

Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless VoIP
		VPN Router
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 3: Transmit (802.11n/ac-40BW) (5190MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	10380	43.14	74.00	-30.86	52.77	-9.63	РК

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless VoIP
		VPN Router
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 3: Transmit (802.11n/ac-40BW) (5230MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	10380	42.58	74.00	-31.42	52.21	-9.63	РК

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



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Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 3: Transmit (802.11n/ac-40BW) (5230MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	10460	46.11	74.00	-27.89	55.24	-9.13	РК

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



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		VPN Router
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 3: Transmit (802.11n/ac-40BW) (5755MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	11510	55.95	74.00	-18.05	62.62	-6.67	РК

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



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Test Mode	:	Mode 3: Transmit (802.11n/ac-40BW) (5755MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	11510	44.25	54.00	-9.75	50.92	-6.67	AV

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
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Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 3: Transmit (802.11n/ac-40BW) (5755MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	11510	59.73	74.00	-14.27	66.40	-6.67	РК

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



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Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	11510	46.54	54.00	-7.46	53.21	-6.67	AV

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



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Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 3: Transmit (802.11n/ac-40BW) (5795MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	11590	59.28	74.00	-14.72	65.93	-6.65	РК

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



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Test Mode	:	Mode 3: Transmit (802.11n/ac-40BW) (5795MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	11590	47.35	54.00	-6.65	54.00	-6.65	AV

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



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Test Mode	:	Mode 3: Transmit (802.11n/ac-40BW) (5795MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	11590	60.63	74.00	-13.37	67.28	-6.65	РК

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
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Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	11590	46.63	54.00	-7.37	53.28	-6.65	AV

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless VoIP
		VPN Router
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 4: Transmit (802.11ac-80BW) (5210MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	10420	44.23	74.00	-29.77	53.63	-9.40	РК

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



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Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 4: Transmit (802.11ac-80BW) (5210MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	10420	46.14	74.00	-27.86	55.54	-9.40	РК

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



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Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 4: Transmit (802.11ac-80BW) (5775MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	11550	58.13	74.00	-15.87	64.79	-6.66	РК

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



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Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 4: Transmit (802.11ac-80BW) (5775MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	11550	48.66	54.00	-5.34	55.32	-6.66	AV

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



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Test Mode	:	Mode 4: Transmit (802.11ac-80BW) (5775MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	11550	61.75	74.00	-12.25	68.41	-6.66	РК

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



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Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 4: Transmit (802.11ac-80BW) (5775MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	11550	49.25	54.00	-4.75	55.91	-6.66	AV

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless VoIP
		VPN Router
Test Item	:	General Radiated Emission
Test Mode	:	Mode 1: Transmit (802.11a) (5220MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	62.333	35.34	40.00	-4.66	48.92	-13.58	QP
2	214.159	31.75	43.50	-11.75	42.81	-11.06	QP
3	536.087	33.20	46.00	-12.80	35.68	-2.48	QP
4	593.725	34.96	46.00	-11.04	36.88	-1.92	QP
5	671.043	33.70	46.00	-12.30	35.25	-1.55	QP
6	978.913	30.55	54.00	-23.45	30.98	-0.43	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



 Product
 : Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless VoIP VPN Router

 Test Item
 : General Radiated Emission

 Test Mode
 : Mode 1: Transmit (802.11a) (5220MHz)

 Test Date
 : 2020/10/06

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	163.551	29.59	43.50	-13.91	43.16	-13.57	QP
2	212.754	27.76	43.50	-15.74	38.95	-11.19	QP
3	531.87	30.21	46.00	-15.79	32.82	-2.61	QP
4	633.087	31.61	46.00	-14.39	32.85	-1.24	QP
5	761.014	29.88	46.00	-16.12	31.04	-1.16	QP
6	942.362	29.56	46.00	-16.44	30.12	-0.56	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless VoIP
		VPN Router
Test Item	:	General Radiated Emission
Test Mode	:	Mode 1: Transmit (802.11a) (5785MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	62.333	35.15	40.00	-4.85	48.73	-13.58	QP
2	212.754	31.59	43.50	-11.91	42.78	-11.19	QP
3	524.841	33.65	46.00	-12.35	36.40	-2.75	QP
4	590.913	34.50	46.00	-11.50	36.62	-2.12	QP
5	637.304	34.43	46.00	-11.57	35.74	-1.31	QP
6	946.58	29.70	46.00	-16.30	30.36	-0.66	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



 Product
 : Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless VoIP VPN Router

 Test Item
 : General Radiated Emission

 Test Mode
 : Mode 1: Transmit (802.11a) (5785MHz)

