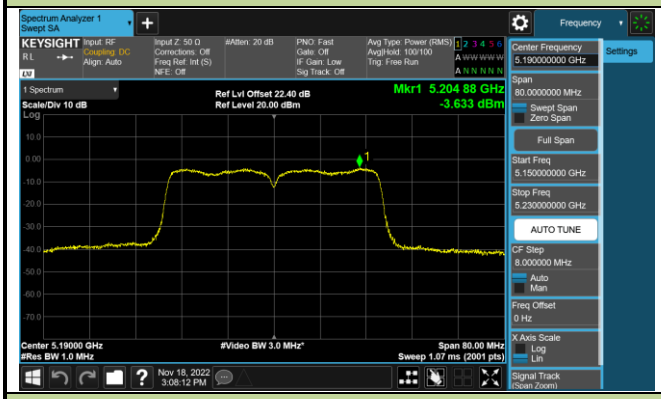
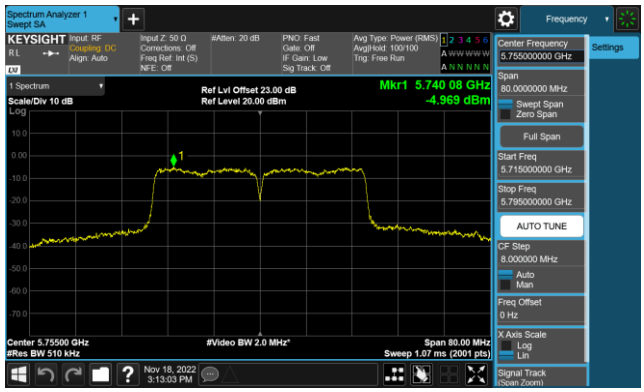
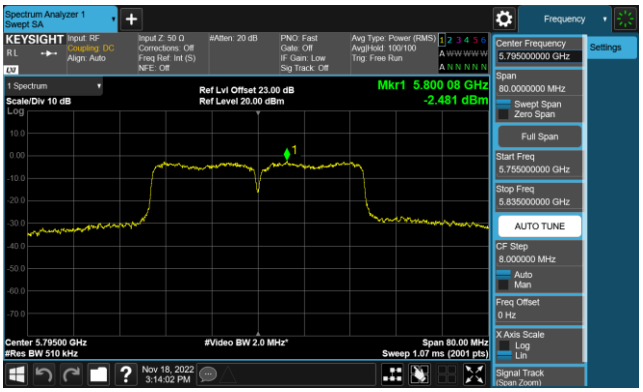
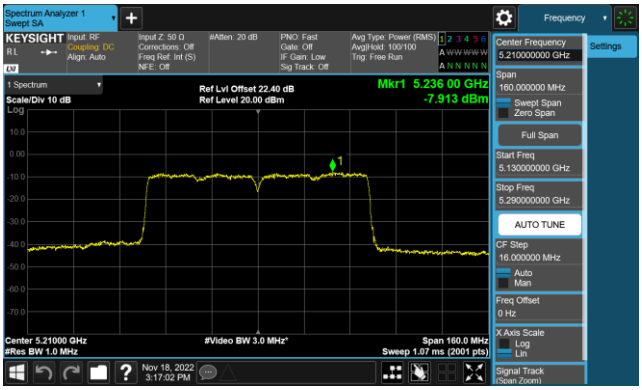
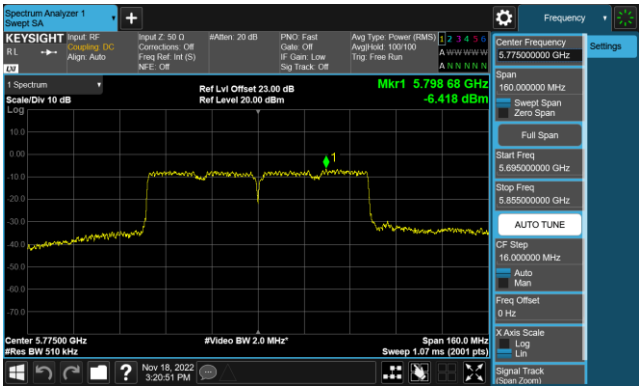
802.11n-HT40 Power Spectral Density_Ant 1	
Channel 38 (5190MHz)	**Channel 46 (5230MHz)**
	
Channel 151 (5755MHz)	**Channel 159 (5795MHz)**
	

802.11ac-VHT80 Power Spectral Density_Ant 1	
Channel 42 (5210MHz)	**Channel 155 (5775MHz)**
	

7.7. Radiated Spurious Emission Measurement

7.7.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [V/m]	Measured Distance [Meters]
0.009 – 0.490	2400/F (kHz)	300
0.490 – 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

7.7.2. Test Procedure Used

KDB 789033 D02v02r01 – Section G

7.7.3. Test Setting

Peak Measurements above 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Quasi-Peak Measurements below 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = 120 kHz
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Average Measurements above 1GHz (Method AD)

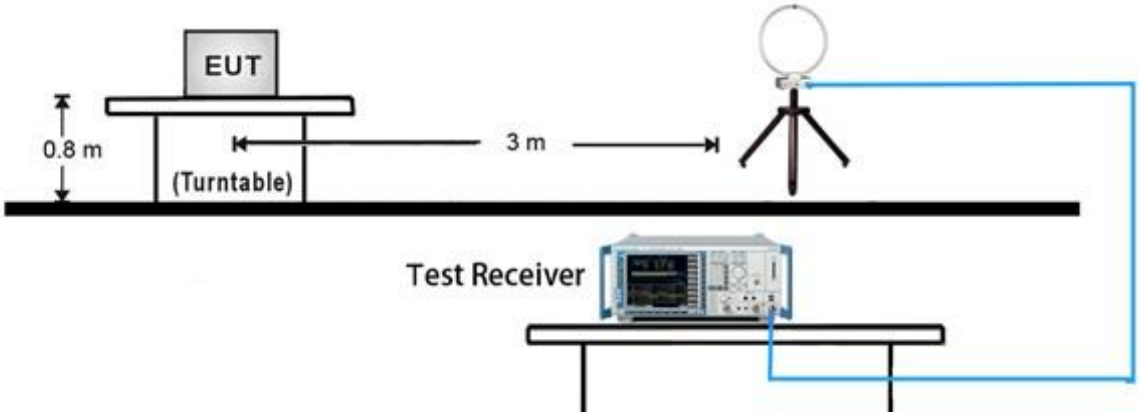
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = power average (Average)
5. Number of measurement points = 1001 (Number of points must be > 2 x span/RBW)
6. Sweep time = auto
7. Trace was averaged over at 100 sweeps

Quasi-Peak & Average Measurements below 30MHz

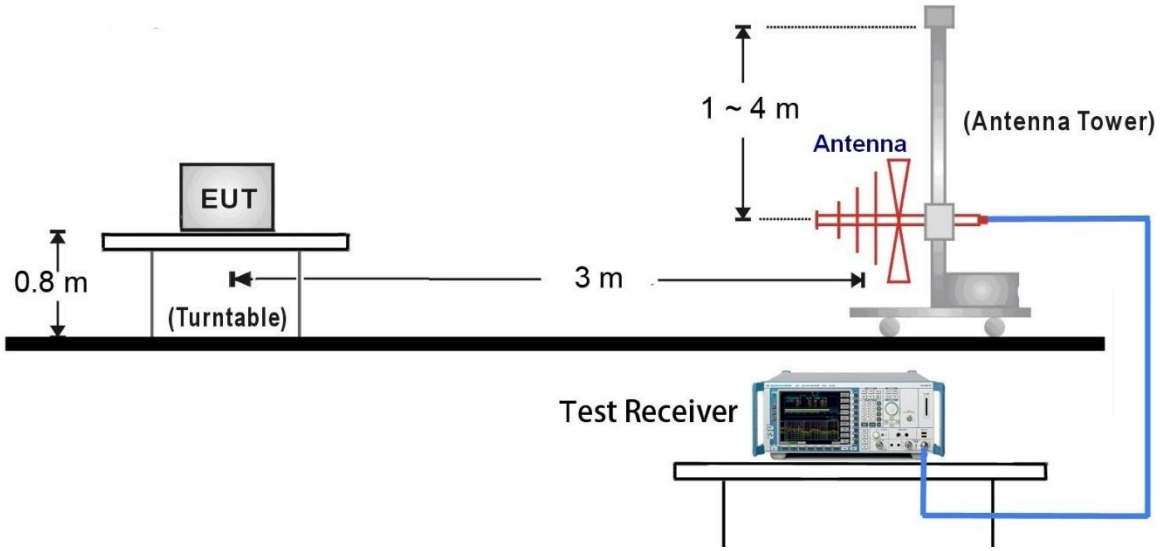
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = 200Hz for 9kHz to 150kHz frequency; RBW = 9kHz for 0.15MHz to 30MHz frequency
4. Detector = CISPR quasi-peak or power average (Average)
5. Sweep time = auto couple
6. Trace was allowed to stabilize

7.7.4. Test Setup

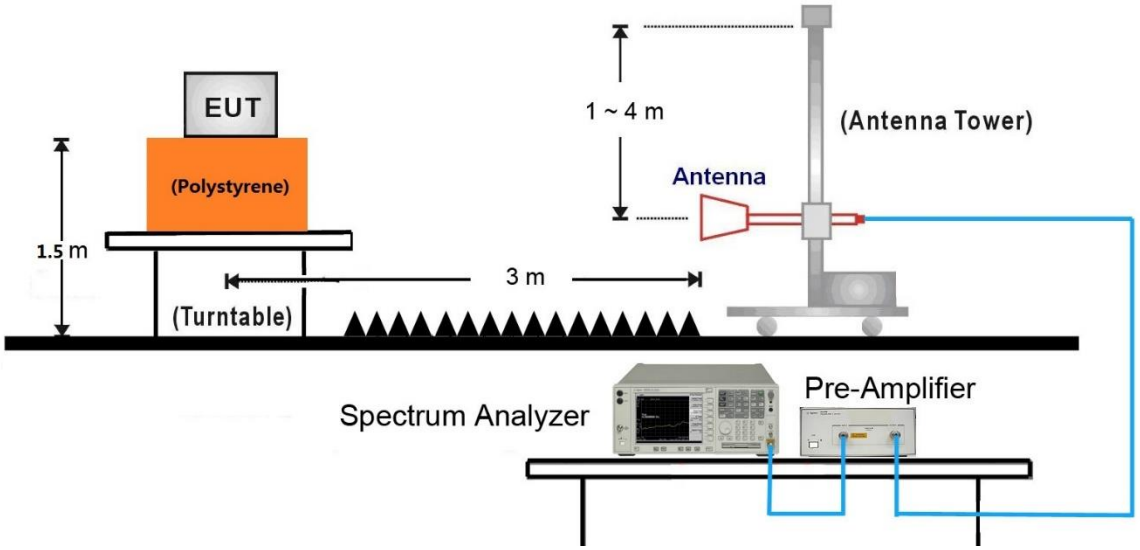
9kHz ~ 30MHz Test Setup:



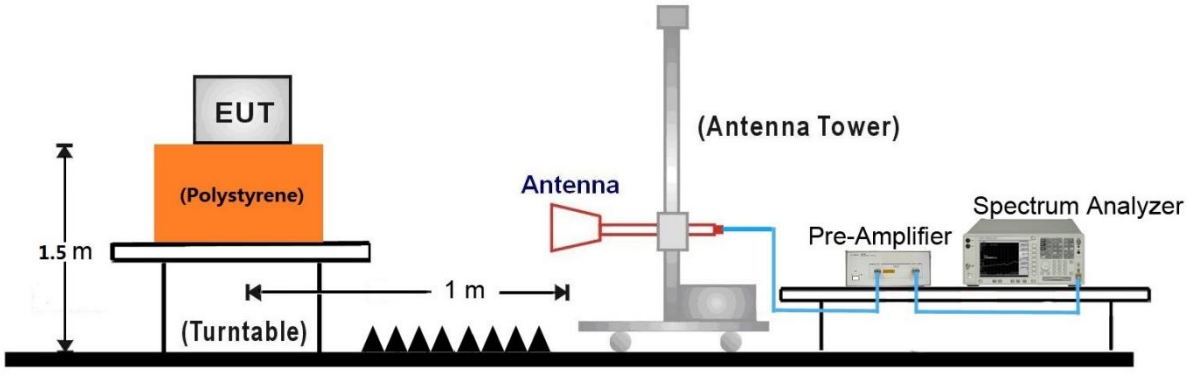
30MHz ~ 1GHz Test Setup:



1GHz ~18GHz Test Setup:

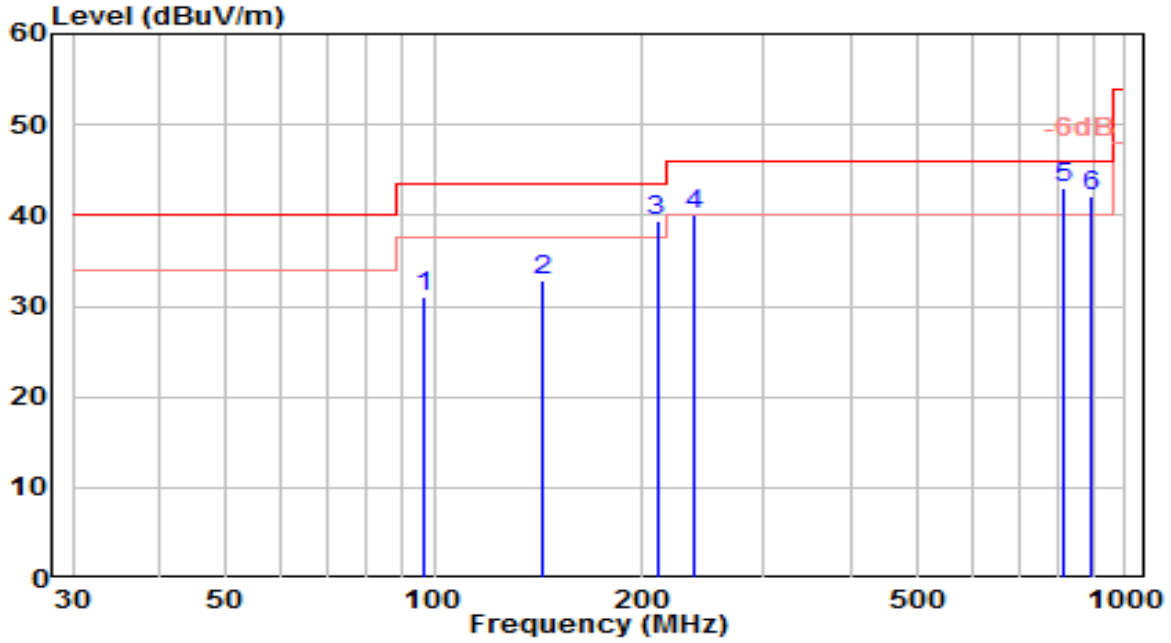


18GHz ~40GHz Test Setup:



7.7.5. Test Result

EUT	Monarch 12	Date of Test	2022-10-22
Factor	VULB 9162	Temp. / Humidity	24°C /69%
Polarity	Horizontal	Site / Test Engineer	AC1 / Jeff
Test Mode	802.11n-20MHz_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 120V/ 60Hz

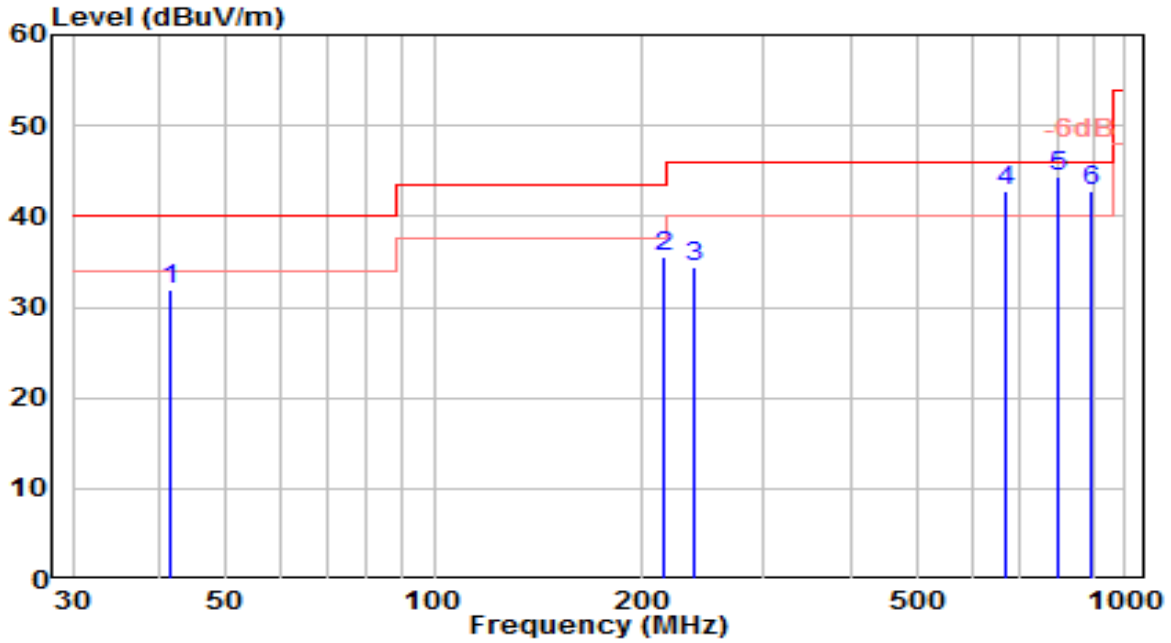


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		96.600	12.29	18.67	30.96	-12.54	43.50	100	345	QP
2		144.050	17.12	15.63	32.75	-10.75	43.50	100	275	QP
3		210.100	20.62	18.69	39.31	-4.19	43.50	115	55	QP
4		237.850	19.77	20.29	40.06	-5.94	46.00	130	280	QP
5	*	815.330	12.47	30.63	43.10	-2.90	46.00	100	85	QP
6		893.390	10.13	32.07	42.19	-3.81	46.00	100	330	QP

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-10-22
Factor	VULB 9162	Temp. / Humidity	24°C /69%
Polarity	Vertical	Site / Test Engineer	AC1 / Jeff
Test Mode	802.11n-20MHz_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 120V/ 60Hz

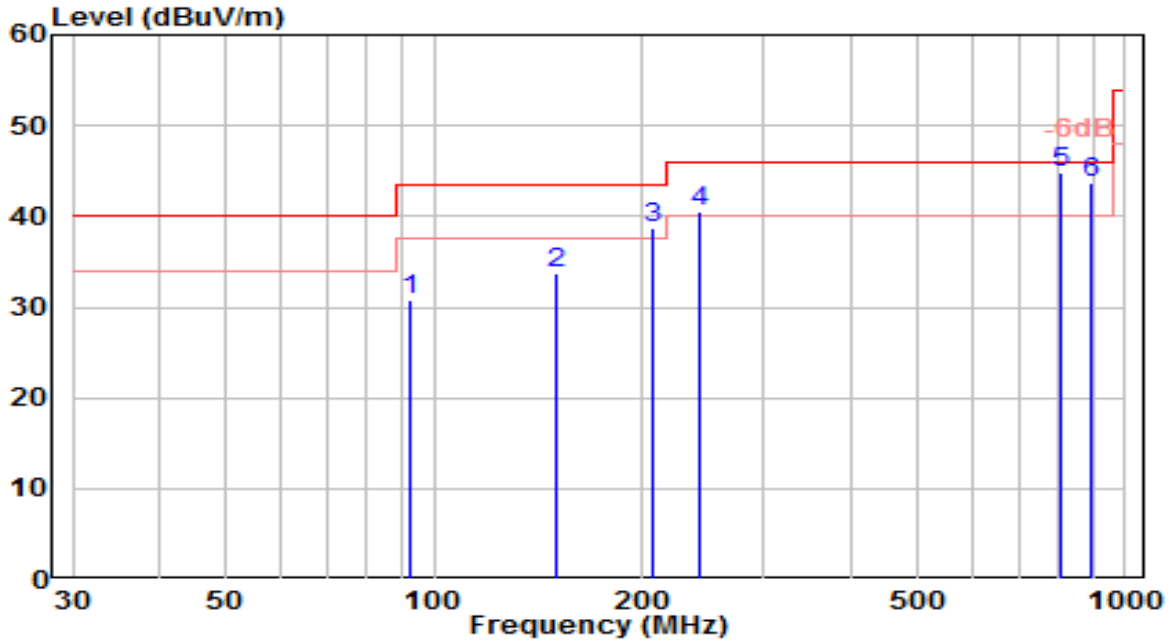


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		41.460	11.37	20.57	31.94	-8.06	40.00	100	160	QP
2		214.650	16.63	18.89	35.52	-7.98	43.50	100	360	QP
3		237.970	14.15	20.29	34.45	-11.55	46.00	100	100	QP
4		670.290	13.85	28.84	42.69	-3.31	46.00	100	50	QP
5	*	797.720	14.09	30.29	44.38	-1.62	46.00	100	175	QP
6		896.720	10.58	32.12	42.70	-3.30	46.00	100	65	QP

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-10-22
Factor	VULB 9162	Temp. / Humidity	24°C /69%
Polarity	Horizontal	Site / Test Engineer	AC1 / Jeff
Test Mode	802.11n-20MHz_RX_Band1_CH 44_ANT 0+1	Test Voltage	AC 120V/ 60Hz

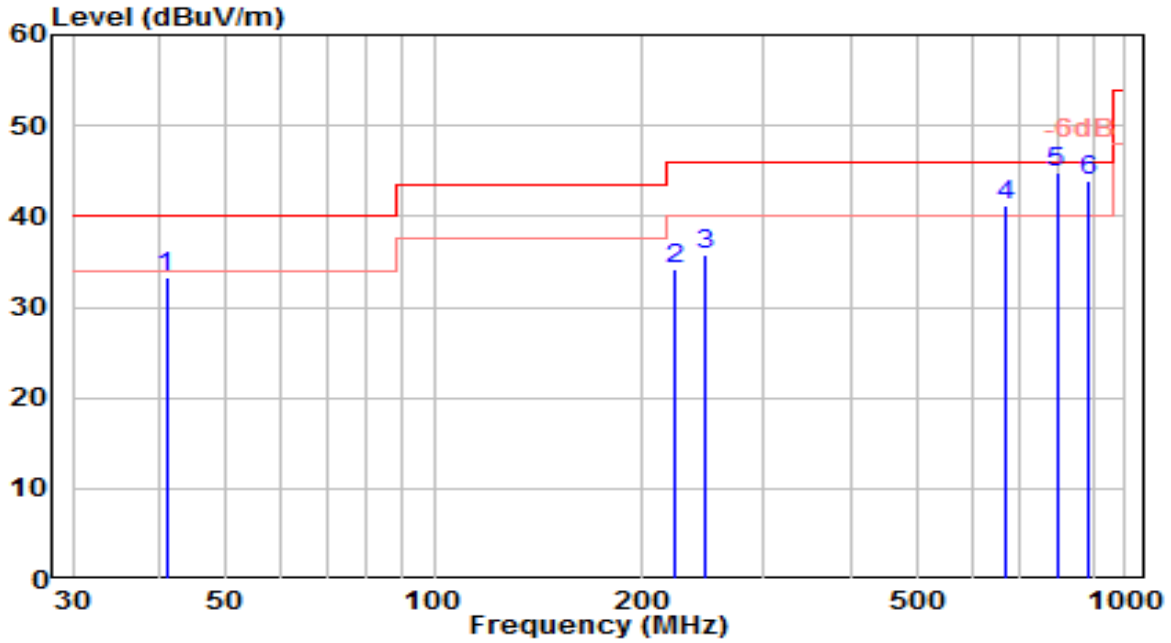


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		92.200	12.91	17.88	30.80	-12.70	43.50	100	75	QP
2		150.600	17.82	15.81	33.63	-9.87	43.50	100	80	QP
3		207.470	19.91	18.70	38.62	-4.88	43.50	115	130	QP
4		243.190	19.88	20.57	40.45	-5.55	46.00	130	355	QP
5	*	809.090	14.25	30.50	44.74	-1.26	46.00	100	20	QP
6		892.860	11.63	32.06	43.69	-2.31	46.00	100	40	QP

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-10-22
Factor	VULB 9162	Temp. / Humidity	24°C /69%
Polarity	Vertical	Site / Test Engineer	AC1 / Jeff
Test Mode	802.11n-20MHz_RX_Band1_CH 44_ANT 0+1	Test Voltage	AC 120V/ 60Hz

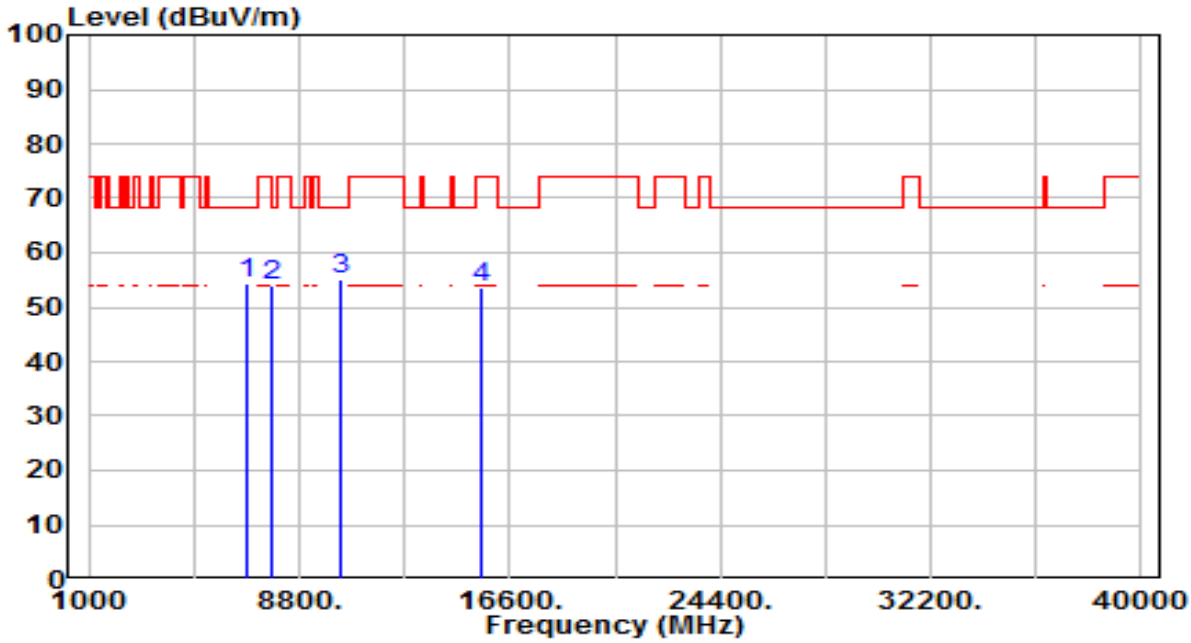


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		40.960	12.92	20.46	33.38	-6.62	40.00	100	190	QP
2		223.310	14.72	19.37	34.09	-11.91	46.00	100	205	QP
3		246.200	14.94	20.74	35.68	-10.32	46.00	100	325	QP
4		673.720	12.39	28.89	41.28	-4.72	46.00	100	285	QP
5	*	795.920	14.45	30.28	44.73	-1.27	46.00	100	215	QP
6		887.620	11.98	31.98	43.95	-2.05	46.00	100	245	QP

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11a_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/ 60Hz

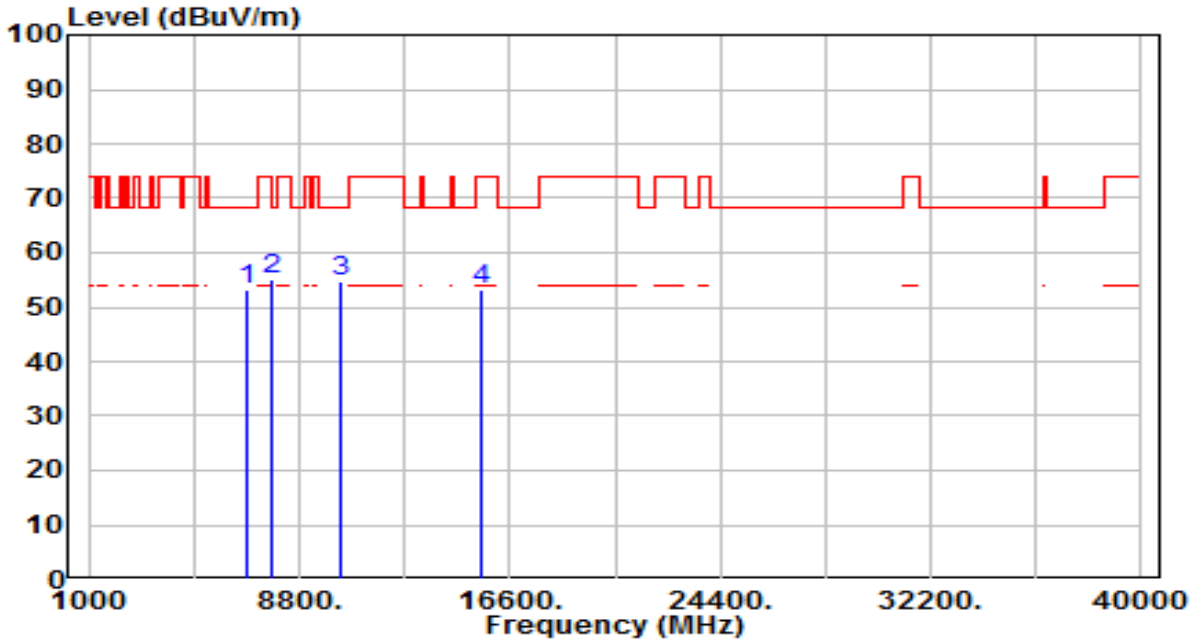


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		6906.438	44.06	10.39	54.45	-13.75	68.20	150	360	Peak
2		7776.094	40.75	13.16	53.92	-14.28	68.20	150	360	Peak
3	*	10360.000	37.14	17.92	55.06	-13.14	68.20	150	360	Peak
4		15540.000	32.31	21.24	53.55	-20.45	74.00	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11a_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/ 60Hz

