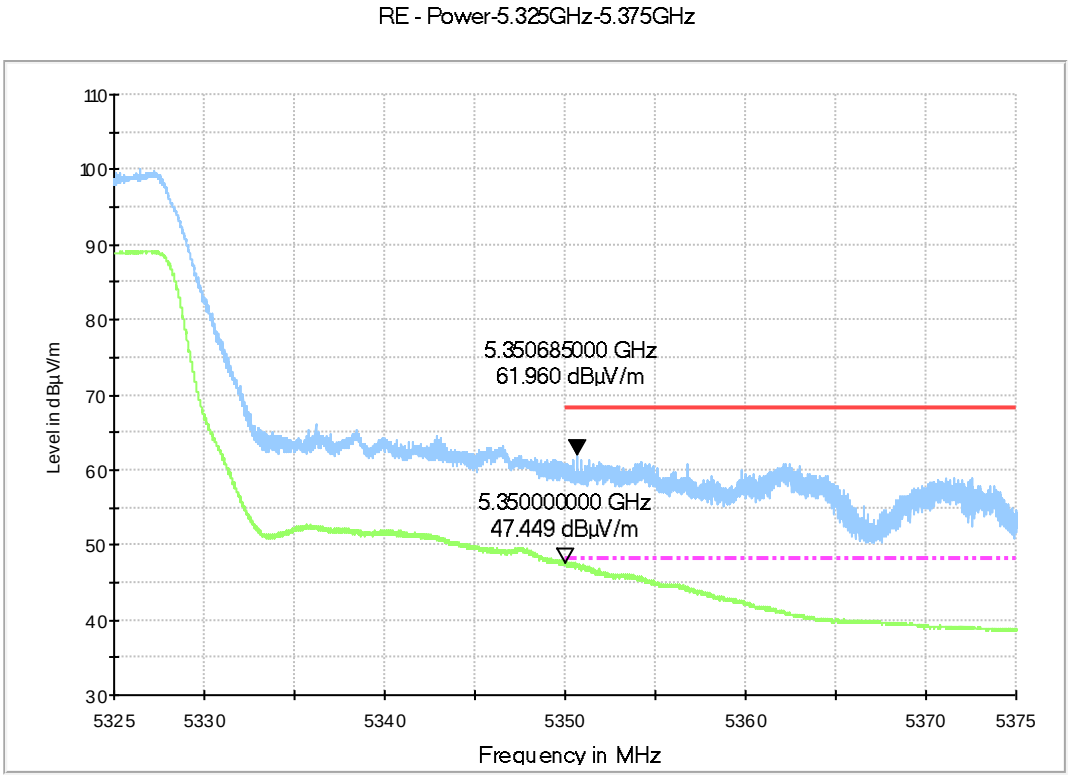


Fig.65 Band Edges (802.11n-HT40, 5310MHz)

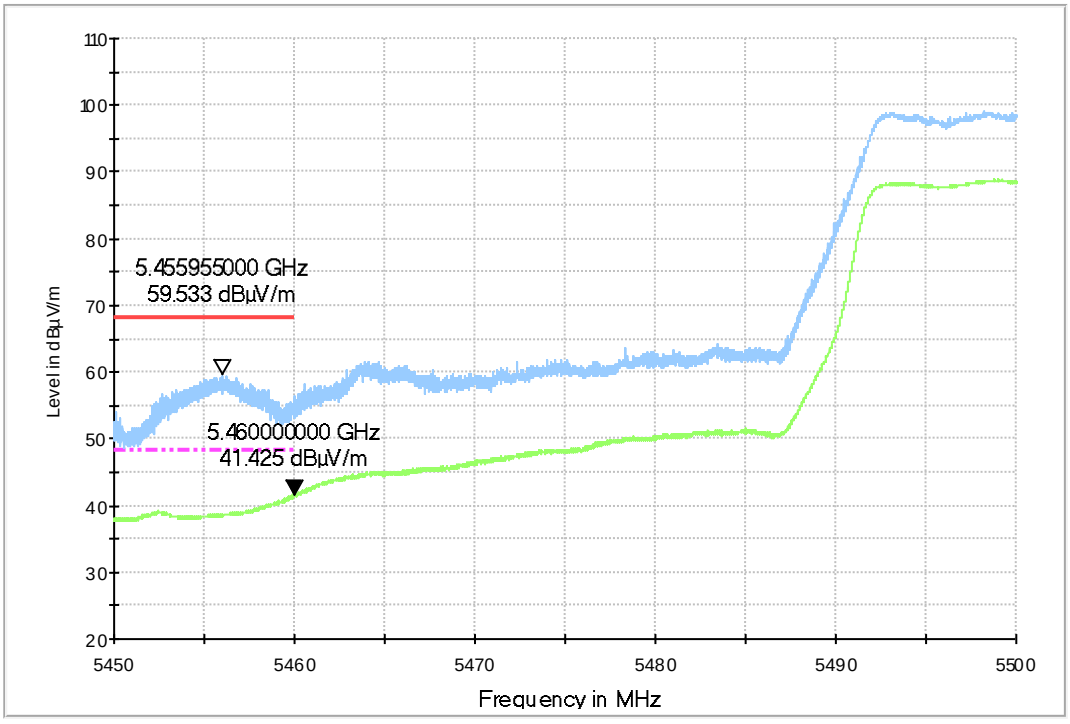


Fig.66 Band Edges (802.11n-HT40, 5510MHz)

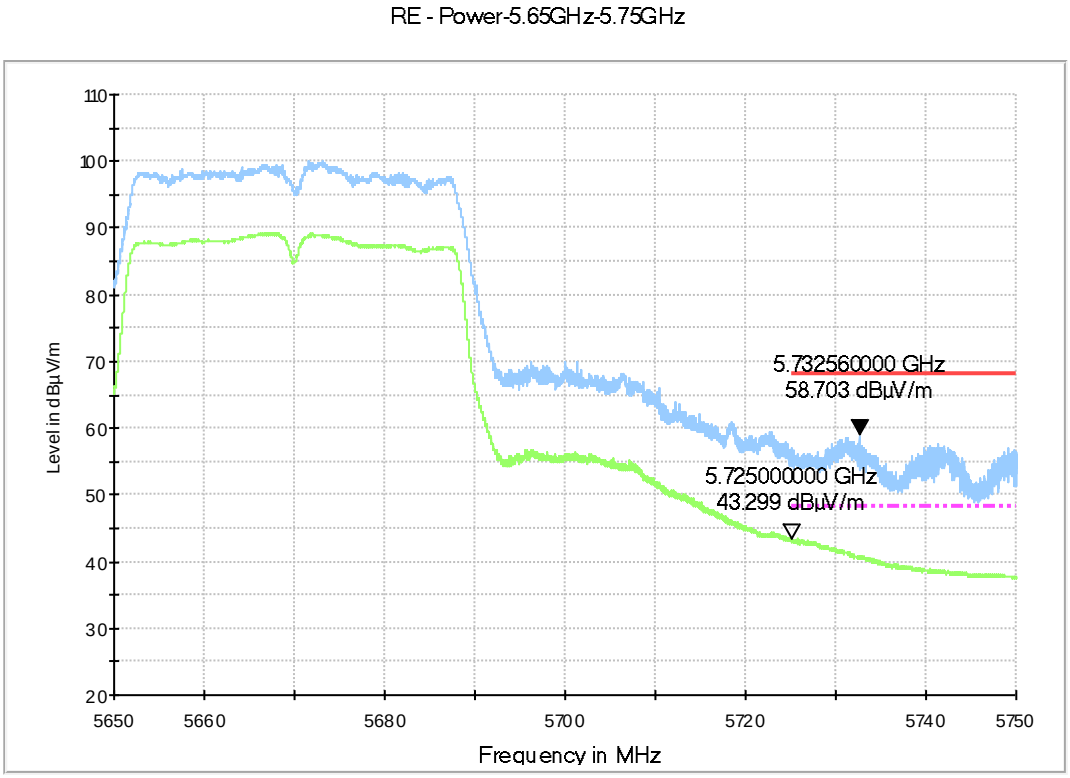


Fig.67 Band Edges (802.11n-HT40, 5670MHz)

