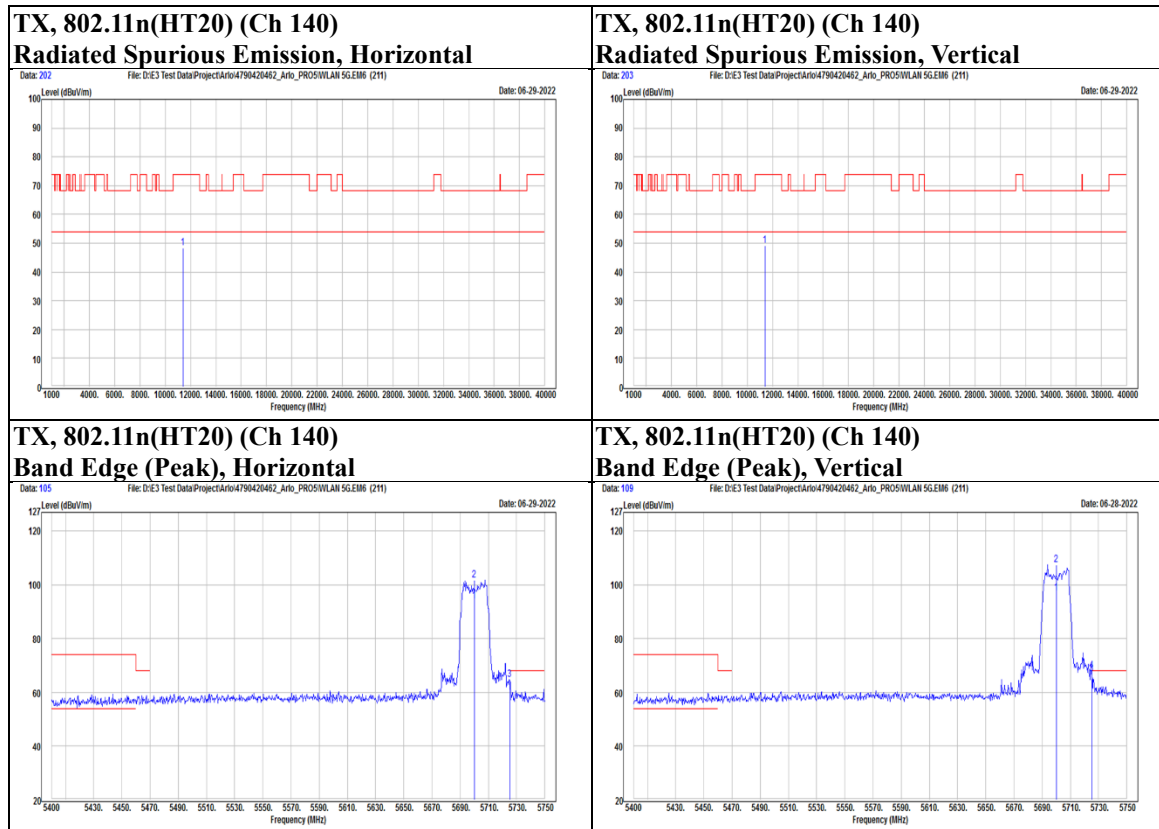




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Mode	802.11n(HT20)	Channel	140
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal	@	5700	81.88	19.73	101.61	N/A	N/A	PK
	@	5700	74.15	19.73	93.88	N/A	N/A	AVG
		5725	44.88	19.96	64.84	68.2	-3.36	PK
	*	11400	29.55	18.85	48.4	74	-25.6	PK
Vertical	@	5700	87.65	19.73	107.38	N/A	N/A	PK
	@	5700	77.12	19.73	96.85	N/A	N/A	AVG
		5725	47.02	19.96	66.98	68.2	-1.22	PK
		5725.15	47.98	19.96	67.94	68.2	-0.26	PK
	*	11400	30.22	18.85	49.07	74	-24.93	PK



