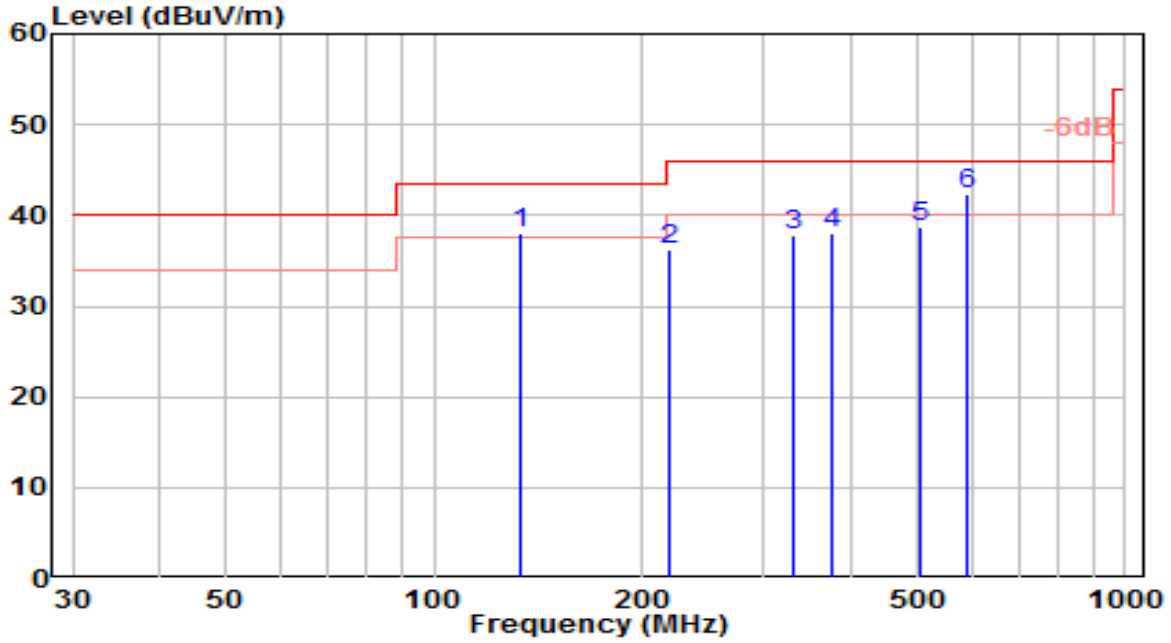
7.6.5. Test Result

EUT	Network Switch	Date of Test	2024-08-22
Factor	VULB 9162	Temp. / Humidity	24°C /50%
Polarity	Horizontal	Site / Test Engineer	AC1 / Dio
Test Mode	BLE_TX_1Mbps_CH 19	Test Voltage	DC 48V

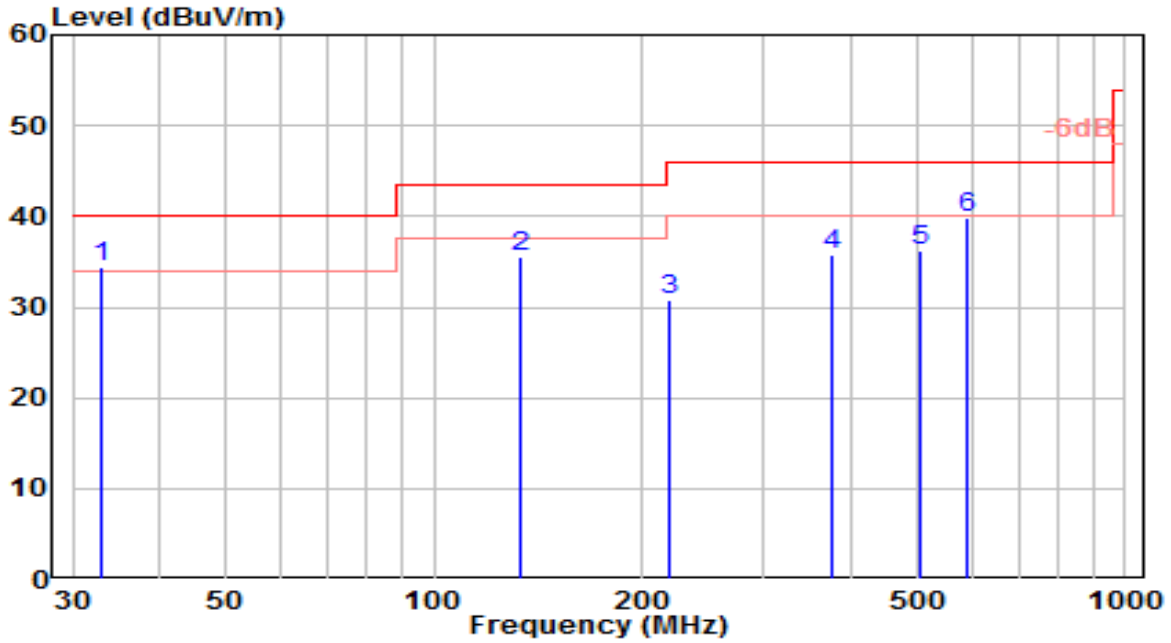


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		132.820	22.71	15.26	37.97	-5.53	43.50	200	276	QP
2		219.150	17.74	18.47	36.21	-9.79	46.00	150	296	QP
3		330.700	15.77	21.94	37.70	-8.30	46.00	100	315	QP
4		375.320	14.78	23.15	37.93	-8.07	46.00	100	72	QP
5		504.330	13.37	25.36	38.73	-7.27	46.00	150	317	QP
6	*	591.630	15.12	27.18	42.30	-3.70	46.00	150	313	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	Network Switch	Date of Test	2024-08-22
Factor	VULB 9162	Temp. / Humidity	24°C /50%
Polarity	Vertical	Site / Test Engineer	AC1 / Dio
Test Mode	BLE_TX_1Mbps_CH 19	Test Voltage	DC 48V

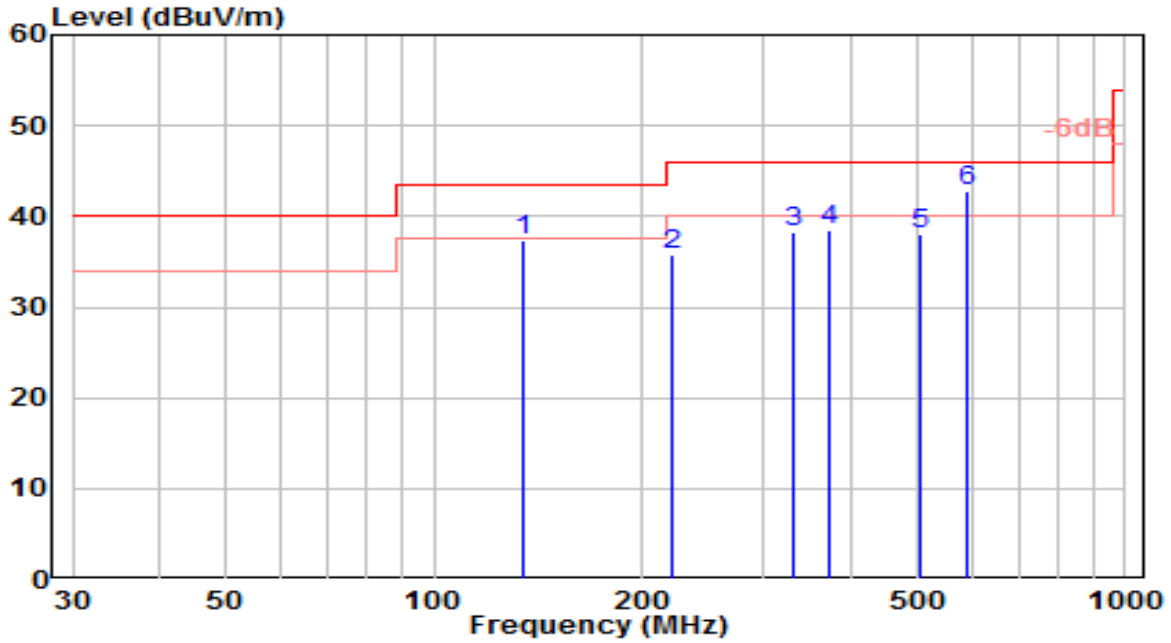


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	32.910	17.08	17.23	34.31	-5.69	40.00	100	223	QP
2		132.820	20.38	15.26	35.64	-7.86	43.50	100	46	QP
3		219.150	12.31	18.47	30.79	-15.21	46.00	200	358	QP
4		375.320	12.67	23.15	35.82	-10.18	46.00	150	144	QP
5		504.330	10.95	25.36	36.31	-9.69	46.00	100	298	QP
6		591.630	12.77	27.18	39.96	-6.04	46.00	100	117	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	Network Switch	Date of Test	2024-08-22
Factor	VULB 9162	Temp. / Humidity	24°C /50%
Polarity	Horizontal	Site / Test Engineer	AC1 / Dio
Test Mode	BLE_RX_1Mbps_CH 19	Test Voltage	DC 48V

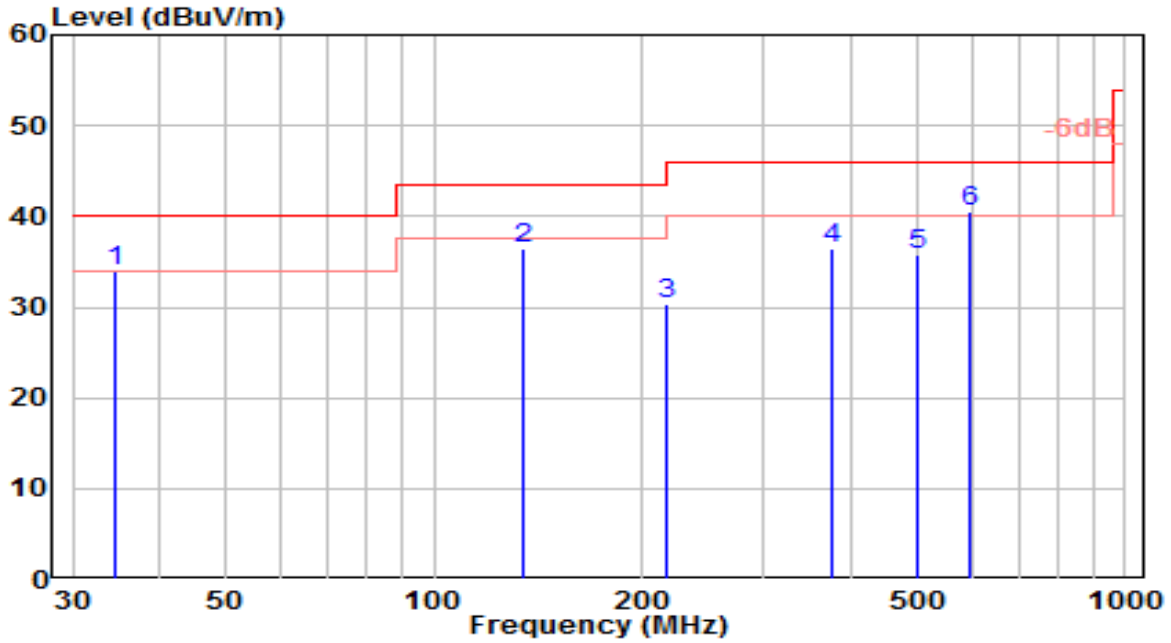


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		134.155	22.13	15.18	37.31	-6.19	43.50	200	276	QP
2		220.584	17.21	18.57	35.77	-10.23	46.00	150	296	QP
3		332.368	16.26	22.00	38.26	-7.74	46.00	100	315	QP
4		373.574	15.46	23.12	38.58	-7.42	46.00	100	72	QP
5		506.189	12.72	25.39	38.11	-7.89	46.00	150	317	QP
6	*	589.956	15.58	27.14	42.72	-3.28	46.00	150	313	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	Network Switch	Date of Test	2024-08-22
Factor	VULB 9162	Temp. / Humidity	24°C /50%
Polarity	Vertical	Site / Test Engineer	AC1 / Dio
Test Mode	BLE_RX_1Mbps_CH 19	Test Voltage	DC 48V

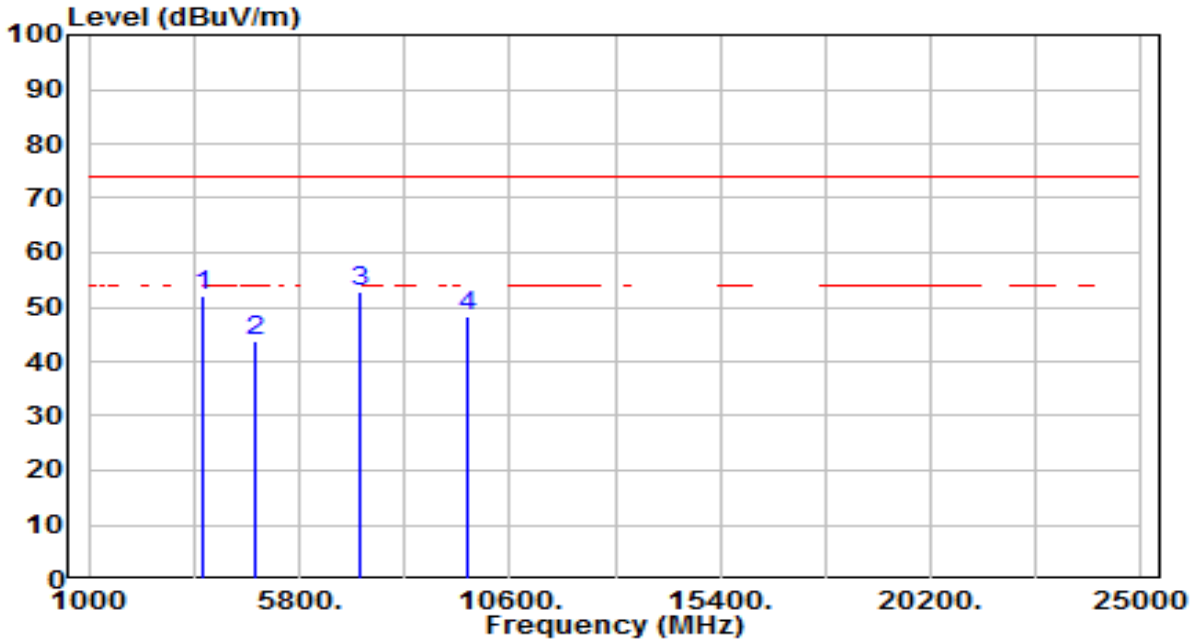


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		34.675	16.21	17.77	33.98	-6.02	40.00	100	223	QP
2		134.678	21.23	15.15	36.38	-7.12	43.50	100	46	QP
3		217.486	11.95	18.37	30.32	-15.68	46.00	200	358	QP
4		376.976	13.16	23.18	36.34	-9.66	46.00	150	144	QP
5		502.647	10.43	25.33	35.77	-10.23	46.00	100	298	QP
6	*	593.452	13.27	27.23	40.50	-5.50	46.00	100	117	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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	24°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_1Mbps_CH 0	Test Voltage	DC 48V

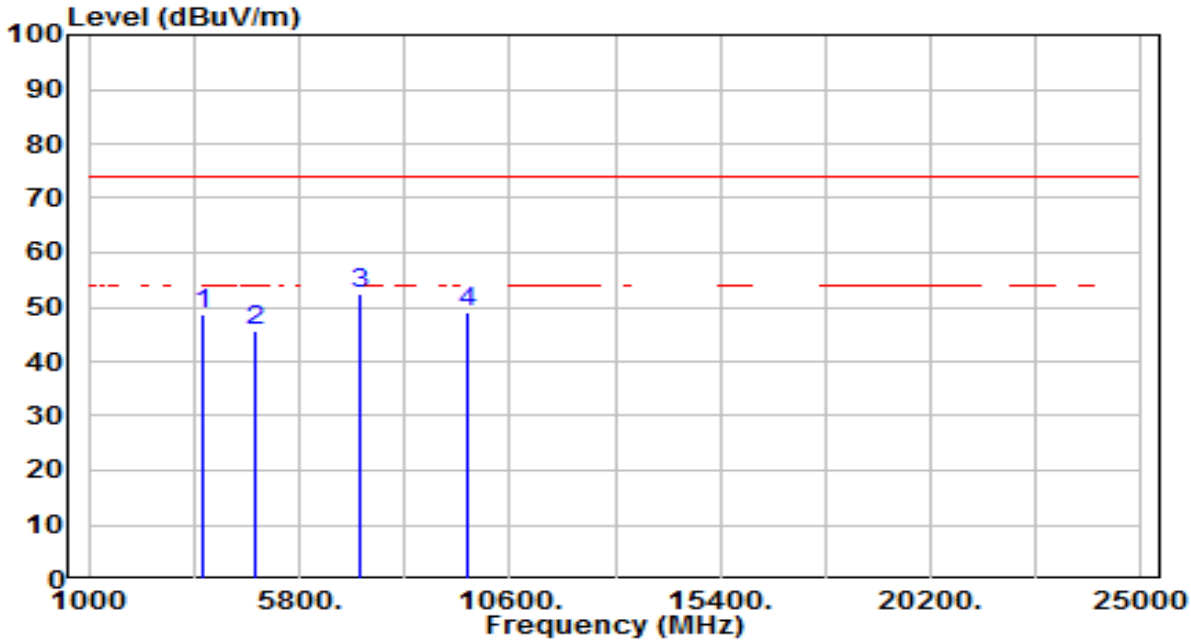


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		3590.906	52.09	-0.17	51.92	-22.08	74.00	100	274	Peak
2		4804.000	39.98	3.71	43.69	-30.31	74.00	100	180	Peak
3	*	7206.000	41.24	11.57	52.81	-21.19	74.00	100	280	Peak
4		9608.000	32.66	15.69	48.36	-25.64	74.00	100	166	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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	24°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_1Mbps_CH 0	Test Voltage	DC 48V

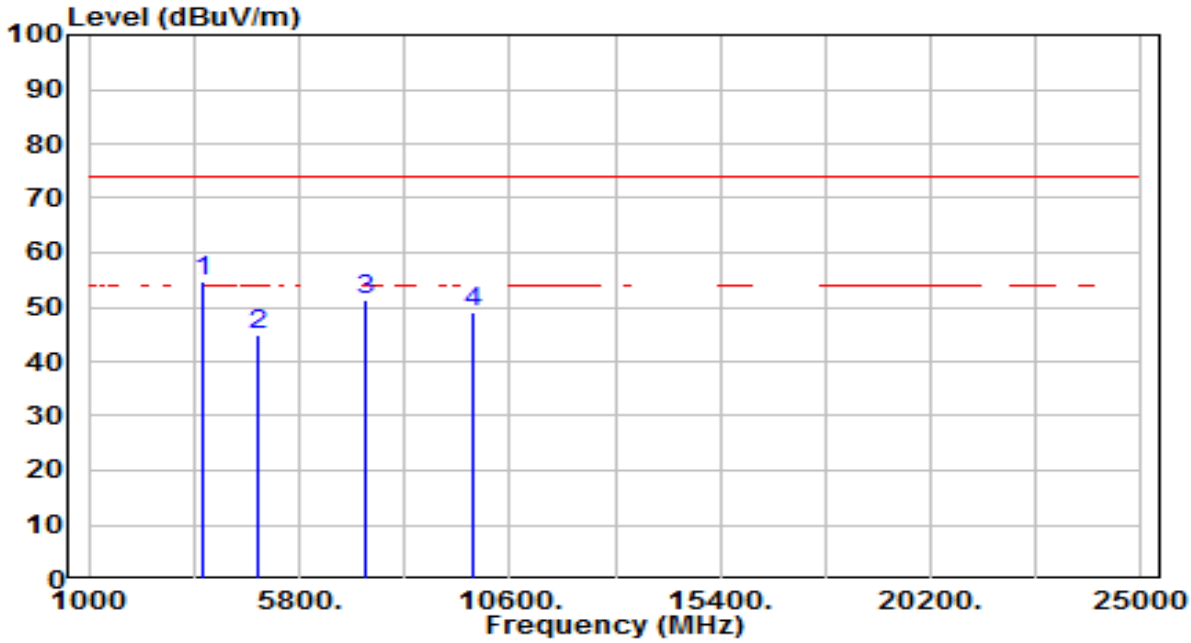


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		3588.781	48.86	-0.18	48.68	-25.32	74.00	100	261	Peak
2		4804.000	42.05	3.71	45.76	-28.24	74.00	100	5	Peak
3	*	7206.000	41.00	11.57	52.57	-21.43	74.00	100	338	Peak
4		9608.000	33.35	15.69	49.04	-24.96	74.00	100	104	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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	24°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_1Mbps_CH 19	Test Voltage	DC 48V

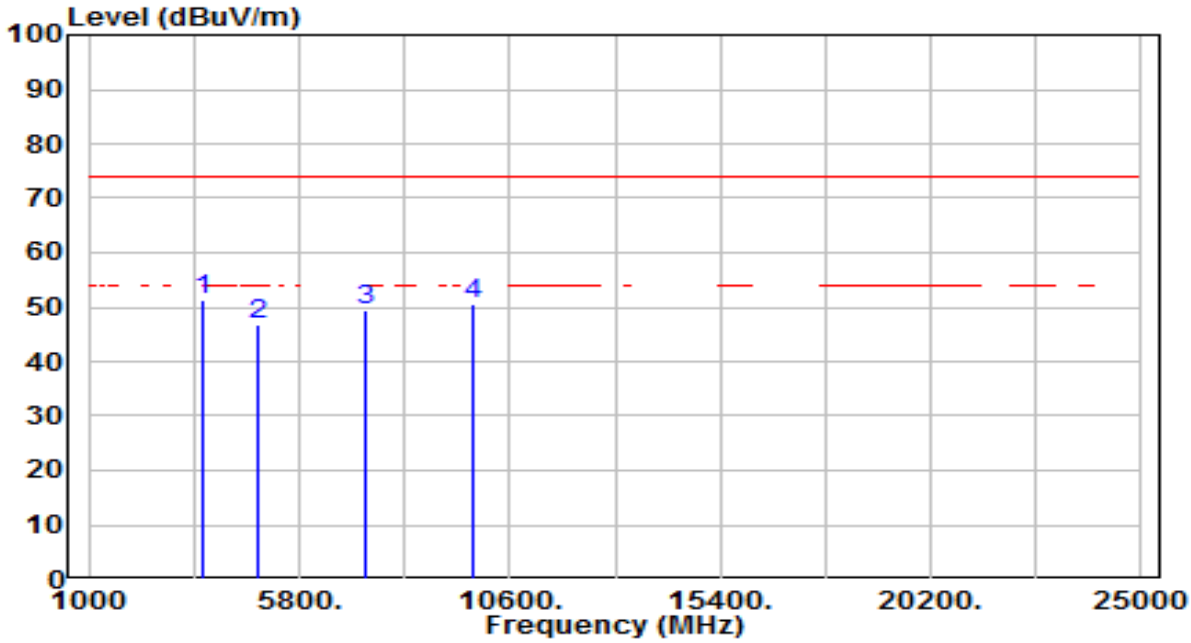


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	3586.656	54.80	-0.18	54.62	-19.38	74.00	100	269	Peak
2		4880.000	41.10	3.85	44.95	-29.05	74.00	100	216	Peak
3		7320.000	39.45	11.97	51.42	-22.58	74.00	100	290	Peak
4		9760.000	33.08	15.98	49.05	-24.95	74.00	100	307	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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	24°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_1Mbps_CH 19	Test Voltage	DC 48V

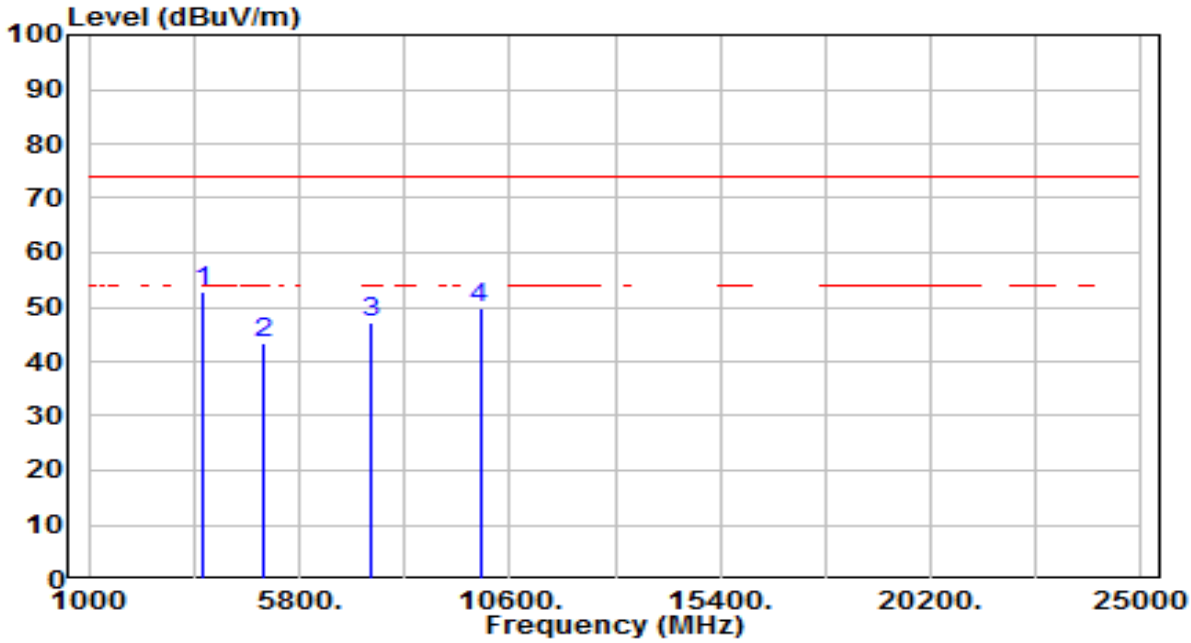


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	3587.719	51.51	-0.18	51.33	-22.67	74.00	100	27	Peak
2		4880.000	42.77	3.85	46.61	-27.39	74.00	100	13	Peak
3		7320.000	37.47	11.97	49.44	-24.56	74.00	100	337	Peak
4		9760.000	34.44	15.98	50.41	-23.59	74.00	100	116	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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	24°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_1Mbps_CH 39	Test Voltage	DC 48V

