Wi-Fi Network Report

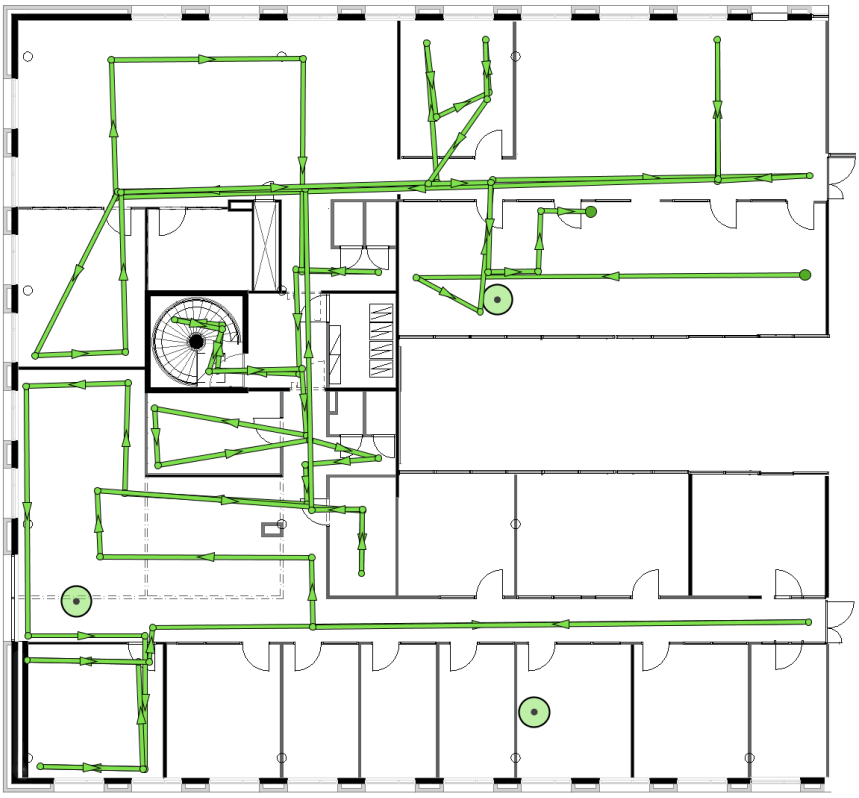
Name: **Spectrum survey**

Location: **Helsinki**

Responsible Person: **Nick Turner**

00 Ground

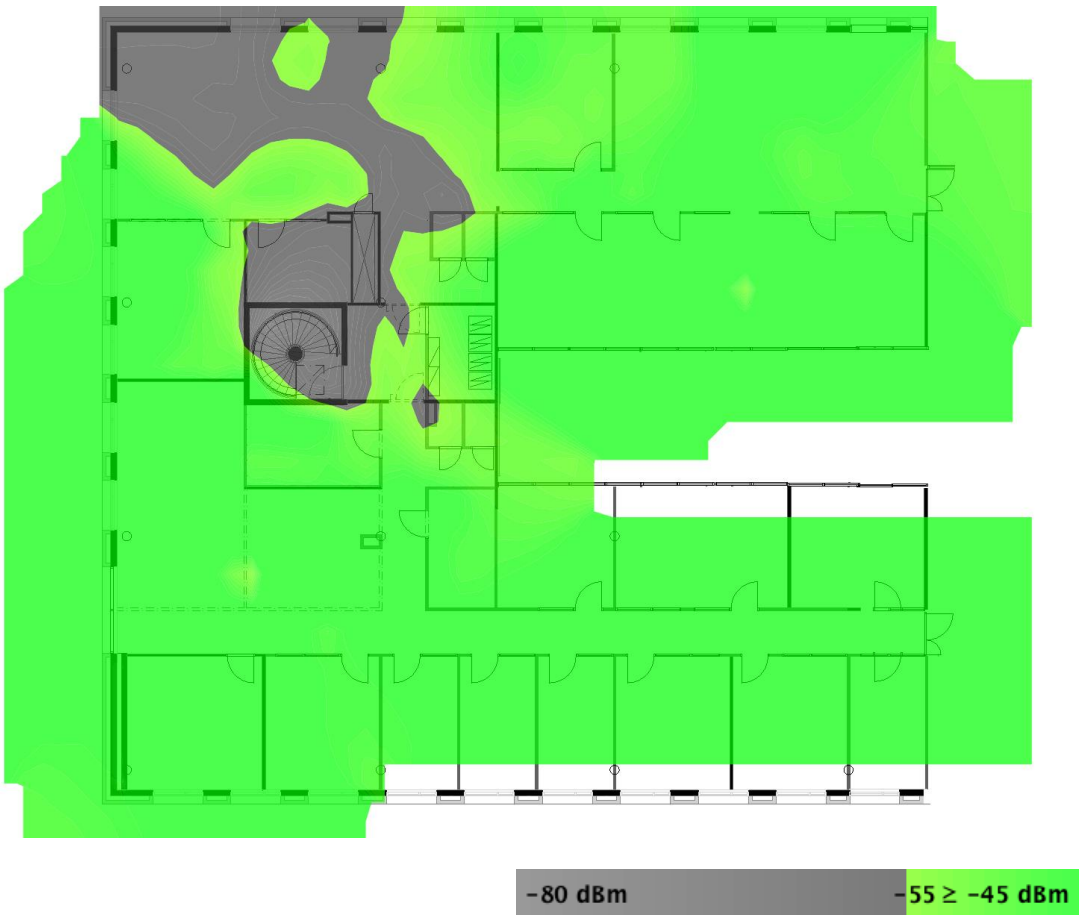
Survey routes and Access Points for 00 Ground



Coverage Requirement: **My Network Requirements**	Signal Strength Min	**-55.0 dBm**
	Signal-to-noise Ratio Min	**20.0 dB**
	Data rate Min	**20 Mbps**
	Number of Access Points Min	**2 at min. -75.0 dBm**
	Channel Overlap Max	**1 at min. -85.0 dBm**
	Round Trip Time (RTT) Max	**200ms**
	Packet Loss Max	**2.0 %**

Signal Strength for 00 Ground on 5 GHz band

Signal Strength - sometimes called coverage - is the most basic requirement for a wireless network. As a general guideline, low signal strength means unreliable connections, and low data throughput.

