements SISO ANT2 (26 Tones)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 132 of 296

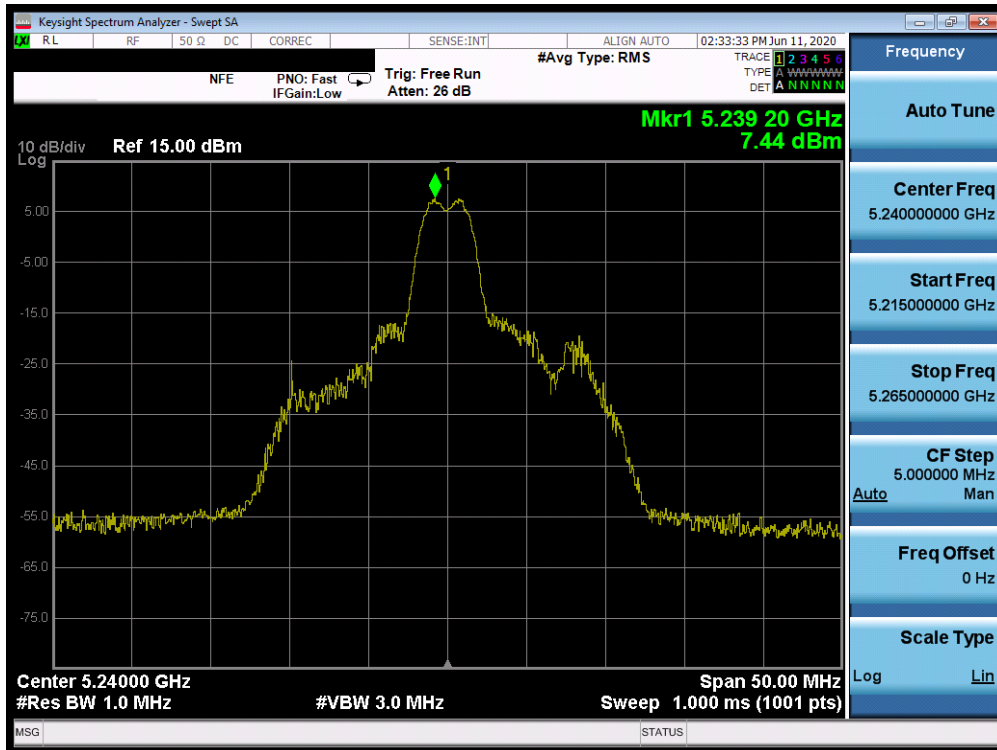


Plot 7-163. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 36)

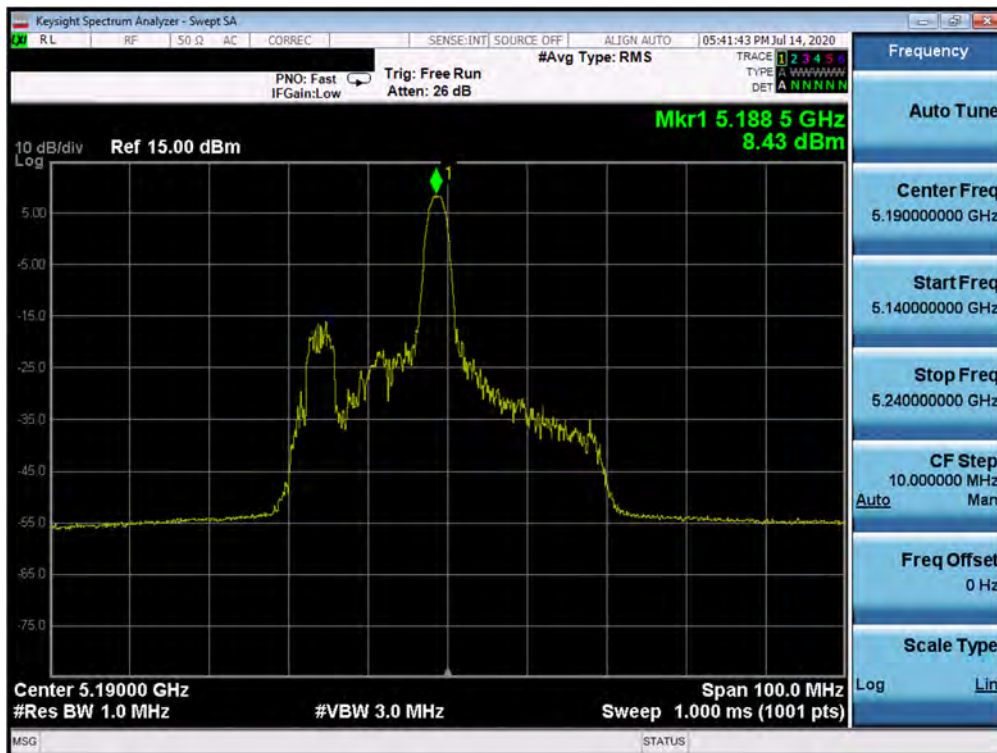


Plot 7-164. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 40)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 133 of 296



Plot 7-165. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 48)

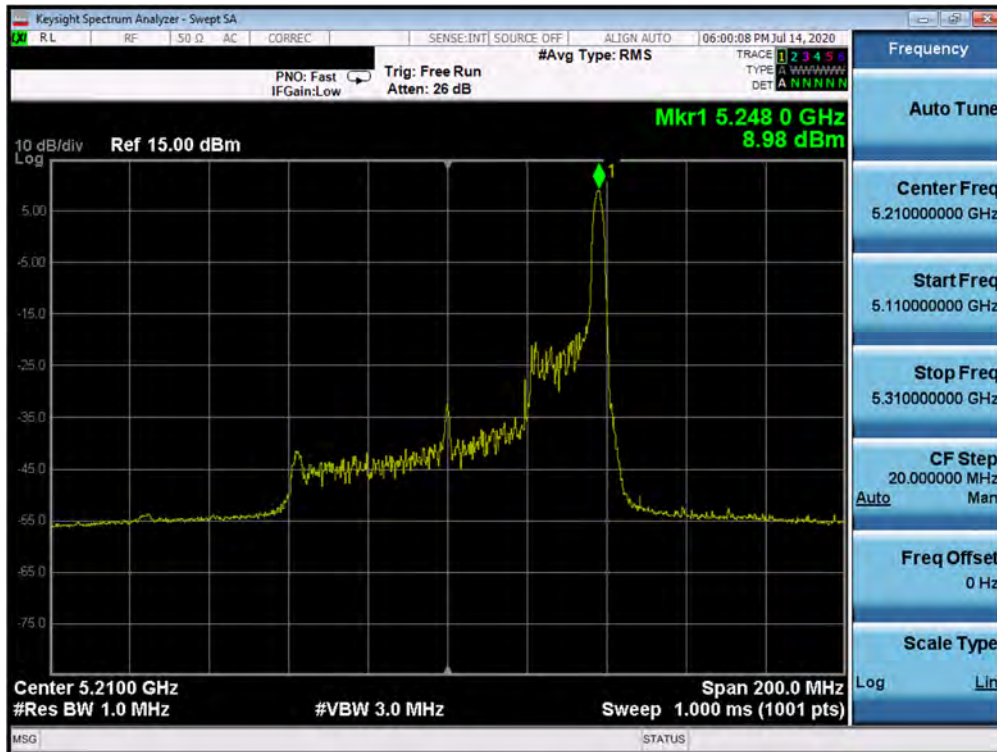


Plot 7-166. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 38)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 134 of 296

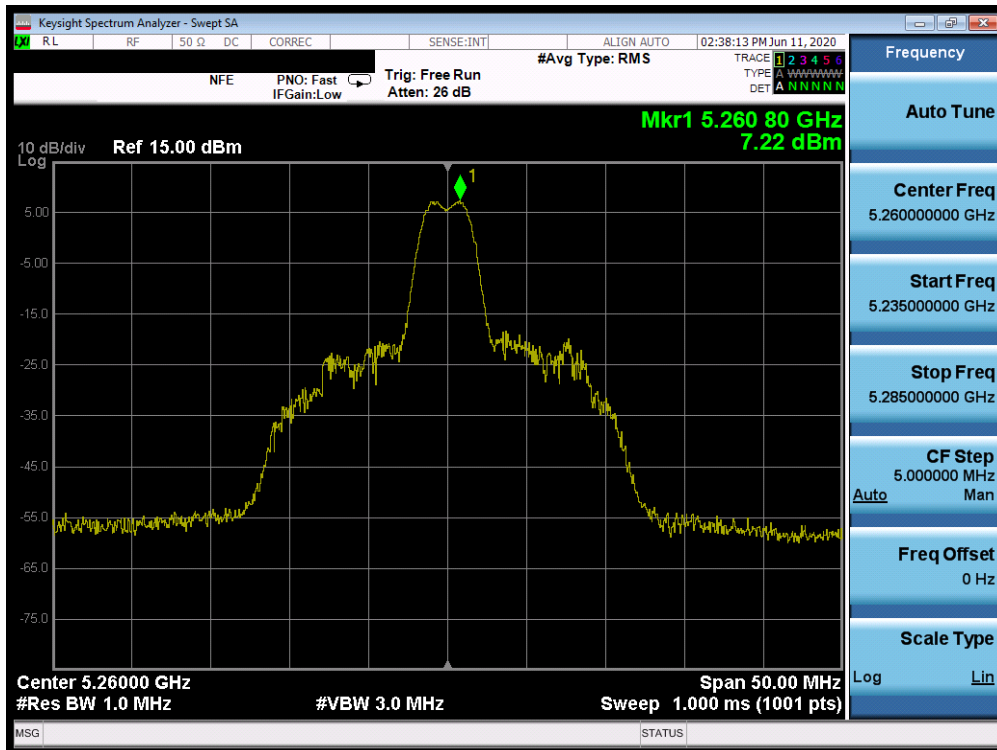


Plot 7-167. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 46)

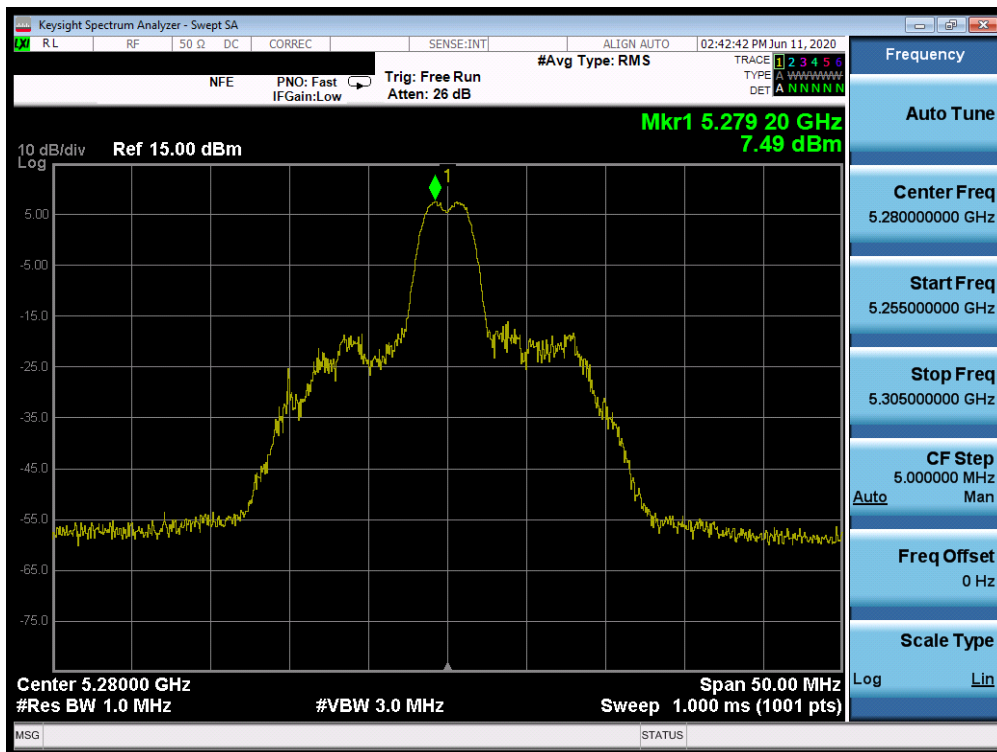


Plot 7-168. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 42)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 135 of 296

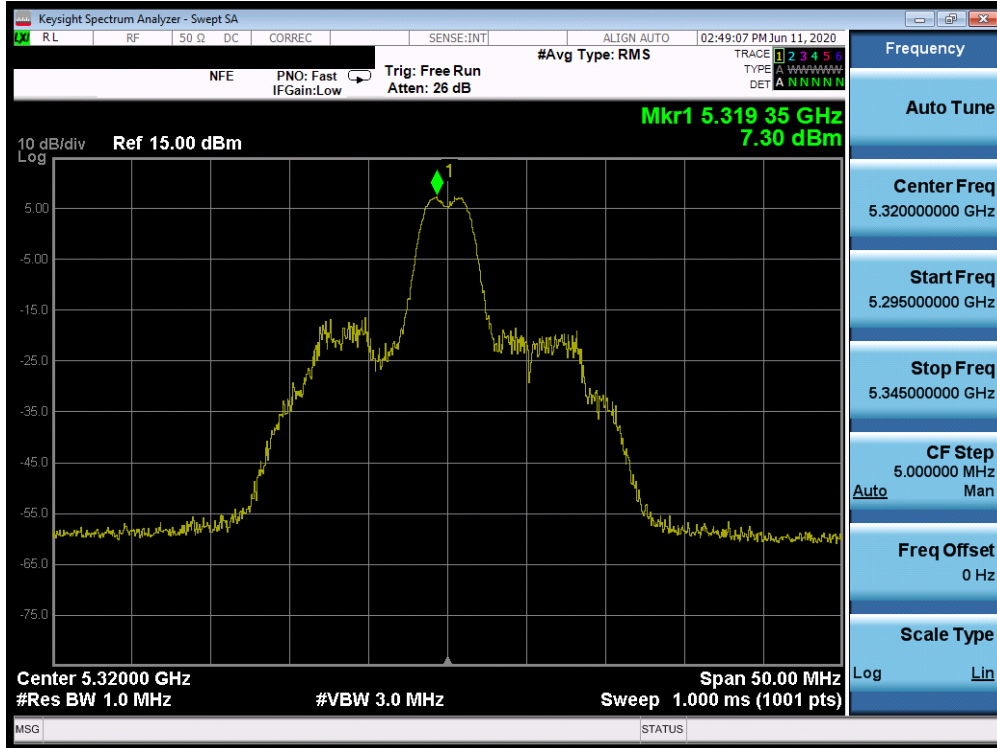


Plot 7-169. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 52)

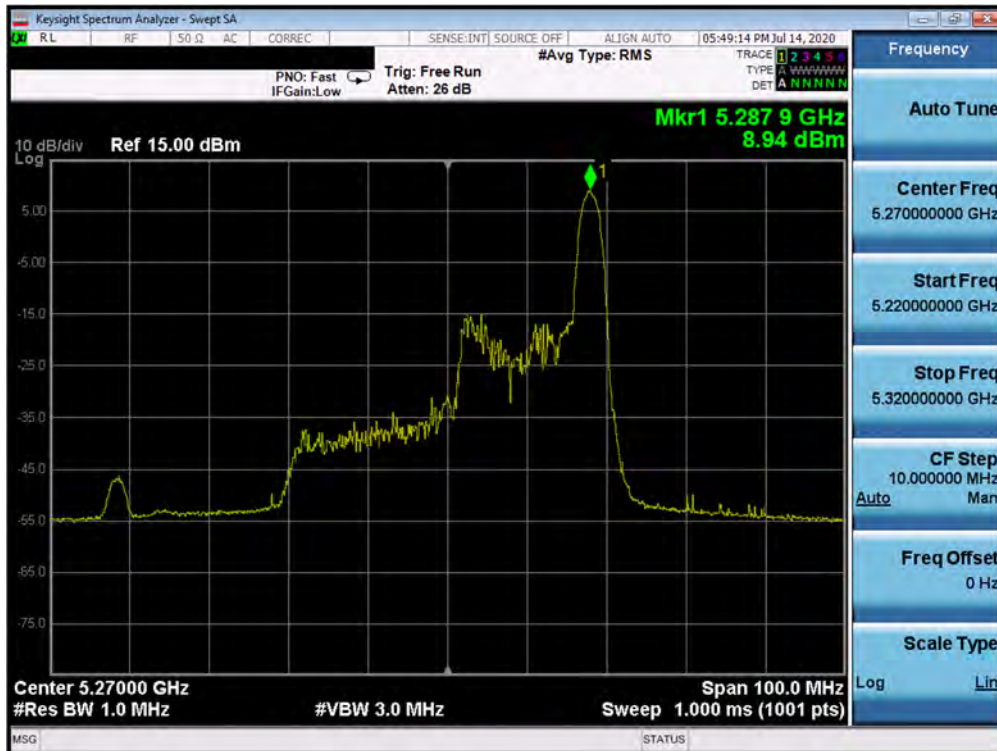


Plot 7-170. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 56)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 136 of 296

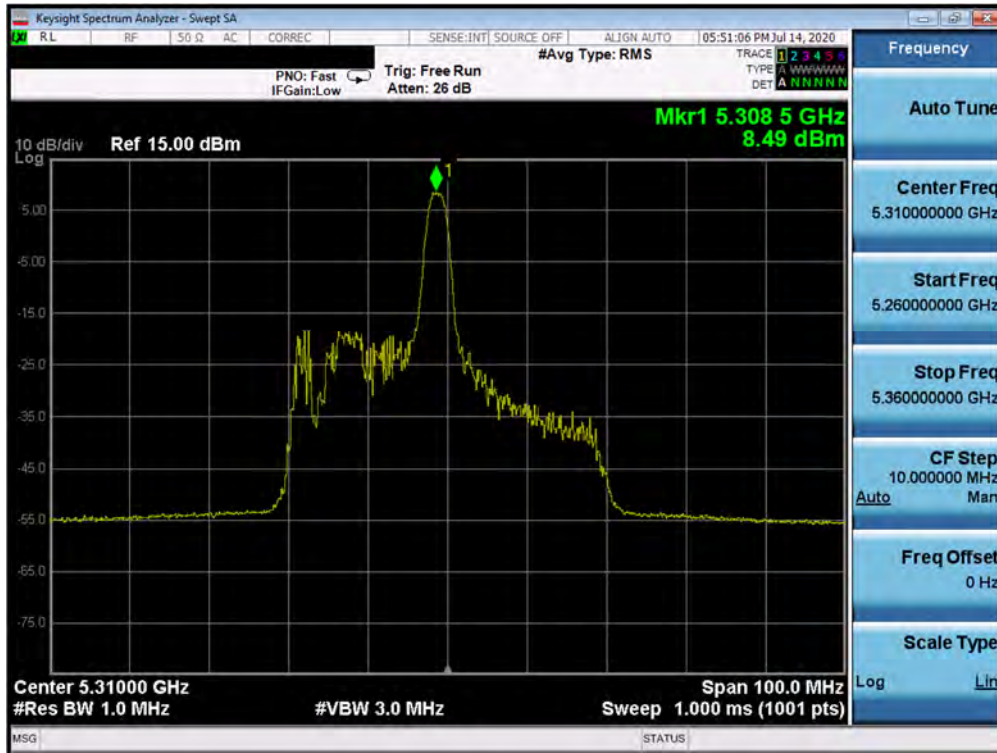


Plot 7-171. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 64)



Plot 7-172. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 54)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 137 of 296

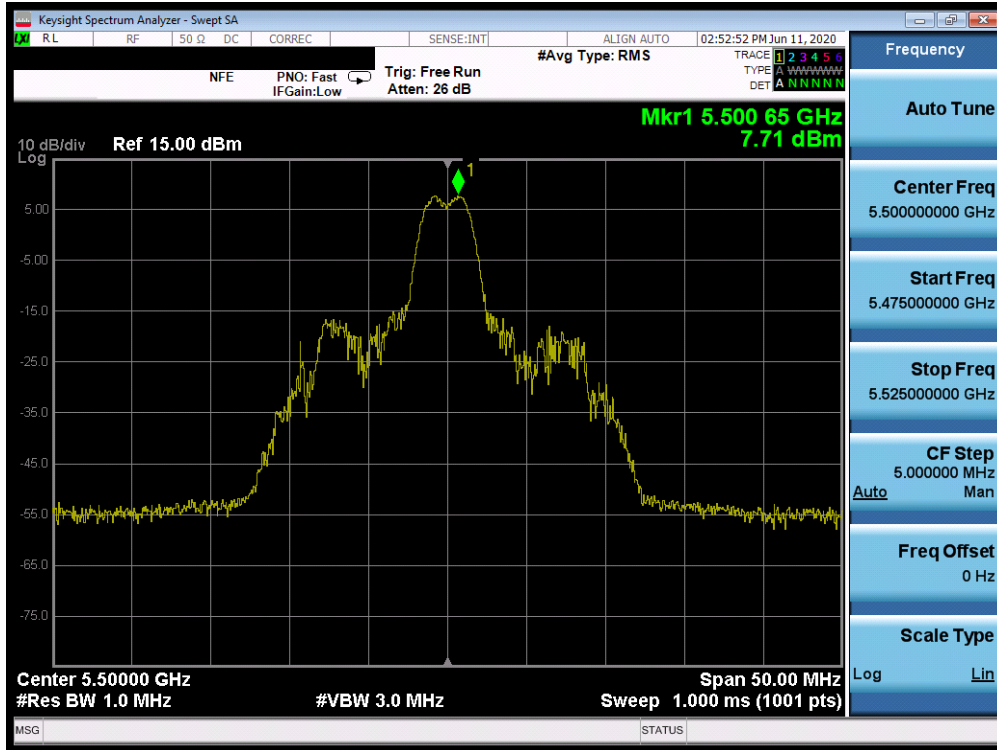


Plot 7-173. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 62)

