

Channel 40

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5149.8	38.95	-33.27	34.26	37.96	54	15.05	V
5351.7	38.58	-32.29	34.34	36.53	54	15.42	V
10400	30.52	-29.32	37.68	22.15	54	23.48	V
15600	34.95	-24.52	40.22	19.25	54	19.06	H
17736	37.9	-22.26	41.55	18.61	54	16.1	H
17919.2	38.09	-22.66	41.52	19.23	54	15.91	V

Channel 48

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5148.3	38.49	-33.28	34.26	37.51	54	15.51	V
5352	38.8	-32.29	34.34	36.75	54	15.2	V
10480	30.64	-29.57	37.78	22.43	54	23.36	H
15720	34.62	-24.36	40.37	18.61	54	19.38	H
17740.8	37.93	-22.27	41.55	18.65	54	16.07	V
17906.4	38.07	-22.63	41.52	19.18	54	15.94	V

Channel 52

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5148.9	38.53	-33.27	34.26	37.54	54	15.47	V
5354.4	39.07	-32.29	34.34	37.02	54	14.93	V
10520	30.76	-29.65	37.81	22.6	54	23.24	V
15780	34.83	-24.2	40.44	18.59	54	19.17	H
17709.6	37.85	-22.2	41.56	18.49	54	16.16	V
17829.6	37.89	-22.47	41.53	18.83	54	16.11	H

Channel 56

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5148.3	38.38	-33.28	34.26	37.4	54	15.62	V
5357.4	39.07	-32.29	34.34	37.01	54	14.93	V
10560	30.21	-29.45	37.82	21.83	54	23.79	H
15840	35.39	-24.06	40.51	18.94	54	18.61	V
17905.6	38.12	-22.63	41.52	19.23	54	15.88	V
17920	38.11	-22.66	41.52	19.25	54	15.89	V

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5350.2	42.87	-32.29	34.34	40.82	54	11.13	V
5352.9	42.18	-32.29	34.34	40.13	54	11.82	V
10640	30.49	-29.3	37.86	21.93	54	23.51	H
15960	35.58	-23.82	40.65	18.75	54	18.42	H
17739.2	37.92	-22.27	41.55	18.63	54	16.08	H
17911.2	38.2	-22.64	41.52	19.32	54	15.8	H

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5360.45	38.68	-32.29	34.35	36.62	54	15.33	V
5380.64	38.7	-32.29	34.35	36.64	54	15.3	V
11000	30.67	-29.87	38	22.54	54	23.33	H
16500	35.94	-23.16	41.5	17.6	54	18.06	H
17800.8	36.86	-22.41	41.54	17.74	54	17.14	H
17907.2	37.55	-22.63	41.52	18.66	54	16.45	V

Channel 120

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5385.9	38.55	-32.29	34.36	36.48	54	15.45	V
5404.8	38.39	-32.35	34.36	36.38	54	15.61	V
11200	30.34	-30.43	38.08	22.69	54	23.66	V
16800	36.3	-23	41.92	17.37	54	17.7	H
17830.4	37.35	-22.48	41.53	18.29	54	16.65	H
17930.4	37.56	-22.68	41.51	18.73	54	16.44	V

Channel 140

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5446.8	38.45	-32.68	34.38	36.75	48.3	9.85	V
5361.6	38.53	-32.29	34.35	36.48	48.3	9.77	V
11400	31.31	-29.72	38.16	22.87	48.3	16.99	V
17100	37.05	-23.04	42.08	18.01	48.3	11.25	H
17829.6	37.35	-22.47	41.53	18.29	48.3	10.95	H
17930.4	37.66	-22.68	41.51	18.82	48.3	10.64	V

802.11ac-HT40

Channel 38

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5149.2	41	-33.27	34.26	40.01	54	13	V
5149.8	41.18	-33.27	34.26	40.19	54	12.82	V
10380	30.35	-29.49	37.66	22.18	54	23.66	V
15570.4	35.09	-24.51	40.19	19.41	54	18.91	H
17708.8	37.71	-22.2	41.56	18.35	54	16.29	H
17910.4	38.09	-22.64	41.52	19.21	54	15.91	H

Channel 46

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5149.8	39.49	-33.27	34.26	38.5	54	14.51	V
5351.7	38.96	-32.29	34.34	36.91	54	15.04	V
10460	30.75	-29.49	37.75	22.48	54	23.26	V
15690.4	34.94	-24.44	40.33	19.04	54	19.07	V
17748.8	37.91	-22.29	41.55	18.65	54	16.09	V
17903.2	38.07	-22.63	41.52	19.17	54	15.93	V

Channel 54

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5148.9	38.45	-33.27	34.26	37.46	54	15.56	V
5351.1	39.45	-32.29	34.34	37.39	54	14.56	V
10540	30.35	-29.55	37.82	22.08	54	23.65	V
15810.4	35.37	-24.12	40.47	19.02	54	18.63	H
17736.8	37.93	-22.26	41.55	18.64	54	16.07	V
17910.4	38.1	-22.64	41.52	19.22	54	15.9	H

Channel 62

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5350.5	41.13	-32.29	34.34	39.08	54	12.87	V
5352	41.09	-32.29	34.34	39.04	54	12.91	V
10620	30.78	-29.2	37.85	22.13	54	23.22	H
15930.4	35.47	-23.88	40.62	18.73	54	18.53	V
17748.8	37.92	-22.29	41.55	18.66	54	16.08	V
17836.8	37.81	-22.49	41.53	18.77	54	16.19	V

Channel 102

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5396.47	38.87	-32.29	34.36	36.79	54	15.14	V
5430.8	38.68	-32.56	34.37	36.87	54	15.32	V
11020	31.25	-29.83	38.01	23.08	54	22.75	H
17724	37.46	-22.23	41.55	18.14	54	16.54	H
17835.2	37.45	-22.49	41.53	18.41	54	16.55	H
17916	37.81	-22.65	41.52	18.94	54	16.19	H

Channel 118

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5444.67	38.68	-32.66	34.38	36.96	54	15.32	V
5386.97	38.77	-32.29	34.36	36.7	54	15.24	V
11180	30.75	-30.45	38.07	23.13	54	23.25	H
17743.2	37.55	-22.28	41.55	18.27	54	16.45	H
17827.2	37.44	-22.47	41.53	18.38	54	16.56	V
17916.8	37.81	-22.65	41.52	18.95	54	16.19	V

Channel 134

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5392.68	38.7	-32.29	34.36	36.63	48.3	9.6	V
5453.67	38.5	-32.7	34.38	36.82	48.3	9.8	V
11340.05	31.26	-30.03	38.14	23.15	48.3	17.04	V
17789.6	37.26	-22.39	41.54	18.1	48.3	11.04	H
17856.8	37.23	-22.53	41.53	18.24	48.3	11.07	V
17941.6	37.64	-22.7	41.51	18.83	48.3	10.66	H

802.11ac-HT80

Channel 42

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5142.900	45.5	-33.3	34.3	44.47	54.0	8.5	V
5147.100	45.7	-33.3	34.3	44.64	54.0	8.3	V
11028.000	31.6	-29.8	37.9	23.49	54.0	22.4	V
15630.400	34.9	-24.5	40.4	19.06	54.0	19.1	V
17831.200	37.6	-22.5	41.3	18.84	54.0	16.4	H
17917.600	37.9	-22.7	41.3	19.24	54.0	16.1	V

Channel 58

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5350.200	46.2	-32.3	34.5	43.98	54.0	7.8	V
5352.900	46.1	-32.3	34.5	43.90	54.0	7.9	V
11013.600	31.9	-29.8	37.9	23.81	54.0	22.1	H
15870.400	35.5	-24.0	40.6	18.89	54.0	18.5	H
17835.200	37.9	-22.5	41.3	19.07	54.0	16.1	H
17911.200	38.1	-22.6	41.3	19.45	54.0	15.9	H

