nWiFi™ Requirement Checklist for Host WiFi Network

Please check all the boxes below and sign at the bottom of 2nd page indicating you will provide a host WiFi network to the following standards for use with nWiFi devices.

General Requirements:

❑ 802.11 b/g/n compliant (WiFi)

❑ Utilizes WPA2 with AES encryption only (WPA2-Enterprise not supported)

❑ Provides DHCP services (nWiFi devices require DHCP assigned IP addresses initially even if static IP addresses are to be used)

❑ A single common subnet can be used for all nWiFi devices.

❑ Multicasts and broadcast communication enabled

❑ Network should be configured to provide 100% network connectivity for all nWiFi devices. nWiFi devices should never be given a non-guaranteed connection service level.

❑ Devices must be allowed to exchange UDP broadcasts on UDP ports 5551, 5555, and 5556.

❑ No internet connection is required.

❑ If WiFi network is to be shared with other non-nLight WiFi devices the Access Points must be capable of supporting the total anticipated number of WiFi devices. Note the maximum number of connections that can be supported by an Access Point varies between manufacturers and models. For a consumer level access point a typical maximum number of clients is 30. For an enterprise level a typical maximum number of clients is 60).

❑ The DHCP server must be able to support the required number of devices. (Class C subnets can support up to 255 clients, Class B can support up to 65,535. The max client setting may need to be adjusted).

Added Requirements for High Density networks (> 20 nWiFi devices per access point):

❑ At least one enterprise level Access Point/Router per 50 nWiFi devices must be present.

❑ 802.11n compliant access points required.

❑ It is strongly recommended that a dedicated host WiFi network be utilized (not shared with general LAN traffic).

Added Requirements if multiple access points are used:

❑ Points must be channeled appropriately to avoid interference.

❑ Points must all have the same SSID and PSK.

❑ The nWiFi devices that join them must all be part of the same subnet.

❑ nWiFi devices must be able to exchange UDP broadcasts on UDP ports 5551, 5555, and 5556.

Coverage:

- ❑ The signal strength at all locations where nWiFi devices are to be installed must be measured.
- ❑ All nWiFi device locations must have a minimum signal strength reading of -60dB.

Device Positioning:

General:

- ❑ All nWiFi devices should be located so that there is as direct a path as possible, via open air, to the access point.
- ❑ Any obstruction between the nWiFi device and the access point may degrade signal strength.
- ❑ Ideally, the locations of each installed nWiFi device (with the type and serial number noted) and all WiFi access points/routers will be provided on a layout to the commissioning agent.

nPP16 WIFI, nPS 80 WIFI:

- ❑ The external antenna must be pointed either straight up or down.
- ❑ It must be in open air with a minimum clearance radius of 6 inches.

Signature of Representative of Host Facility: _____

(Required for acceptance of order)

Note: Sensor Switch is not responsible for supplying or supporting WiFi network devices or technical resources required to provide host WiFi network as described above. The manager of the host wireless (WiFi) network must be available for support when the system is being commissioned.

IT Contact: _____   Router Information:_____

Phone #: _____   Brand:_____

Email: _____   Model #:_____