Table of Contents

Lutron myRoom Plus Security Statement .................................................. 3
Glossary and Abbreviations ................................................................. 4

Network and IT Considerations
Network Architecture Overview ............................................................. 5
Physical Medium ....................................................................................... 5
IP Addressing ......................................................................................... 5
Multicast Addressing .............................................................................. 5
Ports Required .......................................................................................... 6
Ports Optional ............................................................................................ 7
Hop Limit for Unmanaged Networks ....................................................... 7
Latency Requirements for Managed Networks .......................................... 7
Other Protocols Supported ................................................................. 7
Optional Hotel System Integrations ...................................................... 8
Communication Speed & Bandwidth ......................................................... 9

Server and Application Considerations
Required Microsoft SQL and OS Versions for myRoom Plus .................... 10
Hardware Requirements ........................................................................ 10
Software Required ................................................................................ 11
Non-dependent System Server ................................................................. 11
SQL Server Database Usage ................................................................. 11
SQL Instance Requirements .................................................................. 11
SQL Access ............................................................................................ 12
Windows Services .................................................................................. 12
Database Size ......................................................................................... 12
Active Directory (AD) ............................................................................ 13
IIS ............................................................................................................. 13
DNS Host Names ..................................................................................... 13
Multi-Instance Installation ................................................................. 13
Software Installation .............................................................................. 13
IIS Features ............................................................................................ 14
Browser UI (myRoom Vue) ..................................................................... 16
Software Maintenance .......................................................................... 16

Typical System Network Diagram ............................................................ 17
Lutron takes the security of our Lighting Control Systems very seriously. The myRoom Plus Lighting Control System can be configured to meet reasonable standards for security. Lutron has engaged security experts and independent testing firms to review the system’s architectures and Lutron is committed to security and continuous improvement throughout the product’s lifecycle.

Lutron’s Security Architecture Includes:

1. Isolation of the wired Ethernet processor network, the wired QS device links, and the wireless Clear Connect device from each other, which strictly limits the possibility of using the Lutron device links or wireless communication to gain access to the Ethernet network.
2. A web browser user interface protected using TLS and capable of accepting a customer-supplied certificate.
3. Vue user account password storage using NIST-recommended salt and hashing protection. Integration with LDAP is optional. More information can be found in the Guest Room Management Suite specification submittal (P/N 3691020) at www.lutron.com

System Network Deployment

The myRoom Plus processors must be connected via Ethernet to allow the processors to communicate with each other, to access certain features such as BACnet® for BMS integration, PMS integration, CELS integration, Rapid Response Software integration, A/V tablet integration, and to communicate with the optional system server. Lutron advises following best practices in this instance, including separating the guest information network and the building infrastructure network. Use of a VLAN or physically separated networks is recommended for secure deployment. Lutron Services Company Engineers or Lutron Certified Hospitality Technology Integrators can aid in the design and implementation of the myRoom Plus system to meet your specific IT security needs.

The devices on the network can be deployed in one of two ways:

Dedicated Lutron Network Deployment

In this deployment, the myRoom Plus processors are not connected to the building IT network. Dedicated Ethernet cables and switches are used to interconnect the processors with the system server.

Integrated as Part of the Managed IT Network

The myRoom Plus processors communicate with each other, with the system server and with other building systems via the building IT network. Integration with other building systems may require ports to be opened between the systems VLANs. It is strongly recommended that local IT security professionals be involved with the system design and the network configuration to ensure the installation meets their security needs.
Glossary and Abbreviations

**CELS (Central Electronic Locking System)** – The hotel’s door lock system. This system can be integrated with myRoom Plus to interpret/react to specific door lock messages. An example of a commonly used CELS system that the myRoom Plus system compatible with is ASSA ABLOY.

**Hop** – Lutron extends the network definition of a hop that traditionally refers to the number of intermediate devices through which data packets must pass between source and destination to include layer 2 and layer 3 devices. This includes any device that will delay the data packets from a source processor to a destination processor. **Note:** This rule is only applicable when using an unmanaged network to interconnect the devices of a myRoom Plus system.

**Hop Limit** – A hop is one portion of the path that a packet takes from source to destination. Traditionally, the hop limit refers to the time to live (TTL) of that packet before it is discarded. With a Lutron myRoom Plus system, the hop limit is not concerned with TTL. Rather it is a guideline so that latency of myRoom Plus system commands is kept to a minimum. **Note:** This rule is only applicable when using an unmanaged network to interconnect the devices of a myRoom Plus system.

