Prepared for: Sample

Prepared by: NetGemini, Inc.

Location: U.S.

Time of Survey: Sample

Wi-Fi
SURVEY REPORT

NetGemini

Table of Contents

1 Overall Coverage Report by AP

1.1 Access Points Information

AP Name	Media Type	MAC Address	Channel	SSID	Power,mW	Max Signal
ACL						
11ac–ben	Wi-Fi 4–5GHz	50:17:FF:EB:51:7F	CH (108,1)	Cisco11ac	100	−33
AP18e7.28d3.f0f	Wi-Fi 5–5GHz	74:26:AC:14:21:AF	CH (36)	Cisco11ac	100	−40
APc08c.6020.733	Wi-Fi 5–5GHz	50:17:FF:B2:D1:7F	CH (36 P, 40MHz, 36–40)	Cisco11ac	100	−42
Cisco–24:A4:A7	Wi-Fi 5–5GHz	34:DB:FD:24:A4:A7	CH (36 P, 80MHz, 36–48)	Cisco11ac	100	−52

Number of AP: 4

Total APs: 4　　　　　**Total BSSIDs: 4**

1.2 Signal Distribution

1 in. = 31.29 ft   Dimensions(X x Y): 219.05 ft x 136.30 ft

Shasta

AP18e7.28d3.10f

Whitney

Tahoe

Pinnacles

APc08c.6020.733

Yosemite

Presidio

Sequoia   Lassen

e8c7.22b2.a09

Signal   0   -10 -20 -30 -40 -50 -60 -70 -80 -90 -100
(dBm)
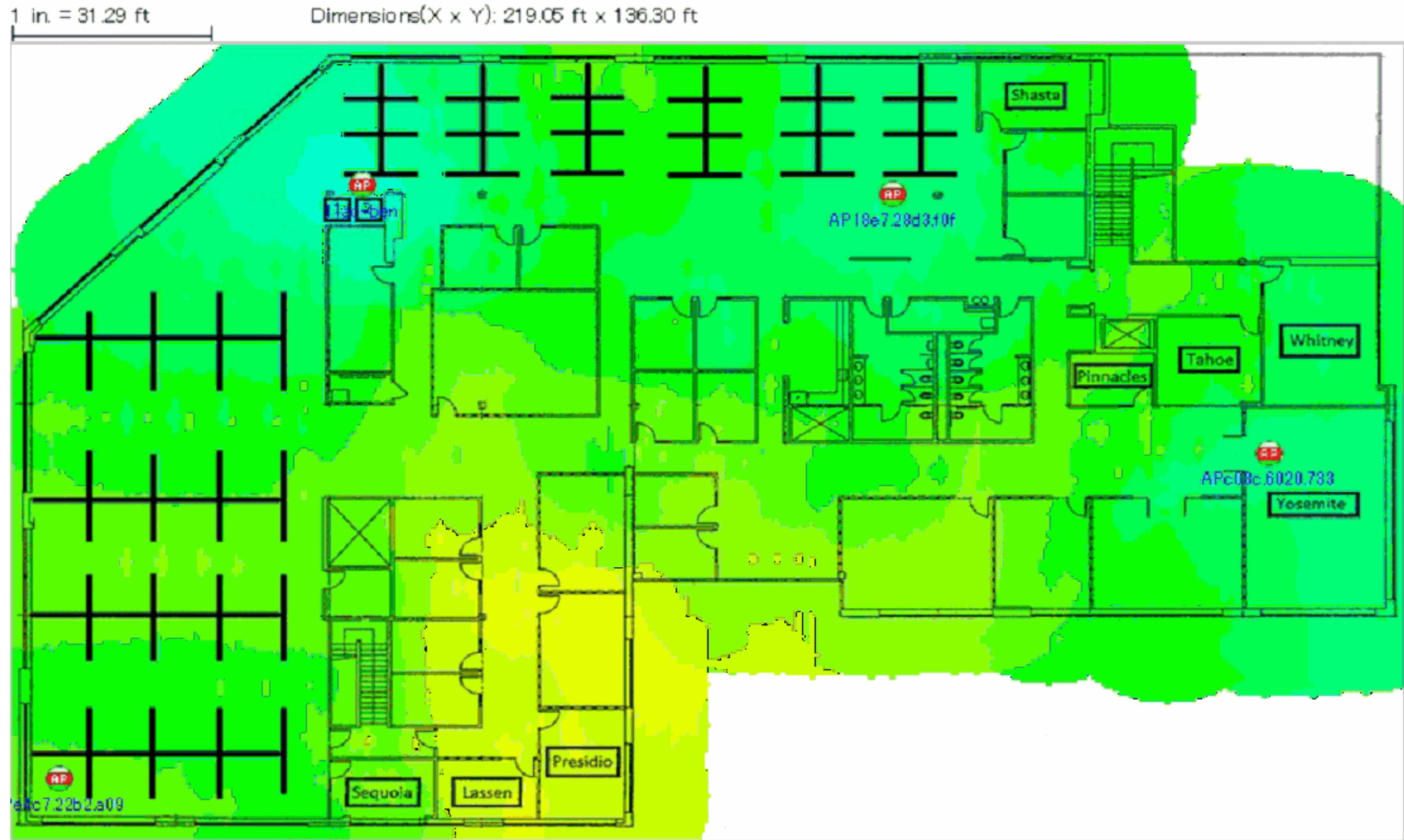
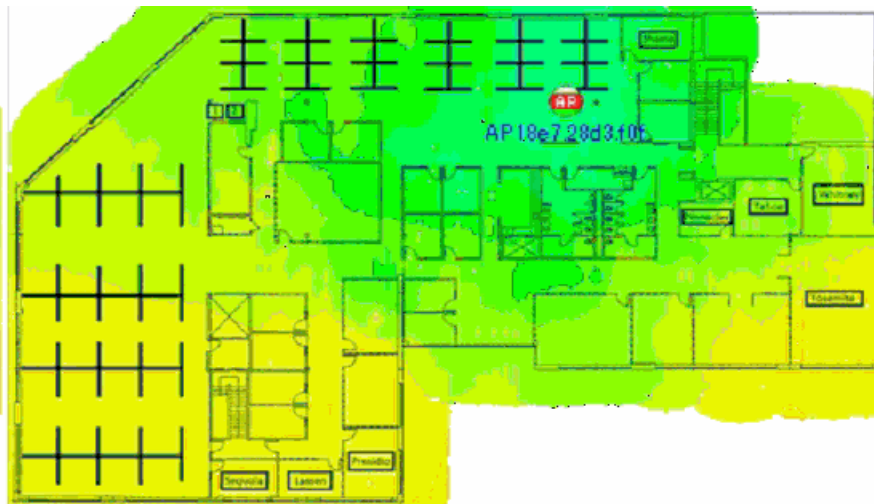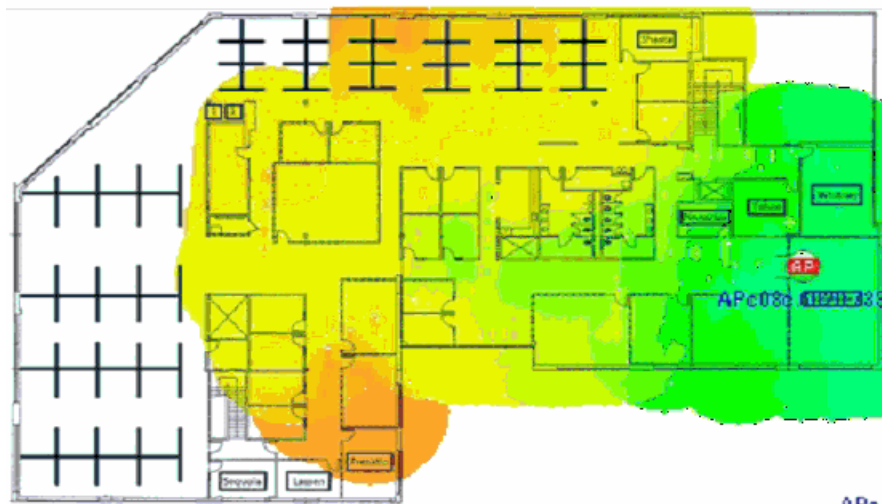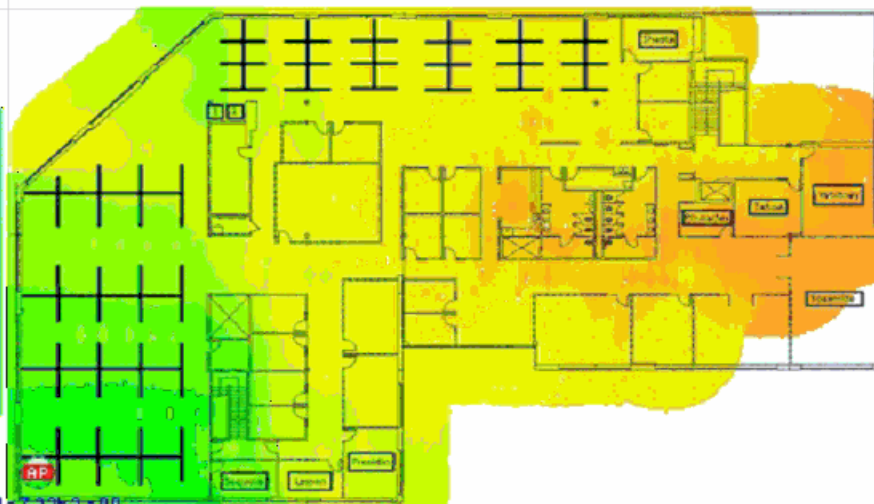**Individual Signal Distribution**
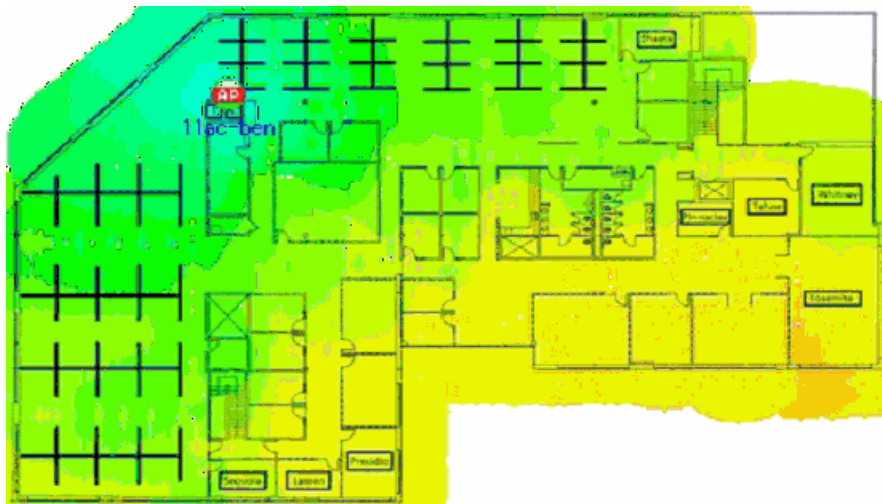
11ac-ben [CH (108),Cisco11ac,−33]

