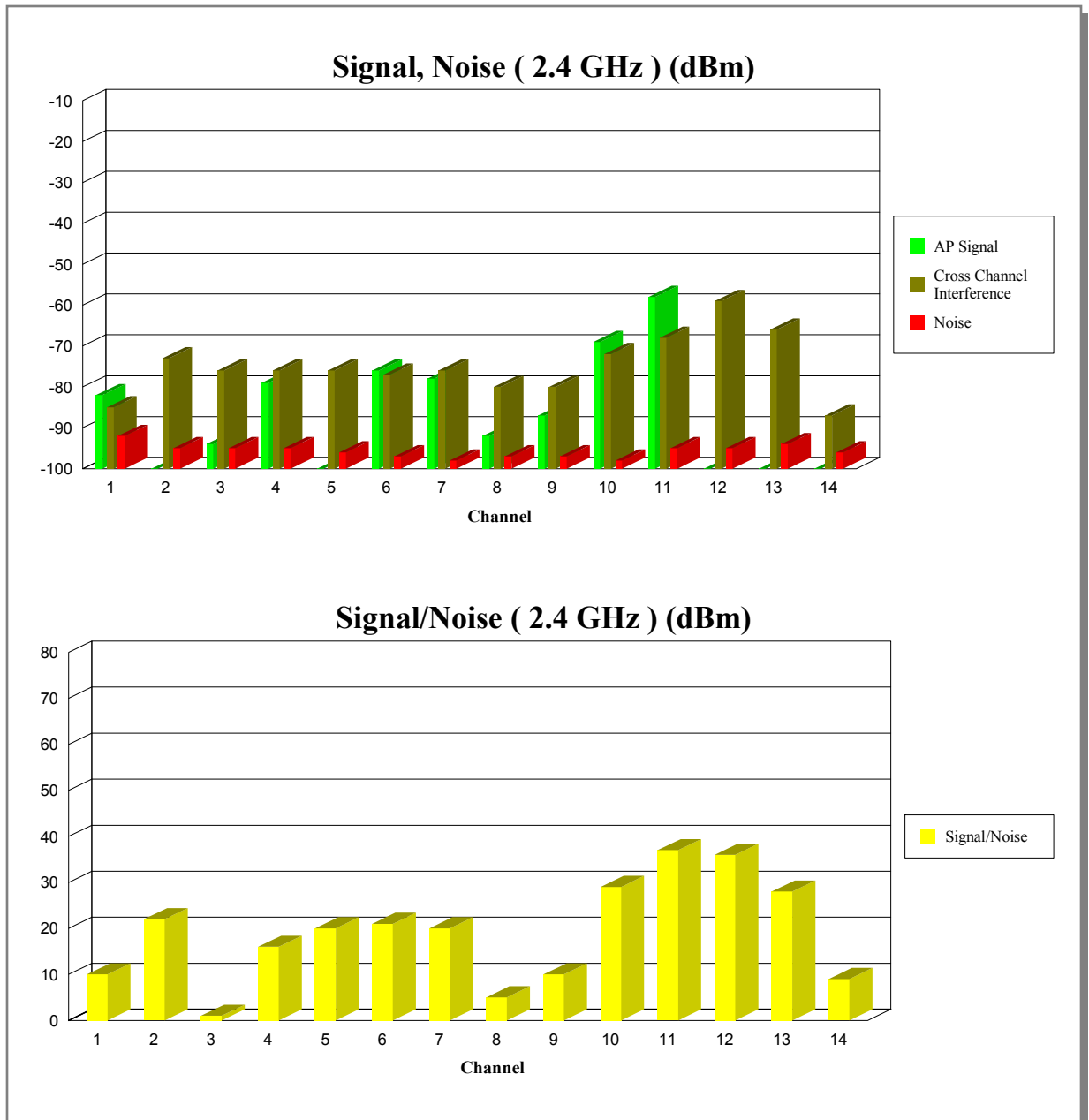


## 802.11 RF Summary

**Time Period:** Wednesday, July 29, 2009 9:23:05 AM

**Description:** This report contains data on the overall RF signal quality of the 802.11 network in terms of signal strength, noise level, and signal-to-noise ratio. It is very critical to note that there is sufficient coverage for all the devices and the RF environment has the minimum amount of noise possible. WLAN reliability and efficiency depend on the quality of the RF media. Be it 802.11b/g/n at 2.4GHz or 802.11a/n at the 5GHz RF spectrum, they are all susceptible to RF noise impact. A cordless phone, Bluetooth devices, microwave, wireless surveillance video camera, or baby monitor can all emit RF energy to disrupt WLAN service. Malicious attacks can manipulate the RF power at 2.4GHz or 5GHz spectrum with a high gain directional antenna to amplify the attack impact from a distance. Excessive noise causes WLAN devices in the target area to be out of wireless service.

