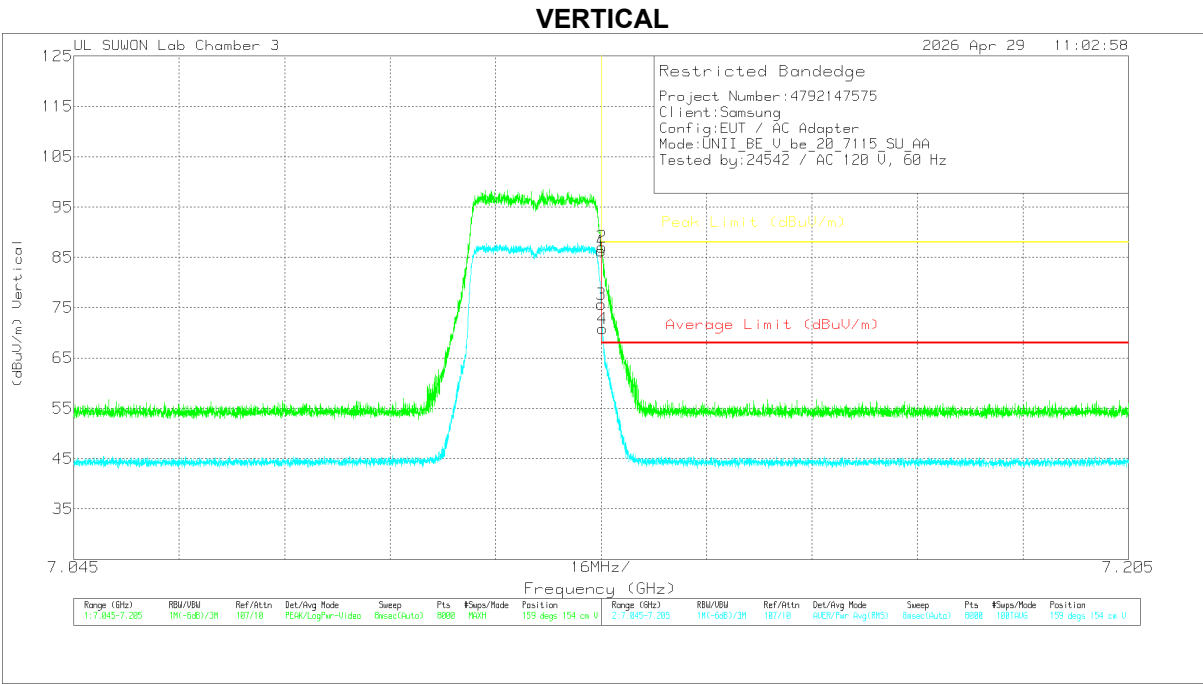


11.4. TX ABOVE 1GHz 2Tx MODE IN U-NII-8 BAND

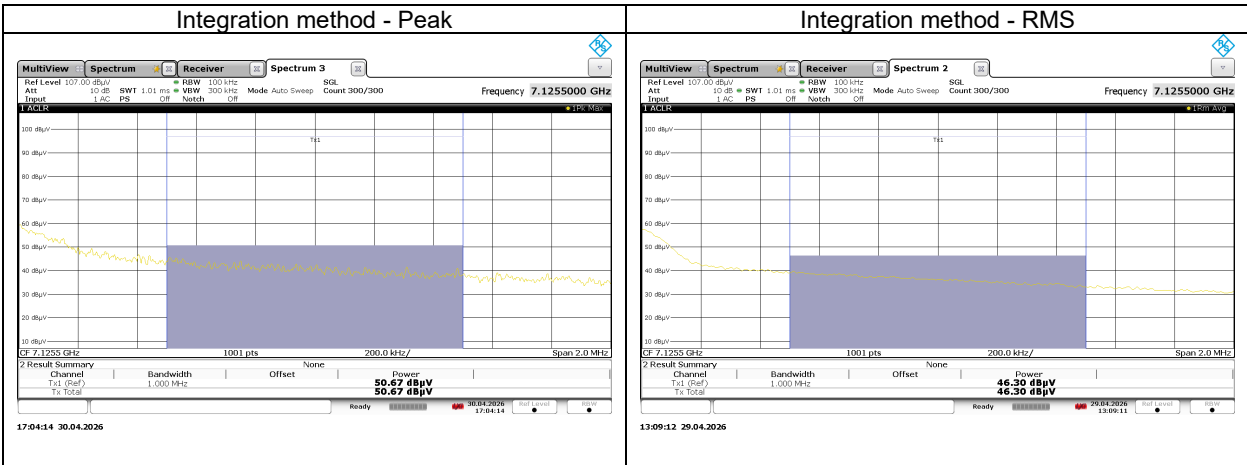
BANDEDGE (WORST CASE: 802.11be EHT20 7115 MHz / SU Low power indoor)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det.	Antenna_Factor (dB/m)	10dB_Path Loss(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	7.12517 (Zoom scan)	50.67	RMS	35.9	-16.6	0	69.97			88	-18.03	159	154	V
2	7.12501 (Zoom scan)	46.30	RMS	35.9	-16.6	0	65.6	68	-2.40	-	-	159	154	V

