

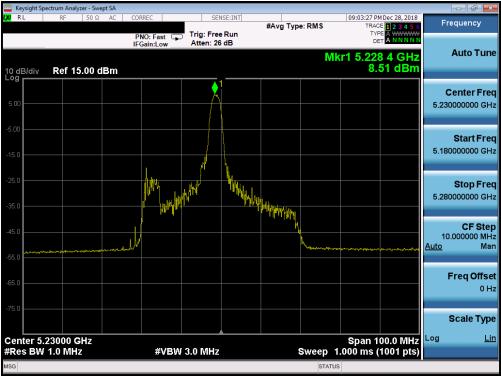
Plot 7-111. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch.



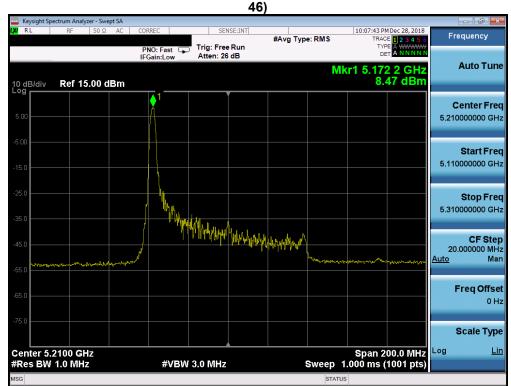
Plot 7-112. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 38)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-113. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch.



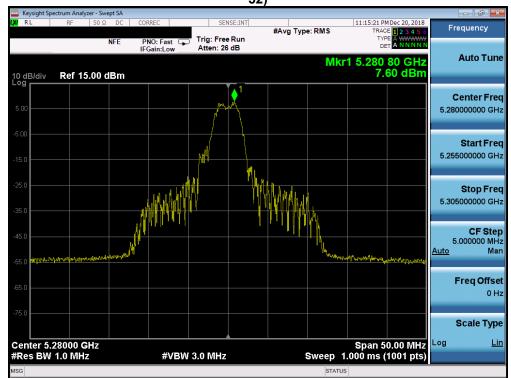
Plot 7-114. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 42)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Daga 100 of 510
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Plot 7-115. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 52)



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

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-117. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch.



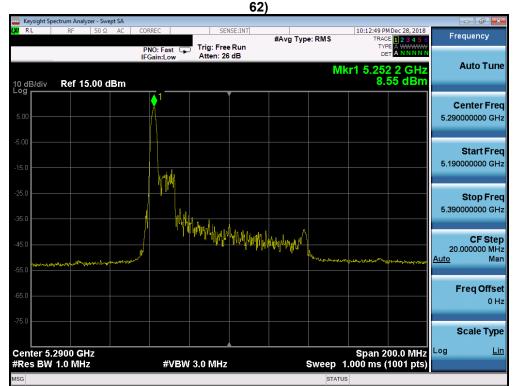
Plot 7-118. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 54)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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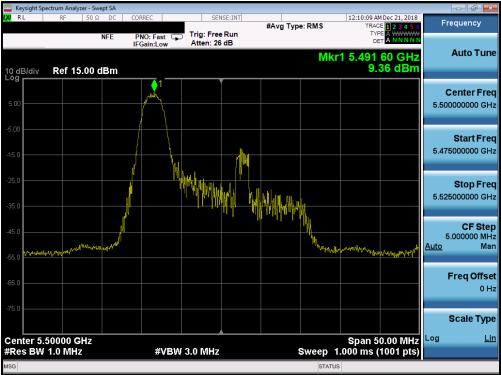
Plot 7-119. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch.



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

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-121. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 100)



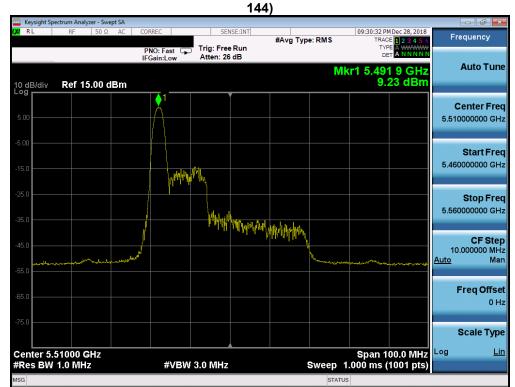
Plot 7-122. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 120)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 112 of 510
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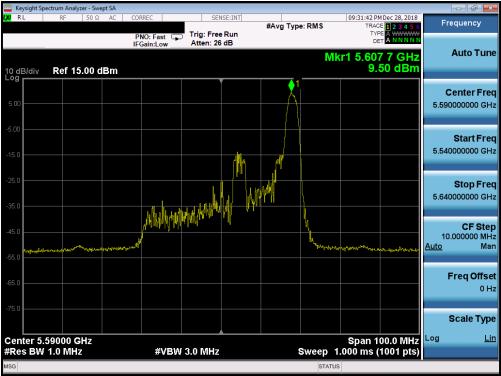
Plot 7-123. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch.



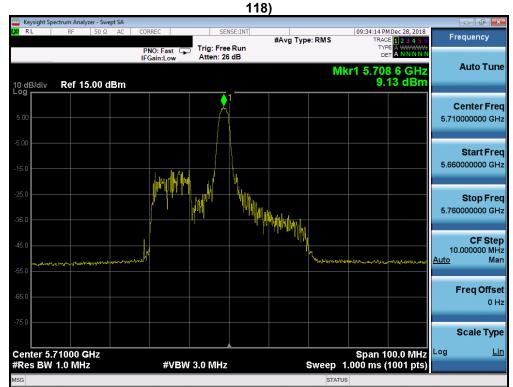
Plot 7-124. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 102)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-125. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch.



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

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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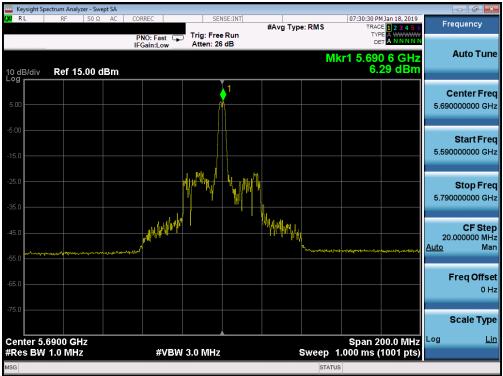
Plot 7-127. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 106)



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

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-129. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch.