 Test Date
 : 2020/10/06

Vertical



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	163.551	29.42	43.50	-14.08	42.99	-13.57	QP
2	212.754	28.91	43.50	-14.59	40.10	-11.19	QP
3	533.275	30.96	46.00	-15.04	33.53	-2.57	QP
4	595.13	31.48	46.00	-14.52	33.31	-1.83	QP
5	637.304	31.52	46.00	-14.48	32.83	-1.31	QP
6	959.232	29.84	46.00	-16.16	31.15	-1.31	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless Voll
		VPN Router
Test Item	:	General Radiated Emission
Test Mode	:	Mode 2: Transmit (802.11n/ac-20BW) (5220MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	62.333	34.80	40.00	-5.20	48.38	-13.58	QP
2	212.754	31.18	43.50	-12.32	42.37	-11.19	QP
3	294.29	31.04	46.00	-14.96	39.77	-8.73	QP
4	541.71	33.34	46.00	-12.66	35.86	-2.52	QP
5	638.71	33.93	46.00	-12.07	35.24	-1.31	QP
6	742.739	32.37	46.00	-13.63	33.29	-0.92	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



/ireless VoIP



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	89.043	35.07	43.50	-8.43	45.54	-10.47	QP
2	163.551	30.44	43.50	-13.06	44.01	-13.57	QP
3	534.681	30.37	46.00	-15.63	32.90	-2.53	QP
4	666.826	33.79	46.00	-12.21	35.34	-1.55	QP
5	742.739	32.01	46.00	-13.99	32.93	-0.92	QP
6	940.957	30.25	46.00	-15.75	30.80	-0.55	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



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		VPN Router
Test Item	:	General Radiated Emission
Test Mode	:	Mode 2: Transmit (802.11n/ac-20BW) (5785MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	62.333	36.85	40.00	-3.15	50.43	-13.58	QP
2	212.754	32.99	43.50	-10.51	44.18	-11.19	QP
3	530.464	32.78	46.00	-13.22	35.42	-2.64	QP
4	583.884	34.02	46.00	-11.98	36.78	-2.76	QP
5	666.826	33.50	46.00	-12.50	35.05	-1.55	QP
6	1000	34.06	54.00	-19.94	34.92	-0.86	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless VoIP
		VPN Router
Test Item	:	General Radiated Emission
Test Mode	:	Mode 2: Transmit (802.11n/ac-20BW) (5785MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	97.478	32.53	43.50	-10.97	42.49	-9.96	QP
2	163.551	29.70	43.50	-13.80	43.27	-13.57	QP
3	534.681	29.71	46.00	-16.29	32.24	-2.53	QP
4	579.667	31.79	46.00	-14.21	34.86	-3.07	QP
5	742.739	32.17	46.00	-13.83	33.09	-0.92	QP
6	971.884	30.60	54.00	-23.40	31.24	-0.64	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless VoIP				
		VPN Router				
Test Item	:	General Radiated Emission				
Test Mode	:	Mode 3: Transmit (802.11n/ac-40BW) (5190MHz)				
Test Date	:	2020/10/06				