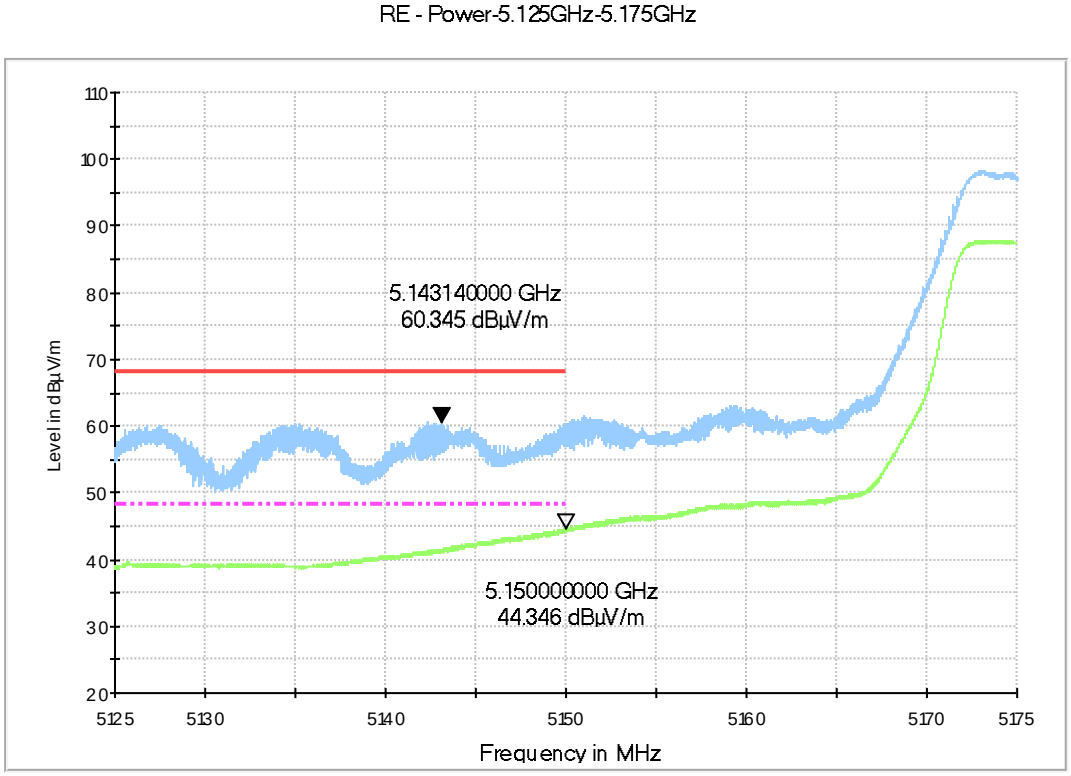


Fig.68 Band Edges (802.11ac-HT40, 5190MHz)

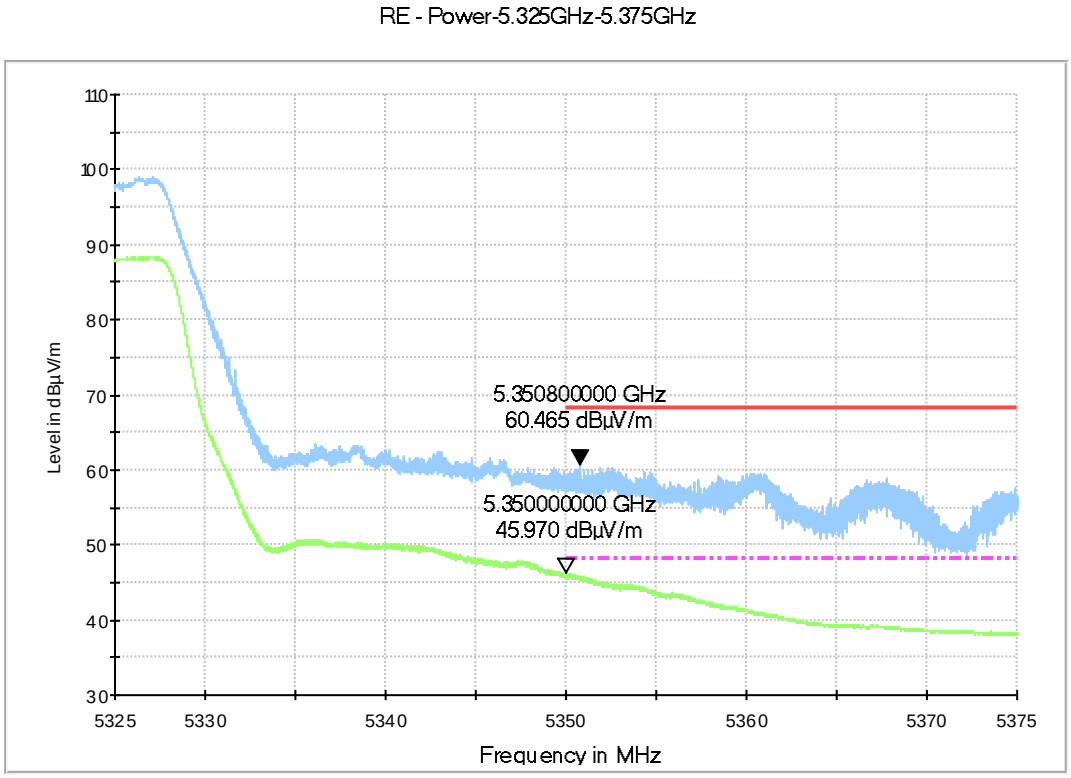


Fig.69 Band Edges (802.11ac-HT40, 5310MHz)

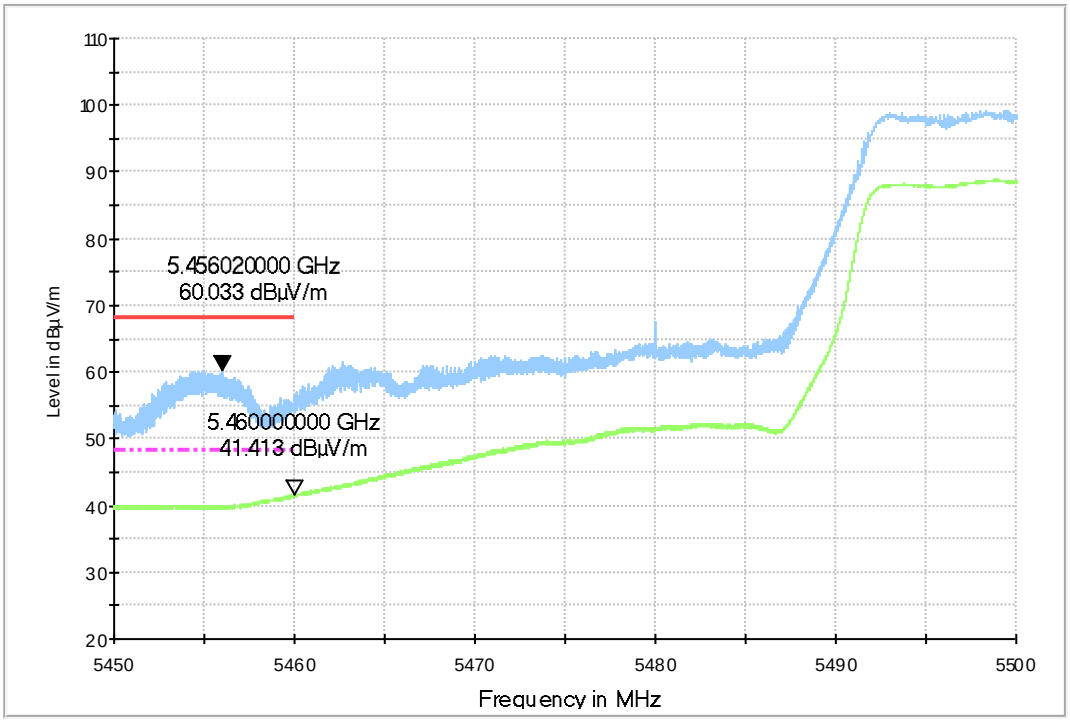


Fig.70 Band Edges (802.11ac-HT40, 5510MHz)