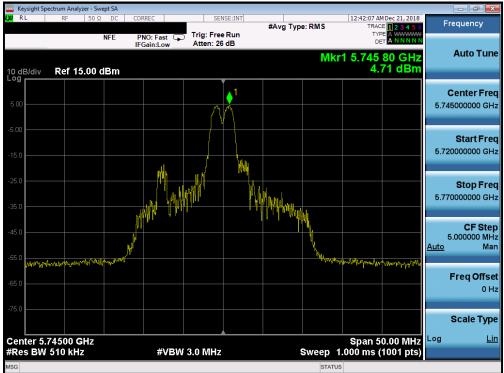
1	38)

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

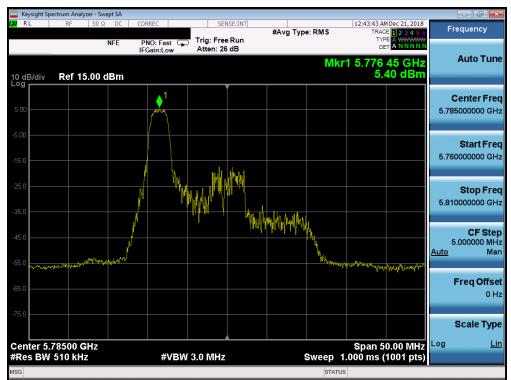
Table 7-65. Band 3 Conducted Power Spectral Density Measurements SISO ANT1 (26 Tones)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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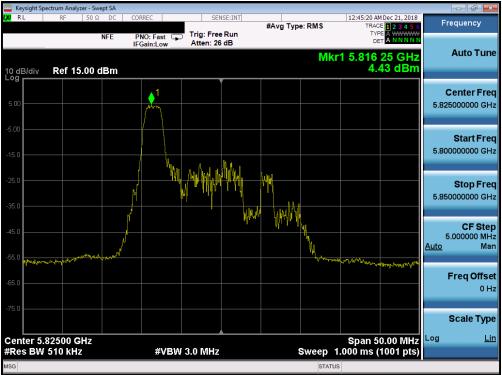
Plot 7-130. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 149)



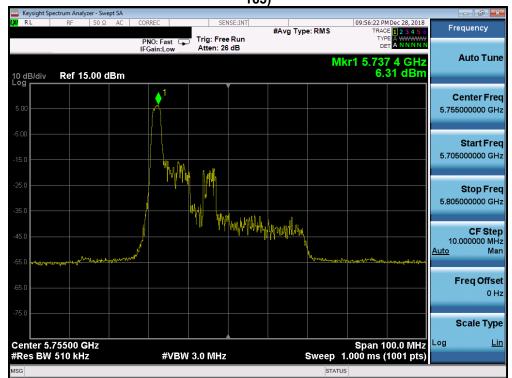
Plot 7-131. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 157)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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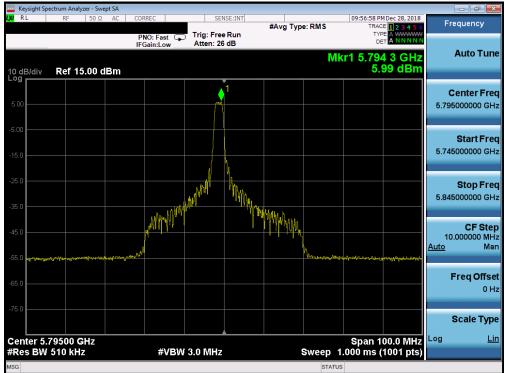
Plot 7-132. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 165)



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

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-134. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 159)



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

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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SISO Antenna-1 Power Spectral Density Measurements (52 Tones)

	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
	5180	36	ax (20MHz)	52T	MCS0	6.73	11.00	-4.27
۲	5200	40	ax (20MHz)	52T	MCS0	6.56	11.00	-4.44
, pr	5240	48	ax (20MHz)	52T	MCS0	7.26	11.00	-3.74
Band	5190	38	ax (40MHz)	52T	MCS0	7.73	11.00	-3.27
_	5230	46	ax (40MHz)	52T	MCS0	7.49	11.00	-3.51
	5210	42	ax (80MHz)	52T	MCS0	7.51	11.00	-3.49
	5260	52	ax (20MHz)	52T	MCS0	7.40	11.00	-3.60
∢	5280	56	ax (20MHz)	52T	MCS0	7.51	11.00	-3.49
d 2	5320	64	ax (20MHz)	52T	MCS0	7.36	11.00	-3.64
Band 2A	5270	54	ax (40MHz)	52T	MCS0	7.70	11.00	-3.30
Ш	5310	62	ax (40MHz)	52T	MCS0	8.20	11.00	-2.80
	5290	58	ax (80MHz)	52T	MCS0	7.76	11.00	-3.24
	5500	100	ax (20MHz)	52T	MCS0	7.91	11.00	-3.09
	5600	120	ax (20MHz)	52T	MCS0	7.13	11.00	-3.87
	5720	144	ax (20MHz)	52T	MCS0	7.77	11.00	-3.23
2C	5510	102	ax (40MHz)	52T	MCS0	7.69	11.00	-3.31
Bnad	5590	118	ax (40MHz)	52T	MCS0	7.78	11.00	-3.22
Bn	5710	142	ax (40MHz)	52T	MCS0	8.03	11.00	-2.97
	5530	106	ax (80MHz)	52T	MCS0	7.11	11.00	-3.89
	5610	122	ax (80MHz)	52T	MCS0	7.28	11.00	-3.72
	5690	138	ax (80MHz)	52T	MCS0	6.04	11.00	-4.96

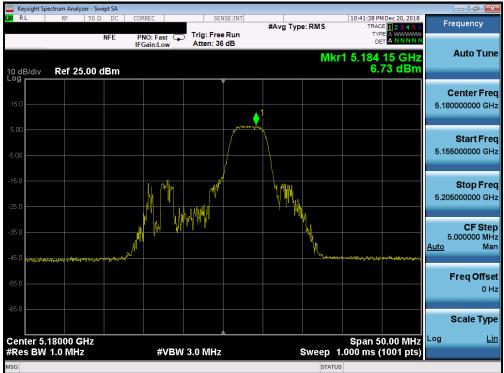
Table 7-66. Bands 1, 2A, 2C Conducted Power Spectral Density Measurements SISO ANT1 (52 Tones)

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

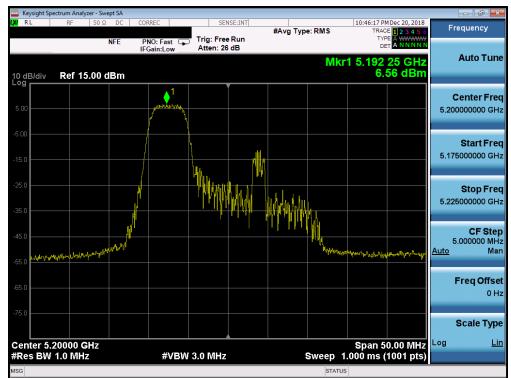
Table 7-67. Bands 1 e.r.i.p Conducted Power Spectral Density Measurements (ISED 52 Tones)

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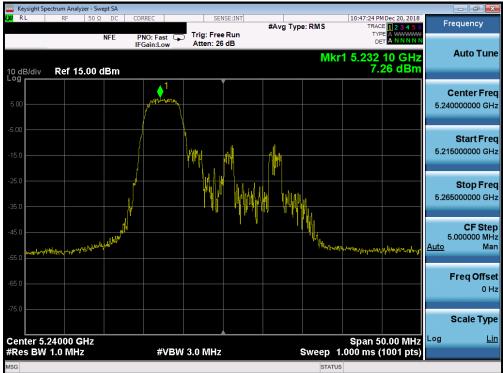
Plot 7-136. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 36)



