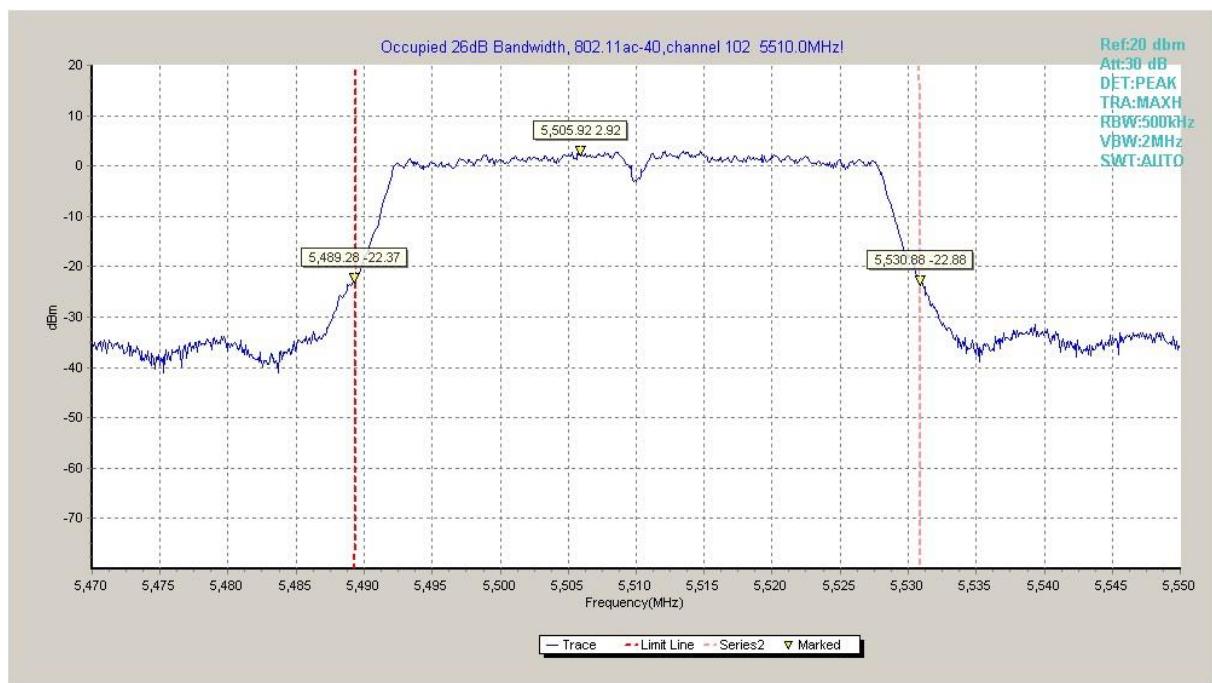

Fig. 38 Occupied 26dB Bandwidth (802.11ac-HT40, 5310MHz)

Fig. 39 Occupied 26dB Bandwidth (802.11ac-HT40, 5510MHz)

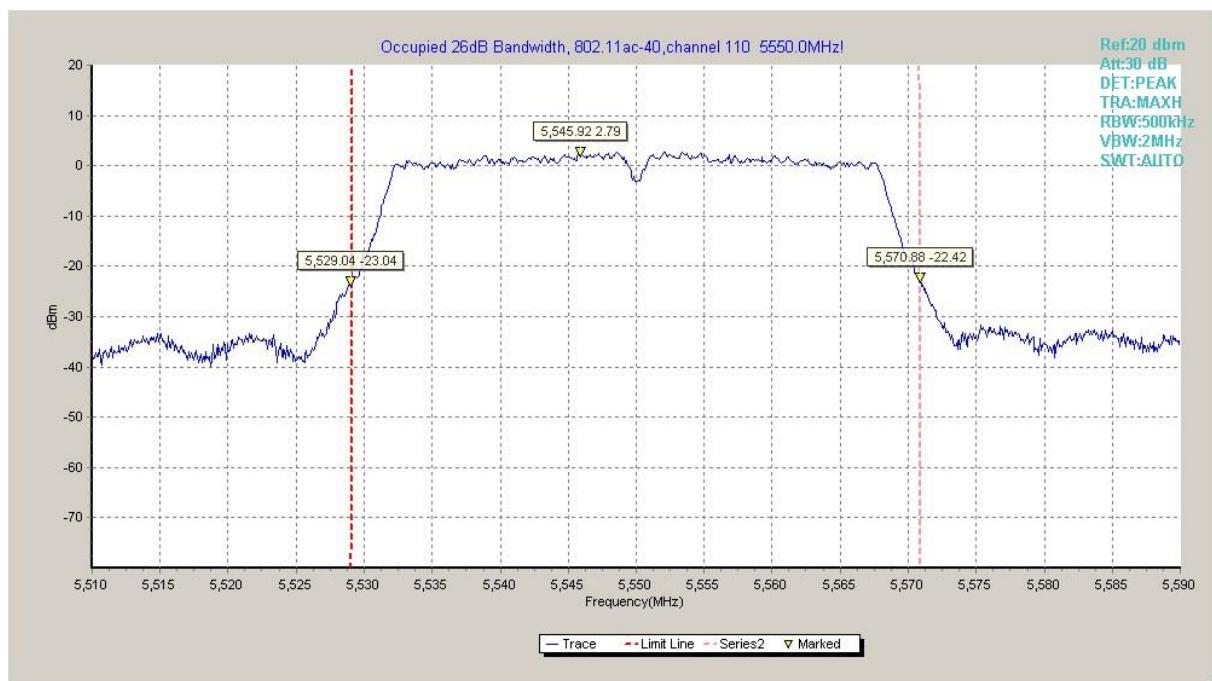


Fig. 40 Occupied 26dB Bandwidth (802. 11ac-HT40, 5550MHz)

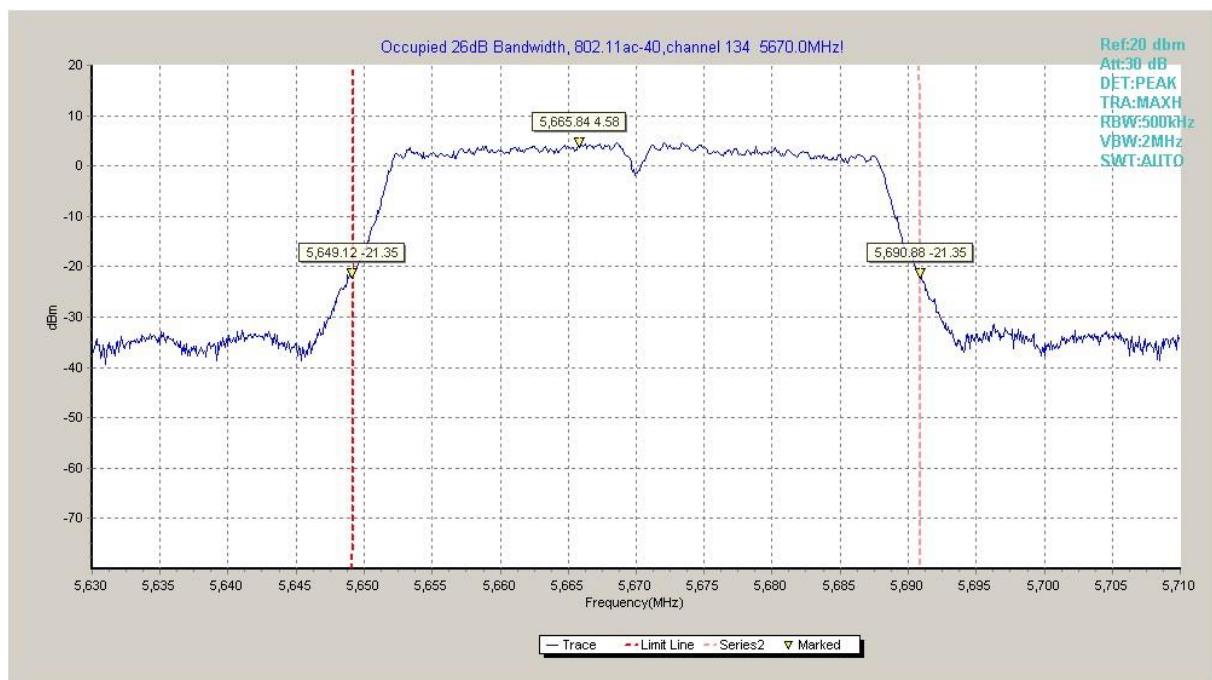
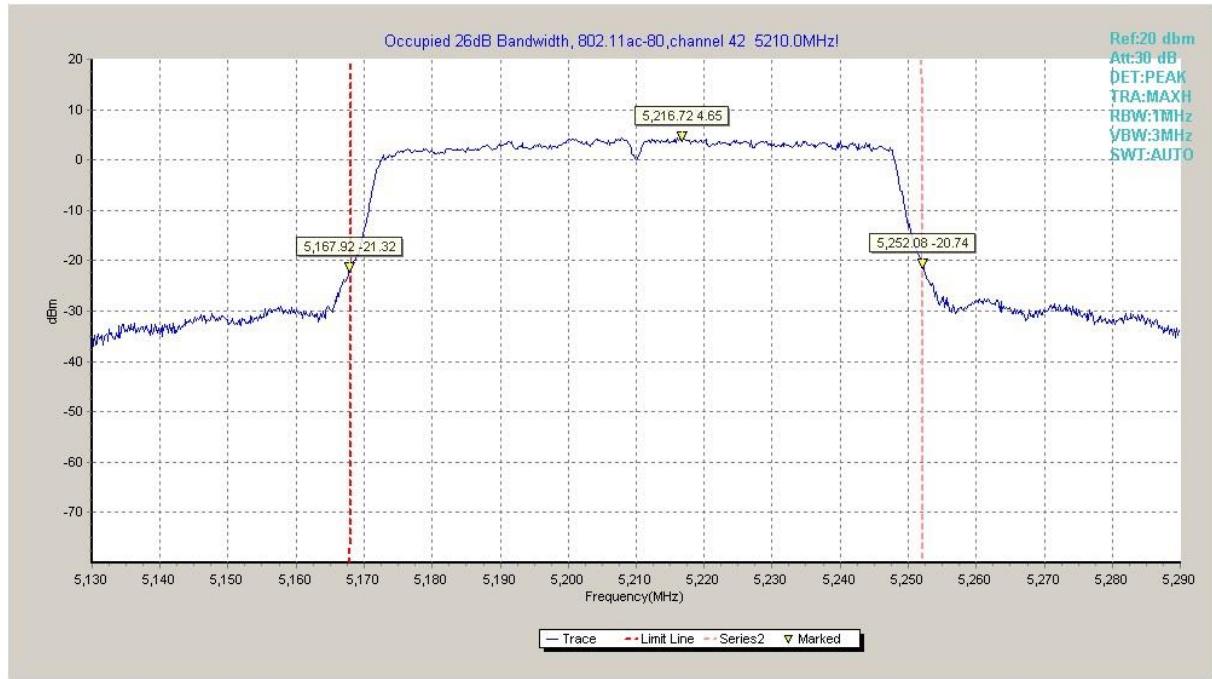
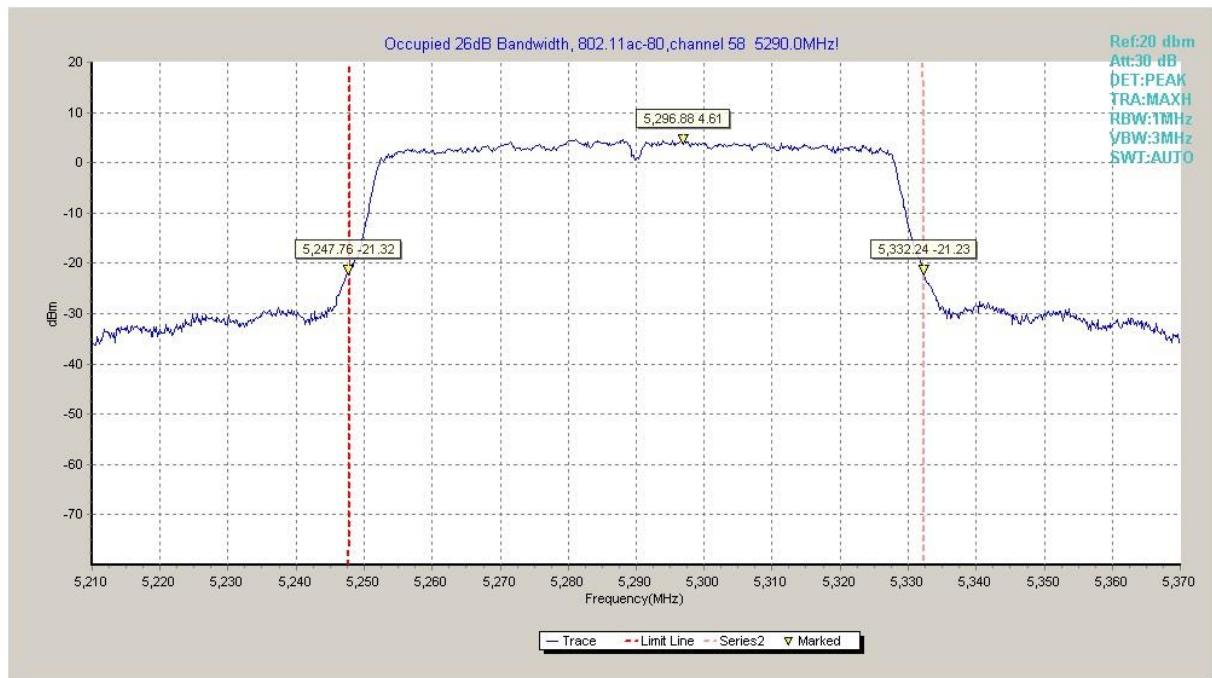


Fig. 41
Occupied 26dB Bandwidth (802. 11ac-HT40, 5670MHz)

Fig. 42
Occupied 26dB Bandwidth (802. 11ac-HT80, 5210MHz)

Fig. 43
Occupied 26dB Bandwidth (802. 11ac-HT80, 5290MHz)

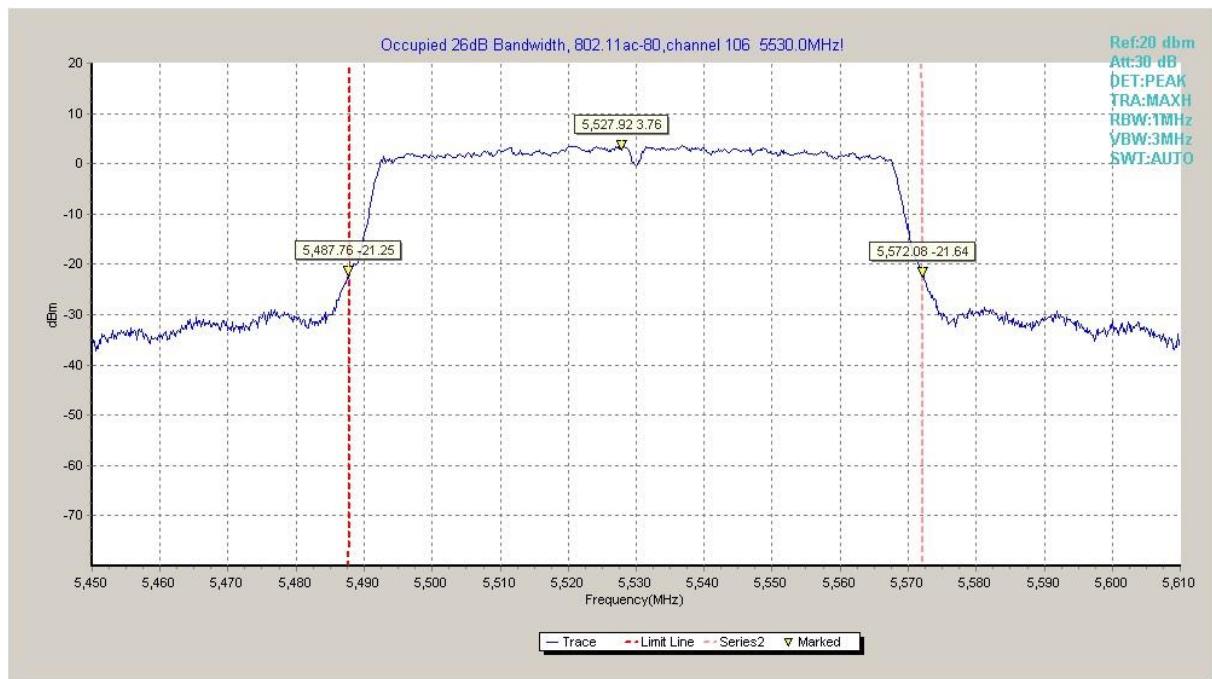

Fig. 44
Occupied 26dB Bandwidth (802. 11ac-HT80, 5530MHz)

