

Receiver Test Data

(Sorted by Dynamic Range Narrow Spaced)

Updated 2 July 2009

Device Under Test	Noise Floor (dBm)	AGC Thrshld (uV)	dB	100kHz Blocking (dB)	Sensitivity (uV)	LO Noise (dBc)	Spacing kHz	Front End Selectivity	Filter Ultimate (dB)	Dynamic Range Wide Spaced (dB)	kHz	Dynamic Range Narrow Spaced (dB)	kHz
Added 2/15/08 Elecraft K3	-130 -138 _b	2.1 0.6 _b	3	140 _s	0.33 0.19 _b	138	10	B Band Pass	105	104	20	101 _{pf} 96 _{qf} 95 _r	2
Updated 7/2/09 Perseus	-123 -125 _b	0.15 0.1 _b	3	125	0.8 0.6 _b	147	10	B Band Pass	109 _f	99	20	99	2
Added 2/15/08 Flex 5000A	-123 -135 _b	2.0 0.5 _b	3	123 _s	1.3 0.3 _b	123	10	B Band Pass	98	96	20	96	2
<i>Added 4/16/06</i> Ten-Tec Orion II	-125 -133 _b	2.7 0.65 _b	3	130	0.75 0.3 _b	126	10	B Band Pass	100 _f	95 _f	20	95 _i	2
<i>Updated 4/17/06</i> Ten-Tec Orion	-127 -135 _b	0.8	3	137	0.6 0.25 _b	130	10	B Band Pass	100 _f	96	20	93	2
Added 2/15/08 Icom R9500	-127 -130 _b -135 _{b1}	1.1 0.25 _b 0.16 _{b1}	3	119	0.7 0.2 _b 0.11 _{b1}	134	10	B Band Pass	80	110 _f	20	85 _f	2
Drake R-4C/CF-600/6	-138	0.7	3	130	0.15	135	10	A-Preselect	130	85	20	84	2

								or					
AOR AR-7030	-122 -128 _b <u> </u>	2.2	3	130	0.5 0.22	130	10	D Hi/Lo Pass	90	100	20	82	2
<i>Added 4/16/06</i> Icom IC-765	-134 -140 _b <u> </u>	5.0 1.7 _b <u> </u>	3	143	0.26	130	10	B Band Pass	95 _f <u> </u>	102	20	81 _{f j m} <u> </u>	2
Atlas 350-XL	-131	1.0	11	117	0.2	125	4	C Band Pass	95	81	20	81	2
Kenwood TS-830/YK88	-129	1.5	3	122	0.1	114	2	C Preselect or	85 _f <u> </u>	84	20	81	2
Added 4/23/07 Ten-Tec Omni VII	-130 -140 ^b	0.8 0.2 ^b	3	130	0.45 0.17 ^b	124	10	B 0.5 Octave	100 _f <u> </u>	92	20	80	2
<i>Added 10/3/04</i> Icom IC-7800	-126 -136 _b <u> </u> -139 _{b1} <u> </u>	4.5 1.2 _b <u> </u> 0.6 _{b1} <u> </u>	3	>135	0.60 0.15 _b <u> </u> 0.10 _{b1} <u> </u>	130	10	A Trk Presel	100 _f <u> </u>	102	20	80 _f <u> </u>	2
<i>Added 10/3/04</i> Elecraft K2 s/n:3170	-129 -136 _g <u> </u>	10 1.7 _b <u> </u>	15	123 134 _h <u> </u>	0.35 0.20	123	10	B Band Pass	80 _f <u> </u>	98	20	80 _f <u> </u>	2
<i>Added 2/27/04</i> Ten-Tec Omni VI+	-135	0.7	3	145	0.2	137	20	B Band Pass	80	97	20	80	2
Yaesu 901-DM	-135	1.6	3	124	0.15	109	2	C Preselect or	85	87	20	80 _f <u> </u>	3
Collins R-390A	-137	N.A.		130	0.2	130	2	A+ Trk Presel	85	81	20	79	2
Ten-Tec Corsair	-131 _a <u> </u>	0.1	14	130	0.2	132	5	C Band	90	93	20	79	3

