Appendix B

E-UTRA Band 4

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1 Main Test Instruments

RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date (yyyy-mm-dd)	Cal.Due date (yyyy-mm-dd)
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2018/3/13	2021/3/12
Spectrum Analyzer (20Hz-43GHz)	Rohde & Schwarz	FSU43	SEM004-08	2018/4/2	2019/4/1
BiConiLog Antenna (26-3000MHz)	ETS-Lindgren	3142C	SEM003-01	2017/6/27	2020/6/26
Horn Antenna (800MHz-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2018/413	2021/412
Horn Antenna (15-40GHz)	Schwarzbeck	BBHA 9170	SEM003-15	2017/10/17	2020/10/16
Amplifier (0.1-1300MHz)	HP	8447D	SEM005-02	2018/9/2	2019/9/2
Low Noise Amplifier (100MHz-18GHz)	Black Diamond Series	BDLNA-0118-352810	SEM005-05	2018/9/2	2019/9/2
Pre-Amplifier (0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	EMC2063	2018/10/20	2019/10/19
Pre-amplifier (26-40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2018/4/2	2019/4/1
Band filter	N/A	N/A	N/A	N/A	N/A
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2018/7/12	2019/7/11
Wideband Radio CommunicationTeste	Anristu	MT8821C	6201462742	2018/5/2	2019/5/1
Wideband Radio CommunicationTester	Rohde & Schwarz	CMW500	W005-02	2018/3/13	2019/3/12

RF conducted test					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date (yyyy-mm-dd)	Cal.Due date (yyyy-mm-dd)
Dual Output Mobile Communication DC Source	Agilent Technologies Inc	66311B	W009-09	2018/9/15	2019/9/15
Signal Analyzer	Rohde & Schwarz	FSV	W025-05	2018/3/13	2019/3/12
Coaxial Cable	SGS	N/A	SEM031-01	2018/7/12	2019/7/11
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2018/9/2	2019/9/2
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	HTC-1	W006-17	2018/9/10	2019/9/10
Temperature Chamber	GIANT FORCE	ICT-150-40-CP-AR	W027-03	2018/11/27	2019/11/27
Wideband Radio CommunicationTeste	Anristu	MT8821C	6201462742	2018/5/2	2019/5/1
Wideband Radio CommunicationTester	Rohde & Schwarz	CMW500	W005-02	2018/3/13	2019/3/12

2 Measurement Uncertainty

For a 95% confidence level (k = 2), the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 as following:

Test Item	Extended Uncertainty	Data
Transmit Output Power Data	Power [dBm]	U =±0.37 dB
Bandwidth	Magnitude [%]	U =± 0.2%
Band Edge Compliance	Disturbance Power [dBm]	U = ±2.0 dB
Spurious Emissions, Conducted	Disturbance Power [dBm]	U = ±2.0 dB
Frequency Stability	Frequency Accuracy [ppm]	U = ±0.24 ppm

3. Effective (Isotropic) Radiated Power

3.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band4	1.4MHz	QPSK	19957	1RB#0	24.20	24.52	30.00	PASS
Band4	1.4MHz	QPSK	19957	1RB#2	24.21	24.53	30.00	PASS
Band4	1.4MHz	QPSK	19957	1RB#5	24.32	24.64	30.00	PASS
Band4	1.4MHz	QPSK	19957	3RB#0	24.42	24.74	30.00	PASS
Band4	1.4MHz	QPSK	19957	3RB#1	24.41	24.73	30.00	PASS
Band4	1.4MHz	QPSK	19957	3RB#3	24.40	24.72	30.00	PASS
Band4	1.4MHz	QPSK	19957	6RB#0	23.11	23.43	30.00	PASS
Band4	1.4MHz	QPSK	20175	1RB#0	24.37	24.69	30.00	PASS
Band4	1.4MHz	QPSK	20175	1RB#2	24.27	24.59	30.00	PASS
Band4	1.4MHz	QPSK	20175	1RB#5	24.34	24.66	30.00	PASS
Band4	1.4MHz	QPSK	20175	3RB#0	24.28	24.60	30.00	PASS
Band4	1.4MHz	QPSK	20175	3RB#1	24.27	24.59	30.00	PASS
Band4	1.4MHz	QPSK	20175	3RB#3	24.25	24.57	30.00	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	23.08	23.40	30.00	PASS
Band4	1.4MHz	QPSK	20393	1RB#0	24.11	24.43	30.00	PASS
Band4	1.4MHz	QPSK	20393	1RB#2	24.25	24.57	30.00	PASS
Band4	1.4MHz	QPSK	20393	1RB#5	24.18	24.50	30.00	PASS
Band4	1.4MHz	QPSK	20393	3RB#0	24.36	24.68	30.00	PASS
Band4	1.4MHz	QPSK	20393	3RB#1	24.38	24.70	30.00	PASS
Band4	1.4MHz	QPSK	20393	3RB#3	24.28	24.60	30.00	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	23.08	23.40	30.00	PASS
Band4	1.4MHz	16QAM	19957	1RB#0	22.58	22.90	30.00	PASS
Band4	1.4MHz	16QAM	19957	1RB#2	23.25	23.57	30.00	PASS
Band4	1.4MHz	16QAM	19957	1RB#5	23.49	23.81	30.00	PASS
Band4	1.4MHz	16QAM	19957	3RB#0	23.15	23.47	30.00	PASS
Band4	1.4MHz	16QAM	19957	3RB#1	23.42	23.74	30.00	PASS
Band4	1.4MHz	16QAM	19957	3RB#3	23.25	23.57	30.00	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	22.23	22.55	30.00	PASS
Band4	1.4MHz	16QAM	20175	1RB#0	23.25	23.57	30.00	PASS
Band4	1.4MHz	16QAM	20175	1RB#2	23.44	23.76	30.00	PASS
Band4	1.4MHz	16QAM	20175	1RB#5	23.21	23.53	30.00	PASS
Band4	1.4MHz	16QAM	20175	3RB#0	23.17	23.49	30.00	PASS
Band4	1.4MHz	16QAM	20175	3RB#1	23.30	23.62	30.00	PASS
Band4	1.4MHz	16QAM	20175	3RB#3	23.23	23.55	30.00	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	21.91	22.23	30.00	PASS
Band4	1.4MHz	16QAM	20393	1RB#0	23.46	23.78	30.00	PASS
Band4	1.4MHz	16QAM	20393	1RB#2	23.31	23.63	30.00	PASS

Band4	1.4MHz	16QAM	20393	1RB#5	23.41	23.73	30.00	PASS
Band4	1.4MHz	16QAM	20393	3RB#0	23.09	23.41	30.00	PASS
Band4	1.4MHz	16QAM	20393	3RB#1	23.45	23.77	30.00	PASS
Band4	1.4MHz	16QAM	20393	3RB#3	23.34	23.66	30.00	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	22.37	22.69	30.00	PASS
Band4	3MHz	QPSK	19965	1RB#0	24.32	24.64	30.00	PASS
Band4	3MHz	QPSK	19965	1RB#8	24.22	24.54	30.00	PASS
Band4	3MHz	QPSK	19965	1RB#14	24.45	24.77	30.00	PASS
Band4	3MHz	QPSK	19965	8RB#0	23.15	23.47	30.00	PASS
Band4	3MHz	QPSK	19965	8RB#4	23.15	23.47	30.00	PASS
Band4	3MHz	QPSK	19965	8RB#7	23.17	23.49	30.00	PASS
Band4	3MHz	QPSK	19965	15RB#0	23.10	23.42	30.00	PASS
Band4	3MHz	QPSK	20175	1RB#0	23.85	24.17	30.00	PASS
Band4	3MHz	QPSK	20175	1RB#8	24.33	24.65	30.00	PASS
Band4	3MHz	QPSK	20175	1RB#14	24.38	24.70	30.00	PASS
Band4	3MHz	QPSK	20175	8RB#0	23.20	23.52	30.00	PASS
Band4	3MHz	QPSK	20175	8RB#4	23.19	23.51	30.00	PASS
Band4	3MHz	QPSK	20175	8RB#7	23.12	23.44	30.00	PASS
Band4	3MHz	QPSK	20175	15RB#0	23.17	23.49	30.00	PASS
Band4	3MHz	QPSK	20385	1RB#0	24.25	24.57	30.00	PASS
Band4	3MHz	QPSK	20385	1RB#8	24.25	24.57	30.00	PASS
Band4	3MHz	QPSK	20385	1RB#14	24.32	24.64	30.00	PASS
Band4	3MHz	QPSK	20385	8RB#0	23.12	23.44	30.00	PASS
Band4	3MHz	QPSK	20385	8RB#4	23.15	23.47	30.00	PASS
Band4	3MHz	QPSK	20385	8RB#7	23.18	23.50	30.00	PASS
Band4	3MHz	QPSK	20385	15RB#0	23.18	23.50	30.00	PASS
Band4	3MHz	16QAM	19965	1RB#0	23.46	23.78	30.00	PASS
Band4	3MHz	16QAM	19965	1RB#8	23.28	23.60	30.00	PASS
Band4	3MHz	16QAM	19965	1RB#14	23.25	23.57	30.00	PASS
Band4	3MHz	16QAM	19965	8RB#0	22.08	22.40	30.00	PASS
Band4	3MHz	16QAM	19965	8RB#4	22.34	22.66	30.00	PASS
Band4	3MHz	16QAM	19965	8RB#7	22.29	22.61	30.00	PASS
Band4	3MHz	16QAM	19965	15RB#0	22.18	22.50	30.00	PASS
Band4	3MHz	16QAM	20175	1RB#0	22.56	22.88	30.00	PASS
Band4	3MHz	16QAM	20175	1RB#8	22.78	23.10	30.00	PASS
Band4	3MHz	16QAM	20175	1RB#14	22.41	22.73	30.00	PASS
Band4	3MHz	16QAM	20175	8RB#0	22.20	22.52	30.00	PASS
Band4	3MHz	16QAM	20175	8RB#4	22.32	22.64	30.00	PASS
Band4	3MHz	16QAM	20175	8RB#7	22.26	22.58	30.00	PASS
Band4	3MHz	16QAM	20175	15RB#0	22.35	22.67	30.00	PASS
Band4	3MHz	16QAM	20385	1RB#0	22.92	23.24	30.00	PASS
Band4	3MHz	16QAM	20385	1RB#8	22.90	23.22	30.00	PASS
Band4	3MHz	16QAM	20385	1RB#14	22.80	23.12	30.00	PASS
Band4	3MHz	16QAM	20385	8RB#0	22.21	22.53	30.00	PASS

