



Appendix B

E-UTRA BAND 25



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1 Effective (Isotropic) Radiated Power Output Data

1.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Conducted power (dBm)	EIRP (dBm)	limit (dBm)	Verdict
Band25	1.4MHz	QPSK	26047	1RB#0	22.36	19.21	33.00	PASS
Band25	1.4MHz	QPSK	26047	1RB#2	22.66	19.51	33.00	PASS
Band25	1.4MHz	QPSK	26047	1RB#5	22.69	19.54	33.00	PASS
Band25	1.4MHz	QPSK	26047	3RB#0	22.89	19.74	33.00	PASS
Band25	1.4MHz	QPSK	26047	3RB#1	22.89	19.74	33.00	PASS
Band25	1.4MHz	QPSK	26047	3RB#3	22.85	19.70	33.00	PASS
Band25	1.4MHz	QPSK	26047	6RB#0	21.87	18.72	33.00	PASS
Band25	1.4MHz	QPSK	26365	1RB#0	22.40	19.25	33.00	PASS
Band25	1.4MHz	QPSK	26365	1RB#2	22.50	19.35	33.00	PASS
Band25	1.4MHz	QPSK	26365	1RB#5	22.39	19.24	33.00	PASS
Band25	1.4MHz	QPSK	26365	3RB#0	22.79	19.64	33.00	PASS
Band25	1.4MHz	QPSK	26365	3RB#1	22.84	19.69	33.00	PASS
Band25	1.4MHz	QPSK	26365	3RB#3	22.88	19.73	33.00	PASS
Band25	1.4MHz	QPSK	26365	6RB#0	21.84	18.69	33.00	PASS
Band25	1.4MHz	QPSK	26683	1RB#0	22.66	19.51	33.00	PASS
Band25	1.4MHz	QPSK	26683	1RB#2	22.59	19.44	33.00	PASS
Band25	1.4MHz	QPSK	26683	1RB#5	22.80	19.65	33.00	PASS
Band25	1.4MHz	QPSK	26683	3RB#0	22.93	19.78	33.00	PASS
Band25	1.4MHz	QPSK	26683	3RB#1	22.95	19.80	33.00	PASS
Band25	1.4MHz	QPSK	26683	3RB#3	22.79	19.64	33.00	PASS
Band25	1.4MHz	QPSK	26683	6RB#0	22.10	18.95	33.00	PASS
Band25	1.4MHz	16QAM	26047	1RB#0	21.06	17.91	33.00	PASS
Band25	1.4MHz	16QAM	26047	1RB#2	21.34	18.19	33.00	PASS
Band25	1.4MHz	16QAM	26047	1RB#5	21.32	18.17	33.00	PASS
Band25	1.4MHz	16QAM	26047	3RB#0	21.76	18.61	33.00	PASS
Band25	1.4MHz	16QAM	26047	3RB#1	21.96	18.81	33.00	PASS
Band25	1.4MHz	16QAM	26047	3RB#3	21.98	18.83	33.00	PASS
Band25	1.4MHz	16QAM	26047	6RB#0	20.85	17.70	33.00	PASS
Band25	1.4MHz	16QAM	26365	1RB#0	21.46	18.31	33.00	PASS
Band25	1.4MHz	16QAM	26365	1RB#2	21.37	18.22	33.00	PASS
Band25	1.4MHz	16QAM	26365	1RB#5	21.37	18.22	33.00	PASS
Band25	1.4MHz	16QAM	26365	3RB#0	21.61	18.46	33.00	PASS
Band25	1.4MHz	16QAM	26365	3RB#1	21.99	18.84	33.00	PASS
Band25	1.4MHz	16QAM	26365	3RB#3	21.89	18.74	33.00	PASS
Band25	1.4MHz	16QAM	26365	6RB#0	20.89	17.74	33.00	PASS
Band25	1.4MHz	16QAM	26683	1RB#0	21.44	18.29	33.00	PASS
Band25	1.4MHz	16QAM	26683	1RB#2	21.56	18.41	33.00	PASS

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Band25	1.4MHz	16QAM	26683	1RB#5	21.43	18.28	33.00	PASS
Band25	1.4MHz	16QAM	26683	3RB#0	21.85	18.70	33.00	PASS
Band25	1.4MHz	16QAM	26683	3RB#1	22.03	18.88	33.00	PASS
Band25	1.4MHz	16QAM	26683	3RB#3	21.96	18.81	33.00	PASS
Band25	1.4MHz	16QAM	26683	6RB#0	21.11	17.96	33.00	PASS
Band25	3MHz	QPSK	26055	1RB#0	22.94	19.79	33.00	PASS
Band25	3MHz	QPSK	26055	1RB#8	23.04	19.89	33.00	PASS
Band25	3MHz	QPSK	26055	1RB#14	22.89	19.74	33.00	PASS
Band25	3MHz	QPSK	26055	8RB#0	22.01	18.86	33.00	PASS
Band25	3MHz	QPSK	26055	8RB#4	22.09	18.94	33.00	PASS
Band25	3MHz	QPSK	26055	8RB#7	22.16	19.01	33.00	PASS
Band25	3MHz	QPSK	26055	15RB#0	22.04	18.89	33.00	PASS
Band25	3MHz	QPSK	26365	1RB#0	22.79	19.64	33.00	PASS
Band25	3MHz	QPSK	26365	1RB#8	22.93	19.78	33.00	PASS
Band25	3MHz	QPSK	26365	1RB#14	23.06	19.91	33.00	PASS
Band25	3MHz	QPSK	26365	8RB#0	21.97	18.82	33.00	PASS
Band25	3MHz	QPSK	26365	8RB#4	22.04	18.89	33.00	PASS
Band25	3MHz	QPSK	26365	8RB#7	22.08	18.93	33.00	PASS
Band25	3MHz	QPSK	26365	15RB#0	21.95	18.80	33.00	PASS
Band25	3MHz	QPSK	26675	1RB#0	23.02	19.87	33.00	PASS
Band25	3MHz	QPSK	26675	1RB#8	22.87	19.72	33.00	PASS
Band25	3MHz	QPSK	26675	1RB#14	22.74	19.59	33.00	PASS
Band25	3MHz	QPSK	26675	8RB#0	22.25	19.10	33.00	PASS
Band25	3MHz	QPSK	26675	8RB#4	22.05	18.90	33.00	PASS
Band25	3MHz	QPSK	26675	8RB#7	22.03	18.88	33.00	PASS
Band25	3MHz	QPSK	26675	15RB#0	22.12	18.97	33.00	PASS
Band25	3MHz	16QAM	26055	1RB#0	21.57	18.42	33.00	PASS
Band25	3MHz	16QAM	26055	1RB#8	21.54	18.39	33.00	PASS
Band25	3MHz	16QAM	26055	1RB#14	21.38	18.23	33.00	PASS
Band25	3MHz	16QAM	26055	8RB#0	20.63	17.48	33.00	PASS
Band25	3MHz	16QAM	26055	8RB#4	20.67	17.52	33.00	PASS
Band25	3MHz	16QAM	26055	8RB#7	20.81	17.66	33.00	PASS
Band25	3MHz	16QAM	26055	15RB#0	20.88	17.73	33.00	PASS
Band25	3MHz	16QAM	26365	1RB#0	21.02	17.87	33.00	PASS
Band25	3MHz	16QAM	26365	1RB#8	21.08	17.93	33.00	PASS
Band25	3MHz	16QAM	26365	1RB#14	21.32	18.17	33.00	PASS
Band25	3MHz	16QAM	26365	8RB#0	20.48	17.33	33.00	PASS
Band25	3MHz	16QAM	26365	8RB#4	20.46	17.31	33.00	PASS
Band25	3MHz	16QAM	26365	8RB#7	20.44	17.29	33.00	PASS
Band25	3MHz	16QAM	26365	15RB#0	20.72	17.57	33.00	PASS
Band25	3MHz	16QAM	26675	1RB#0	21.67	18.52	33.00	PASS
Band25	3MHz	16QAM	26675	1RB#8	21.40	18.25	33.00	PASS
Band25	3MHz	16QAM	26675	1RB#14	21.24	18.09	33.00	PASS
Band25	3MHz	16QAM	26675	8RB#0	20.77	17.62	33.00	PASS
Band25	3MHz	16QAM	26675	8RB#4	20.75	17.60	33.00	PASS
Band25	3MHz	16QAM	26675	8RB#7	20.73	17.58	33.00	PASS

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Band25	3MHz	16QAM	26675	15RB#0	20.88	17.73	33.00	PASS
Band25	5MHz	QPSK	26065	1RB#0	22.89	19.74	33.00	PASS
Band25	5MHz	QPSK	26065	1RB#12	23.13	19.98	33.00	PASS
Band25	5MHz	QPSK	26065	1RB#24	23.09	19.94	33.00	PASS
Band25	5MHz	QPSK	26065	12RB#0	21.98	18.83	33.00	PASS
Band25	5MHz	QPSK	26065	12RB#6	22.16	19.01	33.00	PASS
Band25	5MHz	QPSK	26065	12RB#13	22.04	18.89	33.00	PASS
Band25	5MHz	QPSK	26065	25RB#0	21.90	18.75	33.00	PASS
Band25	5MHz	QPSK	26365	1RB#0	22.76	19.61	33.00	PASS
Band25	5MHz	QPSK	26365	1RB#12	22.93	19.78	33.00	PASS
Band25	5MHz	QPSK	26365	1RB#24	23.21	20.06	33.00	PASS
Band25	5MHz	QPSK	26365	12RB#0	21.89	18.74	33.00	PASS
Band25	5MHz	QPSK	26365	12RB#6	22.05	18.90	33.00	PASS
Band25	5MHz	QPSK	26365	12RB#13	22.12	18.97	33.00	PASS
Band25	5MHz	QPSK	26365	25RB#0	21.92	18.77	33.00	PASS
Band25	5MHz	QPSK	26665	1RB#0	22.68	19.53	33.00	PASS
Band25	5MHz	QPSK	26665	1RB#12	22.73	19.58	33.00	PASS
Band25	5MHz	QPSK	26665	1RB#24	22.64	19.49	33.00	PASS
Band25	5MHz	QPSK	26665	12RB#0	21.88	18.73	33.00	PASS
Band25	5MHz	QPSK	26665	12RB#6	21.59	18.44	33.00	PASS
Band25	5MHz	QPSK	26665	12RB#13	21.54	18.39	33.00	PASS
Band25	5MHz	QPSK	26665	25RB#0	21.77	18.62	33.00	PASS
Band25	5MHz	16QAM	26065	1RB#0	21.63	18.48	33.00	PASS
Band25	5MHz	16QAM	26065	1RB#12	21.57	18.42	33.00	PASS
Band25	5MHz	16QAM	26065	1RB#24	21.48	18.33	33.00	PASS
Band25	5MHz	16QAM	26065	12RB#0	20.58	17.43	33.00	PASS
Band25	5MHz	16QAM	26065	12RB#6	20.77	17.62	33.00	PASS
Band25	5MHz	16QAM	26065	12RB#13	20.42	17.27	33.00	PASS
Band25	5MHz	16QAM	26065	25RB#0	20.48	17.33	33.00	PASS
Band25	5MHz	16QAM	26365	1RB#0	21.16	18.01	33.00	PASS
Band25	5MHz	16QAM	26365	1RB#12	21.49	18.34	33.00	PASS
Band25	5MHz	16QAM	26365	1RB#24	21.02	17.87	33.00	PASS
Band25	5MHz	16QAM	26365	12RB#0	20.33	17.18	33.00	PASS
Band25	5MHz	16QAM	26365	12RB#6	20.68	17.53	33.00	PASS
Band25	5MHz	16QAM	26365	12RB#13	20.67	17.52	33.00	PASS
Band25	5MHz	16QAM	26365	25RB#0	20.71	17.56	33.00	PASS
Band25	5MHz	16QAM	26665	1RB#0	21.41	18.26	33.00	PASS
Band25	5MHz	16QAM	26665	1RB#12	21.30	18.15	33.00	PASS
Band25	5MHz	16QAM	26665	1RB#24	21.00	17.85	33.00	PASS
Band25	5MHz	16QAM	26665	12RB#0	20.59	17.44	33.00	PASS
Band25	5MHz	16QAM	26665	12RB#6	20.67	17.52	33.00	PASS
Band25	5MHz	16QAM	26665	12RB#13	20.60	17.45	33.00	PASS
Band25	5MHz	16QAM	26665	25RB#0	20.88	17.73	33.00	PASS
Band25	10MHz	QPSK	26090	1RB#0	22.69	19.54	33.00	PASS
Band25	10MHz	QPSK	26090	1RB#24	22.64	19.49	33.00	PASS
Band25	10MHz	QPSK	26090	1RB#49	22.58	19.43	33.00	PASS

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Band25	10MHz	QPSK	26090	25RB#0	21.70	18.55	33.00	PASS
Band25	10MHz	QPSK	26090	25RB#12	22.18	19.03	33.00	PASS
Band25	10MHz	QPSK	26090	25RB#25	21.84	18.69	33.00	PASS
Band25	10MHz	QPSK	26090	50RB#0	21.79	18.64	33.00	PASS
Band25	10MHz	QPSK	26365	1RB#0	22.65	19.50	33.00	PASS
Band25	10MHz	QPSK	26365	1RB#24	23.40	20.25	33.00	PASS
Band25	10MHz	QPSK	26365	1RB#49	22.60	19.45	33.00	PASS
Band25	10MHz	QPSK	26365	25RB#0	21.83	18.68	33.00	PASS
Band25	10MHz	QPSK	26365	25RB#12	22.01	18.86	33.00	PASS
Band25	10MHz	QPSK	26365	25RB#25	21.91	18.76	33.00	PASS
Band25	10MHz	QPSK	26365	50RB#0	21.83	18.68	33.00	PASS
Band25	10MHz	QPSK	26640	1RB#0	22.66	19.51	33.00	PASS
Band25	10MHz	QPSK	26640	1RB#24	22.64	19.49	33.00	PASS
Band25	10MHz	QPSK	26640	1RB#49	22.06	18.91	33.00	PASS
Band25	10MHz	QPSK	26640	25RB#0	22.30	19.15	33.00	PASS
Band25	10MHz	QPSK	26640	25RB#12	21.92	18.77	33.00	PASS
Band25	10MHz	QPSK	26640	25RB#25	21.59	18.44	33.00	PASS
Band25	10MHz	QPSK	26640	50RB#0	21.94	18.79	33.00	PASS
Band25	10MHz	16QAM	26090	1RB#0	21.69	18.54	33.00	PASS
Band25	10MHz	16QAM	26090	1RB#24	22.11	18.96	33.00	PASS
Band25	10MHz	16QAM	26090	1RB#49	21.41	18.26	33.00	PASS
Band25	10MHz	16QAM	26090	27RB#0	20.56	17.41	33.00	PASS
Band25	10MHz	16QAM	26365	1RB#0	20.97	17.82	33.00	PASS
Band25	10MHz	16QAM	26365	1RB#24	21.71	18.56	33.00	PASS
Band25	10MHz	16QAM	26365	1RB#49	21.08	17.93	33.00	PASS
Band25	10MHz	16QAM	26365	27RB#0	20.55	17.40	33.00	PASS
Band25	10MHz	16QAM	26640	1RB#0	20.97	17.82	33.00	PASS
Band25	10MHz	16QAM	26640	1RB#24	22.09	18.94	33.00	PASS
Band25	10MHz	16QAM	26640	1RB#49	20.59	17.44	33.00	PASS
Band25	10MHz	16QAM	26640	27RB#0	20.48	17.33	33.00	PASS
Band25	15MHz	QPSK	26115	1RB#0	22.77	19.62	33.00	PASS
Band25	15MHz	QPSK	26115	1RB#38	22.88	19.73	33.00	PASS
Band25	15MHz	QPSK	26115	1RB#74	22.56	19.41	33.00	PASS
Band25	15MHz	QPSK	26115	36RB#0	21.98	18.83	33.00	PASS
Band25	15MHz	QPSK	26115	36RB#18	21.71	18.56	33.00	PASS
Band25	15MHz	QPSK	26115	36RB#39	21.73	18.58	33.00	PASS
Band25	15MHz	QPSK	26115	75RB#0	21.88	18.73	33.00	PASS
Band25	15MHz	QPSK	26365	1RB#0	22.30	19.15	33.00	PASS
Band25	15MHz	QPSK	26365	1RB#38	23.01	19.86	33.00	PASS
Band25	15MHz	QPSK	26365	1RB#74	22.69	19.54	33.00	PASS
Band25	15MHz	QPSK	26365	36RB#0	21.75	18.60	33.00	PASS
Band25	15MHz	QPSK	26365	36RB#18	22.02	18.87	33.00	PASS
Band25	15MHz	QPSK	26365	36RB#39	21.94	18.79	33.00	PASS
Band25	15MHz	QPSK	26365	75RB#0	21.94	18.79	33.00	PASS
Band25	15MHz	QPSK	26615	1RB#0	22.33	19.18	33.00	PASS
Band25	15MHz	QPSK	26615	1RB#38	23.23	20.08	33.00	PASS