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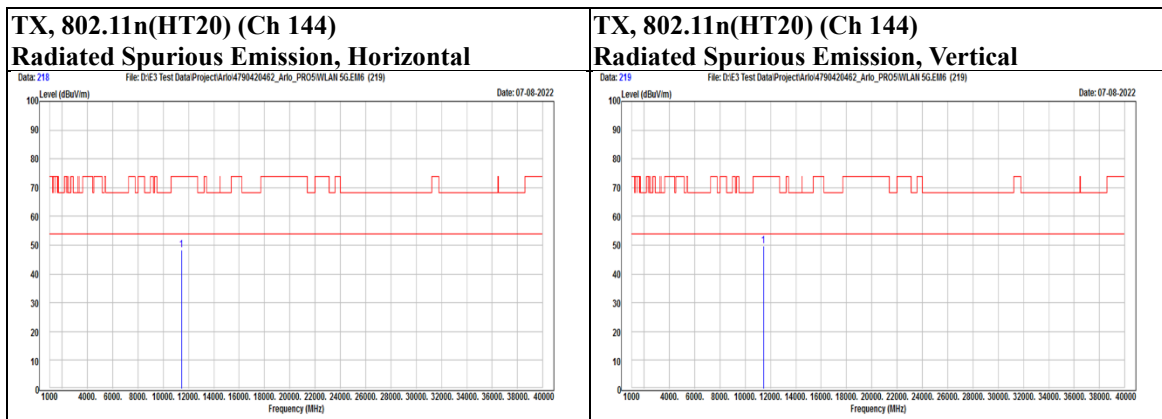
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Mode	802.11n(HT20)	Channel	144
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal	*	11440	29.33	19.06	48.39	74	-25.61	PK
Vertical	*	11440	30.54	19.06	49.6	74	-24.4	PK



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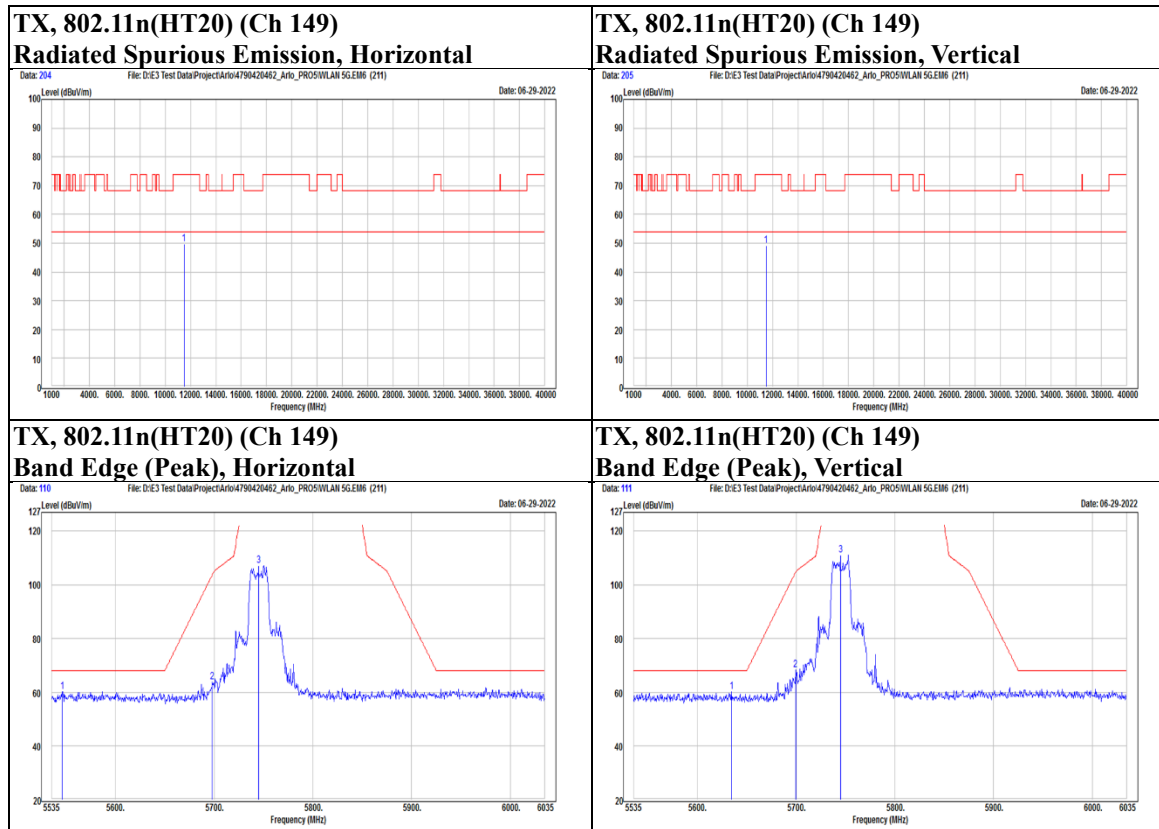
Doc No: 17-EM-F0878 / 6.0