AP18e7.28d3.f0f [CH (36),Cisco11ac,−40]

APc08c.6020.733 [CH (36 P, 40MHz, 36−40),Cisco11ac,−42]

Cisco-24:A4:A7 [CH (36 P, 80MHz, 36−48),Cisco11ac,−52]

Signal (dBm)   0   −10 −20 −30 −40 −50 −60 −70 −80 −90 −100

1.3 Noise Distribution

1 in. = 31.29 ft   Dimensions(X x Y): 219.05 ft x 136.30 ft

Shasta

AP18e7.28d3.10f

Whitney

Tahoe

Pinnacles

APc03c.6020.733

Yosemite

Presidio

Sequoia   Lassen

e0c7.22b2.a09

Noise   0   -10 -20 -30 -40 -50 -60 -70 -80 -90 -100
(dBm)

Individual Noise Distribution

11ac-ben [CH (108),Cisco11ac,-33]

AP18e7.28d3.f0f [CH (36),Cisco11ac,-40]
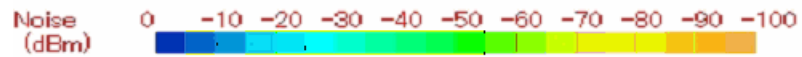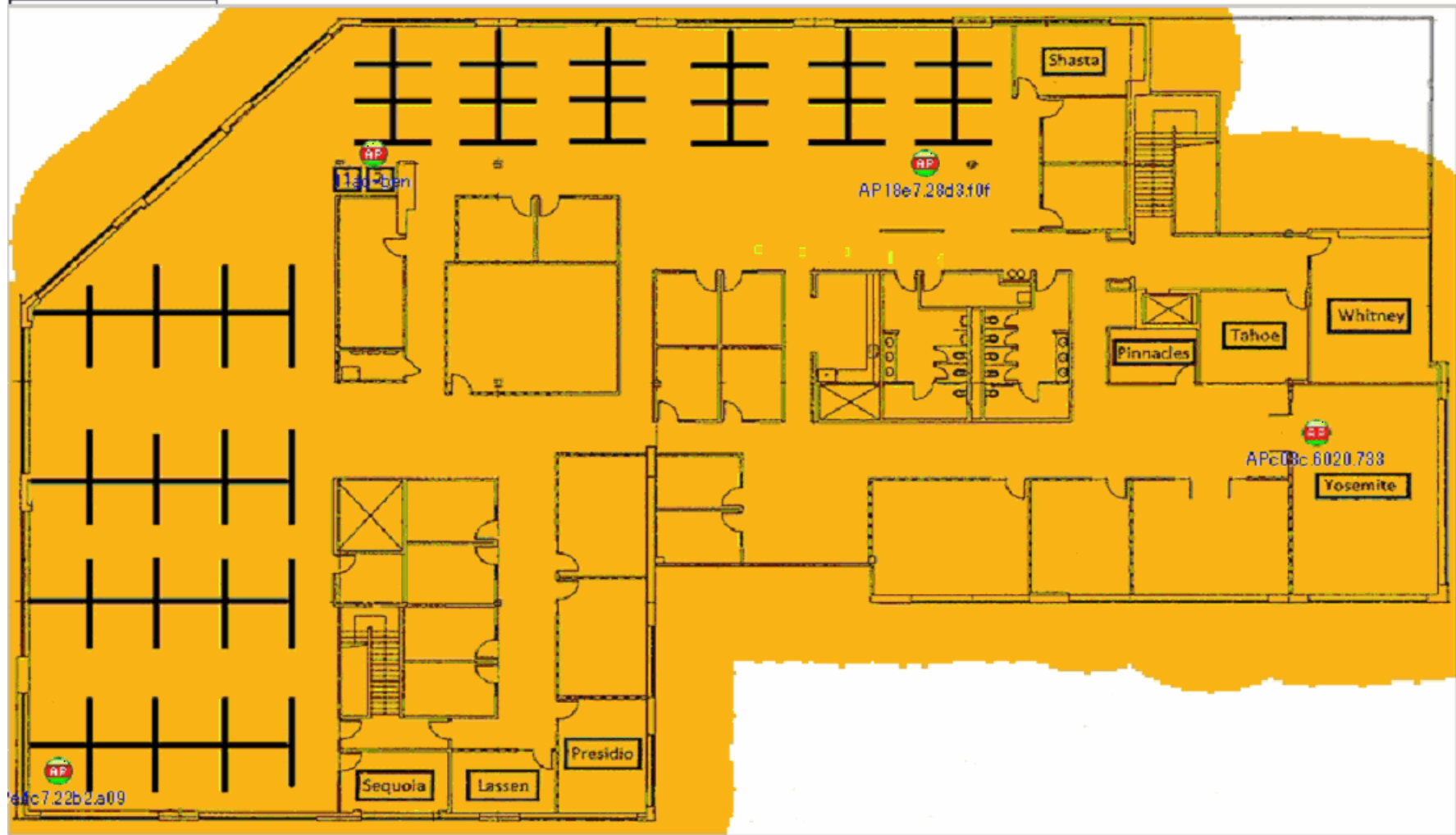
APc08c.6020.733 [CH (36 P, 40MHz, 36-40),Cisco11ac,-42]

Cisco-24:A4:A7 [CH (36 P, 80MHz, 36-48),Cisco11ac,-52]

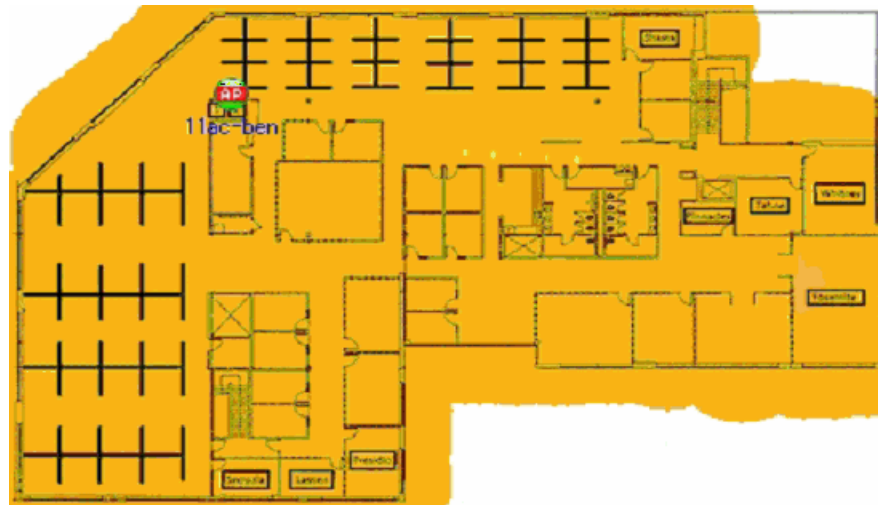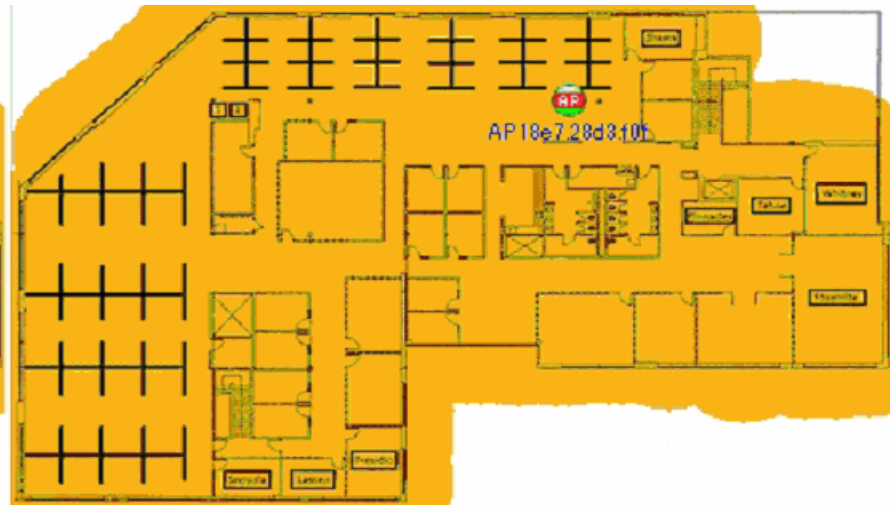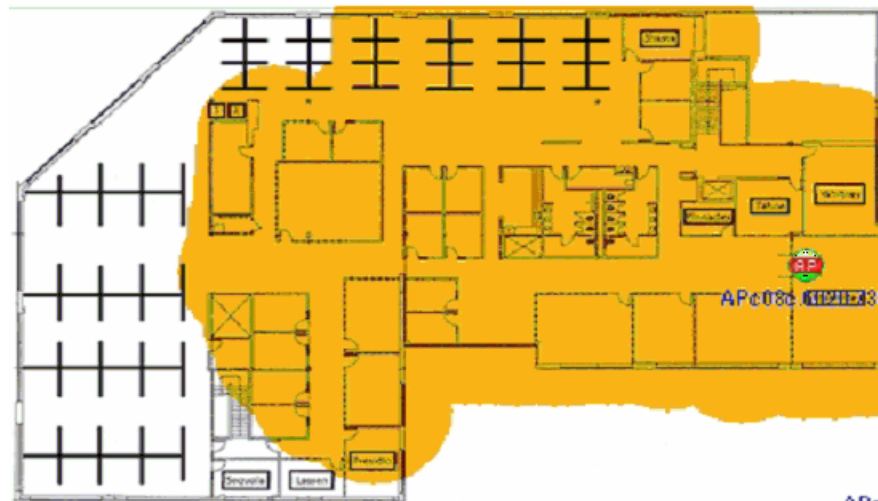Noise (dBm)   0   -10 -20 -30 -40 -50 -60 -70 -80 -90 -100

