

# Site Survey

Redes Sem Fio

Pedro Henrique Dornelas Almeida

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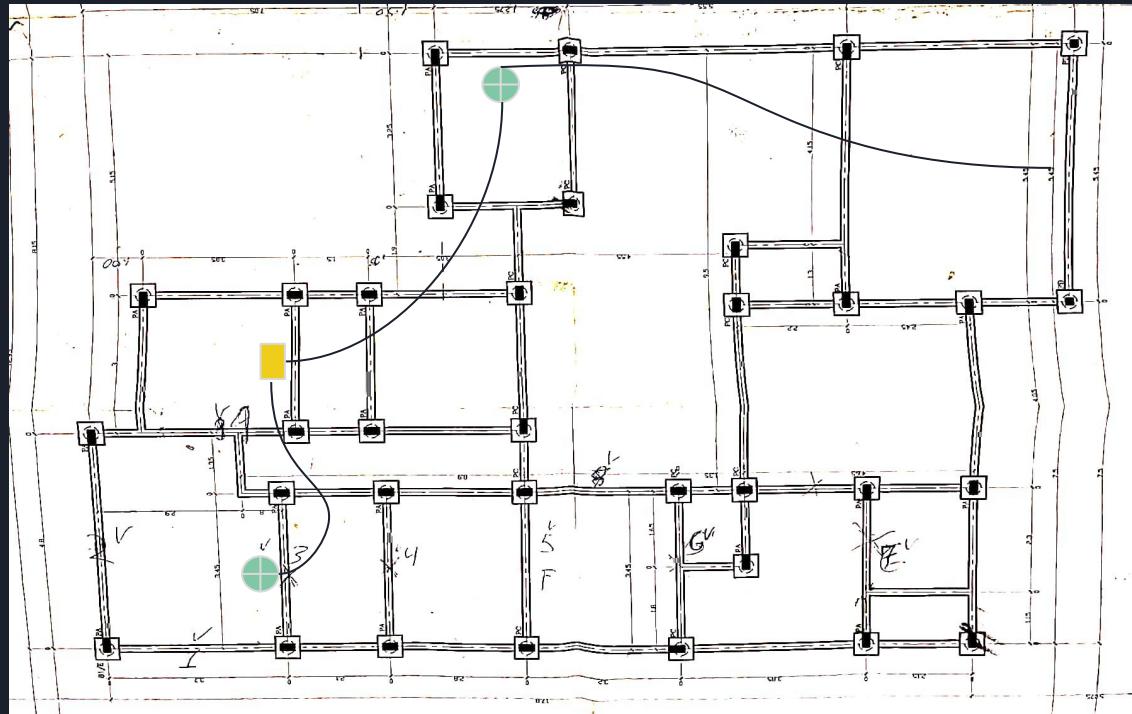
Análises

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Conclusão

# Local - Planta com APs

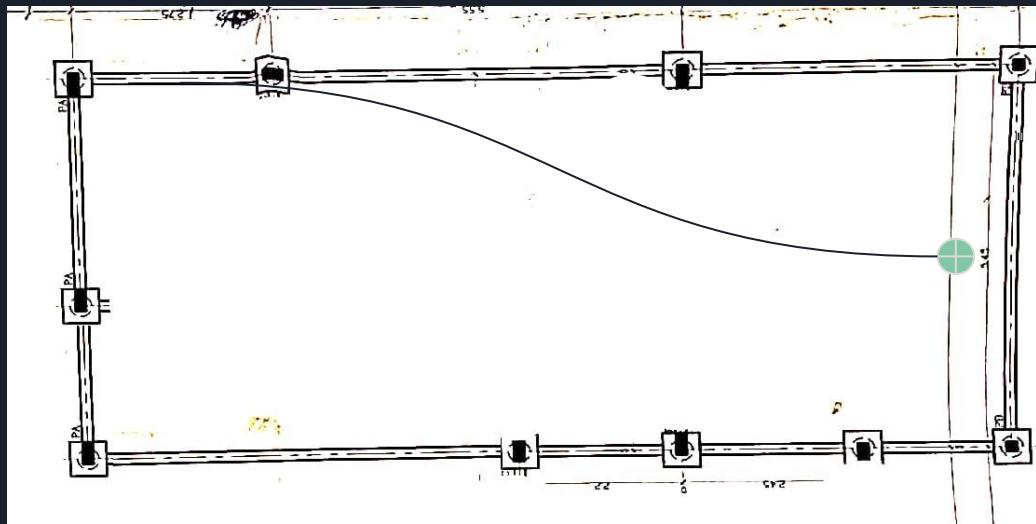
Térreo



- AP
- Switch

# Local - Planta com APs

1º Andar





## Local - Coleta dos dados

- Dia: Sexta-feira
- Horário: 18h30 - 21h30

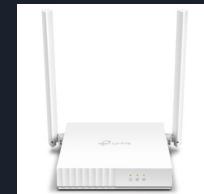


# Equipamentos

01      Huawei Echolife EG8245W5-6T



02      TP-LINK TL-WR829N



03      TP-LINK TL-WR940N





# Equipamentos

04     Switch Multilaser Soho 5 portas



# Huawei Echolife EG8245W5-6T

## Interface Parameters

GPON port	WLAN
<ul style="list-style-type: none"><li>• Class B+</li><li>• Receiver sensitivity: -27 dBm</li><li>• Overload optical power: -8 dBm</li><li>• Wavelengths: US 1310 nm, DS 1490 nm</li><li>• Wavelength blocking filter (WBF) of G.984.5</li><li>• Flexible mapping between GEM Port and TCONT</li><li>• GPON: consistent with the SN or password authentication defined in G.984.3</li><li>• Bi-directional FEC</li><li>• SR-DBA and NSR-DBA</li><li>• Type B (single-homing&amp; dual-homing)</li></ul>	<ul style="list-style-type: none"><li>• IEEE 802.11 b/g/n (2.4G)</li><li>• IEEE 802.11 a/n/ac (5G)</li><li>• 2 × 2 MIMO (2.4G)</li><li>• 4 × 4 MIMO (5G)</li><li>• Antenna gain: 5 dBi</li><li>• WMM/Multiple SSIDs/WPS</li><li>• 2.4G&amp;5G concurrent</li><li>• Air interface rate: 300 Mbit/s (2.4G), 1733 Mbit/s (5G)</li></ul>
Ethernet port	POTS port
<ul style="list-style-type: none"><li>• Ethernet port-based VLAN tags and tag removal</li><li>• 1:1 VLAN, N:1 VLAN, or VLAN transparent transmission</li><li>• QinQ VLAN</li><li>• Limit on the number of learned MAC addresses</li><li>• MAC address learning</li><li>• Auto-adaptive 10 Mbit/s, 100 Mbit/s or 1000 Mbit/s</li></ul>	<ul style="list-style-type: none"><li>• G.711A/μ, G.729a/b and G.722 encoding/decoding</li><li>• T.30/T.38/G.711 fax mode</li><li>• DTMF</li><li>• Emergency calls (with the SIP protocol)</li></ul>
USB port	-
<ul style="list-style-type: none"><li>• USB2.0</li><li>• FTP-based network storage</li><li>• File/Print sharing based on SAMBA</li><li>• DLNA function</li></ul>	



# tp-link TL-WR829N

## Specifications

### Hardware

- Ethernet Ports: 2 10/100 Mbps LAN Ports, 1 10/100 Mbps WAN Port
- Buttons: WPS/Reset Button
- Antennas: 2 Fixed Omni Directional Antennas
- External Power Supply: 5VDC / 0.6A
- Dimensions (W x D x H): 4.5 x 4.2 x 1.0 in. (115 x 106.7 x 24.3 mm)



### Wireless

- Wireless Standards: IEEE 802.11n, IEEE 802.11g, IEEE 802.11b
- Frequency: 2.412~2.472 GHz
- Signal Rate:
  - 11n: Up to 300 Mbps(dynamic)
  - 11g: Up to 54 Mbps(dynamic)
  - 11b: Up to 11 Mbps(dynamic)
- Reception Sensitivity:
  - 270M: -70dBm@10% PER
  - 130M: -74dBm@10% PER
  - 108M: -74dBm@10% PER
  - 54M: -77dBm@10% PER
  - 11M: -87dBm@8% PER
  - 6M: -90dBm@10% PER
  - 1M: -98dBm@8% PER
- Wireless Function: Enable/Disable Wireless Radio, WMM, Wireless Statistics
- Wireless Security: WEP, WPA / WPA2, WPA-PSK / WPA2-PSK



# tp-link TL-WR940N

## Specifications

### Hardware

- Ethernet Ports: 4 10/100Mbps LAN Ports, 1 10/100Mbps WAN Port
- Buttons: Power On/Off Button, Reset Button, Wi-Fi/WPS Button
- Antennas: 3 fixed Omni Directional Antennas
- External Power Supply: 9VDC / 0.6A
- Dimensions (W x D x H): 9.1 x 5.7 x 1.4 in. (230 x 144 x 35mm)



