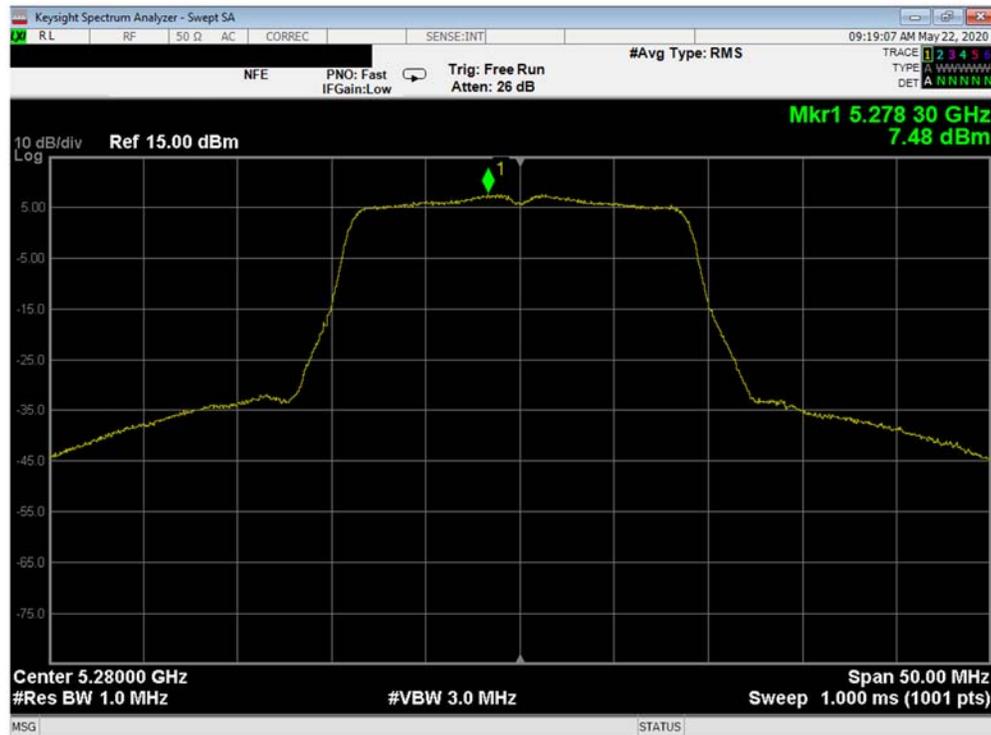
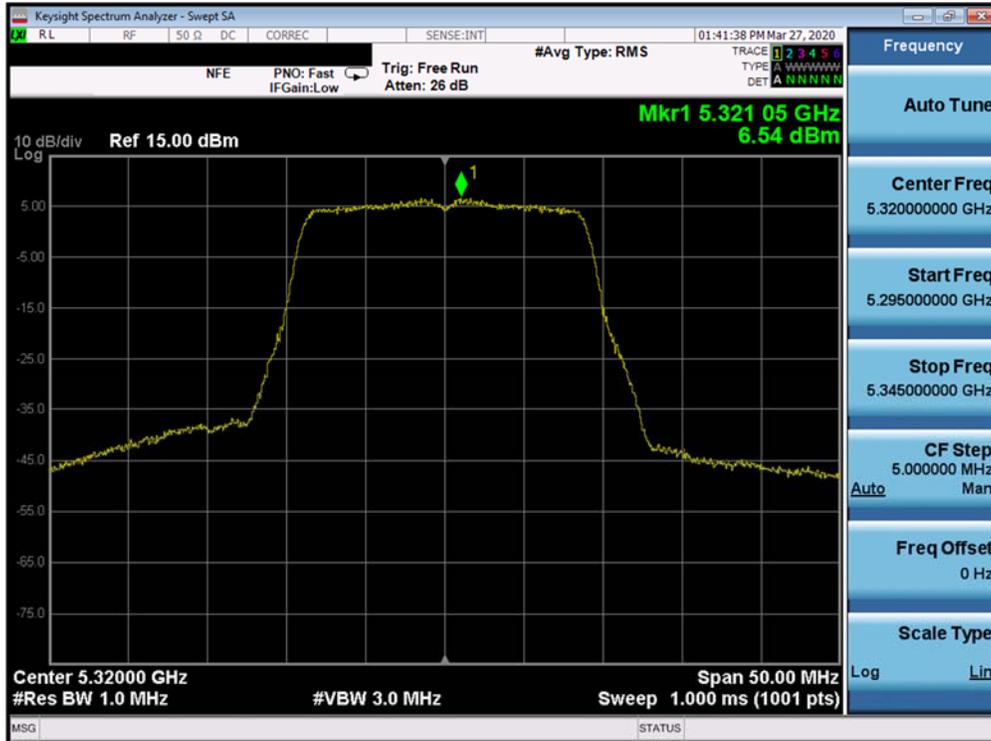


Plot 7-91. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 2A) – Ch. 52)

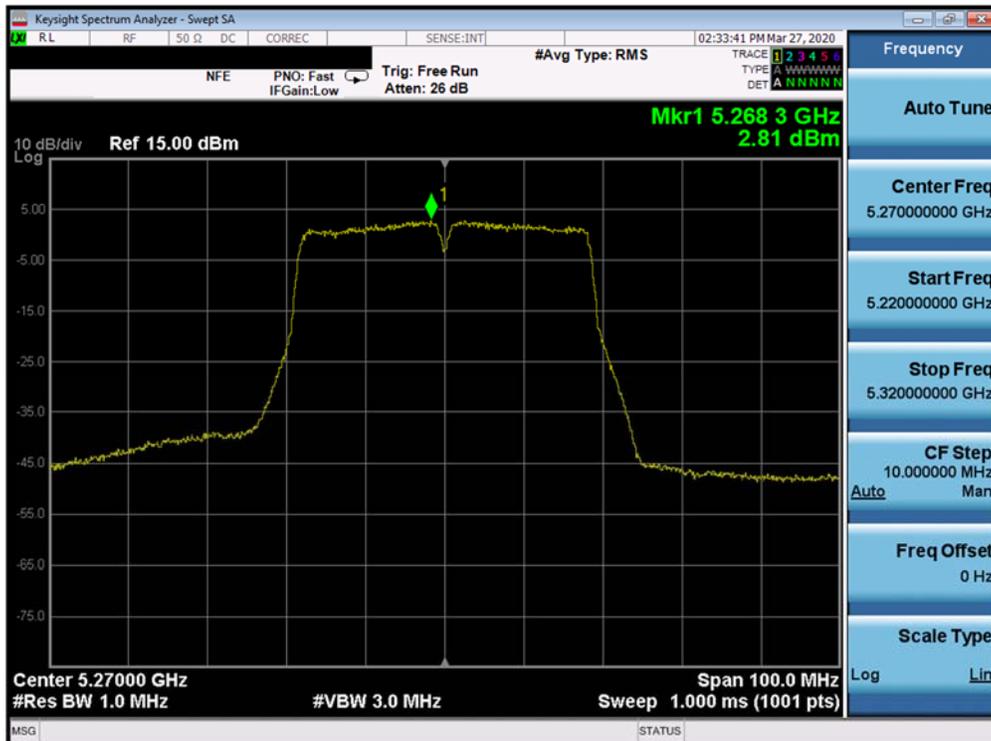


Plot 7-92. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 2A) – Ch. 56)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 75 of 178

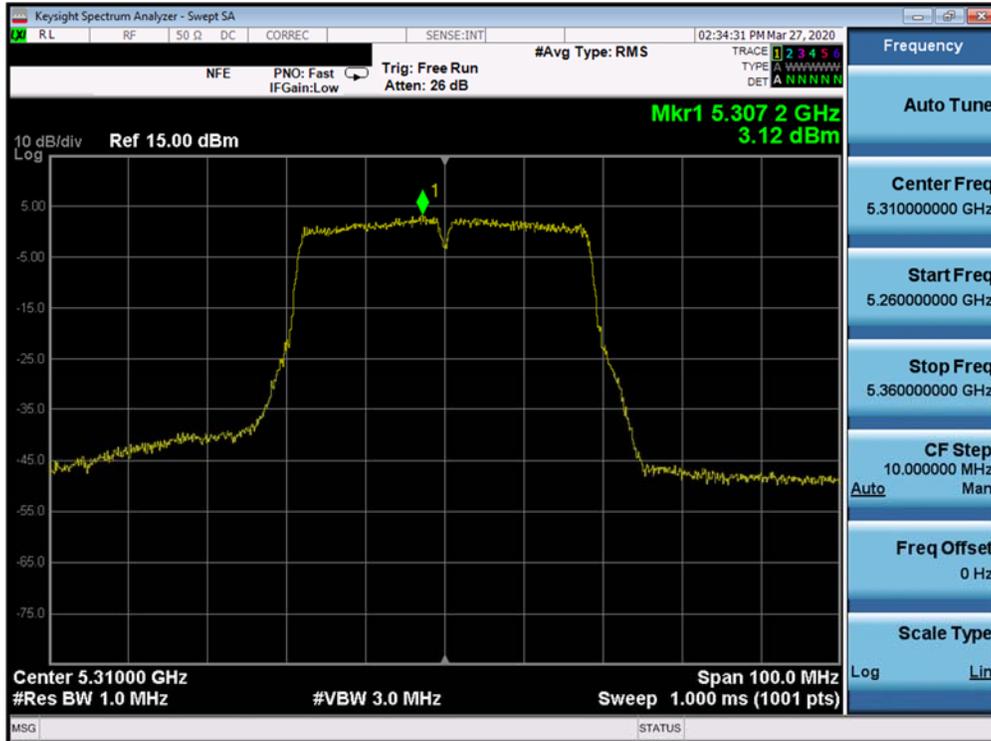


Plot 7-93. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 2A) – Ch. 64)

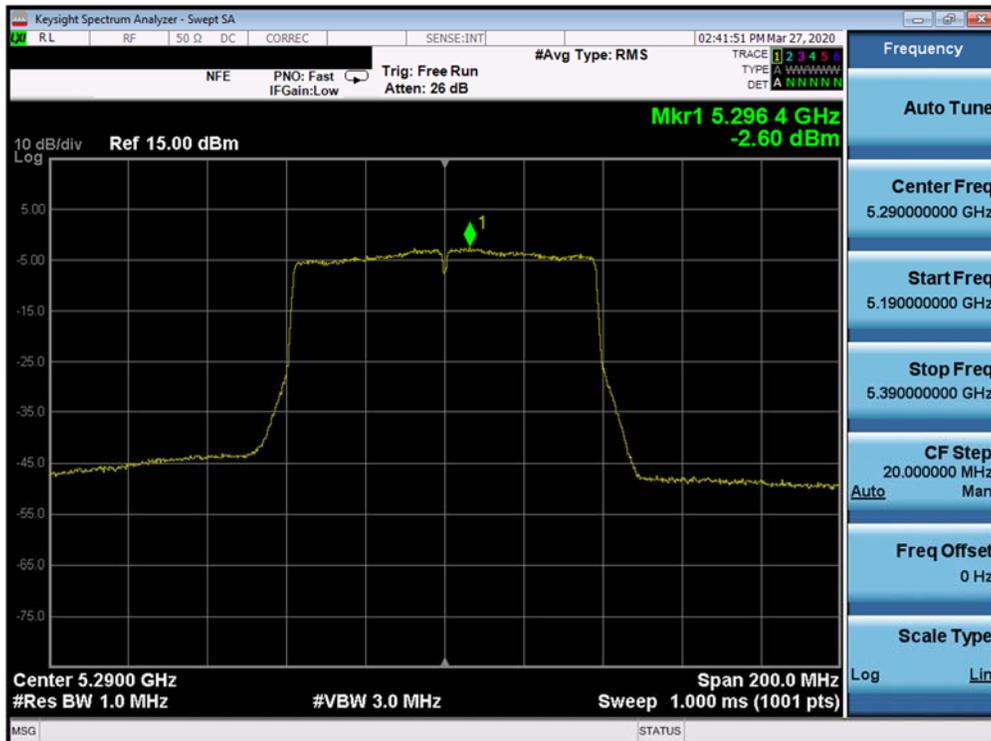


Plot 7-94. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 2A) – Ch. 54)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 76 of 178

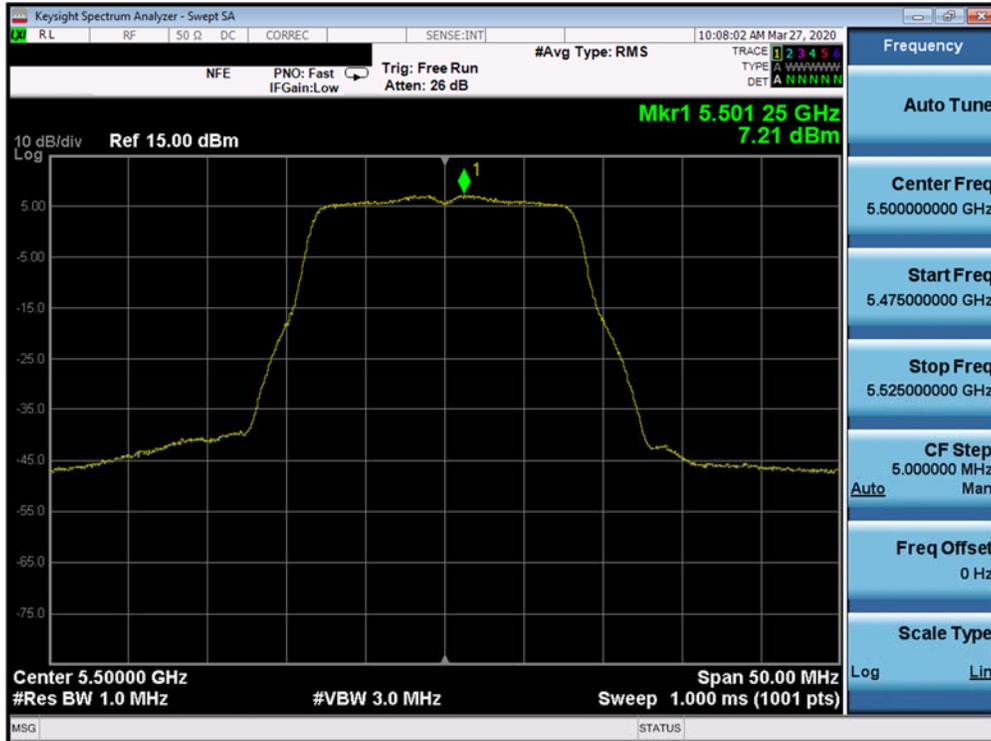


Plot 7-95. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 2A) – Ch. 62)

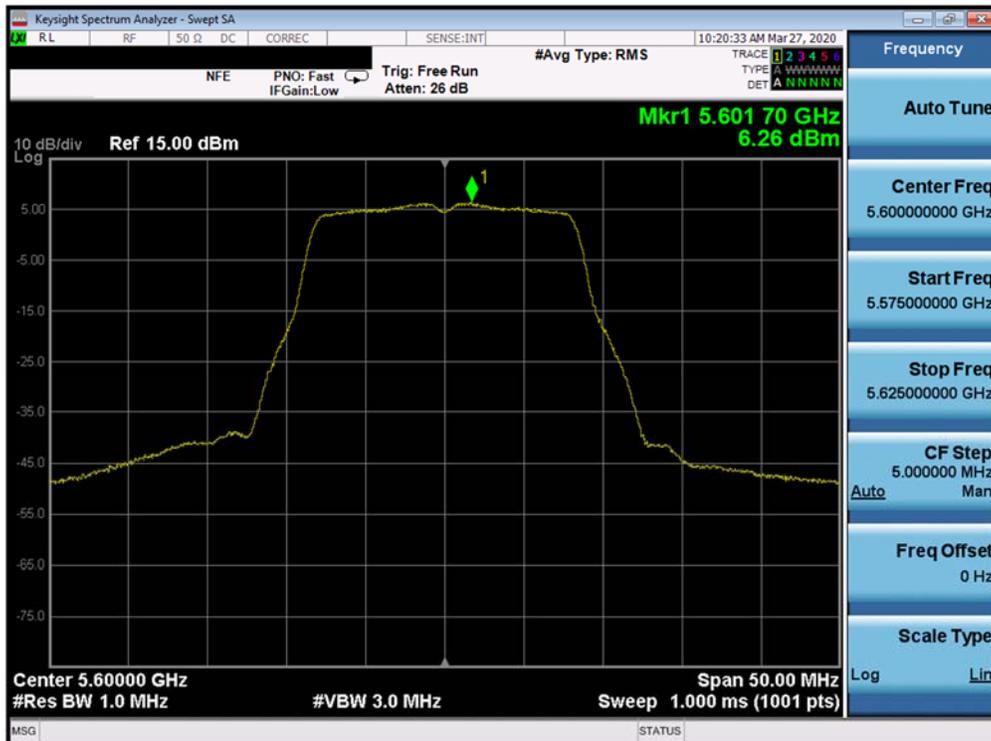


Plot 7-96. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ac (UNII Band 2A) – Ch. 58)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 77 of 178