Channel 106

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5458.500	43.4	-32.7	34.6	41.54	54.0	10.6	V
5459.100	43.5	-32.7	34.6	41.61	54.0	10.5	V
11060.000	31.2	-29.9	38.0	23.10	54.0	22.8	V
17831.200	37.5	-22.5	41.3	18.74	54.0	16.5	H
17874.400	37.3	-22.6	41.3	18.60	54.0	16.7	V
17942.400	37.6	-22.7	41.3	19.03	54.0	16.4	H

Channel 122

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5458.850	40.7	-32.7	34.6	38.79	54.0	13.3	V
5460.980	40.7	-32.7	34.6	38.85	54.0	13.3	V
11220.000	30.7	-30.4	38.2	22.96	54.0	23.3	H
17781.600	37.4	-22.4	41.3	18.51	54.0	16.6	H
17835.200	37.6	-22.5	41.3	18.84	54.0	16.4	H
17926.000	37.8	-22.7	41.3	19.19	54.0	16.2	V

PEAK Results:
802.11a

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5149.31	68.14	-33.27	34.26	67.15	74	5.86	H
5149.975	68.85	-33.27	34.26	67.86	74	5.15	H
10359.95	44.51	-29.67	37.63	36.55	68.3	23.79	V
15539.85	51.89	-24.49	40.15	36.23	74	22.11	V
17850.95	57.04	-22.52	41.53	38.03	74	16.96	H
17983.5	57.88	-22.79	41.5	39.16	74	16.12	H

Channel 40

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5154.6	56.22	-33.26	34.26	55.22	68.3	12.08	H
5241.8	57.19	-33.33	34.3	56.22	68.3	11.11	V
10400.1	44.58	-29.32	37.68	36.22	68.3	23.72	V
15599.8	51.07	-24.52	40.22	35.37	74	22.93	H
17737.65	57.57	-22.27	41.55	38.29	74	16.43	H
17965.35	57.64	-22.75	41.51	38.89	74	16.36	H

Channel 48

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5197.2	59.09	-33.23	34.28	58.03	68.3	9.21	H
5278.2	57.45	-32.87	34.31	56	68.3	10.85	V
10479.85	44.7	-29.57	37.78	36.49	68.3	23.6	H
15720.25	51.43	-24.36	40.37	35.42	74	22.57	H
17627.1	57.34	-22.06	41.57	37.83	68.3	10.96	V
17926.85	57.32	-22.67	41.51	38.48	74	16.68	V

Channel 52

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5205.8	56.47	-33.26	34.28	55.45	68.3	11.83	V
5316.2	56.31	-32.51	34.33	54.49	68.3	11.99	H
10520	45.15	-29.65	37.81	36.99	68.3	23.15	V
15780.2	51.03	-24.2	40.44	34.79	74	22.97	V
17567.7	56.69	-22.45	41.59	37.56	68.3	11.61	H
17809.15	57	-22.43	41.54	37.89	74	17	H

Channel 56

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5234.2	59.95	-33.38	34.3	59.03	68.3	8.35	V
5323.8	56.14	-32.45	34.33	54.25	68.3	12.17	H
10560.15	43.54	-29.45	37.82	35.16	68.3	24.77	V
15840.15	51.67	-24.06	40.51	35.22	68.3	16.63	H
17629.3	57.3	-22.05	41.57	37.78	68.3	11	H
17931.25	57.12	-22.68	41.51	38.29	68.3	11.18	V

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5351.19	64.96	-32.29	34.34	62.91	74	9.04	H
5352.3105	64	-32.29	34.34	61.95	74	10	V
10639.9	44.63	-29.3	37.86	36.07	74	29.37	V
15960.05	52.38	-23.82	40.65	35.55	74	21.62	V
17600.7	57.28	-22.24	41.58	37.93	68.3	11.02	V
17909.8	57	-22.64	41.52	38.12	74	17	H

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5458.9	59.47	-32.69	34.38	57.78	74	14.53	V
5459.395	59.31	-32.69	34.38	57.62	74	14.69	V
11000.15	47.9	-29.87	38	39.77	74	26.1	H
16500.15	52.9	-23.16	41.5	34.56	68.3	15.4	H
16713	55.43	-23.13	41.8	36.75	68.3	12.87	V
16966	56.4	-23.01	42.15	37.26	68.3	11.9	V

Channel 120

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5502.4	54.07	-32.64	34.4	52.3	68.3	14.23	V
5639.6	59.58	-32.84	34.66	57.76	68.3	8.72	V
11199.8	45.59	-30.43	38.08	37.94	74	28.41	V
16799.9	54.31	-23	41.92	35.39	68.3	13.99	V
16965.45	55.77	-23.01	42.15	36.63	68.3	12.53	H
17077.65	56.73	-23.04	42.11	37.66	68.3	11.57	V

Channel 140

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5725.8125	64.43	-32.98	34.82	62.59	68.3	3.87	H
5726.9	64.33	-32.98	34.82	62.49	68.3	3.97	H
11400	45.95	-29.72	38.16	37.5	74	28.06	V
17100.2	55.96	-23.04	42.08	36.92	68.3	12.34	V
17210.75	56.12	-22.89	41.94	37.06	68.3	12.19	V
17477.5	56.64	-23.05	41.63	38.06	68.3	11.66	V

802.11n-HT20

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5147.805	66.26	-33.28	34.26	65.28	74	7.74	V
5149.73	65.89	-33.27	34.26	64.9	74	8.12	H
10359.95	43.77	-29.67	37.63	35.8	68.3	24.54	V
15539.85	51.25	-24.49	40.15	35.59	74	22.75	V
16718.5	57.34	-23.12	41.81	38.65	68.3	10.96	H
17575.95	57.27	-22.4	41.58	38.08	68.3	11.03	V

Channel 40

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5151.8	56.45	-33.27	34.26	55.45	68.3	11.85	H
5245.8	56.75	-33.28	34.3	55.73	68.3	11.55	H
10400.1	45.05	-29.32	37.68	36.68	68.3	23.25	H
15599.8	50.88	-24.52	40.22	35.18	74	23.12	V
17714.55	56.86	-22.21	41.56	37.52	74	17.14	H
17916.4	56.79	-22.65	41.52	37.93	74	17.21	H

Channel 48

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5182.6	56.01	-33.19	34.28	54.92	68.3	12.29	H
5296.2	57.33	-32.67	34.32	55.68	68.3	10.97	V
10479.85	44.09	-29.57	37.78	35.88	68.3	24.22	H
15720.25	51.21	-24.36	40.37	35.2	74	22.79	V
17771.75	57.42	-22.34	41.55	38.22	74	16.58	H
17945	56.79	-22.71	41.51	37.98	74	17.22	H

Channel 52

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5202.8	57.6	-33.25	34.28	56.56	68.3	10.7	H
5315.8	58.19	-32.51	34.33	56.37	68.3	10.11	V
10520	44.79	-29.65	37.81	36.63	68.3	23.51	H
15780.2	52.29	-24.2	40.44	36.05	74	21.71	H
17591.9	56.8	-22.29	41.58	37.51	68.3	11.5	H
17813	56.64	-22.44	41.54	37.55	74	17.36	V

Channel 56

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5221.4	57.8	-33.32	34.29	57.8	-33.32	34.29	H
5337.6	56.56	-32.33	34.34	56.56	-32.33	34.34	H
10560.15	44.44	-29.45	37.82	44.44	-29.45	37.82	H
15840.15	51.59	-24.06	40.51	51.59	-24.06	40.51	H
17496.2	57.44	-22.93	41.6	57.44	-22.93	41.6	V
17799.8	56.66	-22.41	41.54	56.66	-22.41	41.54	V

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5350.5555	64.26	-32.29	34.34	64.26	-32.29	34.34	H
5354.5785	63.85	-32.29	34.34	63.85	-32.29	34.34	H
10639.9	44.57	-29.3	37.86	44.57	-29.3	37.86	V
15960.05	53.29	-23.82	40.65	53.29	-23.82	40.65	H
17492.35	57.52	-22.95	41.61	57.52	-22.95	41.61	H
17775.6	56.83	-22.35	41.54	56.83	-22.35	41.54	H