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Mode	802.11n(HT20)	Channel	149
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5546	40.52	19.83	60.35	68.2	-7.85	PK
		5698	44.17	19.72	63.89	103.73	-39.84	PK
	@	5745	87.16	20.15	107.31	N/A	N/A	PK
	*	11490	30.28	19.33	49.61	74	-24.39	PK
Vertical		5634.5	40.63	19.67	60.3	68.2	-7.9	PK
		5699.5	48.61	19.73	68.34	104.83	-36.49	PK
	@	5745	90.78	20.15	110.93	N/A	N/A	PK
	*	11490	29.92	19.33	49.25	74	-24.75	PK



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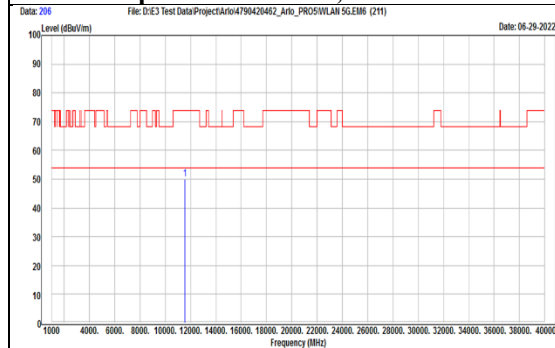


Test report No. : 4790420462-US-R1-V0
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FCC ID : 2APLE18300422

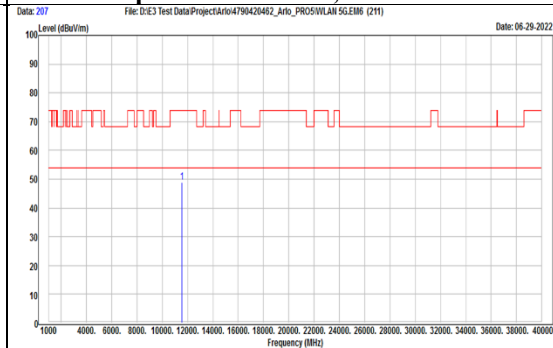
Mode	802.11n(HT20)	Channel	157
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dBm)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5551.5	40.59	19.82	60.41	68.2	-7.79	PK
		5651	40.62	19.67	60.29	68.94	-8.65	PK
	@	5785	85.85	20.45	106.3	N/A	N/A	PK
		5924.5	40.97	20.96	61.93	68.57	-6.64	PK
		6009.5	41.32	20.99	62.31	68.2	-5.89	PK
	*	11570	30.98	19.07	50.05	74	-23.95	PK
Vertical		5635	40.57	19.68	60.25	68.2	-7.95	PK
		5674	41.39	19.7	61.09	86	-24.91	PK
	@	5785	89.04	20.45	109.49	N/A	N/A	PK
		5901.5	40.86	20.98	61.84	85.55	-23.71	PK
		6025	41.4	20.98	62.38	68.2	-5.82	PK
	*	11570	29.74	19.07	48.81	74	-25.19	PK

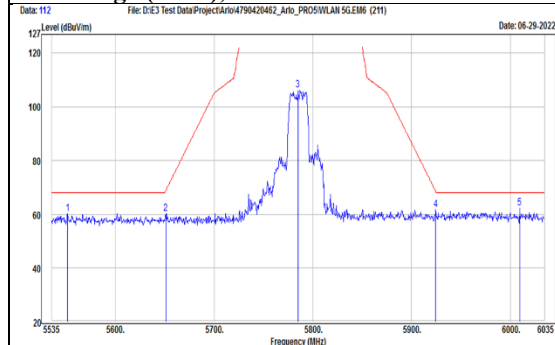
TX, 802.11n(HT20) (Ch 157)
Radiated Spurious Emission, Horizontal



