# MICROWAVE SENSOR APPLICATION NOTE

These sensors operate in the 5.8 GHz C-Band (5.8GHz +/- 75 MHz). When using many sensors in one location, proper spacing and setting selection is required to assure the sensors operate properly. Improper setup may result in interference with other microwave sensors or 5.8 GHz WiFi devices. Like any wireless device, many can operate in the same space with an acceptable level of interference. If excessive numbers of any wireless devices are used close together; performance of the devices may be affected.

Sensor Spacing and Setting Selection

Sensors should be physically spaced and use the sesitivite detection range setting that results in limited detection ranges overlap.

| Sensitivity	Recommended space between sensors		
	Extended Range (LBI-OC2-A)	Standard Range (OCC/OC1/111)	Limited Range (OCCLR / LBI-OC3-A)
25%	8 ft	5 ft	N/A
50%	12 ft	8 ft	N/A
75%	16 ft	13 ft	2 ft
100%	20 ft	15 ft	4 ft

GOOD
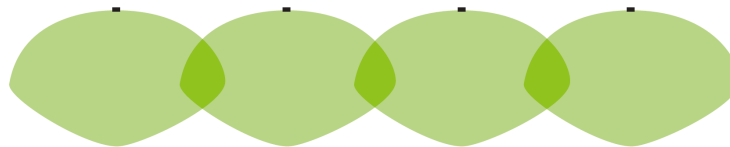
Minimum sensor requirement; use this spacing pattern when it is desired to have the minimum number of sensors used. Each sensor has very limited overlap with the neighboring sensors detection areas.

MIN RECOMMENDED SPACING
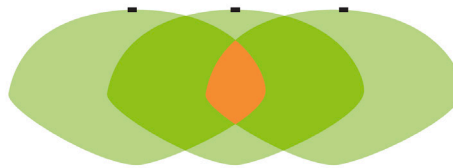
Minimum recommended sensor spacing distance; proper sensor spacing should result in limited area with 3 sensors having overlapping detection areas.

NOT RECCOMENDED
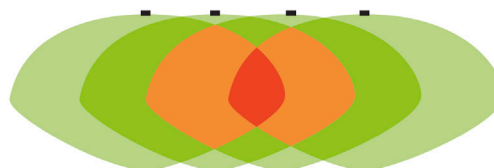
Not recommended; 4 or more sensors have overlapping detection area. Although not ideal, having a small area with dense overlapping detection area should not greatly reduce performance. Most important is not to implement this dense overlapping detection pattern systematically throughout a location. Sensor spacing and sensitivity level should be carefully considered in locations with a high number of sensors to reduce this level of detection range overlap.

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