**myRoom Plus Hotel Integration Software** – Software router and protocol translator which allows for a one-to-many network topology for coordination of the myRoom processors and the various integrations required to other hotel systems (PMS, CELS, RRS). The software is installed on the same myRoom Plus server that runs myRoom Vue.

**myRoom Plus Subsystem** – A group of myRoom processors that share events, overrides, system integrations, sensor controls, or any other system functionality. The inter-processor communication is UDP multicast. A myRoom Plus subsystem is also a multicast group and shares the same Class D multicast address. Typically, connected rooms or large suited rooms (where more than 100 lighting zones are required) is one myRoom Plus subsystem.

**myRoom Processor (GCU-HOSP, GCU-HOSP-1)** – This is the basic myRoom Plus controller supporting an expanded MicroC/OS operating system and will be the main myRoom Plus component connected to any network. Each myRoom processor can have one or two RJ45 female connectors. Typically there is a single myRoom Plus processor per guestroom.

**PMS (Property Management System)** – Controls room management, everyday operations, and communications such as Room Status (sold/unsold/checked in/out). An example of a commonly used PMS system that is compatible with myRoom Plus is Oracle Micros Opera™.

**RRS (Rapid Response System)** – Work order management system that delegates messages and updates regarding room management and everyday operations. An example of a commonly used RRS system that is compatible with myRoom Plus is Amadeus™/HotSOS™/REX™.

**myRoom Vue** – Browser based UI for monitoring and controlling the myRoom Plus system. Available on myRoom Plus software version 3.3 and higher.
Network and IT Considerations

Network Architecture Overview
What is on the traditional network IP architecture? – The myRoom processors, myRoom server, and client devices (e.g., PC, laptop, tablet, etc.).

What is NOT on the traditional network IP architecture? – The lighting actuators, sensors, and load controllers are not on the network architecture. This includes keypads, wired and wireless occupancy sensors, load controllers, dimmers, switches, lighting panels, or LED drivers. These devices communicate on a Lutron proprietary wired or wireless communication network.

Note that AV integration with the processor can be achieved via Telnet integration over Ethernet directly to the processor.

Physical Medium
IEEE 802.3 Ethernet – The physical medium standard for the network between myRoom Plus processors and the myRoom server.

CAT5e – The minimum network wire specification of the myRoom Plus LAN/VLAN.

IP Addressing
IPv4 – The addressing scheme used for the myRoom Plus system. The IPv4 address should be static, but a DHCP reservation system can also be used. Standard DHCP lease is not allowed, as it may allow the myRoom processor IP address to change. DNS Hostname is not supported. The IPv4 address can be field set to any range, Class A, B, or C. Static will be assumed. IPv6 is not supported.

Multicast Addressing
myRoom Plus Subsystem – A myRoom Plus subsystem is a multicast group of myRoom processors sharing a unique and common class D address that need to share events. There is a maximum of five, and minimum of one, myRoom Plus processor(s) per room on a myRoom Plus subsystem. Note that multicast communication is only required within large rooms that contain multiple processors or within suited rooms that can be combined or separated.

Multicast communications – Basic communication to share events between myRoom processors and the myRoom server is based on UDP multicast groups. Below are details on how the myRoom Plus system deploys this communication scheme.
• Each group of myRoom processors that need to share events will need a unique and common class D address. The class D multicast address can be field set and specified by the customer. Processors needing to share events are normally limited to a single guestroom or connected rooms that will be suited together.
• Any source multicast is used because any myRoom processor may be enacting the event.
• Multicast communication in the myRoom Plus system is primarily event based (e.g., system trigger or change in state for monitoring). Polling is not a basis of communications in a myRoom system.
• myRoom servers hosting software version 3.3 and newer can either communicate to the myRoom Plus processors by joining every multicast group or can be setup as TCP unicast communication. This can be setup during system startup by Lutron Field Service at the customer’s discretion.
  Note: Multicast communication is still required for communication among the processors in a subsystem.
Network and IT Considerations (continued)

Ports (REQUIRED)

myRoom processor to myRoom processors within a myRoom Plus subsystem
UDP/2055 up to 3055 (one per subsystem).