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5456.08	58	-32.7	34.38	56.32	74	16	V
5458.6	57.72	-32.69	34.38	56.03	74	16.28	V
11000.15	44.8	-29.87	38	36.67	74	29.2	V
16500.15	53.46	-23.16	41.5	35.12	68.3	14.84	V
16754.8	55.73	-23.04	41.86	36.91	68.3	12.57	V
17016.05	56.73	-23.02	42.18	37.57	68.3	11.57	H

Channel 120

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5549	55.77	-32.61	34.49	53.89	68.3	12.53	H
5638.8	59.67	-32.84	34.66	57.85	68.3	8.64	V
11199.8	45.46	-30.43	38.08	37.8	68.3	22.84	V
16799.9	54.71	-23	41.92	35.78	68.3	13.59	V
17011.65	56.04	-23.02	42.19	36.88	68.3	12.26	V
17178.85	56.01	-22.94	41.98	36.96	68.3	12.3	V

Channel 140

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5725.1875	64.01	-32.98	34.82	62.17	68.3	4.29	H
5725.5125	64.15	-32.98	34.82	62.31	68.3	4.15	V
11400	45.09	-29.72	38.16	36.64	74	28.92	V
17100.2	54.77	-23.04	42.08	35.73	68.3	13.53	H
17500.05	56.94	-22.9	41.6	38.24	68.3	11.36	V
17623.25	56.99	-22.09	41.58	37.5	68.3	11.31	H

802.11n-HT40

Channel 38

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5146.4225	68.6	-33.28	34.26	67.62	74	5.4	V
5149.5375	68.91	-33.27	34.26	67.92	74	5.09	V
10379.75	45	-29.5	37.66	36.84	68.3	23.3	V
15570.1	50.91	-24.5	40.19	35.23	74	23.09	H
17515.45	56.62	-22.8	41.6	37.83	68.3	11.68	H
17781.65	57	-22.37	41.54	37.83	74	17	V

Channel 46

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5159.4	57.67	-33.25	34.27	56.65	68.3	10.63	V
5325.4	56.87	-32.43	34.33	54.97	68.3	11.43	H
10460.05	45.57	-29.49	37.75	37.3	68.3	22.73	H
15690	51.33	-24.44	40.33	35.44	74	22.67	V
17649.1	56.86	-22.06	41.57	37.35	68.3	11.44	H
17774.5	57.7	-22.35	41.54	38.51	74	16.3	H

Channel 54

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5186	59.42	-33.18	34.28	58.32	68.3	8.88	H
5337.6	62	-32.33	34.34	59.99	68.3	6.3	H
10539.8	45.22	-29.55	37.82	36.95	68.3	23.08	V
15809.9	51.46	-24.12	40.47	35.11	74	22.54	V
17509.95	57.16	-22.84	41.6	38.4	68.3	11.14	V
17908.7	57.48	-22.64	41.52	38.59	74	16.53	H

Channel 62

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5351.514	69.33	-32.29	34.34	67.28	74	4.67	H
5351.5815	69.32	-32.29	34.34	67.27	74	4.68	H
10620.1	44.01	-29.2	37.85	35.35	74	29.99	V
15929.8	52.84	-23.88	40.62	36.1	74	21.16	H
16929.7	56.87	-23.01	42.1	37.77	68.3	11.43	H
17727.75	56.91	-22.24	41.55	37.59	74	17.1	H

Channel 102

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5453.74	63.32	-32.7	34.38	61.64	74	10.68	V
5454.265	63.22	-32.7	34.38	61.53	74	10.79	V
11019.95	45.57	-29.83	38.01	37.4	74	28.43	V
16529.85	53.68	-23.21	41.54	35.35	68.3	14.62	V
17503.35	56.92	-22.88	41.6	38.2	68.3	11.39	H
17819.05	56.9	-22.45	41.54	37.81	74	17.1	V

Channel 118

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5505.2	55.71	-32.63	34.41	53.93	68.3	12.59	V
5660.23	58.72	-32.84	34.7	56.86	68.3	9.58	V
11180	45.45	-30.45	38.07	37.83	74	28.55	H
16770.2	53.66	-23.01	41.88	34.79	68.3	14.64	V
17382.35	56.69	-23	41.74	37.95	68.3	11.61	V
17912.55	57.29	-22.64	41.52	38.42	74	16.71	V

Channel 134

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5726.6625	61.61	-32.98	34.82	59.78	68.3	6.69	V
5726.875	61.31	-32.98	34.82	59.47	68.3	6.99	V
11340.05	45.97	-30.03	38.14	37.86	74	28.03	H
17010	54.33	-23.02	42.19	35.16	68.3	13.97	H
17623.8	57.55	-22.08	41.57	38.06	68.3	10.75	V
17850.95	57.5	-22.52	41.53	38.49	74	16.5	H

802.11ac-HT20

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5148.1025	66.77	-33.28	34.26	65.78	74	7.23	H
5149.4675	67.16	-33.27	34.26	66.17	74	6.84	H
10359.95	45.4	-29.67	37.63	37.44	68.3	22.9	H
15539.85	51.3	-24.49	40.15	35.64	74	22.7	H
17641.4	57.23	-22.04	41.57	37.7	68.3	11.07	H
17889.45	57.2	-22.6	41.52	38.27	74	16.8	H

Channel 40

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5153.2	58.34	-33.26	34.26	57.34	68.3	9.96	H
5240	58.75	-33.36	34.3	57.8	68.3	9.56	V
10400.1	45.19	-29.32	37.68	36.82	68.3	23.11	V
15599.8	50.98	-24.52	40.22	35.28	74	23.02	H
17017.7	57.81	-23.02	42.18	38.66	68.3	10.49	H
17709.6	56.94	-22.2	41.56	37.59	74	17.06	V

Channel 48

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5183.8	56.72	-33.18	34.28	55.62	68.3	11.58	H
5286.6	56.49	-32.76	34.32	54.93	68.3	11.81	V
10479.85	44.02	-29.57	37.78	35.82	68.3	24.28	V
15720.25	51.63	-24.36	40.37	35.62	74	22.37	V
17670	57.25	-22.11	41.57	37.79	68.3	11.05	H
17740.4	57.05	-22.27	41.55	37.77	74	16.95	H

Channel 52

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5199.8	55.94	-33.24	34.28	55.94	-33.24	34.28	H
5313.8	55.94	-32.53	34.33	55.94	-32.53	34.33	V
10520	45.03	-29.65	37.81	45.03	-29.65	37.81	V
15780.2	51.15	-24.2	40.44	51.15	-24.2	40.44	H
17063.35	56.85	-23.03	42.12	56.85	-23.03	42.12	V
17868.55	56.78	-22.55	41.53	56.78	-22.55	41.53	V

Channel 56

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5222.2	55.53	-33.33	34.29	55.53	-33.33	34.29	H
5335.2	55.99	-32.35	34.34	55.99	-32.35	34.34	V
10560.15	45.09	-29.45	37.82	45.09	-29.45	37.82	V
15840.15	52.52	-24.06	40.51	52.52	-24.06	40.51	H
17697.5	57.05	-22.17	41.56	57.05	-22.17	41.56	H
17936.75	57.54	-22.69	41.51	57.54	-22.69	41.51	H

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5350.3395	66.61	-32.29	34.34	64.56	74	7.4	V
5351.379	66.43	-32.29	34.34	64.38	74	7.57	V
10639.9	45.14	-29.3	37.86	36.59	68.3	23.16	H
15960.05	52.22	-23.82	40.65	35.38	68.3	16.08	V
16865.35	56.97	-23	42.01	37.96	68.3	11.33	V
17848.75	56.84	-22.51	41.53	37.82	68.3	11.46	V

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5458.21	58.09	-32.69	34.38	56.4	74	15.91	V
5454.88	58.49	-32.7	34.38	56.81	74	15.51	V
11000.15	44.56	-29.87	38	36.44	74	29.44	H
16500.15	52.96	-23.16	41.5	34.63	68.3	15.34	H
17014.95	56.96	-23.02	42.18	37.81	68.3	11.34	V
17912.55	57.14	-22.64	41.52	38.27	74	16.86	H