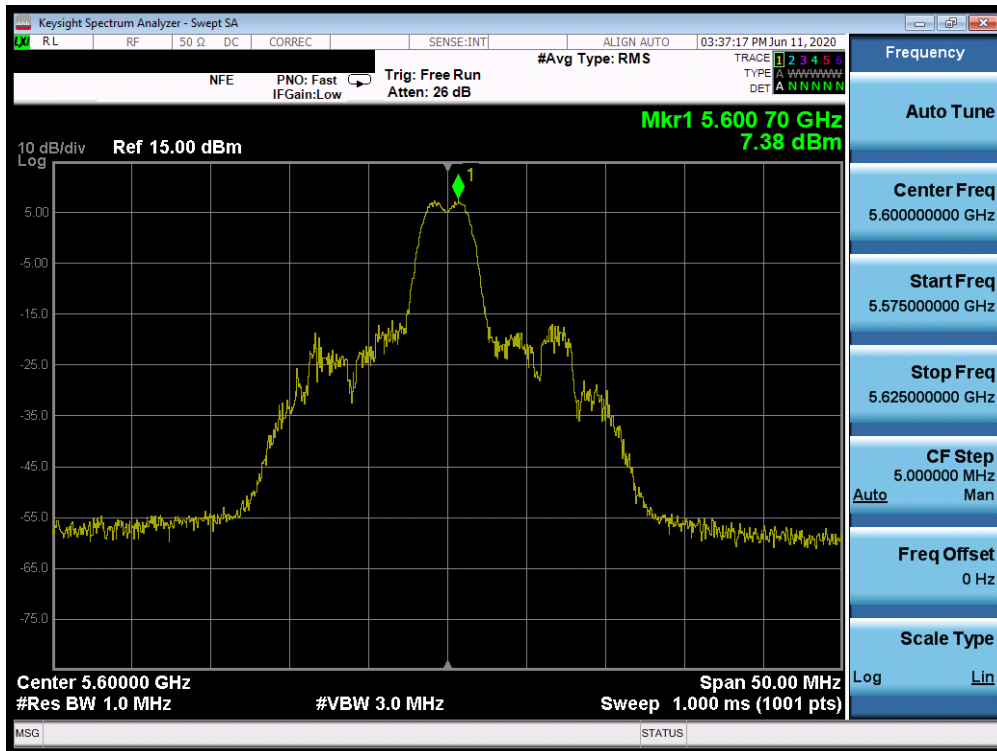


Plot 7-174. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 58)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 138 of 296

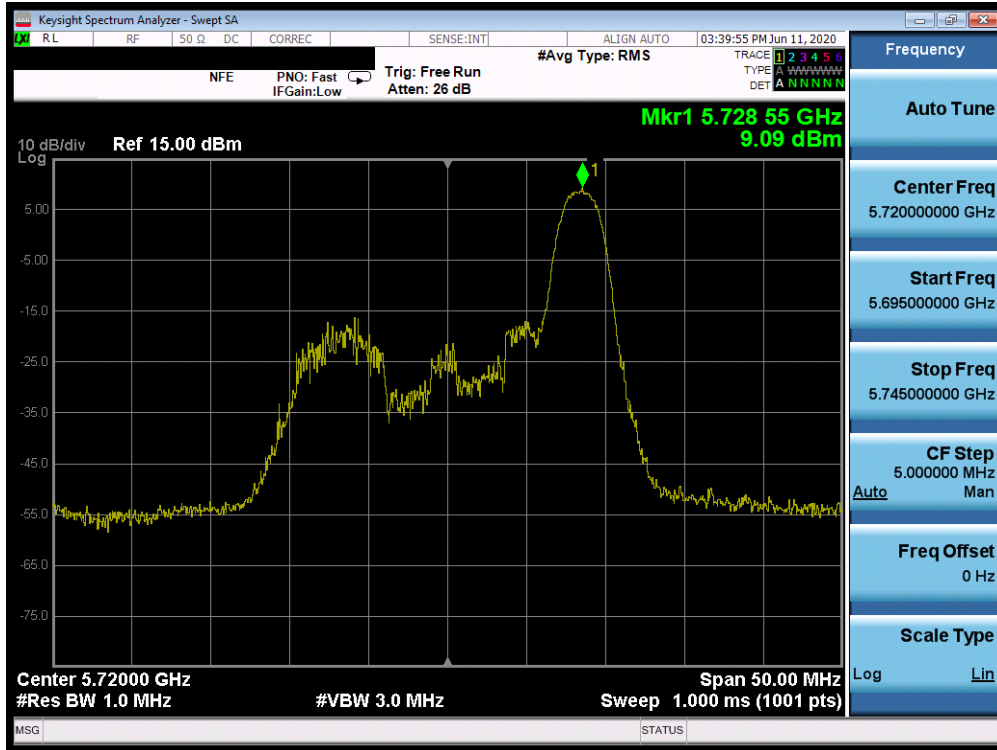


Plot 7-175. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 100)

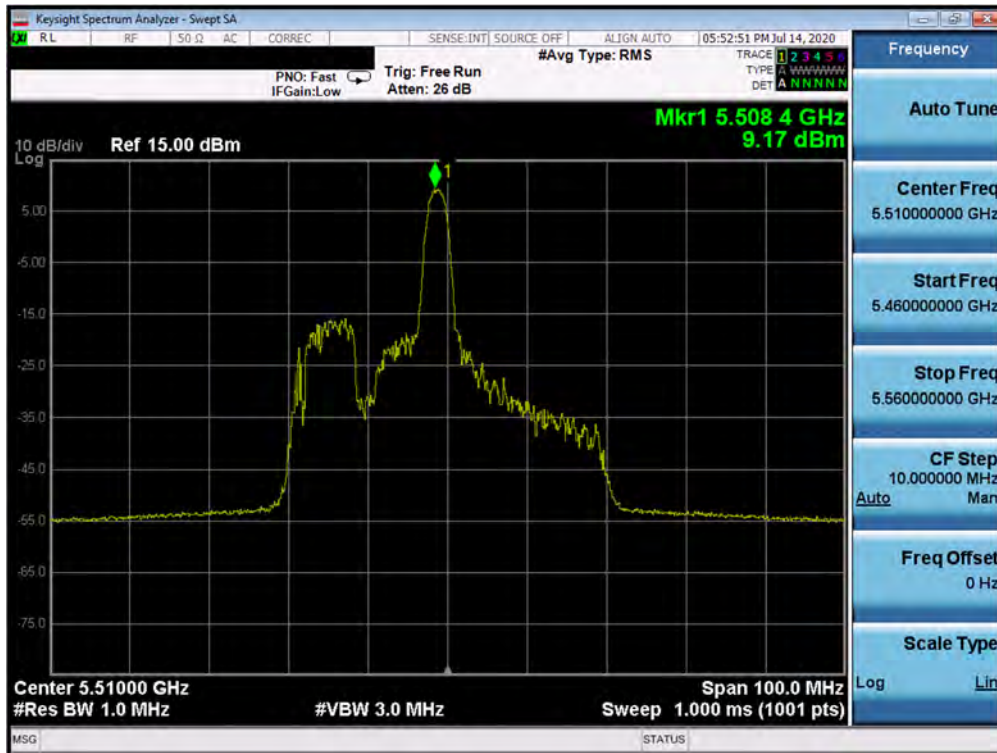


Plot 7-176. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 120)

FCC ID: A3LSMN981U	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 139 of 296

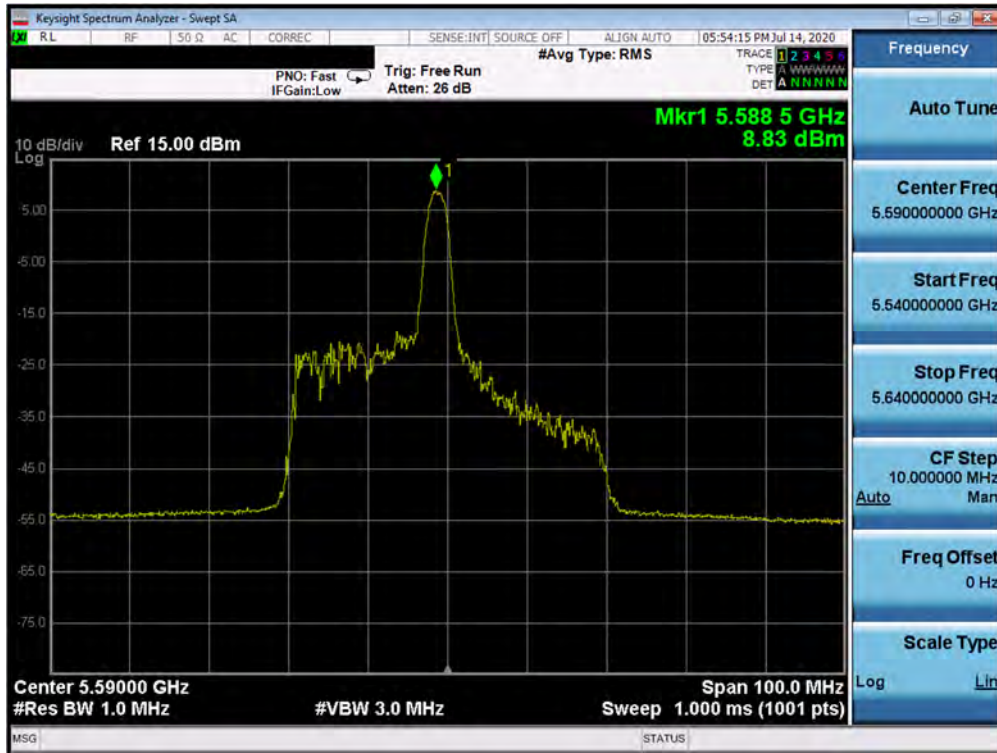


Plot 7-177. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 144)

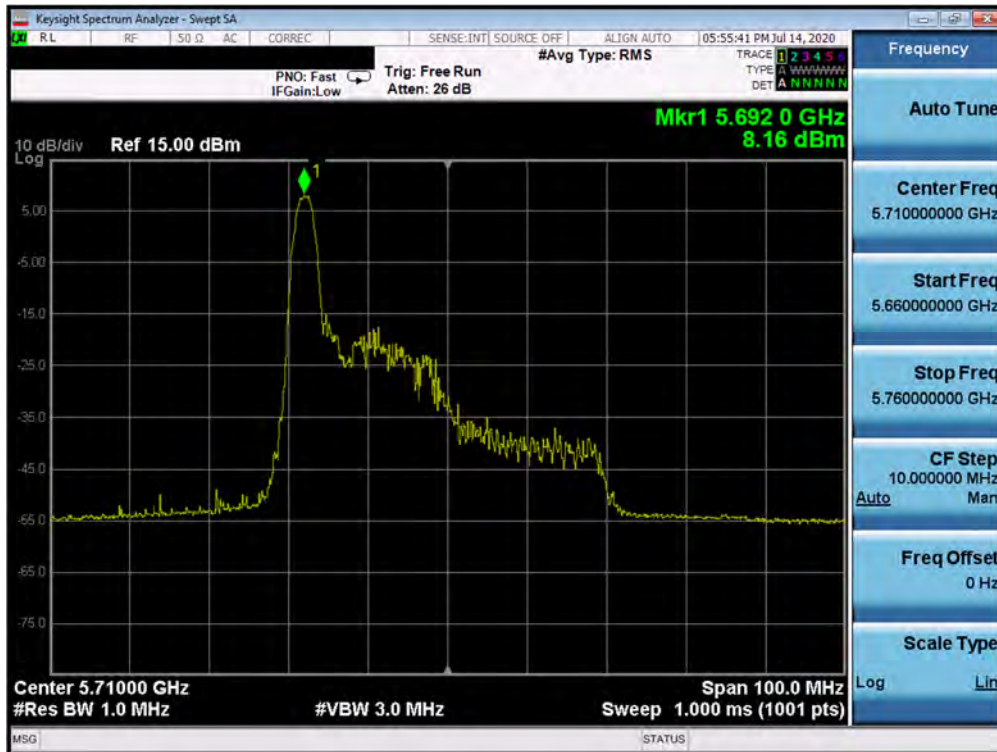


Plot 7-178. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 102)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 140 of 296

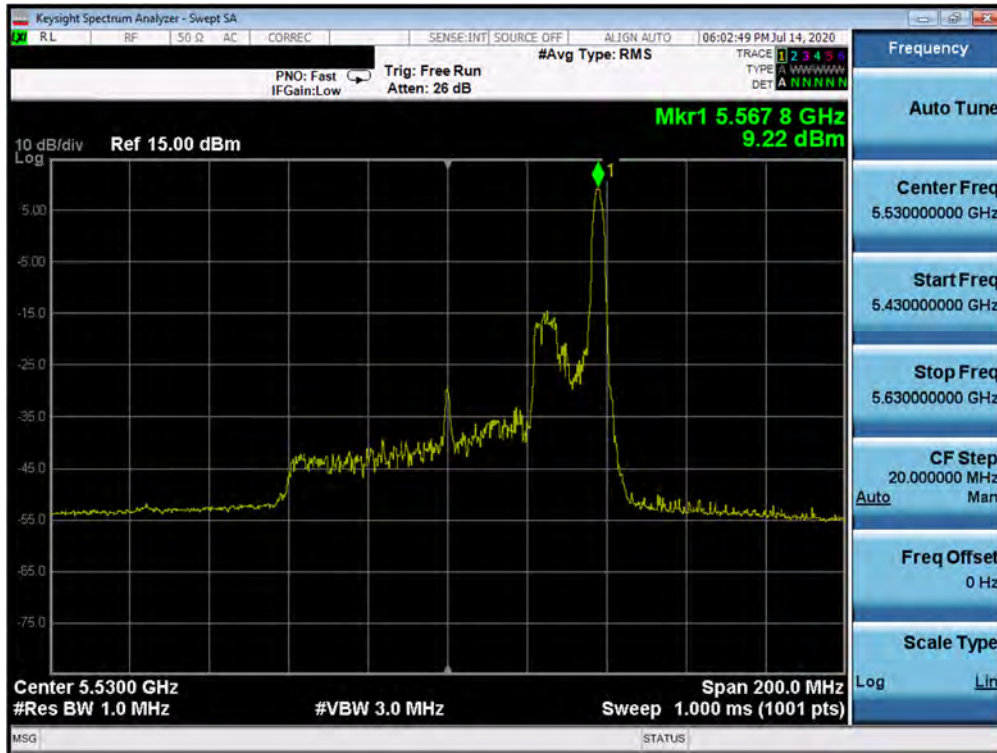


Plot 7-179. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 118)

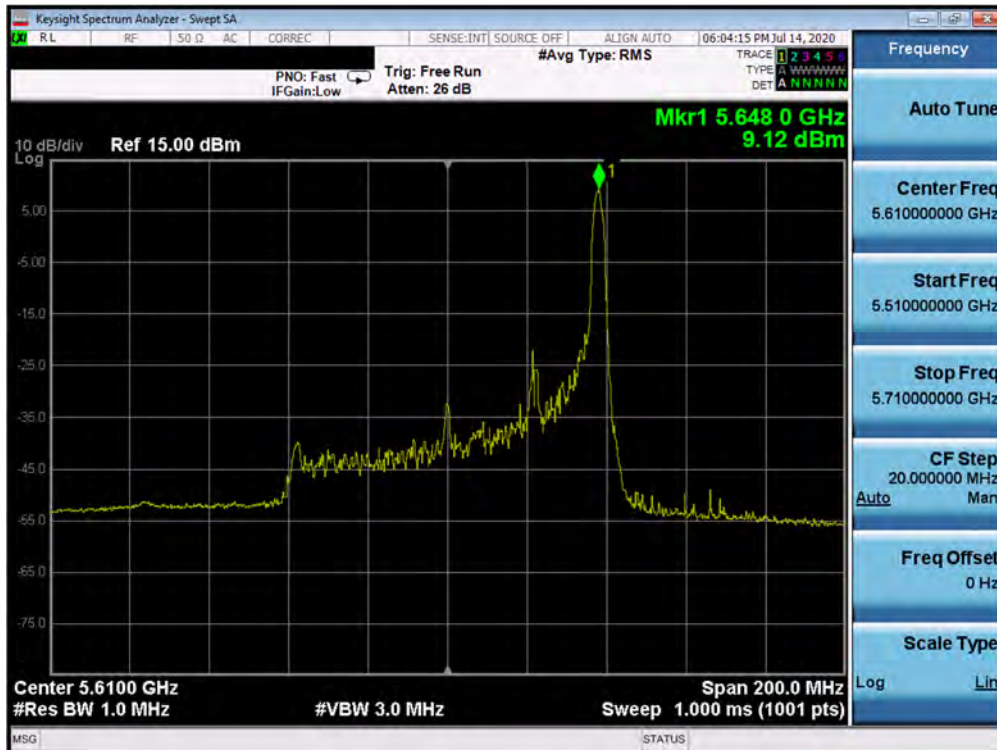


Plot 7-180. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 142)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 141 of 296



Plot 7-181. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 106)



Plot 7-182. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 122)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 142 of 296



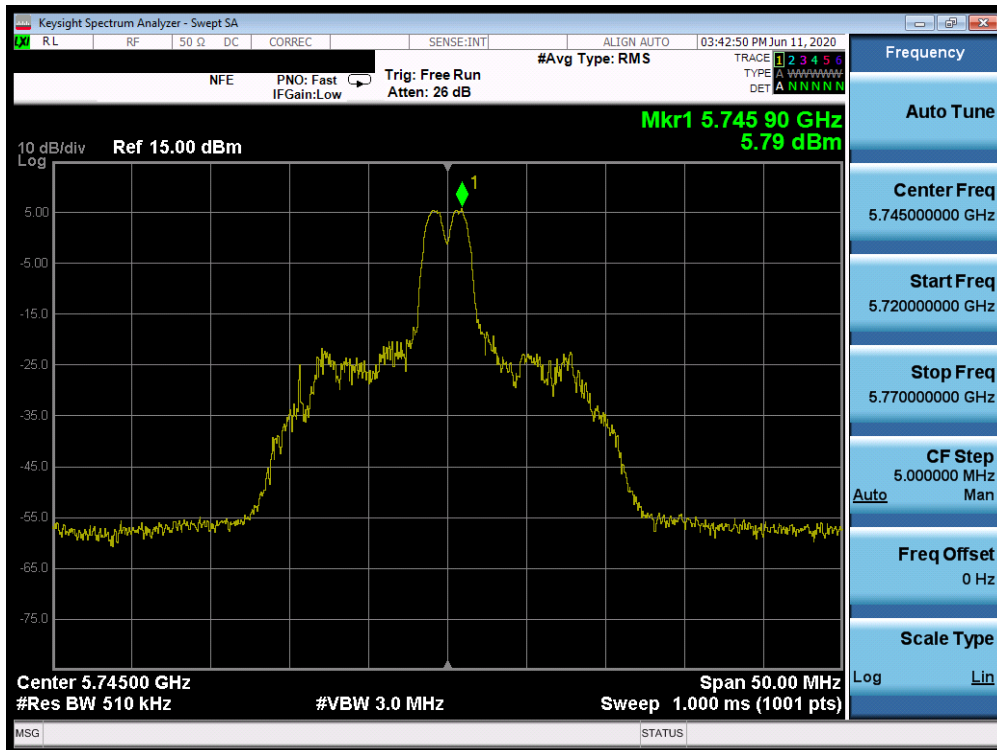
Plot 7-183. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 138)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 143 of 296

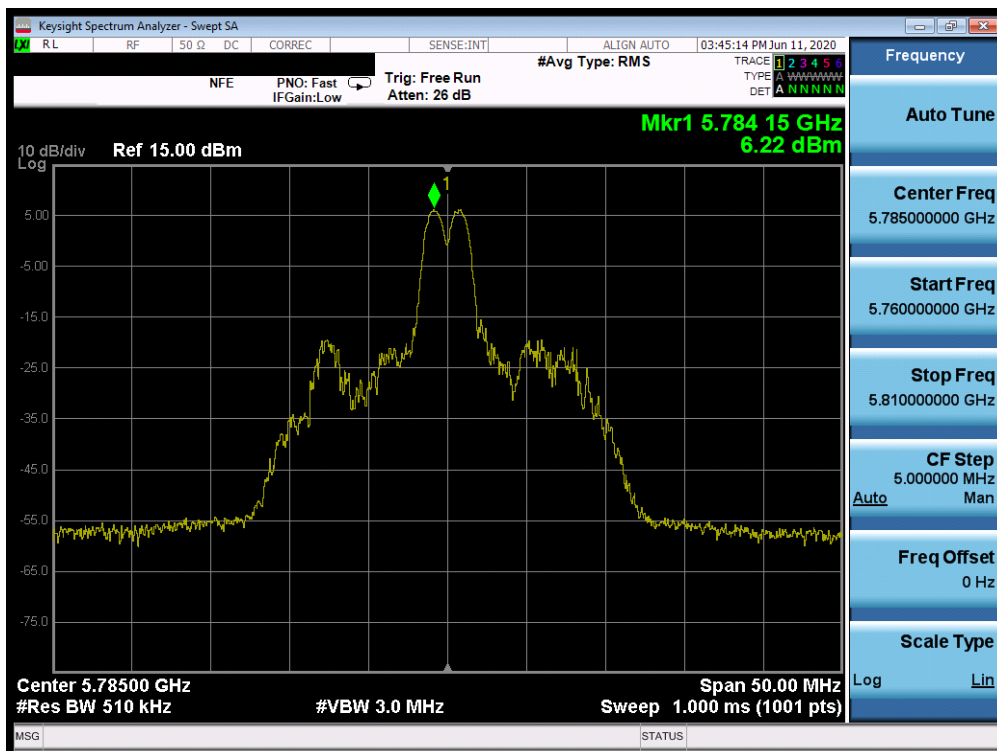
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density	Margin [dB]
Band 3	5745	149	ax (20MHz)	26T	MCS0	5.79	30.00	-24.21
	5785	157	ax (20MHz)	26T	MCS0	6.22	30.00	-23.78
	5825	165	ax (20MHz)	26T	MCS0	5.52	30.00	-24.48
	5755	151	ax (40MHz)	26T	MCS0	8.26	30.00	-21.74
	5795	159	ax (40MHz)	26T	MCS0	8.31	30.00	-21.69
	5775	155	ax (80MHz)	26T	MCS0	8.60	30.00	-21.40

