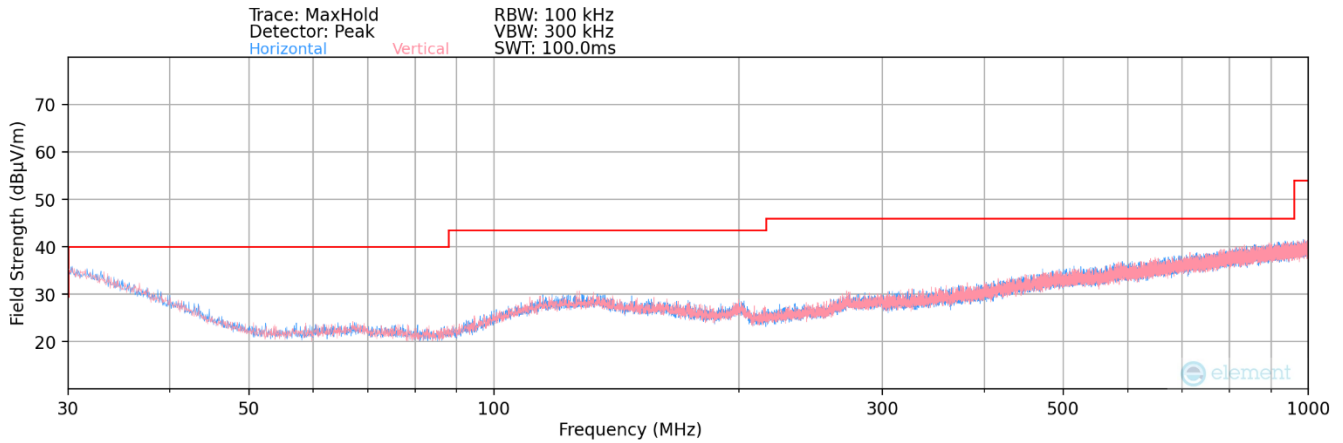
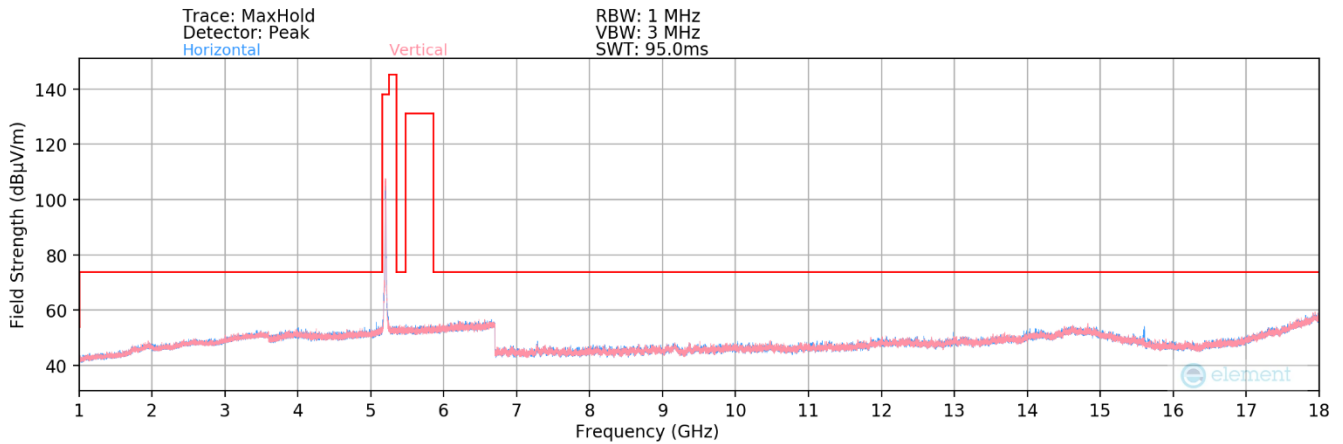


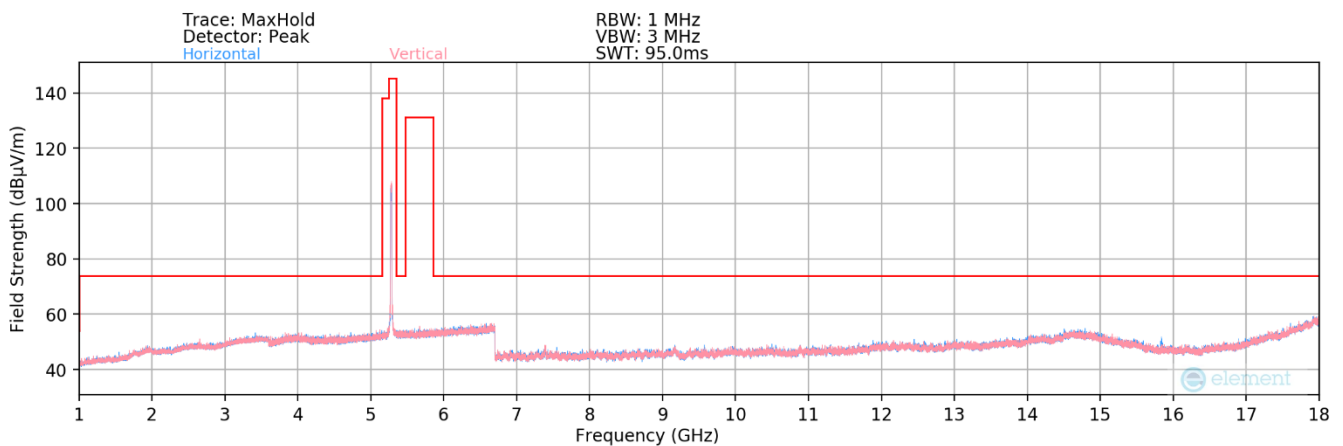
7.6.1 MIMO Radiated Spurious Emission Measurements



Plot 7-187. Radiated Spurious Plot below 1GHz MIMO (802.11a)

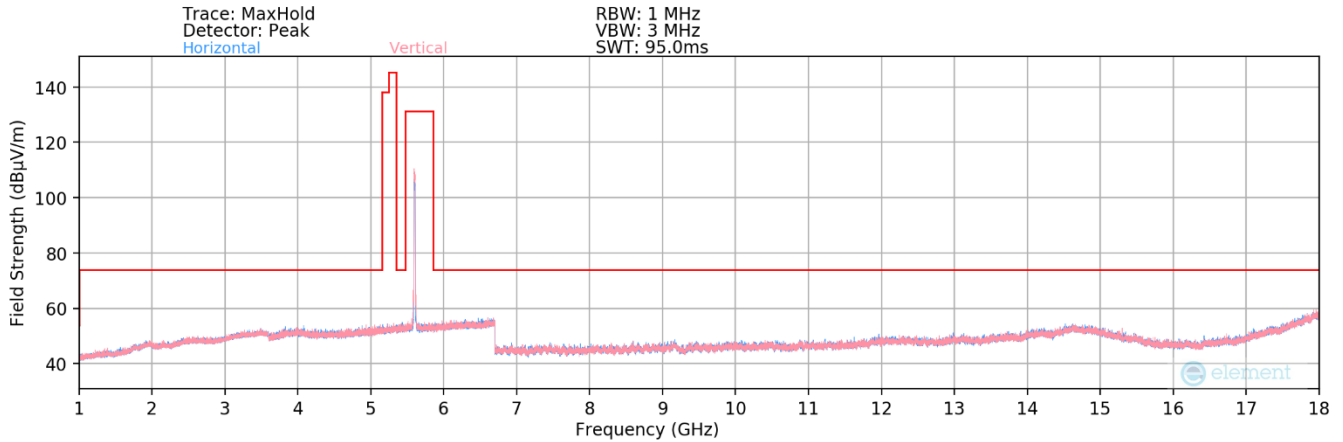


Plot 7-188. Radiated Spurious Plot above 1GHz MIMO (802.11a – UNII Band 1 Ch. 40)

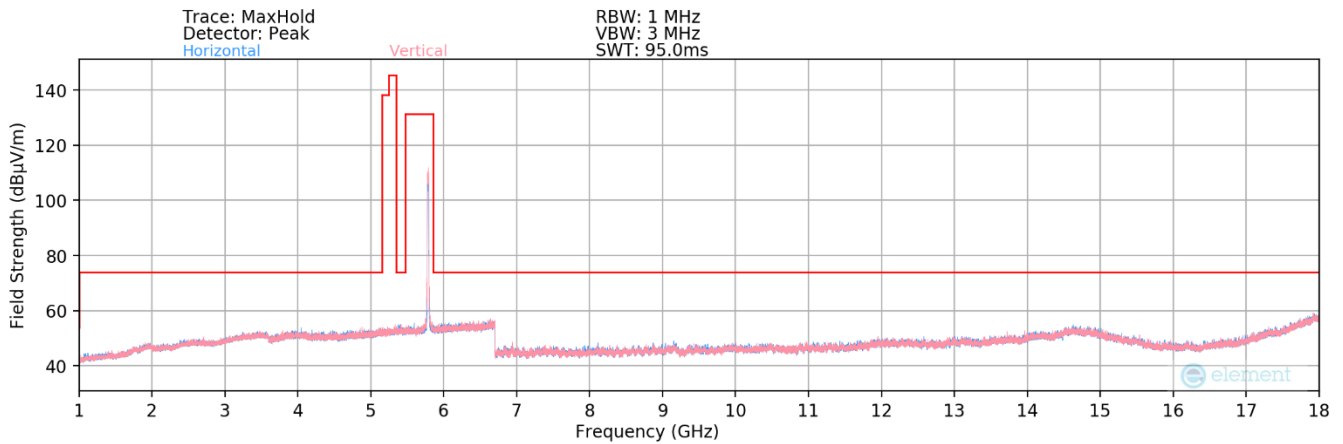


Plot 7-189. Radiated Spurious Plot above 1GHz MIMO (802.11a – UNII Band 2A Ch. 56)

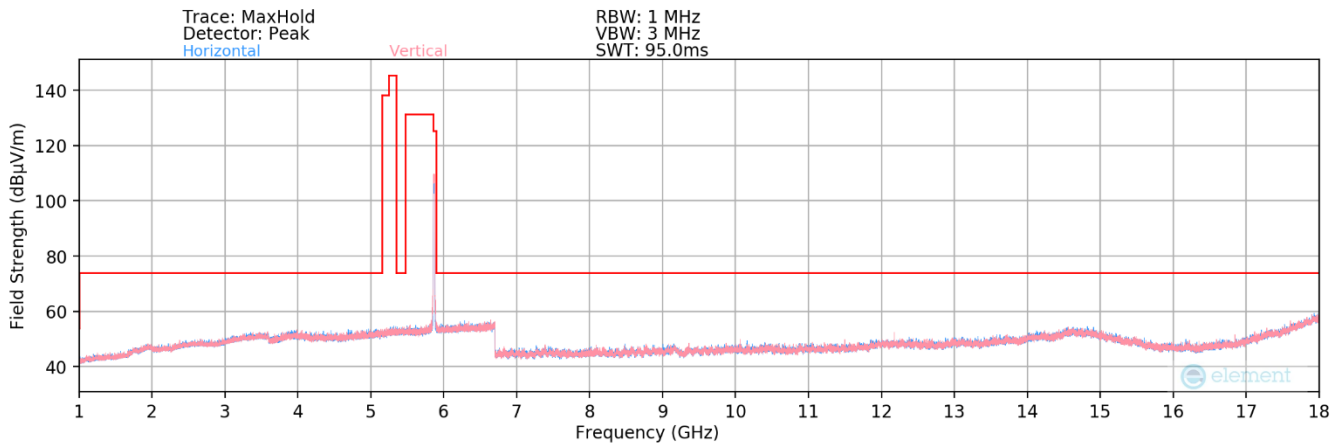
FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2312110124-08.A3L	Test Dates: 9/6/2023 - 11/06/2023	EUT Type: Portable Handset	Page 132 of 163



Plot 7-190. Radiated Spurious Plot above 1GHz MIMO (802.11a – UNII Band 2C Ch. 120)