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Band25	15MHz	QPSK	26615	1RB#74	21.75	18.60	33.00	PASS
Band25	15MHz	QPSK	26615	36RB#0	21.81	18.66	33.00	PASS
Band25	15MHz	QPSK	26615	36RB#18	21.68	18.53	33.00	PASS
Band25	15MHz	QPSK	26615	36RB#39	21.51	18.36	33.00	PASS
Band25	15MHz	QPSK	26615	75RB#0	21.71	18.56	33.00	PASS
Band25	15MHz	16QAM	26115	1RB#0	21.77	18.62	33.00	PASS
Band25	15MHz	16QAM	26115	1RB#38	21.22	18.07	33.00	PASS
Band25	15MHz	16QAM	26115	1RB#74	21.07	17.92	33.00	PASS
Band25	15MHz	16QAM	26115	27RB#0	20.47	17.32	33.00	PASS
Band25	15MHz	16QAM	26365	1RB#0	21.01	17.86	33.00	PASS
Band25	15MHz	16QAM	26365	1RB#38	21.64	18.49	33.00	PASS
Band25	15MHz	16QAM	26365	1RB#74	21.39	18.24	33.00	PASS
Band25	15MHz	16QAM	26365	27RB#0	20.49	17.34	33.00	PASS
Band25	15MHz	16QAM	26615	1RB#0	21.34	18.19	33.00	PASS
Band25	15MHz	16QAM	26615	1RB#38	21.28	18.13	33.00	PASS
Band25	15MHz	16QAM	26615	1RB#74	21.33	18.18	33.00	PASS
Band25	15MHz	16QAM	26615	27RB#0	20.21	17.06	33.00	PASS
Band25	20MHz	QPSK	26140	1RB#0	22.69	19.54	33.00	PASS
Band25	20MHz	QPSK	26140	1RB#49	23.07	19.92	33.00	PASS
Band25	20MHz	QPSK	26140	1RB#99	22.11	18.96	33.00	PASS
Band25	20MHz	QPSK	26140	50RB#0	22.04	18.89	33.00	PASS
Band25	20MHz	QPSK	26140	50RB#25	22.32	19.17	33.00	PASS
Band25	20MHz	QPSK	26140	50RB#50	21.61	18.46	33.00	PASS
Band25	20MHz	QPSK	26140	100RB#0	21.04	17.89	33.00	PASS
Band25	20MHz	QPSK	26365	1RB#0	22.44	19.29	33.00	PASS
Band25	20MHz	QPSK	26365	1RB#49	23.06	19.91	33.00	PASS
Band25	20MHz	QPSK	26365	1RB#99	22.42	19.27	33.00	PASS
Band25	20MHz	QPSK	26365	50RB#0	21.76	18.61	33.00	PASS
Band25	20MHz	QPSK	26365	50RB#25	21.82	18.67	33.00	PASS
Band25	20MHz	QPSK	26365	50RB#50	21.72	18.57	33.00	PASS
Band25	20MHz	QPSK	26365	100RB#0	20.69	17.54	33.00	PASS
Band25	20MHz	QPSK	26590	1RB#0	22.41	19.26	33.00	PASS
Band25	20MHz	QPSK	26590	1RB#49	22.66	19.51	33.00	PASS
Band25	20MHz	QPSK	26590	1RB#99	22.54	19.39	33.00	PASS
Band25	20MHz	QPSK	26590	50RB#0	22.05	18.90	33.00	PASS
Band25	20MHz	QPSK	26590	50RB#25	21.79	18.64	33.00	PASS
Band25	20MHz	QPSK	26590	50RB#50	21.60	18.45	33.00	PASS
Band25	20MHz	QPSK	26590	100RB#0	20.87	17.72	33.00	PASS
Band25	20MHz	16QAM	26140	1RB#0	21.54	18.39	33.00	PASS
Band25	20MHz	16QAM	26140	1RB#49	21.87	18.72	33.00	PASS
Band25	20MHz	16QAM	26140	1RB#99	21.71	18.56	33.00	PASS
Band25	20MHz	16QAM	26140	27RB#0	20.88	17.73	33.00	PASS
Band25	20MHz	16QAM	26365	1RB#0	21.89	18.74	33.00	PASS
Band25	20MHz	16QAM	26365	1RB#49	21.78	18.63	33.00	PASS
Band25	20MHz	16QAM	26365	1RB#99	21.42	18.27	33.00	PASS
Band25	20MHz	16QAM	26365	27RB#0	20.72	17.57	33.00	PASS

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Band25	20MHz	16QAM	26590	1RB#0	21.19	18.04	33.00	PASS
Band25	20MHz	16QAM	26590	1RB#49	21.66	18.51	33.00	PASS
Band25	20MHz	16QAM	26590	1RB#99	21.58	18.43	33.00	PASS
Band25	20MHz	16QAM	26590	27RB#0	20.68	17.53	33.00	PASS

Remark:

a: For getting the EIRP (Efficient Isotropic Radiated Power), the following formula should be taken to calculate it,

$$\text{ERP [dBm]} = \text{Conducted power[dBm]} + \text{Gain [dBd]}$$

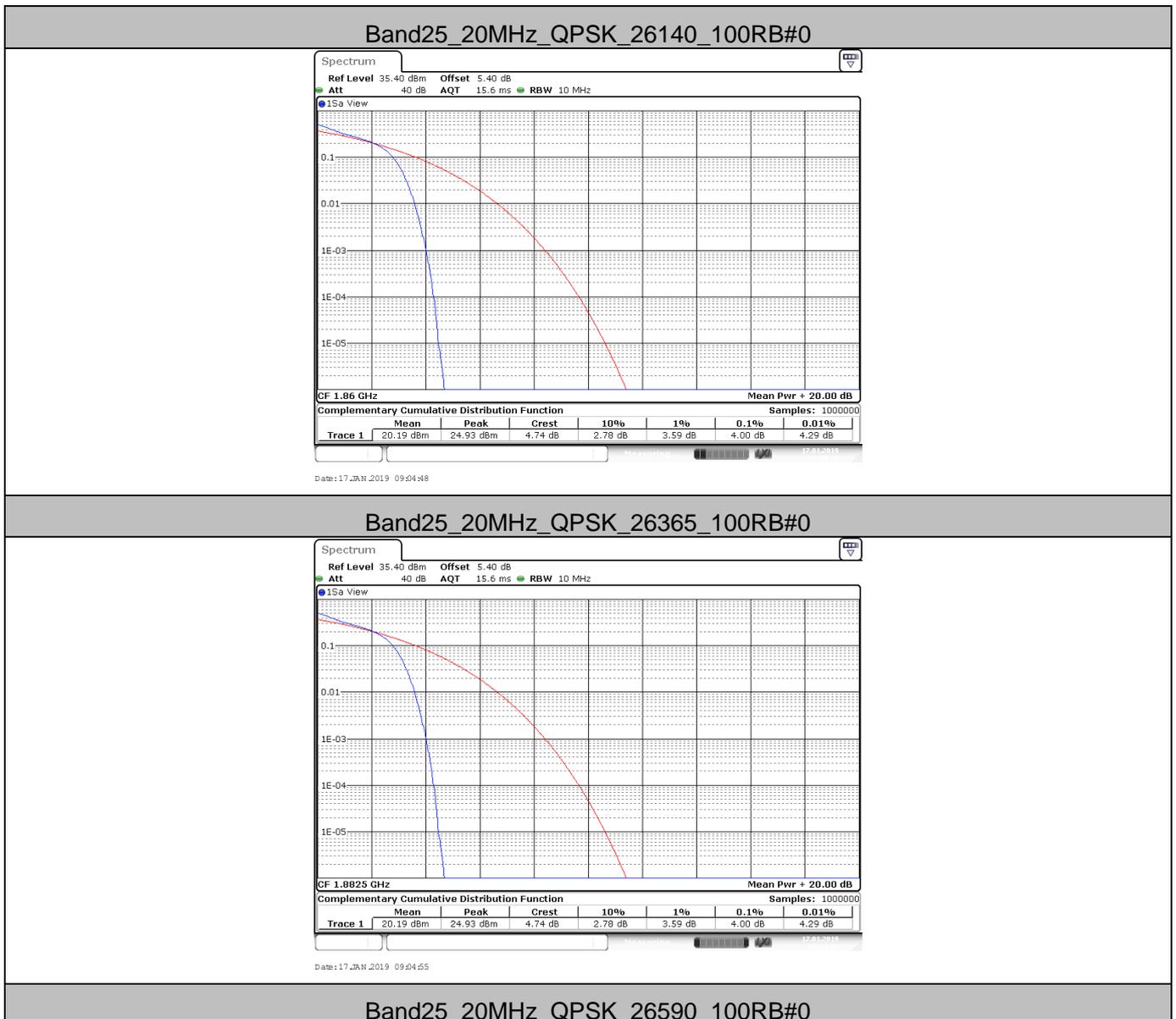
$$\text{EIRP [dBm]} = \text{Conducted power[dBm]} + \text{Gain [dBi]}$$

2 Peak-to-Average Ratio

2.1. Test Result

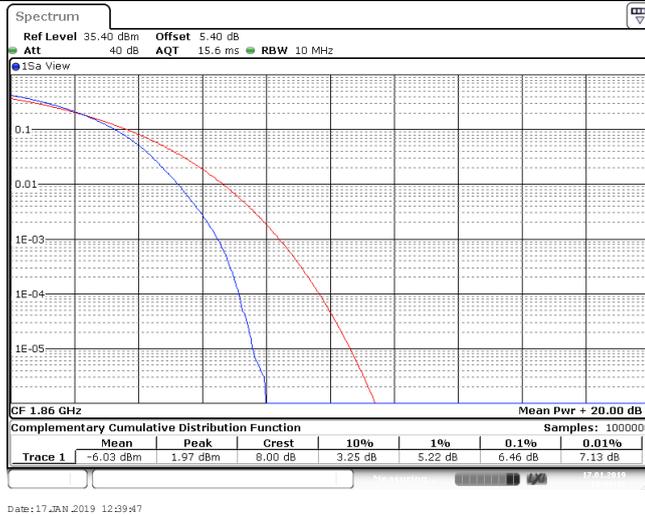
BAND	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band25	20MHz	QPSK	26140	100RB#0	4.00	13	PASS
Band25	20MHz	QPSK	26365	100RB#0	4.00	13	PASS
Band25	20MHz	QPSK	26590	100RB#0	4.00	13	PASS
Band25	20MHz	16QAM	26140	27RB#0	6.46	13	PASS
Band25	20MHz	16QAM	26365	27RB#0	6.46	13	PASS
Band25	20MHz	16QAM	26590	27RB#0	6.46	13	PASS

