HARMONICS AND SPURIOUS EMISSIONS TEST DATA

Mode	Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB/m]	FB Gain [dB]	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	5745	ANT1	* 9.1925	38.61	PK-U	36.20	-39.10	13.20	0.00	48.91	-	-	74.00	-25.09	-	-	244	296	H
			* 9.19196	28.13	ADR	36.20	-39.10	13.20	0.66	39.09	54.00	-14.91	-	-	-	-	244	296	H
			* 9.19211	39.80	PK-U	36.20	-39.10	13.20	0.00	50.10	-	-	74.00	-23.90	-	-	174	150	V
			* 9.19181	30.94	ADR	36.20	-39.10	13.20	0.66	41.90	54.00	-12.10	-	-	-	-	174	150	V
			* 11.48607	44.59	PK-U	38.20	-38.70	14.70	0.00	58.79	-	-	74.00	-15.21	-	-	130	104	H
			* 11.48986	32.67	ADR	38.20	-38.70	14.70	0.66	47.53	54.00	-6.47	-	-	-	-	130	104	H
			* 11.49543	45.95	PK-U	38.20	-38.80	14.70	0.00	60.05	-	-	74.00	-13.95	-	-	152	102	V
			* 11.48968	33.80	ADR	38.20	-38.70	14.70	0.66	48.66	54.00	-5.34	-	-	-	-	152	102	V
			17.22962	37.99	PK-U	40.90	-37.80	18.50	0.00	59.59	-	-	-	-	68.20	-8.61	250	202	H
			17.23499	43.52	PK-U	40.90	-37.80	18.50	0.00	65.12	-	-	-	-	68.20	-3.08	180	214	V
	5785	ANT1	9.25595	38.55	PK-U	36.20	-38.90	13.20	0.00	49.05	-	-	-	-	68.20	-19.15	76	285	H
			9.25578	39.61	PK-U	36.20	-38.90	13.20	0.00	50.11	-	-	-	-	68.20	-18.09	176	147	V
			* 11.56746	40.42	PK-U	38.20	-37.90	14.90	0.00	55.62	-	-	74.00	-18.38	-	-	0	366	H
			* 11.57012	28.07	ADR	38.20	-37.90	14.90	0.66	43.93	54.00	-10.07	-	-	-	-	0	366	H
			* 11.57241	43.26	PK-U	38.20	-37.90	14.90	0.00	58.46	-	-	74.00	-15.54	-	-	307	105	V
			* 11.56997	31.69	ADR	38.20	-37.90	14.90	0.66	47.55	54.00	-6.45	-	-	-	-	307	105	V
			17.36356	40.13	PK-U	40.90	-38.40	18.30	0.00	60.93	-	-	-	-	68.20	-7.27	247	208	H
			17.35801	45.11	PK-U	40.90	-38.50	18.30	0.00	65.81	-	-	-	-	68.20	-2.39	184	218	V
	5825	ANT1	* 9.32035	38.79	PK-U	36.20	-39.10	13.40	0.00	49.29	-	-	74.00	-24.71	-	-	81	110	H
			* 9.31984	28.24	ADR	36.20	-39.10	13.40	0.66	39.40	54.00	-14.60	-	-	-	-	81	110	H
			* 9.3199	39.41	PK-U	36.20	-39.10	13.40	0.00	49.91	-	-	74.00	-24.09	-	-	185	139	V
			* 9.31996	30.42	ADR	36.20	-39.10	13.40	0.66	41.58	54.00	-12.42	-	-	-	-	185	139	V
			* 11.64323	42.06	PK-U	38.30	-38.20	15.20	0.00	57.36	-	-	74.00	-16.64	-	-	117	107	H
			* 11.64834	29.76	ADR	38.30	-38.40	15.20	0.66	45.52	54.00	-8.48	-	-	-	-	117	107	H
			* 11.65018	41.31	PK-U	38.30	-38.50	15.20	0.00	56.31	-	-	74.00	-17.69	-	-	181	103	V
			* 11.64974	29.64	ADR	38.30	-38.50	15.20	0.66	45.30	54.00	-8.70	-	-	-	-	181	103	V
			17.47228	39.84	PK-U	40.90	-38.90	18.70	0.00	60.54	-	-	-	-	68.20	-7.66	245	222	H
			17.47300	45.14	PK-U	40.90	-38.90	18.70	0.00	65.84	-	-	-	-	68.20	-2.36	181	111	V
802.11a	5745	ANT2	8.61306	38.79	PK-U	35.80	-39.20	12.80	0.00	48.19	-	-	-	-	68.20	-20.01	0	100	H
			8.61520	38.76	PK-U	35.80	-39.20	12.80	0.00	48.16	-	-	-	-	68.20	-20.04	0	100	V
			* 11.49171	41.32	PK-U	38.20	-38.80	14.70	0.00	55.42	-	-	74.00	-18.58	-	-	258	107	H
			* 11.48882	29.46	ADR	38.20	-38.70	14.70	0.66	44.32	54.00	-9.68	-	-	-	-	258	107	H
			* 11.49086	44.88	PK-U	38.20	-38.80	14.70	0.00	58.98	-	-	74.00	-15.02	-	-	235	100	V
			* 11.48986	32.91	ADR	38.20	-38.70	14.70	0.66	47.77	54.00	-6.23	-	-	-	-	235	100	V
			17.22984	43.68	PK-U	40.90	-37.80	18.50	0.00	65.28	-	-	-	-	68.20	-2.92	128	111	H
			17.22578	42.24	PK-U	40.90	-37.80	18.50	0.00	63.84	-	-	-	-	68.20	-4.36	115	111	V
	5785	ANT2	8.67524	39.25	PK-U	35.70	-39.40	12.80	0.00	48.35	-	-	-	-	68.20	-19.85	0	100	H
			8.67948	39.32	PK-U	35.70	-39.40	12.80	0.00	48.42	-	-	-	-	68.20	-19.78	0	100	V
			* 11.57086	42.29	PK-U	38.20	-37.90	14.90	0.00	57.49	-	-	74.00	-16.51	-	-	257	103	H
			* 11.57036	30.08	ADR	38.20	-37.90	14.90	0.66	45.94	54.00	-8.06	-	-	-	-	257	103	H
			* 11.57356	44.89	PK-U	38.20	-37.90	14.90	0.00	60.09	-	-	74.00	-13.91	-	-	234	100	V
			* 11.56997	33.94	ADR	38.20	-37.90	14.90	0.66	49.80	54.00	-4.20	-	-	-	-	234	100	V
			17.35028	44.33	PK-U	40.90	-38.50	18.30	0.00	65.03	-	-	-	-	68.20	-3.17	129	111	H
			17.35613	44.46	PK-U	40.90	-38.50	18.30	0.00	65.16	-	-	-	-	68.20	-3.04	118	100	V
	5825	ANT2	8.73523	39.39	PK-U	35.80	-39.00	12.80	0.00	48.99	-	-	-	-	68.20	-19.21	0	100	H
			8.73565	39.23	PK-U	35.80	-39.00	12.80	0.00	48.83	-	-	-	-	68.20	-19.37	0	100	V
			* 11.64966	42.38	PK-U	38.30	-38.50	15.20	0.00	57.38	-	-	74.00	-16.62	-	-	255	106	H
			* 11.64936	30.37	ADR	38.30	-38.50	15.20	0.66	46.03	54.00	-7.97	-	-	-	-	255	106	H
			* 11.64649	46.82	PK-U	38.30	-38.40	15.20	0.00	61.92	-	-	74.00	-12.08	-	-	236	101	V
			* 11.64969	34.76	ADR	38.30	-38.50	15.20	0.66	50.42	54.00	**-3.58**	-	-	-	-	236	101	V
			17.47376	44.29	PK-U	40.90	-38.90	18.70	0.00	64.99	-	-	-	-	68.20	-3.21	129	110	H