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	62.333	35.52	40.00	-4.48	49.10	-13.58	QP
2	211.348	31.40	43.50	-12.10	42.73	-11.33	QP
3	295.696	29.92	46.00	-16.08	38.29	-8.37	QP
4	589.507	34.31	46.00	-11.69	36.53	-2.22	QP
5	635.899	33.45	46.00	-12.55	34.77	-1.32	QP
6	974.696	29.99	54.00	-24.01	30.48	-0.49	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless VoIP
		VPN Router
Test Item	:	General Radiated Emission
Test Mode	:	Mode 3: Transmit (802.11n/ac-40BW) (5190MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	163.551	29.92	43.50	-13.58	43.49	-13.57	QP
2	211.348	28.11	43.50	-15.39	39.44	-11.33	QP
3	434.87	26.70	46.00	-19.30	30.42	-3.72	QP
4	593.725	31.37	46.00	-14.63	33.29	-1.92	QP
5	761.014	30.00	46.00	-16.00	31.16	-1.16	QP
6	973.29	30.93	54.00	-23.07	31.50	-0.57	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless Volf
		VPN Router
Test Item	:	General Radiated Emission
Test Mode	:	Mode 3: Transmit (802.11n/ac-40BW) (5755MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	62.333	35.85	40.00	-4.15	49.43	-13.58	QP
2	212.754	31.30	43.50	-12.20	42.49	-11.19	QP
3	232.435	31.75	46.00	-14.25	41.96	-10.21	QP
4	593.725	36.30	46.00	-9.70	38.22	-1.92	QP
5	638.71	34.68	46.00	-11.32	35.99	-1.31	QP
6	987.348	30.61	54.00	-23.39	31.30	-0.69	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless VoIP
		VPN Router
Test Item	:	General Radiated Emission
Test Mode	:	Mode 3: Transmit (802.11n/ac-40BW) (5755MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	163.551	29.42	43.50	-14.08	42.99	-13.57	QP
2	545.928	29.80	46.00	-16.20	32.78	-2.98	QP
3	592.319	30.75	46.00	-15.25	32.77	-2.02	QP
4	642.928	31.53	46.00	-14.47	32.94	-1.41	QP
5	742.739	30.22	46.00	-15.78	31.14	-0.92	QP
6	976.101	30.52	54.00	-23.48	30.99	-0.47	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless Volf
		VPN Router
Test Item	:	General Radiated Emission
Test Mode	:	Mode 4: Transmit (802.11ac-80BW) (5210MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	62.333	36.88	40.00	-3.12	50.46	-13.58	QP
2	231.029	32.41	46.00	-13.59	42.54	-10.13	QP
3	302.725	29.07	46.00	-16.93	36.30	-7.23	QP
4	545.928	32.86	46.00	-13.14	35.84	-2.98	QP
5	666.826	36.75	46.00	-9.25	38.30	-1.55	QP
6	940.957	30.09	46.00	-15.91	30.64	-0.55	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless VoIP
		VPN Router
Test Item	:	General Radiated Emission
Test Mode	:	Mode 4: Transmit (802.11ac-80BW) (5210MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	96.072	32.93	43.50	-10.57	43.20	-10.27	QP
2	232.435	30.62	46.00	-15.38	40.83	-10.21	QP
3	529.058	29.81	46.00	-16.19	32.48	-2.67	QP
4	593.725	31.16	46.00	-14.84	33.08	-1.92	QP
5	742.739	30.60	46.00	-15.40	31.52	-0.92	QP
6	955.014	29.99	46.00	-16.01	30.97	-0.98	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless VoIP
		VPN Router
Test Item	:	General Radiated Emission
Test Mode	:	Mode 4: Transmit (802.11ac-80BW) (5775MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	162.145	30.00	43.50	-13.50	43.57	-13.57	QP
2	212.754	27.37	43.50	-16.13	38.56	-11.19	QP
3	381.449	25.82	46.00	-20.18	30.01	-4.19	QP
4	537.493	30.35	46.00	-15.65	32.78	-2.43	QP
5	637.304	30.87	46.00	-15.13	32.18	-1.31	QP
6	973.29	30.00	54.00	-24.00	30.57	-0.57	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless VoIP
		VPN Router
Test Item	:	General Radiated Emission
Test Mode	:	Mode 4: Transmit (802.11ac-80BW) (5775MHz)
Test Date	:	2020/10/06



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	94.667	33.62	43.50	-9.88	44.09	-10.47	QP
2	163.551	30.31	43.50	-13.19	43.88	-13.57	QP
3	212.754	26.92	43.50	-16.58	38.11	-11.19	QP
4	583.884	30.60	46.00	-15.40	33.36	-2.76	QP
5	766.638	30.07	46.00	-15.93	31.23	-1.16	QP
6	946.58	29.41	46.00	-16.59	30.07	-0.66	QP

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



6. Band Edge

6.1. Test Setup

RF Conducted Measurement:



RF Radiated Measurement:



6.2. Limits

The provisions of Section 15.205 of this part apply to intentional radiators operating under this section.

Radiated emissions which fall in the restricted bands, as defined in Section 15.205, must also comply with the radiated emission limits specified in Section 15.209:

FCC Part 15 Subpart C Paragraph 15.209 Limits					
Frequency MHz	uV/m @3m	dBµV/m@3m			
30-88	100	40			
88-216	150	43.5			
216-960	200	46			
Above 960	500	54			

Remarks : 1. RF Voltage $(dB\mu V) = 20 \log RF$ Voltage (uV)

2. In the Above Table, the tighter limit applies at the band edges.

3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

6.3. Test Procedure

The EUT is placed on a turn table which is 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10:2013 on radiated measurement.

The bandwidth below 1GHz setting on the field strength meter is 120 kHz, above 1GHz are 1 MHz. The EUT was setup to ANSI C63.10, 2013; tested to UNII test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

RBW and VBW Parameter setting:

According to KDB 789033 section II.G.5 Procedure for Unwanted Maximum Emissions Measurements above 1000 MHz.

RBW = 1MHz. $VBW \ge 3MHz.$

According to KDB 789033 section II.G.6 Procedures for Average Unwanted Emissions Measurements above 1000 MHz.

