

CUBE2-NRC

Project Name:	
Type:	



APPLICATION

The CUBE2-NRC offers an easy integration of lighting and acoustic solutions. While the acoustic provides an acoustic solution to the source of noise for optimal sound absorption, seamlessly designed acoustic felt gives design flexibility and personalization for any application. Perfect for places in need to reduce reverberation such as open offices and lobbies, retails, hospitality, reception areas and corridors, and commercial interiors.

FEATURE:

- Sound absorbing linear direct acoustic LED luminaire.
- Material rated for NRC (Noise Reduction Coefficient) of 0.90.
- Acoustic felt is 100% virgin polyester and 0.5" thick.
- 45 degree deburr design is standard. Flushed design is available upon request.
- Available in 6" to 24" nominal housing heights in 2" increments.
- Wide range of felt color (2 standards and 18 premium) options available. Refer to the last page for color offering.

MOUNTING:

- Pendant mount.

LED:

- High quality array LEDs.
- LM80
- Color Temperature: 2700/3000/3500/4000/5000 (K).
- Color Rendering Index: >80 (optional>90).
- Nominal Lamp Life: 100,000 hours.
- Reported L70 hours: +60,000 (55°C).

ELECTRICAL:

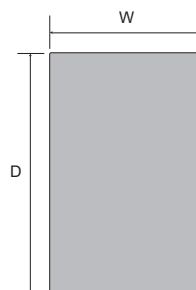
- High power factor electronic driver, operate from a 120 ~ 277 Vac input range, 50 / 60 Hz.
- Features included over voltage protection, surge, short circuit protection and over load protection.
- Power Factor: typical > 0.95, THD <20, meets Class1 or Class 2 circuit.
- 0-10V dimmable driver as standard.
- 0-10VDC dimming 1%~100%.
- Operating temperature: -4°F (-20°C) ~ 122°F (50°C).
- <ELCU-200>
- Guarantees emergency lighting remains ON or is turned on when power to the control device is lost.
- Interfaces with fire alarm panel or security system.
- "Watchdog" feature allows emergency loads to be controlled in tandem with normal power loads.
- UL listed for use in emergency circuits.

FINISH:

- Fixture is powder-coated in standard white finish.
- Comes with snap-in acrylic lens as standard.

LISTING:

- UL / CUL listed.
- Listed to UL 1598 and UL 8750.
- UL listed for dry & damp location.
- DLC listed. ¹¹
- CEC Compliant EM (please contact for more information)
- Assembled in USA (optional).
- BAA compliant (optional).
- Trade Agreements Act compliant (optional).
- 5 years limited warranty.
- 7 or 10 years limited warranty. (optional) ⁶
- Bluetooth Mesh System available, please contact factory for more information.



Specifications: CUBE2-NRC

Width: 3.5 (88.9)
Depth: MIN.6 (152.4)

All dimensions are in inches (millimeters).

WEIGHT

Item	lbs	kg
CUBE 2 2FT PENDANT	6.76	3.07
CUBE 2 3FT PENDANT	8.91	4.04
CUBE 2 4FT PENDANT	10.78	4.89
CUBE 2 8FT PENDANT	19.71	8.94
CUBE 2 HC90 PENDANT	15.19	6.89
CUBE 2 X PENDANT	15.08	6.84
CUBE 2 T PENDANT	10.45	4.74



