

Conducting a Wi-Fi Site Survey

Wireless and Mobile Device Security, Second Edition - Lab 03

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Time on Task:

1 hour, 17 minutes

Progress:

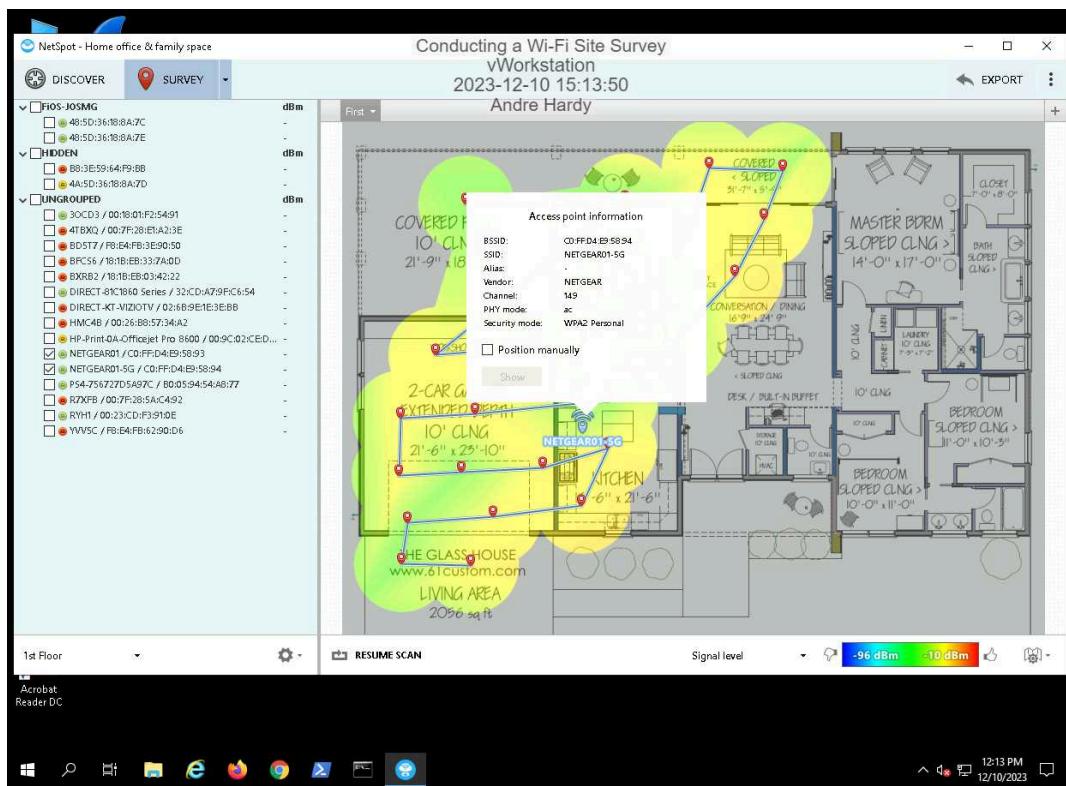
100%

Report Generated: Sunday, December 10, 2023 at 4:17 PM

Hands-On Demonstration

Part 1: Generate a Heatmap for Signal Level Coverage

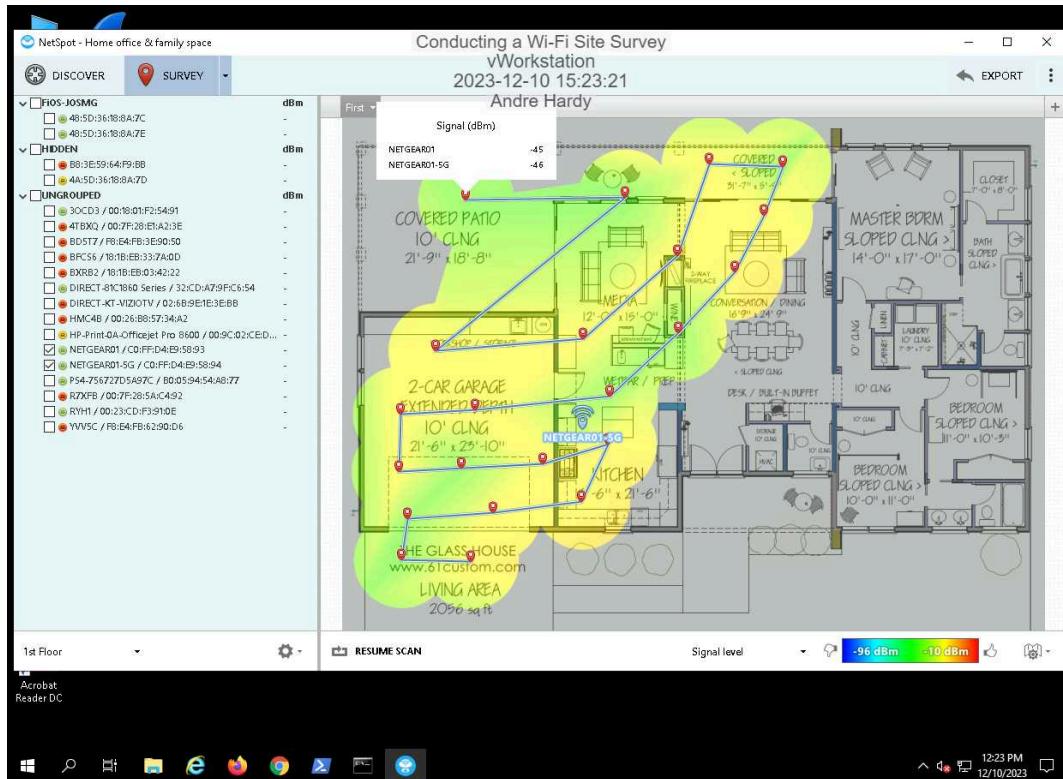
5. Make a screen capture showing the NETGEAR01-5G access point details.