Fig. 45
Occupied 26dB Bandwidth (802. 11ac-HT80, 5610MHz)

A.5. Band Edges Compliance

A5.1 Band Edges - Radiated

Measurement Limit:

Standard	Limit (dB μ V/m)	
FCC 47 CFR Part 15.209	Peak	74
	Average	54

The measurement is made according to KDB 789033

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

Measurement Uncertainty:

Measurement Uncertainty	0.75dB
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Measurement Result:

Mode	Channel	Test Results	Conclusion
802.11a	5180 MHz	Fig.46	P
	5320 MHz	Fig.47	P
	5500 MHz	Fig.48	P
	5700 MHz	Fig.49	P
802.11n HT20	5180 MHz	Fig.50	P
	5320 MHz	Fig.51	P
	5500 MHz	Fig.52	P
	5700 MHz	Fig.53	P
802.11n HT40	5190 MHz	Fig.54	P
	5310 MHz	Fig.55	P
	5510 MHz	Fig.56	P
	5670 MHz	Fig.57	P
802.11ac HT20	5180 MHz	Fig.58	P
	5320 MHz	Fig.59	P
	5500 MHz	Fig.60	P
	5700 MHz	Fig.61	P
802.11ac HT40	5190 MHz	Fig.62	P
	5310 MHz	Fig.63	P
	5510 MHz	Fig.64	P
	5670 MHz	Fig.65	P
802.11ac HT80	5210 MHz	Fig.66	P
	5290 MHz	Fig.67	P
	5530 MHz	Fig.68	P

Conclusion: PASS

Test graphs as below:

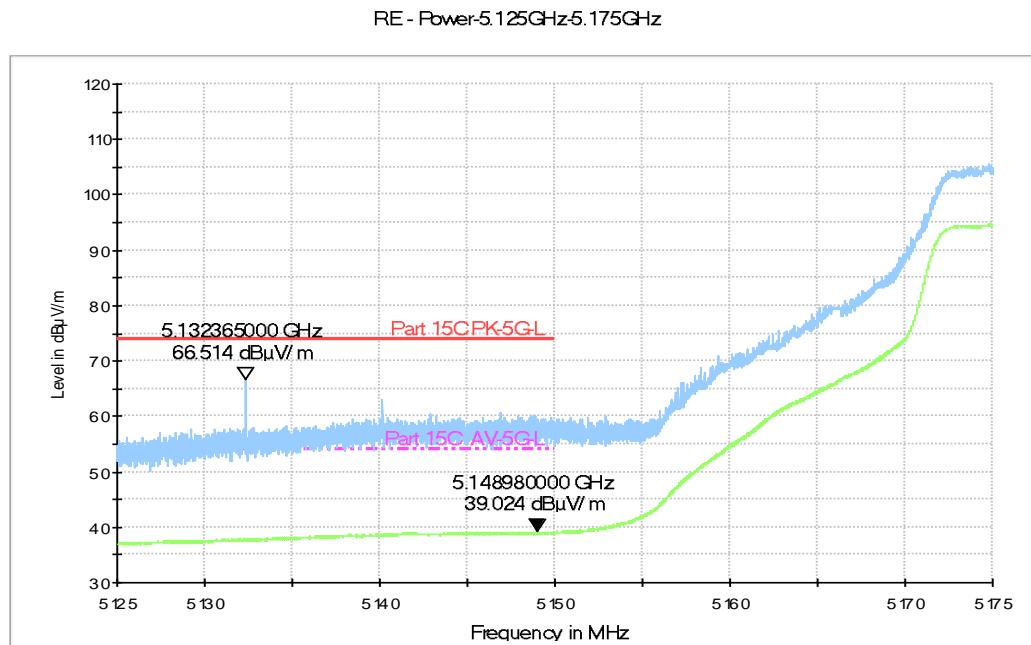


Fig. 46 Band Edges (802.11a, 5180MHz)

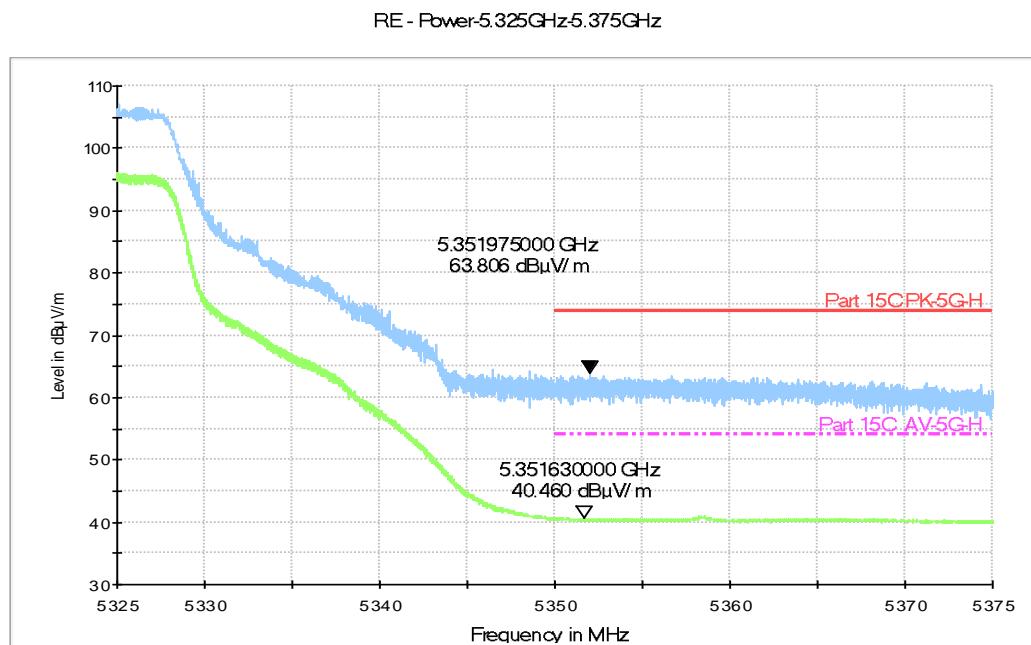
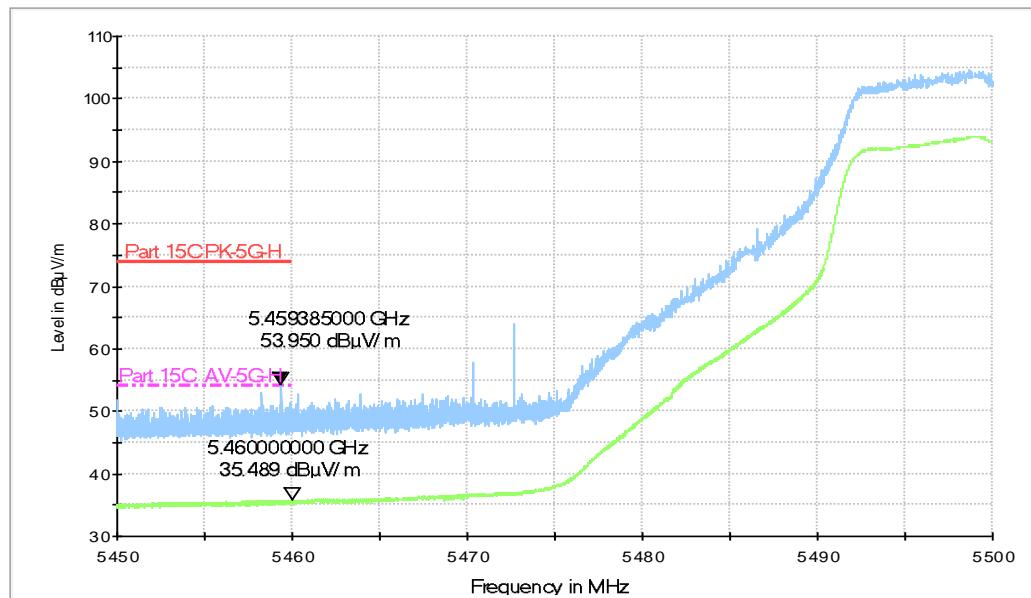
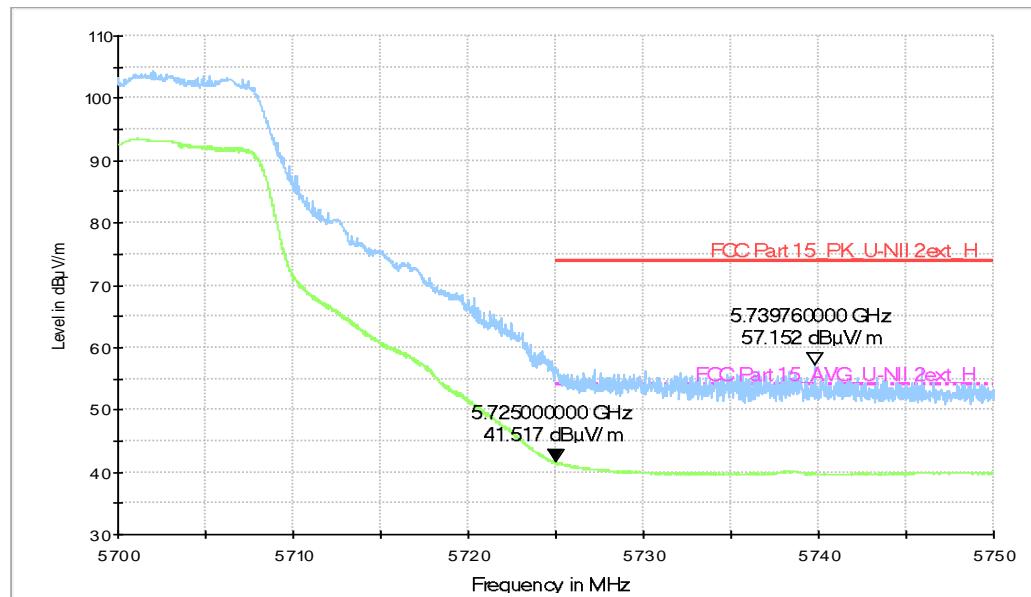


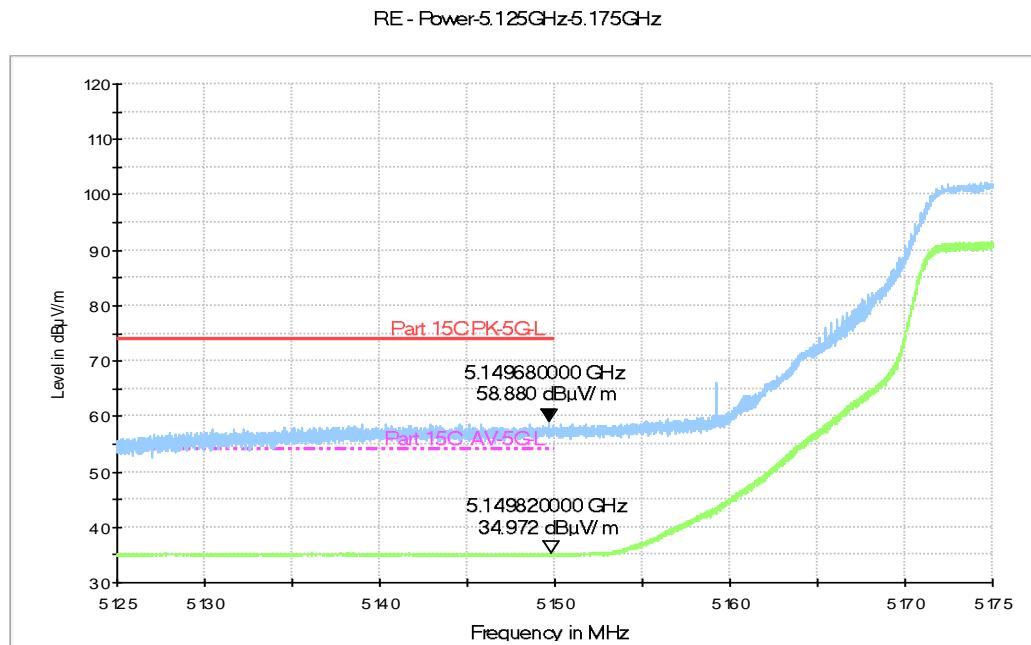
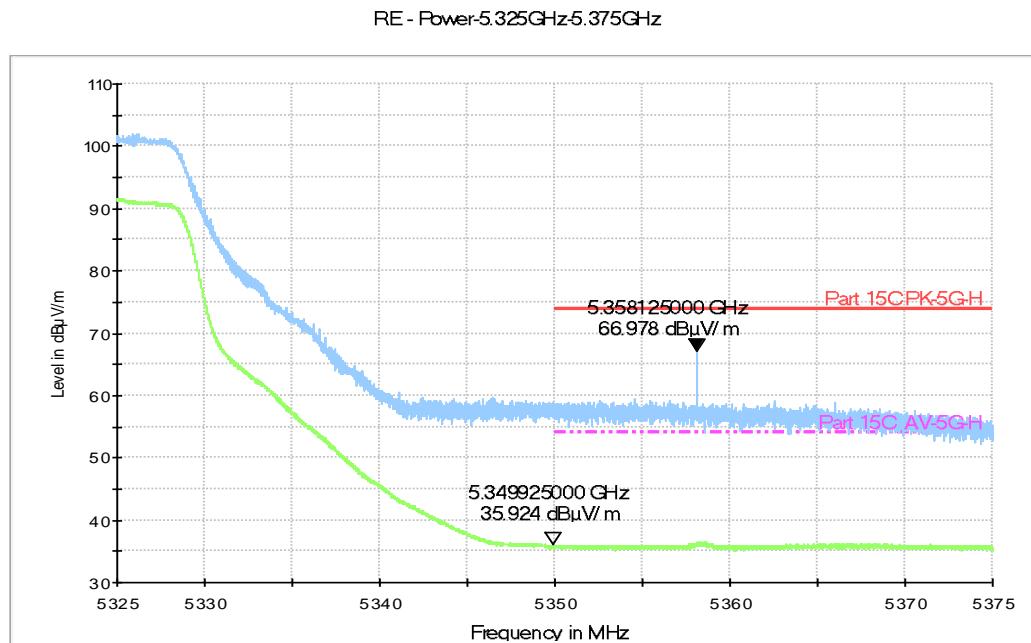
Fig. 47 Band Edges (802.11a, 5320MHz)

RE - Power-5.45GHz-5.50GHz

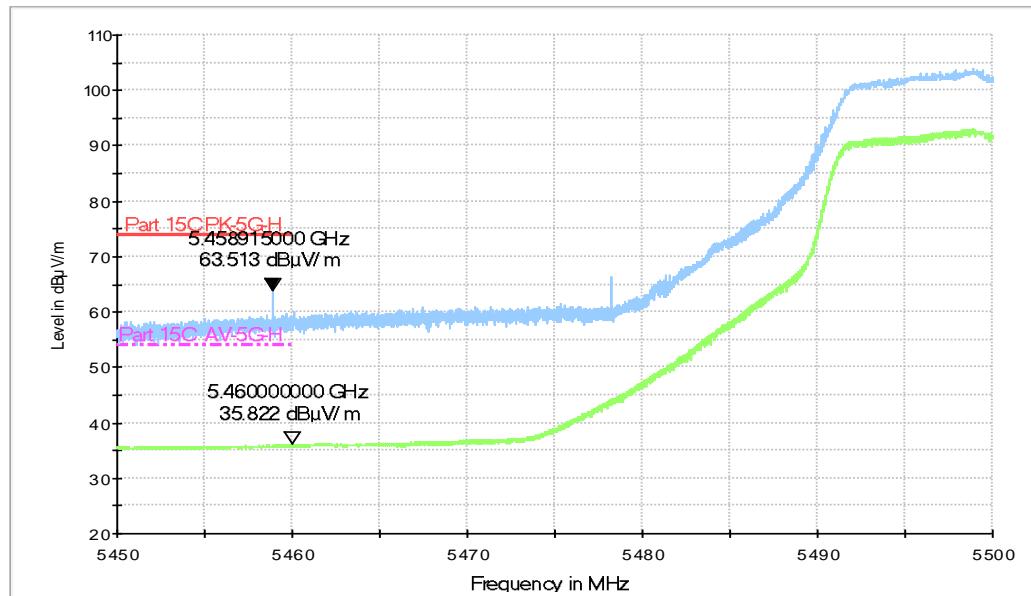

Fig. 48 Band Edges (802.11a, 5500MHz)