Band4	3MHz	16QAM	20385	8RB#4	22.22	22.54	30.00	PASS
Band4	3MHz	16QAM	20385	8RB#7	22.30	22.62	30.00	PASS
Band4	3MHz	16QAM	20385	15RB#0	22.35	22.67	30.00	PASS
Band4	5MHz	QPSK	19975	1RB#0	24.02	24.34	30.00	PASS
Band4	5MHz	QPSK	19975	1RB#12	24.42	24.74	30.00	PASS
Band4	5MHz	QPSK	19975	1RB#24	24.21	24.53	30.00	PASS
Band4	5MHz	QPSK	19975	12RB#0	23.05	23.37	30.00	PASS
Band4	5MHz	QPSK	19975	12RB#6	23.04	23.36	30.00	PASS
Band4	5MHz	QPSK	19975	12RB#13	23.02	23.34	30.00	PASS
Band4	5MHz	QPSK	19975	25RB#0	23.07	23.39	30.00	PASS
Band4	5MHz	QPSK	20175	1RB#0	23.87	24.19	30.00	PASS
Band4	5MHz	QPSK	20175	1RB#12	24.04	24.36	30.00	PASS
Band4	5MHz	QPSK	20175	1RB#24	24.01	24.33	30.00	PASS
Band4	5MHz	QPSK	20175	12RB#0	23.03	23.35	30.00	PASS
Band4	5MHz	QPSK	20175	12RB#6	23.06	23.38	30.00	PASS
Band4	5MHz	QPSK	20175	12RB#13	23.01	23.33	30.00	PASS
Band4	5MHz	QPSK	20175	25RB#0	23.09	23.41	30.00	PASS
Band4	5MHz	QPSK	20375	1RB#0	24.15	24.47	30.00	PASS
Band4	5MHz	QPSK	20375	1RB#12	24.35	24.67	30.00	PASS
Band4	5MHz	QPSK	20375	1RB#24	24.33	24.65	30.00	PASS
Band4	5MHz	QPSK	20375	12RB#0	23.28	23.60	30.00	PASS
Band4	5MHz	QPSK	20375	12RB#6	23.30	23.62	30.00	PASS
Band4	5MHz	QPSK	20375	12RB#13	23.17	23.49	30.00	PASS
Band4	5MHz	QPSK	20375	25RB#0	23.21	23.53	30.00	PASS
Band4	5MHz	16QAM	19975	1RB#0	23.15	23.47	30.00	PASS
Band4	5MHz	16QAM	19975	1RB#12	23.12	23.44	30.00	PASS
Band4	5MHz	16QAM	19975	1RB#24	22.64	22.96	30.00	PASS
Band4	5MHz	16QAM	19975	12RB#0	21.92	22.24	30.00	PASS
Band4	5MHz	16QAM	19975	12RB#6	22.00	22.32	30.00	PASS
Band4	5MHz	16QAM	19975	12RB#13	22.13	22.45	30.00	PASS
Band4	5MHz	16QAM	19975	25RB#0	21.94	22.26	30.00	PASS
Band4	5MHz	16QAM	20175	1RB#0	22.45	22.77	30.00	PASS
Band4	5MHz	16QAM	20175	1RB#12	22.25	22.57	30.00	PASS
Band4	5MHz	16QAM	20175	1RB#24	22.23	22.55	30.00	PASS
Band4	5MHz	16QAM	20175	12RB#0	22.06	22.38	30.00	PASS
Band4	5MHz	16QAM	20175	12RB#6	21.93	22.25	30.00	PASS
Band4	5MHz	16QAM	20175	12RB#13	22.00	22.32	30.00	PASS
Band4	5MHz	16QAM	20175	25RB#0	22.17	22.49	30.00	PASS
Band4	5MHz	16QAM	20375	1RB#0	22.53	22.85	30.00	PASS
Band4	5MHz	16QAM	20375	1RB#12	22.76	23.08	30.00	PASS
Band4	5MHz	16QAM	20375	1RB#24	22.49	22.81	30.00	PASS
Band4	5MHz	16QAM	20375	12RB#0	22.18	22.50	30.00	PASS
Band4	5MHz	16QAM	20375	12RB#6	22.16	22.48	30.00	PASS
Band4	5MHz	16QAM	20375	12RB#13	22.15	22.47	30.00	PASS

Band4	5MHz	16QAM	20375	25RB#0	22.28	22.60	30.00	PASS
Band4	10MHz	QPSK	20000	1RB#0	23.90	24.22	30.00	PASS
Band4	10MHz	QPSK	20000	1RB#24	24.41	24.73	30.00	PASS
Band4	10MHz	QPSK	20000	1RB#49	24.19	24.51	30.00	PASS
Band4	10MHz	QPSK	20000	25RB#0	23.09	23.41	30.00	PASS
Band4	10MHz	QPSK	20000	25RB#12	23.22	23.54	30.00	PASS
Band4	10MHz	QPSK	20000	25RB#25	23.23	23.55	30.00	PASS
Band4	10MHz	QPSK	20000	50RB#0	23.16	23.48	30.00	PASS
Band4	10MHz	QPSK	20175	1RB#0	24.10	24.42	30.00	PASS
Band4	10MHz	QPSK	20175	1RB#24	24.49	24.81	30.00	PASS
Band4	10MHz	QPSK	20175	1RB#49	24.32	24.64	30.00	PASS
Band4	10MHz	QPSK	20175	25RB#0	23.13	23.45	30.00	PASS
Band4	10MHz	QPSK	20175	25RB#12	23.10	23.42	30.00	PASS
Band4	10MHz	QPSK	20175	25RB#25	23.08	23.40	30.00	PASS
Band4	10MHz	QPSK	20175	50RB#0	23.13	23.45	30.00	PASS
Band4	10MHz	QPSK	20350	1RB#0	24.22	24.54	30.00	PASS
Band4	10MHz	QPSK	20350	1RB#24	24.46	24.78	30.00	PASS
Band4	10MHz	QPSK	20350	1RB#49	24.49	24.81	30.00	PASS
Band4	10MHz	QPSK	20350	25RB#0	23.34	23.66	30.00	PASS
Band4	10MHz	QPSK	20350	25RB#12	23.34	23.66	30.00	PASS
Band4	10MHz	QPSK	20350	25RB#25	23.26	23.58	30.00	PASS
Band4	10MHz	QPSK	20350	50RB#0	23.24	23.56	30.00	PASS
Band4	10MHz	16QAM	20000	1RB#0	22.67	22.99	30.00	PASS
Band4	10MHz	16QAM	20000	1RB#24	23.46	23.78	30.00	PASS
Band4	10MHz	16QAM	20000	1RB#49	23.39	23.71	30.00	PASS
Band4	10MHz	16QAM	20000	25RB#0	22.15	22.47	30.00	PASS
Band4	10MHz	16QAM	20000	25RB#12	22.27	22.59	30.00	PASS
Band4	10MHz	16QAM	20000	25RB#25	22.22	22.54	30.00	PASS
Band4	10MHz	16QAM	20000	50RB#0	22.32	22.64	30.00	PASS
Band4	10MHz	16QAM	20175	1RB#0	23.26	23.58	30.00	PASS
Band4	10MHz	16QAM	20175	1RB#24	22.93	23.25	30.00	PASS
Band4	10MHz	16QAM	20175	1RB#49	22.48	22.80	30.00	PASS
Band4	10MHz	16QAM	20175	25RB#0	22.07	22.39	30.00	PASS
Band4	10MHz	16QAM	20175	25RB#12	22.16	22.48	30.00	PASS
Band4	10MHz	16QAM	20175	25RB#25	22.09	22.41	30.00	PASS
Band4	10MHz	16QAM	20175	50RB#0	22.16	22.48	30.00	PASS
Band4	10MHz	16QAM	20350	1RB#0	23.47	23.79	30.00	PASS
Band4	10MHz	16QAM	20350	1RB#24	23.49	23.81	30.00	PASS
Band4	10MHz	16QAM	20350	1RB#49	23.26	23.58	30.00	PASS
Band4	10MHz	16QAM	20350	25RB#0	22.26	22.58	30.00	PASS
Band4	10MHz	16QAM	20350	25RB#12	22.36	22.68	30.00	PASS
Band4	10MHz	16QAM	20350	25RB#25	22.32	22.64	30.00	PASS
Band4	10MHz	16QAM	20350	50RB#0	22.29	22.61	30.00	PASS
Band4	15MHz	QPSK	20025	1RB#0	24.25	24.57	30.00	PASS

Band4	15MHz	QPSK	20025	1RB#38	24.42	24.74	30.00	PASS
Band4	15MHz	QPSK	20025	1RB#74	24.08	24.40	30.00	PASS
Band4	15MHz	QPSK	20025	36RB#0	23.22	23.54	30.00	PASS
Band4	15MHz	QPSK	20025	36RB#18	23.26	23.58	30.00	PASS
Band4	15MHz	QPSK	20025	36RB#39	23.25	23.57	30.00	PASS
Band4	15MHz	QPSK	20025	75RB#0	23.18	23.50	30.00	PASS
Band4	15MHz	QPSK	20175	1RB#0	23.90	24.22	30.00	PASS
Band4	15MHz	QPSK	20175	1RB#38	24.16	24.48	30.00	PASS
Band4	15MHz	QPSK	20175	1RB#74	24.29	24.61	30.00	PASS
Band4	15MHz	QPSK	20175	36RB#0	23.19	23.51	30.00	PASS
Band4	15MHz	QPSK	20175	36RB#18	23.11	23.43	30.00	PASS
Band4	15MHz	QPSK	20175	36RB#39	23.07	23.39	30.00	PASS
Band4	15MHz	QPSK	20175	75RB#0	23.14	23.46	30.00	PASS
Band4	15MHz	QPSK	20325	1RB#0	24.32	24.64	30.00	PASS
Band4	15MHz	QPSK	20325	1RB#38	24.41	24.73	30.00	PASS
Band4	15MHz	QPSK	20325	1RB#74	24.42	24.74	30.00	PASS
Band4	15MHz	QPSK	20325	36RB#0	23.23	23.55	30.00	PASS
Band4	15MHz	QPSK	20325	36RB#18	23.30	23.62	30.00	PASS
Band4	15MHz	QPSK	20325	36RB#39	23.36	23.68	30.00	PASS
Band4	15MHz	QPSK	20325	75RB#0	23.26	23.58	30.00	PASS
Band4	15MHz	16QAM	20025	1RB#0	22.81	23.13	30.00	PASS
Band4	15MHz	16QAM	20025	1RB#38	22.94	23.26	30.00	PASS
Band4	15MHz	16QAM	20025	1RB#74	22.80	23.12	30.00	PASS
Band4	15MHz	16QAM	20025	36RB#0	22.29	22.61	30.00	PASS
Band4	15MHz	16QAM	20025	36RB#18	22.27	22.59	30.00	PASS
Band4	15MHz	16QAM	20025	36RB#39	22.37	22.69	30.00	PASS
Band4	15MHz	16QAM	20025	75RB#0	22.32	22.64	30.00	PASS
Band4	15MHz	16QAM	20175	1RB#0	22.31	22.63	30.00	PASS
Band4	15MHz	16QAM	20175	1RB#38	22.78	23.10	30.00	PASS
Band4	15MHz	16QAM	20175	1RB#74	22.68	23.00	30.00	PASS
Band4	15MHz	16QAM	20175	36RB#0	22.16	22.48	30.00	PASS
Band4	15MHz	16QAM	20175	36RB#18	22.11	22.43	30.00	PASS
Band4	15MHz	16QAM	20175	36RB#39	22.35	22.67	30.00	PASS
Band4	15MHz	16QAM	20175	75RB#0	22.16	22.48	30.00	PASS
Band4	15MHz	16QAM	20325	1RB#0	23.39	23.71	30.00	PASS
Band4	15MHz	16QAM	20325	1RB#38	23.48	23.80	30.00	PASS
Band4	15MHz	16QAM	20325	1RB#74	23.35	23.67	30.00	PASS
Band4	15MHz	16QAM	20325	36RB#0	22.19	22.51	30.00	PASS
Band4	15MHz	16QAM	20325	36RB#18	22.37	22.69	30.00	PASS
Band4	15MHz	16QAM	20325	36RB#39	22.40	22.72	30.00	PASS
Band4	15MHz	16QAM	20325	75RB#0	22.38	22.70	30.00	PASS
Band4	20MHz	QPSK	20050	1RB#0	24.39	24.71	30.00	PASS
Band4	20MHz	QPSK	20050	1RB#49	24.49	24.81	30.00	PASS
Band4	20MHz	QPSK	20050	1RB#99	24.49	24.81	30.00	PASS

