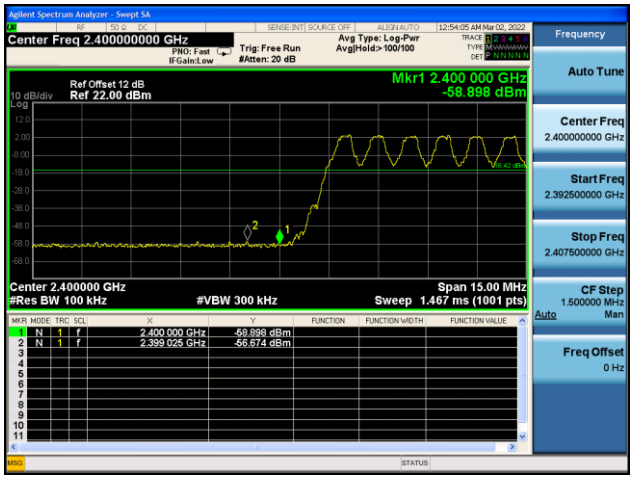
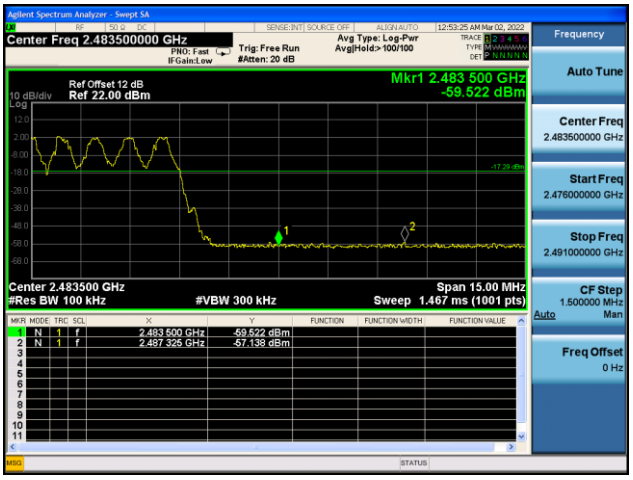
Band Edge With Hopping On

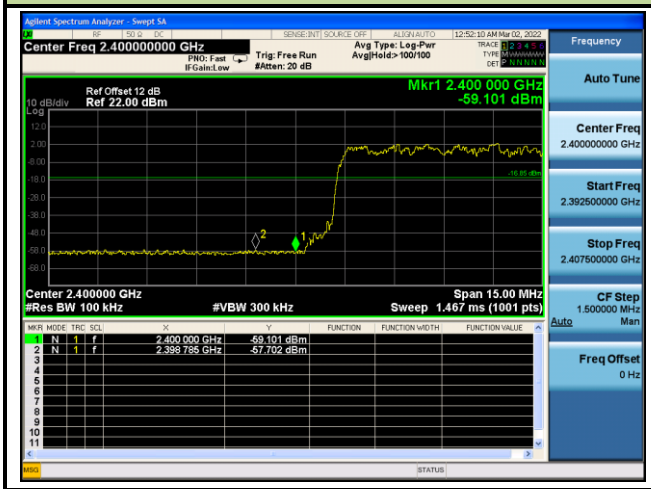
CH00 (2402MHz) DH5(1Mbps)



CH78 (2480MHz) DH5(1Mbps)



CH00 (2402MHz) 3-DH5(3Mbps)



CH78 (2480MHz) 3-DH5(3Mbps)

7.8. Radiated Spurious Emission Measurement

7.8.1. 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

7.8.2. Test Procedure Used

ANSI C63.10-2013 - Section 11.12.1

7.8.3. 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

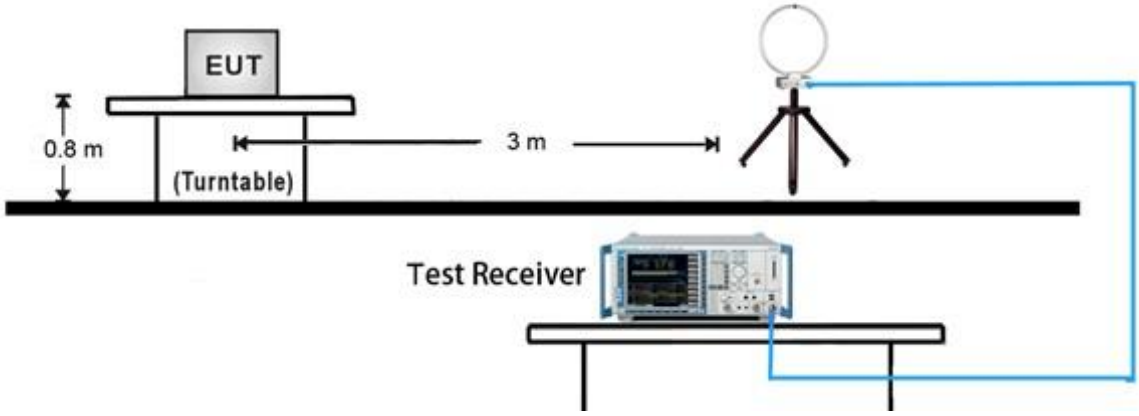
Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Average Field Strength Measurements

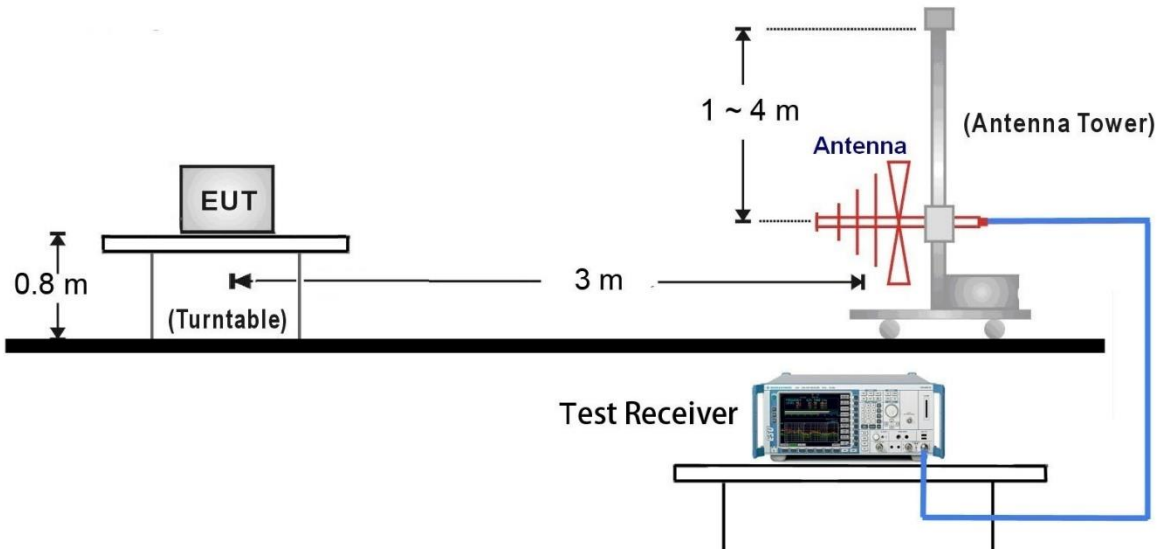
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW ≥ 1/T
4. De As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). 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

7.8.4. Test Setup

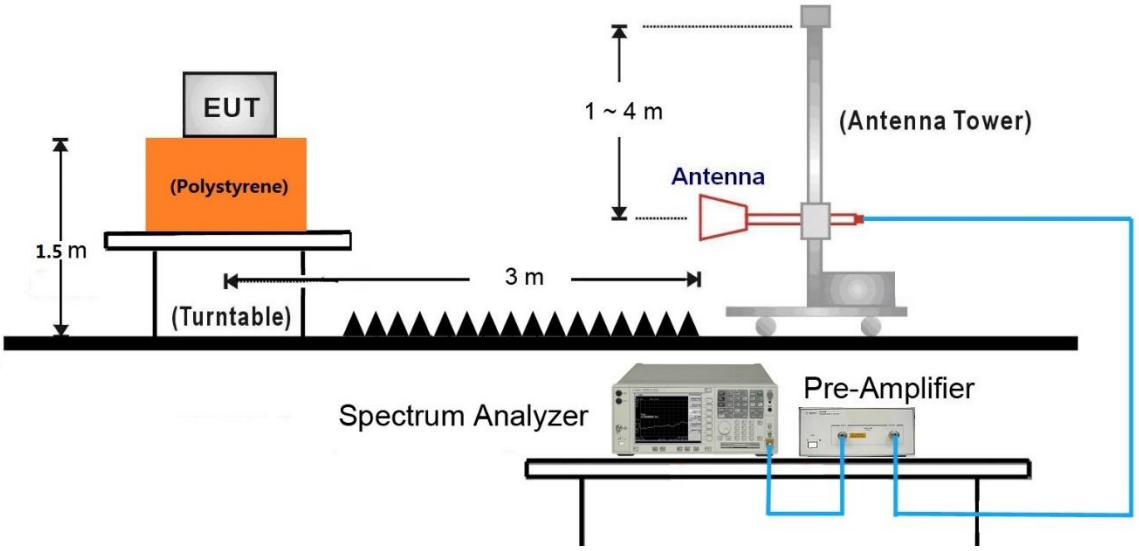
9kHz ~ 30MHz Test Setup:



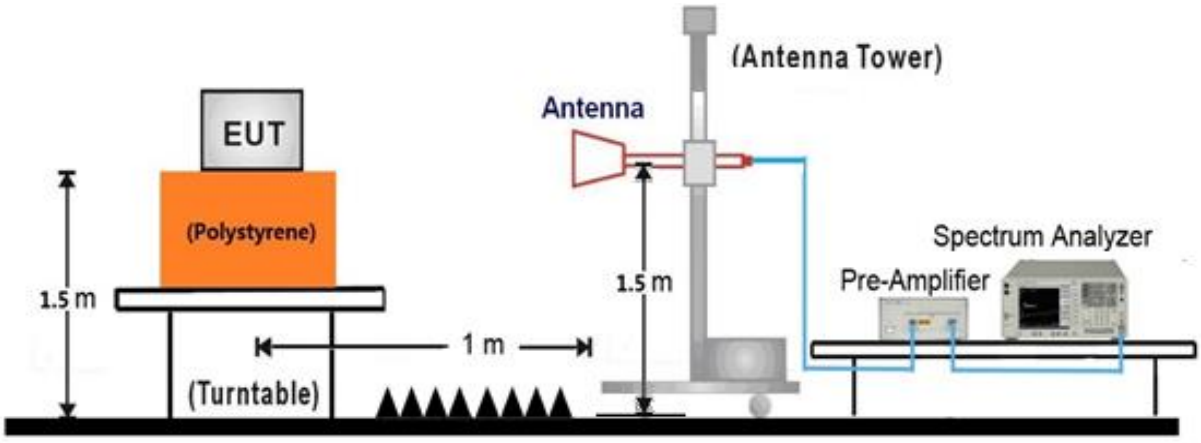
30MHz ~ 1GHz Test Setup:



1GHz ~ 18GHz Test Setup:

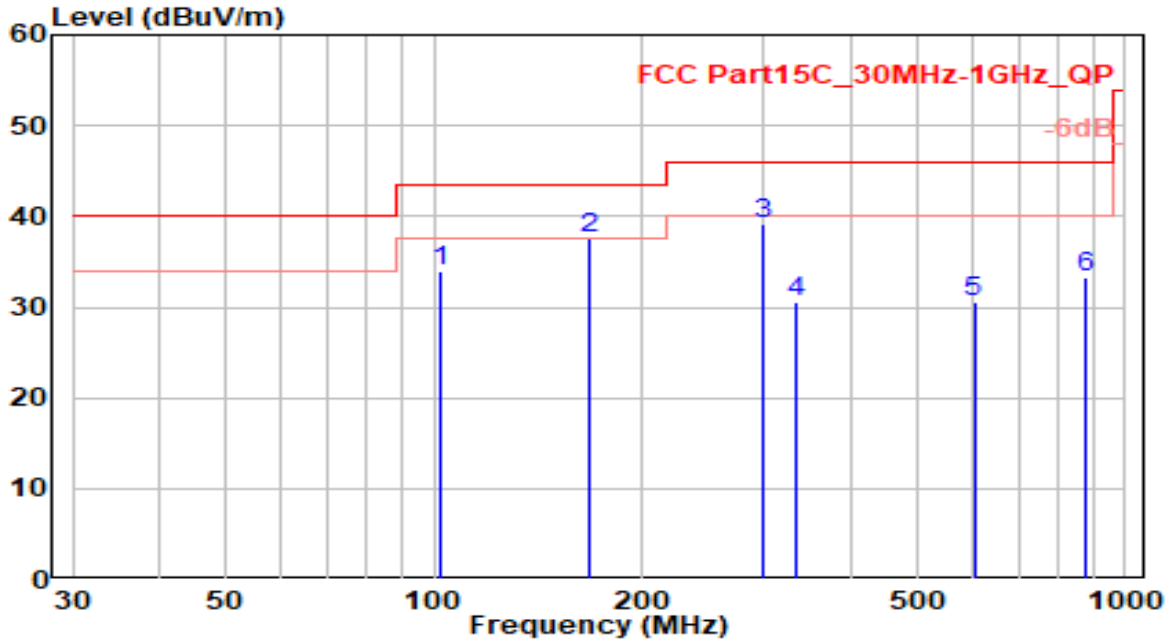


18GHz ~40GHz Test Setup:



7.8.5. Test Result

EUT	Module	Date of Test	2022-01-13
Factor	VULB 9162	Temp. / Humidity	20°C /56%
Polarity	Horizontal	Site / Test Engineer	AC2 / Owen
Test Mode	BT_TX_DH5_CH 39	Test Voltage	AC 120V/60Hz