1.4 Signal/Noise Distribution

1 in. = 31.29 ft

Dimensions(X x Y): 219.05 ft x 136.30 ft

Shasta

AP

11ac-oben

AP

AP18e7.28d3.f0f

Whitney

Tahoe

Pinnacles

AP

AP18c.6020.733

Yosemite

Presidio

Sequoia

Lassen

AP

a4c7.22b2.a09

S/N (dB)   100 90   80   70   60   50   40   30   20   10   0

Individual Signal/Noise Distribution
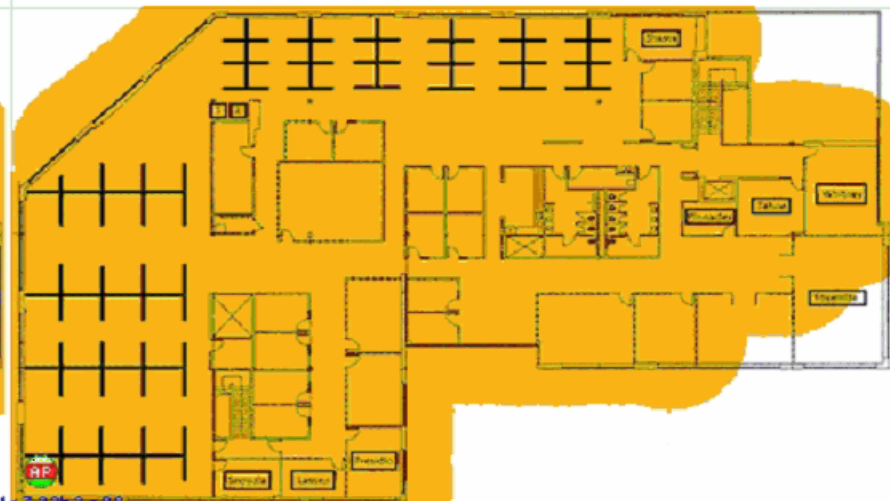

11ac-ben [CH (108),Cisco11ac,-33]

AP18e7.28d3.f0f [CH (36),Cisco11ac,-40]

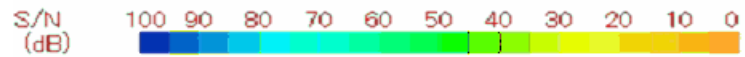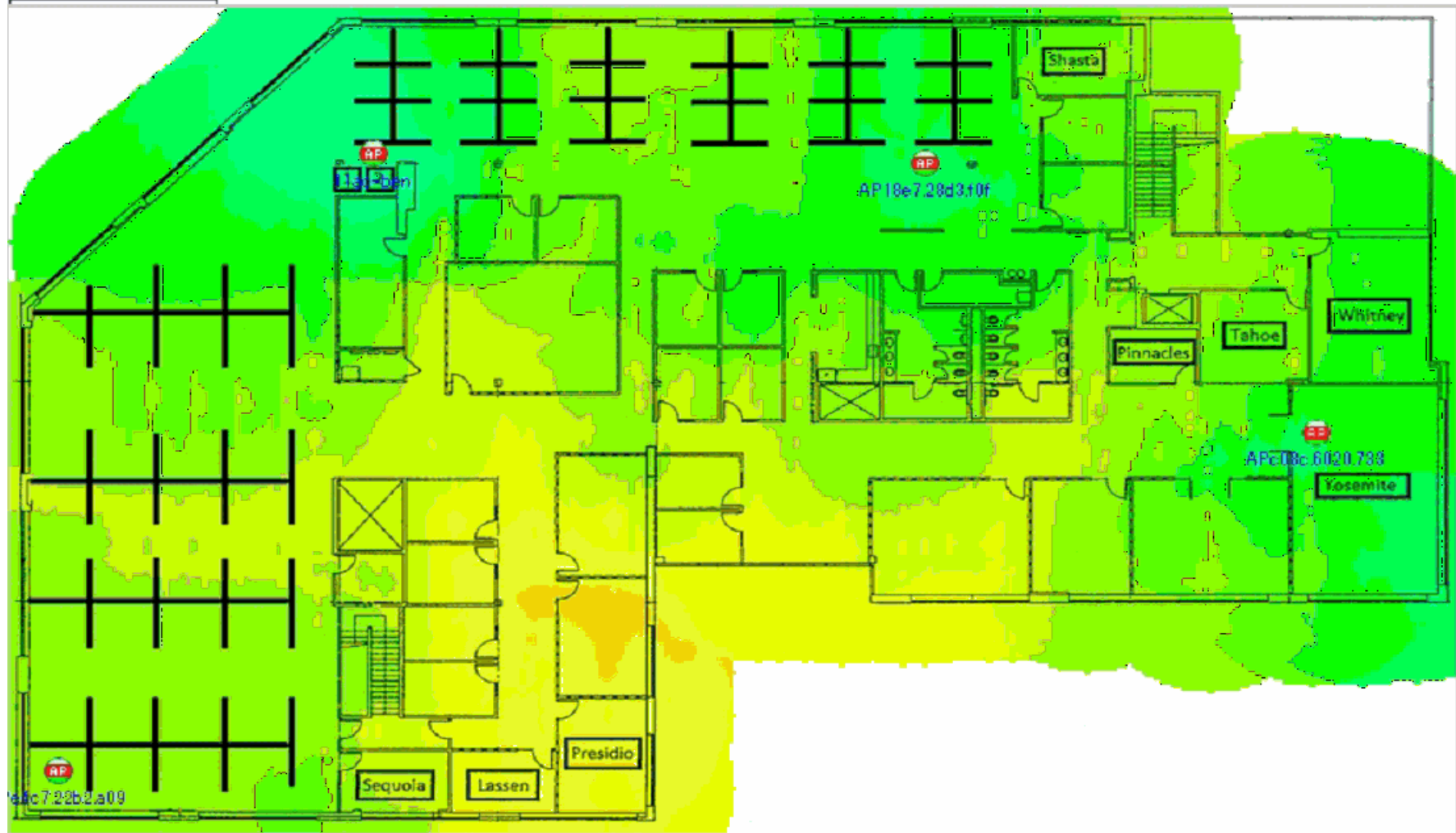APc08c.6020.733 [CH (36 P, 40MHz, 36-40),Cisco11ac,-42]

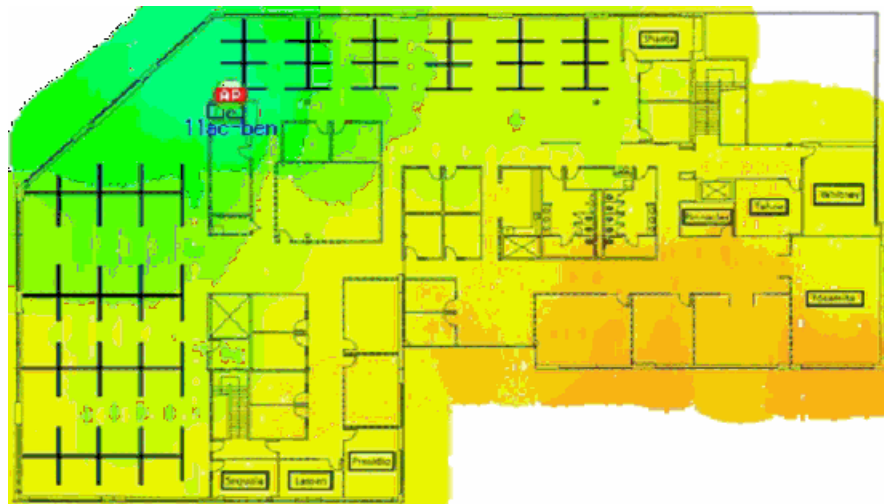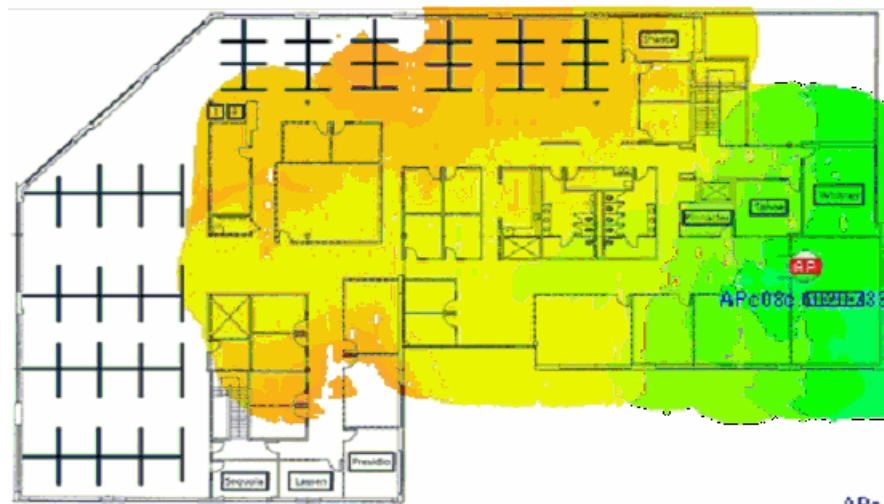Cisco-24:A4:A7 [CH (36 P, 80MHz, 36-48),Cisco11ac,-52]

