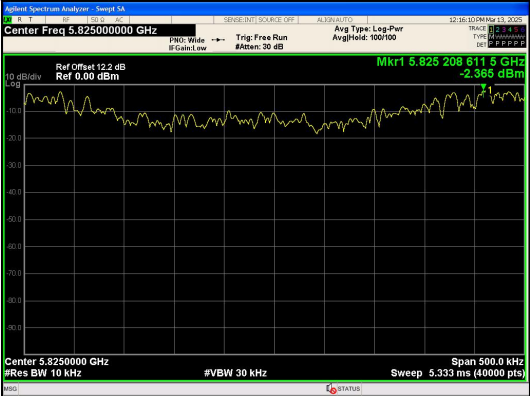




NT/NV_Antenna 0
IEEE 802.11n Channel 149 20MHz



NT/NV_Antenna 0
IEEE 802.11n Channel 157 20MHz



NT/NV_Antenna 0
IEEE 802.11n Channel 165 20MHz

IEEE 802.11n 40



NT/NV_Antenna 0
IEEE 802.11n Channel 151 40MHz



NT/NV_Antenna 0
IEEE 802.11n Channel 159 40MHz

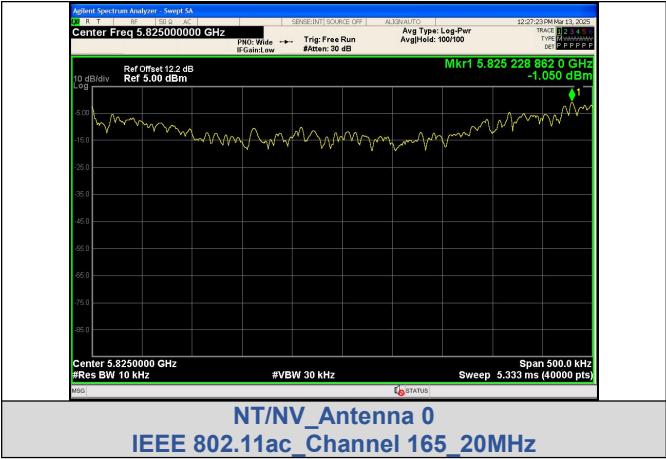
IEEE 802.11ac 20



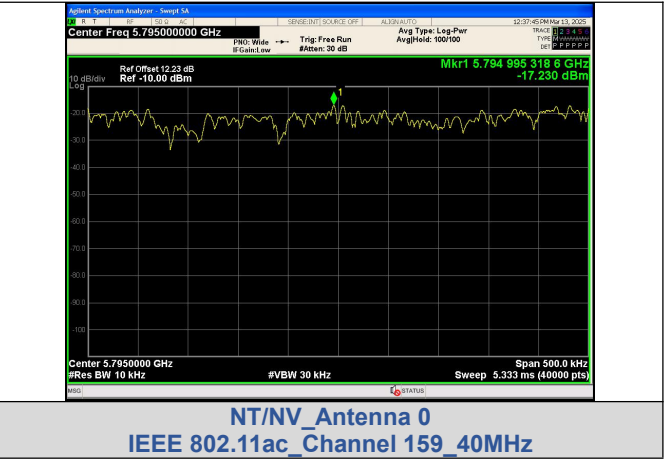
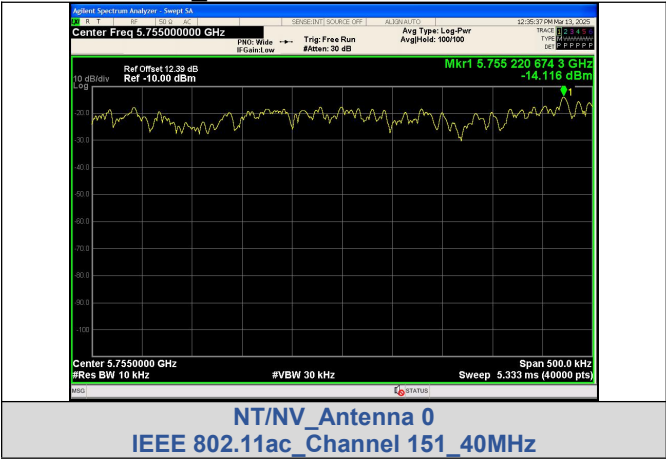
NT/NV_Antenna 0
IEEE 802.11ac Channel 149 20MHz