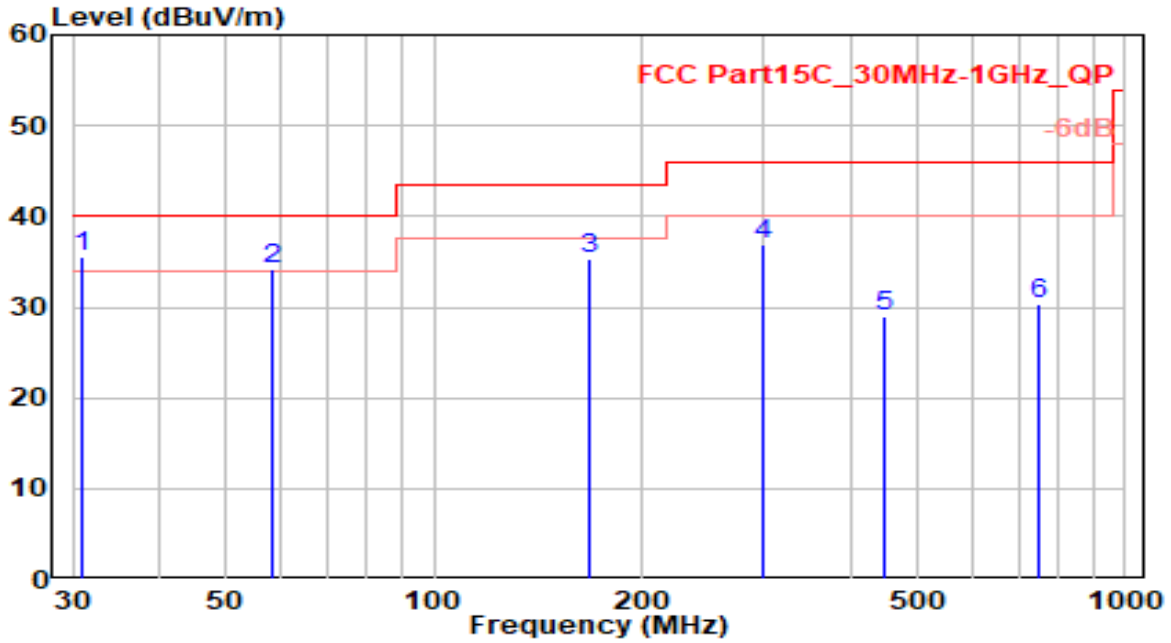


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		101.780	14.73	19.24	33.97	-9.53	43.50	150	270	QP
2	*	167.740	20.97	16.56	37.53	-5.97	43.50	150	165	QP
3		299.660	17.78	21.35	39.13	-6.87	46.00	100	185	QP
4		334.580	8.18	22.46	30.64	-15.36	46.00	100	95	QP
5		604.240	2.79	27.74	30.53	-15.47	46.00	100	310	QP
6		876.810	2.05	31.30	33.35	-12.65	46.00	100	0	QP

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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.
5. The amplitude of radiated emissions (frequency range from9kHz to 30MHz and 18GHz to 25GHz)is that proximity to ambient noise ,which also are attenuated more than 20dB below the permissible value. Therefore, the data / test setup is not presented in the report.

EUT	Module	Date of Test	2022-01-13
Factor	VULB 9162	Temp. / Humidity	20°C /56%
Polarity	Vertical	Site / Test Engineer	AC2 / Owen
Test Mode	BT_TX_DH5_CH 39	Test Voltage	AC 120V/60Hz

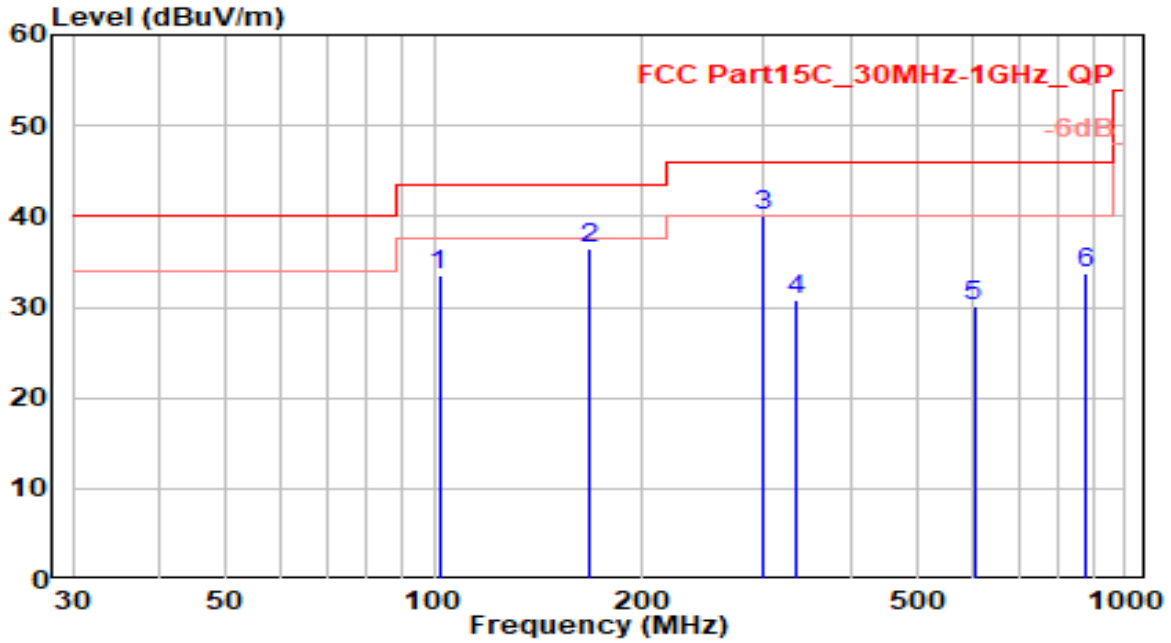


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	30.970	18.10	17.43	35.54	-4.46	40.00	100	215	QP
2		58.130	13.80	20.34	34.14	-5.86	40.00	100	250	QP
3		167.740	18.84	16.56	35.39	-8.11	43.50	100	65	QP
4		299.660	15.60	21.35	36.95	-9.05	46.00	150	0	QP
5		450.010	4.62	24.43	29.05	-16.95	46.00	100	0	QP
6		750.710	0.70	29.61	30.30	-15.70	46.00	150	0	QP

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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.
5. The amplitude of radiated emissions (frequency range from9kHz to 30MHz and 18GHz to 25GHz)is that proximity to ambient noise ,which also are attenuated more than 20dB below the permissible value. Therefore, the data / test setup is not presented in the report.

EUT	Module	Date of Test	2022-01-13
Factor	VULB 9162	Temp. / Humidity	20°C /56%
Polarity	Horizontal	Site / Test Engineer	AC2 / Owen
Test Mode	BT_RX_DH5_CH 39	Test Voltage	AC 120V/60Hz

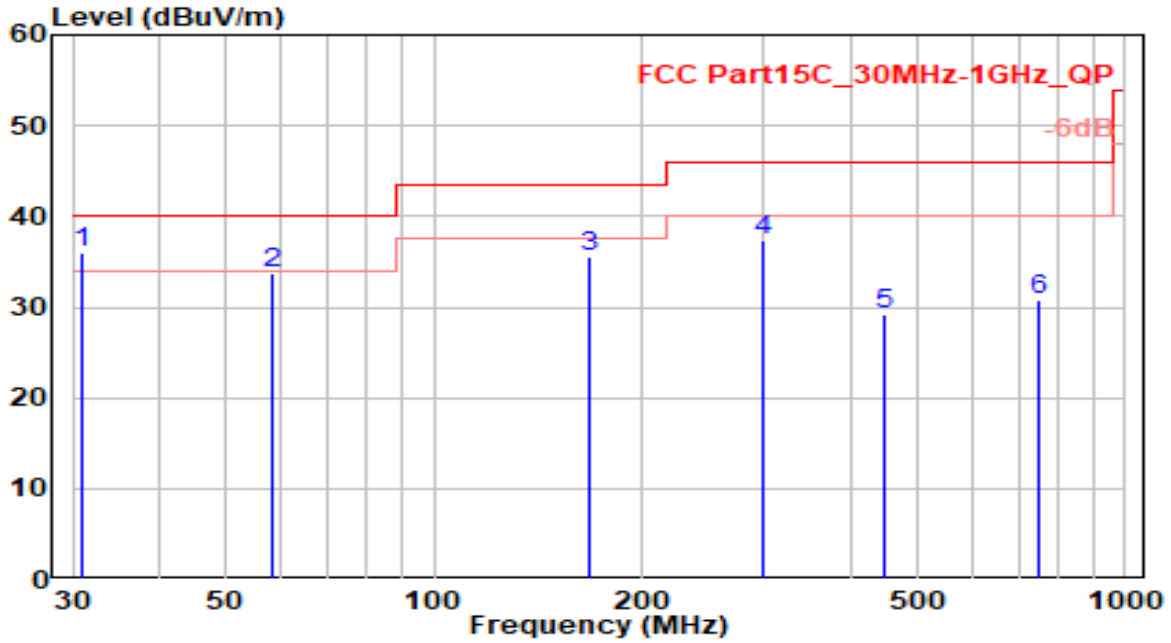


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		101.680	14.33	19.24	33.57	-9.93	43.50	145	270	QP
2		167.880	19.97	16.56	36.53	-6.97	43.50	150	165	QP
3	*	299.150	18.79	21.34	40.13	-5.87	46.00	100	185	QP
4		334.480	8.38	22.46	30.84	-15.16	46.00	100	95	QP
5		604.240	2.37	27.74	30.11	-15.89	46.00	100	310	QP
6		876.810	2.45	31.30	33.75	-12.25	46.00	100	5	QP

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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.
5. The amplitude of radiated emissions (frequency range from9kHz to 30MHz and 18GHz to 25GHz)is that proximity to ambient noise ,which also are attenuated more than 20dB below the permissible value. Therefore, the data / test setup is not presented in the report.

EUT	Module	Date of Test	2022-01-13
Factor	VULB 9162	Temp. / Humidity	20°C /56%
Polarity	Vertical	Site / Test Engineer	AC2 / Owen
Test Mode	BT_RX_DH5_CH 39	Test Voltage	AC 120V/60Hz

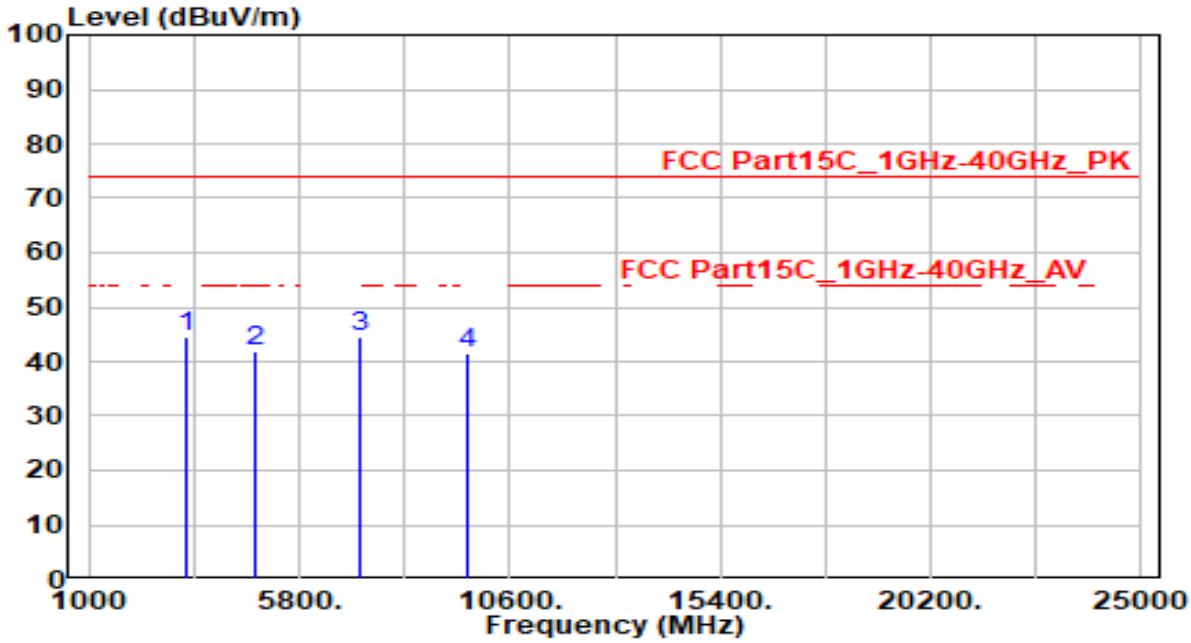


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	30.970	18.60	17.43	36.04	-3.96	40.00	100	220	QP
2		58.130	13.30	20.34	33.64	-6.36	40.00	100	250	QP
3		167.820	18.94	16.56	35.50	-8.00	43.50	100	65	QP
4		299.660	15.90	21.35	37.25	-8.75	46.00	150	0	QP
5		450.010	4.82	24.43	29.25	-16.75	46.00	100	5	QP
6		750.710	1.10	29.61	30.70	-15.30	46.00	150	0	QP

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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.
5. The amplitude of radiated emissions (frequency range from9kHz to 30MHz and 18GHz to 25GHz)is that proximity to ambient noise ,which also are attenuated more than 20dB below the permissible value. Therefore, the data / test setup is not presented in the report.