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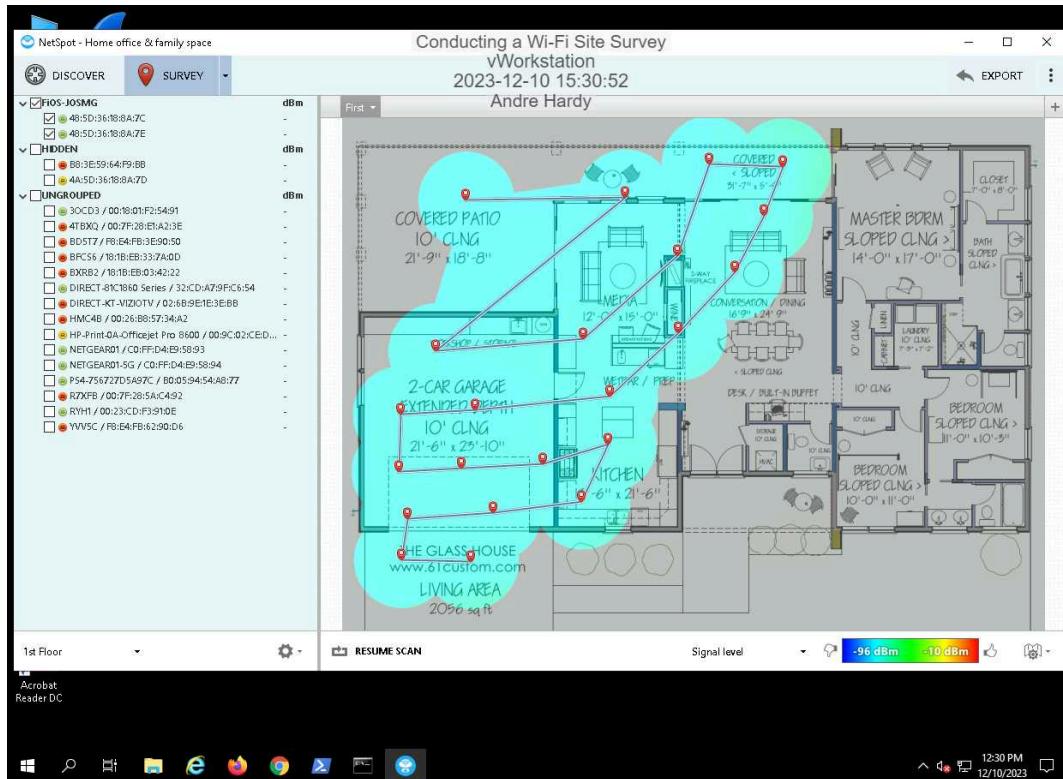
9. Make a screen capture showing the signal levels recorded at the first sample point.



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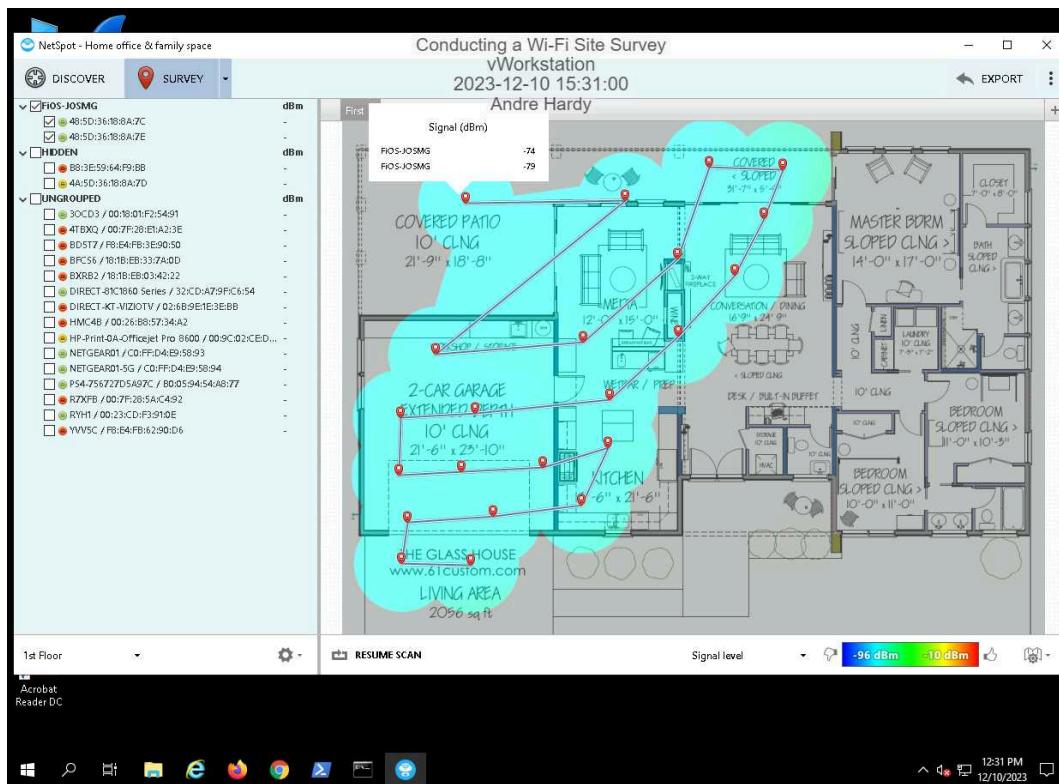
12. Make a screen capture showing the heatmap for the FiOS-JOSMG group only.



