



<CDD Modes>

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )	
802.11a CH 36 5180MHz		5149.76	63.1	-10.9	74	51.19	31.65	11.21	30.95	129	61	P	H	
		5150.	52.19	-1.81	54	40.28	31.65	11.21	30.95	129	61	A	H	
	*	5180	111.02	-	-	99.08	31.68	11.21	30.95	129	61	P	H	
	*	5180	101.28	-	-	89.34	31.68	11.21	30.95	129	61	A	H	
													H	
														H
			5113.62	60.02	-13.98	74	48.11	31.62	11.24	30.95	104	237	P	V
			5149.24	48.82	-5.18	54	36.91	31.65	11.21	30.95	104	237	A	V
	*		5180	101.8	-	-	89.86	31.68	11.21	30.95	104	237	P	V
	*		5180	92.58	-	-	80.64	31.68	11.21	30.95	104	237	A	V
														V
														V
802.11a CH 44 5220MHz		5096.98	58.84	-15.16	74	46.92	31.6	11.27	30.95	106	89	P	H	
		5149.76	47.66	-6.34	54	35.75	31.65	11.21	30.95	106	89	A	H	
	*	5218	109.94	-	-	97.99	31.72	11.18	30.95	106	89	P	H	
	*	5218	99.62	-	-	87.67	31.72	11.18	30.95	106	89	A	H	
			5418.72	59.51	-14.49	74	46.94	31.92	11.6	30.95	106	89	P	H
			5429.76	48.3	-5.7	54	35.68	31.93	11.64	30.95	106	89	A	H
			5043.94	59.13	-14.87	74	47.22	31.55	11.31	30.95	313	100	P	V
			5144.56	47.72	-6.28	54	35.81	31.65	11.21	30.95	313	100	A	V
	*		5222	108.98	-	-	96.95	31.72	11.26	30.95	313	100	P	V
	*		5222	99.17	-	-	87.14	31.72	11.26	30.95	313	100	A	V
			5368.08	60.05	-13.95	74	47.61	31.87	11.52	30.95	313	100	P	V
			5432.64	48.26	-5.74	54	35.64	31.93	11.64	30.95	313	100	A	V