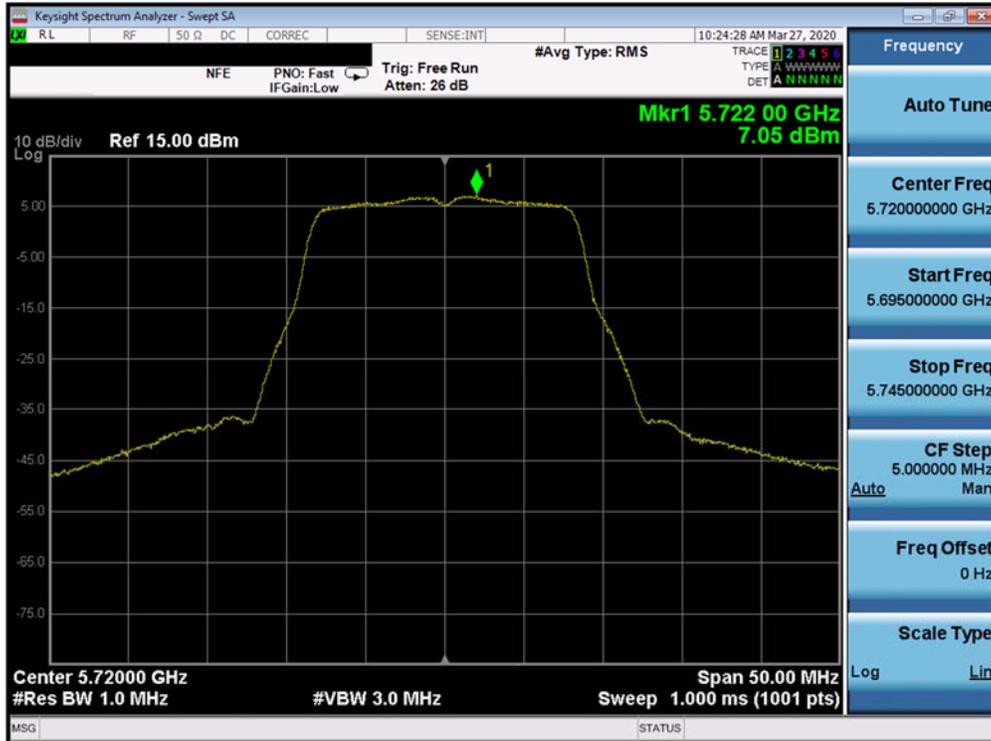


Plot 7-97. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 2C) – Ch. 100)

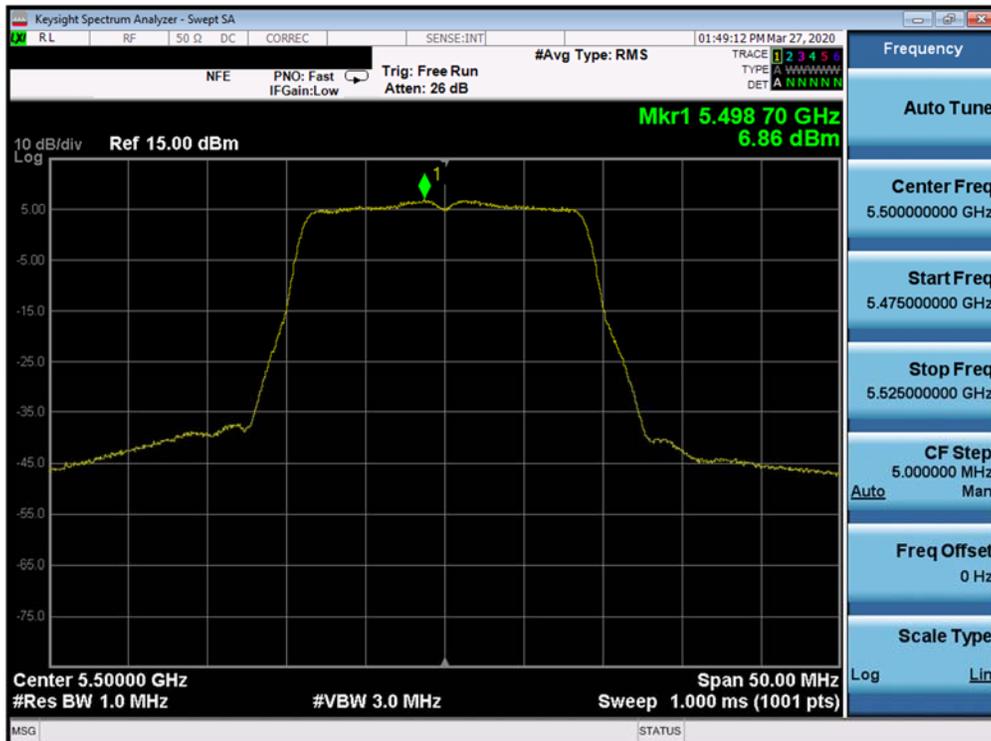


Plot 7-98. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 2C) – Ch. 120)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 78 of 178

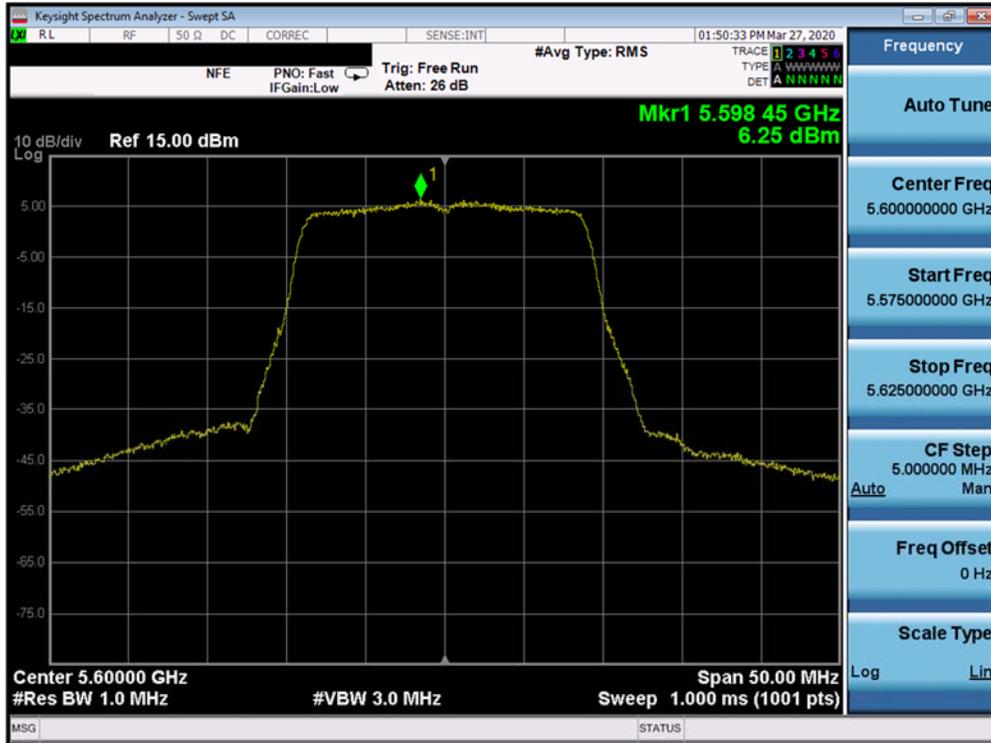


Plot 7-99. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 2C) – Ch. 144)

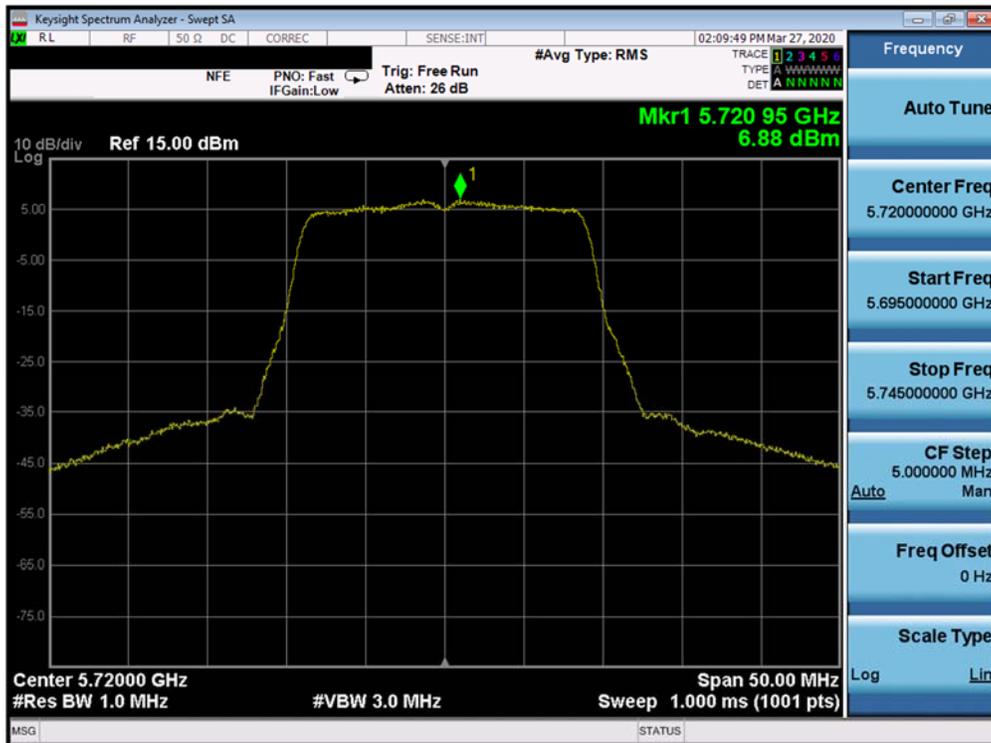


Plot 7-100. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 2C) – Ch. 100)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 79 of 178

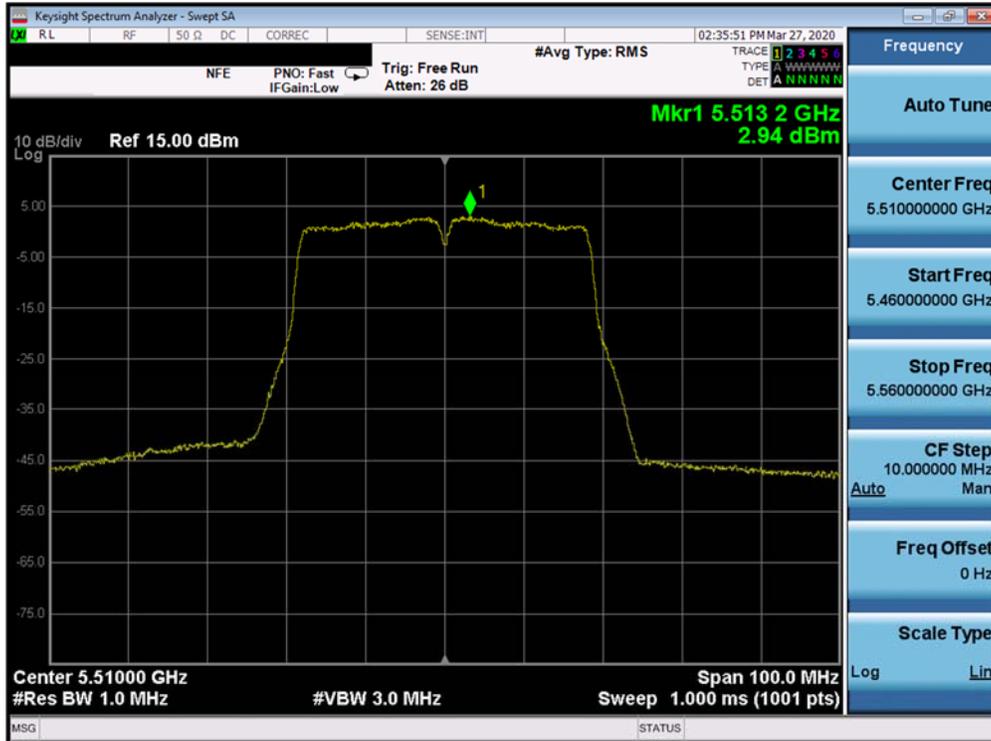


Plot 7-101. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 2C) – Ch. 120)

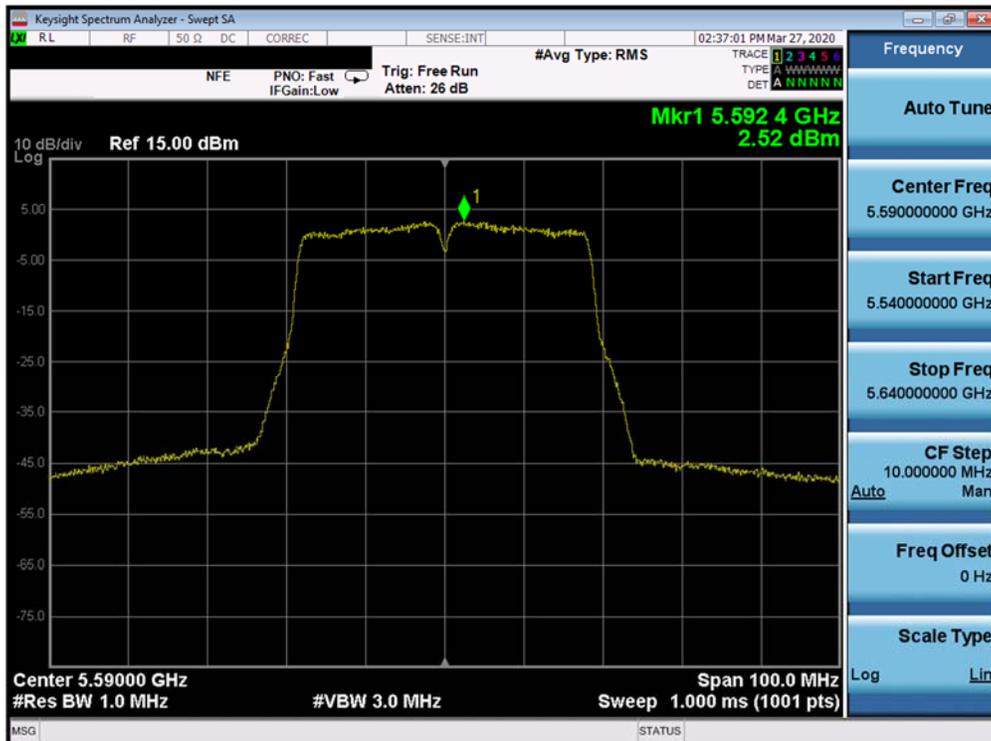


Plot 7-102. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 2C) – Ch. 144)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 80 of 178

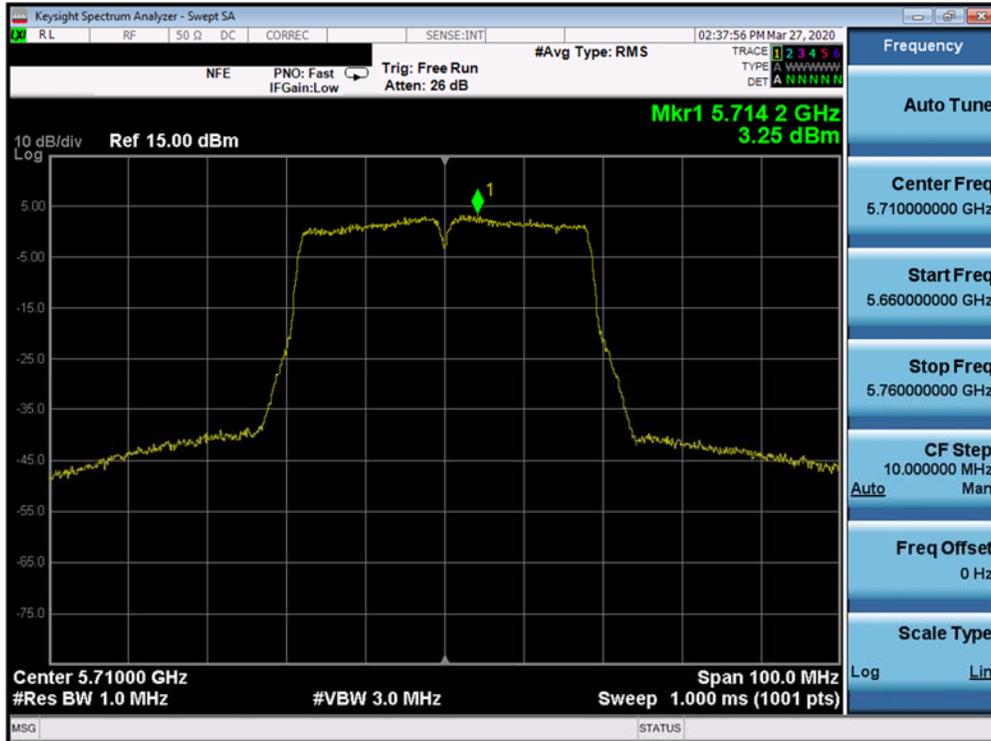


Plot 7-103. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 2C) – Ch. 102)