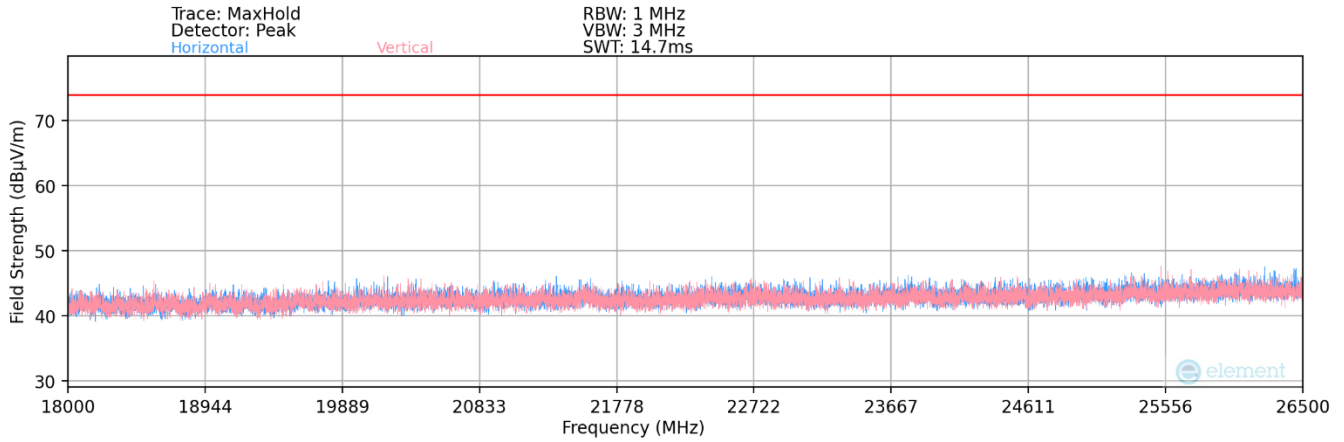


Plot 7-191. Radiated Spurious Plot above 1GHz MIMO (802.11a – UNII Band 3 Ch. 157)

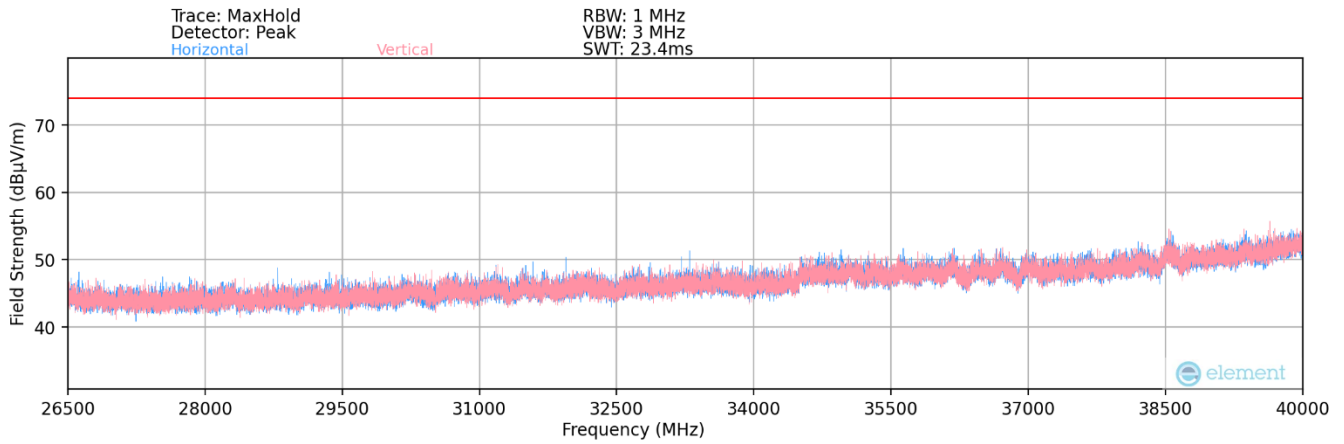


Plot 7-192. Radiated Spurious Plot above 1GHz MIMO (802.11a – UNII Band 4 Ch. 173)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2312110124-08.A3L	Test Dates: 9/6/2023 - 11/06/2023	EUT Type: Portable Handset	Page 133 of 163



Plot 7-193. Radiated Spurious Plot 18GHz – 26.5GHz MIMO (802.11a)



Plot 7-194. Radiated Spurious Plot 26.5GHz – 40GHz MIMO (802.11a)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2312110124-08.A3L	Test Dates: 9/6/2023 - 11/06/2023	EUT Type: Portable Handset	Page 134 of 163



MIMO Radiated Spurious Emission Measurements – UNII Band 1

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6Mbps
 Distance of Measurements: 1 & 3 Meters

Mode	Antenna	UNII Band	Channel	Test Channel Freq. [MHz]	Restricted	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
802.11a	MIMO	1	36	5180		10360.00	Peak	H	-	-	-67.03	8.35	0.00	48.32	68.20	-19.88
					*	15540.00	Average	H	142	49	-74.55	10.01	0.00	42.46	53.98	-11.52
					*	15540.00	Peak	H	142	49	-61.12	10.01	0.00	55.89	73.98	-18.09
					*	20720.00	Average	H	-	-	-66.70	3.50	-9.54	34.26	53.98	-19.72
					*	20720.00	Peak	H	-	-	-57.24	3.50	-9.54	43.72	73.98	-30.26
						25900.00	Peak	H	-	-	-57.37	4.57	-9.54	44.66	68.20	-23.54
			40	5200		10400.00	Peak	H	-	-	-66.54	8.75	0.00	49.21	68.20	-18.99
					*	15600.00	Average	H	137	52	-73.40	8.91	0.00	42.51	53.98	-11.47
					*	15600.00	Peak	H	137	52	-60.87	8.91	0.00	55.04	73.98	-18.94
					*	20800.00	Average	H	-	-	-66.11	3.60	-9.54	34.95	53.98	-19.03
					*	20800.00	Peak	H	-	-	-56.19	3.60	-9.54	44.87	73.98	-29.11
						26000.00	Peak	H	-	-	-57.36	4.60	-9.54	44.70	68.20	-23.50
			48	5240		10480.00	Peak	H	-	-	-66.04	8.11	0.00	49.07	68.20	-19.13
					*	15720.00	Average	H	139	50	-74.52	9.29	0.00	41.77	53.98	-12.21
					*	15720.00	Peak	H	139	50	-61.74	9.29	0.00	54.55	73.98	-19.43
						20960.00	Peak	H	-	-	-56.41	3.61	-9.54	44.66	68.20	-23.54
						26200.00	Peak	H	-	-	-56.20	4.72	-9.54	45.98	68.20	-22.22

Table 7-32. Radiated Measurements MIMO

Mode	Antenna	UNII Band	Channel	Test Channel Freq. [MHz]	Restricted	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
802.11a	MIMO	1	40	5200		10400.00	Peak	H	-	-	-66.24	8.75	0.00	49.51	68.20	-18.69
					*	15600.00	Average	H	101	182	-73.40	8.91	0.00	42.51	53.98	-11.47
					*	15600.00	Peak	H	101	182	-60.87	8.91	0.00	55.04	73.98	-18.94
					*	20800.00	Average	H	-	-	-66.21	3.60	-9.54	34.85	53.98	-19.13
					*	20800.00	Peak	H	-	-	-56.35	3.60	-9.54	44.71	73.98	-29.27
						26000.00	Peak	H	-	-	-56.94	4.60	-9.54	45.12	68.20	-23.08

Table 7-33. Radiated Measurements MIMO with WCP

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2312110124-08.A3L	Test Dates: 9/6/2023 - 11/06/2023	EUT Type: Portable Handset	Page 135 of 163



MIMO Radiated Spurious Emission Measurements – UNII Band 2A

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6Mbps
 Distance of Measurements: 1 & 3 Meters

Mode	Antenna	UNII Band	Channel	Test Channel Freq. [MHz]	Restricted	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
802.11a	MIMO	2A	52	5260		10520.00	Peak	H	-	-	-65.37	7.46	0.00	49.09	68.20	-19.11
					*	15780.00	Average	H	137	50	-73.39	8.86	0.00	42.47	53.98	-11.51
					*	15780.00	Peak	H	137	50	-60.89	8.86	0.00	54.97	73.98	-19.01
					*	21040.00	Average	H	-	-	-66.86	3.71	-9.54	34.31	53.98	-19.67
					*	21040.00	Peak	H	-	-	-57.19	3.71	-9.54	43.99	73.98	-29.99
						26300.00	Peak	H	-	-	-57.39	4.64	-9.54	44.71	68.20	-23.49
			56	5280		10560.00	Peak	H	-	-	-66.23	7.75	0.00	48.52	68.20	-19.68
					*	15840.00	Average	H	132	47	-73.46	8.68	0.00	42.22	53.98	-11.76
					*	15840.00	Peak	H	132	47	-60.82	8.68	0.00	54.86	73.98	-19.12
					*	21120.00	Average	H	-	-	-66.10	3.83	-9.54	35.19	53.98	-18.79
					*	21120.00	Peak	H	-	-	-56.16	3.83	-9.54	45.13	73.98	-28.85
						26400.00	Peak	H	-	-	-56.33	4.68	-9.54	45.81	68.20	-22.39
			64	5320	*	10640.00	Average	H	-	-	-78.44	-17.78	0.00	10.78	53.98	-43.20
					*	10640.00	Peak	H	-	-	-66.02	-17.78	0.00	23.20	73.98	-50.78
					*	15960.00	Average	H	133	44	-74.02	-13.60	0.00	19.38	53.98	-34.60
					*	15960.00	Peak	H	133	44	-61.22	-13.60	0.00	32.18	73.98	-41.80
					*	21280.00	Average	H	-	-	-66.04	3.95	-9.54	35.37	53.98	-18.61
					*	21280.00	Peak	H	-	-	-56.74	3.95	-9.54	44.68	73.98	-29.30
				26600.00	Peak	H	-	-	-56.38	4.51	-9.54	45.59	68.20	-22.61		

Table 7-34. Radiated Measurements MIMO

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2312110124-08.A3L	Test Dates: 9/6/2023 - 11/06/2023	EUT Type: Portable Handset	Page 136 of 163



MIMO Radiated Spurious Emission Measurements – UNII Band 2C

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6Mbps
 Distance of Measurements: 1 & 3 Meters

Mode	Antenna	UNII Band	Channel	Test Channel Freq. [MHz]	Restricted	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
802.11a	MIMO	2C	100	5500	*	11000.00	Average	H	-	-	-78.35	7.81	0.00	36.46	53.98	-17.52
					*	11000.00	Peak	H	-	-	-66.07	7.81	-9.54	39.20	73.98	-34.78
						16500.00	Peak	H	133	19	-63.31	8.23	-9.54	42.38	68.20	-25.82
						22000.00	Peak	H	-	-	-56.39	3.86	-9.54	44.92	68.20	-23.28
						27500.00	Peak	H	-	-	-56.48	4.54	-9.54	45.52	68.20	-22.68
			120	5600	*	11200.00	Average	H	-	-	-78.53	8.05	0.00	36.52	53.98	-17.46
					*	11200.00	Peak	H	-	-	-66.65	8.05	0.00	48.40	73.98	-25.58
						16800.00	Peak	H	152	42	-64.41	8.84	0.00	51.43	68.20	-16.77
					*	22400.00	Average	H	-	-	-66.57	3.86	-9.54	34.74	53.98	-19.24
					*	22400.00	Peak	H	-	-	-57.49	3.86	-9.54	43.82	73.98	-30.16
						28000.00	Peak	H	-	-	-57.39	4.90	-9.54	44.98	68.20	-23.22
			144	5720	*	11440.00	Average	H	-	-	-78.64	8.25	0.00	36.61	53.98	-17.37
					*	11440.00	Peak	H	-	-	-66.39	8.25	0.00	48.86	73.98	-25.12
						17160.00	Peak	H	-	-	-65.51	10.91	0.00	52.40	68.20	-15.80
					*	22880.00	Average	H	-	-	-66.20	4.09	-9.54	35.36	53.98	-18.62
					*	22880.00	Peak	H	-	-	-56.36	4.09	-9.54	45.20	73.98	-28.78
						28600.00	Peak	H	-	-	-56.89	5.30	-9.54	45.87	68.20	-22.33

Table 7-35. Radiated Measurements MIMO

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2312110124-08.A3L	Test Dates: 9/6/2023 - 11/06/2023	EUT Type: Portable Handset	Page 137 of 163



MIMO Radiated Spurious Emission Measurements – UNII Band 3

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6Mbps
 Distance of Measurements: 1 & 3 Meters