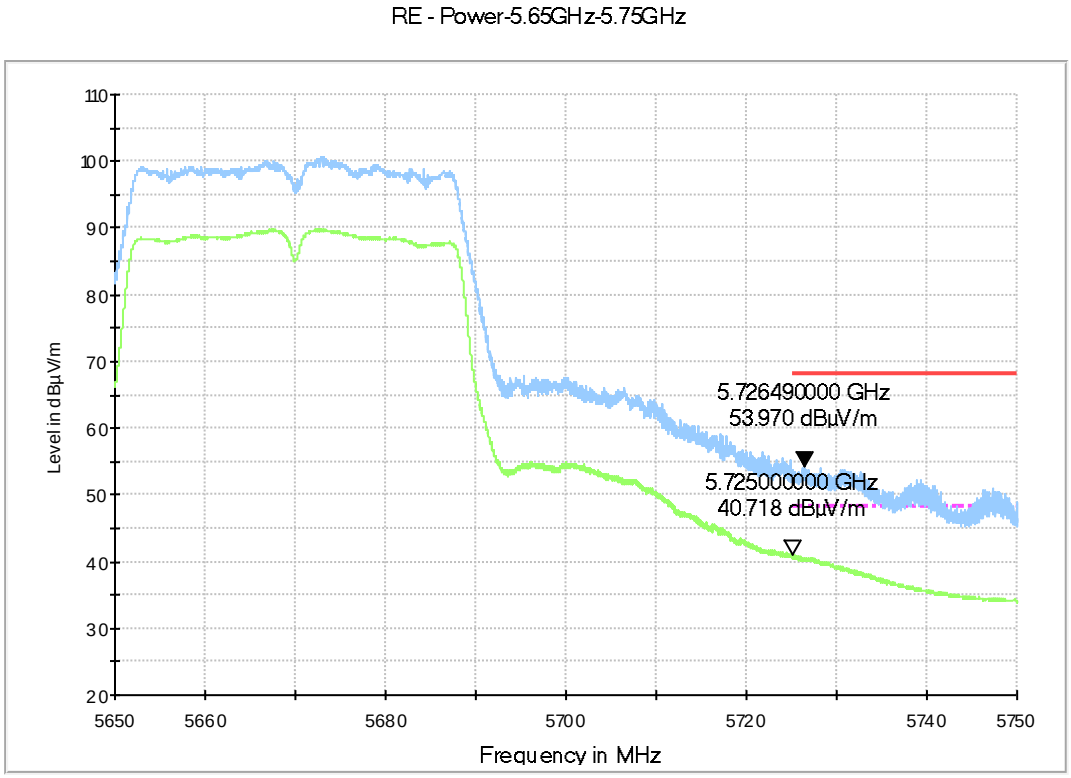


Fig.71 Band Edges (802.11ac-HT40, 5670MHz)

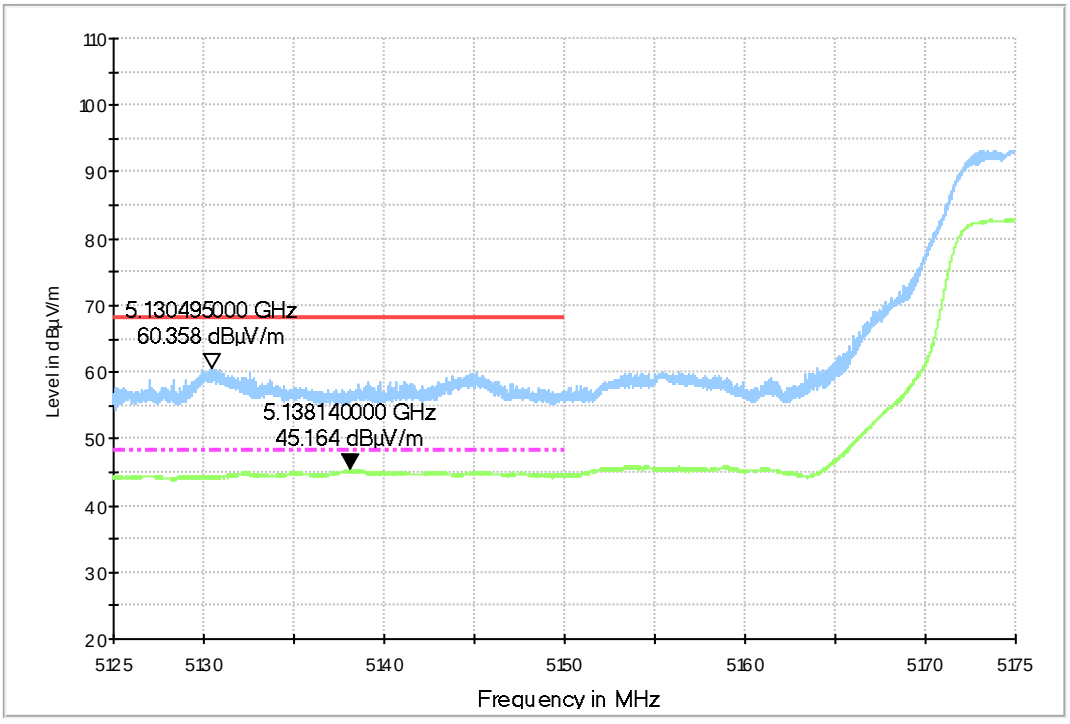


Fig.72 Band Edges (802.11ac-HT80, 5210MHz)

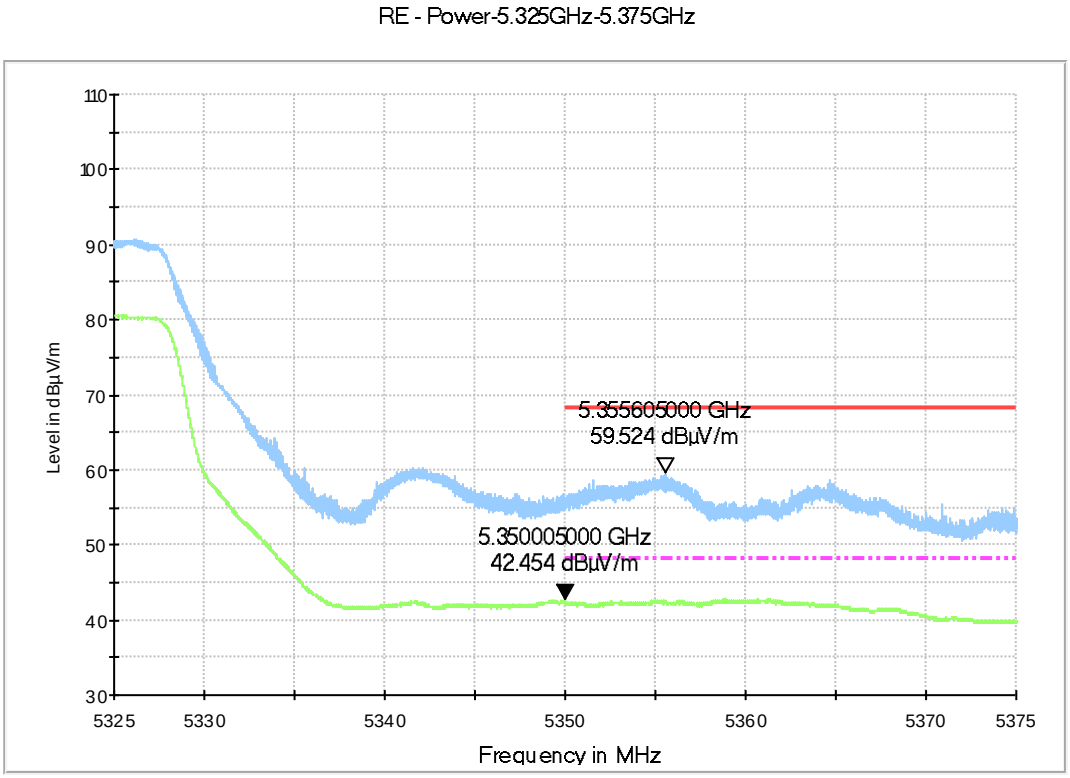


Fig.73 Band Edges (802.11ac-HT80, 5290MHz)