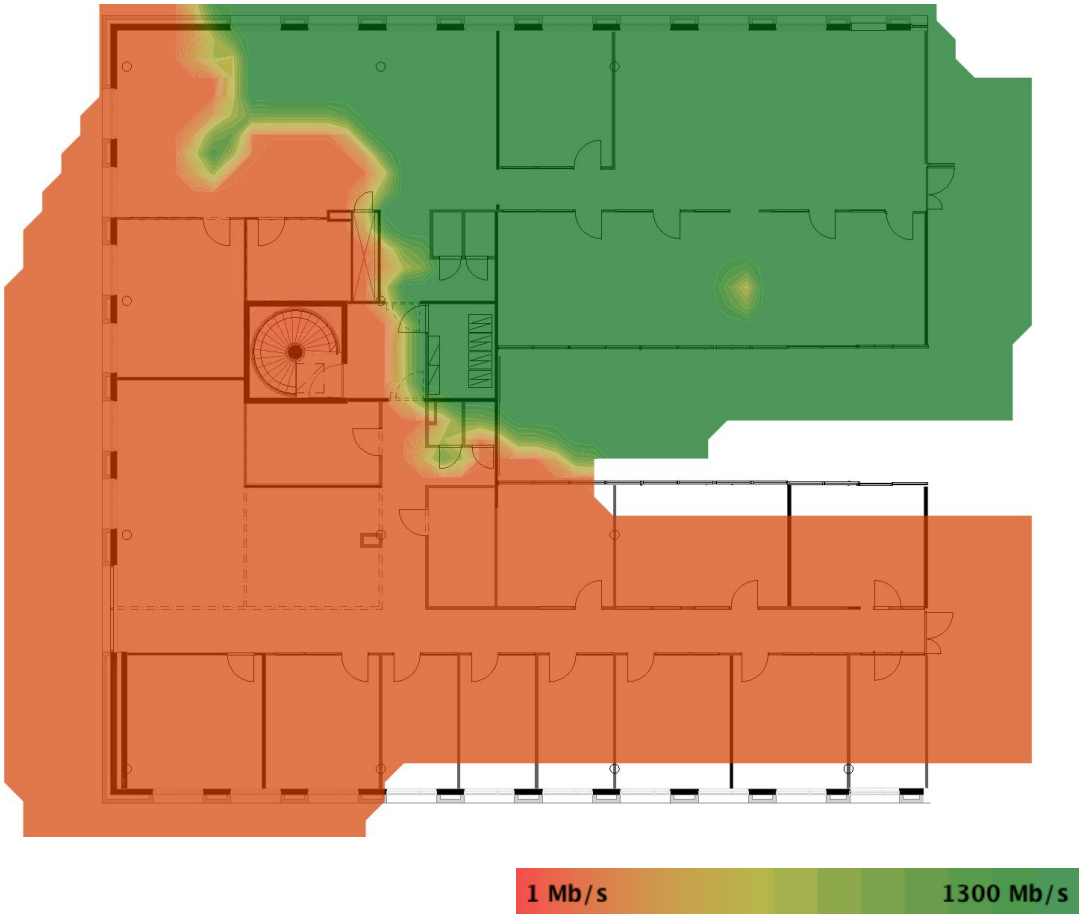


Signal To Noise Ratio (SNR) for 00 Ground on 5 GHz band

Signal-To-Noise Ratio indicates how much the signal strength is stronger than the noise (co-channel interference). Signal must be stronger than noise (SNR greater than zero) for data transfer to be possible. If the signal is only barely stronger than noise, you may encounter occasional connection drop-offs.

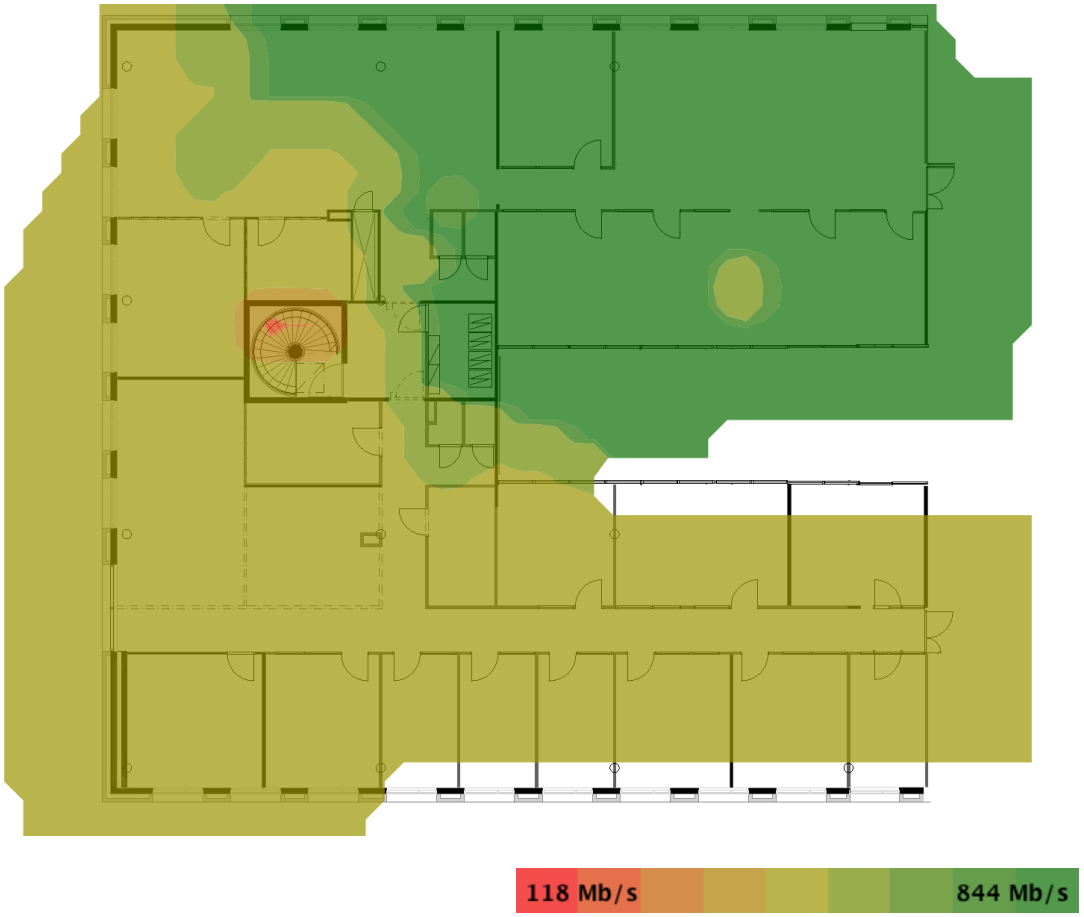
Data Rate for 00 Ground on 5 GHz band

Data Rate is the highest possible speed (measured in megabits per second) at which the wireless devices will be transmitting data. Typically the true data throughput is about half of the data rate or less.