Mode	Antenna	UNII Band	Channel	Test Channel Freq. [MHz]	Restricted	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
802.11a	MIMO	3	149	5745	*	11490.00	Average	H	-	-	-78.41	7.98	0.00	36.57	53.98	-17.41
					*	11490.00	Peak	H	-	-	-65.50	7.98	0.00	49.48	73.98	-24.50
						17235.00	Peak	H	-	-	-65.08	11.32	0.00	53.24	68.20	-14.96
					*	22980.00	Average	H	-	-	-66.31	4.00	-9.54	35.16	53.98	-18.82
					*	22980.00	Peak	H	-	-	-56.34	4.00	-9.54	45.13	73.98	-28.85
						28725.00	Peak	H	-	-	-56.14	5.36	-9.54	46.68	68.20	-21.52
			157	5785	*	11570.00	Average	H	-	-	-78.57	8.19	0.00	36.62	53.98	-17.36
					*	11570.00	Peak	H	-	-	-66.17	8.19	0.00	49.02	73.98	-24.96
						17355.00	Peak	H	-	-	-65.47	12.44	0.00	53.97	68.20	-14.23
						23140.00	Peak	H	-	-	-55.98	3.94	-9.54	45.42	68.20	-22.78
			165	5825		28925.00	Peak	H	-	-	-56.43	5.33	-9.54	46.36	68.20	-21.84
					*	11650.00	Average	H	-	-	-78.26	8.38	0.00	37.12	53.98	-16.86
					*	11650.00	Peak	H	-	-	-66.34	8.38	0.00	49.04	73.98	-24.94
						17475.00	Peak	H	-	-	-65.30	13.29	0.00	54.99	68.20	-13.21
						23300.00	Peak	H	-	-	-56.50	4.04	-9.54	44.99	68.20	-23.21
				29125.00	Peak	H	-	-	-57.08	5.36	-9.54	45.74	68.20	-22.46		

Table 7-36. Radiated Measurements MIMO

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2312110124-08.A3L	Test Dates: 9/6/2023 - 11/06/2023	EUT Type: Portable Handset	Page 138 of 163



MIMO Radiated Spurious Emission Measurements – UNII Band 4

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6Mbps
 Distance of Measurements: 1 & 3 Meters

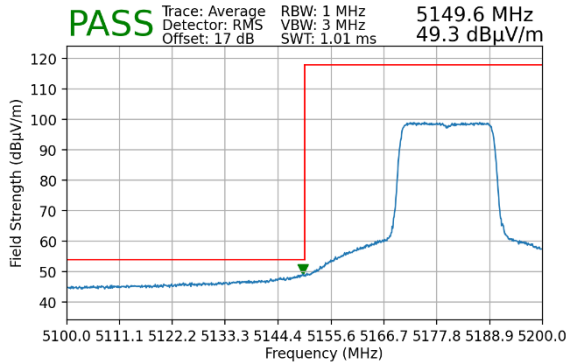
Mode	Antenna	UNII Band	Channel	Test Channel Freq. [MHz]	Restricted	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
802.11a	MIMO	4	169	5845	*	11690.00	Average	H	-	-	-78.50	8.92	0.00	37.42	53.98	-16.56
					*	11690.00	Peak	H	-	-	-66.29	8.92	0.00	49.63	73.98	-24.35
						17535.00	Peak	H	-	-	-65.21	13.86	0.00	55.65	68.20	-12.55
						23380.00	Peak	H	-	-	-56.83	3.89	-9.54	44.52	68.20	-23.68
						29225.00	Peak	H	-	-	-57.00	5.50	-9.54	45.96	68.20	-22.24
						35070.00	Peak	H	-	-	-56.64	8.14	-9.54	48.96	68.20	-19.24
			173	5865	*	11730.00	Average	H	-	-	-79.04	9.28	0.00	37.24	53.98	-16.74
					*	11730.00	Peak	H	-	-	-66.68	9.28	0.00	49.60	73.98	-24.38
						17595.00	Peak	H	-	-	-65.20	14.27	0.00	56.07	68.20	-12.13
						23460.00	Peak	H	-	-	-55.86	4.00	-9.54	45.59	68.20	-22.61
						29325.00	Peak	H	-	-	-56.57	5.64	-9.54	46.53	68.20	-21.67
						35190.00	Peak	H	-	-	-56.98	8.16	-9.54	48.64	68.20	-19.56
			177	5885	*	11770.00	Average	H	-	-	-78.66	9.33	0.00	37.67	53.98	-16.31
					*	11770.00	Peak	H	-	-	-66.69	9.33	0.00	49.64	73.98	-24.34
						17655.00	Peak	H	-	-	-66.79	14.53	0.00	54.74	68.20	-13.46
						23540.00	Peak	H	-	-	-56.97	4.00	-9.54	44.49	68.20	-23.71
						29425.00	Peak	H	-	-	-57.74	5.71	-9.54	45.42	68.20	-22.78
						35310.00	Peak	H	-	-	-57.74	8.37	-9.54	48.09	68.20	-20.11

Table 7-37. Radiated Measurements MIMO

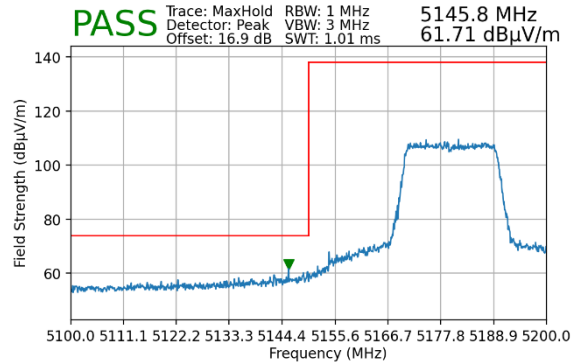
FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2312110124-08.A3L	Test Dates: 9/6/2023 - 11/06/2023	EUT Type: Portable Handset	Page 139 of 163

7.6.2 MIMO Radiated Band Edge Measurements (20MHz BW)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
Distance of Measurements:	3 Meters
Operating Frequency:	5180MHz
Channel:	36

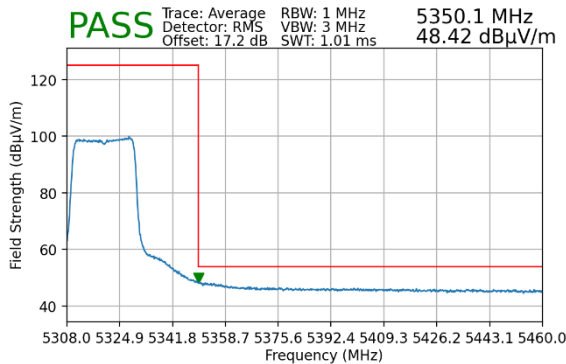


Plot 7-195. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1)

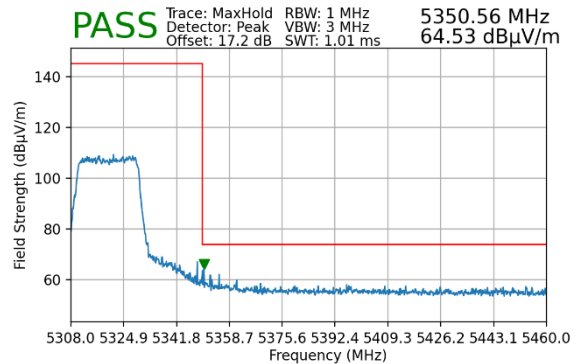


Plot 7-196. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
Distance of Measurements:	3 Meters
Operating Frequency:	5320MHz
Channel:	64



Plot 7-197. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A)

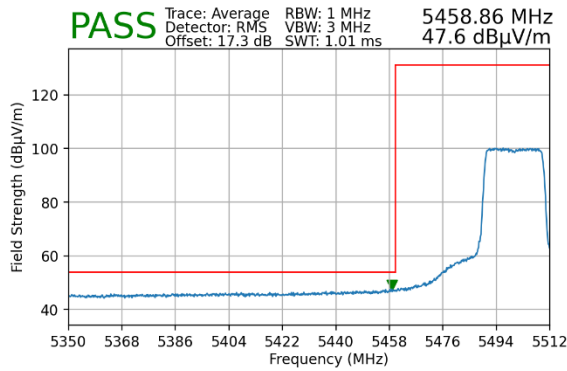


Plot 7-198. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A)

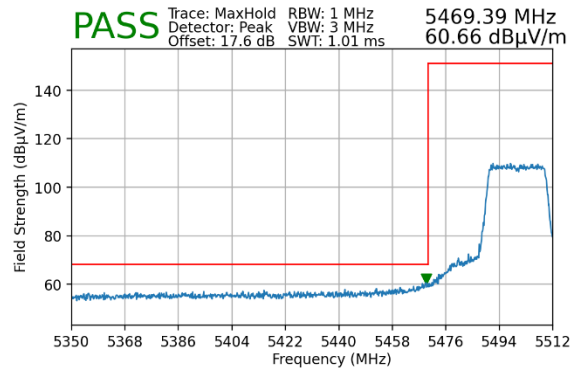
FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2312110124-08.A3L	Test Dates: 9/6/2023 - 11/06/2023	EUT Type: Portable Handset	Page 140 of 163



Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5500MHz
 Channel: 100

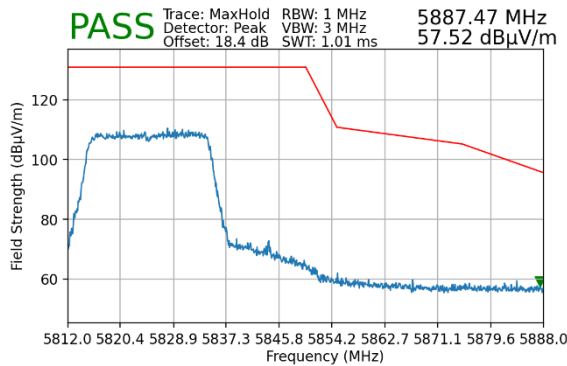


Plot 7-199. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C)



Plot 7-200. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C)

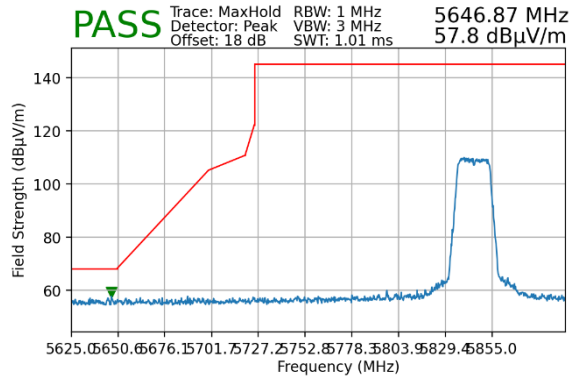
Worst Case Mode: 802.11be
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5825MHz
 Channel: 165



Plot 7-201. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3)

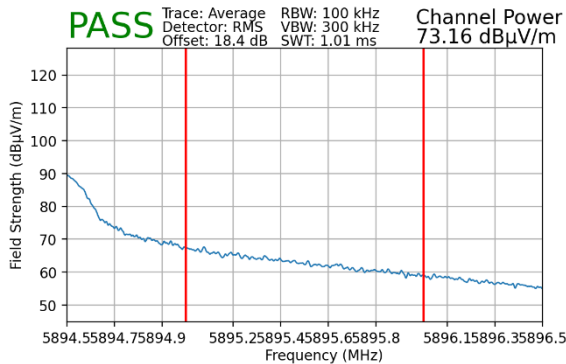
FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2312110124-08.A3L	Test Dates: 9/6/2023 - 11/06/2023	EUT Type: Portable Handset	Page 141 of 163

Worst Case Mode: 802.11n
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5845MHz
 Channel: 169

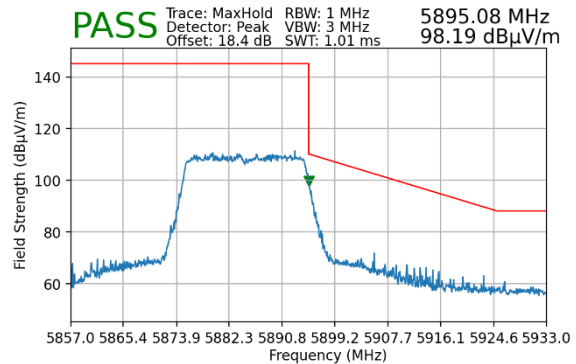


Plot 7-202. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 4)

Worst Case Mode: 802.11be
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5885MHz
 Channel: 177



Plot 7-203. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 4)

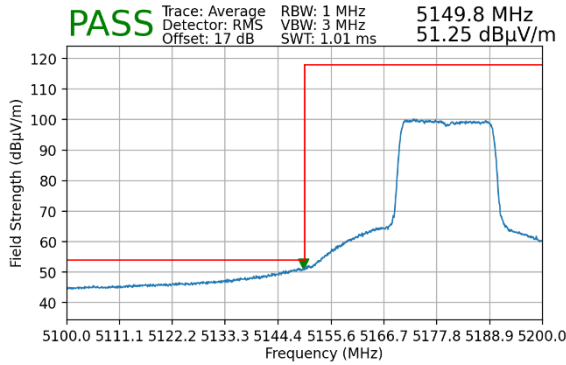


Plot 7-204. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 4)