			17.46297	42.95	PK-U	40.90	-38.90	18.60	0.00	63.55	-	-	-	-	68.20	-4.65	109	112	V
802.11n (HT20)	5745	MIMO	* 9.19213	37.66	PK-U	36.20	-39.10	13.20	0.00	47.96	-	-	74.00	-26.04	-	-	29	115	H
			* 9.19192	27.39	ADR	36.20	-39.10	13.20	0.43	38.12	54.00	-15.88	-	-	-	-	29	115	H
			* 9.19195	39.55	PK-U	36.20	-39.10	13.20	0.00	49.85	-	-	74.00	-24.15	-	-	96	106	V
			* 9.19203	30.45	ADR	36.20	-39.10	13.20	0.43	41.18	54.00	-12.82	-	-	-	-	96	106	V
			* 11.4865	45.53	PK-U	38.20	-38.70	14.70	0.00	59.73	-	-	74.00	-14.27	-	-	143	100	H
			* 11.49089	32.39	ADR	38.20	-38.80	14.70	0.43	46.92	54.00	-7.08	-	-	-	-	143	100	H
			* 11.4861	45.52	PK-U	38.20	-38.70	14.70	0.00	59.72	-	-	74.00	-14.28	-	-	89	100	V
			* 11.4883	33.09	ADR	38.20	-38.70	14.70	0.43	47.72	54.00	-6.28	-	-	-	-	89	100	V
			17.22858	44.52	PK-U	40.90	-37.80	18.50	0.00	66.12	-	-	-	-	68.20	**-2.08**	242	110	H
			17.22579	42.18	PK-U	40.90	-37.80	18.50	0.00	63.78	-	-	-	-	68.20	-4.42	232	111	V
	5785	MIMO	9.25609	38.40	PK-U	36.20	-38.90	13.20	0.00	48.90	-	-	-	-	68.20	-19.30	307	120	H
			9.25620	39.82	PK-U	36.20	-38.90	13.20	0.00	50.32	-	-	-	-	68.20	-17.88	265	111	V
			* 11.57093	43.84	PK-U	38.20	-37.90	14.90	0.00	59.04	-	-	74.00	-14.96	-	-	322	107	H
			* 11.56849	31.39	ADR	38.20	-37.90	14.90	0.43	47.02	54.00	-6.98	-	-	-	-	322	107	H
			* 11.57292	44.51	PK-U	38.20	-37.90	14.90	0.00	59.71	-	-	74.00	-14.29	-	-	261	104	V
			* 11.57008	32.14	ADR	38.20	-37.90	14.90	0.43	47.77	54.00	-6.23	-	-	-	-	261	104	V
			17.35757	44.47	PK-U	40.90	-38.50	18.30	0.00	65.17	-	-	-	-	68.20	-3.03	52	111	H
			17.35931	44.65	PK-U	40.90	-38.40	18.30	0.00	65.45	-	-	-	-	68.20	-2.75	84	111	V
	5825	MIMO	* 9.31987	38.60	PK-U	36.20	-39.10	13.40	0.00	49.10	-	-	74.00	-24.90	-	-	310	358	H
			* 9.31997	29.03	ADR	36.20	-39.10	13.40	0.43	39.96	54.00	-14.04	-	-	-	-	310	358	H
			* 9.31961	40.33	PK-U	36.20	-39.10	13.40	0.00	50.83	-	-	74.00	-23.17	-	-	269	119	V
			* 9.31998	30.58	ADR	36.20	-39.10	13.40	0.43	41.51	54.00	-12.49	-	-	-	-	269	119	V
			* 11.65633	42.98	PK-U	38.30	-38.60	15.20	0.00	57.88	-	-	74.00	-16.12	-	-	323	108	H
			* 11.64906	30.75	ADR	38.30	-38.50	15.20	0.43	46.18	54.00	-7.82	-	-	-	-	323	108	H
			* 11.65031	43.77	PK-U	38.30	-38.50	15.20	0.00	58.77	-	-	74.00	-15.23	-	-	250	103	V
			* 11.65075	31.10	ADR	38.30	-38.50	15.20	0.43	46.53	54.00	-7.47	-	-	-	-	250	103	V
			17.46846	43.46	PK-U	40.90	-38.90	18.70	0.00	64.16	-	-	-	-	68.20	-4.04	50	111	H
			17.46681	45.23	PK-U	40.90	-38.90	18.70	0.00	65.93	-	-	-	-	68.20	-2.27	85	111	V
802.11n (HT40)	5755	MIMO	8.60051	39.70	PK-U	35.80	-39.10	12.80	0.00	49.20	-	-	-	-	68.20	-19.00	241	100	H
			8.61977	39.00	PK-U	35.80	-39.30	12.80	0.00	48.30	-	-	-	-	68.20	-19.90	10	100	V
			* 11.50893	44.31	PK-U	38.20	-38.80	14.70	0.00	58.41	-	-	74.00	-15.59	-	-	54	103	H
			* 11.51091	32.27	ADR	38.20	-38.80	14.80	0.58	47.05	54.00	-6.95	-	-	-	-	54	103	H
			* 11.50923	43.89	PK-U	38.20	-38.80	14.70	0.00	57.99	-	-	74.00	-16.01	-	-	129	102	V
			* 11.51127	31.56	ADR	38.20	-38.80	14.80	0.58	46.34	54.00	-7.66	-	-	-	-	129	102	V
			17.26892	41.38	PK-U	40.90	-38.00	18.30	0.00	62.58	-	-	-	-	68.20	-5.62	221	102	H
			17.26753	44.45	PK-U	40.90	-38.00	18.30	0.00	65.65	-	-	-	-	68.20	-2.55	172	113	V
	5795	MIMO	9.27204	38.29	PK-U	36.20	-38.90	13.20	0.00	48.79	-	-	-	-	68.20	-19.41	239	106	H
			9.27230	39.07	PK-U	36.20	-38.90	13.20	0.00	49.57	-	-	-	-	68.20	-18.63	358	122	V
			* 11.59172	43.06	PK-U	38.30	-37.80	15.00	0.00	58.56	-	-	74.00	-15.44	-	-	51	102	H
			* 11.59112	31.42	ADR	38.30	-37.80	15.00	0.58	47.50	54.00	-6.50	-	-	-	-	51	102	H
			* 11.59821	43.96	PK-U	38.30	-37.80	14.90	0.00	59.36	-	-	74.00	-14.64	-	-	360	100	V
			* 11.58592	32.43	ADR	38.30	-37.80	14.90	0.58	48.41	54.00	-5.59	-	-	-	-	360	100	V
			17.39659	42.98	PK-U	40.90	-38.50	18.40	0.00	63.78	-	-	-	-	68.20	-4.42	178	108	H
			17.39491	45.32	PK-U	40.90	-38.50	18.40	0.00	66.12	-	-	-	-	68.20	**-2.08**	123	111	V
802.11ac (VHT80)	5775	MIMO	9.24000	39.88	PK-U	36.20	-39.00	13.20	0.00	50.28	-	-	-	-	68.20	-17.92	208	112	H
			9.23976	39.42	PK-U	36.20	-39.00	13.20	0.00	49.82	-	-	-	-	68.20	-18.38	233	106	V
			* 11.56642	43.59	PK-U	38.20	-37.90	14.90	0.00	58.79	-	-	74.00	-15.21	-	-	252	110	H
			* 11.57062	28.89	ADR	38.20	-37.90	14.90	1.15	45.24	54.00	-8.76	-	-	-	-	252	110	H
			* 11.56631	41.68	PK-U	38.20	-37.90	14.90	0.00	56.88	-	-	74.00	-17.12	-	-	53	101	V
			* 11.54421	27.61	ADR	38.20	-38.30	14.80	1.15	43.46	54.00	-10.54	-	-	-	-	53	101	V
			17.33203	41.06	PK-U	40.90	-38.70	19.20	0.00	61.46	-	-	-	-	68.20	-6.74	138	308	H
			17.30696	40.04	PK-U	40.90	-38.40	18.10	0.00	60.64	-	-	-	-	68.20	-7.56	218	112	V

