Appendix-A LTE Band 71

Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band71	5MHz	QPSK	133147	1RB#0	23.08	20.03	34.77	PASS
Band71	5MHz	QPSK	133147	1RB#12	23.16	20.11	34.77	PASS
Band71	5MHz	QPSK	133147	1RB#24	23.27	20.22	34.77	PASS
Band71	5MHz	QPSK	133147	25RB#0	22.47	19.42	34.77	PASS
Band71	5MHz	16QAM	133147	1RB#0	22.36	19.31	34.77	PASS
Band71	5MHz	16QAM	133147	1RB#12	22.45	19.4	34.77	PASS
Band71	5MHz	16QAM	133147	1RB#24	22.44	19.39	34.77	PASS
Band71	5MHz	16QAM	133147	25RB#0	21.39	18.34	34.77	PASS
Band71	5MHz	QPSK	133297	1RB#0	23.3	20.25	34.77	PASS
Band71	5MHz	QPSK	133297	1RB#12	23.54	20.49	34.77	PASS
Band71	5MHz	QPSK	133297	1RB#24	23.27	20.22	34.77	PASS
Band71	5MHz	QPSK	133297	25RB#0	22.38	19.33	34.77	PASS
Band71	5MHz	16QAM	133297	1RB#0	22.26	19.21	34.77	PASS
Band71	5MHz	16QAM	133297	1RB#12	22.45	19.4	34.77	PASS
Band71	5MHz	16QAM	133297	1RB#24	22.36	19.31	34.77	PASS
Band71	5MHz	16QAM	133297	25RB#0	21.47	18.42	34.77	PASS
Band71	5MHz	QPSK	133447	1RB#0	23.36	20.31	34.77	PASS
Band71	5MHz	QPSK	133447	1RB#12	23.43	20.38	34.77	PASS
Band71	5MHz	QPSK	133447	1RB#24	23.16	20.11	34.77	PASS
Band71	5MHz	QPSK	133447	25RB#0	22.32	19.27	34.77	PASS
Band71	5MHz	16QAM	133447	1RB#0	22.27	19.22	34.77	PASS
Band71	5MHz	16QAM	133447	1RB#12	22.5	19.45	34.77	PASS
Band71	5MHz	16QAM	133447	1RB#24	22.41	19.36	34.77	PASS
Band71	5MHz	16QAM	133447	25RB#0	21.46	18.41	34.77	PASS
Band71	10MHz	QPSK	133172	1RB#0	23.28	20.23	34.77	PASS
Band71	10MHz	QPSK	133172	1RB#24	23.67	20.62	34.77	PASS
Band71	10MHz	QPSK	133172	1RB#49	23.16	20.11	34.77	PASS
Band71	10MHz	QPSK	133172	50RB#0	22.36	19.31	34.77	PASS
Band71	10MHz	16QAM	133172	1RB#0	22.45	19.4	34.77	PASS
Band71	10MHz	16QAM	133172	1RB#24	22.22	19.17	34.77	PASS
Band71	10MHz	16QAM	133172	1RB#49	22.27	19.22	34.77	PASS
Band71	10MHz	16QAM	133172	50RB#0	21.35	18.3	34.77	PASS
Band71	10MHz	QPSK	133297	1RB#0	23.28	20.23	34.77	PASS
Band71	10MHz	QPSK	133297	1RB#24	23.62	20.57	34.77	PASS
Band71	10MHz	QPSK	133297	1RB#49	23.24	20.19	34.77	PASS
Band71	10MHz	QPSK	133297	50RB#0	22.47	19.42	34.77	PASS
Band71	10MHz	16QAM	133297	1RB#0	22.14	19.09	34.77	PASS

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.

Band71	10MHz	16QAM	133297	1RB#24	22.35	19.3	34.77	PASS
Band71	10MHz	16QAM	133297	1RB#49	22.53	19.48	34.77	PASS
Band71	10MHz	16QAM	133297	50RB#0	21.48	18.43	34.77	PASS
Band71	10MHz	QPSK	133422	1RB#0	23.54	20.49	34.77	PASS
Band71	10MHz	QPSK	133422	1RB#24	23.79	20.74	34.77	PASS
Band71	10MHz	QPSK	133422	1RB#49	23.25	20.2	34.77	PASS
Band71	10MHz	QPSK	133422	50RB#0	22.51	19.46	34.77	PASS
Band71	10MHz	16QAM	133422	1RB#0	22.28	19.23	34.77	PASS
Band71	10MHz	16QAM	133422	1RB#24	22.35	19.3	34.77	PASS
Band71	10MHz	16QAM	133422	1RB#49	22.34	19.29	34.77	PASS
Band71	10MHz	16QAM	133422	50RB#0	21.5	18.45	34.77	PASS
Band71	15MHz	QPSK	133197	1RB#0	23.34	20.29	34.77	PASS
Band71	15MHz	QPSK	133197	1RB#38	23.22	20.17	34.77	PASS
Band71	15MHz	QPSK	133197	1RB#74	23.08	20.03	34.77	PASS
Band71	15MHz	QPSK	133197	75RB#0	22.38	19.33	34.77	PASS
Band71	15MHz	16QAM	133197	1RB#0	22.56	19.51	34.77	PASS
Band71	15MHz	16QAM	133197	1RB#38	22.27	19.22	34.77	PASS
Band71	15MHz	16QAM	133197	1RB#74	22.26	19.21	34.77	PASS
Band71	15MHz	16QAM	133197	75RB#0	21.37	18.32	34.77	PASS
Band71	15MHz	QPSK	133297	1RB#0	23.29	20.24	34.77	PASS
Band71	15MHz	QPSK	133297	1RB#38	23.35	20.3	34.77	PASS
Band71	15MHz	QPSK	133297	1RB#74	23.33	20.28	34.77	PASS
Band71	15MHz	QPSK	133297	75RB#0	22.46	19.41	34.77	PASS
Band71	15MHz	16QAM	133297	1RB#0	22.13	19.08	34.77	PASS
Band71	15MHz	16QAM	133297	1RB#38	22.41	19.36	34.77	PASS
Band71	15MHz	16QAM	133297	1RB#74	22.24	19.19	34.77	PASS
Band71	15MHz	16QAM	133297	75RB#0	21.45	18.4	34.77	PASS
Band71	15MHz	QPSK	133397	1RB#0	23.43	20.38	34.77	PASS
Band71	15MHz	QPSK	133397	1RB#38	23.7	20.65	34.77	PASS
Band71	15MHz	QPSK	133397	1RB#74	23.29	20.24	34.77	PASS
Band71	15MHz	QPSK	133397	75RB#0	22.53	19.48	34.77	PASS
Band71	15MHz	16QAM	133397	1RB#0	22.51	19.46	34.77	PASS
Band71	15MHz	16QAM	133397	1RB#38	22.14	19.09	34.77	PASS
Band71	15MHz	16QAM	133397	1RB#74	22.67	19.62	34.77	PASS
Band71	15MHz	16QAM	133397	75RB#0	21.63	18.58	34.77	PASS
Band71	20MHz	QPSK	133222	1RB#0	23.59	20.54	34.77	PASS
Band71	20MHz	QPSK	133222	1RB#49	23.69	20.64	34.77	PASS
Band71	20MHz	QPSK	133222	1RB#99	23.2	20.15	34.77	PASS
Band71	20MHz	QPSK	133222	100RB#0	22.38	19.33	34.77	PASS
Band71	20MHz	16QAM	133222	1RB#0	22.81	19.76	34.77	PASS
Band71	20MHz	16QAM	133222	1RB#49	22.87	19.82	34.77	PASS
Band71	20MHz	16QAM	133222	1RB#99	22.67	19.62	34.77	PASS
Band71	20MHz	16QAM	133222	100RB#0	21.38	18.33	34.77	PASS
Band71	20MHz	QPSK	133322	1RB#0	23.25	20.2	34.77	PASS
Band71	20MHz	QPSK	133322	1RB#49	23.48	20.43	34.77	PASS

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.

Band71	20MHz	QPSK	133322	1RB#99	23.31	20.26	34.77	PASS
Band71	20MHz	QPSK	133322	100RB#0	22.46	19.41	34.77	PASS
Band71	20MHz	16QAM	133322	1RB#0	22.3	19.25	34.77	PASS
Band71	20MHz	16QAM	133322	1RB#49	22.21	19.16	34.77	PASS
Band71	20MHz	16QAM	133322	1RB#99	22.16	19.11	34.77	PASS
Band71	20MHz	16QAM	133322	100RB#0	21.44	18.39	34.77	PASS
Band71	20MHz	QPSK	133372	1RB#0	23.23	20.18	34.77	PASS
Band71	20MHz	QPSK	133372	1RB#49	23.44	20.39	34.77	PASS
Band71	20MHz	QPSK	133372	1RB#99	23.09	20.04	34.77	PASS
Band71	20MHz	QPSK	133372	100RB#0	22.49	19.44	34.77	PASS
Band71	20MHz	16QAM	133372	1RB#0	22.25	19.2	34.77	PASS
Band71	20MHz	16QAM	133372	1RB#49	22.5	19.45	34.77	PASS
Band71	20MHz	16QAM	133372	1RB#99	22.31	19.26	34.77	PASS
Band71	20MHz	16QAM	133372	100RB#0	21.41	18.36	34.77	PASS

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.

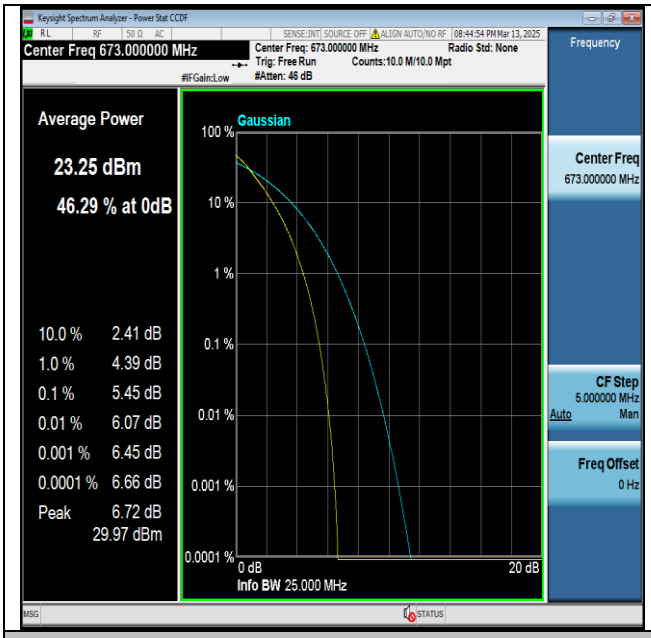
Peak-to-Average Ratio(CCDF)

Test Result

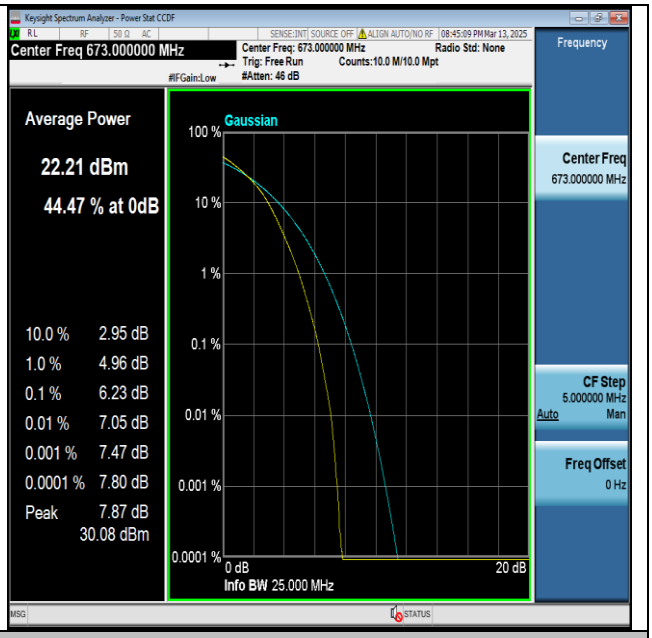
Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band71	20MHz	QPSK	133222	100RB#0	5.45	13	PASS
Band71	20MHz	16QAM	133222	100RB#0	6.23	13	PASS
Band71	20MHz	QPSK	133322	100RB#0	5.49	13	PASS
Band71	20MHz	16QAM	133322	100RB#0	6.28	13	PASS
Band71	20MHz	QPSK	133372	100RB#0	5.53	13	PASS
Band71	20MHz	16QAM	133372	100RB#0	6.31	13	PASS

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.