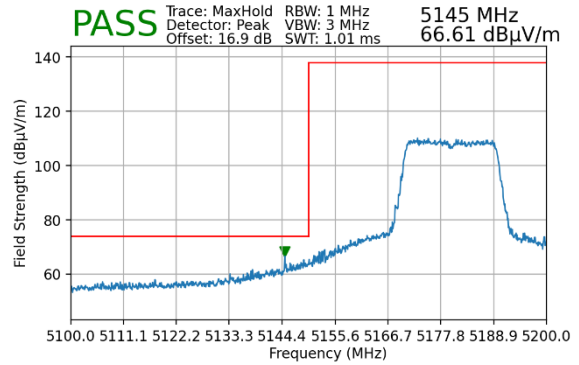
FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
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Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5180MHz
 Channel: 36



Plot 7-205. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1) with WCP

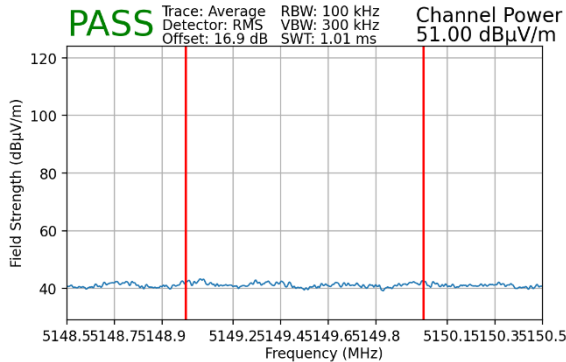


Plot 7-206. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1) with WCP

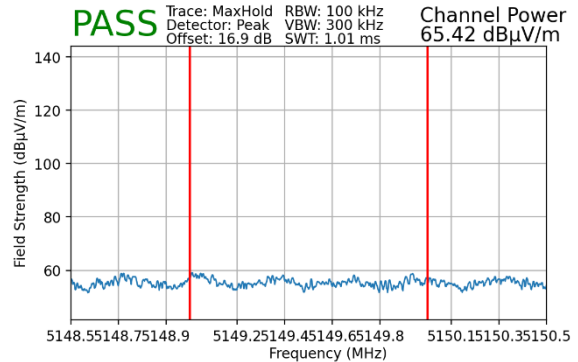
FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
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7.6.3 MIMO Radiated Band Edge Measurements (40MHz BW)

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5190MHz
 Channel: 38

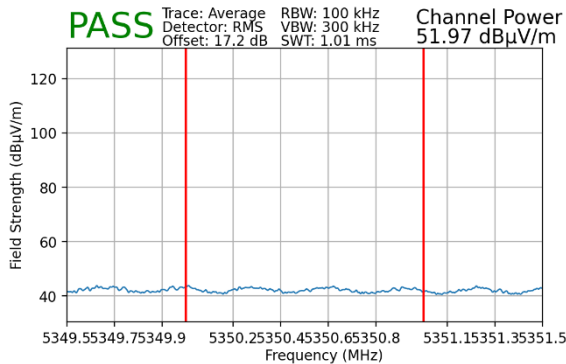


Plot 7-207. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1)

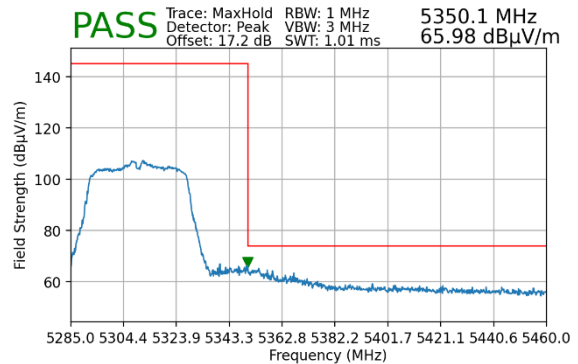


Plot 7-208. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1)

Worst Case Mode: 802.11ac
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5310MHz
 Channel: 62



Plot 7-209. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A)

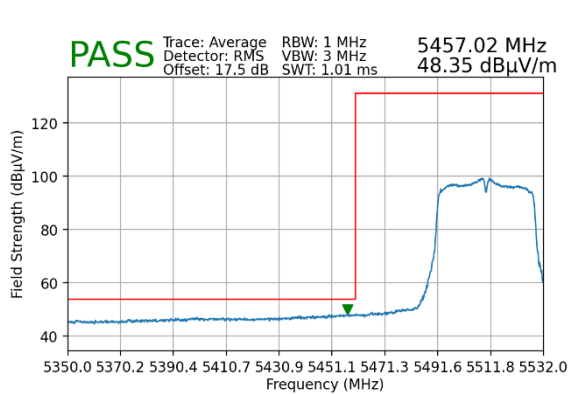


Plot 7-210. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A)

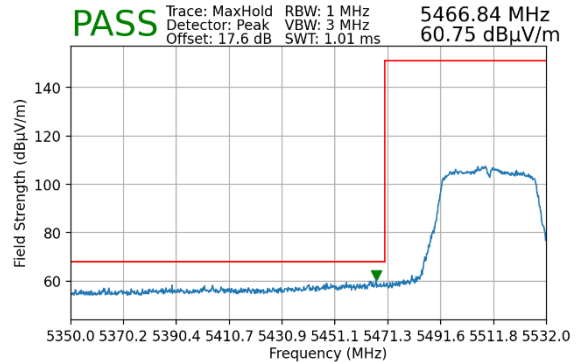
FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
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Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5510MHz
 Channel: 102

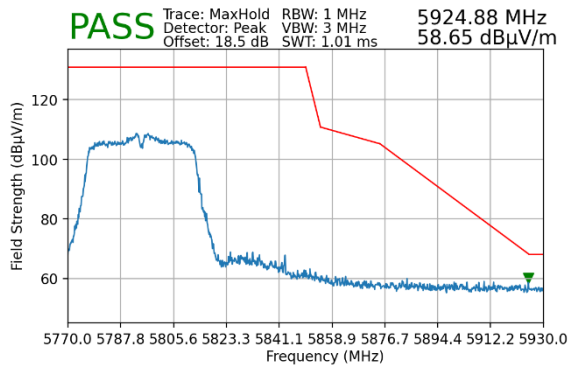


Plot 7-211. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C)



Plot 7-212. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C)

Worst Case Mode: 802.11n
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5795MHz
 Channel: 159

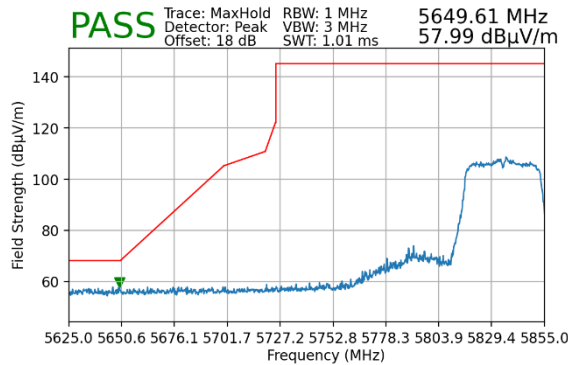


Plot 7-213. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
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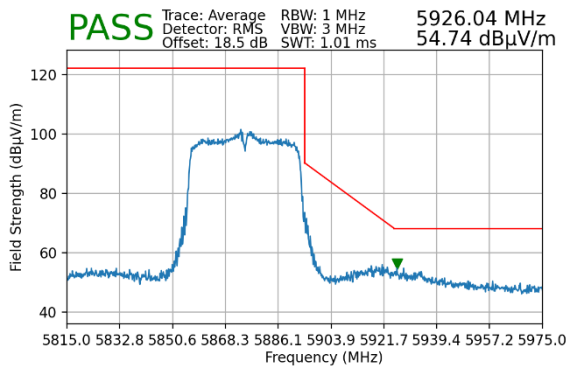


Worst Case Mode: 802.11ac
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5835MHz
 Channel: 167

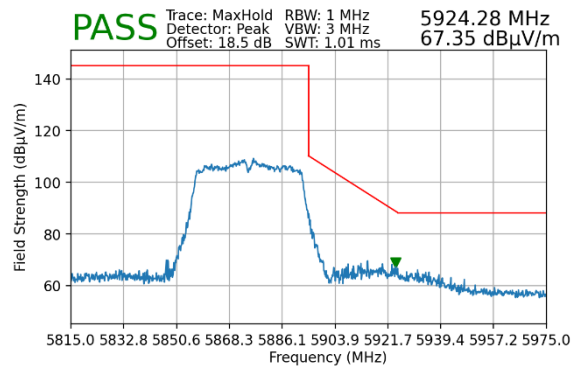


Plot 7-214. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 4)

Worst Case Mode: 802.11n
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5875MHz
 Channel: 175



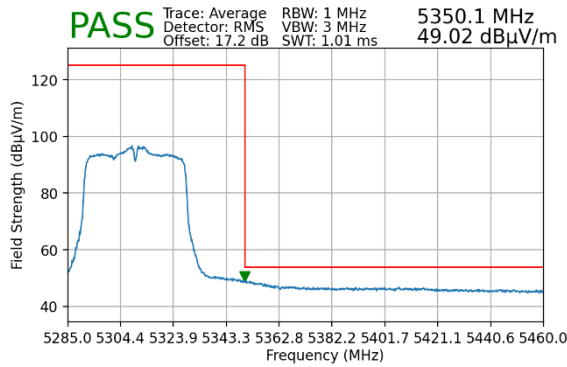
Plot 7-215. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 4)



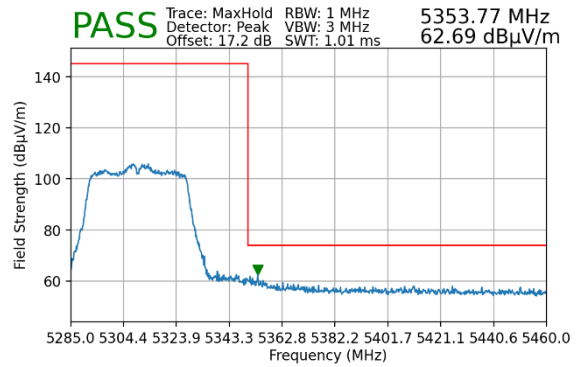
Plot 7-216. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 4)

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Worst Case Mode: 802.11ac
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5310MHz
 Channel: 62



Plot 7-217. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A) with WCP

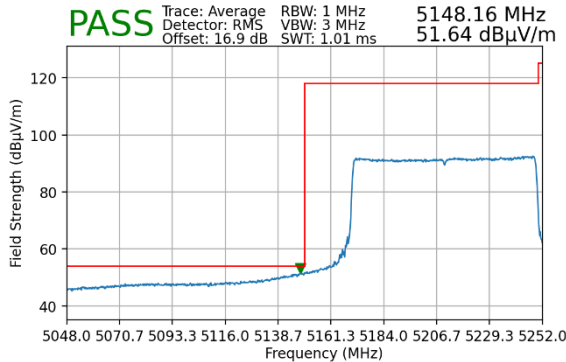


Plot 7-218. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A) with WCP

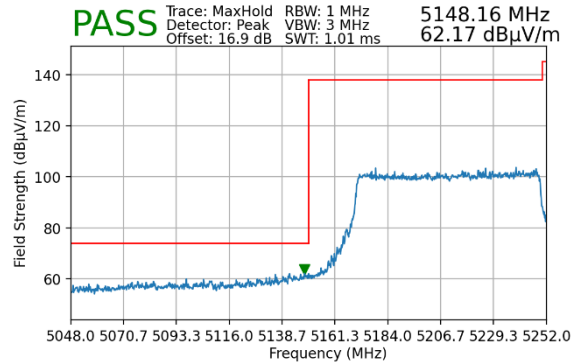
FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
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7.6.4 MIMO Radiated Band Edge Measurements (80MHz BW)

Worst Case Mode:	802.11be
Worst Case Transfer Rate:	MCS0
Distance of Measurements:	3 Meters
Operating Frequency:	5210MHz
Channel:	42

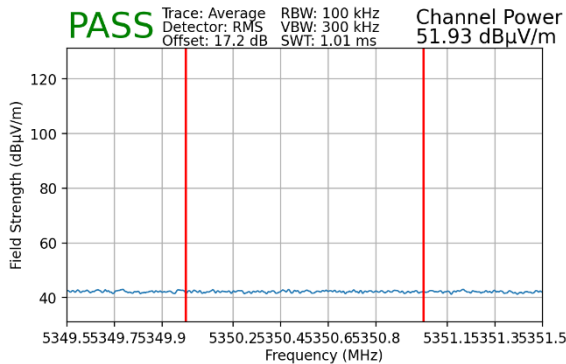


Plot 7-219. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1)