S/N
(dB)   100 90   80   70   60   50   40   30   20   10   0

1.5 Maximum Predictive PHY Data Rate Downlink Distribution

1 in. = 31.29 ft   Dimensions(X x Y): 219.05 ft x 136.30 ft

PHY Data Rate
(Mbps)   1300 600   240   120   36   6 1

Individual Predictive PHY Data Rate (Downlink) Distribution

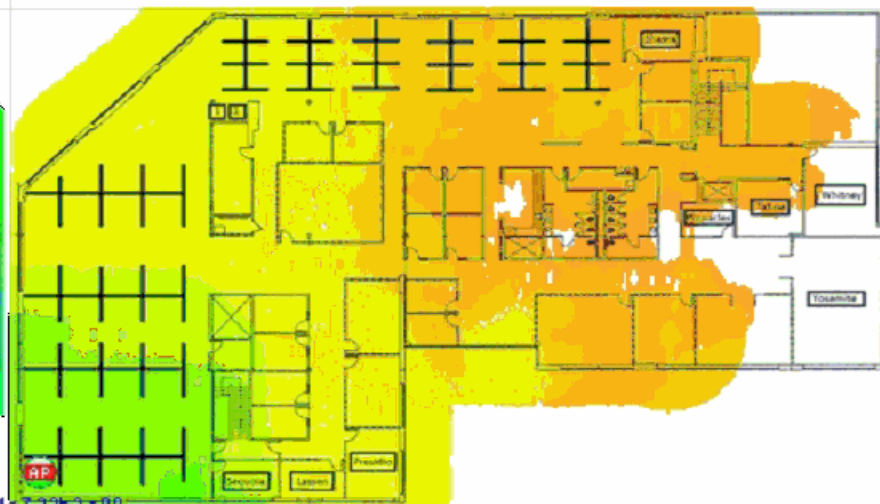11ac-ben [CH (108),Cisco11ac,-33]

AP18e7.28d3.f0f [CH (36),Cisco11ac,-40]

APc08c.6020.733 [CH (36 P, 40MHz, 36-40),Cisco11ac,-42]
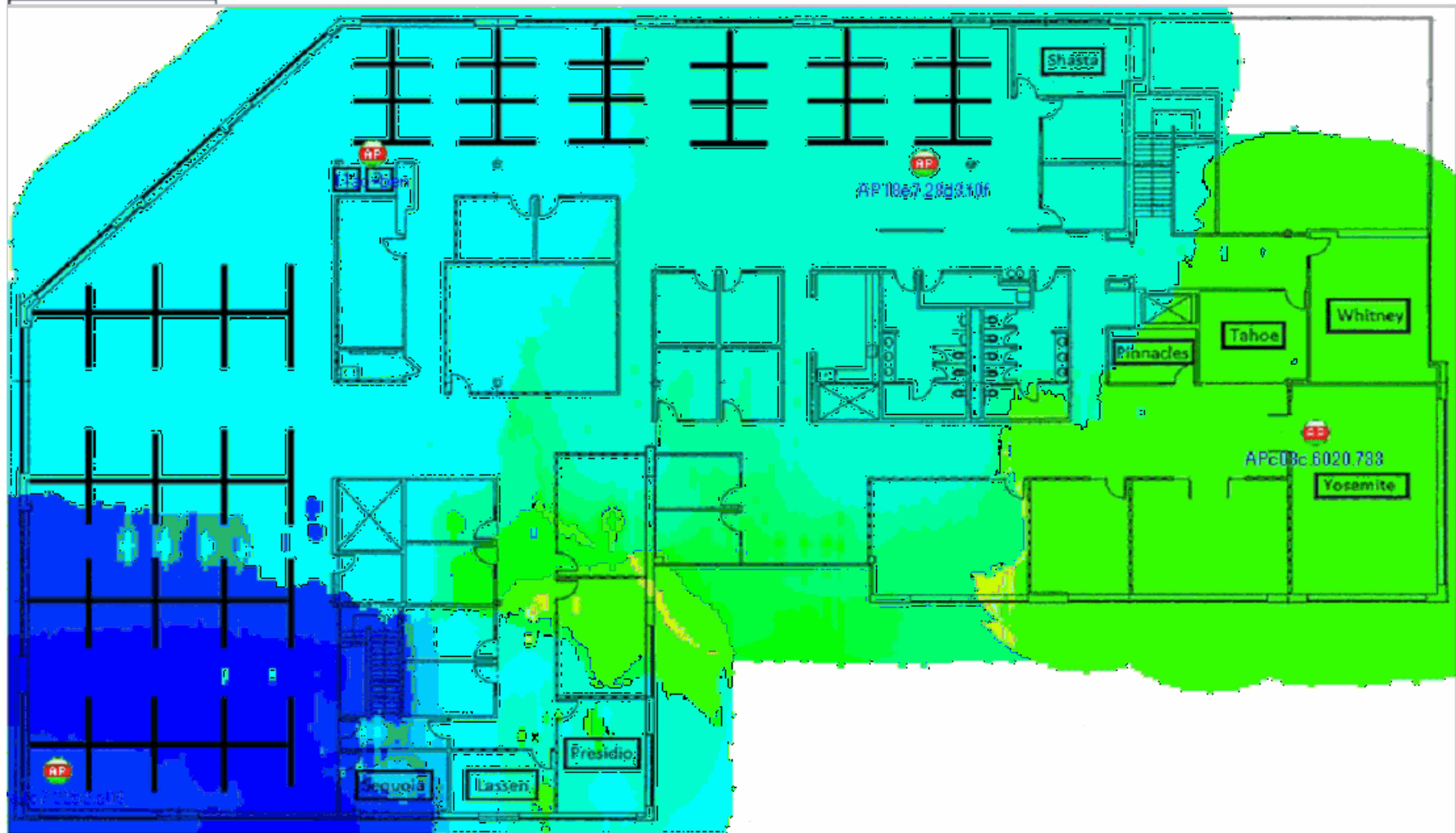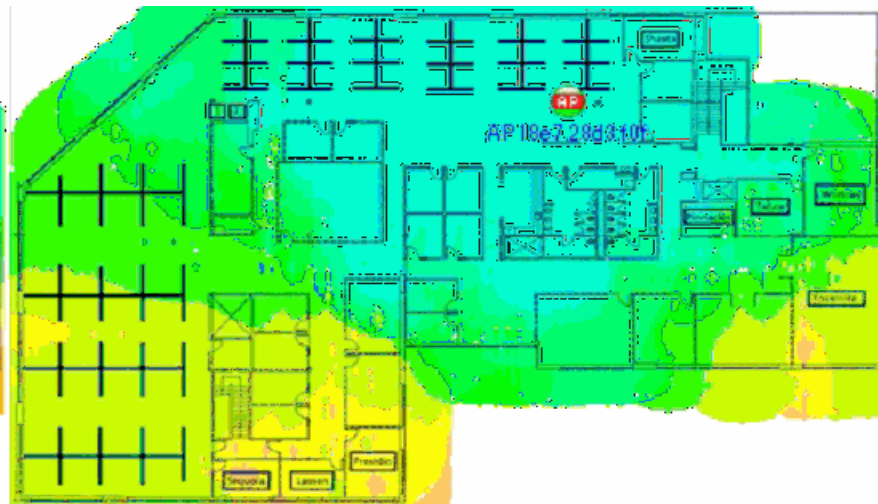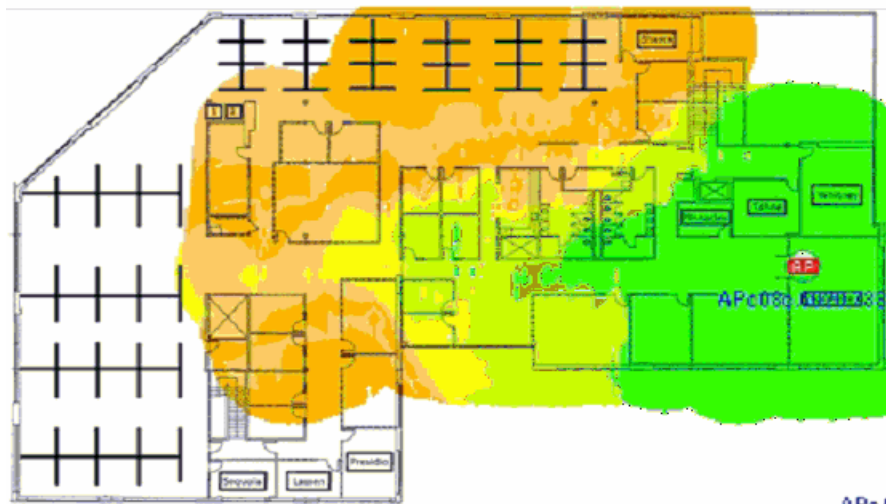
Cisco-24:A4:A7 [CH (36 P, 80MHz, 36-48),Cisco11ac,-52]