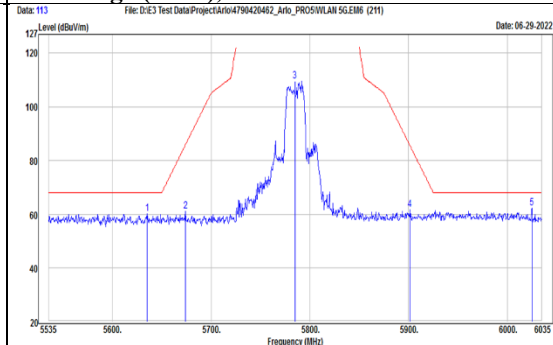
TX, 802.11n(HT20) (Ch 157)
Radiated Spurious Emission, Vertical



TX, 802.11n(HT20) (Ch 157)
Band Edge (Peak), Horizontal



TX, 802.11n(HT20) (Ch 157)
Band Edge (Peak), Vertical



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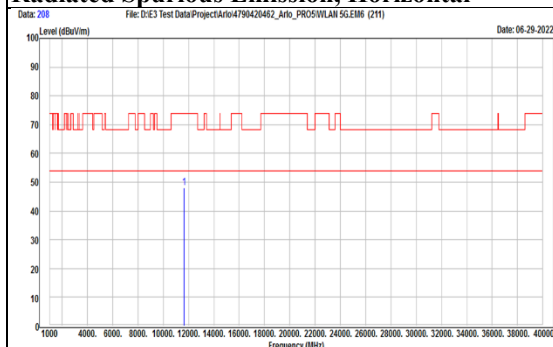
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Mode	802.11n(HT20)	Channel	165
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal	@	5825	85.52	20.58	106.1	N/A	N/A	PK
		5875	40.64	20.8	61.44	105.2	-43.76	PK
		5933	40.84	20.95	61.79	68.2	-6.41	PK
	*	11650	29.16	18.83	47.99	74	-26.01	PK
Vertical	@	5825	88.47	20.58	109.05	N/A	N/A	PK
		5916	40.57	20.97	61.54	74.84	-13.3	PK
		5969	40.14	20.96	61.1	68.2	-7.1	PK
	*	11650	29.02	18.83	47.85	74	-26.15	PK

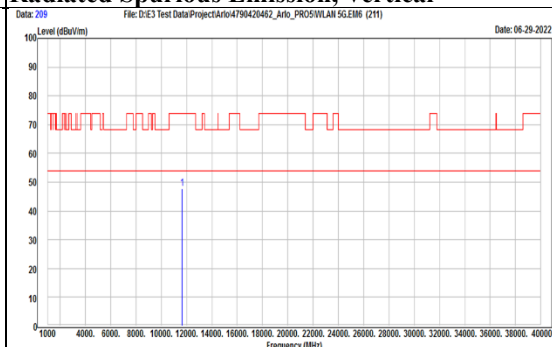
TX, 802.11n(HT20) (Ch 165)

Radiated Spurious Emission, Horizontal



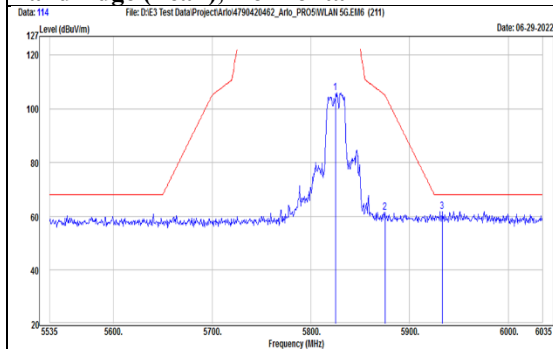
TX, 802.11n(HT20) (Ch 165)