<b>802.11a CH 48 5240MHz</b>		5137.02	58.86	-15.14	74	46.94	31.63	11.24	30.95	140	82	P	H
		5139.88	47.55	-6.45	54	35.61	31.65	11.24	30.95	140	82	A	H
	*	5238	109.99	-	-	97.95	31.73	11.26	30.95	140	82	P	H
	*	5238	100.51	-	-	88.47	31.73	11.26	30.95	140	82	A	H
		5393.76	60.56	-13.44	74	48.03	31.88	11.6	30.95	140	82	P	H
		5394	48.4	-5.6	54	35.87	31.88	11.6	30.95	140	82	A	H
		5092.04	59.7	-14.3	74	47.78	31.6	11.27	30.95	294	99	P	V
		5138.32	47.48	-6.52	54	35.56	31.63	11.24	30.95	294	99	A	V
	*	5238	109.78	-	-	97.74	31.73	11.26	30.95	294	99	P	V
	*	5238	99.73	-	-	87.69	31.73	11.26	30.95	294	99	A	V
		5377.2	59.41	-14.59	74	46.97	31.87	11.52	30.95	294	99	P	V
		5452.8	48.43	-5.57	54	35.79	31.95	11.64	30.95	294	99	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11a CH 36 5180MHz		10360	46.27	-27.73	74	47.02	39.59	17.13	57.47	100	0	P	H
		15540	44.79	-29.21	74	43.45	38.26	21.61	58.53	100	0	P	H
													H
													H
		10360	47.43	-26.57	74	48.18	39.59	17.13	57.47	100	0	P	V
		15540	44.96	-29.04	74	43.62	38.26	21.61	58.53	100	0	P	V
													V
													V
802.11a CH 44 5220MHz		10440	47.44	-26.56	74	47.86	39.69	17.22	57.33	100	0	P	H
		15660	46.47	-27.53	74	44.95	38.11	21.7	58.29	100	0	P	H
													H
													H
		10440	46.88	-27.12	74	47.3	39.69	17.22	57.33	100	0	P	V
		15660	48.42	-25.58	74	46.9	38.11	21.7	58.29	100	0	P	V
													V
													V
802.11a CH 48 5240MHz		10480	46.55	-27.45	74	46.74	39.77	17.27	57.23	100	0	P	H
		15720	45.92	-28.08	74	44.28	38.03	21.76	58.15	100	0	P	H
													H
													H
		10480	47.48	-26.52	74	47.67	39.77	17.27	57.23	100	0	P	V
		15720	46.58	-27.42	74	44.94	38.03	21.76	58.15	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 - 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	(P/A)	(H/V)
802.11a CH 52 5260MHz		5015.6	59.06	-14.94	74	47.15	31.52	11.34	30.95	126	83	P	H
		5145.6	47.48	-6.52	54	35.57	31.65	11.21	30.95	126	83	A	H
	*	5262	109.76	-	-	97.59	31.77	11.35	30.95	126	83	P	H
	*	5262	100.71	-	-	88.54	31.77	11.35	30.95	126	83	A	H
		5360.96	59.84	-14.16	74	47.4	31.87	11.52	30.95	126	83	P	H
		5350.72	48.32	-5.68	54	35.9	31.85	11.52	30.95	126	83	A	H
		5142.48	58.63	-15.37	74	46.72	31.65	11.21	30.95	305	96	P	V
		5088.92	47.56	-6.44	54	35.64	31.6	11.27	30.95	305	96	A	V
	*	5262	107.99	-	-	95.82	31.77	11.35	30.95	305	96	P	V
	*	5262	99	-	-	86.83	31.77	11.35	30.95	305	96	A	V
		5363.2	59.5	-14.5	74	47.06	31.87	11.52	30.95	305	96	P	V
		5402.56	48.3	-5.7	54	35.75	31.9	11.6	30.95	305	96	A	V
	802.11a CH 60 5300MHz		5117	58.82	-15.18	74	46.91	31.62	11.24	30.95	126	81	P
		5146.38	47.48	-6.52	54	35.57	31.65	11.21	30.95	126	81	A	H
*		5298	110.8	-	-	98.6	31.8	11.35	30.95	126	81	P	H
*		5298	100.21	-	-	88.01	31.8	11.35	30.95	126	81	A	H
		5366.4	61.16	-12.84	74	48.72	31.87	11.52	30.95	126	81	P	H
		5351.04	50.07	-3.93	54	37.65	31.85	11.52	30.95	126	81	A	H
		5116.74	59.87	-14.13	74	47.96	31.62	11.24	30.95	291	99	P	V
		5116.22	47.39	-6.61	54	35.48	31.62	11.24	30.95	291	99	A	V
*		5298	109.86	-	-	97.66	31.8	11.35	30.95	291	99	P	V
*		5298	99.17	-	-	86.97	31.8	11.35	30.95	291	99	A	V
		5352.16	60.75	-13.25	74	48.33	31.85	11.52	30.95	291	99	P	V
		5351.84	49.32	-4.68	54	36.9	31.85	11.52	30.95	291	99	A	V