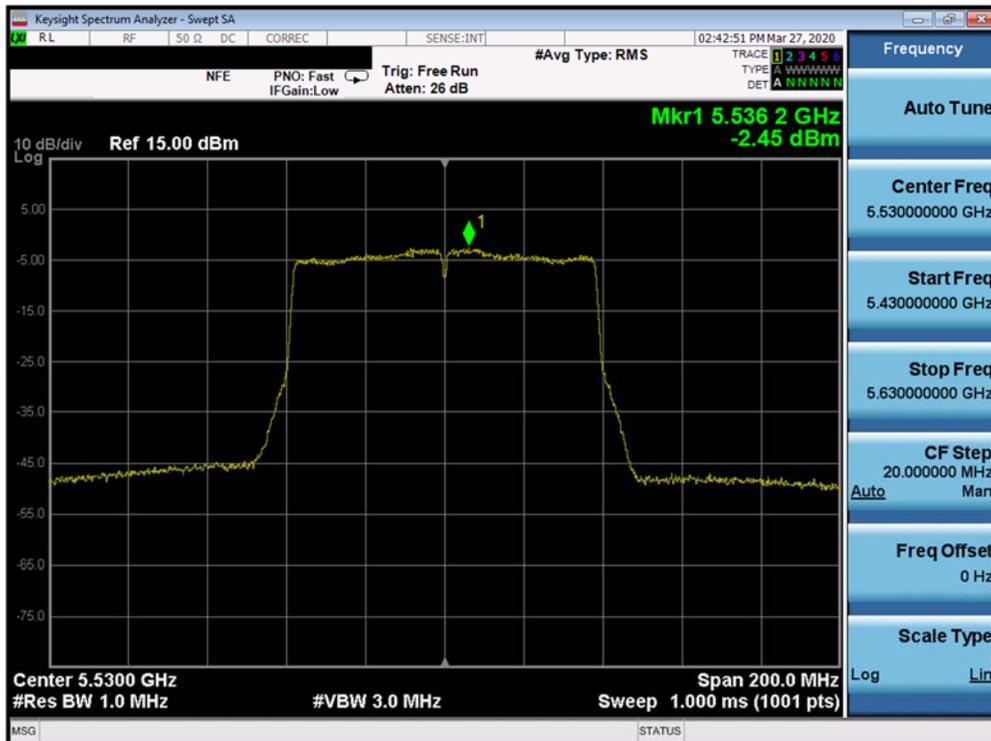


Plot 7-104. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 2C) – Ch. 118)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 81 of 178

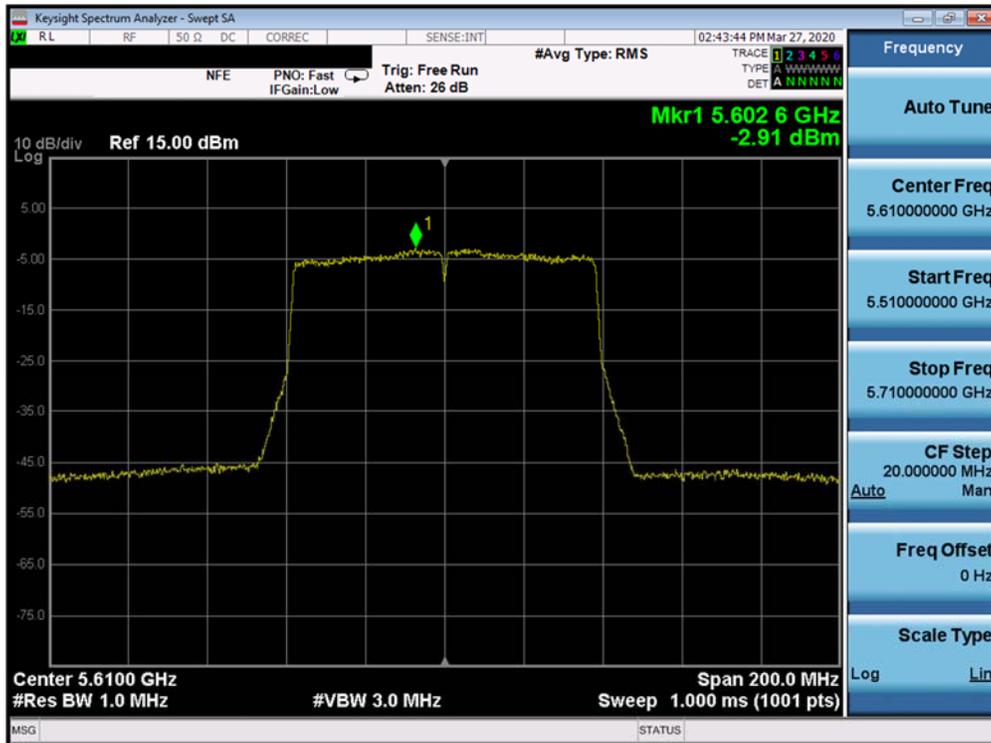


Plot 7-105. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 2C) – Ch. 142)

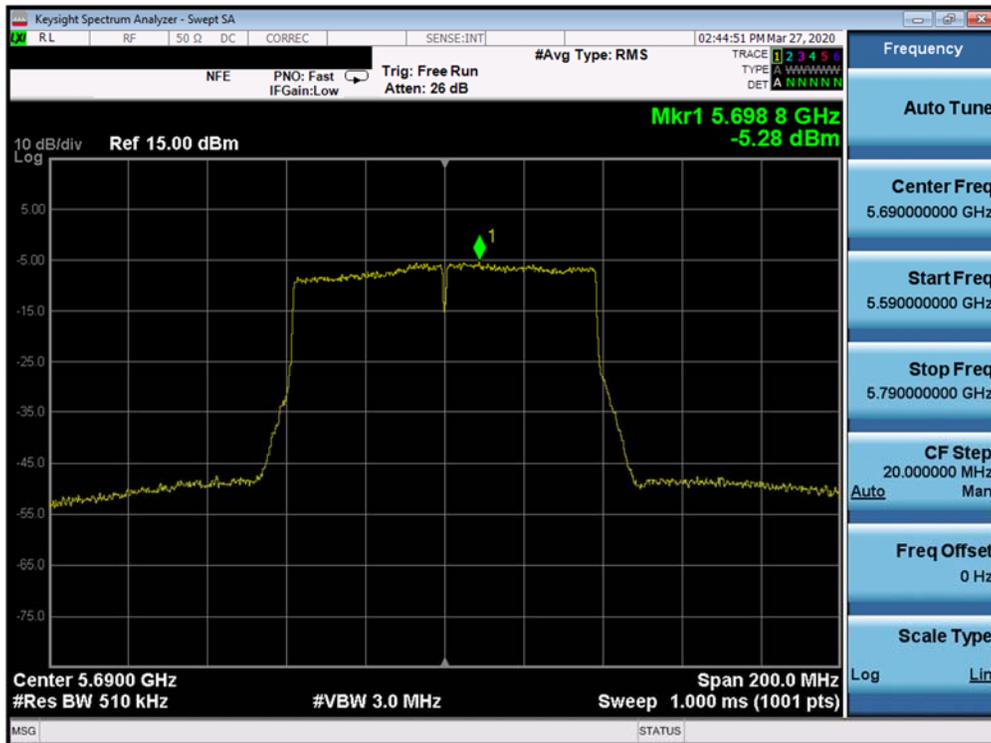


Plot 7-106. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 106)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 82 of 178



Plot 7-107. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 122)

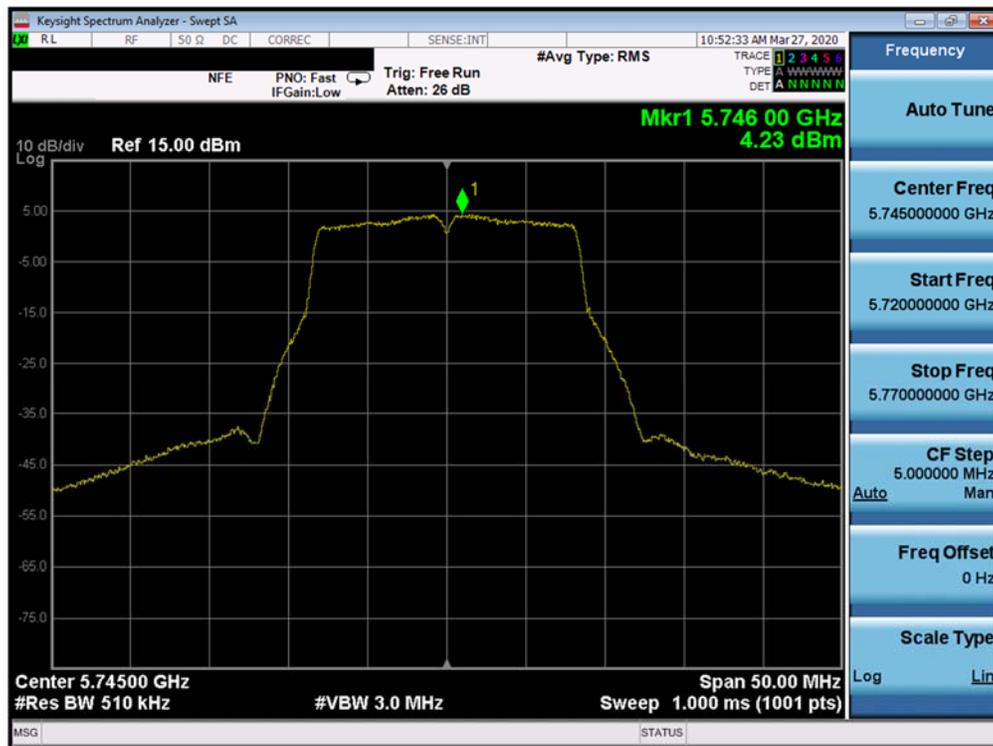


Plot 7-108. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 138)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 83 of 178

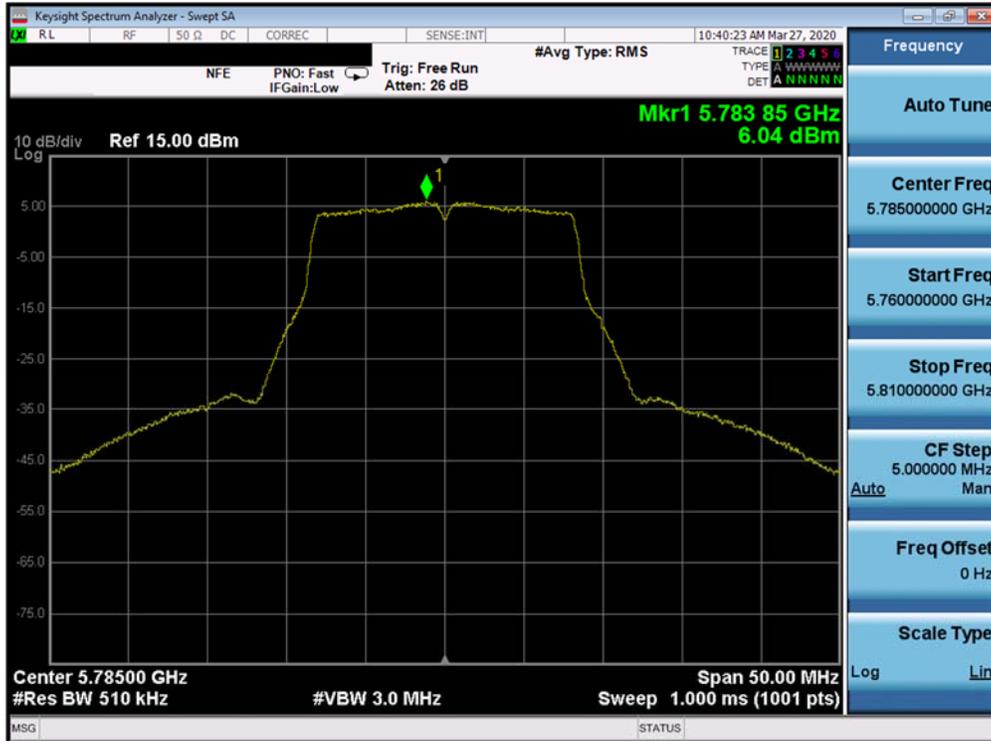
	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
Band 3	5745	149	a	6	4.23	30.0	-25.77
	5785	157	a	6	6.04	30.0	-23.96
	5825	165	a	6	5.83	30.0	-24.17
	5745	149	n (20MHz)	6.5/7.2 (MCS0)	4.11	30.0	-25.89
	5785	157	n (20MHz)	6.5/7.2 (MCS0)	5.46	30.0	-24.54
	5825	165	n (20MHz)	6.5/7.2 (MCS0)	5.49	30.0	-24.52
	5755	151	n (40MHz)	13.5/15 (MCS0)	0.32	30.0	-29.69
	5795	159	n (40MHz)	13.5/15 (MCS0)	0.22	30.0	-29.78
	5775	155	ac (80MHz)	29.3/32.5 (MCS0)	-2.62	30.0	-32.62

Table 7-19. Band 3 Conducted Power Spectral Density Measurements SISO ANT1

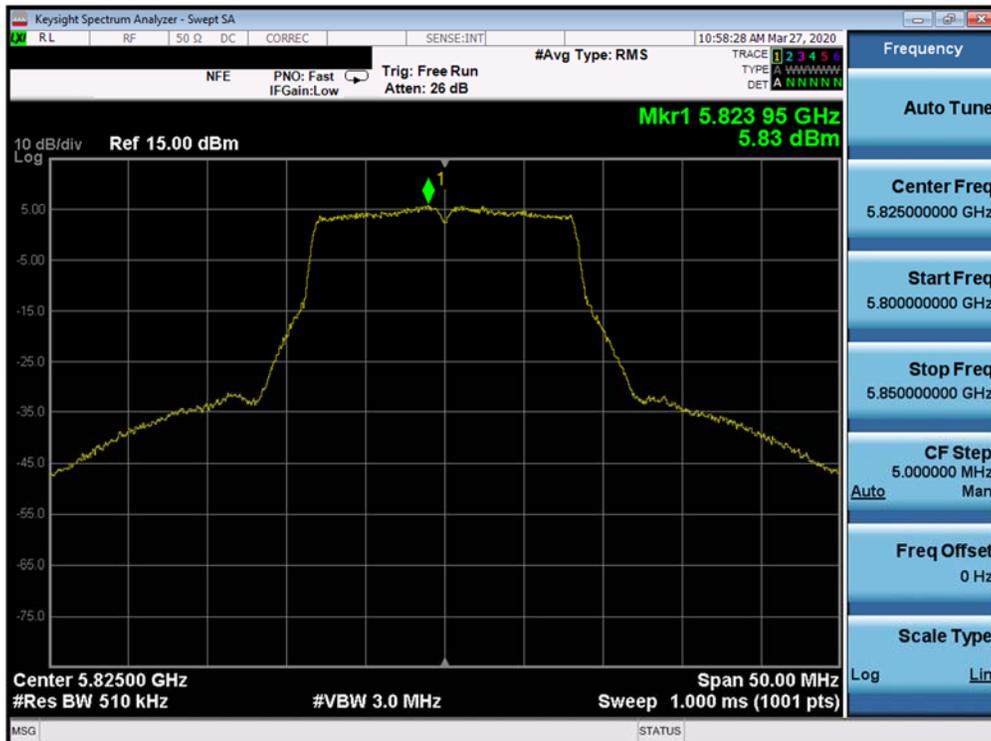


Plot 7-109. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 3) – Ch. 149)