Mode	Freq. [MHz]	Antenna	Frequency [GHz]	Reading [dBuV]	Detector Mode	ANT Factor [dB/m]	FB Gain [dB]	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
802.11ax (HE20)	5745	MIMO	* 9.19184	38.05	PK-U	36.20	-39.10	13.20	0.00	48.35	-	-	74.00	-25.65	-	-	46	110	H
			* 9.19192	28.32	ADR	36.20	-39.10	13.20	1.35	39.97	54.00	-14.03	-	-	-	-	46	110	H
			* 9.19211	38.68	PK-U	36.20	-39.10	13.20	0.00	48.98	-	-	74.00	-25.02	-	-	50	112	V
			* 9.19199	29.60	ADR	36.20	-39.10	13.20	1.35	41.25	54.00	-12.75	-	-	-	-	50	112	V
			* 11.48389	44.78	PK-U	38.20	-38.70	14.70	0.00	58.98	-	-	74.00	-15.02	-	-	310	111	H
			* 11.4909	32.15	ADR	38.20	-38.80	14.70	1.35	47.60	54.00	-6.40	-	-	-	-	310	111	H
			* 11.49062	47.51	PK-U	38.20	-38.80	14.70	0.00	61.61	-	-	74.00	-12.39	-	-	357	102	V
			* 11.4905	33.50	ADR	38.20	-38.80	14.70	1.35	48.95	54.00	-5.05	-	-	-	-	357	102	V
			17.23404	41.93	PK-U	40.90	-37.80	18.50	0.00	63.53	-	-	-	-	68.20	-4.67	184	217	H
			17.23302	44.37	PK-U	40.90	-37.80	18.50	0.00	65.97	-	-	-	-	68.20	-2.23	176	111	V
	5785	MIMO	9.25518	38.40	PK-U	36.20	-38.90	13.20	0.00	48.90	-	-	-	-	68.20	-19.30	203	253	H
			9.25605	39.50	PK-U	36.20	-38.90	13.20	0.00	50.00	-	-	-	-	68.20	-18.20	163	262	V
			* 11.56981	41.53	PK-U	38.20	-37.90	14.90	0.00	56.73	-	-	74.00	-17.27	-	-	53	373	H
			* 11.56986	29.66	ADR	38.20	-37.90	14.90	1.35	46.21	54.00	-7.79	-	-	-	-	53	373	H
			* 11.57069	45.06	PK-U	38.20	-37.90	14.90	0.00	60.26	-	-	74.00	-13.74	-	-	178	101	V
			* 11.57057	32.00	ADR	38.20	-37.90	14.90	1.35	48.55	54.00	-5.45	-	-	-	-	178	101	V
			17.35523	43.53	PK-U	40.90	-38.50	18.30	0.00	64.23	-	-	-	-	68.20	-3.97	52	110	H
			17.35352	41.80	PK-U	40.90	-38.50	18.30	0.00	62.50	-	-	-	-	68.20	-5.70	299	112	V
	5825	MIMO	* 9.32004	39.46	PK-U	36.20	-39.10	13.40	0.00	49.96	-	-	74.00	-24.04	-	-	47	381	H
			* 9.31987	28.89	ADR	36.20	-39.10	13.40	1.35	40.74	54.00	-13.26	-	-	-	-	47	381	H
			* 9.32011	39.37	PK-U	36.20	-39.10	13.40	0.00	49.87	-	-	74.00	-24.13	-	-	228	366	V
			* 9.31994	29.96	ADR	36.20	-39.10	13.40	1.35	41.81	54.00	-12.19	-	-	-	-	228	366	V
			* 11.65165	43.57	PK-U	38.30	-38.50	15.20	0.00	58.57	-	-	74.00	-15.43	-	-	51	105	H
			* 11.64881	29.94	ADR	38.30	-38.50	15.20	1.35	46.29	54.00	-7.71	-	-	-	-	51	105	H
			* 11.6468	39.27	PK-U	38.30	-38.40	15.20	0.00	54.37	-	-	74.00	-19.63	-	-	323	104	V
			* 11.65004	28.30	ADR	38.30	-38.50	15.20	1.35	44.65	54.00	-9.35	-	-	-	-	323	104	V
			17.46926	41.37	PK-U	40.90	-38.90	18.70	0.00	62.07	-	-	-	-	68.20	-6.13	229	108	H
			17.47375	44.66	PK-U	40.90	-38.90	18.70	0.00	65.36	-	-	-	-	68.20	-2.84	177	100	V
802.11ax (HE40)	5755	MIMO	9.20776	38.25	PK-U	36.20	-39.00	13.20	0.00	48.65	-	-	-	-	68.20	-19.55	228	100	H
			9.20863	39.13	PK-U	36.20	-39.00	13.20	0.00	49.53	-	-	-	-	68.20	-18.67	213	114	V
			* 11.50374	41.77	PK-U	38.20	-38.80	14.70	0.00	55.87	-	-	74.00	-18.13	-	-	142	106	H
			* 11.50893	29.51	ADR	38.20	-38.80	14.70	1.45	45.06	54.00	-8.94	-	-	-	-	142	106	H
			* 11.51053	44.95	PK-U	38.20	-38.80	14.80	0.00	59.15	-	-	74.00	-14.85	-	-	175	102	V
			* 11.51032	32.27	ADR	38.20	-38.80	14.80	1.45	47.92	54.00	-6.08	-	-	-	-	175	102	V
			17.27239	42.18	PK-U	40.90	-38.10	18.30	0.00	63.28	-	-	-	-	68.20	-4.92	1	111	H
			17.26953	43.85	PK-U	40.90	-38.00	18.30	0.00	65.05	-	-	-	-	68.20	-3.15	356	100	V
	5795	MIMO	9.27206	38.06	PK-U	36.20	-38.90	13.20	0.00	48.56	-	-	-	-	68.20	-19.64	220	237	H
			9.27184	39.02	PK-U	36.20	-38.90	13.20	0.00	49.52	-	-	-	-	68.20	-18.68	218	109	V
			* 11.58353	41.66	PK-U	38.30	-37.80	14.90	0.00	57.06	-	-	74.00	-16.94	-	-	231	105	H
			* 11.5862	29.83	ADR	38.30	-37.80	14.90	1.45	46.68	54.00	-7.32	-	-	-	-	231	105	H
			* 11.58585	42.62	PK-U	38.30	-37.80	14.90	0.00	58.02	-	-	74.00	-15.98	-	-	182	103	V
			* 11.58593	29.98	ADR	38.30	-37.80	14.90	1.45	46.83	54.00	-7.17	-	-	-	-	182	103	V
			17.37746	43.23	PK-U	40.90	-38.40	18.30	0.00	64.03	-	-	-	-	68.20	-4.17	325	207	H
			17.36556	44.69	PK-U	40.90	-38.40	18.30	0.00	65.49	-	-	-	-	68.20	-2.71	356	111	V
802.11ax (HE80)	5775	MIMO	9.24012	38.94	PK-U	36.20	-39.00	13.20	0.00	49.34	-	-	-	-	68.20	-18.86	47	311	H
			9.23987	37.91	PK-U	36.20	-39.00	13.20	0.00	48.31	-	-	-	-	68.20	-19.89	358	110	V
			* 11.55089	41.63	PK-U	38.20	-38.10	14.80	0.00	56.53	-	-	74.00	-17.47	-	-	50	104	H
			* 11.5488	28.79	ADR	38.20	-38.10	14.80	1.65	45.34	54.00	-8.66	-	-	-	-	50	104	H
			* 11.54862	42.59	PK-U	38.20	-38.20	14.80	0.00	57.39	-	-	74.00	-16.61	-	-	357	101	V
			* 11.53817	29.69	ADR	38.20	-38.50	14.80	1.65	45.84	54.00	-8.16	-	-	-	-	357	101	V
			17.32279	40.43	PK-U	40.90	-38.60	18.20	0.00	60.93	-	-	-	-	68.20	-7.27	234	237	H
			17.32950	42.66	PK-U	40.90	-38.70	18.20	0.00	63.06	-	-	-	-	68.20	-5.14	174	100	V
802.11ax HE20 RU mode 26 Tone offset 0 Spot-check	5745	MIMO	* 9.19165	39.17	PK-U	36.20	-39.10	13.20	0.00	49.47	-	-	74.00	-24.53	-	-	215	105	H
			* 9.19196	28.66	ADR	36.20	-39.10	13.20	0.98	39.94	54.00	-14.06	-	-	-	-	215	105	H
			* 9.19166	39.45	PK-U	36.20	-39.10	13.20	0.00	49.75	-	-	74.00	-24.25	-	-	171	110	V
			* 9.19203	30.44	ADR	36.20	-39.10	13.20	0.98	41.72	54.00	-12.28	-	-	-	-	171	110	V
			* 11.47336	48.86	PK-U	38.10	-38.60	14.80	0.00	63.16	-	-	74.00	**-10.84**	-	-	232	107	H
			* 11.47319	32.09	ADR	38.10	-38.50	14.80	0.98	47.47	54.00	-6.53	-	-	-	-	232	107	H
			* 11.47295	48.54	PK-U	38.10	-38.50	14.80	0.00	62.94	-	-	74.00	-11.06	-	-	165	100	V
			* 11.47297	32.69	ADR	38.10	-38.50	14.80	0.98	48.07	54.00	-5.93	-	-	-	-	165	100	V
			17.24413	34.87	PK-U	40.90	-37.80	18.50	0.00	56.47	-	-	-	-	68.20	-11.73	63	100	H
			17.23354	34.55	PK-U	40.90	-37.80	18.50	0.00	56.15	-	-	-	-	68.20	-12.05	35	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

