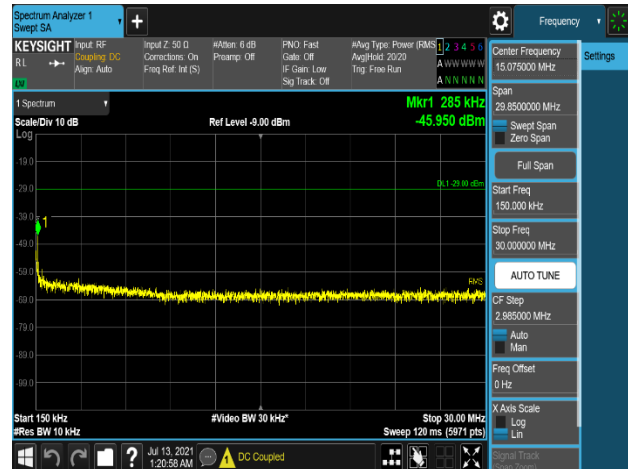
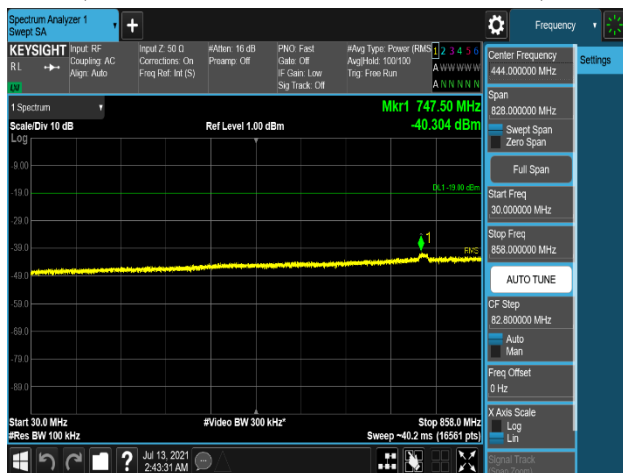




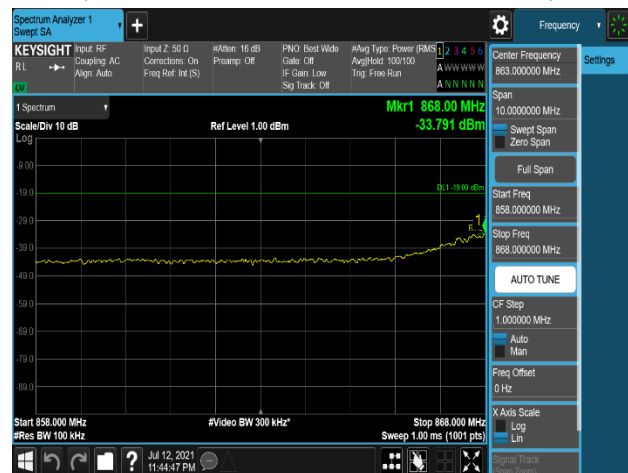
Plot 7-347. Conducted Spurious Emission Plot  
9 kHz to 150 kHz  
(LTE\_B5\_10M\_1C\_QPSK - Low Channel, Port 0)



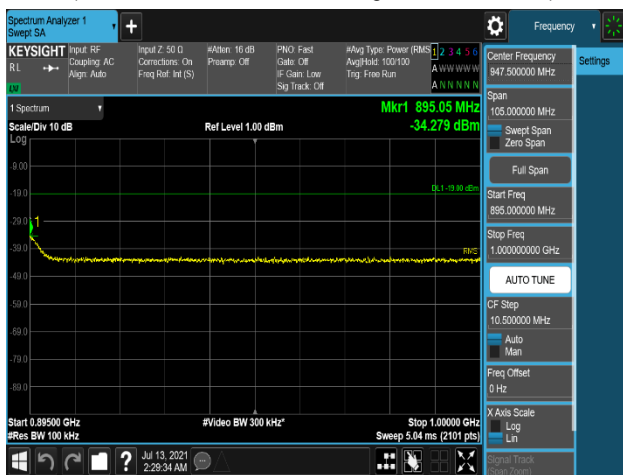
Plot 7-348. Conducted Spurious Emission Plot  
150 kHz to 30 MHz  
(LTE\_B5\_10M\_1C\_16QAM - Mid Channel, Port 0)



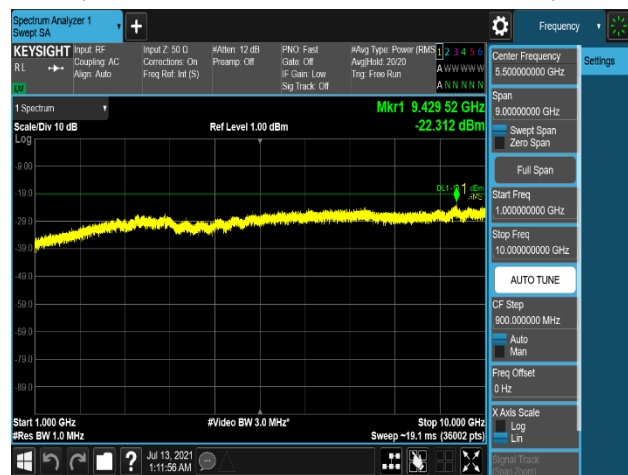
Plot 7-349. Conducted Spurious Emission Plot  
30 MHz to 858 MHz  
(LTE\_B5\_10M\_1C\_64QAM - High Channel, Port 2)



Plot 7-350. Conducted Spurious Emission Plot  
858 MHz to 868 MHz  
(LTE\_B5\_10M\_1C\_16QAM - Low Channel, Port 1)




Plot 7-351. Conducted Spurious Emission Plot  
895 MHz to 1 GHz  
(LTE\_B5\_10M\_1C\_16QAM - High Channel, Port 2)



Plot 7-352. Conducted Spurious Emission Plot  
1 GHz to 10 GHz  
(LTE\_B5\_10M\_1C\_QPSK - Mid Channel, Port 3)


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Channel	Port	Measurement Range	Level (dBm)				Limit (dBm)	Worst Margin (dB)
			QPSK	16QAM	64QAM	256QAM		
Low	0	9 kHz to 150 kHz	-57.12	-56.79	-56.64	-57.47	-39.02	-17.62
		150 kHz to 30 MHz	-47.14	-47.52	-47.36	-46.97	-29.02	-17.95
		30 MHz to 858 MHz	-41.13	-41.04	-40.97	-41.08	-19.02	-21.95
		858 MHz to 868 MHz	-35.29	-34.55	-34.89	-35.11	-19.02	-15.53
		895 MHz to 1 GHz	-40.59	-40.24	-40.31	-40.65	-19.02	-21.22
		1 GHz to 10 GHz	-24.19	-23.71	-23.91	-24.27	-19.02	-4.69
	1	9 kHz to 150 kHz	-57.46	-57.91	-57.42	-58.35	-39.02	-18.40
		150 kHz to 30 MHz	-47.78	-47.55	-48.02	-47.85	-29.02	-18.53
		30 MHz to 858 MHz	-41.13	-41.04	-41.33	-41.23	-19.02	-22.02
		858 MHz to 868 MHz	-34.98	-35.05	-33.99	-33.94	-19.02	-14.92
		895 MHz to 1 GHz	-41.20	-40.59	-40.89	-40.86	-19.02	-21.57
		1 GHz to 10 GHz	-23.22	-23.42	-23.37	-23.39	-19.02	-4.20
	2	9 kHz to 150 kHz	-57.14	-57.29	-56.85	-57.22	-39.02	-17.83
		150 kHz to 30 MHz	-47.65	-47.65	-47.55	-47.65	-29.02	-18.53
		30 MHz to 858 MHz	-41.14	-41.07	-41.05	-41.02	-19.02	-22.00
		858 MHz to 868 MHz	-34.67	-34.23	-33.52	<b>-33.36</b>	-19.02	-14.34
		895 MHz to 1 GHz	-40.06	-39.84	-39.78	-39.32	-19.02	-20.30
		1 GHz to 10 GHz	-23.86	-24.19	-24.07	-24.24	-19.02	-4.84
	3	9 kHz to 150 kHz	-56.95	-57.24	-57.49	-57.24	-39.02	-17.93
		150 kHz to 30 MHz	-47.53	-47.98	-47.07	-47.84	-29.02	-18.05
		30 MHz to 858 MHz	-41.17	-41.16	-41.09	-41.17	-19.02	-22.07
		858 MHz to 868 MHz	-35.04	-35.02	-34.67	-35.06	-19.02	-15.65
		895 MHz to 1 GHz	-40.65	-40.72	-41.03	-41.15	-19.02	-21.63
		1 GHz to 10 GHz	-23.35	-22.86	-22.87	-23.54	-19.02	-3.84
Middle	0	9 kHz to 150 kHz	-57.08	-57.40	-57.39	-56.70	-39.02	-17.68
		150 kHz to 30 MHz	-47.29	-47.47	-47.29	-47.23	-29.02	-18.21
		30 MHz to 858 MHz	-40.77	-40.92	-40.77	-41.06	-19.02	-21.75
		858 MHz to 868 MHz	-39.45	-39.59	-39.66	-37.39	-19.02	-18.37
		895 MHz to 1 GHz	-39.58	-39.66	-39.13	-39.18	-19.02	-20.11
		1 GHz to 10 GHz	-23.35	-23.64	-23.47	-23.54	-19.02	-4.33
	1	9 kHz to 150 kHz	-57.87	-58.32	-57.91	-57.29	-39.02	-18.27
		150 kHz to 30 MHz	-48.38	-47.60	-47.87	-47.98	-29.02	-18.58
		30 MHz to 858 MHz	-41.14	-41.04	-41.03	-41.02	-19.02	-22.00
		858 MHz to 868 MHz	-40.12	-40.61	-40.66	-39.25	-19.02	-20.23
		895 MHz to 1 GHz	-40.65	-40.05	-40.18	-40.96	-19.02	-21.03
		1 GHz to 10 GHz	-23.79	-23.96	-23.48	-23.69	-19.02	-4.46



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	2	9 kHz to 150 kHz	-56.97	-57.81	-57.54	-57.42	-39.02	-17.95
		150 kHz to 30 MHz	-47.61	-47.43	-47.78	-47.39	-29.02	-18.37
		30 MHz to 858 MHz	-40.91	-40.67	-40.87	-40.78	-19.02	-21.65
		858 MHz to 868 MHz	-38.75	-39.31	-39.28	-36.69	-19.02	-17.67
		895 MHz to 1 GHz	-37.72	-38.82	-38.48	-38.69	-19.02	-18.70
		1 GHz to 10 GHz	-23.85	-23.95	-24.04	-23.57	-19.02	-4.55
	3	9 kHz to 150 kHz	-57.29	-57.72	-56.92	-57.27	-39.02	-17.90
		150 kHz to 30 MHz	-47.33	-47.53	-47.47	-47.57	-29.02	-18.31
		30 MHz to 858 MHz	-40.58	-41.01	-41.02	-41.18	-19.02	-21.56
		858 MHz to 868 MHz	-39.97	-40.11	-40.61	-38.72	-19.02	-19.70
		895 MHz to 1 GHz	-40.37	-40.61	-40.22	-40.29	-19.02	-21.20
		1 GHz to 10 GHz	-22.80	<b>-22.75</b>	-22.87	-23.26	-19.02	-3.73
High	0	9 kHz to 150 kHz	<b>-56.56</b>	-56.91	-57.30	-57.26	-39.02	-17.54
		150 kHz to 30 MHz	-47.23	-47.23	-47.74	<b>-46.90</b>	-29.02	-17.88
		30 MHz to 858 MHz	-40.54	-40.50	<b>-40.11</b>	-40.38	-19.02	-21.09
		858 MHz to 868 MHz	-39.85	-39.74	-39.75	<b>-39.66</b>	-19.02	-20.64
		895 MHz to 1 GHz	<b>-34.69</b>	-35.72	-35.59	-35.88	-19.02	-15.67
		1 GHz to 10 GHz	-24.52	-23.55	-23.90	-23.45	-19.02	-4.43
	1	9 kHz to 150 kHz	-57.21	-57.85	-57.89	-57.98	-39.02	-18.19
		150 kHz to 30 MHz	-47.97	-47.89	-47.54	-47.65	-29.02	-18.52
		30 MHz to 858 MHz	-40.76	-40.65	-40.78	-40.33	-19.02	-21.31
		858 MHz to 868 MHz	-40.70	-41.00	-40.66	-40.83	-19.02	-21.64
		895 MHz to 1 GHz	-36.91	-35.82	-37.19	-36.86	-19.02	-16.80
		1 GHz to 10 GHz	-23.69	-23.27	-23.38	-23.53	-19.02	-4.25
	2	9 kHz to 150 kHz	-57.33	-56.74	-57.45	-57.40	-39.02	-17.72
		150 kHz to 30 MHz	-47.19	-47.84	-47.80	-47.45	-29.02	-18.17
		30 MHz to 858 MHz	-40.34	-40.43	-40.48	-40.47	-19.02	-21.32
		858 MHz to 868 MHz	-39.33	-40.22	-39.68	-38.30	-19.02	-19.28
		895 MHz to 1 GHz	-34.75	-34.90	-34.83	-35.01	-19.02	-15.73
		1 GHz to 10 GHz	-24.03	-23.86	-23.41	-23.40	-19.02	-4.38
	3	9 kHz to 150 kHz	-57.45	-57.12	-57.01	-57.50	-39.02	-17.99
		150 kHz to 30 MHz	-47.27	-47.20	-47.75	-48.38	-29.02	-18.18
		30 MHz to 858 MHz	-40.69	-40.70	-40.77	-40.59	-19.02	-21.57
		858 MHz to 868 MHz	-39.40	-40.62	-40.96	-40.45	-19.02	-20.38
		895 MHz to 1 GHz	-36.73	-37.72	-37.89	-37.72	-19.02	-17.71
		1 GHz to 10 GHz	-23.05	-23.23	-23.36	-23.61	-19.02	-4.03