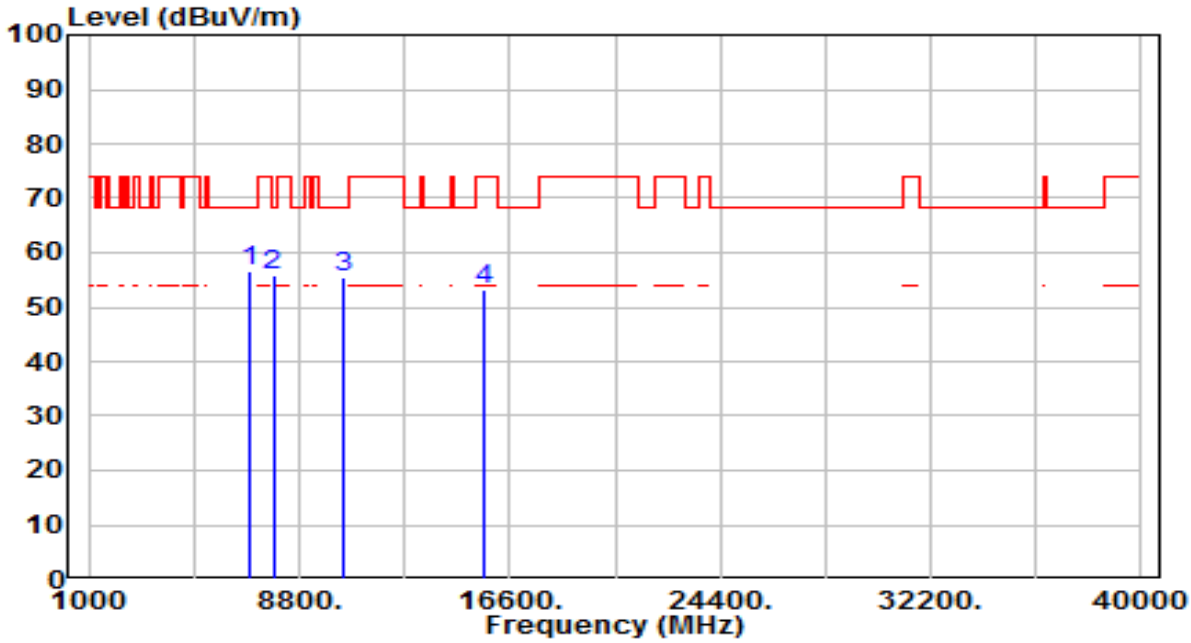


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		6906.969	42.92	10.39	53.31	-14.89	68.20	150	360	Peak
2	*	7777.156	42.05	13.16	55.21	-12.99	68.20	150	360	Peak
3		10360.000	36.73	17.92	54.65	-13.55	68.20	150	360	Peak
4		15540.000	31.80	21.24	53.04	-20.96	74.00	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11a_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 120V/ 60Hz

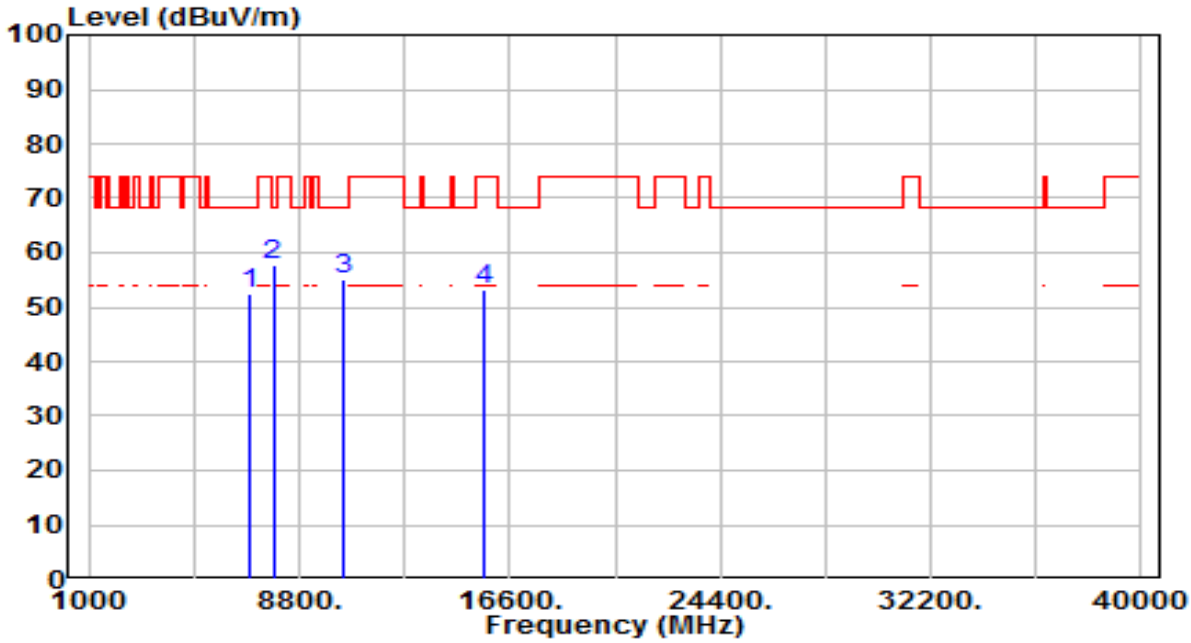


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	6960.625	45.82	10.64	56.46	-11.74	68.20	150	360	Peak
2		7833.469	42.49	13.22	55.70	-12.50	68.20	150	360	Peak
3		10440.000	37.12	18.25	55.37	-12.83	68.20	150	360	Peak
4		15660.000	32.41	20.91	53.33	-20.67	74.00	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11a_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 120V/ 60Hz

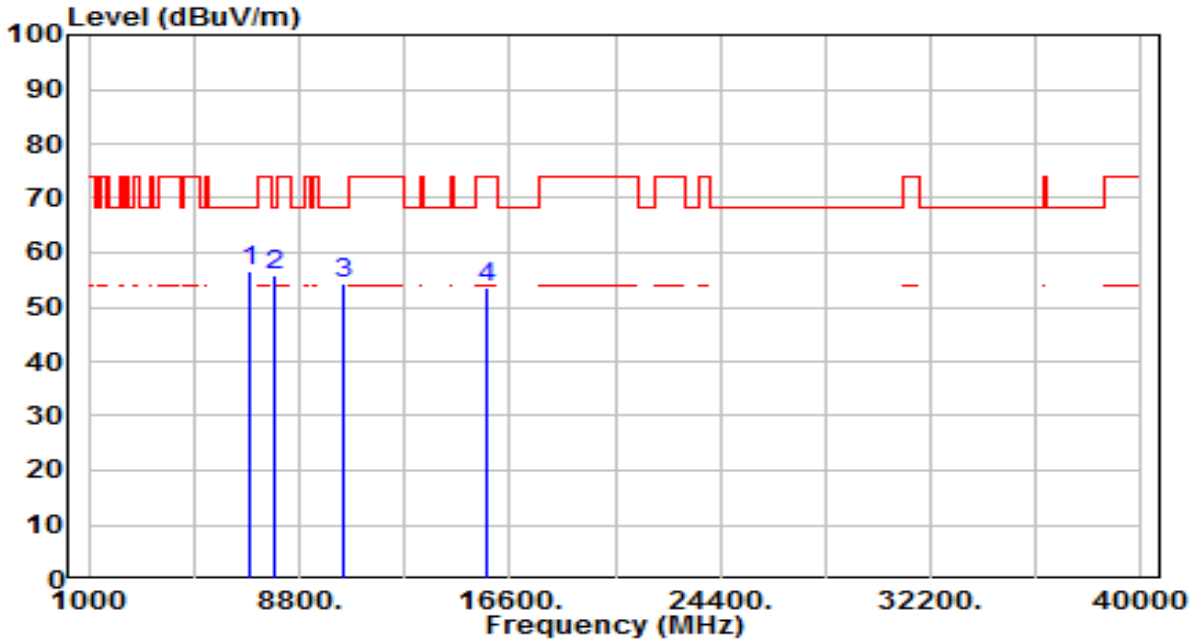


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		6959.563	41.81	10.64	52.45	-15.75	68.20	150	360	Peak
2	*	7835.063	44.39	13.22	57.61	-10.59	68.20	150	360	Peak
3		10440.000	36.94	18.25	55.19	-13.01	68.20	150	360	Peak
4		15660.000	32.24	20.91	53.16	-20.84	74.00	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11a_TX_Band1_CH 48_ANT 0+1	Test Voltage	AC 120V/ 60Hz

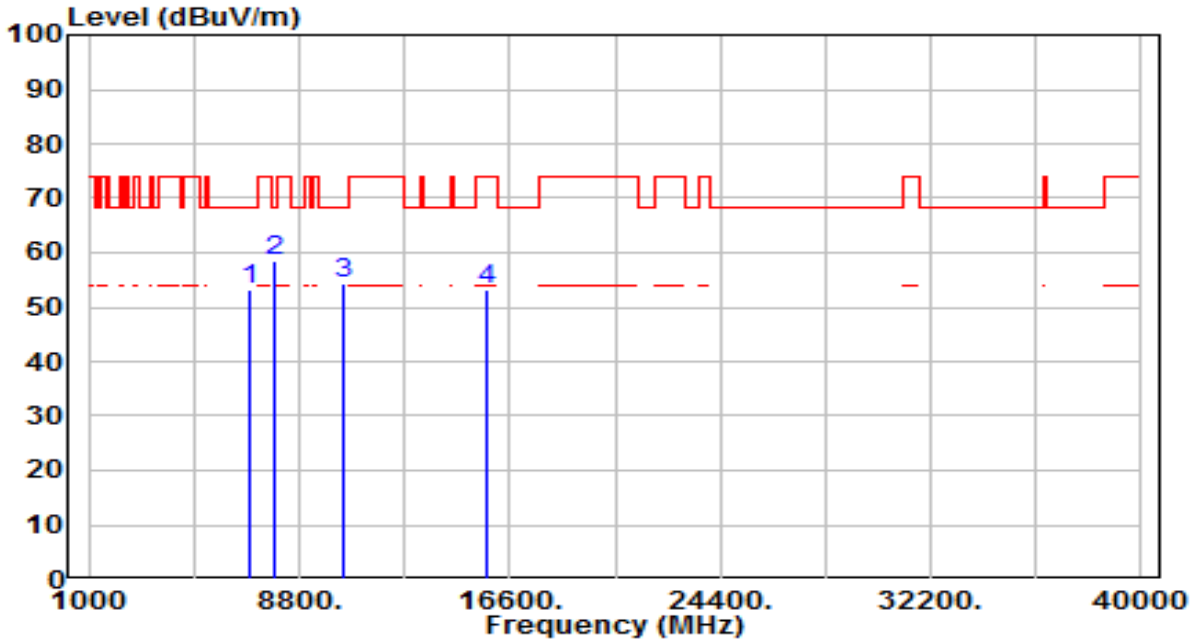


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	6986.656	45.99	10.77	56.76	-11.44	68.20	150	360	Peak
2		7860.031	42.54	13.24	55.78	-12.42	68.20	150	360	Peak
3		10480.000	35.94	18.42	54.36	-13.84	68.20	150	360	Peak
4		15720.000	32.70	20.75	53.45	-20.55	74.00	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11a_TX_Band1_CH 48_ANT 0+1	Test Voltage	AC 120V/ 60Hz

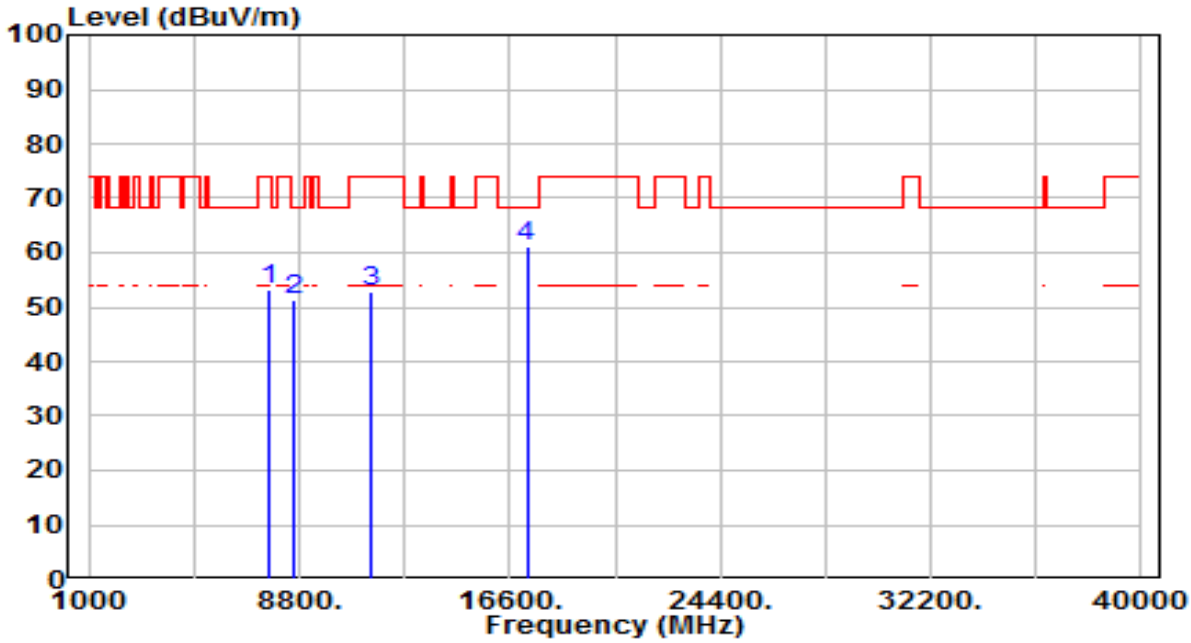


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		6987.188	42.51	10.77	53.28	-14.92	68.20	150	360	Peak
2	*	7864.281	45.12	13.25	58.36	-9.84	68.20	150	360	Peak
3		10480.000	36.09	18.42	54.51	-13.69	68.20	150	360	Peak
4		15720.000	32.42	20.75	53.17	-20.83	74.00	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11a_TX_Band4_CH 149_ANT 0+1	Test Voltage	AC 120V/ 60Hz

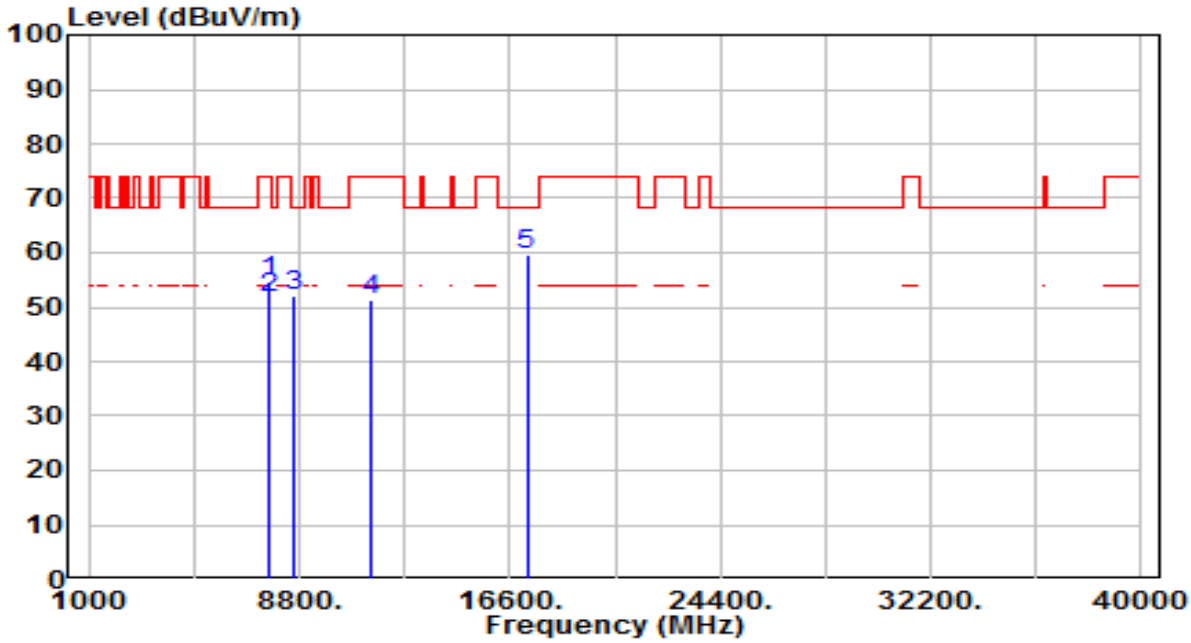


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		7659.750	39.97	13.05	53.02	-20.98	74.00	150	360	Peak
2		8610.688	37.46	13.89	51.35	-16.85	68.20	150	360	Peak
3		11490.000	32.64	20.03	52.67	-21.33	74.00	150	360	Peak
4	*	17235.000	35.15	25.99	61.14	-7.06	68.20	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11a_TX_Band4_CH 149_ANT 0+1	Test Voltage	AC 120V/ 60Hz

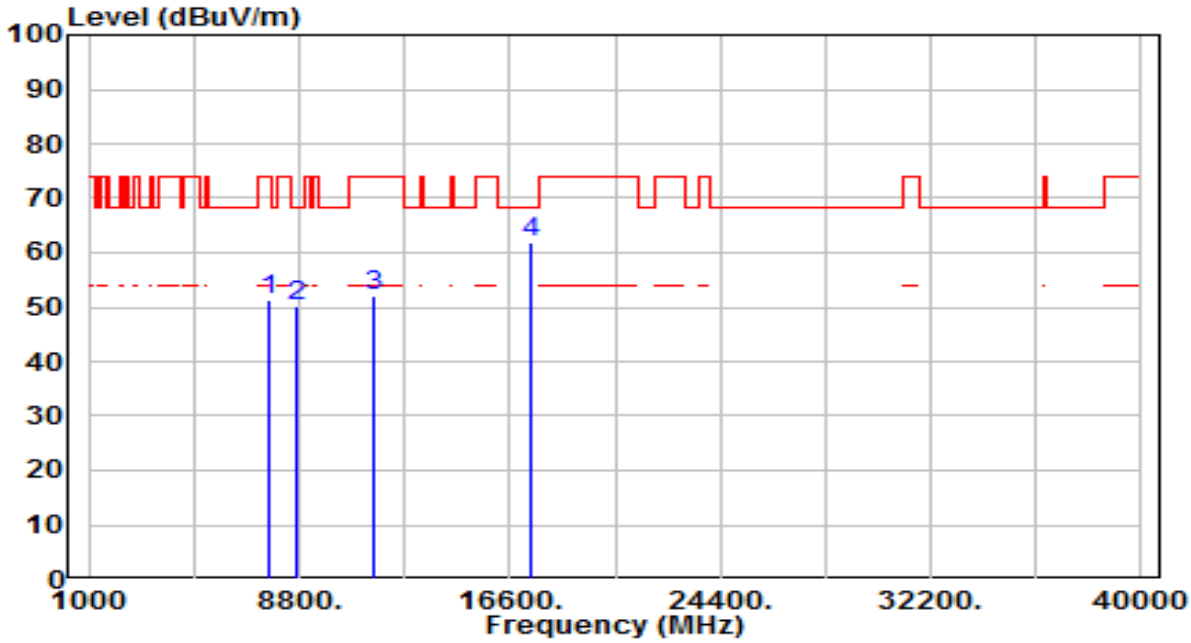


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	7659.750	41.73	13.05	54.78	-19.22	74.00	105	175	Peak
2	*	7659.750	38.76	13.05	51.81	-2.19	54.00	105	175	Average
3		8614.938	38.16	13.90	52.06	-16.14	68.20	150	360	Peak
4		11490.000	31.39	20.03	51.42	-22.58	74.00	150	360	Peak
5		17235.000	33.76	25.99	59.75	-8.45	68.20	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11a_TX_Band4_CH 157_ANT 0+1	Test Voltage	AC 120V/ 60Hz

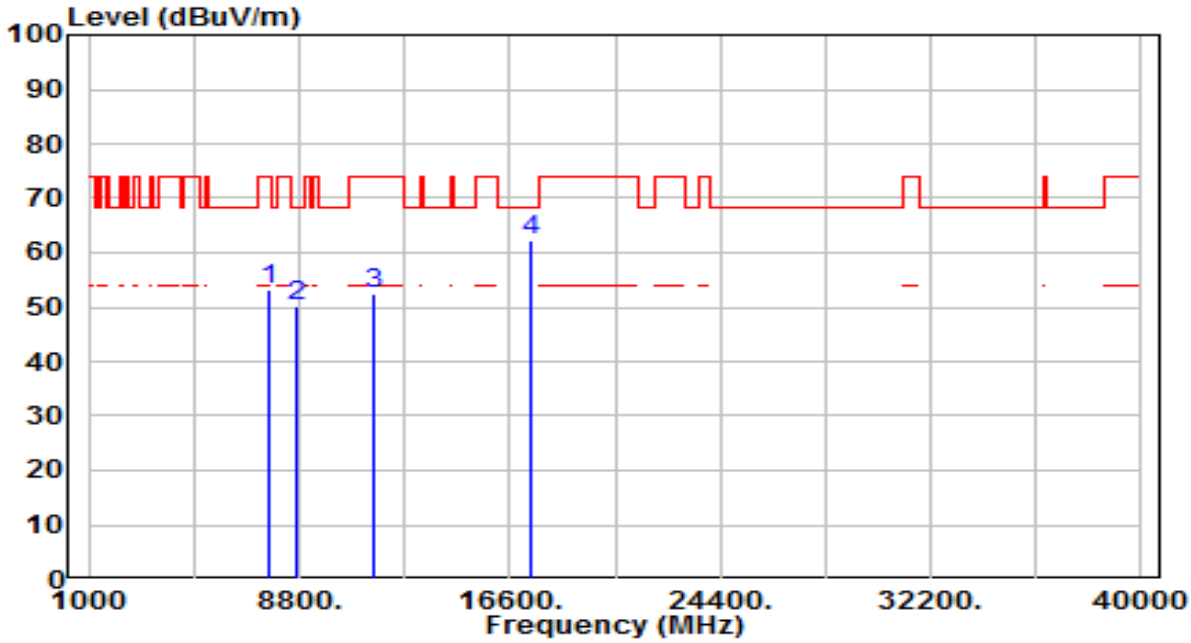


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		7712.344	38.23	13.10	51.33	-22.67	74.00	150	360	Peak
2		8685.594	35.99	14.07	50.06	-18.14	68.20	150	360	Peak
3		11570.000	32.07	19.90	51.96	-22.04	74.00	150	360	Peak
4	*	17355.000	34.90	26.91	61.81	-6.39	68.20	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11a_TX_Band4_CH 157_ANT 0+1	Test Voltage	AC 120V/ 60Hz

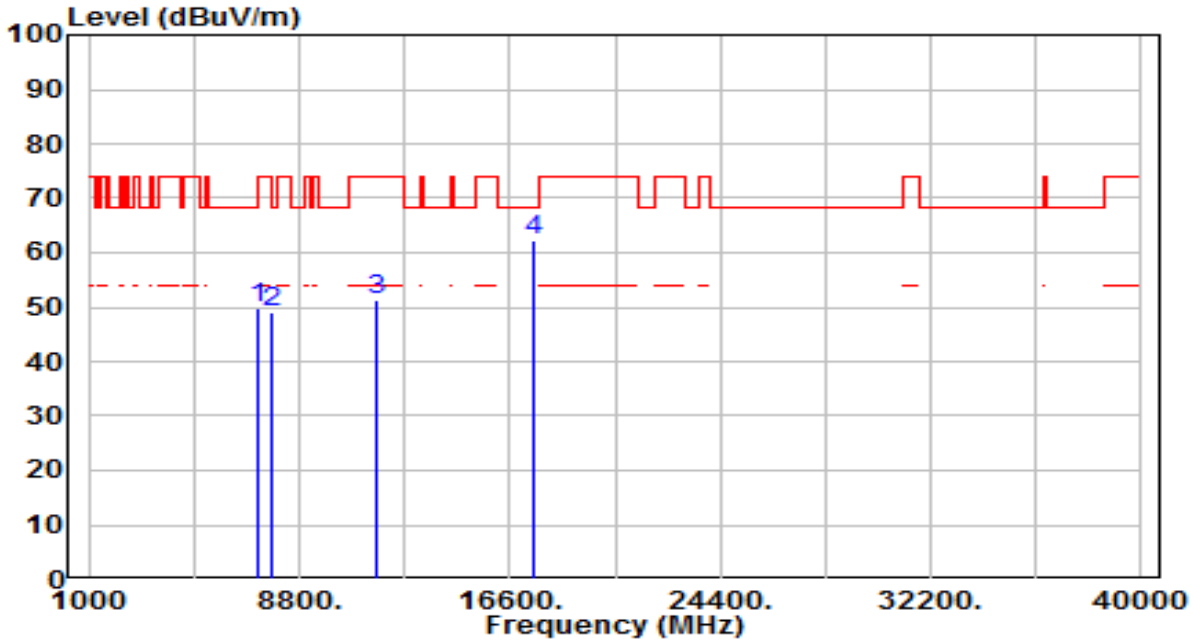


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		7713.406	40.25	13.10	53.35	-20.65	74.00	150	360	Peak
2		8677.625	36.25	14.05	50.30	-17.90	68.20	150	360	Peak
3		11570.000	32.40	19.90	52.30	-21.70	74.00	150	360	Peak
4	*	17355.000	35.34	26.91	62.24	-5.96	68.20	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11a_TX_Band4_CH 165_ANT 0+1	Test Voltage	AC 120V/ 60Hz

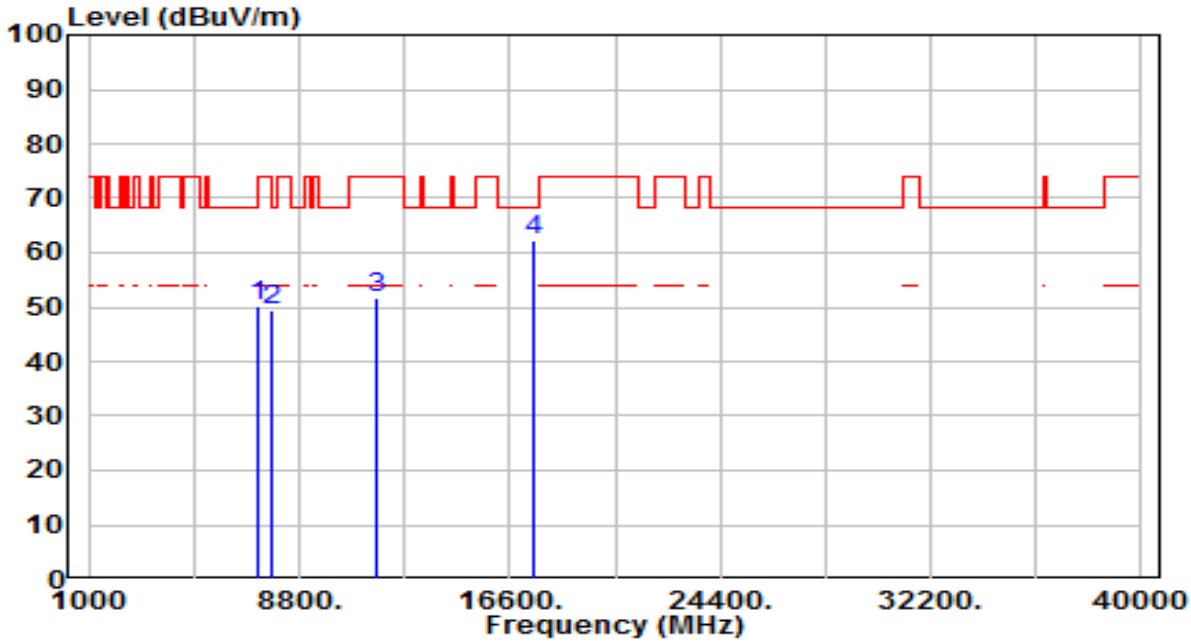


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		7279.375	37.65	11.98	49.64	-24.36	74.00	150	360	Peak
2		7766.531	35.75	13.15	48.90	-19.30	68.20	150	360	Peak
3		11650.000	31.46	19.73	51.18	-22.82	74.00	150	360	Peak
4	*	17475.000	34.30	27.82	62.12	-6.08	68.20	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11a_TX_Band4_CH 165_ANT 0+1	Test Voltage	AC 120V/ 60Hz