Pk - Peak detector
RMS - RMS detection

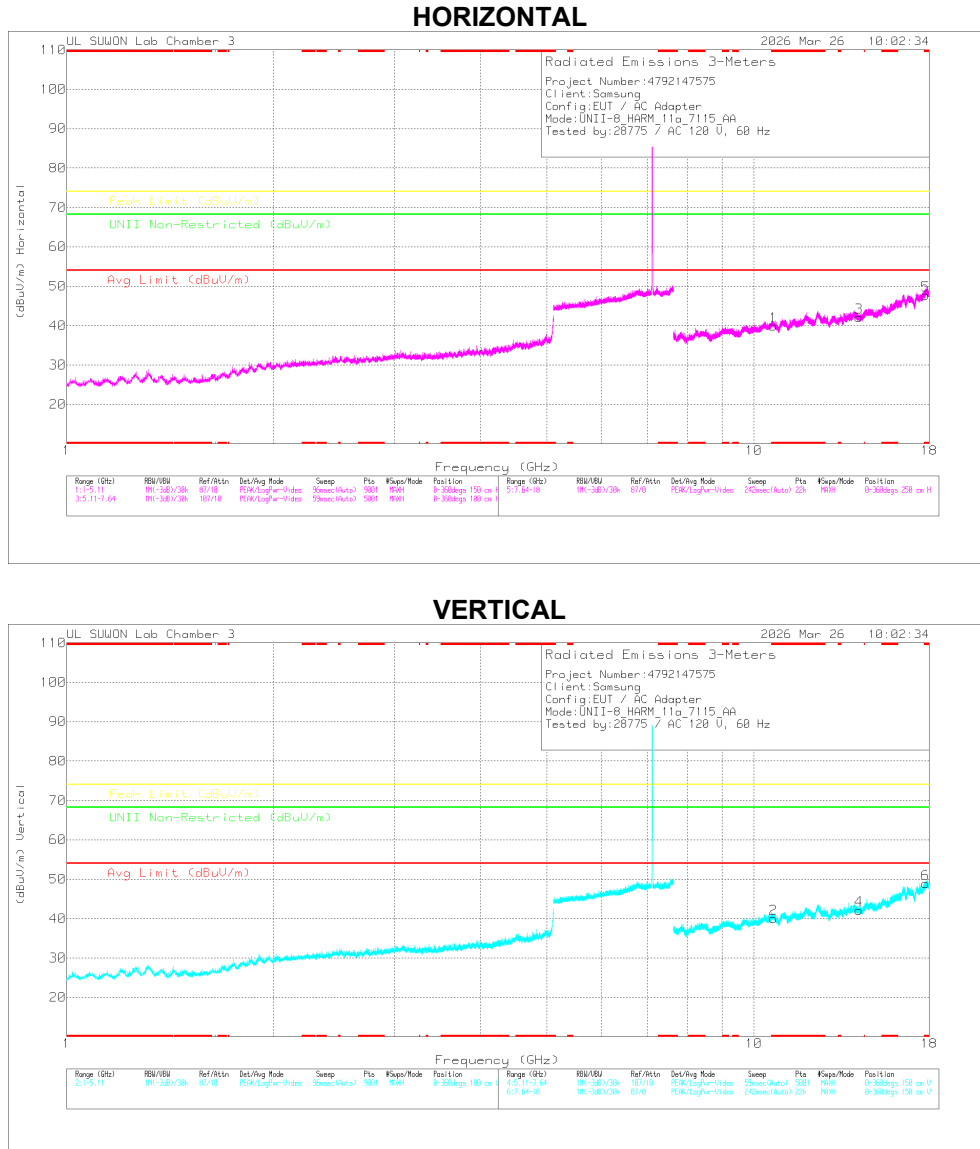


BANDEDGE TEST DATA

Mode	Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB/m]	Loss [dB]	DC Corr [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
802.11a LPI & VLP	7115	MIMO	7.12533	59.70	Pk	35.90	-16.60	0.00	79.00	-	-	88.00	-9.00	176	261	H
			7.12509 (Zoom scan)	44.52	RMS	35.90	-16.60	0.30	64.12	68.00	-3.88	-	-	176	261	H
			7.12507	58.85	Pk	35.90	-16.60	0.00	78.15	-	-	88.00	-9.85	162	155	V
			7.12507 (Zoom scan)	45.43	RMS	35.90	-16.60	0.30	65.03	68.00	-2.97	-	-	162	155	V
802.11be EHT20 SU mode LPI (SU Worst case)	7115	MIMO	7.12509 (Zoom scan)	60.52	Pk	35.90	-16.60	0.00	79.82	-	-	88.00	-8.18	180	264	H
			7.12501 (Zoom scan)	44.84	RMS	35.90	-16.60	0.00	64.14	68.00	-3.86	-	-	180	264	H
			7.12517 (Zoom scan)	50.67	Pk	35.90	-16.60	0.00	69.97	-	-	88.00	-18.03	159	154	V
			7.12501 (Zoom scan)	46.30	RMS	35.90	-16.60	0.00	65.60	68.00	-2.40	-	-	159	154	V
802.11be EHT20 SU mode VLP	7115	MIMO	7.12503 (Zoom scan)	55.83	Pk	35.90	-16.60	0.00	75.13	-	-	88.00	-12.87	176	264	H
			7.12501 (Zoom scan)	40.66	RMS	35.90	-16.60	0.00	59.96	68.00	-8.04	-	-	176	264	H
			7.12509 (Zoom scan)	55.21	Pk	35.90	-16.60	0.00	74.51	-	-	88.00	-13.49	207	162	V
			7.12501 (Zoom scan)	40.03	RMS	35.90	-16.60	0.00	59.33	68.00	-8.67	-	-	207	162	V
802.11be EHT20 RU mode 52 Tone offset 40 LPI	7115	MIMO	7.12501 (Zoom scan)	58.07	Pk	35.90	-16.60	0.00	77.37	-	-	88.00	-10.63	173	279	H
			7.12501 (Zoom scan)	42.88	RMS	35.90	-16.60	0.00	62.18	68.00	-5.82	-	-	173	279	H
			7.12503 (Zoom scan)	56.36	Pk	35.90	-16.60	0.00	75.66	-	-	88.00	-12.34	199	286	V
			7.12501 (Zoom scan)	42.01	RMS	35.90	-16.60	0.00	61.31	68.00	-6.69	-	-	199	286	V
802.11be EHT20 MRU mode 106+26 Tone offset 83 LPI	7115	MIMO	7.12501 (Zoom scan)	56.02	Pk	35.90	-16.60	0.00	75.32	-	-	88.00	-12.68	181	263	H
			7.12501 (Zoom scan)	41.70	RMS	35.90	-16.60	0.09	61.09	68.00	-6.91	-	-	181	263	H
			7.12501 (Zoom scan)	56.37	Pk	35.90	-16.60	0.00	75.67	-	-	88.00	-12.33	207	155	V
			7.12501 (Zoom scan)	42.26	RMS	35.90	-16.60	0.09	61.65	68.00	-6.35	-	-	207	155	V
802.11be EHT40 SU mode LPI	7085	MIMO	7.12501	35.11	Pk	35.90	-16.60	0.00	54.41	-	-	88.00	-33.59	207	164	V
			7.14854	37.43	Pk	35.90	-16.40	0.00	56.93	-	-	88.00	-31.07	207	164	V
			7.12501	24.95	RMS	35.90	-16.60	0.00	44.25	68.00	-23.75	-	-	207	164	V
			7.17288	25.87	RMS	35.90	-16.30	0.00	45.47	68.00	-22.53	-	-	207	164	V
802.11be EHT80 SU mode LPI	7025	MIMO	7.12501	35.61	Pk	35.90	-16.60	0.00	54.91	-	-	88.00	-33.09	207	165	V
			7.12615	37.52	Pk	35.90	-16.60	0.00	56.82	-	-	88.00	-31.18	207	165	V
			7.12501	25.87	RMS	35.90	-16.60	0.00	45.17	68.00	-22.83	-	-	207	165	V
			7.12907	26.70	RMS	35.90	-16.60	0.00	46.00	68.00	-22.00	-	-	207	165	V
802.11be EHT160 SU mode LPI	6985	MIMO	7.12501	38.99	Pk	35.90	-16.60	0.00	58.29	-	-	88.00	-29.71	205	165	V
			7.12913	50.18	Pk	35.90	-16.60	0.00	69.48	-	-	88.00	-18.52	205	165	V
			7.12501	29.56	RMS	35.90	-16.60	0.00	48.86	68.00	-19.14	-	-	205	165	V
			7.13915	31.67	RMS	35.90	-16.50	0.00	51.07	68.00	-16.93	-	-	205	165	V
802.11be EHT320 SU mode LPI	6905	MIMO	7.12501	39.69	Pk	35.90	-16.60	0.00	58.99	-	-	88.00	-29.01	207	164	V
			7.16900	43.17	Pk	35.90	-16.30	0.00	62.77	-	-	88.00	-25.23	207	164	V
			7.12501	28.34	RMS	35.90	-16.60	0.00	47.64	68.00	-20.36	-	-	207	164	V
			7.14151	30.32	RMS	35.90	-16.50	0.00	49.72	68.00	-18.28	-	-	207	164	V

Note1. PK-U - U-NII: Maximum Peak / ADR - U-NII AD primary method, RMS average

HARMONICS AND SPURIOUS EMISSIONS (WORST CASE: 802.11a 7115 MHz / Very Low Power)



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

Radiated Emissions

Frequency (GHz)	Marker Reading (dBm)	Det	Antenna Factor (dBm)	RDCh_HP_Path Loss(dB)	DC Corr (dB)	Corrected Reading (dBm)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Altitude (m)	Height (m)	Polarity
* 10.67371	33.1	PK-U	37.7	-20.4	0	50.4	-	-	74	-23.6	-	-	0	100	H
* 10.67392	32.84	PK-U	37.7	-20.4	0	50.14	-	-	74	-23.86	-	-	0	100	V
14.22655	35.55	PK-U	39.3	-22.6	0	52.25	-	-	-	-	58.2	-15.95	0	100	H
14.2367	36.26	PK-U	39.3	-22.7	0	52.86	-	-	-	-	58.2	-15.34	0	100	V
* 17.79024	31.91	PK-U	41.4	-14.2	0	59.11	-	-	74	-14.89	-	-	0	100	H
* 17.78831	19.86	ADR	41.4	-14.3	3	47.26	54	-6.74	-	-	-	-	0	100	H
* 17.78626	31.61	PK-U	41.4	-14.2	0	58.81	-	-	74	-15.19	-	-	0	100	V
* 17.78799	19.99	ADR	41.4	-14.3	3	47.39	54	-6.61	-	-	-	-	0	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

