

Date: 23.AUG.2018 13:18:06

Date: 23.AUG.2018 13:20:27

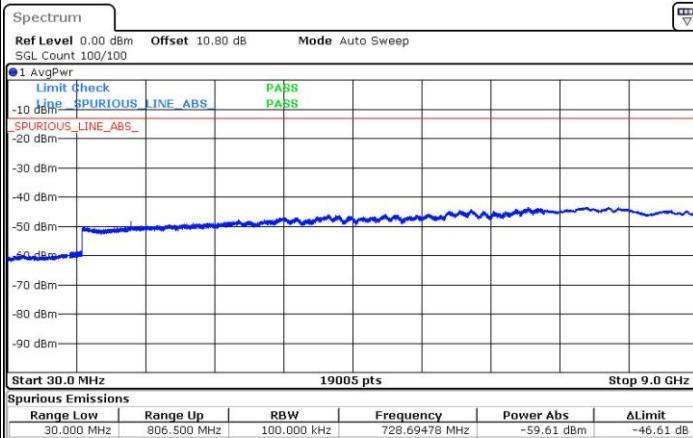
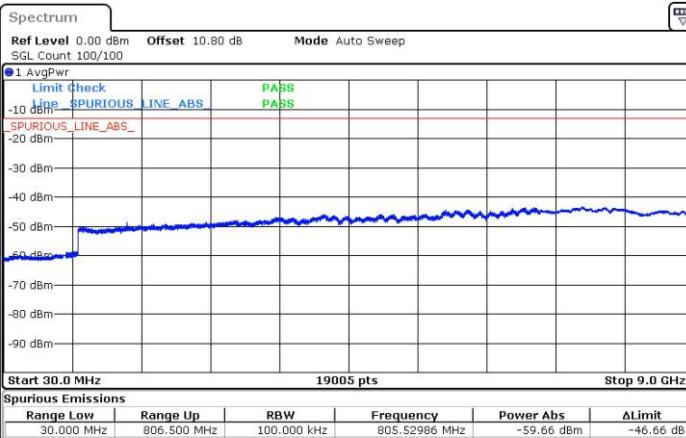


## Conducted Spurious Emission

### LTE Band 26 / 1.4MHz

#### Lowest Channel / QPSK

#### Lowest Channel / 16QAM

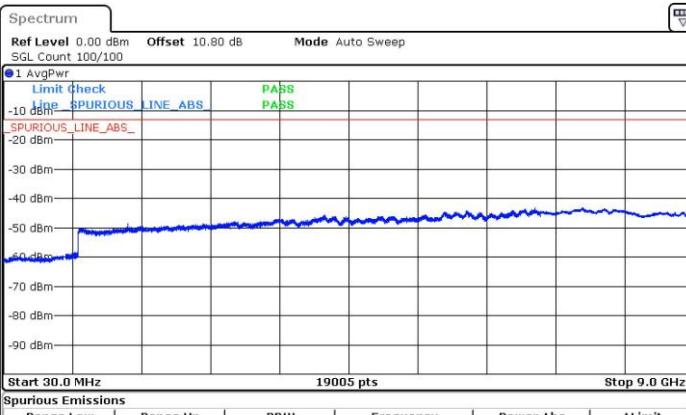


Date: 23 AUG 2018 15:01:14

Date: 23 AUG 2018 15:02:16

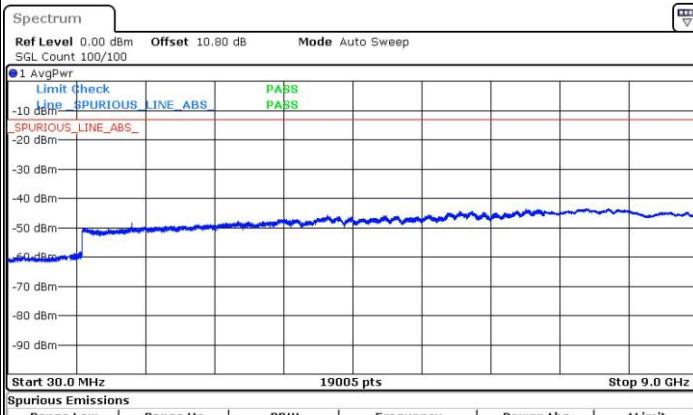
#### Middle Channel / QPSK

#### Middle Channel / 16QAM



Date: 23 AUG 2018 15:04:03

Date: 23 AUG 2018 15:05:04

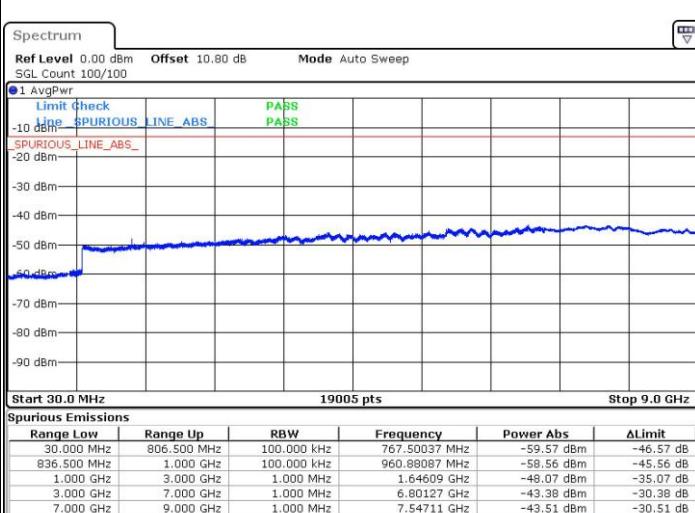
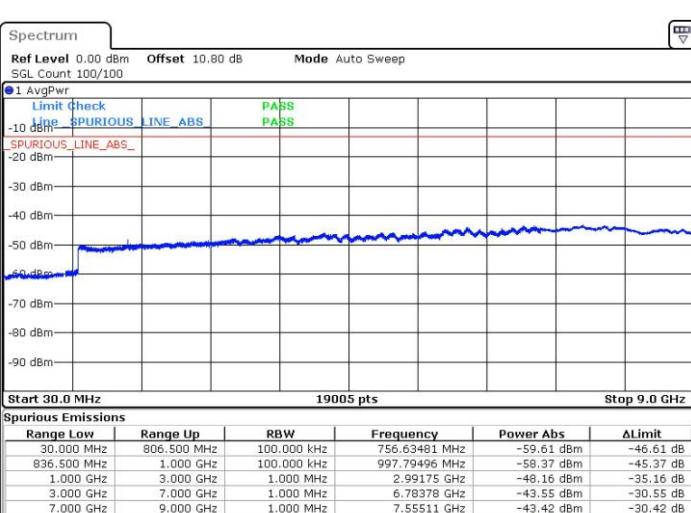