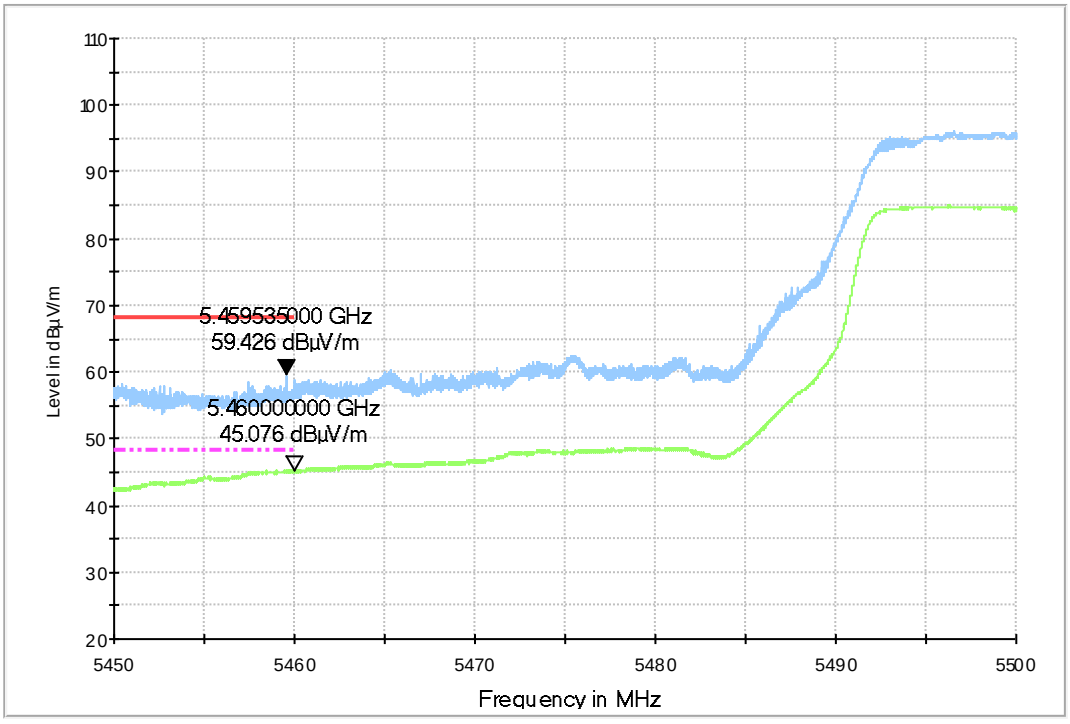


Fig.74 Band Edges (802.11ac-HT80, 5530MHz)

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:

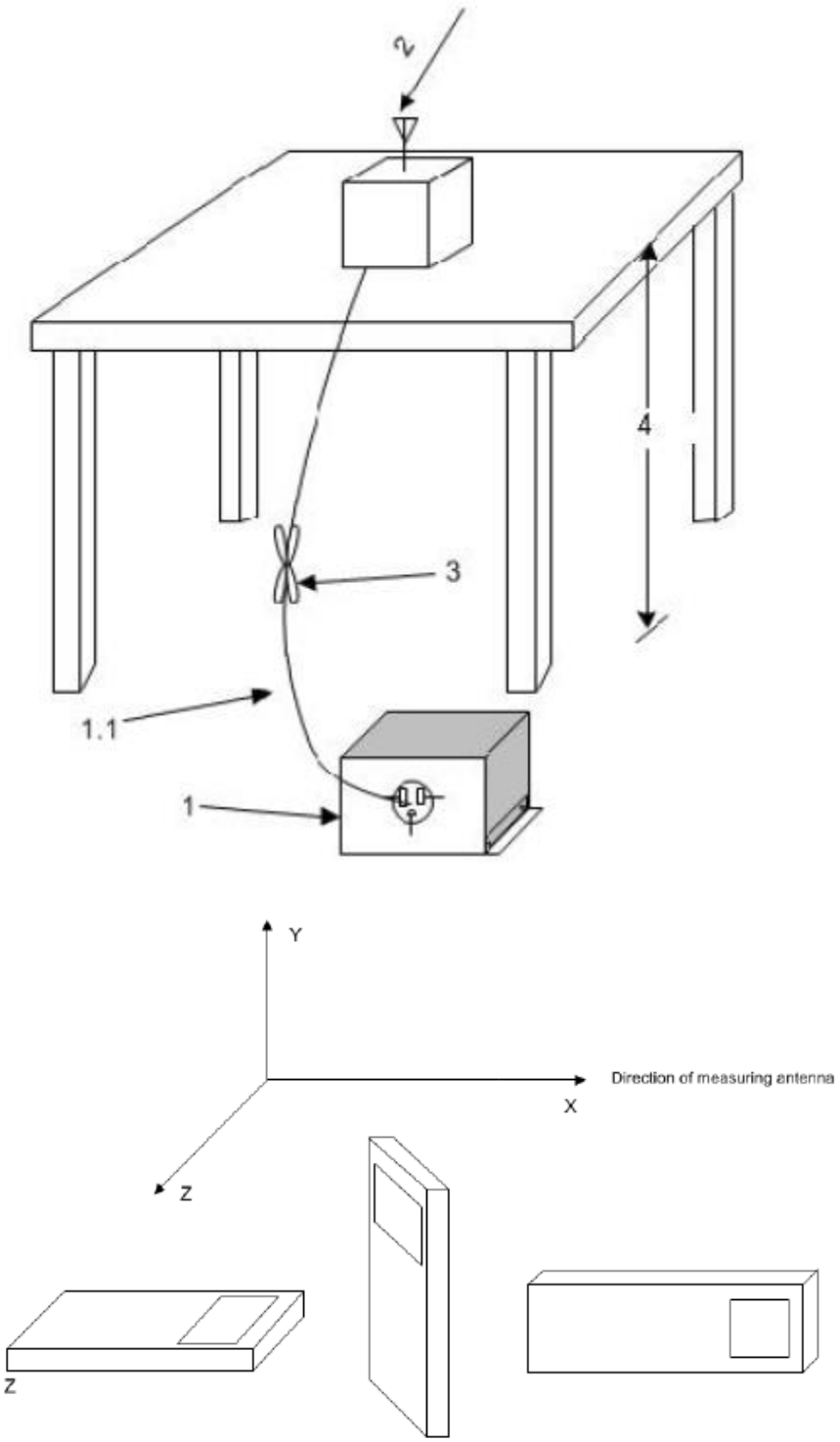
Frequency (MHz)	Field strength(μV/m)	Measurement distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Set up:

Tabletop devices shall be placed on a nonconducting platform with nominal top surface dimensions 1 m by 1.5 m. For emissions testing at or below 1 GHz, the table height shall be 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height shall be 1.5 m

The EUT and transmitting antenna shall be centered on the turntable.



Test Condition

The EUT shall be tested 1 near top, 1 near middle, and 1 near bottom. Set the unlicensed wireless device to operate in continuous transmit mode. For unlicensed wireless devices unable to be configured for 100% duty cycle even in test mode, configure the system for the maximum duty cycle supported.

When required for unlicensed wireless devices, measurements of the variation of the input power or the radiated signal level of the fundamental frequency component of the emission, as

appropriate, shall be performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage.