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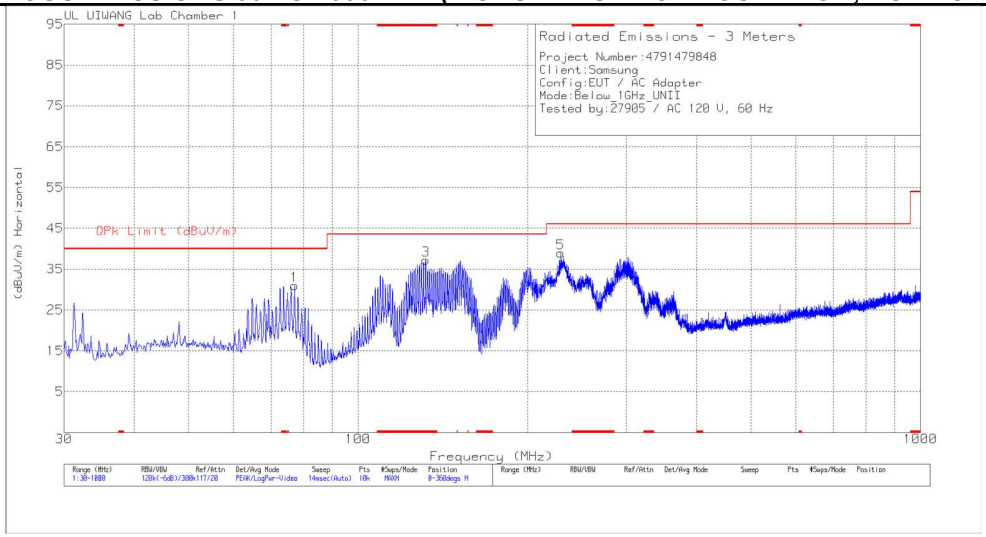
13. WORST-CASE BELOW 1 GHz

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	VULB 9163 (dB/m)	1Cham_30M-1000M_AMP(ELNA 03-40D (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	77.0499	58.07	Pk	12.6	-39.7	30.97	40	-9.03	0-360	200	H
2	32.5223	61.4	Pk	15.7	-40	37.1	40	-2.9	0-360	100	V
3	32.5095	58.92	Qp	15.7	-40	34.62	40	-5.38	233	101	V
4	* 131.8605	62.37	Pk	14.2	-39.4	37.17	43.52	-6.35	0-360	100	H
5	* 132.2411	59.52	Qp	14.2	-39.4	34.32	43.52	-9.2	254	198	H
6	* 130.0173	63.81	Pk	14.3	-39.4	38.71	43.52	-4.81	0-360	100	V
7	* 130.0636	61.54	Qp	14.3	-39.4	36.44	43.52	-7.08	290	101	V
8	229.2585	60.45	Pk	17.5	-39	38.95	46.02	-7.07	0-360	100	H
9	231.9095	56.38	Qp	17.7	-39	35.08	46.02	-10.94	232	124	H
10	295.8074	54.58	Pk	19	-38.7	34.88	46.02	-11.14	0-360	100	V

Pk - Peak detector
Qp - Quasi-Peak detector

14. 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

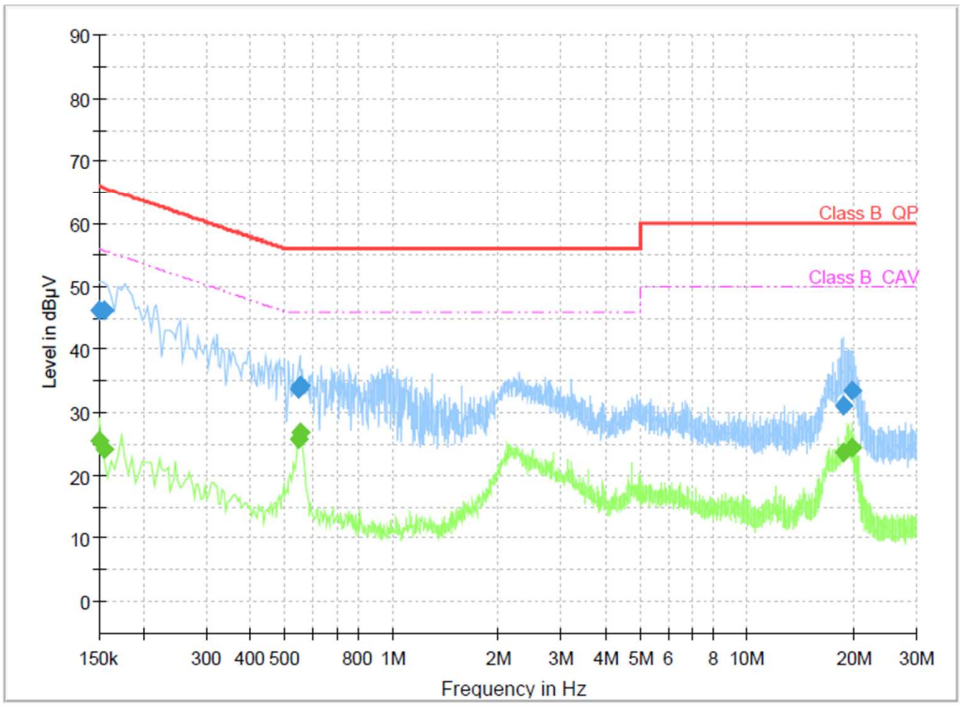
LINE 1 DATA

AC LINE UNII-L 1 / 1

Test Report

Common Information

Project No:	479147984
Test Description:	Shielded Room#1, Conducted Emission
Test Standard:	FCC Part 15 Subpart C
Model Name:	WCF934M
Test Voltage:	AC 120 V, 60 Hz
Test Mode:	AC Line UNII
Opeartor:	27905
Line:	LINE