### Wireless

- Wireless Standards: IEEE 802.11n, IEEE 802.11g, IEEE 802.11b
- Frequency: 2.4-2.4835GHz
- Signal Rate:
  - 11n: Up to 450Mbps(dynamic)
  - 11g: Up to 54Mbps(dynamic)
  - 11b: Up to 11Mbps(dynamic)
- Reception Sensitivity:
  - 450M: -68dBm@10% PER
  - 216M: -70dBm@10% PER
  - 130M: -78dBm@10% PER
  - 54M: -74dBm@10% PER
  - 11M: -85dBm@8% PER
  - 6M: -88dBm@10% PER
  - 1M: -93dBm@8% PER
- Wireless Function: Enable/Disable Wireless Radio, WMM, Wireless Statistics
- Wireless Security: WEP, WPA / WPA2, WPA-PSK / WPA2-PSK



# Ferramentas

## Heatmap - Acrylic Heatmaps

- Planta
- Cobertura

## Análises - Acrylic Professional

- Análises mais detalhadas
- Canal
- Segurança
- Protocolos
- Desempenho da rede
- Taxas de transmissão

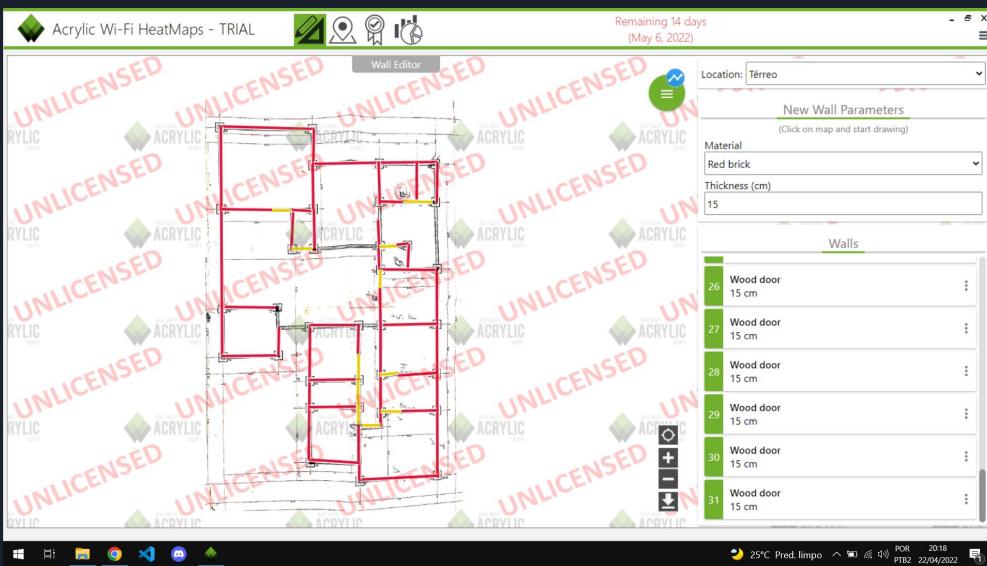
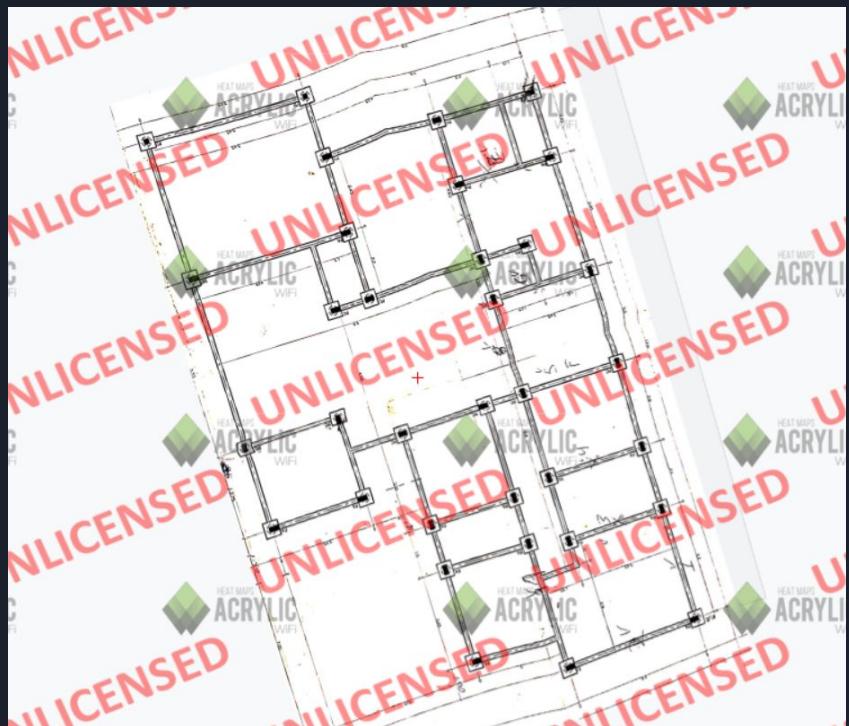