## LTE Band 26 / 1.4MHz

## Highest Channel / QPSK

## Highest Channel / 16QAM



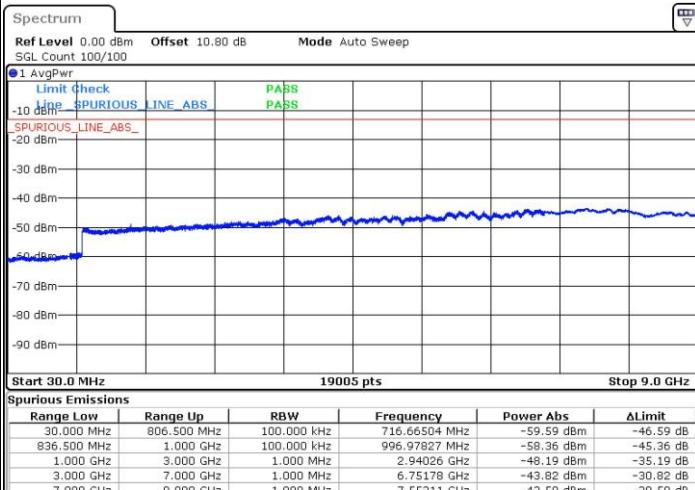
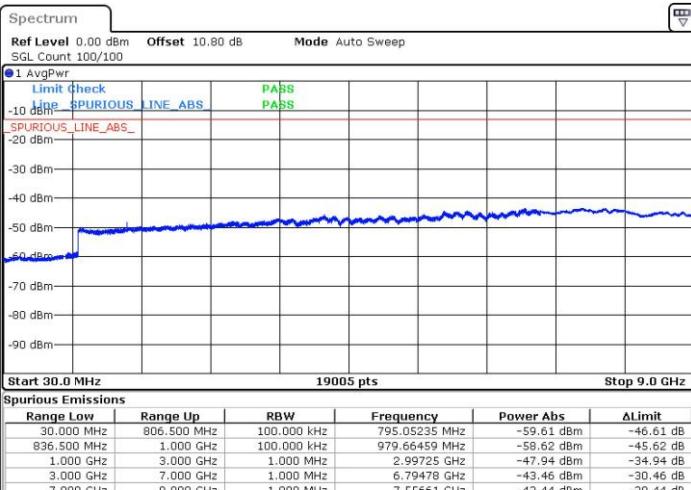
Date: 23.AUG.2018 15:06:52