RE - Power-5.7GHz-5.75GHz

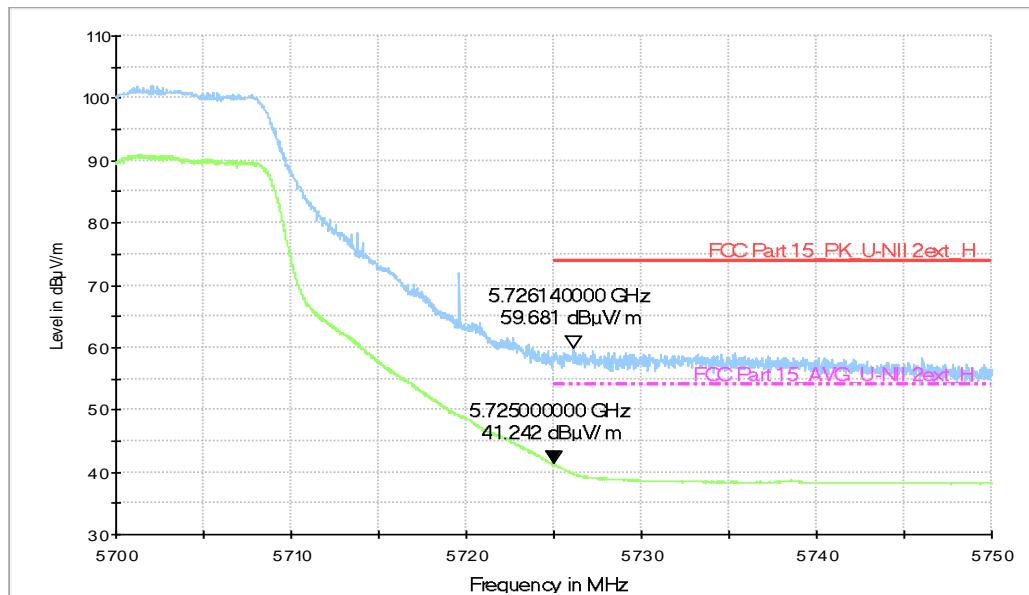

Fig. 49 Band Edges (802.11a, 5700MHz)


Fig. 50 Band Edges (802.11n-HT20, 5180MHz)

Fig. 51 Band Edges (802.11n-HT20, 5320MHz)

RE - Power-5.45GHz-5.50GHz


Fig. 52 Band Edges (802.11n-HT20, 5500MHz)

RE - Power-5.7GHz-5.75GHz


Fig. 53 Band Edges (802.11n-HT20, 5700MHz)

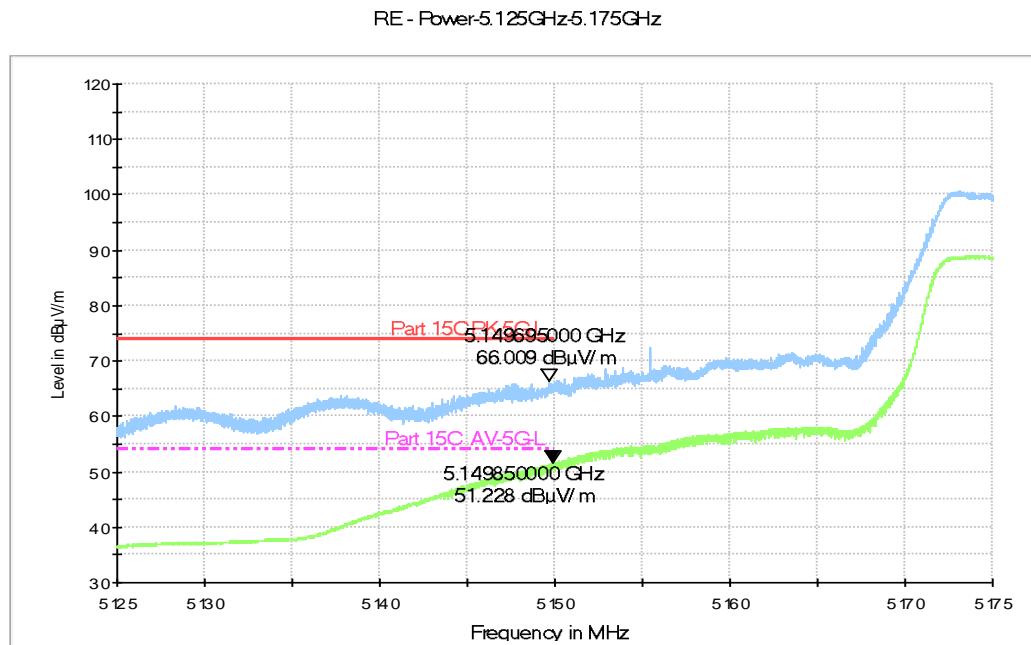


Fig. 54 Band Edges (802.11n-HT40, 5190MHz)

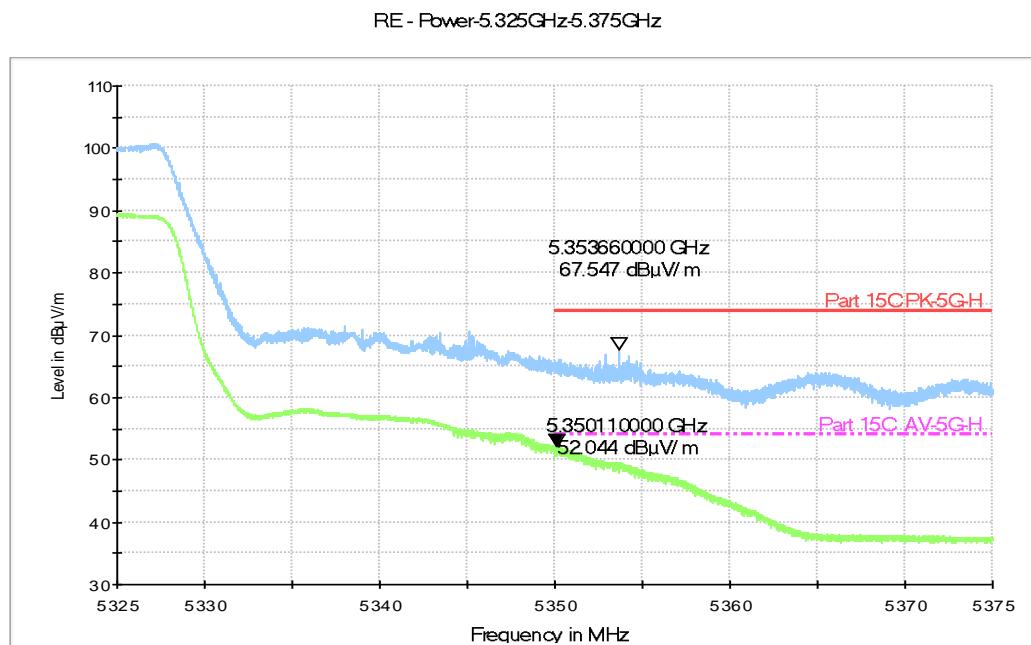
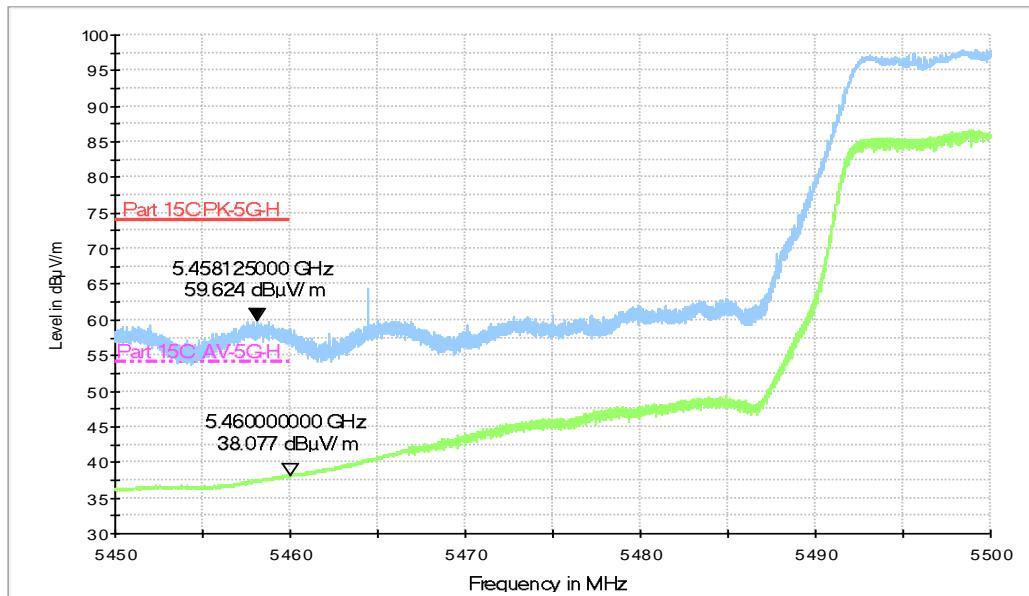
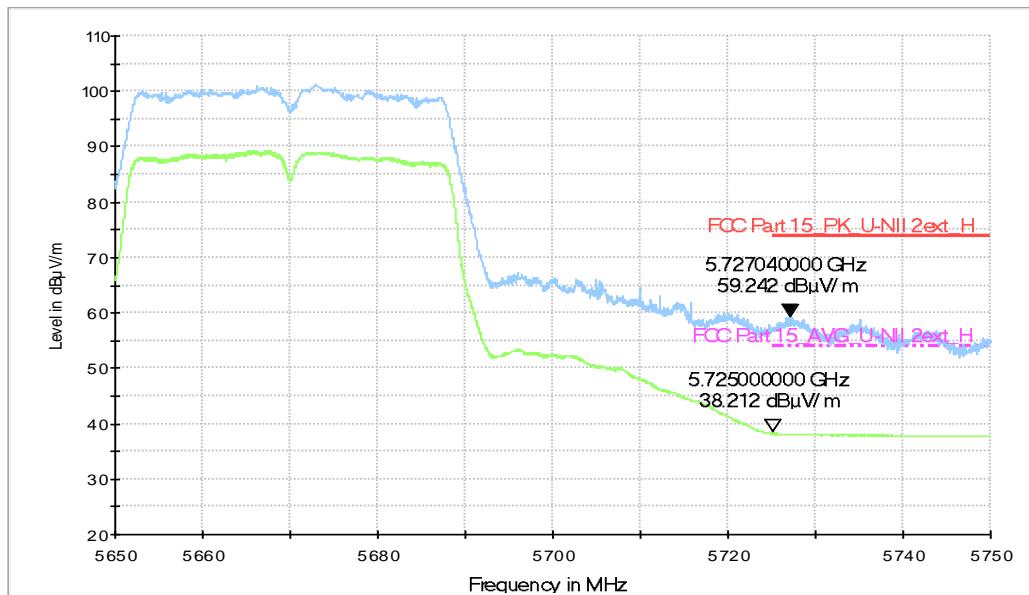


Fig. 55 Band Edges (802.11n-HT40, 5310MHz)

RE - Power-5.45GHz-5.50GHz


Fig. 56 Band Edges (802.11n-HT40, 5510MHz)

RE - Power-5.7GHz-5.75GHz


Fig. 57 Band Edges (802.11n-HT40, 5670MHz)

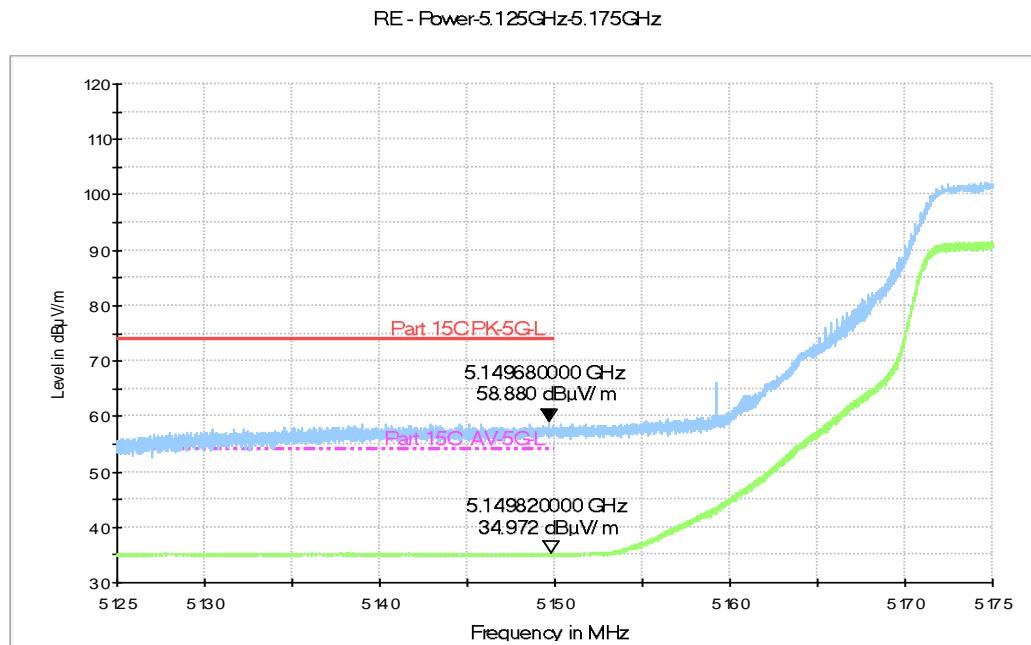


Fig. 58 Band Edges (802.11ac-HT20, 5180MHz)