HARMONICS AND SPURIOUS EMISSIONS TEST DATA

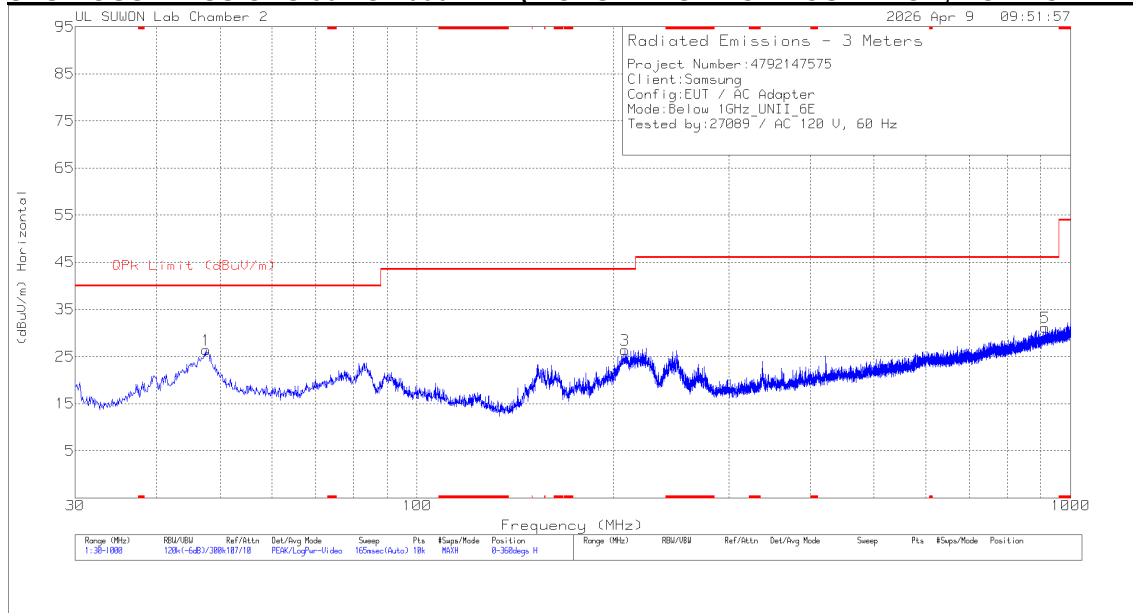
Mode	Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB/m]	Loss [dB]	DC Corr [dB]	Result [dBuV/m]	AV Limit [dBuV/m]	AV Margin [dB]	PK Limit [dBuV/m]	PK Margin [dB]	Non-Restricted [dBuV/m]	Margin [dB]	Azimuth [Degs]	Height [cm]	Polarity
802.11a LPI	6895	MIMO	10.34512	33.77	PK-U	37.50	-20.50	0.00	50.77	-	-	-	-	68.20	-17.43	0	100	H
			10.34538	33.71	PK-U	37.50	-20.50	0.00	50.71	-	-	-	-	68.20	-17.49	0	100	V
			13.79432	35.74	PK-U	38.70	-22.30	0.00	52.14	-	-	-	-	68.20	-16.06	0	100	H
			13.78356	36.23	PK-U	38.70	-22.20	0.00	52.73	-	-	-	-	68.20	-15.47	359	100	V
			17.23629	32.73	PK-U	41.10	-16.10	0.00	57.73	-	-	-	-	68.20	-10.47	0	100	H
			17.23771	32.56	PK-U	41.10	-16.10	0.00	57.56	-	-	-	-	68.20	-10.64	0	100	V
	6995	MIMO	10.49143	33.45	PK-U	37.60	-21.10	0.00	49.95	-	-	-	-	68.20	-18.25	0	100	H
			10.49176	33.74	PK-U	37.60	-21.20	0.00	50.14	-	-	-	-	68.20	-18.06	0	100	V
			13.98961	36.48	PK-U	38.80	-22.40	0.00	52.88	-	-	-	-	68.20	-15.32	0	100	H
			13.98413	39.53	PK-U	38.80	-22.40	0.00	55.93	-	-	-	-	68.20	-12.27	204	100	V
			17.48913	32.30	PK-U	41.20	-15.60	0.00	57.90	-	-	-	-	68.20	-10.30	0	100	H
			17.48940	32.08	PK-U	41.20	-15.60	0.00	57.68	-	-	-	-	68.20	-10.52	0	100	V
	7115	MIMO	*10.67093	33.40	PK-U	37.70	-20.50	0.00	50.60	-	-	74.00	-23.40	-	-	0	100	H
			*10.68666	33.32	PK-U	37.70	-20.50	0.00	50.52	-	-	74.00	-23.48	-	-	0	100	V
			14.22931	35.85	PK-U	39.30	-22.60	0.00	52.55	-	-	-	-	68.20	-15.65	0	100	H
			14.22856	40.44	PK-U	39.30	-22.60	0.00	57.14	-	-	-	-	68.20	-11.06	208	100	V
			17.79	30.68	PK-U	41.40	-14.20	0.00	57.88	-	-	74.00	-16.12	-	-	0	100	H
			*17.78842	19.39	ADR	41.40	-14.30	0.30	46.79	54.00	-7.21	-	-	-	-	0	100	H
			*17.78446	31.13	PK-U	41.40	-14.30	0.00	58.23	-	-	74.00	-15.77	-	-	0	100	V
			*17.79211	19.15	ADR	41.40	-14.00	0.30	46.85	54.00	-7.15	-	-	-	-	0	100	V
	6895	MIMO	10.33932	33.08	PK-U	37.50	-20.50	0.00	50.08	-	-	-	-	68.20	-18.12	0	100	H
			10.34173	33.68	PK-U	37.50	-20.60	0.00	50.58	-	-	-	-	68.20	-17.62	0	100	V
			13.79159	35.49	PK-U	38.70	-22.10	0.00	52.09	-	-	-	-	68.20	-16.11	0	100	H
			13.79050	35.98	PK-U	38.70	-22.10	0.00	52.58	-	-	-	-	68.20	-15.62	0	100	V
			17.23526	33.08	PK-U	41.10	-16.10	0.00	58.08	-	-	-	-	68.20	-10.12	0	100	H
			17.24158	32.32	PK-U	41.10	-16.00	0.00	57.42	-	-	-	-	68.20	-10.78	0	100	V
	6995	MIMO	10.49356	33.07	PK-U	37.60	-21.20	0.00	49.47	-	-	-	-	68.20	-18.73	0	100	H
			10.49222	33.10	PK-U	37.60	-21.20	0.00	49.50	-	-	-	-	68.20	-18.70	0	100	V
			13.98560	36.07	PK-U	38.80	-22.40	0.00	52.47	-	-	-	-	68.20	-15.73	0	100	H
			13.99268	36.32	PK-U	38.80	-22.30	0.00	52.82	-	-	-	-	68.20	-15.38	0	100	V
			17.48876	32.35	PK-U	41.20	-15.60	0.00	57.95	-	-	-	-	68.20	-10.25	0	100	H
			17.48746	32.59	PK-U	41.20	-15.60	0.00	58.19	-	-	-	-	68.20	-10.01	0	100	V
	7115	MIMO	*10.67371	33.10	PK-U	37.70	-20.40	0.00	50.40	-	-	74.00	-23.60	-	-	0	100	H
			*10.67392	32.84	PK-U	37.70	-20.40	0.00	50.14	-	-	74.00	-23.86	-	-	0	100	V
			14.22655	35.55	PK-U	39.30	-22.60	0.00	52.25	-	-	-	-	68.20	-15.95	0	100	H
			14.23670	36.26	PK-U	39.30	-22.70	0.00	52.86	-	-	-	-	68.20	-15.34	0	100	V
			*17.79024	31.91	PK-U	41.40	-14.20	0.00	59.11	-	-	74.00	-14.89	-	-	0	100	H
			*17.78831	19.86	ADR	41.40	-14.30	0.30	47.26	54.00	-6.74	-	-	-	-	0	100	H
			*17.78626	31.61	PK-U	41.40	-14.20	0.00	58.81	-	-	74.00	-15.19	-	-	0	100	V
			*17.78799	19.99	ADR	41.40	-14.30	0.30	47.39	54.00	-6.61	-	-	-	-	0	100	V
802.11be EHT20 RU mode 52 Tone offset 37 Spot-check LPI	7115	MIMO	*10.6615	33.75	PK-U	37.70	-20.50	0.00	50.95	-	-	74.00	-23.05	-	-	0	100	H
			*10.65674	33.47	PK-U	37.70	-20.50	0.00	50.67	-	-	74.00	-23.33	-	-	0	100	V
			14.21865	35.59	PK-U	39.20	-22.60	0.00	52.19	-	-	-	-	68.20	-16.01	0	100	H
			14.21686	36.72	PK-U	39.20	-22.60	0.00	53.32	-	-	-	-	68.20	-14.88	209	101	V
			*17.76701	30.61	PK-U	41.40	-14.30	0.00	57.71	-	-	74.00	-16.29	-	-	0	100	H
			*17.7682	18.92	ADR	41.40	-14.30	0.00	46.02	54.00	-7.98	-	-	-	-	0	100	H
			*17.76595	31.23	PK-U	41.40	-14.30	0.00	58.33	-	-	74.00	-15.67	-	-	0	100	V
			*17.76851	19.18	ADR	41.40	-14.30	0.00	46.28	54.00	-7.72	-	-	-	-	0	100	V
	7115	MIMO	*10.65963	33.62	PK-U	37.70	-20.60	0.00	50.72	-	-	74.00	-23.28	-	-	0	100	H
			*10.66173	33.34	PK-U	37.70	-20.50	0.00	50.54	-	-	74.00	-23.46	-	-	0	100	V
			14.22073	35.53	PK-U	39.20	-22.70	0.00	52.03	-	-	-	-	68.20	-16.17	0	100	H
			14.22828	36.03	PK-U	39.30	-22.60	0.00	52.73	-	-	-	-	68.20	-15.47	0	100	V
			*17.77856	31.51	PK-U	41.40	-14.20	0.00	58.71	-	-	74.00	-15.29	-	-	0	100	H
			*17.77527	19.59	ADR	41.40	-14.20	0.00	46.79	54.00	-7.21	-	-	-	-	0	100	H
			*17.78169	30.99	PK-U	41.40	-14.20	0.00	58.19	-	-	74.00	-15.81	-	-	0	100	V
			*17.77998	19.61	ADR	41.40	-14.10	0.00	46.91	54.00	-7.09	-	-	-	-	0	100	V