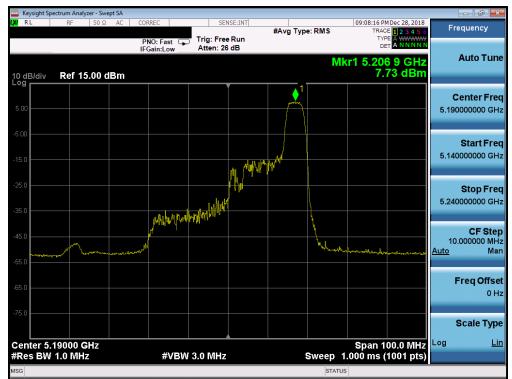
Plot 7-137. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 40)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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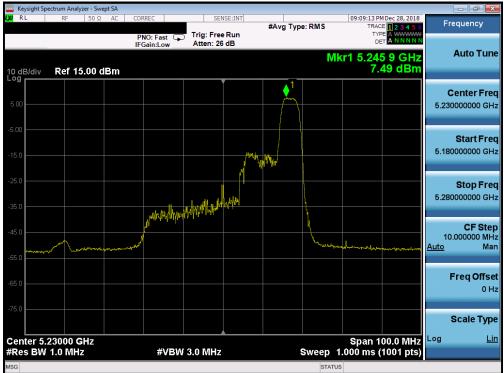
Plot 7-138. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 52 Tones (UNII Band 1) – Ch. 48)



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

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



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

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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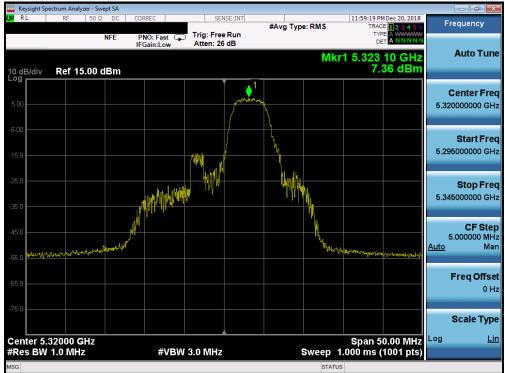
Plot 7-142. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 52)



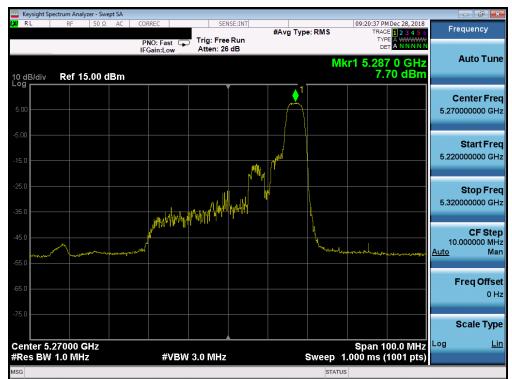
Plot 7-143. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 56)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-144. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 64)



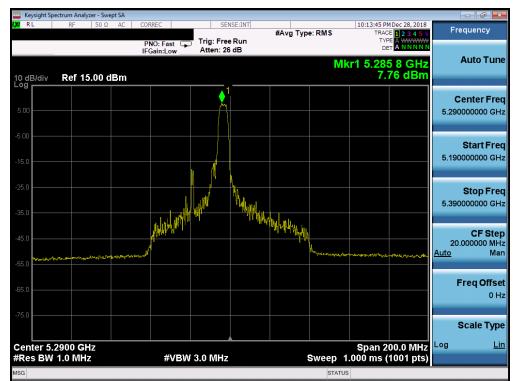
Plot 7-145. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 54)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-146. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 62)



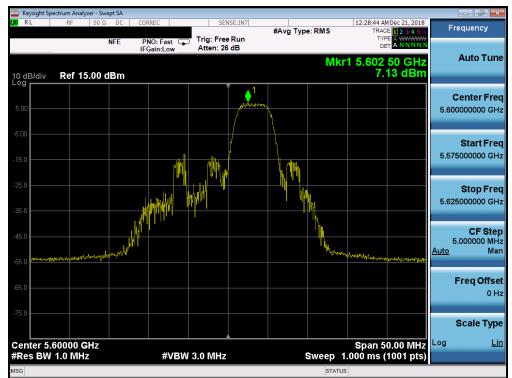
Plot 7-147. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 52 Tones (UNII Band 2A) – Ch. 58)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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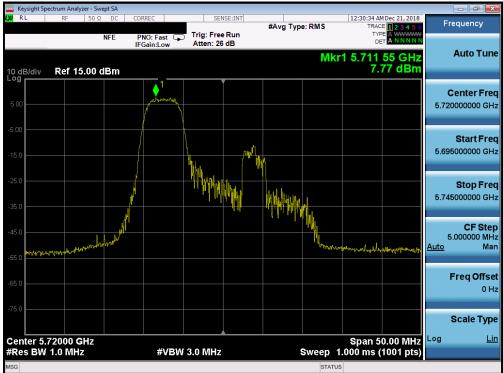
Plot 7-148. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 100)



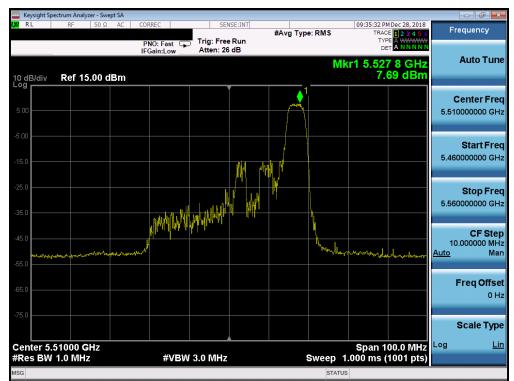
Plot 7-149. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 120)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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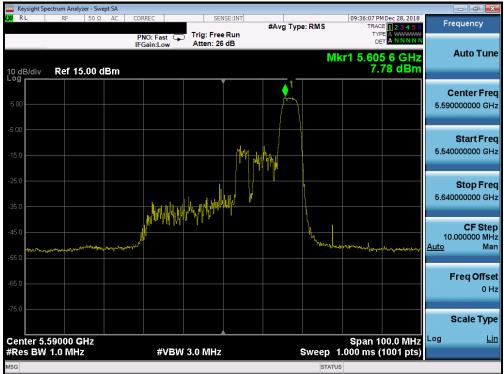
Plot 7-150. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 144)



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

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-152. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 118)



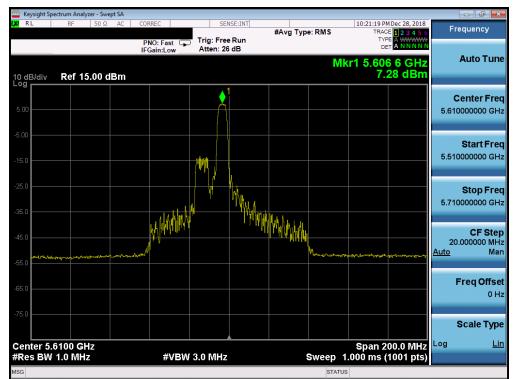
Plot 7-153. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 142)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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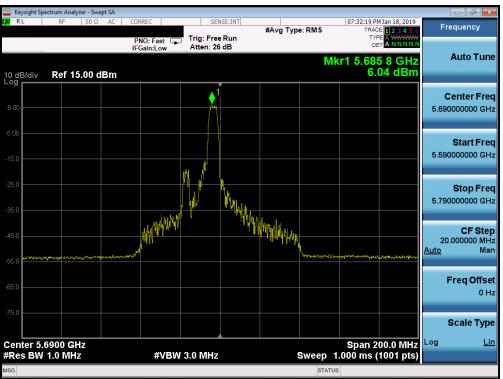
Plot 7-154. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 106)