myRoom Application Server to myRoom processors **UNICAST OPTION**
TCP/51023

**Note:** Unicast or multicast communication option is configured onsite. System will default to multicast if not specified.

myRoom Vue Web Page
Source TCP/49152 - 65535 to Destination TCP/443 (HTTPS) or TCP/80 (HTTP)
- myRoom version 3.3 defaults to port 80 but can be configured for port 443

myRoom processor to myRoom Server
TCP/5001 to 5003 (default)
- Required if myRoom Plus system is integrated with PMS, CELS, and/or RRS
- Port can be configured during initial system startup

myRoom Server to PMS Server
TCP/7000 (default)
- Required if myRoom Plus system is integrated with PMS
- Port can be configured during initial system startup

myRoom Server to CELS Server
TCP/9002
- Required if myRoom Plus system is integrated with CELS
- Port can be configured during initial system startup

myRoom Server to RRS Cloud service
TCP/443
- Required if myRoom Plus system is integrated with RRS
Network and IT Considerations  (continued)

Ports (OPTIONAL)

myRoom Processor Configuration and detection software
    UDP/2647
    • Only required while performing initial commissioning or maintenance

myRoom Processor BACnet/IP
    UDP/47808 (default)
    • Only required if the myRoom Plus system is integrating with a BMS through
      BACnet/IP
    • UDP Port 47808 is configurable at the time of system startup

myRoom Processor TELNET
    Source TCP/23 (default)
    • Only required if the myRoom Plus system is integrating with AV or tablet equipment
    • This port is open by default in version 3.3
    • The port number is configurable if desired

myRoom Processor Additional Ports
    Source TCP21 (FTP) and TCP80 (HTTP)
    • These ports are open by default in versions 3.3

Hop Limit for Unmanaged Networks
The required hop limit of any data packet from a source processor to a destination processor/
server within a single subsystem is six.  Note: This rule is only applicable when using an
unmanaged network to interconnect the devices of a myRoom Plus system and is required to
ensure optimal performance.

Latency Requirements for Managed Networks
Note that for managed networks, the maximum latency between any two myRoom processors
should be less than 10 ms. The maximum latency between the myRoom server and any processor
is 10 ms.

Other Protocols Supported
IGMP – myRoom supports Versions 1, 2, and 3 for multicast communication within a subsystem.
Any possible flooding of multicast traffic can be constrained to a set of interested ports by using
IGMP snooping.

PIM – If myRoom processors within a subsystem are deployed on different subnets and need
routing, PIM is supported in both sparse and dense modes. PIM is typically not required if the
connections from the server to the processors is configured for Unicast.
Network and IT Considerations (continued)

Other Protocols Supported (continued)

**BACnet/IP** – BACnet is a communications protocol for building automation and control networks. It is defined in ASHRAE/ANSI standard 135. Below are details on how the myRoom Plus system implements BACnet communications.

- BACnet communication is used to allow two-way communication between the myRoom system and a Building Management System (BMS) for control and monitoring of the system.
- The myRoom processors adhere to Annex J of the BACnet standard. Annex J defines BACnet/IP which uses BACnet communication over a TCP/IP network.
- The BMS communicates directly to the myRoom processors, not to the myRoom server.
- If the BMS is on a different subnet than the myRoom processors then BACnet/IP Broadcast Management Devices (BBMDs) can be used to allow the BMS to communicate across subnets.
- BACnet should not be used for Central Electronic Lock System (CELS) integration, nor Property Management System (PMS) integration. See the Guestroom Management Suite’s list of software licenses available for these types of integrations.

**Telnet** – Telnet is an application layer protocol used to provide a bi-directional text-based communication between client and server devices. The myRoom processors will use this protocol over TCP/IP for two main instances:

1. Telnet may be used during system startup to run diagnostics and initiate firmware updates. Once system startup is complete, the Telnet port may be closed.
2. If there is an AV system (e.g., a touchscreen) integrating with the myRoom Plus system, it may communicate to the myRoom processor over a Telnet session. By default, port 23 will be used but this can be changed at the customer’s discretion.
3. Telnet should not be used for Central Electronic Lock System (CELS) integration, nor Property Management System (PMS) integration. See the Guestroom Management Suite’s list of software licenses available for these types of integrations.