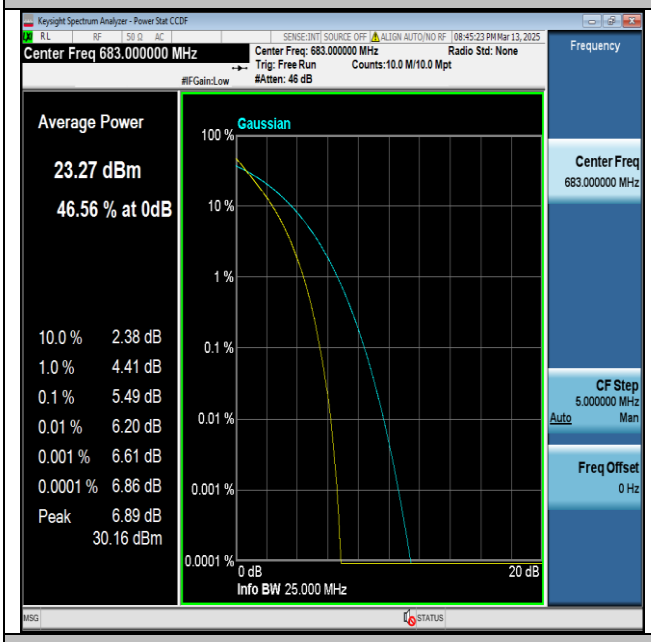
Test Graphs



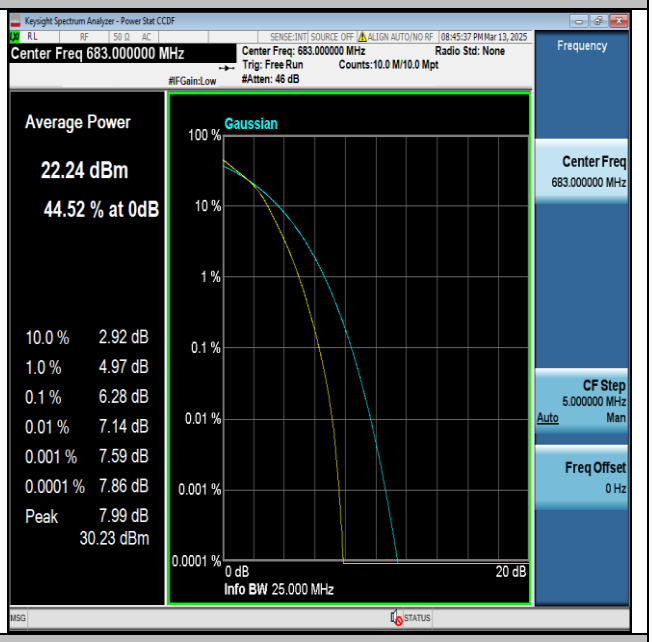
Band71-20MHz-QPSK-133222-100RB#0-PASS



Band71-20MHz-16QAM-133222-100RB#0-PASS

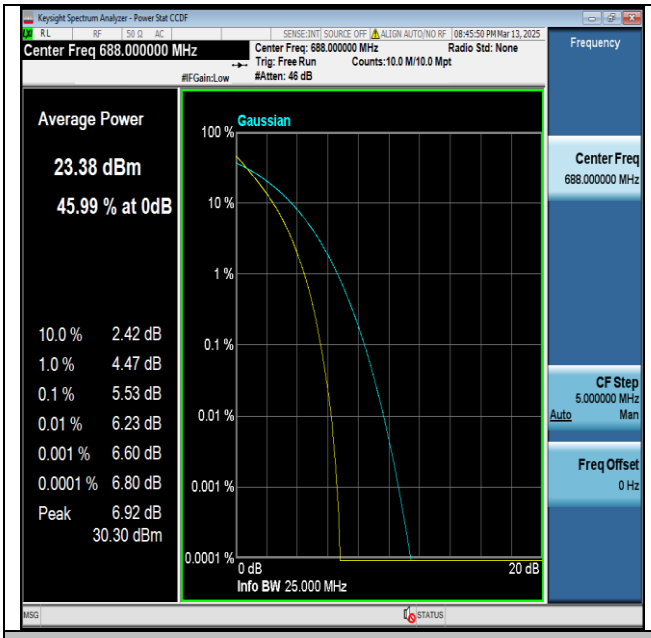


Band71-20MHz-QPSK-133322-100RB#0-PASS

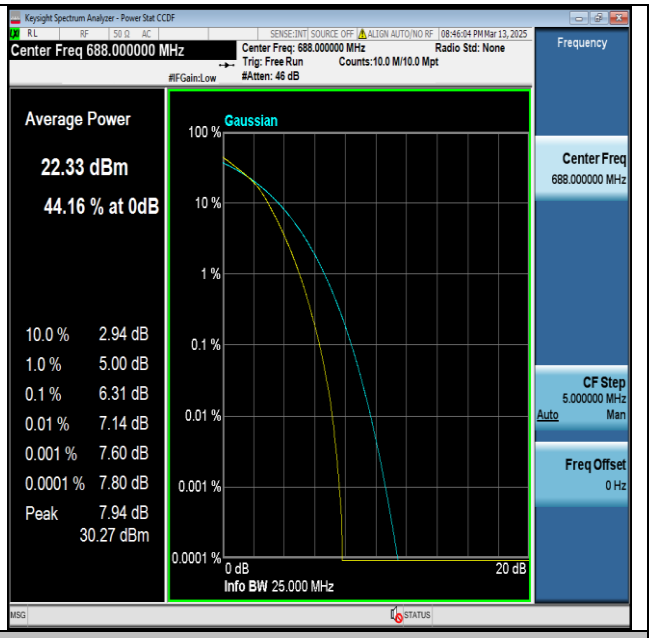


Band71-20MHz-16QAM-133322-100RB#0-PASS

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.



Band71-20MHz-QPSK-133372-100RB#0-PASS



Band71-20MHz-16QAM-133372-100RB#0-PASS

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.

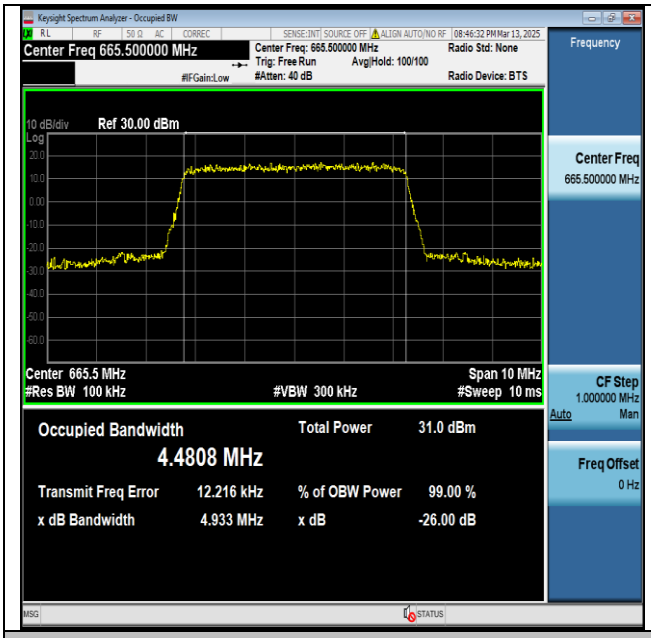
26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band71	5MHz	QPSK	133147	25RB#0	4.4808	4.933	PASS
Band71	5MHz	16QAM	133147	25RB#0	4.4796	4.975	PASS
Band71	5MHz	QPSK	133297	25RB#0	4.4906	4.946	PASS
Band71	5MHz	16QAM	133297	25RB#0	4.4787	4.980	PASS
Band71	5MHz	QPSK	133447	25RB#0	4.4806	4.956	PASS
Band71	5MHz	16QAM	133447	25RB#0	4.4769	4.956	PASS
Band71	10MHz	QPSK	133172	50RB#0	8.9588	9.729	PASS
Band71	10MHz	16QAM	133172	50RB#0	8.9228	9.778	PASS
Band71	10MHz	QPSK	133297	50RB#0	8.9800	9.805	PASS
Band71	10MHz	16QAM	133297	50RB#0	8.9492	9.808	PASS
Band71	10MHz	QPSK	133422	50RB#0	8.9823	9.759	PASS
Band71	10MHz	16QAM	133422	50RB#0	8.9285	9.822	PASS
Band71	15MHz	QPSK	133197	75RB#0	13.431	14.65	PASS
Band71	15MHz	16QAM	133197	75RB#0	13.424	14.57	PASS
Band71	15MHz	QPSK	133297	75RB#0	13.425	14.62	PASS
Band71	15MHz	16QAM	133297	75RB#0	13.408	14.58	PASS
Band71	15MHz	QPSK	133397	75RB#0	13.433	14.71	PASS
Band71	15MHz	16QAM	133397	75RB#0	13.442	14.70	PASS
Band71	20MHz	QPSK	133222	100RB#0	17.857	19.34	PASS
Band71	20MHz	16QAM	133222	100RB#0	17.853	19.40	PASS
Band71	20MHz	QPSK	133322	100RB#0	17.918	19.31	PASS
Band71	20MHz	16QAM	133322	100RB#0	17.889	19.34	PASS
Band71	20MHz	QPSK	133372	100RB#0	17.886	19.38	PASS
Band71	20MHz	16QAM	133372	100RB#0	17.937	19.28	PASS

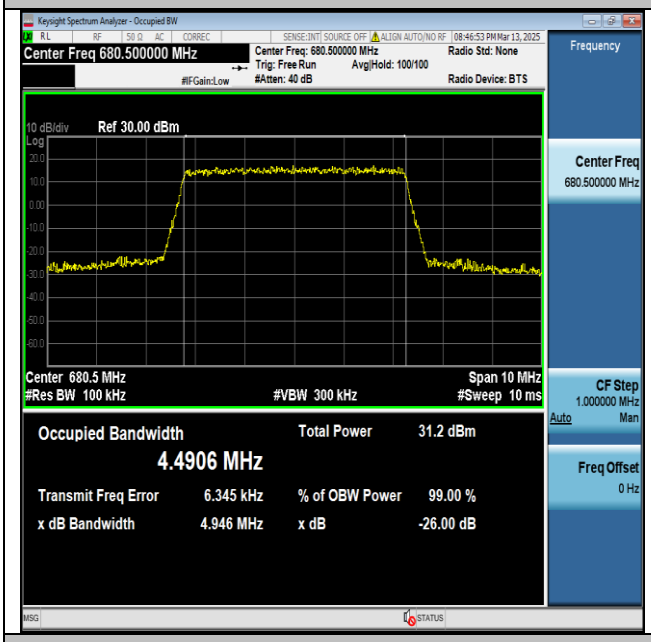
All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.