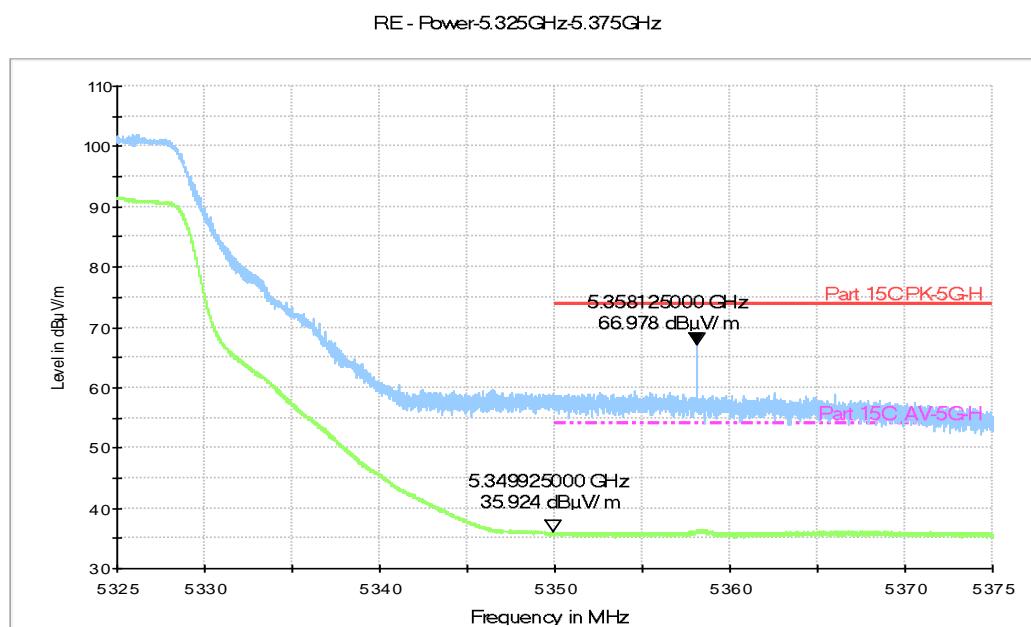
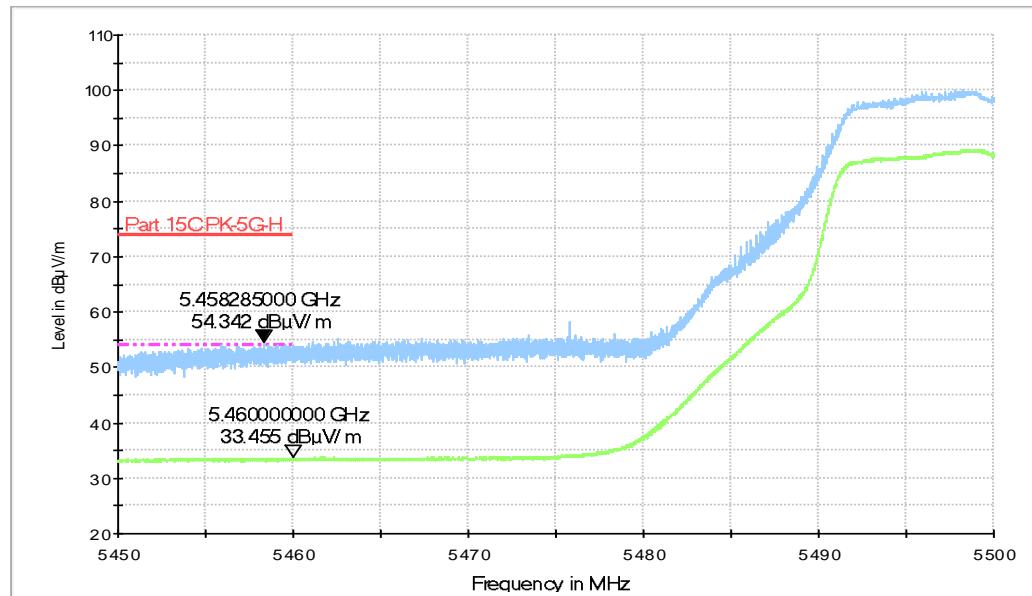
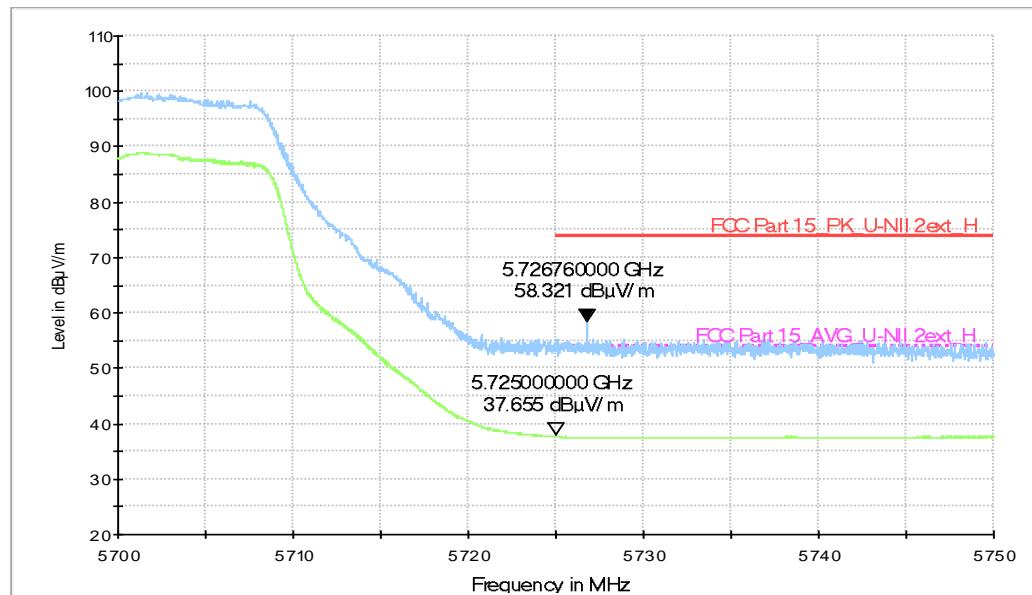


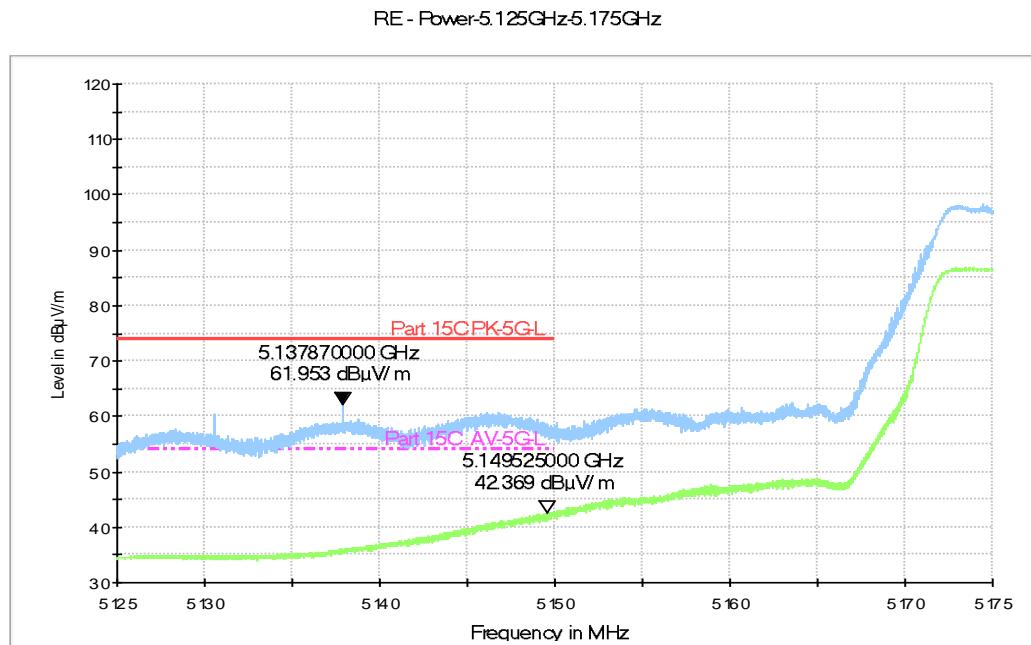
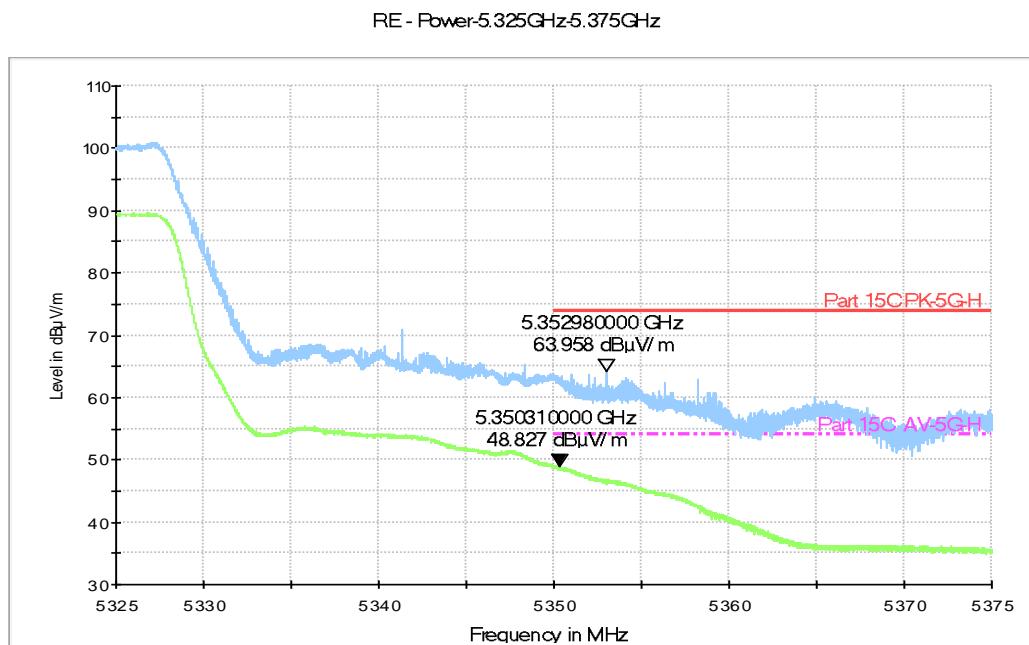
Fig. 59 Band Edges (802.11ac-HT20, 5320MHz)

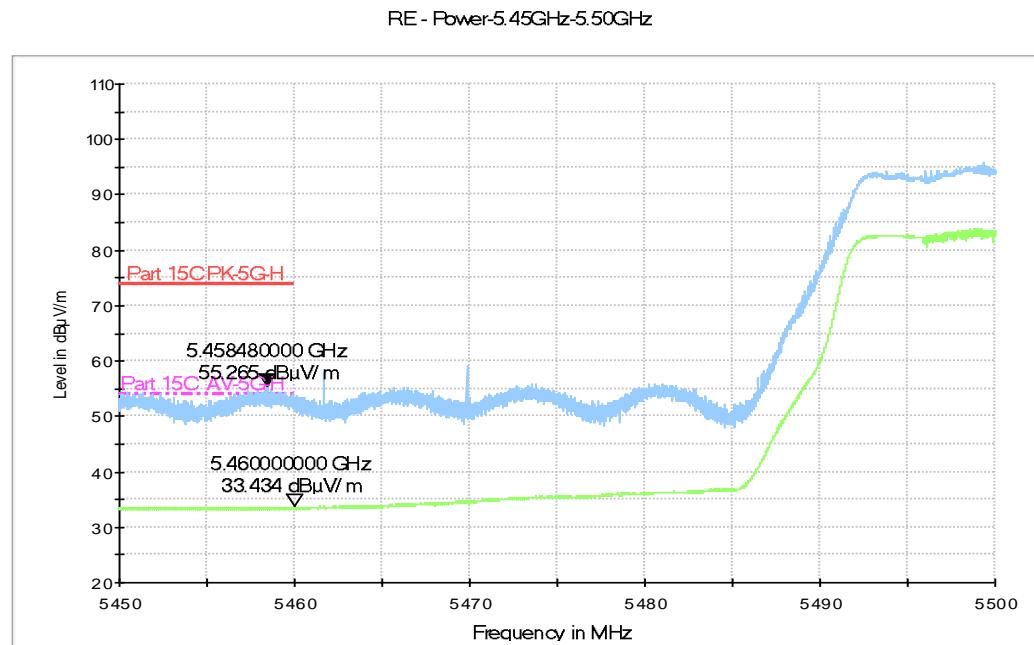
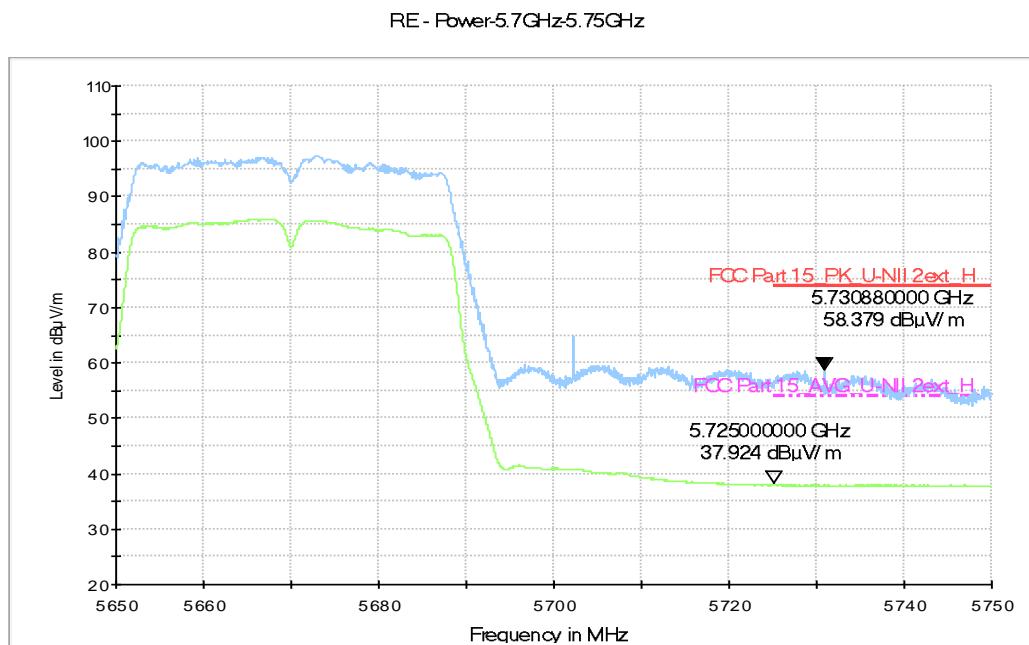
RE - Power-5.45GHz-5.50GHz

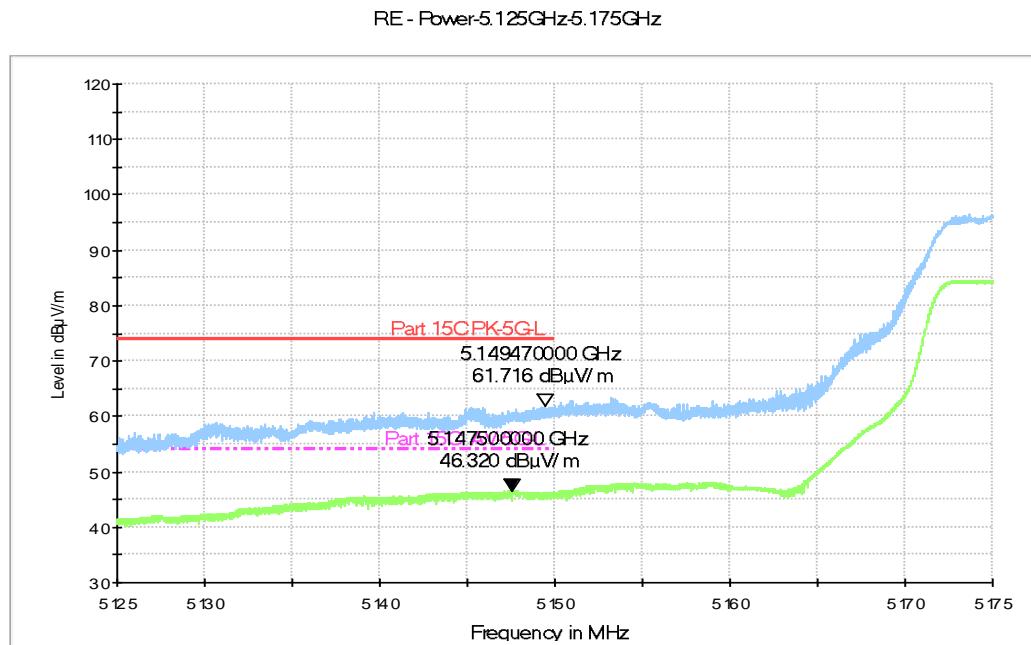
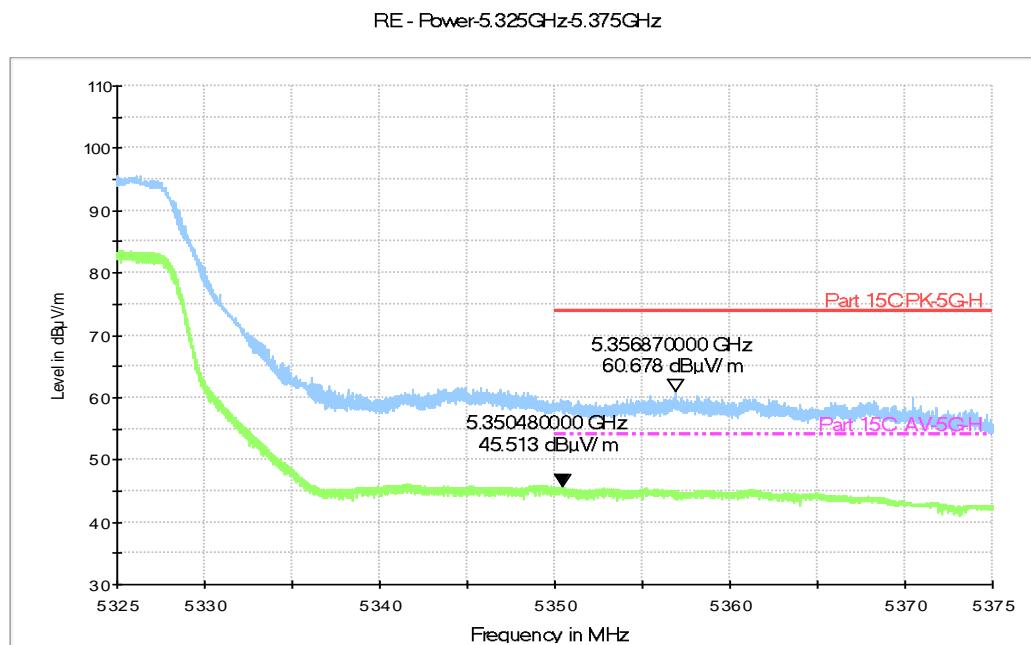

Fig. 60 Band Edges (802.11ac-HT20, 5500MHz)

RE - Power-5.7GHz-5.75GHz


Fig. 61 Band Edges (802.11ac-HT20, 5700MHz)