Channel 120

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5549.8	54.99	-32.61	34.49	53.11	68.3	13.31	V
5639.8	58.65	-32.84	34.66	56.83	68.3	9.65	H
11199.8	45.31	-30.43	38.08	37.66	74	28.69	H
16799.9	53.43	-23	41.92	34.5	68.3	14.87	V
17613.35	56.76	-22.15	41.58	37.33	68.3	11.54	H
17946.1	57.59	-22.71	41.51	38.79	74	16.41	V

Channel 140

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5727.0875	64.64	-32.98	34.82	62.8	68.3	3.66	H
5725.2125	63.65	-32.98	34.82	61.81	68.3	4.65	V
11400	45.36	-29.72	38.16	36.92	74	28.64	V
17100.2	55.39	-23.04	42.08	36.35	68.3	12.91	V
17637.55	56.37	-22.03	41.57	36.83	68.3	11.93	H
17815.75	56.76	-22.45	41.54	37.66	74	17.24	H

802.11ac-HT40

Channel 38

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5146.895	67.17	-33.28	34.26	66.18	74	6.83	H
5149.5025	68.27	-33.27	34.26	67.28	74	5.73	H
10379.75	44.3	-29.5	37.66	36.13	68.3	24	V
15570.1	51.2	-24.5	40.19	35.52	74	22.8	H
17589.15	57.04	-22.31	41.58	37.77	68.3	11.26	V
17888.35	58.1	-22.59	41.52	39.17	74	15.9	H

Channel 46

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5156.2	57.65	-33.26	34.26	56.64	68.3	10.65	V
5316.2	56.85	-32.51	34.33	55.02	68.3	11.46	V
10460.05	44.34	-29.49	37.75	36.08	68.3	23.96	V
15690	51.36	-24.44	40.33	35.46	74	22.65	V
17632.6	57.08	-22.02	41.57	37.53	68.3	11.22	H
17768.45	57.22	-22.34	41.55	38.01	74	16.78	H

Channel 54

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5202	58.25	-33.25	34.28	57.22	68.3	10.05	H
5334.4	60.56	-32.36	34.34	58.58	68.3	7.74	V
10539.8	45.03	-29.55	37.82	36.76	68.3	23.27	V
15809.9	51.28	-24.12	40.47	34.93	74	22.72	H
17679.35	57.05	-22.13	41.56	37.62	68.3	11.25	V
17858.1	56.69	-22.53	41.53	37.7	74	17.31	V

Channel 62

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5352.445	67.3	-32.29	34.34	65.25	74	6.7	H
5355.9285	66.3	-32.29	34.34	64.25	74	7.7	V
10620.1	44.37	-29.2	37.85	35.72	74	29.63	V
15929.8	52.52	-23.88	40.62	35.78	74	21.49	H
17215.7	57.24	-22.88	41.94	38.18	68.3	11.06	H
17729.4	56.56	-22.25	41.55	37.26	74	17.44	H

Channel 102

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5458.33	61.09	-32.69	34.38	59.4	74	12.91	H
5459.26	61.05	-32.69	34.38	59.36	74	12.95	V
11019.95	45.12	-29.83	38.01	36.94	74	28.88	H
16529.85	52.98	-23.21	41.54	34.65	68.3	15.32	V
16805.4	56.26	-23	41.93	37.33	68.3	12.04	V
17113.4	56.17	-23.04	42.06	37.15	68.3	12.13	V

Channel 118

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5528.6	56.46	-32.62	34.45	54.63	68.3	11.84	H
5665.6	56.23	-32.84	34.71	54.36	68.3	12.07	V
11180	44.55	-30.45	38.07	36.92	68.3	23.76	H
16770.2	53.55	-23.01	41.88	34.68	68.3	14.75	H
16902.7	56.66	-23.01	42.07	37.6	68.3	11.64	V
17282.25	57	-22.77	41.86	37.91	68.3	11.3	V

Channel 134

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5727.2875	61.1	-32.98	34.82	59.26	68.3	7.2	H
5730.075	60.55	-32.98	34.82	58.71	68.3	7.75	V
11340.05	45.71	-30.03	38.14	37.6	74	28.29	H
17010	54.68	-23.02	42.19	35.52	68.3	13.62	H
17139.8	55.83	-23	42.03	36.8	68.3	12.47	H
17269.05	55.53	-22.79	41.87	36.45	68.3	12.77	H

802.11ac-HT80

Channel 42

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5147.333	69.6	-33.3	34.3	68.51	74.0	4.4	H
5148.208	69.8	-33.3	34.3	68.71	74.0	4.2	V
10419.900	45.6	-29.3	37.5	37.37	68.3	22.7	V
15630.050	50.6	-24.5	40.4	34.82	74.0	23.4	H
16941.250	57.0	-23.0	41.7	38.33	68.3	11.3	H
17083.700	56.9	-23.0	41.6	38.33	68.3	11.4	V

Channel 58

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5355.686	70.0	-32.3	34.5	67.79	74.0	4.0	V
5358.291	69.9	-32.3	34.5	67.65	74.0	4.2	H
10579.950	44.3	-29.3	37.6	36.04	68.3	24.0	V
15869.850	52.6	-24.0	40.6	35.92	68.3	15.7	H
16914.300	56.1	-23.0	41.6	37.41	68.3	12.2	V
17068.850	56.3	-23.0	41.6	37.71	68.3	12.0	H

Channel 106

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5456.200	67.3	-32.7	34.6	65.47	74.0	6.7	V
5457.460	67.8	-32.7	34.6	65.94	74.0	6.2	H
11060.100	45.4	-29.9	38.0	37.33	74.0	28.6	V
15548.650	52.0	-24.5	40.3	36.20	68.3	16.3	H
16760.300	54.9	-23.0	41.6	36.32	68.3	13.5	H
16760.300	56.9	-23.0	41.6	38.36	68.3	11.4	V

Channel 122

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5728.975	61.0	-33.0	34.9	59.06	74.0	13.0	H
5742.250	61.5	-33.0	34.9	59.58	74.0	12.5	V
11220.150	45.3	-30.4	38.2	37.58	68.3	23.0	H
16830.150	55.1	-23.0	41.6	36.51	68.3	13.2	V
16974.250	56.4	-23.0	41.7	37.75	68.3	11.9	V
17289.950	55.3	-22.8	41.4	36.71	68.3	13.0	V

B.7. AC Powerline Conducted Emission (150kHz- 30MHz)

Test Condition:

Voltage (V)	Frequency (Hz)
120	60

Measurement uncertainty:

Expanded measurement uncertainty for this test item is $U = 3.10\text{dB}$, $k=2$.

Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Result (dB μ V)		Conclusion
		With charger AE5		
		802.11a	Idle	
0.15 to 0.5	66 to 56	Fig.54	Fig.55	P
0.5 to 5	56			
5 to 30	60			

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dB μ V)	Result (dB μ V)		Conclusion
		With charger AE5		
		802.11a	Idle	
0.15 to 0.5	67 56 to 46	Fig.54	Fig.55	P
0.5 to 5	46			
5 to 30	50			

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

Conclusion: PASS

Note: The measurement results showed here are worst cases.