**Table 7-90. Conducted Spurious Emission Summary Data (LTE\_B5\_5M+5M\_2C)**



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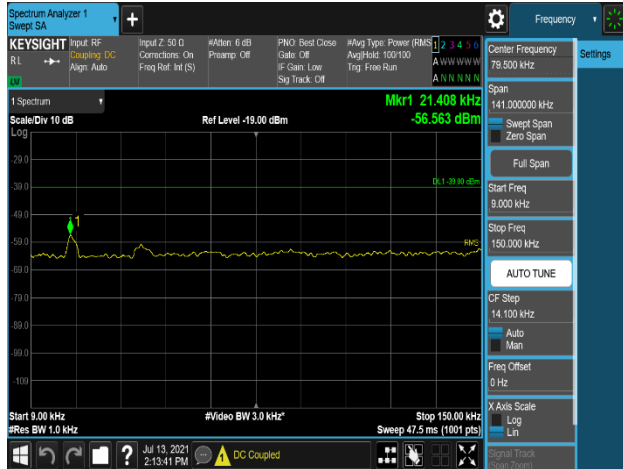
Channel	Port	Measurement Range	Level (dBm)				Limit (dBm)	Worst Margin (dB)
			QPSK	16QAM	64QAM	256QAM		
Low	0	9 kHz to 150 kHz	-56.65	-57.21	-57.21	-57.21	-39.02	-17.63
		150 kHz to 30 MHz	-47.27	-47.31	-47.63	-46.94	-29.02	-17.92
		30 MHz to 858 MHz	-40.54	-40.93	-40.52	-40.78	-19.02	-21.50
		858 MHz to 868 MHz	-35.79	-35.61	-35.59	<b>-35.22</b>	-19.02	-16.20
		895 MHz to 1 GHz	-37.39	-37.81	-38.32	-37.01	-19.02	-17.99
		1 GHz to 10 GHz	-23.95	-23.83	-23.73	-23.97	-19.02	-4.71
	1	9 kHz to 150 kHz	-57.78	-57.57	-57.51	-57.70	-39.02	-18.49
		150 kHz to 30 MHz	-48.30	-47.78	-47.70	-47.99	-29.02	-18.68
		30 MHz to 858 MHz	-40.56	-41.07	-41.04	-40.73	-19.02	-21.54
		858 MHz to 868 MHz	-35.58	-35.69	-35.48	-35.40	-19.02	-16.38
		895 MHz to 1 GHz	-39.58	-39.65	-39.35	-39.79	-19.02	-20.33
		1 GHz to 10 GHz	-24.04	-23.43	-23.74	-23.36	-19.02	-4.34
	2	9 kHz to 150 kHz	-57.07	-57.86	-57.57	-57.01	-39.02	-17.99
		150 kHz to 30 MHz	-47.50	-47.77	-47.09	-47.56	-29.02	-18.07
		30 MHz to 858 MHz	-40.84	-40.97	-40.66	-40.93	-19.02	-21.64
		858 MHz to 868 MHz	-35.44	-35.64	-35.50	-35.42	-19.02	-16.40
		895 MHz to 1 GHz	-37.07	-36.72	-37.54	-37.65	-19.02	-17.70
		1 GHz to 10 GHz	-23.53	-24.05	-23.79	-23.94	-19.02	-4.51
	3	9 kHz to 150 kHz	-57.10	-58.12	-57.71	-57.84	-39.02	-18.08
		150 kHz to 30 MHz	-47.67	-47.22	-47.52	-47.61	-29.02	-18.20
		30 MHz to 858 MHz	-40.78	-40.87	-40.82	-40.92	-19.02	-21.76
		858 MHz to 868 MHz	-36.02	-36.46	-36.58	-35.95	-19.02	-16.93
		895 MHz to 1 GHz	-39.33	-39.72	-39.19	-39.12	-19.02	-20.10
		1 GHz to 10 GHz	-22.92	-22.89	-23.23	-22.75	-19.02	-3.73
Middle	0	9 kHz to 150 kHz	-56.98	-56.70	-57.04	-56.75	-39.02	-17.68
		150 kHz to 30 MHz	-47.51	-46.99	-47.83	-46.91	-29.02	-17.89
		30 MHz to 858 MHz	-40.80	-40.79	-40.91	-40.77	-19.02	-21.75
		858 MHz to 868 MHz	-37.04	-36.66	-36.78	-37.42	-19.02	-17.64
		895 MHz to 1 GHz	-36.99	-36.86	-37.18	-36.61	-19.02	-17.59
		1 GHz to 10 GHz	-23.95	-23.71	-23.71	-24.30	-19.02	-4.69
	1	9 kHz to 150 kHz	-57.92	-57.75	-57.57	-57.92	-39.02	-18.55
		150 kHz to 30 MHz	-47.50	-47.57	-48.06	-47.42	-29.02	-18.40
		30 MHz to 858 MHz	-40.97	-40.42	-40.91	-40.65	-19.02	-21.40
		858 MHz to 868 MHz	-38.43	-37.11	-38.11	-37.44	-19.02	-18.09
		895 MHz to 1 GHz	-39.10	-38.67	-39.34	-38.99	-19.02	-19.65
		1 GHz to 10 GHz	<b>-22.58</b>	-23.35	-23.82	-23.49	-19.02	-3.56

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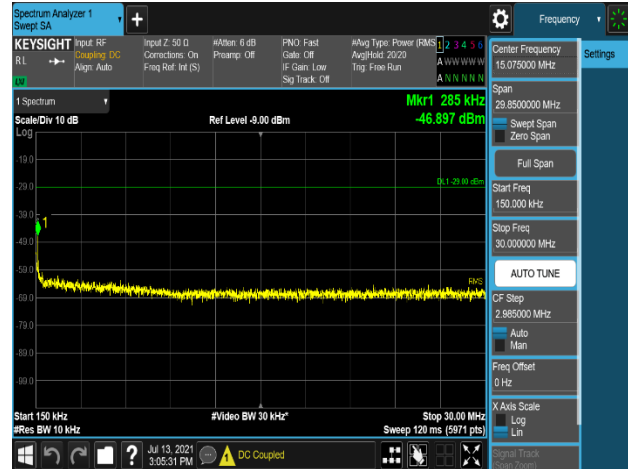
	2	9 kHz to 150 kHz	-57.35	-57.54	-57.12	-57.17	-39.02	-18.10
		150 kHz to 30 MHz	-47.75	-47.48	-47.46	-47.84	-29.02	-18.44
		30 MHz to 858 MHz	<b>-40.33</b>	-40.53	-40.72	-40.61	-19.02	-21.31
		858 MHz to 868 MHz	-37.08	-36.85	-36.81	-37.03	-19.02	-17.79
		895 MHz to 1 GHz	-36.71	-36.67	-36.68	-36.72	-19.02	-17.65
		1 GHz to 10 GHz	-24.11	-24.05	-24.21	-24.16	-19.02	-5.03
	3	9 kHz to 150 kHz	-57.80	-57.31	-57.01	-57.07	-39.02	-17.99
		150 kHz to 30 MHz	-46.94	-47.32	-47.25	-47.48	-29.02	-17.92
		30 MHz to 858 MHz	-40.91	-40.82	-40.99	-40.82	-19.02	-21.80
		858 MHz to 868 MHz	-38.29	-38.86	-38.47	-37.95	-19.02	-18.93
		895 MHz to 1 GHz	-39.44	-38.76	-38.60	-38.73	-19.02	-19.58
		1 GHz to 10 GHz	-23.04	-23.37	-22.69	-23.33	-19.02	-3.67
High	0	9 kHz to 150 kHz	-57.20	-57.66	-57.63	<b>-56.59</b>	-39.02	-17.57
		150 kHz to 30 MHz	<b>-46.78</b>	-47.39	-47.01	-47.31	-29.02	-17.76
		30 MHz to 858 MHz	-40.36	-40.68	-40.72	-40.44	-19.02	-21.34
		858 MHz to 868 MHz	-37.53	-37.18	-37.92	-37.23	-19.02	-18.16
		895 MHz to 1 GHz	-36.10	-35.59	-35.84	-35.95	-19.02	-16.57
		1 GHz to 10 GHz	-24.15	-24.25	-23.97	-24.42	-19.02	-4.95
	1	9 kHz to 150 kHz	-57.67	-57.85	-57.58	-57.69	-39.02	-18.56
		150 kHz to 30 MHz	-48.17	-47.20	-47.91	-47.47	-29.02	-18.18
		30 MHz to 858 MHz	-40.84	-41.05	-40.68	-40.45	-19.02	-21.43
		858 MHz to 868 MHz	-38.81	-38.27	-38.15	-38.41	-19.02	-19.13
		895 MHz to 1 GHz	-38.06	-38.29	-37.45	-38.01	-19.02	-18.43
		1 GHz to 10 GHz	-23.80	-23.66	-23.63	-23.28	-19.02	-4.26
	2	9 kHz to 150 kHz	-57.62	-57.28	-57.72	-57.05	-39.02	-18.03
		150 kHz to 30 MHz	-47.06	-47.56	-47.24	-47.40	-29.02	-18.04
		30 MHz to 858 MHz	-40.73	-40.71	-40.51	-40.97	-19.02	-21.49
		858 MHz to 868 MHz	-37.00	-38.07	-37.93	-37.04	-19.02	-17.98
		895 MHz to 1 GHz	<b>-35.45</b>	-34.46	-35.49	-34.54	-19.02	-15.44
		1 GHz to 10 GHz	-23.97	-23.69	-23.72	-23.89	-19.02	-4.67
	3	9 kHz to 150 kHz	-56.80	-58.11	-57.00	-57.24	-39.02	-17.78
		150 kHz to 30 MHz	-47.70	-47.45	-47.67	-47.55	-29.02	-18.43
		30 MHz to 858 MHz	-41.08	-40.66	-40.85	-40.60	-19.02	-21.58
		858 MHz to 868 MHz	-38.54	-38.81	-39.13	-38.68	-19.02	-19.52
		895 MHz to 1 GHz	-38.87	-38.73	-38.79	-38.77	-19.02	-19.71
		1 GHz to 10 GHz	-23.27	-23.12	-23.26	-23.01	-19.02	-3.99

**Table 7-91. Conducted Spurious Emission Summary Data (LTE\_B5\_10M+10M\_2C)**

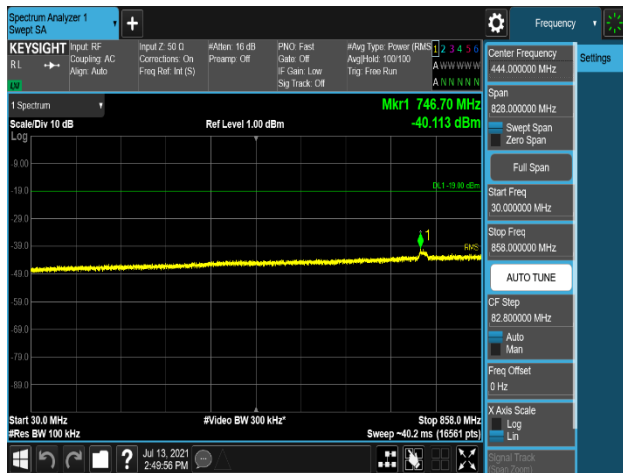
FCC ID: A3LRF4442D-13A		<b>MEASUREMENT REPORT (CERTIFICATION)</b>		<b>Approved by:</b> Technical Manager
Test Report S/N: 8K21070502R3.A3L	Test Dates: 07/09/2021 - 08/26/2021	EUT Type: RRU (RF4442d)	Page 138 of 225	



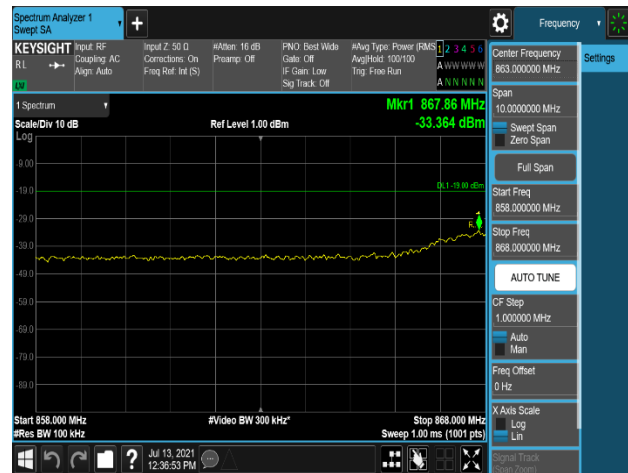
Plot 7-353. Conducted Spurious Emission Plot  
9 kHz to 150 kHz  
(LTE\_B5\_5M+5M\_2C\_QPSK - High Channel, Port 0)



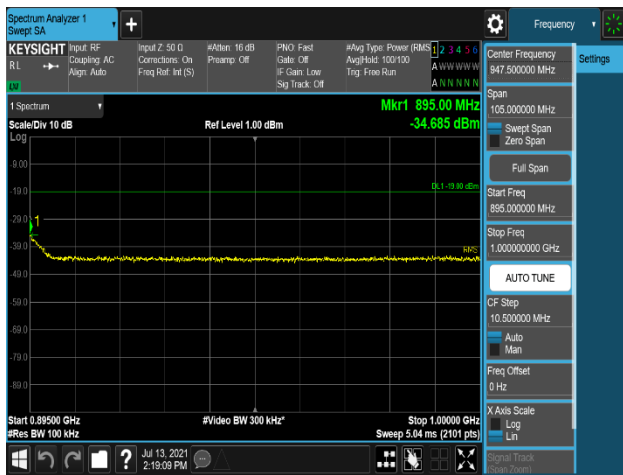
Plot 7-354. Conducted Spurious Emission Plot  
150 kHz to 30 MHz  
(LTE\_B5\_5M+5M\_2C\_256QAM - High Channel, Port 0)



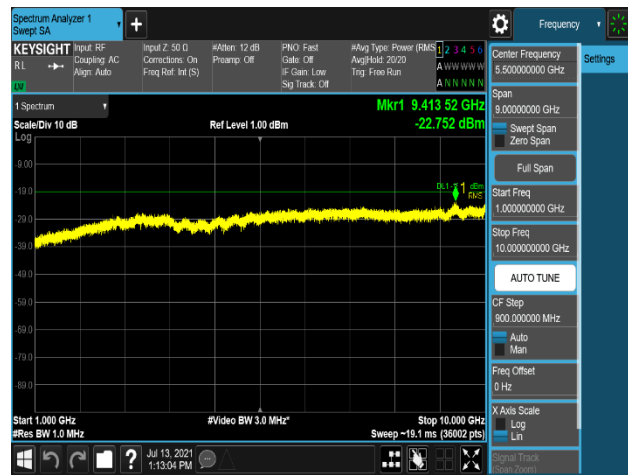
Plot 7-355. Conducted Spurious Emission Plot  
30 MHz to 858 MHz  
(LTE\_B5\_5M+5M\_2C\_64QAM - High Channel, Port 0)



Plot 7-356. Conducted Spurious Emission Plot  
858 MHz to 868 MHz  
(LTE\_B5\_5M+5M\_2C\_256QAM - Low Channel, Port 2)

