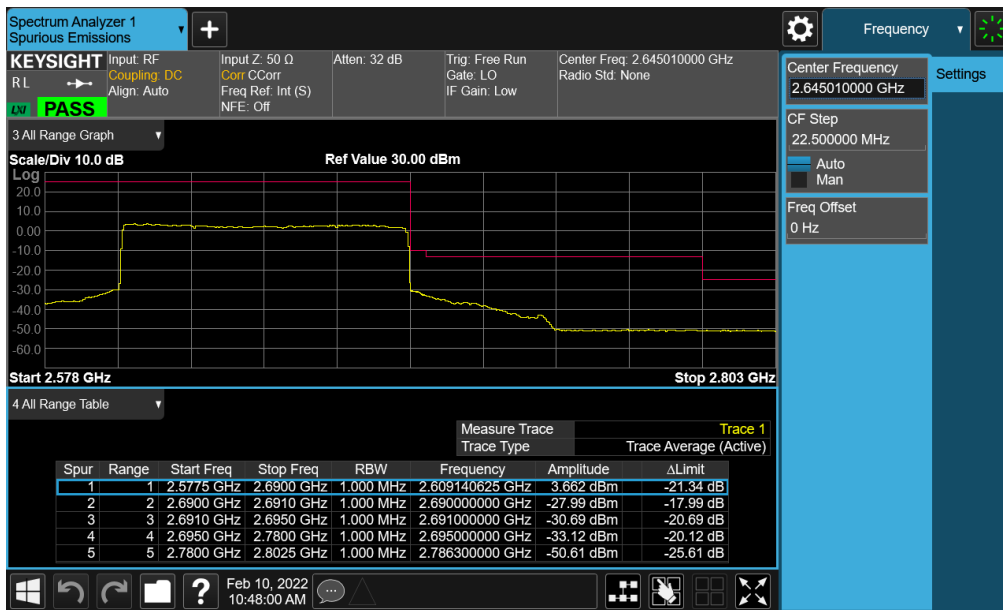
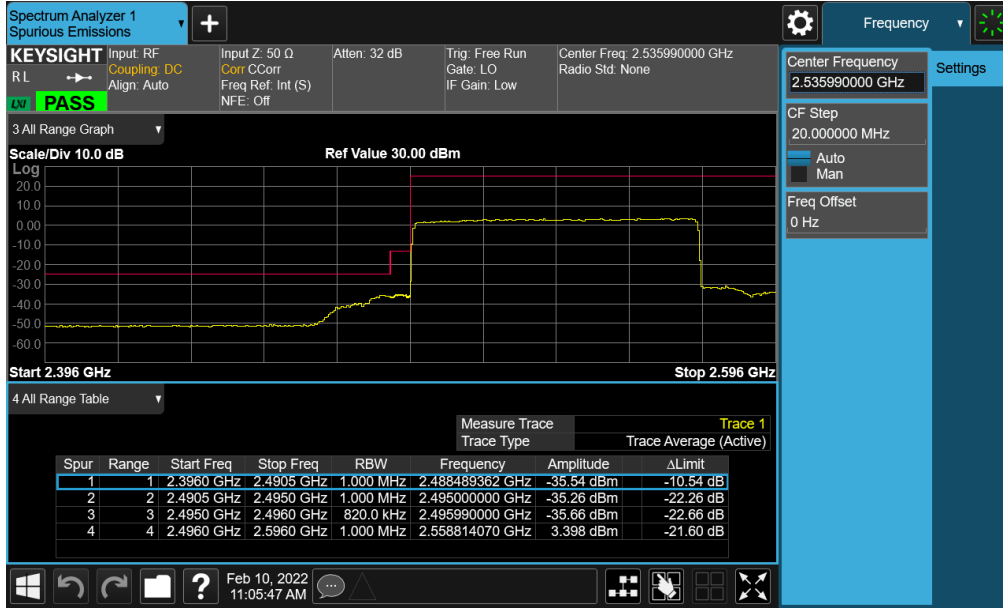


Plot 7-63. Lower ACP Plot (NR Band n41 - 90MHz CP-OFDM-QPSK – Full RB - Ant I)

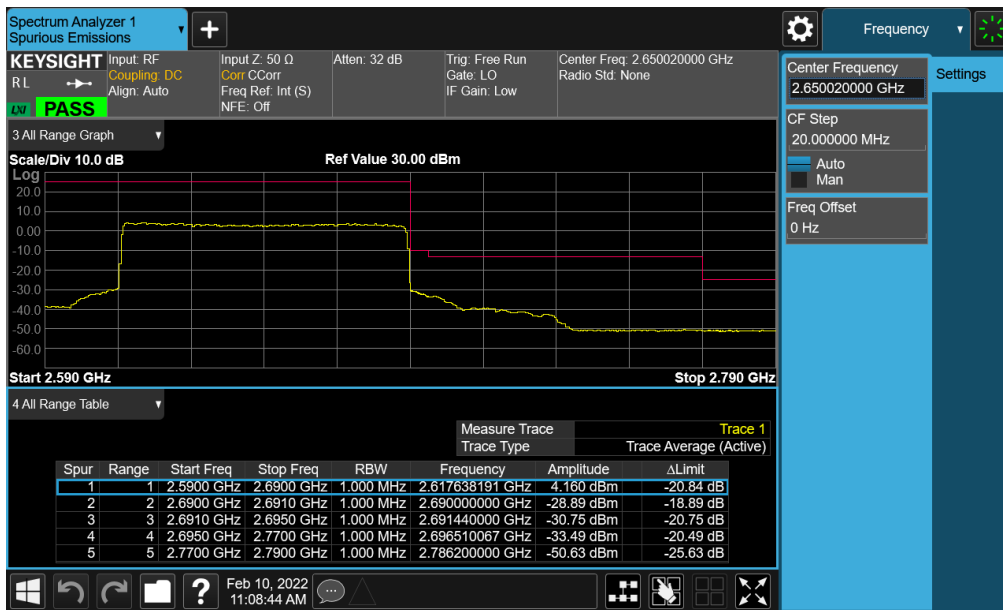


Plot 7-64. Upper ACP Plot (NR Band n41 - 90MHz CP-OFDM-QPSK – Full RB - Ant I)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE	Approved by: Technical Manager
Test Report S/N: 1M2202030009-02.A3L	Test Dates: 02/01/2022 - 02/28/2022	EUT Type: Portable Handset	Page 52 of 84

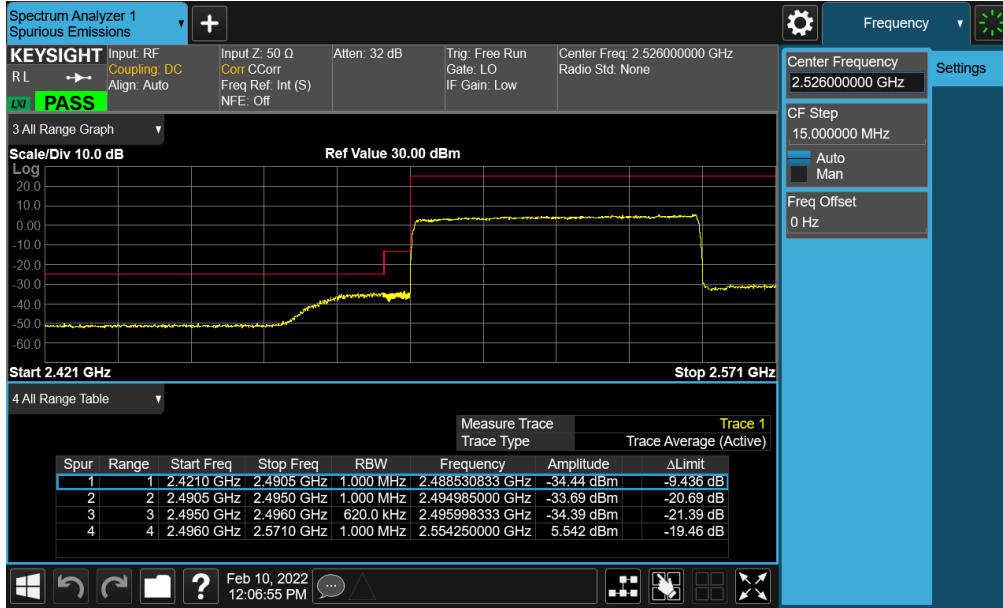


Plot 7-65. Lower ACP Plot (NR Band n41 - 80MHz CP-OFDM-QPSK – Full RB - Ant I)

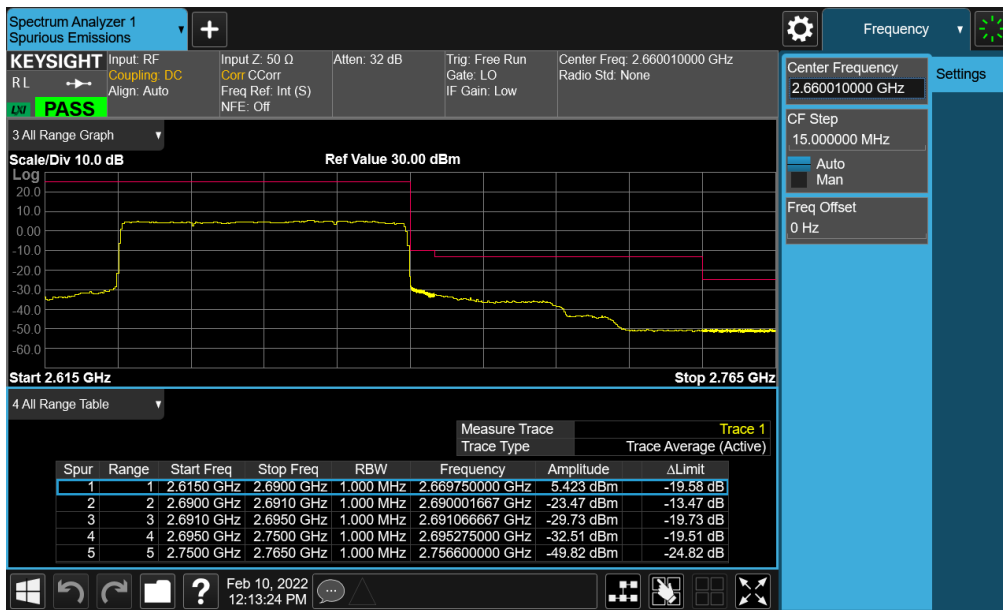


Plot 7-66. Upper ACP Plot (NR Band n41 - 80MHz CP-OFDM-QPSK – Full RB - Ant I)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE	Approved by: Technical Manager
Test Report S/N: 1M2202030009-02.A3L	Test Dates: 02/01/2022 - 02/28/2022	EUT Type: Portable Handset	Page 53 of 84

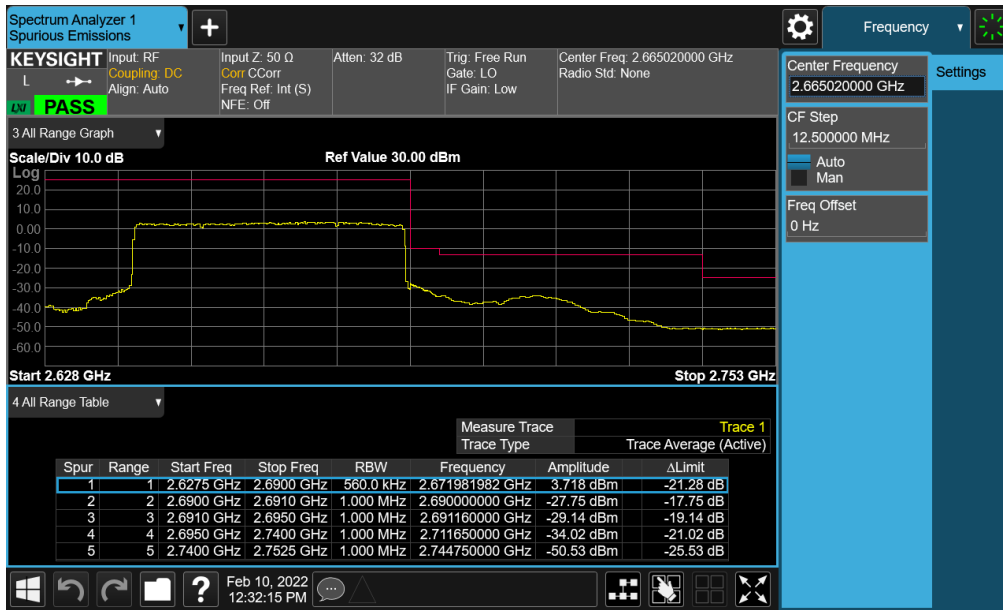
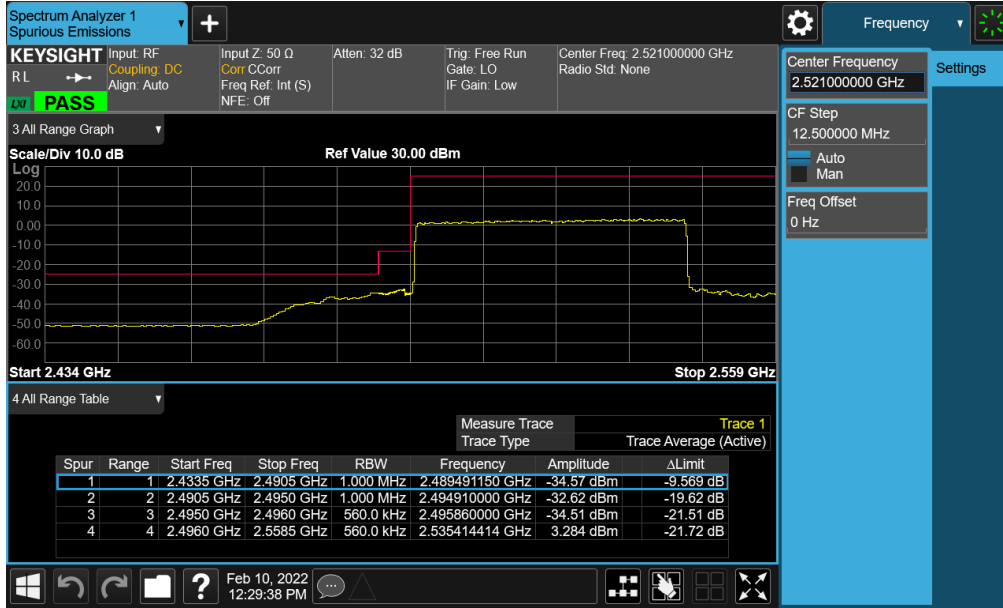