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

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-156. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 52 Tones (UNII Band 2C) – Ch. 138)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 122 of 510
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	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
	5745	149	ax (20MHz)	52T	MCS0	4.47	30.00	-25.53
с	5785	157	ax (20MHz)	52T	MCS0	4.61	30.00	-25.39
	5825	165	ax (20MHz)	52T	MCS0	4.51	30.00	-25.49
Band	5755	151	ax (40MHz)	52T	MCS0	5.25	30.00	-24.75
_	5795	159	ax (40MHz)	52T	MCS0	5.05	30.00	-24.95
	5775	155	ax (80MHz)	52T	MCS0	8.40	30.00	-21.60

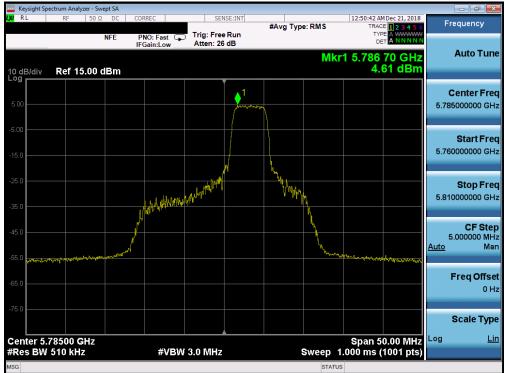
Table 7-68. Band 3 Conducted Power Spectral Density Measurements SISO ANT1 (52 Tones)



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

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 122 of 510
1M1811260212-15.A3L	11/9/2018 - 1/22/2019	Portable Handset		Page 133 of 519
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Plot 7-158. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 52 Tones (UNII Band 3) – Ch. 157)



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

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 124 of 510
1M1811260212-15.A3L 11/9/2018 - 1/22/2019 Portable		Portable Handset		Page 134 of 519
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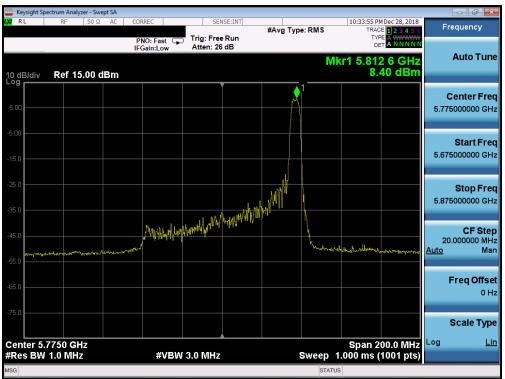
Plot 7-160. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 52 Tones (UNII Band 3) – Ch. 151)



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

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 125 of 510
1M1811260212-15.A3L 11/9/2018 - 1/22/2019 Portable Hands		Portable Handset		Page 135 of 519
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Plot 7-162. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 52 Tones (UNII Band 3) – Ch. 155)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 126 of 510
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SISO Antenna-1 Power Spectral Density Measurements (106 Tones)

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

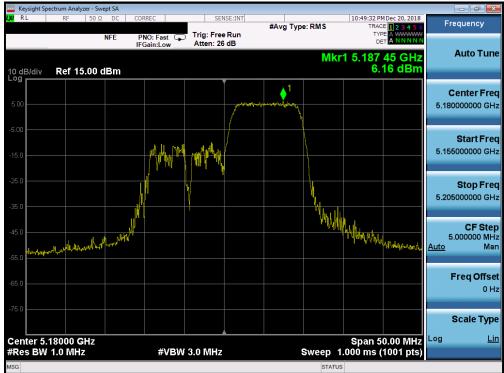
Table 7-69. Bands 1, 2A, 2C Conducted Power Spectral Density Measurements SISO ANT1 (106 Tones)

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

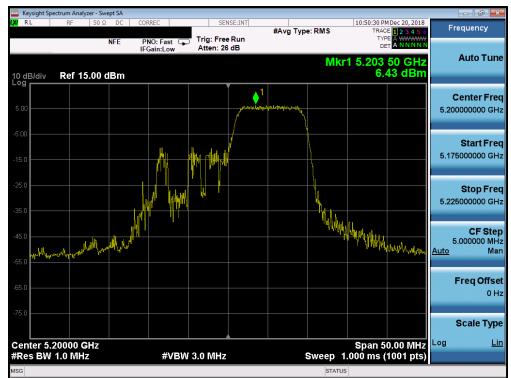
Table 7-70. Bands 1 e.r.i.p Conducted Power Spectral Density Measurements (ISED 106 Tones)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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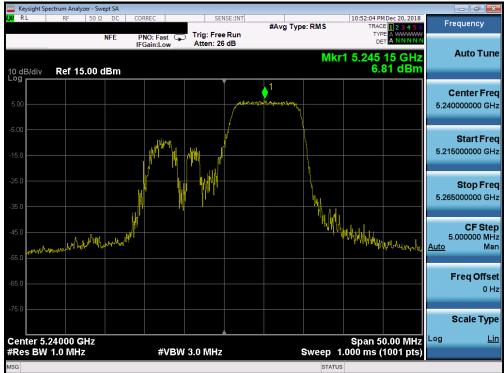
Plot 7-163. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 36)



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

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-165. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 48)



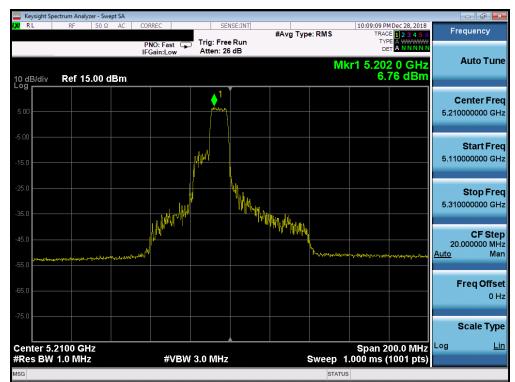
Plot 7-166. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 38)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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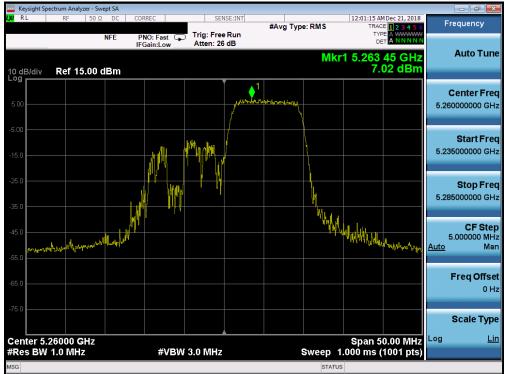
Plot 7-167. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 46)



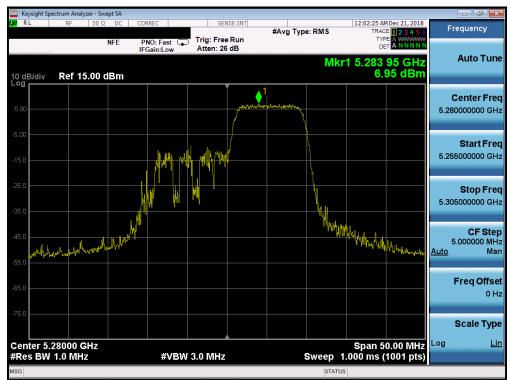
Plot 7-168. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 106 Tones (UNII Band 1) – Ch. 42)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-169. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 52)