Table 7-60. Band 3 Conducted Power Spectral Density Measurements SISO ANT2 (26 Tones)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 144 of 296

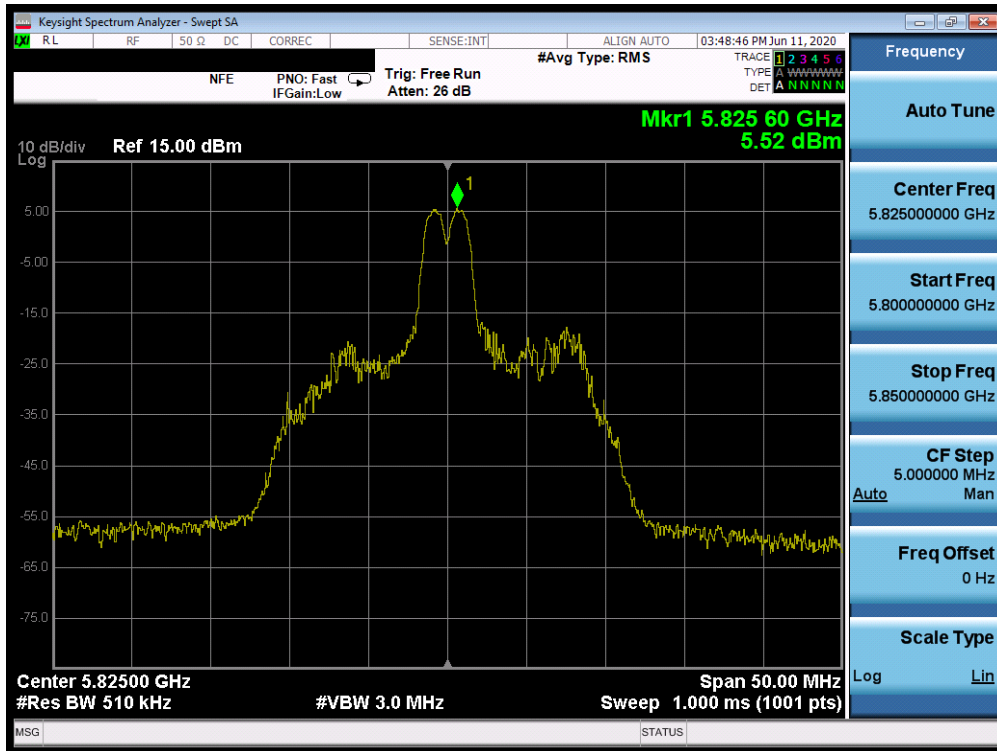


Plot 7-184. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 149)

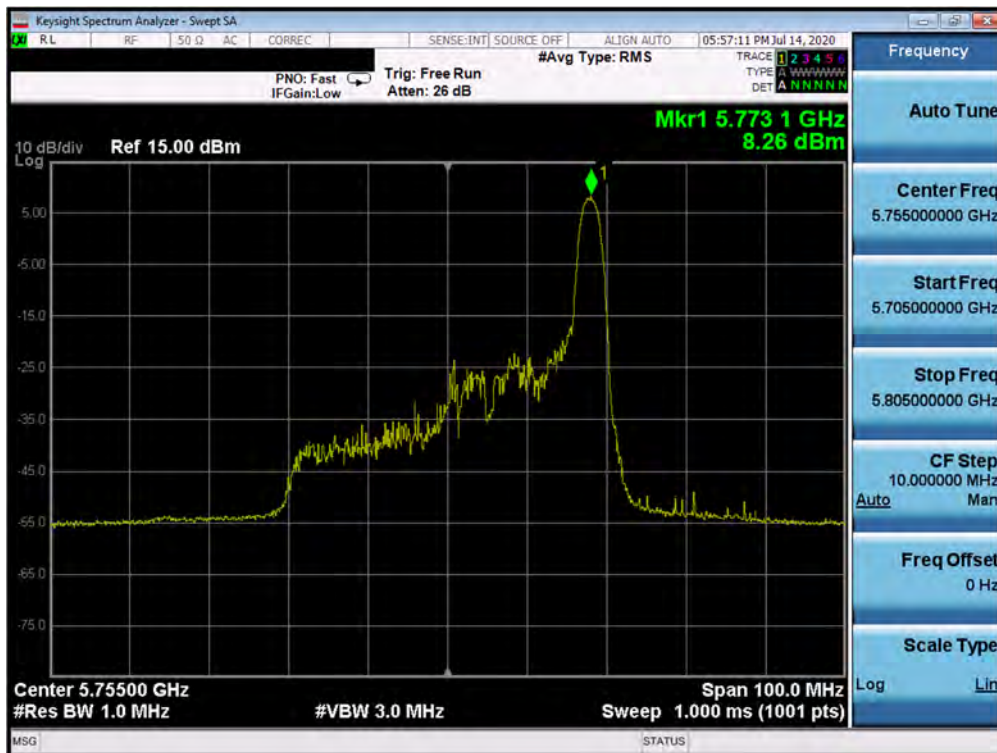


Plot 7-185. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 157)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 145 of 296

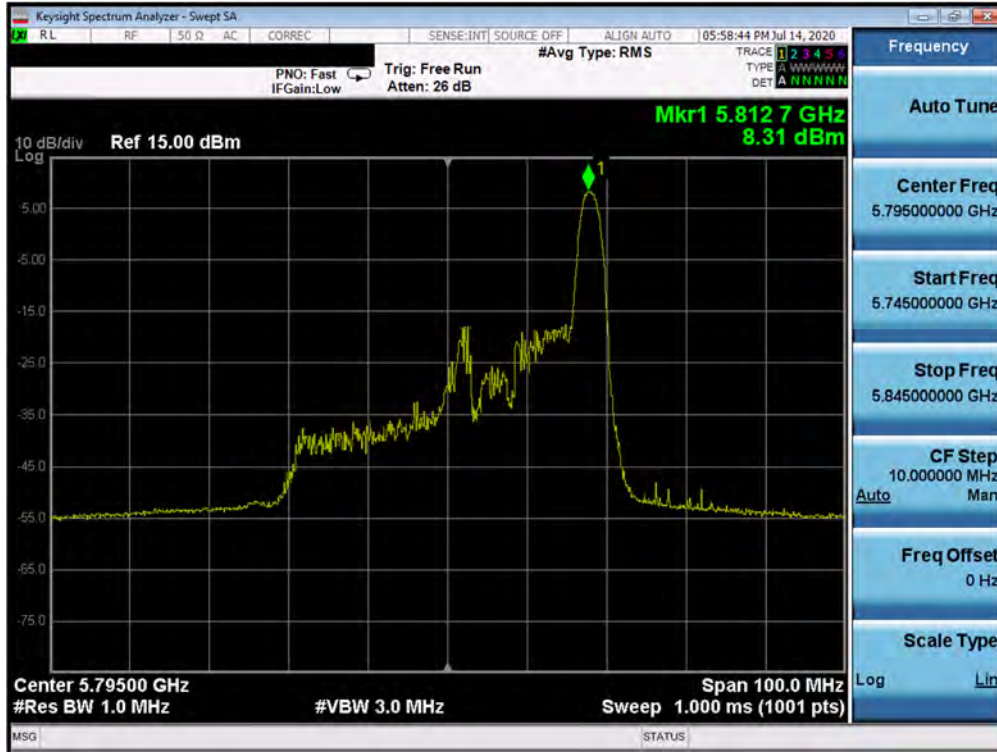


Plot 7-186. Power Spectral Density Plot SISO ANT2 (20 MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 165)

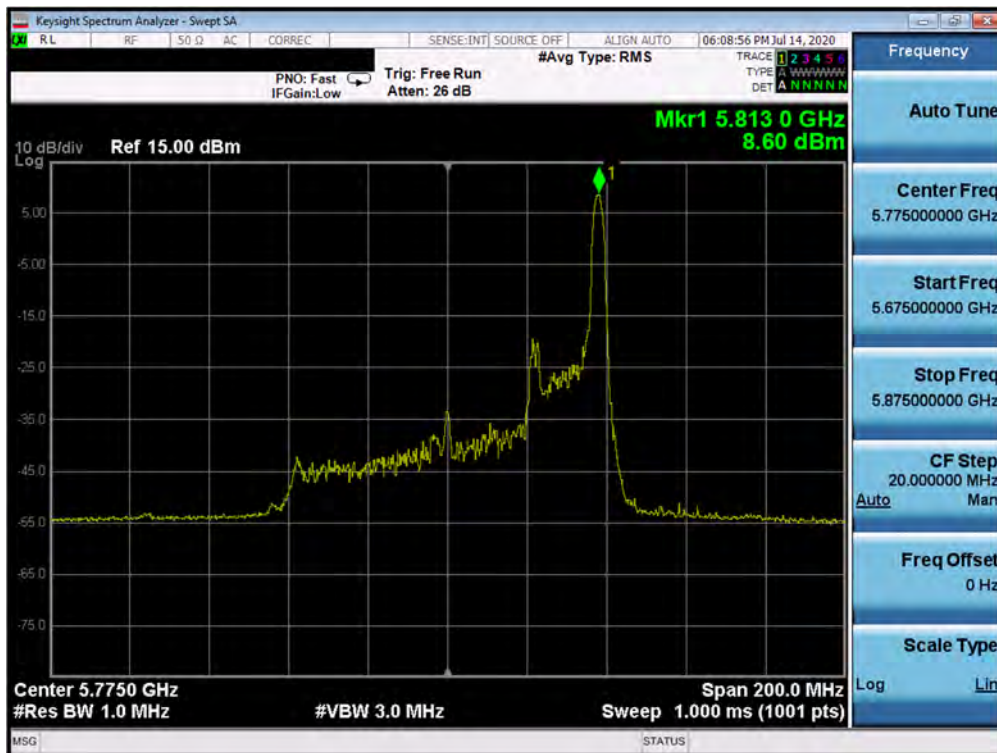


Plot 7-187. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 151)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 146 of 296



Plot 7-188. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 159)



Plot 7-189. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 155)

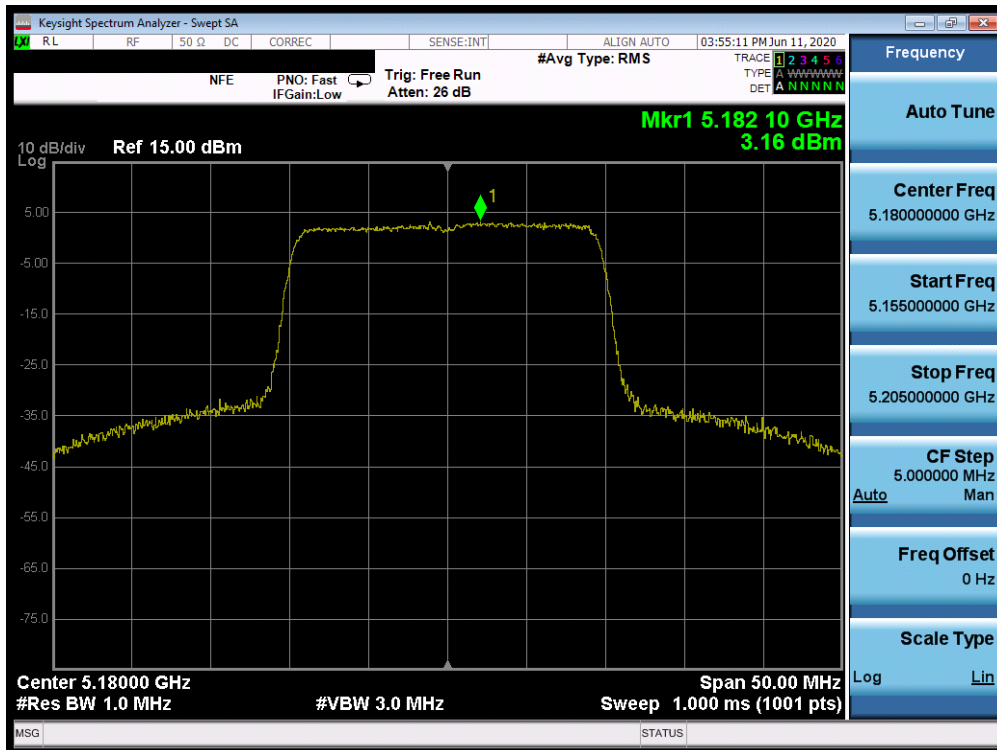
FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 147 of 296

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

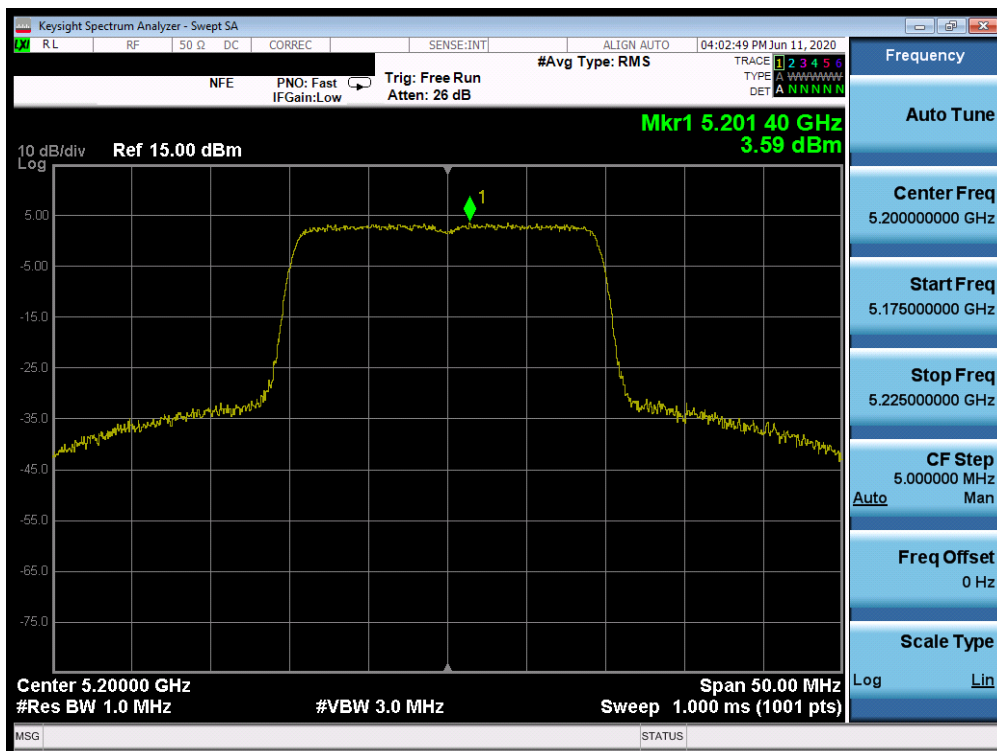
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	ax (20MHz)	242T	MCS0	3.16	11.0	-7.84
	5200	40	ax (20MHz)	242T	MCS0	3.59	11.0	-7.41
	5240	48	ax (20MHz)	242T	MCS0	3.51	11.0	-7.49
	5190	38	ax (40MHz)	484T	MCS0	-1.62	11.0	-12.62
	5230	46	ax (40MHz)	484T	MCS0	-0.56	11.0	-11.56
	5210	42	ax (80MHz)	996T	MCS0	-4.75	11.0	-15.75
Band 2A	5260	52	ax (20MHz)	242T	MCS0	4.08	11.0	-6.92
	5280	56	ax (20MHz)	242T	MCS0	3.92	11.0	-7.08
	5320	64	ax (20MHz)	242T	MCS0	3.48	11.0	-7.52
	5270	54	ax (40MHz)	484T	MCS0	-1.12	11.0	-12.12
	5310	62	ax (40MHz)	484T	MCS0	-1.57	11.0	-12.57
	5290	58	ax (80MHz)	996T	MCS0	-5.32	11.0	-16.32
Band 2C	5500	100	ax (20MHz)	242T	MCS0	4.11	11.0	-6.89
	5600	120	ax (20MHz)	242T	MCS0	3.16	11.0	-7.84
	5720	144	ax (20MHz)	242T	MCS0	3.88	11.0	-7.12
	5510	102	ax (40MHz)	484T	MCS0	-0.65	11.0	-11.65
	5590	118	ax (40MHz)	484T	MCS0	-1.12	11.0	-12.12
	5710	142	ax (40MHz)	484T	MCS0	-0.80	11.0	-11.80
	5530	106	ax (80MHz)	996T	MCS0	-5.77	11.0	-16.77
	5610	122	ax (80MHz)	996T	MCS0	-5.83	11.0	-16.83
	5690	138	ax (80MHz)	996T	MCS0	-8.62	11.0	-19.62

Table 7-61. Conducted Power Spectral Density Measurements SISO ANT2 (Full Tones)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 148 of 296

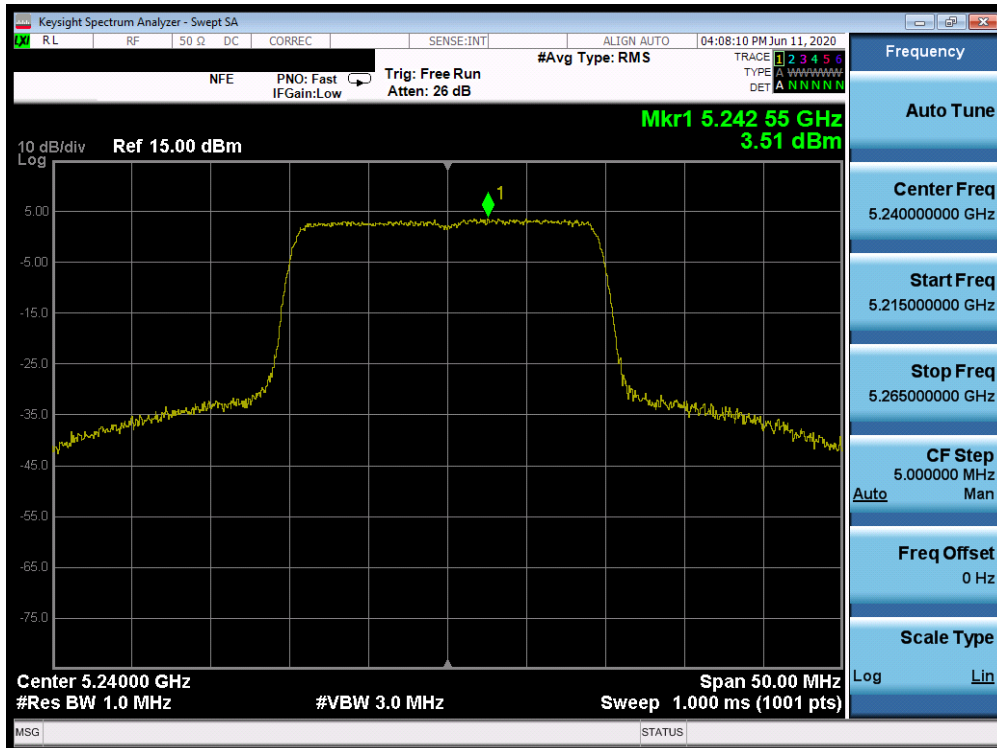


Plot 7-190. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 36)

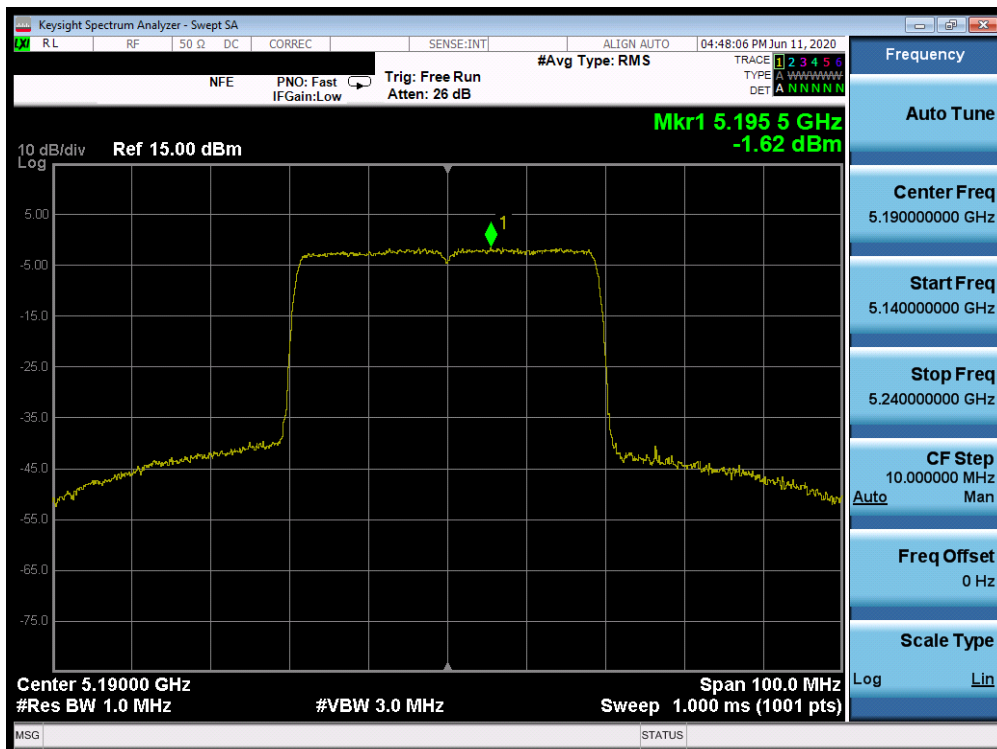


Plot 7-191. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 40)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 149 of 296