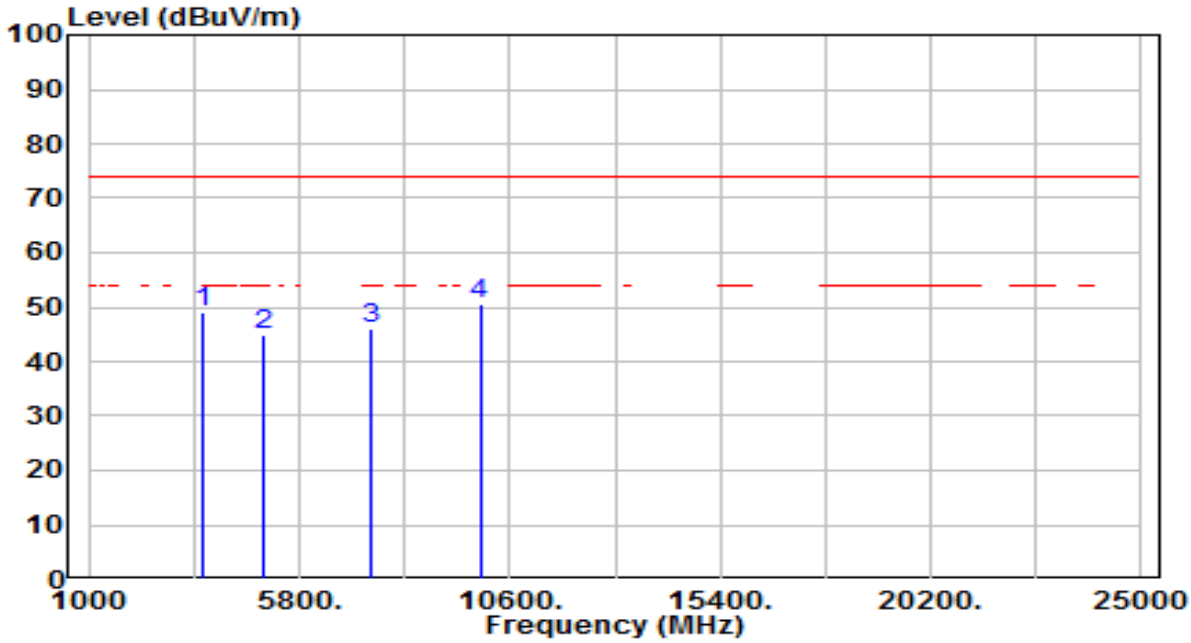


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	3591.969	53.06	-0.17	52.89	-21.11	74.00	100	268	Peak
2		4960.000	39.55	3.99	43.54	-30.46	74.00	100	233	Peak
3		7440.000	34.86	12.40	47.26	-26.74	74.00	100	251	Peak
4		9920.000	33.60	16.27	49.88	-24.12	74.00	100	261	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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	24°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_1Mbps_CH 39	Test Voltage	DC 48V

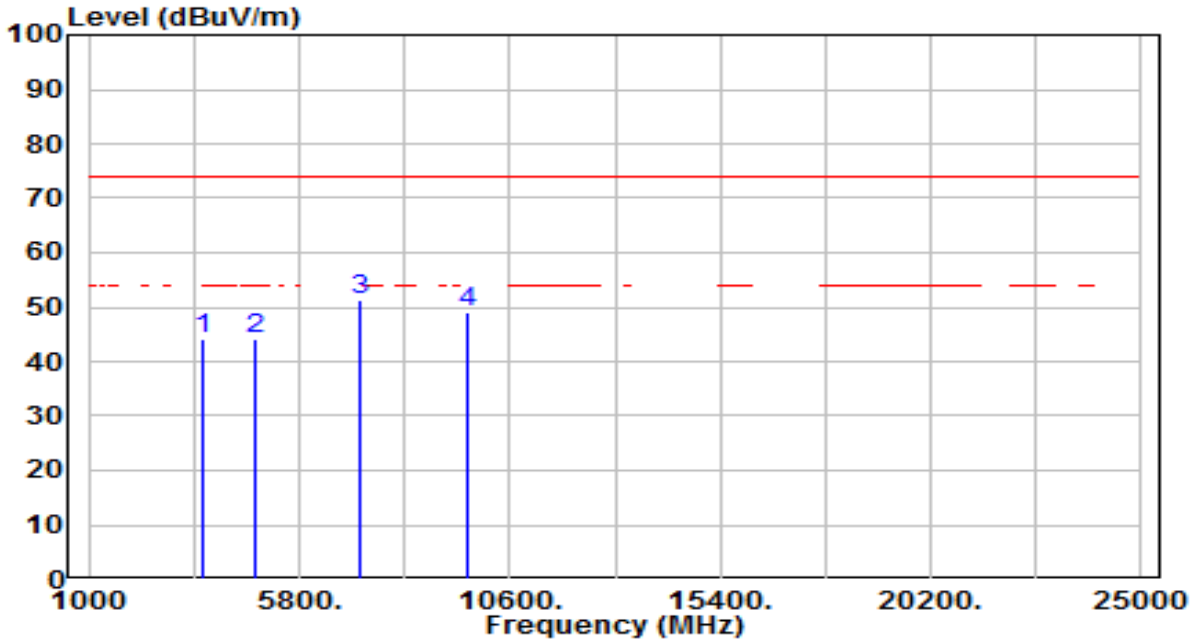


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		3587.719	49.40	-0.18	49.22	-24.78	74.00	100	240	Peak
2		4960.000	41.00	3.99	44.99	-29.01	74.00	100	16	Peak
3		7440.000	33.81	12.40	46.21	-27.79	74.00	100	226	Peak
4	*	9920.000	34.33	16.27	50.60	-23.40	74.00	100	319	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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	24°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_2Mbps_CH 0	Test Voltage	DC 48V

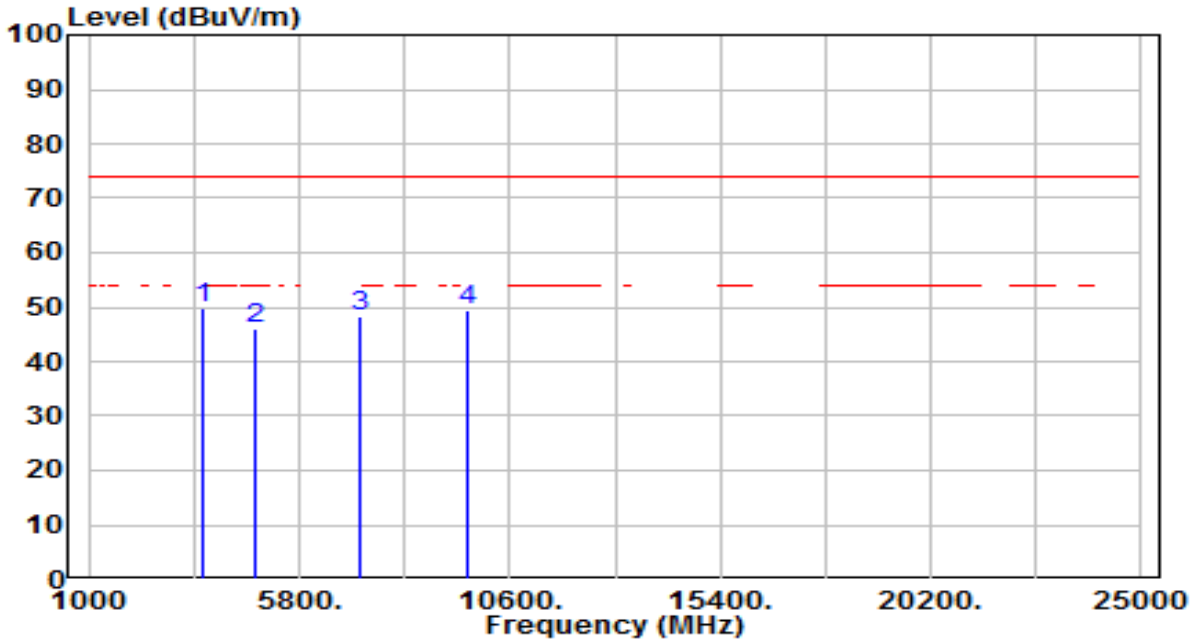


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		3591.969	44.19	-0.17	44.02	-29.98	74.00	100	306	Peak
2		4804.000	40.46	3.71	44.17	-29.83	74.00	100	330	Peak
3	*	7206.000	39.65	11.57	51.22	-22.78	74.00	100	226	Peak
4		9608.000	33.23	15.69	48.92	-25.08	74.00	100	258	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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	24°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_2Mbps_CH 0	Test Voltage	DC 48V

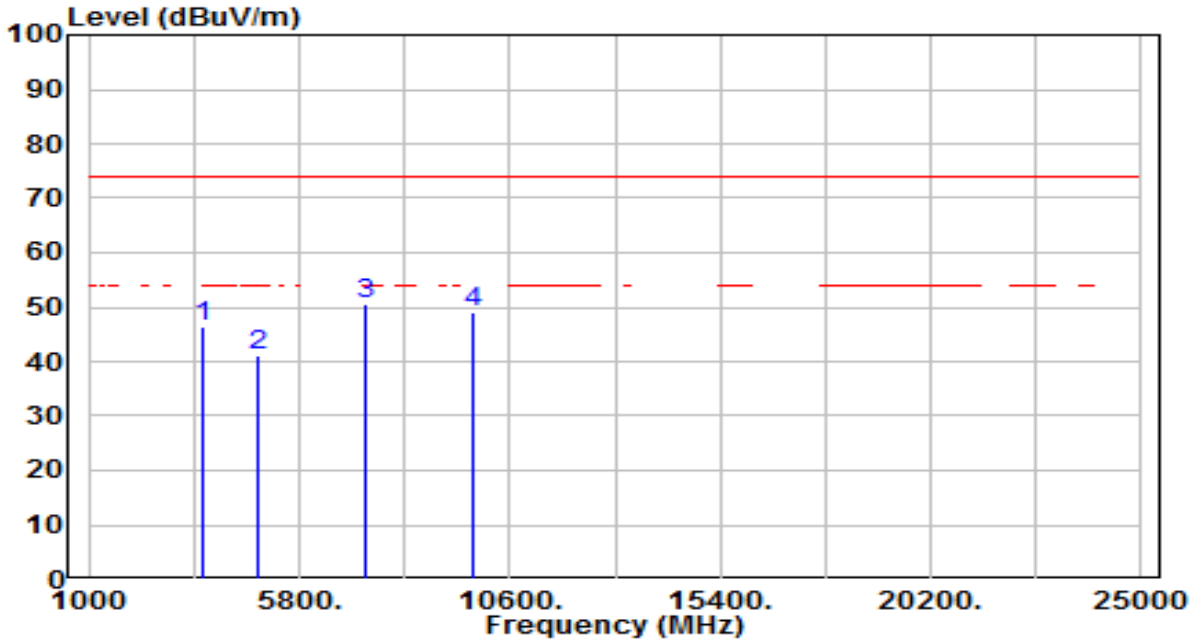


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	3583.469	50.11	-0.19	49.92	-24.08	74.00	100	236	Peak
2		4804.000	42.19	3.71	45.90	-28.10	74.00	100	350	Peak
3		7206.000	36.60	11.57	48.17	-25.83	74.00	100	295	Peak
4		9608.000	33.58	15.69	49.28	-24.72	74.00	100	333	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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	24°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_2Mbps_CH 19	Test Voltage	DC 48V

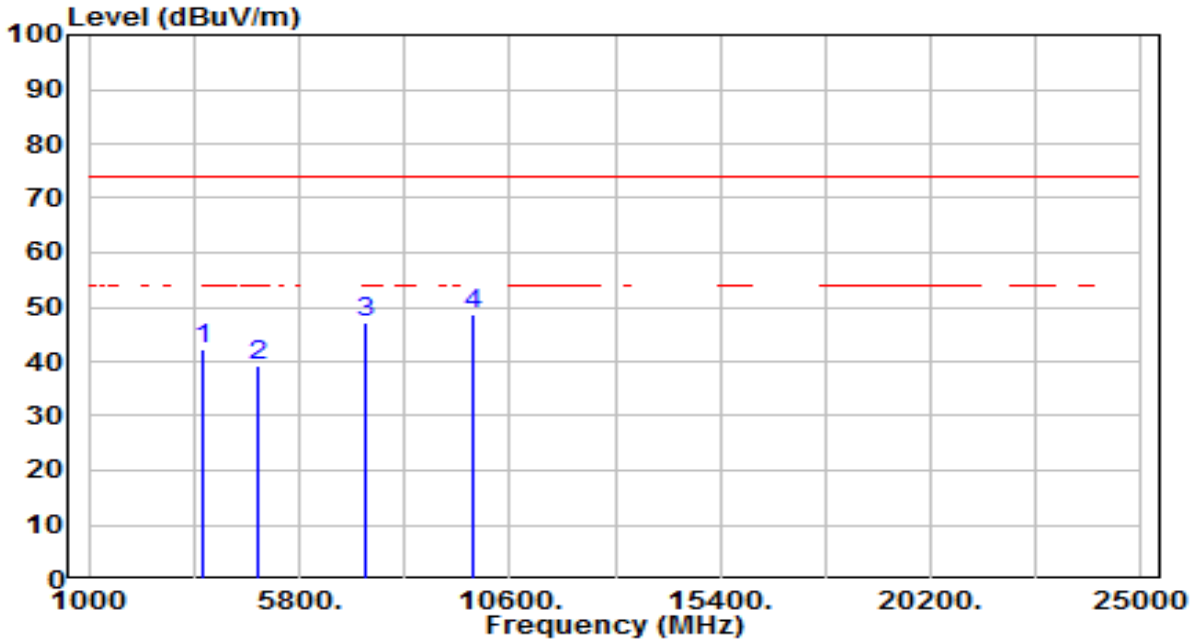


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		3589.844	46.45	-0.17	46.27	-27.73	74.00	100	223	Peak
2		4880.000	37.38	3.85	41.23	-32.77	74.00	100	303	Peak
3	*	7320.000	38.78	11.97	50.75	-23.25	74.00	100	289	Peak
4		9760.000	33.14	15.98	49.12	-24.88	74.00	100	258	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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	24°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_2Mbps_CH 19	Test Voltage	DC 48V

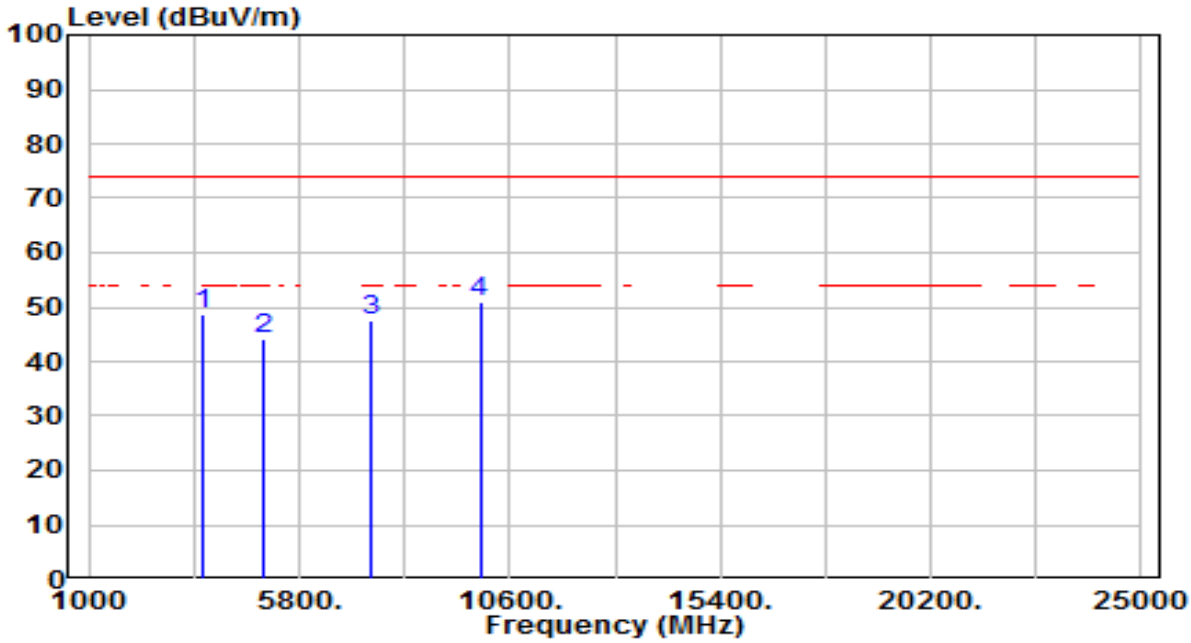


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		3587.719	42.30	-0.18	42.12	-31.88	74.00	100	78	Peak
2		4880.000	35.25	3.85	39.10	-34.90	74.00	100	30	Peak
3		7320.000	35.02	11.97	47.00	-27.00	74.00	100	183	Peak
4	*	9760.000	32.88	15.98	48.85	-25.15	74.00	100	134	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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	24°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_2Mbps_CH 39	Test Voltage	DC 48V

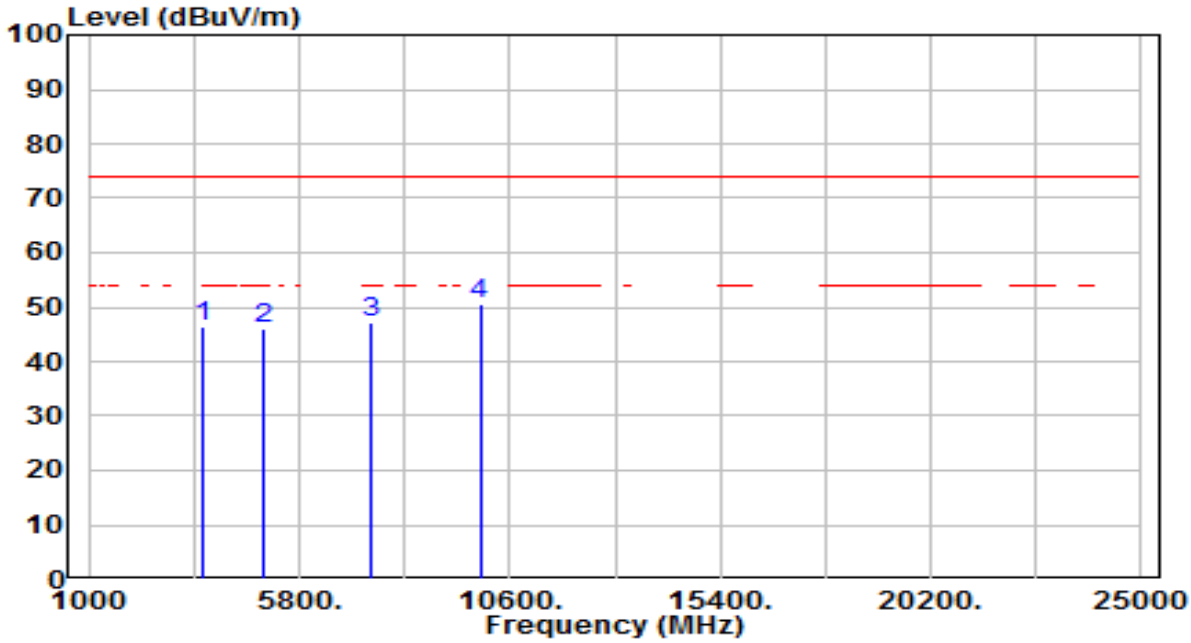


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		3591.438	48.88	-0.17	48.71	-25.29	74.00	100	241	Peak
2		4960.000	39.99	3.99	43.98	-30.02	74.00	100	265	Peak
3		7440.000	34.98	12.40	47.38	-26.62	74.00	100	265	Peak
4	*	9920.000	34.82	16.27	51.09	-22.91	74.00	100	52	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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	24°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_2Mbps_CH 39	Test Voltage	DC 48V

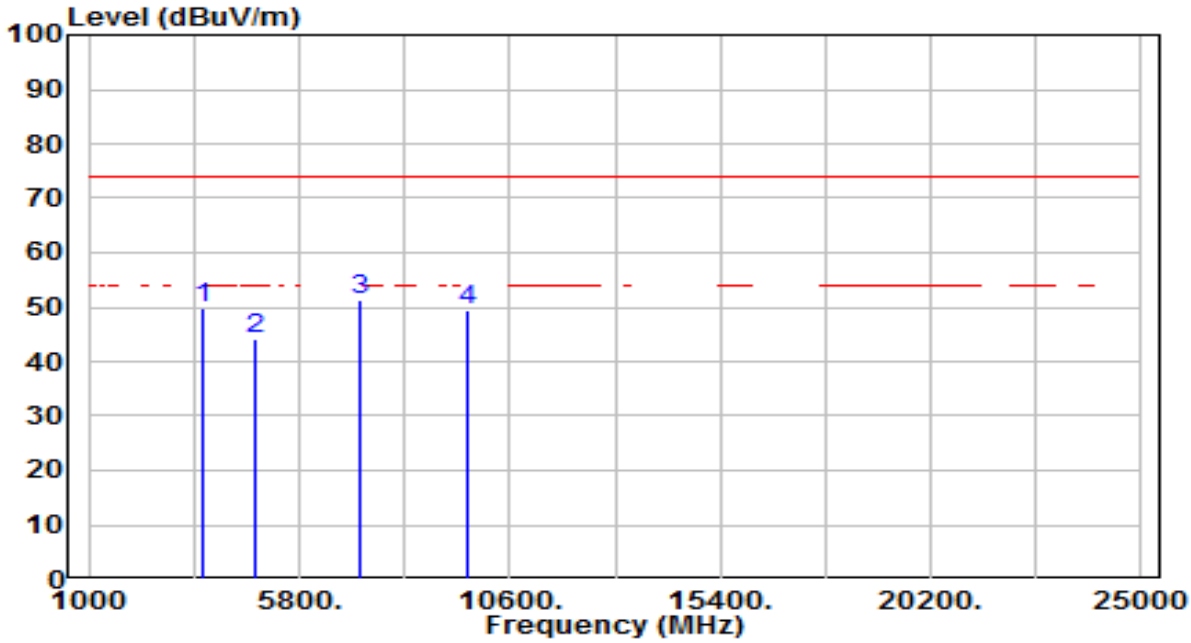


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		3599.406	46.59	-0.15	46.44	-27.56	74.00	100	237	Peak
2		4960.000	41.87	3.99	45.86	-28.14	74.00	100	226	Peak
3		7440.000	34.81	12.40	47.21	-26.79	74.00	100	272	Peak
4	*	9920.000	34.47	16.27	50.75	-23.25	74.00	100	341	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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	25°C /56%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_500kbps_CH 0	Test Voltage	DC 48V

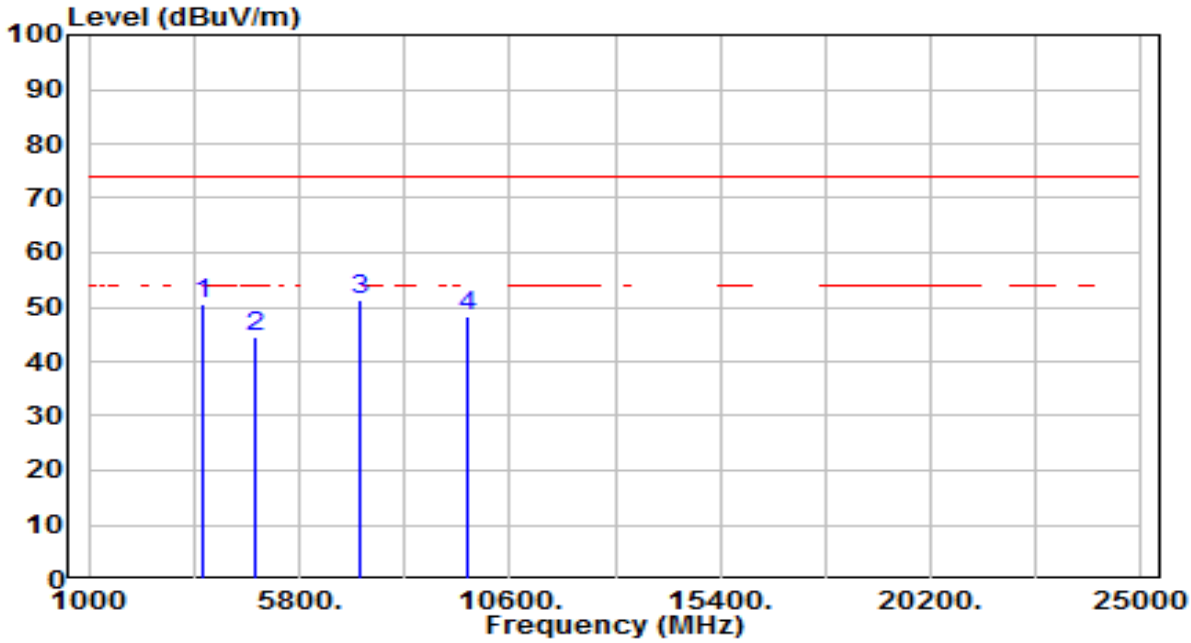


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		3588.781	49.86	-0.18	49.68	-24.32	74.00	100	281	Peak
2		4804.000	40.28	3.71	43.99	-30.01	74.00	100	281	Peak
3	*	7206.000	39.89	11.57	51.46	-22.54	74.00	100	249	Peak
4		9608.000	33.61	15.69	49.30	-24.70	74.00	100	284	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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	25°C /56%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_500kbps_CH 0	Test Voltage	DC 48V