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150380	---	25.49	55.98	30.48	9.000	L1	ON	9.7
0.150380	46.29	---	65.98	19.69	9.000	L1	ON	9.7
0.155390	---	24.27	55.71	31.44	9.000	L1	ON	9.7
0.155390	46.25	---	65.71	19.46	9.000	L1	ON	9.7
0.546420	---	25.79	46.00	20.21	9.000	L1	ON	9.8
0.546420	33.78	---	56.00	22.22	9.000	L1	ON	9.8
0.555390	---	26.74	46.00	19.26	9.000	L1	ON	9.8
0.555390	34.38	---	56.00	21.62	9.000	L1	ON	9.8
18.614670	---	23.69	50.00	26.31	9.000	L1	ON	10.0
18.614670	31.18	---	60.00	28.82	9.000	L1	ON	10.0
19.822280	---	24.52	50.00	25.48	9.000	L1	ON	10.0
19.822280	33.52	---	60.00	26.48	9.000	L1	ON	10.0

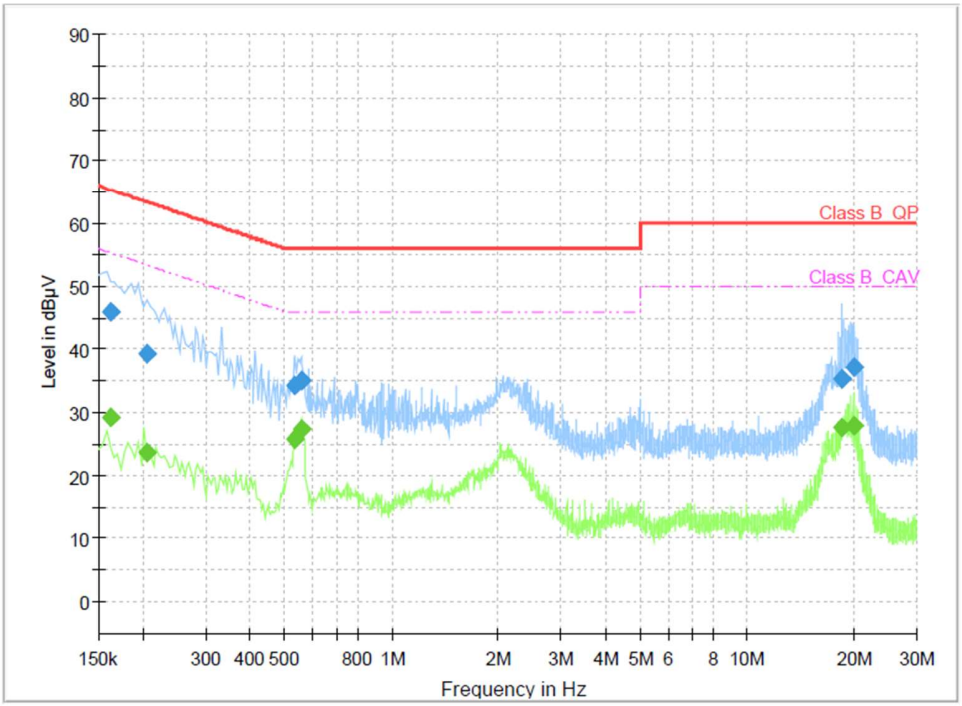
LINE 2 DATA

AC LINE UNII-N 1 / 1

Test Report

Common Information

Project No:	479147984
Test Description:	Shielded Room#1, Conducted Emission
Test Standard:	FCC Part 15 Subpart C
Model Name:	WCF934M
Test Voltage:	AC 120 V, 60 Hz
Test Mode:	AC Line UNII
Opeartor:	27905
Line:	NEUTRAL



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.162210	---	29.12	55.35	26.23	9.000	N	ON	9.8
0.162210	45.91	---	65.35	19.44	9.000	N	ON	9.8
0.204810	---	23.67	53.41	29.74	9.000	N	ON	9.8
0.204810	39.33	---	63.41	24.08	9.000	N	ON	9.8
0.536960	---	25.65	46.00	20.35	9.000	N	ON	9.9
0.536960	34.31	---	56.00	21.69	9.000	N	ON	9.9
0.558230	---	27.41	46.00	18.59	9.000	N	ON	9.9
0.558230	35.06	---	56.00	20.94	9.000	N	ON	9.9
18.591890	---	27.73	50.00	22.27	9.000	N	ON	10.0
18.591890	35.31	---	60.00	24.69	9.000	N	ON	10.0
19.900380	---	27.96	50.00	22.04	9.000	N	ON	10.1
19.900380	37.32	---	60.00	22.68	9.000	N	ON	10.1

15. DYNAMIC FREQUENCY SELECTION

15.1. OVERVIEW

15.1.1. LIMITS

FCC

§15.407 (h), FCC KDB 905462 D02 “COMPLIANCE MEASUREMENT PROCEDURES FOR UNLICENSED-NATIONAL INFORMATION INFRASTRUCTURE DEVICES OPERATING IN THE 5250-5350 MHz AND 5470-5725 MHz BANDS INCORPORATING DYNAMIC FREQUENCY SELECTION” and KDB 905462 D03 “U-NII CLIENT DEVICES WITHOUT RADAR DETECTION CAPABILITY”.

RSS-247 Section 6.3

ISED requires the use of either the FCC KDB Procedure 905462 or the DFS test procedure in the ETSI EN 301 893 for demonstrating compliance with the DFS radar detection requirements set out in this section.If any part of an operating device’s emission bandwidth falls in the bands 5250-5350 MHz, 5470-5600 MHz or 5650-5725 MHz, the device shall comply with requirements in the following sections.

Table 1: Applicability of DFS requirements prior to use of a channel

Requirement	Operational Mode		
	Master	Client (without radar detection)	Client (with radar detection)
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
U-NII Detection Bandwidth	Yes	Not required	Yes

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode		
	Master	Client **(without DFS)**	Client **(with DFS)**
DFS Detection Threshold	Yes	Not required	Yes
Channel Closing Transmission Time	Yes	Yes	Yes
Channel Move Time	Yes	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required	Yes

Additional requirements for devices with multiple bandwidth modes	Master Device or Client with Radar DFS	Client (without DFS)
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required

Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in all 20 MHz channel blocks and a null frequency between the bonded 20 MHz channel blocks.

Table 3: Interference Threshold values, Master or Client incorporating In-Service Monitoring

Maximum Transmit Power	Value (see notes)
E.I.R.P. ≥ 200 mill watt	-64 dBm
E.I.R.P. < 200 mill watt and power spectral density < 10 dBm/MHz	-62 dBm
E.I.R.P. < 200 mill watt that do not meet power spectral density requirement	-64 dBm

Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna
Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.
Note 3: E.I.R.P. is based on the highest antenna gain. For MIMO devices refer to KDB publication 662911 D01.