Fig. 62 Band Edges (802.11ac-HT40, 5190MHz)

Fig. 63 Band Edges (802.11ac-HT40, 5310MHz)


Fig. 64 Band Edges (802.11ac-HT40, 5510MHz)

Fig. 65 Band Edges (802.11ac-HT40, 5670MHz)


Fig. 66 Band Edges (802.11ac-HT80, 5210MHz)

Fig. 67 Band Edges (802.11ac-HT80, 5290MHz)

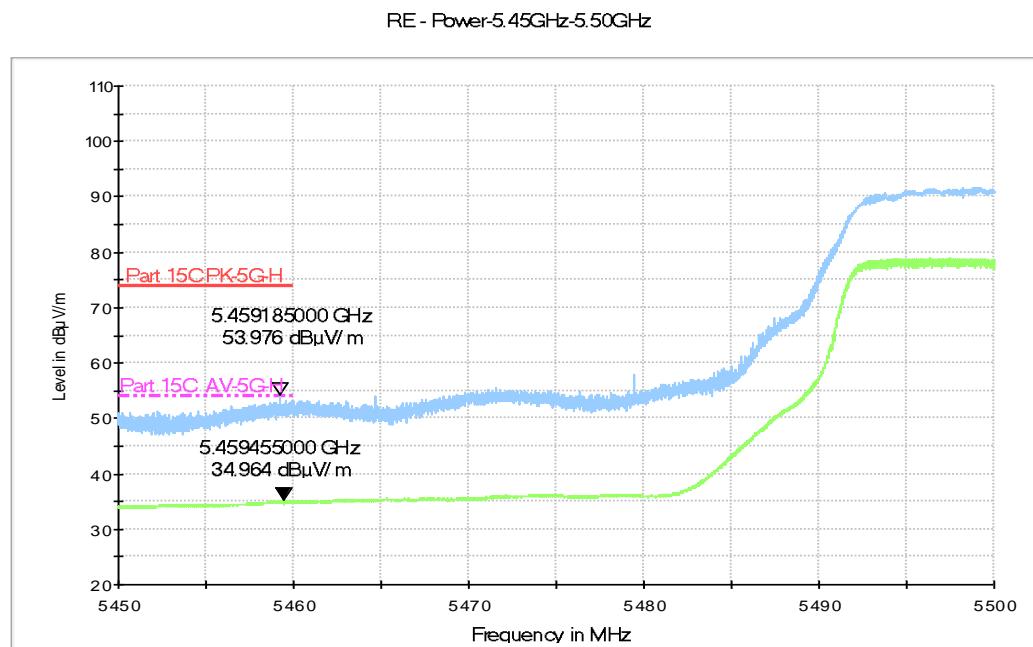


Fig. 68 Band Edges (802.11ac-HT80, 5530MHz)

A.6. Transmitter Spurious Emission

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.407	-27 dBm/MHz

The measurement is made according to KDB 789033

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

Limit in restricted band:

Frequency of emission (MHz)	Field strength(dB μ V/m)	Measurement distance(m)
30-88	40.0	3
88-216	43.5	3
216-960	46.0	3
Above 960	54.0	3

Note: for frequency range below 960MHz, the limit in 15.209 is defined in 10m test distance. The limit used above is calculated from 10m to 3m

Measurement uncertainty:

Expanded measurement uncertainty for this test item is U = 3.9dB, k=2.

Measurement Results:

Conclusion: PASS

Note:

A "reference path loss" is established and the A_{RPL} is the attenuation of "reference path loss", and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

P_{Mea} is the field strength recorded from the instrument.

The measurement results are obtained as described below:

$$\text{Result} = P_{Mea} + A_{RPL} = P_{Mea} + \text{Cable Loss} + \text{Antenna Factor}$$

AVERAGE Results:

802.11a

Channel 36

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5141.602	39.5	-32.3	34.1	37.61	54.0	14.5	H
5148.060	39.7	-32.2	34.2	37.77	54.0	14.3	H
10360.500	32.5	-30.9	37.6	25.77	54.0	21.5	H
15540.400	37.5	-25.7	40.3	22.89	54.0	16.5	H
17634.800	38.3	-25.2	41.5	22.02	54.0	15.7	H
17960.400	38.6	-25.1	41.4	22.30	54.0	15.4	H

Channel 40

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5138.860	37.3	-32.3	34.1	35.47	54.0	16.7	H
5318.200	37.9	-31.8	34.3	35.35	54.0	16.1	H
10400.100	31.9	-31.0	37.6	25.24	54.0	22.1	H
15599.800	36.3	-25.9	40.4	21.81	54.0	17.7	H
16950.600	37.5	-25.8	41.8	21.51	54.0	16.5	H
17950.500	37.3	-25.2	41.4	21.14	54.0	16.7	H

Channel 48

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5149.200	37.3	-32.2	34.2	35.34	54.0	16.7	H
5332.460	37.8	-31.7	34.3	35.24	54.0	16.2	H
10480.400	31.7	-30.9	37.7	24.92	54.0	22.3	H
15719.700	35.9	-25.8	40.6	21.12	54.0	18.1	H
16937.400	37.5	-25.8	41.8	21.55	54.0	16.5	H
17617.200	37.4	-25.2	41.5	21.15	54.0	16.6	H

Channel 52

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5244.850	37.9	-31.9	34.3	35.61	54.0	16.1	H
5356.760	39.4	-31.6	34.4	36.57	54.0	14.7	H
10520.000	32.2	-30.8	37.7	25.25	54.0	21.8	H
15780.000	35.6	-25.6	40.6	20.48	54.0	18.4	H
17738.400	37.5	-25.7	41.5	21.72	54.0	16.5	H
17955.200	37.7	-25.2	41.4	21.46	54.0	16.3	H

Channel 56

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5245.630	38.0	-31.9	34.3	35.64	54.0	16.0	H
5358.640	39.2	-31.6	34.4	36.41	54.0	14.8	H
10560.000	31.7	-30.5	37.7	24.53	54.0	22.3	H
15840.000	36.5	-25.6	40.7	21.33	54.0	17.5	H
17658.400	37.5	-25.3	41.5	21.31	54.0	16.5	H
17781.600	37.3	-25.9	41.4	21.80	54.0	16.7	H

Channel 64

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5358.840	39.7	-31.6	34.4	36.94	54.0	14.3	H
5354.210	39.4	-31.6	34.4	36.61	54.0	14.6	H
10640.000	31.4	-30.2	37.8	23.88	54.0	22.6	H
15960.000	36.3	-26.1	40.9	21.56	54.0	17.7	H
17751.200	37.3	-25.8	41.4	21.65	54.0	16.7	H
17952.800	37.7	-25.2	41.4	21.48	54.0	16.3	H

Channel 100

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5456.400	37.9	-31.4	34.5	34.80	54.0	16.1	H
5458.800	38.0	-31.4	34.5	34.89	54.0	16.0	H
11000.000	32.7	-31.0	37.9	25.83	54.0	21.3	H
16500.000	37.7	-25.8	41.5	21.99	54.0	16.3	H
16939.200	38.2	-25.8	41.8	22.26	54.0	15.8	H
17633.600	38.5	-25.2	41.5	22.18	54.0	15.5	H

Channel 120

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5546.000	39.6	-31.7	34.6	36.80	54.0	14.4	H
5648.400	39.2	-32.1	34.7	36.52	54.0	14.8	H
11200.000	33.6	-30.4	38.0	25.95	54.0	20.4	H
16800.000	37.8	-25.9	41.7	22.02	54.0	16.2	H
17640.000	38.4	-25.2	41.5	22.08	54.0	15.6	H
17954.400	38.6	-25.2	41.4	22.39	54.0	15.4	H

Channel 140

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5725.200	40.8	-32.8	34.8	38.72	54.0	13.2	H
5738.400	39.4	-32.8	34.8	37.34	54.0	14.6	H
11400.000	33.2	-30.7	38.1	25.79	54.0	20.8	H
17100.000	37.8	-26.2	41.7	22.20	54.0	16.2	H
17658.400	38.4	-25.3	41.5	22.20	54.0	15.6	H
17966.400	38.6	-25.1	41.4	22.25	54.0	15.4	H

802.11n-HT20

Channel 36

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5141.736	39.5	-32.3	34.1	37.62	54.0	14.5	H
5146.860	39.7	-32.2	34.2	37.77	54.0	14.3	H
10360.000	31.3	-30.9	37.6	24.64	54.0	22.7	H
15540.000	36.1	-25.7	40.3	21.45	54.0	17.9	H
16940.000	37.4	-25.8	41.8	21.41	54.0	16.6	H
17954.400	37.4	-25.2	41.4	21.12	54.0	16.6	H

Channel 40

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5147.630	37.3	-32.2	34.2	35.37	54.0	16.7	H
5329.570	37.7	-31.7	34.3	35.10	54.0	16.3	H
10400.000	31.6	-31.0	37.6	24.99	54.0	22.4	H
15600.000	36.4	-25.9	40.4	21.93	54.0	17.6	H
17014.400	37.3	-25.9	41.8	21.50	54.0	16.7	H
17738.400	37.2	-25.7	41.5	21.48	54.0	16.8	H

Channel 48

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5145.760	37.2	-32.2	34.2	35.32	54.0	16.8	H
5339.570	37.6	-31.7	34.3	35.00	54.0	16.4	H
10480.000	31.6	-30.9	37.7	24.80	54.0	22.4	H
15720.000	35.8	-25.8	40.6	21.06	54.0	18.2	H
16950.400	37.4	-25.8	41.8	21.45	54.0	16.6	H
17993.600	37.4	-25.0	41.4	20.97	54.0	16.6	H

Channel 52

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5208.420	39.7	-31.9	34.2	37.35	54.0	14.3	H
5358.860	39.4	-31.6	34.4	36.62	54.0	14.6	H
10520.000	32.6	-30.8	37.7	25.66	54.0	21.4	H
15780.000	36.6	-25.6	40.6	21.50	54.0	17.4	H
16944.800	38.1	-25.8	41.8	22.14	54.0	15.9	H
17636.000	38.3	-25.2	41.5	21.96	54.0	15.7	H

Channel 56

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5219.670	39.8	-31.9	34.2	37.42	54.0	14.2	H
5351.670	39.0	-31.6	34.4	36.27	54.0	15.0	H
10560.000	32.7	-30.5	37.7	25.50	54.0	21.3	H
15840.000	37.5	-25.6	40.7	22.41	54.0	16.5	H
17624.800	38.3	-25.2	41.5	22.06	54.0	15.7	H
17956.000	38.7	-25.2	41.4	22.45	54.0	15.3	H

Channel 64

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5358.820	39.4	-31.6	34.4	36.62	54.0	14.6	H
5370.000	39.2	-31.5	34.4	36.29	54.0	14.8	H
10640.000	32.4	-30.2	37.8	24.84	54.0	21.6	H
15960.000	36.9	-26.1	40.9	22.08	54.0	17.1	H
17659.200	38.2	-25.3	41.5	22.06	54.0	15.8	H
17972.800	38.5	-25.1	41.4	22.14	54.0	15.5	H

Channel 100

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5457.600	38.0	-31.4	34.5	34.95	54.0	16.0	H
5459.200	38.2	-31.4	34.5	35.08	54.0	15.8	H
11000.000	32.7	-31.0	37.9	25.79	54.0	21.3	H
16500.000	37.7	-25.8	41.5	21.97	54.0	16.3	H
16944.000	38.3	-25.8	41.8	22.33	54.0	15.7	H
17628.000	38.3	-25.2	41.5	22.03	54.0	15.7	H

Channel 120

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5561.200	38.9	-31.7	34.6	36.06	54.0	15.1	H
5663.600	37.8	-32.0	34.7	35.13	54.0	16.2	H
11200.000	33.5	-30.4	38.0	25.89	54.0	20.5	H
16800.000	37.8	-25.9	41.7	22.03	54.0	16.2	H
17008.000	38.3	-25.9	41.8	22.43	54.0	15.7	H
17949.600	38.6	-25.2	41.4	22.37	54.0	15.4	H

Channel 140

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5725.200	40.6	-32.8	34.8	38.53	54.0	13.4	H
5726.400	39.0	-32.8	34.8	36.98	54.0	15.0	H
11400.000	33.3	-30.7	38.1	25.86	54.0	20.7	H
17100.000	37.7	-26.2	41.7	22.13	54.0	16.3	H
17628.000	38.3	-25.2	41.5	22.04	54.0	15.7	H
17944.000	38.5	-25.2	41.4	22.32	54.0	15.5	H

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Channel 38

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5146.230	46.6	-32.2	34.2	44.64	54.0	7.4	H
5148.020	48.0	-32.2	34.2	46.01	54.0	6.0	H
10380.000	32.0	-30.9	37.6	25.35	54.0	22.0	H
15570.400	36.5	-25.8	40.4	21.95	54.0	17.5	H
16938.400	37.6	-25.8	41.8	21.67	54.0	16.4	H
17654.400	37.5	-25.3	41.5	21.28	54.0	16.5	H

Channel 46

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5148.670	37.8	-32.2	34.2	35.89	54.0	16.2	H
5143.780	37.0	-32.3	34.1	35.14	54.0	17.0	H
10460.000	32.1	-30.9	37.7	25.31	54.0	21.9	H
15690.400	36.2	-25.9	40.5	21.55	54.0	17.8	H
16943.200	37.7	-25.8	41.8	21.71	54.0	16.3	H
17961.600	37.6	-25.1	41.4	21.32	54.0	16.4	H

Channel 54

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5209.780	36.9	-31.9	34.2	34.60	54.0	17.1	H
5351.180	39.1	-31.6	34.4	36.41	54.0	14.9	H
10540.000	32.7	-30.6	37.7	25.60	54.0	21.3	H
15810.400	37.5	-25.5	40.7	22.27	54.0	16.5	H
16944.000	38.2	-25.8	41.8	22.24	54.0	15.8	H
17636.000	38.4	-25.2	41.5	22.06	54.0	15.7	H

Channel 62

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5354.280	50.0	-31.6	34.4	47.26	54.0	4.0	H
5354.390	49.1	-31.6	34.4	46.34	54.0	4.9	H
10620.000	32.7	-30.1	37.7	25.05	54.0	21.3	H
15930.400	36.9	-25.9	40.8	22.06	54.0	17.1	H
17614.400	38.3	-25.2	41.5	22.06	54.0	15.7	H
17948.000	38.5	-25.2	41.4	22.28	54.0	15.5	H

Channel 102

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5454.400	38.5	-31.4	34.5	35.35	54.0	15.5	H
5460.000	39.4	-31.4	34.5	36.28	54.0	14.7	H
11020.000	33.1	-31.0	37.9	26.22	54.0	20.9	H
16530.400	37.6	-25.8	41.5	21.85	54.0	16.4	H
17655.200	38.4	-25.3	41.5	22.25	54.0	15.6	H
17950.400	38.6	-25.2	41.4	22.35	54.0	15.4	H

Channel 118

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5535.600	38.5	-31.7	34.6	35.68	54.0	15.5	H
5656.000	38.5	-32.0	34.7	35.82	54.0	15.5	H
11180.000	33.6	-30.4	38.0	25.99	54.0	20.4	H
16770.400	37.6	-26.0	41.7	21.92	54.0	16.4	H
16944.000	38.3	-25.8	41.8	22.31	54.0	15.7	H
17616.800	38.5	-25.2	41.5	22.21	54.0	15.5	H

Channel 134

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5725.200	37.5	-32.8	34.8	35.46	54.0	16.5	H
5730.400	37.2	-32.8	34.8	35.18	54.0	16.8	H
11340.000	33.3	-30.6	38.1	25.87	54.0	20.7	H
17010.400	38.1	-25.9	41.8	22.29	54.0	15.9	H
17659.200	38.5	-25.3	41.5	22.29	54.0	15.5	H
17961.600	38.6	-25.1	41.4	22.28	54.0	15.4	H

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Channel 36

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5143.560	39.5	-32.3	34.1	37.62	54.0	14.5	H
5147.690	39.7	-32.2	34.2	37.80	54.0	14.3	H
10360.000	31.4	-30.9	37.6	24.70	54.0	22.6	H
15540.000	36.1	-25.7	40.3	21.46	54.0	17.9	H
17012.000	37.4	-25.9	41.8	21.51	54.0	16.6	H
17951.200	37.4	-25.2	41.4	21.16	54.0	16.6	H