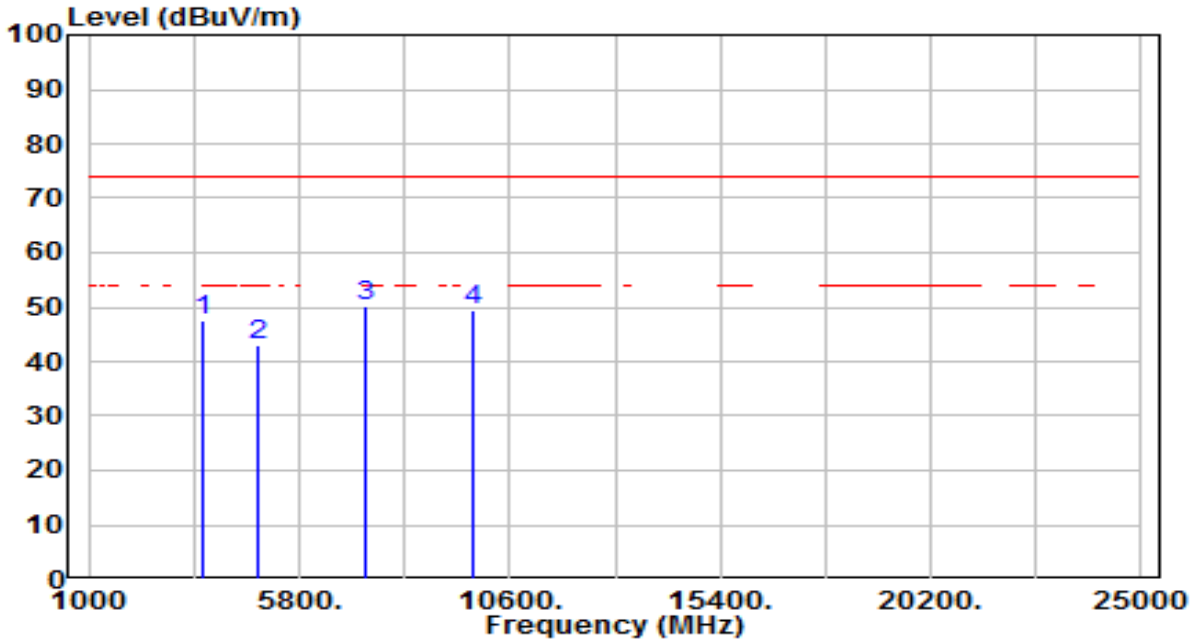


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		3590.906	50.59	-0.17	50.42	-23.58	74.00	100	217	Peak
2		4804.000	40.76	3.71	44.48	-29.52	74.00	100	210	Peak
3	*	7206.000	39.91	11.57	51.48	-22.52	74.00	100	275	Peak
4		9608.000	32.73	15.69	48.43	-25.57	74.00	100	132	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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	25°C /56%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_500kbps_CH 19	Test Voltage	DC 48V

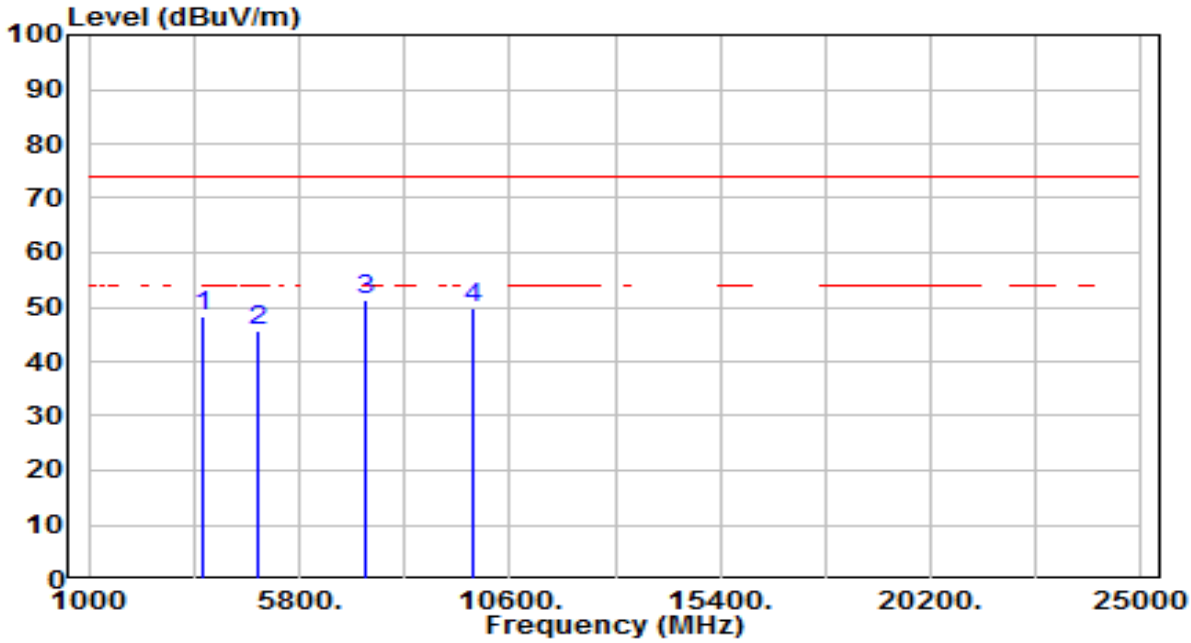


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		3588.781	47.87	-0.18	47.70	-26.30	74.00	100	316	Peak
2		4880.000	39.19	3.85	43.03	-30.97	74.00	100	291	Peak
3	*	7320.000	38.34	11.97	50.31	-23.69	74.00	100	327	Peak
4		9760.000	33.44	15.98	49.42	-24.58	74.00	100	202	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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	25°C /56%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_500kbps_CH 19	Test Voltage	DC 48V

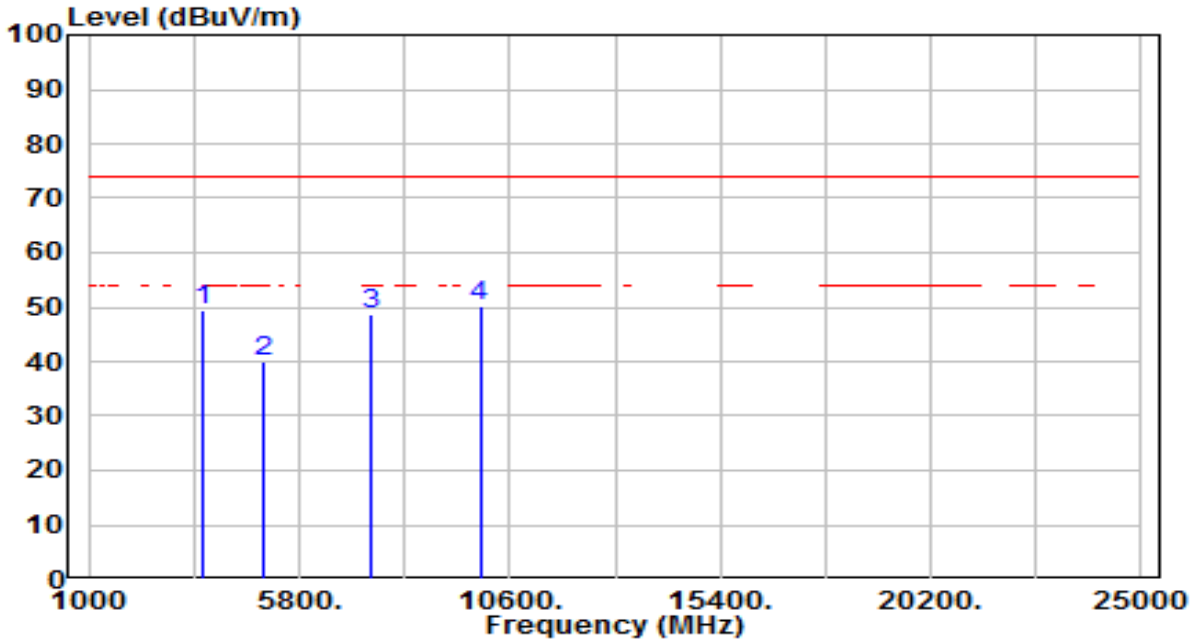


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		3593.563	48.28	-0.16	48.12	-25.88	74.00	100	227	Peak
2		4880.000	41.82	3.85	45.66	-28.34	74.00	100	206	Peak
3	*	7320.000	39.18	11.97	51.15	-22.85	74.00	100	289	Peak
4		9760.000	33.65	15.98	49.63	-24.37	74.00	100	101	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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	25°C /56%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_500kbps_CH 39	Test Voltage	DC 48V

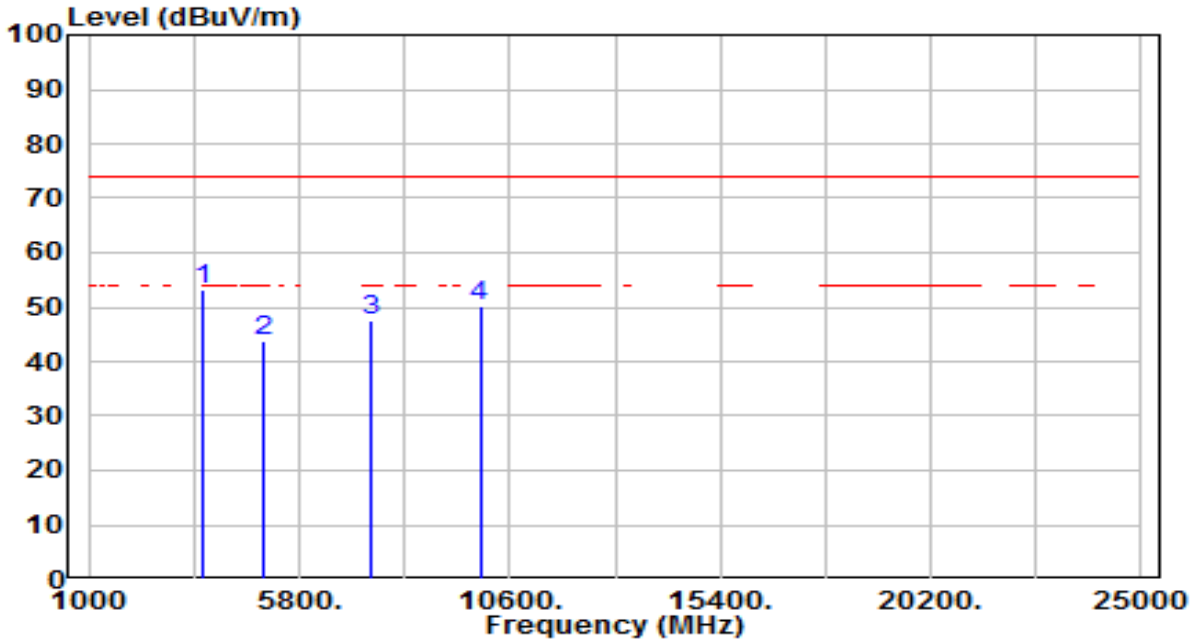


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		3593.563	49.54	-0.16	49.37	-24.63	74.00	100	273	Peak
2		4960.000	35.90	3.99	39.89	-34.11	74.00	100	327	Peak
3		7440.000	36.10	12.40	48.49	-25.51	74.00	100	331	Peak
4	*	9920.000	33.83	16.27	50.10	-23.90	74.00	100	230	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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	25°C /56%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_500kbps_CH 39	Test Voltage	DC 48V

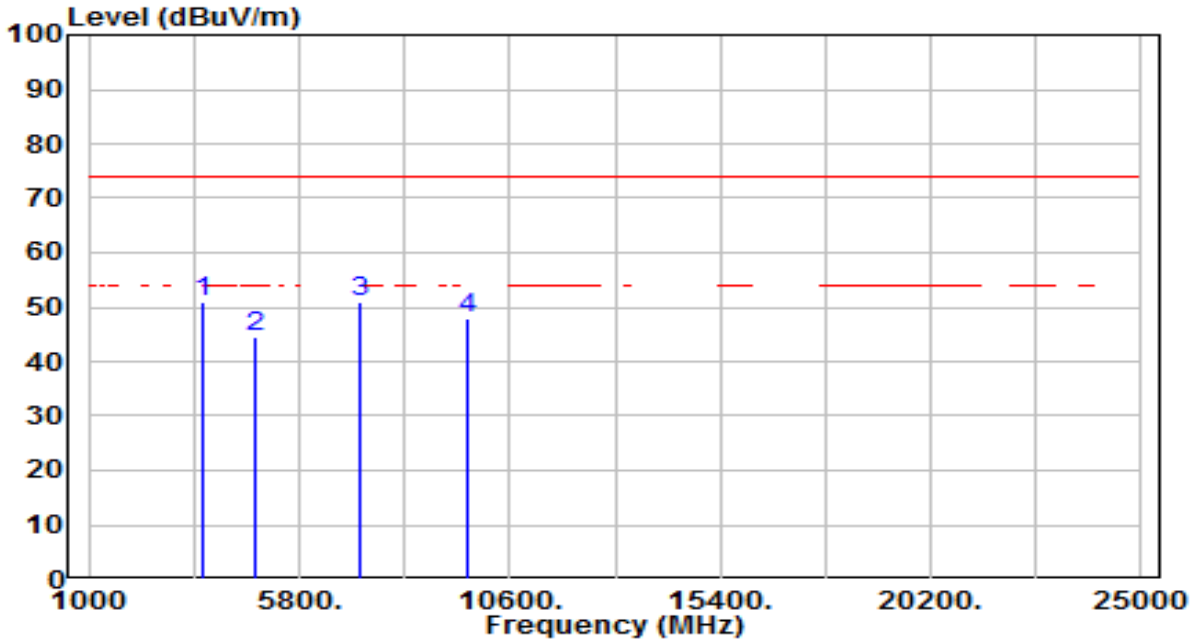


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	3587.719	53.48	-0.18	53.30	-20.70	74.00	100	220	Peak
2		4960.000	39.66	3.99	43.65	-30.35	74.00	100	260	Peak
3		7440.000	35.18	12.40	47.58	-26.42	74.00	100	271	Peak
4		9920.000	34.07	16.27	50.35	-23.65	74.00	100	228	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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	25°C /56%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_125kbps_CH 0	Test Voltage	DC 48V

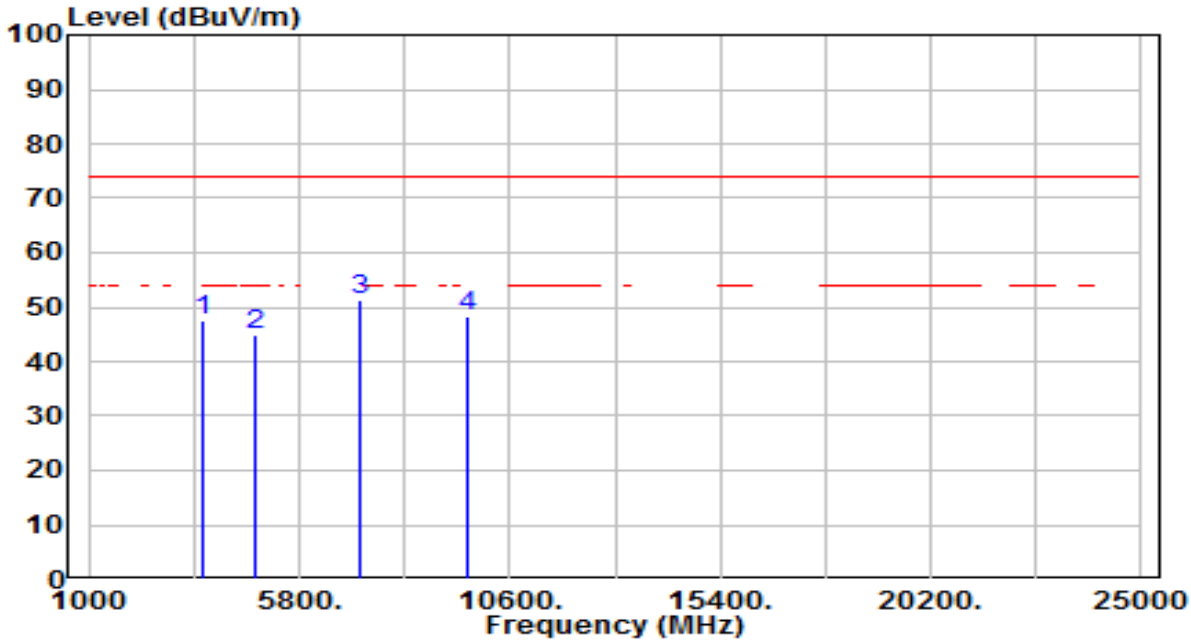


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		3589.844	50.93	-0.17	50.76	-23.24	74.00	100	277	Peak
2		4804.000	40.74	3.71	44.46	-29.54	74.00	100	284	Peak
3	*	7206.000	39.39	11.57	50.96	-23.04	74.00	100	313	Peak
4		9608.000	32.09	15.69	47.78	-26.22	74.00	100	273	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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	25°C /56%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_125kbps_CH 0	Test Voltage	DC 48V

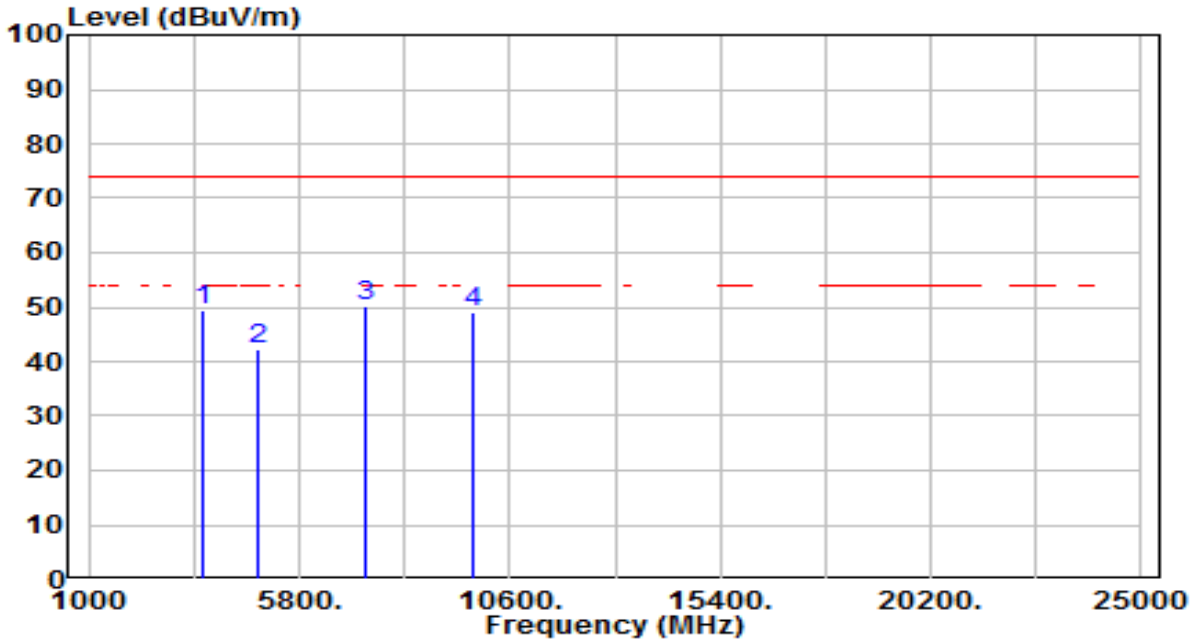


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		3592.500	47.55	-0.17	47.38	-26.62	74.00	100	232	Peak
2		4804.000	41.10	3.71	44.81	-29.19	74.00	100	206	Peak
3	*	7206.000	39.85	11.57	51.42	-22.58	74.00	100	289	Peak
4		9608.000	32.59	15.69	48.29	-25.71	74.00	100	91	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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	25°C /56%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_125kbps_CH 19	Test Voltage	DC 48V

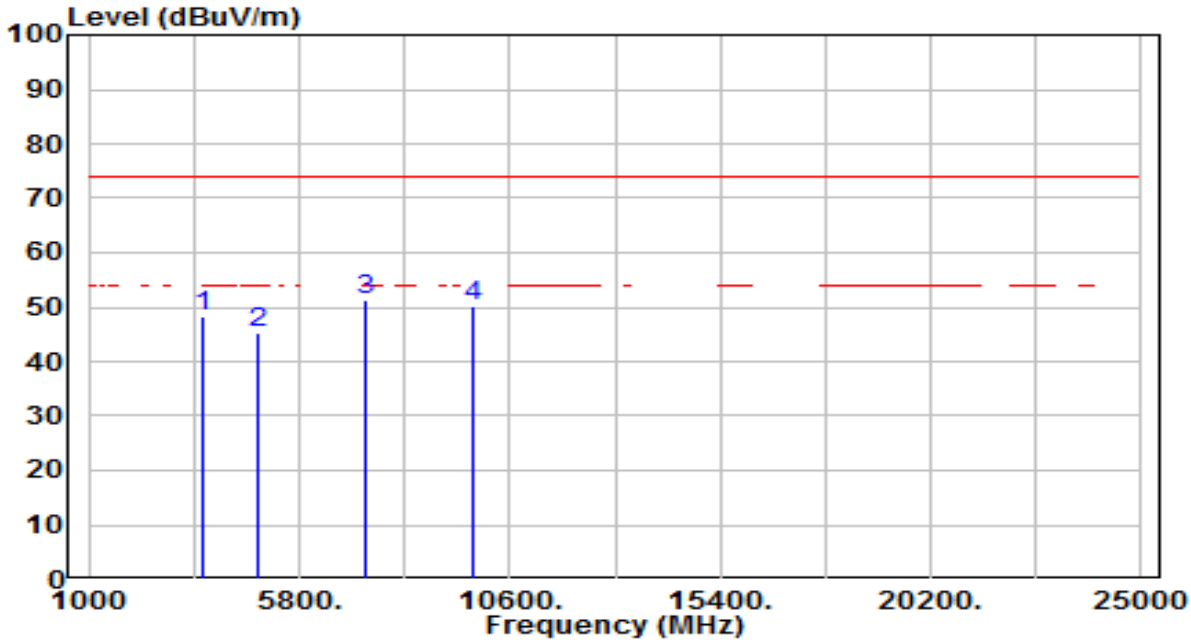


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		3585.594	49.58	-0.19	49.39	-24.61	74.00	100	241	Peak
2		4880.000	38.39	3.85	42.24	-31.76	74.00	100	237	Peak
3	*	7320.000	38.29	11.97	50.26	-23.74	74.00	100	313	Peak
4		9760.000	33.18	15.98	49.15	-24.85	74.00	100	306	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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	25°C /56%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_125kbps_CH 19	Test Voltage	DC 48V

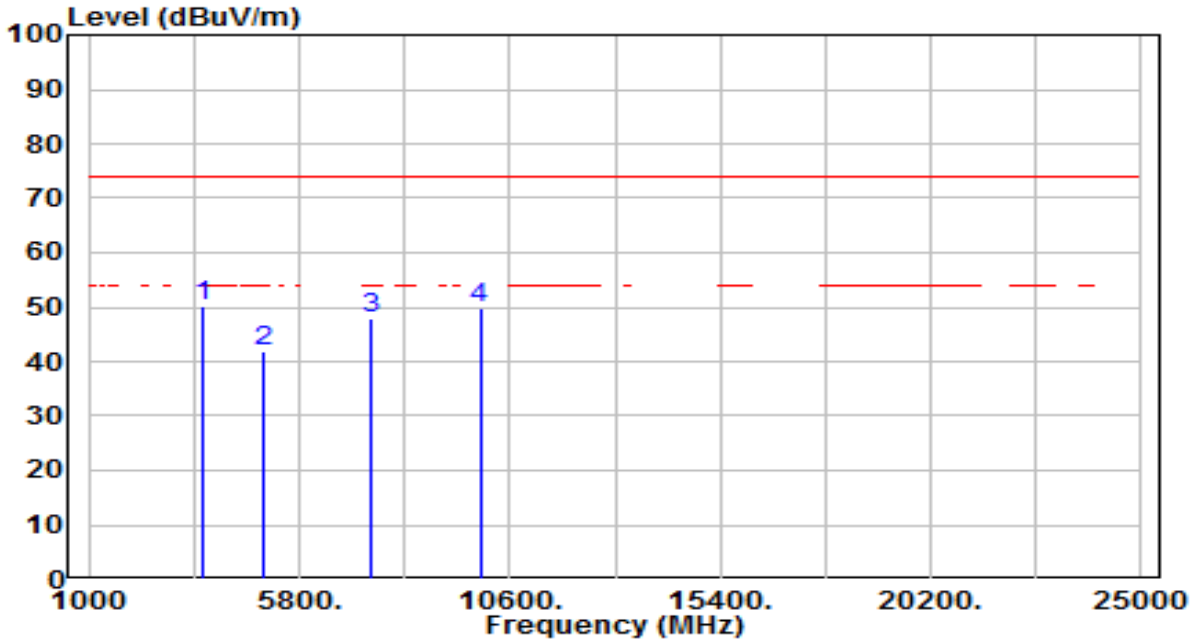


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		3588.781	48.32	-0.18	48.14	-25.86	74.00	100	36	Peak
2		4880.000	41.44	3.85	45.29	-28.71	74.00	100	252	Peak
3	*	7320.000	39.33	11.97	51.30	-22.70	74.00	100	292	Peak
4		9760.000	34.32	15.98	50.30	-23.70	74.00	100	325	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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	25°C /56%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_125kbps_CH 39	Test Voltage	DC 48V