2.2. Test Plots

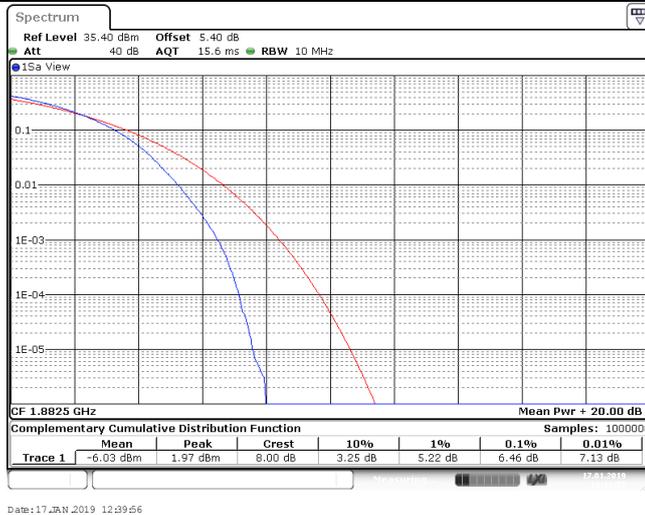




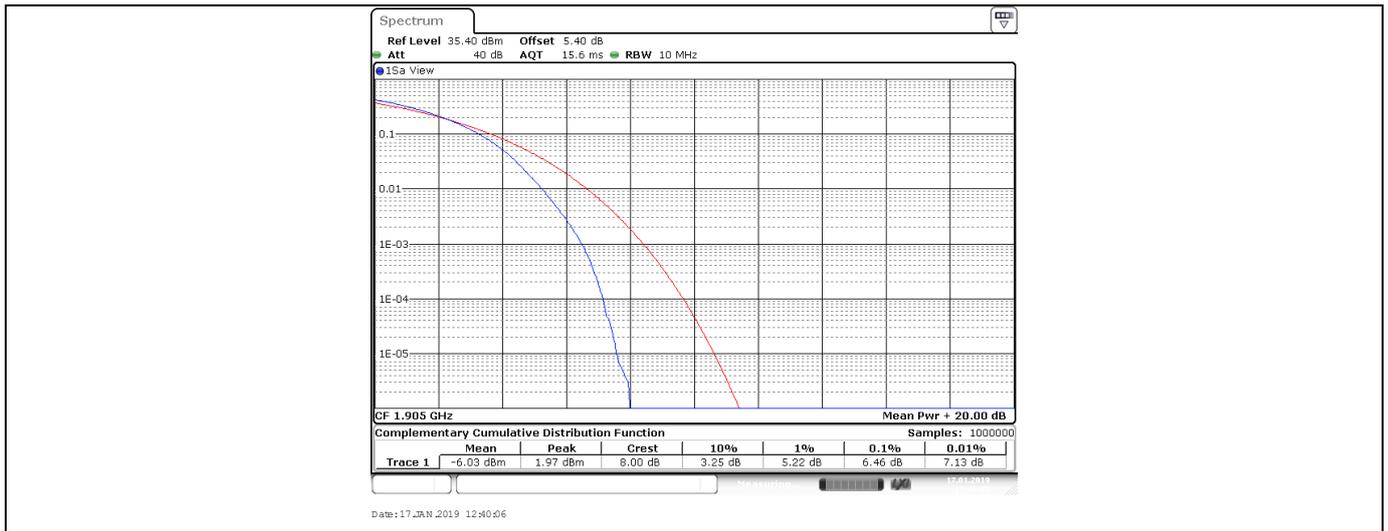
Band25_20MHz_16QAM_26140_27RB#0



Band25_20MHz_16QAM_26365_27RB#0



Band25_20MHz_16QAM_26590_27RB#0



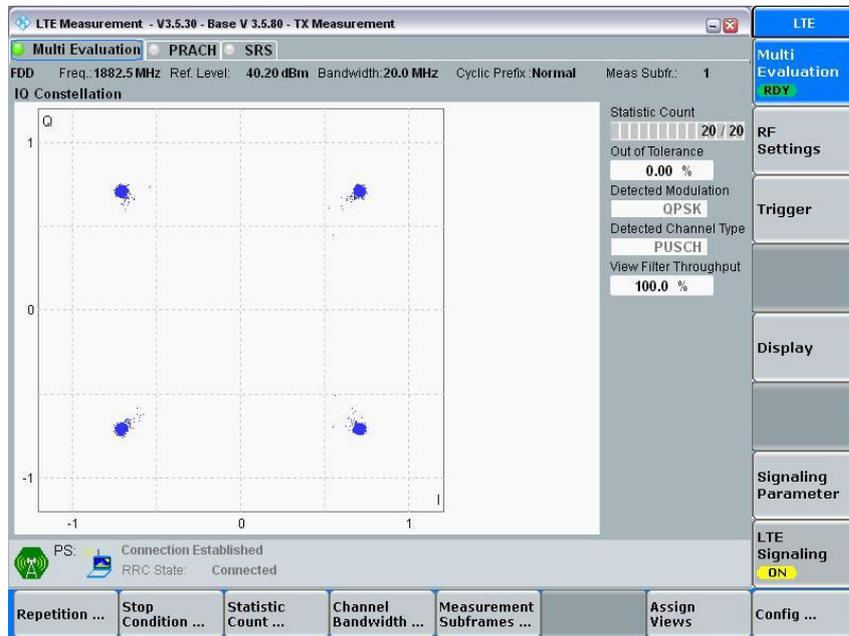
3 Modulation Characteristics

3.1. For LTE

3.1.1 Test BAND = LTE BAND 25

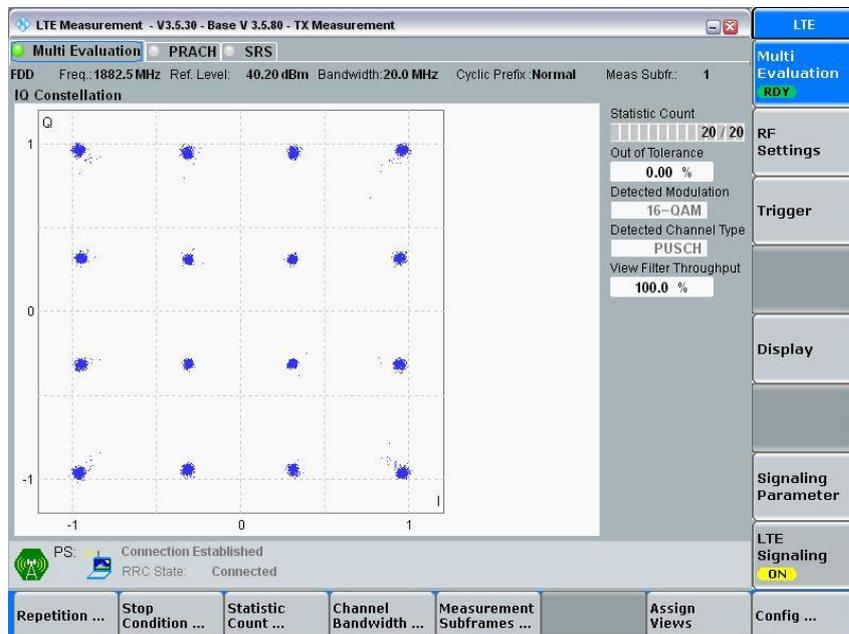
3.1.1.1 Test Mode = LTE /TM1 20MHz

3.1.1.1.1 Test Channel = MCH



3.1.1.2 Test Mode = LTE /TM2 20MHz

3.1.1.2.1 Test Channel = MCH



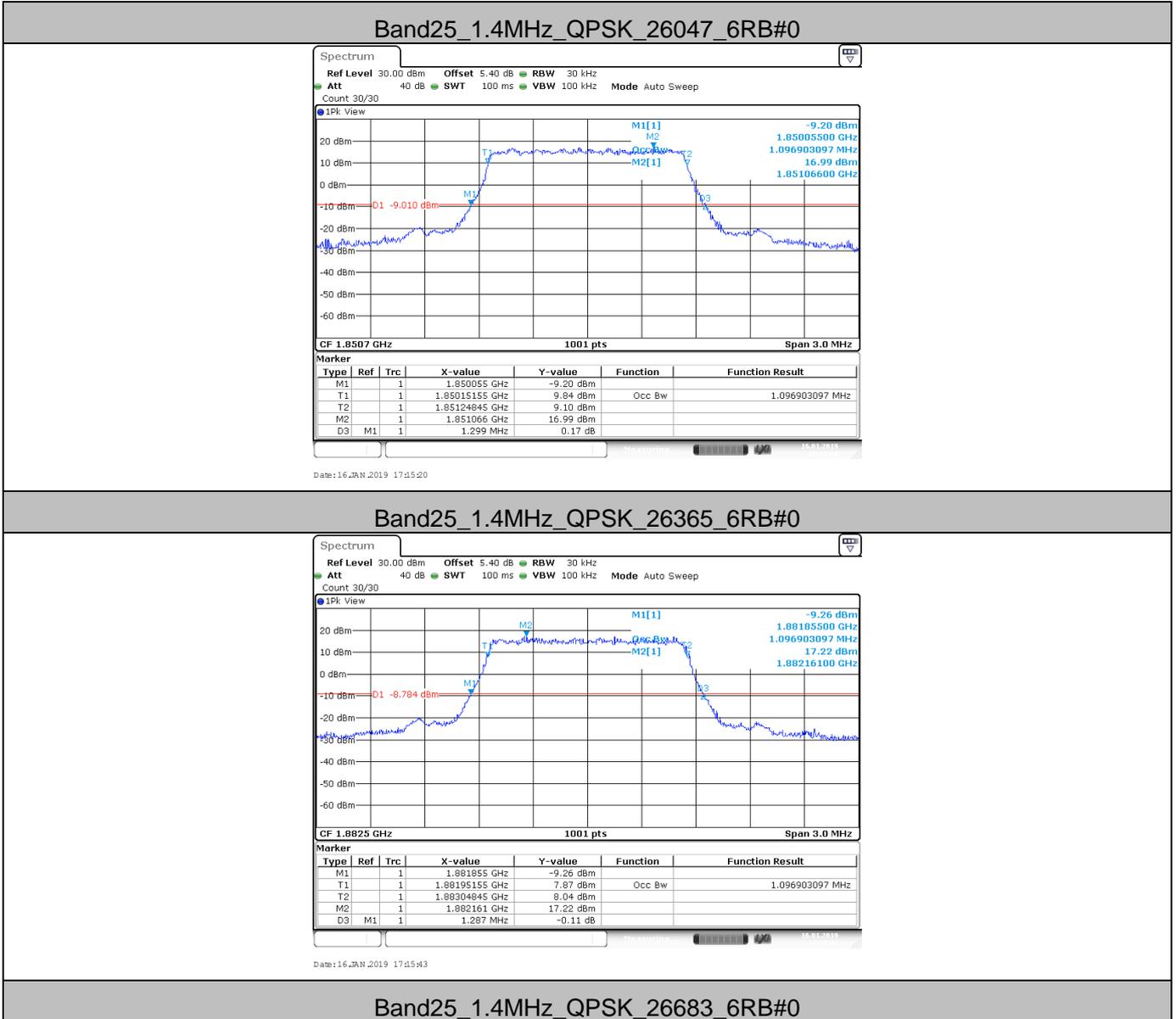
4 26dB Bandwidth and Occupied Bandwidth

4.1. Test Result

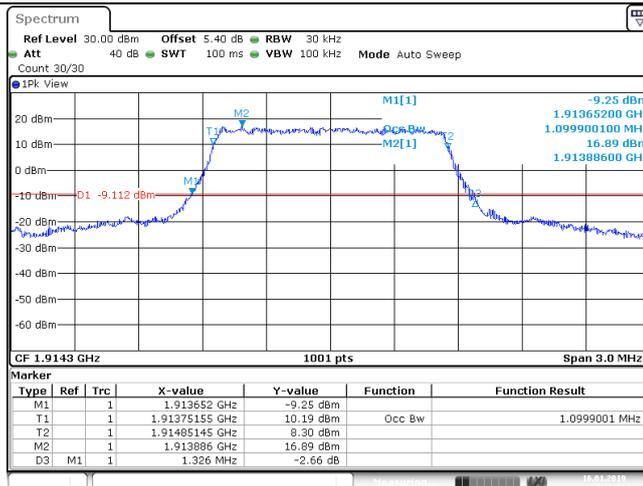
BAND	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band25	1.4MHz	QPSK	26047	6RB#0	1.097	1.299	PASS
Band25	1.4MHz	QPSK	26365	6RB#0	1.097	1.287	PASS
Band25	1.4MHz	QPSK	26683	6RB#0	1.100	1.326	PASS
Band25	1.4MHz	16QAM	26047	6RB#0	1.100	1.314	PASS
Band25	1.4MHz	16QAM	26365	6RB#0	1.094	1.308	PASS
Band25	1.4MHz	16QAM	26683	6RB#0	1.088	1.290	PASS
Band25	3MHz	QPSK	26055	15RB#0	2.697	2.982	PASS
Band25	3MHz	QPSK	26365	15RB#0	2.697	2.982	PASS
Band25	3MHz	QPSK	26675	15RB#0	2.703	2.970	PASS
Band25	3MHz	16QAM	26055	15RB#0	2.697	3.000	PASS
Band25	3MHz	16QAM	26365	15RB#0	2.697	2.982	PASS
Band25	3MHz	16QAM	26675	15RB#0	2.691	2.982	PASS
Band25	5MHz	QPSK	26065	25RB#0	4.466	4.930	PASS
Band25	5MHz	QPSK	26365	25RB#0	4.486	4.950	PASS
Band25	5MHz	QPSK	26665	25RB#0	4.486	4.950	PASS
Band25	5MHz	16QAM	26065	25RB#0	4.476	4.950	PASS
Band25	5MHz	16QAM	26365	25RB#0	4.486	4.940	PASS
Band25	5MHz	16QAM	26665	25RB#0	4.466	4.890	PASS
Band25	10MHz	QPSK	26090	50RB#0	8.931	9.760	PASS
Band25	10MHz	QPSK	26365	50RB#0	8.931	9.740	PASS
Band25	10MHz	QPSK	26640	50RB#0	8.931	9.780	PASS
Band25	10MHz	16QAM	26090	27RB#0	4.875	5.620	PASS
Band25	10MHz	16QAM	26365	27RB#0	4.975	5.600	PASS
Band25	10MHz	16QAM	26640	27RB#0	4.855	5.580	PASS
Band25	15MHz	QPSK	26115	75RB#0	13.427	14.850	PASS
Band25	15MHz	QPSK	26365	75RB#0	13.397	14.790	PASS
Band25	15MHz	QPSK	26615	75RB#0	13.397	14.850	PASS
Band25	15MHz	16QAM	26115	27RB#0	5.125	6.180	PASS
Band25	15MHz	16QAM	26365	27RB#0	5.095	6.210	PASS
Band25	15MHz	16QAM	26615	27RB#0	5.095	6.270	PASS
Band25	20MHz	QPSK	26140	100RB#0	17.782	19.480	PASS
Band25	20MHz	QPSK	26365	100RB#0	17.902	19.360	PASS
Band25	20MHz	QPSK	26590	100RB#0	17.862	19.240	PASS
Band25	20MHz	16QAM	26140	27RB#0	5.195	6.480	PASS
Band25	20MHz	16QAM	26365	27RB#0	5.195	6.400	PASS
Band25	20MHz	16QAM	26590	27RB#0	5.155	6.560	PASS



4.2. Test Plots

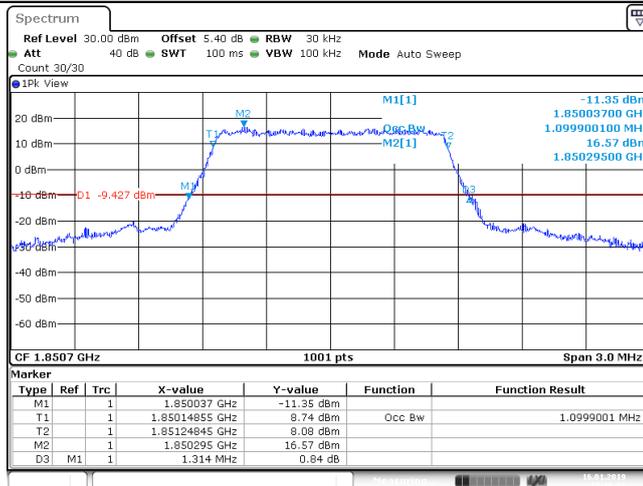


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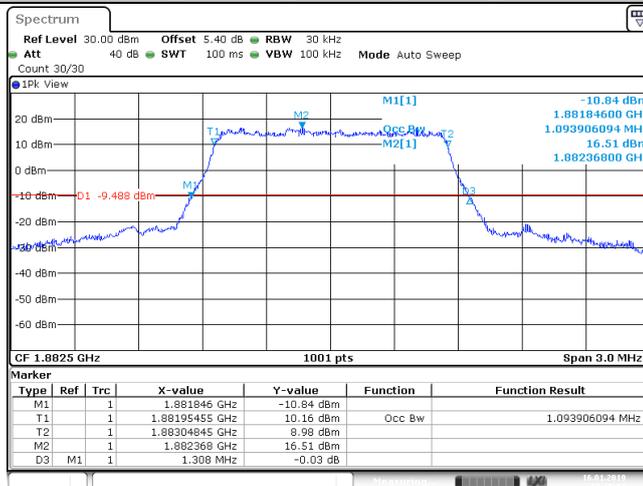
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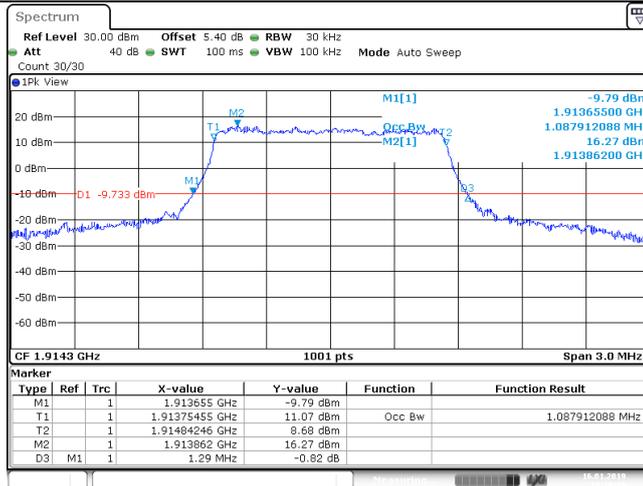
Date: 16 JAN 2019 17:15:31

Band25_1.4MHz_16QAM_26365_6RB#0



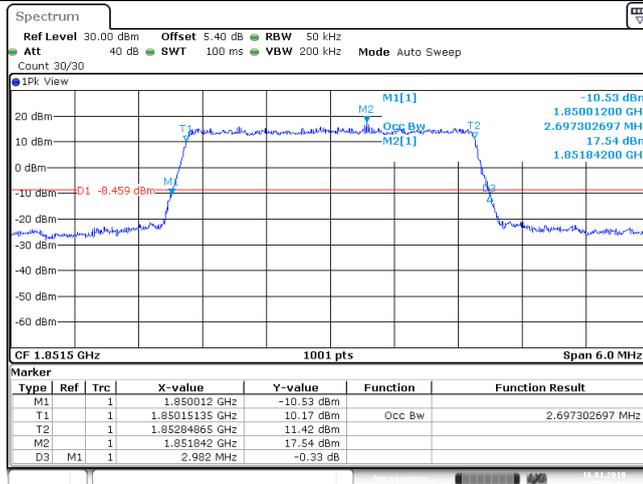
Date: 16 JAN 2019 17:15:54

Band25_1.4MHz_16QAM_26683_6RB#0



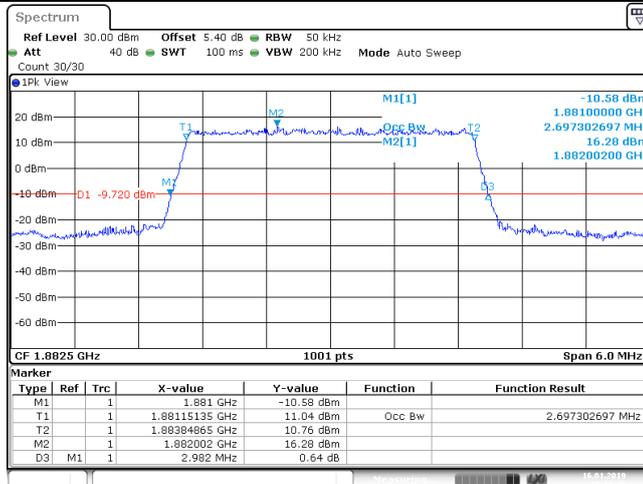
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Band25_3MHz_QPSK_26055_15RB#0



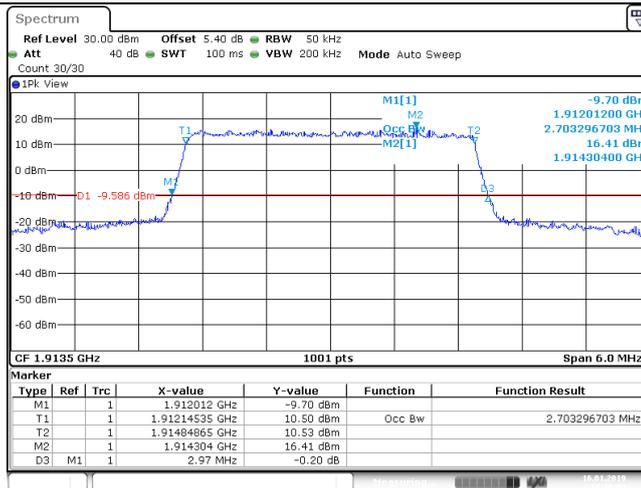
Date: 16 JAN 2019 17:17:17

Band25_3MHz_QPSK_26365_15RB#0



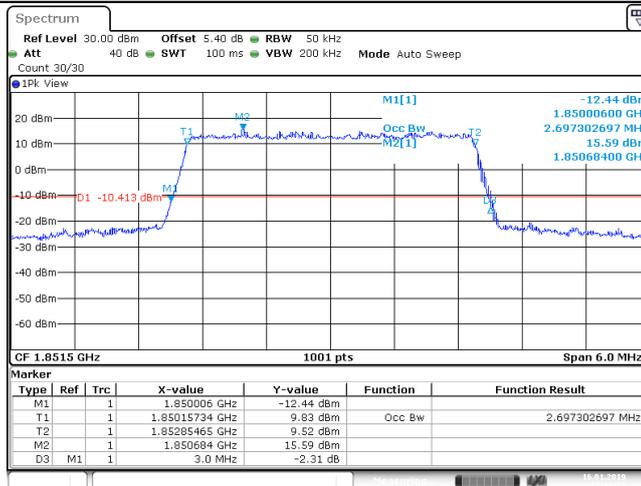
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Band25_3MHz_QPSK_26675_15RB#0



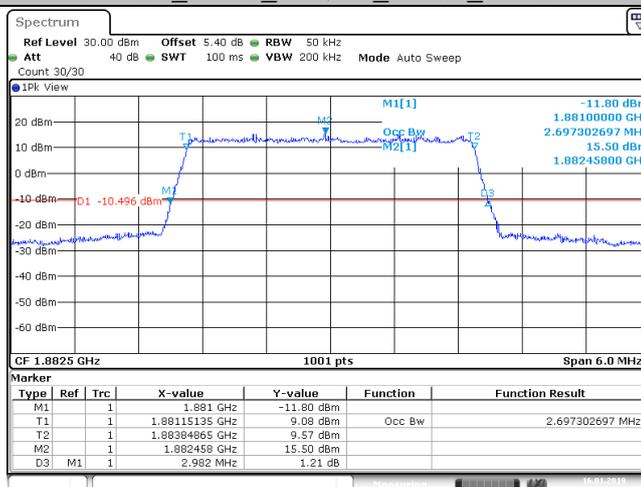
Date: 16 JAN 2019 17:18:03

Band25_3MHz_16QAM_26055_15RB#0



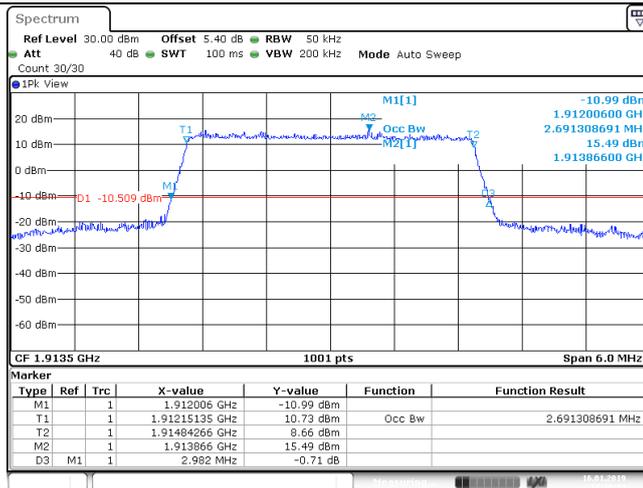
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Band25_3MHz_16QAM_26365_15RB#0