NT/NV_Antenna 0
IEEE 802.11ac Channel 157 20MHz



IEEE 802.11ac 40

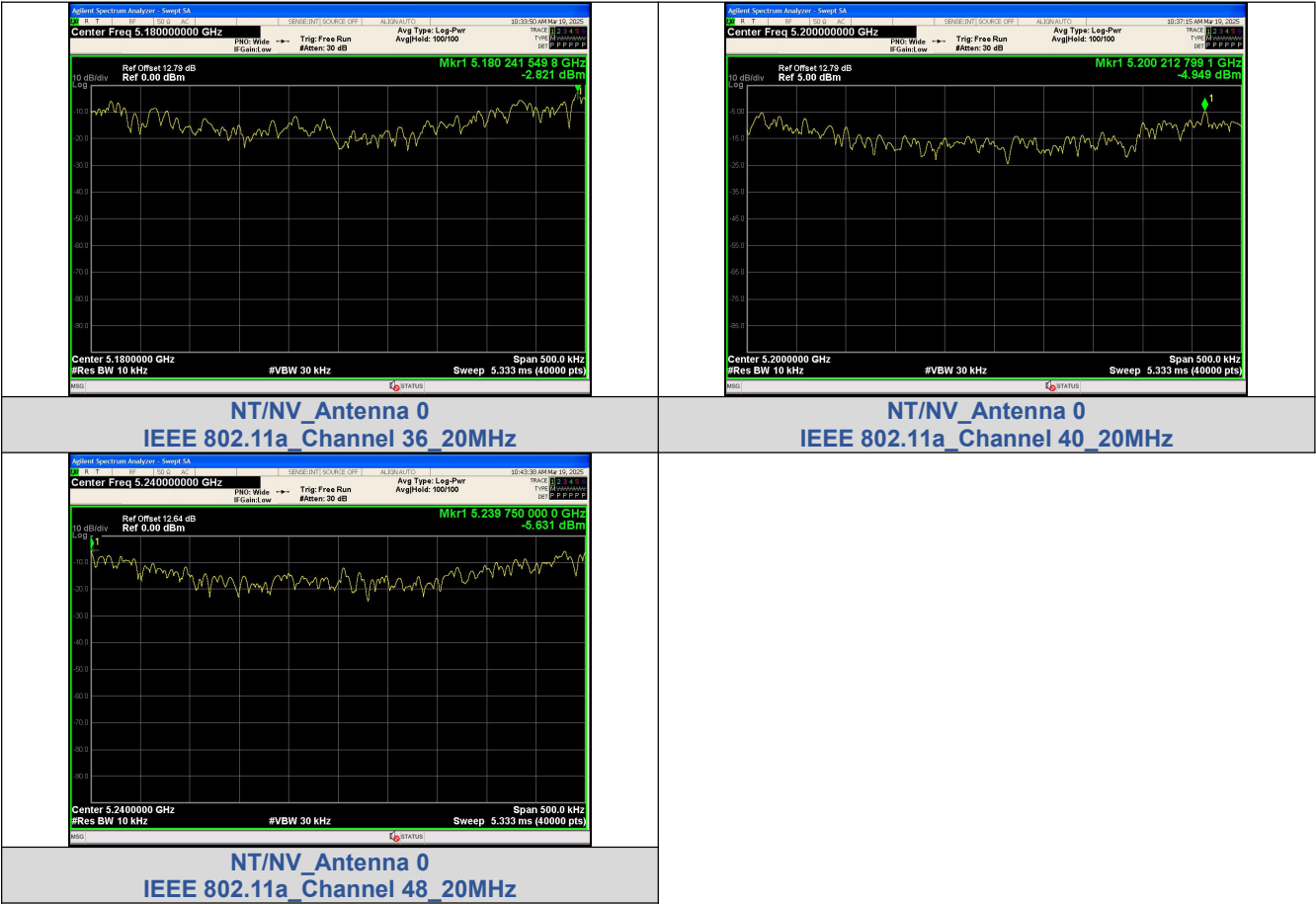


Antenna B:
Test Result

Condition	Mode	Ch.	Antenna	Center Frequency (MHz)	Calculated Value of Center Frequency(MHz)	Result (ppm)	Limit (ppm)	State
NT/NV	IEEE 802.11a	36	0	5180.0	5180.241550	46.63	Within authorized band	PASS
		40		5200.0	5200.212799	40.92		PASS
		48		5240.0	5239.750000	-47.71		PASS
	IEEE 802.11n_20	36		5180.0	5180.238062	45.96		PASS
		40		5200.0	5200.239850	46.12		PASS
		48		5240.0	5240.246687	47.08		PASS