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14. Make a screen capture showing the FiOS-JOSMG signal levels detected at the first sample point.

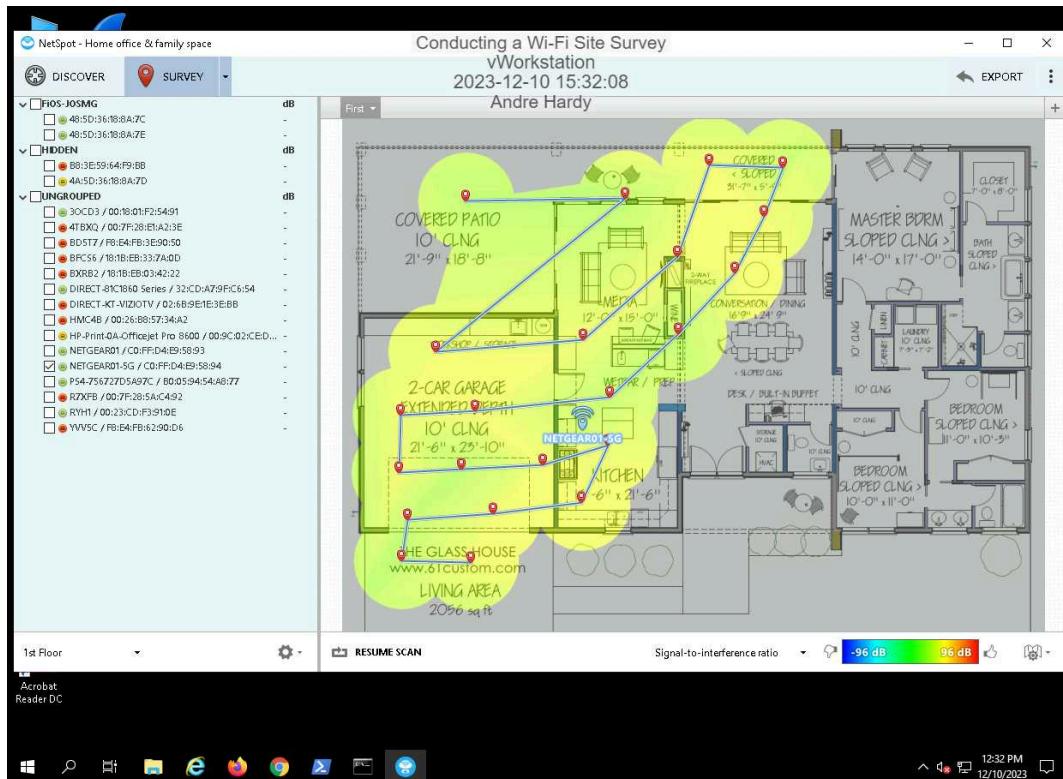


Part 2: Generate Heatmaps for Other Key Attributes

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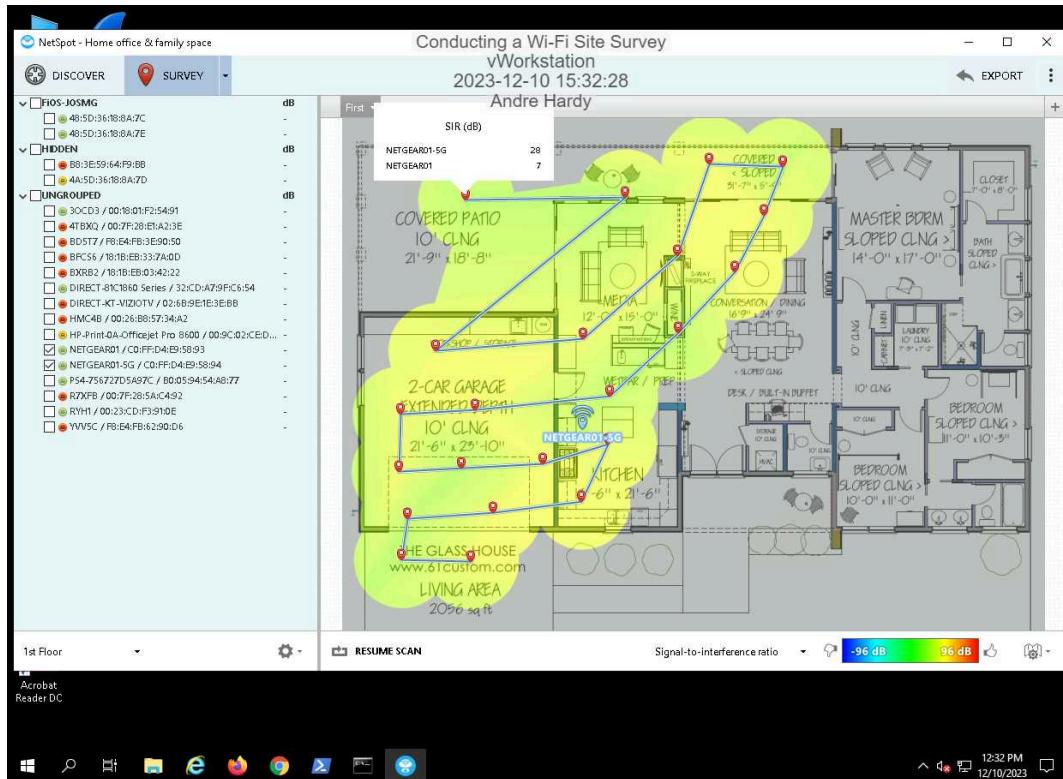
4. Make a screen capture showing the signal-to-interference ratio heatmap for the NETGEAR01-5G transmitter.