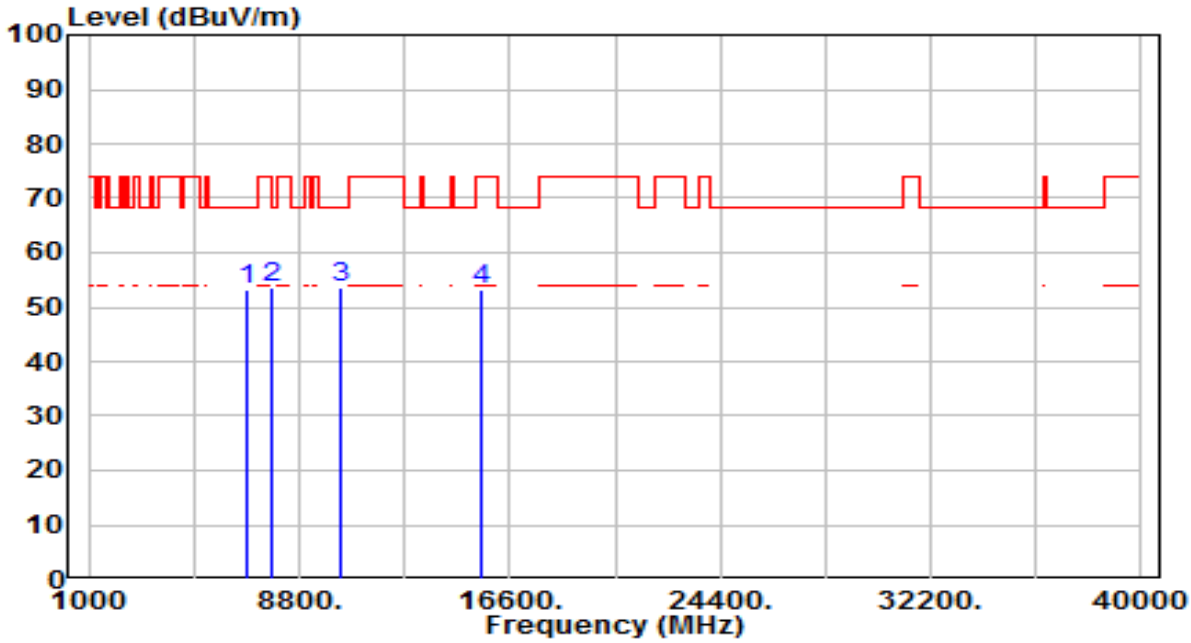


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		7283.625	38.17	12.00	50.18	-23.82	74.00	150	360	Peak
2		7770.250	36.30	13.16	49.45	-18.75	68.20	150	360	Peak
3		11650.000	32.07	19.73	51.80	-22.20	74.00	150	360	Peak
4	*	17475.000	34.31	27.82	62.13	-6.07	68.20	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-20MHz_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/ 60Hz

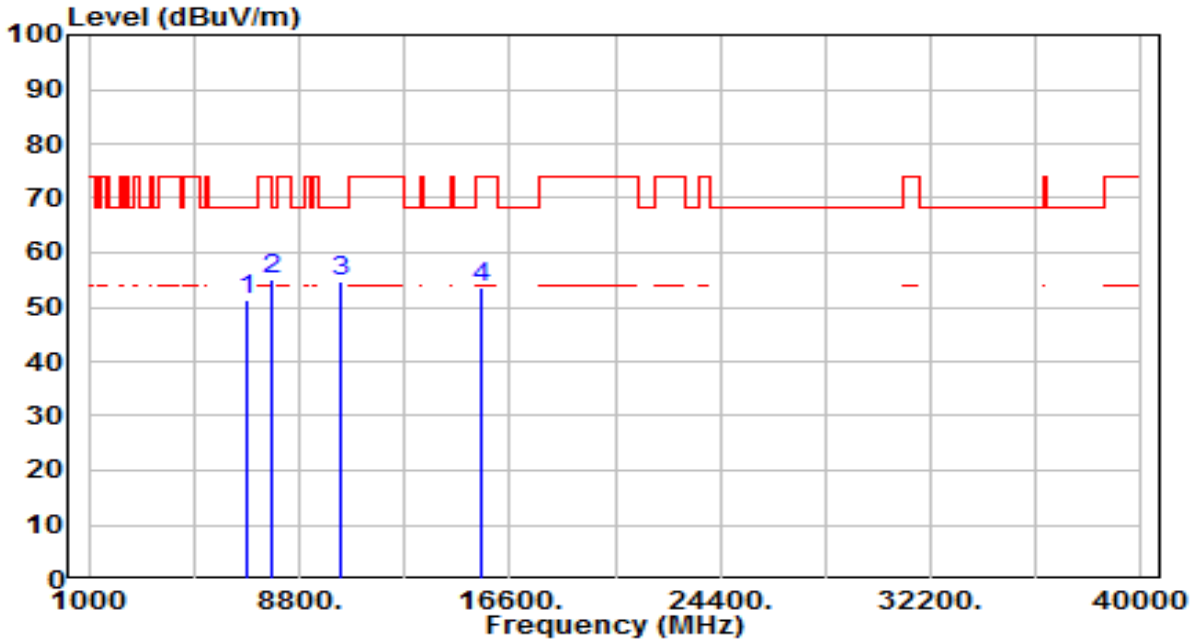


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		6906.969	42.67	10.39	53.06	-15.14	68.20	150	360	Peak
2		7772.375	40.50	13.16	53.66	-14.54	68.20	150	360	Peak
3	*	10360.000	35.79	17.92	53.71	-14.49	68.20	150	360	Peak
4		15540.000	32.12	21.24	53.37	-20.63	74.00	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-20MHz_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/ 60Hz

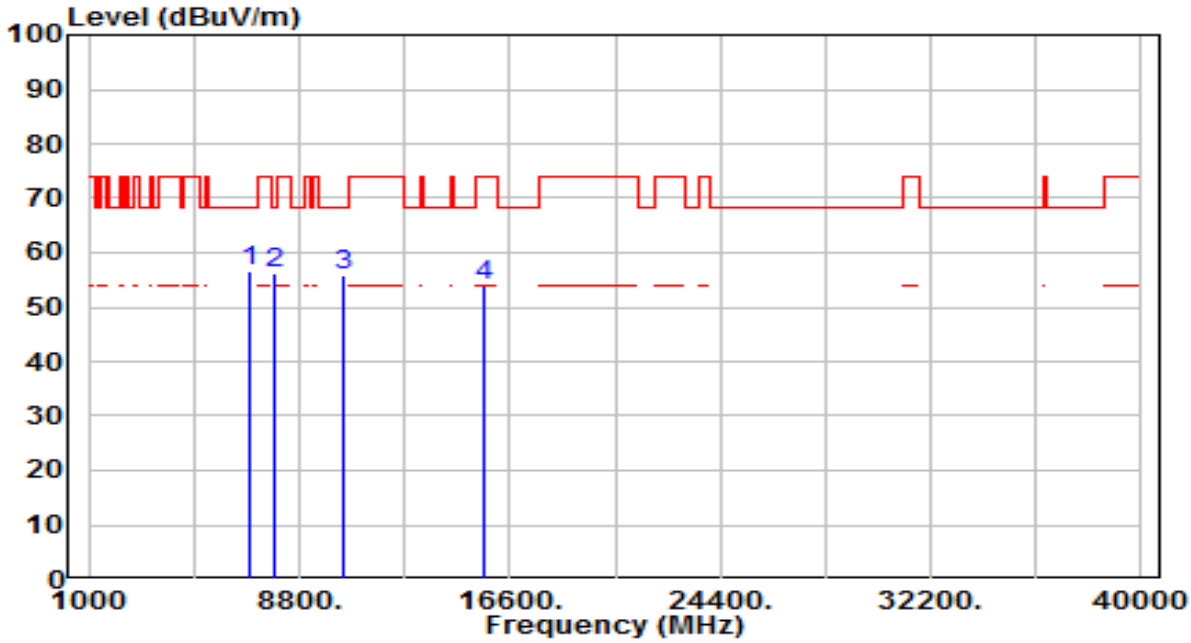


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		6906.969	41.02	10.39	51.41	-16.79	68.20	150	360	Peak
2	*	7773.969	41.77	13.16	54.93	-13.27	68.20	150	360	Peak
3		10360.000	36.80	17.92	54.72	-13.48	68.20	150	360	Peak
4		15540.000	32.48	21.24	53.72	-20.28	74.00	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-20MHz_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 120V/ 60Hz

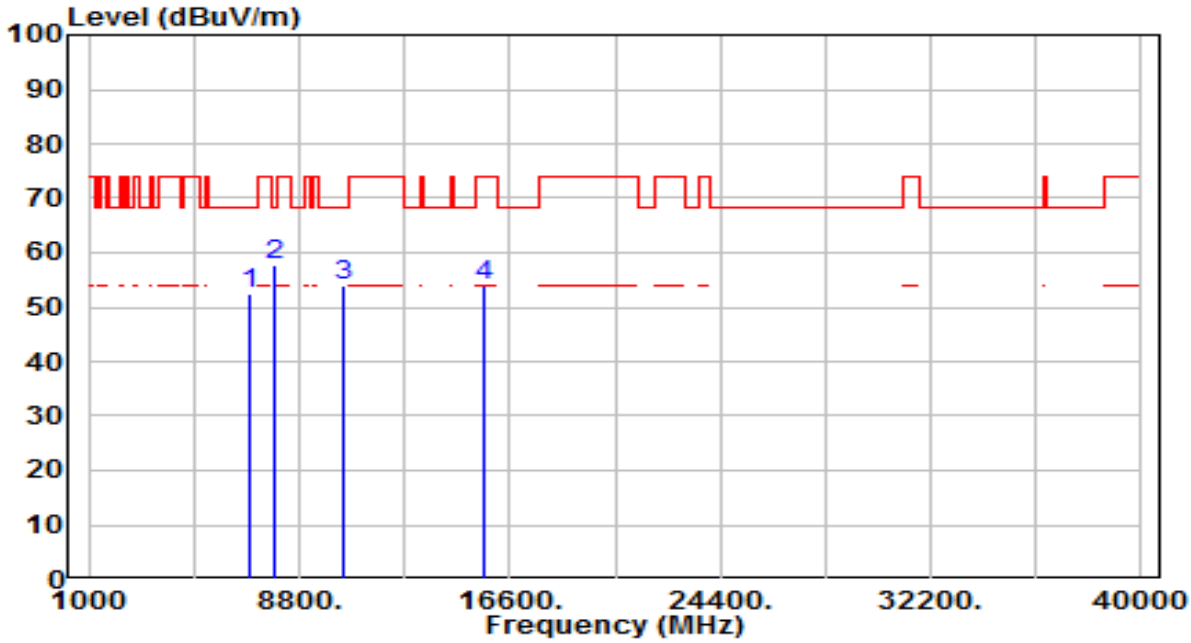


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	6960.094	45.86	10.64	56.50	-11.70	68.20	150	360	Peak
2		7837.188	42.93	13.22	56.15	-12.05	68.20	150	360	Peak
3		10440.000	37.75	18.25	56.00	-12.20	68.20	150	360	Peak
4		15660.000	32.87	20.91	53.78	-20.22	74.00	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-20MHz_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 120V/ 60Hz

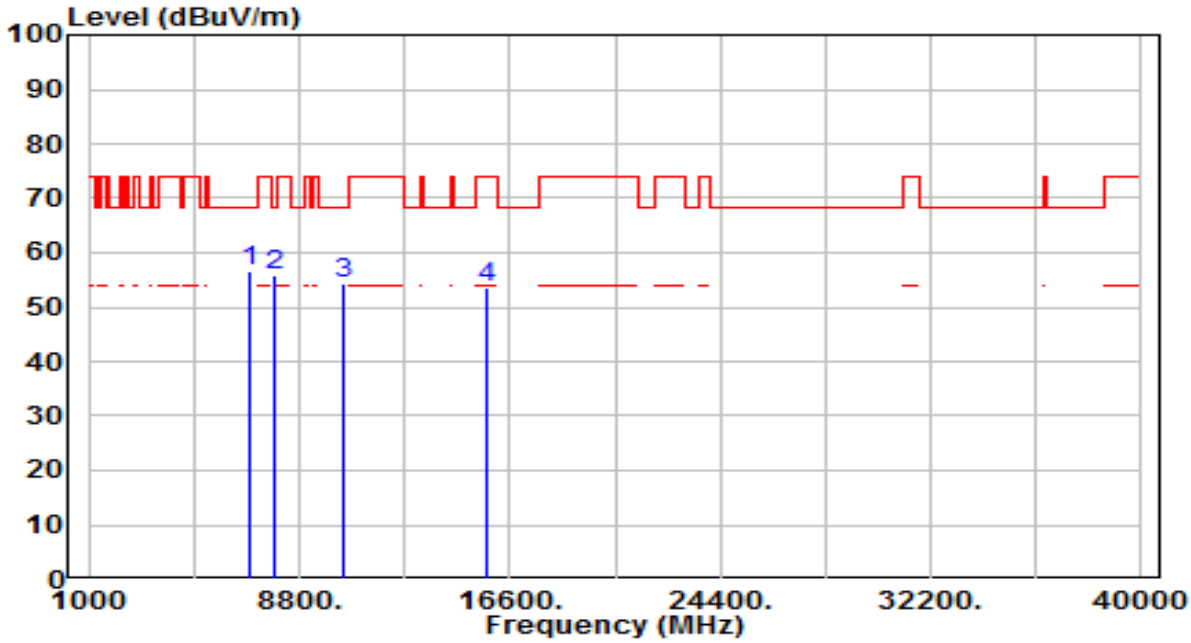


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		6960.094	41.88	10.64	52.52	-15.68	68.20	150	360	Peak
2	*	7838.250	44.44	13.22	57.66	-10.54	68.20	150	360	Peak
3		10440.000	35.63	18.25	53.88	-14.32	68.20	150	360	Peak
4		15660.000	32.90	20.91	53.81	-20.19	74.00	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-20MHz_TX_Band1_CH 48_ANT 0+1	Test Voltage	AC 120V/ 60Hz

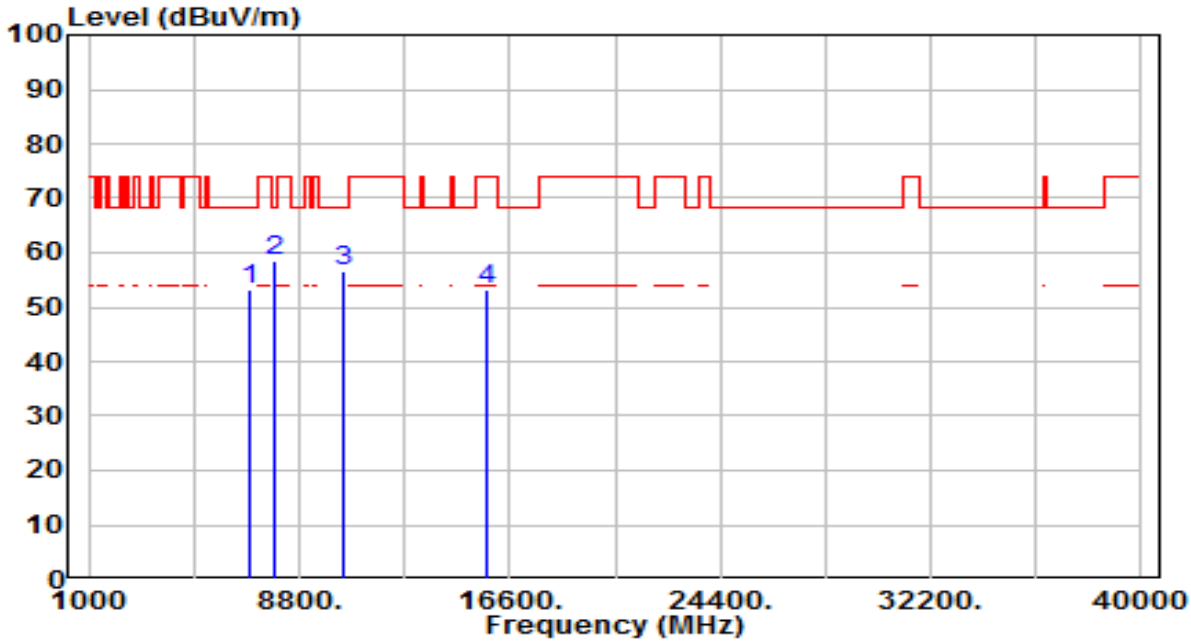


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	6986.656	45.94	10.77	56.70	-11.50	68.20	150	360	Peak
2		7858.438	42.55	13.24	55.80	-12.40	68.20	150	360	Peak
3		10480.000	35.81	18.42	54.23	-13.97	68.20	150	360	Peak
4		15720.000	32.82	20.75	53.57	-20.43	74.00	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-20MHz_TX_Band1_CH 48_ANT 0+1	Test Voltage	AC 120V/ 60Hz

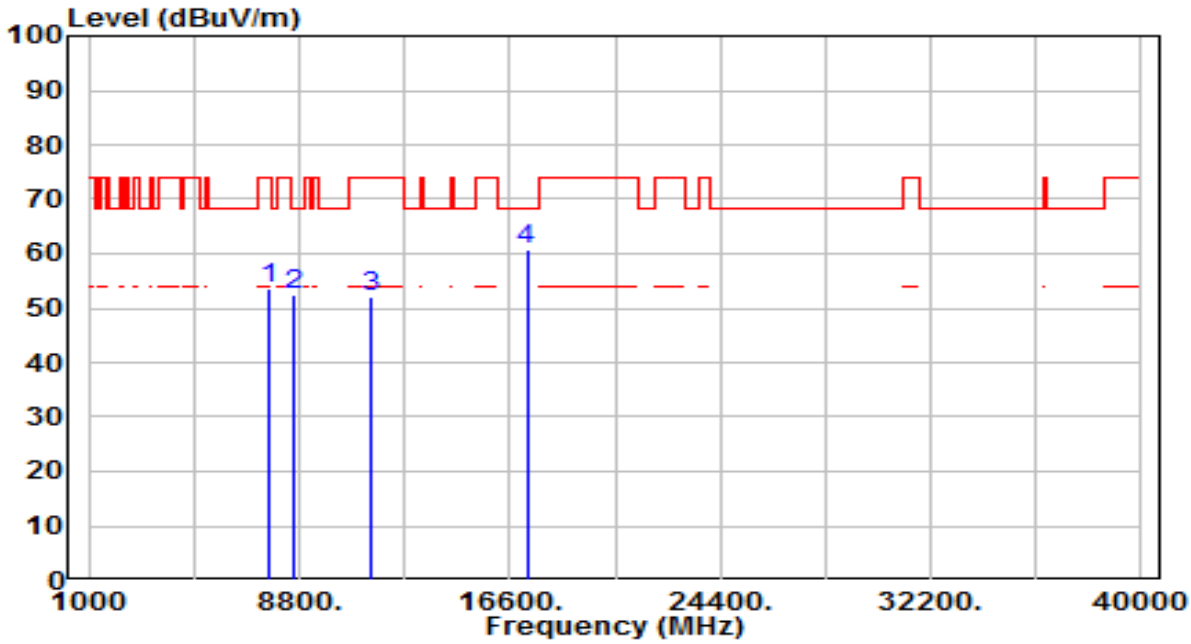


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		6986.656	42.45	10.77	53.22	-14.98	68.20	150	360	Peak
2	*	7862.688	45.42	13.25	58.67	-9.53	68.20	150	360	Peak
3		10480.000	38.04	18.42	56.45	-11.75	68.20	150	360	Peak
4		15720.000	32.58	20.75	53.34	-20.66	74.00	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-20MHz_TX_Band4_CH 149_ANT 0+1	Test Voltage	AC 120V/ 60Hz

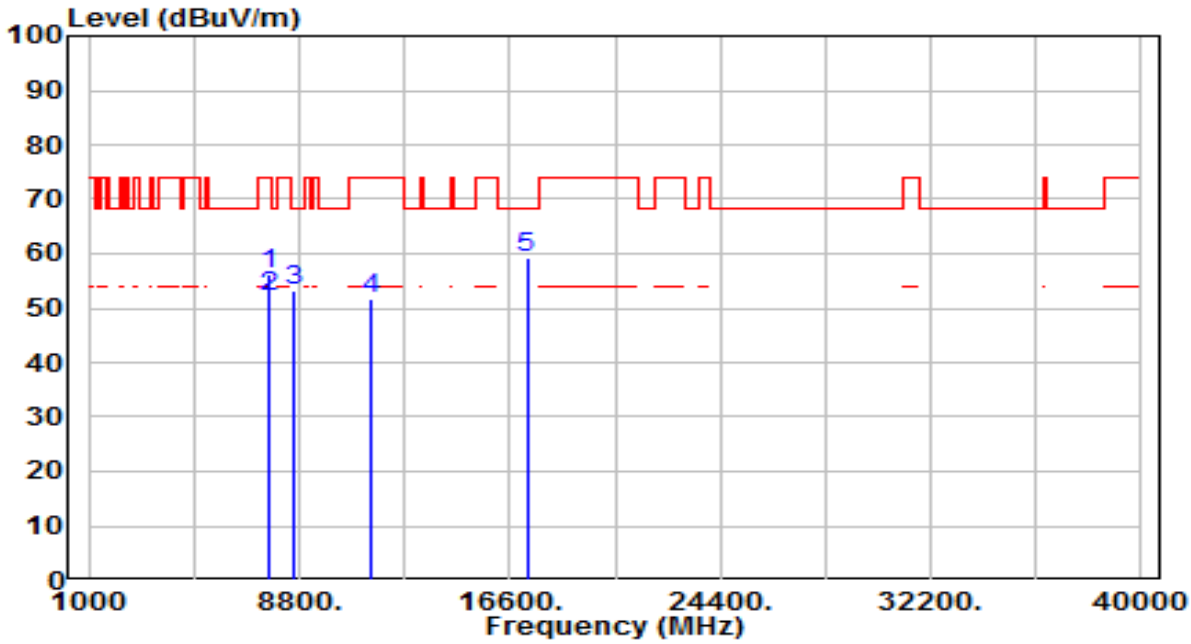


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		7660.813	40.65	13.05	53.70	-20.30	74.00	150	360	Peak
2		8624.500	38.68	13.92	52.60	-15.60	68.20	150	360	Peak
3		11490.000	31.89	20.03	51.92	-22.08	74.00	150	360	Peak
4	*	17235.000	34.70	25.99	60.69	-7.51	68.20	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-20MHz_TX_Band4_CH 149_ANT 0+1	Test Voltage	AC 120V/ 60Hz

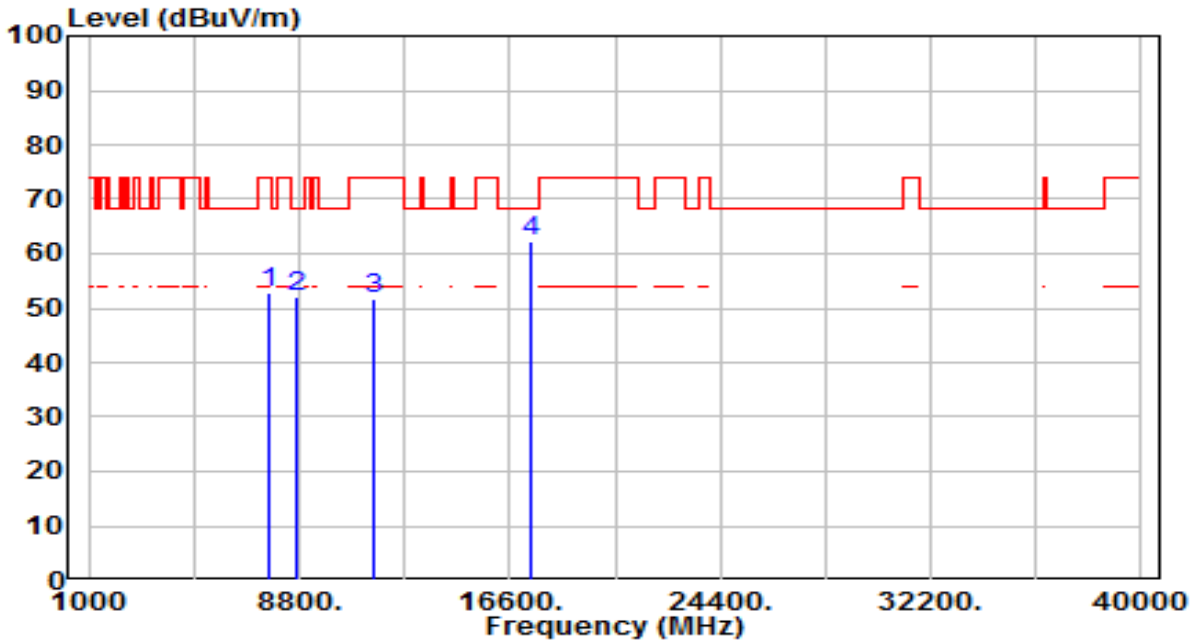


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	7659.750	43.02	13.05	56.07	-17.93	74.00	150	175	Peak
2	*	7659.750	39.13	13.05	52.18	-1.82	54.00	150	175	Average
3		8617.594	39.21	13.91	53.11	-15.09	68.20	150	360	Peak
4		11490.000	31.55	20.03	51.58	-22.42	74.00	150	360	Peak
5		17235.000	33.31	25.99	59.31	-8.89	68.20	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-20MHz_TX_Band4_CH 157_ANT 0+1	Test Voltage	AC 120V/ 60Hz

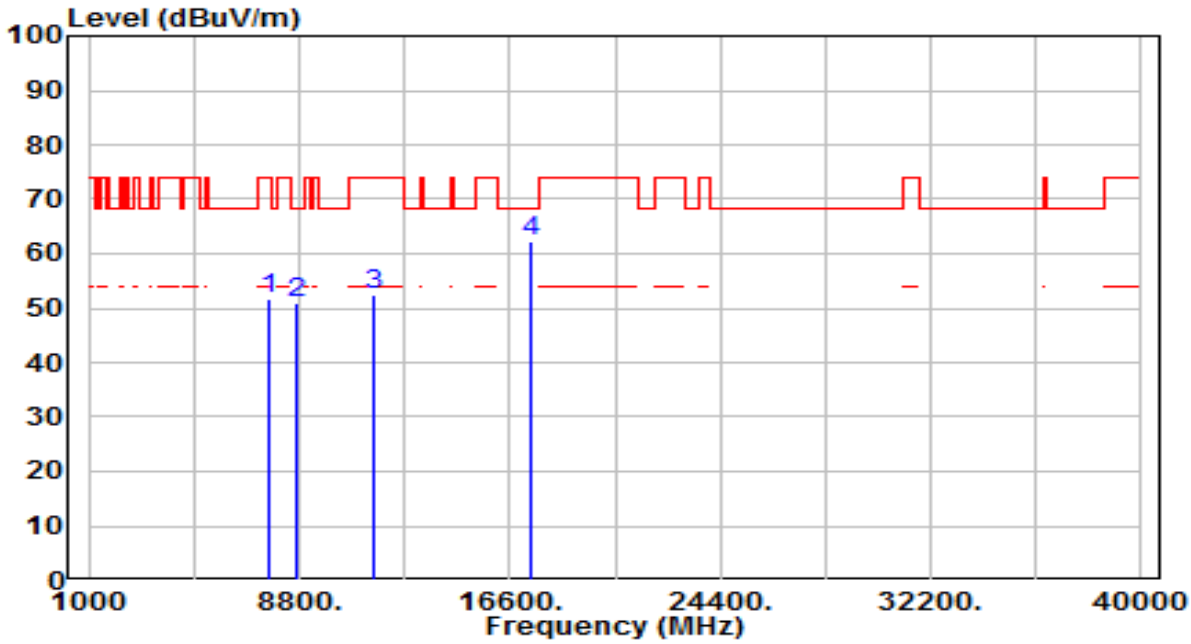


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		7712.875	39.82	13.10	52.92	-21.08	74.00	150	360	Peak
2		8680.281	38.10	14.06	52.16	-16.04	68.20	150	360	Peak
3		11570.000	31.88	19.90	51.78	-22.22	74.00	150	360	Peak
4	*	17355.000	35.18	26.91	62.09	-6.11	68.20	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-20MHz_TX_Band4_CH 157_ANT 0+1	Test Voltage	AC 120V/ 60Hz

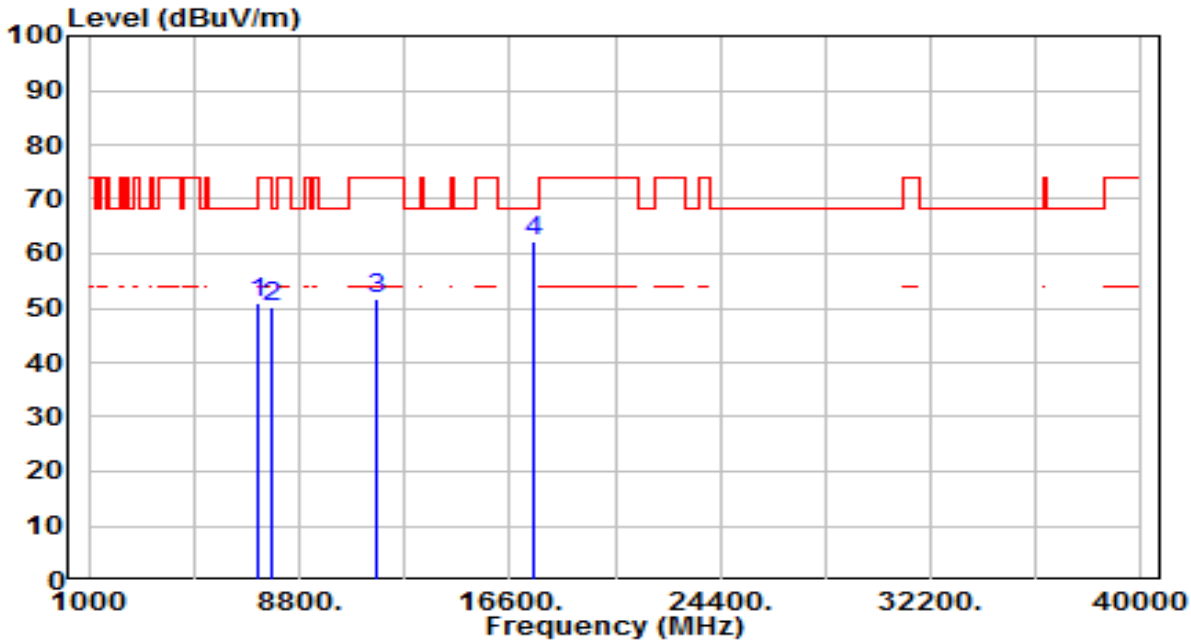


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		7713.938	38.56	13.10	51.66	-22.34	74.00	150	360	Peak
2		8685.063	37.00	14.07	51.06	-17.14	68.20	150	360	Peak
3		11570.000	32.70	19.90	52.60	-21.40	74.00	150	360	Peak
4	*	17355.000	35.42	26.91	62.33	-5.87	68.20	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-20MHz_TX_Band4_CH 165_ANT 0+1	Test Voltage	AC 120V/ 60Hz