	IEEE 802.11n_40	38		5190.0	5189.956043	-8.47		PASS
		46		5230.0	5230.229712	43.92		PASS
	IEEE 802.11ac_20	36		5180.0	5180.238737	46.09		PASS
		40		5200.0	5200.244400	47.0		PASS
		48		5240.0	5240.250000	47.71		PASS
	IEEE 802.11ac_40	38		5190.0	5190.002881	0.56		PASS
		46		5230.0	5230.247575	47.34		PASS

Test Graphs
NT/NV

IEEE 802.11a



IEEE 802.11n_20

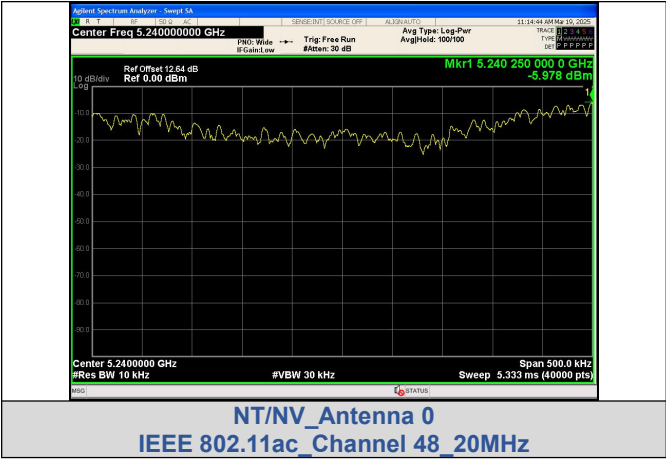


IEEE 802.11n_40

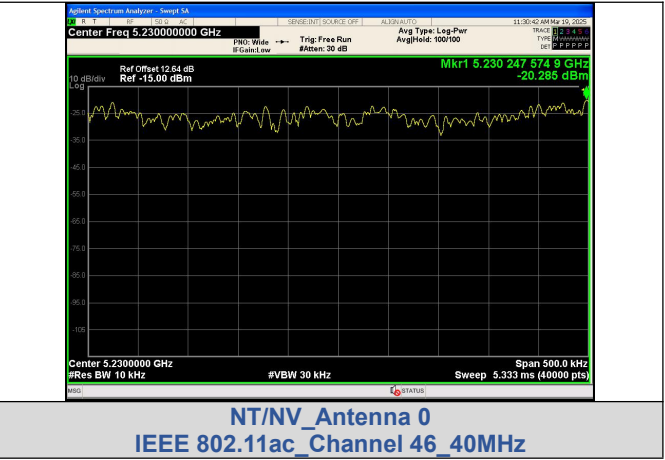
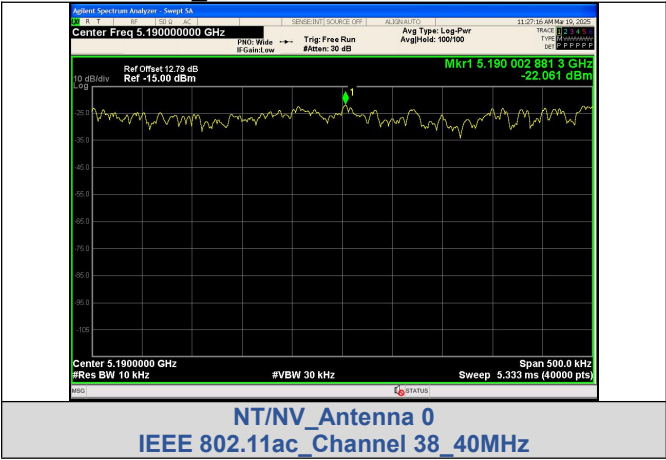