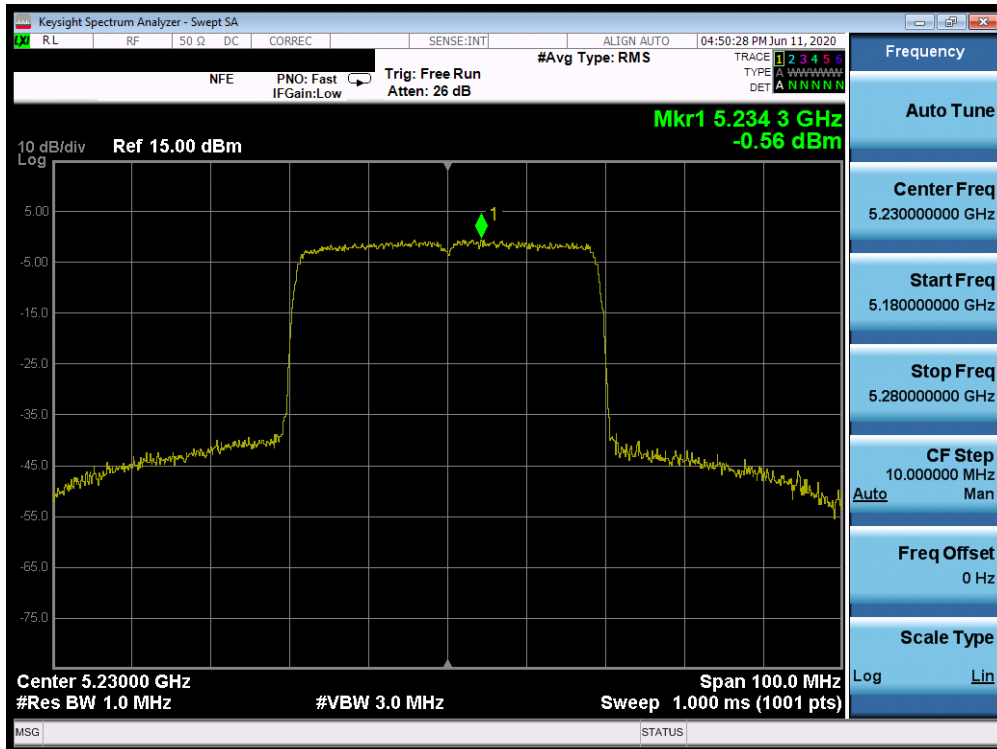


Plot 7-192. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 48)

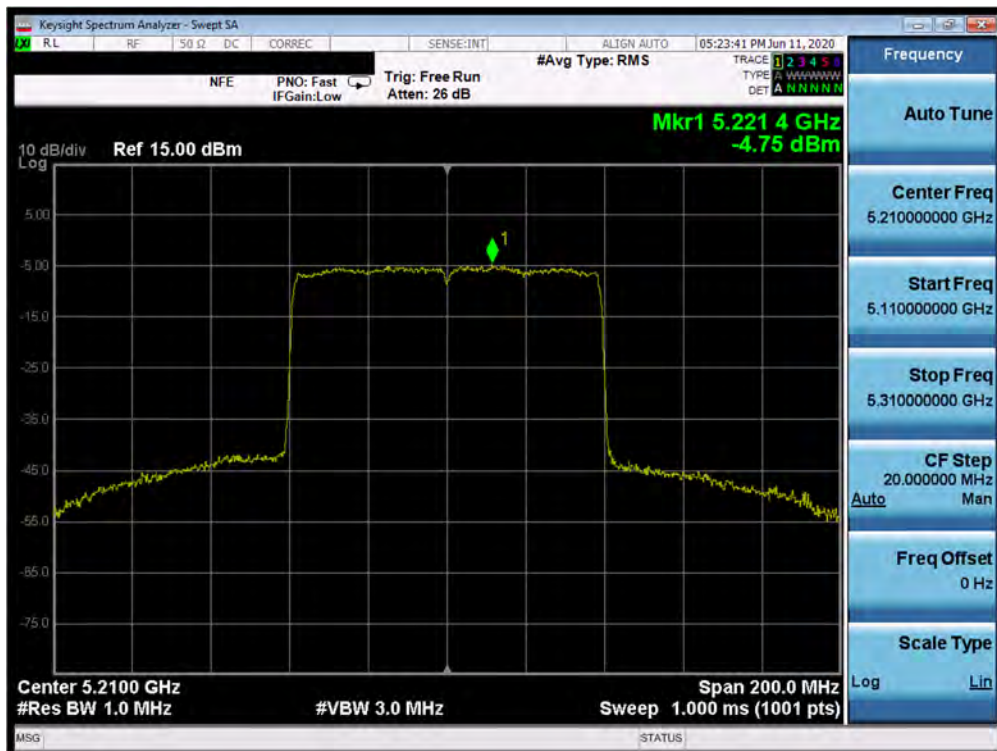


Plot 7-193. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 38)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 150 of 296

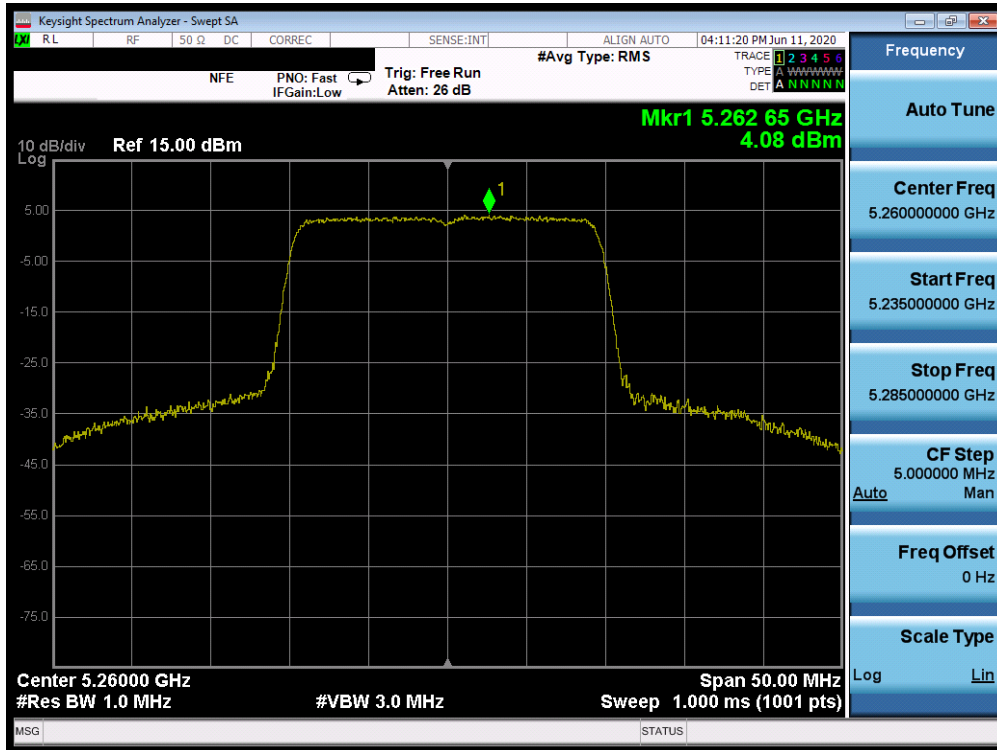


Plot 7-194. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 46)

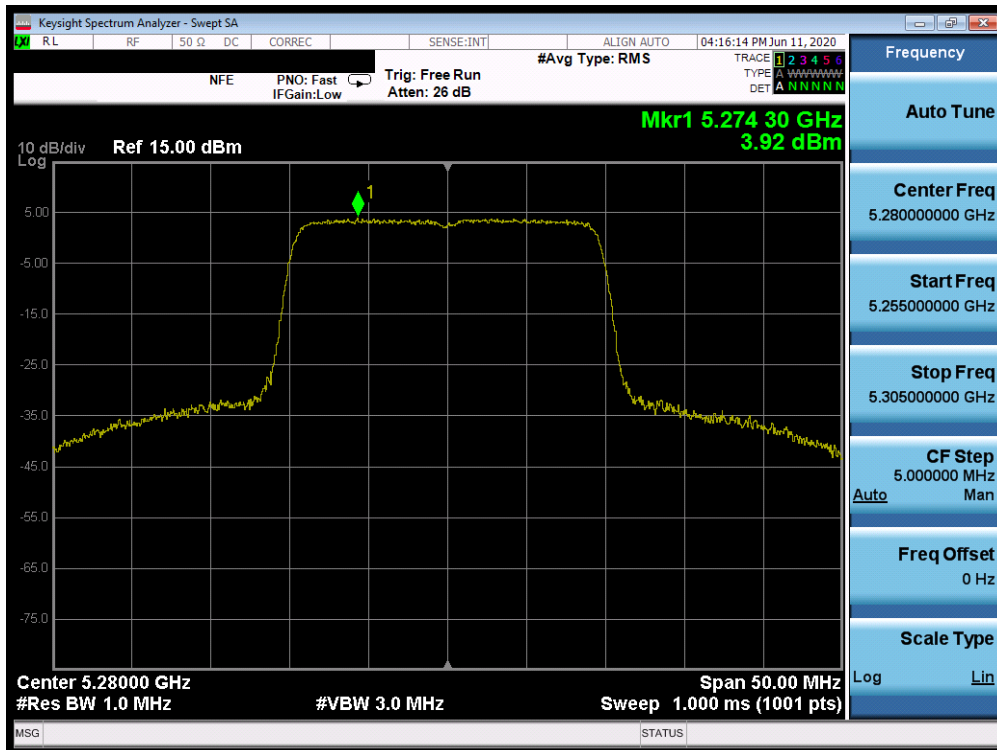


Plot 7-195. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 42)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 151 of 296

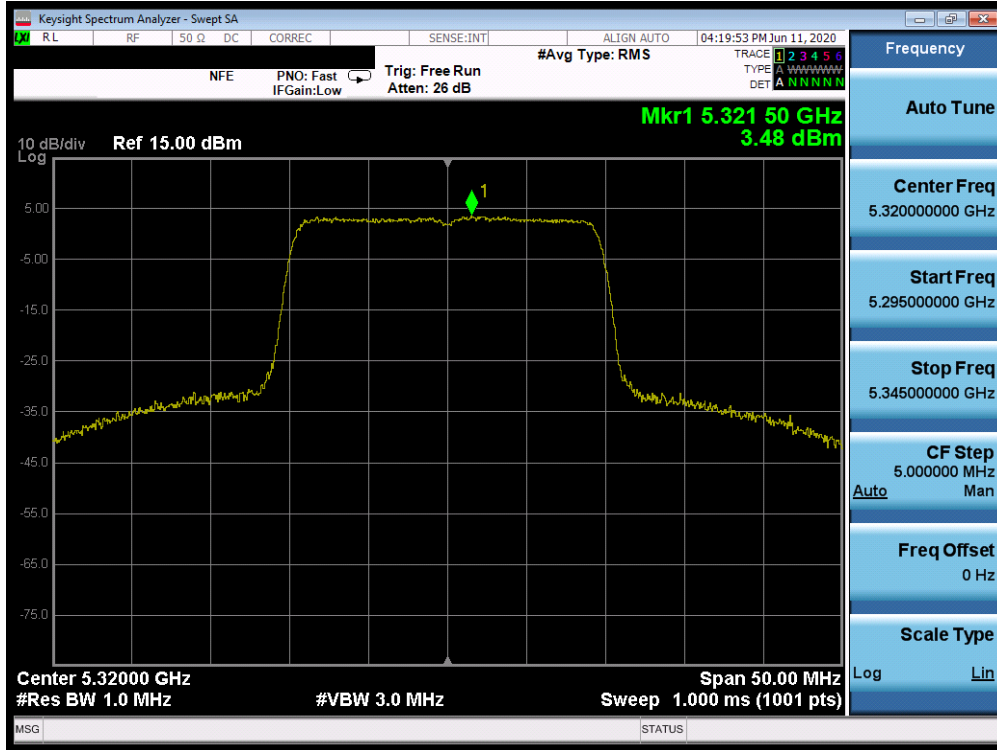


Plot 7-196. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 52)

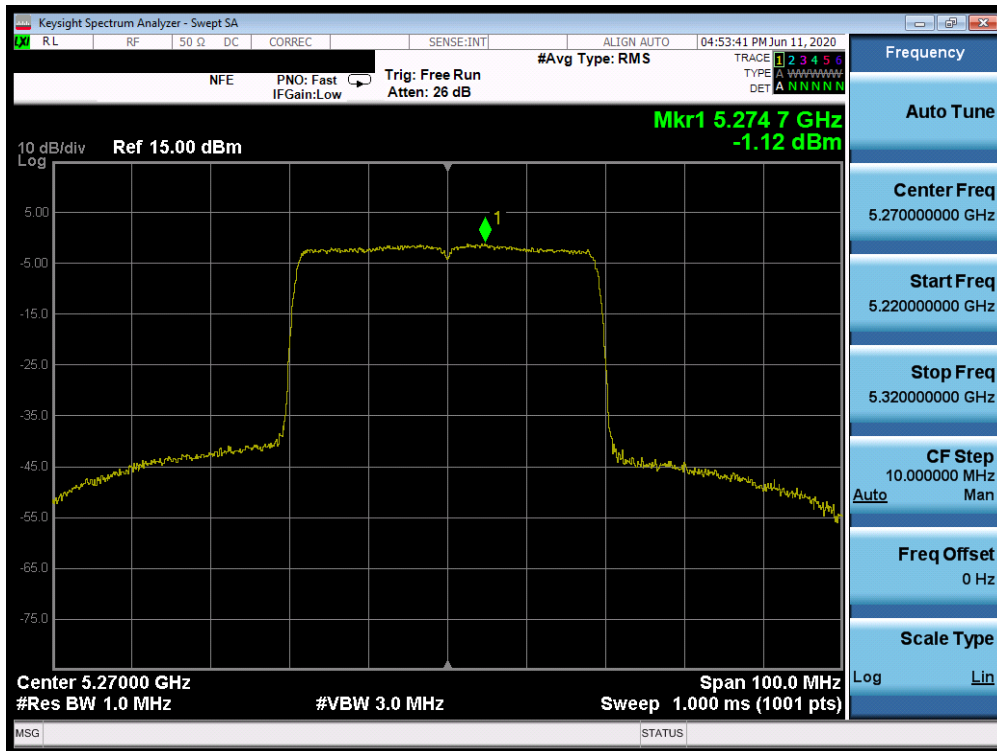


Plot 7-197. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 56)

FCC ID: A3LSMN981U	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 152 of 296

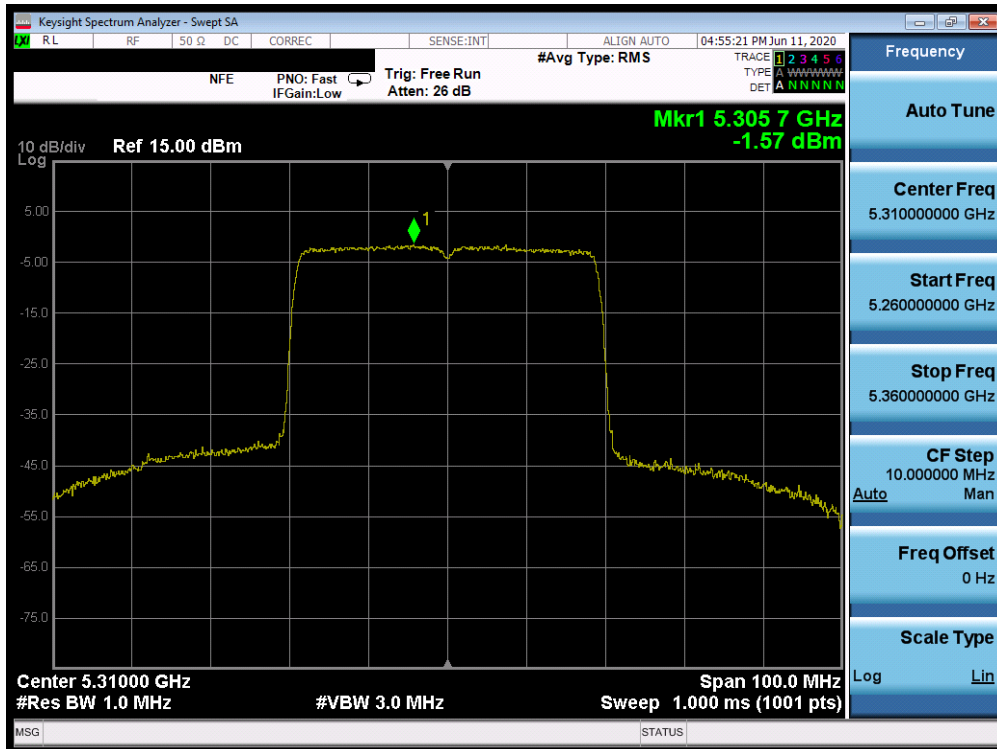


Plot 7-198. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 64)

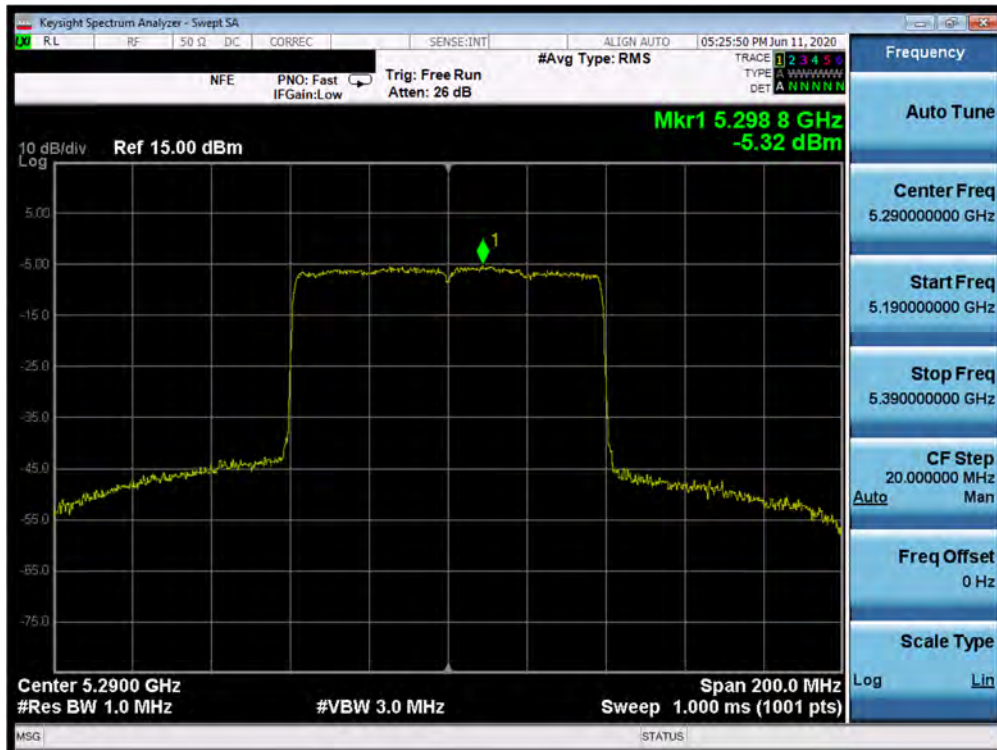


Plot 7-199. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 54)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 153 of 296

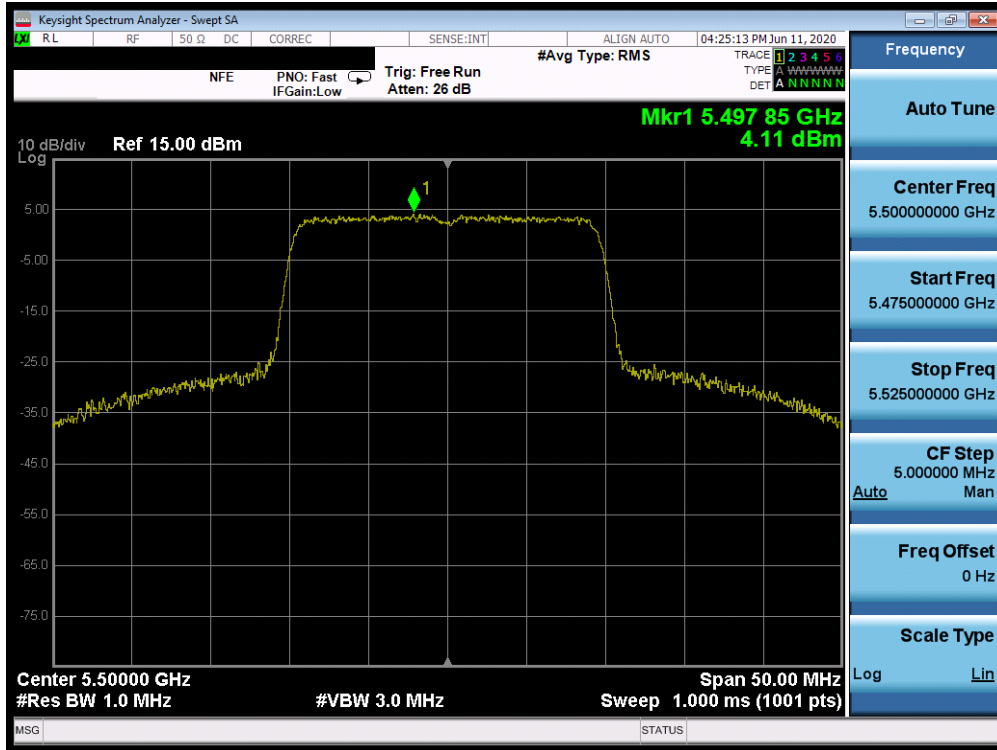


Plot 7-200. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 62)