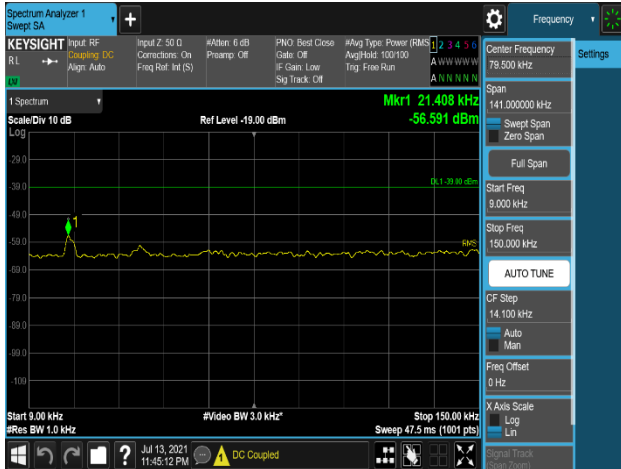


Plot 7-357. Conducted Spurious Emission Plot  
895 MHz to 1 GHz  
(LTE\_B5\_5M+5M\_2C\_QPSK - High Channel, Port 0)

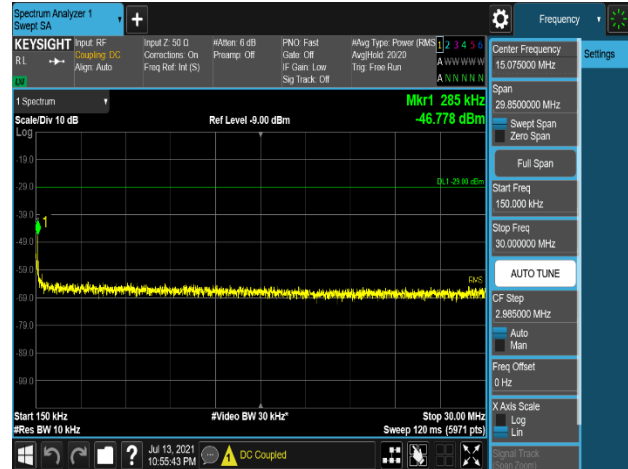


Plot 7-358. Conducted Spurious Emission Plot  
1 GHz to 10 GHz  
(LTE\_B5\_5M+5M\_2C\_16QAM - Mid Channel, Port 3)

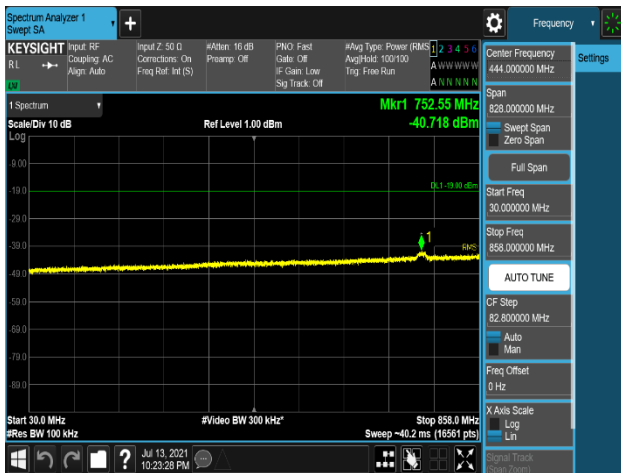
FCC ID: A3LRF4442D-13A		<b>MEASUREMENT REPORT (CERTIFICATION)</b>		<b>Approved by:</b> Technical Manager
Test Report S/N: 8K21070502R3.A3L	Test Dates: 07/09/2021 - 08/26/2021	EUT Type: RRU (RF4442d)		Page 139 of 225



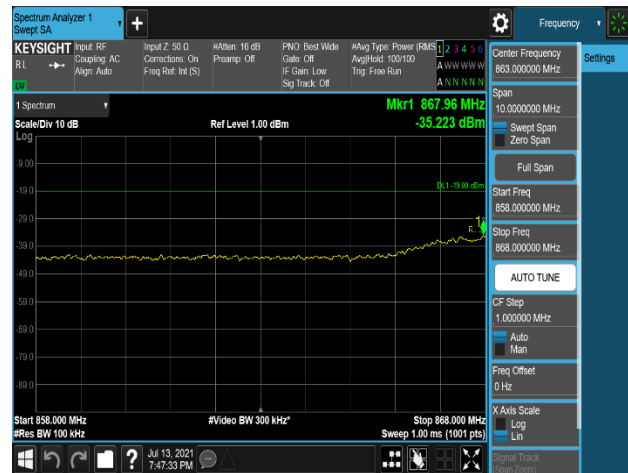
Plot 7-359. Conducted Spurious Emission Plot  
9 kHz to 150 kHz  
(LTE\_B5\_10M+10M\_2C\_256QAM - High Channel, Port 0)



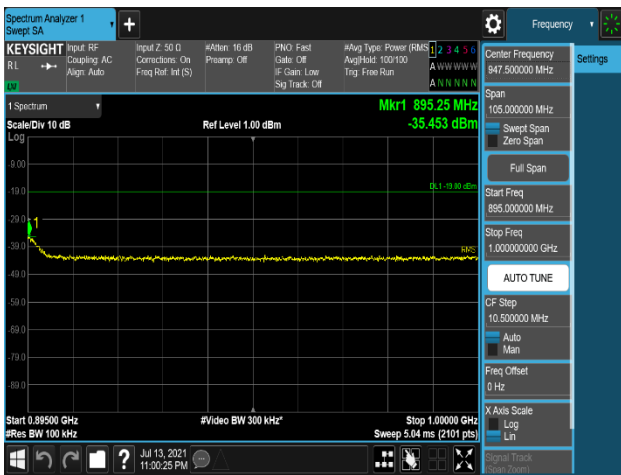
Plot 7-360. Conducted Spurious Emission Plot  
150 kHz to 30 MHz  
(LTE\_B5\_10M+10M\_2C\_QPSK - High Channel, Port 0)



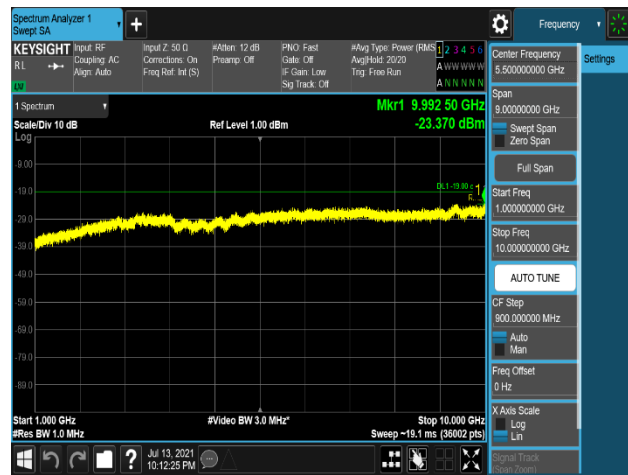
Plot 7-361. Conducted Spurious Emission Plot  
30 MHz to 858 MHz  
(LTE\_B5\_10M+10M\_2C\_64QAM - Mid Channel, Port 2)



Plot 7-362. Conducted Spurious Emission Plot  
858 MHz to 868 MHz  
(LTE\_B5\_10M+10M\_2C\_256QAM - Low Channel, Port 0)



Plot 7-363. Conducted Spurious Emission Plot  
895 MHz to 1 GHz  
(LTE\_B5\_10M+10M\_2C\_QPSK - High Channel, Port 2)



Plot 7-364. Conducted Spurious Emission Plot  
1 GHz to 10 GHz  
(LTE\_B5\_10M+10M\_2C\_16QAM - Mid Channel, Port 3)

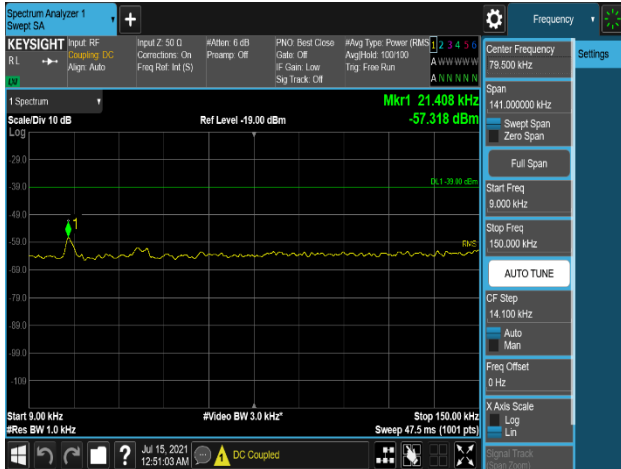
FCC ID: A3LRF4442D-13A		<b>MEASUREMENT REPORT (CERTIFICATION)</b>		<b>Approved by:</b> Technical Manager
Test Report S/N: 8K21070502R3.A3L	Test Dates: 07/09/2021 - 08/26/2021	EUT Type: RRU (RF4442d)		Page 140 of 225

Channel	Port	Measurement Range	Level (dBm)				Limit (dBm)	Worst Margin (dB)
			QPSK	16QAM	64QAM	256QAM		
Middle	0	9 kHz to 150 kHz	-57.90	-57.43	-57.78	-57.56	-39.02	-18.41
		150 kHz to 30 MHz	-47.28	-47.16	-47.15	<b>-47.14</b>	-29.02	-18.12
		30 MHz to 858 MHz	-40.52	<b>-40.22</b>	-40.64	-40.28	-19.02	-21.20
		858 MHz to 868 MHz	-34.86	-35.29	-35.01	-35.45	-19.02	-15.84
		895 MHz to 1 GHz	-34.27	-34.67	-35.22	-35.05	-19.02	-15.25
		1 GHz to 10 GHz	-24.03	-24.19	-24.11	-24.37	-19.02	-5.01
	1	9 kHz to 150 kHz	-57.93	-57.95	-58.34	-58.50	-39.02	-18.91
		150 kHz to 30 MHz	-48.08	-48.03	-47.70	-48.18	-29.02	-18.68
		30 MHz to 858 MHz	-40.62	-40.33	-40.61	-40.70	-19.02	-21.31
		858 MHz to 868 MHz	-35.92	-35.98	-36.01	-35.31	-19.02	-16.29
		895 MHz to 1 GHz	-37.53	-37.84	-37.71	-38.32	-19.02	-18.51
		1 GHz to 10 GHz	-23.74	-23.07	-23.52	-23.48	-19.02	-4.05
	2	9 kHz to 150 kHz	<b>-57.32</b>	-57.51	-58.00	-57.74	-39.02	-18.30
		150 kHz to 30 MHz	-47.37	-47.30	-47.84	-47.76	-29.02	-18.28
		30 MHz to 858 MHz	-40.55	-40.54	-40.70	-40.46	-19.02	-21.44
		858 MHz to 868 MHz	-34.26	-34.48	-34.65	<b>-34.18</b>	-19.02	-15.16
		895 MHz to 1 GHz	-33.69	<b>-33.08</b>	-34.14	-33.70	-19.02	-14.06
		1 GHz to 10 GHz	-23.94	-24.11	-23.91	-23.20	-19.02	-4.18
	3	9 kHz to 150 kHz	-57.87	-57.63	-57.99	-57.50	-39.02	-18.48
		150 kHz to 30 MHz	-47.52	-47.73	-47.46	-47.51	-29.02	-18.44
		30 MHz to 858 MHz	-40.61	-40.33	-40.33	-40.84	-19.02	-21.31
		858 MHz to 868 MHz	-37.08	-36.36	-36.68	-36.93	-19.02	-17.34
		895 MHz to 1 GHz	-38.08	-37.51	-38.34	-38.24	-19.02	-18.49
		1 GHz to 10 GHz	-23.22	-23.13	-22.94	<b>-22.61</b>	-19.02	-3.59

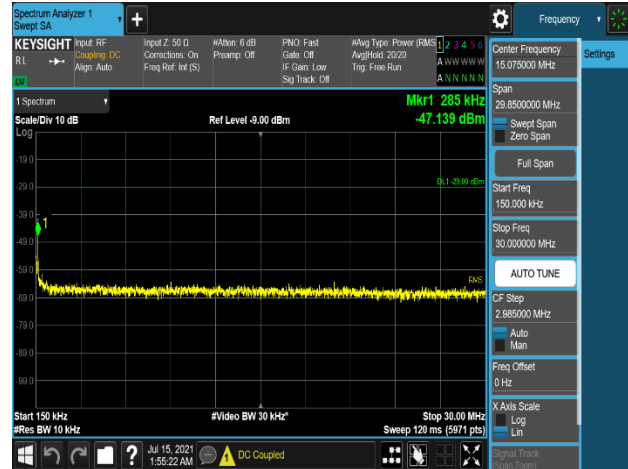
**Table 7-92. Conducted Spurious Emission Summary Data (LTE\_B5\_5M+10M+10M\_3C)**

FCC ID: A3LRF4442D-13A		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 8K21070502R3.A3L	Test Dates: 07/09/2021 - 08/26/2021	EUT Type: RRU (RF4442d)		Page 141 of 225

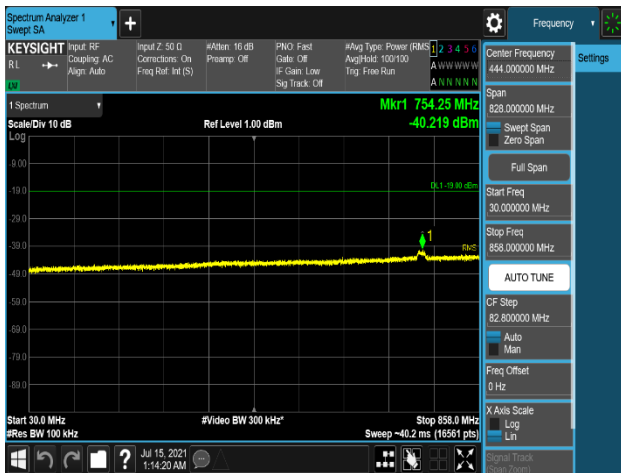




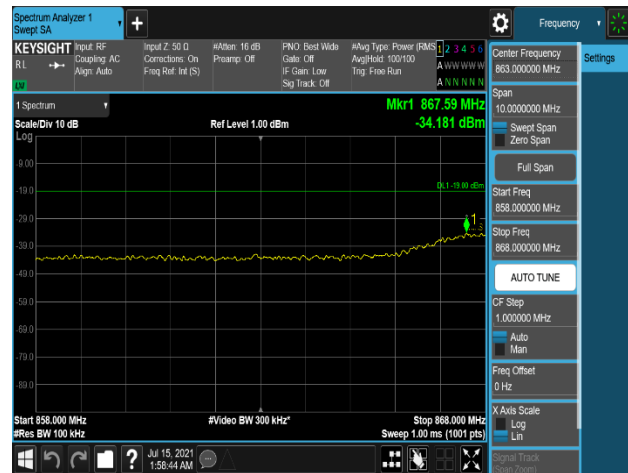
Plot 7-365. Conducted Spurious Emission Plot  
9 kHz to 150 kHz  
(LTE\_B5\_5M+10M+10M\_3C\_QPSK - Port 2)