FCC ID: ZNFG900UM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 84 of 178

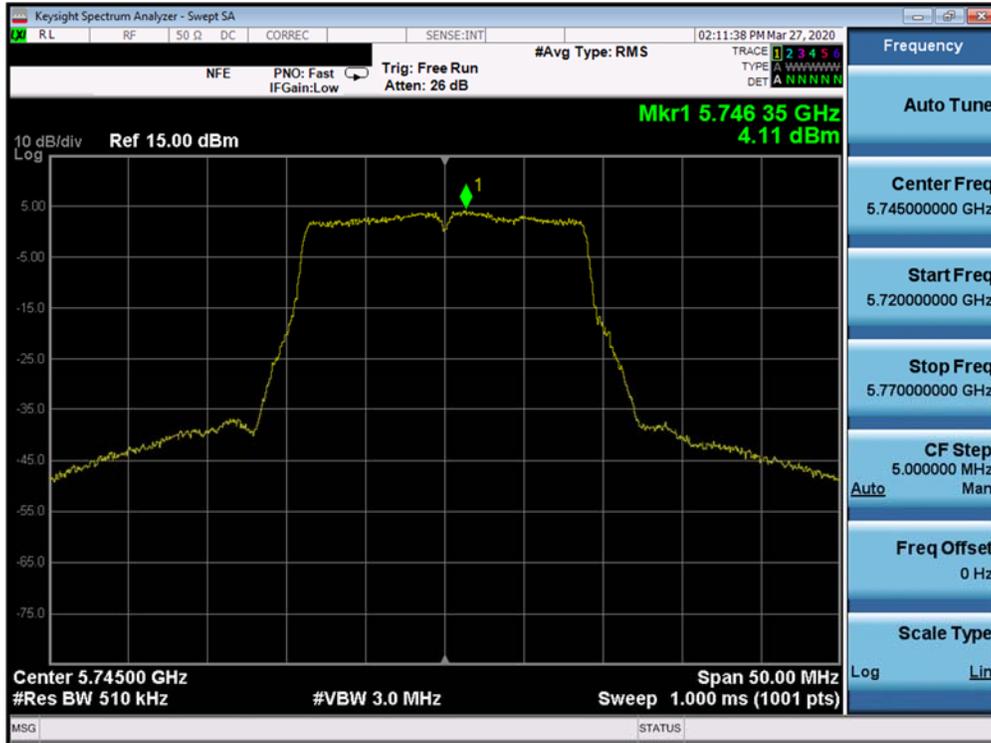


Plot 7-110. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 3) – Ch. 157)

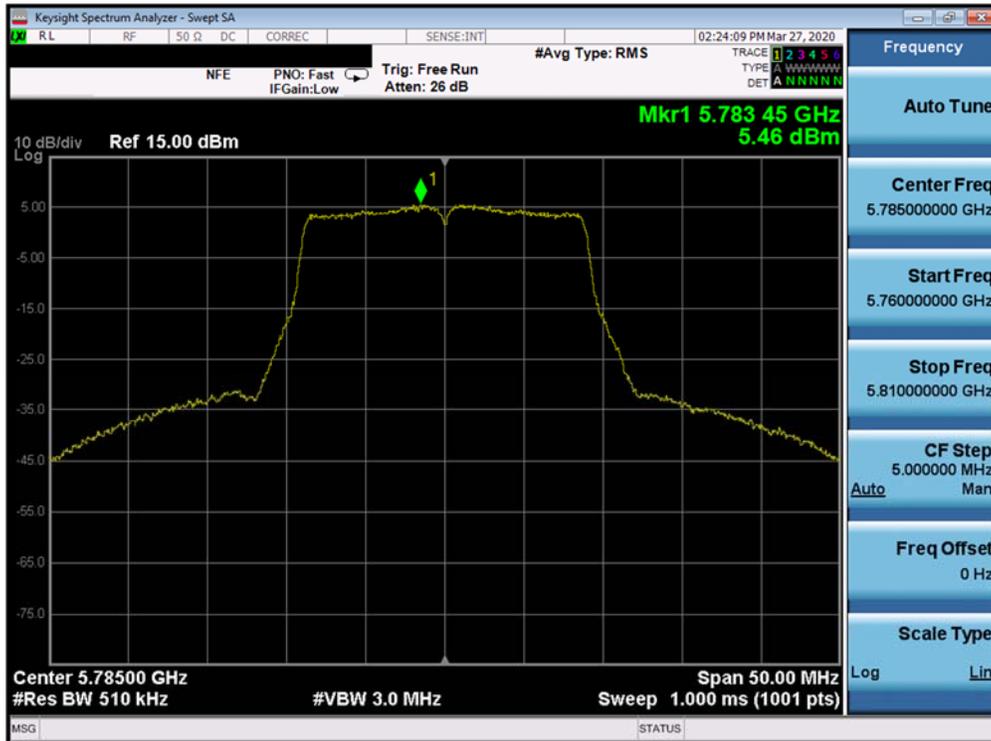


Plot 7-111. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 3) – Ch. 165)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 85 of 178

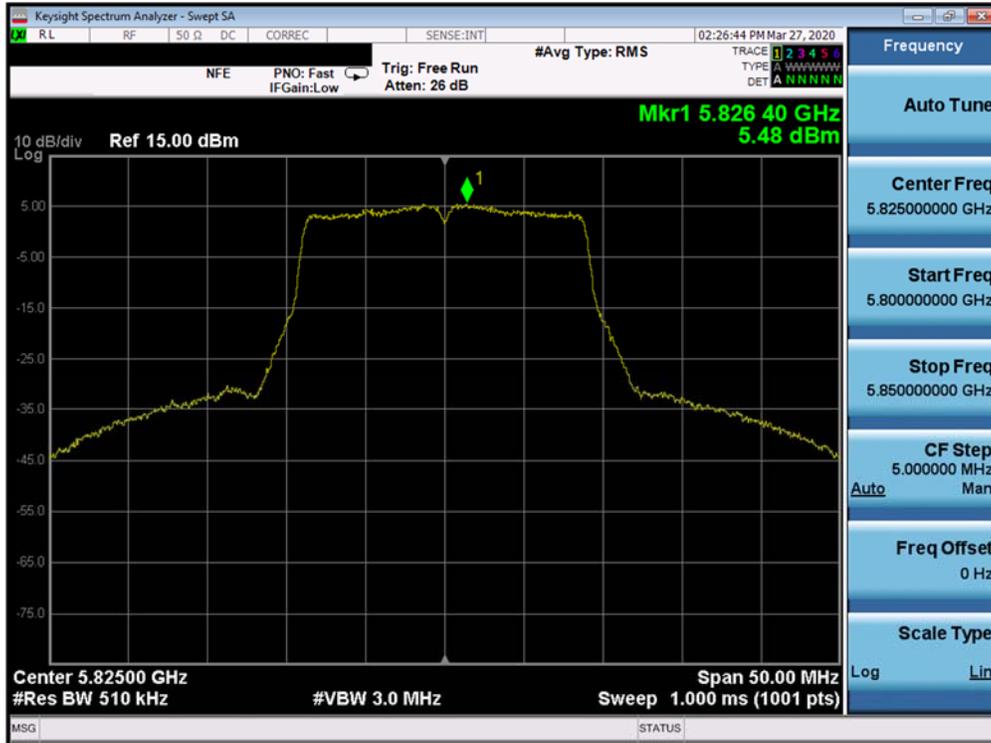


Plot 7-112. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 3) – Ch. 149)

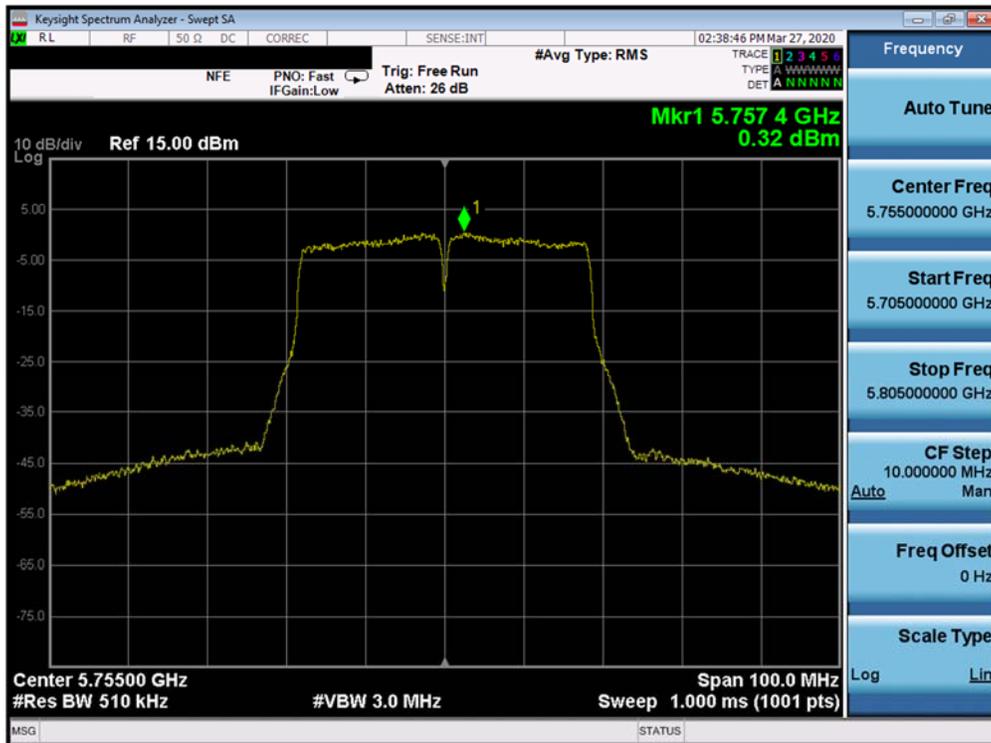


Plot 7-113. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 3) – Ch. 157)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 86 of 178

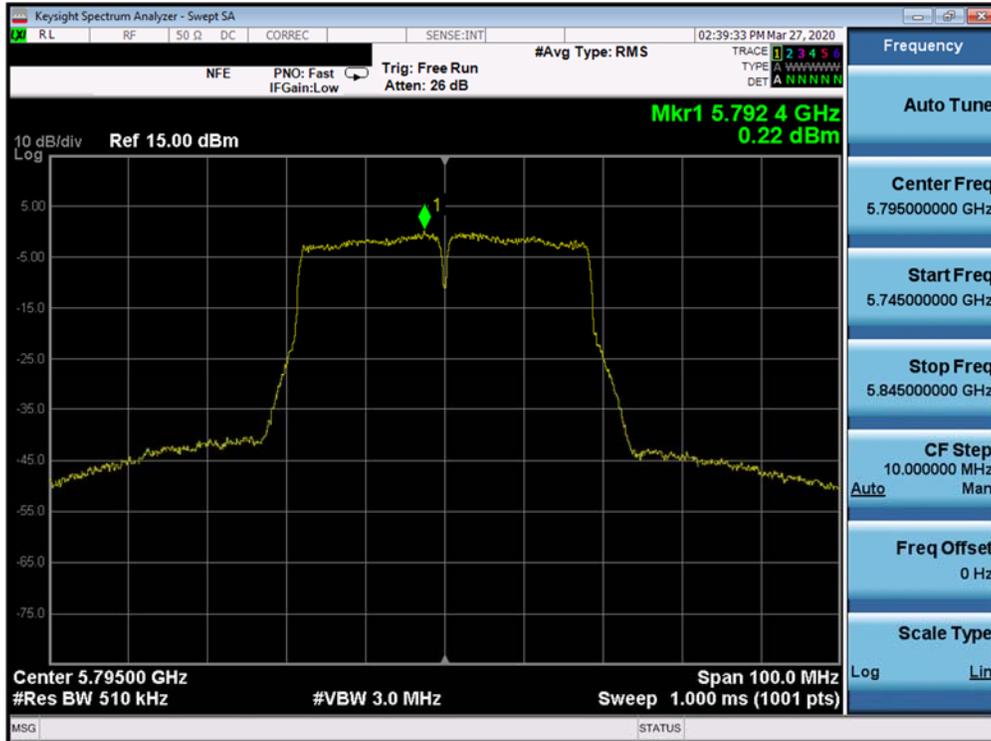


Plot 7-114. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 3) – Ch. 165)

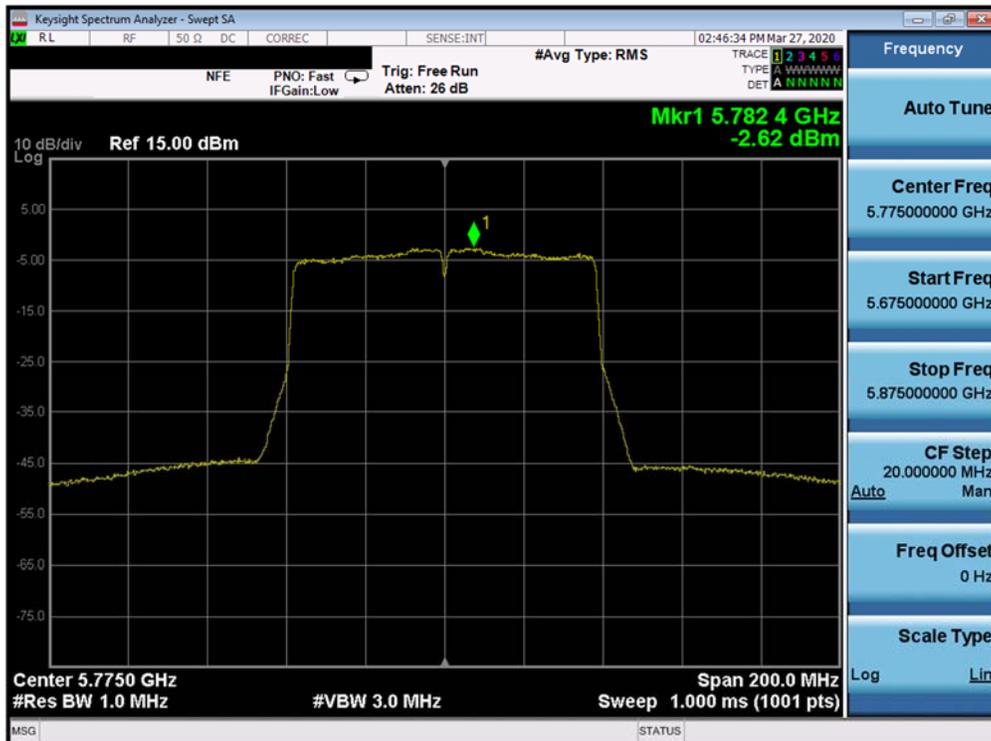


Plot 7-115. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 3) – Ch. 151)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 87 of 178



Plot 7-116. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 3) – Ch. 159)



Plot 7-117. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ac (UNII Band 3) – Ch. 155)

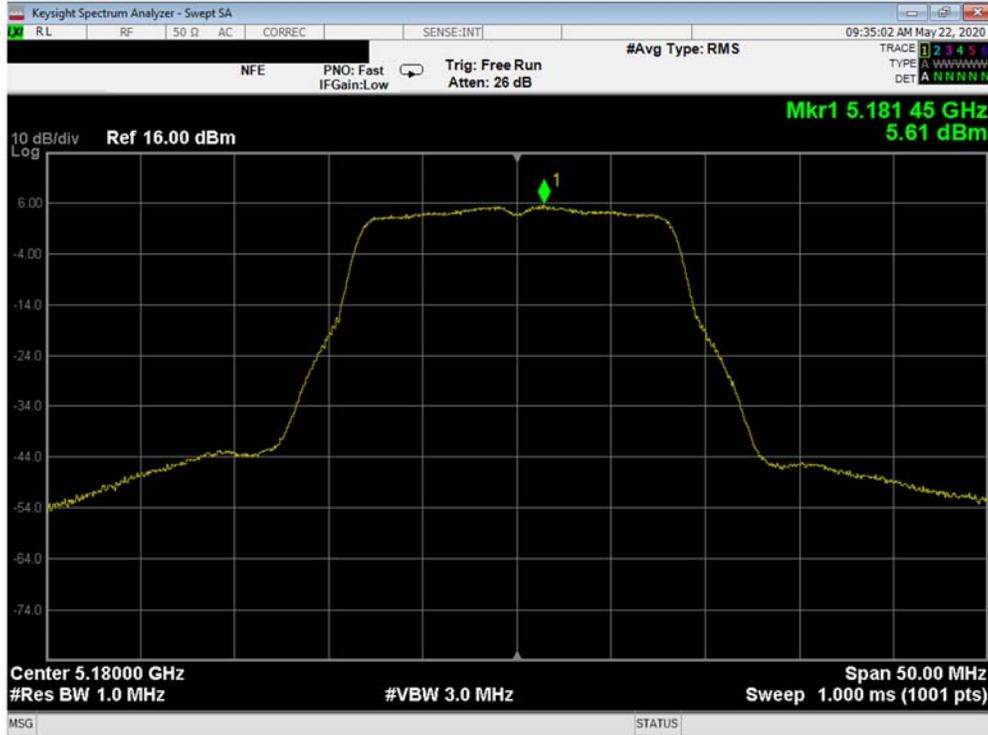
FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 88 of 178