EUT	Module	Date of Test	2022-01-14
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	20.3°C /51%
Polarity	Horizontal	Site / Test Engineer	AC2 / Owen
Test Mode	BT_TX_DH5_CH 0	Test Voltage	AC 120V/60Hz

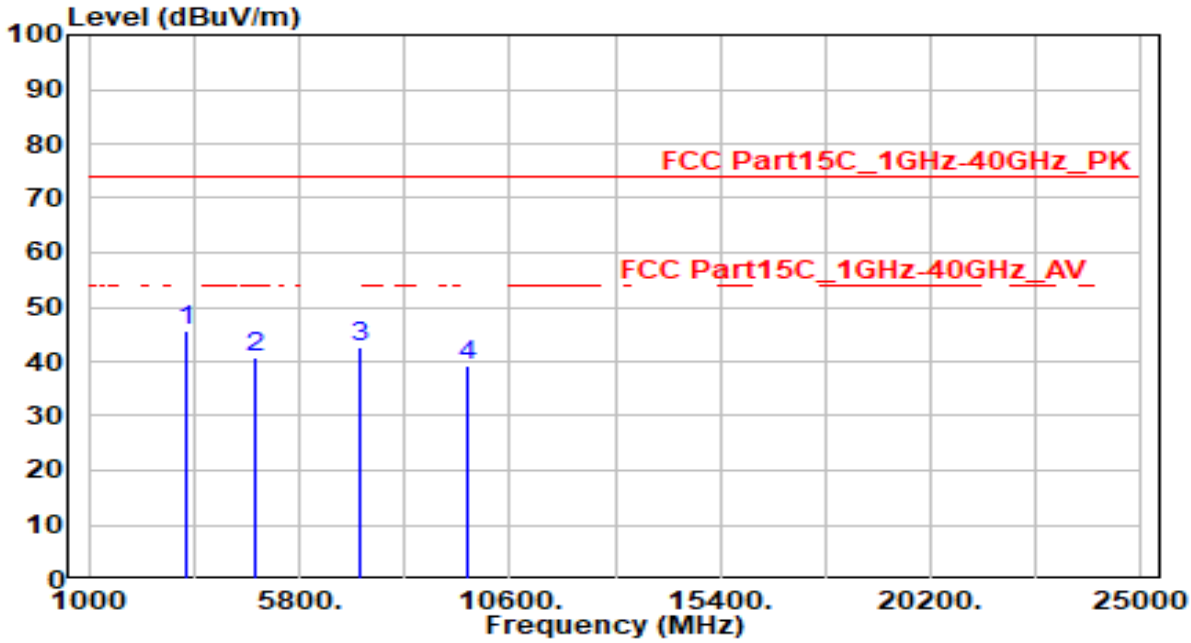


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	3202.563	48.03	-3.54	44.49	-29.51	74.00	100	360	Peak
2		4804.000	41.97	-0.06	41.91	-32.09	74.00	100	360	Peak
3		7206.000	39.44	4.98	44.42	-29.58	74.00	100	360	Peak
4		9608.000	36.65	4.67	41.32	-32.68	74.00	100	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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	Module	Date of Test	2022-01-14
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	20.3°C /51%
Polarity	Vertical	Site / Test Engineer	AC2 / Owen
Test Mode	BT_TX_DH5_CH 0	Test Voltage	AC 120V/60Hz

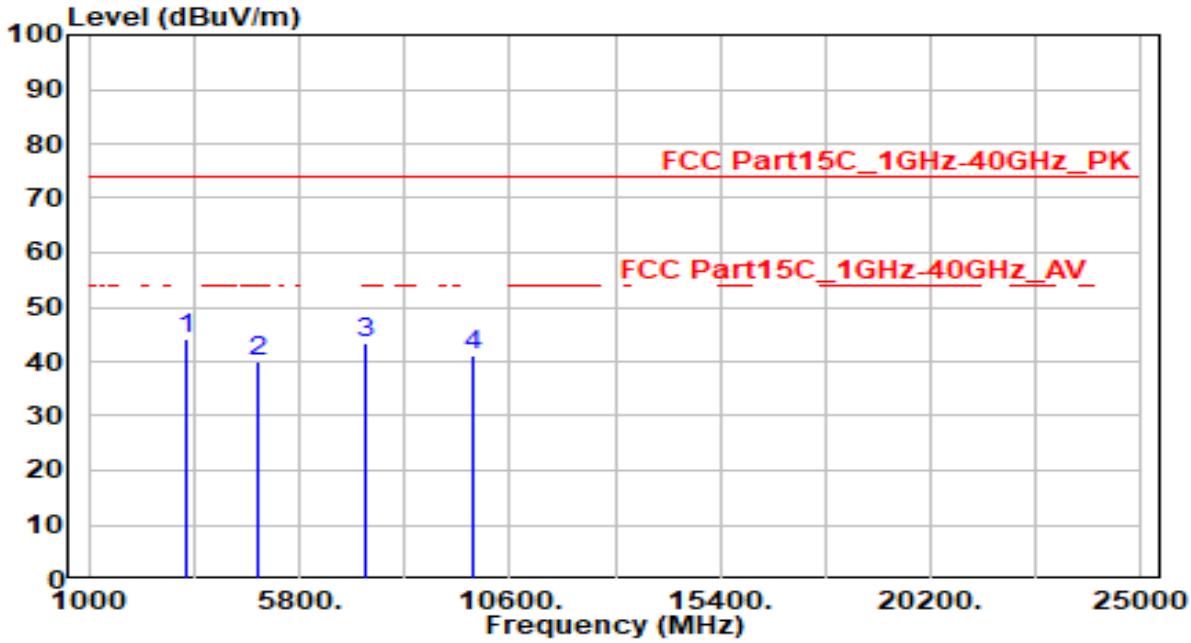


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	3202.563	49.11	-3.54	45.58	-28.42	74.00	100	360	Peak
2		4804.000	40.99	-0.06	40.93	-33.07	74.00	100	360	Peak
3		7206.000	37.71	4.98	42.69	-31.31	74.00	100	360	Peak
4		9608.000	34.64	4.67	39.31	-34.69	74.00	100	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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	Module	Date of Test	2022-01-14
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	20.3°C /51%
Polarity	Horizontal	Site / Test Engineer	AC2 / Owen
Test Mode	BT_TX_DH5_CH 39	Test Voltage	AC 120V/60Hz

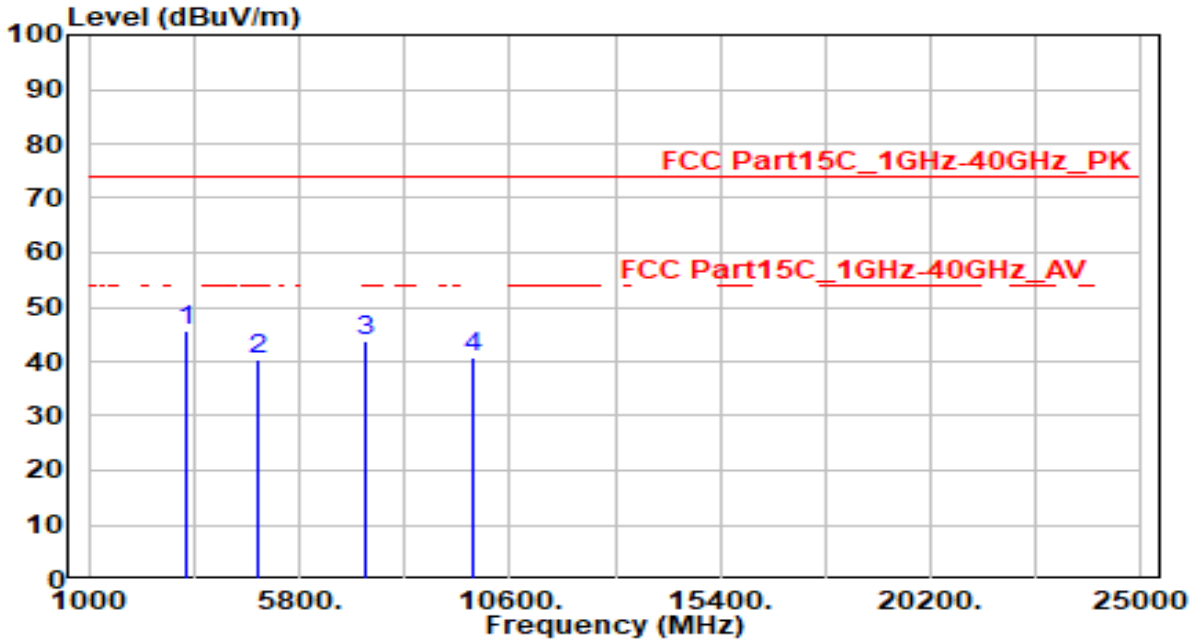


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	3254.625	47.52	-3.46	44.06	-29.94	74.00	100	360	Peak
2		4882.000	39.82	0.10	39.92	-34.08	74.00	100	360	Peak
3		7323.000	38.29	5.10	43.39	-30.61	74.00	100	360	Peak
4		9764.000	36.41	4.74	41.15	-32.85	74.00	100	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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	Module	Date of Test	2022-01-14
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	20.3°C /51%
Polarity	Vertical	Site / Test Engineer	AC2 / Owen
Test Mode	BT_TX_DH5_CH 39	Test Voltage	AC 120V/60Hz

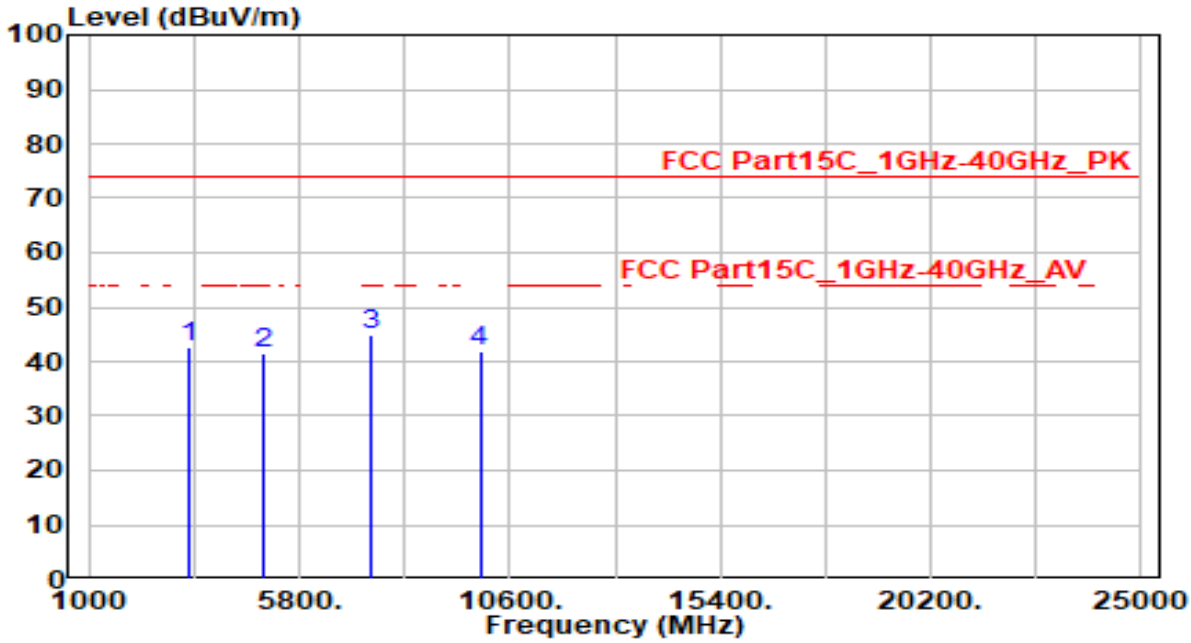


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	3254.094	49.18	-3.46	45.72	-28.28	74.00	100	360	Peak
2		4882.000	40.10	0.10	40.20	-33.80	74.00	100	360	Peak
3		7323.000	38.64	5.10	43.74	-30.26	74.00	100	360	Peak
4		9764.000	36.07	4.74	40.81	-33.19	74.00	100	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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	Module	Date of Test	2022-01-14
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	20.3°C /51%
Polarity	Horizontal	Site / Test Engineer	AC2 / Owen
Test Mode	BT_TX_DH5_CH 78	Test Voltage	AC 120V/60Hz

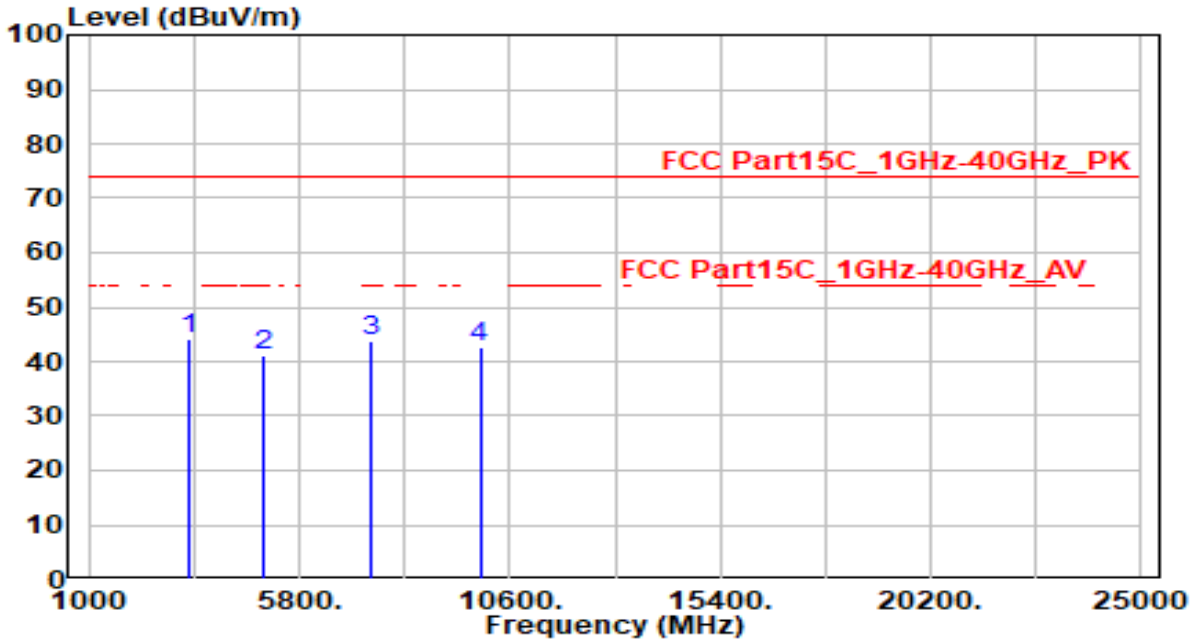


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		3306.156	46.14	-3.39	42.75	-31.25	74.00	100	360	Peak
2		4960.000	41.07	0.27	41.34	-32.66	74.00	100	360	Peak
3	*	7440.000	39.65	5.11	44.75	-29.25	74.00	100	360	Peak
4		9920.000	37.31	4.75	42.06	-31.94	74.00	100	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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	Module	Date of Test	2022-01-14
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	20.3°C /51%
Polarity	Vertical	Site / Test Engineer	AC2 / Owen
Test Mode	BT_TX_DH5_CH 78	Test Voltage	AC 120V/60Hz

