

FCC Radiated Spurious Suppression Requirements Harmonic & Frequency vs OML Mixer Model

Signal GHz	*2 GHz	Use Mixer #	*3 GHz	Use Mixer #	*4 GHz	Use Mixer #	*5 GHz	Use Mixer #	*6 GHz	Use Mixer #	*7 GHz	Use Mixer #	*8 GHz	Use Mixer #
23	46	M19HW	69	M12HW	92	M08HW	115	M08HW	138	M08HW	161	M05HW	184	M05HW
24	48	"	72	"	96	"	120	"	144	M05HW	168	"	192	"
25	50	"	75	"	100	"	125	"	150	"	175	"	200	"
26	52	"	78	"	104	"	130	"	156	"	182	"	208	"
27	54	"	81	"	108	"	135	M08HW	162	"	189	"	216	M05HW
28	56	"	84	"	112	"	140	-----	168	"	196	"	224	M03HW
29	58	M19HW	87	M12HW	116	"	145	M05HW	174	"	203	"	232	M03HW
30	60	-----	90	-----	120	"	150	"	180	"	210	"		
31	62	M12HW	93	M08HW	124	"	155	"	186	"	217	M05HW		
32	64	"	96	"	128	"	160	"	192	"	224	M03HW		
33	66	"	99	"	132	"	165	"	198	"	231	M03HW		
34	68	"	102	"	136	M08HW	170	"	204	"				
35	70	"	105	"	140	-----	175	"	210	"				
36	72	"	108	"	144	M05HW	180	"	216	M05HW				
37	74	"	111	"	148	"	185	"	222	M03HW				
38	76	"	114	"	152	"	190	"	228	M03HW				
39	78	"	117	"	156	"	195	"						
40	80	"	120	"	160	"	200	"						
41	82	"	123	"	164	"	205	"						
42	84	"	126	"	168	"	210	"						
43	86	"	129	"	172	"	215	M05HW						
44	88	M12HW	132	"	176	"	220	-----						
45	90	-----	135	"	180	"	225	M03HW						
46	92	M08HW	138	M08HW	184	"	230	M03HW						
47	94	"	141	M05HW	188	"								
48	96	"	144	"	192	"								
49	98	"	147	"	196	"								
50	100	"	150	"	200	"								
51	102	"	153	"	204	"								
52	104	"	156	"	208	"								
53	106	"	159	"	212	"								
54	108	"	162	"	216	M05HW								
55	110	"	165	"	220	-----								
56	112	"	168	"	224	M03HW								
57	114	"	171	"	228	"								
58	116	"	174	"	232	M03HW								
59	118	"	177	"										
60	120	"	180	"										
61	122	"	183	"										
62	124	"	186	"										
63	126	"	189	"										
64	128	"	192	"										
65	130	"	195	"										
66	132	"	198	"										
67	134	"	201	"										
68	136	"	204	"										
69	138	M08HW	207	"										
70	140	-----	210	"										
71	142	M05HW	213	"										
72	144	"	216	"										
73	146	"	219	M05HW										
74	148	"	222	M03HW										
75	150	"	225	"										
76	152	"	228	"										
77	154	"	231	M03HW										
78	156	M05HW												

FCC Spurious Emissions Suppression Testing Requirements

Signal <10 GHz the lower of the 10th harmonic or 40 GHz
Signal 10 to 30 GHz the lower of the 5th harmonic or 100 GHz
Signal >30 GHz the lower of the 5th harmonic or 200 GHz
Signal 76 to 77 GHz to 231 GHz

OML Mixer Model # vs Frequency Coverage

M19HW = 40 to 60 GHz Waveguide cutoff = 31.41 GHz
M12HW = 60 to 90 GHz Waveguide cutoff = 48.35 GHz
M08HW = 90 to 140 GHz Waveguide cutoff = 73.84 GHz
M05HW = 140 to 220 GHz Waveguide cutoff = 115.75 GHz
M03HW = 220 to 325 GHz Waveguide cutoff = 173.28 GHz

Frequency coverage of a mixer type extends to the line (-----).