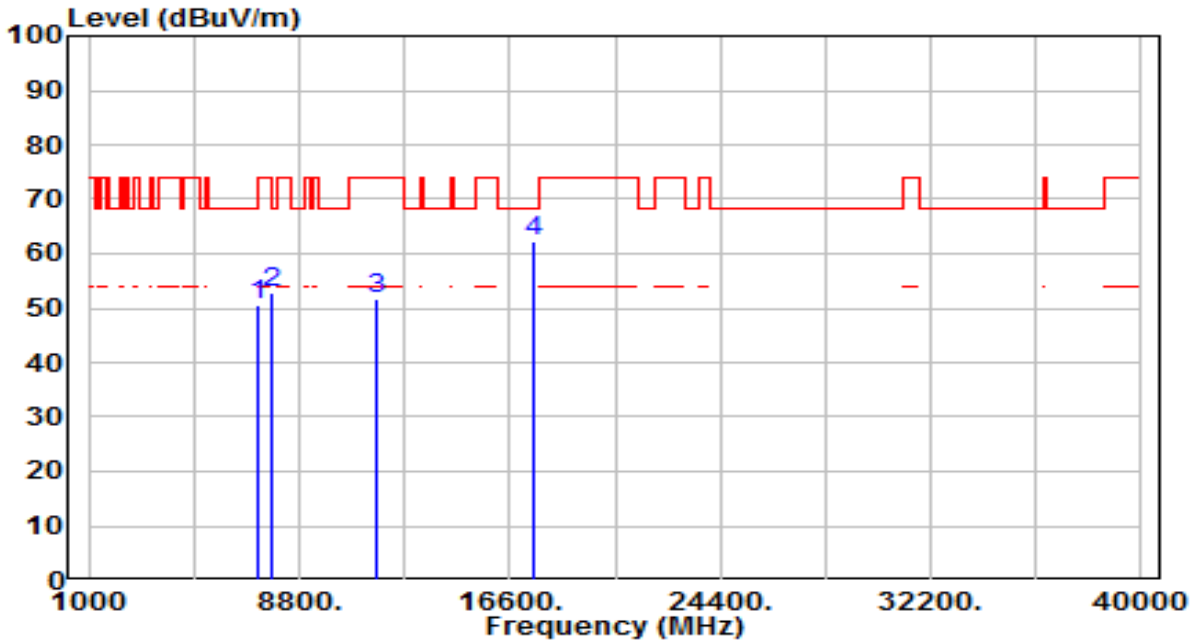


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		7274.594	39.08	11.96	51.04	-22.96	74.00	150	360	Peak
2		7767.594	36.87	13.15	50.02	-18.18	68.20	150	360	Peak
3		11650.000	31.81	19.73	51.54	-22.46	74.00	150	360	Peak
4	*	17475.000	34.63	27.82	62.45	-5.75	68.20	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-20MHz_TX_Band4_CH 165_ANT 0+1	Test Voltage	AC 120V/ 60Hz

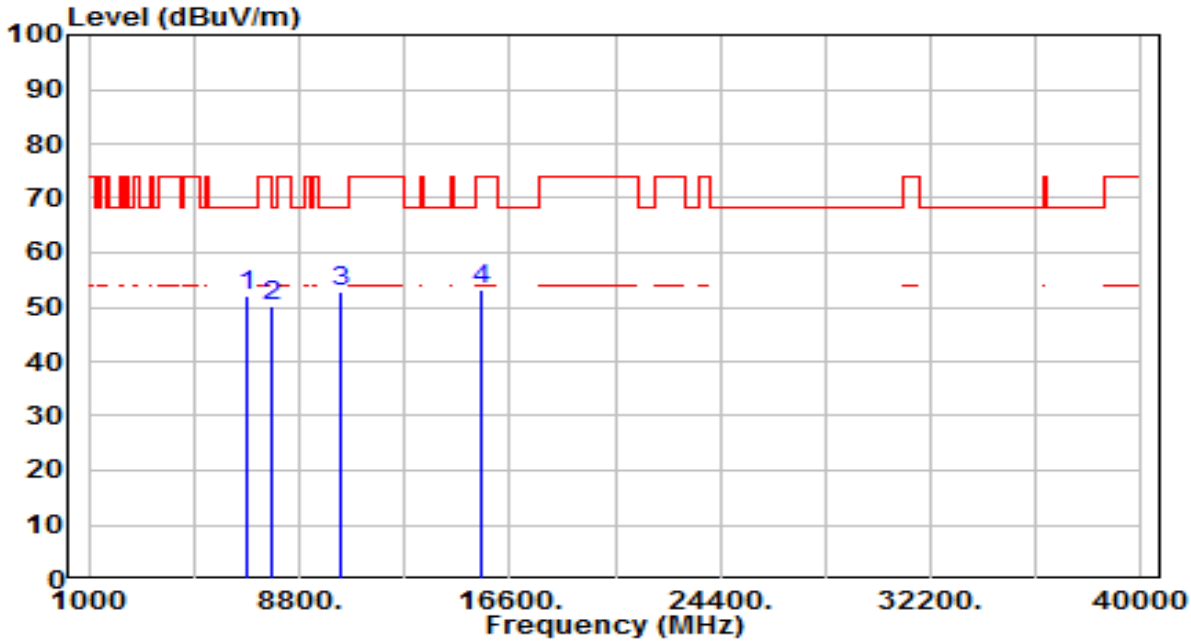


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		7282.563	38.40	12.00	50.40	-23.60	74.00	150	360	Peak
2		7761.219	39.69	13.15	52.83	-15.37	68.20	150	360	Peak
3		11650.000	31.90	19.73	51.62	-22.38	74.00	150	360	Peak
4	*	17475.000	34.43	27.82	62.25	-5.95	68.20	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-40MHz_TX_Band1_CH 38_ANT 0+1	Test Voltage	AC 120V/ 60Hz

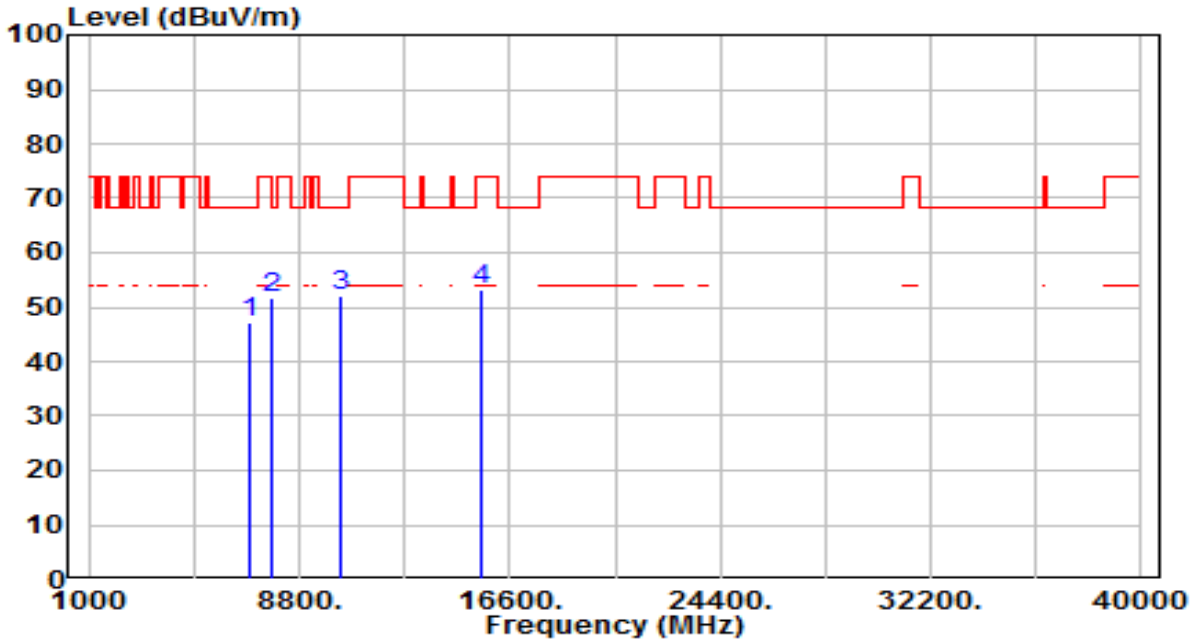


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		6895.281	41.82	10.33	52.15	-16.05	68.20	150	360	Peak
2		7796.813	36.83	13.18	50.02	-18.18	68.20	150	360	Peak
3	*	10380.000	34.78	18.00	52.78	-15.42	68.20	150	360	Peak
4		15570.000	31.96	21.16	53.12	-20.88	74.00	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-40MHz_TX_Band1_CH 38_ANT 0+1	Test Voltage	AC 120V/ 60Hz

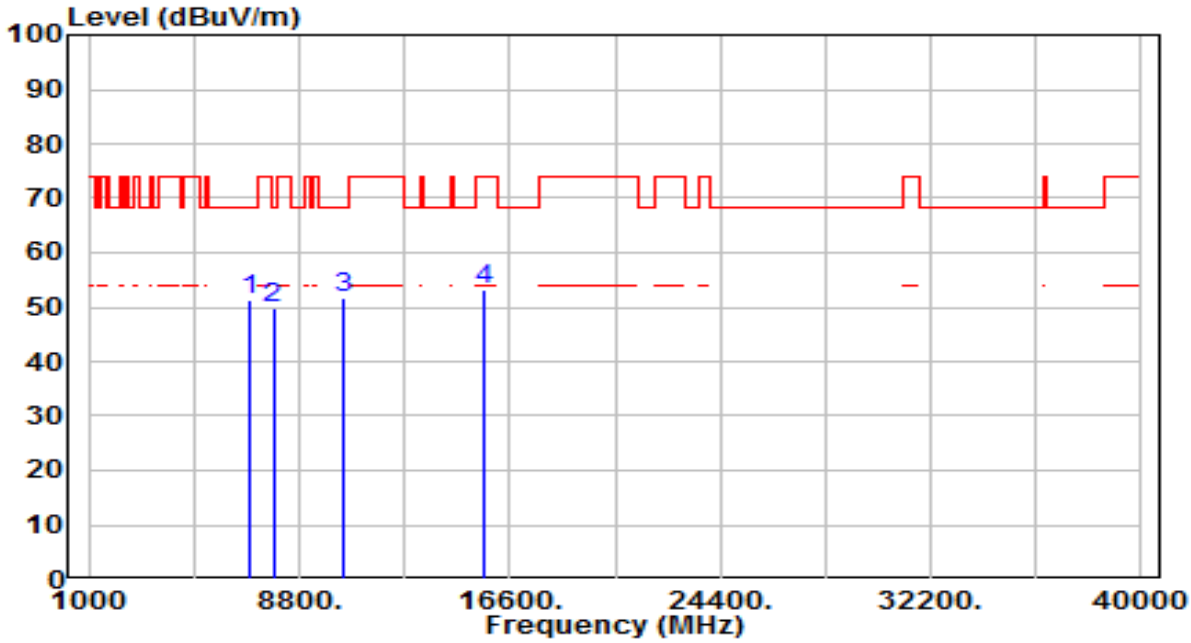


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		6920.250	36.80	10.45	47.25	-20.95	68.20	150	360	Peak
2		7781.406	38.40	13.17	51.57	-16.63	68.20	150	360	Peak
3	*	10380.000	34.04	18.00	52.04	-16.16	68.20	150	360	Peak
4		15570.000	31.87	21.16	53.03	-20.97	74.00	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-40MHz_TX_Band1_CH 46_ANT 0+1	Test Voltage	AC 120V/ 60Hz

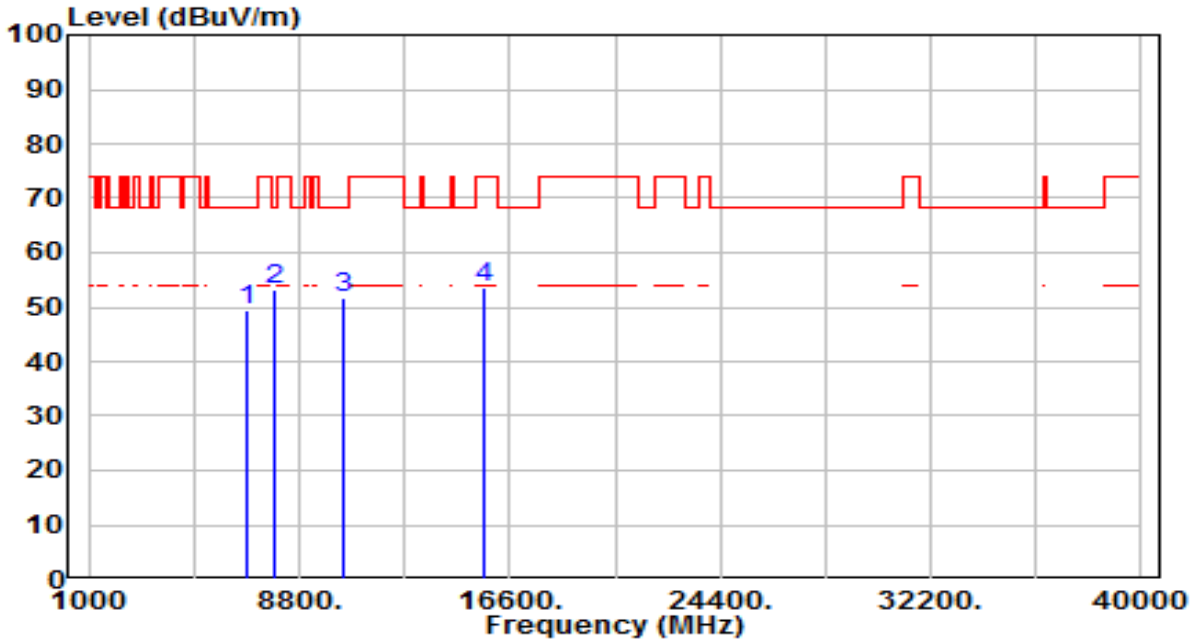


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		6972.844	40.50	10.70	51.20	-17.00	68.20	150	360	Peak
2		7832.406	36.74	13.22	49.96	-18.24	68.20	150	360	Peak
3	*	10460.000	33.29	18.33	51.62	-16.58	68.20	150	360	Peak
4		15690.000	32.24	20.83	53.07	-20.93	74.00	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-40MHz_TX_Band1_CH 46_ANT 0+1	Test Voltage	AC 120V/ 60Hz

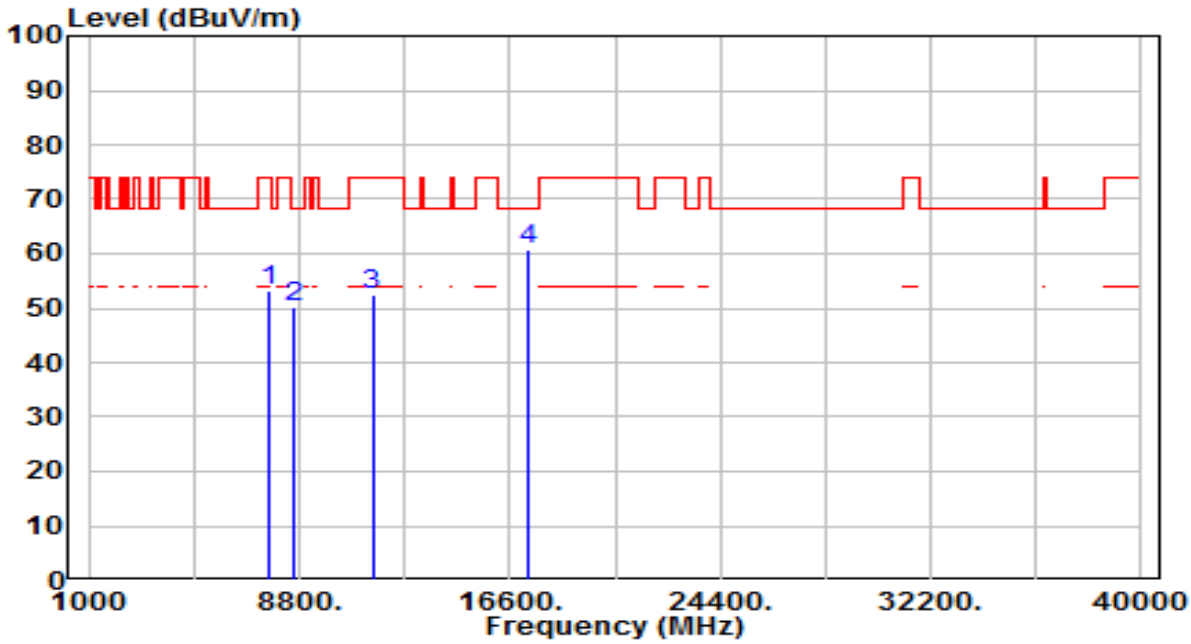


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		6872.438	39.38	10.23	49.61	-18.59	68.20	150	360	Peak
2	*	7857.906	39.84	13.24	53.08	-15.12	68.20	150	360	Peak
3		10460.000	33.28	18.33	51.61	-16.59	68.20	150	360	Peak
4		15690.000	32.60	20.83	53.43	-20.57	74.00	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-40MHz_TX_Band4_CH 151_ANT 0+1	Test Voltage	AC 120V/ 60Hz

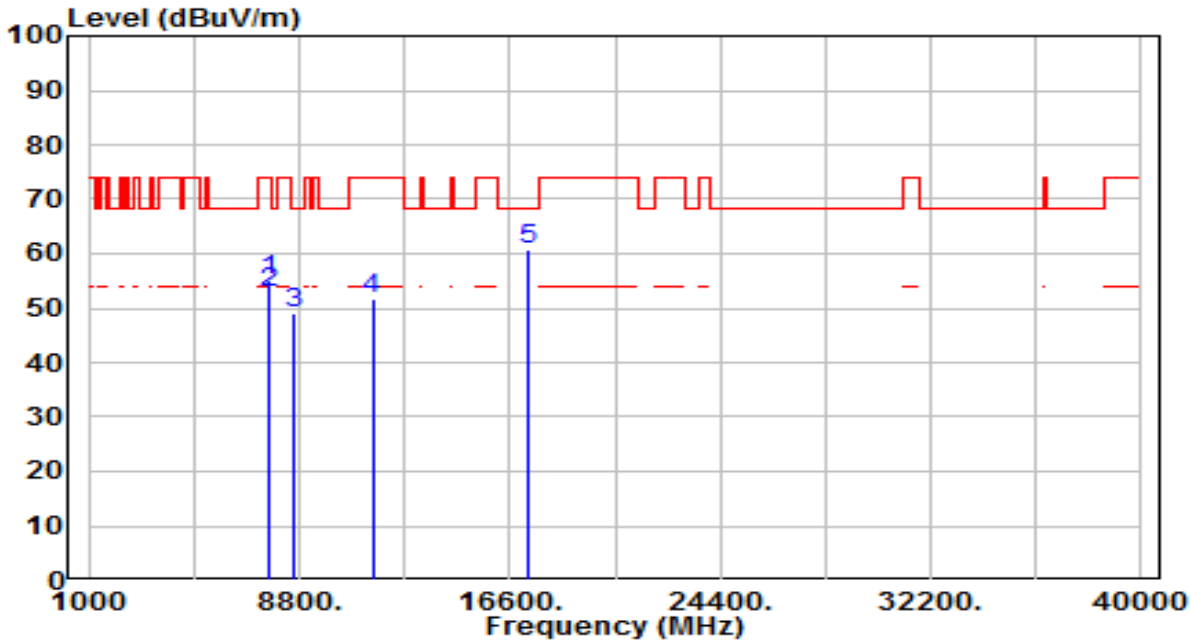


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		7673.563	40.30	13.06	53.37	-20.63	74.00	150	360	Peak
2		8627.156	36.09	13.93	50.02	-18.18	68.20	150	360	Peak
3		11510.000	32.52	20.03	52.55	-21.45	74.00	150	360	Peak
4	*	17265.000	34.60	26.22	60.82	-7.38	68.20	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-40MHz_TX_Band4_CH 151_ANT 0+1	Test Voltage	AC 120V/ 60Hz

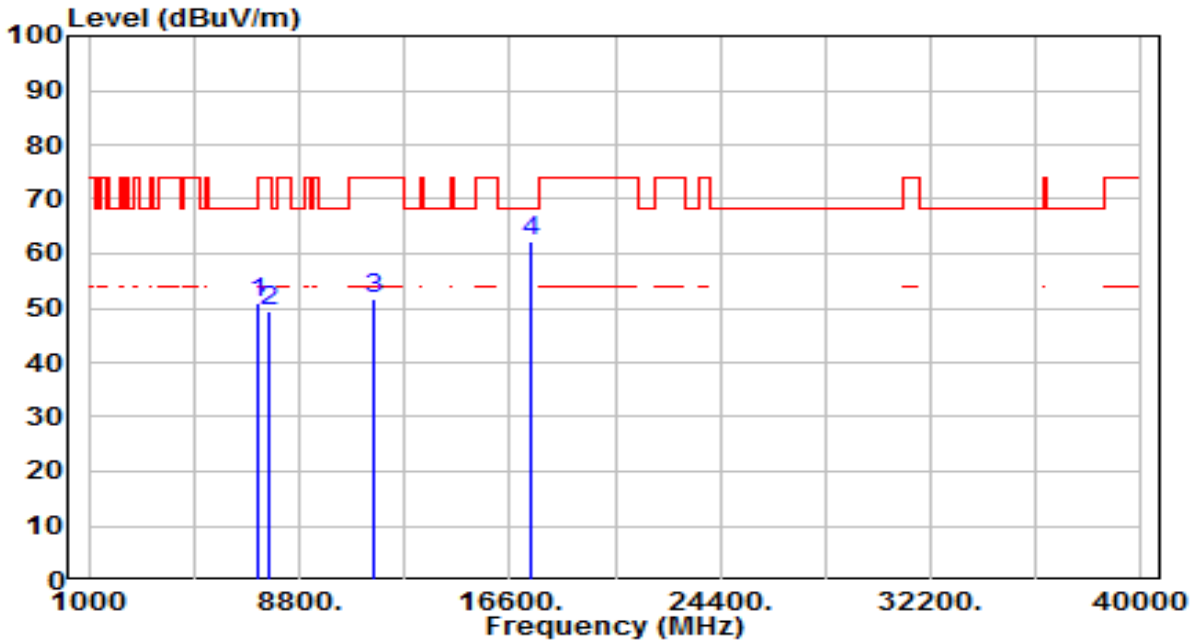


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	7673.031	41.98	13.06	55.04	-18.96	74.00	105	175	Peak
2	*	7673.031	39.88	13.06	52.94	-1.06	54.00	105	175	Average
3		8629.281	35.15	13.93	49.09	-19.11	68.20	105	175	Peak
4		11510.000	31.68	20.03	51.71	-22.29	74.00	150	360	Peak
5		17265.000	34.66	26.22	60.88	-7.32	68.20	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-40MHz_TX_Band4_CH 159_ANT 0+1	Test Voltage	AC 120V/ 60Hz

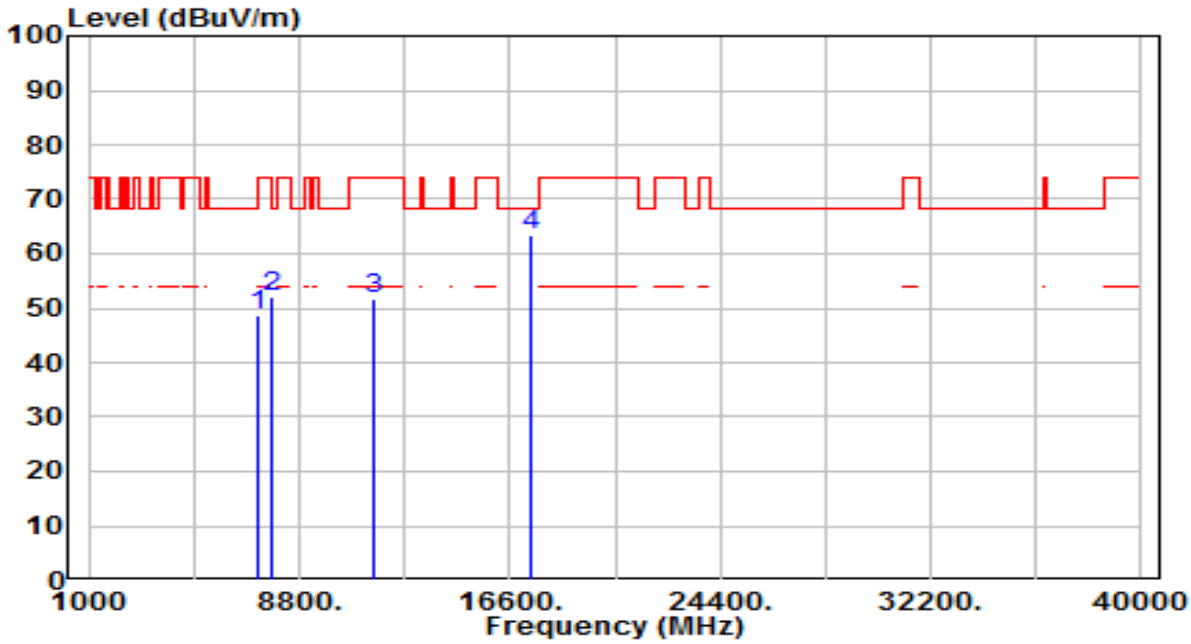


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		7259.188	38.86	11.90	50.76	-23.24	74.00	150	360	Peak
2		7726.688	36.48	13.11	49.60	-24.40	74.00	150	360	Peak
3		11590.000	31.92	19.86	51.77	-22.23	74.00	150	360	Peak
4	*	17385.000	35.01	27.13	62.14	-6.06	68.20	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-40MHz_TX_Band4_CH 159_ANT 0+1	Test Voltage	AC 120V/ 60Hz

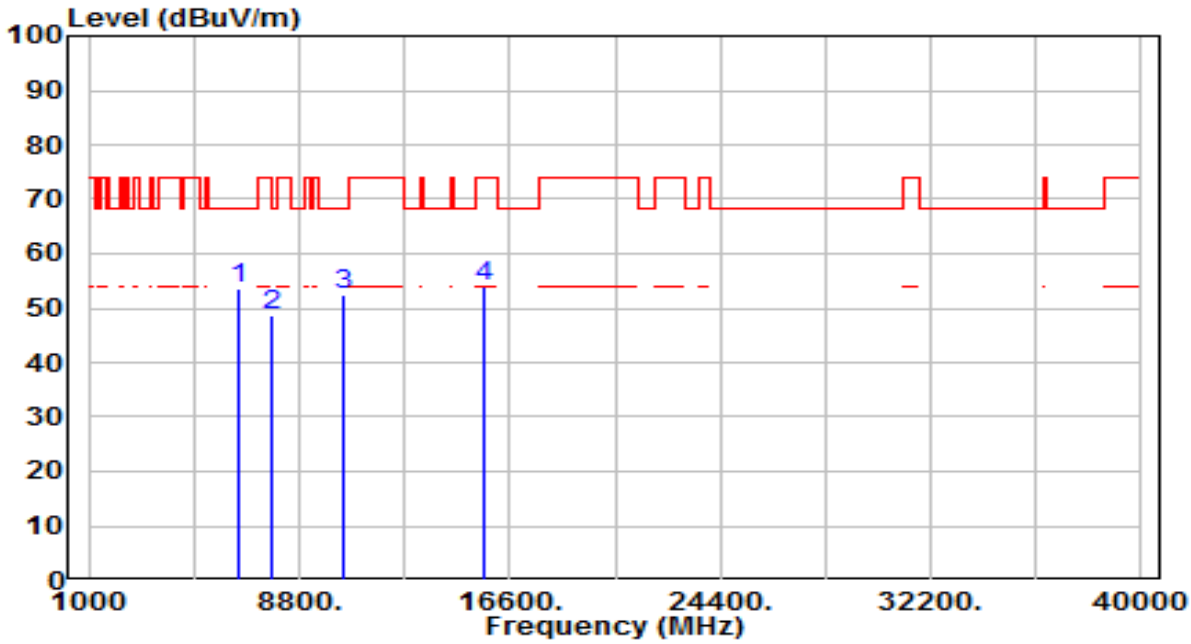


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		7246.438	36.87	11.85	48.72	-19.48	68.20	150	360	Peak
2		7753.250	39.11	13.14	52.25	-15.95	68.20	150	360	Peak
3		11590.000	32.03	19.86	51.89	-22.11	74.00	150	360	Peak
4	*	17385.000	36.23	27.13	63.36	-4.84	68.20	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11ac-80MHz_TX_Band1_CH 42_ANT 0+1	Test Voltage	AC 120V/ 60Hz