Exploratory radiated emissions measurements

Exploratory radiated measurements shall be performed at the measurement distance or at a closer distance than that specified for compliance to determine the emission characteristics of the EUT and, if applicable, the EUT configuration that produces the maximum level of emissions. The frequencies of maximum emission may be determined by manually positioning the antenna close to the EUT, and then moving the antenna over all sides of the EUT while observing a spectral display. It is advantageous to have prior knowledge of the frequencies of emissions, although this may be determined from such a near-field scan. The near-field scan shall only be used to determine the frequency but not the amplitude of the emissions. Where exploratory measurements are not adequate to determine the worst-case operating modes and are used only to identify the frequencies of the highest emissions, additional preliminary tests can be required.
For emissions from the EUT, the maximum level shall be determined by rotating the EUT and its antenna through 0° to 360°. For each mode of operation required to be tested, the frequency spectrum (based on findings from exploratory measurements) shall be monitored.
Broadband antennas and a spectrum analyzer or a radio-noise meter with a panoramic display are often useful in this type of test. If either antenna height or EUT azimuth are not fully measured during exploratory testing, then complete testing can be required at the OATS or semi-anechoic chamber when the final full spectrum testing is performed.

Final radiated emissions measurements

The final measurements are using the orientation and equipment arrangement of the EUT based on the measurement results found during the preliminary (exploratory) measurements, the EUT arrangement, appropriate modulation, and modes of operation that produce the emissions that have the highest amplitude relative to the limit shall be selected for the final measurement.
For each mode of operation required to be tested, the frequency spectrum (based on findings from exploratory measurements) shall be monitored. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations.
For each mode selected, record the frequency and amplitude of the highest fundamental emission (if applicable), as well as the frequency and amplitude of the six highest spurious emissions relative to the limit. Emissions more than 20 dB below the limit do not need to be reported.
This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

The receiver references:

Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	100KHz/300KHz	5
1000-4000	1MHz/3MHz	15
4000-18000	1MHz/3MHz	40
18000-40000	1MHz/3MHz	20

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

The measurement results are obtained as described below:

Result= P_{Mea} + Cable Loss + Antenna Factor

Where:

P_{Mea} field strength recorded from the instrument

EUT ID: EUT1

Average

82.11a

Channel 36

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5148.300	41.7	-34.8	34.2	42.23	54.0	12.3	H	155	6
5149.400	41.7	-34.8	34.2	42.28	54.0	12.3	H	155	48
10359.400	36.0	-30.0	37.5	28.53	54.0	18.0	H	155	92
15540.400	36.2	-27.6	40.1	23.67	54.0	17.8	H	155	48
16828.500	37.5	-26.8	41.6	22.74	54.0	16.5	H	155	68
17011.100	38.1	-26.6	41.7	23.04	54.0	15.9	H	155	92

Channel 40

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5148.300	41.7	-34.8	34.2	42.23	54.0	12.3	H	155	6
5149.400	41.7	-34.8	34.2	42.28	54.0	12.3	H	155	48
10359.400	36.0	-30.0	37.5	28.53	54.0	18.0	H	155	92
15540.400	36.2	-27.6	40.1	23.67	54.0	17.8	H	155	48
16828.500	37.5	-26.8	41.6	22.74	54.0	16.5	H	155	68
17011.100	38.1	-26.6	41.7	23.04	54.0	15.9	H	155	92

Channel 48

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5159.200	34.0	-34.6	34.2	34.40	54.0	20.0	H	155	16
5299.200	33.2	-35.1	34.3	33.90	54.0	20.9	H	155	48
10480.400	35.7	-31.5	37.6	29.58	54.0	18.3	H	155	80
15719.700	36.1	-27.5	40.4	23.23	54.0	17.9	H	155	8
16945.100	38.2	-27.1	41.7	23.61	54.0	15.8	H	155	102
17106.800	38.0	-26.0	41.6	22.40	54.0	16.0	H	155	118

Channel 52

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5125.200	36.0	-35.0	34.2	53.72	48.3	12.3	H	155	18
5298.400	36.1	-35.1	34.3	55.14	48.3	12.2	H	155	56
10520.000	35.3	-32.0	37.6	42.14	48.3	13.0	H	155	139
15780.200	35.5	-27.6	40.4	37.01	48.3	12.8	H	155	108
16483.100	37.3	-27.1	41.3	40.06	48.3	11.0	H	155	78
16946.200	38.2	-27.1	41.7	40.01	48.3	10.1	H	155	36

Channel 56

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5240.400	33.8	-34.5	34.3	34.01	48.3	14.5	H	155	268
5312.400	34.5	-35.0	34.4	35.10	48.3	13.8	H	155	138
10559.600	34.8	-30.7	37.6	27.85	48.3	13.5	H	155	104
15839.600	35.9	-27.5	40.5	22.95	48.3	12.4	H	155	40
16945.100	38.1	-27.1	41.7	23.51	48.3	10.2	H	155	28
17034.200	37.8	-26.5	41.7	22.65	48.3	10.5	H	155	8

Channel 64

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5350.000	35.4	-34.6	34.4	35.59	48.3	12.9	H	155	16
5361.600	35.5	-34.3	34.4	35.48	48.3	12.8	H	155	48
10639.900	34.0	-29.0	37.7	25.29	48.3	14.3	H	155	80
15959.500	35.8	-27.1	40.7	22.22	48.3	12.5	H	155	8
16905.500	37.8	-27.0	41.6	23.21	48.3	10.5	H	155	102
17065.000	37.8	-26.3	41.6	22.44	48.3	10.5	H	155	118

Channel 100

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5456.400	38.0	-33.2	34.5	36.67	54.0	16.0	H	155	20
5460.000	38.3	-33.3	34.5	37.08	54.0	15.7	H	155	18
10999.600	34.5	-30.1	37.8	26.83	54.0	19.5	H	155	90
16499.600	37.2	-27.0	41.3	22.91	54.0	16.8	H	155	114
16946.200	38.3	-27.1	41.7	23.68	54.0	15.7	H	155	36
17132.100	37.9	-26.1	41.6	22.39	54.0	16.1	H	155	2

Channel 120

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5564.000	36.0	-34.7	34.6	36.14	54.0	18.0	H	155	8
5646.000	36.8	-33.1	34.7	35.22	54.0	17.2	H	155	46
11199.800	33.7	-30.3	38.0	25.98	54.0	20.3	H	155	20
16799.900	37.4	-26.8	41.5	22.64	54.0	16.6	H	155	118
16946.200	38.1	-27.1	41.7	23.50	54.0	15.9	H	155	82
17109.000	38.1	-26.0	41.6	22.50	54.0	15.9	H	155	46

Channel 140

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5725.200	44.6	-33.6	34.8	43.33	54.0	9.4	H	155	8
5727.600	43.3	-33.6	34.8	42.11	54.0	10.7	H	155	52
11400.000	35.7	-30.4	38.1	27.93	54.0	18.3	H	155	18
17100.200	37.9	-26.1	41.6	22.35	54.0	16.1	H	155	6
17178.300	37.7	-26.3	41.5	22.49	54.0	16.3	H	155	48
17397.200	37.5	-26.5	41.3	22.65	54.0	16.5	H	155	128

802.11n-HT20

Channel 36

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5134.000	40.0	-35.0	34.2	40.74	54.0	14.0	H	155	28
5149.400	40.0	-34.8	34.2	40.56	54.0	14.0	H	155	46
10360.500	35.8	-30.0	37.5	28.27	54.0	18.2	H	155	8
15540.400	36.3	-27.6	40.1	23.76	54.0	17.7	H	155	6
16411.600	37.1	-27.1	41.2	23.00	54.0	16.9	H	155	24
17034.200	38.0	-26.5	41.7	22.79	54.0	16.0	H	155	185