Plot 7-67. Lower ACP Plot (NR Band n41 - 60MHz CP-OFDM-QPSK – Full RB - Ant I)

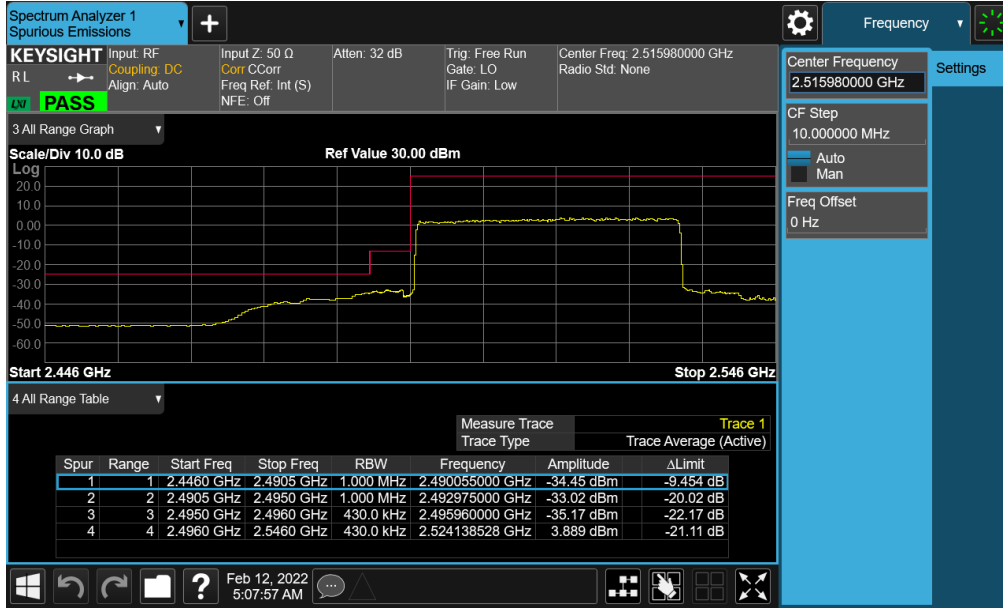


Plot 7-68. Upper ACP Plot (NR Band n41 - 60MHz CP-OFDM-QPSK – Full RB - Ant I)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE	Approved by: Technical Manager
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FCC ID: A3LSMS906E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE	Approved by: Technical Manager
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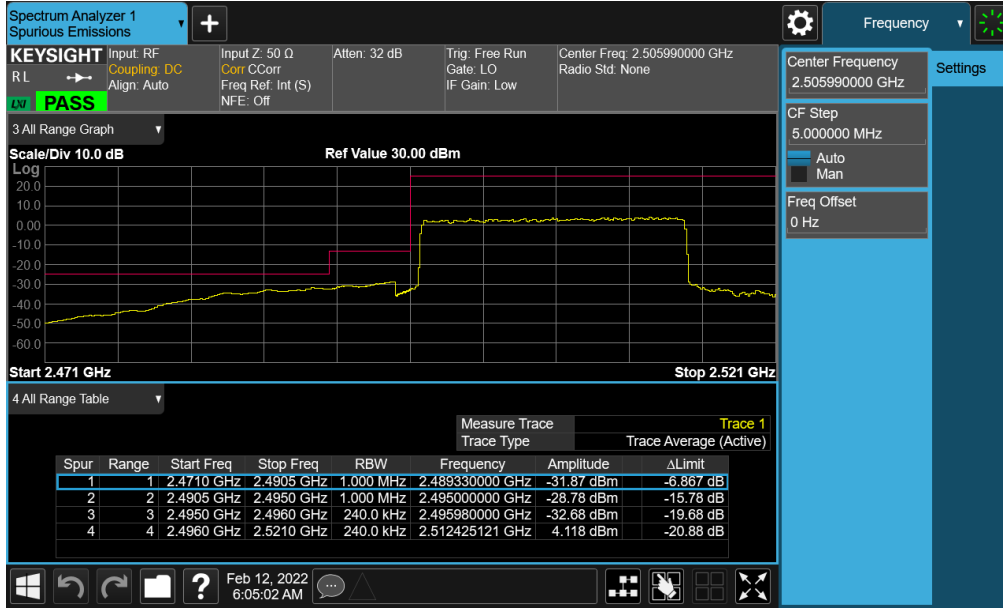


Plot 7-71. Lower ACP Plot (NR Band n41 - 40MHz CP-OFDM-QPSK – Full RB - Ant I)



Plot 7-72. Upper ACP Plot (NR Band n41 - 40MHz CP-OFDM-QPSK – Full RB - Ant I)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE	Approved by: Technical Manager
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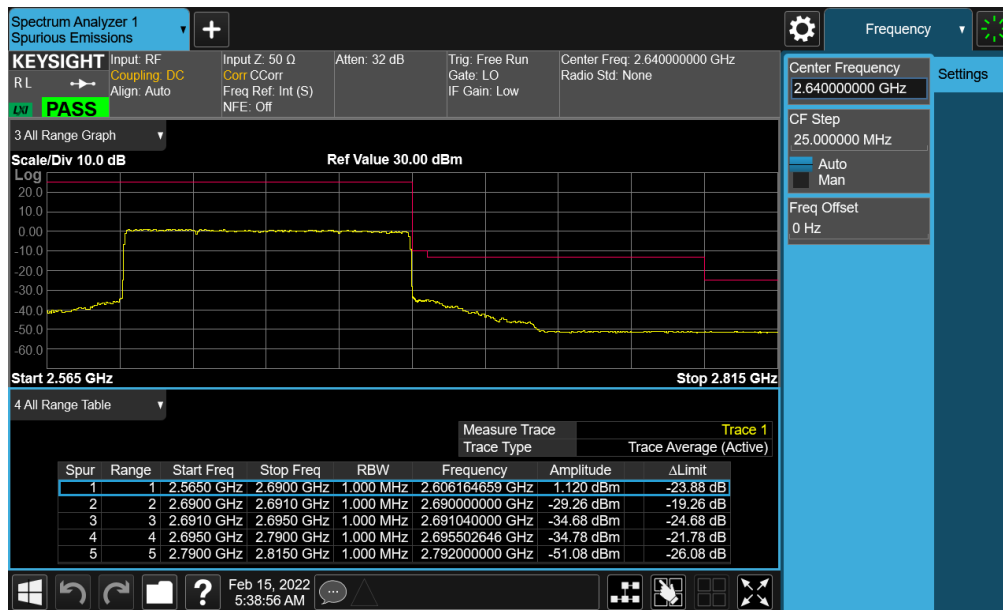
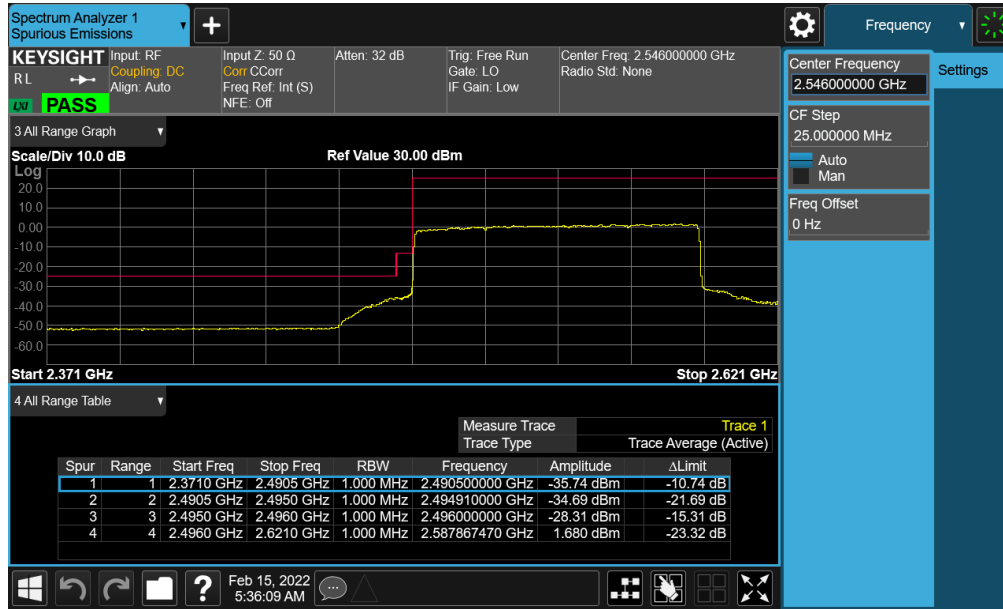
Plot 7-73. Lower ACP Plot (NR Band n41 - 20MHz CP-OFDM-QPSK – Full RB - Ant I)





Plot 7-74. Upper ACP Plot (NR Band n41 - 20MHz CP-OFDM-QPSK – Full RB - Ant I)

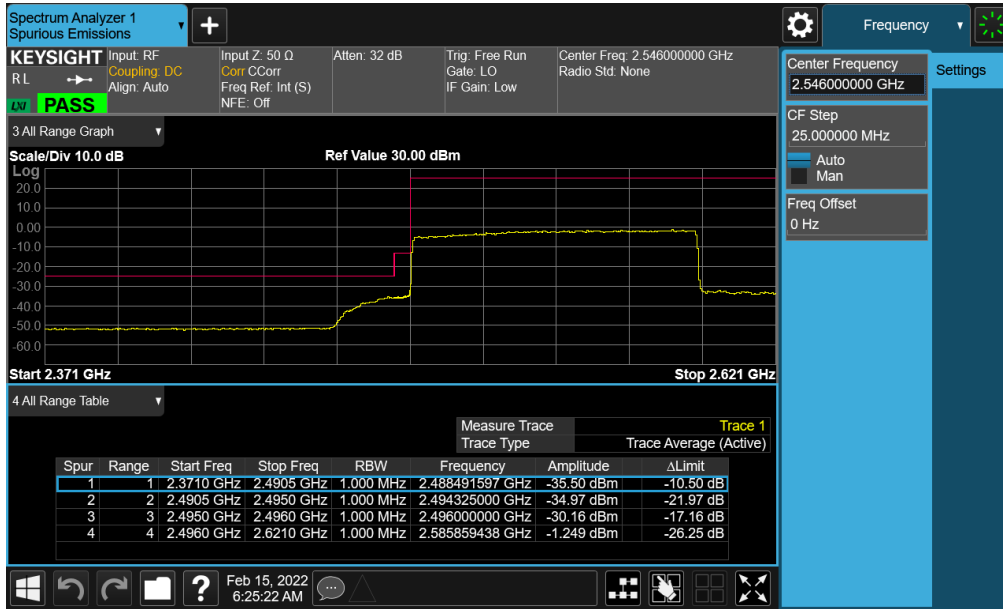
FCC ID: A3LSMS906E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE	Approved by: Technical Manager
Test Report S/N: 1M2202030009-02.A3L	Test Dates: 02/01/2022 - 02/28/2022	EUT Type: Portable Handset	Page 57 of 84

NR Band n41 – SRS 2 - Ant B

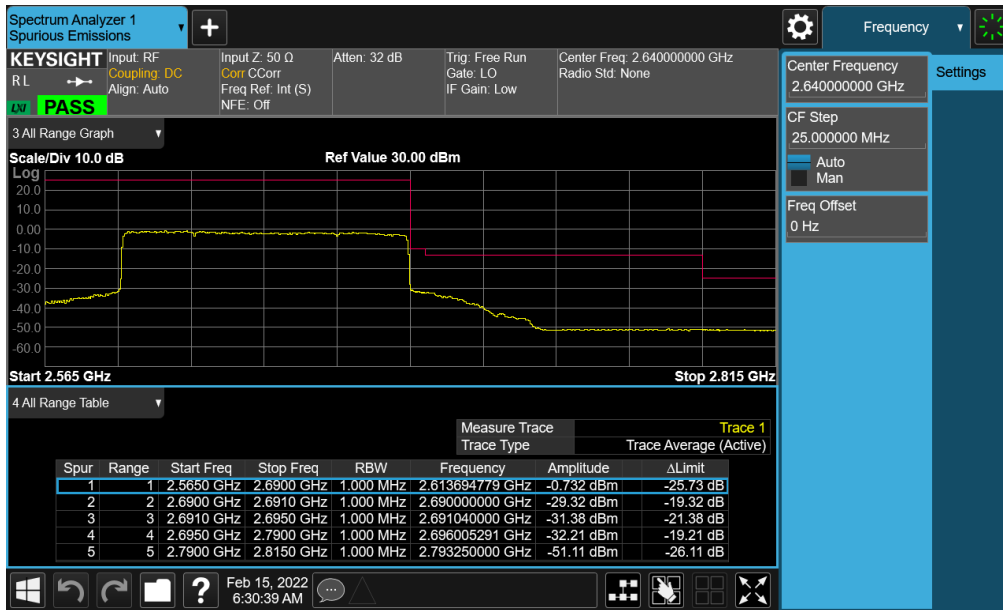


FCC ID: A3LSMS906E		PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE		Approved by: Technical Manager
Test Report S/N: 1M2202030009-02.A3L	Test Dates: 02/01/2022 - 02/28/2022	EUT Type: Portable Handset		Page 58 of 84