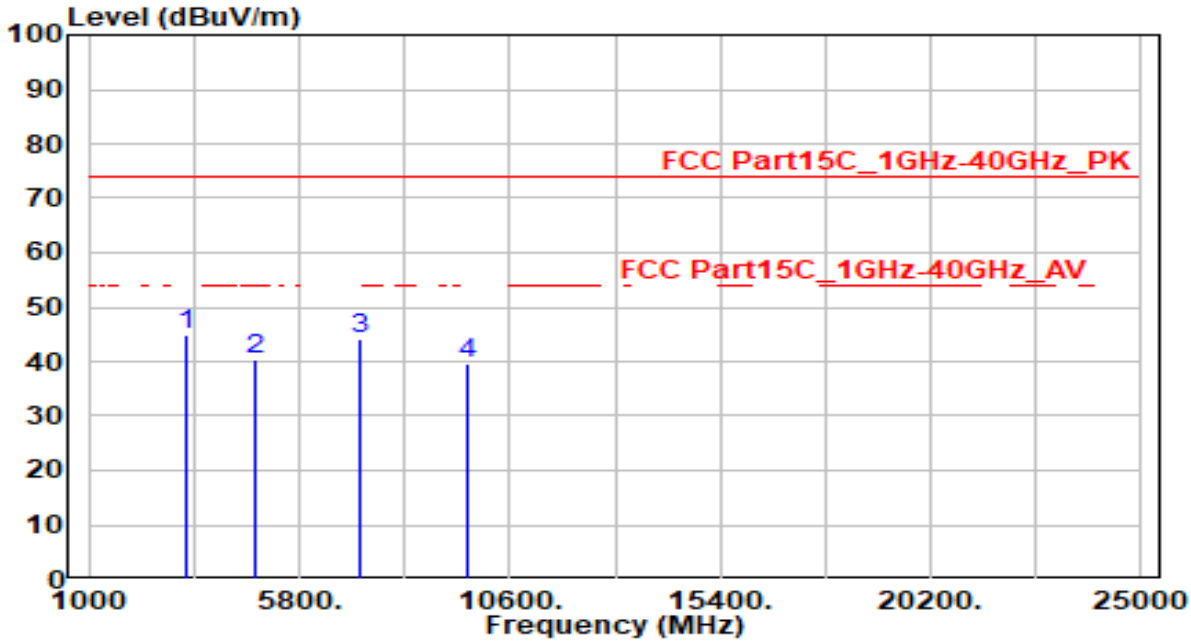


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	3306.156	47.70	-3.39	44.30	-29.70	74.00	100	360	Peak
2		4960.000	40.82	0.27	41.09	-32.91	74.00	100	360	Peak
3		7440.000	38.71	5.11	43.81	-30.19	74.00	100	360	Peak
4		9920.000	38.02	4.75	42.76	-31.24	74.00	100	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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	Module	Date of Test	2022-01-14
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	20.3°C /51%
Polarity	Horizontal	Site / Test Engineer	AC2 / Owen
Test Mode	BT_TX_3DH5_CH 0	Test Voltage	AC 120V/60Hz

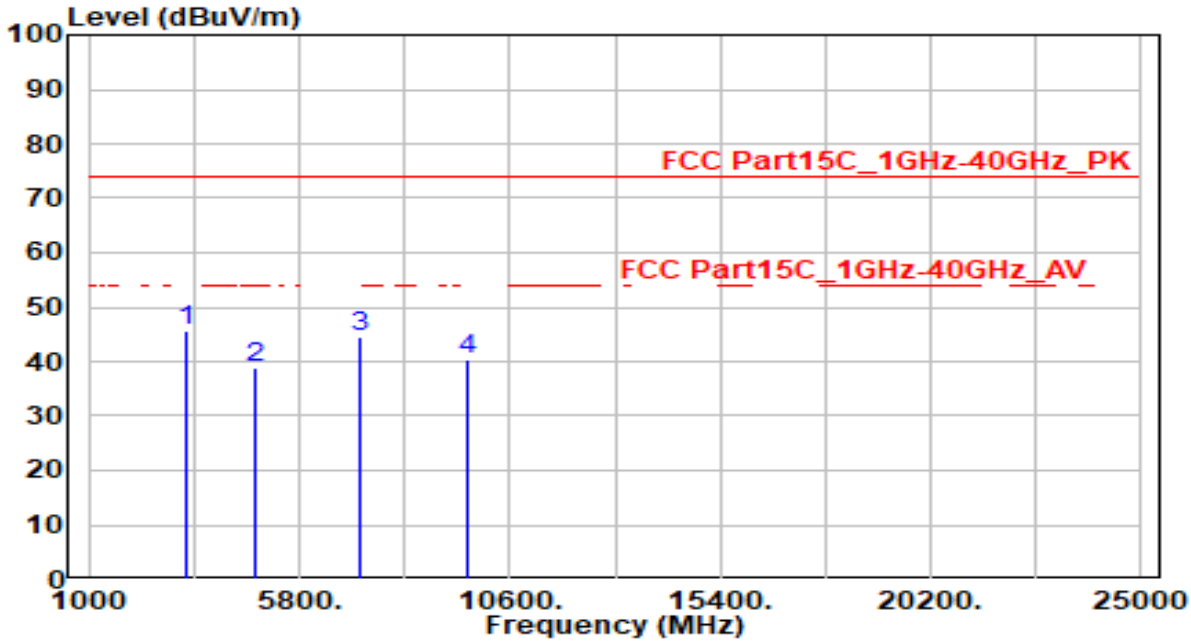


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	3202.563	48.48	-3.54	44.94	-29.06	74.00	100	360	Peak
2		4804.000	40.35	-0.06	40.29	-33.71	74.00	100	360	Peak
3		7206.000	39.08	4.98	44.06	-29.94	74.00	100	360	Peak
4		9608.000	35.06	4.67	39.73	-34.27	74.00	100	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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	Module	Date of Test	2022-01-14
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	20.3°C /51%
Polarity	Vertical	Site / Test Engineer	AC2 / Owen
Test Mode	BT_TX_3DH5_CH 0	Test Voltage	AC 120V/60Hz

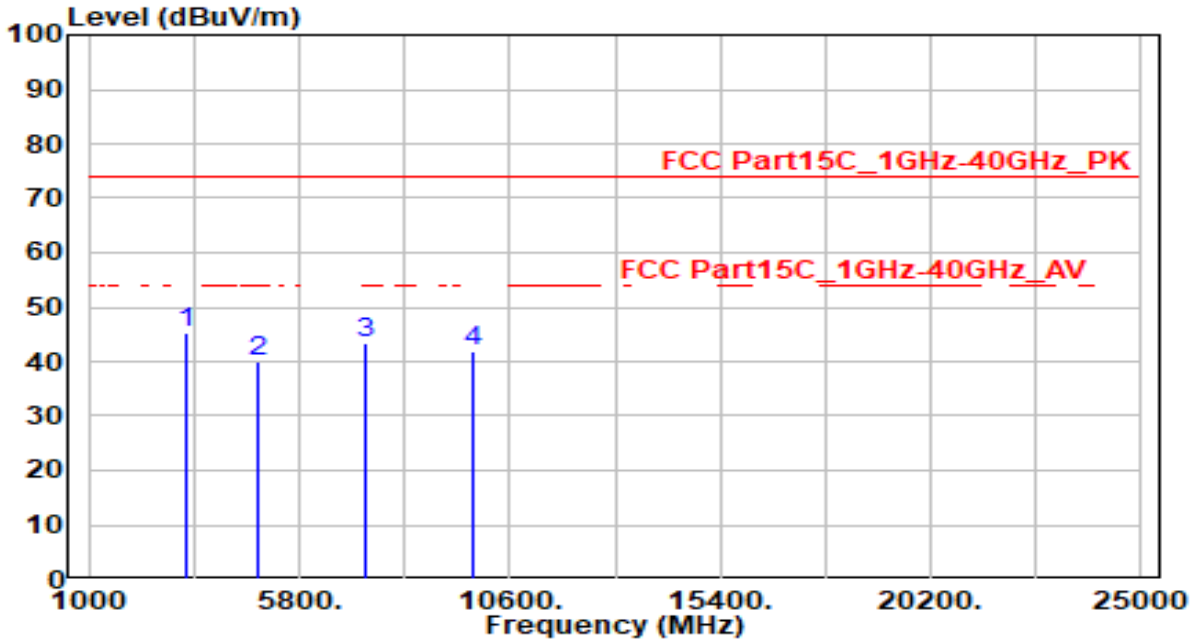


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	3202.563	49.38	-3.54	45.84	-28.16	74.00	100	360	Peak
2		4804.000	38.96	-0.06	38.90	-35.10	74.00	100	360	Peak
3		7206.000	39.41	4.98	44.39	-29.61	74.00	100	360	Peak
4		9608.000	35.64	4.67	40.32	-33.68	74.00	100	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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	Module	Date of Test	2022-01-14
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	20.3°C /51%
Polarity	Horizontal	Site / Test Engineer	AC2 / Owen
Test Mode	BT_TX_3DH5_CH 39	Test Voltage	AC 120V/60Hz

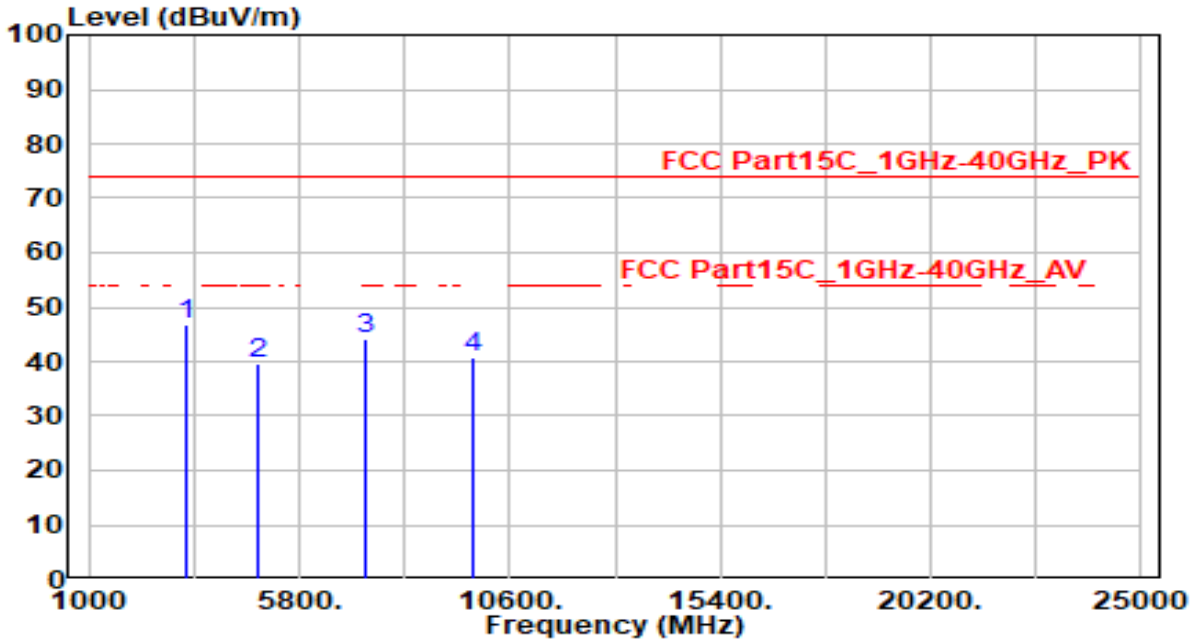


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	3254.625	48.91	-3.46	45.44	-28.56	74.00	100	360	Peak
2		4882.000	40.04	0.10	40.14	-33.86	74.00	100	360	Peak
3		7323.000	38.47	5.10	43.57	-30.43	74.00	100	360	Peak
4		9764.000	37.17	4.74	41.90	-32.10	74.00	100	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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	Module	Date of Test	2022-01-14
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	20.3°C /51%
Polarity	Vertical	Site / Test Engineer	AC2 / Owen
Test Mode	BT_TX_3DH5_CH 39	Test Voltage	AC 120V/60Hz

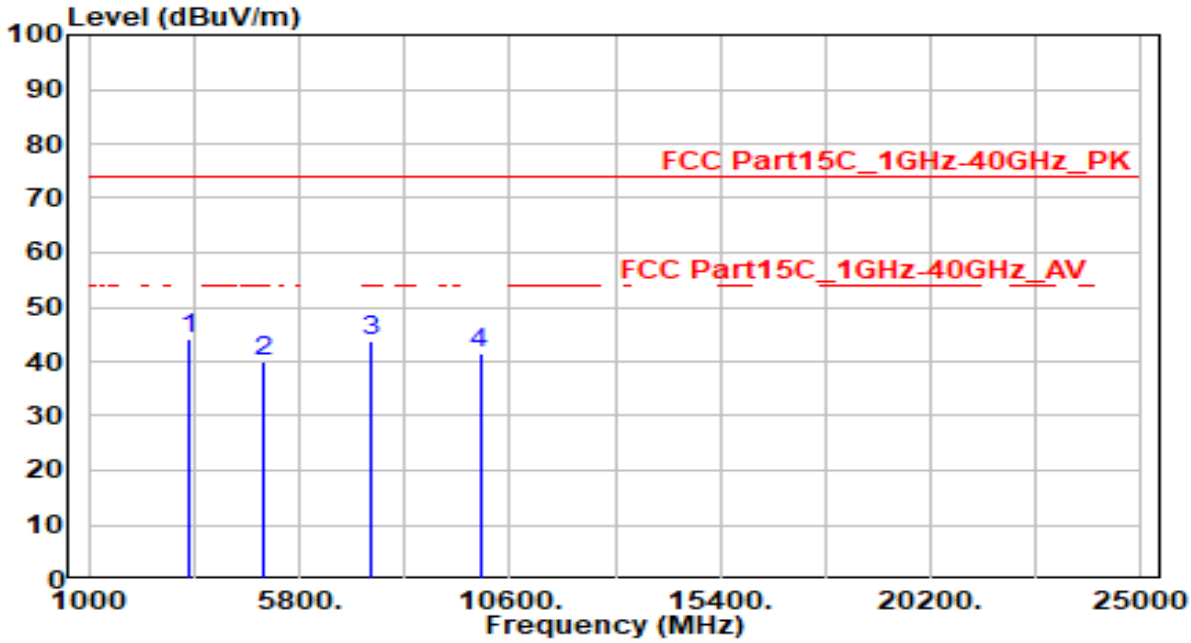


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	3254.625	50.29	-3.46	46.83	-27.17	74.00	100	360	Peak
2		4882.000	39.34	0.10	39.44	-34.56	74.00	100	360	Peak
3		7323.000	39.03	5.10	44.13	-29.87	74.00	100	360	Peak
4		9764.000	35.85	4.74	40.58	-33.42	74.00	100	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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	Module	Date of Test	2022-01-14
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	20.3°C /51%
Polarity	Horizontal	Site / Test Engineer	AC2 / Owen
Test Mode	BT_TX_3DH5_CH 78	Test Voltage	AC 120V/60Hz