Channel 40

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5142.380	37.3	-32.3	34.1	35.43	54.0	16.7	H
5338.640	37.7	-31.7	34.3	35.09	54.0	16.3	H
10400.000	31.7	-31.0	37.6	25.04	54.0	22.3	H
15600.000	36.3	-25.9	40.4	21.83	54.0	17.7	H
16944.000	37.5	-25.8	41.8	21.49	54.0	16.5	H
17968.800	37.4	-25.1	41.4	21.12	54.0	16.6	H

Channel 48

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5141.480	37.3	-32.3	34.1	35.43	54.0	16.7	H
5331.860	37.4	-31.7	34.3	34.82	54.0	16.6	H
10480.000	31.7	-30.9	37.7	24.95	54.0	22.3	H
15720.000	35.9	-25.8	40.6	21.10	54.0	18.1	H
16932.800	37.4	-25.8	41.8	21.47	54.0	16.6	H
17581.600	37.4	-25.4	41.5	21.26	54.0	16.6	H

Channel 52

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5211.570	37.4	-31.9	34.2	35.04	54.0	16.6	H
5358.620	38.0	-31.6	34.4	35.22	54.0	16.0	H
10520.000	32.6	-30.8	37.7	25.68	54.0	21.4	H
15780.000	36.7	-25.6	40.6	21.60	54.0	17.3	H
16944.000	38.2	-25.8	41.8	22.24	54.0	15.8	H
17957.600	38.6	-25.2	41.4	22.31	54.0	15.4	H

Channel 56

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5204.690	37.2	-31.9	34.2	34.84	54.0	16.8	H
5358.640	38.2	-31.6	34.4	35.41	54.0	15.8	H
10560.000	32.8	-30.5	37.7	25.56	54.0	21.2	H
15840.000	37.6	-25.6	40.7	22.45	54.0	16.4	H
17640.800	38.3	-25.2	41.5	22.06	54.0	15.7	H
17949.600	38.6	-25.2	41.4	22.35	54.0	15.4	H

Channel 64

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5352.120	38.0	-31.6	34.4	35.29	54.0	16.0	H
5365.620	38.1	-31.5	34.4	35.28	54.0	15.9	H
10640.000	32.4	-30.2	37.8	24.89	54.0	21.6	H
15960.000	36.9	-26.1	40.9	22.11	54.0	17.1	H
17038.400	38.0	-26.0	41.8	22.19	54.0	16.0	H
17616.800	38.4	-25.2	41.5	22.13	54.0	15.6	H

Channel 100

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5456.800	37.2	-31.4	34.5	34.08	54.0	16.8	H
5460.000	37.3	-31.4	34.5	34.21	54.0	16.7	H
11000.000	32.9	-31.0	37.9	25.97	54.0	21.1	H
16500.000	37.7	-25.8	41.5	21.98	54.0	16.3	H
16944.000	38.3	-25.8	41.8	22.34	54.0	15.7	H
17648.800	38.3	-25.2	41.5	22.11	54.0	15.7	H

Channel 120

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5568.000	37.9	-31.8	34.6	35.08	54.0	16.1	H
5630.000	37.9	-31.8	34.6	34.93	54.0	16.1	H
11200.000	37.9	-31.8	34.6	25.91	54.0	16.1	H
16800.000	37.9	-31.8	34.6	22.04	54.0	16.1	H
17015.200	37.9	-31.8	34.6	22.39	54.0	16.1	H
17948.000	37.9	-31.8	34.6	22.38	54.0	16.1	H

Channel 140

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5725.200	36.9	-32.8	34.8	34.87	54.0	17.1	H
5753.200	36.9	-32.7	34.9	34.73	54.0	17.1	H
11400.000	33.4	-30.7	38.1	25.94	54.0	20.6	H
17100.000	37.8	-26.2	41.7	22.20	54.0	16.2	H
17648.800	38.3	-25.2	41.5	22.11	54.0	15.7	H
17967.200	38.6	-25.1	41.4	22.25	54.0	15.4	H

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Channel 38

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5148.020	43.6	-32.2	34.2	41.64	54.0	10.4	H
5149.230	44.2	-32.2	34.2	42.25	54.0	9.8	H
10380.000	31.8	-30.9	37.6	25.18	54.0	22.2	H
15570.400	36.4	-25.8	40.4	21.85	54.0	17.6	H
17615.200	37.3	-25.2	41.5	21.11	54.0	16.7	H
17950.400	37.5	-25.2	41.4	21.30	54.0	16.5	H

Channel 46

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5146.830	37.3	-32.2	34.2	35.36	54.0	16.7	H
5148.270	37.2	-32.2	34.2	35.29	54.0	16.8	H
10460.000	31.9	-30.9	37.7	25.18	54.0	22.1	H
15690.400	36.0	-25.9	40.5	21.35	54.0	18.0	H
17656.800	38.5	-25.3	41.5	22.33	54.0	15.5	H
17956.800	37.6	-25.2	41.4	21.30	54.0	16.5	H

Channel 54

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5216.980	36.9	-31.9	34.2	34.57	54.0	17.1	H
5354.380	39.9	-31.6	34.4	37.12	54.0	14.1	H
10540.000	32.7	-30.6	37.7	25.62	54.0	21.3	H
15810.400	37.4	-25.5	40.7	22.20	54.0	16.6	H
16949.600	38.3	-25.8	41.8	22.30	54.0	15.7	H
17656.000	38.4	-25.3	41.5	22.17	54.0	15.6	H

Channel 62

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5352.030	46.5	-31.6	34.4	43.79	54.0	7.5	H
5356.340	45.8	-31.6	34.4	43.00	54.0	8.2	H
10620.000	32.5	-30.1	37.7	24.94	54.0	21.5	H
15930.400	36.9	-25.9	40.8	22.03	54.0	17.1	H
17614.400	38.2	-25.2	41.5	21.99	54.0	15.8	H
17956.000	38.6	-25.2	41.4	22.37	54.0	15.4	H

Channel 102

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5452.000	37.2	-31.3	34.5	34.08	54.0	16.8	H
5458.800	37.2	-31.4	34.5	34.09	54.0	16.8	H
11020.000	33.2	-31.0	37.9	26.31	54.0	20.8	H
16530.400	37.6	-25.8	41.5	21.93	54.0	16.4	H
16950.400	38.4	-25.8	41.8	22.39	54.0	15.6	H
17631.200	38.3	-25.2	41.5	22.00	54.0	15.7	H

Channel 118

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5580.000	40.5	-31.9	34.6	37.71	54.0	13.5	H
5622.800	40.1	-32.1	34.7	37.52	54.0	13.9	H
11180.000	33.5	-30.4	38.0	25.91	54.0	20.5	H
16770.400	37.6	-26.0	41.7	21.94	54.0	16.4	H
17660.000	38.4	-25.3	41.5	22.27	54.0	15.6	H
17954.400	38.6	-25.2	41.4	22.36	54.0	15.4	H

Channel 134

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5725.200	37.2	-32.8	34.8	35.17	54.0	16.8	H
5747.200	37.2	-32.7	34.9	35.01	54.0	16.8	H
11340.000	33.4	-30.6	38.1	25.96	54.0	20.6	H
17010.400	38.2	-25.9	41.8	22.33	54.0	15.8	H
17633.600	38.4	-25.2	41.5	22.11	54.0	15.6	H
17954.400	38.6	-25.2	41.4	22.36	54.0	15.4	H

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Channel 42

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5158.800	46.3	-32.1	34.2	44.21	54.0	7.7	H
5154.020	46.1	-32.1	34.2	44.11	54.0	7.9	H
10420.000	32.5	-31.0	37.6	25.85	54.0	21.5	H
15630.400	36.3	-26.0	40.5	21.84	54.0	17.7	H
15816.000	37.7	-25.5	40.7	22.52	54.0	16.3	H
17649.600	38.4	-25.2	41.5	22.16	54.0	15.6	H

Channel 58

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5352.810	44.0	-31.6	34.4	41.24	54.0	10.0	H
5361.630	43.9	-31.5	34.4	41.08	54.0	10.1	H
10580.000	33.2	-30.4	37.7	25.87	54.0	20.8	H
15870.400	37.5	-25.7	40.7	22.46	54.0	16.5	H
16932.000	38.2	-25.8	41.8	22.23	54.0	15.8	H
17639.200	38.4	-25.2	41.5	22.15	54.0	15.6	H

Channel 106

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5459.620	37.8	-31.4	34.5	34.78	54.0	16.2	H
5452.860	37.6	-31.3	34.5	34.51	54.0	16.4	H
11060.000	33.2	-30.9	37.9	26.13	54.0	20.8	H
16590.400	37.4	-25.8	41.6	21.64	54.0	16.6	H
17658.400	38.5	-25.3	41.5	22.33	54.0	15.5	H
17954.400	38.7	-25.2	41.4	22.44	54.0	15.3	H

PEAK Results:
802.11a

Channel 36

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5132.365	66.5	-32.4	34.1	64.74	74.0	7.5	H
5140.165	63.0	-32.3	34.1	61.12	74.0	11.0	H
10359.950	46.2	-30.9	37.6	39.53	74.0	27.8	H
15539.850	51.6	-25.7	40.3	37.04	74.0	22.4	V
16269.700	55.1	-25.6	41.2	39.51	74.0	18.9	H
17976.350	56.4	-25.0	41.4	40.08	74.0	17.6	H

Channel 40

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5132.040	54.6	-32.4	34.1	52.86	74.0	19.4	H
5269.320	56.1	-31.9	34.3	53.74	74.0	17.9	H
10400.100	44.1	-31.0	37.6	37.49	74.0	29.9	H
15599.800	50.8	-25.9	40.4	36.36	74.0	23.2	H
17968.100	55.3	-25.1	41.4	38.99	74.0	18.7	H
17652.400	54.5	-25.3	41.5	38.29	74.0	19.5	V

Channel 48

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5146.200	56.5	-32.2	34.2	54.53	74.0	17.5	H
5263.140	56.3	-31.9	34.3	53.99	74.0	17.7	H
10479.850	44.6	-30.9	37.7	37.79	74.0	29.4	V
15720.250	51.2	-25.8	40.6	36.47	74.0	22.8	V
16680.000	54.5	-25.9	41.6	38.78	74.0	19.5	H
17518.000	54.5	-25.7	41.5	38.66	74.0	19.5	H

Channel 52

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5185.670	53.8	-31.8	34.2	51.47	74.0	20.2	H
5338.640	53.8	-31.7	34.3	51.21	74.0	20.2	H
10520.000	45.5	-30.8	37.7	38.56	74.0	28.5	V
15780.200	50.4	-25.6	40.6	35.32	74.0	23.6	H
17035.300	55.6	-26.0	41.8	39.82	74.0	18.4	H
17947.750	55.2	-25.2	41.4	39.01	74.0	18.8	H

Channel 56

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5213.637	55.0	-31.9	34.2	52.64	74.0	19.0	H
5354.030	55.5	-31.6	34.4	52.70	74.0	18.5	H
10560.150	46.1	-30.5	37.7	38.90	74.0	27.9	V
15840.150	51.6	-25.6	40.7	36.50	74.0	22.4	H
16904.400	55.9	-25.8	41.7	40.03	74.0	18.1	V
17977.450	56.6	-25.0	41.4	40.22	74.0	17.4	V

Channel 64

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5351.975	63.8	-31.6	34.4	61.07	74.0	10.2	H
5351.350	63.4	-31.6	34.4	60.65	74.0	10.6	H
10639.900	45.3	-30.2	37.8	37.75	74.0	28.7	H
15960.050	52.4	-26.1	40.9	37.65	74.0	21.6	V
17041.900	55.5	-26.0	41.8	39.78	74.0	18.5	V
17673.300	55.7	-25.4	41.5	39.55	74.0	18.3	H

Channel 100

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5458.275	53.0	-31.4	34.5	49.94	74.0	21.0	H
5459.385	54.0	-31.4	34.5	50.88	74.0	20.1	H
11000.150	47.0	-31.0	37.9	40.11	74.0	27.0	V
16500.150	53.0	-25.8	41.5	37.32	74.0	21.0	H
17237.700	55.4	-26.2	41.7	39.94	74.0	18.6	V
17949.950	55.8	-25.2	41.4	39.62	74.0	18.2	V

Channel 120

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5553.400	54.6	-31.7	34.6	51.73	74.0	19.4	H
5642.800	51.4	-32.1	34.7	48.80	74.0	22.6	H
11199.800	46.7	-30.4	38.0	39.08	74.0	27.3	V
16799.900	52.6	-25.9	41.7	36.85	74.0	21.4	H
16921.450	55.7	-25.8	41.8	39.76	74.0	18.3	V
17496.750	55.3	-25.7	41.5	39.53	74.0	18.7	V

Channel 140

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5725.000	56.8	-32.8	34.8	54.75	74.0	17.2	H
5739.760	57.2	-32.7	34.8	55.05	74.0	16.8	H
11400.000	45.2	-30.7	38.1	37.76	74.0	28.8	H
16369.800	55.6	-25.7	41.3	39.91	74.0	18.4	H
17100.200	52.7	-26.2	41.7	37.13	74.0	21.3	H
17419.200	56.5	-26.0	41.5	40.89	74.0	17.5	H

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Channel 36

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5146.550	67.1	-32.2	34.2	65.13	74.0	6.9	H
5148.162	67.2	-32.2	34.2	65.22	74.0	6.8	H
10359.950	44.8	-30.9	37.6	38.07	74.0	29.2	V
15539.850	50.7	-25.7	40.3	36.09	74.0	23.3	H
16161.900	54.9	-25.8	41.1	39.60	74.0	19.1	V
17503.350	54.7	-25.7	41.5	38.92	74.0	19.3	H

Channel 40

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5146.800	53.9	-32.2	34.2	51.97	74.0	20.1	H
5258.630	53.0	-31.9	34.3	50.68	74.0	21.0	H
10400.100	44.6	-31.0	37.6	38.00	74.0	29.4	V
15599.800	50.7	-25.9	40.4	36.17	74.0	23.3	H
17219.550	54.6	-26.2	41.7	39.11	74.0	19.4	V
17989.550	54.5	-25.0	41.4	38.07	74.0	19.5	H

Channel 48

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5139.400	54.6	-32.3	34.1	52.80	74.0	19.4	H
5277.600	54.3	-31.9	34.3	51.96	74.0	19.7	H
10479.850	45.3	-30.9	37.7	38.48	74.0	28.7	H
15720.250	50.8	-25.8	40.6	36.03	74.0	23.2	V
16993.500	55.1	-25.9	41.8	39.20	74.0	18.9	V
16921.450	54.6	-25.8	41.8	38.66	74.0	19.4	H

Channel 52

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5184.230	51.2	-31.8	34.2	48.85	74.0	22.8	H
5348.250	50.0	-31.6	34.4	47.28	74.0	24.0	H
10520.000	45.6	-30.8	37.7	38.67	74.0	28.4	H
15780.200	51.5	-25.6	40.6	36.36	74.0	22.5	V
16683.300	55.2	-25.9	41.6	39.50	74.0	18.8	H
17941.700	55.5	-25.3	41.4	39.33	74.0	18.5	H

Channel 56

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5205.630	52.6	-31.9	34.2	50.26	74.0	21.4	H
5373.450	51.9	-31.4	34.4	48.99	74.0	22.1	H
10560.150	45.5	-30.5	37.7	38.28	74.0	28.5	H
15840.150	51.5	-25.6	40.7	36.36	74.0	22.5	H
16834.550	55.7	-25.9	41.7	39.92	74.0	18.3	V
17060.050	56.3	-26.1	41.8	40.59	74.0	17.7	H

Channel 64

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5350.632	62.7	-31.6	34.4	59.98	74.0	11.3	H
5363.420	67.3	-31.5	34.4	64.44	74.0	6.7	H
10639.900	44.7	-30.2	37.8	37.19	74.0	29.3	V
15960.050	51.3	-26.1	40.9	36.53	74.0	22.7	V
16420.400	56.1	-25.8	41.4	40.48	74.0	17.9	H
17893.850	55.7	-25.5	41.4	39.78	74.0	18.3	V

Channel 100

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5458.915	63.5	-31.4	34.5	60.44	74.0	10.5	H
5459.705	59.9	-31.4	34.5	56.78	74.0	14.2	H
11000.150	45.5	-31.0	37.9	38.61	74.0	28.5	V
16500.150	52.5	-25.8	41.5	36.82	74.0	21.5	H
17000.650	55.2	-25.9	41.8	39.30	74.0	18.8	V
17875.700	55.3	-25.6	41.4	39.51	74.0	18.7	V