PHY Data Rate (Mbps)   1300 600 240 120 36 6 1

1.6 Operating Mode Information Distribution

1 in. = 31.29 ft

Dimensions(X x Y): 219.05 ft x 136.30 ft

Operating Mode

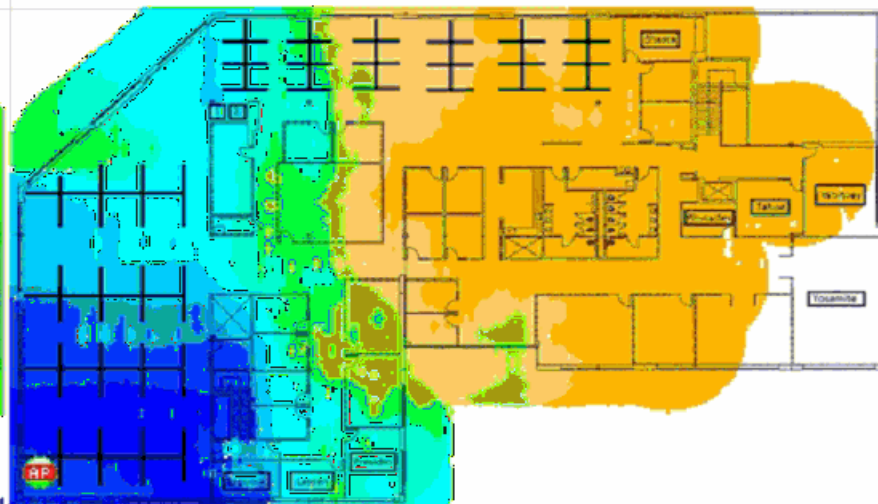| | Legacy | | Mixed HT | | Mixed VHT | | Mixed HE | | Greenfield HT/HE |

Individual Operating Mode Distribution

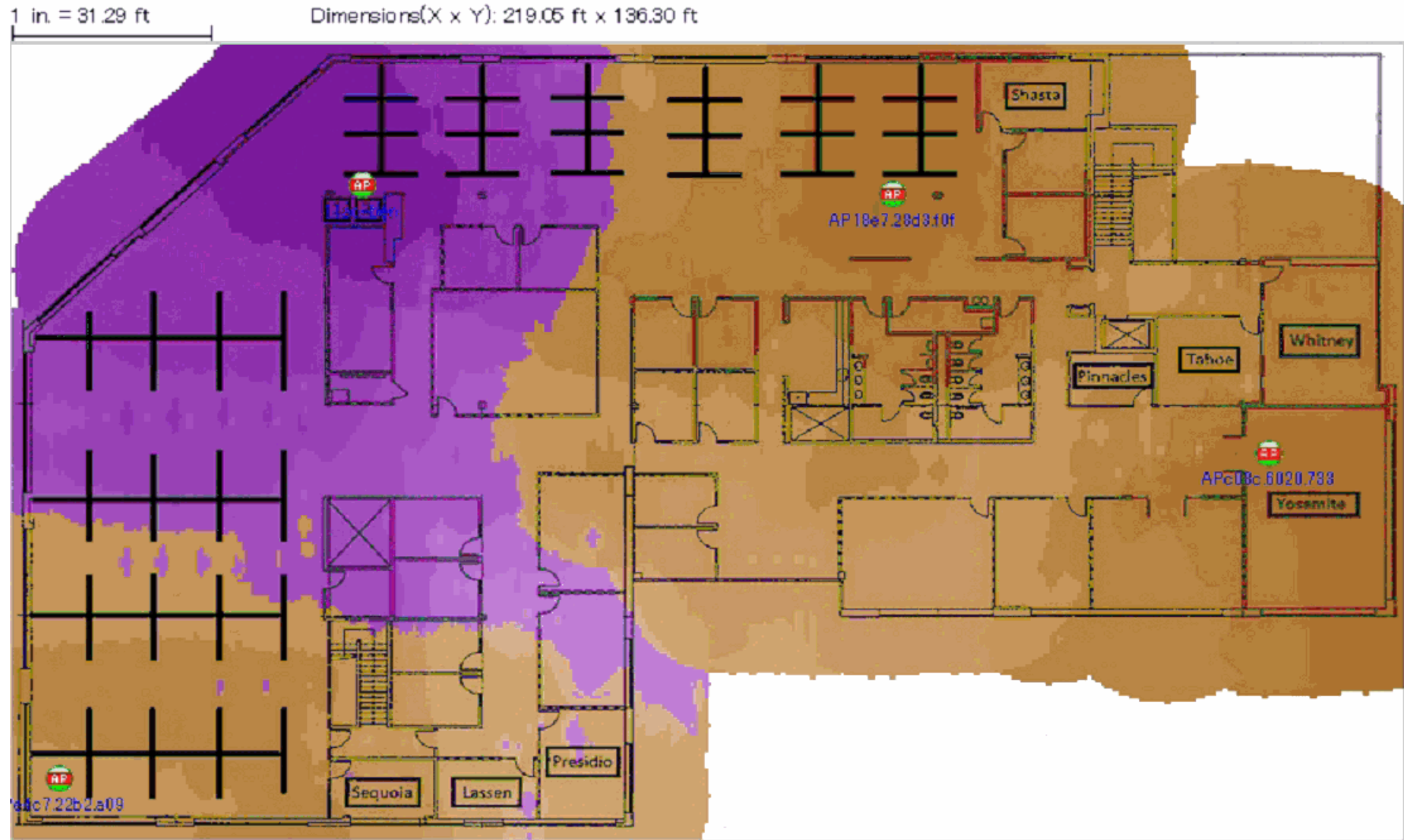11ac-ben [CH (108),Cisco11ac,-33]

AP18e7.28d3.f0f [CH (36),Cisco11ac,-40]

APc08c.6020.733 [CH (36 P, 40MHz, 36-40),Cisco11ac,-42]

Cisco-24:A4:A7 [CH (36 P, 80MHz, 36-48),Cisco11ac,-52]

Operating Mode   ▌ Legacy   ▌ Mixed HT   ▌ Mixed VHT   ▌ Mixed HE   ▌ Greenfield HT/HE

1.7 20/40/80/160 MHz Channel Width Distribution

1 in. = 31.29 ft   Dimensions(X x Y): 219.05 ft x 136.30 ft

Channel Width	20 MHz (Legacy)	20 MHz (Wi-Fi 4/5/6 HT)	40 MHz (Wi-Fi 4/5/6 HT)
	80 MHz (Wi-Fi 5/6 VHT/HE)	160 MHz (Wi-Fi 5/6 VHT/HE)	

Individual 20/40/80/160 MHz Channel Width Distribution

11ac-ben [CH (108),Cisco11ac,-33]

AP18e7.28d3.f0f [CH (36),Cisco11ac,-40]