Date: 23.AUG.2018 15:07:53

## LTE Band 26 / 3MHz

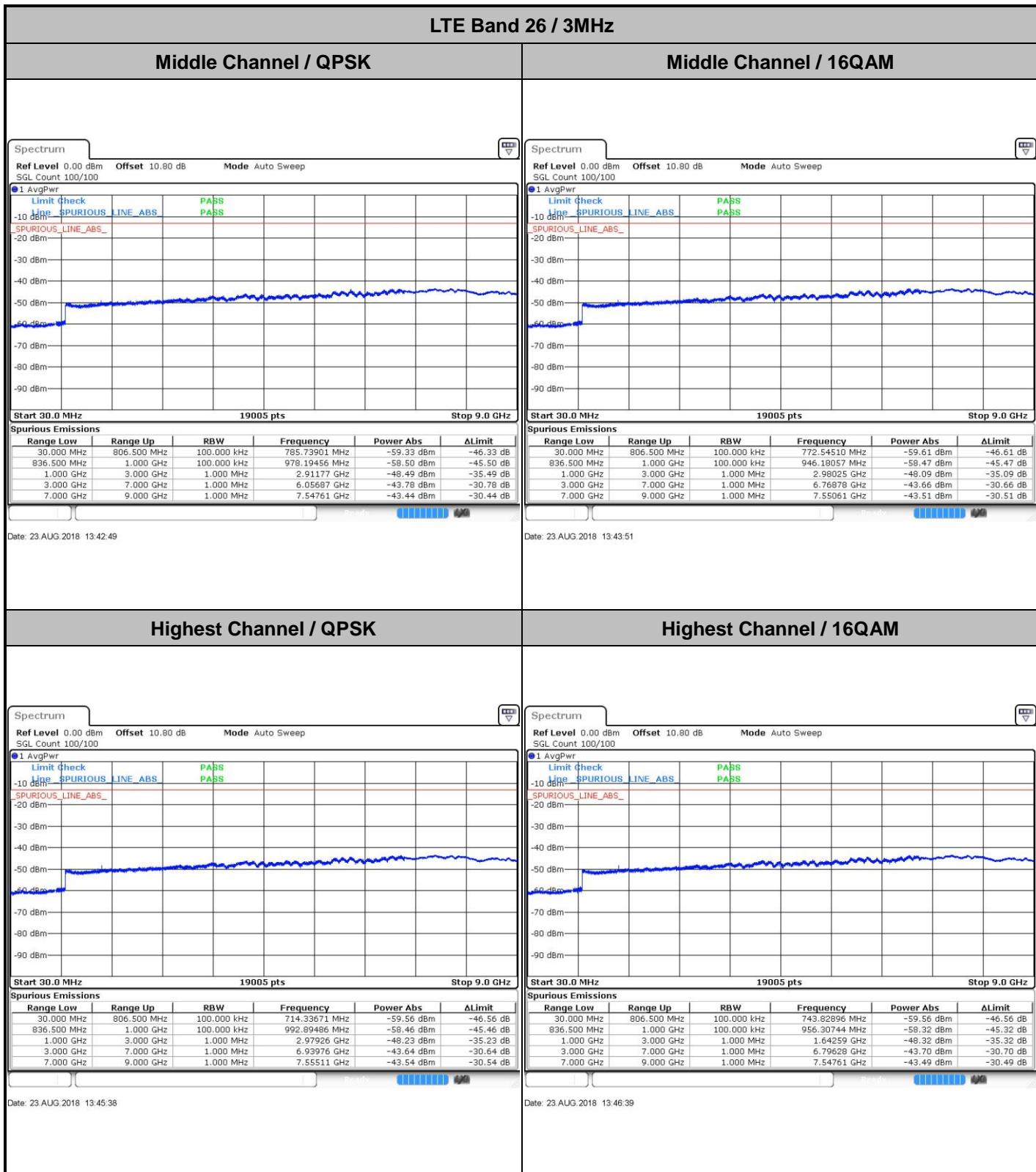
## Lowest Channel / QPSK

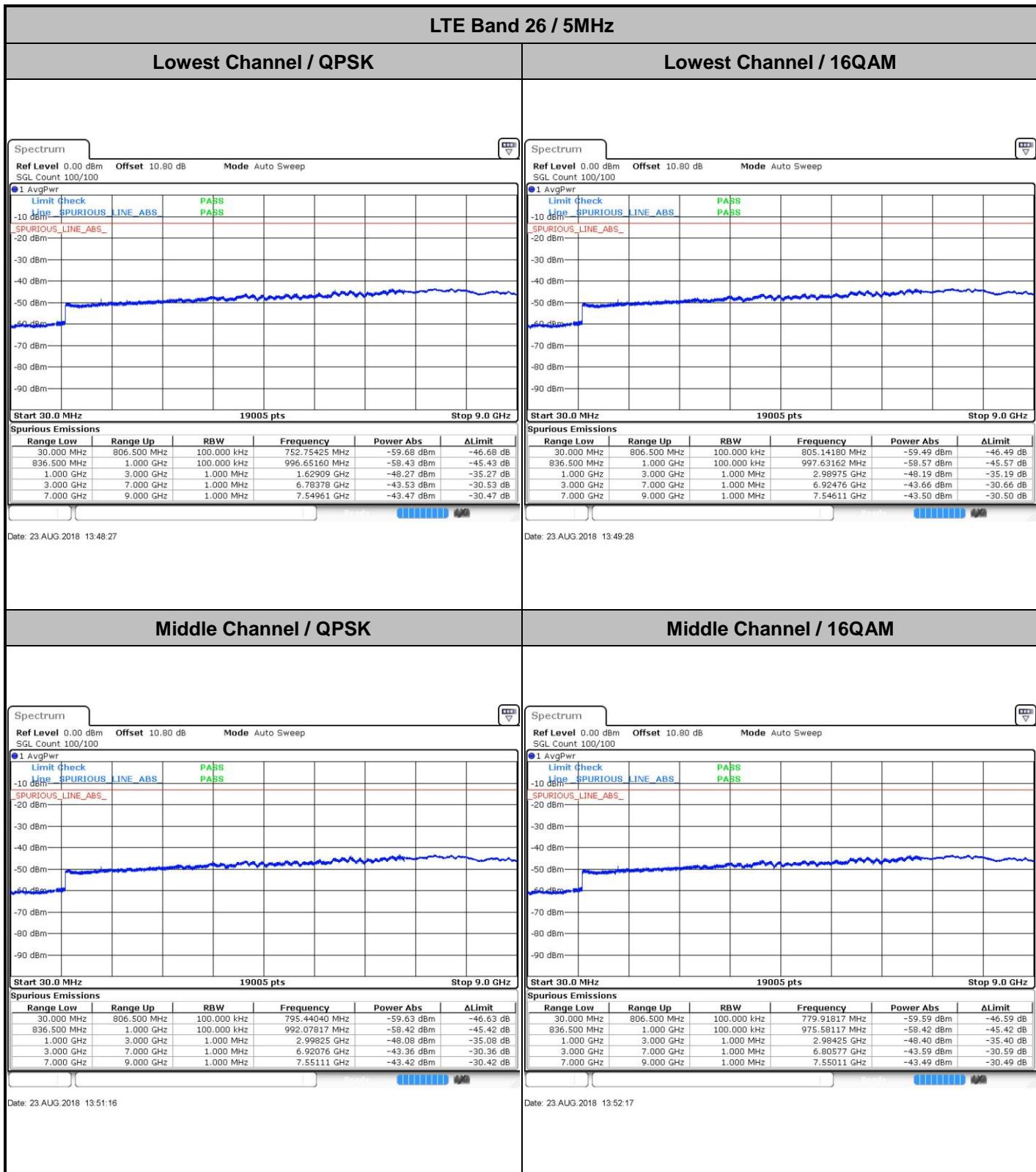
## Lowest Channel / 16QAM



Date: 23.AUG.2018 13:39:46

Date: 23.AUG.2018 13:40:48



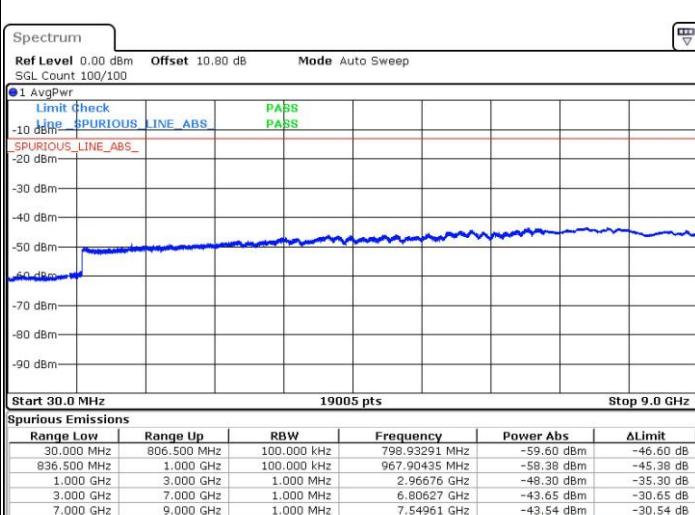
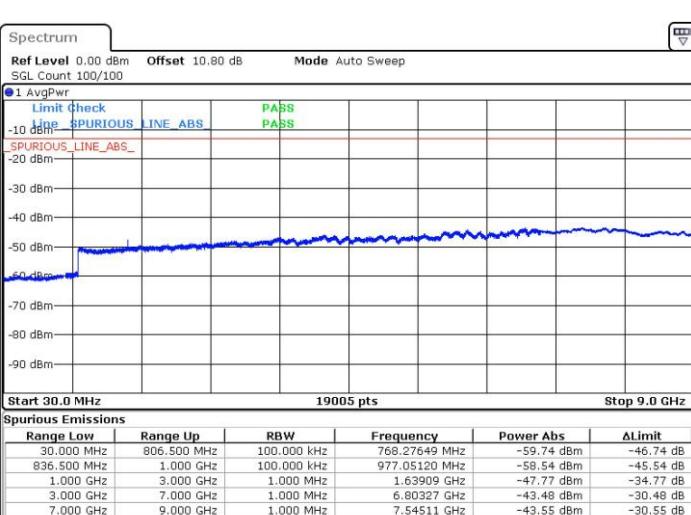