Note1. PK-U - U-NII: Maximum Peak / ADR - U-NII AD primary method, RMS average

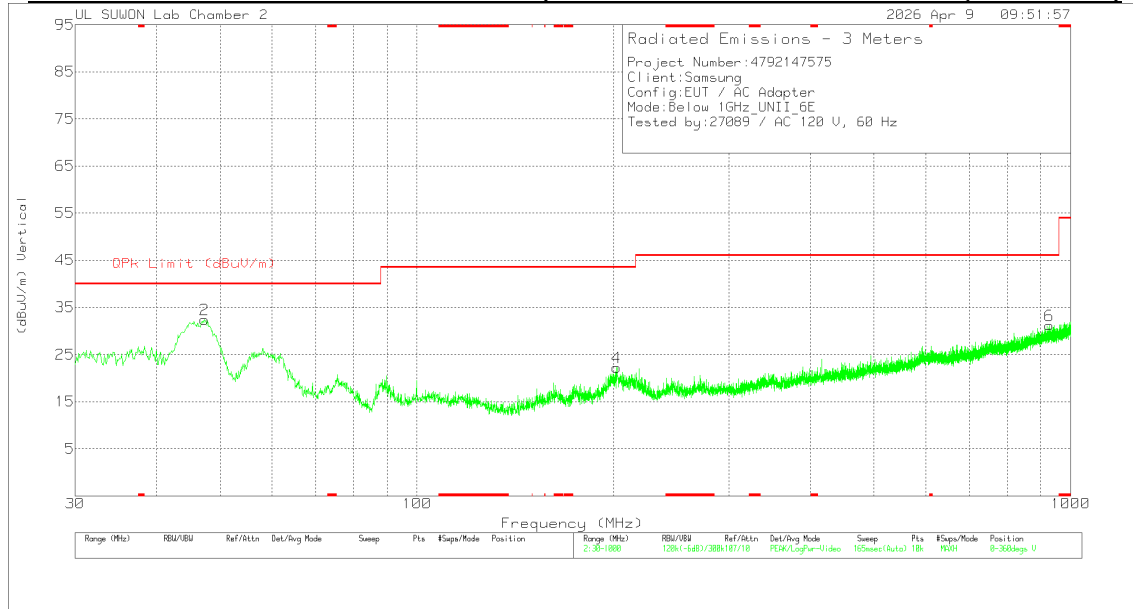
Note2. * - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

12. WORST-CASE BELOW 1 GHz

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)



SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)



Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Antenna_Factor (dB/m)	Below_1G_Path Loss(dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	47.654	38.54	Pk	19.7	-31.8	26.44	40	-13.56	0-360	200	H
3	208.092	40.45	Pk	16.6	-30.7	26.35	43.52	-17.17	0-360	100	H
5	914.058	30.93	Pk	28.1	-27.9	31.13	46.02	-14.89	0-360	100	H
2	47.266	44.52	Pk	19.7	-31.8	32.42	40	-7.58	0-360	100	V
4	202.175	36.06	Pk	16.9	-30.7	22.26	43.52	-21.26	0-360	100	V
6	927.056	30.93	Pk	28.1	-27.8	31.23	46.02	-14.79	0-360	300	V

Pk - Peak detector

13. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)
IC RSS-GEN Clause 8.8

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 [*]	56 to 46 [*]
0.5-5	56	46
5-30	60	50

^{*} Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

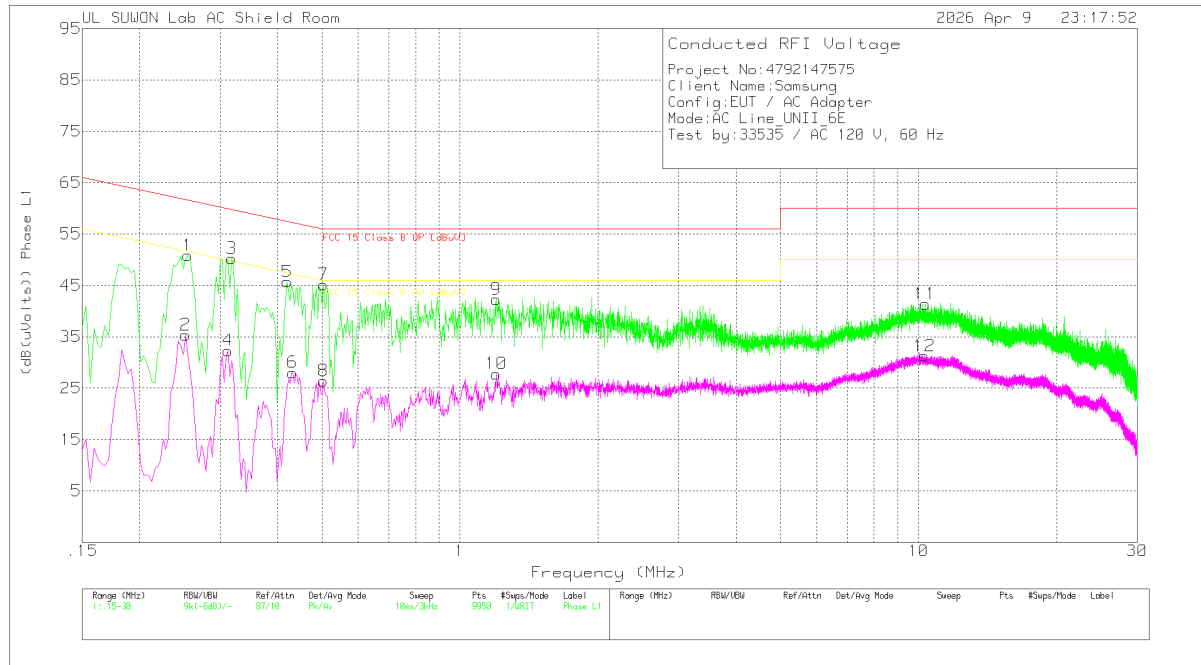
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