								Pass					
Icom IC-720A	-137	1.6	3	138	0.15	117	10	C 0.5 Octave	80	93	50	78	3
Kenwood TS-820S	-137	0.4	3	115	0.2	125	10	C Preselect or	80	79	20	78	3
<i>Updated 4/17/06</i> Kenwood TS-850 Inrad-400s	-128 -138 _b	2.2 0.5 _b	3	128	0.45 0.15 _b					90	20	77	2
JRC NRD-515	-138	3.5	4	103	0.1	118	10	C 0.8 Octave	80	95	20	77 _f	2
Ten-Tec Omni V	-134	1.2	6	135	0.18	134	10	C Band Pass	100	89	20	76	2
Atlas 210/215X	-120 _a	N.A.		123	0.5	N.A.		C Band Pass	95	76	20	76	2
Device Under Test	Noise Floor (dBm)	AGC Thrshld (uV)	dB	100kHz Blocking (dB)	Sensitivity (uV)	LO Noise Spacing (dBc)	kHz	Front End Selectivity	Filter Ultima te (dB)	Dynamic Range W i d e Spaced (dB)	kHz	Dynamic Range N a r r o w Spaced (dB)	kHz
<i>Corrected 4/7/06</i> Icom 756 Pro III	-132 -140 _b -142 _{b1}	2.3 0.7 0.3	3	142	0.35 0.14 0.11	126	10	B 0.5 Octave	80	99	20	75	2
<i>Added 4/7/06</i> Icom 756 Pro II	-133 -138 _b -141 _{b1}	2.1 0.65 0.26	3	138	0.32 0.15 0.11	124	10	B 0.5 Octave	80	98	20	75	2
Drake R-7	-135 -140 _b	1.0 0.4 _b	3	145	0.28 0.15 _b	114	10	B 0.5 Octave	85	97	100	75	2
Drake TR-7	-134	1.3	3	146	0.5	116	10	B 0.5 Octave	90	99	100	75	2

Heath SB-104	-123	<i>N.A.</i>		92	0.5	<i>N.A.</i>		C Band Pass	75	79	20	75	4
WJ HF-1000	-129 -136 ^{ab} _—	0.11	3	123	0.23 0.13 ^b _—	115	10	D Wideband	80	99	20	75	5
<i>Added 4/7/06</i> Icom 706MkIIG	-135 -140 ^b _—	1.9 0.6	3	126	0.23 0.12	127	10	C Octave	80	87	20	74	2
Ten-Tec Omni-B	-136	0.2	25	129	0.15	130	10	C Preselect or	80	87	20	74	2
Icom IC-730	-140	1.5	3	135	0.1	118	10	C 0.5 Octave	80	92	50	74	3
Kenwood R-820S	-125	4.0	3	125	0.35	123	10	C Preselect or	75	74	20	74	4
Collins 75-S3B	-146	1.1	15	122	0.1	120	4	B+ Preselect or	85	88	20	74	2
Icom IC-781	-127 -138 ^b _—	2.0 0.5 ^b _—	3		0.5 0.18 ^b _—	129	10	B 0.5 Octave	90 ^f _—	94	20	73	2
<i>Updated 4/18/06</i> Stock 781	-128 -135 ^b _—	2.4 0.7 ^b _—	3	131	0.5 0.22 ^b _—			B 0.5 Octave	90	98	20	78	2
<i>Updated 4/18/06</i> 781 with Pin Diodes	-126 -134 ^b _—	3.6 1.15 ^b _—	3	134	0.54 0.21 ^b _—			B 0.5 Octave	90	98	20	72	2
Kenwood TS-930S	-135	2.0	3	143	0.15	115	10	B- 0.5 Octave	80 ^f _—	86	20	73	3
Icom IC-701	-129	5.5	6	130	0.3	125	10	C Band Pass	75	81	50	73	4

Collins 75S-3C	-141	1.3	12	121	0.14	120	4	B+ Preselect or	95	85 ^d ₋	20	72	2
JRC NRD-525	-132 ^a ₋	0.9	3	123	0.2	120	10	B Trk Presel	65	95	50	72	5
<i>Updated 4/13/09</i> Yaesu FT-1000 MP MKV Field Inrad roofing filter mod	-133 ^b ₋	3.0 ^b ₋	3	135	0.2 ^b ₋	128	10	B 0.5 Octave	90 ^f ₋	89	20	71 ^k ₋	2
<i>Added 10/3/04</i> Icom 756 Pro	-127 ^b ₋ -136 ^{b1} ₋ -139 ^{b1} ₋	3.5 ^b ₋ 1.0 ^b ₋ 0.5 ^{b1} ₋	3	132	0.55 ^b ₋ 0.21 ^{b1} ₋ 0.14 ^{b1} ₋	127	10	B 0.5 Octave	90	86	20	71	2
Drake R-8	-128 ^{ab} ₋ -131 ^{ab} ₋	0.6 0.3	3	130	0.25 ^b ₋ 0.18 ^b ₋	115	10	C 0.5 Octave	75 ^f ₋ 90 ^b ₋ 85 ^b ₋		20	71	5
Device Under Test	Noise Floor (dBm)	AGC Thrshld (uV)	dB	100kHz Blocking (dB)	Sensitivity (uV)	LO Noise Spacing (dBc)	kHz	Front End Selectivity	Filter Ultima te (dB)	Dynamic Range W i d e Spaced (dB)	kHz	D y n a m i c Range N a r r o w Spaced (dB)	kHz
Icom IC-R72	-127 ^a ₋ -135 ^a ₋	3.1 1.2 ^b ₋	3	129	0.28 ^b ₋ 0.11 ^b ₋	122	10	C 0.5 Octave	75	87 ^b ₋	20	71	5
Icom R-9000	-131 ^a ₋	0.8	3	129	0.15	128	10	B 0.5 Octave	90	93	20	71	5
<i>Added 2/27/04</i> Elecraft K2 s/n: 1140	-135	2.6	15	118	0.22	123	10	B Band Pass	80 ^f ₋	95	20	70	2
JRC NRD-535	-135 ^a ₋	0.9	3	114	0.1	117	10	B Trk Presel	70	92	50	70	5
Kenwood TS-830S	-136 ^a ₋	0.9	3	122	0.1	113	2	C Preselect or	80	84	20	70	3