NR Band n41 – SRS 3 - Ant D



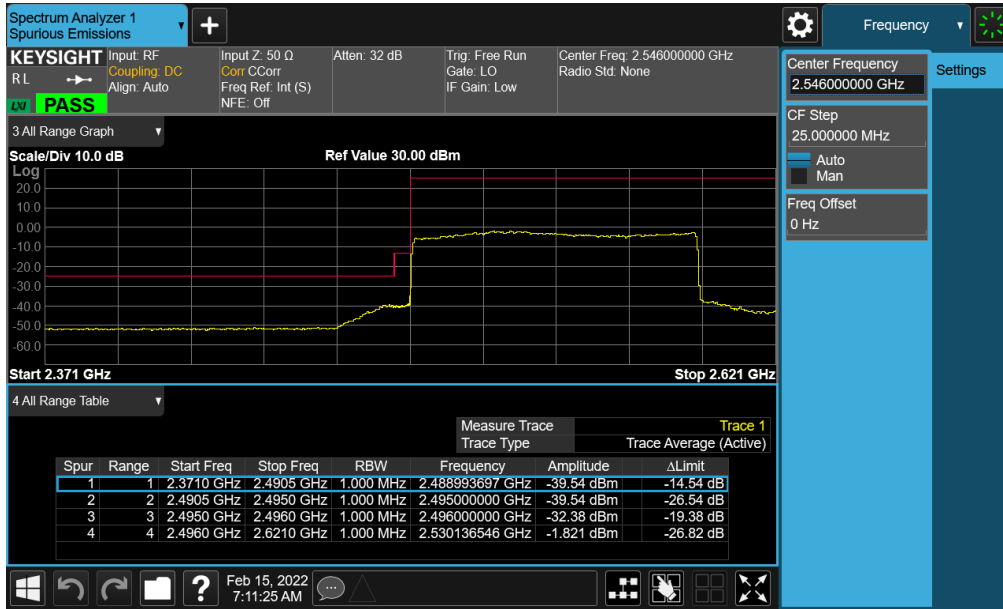
Plot 7-77. Lower ACP Plot (NR Band n41 - 100MHz CP-OFDM-QPSK – Full RB - Ant D)



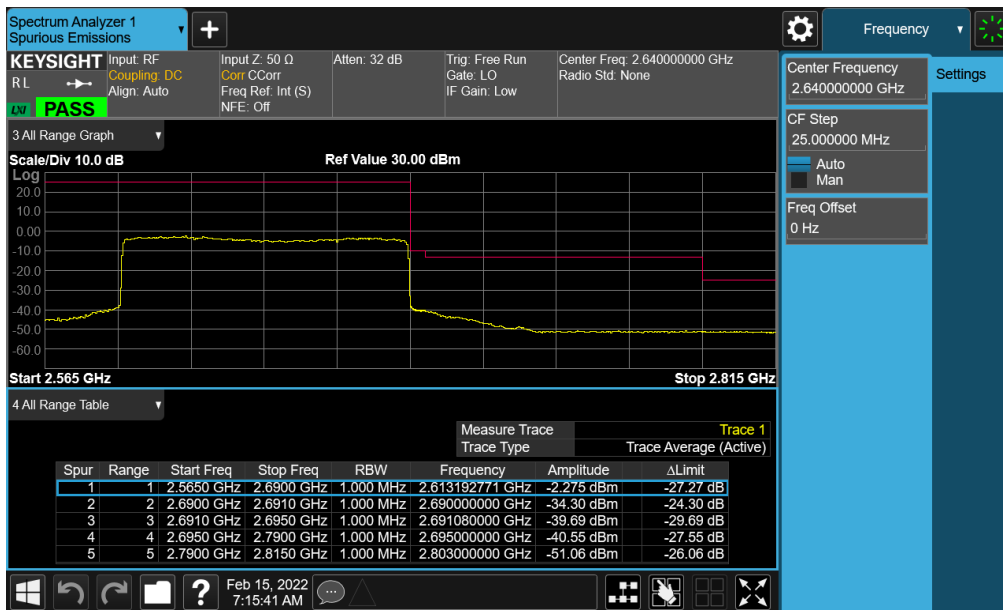
Plot 7-78. Upper ACP Plot (NR Band n41 - 100MHz CP-OFDM-QPSK – Full RB - Ant D)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE		Approved by: Technical Manager
Test Report S/N: 1M2202030009-02.A3L	Test Dates: 02/01/2022 - 02/28/2022	EUT Type: Portable Handset		Page 59 of 84

NR Band n41 – SRS 4 - Ant E



Plot 7-79. Lower ACP Plot (NR Band n41 - 100MHz CP-OFDM-QPSK – Full RB - Ant E)



Plot 7-80. Upper ACP Plot (NR Band n41 - 100MHz CP-OFDM-QPSK – Full RB - Ant E)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE	Approved by: Technical Manager
Test Report S/N: 1M2202030009-02.A3L	Test Dates: 02/01/2022 - 02/28/2022	EUT Type: Portable Handset	Page 60 of 84

7.6 Radiated Power (EIRP)

Test Overview

Equivalent Isotropic Radiated Power (EIRP) measurements are performed using the substitution method described in ANSI/TIA-603-E-2016 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using vertically and horizontally polarized tuned dipole antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized broadband horn antennas. All measurements are performed as RMS average measurements while the EUT is operating at maximum power, and at the appropriate frequencies.



Test Procedures Used

KDB 971168 D01 v03r01 – Section 5.2.1

ANSI/TIA-603-E-2016 – Section 2.2.17

Test Settings

1. Radiated power measurements are performed using the signal analyzer’s “channel power” measurement capability for signals with continuous operation. For signals with burst transmission, the signal analyzer’s “time domain power” measurement capability is used
2. RBW = 1 – 5% of the expected OBW, not to exceed 1MHz
3. VBW \geq 3 x RBW
4. Span = 1.5 times the OBW
5. No. of sweep points \geq 2 x span / RBW
6. Detector = RMS
7. Trigger is set to “free run” for signals with continuous operation with the sweep times set to “auto”. Trigger is set to enable triggering only on full power bursts with the sweep time set less than or equal to the transmission burst duration
8. The integration bandwidth was roughly set equal to the measured OBW of the signal for signals with continuous operation. For signals with burst transmission, the “gating” function was enabled to ensure that measurements are performed during times in which the transmitter is operating at its maximum power
9. Trace mode = trace averaging (RMS) over 100 sweeps
10. The trace was allowed to stabilize

FCC ID: A3LSMS906E	 Proud to be part of element	PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE		Approved by: Technical Manager
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Test Setup

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

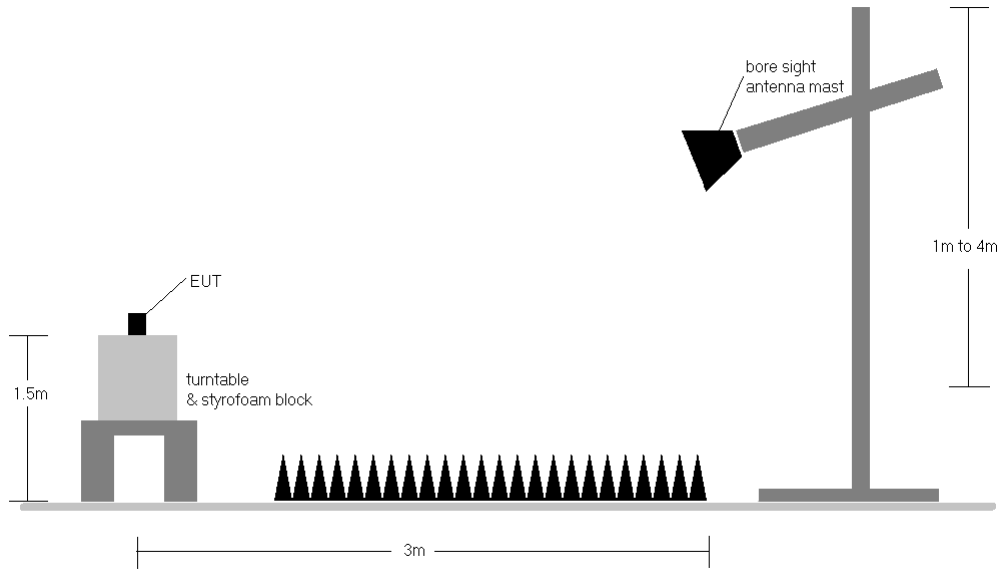


Figure 7-5. Radiated Test Setup >1GHz



Test Notes

- 1) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the tables below.
- 2) This unit was tested with its standard battery.
- 3) For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

FCC ID: A3LSMS906E		PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE		Approved by: Technical Manager
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Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
100 MHz	π/2 BPSK	2546.0	H	239	26	9.38	1 / 136	11.59	20.97	0.125	33.01	-12.04
	π/2 BPSK	2593.0	H	239	18	9.49	1 / 204	12.88	22.37	0.173	33.01	-10.64
	π/2 BPSK	2640.0	H	239	30	9.89	1 / 68	12.46	22.35	0.172	33.01	-10.66
	QPSK	2546.0	H	239	26	9.38	1 / 204	11.42	20.80	0.120	33.01	-12.21
	QPSK	2593.0	H	239	18	9.49	1 / 136	12.64	22.13	0.163	33.01	-10.88
	QPSK	2640.0	H	239	30	9.89	1 / 68	12.11	22.00	0.159	33.01	-11.01
16-QAM	2640.0	H	239	30	9.89	1 / 68	11.19	21.08	0.128	33.01	-11.93	
90 MHz	π/2 BPSK	2541.0	H	239	26	9.39	1 / 183	11.88	21.27	0.134	33.01	-11.74
	π/2 BPSK	2593.0	H	239	18	9.49	1 / 183	12.76	22.25	0.168	33.01	-10.76
	π/2 BPSK	2645.0	H	239	30	9.91	1 / 122	12.47	22.38	0.173	33.01	-10.63
	QPSK	2541.0	H	239	26	9.39	1 / 122	11.62	21.00	0.126	33.01	-12.01
	QPSK	2593.0	H	239	18	9.49	1 / 183	12.30	21.79	0.151	33.01	-11.22
	QPSK	2645.0	H	239	30	9.91	1 / 122	12.06	21.97	0.158	33.01	-11.04
16-QAM	2645.0	H	239	30	9.91	1 / 122	10.79	20.70	0.118	33.01	-12.31	
80 MHz	π/2 BPSK	2536.0	H	239	26	9.40	1 / 162	11.90	21.30	0.135	33.01	-11.71
	π/2 BPSK	2593.0	H	239	18	9.49	1 / 162	12.92	22.41	0.174	33.01	-10.60
	π/2 BPSK	2650.0	H	239	30	9.93	1 / 162	12.55	22.48	0.177	33.01	-10.53
	QPSK	2536.0	H	239	26	9.40	1 / 162	11.34	20.74	0.119	33.01	-12.27
	QPSK	2593.0	H	239	18	9.49	1 / 162	12.86	22.35	0.172	33.01	-10.66
	QPSK	2650.0	H	239	30	9.93	1 / 162	12.51	22.44	0.175	33.01	-10.57
16-QAM	2650.0	H	239	30	9.93	1 / 162	11.01	20.94	0.124	33.01	-12.07	
60 MHz	π/2 BPSK	2526.0	H	239	26	9.43	1 / 121	11.79	21.22	0.133	33.01	-11.79
	π/2 BPSK	2593.0	H	239	18	9.49	1 / 121	13.06	22.55	0.180	33.01	-10.46
	π/2 BPSK	2660.0	H	239	30	9.85	1 / 40	12.97	22.82	0.191	33.01	-10.19
	QPSK	2526.0	H	239	26	9.43	1 / 121	11.46	20.89	0.123	33.01	-12.12
	QPSK	2593.0	H	239	18	9.49	1 / 121	12.88	22.37	0.173	33.01	-10.64
	QPSK	2660.0	H	239	30	9.85	1 / 40	12.21	22.06	0.161	33.01	-10.95
16-QAM	2660.0	H	239	30	9.85	1 / 40	10.54	20.39	0.109	33.01	-12.62	
50 MHz	π/2 BPSK	2521.0	H	239	26	9.45	1 / 99	12.04	21.49	0.141	33.01	-11.52
	π/2 BPSK	2593.0	H	239	18	9.49	1 / 66	13.28	22.77	0.189	33.01	-10.24
	π/2 BPSK	2665.0	H	239	30	9.84	1 / 99	12.85	22.69	0.186	33.01	-10.32
	QPSK	2521.0	H	239	26	9.45	1 / 99	11.50	20.95	0.124	33.01	-12.06
	QPSK	2593.0	H	239	18	9.49	1 / 66	12.92	22.41	0.174	33.01	-10.60
	QPSK	2665.0	H	239	30	9.84	1 / 99	12.61	22.45	0.176	33.01	-10.56
16-QAM	2665.0	H	239	30	9.84	1 / 99	11.40	21.24	0.133	33.01	-11.77	
40 MHz	π/2 BPSK	2516.0	H	239	26	9.48	106 / 0	11.39	20.87	0.122	33.01	-12.14
	π/2 BPSK	2593.0	H	239	18	9.49	1 / 53	13.48	22.97	0.198	33.01	-10.04
	π/2 BPSK	2670.0	H	239	30	9.82	106 / 0	12.30	22.12	0.163	33.01	-10.89
	QPSK	2516.0	H	239	26	9.48	1 / 26	11.66	21.14	0.130	33.01	-11.87
	QPSK	2593.0	H	239	18	9.49	1 / 53	13.40	22.89	0.195	33.01	-10.12
	QPSK	2670.0	H	239	30	9.82	1 / 53	12.82	22.64	0.184	33.01	-10.37
16-QAM	2593.0	H	239	18	9.49	1 / 53	11.71	21.20	0.132	33.01	-11.81	
30 MHz	π/2 BPSK	2511.0	H	239	26	9.50	1 / 58	11.95	21.45	0.140	33.01	-11.56
	π/2 BPSK	2593.0	H	239	18	9.49	1 / 19	13.36	22.85	0.193	33.01	-10.16
	π/2 BPSK	2675.0	H	239	30	9.85	1 / 19	13.06	22.91	0.196	33.01	-10.10
	QPSK	2511.0	H	239	26	9.50	1 / 58	11.99	21.49	0.141	33.01	-11.52
	QPSK	2593.0	H	239	18	9.49	1 / 19	13.17	22.66	0.185	33.01	-10.35
	QPSK	2675.0	H	239	30	9.85	1 / 19	12.96	22.81	0.191	33.01	-10.20
16-QAM	2675.0	H	239	30	9.85	1 / 19	10.72	20.57	0.114	33.01	-12.44	
20 MHz	π/2 BPSK	2506.0	H	239	26	9.50	51 / 0	11.98	21.48	0.141	33.01	-11.53
	π/2 BPSK	2593.0	H	239	18	9.49	1 / 13	13.17	22.66	0.185	33.01	-10.35
	π/2 BPSK	2680.0	H	239	30	9.87	1 / 25	12.70	22.57	0.181	33.01	-10.44
	QPSK	2506.0	H	239	26	9.50	1 / 25	12.36	21.86	0.153	33.01	-11.15
	QPSK	2593.0	H	239	18	9.49	1 / 13	12.41	21.90	0.155	33.01	-11.11
	QPSK	2680.0	H	239	30	9.87	1 / 25	12.81	22.68	0.185	33.01	-10.33
16-QAM	2593.0	H	239	18	9.49	1 / 13	10.89	20.38	0.109	33.01	-12.63	
100 MHz	QPSK (CP-OFDM)	2593.0	H	239	18	9.38	1/136	11.18	20.56	0.114	33.01	-12.45
	QPSK (Opposite Pol.)	2593.0	V	100	284	9.46	1/68	10.72	20.18	0.104	33.01	-12.83
	QPSK (WCP)	2593.0	H	239	18	9.38	1/136	12.32	21.70	0.148	33.01	-11.31