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

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-171. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax - 106 Tones (UNII Band 2A) - Ch. 64)

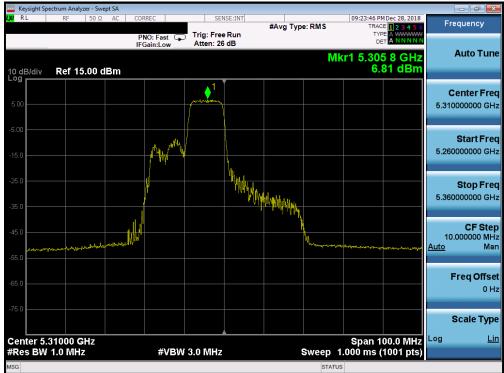


Plot 7-172. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax - 106 Tones (UNII Band 2A) - Ch. 54)

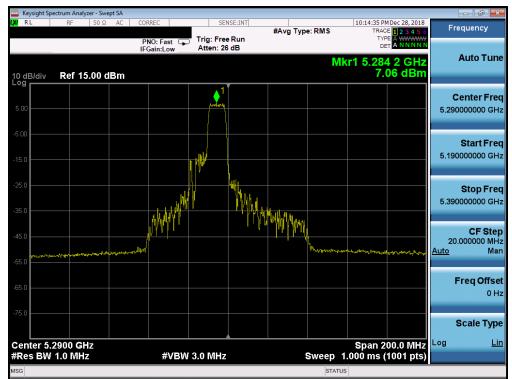
FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 142 of 510
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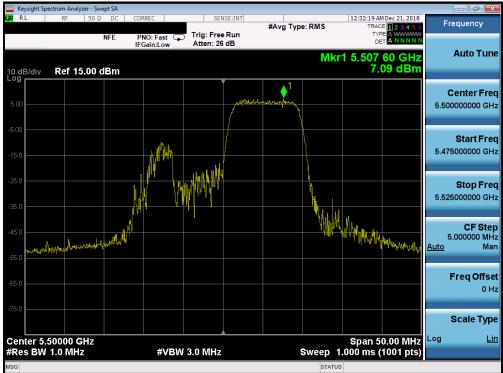
Plot 7-173. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 62)



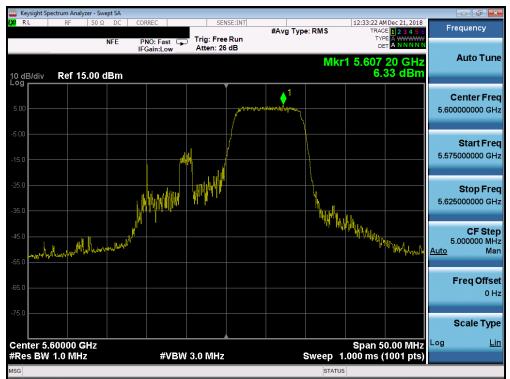
Plot 7-174. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 106 Tones (UNII Band 2A) – Ch. 58)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-175. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax - 106 Tones (UNII Band 2C) - Ch. 100)

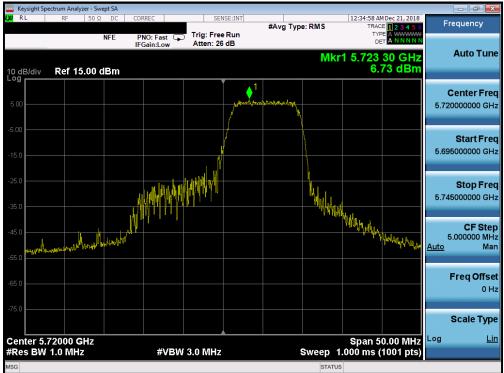


Plot 7-176. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax - 106 Tones (UNII Band 2C) - Ch. 120)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Daga 111 of 510	
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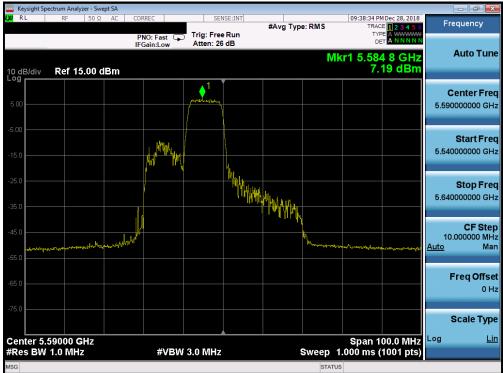
Plot 7-177. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 144)



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

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
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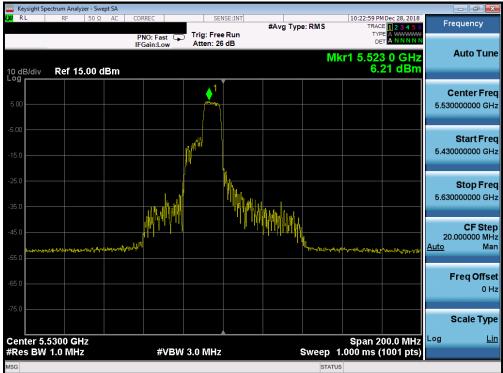
Plot 7-179. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 118)



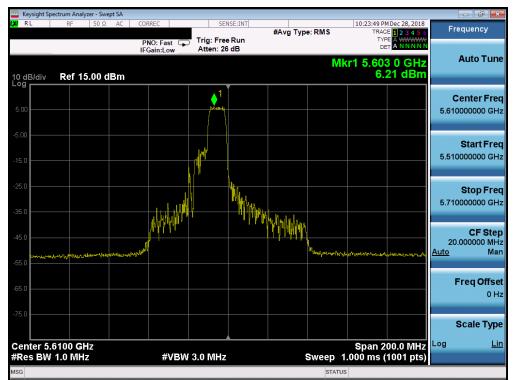
Plot 7-180. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 142)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
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Plot 7-181. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 106)



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

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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	pectrum Ana	lyzer - Swep	pt SA									
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Plot 7-183. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 106 Tones (UNII Band 2C) – Ch. 138)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
	5745	149	ax (20MHz)	106T	MCS0	3.18	30.00	-26.82
e	5785	157	ax (20MHz)	106T	MCS0	3.43	30.00	-26.57
	5825	165	ax (20MHz)	106T	MCS0	3.01	30.00	-26.99
Band	5755	151	ax (40MHz)	106T	MCS0	4.21	30.00	-25.79
_	5795	159	ax (40MHz)	106T	MCS0	3.90	30.00	-26.10
	5775	155	ax (80MHz)	106T	MCS0	7.15	30.00	-22.85

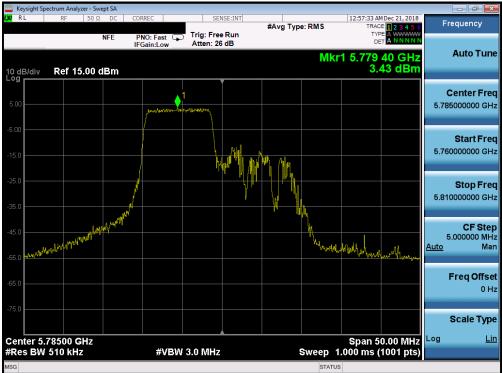
Table 7-71. Band 3 Conducted Power Spectral Density Measurements SISO ANT1 (106 Tones)