WORST EMISSIONS

LINE 1 DATA



Trace Markers

Range 1: Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836_Wit h EX_L1 [dB]	Cable Loss [dB]	Corrected Reading (dB(uVolts))	FCC 15 Class B QP [dBuV]	Margin (dB)	FCC 15 Class B AV [dBuV]	Margin (dB)
1	.255	41.12	Pk	9.6	.1	50.82	61.59	-10.77	-	-
2	.252	25.66	Av	9.6	.1	35.36	-	-	51.69	-16.33
3	.318	40.45	Pk	9.7	.1	50.25	59.76	-9.51	-	-
4	.312	22.53	Av	9.7	.1	32.33	-	-	49.92	-17.59
5	.42	35.81	Pk	9.8	.1	45.71	57.45	-11.74	-	-
6	.432	18.15	Av	9.8	.1	28.05	-	-	47.21	-19.16
7	.504	35.15	Pk	9.9	.1	45.15	56	-10.85	-	-
8	.504	16.41	Av	9.9	.1	26.41	-	-	46	-19.59
9	1.2	32.5	Pk	9.7	.1	42.3	56	-13.7	-	-
10	1.2	18	Av	9.7	.1	27.8	-	-	46	-18.2
11	10.344	31.29	Pk	9.9	.2	41.39	60	-18.61	-	-
12	10.299	21.17	Av	9.9	.2	31.27	-	-	50	-18.73

Pk - Peak detector

Qp - Quasi-Peak detector

Av - Average detection

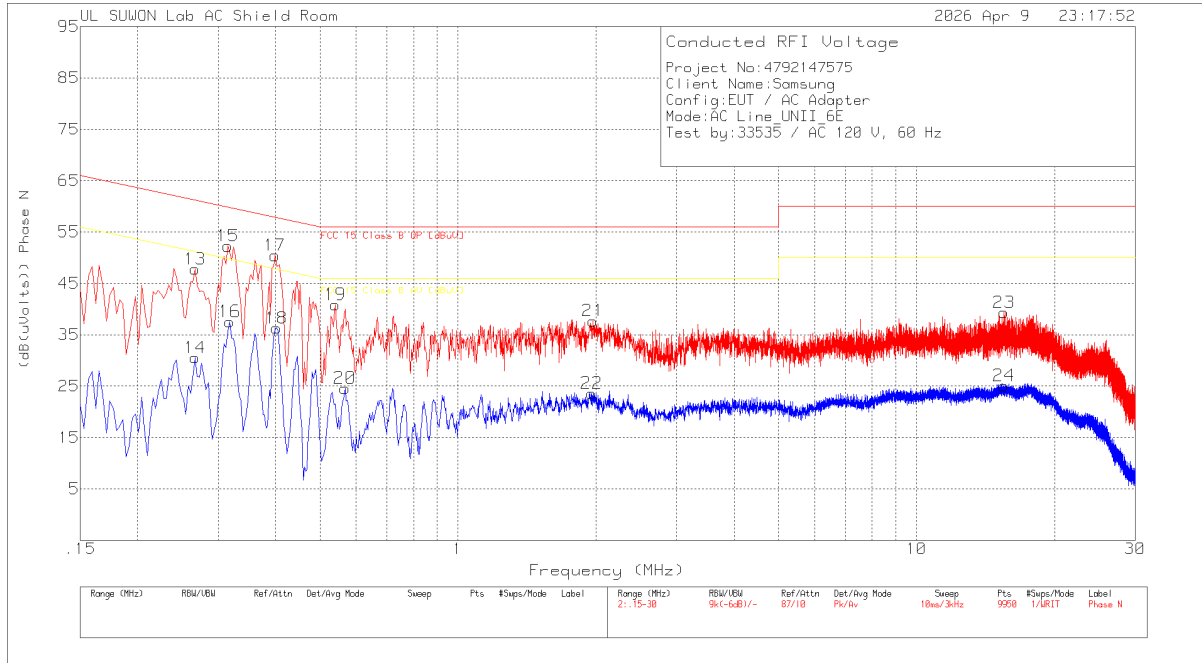
Quasi-Peak Emissions

Range 1: Phase L1 .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101836_Wit h EX_L1 [dB]	Cable Loss [dB]	Corrected Reading (dB(uVolts))	FCC 15 Class B QP [dBuV]	Margin (dB)	FCC 15 Class B AV [dBuV]	Margin (dB)
.31725	36.78	Qp	9.7	.1	46.58	59.78	-13.2	-	-

Qp - Quasi-Peak detector

LINE 2 DATA



Trace Markers

Range 2: Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836_Wit h EX_N [dB]	Cable Loss [dB]	Corrected Reading (dB(uVolts))	FCC 15 Class B QP [dBuV]	Margin (dB)	FCC 15 Class B AV [dBuV]	Margin (dB)
13	.267	38.08	Pk	9.6	.1	47.78	61.21	-13.43	-	-
14	.267	20.84	Av	9.6	.1	30.54	-	-	51.21	-20.67
15	.315	42.48	Pk	9.7	.1	52.28	59.84	-7.56	-	-
16	.318	27.74	Av	9.7	.1	37.54	-	-	49.76	-12.22
17	.399	40.54	Pk	9.8	.1	50.44	57.87	-7.43	-	-
18	.402	26.38	Av	9.8	.1	36.28	-	-	47.81	-11.53
19	.54	30.87	Pk	9.9	.1	40.87	56	-15.13	-	-
20	.567	14.71	Av	9.8	.1	24.61	-	-	46	-21.39
21	1.971	27.91	Pk	9.7	.1	37.71	56	-18.29	-	-
22	1.956	13.8	Av	9.7	.1	23.6	-	-	46	-22.4
23	15.522	28.96	Pk	10.1	.3	39.36	60	-20.64	-	-
24	15.525	14.69	Av	10.1	.3	25.09	-	-	50	-24.91

Pk - Peak detector

Qp - Quasi-Peak detector

Av - Average detection

Quasi-Peak Emissions

Range 2: Phase N .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101836_Wit h EX_N [dB]	Cable Loss [dB]	Corrected Reading (dB(uVolts))	FCC 15 Class B QP [dBuV]	Margin (dB)	FCC 15 Class B AV [dBuV]	Margin (dB)
.31575	39.01	Qp	9.7	.1	48.81	59.82	-11.01	-	-
.39975	38.03	Qp	9.8	.1	47.93	57.86	-9.93	-	-

Qp - Quasi-Peak detector

14. Contention Based Protocol

14.1. OVERVIEW

14.1.1. LIMITS

FCC

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KDB 987594 D02

Indoor access points, subordinate devices and client devices operating in the 5.925-7.125 GHz band (herein referred to as unlicensed devices) are required to use technologies that include a contention-based protocol to avoid co-channel interference with incumbent devices sharing the band. To ensure incumbent co-channel operations are detected in a technology-agnostic manner, unlicensed devices are required to detect co-channel radio frequency energy (energy detect) and avoid simultaneous transmission.