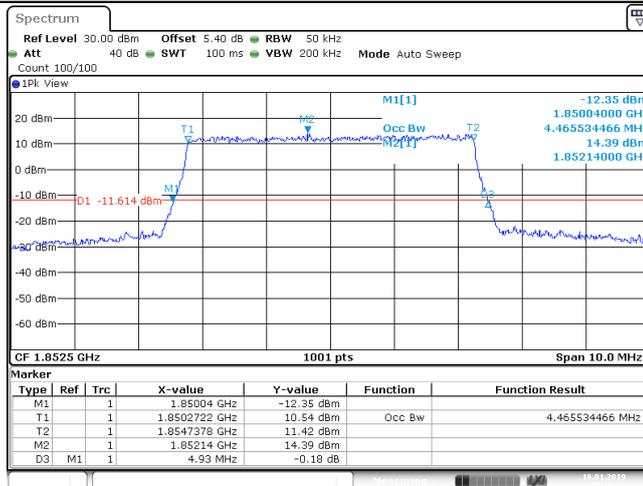
Date: 16 JAN 2019 17:17:50

Band25_3MHz_16QAM_26675_15RB#0



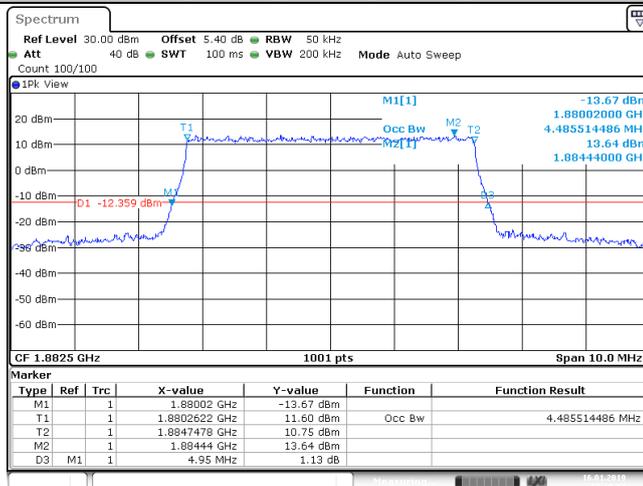
Date: 16 JAN 2019 17:18:13

Band25_5MHz_QPSK_26065_25RB#0



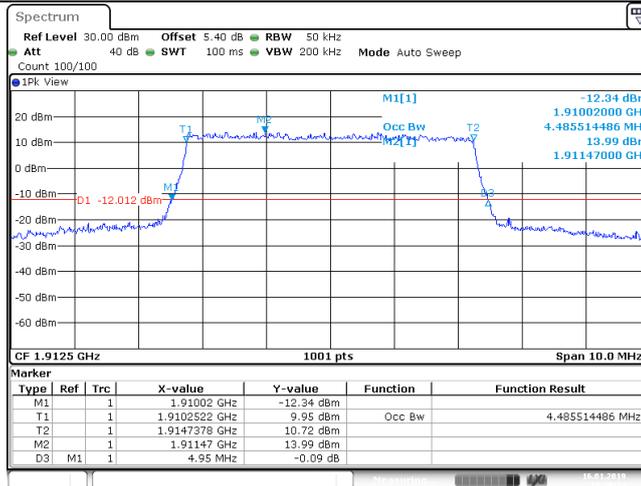
Date: 16 JAN 2019 17:19:21

Band25_5MHz_QPSK_26365_25RB#0



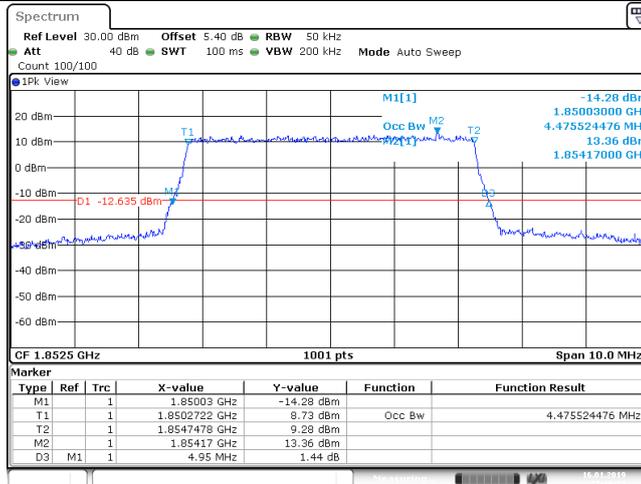
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Band25_5MHz_QPSK_26665_25RB#0



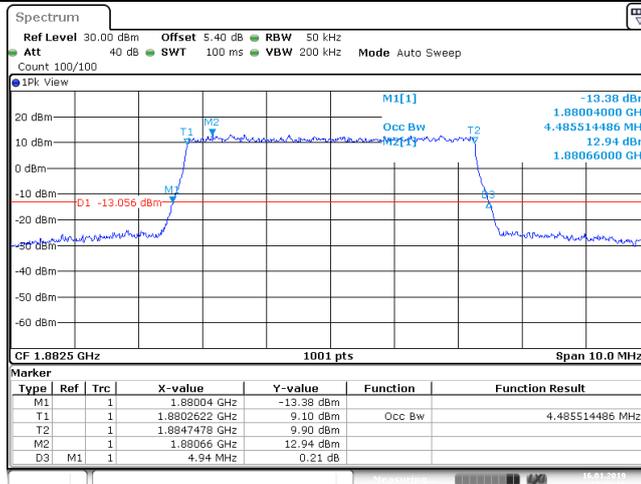
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Band25_5MHz_16QAM_26065_25RB#0



Date: 16_JAN 2019 17:19:38

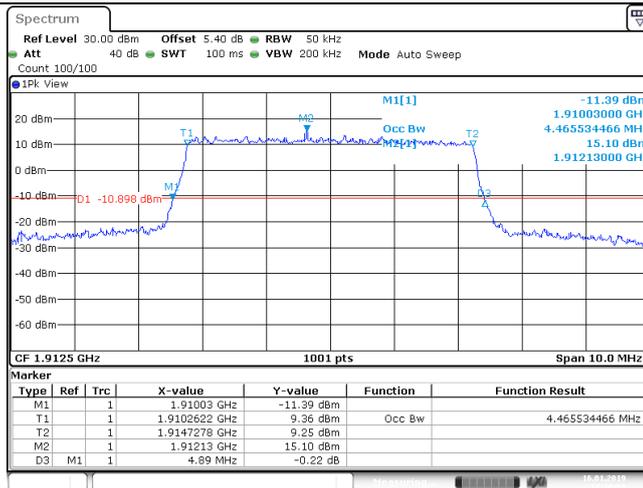
Band25_5MHz_16QAM_26365_25RB#0



Date: 16_JAN 2019 17:20:15

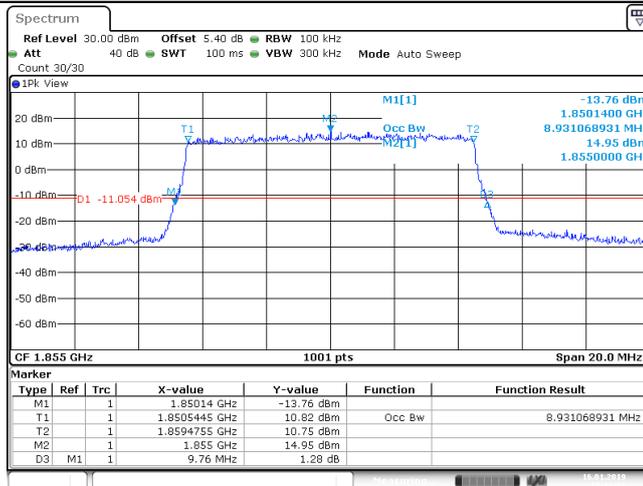
Band25_5MHz_16QAM_26665_25RB#0

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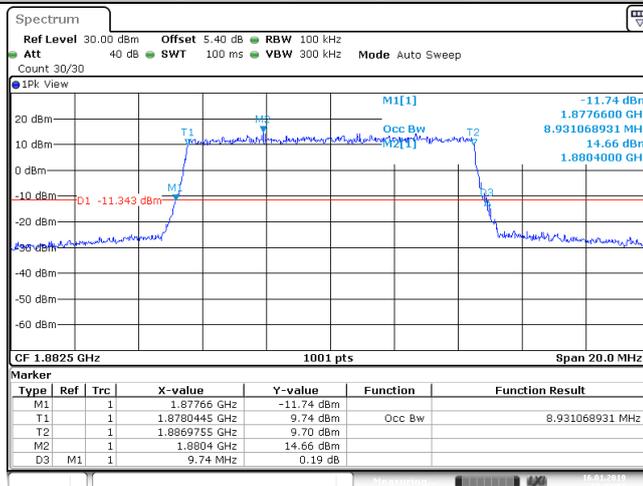
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Band25_10MHz_QPSK_26090_50RB#0



Date: 16 JAN 2019 17:21:51

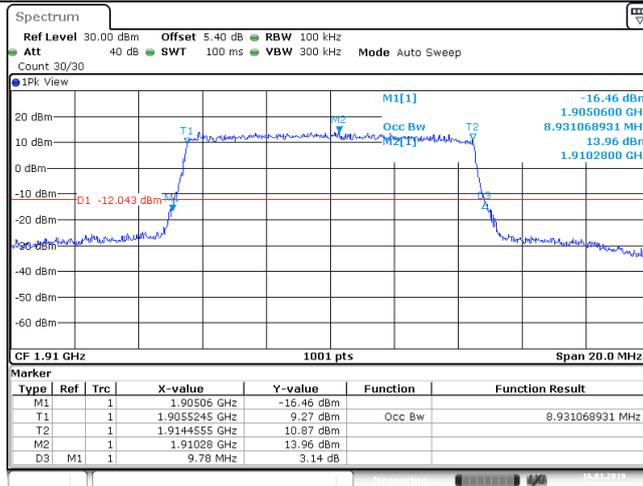
Band25_10MHz_QPSK_26365_50RB#0



Date: 16 JAN 2019 17:22:03

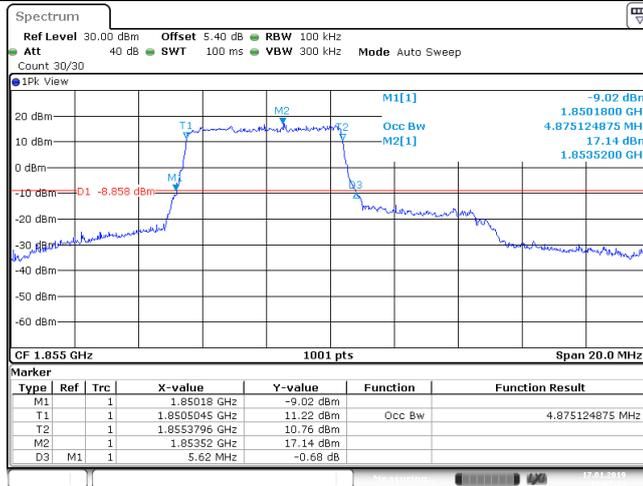
Band25_10MHz_QPSK_26640_50RB#0

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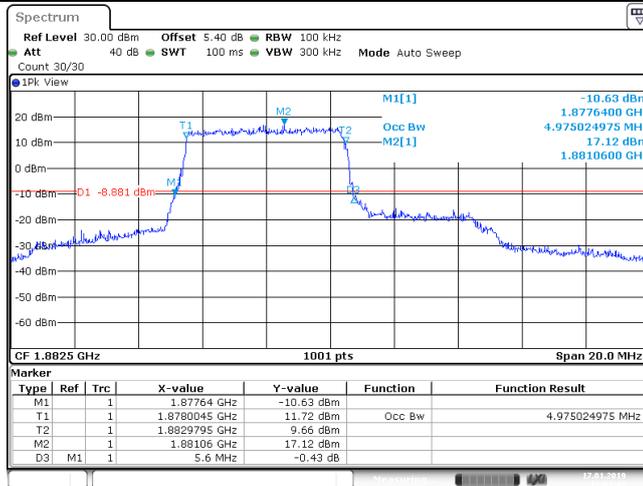
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Band25_10MHz_16QAM_26090_27RB#0



Date: 17_JAN 2019 12:07:16

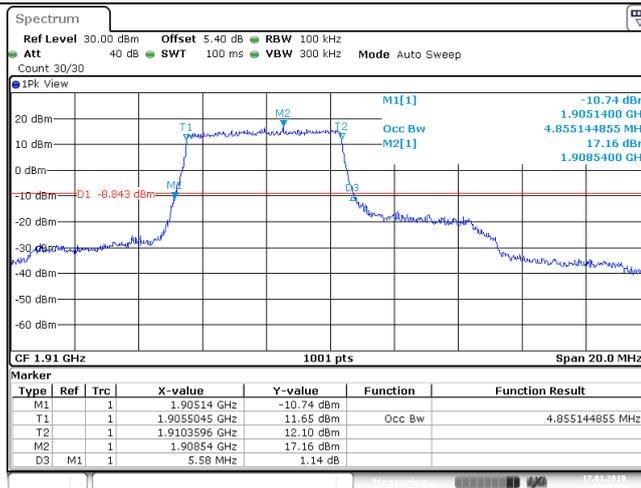
Band25_10MHz_16QAM_26365_27RB#0



Date: 17_JAN 2019 12:07:44

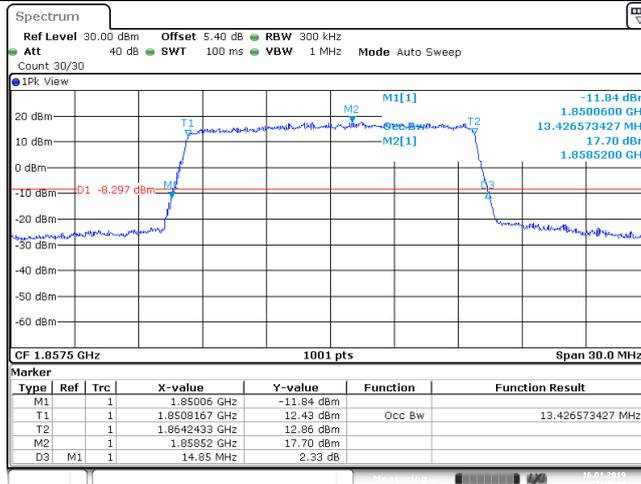
Band25_10MHz_16QAM_26640_27RB#0

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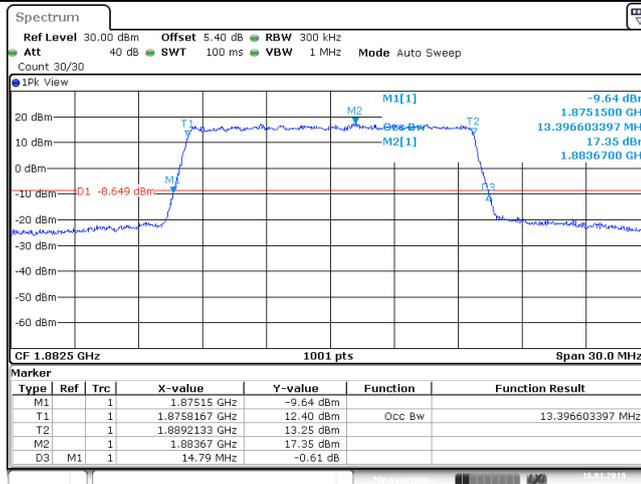
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Band25_15MHz_QPSK_26115_75RB#0



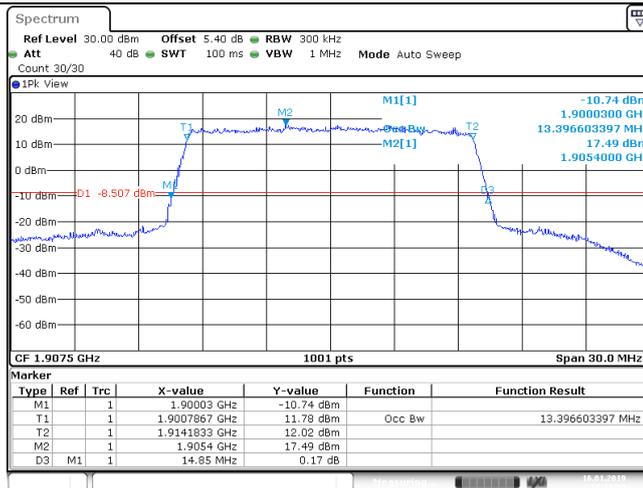
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Band25_15MHz_QPSK_26365_75RB#0



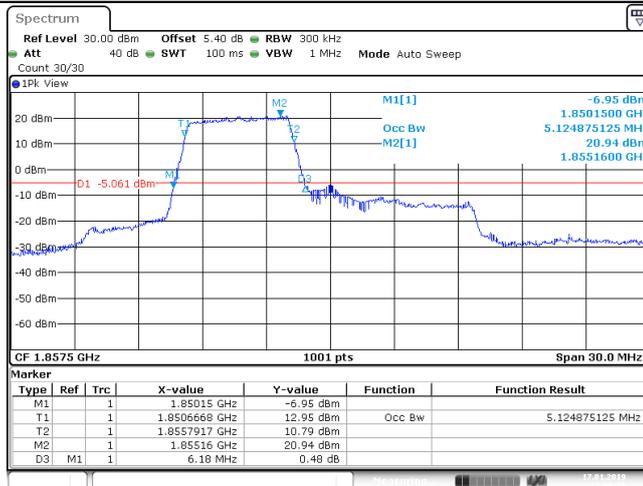
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Band25_15MHz_QPSK_26615_75RB#0



