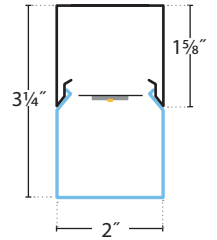


BoltPro Triangle | Pendant, Surface & Wall



PRUDENTIAL LTG.

PRULITE.COM 213.746.0360



ACOUSTIC OPTIONS

BTR-PRO-22-LED35-LO

3017 Delivered Lumens

23 Watts

131 lm/w

UP TO 131 LPW

SMART SPECS

	LO	MO	SO	HO
11:	Im 1400	2300	3500	4600
	w 10	17	25	33
22:	Im 3000	5000	6900	9000
	w 23	39	57	75
33:	Im 4400	7500	10500	12500
	w 34	60	85	112
44:	Im 5800	9800	13500	1700
	w 45	78	112	150

Design + Function. BoltPro shapes + sound absorbing panels.

Bolt Triangle, Square, Pentagon and Hexagon now available with acoustic panels. We are in an era of open ceilings, concrete floors where noise reduction is imperative. Add fixtures with abundant light, vertical illumination and a multitude of shapes and colors for a "two birds (maybe three), one stone" solution.



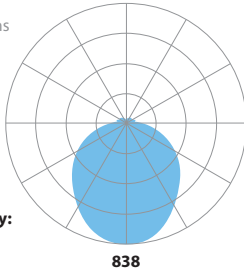
Lumen output may vary +/- 5%
3500K used for lm/ft estimates above
4000K +2% llf, 3000K -2%, 2700K -4%
-10% llf for 90 CRI (4K, 3500K and 3K)

SERIES	NOMINAL LENGTH	LED COLOR	OUT-PUT	SHIELD-ING	ACOUSTIC COLORS (OPTIONAL)	COLOR/ FINISH	VOLT-AGE	MOUNTING	CEILING SYSTEMS	DRIVERS	OPTIONS & SEN-SORS
BTRI-PRO				SAL							
BoltPro Triangle	11 1'+1' 22 2'+2'+2' 33 3'+3'+3' 44 4'+4'+4'	LED27 2700K (90CRI) LED3 3000K LED35 3500K LED4 4000K LED3-90 90CRI LED35-90 90CRI LED4-90 90CRI LED5-90 90CRI	LO Low MO Me-dium SO Stan-dard HO High PROG Pro-gram-mable Light Out-put (Specify desired lm/ft or w/ft)	SAL Satin Acrylic Lens	STANDARD: DB05 White DB03 Marble DB33 Grey PREMIUM: (LONGER LEAD TIMES) DB02 Oat DB29 Brown DB27 Teal DB30 Earth Brown DB24 Sky Blue DB32 Stone DB26 Midnight Blue DB34 Charcoal DB09 Yellow DB31 Blue DB16 Orange Jean DB10 Red DB25 Navy DB11 Berry DB28 Hickory DB17 Pumpkin DB12 Pink DB08 Lemon DB01 Sand Dollar DB19 Pear DB06 Periwinkle DB21 Green DB36 Black DB22 Heather Green DB20 Lime DB13 Lilac DB23 Honey Dew DB15 Purple DB18 Maroon DB07 Salmon DB14 Violet	TMW Textured Matte White YGW Gloss White (Standard) Y Pre-mium Color CC Cus-tom Color LUXE METALLICS: YBZ Bronze YCP Copper Penny YGN Gold Nugget NOTE: All canopies are painted the same color as the fixture. Consult factory to specify	UNV (120-277) 347 (Emergency battery requires a Step Down transformer, NA - 11)	CA48", 96" or 144" Aircraft Cable (Adjustable, NA - 11) 3RPM48", 96" or 144" Round Cast Aluminum Canopy (Min from fixture to ceiling 2': 14", 3': 22", 4': 30") 3SPM48", 96" or 144" Square Cast Aluminum Canopy (Min from fixture to ceiling 2': 14", 3': 22", 4': 30") SUR Surface or Wall Mount (Hard ceiling only)	X1 T-Bar 1 5/16" or 9/16" Exposed (Standard) X3 Hard Ceiling X6 Slot Grid or Interlude	ND Non-Dimming DM01 0-10v, 1% Dimming (Standard) LDE1 Hi-lume 1% EcoSystem LED (Soft fade on, fade-to-black dimming) ECO 1% 0-10v, EldoLED (Logarithmic dimming std) ECDA 1% DALI, EldoLED (Logarithmic dimming std) nLight-Air Acuity nLight Drivers (ECDA driver ONLY) nLight-Wired Acuity nLight Drivers (ECO driver ONLY) SOLO 0.1% 0-10v, EldoLED (Dim-to-dark, Logarithmic dimming std) SODA 0.1% DALI, EldoLED (Dim-to-dark, Logarithmic dimming std) STEP Signify Advance Step Dimming 2WIRE ELV/ Forward/Reverse Phase Driver ‡ NA-11	EMHE* CAT20 Emergency Battery (1350 Delivered lumens, CA Title 20 compliant) ETS-DR* Iota ETS-DR Emergency Transfer Switch * NA - 11 SENSORS: (NA w/ EDMX) (See Page 8) 205 WattStopper PIR Occupancy 205-ON/OFF 205-STEP: Dim to 50% 205-DM: Dim to 1% (NA with DALI) ATHENA Lutron RF BPRO Sensors (Dim-to-Off Standard) LVOC** Lutron Vive (Occ & RF) LVRF** Lutron Vive (RF Only) ‡ Requires Lutron driver (Occ) rES7 Daylight+(PIR Acoustic) (Occ) nLight-Air Part Number: rES7-PDT-180D-G2 nES7 Daylight+(PIR Acoustic) (Occ) (nLight-Wired) Part Number: nES-PDT7-ADCX