Table 7-6. EIRP Data (NR Band n41 – Ant I)

FCC ID: A3LSMS906E		PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE		Approved by: Technical Manager
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Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
100 MHz	$\pi/2$ BPSK	2546.0	H	123	331	9.38	1 / 204	9.00	18.38	0.069	33.01	-14.63
	$\pi/2$ BPSK	2593.0	H	121	326	9.49	1 / 136	10.25	19.74	0.094	33.01	-13.27
	$\pi/2$ BPSK	2640.0	H	116	317	9.89	1 / 68	8.88	18.77	0.075	33.01	-14.24
	QPSK	2546.0	H	123	331	9.38	1 / 204	9.36	18.74	0.075	33.01	-14.27
	QPSK	2593.0	H	121	326	9.49	1 / 136	11.07	20.56	0.114	33.01	-12.45
	QPSK	2640.0	H	116	317	9.89	1 / 68	9.34	19.23	0.084	33.01	-13.78
	16-QAM	2640.0	H	116	317	9.89	1 / 68	7.99	17.88	0.061	33.01	-15.13
100 MHz	QPSK (CP-OFDM)	2593.0	H	121	326	9.49	1/136	8.84	18.33	0.068	33.01	-14.68
	QPSK (Opposite Pol.)	2593.0	V	301	252	9.46	1/136	10.51	19.97	0.099	33.01	-13.04
	QPSK (WCP)	2593.0	H	114	312	9.49	1/204	-0.73	8.76	0.008	33.01	-24.25



Table 7-7. EIRP Data (NR Band n41 – Ant B)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
100 MHz	$\pi/2$ BPSK	2546.0	V	137	11	9.40	1 / 136	5.11	14.51	0.028	33.01	-18.50
	$\pi/2$ BPSK	2593.0	V	123	10	9.46	1 / 68	4.56	14.02	0.025	33.01	-18.99
	$\pi/2$ BPSK	2640.0	V	152	13	9.50	1 / 68	4.42	13.92	0.025	33.01	-19.09
	QPSK	2546.0	V	137	11	9.40	1 / 136	5.14	14.54	0.028	33.01	-18.47
	QPSK	2593.0	V	123	10	9.46	1 / 68	4.77	14.23	0.026	33.01	-18.78
	QPSK	2640.0	V	152	13	9.50	1 / 68	4.51	14.01	0.025	33.01	-19.00
	16-QAM	2640.0	V	152	13	9.50	1 / 68	4.05	13.55	0.023	33.01	-19.46
100 MHz	QPSK (CP-OFDM)	2546.0	V	137	11	9.40	1/68	4.07	13.47	0.022	33.01	-19.54
	QPSK (Opposite Pol.)	2546.0	H	139	42	9.38	1/68	4.95	14.33	0.027	33.01	-18.68
	QPSK (WCP)	2546.0	V	137	11	9.40	1/204	-1.87	7.53	0.006	33.01	-25.48

Table 7-8. EIRP Data (NR Band n41 – Ant D)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
100 MHz	$\pi/2$ BPSK	2546.0	V	196	149	9.40	1 / 68	3.12	12.52	0.018	33.01	-20.49
	$\pi/2$ BPSK	2593.0	V	210	151	9.46	1 / 136	1.68	11.14	0.013	33.01	-21.87
	$\pi/2$ BPSK	2640.0	V	188	151	9.50	1 / 68	0.65	10.15	0.010	33.01	-22.86
	QPSK	2546.0	V	196	149	9.40	1 / 68	2.86	12.26	0.017	33.01	-20.75
	QPSK	2593.0	V	210	151	9.46	1 / 136	1.85	11.31	0.014	33.01	-21.70
	QPSK	2640.0	V	188	151	9.50	1 / 68	0.86	10.36	0.011	33.01	-22.65
	16-QAM	2546.0	V	196	149	9.40	1 / 68	2.22	11.62	0.015	33.01	-21.39
100 MHz	QPSK (CP-OFDM)	2546.0	V	196	149	9.40	1/68	1.04	10.44	0.011	33.01	-22.57
	QPSK (Opposite Pol.)	2546.0	H	102	233	9.38	1/68	2.30	11.68	0.015	33.01	-21.33
	QPSK (WCP)	2546.0	V	196	149	9.40	1/204	0.89	10.29	0.011	33.01	-22.72

Table 7-9. EIRP Data (NR Band n41 – Ant E)

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Test Report S/N: 1M2202030009-02.A3L	Test Dates: 02/01/2022 - 02/28/2022	EUT Type: Portable Handset		Page 64 of 84	

7.7 Radiated Spurious Emissions Measurements

Test Overview



Radiated spurious emissions measurements are performed using the field strength conversion method described in KDB 971168 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using horizontally and vertically polarized tuned dipole antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized broadband horn antennas. All measurements are performed as RMS measurements while the EUT is operating at maximum power, and at the appropriate frequencies.

Test Procedures Used

KDB 971168 D01 v03r01 – Section 5.8

Test Settings

1. RBW = 100kHz for emissions below 1GHz and 1MHz for emissions above 1GHz
2. VBW $\geq 3 \times$ RBW
3. Span = 1.5 times the OBW
4. No. of sweep points $\geq 2 \times$ span / RBW
5. Detector = RMS
6. Trace mode = Average (Max Hold for pulsed emissions)
7. The trace was allowed to stabilize

FCC ID: A3LSMS906E	 PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE 		Approved by: Technical Manager
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Test Setup

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

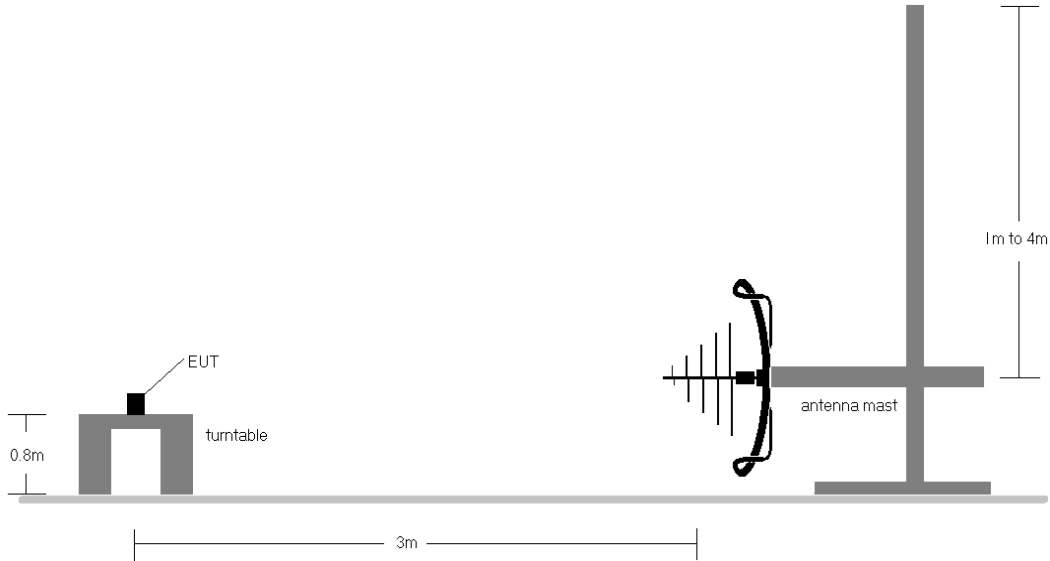


Figure 7-6. Test Instrument & Measurement Setup < 1GHz

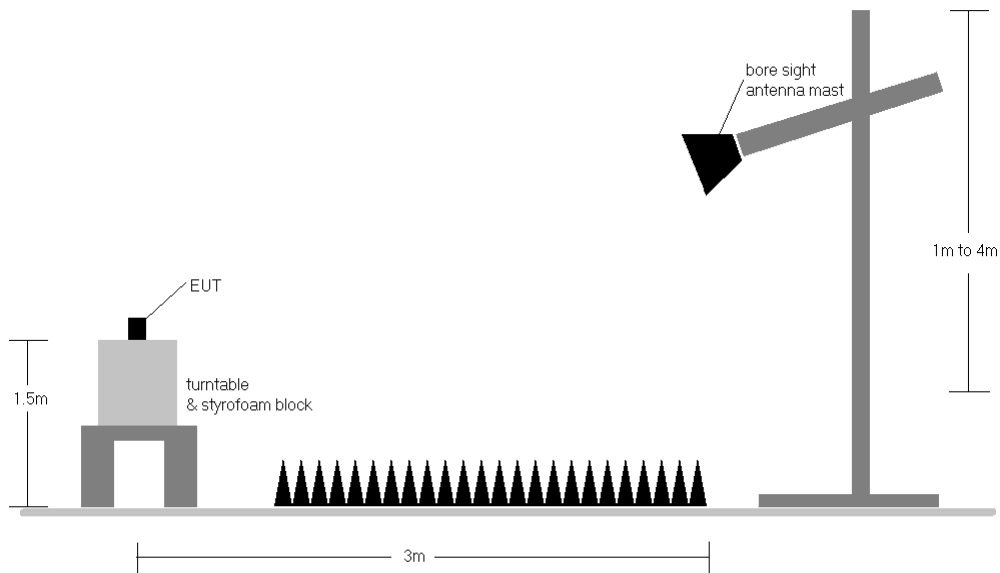




Figure 7-7. Test Instrument & Measurement Setup >1 GHz

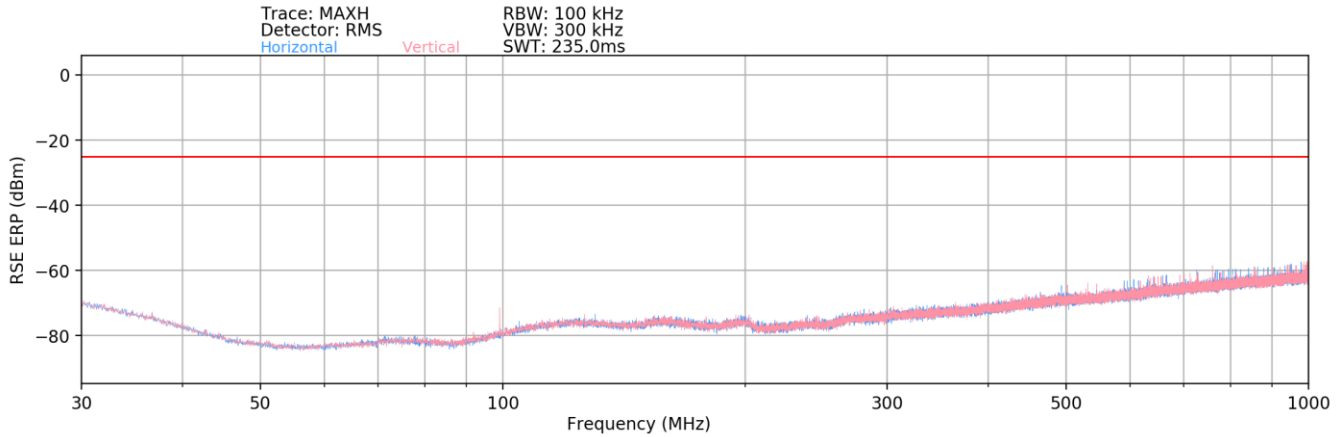
FCC ID: A3LSMS906E		PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE		Approved by: Technical Manager
Test Report S/N: 1M2202030009-02.A3L	Test Dates: 02/01/2022 - 02/28/2022	EUT Type: Portable Handset	Page 66 of 84	