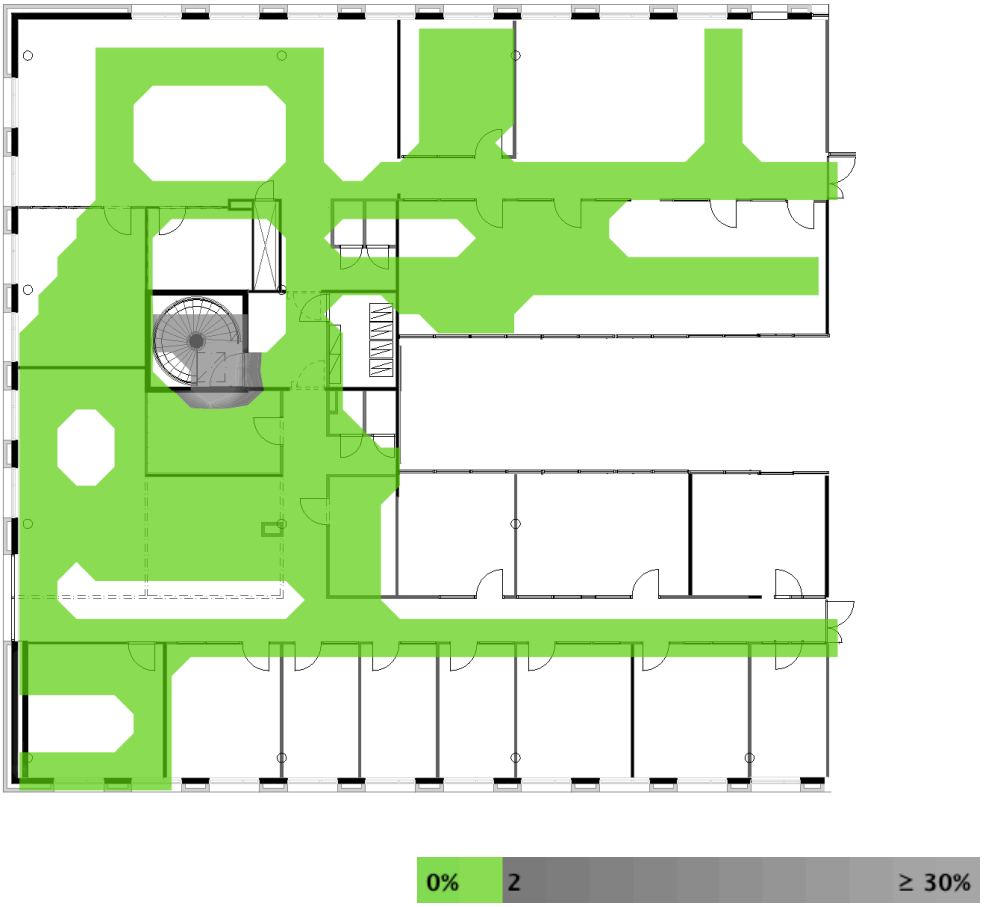
Throughput for 00 Ground on 5 GHz band

Displays the measured throughput. If no measured throughput is available, then the estimated maximum throughput is shown instead.



Packet Loss for 00 Ground

Displays how many replies did not arrive to a sent packet.

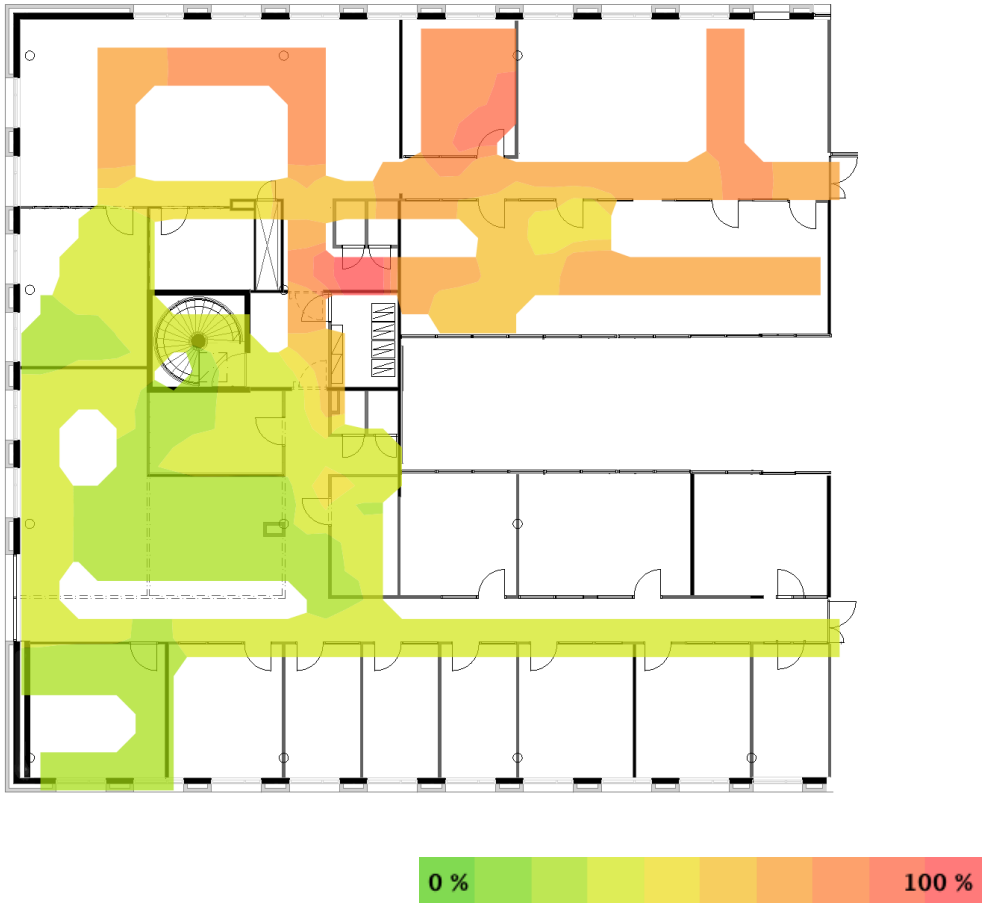


Round-Trip Time for 00 Ground

Displays how long it took for a reply to arrive to a sent packet.

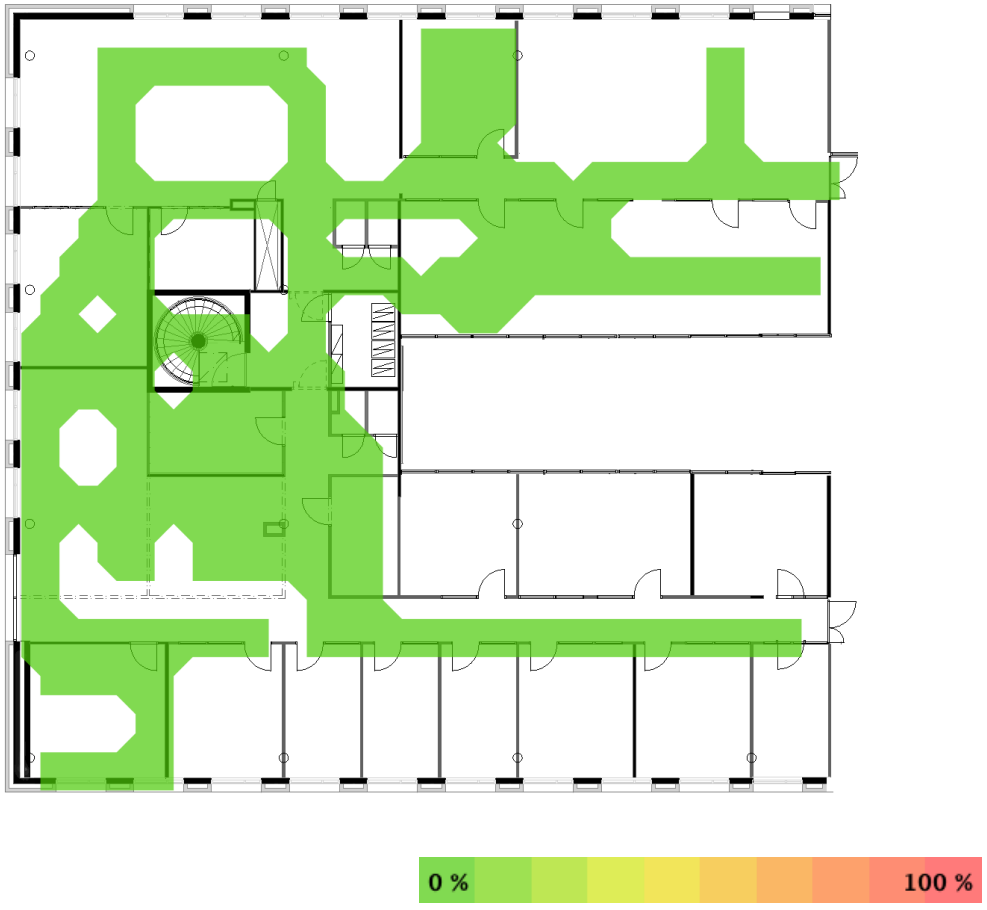
Spectrum Utilization for 00 Ground on 2.4 GHz band

Spectrum utilization shows the share of time the spectrum power measured by spectrum analyzer high enough so that the channel can be considered as occupied.