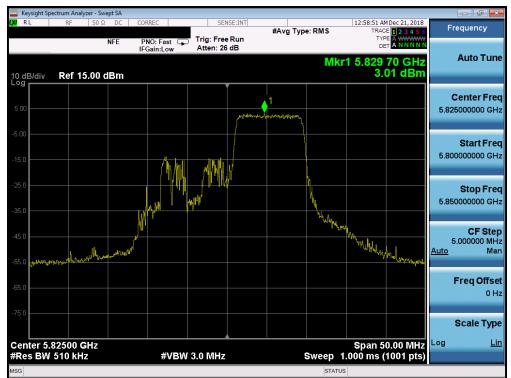
Plot 7-184. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 149)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-185. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 157)



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

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Keysight Species	ectrum Analyze	er - Swept S	SA								
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ISG								STATU			

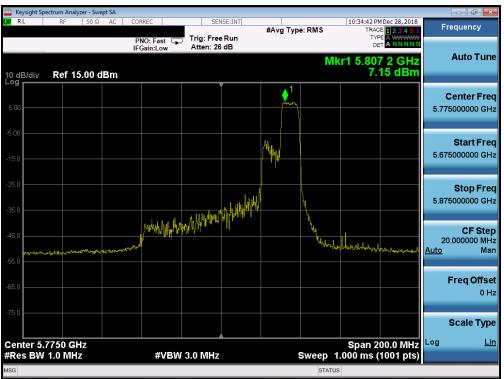
Plot 7-187. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 151)



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

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-189. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 106 Tones (UNII Band 3) – Ch. 155)

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

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

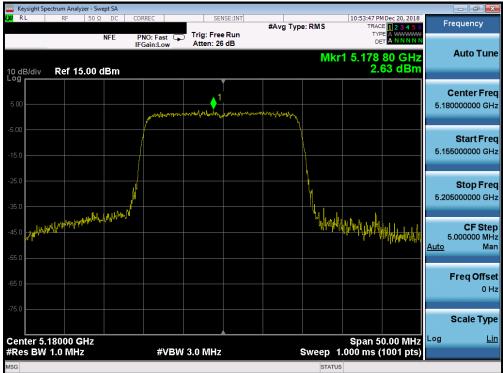
Table 7-72. Bands 1, 2A, 2C Conducted Power Spectral Density Measurements SISO ANT1 (242 Tones)

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

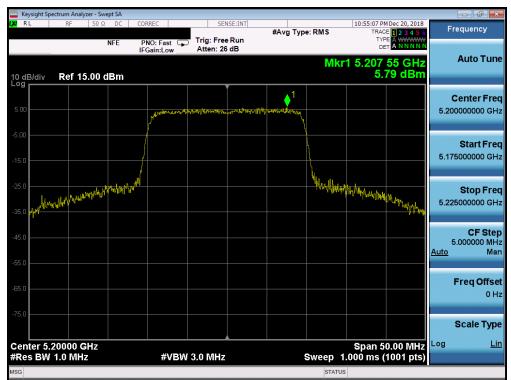
Table 7-73. Bands 1 e.r.i.p Conducted Power Spectral Density Measurements (ISED 242 Tones)

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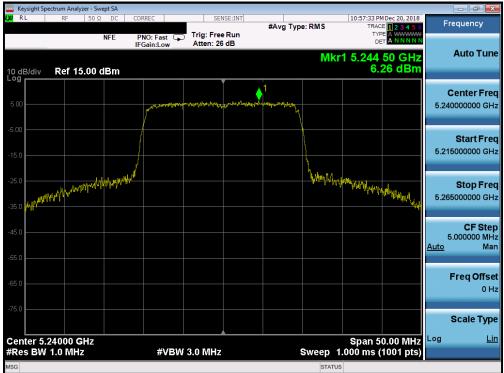
Plot 7-190. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 36)



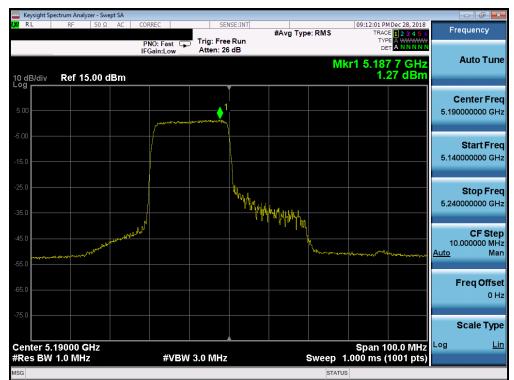
Plot 7-191. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 40)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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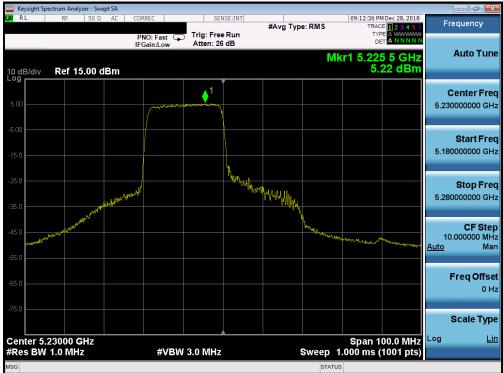
Plot 7-192. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax - 242 Tones (UNII Band 1) - Ch. 48)



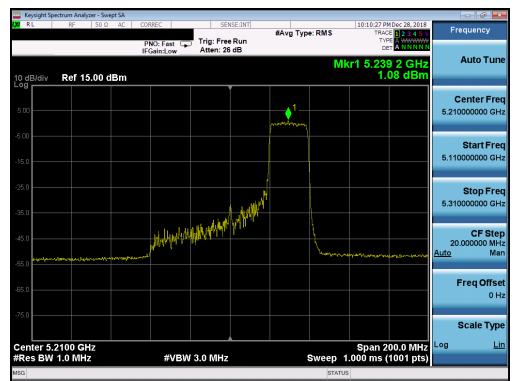
Plot 7-193. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 38)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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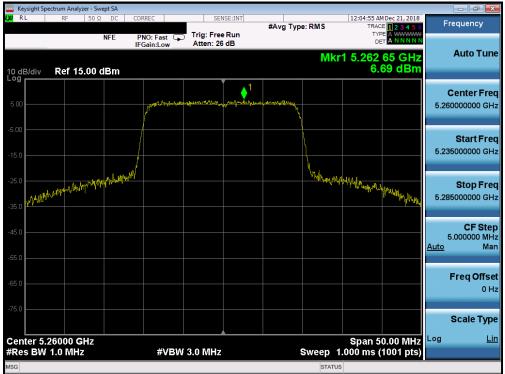
Plot 7-194. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 46)



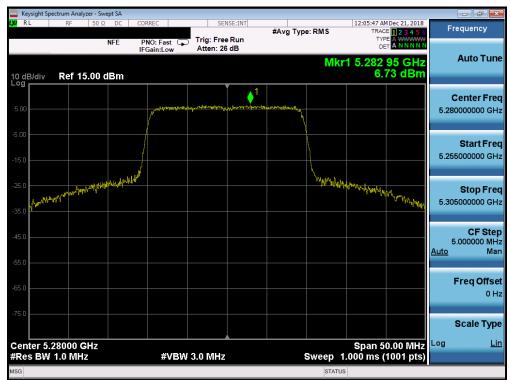
Plot 7-195. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 242 Tones (UNII Band 1) – Ch. 42)