Band4	20MHz	QPSK	20050	50RB#0	23.30	23.62	30.00	PASS
Band4	20MHz	QPSK	20050	50RB#25	23.28	23.60	30.00	PASS
Band4	20MHz	QPSK	20050	50RB#50	23.20	23.52	30.00	PASS
Band4	20MHz	QPSK	20050	100RB#0	23.21	23.53	30.00	PASS
Band4	20MHz	QPSK	20175	1RB#0	24.02	24.34	30.00	PASS
Band4	20MHz	QPSK	20175	1RB#49	24.11	24.43	30.00	PASS
Band4	20MHz	QPSK	20175	1RB#99	24.17	24.49	30.00	PASS
Band4	20MHz	QPSK	20175	50RB#0	23.14	23.46	30.00	PASS
Band4	20MHz	QPSK	20175	50RB#25	23.01	23.33	30.00	PASS
Band4	20MHz	QPSK	20175	50RB#50	23.33	23.65	30.00	PASS
Band4	20MHz	QPSK	20175	100RB#0	23.13	23.45	30.00	PASS
Band4	20MHz	QPSK	20300	1RB#0	24.11	24.43	30.00	PASS
Band4	20MHz	QPSK	20300	1RB#49	24.46	24.78	30.00	PASS
Band4	20MHz	QPSK	20300	1RB#99	23.96	24.28	30.00	PASS
Band4	20MHz	QPSK	20300	50RB#0	23.40	23.72	30.00	PASS
Band4	20MHz	QPSK	20300	50RB#25	23.36	23.68	30.00	PASS
Band4	20MHz	QPSK	20300	50RB#50	23.24	23.56	30.00	PASS
Band4	20MHz	QPSK	20300	100RB#0	23.17	23.49	30.00	PASS
Band4	20MHz	16QAM	20050	1RB#0	22.67	22.99	30.00	PASS
Band4	20MHz	16QAM	20050	1RB#49	23.14	23.46	30.00	PASS
Band4	20MHz	16QAM	20050	1RB#99	22.69	23.01	30.00	PASS
Band4	20MHz	16QAM	20050	50RB#0	22.24	22.56	30.00	PASS
Band4	20MHz	16QAM	20050	50RB#25	22.33	22.65	30.00	PASS
Band4	20MHz	16QAM	20050	50RB#50	22.29	22.61	30.00	PASS
Band4	20MHz	16QAM	20050	100RB#0	22.22	22.54	30.00	PASS
Band4	20MHz	16QAM	20175	1RB#0	23.23	23.55	30.00	PASS
Band4	20MHz	16QAM	20175	1RB#49	23.43	23.75	30.00	PASS
Band4	20MHz	16QAM	20175	1RB#99	22.56	22.88	30.00	PASS
Band4	20MHz	16QAM	20175	50RB#0	22.13	22.45	30.00	PASS
Band4	20MHz	16QAM	20175	50RB#25	22.22	22.54	30.00	PASS
Band4	20MHz	16QAM	20175	50RB#50	21.95	22.27	30.00	PASS
Band4	20MHz	16QAM	20175	100RB#0	22.17	22.49	30.00	PASS
Band4	20MHz	16QAM	20300	1RB#0	23.11	23.43	30.00	PASS
Band4	20MHz	16QAM	20300	1RB#49	23.35	23.67	30.00	PASS
Band4	20MHz	16QAM	20300	1RB#99	22.68	23.00	30.00	PASS
Band4	20MHz	16QAM	20300	50RB#0	22.37	22.69	30.00	PASS
Band4	20MHz	16QAM	20300	50RB#25	22.36	22.68	30.00	PASS
Band4	20MHz	16QAM	20300	50RB#50	22.31	22.63	30.00	PASS
Band4	20MHz	16QAM	20300	100RB#0	22.17	22.49	30.00	PASS

Remark:

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

ERP [dBm] = SGP [dBm] - Cable Loss [dB] + Gain [dBd]

EIRP [dBm] = SGP [dBm] – Cable Loss [dB] + Gain [dBi]

b: SGP=Signal Generator Level

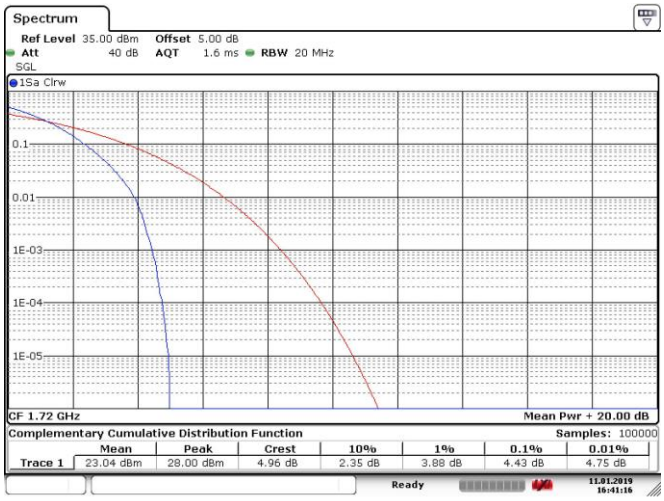
4. Peak-to-Average Ratio(CCDF)

4.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band4	20MHz	QPSK	20050	100RB#0	4.43	13	PASS
Band4	20MHz	QPSK	20175	100RB#0	4.46	13	PASS
Band4	20MHz	QPSK	20300	100RB#0	4.49	13	PASS
Band4	20MHz	16QAM	20050	100RB#0	5.57	13	PASS
Band4	20MHz	16QAM	20175	100RB#0	5.48	13	PASS
Band4	20MHz	16QAM	20300	100RB#0	5.51	13	PASS