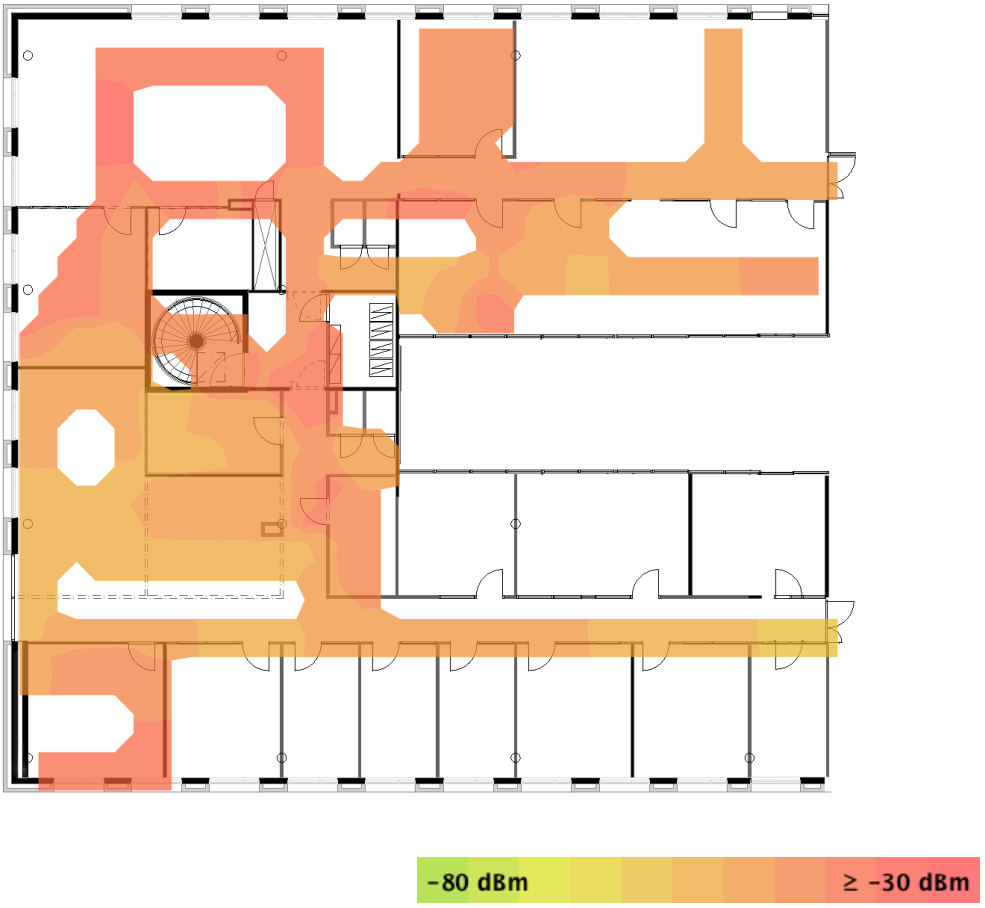


Spectrum Utilization for 00 Ground on 5 GHz band

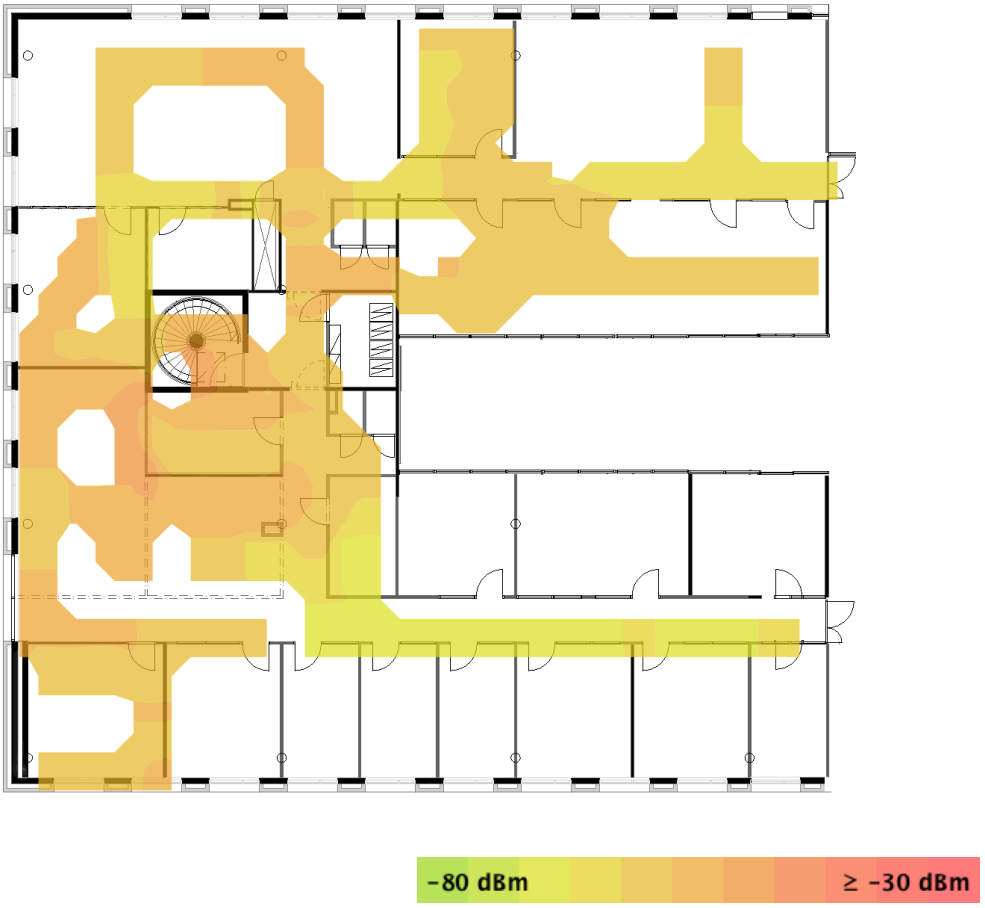
Spectrum utilization shows the share of time the spectrum power measured by spectrum analyzer high enough so that the channel can be considered as occupied.