PHOTOMETRICS

Low Output:
BTR-PRO-22-LED35-LO
 3017 Delivered Lumens
 23 Watts
 131 lm/w
 3500 CCT



Zonal Lumen Summary:
 0-90 (Down) = 89%
 90-180 (Up) = 11%

Vertical Angle	0°	45°	90°	135°	180°
0°	838	838	838	838	838
5°	834	840	834	838	841
15°	803	809	801	810	807
25°	736	742	731	737	739
35°	651	654	641	649	655
45°	557	565	550	555	569
55°	461	477	457	458	481
65°	358	381	361	358	385
75°	251	276	257	252	280
85°	135	159	144	133	159
90°	82	99	101	79	101
95°	72	85	75	72	89
105°	69	72	69	69	79
115°	53	59	51	50	61
125°	44	48	41	42	51
135°	33	39	33	32	42
145°	21	29	25	25	34
155°	13	21	17	17	23
165°	9	14	12	12	14
175°	5	6	6	5	7
180°	0	0	0	0	0

LUMEN MAINTENANCE

L70 — 200,000+ Hours
L90 — 100,000+ Hours (LO, MO & SO)
L90 — 60,000+ Hours (HO)

LED SYSTEM LED modules and drivers are field replaceable.

PROG (OPTIONAL) Programmable light output. Specify desired lumens or watts per linear foot. Min: 3.75 w/ft, Max 12.5 w/ft.

LABELS CSA and ETL damp labeled and I.B.E.W. manufactured.

ELECTRICAL Must specify LED dimming controls. LED fixtures have constant current driver(s) with less than 20% THD when loaded to a minimum of 60%. Drivers sink a maximum of 6mA per driver. DM01 LED drivers are 0-10V dimmable and are compatible with most 0-10V wall slide dimmers and direct 0-10V analog signal dimmers. Max driver size 1.65" w x 1.25" h. 32v Forward Voltage (+/- 1 volt based on drive current)
Drive Currents:
LO: 100mA, **MO:** 100mA, **SO:** 250mA, **HO:** 325mA

CONSTRUCTION

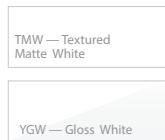
Housing Extruded aluminum, 25% PC recycled, 100% recyclable.
Lens Extruded acrylic, 100% recyclable.
Weight 11: 6 lbs
 22: 12 lbs
 33: 18 lbs
 44: 24 lbs

MOUNTING Fixture is to be suspended with aircraft cables or surface mounted.