Test Graphs



Band71-5MHz-QPSK-133147-25RB#0-PASS

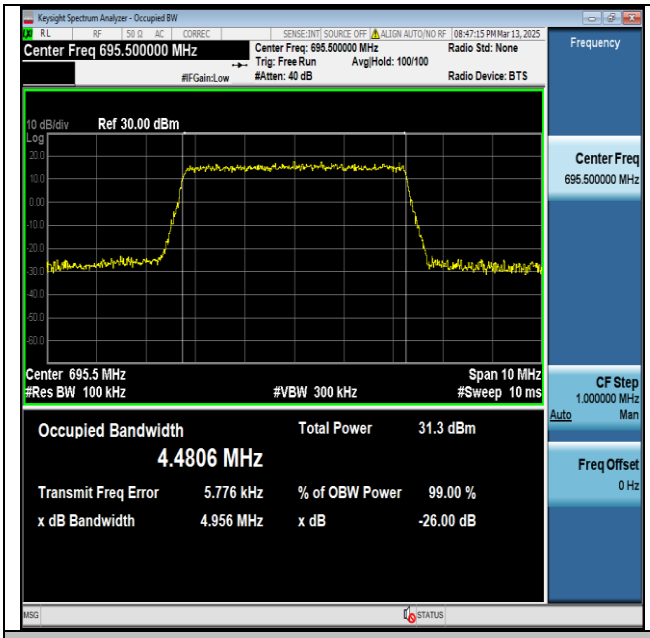
Band71-5MHz-16QAM-133147-25RB#0-PASS



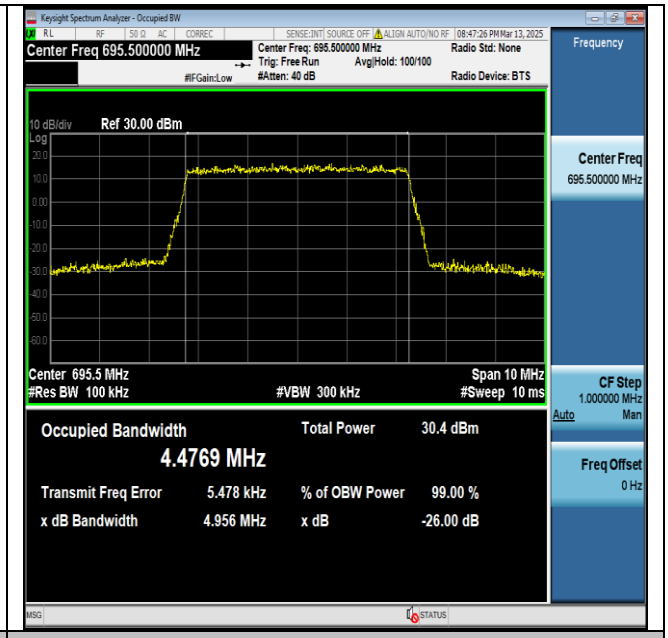
Band71-5MHz-QPSK-133297-25RB#0-PASS

Band71-5MHz-16QAM-133297-25RB#0-PASS

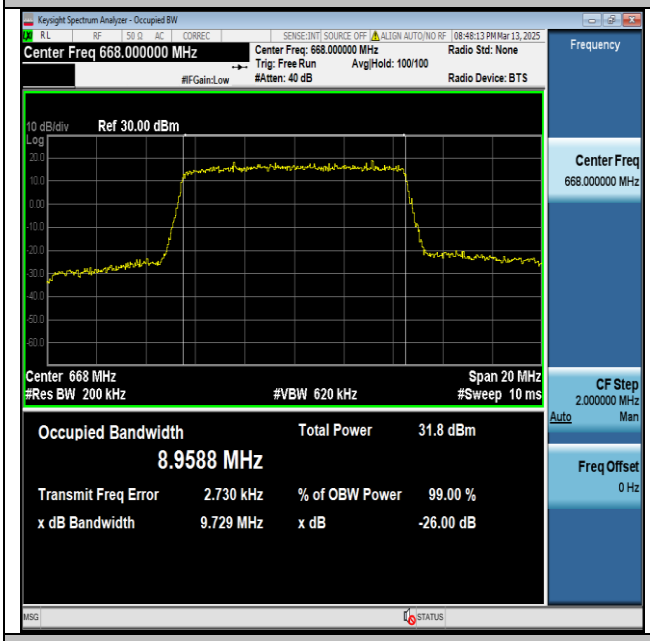
All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.



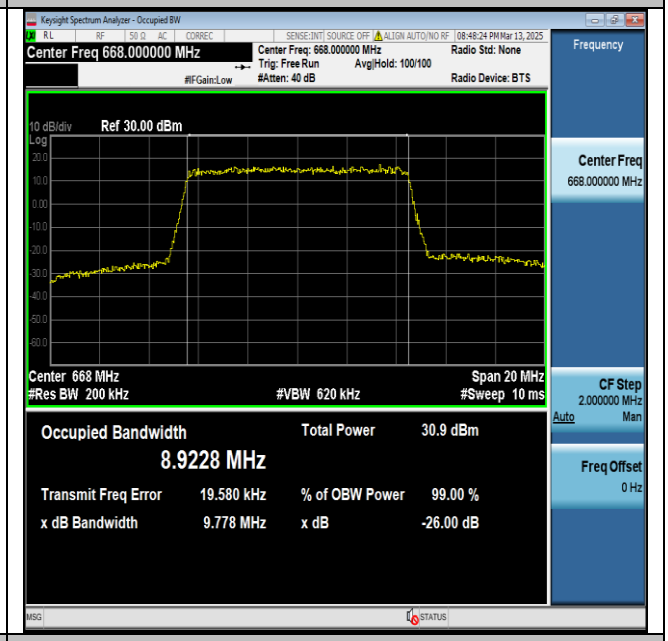
Band71-5MHz-QPSK-133447-25RB#0-PASS



Band71-5MHz-16QAM-133447-25RB#0-PASS

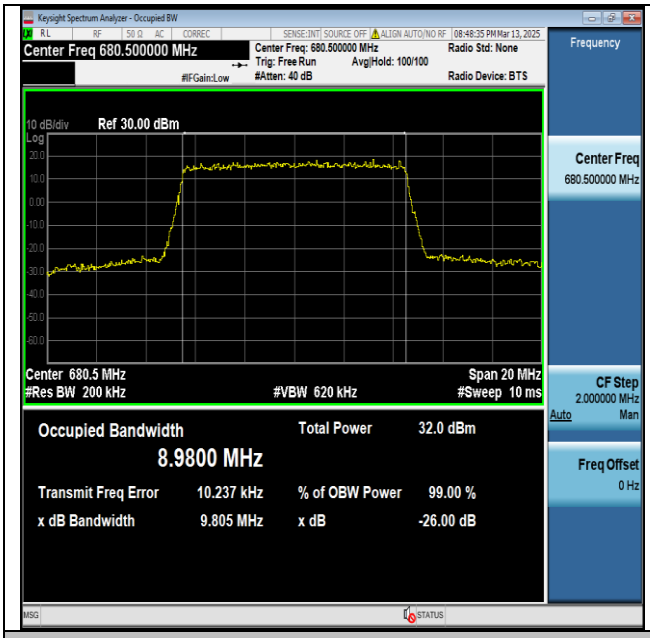


Band71-10MHz-QPSK-133172-50RB#0-PASS

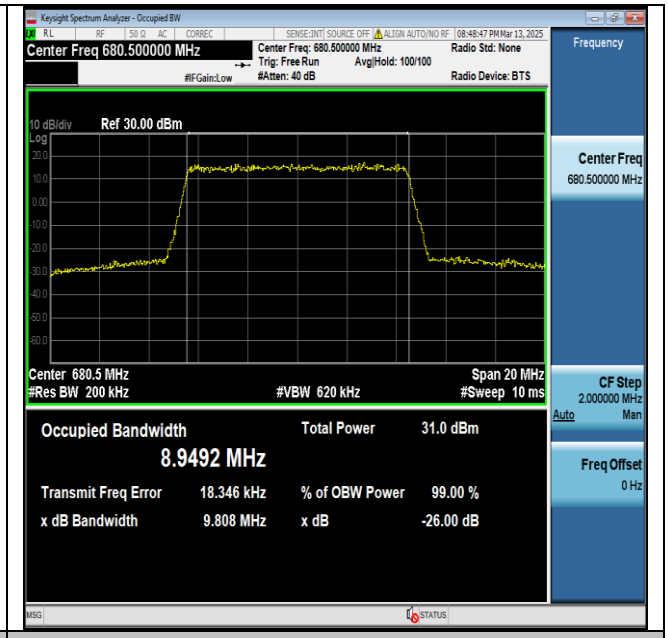


Band71-10MHz-16QAM-133172-50RB#0-PASS

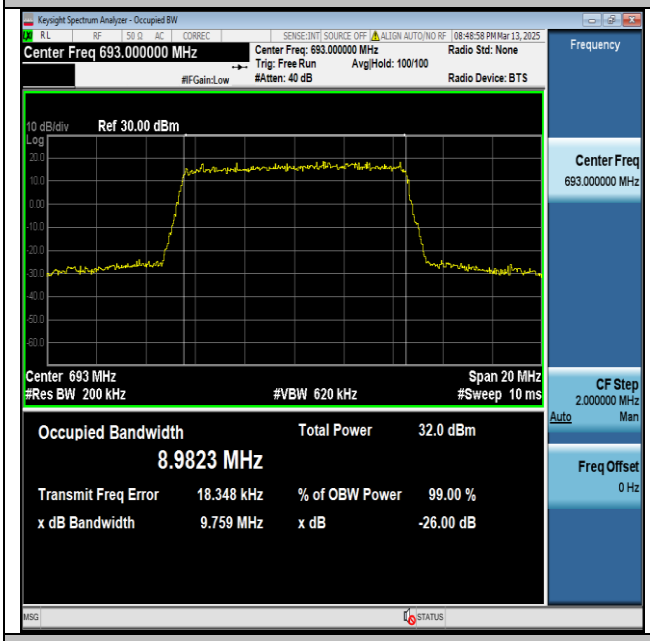
All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.