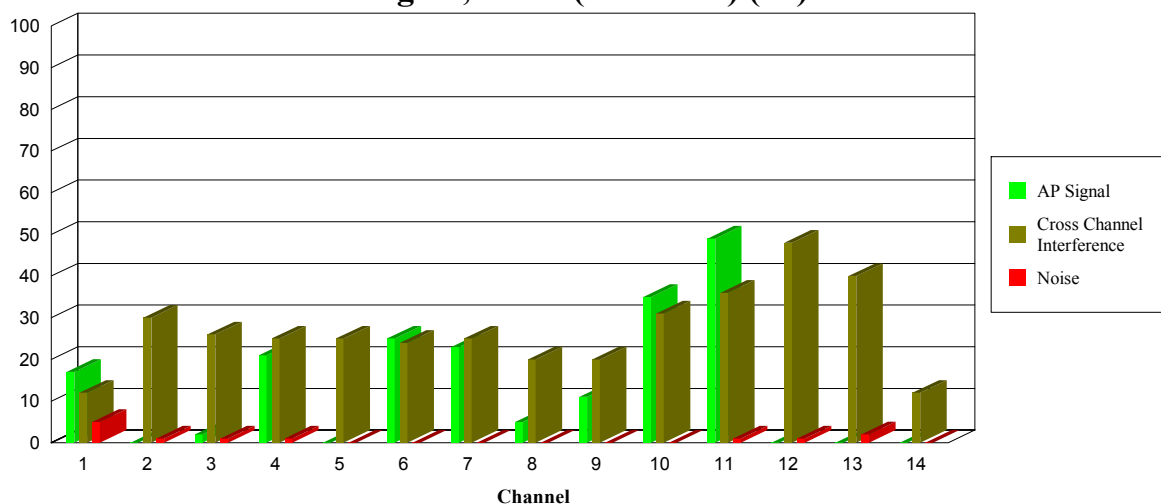


## 2.4 GHz / dBm

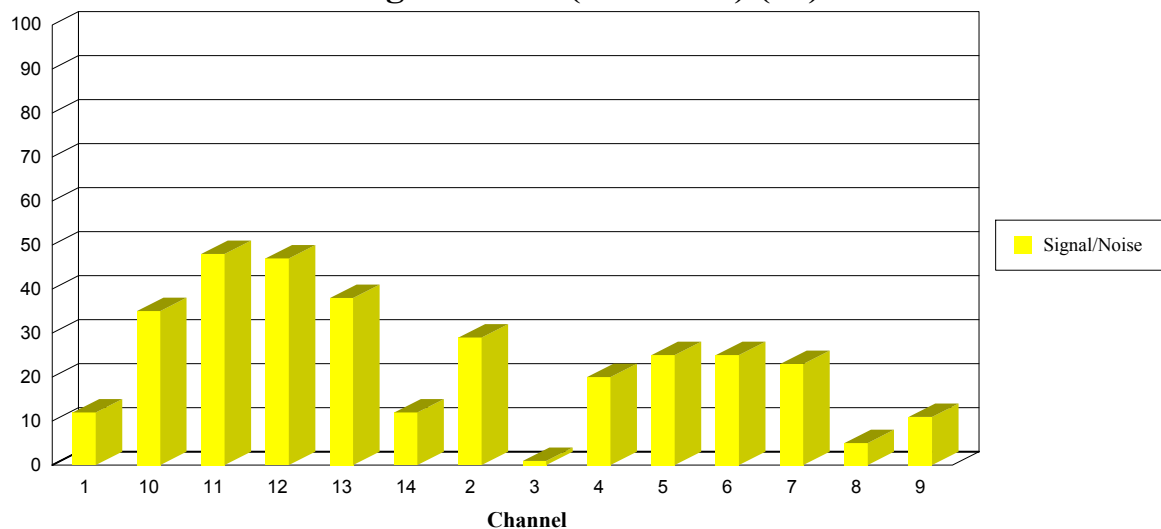
Channel	Tx Ch Width	AP Signal	Cross Channel Interference	Noise	Signal / Noise
1(2.4GHz)	20	-82	-85	-92	10
2(2.4GHz)	20	-100	-73	-95	22
3(2.4GHz)	20	-94	-76	-95	1
4(2.4GHz)	20	-79	-76	-95	16
5(2.4GHz)	20	-100	-76	-96	20
6(2.4GHz)	20	-76	-77	-97	21
7(2.4GHz)	20	-78	-76	-98	20
8(2.4GHz)	20	-92	-80	-97	5
9(2.4GHz)	20	-87	-80	-97	10
10(2.4GHz)	20	-69	-72	-98	29
11(2.4GHz)	20	-58	-68	-95	37
12(2.4GHz)	20	-100	-59	-95	36
13(2.4GHz)	20	-100	-66	-94	28
14(2.4GHz)	20	-100	-87	-96	9