Channel 40

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5110.800	34.4	-35.0	34.2	35.23	54.0	19.6	H	155	92
5246.800	34.6	-34.6	34.3	34.87	54.0	19.4	H	155	26
10400.100	36.0	-29.4	37.5	27.97	54.0	18.0	H	155	222
15599.800	36.3	-27.5	40.2	23.57	54.0	17.7	H	155	248
16942.900	37.9	-27.1	41.7	23.35	54.0	16.1	H	155	46
17338.900	37.6	-26.7	41.4	22.90	54.0	16.4	H	155	68

Channel 48

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5161.600	34.4	-34.6	34.2	34.71	54.0	19.6	H	155	8
5284.000	34.1	-35.1	34.3	34.81	54.0	19.9	H	155	28
10480.400	35.0	-31.5	37.6	28.84	54.0	19.0	H	155	119
15719.700	35.9	-27.5	40.4	23.00	54.0	18.1	H	155	146
16907.700	37.7	-27.0	41.6	23.08	54.0	16.3	H	155	76
17133.200	37.7	-26.1	41.6	22.22	54.0	16.3	H	155	94

Channel 52

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5218.800	36.8	-34.3	34.3	36.91	48.3	11.5	H	155	28
5299.600	37.3	-35.1	34.3	38.03	48.3	11.0	H	155	46
10520.000	35.1	-32.0	37.6	29.51	48.3	13.2	H	155	8
15780.200	35.6	-27.6	40.4	22.80	48.3	12.7	H	155	6
16955.000	38.1	-27.0	41.7	23.47	48.3	10.2	H	155	24
17106.800	38.6	-26.0	41.6	22.99	48.3	9.7	H	155	185

Channel 56

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5241.600	35.2	-34.5	34.3	35.34	48.3	13.1	H	155	28
5331.600	35.3	-34.8	34.4	35.79	48.3	13.0	H	155	248
10559.600	34.6	-30.7	37.6	27.64	48.3	13.7	H	155	38
15839.600	36.0	-27.5	40.5	23.04	48.3	12.3	H	155	98
16942.900	38.2	-27.1	41.7	23.64	48.3	10.1	H	155	183
17085.900	37.9	-26.2	41.6	22.49	48.3	10.4	H	155	356

Channel 64

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5350.000	35.6	-34.6	34.4	35.83	48.3	12.7	H	155	20
5361.200	35.6	-34.3	34.4	35.55	48.3	12.7	H	155	18
10639.900	33.9	-29.0	37.7	25.23	48.3	14.4	H	155	90
15959.500	36.0	-27.1	40.7	22.41	48.3	12.3	H	155	114
16412.700	37.3	-27.1	41.2	23.15	48.3	11.0	H	155	36
17022.100	38.1	-26.6	41.7	23.00	48.3	10.2	H	155	2

Channel 100

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5448.400	36.0	-33.1	34.5	34.62	54.0	18.0	H	155	20
5460.000	36.5	-33.3	34.5	35.33	54.0	17.5	H	155	248
10999.600	34.7	-30.1	37.8	26.98	54.0	19.3	H	155	49
16499.600	37.2	-27.0	41.3	22.94	54.0	16.8	H	155	82
16940.700	38.1	-27.1	41.7	23.55	54.0	15.9	H	155	168
17192.600	37.7	-26.4	41.5	22.55	54.0	16.3	H	155	8

Channel 120

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5561.600	35.9	-34.7	34.6	36.02	54.0	18.1	H	155	4
5645.200	36.5	-33.2	34.7	34.97	54.0	17.5	H	155	26
11199.800	33.8	-30.3	38.0	26.09	54.0	20.2	H	155	356
16799.900	37.4	-26.8	41.5	22.62	54.0	16.6	H	155	348
16946.200	38.2	-27.1	41.7	23.58	54.0	15.8	H	155	174
17135.400	37.8	-26.1	41.6	22.34	54.0	16.2	H	155	112

Channel 140

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5725.200	44.9	-33.6	34.8	43.68	54.0	9.1	H	155	8
5726.000	44.0	-33.6	34.8	42.76	54.0	10.0	H	155	28
11400.000	35.8	-30.4	38.1	28.07	54.0	18.2	H	155	6
17100.200	38.1	-26.1	41.6	22.52	54.0	15.9	H	155	278
17226.700	37.9	-26.6	41.5	22.95	54.0	16.1	H	155	122
17387.300	37.8	-26.5	41.3	22.99	54.0	16.2	H	155	245

802.11n-HT40

Channel 38

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5150.000	43.1	-34.7	34.2	43.64	54.0	10.9	H	155	142
5148.800	42.5	-34.8	34.2	43.02	54.0	11.5	H	155	168
10380.300	34.8	-29.7	37.5	27.01	54.0	19.2	H	155	90
15570.100	36.5	-27.6	40.2	23.83	54.0	17.5	H	155	102
16929.700	38.0	-27.0	41.6	23.42	54.0	16.0	H	155	118
17032.000	37.8	-26.5	41.7	22.64	54.0	16.2	H	155	94

Channel 46

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5185.200	32.2	-34.2	34.3	32.10	54.0	21.8	H	155	98
5260.800	31.1	-34.8	34.3	31.53	54.0	22.9	H	155	135
10459.500	35.2	-30.9	37.6	28.55	54.0	18.8	H	155	4
15690.000	36.2	-27.4	40.3	23.31	54.0	17.8	H	155	74
16955.000	38.0	-27.0	41.7	23.35	54.0	16.0	H	155	48
17133.200	37.9	-26.1	41.6	22.35	54.0	16.1	H	155	246

Channel 54

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5208.000	36.6	-34.3	34.3	36.62	48.3	11.7	H	155	28
5331.200	36.8	-34.8	34.4	37.27	48.3	11.5	H	155	49
10580.500	32.9	-30.0	37.6	25.21	48.3	15.4	H	155	246
15870.400	36.0	-27.4	40.5	22.91	48.3	12.3	H	155	182
16344.500	37.1	-26.8	41.1	22.79	48.3	11.2	H	155	94
17001.200	38.1	-26.7	41.7	23.12	48.3	10.2	H	155	42

Channel 62

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5350.000	45.7	-34.6	34.4	45.90	48.3	2.6	H	155	98
5352.400	43.9	-34.5	34.4	44.07	48.3	4.4	H	155	135
10620.100	33.3	-28.8	37.6	24.53	48.3	15.0	H	155	4
15929.800	36.0	-27.2	40.6	22.61	48.3	12.3	H	155	74
16944.000	38.2	-27.1	41.7	23.60	48.3	10.1	H	155	48
17132.100	37.8	-26.1	41.6	22.33	48.3	10.5	H	155	246

Channel 102

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5458.000	37.9	-33.2	34.5	36.68	54.0	16.1	H	155	28
5460.000	39.1	-33.3	34.5	37.84	54.0	14.9	H	155	74
11020.000	34.3	-30.7	37.8	27.22	54.0	19.7	H	155	140
16530.000	37.6	-26.9	41.3	23.20	54.0	16.4	H	155	8
13845.600	38.5	-29.5	38.9	29.14	54.0	15.5	H	155	80
16948.500	38.5	-27.0	41.7	23.85	54.0	15.5	H	155	243

Channel 118

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5535.600	37.5	-34.5	34.6	37.41	54.0	16.5	H	155	170
5650.800	36.8	-33.0	34.7	35.11	54.0	17.2	H	155	150
11180.000	35.5	-30.1	37.9	27.66	54.0	18.5	H	155	20
16770.000	37.5	-26.7	41.5	22.75	54.0	16.5	H	155	180
13425.200	39.0	-30.4	38.9	30.41	54.0	15.0	H	155	202
17235.500	38.3	-26.6	41.5	23.42	54.0	15.7	H	155	8