Unlicensed low-power indoor devices must detect co-channel radio frequency power that is at least -62 dBm or lower. Upon detection of energy in the band, unlicensed low power indoor devices must vacate the channel (in which incumbent signal is transmitted) and stay off the incumbent channel as long as detected radio frequency power is equal to or greater than the threshold (-62 dBm)¹. The -62 dBm (or lower) threshold is referenced to a 0 dBi antenna gain.

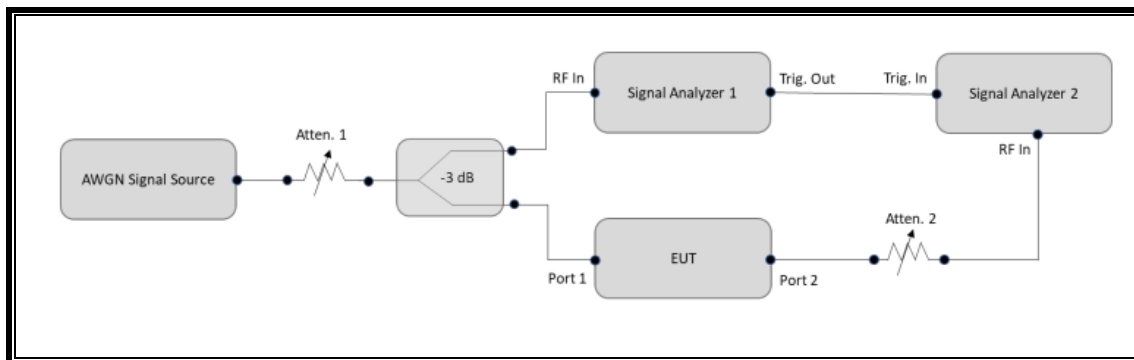
To ensure incumbent operations are reliably detected in the band, low power indoor devices must detect RF energy throughout their intended operating channel. For example, an 802.11 device that plans to transmit a 40 MHz- wide signal (on a primary 20 MHz channel and a secondary 20 MHz channel) must detect energy throughout the entire 40 MHz channel. Additionally, low-power indoor devices must detect co-channel energy with 90% or greater certainty.

CHANNEL PUNCTURING AND BANDWIDTH REDUCTION (802.11be)

This EUT does support channel puncturing and bandwidth reduction. Only bandwidth reduction is used to avoid the incumbent signal, channel puncturing is only used for network optimization purposes as detailed on the product operational description.

14.1.2. TEST AND MEASUREMENT SYSTEM

CONDUCTED METHOD SYSTEM BLOCK DIAGRAM



TEST SETTING

- 1) Configure the EUT to transmit with a constant duty cycle.
- 2) Set the operating parameters of the EUT including power level, operating frequency, modulation and bandwidth.
- 3) Set the signal analyzer center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT. Connect the output port of the EUT to the signal analyzer 2, as shown in Figure 2. Ensure that the attenuator 2 provides enough attenuation to not overload the signal analyzer 2 receiver.
- 4) Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters set at step two.
- 5) Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use Table 1 to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
- 6) Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT as shown in Figure 2.
- 7) Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
- 8) Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
- 9) (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
- 10) Refer to Table 1 to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step 5, choose a different center frequency for the AWGN signal and repeat the process.

TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment were utilized for the tests documented in this report:

TEST EQUIPMENT LIST				
Description	Manufacturer	Model	S/N	Next Cal Due
Spectrum Analyzer	Keysight	N9030B	MY60070693	2027-01-07
Spectrum Analyzer	Agilent	N9030A	MY54170614	2026-07-21
Vector Signal Generator	R&S	SMW200A	110251	2026-07-22
Combiner	WEINSCHTEL	WA1534	UL001	2027-01-06
Combiner	WEINSCHTEL	WA1534	UL003	2026-12-29
Combiner	WEINSCHTEL	WA1534	UL004	2027-01-06
Attenuator	WEINSCHTEL	WA76-30-21	A015	2026-07-22
Attenuator	PASTERNAK	PE7087-10	A001	2026-07-22
Attenuator	PASTERNAK	PE7087-10	A008	2026-07-22

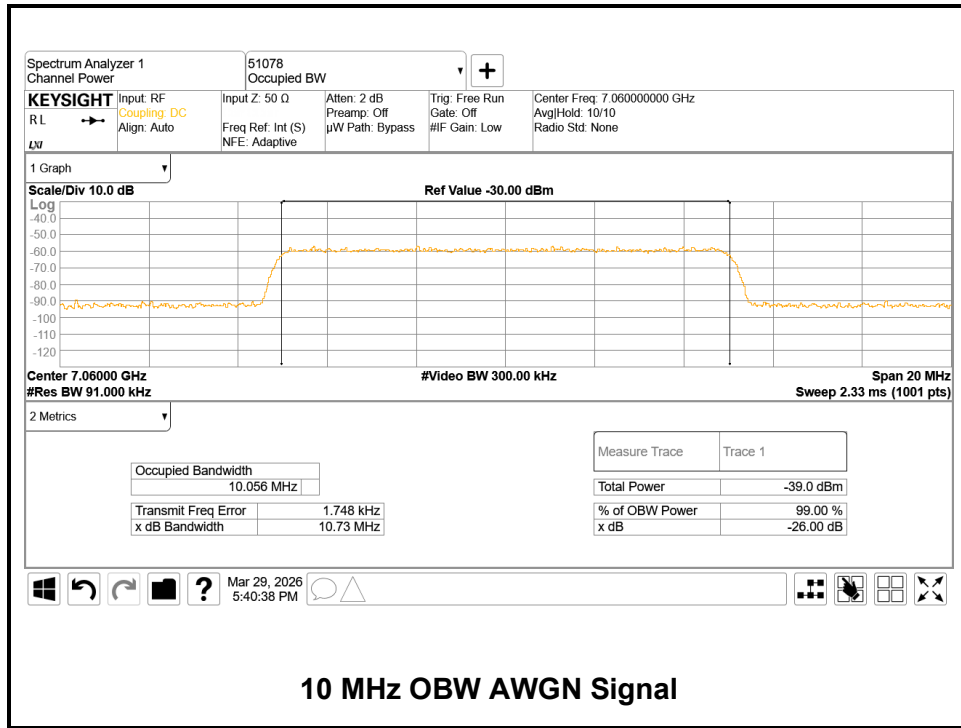
SUPPORT EQUIPMENT

The following support equipment was utilized for the CBP tests documented in this report:

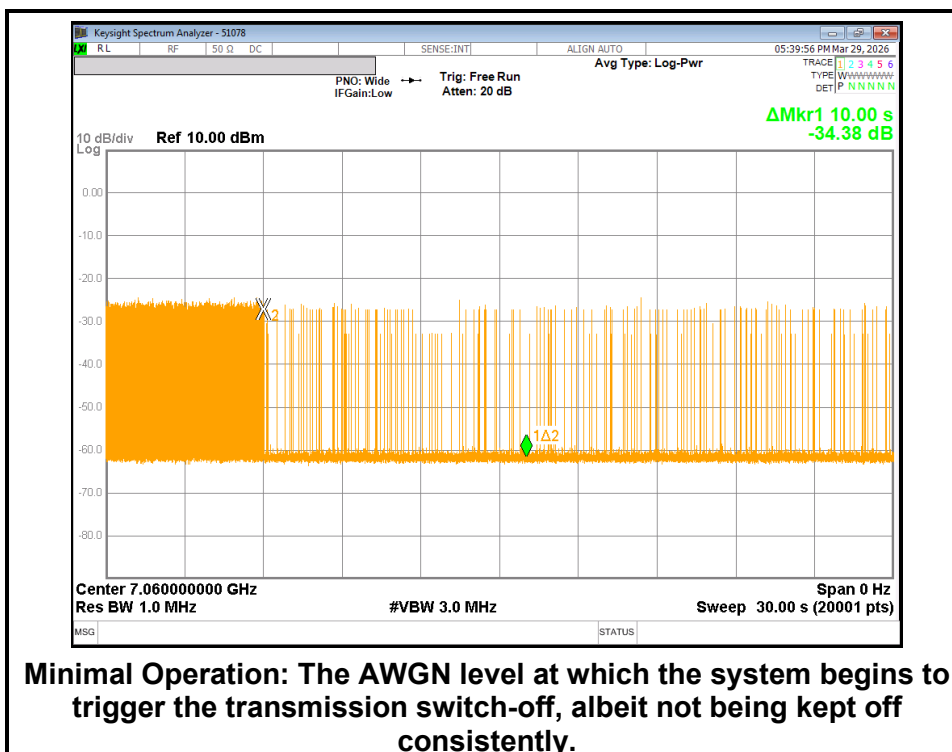
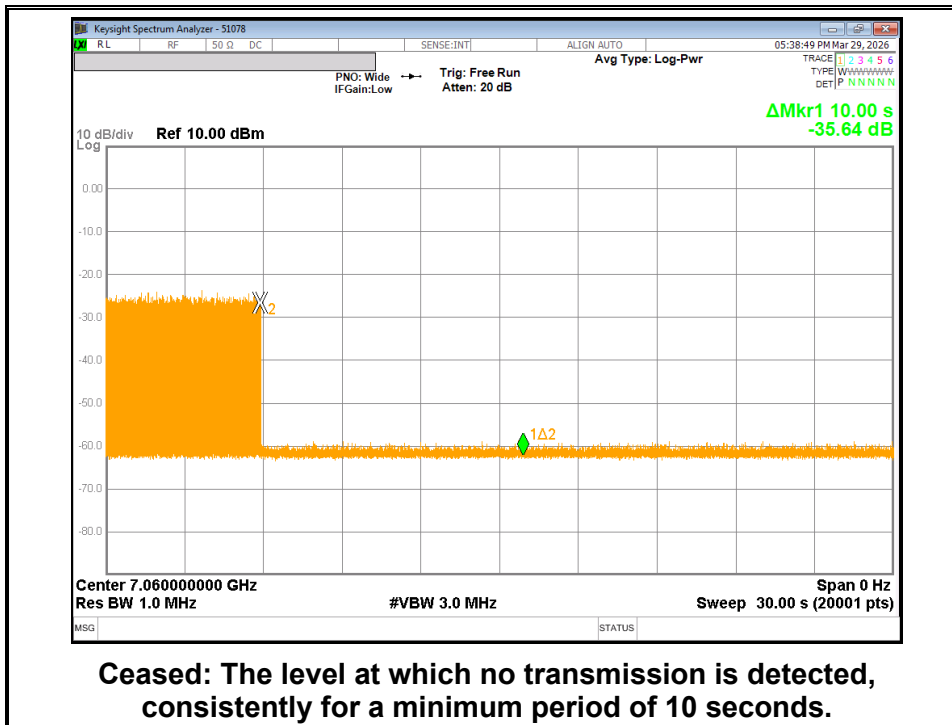
PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	Manufacturer	Model	Serial Number	FCC ID
Wireless Access Point	ASUS	RT-BE92U	T6IG7L212611DY4	MSQ-RTBE7L00
Notebook PC (Controller/Server)	HP	HP EliteDesk 800 G1 TWR	CZC4125J25	DoC