FL

CUBE2-NRC

CONFIGURATIONS

Series	Size	Model #	AC Input	Fixture Lumen Output (4000K)		Lumen Efficiency (4000K)
CUBE2	2'	18L	9.9W	1280.46 lm (100% Down)	1280.46 lm	129.34 lm/W
		27L	14.85W	1641.66 lm (100% Down)	1641.66 lm	110.55 lm/W
		36L	19.8W	2122.36 lm (100% Down)	2122.36 lm	107.19 lm/W
		48L	26.4W	2811.6 lm (100% Down)	2811.6 lm	106.5 lm/W
		54L	29.7W	3146.41 lm (100% Down)	3146.41 lm	105.94 lm/W
	3'	18L	14.85W	1921.29 lm (100% Down)	1921.29 lm	129.38 lm/W
		27L	22.27W	2461.50 lm (100% Down)	2461.50 lm	110.53 lm/W
		36L	29.7W	3182.95 lm (100% Down)	3182.95 lm	107.17 lm/W
		48L	39.6W	4217.4 lm (100% Down)	4217.4 lm	106.5 lm/W
		54L	44.55W	4720.51 lm (100% Down)	4720.51 lm	105.96 lm/W
	4'	18L	19.8W	2562.12 lm (100% Down)	2562.12 lm	129.40 lm/W
		27L	29.7W	3283.33 lm (100% Down)	3283.33 lm	110.55 lm/W
		36L	39.6W	4244.72 lm (100% Down)	4244.72 lm	107.19 lm/W
		48L	52.8W	5623.2 lm (100% Down)	5623.2 lm	106.5 lm/W
		54L	59.4W	6294.02 lm (100% Down)	6294.02 lm	105.96 lm/W
	5'	18L	24.75W	3202.15 lm (100% Down)	3202.15 lm	129.38 lm/W
		27L	37.13W	4104.72 lm (100% Down)	4104.72 lm	110.55 lm/W
		36L	49.5W	5305.9 lm (100% Down)	5305.9 lm	107.19 lm/W
		48L	66W	7029 lm (100% Down)	7029 lm	106.5 lm/W
		54L	74.25W	7866.78 lm (100% Down)	7866.78 lm	105.95 lm/W
	6'	18L	29.7W	3842.58 lm (100% Down)	3842.58 lm	129.38 lm/W
		27L	44.55W	4925 lm (100% Down)	4925 lm	110.55 lm/W
		36L	59.4W	6367.08 lm (100% Down)	6367.08 lm	107.19 lm/W
		48L	79.2W	8434.8 lm (100% Down)	8434.8 lm	106.5 lm/W
		54L	89.1W	9400.14 lm (100% Down)	9400.14 lm	105.95 lm/W
	8'	18L	39.6W	5124.24 lm (100% Down)	5124.24 lm	129.40 lm/W
		27L	59.4W	6566.67 lm (100% Down)	6566.67 lm	110.55 lm/W
		36L	79.2W	8489.45 lm (100% Down)	8489.45 lm	107.19 lm/W
		48L	105.6W	11246.4 lm (100% Down)	11246.4 lm	106.5 lm/W
		54L	118.8W	12588.05 lm (100% Down)	12588.05 lm	105.96 lm/W

OUTPUT CURRENT

		Bi-Level		Tri-Level (Default)	
SW1	SW2	Config Range	Default	Config Range	Default
Close	Open	10% - 70%	40%	10% - 70%	30%
Open	Close	10% - 70%	40%	10% - 70%	70%
Close	Close	100%	100%	100%	100%
Open	Open	0%	0%	0%	0%

Multiplier			
CCT	3000K	3500K	5000K
Down only	0.9642	0.9822	1.0357

ORDERING INFORMATION

* These custom products are non-cancellable, non-returnable, and non-refundable with the exception of manufacturer defects or damages.

EXAMPLE: CUBE2-NRC-IND-4-D27L-40K-UNV-SM

MODEL	ROW ¹		SECTION ²		HEIGHT (heights are nominal)		LED Downlight (per/4ft section)		COLOR TEMP.		CRI	
CUBE2-NRC	IND	Individual Mount	2	2' Length	6	6" (Minimum)	D18L	18W LED (734 lm/ft)	-27K	2700K ¹⁰	(Blank)	80+ CRI
	CON	Continuous Row Mount	3	3' Length	8	8"	D27L	27W LED (924 lm/ft)	-30K	3000K	C9	90+ CRI ⁹
			5	5' Length	10	10"	D36L	36W LED (991 lm/ft)	-35K	3500K		
			4	4' Length	12	12"	D54L	54W LED (1467 lm/ft)	-40K	4000K		
			6	6' Length	XX	Custom Height, Max. 24" (2" increments)	NL	Non-Lit	-50K	5000K		
			8	8' Length ³								
* Number of circuit(s) should be determined by the customer prior to ordering the continuous run considering the AC input voltage and total run wattage. * Maximum wattage per 4ft section - 54W (down light) * Contact factory for custom wattage or lumen requirement.												