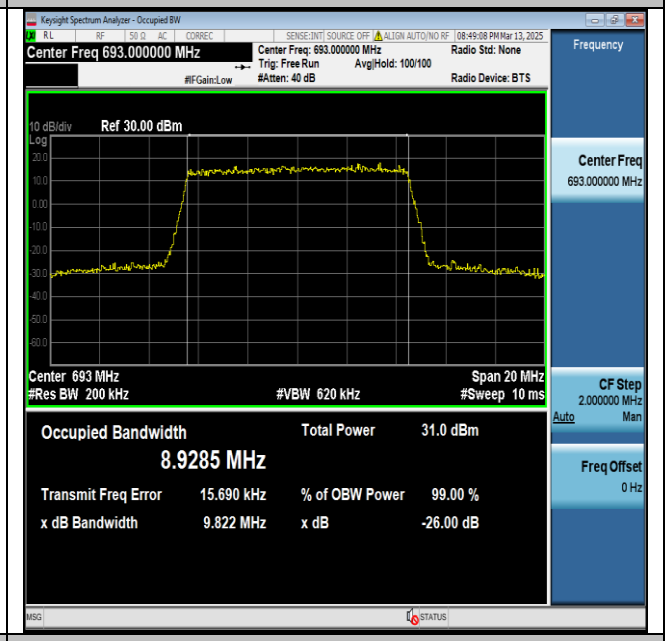
Band71-10MHz-QPSK-133297-50RB#0-PASS



Band71-10MHz-16QAM-133297-50RB#0-PASS

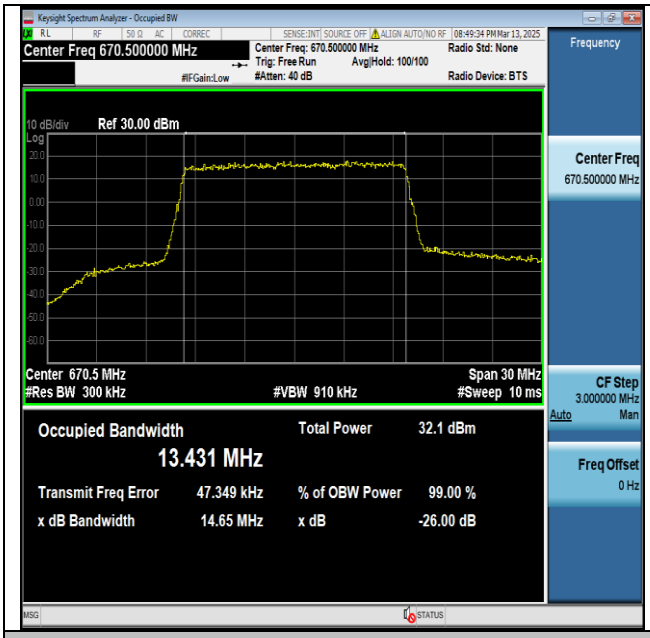


Band71-10MHz-QPSK-133422-50RB#0-PASS

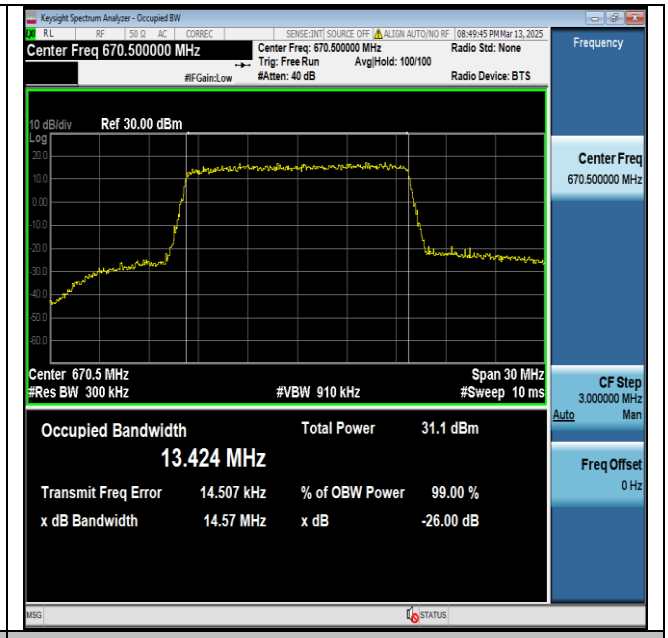


Band71-10MHz-16QAM-133422-50RB#0-PASS

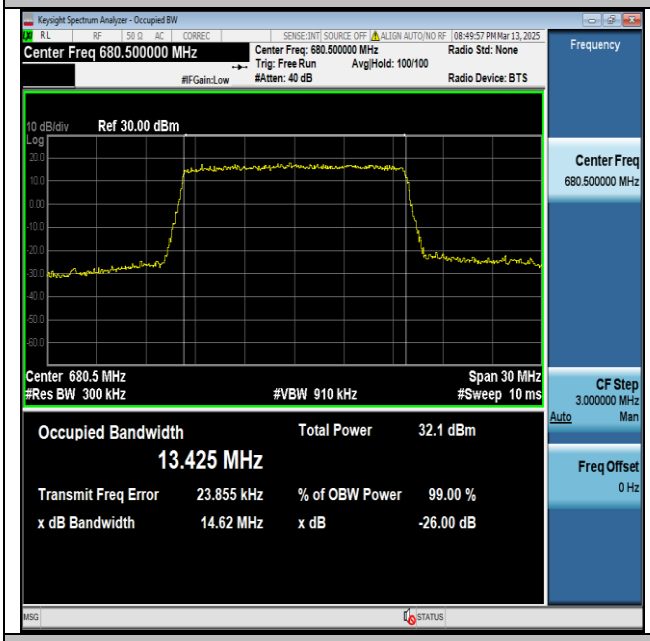
All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.



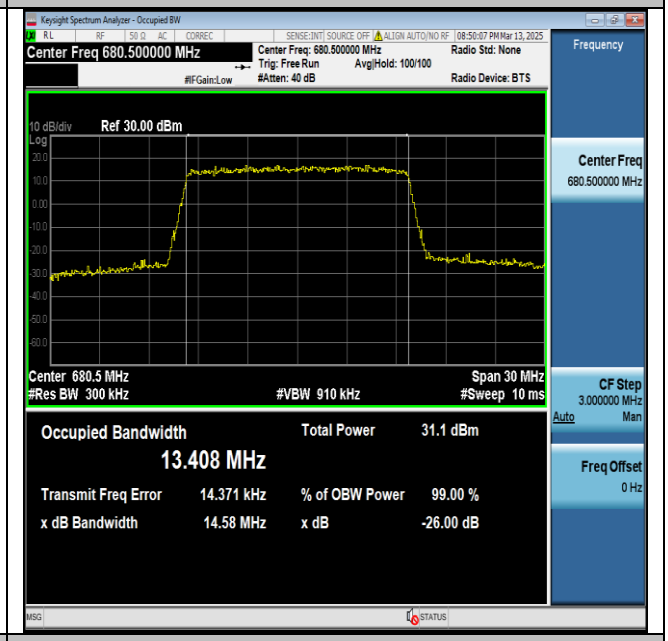
Band71-15MHz-QPSK-133197-75RB#0-PASS



Band71-15MHz-16QAM-133197-75RB#0-PASS

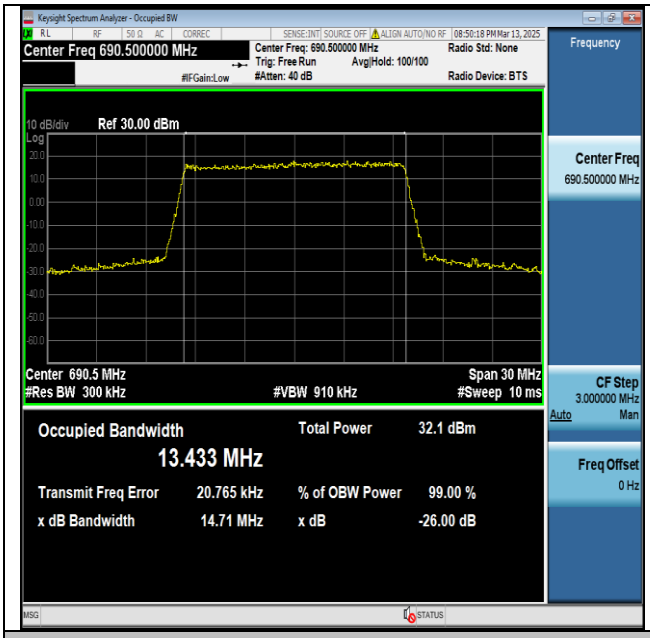


Band71-15MHz-QPSK-133297-75RB#0-PASS

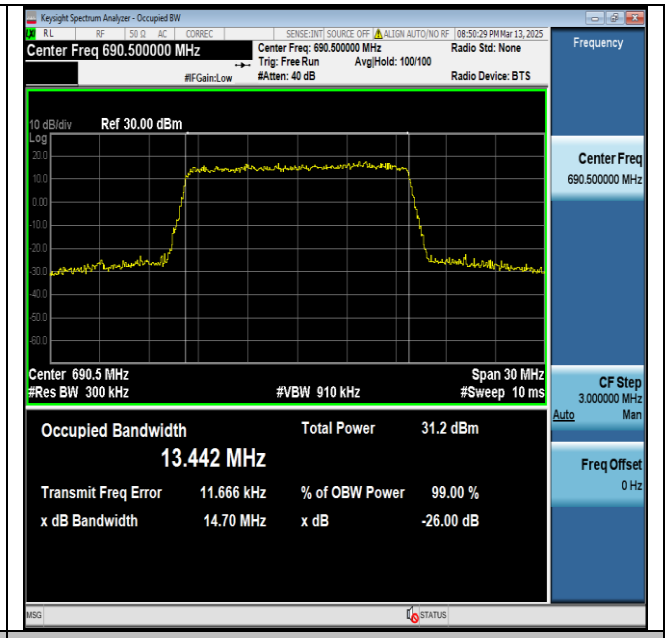


Band71-15MHz-16QAM-133297-75RB#0-PASS

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.