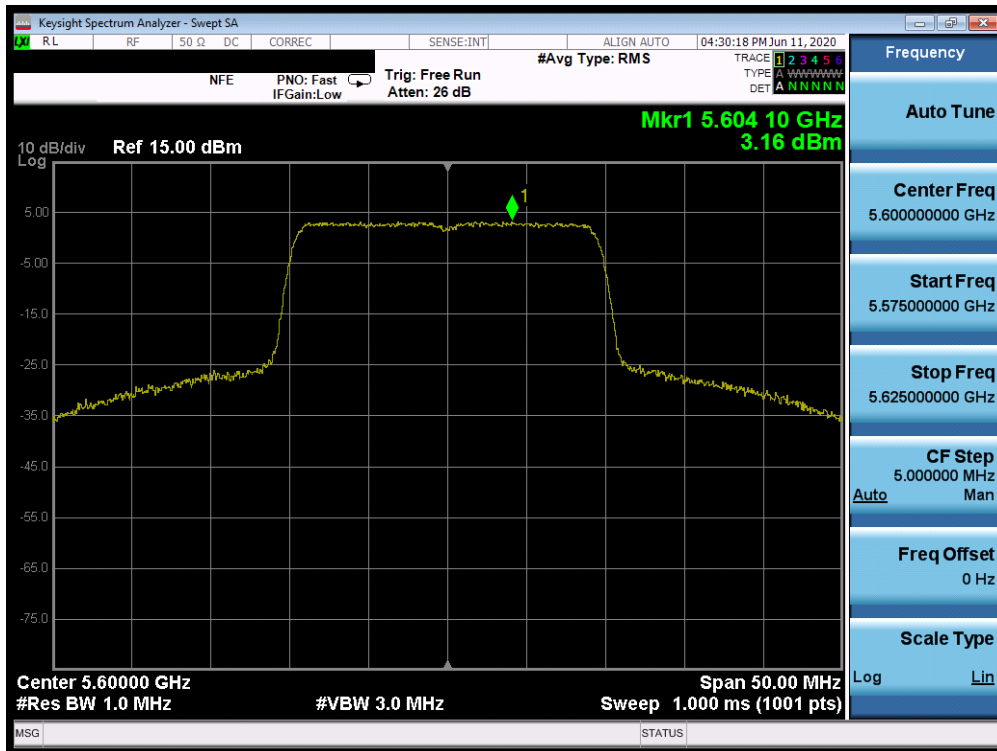


Plot 7-201. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 58)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 154 of 296

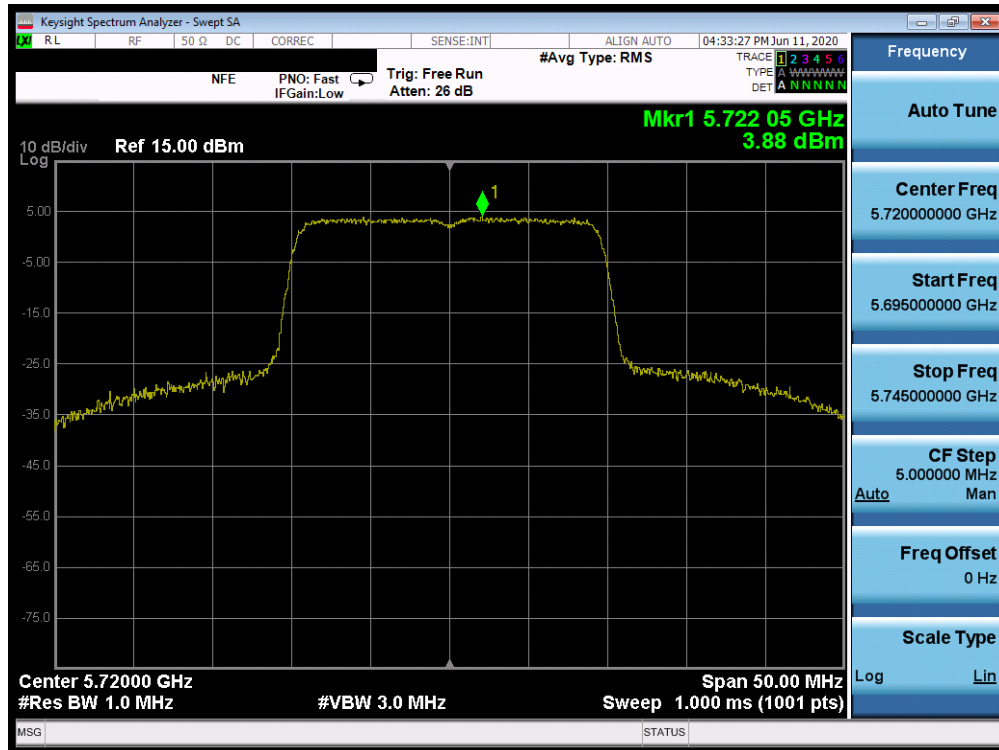


Plot 7-202. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 100)

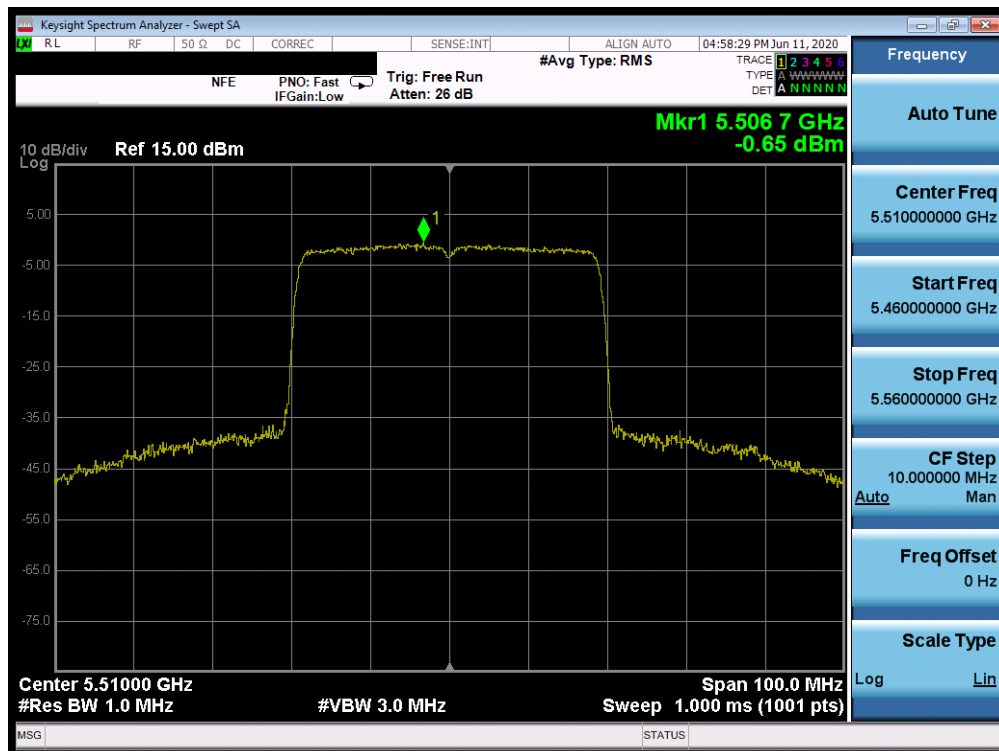


Plot 7-203. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 120)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 155 of 296

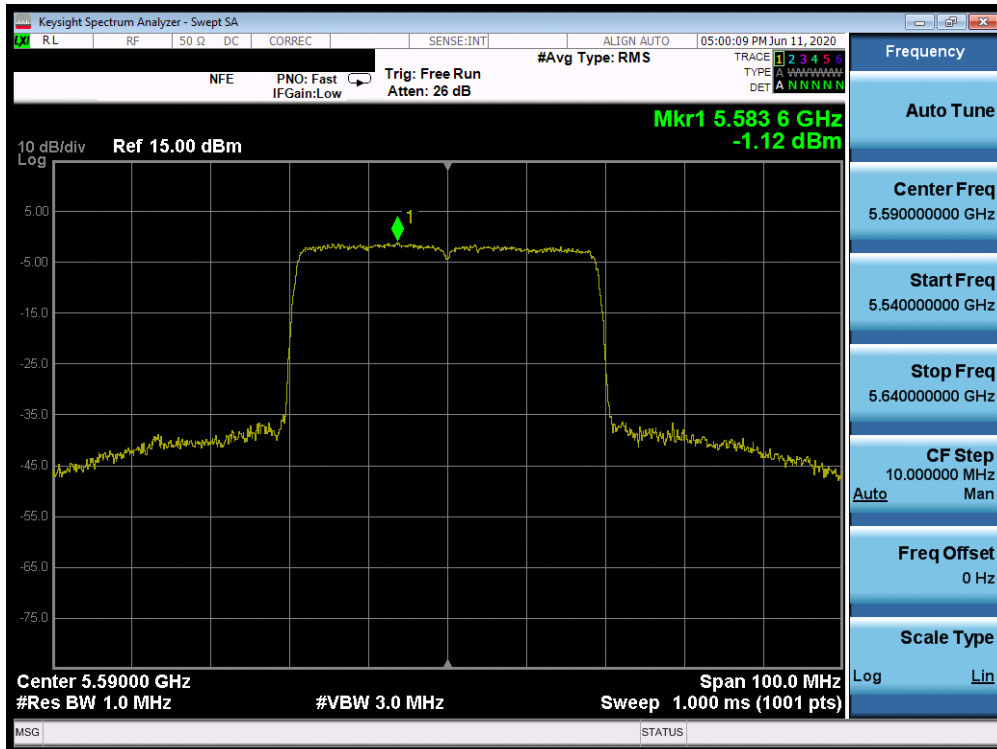


Plot 7-204. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 144)

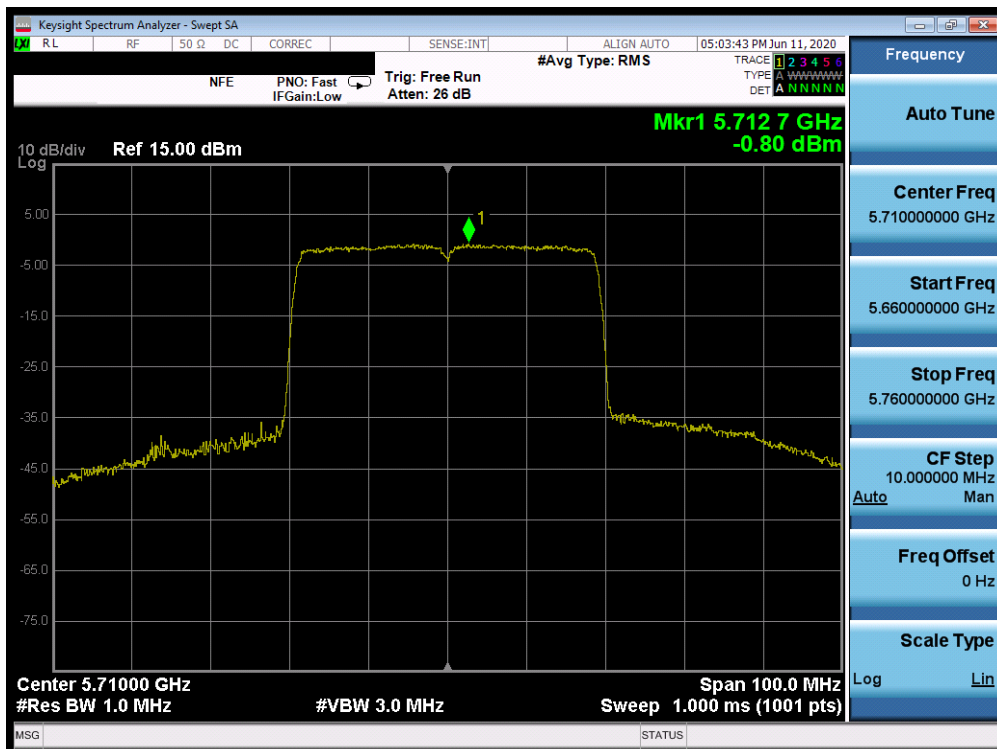


Plot 7-205. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 102)

FCC ID: A3LSMN981U	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 156 of 296



Plot 7-206. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 118)

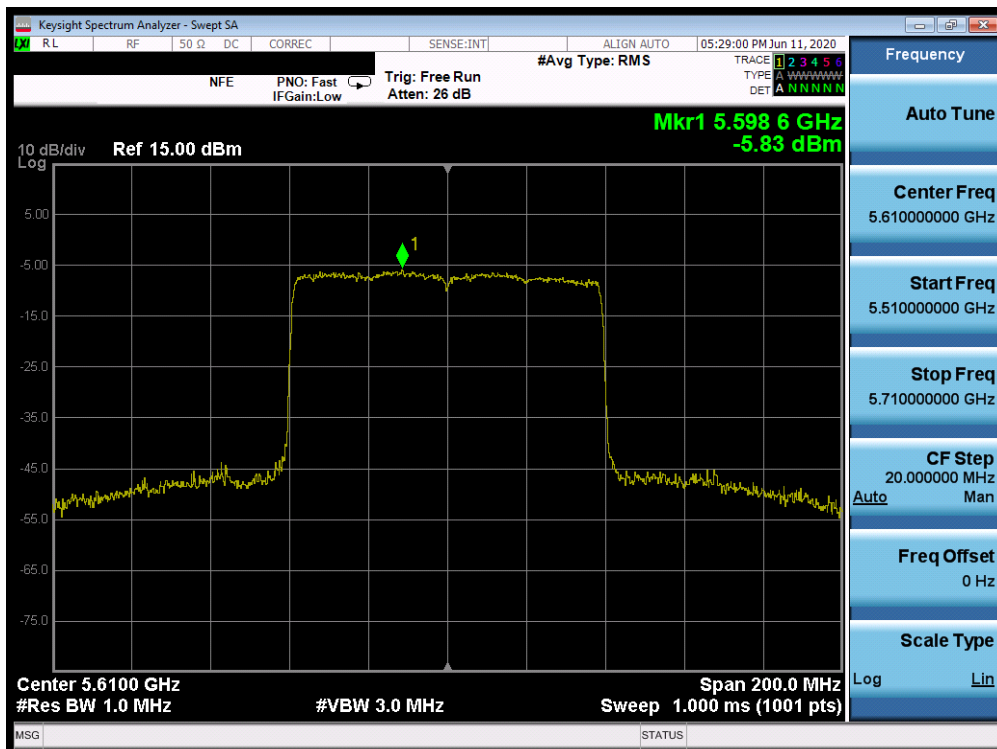


Plot 7-207. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 142)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 157 of 296



Plot 7-208. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 106)



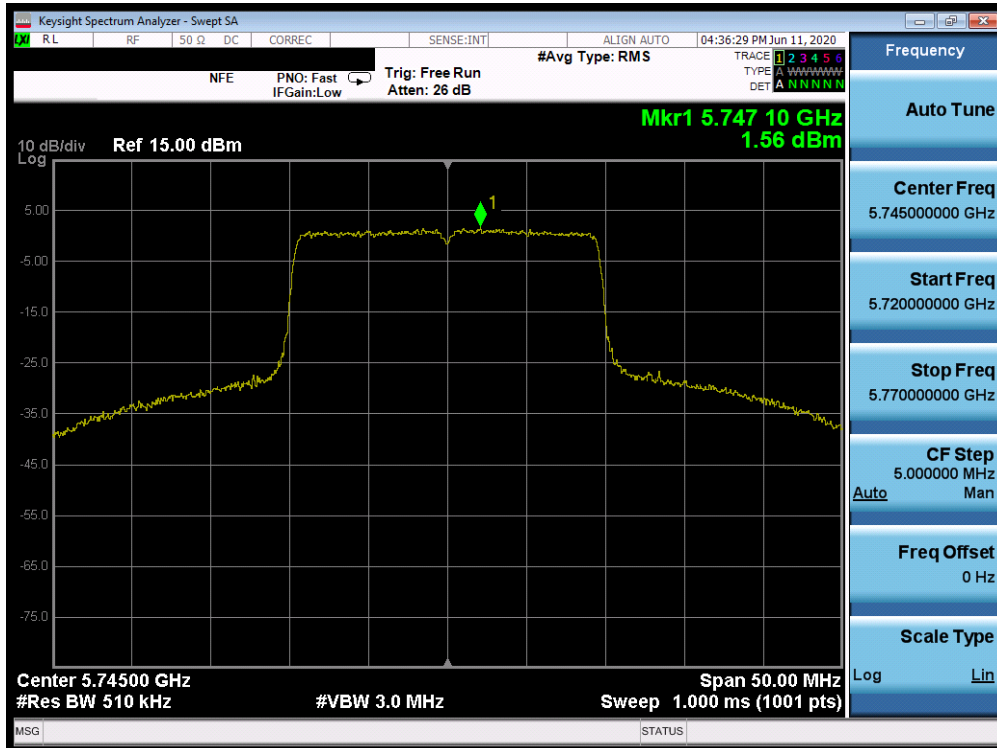
Plot 7-209. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 122)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 158 of 296

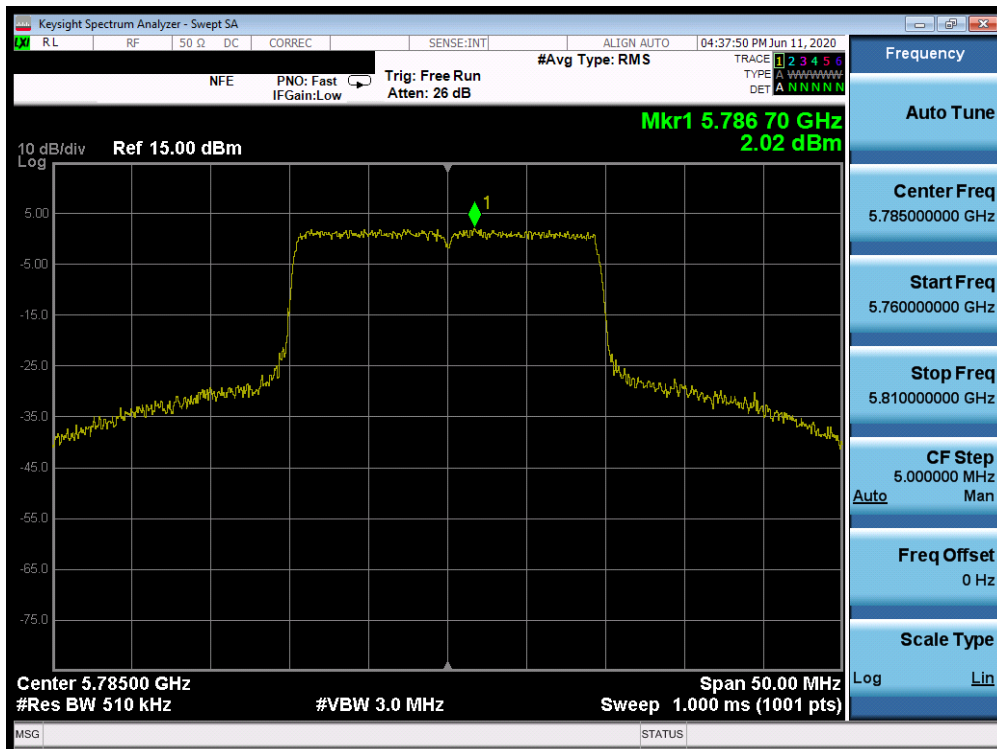
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density	Margin [dB]
Band 3	5745	149	ax (20MHz)	242T	MCS0	1.56	30.00	-28.44
	5785	157	ax (20MHz)	242T	MCS0	2.02	30.00	-27.98
	5825	165	ax (20MHz)	242T	MCS0	1.24	30.00	-28.76
	5755	151	ax (40MHz)	484T	MCS0	-3.88	30.00	-33.88
	5795	159	ax (40MHz)	484T	MCS0	-2.92	30.00	-32.92
	5775	155	ax (80MHz)	996T	MCS0	-5.05	30.00	-35.05

Table 7-62. Band 3 Conducted Power Spectral Density Measurements SISO ANT2 (Full Tones)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 160 of 296

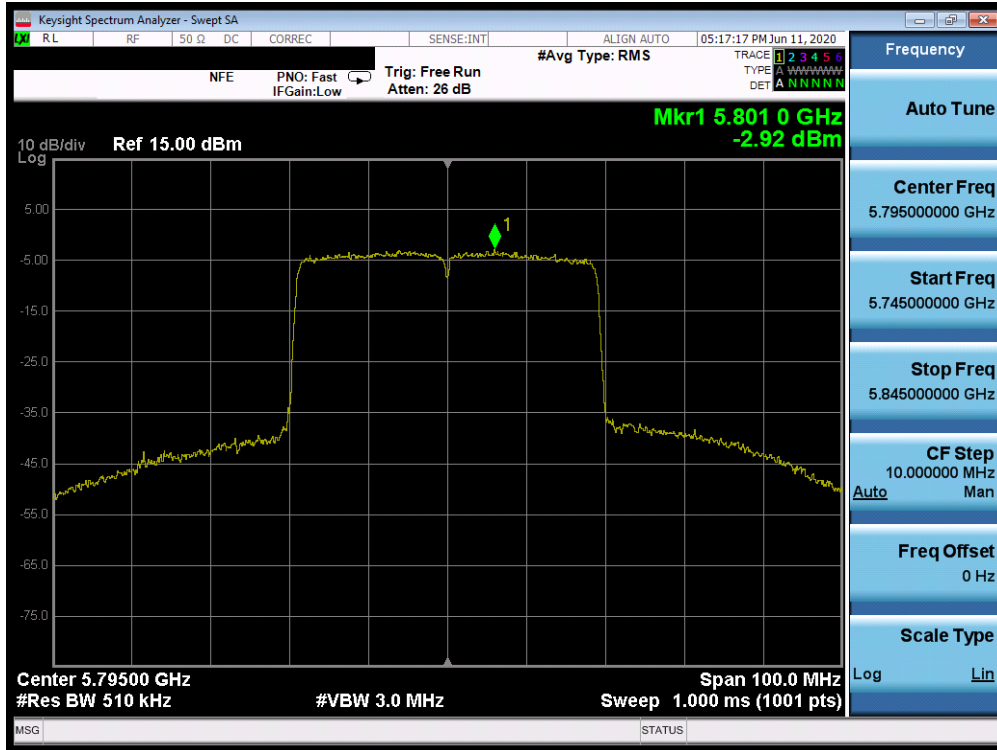


Plot 7-211. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 149)