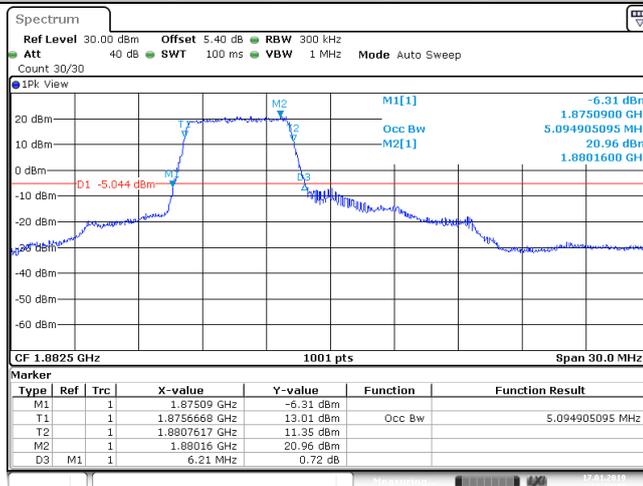
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Band25_15MHz_16QAM_26115_27RB#0



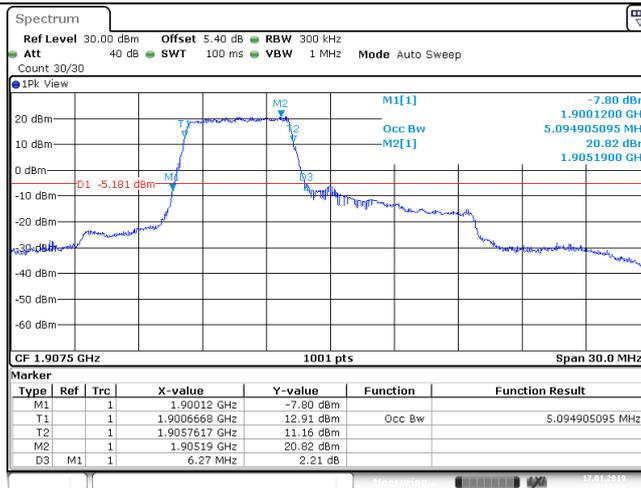
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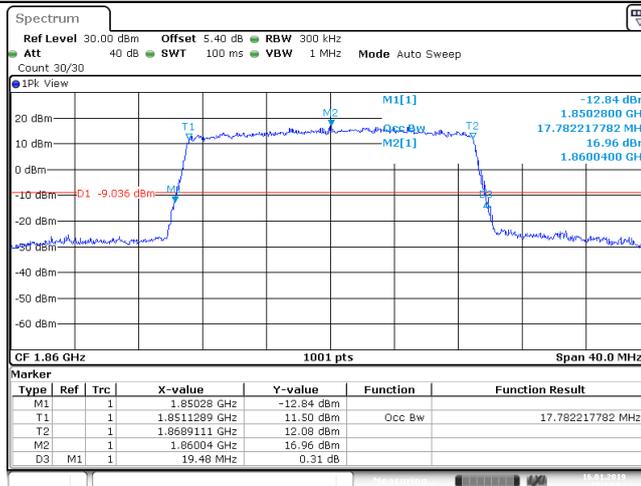
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Band25_15MHz_16QAM_26615_27RB#0



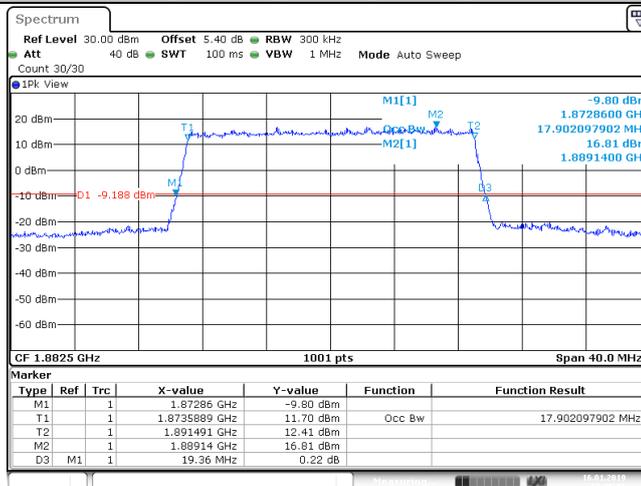
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Band25_20MHz_QPSK_26140_100RB#0



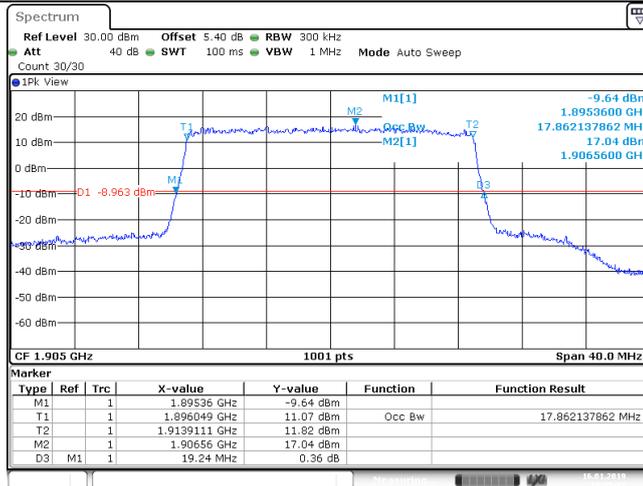
Date: 16 JAN 2019 17:24:53

Band25_20MHz_QPSK_26365_100RB#0



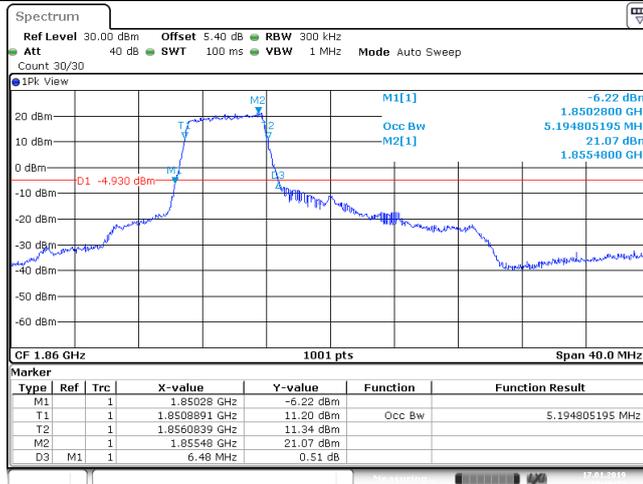
Date: 16 JAN 2019 17:25:06

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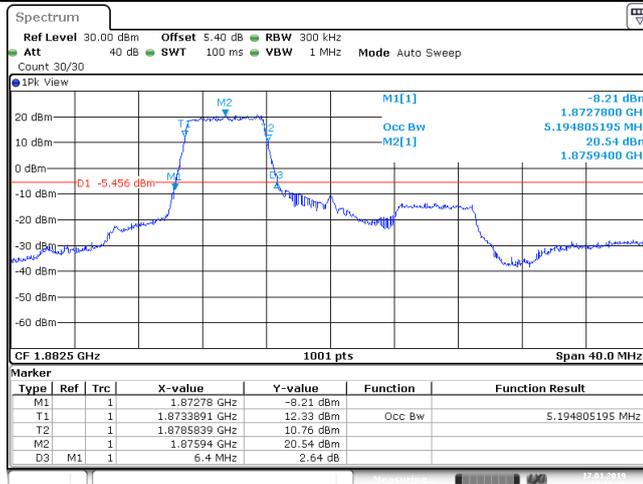
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Band25_20MHz_16QAM_26140_27RB#0



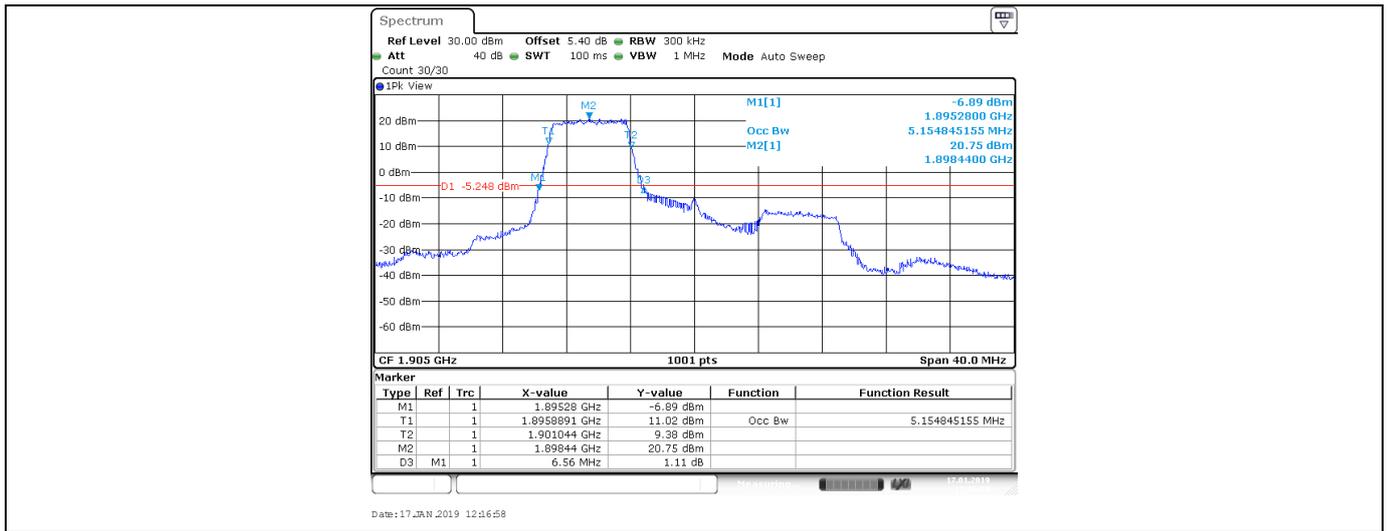
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Band25_20MHz_16QAM_26365_27RB#0



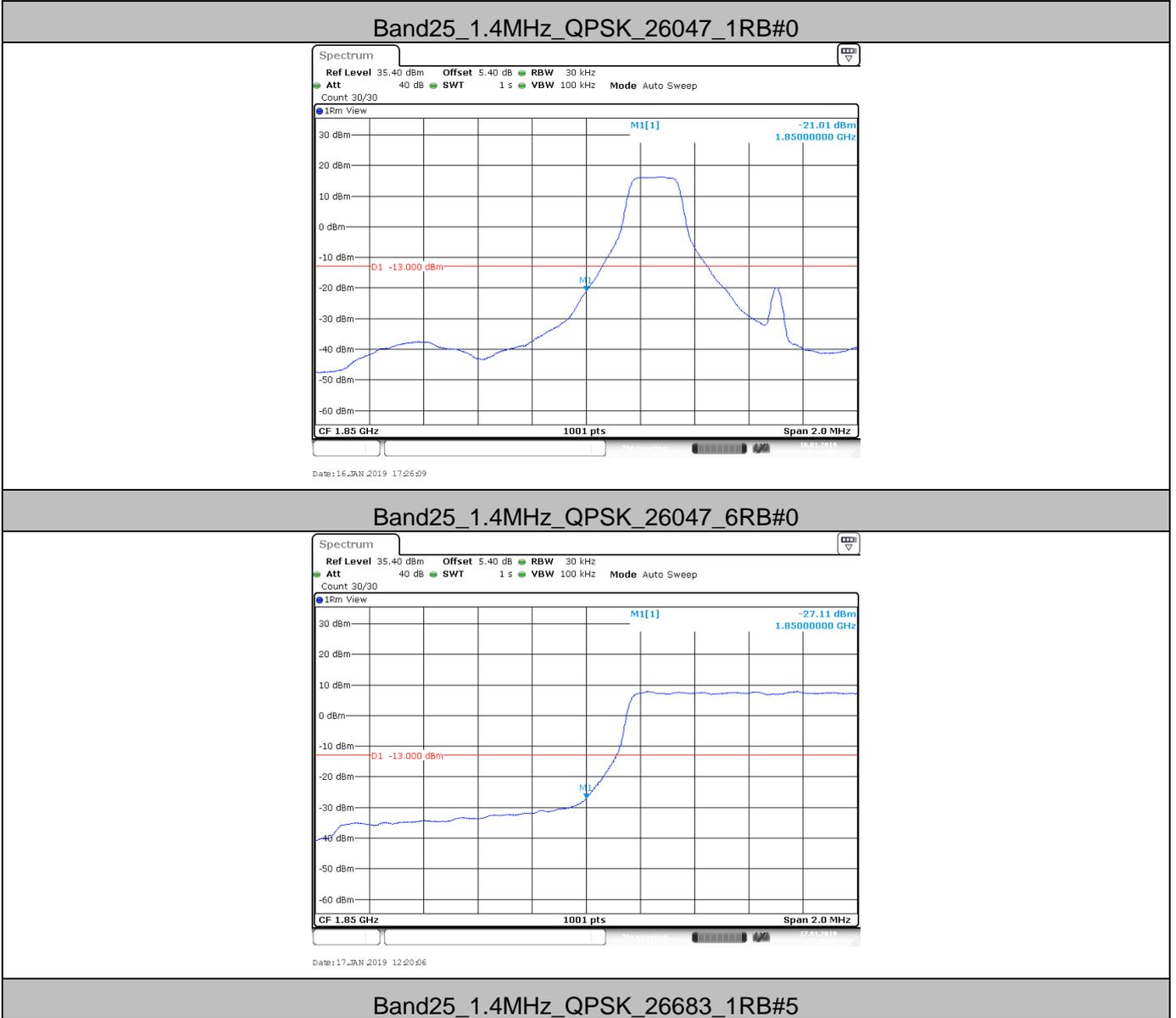
Date: 17_JAN 2019 12:16:45

Band25_20MHz_16QAM_26590_27RB#0



5 Band Edges Compliance

5.1. Test Plots





Band25_1.4MHz_QPSK_26683_6RB#0



Band25_1.4MHz_16QAM_26047_1RB#0

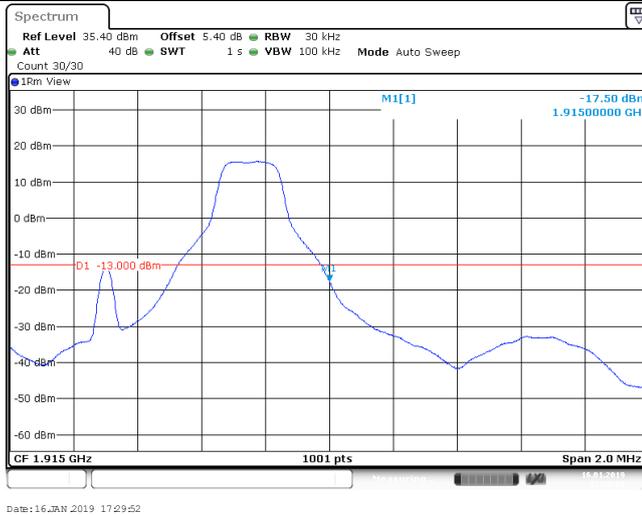


Band25_1.4MHz_16QAM_26047_6RB#0

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Band25_1.4MHz_16QAM_26683_1RB#5

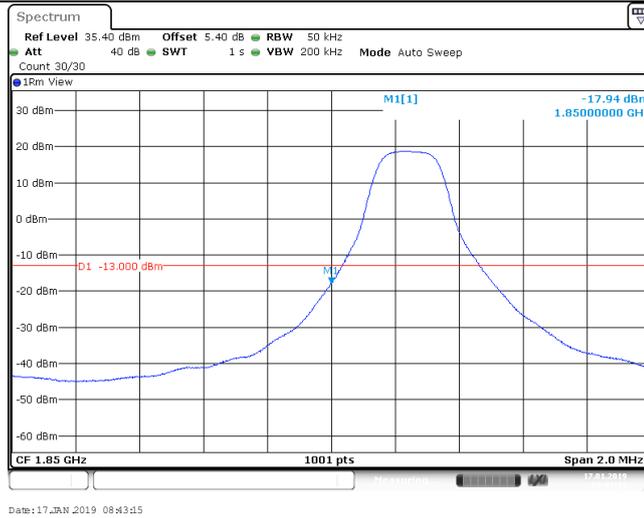


Band25_1.4MHz_16QAM_26683_6RB#0



Band25_3MHz_QPSK_26055_1RB#0

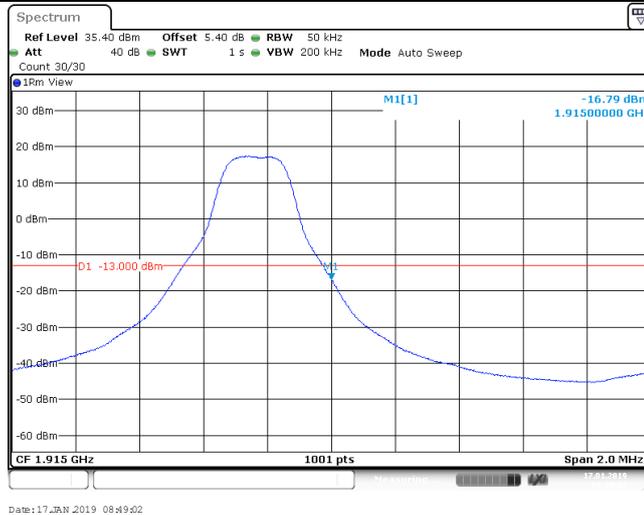
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Band25_3MHz_QPSK_26055_15RB#0