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7. Make a screen capture showing the Netgear SIR levels detected at the first sample point.



13. Record the PHY mode for the NETGEAR01 transmitter.

802.11n

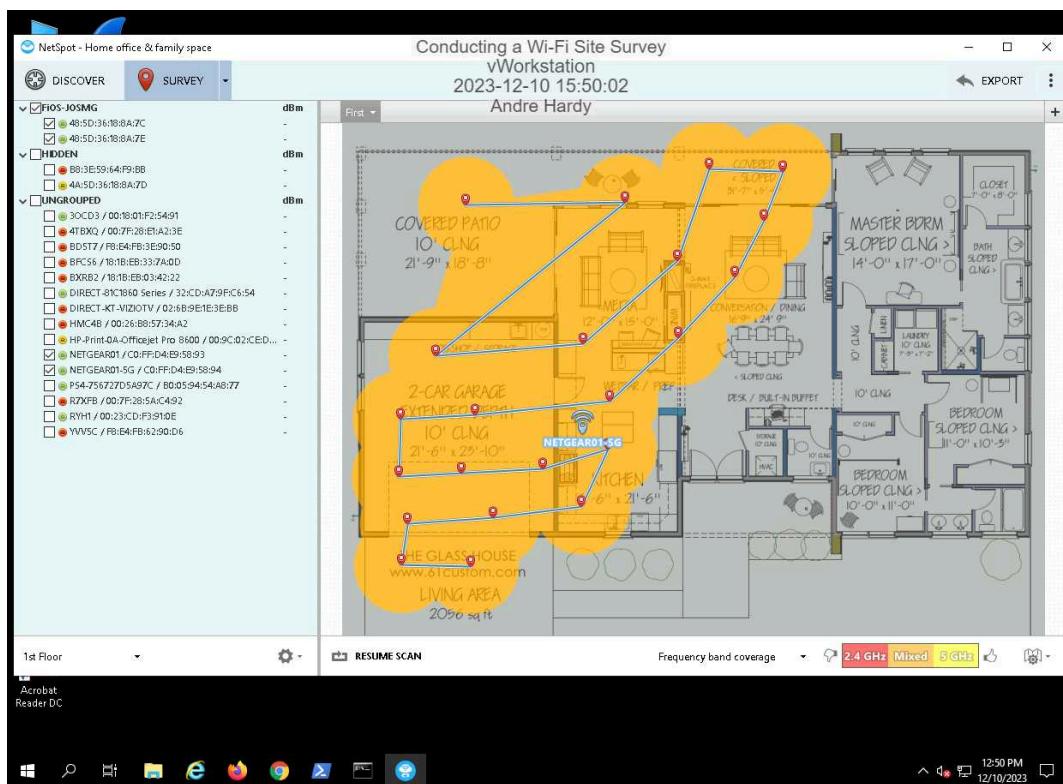
15. Record the PHY mode for the NETGEAR01-5G transmitter.

802.11ac

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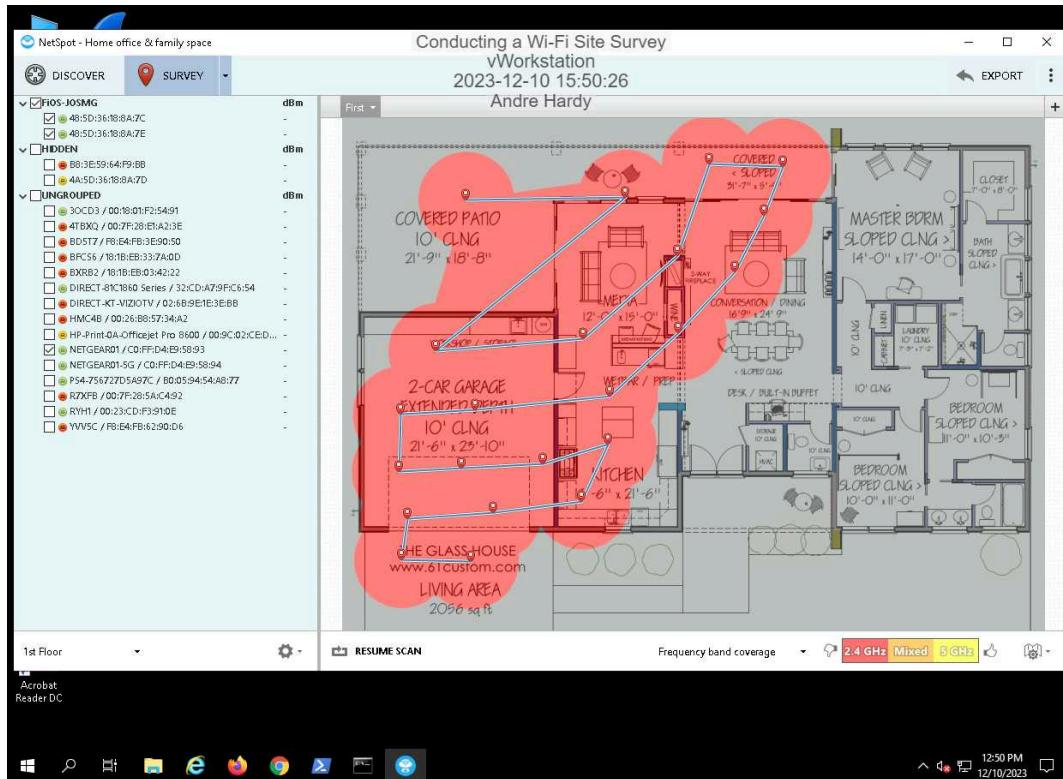
17. Make a screen capture showing the frequency band heatmap.