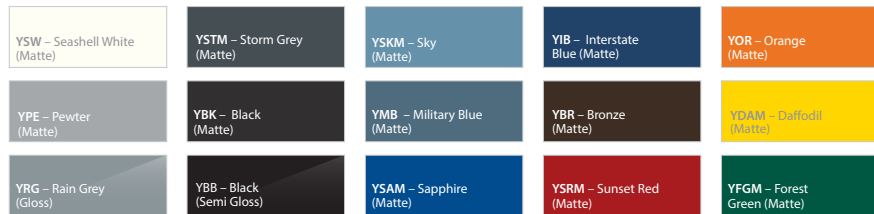
WARRANTY Single-source, 5 year limited warranty covers standard components and construction.

FINISH COLORS

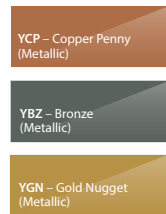
STANDARD:



PREMIUM:



LUXE METALLICS:



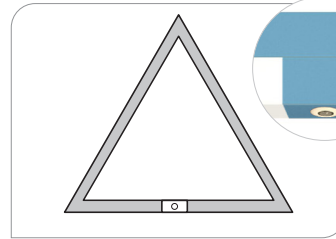
Choose from one of our Premium Colors with no set-up fee. For paint chip samples, please email: info@prulite.com



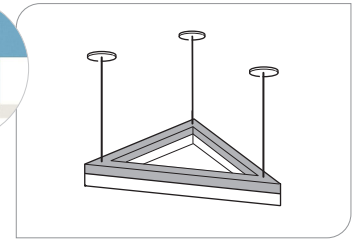
SENSOR BOX



SENSOR MOUNTING LOCATION



MOUNTING



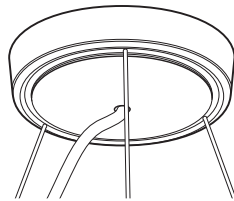
NA - 11.

NOTE: Sensor plate will match fixture color

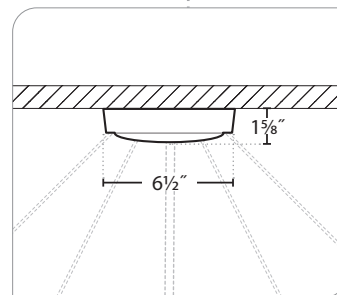
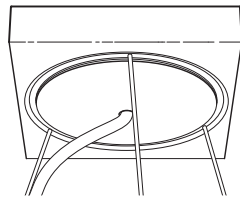
Sensor box is always centered in one lens

CA 48", 96" & 144": 5" Canopies
(NA - 11)

3RPM48", 96" or 144": Round Cast Aluminum Canopy
3SPM: 2', 3', 4' (3 Cables)

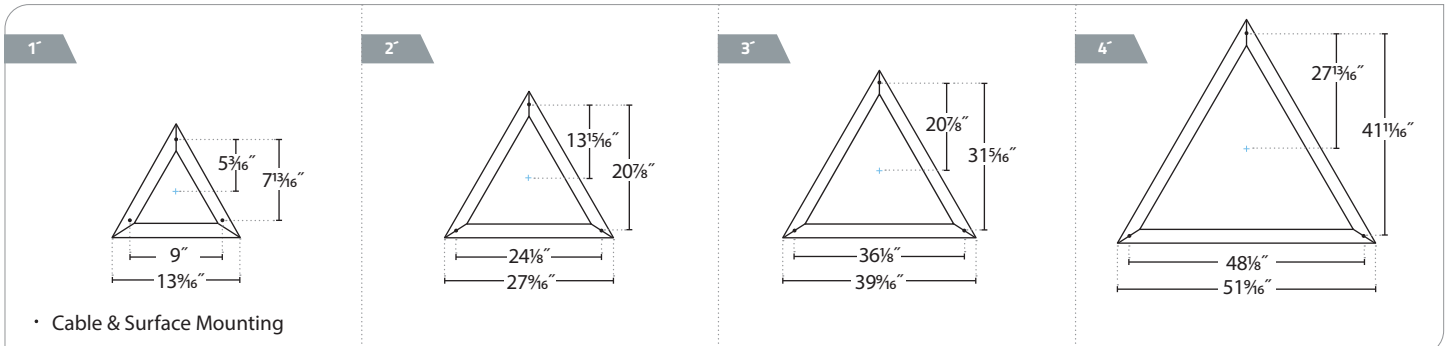


3SPM48", 96" or 144": Round Cast Aluminum Canopy
3SPM: 2', 3', 4' (3 Cables)