RBW = 1MHz.

VBW = 10Hz, when duty cycle \ge 98 %

VBW \geq 1/T, when duty cycle < 98 %

(T refers to the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.)

5GHz band	Duty Cycle	Т	1/T	VBW
	(%)	(ms)	(Hz)	(Hz)
802.11a	79.25	1.3841	723	1000
802.11n/ac20	51.87	0.3623	2760	3000
802.11n/ac40	38.20	0.2087	4792	5000
802.11ac80	27.13	0.1246	8023	10000

Note: Duty Cycle Refer to Section 8



6.4. Test Result of Band Edge

Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless
		VoIP VPN Router
Test Item	:	Band Edge Data
Test Mode	:	Mode 1: Transmit (802.11a) (5180MHz)
Test Date	:	2020/09/24

Horizontal



Note:

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless
		VoIP VPN Router
Test Item	:	Band Edge Data
Test Mode	:	Mode 1: Transmit (802.11a) (5180MHz)
Test Date	:	2020/09/24



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
1	5142.174	52.14	54.00	-1.86	35.02	17.12	AV
2	5150	50.75	54.00	-3.25	33.57	17.18	AV
! 3	5182.319	108.53			91.10	17.43	AV

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless
		VoIP VPN Router
Test Item	:	Band Edge Data
Test Mode	:	Mode 1: Transmit (802.11a) (5180MHz)
Test Date	:	2020/09/24



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
1	5132.464	62.88	74.00	-11.12	45.83	17.05	РК
2	5150	60.01	74.00	-13.99	42.83	17.18	РК
! 3	5179.565	115.68			98.26	17.42	РК

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless
		VoIP VPN Router
Test Item	:	Band Edge Data
Test Mode	:	Mode 1: Transmit (802.11a) (5180MHz)
Test Date	:	2020/09/24



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
1	5110.29	50.56	54.00	-3.44	33.67	16.89	AV
2	5150	48.96	54.00	-5.04	31.78	17.18	AV
! 3	5179.13	106.11			88.70	17.41	AV

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless
		VoIP VPN Router
Test Item	:	Band Edge Data
Test Mode	:	Mode 1: Transmit (802.11a) (5745MHz)
Test Date	:	2020/09/24

No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	5650	67.19	68.22	-1.03	49.04	18.15	PK
2	5668.732	68.46	82.11	-13.65	50.28	18.18	PK
3	5700	65.02	105.20	-40.18	46.79	18.23	PK
4	5720	68.82	110.80	-41.98	50.47	18.35	PK
5	5725	72.18	122.20	-50.02	53.80	18.38	PK
6	5748.116	118.87	131.20	-12.33	100.36	18.51	РК



Vertical

No	Frequency (MHz)	Emission Level	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
		(dBuv/m)					
* 1	5635	67.22	68.22	-1.00	49.12	18.10	PK
2	5650	63.34	68.22	-4.88	45.19	18.15	PK
3	5674.565	66.58	86.43	-19.85	48.39	18.19	PK
4	5700	63.92	105.20	-41.28	45.69	18.23	PK
5	5720	68.23	110.80	-42.57	49.88	18.35	PK
6	5725	71.88	122.20	-50.32	53.50	18.38	PK
7	5746.594	118.27	131.20	-12.93	99.77	18.50	PK





Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless
		VoIP VPN Router
Test Item	:	Band Edge Data
Test Mode	:	Mode 1: Transmit (802.11a) (5825MHz)
Test Date	:	2020/09/28

No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)	, , , , , , , , , , , , , , , , , , ,				
1	5823.261	120.27	131.20	-10.93	101.72	18.55	PK
2	5850	68.79	122.20	-53.41	50.27	18.52	РК
3	5855	66.60	110.80	-44.20	48.11	18.49	PK
4	5875	67.90	105.20	-37.30	49.46	18.44	PK
5	5925	67.19	68.20	-1.01	48.80	18.39	PK
* 6	5937.391	67.97	68.20	-0.23	49.57	18.40	PK



Vertical

No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
1	5826.196	117.42	131.20	-13.78	98.88	18.54	PK
2	5850	66.55	122.20	-55.65	48.03	18.52	PK
3	5855	62.96	110.80	-47.84	44.47	18.49	PK
4	5875	63.01	105.20	-42.19	44.57	18.44	PK
* 5	5925	62.92	68.20	-5.28	44.53	18.39	PK





Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless
		VoIP VPN Router
Test Item	:	Band Edge Data
Test Mode	:	Mode 2: Transmit (802.11n/ac-20BW) (5180MHz)
Test Date	:	2020/09/30