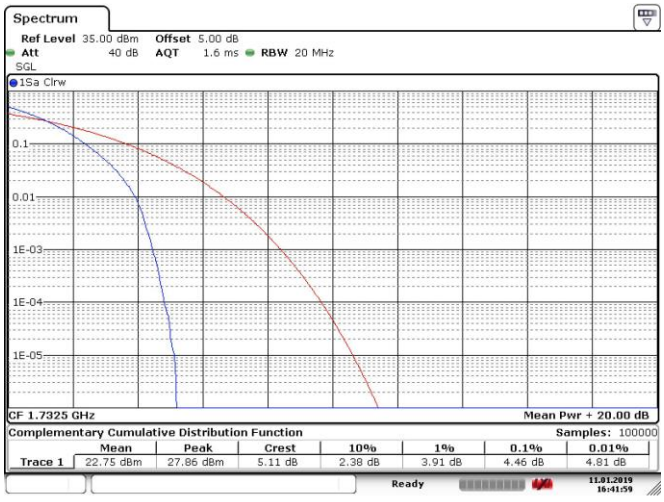
4.2. Test Plots

Band4_20MHz_QPSK_20050_100RB#0



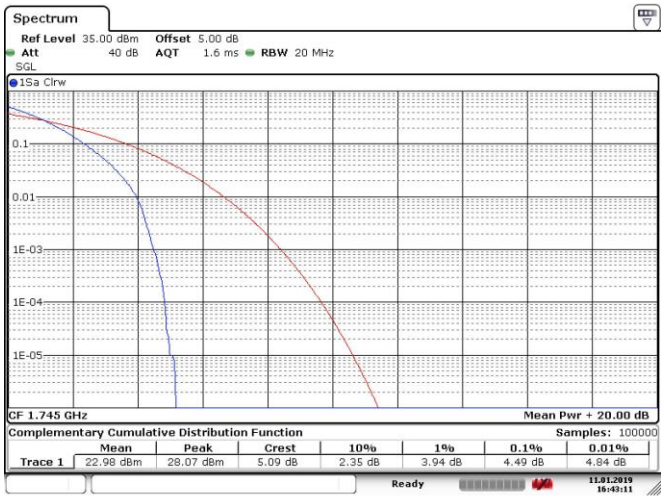
Date: 11.JAN.2019 16:41:17

Band4_20MHz_QPSK_20175_100RB#0



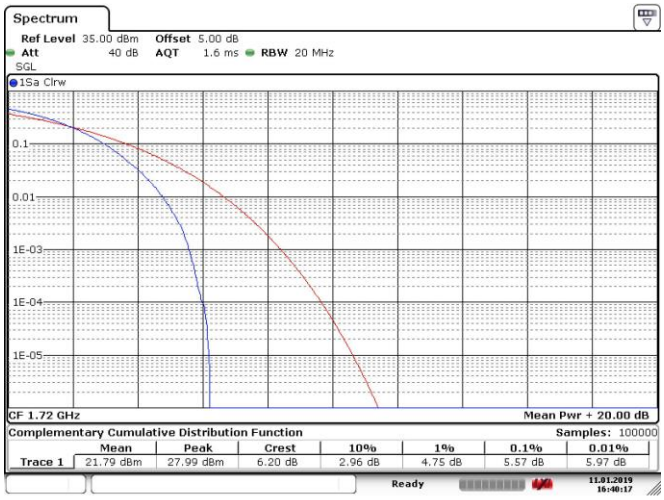
Date: 11.JAN.2019 16:41:59

Band4_20MHz_QPSK_20300_100RB#0



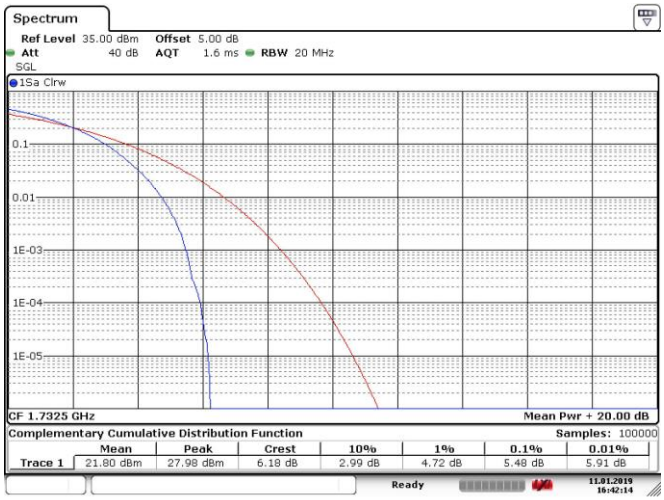
Date: 11.JAN.2019 16:43:11

Band4_20MHz_16QAM_20050_100RB#0



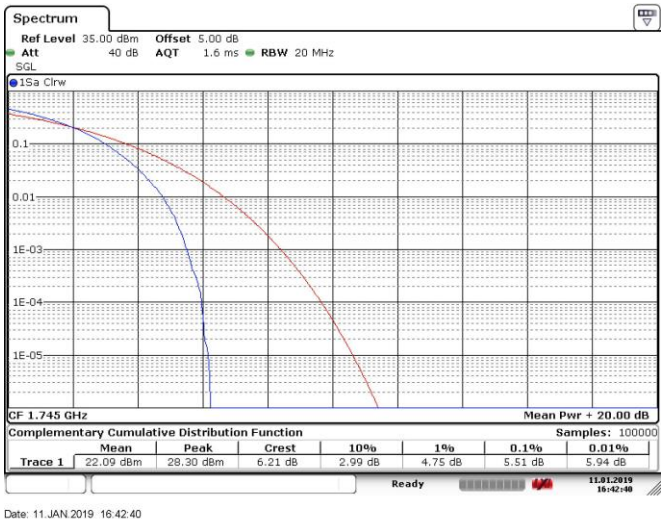
Date: 11.JAN.2019 16:40:17

Band4_20MHz_16QAM_20175_100RB#0



Date: 11.JAN.2019 16:42:14

Band4_20MHz_16QAM_20300_100RB#0

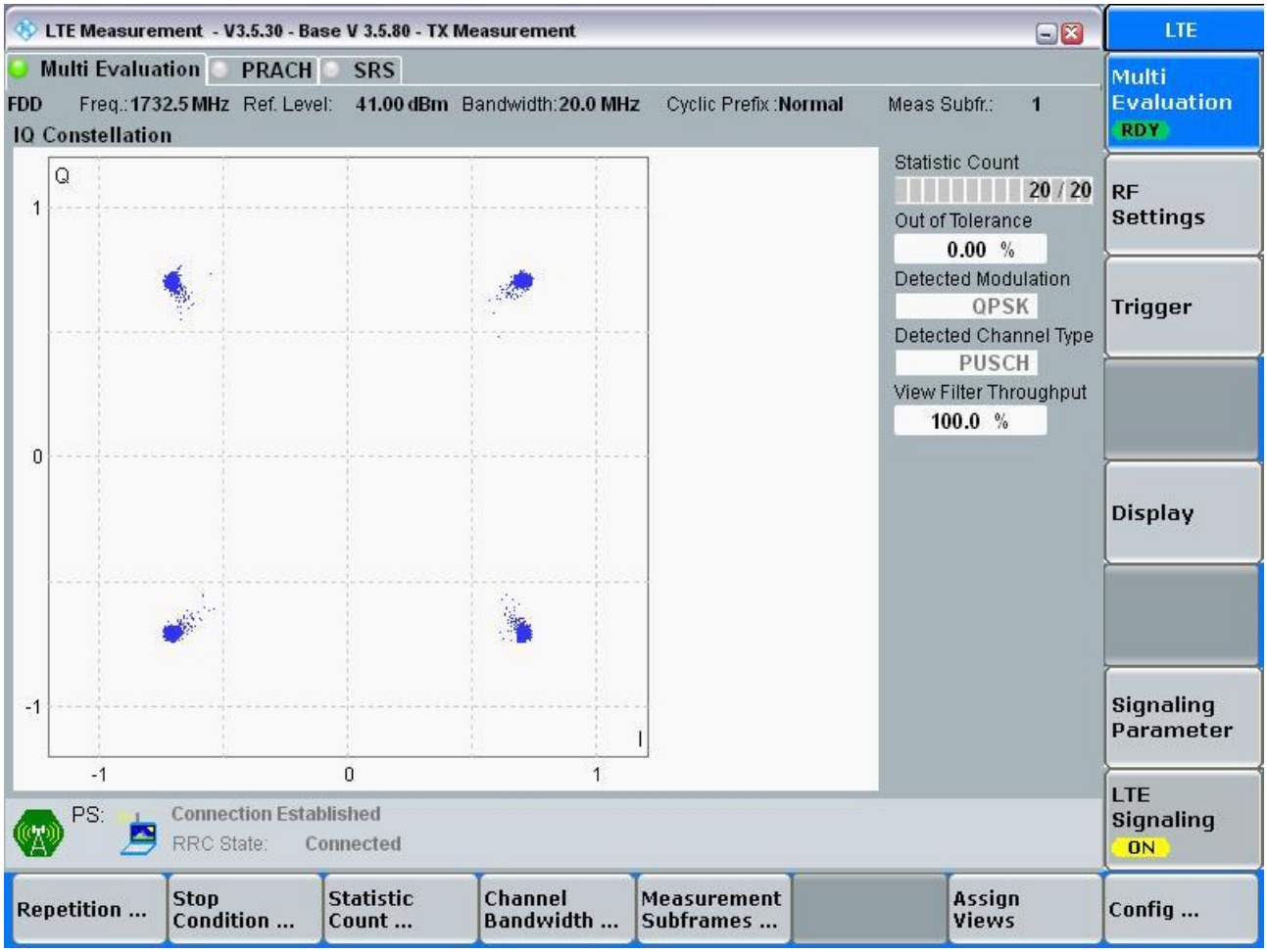


5. Modulation Characteristics

5.1. Test BAND = LTE Band 4

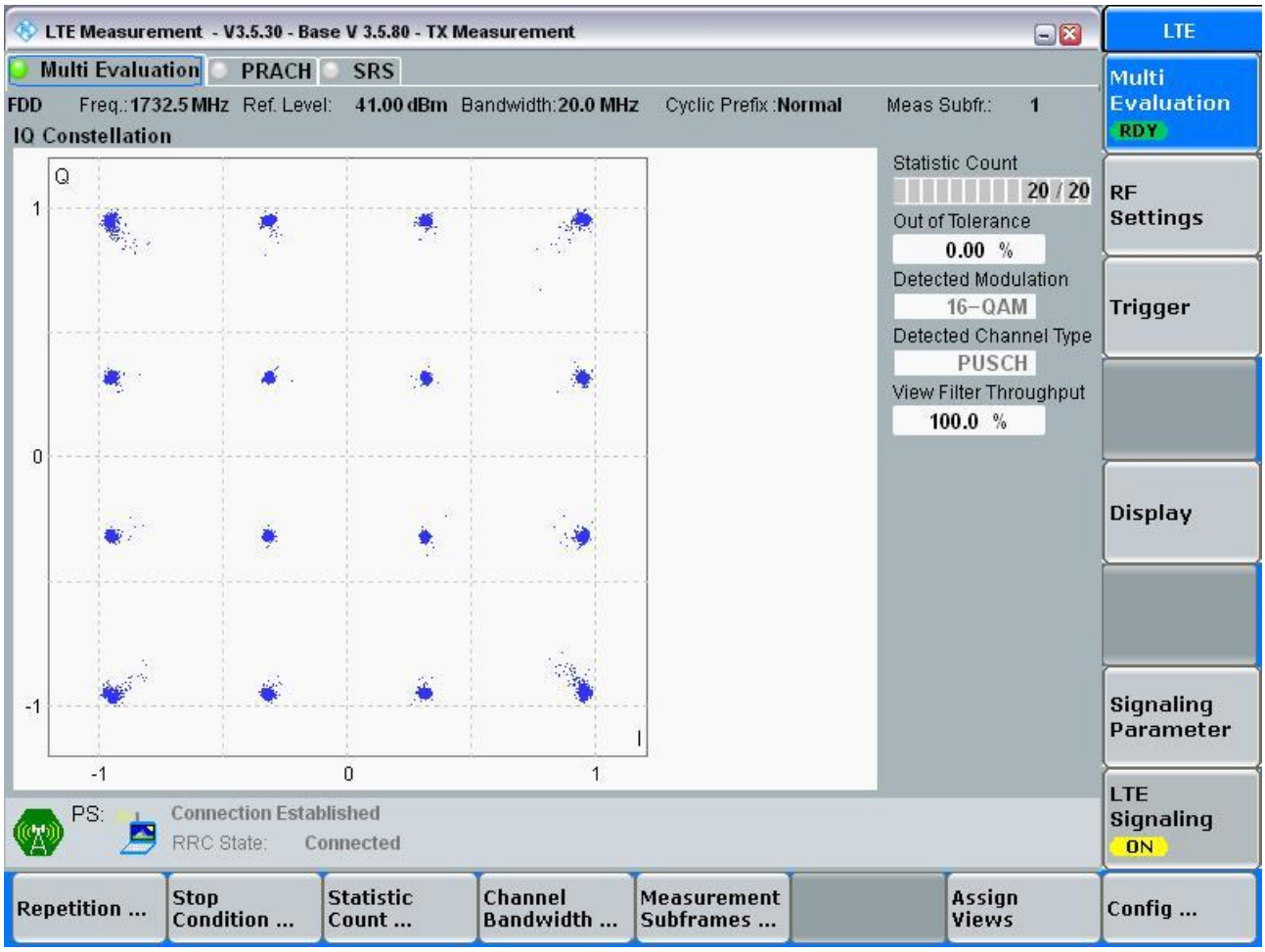
5.1.1. Test Mode = LTE /TM1 20MHz

5.1.1.1. Test Channel = MCH



5.1.2. Test Mode = LTE /TM2 20MHz

5.1.2.1. Test Channel = MCH



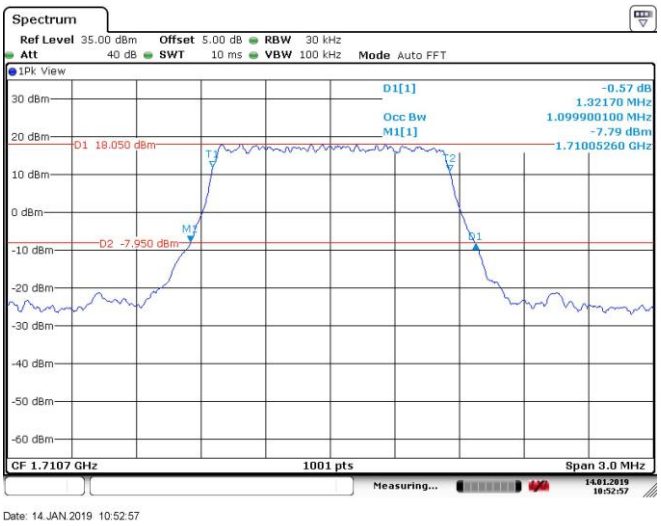
6. 26dB Bandwidth and Occupied Bandwidth