## LTE Band 26 / 5MHz

## Highest Channel / QPSK

## Highest Channel / 16QAM



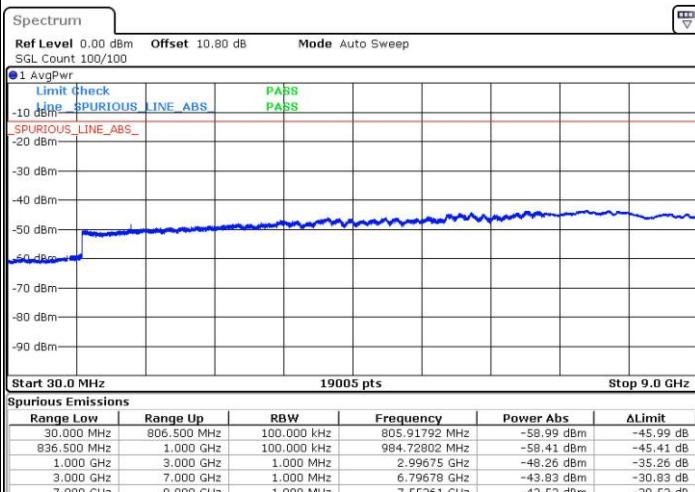
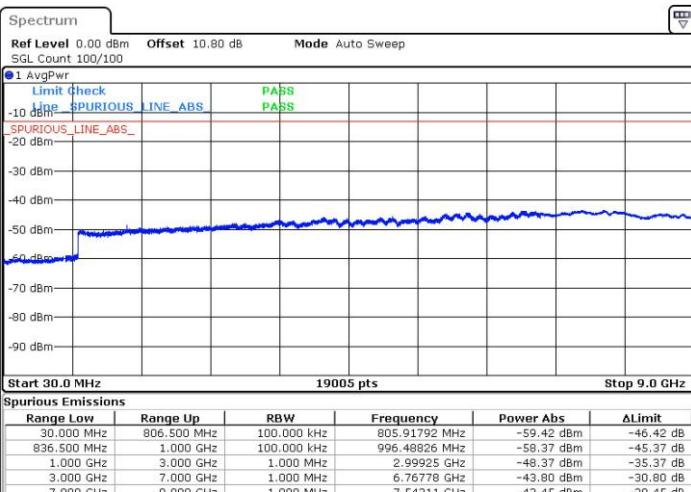
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Date: 23.AUG.2018 13:55:06