NOTE: Canopies cannot mount directly to t-bar grids

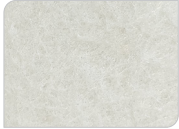
MOUNTING DIMENSIONS



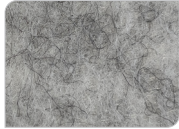


ACOUSTIC COLORS

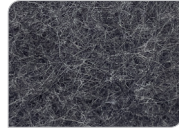
STANDARD



DB05 White



DB03 Marble

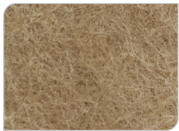


DB33 Grey

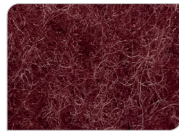
PREMIUM (LONGER LEAD TIMES)



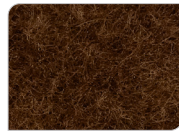
DB01 Sand Dollar



DB02 Oat



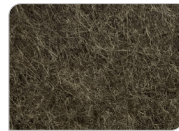
DB18 Maroon



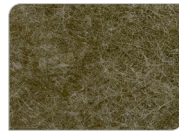
DB28 Hickory



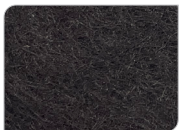
DB29 Brown



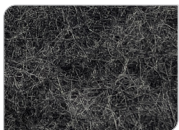
DB30 Earth Brown



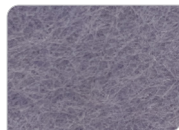
DB32 Stone



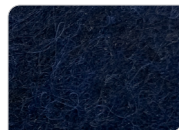
DB34 Charcoal



DB35 Pepper



DB06 Periwinkle



DB31 Blue Jean



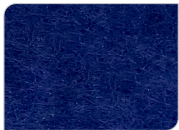
DB26 Midnight Blue



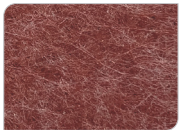
DB27 Teal



DB24 Sky Blue



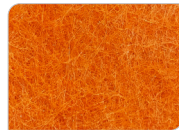
DB25 Navy



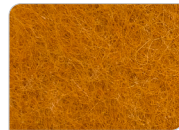
DB11 Berry



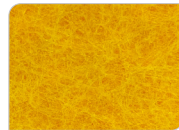
DB10 Red



DB16 Orange



DB17 Pumpkin



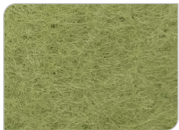
DB09 Yellow



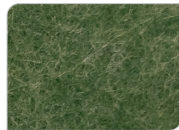
DB08 Lemon



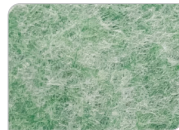
DB20 Lime



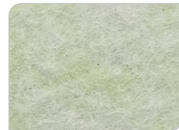
DB19 Pear



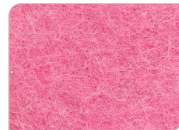
DB21 Green



DB22 Heather Green



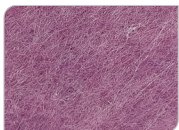
DB23 Honey Dew



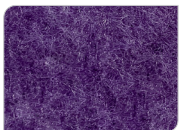
DB12 Pink



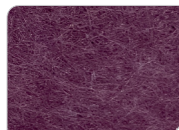
DB07 Salmon



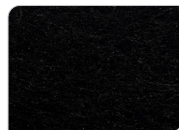
DB13 Lilac



DB14 Violet



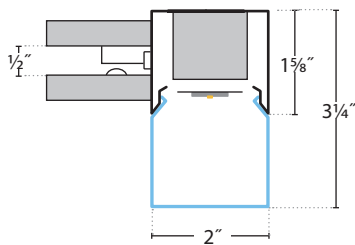
DB15 Purple



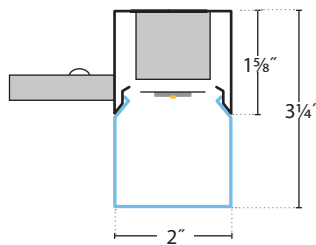
DB36 Black

Consult factory for Premium Color acoustic lead times.