SISO Antenna-2 Power Spectral Density Measurements

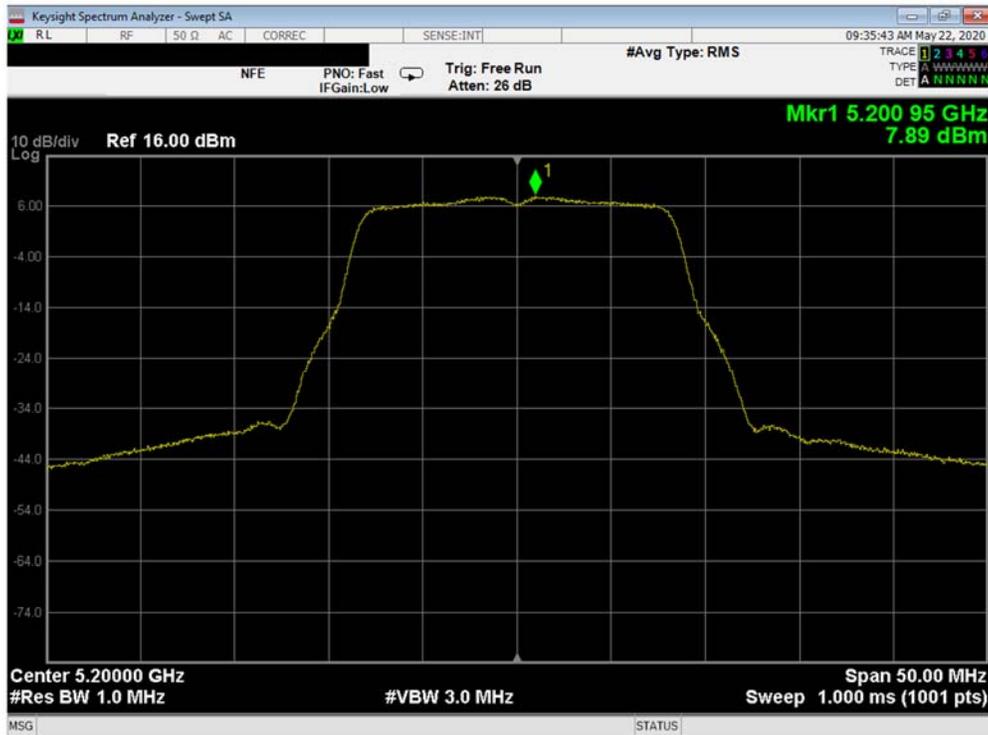
	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Automated (raw data)	Measured Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	a	6	5.61	5.61	11.0	-5.39
	5200	40	a	6	7.89	7.89	11.0	-3.11
	5240	48	a	6	6.21	6.21	11.0	-4.79
	5180	36	n (20MHz)	6.5/7.2 (MCS0)	5.27	5.27	11.0	-5.73
	5200	40	n (20MHz)	6.5/7.2 (MCS0)	7.51	7.51	11.0	-3.49
	5240	48	n (20MHz)	6.5/7.2 (MCS0)	5.52	5.52	11.0	-5.48
	5190	38	n (40MHz)	13.5/15 (MCS0)	1.48	1.48	11.0	-9.52
	5230	46	n (40MHz)	13.5/15 (MCS0)	1.46	1.46	11.0	-9.54
	5210	42	ac (80MHz)	29.3/32.5 (MCS0)	-3.97	-3.97	11.0	-14.97
Band 2A	5260	52	a	6	5.89	5.89	11.0	-5.11
	5280	56	a	6	7.60	7.60	11.0	-3.40
	5320	64	a	6	5.67	5.67	11.0	-5.33
	5260	52	n (20MHz)	6.5/7.2 (MCS0)	5.70	5.70	11.0	-5.30
	5280	56	n (20MHz)	6.5/7.2 (MCS0)	7.30	7.30	11.0	-3.70
	5320	64	n (20MHz)	6.5/7.2 (MCS0)	5.12	5.12	11.0	-5.88
	5270	54	n (40MHz)	13.5/15 (MCS0)	1.26	1.26	11.0	-9.75
	5310	62	n (40MHz)	13.5/15 (MCS0)	0.37	0.37	11.0	-10.63
	5290	58	ac (80MHz)	29.3/32.5 (MCS0)	-4.47	-4.47	11.0	-15.47
Band 2C	5500	100	a	6	5.73	5.73	11.0	-5.28
	5600	120	a	6	5.71	5.71	11.0	-5.29
	5720	144	a	6	6.04	6.04	11.0	-4.96
	5500	100	n (20MHz)	6.5/7.2 (MCS0)	5.34	5.34	11.0	-5.66
	5600	120	n (20MHz)	6.5/7.2 (MCS0)	5.18	5.18	11.0	-5.82
	5720	144	n (20MHz)	6.5/7.2 (MCS0)	5.66	5.66	11.0	-5.34
	5510	102	n (40MHz)	13.5/15 (MCS0)	-0.08	-0.08	11.0	-11.08
	5590	118	n (40MHz)	13.5/15 (MCS0)	1.23	1.23	11.0	-9.77
	5710	142	n (40MHz)	13.5/15 (MCS0)	1.89	1.89	11.0	-9.11
	5530	106	ac (80MHz)	29.3/32.5 (MCS0)	-4.42	-4.42	11.0	-15.42
	5610	122	ac (80MHz)	29.3/32.5 (MCS0)	-4.83	-4.83	11.0	-15.83
	5690	138	ac (80MHz)	29.3/32.5 (MCS0)	-6.85	-6.85	11.0	-17.85

Table 7-20. Conducted Power Spectral Density Measurements SISO ANT2

FCC ID: ZNFG900UM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 89 of 178

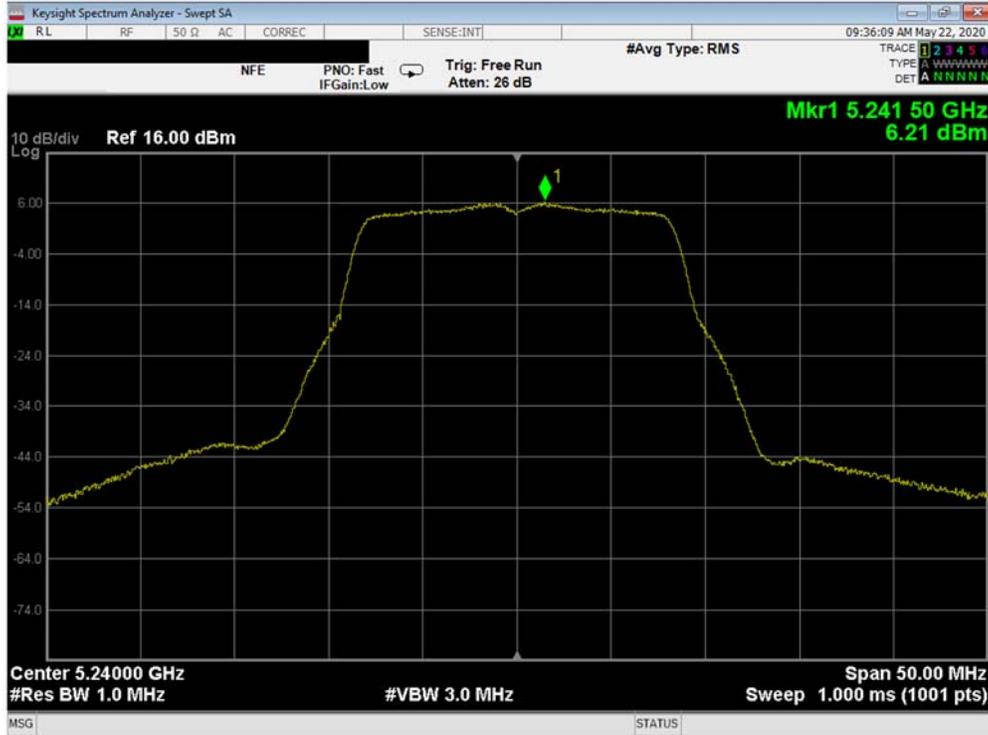


Plot 7-118. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 1) – Ch. 36)



Plot 7-119. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 1) – Ch. 40)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 90 of 178

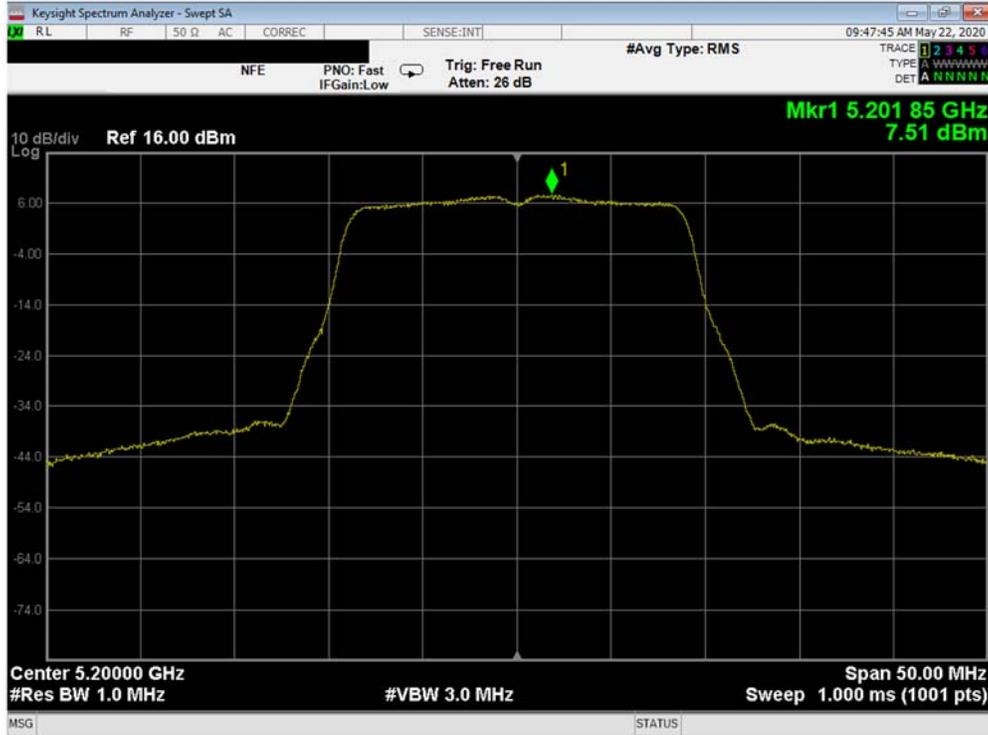


Plot 7-120. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 1) – Ch. 48)

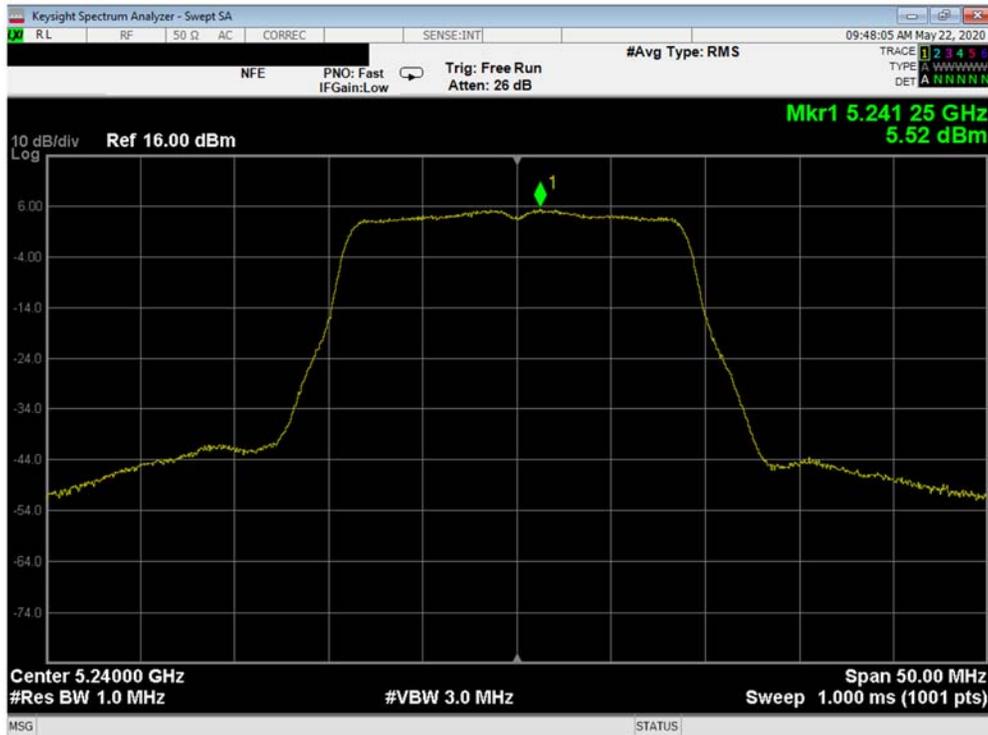


Plot 7-121. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 1) – Ch. 36)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 91 of 178

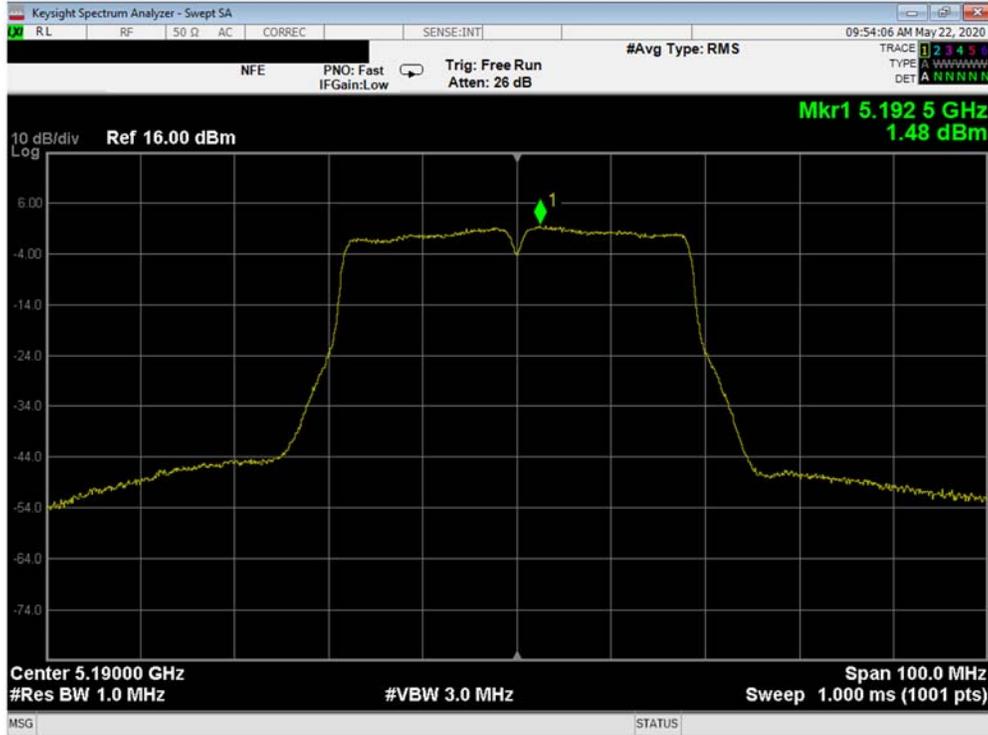


Plot 7-122. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 1) – Ch. 40)

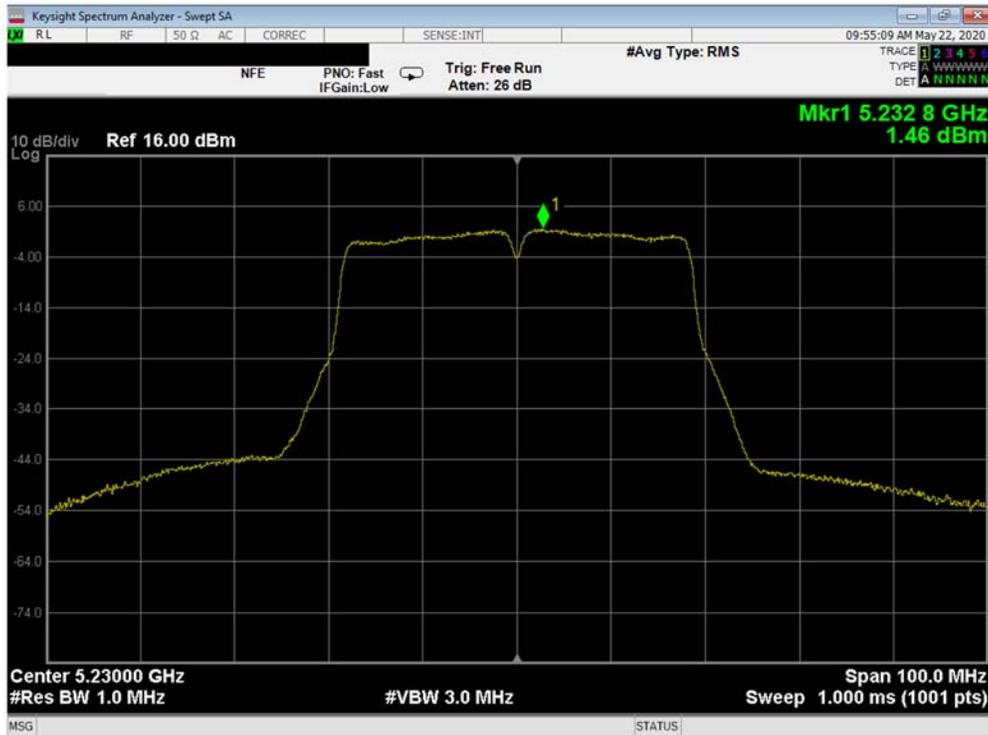


Plot 7-123. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 1) – Ch. 48)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 92 of 178