Optional Hotel System Integrations

PMS, CELS, and Hotel optimization systems integrate with the myRoom system, as described below:

- Property Management System Integration (PMS): Done through server-to-server communication. Integration partners include Protel, Infor, and others. Additional software licenses are required to enable the integration. See the software license specification for your hotel’s PMS below:
  - Oracle (Micros) Opera – LMR-OPERA-PR (P\N 369855)
  - Hilton OnQ – LMR-HLTNPMS-PR (P\N 3691031)
  - Protel – LMR-PROTEL-PR (P\N 3691032)
  - Infor – LMR-INFOR-PR (P\N 3691053)
- Central Electronic Locking System (CELS): Done via server-to-server communication. Integration partners include Salto, KABA/Saflok, and ASSA Abloy/VingCard. Additional software licenses are required to enable the integration. See the software license specification for your hotel’s CELS below:
  - Salto – LMR-SALTO-PR (P\N 369922)
  - KABA Saflok – LMR-SAFLOK-PR (P\N 369943)
  - ASSA Abloy Vingcard – LMR-VINGCARD-PR (P\N 369942)
  - Integration must adhere to specific Vingcard models listed in the submittal
- Housekeeping/ Optimization: Done via server-to-server communication. Integration partners include HotSOS/REX. Additional software licenses are required to enable the integration. See the software license specification for your hotel’s optimization service below:
  - HotSOS – LMR-HOTSOS-PR (P\N 369972)
Network and IT Considerations (continued)

Communication Speed and Bandwidth

100 BaseT – Is the maximum communication speed required for the myRoom processor and myRoom server communications.

1.88 MBPS – Worst case bandwidth in a fully loaded subsystem of five processors. Most subsystems include only one to two processors.
Server and Application Considerations

Required Microsoft® SQL and OS Versions for myRoom Plus

<table>
<thead>
<tr>
<th>Software Version</th>
<th>Microsoft® SQL Version</th>
<th>Microsoft® OS Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>myRoom 3.3</td>
<td>SQL 2012 Express (default)</td>
<td>Windows 2012 R2 Server (64-bit)</td>
</tr>
<tr>
<td></td>
<td>SQL 2012 Full* (requires custom installation)</td>
<td>Windows 2016 R2 Server (64-bit)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Windows 10 Professional (64-bit)</td>
</tr>
</tbody>
</table>

* Configuring the myRoom system to use a full install of SQL server will require additional field service time as well as customer IT/DBA support. The SQL instance must be installed on the application server where the myRoom software is installed. Remote SQL is not supported.

Hardware Requirements

<table>
<thead>
<tr>
<th>Software Version</th>
<th>Programming Laptop</th>
<th>Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3</td>
<td>Minimum AMD Ryzen™ 7 processor or Intel® i7  – 4 core, 8 threads – 2.5 GHz clock speed  • Minimum 500 GB NVME (SSD) hard drive  • Minimum 32 GB RAM  • Minimum 1280 x 1024 screen resolution  • Windows 10 professional operating system (64-bit)  • Minimum one 100 Mbps wired Ethernet interface  • 802.11 Wi-Fi Ethernet connection</td>
<td>Processor: Intel® Xeon® (4 cores, 8 threads 2.5 GHz) or AMD® equivalent  • 16 GB RAM  • 500 GB SSD  • Two (2) 100 Mbps Ethernet network interfaces  – One (1) Ethernet network interface will be used for communication to myRoom panels.  – One (1) Ethernet network interface will be used for communication to corporate intranet, allowing access for administration and client PC.  <strong>Note:</strong> Only one (1) Ethernet network interface is used if all myRoom panels and client PCs are on the same network.</td>
</tr>
</tbody>
</table>
Server and Application Considerations (continued)

Software Required
• Microsoft® Internet Information Services (IIS) 7 or later for myRoom Vue
• Microsoft® .NET Framework 3.5
• Microsoft® .NET Framework 4.5.1
• A web browser that supports HTML-5, the latest version of Google® Chrome® recommended

Non-Dependent System Server
The myRoom processors can fully function without server connectivity. Loss of server connectivity does however impact integration events received from PMS, CELS, or RRS systems. The myRoom server serves three functions;
1. Enables End User UI – Provides the web server for myRoom Vue.
2. Historical Data Collection – All energy management and asset management is stored on the SQL logging server for reporting.
3. Integration with other Hotel systems via the Hotel Integration software installed on the myRoom server.

