

7.7.3 SISO Antenna-2 Radiated Restricted Band Edge Measurements §15.205 §15.209; RSS-Gen [8.9]

The radiated restricted band edge measurements are measured with an EMI test receiver connected to the receive antenna while the EUT is transmitting.

Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

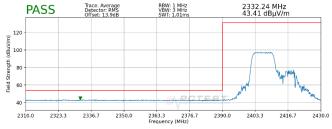
802.11ax OFDMA

MCS0

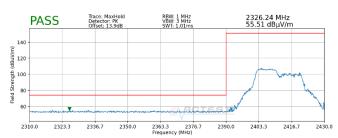
53

3 Meters

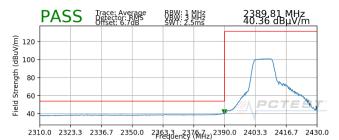
2412MHz



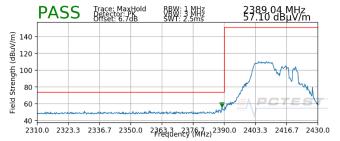
Plot 7-153. Radiated Restricted Lower Band Edge Measurement SISO ANT2 (Average – 106 Tones) -Q



Plot 7-154. Radiated Restricted Lower Band Edge Measurement SISO ANT2 (Peak – 106 Tones) - Q



Plot 7-155. Radiated Restricted Lower Band Edge Measurement SISO ANT2 (Average – 106 Tones) -



Plot 7-156. Radiated Restricted Lower Band Edge Measurement SISO ANT2 (Peak – 106 Tones) - N

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 112 of 120
1M2104130035-11.A3L	04/12/2021 - 06/04/2021	Portable Handset	Page 113 of 129



Trace: Average Detector: RMS Offset: 14.8dB

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

PASS

120

802.11ax OFDMA MCS0

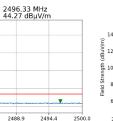
MCS0 54

11

RBW: 1 MHz VBW: 3 MHz SWT: 1.01m:

3 Meters

2462MHz

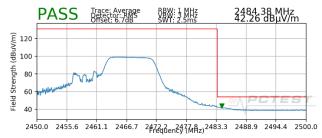


Plot 7-157. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Average – 106 Tones) -Q

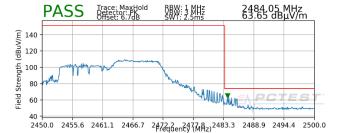
2472.2 2477.8 Frequency (MHz)



Plot 7-158. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Peak – 106 Tones) - Q



Plot 7-159. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Average – 106 Tones) -



Plot 7-160. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Peak – 106 Tones) - N

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 114 of 120
1M2104130035-11.A3L	04/12/2021 - 06/04/2021	Portable Handset	Page 114 of 129



RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax OFDMA

MCS0 54

3 Meters



Plot 7-161. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Average - 106 Tones) -Q



Plot 7-162. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Peak - 106 Tones) - Q



Plot 7-163. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Average - 106 Tones) -



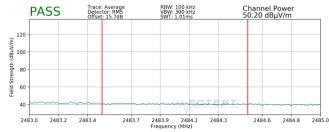
Plot 7-164. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Peak - 106 Tones) - N

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 115 of 129
1M2104130035-11.A3L	04/12/2021 - 06/04/2021	Portable Handset	Page 115 01 129



Worst Case Mode:
Worst Case Transfer Rate:
RU Index:
Distance of Measurements:
Operating Frequency:
Channel:

802.11ax OFDMA
MCS0
54
3 Meters
2472MHz
13



Plot 7-165. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Average – 106 Tones) -Q



Plot 7-166. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Peak – 106 Tones) - Q



Plot 7-167. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Average – 106 Tones) -



Plot 7-168. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Peak – 106 Tones) - N

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 116 of 129
1M2104130035-11.A3L	04/12/2021 - 06/04/2021	Portable Handset	Page 110 01 129



RU Index:

Distance of Measurements: Operating Frequency:

Channel:

802.11ax OFDMA

MCS0

61

3 Meters 2412MHz



Plot 7-169. Radiated Restricted Lower Band Edge Measurement SISO ANT2 (Average - 242 Tones) -