Band25_3MHz_QPSK_26675_1RB#14

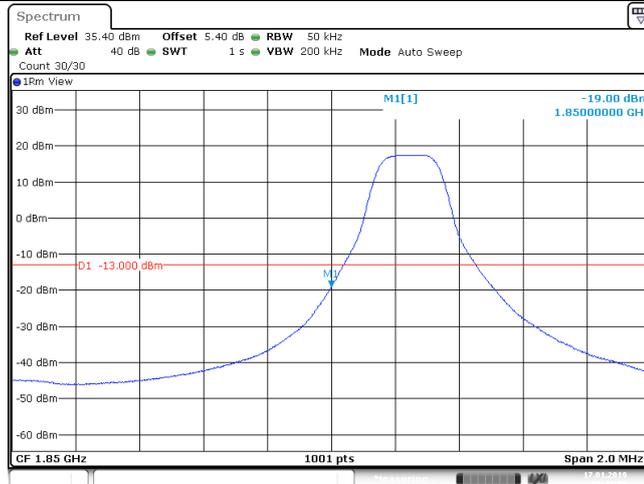


Band25_3MHz_QPSK_26675_15RB#0



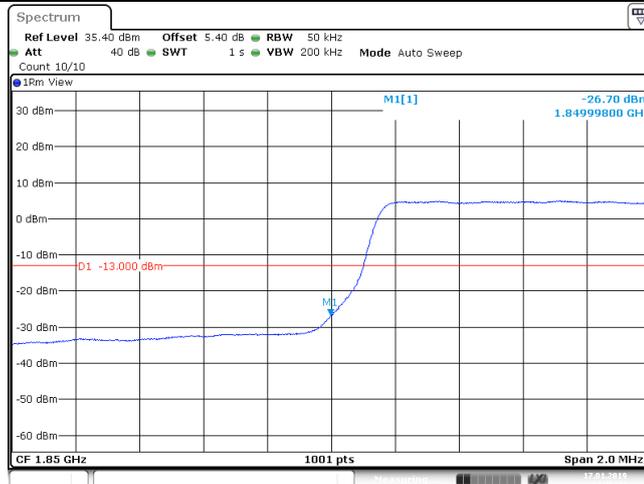
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Band25_3MHz_16QAM_26055_1RB#0



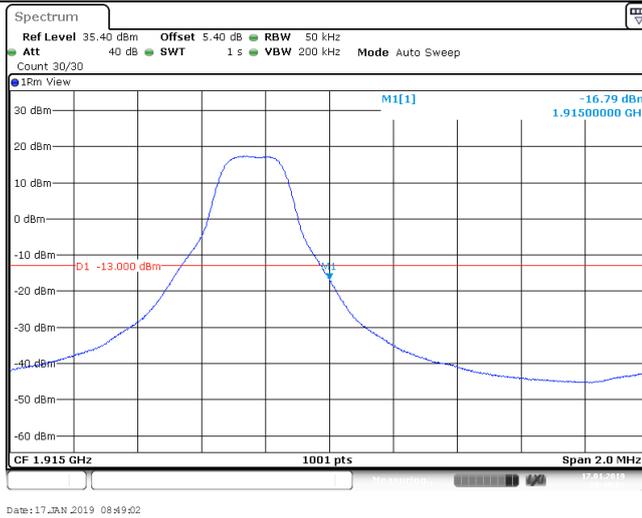
Date: 17 JAN 2019 08:44:00

Band25_3MHz_16QAM_26055_15RB#0



Date: 17 JAN 2019 12:25:23

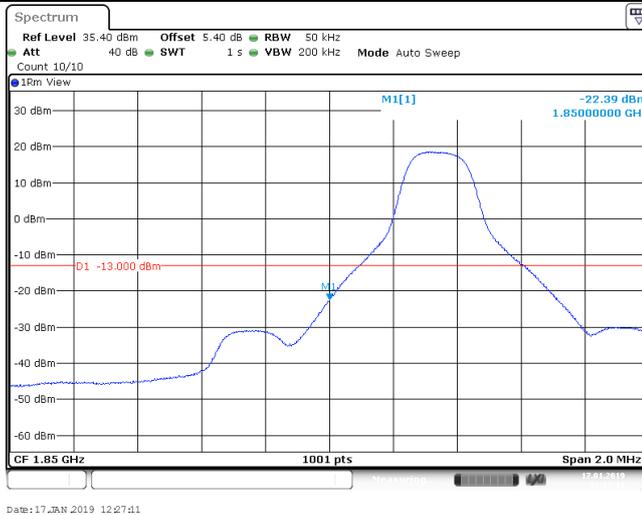
Band25_3MHz_16QAM_26675_1RB#14



Band25_3MHz_16QAM_26675_15RB#0

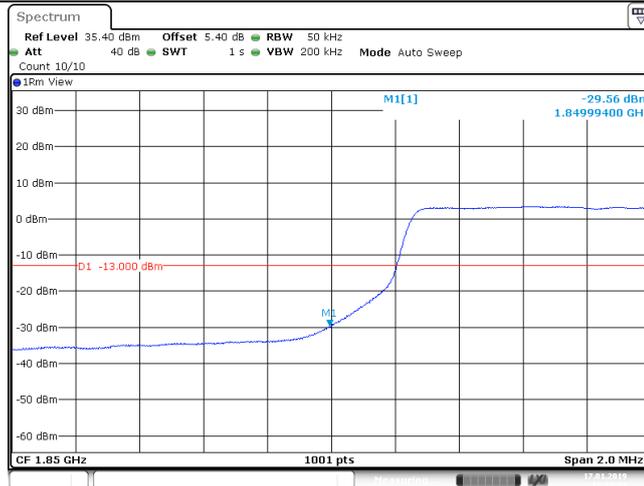


Band25_5MHz_QPSK_26065_1RB#0



Band25_5MHz_QPSK_26065_25RB#0

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Date: 17 JAN 2019 12:27:51

Band25_5MHz_QPSK_26665_1RB#24



Date: 17 JAN 2019 12:29:46

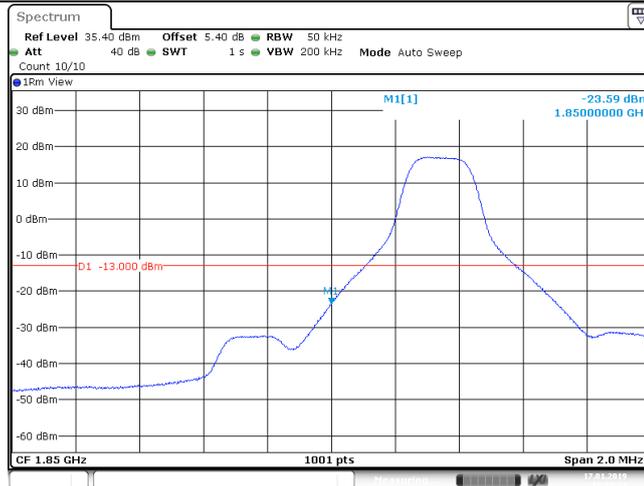
Band25_5MHz_QPSK_26665_25RB#0



Date: 17 JAN 2019 12:30:25

Band25_5MHz_16QAM_26065_1RB#0

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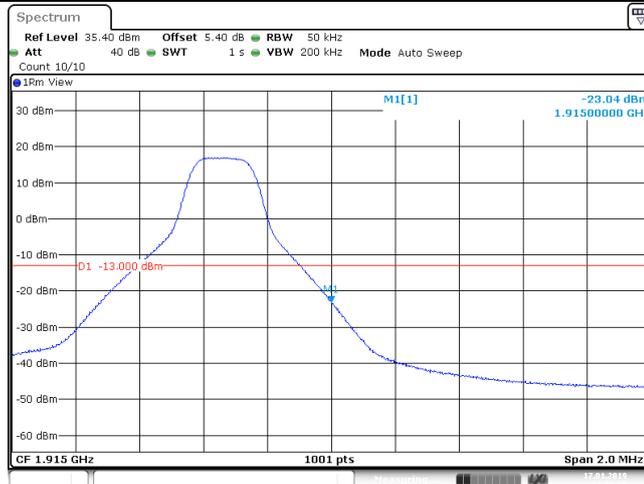
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Band25_5MHz_16QAM_26065_25RB#0



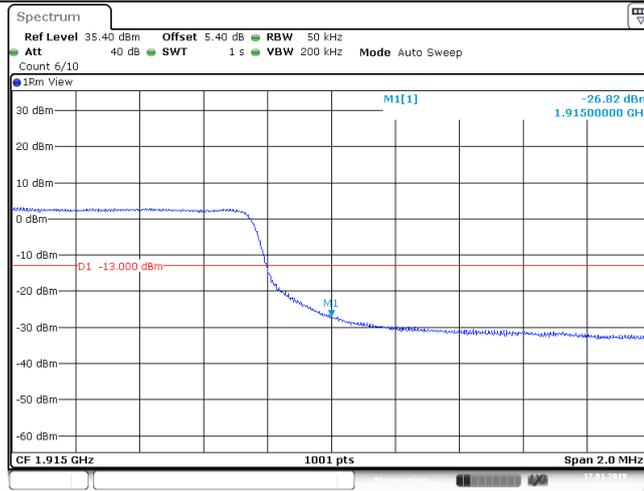
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Band25_5MHz_16QAM_26665_1RB#24



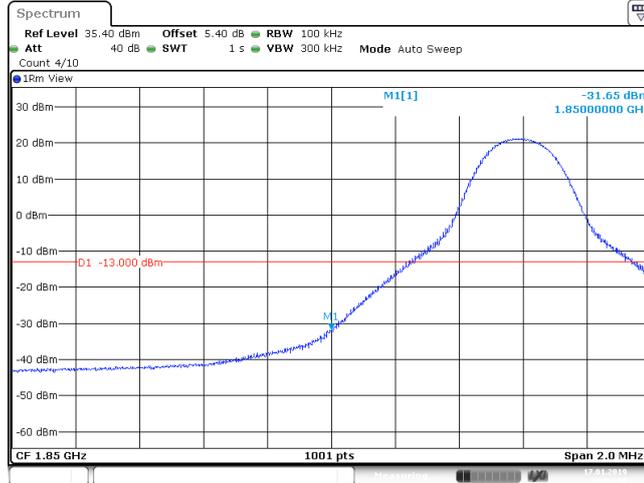
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Band25_5MHz_16QAM_26665_25RB#0



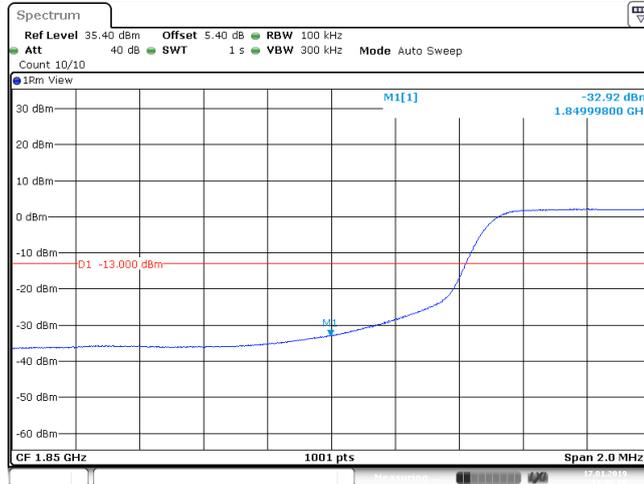
Date: 17 JAN 2019 12:31:22

Band25_10MHz_QPSK_26090_1RB#0



Date: 17 JAN 2019 12:32:38

Band25_10MHz_QPSK_26090_50RB#0



Date: 17 JAN 2019 12:32:59

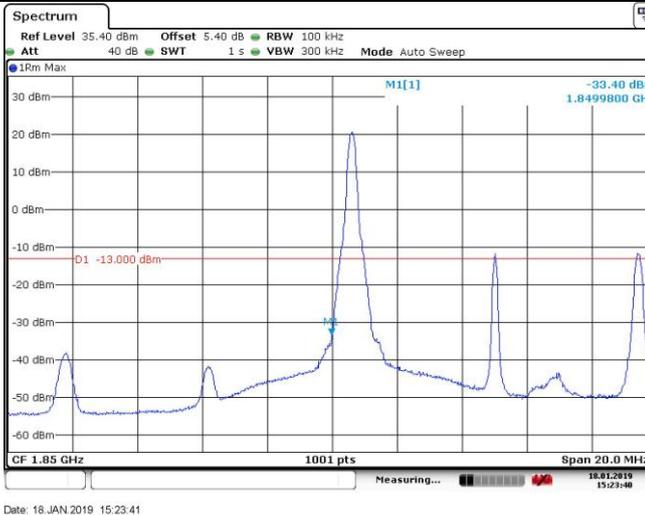
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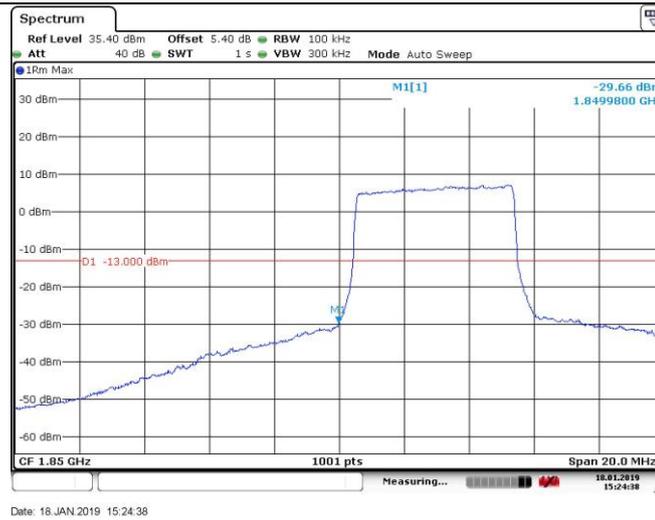
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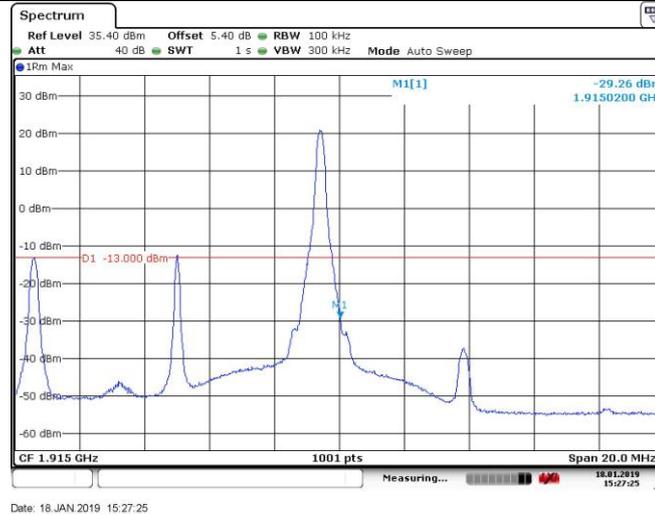
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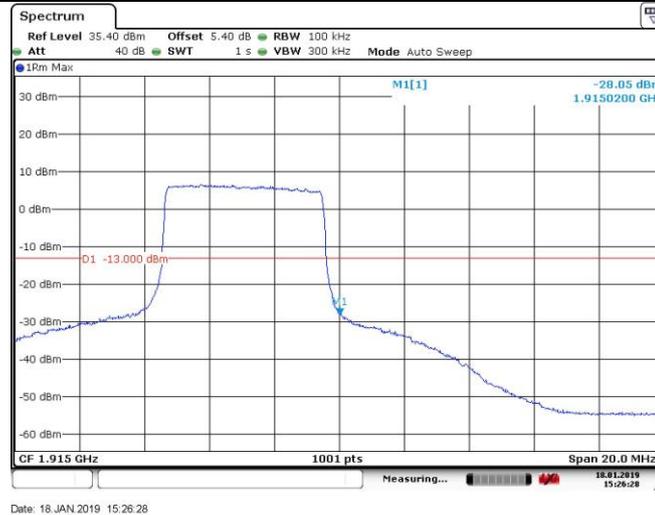
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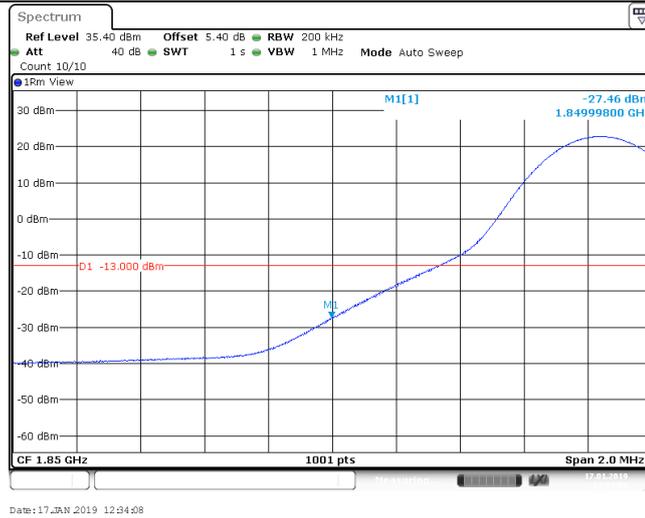
Band25_10MHz_16QAM_26640_1RB#49



Band25_10MHz_16QAM_26640_27RB#23



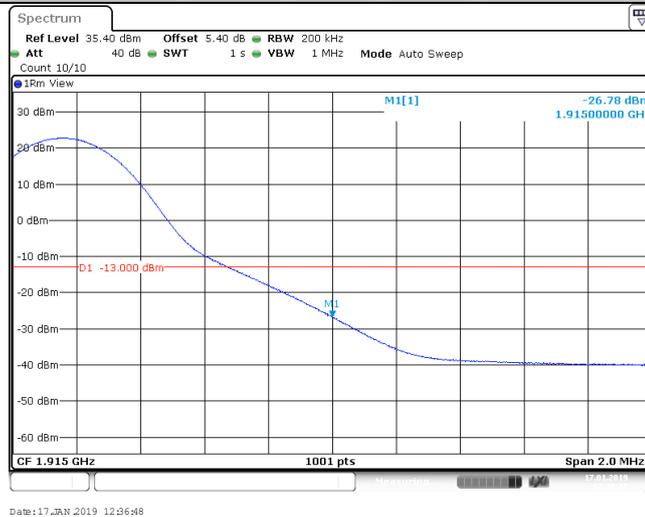
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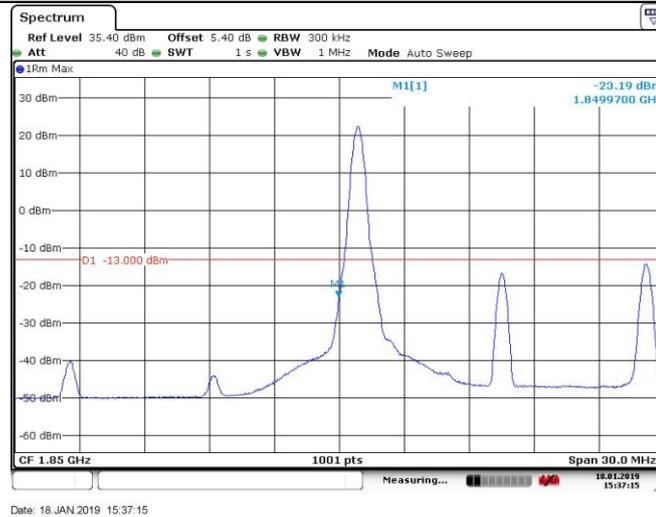
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Band25_15MHz_QPSK_26615_75RB#0