Test Notes

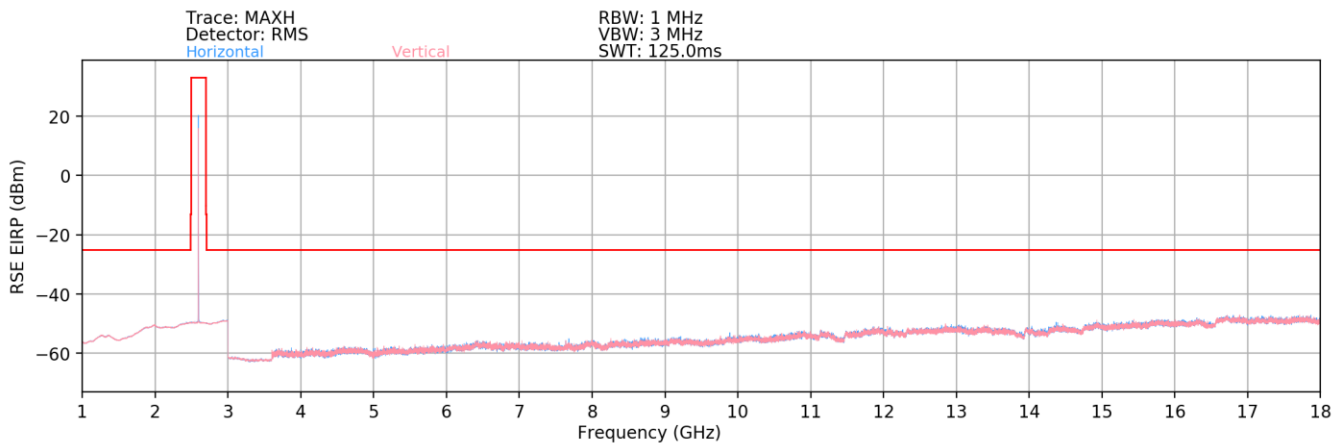
- 1) Field strengths are calculated using the Measurement quantity conversions in KDB 971168 Section 5.8.4.
 - a) $E(\text{dB}\mu\text{V}/\text{m}) = \text{Measured amplitude level (dBm)} + 107 + \text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)}$
 - b) $\text{EIRP (dBm)} = E(\text{dB}\mu\text{V}/\text{m}) + 20\log D - 104.8$; where D is the measurement distance in meters.
- 2) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the tables below.
- 3) This unit was tested with its standard battery.
- 4) The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter. The worst-case emissions are reported.
- 5) Emissions below 18GHz were measured at a 3 meter test distance while emissions above 18GHz were measured at a 1 meter test distance with the application of a distance correction factor.
- 6) The "-" shown in the following RSE tables are used to denote a noise floor measurement.
- 7) For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.
- 8) Spurious emissions shown in this section are measured while operating in EN-DC mode with Sub 6GHz NR carrier as well as an LTE carrier (anchor). Spurious emissions from the NR carrier device, is subject to the rules under which the NR carrier operates. Spurious emission caused by the LTE carrier must meet the requirements of the rules under which the LTE carrier operates.

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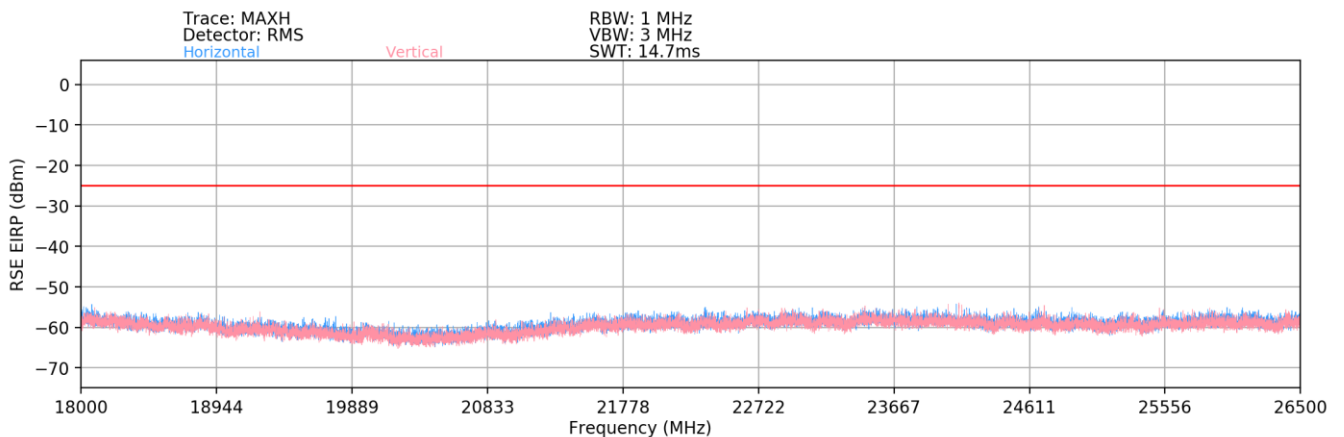
NR Band n41 – SRS 1 - Ant I



Plot 7-81. Radiated Spurious Plot (NR Band n41 – Ant I – 30MHz-1GHz)



Plot 7-82. Radiated Spurious Plot (NR Band n41 – Ant I – 1-18GHz)



Plot 7-83. Radiated Spurious Plot (NR Band n41 – Ant I – 18-26.5GHz)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2202030009-02.A3L	Test Dates: 02/01/2022 - 02/28/2022	EUT Type: Portable Handset		Page 68 of 84

Bandwidth (MHz):	100
Frequency (MHz):	2593.0
RB / Offset:	1 / 136
Mode:	Stand Alone
Anchor Band:	N/A

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
99.05	V	108	106	-96.41	17.01	27.60	-67.66	-25.00	-42.66
130.15	H	-	-	-97.52	20.42	29.90	-65.36	-25.00	-40.36
493.25	H	-	-	-97.81	25.70	34.89	-60.36	-25.00	-35.36
759.50	V	-	-	-97.57	29.38	38.81	-56.45	-25.00	-31.45

Table 7-10. Radiated Spurious Data (NR Band n41 – Mid Channel - Ant I – Below 1GHz)

Bandwidth (MHz):	100
Frequency (MHz):	2546.0
RB / Offset:	1 / 136
Mode:	Stand Alone



Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
5092.00	H	-	-	-75.42	4.48	36.06	-59.20	-25.00	-34.20
7638.00	H	-	-	-76.17	7.81	38.64	-56.61	-25.00	-31.61
10184.00	H	114	47	-75.21	11.10	42.89	-52.36	-25.00	-27.36
12730.00	H	116	16	-75.80	14.20	45.40	-49.86	-25.00	-24.86
15276.00	H	-	-	-77.27	15.92	45.65	-49.61	-25.00	-24.61
17822.00	H	-	-	-78.11	18.75	47.64	-47.62	-25.00	-22.62
20368.00	H	-	-	-57.84	2.10	51.26	-53.54	-25.00	-28.54

Table 7-11. Radiated Spurious Data (NR Band n41 – Low Channel – Ant I)

Bandwidth (MHz):	100
Frequency (MHz):	2593.0
RB / Offset:	1 / 136
Mode:	Stand Alone

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
5186.00	H	183	9	-74.42	4.91	37.49	-57.77	-25.00	-32.77
7779.00	H	-	-	-76.33	7.30	37.97	-57.29	-25.00	-32.29
10372.00	H	114	51	-75.80	11.04	42.24	-53.02	-25.00	-28.02
12965.00	H	122	30	-76.09	14.49	45.40	-49.86	-25.00	-24.86
15558.00	H	-	-	-78.20	15.73	44.53	-50.73	-25.00	-25.73
18151.00	H	-	-	-58.79	1.18	49.39	-55.41	-25.00	-30.41
20744.00	H	-	-	-58.88	2.73	50.85	-53.95	-25.00	-28.95

Table 7-12. Radiated Spurious Data (NR Band n41 – Mid Channel – Ant I)

FCC ID: A3LSMS906E	 PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE		Approved by: Technical Manager
Test Report S/N: 1M2202030009-02.A3L	Test Dates: 02/01/2022 - 02/28/2022	EUT Type: Portable Handset	Page 69 of 84	

Bandwidth (MHz):	100
Frequency (MHz):	2640.0
RB / Offset:	1 / 136
Mode:	Stand Alone



Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
5280.00	H	323	17	-72.86	4.66	38.80	-56.46	-25.00	-31.46
7920.00	H	134	9	-74.95	8.30	40.35	-54.91	-25.00	-29.91
10560.00	H	186	283	-76.20	11.56	42.36	-52.90	-25.00	-27.90
13200.00	H	177	28	-76.99	14.06	44.07	-51.18	-25.00	-26.18
15840.00	H	-	-	-78.19	17.07	45.88	-49.38	-25.00	-24.38
18480.00	H	-	-	-59.01	1.13	49.12	-55.68	-25.00	-30.68
21120.00	H	-	-	-58.34	2.78	51.43	-53.37	-25.00	-28.37

Table 7-13. Radiated Spurious Data (NR Band n41 – High Channel – Ant I)

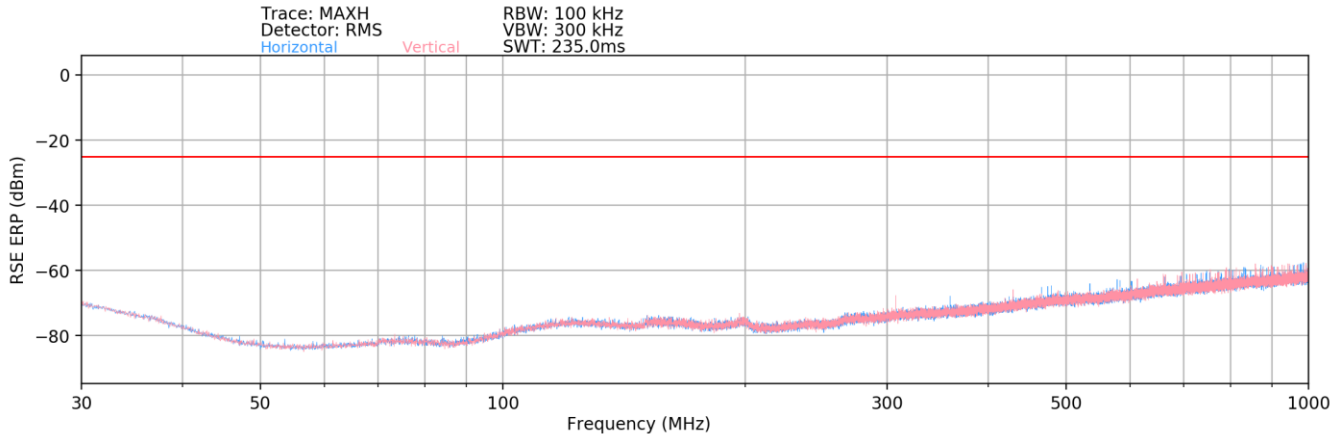
Case:	w/ Wireless Charging Pad
Bandwidth (MHz):	100
Frequency (MHz):	2546.0
RB / Offset:	1 / 136
Mode:	Stand Alone
Anchor Band:	N/A

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
5092.00	H	-	-	-75.70	4.48	35.78	-59.48	-25.00	-34.48
7638.00	H	-	-	-76.48	7.81	38.33	-56.92	-25.00	-31.92
10184.00	H	144	351	-76.67	11.10	41.43	-53.82	-25.00	-28.82
12730.00	H	147	75	-77.12	14.20	44.08	-51.18	-25.00	-26.18
15276.00	H	-	-	-77.71	15.92	45.21	-50.05	-25.00	-25.05
17822.00	H	-	-	-78.43	18.75	47.32	-47.94	-25.00	-22.94

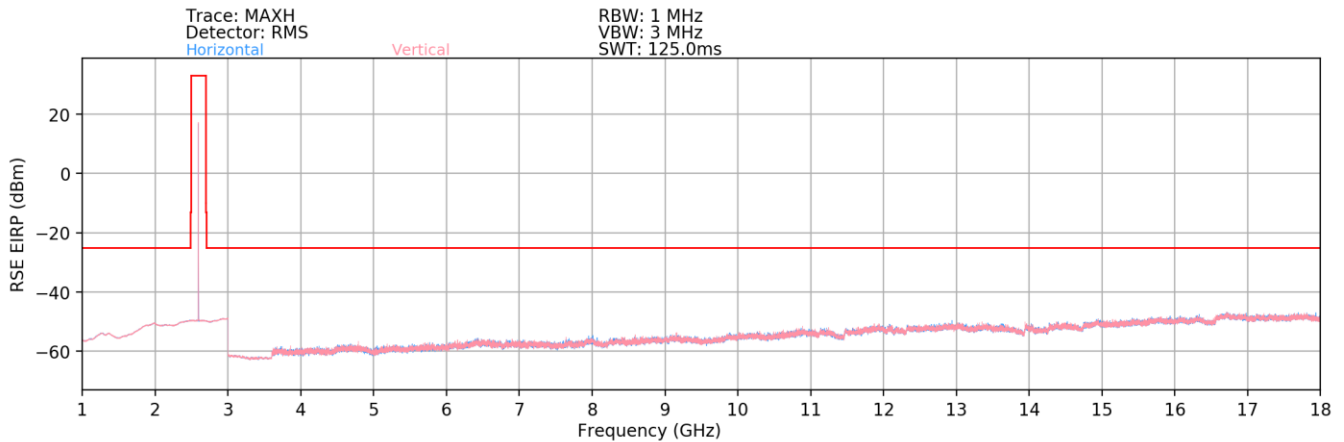
Table 7-14. Radiated Spurious Data with WCP (NR Band n41 – Ant I)

FCC ID: A3LSMS906E	 PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE		Approved by: Technical Manager
Test Report S/N: 1M2202030009-02.A3L	Test Dates: 02/01/2022 - 02/28/2022	EUT Type: Portable Handset	Page 70 of 84	