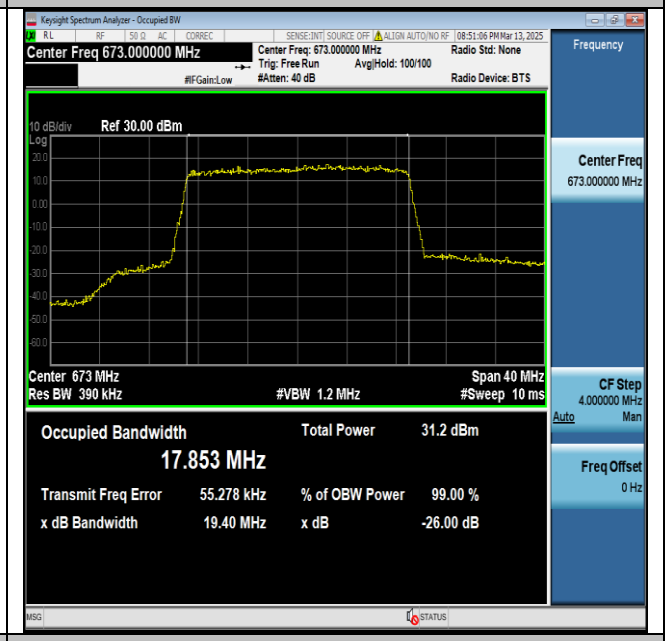


Band71-15MHz-QPSK-133397-75RB#0-PASS



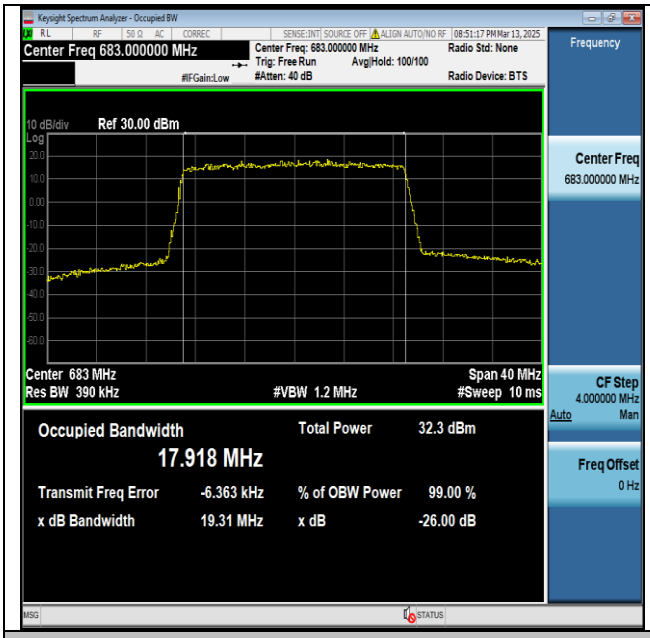
Band71-15MHz-16QAM-133397-75RB#0-PASS

Band71-20MHz-QPSK-133222-100RB#0-PASS

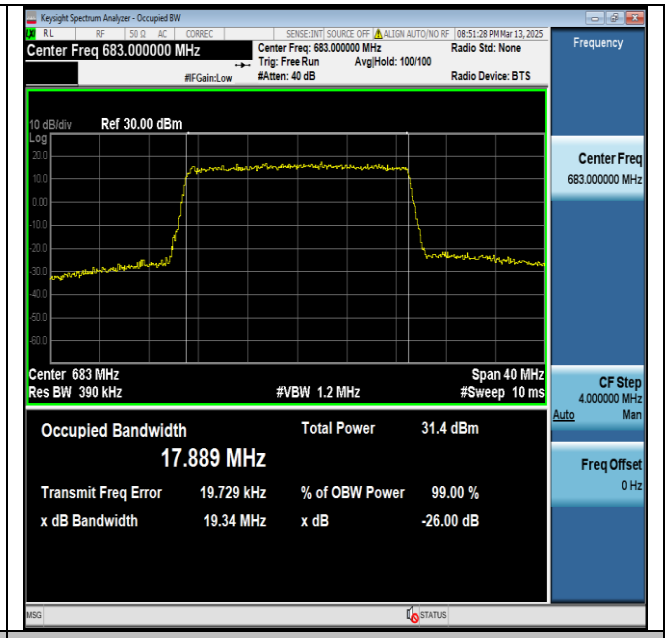


Band71-20MHz-16QAM-133222-100RB#0-PASS

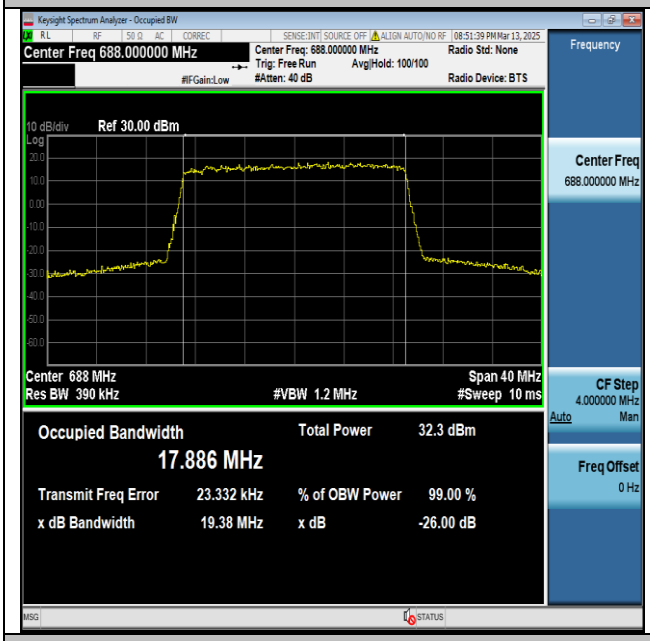
All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.



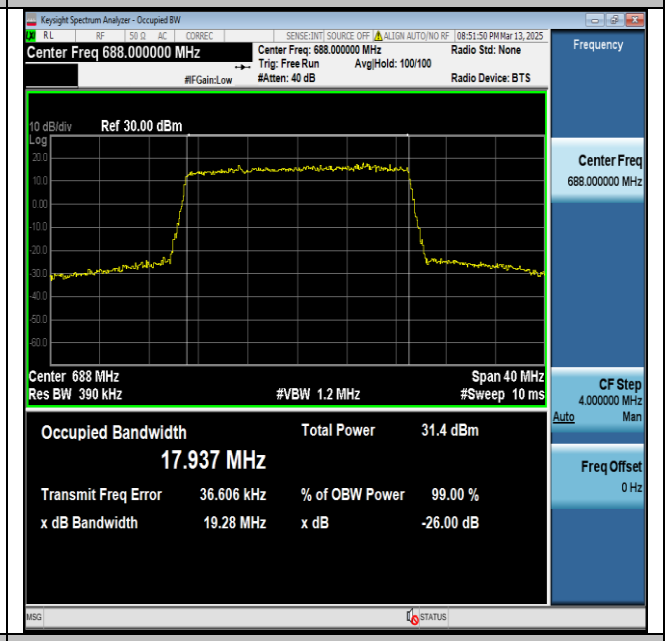
Band71-20MHz-QPSK-133322-100RB#0-PASS



Band71-20MHz-16QAM-133322-100RB#0-PASS



Band71-20MHz-QPSK-133372-100RB#0-PASS

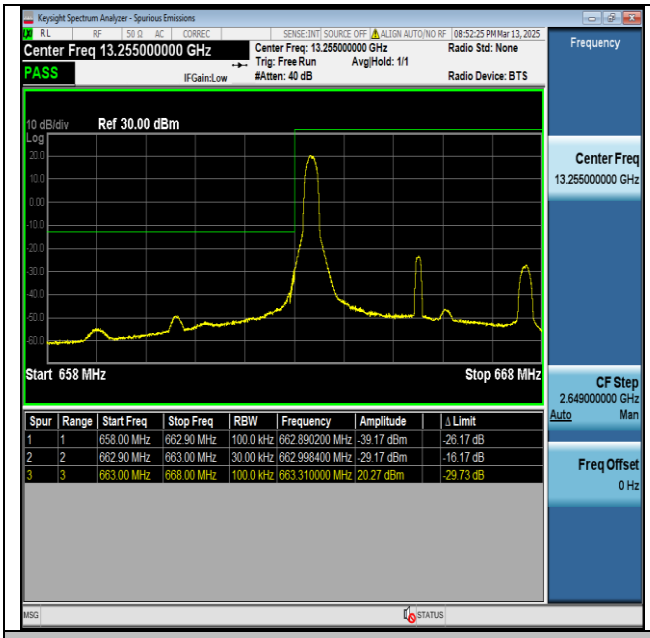


Band71-20MHz-16QAM-133372-100RB#0-PASS

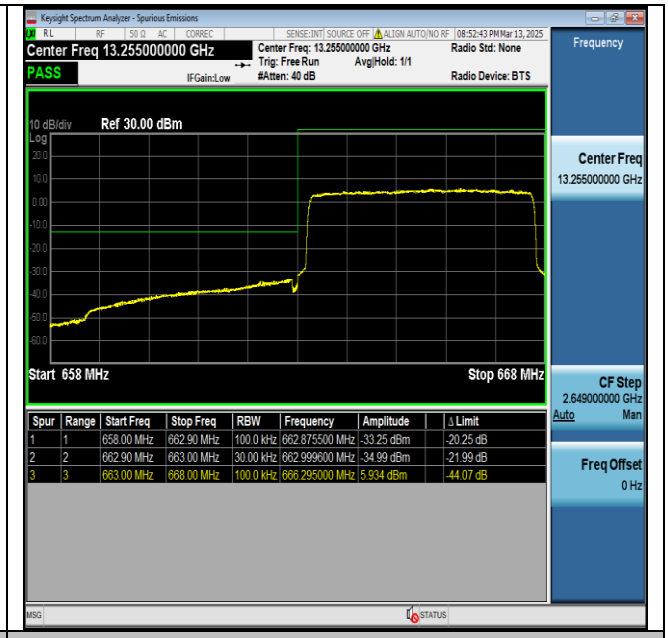
All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.