# Análises



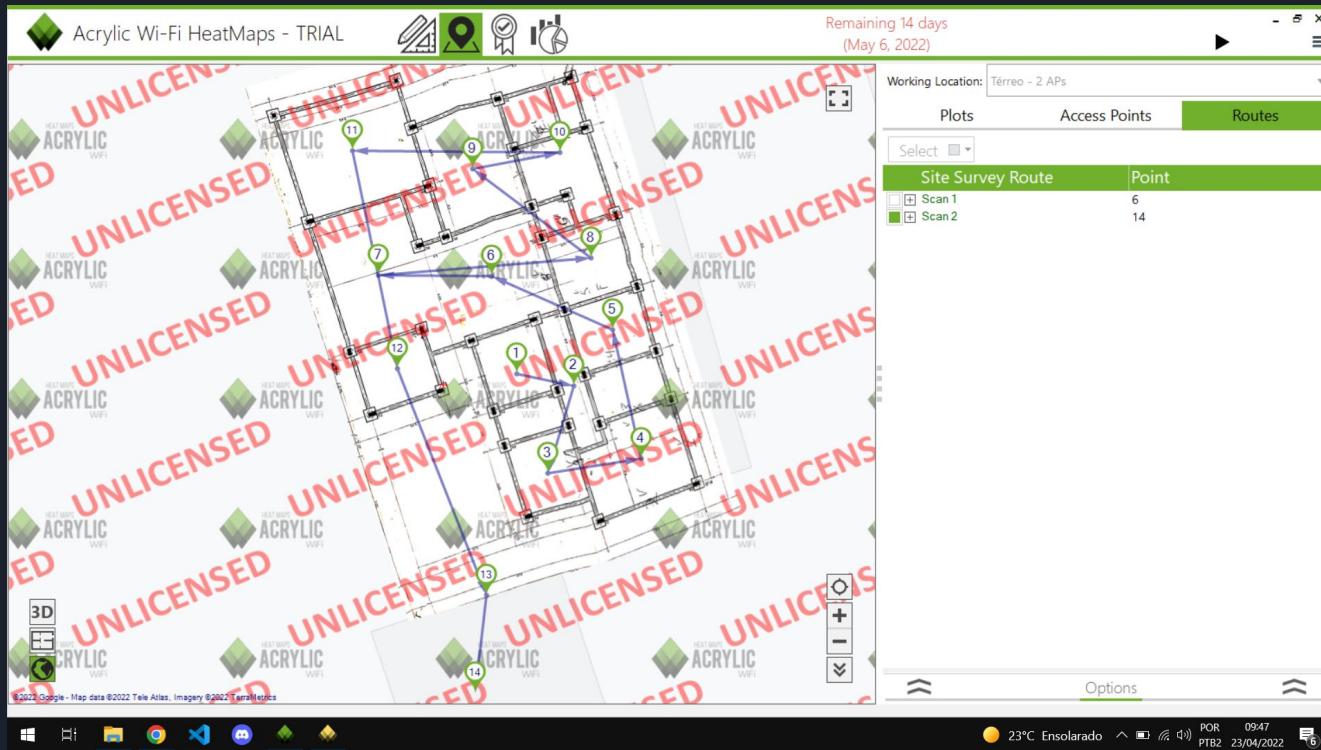
# Análises

## Planta e Ajustes

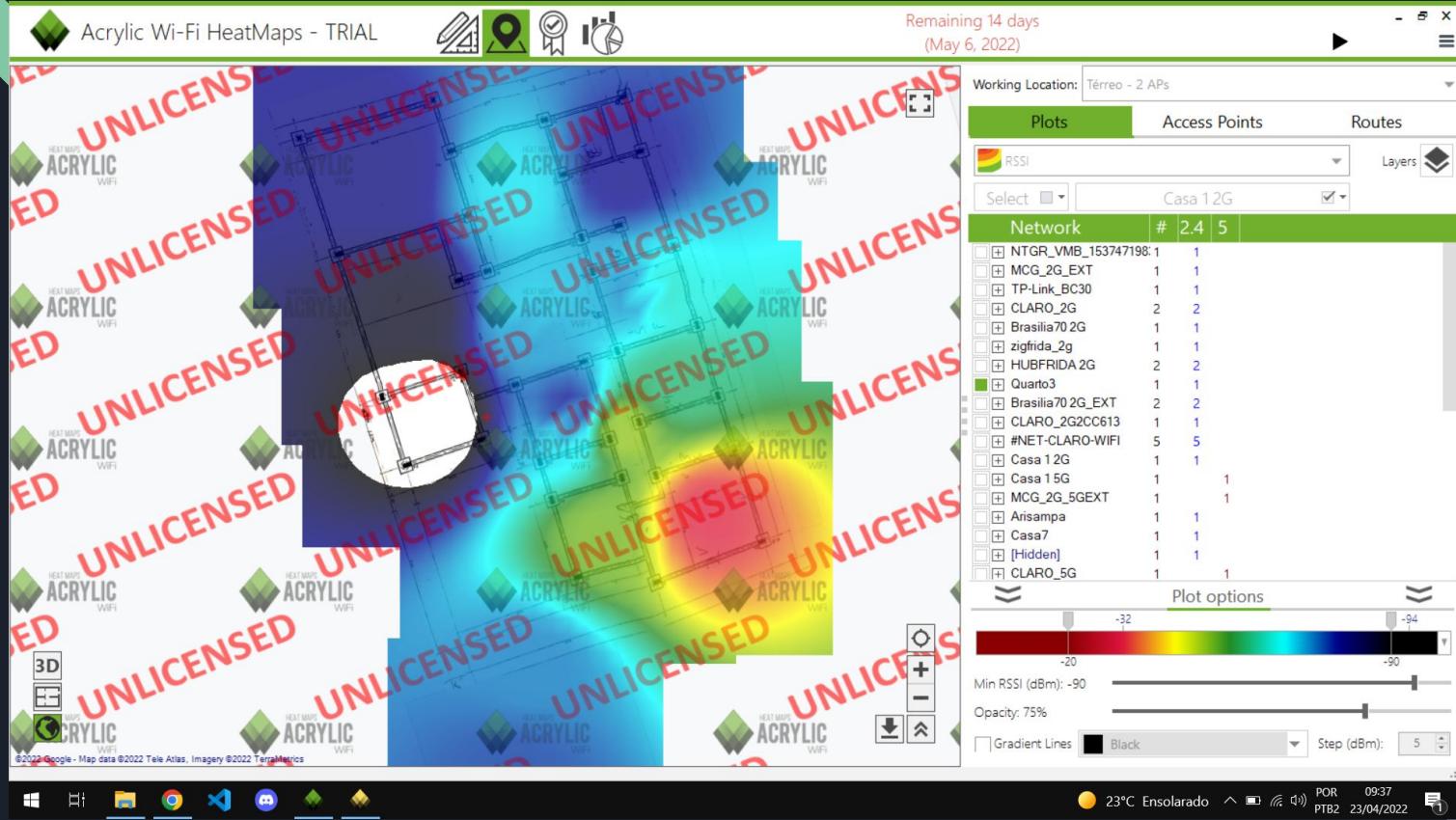


# Análises

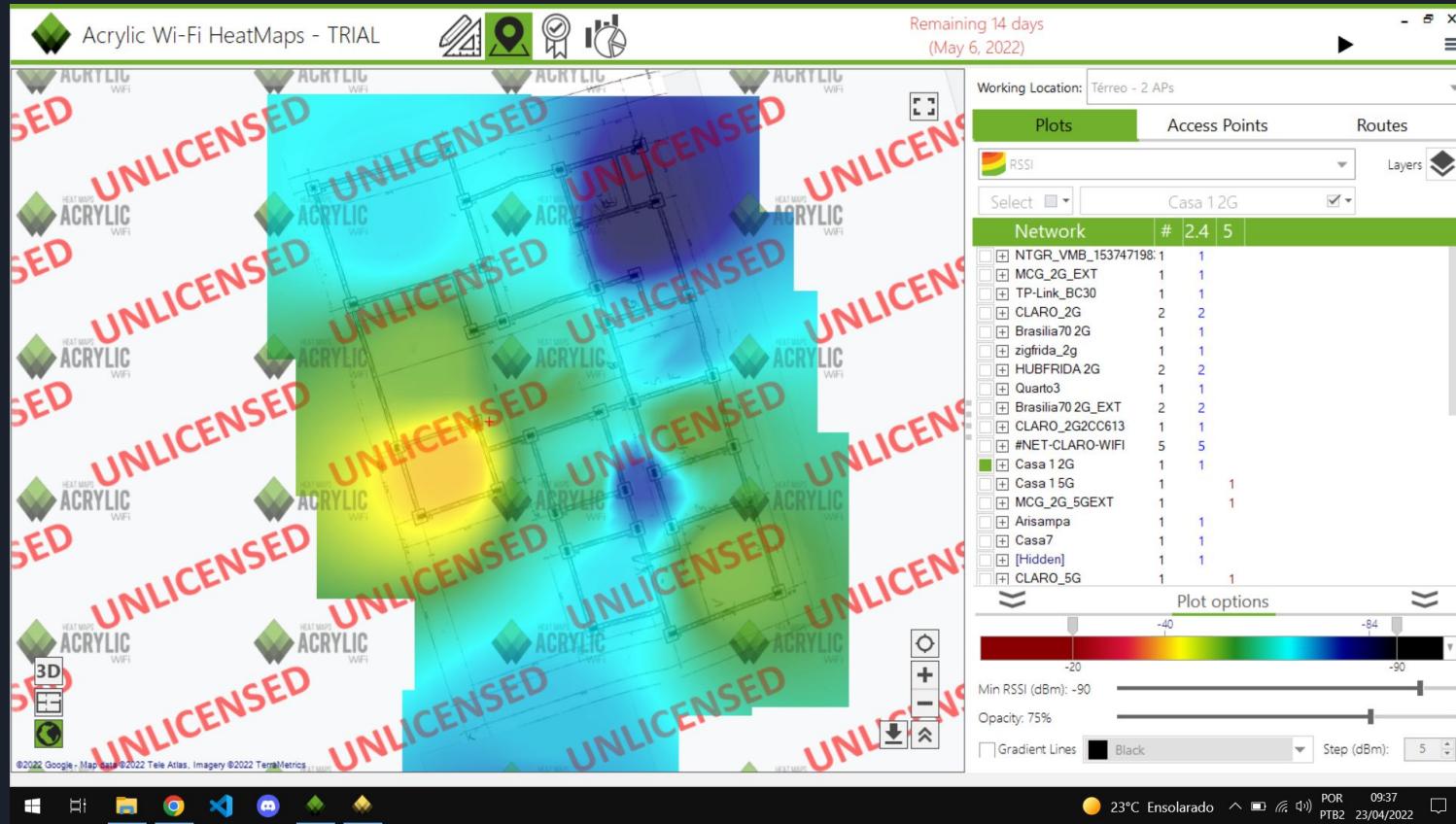
## Medições - Térreo



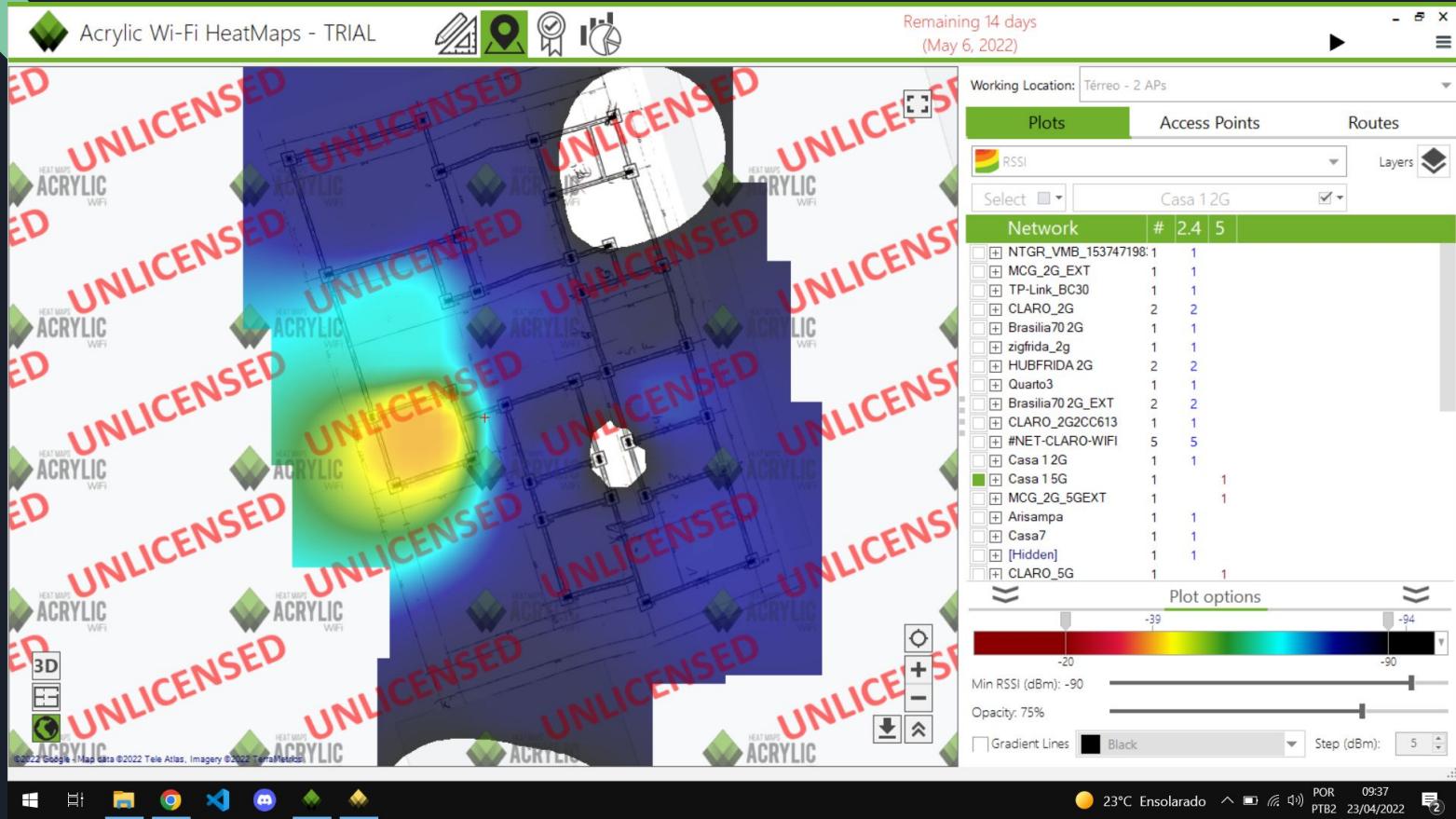
# Análises - Heatmap



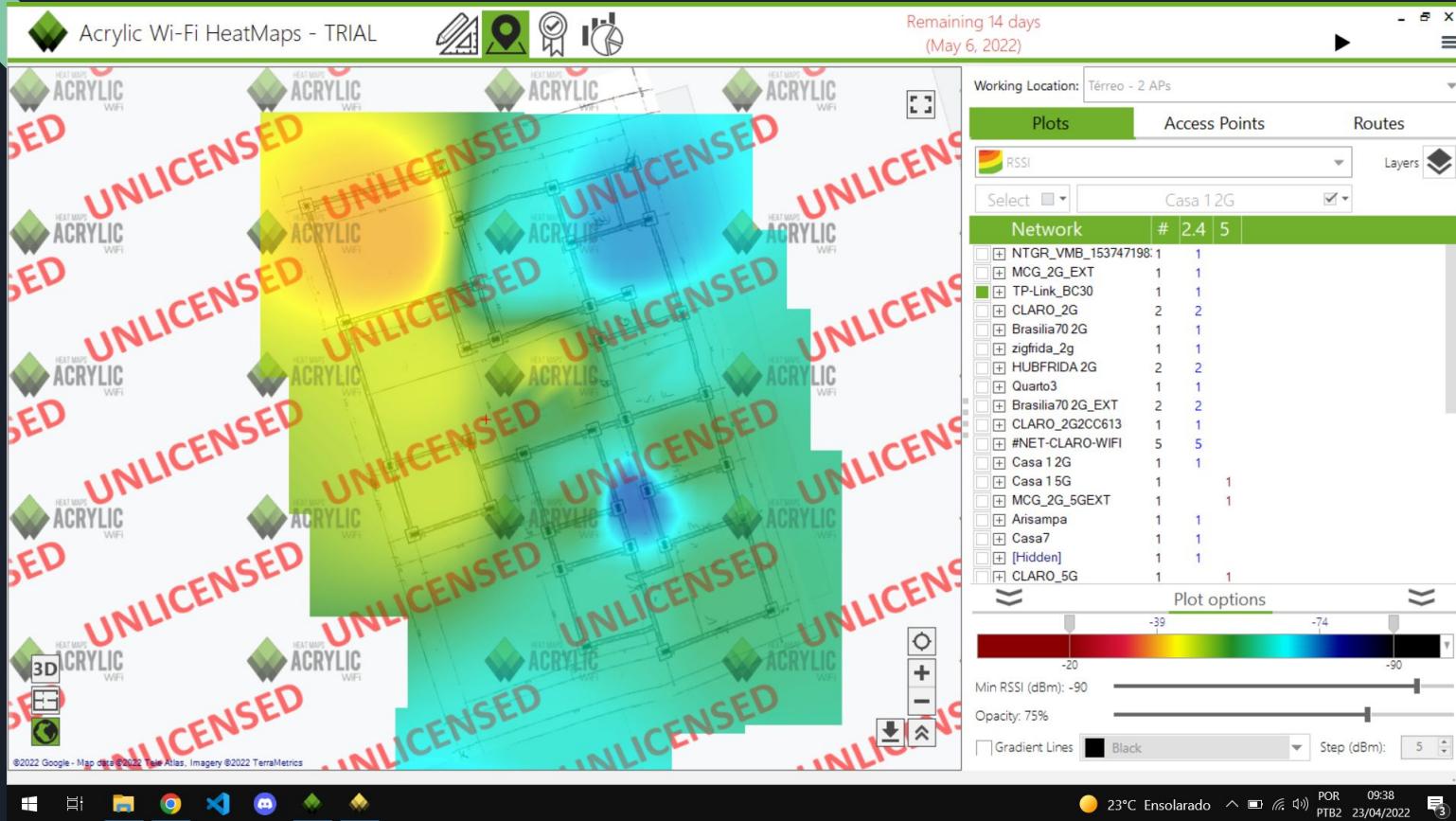
# Análises - Heatmap



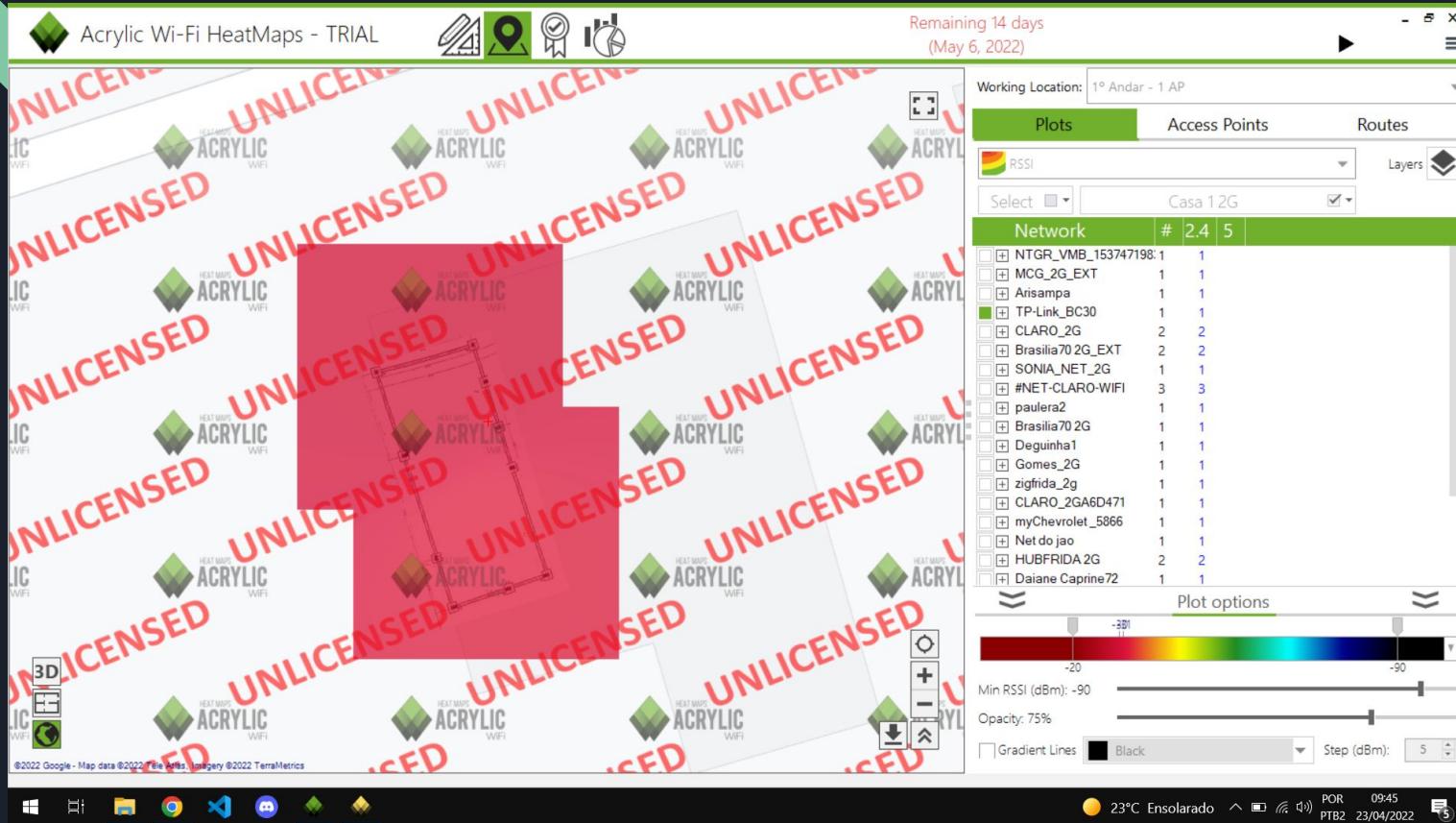
# Análises - Heatmap



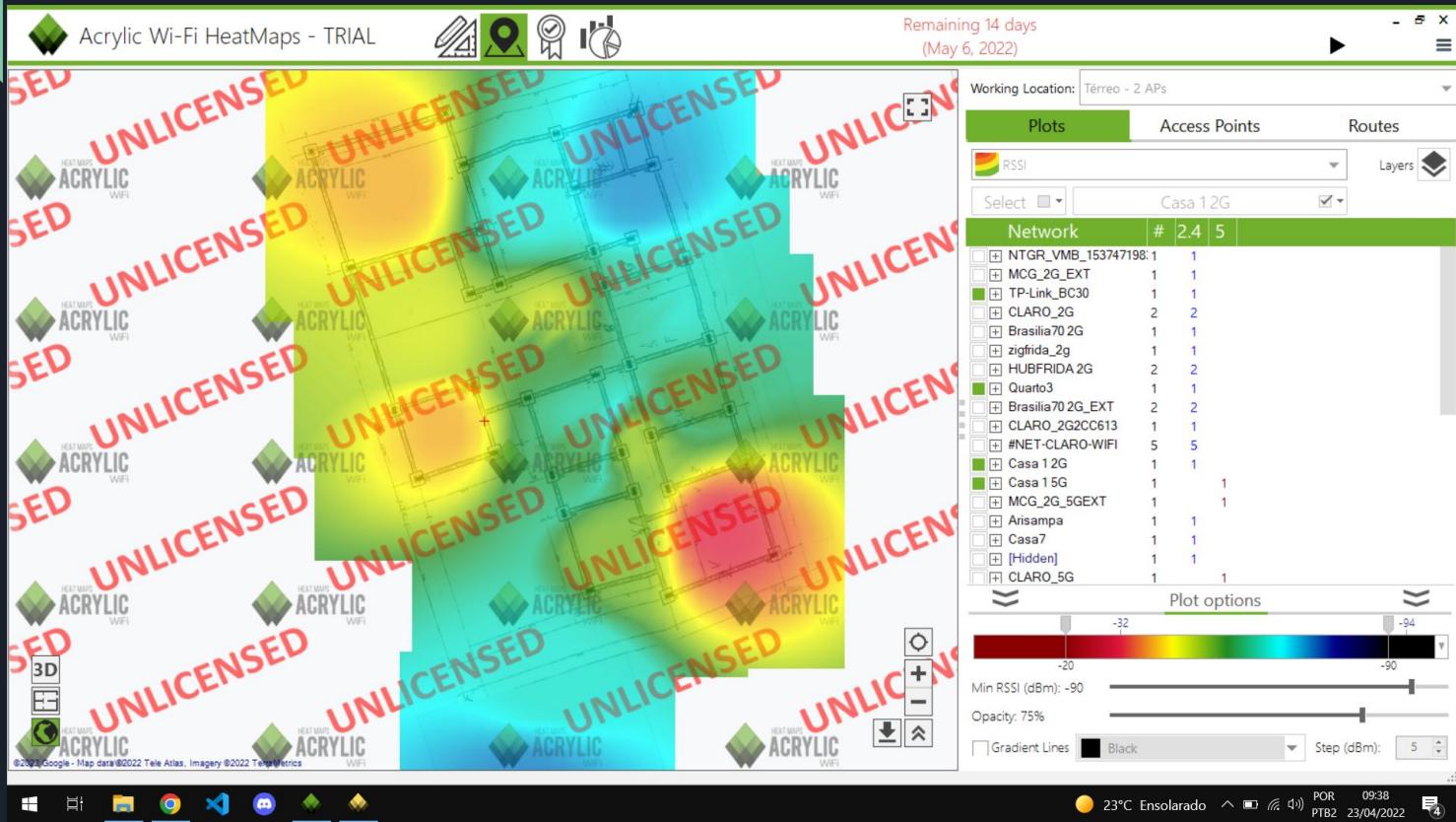
# Análises - Heatmap



# Análises - Heatmap



# Análises - Heatmap



# Análises - Canais/Protocolos/Tx Trans/Segurança

Acrylic Wi-Fi Professional - TRIAL

Remaining 4 days  
(April 26, 2022)

SSID	#	MAC Address	RSSI	Chan	Width	802.11	Max Rate	WEP	WPA	WPA2	WPA3	WPS	Vendor
Casa 1 2G		F4:D:E:AF:C2:7E:70	-61	6	20	b, g, n	144.4		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	HUAWEI T