## LTE Band 26 / 10MHz

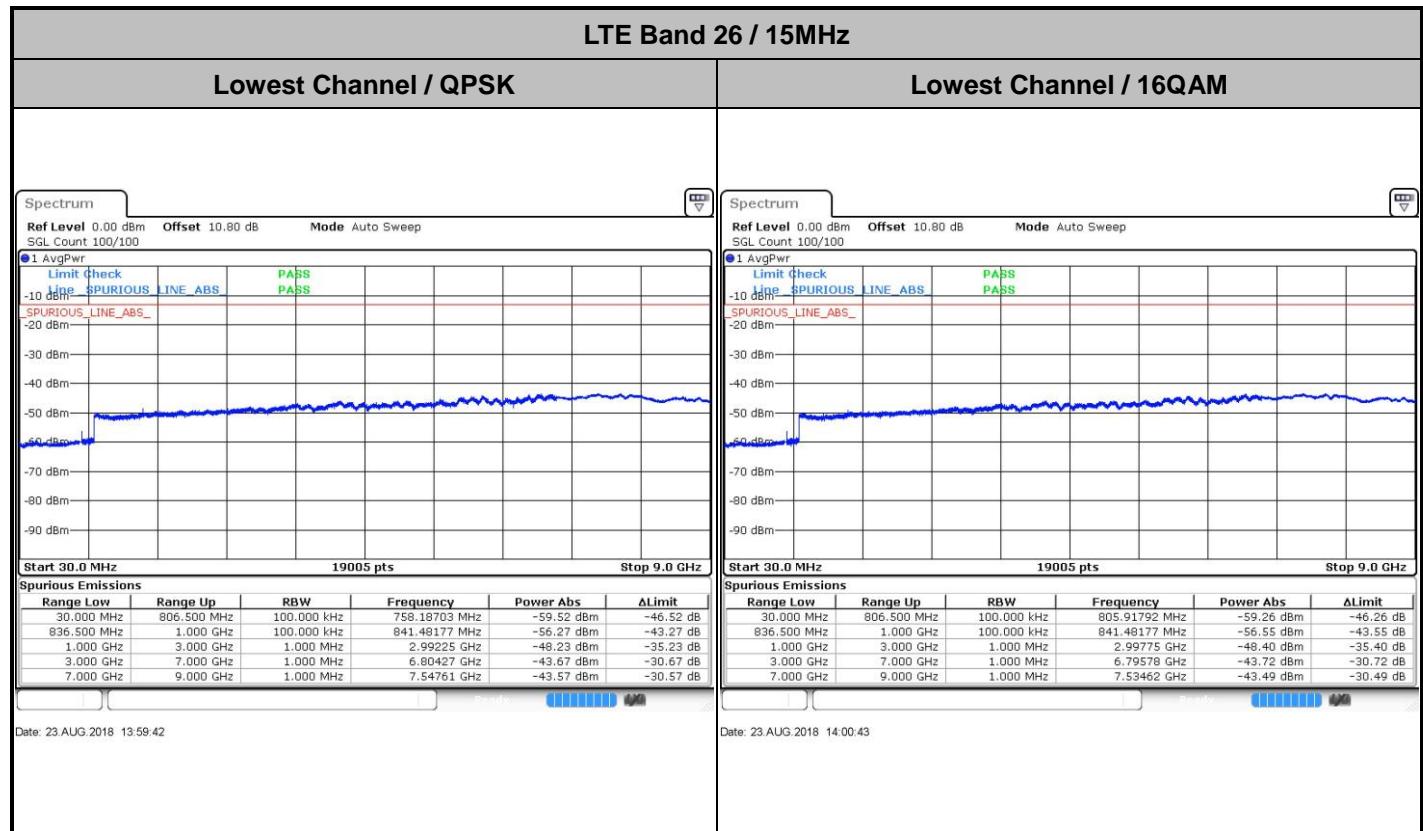
## Middle Channel / QPSK

## Middle Channel / 16QAM



Date: 23.AUG.2018 13:56:54

Date: 23.AUG.2018 13:57:54

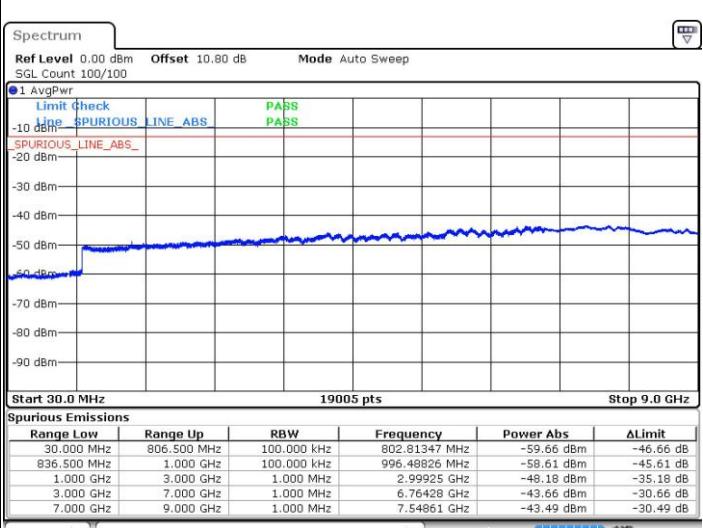
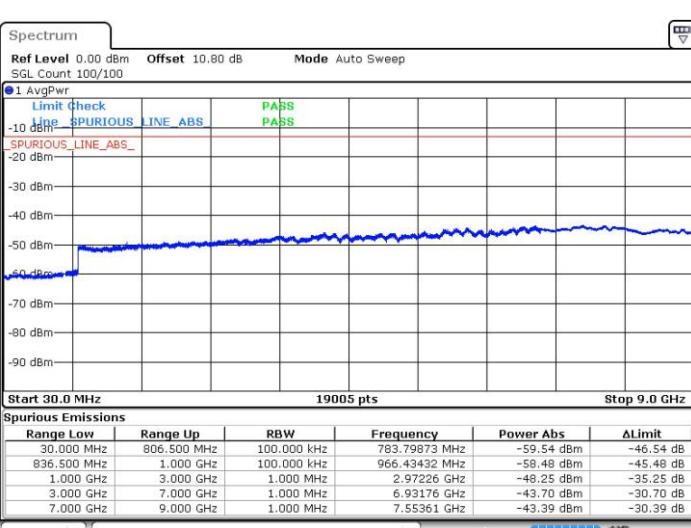