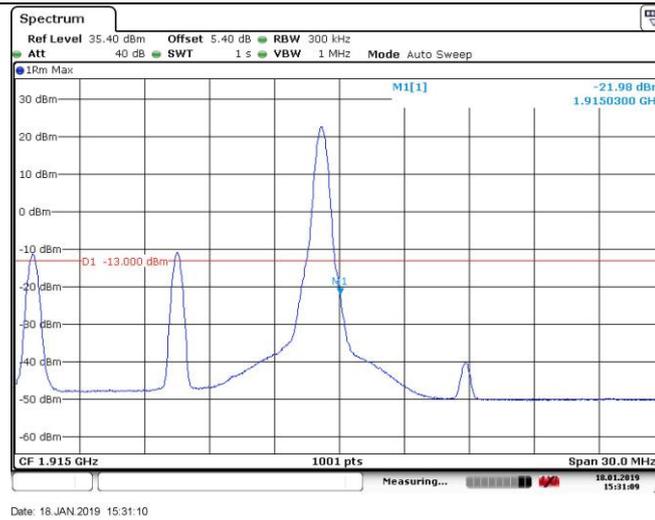
Band25_15MHz_16QAM_26115_1RB#0



Band25_15MHz_16QAM_26115_27RB#0



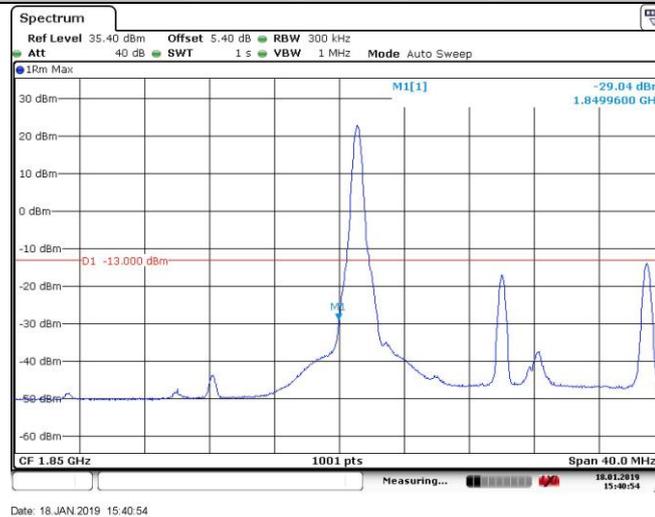
Band25_15MHz_16QAM_26615_1RB#74



Band25_15MHz_16QAM_26615_27RB#48



Band25_20MHz_QPSK_26140_1RB#0

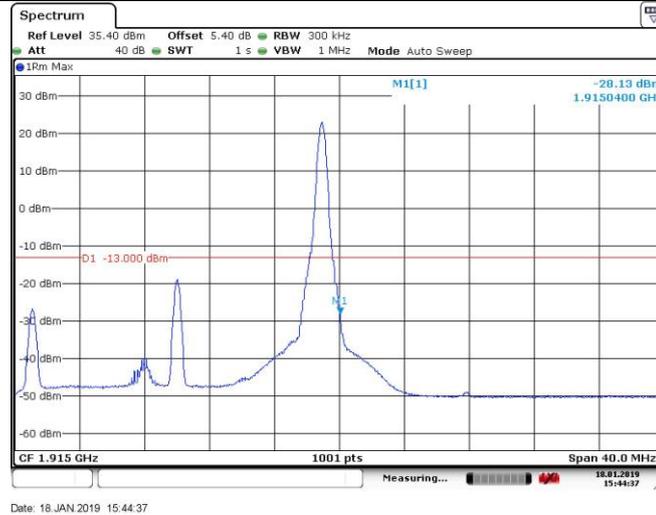


Band25_20MHz_QPSK_26140_100RB#0

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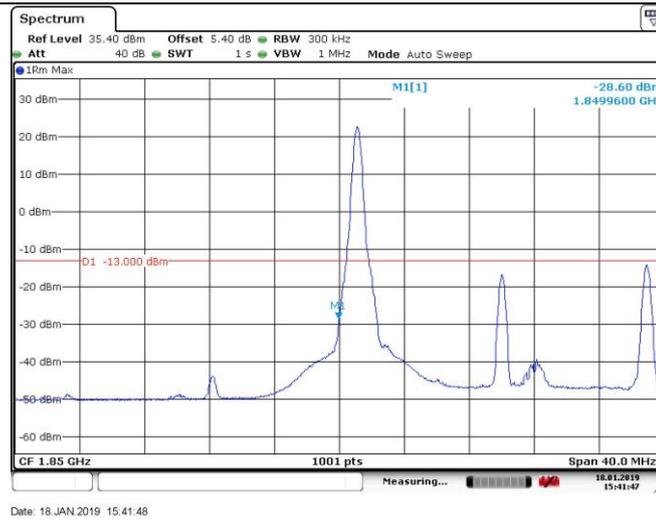
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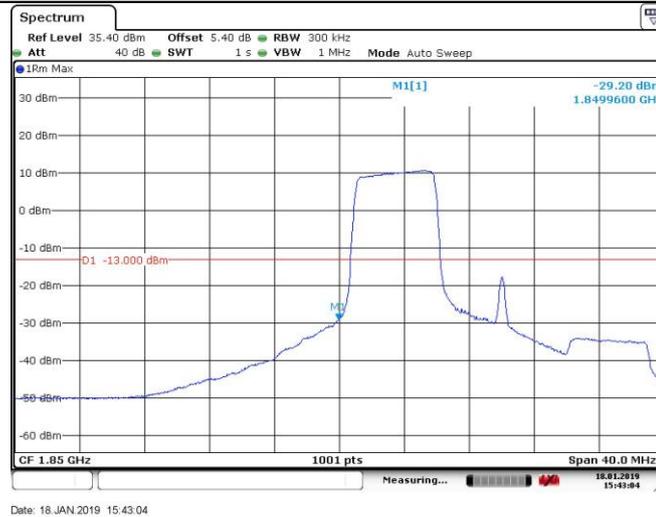
Band25_20MHz_QPSK_26590_100RB#0



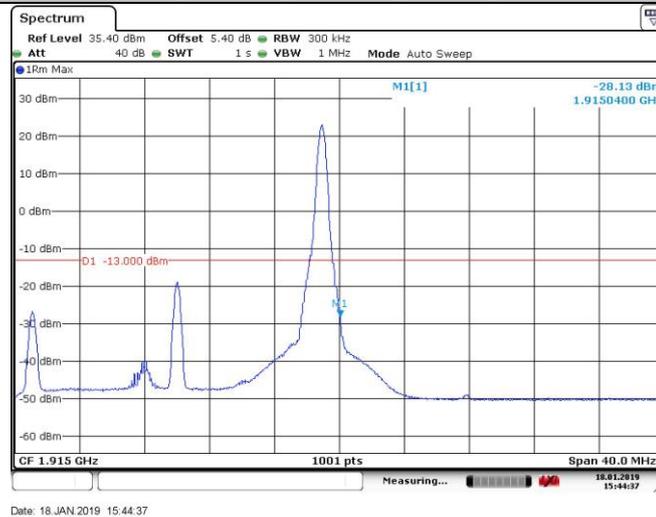
Band25_20MHz_16QAM_26140_1RB#0



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Band25_20MHz_16QAM_26590_1RB#99



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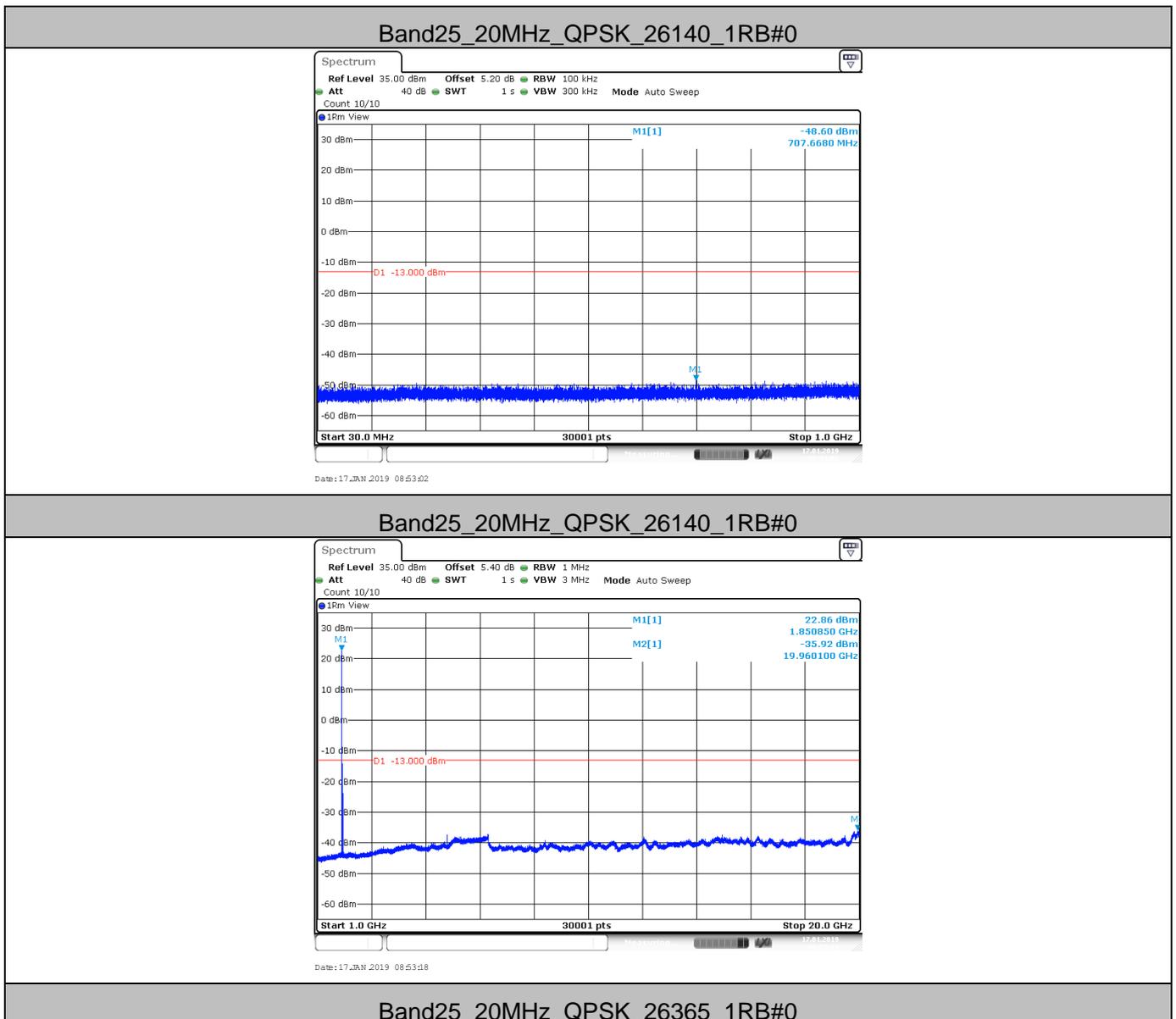


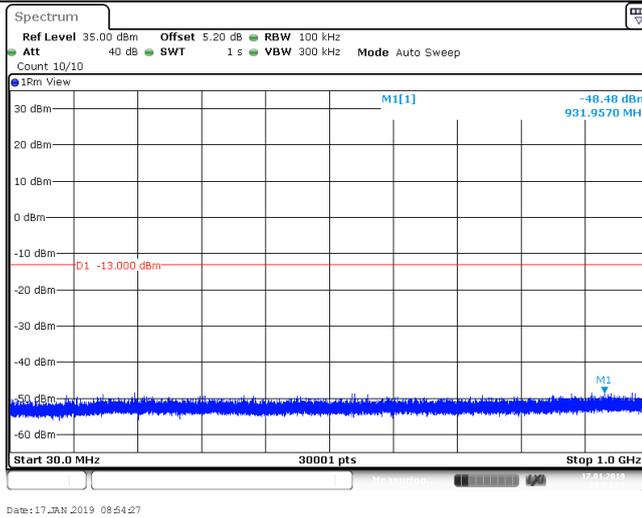
6 Spurious Emission at Antenna Terminal

Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k * (Span / RBW)$ " with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

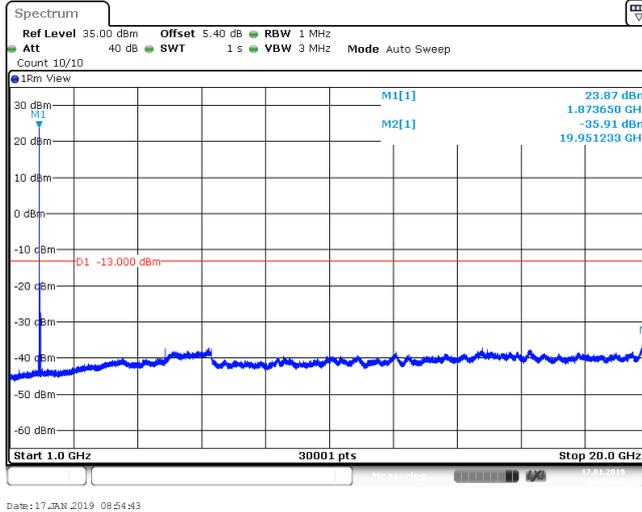
Remark2: only the worst case data displayed in this report.