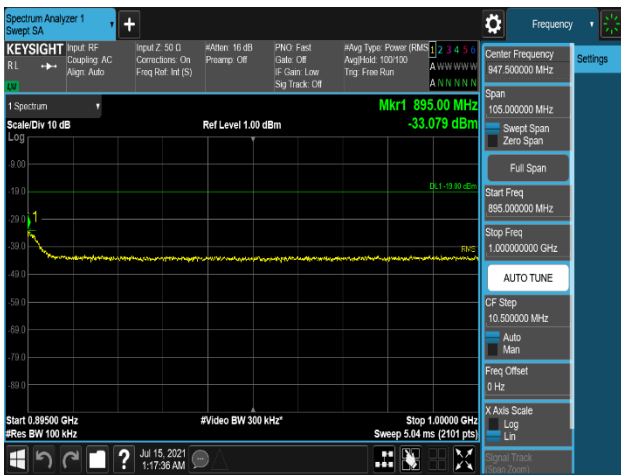
Plot 7-366. Conducted Spurious Emission Plot  
150 kHz to 30 MHz  
(LTE\_B5\_5M+10M+10M\_3C\_256QAM - Port 0)



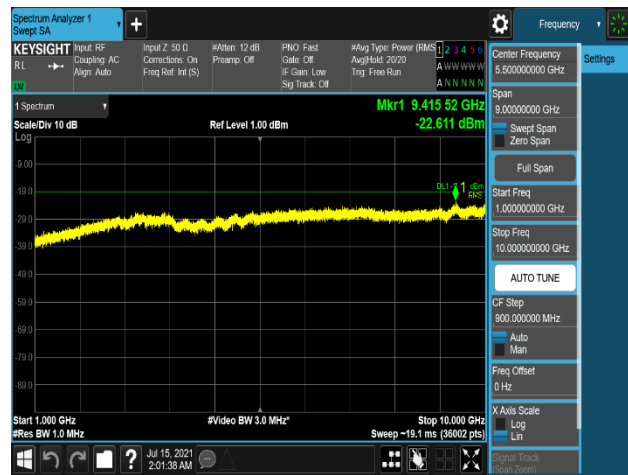
Plot 7-367. Conducted Spurious Emission Plot  
30 MHz to 858 MHz  
(LTE\_B5\_5M+10M+10M\_3C\_16QAM - Port 0)



Plot 7-368. Conducted Spurious Emission Plot  
858 MHz to 868 MHz  
(LTE\_B5\_5M+10M+10M\_3C\_256QAM - Port 2)



Plot 7-369. Conducted Spurious Emission Plot  
895 MHz to 1 GHz  
(LTE\_B5\_5M+10M+10M\_3C\_16QAM - Port 2)





Plot 7-370. Conducted Spurious Emission Plot  
1 GHz to 10 GHz  
(LTE\_B5\_5M+10M+10M\_3C\_256QAM - Port 3)

FCC ID: A3LRF4442D-13A		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 8K21070502R3.A3L	Test Dates: 07/09/2021 - 08/26/2021	EUT Type: RRU (RF4442d)		Page 142 of 225



Channel	Port	Measurement Range	Level (dBm)				Limit (dBm)	Worst Margin (dB)
			QPSK	16QAM	64QAM	256QAM		
Middle	0	9 kHz to 150 kHz	-57.95	-57.23	-56.89	<b>-56.81</b>	-39.02	-17.79
		150 kHz to 30 MHz	-47.64	-47.61	-47.65	-47.62	-29.02	-18.59
		30 MHz to 858 MHz	-39.69	-39.93	-39.67	-40.21	-19.02	-20.65
		858 MHz to 868 MHz	-35.20	-35.21	<b>-34.25</b>	-34.88	-19.02	-15.23
		895 MHz to 1 GHz	-32.46	-33.13	-33.82	-32.15	-19.02	-13.13
		1 GHz to 10 GHz	-23.94	-24.26	-23.69	-24.21	-19.02	-4.67
	1	9 kHz to 150 kHz	-57.43	-57.71	-57.43	-57.35	-39.02	-18.33
		150 kHz to 30 MHz	-48.01	-48.58	-47.47	-47.93	-29.02	-18.45
		30 MHz to 858 MHz	-40.36	-39.93	-40.45	-40.26	-19.02	-20.91
		858 MHz to 868 MHz	-34.98	-35.13	-35.93	-36.01	-19.02	-15.96
		895 MHz to 1 GHz	-35.44	-38.19	-35.86	-35.92	-19.02	-16.42
		1 GHz to 10 GHz	-23.56	-23.75	-23.40	-23.34	-19.02	-4.32
	2	9 kHz to 150 kHz	-57.72	-57.48	-57.09	-57.39	-39.02	-18.07
		150 kHz to 30 MHz	-47.37	-48.81	-47.57	-47.43	-29.02	-18.35
		30 MHz to 858 MHz	<b>-39.64</b>	-39.98	-39.95	-40.28	-19.02	-20.62
		858 MHz to 868 MHz	-35.14	-34.89	-34.86	-34.53	-19.02	-15.51
		895 MHz to 1 GHz	-31.80	-32.19	<b>-31.78</b>	-31.95	-19.02	-12.76
		1 GHz to 10 GHz	-23.80	-24.00	-24.05	-23.71	-19.02	-4.69
	3	9 kHz to 150 kHz	-57.18	-57.55	-57.30	-57.35	-39.02	-18.16
		150 kHz to 30 MHz	-47.48	-47.88	<b>-47.31</b>	-47.62	-29.02	-18.29
		30 MHz to 858 MHz	-40.49	-40.37	-40.28	-40.66	-19.02	-21.26
		858 MHz to 868 MHz	-36.86	-36.38	-36.43	-36.34	-19.02	-17.32
		895 MHz to 1 GHz	-36.30	-38.27	-36.57	-37.53	-19.02	-17.28
		1 GHz to 10 GHz	-23.42	-23.27	-23.30	<b>-22.98</b>	-19.02	-3.96

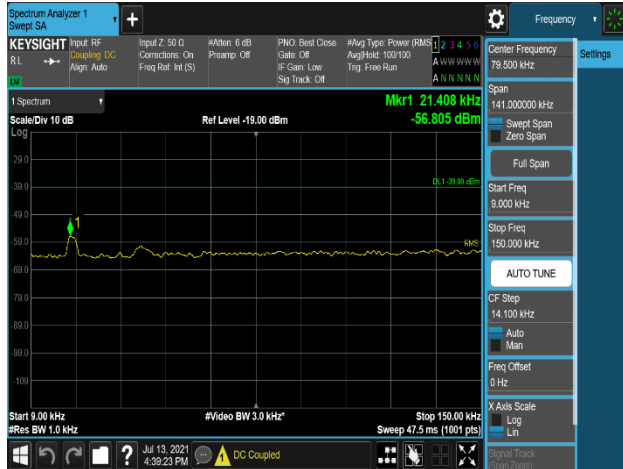
**Table 7-93. Conducted Spurious Emission Summary Data (LTE\_B5\_5M+5M\_2C\_ Non-contiguous)**

FCC ID: A3LRF4442D-13A		MEASUREMENT REPORT (CERTIFICATION)			Approved by: Technical Manager
Test Report S/N: 8K21070502R3.A3L	Test Dates: 07/09/2021 - 08/26/2021	EUT Type: RRU (RF4442d)		Page 143 of 225	

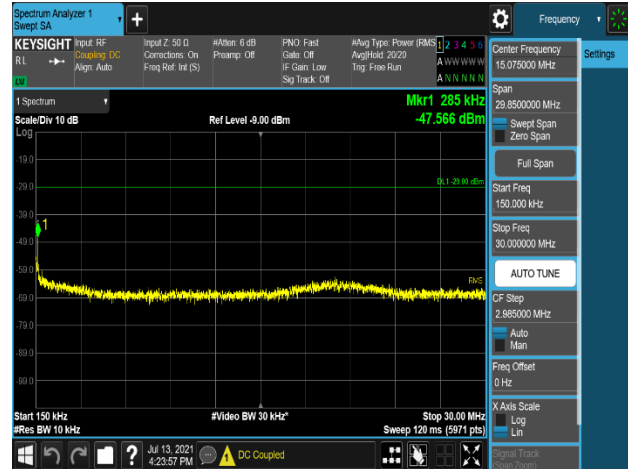
Channel	Port	Measurement Range	Level (dBm)				Limit (dBm)	Worst Margin (dB)
			QPSK	16QAM	64QAM	256QAM		
Middle	0	9 kHz to 150 kHz	<b>-56.82</b>	-57.20	-57.63	-57.09	-39.02	-17.80
		150 kHz to 30 MHz	-47.55	<b>-46.99</b>	-47.50	-47.60	-29.02	-17.97
		30 MHz to 858 MHz	-40.48	-40.41	-40.35	-40.69	-19.02	-21.33
		858 MHz to 868 MHz	-35.14	-35.35	<b>-34.85</b>	-35.69	-19.02	-15.83
		895 MHz to 1 GHz	-35.08	-33.93	-34.27	-34.46	-19.02	-14.91
		1 GHz to 10 GHz	-23.50	-24.28	-23.90	-24.43	-19.02	-4.48
	1	9 kHz to 150 kHz	-57.65	-57.20	-57.71	-57.63	-39.02	-18.18
		150 kHz to 30 MHz	-47.86	-47.76	-47.49	-47.62	-29.02	-18.47
		30 MHz to 858 MHz	-40.90	-40.76	-40.59	-40.38	-19.02	-21.36
		858 MHz to 868 MHz	-35.57	-35.89	-35.53	-35.92	-19.02	-16.51
		895 MHz to 1 GHz	-35.48	-36.47	-37.32	-37.03	-19.02	-16.46
		1 GHz to 10 GHz	-23.49	-23.95	-23.59	-22.96	-19.02	-3.94
	2	9 kHz to 150 kHz	-57.21	-57.02	-57.00	-57.57	-39.02	-17.98
		150 kHz to 30 MHz	-47.46	-47.40	-47.83	-47.90	-29.02	-18.38
		30 MHz to 858 MHz	-40.57	<b>-40.33</b>	-40.52	-40.65	-19.02	-21.31
		858 MHz to 868 MHz	-35.47	-35.72	-35.03	-35.47	-19.02	-16.01
		895 MHz to 1 GHz	-34.22	-33.77	-33.57	<b>-32.99</b>	-19.02	-13.97
		1 GHz to 10 GHz	-23.88	-23.80	-24.04	-23.42	-19.02	-4.40
	3	9 kHz to 150 kHz	-57.27	-57.22	-57.02	-57.63	-39.02	-18.00
		150 kHz to 30 MHz	-47.55	-47.30	-47.40	-47.20	-29.02	-18.18
		30 MHz to 858 MHz	-40.89	-40.58	-41.08	-40.78	-19.02	-21.56
		858 MHz to 868 MHz	-36.32	-36.23	-36.10	-36.58	-19.02	-17.08
		895 MHz to 1 GHz	-38.13	-37.53	-37.88	-38.20	-19.02	-18.51
		1 GHz to 10 GHz	-22.92	-23.20	-22.94	<b>-22.92</b>	-19.02	-3.90

**Table 7-94. Conducted Spurious Emission Summary Data (LTE\_B5\_10M+10M\_2C\_ Non-contiguous)**

FCC ID: A3LRF4442D-13A		<b>MEASUREMENT REPORT (CERTIFICATION)</b>		<b>Approved by:</b> Technical Manager
<b>Test Report S/N:</b> 8K21070502R3.A3L	<b>Test Dates:</b> 07/09/2021 - 08/26/2021	<b>EUT Type:</b> RRU (RF4442d)	Page 144 of 225	



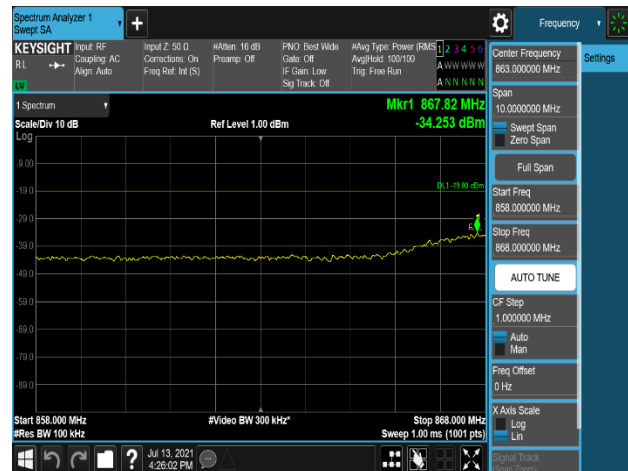
Plot 7-371. Conducted Spurious Emission Plot  
9 kHz to 150 kHz  
(LTE\_B5\_5M+5M+2C\_256QAM - Port 0)



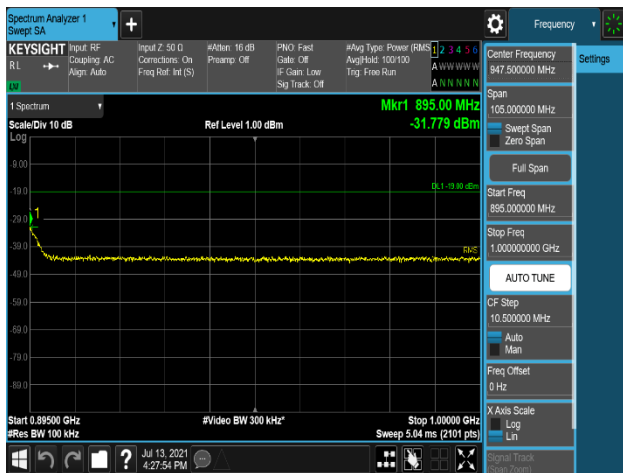
Plot 7-372. Conducted Spurious Emission Plot  
150 kHz to 30 MHz  
(LTE\_B5\_5M+5M+2C\_64QAM - Port 2)



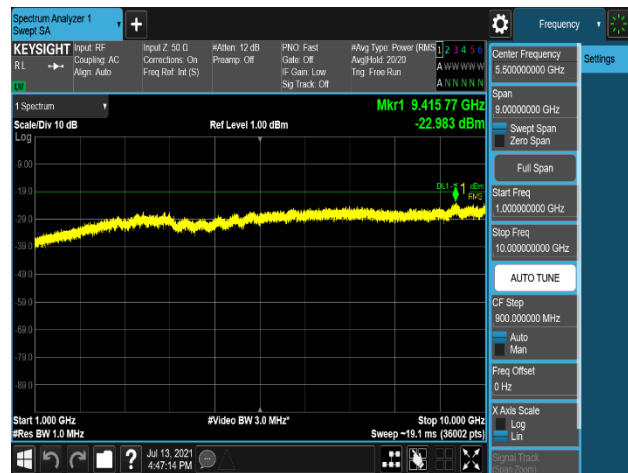
Plot 7-373. Conducted Spurious Emission Plot  
30 MHz to 858 MHz  
(LTE\_B5\_5M+5M+2C\_QPSK - Port 2)