6.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band4	1.4MHz	QPSK	19957	6RB#0	1.100	1.322	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	1.102	1.295	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	1.097	1.319	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	1.097	1.286	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	1.097	1.310	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	1.100	1.307	PASS
Band4	3MHz	QPSK	19965	15RB#0	2.691	2.295	PASS
Band4	3MHz	QPSK	20175	15RB#0	2.685	2.937	PASS
Band4	3MHz	QPSK	20385	15RB#0	2.685	2.295	PASS
Band4	3MHz	16QAM	19965	15RB#0	2.685	2.295	PASS
Band4	3MHz	16QAM	20175	15RB#0	2.685	2.937	PASS
Band4	3MHz	16QAM	20385	15RB#0	2.685	2.967	PASS
Band4	5MHz	QPSK	19975	25RB#0	4.476	4.925	PASS
Band4	5MHz	QPSK	20175	25RB#0	4.476	4.895	PASS
Band4	5MHz	QPSK	20375	25RB#0	4.486	4.915	PASS
Band4	5MHz	16QAM	19975	25RB#0	4.486	4.935	PASS
Band4	5MHz	16QAM	20175	25RB#0	4.486	4.945	PASS
Band4	5MHz	16QAM	20375	25RB#0	4.476	4.875	PASS
Band4	10MHz	QPSK	20000	50RB#0	8.931	9.770	PASS
Band4	10MHz	QPSK	20175	50RB#0	8.931	9.650	PASS
Band4	10MHz	QPSK	20350	50RB#0	8.931	9.663	PASS
Band4	10MHz	16QAM	20000	50RB#0	8.931	9.590	PASS
Band4	10MHz	16QAM	20175	50RB#0	8.931	9.650	PASS
Band4	10MHz	16QAM	20350	50RB#0	8.931	9.683	PASS
Band4	15MHz	QPSK	20025	75RB#0	13.457	14.805	PASS
Band4	15MHz	QPSK	20175	75RB#0	13.397	14.595	PASS
Band4	15MHz	QPSK	20325	75RB#0	13.427	14.790	PASS
Band4	15MHz	16QAM	20025	75RB#0	13.457	14.715	PASS
Band4	15MHz	16QAM	20175	75RB#0	13.427	14.701	PASS
Band4	15MHz	16QAM	20325	75RB#0	13.457	14.790	PASS
Band4	20MHz	QPSK	20050	100RB#0	17.862	19.221	PASS
Band4	20MHz	QPSK	20175	100RB#0	17.862	19.421	PASS
Band4	20MHz	QPSK	20300	100RB#0	17.862	19.261	PASS
Band4	20MHz	16QAM	20050	100RB#0	17.902	19.341	PASS
Band4	20MHz	16QAM	20175	100RB#0	17.862	19.301	PASS
Band4	20MHz	16QAM	20300	100RB#0	17.902	19.500	PASS