Icom IC-761	-131 -139 _b	2.0 0.7 _b	3	145	0.4 0.17 _b	129	10	B- 0.5 Octave	90 _f	87	20	70	2
<i>Added 4/16/06</i> Kenwood TS-870S	-127 -137 _b	1.9 0.44 _b	3	137	0.5	121	10	C 0.5 Octave	90 _f	95	20	69	2
<i>Added 10/3/04</i> Yaesu FT-1000 MP MKV Field	-133 _b	3.0 _b	3	135	0.2 _b	128	10	B 0.5 Octave	90 _f	88	20	69	2
<i>Added 10/3/04</i> Yaesu FT-1000 D	-128 _{b1}	6.0 _{b1}	3	>131	0.3 _{b1}	121	10	B 0.5 Octave	90 _f	90	20	69	2
Lowe HF-150	-126 _a	0.7	3	126	0.3	113	10	F No Bandpass	75	84	20	69	5
Kenwood TS-430S	-136 _a	0.6	3	134	0.1	102	10	C 0.5 Octave	70	78	20	69	5
<i>Added 10/3/04</i> Yaesu FT-1000 MP	-125 -134 _b	3.8 1.1 _b	3	>135	0.48 0.18 _b	128	10	B 0.5 Octave	90 _f	97	20	68	2
JRC NRD-545	-130 _a	2.0	6	127	0.2	118	10	B 0.5 Octave	65	96	100	68	5
Signal/One CX-11A	-122 _a	0.6	17	109	0.6	119	50	C 0.5 Octave	105	90	50	68	5 _f
Kenwood TS-180S	-139	0.9	3	115	0.15	120	10	C Preselect or	80	70	20	68	3
Drake TR-4C	-124 _a	1.2	3	105	0.4	130	10	C Preselect or	80	74	20	68	2

Icom IC-735	-126 ^b -133 ₋	1.5	12	135	0.35 0.18 ₋ ^b	123	10	C 0.5 Octave	90 ^f ₋	83	20	68	2
<i>Added 1/21/04</i> Icom IC-R75	-123 ^a -130 ₋ ^b	3.5 1.3 ₋ ^b	3	119	0.5 0.2 ₋ ^b	109	10	B 0.5 Octave	80	95	50	67	5
Drake SW8	-127 ^a ₋	0.9	3	125	0.32	113	10	<i>N.A.</i>	70	92	20	67	5
Racal 6790 GM	-128	0.3	1	145	0.7	130	10	D Broadband	85	95	20	66	2
Device Under Test	Noise Floor (dBm)	AGC Thrshld (uV)	dB	100kHz Blocking (dB)	Sensitivity (uV)	LO Noise Spacing (dBc)	kHz	Front End Selectivity	Filter Ultimate (dB)	Dynamic Range Wide Spaced (dB)	kHz	Dynamic Range Narrow Spaced (dB)	kHz
Lowe HF-235	-126 ^a ₋	0.8	3	129	0.35	117	10	D Octave	80	71	20	66	5
AOR AR3030	-131 ^a ₋	2.0	10	130	0.16	117	10	C 0.5 Octave	85	90	20	66	5
Yaesu FRG-100	-133 ^a ₋	0.9	3	127	0.13	112	10	C 0.5 Octave	70	99	50	65	5
Kenwood R-5000	-131 ^a ₋	0.4	3	134	0.2	120	10	C 0.5 Octave	80 ^f ₋	86	20	65	5
<i>Added 2/27/04</i> Palstar R-30	-123	2.6	3	130	0.35	116	10	C Octave	90	88	20	64	5
Yaesu FRG-7700	-130 ^a ₋	1.3	3	123	0.2	100	10	D Octave	65	83	50	64 ^f ₋	5 ₋ ^c
Kenwood R-1000	-130 ^a ₋	0.9	3	119	0.2	107	10	D Octave	70	76	20	64 ^f ₋	3 ₋ ^c
Heath	-134	<i>N.A.</i>		104	0.5	<i>N.A.</i>		C	70	66	20	64	4