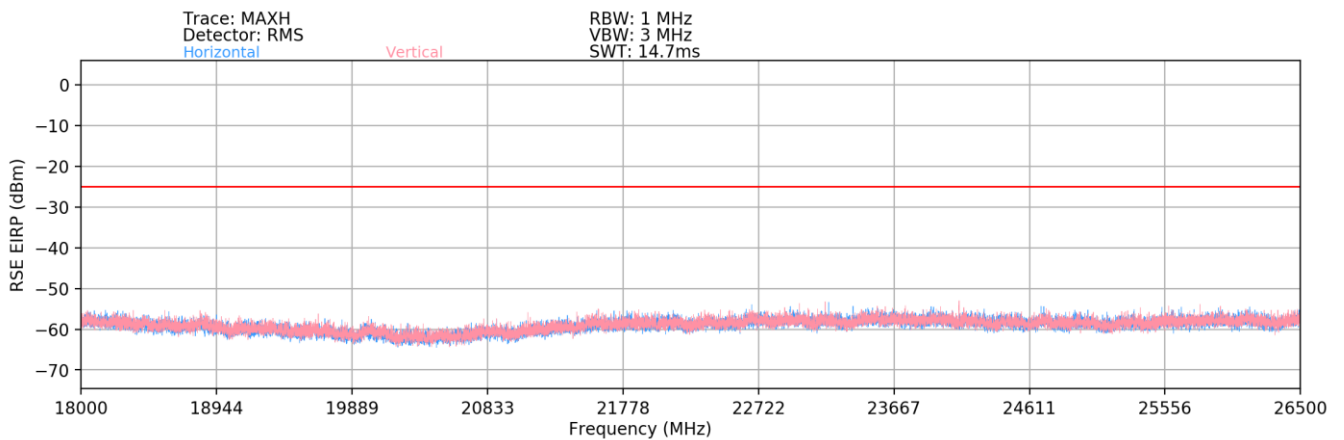
NR Band n41 – SRS 2 - Ant B



Plot 7-84. Radiated Spurious Plot (NR Band n41 – Ant B – 30MHz-1GHz)



Plot 7-85. Radiated Spurious Plot (NR Band n41 – Ant B – 1-18GHz)



Plot 7-86. Radiated Spurious Plot (NR Band n41 – Ant B – 18-26.5GHz)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE	Approved by: Technical Manager
Test Report S/N: 1M2202030009-02.A3L	Test Dates: 02/01/2022 - 02/28/2022	EUT Type: Portable Handset	Page 71 of 84

Bandwidth (MHz):	100
Frequency (MHz):	2593.0
RB / Offset:	1 / 136
Mode:	Stand Alone
Anchor Band:	N/A

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
307.40	V	-	-	-98.00	21.32	30.32	-64.94	-25.00	-39.94
358.85	H	-	-	-98.27	22.38	31.11	-64.15	-25.00	-39.15
419.65	V	-	-	-98.08	23.92	32.84	-62.42	-25.00	-37.42

Table 7-15. Radiated Spurious Data (NR Band n41 – Mid Channel – Ant B – Below 1GHz)

Bandwidth (MHz):	100
Frequency (MHz):	2546.0
RB / Offset:	1 / 136
Mode:	Stand Alone
Anchor Band:	N/A



Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
5092.00	V	112	39	-66.50	4.48	44.98	-50.28	-25.00	-25.28
7638.00	V	-	-	-76.45	7.81	38.36	-56.89	-25.00	-31.89
10184.00	V	202	347	-76.83	11.10	41.27	-53.98	-25.00	-28.98
12730.00	V	142	47	-77.13	14.20	44.07	-51.19	-25.00	-26.19
15276.00	V	-	-	-77.79	15.92	45.13	-50.13	-25.00	-25.13
17822.00	V	-	-	-78.35	18.75	47.40	-47.86	-25.00	-22.86
20368.00	V	-	-	-58.55	2.10	50.55	-54.25	-25.00	-29.25

Table 7-16. Radiated Spurious Data (NR Band n41 – Low Channel – Ant B)

Bandwidth (MHz):	100
Frequency (MHz):	2593.0
RB / Offset:	1 / 136
Mode:	Stand Alone
Anchor Band:	N/A

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
5186.00	V	116	348	-70.88	4.91	41.03	-54.23	-25.00	-29.23
7779.00	V	-	-	-76.17	7.30	38.13	-57.13	-25.00	-32.13
10372.00	V	299	45	-76.87	11.04	41.17	-54.09	-25.00	-29.09
12965.00	V	384	42	-75.80	14.49	45.69	-49.57	-25.00	-24.57
15558.00	V	-	-	-78.17	15.73	44.56	-50.70	-25.00	-25.70
18151.00	V	-	-	-58.72	1.18	49.46	-55.34	-25.00	-30.34
20744.00	V	-	-	-58.46	2.73	51.27	-53.53	-25.00	-28.53

Table 7-17. Radiated Spurious Data (NR Band n41 – Mid Channel – Ant B)

FCC ID: A3LSMS906E		PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE		Approved by: Technical Manager
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Bandwidth (MHz):	100
Frequency (MHz):	2640.0
RB / Offset:	1 / 136
Mode:	Stand Alone
Anchor Band:	N/A



Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
5280.00	V	112	353	-72.68	4.66	38.98	-56.28	-25.00	-31.28
7920.00	V	234	4	-75.89	8.30	39.41	-55.85	-25.00	-30.85
10560.00	V	134	24	-76.98	11.56	41.58	-53.68	-25.00	-28.68
13200.00	V	379	42	-76.64	14.06	44.42	-50.83	-25.00	-25.83
15840.00	V	-	-	-78.24	17.07	45.83	-49.43	-25.00	-24.43
18480.00	V	-	-	-59.12	1.13	49.01	-55.79	-25.00	-30.79
21120.00	V	-	-	-58.70	2.78	51.08	-53.72	-25.00	-28.72

Table 7-18. Radiated Spurious Data (NR Band n41 – High Channel – Ant B)

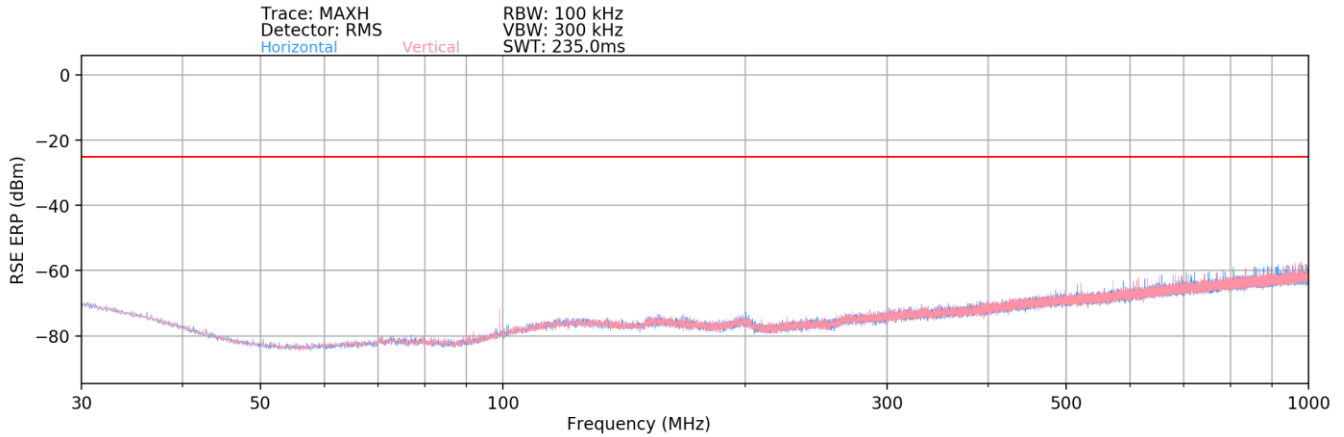
Case:	w/ Wireless Charging Pad
Bandwidth (MHz):	100
Frequency (MHz):	2593.0
RB / Offset:	1 / 136
Mode:	Stand Alone
Anchor Band:	N/A

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
5186.00	V	271	12	-73.21	4.91	38.70	-56.56	-25.00	-31.56
7779.00	V	-	-	-76.44	7.30	37.86	-57.40	-25.00	-32.40
10372.00	V	168	31	-79.61	11.04	38.43	-56.83	-25.00	-31.83
12965.00	V	288	186	-78.36	14.49	43.13	-52.13	-25.00	-27.13
15558.00	V	-	-	-78.61	15.73	44.12	-51.14	-25.00	-26.14

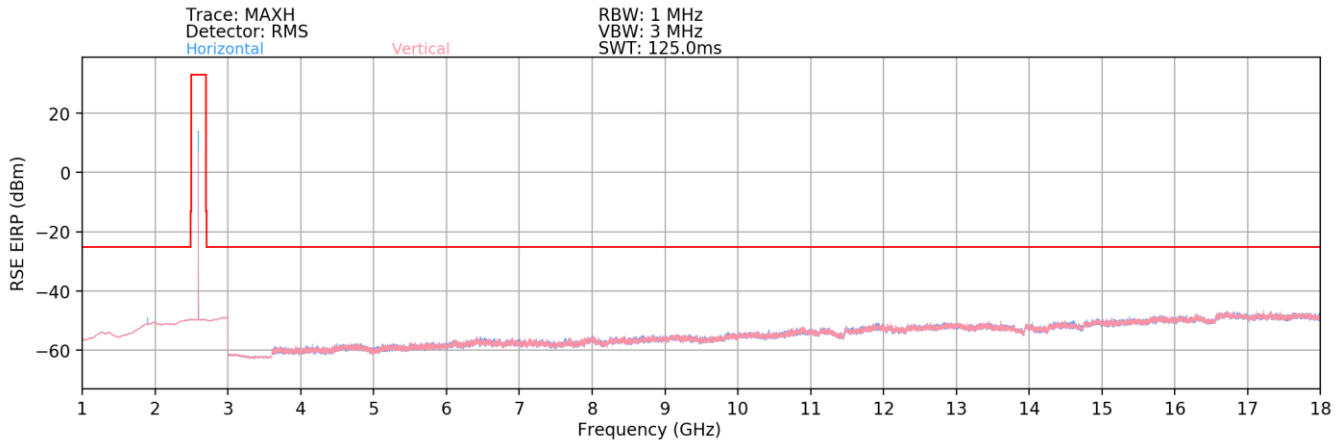
Table 7-19. Radiated Spurious Data with WCP (NR Band n41 – Ant B)

FCC ID: A3LSMS906E	 PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE		Approved by: Technical Manager
Test Report S/N: 1M2202030009-02.A3L	Test Dates: 02/01/2022 - 02/28/2022	EUT Type: Portable Handset	Page 73 of 84	

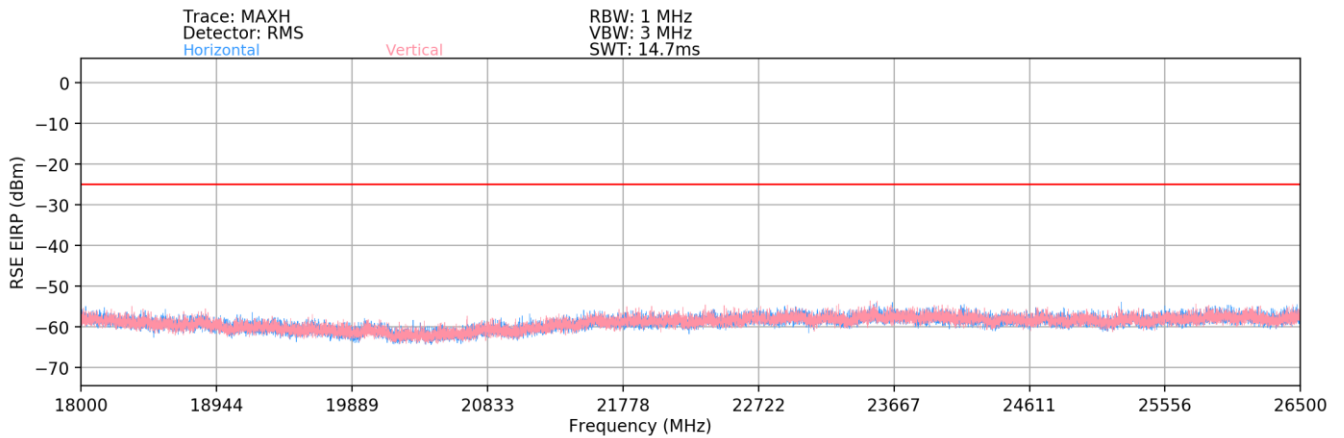
NR Band n41 – SRS 3 - Ant D



Plot 7-87. Radiated Spurious Plot (NR Band n41 – Ant D – 30MHz-1GHz)



Plot 7-88. Radiated Spurious Plot (NR Band n41 – Ant D – 1-18GHz)



Plot 7-89. Radiated Spurious Plot (NR Band n41 – Ant D – 18-26.5GHz)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2202030009-02.A3L	Test Dates: 02/01/2022 - 02/28/2022	EUT Type: Portable Handset		Page 74 of 84

Bandwidth (MHz):	100
Frequency (MHz):	2593.0
RB / Offset:	1 / 136
Mode:	Stand Alone
Anchor Band:	N/A

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
99.05	V	118.00	146.00	-96.49	17.01	27.52	-67.74	-25.00	-42.74
516.50	H	-	-	-101.96	26.03	31.07	-64.19	-25.00	-39.19
521.45	V	-	-	-102.68	26.06	30.38	-64.87	-25.00	-39.87

Table 7-20. Radiated Spurious Data (NR Band n41 – Mid Channel – Ant D – Below 1GHz)

Bandwidth (MHz):	100
Frequency (MHz):	2546.0
RB / Offset:	1 / 136
Mode:	Stand Alone
Anchor Band:	N/A



Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
5092.00	V	317	367	-75.46	4.48	36.02	-59.24	-25.00	-34.24
7638.00	V	-	-	-76.01	7.81	38.80	-56.45	-25.00	-31.45
10184.00	V	223	342	-73.28	11.10	44.82	-50.43	-25.00	-25.43
12730.00	V	236	350	-76.19	14.20	45.01	-50.25	-25.00	-25.25
15276.00	V	-	-	-77.41	15.92	45.51	-49.75	-25.00	-24.75
17822.00	V	-	-	-78.24	18.75	47.51	-47.75	-25.00	-22.75
20368.00	V	-	-	-58.83	2.10	50.27	-54.53	-25.00	-29.53