IEEE 802.11ac_20





IEEE 802.11ac 40



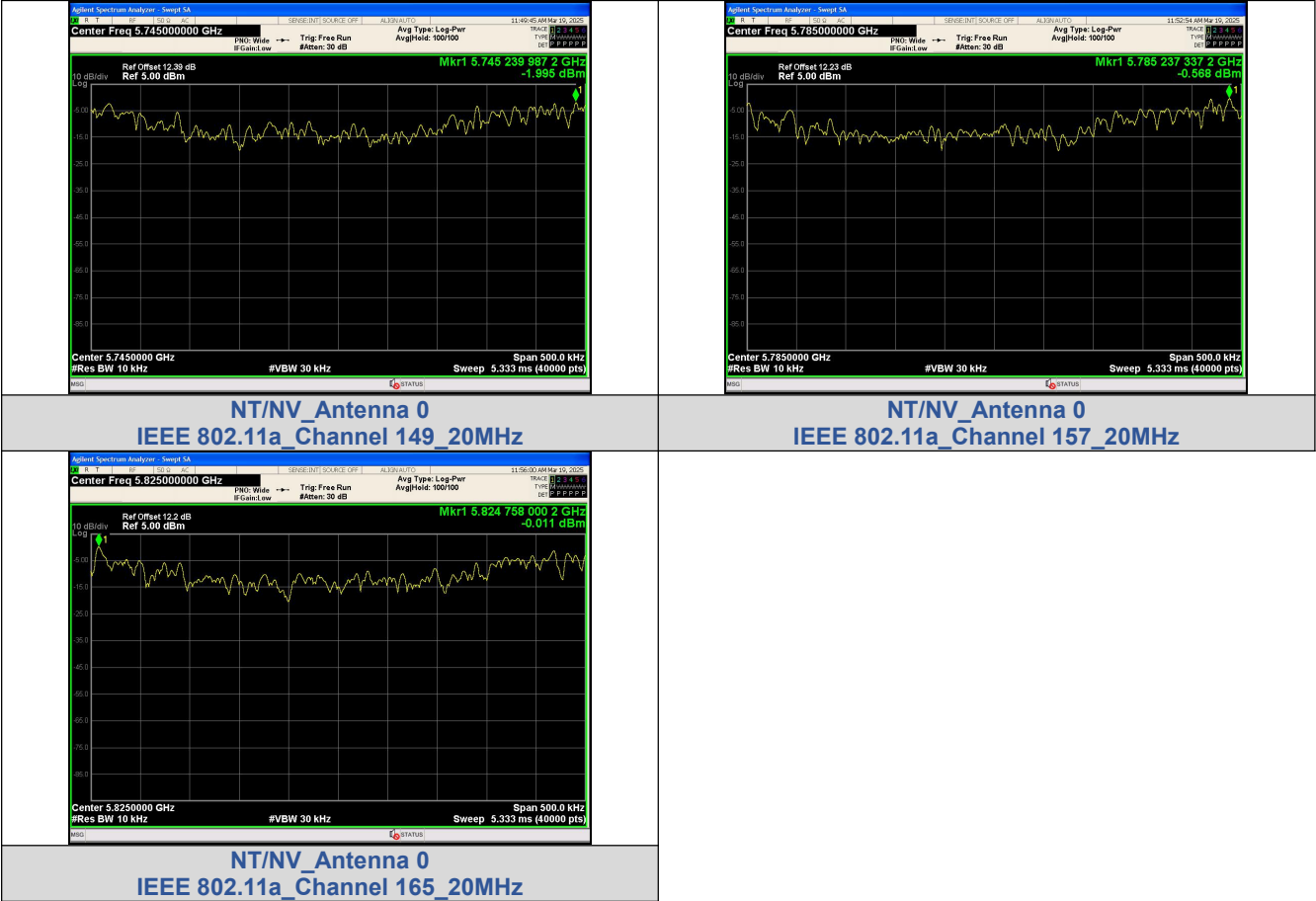
Test Result

Condition	Mode	Ch.	Antenna	Center Frequency (MHz)	Calculated Value of Center Frequency(MHz)	Result (ppm)	Limit (ppm)	State
NT/NV	IEEE 802.11a	149	0	5745.0	5745.239987	41.77	Within authorized band	PASS
		157		5785.0	5785.237337	41.03		PASS
		165		5825.0	5824.758000	-41.55		PASS
	IEEE 802.11n_20	149		5745.0	5745.248850	43.32		PASS
		157		5785.0	5785.245162	42.38		PASS
		165		5825.0	5825.246787	42.37		PASS
	IEEE 802.11n_40	151		5755.0	5754.989943	-1.75		PASS
		159		5795.0	5795.182661	31.52		PASS
	IEEE 802.11ac_20	149		5745.0	5745.244962	42.64		PASS
		157		5785.0	5785.234100	40.47		PASS
		165		5825.0	5825.247162	42.43		PASS
	IEEE 802.11ac_40	151		5755.0	5754.774513	-39.18		PASS
		159		5795.0	5795.243475	42.01		PASS