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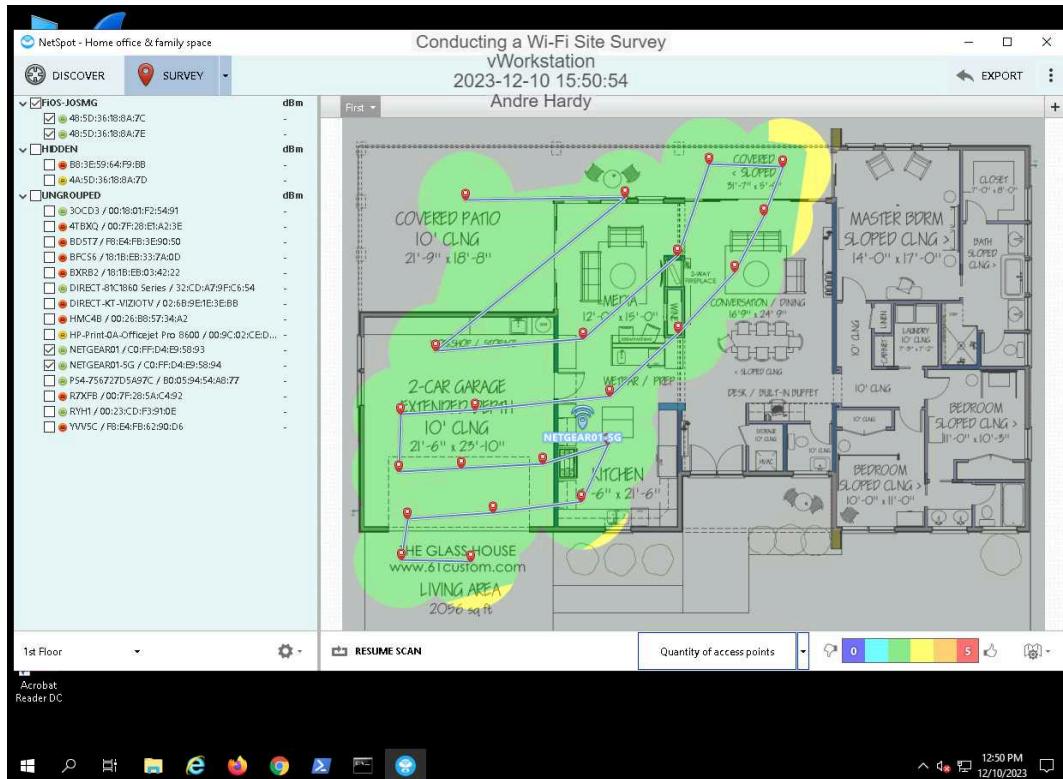
19. Make a screen capture showing the 2.4 GHz frequency band heatmap.