Table 7-21. Radiated Spurious Data (NR Band n41 – Low Channel – Ant D)

Bandwidth (MHz):	100
Frequency (MHz):	2593.0
RB / Offset:	1 / 136
Mode:	Stand Alone
Anchor Band:	N/A

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
5186.00	V	-	-	-75.24	4.91	36.67	-58.59	-25.00	-33.59
7779.00	V	262	346	-74.12	7.30	40.18	-55.08	-25.00	-30.08
10372.00	V	209	340	-74.22	11.04	43.82	-51.44	-25.00	-26.44
12965.00	V	249	349	-74.97	14.49	46.52	-48.74	-25.00	-23.74
15558.00	V	-	-	-78.06	15.73	44.67	-50.59	-25.00	-25.59
18151.00	V	-	-	-58.71	1.18	49.47	-55.33	-25.00	-30.33
20744.00	V	-	-	-58.51	2.73	51.22	-53.58	-25.00	-28.58

Table 7-22. Radiated Spurious Data (NR Band n41 – Mid Channel – Ant D)

FCC ID: A3LSMS906E		PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE		Approved by: Technical Manager
Test Report S/N: 1M2202030009-02.A3L	Test Dates: 02/01/2022 - 02/28/2022	EUT Type: Portable Handset	Page 75 of 84	

Bandwidth (MHz):	100
Frequency (MHz):	2640.0
RB / Offset:	1 / 136
Mode:	Stand Alone
Anchor Band:	N/A



Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
5280.00	V	-	-	-75.77	4.66	35.89	-59.37	-25.00	-34.37
7920.00	V	236	6	-74.24	8.30	41.06	-54.20	-25.00	-29.20
10560.00	V	182	337	-75.30	11.56	43.26	-52.00	-25.00	-27.00
13200.00	V	249	349	-76.22	14.06	44.84	-50.41	-25.00	-25.41
15840.00	V	-	-	-77.89	17.07	46.18	-49.08	-25.00	-24.08
18480.00	V	-	-	-59.65	1.13	48.48	-56.32	-25.00	-31.32
21120.00	V	-	-	-58.87	2.78	50.91	-53.89	-25.00	-28.89

Table 7-23. Radiated Spurious Data (NR Band n41 – High Channel – Ant D)

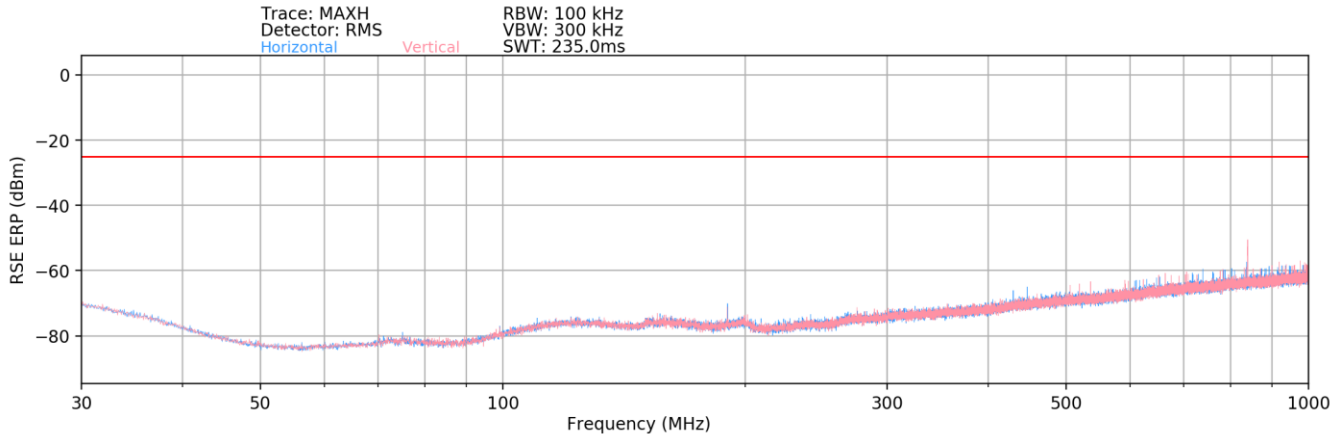
Case:	w/ Wireless Charging Pad
Bandwidth (MHz):	100
Frequency (MHz):	2593.0
RB / Offset:	1 / 136
Mode:	Stand Alone
Anchor Band:	N/A

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
5186.00	V	-	-	-75.84	4.91	36.07	-59.19	-25.00	-34.19
7779.00	V	118	38	-76.84	7.30	37.46	-57.80	-25.00	-32.80
10372.00	V	197	56	-77.03	11.04	41.01	-54.25	-25.00	-29.25
12965.00	V	211	210	-77.99	14.49	43.50	-51.76	-25.00	-26.76
15558.00	V	-	-	-78.31	15.73	44.42	-50.84	-25.00	-25.84

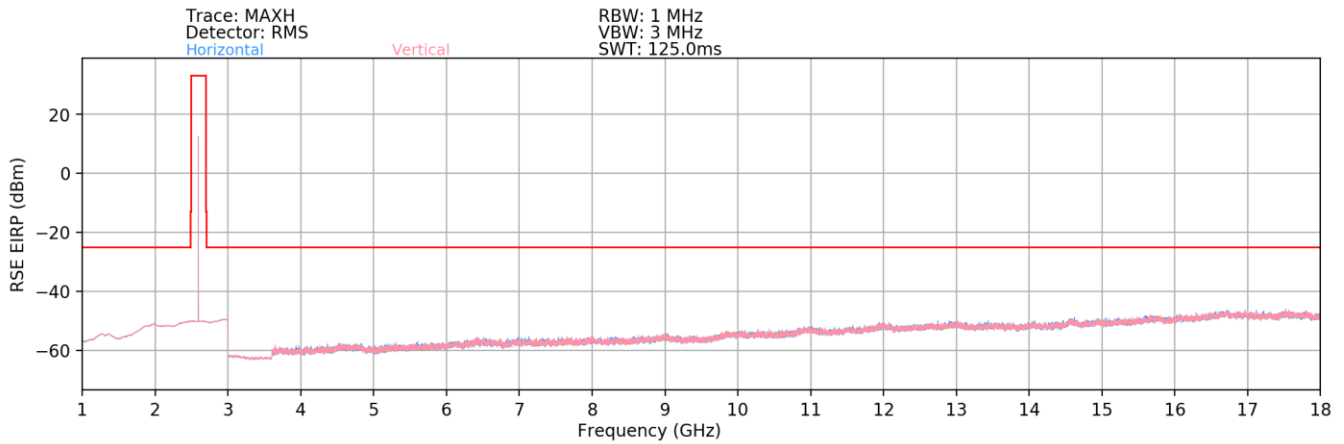
Table 7-24. Radiated Spurious Data with WCP (NR Band n41 – Ant D)

FCC ID: A3LSMS906E	 PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE		 Approved by: Technical Manager
Test Report S/N: 1M2202030009-02.A3L	Test Dates: 02/01/2022 - 02/28/2022	EUT Type: Portable Handset	Page 76 of 84

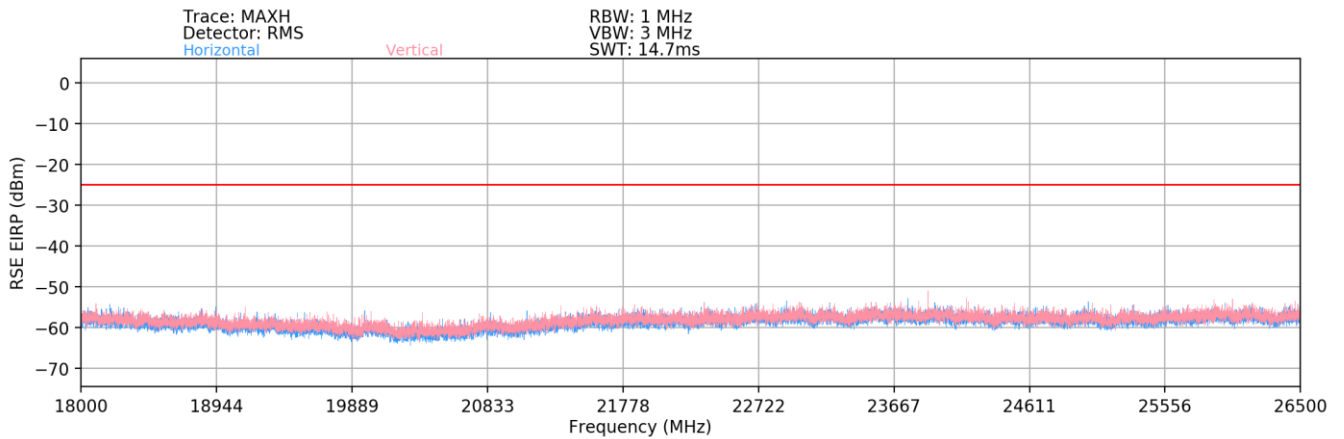
NR Band n41 – SRS 4 - Ant E



Plot 7-90. Radiated Spurious Plot (NR Band n41 – Ant E – 30MHz-1GHz)



Plot 7-91. Radiated Spurious Plot (NR Band n41 – Ant E – 1-18GHz)



Plot 7-92. Radiated Spurious Plot (NR Band n41 – Ant E – 18-26.5GHz)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE	Approved by: Technical Manager
Test Report S/N: 1M2202030009-02.A3L	Test Dates: 02/01/2022 - 02/28/2022	EUT Type: Portable Handset	Page 77 of 84

Bandwidth (MHz):	100
Frequency (MHz):	2640.0
RB / Offset:	1 / 136
Mode:	Stand Alone
Anchor Band:	N/A

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
187.00	V	-	-	-84.90	18.35	40.45	-54.81	-25.00	-29.81
419.00	V	-	-	-85.18	23.91	45.73	-49.53	-25.00	-24.53
837.00	V	-	-	-83.71	30.63	53.92	-41.34	-25.00	-16.34
901.00	V	-	-	-82.83	31.21	55.38	-39.88	-25.00	-14.88

Table 7-25. Radiated Spurious Data (NR Band n41 – Mid Channel – Ant E – Below 1GHz)

Bandwidth (MHz):	100
Frequency (MHz):	2546.0
RB / Offset:	1 / 136
Mode:	Stand Alone
Anchor Band:	N/A



Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
5092.00	V	-	-	-77.20	4.48	34.28	-60.98	-25.00	-35.98
7638.00	V	-	-	-77.43	7.81	37.38	-57.87	-25.00	-32.87
10184.00	V	136	49	-76.25	11.10	41.85	-53.40	-25.00	-28.40
12730.00	V	131	44	-77.32	14.20	43.88	-51.38	-25.00	-26.38
15276.00	V	-	-	-79.34	15.92	43.58	-51.68	-25.00	-26.68
17822.00	V	-	-	-80.13	18.75	45.62	-49.64	-25.00	-24.64
20368.00	V	-	-	-59.03	2.10	50.07	-54.73	-25.00	-29.73

Table 7-26. Radiated Spurious Data (NR Band n41 – Low Channel – Ant E)

Bandwidth (MHz):	100
Frequency (MHz):	2593.0
RB / Offset:	1 / 136
Mode:	Stand Alone
Anchor Band:	N/A

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
5186.00	V	-	-	-76.97	4.91	34.94	-60.32	-25.00	-35.32
7779.00	V	129	338	-76.21	7.30	38.09	-57.17	-25.00	-32.17
10372.00	V	128	49	-77.08	11.04	40.96	-54.30	-25.00	-29.30
12965.00	V	183	33	-77.27	14.49	44.22	-51.04	-25.00	-26.04
15558.00	V	-	-	-79.41	15.73	43.32	-51.94	-25.00	-26.94
18151.00	V	-	-	-59.78	1.18	48.39	-56.41	-25.00	-31.41
20744.00	V	-	-	-59.31	2.73	50.41	-54.39	-25.00	-29.39

Table 7-27. Radiated Spurious Data (NR Band n41 – Mid Channel – Ant E)

FCC ID: A3LSMS906E		PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE		Approved by: Technical Manager
Test Report S/N: 1M2202030009-02.A3L	Test Dates: 02/01/2022 - 02/28/2022	EUT Type: Portable Handset	Page 78 of 84	

Bandwidth (MHz):	100
Frequency (MHz):	2640.0
RB / Offset:	1 / 136
Mode:	Stand Alone
Anchor Band:	N/A



Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
5280.00	V	-	-	-76.89	4.66	34.77	-60.49	-25.00	-35.49
7920.00	V	134	1	-77.01	8.30	38.29	-56.97	-25.00	-31.97
10560.00	V	136	52	-77.14	11.56	41.42	-53.84	-25.00	-28.84
13200.00	V	178	35	-76.89	14.06	44.17	-51.08	-25.00	-26.08
15840.00	V	-	-	-80.00	17.07	44.07	-51.19	-25.00	-26.19
18480.00	V	-	-	-59.78	1.13	48.35	-56.45	-25.00	-31.45
21120.00	V	-	-	-58.44	2.78	51.34	-53.46	-25.00	-28.46

Table 7-28. Radiated Spurious Data (NR Band n41 – High Channel – Ant E)