CROSS SECTION



Two layers of acoustic with 1/2" air gap for better sound absorption



One layer acoustic for Surface Mounted



SOUND ABSORPTION

Why acoustical fixtures?

Open office, open ceilings, hard floors have replaced sound absorbing cubicles, acoustic ceilings and carpet, thus acoustics have declined, enter Acoustics.

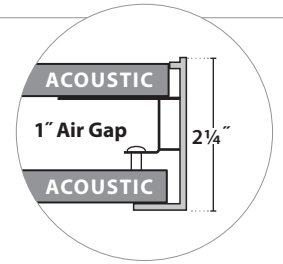
The benefits of Acoustics?

- Reduced echoes, background noise
- Improved sound quality
- A more peaceful space
- Enhanced aesthetics

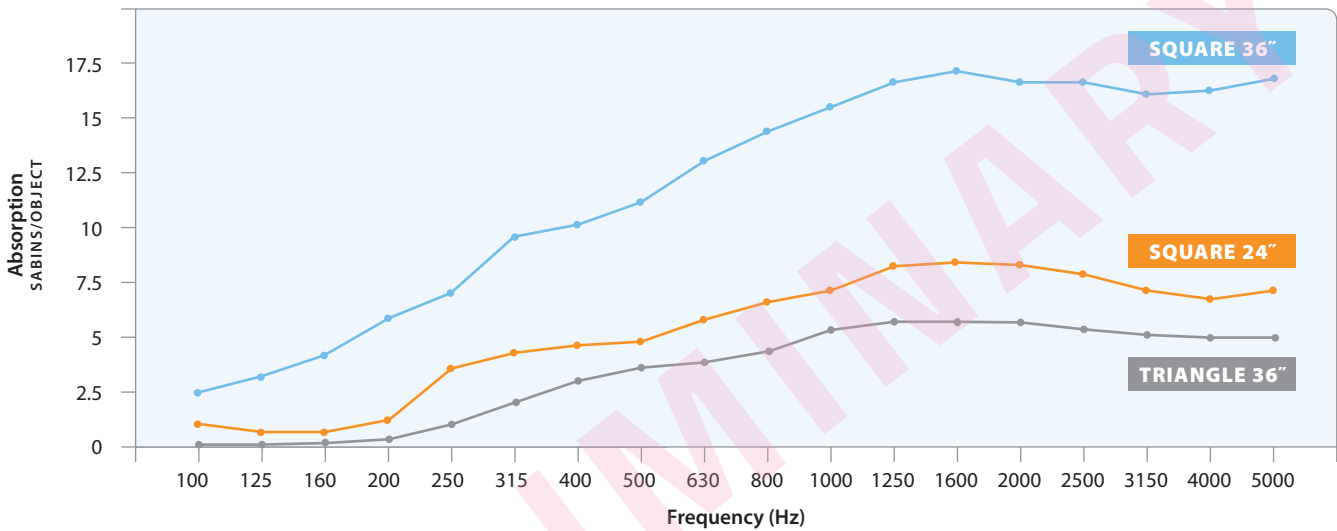
How can I calculate Acoustic sound absorption?

Sabins per object is the standard measurement. One Sabins is approximately 1ft² of sound absorption. Sound absorption varies at different frequencies.

For precise acoustic performance of a space, please consult an acoustician.