MOUNTING		VOLTAGE		EM SECTION ⁴		FINISH (fixture) ¹²		FINISH (baffle)		BAFFLE STYLE	
(Blank)	Pendant	UNV	120-277V	(Blank)	None EM	(Blank)	Matte White RAL #9003 (Std.)	SL	Slate	(Blank)	45° regressed
		120	120V	1SE	1 Section	*BK	Black RAL #9011	PW	Pewter	FL	Flat
		277	277V	2SE	2 Section	*SV	Silver (Cardinal #T353-GR06)	CC	Premium Color (choose 2 letters from the last page)		
		347	347V ¹⁷	xSE	x Section	**CC	Custom Color ¹⁵				
						*AMB	Anti-Microbial Coating (Matte Skye White)				
* Non-standard finish with extra charge. ** Additional charge & set up fee. * Contact factory for lead time and pricing for premium color.											

CUBE2-NRC

CORD FINISH (for pendant)		CANOPY FINISH (for pendant)		CEILING TYPE (for pendant)		SUSPENSION LENGTH (for pendant)	
(Blank) *BKC	White (Std.) Black	(Blank) *BC *SC **CSS	White (Std.) Black Canopy Silver Canopy Custom Canopy Color (White is Std.)	X1 X2 X3 X5	T-bar ceiling Hard ceiling Sloped Hard ceiling 9/16" Screw Slot ceiling	AC48 AC96 ST24 ST48	Adjustable Aircraft Cable Canopy 48"L Adjustable Aircraft Cable Canopy 96"L Stem Canopy 24"L Stem Canopy 48"L
* Non-standard finish with extra charge. ** Additional charge & set up fee.		* Non-standard finish with extra charge. ** Additional charge & set up fee.				* add "FC" at the end of stem length for field cuttable stem kit (Ex) ST48FC)	

LED DRIVER		OPTIONS	
(Blank) ES566 SD40 SDXX PHSR PHDL TDM TD30/70 TDXX/YY LDE1 ELV TRIOT DTO LTEA2W BLT	0-10V dim to 1% (Std.) eldoLED SOLDrive Natural Dimming to dark, 0-10V, 100% ~ 0.1% dim 40% / 100% Bi-Level Step dim XX% / 100% Bi-Level Step dim (Specify XX : 10% ~ 70%) Philips Xitanium Sensor-Ready, Dali 5%~100% dim. Philips Xitanium DALI driver, Dim to 5% Triac Dim. (120V only) 30% / 70% / 100% Tri-Level Step dim XX% / YY% / 100% Tri-Level Step dim (Specify XX, YY : 10% ~ 70%) Hi-lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology, 100% ~ 1% dim ELV compatible (reverse-phase or trailing-edge), (120V only) Tridonic IoT ready, 1-100% dim via Smart Module Interface (SMI), automated dimming/ lighting controls via Enlighted Sensor Interface 0-10V DIM-TO-OFF Hi-lume 1% 2-wire LED driver (120V forward phase only) ¹⁹ Bluetooth Mesh System (contact factory for more information)	EMG8 EMG15 EMG20 EMG25 ELCU-200 GLR GMF ARRA BAA TAA O7W O10W AMS DPMS SO LSR-301-S LSR-301-P	1296 LUMEN EM Battery Backup (CEC Compliant EM) ^{7, 20} 2430 LUMEN EM Battery Backup (CEC Compliant EM) ^{7, 20} 3240 LUMEN EM Battery Backup (CEC Compliant EM) ^{7, 20} 4050 LUMEN EM Battery Backup (CEC Compliant EM) ^{7, 20} Fail-to-on Emergency lighting, UL924 ⁸ Fast Blow Fuse ¹⁸ Slow Blow Fuse ¹⁸ Assembled in USA for Buy American Act BAA(Buy American Act) and BABA(Build America Buy America) compliant Trade Agreements Act compliant Optional 7 Years Limited Warranty ⁵ Optional 10 Years Limited Warranty ⁵ Bluetooth Mesh Wireless Sensor. Occupancy/Daylight/0-10V Dimming ²² Daylight Dimming Photo Sensor (0-10 VDC Control), (LSR-301-S required if FD-301 is installed) ²¹ Dimming Wires connected to Sensor Only (available option on FS-205 non-Bluetooth AMS sensor only) ⁶ Setup Remote Control for DPMS (Required for DPMS) Occupant Remote Control for DPMS