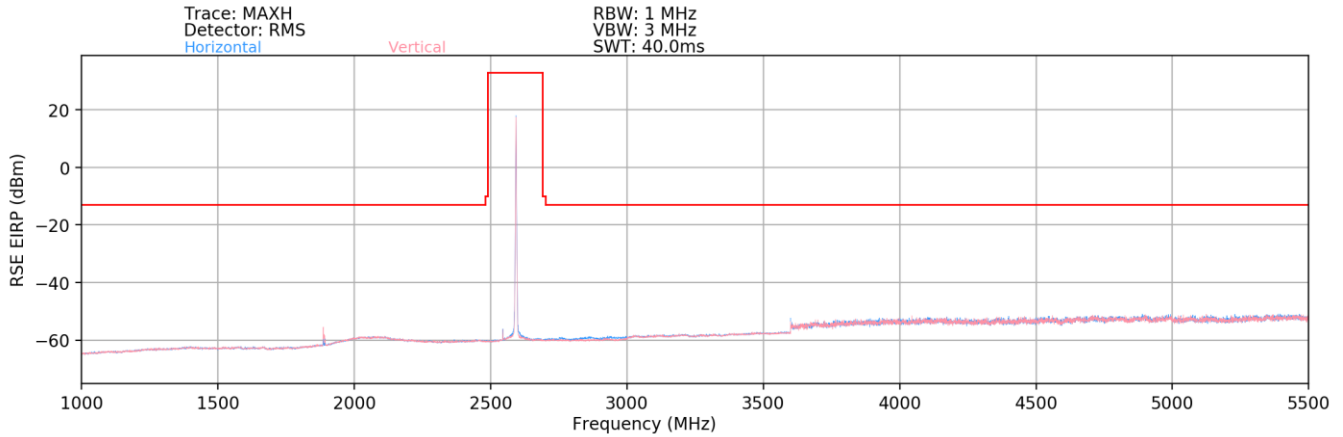
Case:	WCP
Bandwidth (MHz):	100
Frequency (MHz):	2640.0
RB / Offset:	1 / 136
Mode:	Stand Alone
Anchor Band:	N/A

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
5280.0	H	-	-	-77.25	4.66	34.41	-60.85	-25.00	-35.85
7920.0	H	231	46	-78.14	8.30	37.16	-58.10	-25.00	-33.10
10560.0	H	222	59	-77.98	11.56	40.58	-54.68	-25.00	-29.68
13200.0	H	-	-	-77.87	14.06	43.19	-52.06	-25.00	-27.06
15840.0	H	-	-	-80.11	17.07	43.96	-51.30	-25.00	-26.30

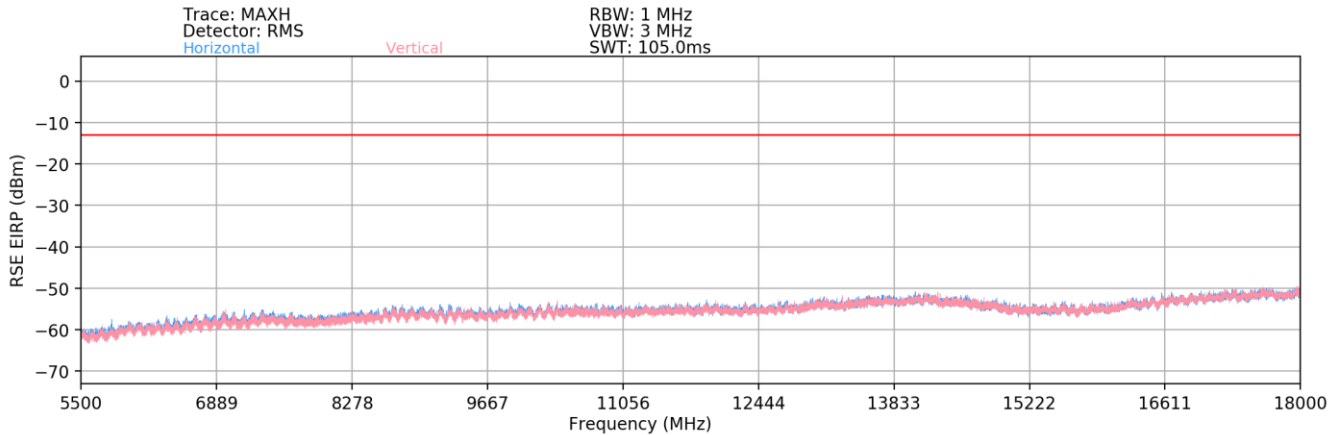
Table 7-29. Radiated Spurious Data with WCP (NR Band n41 – Ant E)

FCC ID: A3LSMS906E	 PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE			Approved by: Technical Manager
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EN-DC: NR Band n41 – Band 12



Plot 7-93. Radiated Spurious Plot (EN-DC: n41 – Band 12 - 1-5.5GHz)





Plot 7-94. Radiated Spurious Plot (EN-DC: n41 – Band 12 - 5.5-18GHz)

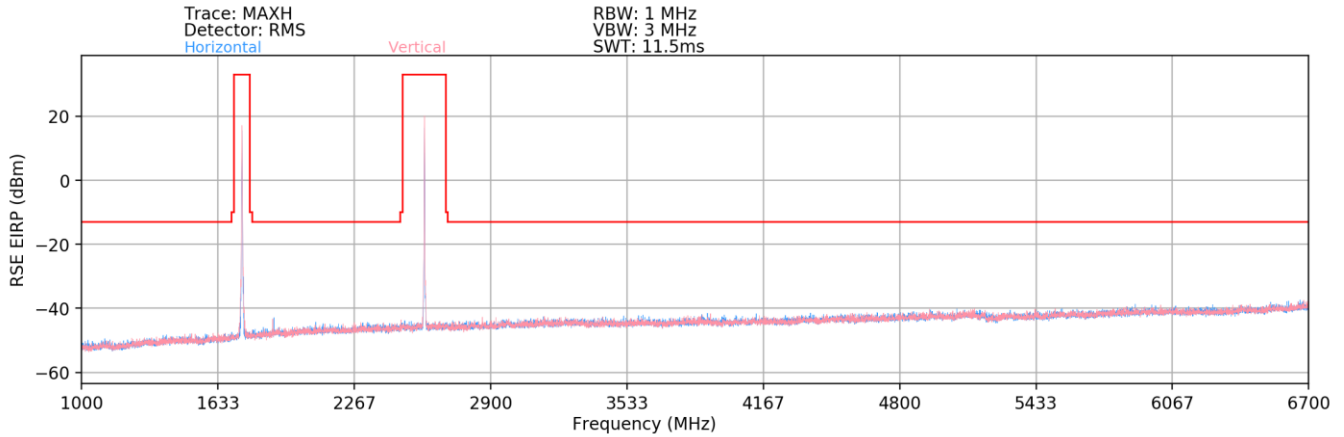
Case:	n41- B12
Bandwidth (MHz):	100 & 10
Frequency (MHz):	2593 & 707.5
RB / Offset:	1/136 & 1/25
Mode:	EN-DC
Anchor Band:	Band 12

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1886.5	V	-	-	-74.54	1.11	33.57	-61.69	-13.00	-48.69
6364.0	V	-	-	-77.42	4.35	33.93	-61.33	-13.00	-48.33
8249.5	V	-	-	-79.20	7.98	35.78	-59.48	-13.00	-46.48
10135.0	V	-	-	-80.79	10.20	36.41	-58.85	-13.00	-45.85

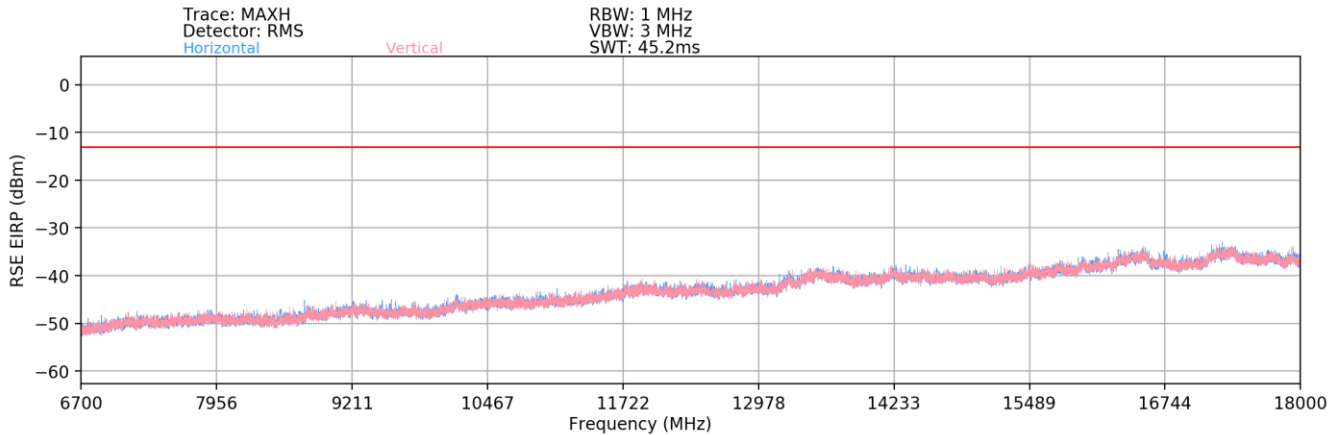
Table 7-30. Radiated Spurious Data (EN-DC: n41 – Band 12)

FCC ID: A3LSMS906E		PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE		Approved by: Technical Manager
Test Report S/N: 1M2202030009-02.A3L	Test Dates: 02/01/2022 - 02/28/2022	EUT Type: Portable Handset		Page 80 of 84

EN-DC: NR Band n41 – Band 66/4



Plot 7-95. Radiated Spurious Plot (EN-DC: n41 – Band 66/4 - 1-6.7GHz)





Plot 7-96. Radiated Spurious Plot (EN-DC: n41 – Band 66/4 - 6.7-18GHz)

Case:	n41-B66
Bandwidth (MHz):	100 & 20
Frequency (MHz):	2593 & 1745
RB / Offset:	1/136 & 1/50
Mode:	EN-DC
Anchor Band:	Band 66

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1893.7	H	-	-	-78.31	12.26	40.95	-54.31	-13.00	-41.31
3441.0	H	-	-	-80.01	16.43	43.42	-51.83	-13.00	-38.83
4289.0	H	-	-	-80.58	17.39	43.81	-51.45	-13.00	-38.45
5137.0	H	-	-	-81.25	19.52	45.27	-49.99	-13.00	-36.99

Table 7-31. Radiated Spurious Data (EN-DC: n41 – Band 66/4)

FCC ID: A3LSMS906E		PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE		Approved by: Technical Manager
Test Report S/N: 1M2202030009-02.A3L	Test Dates: 02/01/2022 - 02/28/2022	EUT Type: Portable Handset	Page 81 of 84	

7.8 Frequency Stability / Temperature Variation

Test Overview and Limit

Frequency stability testing is performed in accordance with the guidelines of ANSI/TIA-603-E-2016. The frequency stability of the transmitter is measured by:

- a.) **Temperature:** The temperature is varied from -30°C to +50°C in 10°C increments using an environmental chamber.
- b.) **Primary Supply Voltage:** The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

Test Procedure Used

ANSI/TIA-603-E-2016

Test Settings



1. The carrier frequency of the transmitter is measured at room temperature (20°C to provide a reference).
2. The equipment is turned on in a “standby” condition for fifteen minutes before applying power to the transmitter. Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.
3. Frequency measurements are made at 10°C intervals ranging from -30°C to +50°C. A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.

Test Setup

The EUT was connected via an RF cable to a spectrum analyzer with the EUT placed inside an environmental chamber.

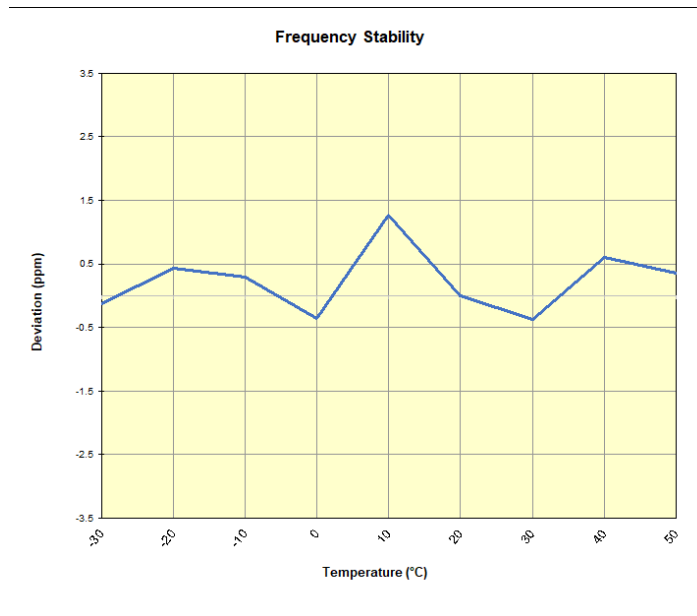
Test Notes

None

FCC ID: A3LSMS906E	 PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE		Approved by: Technical Manager
Test Report S/N: 1M2202030009-02.A3L	Test Dates: 02/01/2022 - 02/28/2022	EUT Type: Portable Handset		Page 82 of 84

NR Band n41					
		Operating Frequency (Hz):		2,593,000,000	
		Ref. Voltage (VDC):		4.39	
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.39	- 30	2,592,969,544	-340	-0.0000131
		- 20	2,592,970,994	1,111	0.0000428
		- 10	2,592,970,634	751	0.0000290
		0	2,592,968,976	-907	-0.0000350
		+ 10	2,592,973,181	3,298	0.0001272
		+ 20 (Ref)	2,592,969,883	0	0.0000000
		+ 30	2,592,968,939	-944	-0.0000364
		+ 40	2,592,971,438	1,555	0.0000600
Battery Endpoint	3.80	+ 20	2,592,971,191	1,308	0.0000504

Table 7-32. NR Band n41 Frequency Stability Data





Plot 7-97. NR Band n41 Frequency Stability Chart

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2202030009-02.A3L	Test Dates: 02/01/2022 - 02/28/2022	EUT Type: Portable Handset		Page 83 of 84

8.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the Samsung **Portable Handset** **FCC ID: A3LSMS906E** complies with all the requirements of Part 27 of the FCC rules.

FCC ID: A3LSMS906E	 PART 27 MEASUREMENT REPORT CLASS II PERMISSIVE CHANGE 		Approved by: Technical Manager
Test Report S/N: 1M2202030009-02.A3L	Test Dates: 02/01/2022 - 02/28/2022	EUT Type: Portable Handset	Page 84 of 84