SQL Server Database Usage
Application (Runtime Project) Database – Stores all of the configuration information for the system (areas, zones, programming, and other settings). A locally installed instance of SQL Server Express edition is best suited for this database and is automatically installed and configured during installation of a myRoom system on the server. Due to the operations performed (backup, restore, etc.) the myRoom software requires high-level permissions to this database. For this reason, remote SQL is not supported in the myRoom system.

Logging Database – Real-time database that stores system and user activity reported from the myRoom system. Used to generate historical activity reports in myRoom Vue software.

Energy Database – Real-time database that stores energy consumption data for the lighting control system. Used to show energy reports in myRoom Vue. Data is recorded at an area level every time there is a change in the system.

SQL Instance Requirements
• Lutron requires a dedicated SQL instance for all installs for data integrity and reliability.
• A myRoom system does not support remote SQL. The SQL instance must be installed on the application server.
• System administrator privileges are required for myRoom software to access the SQL instance.
• Microsoft® SQL Server Express will be installed by default. Alternatively, full SQL can be installed if provided by the customer.
Server and Application Considerations (continued)

SQL Access
Lutron applications use “sa” user and “sysadmin” permission levels with SQL Server because the myRoom Plus applications need backup, restore, create new, delete and modify permissions under normal use. The username and password can be changed but the privileges are required. Note that only SQL authentication is supported.

Windows® Services
The Lutron Services Manager is a Windows® service that runs on the myRoom server and provides status information about key myRoom applications and also ensures that they are running any time the machine is restarted. The Lutron Services Manager application coincides with the Lutron Service Manager service which should always be running on the server machine. It can be accessed using the small red “gears” icon in the system tray or from Services within the Windows® operating system.

myRoom applications in Lutron Service Manager includes:
- **Q-Runtime** – runs in the background and serves a number of purposes, among them it acts as a facilitator of system traffic.
- **Q-Reporting** – stores system data and logs it for the purpose of displaying energy savings, system events, or user activity.
- **Q-Gateway** – interfaces the myRoom Vue software with the myRoom Plus server.
- **Q-Alerts** – monitors the system for certain events/triggers and raise awareness through visible changes in the myRoom software or through email messages.

Alerts can be emailed using a SMTP server connection and port designation as configured by the administrator. SSL encryption and authentication can also be enabled.

Database Size
Typically, each database is capped at 10 GB when using SQL Server 2012 Express edition. If this database is deployed to a customer-supplied instance of SQL Server full edition on the application server, the 10 GB limit need not apply and the policy for data retention can be specified using myRoom configuration options.

**Application (Runtime Project) Database** – Does not grow appreciably post-deployment. Data modifications take place via software tools like myRoom Vue where a facility manager can modify scheduled events and settings. Typical size is less than 100 MB but can reach ~250 MB for very large installations.

**Logging Database** – Growth of the database varies based on the size of the facility, nature of devices used, and occupant activity. For example, occupancy sensors tend to report larger volumes of data as compared to other devices. When using SQL Server 2012 Express edition, the database can store a minimum of 3 months of activity data. The database will delete the oldest information once it is close to being full.

**Energy Database** – When using SQL Server 2012 Express edition, the database can store up to 10 years of energy data for systems having ~2000 areas or less (rooms).
Server and Application Considerations (continued)

Active Directory (AD)
Individual user accounts can be setup and identified using AD. At setup, each user account can be setup by the administrator with a direct application individual name and password or with authentication using Integrated Windows Authentication (IWA). Active directory is not used for the application but for individual user accounts in myRoom Vue.

IIS
IIS is required to be installed on the Application server to host the myRoom Vue web page. Minimum version required is IIS 7.5. A recommendation of installing all features listed for IIS is advised. It is recommend that a website security certificate be purchased from a trusted certification authority and installed on the server to provide proper security for the myRoom Vue web page.

DNS Host Names
When multiple myRoom systems are installed on the same server, each system’s webpage requires a DNS host name for the system web page. If you have multiple systems (e.g., a phased project using separate versions), there may be multiple systems on the same server and/or there may be multiple servers.