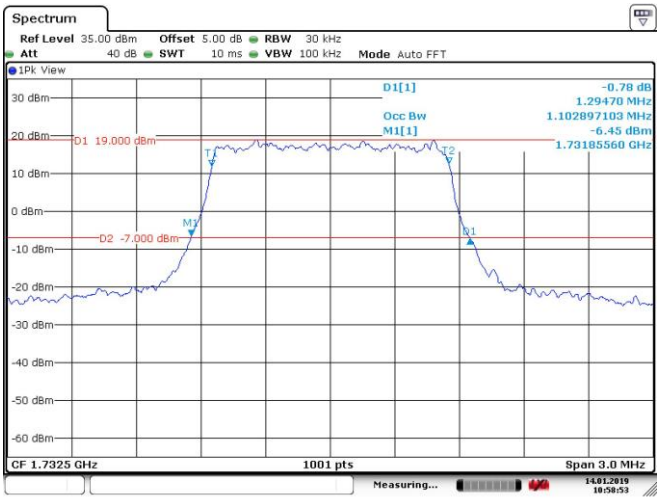
6.2. Test Plots

Band4_1.4MHz_QPSK_19957_6RB#0



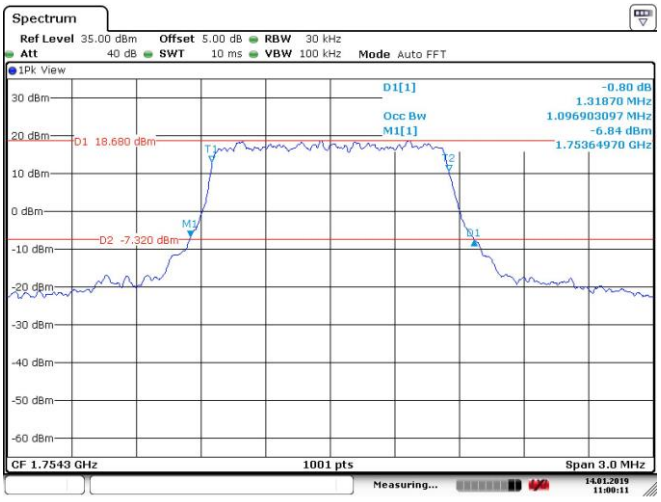
Date: 14.JAN.2019 10:52:57

Band4_1.4MHz_QPSK_20175_6RB#0

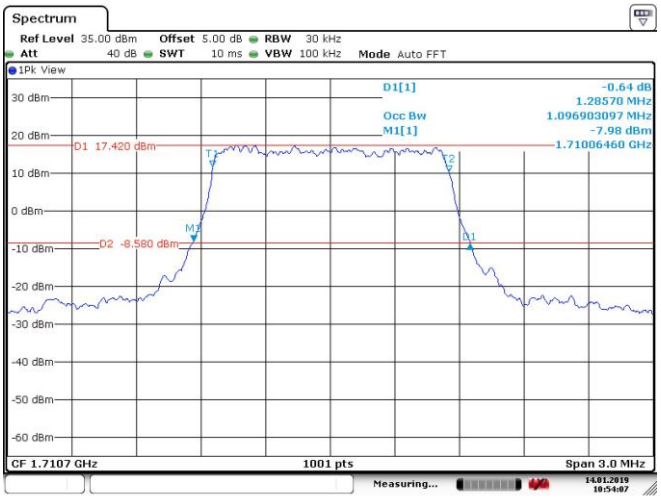


Date: 14.JAN.2019 10:58:53

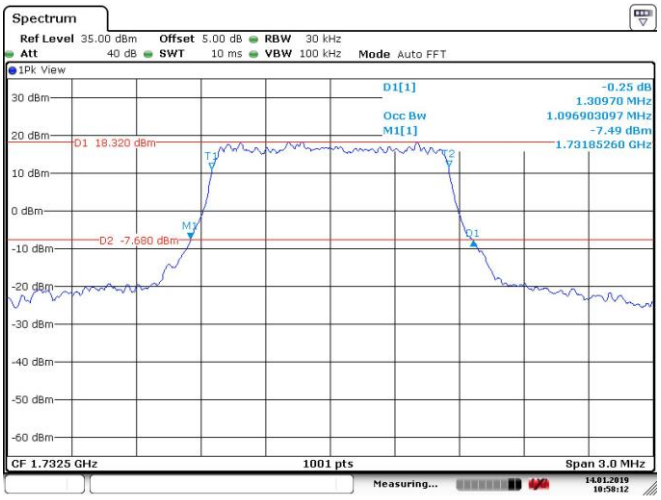
Band4_1.4MHz_QPSK_20393_6RB#0



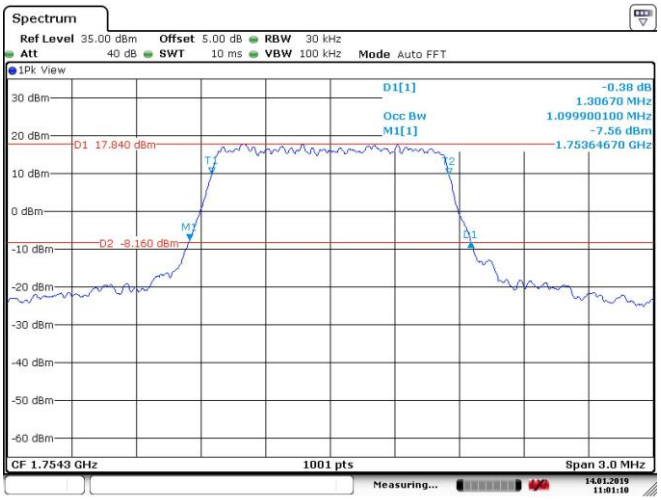
Date: 14.JAN.2019 11:00:11

Band4_1.4MHz_16QAM_19957_6RB#0


Date: 14.JAN.2019 10:54:08

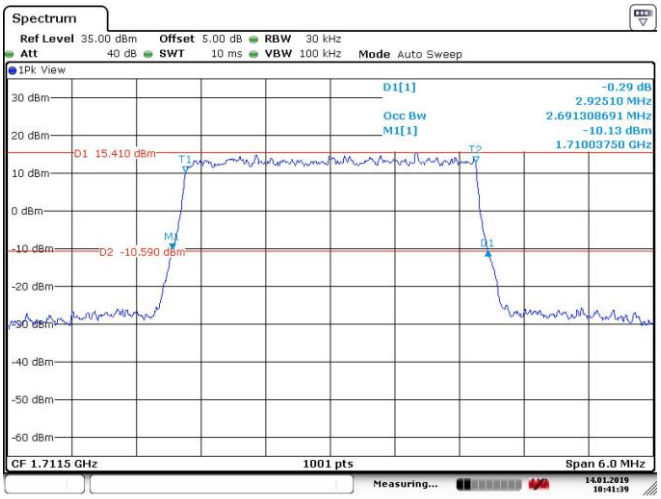
Band4_1.4MHz_16QAM_20175_6RB#0


Date: 14.JAN.2019 10:58:13

Band4_1.4MHz_16QAM_20393_6RB#0


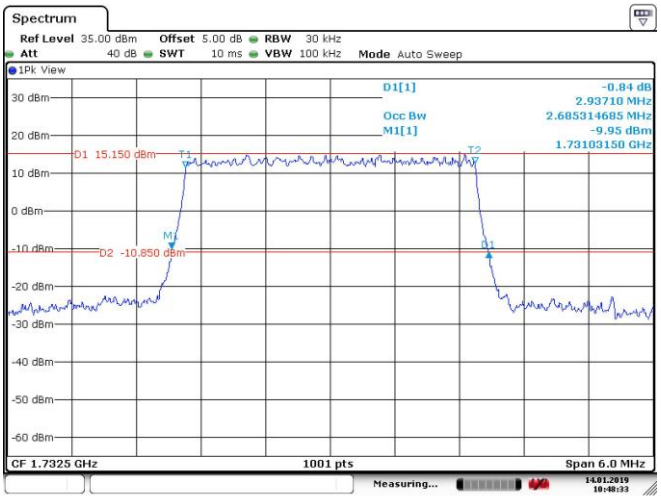
Date: 14.JAN.2019 11:01:10

Band4_3MHz_QPSK_19965_15RB#0



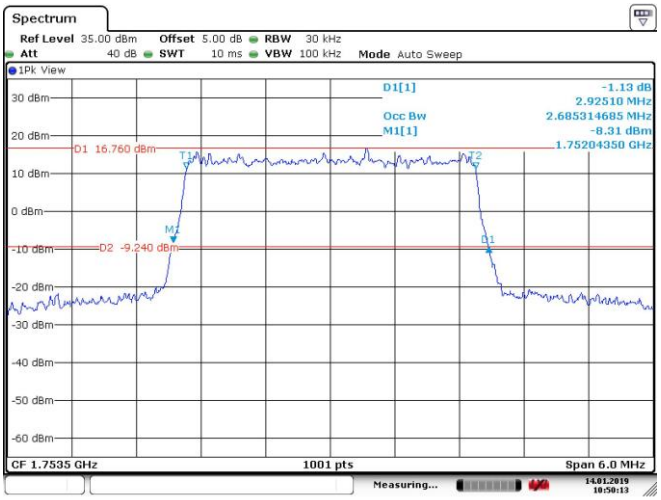
Date: 14.JAN.2019 10:41:39

Band4_3MHz_QPSK_20175_15RB#0



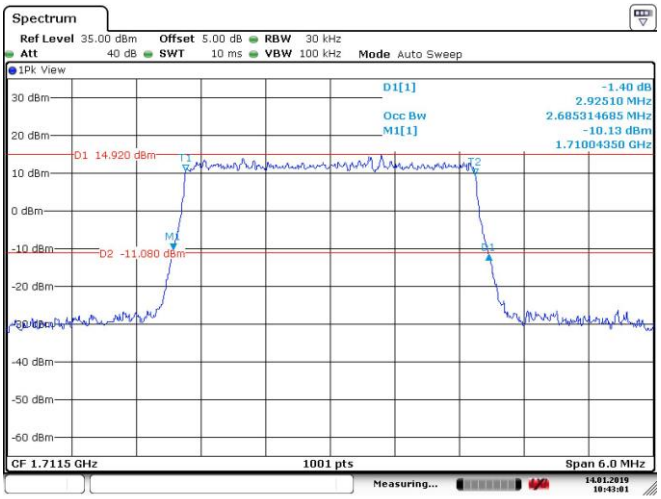
Date: 14.JAN.2019 10:48:34

Band4_3MHz_QPSK_20385_15RB#0



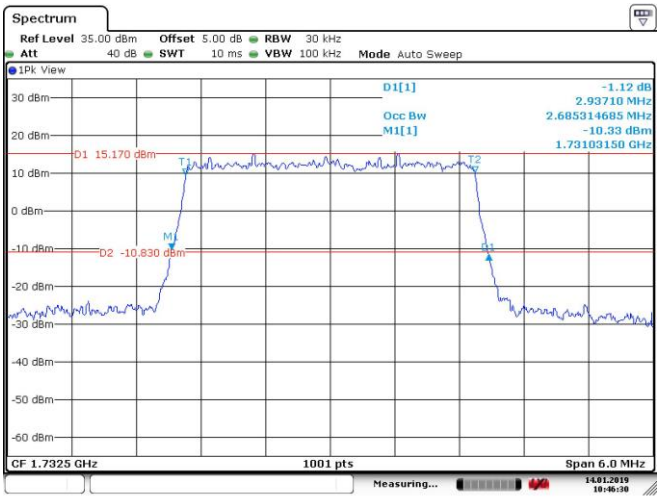
Date: 14.JAN.2019 10:50:14

Band4_3MHz_16QAM_19965_15RB#0



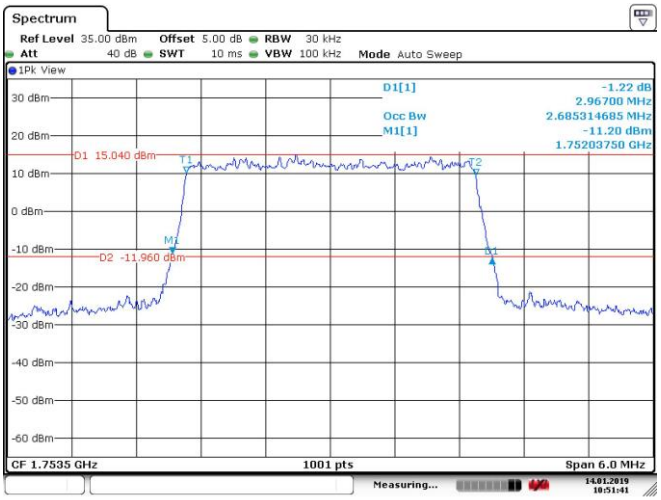
Date: 14.JAN.2019 10:43:02

Band4_3MHz_16QAM_20175_15RB#0



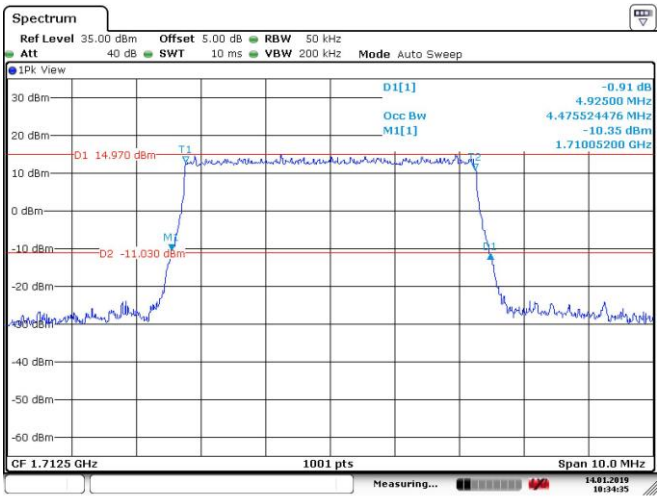
Date: 14.JAN.2019 10:46:30

Band4_3MHz_16QAM_20385_15RB#0



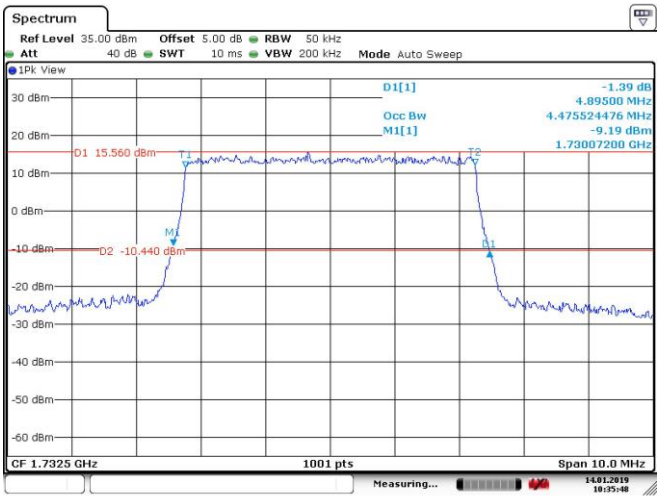