### Signal, Noise ( 2.4 GHz ) (%)



### Signal/Noise ( 2.4 GHz ) (%)



### 2.4 GHz / %

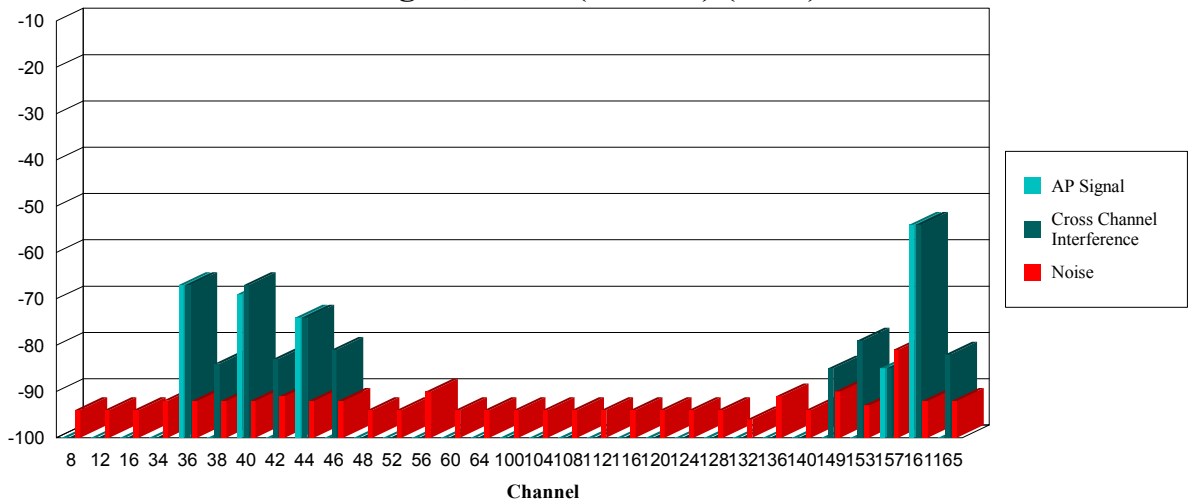
Channel	Tx Ch Width	AP Signal	Cross Channel Interference	Noise	Signal/Noise
1(2.4GHz)	20	17	12	5	12
2(2.4GHz)	20	0	30	1	29
3(2.4GHz)	20	2	26	1	1
4(2.4GHz)	20	21	25	1	20
5(2.4GHz)	20	0	25	0	25
6(2.4GHz)	20	25	24	0	25