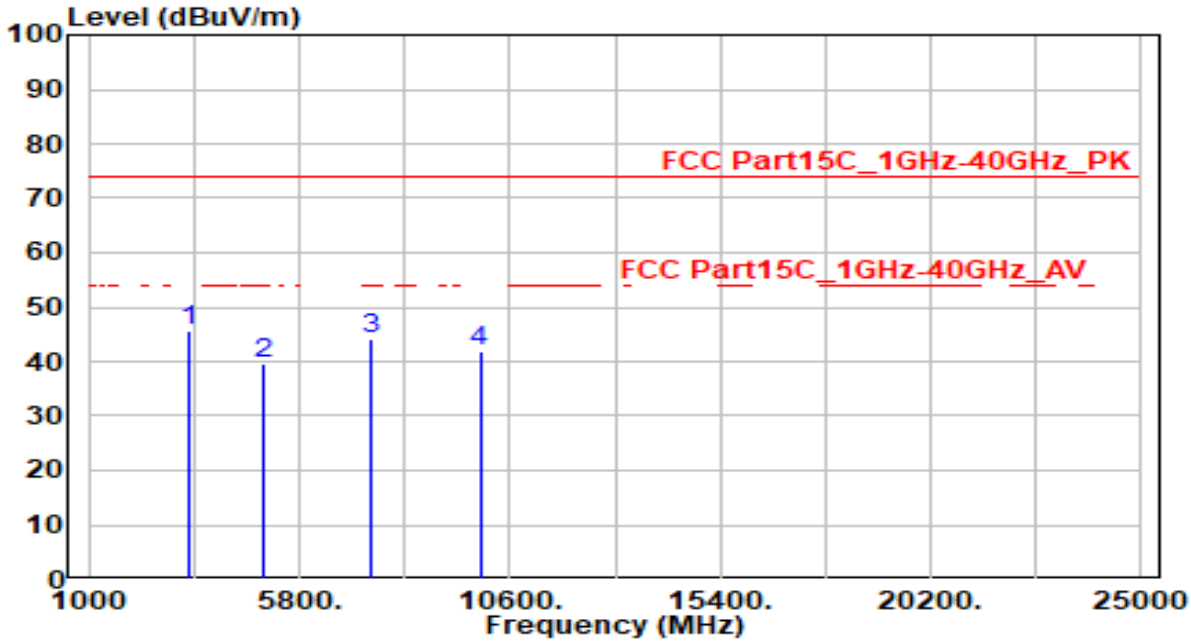


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	3306.688	47.43	-3.39	44.04	-29.96	74.00	100	360	Peak
2		4960.000	39.70	0.27	39.97	-34.03	74.00	100	360	Peak
3		7440.000	38.76	5.11	43.86	-30.14	74.00	100	360	Peak
4		9920.000	36.76	4.75	41.51	-32.49	74.00	100	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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	Module	Date of Test	2022-01-14
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	20.3°C /51%
Polarity	Vertical	Site / Test Engineer	AC2 / Owen
Test Mode	BT_TX_3DH5_CH 78	Test Voltage	AC 120V/60Hz

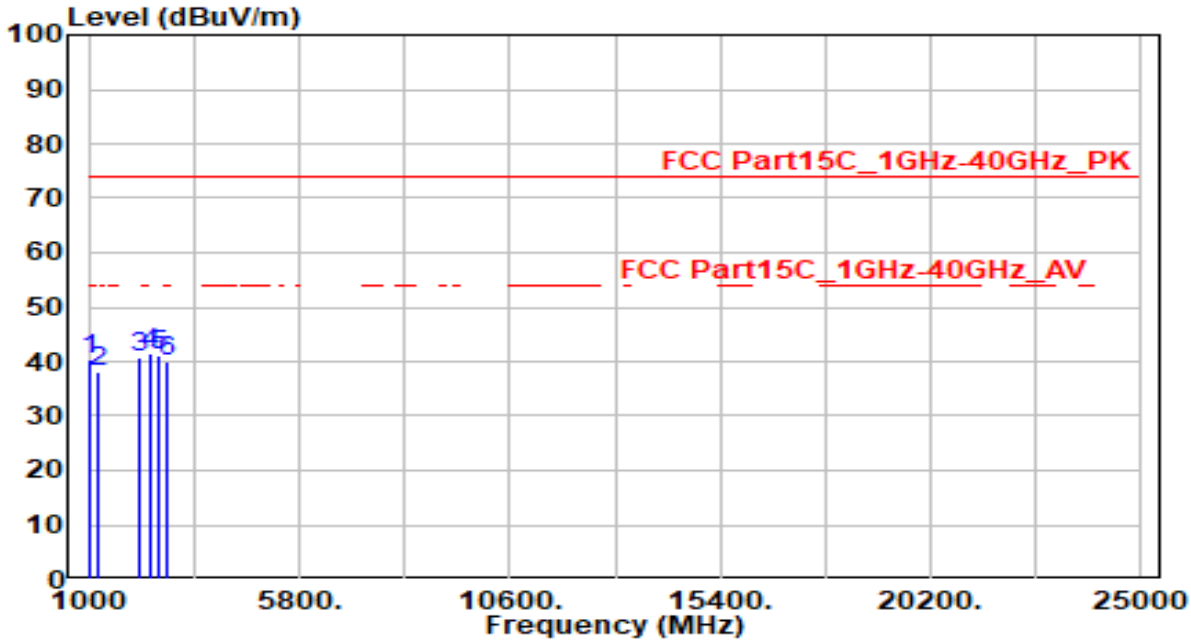


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	3306.688	49.15	-3.39	45.76	-28.24	74.00	100	360	Peak
2		4960.000	39.22	0.27	39.49	-34.51	74.00	100	360	Peak
3		7440.000	39.17	5.11	44.28	-29.72	74.00	100	360	Peak
4		9920.000	37.13	4.75	41.88	-32.12	74.00	100	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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	Module	Date of Test	2022-01-14
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	20.3°C /51%
Polarity	Horizontal	Site / Test Engineer	AC2 / Owen
Test Mode	BT_RX_DH5_CH 39	Test Voltage	AC 120V/60Hz

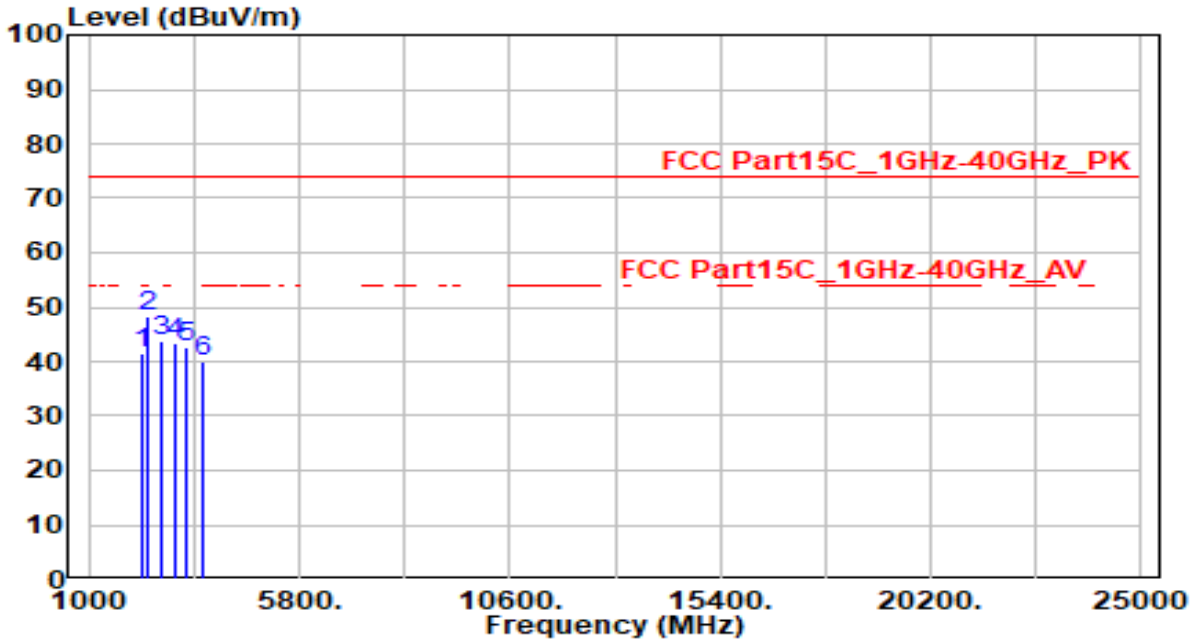


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		1024.969	49.14	-8.68	40.46	-33.54	74.00	100	360	Peak
2		1200.813	45.93	-7.74	38.20	-35.80	74.00	100	360	Peak
3		2184.688	46.32	-5.46	40.86	-33.14	74.00	100	360	Peak
4	*	2396.125	46.71	-5.13	41.59	-32.41	74.00	100	360	Peak
5		2624.031	45.75	-4.76	40.99	-33.01	74.00	100	360	Peak
6		2805.188	43.90	-3.95	39.95	-34.05	74.00	100	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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	Module	Date of Test	2022-01-14
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	20.3°C /51%
Polarity	Vertical	Site / Test Engineer	AC2 / Owen
Test Mode	BT_RX_DH5_CH 39	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		2202.219	46.99	-5.42	41.57	-32.43	74.00	100	360	Peak
2	*	2356.281	53.48	-5.19	48.29	-25.71	74.00	100	360	Peak
3		2637.313	48.61	-4.70	43.91	-30.09	74.00	100	360	Peak
4		2987.938	47.07	-3.57	43.50	-30.50	74.00	100	360	Peak
5		3198.844	46.16	-3.54	42.62	-31.38	74.00	100	360	Peak
6		3607.375	42.66	-2.51	40.15	-33.85	74.00	100	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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.

7.9. Radiated Restricted Band Edge Measurement

7.9.1. 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

7.9.2. Test Procedure Used

ANSI C63.10-2013 - Section 11.12.1

7.9.3. 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

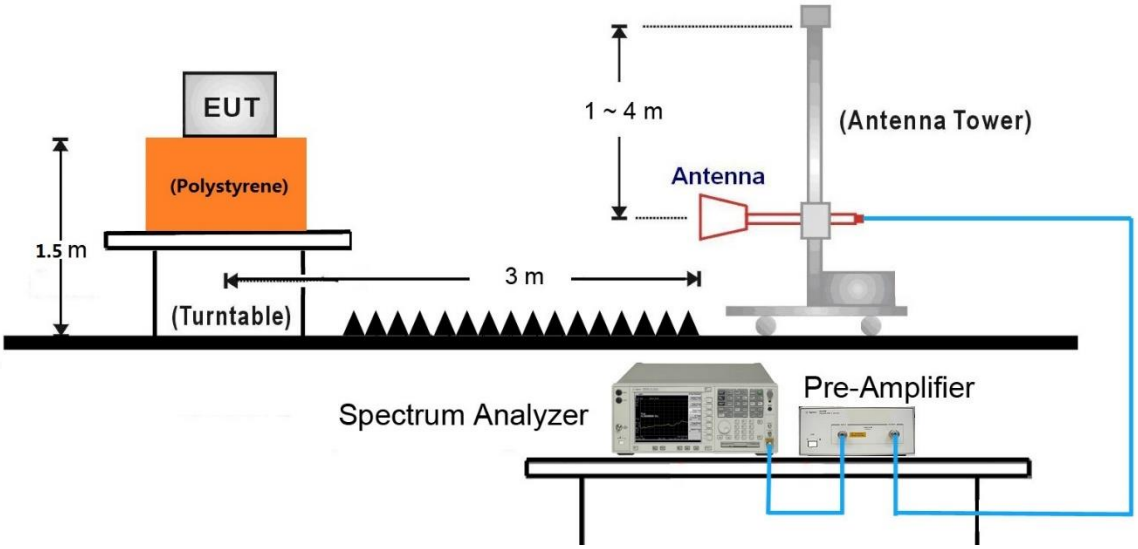
Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Average Field Strength Measurements