Test Graphs

NT/NV

IEEE 802.11a



IEEE 802.11n_20



NT/NV_Antenna 0
IEEE 802.11n Channel 149 20MHz



NT/NV_Antenna 0
IEEE 802.11n Channel 157 20MHz



NT/NV_Antenna 0
IEEE 802.11n Channel 165 20MHz

IEEE 802.11n 40



NT/NV_Antenna 0
IEEE 802.11n Channel 151 40MHz



NT/NV_Antenna 0
IEEE 802.11n Channel 159 40MHz

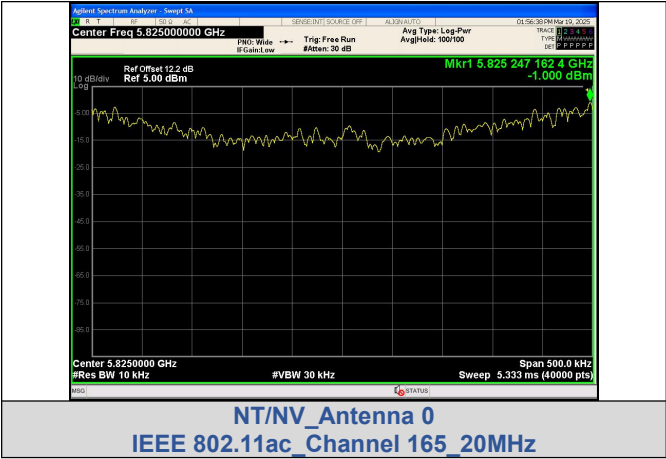
IEEE 802.11ac 20



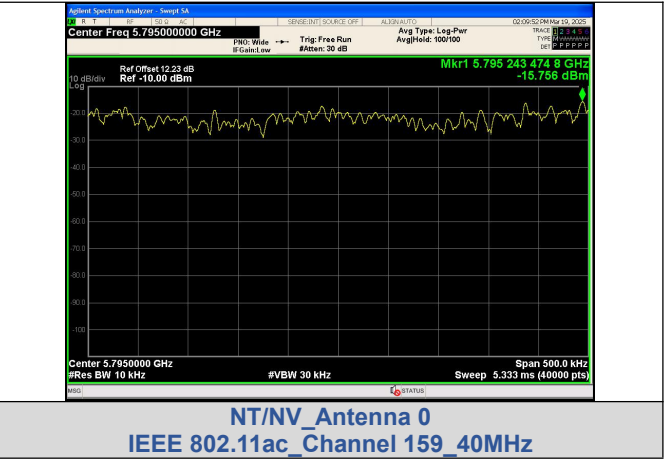
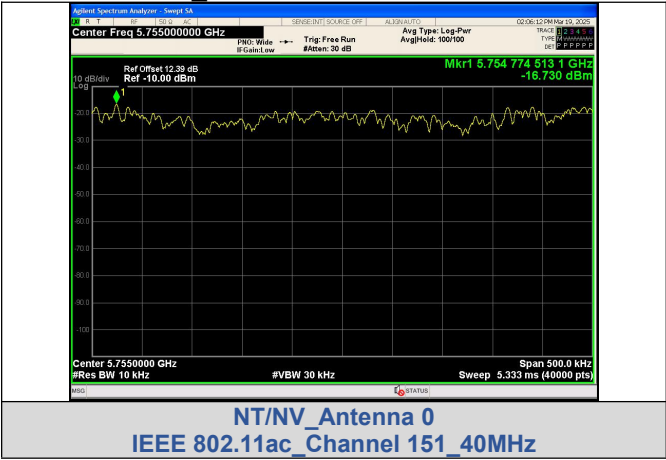
NT/NV_Antenna 0
IEEE 802.11ac Channel 149 20MHz



NT/NV_Antenna 0
IEEE 802.11ac Channel 157 20MHz



IEEE 802.11ac 40



APPENDIX II. Conducted Output Power

Antenna A:

Conducted output power

Mode	Channel	Ant. 0 (dBm)	Corr'd Value Ant. 0 (dBm)	Limit (dBm)	Result
IEEE 802.11a	36	5.813	21.71	≤24	PASS
	40	5.768	21.67	≤24	PASS
	48	5.532	21.43	≤24	PASS
IEEE 802.11n_20	36	9.771	22.46	≤24	PASS
	40	9.916	22.6	≤24	PASS
	48	9.904	22.59	≤24	PASS
IEEE 802.11n_40	38	9.006	21.86	≤24	PASS
	46	10.250	23.11	≤24	PASS
IEEE 802.11ac_20	36	5.511	18.86	≤24	PASS
	40	6.027	19.37	≤24	PASS
	48	7.022	20.37	≤24	PASS
IEEE 802.11ac_40	38	5.889	19.72	≤24	PASS
	46	6.745	20.57	≤24	PASS

Note1:Antenna Gain: Antenna A: 4.09dBi ; Antenna B:4.03dBi