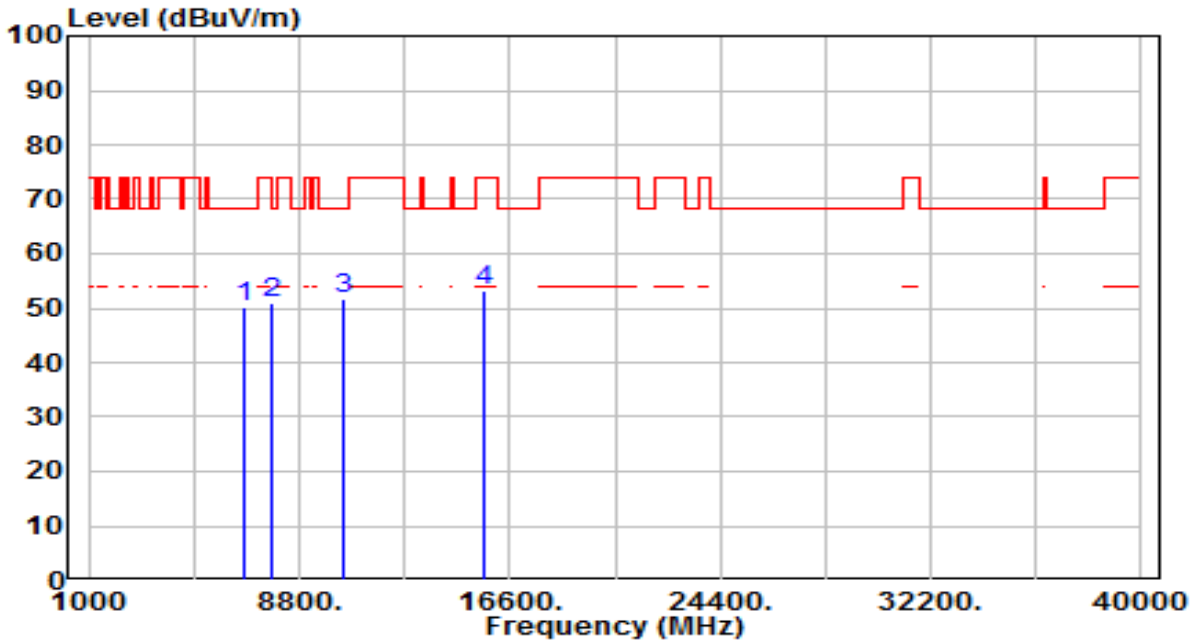


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	6538.813	44.97	8.65	53.62	-14.58	68.20	150	360	Peak
2		7759.625	35.68	13.15	48.83	-19.37	68.20	150	360	Peak
3		10420.000	34.39	18.17	52.56	-15.64	68.20	150	360	Peak
4		15630.000	32.78	21.00	53.78	-20.22	74.00	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11ac-80MHz_TX_Band1_CH 42_ANT 0+1	Test Voltage	AC 120V/ 60Hz

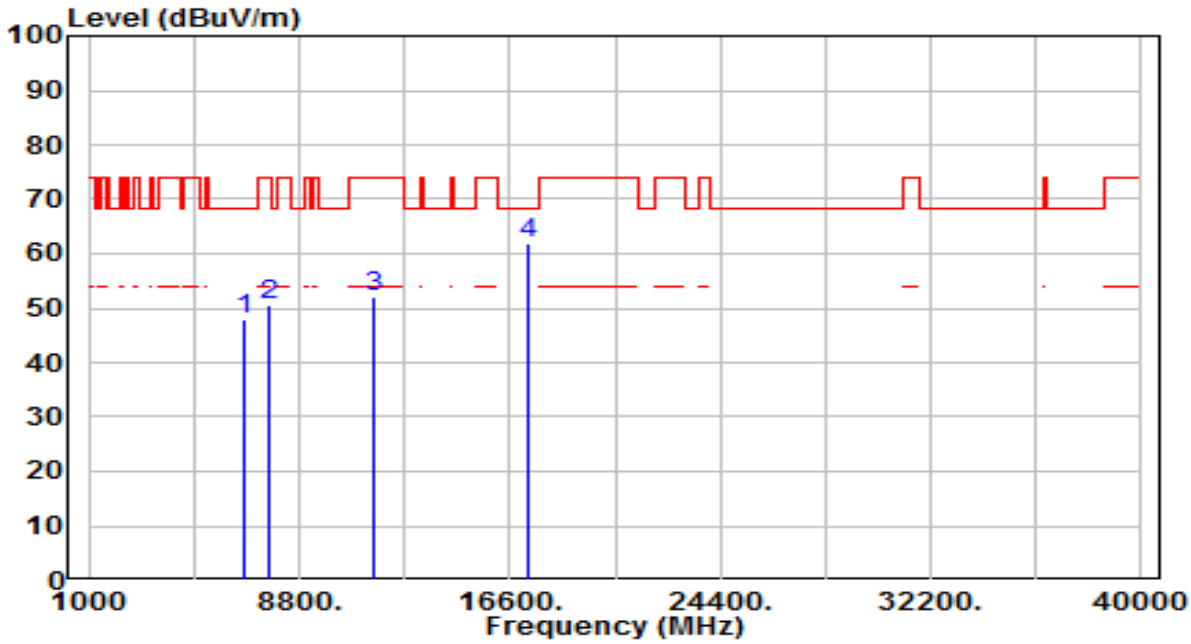


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		6798.594	40.22	9.88	50.10	-18.10	68.20	150	360	Peak
2		7804.250	37.78	13.19	50.97	-17.23	68.20	150	360	Peak
3	*	10420.000	33.36	18.17	51.53	-16.67	68.20	150	360	Peak
4		15630.000	32.21	21.00	53.21	-20.79	74.00	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11ac-80MHz_TX_Band4_CH 155_ANT 0+1	Test Voltage	AC 120V/ 60Hz

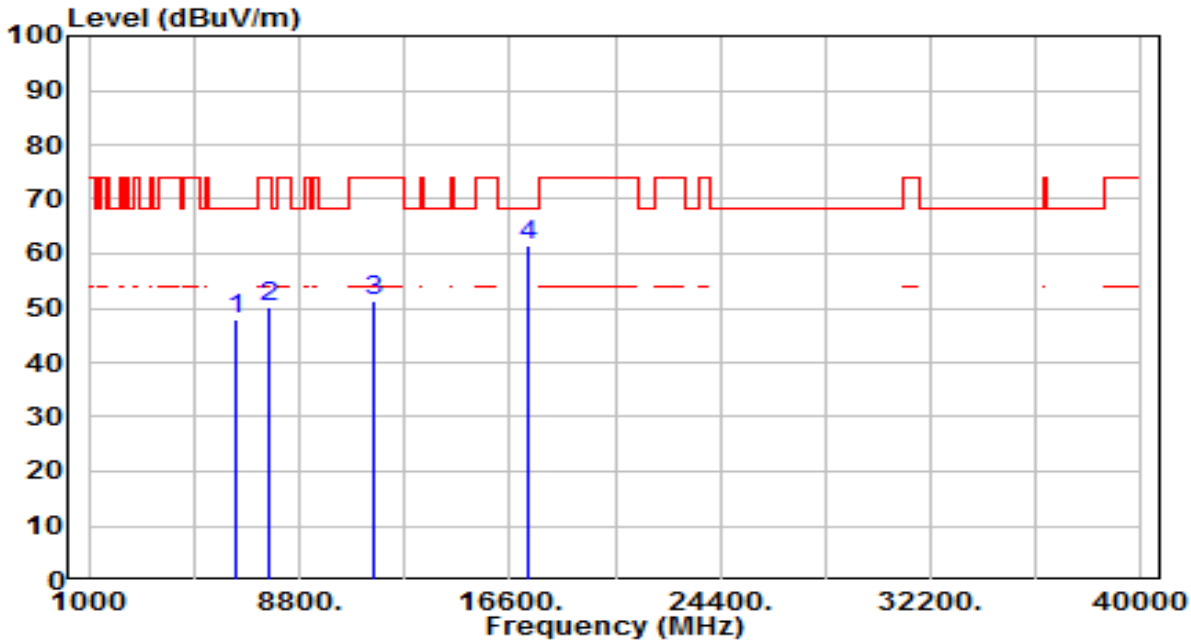


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		6796.469	38.04	9.87	47.90	-20.30	68.20	150	360	Peak
2		7700.125	37.45	13.09	50.54	-23.46	74.00	150	360	Peak
3		11550.000	32.23	19.94	52.17	-21.83	74.00	150	360	Peak
4	*	17325.000	35.15	26.68	61.83	-6.37	68.20	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11ac-80MHz_TX_Band4_CH 155_ANT 0+1	Test Voltage	AC 120V/ 60Hz

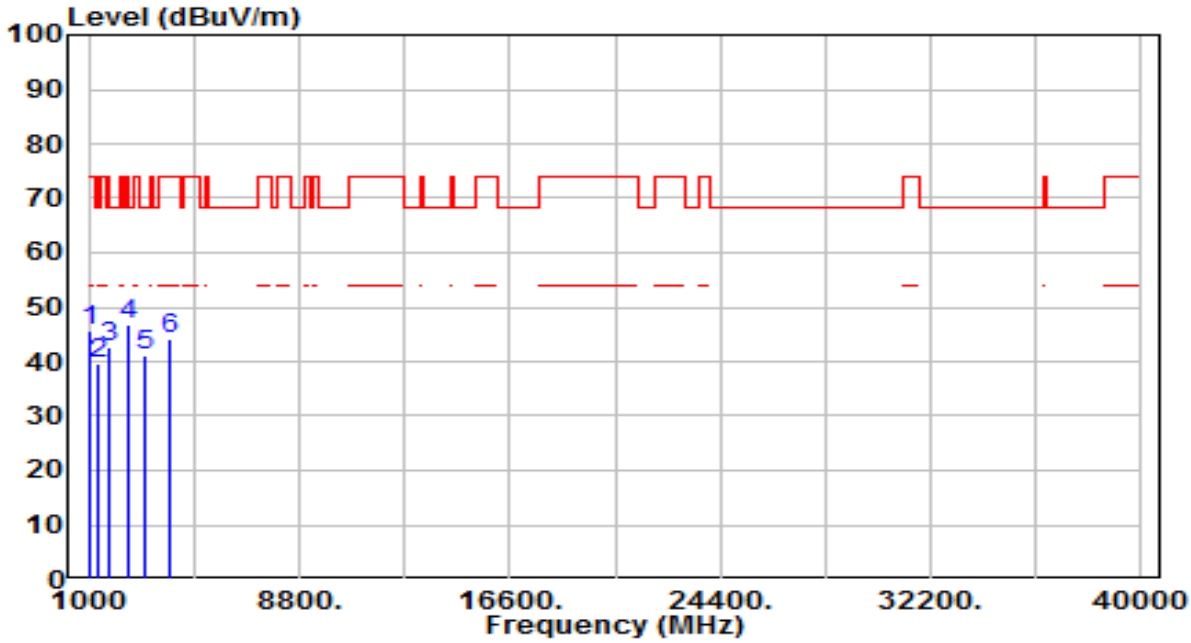


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		6455.406	39.46	8.28	47.75	-20.45	68.20	150	360	Peak
2		7699.594	37.13	13.09	50.22	-23.78	74.00	150	360	Peak
3		11550.000	31.42	19.94	51.36	-22.64	74.00	150	360	Peak
4	*	17325.000	34.82	26.68	61.49	-6.71	68.20	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-20MHz_RX_Band1_CH 44_ANT 0+1	Test Voltage	AC 120V/ 60Hz

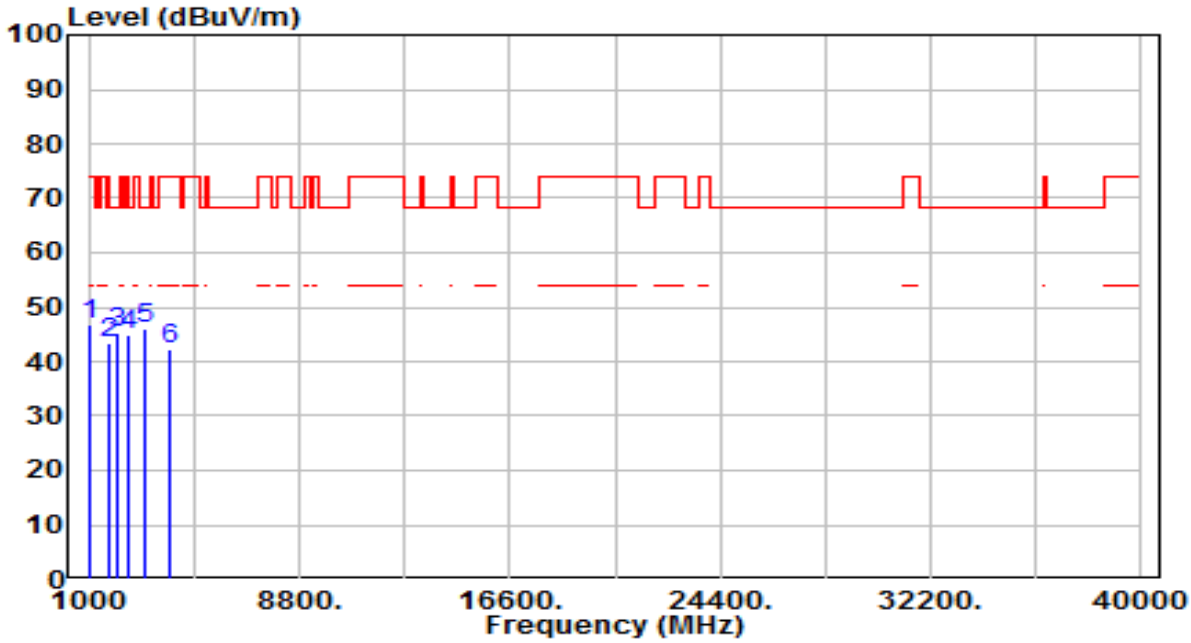


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		1039.313	51.86	-6.11	45.75	-28.25	74.00	150	360	Peak
2		1336.813	44.63	-4.88	39.76	-34.24	74.00	150	360	Peak
3		1781.469	46.16	-3.68	42.49	-25.71	68.20	150	360	Peak
4	*	2435.438	48.71	-1.89	46.81	-21.39	68.20	150	360	Peak
5		3118.625	42.50	-1.54	40.95	-27.25	68.20	150	360	Peak
6		3999.438	43.09	1.04	44.13	-29.87	74.00	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-20MHz_RX_Band1_CH 44_ANT 0+1	Test Voltage	AC 120V/ 60Hz



No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		1039.313	52.79	-6.11	46.68	-27.32	74.00	150	360	Peak
2		1707.625	47.11	-3.81	43.30	-30.70	74.00	150	360	Peak
3		2078.969	48.39	-3.02	45.37	-22.83	68.20	150	360	Peak
4		2434.906	46.96	-1.90	45.07	-23.13	68.20	150	360	Peak
5	*	3118.625	47.64	-1.54	46.10	-22.10	68.20	150	360	Peak
6		3999.969	41.21	1.04	42.25	-31.75	74.00	150	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

7.8. Radiated Restricted Band Edge Measurement

7.8.1. Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1] 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.25 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 – 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	([2])
13.36 - 13.41	--	--	--

For 15.407(b) requirement:

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

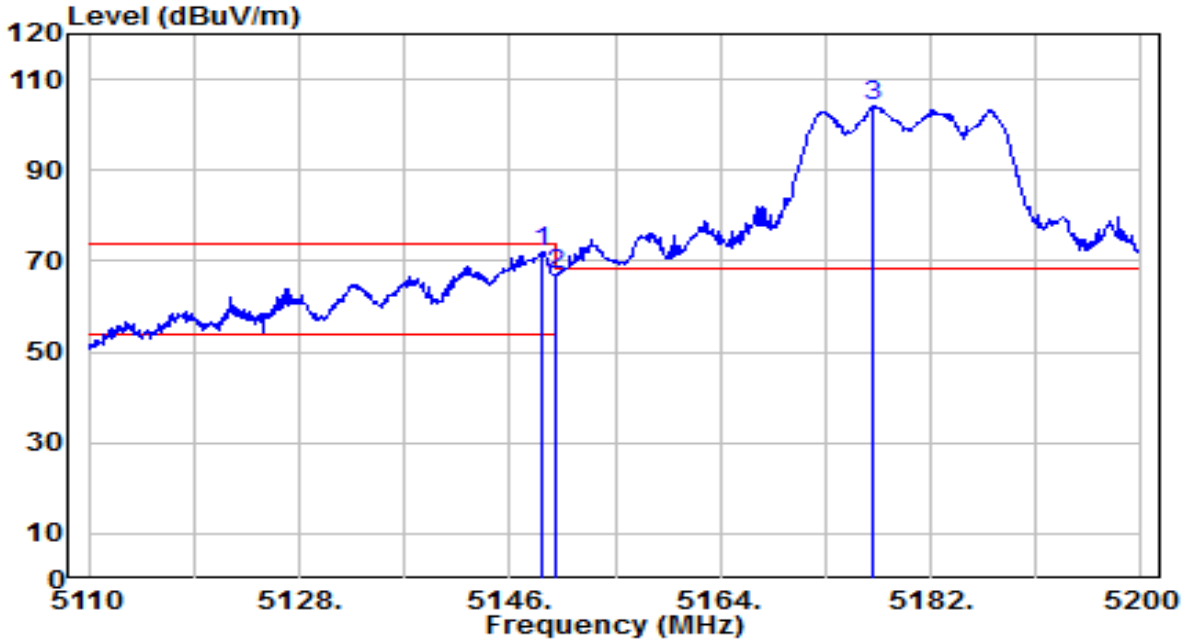
For FCC transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

FCC-Radiated emission limits; general requirements.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [V/m]	Measured Distance [Meters]
0.009 ~ 0.490	2400/F (kHz)	300
0.490 ~ 1.705	24000/F (kHz)	30
1.705 ~ 30	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

7.8.2. Test Result

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11a_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/ 60Hz

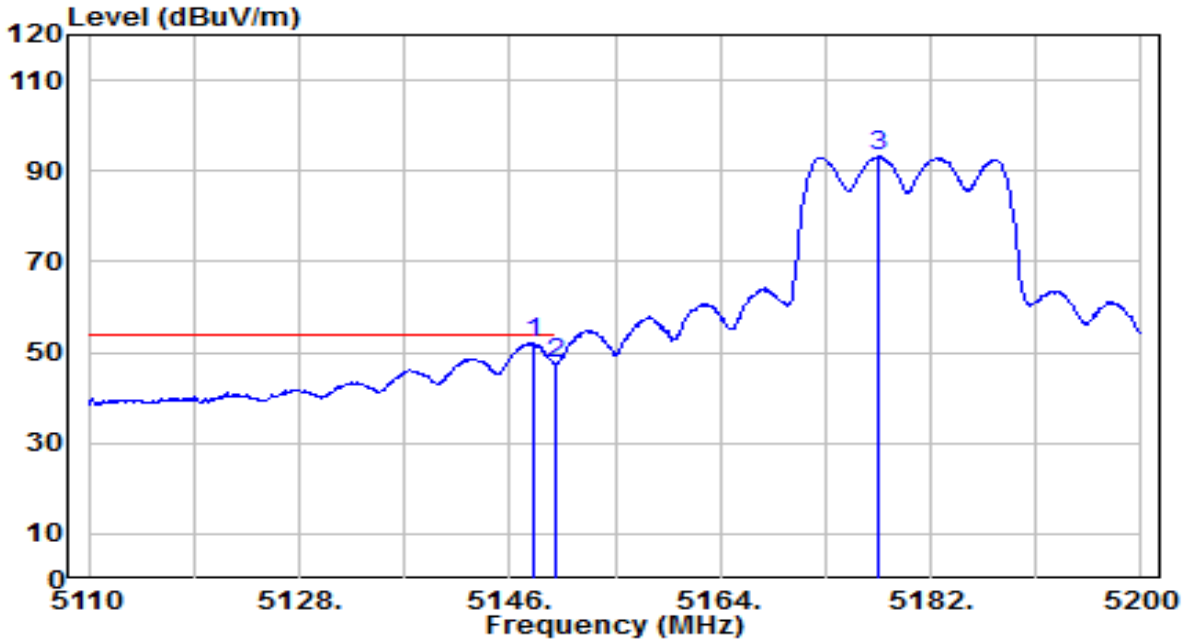


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5148.790	67.92	4.19	72.11	-1.89	74.00	125	150	Peak
2		5150.000	62.67	4.19	66.86	-7.14	74.00	125	150	Peak
3		5177.140	99.80	4.23	104.03	N/A	N/A	125	150	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11a_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/ 60Hz

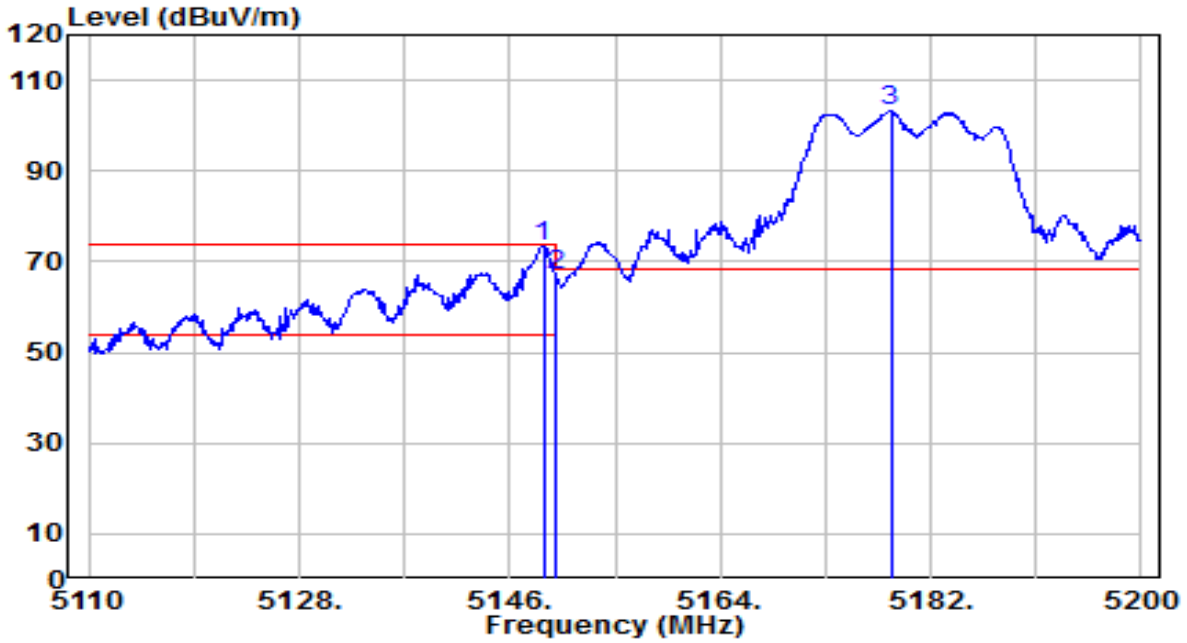


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5147.980	47.94	4.19	52.13	-1.87	54.00	125	150	Average
2		5150.000	43.19	4.19	47.39	-6.61	54.00	125	150	Average
3		5177.590	88.91	4.23	93.14	N/A	N/A	125	150	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11a_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/ 60Hz

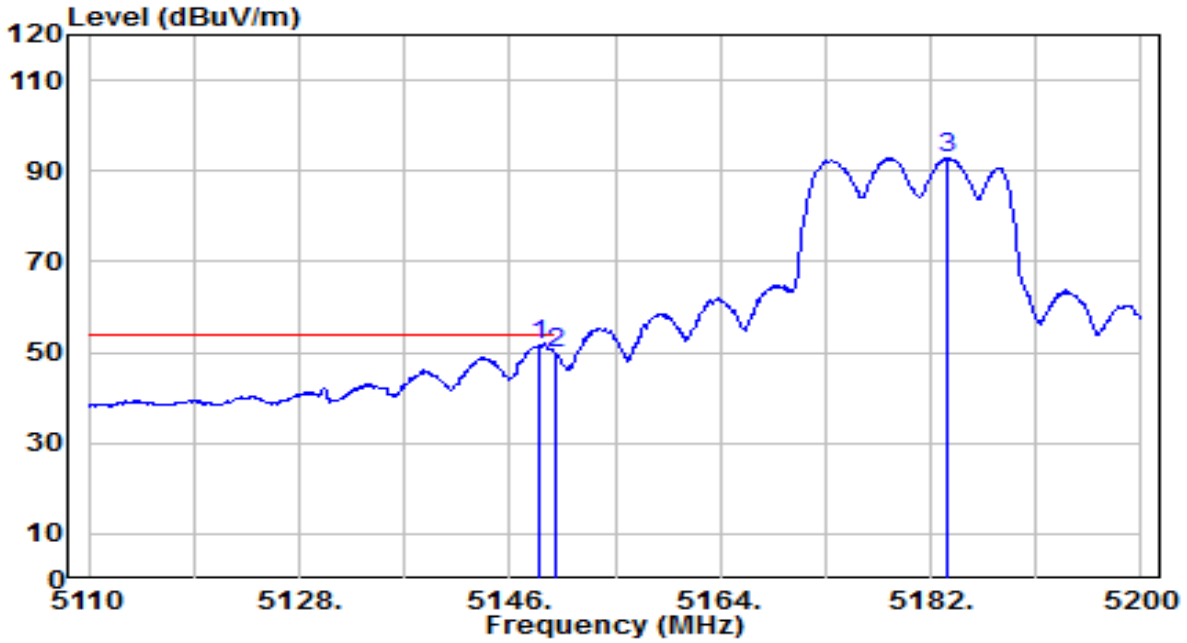


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5148.880	69.34	4.19	73.53	-0.47	74.00	225	205	Peak
2		5150.000	62.86	4.19	67.05	-6.95	74.00	225	205	Peak
3		5178.580	98.87	4.23	103.10	N/A	N/A	225	205	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11a_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/ 60Hz

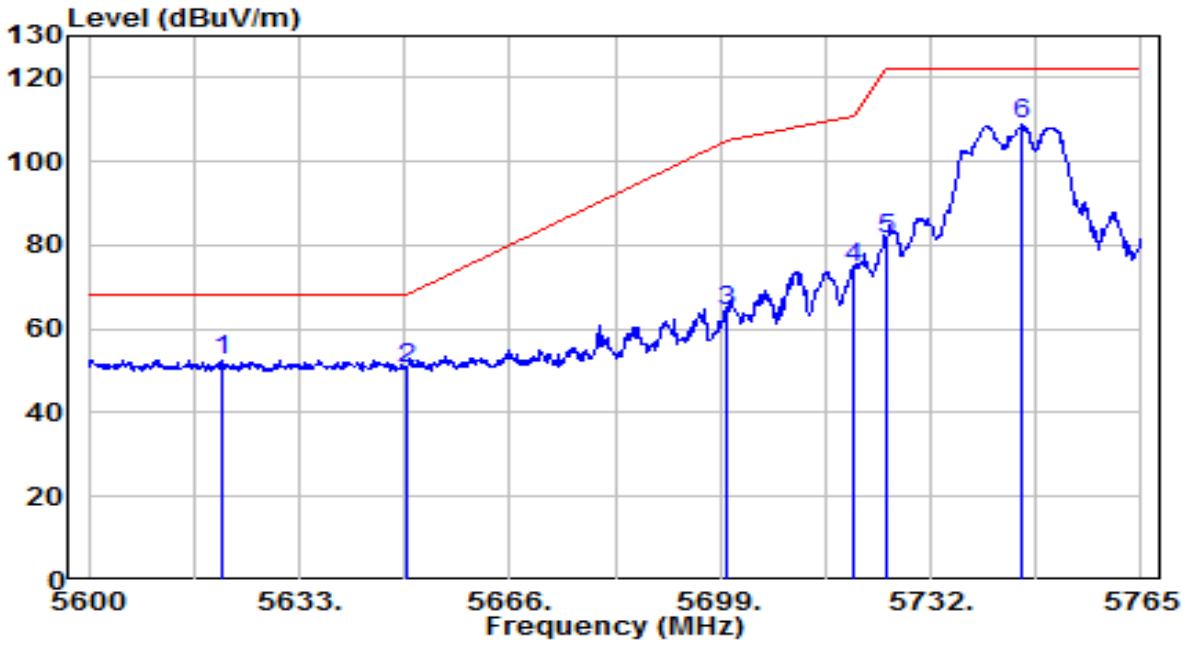


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5148.520	47.41	4.19	51.60	-2.40	54.00	225	205	Average
2		5150.000	45.52	4.19	49.71	-4.29	54.00	225	205	Average
3		5183.440	88.78	4.24	93.03	N/A	N/A	225	205	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11a_TX_Band4_CH 149_ANT 0+1	Test Voltage	AC 120V/ 60Hz

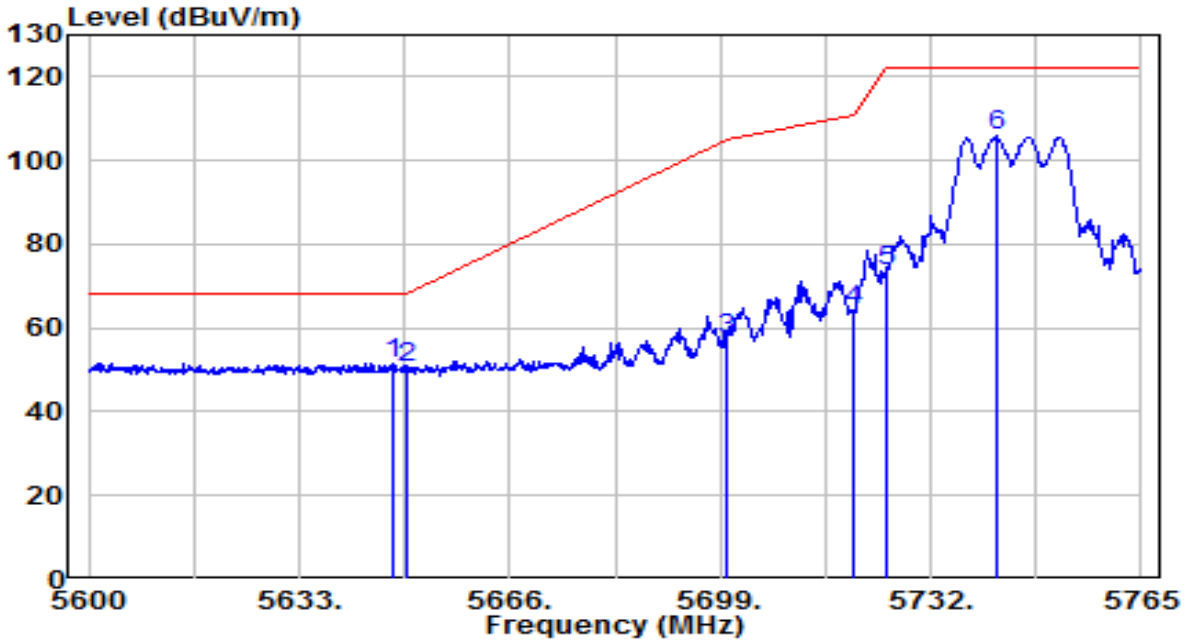


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5621.120	47.51	5.12	52.64	-15.56	68.20	230	155	Peak
2		5650.000	45.24	5.22	50.46	-17.74	68.20	230	155	Peak
3		5700.000	58.96	5.39	64.35	-40.85	105.20	230	155	Peak
4		5720.000	69.23	5.46	74.69	-36.11	110.80	230	155	Peak
5		5725.000	76.10	5.48	81.58	-40.62	122.20	230	155	Peak
6		5746.355	103.38	5.55	108.93	N/A	N/A	230	155	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11a_TX_Band4_CH 149_ANT 0+1	Test Voltage	AC 120V/ 60Hz