Table 4: DFS Response requirement values

Parameter	Value
Non-occupancy period	30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds (See Note 1)
Channel Closing Transmission Time	200 milliseconds + approx. 60 milliseconds over remaining 10 second period. (See Notes 1 and 2)
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. (See Note 3)

Note 1: *Channel Move Time* and the *Channel Closing Transmission Time* should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.
Note 2: The *Channel Closing Transmission Time* is comprised of 200 milliseconds starting at the beginning of the *Channel Move Time* plus any additional intermittent control signals required to facilitate a *Channel* move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.
Note 3: During the *U-NII Detection Bandwidth* detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

Table 5 – Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (usec)	PRI (usec)	Pulses	Minimum Percentage of Successful Detection	Minimum Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in table 5a	Roundup: $\{(1/360) \times (19 \times 10^6 \text{ PRI}_{usec})\}$	60%	30
		Test B: 15 unique PRI values randomly selected within the range of 518-3066 usec. With a minimum increment of 1 usec, excluding PRI values selected in Test A			
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120

Note 1: Short Pulse Radar Type 0 should be used for the *Detection Bandwidth* test, *Channel Move Time*, and *Channel Closing Time* tests.

Table 6 – Long Pulse Radar Test Signal

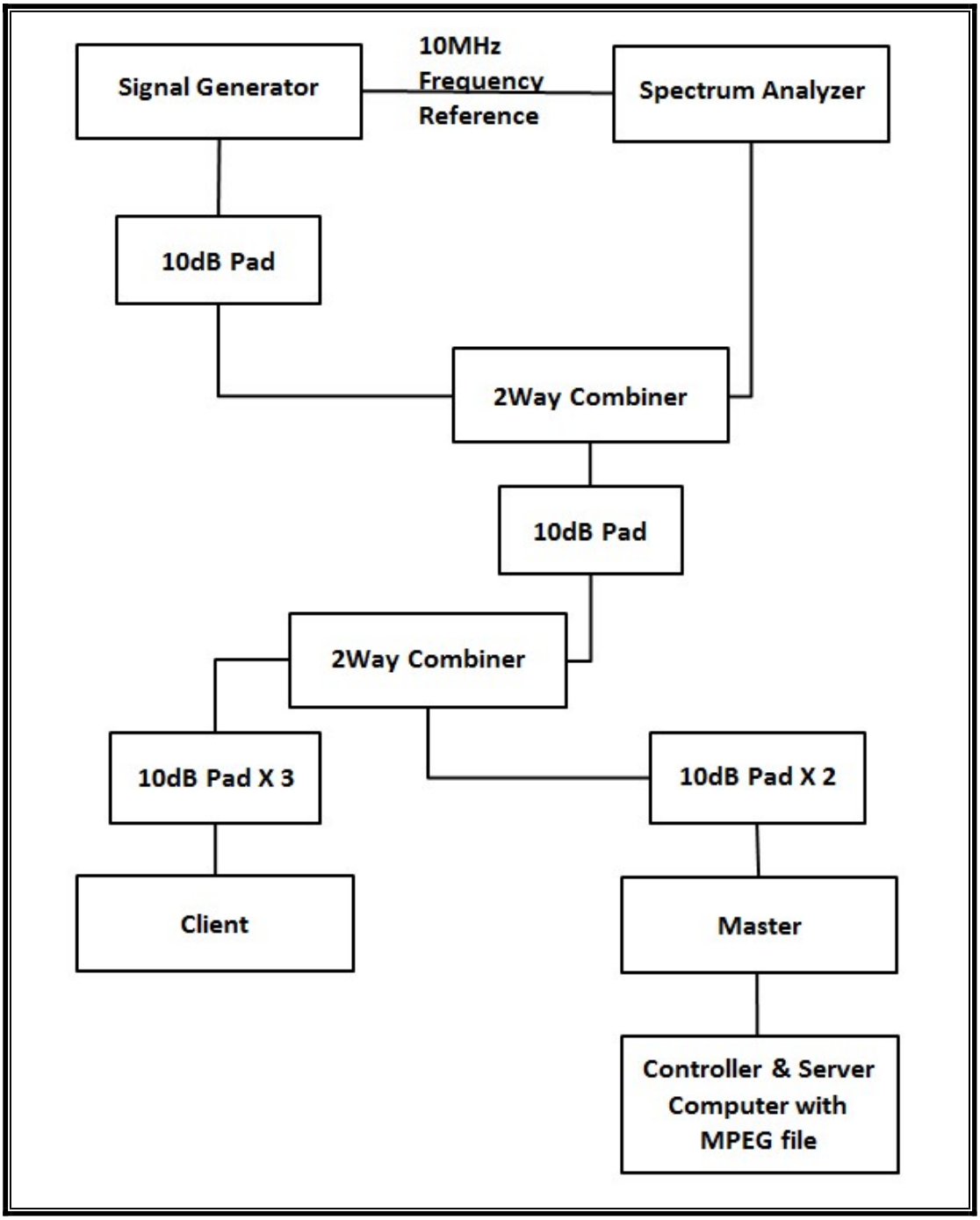
Radar Waveform Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Pulses per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

Table 7 – Frequency Hopping Radar Test Signal

Radar Waveform Type	Pulse Width (μsec)	PRI (μsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Percentage of Successful Detection	Minimum Trials
6	1	333	9	0.333	300	70%	30

15.1.2. TEST AND MEASUREMENT SYSTEM

CONDUCTED METHOD SYSTEM BLOCK DIAGRAM



SYSTEM OVERVIEW

The short pulse and long pulse signal generating system utilizes the Keysite Signal Studio for Pulse Building as N5182B. The Vector Signal Generator has been validated by the NTIA. The hopping signal generating system utilizes the CCS simulated hopping method and system, which has been validated by the DoD, FCC and NTIA. The software selects waveform parameters from within the bounds of the signal type on a random basis using uniform distribution.

The short pulse types 1, 2, 3 and 4, and the long pulse type 5 parameters are randomized at run-time.

The hopping type 6 pulse parameters are fixed while the hopping sequence is based on the August 2005 NTIA Hopping Frequency List. The initial starting point randomized at run-time and each subsequent starting point is incremented by 475. Each frequency in the 100-length segment is compared to the boundaries of the EUT Detection Bandwidth and the software creates a hopping burst pattern in accordance with Section 7.4.1.3 Method #2 Simulated Frequency Hopping Radar Waveform Generating Subsystem of KDB 905462 D02. The frequency of the signal generator is incremented in 1 MHz steps from F_L to F_H for each successive trial. This incremental sequence is repeated as required to generate a minimum of 30 total trials and to maintain a uniform frequency distribution over the entire Detection Bandwidth.

The signal monitoring equipment consists of a spectrum analyzer. The aggregate ON time is calculated by multiplying the number of bins above a threshold during a particular observation period by the dwell time per bin, with the analyzer set to peak detection and max hold.

SYSTEM CALIBRATION

A 50-ohm load is connected in place of the spectrum analyzer, and the spectrum analyzer is connected to a horn antenna via a coaxial cable, with the reference level offset set to (horn antenna gain – coaxial cable loss). The signal generator is set to CW mode. The amplitude of the signal generator is adjusted to yield a level of –64 dBm as measured on the spectrum analyzer.

Without changing any of the instrument settings, the spectrum analyzer is reconnected to the Common port of the Spectrum Analyzer Combiner/Divider. The Reference Level Offset of the spectrum analyzer is adjusted so that the displayed amplitude of the signal is –64 dBm.