Plot 7-170. Radiated Restricted Lower Band Edge Measurement SISO ANT2 (Peak - 242 Tones) - Q



Plot 7-171. Radiated Restricted Lower Band Edge Measurement SISO ANT2 (Average - 242 Tones) -Ν



Plot 7-172. Radiated Restricted Lower Band Edge Measurement SISO ANT2 (Peak - 242 Tones) - N

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogg 447 of 400
1M2104130035-11.A3L	04/12/2021 - 06/04/2021	Portable Handset		Page 117 of 129
© 2021 PCTEST				V 9.0 02/01/2019



802.11ax OFDMA Worst Case Mode: Worst Case Transfer Rate:

MCS0

RU Index:

61

Distance of Measurements: Operating Frequency:

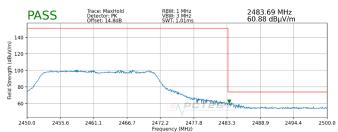
3 Meters 2462MHz

Channel:

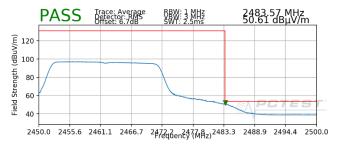
11



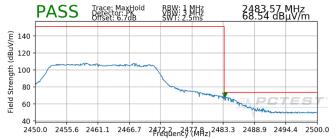
Plot 7-173. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Average - 242 Tones) -Q



Plot 7-174. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Peak - 242 Tones) - Q



Plot 7-175. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Average - 242 Tones) -



Plot 7-176. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Peak - 242 Tones) - N

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 119 of 120
1M2104130035-11.A3L	04/12/2021 - 06/04/2021	Portable Handset	Page 118 of 129



RU Index:

Distance of Measurements: Operating Frequency:

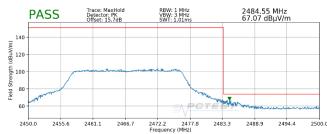
Channel:

802.11ax OFDMA	
MCS0	

61 3 Meters



Plot 7-177. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Average - 242 Tones) -



Plot 7-178. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Peak - 242 Tones) - Q



Plot 7-179. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Average - 242 Tones) -



Plot 7-180. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Peak - 242 Tones) - N

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 110 of 120
1M2104130035-11.A3L	04/12/2021 - 06/04/2021	Portable Handset	Page 119 of 129



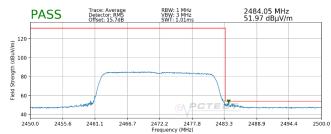
Worst Case Transfer Rate RU Index:

Distance of Measurements: Operating Frequency:

Channel:

802.11ax	OFDMA
MCCO	

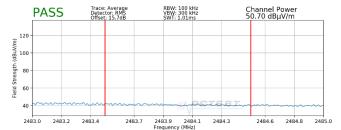
MCS0 61 3 Meters



Plot 7-181. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Average – 242 Tones) -



Plot 7-182. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Peak – 242 Tones) - Q



Plot 7-183. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Average – 242 Tones) -



Plot 7-184. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Peak – 242 Tones) - N

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 120 of 120
1M2104130035-11.A3L	04/12/2021 - 06/04/2021	Portable Handset	Page 120 of 129



7.7.4 MIMO Radiated Restricted Band Edge Measurements §15.205 §15.209; RSS-Gen [8.9]

The radiated restricted band edge measurements are measured with an EMI test receiver connected to the receive antenna while the EUT is transmitting.

PASS

Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

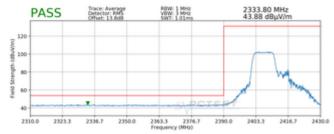
802.11ax OFDMA

MCS0

53

3 Meters

2412MHz



2310.0 2323.3 2336.7 2350.0 2383.3 2376.7 2590.0 2403.3 2436.7 2430.0

YOW: 3 MHz SWT: 1.03mm 2388.82 MHz 59.77 dBµV/m

Plot 7-185. Radiated Restricted Lower Band Edge Measurement MIMO (Average – 106 Tones) - Q

Plot 7-186. Radiated Restricted Lower Band Edge Measurement MIMO (Peak – 106 Tones) - Q



Plot 7-187. Radiated Restricted Lower Band Edge Measurement MIMO (Average – 106 Tones) - N