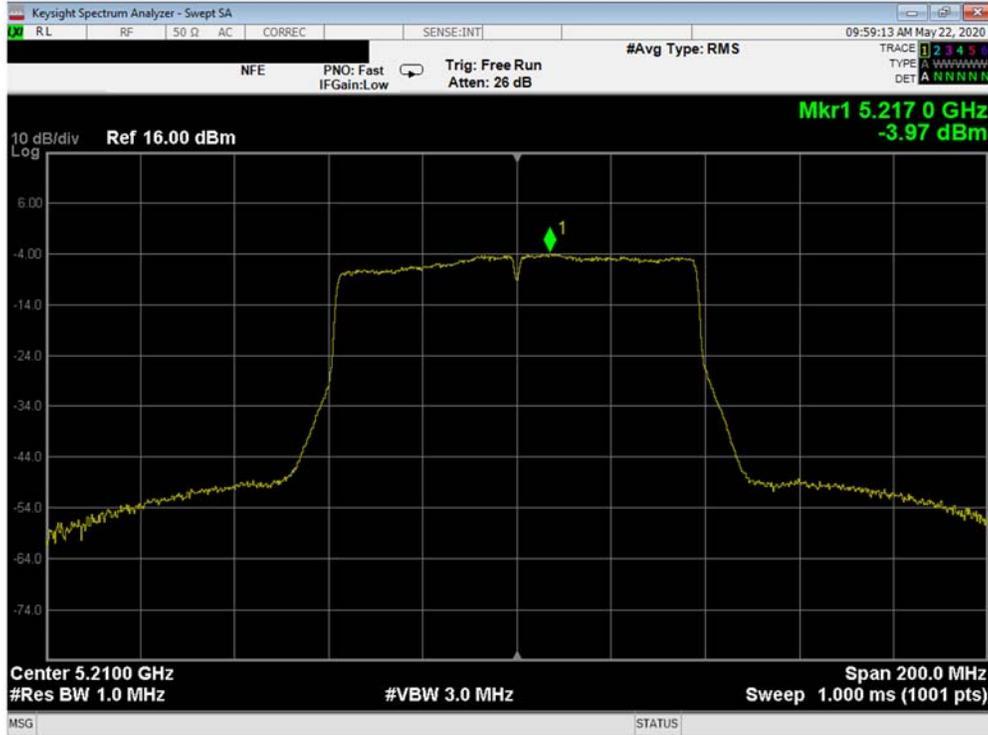


Plot 7-124. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11n (UNII Band 1) – Ch. 38)

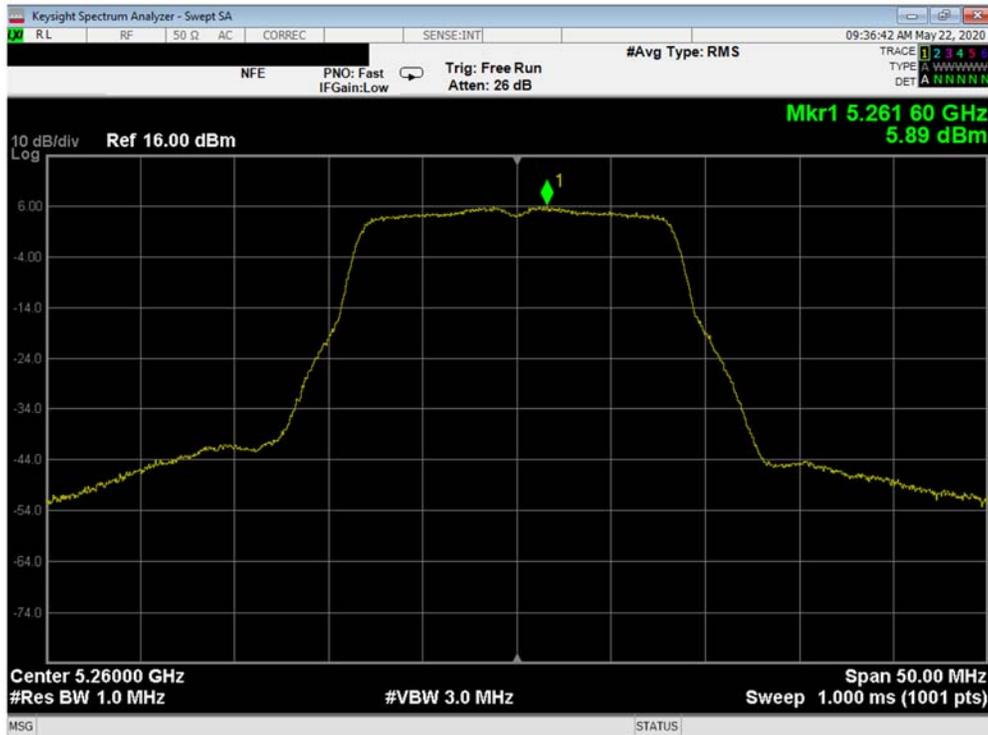


Plot 7-125. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11n (UNII Band 1) – Ch. 46)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 93 of 178

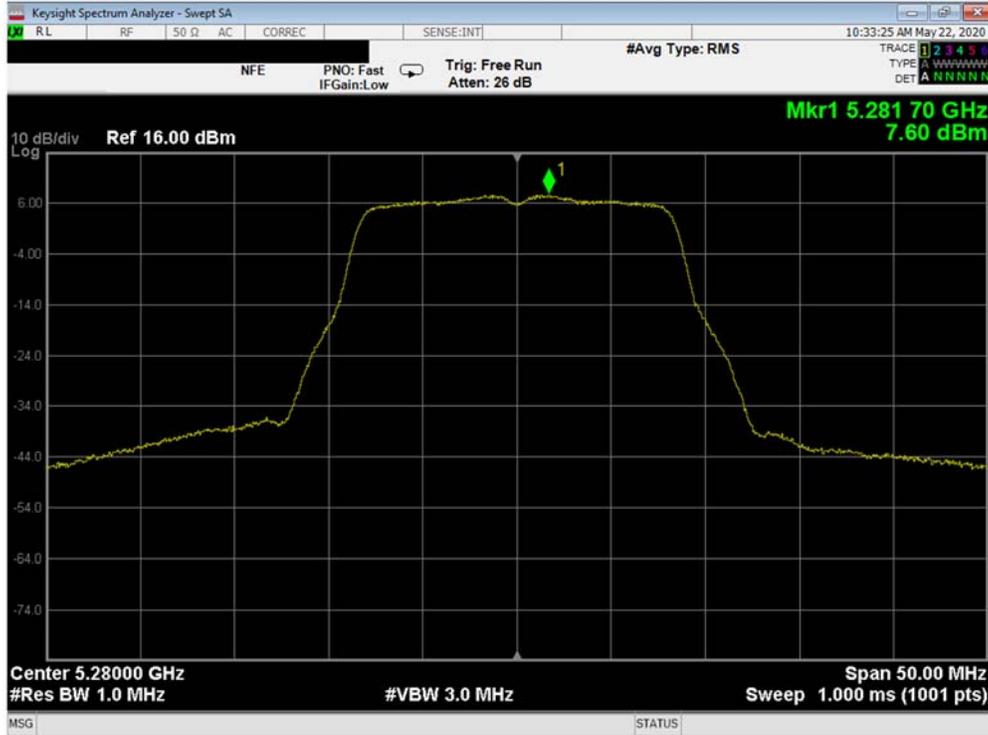


Plot 7-126. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ac (UNII Band 1) – Ch. 42)



Plot 7-127. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 2A) – Ch. 52)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 94 of 178

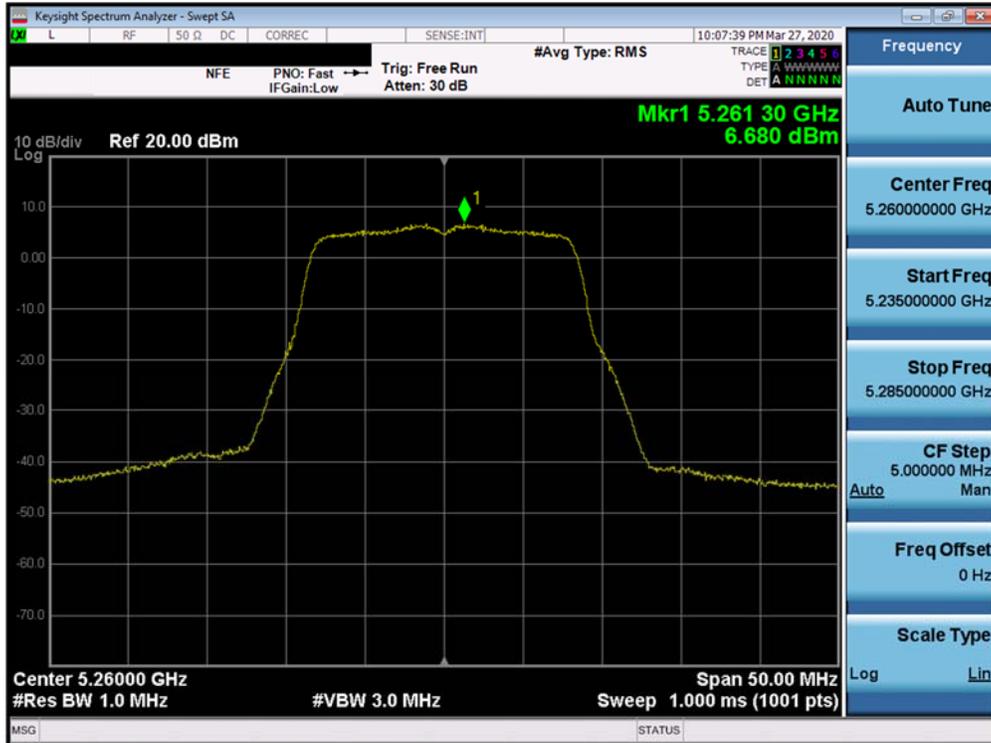


Plot 7-128. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 2A) – Ch. 56)

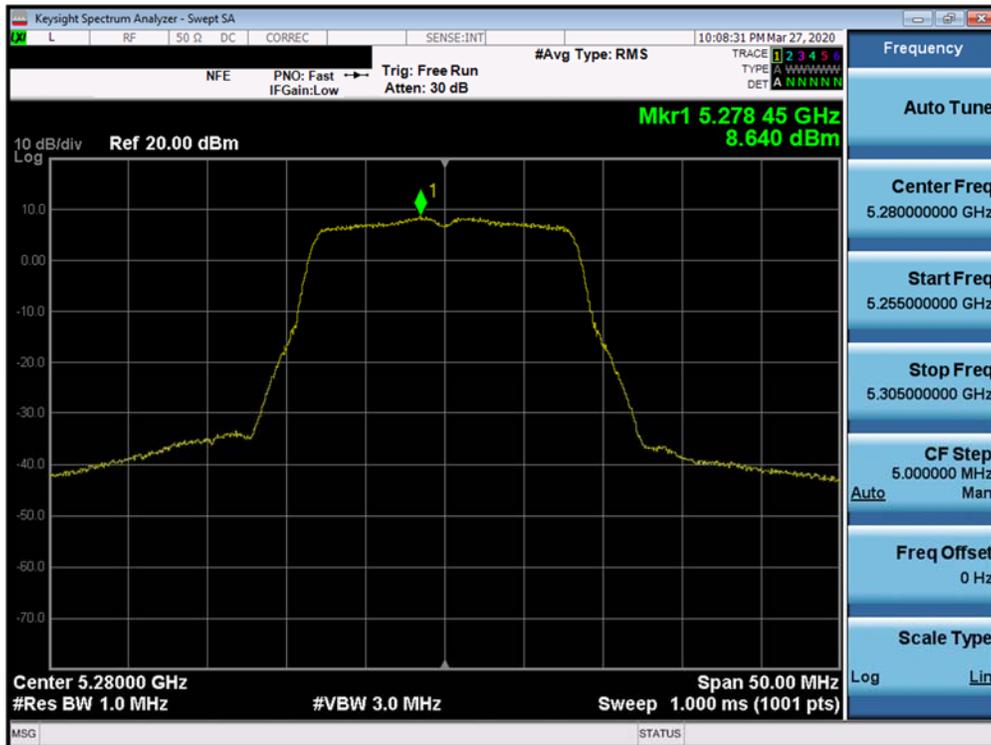


Plot 7-129. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 2A) – Ch. 64)

FCC ID: ZNFG900UM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 95 of 178

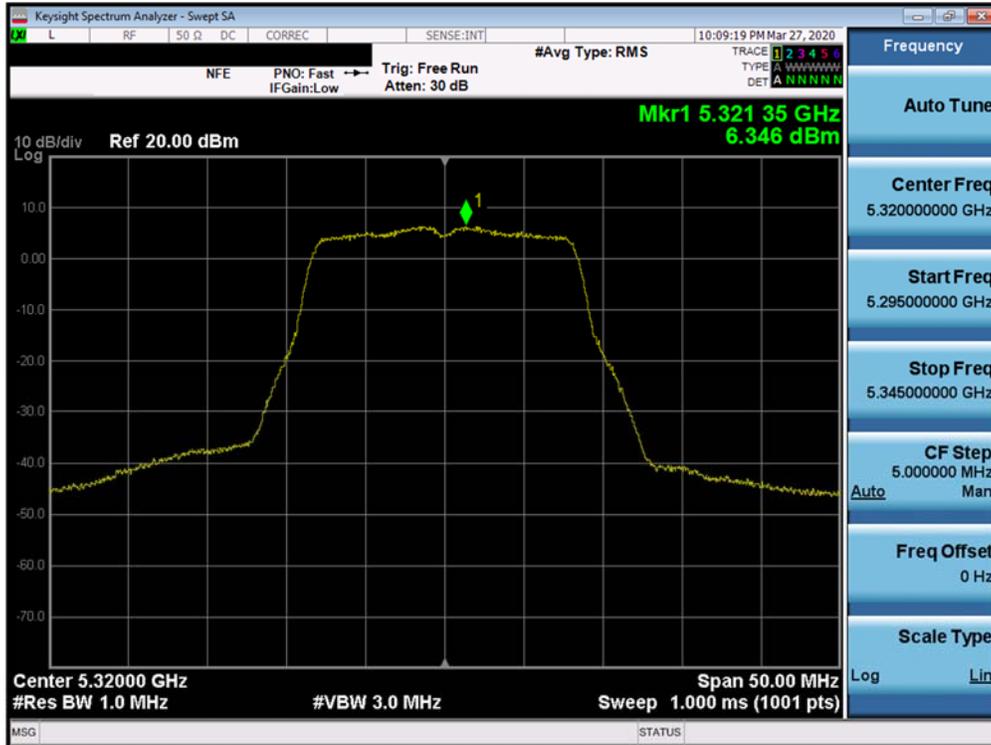


Plot 7-130. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 2A) – Ch. 52)

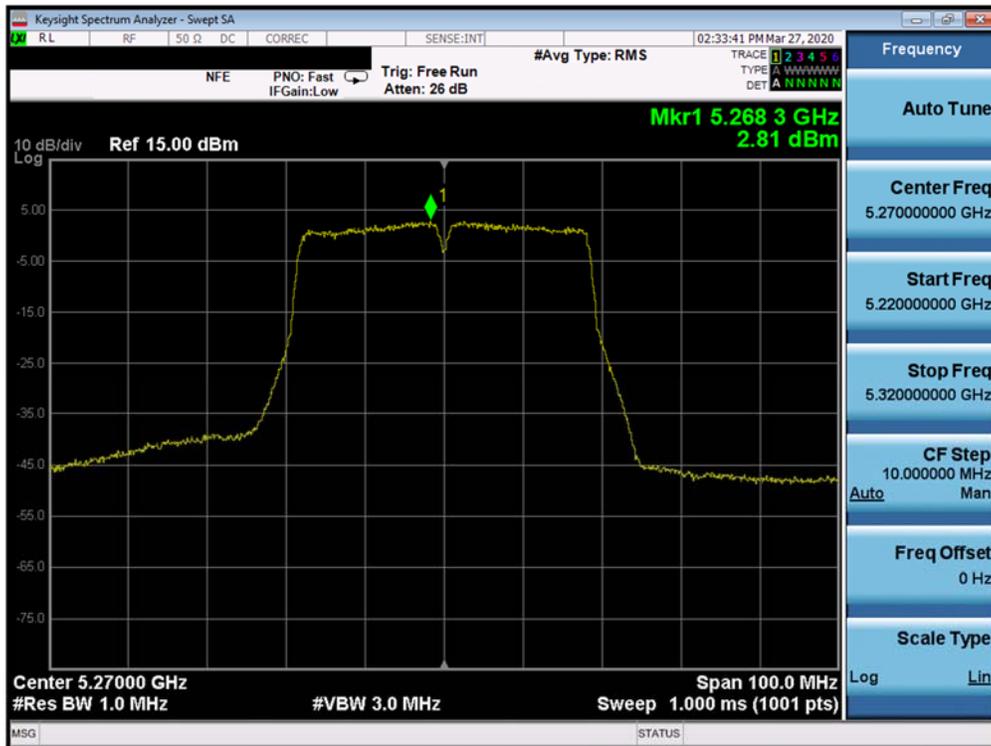


Plot 7-131. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 2A) – Ch. 56)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 96 of 178