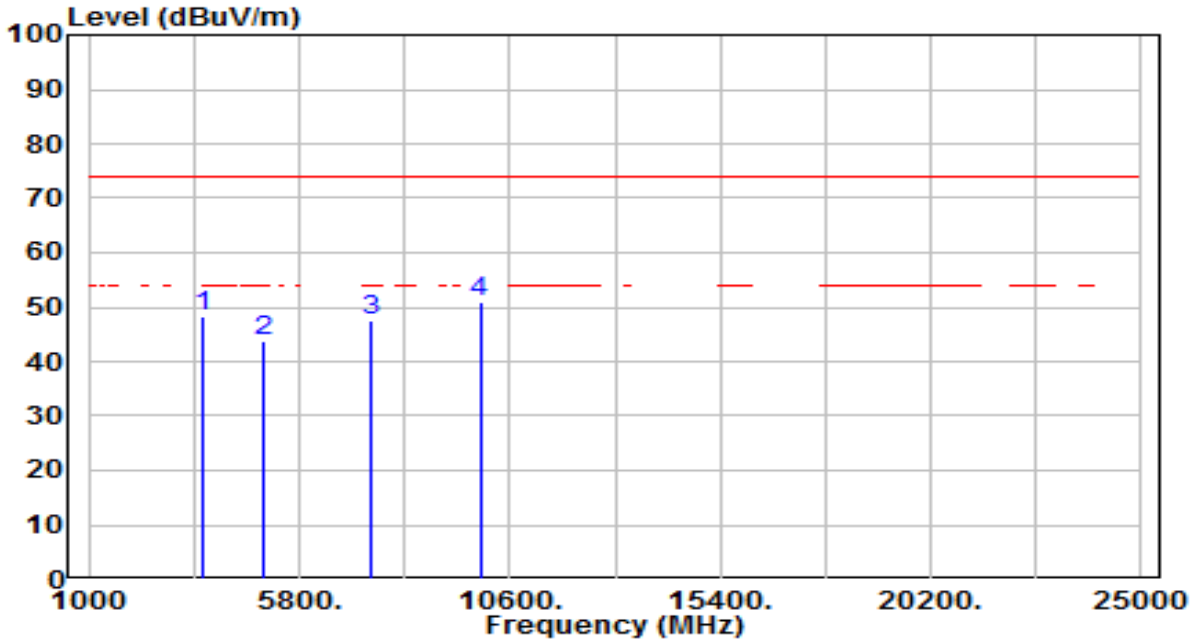


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	3583.469	50.37	-0.19	50.18	-23.82	74.00	100	275	Peak
2		4960.000	37.98	3.99	41.97	-32.03	74.00	100	290	Peak
3		7440.000	35.45	12.40	47.85	-26.15	74.00	100	229	Peak
4		9920.000	33.48	16.27	49.75	-24.25	74.00	100	10	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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	25°C /56%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_125kbps_CH 39	Test Voltage	DC 48V

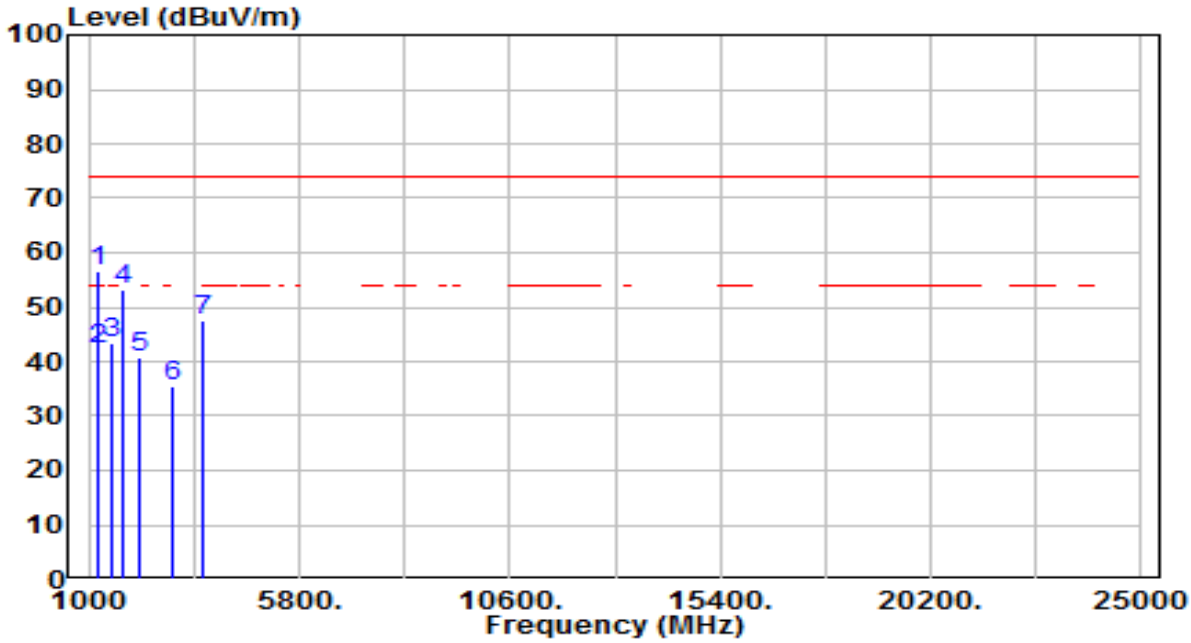


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		3586.125	48.47	-0.18	48.29	-25.71	74.00	100	20	Peak
2		4960.000	39.84	3.99	43.82	-30.18	74.00	100	253	Peak
3		7440.000	35.23	12.40	47.62	-26.38	74.00	100	299	Peak
4	*	9920.000	34.68	16.27	50.95	-23.05	74.00	100	278	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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	24°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_RX_1Mbps_CH 19	Test Voltage	DC 48V

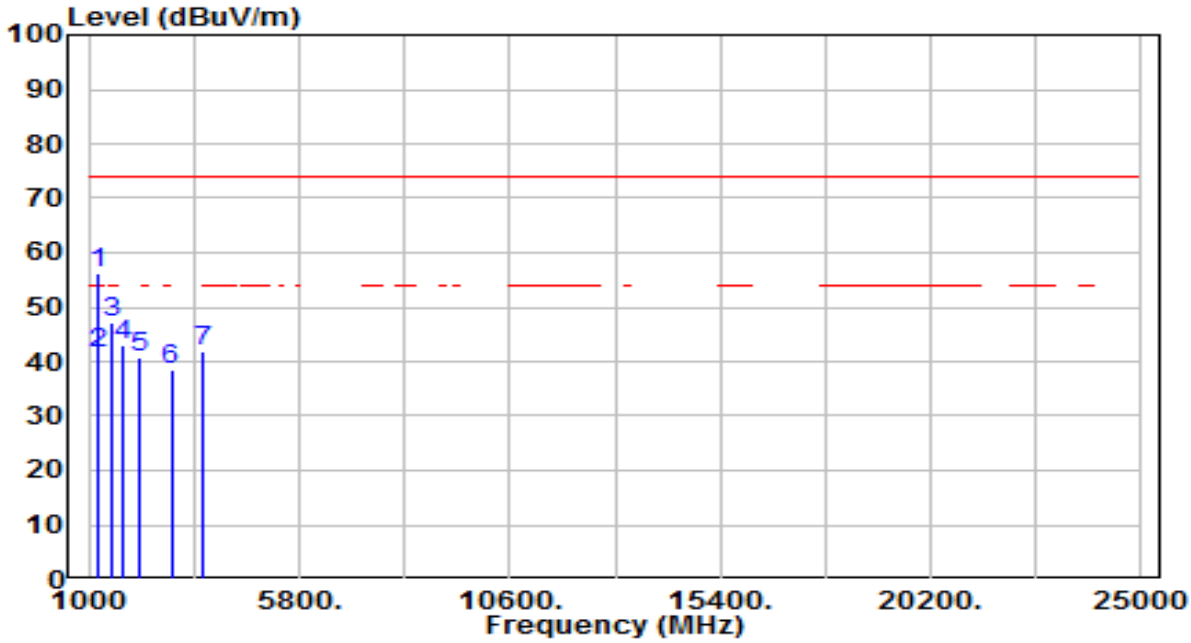


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	1199.750	61.54	-5.09	56.45	-17.55	74.00	100	129	Peak
2	*	1199.750	47.17	-5.09	42.08	-11.92	54.00	100	129	Average
3		1499.375	47.44	-3.93	43.51	-30.49	74.00	100	213	Peak
4		1797.938	56.78	-3.53	53.25	-20.75	74.00	100	261	Peak
5		2171.938	43.33	-2.72	40.61	-33.39	74.00	100	213	Peak
6		2891.250	37.38	-2.06	35.32	-38.68	74.00	100	98	Peak
7		3584.000	47.70	-0.19	47.51	-26.49	74.00	100	272	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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	24°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_RX_1Mbps_CH 19	Test Voltage	DC 48V



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	*	1200.281	61.38	-5.09	56.29	-17.71	74.00	100	78	Peak
2	*	1200.281	46.45	-5.09	41.36	-12.64	54.00	100	78	Average
3		1499.375	51.16	-3.93	47.23	-26.77	74.00	100	285	Peak
4		1800.063	46.68	-3.53	43.15	-30.85	74.00	100	320	Peak
5		2162.375	43.67	-2.75	40.92	-33.08	74.00	100	198	Peak
6		2880.094	40.46	-2.05	38.41	-35.59	74.00	100	229	Peak
7		3597.813	42.00	-0.15	41.85	-32.15	74.00	100	191	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.

7.7. Radiated Restricted Band Edge Measurement

7.7.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205/ IC RSS-Gen must not exceed the limits shown in Table per Section 15.209/ IC RSS-Gen Table 5, 6.

FCC Part 15 Subpart C Paragraph 15.209/ IC RSS-Gen Table 5, 6		
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

ANSI C63.10-2013 - Section 11.13

7.7.3. Test Setting

Peak Field Strength Measurements

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

Table 1 - RBW as a function of frequency

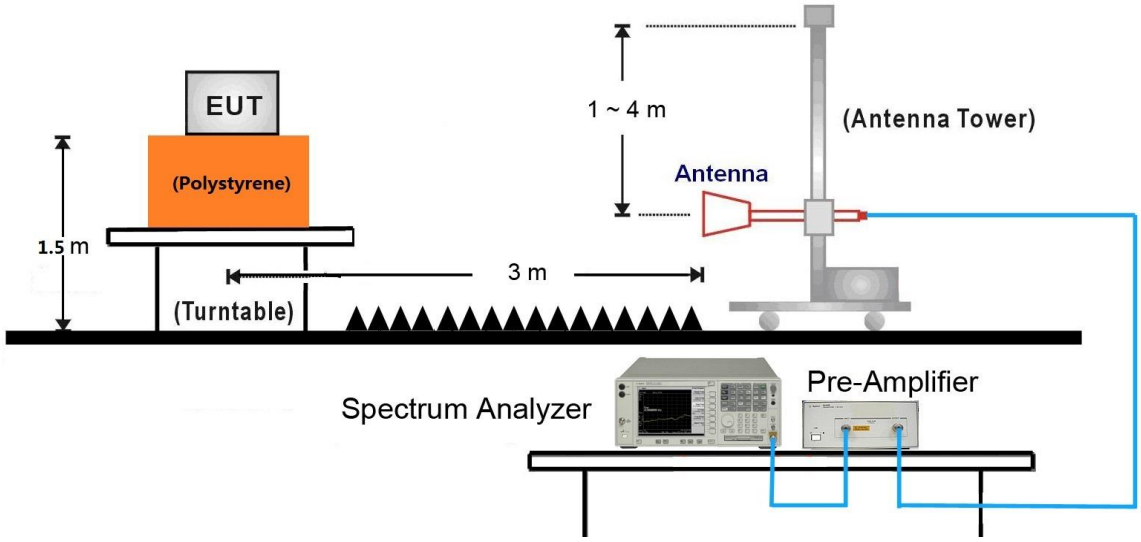
Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Average Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW ≥ 1/T
4. De As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to “Voltage” regardless of the display mode
5. Detector = Peak
6. Sweep time = auto
7. Trace mode = max hold
8. Allow max hold to run for at least 50 times (1/duty cycle) traces

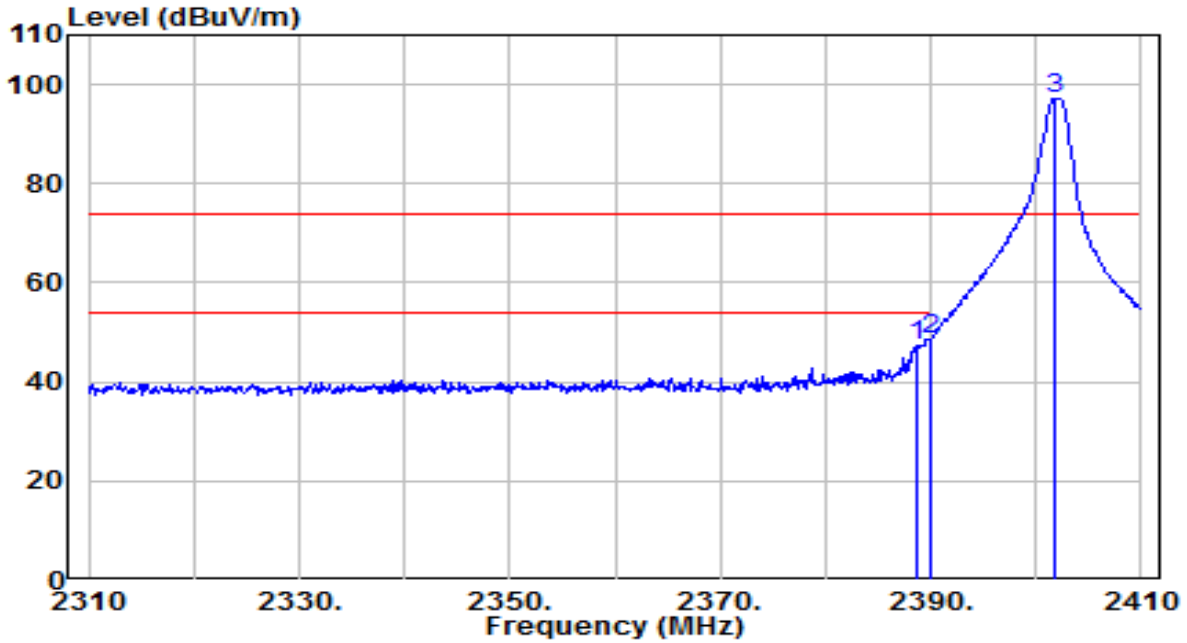
7.7.4. Test Setup

1GHz ~ 18GHz Test Setup:



7.7.5. Test Result

EUT	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D	Temp. / Humidity	24°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_1Mbps_CH 0	Test Voltage	DC 48V

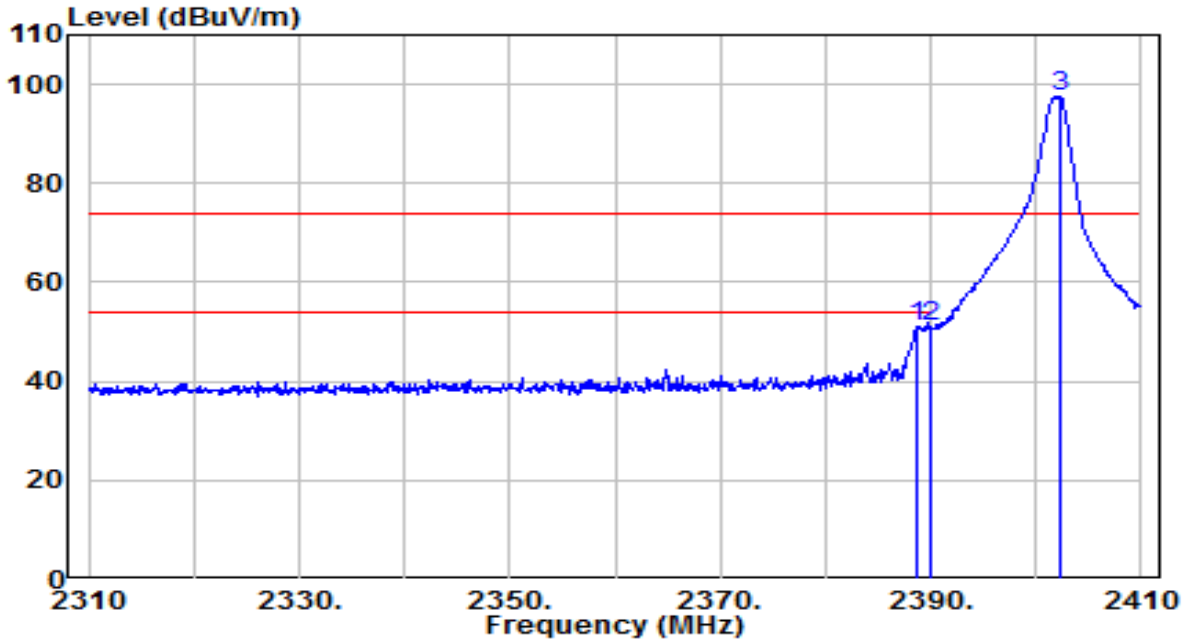


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2388.600	49.32	-2.03	47.28	-26.72	74.00	215	225	Peak
2	*	2390.000	50.44	-2.03	48.41	-25.59	74.00	215	225	Peak
3		2401.900	99.32	-1.99	97.33	N/A	N/A	215	225	Peak

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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D	Temp. / Humidity	24°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_1Mbps_CH 0	Test Voltage	DC 48V

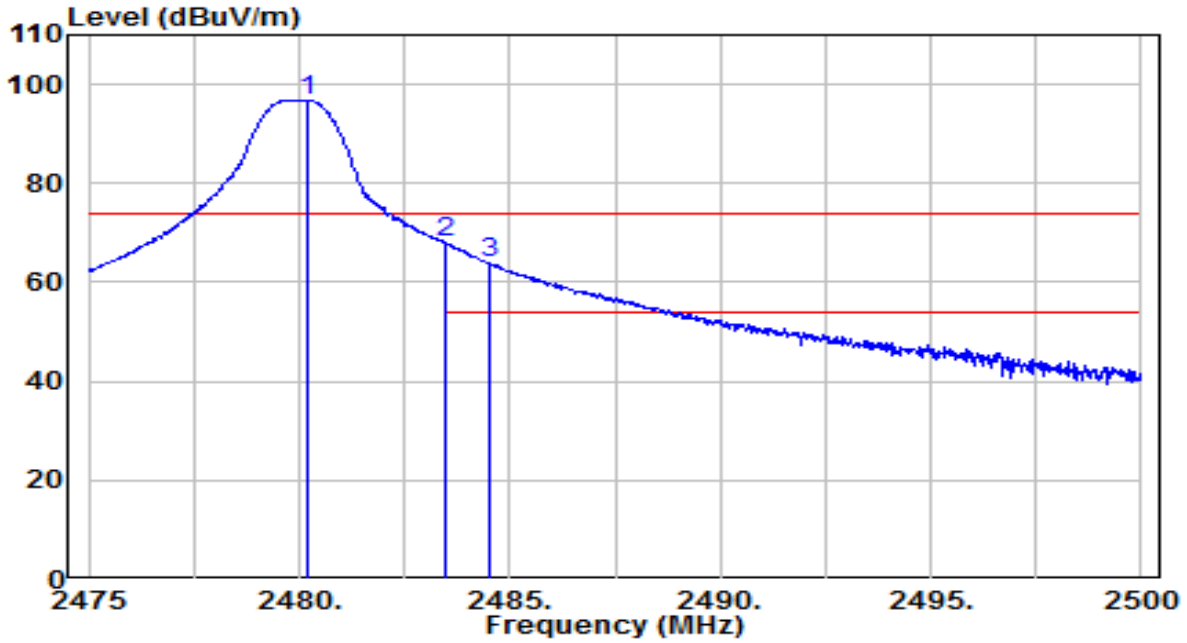


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2388.800	52.95	-2.03	50.92	-23.08	74.00	100	170	Peak
2	*	2390.000	53.15	-2.03	51.12	-22.88	74.00	100	170	Peak
3		2402.200	99.40	-1.99	97.41	N/A	N/A	100	170	Peak

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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D	Temp. / Humidity	24°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_1Mbps_CH 39	Test Voltage	DC 48V

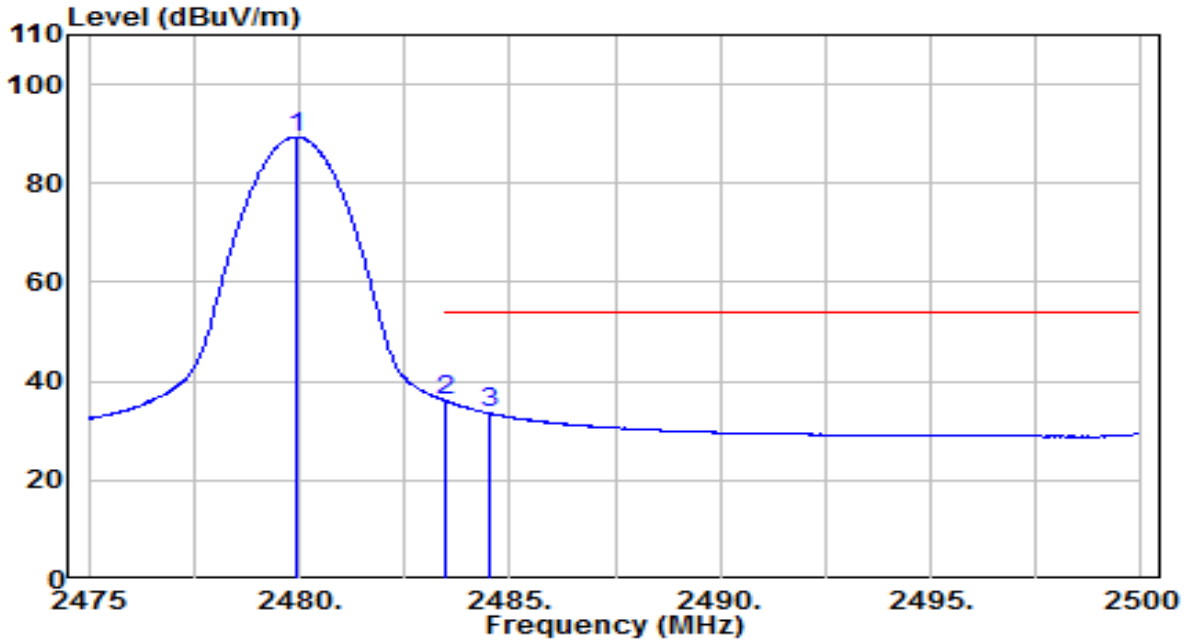


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2480.200	98.56	-1.74	96.82	N/A	N/A	115	60	Peak
2	*	2483.500	69.71	-1.73	67.98	-6.02	74.00	115	60	Peak
3		2484.525	65.65	-1.73	63.93	-10.07	74.00	115	60	Peak

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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D	Temp. / Humidity	24°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_1Mbps_CH 39	Test Voltage	DC 48V