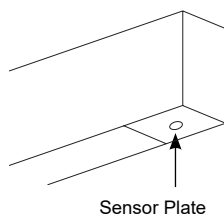
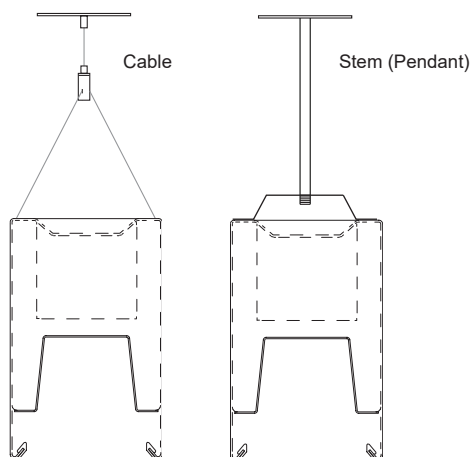
LIGHTING CONTROL SYSTEM	
LUTRON VIVE	<Lutron Vive System Enabled>  Click Here!
SNS200 RS-IR	<EasySense> EasySense Fixture-mount occupancy sensing, daylight harvesting and task tuning in one device (Must be ordered with PHSR driver) ^{13, 16} IR dongle v2.0 for EasySense control
SU-5E	<Enlighted> Enlighted IoT ready 0-10V Indoor Micro sensor with occupancy/vacancy detection, daylight harvesting, thermal sensing, task tuning, and room and zone control, Bluetooth enabled (Must be ordered with TRIOT) ¹⁴
RS-WS	Enlighted Room controller providing basic control functions of a standard wall switch with preset dimming capability
IFS105SE PPA102S	<Bluetooth> Bluetooth Mesh Wireless Sensor. Occupancy/Daylight/0-10V Dimming Bluetooth Powerpack (Consult factory for installation location)
CASAMBI	Contact factory for CASAMBI READY options

NOTES:

- Specify only when Continuous Row Mount.
- No need to select, if same as row length and section length.
- Comes with 1pc 8ft lens.
- EM is installed in last 4' of luminaire sections. Separate section required 2SE or specified.
Must specify voltage, not available with 347V.
- This limited warranty covers electrical parts only and does not apply to labor, equipment lease, or defect from improper installation or operation.
- Dimming wires provided and connected to sensor only, not for dimmer switch.
(available with AMS and DPMS option)
- Contact factory for other emergency ballast options.
- Shipped separately.
- Lumen per watt is around 15% less than standard CRI (80+).
- Available with C9 (CRI 90+) only.
- DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

- Cord is available in white or black. (Black is not available for the EM option)
- See NFC and IR manual in the separate attachment. If your phone is not compatible, please order "RS-IR" and follow the manual.
- "RS-WS" option can be added if wish to have a wall switch, please see Enlighted Room Controller in the separate attachment.
- Refer to color charts (RAL and/or Cardinal) in the separate attachment.
- Refer to Advanced Grouping Datasheet for its default setting and compatible wireless switches.
- 347V cannot work with Emergency Battery Backup.
- Must specify voltage, not available with 347V.
- Not available with any 1ft individual configuration due to space limitations.
- For 3ft configuration, EM can only be remote mounted. Remote box is provided by others.
- Automatic on/off is not available. For automatic on/off, additional occupancy sensor is required or a manual on/off switch can be done.
- With TDM/ELV/SDxx/TDxx: Only available with line-voltage on/off occupancy sensor.