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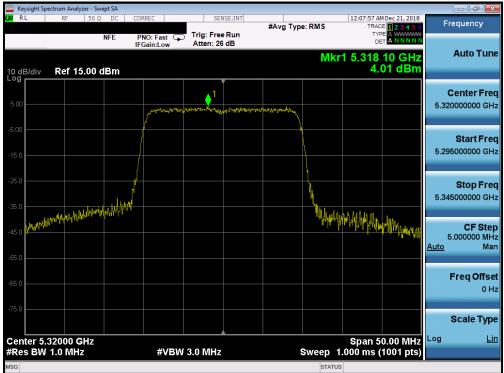
Plot 7-196. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 52)



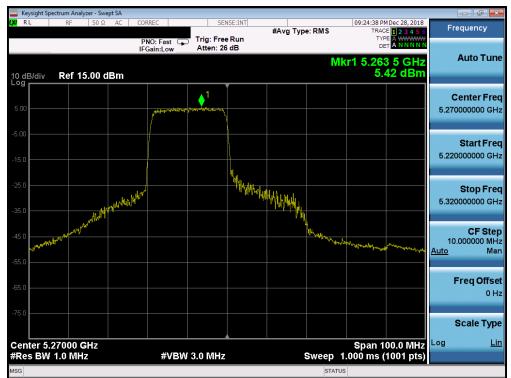
Plot 7-197. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 56)

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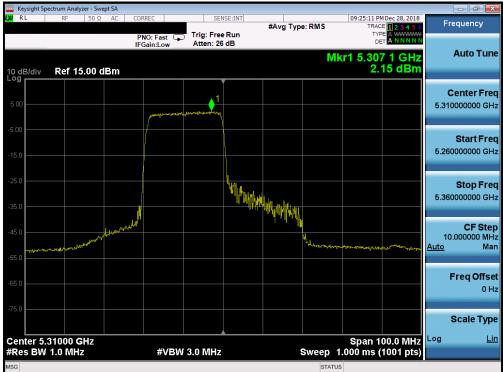
Plot 7-198. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 64)



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

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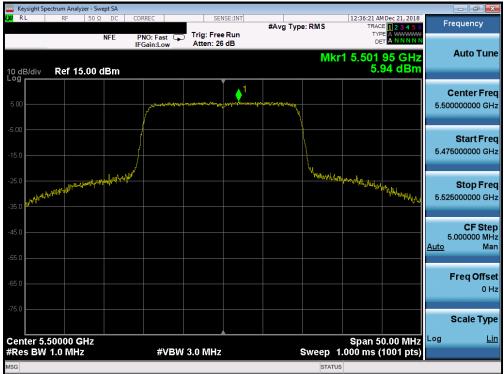
Plot 7-200. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 62)



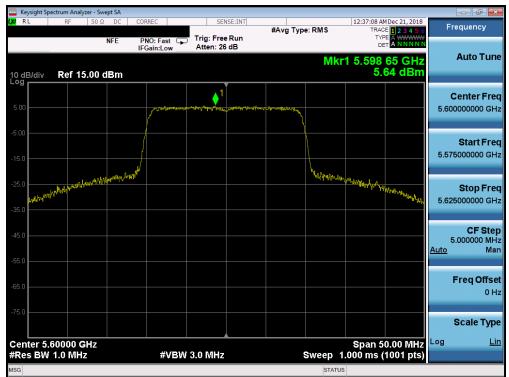
Plot 7-201. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 242 Tones (UNII Band 2A) – Ch. 58)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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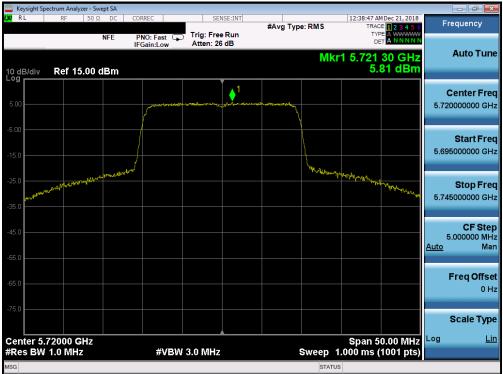
Plot 7-202. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 100)



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

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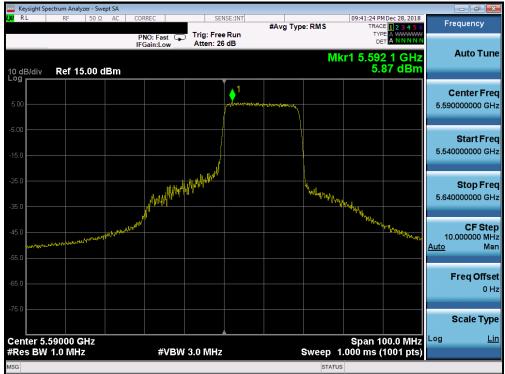
Plot 7-204. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 144)



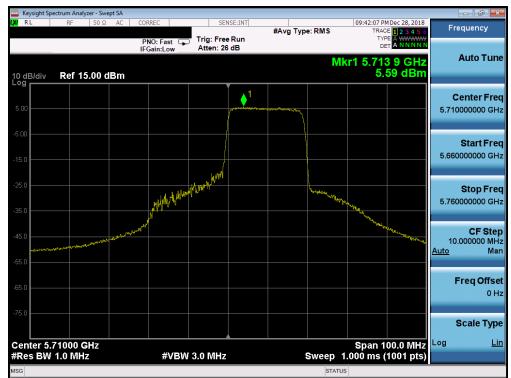
Plot 7-205. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 102)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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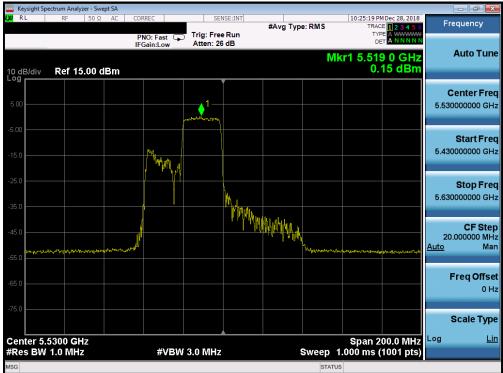
Plot 7-206. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 118)



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

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



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

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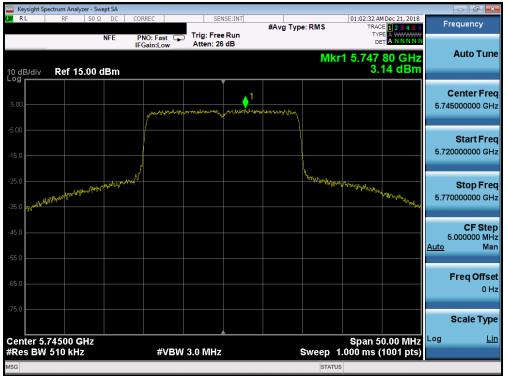
Plot 7-210. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 242 Tones (UNII Band 2C) – Ch. 138)