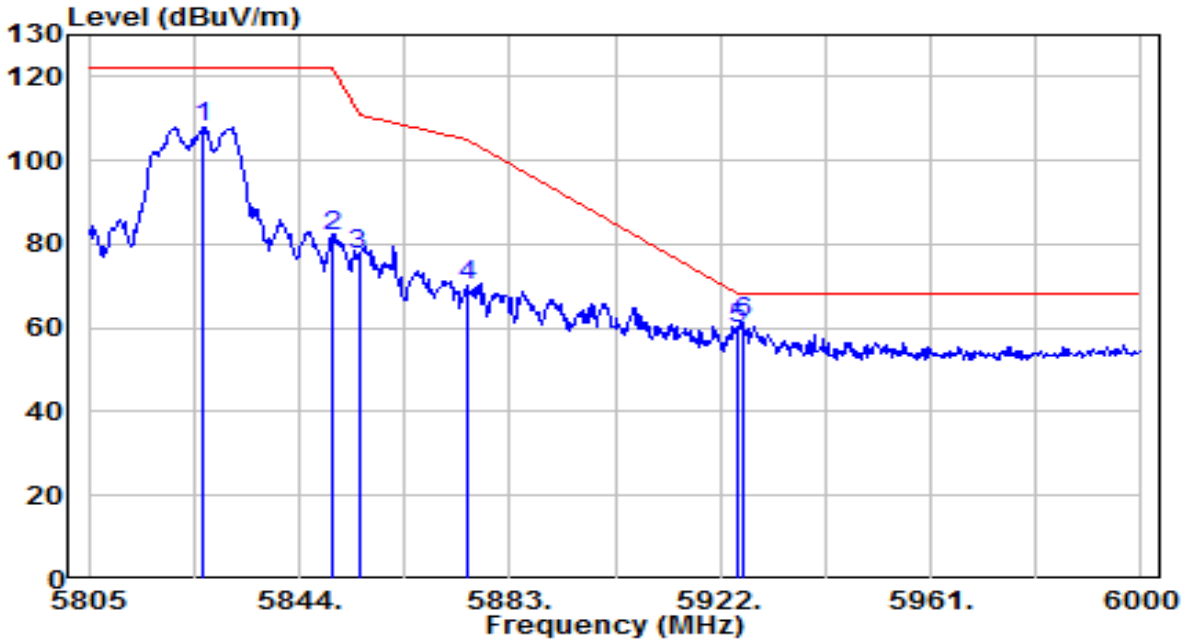


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5647.685	46.23	5.22	51.44	-16.76	68.20	170	205	Peak
2		5650.000	45.14	5.22	50.36	-17.84	68.20	170	205	Peak
3		5700.000	51.86	5.39	57.25	-47.95	105.20	170	205	Peak
4		5720.000	59.00	5.46	64.46	-46.34	110.80	170	205	Peak
5		5725.000	68.26	5.48	73.74	-48.46	122.20	170	205	Peak
6		5742.230	100.49	5.54	106.03	N/A	N/A	170	205	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11a_TX_Band4_CH 165_ANT 0+1	Test Voltage	AC 120V/ 60Hz

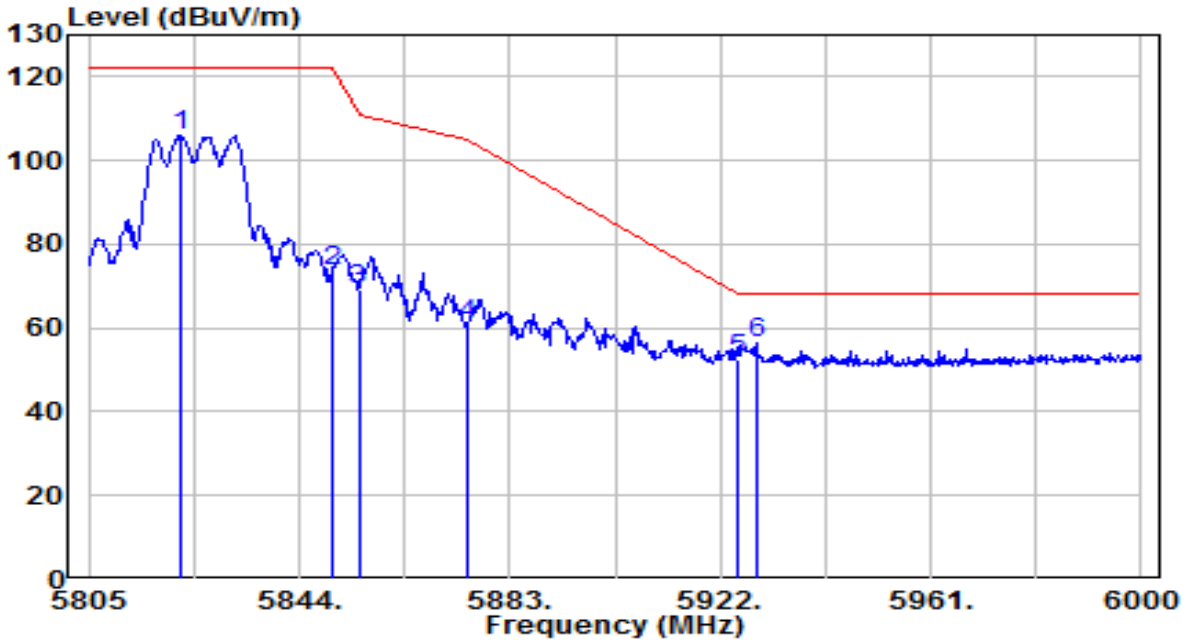


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		5826.255	102.23	5.83	108.05	N/A	N/A	275	155	Peak
2		5850.000	75.93	5.91	81.84	-40.36	122.20	275	155	Peak
3		5855.000	71.52	5.92	77.45	-33.35	110.80	275	155	Peak
4		5875.000	64.39	5.99	70.38	-34.82	105.20	275	155	Peak
5		5925.000	53.67	6.16	59.84	-8.36	68.20	275	155	Peak
6	*	5926.290	54.95	6.17	61.12	-7.08	68.20	275	155	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11a_TX_Band4_CH 165_ANT 0+1	Test Voltage	AC 120V/ 60Hz

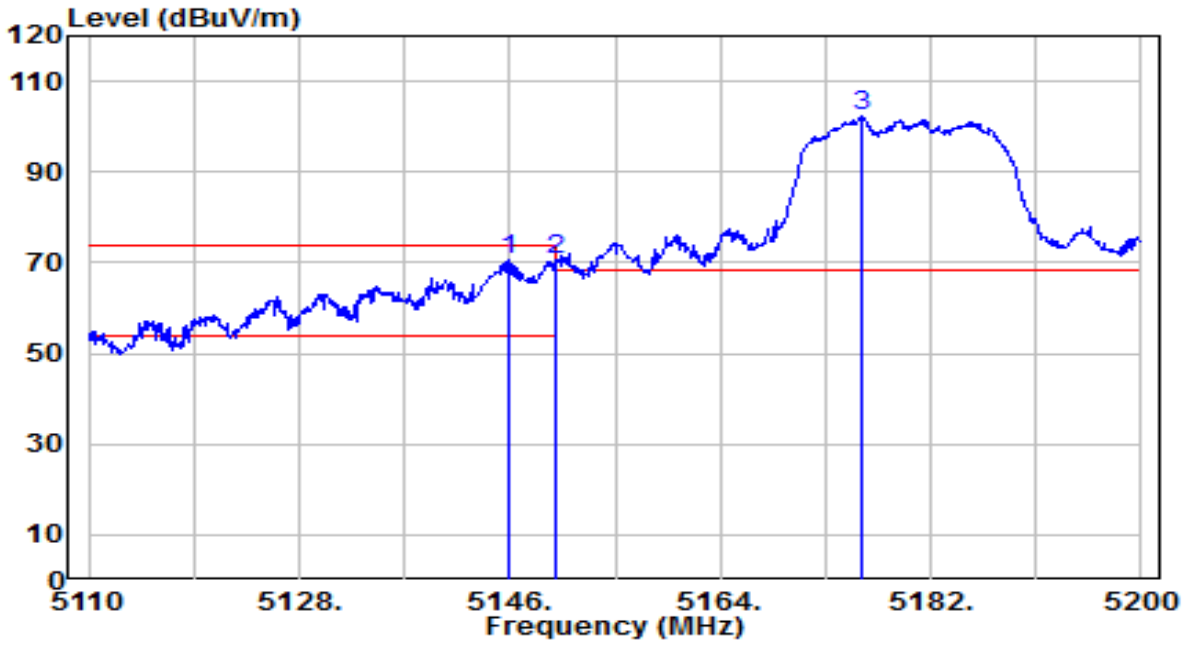


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		5822.160	100.33	5.81	106.14	N/A	N/A	130	210	Peak
2		5850.000	67.75	5.91	73.65	-48.55	122.20	130	210	Peak
3		5855.000	63.40	5.92	69.33	-41.47	110.80	130	210	Peak
4		5875.000	55.03	5.99	61.02	-44.18	105.20	130	210	Peak
5		5925.000	46.35	6.16	52.52	-15.68	68.20	130	210	Peak
6	*	5928.630	50.06	6.18	56.24	-11.96	68.20	130	210	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-20MHz_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/ 60Hz

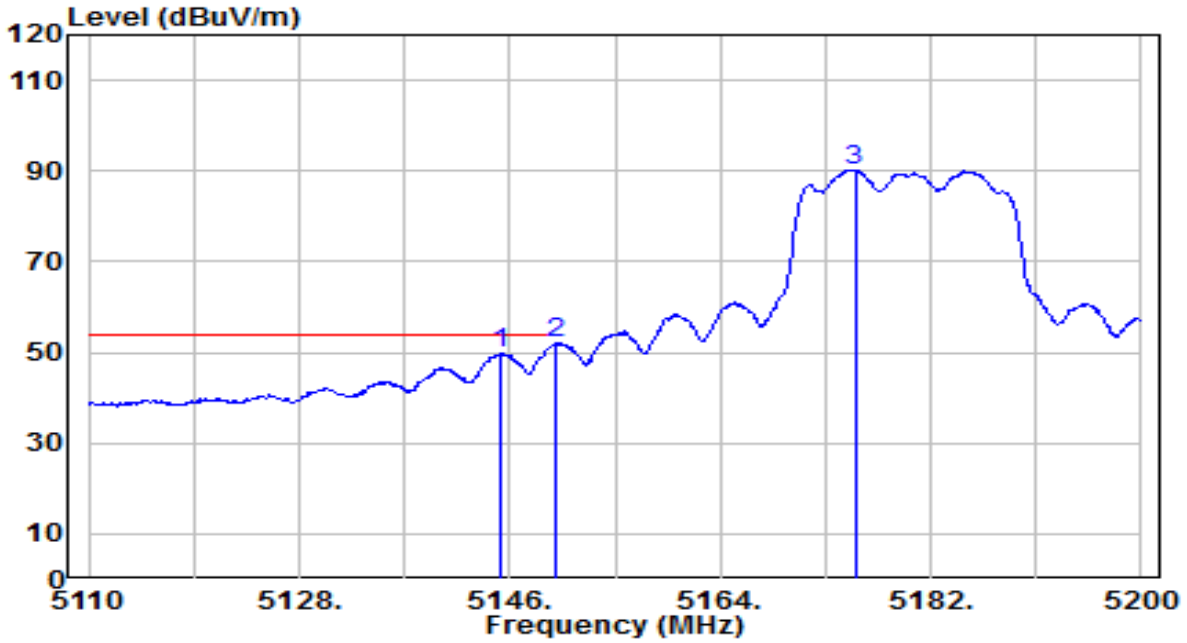


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5145.910	66.65	4.19	70.83	-3.17	74.00	125	150	Peak
2		5150.000	66.27	4.19	70.46	-3.54	74.00	125	150	Peak
3		5176.150	97.91	4.23	102.14	N/A	N/A	125	150	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-20MHz_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/ 60Hz

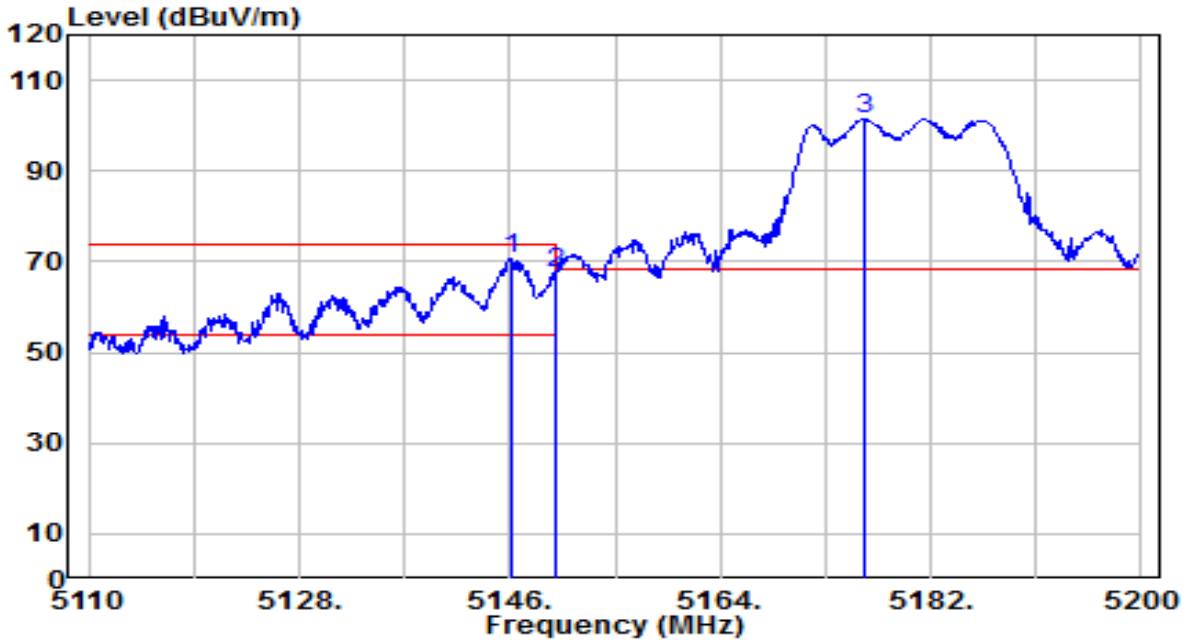


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		5145.190	45.76	4.18	49.95	-4.05	54.00	125	150	Average
2	*	5150.000	47.76	4.19	51.95	-2.05	54.00	125	150	Average
3		5175.520	86.01	4.23	90.24	N/A	N/A	125	150	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-20MHz_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/ 60Hz

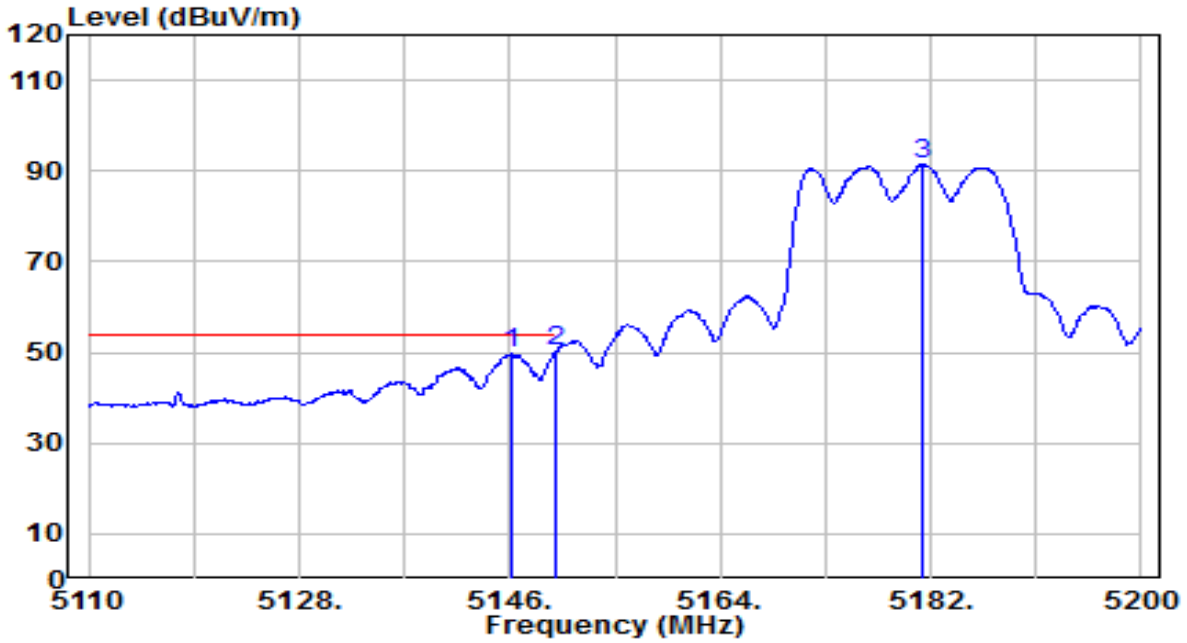


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5146.090	66.28	4.19	70.47	-3.53	74.00	225	205	Peak
2		5150.000	63.31	4.19	67.50	-6.50	74.00	225	205	Peak
3		5176.240	97.31	4.23	101.54	N/A	N/A	225	205	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-20MHz_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/ 60Hz

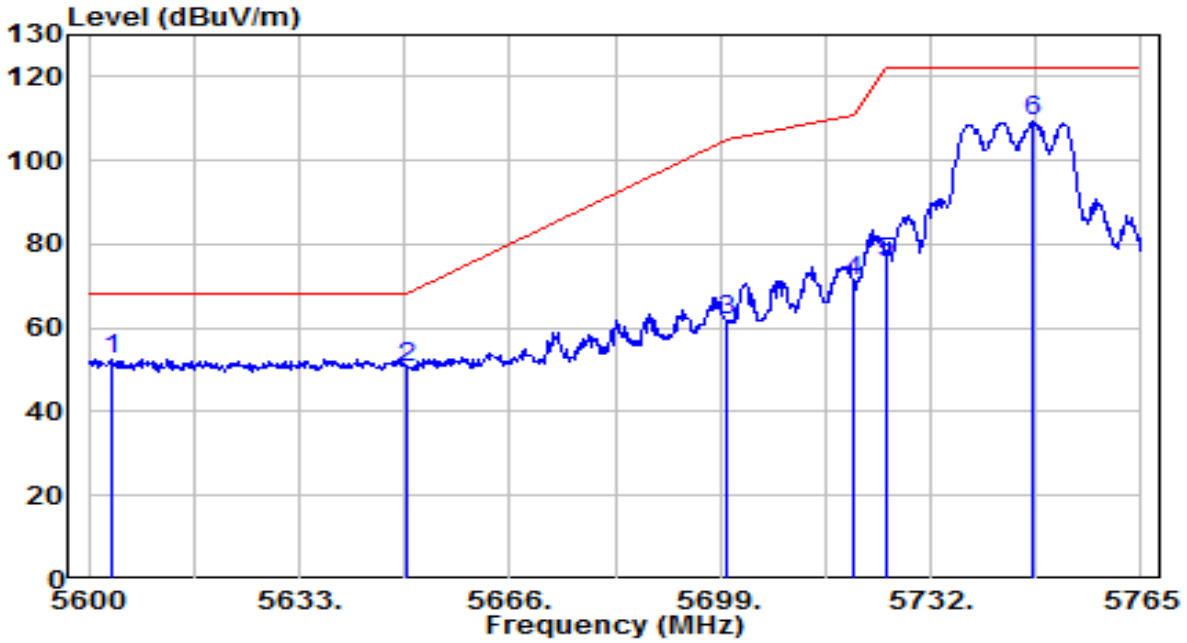


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		5146.180	45.55	4.19	49.74	-4.26	54.00	225	205	Average
2	*	5150.000	46.24	4.19	50.43	-3.57	54.00	225	205	Average
3		5181.280	87.32	4.24	91.56	N/A	N/A	225	205	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-20MHz_TX_Band4_CH 149_ANT 0+1	Test Voltage	AC 120V/ 60Hz

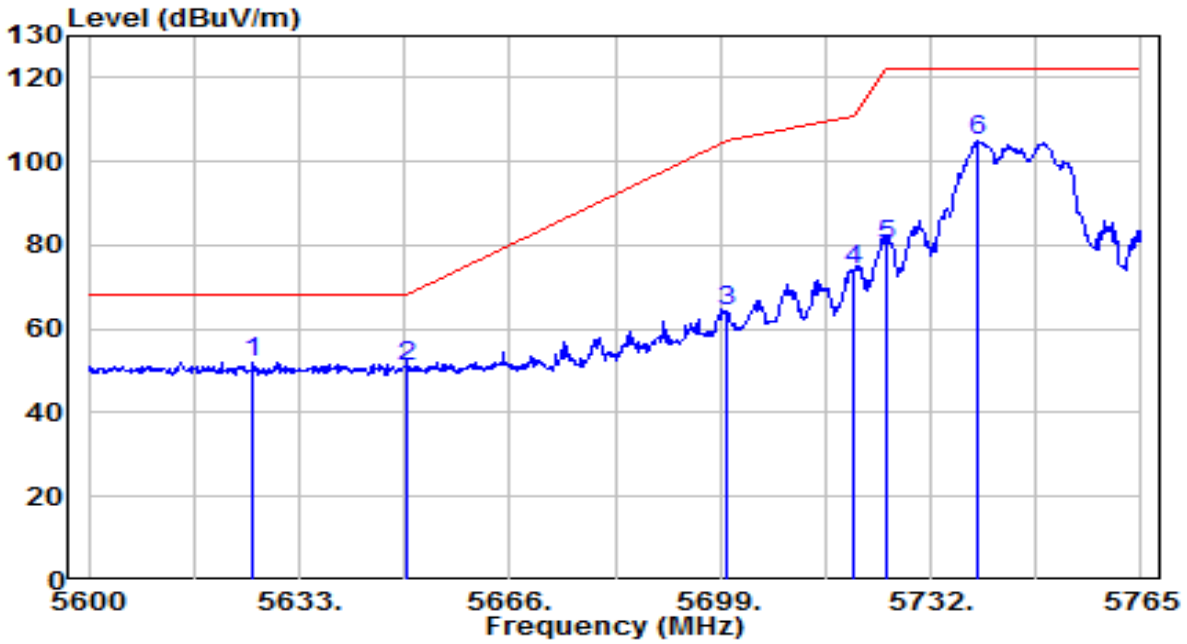


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5603.795	47.64	5.06	52.71	-15.49	68.20	230	155	Peak
2		5650.000	45.06	5.22	50.29	-17.91	68.20	230	155	Peak
3		5700.000	56.30	5.39	61.69	-43.51	105.20	230	155	Peak
4		5720.000	65.67	5.46	71.14	-39.66	110.80	230	155	Peak
5		5725.000	70.01	5.48	75.49	-46.71	122.20	230	155	Peak
6		5748.170	103.74	5.56	109.30	N/A	N/A	230	155	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-20MHz_TX_Band4_CH 149_ANT 0+1	Test Voltage	AC 120V/ 60Hz

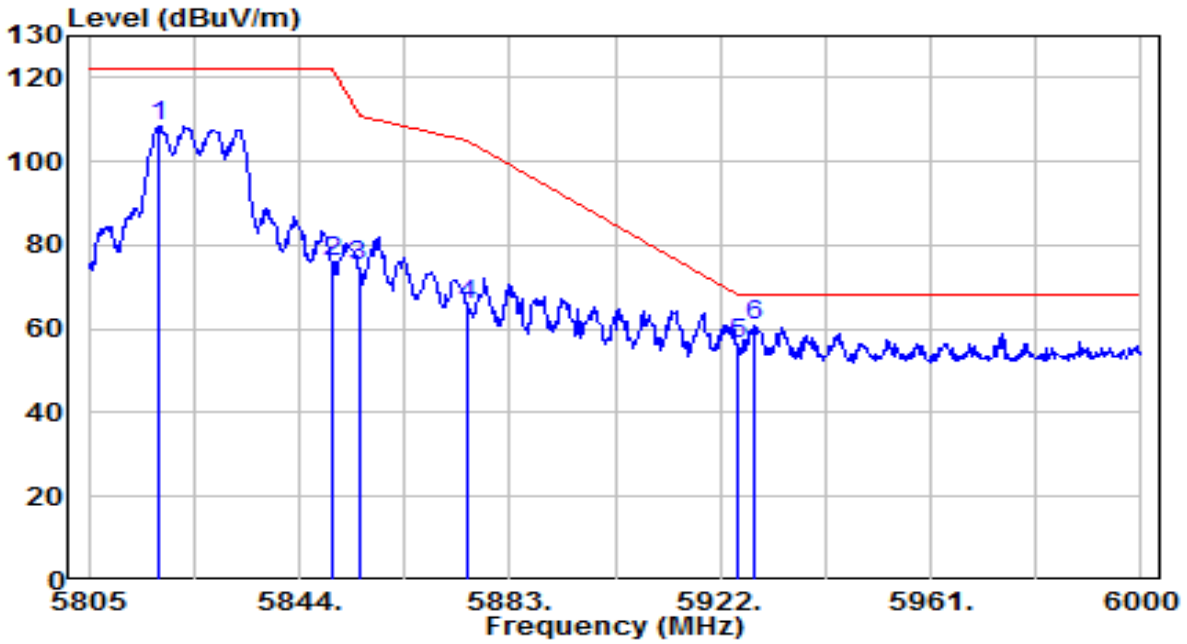


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5625.740	47.09	5.14	52.23	-15.97	68.20	170	205	Peak
2		5650.000	45.57	5.22	50.80	-17.40	68.20	170	205	Peak
3		5700.000	58.64	5.39	64.03	-41.17	105.20	170	205	Peak
4		5720.000	68.43	5.46	73.89	-36.91	110.80	170	205	Peak
5		5725.000	74.47	5.48	79.95	-42.25	122.20	170	205	Peak
6		5739.425	99.28	5.53	104.81	N/A	N/A	170	205	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-20MHz_TX_Band4_CH 165_ANT 0+1	Test Voltage	AC 120V/ 60Hz

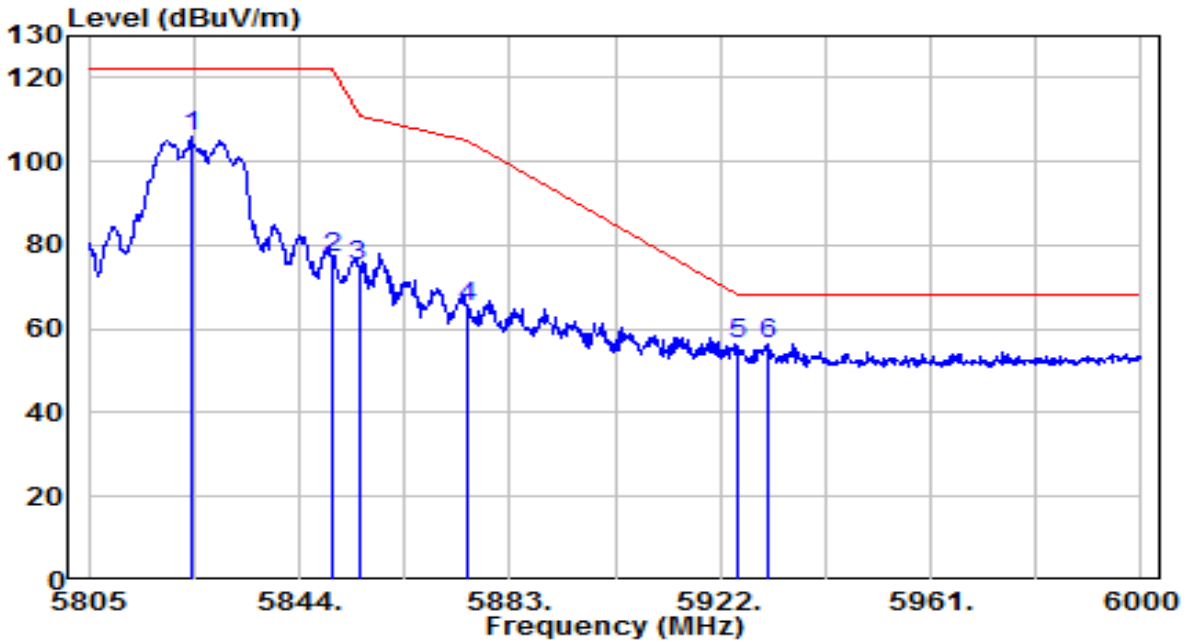


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		5817.870	102.70	5.80	108.50	N/A	N/A	275	155	Peak
2		5850.000	70.14	5.91	76.05	-46.15	122.20	275	155	Peak
3		5855.000	69.24	5.92	75.16	-35.64	110.80	275	155	Peak
4		5875.000	59.55	5.99	65.54	-39.66	105.20	275	155	Peak
5		5925.000	50.33	6.16	56.50	-11.70	68.20	275	155	Peak
6	*	5928.240	54.51	6.17	60.68	-7.52	68.20	275	155	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-20MHz_TX_Band4_CH 165_ANT 0+1	Test Voltage	AC 120V/ 60Hz