CLARO_2G		6C:BA:B8:EB:90:E1	-84	6	20	b, g, n	600			PSK-CCMP		1.0	
CLARO_2G		CA:E7:D8:0B:D1:9C	-86	6+2	40	b, g, n	300		PSK-CCMP	PSK-CCMP			MERCURY
#NET-CLARO-WIFI		82:D0:4A:96:20:5E	-91	11	20	b, g, n	216.7	Open					Technicolor
MCG_2G_EXT		3C:84:6A:91:17:7A	-92	6	20	b, g, n	144.4			PSK-(TKIP CCMP)		1.0	ASUSTek C
HUBFRIDA 2G		D8:50:E6:59:BC:B0	-91	1	20	b, g, n	216.7			PSK-CCMP			Technicolor
SONIA_NET_2G		80:D0:4A:96:1F:5D	-92	11	20	b, g, n	216.7		PSK-CCMP	PSK-CCMP		1.0	Sagemcom
Brasilia70 2G		90:16:BA:17:43:20	-94	6+10	40	b, g, n, ax	542		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	
Quarto3		E4:C3:2A:66:BF:74	-74	11+7	40	b, g, n	300		PSK-CCMP	PSK-CCMP		1.0	
zigfrida_2g		C8:5D:38:62:40:B8	-89	1	20	b, g, n	288.9			PSK-CCMP		1.0	HUMAX C
Brasilia70 2G_EXT		EC:08:6B:D3:9E:E2	-93	6	20	b, g, n	144.4		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	TP-LINK T
Casa 1 5G		F4:D:E:AF:C2:7E:74	-76	36+40+44+48	80	a, n, ac	1733.4		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	HUAWEI T
TP-Link_BC30		50:D4:F7:71:BC:30	-60	2+6	40	b, g, n	450			PSK-CCMP		1.0	TP-LINK T
#NET-CLARO-WIFI		F2:81:75:2C:C8:1B	-92	11	20	b, g, n	216.7	Open		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		Sagemcom
CLARO_2GCC613		F0:81:75:2C:C6:18	-92	11	20	b, g, n	216.7			PSK-(TKIP CCMP)	PSK-(TKIP CCMP)	1.0	Sagemcom

Signal strength Network quality 2.4GHz Networks 5GHz Networks Detailed info Connectivity

Control Status How to Improve your Wi-Fi Network Performance: Channel interference

What are Wi-Fi Channels:

Wi-Fi devices can operate on 2.4GHz and 5GHz frequency bands. In turn, these frequency bands are split up into frequency ranges known as Wi-Fi channels. Wi-Fi devices use these channels to transmit data and communications.