6.1. Test Plots

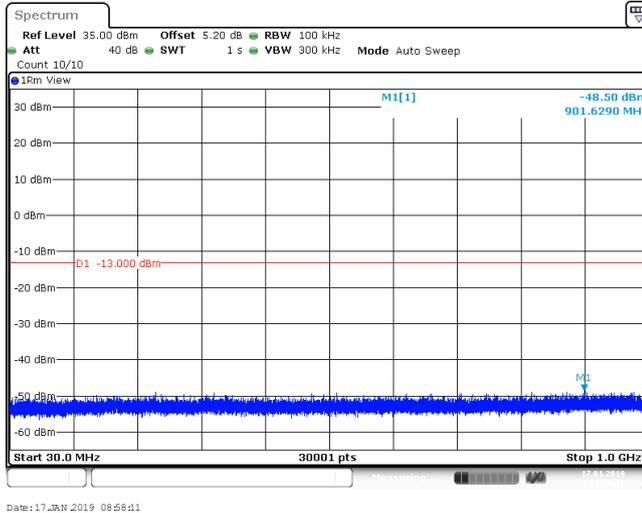




Band25_20MHz_QPSK_26365_1RB#0

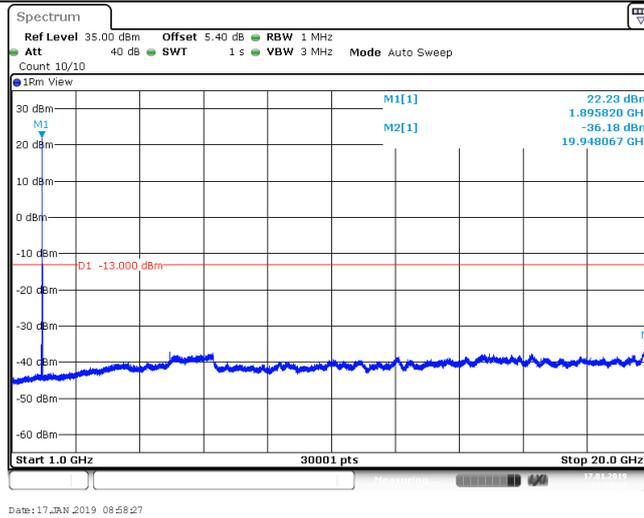


Band25_20MHz_QPSK_26590_1RB#0

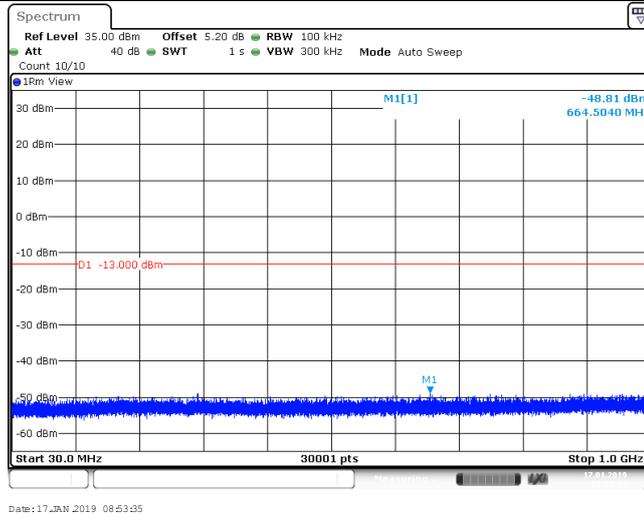


Band25_20MHz_QPSK_26590_1RB#0

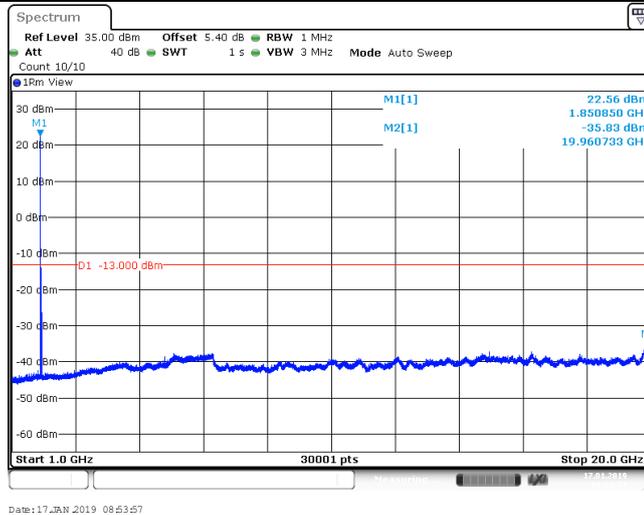
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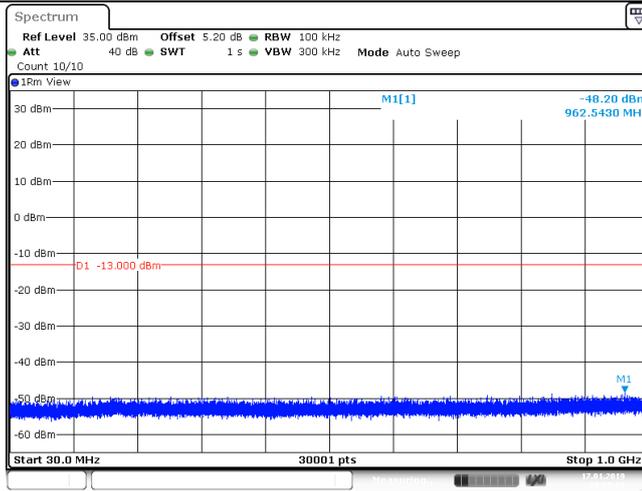
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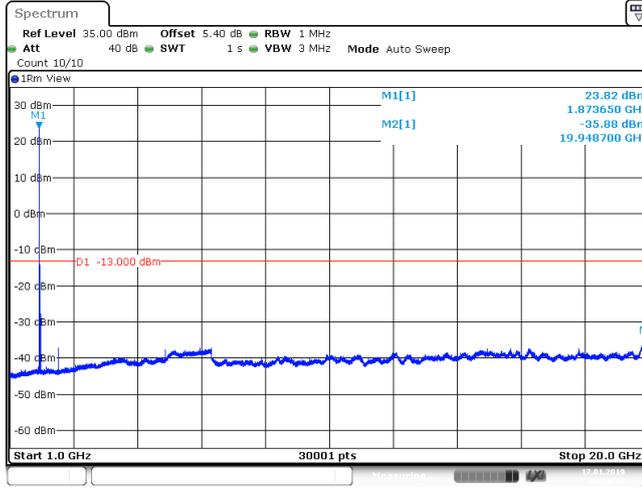
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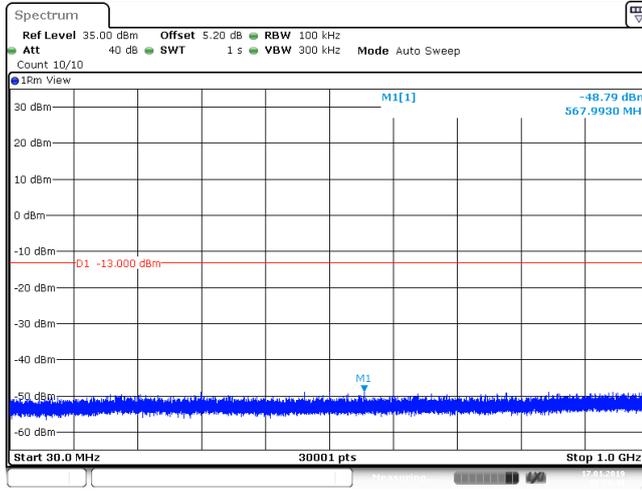
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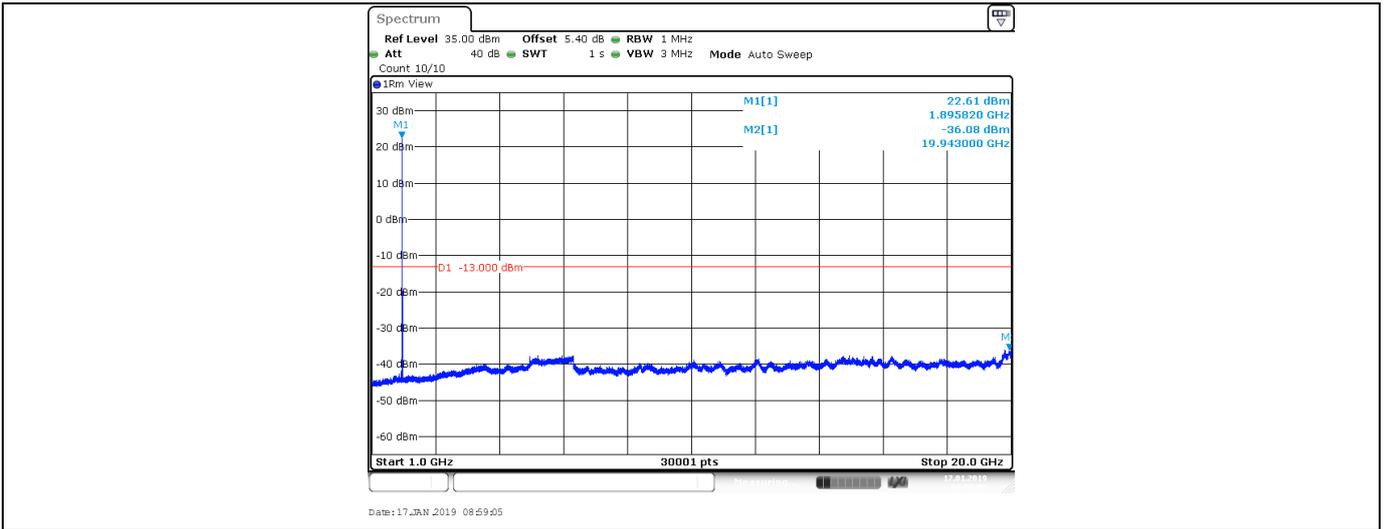


Band25_20MHz_16QAM_26590_1RB#0



Band25_20MHz_16QAM_26590_1RB#0

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7 Field Strength of Spurious Radiation

For LTE

7.1.1 Test BAND = LTE BAND 25

7.1.1.1 Test Mode =LTE/TM1 20MHz RB1#0

7.1.1.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
63.550000	-81.18	-13.00	68.18	Vertical
104.200000	-84.26	-13.00	71.26	Vertical
300.300000	-73.54	-13.00	60.54	Vertical
3702.000000	-64.38	-13.00	51.38	Vertical
5553.200000	-64.89	-13.00	51.89	Vertical
9248.450000	-62.68	-13.00	49.68	Vertical
63.350000	-76.43	-13.00	63.43	Horizontal
192.000000	-81.13	-13.00	68.13	Horizontal
521.179167	-75.15	-13.00	62.15	Horizontal
3702.000000	-63.49	-13.00	50.49	Horizontal
5553.200000	-55.26	-13.00	42.26	Horizontal
9267.950000	-61.68	-13.00	48.68	Horizontal

7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
63.600000	-81.26	-13.00	68.26	Vertical
300.300000	-67.62	-13.00	54.62	Vertical
575.995833	-72.53	-13.00	59.53	Vertical
3746.850000	-52.78	-13.00	39.78	Vertical
5620.800000	-54.52	-13.00	41.52	Vertical
7494.100000	-59.34	-13.00	46.34	Vertical
62.800000	-76.41	-13.00	63.41	Horizontal
300.300000	-77.11	-13.00	64.11	Horizontal
575.995833	-78.21	-13.00	65.21	Horizontal
3747.175000	-58.48	-13.00	45.48	Horizontal
5620.800000	-49.75	-13.00	36.75	Horizontal
7494.425000	-61.69	-13.00	48.69	Horizontal

7.1.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
64.400000	-81.03	-13.00	68.03	Vertical
104.250000	-84.39	-13.00	71.39	Vertical
300.300000	-73.84	-13.00	60.84	Vertical
3792.025000	-64.43	-13.00	51.43	Vertical
5688.075000	-62.62	-13.00	49.62	Vertical
9219.850000	-62.75	-13.00	49.75	Vertical
63.050000	-76.73	-13.00	63.73	Horizontal
104.300000	-84.51	-13.00	71.51	Horizontal
300.300000	-75.35	-13.00	62.35	Horizontal
3792.025000	-60.93	-13.00	47.93	Horizontal
5688.075000	-56.76	-13.00	43.76	Horizontal
9248.775000	-62.24	-13.00	49.24	Horizontal

Spot Check data

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
65.000000	-81.84	-13.00	68.84	Vertical
90.450000	-80.02	-13.00	67.02	Vertical
300.250000	-80.34	-13.00	67.34	Vertical
3746.850000	-65.26	-13.00	52.26	Vertical
6053.375000	-65.12	-13.00	52.12	Vertical
10651.150000	-63.39	-13.00	50.39	Vertical
62.400000	-77.36	-13.00	64.36	Horizontal
104.300000	-81.16	-13.00	68.16	Horizontal
300.350000	-81.57	-13.00	68.57	Horizontal
3746.850000	-66.91	-13.00	53.91	Horizontal
5620.800000	-63.57	-13.00	50.57	Horizontal
9213.350000	-63.36	-13.00	50.36	Horizontal

Remark:

- 1) The disturbance above 12.75GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the worst case data had been displayed.
- 2) We have tested all modulation and all Bandwidth , but only the worst case data presented in this report.



8 Frequency Stability

8.1. Frequency Vs Voltage

Voltage										
BAND	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band25	20MHz	QPSK	26140	100RB#0	VH	NT	-0.27	-0.000146	±2.5	PASS
Band25	20MHz	QPSK	26140	100RB#0	VL	NT	1.10	0.000594	±2.5	PASS
Band25	20MHz	QPSK	26140	100RB#0	VN	NT	-10.06	-0.005411	±2.5	PASS
Band25	20MHz	QPSK	26365	100RB#0	VH	NT	-7.74	-0.004109	±2.5	PASS
Band25	20MHz	QPSK	26365	100RB#0	VL	NT	4.80	0.002552	±2.5	PASS
Band25	20MHz	QPSK	26365	100RB#0	VN	NT	-7.77	-0.004125	±2.5	PASS
Band25	20MHz	QPSK	26590	100RB#0	VH	NT	10.52	0.005521	±2.5	PASS
Band25	20MHz	QPSK	26590	100RB#0	VL	NT	-1.06	-0.000559	±2.5	PASS
Band25	20MHz	QPSK	26590	100RB#0	VN	NT	10.23	0.005372	±2.5	PASS
Band25	20MHz	16QAM	26140	27RB#0	VH	NT	-13.08	-0.007033	±2.5	PASS
Band25	20MHz	16QAM	26140	27RB#0	VL	NT	-0.08	-0.000042	±2.5	PASS
Band25	20MHz	16QAM	26140	27RB#0	VN	NT	7.20	0.003870	±2.5	PASS
Band25	20MHz	16QAM	26365	27RB#0	VH	NT	-5.06	-0.002686	±2.5	PASS
Band25	20MHz	16QAM	26365	27RB#0	VL	NT	-14.76	-0.007842	±2.5	PASS
Band25	20MHz	16QAM	26365	27RB#0	VN	NT	-12.33	-0.006551	±2.5	PASS
Band25	20MHz	16QAM	26590	27RB#0	VH	NT	-0.15	-0.000081	±2.5	PASS
Band25	20MHz	16QAM	26590	27RB#0	VL	NT	13.72	0.007202	±2.5	PASS
Band25	20MHz	16QAM	26590	27RB#0	VN	NT	-13.85	-0.007271	±2.5	PASS

8.2. Frequency Vs Temperature

Temperature										
BAND	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band25	20MHz	QPSK	26140	100RB#0	NV	-30	13.74	0.007385	±2.5	PASS
Band25	20MHz	QPSK	26140	100RB#0	NV	-20	-4.34	-0.002336	±2.5	PASS
Band25	20MHz	QPSK	26140	100RB#0	NV	0	6.48	0.003486	±2.5	PASS
Band25	20MHz	QPSK	26140	100RB#0	NV	10	1.30	0.000698	±2.5	PASS
Band25	20MHz	QPSK	26140	100RB#0	NV	20	12.67	0.006814	±2.5	PASS
Band25	20MHz	QPSK	26140	100RB#0	NV	30	-6.62	-0.003561	±2.5	PASS
Band25	20MHz	QPSK	26140	100RB#0	NV	40	11.26	0.006056	±2.5	PASS
Band25	20MHz	QPSK	26140	100RB#0	NV	50	4.14	0.002226	±2.5	PASS
Band25	20MHz	QPSK	26365	100RB#0	NV	-30	11.74	0.006235	±2.5	PASS
Band25	20MHz	QPSK	26365	100RB#0	NV	-20	-13.46	-0.007151	±2.5	PASS
Band25	20MHz	QPSK	26365	100RB#0	NV	0	-1.24	-0.000660	±2.5	PASS
Band25	20MHz	QPSK	26365	100RB#0	NV	10	9.62	0.005108	±2.5	PASS
Band25	20MHz	QPSK	26365	100RB#0	NV	20	7.32	0.003888	±2.5	PASS
Band25	20MHz	QPSK	26365	100RB#0	NV	30	-4.34	-0.002307	±2.5	PASS
Band25	20MHz	QPSK	26365	100RB#0	NV	40	-0.25	-0.000133	±2.5	PASS
Band25	20MHz	QPSK	26365	100RB#0	NV	50	12.85	0.006827	±2.5	PASS
Band25	20MHz	QPSK	26590	100RB#0	NV	-30	13.22	0.006940	±2.5	PASS
Band25	20MHz	QPSK	26590	100RB#0	NV	-20	-1.10	-0.000576	±2.5	PASS
Band25	20MHz	QPSK	26590	100RB#0	NV	0	-2.06	-0.001082	±2.5	PASS
Band25	20MHz	QPSK	26590	100RB#0	NV	10	9.70	0.005092	±2.5	PASS
Band25	20MHz	QPSK	26590	100RB#0	NV	20	14.57	0.007649	±2.5	PASS
Band25	20MHz	QPSK	26590	100RB#0	NV	30	-12.56	-0.006591	±2.5	PASS

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Band25	20MHz	QPSK	26590	100RB#0	NV	40	-14.86	-0.007800	±2.5	PASS
Band25	20MHz	QPSK	26590	100RB#0	NV	50	-6.76	-0.003548	±2.5	PASS
Band25	20MHz	16QAM	26140	27RB#0	NV	-30	-2.07	-0.001113	±2.5	PASS
Band25	20MHz	16QAM	26140	27RB#0	NV	-20	-7.76	-0.004174	±2.5	PASS
Band25	20MHz	16QAM	26140	27RB#0	NV	0	-9.42	-0.005065	±2.5	PASS
Band25	20MHz	16QAM	26140	27RB#0	NV	10	12.30	0.006611	±2.5	PASS
Band25	20MHz	16QAM	26140	27RB#0	NV	20	8.70	0.004680	±2.5	PASS
Band25	20MHz	16QAM	26140	27RB#0	NV	30	-10.46	-0.005621	±2.5	PASS
Band25	20MHz	16QAM	26140	27RB#0	NV	40	-4.54	-0.002440	±2.5	PASS
Band25	20MHz	16QAM	26140	27RB#0	NV	50	2.00	0.001074	±2.5	PASS
Band25	20MHz	16QAM	26365	27RB#0	NV	-30	-4.69	-0.002492	±2.5	PASS
Band25	20MHz	16QAM	26365	27RB#0	NV	-20	2.86	0.001521	±2.5	PASS
Band25	20MHz	16QAM	26365	27RB#0	NV	0	13.88	0.007375	±2.5	PASS
Band25	20MHz	16QAM	26365	27RB#0	NV	10	6.67	0.003544	±2.5	PASS
Band25	20MHz	16QAM	26365	27RB#0	NV	20	7.04	0.003741	±2.5	PASS
Band25	20MHz	16QAM	26365	27RB#0	NV	30	-8.77	-0.004658	±2.5	PASS
Band25	20MHz	16QAM	26365	27RB#0	NV	40	-14.98	-0.007959	±2.5	PASS
Band25	20MHz	16QAM	26365	27RB#0	NV	50	-4.72	-0.002507	±2.5	PASS
Band25	20MHz	16QAM	26590	27RB#0	NV	-30	-1.76	-0.000924	±2.5	PASS
Band25	20MHz	16QAM	26590	27RB#0	NV	-20	-10.40	-0.005460	±2.5	PASS
Band25	20MHz	16QAM	26590	27RB#0	NV	0	1.74	0.000916	±2.5	PASS
Band25	20MHz	16QAM	26590	27RB#0	NV	10	-1.08	-0.000569	±2.5	PASS
Band25	20MHz	16QAM	26590	27RB#0	NV	20	13.06	0.006856	±2.5	PASS
Band25	20MHz	16QAM	26590	27RB#0	NV	30	-11.04	-0.005796	±2.5	PASS
Band25	20MHz	16QAM	26590	27RB#0	NV	40	8.13	0.004268	±2.5	PASS
Band25	20MHz	16QAM	26590	27RB#0	NV	50	11.00	0.005776	±2.5	PASS

The End

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