## LTE Band 26 / 1.4MHz

## Lowest Channel / 64QAM

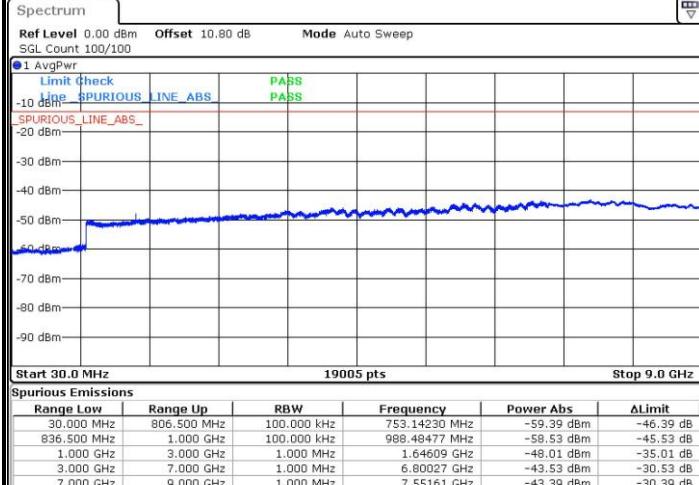
## Middle Channel / 64QAM



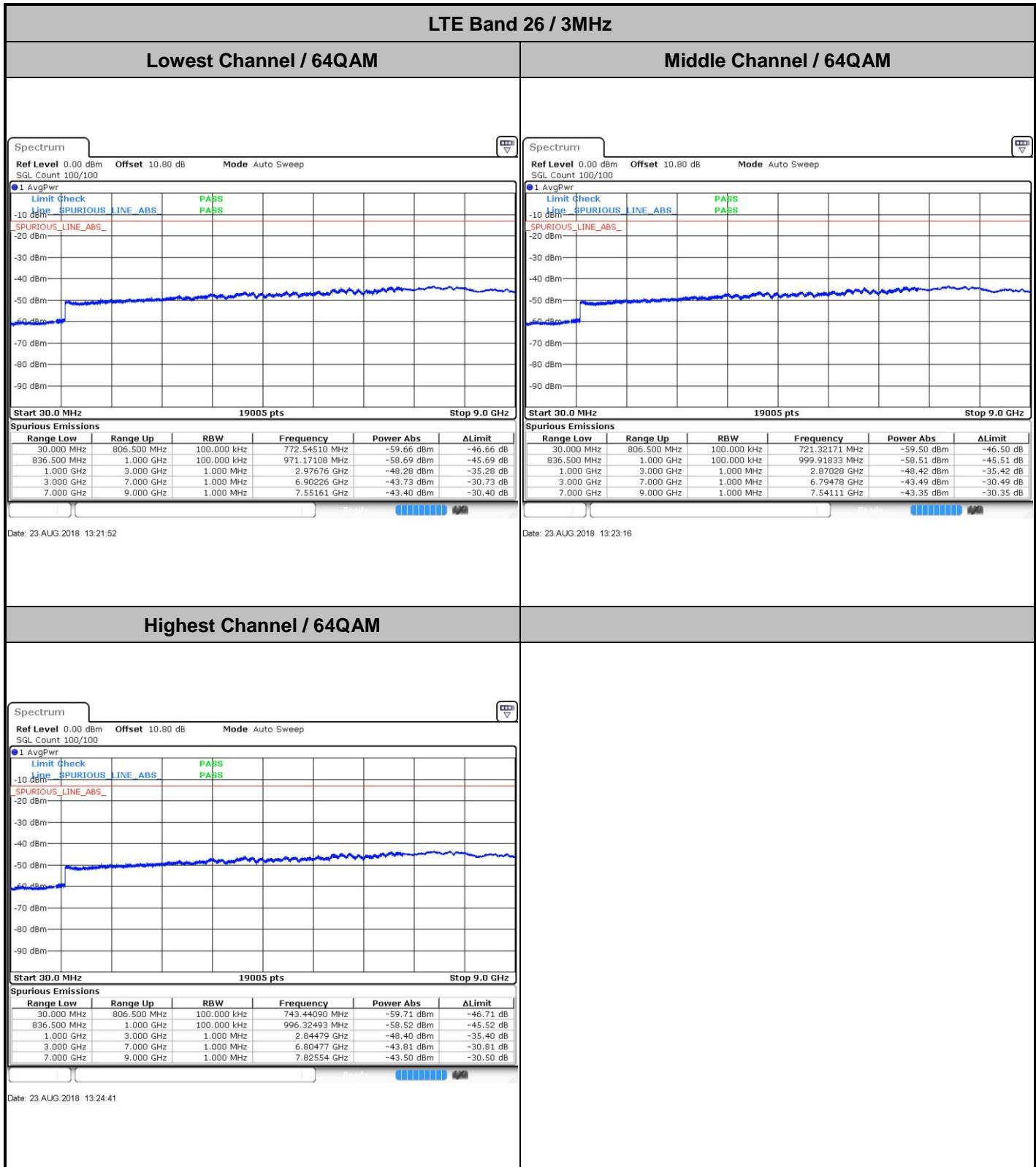