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
1	5128.551	65.07	74.00	-8.93	48.05	17.02	РК
2	5150	63.54	74.00	-10.46	46.36	17.18	РК
! 3	5181.159	117.42			100.00	17.42	РК

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless
		VoIP VPN Router
Test Item	:	Band Edge Data
Test Mode	:	Mode 2: Transmit (802.11n/ac-20BW) (5180MHz)
Test Date	:	2020/09/30



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
1	5140.145	52.93	54.00	-1.07	35.82	17.11	AV
2	5150	51.93	54.00	-2.07	34.75	17.18	AV
! 3	5182.899	106.37			88.93	17.44	AV

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless
		VoIP VPN Router
Test Item	:	Band Edge Data
Test Mode	:	Mode 2: Transmit (802.11n/ac-20BW) (5180MHz)
Test Date	:	2020/09/30



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
1	5140.29	62.76	74.00	-11.24	45.65	17.11	РК
2	5150	61.59	74.00	-12.41	44.41	17.18	РК
! 3	5181.304	115.90			98.47	17.43	РК

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless
		VoIP VPN Router
Test Item	:	Band Edge Data
Test Mode	:	Mode 2: Transmit (802.11n/ac-20BW) (5180MHz)
Test Date	:	2020/09/30



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
1	5127.681	51.45	54.00	-2.55	34.43	17.02	AV
2	5150	50.64	54.00	-3.36	33.46	17.18	AV
! 3	5181.014	105.42			88.00	17.42	AV

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless VoIP
		VPN Router
Test Item	:	Band Edge Data
Test Mode	:	Mode 2: Transmit (802.11n/ac-20BW) (5745MHz)
Test Date	:	2020/09/30

No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	5636.775	67.76	68.22	-0.46	49.66	18.10	PK
2	5650	65.09	68.22	-3.13	46.94	18.15	PK
3	5674.819	68.24	86.62	-18.37	50.05	18.19	PK
4	5700	64.56	105.20	-40.64	46.33	18.23	PK
5	5720	66.12	110.80	-44.68	47.77	18.35	PK
6	5725	70.82	122.20	-51.38	52.44	18.38	РК
7	5746.087	119.92	131.20	-11.28	101.43	18.49	PK



Vertical

No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	5638.551	66.03	68.22	-2.19	47.92	18.11	РК
2	5650	64.99	68.22	-3.23	46.84	18.15	PK
3	5668.986	67.03	82.30	-15.27	48.85	18.18	PK
4	5700	63.55	105.20	-41.65	45.32	18.23	PK
5	5720	65.20	110.80	-45.60	46.85	18.35	PK
6	5725	66.69	122.20	-55.51	48.31	18.38	РК
7	5741.775	118.41	131.20	-12.79	99.93	18.48	PK





Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless VoIP
		VPN Router
Test Item	:	Band Edge Data
Test Mode	:	Mode 2: Transmit (802.11n/ac-20BW) (5825MHz)
Test Date	:	2020/09/30

No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
1	5823.913	119.49	131.20	-11.71	100.95	18.54	PK
2	5850	66.36	122.20	-55.84	47.84	18.52	PK
3	5855	66.71	110.80	-44.09	48.22	18.49	PK
4	5875	65.68	105.20	-39.52	47.24	18.44	PK
5	5898.587	67.50	87.71	-20.21	49.13	18.37	PK
* 6	5925	66.41	68.20	-1.79	48.02	18.39	РК



Vertical

No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Type
	. ,	(dBuV/m)	, , ,	, ,	, í	, í	••
1	5821.63	116.89	131.20	-14.31	98.35	18.54	PK
2	5850	66.18	122.20	-56.02	47.66	18.52	PK
3	5855	63.11	110.80	-47.69	44.62	18.49	PK
4	5875	63.22	105.20	-41.98	44.78	18.44	PK
* 5	5925	62.05	68.20	-6.15	43.66	18.39	PK





Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless
		VoIP VPN Router
Test Item	:	Band Edge Data
Test Mode	:	Mode 3: Transmit (802.11n/ac-40BW) (5190MHz)
Test Date	:	2020/09/30



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
1	5112.174	63.95	74.00	-10.05	47.05	16.90	РК
2	5150	62.91	74.00	-11.09	45.73	17.18	РК
! 3	5188.551	113.04			95.56	17.48	РК

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless
		VoIP VPN Router
Test Item	:	Band Edge Data
Test Mode	:	Mode 3: Transmit (802.11n/ac-40BW) (5190MHz)
Test Date	:	2020/09/30