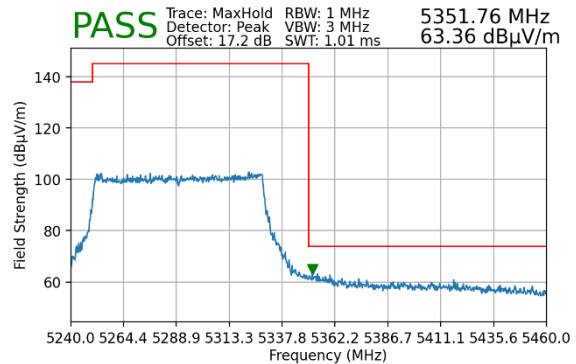


Plot 7-220. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1)

Worst Case Mode:	802.11be
Worst Case Transfer Rate:	MCS0
Distance of Measurements:	3 Meters
Operating Frequency:	5290MHz
Channel:	58



Plot 7-221. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A)

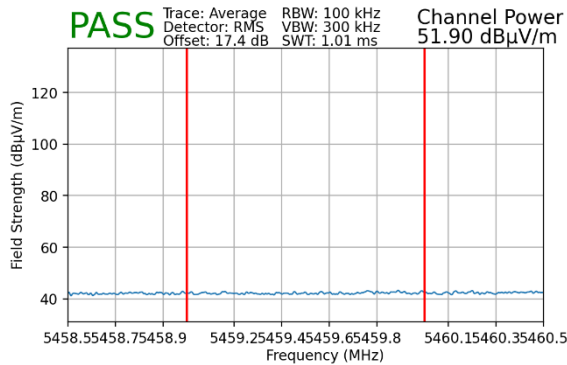


Plot 7-222. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A)

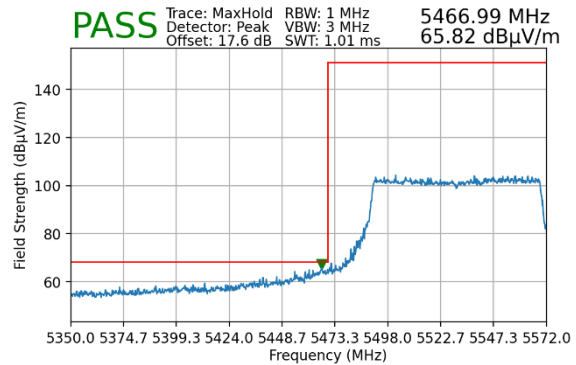
FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
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Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5530MHz
 Channel: 106

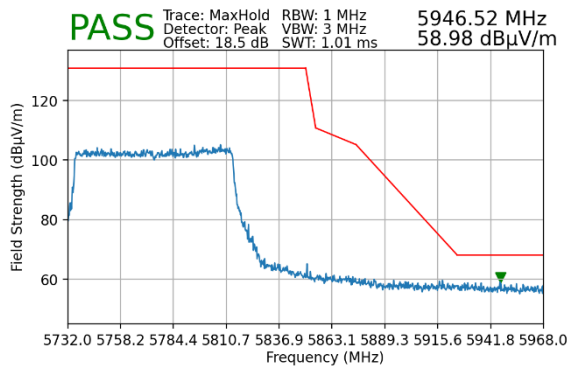


Plot 7-223. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C)



Plot 7-224. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C)

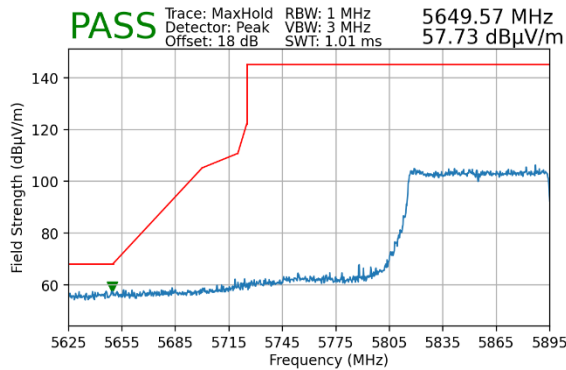
Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5775MHz
 Channel: 155



Plot 7-225. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3)

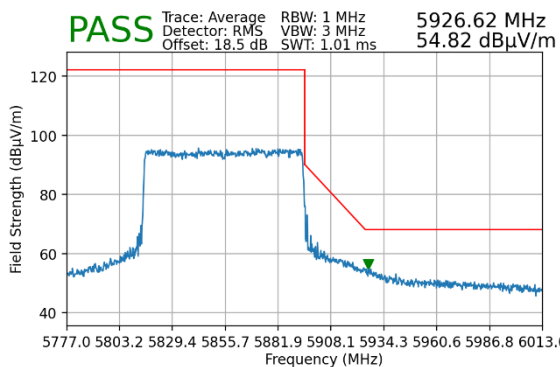
FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
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Worst Case Mode: 802.11be
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5855MHz
 Channel: 171

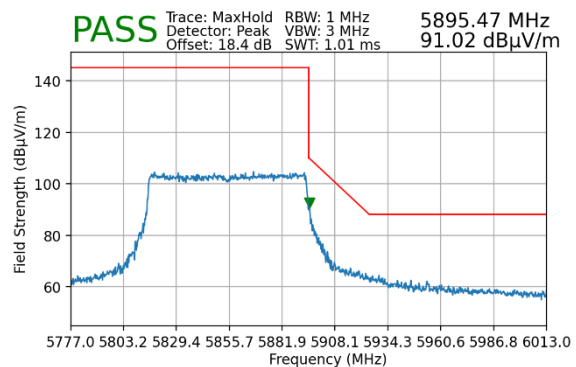


Plot 7-226. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 4)

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5855MHz
 Channel: 171



Plot 7-227. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 4)

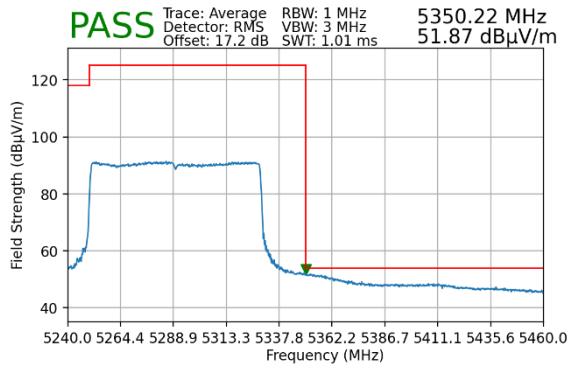


Plot 7-228. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 4)

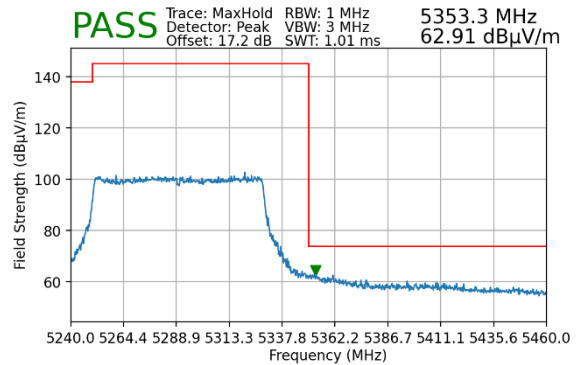
FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
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Worst Case Mode: 802.11be
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5290MHz
 Channel: 58

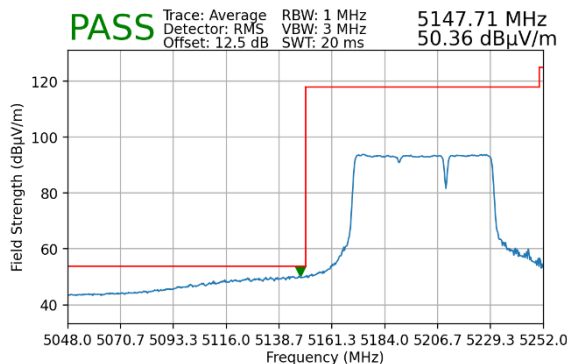


Plot 7-229. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A) with WCP

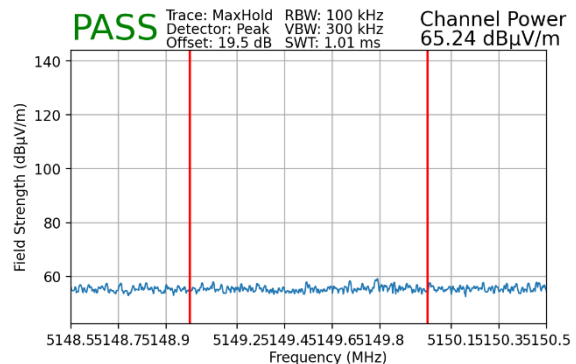


Plot 7-230. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A) with WCP

Worst Case Mode: 802.11be
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5210MHz
 Channel: 42



Plot 7-231. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1) with Punctured

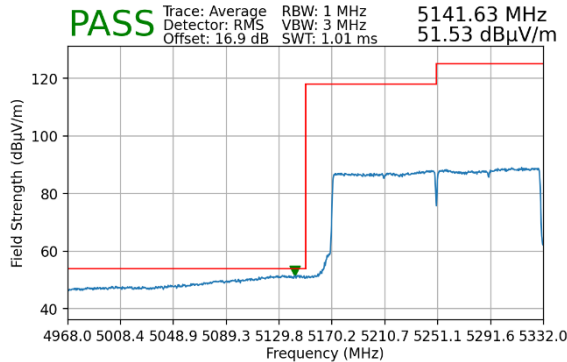


Plot 7-232. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1) with Punctured

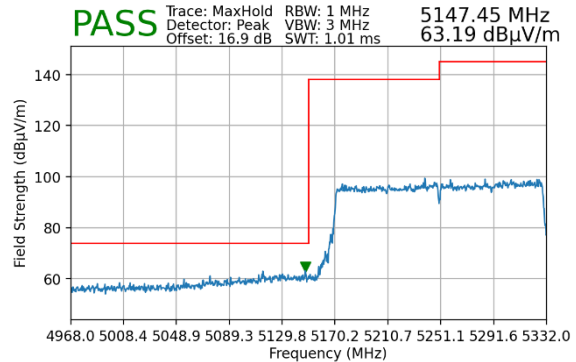
FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
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7.6.5 MIMO Radiated Band Edge Measurements (160MHz BW)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
Distance of Measurements:	3 Meters
Operating Frequency:	5250MHz
Channel:	50

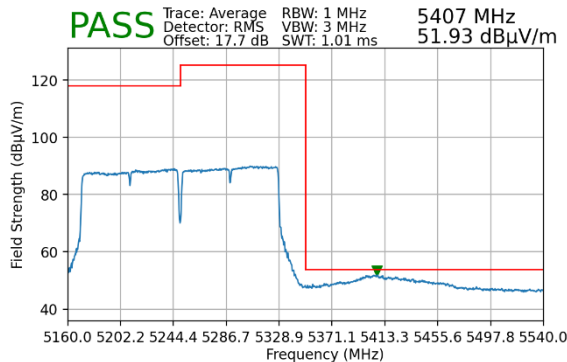


Plot 7-233. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1)

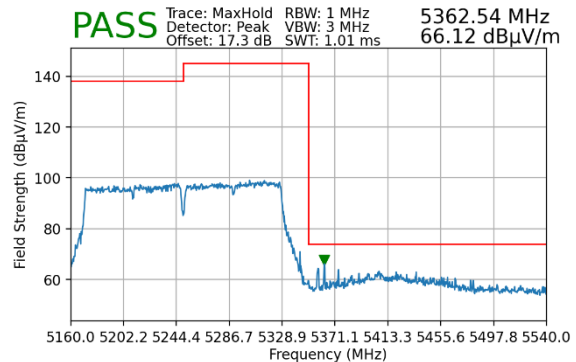


Plot 7-234. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
Distance of Measurements:	3 Meters
Operating Frequency:	5250MHz
Channel:	50



Plot 7-235. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A)

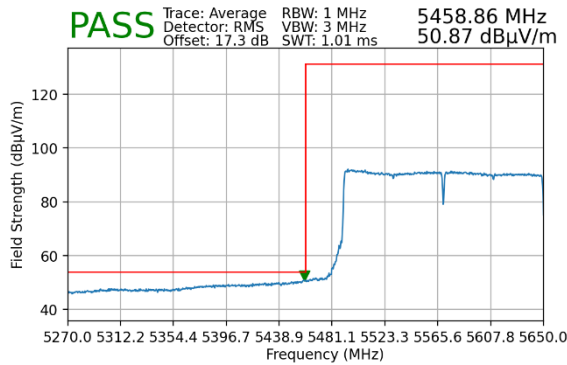


Plot 7-236. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A)