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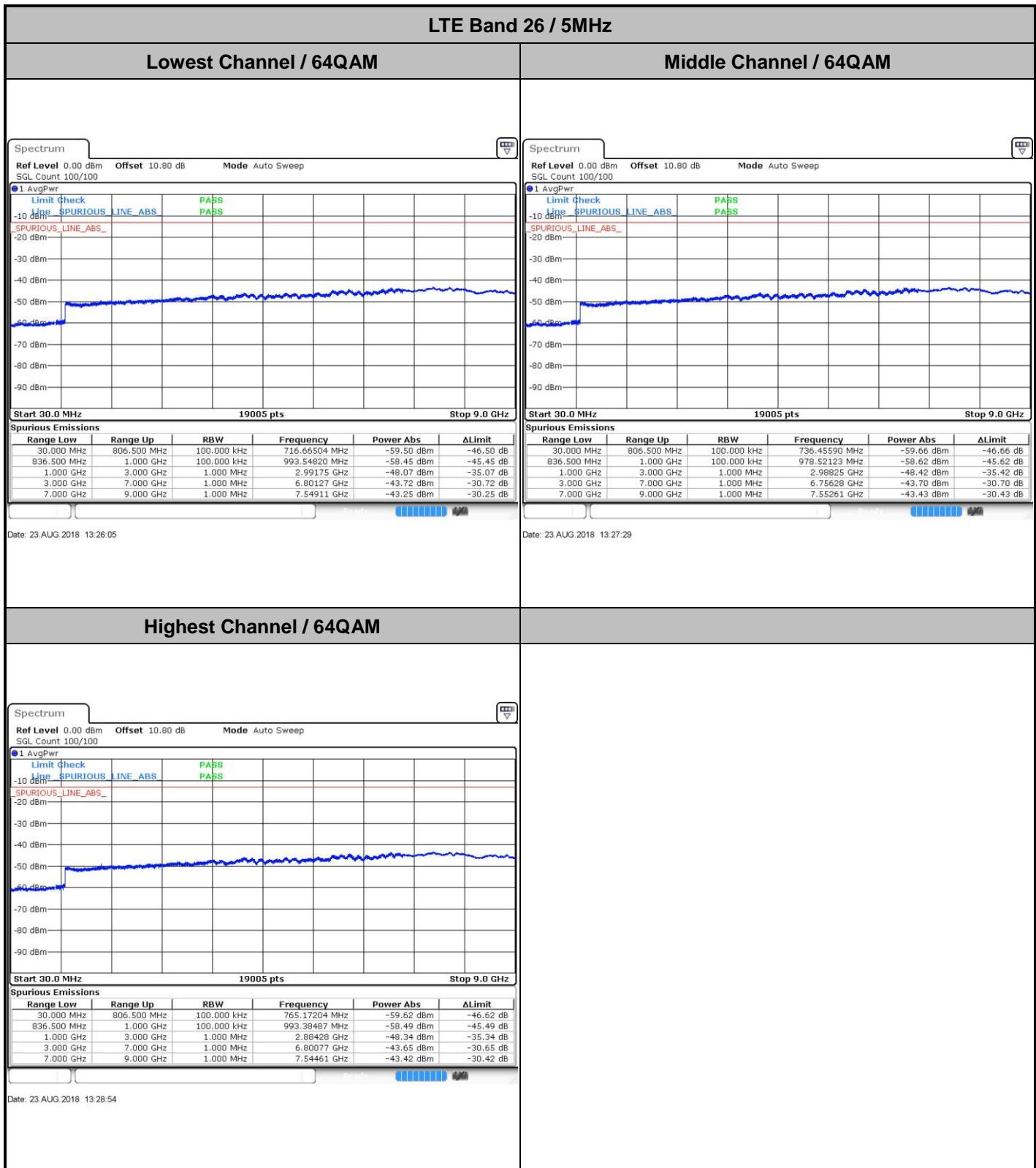
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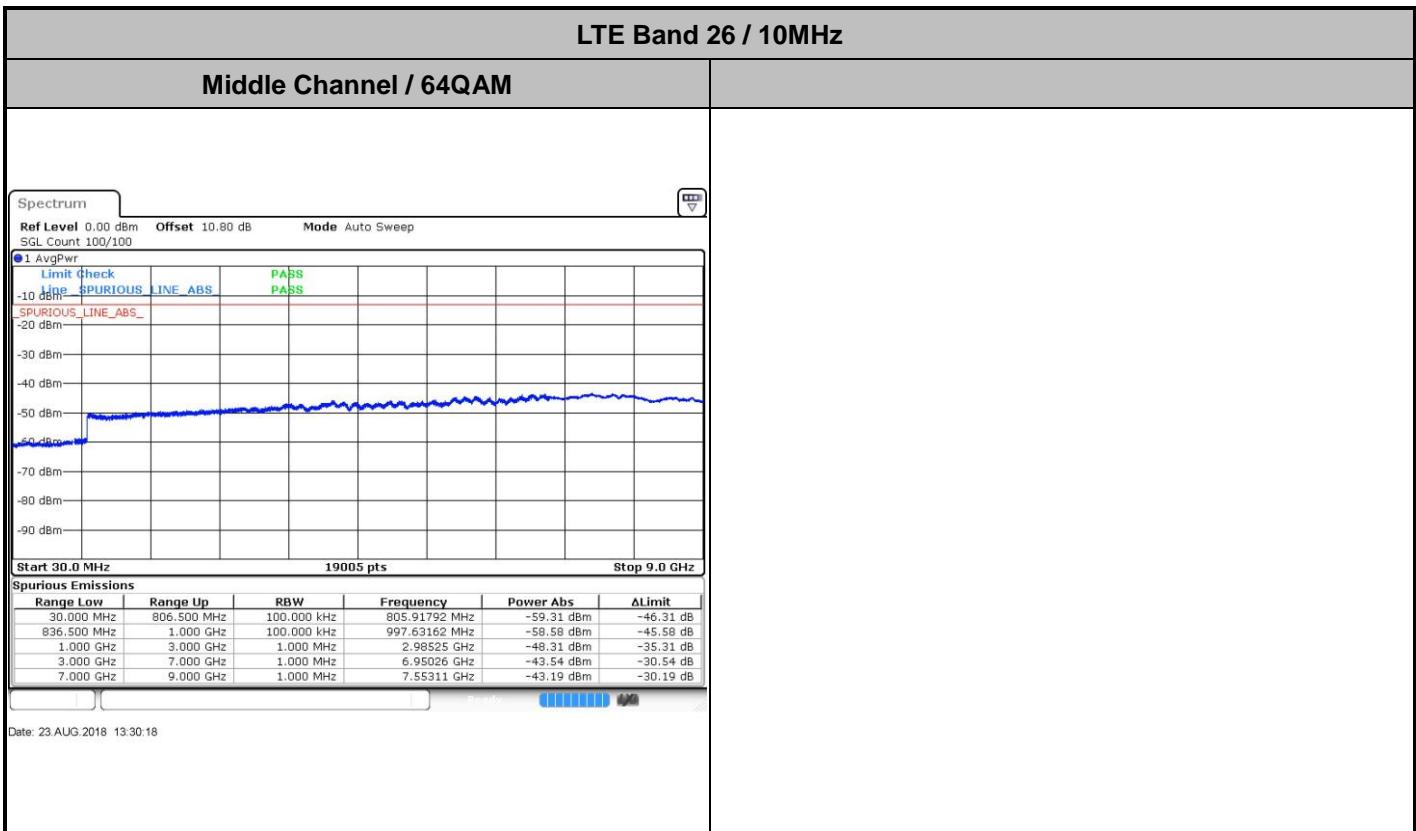
## Highest Channel / 64QAM