Band Edge

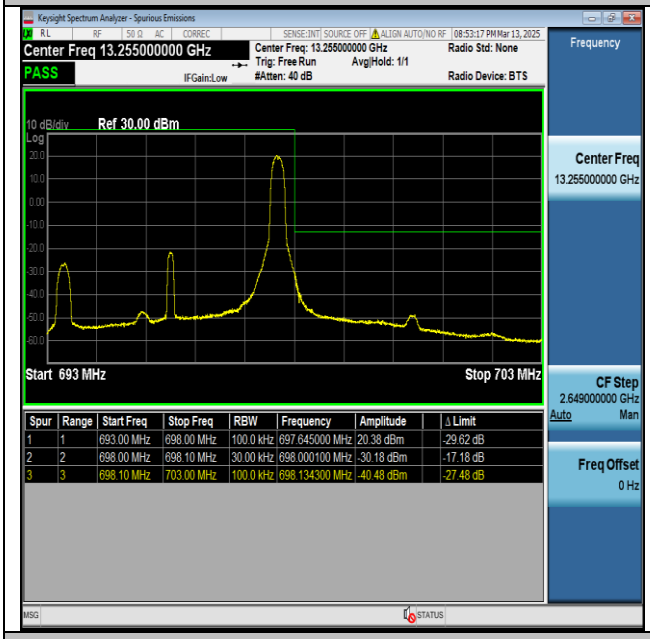
Test Graphs



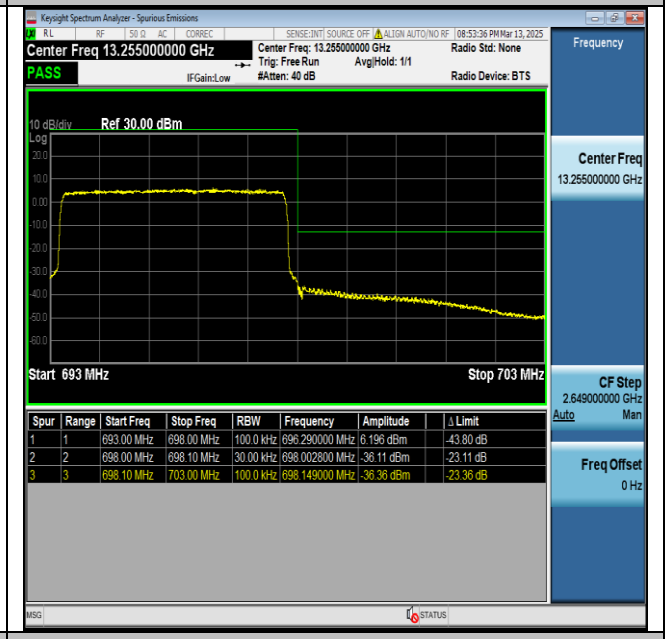
Band71-5MHz-QPSK-133147-1RB#0-PASS



Band71-5MHz-QPSK-133147-25RB#0-PASS

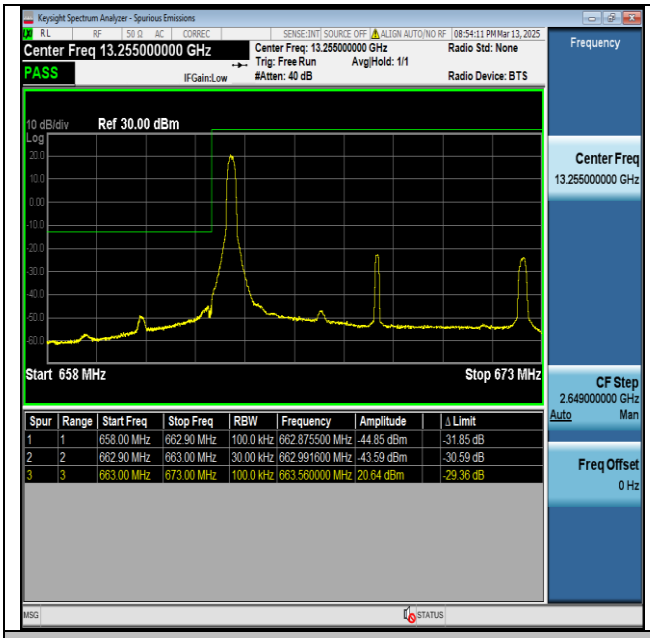


Band71-5MHz-QPSK-133447-1RB#24-PASS



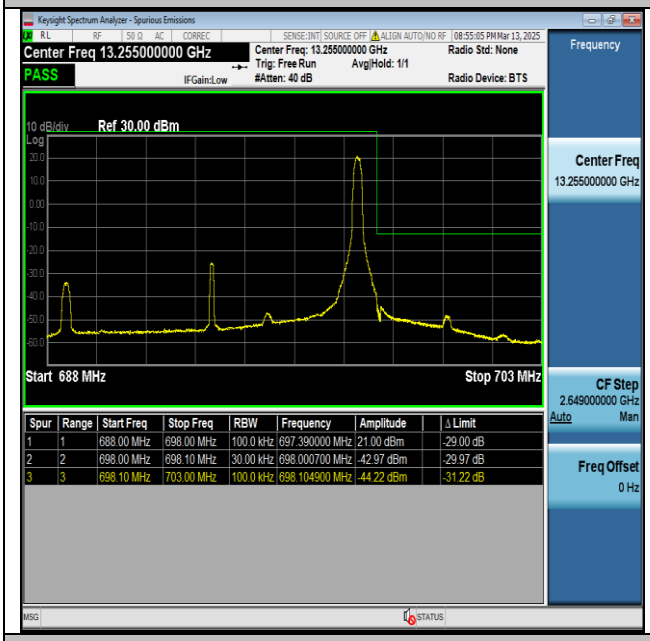
Band71-5MHz-QPSK-133447-25RB#0-PASS

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.



Band71-10MHz-QPSK-133172-1RB#0-PASS

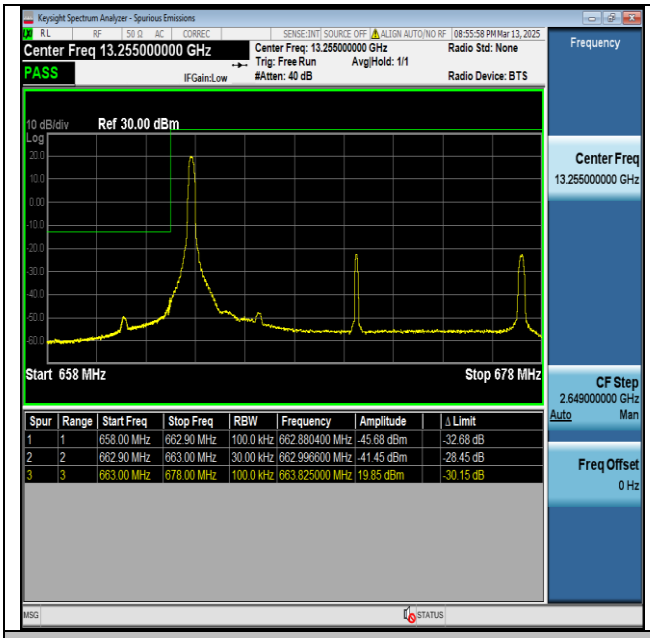
Band71-10MHz-QPSK-133172-50RB#0-PASS



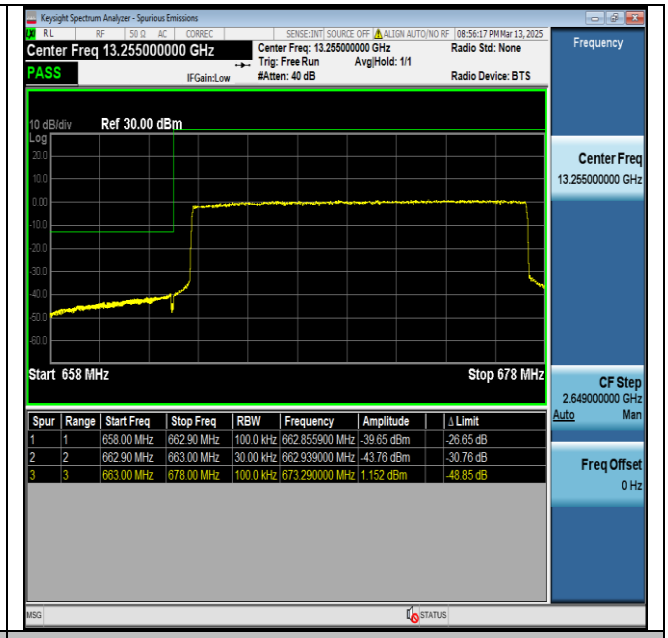
Band71-10MHz-QPSK-133422-1RB#49-PASS

Band71-10MHz-QPSK-133422-50RB#0-PASS

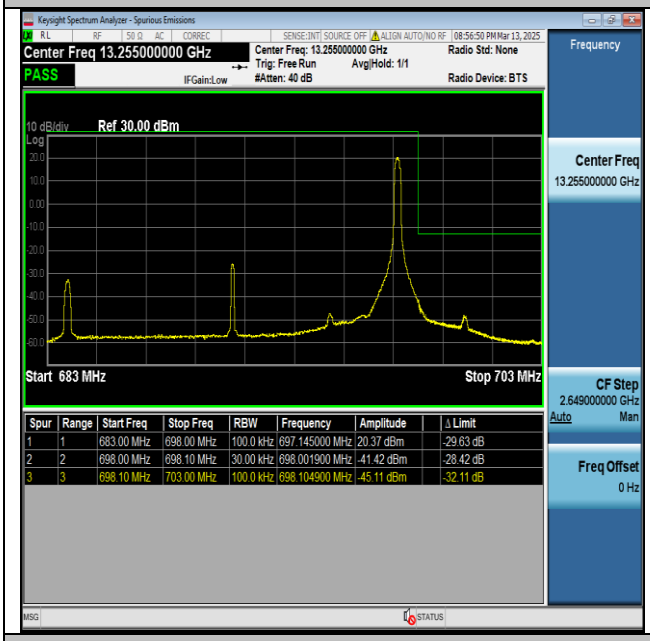
All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.



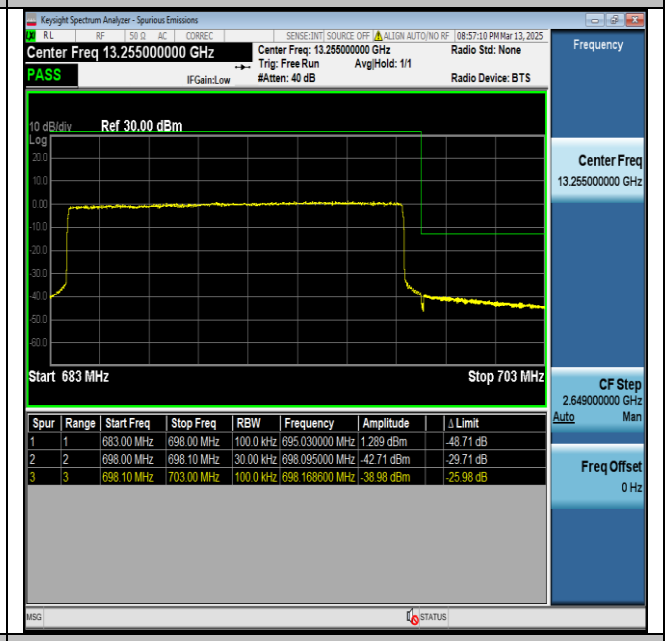
Band71-15MHz-QPSK-133197-1RB#0-PASS



Band71-15MHz-QPSK-133197-75RB#0-PASS

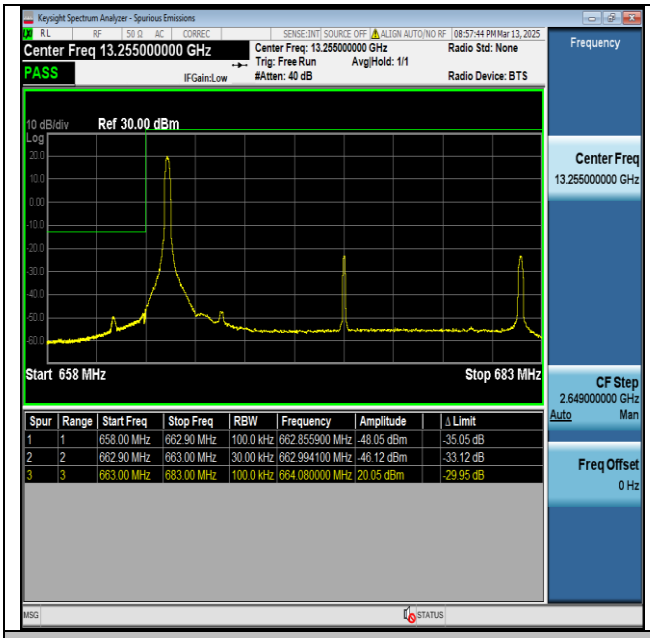


Band71-15MHz-QPSK-133397-1RB#74-PASS



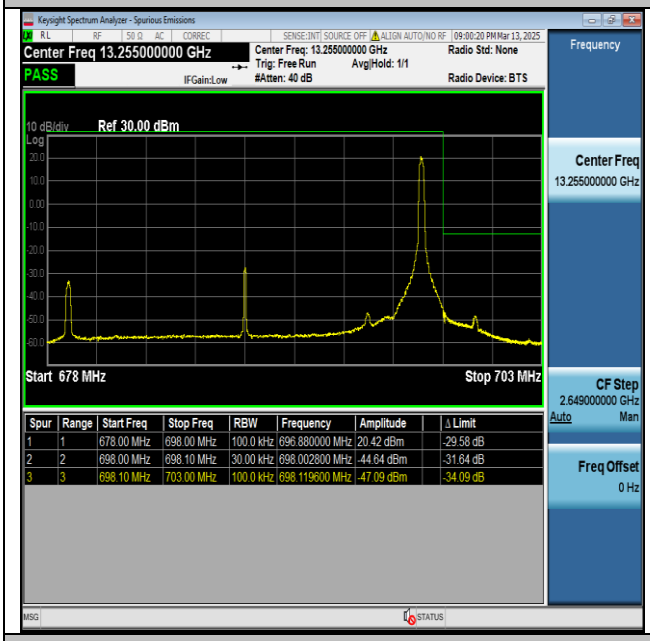
Band71-15MHz-QPSK-133397-75RB#0-PASS

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.