Test graphs as below:

Traffic:

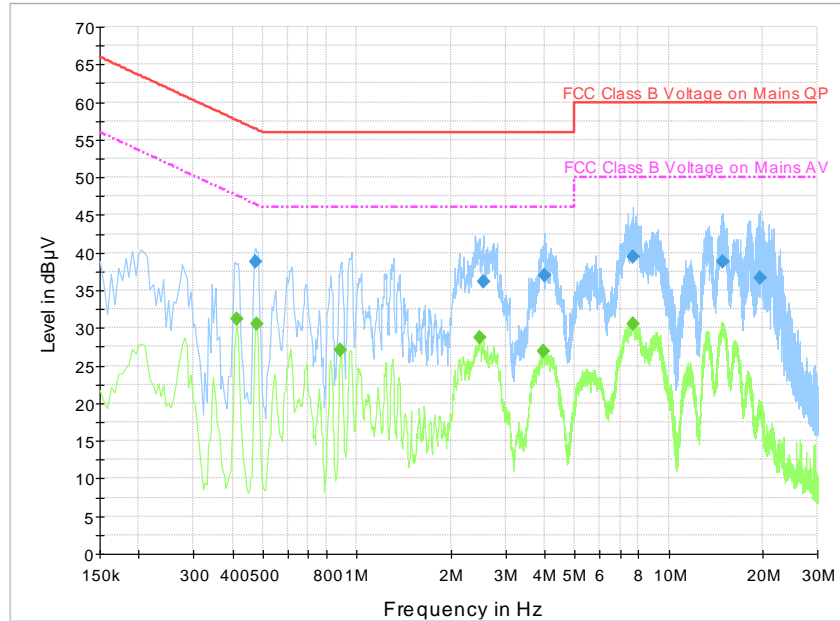


Fig.54 Conducted Emission (802.11a, Ch36, TX)

Note1: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.474000	38.9	1000.0	9.000	On	L1	19.6	17.6	56.4
2.548500	36.2	1000.0	9.000	On	L1	19.6	19.8	56.0
3.984000	37.0	1000.0	9.000	On	L1	19.7	19.0	56.0
7.710000	39.5	1000.0	9.000	On	L1	19.7	20.5	60.0
14.928000	38.8	1000.0	9.000	On	L1	20.0	21.2	60.0
19.599000	36.7	1000.0	9.000	On	N	19.9	23.3	60.0

Final Result 2

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.411000	31.2	1000.0	9.000	On	L1	19.6	16.4	47.6
0.478500	30.5	1000.0	9.000	On	L1	19.6	15.8	46.4
0.888000	27.1	1000.0	9.000	On	L1	19.6	18.9	46.0
2.476500	28.7	1000.0	9.000	On	L1	19.6	17.3	46.0
3.966000	26.9	1000.0	9.000	On	L1	19.7	19.1	46.0
7.692000	30.6	1000.0	9.000	On	L1	19.7	19.4	50.0

Note2: The measurement results showed here are worst cases of the combinations of different cables and chargers

Idle:

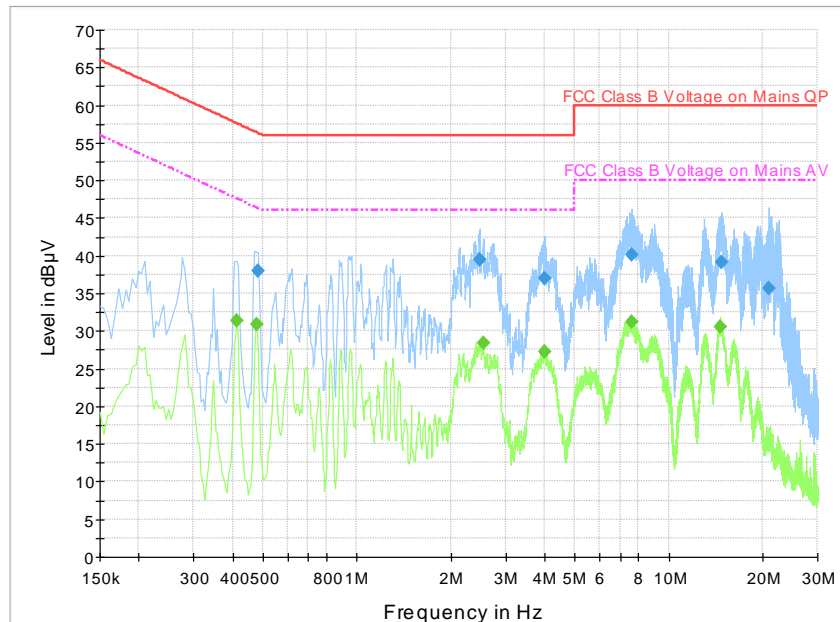


Fig.55 Conducted Emission(802.11a, IDLE)

Note1: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.483000	38.1	1000.0	9.000	On	L1	19.6	18.2	56.3
2.476500	39.5	1000.0	9.000	On	L1	19.6	16.5	56.0
3.993000	37.1	1000.0	9.000	On	L1	19.7	18.9	56.0
7.629000	40.1	1000.0	9.000	On	L1	19.7	19.9	60.0
14.712000	39.1	1000.0	9.000	On	L1	20.0	20.9	60.0
21.016500	35.7	1000.0	9.000	On	N	19.9	24.3	60.0

Final Result 2

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.411000	31.4	1000.0	9.000	On	L1	19.6	16.2	47.6
0.478500	30.8	1000.0	9.000	On	L1	19.6	15.6	46.4
2.539500	28.3	1000.0	9.000	On	L1	19.6	17.7	46.0
3.993000	27.3	1000.0	9.000	On	L1	19.7	18.7	46.0
7.606500	31.1	1000.0	9.000	On	L1	19.7	18.9	50.0
14.685000	30.5	1000.0	9.000	On	L1	20.0	19.5	50.0

Note2: The measurement results showed here are worst cases of the combinations of different cables and chargers

B.8. 99% Occupied bandwidth

Method of Measurement: See ANSI C63.10-2013-clause 12.4.2.

- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (OBW/RBW)]$ below the reference level. Specific guidance is given in 4.1.5.2.
- d) Step a) through step c) might require iteration to adjust within the specified range.
- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
- h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

Measurement Uncertainty:

Measurement Uncertainty	60.80Hz
-------------------------	---------

Measurement Result:

Mode	Frequency	99% Occupied bandwidth (MHz)		conclusion
802.11a	5180 MHz	Fig.56	17.55	P
	5200 MHz	Fig.57	17.52	P
	5240 MHz	Fig.58	17.60	P
802.11ac HT20	5180 MHz	Fig.59	18.37	P
	5200 MHz	Fig.60	18.29	P
	5240 MHz	Fig.61	18.35	P
802.11ac HT40	5190 MHz	Fig.62	36.32	P
	5230 MHz	Fig.63	36.29	P
802.11ac HT80	5210 MHz	Fig.64	75.42	P

Conclusion: PASS
Test graphs as below:

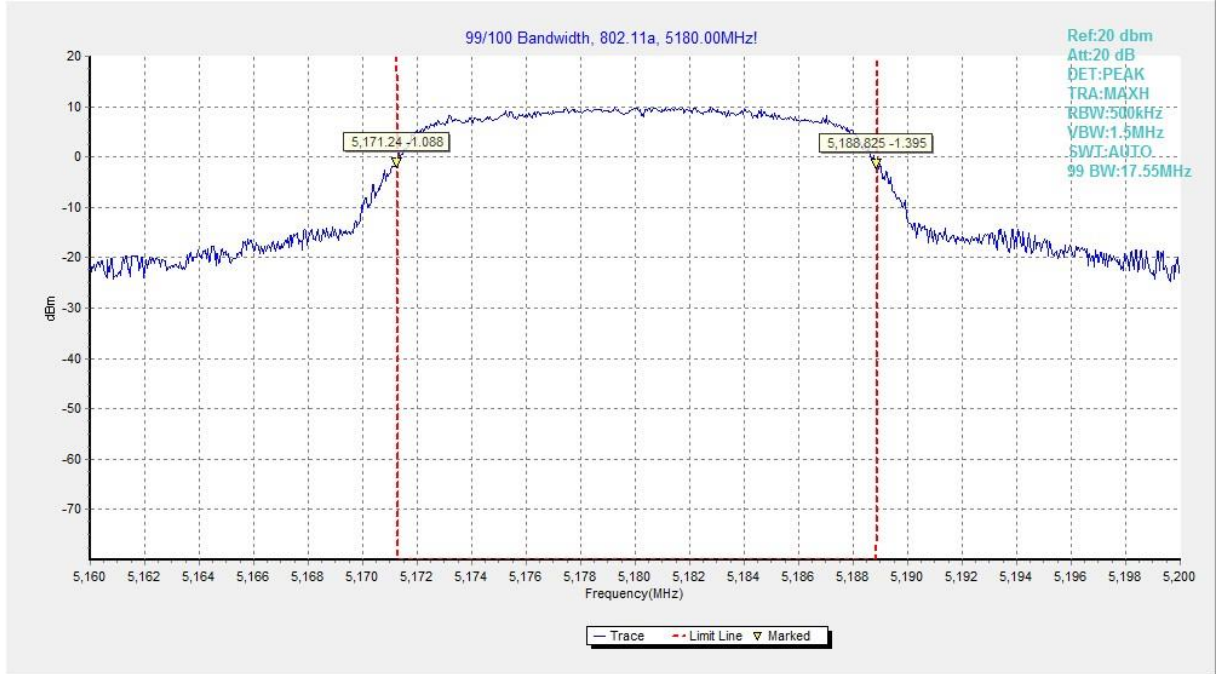


Fig.56 99% Occupied bandwidth (802.11a, 5180MHz)