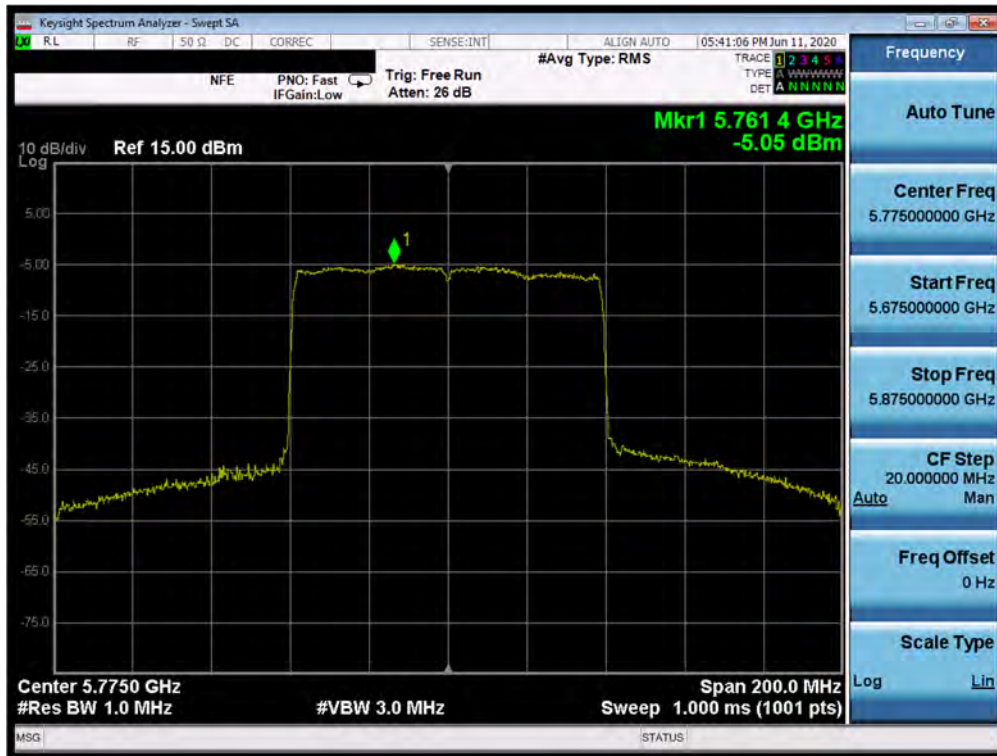


Plot 7-212. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 157)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 161 of 296



Plot 7-215. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 159)



Plot 7-216. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 155)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 163 of 296

Summed MIMO Power Spectral Density Measurements (26 Tones)

	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Antenna-1 Power Density [dBm]	Antenna-2 Power Density [dBm]	Summed MIMO Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	ax (20MHz)	26T	MCS0	6.06	4.46	8.34	11.00	-2.66
	5200	40	ax (20MHz)	26T	MCS0	5.54	4.60	8.11	11.00	-2.89
	5240	48	ax (20MHz)	26T	MCS0	5.56	4.86	8.23	11.00	-2.77
	5190	38	ax (40MHz)	26T	MCS0	5.50	4.95	8.24	11.00	-2.76
	5230	46	ax (40MHz)	26T	MCS0	6.17	5.76	8.98	11.00	-2.02
	5210	42	ax (80MHz)	26T	MCS0	6.49	-8.07	6.64	11.00	-4.36
Band 2A	5260	52	ax (20MHz)	26T	MCS0	4.46	4.79	7.64	11.00	-3.36
	5280	56	ax (20MHz)	26T	MCS0	4.62	4.61	7.63	11.00	-3.37
	5320	64	ax (20MHz)	26T	MCS0	4.91	4.18	7.57	11.00	-3.43
	5270	54	ax (40MHz)	26T	MCS0	6.65	6.10	9.39	11.00	-1.61
	5310	62	ax (40MHz)	26T	MCS0	5.62	4.62	8.16	11.00	-2.84
	5290	58	ax (80MHz)	26T	MCS0	6.49	-8.96	6.61	11.00	-4.39
Band 2C	5500	100	ax (20MHz)	26T	MCS0	4.56	4.05	7.32	11.00	-3.68
	5600	120	ax (20MHz)	26T	MCS0	4.42	3.84	7.15	11.00	-3.85
	5720	144	ax (20MHz)	26T	MCS0	3.58	3.71	6.66	11.00	-4.34
	5510	102	ax (40MHz)	26T	MCS0	6.39	6.13	9.27	11.00	-1.73
	5590	118	ax (40MHz)	26T	MCS0	5.89	5.65	8.78	11.00	-2.22
	5710	142	ax (40MHz)	26T	MCS0	6.17	5.52	8.87	11.00	-2.13
	5530	106	ax (80MHz)	26T	MCS0	5.25	5.56	8.42	11.00	-2.58
	5610	122	ax (80MHz)	26T	MCS0	4.62	4.91	7.78	11.00	-3.22
	5690	138	ax (80MHz)	26T	MCS0	4.45	4.37	7.42	11.00	-3.58

Table 7-63. Bands 1, 2A, 2C MIMO Conducted Power Spectral Density Measurements MIMO (26 Tones)

	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Antenna-1 Power Density [dBm]	Antenna-2 Power Density [dBm]	Summed MIMO Power Density [dBm]	Max Permissible Power Density	Margin [dB]
Band 3	5745	149	ax (20MHz)	26T	MCS0	2.21	1.79	5.02	30.00	-24.98
	5785	157	ax (20MHz)	26T	MCS0	2.72	2.26	5.51	30.00	-24.49
	5825	165	ax (20MHz)	26T	MCS0	2.16	1.81	5.00	30.00	-25.00
	5755	151	ax (40MHz)	26T	MCS0	6.26	5.31	8.82	30.00	-21.18
	5795	159	ax (40MHz)	26T	MCS0	6.26	5.44	8.88	30.00	-21.12
	5775	155	ax (80MHz)	26T	MCS0	6.40	4.99	8.76	30.00	-21.24

Table 7-64. Band 3 MIMO Conducted Power Spectral Density Measurements MIMO (26 Tones)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 164 of 296

	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Antenna-1 Power Density [dBm]	Antenna-2 Power Density [dBm]	Summed MIMO Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	ax (20MHz)	242T	MCS0	0.64	1.33	4.01	11.00	-6.99
	5200	40	ax (20MHz)	242T	MCS0	0.58	0.49	3.55	11.00	-7.45
	5240	48	ax (20MHz)	242T	MCS0	0.52	0.96	3.76	11.00	-7.24
	5190	38	ax (40MHz)	242T	MCS0	-5.71	-4.35	-1.97	11.00	-12.97
	5230	46	ax (40MHz)	242T	MCS0	-3.72	-3.57	-0.63	11.00	-11.63
Band 2A	5210	42	ax (80MHz)	242T	MCS0	-8.63	-8.07	-5.33	11.00	-16.33
	5260	52	ax (20MHz)	242T	MCS0	1.08	1.36	4.23	11.00	-6.77
	5280	56	ax (20MHz)	242T	MCS0	0.91	1.29	4.11	11.00	-6.89
	5320	64	ax (20MHz)	242T	MCS0	1.04	1.17	4.12	11.00	-6.88
	5270	54	ax (40MHz)	242T	MCS0	-3.85	-3.99	-0.91	11.00	-11.91
	5310	62	ax (40MHz)	242T	MCS0	-4.22	-3.81	-1.00	11.00	-12.00
Band 2C	5290	58	ax (80MHz)	242T	MCS0	-9.72	-8.96	-6.31	11.00	-17.31
	5500	100	ax (20MHz)	242T	MCS0	-0.16	0.45	3.17	11.00	-7.83
	5600	120	ax (20MHz)	242T	MCS0	-0.65	-0.01	2.69	11.00	-8.31
	5720	144	ax (20MHz)	242T	MCS0	-0.29	0.58	3.18	11.00	-7.82
	5510	102	ax (40MHz)	242T	MCS0	-4.86	-4.75	-1.79	11.00	-12.79
	5590	118	ax (40MHz)	242T	MCS0	-5.42	-5.22	-2.31	11.00	-13.31
	5710	142	ax (40MHz)	242T	MCS0	-4.97	-4.55	-1.74	11.00	-12.74
	5530	106	ax (80MHz)	242T	MCS0	-8.37	-8.19	-5.27	11.00	-16.27
5610	122	ax (80MHz)	242T	MCS0	-10.17	-9.22	-6.66	11.00	-17.66	
	5690	138	ax (80MHz)	242T	MCS0	-11.23	-11.60	-8.40	11.00	-19.40

Table 7-65. Bands 1, 2A, 2C MIMO Conducted Power Spectral Density Measurements MIMO (Full Tones)

	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Antenna-1 Power Density [dBm]	Antenna-2 Power Density [dBm]	Summed MIMO Power Density [dBm]	Max Permissible Power Density	Margin [dB]
Band 3	5745	149	ax (20MHz)	242T	MCS0	-2.18	-2.31	0.77	30.00	-29.23
	5785	157	ax (20MHz)	242T	MCS0	-2.29	-2.17	0.78	30.00	-29.22
	5825	165	ax (20MHz)	242T	MCS0	-2.72	-2.43	0.44	30.00	-29.56
	5755	151	ax (40MHz)	242T	MCS0	-7.52	-6.56	-4.00	30.00	-34.00
	5795	159	ax (40MHz)	242T	MCS0	-7.14	-7.27	-4.19	30.00	-34.19
	5775	155	ax (80MHz)	242T	MCS0	-9.20	-7.78	-5.42	30.00	-35.42

Table 7-66. Band 3 MIMO Conducted Power Spectral Density Measurements MIMO (Full Tones)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 165 of 296

Note:

Per ANSI C63.10-2013 Section 14.3.2.2 and KDB 662911 v02r01 Section E)2), the power spectral density at Antenna 1 and Antenna 2 were first measured separately with reduced Antenna 1 and Antenna 2 powers per manufacture's tune-up document. The measured values were then summed in linear power units then converted back to dBm.

Sample MIMO Calculation:

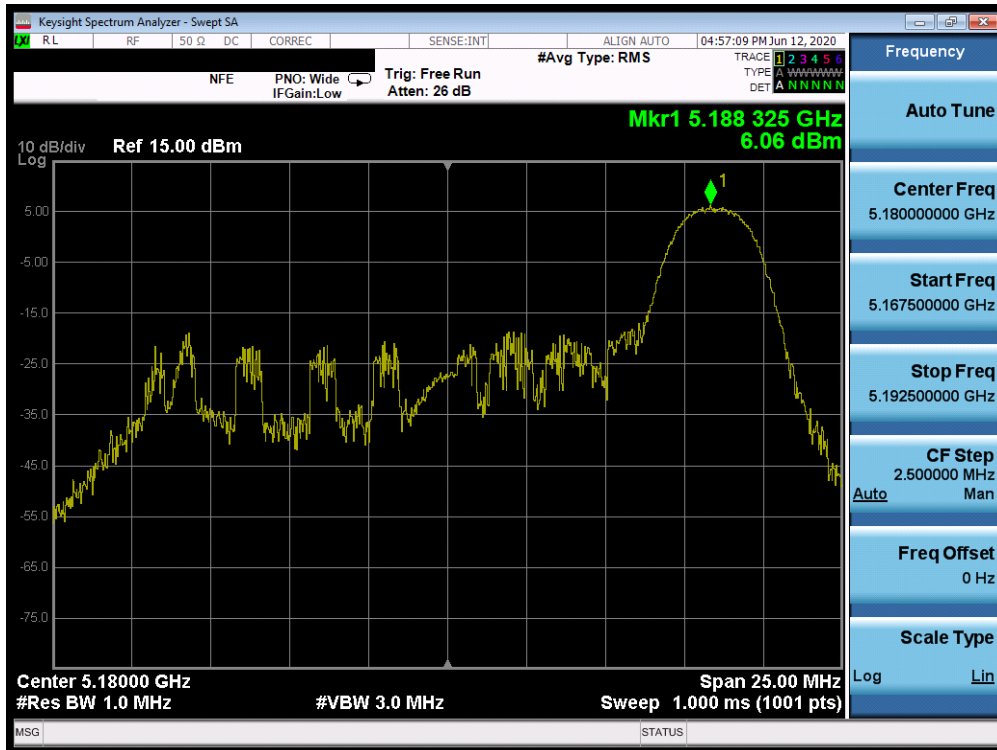
Assuming the average conducted power spectral density was measured to be 5.88 dBm for Antenna-1 and 6.27 dBm for Antenna-2.

$$\text{Antenna 1} + \text{Antenna 2} = \text{MIMO}$$

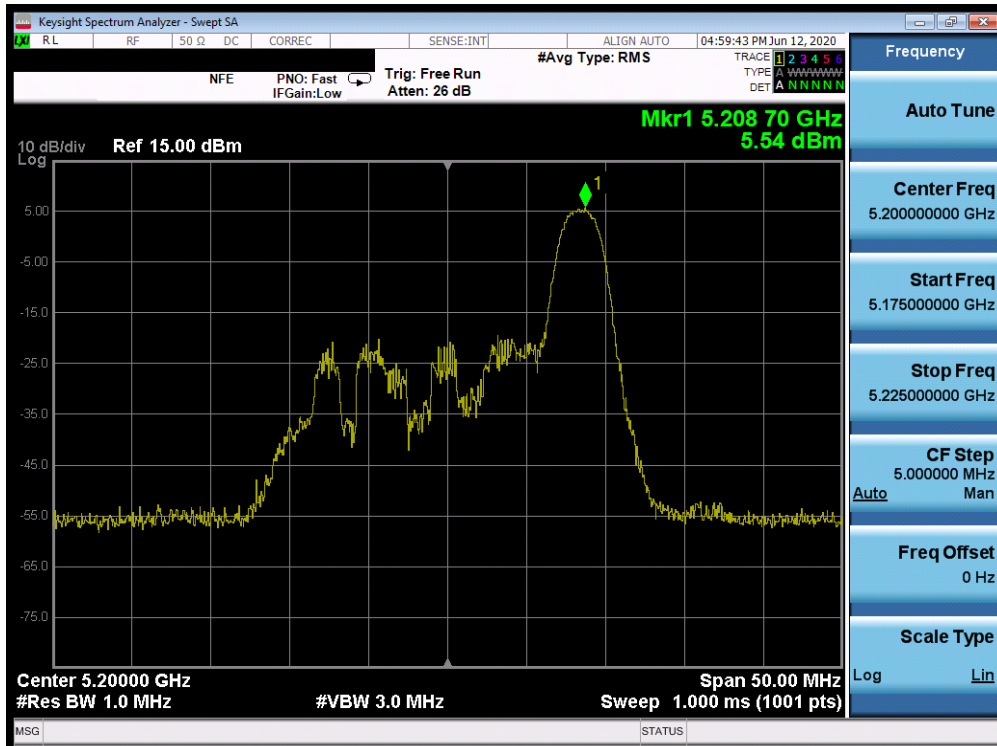
$$(5.88 \text{ dBm} + 6.27 \text{ dBm}) = (3.87 \text{ mW} + 4.24 \text{ mW}) = 8.11 \text{ mW} = 9.09 \text{ dBm}$$

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset	Page 166 of 296

MIMO Antenna-1 Power Spectral Density Measurements (26 Tones)

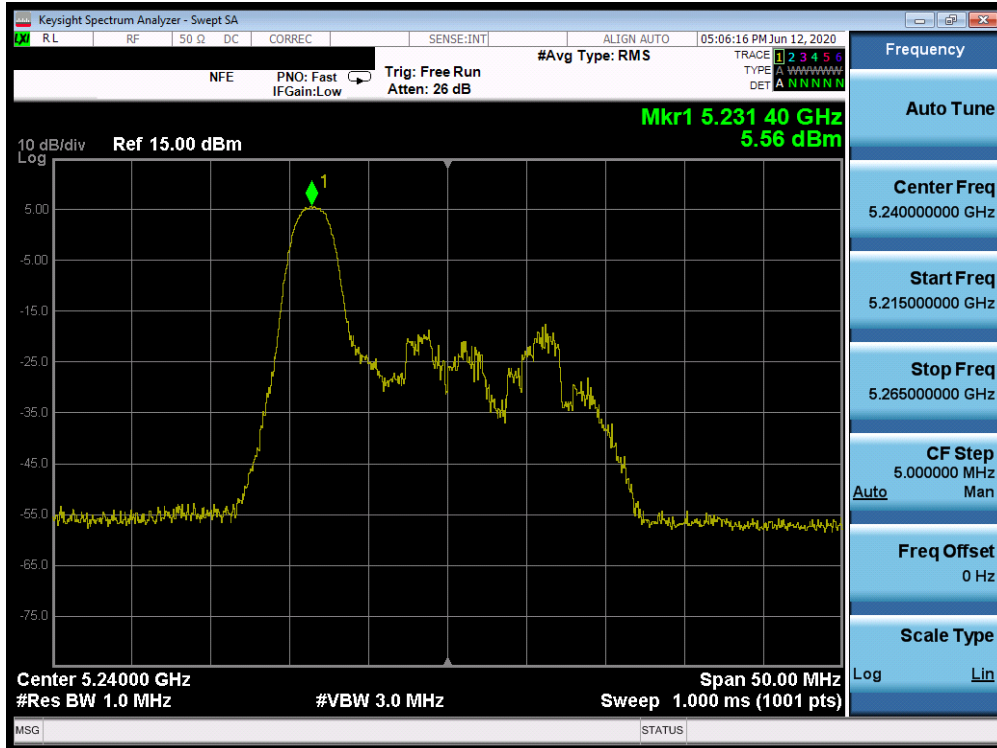


Plot 7-217. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 36)

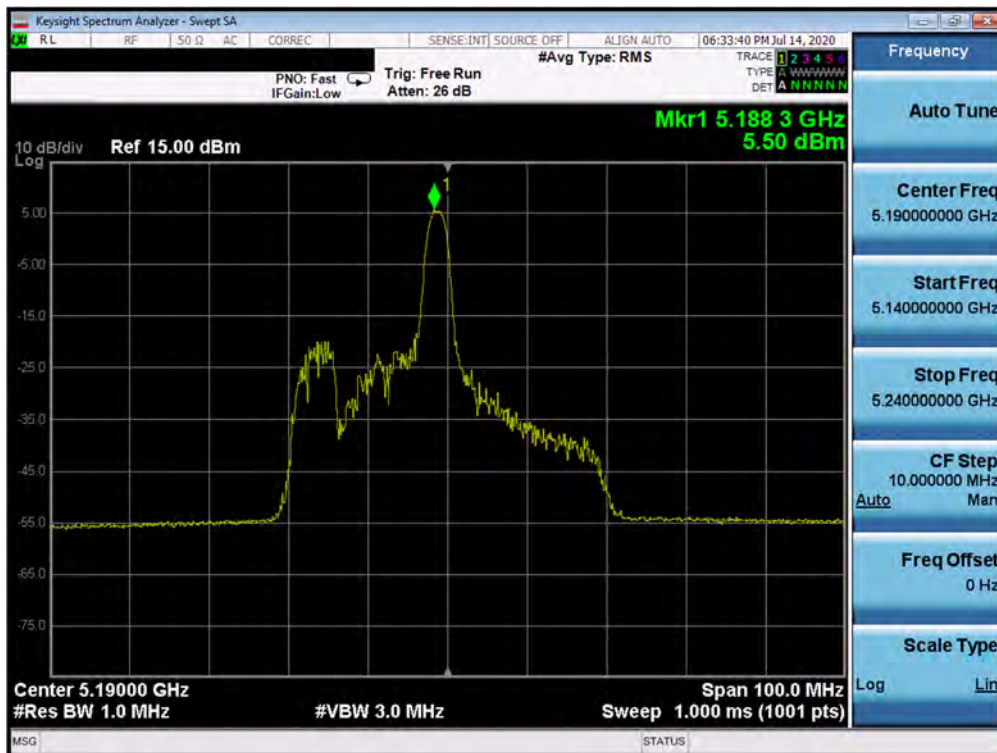


Plot 7-218. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 40)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 167 of 296

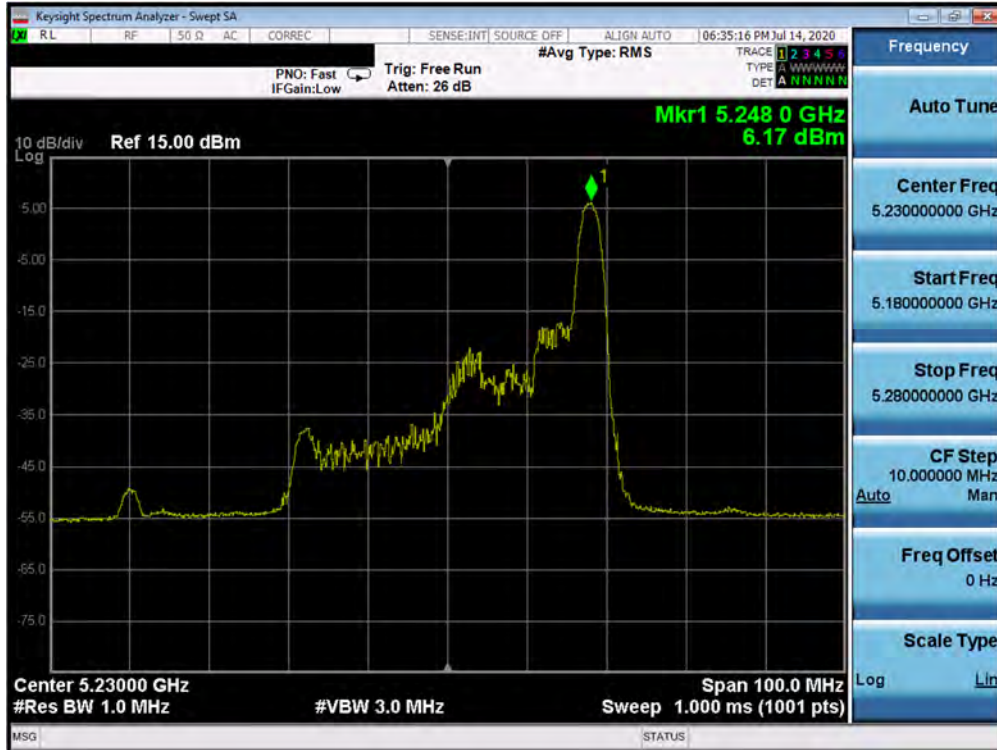


Plot 7-219. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 48)