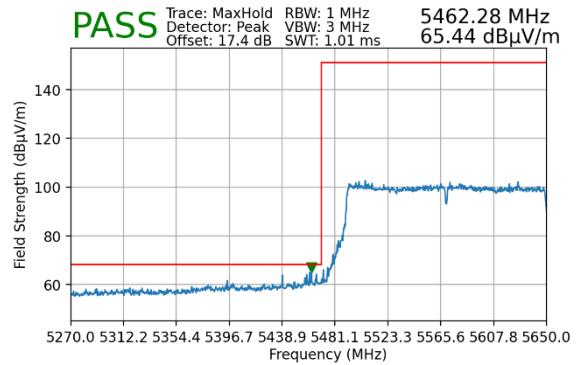
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Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5570MHz
 Channel: 114

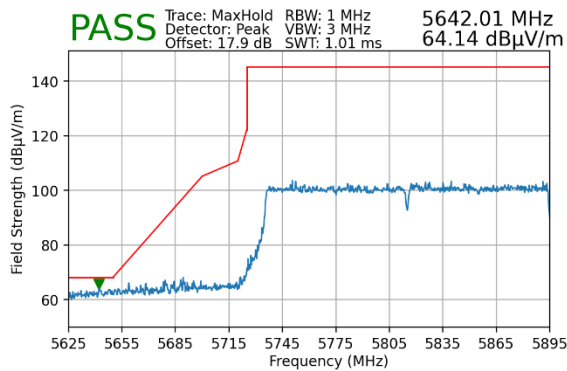


Plot 7-237. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C)



Plot 7-238. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C)

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5815MHz
 Channel: 163

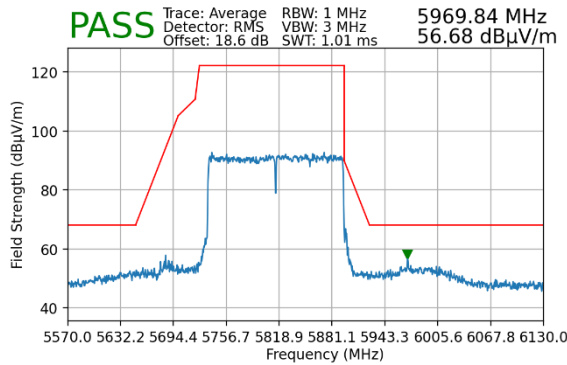


Plot 7-239. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 4)

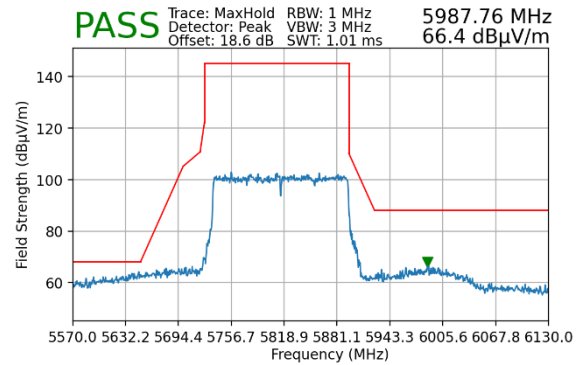
FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
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Worst Case Mode: 802.11be
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5815MHz
 Channel: 163

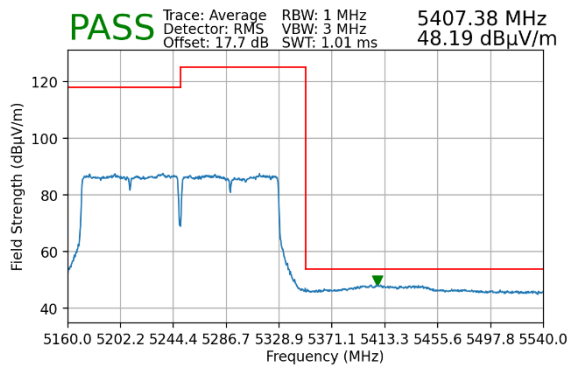


Plot 7-240. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 4)

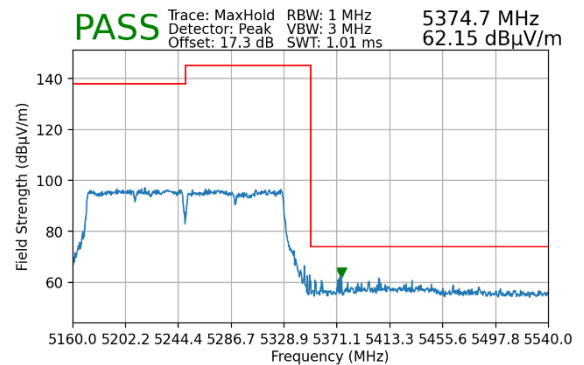


Plot 7-241. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 4)

Worst Case Mode: 802.11ac
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5250MHz
 Channel: 50



Plot 7-242. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1) with WCP



Plot 7-243. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1) with WCP

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7.7 Line-Conducted Test Data

Test Overview and Limit

All AC line conducted spurious emissions are measured with a receiver connected to a grounded LISN while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates and modes were investigated for conducted spurious emissions. Only the conducted emissions of the configuration that produced the worst-case emissions are reported in this section.

All conducted emissions must not exceed the limits shown in the table below per FCC §15.207 and RSS-Gen (8.8).

Frequency of emission (MHz)	Conducted Limit (dB μ V)	
	Quasi-peak	Average
0.15 – 0.5	66 to 56*	56 to 46*
0.5 – 5	56	46
5 – 30	60	50

Table 7-38. Conducted Limits

*Decreases with the logarithm of the frequency.

Test Procedures Used

ANSI C63.10-2013, Section 6.2

Test Settings

Quasi-Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the spurious emission of interest
2. RBW = 9kHz (for emissions from 150kHz – 30MHz)
3. Detector = quasi-peak
4. Sweep time = auto couple
5. Trace mode = max hold
6. Trace was allowed to stabilize

Average Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the spurious emission of interest
2. RBW = 9kHz (for emissions from 150kHz – 30MHz)
3. Detector = RMS
4. Sweep time = auto couple
5. Trace mode = max hold
6. Trace was allowed to stabilize

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Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

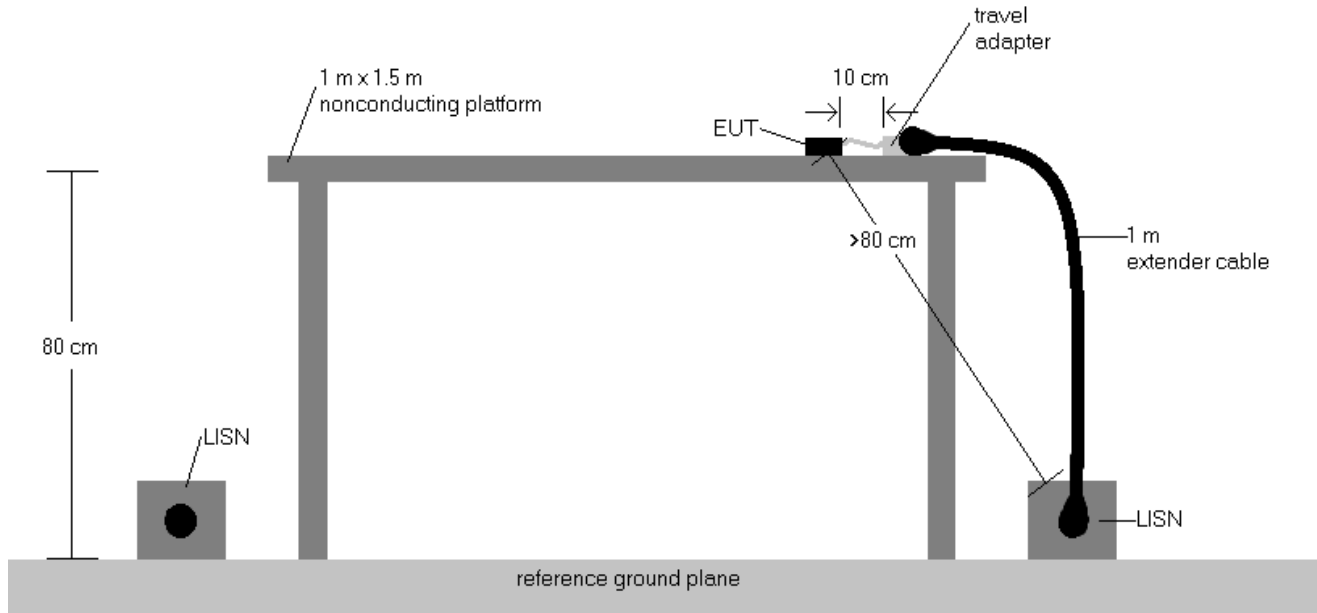
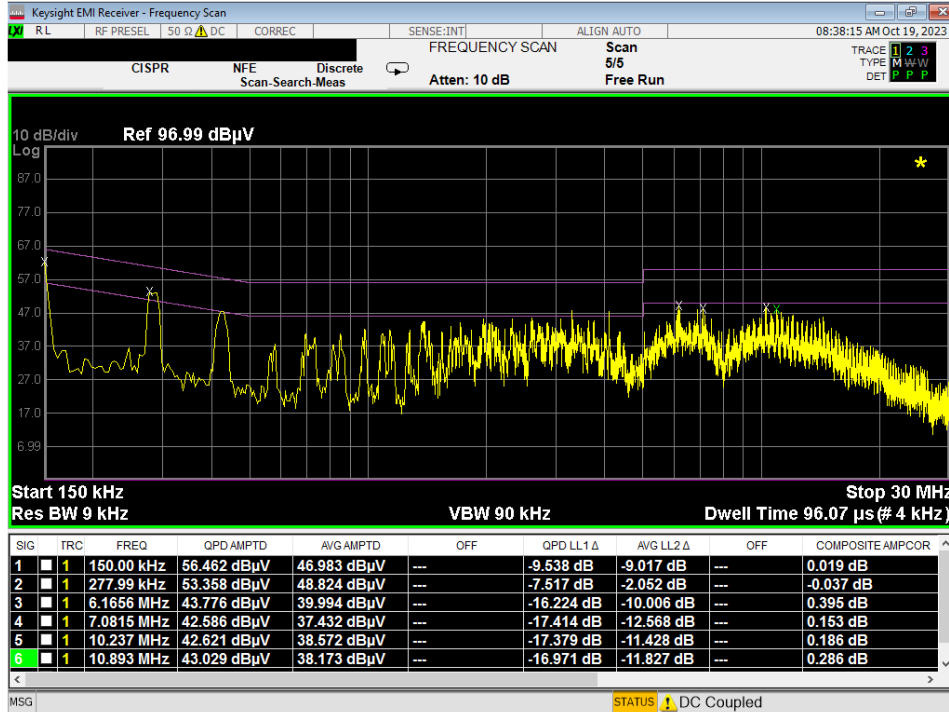


Figure 7-8. Test Instrument & Measurement Setup

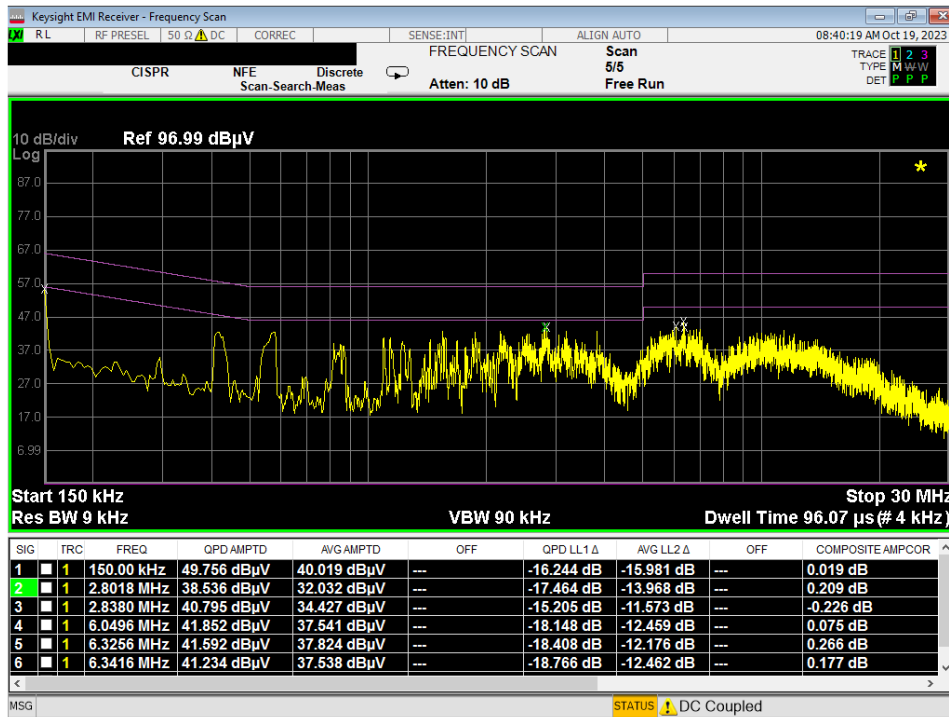
Test Notes

1. All modes of operation were investigated, and the worst-case emissions are reported using mid channel. The emissions found were not affected by the choice of channel used during testing.
2. The limit for an intentional radiator from 150kHz to 30MHz is specified in §15.207 and RSS-Gen (8.8).
3. $\text{Corr. (dB)} = \text{Cable loss (dB)} + \text{LISN insertion factor (dB)}$
4. $\text{QP/AV Level (dB}\mu\text{V)} = \text{QP/AV Analyzer/Receiver Level (dB}\mu\text{V)} + \text{Corr. (dB)}$
5. $\text{Margin (dB)} = \text{QP/AV Limit (dB}\mu\text{V)} - \text{QP/AV Level (dB}\mu\text{V)}$
6. Traces shown in plot are made using a peak detector.
7. Deviations to the Specifications: None.