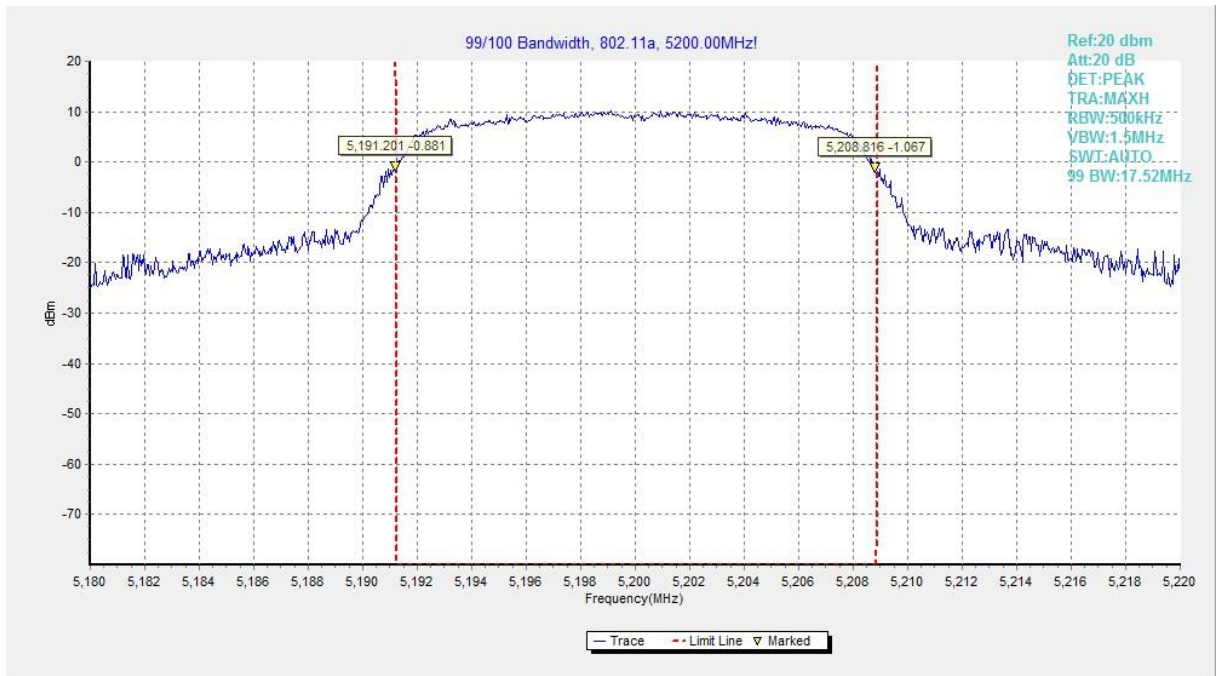


Fig.57 99% Occupied bandwidth (802.11a, 5200MHz)

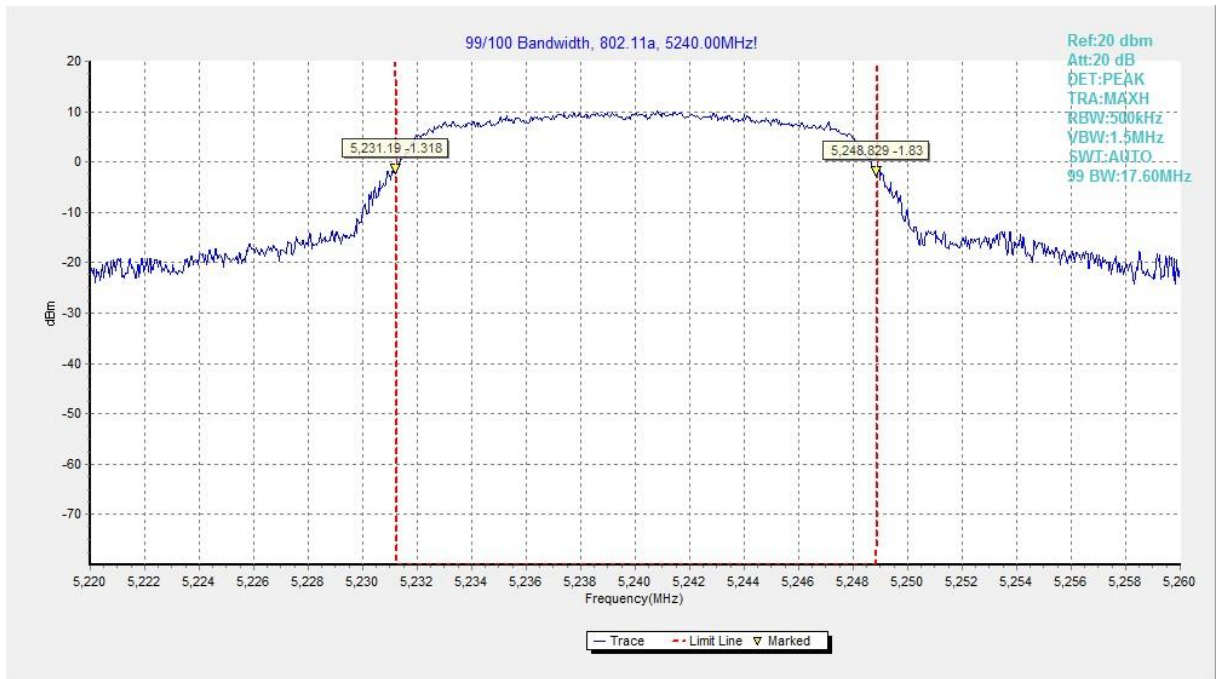


Fig.58 99% Occupied bandwidth (802.11a, 5240MHz)