Channel 134

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5725.200	41.7	-33.6	34.8	40.50	54.0	12.3	H	155	25
5727.600	40.9	-33.6	34.8	39.72	54.0	13.1	H	155	49
11340.000	34.6	-30.5	38.1	26.99	54.0	19.4	H	155	4
17010.000	38.3	-26.6	41.7	23.29	54.0	15.7	H	155	6
12942.500	38.2	-29.9	39.2	29.00	54.0	15.8	H	155	25
17684.500	37.9	-26.5	41.2	23.17	54.0	16.1	H	155	186

802.11ac-HT20

Channel 36

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5132.900	39.3	-35.0	34.2	40.10	54.0	14.7	H	155	48
5149.400	39.9	-34.8	34.2	40.39	54.0	14.1	H	155	6
10360.500	35.9	-30.0	37.5	28.36	54.0	18.1	H	155	312
15540.400	36.1	-27.6	40.1	23.60	54.0	17.9	H	155	48
16944.000	38.1	-27.1	41.7	23.49	54.0	15.9	H	155	68
17078.200	37.9	-26.2	41.6	22.47	54.0	16.1	H	155	80

Channel 40

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5131.200	34.0	-35.0	34.2	34.84	54.0	20.0	H	155	268
5246.800	32.7	-34.6	34.3	32.94	54.0	21.3	H	155	138
10400.100	36.1	-29.4	37.5	28.02	54.0	17.9	H	155	104
15599.800	36.4	-27.5	40.2	23.64	54.0	17.6	H	155	40
16974.800	37.9	-26.9	41.7	23.09	54.0	16.1	H	155	28
17135.400	37.7	-26.1	41.6	22.18	54.0	16.3	H	155	8

Channel 48

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5180.000	33.7	-34.3	34.2	33.71	54.0	20.3	H	155	354
5277.600	32.7	-35.0	34.3	33.36	54.0	21.3	H	155	28
10480.400	35.7	-31.5	37.6	29.54	54.0	18.3	H	155	348
15719.700	36.2	-27.5	40.4	23.30	54.0	17.8	H	155	345
17002.300	38.2	-26.7	41.7	23.17	54.0	15.8	H	155	184
17115.600	38.0	-26.0	41.6	22.40	54.0	16.0	H	155	182

Channel 52

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5218.800	36.9	-34.3	34.3	36.92	48.3	11.4	H	155	48
5295.600	37.4	-35.1	34.3	38.17	48.3	10.9	H	155	6
10520.000	35.0	-32.0	37.6	29.35	48.3	13.3	H	155	312
15780.200	35.6	-27.6	40.4	22.75	48.3	12.7	H	155	48
16562.300	37.2	-26.7	41.4	22.63	48.3	11.1	H	155	68
17015.500	38.1	-26.6	41.7	23.03	48.3	10.2	H	155	80

Channel 56

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5240.400	35.3	-34.5	34.3	35.48	48.3	13.0	H	155	28
5322.400	35.4	-34.9	34.4	35.91	48.3	12.9	H	155	49
10559.600	34.5	-30.7	37.6	27.52	48.3	13.8	H	155	226
15839.600	36.1	-27.5	40.5	23.14	48.3	12.2	H	155	248
16942.900	38.3	-27.1	41.7	23.67	48.3	10.0	H	155	268
17136.500	38.0	-26.1	41.6	22.49	48.3	10.3	H	155	298

Channel 64

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5350.000	36.5	-34.6	34.4	36.74	48.3	11.8	H	155	28
5359.600	36.4	-34.4	34.4	36.40	48.3	11.9	H	155	48
10639.900	33.8	-29.0	37.7	25.11	48.3	14.5	H	155	8
15959.500	35.9	-27.1	40.7	22.37	48.3	12.4	H	155	16
16902.200	37.8	-27.0	41.6	23.13	48.3	10.5	H	155	228
16973.700	38.1	-26.9	41.7	23.27	48.3	10.2	H	155	92

Channel 100

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5459.200	37.8	-33.2	34.5	36.55	54.0	16.2	H	155	86
5459.600	37.8	-33.3	34.5	36.57	54.0	16.2	H	155	107
11000.000	34.7	-30.1	37.8	27.03	54.0	19.3	H	155	130
16500.000	37.6	-27.0	41.3	23.29	54.0	16.4	H	155	152
17928.560	38.3	-26.1	41.3	23.03	54.0	15.7	H	155	174
14972.650	37.6	-28.5	39.8	26.36	54.0	16.4	H	155	195

Channel 120

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5550.000	34.5	-34.7	34.6	34.61	54.0	19.5	H	155	175
5650.800	35.5	-33.0	34.7	33.84	54.0	18.5	H	155	194
11200.000	33.6	-30.3	38.0	25.97	54.0	20.4	H	155	215
16800.000	37.8	-26.8	41.5	23.02	54.0	16.2	H	155	196
13388.560	39.1	-30.5	39.0	30.58	54.0	14.9	H	155	241
16938.500	38.5	-27.1	41.7	23.88	54.0	15.5	H	155	259

Channel 140

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5725.200	44.1	-33.6	34.8	42.91	54.0	9.9	H	155	40
5726.800	42.2	-33.6	34.8	40.98	54.0	11.8	H	155	65
11400.000	33.7	-30.4	38.1	25.95	54.0	20.3	H	155	84
17100.000	38.3	-26.1	41.6	22.81	54.0	15.7	H	155	107
13388.560	39.3	-30.5	39.0	30.80	54.0	14.7	H	155	135
16938.500	38.4	-27.1	41.7	23.77	54.0	15.6	H	155	151

802.11ac-HT40

Channel 38

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5149.600	42.9	-34.8	34.2	43.40	54.0	11.1	H	155	92
5150.000	43.3	-34.7	34.2	43.82	54.0	10.7	H	155	68
10379.200	34.9	-29.7	37.5	27.06	54.0	19.2	H	155	118
15570.100	36.5	-27.6	40.2	23.83	54.0	17.5	H	155	354
16946.200	38.1	-27.1	41.7	23.47	54.0	15.9	H	155	18
17253.100	37.7	-26.7	41.4	22.98	54.0	16.3	H	155	38

Channel 46

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5126.800	34.3	-35.0	34.2	35.07	54.0	19.7	H	155	20
5290.000	33.7	-35.2	34.3	34.52	54.0	20.3	H	155	18
10459.500	34.7	-30.9	37.6	28.06	54.0	19.3	H	155	90
15690.000	36.1	-27.4	40.3	23.18	54.0	17.9	H	155	114
16946.200	38.0	-27.1	41.7	23.44	54.0	16.0	H	155	36
17192.600	37.6	-26.4	41.5	22.48	54.0	16.4	H	155	2

Channel 54

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5210.000	35.8	-34.3	34.3	35.84	48.3	12.5	H	155	92
5331.600	35.8	-34.8	34.4	36.29	48.3	12.5	H	155	68
10539.800	33.9	-31.3	37.6	27.62	48.3	14.4	H	155	118
15809.900	36.1	-27.6	40.5	23.23	48.3	12.2	H	155	354
16906.600	37.9	-27.0	41.6	23.25	48.3	10.4	H	155	18
17090.300	38.0	-26.1	41.6	22.51	48.3	10.3	H	155	38

Channel 62

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5350.000	43.9	-34.6	34.4	44.09	48.3	4.4	H	155	24
5350.800	43.6	-34.6	34.4	43.75	48.3	4.7	H	155	336
10620.100	33.4	-28.8	37.6	24.62	48.3	14.9	H	155	248
15929.800	35.8	-27.2	40.6	22.43	48.3	12.5	H	155	268
16977.000	37.9	-26.9	41.7	23.10	48.3	10.4	H	155	290
17132.100	37.8	-26.1	41.6	22.33	48.3	10.5	H	155	300

Channel 102

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5458.000	39.6	-33.2	34.5	38.34	54.0	14.4	H	155	175
5460.000	40.5	-33.3	34.5	39.33	54.0	13.5	H	155	194
11020.000	34.3	-30.7	37.8	27.16	54.0	19.7	H	155	215
16530.000	37.5	-26.9	41.3	23.05	54.0	16.5	H	155	196
12847.690	38.4	-31.0	39.2	30.31	54.0	15.6	H	155	241
16951.760	38.6	-27.0	41.7	23.93	54.0	15.4	H	155	259