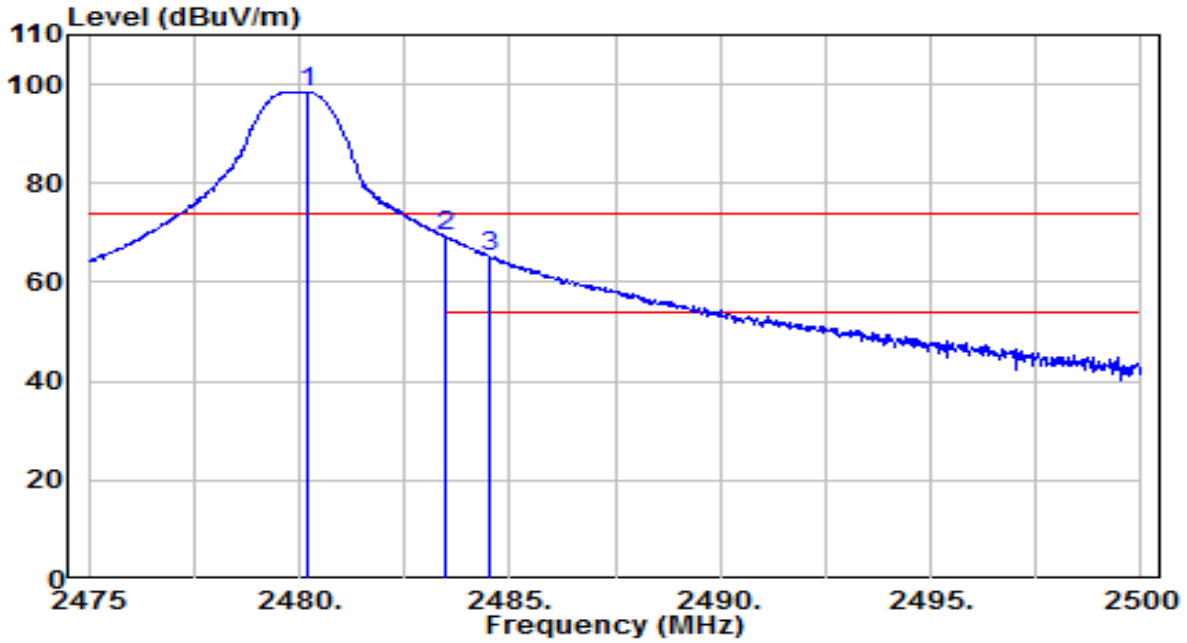


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2479.925	91.13	-1.74	89.38	N/A	N/A	115	60	Average
2	*	2483.500	37.77	-1.73	36.04	-17.96	54.00	115	60	Average
3		2484.500	35.38	-1.73	33.65	-20.35	54.00	115	60	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D	Temp. / Humidity	24°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_1Mbps_CH 39	Test Voltage	DC 48V

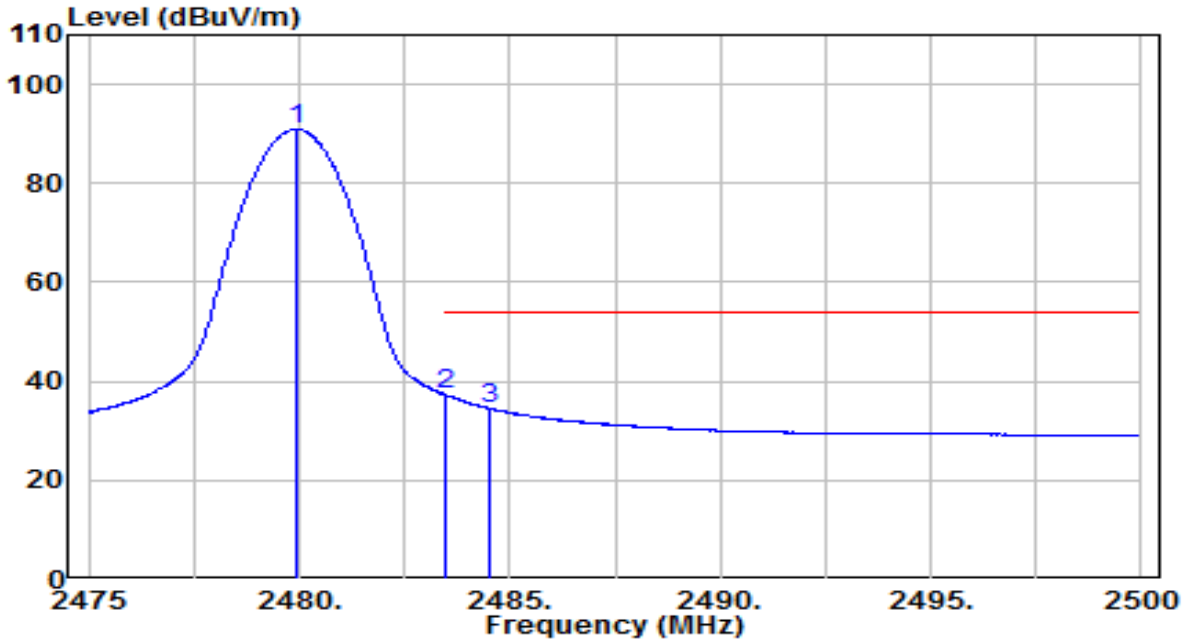


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2480.200	100.11	-1.74	98.37	N/A	N/A	100	140	Peak
2	*	2483.500	70.96	-1.73	69.22	-4.78	74.00	100	140	Peak
3		2484.500	67.05	-1.73	65.32	-8.68	74.00	100	140	Peak

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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D	Temp. / Humidity	24°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_1Mbps_CH 39	Test Voltage	DC 48V

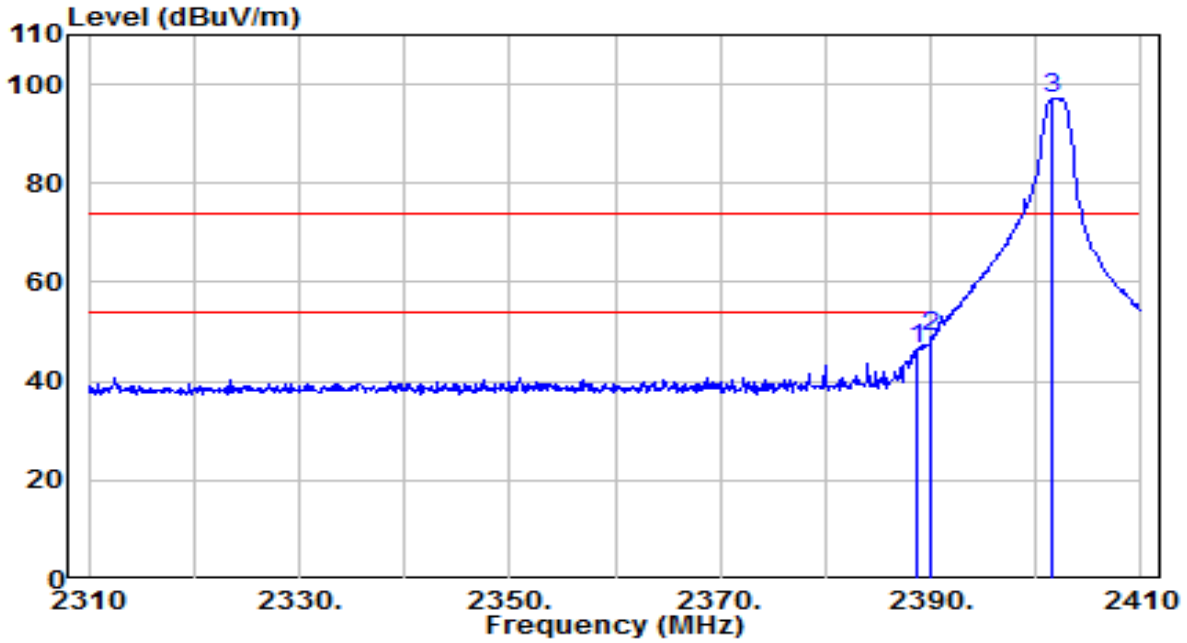


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2479.925	92.72	-1.74	90.98	N/A	N/A	100	140	Average
2	*	2483.500	38.94	-1.73	37.21	-16.79	54.00	100	140	Average
3		2484.500	36.32	-1.73	34.59	-19.41	54.00	100	140	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).
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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D	Temp. / Humidity	24°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_2Mbps_CH 0	Test Voltage	DC 48V

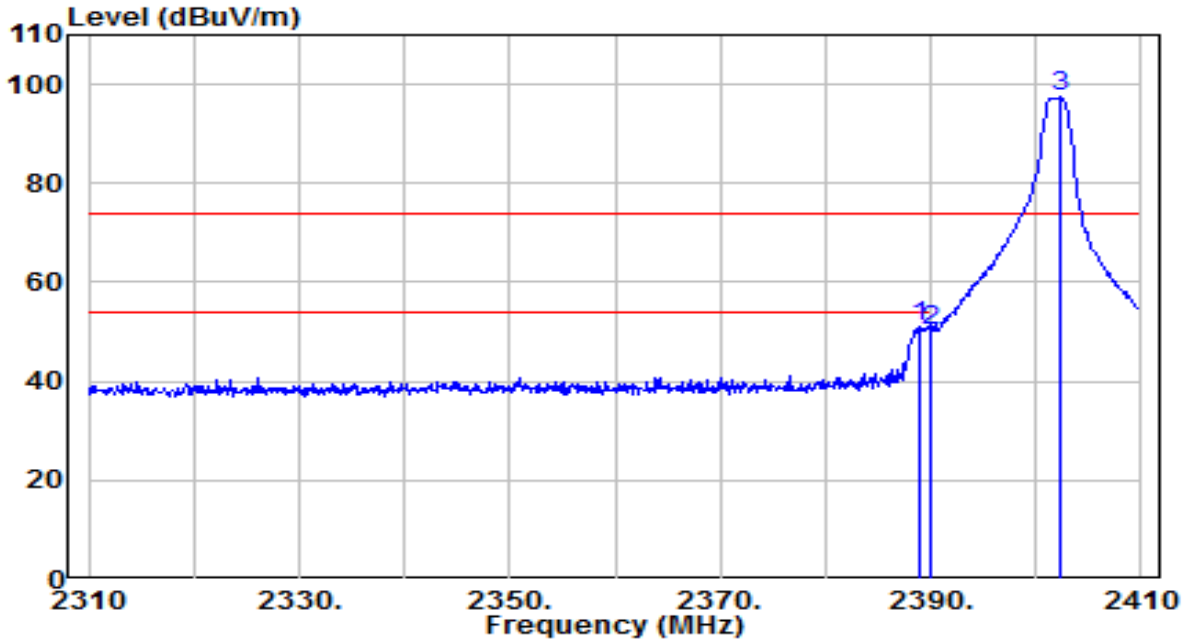


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2388.700	48.71	-2.03	46.68	-27.32	74.00	215	225	Peak
2	*	2390.000	50.84	-2.03	48.81	-25.19	74.00	215	225	Peak
3		2401.500	99.13	-1.99	97.14	N/A	N/A	215	225	Peak

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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D	Temp. / Humidity	24°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_2Mbps_CH 0	Test Voltage	DC 48V

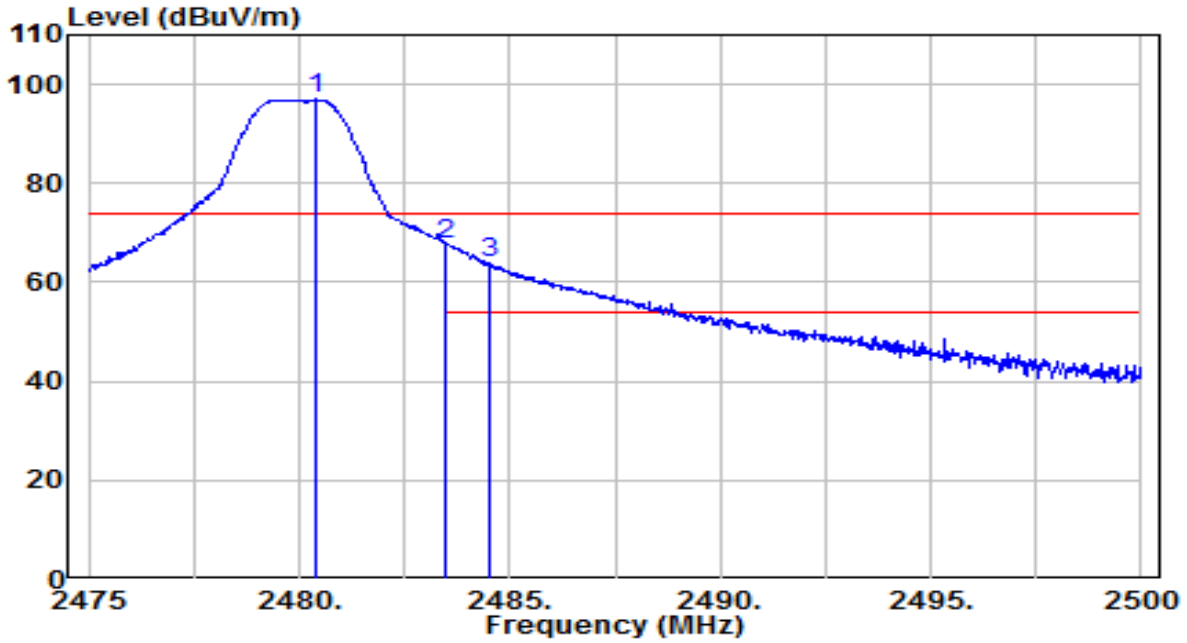


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	2388.900	53.01	-2.03	50.98	-23.02	74.00	100	170	Peak
2		2390.000	52.26	-2.03	50.24	-23.76	74.00	100	170	Peak
3		2402.400	99.38	-1.99	97.39	N/A	N/A	100	170	Peak

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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D	Temp. / Humidity	24°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_2Mbps_CH 39	Test Voltage	DC 48V

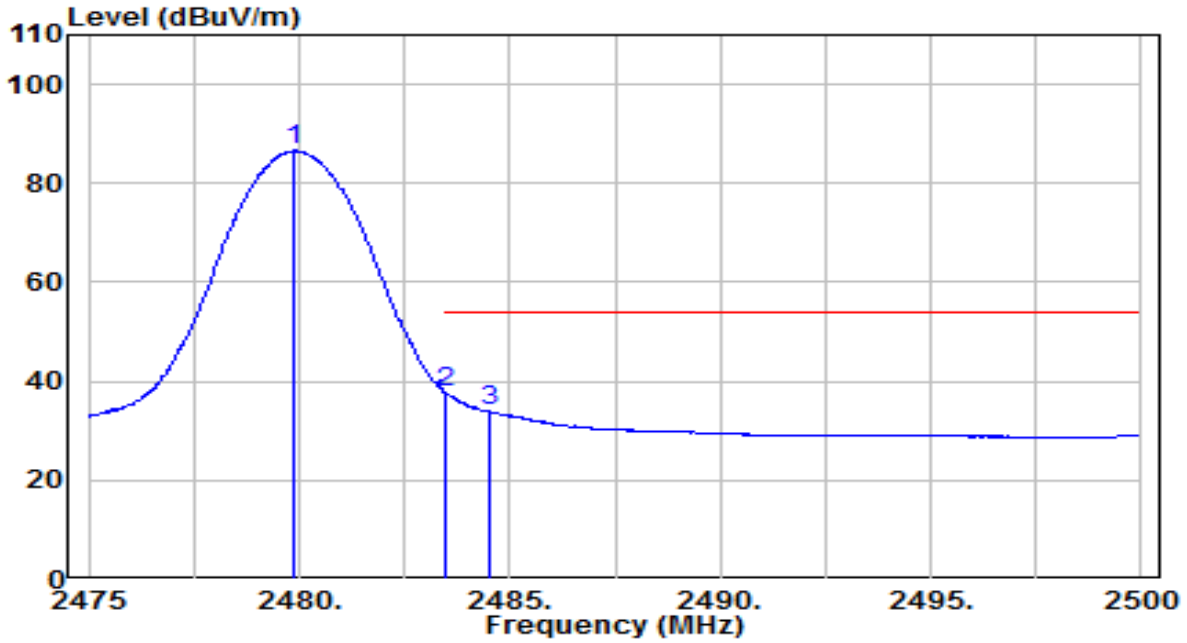


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2480.400	98.71	-1.74	96.96	N/A	N/A	115	60	Peak
2	*	2483.500	69.49	-1.73	67.76	-6.24	74.00	115	60	Peak
3		2484.550	65.72	-1.73	63.99	-10.01	74.00	115	60	Peak

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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D	Temp. / Humidity	24°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_2Mbps_CH 39	Test Voltage	DC 48V

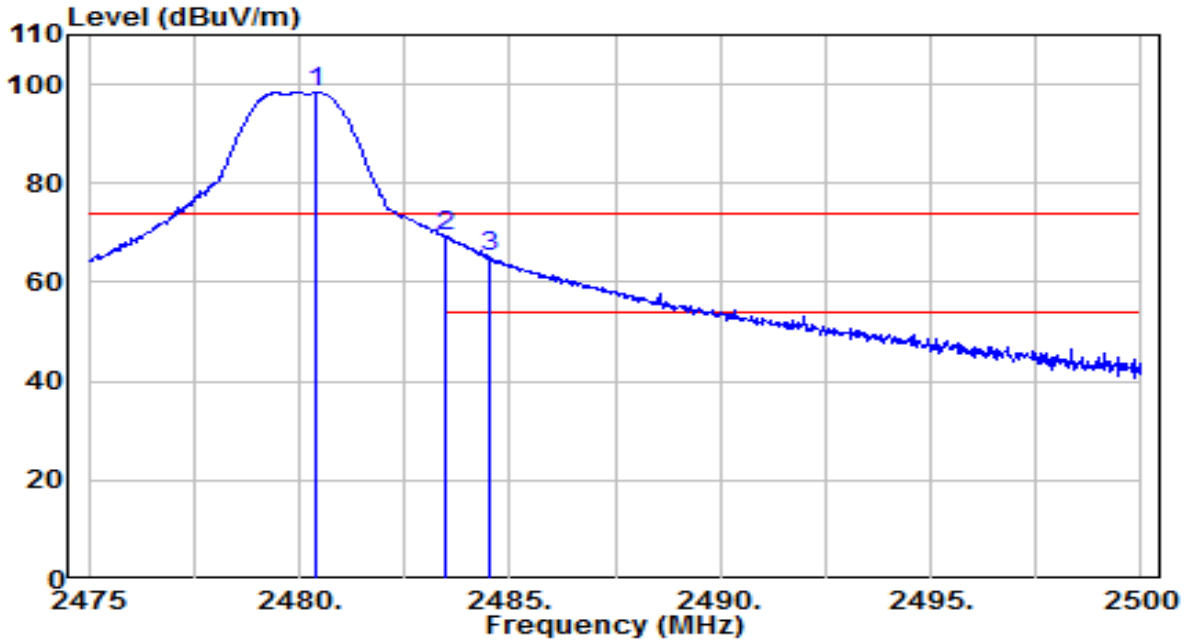


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2479.850	88.34	-1.74	86.59	N/A	N/A	115	60	Average
2	*	2483.500	39.44	-1.73	37.70	-16.30	54.00	115	60	Average
3		2484.500	35.65	-1.73	33.92	-20.08	54.00	115	60	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D	Temp. / Humidity	24°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_2Mbps_CH 39	Test Voltage	DC 48V

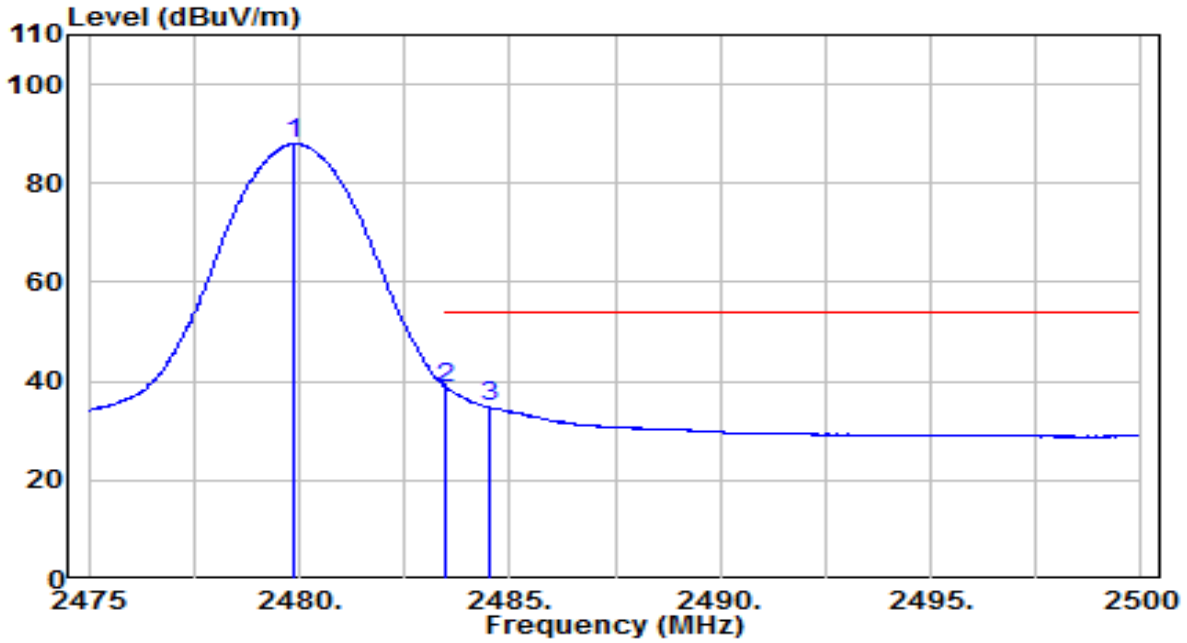


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2480.425	100.05	-1.74	98.31	N/A	N/A	100	140	Peak
2	*	2483.500	70.88	-1.73	69.15	-4.85	74.00	100	140	Peak
3		2484.550	66.71	-1.73	64.98	-9.02	74.00	100	140	Peak

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	Network Switch	Date of Test	2024-04-11
Factor	BBHA 9120D	Temp. / Humidity	24°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_2Mbps_CH 39	Test Voltage	DC 48V

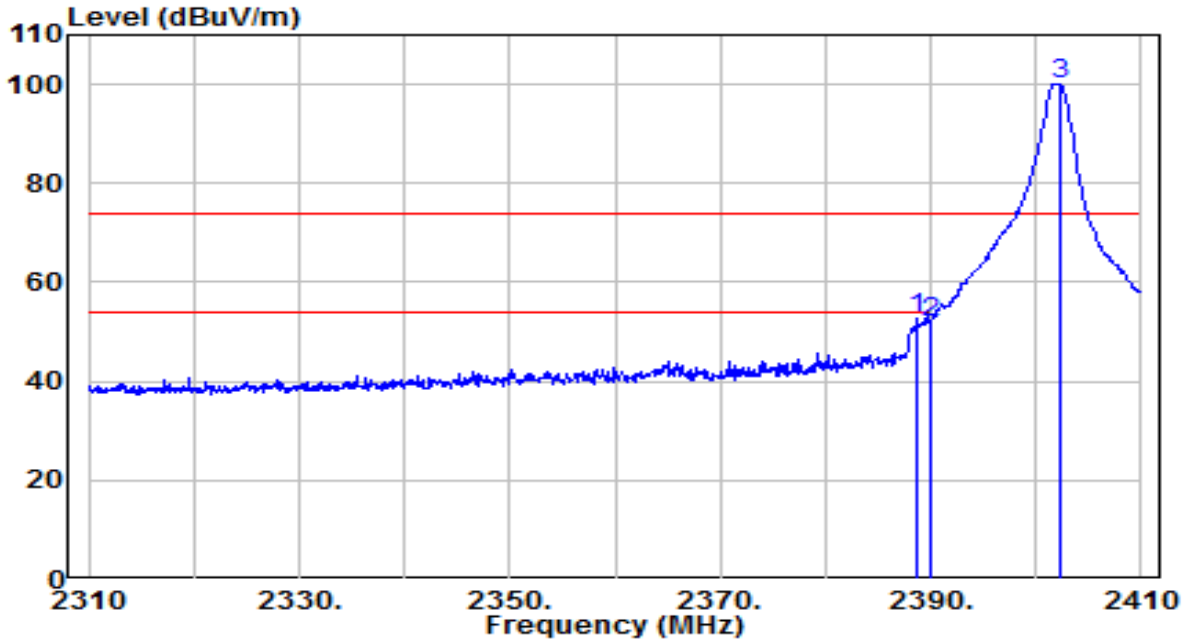


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2479.900	89.81	-1.74	88.07	N/A	N/A	100	140	Average
2	*	2483.500	40.39	-1.73	38.66	-15.34	54.00	100	140	Average
3		2484.500	36.63	-1.73	34.90	-19.10	54.00	100	140	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).
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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D	Temp. / Humidity	25°C /56%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_500kbps_CH 0	Test Voltage	DC 48V