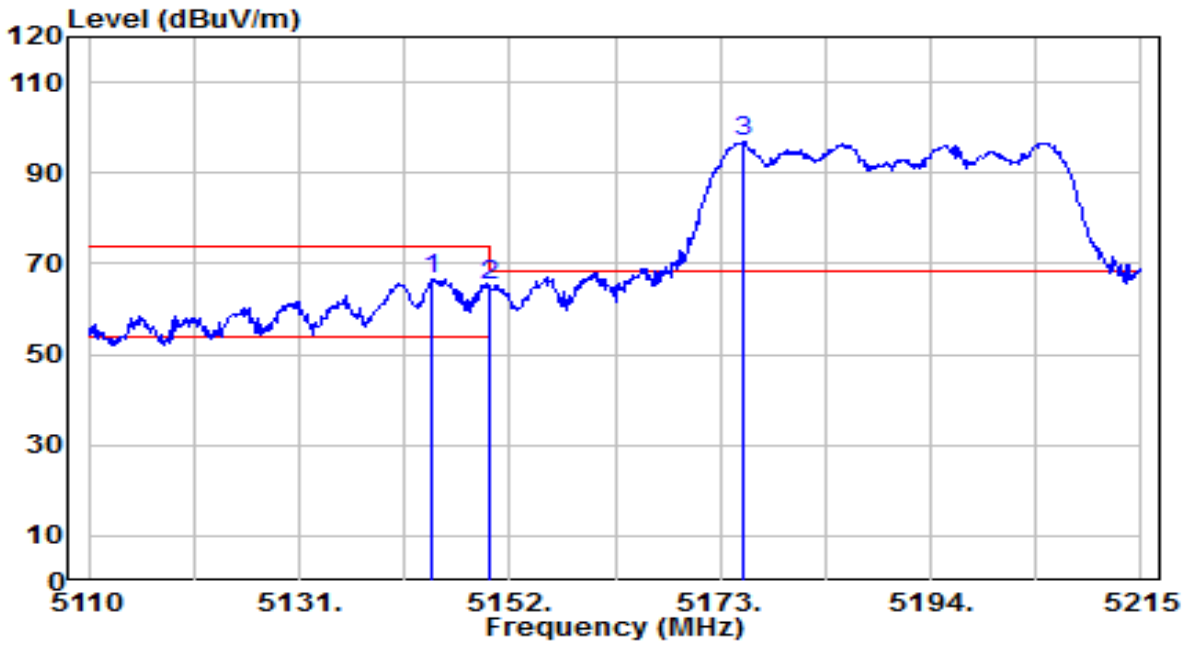


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		5824.110	100.08	5.82	105.90	N/A	N/A	130	210	Peak
2		5850.000	71.04	5.91	76.94	-45.26	122.20	130	210	Peak
3		5855.000	69.02	5.92	74.94	-35.86	110.80	130	210	Peak
4		5875.000	59.36	5.99	65.36	-39.84	105.20	130	210	Peak
5	*	5925.000	50.28	6.16	56.45	-11.75	68.20	130	210	Peak
6		5930.970	50.26	6.18	56.44	-11.76	68.20	130	210	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-40MHz_TX_Band1_CH 38_ANT 0+1	Test Voltage	AC 120V/ 60Hz

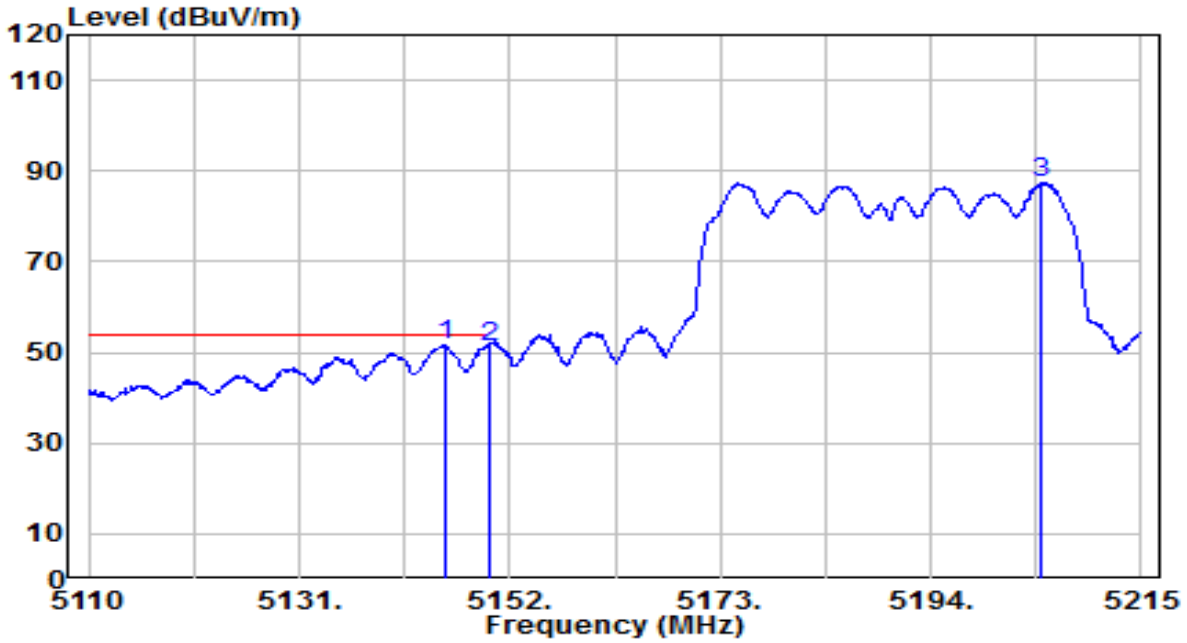


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5144.335	62.41	4.18	66.59	-7.41	74.00	125	150	Peak
2		5150.000	61.06	4.19	65.25	-8.75	74.00	125	150	Peak
3		5175.415	92.59	4.23	96.82	N/A	N/A	125	150	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-40MHz_TX_Band1_CH 38_ANT 0+1	Test Voltage	AC 120V/ 60Hz

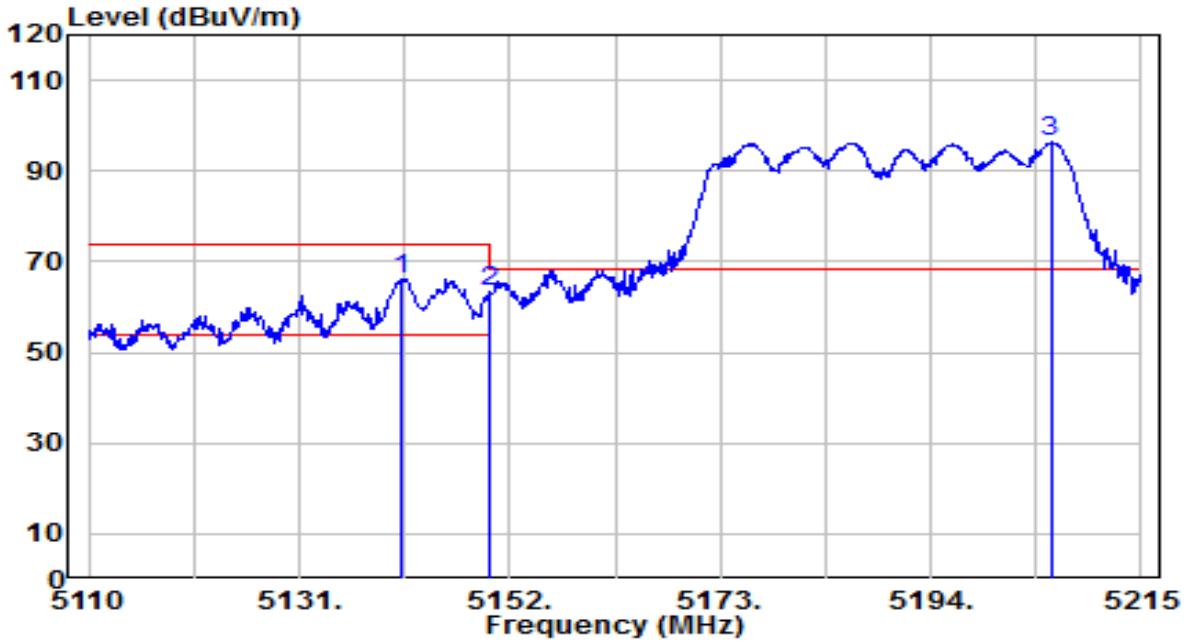


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5145.700	47.43	4.19	51.61	-2.39	54.00	125	150	Average
2		5150.000	47.17	4.19	51.37	-2.63	54.00	125	150	Average
3		5205.130	83.20	4.27	87.48	N/A	N/A	125	150	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-40MHz_TX_Band1_CH 38_ANT 0+1	Test Voltage	AC 120V/ 60Hz

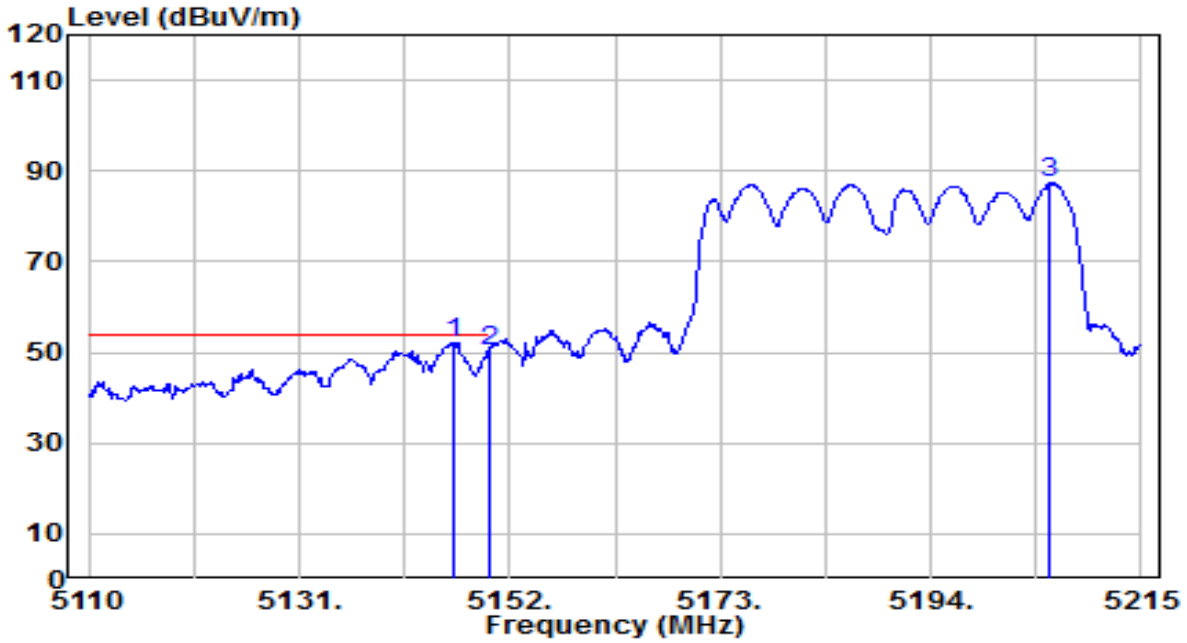


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5141.185	61.86	4.18	66.04	-7.96	74.00	225	205	Peak
2		5150.000	59.27	4.19	63.47	-10.53	74.00	225	205	Peak
3		5205.970	92.23	4.27	96.50	N/A	N/A	225	205	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-40MHz_TX_Band1_CH 38_ANT 0+1	Test Voltage	AC 120V/ 60Hz

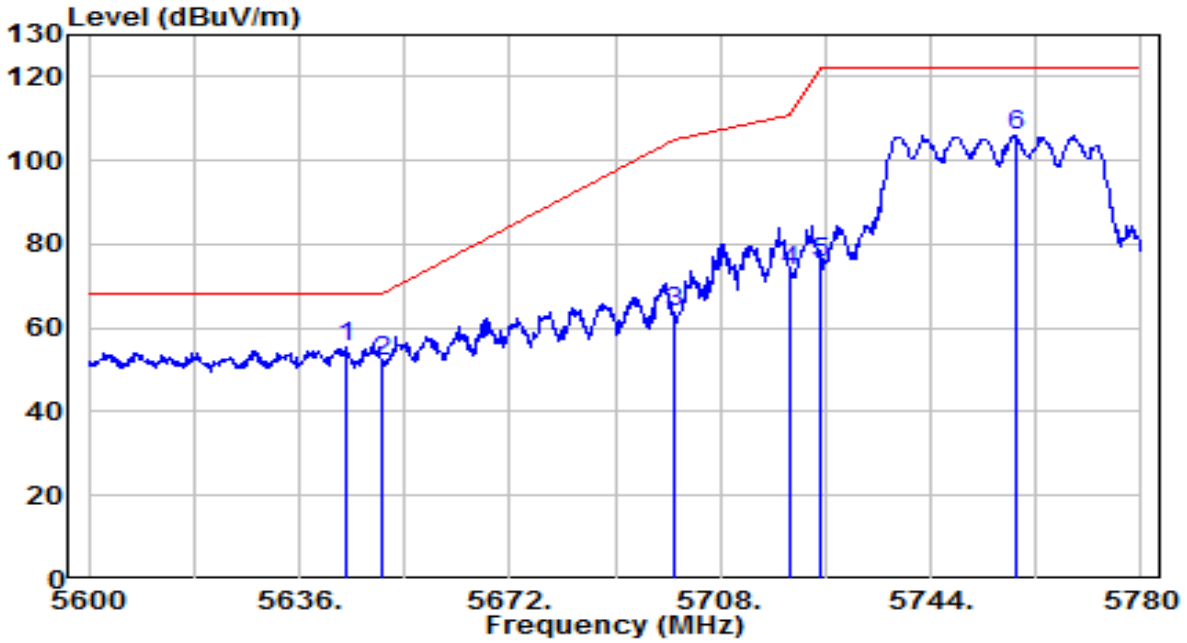


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5146.435	48.08	4.19	52.26	-1.74	54.00	225	205	Average
2		5150.000	46.15	4.19	50.34	-3.66	54.00	225	205	Average
3		5205.865	83.11	4.27	87.39	N/A	N/A	225	205	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-400MHz_TX_Band4_CH 151_ANT 0+1	Test Voltage	AC 120V/ 60Hz

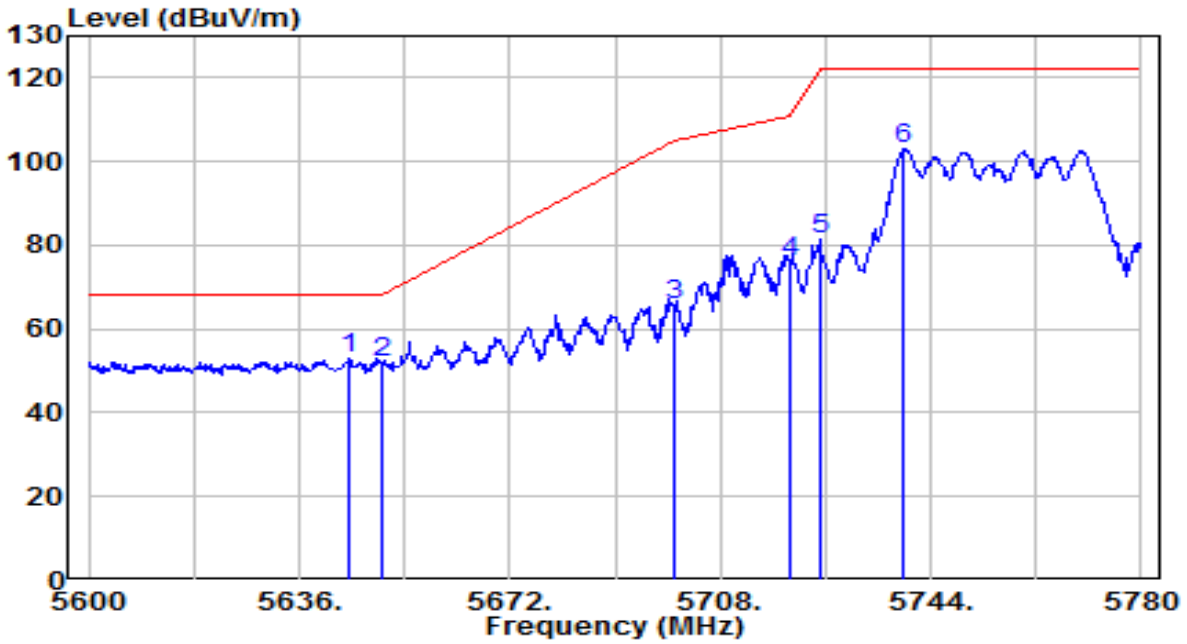


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5643.920	50.45	5.20	55.65	-12.55	68.20	230	155	Peak
2		5650.000	46.59	5.22	51.81	-16.39	68.20	230	155	Peak
3		5700.000	58.38	5.39	63.78	-41.42	105.20	230	155	Peak
4		5720.000	67.97	5.46	73.44	-37.36	110.80	230	155	Peak
5		5725.000	70.22	5.48	75.69	-46.51	122.20	230	155	Peak
6		5758.580	100.50	5.59	106.10	N/A	N/A	230	155	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-400MHz_TX_Band4_CH 151_ANT 0+1	Test Voltage	AC 120V/ 60Hz

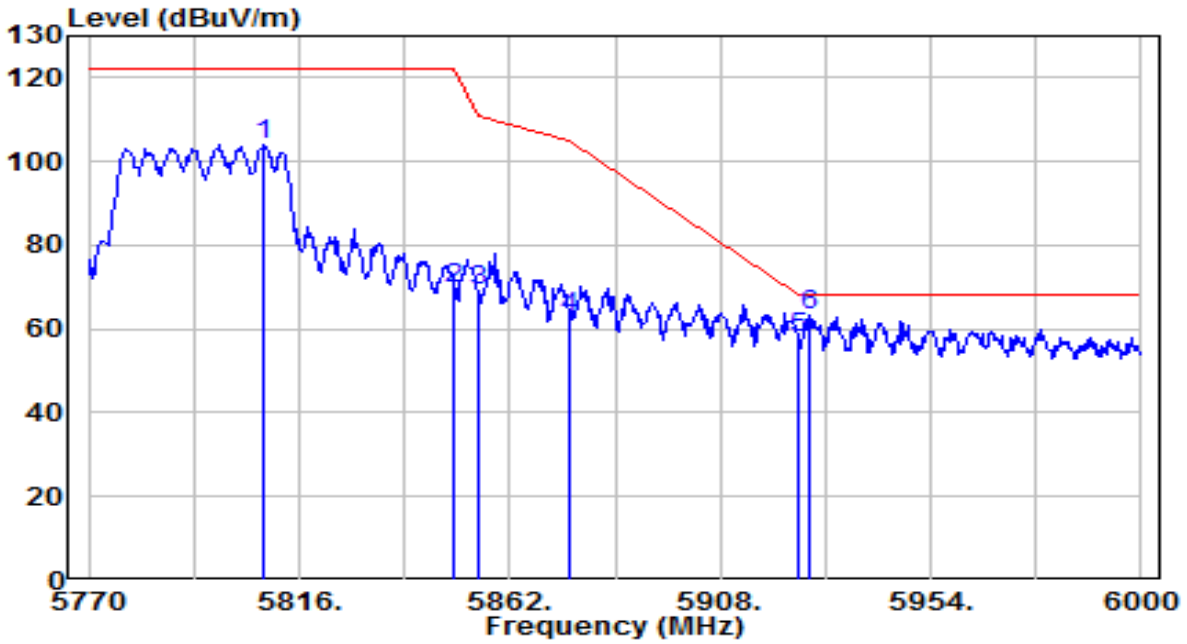


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5644.640	47.55	5.20	52.75	-15.45	68.20	170	205	Peak
2		5650.000	46.90	5.22	52.13	-16.07	68.20	170	205	Peak
3		5700.000	60.18	5.39	65.57	-39.63	105.20	170	205	Peak
4		5720.000	70.49	5.46	75.95	-34.85	110.80	170	205	Peak
5		5725.000	76.02	5.48	81.50	-40.70	122.20	170	205	Peak
6		5739.500	97.35	5.53	102.88	N/A	N/A	170	205	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-40MHz_TX_Band4_CH 159_ANT 0+1	Test Voltage	AC 120V/ 60Hz

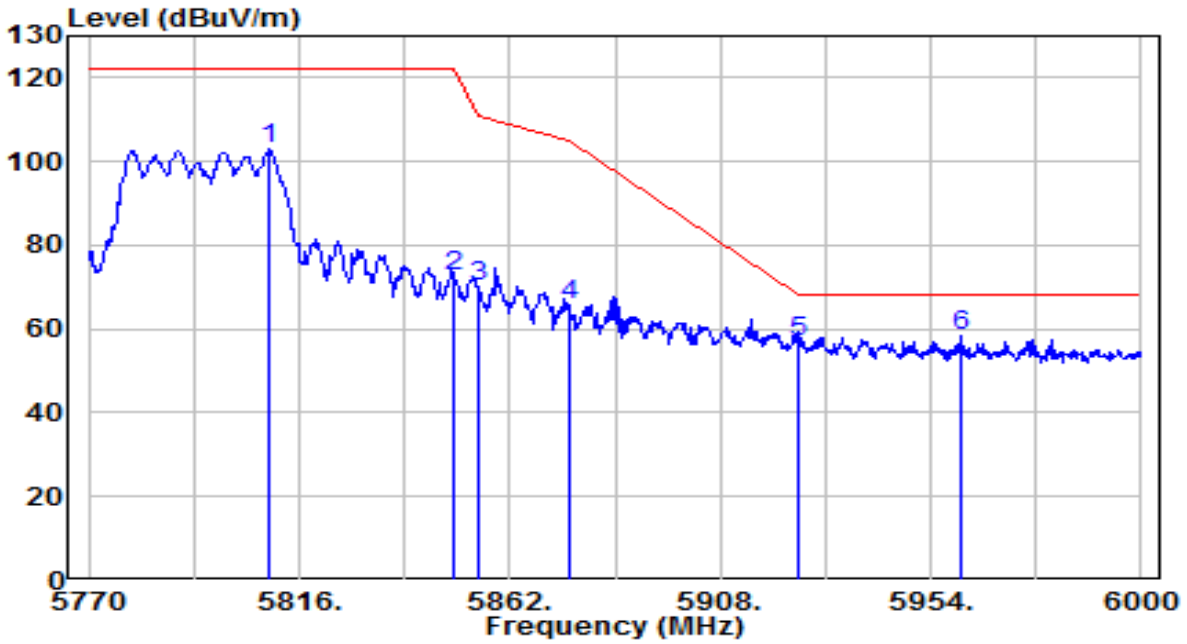


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		5808.410	98.11	5.76	103.87	N/A	N/A	275	155	Peak
2		5850.000	63.99	5.91	69.90	-52.30	122.20	275	155	Peak
3		5855.000	63.46	5.92	69.38	-41.42	110.80	275	155	Peak
4		5875.000	57.00	5.99	62.99	-42.21	105.20	275	155	Peak
5		5925.000	51.83	6.16	57.99	-10.21	68.20	275	155	Peak
6	*	5927.320	56.89	6.17	63.06	-5.14	68.20	275	155	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-40MHz_TX_Band4_CH 159_ANT 0+1	Test Voltage	AC 120V/ 60Hz

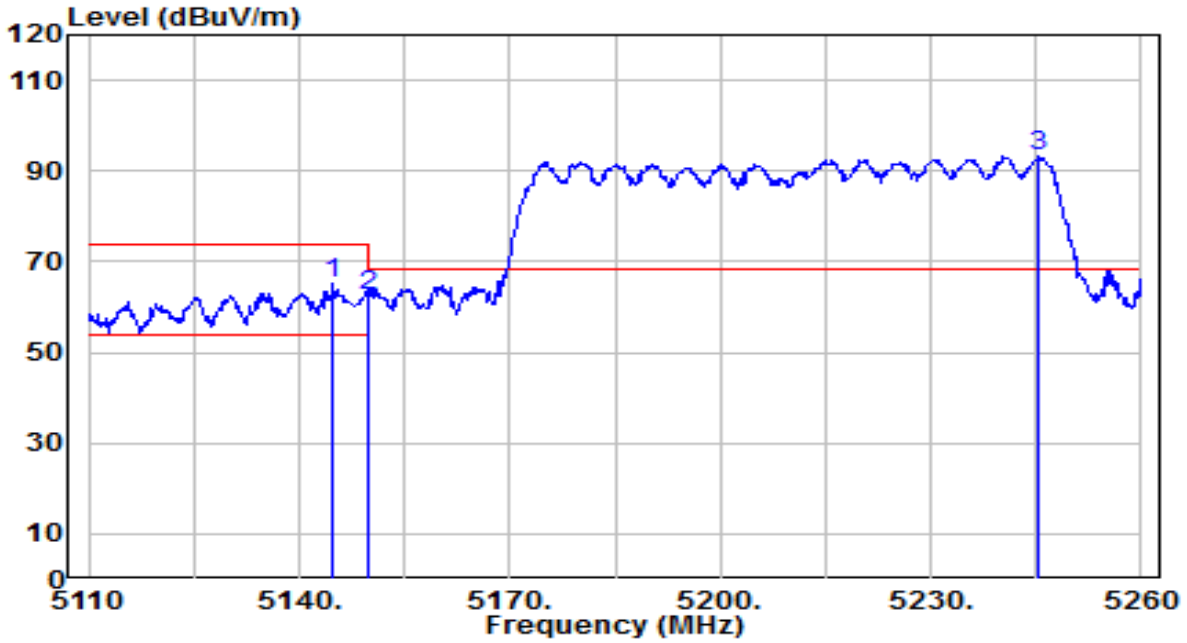


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		5809.560	97.01	5.77	102.78	N/A	N/A	130	210	Peak
2		5850.000	66.81	5.91	72.71	-49.49	122.20	130	210	Peak
3		5855.000	64.29	5.92	70.21	-40.59	110.80	130	210	Peak
4		5875.000	59.67	5.99	65.66	-39.54	105.20	130	210	Peak
5		5925.000	50.87	6.16	57.04	-11.16	68.20	130	210	Peak
6	*	5960.900	51.91	6.29	58.20	-10.00	68.20	130	210	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11ac-80MHz_TX_Band1_CH 42_ANT 0+1	Test Voltage	AC 120V/ 60Hz

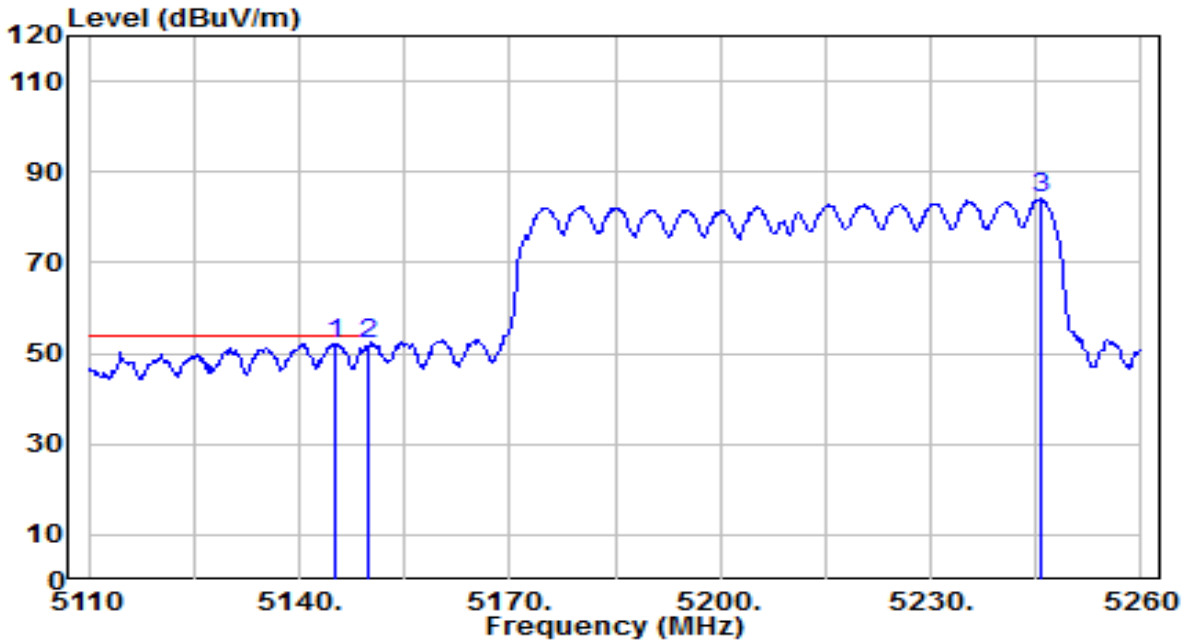


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5144.800	60.81	4.18	65.00	-9.00	74.00	125	150	Peak
2		5150.000	58.12	4.19	62.31	-11.69	74.00	125	150	Peak
3		5245.300	89.09	4.33	93.42	N/A	N/A	125	150	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11ac-80MHz_TX_Band1_CH 42_ANT 0+1	Test Voltage	AC 120V/ 60Hz