Channel 118

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5522.800	34.5	-34.3	34.5	34.27	54.0	19.5	H	155	40
5650.800	35.1	-33.0	34.7	33.40	54.0	18.9	H	155	65
11180.000	35.6	-30.1	37.9	27.82	54.0	18.4	H	155	84
16770.000	37.7	-26.7	41.5	22.93	54.0	16.3	H	155	107
13389.650	39.1	-30.5	39.0	30.57	54.0	14.9	H	155	135
17039.750	38.4	-26.5	41.7	23.15	54.0	15.6	H	155	151

Channel 134

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5725.200	38.7	-33.6	34.8	37.49	54.0	15.3	H	155	8
5727.200	38.4	-33.6	34.8	37.18	54.0	15.6	H	155	28
11340.000	34.8	-30.5	38.1	27.17	54.0	19.2	H	155	246
17010.000	38.2	-26.6	41.7	23.19	54.0	15.8	H	155	249
12940.350	38.2	-30.0	39.2	28.97	54.0	15.8	H	155	186
17659.380	38.0	-26.5	41.2	23.22	54.0	16.0	H	155	128

802.11ac-HT80

Channel 42

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5149.800	42.2	-34.8	34.2	42.74	48.3	11.8	H	155	5
5150.000	42.5	-34.7	34.2	43.04	48.3	11.5	H	155	25
10420.000	34.0	-29.8	37.5	26.20	48.3	14.3	H	155	356
15630.000	36.3	-27.4	40.3	23.51	48.3	12.0	H	155	350
17005.620	38.3	-26.7	41.7	23.27	48.3	10.0	H	155	185
17627.150	37.8	-26.5	41.2	23.08	48.3	10.5	H	155	187

Channel 58

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5350.500	40.9	-34.6	34.4	41.11	48.3	13.1	H	155	4
5350.000	41.5	-34.6	34.4	41.71	48.3	12.5	H	155	2
10580.000	32.9	-30.0	37.6	25.25	48.3	15.4	H	155	25
15870.000	36.1	-27.4	40.5	22.99	48.3	12.2	H	155	350
13375.620	38.8	-30.5	39.0	30.35	48.3	9.5	H	155	92
16974.580	38.2	-26.9	41.7	23.39	48.3	10.1	H	155	85

Channel 106

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5459.800	42.8	-33.3	34.5	41.63	48.3	11.2	H	155	175
5460.000	43.1	-33.3	34.5	41.89	48.3	10.9	H	155	194
11060.000	34.0	-31.3	37.8	27.40	48.3	14.3	H	155	215
16590.000	37.1	-26.6	41.4	22.40	48.3	11.2	H	155	196
13419.650	38.6	-30.4	38.9	30.00	48.3	9.7	H	155	241
17054.630	38.2	-26.4	41.6	22.94	48.3	10.1	H	155	259

Peak

802.11a

Channel 36

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5148.575	65.1	-34.8	34.2	65.63	74.0	8.9	H	155	0
5149.585	65.3	-34.8	34.2	65.82	74.0	8.7	H	155	44
10359.950	47.9	-30.0	37.5	40.33	74.0	26.1	V	155	88
15539.850	51.1	-27.6	40.1	38.60	74.0	22.9	V	155	44
16147.600	54.8	-27.5	40.9	41.44	74.0	19.2	V	155	66
16847.750	55.3	-26.9	41.6	40.65	74.0	18.7	H	155	88

Channel 40

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5095.600	49.8	-35.1	34.2	50.73	74.0	24.2	H	155	264
5270.000	48.1	-34.9	34.3	48.66	74.0	25.9	H	155	132
10400.100	49.0	-29.4	37.5	40.95	74.0	25.0	H	155	110
15599.800	51.2	-27.5	40.2	38.42	74.0	22.8	H	155	44
16828.500	54.9	-26.8	41.6	40.17	74.0	19.1	H	155	22
17088.100	55.1	-26.1	41.6	39.65	74.0	18.9	V	155	0

Channel 48

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5160.400	49.2	-34.6	34.2	49.55	74.0	24.8	H	155	22
5325.000	47.8	-34.9	34.4	48.35	74.0	26.2	H	155	66
10479.850	47.6	-31.5	37.6	41.48	74.0	26.4	V	155	88
15720.250	51.4	-27.5	40.4	38.49	74.0	22.6	V	155	0
16478.150	55.0	-27.1	41.3	40.78	74.0	19.0	H	155	110
16918.700	55.3	-27.0	41.6	40.73	74.0	18.7	H	155	132

Channel 52

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5210.800	53.7	-34.3	34.3	53.72	68.3	14.6	H	155	22
5290.200	54.3	-35.2	34.3	55.14	68.3	14.0	H	155	44
10520.000	47.8	-32.0	37.6	42.14	68.3	20.5	H	155	132
15780.200	49.8	-27.6	40.4	37.01	68.3	18.5	V	155	110
16770.750	54.8	-26.7	41.5	40.06	68.3	13.5	H	155	88
17040.250	55.2	-26.4	41.7	40.01	68.3	13.1	H	155	44

Channel 56

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5246.400	56.6	-34.6	34.3	56.83	68.3	11.7	H	155	264
5311.200	55.2	-35.0	34.4	55.88	68.3	13.1	H	155	132
10560.150	46.7	-30.6	37.6	39.74	68.3	21.6	H	155	110
15840.150	50.6	-27.5	40.5	37.58	68.3	17.7	H	155	44
16196.550	54.2	-27.2	40.9	40.46	68.3	14.1	H	155	22
16665.150	55.3	-26.6	41.4	40.48	68.3	13.0	V	155	0

Channel 64

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5350.580	56.7	-34.6	34.4	56.91	68.3	11.6	H	155	22
5351.560	56.0	-34.5	34.4	56.20	68.3	12.3	H	155	44
10639.900	46.8	-29.0	37.7	38.08	68.3	21.5	V	155	88
15960.050	50.2	-27.1	40.7	36.64	68.3	18.1	V	155	0
16405.000	53.8	-27.1	41.2	39.66	68.3	14.5	H	155	110
16844.450	54.6	-26.9	41.6	39.92	68.3	13.7	H	155	132

Channel 100

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5459.265	59.3	-33.2	34.5	58.12	74.0	14.7	H	155	22
5459.635	59.2	-33.3	34.5	58.02	74.0	14.8	H	155	22
11000.150	46.4	-30.1	37.8	38.76	74.0	27.6	H	155	88
16500.150	52.3	-27.0	41.3	38.05	74.0	21.7	V	155	110
16904.950	54.8	-27.0	41.6	40.12	74.0	19.2	V	155	44
17205.250	54.7	-26.4	41.5	39.65	74.0	19.3	H	155	0

Channel 120

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5560.200	57.3	-34.8	34.6	57.47	74.0	16.7	H	155	0
5634.200	56.4	-33.4	34.7	55.07	74.0	17.6	H	155	44
11199.800	46.1	-30.3	38.0	38.47	74.0	27.9	V	155	22
16799.900	53.1	-26.8	41.5	38.35	74.0	20.9	H	155	110
17047.950	55.7	-26.4	41.7	40.42	74.0	18.3	H	155	88
17206.900	54.9	-26.5	41.5	39.83	74.0	19.1	H	155	44

Channel 140

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
5725.585	59.9	-33.6	34.8	58.71	74.0	14.1	V	155	0
5725.915	59.9	-33.6	34.8	58.65	74.0	14.1	H	155	44
11400.000	49.3	-30.4	38.1	41.51	74.0	24.7	V	155	22
17100.200	53.5	-26.1	41.6	37.93	74.0	20.5	H	155	0
17402.700	54.7	-26.5	41.3	39.83	74.0	19.3	H	155	44
17709.600	54.9	-26.5	41.2	40.15	74.0	19.1	V	155	132