CUBE2-NRC



Sensor Plate

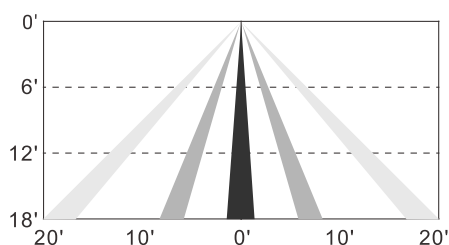


Lutron Vive Integral
fixture control installation

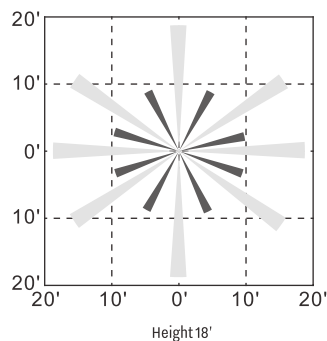


EasySense
fixture-mount installation

SIDE VIEW



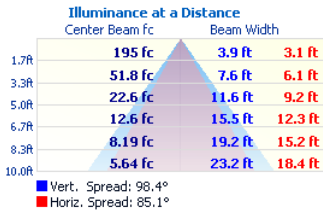
TOP VIEW



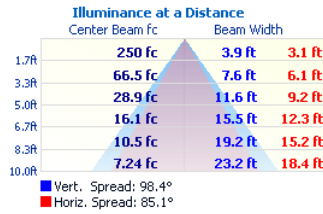
AMS, IFS105SE coverage pattern

CUBE2-NRC

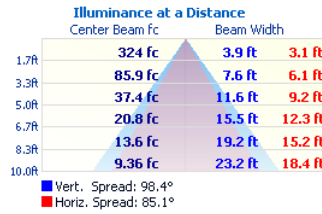
CUBE2-2-18L



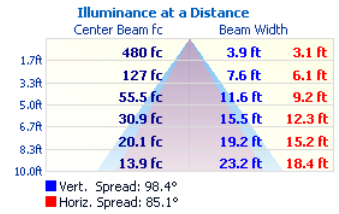
CUBE2-2-27L



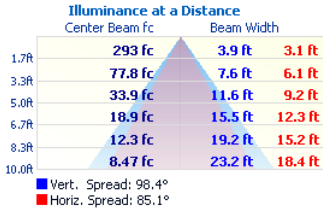
CUBE2-2-36L



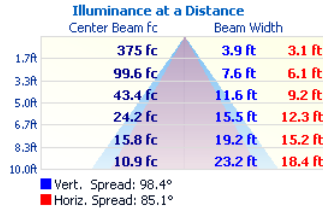
CUBE2-2-54L



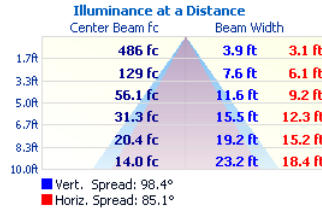
CUBE2-3-18L



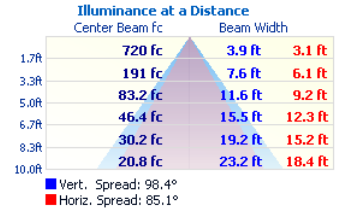
CUBE2-3-27L



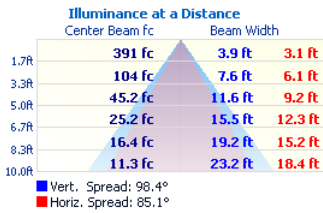