Band71-20MHz-QPSK-133222-1RB#0-PASS

Band71-20MHz-QPSK-133222-100RB#0-PASS



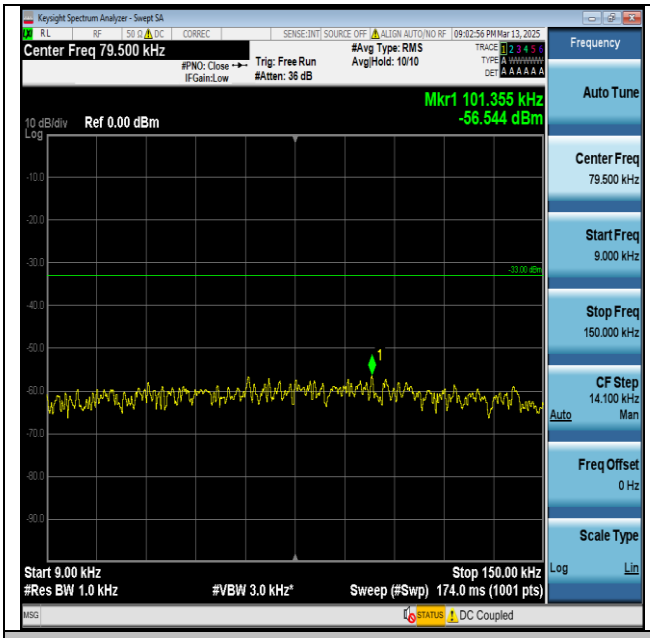
Band71-20MHz-QPSK-133372-1RB#99-PASS

Band71-20MHz-QPSK-133372-100RB#0-PASS

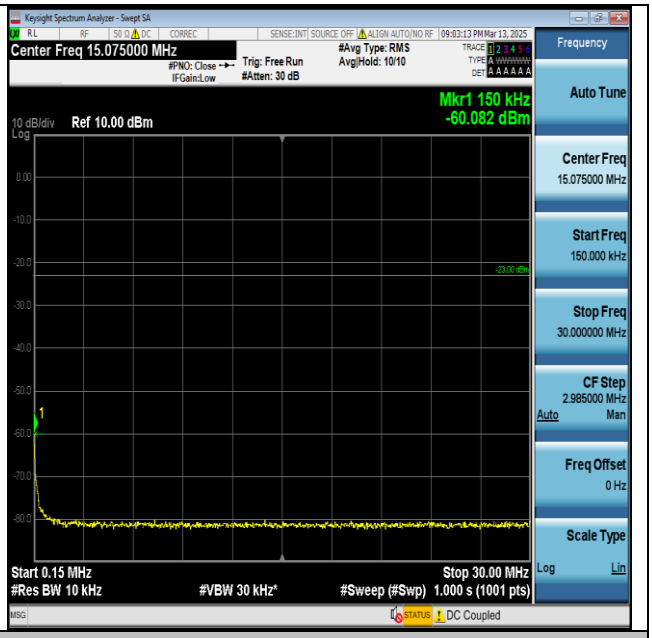
All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.

Conducted Spurious Emission

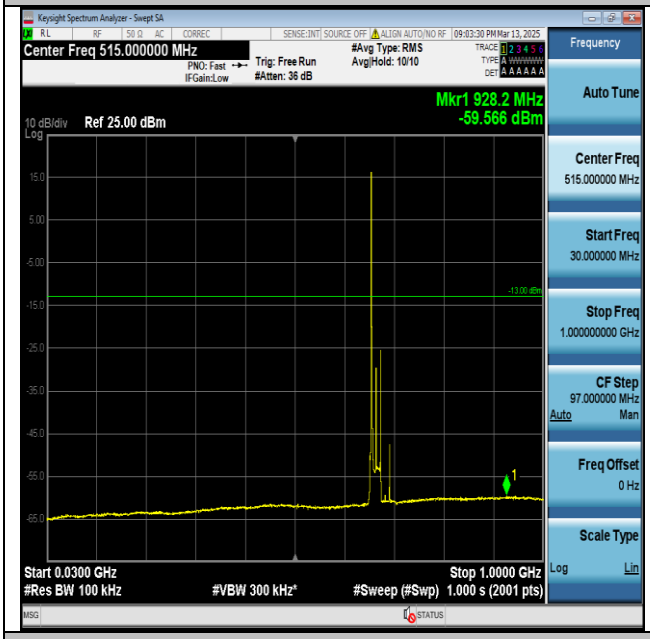
Test Graphs



Band71-20MHz-QPSK-133222-1RB#0-0.009~0.15-PASS



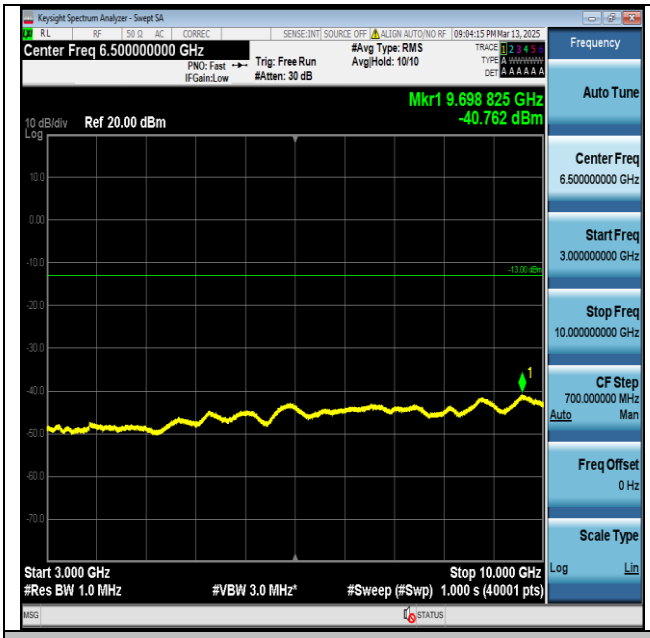
Band71-20MHz-QPSK-133222-1RB#0-0.15~30-PASS



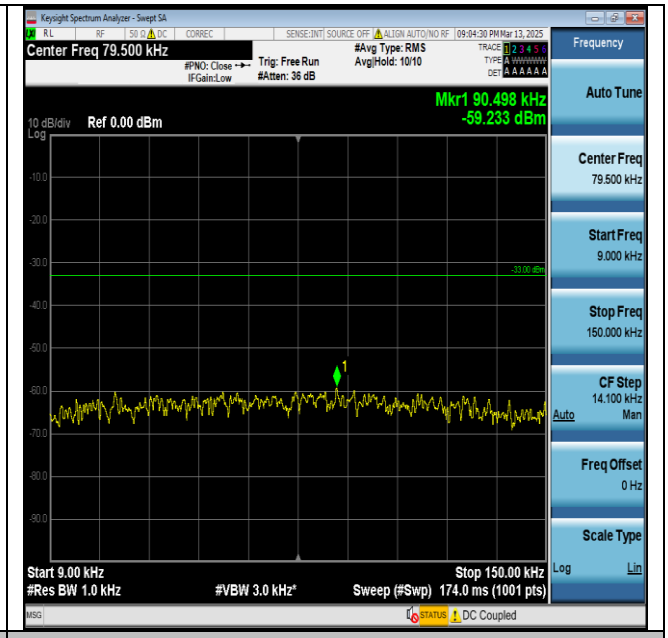
Band71-20MHz-QPSK-133222-1RB#0-30~1000-PASS

Band71-20MHz-QPSK-133222-1RB#0-1000~3000-PASS

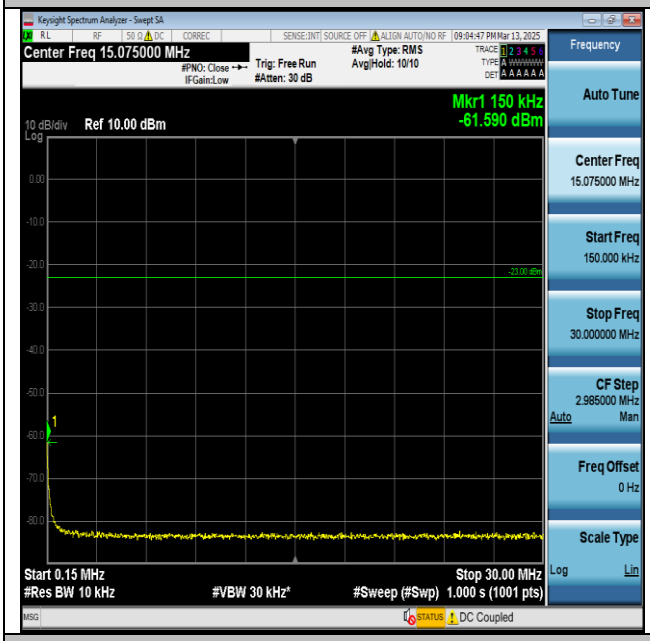
All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.