Radiated Spurious Emission, Vertical



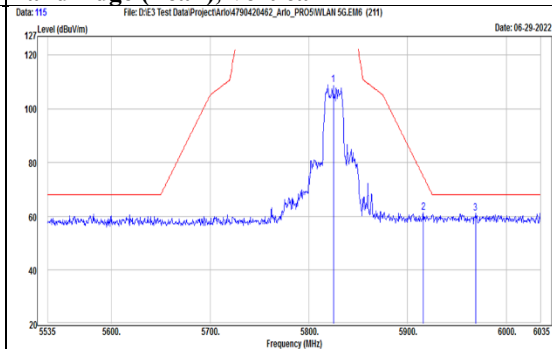
TX, 802.11n(HT20) (Ch 165)

Band Edge (Peak), Horizontal



TX, 802.11n(HT20) (Ch 165)

Band Edge (Peak), Vertical



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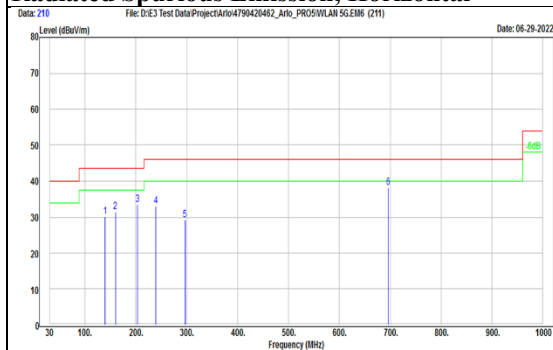
Below 1 GHz

Mode	802.11n(HT20)	Channel	116
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Polarization	Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
Horizontal		139.61	42.3	-12.21	30.09	43.5	-13.41	PK
		159.98	42.46	-11.11	31.35	43.5	-12.15	PK
		203.63	47.56	-13.99	33.57	43.5	-9.93	PK
		239.52	45.29	-12.16	33.13	46	-12.87	PK
		296.75	39.38	-10.13	29.25	46	-16.75	PK
		696.39	38.69	-0.57	38.12	46	-7.88	PK
Vertical		31.94	46.66	-12.51	34.15	40	-5.85	PK
		44.55	44.26	-11.37	32.89	40	-7.11	PK
		85.29	50.43	-17.57	32.86	40	-7.14	PK
		182.29	44.98	-12.65	32.33	43.5	-11.17	PK
		359.8	38.54	-8.3	30.24	46	-15.76	PK
		696.39	36.82	-0.57	36.25	46	-9.75	PK

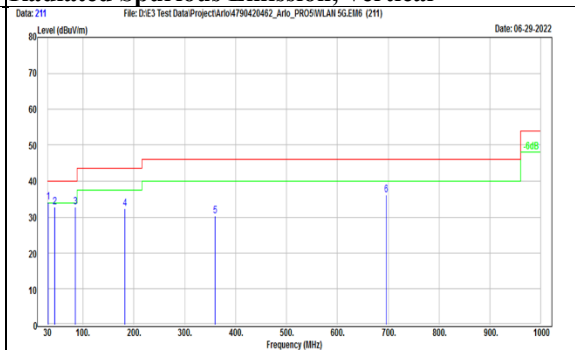
TX, 802.11n(HT20) (Ch 116)

Radiated Spurious Emission, Horizontal



TX, 802.11n(HT20) (Ch 116)

Radiated Spurious Emission, Vertical



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9 kHz ~ 30 MHz Data:

For 9 kHz to 30 MHz radiated emission have performed all modes of operation were investigated. The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

No non-compliance noted:

KDB 414788 D01 OATS and Chamber Correlation Justification

- Base on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

- OATs and chamber correlation testing had been performed and chamber measured test results is the worst case test result.

Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30m open area test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.

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9.8. AC Power Line Conducted Emission

Requirements

Frequency (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15 - 0.5	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.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

Test Procedures

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver is 9kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15MHz-30MHz.
2. All modes of operation were investigated (includes all external accessories) and the worst-case emissions are reported, the other emission levels were low against the limit.
3. Test data of Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB).
4. Test data of Margin(dB) = Result value (dBuV) - Limit value (dBuV).
5. Test data of Correction Factor (dB) = Insertion loss(dB) + Cable loss(dB).