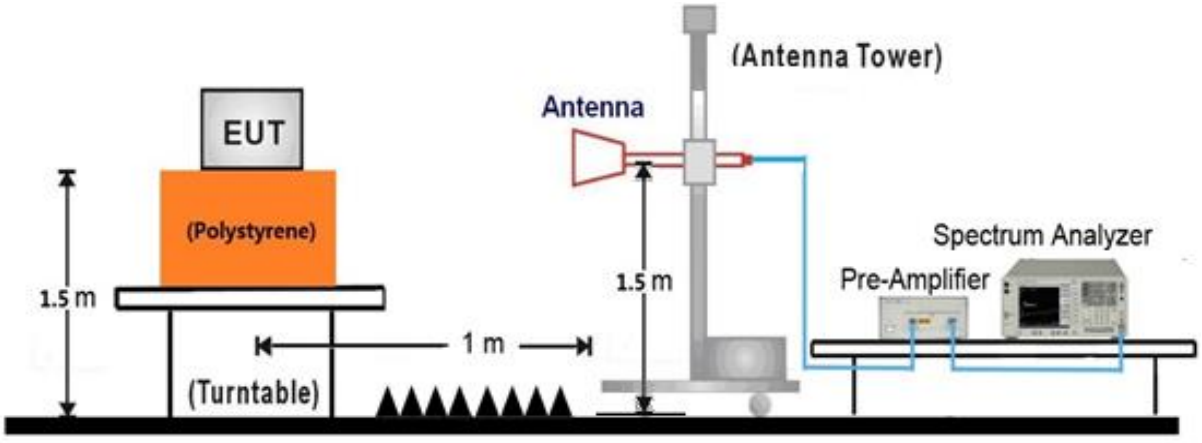
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW ≥ 1/T
4. De As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). 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

7.9.4. Test Setup

1GHz ~ 18GHz Test Setup:

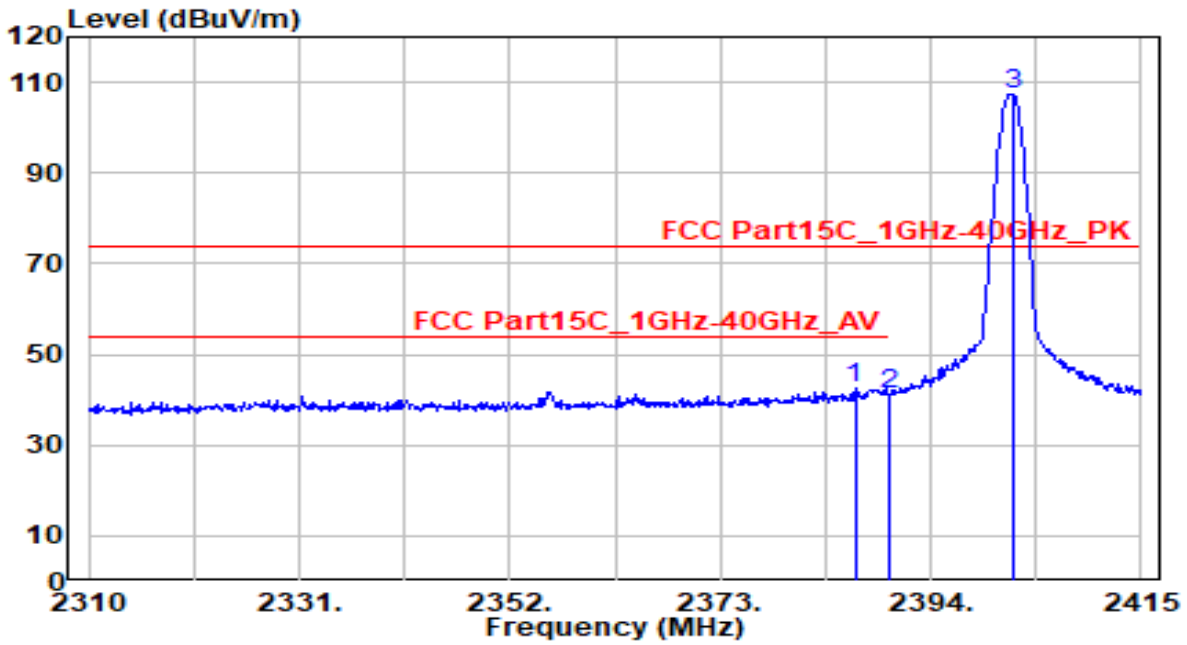


18GHz ~40GHz Test Setup:



7.9.5. Test Result

EUT	Module	Date of Test	2022-01-14
Factor	DRH18-E	Temp. / Humidity	20.3°C /51%
Polarity	Horizontal	Site / Test Engineer	AC2 / Owen
Test Mode	BT_TX_DH5_CH 0	Test Voltage	AC 120V/60Hz

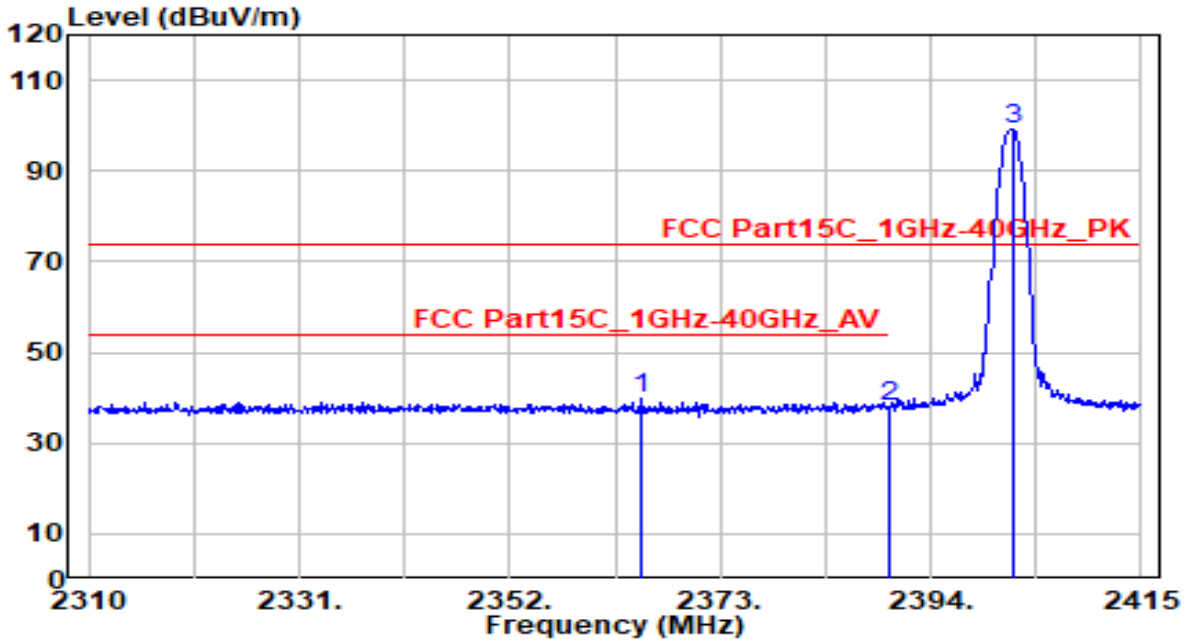


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	2386.440	47.75	-5.14	42.61	-31.39	74.00	160	360	Peak
2		2390.000	46.22	-5.14	41.08	-32.92	74.00	160	360	Peak
3		2402.190	112.56	-5.12	107.44	N/A	N/A	160	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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	Module	Date of Test	2022-01-14
Factor	DRH18-E	Temp. / Humidity	20.3°C /51%
Polarity	Vertical	Site / Test Engineer	AC2 / Owen
Test Mode	BT_TX_DH5_CH 0	Test Voltage	AC 120V/60Hz

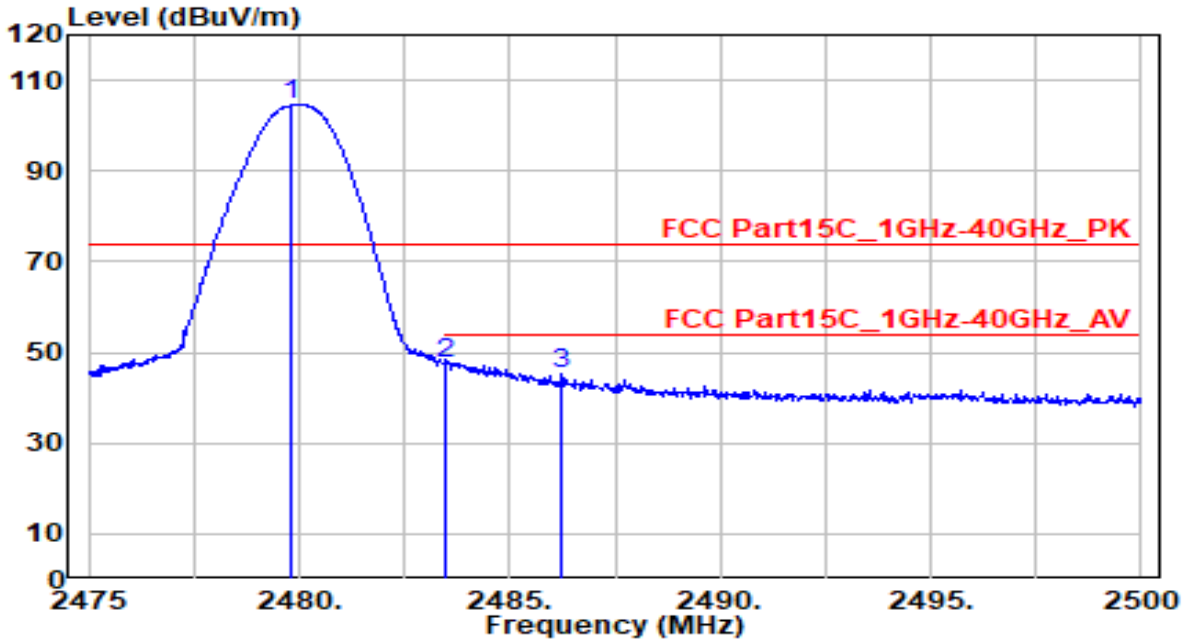


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	2365.230	44.87	-5.18	39.69	-34.31	74.00	320	80	Peak
2		2390.000	43.28	-5.14	38.14	-35.86	74.00	320	80	Peak
3		2402.190	104.29	-5.12	99.17	N/A	N/A	320	80	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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	Module	Date of Test	2022-01-14
Factor	DRH18-E	Temp. / Humidity	20.3°C /51%
Polarity	Horizontal	Site / Test Engineer	AC2 / Owen
Test Mode	BT_TX_DH5_CH 78	Test Voltage	AC 120V/60Hz

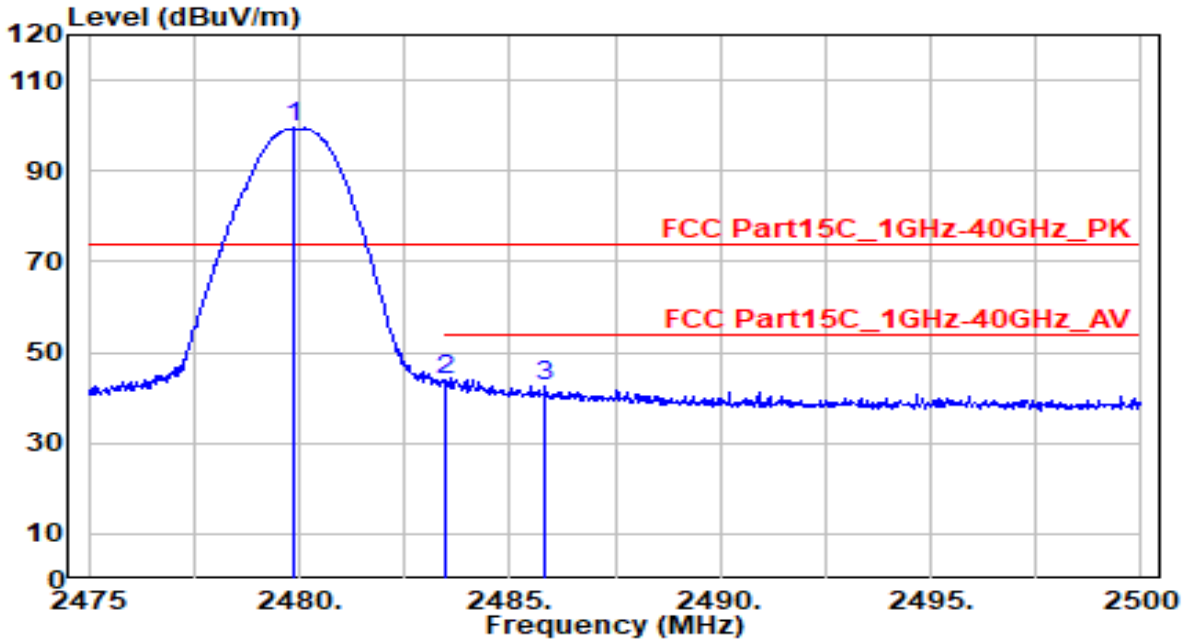


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2479.825	109.51	-5.03	104.48	N/A	N/A	175	355	Peak
2	*	2483.500	52.58	-5.02	47.56	-26.44	74.00	175	355	Peak
3		2486.250	50.22	-5.02	45.20	-28.80	74.00	175	355	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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	Module	Date of Test	2022-01-14
Factor	DRH18-E	Temp. / Humidity	20.3°C /51%
Polarity	Vertical	Site / Test Engineer	AC2 / Owen
Test Mode	BT_TX_DH5_CH 78	Test Voltage	AC 120V/60Hz