The spectrum analyzer displays the level of the signal generator as received at the antenna ports of the Master Device. The interference detection threshold may be varied from the calibrated value of –64 dBm and the spectrum analyzer will still indicate the level as received by the Master Device.

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ADJUSTMENT OF DISPLAYED TRAFFIC LEVEL

A link is established between the Master and Slave and the distance between the units is adjusted as needed to provide a suitable received level at the Master and Slave devices. The video test file is streamed to generate WLAN traffic. The monitoring antenna is adjusted so that the WLAN traffic level, as displayed on the spectrum analyzer, is at lower amplitude than the radar detection threshold.

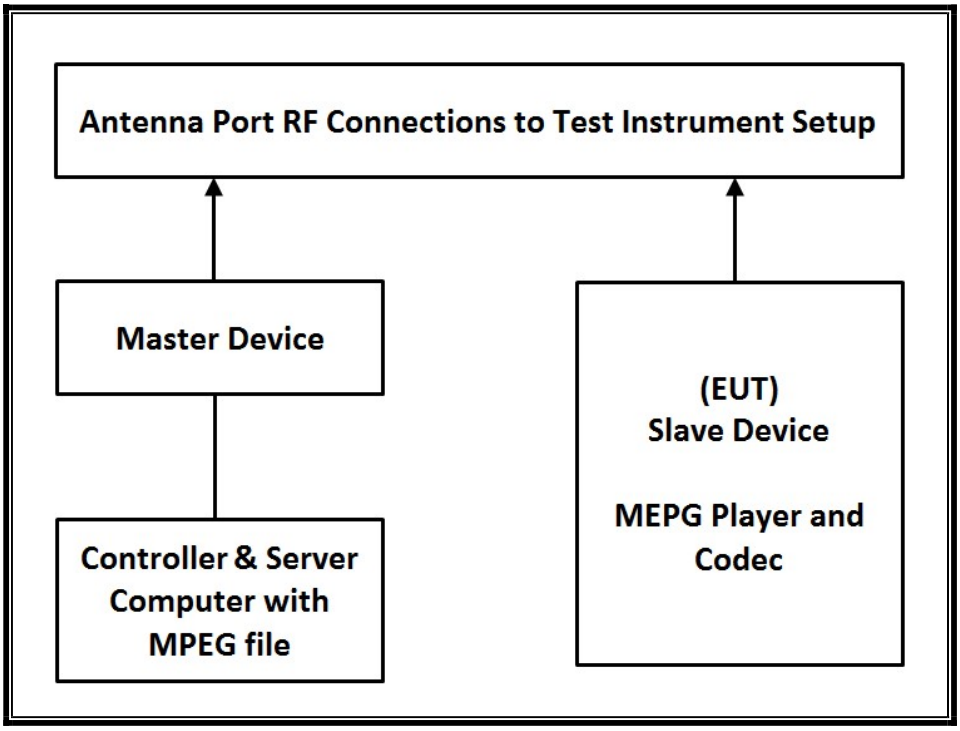
TEST AND MEASUREMENT EQUIPMENT

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

TEST EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**S/N**	**Next Cal Due**
Spectrum Analyzer	Keysight	N9030B	MY57143652	2025-07-24
Vector Signal Generator	Agilent / HP	N5182B	MY53051241	2025-07-24
Power Divider	WEINSCHEL	1580	SQ373	2025-07-24
Power Splitter	WEINSCHEL	WA1534	UL009	2025-07-26
Attenuator	AEROFLEX/WEINSCHEL	2	CE9521	2025-07-23
Attenuator	PASTERNACK	PE7087-10	A001	2025-07-23
Attenuator	PASTERNACK	PE7087-10	A002	2025-07-23
Attenuator	PASTERNACK	PE7087-10	A004	2025-07-23

15.1.3. SETUP OF EUT

CONDUCTED METHOD EUT TEST SETUP



SUPPORT EQUIPMENT

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

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
Wireless Access Point	ASUS	GT-AXE11000	NBIG0X401037X8D	MSQ-RTAXJF00
Notebook PC (Controller/Server)	Lenovo	TP00050C	XU100606-15005A	-

15.1.4. DESCRIPTION OF EUT

The EUT operates over the 5250-5350 MHz and 5470-5725 MHz ranges.

The EUT is a Slave Device without Radar Detection.

The highest power level of the widest bandwidth within these bands is 19.39 dBm in the 5250-5350 MHz band and 5470-5725 MHz band.

The antenna assembly utilized two antenna.
Gain of ANT1 : 1.56 dBi for UNII 2A and 1.47 dBi for UNII 2C.
Gain of ANT2 : 1.67 dBi for UNII 2A and 1.75 dBi for UNII 2C.

The rated output power of the Master unit is > 23dBm (EIRP). Therefore the required interference threshold level is –64 dBm. After correction for procedural adjustments, the required conducted threshold at the antenna port is –64 + 1 = -63 dBm.

The calibrated radiated DFS Detection Threshold level is set to –64 dBm. The tested level is lower than the required level hence it provides a margin to the limit.
The EUT uses one transmitter/receiver chain connected to an antenna to perform radiated tests.
WLAN traffic that meets or exceeds the minimum required loading was generated by transferring a data stream from the controller/server PC to the EUT using iPerf version 2.0.5 software package.

TPC is not required since the maximum EIRP is less than 500 mW (27 dBm).
The EUT utilizes the 802.11 architecture. 4 nominal channel bandwidth are implemented:
20 MHz, 40 MHz, 80 MHz.

The software installed in the access point is 12.4(25d)JA1.

UNIFORM CHANNEL SPREADING

This requirement is not applicable to Slave radio devices.

CHANNEL PUNCTURING(802.11ax)

This EUT does not support channel puncturing.

OVERVIEW OF MASTER DEVICE WITH RESPECT TO §15.407 (h) REQUIREMENTS

The Master Device is a ASUS Access Point, FCC ID: MSQ-RTAXJF00. The minimum antenna gain for the Master Device is 6 dBi.

The rated output power of the Master unit is > 23dBm (EIRP). Therefore the required interference threshold level is –64 dBm. After correction for procedural adjustments, the required radiated threshold at the antenna port is –64 + 1 = -63 dBm.

The calibrated radiated DFS Detection Threshold level is set to –64 dBm. The tested level is lower than the required level hence it provides a margin to the limit.

15.2. RESULTS FOR 80 MHz BANDWIDTH (UNII-2A & 2C BANDS)

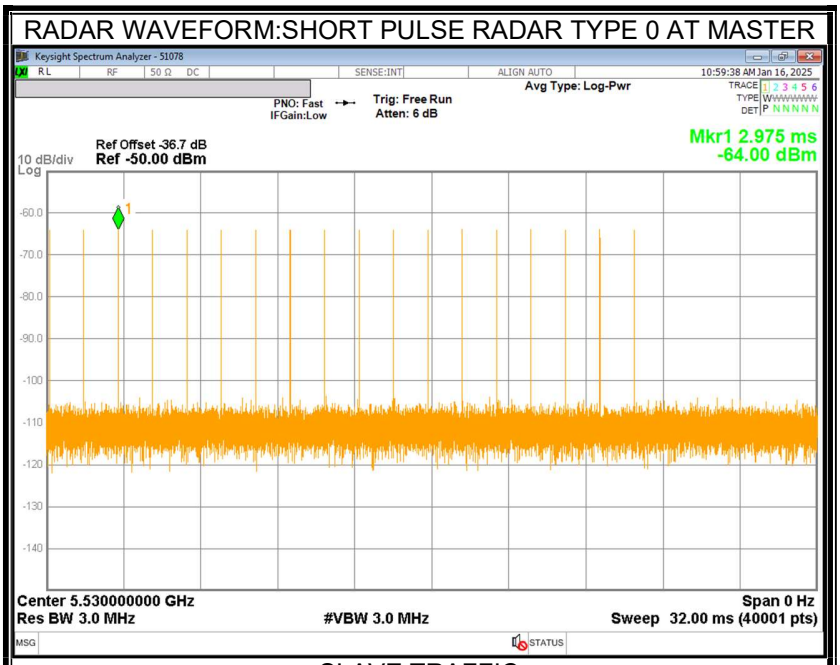
15.2.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5530 MHz.