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
1	5149.275	52.39	54.00	-1.61	35.21	17.18	AV
2	5150	50.84	54.00	-3.16	33.66	17.18	AV
! 3	5187.246	102.72			85.25	17.47	AV

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless
		VoIP VPN Router
Test Item	:	Band Edge Data
Test Mode	:	Mode 3: Transmit (802.11n/ac-40BW) (5190MHz)
Test Date	:	2020/09/30



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
1	5149.13	65.96	74.00	-8.04	48.78	17.18	РК
2	5150	63.70	74.00	-10.30	46.52	17.18	РК
! 3	5195.217	113.77			96.24	17.53	РК

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless
		VoIP VPN Router
Test Item	:	Band Edge Data
Test Mode	:	Mode 3: Transmit (802.11n/ac-40BW) (5190MHz)
Test Date	:	2020/09/30



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
1	5149.13	53.09	54.00	-0.91	35.91	17.18	AV
2	5150	51.76	54.00	-2.24	34.58	17.18	AV
! 3	5197.536	103.72			86.17	17.55	AV

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product:Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless VoIP
VPN RouterTest Item:Band Edge DataTest Mode:Mode 3: Transmit (802.11n/ac-40BW) (5755MHz)Test Date:2020/09/30

Horizontal

No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	5625.109	67.14	68.22	-1.08	49.08	18.06	PK
2	5650	66.02	68.22	-2.20	47.87	18.15	PK
3	5700	68.88	105.20	-36.32	50.65	18.23	PK
4	5717.681	76.01	110.15	-34.14	57.68	18.33	PK
5	5720	73.75	110.80	-37.05	55.40	18.35	PK
6	5725	71.83	122.20	-50.37	53.45	18.38	PK
7	5758.514	117.62	131.20	-13.58	99.10	18.52	PK



Vertical

No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
* 1	5650	65.78	68.22	-2.44	47.63	18.15	РК
2	5669.746	67.60	82.86	-15.26	49.42	18.18	PK
3	5700	63.34	105.20	-41.86	45.11	18.23	PK
4	5716.159	68.54	109.73	-41.19	50.22	18.32	РК
5	5720	66.48	110.80	-44.32	48.13	18.35	PK
6	5725	68.79	122.20	-53.41	50.41	18.38	PK
7	5750.652	115.99	131.20	-15.21	97.48	18.51	PK





Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless VoIP
		VPN Router
Test Item	:	Band Edge Data
Test Mode	:	Mode 3: Transmit (802.11n/ac-40BW) (5795MHz)
Test Date	:	2020/09/30

No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
1	5798.478	119.61	131.20	-11.59	101.05	18.56	PK
2	5850	67.16	122.20	-55.04	48.64	18.52	PK
3	5855	67.18	110.80	-43.62	48.69	18.49	PK
4	5875	66.08	105.20	-39.12	47.64	18.44	PK
* 5	5925	66.32	68.20	-1.88	47.93	18.39	PK



Vertical

No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
1	5790.326	115.28	131.20	-15.92	96.73	18.55	PK
2	5850	65.93	122.20	-56.27	47.41	18.52	PK
3	5855	63.67	110.80	-47.13	45.18	18.49	PK
4	5875	63.44	105.20	-41.76	45.00	18.44	PK
5	5925	63.33	68.20	-4.87	44.94	18.39	PK
* 6	5939.022	63.42	68.20	-4.78	45.01	18.41	PK





Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless
		VoIP VPN Router
Test Item	:	Band Edge Data
Test Mode	:	Mode 4: Transmit (802.11ac-80BW) (5210MHz)
Test Date	:	2020/09/30



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
1	5148.261	71.75	74.00	-2.25	54.57	17.18	РК
2	5150	69.04	74.00	-4.96	51.86	17.18	РК
! 3	5198.261	113.49			95.94	17.55	РК

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless
		VoIP VPN Router
Test Item	:	Band Edge Data
Test Mode	:	Mode 4: Transmit (802.11ac-80BW) (5210MHz)
Test Date	:	2020/09/30



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
1	5133.623	51.56	54.00	-2.44	34.49	17.07	AV
2	5150	49.54	54.00	-4.46	32.36	17.18	AV
! 3	5198.841	97.84			80.28	17.56	AV

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless
		VoIP VPN Router
Test Item	:	Band Edge Data
Test Mode	:	Mode 4: Transmit (802.11ac-80BW) (5210MHz)
Test Date	:	2020/09/30



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
1	5141.449	69.36	74.00	-4.64	52.24	17.12	РК
2	5150	67.95	74.00	-6.05	50.77	17.18	РК
! 3	5197.391	112.63			95.09	17.54	РК