Channel 120

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5560.800	60.6	-31.7	34.6	57.78	74.0	13.4	H
5634.600	57.1	-32.1	34.7	54.52	74.0	16.9	H
11199.800	46.5	-30.4	38.0	38.88	74.0	27.5	V
16799.900	52.8	-25.9	41.7	37.06	74.0	21.2	V
17661.750	55.4	-25.3	41.5	39.27	74.0	18.6	H
17953.250	55.2	-25.2	41.4	38.94	74.0	18.8	H

Channel 140

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5726.140	59.7	-32.8	34.8	57.64	74.0	14.3	H
5727.200	59.4	-32.8	34.8	57.33	74.0	14.6	V
11400.000	46.5	-30.7	38.1	39.09	74.0	27.5	H
16678.350	55.7	-25.9	41.6	39.98	74.0	18.3	H
17100.200	52.8	-26.2	41.7	37.20	74.0	21.2	H
17524.800	55.8	-25.6	41.5	39.92	74.0	18.2	H

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Channel 38

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5147.723	65.8	-32.2	34.2	63.85	74.0	8.2	H
5149.695	66.0	-32.2	34.2	64.05	74.0	8.0	H
10379.750	44.0	-30.9	37.6	37.34	74.0	30.0	V
15570.100	50.1	-25.8	40.4	35.52	74.0	23.9	V
17685.400	55.0	-25.4	41.5	38.96	74.0	19.0	V
17079.300	54.9	-26.1	41.8	39.25	74.0	19.1	H

Channel 46

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5141.460	53.6	-32.3	34.1	51.74	74.0	20.4	H
5326.170	54.6	-31.8	34.3	52.04	74.0	19.4	H
10460.050	45.7	-30.9	37.7	38.93	74.0	28.3	V
15690.000	50.5	-25.9	40.5	35.90	74.0	23.5	V
16983.050	55.2	-25.9	41.8	39.29	74.0	18.8	V
17136.500	54.8	-26.2	41.7	39.27	74.0	19.2	V

Channel 54

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5191.800	51.6	-31.8	34.2	49.20	74.0	22.4	H
5362.230	52.9	-31.5	34.4	50.10	74.0	21.1	H
10539.800	45.6	-30.6	37.7	38.57	74.0	28.4	H
15809.900	51.3	-25.5	40.7	36.08	74.0	22.7	V
17650.200	56.2	-25.3	41.5	39.96	74.0	17.8	H
17962.050	55.7	-25.1	41.4	39.39	74.0	18.3	V

Channel 62

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5353.660	67.5	-31.6	34.4	64.79	74.0	6.5	H
5352.920	66.9	-31.6	34.4	64.17	74.0	7.1	H
10620.100	44.7	-30.1	37.7	37.14	74.0	29.3	V
15929.800	52.7	-25.9	40.8	37.82	74.0	21.3	V
17446.150	55.5	-25.9	41.5	39.92	74.0	18.5	H
17888.350	56.3	-25.6	41.4	40.47	74.0	17.7	V

Channel 102

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5451.970	59.3	-31.3	34.5	56.22	74.0	14.7	H
5458.125	59.6	-31.4	34.5	56.54	74.0	14.4	H
11019.950	46.0	-31.0	37.9	39.07	74.0	28.0	V
16529.850	54.2	-25.8	41.5	38.52	74.0	19.8	H
17659.000	55.5	-25.3	41.5	39.28	74.0	18.5	H
17971.950	55.7	-25.1	41.4	39.32	74.0	18.3	H

Channel 118

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5514.400	55.2	-31.7	34.5	52.39	74.0	18.8	H
5677.600	55.7	-32.1	34.8	53.01	74.0	18.3	H
11180.000	46.2	-30.4	38.0	38.62	74.0	27.8	V
16770.200	52.8	-26.0	41.7	37.10	74.0	21.2	H
16997.900	55.3	-25.9	41.8	39.43	74.0	18.7	V
17492.900	55.2	-25.8	41.5	39.48	74.0	18.8	V

Channel 134

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5727.040	59.2	-32.8	34.8	57.22	74.0	14.8	H
5728.560	58.7	-32.8	34.8	56.72	74.0	15.3	H
11340.050	45.4	-30.6	38.1	37.96	74.0	28.6	H
17010.000	52.1	-25.9	41.8	36.20	74.0	21.9	V
17533.050	56.0	-25.6	41.5	40.05	74.0	18.0	V
17617.200	55.7	-25.2	41.5	39.47	74.0	18.3	V

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Channel 36

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5145.065	58.6	-32.2	34.2	56.69	74.0	15.4	V
5149.680	58.9	-32.2	34.2	56.92	74.0	15.1	H
10359.950	45.8	-30.9	37.6	39.08	74.0	28.2	V
15539.850	50.8	-25.7	40.3	36.17	74.0	23.2	H
16801.550	55.9	-25.9	41.7	40.16	74.0	18.1	H
17991.200	55.3	-25.0	41.4	38.87	74.0	18.7	V

Channel 40

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5140.830	53.9	-32.3	34.1	52.03	74.0	20.1	H
5266.460	53.4	-31.9	34.3	51.08	74.0	20.6	V
10400.100	44.8	-31.0	37.6	38.21	74.0	29.2	H
15599.800	50.3	-25.9	40.4	35.83	74.0	23.7	V
17567.150	54.6	-25.4	41.5	38.56	74.0	19.4	V
17815.200	54.5	-26.0	41.4	39.07	74.0	19.5	V

Channel 48

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5165.610	50.8	-32.0	34.2	48.62	74.0	23.2	H
5316.590	51.3	-31.8	34.3	48.78	74.0	22.7	V
10479.850	45.2	-30.9	37.7	38.38	74.0	28.8	V
15720.250	51.0	-25.8	40.6	36.22	74.0	23.0	V
16963.250	54.7	-25.8	41.8	38.75	74.0	19.3	V
17814.650	54.6	-26.0	41.4	39.17	74.0	19.4	V

Channel 52

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5198.800	53.3	-31.9	34.2	50.98	74.0	20.7	H
5321.481	54.5	-31.8	34.3	51.94	74.0	19.5	H
10520.000	46.4	-30.8	37.7	39.50	74.0	27.6	H
15780.200	51.4	-25.6	40.6	36.31	74.0	22.6	V
16981.400	55.1	-25.9	41.8	39.19	74.0	18.9	H
17585.850	55.2	-25.4	41.5	39.08	74.0	18.8	H

Channel 56

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5221.480	54.0	-31.9	34.2	51.67	74.0	20.0	H
5350.600	54.0	-31.6	34.4	51.25	74.0	20.0	H
10560.150	45.5	-30.5	37.7	38.32	74.0	28.5	V
15840.150	51.7	-25.6	40.7	36.60	74.0	22.3	H
17002.300	55.1	-25.9	41.8	39.24	74.0	18.9	H
17659.000	55.8	-25.3	41.5	39.62	74.0	18.2	V

Channel 64

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5352.654	58.8	-31.6	34.4	56.07	74.0	15.2	H
5358.125	67.0	-31.6	34.4	64.18	74.0	7.0	H
10639.900	45.7	-30.2	37.8	38.13	74.0	28.3	H
15960.050	51.5	-26.1	40.9	36.72	74.0	22.5	H
16948.950	55.4	-25.8	41.8	39.42	74.0	18.6	H
17605.650	55.6	-25.3	41.5	39.45	74.0	18.4	H

Channel 100

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5458.285	54.3	-31.4	34.5	51.26	74.0	19.7	H
5459.595	54.0	-31.4	34.5	50.90	74.0	20.0	H
11000.150	45.4	-31.0	37.9	38.50	74.0	28.6	V
16500.150	54.5	-25.8	41.5	38.84	74.0	19.5	V
16951.150	55.8	-25.8	41.8	39.79	74.0	18.2	V
17552.850	55.7	-25.5	41.5	39.76	74.0	18.3	V

Channel 120

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5552.800	53.8	-31.7	34.6	50.99	74.0	20.2	H
5647.400	54.0	-32.1	34.7	51.33	74.0	20.0	H
11199.800	47.5	-30.4	38.0	39.86	74.0	26.5	H
16799.900	51.9	-25.9	41.7	36.20	74.0	22.1	H
17605.100	55.5	-25.3	41.5	39.34	74.0	18.5	H
17655.150	56.0	-25.3	41.5	39.84	74.0	18.0	V

Channel 140

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5725.040	55.2	-32.8	34.8	53.17	74.0	18.8	H
5726.760	58.3	-32.8	34.8	56.29	74.0	15.7	H
11400.000	45.5	-30.7	38.1	38.04	74.0	28.5	V
17100.200	52.6	-26.2	41.7	37.00	74.0	21.4	V
17772.850	56.4	-25.9	41.4	40.85	74.0	17.6	V
17929.600	56.1	-25.3	41.4	40.01	74.0	17.9	V

802.11ac-HT40

Channel 38

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5130.525	60.3	-32.4	34.1	58.54	74.0	13.7	H
5137.870	62.0	-32.3	34.1	60.12	74.0	12.0	H
10379.750	44.4	-30.9	37.6	37.77	74.0	29.6	H
15570.100	51.8	-25.8	40.4	37.29	74.0	22.2	V
17054.550	55.3	-26.0	41.8	39.58	74.0	18.7	V
17963.150	55.0	-25.1	41.4	38.72	74.0	19.0	V

Channel 46

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5156.840	54.7	-32.1	34.2	52.63	74.0	19.3	H
5318.882	53.9	-31.8	34.3	51.36	74.0	20.1	H
10460.050	44.4	-30.9	37.7	37.70	74.0	29.6	V
15690.000	52.0	-25.9	40.5	37.41	74.0	22.0	H
17099.100	55.3	-26.1	41.7	39.71	74.0	18.7	V
17039.150	55.2	-26.0	41.8	39.43	74.0	18.8	H

Channel 54

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5209.410	55.3	-31.9	34.2	52.99	74.0	18.7	H
5351.640	56.2	-31.6	34.4	53.47	74.0	17.8	H
10539.800	46.2	-30.6	37.7	39.15	74.0	27.8	V
15809.900	52.3	-25.5	40.7	37.07	74.0	21.7	H
17502.800	55.6	-25.7	41.5	39.86	74.0	18.4	V
17605.100	55.6	-25.3	41.5	39.43	74.0	18.4	V

Channel 62

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5352.035	63.7	-31.6	34.4	60.91	74.0	10.4	H
5352.980	64.0	-31.6	34.4	61.21	74.0	10.0	H
10620.100	45.1	-30.1	37.7	37.51	74.0	28.9	H
15929.800	51.3	-25.9	40.8	36.43	74.0	22.7	V
16485.300	55.5	-25.8	41.5	39.82	74.0	18.5	V
17901.000	55.6	-25.5	41.4	39.69	74.0	18.4	H

Channel 102

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5457.875	55.0	-31.4	34.5	51.88	74.0	19.0	V
5458.400	55.3	-31.4	34.5	52.19	74.0	18.7	H
11019.950	46.1	-31.0	37.9	39.14	74.0	27.9	V
16529.850	54.2	-25.8	41.5	38.47	74.0	19.8	H
16638.200	55.6	-25.9	41.6	39.85	74.0	18.4	V
17950.500	55.7	-25.2	41.4	39.46	74.0	18.3	V

Channel 118

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5547.000	53.9	-31.7	34.6	51.07	74.0	20.1	V
5642.200	53.8	-32.1	34.7	51.18	74.0	20.2	H
11180.000	47.1	-30.4	38.0	39.55	74.0	26.9	V
16770.200	52.0	-26.0	41.7	36.30	74.0	22.0	H
16940.700	55.4	-25.8	41.8	39.43	74.0	18.6	H
17991.750	55.8	-25.0	41.4	39.38	74.0	18.2	V

Channel 134

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5727.960	58.4	-32.8	34.8	56.36	74.0	15.6	V
5730.880	58.4	-32.8	34.8	56.35	74.0	15.6	H
11340.050	45.6	-30.6	38.1	38.15	74.0	28.4	H
16898.350	56.0	-25.8	41.7	40.08	74.0	18.0	V
17010.000	52.6	-25.9	41.8	36.79	74.0	21.4	V
17648.000	55.4	-25.2	41.5	39.13	74.0	18.6	H

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Channel 42

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5145.280	61.4	-32.2	34.2	59.48	74.0	12.6	H
5149.472	61.7	-32.2	34.2	59.76	74.0	12.3	H
10419.900	44.8	-31.0	37.6	38.13	74.0	29.2	H
15630.050	50.5	-26.0	40.5	36.03	74.0	23.5	V
16310.400	55.3	-25.7	41.3	39.68	74.0	18.7	V
17296.550	55.3	-26.2	41.6	39.88	74.0	18.7	V

Channel 58

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5356.870	60.7	-31.6	34.4	57.89	74.0	13.3	V
5358.115	60.2	-31.6	34.4	57.37	74.0	13.8	H
10579.950	46.0	-30.4	37.7	38.66	74.0	28.0	H
15869.850	51.4	-25.7	40.7	36.32	74.0	22.6	V
16818.050	55.1	-25.9	41.7	39.34	74.0	18.9	V
17622.150	55.4	-25.2	41.5	39.12	74.0	18.6	H

Channel 106

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5459.185	54.0	-31.4	34.5	50.90	74.0	20.0	V
5458.665	52.9	-31.4	34.5	49.83	74.0	21.1	H
11060.100	45.9	-30.9	37.9	38.85	74.0	28.1	H
16530.950	55.3	-25.8	41.5	39.56	74.0	18.7	H
16589.800	52.0	-25.8	41.6	36.23	74.0	22.0	H
17577.600	55.5	-25.4	41.5	39.37	74.0	18.5	V

Sample calculation: 802.11ac 80MHz CH106-Peak, 5457.825 MHz

Peak ERP(dBm) = P_{Mea}(62.5 dB μ V/m) + Cable Loss(-34.9) + Antenna Factor(34.6) = 62.2 dB μ V/m

A.7. Spurious Emissions Radiated (150kHz- 30MHz)

Test Condition:

Voltage (V)	Frequency (Hz)
110	60

Measurement uncertainty:

Expanded measurement uncertainty for this test item is U =3.2dB, 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			
		11a mode	Idle		
0.15 to 0.5	66 to 56				
0.5 to 5	56	Fig. 69	Fig. 70	P	
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.