Spectrum Channel Power for 00 Ground on 2.4 GHz band

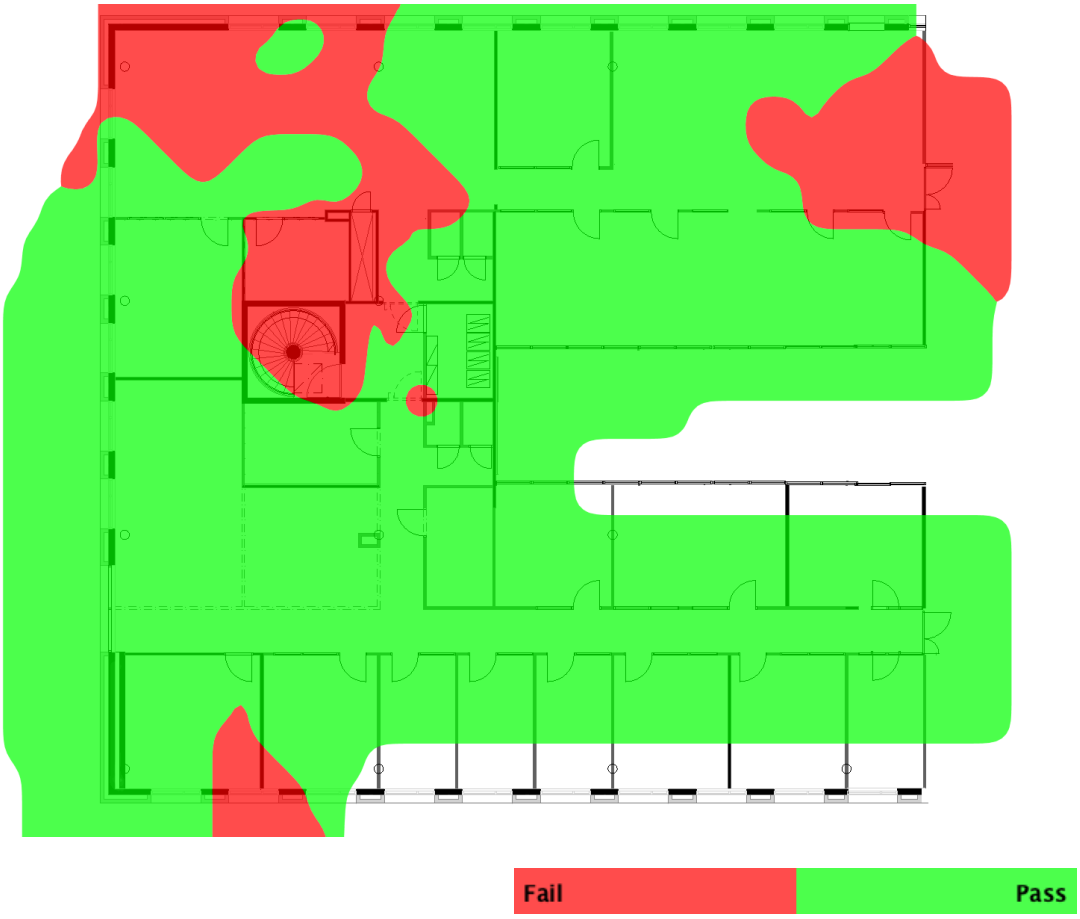


Spectrum Channel Power for 00 Ground on 5 GHz band



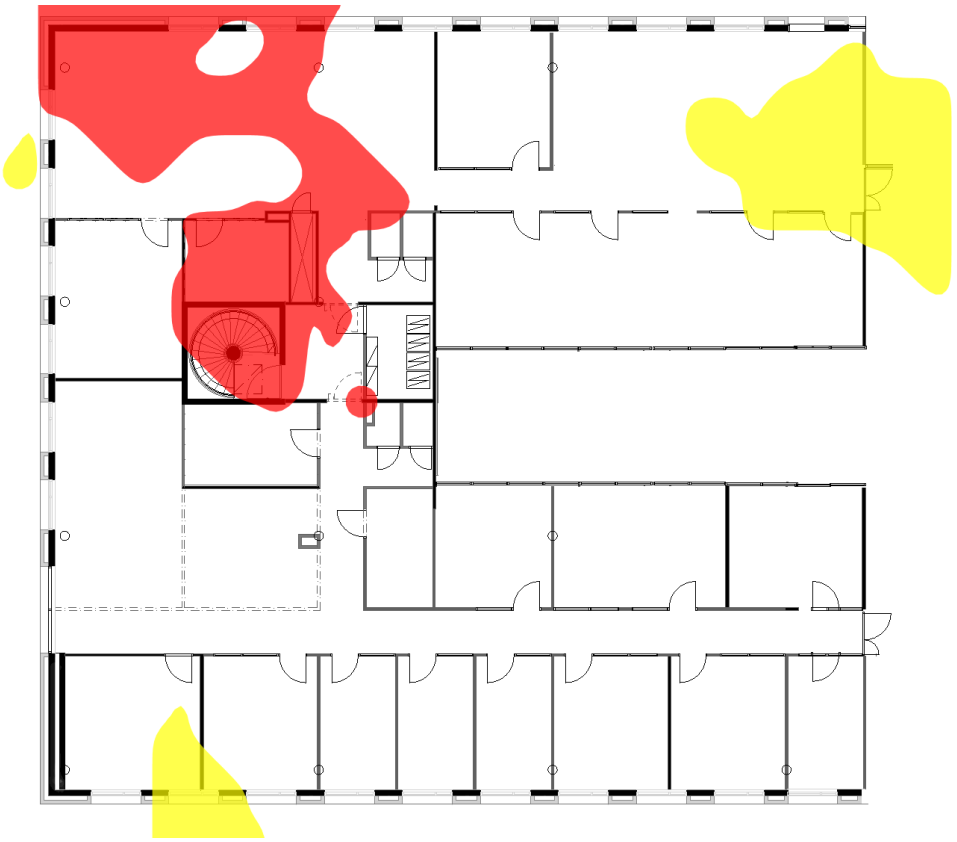
Network Health for 00 Ground on 5 GHz band

Wi-Fi is typically built for a certain purpose or several purposes, such as VoIP, web browsing, or location tracking. With Network Health, you can, with a single visualization, display whether the network meets your requirements or not.



Network Issues for 00 Ground on 5 GHz band

Network Issues complements Network Health by showing the requirement that is below the threshold level at each location. Whereas Network Health answers the question "Does it work?", Network Issues answers the question "If it doesn't work, why?".



Access Points on 00 Ground

My Access Points on 00 Ground

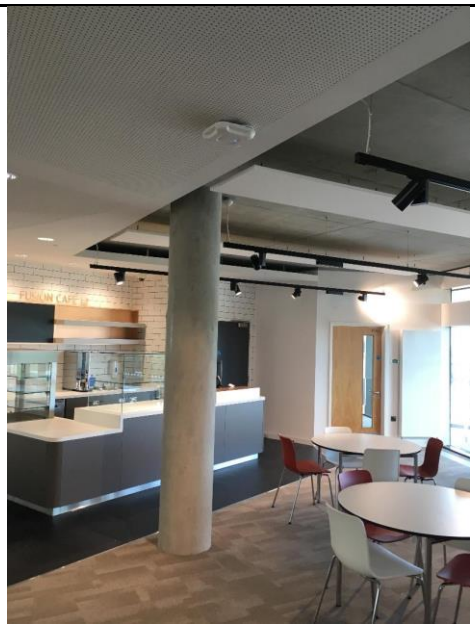
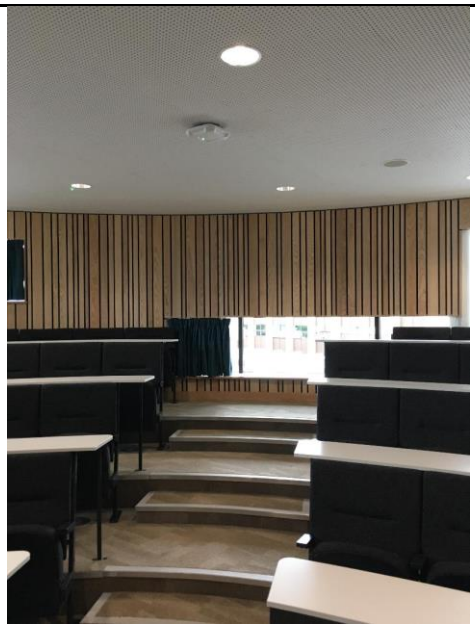
Simulated Access Points on 00 Ground

None.