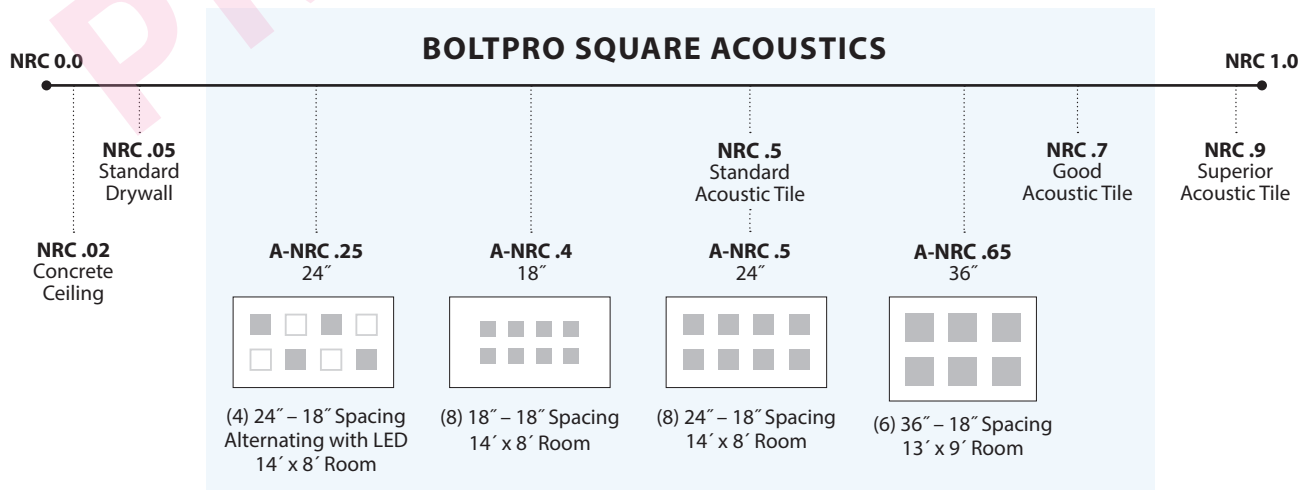
Two layers of acoustic trapping 1" of air for superior sound absorption



What is an NRC rating?

Noise Reduction Coefficient (NRC) is a rating for how much sound a surface absorbs according to the test method ASTM C423. Acoustic performance is measured using this rating. NRC is the average Sabins per square foot of surface covered. Apparent NRC (A-NRC) Ratings are calculated from the total Sabins measured for an object array over an area of projected continuous ceiling. This is equivalent to ceiling tile of the same NRC rating over the same installed area.

NRC ratings range from 0 to 1+





PRULITE ACOUSTIC CALCULATOR

How many Acoustic fixtures should you choose for your space? There are multiple factors when calculating acoustics, we have done our best to provide a simple guide for those who prefer not to calculate using Sabins per Object or NRC ratings.

1) Calculate the square feet of your space (L x W).

2) Choose the amount of acoustical improvement you want (sound absorption for reduced reverberation) and find the Acoustic VALUE based on room dimensions.

Estimated % of reduced reverberation time	SIZE	Room dimensions under 300 sq ft			Room dimensions over 300 sq ft		
		GOOD 👍	BETTER 👍👍	BEST 👍👍👍	GOOD 👍	BETTER 👍👍	BEST 👍👍👍
👍 GOOD 25%	36" Triangle Acoustic	20	15	10	30	20	15
👍👍 BETTER 37.5%	24" Square Acoustic	30	20	15	40	30	20
👍👍👍 BEST 50%	36" Square Acoustic	40	30	25	60	40	30

Calculations based on a 9' ceiling height.
Prudential Lighting Acoustic Calculator is a guide.
For precise acoustic performance, please consult an acoustician.

3) Use this Acoustic VALUE Formula to determine the number of luminaires recommended:

$$\text{Square feet} / \text{Acoustic VALUE} = \# \text{ of luminaires recommended}$$

Example:

$$20' \times 30' = \mathbf{600} \text{ square feet}$$

$$36'' \text{ BoltPro Square Acoustics seeking Better } (\sim 37.5\% \text{ reduced reverb}), \text{ Acoustic VALUE} = \mathbf{40}$$

$$\mathbf{600} / \mathbf{40} = \mathbf{15} \text{ BoltPro Square Acoustics recommended for the space}$$

NOTE: We are testing BoltPro Acoustical fixtures. this data is from our Gaze Square Acoustical fixtures which should be comparable.