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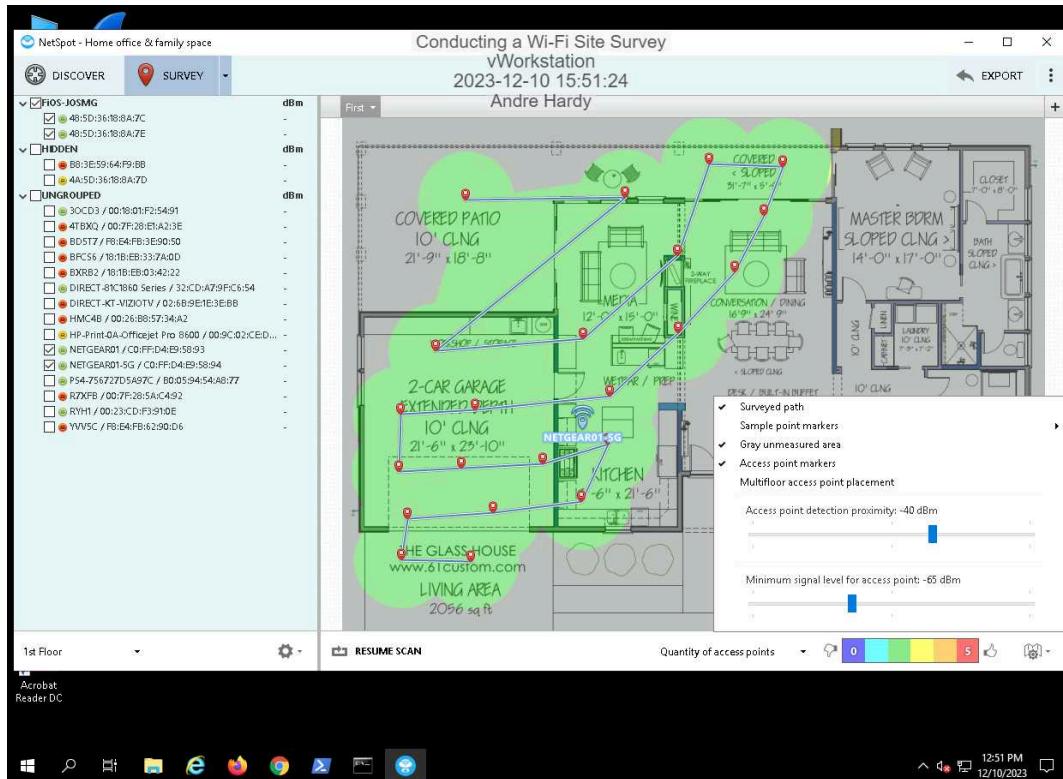
22. Make a screen capture showing the quantity of access points heatmap.



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25. Make a screen capture showing the updated quantity of access points heatmap.