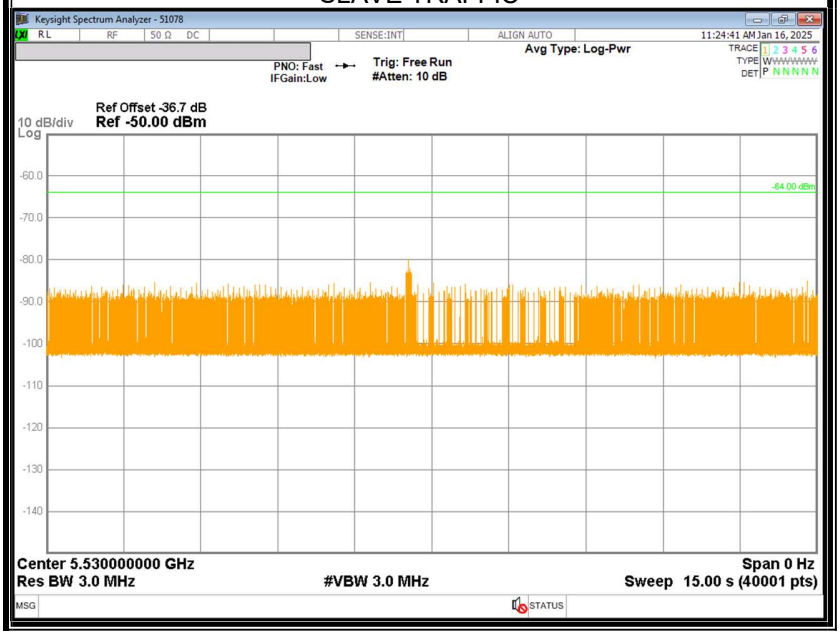
15.2.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM

RADAR WAVEFORM:SHORT PULSE RADAR TYPE 0 AT MASTER



SLAVE TRAFFIC



15.2.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

15.2.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

Channel Move Time (sec)	Limit (sec)
0.766	10

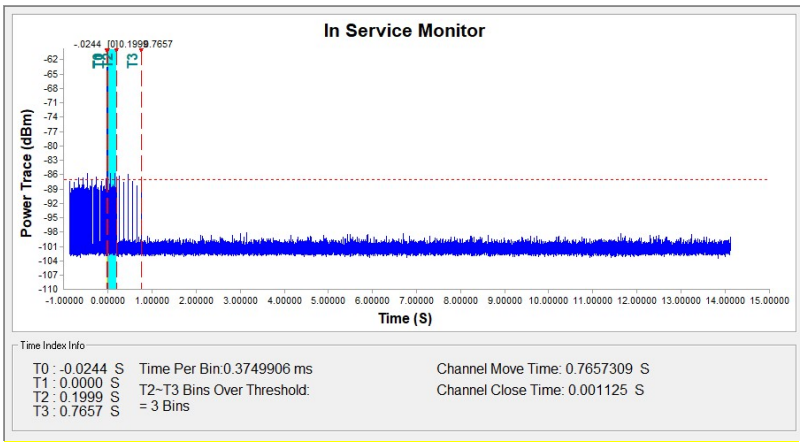
Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
1.125	60

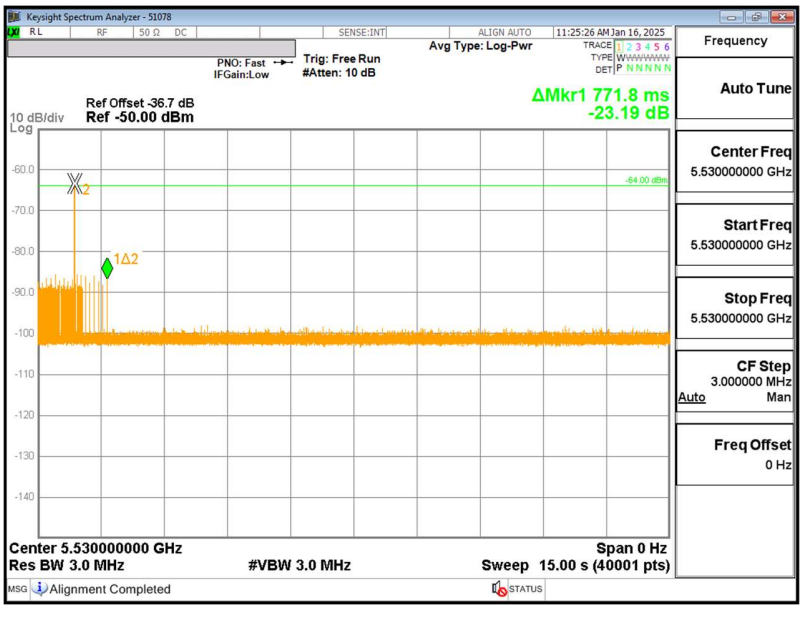
MOVE TIME & CHANNEL CLOSING TIME

AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.

MOVE TIME & AGGREGATE CHANNEL CLOSING TRANSMISSION TIME



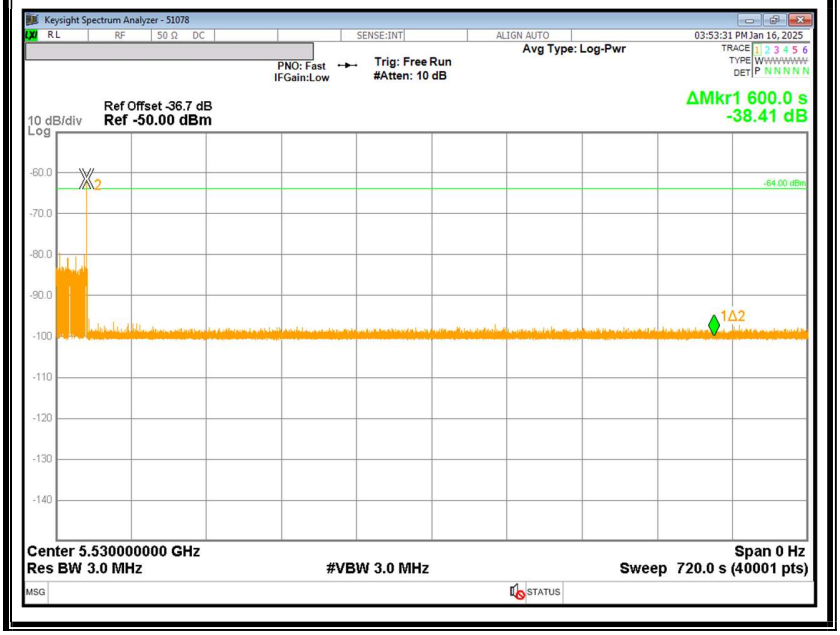


NON-OCCUPANCY PERIOD

RESULTS

No EUT transmissions were observed on the test channel during the 10-minute observation time.

10-MINUTE BEACON MONITORING PERIOD



END OF TEST REPORT