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

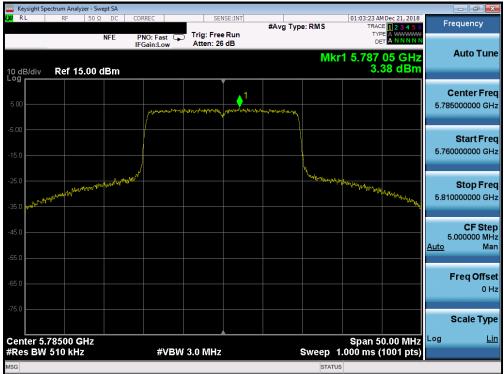
Table 7-74. Band 3 Conducted Power Spectral Density Measurements SISO ANT1 (242 Tones)



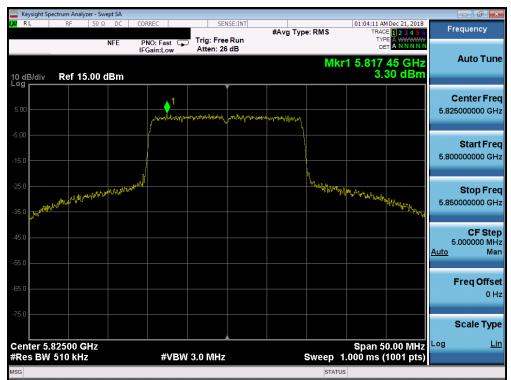
Plot 7-211. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 149)

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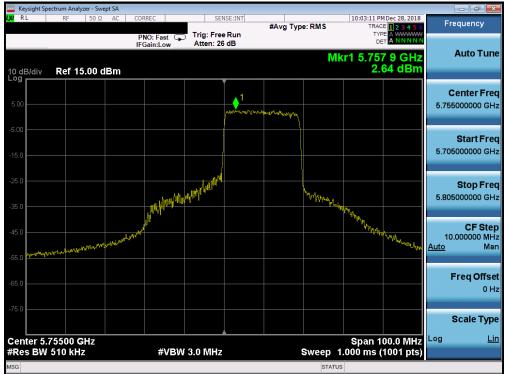
Plot 7-212. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 157)



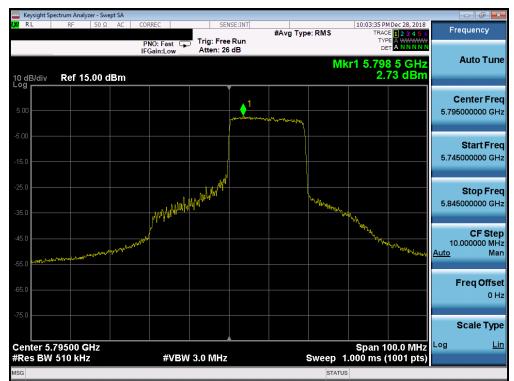
Plot 7-213. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 165)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-214. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 151)



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

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-216. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 155)

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

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

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

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

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

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



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

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	Keysight Spectrum Analyzer - Swept SA									- • •		
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-65.0												0 Hz
-75.0												
											:	Scale Type
Center	5.2100 G	Hz							Span 2	00.0 MHz	Log	Lin
	W 1.0 MH			#VE	W 3.0 MHz			Sweep 1	.000 ms (1001 pts)		
MSG								STATUS				

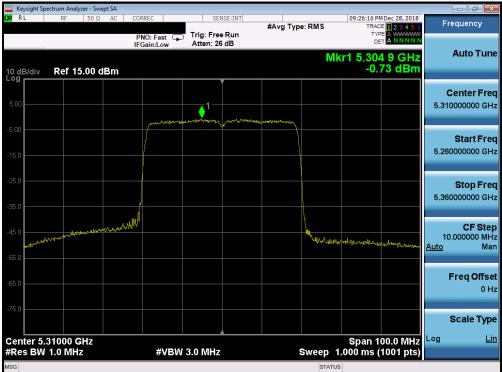
Plot 7-219. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 484 Tones (UNII Band 1) – Ch. 42)



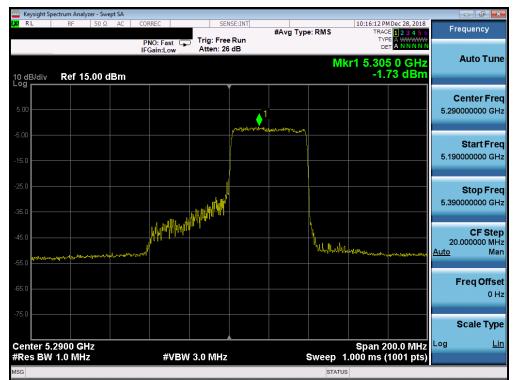
Plot 7-220. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 484 Tones (UNII Band 2A) – Ch. 54)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dage 171 of 510	
1M1811260212-15.A3L	11/9/2018 - 1/22/2019		Page 171 of 519		
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Plot 7-221. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 484 Tones (UNII Band 2A) – Ch. 62)



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

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dage 172 of 510	
1M1811260212-15.A3L	11/9/2018 - 1/22/2019	Portable Handset		Page 172 of 519	
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	pectrum Analyz	er - Swept SA										
L XI RL	RF	50 Ω AC		C	SEN	Run	#Avg Typ	e: RMS	TRAC	M Dec 28, 2018 DE 1 2 3 4 5 6 PE A WWWWW ET A N N N N N	Fre	quency
10 dB/div	Ref 15	.00 dBn	IFGair	n:Low	Atten: 26	dB		M	(r1 5.51	8 7 GHz 32 dBm		Auto Tune
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-5.00												Start Freq 000000 GHz
-25.0												Stop Freq 000000 GHz
-45.0	11- marchen	ntradound libration	a					hurryrangel	11 minungalang	STATE PATE AND	10. <u>Auto</u>	CF Step 000000 MHz Man
-55.0											F	req Offset 0 Hz
-75.0											S	cale Type
	enter 5.51000 GHz Span 100.0 MHz Sweep 1.000 ms (1001 pts) \$						Log	Lin				
MSG								STATUS				

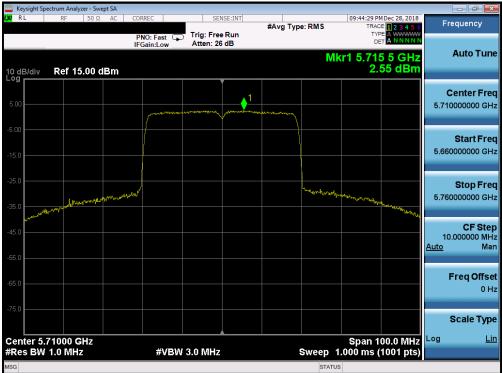
Plot 7-223. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 484 Tones (UNII Band 2C) – Ch. 102)



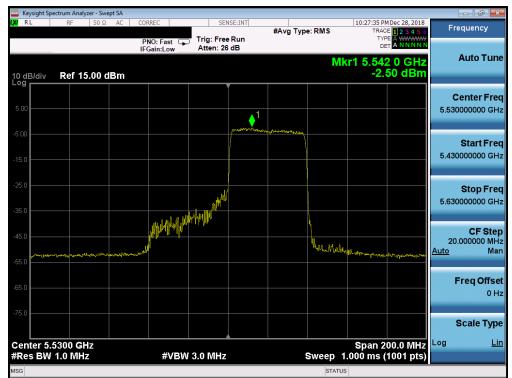
Plot 7-224. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 484 Tones (UNII Band 2C) – Ch. 118)

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Plot 7-225. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 484 Tones (UNII Band 2C) – Ch. 142)



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

FCC ID: A3LSMG9700		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dago 174 of 510	
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