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless
		VoIP VPN Router
Test Item	:	Band Edge Data
Test Mode	:	Mode 4: Transmit (802.11ac-80BW) (5210MHz)
Test Date	:	2020/09/30



No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
1	5149.71	50.27	54.00	-3.73	33.09	17.18	AV
2	5150	48.59	54.00	-5.41	31.41	17.18	AV
! 3	5198.841	95.43			77.87	17.56	AV

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Emission Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



nd Wireless

No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector
	(MHz)	Level	(dBuV/m)	(dB)	(dBuV)	(dB/m)	Туре
		(dBuV/m)					
1	5789.022	114.86	131.20	-16.34	96.30	18.56	PK
2	5850	76.62	122.20	-45.58	58.10	18.52	PK
3	5855	74.13	110.80	-36.67	55.64	18.49	PK
4	5875	68.85	105.20	-36.35	50.41	18.44	PK
5	5925	66.13	68.20	-2.07	47.74	18.39	PK
* 6	5925.326	67.66	68.20	-0.54	49.27	18.39	PK



Vertical

No	Frequency	Emission	Limit	Margin	Reading Level	Correct Factor	Detector	
	(MHz)	Level	(dBuV/m)	$(d\bar{B})$	(dBuV)	(dB/m)	Туре	
		(dBuV/m)	, , ,	, ,		, í	• •	
1	5791.304	112.39	131.20	-18.81	93.83	18.56	PK	
2	5850	72.29	122.20	-49.91	53.77	18.52	PK	
3	5852.283	76.35	116.99	-40.64	57.85	18.50	PK	
4	5855	75.48	110.80	-35.32	56.99	18.49	PK	
5	5875	71.20	105.20	-34.00	52.76	18.44	PK	
* 6	5925	61.46	68.20	-6.74	43.07	18.39	PK	



Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless
		VoIP VPN Router
Test Item	:	Band Edge Data
Test Mode	:	Mode 1: Transmit (802.11a)

Chain A

Test Frequency	Measurement Level	Limit	Result
(MHz)	(MHz)	(MHz)	
5240	5248.39	<5250	PASS

Chain B

Test Frequency	Measurement Level	Limit	Result
(MHz)	(MHz)	(MHz)	
5240	5248.32	<5250	PASS

Chain C

Test Frequency	Measurement Level	Limit	Result
(MHz)	(MHz)	(MHz)	
5240	5248.39	<5250	PASS

Chain D

Test Frequency	Measurement Level	Limit	Result
(MHz)	(MHz)	(MHz)	
5240	5248.32	<5250	PASS

Note: The test item setting is 99% BW.

	C				C	hain	Α				
Spect	rum	s	pectrum 2	∞							
Ref L	evel 2	1.50 dB	m Offset	1.50 dB	RBW 30)0 kHz					
Att		30 (B 🖷 SWT	100 ms 🖷	VBW	1 MHz	Mode Aut	o Swee	p		
●1Pk M	ax										
10 dBm						N	M1[1]	l w		5.24 16.7872	7.04 dBm 416640 GHz 264834 MHz
0 dBm-	_			Tym	man	~ ~~~		And 2	1	5.2	-16.25 dBm 500000 GHz
-10 dBr	n			/		_		7	3		-
-20 dBr	n								1		
-30 dBr	n					-					
-40 dBr	ann	wanter	man		-	-			when	- Artistanting	herenander
-50 dBr	n					-					
-60 dBr	n					_					
-70 dBr	n					-					-
CF 5.2	4 GHz					591 pts				Spar	1 50.0 MHz
Marker											
Туре	Ref	Trc	X-value	e	Y-valu	e l	Function		Fun	ction Resul	t
M1		1	5.2416	64 GHz	7.04	4 dBm					
T1		1	5.23160	64 GHz	-1.83	3 dBm	Occ B	5w		16.7872	64834 MHz
T2		1	5.24839	36 GHz	-2.15	5 dBm					
M3		1	5.	25 GHz	-16.25	5 dBm]

Date: 12.NOV.2020 11:00:17



Chain B

Spect	rum	s	pectrum 2	∞						
Ref L Att	evel	21.50 dE 30	Bm Offset dB e SWT	1.50 dB (100 ms (RBW 300 kH VBW 1 MH	iz iz M	ode Auto Sw	eep		
●1Pk M	lax		~ ~ ~							
10 dBm	-				month	MI			5.24 16.6425	7.60 dBm 15200 GHz 47033 MHz 18.06 dBm
0 dBm-	+			Trans			- 1 th	1	5.25	00000 GHz
-10 dBr	n			/				Ma		
-20 dBr	n-+-		1	0	-			1		
-30 dBr	n		in					heter.		
-40 dBr	work	w How who	Anna						W- alwarder	Mithalwardur
-50 dBr	n				_					
-60 dBr	n-+-									
-70 dBr	n						_			
CF 5.2	4 GHz				691	pts			Span	50.0 MHz
Marker										
Type	Ref	Trc	X-value		Y-value	1 1	unction	Fun	ction Result	
M1		1	5.241	52 GHz	7.60 dBr	m				
T1		1	5.23167	87 GHz	-1.93 dBr	m	Occ Bw		16.6425	47033 MHz
T2		1	5.24832	13 GHz	-1.75 dBr	m				
M3		1	5.	25 GHz	-18.06 dBr	m				