Plot 7-374. Conducted Spurious Emission Plot  
858 MHz to 868 MHz  
(LTE\_B5\_5M+5M+2C\_64QAM - Port 0)

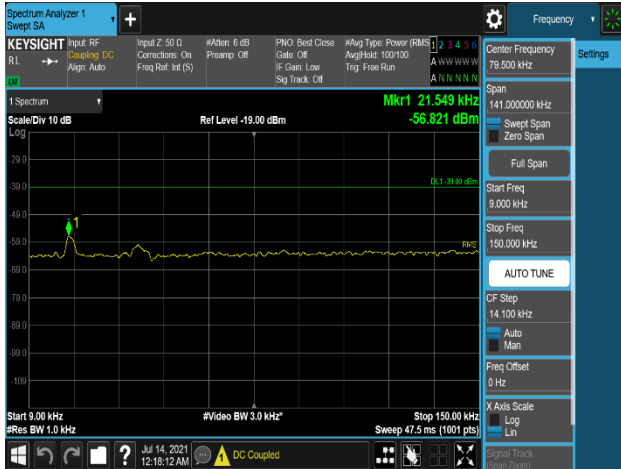


Plot 7-375. Conducted Spurious Emission Plot  
895 MHz to 1 GHz  
(LTE\_B5\_5M+5M+2C\_64QAM - Port 2)

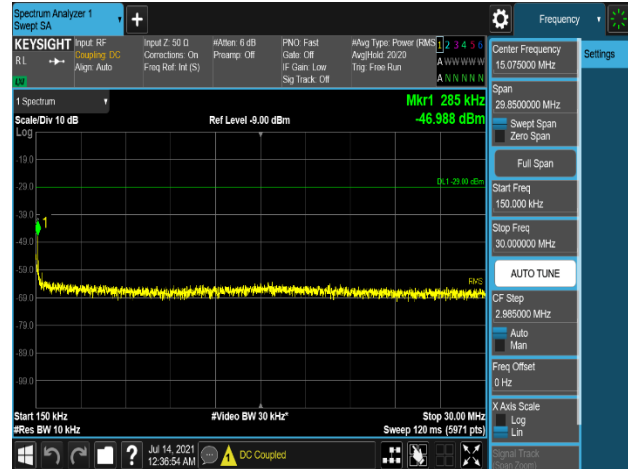


Plot 7-376. Conducted Spurious Emission Plot  
1 GHz to 10 GHz  
(LTE\_B5\_5M+5M+2C\_256QAM - Port 3)

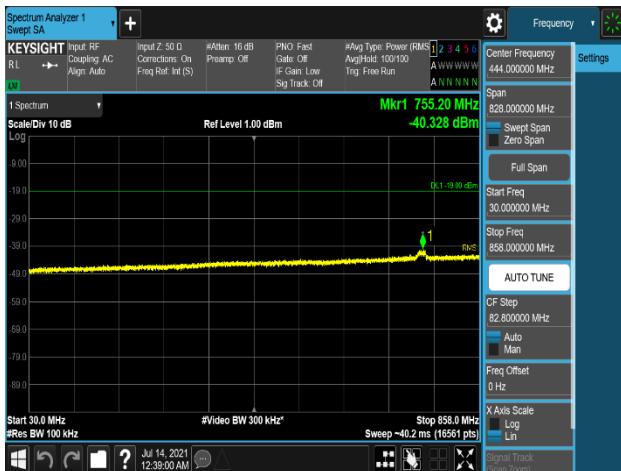
FCC ID: A3LRF4442D-13A		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 8K21070502R3.A3L	Test Dates: 07/09/2021 - 08/26/2021	EUT Type: RRU (RF4442d)		Page 145 of 225



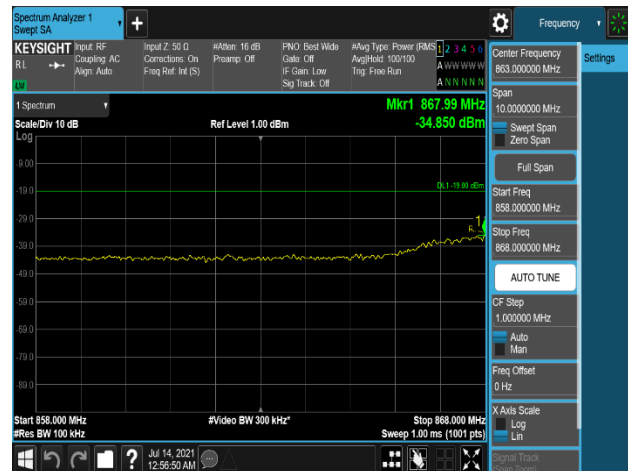
Plot 7-377. Conducted Spurious Emission Plot  
9 kHz to 150 kHz  
(LTE\_B5\_10M+10M+2C\_QPSK - Port 0)



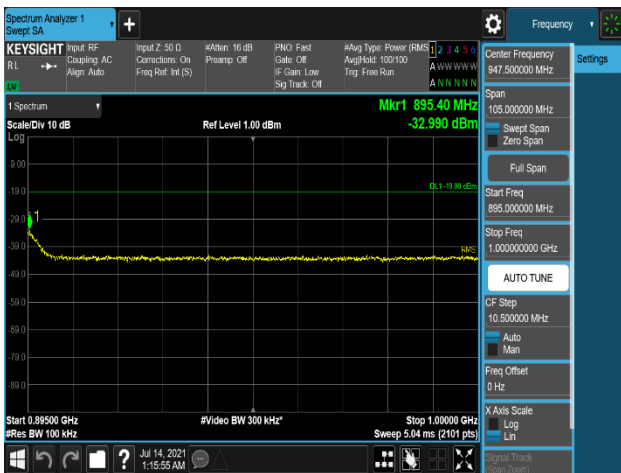
Plot 7-378. Conducted Spurious Emission Plot  
150 kHz to 30 MHz  
(LTE\_B5\_10M+10M+2C\_16QAM - Port 0)



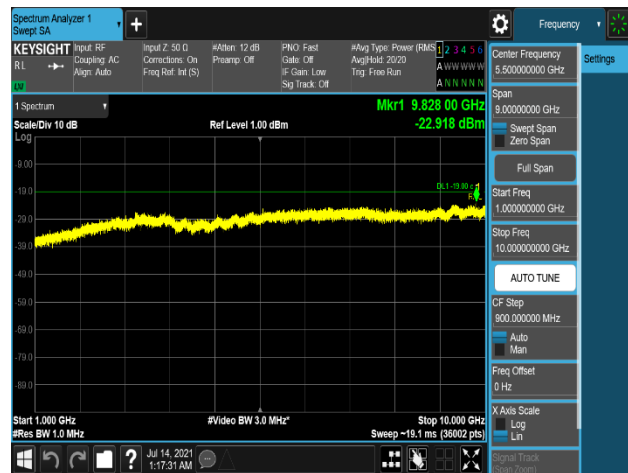
Plot 7-379. Conducted Spurious Emission Plot  
30 MHz to 858 MHz  
(LTE\_B5\_10M+10M+2C\_16QAM - Port 2)



Plot 7-380. Conducted Spurious Emission Plot  
858 MHz to 868 MHz  
(LTE\_B5\_10M+10M+2C\_64QAM - Port 0)




Plot 7-381. Conducted Spurious Emission Plot  
895 MHz to 1 GHz  
(LTE\_B5\_10M+10M+2C\_256QAM - Port 2)



Plot 7-382. Conducted Spurious Emission Plot  
1 GHz to 10 GHz  
(LTE\_B5\_10M+10M+2C\_256QAM - Port 3)



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Test Report S/N: 8K21070502R3.A3L	Test Dates: 07/09/2021 - 08/26/2021	EUT Type: RRU (RF4442d)		Page 146 of 225

Channel	Port	Measurement Range	Level (dBm)				Limit (dBm)	Worst Margin (dB)
			QPSK	16QAM	64QAM	256QAM		
Low	0	9 kHz to 150 kHz	-57.45	-57.44	-56.90	-56.52	-39.02	-17.50
		150 kHz to 30 MHz	-46.74	-47.69	-46.95	-46.44	-29.02	-17.42
		30 MHz to 735 MHz	-42.62	-42.36	-42.51	-42.25	-19.02	-23.23
		735 MHz to 745.9 GHz	-26.29	-24.86	<b>-24.18</b>	-25.13	-19.02	-5.16
		756.1 MHz to 1 GHz	-39.84	-39.19	-39.19	-37.86	-19.02	-18.84
		1 GHz to 10 GHz	-23.77	-23.45	-24.08	-24.29	-19.02	-4.43
	1	9 kHz to 150 kHz	-57.84	-58.02	-57.32	-57.85	-39.02	-18.30
		150 kHz to 30 MHz	-48.27	-47.55	-47.31	-47.99	-29.02	-18.29
		30 MHz to 735 MHz	-43.01	-43.08	-43.04	-43.17	-19.02	-23.99
		735 MHz to 745.9 GHz	-27.40	-27.00	-26.49	-25.64	-19.02	-6.62
		756.1 MHz to 1 GHz	-40.24	-39.18	-39.97	-38.05	-19.02	-19.03
		1 GHz to 10 GHz	-23.74	-23.59	-23.76	-23.40	-19.02	-4.38
	2	9 kHz to 150 kHz	-57.26	-57.39	-57.81	-57.81	-39.02	-18.24
		150 kHz to 30 MHz	-46.49	-46.81	-47.42	-47.44	-29.02	-17.47
		30 MHz to 735 MHz	-42.55	-42.44	-42.53	-42.50	-19.02	-23.42
		735 MHz to 745.9 GHz	-26.09	-25.43	-24.77	-24.82	-19.02	-5.75
		756.1 MHz to 1 GHz	-39.78	-38.01	-38.78	-38.16	-19.02	-18.99
		1 GHz to 10 GHz	-23.45	-24.35	-23.76	-24.20	-19.02	-4.43
	3	9 kHz to 150 kHz	-57.18	-56.90	-56.68	-57.62	-39.02	-17.66
		150 kHz to 30 MHz	-46.62	-47.97	-48.20	-47.48	-29.02	-17.60
		30 MHz to 735 MHz	-42.60	-42.47	-42.79	-42.71	-19.02	-23.45
		735 MHz to 745.9 GHz	-26.02	-24.57	-24.73	-24.21	-19.02	-5.19
		756.1 MHz to 1 GHz	-39.97	-38.02	-39.53	-38.02	-19.02	-19.00
		1 GHz to 10 GHz	-23.02	-23.01	<b>-22.81</b>	-23.19	-19.02	-3.79
Middle	0	9 kHz to 150 kHz	-57.27	-56.78	-57.16	<b>-56.09</b>	-39.02	-17.07
		150 kHz to 30 MHz	-46.25	-47.72	<b>-45.97</b>	-46.52	-29.02	-16.95
		30 MHz to 735 MHz	<b>-42.17</b>	-42.20	-42.28	-42.26	-19.02	-23.15
		735 MHz to 745.9 GHz	-32.11	-33.67	-33.07	-32.67	-19.02	-13.09
		756.1 MHz to 1 GHz	-33.36	-34.38	-33.50	-33.72	-19.02	-14.34
		1 GHz to 10 GHz	-24.00	-23.74	-23.54	-24.13	-19.02	-4.52
	1	9 kHz to 150 kHz	-57.53	-57.55	-57.59	-57.67	-39.02	-18.51
		150 kHz to 30 MHz	-48.37	-47.42	-47.17	-48.44	-29.02	-18.15
		30 MHz to 735 MHz	-43.04	-42.93	-42.88	-43.11	-19.02	-23.86
		735 MHz to 745.9 GHz	-34.97	-34.47	-33.36	-32.75	-19.02	-13.73
		756.1 MHz to 1 GHz	-35.18	-34.97	-34.91	-32.73	-19.02	-13.71
		1 GHz to 10 GHz	-23.27	-23.59	-23.14	-23.42	-19.02	-4.12

FCC ID: A3LRF4442D-13A		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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	2	9 kHz to 150 kHz	-57.57	-57.68	-57.45	-57.06	-39.02	-18.04
		150 kHz to 30 MHz	-47.27	-47.99	-46.97	-47.50	-29.02	-17.95
		30 MHz to 735 MHz	-42.34	-42.48	-42.60	-42.47	-19.02	-23.32
		735 MHz to 745.9 GHz	-32.13	-34.53	-32.40	-33.20	-19.02	-13.11
		756.1 MHz to 1 GHz	-33.28	-34.83	-34.27	-32.81	-19.02	-13.79
		1 GHz to 10 GHz	-24.04	-23.71	-23.76	-23.95	-19.02	-4.69
	3	9 kHz to 150 kHz	-57.17	-57.64	-57.50	-57.15	-39.02	-18.13
		150 kHz to 30 MHz	-47.00	-47.87	-46.95	-47.66	-29.02	-17.93
		30 MHz to 735 MHz	-42.49	-42.35	-42.70	-42.75	-19.02	-23.33
		735 MHz to 745.9 GHz	-29.58	-32.08	-34.23	-33.68	-19.02	-10.56
		756.1 MHz to 1 GHz	-33.32	-34.30	-34.28	-34.25	-19.02	-14.30
		1 GHz to 10 GHz	-23.17	-23.45	-23.38	-22.96	-19.02	-3.94
High	0	9 kHz to 150 kHz	-57.31	-57.37	-56.99	-56.78	-39.02	-17.76
		150 kHz to 30 MHz	-47.50	-47.20	-47.68	-46.77	-29.02	-17.75
		30 MHz to 735 MHz	-42.30	-42.24	-42.39	-42.52	-19.02	-23.22
		735 MHz to 745.9 GHz	-33.17	-37.69	-38.15	-36.73	-19.02	-14.15
		756.1 MHz to 1 GHz	<b>-22.47</b>	-24.01	-23.99	-23.39	-19.02	-3.45
		1 GHz to 10 GHz	-24.03	-24.13	-23.86	-24.12	-19.02	-4.84
	1	9 kHz to 150 kHz	-57.61	-57.72	-57.91	-57.40	-39.02	-18.38
		150 kHz to 30 MHz	-47.37	-47.74	-46.88	-48.02	-29.02	-17.86
		30 MHz to 735 MHz	-42.93	-42.88	-43.10	-42.89	-19.02	-23.86
		735 MHz to 745.9 GHz	-33.13	-38.26	-38.95	-37.63	-19.02	-14.11
		756.1 MHz to 1 GHz	-25.24	-25.67	-25.26	-23.23	-19.02	-4.21
		1 GHz to 10 GHz	-23.72	-23.70	-23.54	-23.54	-19.02	-4.52
	2	9 kHz to 150 kHz	-57.58	-57.71	-57.17	-57.48	-39.02	-18.15
		150 kHz to 30 MHz	-46.42	-47.03	-47.33	-46.82	-29.02	-17.40
		30 MHz to 735 MHz	-42.21	-42.18	-42.52	-42.47	-19.02	-23.16
		735 MHz to 745.9 GHz	-37.91	-36.41	-38.60	-36.35	-19.02	-17.33
		756.1 MHz to 1 GHz	-23.76	-24.11	-23.59	-23.80	-19.02	-4.57
		1 GHz to 10 GHz	-23.71	-23.91	-23.80	-23.94	-19.02	-4.69
	3	9 kHz to 150 kHz	-57.93	-57.67	-57.12	-57.13	-39.02	-18.10
		150 kHz to 30 MHz	-46.19	-46.64	-48.12	-47.11	-29.02	-17.17
		30 MHz to 735 MHz	-42.63	-42.65	-42.59	-42.72	-19.02	-23.57
		735 MHz to 745.9 GHz	-33.72	-36.75	-38.11	-37.68	-19.02	-14.70
		756.1 MHz to 1 GHz	-23.54	-24.02	-23.85	-23.47	-19.02	-4.45
		1 GHz to 10 GHz	-23.20	-23.10	-23.14	-23.01	-19.02	-3.99