Overall Network Quality:  ( 5/10 )

Region North America Europe / Asia Japan

Channel Center Frequency Ch1 Ch2 Ch3 Ch4 Ch5 Ch6 Ch7 Ch8 Ch9 Ch10 Ch11 Ch12 Ch13 Ch14

2.412 2.417 2.422 2.427 2.432 2.437 2.442 2.447 2.452 2.457 2.462 2.467 2.472 2.484

Language: English

25°C Pred. limpo 20:39 POR PTB2 22/04/2022

# Análises - Qualidade geral da rede

Acrylic Wi-Fi Professional - TRIAL

Remaining 4 days  
(April 26, 2022)

SSID	#	MAC Address	RSSI	Chan	Width	802.11	Max Rate	WEP	WPA	WPA2	WPA3	WPS	Vendor
Casa 1 2G		F4:D:E:AF:C2:7E:70	-61	6	20	b, g, n	144.4		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	HUAWEI
CLARO_2G		6C:BA:B8:EB:90:E1	-83	6	20	b, g, n	600		PSK-CCMP			1.0	
CLARO_2G		CA:E7:D8:0B:D1:9C	-79	6+2	40	b, g, n	300		PSK-CCMP	PSK-CCMP			MERCURY
#NET-CLARO-WIFI		82:D0:4A:96:20:5E	-91	11	20	b, g, n	216.7	Open					Technicolor
MCG_2G_EXT		3C:84:6A:91:17:7A	-95	6	20	b, g, n	144.4			PSK-(TKIP CCMP)			ASUSTeK
HUBFRIDA 2G		D8:50:E6:59:BC:B0	-92	1	20	b, g, n	216.7		PSK-CCMP	PSK-CCMP			
SONIA_NET_2G		80:D0:4A:96:1F:5D	-93	11	20	b, g, n	216.7		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	Technicolor
Brasilia70 2G		90:16:BA:17:43:20	-88	6+10	40	b, g, n, ax	542		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)			
Quarto3		E4:1C:32:A6:BF:74	-62	11+7	40	b, g, n	300		PSK-CCMP	PSK-CCMP		1.0	
zigfrida_2g		C8:5D:38:62:40:B8	-88	1	20	b, g, n	288.9		PSK-CCMP			1.0	HUMAX
Brasilia70 2G_EXT		EC:08:6B:D3:9E:E2	-94	6	20	b, g, n	144.4		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	TP-LINK
Casa 1 5G		F4:DE:AF:C2:7E:74	-78	36+40+44+48	80	a, n, ac	1733.4		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	HUAWEI
TP-Link_BC30		50:D4:F7:71:BC:30	-50	2+6	40	b, g, n	450		PSK-CCMP			1.0	TP-LINK
#NET-CLARO-WIFI		F2:81:75:2C:C8:1B	-92	11	20	b, g, n	216.7	Open		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		Sagemcom
CLARO_2G2CC613		F0:81:75:2C:C6:18	-91	11	20	b, g, n	216.7					1.0	Sagemcom
Smart WiFi 2022		CF:20:96:51:31:31	-60	6	20	b, g, n	288.9						

Signal strength      Network quality      2.4GHz Networks      5GHz Networks      Detailed info      Connectivity

Control      Status

How to Improve your Wi-Fi Network Performance: Channel interference

What are Wi-Fi Channels:

Wi-Fi devices can operate on 2.4GHz and 5GHz frequency bands. In turn, these frequency bands are split up into frequency ranges known as Wi-Fi channels. Wi-Fi devices use these channels to transmit data and communications.

Region	North America	Europe / Asia	Japan											
Channel Center Frequency	Ch1 2.412	Ch2 2.417	Ch3 2.422	Ch4 2.427	Ch5 2.432	Ch6 2.437	Ch7 2.442	Ch8 2.447	Ch9 2.452	Ch10 2.457	Ch11 2.462	Ch12 2.467	Ch13 2.472	Ch14 2.484

Overall Network Quality: ( 5/10 )

Language: English

25°C Pred. limpo 20:41 POR PTB2 22/04/2022

# Análises - Qualidade geral da rede

Acrylic Wi-Fi Professional - TRIAL

Remaining 4 days  
(April 26, 2022)

SSID	#	MAC Address	RSSI	Chan	Width	802.11	Max Rate	WEP	WPA	WPA2	WPA3	WPS	Vendor
#NET-CLARO-WIFI		82:D0:4A:96:20:5E	-91	11	20	b, g, n	216.7	Open				1.0	Technic
MCG_2G_EXT		3C:84:6A:91:17:7A	-95	6	20	b, g, n	144.4		PSK-(TKIP CCMP)				ASUSTe
HUBFRIDA 2G		D8:50:E6:59:BC:B0	-92	1	20	b, g, n	216.7		PSK-CCMP				
SONIA_NET_2G		80:D0:4A:96:1F:5D	-93	11	20	b, g, n	216.7		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	Technic
Brasilia70 2G		90:16:BA:17:43:20	-88	6+10	40	b, g, n, ax	542		PSK-CCMP	PSK-(TKIP CCMP)		1.0	
Quarto3		E4:C3:2A:66:BF:74	-75	11+7	40	b, g, n	300		PSK-CCMP	PSK-CCMP		1.0	
zigfrida_2g		C8:5D:38:62:40:B8	-91	1	20	b, g, n	288.9		PSK-CCMP	PSK-CCMP		1.0	HUMAX
Brasilia70 2G_EXT		EC:08:6B:D3:9E:E2	-94	6	20	b, g, n	144.4		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	TP-LINK
Casa 1 5G		F4:DE:A8:C2:7E:74	-77	36+40+44+48	80	a, n, ac	1733.4		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	HUAWEI
TP-Link_BC30		50:D4:E7:71:BC:30	-50	2+6	40	b, g, n	450		PSK-CCMP			1.0	TP-LINK
#NET-CLARO-WIFI		F2:81:75:2C:C8:1B	-92	11	20	b, g, n	216.7	Open					Sagemc
CLARO_2G2CC613		F0:81:75:2C:C6:18	-91	11	20	b, g, n	216.7		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	Sagemc
myChevrolet_5866		CE:22:26:51:6AC8	-88	1	20	g, n	72.2		PSK-CCMP			1.0	
[Hidden]		10:DA:43:7B:55:D7	-94	1	20	b, g, n	144.4		PSK-CCMP			1.0	NETGEA

Signal strength Network quality 2.4GHz Networks 5GHz Networks Detailed info Connectivity

Control Status How to Improve your Wi-Fi Network Performance: Channel interference

Channel Quality Signal Quality Network Security Transmission Speed 802.11 Standards Snr Retry rates

What are Wi-Fi Channels: Wi-Fi devices can operate on 2.4GHz and 5GHz frequency bands. In turn, these frequency bands are split up into frequency ranges known as Wi-Fi channels. Wi-Fi devices use these channels to transmit data and communications.

Overall Network Quality: ( 6/10 )

Frequency Band UNII-1 (Lower) UNII-2 (Middle)

Channel	Center Frequency	Ch36	Ch40	Ch44	Ch48	Ch52	Ch56	Ch60	Ch64
	5.180	T	T	T	T	T	T	T	T
	5.200								
	5.220								
	5.240								
	5.260								
	5.280								
	5.300								
	5.320								

Lightshot Captura salva como Screenshot\_14.png. Clique aqui para abrir a pasta.

25°C Pred. limpo 20:41 POR PTB2 22/04/2022

# Análises - Qualidade geral da rede

Acrylic Wi-Fi Professional - TRIAL

Remaining 4 days  
(April 26, 2022)

SSID	#	MAC Address	RSSI	Chan	Width	802.11	Max Rate	WEP	WPA	WPA2	WPA3	WPS	Vendor
#NET-CLARO-WIFI		82:D0:4A:96:20:5E	-94	11	20	b, g, n	216.7	Open				1.0	Technic
MCG_2G_EXT		3C:84:6A:91:17:7A	-95	6	20	b, g, n	144.4		PSK-(TKIP CCMP)				ASUSTe
HUBFRIDA 2G		D8:50:E6:59:BC:B0	-94	1	20	b, g, n	216.7		PSK-CCMP				
SONIA_NET_2G		80:D0:4A:96:1F:5D	-93	11	20	b, g, n	216.7		PSK-(TKIP CCMP)	PSK-CCMP		1.0	Technic
Brasilia70 2G		90:16:BA:17:43:20	-86	6+10	40	b, g, n, ax	542		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	
Quarto3		E4:C3:2A:66:BF:74	-67	11+7	40	b, g, n	300		PSK-CCMP	PSK-CCMP		1.0	
zigfrida_2g		C8:5D:38:62:40:B8	-85	1	20	b, g, n	288.9		PSK-CCMP	PSK-CCMP		1.0	HUMAX
Brasilia70 2G_EXT		EC:08:6B:D3:9E:E2	-94	6	20	b, g, n	144.4		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	TP-LINK
Casa 1 5G		F4:DE:A8:C2:7E:74	-78	36+40+44+48	80	a, n, ac	1733.4		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	HUAWEI
TP-Link_BC30		50:D4:E7:71:BC:30	-49	2+6	40	b, g, n	450		PSK-CCMP	PSK-CCMP		1.0	TP-LINK
#NET-CLARO-WIFI		F2:81:75:2C:C8:1B	-92	11	20	b, g, n	216.7	Open					Sagemc
CLARO_2G2CC613		F0:81:75:2C:C6:18	-92	11	20	b, g, n	216.7		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	Sagemc
myChevrolet _5866		CE:22:26:51:6AC:8	-88	1	20	g, n	72.2		PSK-CCMP	PSK-CCMP		1.0	
[Hidden]		10:DA:43:7B:55:D7	-91	1	20	b, g, n	144.4		PSK-CCMP	PSK-CCMP		1.0	NETGEA