DNS naming examples:
- myRoom System 1 - https://tower1.myroom.com
- myRoom System 2 – https://tower2.myroom.com
- myRoom System 3 – https://tower3.myroom.com
- myRoom System 4 – https://tower4.myroom.com
- myRoom System 5 – https://tower5.myroom.com

Multi-Instance Installation
A myRoom system allows multiple instances of a myRoom server to be installed and run on the same machine in parallel. Up to 10 systems can be installed on a single machine.

Software Installation
- Software installation requires administrator privileges to install.
- Once installed, administrator privileges are not required for day to day operation.
- Administrator account access will be required for any maintenance or troubleshooting.
- The myRoom software will run in the background even when there is no user logged into the server.
- Internet access is required during installation to download the necessary Lutron software and third-party software as needed. Internet access is not required after installation.
**Server and Application Considerations (continued)**

### IIS Features

The table below is a minimal list of features that MUST be installed.

<table>
<thead>
<tr>
<th>Feature Name</th>
<th>Required</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FTP Server</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FTP Extensibility</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>FTP Service</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td><strong>Web Management Tools</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IIS 6 Management Compatibility</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IIS 6 Management Console</td>
<td>no</td>
<td>Allows you to use existing IIS 6.0 APIs and scripts to manage this IIS 7.0 and above Web server.</td>
</tr>
<tr>
<td>IIS 6 Scripting Tools</td>
<td>no</td>
<td>Allows you to use existing IIS 6.0 APIs and scripts to manage this IIS 7.0 and above Web server.</td>
</tr>
<tr>
<td>IIS 6 WMI Compatibility</td>
<td>no</td>
<td>Allows you to use existing IIS 6.0 APIs and scripts to manage this IIS 7.0 and above Web server.</td>
</tr>
<tr>
<td>IIS Metabase and IIS 6 Configuration Compatibility</td>
<td>no</td>
<td>Allows you to use existing IIS 6.0 APIs and scripts to manage this IIS 7.0 and above Web server.</td>
</tr>
<tr>
<td>IIS Management Console</td>
<td>yes</td>
<td>Installs Web server Management Console which supports management of local and remote Web servers.</td>
</tr>
<tr>
<td>IIS Management Scripts and tools</td>
<td>yes</td>
<td>Manages a local Web server with IIS configuration scripts.</td>
</tr>
<tr>
<td>IIS Management Services</td>
<td>yes</td>
<td>Allows this Web server to be managed remotely from another computer via the Web server Management Console.</td>
</tr>
<tr>
<td><strong>World Wide Web Services</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Common HTTP Features</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Static Content</td>
<td>yes</td>
<td>Serves .htm, .html, and image files from a Web site.</td>
</tr>
<tr>
<td>Default Document</td>
<td>no</td>
<td>Allows you to specify a default file to be loaded when users do not specify a file in a request URL.</td>
</tr>
<tr>
<td>Directory Browsing</td>
<td>no</td>
<td>Allow clients to see the contents of a directory on your Web server.</td>
</tr>
<tr>
<td>HTTP Errors</td>
<td>no</td>
<td>Installs HTTP Error files. Allows you to customize the error messages returned to clients.</td>
</tr>
<tr>
<td>WebDAV Publishing</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>HTTP Redirection</td>
<td>no</td>
<td>Provides support to redirect client requests to a specific destination.</td>
</tr>
<tr>
<td><strong>Application Development Features</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASP.NET</td>
<td>yes</td>
<td>Enables Web server to host ASP.NET applications.</td>
</tr>
<tr>
<td>.NET Extensibility</td>
<td>yes</td>
<td>Enables Web server to host .NET framework-managed module extensions.</td>
</tr>
<tr>
<td>ASP</td>
<td>no</td>
<td>Enables Web server to host Classic ASP applications.</td>
</tr>
<tr>
<td>CGI</td>
<td>no</td>
<td>Enables support for CGI executables.</td>
</tr>
<tr>
<td>ISAPI Extensions</td>
<td>yes</td>
<td>Allows ISAPI extensions to handle client requests.</td>
</tr>
<tr>
<td>ISAPI Filters</td>
<td>yes</td>
<td>Allows ISAPI filters to modify Web server behavior.</td>
</tr>
<tr>
<td>Server-Side Includes</td>
<td>no</td>
<td>Provides support for .stm, .shtm, and .shtml include files.</td>
</tr>
</tbody>
</table>
## Server and Application Considerations (continued)
### IIS Features (continued)