**Table 7-95. Conducted Spurious Emission Summary Data (LTE\_B13\_5M\_1C)**

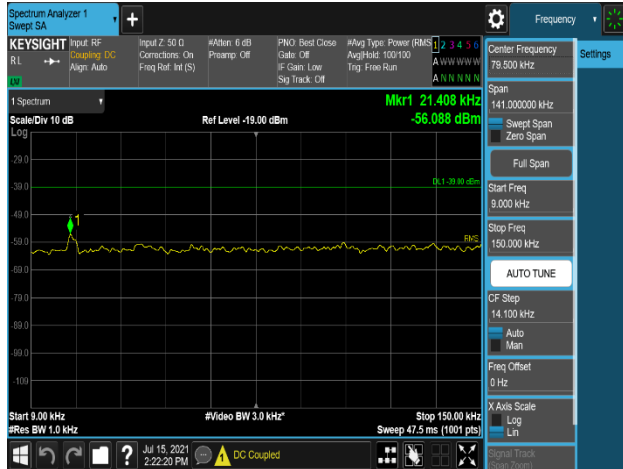
FCC ID: A3LRF4442D-13A		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 8K21070502R3.A3L	Test Dates: 07/09/2021 - 08/26/2021	EUT Type: RRU (RF4442d)		Page 148 of 225

Channel	Port	Measurement Range	Level (dBm)				Limit (dBm)	Worst Margin (dB)
			QPSK	16QAM	64QAM	256QAM		
Middle	0	9 kHz to 150 kHz	-57.07	-56.88	<b>-56.47</b>	-57.75	-39.02	-17.45
		150 kHz to 30 MHz	-47.14	<b>-46.72</b>	-47.64	-47.72	-29.02	-17.70
		30 MHz to 735 MHz	-42.32	<b>-41.93</b>	-42.36	-42.67	-19.02	-22.91
		735 MHz to 745.9 GHz	-27.99	-27.82	-28.89	-28.12	-19.02	-8.80
		756.1 MHz to 1 GHz	-26.92	-27.89	-27.10	-27.48	-19.02	-7.90
		1 GHz to 10 GHz	-24.01	-23.87	-23.81	-23.88	-19.02	-4.79
	1	9 kHz to 150 kHz	-57.84	-58.22	-57.93	-57.55	-39.02	-18.53
		150 kHz to 30 MHz	-47.69	-47.10	-48.04	-47.93	-29.02	-18.08
		30 MHz to 735 MHz	-42.96	-43.02	-42.85	-43.11	-19.02	-23.83
		735 MHz to 745.9 GHz	-29.19	-28.83	-29.23	-29.69	-19.02	-9.81
		756.1 MHz to 1 GHz	-28.26	-26.95	-28.33	-28.35	-19.02	-7.93
		1 GHz to 10 GHz	-23.85	-23.36	-23.46	<b>-22.93</b>	-19.02	-3.91
	2	9 kHz to 150 kHz	-57.70	-57.37	-57.88	-57.47	-39.02	-18.35
		150 kHz to 30 MHz	-47.92	-47.68	-47.25	-46.96	-29.02	-17.94
		30 MHz to 735 MHz	-42.01	-42.28	-42.48	-42.48	-19.02	-22.99
		735 MHz to 745.9 GHz	-28.28	-27.45	-28.46	-28.10	-19.02	-8.43
		756.1 MHz to 1 GHz	<b>-26.82</b>	-27.26	-28.01	-27.89	-19.02	-7.80
		1 GHz to 10 GHz	-23.18	-23.76	-23.94	-24.13	-19.02	-4.16
	3	9 kHz to 150 kHz	-57.27	-57.26	-57.69	-56.86	-39.02	-17.84
		150 kHz to 30 MHz	-47.54	-46.91	-46.98	-47.64	-29.02	-17.89
		30 MHz to 735 MHz	-42.79	-42.79	-42.42	-42.88	-19.02	-23.40
		735 MHz to 745.9 GHz	-27.64	-27.35	<b>-27.15</b>	-27.17	-19.02	-8.13
		756.1 MHz to 1 GHz	-27.48	-27.41	-27.43	-27.59	-19.02	-8.39
		1 GHz to 10 GHz	-23.35	-23.26	-23.00	-22.97	-19.02	-3.95

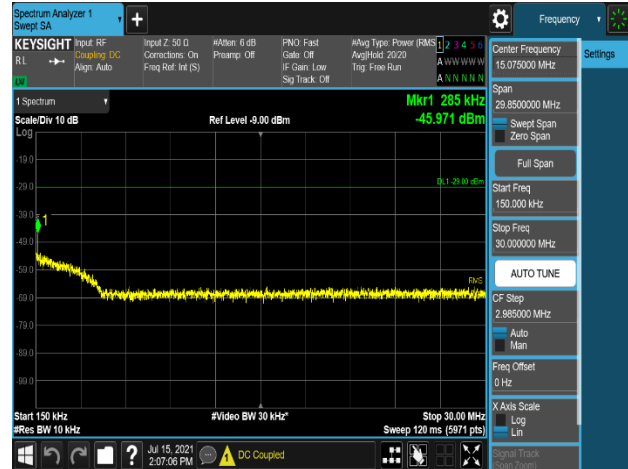
**Table 7-96. Conducted Spurious Emission Summary Data (LTE\_B13\_10M\_1C)**

FCC ID: A3LRF4442D-13A		<b>MEASUREMENT REPORT (CERTIFICATION)</b>		<b>Approved by:</b> Technical Manager
<b>Test Report S/N:</b> 8K21070502R3.A3L	<b>Test Dates:</b> 07/09/2021 - 08/26/2021	<b>EUT Type:</b> RRU (RF4442d)	Page 149 of 225	

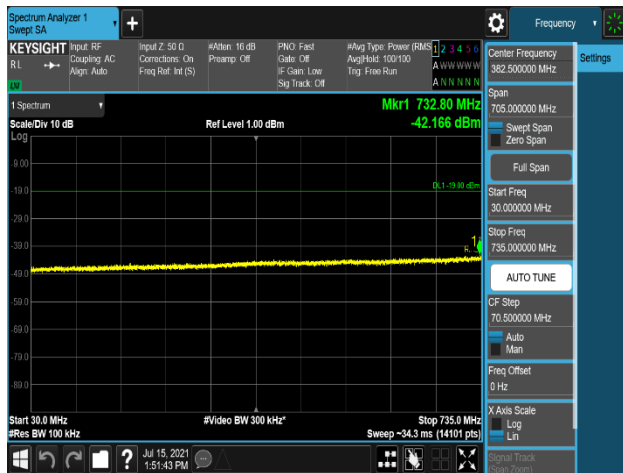




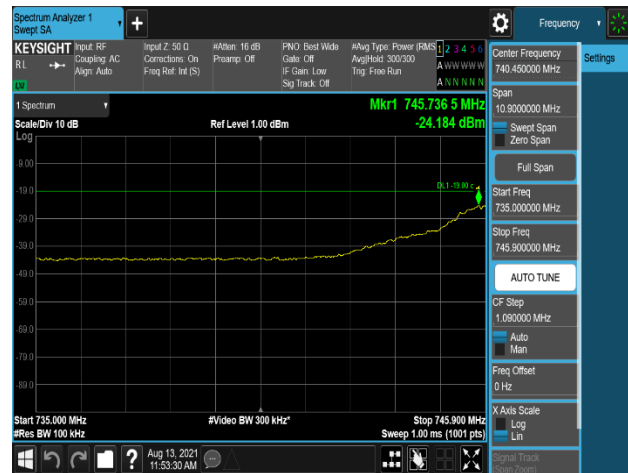
Plot 7-383. Conducted Spurious Emission Plot  
9 kHz to 150 kHz  
(LTE\_B13\_5M\_1C\_256QAM - Mid Channel, Port 0)



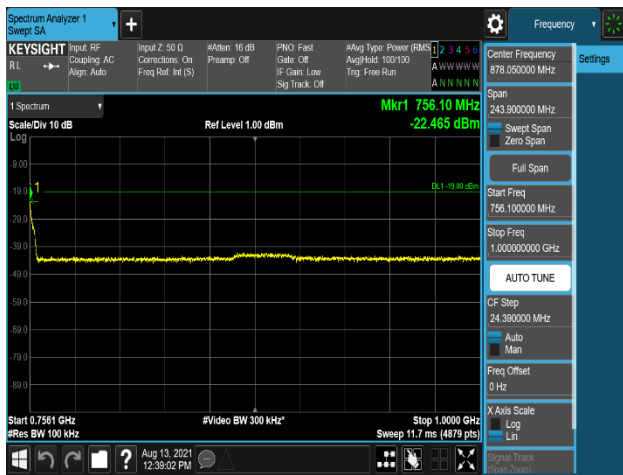
Plot 7-384. Conducted Spurious Emission Plot  
150 kHz to 30 MHz  
(LTE\_B13\_5M\_1C\_64QAM - Mid Channel, Port 0)



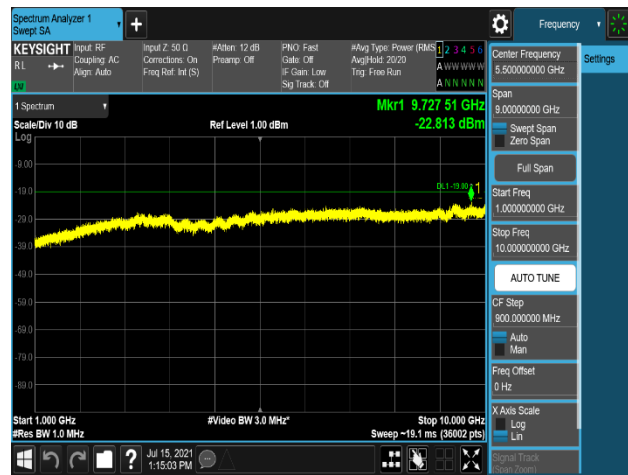
Plot 7-385. Conducted Spurious Emission Plot  
30 MHz to 735 MHz  
(LTE\_B13\_5M\_1C\_QPSK - Mid Channel, Port 0)



Plot 7-386. Conducted Spurious Emission Plot  
735 MHz to 745.9 MHz  
(LTE\_B13\_5M\_1C\_64QAM - Low Channel, Port 0)

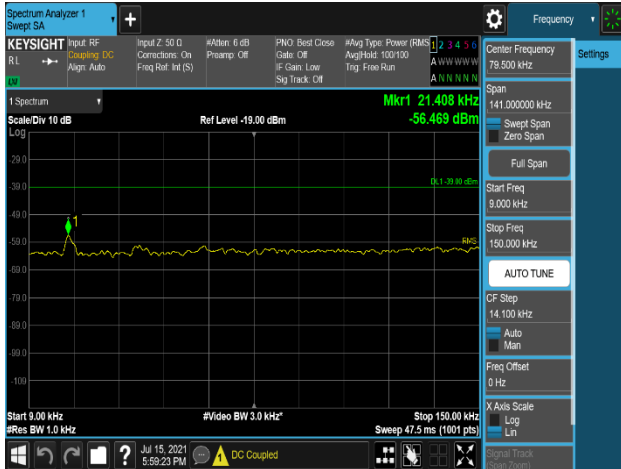


Plot 7-387. Conducted Spurious Emission Plot  
756.1 MHz to 1 GHz  
(LTE\_B13\_5M\_1C\_QPSK - High Channel, Port 0)

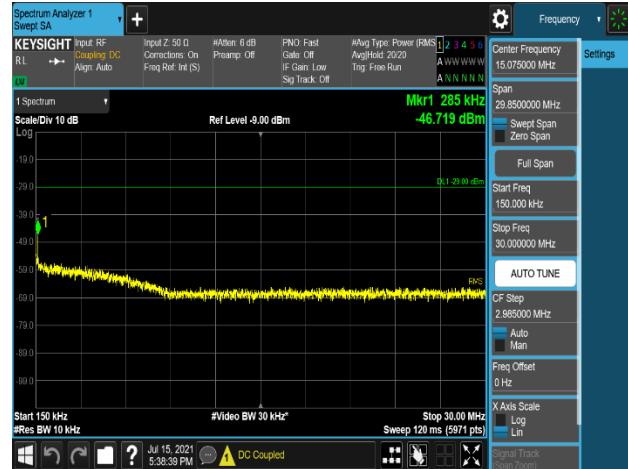


Plot 7-388. Conducted Spurious Emission Plot  
1 GHz to 10 GHz  
(LTE\_B13\_5M\_1C\_64QAM - Low Channel, Port 3)

FCC ID: A3LRF4442D-13A		<b>MEASUREMENT REPORT (CERTIFICATION)</b>		<b>Approved by:</b> Technical Manager
Test Report S/N: 8K21070502R3.A3L	Test Dates: 07/09/2021 - 08/26/2021	EUT Type: RRU (RF4442d)		Page 150 of 225