Measured Access Points on 00 Ground

AP #	Access Point			
1	AP01			
	802.11ac	140	02:18:5a:5b:91:b0	EkaLAN
2	AP02			
	802.11ac	136	02:18:5a:2a:24:d0	EkaLAN
3	AP03			
	802.11ac	112@80	02:18:5a:24:8d:10	EkaLAN

AP #	Note	Picture
1	Model: AP Model Antenna: Integrated Mount: Channel Suspended Ceiling Height: 2.5 m MAC Address: XX:XX:XX:XX:XX:XX Serial: 123456789	

2	Model: AP Model Antenna: Integrated Mount: Plasterboard Ceiling Height: 3 m MAC Address: XX:XX:XX:XX:XX:XX Serial: 123456789	
3	Model: AP Model Antenna: Integrated Mount: Plasterboard Ceiling Height: 2.5 m MAC Address: XX:XX:XX:XX:XX:XX Serial: 123456789	

Other Access Points on 00 Ground

Simulated Access Points on 00 Ground

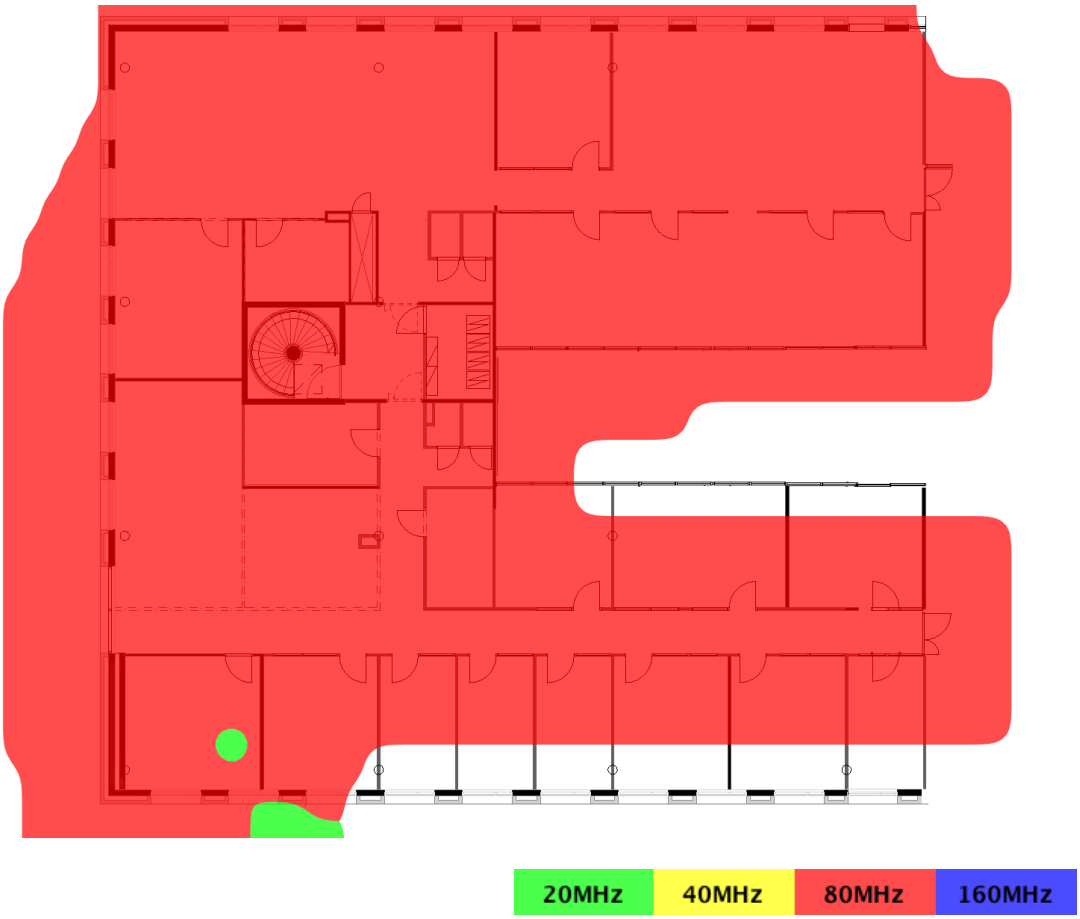
None.

Measured Access Points on 00 Ground

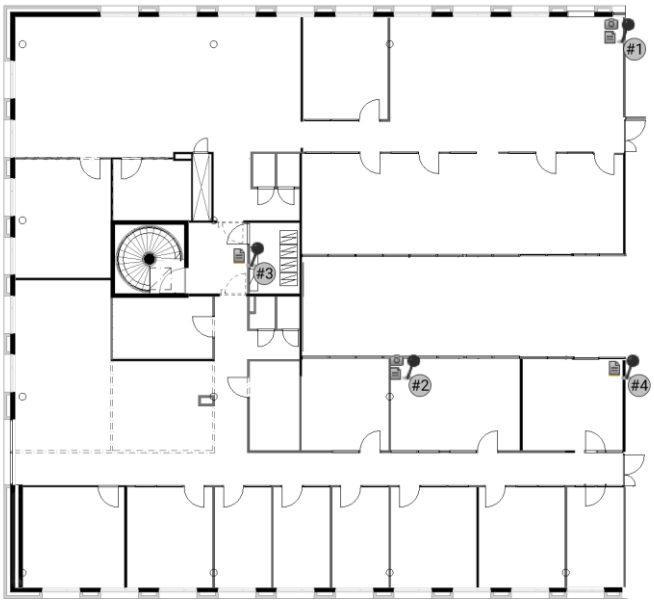
None.

Channel Width for 00 Ground on 5 GHz band

Shows the maximum channel width available in each area.