SB-303								Preselect or					
Collins KWM-380	-127 ^a ₋	1.1	5	123	0.3	99	10	B 0.5 Octave	70 ^f ₋	94	50	64 ^f ₋	2
Icom IC-751	-127 ₋ -133 ^b ₋	6.3	3	138	0.4 0.2 ^b ₋	127	10	B- 0.5 Octave	90 ^f ₋	84	20	64	2
<i>Added 3/27/06</i> Icom 7000	-129 ₋ -139 ^b ₋	4.5 1.0	3	119	0.45 0.13	122	10	C Octave	65	90	20	63	2
Added 9/22/07 Yaesu FT-2000	-122 ₋ -132 ^b ₋ -140 ^{b1} ₋	5 1.3 ^b ₋ 0.5 ^{b1} ₋	3	120	1.0 0.3 ^b ₋ 0.14 ^{b1} ₋	122	10	B+ Bandpass + Trk	80 ^f ₋	81 ⁿ ₋ 90 ^o ₋	20	63 ⁿ ₋ 61 ^o ₋	2
Kenwood TS-520	-139	<i>N.A.</i>		116	0.15	<i>N.A.</i>		C Preselect or	70	63	20	63	3
Yaesu FT-One	-135	1.0	3	130	0.2	99	10	C 0.5 Octave	80 ^f ₋	91	50	63 ^f ₋	2
Collins 75-S3 Wing	-145	1.0	14	105	0.1	<i>N.A.</i>		B Preselect or	75	75	20	63	3
JRC NRD-93	-141	1.6	3	128	0.15	133	10	A+ Trk Presel	80	94	20	63	2
Yaesu FT-980	-136	1.8	3	140	0.12	106	10	C 0.5 Octave	62 ^f ₋	96	50	63	2
Icom IC-R70/R-71A	-129 ₋ -135 ^b ₋	3.1 1.4 ^b ₋	3	132	0.4 0.2 ^b ₋	128	10	B- 0.5 Octave	90 ^f ₋	86	20	62	3
Grundig Satellite 700	-127 ^a ₋	1.6	3	106	0.3	118	10	<i>N.A.</i>	85	76	20	62	5
KWZ-30	-130	1.0	3	120	0.8	118	10	^d ₋	80	100	20	60	5

Collins 51S1	-134	1.0	7	117	0.13	146	10	A Trk Presel	100	84 ^e ₋	100	60	5
Icom R-8500	-135 ^a ₋	0.45	3	132	0.11	131	10	B 0.5 Octave	75	81	20	59	5
Yaesu FT-101E	-141	<i>N.A.</i>		102	0.15	<i>N.A.</i>		C Preselect or	70	60	20	59	3
Drake R-4C Stock	-139	0.7	3	130	0.15	135	10	A- Preselect or	70	85	20	58	2
Yaesu FT-757	-120 -134 ^b ₋	1.6	3	130	0.7 0.15 ^b ₋	109	10	C 0.5 Octave	70 ^f ₋	86	20	56	3
Ten-Tec 340	-123 -133 ^{ab} ₋	0.5 0.13	3	109	0.4 0.14	113	10	B 0.5 Octave	70	93	100	46	5
Kenwood R-2000	-130 ^a ₋	1.4	3	115	0.15	105	10	D Octave	70	71	20	45	5
Kenwood R-600	-130 ^a ₋	0.8	3	109	0.2	99	10	D Octave	65	68	20	<i>F.L.</i> ₋	5
Yaesu FRG-8800	-132 ^a ₋	0.6	3	122	0.18	<i>N.A.</i>		D Octave	70	87	20	<i>F.L.</i> ₋	5
AOR 5000	-124 -130 ^{ab} ₋	0.9 1.8	3	118	0.2 0.35	103	10	B 0.5 Octave	60	58	50	^f ₋	5
Device Under Test	Noise Floor (dBm)	AGC Thrshld (uV)	dB	100kHz Blocking (dB)	Sensitivity (uV)	LO Noise Spacing (dBc)	kHz	Front End Selectivity	Filter Ultima te (dB)	Dynamic Range W i d e Spaced (dB)	kHz	Dynamic Range N a r r o w Spaced (dB)	kHz