<b>802.11a</b> <b>CH 64</b> <b>5320MHz</b>	*	5326	111.23	-	-	98.93	31.82	11.43	30.95	100	93	P	H
	*	5326	100.99	-	-	88.69	31.82	11.43	30.95	100	93	A	H
		5353.6	64.29	-9.71	74	51.87	31.85	11.52	30.95	100	93	P	H
		5350.4	52.63	-1.37	54	40.21	31.85	11.52	30.95	100	93	A	H
													H
													H
	*	5320	103.57	-	-	91.27	31.82	11.43	30.95	100	126	P	V
	*	5320	93.34	-	-	81.04	31.82	11.43	30.95	100	126	A	V
		5436.8	59.73	-14.27	74	47.11	31.93	11.64	30.95	100	126	P	V
		5350.56	48.91	-5.09	54	36.49	31.85	11.52	30.95	100	126	A	V
													V
													V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11a CH 52 5260MHz		10520	50.04	-23.96	74	50.11	39.82	17.31	57.2	100	0	P	H
		15780	45.67	-28.33	74	43.96	37.97	21.79	58.05	100	0	P	H
													H
													H
		10520	50.19	-23.81	74	50.26	39.82	17.31	57.2	100	0	P	V
		15780	50.49	-23.51	74	48.78	37.97	21.79	58.05	100	0	P	V
													V
													V
802.11a CH 60 5300MHz		10600	46.5	-27.5	74	46.36	39.92	17.4	57.18	100	0	P	H
		15900	45.14	-28.86	74	43.25	37.82	21.88	57.81	100	0	P	H
													H
													H
		10600	46.76	-27.24	74	46.62	39.92	17.4	57.18	100	0	P	V
		15900	44.64	-29.36	74	42.75	37.82	21.88	57.81	100	0	P	V
													V
													V
802.11a CH 64 5320MHz		10640	48.73	-25.27	74	48.48	39.97	17.45	57.17	100	0	P	H
		15960	43.29	-30.71	74	41.28	37.74	21.94	57.67	100	0	P	H
													H
													H
		10640	47.53	-26.47	74	47.28	39.97	17.45	57.17	100	0	P	V
		15960	43.82	-30.18	74	41.81	37.74	21.94	57.67	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.	
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.		
2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )	
802.11a CH 100 5500MHz		5454.64	61.96	-12.04	74	49.32	31.95	11.64	30.95	100	64	P	H	
		5469.36	66.56	-1.74	68.3	53.87	31.97	11.67	30.95	100	64	P	H	
		5457.84	51.12	-2.88	54	38.48	31.95	11.64	30.95	100	64	A	H	
	*	5500	111.85	-	-	99.13	32	11.67	30.95	100	64	P	H	
	*	5500	100.98	-	-	88.26	32	11.67	30.95	100	64	A	H	
														H
			5435.76	60.03	-13.97	74	47.41	31.93	11.64	30.95	100	174	P	V
			5469.84	62.27	-6.03	68.3	49.58	31.97	11.67	30.95	100	174	P	V
			5459.6	48.84	-5.16	54	36.2	31.95	11.64	30.95	100	174	A	V
	*		5500	104.57	-	-	91.85	32	11.67	30.95	100	174	P	V
	*		5500	94.34	-	-	81.62	32	11.67	30.95	100	174	A	V
														V
802.11a CH 116 5580MHz		5419.12	61.14	-12.86	74	48.57	31.92	11.6	30.95	128	86	P	H	
		5468.56	58.62	-9.68	68.3	45.93	31.97	11.67	30.95	128	86	P	H	
		5434.24	48.23	-5.77	54	35.61	31.93	11.64	30.95	128	86	A	H	
	*	5582	112.34	-	-	99.43	32.12	11.77	30.98	128	86	P	H	
	*	5582	102.39	-	-	89.48	32.12	11.77	30.98	128	86	A	H	
			5760.98	59.95	-8.35	68.3	46.77	32.36	11.86	31.04	128	86	P	H
			5458.48	58.78	-15.22	74	46.14	31.95	11.64	30.95	310	97	P	V
			5468.8	59.44	-8.86	68.3	46.75	31.97	11.67	30.95	310	97	P	V
			5409.04	48.16	-5.84	54	35.61	31.9	11.6	30.95	310	97	A	V
	*		5582	110.87	-	-	97.96	32.12	11.77	30.98	310	97	P	V
	*		5582	100.43	-	-	87.52	32.12	11.77	30.98	310	97	A	V
			5753.98	59.94	-8.36	68.3	46.75	32.36	11.86	31.03	310	97	P	V



<b>802.11a</b> <b>CH 140</b> <b>5700MHz</b>	*	5700	109.31	-	-	96.23	32.27	11.82	31.01	119	64	P	H
	*	5700	99.14	-	-	86.06	32.27	11.82	31.01	119	64	A	H
		5725.72	66.7	-1.6	68.3	53.57	32.31	11.84	31.02	119	64	P	H
													H
													H
													H
	*	5700	103.51	-	-	90.43	32.27	11.82	31.01	100	174	P	V
	*	5700	93.18	-	-	80.1	32.27	11.82	31.01	100	174	A	V
		5726.12	62.6	-5.7	68.3	49.47	32.31	11.84	31.02	100	174	P	V
													V
													V
													V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												