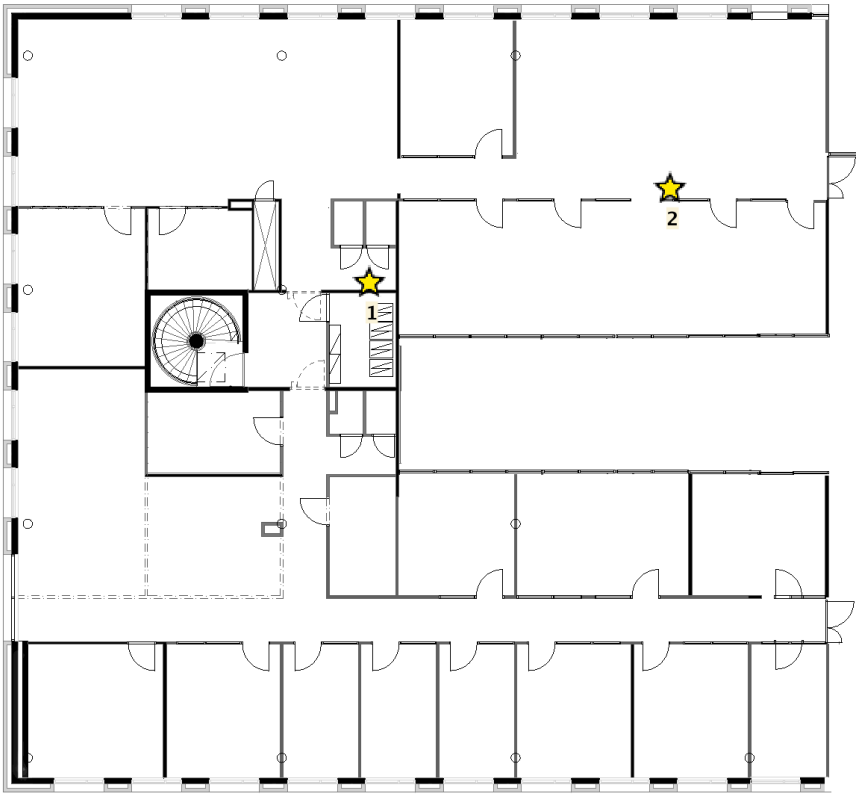


Picture/Text notes for floor 00 Ground

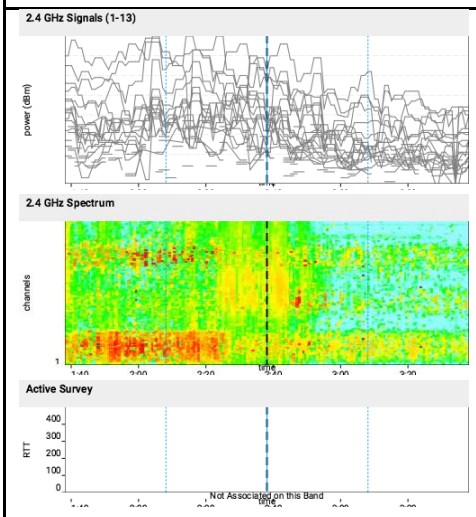


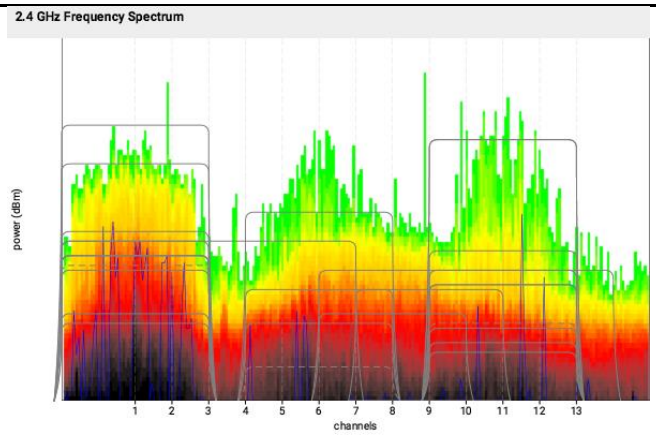
Number	Description	Picture
1	DECT handset	
2	Motion Sensor	
3	Some random wideband noise probably coming from the cabling closet?	[No picture]
4	Wireless Printer seen here	[No picture]

Survey Bookmarks

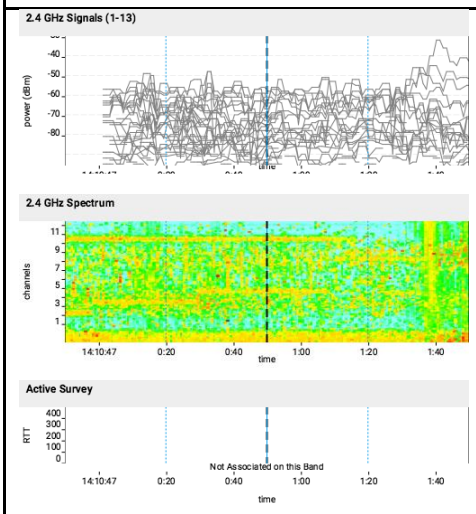


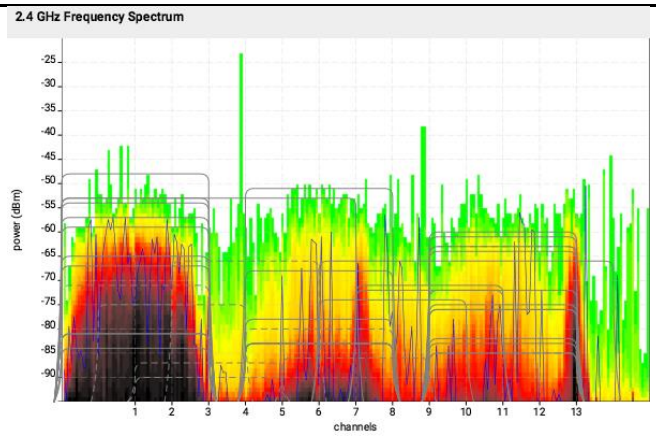
#	Bookmarks
1	source of wide-band interference





2	spikes of narrow-band interference





Measured Access Points not placed on any map

My Access Points not placed on any map

None.

Other Access Points not placed on any map

AP #	Access Point			
4				
	802.11n	36	00:90:7f:b0:4b:dc	Datpro
5				
	802.11n	6	02:90:7f:b0:4b:db	DatproGuest
6				
	802.11n	1	0e:02:01:04:e6:b8	tokassid
	802.11n	36	0e:02:02:04:e6:b8	tokassid
7				
	802.11n	100@40	22:c9:d0:23:b7:e0	Cocon Guest
8				
	802.11n	2	22:c9:d0:23:b7:e0	Cocon Guest
9				
	802.11n	6	00:90:7f:b0:4b:db	Datpro
10				
	802.11n	1@40	14:2d:27:a7:0c:02	HP-Print-02-Color LaserJet MFP
11				
	802.11n	36	02:90:7f:b0:4b:dc	DatproGuest
12				

	802.11n	11	30:91:8f:c9:0b:c3	SoneraInternet
13				
	802.11n	4	10:08:b1:45:7c:9f	HP-Print-9F-Color LaserJet Pro
14				
	802.11g	1	1c:3e:84:6f:ba:2b	HP-Print-2b-LaserJet 200
15				
	802.11n	6	fa:8f:ca:6c:dd:e8	Unknown SSID
16	Accton			
	802.11g	2	00:12:cf:81:44:45	AMX Marx
17	Apple			
	802.11n	11	34:12:98:0b:a7:c2	Invesdor's Wi-Fi Network
18	Apple			
	802.11ac	36@80	6c:70:9f:d9:e9:47	tetrasim
19	Apple			
	802.11n	100@40	20:c9:d0:23:b7:e8	Cocon
20	Apple			
	802.11n	2	20:c9:d0:23:b7:e7	Cocon
21	Apple			
	802.11ac	36@80	34:12:98:0b:a7:c3	Invesdor's Wi-Fi Network
22	Apple			
	802.11n	6	6c:70:9f:d9:e9:46	tetrasim
23	Apple			
	802.11n	11	00:1c:b3:ae:c2:28	Wiggle WiFi
24	Apple			