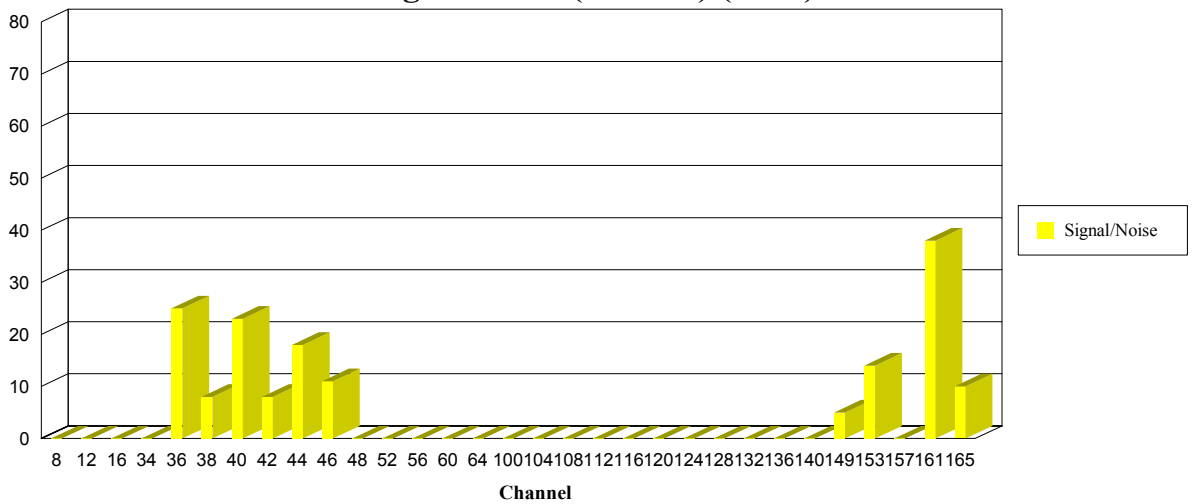
7(2.4GHz)	20	23	25	0	23
8(2.4GHz)	20	5	20	0	5
9(2.4GHz)	20	11	20	0	11
10(2.4GHz)	20	35	31	0	35
11(2.4GHz)	20	49	36	1	48
12(2.4GHz)	20	0	48	1	47
13(2.4GHz)	20	0	40	2	38
14(2.4GHz)	20	0	12	0	12



### Signal, Noise ( 5 GHz ) (dBm)



### Signal/Noise ( 5 GHz ) (dBm)



### (dBm)/ ( 5 GHz)

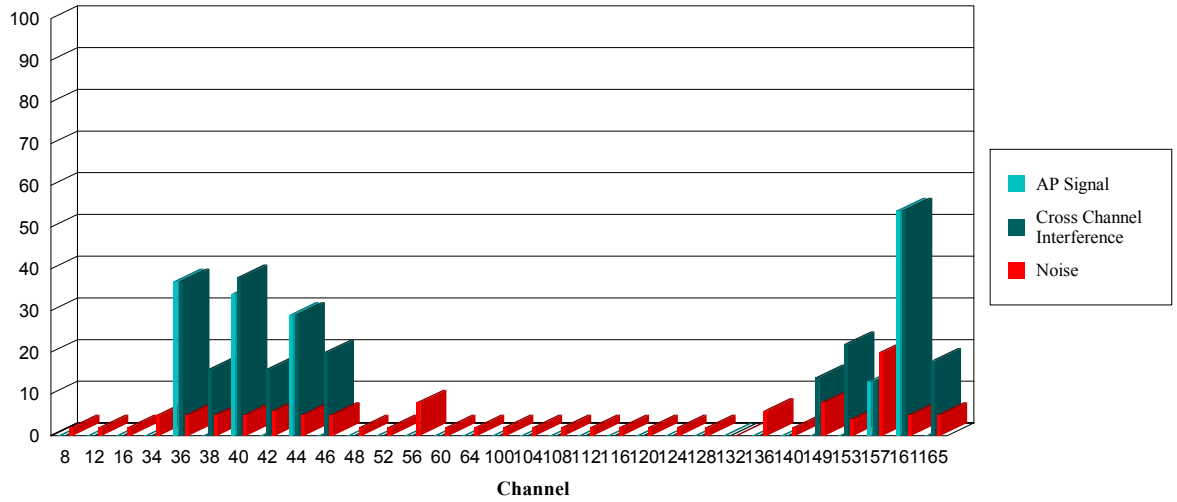
Channel	Tx Ch Width	AP Signal	Cross Channel Interference	Noise	Signal / Noise
8(5GHz)	20	-100	-100	-94	0
12(5GHz)	20	-100	-100	-94	0
16(5GHz)	20	-100	-100	-94	0
34(5GHz)	20	-100	-100	-92	0
36(5GHz)	20	-67	-67	-92	25
38(5GHz)	20	-100	-84	-92	8
40(5GHz)	20	-69	-67	-92	23
42(5GHz)	20	-100	-83	-91	8