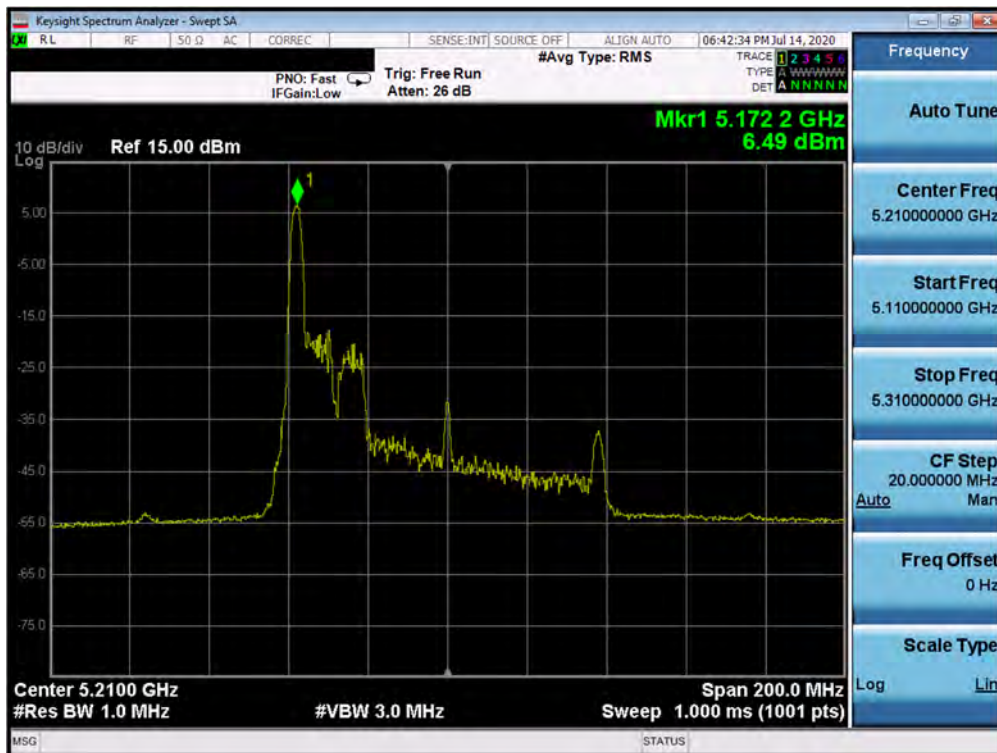


Plot 7-220. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 38)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 168 of 296

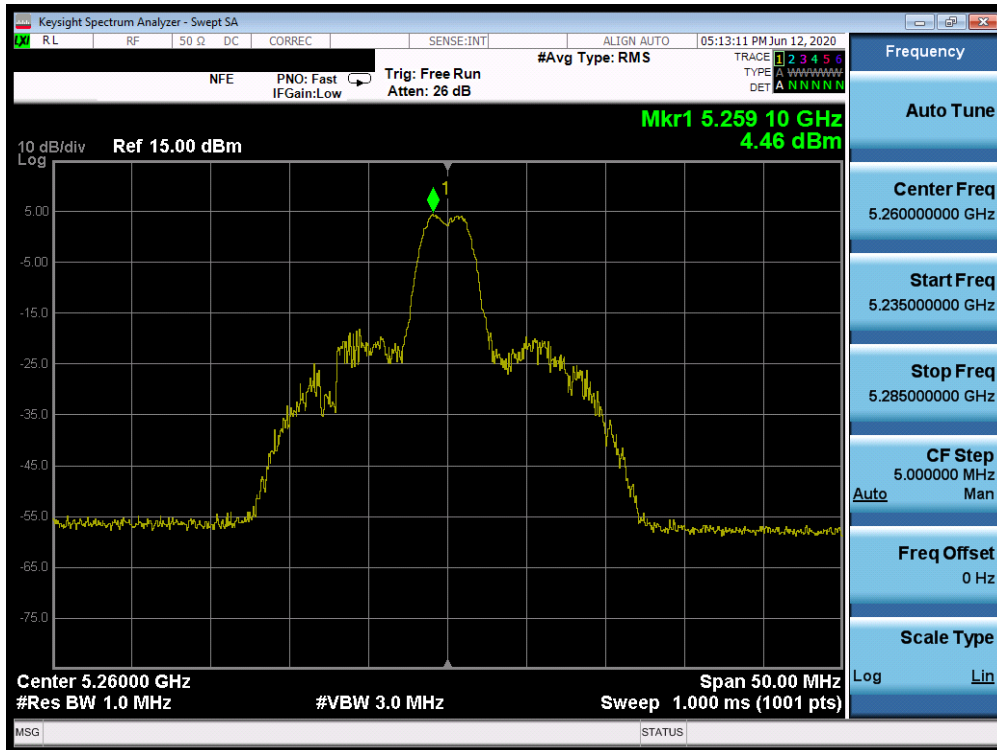


Plot 7-221. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 46)

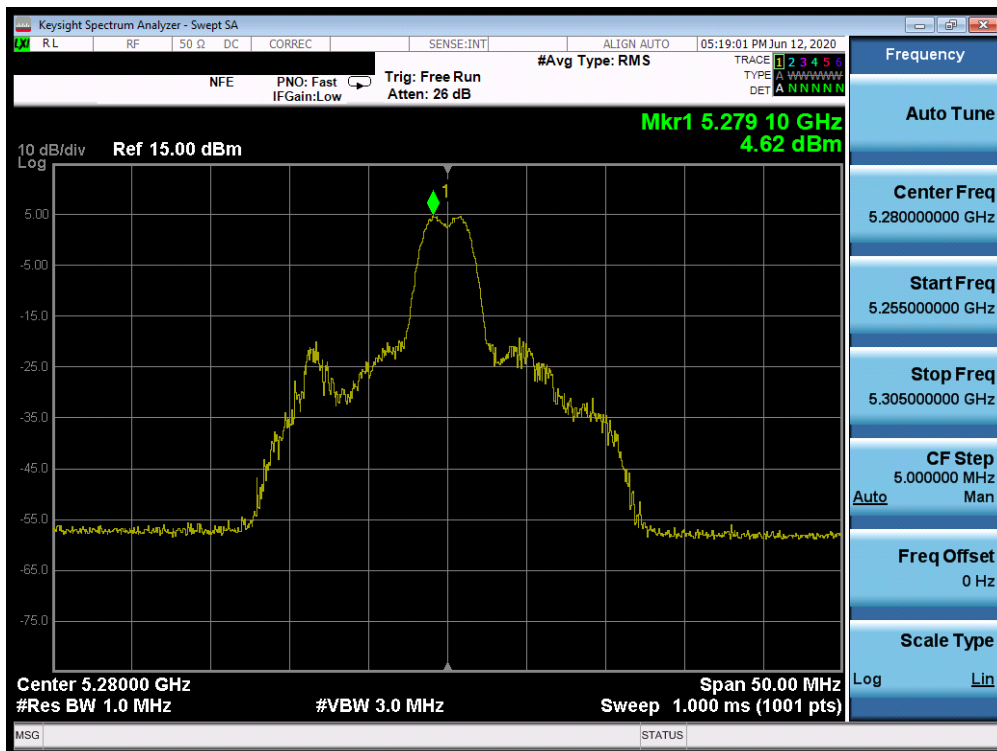


Plot 7-222. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 42)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 169 of 296

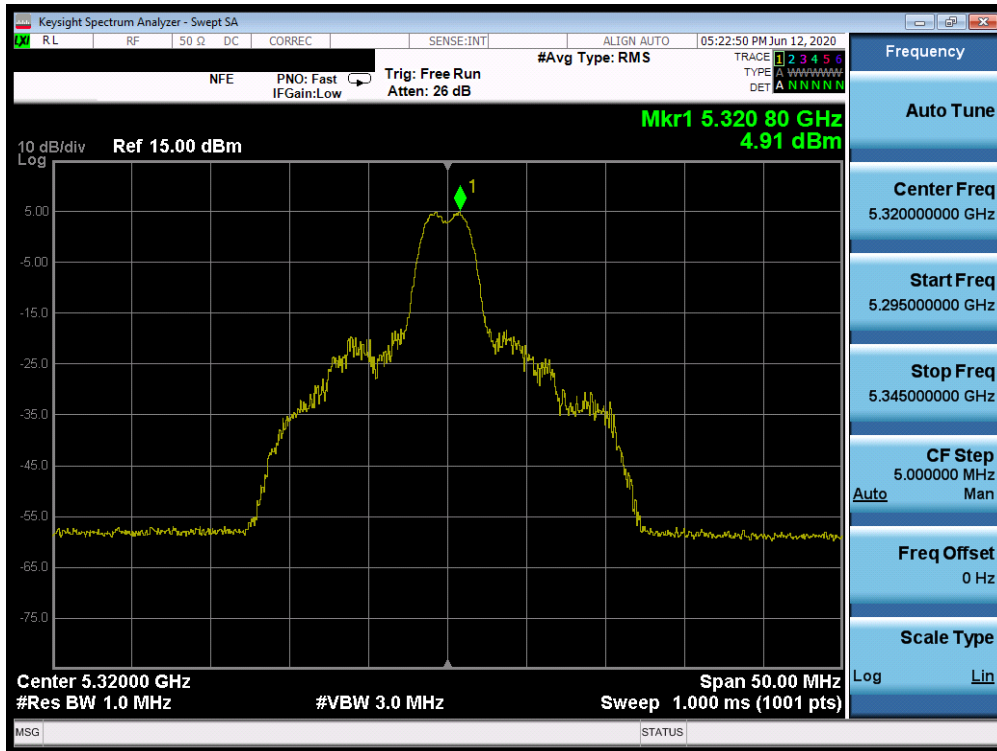


Plot 7-223. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 52)

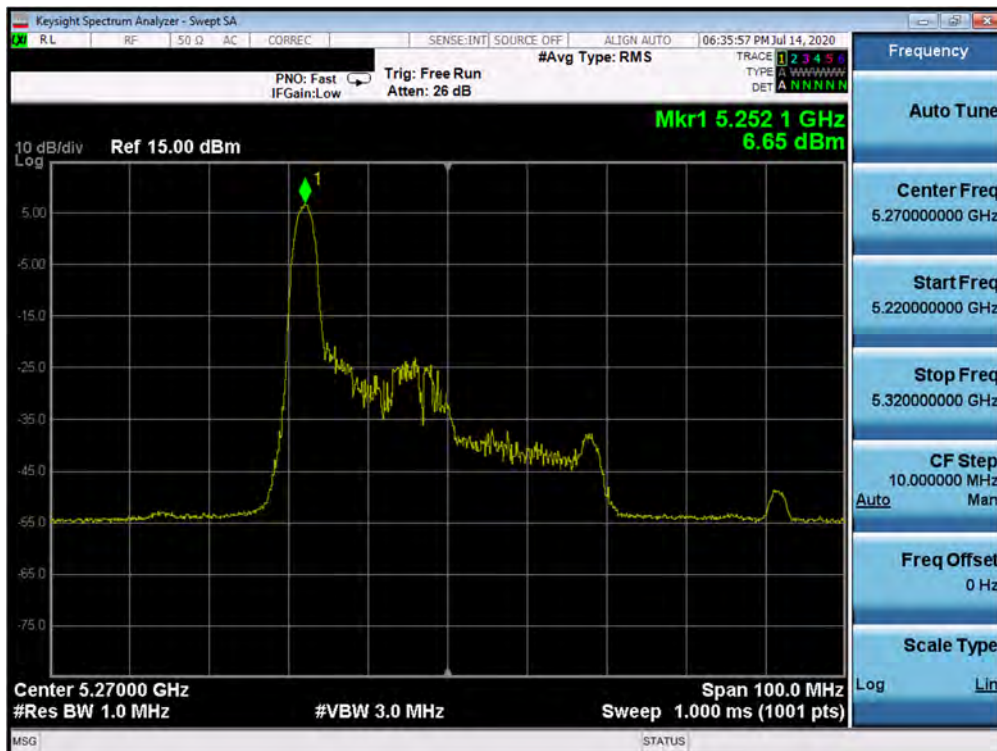


Plot 7-224. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 56)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 170 of 296

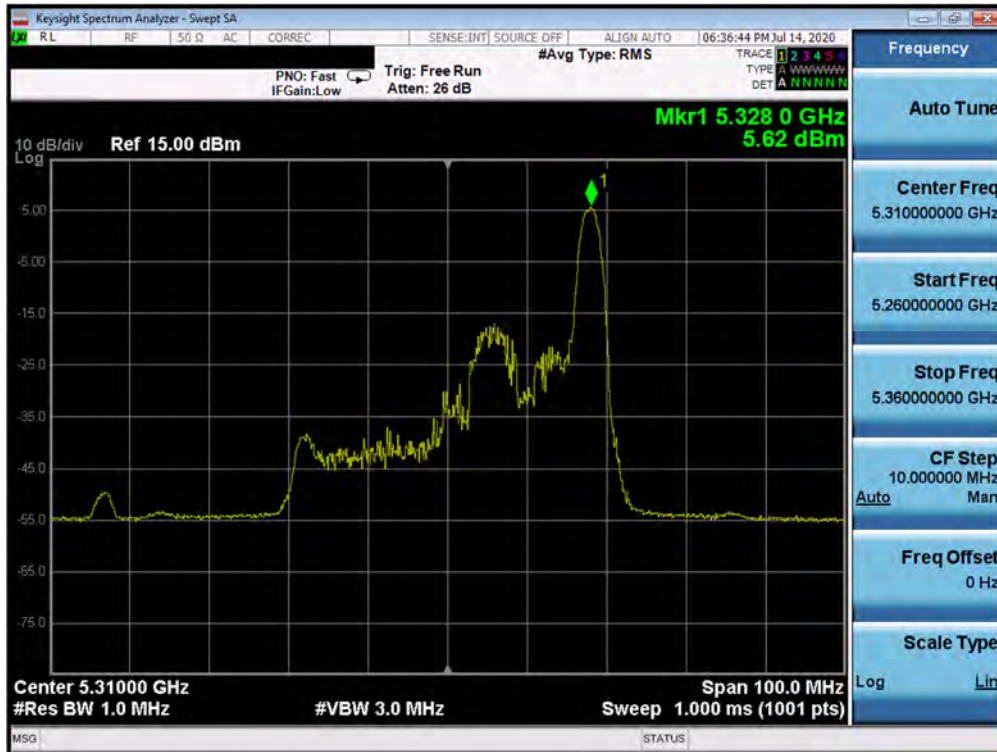


Plot 7-225. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 64)

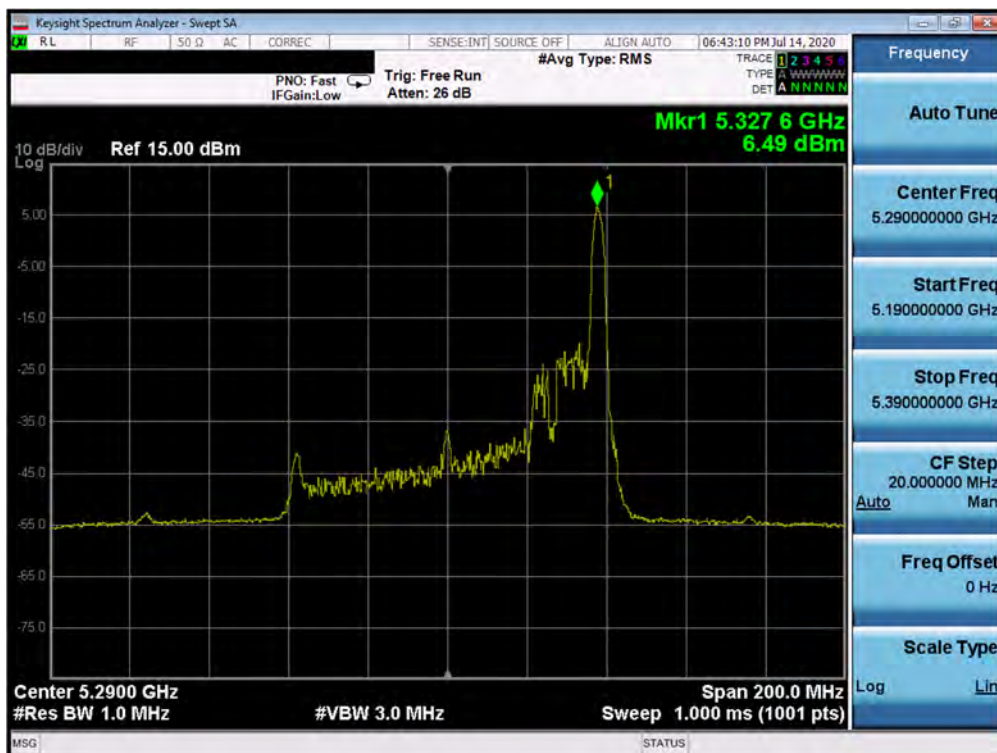


Plot 7-226. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 54)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 171 of 296

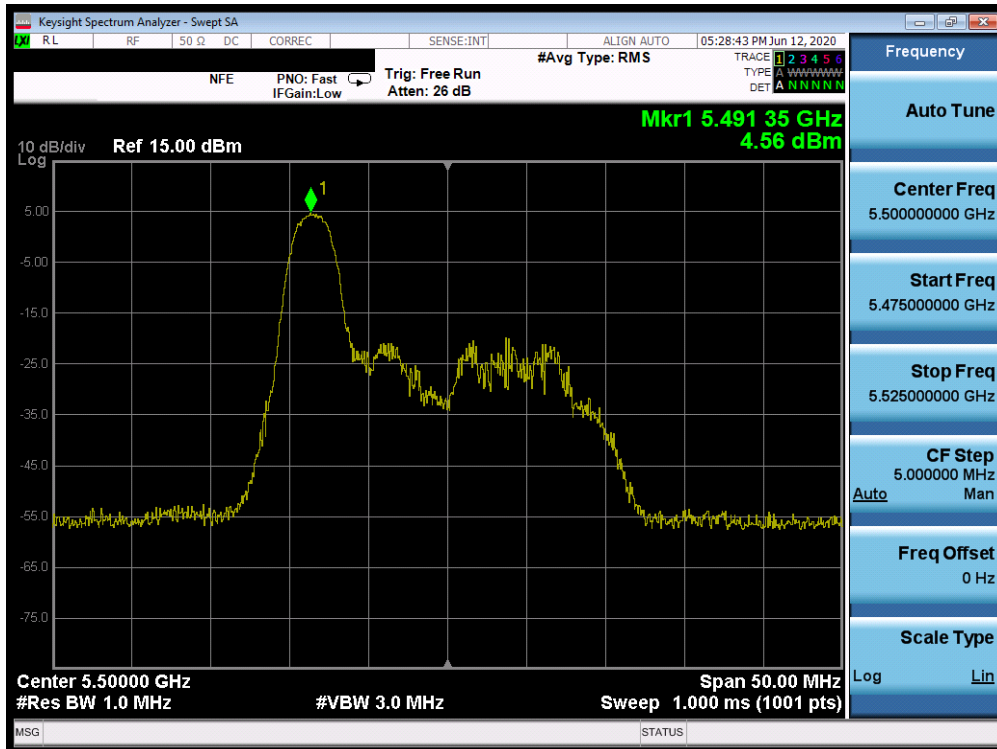


Plot 7-227. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 62)

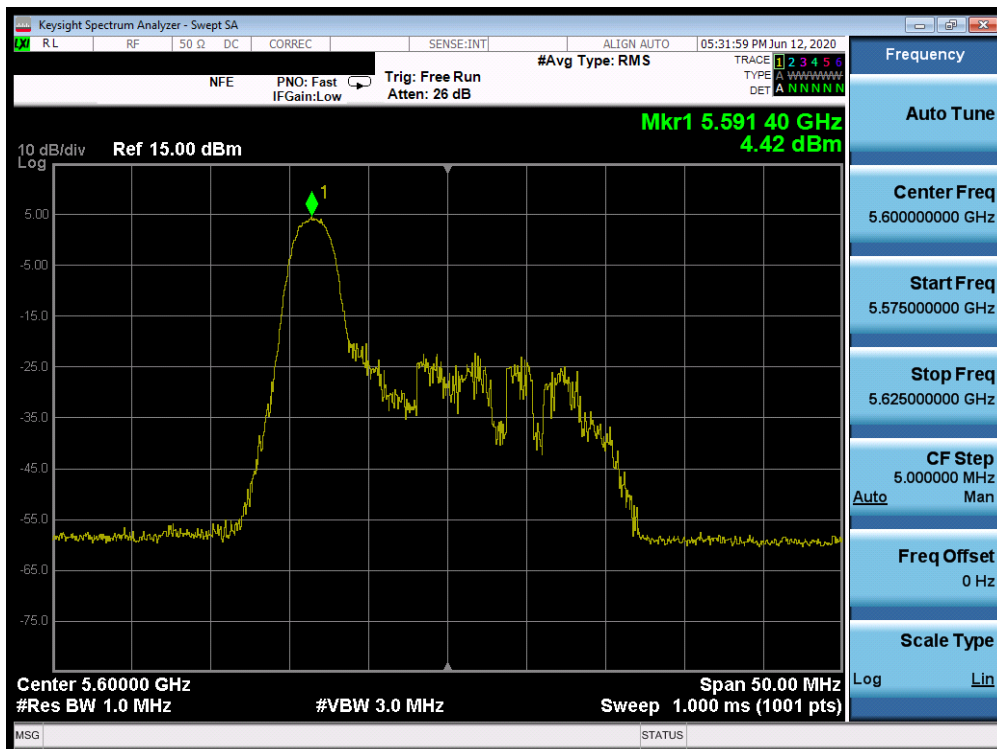


Plot 7-228. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 58)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 172 of 296