Note2: Directional Gain: Uncorrelated(Directional Gain = Ant Gain)

Conducted output power

Mode	Channel	Ant. 0 (dBm)	Corr'd Value Ant. 0 (dBm)	Limit (dBm)	Result
IEEE 802.11a	149	6.301	22.1	≤30	PASS
	157	4.875	20.68	≤30	PASS
	165	5.929	21.73	≤30	PASS
IEEE 802.11n_20	149	10.672	23.4	≤30	PASS
	157	9.122	21.85	≤30	PASS
	165	9.513	22.24	≤30	PASS
IEEE 802.11n_40	151	6.863	19.72	≤30	PASS
	159	9.902	22.76	≤30	PASS
IEEE 802.11ac_20	149	8.201	21.49	≤30	PASS
	157	8.980	22.27	≤30	PASS
	165	7.868	21.16	≤30	PASS
IEEE 802.11ac_40	151	7.311	21.14	≤30	PASS
	159	7.080	20.91	≤30	PASS

Note1:Antenna Gain: Antenna A: 4.09dBi ; Antenna B:4.03dBi

Note2: Directional Gain: Uncorrelated(Directional Gain = Ant Gain)

Antenna B:

Conducted output power

Mode	Channel	Ant. 0 (dBm)	Corr'd Value Ant. 0 (dBm)	Limit (dBm)	Result
IEEE 802.11a	36	1.441	17.24	≤24	PASS
	40	1.225	17.03	≤24	PASS
	48	1.659	17.46	≤24	PASS
IEEE 802.11n_20	36	5.891	18.58	≤24	PASS
	40	6.285	18.97	≤24	PASS
	48	5.517	18.2	≤24	PASS
IEEE 802.11n_40	38	5.922	18.79	≤24	PASS
	46	4.252	17.12	≤24	PASS
IEEE 802.11ac_20	36	2.712	16.06	≤24	PASS
	40	2.988	16.33	≤24	PASS
	48	3.851	17.2	≤24	PASS
IEEE 802.11ac_40	38	2.145	15.97	≤24	PASS
	46	1.593	15.42	≤24	PASS