APc08c.6020.733 [CH (36 P, 40MHz, 36-40),Cisco11ac,-42]
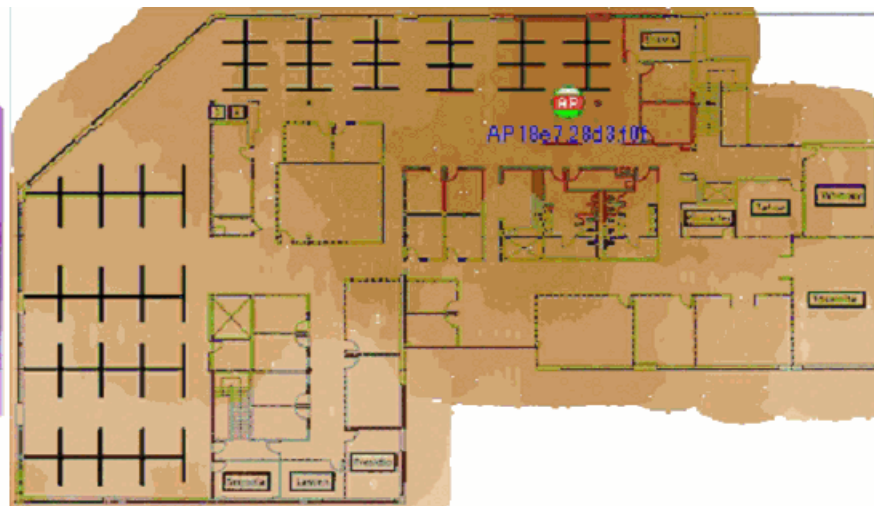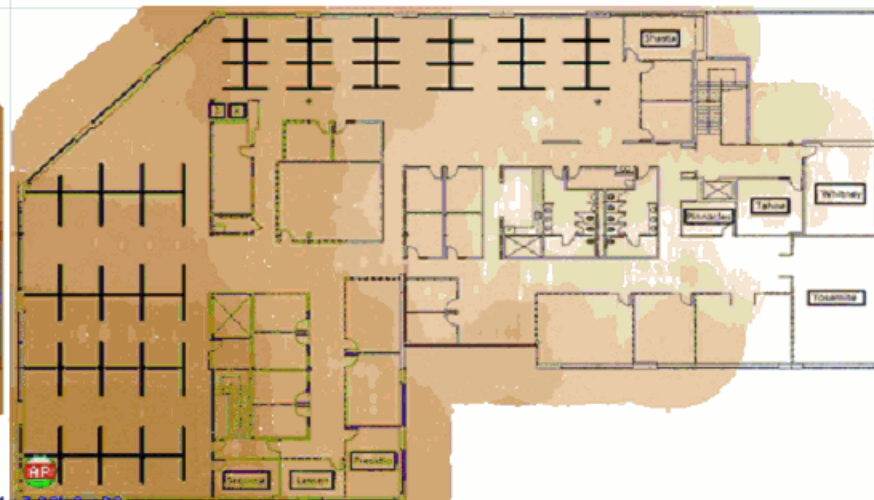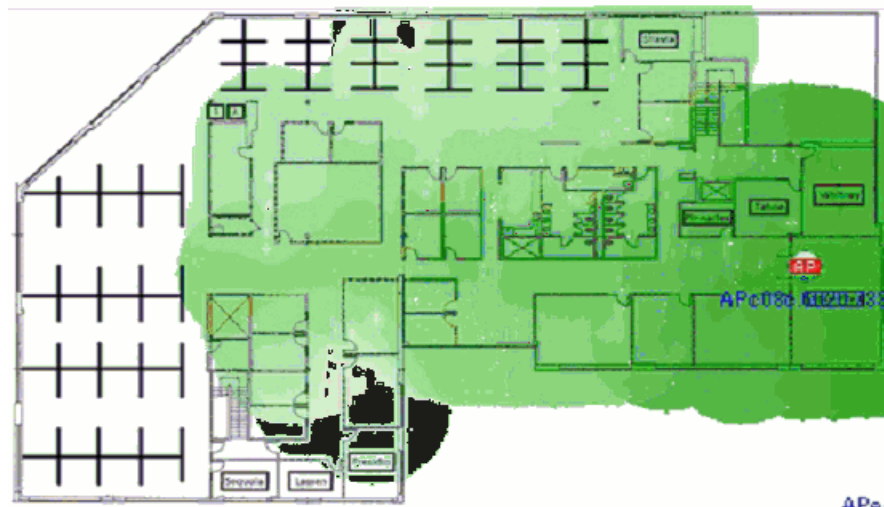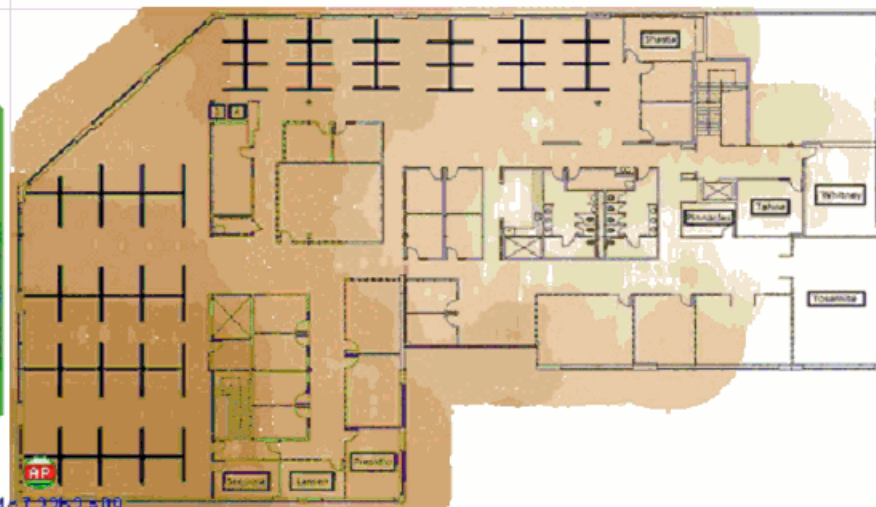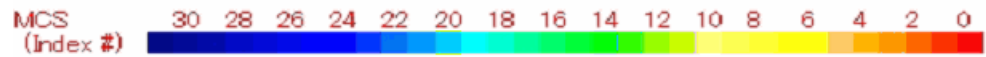
Cisco-24:A4:A7 [CH (36 P, 80MHz, 36-48),Cisco11ac,-52]

Channel Width
- 20 MHz (Legacy)
- 20 MHz (Wi-Fi 4/5/6 HT)
- 40 MHz (Wi-Fi 4/5/6 HT)
- 80 MHz (Wi-Fi 5/6 VHT/HE)
- 160 MHz (Wi-Fi 5/6 VHT/HE)

1.8 Wi-Fi 4 Tx MCS Index Information Distribution

1 in. = 31.29 ft   Dimensions(X x Y): 219.05 ft x 136.30 ft

MCS
(Index #)   30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0
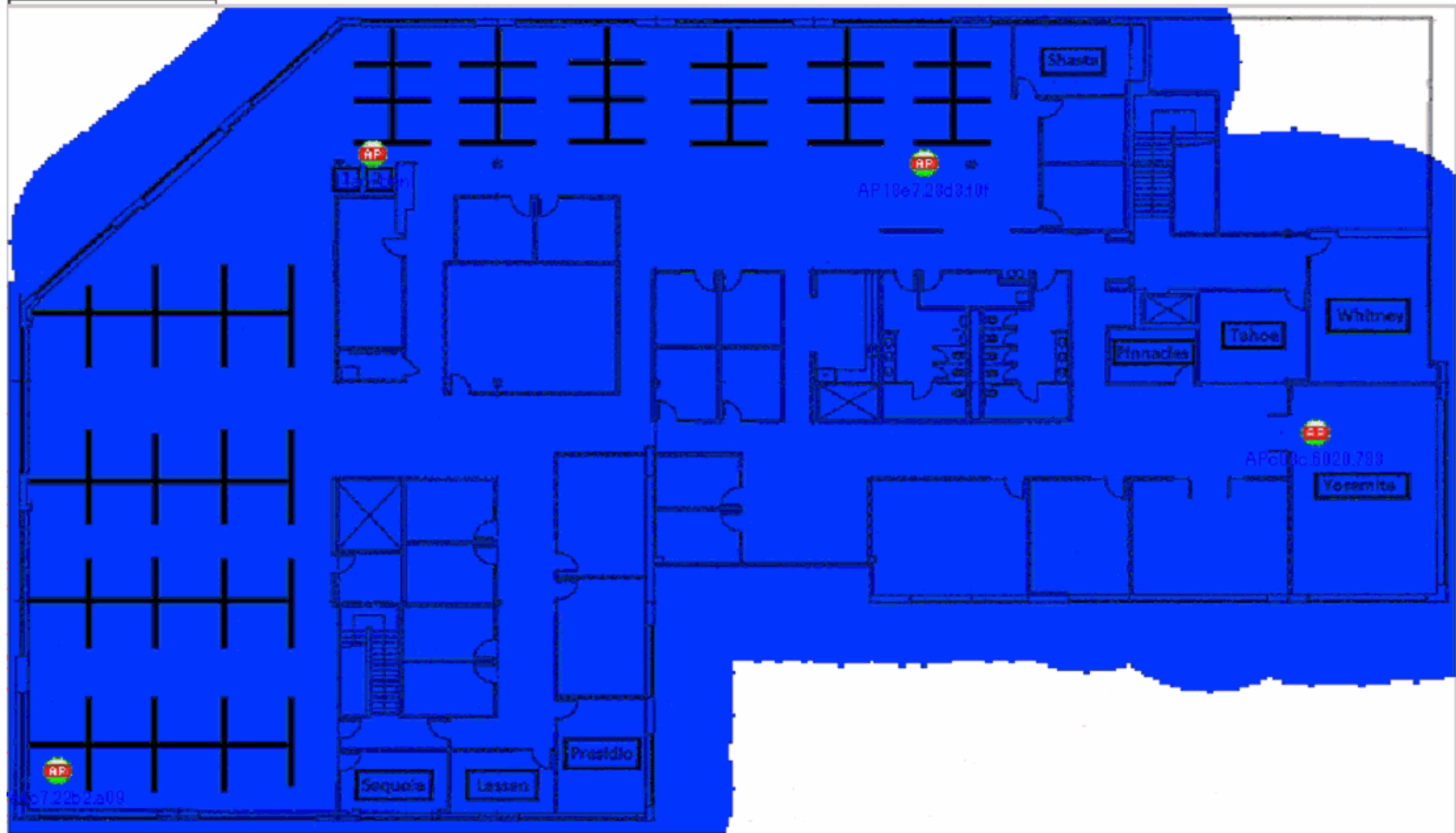
Individual Wi-Fi 4 Max MCS (AP Tx) Distribution

11ac-ben [CH (108),Cisco11ac,-33]

| MCS (Index #) | 30 | 28 | 26 | 24 | 22 | 20 | 18 | 16 | 14 | 12 | 10 | 8 | 6 | 4 | 2 | 0 |
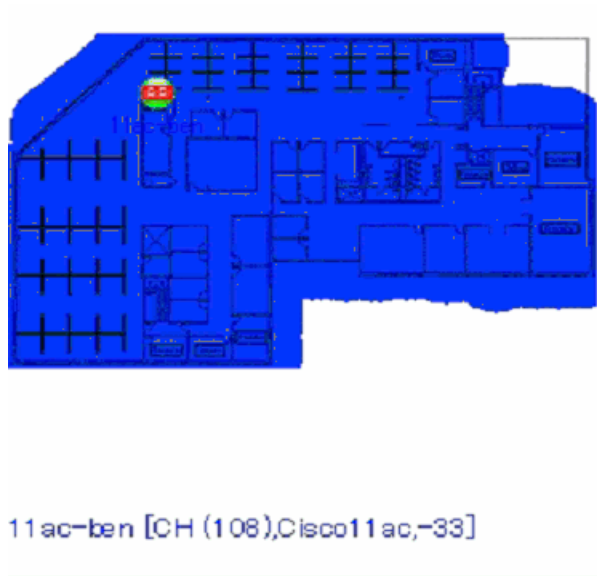
1.9 Wi-Fi 4 Rx MCS Index Information Distribution