LM79 & TM30 DATA:





	MEASURED CCT	MEASURED LUMENS	CRI	R9	DuV	SPD	TM30 — COLOR VECTOR	TM30 — COLOR DISTORTION
LED27	2680	80%	93	58	0.001		89 Rf	97 Rg
LED3	3042	95%	82	6	0.001		81 Rf	92 Rg
LED3-90	3016	85%	93	61	0.000		88 Rf	96 Rg
LED35	3482	100%	82	3	0.002		81 Rf	92 Rg
LED35-90	3417	85%	93	67	0.000		88 Rf	96 Rg
LED4	3952	102%	82	4	0.003		81 Rf	92 Rg
LED4-90	3882	85%	92	67	0.003		87 Rf	96 Rg
LED5-90	4889	85%	94	84	0.002		86 Rf	95 Rg



SENSORS

SENSORS NA - 11

				
205: Wattstopper	LVOC: Lutron Occupancy /Daylight Sensor	LVRF: Lutron Vive Control Node	NXSMP: Hubbell Occupancy /Daylight Sensor	ATHENA
Low voltage PIR fixture integrated occupancy sensor.	Measures light in the space (daylighting) while detecting people moving within an area using passive infrared to determine occupancy. Controls the lights to balance the light level in the space, combining convenience, exceptional energy savings, and ease of installation.	Provides wireless control of the fixture when neither occupancy nor daylight sensing is needed.	Hubbell Integrated/embedded networked lighting control, luminaire-level lighting control, LLLC. PIR motion sensor for automatic On/Off control. Integrated daylight sensor for daylight harvesting and/or lumen maintenance. Bluetooth radio provides wireless control of luminaire. Simple plug-in connection to NX Fixture Modules. Wireless Internet.	The Athena wireless node is a radio frequency (RF) device that enables simple, digital control of individual light fixtures in an Athena control system. The small size and compatibility with a wide variety of drivers allow for seamless integration with common commercial lighting fixtures from any manufacturer. Requires drivers with auxiliary power, consult factory for lead times

			
NLT-AIR-rIO: Daylight+Occ	NLT-AIR-ADCX: Daylight+(PIR Acoustic) Occ	NLT-WIRED-nIO: Daylight+Occ	NLT-WIRED-ADCX: Daylight+(PIR Acoustic) Occ
The rIO is a fixture embedded low voltage wireless nLight AIR device capable of individual fixture control and analog or digital dimming. This smart device results in the luminaire being “nLight AIR-enabled” — making it an addressable nLight AIR device. It uses a 900MHz radio to communicate with other nLight AIR devices, such as occupancy sensors, photocells, wall switches, powerpacks and other nLight AIR-enabled luminaires. This allows for advanced operation and design flexibility ranging from stand-alone rooms to building and campus-wide networks.	The nLight® AIR rES7 sensor is an in-fixture, low voltage, digital sensor providing embedded wireless lighting control, analog or digital dimming, occupancy detection and daylight harvesting capabilities. The rES7 is designed for mounting heights up to 20 ft in indoor luminaires. The rES7 sensor provides Passive Infrared (PIR) occupancy detection over a 15-20 ft (4.57 - 6.10 m) radial coverage pattern and photocell light level detection in one compact low profile design with optional Dual Technology, which adds Microphonics™ to PIR detection. The rES7 sensor is ideal for occupancy and daylighting control in suspended or recessed luminaires.	nLight digital nIO modules are low voltage control devices that enable digital control of LEDcode enabled eldoLED LED drivers. Through eldoLED's bi-directional 2-wire interface, these modules deliver natural, flicker-free high performance dimming while eliminating common issues related to 0-10 VDC alternatives. The modules also enable the eldoLED LED Drivers to be addressable, as well as capable of digitally communicating with other nLight controls such as occupancy sensors, photocells, and WallPods. This allows for advanced operation and design flexibility ranging from stand-alone rooms to building and campus-wide networks.	The nES7 is a small passive infrared occupancy sensor designed to be easily embedded into luminaires. This sensor provides excellent line of sight 360° PIR detection of small motion and walking motion. The nES7 is ideal for small rooms without obstructions or areas with primarily walking motion (e.g. corridors, library stacks). Additionally, an optional integrated photocell enables daylight harvesting control as well. Typically one or more nES7 sensors are paired with an nLight controller within an nLight enabled luminaire. For rooms like classrooms and private offices or any space with obstructions, the nES PDT 7 dual technology sensor is recommended.