Date: 12.NOV.2020 11:03:50

Chain C

Spect	rum	Ĩ	Spectrum 2	∞								
Ref L	evel	21.50	dBm Offset	1.50 dB	RBW 300 ki	Hz						
🔵 Att		30) dB 🔵 SWT	100 ms	VBW 1 MI	Hz	Mode	Auto S	weep			
⊖1Pk M	ax											
						<u> </u>	- M	1[1]				7.80 dBm
											5.23	92760 GHz
10 dBm	-				MI		00	C Bw			16.7149	05933 MHz
				- N	mound	pour	manpa	Hthm.			-	15.80 dBm
0 dBm-				TP.		2			12		5.25	00000 GHz
-10 dBn	n-+			/						2		
				V					N.	5		
-20 dBn	n —			4						· · · · · ·		
20 001	·									1		
-30 dBo												
-50 abii	"					35				1		
-40 dBa			- munder							way	Saud	
eventhan	when	martin									margar	h Munkurker luck
E0 dba	_											
-50 UBI	"											
co do-												
-60 авл	n											
-70 dBn	n-+											
CF 5.2	4 GH	z			691	pts					Span	50.0 MHz
Marker												
Type	Ref	Trc	X-valu	e	Y-value		Funct	ion		Fund	tion Result	
M1		1	5.2392	76 GHz	7.80 dB	m						
T1		1	5.23167	87 GHz	-1.69 dB	m	Oc	C Bw			16.71490)5933 MHz
T2		1	5.24839	36 GHz	-1.66 dB	m						
M3		1	5.	25 GHz	-15.80 dB	m						

Date: 12.NOV.2020 11:04:47



Chain D

Spect	rum	s	pectrum 2	\boxtimes					
Ref L Att	evel :	21.50 dE 30	om Offset 1. dB 🕳 SWT 10	50 dB 👄 00 ms 👄	RBW 300 kHz VBW 1 MHz	Mode Auto S	weep		
●1Pk M	ax								
10 dBm	-				M1	M1[1]		5.24 16.5701	7.88 dBm 05790 GHz 88133 MHz
0 dBm-	_			Tur	the second s		2	5.25	17.81 dBm 00000 GHz
-10 dBr	n		/	<u> </u>			13		
-20 dBr	n-+-						1		
-30 dBr	n						1 Ma	-	
-40,dBr	Burn	monored	identities				www	Manunan	manupan
-50 dBr	n						_		
-60 dBr	n+								
-70 dBr	n+								
CF 5.2	4 GHz				691 pts	5		Span	50.0 MHz
Marker	_				and the second				
Type	Ref	Trc	X-value	1	Y-value	Function	Fun	ction Result	
M1		1	5.240579	GHz	7.88 dBm				
T1		1	5.2317511	GHz	-0.52 dBm	Occ Bw		16.57018	38133 MHz
T2		1	5.2483213	GHz	-1.35 dBm				
M3		1	5.25	GHz	-17.81 dBm				

Date: 12.NOV.2020 11:06:51

Product	:	Gigabit LTE Multi-Service Router / LTE Dual-SIM Dual-Band Wireless
		VoIP VPN Router
Test Item	:	Band Edge Data
Test Mode	:	Mode 2: Transmit (802.11n/ac-20BW)

Chain A

Test Frequency	Measurement Level	Limit	Result
(MHz)	(MHz)	(MHz)	
5240	5248.90	<5250	PASS

Chain B

Test Frequency	Measurement Level	Limit	Result
(MHz)	(MHz)	(MHz)	
5240	5248.83	<5250	PASS

Chain C

Test Frequency	Measurement Level	Limit	Result
(MHz)	(MHz)	(MHz)	
5240	5248.83	<5250	PASS

Chain D

Test Frequency	Measurement Level	Limit	Result
(MHz)	(MHz)	(MHz)	
5240	5248.83	<5250	PASS

Note: The test item setting is 99% BW.



Date: 12.NOV.2020 11:13:07