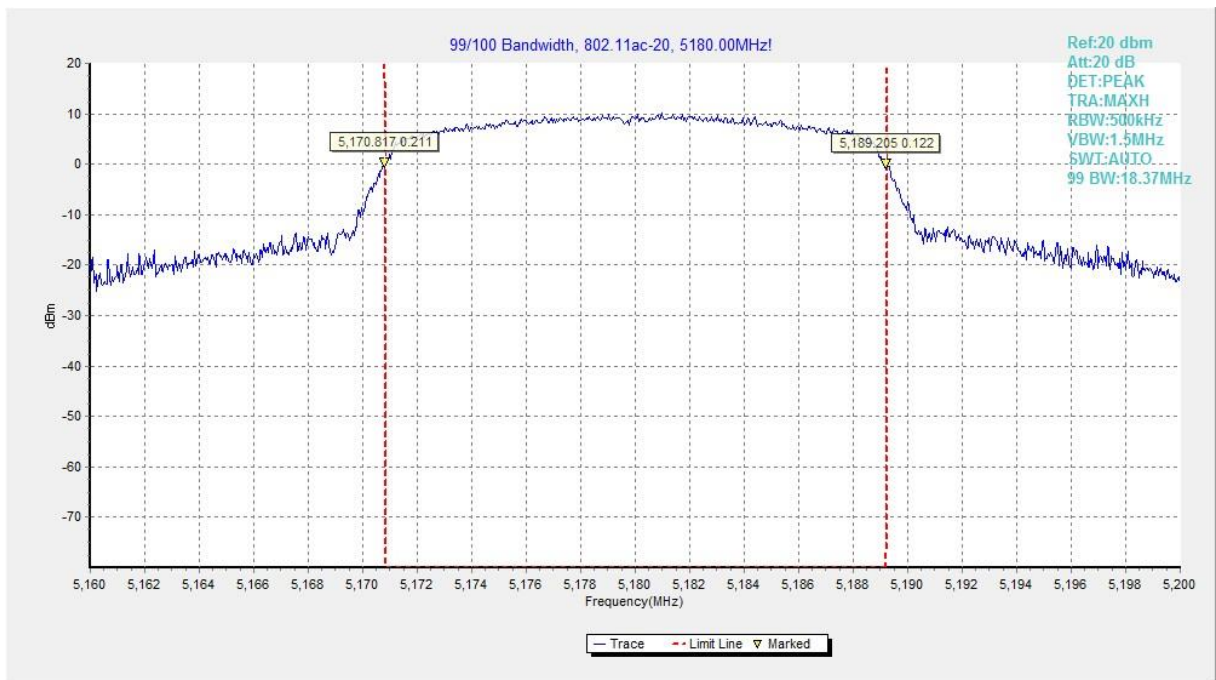


Fig.59 99% Occupied bandwidth (802.11ac-HT20, 5180MHz)

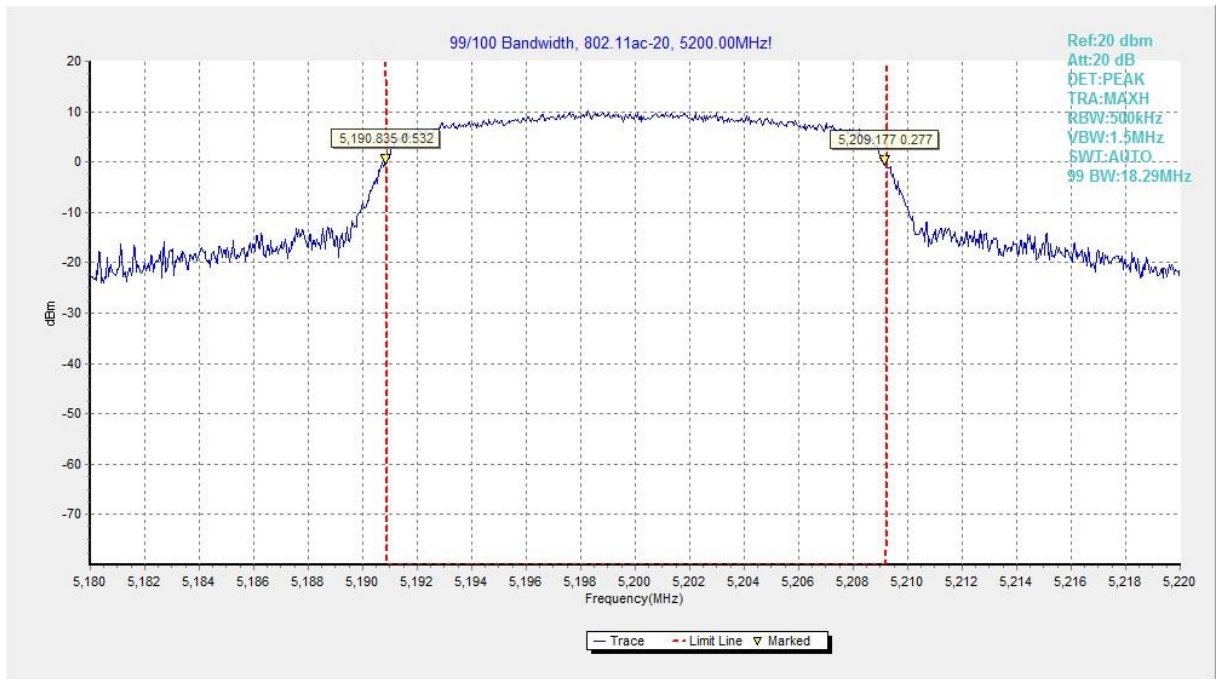


Fig.60 99% Occupied bandwidth (802.11ac-HT20, 5200MHz)

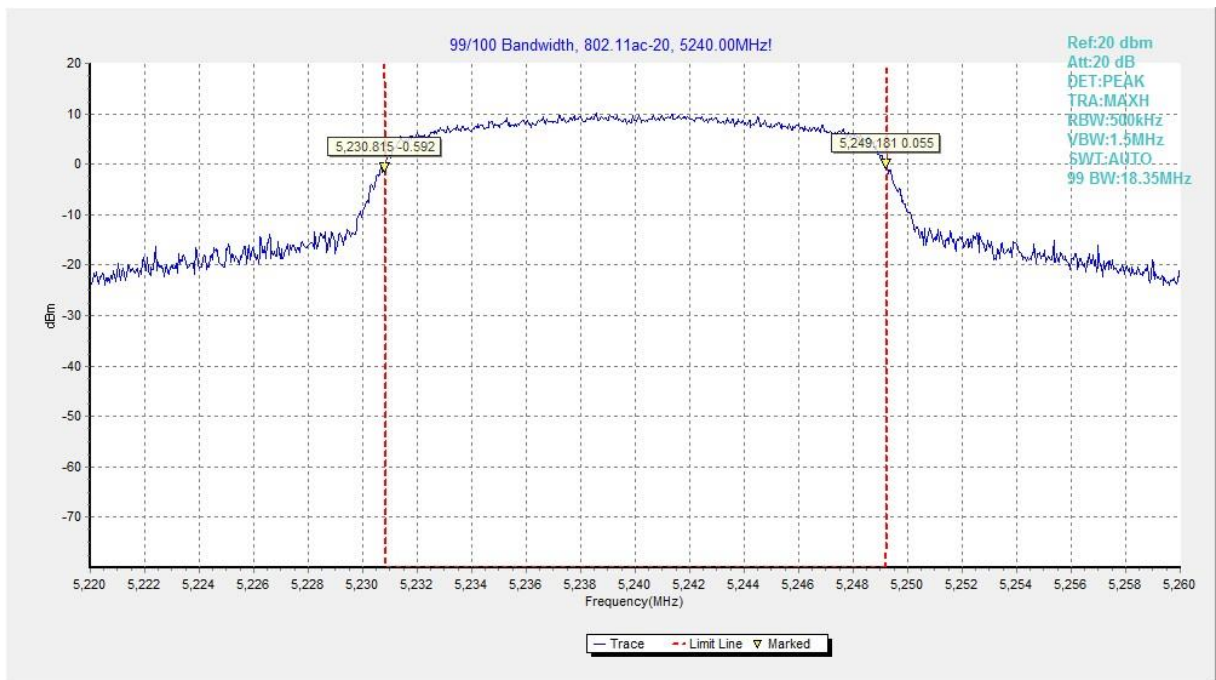


Fig.61 99% Occupied bandwidth (802.11ac-HT20, 5240MHz)