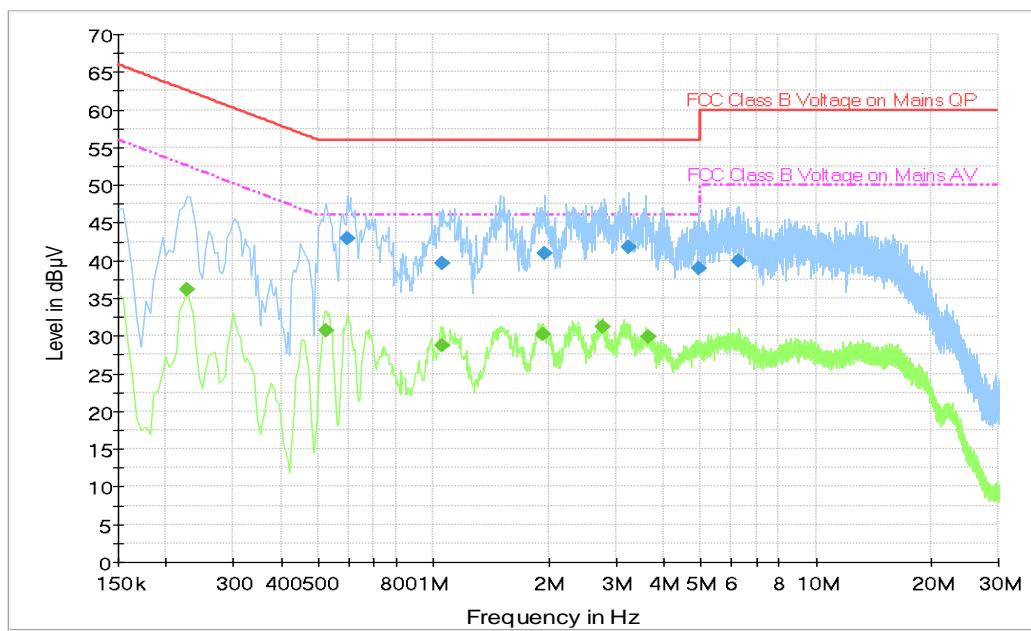
WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dB μ V)	Result (dB μ V)		Conclusion	
		With charger			
		11a mode	Idle		
0.15 to 0.5	56 to 46				
0.5 to 5	46	Fig. 69	Fig. 70	P	
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

Test graphs as below:

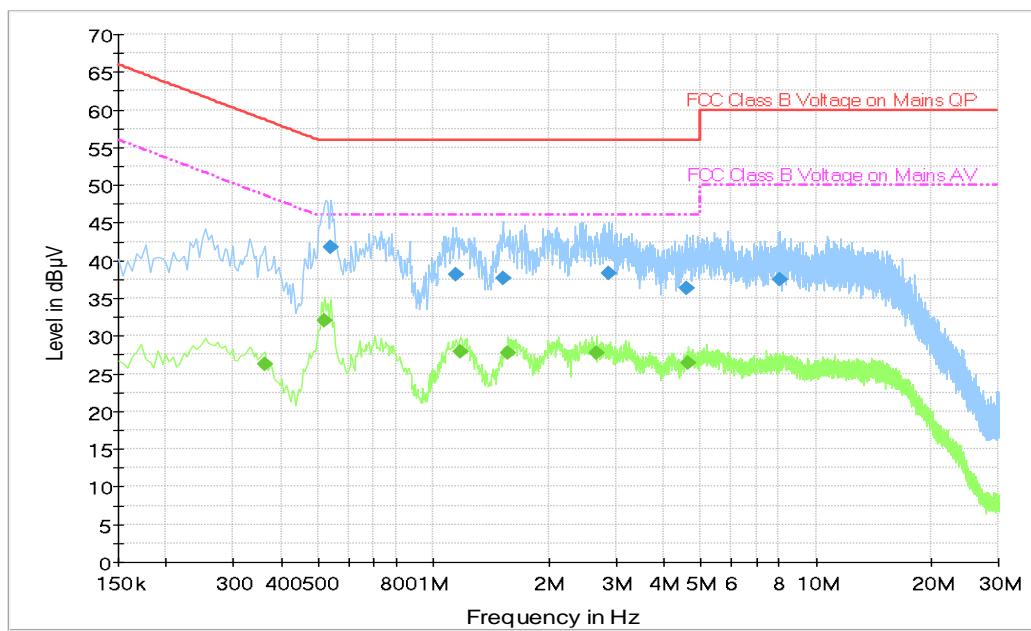

Fig. 69 Conducted Emission(802.11a, Ch40, TX)

Final Result 1

Frequency (MHz)	QuasiPeak (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.595500	43.0	2000.0	9.000	On	L1	19.8	13.0	56.0
1.059000	39.7	2000.0	9.000	On	L1	19.6	16.3	56.0
1.954500	41.0	2000.0	9.000	On	L1	19.7	15.0	56.0
3.237000	41.7	2000.0	9.000	On	L1	19.7	14.3	56.0
4.951500	39.0	2000.0	9.000	On	L1	19.6	17.0	56.0
6.306000	39.9	2000.0	9.000	On	L1	19.8	20.1	60.0

Final Result 2

Frequency (MHz)	Average (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.226500	36.2	2000.0	9.000	On	L1	19.8	16.4	52.6
0.523500	30.7	2000.0	9.000	On	L1	19.9	15.3	46.0
1.050000	28.7	2000.0	9.000	On	L1	19.6	17.3	46.0
1.941000	30.2	2000.0	9.000	On	L1	19.7	15.8	46.0
2.778000	31.2	2000.0	9.000	On	L1	19.7	14.8	46.0
3.646500	29.8	2000.0	9.000	On	L1	19.6	16.2	46.0


Fig. 70 Conducted Emission(802.11a, IDLE)

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.537000	41.8	2000.0	9.000	On	L1	19.9	14.2	56.0
1.149000	38.1	2000.0	9.000	On	L1	19.6	17.9	56.0
1.518000	37.6	2000.0	9.000	On	L1	19.7	18.4	56.0
2.872500	38.3	2000.0	9.000	On	L1	19.7	17.7	56.0
4.600500	36.4	2000.0	9.000	On	L1	19.6	19.6	56.0
8.016000	37.4	2000.0	9.000	On	L1	19.8	22.6	60.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.361500	26.3	2000.0	9.000	On	L1	19.8	22.4	48.7
0.519000	32.1	2000.0	9.000	On	L1	19.9	13.9	46.0
1.176000	27.8	2000.0	9.000	On	L1	19.6	18.2	46.0
1.567500	27.7	2000.0	9.000	On	L1	19.7	18.3	46.0
2.679000	27.7	2000.0	9.000	On	L1	19.7	18.3	46.0
4.632000	26.4	2000.0	9.000	On	L1	19.6	19.6	46.0

A.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
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Measurement Result:

Mode	Channel	99% Occupied bandwidth (MHz)	conclusion
802.11a	5180 MHz	Fig. 71	17.00
	5200 MHz	Fig. 72	17.04
	5240 MHz	Fig. 73	17.04
802.11n HT20	5180 MHz	Fig. 74	18.24
	5200 MHz	Fig. 75	18.20
	5240 MHz	Fig. 76	18.24
802.11ac HT20	5180 MHz	Fig. 77	18.20
	5200 MHz	Fig. 78	18.20
	5240 MHz	Fig. 79	18.24
802.11n HT40	5190 MHz	Fig. 80	36.32
	5230 MHz	Fig. 81	36.32
802.11ac	5190 MHz	Fig. 82	36.32

HT40	5230 MHz	Fig. 83	36.32	P
802.11ac HT80	5210 MHz	Fig. 84	75.84	P

Conclusion: PASS

Test graphs as below:



Fig. 71 99% Occupied bandwidth (802.11a, 5180MHz)

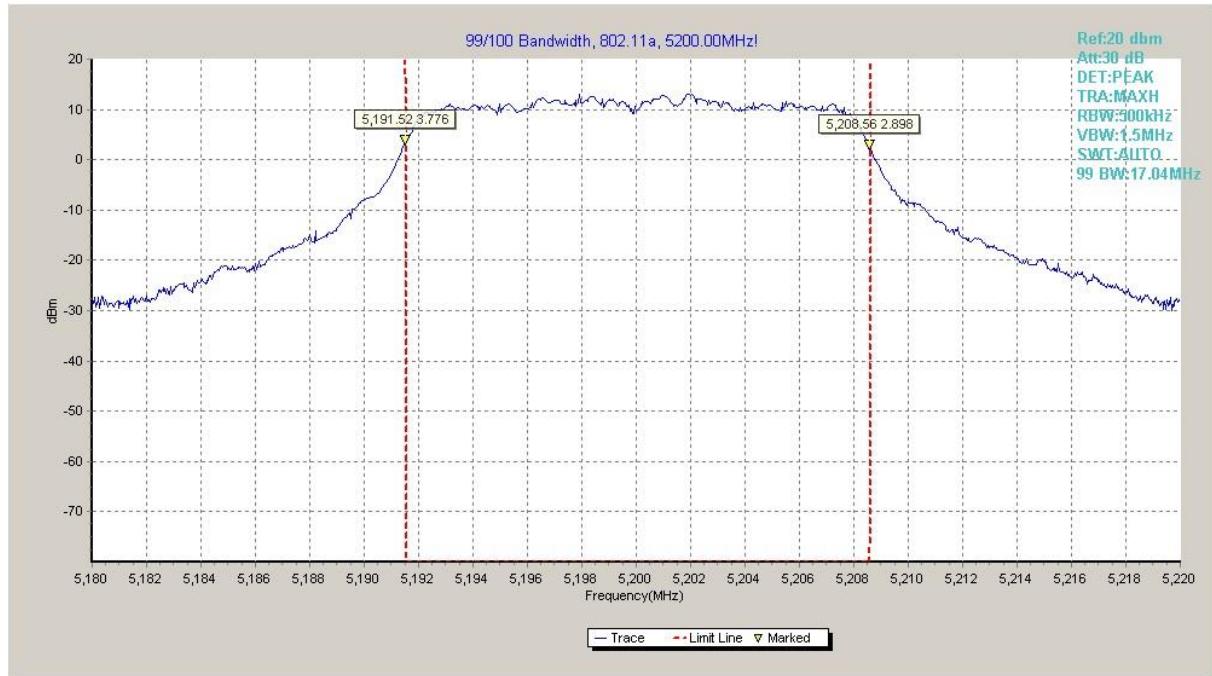


Fig. 72 99% Occupied bandwidth (802.11a, 5200MHz)



Fig. 73 99% Occupied bandwidth (802.11a, 5240MHz)

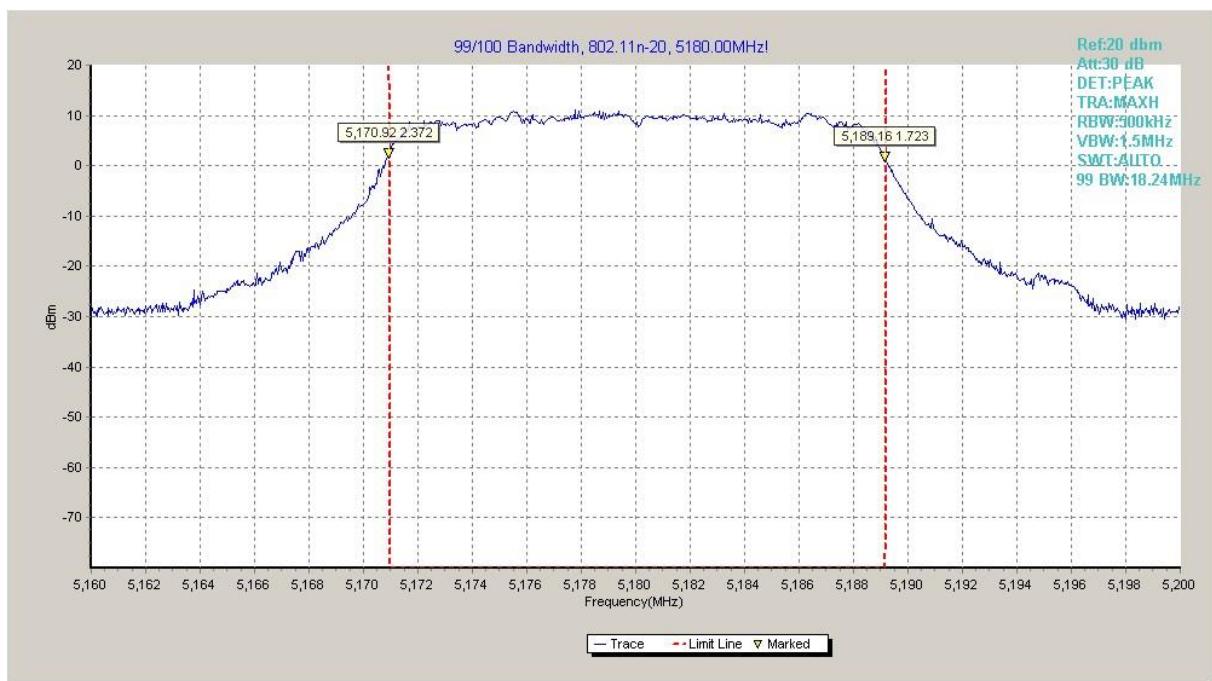
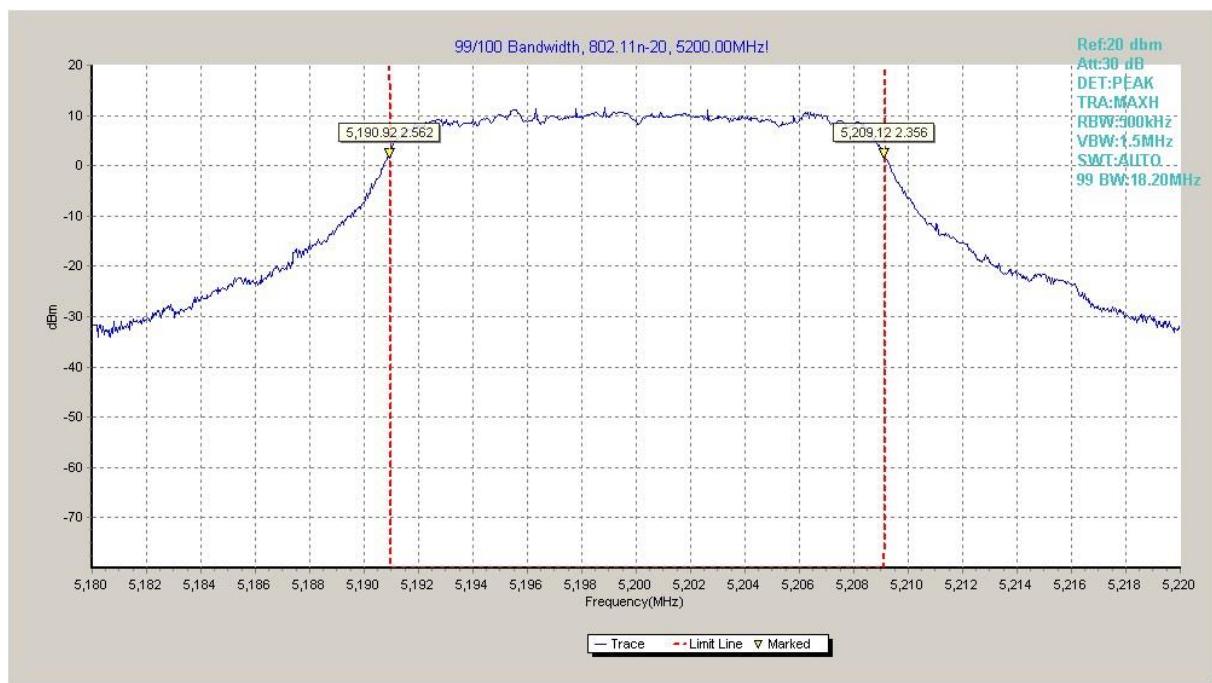
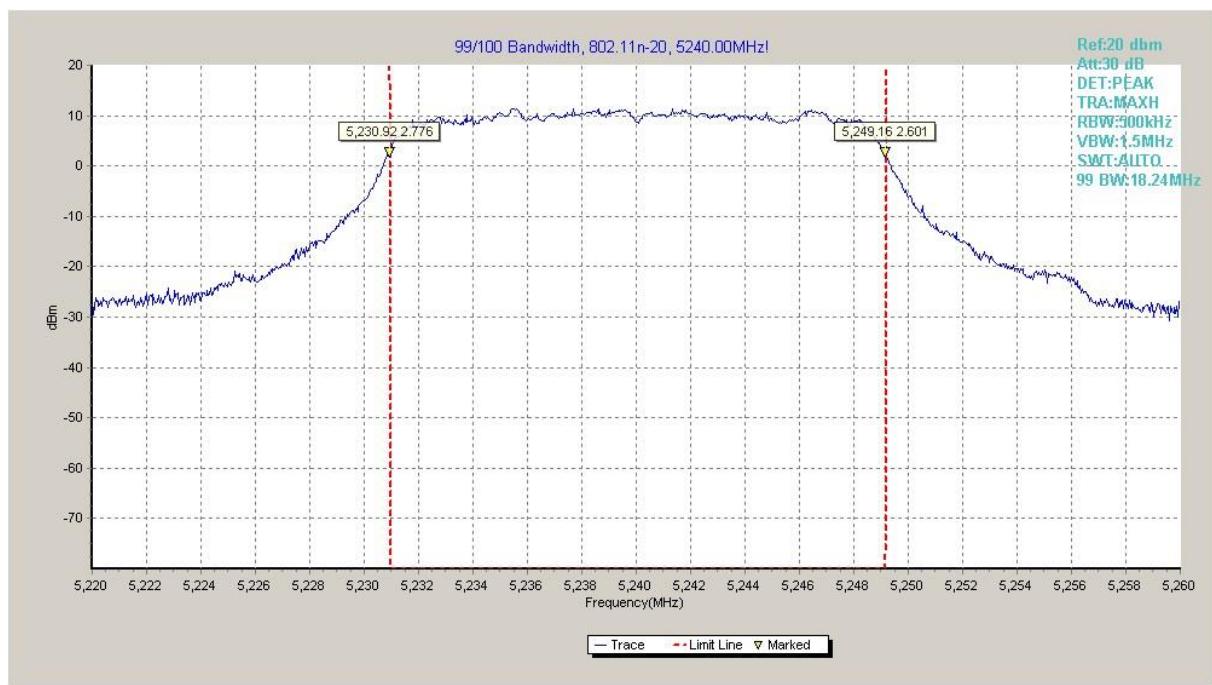


Fig. 74 99% Occupied bandwidth (802.11n-HT20, 5180MHz)


Fig. 75 99% Occupied bandwidth (802.11n-HT20, 5200MHz)

Fig. 76 99% Occupied bandwidth (802.11n-HT20, 5240MHz)