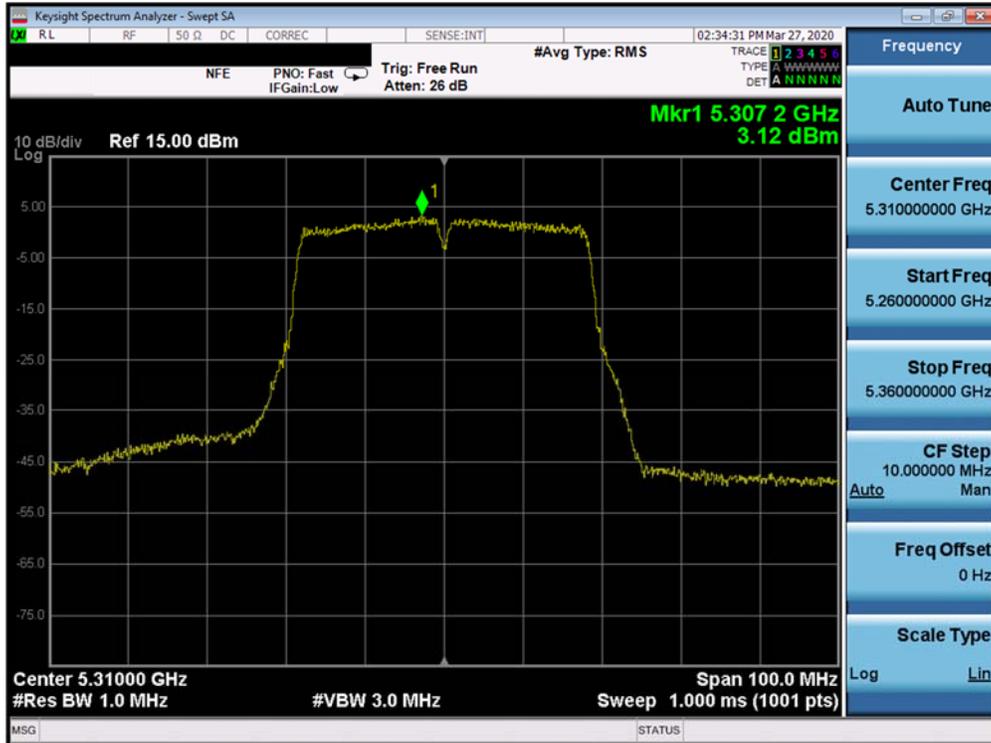


Plot 7-132. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 2A) – Ch. 64)

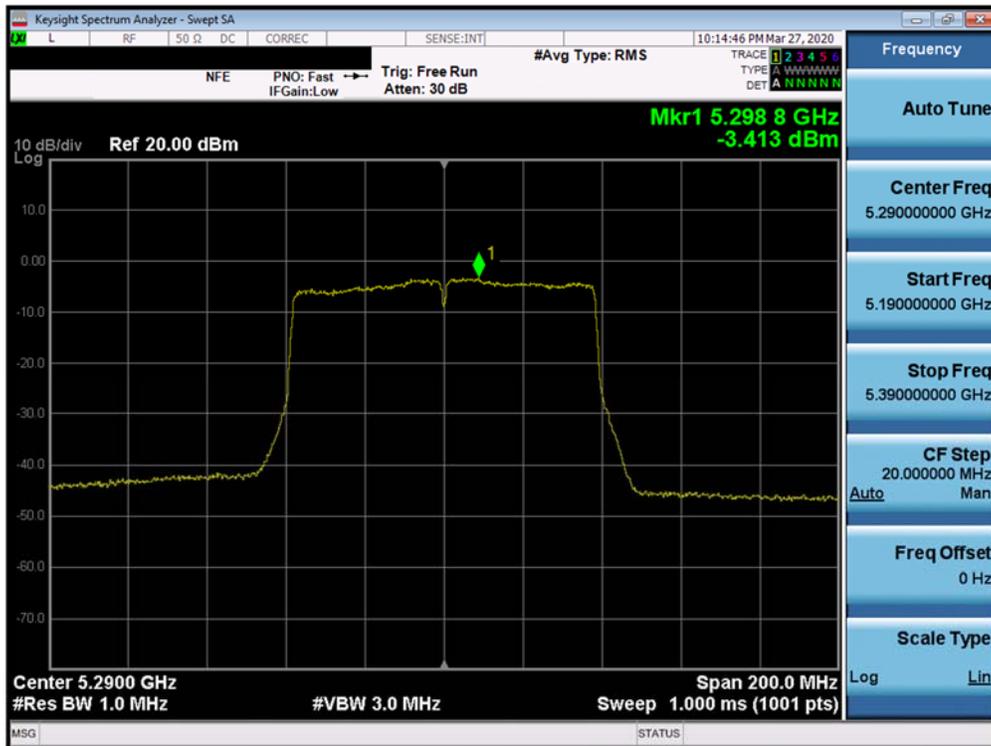


Plot 7-133. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11n (UNII Band 2A) – Ch. 54)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 97 of 178

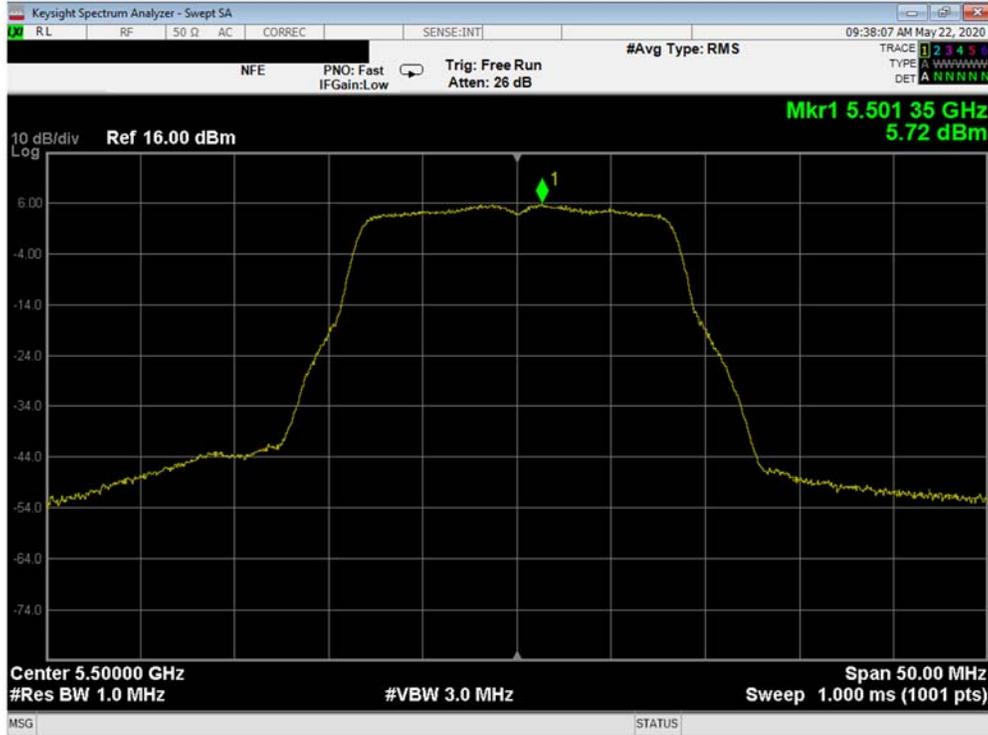


Plot 7-134. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11n (UNII Band 2A) – Ch. 62)



Plot 7-135. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ac (UNII Band 2A) – Ch. 58)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 98 of 178

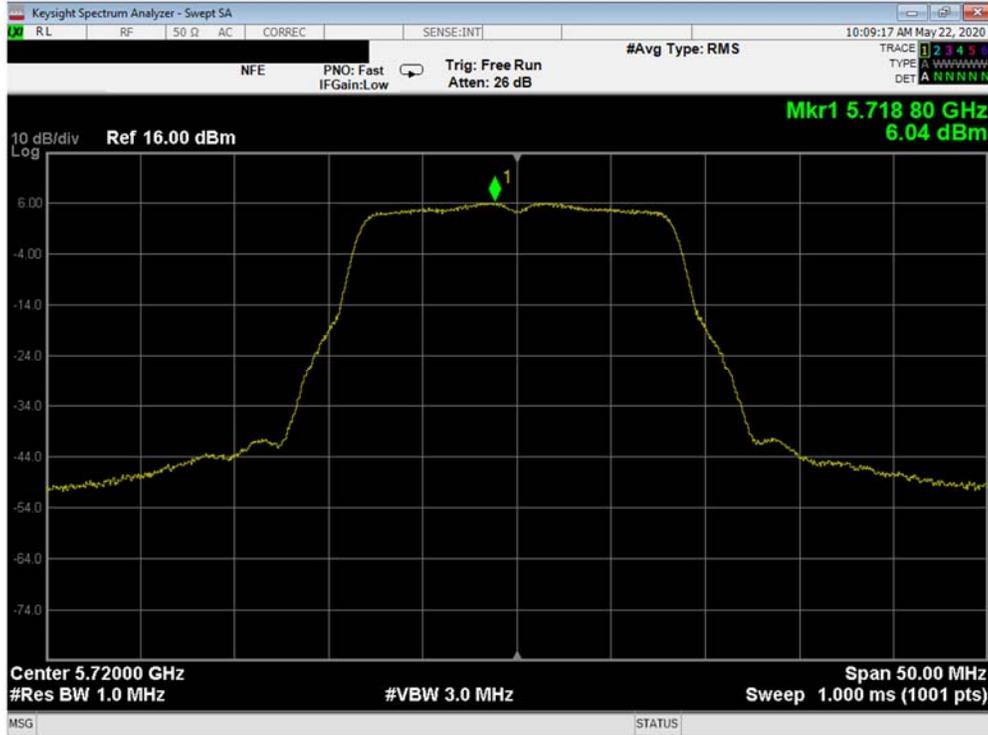


Plot 7-136. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 2C) – Ch. 100)

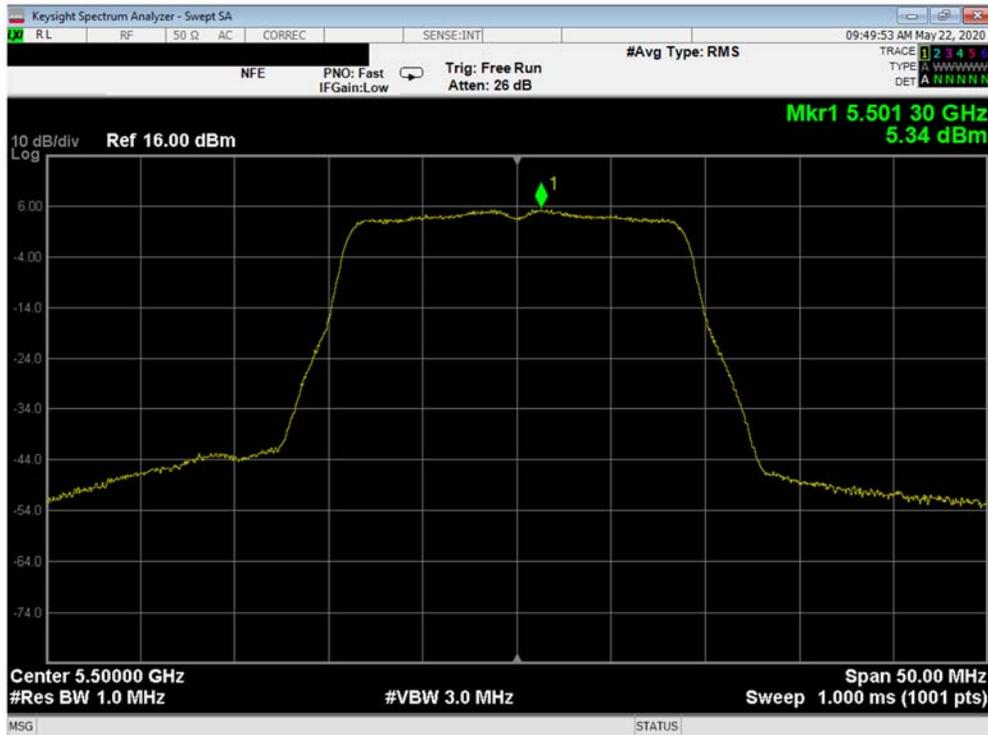


Plot 7-137. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 2C) – Ch. 120)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 99 of 178

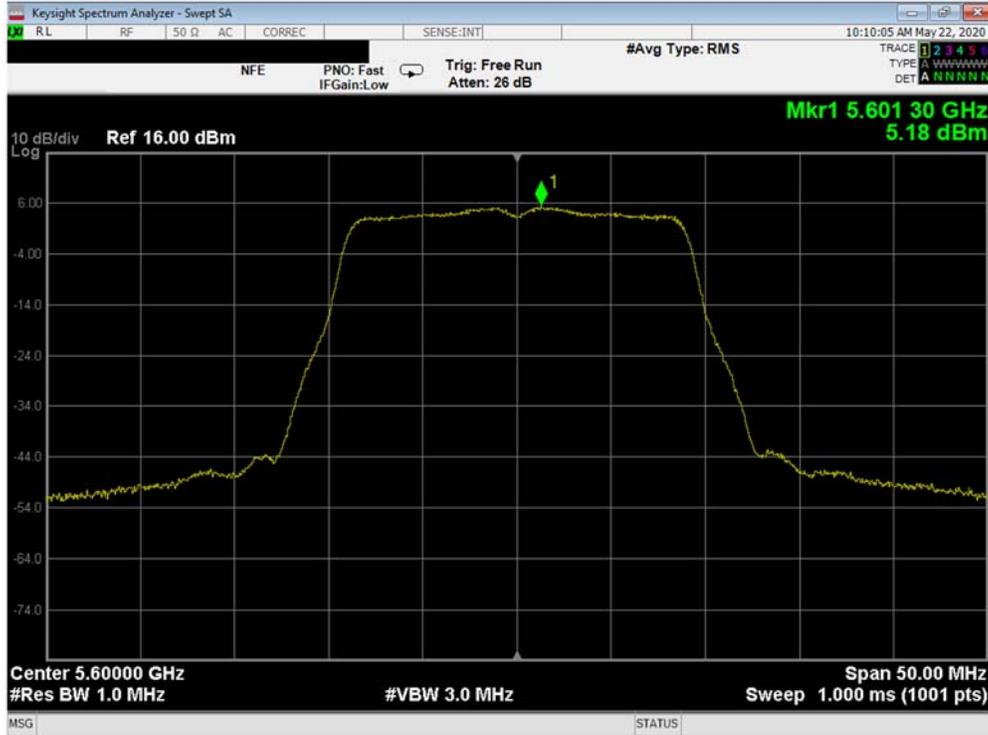


Plot 7-138. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 2C) – Ch. 144)

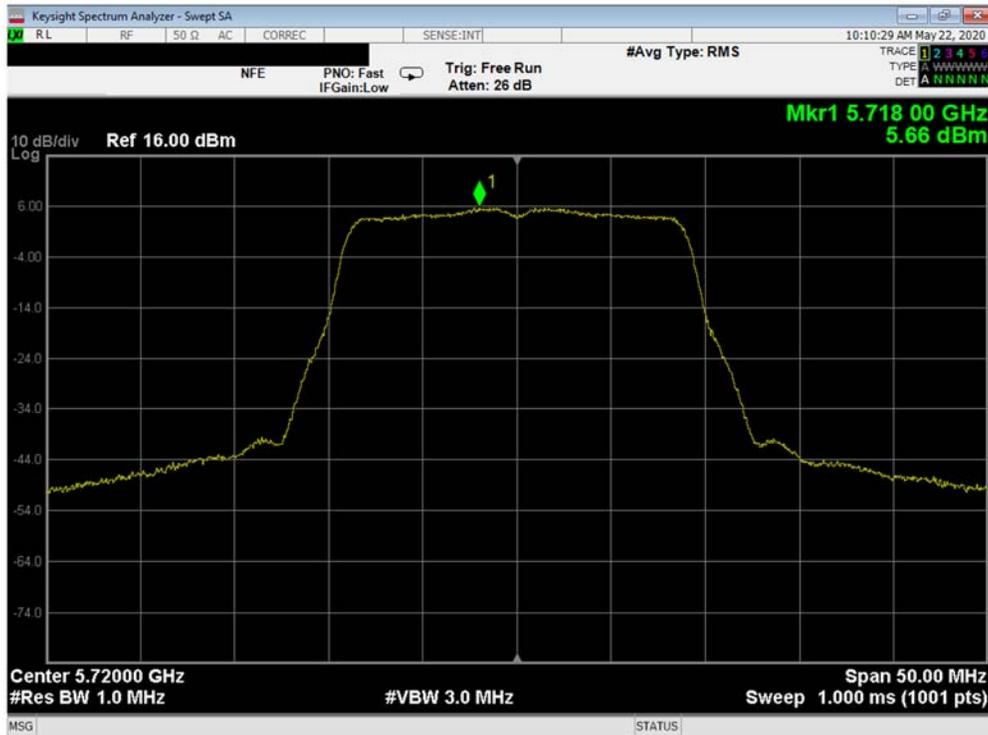


Plot 7-139. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 2C) – Ch. 100)