CUBE2-3-36L



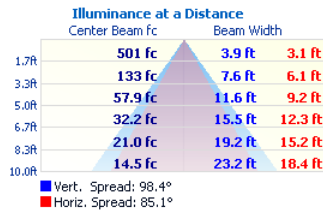
CUBE2-3-54L



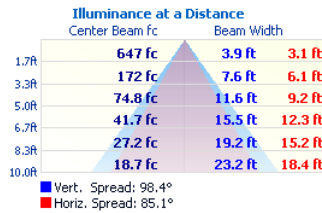
CUBE2-4-18L



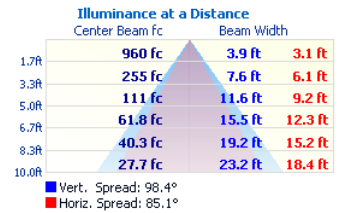
CUBE2-4-27L



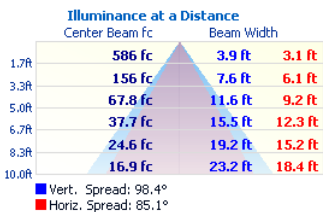
CUBE2-4-36L



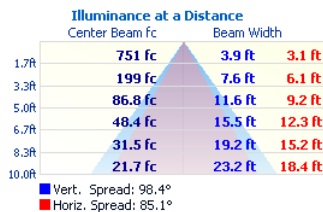
CUBE2-4-54L



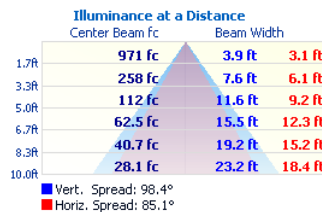
CUBE2-6-18L



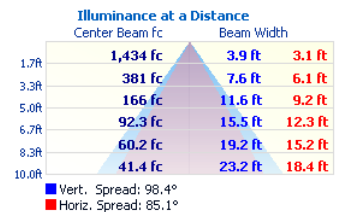
CUBE2-6-27L



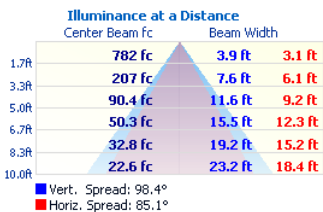
CUBE2-6-36L



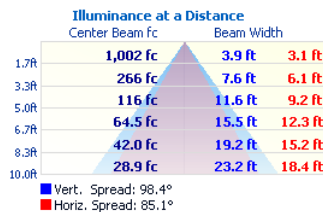
CUBE2-6-54L



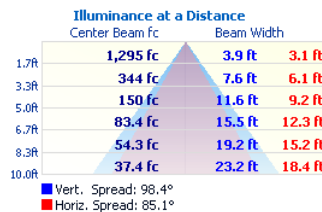
CUBE2-8-18L



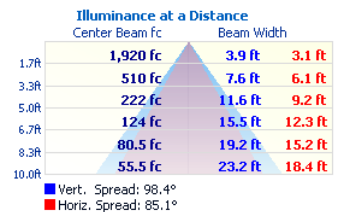
CUBE2-8-27L



CUBE2-8-36L



CUBE2-8-54L



COMPATIBLE DIMMER SWITCH (TABLE 1)