Plot 7-188. Radiated Restricted Lower Band Edge Measurement MIMO (Peak – 106 Tones) - N

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogg 124 of 120
1M2104130035-11.A3L	04/12/2021 - 06/04/2021	Portable Handset		Page 121 of 129
© 2021 PCTEST				V 9.0 02/01/2019



Channel:

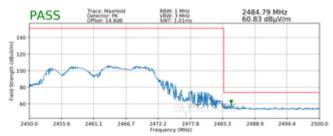
Worst Case Mode:
Worst Case Transfer Rate:
RU Index:
Distance of Measurements:
Operating Frequency:

802.11ax OFDMA
MCS0
54
3 Meters
2462MHz

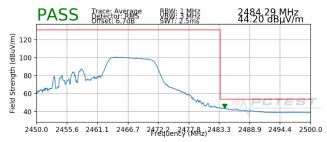
11



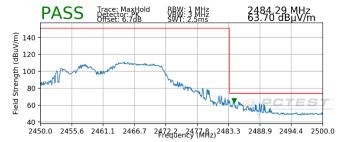
Plot 7-189. Radiated Restricted Upper Band Edge Measurement MIMO (Average – 106 Tones) - Q



Plot 7-190. Radiated Restricted Upper Band Edge Measurement MIMO (Peak – 106 Tones) - Q



Plot 7-191. Radiated Restricted Upper Band Edge Measurement MIMO (Average – 106 Tones) - N



Plot 7-192. Radiated Restricted Upper Band Edge Measurement MIMO (Peak – 106 Tones) - N

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogg 122 of 120
1M2104130035-11.A3L	04/12/2021 - 06/04/2021	Portable Handset		Page 122 of 129
© 2021 PCTEST				V 9.0 02/01/2019

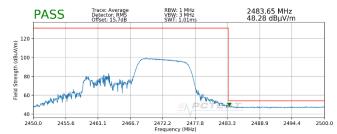


RU Index:

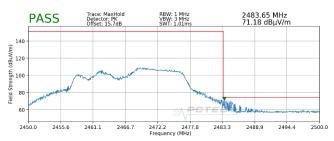
Distance of Measurements: Operating Frequency:

Channel:

802.11ax OFDMA
MCS0
54
3 Meters
2467MHz
12



Plot 7-193. Radiated Restricted Upper Band Edge Measurement MIMO (Average - 106 Tones) - Q



Plot 7-194. Radiated Restricted Upper Band Edge Measurement MIMO (Peak - 106 Tones) - Q



Plot 7-195. Radiated Restricted Upper Band Edge Measurement MIMO (Average - 106 Tones) - N



Plot 7-196. Radiated Restricted Upper Band Edge Measurement MIMO (Peak - 106 Tones) - N

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogg 122 of 120
1M2104130035-11.A3L	04/12/2021 - 06/04/2021	Portable Handset		Page 123 of 129
© 2021 PCTEST				V 9.0 02/01/2019



RU Index:

Distance of Measurements: Operating Frequency:

Channel:

802.11ax OFDMA MCS0 54

3 Meters



Plot 7-197. Radiated Restricted Upper Band Edge Measurement MIMO (Average - 106 Tones) - Q



Plot 7-198. Radiated Restricted Upper Band Edge Measurement MIMO (Peak - 106 Tones) - Q



Plot 7-199. Radiated Restricted Upper Band Edge Measurement MIMO (Average - 106 Tones) - N



Plot 7-200. Radiated Restricted Upper Band Edge Measurement MIMO (Peak - 106 Tones) - N

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogg 424 of 420
1M2104130035-11.A3L	04/12/2021 - 06/04/2021	Portable Handset		Page 124 of 129
© 2021 PCTEST	•			V 9.0 02/01/2019



Worst Case Transfer Rate:

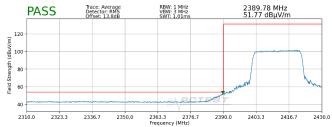
RU Index:

Distance of Measurements:

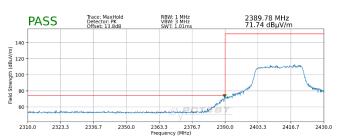
Operating Frequency:

Channel:

802.11ax OFDMA	
MCS0	
61	
3 Meters	
2412MHz	



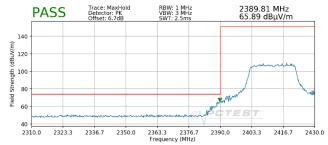
Plot 7-201. Radiated Restricted Lower Band Edge Measurement MIMO (Average – 242 Tones) - Q



Plot 7-202. Radiated Restricted Lower Band Edge Measurement MIMO (Peak – 242 Tones) - Q



Plot 7-203. Radiated Restricted Lower Band Edge Measurement MIMO (Average – 242 Tones) - N



Plot 7-204. Radiated Restricted Lower Band Edge Measurement MIMO (Peak – 242 Tones) - N

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 425 of 420
1M2104130035-11.A3L	04/12/2021 - 06/04/2021	Portable Handset	Page 125 of 129



Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

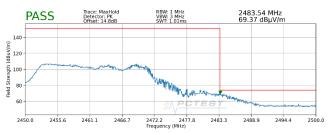
Operating Frequency:

Channel:

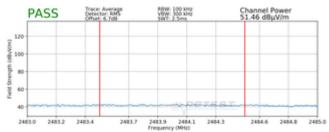
802.11ax OFDMA MCS0 61 3 Meters



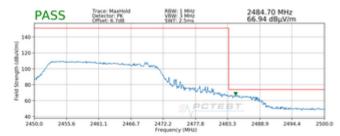
Plot 7-205. Radiated Restricted Upper Band Edge Measurement MIMO (Average - 242 Tones) - Q



Plot 7-206. Radiated Restricted Upper Band Edge Measurement MIMO (Peak - 242 Tones) - Q



Plot 7-207. Radiated Restricted Upper Band Edge Measurement MIMO (Average - 242 Tones) - N



Plot 7-208. Radiated Restricted Upper Band Edge Measurement MIMO (Peak - 242 Tones) - N

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogg 120 of 120
1M2104130035-11.A3L	04/12/2021 - 06/04/2021	Portable Handset		Page 126 of 129
© 2021 PCTEST				V 9.0 02/01/2019



RU Index:

Distance of Measurements:

Operating Frequency:

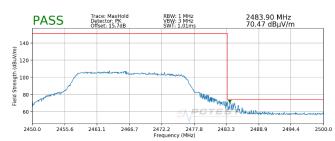
Channel:

802.11ax OFDMA MCS0 61 3 Meters 2467MHz



12

Plot 7-209. Radiated Restricted Upper Band Edge Measurement MIMO (Average - 242 Tones) - Q



Plot 7-210. Radiated Restricted Upper Band Edge Measurement MIMO (Peak - 242 Tones) - Q



Plot 7-211. Radiated Restricted Upper Band Edge Measurement MIMO (Average - 242 Tones) - N



Plot 7-212. Radiated Restricted Upper Band Edge Measurement MIMO (Peak - 242 Tones) - N

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogg 127 of 120
1M2104130035-11.A3L	04/12/2021 - 06/04/2021	Portable Handset		Page 127 of 129
© 2021 PCTEST				V 9.0 02/01/2019



Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax OFDMA	
MCS0	
61	
3 Meters	
2472MHz	
13	



Plot 7-213. Radiated Restricted Upper Band Edge Measurement MIMO (Average - 242 Tones) - Q



Plot 7-214. Radiated Restricted Upper Band Edge Measurement MIMO (Peak - 242 Tones) - Q



Plot 7-215. Radiated Restricted Upper Band Edge Measurement MIMO (Average - 242 Tones) - N



Plot 7-216. Radiated Restricted Upper Band Edge Measurement MIMO (Peak - 242 Tones) - N

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogg 120 of 120
1M2104130035-11.A3L	04/12/2021 - 06/04/2021	Portable Handset		Page 128 of 129
© 2021 PCTEST				V 9.0 02/01/2019



8.0 CONCLUSION

The data collected relate only the item(s) tested and show that the **Samsung Portable Handset FCC ID: A3LSMF711B** is in compliance with Part 15 Subpart C (15.247) of the FCC Rules.

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 129 of 129
1M2104130035-11.A3L	04/12/2021 - 06/04/2021	Portable Handset	Page 129 01 129