FCC ID: ZNFG900UM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 100 of 178

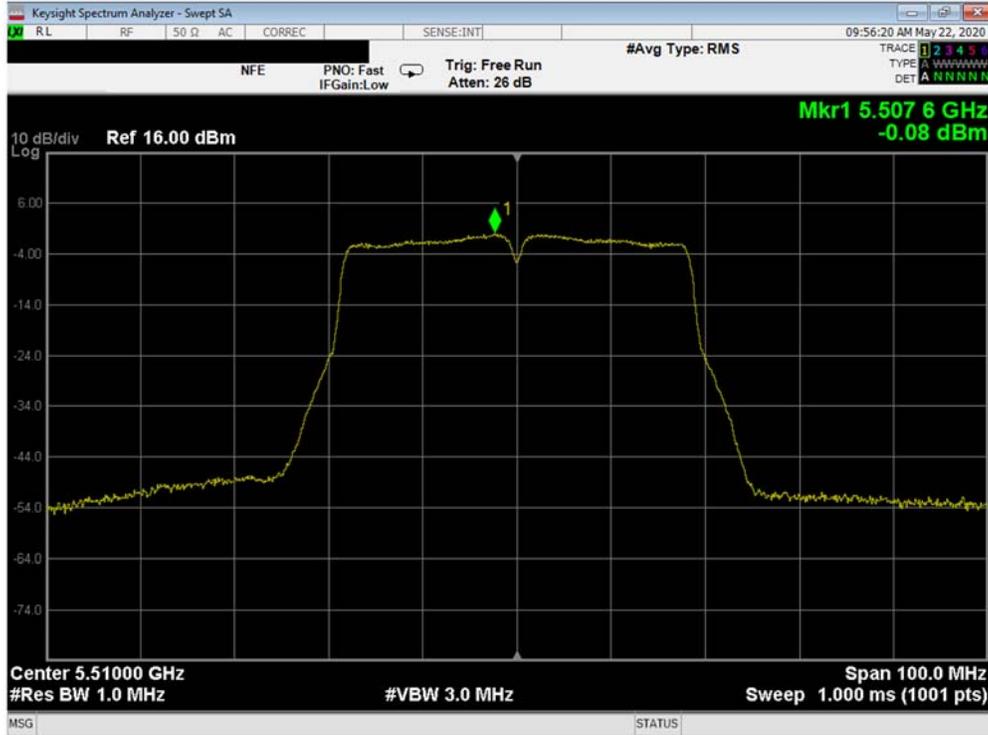


Plot 7-140. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 2C) – Ch. 120)

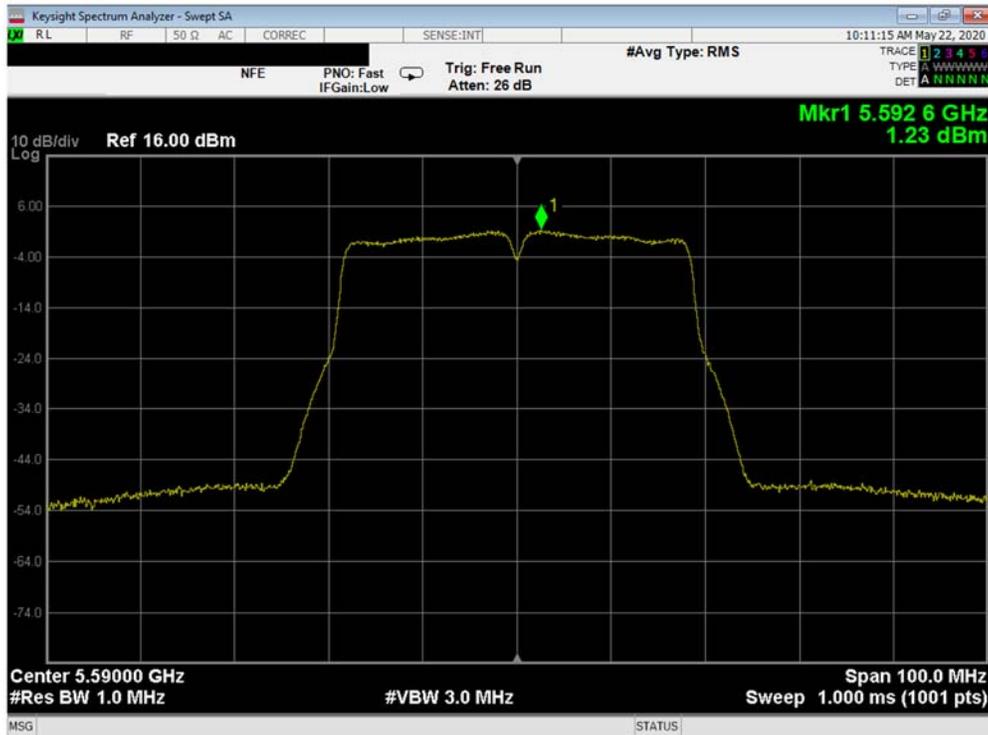


Plot 7-141. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 2C) – Ch. 144)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 101 of 178

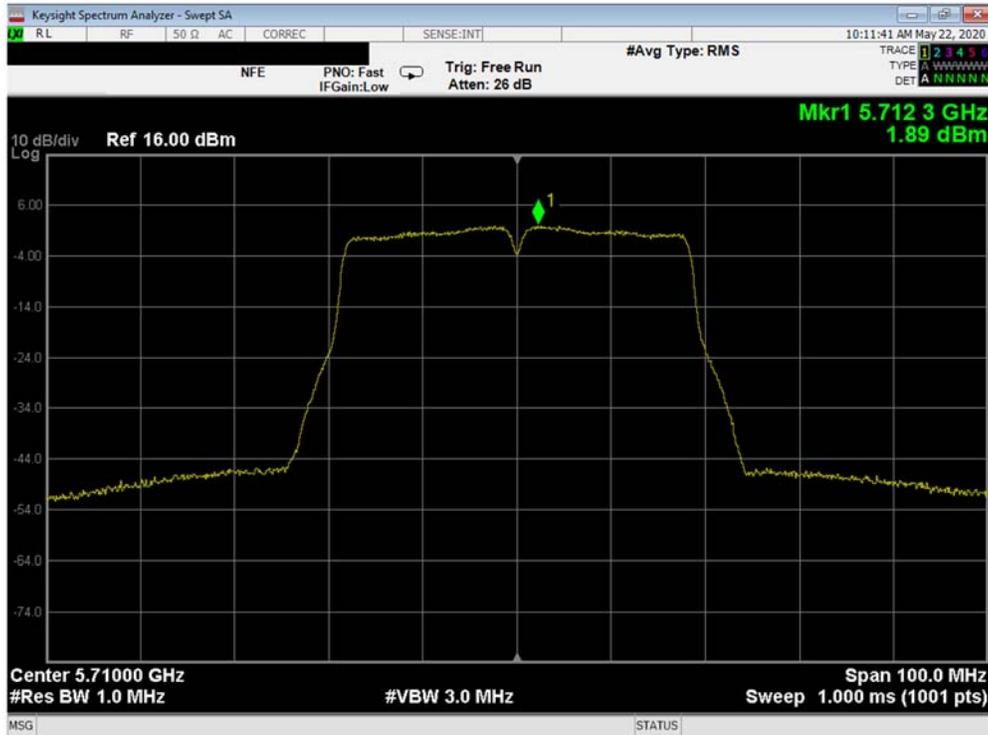


Plot 7-142. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11n (UNII Band 2C) – Ch. 102)

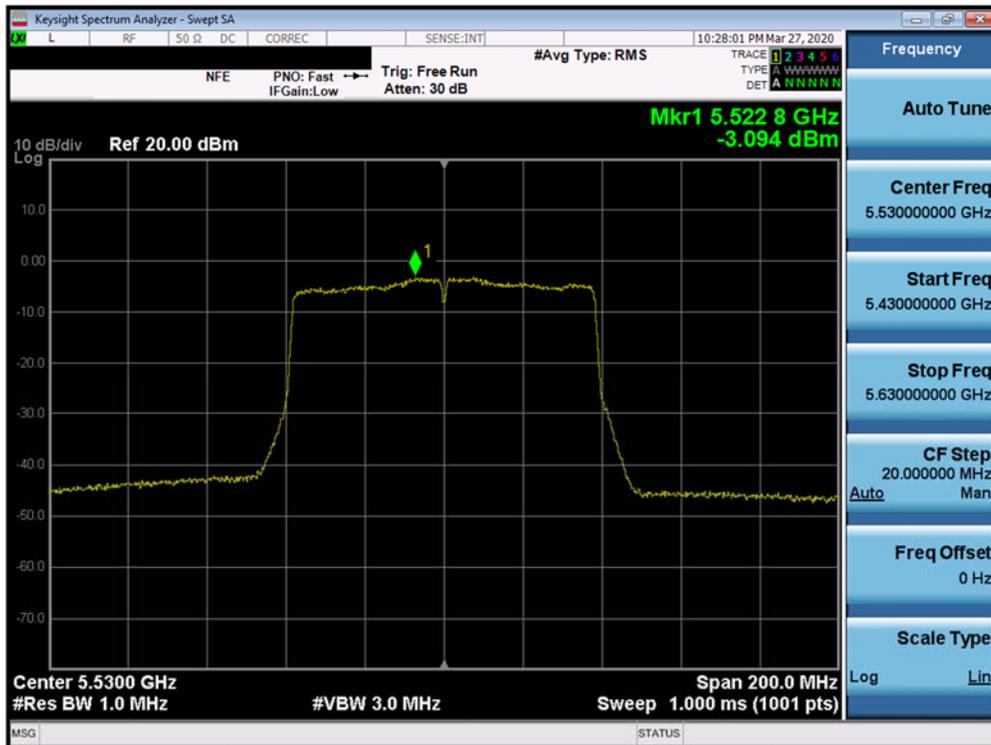


Plot 7-143. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11n (UNII Band 2C) – Ch. 118)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 102 of 178

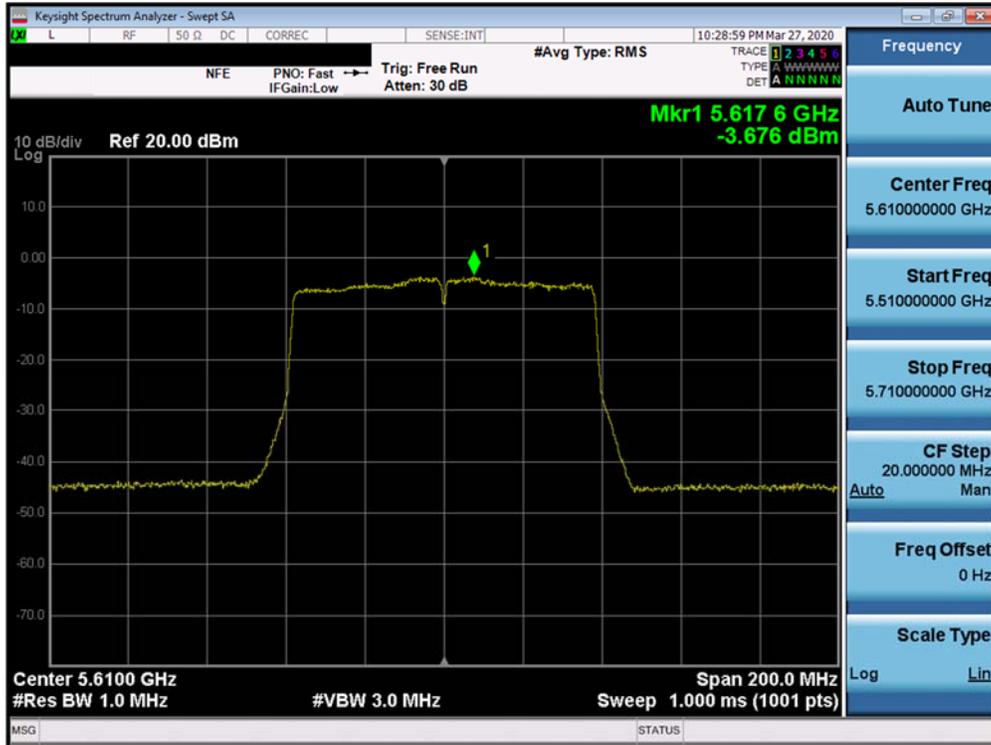


Plot 7-144. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11n (UNII Band 2C) – Ch. 142)

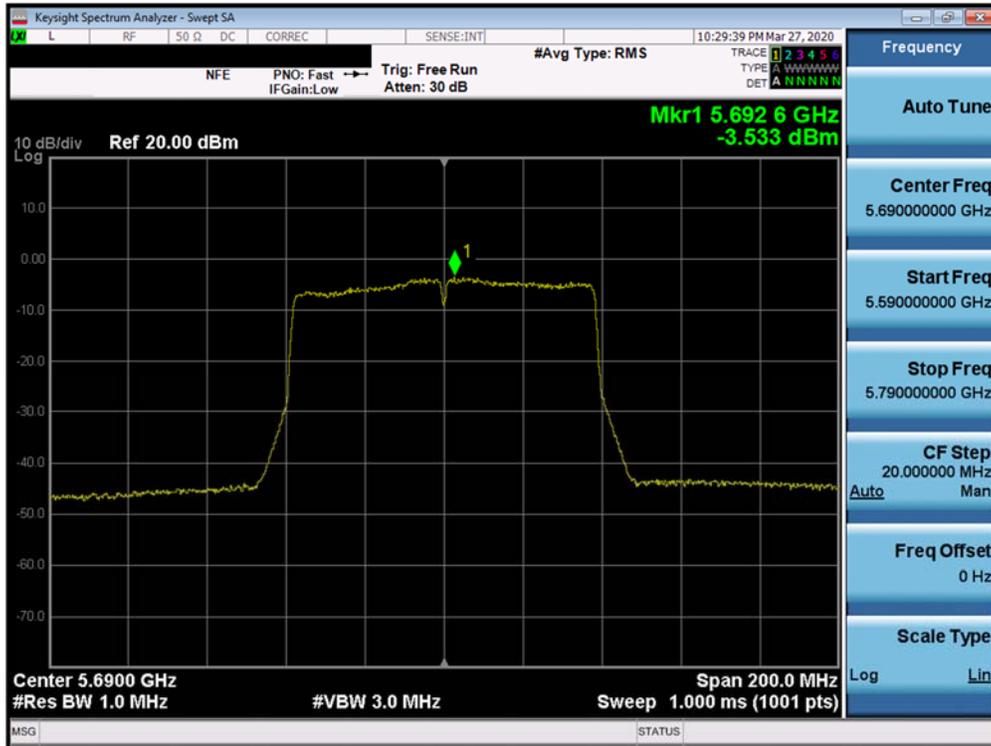


Plot 7-145. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 106)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 103 of 178



Plot 7-146. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 122)



Plot 7-147. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 138)

FCC ID: ZNFG900UM	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 104 of 178

	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
Band 3	5745	149	a	6	6.66	30.0	-23.34
	5785	157	a	6	8.57	30.0	-21.43
	5825	165	a	6	8.10	30.0	-21.90
	5745	149	n (20MHz)	6.5/7.2 (MCS0)	6.24	30.0	-23.76
	5785	157	n (20MHz)	6.5/7.2 (MCS0)	8.32	30.0	-21.68
	5825	165	n (20MHz)	6.5/7.2 (MCS0)	7.67	30.0	-22.34
	5755	151	n (40MHz)	13.5/15 (MCS0)	2.48	30.0	-27.52
	5795	159	n (40MHz)	13.5/15 (MCS0)	2.40	30.0	-27.60
	5775	155	ac (80MHz)	29.3/32.5 (MCS0)	-3.09	30.0	-33.09

Table 7-21. Band 3 Conducted Power Spectral Density Measurements SISO ANT2



Plot 7-148. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 3) – Ch. 149)

FCC ID: ZNFG900UM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200048-06.ZNF	Test Dates: 3/23-5/23/2020	EUT Type: Portable Handset		Page 105 of 178