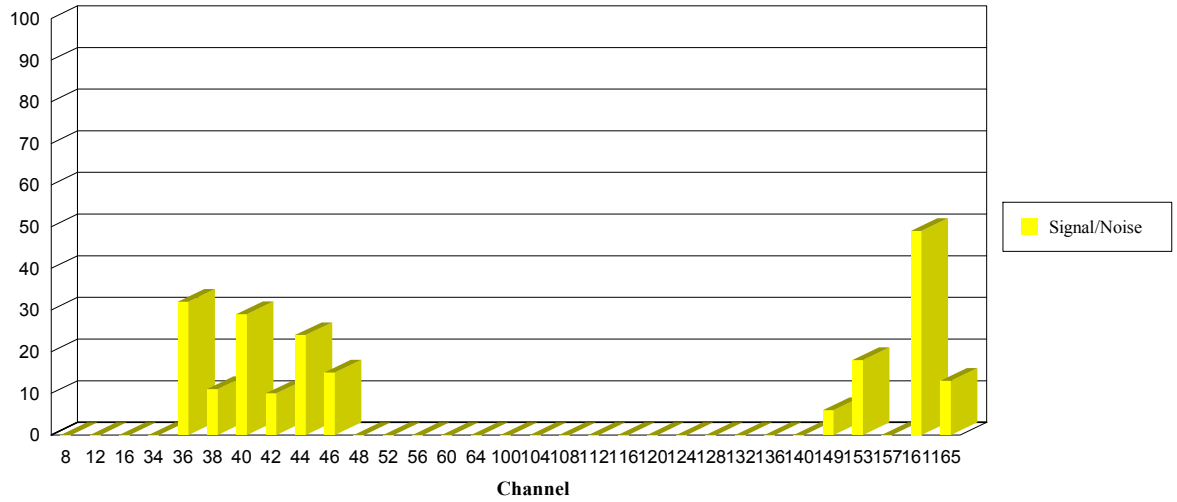
44(5GHz)	20	-74	-74	-92	18
46(5GHz)	20	-100	-81	-92	11
48(5GHz)	20	-100	-100	-94	0
52(5GHz)	20	-100	-100	-94	0
56(5GHz)	20	-100	-100	-90	0
60(5GHz)	20	-100	-100	-94	0
64(5GHz)	20	-100	-100	-94	0
100(5GHz)	20	-100	-100	-94	0
104(5GHz)	20	-100	-100	-94	0
108(5GHz)	20	-100	-100	-94	0
112(5GHz)	20	-100	-100	-94	0
116(5GHz)	20	-100	-100	-94	0
120(5GHz)	20	-100	-100	-94	0
124(5GHz)	20	-100	-100	-94	0
128(5GHz)	20	-100	-100	-94	0
132(5GHz)	20	-100	-100	-96	0
136(5GHz)	20	-100	-100	-91	0
140(5GHz)	20	-100	-100	-94	0
149(5GHz)	20	-100	-85	-90	5
153(5GHz)	20	-100	-79	-93	14
157(5GHz)	20	-85	-85	-81	0
161(5GHz)	20	-54	-54	-92	38
165(5GHz)	20	-100	-82	-92	10



### Signal, Noise ( 5 GHz ) (%)



### Signal/Noise ( 5 GHz ) (%)



### 5 GHz / %

Channel	Tx Ch Width	AP Signal	Cross Channel Interference	Noise	Signal / Noise
8(5GHz)	20	0	0	2	0
12(5GHz)	20	0	0	2	0
16(5GHz)	20	0	0	2	0
34(5GHz)	20	0	0	5	0
36(5GHz)	20	37	37	5	32
38(5GHz)	20	0	16	5	11
40(5GHz)	20	34	38	5	29



42(5GHz)	20	0	16	6	10
44(5GHz)	20	29	29	5	24
46(5GHz)	20	0	20	5	15
48(5GHz)	20	0	0	2	0
52(5GHz)	20	0	0	2	0
56(5GHz)	20	0	0	8	0
60(5GHz)	20	0	0	2	0
64(5GHz)	20	0	0	2	0
100(5GHz)	20	0	0	2	0
104(5GHz)	20	0	0	2	0
108(5GHz)	20	0	0	2	0
112(5GHz)	20	0	0	2	0
116(5GHz)	20	0	0	2	0
120(5GHz)	20	0	0	2	0
124(5GHz)	20	0	0	2	0
128(5GHz)	20	0	0	2	0
132(5GHz)	20	0	0	0	0
136(5GHz)	20	0	0	6	0
140(5GHz)	20	0	0	2	0
149(5GHz)	20	0	14	8	6
153(5GHz)	20	0	22	4	18
157(5GHz)	20	13	13	20	0
161(5GHz)	20	54	54	5	49
165(5GHz)	20	0	18	5	13