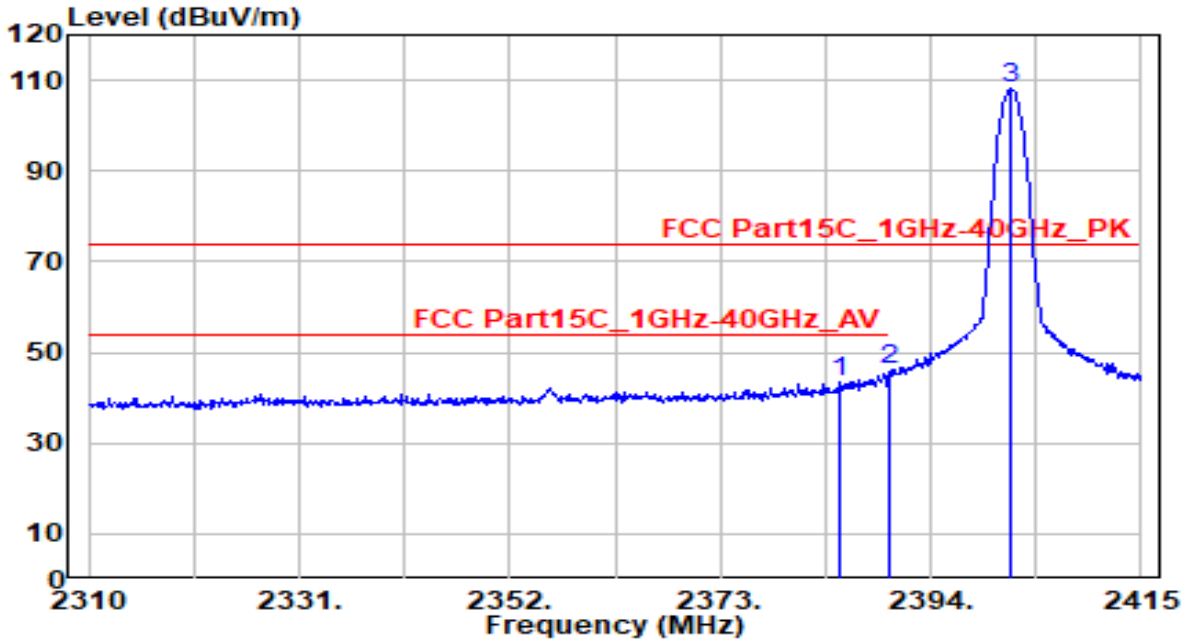


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2479.875	104.44	-5.03	99.41	N/A	N/A	260	85	Peak
2	*	2483.500	48.94	-5.02	43.92	-30.08	74.00	260	85	Peak
3		2485.850	47.53	-5.02	42.51	-31.49	74.00	260	85	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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	Module	Date of Test	2022-01-14
Factor	DRH18-E	Temp. / Humidity	20.3°C /51%
Polarity	Horizontal	Site / Test Engineer	AC2 / Owen
Test Mode	BT_TX_3DH5_CH 0	Test Voltage	AC 120V/60Hz

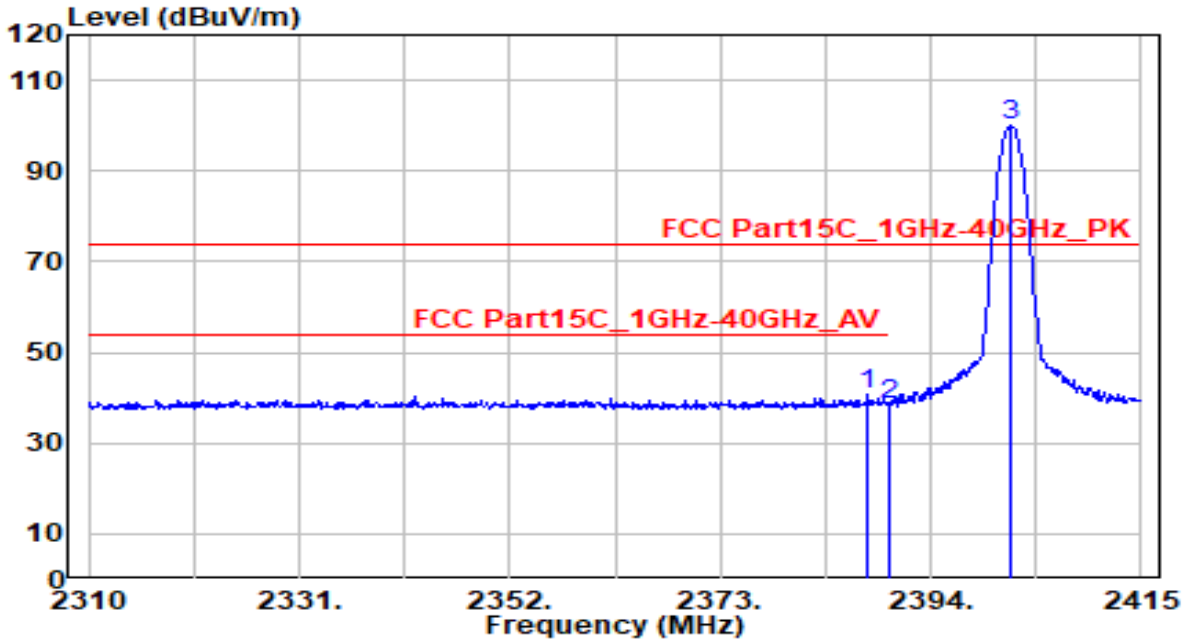


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2384.865	48.65	-5.15	43.51	-30.49	74.00	160	360	Peak
2	*	2390.000	51.29	-5.14	46.15	-27.85	74.00	160	360	Peak
3		2401.980	113.12	-5.12	108.00	N/A	N/A	160	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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	Module	Date of Test	2022-01-14
Factor	DRH18-E	Temp. / Humidity	20.3°C /51%
Polarity	Vertical	Site / Test Engineer	AC2 / Owen
Test Mode	BT_TX_3DH5_CH 0	Test Voltage	AC 120V/60Hz

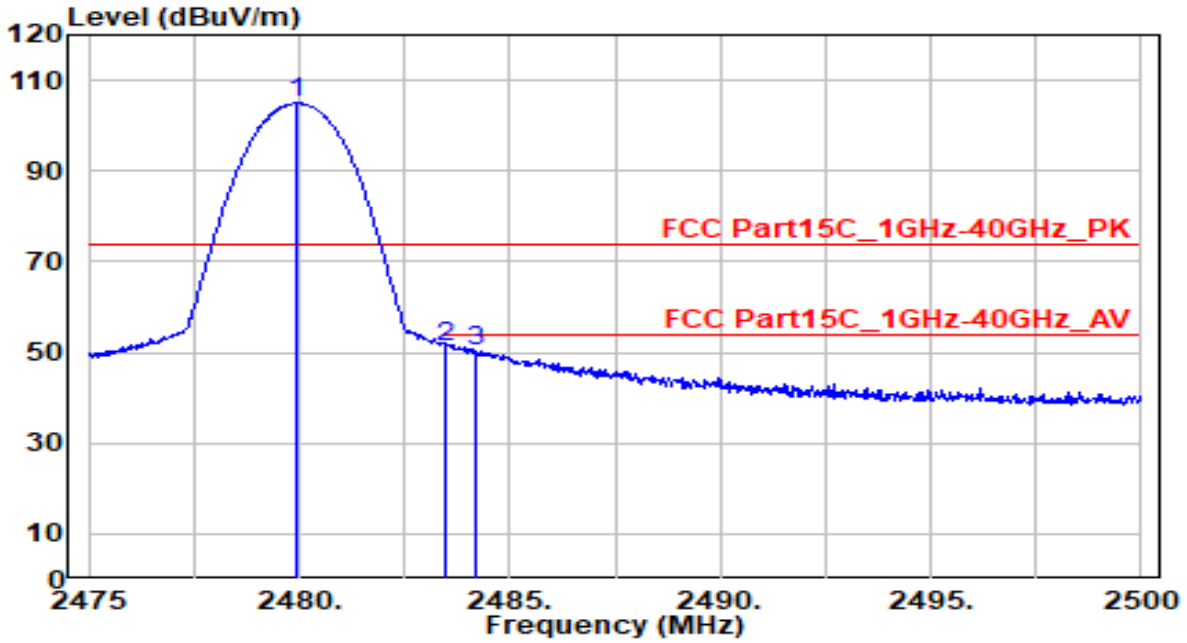


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	2387.805	45.92	-5.14	40.78	-33.22	74.00	320	80	Peak
2		2390.000	43.81	-5.14	38.68	-35.32	74.00	320	80	Peak
3		2401.980	105.06	-5.12	99.94	N/A	N/A	320	80	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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	Module	Date of Test	2022-01-14
Factor	DRH18-E	Temp. / Humidity	20.3°C /51%
Polarity	Horizontal	Site / Test Engineer	AC2 / Owen
Test Mode	BT_TX_3DH5_CH 78	Test Voltage	AC 120V/60Hz

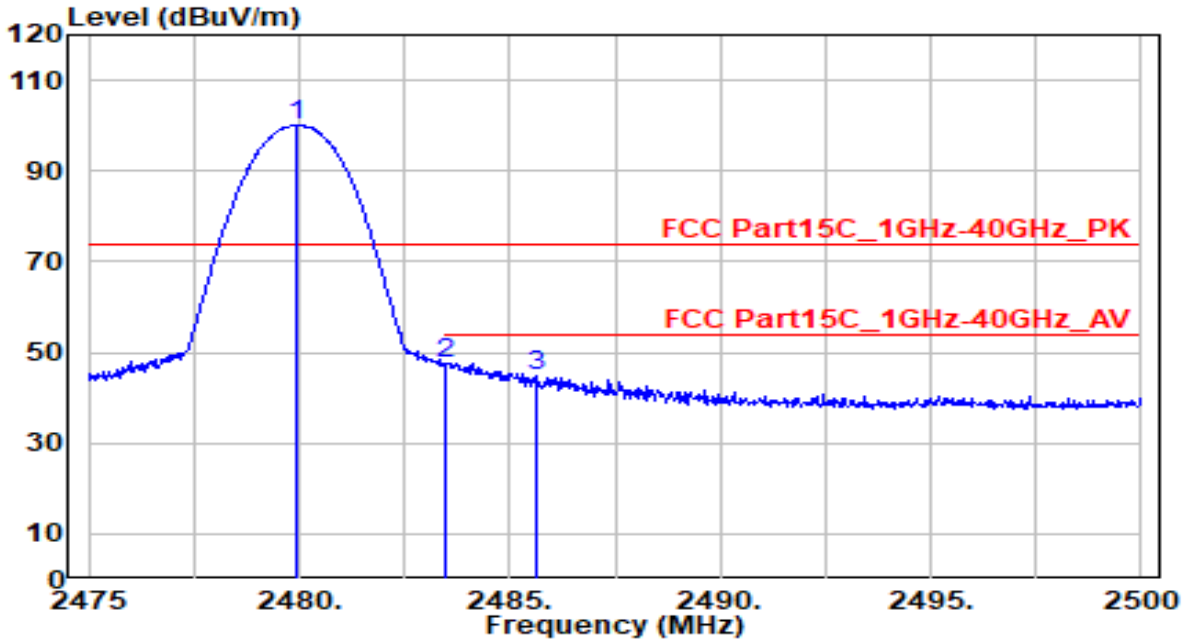


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		2479.950	109.97	-5.03	104.95	N/A	N/A	175	355	Peak
2	*	2483.500	56.25	-5.02	51.23	-22.77	74.00	175	355	Peak
3		2484.200	55.40	-5.02	50.38	-23.62	74.00	175	355	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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	Module	Date of Test	2022-01-14
Factor	DRH18-E	Temp. / Humidity	20.3°C /51%
Polarity	Vertical	Site / Test Engineer	AC2 / Owen
Test Mode	BT_TX_3DH5_CH 78	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		2479.950	105.20	-5.03	100.17	N/A	N/A	260	85	Peak
2	*	2483.500	52.50	-5.02	47.48	-26.52	74.00	260	85	Peak
3		2485.650	49.92	-5.02	44.90	-29.10	74.00	260	85	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ 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.

7.10. AC Conducted Emissions Measurement

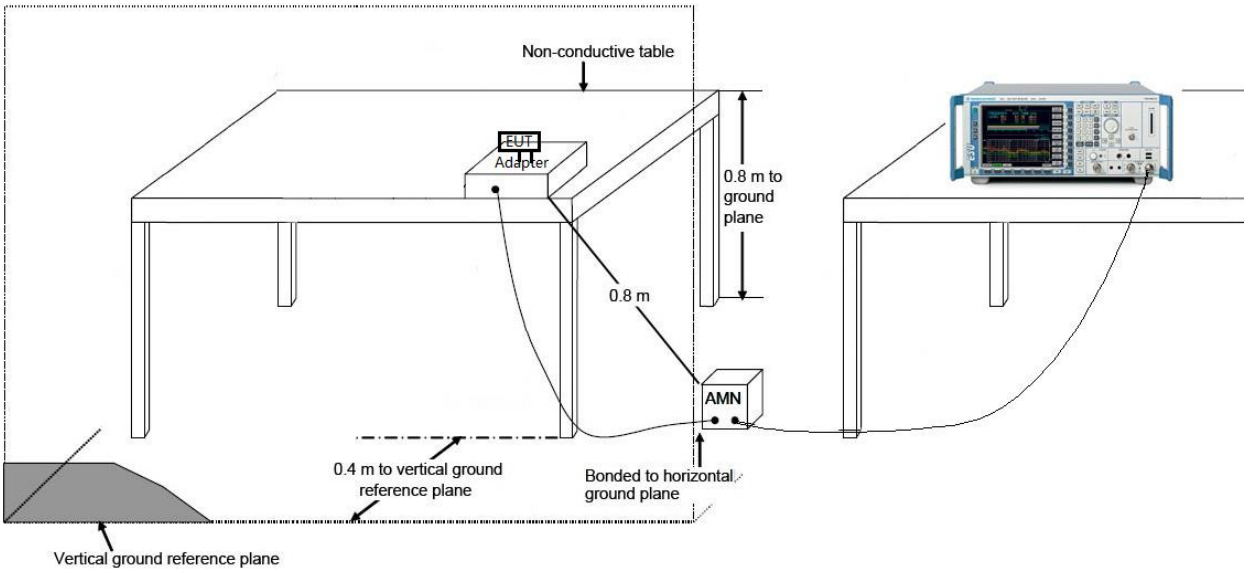
7.10.1. Test Limit

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.