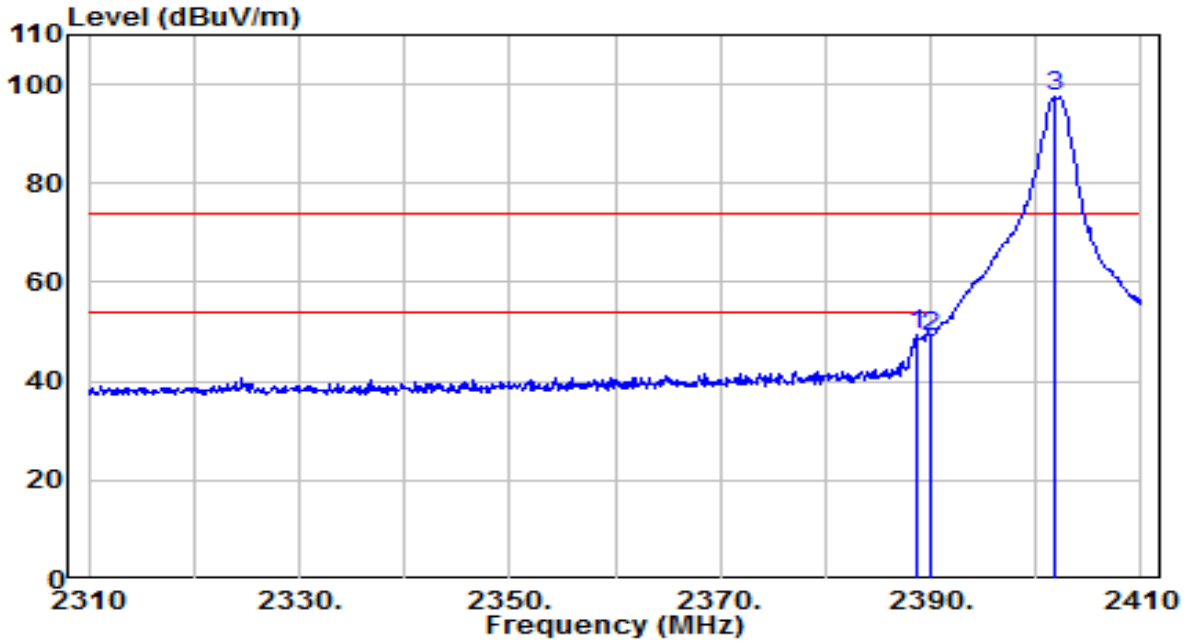


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	2388.700	54.82	-2.03	52.78	-21.22	74.00	100	290	Peak
2		2390.000	54.11	-2.03	52.08	-21.92	74.00	100	290	Peak
3		2402.300	101.97	-1.99	99.98	N/A	N/A	100	290	Peak

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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D	Temp. / Humidity	25°C /56%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_500kbps_CH 0	Test Voltage	DC 48V

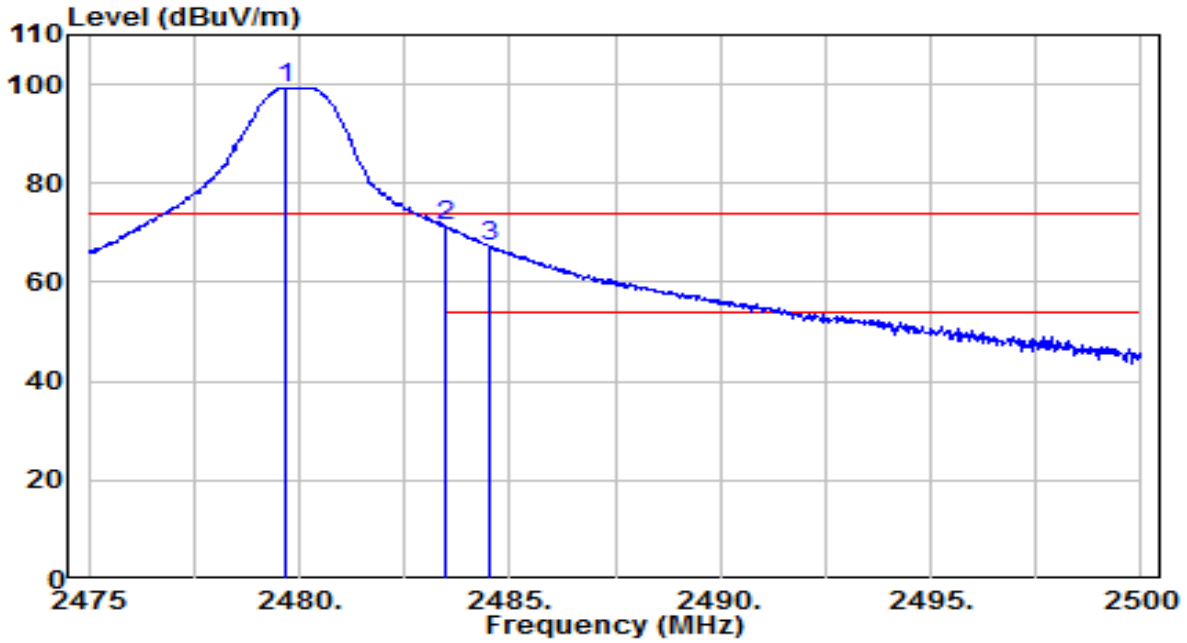


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	2388.600	51.38	-2.03	49.35	-24.65	74.00	115	155	Peak
2		2390.000	50.88	-2.03	48.85	-25.15	74.00	115	155	Peak
3		2401.700	99.34	-1.99	97.35	N/A	N/A	115	155	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D	Temp. / Humidity	25°C /56%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_500kbps_CH 39	Test Voltage	DC 48V

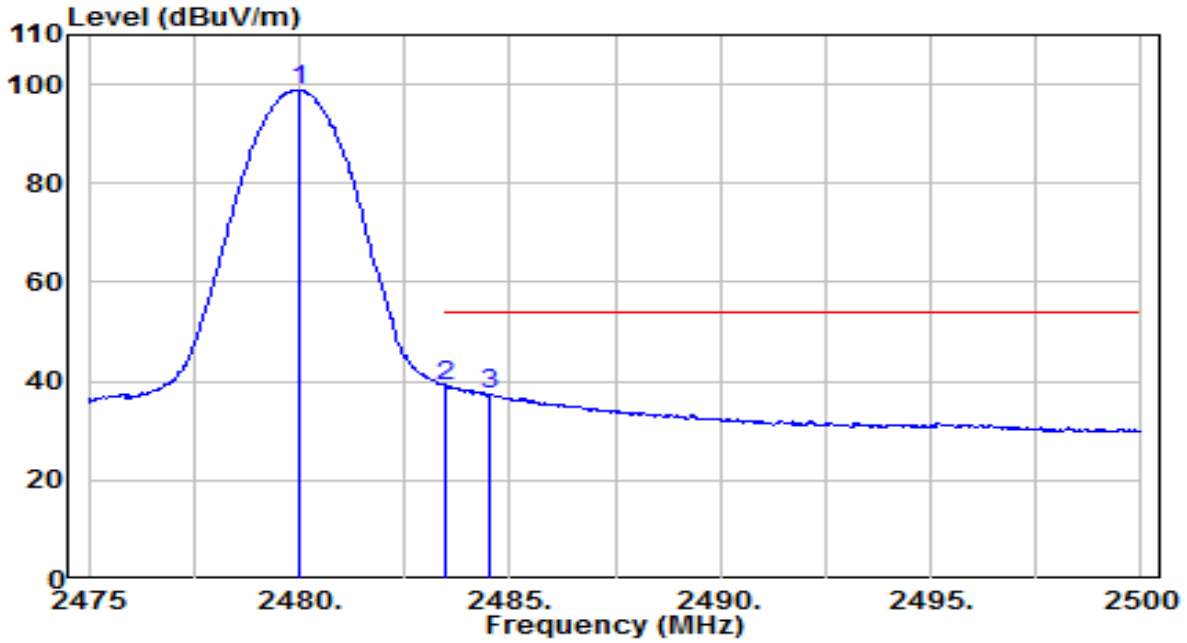


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2479.675	101.05	-1.74	99.31	N/A	N/A	150	290	Peak
2	*	2483.500	72.99	-1.73	71.26	-2.74	74.00	150	290	Peak
3		2484.500	69.02	-1.73	67.29	-6.71	74.00	150	290	Peak

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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D	Temp. / Humidity	25°C /56%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_500kbps_CH 39	Test Voltage	DC 48V

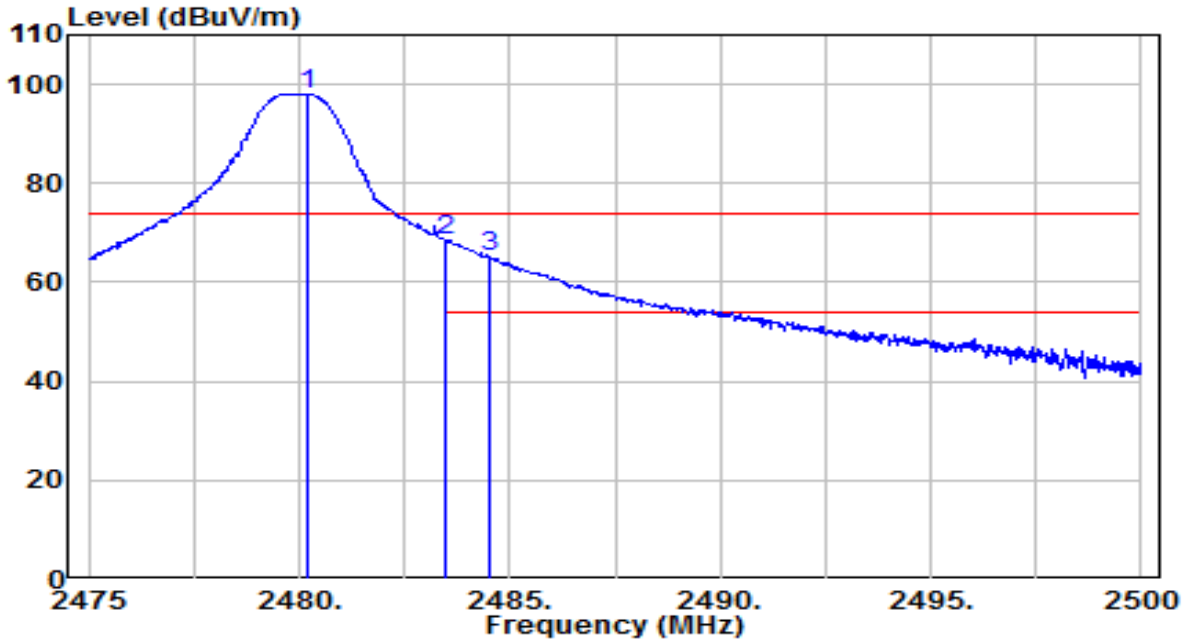


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2480.000	100.53	-1.74	98.79	N/A	N/A	150	290	Average
2	*	2483.500	40.84	-1.73	39.10	-14.90	54.00	150	290	Average
3		2484.550	39.05	-1.73	37.32	-16.68	54.00	150	290	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).
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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D	Temp. / Humidity	25°C /56%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_500kbps_CH 39	Test Voltage	DC 48V

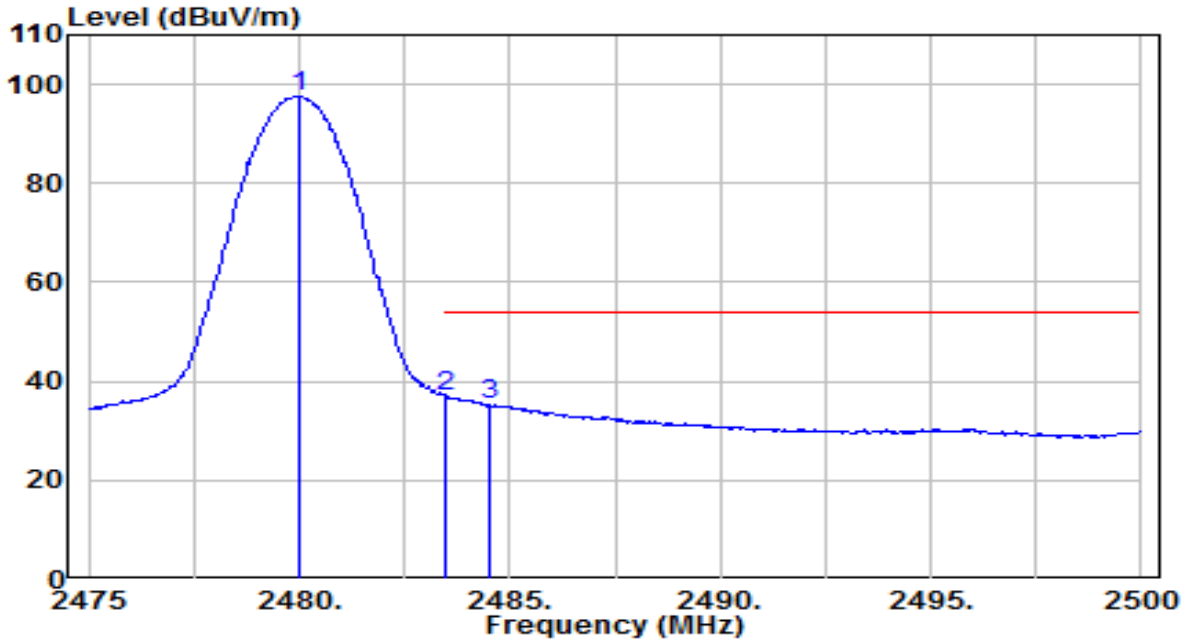


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2480.200	99.74	-1.74	98.00	N/A	N/A	105	155	Peak
2	*	2483.500	70.13	-1.73	68.40	-5.60	74.00	105	155	Peak
3		2484.500	66.98	-1.73	65.25	-8.75	74.00	105	155	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D	Temp. / Humidity	25°C /56%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_500kbps_CH 39	Test Voltage	DC 48V

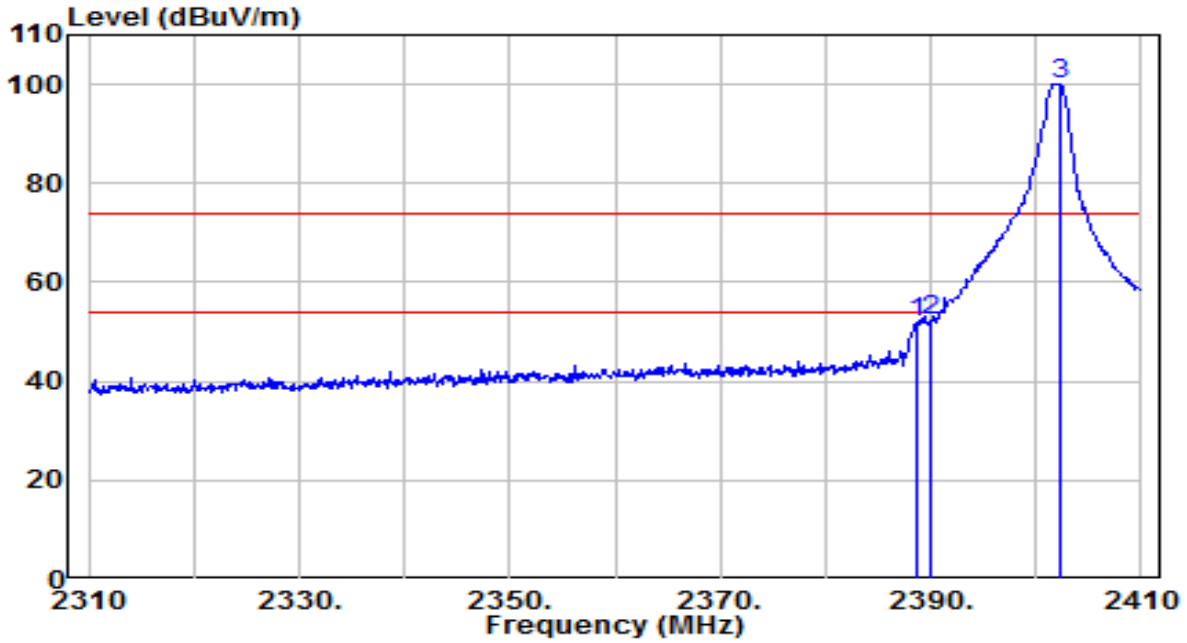


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2480.025	99.24	-1.74	97.49	N/A	N/A	105	155	Average
2	*	2483.500	38.50	-1.73	36.77	-17.23	54.00	105	155	Average
3		2484.550	36.96	-1.73	35.23	-18.77	54.00	105	155	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).
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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D	Temp. / Humidity	25°C /56%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_125kbps_CH 0	Test Voltage	DC 48V

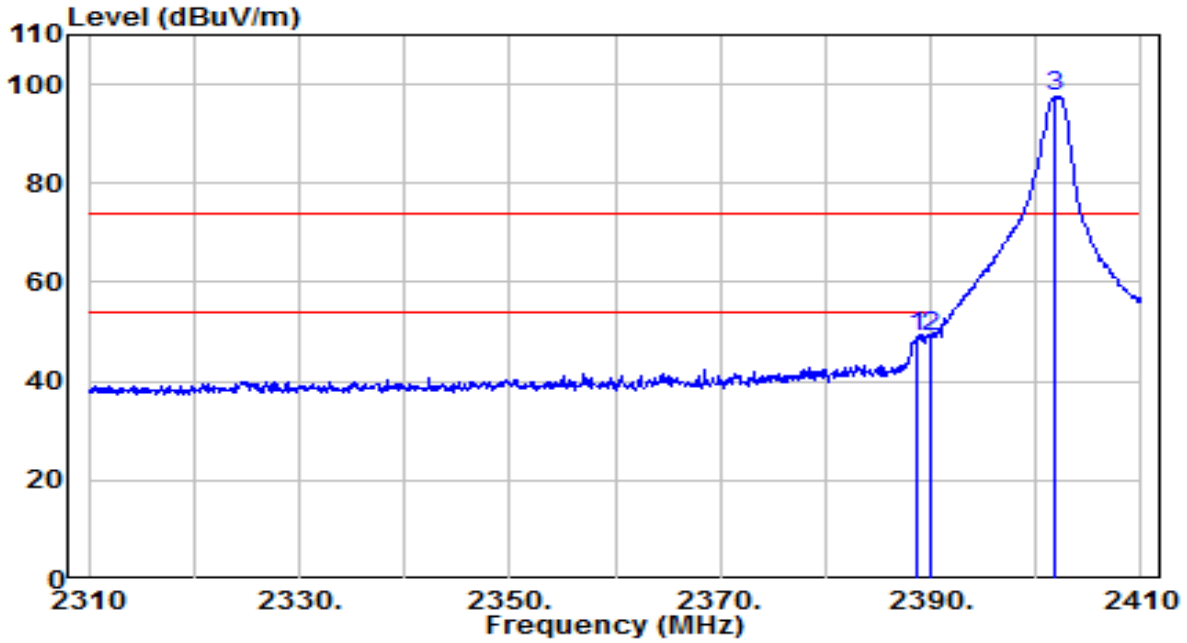


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2388.600	54.02	-2.03	51.98	-22.02	74.00	100	290	Peak
2	*	2390.000	54.39	-2.03	52.37	-21.63	74.00	100	290	Peak
3		2402.200	101.87	-1.99	99.88	N/A	N/A	100	290	Peak

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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D	Temp. / Humidity	25°C /56%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_125kbps_CH 0	Test Voltage	DC 48V

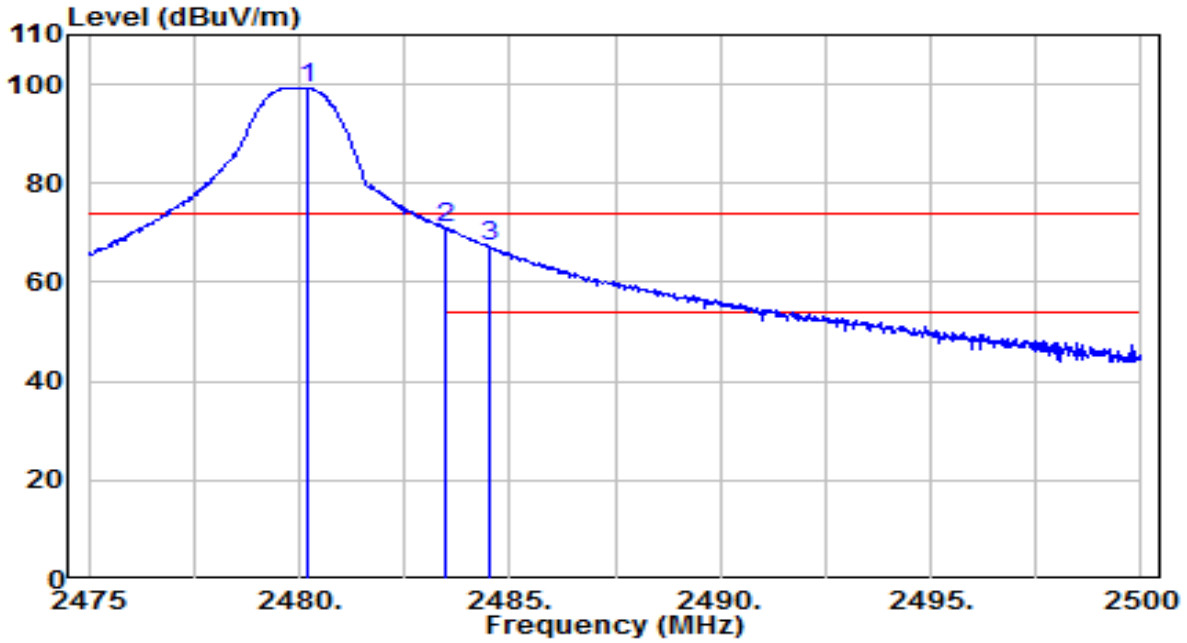


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	2388.700	51.18	-2.03	49.15	-24.85	74.00	115	155	Peak
2		2390.000	51.00	-2.03	48.97	-25.03	74.00	115	155	Peak
3		2401.700	99.35	-1.99	97.36	N/A	N/A	115	155	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D	Temp. / Humidity	25°C /56%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_125kbps_CH 39	Test Voltage	DC 48V

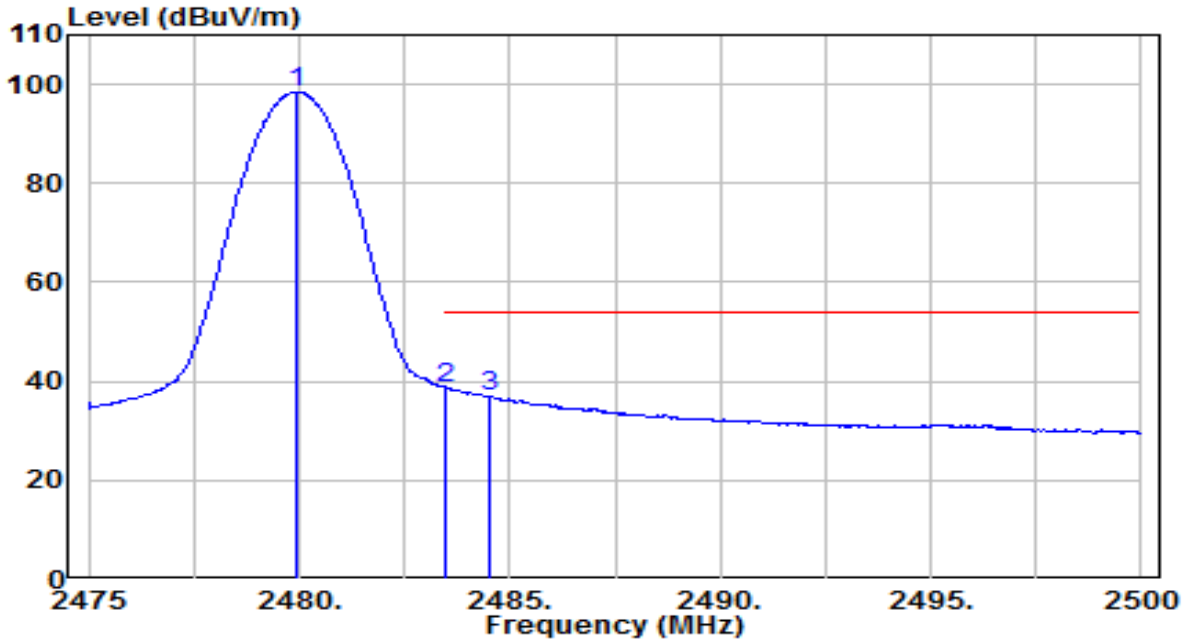


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2480.200	101.02	-1.74	99.28	N/A	N/A	150	290	Peak
2	*	2483.500	72.68	-1.73	70.95	-3.05	74.00	150	290	Peak
3		2484.550	68.97	-1.73	67.24	-6.76	74.00	150	290	Peak

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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D	Temp. / Humidity	25°C /56%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_125kbps_CH 39	Test Voltage	DC 48V

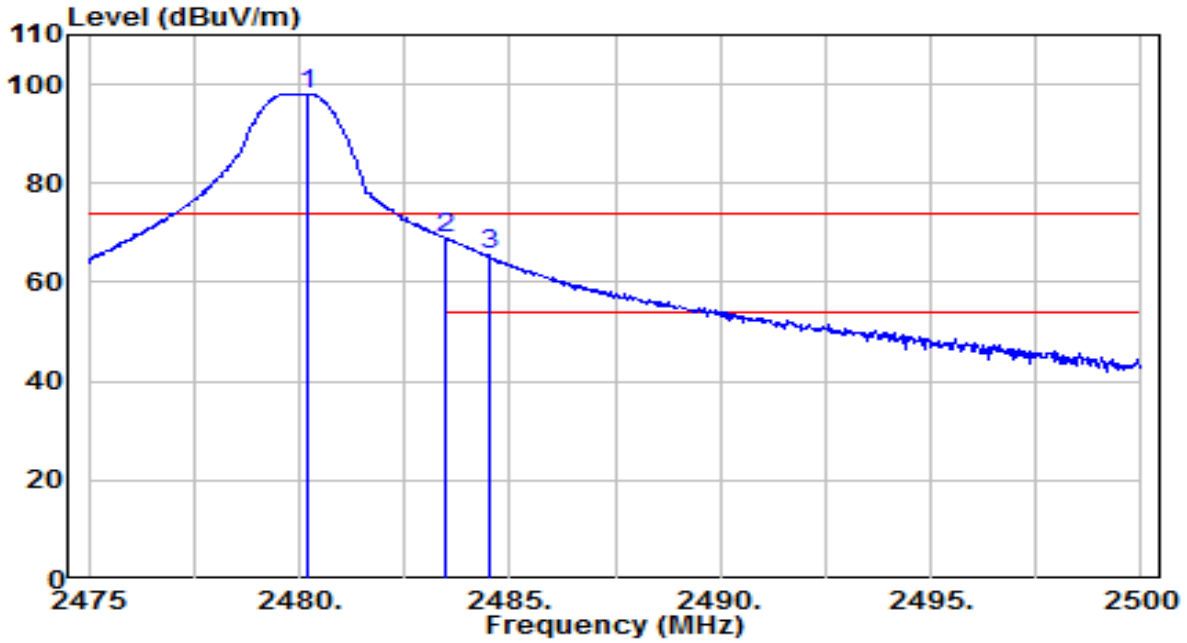


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2479.950	100.22	-1.74	98.48	N/A	N/A	150	290	Average
2	*	2483.500	40.44	-1.73	38.71	-15.29	54.00	150	290	Average
3		2484.500	38.62	-1.73	36.89	-17.11	54.00	150	290	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).
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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D	Temp. / Humidity	25°C /56%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_125kbps_CH 39	Test Voltage	DC 48V