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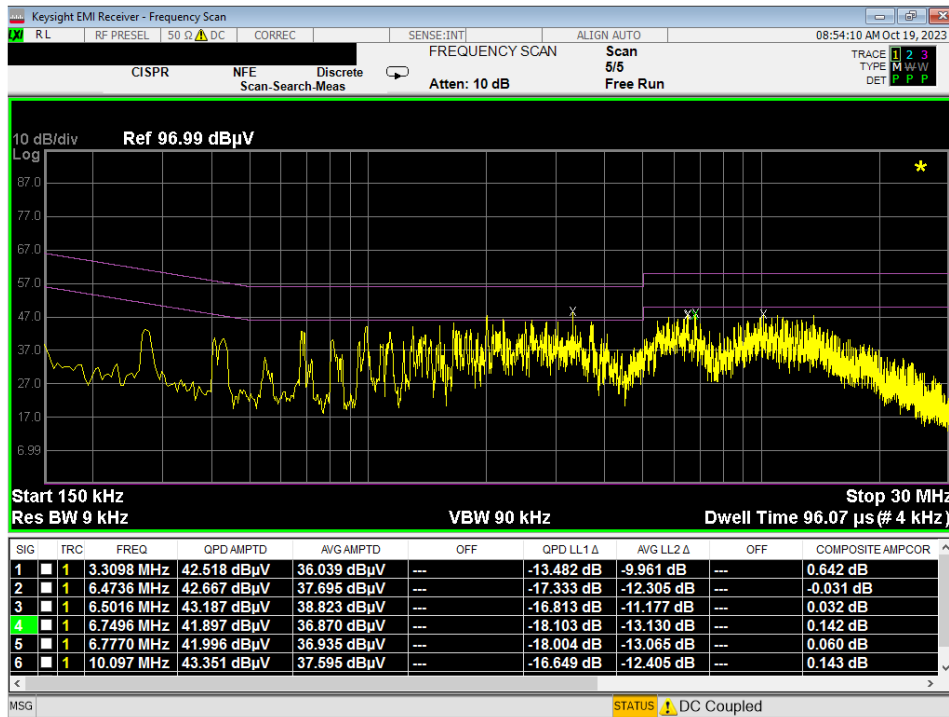


Plot 7-244. Line Conducted Plot with 802.11a UNII Band 1 (L1)

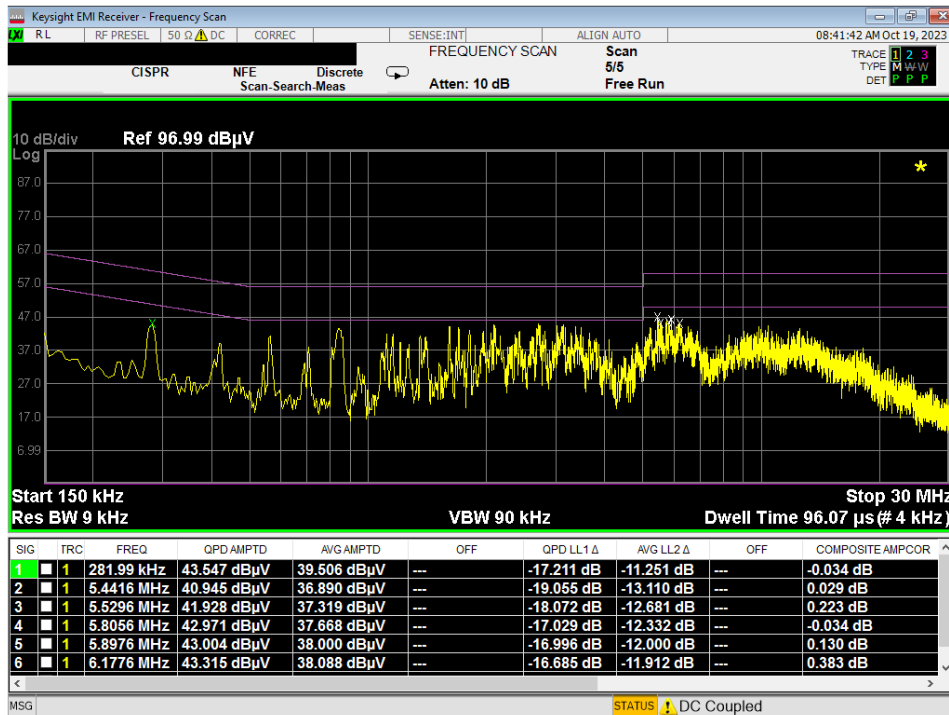


Plot 7-245. Line Conducted Plot with 802.11a UNII Band 1 (N)

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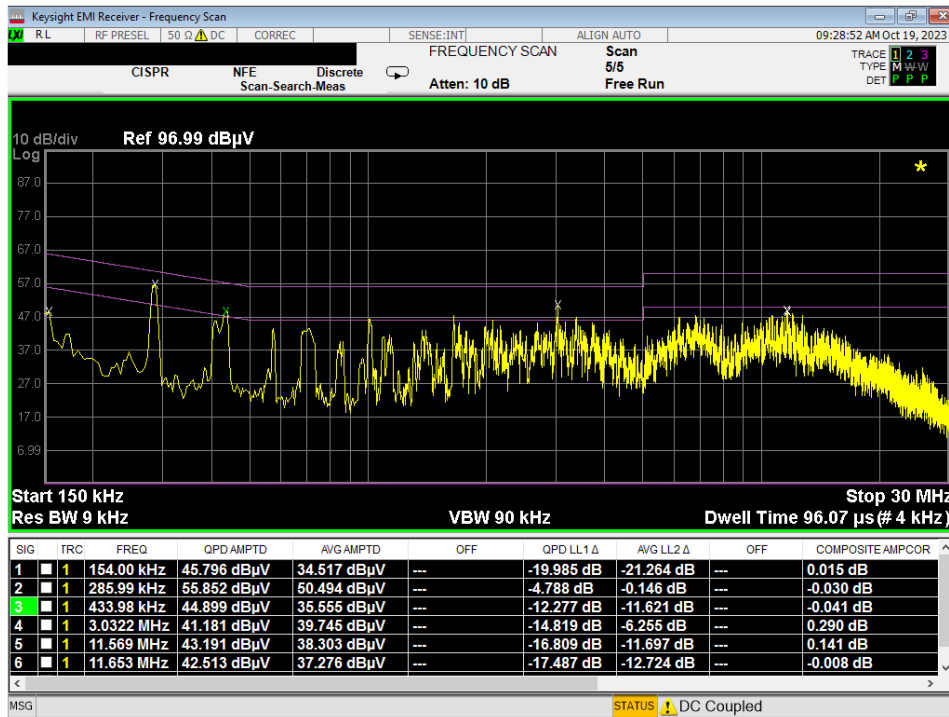


Plot 7-246. Line Conducted Plot with 802.11a UNII Band 2A (L1)

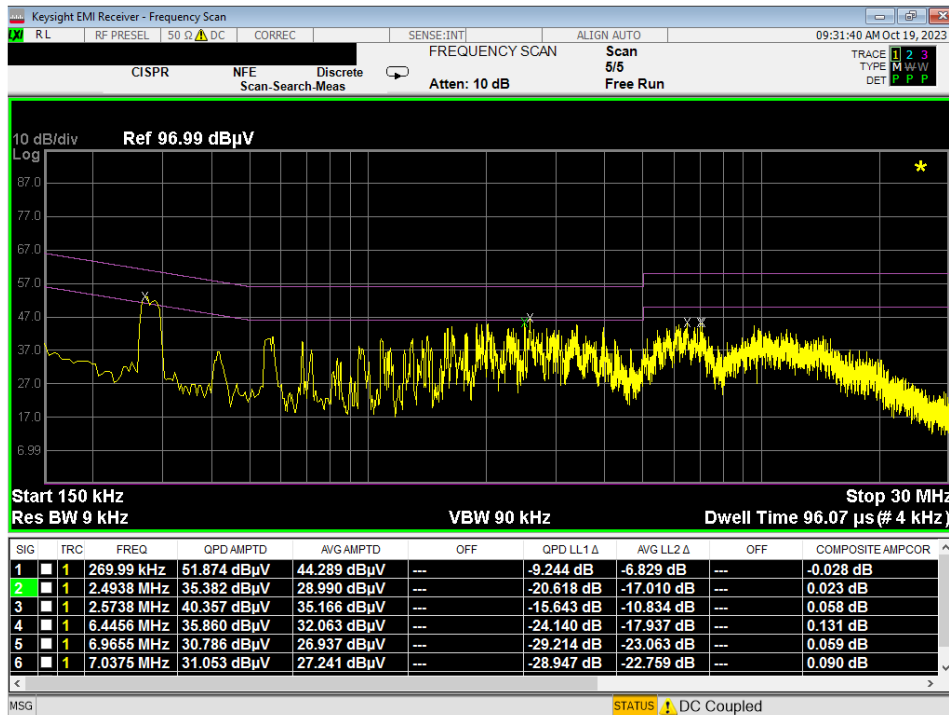


Plot 7-247. Line Conducted Plot with 802.11a UNII Band 2A (N)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
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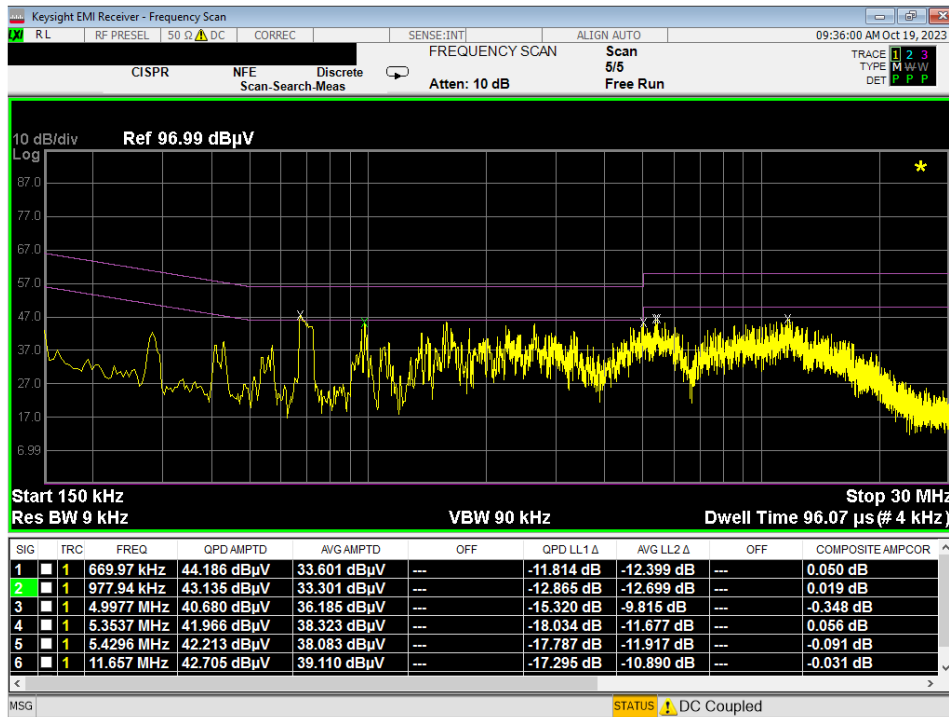


Plot 7-248. Line Conducted Plot with 802.11a UNII Band 2C (L1)