<table>
<thead>
<tr>
<th>Feature Name</th>
<th>Required</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health and Diagnostics Features</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HTTP Logging</td>
<td>yes</td>
<td>Enables logging of Web site activity for this server.</td>
</tr>
<tr>
<td>Logging Tools</td>
<td>yes</td>
<td>Installs IIS logging tools and scripts.</td>
</tr>
<tr>
<td>Request Monitor</td>
<td>yes</td>
<td>Monitors server, site, and application health.</td>
</tr>
<tr>
<td>Tracing</td>
<td>yes</td>
<td>Enables tracing for ASP.NET applications and failed requests.</td>
</tr>
<tr>
<td>Custom Logging</td>
<td>yes</td>
<td>Enables support for custom logging for Web servers, sites, and applications.</td>
</tr>
<tr>
<td>ODBC Logging</td>
<td>no</td>
<td>Enables support for logging to an ODBC-compliant database.</td>
</tr>
<tr>
<td><strong>Security Features</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Authentication</td>
<td>no</td>
<td>Requires a valid Windows user name and password for connection.</td>
</tr>
<tr>
<td>Windows Authentication</td>
<td>no</td>
<td>Authentiﬁes clients by using NTLM or Kerberos.</td>
</tr>
<tr>
<td>Digest Authentication</td>
<td>no</td>
<td>Authentiﬁes clients by sending a password hash to a Windows domain controller.</td>
</tr>
<tr>
<td>Client Certificate Mapping Authentication</td>
<td>no</td>
<td>Authentiﬁes client certiﬁcates with Active Directory accounts.</td>
</tr>
<tr>
<td>IIS Client Certificate Mapping Authentication</td>
<td>no</td>
<td>Maps client certiﬁcates 1-to-1 or many-to-1 to a Windows security identity.</td>
</tr>
<tr>
<td>URL Authorization</td>
<td>no</td>
<td>Authorizes client access to the URLs that comprise a Web application.</td>
</tr>
<tr>
<td>Request Filtering</td>
<td>yes</td>
<td>Conﬁgures rules to block selected client requests.</td>
</tr>
<tr>
<td>IP and Domain Restrictions</td>
<td>no</td>
<td>Allows or denies content access based on IP address or domain name.</td>
</tr>
<tr>
<td><strong>Performance Features</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Static Content Compression</td>
<td>no</td>
<td>Compresses static content before returning it to a client.</td>
</tr>
<tr>
<td>Dynamic Content Compression</td>
<td>no</td>
<td>Compresses dynamic content before returning it to a client.</td>
</tr>
</tbody>
</table>
Server and Application Considerations  (continued)

Browser UI (myRoom Vue)
The main UI into the myRoom system is myRoom Vue and is browser based. Below is the supported browsers:

Browser Options

<table>
<thead>
<tr>
<th>Device</th>
<th>Browser</th>
</tr>
</thead>
<tbody>
<tr>
<td>iPad Air or iPad Mini</td>
<td>Safari (iOS 8 or 9)</td>
</tr>
<tr>
<td>Android™ or Windows® laptop, desktop, or tablet</td>
<td>Google Chrome®, latest version</td>
</tr>
</tbody>
</table>

Software Maintenance
1. Each myRoom software version is designed and tested to work on specified Windows Operating System versions. See page 10 of this document for which versions of the myRoom software are compatible with each version of Windows and SQL.
2. Lutron recommends keeping the Windows Servers and PCs used with a myRoom system up to date on all Windows patches that have been recommended by the customer’s IT department.
3. Lutron recommends installing, configuring and updating an anti-virus program, such as Symantec, on any Server or PC running the myRoom software.
Typical System Network Diagram

Key

Wiring
- Wireless doorlock link
- Network link (Ethernet)
- QS wired link

Assembled in U.S.A. 50015757 Rev. A
GCU-HOSP Guestroom Control Unit
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243C  IND. CONT. EQ.
IEC PELV/NEC   Class 2 ®
Customer Assistance
If you have questions concerning the installation or operation of this product, call the Lutron Customer Assistance.

Please provide the exact model number when calling. Model number can be found on the product packaging.
Example: SZ-CI-PRG

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Other countries call: +1.610.282.3800
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