Date: 14.JAN.2019 10:51:41

Band4_5MHz_QPSK_19975_25RB#0



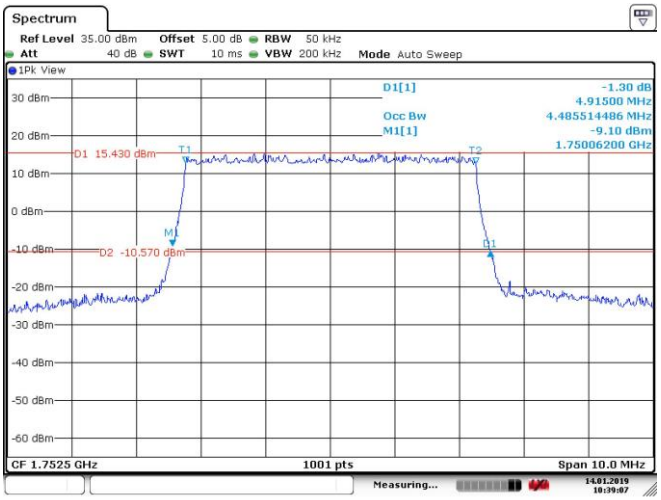
Date: 14.JAN.2019 10:34:35

Band4_5MHz_QPSK_20175_25RB#0



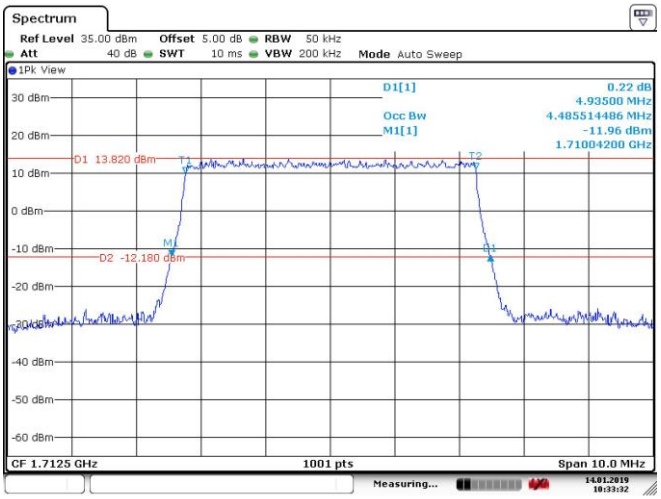
Date: 14.JAN.2019 10:35:48

Band4_5MHz_QPSK_20375_25RB#0



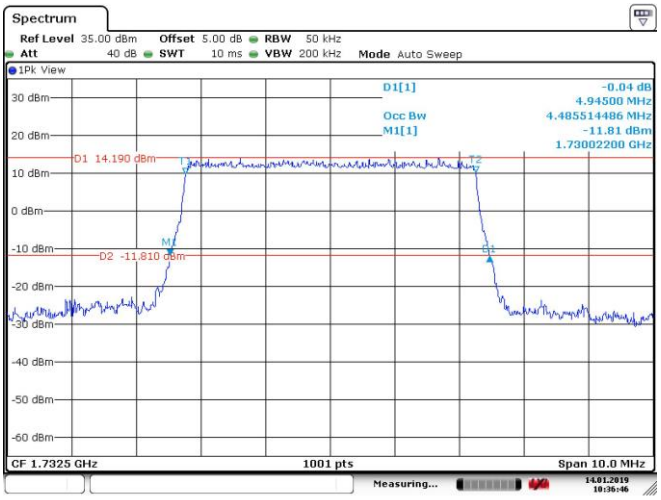
Date: 14.JAN.2019 10:39:07

Band4_5MHz_16QAM_19975_25RB#0



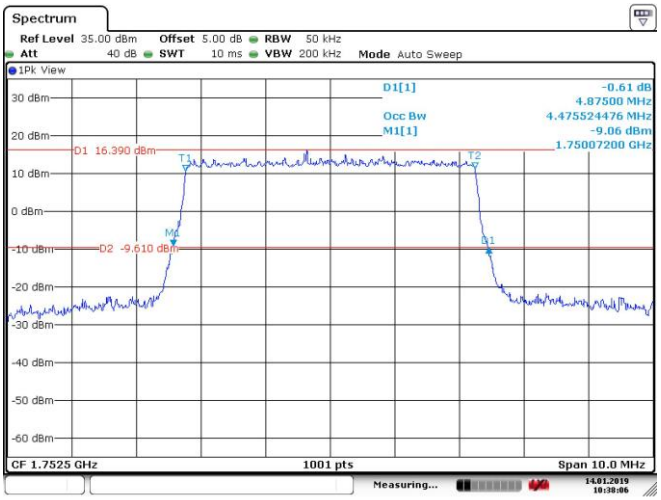
Date: 14.JAN.2019 10:33:33

Band4_5MHz_16QAM_20175_25RB#0



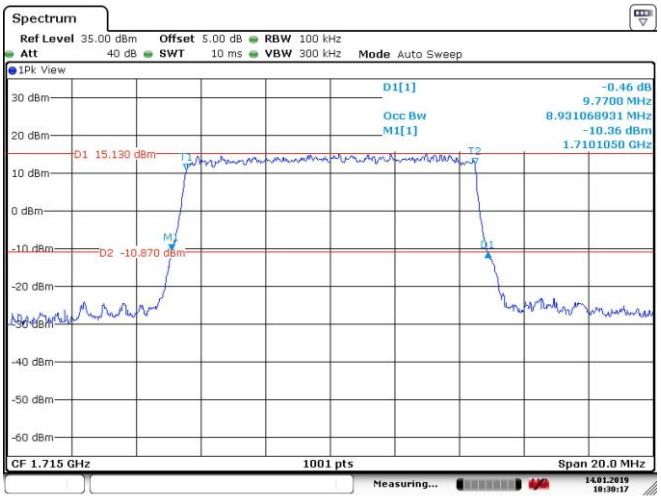
Date: 14.JAN.2019 10:36:46

Band4_5MHz_16QAM_20375_25RB#0



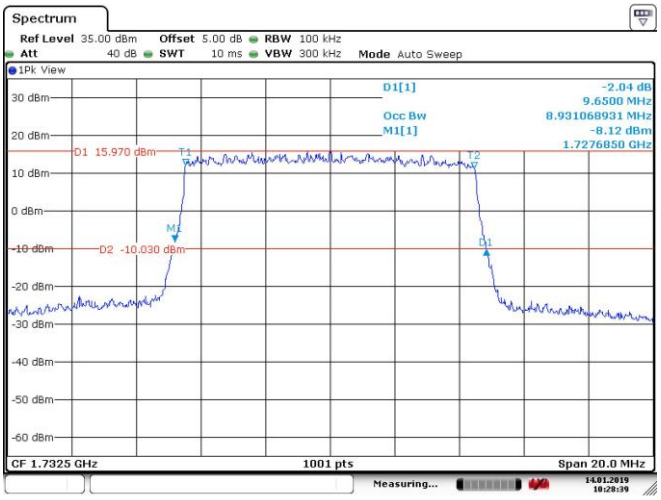
Date: 14.JAN.2019 10:38:06

Band4_10MHz_QPSK_20000_50RB#0



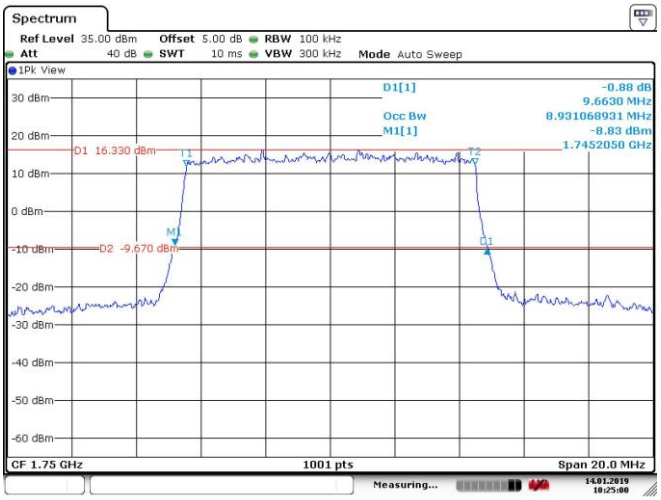
Date: 14.JAN.2019 10:30:17

Band4_10MHz_QPSK_20175_50RB#0



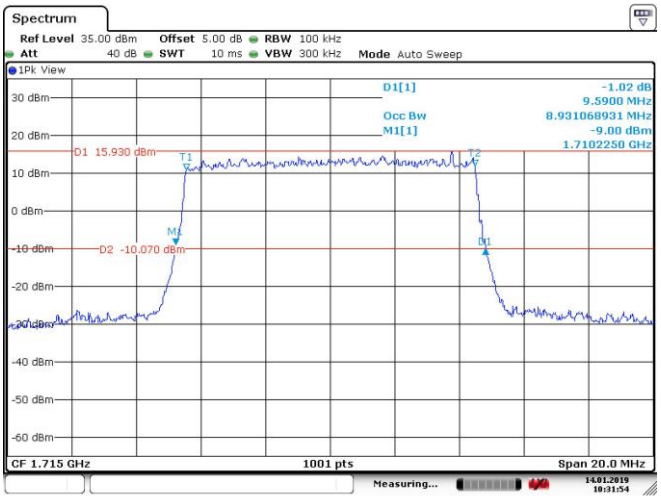
Date: 14.JAN.2019 10:28:39

Band4_10MHz_QPSK_20350_50RB#0



Date: 14.JAN.2019 10:25:00

Band4_10MHz_16QAM_20000_50RB#0



Date: 14.JAN.2019 10:31:54

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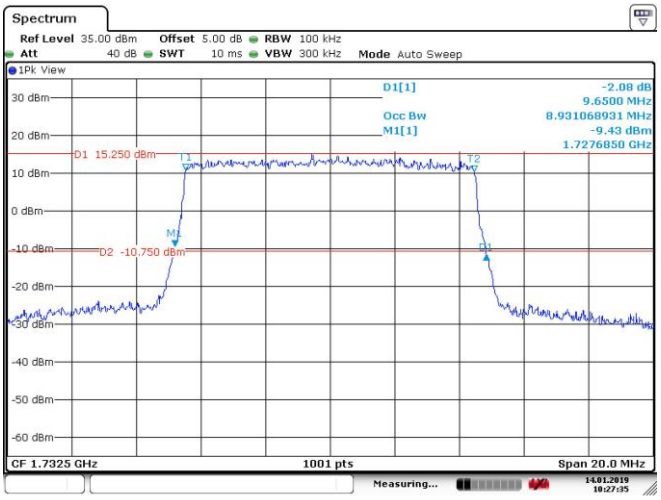

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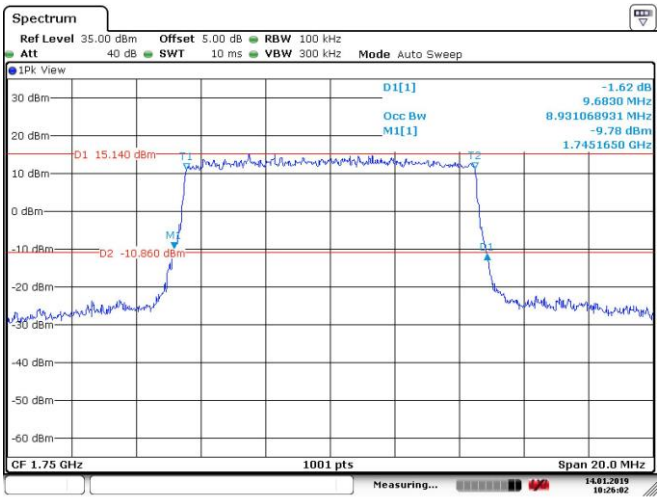
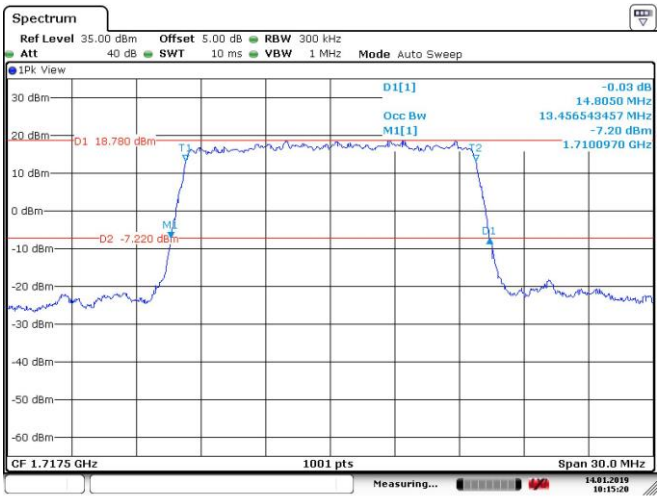
Band4_10MHz_16QAM_20350_50RB#0