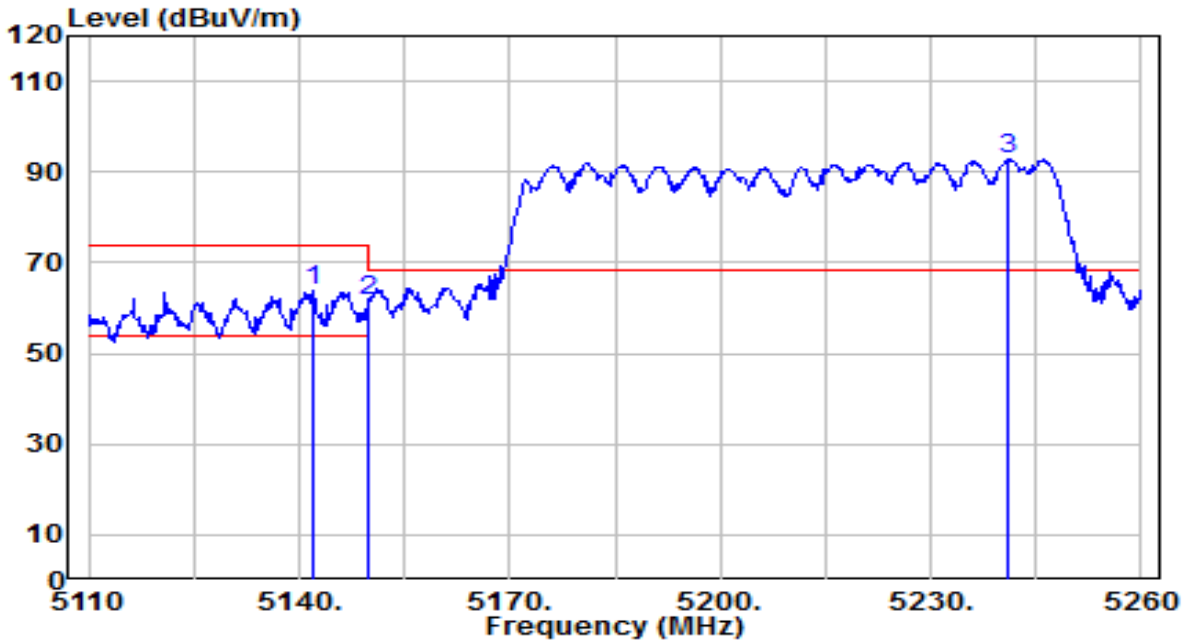


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5144.950	48.10	4.18	52.28	-1.72	54.00	125	150	Average
2		5150.000	47.95	4.19	52.14	-1.86	54.00	125	150	Average
3		5245.750	79.68	4.33	84.01	N/A	N/A	125	150	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11ac-80MHz_TX_Band1_CH 42_ANT 0+1	Test Voltage	AC 120V/ 60Hz

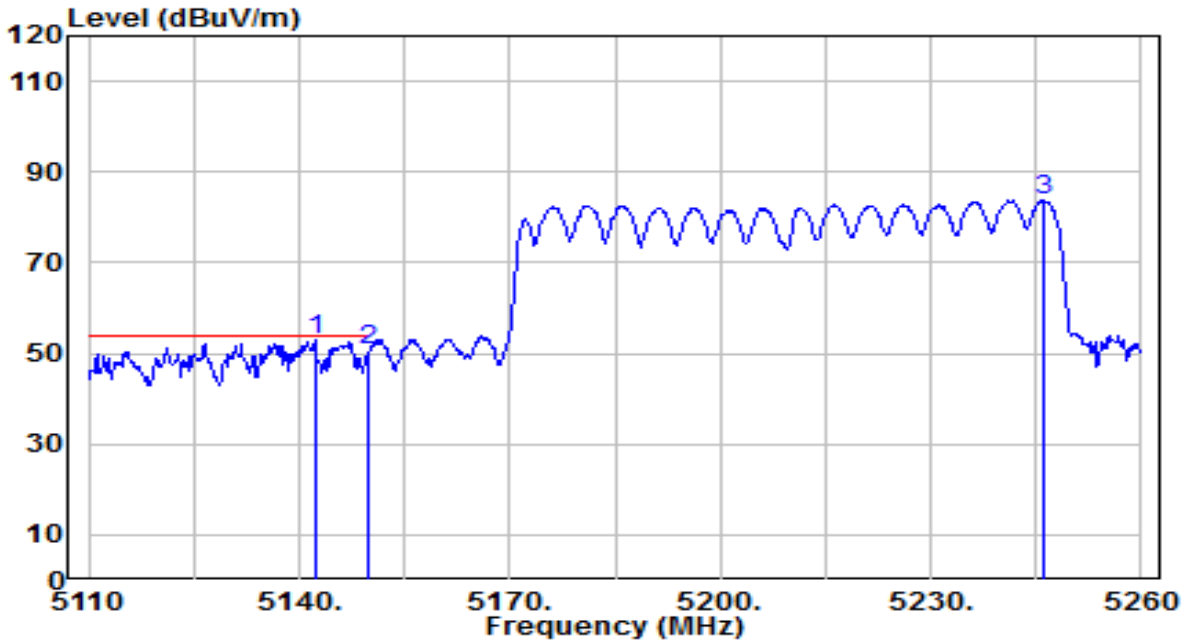


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5141.800	59.45	4.18	63.63	-10.37	74.00	225	205	Peak
2		5150.000	57.59	4.19	61.78	-12.22	74.00	225	205	Peak
3		5240.950	88.48	4.33	92.81	N/A	N/A	225	205	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11ac-80MHz_TX_Band1_CH 42_ANT 0+1	Test Voltage	AC 120V/ 60Hz

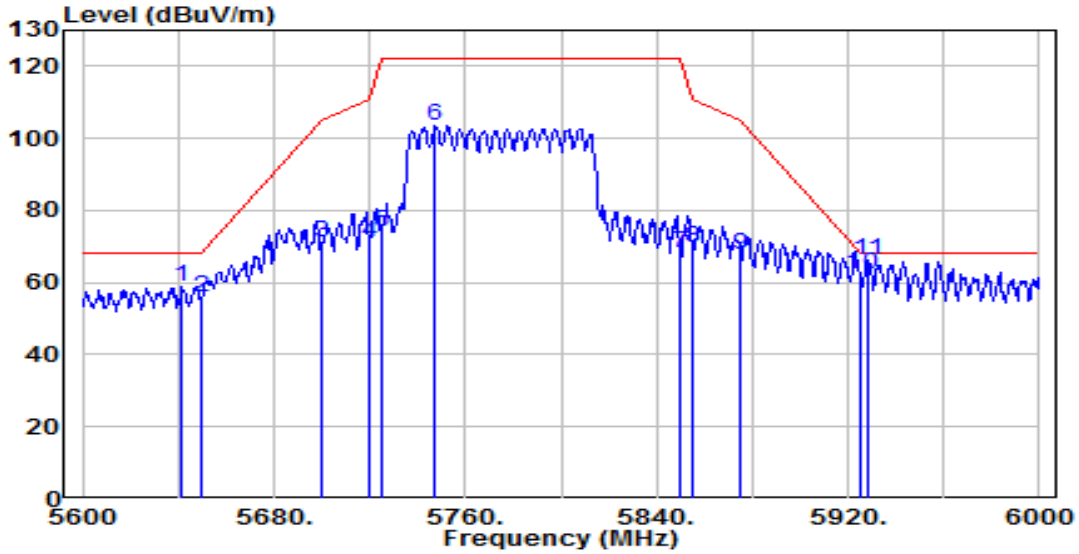


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5142.250	48.60	4.18	52.78	-1.22	54.00	225	205	Average
2		5150.000	46.48	4.19	50.67	-3.33	54.00	225	205	Average
3		5246.050	79.43	4.33	83.77	N/A	N/A	225	205	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Horizontal	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-40MHz_TX_Band4_CH 159_ANT 0+1	Test Voltage	AC 120V/ 60Hz

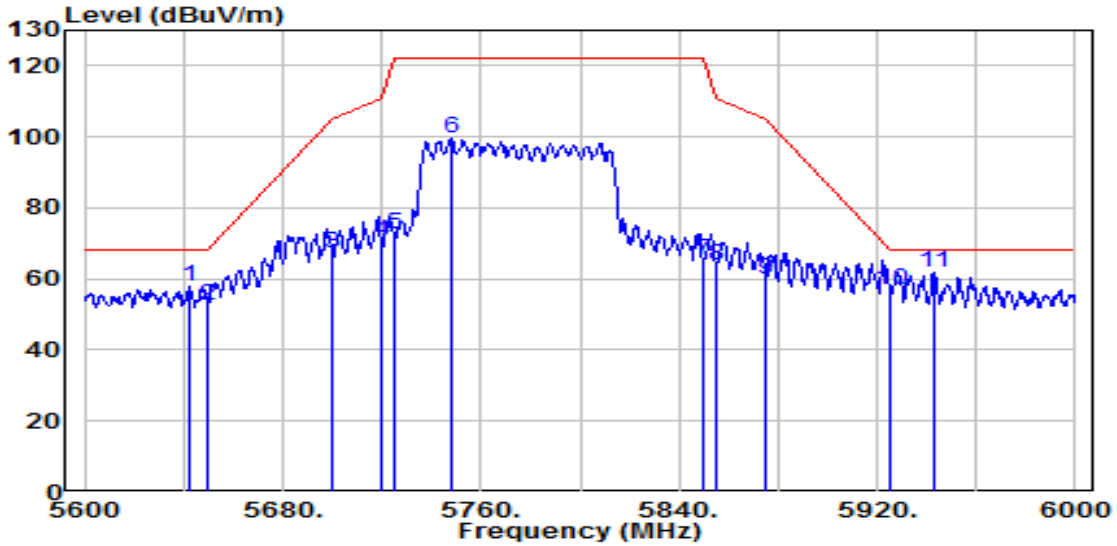


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		5641.600	53.85	5.19	59.04	-9.16	68.20	225	150	Peak
2		5650.000	50.60	5.22	55.83	-12.37	68.20	225	150	Peak
3		5700.000	65.52	5.39	70.91	-34.29	105.20	225	150	Peak
4		5720.000	65.67	5.46	71.13	-39.67	110.80	225	150	Peak
5		5725.000	68.57	5.48	74.05	-48.15	122.20	225	150	Peak
6		5747.200	98.08	5.56	103.64	N/A	N/A	225	150	Peak
7		5850.000	62.40	5.91	68.31	-53.89	122.20	225	150	Peak
8		5855.000	63.80	5.92	69.73	-41.07	110.80	225	150	Peak
9		5875.000	61.83	5.99	67.82	-37.38	105.20	225	150	Peak
10		5925.000	55.95	6.16	62.11	-6.09	68.20	225	150	Peak
11	*	5928.000	60.19	6.17	66.37	-1.83	68.20	225	150	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Monarch 12	Date of Test	2022-11-18
Factor	BBHA 9120D	Temp. / Humidity	23°C /64%
Polarity	Vertical	Site / Test Engineer	AC1 / Kaunaz
Test Mode	802.11n-40MHz_TX_Band4_CH 159_ANT 0+1	Test Voltage	AC 120V/ 60Hz



No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		5642.800	52.56	5.20	57.76	-10.44	68.20	155	165	Peak
2		5650.000	47.38	5.22	52.60	-15.60	68.20	155	165	Peak
3		5700.000	61.65	5.39	67.04	-38.16	105.20	155	165	Peak
4		5720.000	65.28	5.46	70.74	-40.06	110.80	155	165	Peak
5		5725.000	67.15	5.48	72.63	-49.57	122.20	155	165	Peak
6		5748.400	93.87	5.56	99.43	N/A	N/A	155	165	Peak
7		5850.000	59.17	5.91	65.08	-57.12	122.20	155	165	Peak
8		5855.000	58.04	5.92	63.96	-46.84	110.80	155	165	Peak
9		5875.000	53.93	5.99	59.92	-45.28	105.20	155	165	Peak
10		5925.000	50.82	6.16	56.98	-11.22	68.20	155	165	Peak
11	*	5942.800	55.55	6.22	61.78	-6.42	68.20	155	165	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

7.9. AC Conducted Emissions Measurement

7.9.1. Test Limit

FCC Part 15.207 Limits		
Frequency (MHz)	QP (dBμV)	AV (dBμV)
0.15 ~ 0.50	66 ~ 56	56 ~ 46
0.50 ~ 5.0	56	46
5.0 ~ 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

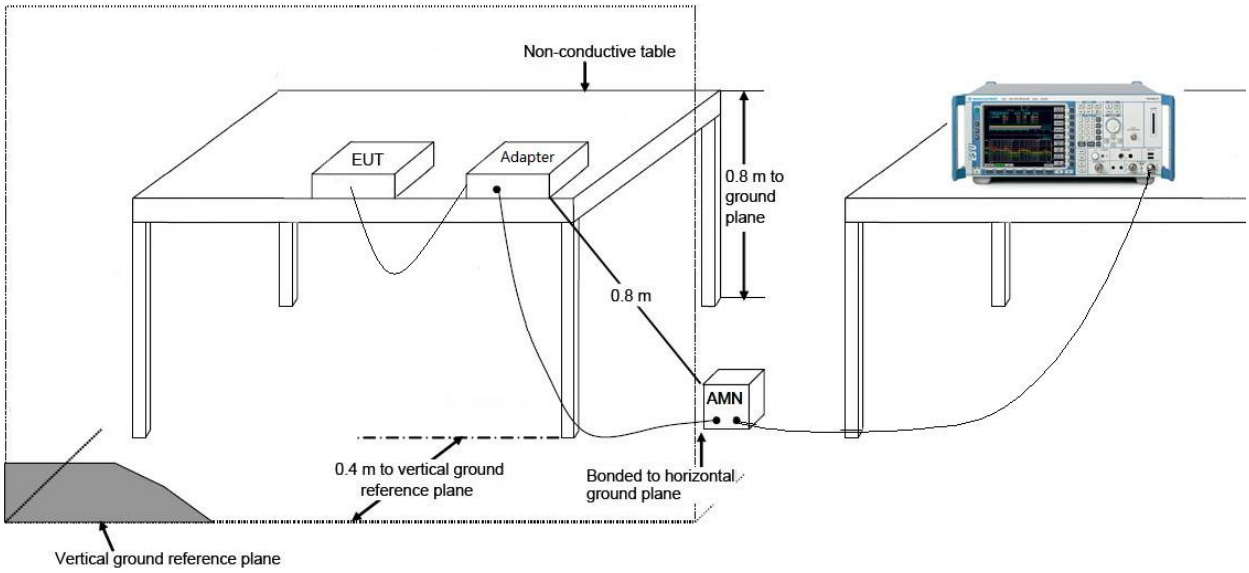
7.9.2. Test Procedure

The EUT was setup according to ANSI C63.4, 2009 and tested according to KDB 789033 for compliance to FCC 47CFR 15.247 requirements. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs) Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

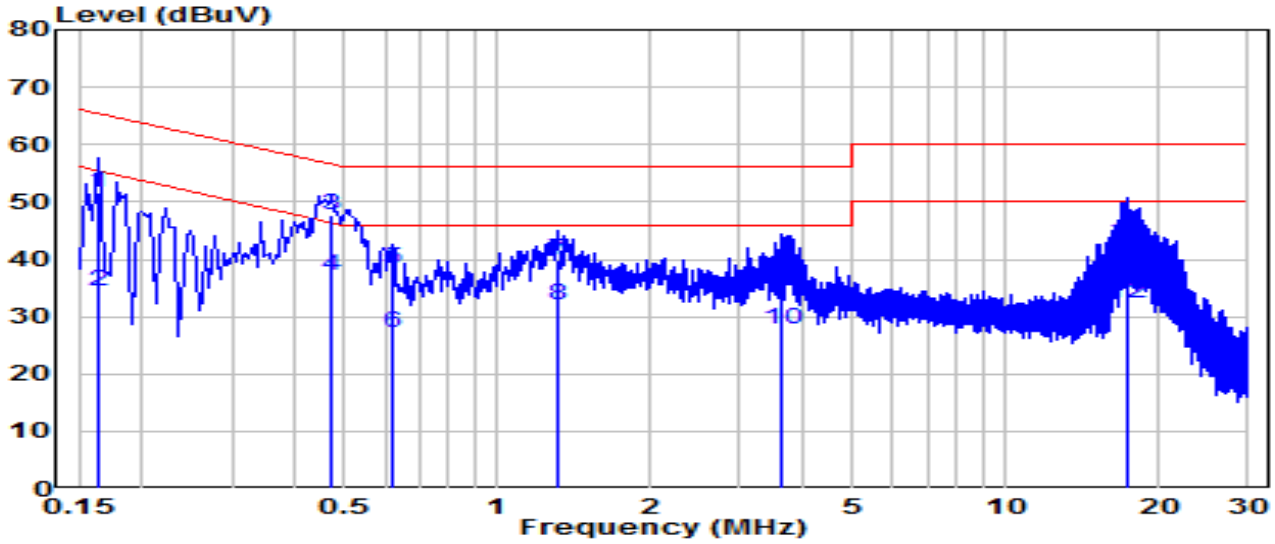
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

7.9.3. Test Setup



7.9.4. Test Result

EUT	Monarch 12	Date of Test	2022-11-03
Factor	CE_ENV216-L1 (Filter ON)	Temp. / Humidity	23.5°C /59%
Polarity	Line1	Site / Test Engineer	SR2 / Dio
Test Mode	802.11n_20_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 120V/60Hz



No		Frequency (MHz)	Reading (dBuV)	C.F (dB)	Measurement (dBuV)	Margin (dB)	Limit (dBuV)	Remark (QP/PK/AV)
1		0.163	42.02	9.62	51.64	-13.65	65.28	QP
2		0.163	24.79	9.62	34.41	-20.87	55.28	Average
3	*	0.469	38.04	9.64	47.68	-8.84	56.52	QP
4	*	0.469	27.45	9.64	37.09	-9.43	46.52	Average
5		0.622	28.59	9.65	38.24	-17.76	56.00	QP
6		0.622	17.52	9.65	27.17	-18.83	46.00	Average
7		1.320	30.18	9.68	39.86	-16.14	56.00	QP
8		1.320	22.34	9.68	32.02	-13.98	46.00	Average
9		3.615	27.15	9.72	36.87	-19.13	56.00	QP
10		3.615	18.05	9.72	27.77	-18.23	46.00	Average
11		17.253	33.11	9.91	43.02	-16.98	60.00	QP
12		17.253	22.53	9.91	32.44	-17.56	50.00	Average

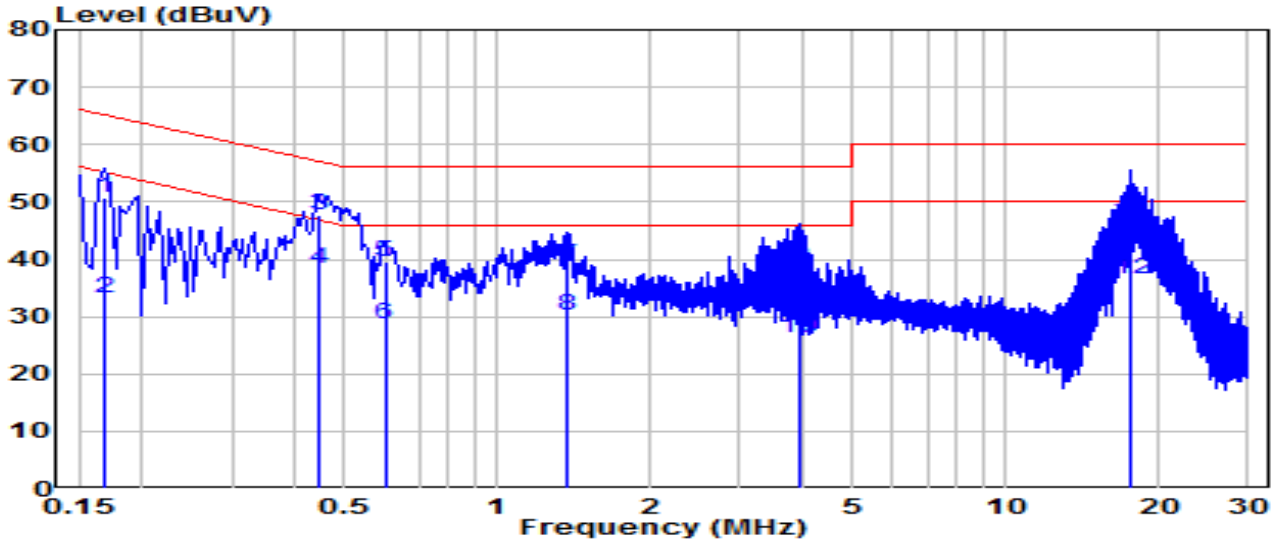
Note:

1. " *", means this data is the worst emission level.

2. C.F (Correction Factor) = LISN Factor (dB)+ Cable Loss (dB).

3. Measurement (dBuV) = Reading(dBuV) + C.F (Correction Factor).

EUT	Monarch 12	Date of Test	2022-11-03
Factor	CE_ENV216-N (Filter ON)	Temp. / Humidity	23.5°C /59%
Polarity	Neutral	Site / Test Engineer	SR2 / Dio
Test Mode	802.11n_20_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 120V/60Hz

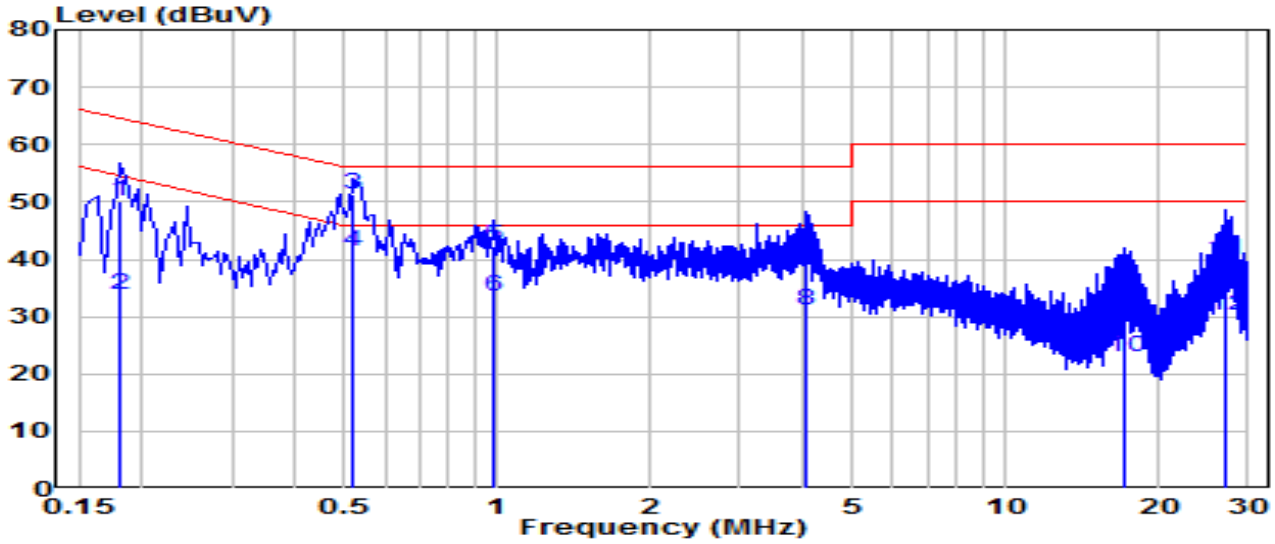


No		Frequency (MHz)	Reading (dBuV)	C.F (dB)	Measurement (dBuV)	Margin (dB)	Limit (dBuV)	Remark (QP/PK/AV)
1		0.168	41.13	9.62	50.75	-14.31	65.06	QP
2		0.168	23.74	9.62	33.36	-21.70	55.06	Average
3	*	0.442	38.15	9.64	47.79	-9.23	57.02	QP
4	*	0.442	28.80	9.64	38.44	-8.57	47.02	Average
5		0.600	29.96	9.65	39.61	-16.39	56.00	QP
6		0.600	19.08	9.65	28.73	-17.27	46.00	Average
7		1.365	29.24	9.68	38.92	-17.08	56.00	QP
8		1.365	20.36	9.68	30.04	-15.96	46.00	Average
9		3.912	28.80	9.73	38.53	-17.47	56.00	QP
10		3.912	16.39	9.73	26.12	-19.88	46.00	Average
11		17.572	36.40	9.97	46.37	-13.63	60.00	QP
12		17.572	26.65	9.97	36.61	-13.39	50.00	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = LISN Factor (dB)+ Cable Loss (dB).
3. Measurement (dBuV) = Reading(dBuV) + C.F (Correction Factor).

EUT	Monarch 12	Date of Test	2022-11-03
Factor	CE_ENV216-L1 (Filter ON)	Temp. / Humidity	23.5°C /59%
Polarity	Line1	Site / Test Engineer	SR2 / Dio
Test Mode	802.11n_20_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 240V/60Hz

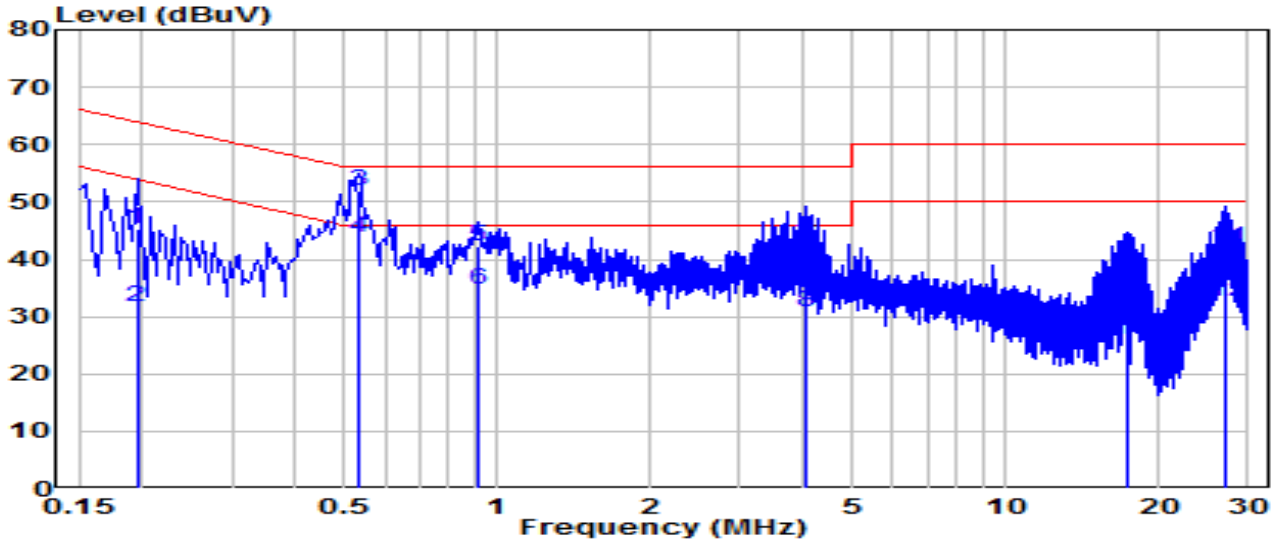


No		Frequency (MHz)	Reading (dBuV)	C.F (dB)	Measurement (dBuV)	Margin (dB)	Limit (dBuV)	Remark (QP/PK/AV)
1		0.181	40.53	9.62	50.15	-14.26	64.42	QP
2		0.181	24.04	9.62	33.67	-20.75	54.42	Average
3	*	0.519	41.83	9.64	51.47	-4.53	56.00	QP
4	*	0.519	31.62	9.64	41.26	-4.74	46.00	Average
5		0.987	32.71	9.67	42.38	-13.62	56.00	QP
6		0.987	23.84	9.67	33.51	-12.49	46.00	Average
7		4.069	30.99	9.73	40.72	-15.28	56.00	QP
8		4.069	21.30	9.73	31.03	-14.97	46.00	Average
9		17.086	23.72	9.91	33.63	-26.37	60.00	QP
10		17.086	12.95	9.91	22.86	-27.14	50.00	Average
11		27.071	29.85	9.91	39.76	-20.24	60.00	QP
12		27.071	20.16	9.91	30.08	-19.92	50.00	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = LISN Factor (dB)+ Cable Loss (dB).
3. Measurement (dBuV) = Reading(dBuV) + C.F (Correction Factor).

EUT	Monarch 12	Date of Test	2022-11-03
Factor	CE_ENV216-N (Filter ON)	Temp. / Humidity	23.5°C /59%
Polarity	Neutral	Site / Test Engineer	SR2 / Dio
Test Mode	802.11n_20_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 240V/60Hz



No		Frequency (MHz)	Reading (dBuV)	C.F (dB)	Measurement (dBuV)	Margin (dB)	Limit (dBuV)	Remark (QP/PK/AV)
1		0.195	35.78	9.62	45.40	-18.42	63.82	QP
2		0.195	22.11	9.62	31.73	-22.09	53.82	Average
3	*	0.532	42.26	9.64	51.91	-4.09	56.00	QP
4	*	0.532	34.17	9.64	43.82	-2.18	46.00	Average
5		0.919	32.58	9.67	42.25	-13.75	56.00	QP
6		0.919	25.11	9.67	34.78	-11.22	46.00	Average
7		4.065	32.56	9.73	42.29	-13.71	56.00	QP
8		4.065	20.91	9.73	30.64	-15.36	46.00	Average
9		17.293	27.44	9.96	37.40	-22.60	60.00	QP
10		17.293	16.15	9.96	26.11	-23.89	50.00	Average
11		27.246	32.01	10.04	42.05	-17.95	60.00	QP
12		27.246	22.53	10.04	32.56	-17.44	50.00	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = LISN Factor (dB)+ Cable Loss (dB).
3. Measurement (dBuV) = Reading(dBuV) + C.F (Correction Factor).

8. CONCLUSION

The data collected relate only the item(s) tested and show that the **Intercom,** is in compliance with Part 15E of the FCC Rules.

The End