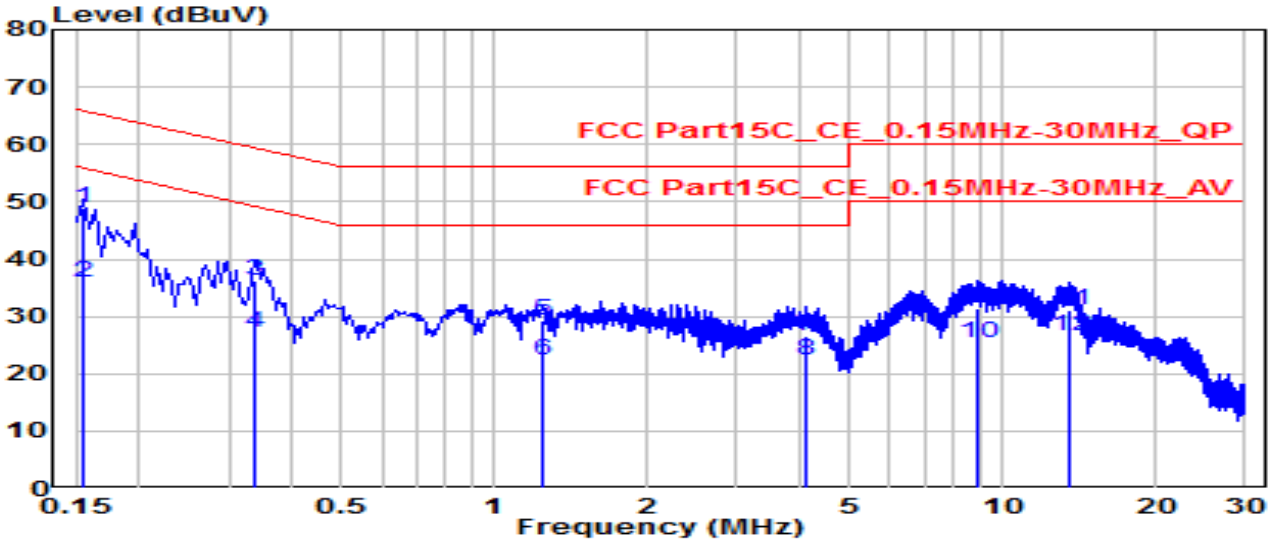
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

7.10.2. Test Setup



7.10.3. Test Result

EUT	Module	Date of Test	2022-01-23
Factor	CE_ENV216-L1 (Filter ON)	Temp. / Humidity	22.7°C /71%
Polarity	Line1	Site / Test Engineer	SR2 / Owen
Test Mode	BT_TX_DH5_CH 39	Test Voltage	AC 120V/60Hz



No		Frequency (MHz)	Reading (dBuV)	C.F (dB)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Remark (QP/PK/AV)
1	*	0.154	39.36	9.61	48.97	-16.79	65.75	QP
2	*	0.154	26.24	9.61	35.85	-19.91	55.75	Average
3		0.339	26.53	9.62	36.15	-23.08	59.23	QP
4		0.339	17.53	9.62	27.15	-22.08	49.23	Average
5		1.239	19.53	9.67	29.19	-26.81	56.00	QP
6		1.239	12.71	9.67	22.38	-23.62	46.00	Average
7		4.114	16.74	9.72	26.47	-29.53	56.00	QP
8		4.114	12.71	9.72	22.43	-23.57	46.00	Average
9		8.947	21.69	9.84	31.53	-28.47	60.00	QP
10		8.947	15.63	9.84	25.47	-24.53	50.00	Average
11		13.590	21.31	9.91	31.22	-28.78	60.00	QP
12		13.590	16.56	9.91	26.47	-23.53	50.00	Average

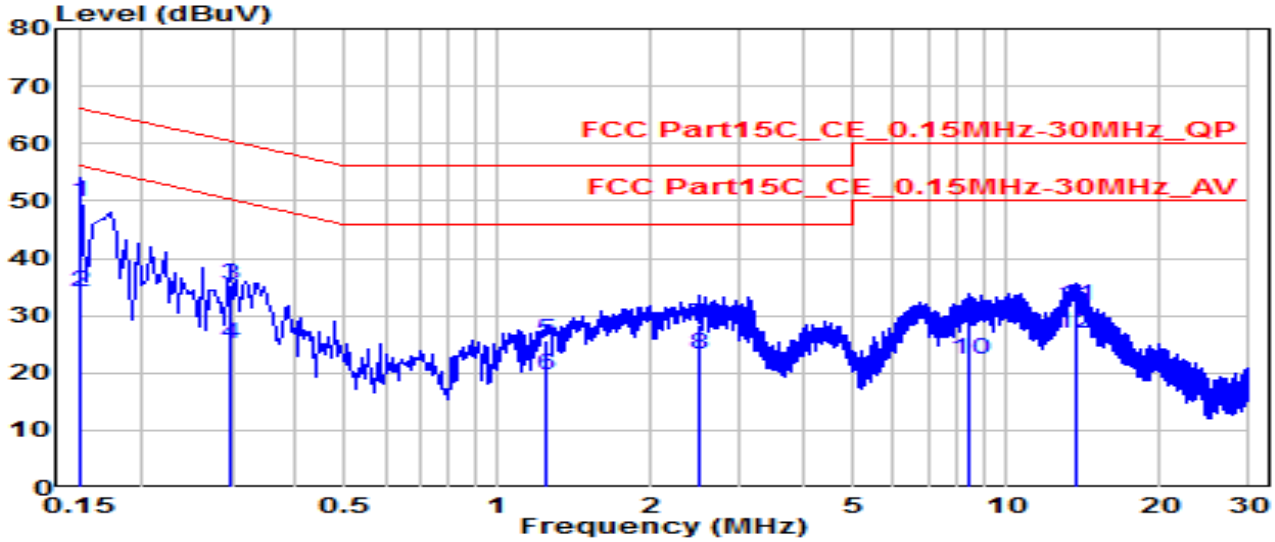
Note:

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

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

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

EUT	Module	Date of Test	2022-01-23
Factor	CE_ENV216-N (Filter ON)	Temp. / Humidity	22.7°C /71%
Polarity	Neutral	Site / Test Engineer	SR2 / Owen
Test Mode	BT_TX_DH5_CH 39	Test Voltage	AC 120V/60Hz

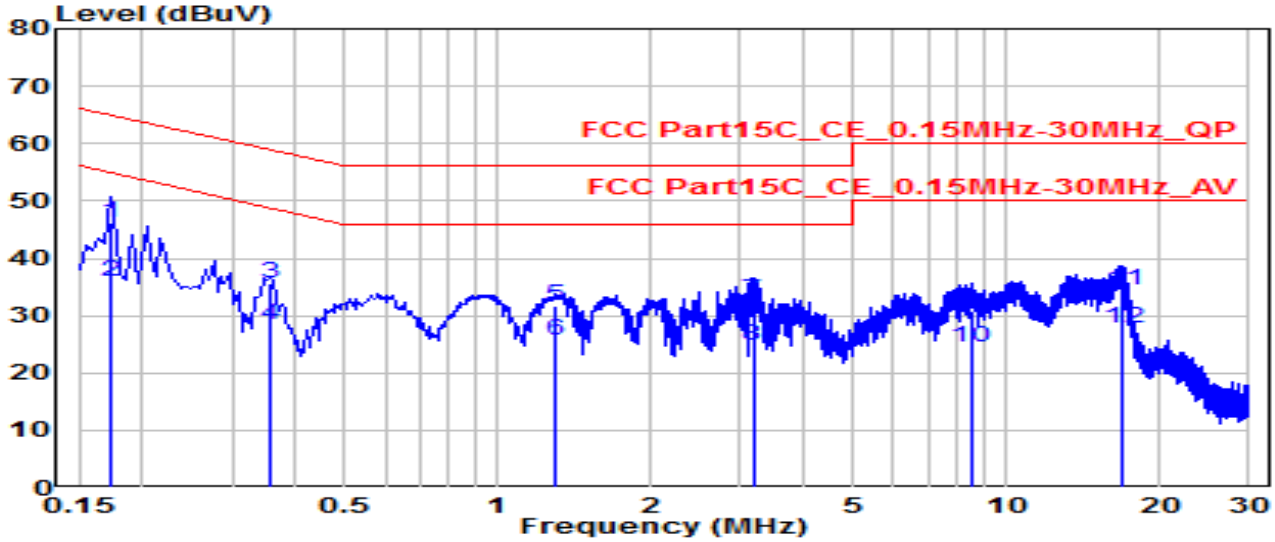


No		Frequency (MHz)	Reading (dBuV)	C.F (dB)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Remark (QP/PK/AV)
1	*	0.150	40.06	9.62	49.68	-16.32	66.00	QP
2	*	0.150	24.51	9.62	34.13	-21.87	56.00	Average
3		0.298	25.69	9.62	35.31	-24.97	60.28	QP
4		0.298	15.49	9.62	25.10	-25.18	50.28	Average
5		1.239	15.85	9.67	25.53	-30.47	56.00	QP
6		1.239	10.00	9.67	19.67	-26.33	46.00	Average
7		2.476	18.80	9.70	28.50	-27.50	56.00	QP
8		2.476	13.59	9.70	23.29	-22.71	46.00	Average
9		8.443	18.44	9.85	28.29	-31.71	60.00	QP
10		8.443	12.56	9.85	22.41	-27.59	50.00	Average
11		13.640	21.76	9.94	31.70	-28.30	60.00	QP
12		13.640	17.01	9.94	26.95	-23.05	50.00	Average

Note:

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

EUT	Module	Date of Test	2022-01-23
Factor	CE_ENV216-L1 (Filter ON)	Temp. / Humidity	22.7°C /71%
Polarity	Line1	Site / Test Engineer	SR2 / Owen
Test Mode	BT_TX_DH5_CH 39	Test Voltage	AC 240V/60Hz



No		Frequency (MHz)	Reading (dBuV)	C.F (dB)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Remark (QP/PK/AV)
1	*	0.172	36.58	9.61	46.19	-18.65	64.84	QP
2	*	0.172	26.18	9.61	35.79	-19.05	54.84	Average
3		0.357	25.99	9.62	35.61	-23.19	58.80	QP
4		0.357	18.84	9.62	28.46	-20.34	48.80	Average
5		1.297	21.89	9.67	31.56	-24.44	56.00	QP
6		1.297	16.03	9.67	25.70	-20.30	46.00	Average
7		3.174	22.89	9.71	32.60	-23.40	56.00	QP
8		3.174	15.11	9.71	24.82	-21.18	46.00	Average
9		8.501	21.08	9.83	30.91	-29.09	60.00	QP
10		8.501	14.51	9.83	24.34	-25.66	50.00	Average
11		16.992	24.37	9.94	34.32	-25.68	60.00	QP
12		16.992	17.89	9.94	27.83	-22.17	50.00	Average

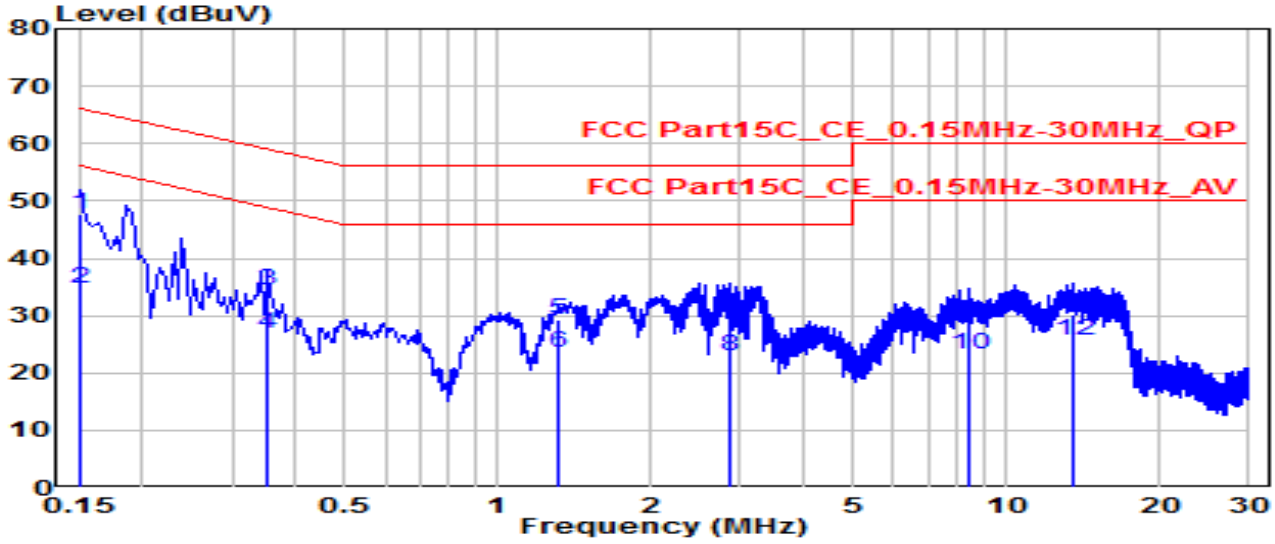
Note:

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

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

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

EUT	Module	Date of Test	2022-01-23
Factor	CE_ENV216-N (Filter ON)	Temp. / Humidity	22.7°C /71%
Polarity	Neutral	Site / Test Engineer	SR2 / Owen
Test Mode	BT_TX_DH5_CH 39	Test Voltage	AC 240V/60Hz



No		Frequency (MHz)	Reading (dBuV)	C.F (dB)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Remark (QP/PK/AV)
1	*	0.150	38.13	9.62	47.75	-18.25	66.00	QP
2	*	0.150	25.07	9.62	34.69	-21.31	56.00	Average
3		0.352	24.87	9.62	34.49	-24.41	58.90	QP
4		0.352	17.36	9.62	26.99	-21.92	48.90	Average
5		1.320	19.65	9.68	29.32	-26.68	56.00	QP
6		1.320	13.75	9.68	23.43	-22.57	46.00	Average
7		2.859	20.56	9.71	30.26	-25.74	56.00	QP
8		2.859	13.14	9.71	22.85	-23.15	46.00	Average
9		8.416	18.70	9.85	28.55	-31.45	60.00	QP
10		8.416	13.32	9.85	23.17	-26.83	50.00	Average
11		13.518	20.31	9.94	30.26	-29.74	60.00	QP
12		13.518	15.79	9.94	25.73	-24.27	50.00	Average

Note:

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

8. CONCLUSION

The data collected relate only the item(s) tested and show that the **Module,** is in compliance with Part 15C & IC RSS-247 of the FCC Rules & IC Rules..

The End