Signal strength      Network quality      2.4GHz Networks      5GHz Networks      Detailed info      Connectivity

Control      Status

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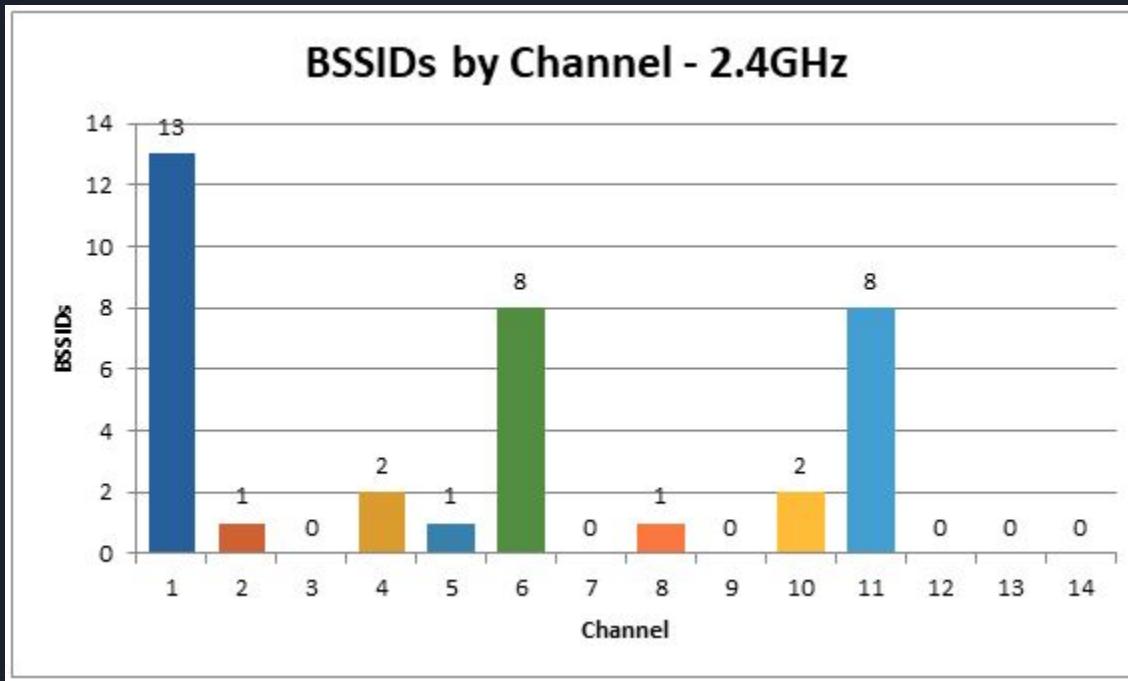
Region	North America	Europe / Asia	Japan											
Channel Center Frequency	Ch1 2.412	Ch2 2.417	Ch3 2.422	Ch4 2.427	Ch5 2.432	Ch6 2.437	Ch7 2.442	Ch8 2.447	Ch9 2.452	Ch10 2.457	Ch11 2.462	Ch12 2.467	Ch13 2.472	Ch14 2.484

Overall Network Quality:  ( 6/10 )

Language: English

25°C Pred. limpo 20:41 POR PTB2 22/04/2022

# Análises - Interferência Co-Canal



# Análises - Interferência Co-Canal

Acrylic Wi-Fi Professional - TRIAL

Remaining 4 days  
(April 26, 2022)

SSID	#	MAC Address	RSSI	Chan	Width	802.11	Max Rate	WEP	WPA	WPA2	WPA3	WPS	Vendor	
Casa 1 2G		F4:DE:AF:C2:7E:70	-61	6	20	b, g, n	144.4		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	HUAWEI T	
CLARO_2G		6C:BA:B8:EB:90:E1	-83	6	20	b, g, n	600		PSK-CCMP	PSK-CCMP		1.0		
CLARO_2G		CA:E7:D8:0B:D1:9C	-88	6+2	40	b, g, n	300		PSK-CCMP	PSK-CCMP			MERCURY	
#NET-CLARO-WIFI		82:D0:4A:96:20:5E	-89	11	20	b, g, n	216.7	Open					1.0	
MCG_2G_EXT		3C:84:6A:91:17:7A	-92	6	20	b, g, n	144.4		PSK-(TKIP CCMP)				Technicolor	
HUBFRIDA 2G		D8:50:E6:59:BC:B0	-89	1	20	b, g, n	216.7		PSK-CCMP	PSK-CCMP			ASUSTek C	
SONIA_NET_2G		80:D0:4A:96:1F:5D	-90	11	20	b, g, n	216.7		PSK-CCMP	PSK-CCMP			Technicolor	
Brasilia70 2G		90:16:BA:17:43:20	-93	6+10	40	b, g, n, ax	542		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0		
Quarto3		E4:C3:2A:66:BE:74	-73	11+7	40	b, g, n	300		PSK-CCMP	PSK-CCMP		1.0		
zigfrida_2g		C8:5D:38:62:40:B6	-89	1	20	b, g, n	288.9		PSK-CCMP	PSK-CCMP		1.0	HUMAX C	
Brasilia70 2G_EXT		EC:10:6B:D3:9E:E2	-92	6	20	b, g, n	144.4		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	TP-LINK T	
Casa 1 5G		F4:DE:AF:C2:7E:74	-77	36+40+44+48	80	a, n, ac	1733.4		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	HUAWEI T	
TP-Link_BC30		50:D4:F7:71:BC:30	-60	2+6	40	b, g, n	450		PSK-CCMP	PSK-CCMP		1.0	TP-LINK T	
#NET-CLARO-WIFI		F2:81:75:2C:C8:1B	-95	11	20	b, g, n	216.7	Open		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)			Sagemcom
CLARO_2GCC613		F0:81:75:2C:C6:18	-92	11	20	b, g, n	216.7		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	Sagemcom	

Signal strength    Network quality    2.4GHz Networks    5GHz Networks    Detailed info    Connectivity

2.4GHz Networks: 2402MHz, 2412MHz, 2422MHz, 2432MHz, 2442MHz, 2452MHz, 2462MHz, 2472MHz, 2484MHz, 2494MHz.

5GHz Networks: 2407MHz, 2417MHz, 2427MHz, 2437MHz, 2447MHz, 2457MHz, 2467MHz, 2478MHz, 2489MHz.

Detailed info: North America, Europe/Asia, 802.11 Specs.

Connectivity: Signal strength, Network quality.

Bottom Taskbar: Windows, File Explorer, Google Chrome, Microsoft Edge, File Manager, Acrylic Wi-Fi Professional icon, Battery, Temperature (25°C), Weather (Pred. limpo), Network, Power (POR PTB2), Date (22/04/2022), Time (20:39).