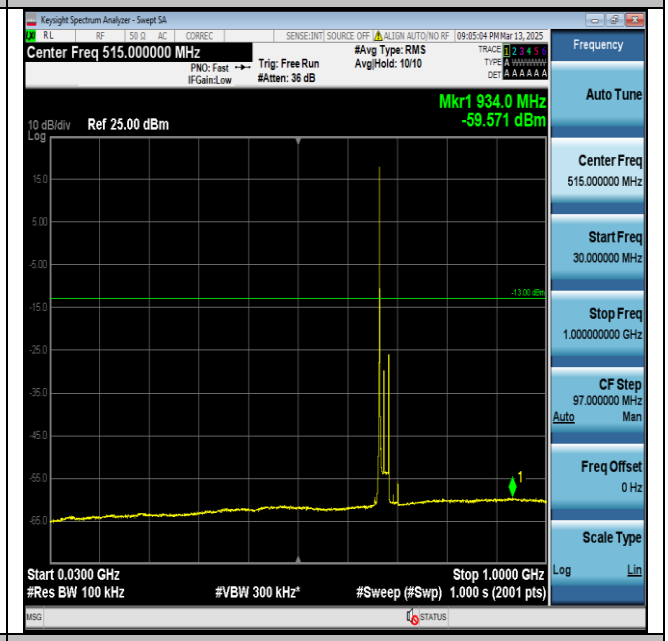
Band71-20MHz-QPSK-133222-1RB#0-3000~10000-PASS



Band71-20MHz-QPSK-133322-1RB#0-0.009~0.15-PASS

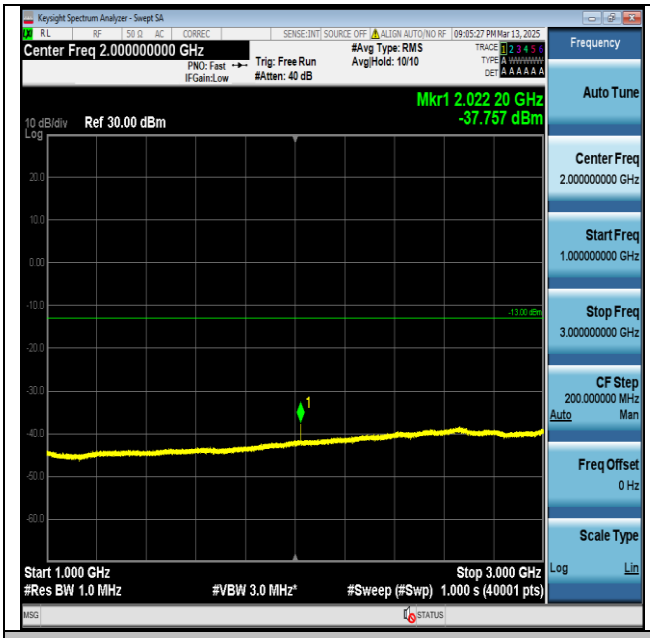


Band71-20MHz-QPSK-133322-1RB#0-0.15~30-PASS

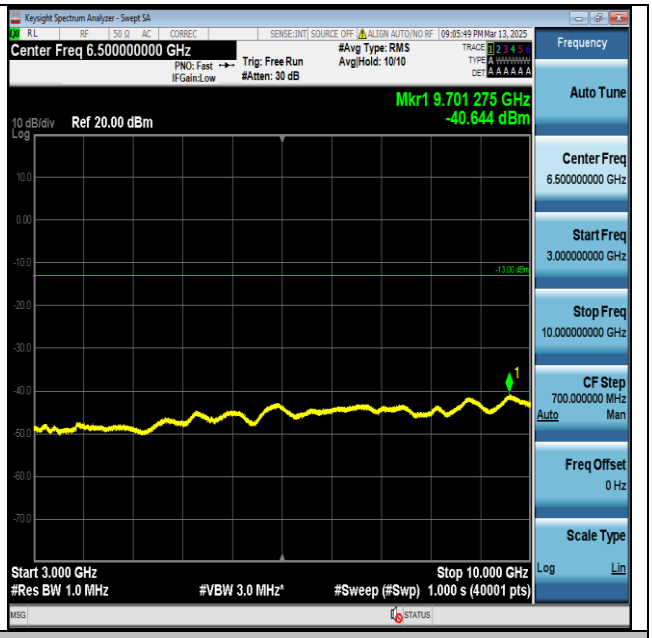


Band71-20MHz-QPSK-133322-1RB#0-30~1000-PASS

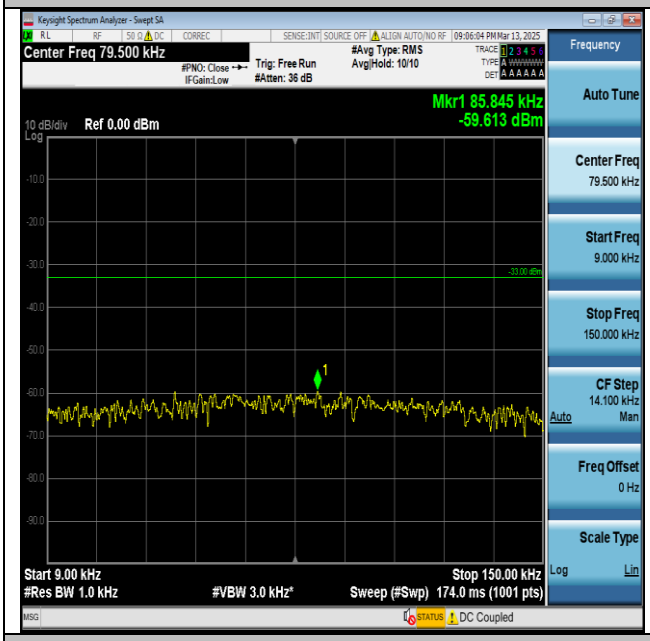
All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.



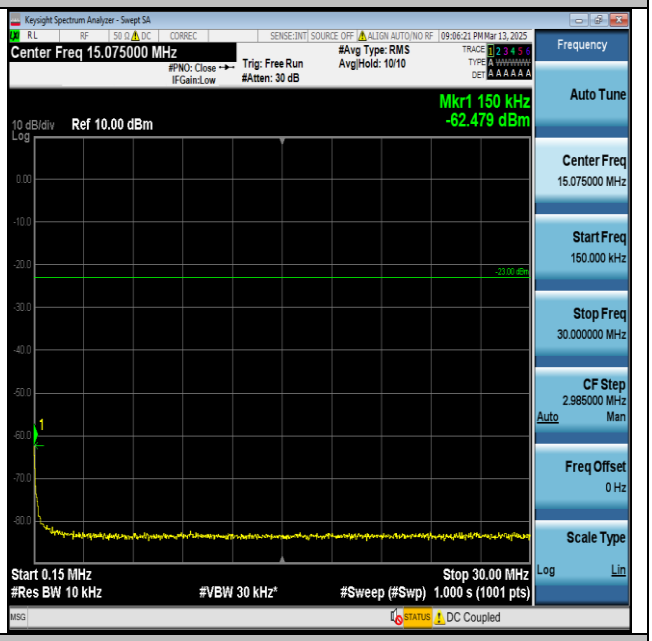
Band71-20MHz-QPSK-133322-1RB#0-1000~3000-PASS



Band71-20MHz-QPSK-133322-1RB#0-3000~10000-PASS

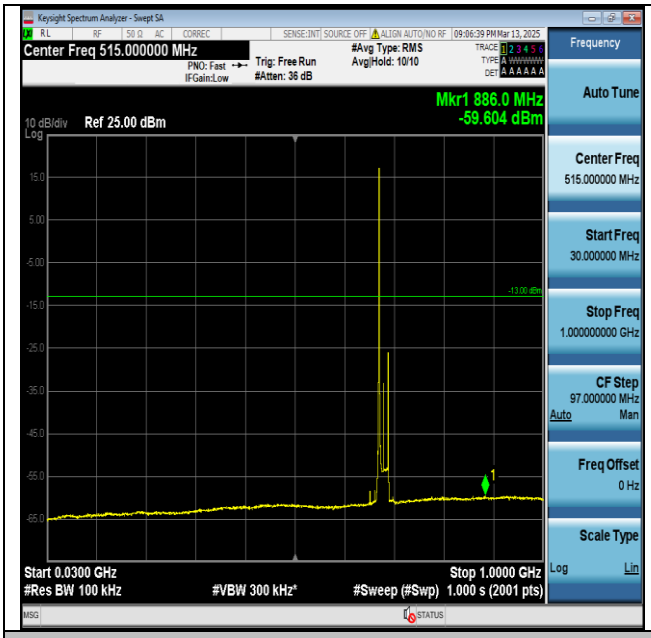


Band71-20MHz-QPSK-133372-1RB#0-0.009~0.15-PASS



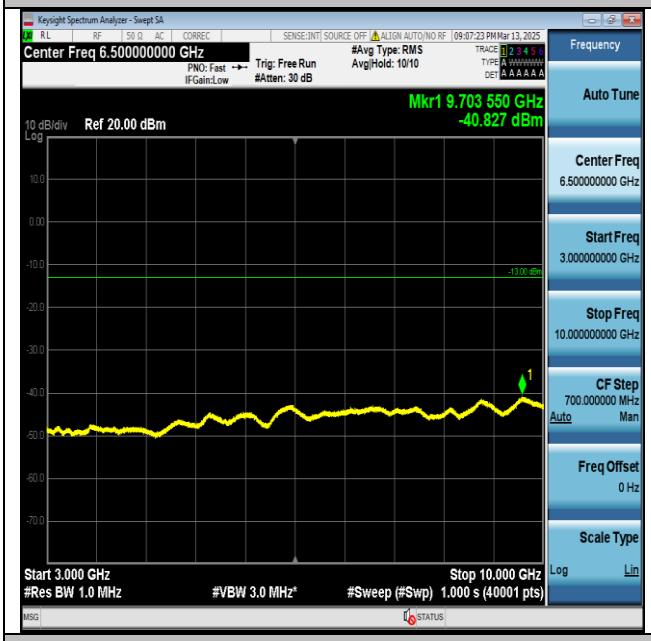
Band71-20MHz-QPSK-133372-1RB#0-0.15~30-PASS

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.



Band71-20MHz-QPSK-133372-1RB#0-30~1000-PASS

Band71-20MHz-QPSK-133372-1RB#0-1000~3000-PASS



Band71-20MHz-QPSK-133372-1RB#0-3000~10000-PASS

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.

Frequency Stability

Test Result

Voltage									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Verdict
Band71	20MHz	QPSK	133322	100RB#0	VN	NT	-1.40	-0.002050	PASS
Band71	20MHz	QPSK	133322	100RB#0	VL	NT	-1.20	-0.001757	PASS
Band71	20MHz	QPSK	133322	100RB#0	VH	NT	-0.80	-0.001171	PASS

Temperature									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Verdict
Band71	20MHz	QPSK	133322	100RB#0	NV	-30	-1.10	-0.001611	PASS
Band71	20MHz	QPSK	133322	100RB#0	NV	-20	0.20	0.000293	PASS
Band71	20MHz	QPSK	133322	100RB#0	NV	-10	0.50	0.000732	PASS
Band71	20MHz	QPSK	133322	100RB#0	NV	0	-1.10	-0.001611	PASS
Band71	20MHz	QPSK	133322	100RB#0	NV	10	-0.30	-0.000439	PASS
Band71	20MHz	QPSK	133322	100RB#0	NV	20	-1.10	-0.001611	PASS
Band71	20MHz	QPSK	133322	100RB#0	NV	30	-2.00	-0.002928	PASS
Band71	20MHz	QPSK	133322	100RB#0	NV	40	0.90	0.001318	PASS
Band71	20MHz	QPSK	133322	100RB#0	NV	50	-1.20	-0.001757	PASS

~The End~

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.