Note1:Antenna Gain: Antenna A: 4.09dBi ; Antenna B:4.03dBi

Note2: Directional Gain: Uncorrelated(Directional Gain = Ant Gain)

Conducted output power

Mode	Channel	Ant. 0 (dBm)	Corr'd Value Ant. 0 (dBm)	Limit (dBm)	Result
IEEE 802.11a	149	6.545	22.35	≤30	PASS
	157	6.373	22.17	≤30	PASS
	165	7.671	23.47	≤30	PASS
IEEE 802.11n_20	149	9.852	22.58	≤30	PASS
	157	10.674	23.41	≤30	PASS
	165	10.336	23.07	≤30	PASS
IEEE 802.11n_40	151	10.800	23.66	≤30	PASS
	159	8.298	21.15	≤30	PASS
IEEE 802.11ac_20	149	7.043	20.39	≤30	PASS
	157	8.067	21.41	≤30	PASS
	165	8.283	21.63	≤30	PASS
IEEE 802.11ac_40	151	6.999	20.83	≤30	PASS
	159	6.860	20.69	≤30	PASS

Note1:Antenna Gain: Antenna A: 4.09dBi ; Antenna B:4.03dBi

Note2: Directional Gain: Uncorrelated(Directional Gain = Ant Gain)

Antenna A+B:

Mode	Channel	Ant. 0 (dBm)	Corr'd Value Ant. 0 (dBm)	Limit (dBm)	Result
IEEE 802.11n_20	36	11.261	22.46	≤24	PASS
	40	11.480	22.6	≤24	PASS
	48	11.253	22.59	≤24	PASS
IEEE 802.11n_40	38	10.742	21.86	≤24	PASS
	46	11.224	23.11	≤24	PASS
IEEE 802.11ac_20	36	7.343	18.86	≤24	PASS
	40	7.778	19.37	≤24	PASS
	48	8.730	20.37	≤24	PASS
IEEE 802.11ac_40	38	7.419	19.72	≤24	PASS
	46	7.902	20.57	≤24	PASS

Note1:Antenna Gain: Antenna A: 4.09dBi ; Antenna B:4.03dBi

Note2: Directional Gain: Uncorrelated(Directional Gain = Ant Gain)

Mode	Channel	Ant. 0 (dBm)	Corr'd Value Ant. 0 (dBm)	Limit (dBm)	Result
IEEE 802.11n_20	149	13.292	22.58	≤30	PASS
	157	12.977	23.41	≤30	PASS
	165	12.954	23.07	≤30	PASS
IEEE 802.11n_40	151	12.273	23.66	≤30	PASS
	159	12.184	21.15	≤30	PASS
IEEE 802.11ac_20	149	10.671	20.39	≤30	PASS
	157	11.558	21.41	≤30	PASS
	165	11.091	21.63	≤30	PASS
IEEE 802.11ac_40	151	10.168	20.83	≤30	PASS
	159	9.982	20.69	≤30	PASS

Note1:Antenna Gain: Antenna A: 4.09dBi ; Antenna B:4.03dBi

Note2: Directional Gain: Uncorrelated(Directional Gain = Ant Gain)

APPENDIX III. 99% Bandwidth

Antenna A: Test Result

Mode	Channel	Ant.	Center Frequency (MHz)	99% BW (MHz)
IEEE 802.11a	36	0	5180	16.729
	40		5200	16.642
	48		5240	16.552
IEEE 802.11n_20	36		5180	17.819
	40		5200	17.863
	48		5240	17.843
IEEE 802.11n_40	38		5190	36.415
	46		5230	36.258
	36		5180	17.845
IEEE 802.11ac_20	40		5200	17.834
	48		5240	17.863
	38		5190	36.264
IEEE 802.11ac_40	46		5230	36.273

Test Graphs