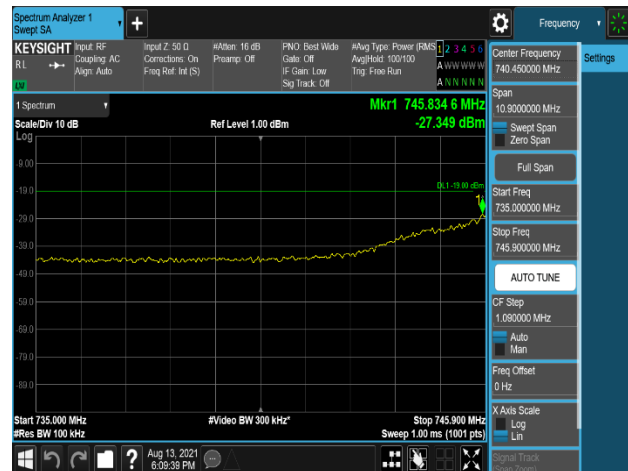
Plot 7-389. Conducted Spurious Emission Plot  
9 kHz to 150 kHz  
(LTE\_B13\_10M\_1C\_64QAM - Port 0)



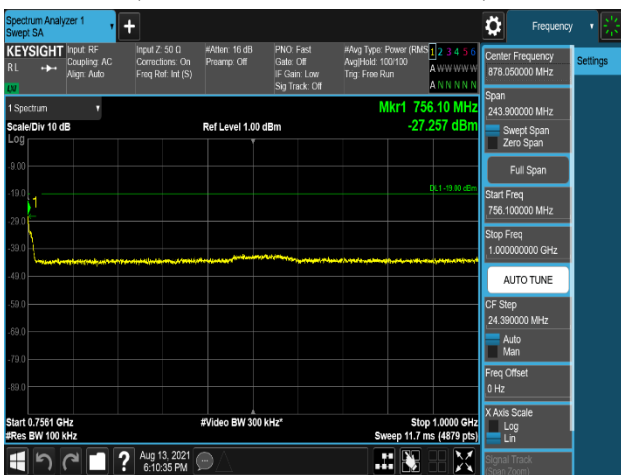
Plot 7-390. Conducted Spurious Emission Plot  
150 kHz to 30 MHz  
(LTE\_B13\_10M\_1C\_16QAM - Port 0)



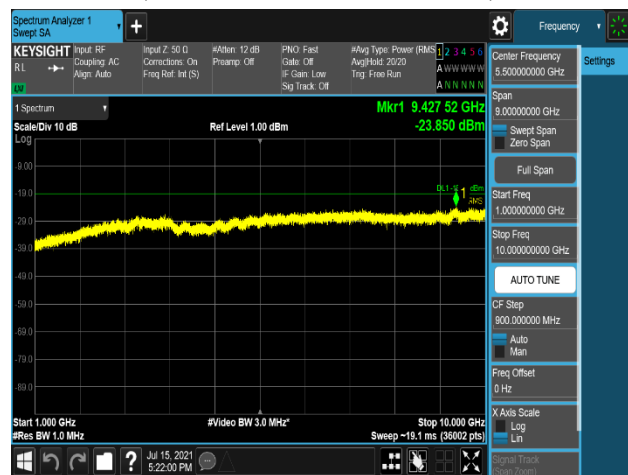
Plot 7-391. Conducted Spurious Emission Plot  
30 MHz to 735 MHz  
(LTE\_B13\_10M\_1C\_16QAM - Port 2)



Plot 7-392. Conducted Spurious Emission Plot  
735 MHz to 745.9 MHz  
(LTE\_B13\_10M\_1C\_16QAM - Port 3)



Plot 7-393. Conducted Spurious Emission Plot  
756.1 MHz to 1 GHz  
(LTE\_B13\_10M\_1C\_16QAM - Port 2)




Plot 7-394. Conducted Spurious Emission Plot  
1 GHz to 10 GHz  
(LTE\_B13\_10M\_1C\_QPSK - Port 1)


FCC ID: A3LRF4442D-13A		<b>MEASUREMENT REPORT (CERTIFICATION)</b>		<b>Approved by:</b> Technical Manager
Test Report S/N: 8K21070502R3.A3L	Test Dates: 07/09/2021 - 08/26/2021	EUT Type: RRU (RF4442d)		Page 151 of 225

Channel	Port	Measurement Range	Level (dBm)				Limit (dBm)	Worst Margin (dB)
			QPSK	16QAM	64QAM	256QAM		
Middle	0	9 kHz to 150 kHz	-58.84	-58.68	-58.36	-58.53	-39.02	-19.34
		150 kHz to 30 MHz	-47.70	-47.13	-47.66	-48.05	-29.02	-18.11
		30 MHz to 735 MHz	-42.31	-42.34	-42.21	-42.51	-19.02	-23.19
		735 MHz to 745.9 GHz	-28.63	<b>-26.43</b>	-26.84	-27.79	-19.02	-7.41
		756.1 MHz to 1 GHz	-28.86	-28.66	-26.84	<b>-26.54</b>	-19.02	-7.52
		1 GHz to 10 GHz	-24.13	-24.10	-24.25	-23.96	-19.02	-4.94
	1	9 kHz to 150 kHz	-58.90	-58.90	-59.30	-58.60	-39.02	-19.58
		150 kHz to 30 MHz	-47.54	-46.95	-48.03	-48.51	-29.02	-17.93
		30 MHz to 735 MHz	-42.79	-42.91	-43.03	-43.13	-19.02	-23.77
		735 MHz to 745.9 GHz	-29.77	-29.32	-28.15	-29.41	-19.02	-9.13
		756.1 MHz to 1 GHz	-28.51	-28.82	-26.93	-27.64	-19.02	-7.91
		1 GHz to 10 GHz	-23.29	-23.81	-23.31	-23.59	-19.02	-4.27
	2	9 kHz to 150 kHz	-58.85	-58.58	-58.99	-58.84	-39.02	-19.56
		150 kHz to 30 MHz	-47.90	-47.66	<b>-46.74</b>	-47.33	-29.02	-17.72
		30 MHz to 735 MHz	-42.18	-42.11	<b>-42.09</b>	-42.37	-19.02	-23.07
		735 MHz to 745.9 GHz	-29.29	-27.17	-27.63	-26.88	-19.02	-7.86
		756.1 MHz to 1 GHz	-27.83	-26.98	-27.25	-27.04	-19.02	-7.96
		1 GHz to 10 GHz	-24.12	-24.11	-23.94	-23.85	-19.02	-4.83
	3	9 kHz to 150 kHz	-58.74	<b>-58.18</b>	-58.75	-59.25	-39.02	-19.16
		150 kHz to 30 MHz	-47.07	-47.65	-48.83	-47.62	-29.02	-18.05
		30 MHz to 735 MHz	-42.72	-42.90	-42.65	-42.63	-19.02	-23.61
		735 MHz to 745.9 GHz	-28.28	-27.07	-27.86	-27.01	-19.02	-7.99
		756.1 MHz to 1 GHz	-28.68	-27.23	-27.84	-26.90	-19.02	-7.88
		1 GHz to 10 GHz	-22.96	<b>-22.91</b>	-23.33	-23.57	-19.02	-3.89

**Table 7-97. Conducted Spurious Emission Summary Data (LTE\_B13\_5M+5M\_2C)**



FCC ID: A3LRF4442D-13A		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 8K21070502R3.A3L	Test Dates: 07/09/2021 - 08/26/2021	EUT Type: RRU (RF4442d)		Page 152 of 225

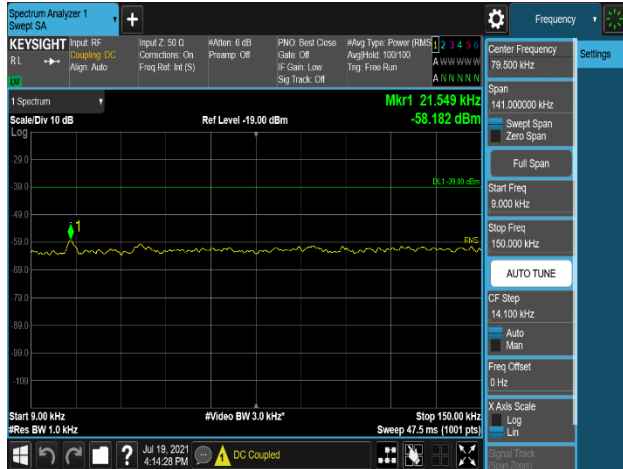
Channel	Port	Measurement Range	Level (dBm)	Limit (dBm)	Worst Margin (dB)
Low	0	9 kHz to 150 kHz	-56.62	-39.02	-17.60
		150 kHz to 30 MHz	-47.86	-29.02	-18.84
		30 MHz to 735 MHz	-42.62	-19.02	-23.60
		735 MHz to 745.9 GHz	-22.56	-19.02	-3.54
		756.1 MHz to 1 GHz	-38.29	-19.02	-19.27
		1 GHz to 10 GHz	-24.40	-19.02	-5.38
	1	9 kHz to 150 kHz	-57.42	-39.02	-18.40
		150 kHz to 30 MHz	-47.23	-29.02	-18.21
		30 MHz to 735 MHz	-43.18	-19.02	-24.16
		735 MHz to 745.9 GHz	-24.14	-19.02	-5.12
		756.1 MHz to 1 GHz	-37.68	-19.02	-18.66
		1 GHz to 10 GHz	-23.74	-19.02	-4.72
	2	9 kHz to 150 kHz	<b>-56.50</b>	-39.02	-17.48
		150 kHz to 30 MHz	-46.85	-29.02	-17.83
		30 MHz to 735 MHz	-42.41	-19.02	-23.39
		735 MHz to 745.9 GHz	-22.33	-19.02	-3.31
		756.1 MHz to 1 GHz	-38.71	-19.02	-19.69
		1 GHz to 10 GHz	-24.27	-19.02	-5.25
	3	9 kHz to 150 kHz	-56.61	-39.02	-17.59
		150 kHz to 30 MHz	-46.59	-29.02	-17.57
		30 MHz to 735 MHz	-42.45	-19.02	-23.43
		735 MHz to 745.9 GHz	<b>-21.78</b>	-19.02	-2.76
		756.1 MHz to 1 GHz	-36.08	-19.02	-17.06
		1 GHz to 10 GHz	-23.19	-19.02	-4.17
Middle	0	9 kHz to 150 kHz	-56.67	-39.02	-17.65
		150 kHz to 30 MHz	-46.91	-29.02	-17.89
		30 MHz to 735 MHz	-42.40	-19.02	-23.38
		735 MHz to 745.9 GHz	-31.15	-19.02	-12.13
		756.1 MHz to 1 GHz	-33.83	-19.02	-14.81
		1 GHz to 10 GHz	-24.19	-19.02	-5.17
	1	9 kHz to 150 kHz	-56.72	-39.02	-17.70
		150 kHz to 30 MHz	-47.87	-29.02	-18.85
		30 MHz to 735 MHz	-43.20	-19.02	-24.18
		735 MHz to 745.9 GHz	-33.34	-19.02	-14.32
		756.1 MHz to 1 GHz	-35.74	-19.02	-16.72
		1 GHz to 10 GHz	-23.84	-19.02	-4.82
	2	9 kHz to 150 kHz	-56.73	-39.02	-17.71
		150 kHz to 30 MHz	-47.13	-29.02	-18.11

FCC ID: A3LRF4442D-13A		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 8K21070502R3.A3L	Test Dates: 07/09/2021 - 08/26/2021	EUT Type: RRU (RF4442d)	Page 153 of 225	

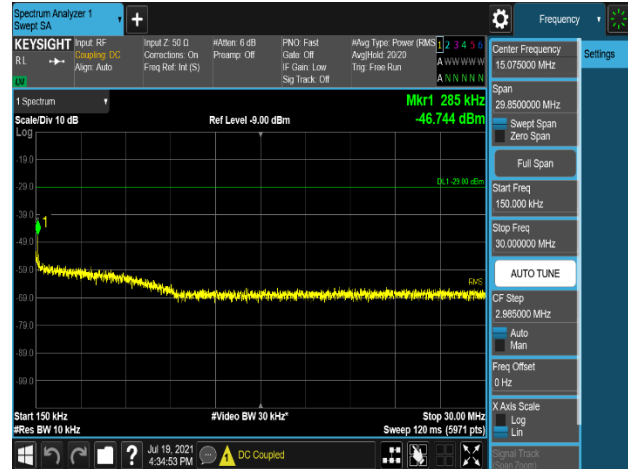
		30 MHz to 735 MHz	-42.54	-19.02	-23.52	
		735 MHz to 745.9 GHz	-28.34	-19.02	-9.32	
		756.1 MHz to 1 GHz	-34.69	-19.02	-15.67	
		1 GHz to 10 GHz	-23.42	-19.02	-4.40	
	3	9 kHz to 150 kHz	-56.62	-39.02	-17.60	
			150 kHz to 30 MHz	<b>-46.31</b>	-29.02	-17.29
		30 MHz to 735 MHz	-42.80	-19.02	-23.78	
		735 MHz to 745.9 GHz	-30.70	-19.02	-11.68	
		756.1 MHz to 1 GHz	-34.40	-19.02	-15.38	
		1 GHz to 10 GHz	-23.30	-19.02	-4.28	
	High	0	9 kHz to 150 kHz	-56.57	-39.02	-17.55
			150 kHz to 30 MHz	-46.41	-29.02	-17.39
			30 MHz to 735 MHz	<b>-42.30</b>	-19.02	-23.28
			735 MHz to 745.9 GHz	-36.42	-19.02	-17.40
756.1 MHz to 1 GHz			<b>-21.73</b>	-19.02	-2.71	
1 GHz to 10 GHz			-24.33	-19.02	-5.31	
1		9 kHz to 150 kHz	-57.37	-39.02	-18.35	
		150 kHz to 30 MHz	-47.41	-29.02	-18.39	
		30 MHz to 735 MHz	-42.80	-19.02	-23.78	
		735 MHz to 745.9 GHz	-37.21	-19.02	-18.19	
		756.1 MHz to 1 GHz	-24.49	-19.02	-5.47	
		1 GHz to 10 GHz	-23.27	-19.02	-4.25	
2		9 kHz to 150 kHz	-57.24	-39.02	-18.22	
		150 kHz to 30 MHz	-47.06	-29.02	-18.04	
		30 MHz to 735 MHz	-42.46	-19.02	-23.44	
		735 MHz to 745.9 GHz	-35.00	-19.02	-15.98	
		756.1 MHz to 1 GHz	-22.45	-19.02	-3.43	
		1 GHz to 10 GHz	-23.72	-19.02	-4.70	
3		9 kHz to 150 kHz	-56.88	-39.02	-17.86	
		150 kHz to 30 MHz	-46.65	-29.02	-17.63	
		30 MHz to 735 MHz	-42.73	-19.02	-23.71	
		735 MHz to 745.9 GHz	-37.70	-19.02	-18.68	
		756.1 MHz to 1 GHz	-22.68	-19.02	-3.66	
		1 GHz to 10 GHz	<b>-23.09</b>	-19.02	-4.07	