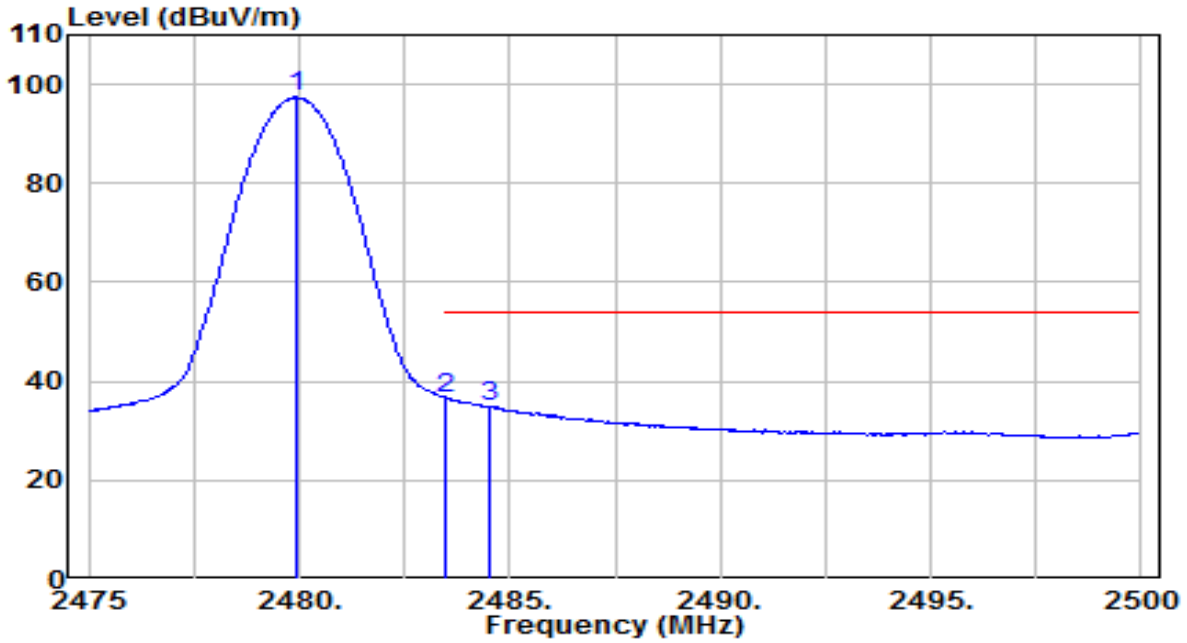


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2480.200	99.78	-1.74	98.03	N/A	N/A	105	155	Peak
2	*	2483.500	70.71	-1.73	68.98	-5.02	74.00	105	155	Peak
3		2484.500	67.16	-1.73	65.43	-8.57	74.00	105	155	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
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	Network Switch	Date of Test	2024-11-05
Factor	BBHA 9120D	Temp. / Humidity	25°C /56%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	BLE_TX_125kbps_CH 39	Test Voltage	DC 48V



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		2479.950	99.09	-1.74	97.34	N/A	N/A	105	155	Average
2	*	2483.500	38.36	-1.73	36.63	-17.37	54.00	105	155	Average
3		2484.550	36.55	-1.73	34.83	-19.17	54.00	105	155	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).
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. AC Conducted Emissions Measurement

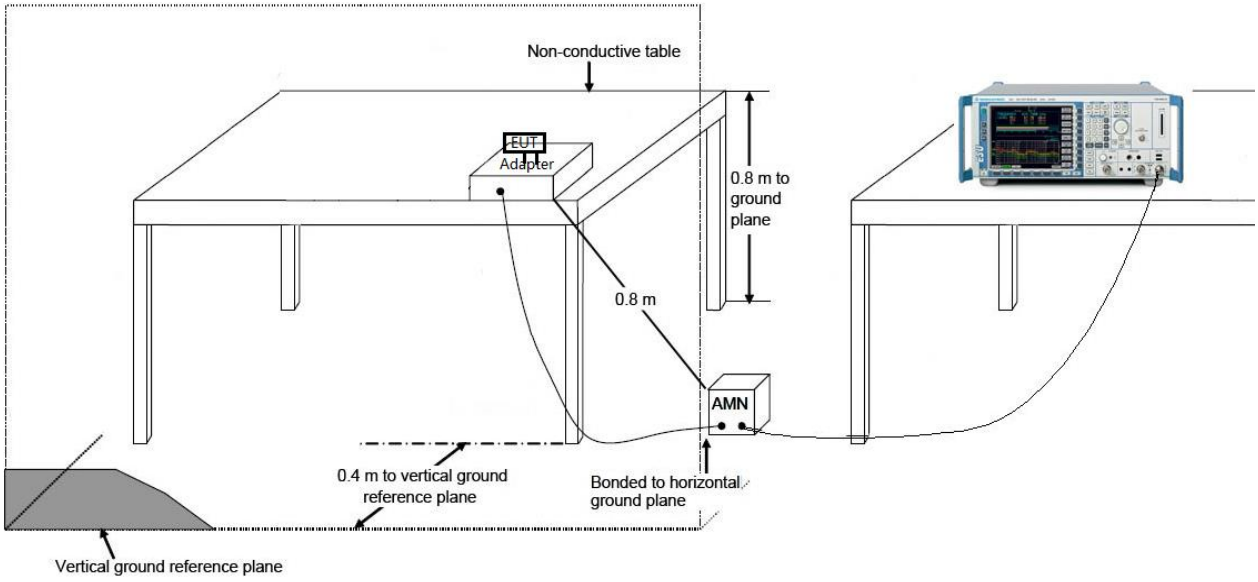
7.8.1. Test Limit

FCC Part 15 Subpart C Paragraph 15.207 / RSS-Gen Limits		
Frequency (MHz)	QP (dBμV)	Average (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.

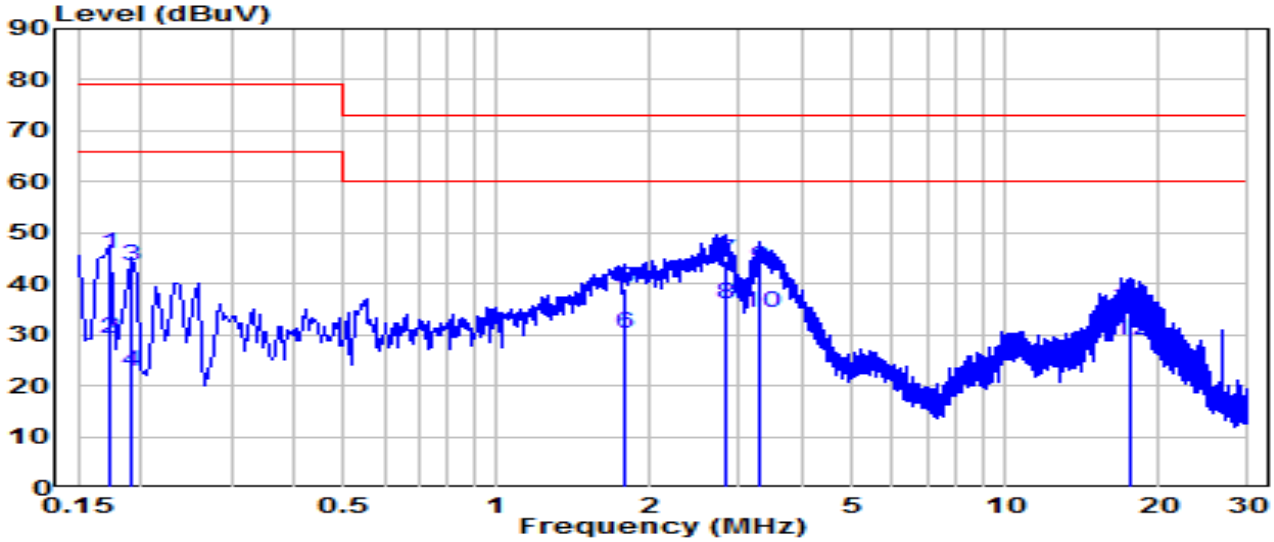
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

7.8.2. Test Setup



7.8.3. Test Result

EUT	Network Switch	Date of Test	2024-04-12
Factor	CE_ENV216-L1 (Filter ON)	Temp. / Humidity	24.1°C /54%
Polarity	Line1	Site / Test Engineer	SR2 / Bob
Test Mode	BLE_TX_1Mbps_CH 19	Test Voltage	AC 120V/60Hz

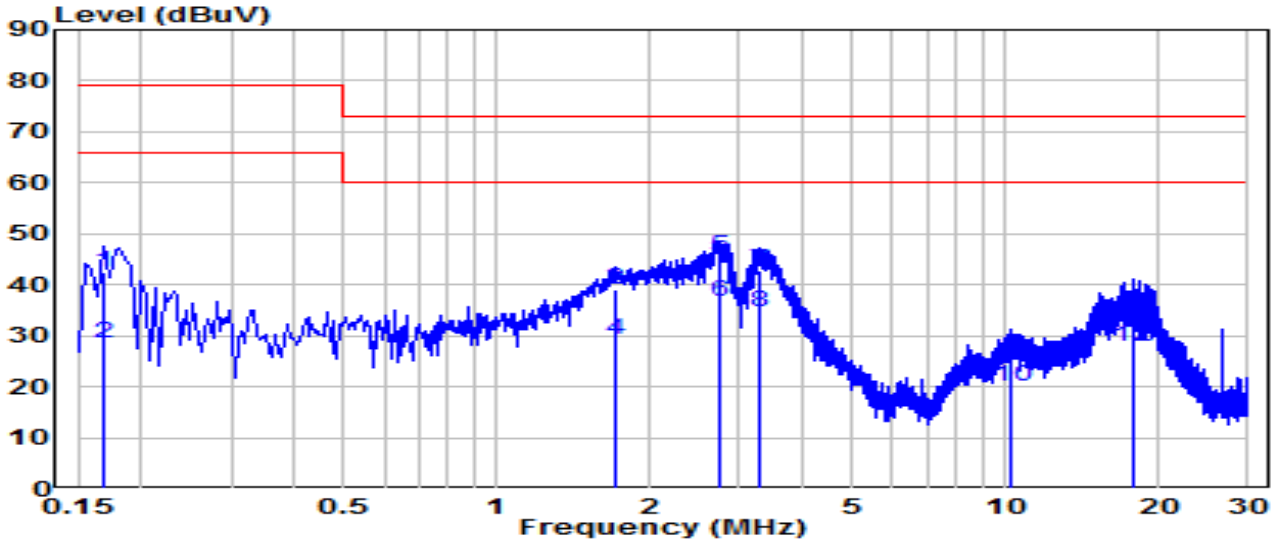


No		Frequency (MHz)	Reading (dBuV)	C.F (dB)	Measurement (dBuV)	Margin (dB)	Limit (dBuV)	Remark (QP/PK/AV)
1		0.172	36.11	9.63	45.74	-33.26	79.00	QP
2		0.172	19.45	9.63	29.09	-36.91	66.00	Average
3		0.190	33.68	9.63	43.31	-35.69	79.00	QP
4		0.190	13.06	9.63	22.70	-43.30	66.00	Average
5		1.783	29.24	9.70	38.94	-34.06	73.00	QP
6		1.783	20.62	9.70	30.31	-29.69	60.00	Average
7	*	2.805	34.68	9.71	44.39	-28.61	73.00	QP
8	*	2.805	26.13	9.71	35.84	-24.16	60.00	Average
9		3.300	33.30	9.72	43.02	-29.98	73.00	QP
10		3.300	24.69	9.72	34.41	-25.59	60.00	Average
11		17.554	25.48	9.92	35.40	-37.60	73.00	QP
12		17.554	19.07	9.92	28.99	-31.01	60.00	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	Network Switch	Date of Test	2024-04-12
Factor	CE_ENV216-N (Filter ON)	Temp. / Humidity	24.1°C /54%
Polarity	Neutral	Site / Test Engineer	SR2 / Bob
Test Mode	BLE_TX_1Mbps_CH 19	Test Voltage	AC 120V/60Hz

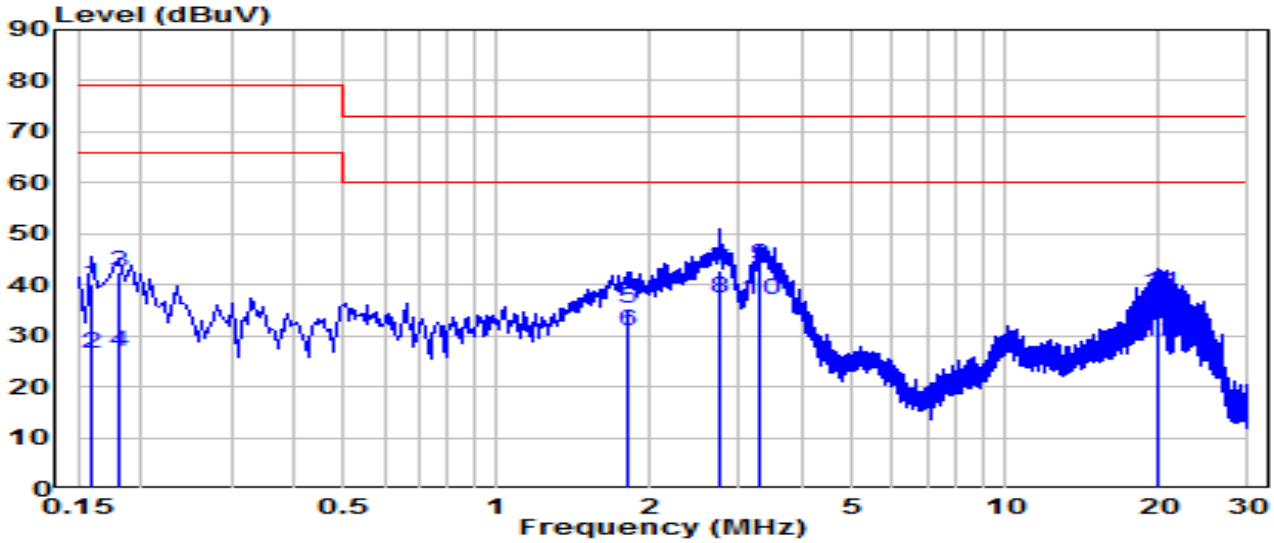


No		Frequency (MHz)	Reading (dBuV)	C.F (dB)	Measurement (dBuV)	Margin (dB)	Limit (dBuV)	Remark (QP/PK/AV)
1		0.168	32.82	9.63	42.45	-36.55	79.00	QP
2		0.168	18.88	9.63	28.51	-37.49	66.00	Average
3		1.702	29.37	9.70	39.08	-33.92	73.00	QP
4		1.702	19.51	9.70	29.21	-30.79	60.00	Average
5	*	2.760	35.66	9.72	45.38	-27.62	73.00	QP
6	*	2.760	26.80	9.72	36.52	-23.48	60.00	Average
7		3.304	33.01	9.73	42.74	-30.26	73.00	QP
8		3.304	24.92	9.73	34.65	-25.35	60.00	Average
9		10.314	15.91	9.89	25.80	-47.20	73.00	QP
10		10.314	10.13	9.89	20.03	-39.97	60.00	Average
11		17.748	23.67	9.97	33.65	-39.35	73.00	QP
12		17.748	18.02	9.97	28.00	-32.00	60.00	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	Network Switch	Date of Test	2024-04-12
Factor	CE_ENV216-L1 (Filter ON)	Temp. / Humidity	24.1°C /54%
Polarity	Line1	Site / Test Engineer	SR2 / Bob
Test Mode	BLE_TX_1Mbps_CH 19	Test Voltage	AC 240V/60Hz

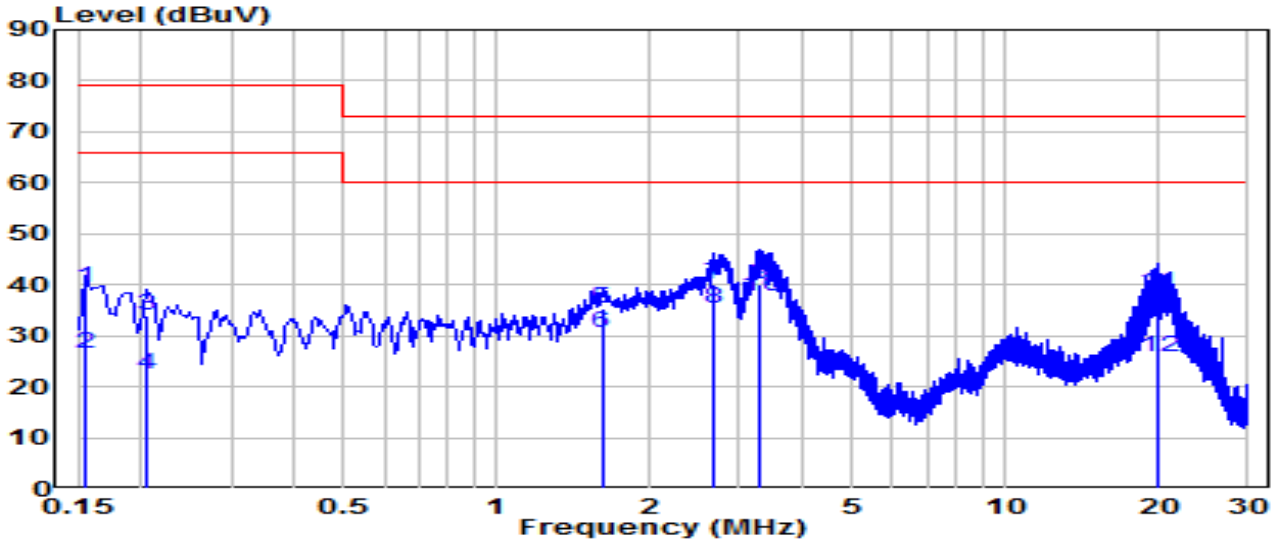


No		Frequency (MHz)	Reading (dBuV)	C.F (dB)	Measurement (dBuV)	Margin (dB)	Limit (dBuV)	Remark (QP/PK/AV)
1		0.159	30.46	9.63	40.09	-38.91	79.00	QP
2		0.159	16.81	9.63	26.44	-39.56	66.00	Average
3		0.181	32.92	9.63	42.55	-36.45	79.00	QP
4		0.181	17.16	9.63	26.79	-39.21	66.00	Average
5		1.806	25.75	9.70	35.44	-37.56	73.00	QP
6		1.806	21.12	9.70	30.81	-29.19	60.00	Average
7	*	2.746	33.05	9.71	42.76	-30.24	73.00	QP
8	*	2.746	27.79	9.71	37.50	-22.50	60.00	Average
9		3.286	34.05	9.72	43.76	-29.24	73.00	QP
10		3.286	27.36	9.72	37.08	-22.92	60.00	Average
11		20.070	28.48	9.94	38.42	-34.58	73.00	QP
12		20.070	18.96	9.94	28.89	-31.11	60.00	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	Network Switch	Date of Test	2024-04-12
Factor	CE_ENV216-N (Filter ON)	Temp. / Humidity	24.1°C /54%
Polarity	Neutral	Site / Test Engineer	SR2 / Bob
Test Mode	BLE_TX_1Mbps_CH 19	Test Voltage	AC 240V/60Hz



No		Frequency (MHz)	Reading (dBuV)	C.F (dB)	Measurement (dBuV)	Margin (dB)	Limit (dBuV)	Remark (QP/PK/AV)
1		0.154	29.64	9.63	39.27	-39.73	79.00	QP
2		0.154	16.90	9.63	26.53	-39.47	66.00	Average
3		0.204	24.36	9.63	34.00	-45.00	79.00	QP
4		0.204	12.63	9.63	22.27	-43.73	66.00	Average
5		1.608	25.70	9.70	35.40	-37.60	73.00	QP
6		1.608	20.97	9.70	30.67	-29.33	60.00	Average
7		2.661	30.48	9.72	40.20	-32.80	73.00	QP
8		2.661	25.57	9.72	35.29	-24.71	60.00	Average
9	*	3.304	30.18	9.73	39.91	-33.09	73.00	QP
10	*	3.304	27.97	9.73	37.70	-22.30	60.00	Average
11		19.908	28.25	10.00	38.25	-34.75	73.00	QP
12		19.908	15.81	10.00	25.81	-34.19	60.00	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).