Band 3 - 5470~5725MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11a CH 100 5500MHz		11000	47.82	-26.18	74	46.66	40.4	17.86	57.1	100	0	P	H
		16500	45.35	-22.95	68.3	39.63	39.3	22.42	56	100	0	P	H
													H
													H
		11000	48.05	-25.95	74	46.89	40.4	17.86	57.1	100	0	P	V
		16500	44.53	-23.77	68.3	38.81	39.3	22.42	56	100	0	P	V
													V
													V
802.11a CH 116 5580MHz		11160	47.25	-26.75	74	46.24	40.3	18.04	57.33	100	0	P	H
		16740	52.78	-15.52	68.3	46.2	40.07	22.65	56.14	100	0	P	H
													H
													H
		11160	48.37	-25.63	74	47.36	40.3	18.04	57.33	100	0	P	V
		16740	52.74	-15.56	68.3	46.16	40.07	22.65	56.14	100	0	P	V
													V
													V
802.11a CH 140 5700MHz		11400	46.15	-27.85	74	45.34	40.16	18.31	57.66	100	0	P	H
		17100	53.72	-14.58	68.3	46.17	41.22	22.99	56.66	100	0	P	H
													H
													H
		11400	46.34	-27.66	74	45.53	40.16	18.31	57.66	100	0	P	V
		17100	54.82	-13.48	68.3	47.27	41.22	22.99	56.66	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )
802.11a CH 144 5720MHz	*	5720	111.72	-	-	98.59	32.31	11.84	31.02	147	96	P	H
	*	5720	101.04	-	-	87.91	32.31	11.84	31.02	147	96	A	H
													H
													H
													H
													H
	*	5722	106.44	-	-	93.31	32.31	11.84	31.02	100	179	P	V
	*	5722	95.54	-	-	82.41	32.31	11.84	31.02	100	179	A	V
													V
													V
													V
	<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.											



**Band 3 - Straddle Channel**  
**WIFI 802.11a (Harmonic @ 3m)**

WIFI Ant. 2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 144 5720MHz		11440	45.12	-28.88	74	44.33	40.14	18.36	57.71	100	0	P	H	
		17160	53.27	-20.73	74	45.68	41.43	23.06	56.9	100	0	A	H	
													H	
													H	
			11440	45.3	-28.7	74	44.51	40.14	18.36	57.71	100	0	P	V
			17160	63.51	-10.49	74	55.92	41.43	23.06	56.9	205	283	P	V
			17160	47.98	-6.02	54	40.39	41.43	23.06	56.9	205	283	A	V
														V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Emission below 1GHz

WIFI 802.11a (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.	
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.		
2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )	
802.11a LF		67.8	26.58	-13.42	40	45.77	12.2	1.06	32.45	-	-	P	H	
		201.99	26.81	-16.69	43.5	41.67	15.85	1.7	32.41	-	-	P	H	
		244.11	27.82	-18.18	46	40.31	18.01	1.83	32.33	-	-	P	H	
		769.7	30.42	-15.58	46	31.03	27.68	3.97	32.26	-	-	P	H	
		854.4	32.18	-13.82	46	31.13	28.63	4.28	31.86	-	-	P	H	
		948.2	33.2	-12.8	46	29.33	30.27	4.75	31.15	100	62	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
			31.89	35.53	-4.47	40	42.49	24.72	0.78	32.46	100	119	P	V
			65.37	27.09	-12.91	40	46.43	12.05	1.06	32.45	-	-	P	V
			201.18	28.85	-14.65	43.5	43.73	15.83	1.7	32.41	-	-	P	V
			766.2	29.36	-16.64	46	29.99	27.67	3.97	32.27	-	-	P	V
			874	31.99	-14.01	46	30.53	28.74	4.45	31.73	-	-	P	V
			937	33.08	-12.92	46	29.78	29.94	4.6	31.24	-	-	P	V
												V		
												V		
												V		
												V		
												V		
												V		
Remark	1. No other spurious found. 2. All results are PASS against limit line.													



**Note symbol**

*	<b>Fundamental Frequency</b> which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is <b>over limit</b> line.
P/A	<b>Peak</b> or <b>Average</b>
H/V	<b>Horizontal</b> or <b>Vertical</b>



A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

- Level(dBμV/m) =  
Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
- Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

**For Peak Limit @ 2390MHz:**

- Level(dBμV/m)  
= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)  
= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)  
= 55.45 (dBμV/m)
- Over Limit(dB)  
= Level(dBμV/m) – Limit Line(dBμV/m)  
= 55.45(dBμV/m) – 74(dBμV/m)  
= -18.55(dB)

**For Average Limit @ 2390MHz:**

- Level(dBμV/m)  
= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)  
= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)  
= 43.54 (dBμV/m)
- Over Limit(dB)  
= Level(dBμV/m) – Limit Line(dBμV/m)  
= 43.54(dBμV/m) – 54(dBμV/m)  
= -10.46(dB)

**Both peak and average measured complies with the limit line, so test result is “PASS”.**