**Table 7-98. Conducted Spurious Emission Summary Data (LTE\_B13\_10M+NB-IoT(IB)\_1C)**

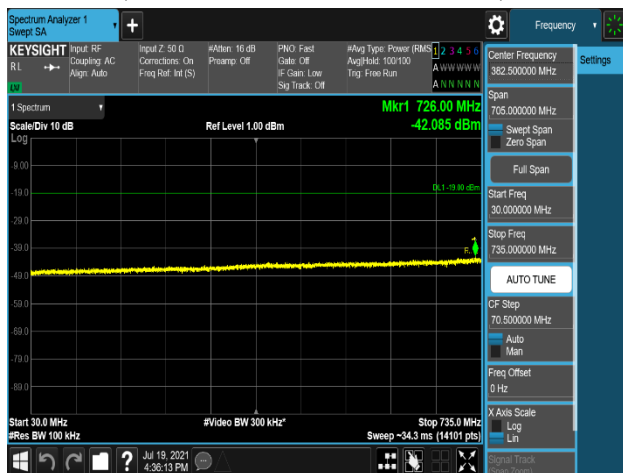
FCC ID: A3LRF4442D-13A		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Plot 7-395. Conducted Spurious Emission Plot  
9 kHz to 150 kHz  
(LTE\_B13\_5M+5M\_2C\_16QAM - Port 3)



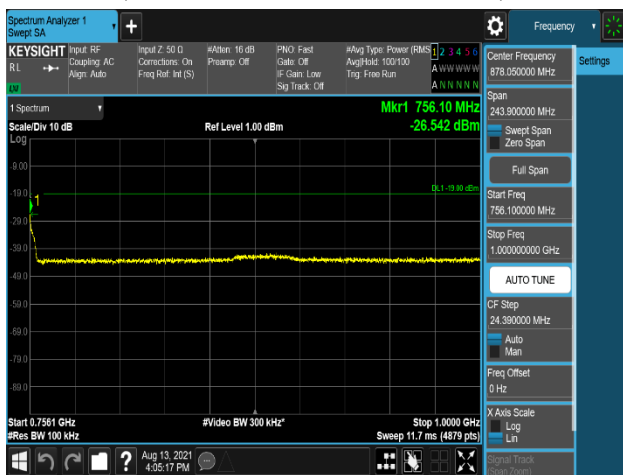
Plot 7-396. Conducted Spurious Emission Plot  
150 kHz to 30 MHz  
(LTE\_B13\_5M+5M\_2C\_64QAM - Port 2)



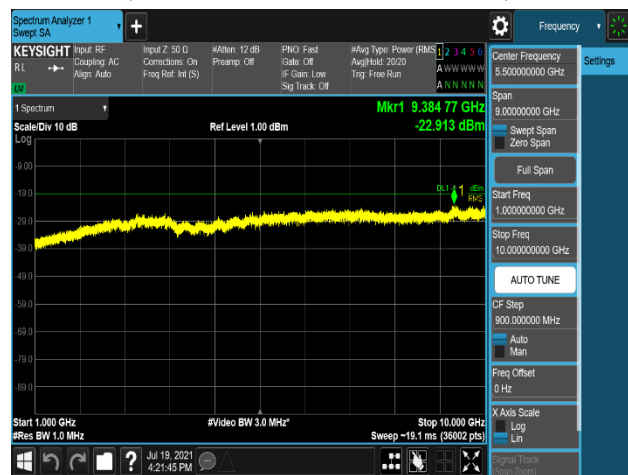
Plot 7-397. Conducted Spurious Emission Plot  
30 MHz to 735 MHz  
(LTE\_B13\_5M+5M\_2C\_64QAM - Port 2)





Plot 7-398. Conducted Spurious Emission Plot  
735 MHz to 745.9 MHz  
(LTE\_B13\_5M+5M\_2C\_16QAM - Port 0)

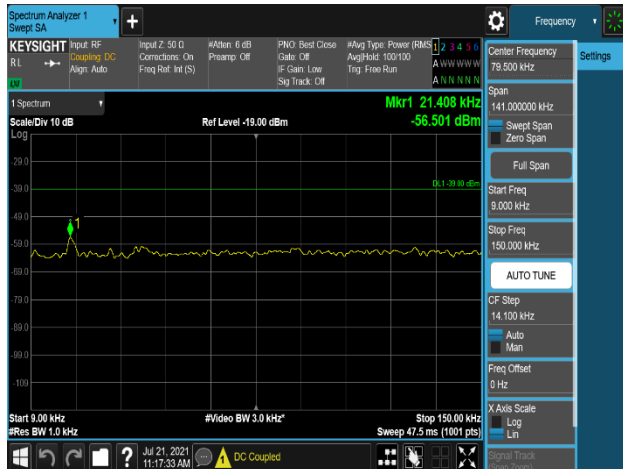


Plot 7-399. Conducted Spurious Emission Plot  
756.1 MHz to 1 GHz  
(LTE\_B13\_5M+5M\_2C\_256QAM - Port 0)

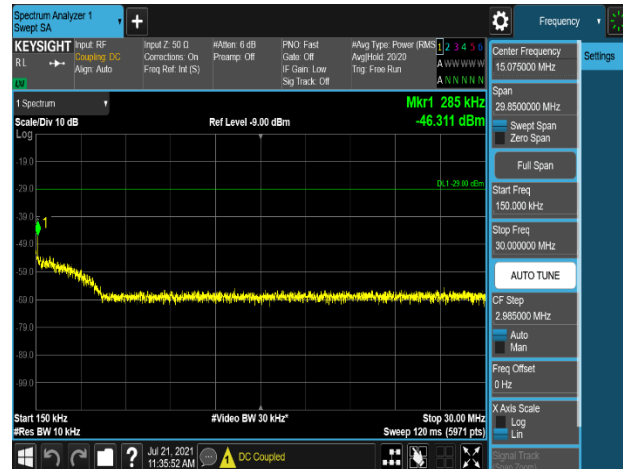


Plot 7-400. Conducted Spurious Emission Plot  
1 GHz to 10 GHz  
(LTE\_B13\_5M+5M\_2C\_16QAM - Port 3)

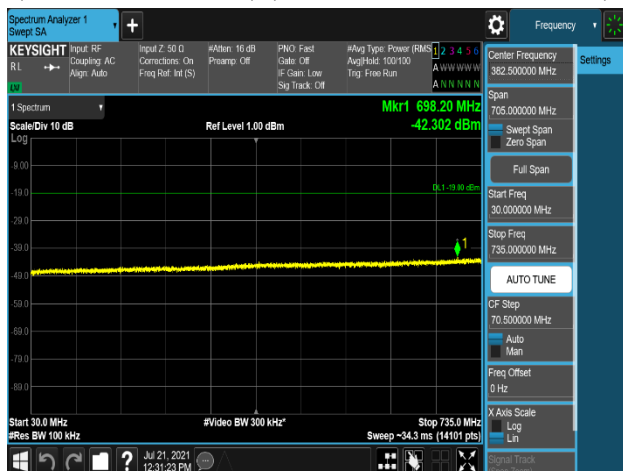
FCC ID: A3LRF4442D-13A		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 8K21070502R3.A3L	Test Dates: 07/09/2021 - 08/26/2021	EUT Type: RRU (RF4442d)		Page 155 of 225



Plot 7-401. Conducted Spurious Emission Plot  
9 kHz to 150 kHz  
(LTE\_B13\_10M+ NB-IoT(IB)\_1C\_QPSK - Low Channel, Port 2)



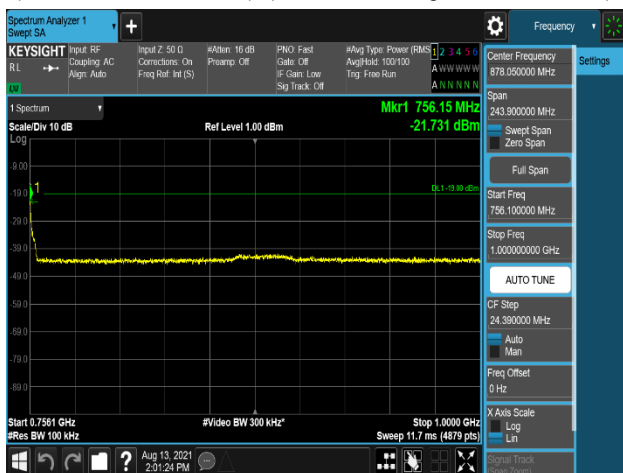
Plot 7-402. Conducted Spurious Emission Plot  
150 kHz to 30 MHz  
(LTE\_B13\_10M+ NB-IoT(IB)\_1C\_QPSK - Mid Channel, Port 3)



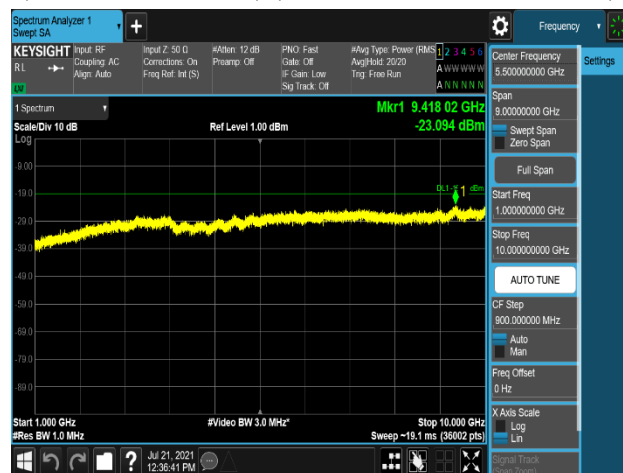
Plot 7-403. Conducted Spurious Emission Plot  
30 MHz to 735 MHz  
(LTE\_B13\_10M+ NB-IoT(IB)\_1C\_QPSK - High Channel, Port 0)



Plot 7-404. Conducted Spurious Emission Plot  
735 MHz to 745.9 MHz  
(LTE\_B13\_10M+ NB-IoT(IB)\_1C\_QPSK - Low Channel, Port 3)



Plot 7-405. Conducted Spurious Emission Plot  
756.1 MHz to 1 GHz  
(LTE\_B13\_10M+ NB-IoT(IB)\_1C\_QPSK - High Channel, Port 0)





Plot 7-406. Conducted Spurious Emission Plot  
1 GHz to 10 GHz  
(LTE\_B13\_10M+ NB-IoT(IB)\_1C\_QPSK - High Channel, Port 3)

FCC ID: A3LRF4442D-13A		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Channel	Port	Measurement Range	Level (dBm)	Limit (dBm)	Worst Margin (dB)
Middle	0	9 kHz to 150 kHz	<b>-56.63</b>	-39.02	-17.61
		150 kHz to 30 MHz	-47.12	-29.02	-18.10
		30 MHz to 735 MHz	<b>-42.30</b>	-19.02	-23.28
		735 MHz to 745.9 GHz	<b>-25.93</b>	-19.02	-6.91
		756.1 MHz to 1 GHz	<b>-27.23</b>	-19.02	-8.21
		1 GHz to 10 GHz	-24.21	-19.02	-5.19
	1	9 kHz to 150 kHz	-57.45	-39.02	-18.43
		150 kHz to 30 MHz	-47.00	-29.02	-17.98
		30 MHz to 735 MHz	-43.13	-19.02	-24.11
		735 MHz to 745.9 GHz	-27.28	-19.02	-8.26
		756.1 MHz to 1 GHz	-28.31	-19.02	-9.29
		1 GHz to 10 GHz	-23.15	-19.02	-4.13
	2	9 kHz to 150 kHz	-57.37	-39.02	-18.35
		150 kHz to 30 MHz	-47.11	-29.02	-18.09
		30 MHz to 735 MHz	-42.51	-19.02	-23.49
		735 MHz to 745.9 GHz	-28.74	-19.02	-9.72
		756.1 MHz to 1 GHz	-27.28	-19.02	-8.26
		1 GHz to 10 GHz	-23.70	-19.02	-4.68
	3	9 kHz to 150 kHz	-57.04	-39.02	-18.02
		150 kHz to 30 MHz	<b>-46.71</b>	-29.02	-17.69
		30 MHz to 735 MHz	-42.88	-19.02	-23.86
		735 MHz to 745.9 GHz	-27.28	-19.02	-8.26
		756.1 MHz to 1 GHz	-27.71	-19.02	-8.69
		1 GHz to 10 GHz	<b>-22.90</b>	-19.02	-3.88



**Table 7-99. Conducted Spurious Emission Summary Data  
(LTE\_B13\_10M+Low\_NB-lot(IB)+High\_NB-lot(IB)\_1C)**

FCC ID: A3LRF4442D-13A		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Channel	Port	Measurement Range	Level (dBm)	Limit (dBm)	Worst Margin (dB)
Middle	0	9 kHz to 150 kHz	-57.05	-39.02	-18.03
		150 kHz to 30 MHz	-47.04	-29.02	-18.02
		30 MHz to 735 MHz	<b>-42.65</b>	-19.02	-23.63
		735 MHz to 745.9 GHz	-28.53	-19.02	-9.51
		756.1 MHz to 1 GHz	-27.90	-19.02	-8.88
		1 GHz to 10 GHz	-24.34	-19.02	-5.32
	1	9 kHz to 150 kHz	<b>-56.72</b>	-39.02	-17.70
		150 kHz to 30 MHz	-47.96	-29.02	-18.94
		30 MHz to 735 MHz	-42.97	-19.02	-23.95
		735 MHz to 745.9 GHz	-29.20	-19.02	-10.18
		756.1 MHz to 1 GHz	-27.69	-19.02	-8.67
		1 GHz to 10 GHz	-23.94	-19.02	-4.92
	2	9 kHz to 150 kHz	-57.30	-39.02	-18.28
		150 kHz to 30 MHz	-48.38	-29.02	-19.36
		30 MHz to 735 MHz	-42.68	-19.02	-23.66
		735 MHz to 745.9 GHz	<b>-26.83</b>	-19.02	-7.81
		756.1 MHz to 1 GHz	-27.69	-19.02	-8.67
		1 GHz to 10 GHz	-23.84	-19.02	-4.82
	3	9 kHz to 150 kHz	-57.10	-39.02	-18.08
		150 kHz to 30 MHz	<b>-46.74</b>	-29.02	-17.72
		30 MHz to 735 MHz	-42.79	-19.02	-23.77
		735 MHz to 745.9 GHz	-26.83	-19.02	-7.81
		756.1 MHz to 1 GHz	<b>-27.28</b>	-19.02	-8.26
		1 GHz to 10 GHz	<b>-23.30</b>	-19.02	-4.28

**Table 7-100. Conducted Spurious Emission Summary Data  
(LTE\_B13\_10M+Low\_NB-lot(IB)+Low\_NB-lot(IB)\_1C)**

FCC ID: A3LRF4442D-13A		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 8K21070502R3.A3L	Test Dates: 07/09/2021 - 08/26/2021	EUT Type: RRU (RF4442d)		Page 158 of 225