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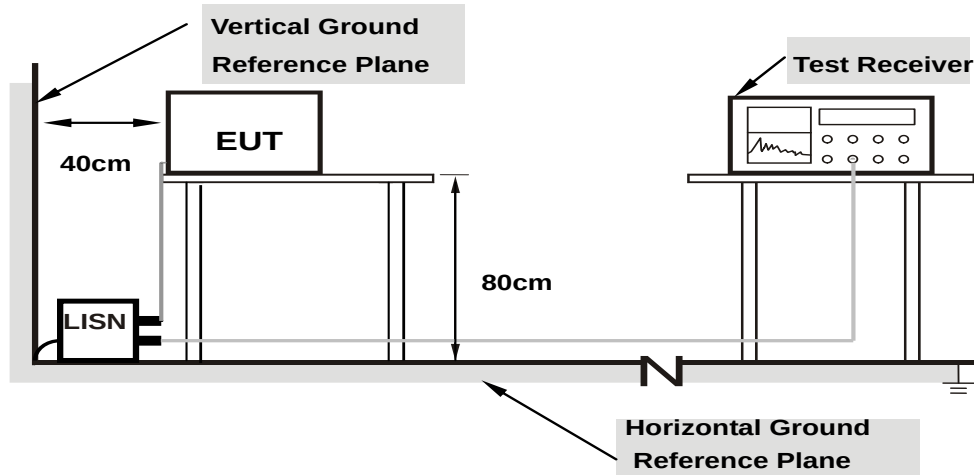
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Test Setup



Note: 1.Support units were connected to second LISN.

For the actual test configuration, please refer to the Setup Configurations.

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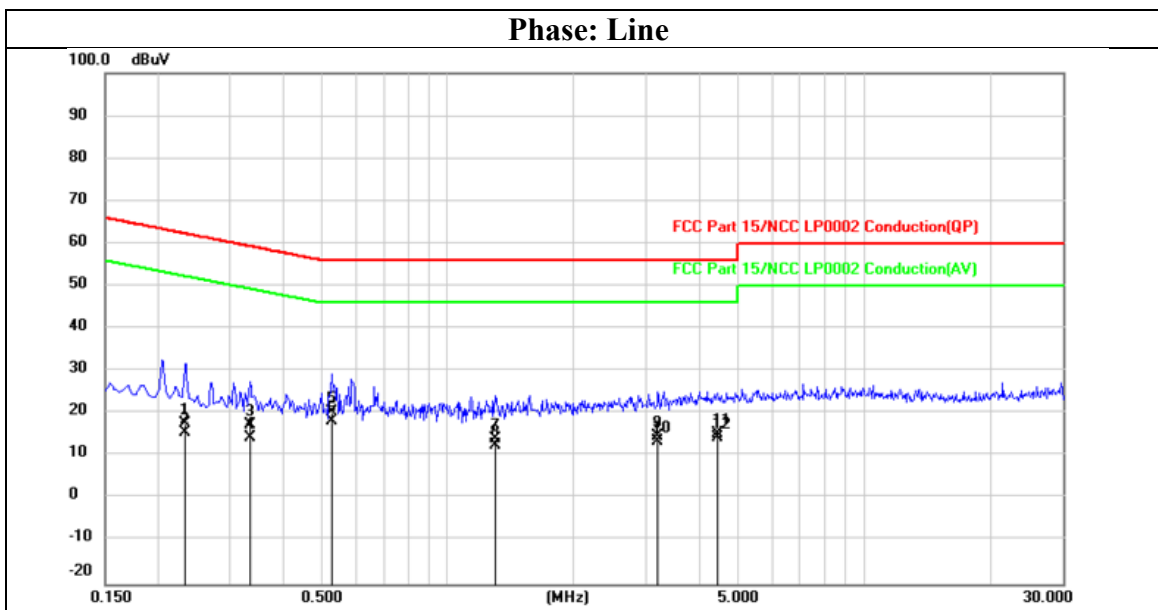
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Test Data