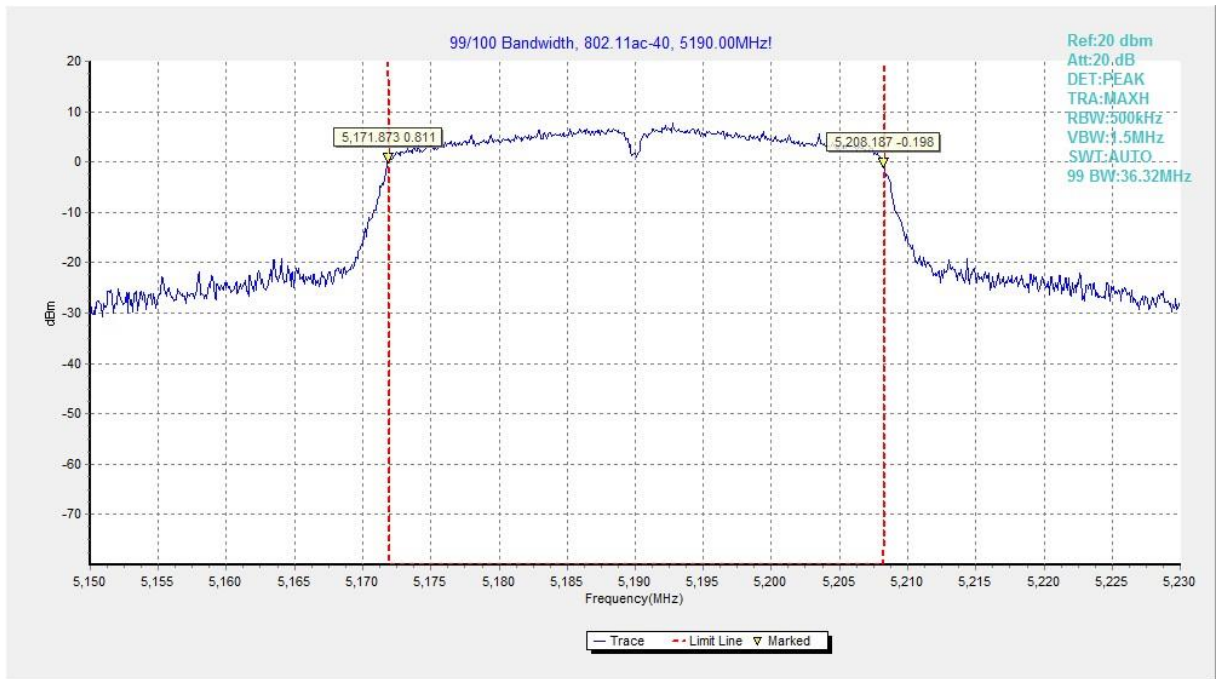


Fig.62 99% Occupied bandwidth (802.11ac-HT40, 5190MHz)

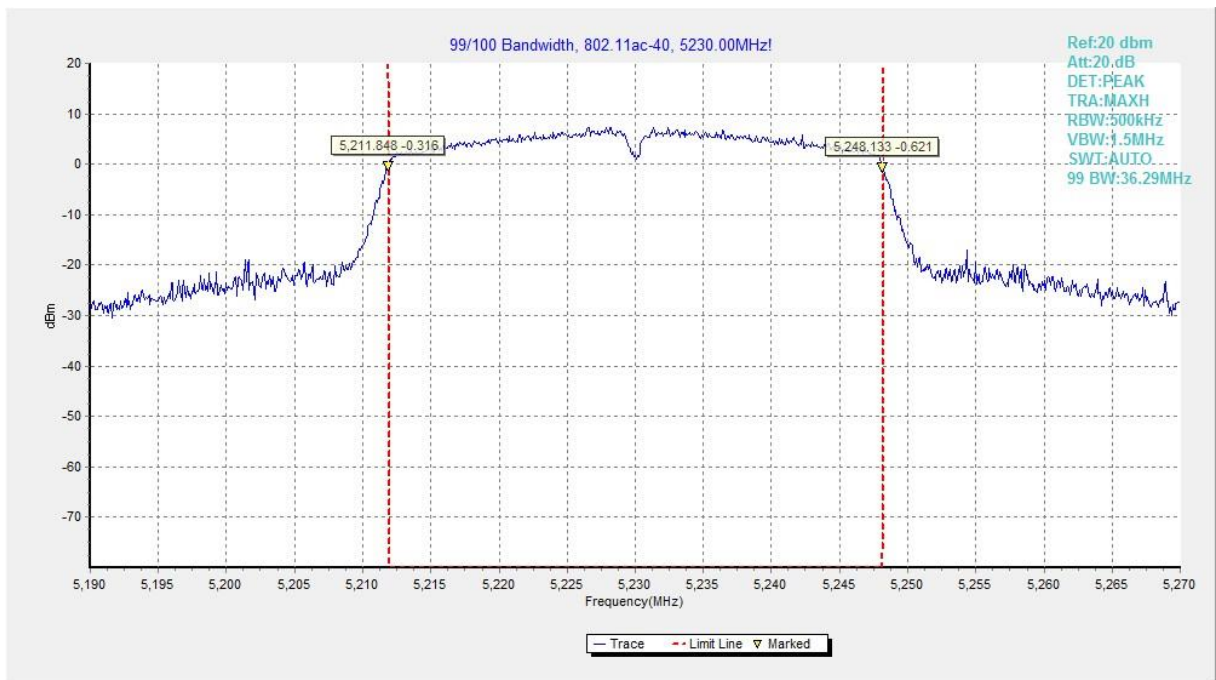


Fig.63 99% Occupied bandwidth (802.11ac-HT40, 5230MHz)

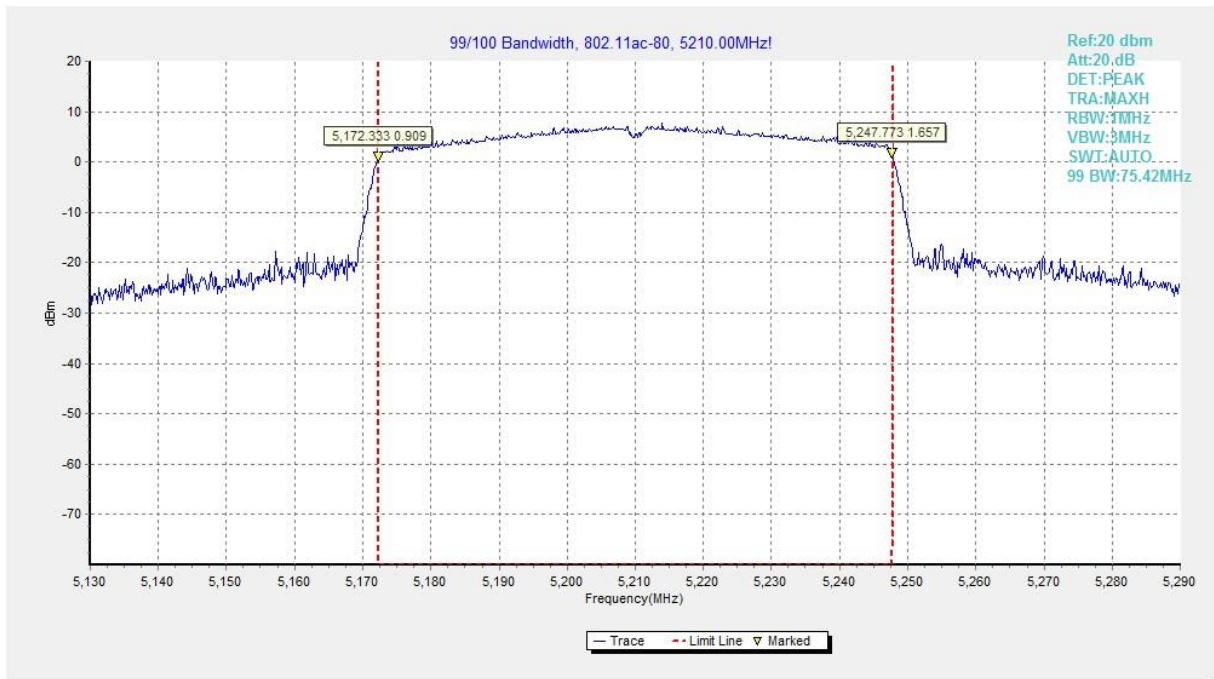


Fig.64 99% Occupied bandwidth (802.11ac-HT80, 5210MHz)

B.9. Power control

A Transmission Power Control mechanism is not required for systems with an e.i.r.p. of less than 27dBm (500 mW).

ANNEX C: Accreditation Certificate

United States Department of Commerce National Institute of Standards and Technology	
 	
<hr/> Certificate of Accreditation to ISO/IEC 17025:2017 <hr/>	
NVLAP LAB CODE: 600118-0	
Telecommunication Technology Labs, CAICT Beijing China	
<i>is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:</i>	
Electromagnetic Compatibility & Telecommunications	
<i>This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).</i>	
<hr/> 2021-09-29 through 2022-09-30 <i>Effective Dates</i>	 For the National Voluntary Laboratory Accreditation Program

*** END OF REPORT BODY ***