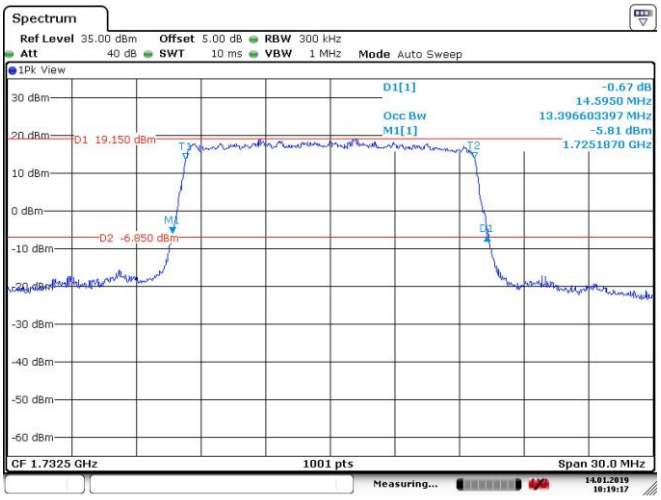
Date: 14.JAN.2019 10:26:03

Band4_15MHz_QPSK_20025_75RB#0



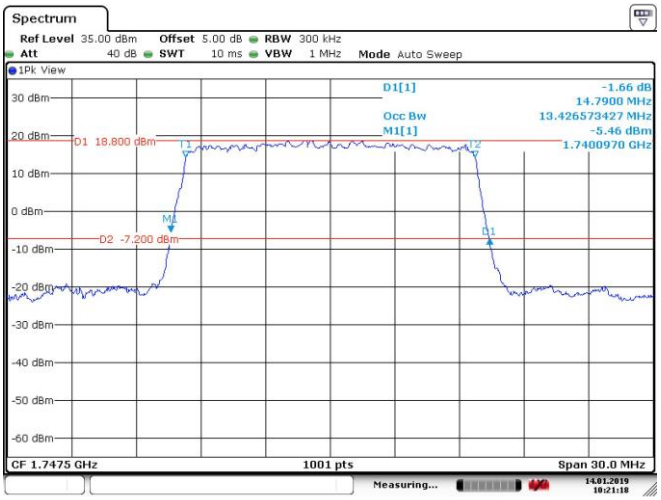
Date: 14.JAN.2019 10:15:20

Band4_15MHz_QPSK_20175_75RB#0



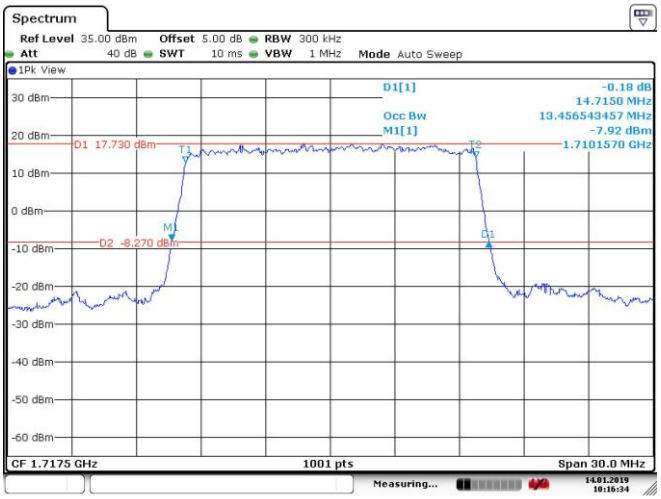
Date: 14.JAN.2019 10:19:17

Band4_15MHz_QPSK_20325_75RB#0



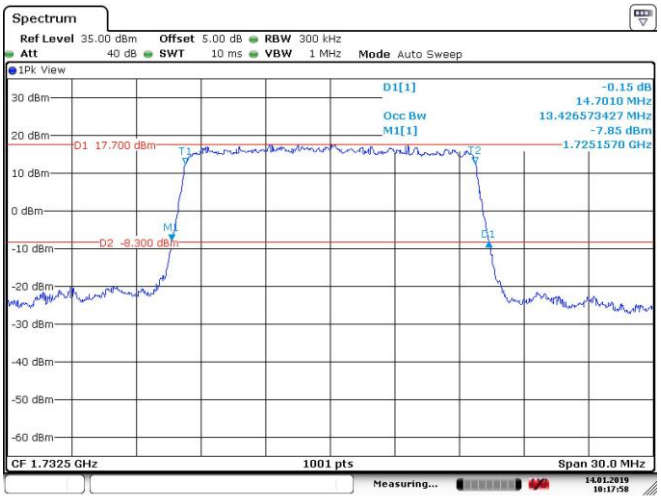
Date: 14.JAN.2019 10:21:18

Band4_15MHz_16QAM_20025_75RB#0



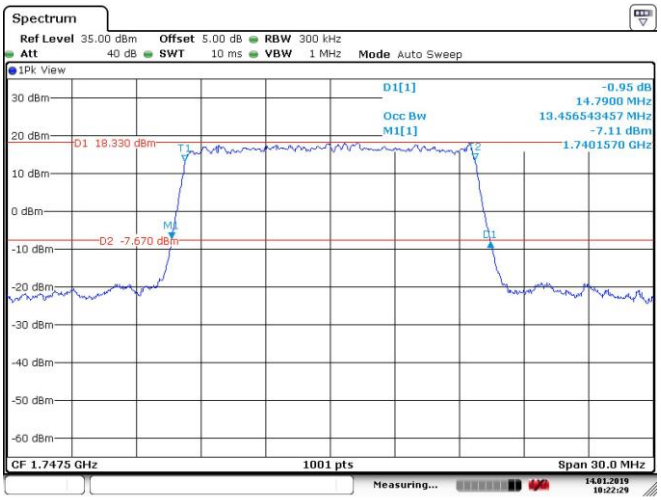
Date: 14.JAN.2019 10:16:35

Band4_15MHz_16QAM_20175_75RB#0

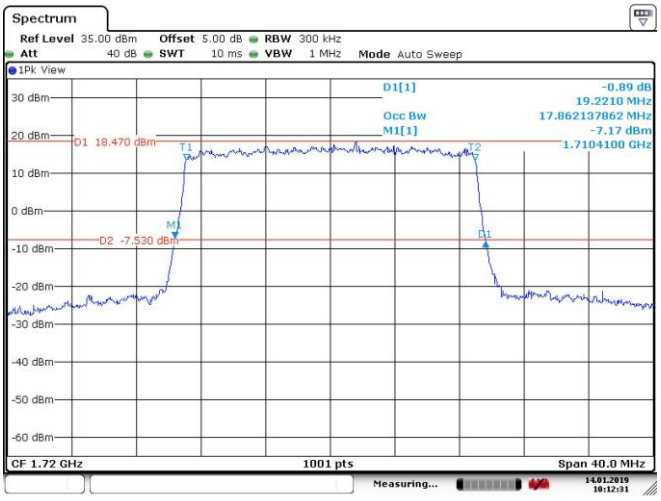


Date: 14.JAN.2019 10:17:59

Band4_15MHz_16QAM_20325_75RB#0



Date: 14.JAN.2019 10:22:30

Band4_20MHz_QPSK_20050_100RB#0
 Date: 14.JAN.2019 10:12:31
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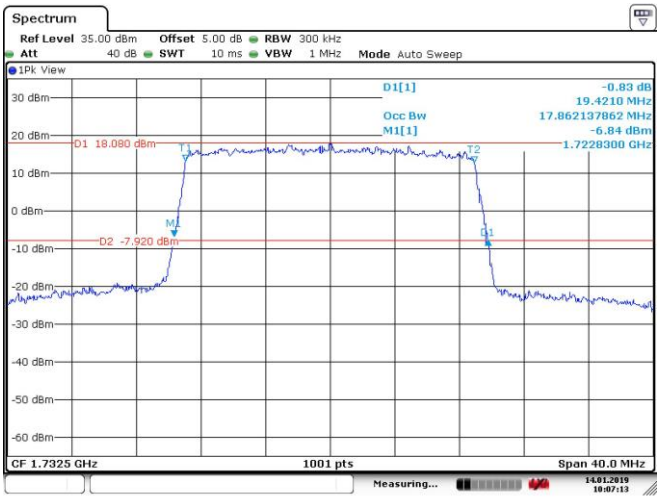 Date: 14.JAN.2019 10:07:14
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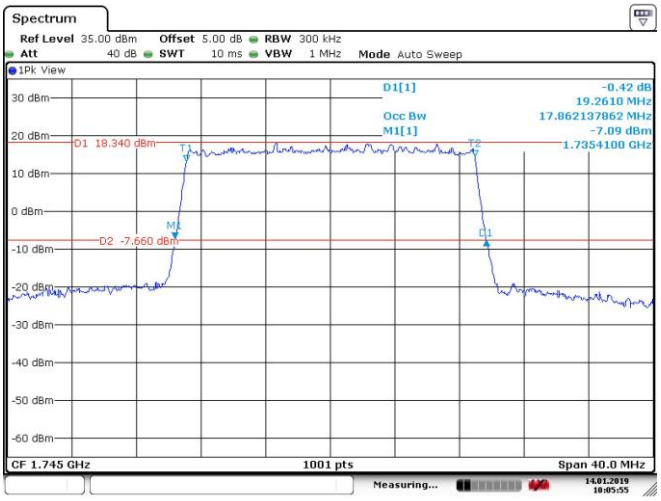
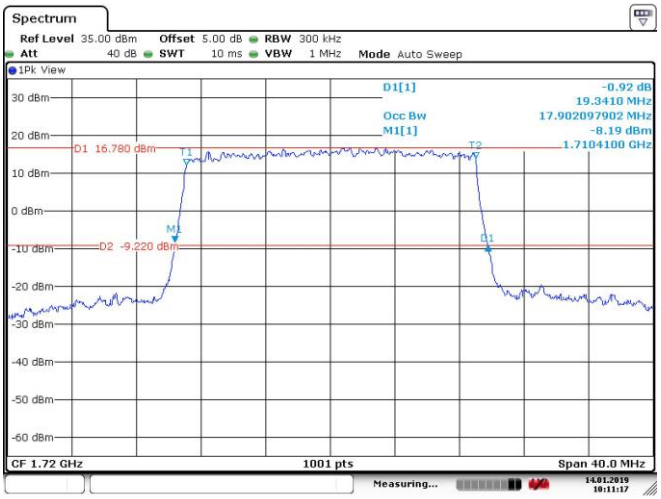
 Date: 14.JAN.2019 10:05:55

Band4_20MHz_16QAM_20050_100RB#0



Date: 14.JAN.2019 10:11:17

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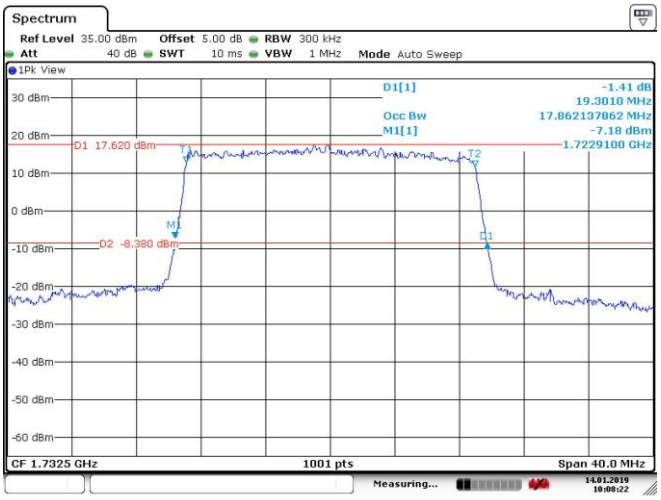

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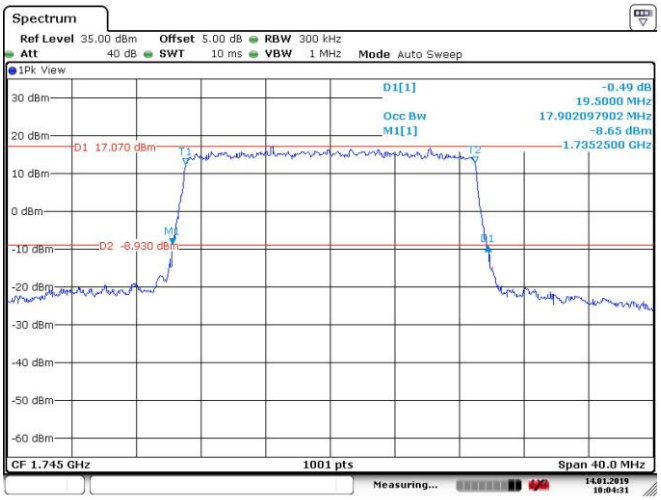
Band4_20MHz_16QAM_20300_100RB#0



Date: 14.JAN.2019 10:04:32