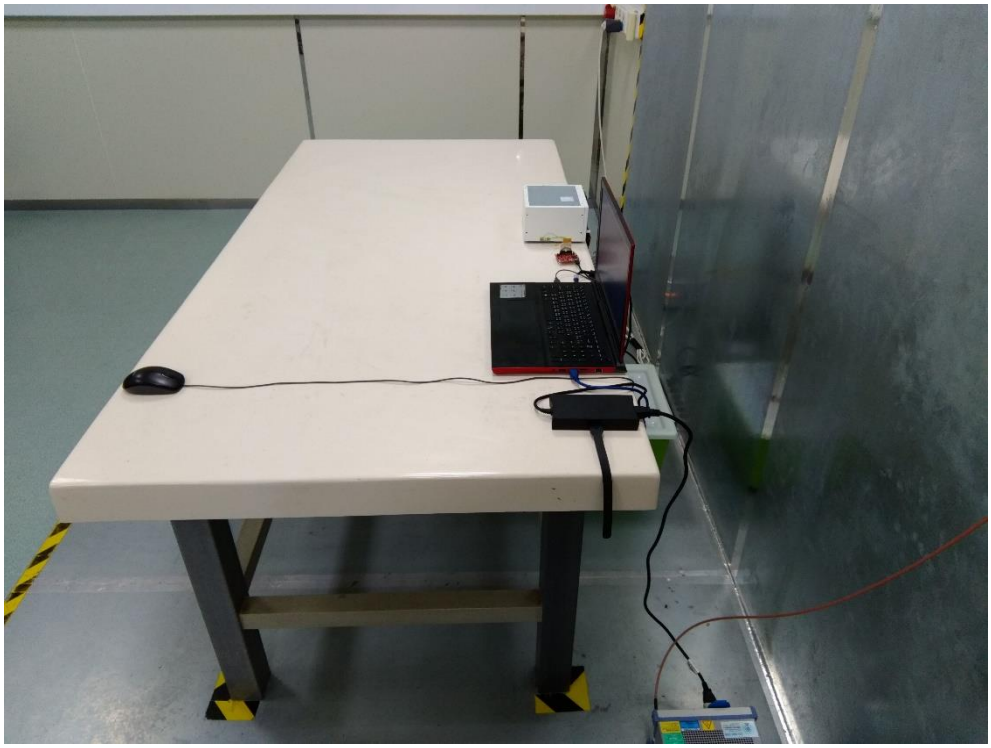
8. CONCLUSION

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

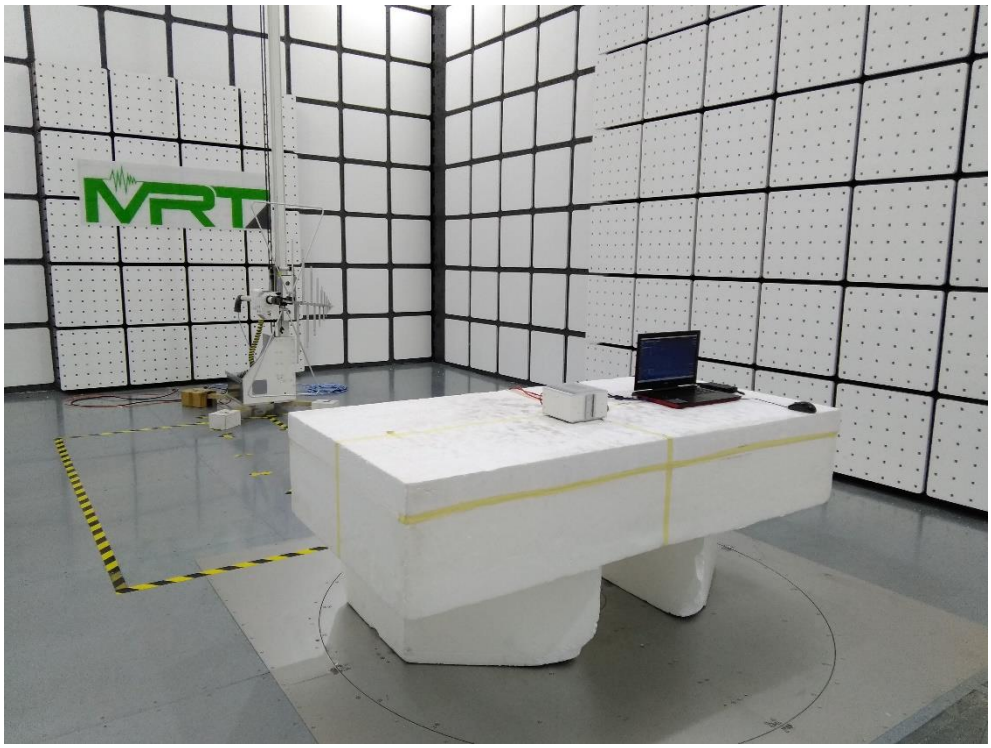
Appendix A : Test Photograph

Description: Front View of Conducted Emission Test Setup

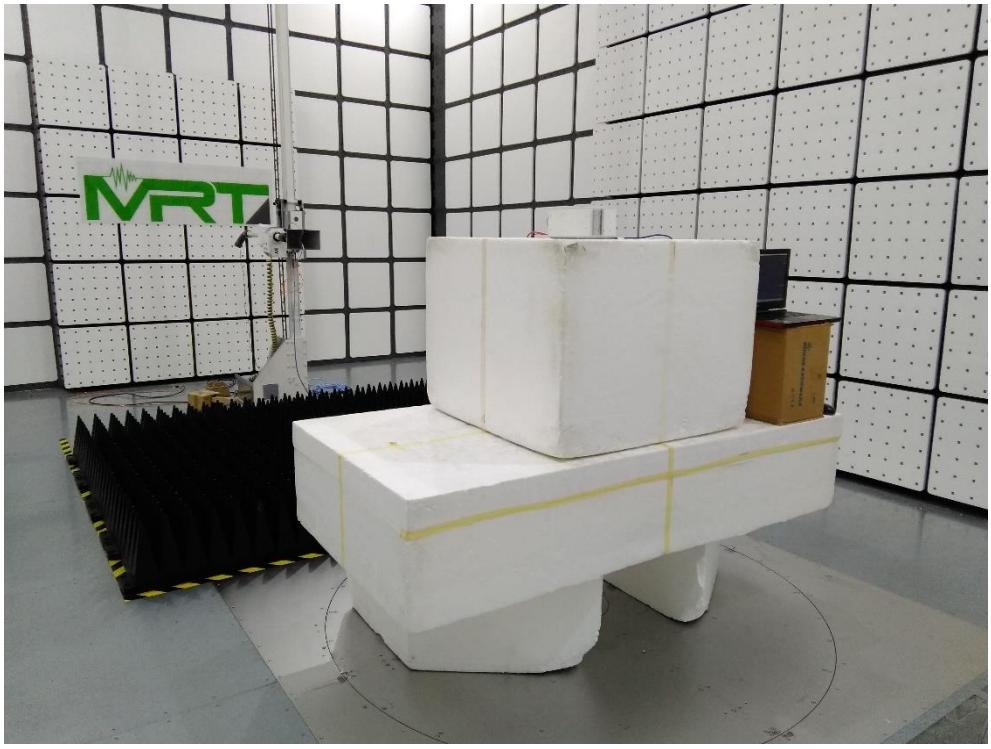
Description: Back View of Conducted Emission Test Setup



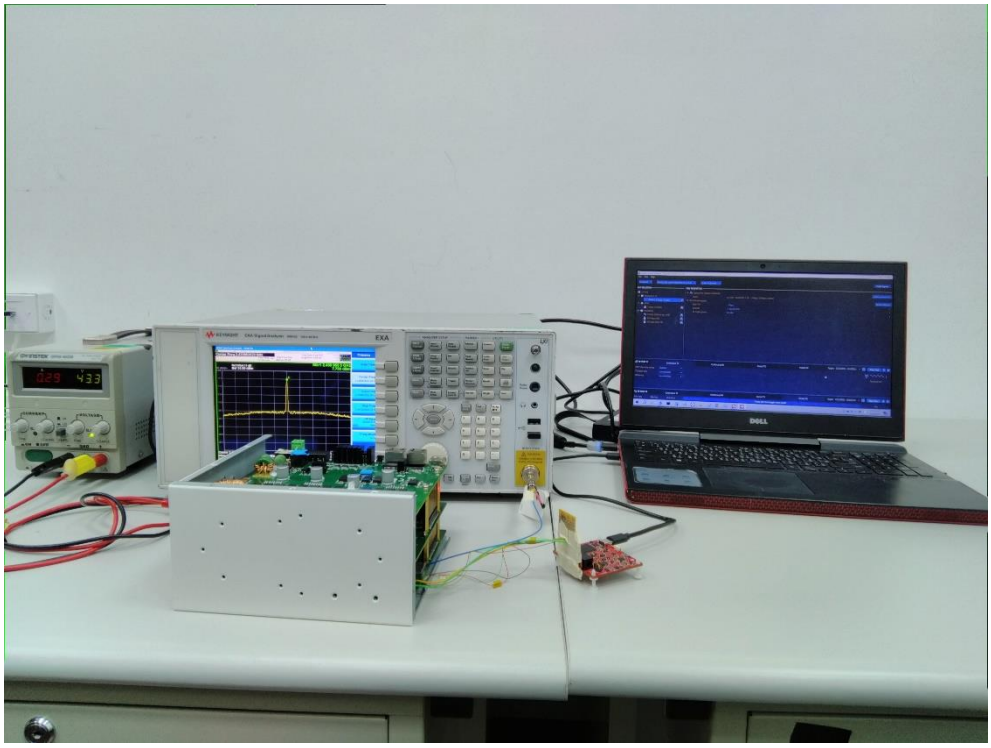
Description: Radiated Emission Test Setup for below 1GHz



Description: Radiated Emission Test Setup for above 1GHz



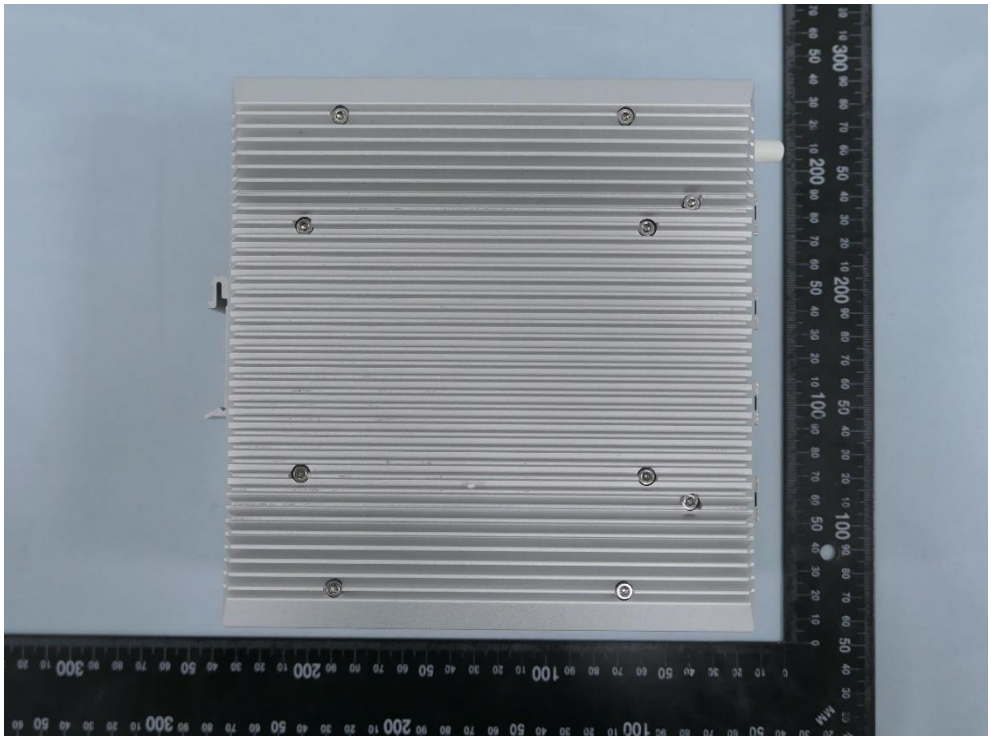
Description: Conducted Emission Test Setup



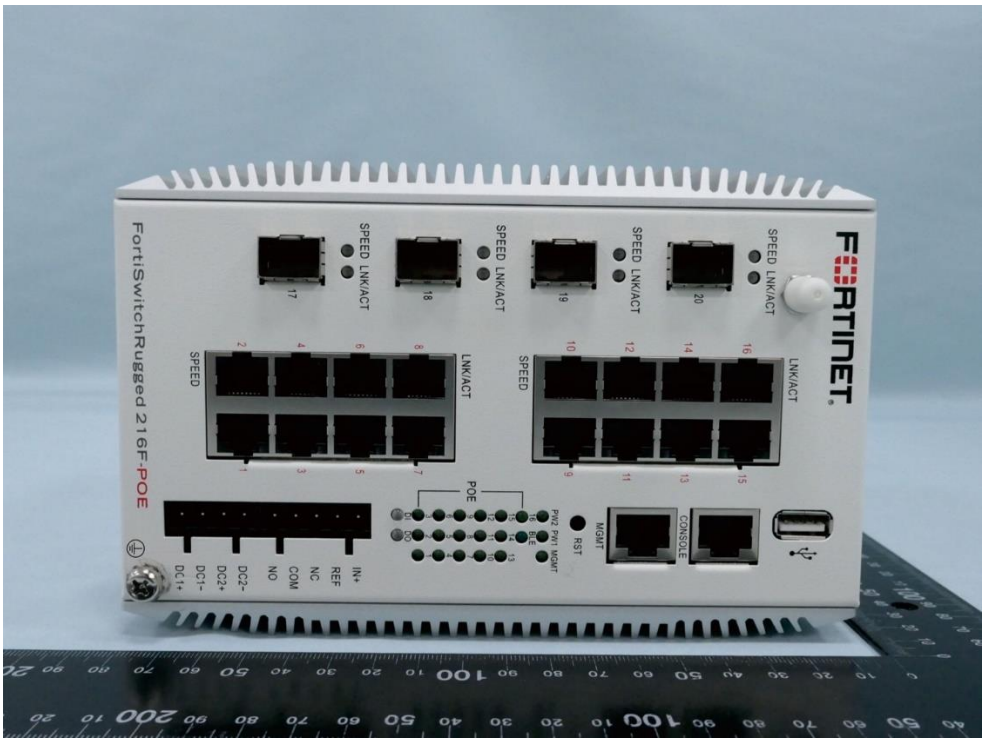
Appendix B : External Photograph

(1) EUT Photo

(2) EUT Photo



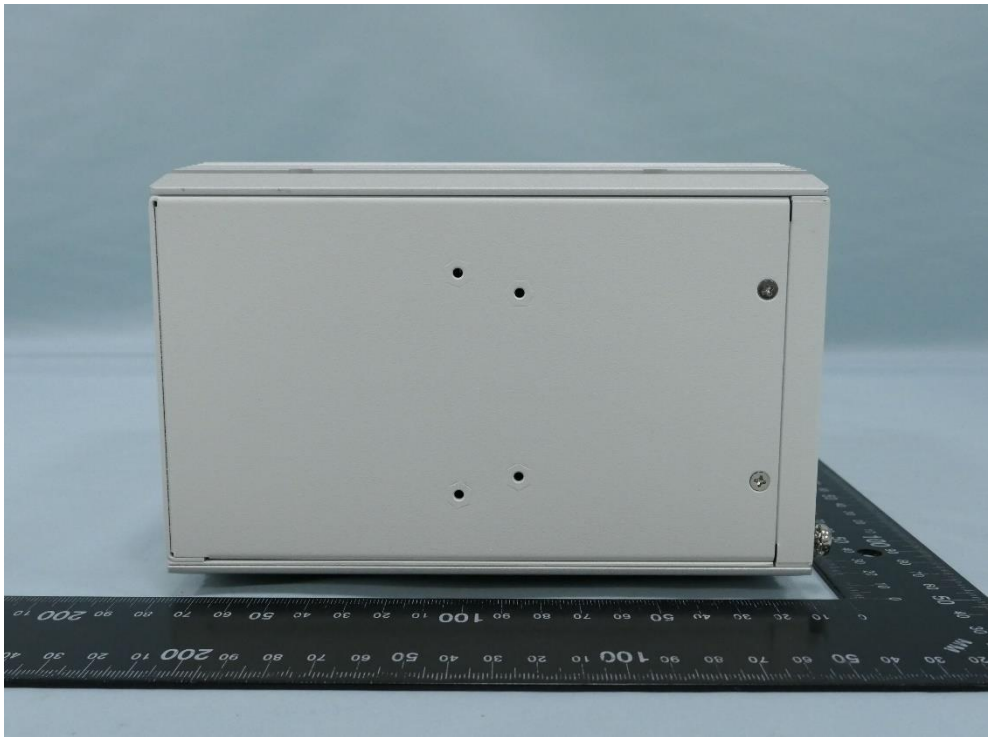
(3) EUT Photo



(4) EUT Photo

(5) EUT Photo

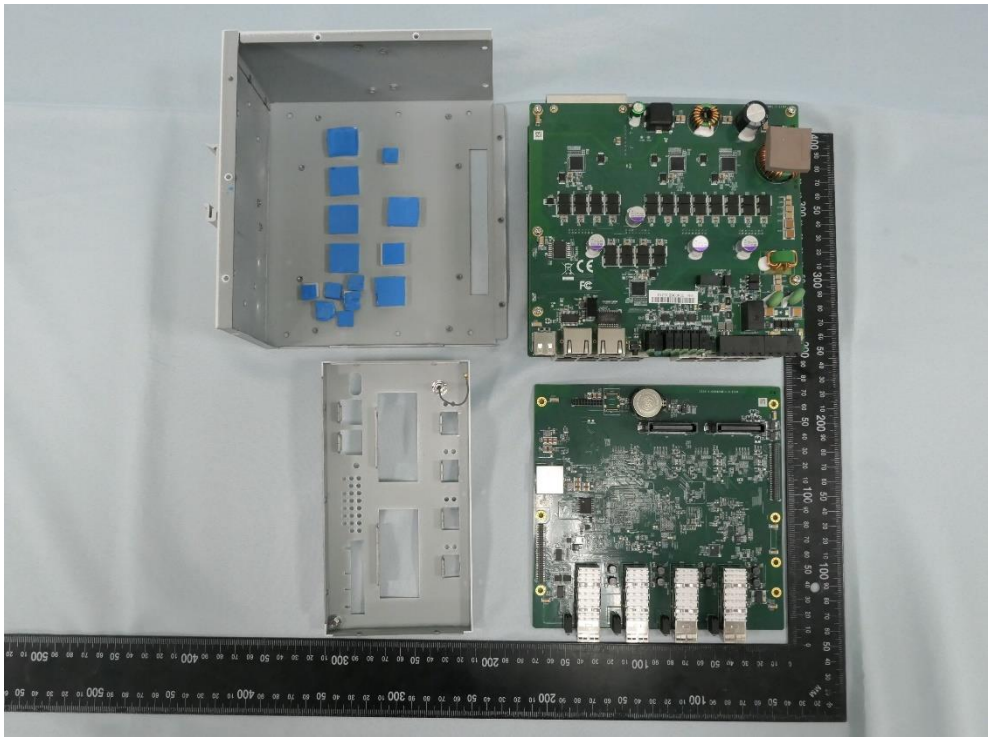
(6) EUT Photo



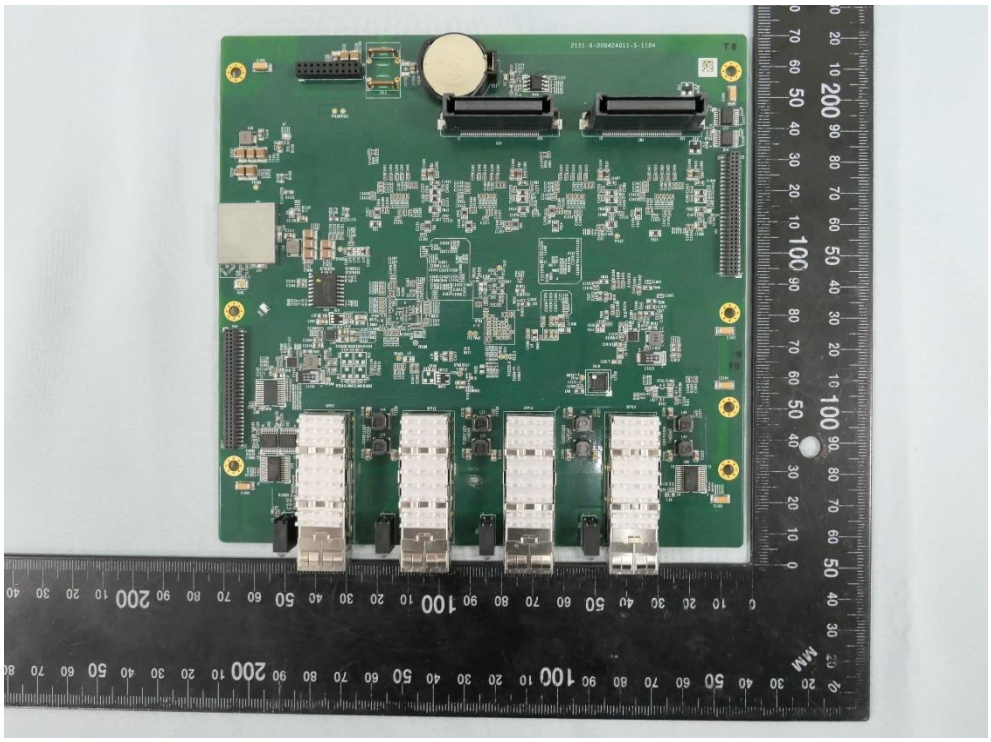
Appendix C : Internal Photograph

(7) EUT Photo

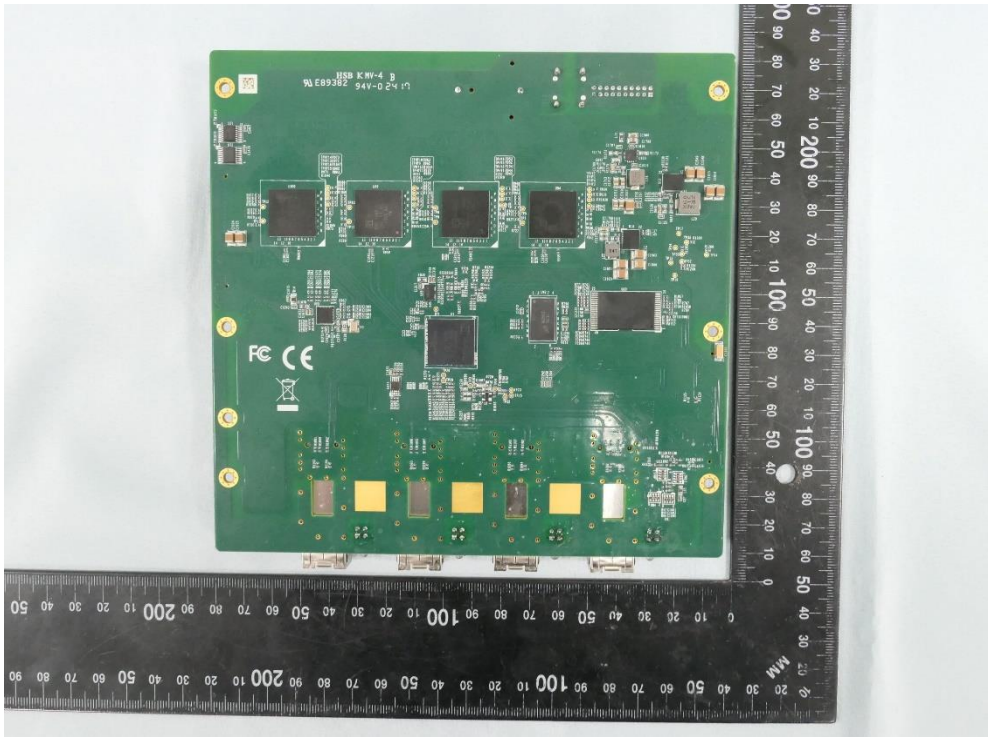
(8) EUT Photo



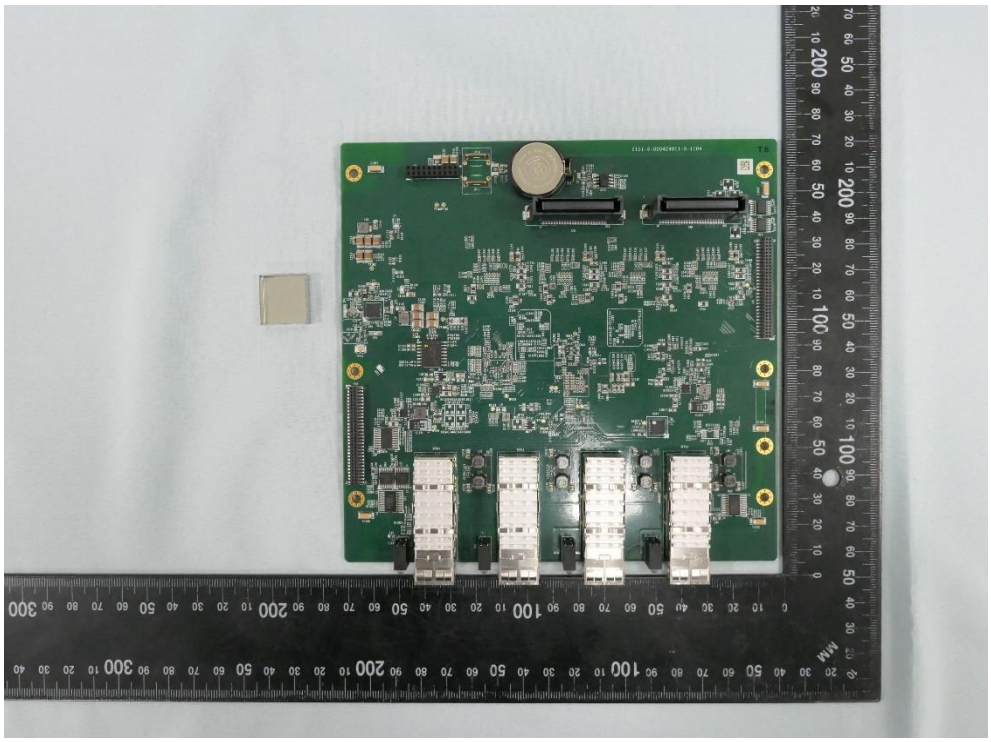
(9) EUT Photo



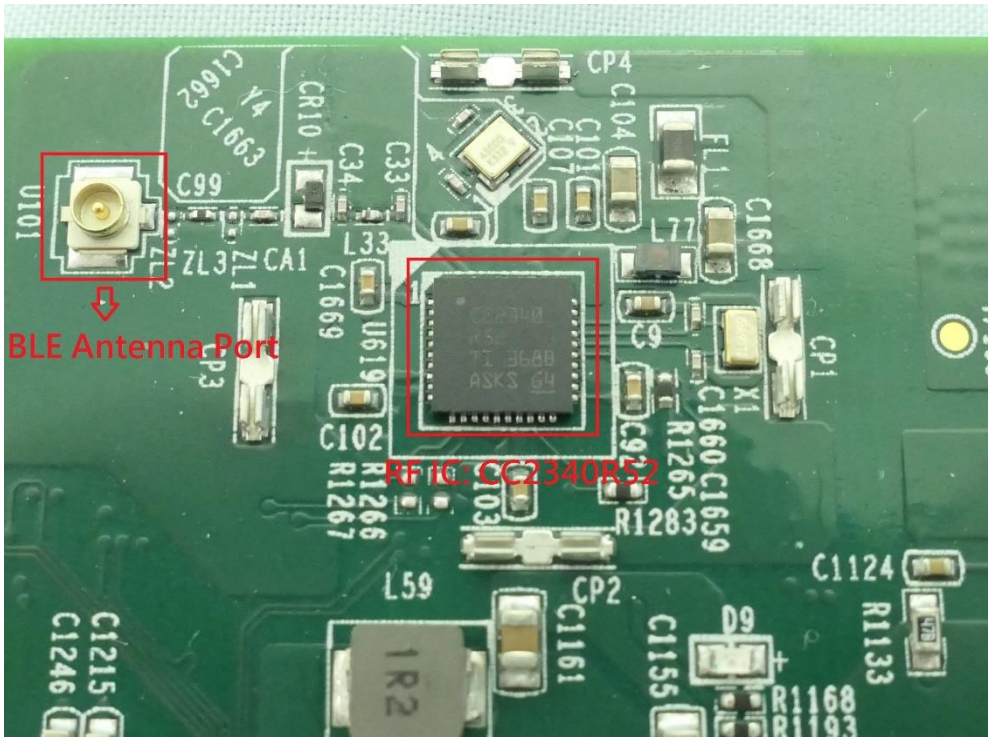
(10) EUT Photo



(11) EUT Photo



(12) EUT Photo



The End