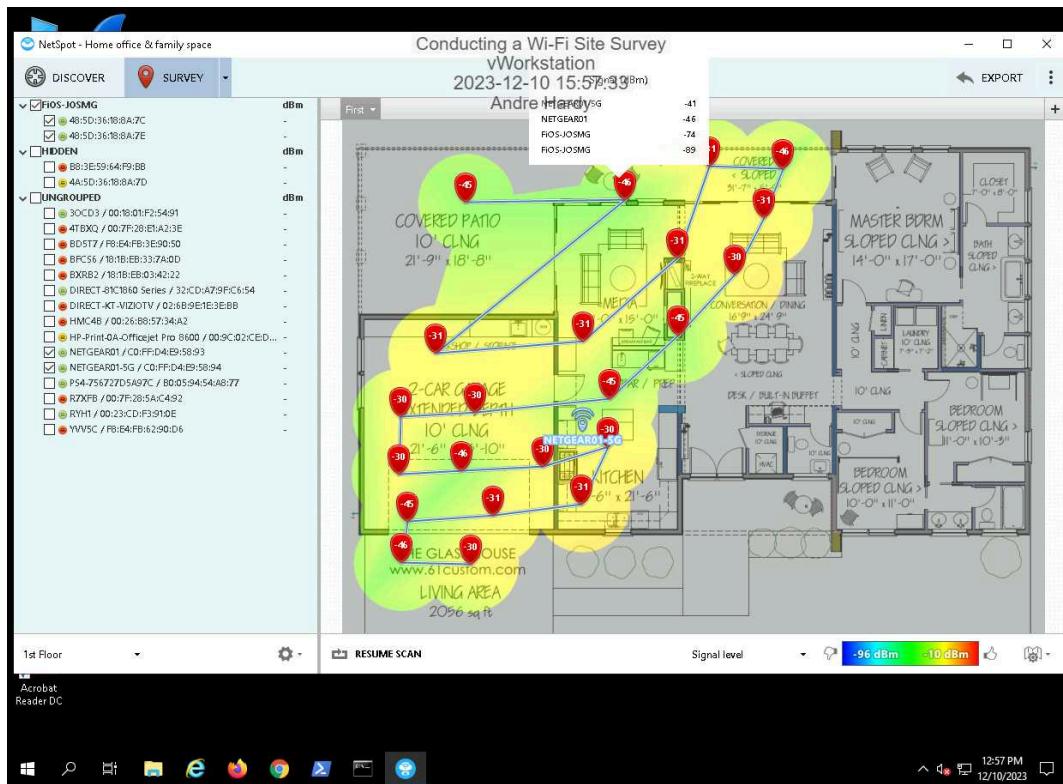


Part 3: Identify Potential Sources of Interference

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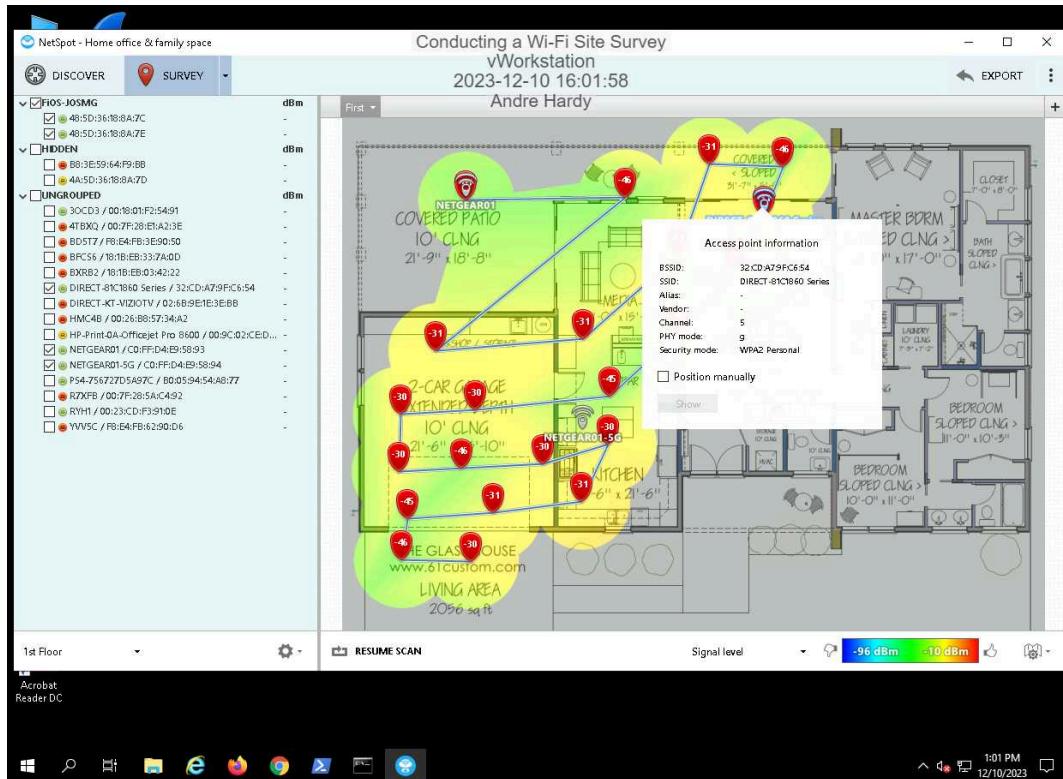
4. Make a screen capture showing the signal level heatmap with detailed sample points.



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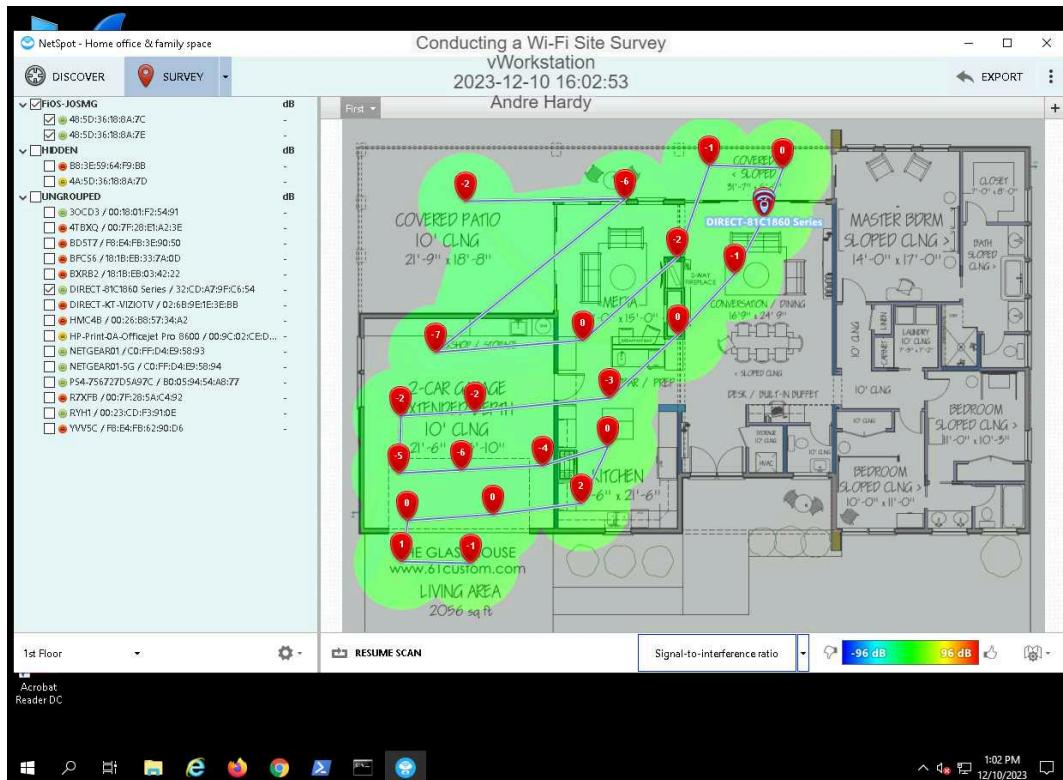
9. Make a screen capture showing the DIRECT-81C1860 Series access point details.



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12. Make a screen capture showing the SIR values for the DIRECT-81C1860 Series access point.



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Challenge and Analysis

Part 1: Analyze Wireless Signal Strength and SIR

Document the BSSID of the AP you discovered nearest the low-signal sample point.

04:18:D6:B4:1C:81

Document the SIR value of the low-signal sample point you identified above.