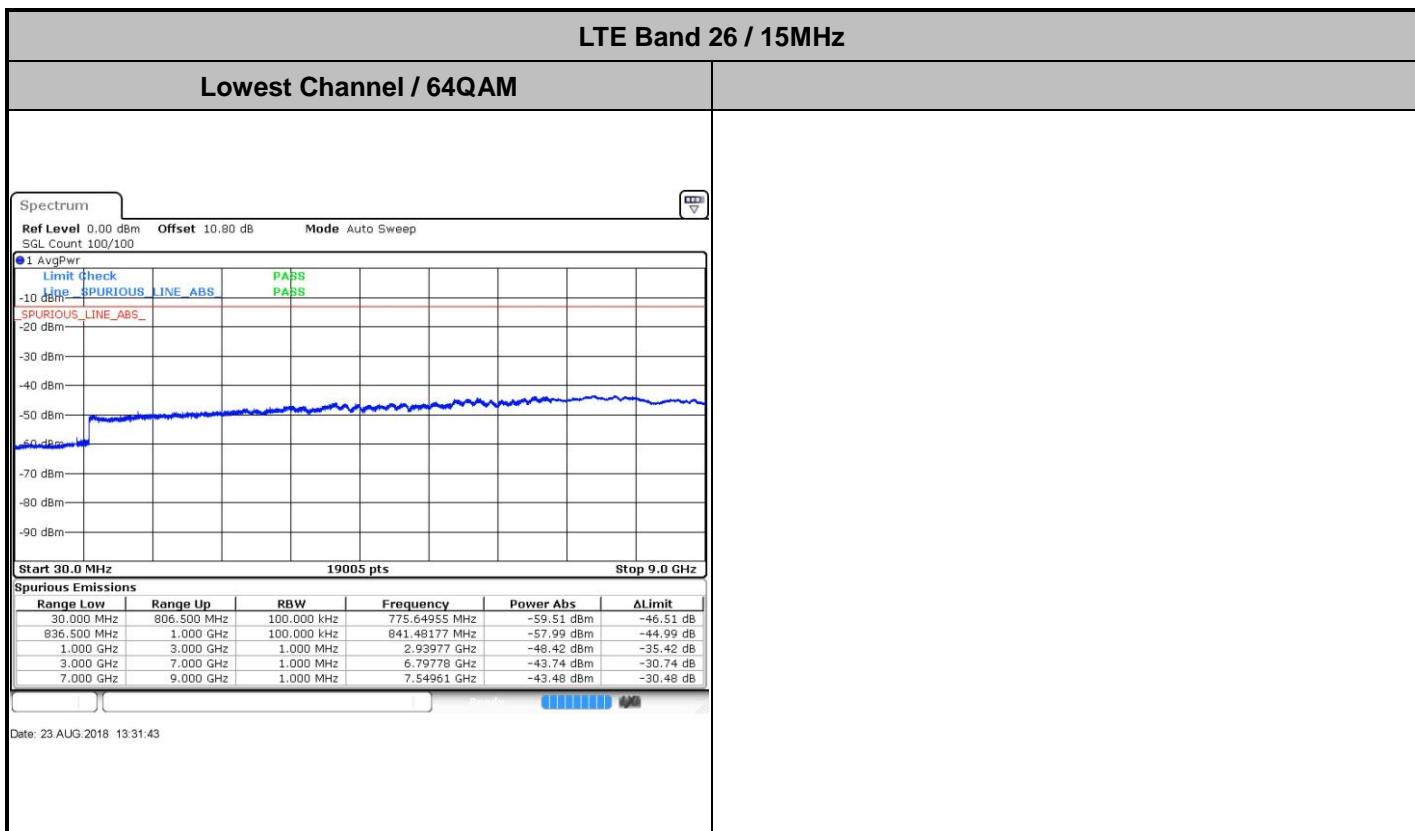


Date: 23.AUG.2018 13:37:59











## Frequency Stability

Test Conditions		LTE Band 26 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0017	PASS
40	Normal Voltage	0.0084	
30	Normal Voltage	0.0099	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0002	
0	Normal Voltage	0.0101	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0015	
-30	Normal Voltage	0.0021	
20	Maximum Voltage	0.0084	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0072	

**Note:**

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 26 (QPSK) / Low Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 15MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0024	PASS
40	Normal Voltage	0.0084	
30	Normal Voltage	0.0075	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0019	
0	Normal Voltage	0.0029	
-10	Normal Voltage	0.0079	
-20	Normal Voltage	0.0066	
-30	Normal Voltage	0.0000	
20	Maximum Voltage	0.0095	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0091	

**Note:**

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



## Appendix B. Test Results of ERP and Radiated Test

### ERP

<Reporting Only>

LTE Band 26 / 15MHz (Channel 26765)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	23.58	0.23	23.30	0.21
Middle		-	-	-	-	-	-
Highest		-	-	-	-	-	-
Lowest	16QAM	1	74	22.88	0.19	22.60	0.18
Middle		-	-	-	-	-	-
Highest		-	-	-	-	-	-
Lowest	64QAM	1	74	21.81	0.15	21.53	0.14
Middle		-	-	-	-	-	-
Highest		-	-	-	-	-	-
Limit	ERP < 7W			Result		PASS	

**Radiated Spurious Emission****LTE Band 26**

LTE Band 26 / 1.4MHz / QPSK									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1632	-52.82	-13	-39.82	-59.56	-58.49	0.81	8.63	H
	2448	-59.20	-13	-46.20	-70.79	-66.74	1.04	10.73	H
	3256	-56.01	-13	-43.01	-69.91	-64.52	1.10	11.76	H
	4072	-48.60	-13	-35.60	-64.6	-57.74	1.40	12.69	H
									H
									H
									H
	1632	-56.69	-13	-43.69	-63.29	-62.36	0.81	8.63	V
	2448	-61.52	-13	-48.52	-73.31	-69.06	1.04	10.73	V
	3256	-56.30	-13	-43.30	-70.46	-64.81	1.10	11.76	V
	4072	-54.80	-13	-41.80	-71.52	-63.94	1.40	12.69	V
									V
									V
									V



LTE Band 26 / 1.4MHz / QPSK									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1640	-54.38	-13	-41.38	-61.14	-60.08	0.81	8.66	H
	2456	-60.81	-13	-47.81	-72.42	-68.36	1.04	10.74	H
	3272	-58.65	-13	-45.65	-72.48	-67.20	1.10	11.80	H
	4096	-52.51	-13	-39.51	-68.55	-61.65	1.39	12.68	H
									H
									H
									H
	1640	-57.96	-13	-44.96	-64.57	-63.66	0.81	8.66	V
	2456	-62.01	-13	-49.01	-73.8	-69.56	1.04	10.74	V
	3272	-58.60	-13	-45.60	-72.73	-67.15	1.10	11.80	V
Highest	4096	-55.54	-13	-42.54	-72.29	-64.68	1.39	12.68	V
									V
									V
									V
	1648	-55.12	-13	-42.12	-61.91	-60.85	0.81	8.69	H
	2472	-59.47	-13	-46.47	-71.12	-67.04	1.04	10.76	H
	3296	-58.34	-13	-45.34	-72.04	-66.94	1.10	11.85	H
	4120	-51.34	-13	-38.34	-67.43	-60.49	1.38	12.68	H
									H
									H
Lowest	1648	-58.91	-13	-45.91	-65.55	-64.64	0.81	8.69	V
	2472	-61.65	-13	-48.65	-73.44	-69.22	1.04	10.76	V
	3296	-59.34	-13	-46.34	-73.41	-67.94	1.10	11.85	V
	4120	-54.78	-13	-41.78	-71.58	-63.93	1.38	12.68	V
									V
									V
									V
									V
									V
									V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.