1 in. = 31.29 ft

Dimensions(X x Y): 219.05 ft x 136.30 ft

MCS (Index #): 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0
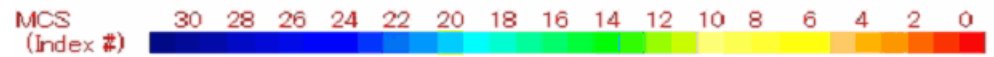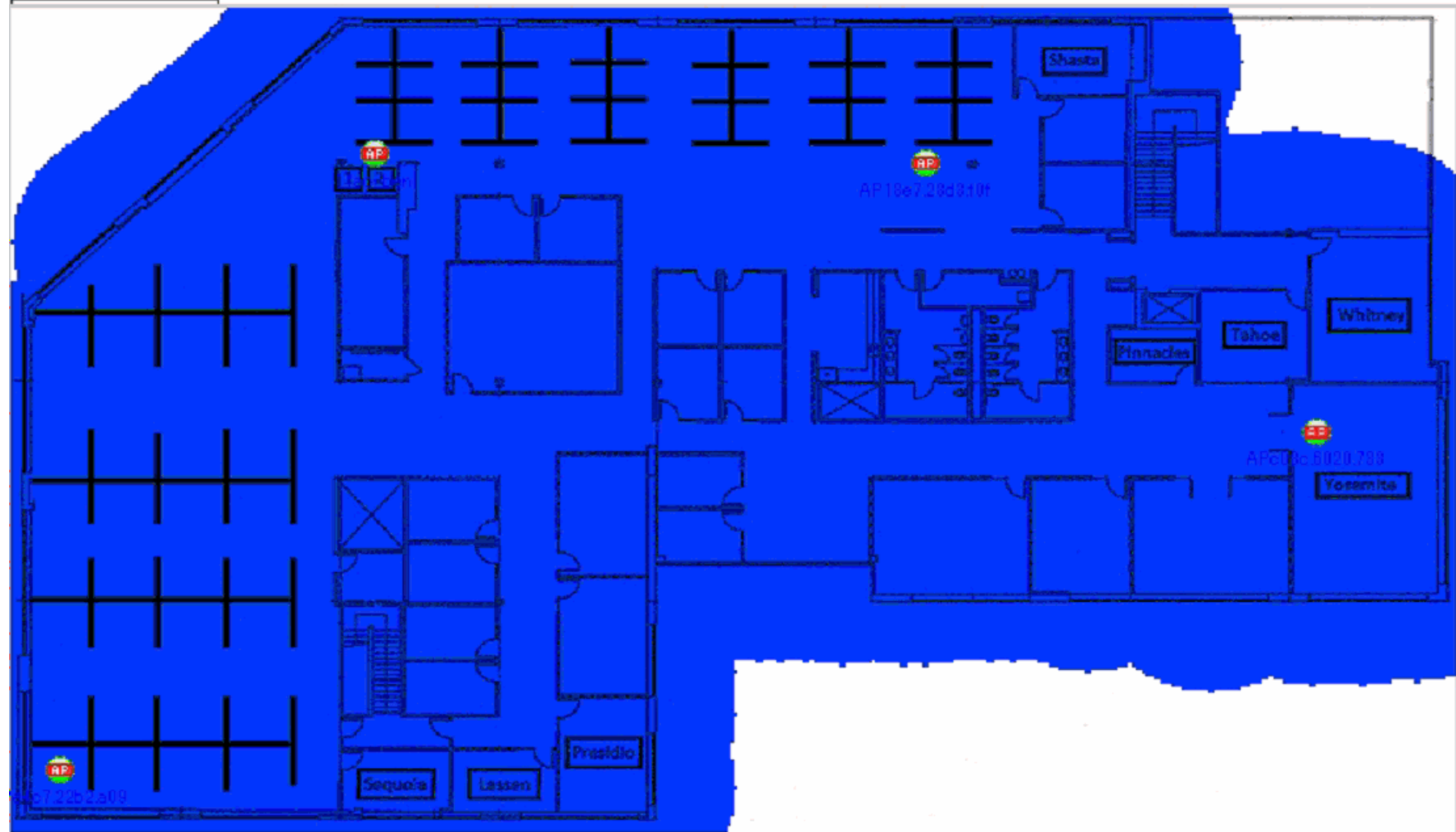
Individual Wi-Fi 4 Max MCS (AP Rx) Distribution

11ac-ben [CH (108),Cisco11ac,-33]

MCS
(Index #)   30 28 26 24 22 20 18 16 14 12 10 8   6   4   2   0
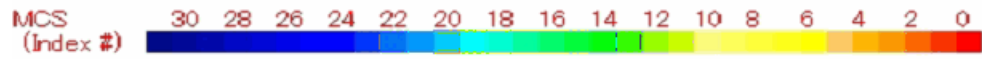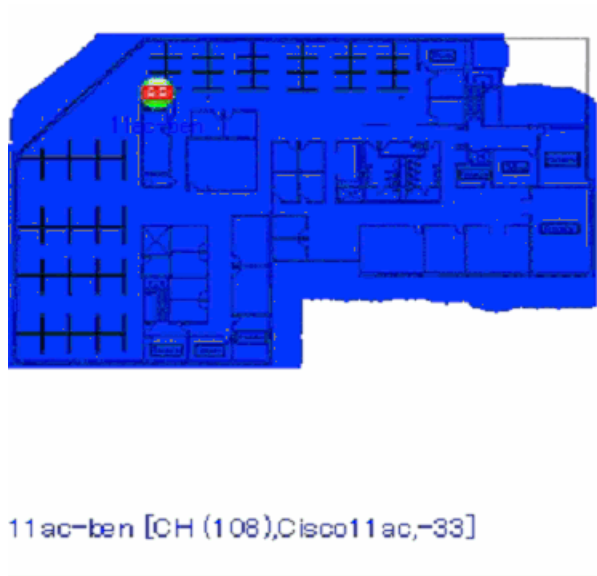
1.10 Wi-Fi 5 Tx MCS Index Information Distribution

1 in. = 31.29 ft   Dimensions(X x Y): 219.05 ft x 136.30 ft

Shasta

AP

11a1-ben

AP

AP18e7.28d3.10f

Whitney

Pinnacles   Tahoe

AP

APc08c.6020.733

Yosemite

AP

e8c7.22b2.a09

Presidio

Sequoia   Lassen

MCS   9   8   7   6   5   4   3   2   1   0
(Index #)
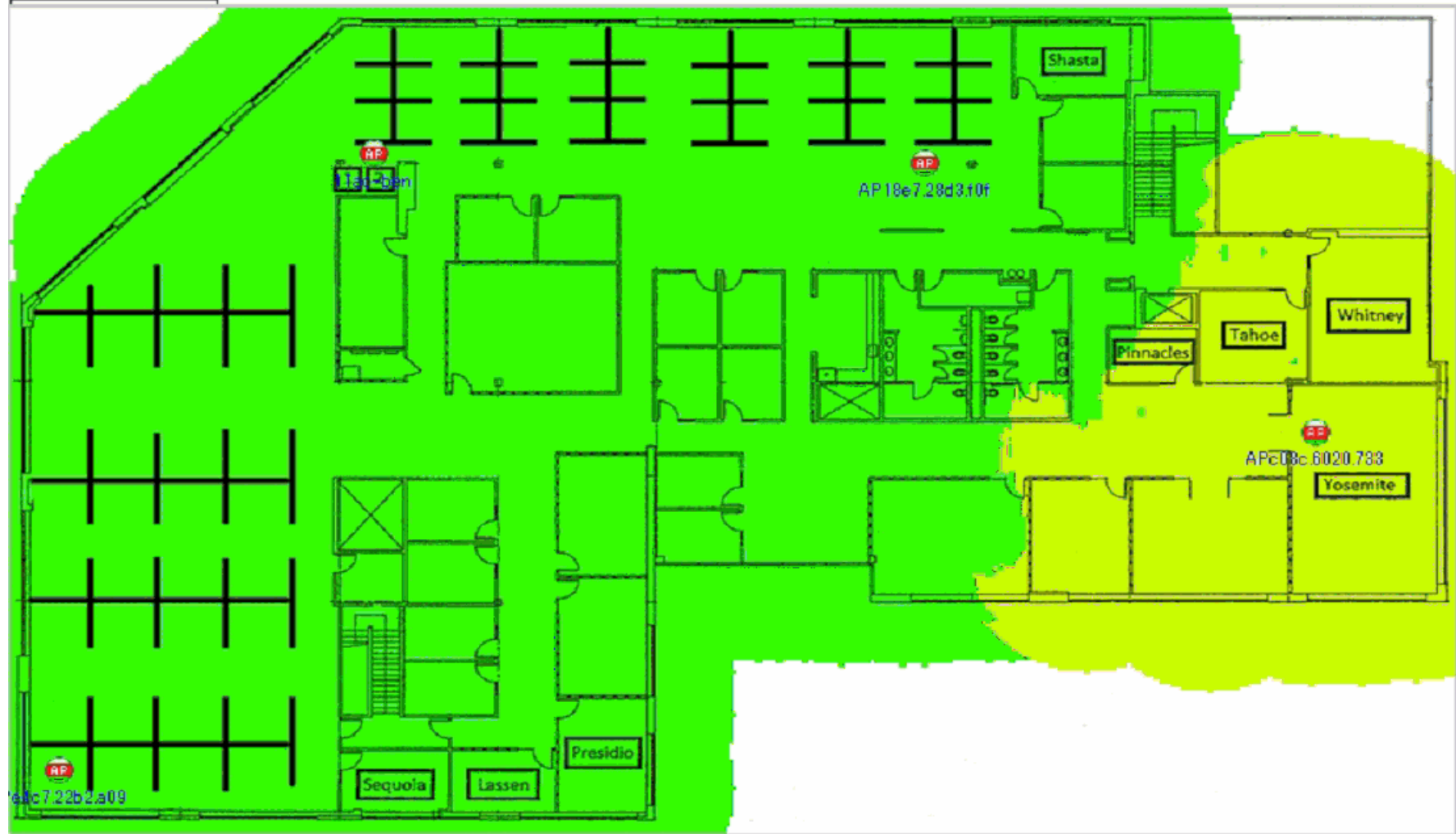
Individual Wi-Fi 5 Max MCS (AP Tx) Distribution