# Análises - Interferência Co-Canal

Acrylic Wi-Fi Professional - TRIAL

Remaining 4 days  
(April 26, 2022)

SSID	#	MAC Address	RSSI	Chan	Width	802.11	Max Rate	WEP	WPA	WPA2	WPA3	WPS	Vendor	
Casa 1 2G		F4:DE:AF:C2:7E:70	-60	6	20	b, g, n	144.4		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	HUAWEI T	
CLARO_2G		6C:BA:B8:EB:90:EL	-84	6	20	b, g, n	600		PSK-CCMP	PSK-CCMP		1.0		
CLARO_2G		CA:E7:D8:0B:D1:9C	-86	6+2	40	b, g, n	300		PSK-CCMP	PSK-CCMP			MERCURY	
#NET-CLARO-WIFI		82:D0:4A:96:20:5E	-91	11	20	b, g, n	216.7	Open					1.0	
MCG_2G_EXT		3C:84:6A:91:17:7A	-92	6	20	b, g, n	144.4		PSK-(TKIP CCMP)				Technicolor	
HUBFRIDA 2G		D8:50:E6:59:BC:B0	-90	1	20	b, g, n	216.7		PSK-CCMP	PSK-CCMP			ASUSTek C	
SONIA_NET_2G		80:D0:4A:96:1F:5D	-89	11	20	b, g, n	216.7		PSK-CCMP	PSK-CCMP		1.0	Technicolor	
Brasilia70 2G		90:16:BA:17:43:20	-86	6+10	40	b, g, n, ax	542		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0		
Quarto3		E4:3C:2A:66:BF:74	-74	11+7	40	b, g, n	300		PSK-CCMP	PSK-CCMP		1.0		
zigfrida_2g		C8:5D:38:62:40:B6	-92	1	20	b, g, n	288.9		PSK-CCMP			1.0	HUMAX C	
Brasilia70 2G_EXT		EC:10:6B:D3:9E:E2	-92	6	20	b, g, n	144.4		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	TP-LINK T	
Casa 1 5G		F4:DE:AF:C2:7E:74	-76	36+40+44+48	80	a, n, ac	1733.4		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	HUAWEI T	
TP-Link_BC30		50:D4:F7:71:BC:30	-63	2+6	40	b, g, n	450		PSK-CCMP			1.0	TP-LINK T	
#NET-CLARO-WIFI		F2:81:75:2C:C8:1B	-92	11	20	b, g, n	216.7	Open		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)			Sagemcom
CLARO_2GCC613		F0:81:75:2C:C6:18	-92	11	20	b, g, n	216.7					1.0	Sagemcom	

Signal strength    Network quality    2.4GHz Networks    5GHz Networks    Detailed info    Connectivity

2.4GHz Networks: 2402MHz, 2412MHz, 2422MHz, 2432MHz, 2442MHz, 2452MHz, 2462MHz, 2472MHz, 2484MHz, 2494MHz.

5GHz Networks: 2407MHz, 2417MHz, 2427MHz, 2437MHz, 2447MHz, 2457MHz, 2467MHz, 2478MHz, 2489MHz.

Detailed info: Shows channel usage and interference levels.

Connectivity: Shows signal strength and interference levels across the 2.4GHz and 5GHz bands.

Bottom Taskbar: Windows icons, battery level (25°C), weather (Pred. limpo), system status (POR PTB2 2039 22/04/2022).

# Análises - Interferência Co-Canal

Acrylic Wi-Fi Professional - TRIAL

Remaining 4 days  
(April 26, 2022)

SSID	#	MAC Address	RSSI	Chan	Width	802.11	Max Rate	WEP	WPA	WPA2	WPA3	WPS	Vendor
Casa 1 2G		F4:DE:AF:C2:7E:70	-50	6	20	b, g, n	144.4		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	HUAWEI
CLARO_2G		6C:BA:B8:EB:90:EL	-81	6	20	b, g, n	600		PSK-CCMP	PSK-CCMP		1.0	
CLARO_2G		CA:E7:D8:0B:D1:9C	-81	6+2	40	b, g, n	300		PSK-CCMP	PSK-CCMP			MERCURY
#NET-CLARO-WIFI		82:D0:4A:96:20:5E	-90	11	20	b, g, n	216.7	Open					1.0
MCG_2G_EXT		3C:84:6A:91:17:7A	-92	6	20	b, g, n	144.4			PSK-(TKIP CCMP)			Technicolor
HUBFRIDA 2G		D8:50:E6:59:BC:B0	-91	1	20	b, g, n	216.7		PSK-CCMP	PSK-CCMP			ASUSTeK
SONIA_NET_2G		80:D0:4A:96:1F:5D	-93	11	20	b, g, n	216.7		PSK-CCMP	PSK-CCMP		1.0	Technicolor
Brasilia70 2G		90:16:BA:17:43:20	-86	6+10	40	b, g, n, ax	542		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	
Quarto3		E4:03:2A:66:BE:74	-62	11+7	40	b, g, n	300		PSK-CCMP	PSK-CCMP		1.0	
zigfrida_2g		C8:5D:38:62:40:B6	-87	1	20	b, g, n	288.9		PSK-CCMP	PSK-CCMP		1.0	HUMAX
Brasilia70 2G_EXT		EC:08:6B:D3:9E:E2	-91	6	20	b, g, n	144.4		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	TP-LINK
Casa 1 5G		F4:DE:AF:C2:7E:74	-79	36+40+44+48	80	a, n, ac	1733.4		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	HUAWEI
TP-Link_BC30		50:D4:F7:71:BC:30	-49	2+6	40	b, g, n	450		PSK-CCMP	PSK-CCMP		1.0	TP-LINK
#NET-CLARO-WIFI		F2:81:75:2C:C8:1B	-92	11	20	b, g, n	216.7	Open					Sagemcom
CLARO_2G2CC613		F0:81:75:2C:CE:18	-92	11	20	b, g, n	216.7		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)		1.0	Sagemcom
Claro_2G_E505		CF:00:00:01:61:31	-65	1	20	b, g, n	70.0		PSK-CCMP	PSK-CCMP			

Signal strength      Network quality      2.4GHz Networks      5GHz Networks      Detailed info      Connectivity

North America  
Europe/Asia  
802.11 Specs

Windows Taskbar icons: File Explorer, File History, Google Chrome, Microsoft Edge, Task View, File Explorer, Acrylic Wi-Fi Professional.

System tray icons: Battery (25°C), Predictive Maintenance (Pred. limpo), Network (Wi-Fi), Power (POR PTB2), Date/Time (22/04/2022), Task View (6).

# Análises - Interferência Co-Canal

Acrylic Wi-Fi Professional - TRIAL

Remaining 4 days  
(April 26, 2022)

SSID	#	MAC Address	RSSI	Chan	Width	802.11	Max Rate	WEP	WPA	WPA2	WPA3	WPS	Vendor
CLARO_2G		CA:E7:D8:0B:D1:9C	-91	6+2	40	b, g, n	300		PSK-CCMP	PSK-CCMP			MERCU
#NET-CLARO-WIFI		82:D0:4A:96:20:5E	-93	11	20	b, g, n	216.7	Open					Technic
MCG_2G_EXT		3C:B4:6A:91:17:7A	-94	6	20	b, g, n	144.4			PSK-(TKIP CCMP)			
HUBFRIDA_2G		D8:15:6E:59:BC:B0	-91	1	20	b, g, n	216.7			PSK-CCMP			ASUSTe
SONIA_NET_2G		80:D0:4A:96:1F:5D	-93	11	20	b, g, n	216.7		PSK-CCMP	PSK-CCMP			Technic
Brasilia70_2G		90:16:BA:17:43:20	-88	6+10	40	b, g, n, ax	542		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)			
Quarto3		E4:C3:2A:66:BF:74	-74	11+7	40	b, g, n	300		PSK-CCMP	PSK-CCMP			
zigfrida_2g		C8:5D:38:62:40:B8	-87	1	20	b, g, n	288.9		PSK-CCMP				HUMA
Brasilia70_2G_EXT		EC:08:6B:D3:9E:E2	-95	6	20	b, g, n	144.4		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)			TP-LINK
Casa 1 5G		F4:D8:AF:C2:7E:74	-81	36+40+44+48	80	a, n, ac	1733.4		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)			HUAWE
TP-Link_BC30		50:D4:F7:71:BC:30	-60	2+6	40	b, g, n	450			PSK-CCMP			TP-LINK
#NET-CLARO-WIFI		F2:81:75:2C:C8:1B	-92	11	20	b, g, n	216.7	Open					Sagemc
CLARO_2G2CC613		F0:81:75:2C:CE:18	-93	11	20	b, g, n	216.7		PSK-(TKIP CCMP)	PSK-(TKIP CCMP)			
myChevrolet _5866		CE:22:6E:51:6A:CA	-88	1	20	g, n	72.2		PSK-CCMP				1.0
[Hidden]		10:DA:43:7B:55:D7	-93	1	20	b, g, n	144.4		PSK-CCMP				NETGEA

Signal strength      Network quality      2.4GHz Networks      5GHz Networks      Detailed info      Connectivity

Frequency Bands:

- 2.4GHz: 5180, 5240, 5260, 5320, 5500 MHz
- 5GHz: 5720, 5745, 5805, 5825 MHz

Channel 5240 (highlighted): Casa 1 5G

Bottom navigation bar: Windows, Task View, File Explorer, Edge, File Manager, Taskbar, Acrylic Wi-Fi Professional icon.

Bottom right status bar: 25°C Pred. limpo, 20:40, 22/04/2022, PTB2, battery level (7).



# Melhorias & Problemas



# Problemas

- SSIDs diferentes
- Switch Limitante
  - 10/100Mbps
  - Tx contratada: 300Mbps
- APs mal posicionados
- Área externa s/ cobertura

# Melhorias

- Configurar como AP
  - Função de AP disponível
- Switch 10/100/1000Mbps
- APs
  - Centralizar
  - Tirar de ambiente mais fechados
- AP na área externa



Obrigado pela  
atenção!