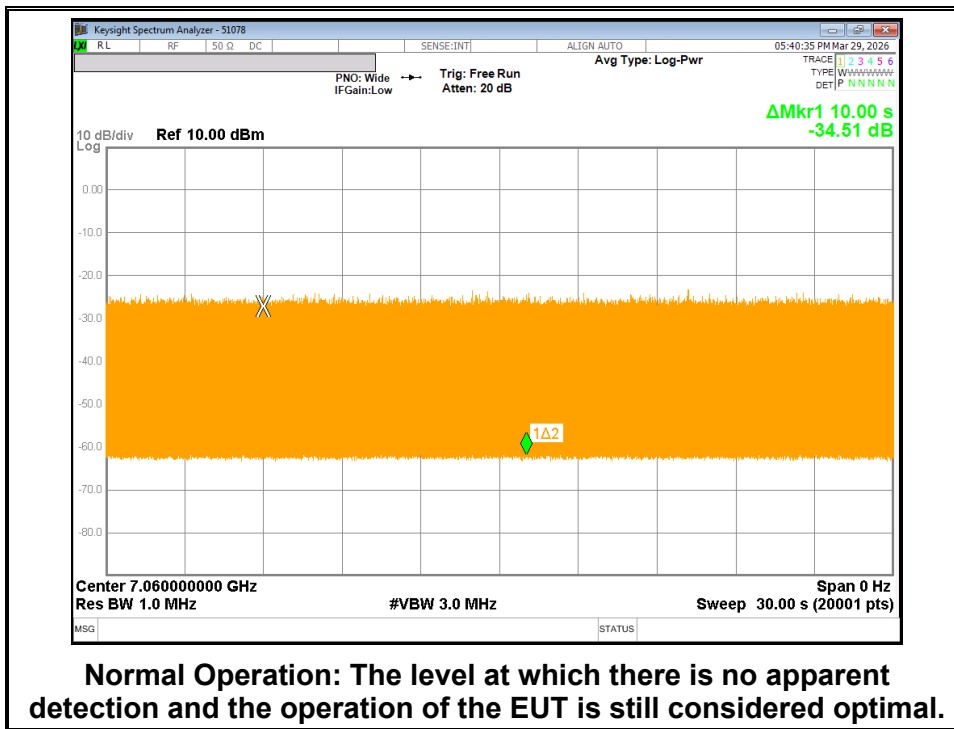
14.2. TEST RESULTS

14.2.1. AWGN Sample signal



14.2.2. Contention Based Protocol Timing Plot (Measurement Criteria)



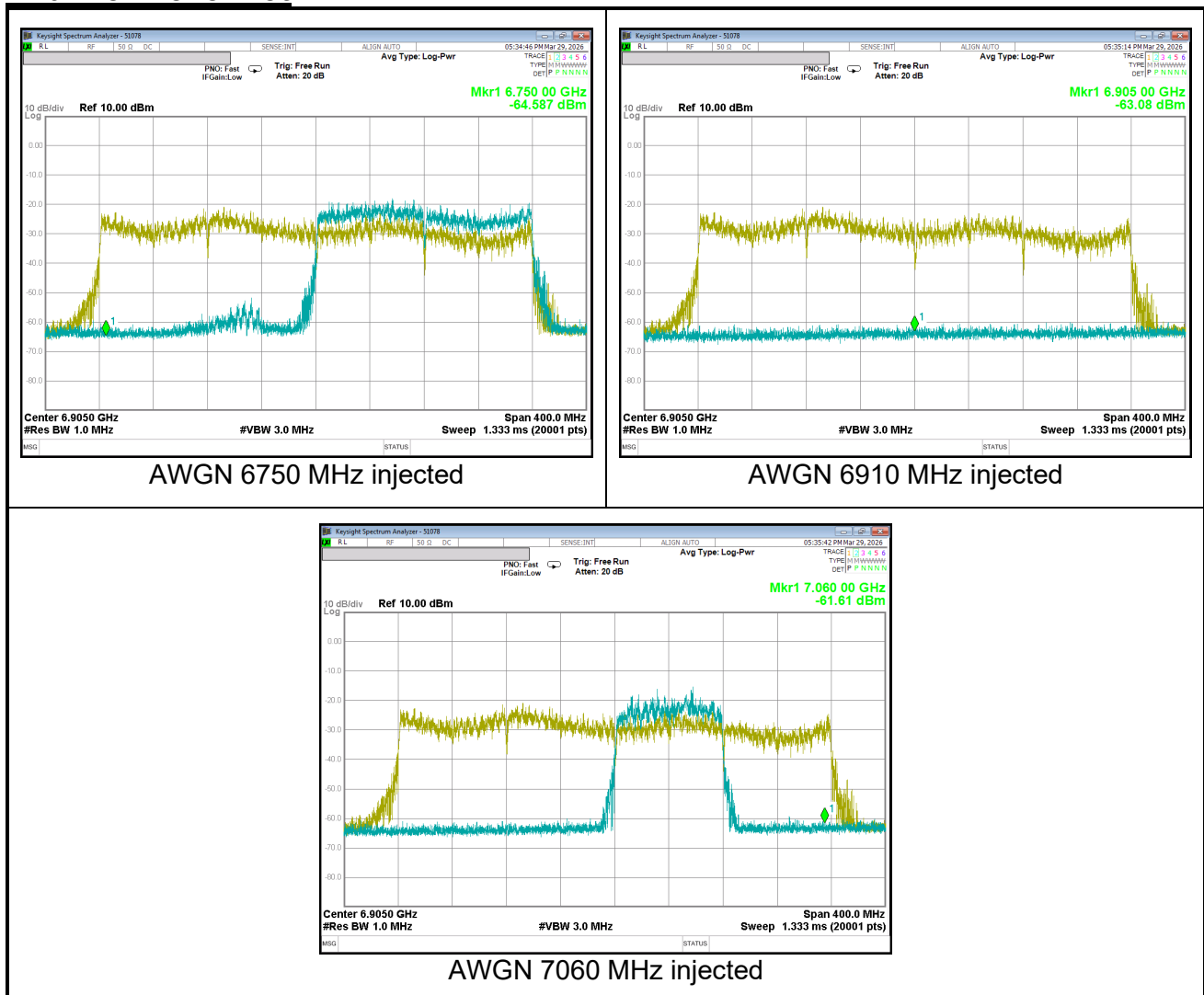


14.2.3. Channel Move Plots

This section demonstrates the effect of injecting the AWGN signal at various locations throughout the 802.11be 320 MHz signal. The yellow trace shows the full 320 MHz signal prior to AWGN injection while the blue trace shows the spectrum following AWGN injection. The following items were observed as demonstrated in the plot shown below:

- When a 10 MHz AWGN signal centered at 6750 MHz (lower edge of channel) is injected, only the higher sub 160 MHz bandwidth channel transmitting.
- When a 10 MHz AWGN signal centered at 6905 MHz (middle of channel) is injected, the affected channel is completely shut down.
- When a 10 MHz AWGN signal centered at 7060 MHz (upper edge of channel) is injected, only higher than middle 40 MHz channel transmitting.

Channel Move Plot



14.2.4. Contention Based Protocol – Incumbent Detection & Trial Results

Band	Channel	Freq	BW	Inc. Freq	Detection power level	Detection limit	Gain	Detection limit (include Gain)	Margin	Condition
5	85	6375	20	6375	-73.78	-62.00	-8.68	-70.68	-3.10	Ceased
					-78.72	-62.00	-8.68	-70.68	-8.04	Minimal
					-81.72	-62.00	-8.68	-70.68	-11.04	Normal
	63	6265	320	6110	-73.72	-62.00	-8.68	-70.68	-3.04	Ceased
					-80.75	-62.00	-8.68	-70.68	-10.07	Minimal
					-83.71	-62.00	-8.68	-70.68	-13.03	Normal
				6265	-74.32	-62.00	-8.68	-70.68	-3.64	Ceased
					-78.81	-62.00	-8.68	-70.68	-8.13	Minimal
					-81.82	-62.00	-8.68	-70.68	-11.14	Normal
				6420	-73.87	-62.00	-8.68	-70.68	-3.19	Ceased
					-81.88	-62.00	-8.68	-70.68	-11.20	Minimal
					-84.90	-62.00	-8.68	-70.68	-14.22	Normal
6	101	6455	20	6455	-74.87	-62.00	-8.68	-70.68	-4.19	Ceased
					-79.89	-62.00	-8.68	-70.68	-9.21	Minimal
					-82.40	-62.00	-8.68	-70.68	-11.72	Normal
	95	6425	320	6270	-72.79	-62.00	-8.68	-70.68	-2.11	Ceased
					-80.95	-62.00	-8.68	-70.68	-10.27	Minimal
					-82.94	-62.00	-8.68	-70.68	-12.26	Normal
				6425	-73.80	-62.00	-8.68	-70.68	-3.12	Ceased
					-79.80	-62.00	-8.68	-70.68	-9.12	Minimal
					-81.76	-62.00	-8.68	-70.68	-11.08	Normal
				6580	-74.89	-62.00	-8.68	-70.68	-4.21	Ceased
					-80.74	-62.00	-8.68	-70.68	-10.06	Minimal
					-82.87	-62.00	-8.68	-70.68	-12.19	Normal
7	149	6695	20	6695	-74.88	-62.00	-8.28	-70.28	-4.60	Ceased
					-79.88	-62.00	-8.28	-70.28	-9.60	Minimal
					-82.31	-62.00	-8.28	-70.28	-12.03	Normal
	159	6745	320	6590	-74.91	-62.00	-8.28	-70.28	-4.63	Ceased
					-80.04	-62.00	-8.28	-70.28	-9.76	Minimal
					-83.12	-62.00	-8.28	-70.28	-12.84	Normal
				6745	-75.15	-62.00	-8.28	-70.28	-4.87	Ceased
					-78.83	-62.00	-8.28	-70.28	-8.55	Minimal
					-82.65	-62.00	-8.28	-70.28	-12.37	Normal
				6900	-74.96	-62.00	-8.28	-70.28	-4.68	Ceased
					-81.32	-62.00	-8.28	-70.28	-11.04	Minimal
					-83.44	-62.00	-8.28	-70.28	-13.16	Normal
8	197	6935	20	6935	-75.92	-62.00	-7.86	-69.86	-6.06	Ceased
					-79.11	-62.00	-7.86	-69.86	-9.25	Minimal
					-83.12	-62.00	-7.86	-69.86	-13.26	Normal
	191	6905	320	6750	-80.02	-62.00	-7.86	-69.86	-10.16	Ceased
					-84.44	-62.00	-7.86	-69.86	-14.58	Minimal
					-86.48	-62.00	-7.86	-69.86	-16.62	Normal
				6905	-71.25	-62.00	-7.86	-69.86	-1.39	Ceased
					-77.25	-62.00	-7.86	-69.86	-7.39	Minimal
					-80.34	-62.00	-7.86	-69.86	-10.48	Normal
				7060	-79.05	-62.00	-7.86	-69.86	-9.19	Ceased
					-83.51	-62.00	-7.86	-69.86	-13.65	Minimal
					-85.65	-62.00	-7.86	-69.86	-15.79	Normal

Note. Detection limit (include gain) = Detection limit (-62 dBm) + Antenna Gain (dBi). Detection power threshold is the level of the incumbent at the antenna port and includes all losses between the signal generator and the EUT antenna port.

Band	Channel	Freq	BW	Inc. Freq	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5	85	6375	20	6375	O	O	O	O	O	O	O	O	O	O	100
				6110	O	O	O	O	O	O	O	O	O	O	100
	63	6265	320	6265	O	O	O	O	O	O	O	O	O	O	100
				6420	O	O	O	O	O	O	O	O	O	O	100
6	101	6455	20	6455	O	O	O	O	O	O	O	O	O	O	100
				6270	O	O	O	O	O	O	O	O	O	O	100
	95	6425	320	6425	O	O	O	O	O	O	O	O	O	O	100
				6580	O	O	O	O	O	O	O	O	O	O	100
7	149	6695	20	6695	O	O	O	O	O	O	O	O	O	O	100
				6590	O	O	O	O	O	O	O	O	O	O	100
	159	6745	320	6745	O	O	O	X	O	O	O	O	O	O	90
				6900	O	O	O	O	O	O	O	O	O	O	100
8	197	6935	20	6935	O	O	O	O	O	O	O	O	O	O	100
				6750	O	O	O	O	O	O	O	O	O	O	100
	191	6905	320	6905	O	O	O	O	O	O	O	O	O	O	100
				7060	O	O	O	O	O	O	O	O	O	O	100

END OF TEST REPORT