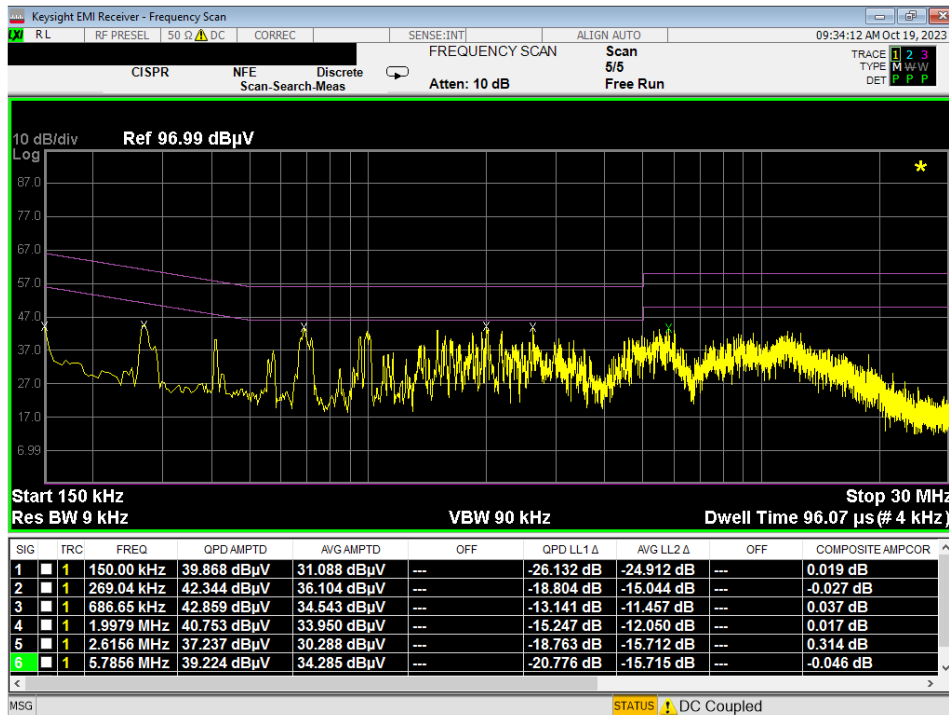


Plot 7-249. Line Conducted Plot with 802.11a UNII Band 2C (N)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2312110124-08.A3L	Test Dates: 9/6/2023 - 11/06/2023	EUT Type: Portable Handset	Page 159 of 163

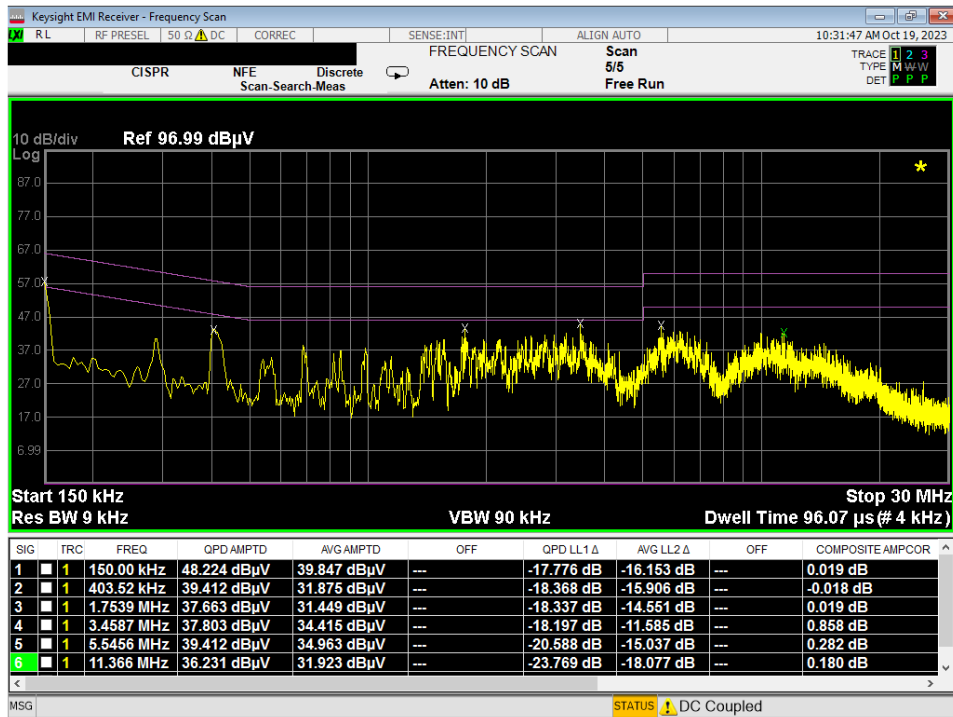


Plot 7-250. Line Conducted Plot with 802.11a UNII Band 3 (L1)

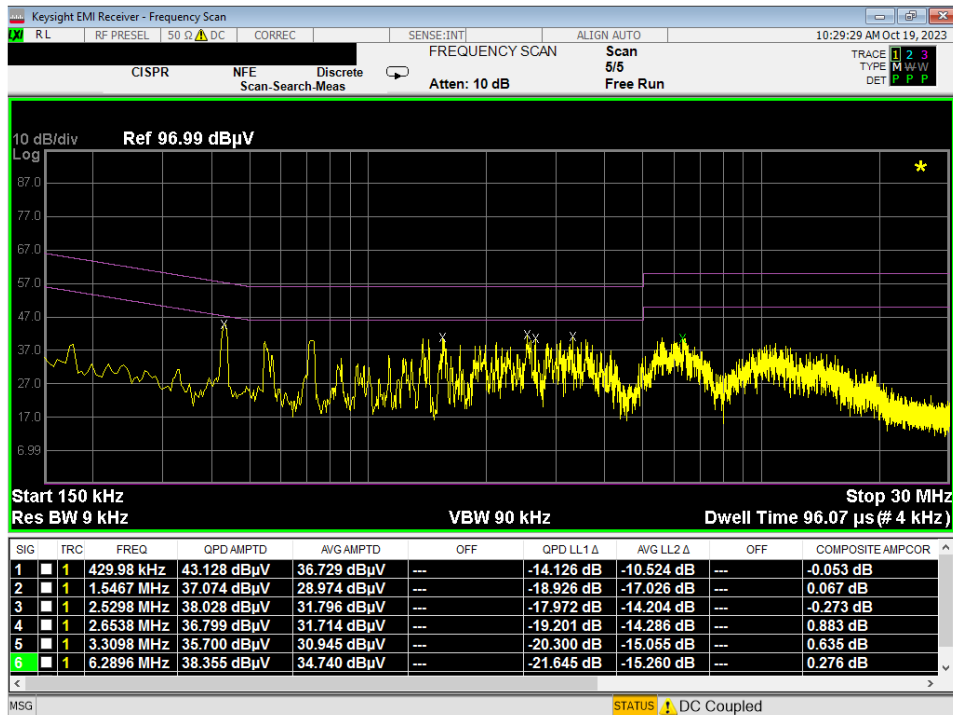


Plot 7-251. Line Conducted Plot with 802.11a UNII Band 3 (N)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2312110124-08.A3L	Test Dates: 9/6/2023 - 11/06/2023	EUT Type: Portable Handset	Page 160 of 163

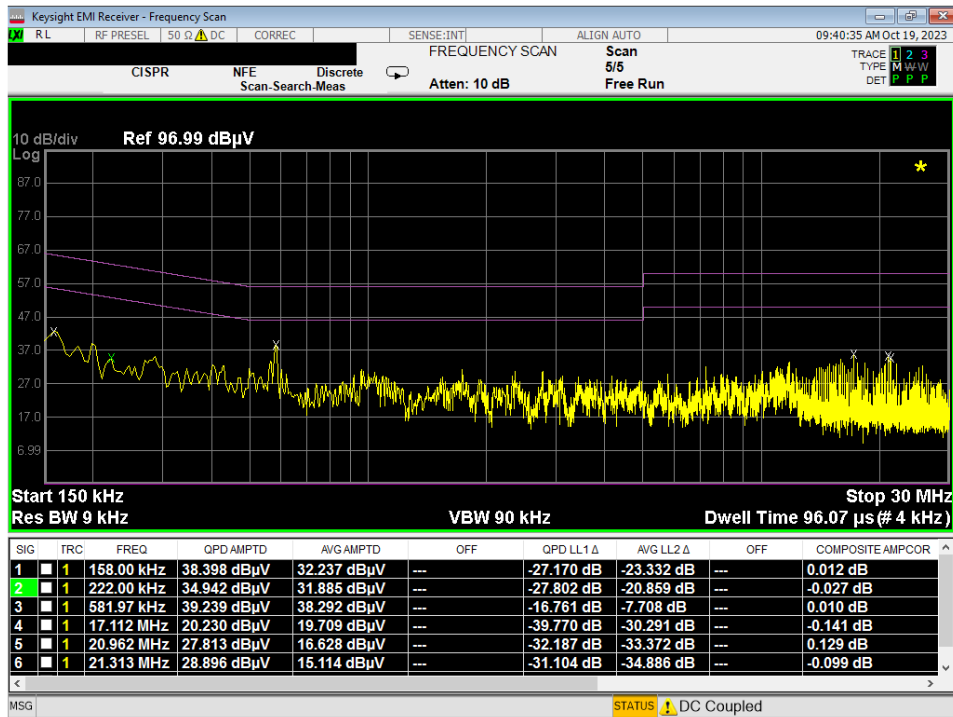


Plot 7-252. Line Conducted Plot with 802.11a UNII Band 4 (L1)

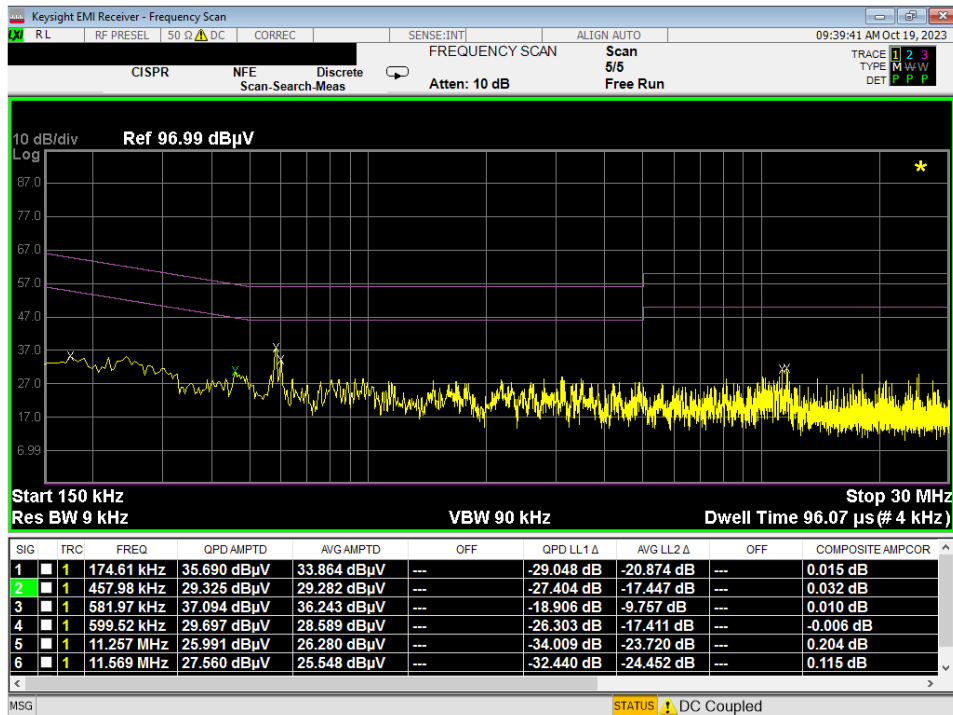


Plot 7-253. Line Conducted Plot with 802.11a UNII Band 4 (N)

FCC ID: A3LSMS928JPN		MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2312110124-08.A3L	Test Dates: 9/6/2023 - 11/06/2023	EUT Type: Portable Handset		Page 161 of 163



Plot 7-254. Line Conducted Plot with 802.11a UNII Band 1 (L1) with WCP



Plot 7-255. Line Conducted Plot with 802.11a UNII Band 1 (N) with WCP

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
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8.0 CONCLUSION

The data collected relate only the item(s) tested and show that the **Samsung Portable Handset FCC ID: A3LSMS928JPN** is in compliance with Part 15 Subpart E (15.407) of the FCC Rules.

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2312110124-08.A3L	Test Dates: 9/6/2023 - 11/06/2023	EUT Type: Portable Handset	Page 163 of 163