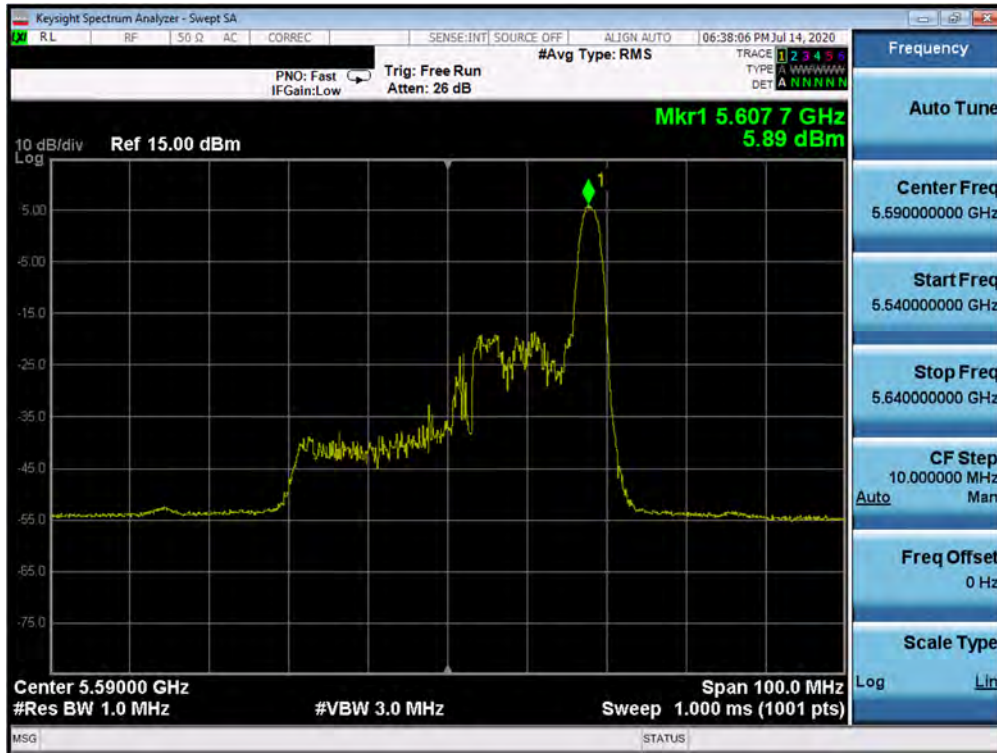


Plot 7-229. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 100)

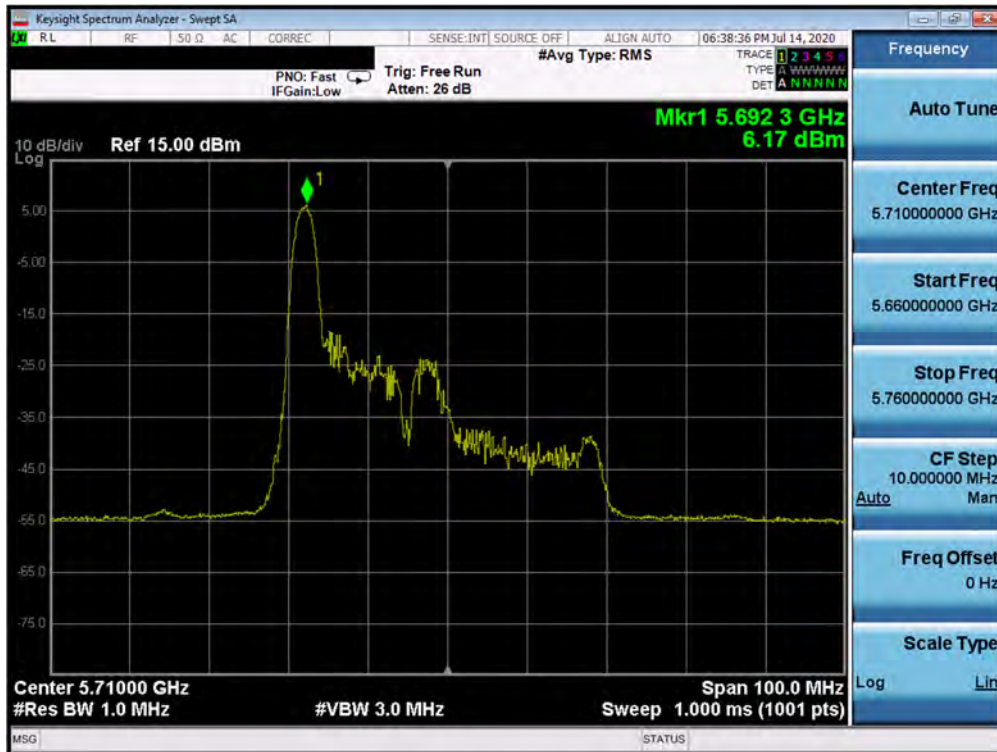


Plot 7-230. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 120)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 173 of 296



Plot 7-233. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 118)



Plot 7-234. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 142)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 175 of 296



Plot 7-235. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 106)

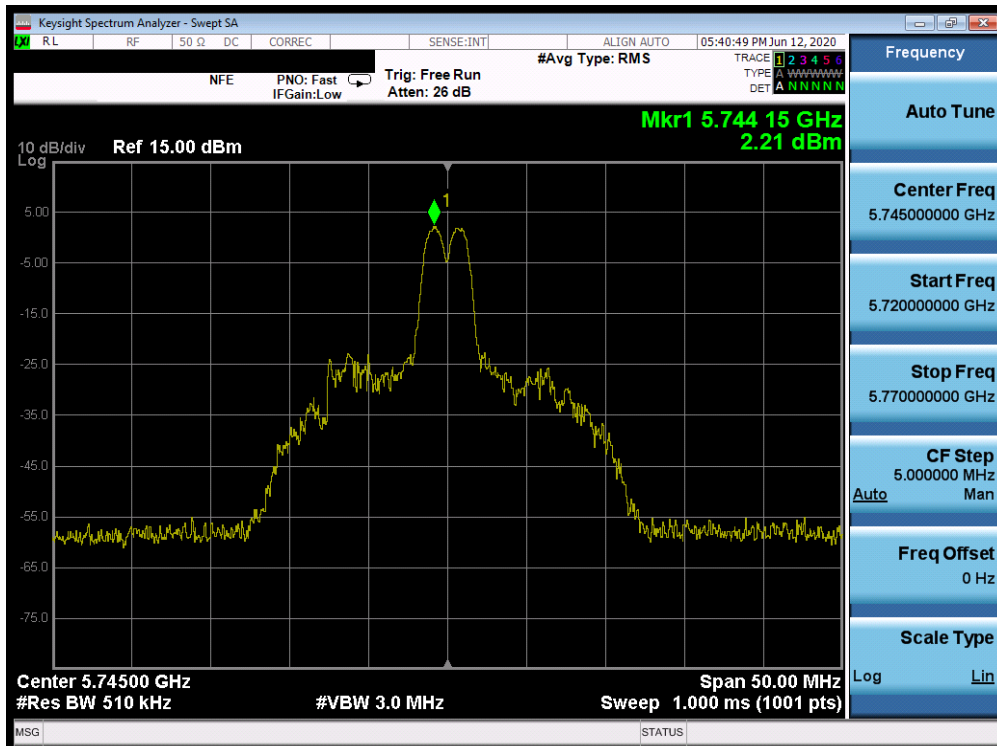


Plot 7-236. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 122)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 176 of 296

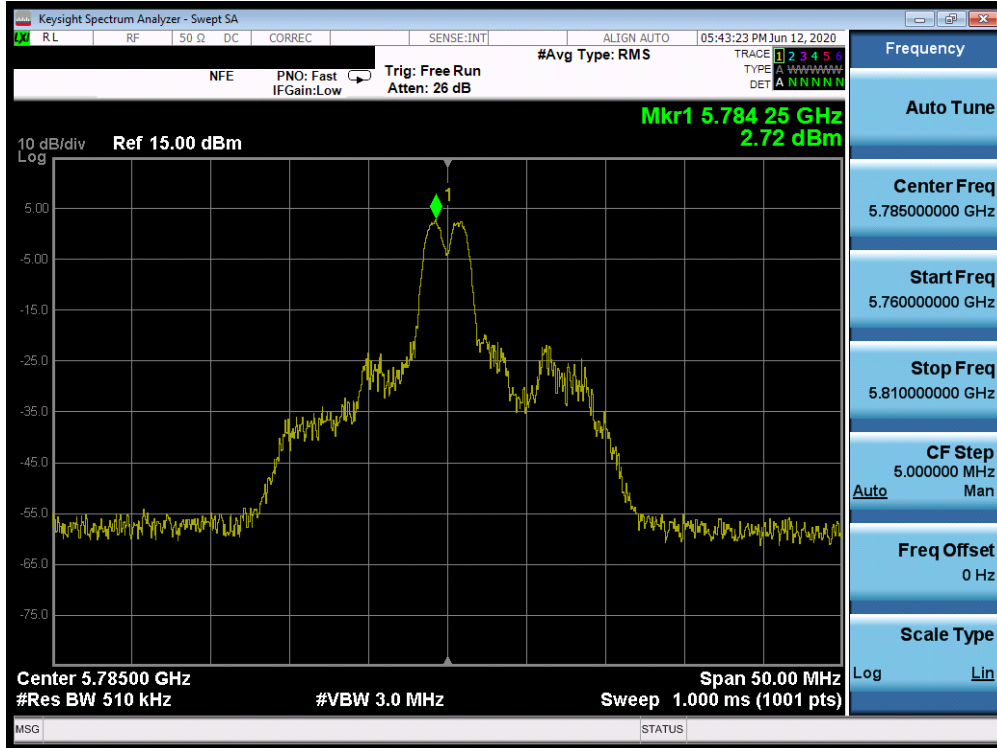


Plot 7-237. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 138)

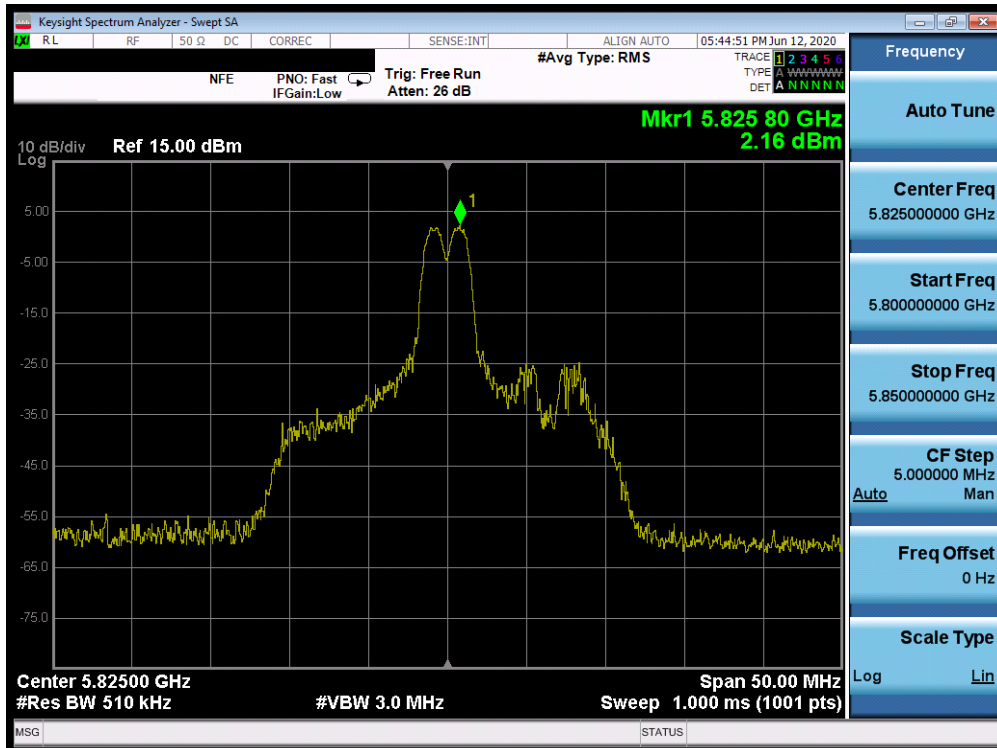


Plot 7-238. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 149)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 177 of 296

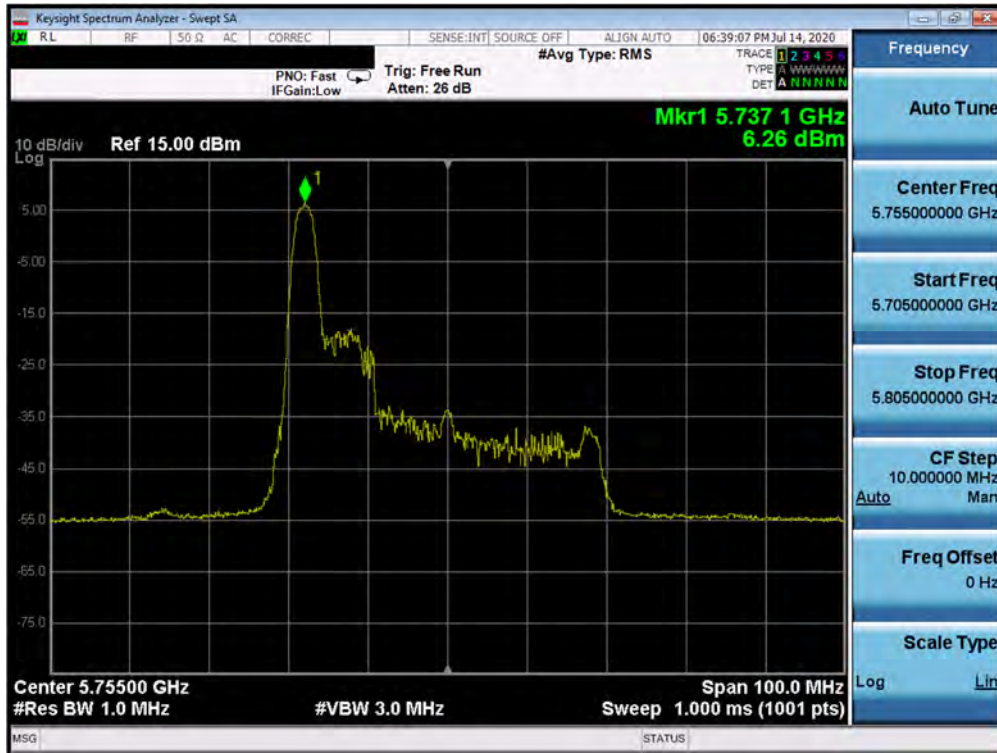


Plot 7-239. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 157)

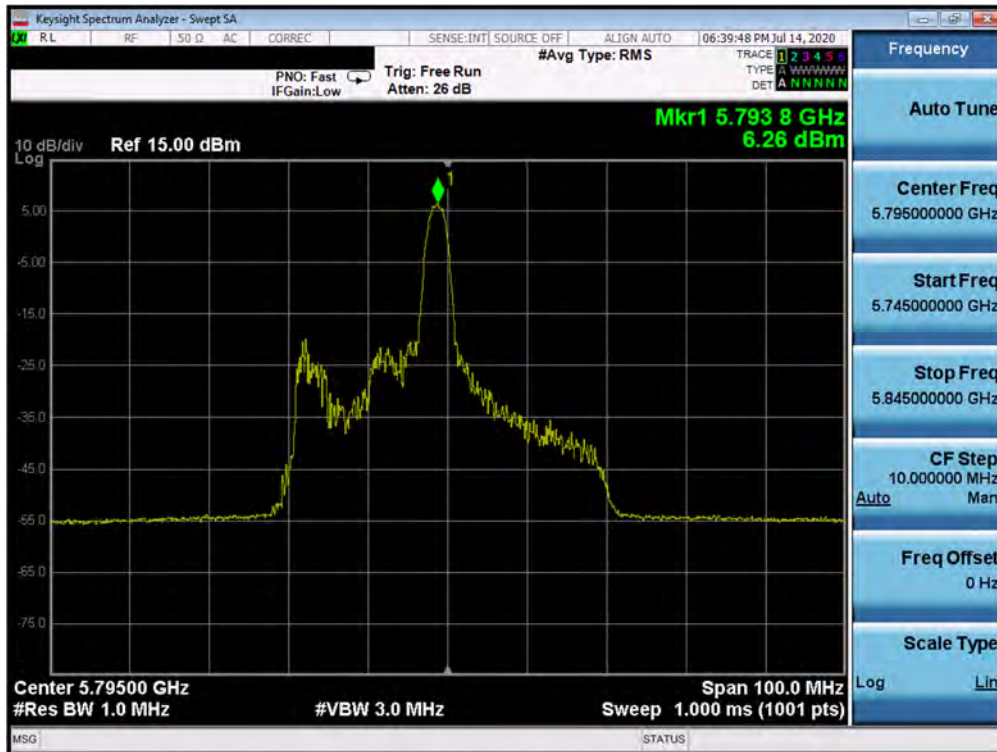


Plot 7-240. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 165)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 178 of 296

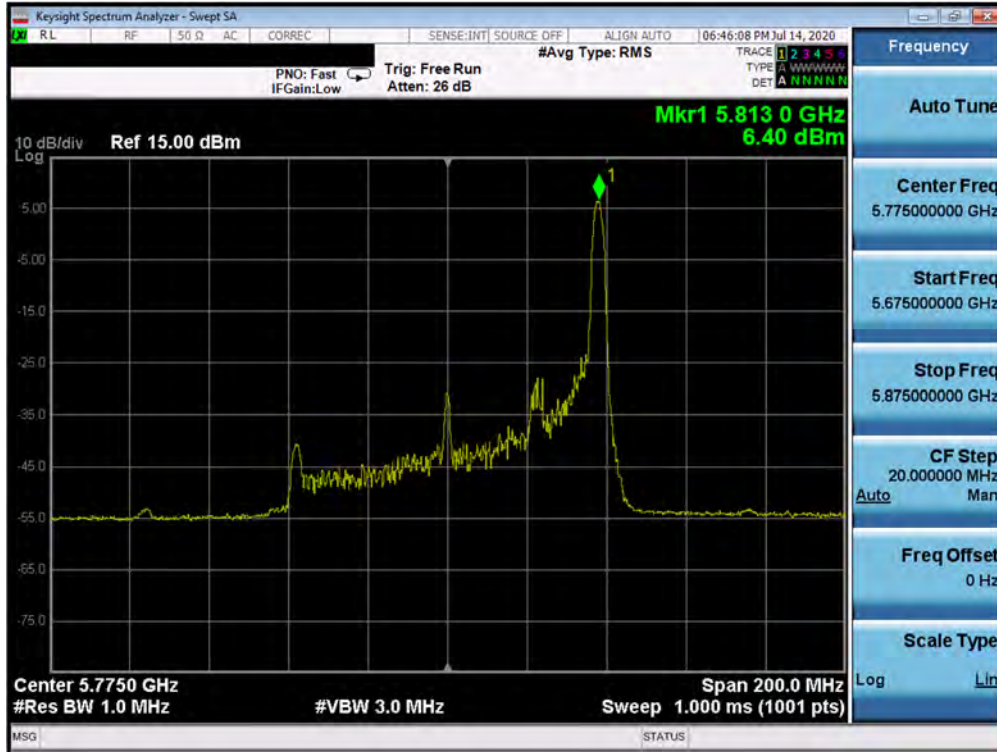


Plot 7-241. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 151)

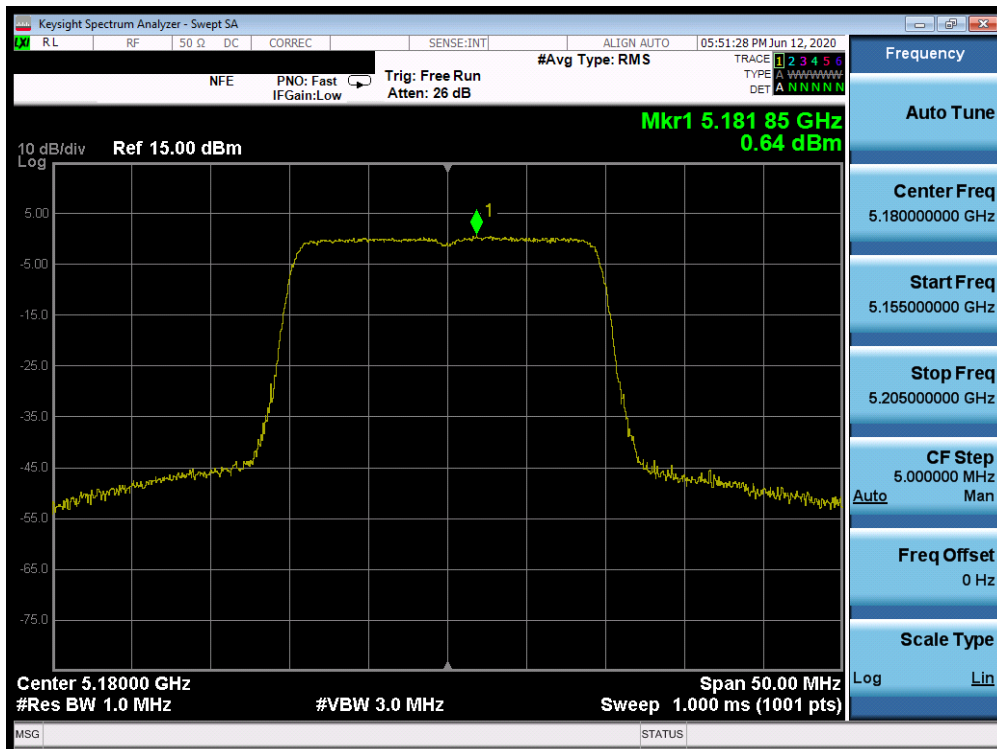


Plot 7-242. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 159)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 179 of 296



Plot 7-243. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 155)



Plot 7-244. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 36)

FCC ID: A3LSMN981U	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-09.A3L	Test Dates: 5/5 - 7/7/2020	EUT Type: Portable Handset		Page 180 of 296