	802.11n	100@40	20:c9:d0:1b:52:88	TimeC net 5GHz
25	Apple			
	802.11n	11	20:c9:d0:1b:52:87	TimeC net
26	Asustek			
	802.11n	1	e0:3f:49:3c:f4:40	FF_ASUS
27	Asustek			
	802.11g	6	74:d0:2b:2e:d6:30	EkahauTagWifi
28	Asustek			
	802.11n	6	08:62:66:8b:92:d0	Zedge2.4
29	Asustek			
	802.11g	11	08:60:6e:ee:3d:4c	EkahauTagWifi
30	Asustek			
	802.11g	11	74:d0:2b:2e:c2:4c	EkahauTagWifi
31	Asustek			
	802.11ac	44@80	08:62:66:8b:92:d4	Zedge
32	Asustek			
	802.11g	6	74:d0:2b:2e:bf:88	EkahauTagWifi
33	Cisco: AP44d3.ca42.358			
	802.11n 802.11a 802.11a	44 44 44	64:d9:89:42:77:9f 64:d9:89:42:77:9e 64:d9:89:42:77:9e	EssMcsTest BSSID2 BSSID2
34	Cisco: ap-LL1894587-11			
	802.11n 802.11n 802.11n	11 11 11	44:e4:d9:01:1c:00 44:e4:d9:01:1c:02 44:e4:d9:01:1c:01	TechnoWLAN Unknown SSID Unknown SSID

	802.11n 802.11n 802.11n	64@40 64@40 64@40	44:e4:d9:01:1c:0d 44:e4:d9:01:1c:0f 44:e4:d9:01:1c:0e	Unknown SSID TechnoWLAN Unknown SSID
35	Cisco: ap-LL1894587-11			
	802.11n 802.11n 802.11n	1 1 1	8c:b6:4f:c9:7d:42 8c:b6:4f:c9:7d:40 8c:b6:4f:c9:7d:41	Unknown SSID TechnoWLAN Unknown SSID
	802.11n 802.11n 802.11n	64@40 64@40 64@40	8c:b6:4f:c9:7d:4e 8c:b6:4f:c9:7d:4f 8c:b6:4f:c9:7d:4d	Unknown SSID TechnoWLAN Unknown SSID
36	Cisco: ap-LL1894587-18			
	802.11n 802.11n 802.11n	1 1 1	54:4a:00:2a:c3:81 54:4a:00:2a:c3:82 54:4a:00:2a:c3:80	Unknown SSID Unknown SSID TechnoWLAN
	802.11n 802.11n 802.11n	64@40 64@40 64@40	54:4a:00:2a:c3:8d 54:4a:00:2a:c3:8f 54:4a:00:2a:c3:8e	Unknown SSID TechnoWLAN Unknown SSID
37	Cisco: gameroom			
	802.11n 802.11n 802.11n 802.11g	6 6 6 6	00:1f:9e:8d:20:83 00:1f:9e:8d:20:81 00:1f:9e:8d:20:8e 00:1f:9e:8d:20:80	Unknown SSID ofi2 tikal testissid2
38	Cisco: hakala			
	802.11g 802.11g 802.11g 802.11g	11 11 11 11	00:19:07:8c:5b:50 00:19:07:8c:5b:5e 00:19:07:8c:5b:53 00:19:07:8c:5b:51	testissid2 tikal Unknown SSID ofi2
39	Cisco: seppanen			
	802.11g 802.11g	1 1	00:19:07:c5:58:10 00:19:07:c5:58:13	testissid2 Unknown SSID

	802.11g 802.11g	1 1	00:19:07:c5:58:11 00:19:07:c5:58:1e	ofi2 tikal
40	D-Link			
	802.11g	11	00:1e:58:0e:c8:90	Profiles
41	D-Link			
	802.11n	11	c8:d3:a3:15:4c:18	M2T
42	Huawei			
	802.11n	3	c4:07:2f:0c:34:94	Datpro-vara
43	Huawei			
	802.11n	6	64:a6:51:57:ad:dd	4G-Mobile-WiFi-ADDD
44	Linksys			
	802.11g	11	20:aa:4b:3d:91:2a	AddValueWLAN
45	Linksys			
	802.11g	11	20:aa:4b:3d:91:2c	AddValueWLAN-guest
46	Linksys			
	802.11a 802.11a	44 44	20:aa:4b:3d:91:2b 20:aa:4b:3d:91:2b	Unknown SSID Unknown SSID
47	Linksys			
	802.11g	9	00:1d:7e:ed:67:82	intAKfi
48	NetGear			
	802.11g	11	00:22:3f:bd:87:d4	microdebug
49	Nokia			
	802.11n	11	e8:15:0e:47:0c:e2	NOKIA Lumia 930_3322
50	Proxim			
	802.11a	36	00:20:a6:56:20:17	Armstrong

51	Proxim			
	802.11b	1	00:20:a6:55:ea:d4	PXI-WLAN
52	Proxim			
	802.11b	1	00:20:a6:ef:47:f5	Unknown SSID
53	Proxim			
	802.11b	1	00:20:a6:56:20:18	BATTTEST
54	Proxim			
	802.11b	11	00:20:a6:56:20:1e	BATTTEST
55	Proxim			
	802.11a	36	00:20:a6:56:20:1d	Unknown SSID
56	Proxim			
	802.11a	48	00:20:a6:55:ea:c7	NIC_TEST_A
57	Proxim			
	802.11g	6	00:20:a6:55:ea:c8	NIC_TEST_B
58	Proxim			
	802.11g	6	00:20:a6:49:bc:2e	Unknown SSID
59	Proxim			
	802.11b	1	00:20:a6:ef:48:16	Unknown SSID
60	Proxim			
	802.11a	56	00:20:a6:55:ea:c4	Unknown SSID
61	Zyxel			
	802.11n	1	cc:5d:4e:59:ae:68	NM-WLAN
	802.11g	1	cc:5d:4e:59:ae:69	NM-WLAN2
62	Zyxel			

	802.11n	7	e8:37:7a:e2:df:5b	ZyXEL2DF5A
63	Zyxel			
	802.11n	9	10:7b:ef:c9:21:80	LATO
64	Zyxel			
	802.11n	8@40	10:7b:ef:c9:8a:58	ZyXELC98A58
65	Zyxel			
	802.11n	6	fc:f5:28:d3:05:50	ZyXELD30550
	802.11ac	36@80	fc:f5:28:d3:05:51	ZyXELD30551
66	Zyxel			
	802.11n	3	10:7b:ef:ce:aa:25	Invesdor's Guest Wi-Fi Network
67	Zyxel			
	802.11n	1	cc:5d:4e:59:a1:cc	NM-WLAN
68	Zyxel			
	802.11ac	44@80	10:7b:ef:c9:8a:5c	ZyXELC98A5C
69	Zyxel			
	802.11n	8	50:67:f0:39:33:5e	AMX Valopiha