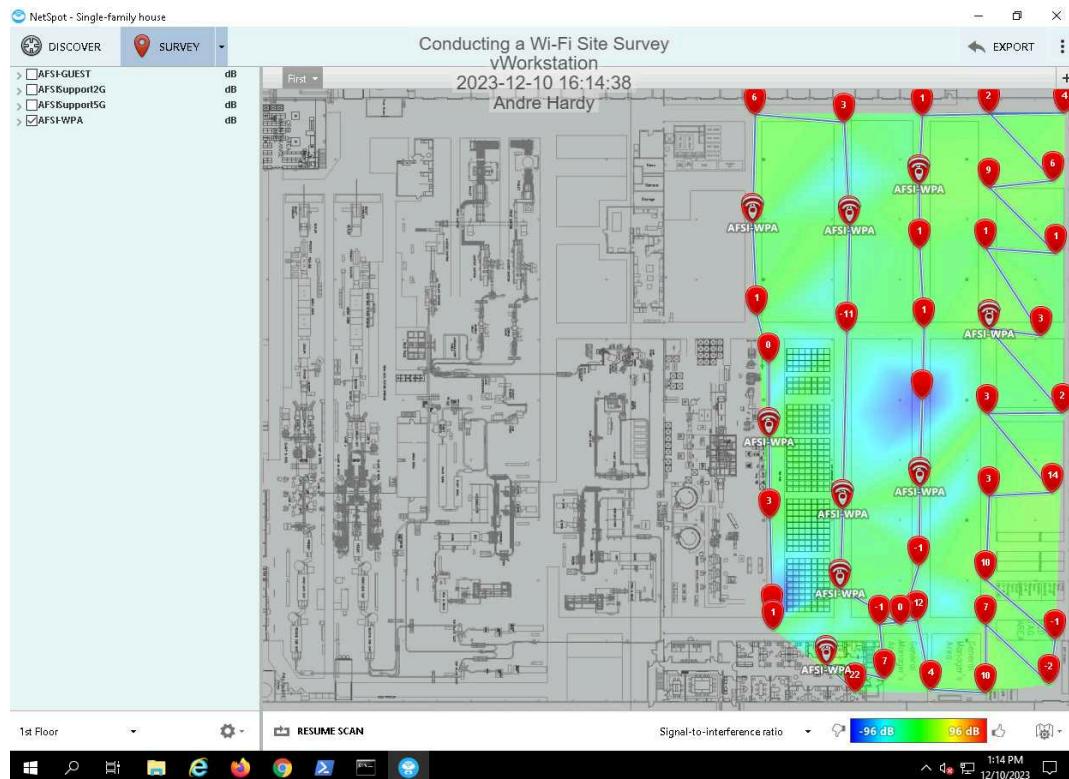
5

Part 2: Analyze Wireless Network and Frequency Coverage

Document the network(s) with any dead zone(s).

AFSI-WPA

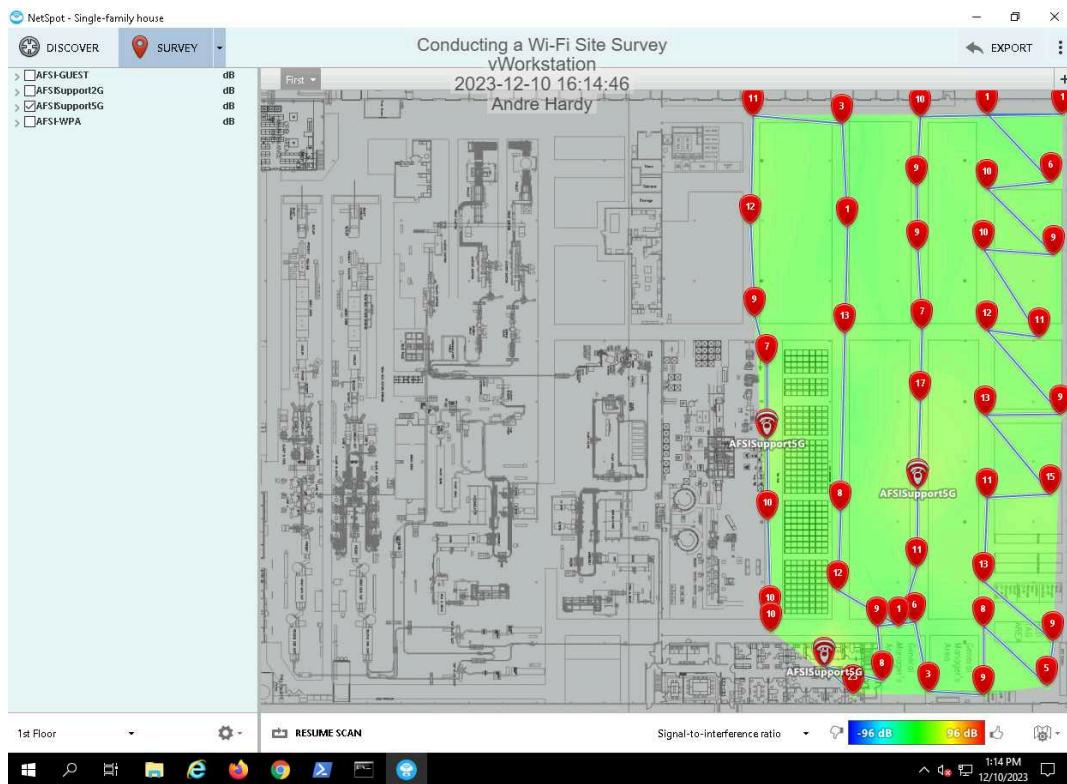
Make a screen capture showing the **dead zone** you identified above.



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Make a screen capture showing the 5GHz network coverage in the visualization.



Part 3: Find the Sweet Spot

Document which GM area has the better SIR on the guest network (using GMA1 or GMA2 to answer, per the screenshot below).

GMA1 has better coverage (5 compared to 4)