Mode	802.11n(HT20)	Channel	116
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.2340	-1.86	19.53	17.67	62.31	-44.64	QP
2	0.2340	-3.95	19.53	15.58	52.31	-36.73	AVG
3	0.3339	-2.25	19.53	17.28	59.35	-42.07	QP
4	0.3339	-5.24	19.53	14.29	49.35	-35.06	AVG
5	0.5260	0.96	19.54	20.50	56.00	-35.50	QP
6	0.5260	-1.24	19.54	18.30	46.00	-27.70	AVG
7	1.2980	-5.35	19.55	14.20	56.00	-41.80	QP
8	1.2980	-6.93	19.55	12.62	46.00	-33.38	AVG
9	3.1980	-4.81	19.60	14.79	56.00	-41.21	QP
10	3.1980	-6.00	19.60	13.60	46.00	-32.40	AVG
11	4.4540	-4.26	19.62	15.36	56.00	-40.64	QP
12	4.4540	-5.35	19.62	14.27	46.00	-31.73	AVG

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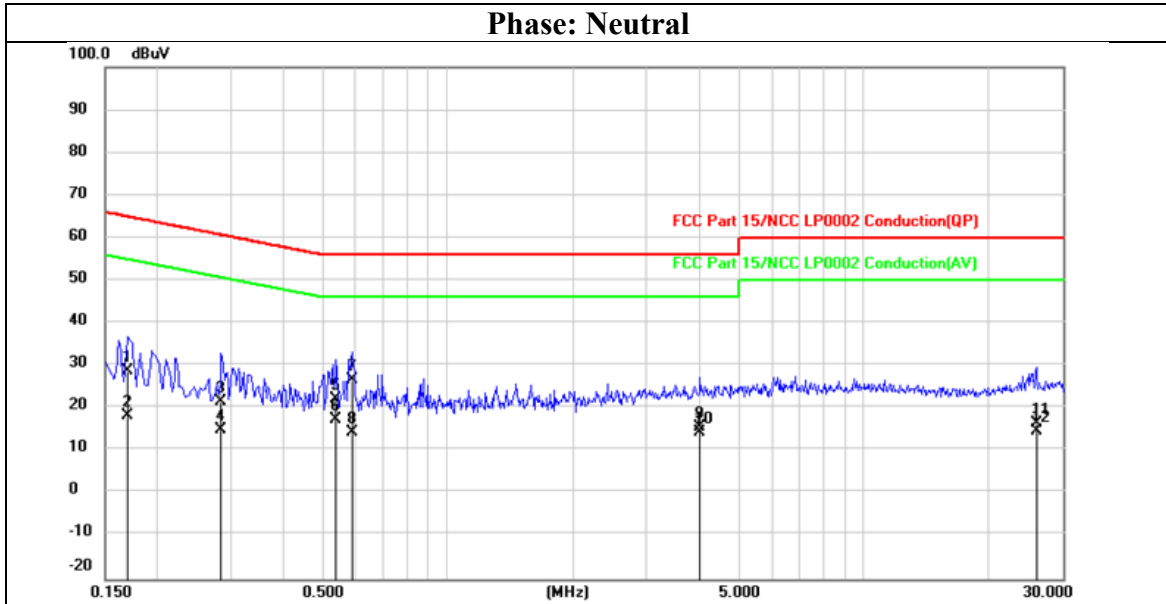
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Mode	5G_TX5580	Channel	116
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1700	9.32	19.53	28.85	64.96	-36.11	QP
2	0.1700	-1.18	19.53	18.35	54.96	-36.61	AVG
3	0.2860	2.12	19.53	21.65	60.64	-38.99	QP
4	0.2860	-4.59	19.53	14.94	50.64	-35.70	AVG
5	0.5380	2.71	19.54	22.25	56.00	-33.75	QP
6	0.5380	-2.08	19.54	17.46	46.00	-28.54	AVG
7	0.5899	7.21	19.54	26.75	56.00	-29.25	QP
8	0.5899	-5.18	19.54	14.36	46.00	-31.64	AVG
9	4.0340	-3.98	19.62	15.64	56.00	-40.36	QP
10	4.0340	-5.34	19.62	14.28	46.00	-31.72	AVG
11	25.9540	-3.61	19.93	16.32	60.00	-43.68	QP
12	25.9540	-5.36	19.93	14.57	50.00	-35.43	AVG

END OF REPORT

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