AP18e7.28d3.f0f [CH (36),Cisco11ac,-40]

AP18e7.28d3.f0f

APc08c.6020.733 [CH (36 P, 40MHz, 36-40),Cisco11ac,-42]

APc08c

Cisco-24:A4:A7 [CH (36 P, 80MHz, 36-48),Cisco11ac,-52]

57.28b2.n09

MCS   9   8   7   6   5   4   3   2   1   0
(Index #)

1.11 Wi-Fi 5 Rx MCS Index Information Distribution

1 in. = 31.29 ft

Dimensions(X x Y): 219.05 ft x 136.30 ft

MCS
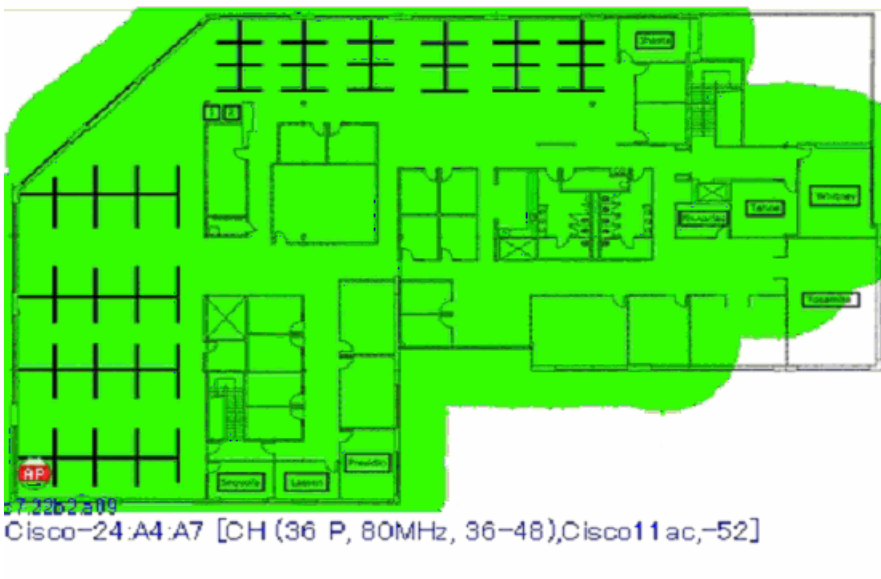(Index #)   9 8 7 6 5 4 3 2 1 0

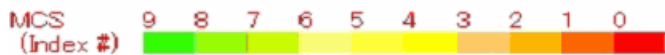## Individual Wi-Fi 5 Max MCS (AP Rx) Distribution

AP18e7.28d3.f0f [CH (36),Cisco11ac,-40]
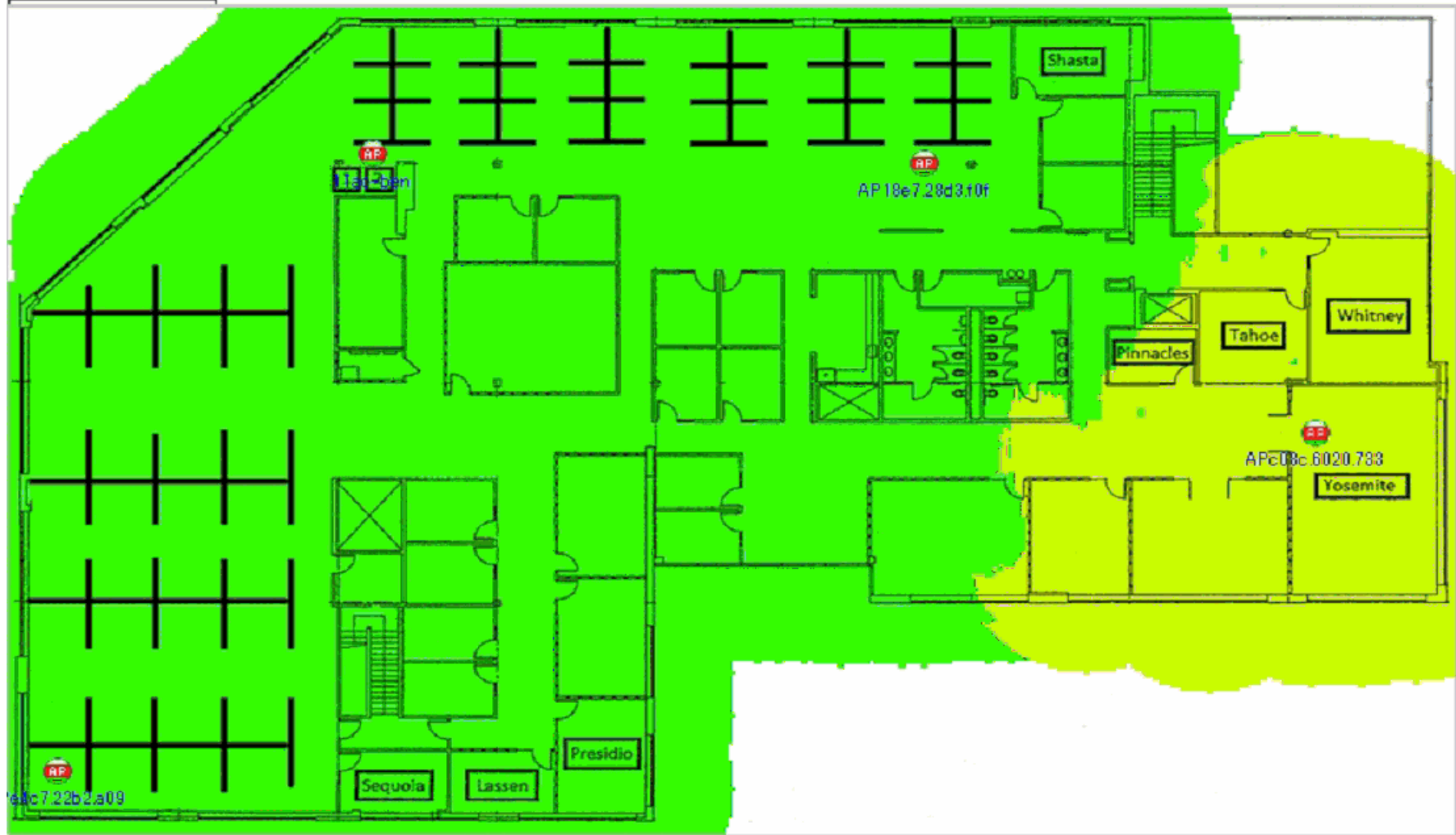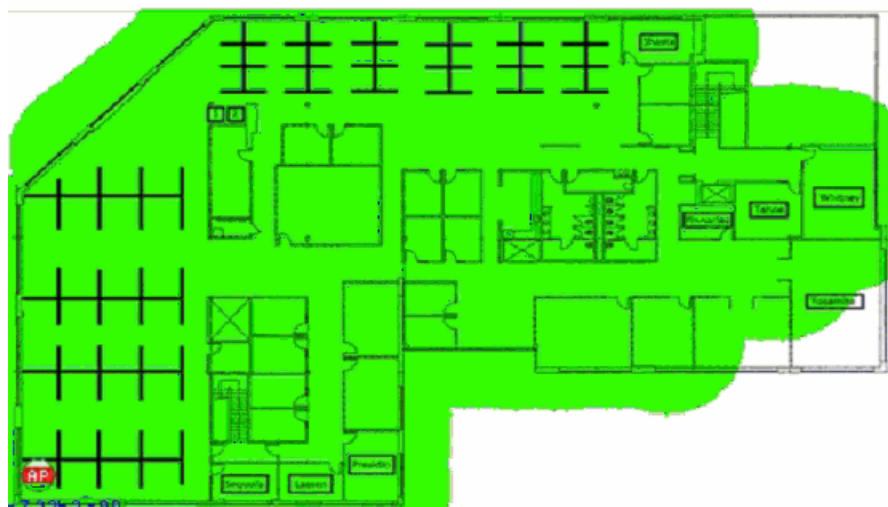
APc08c.6020.733 [CH (36 P, 40MHz, 36-40),Cisco11ac,-42]

Cisco-24:A4:A7 [CH (36 P, 80MHz, 36-48),Cisco11ac,-52]

MCS   9   8   7   6   5   4   3   2   1   0
(Index #)
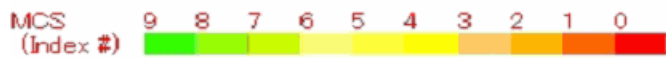
1.12 Wi-Fi 6 Tx MCS Index Information Distribution

1 in. = 31.29 ft

Dimensions(X x Y): 219.05 ft x 136.30 ft

Shasta

AP18e7.28d3.f0f

Whitney

Tahoe

Pinnacles

APc08c.6020.733

Yosemite

Presidio

Sequoia

Lassen

MCS
(Index #)

11 10 9 8 7 6 5 4 3 2 1 0

1.13 Wi-Fi 6 Rx MCS Index Information Distribution

1 in. = 31.29 ft

Dimensions(X x Y): 219.05 ft x 136.30 ft

Shasta

11a2-ben

AP18e7.28d3.f0f

Whitney

Tahoe

Pinnacles

APc08c.6020.733

Yosemite

Sequoia

Lassen

Presidio

e4c7.22b2.a09

MCS (Index #)   11 10 9 8 7 6 5 4 3 2 1 0

2 AP Interference Report

2.1 Channel Interference

1 in. = 31.29 ft   Dimensions(X x Y): 219.05 ft x 136.30 ft

Interfer. (%)   100 90 80 70 60 50 40 30 20 10 0