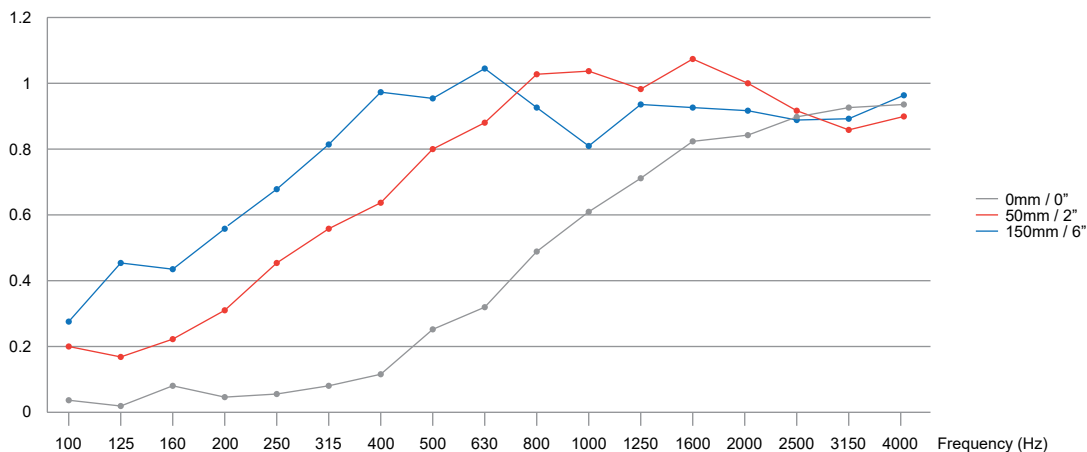
Model #	Brand	Compatible Dimmer Switch	
(Blank)	-	<Leviton>	IP710-LFZ
		<Lutron>	Visit www.lutron.com/advance for a list of dimmers (Mark VII) that will work with this driver.
ES566	eldoLED SOLOdrive	<Busch-Jaeger>	2112U-101
		<Jung>	240-10
		<Leviton>	IlumaTech - IP710-DLX
		<Lightoller Controls>	ZP600FAM120
		<Merten>	5729
		<Pass & Seymour>	CD4FB-W
		<Wattstopper>	DCLV1
		<Sensor Switch>	nIO EZ
		<Synergy>	ISD BC
		<ABB>	SD/S 2.16.1
		<Lutron>	Nova T: NTFTV Diva - DVTV-xx, NFTV GRAFIK Eye: GRX-TVI w GRX3503 Energy Savr Node: QSN-4T16-S TVM2 Module
		<Crestron>	GLX-DIMFLV8, GLXP-DIMFLV8, GLPAC-DIMFLV4-*, GLPAC-DIMFLV8-*, GLPP-DIMFLVEX-PM, GLPP-1DIMFLV2EX-PM, GLPP-1DIMFLV3EX-PM, DIN-AO8, DIN-4DIMFLV4, CLS-EXP-DIMFLV, CLCI-1DIMFLV2EX
LDE1	Lutron Hi-lume 1% EcoSystem	<Lutron>	PowPak Dimming Modules: RMJ-ECO32-DV-B, FCJ/FCJS-ECO ^{1, 2} Energi Savr Node (120V only): QSN-1ECO-S, QSN-2ECO-S GRAFIK Eye QS/Homeworks QS control unit (120V only): QSGRJ- E(wireless) QSGR- E Quantum Hub (120V only): QP2- _ 2C/4C/6C/8C Homeworks QS/myRoom Plus power module (120V only): LQSE-2ECO-D
PHSR ³	Philips Xitanium Sensor-Ready	<Ilumra>	<u>Single Rocker Self-Powered Light Switch (on/off, dim-up/down)</u> Ilumra# ZBT-S1AWH Digi-Key# 1082-1033-ND <u>Dual Rocker Self-Powered Light Switch (on/off, dim-up/down, scene1,2)</u> Ilumra# ZBT-S2AWH Digi-Key# 1082-1034-ND
TDM	KEYSTONE	<Lutron>	Diva DV-600P, SkyLark S-600P, Ariadni AY-600P, Ariadni TG-603P, Maestro MA-600 (Digital), Diva CFL/LED DVCL-153P, Satin Colors DVSC-600P-SW
ELV	KEYSTONE	<Leviton>	6641, IlumaTech IPI06-1LX, ToggleTouch TGI06-1LW (Digital)
ELV	KEYSTONE	<Lutron>	MAELV-600BL (Digital), DVELV-300P, SkyLark SELV-300P
DTO	Philips Xitanium Gen.2 Philips Xitanium Sensor-Ready	<Lutron>	Nova T: #NTSTV-DV http://www.lutron.com/TechnicalDocumentLibrary/NovaTB.pdf See page13.
LTEA2W	Lutron Hi-lume 2-wire (120V forward voltage only)	<Lutron>	Visit http://www.lutron.com/TechnicalDocumentLibrary/369543_ENG.pdf for a list of compatible dimmer switches.

NOTES:

1. All devices connected to one FCJ/FCJS-ECO will be controlled together. Devices will dim to the same level as the result of a control command.
For more detail on adjusting low-end light level refer to Application Note#556 at www.lutron.com.
2. For the Line/Hot (L/H) terminal on the driver, it is preferred not to use the switched hot (red) wire from the control but rather the hot wire directly from the power source.
3. Recommended for EasySense System.

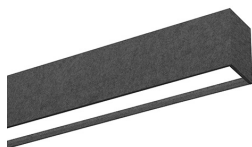
NRC COMPARISON

Frequency/Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	ā	NRC
0mm / 0"	0.03	0.01	0.09	0.04	0.05	0.09	0.12	0.25	0.32	0.49	0.61	0.72	0.82	0.85	0.91	0.94	0.95	0.44	0.45
50mm / 2"	0.20	0.16	0.22	0.32	0.46	0.56	0.63	0.80	0.89	1.03	1.04	0.99	1.07	1.00	0.93	0.87	0.92	0.81	0.80
150mm / 6"	0.29	0.46	0.44	0.57	0.68	0.81	0.97	0.96	0.91	1.04	0.92	0.80	0.94	0.94	0.91	0.90	0.91	0.97	0.90

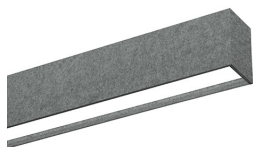


CUBE2-NRC

<STANDARD>

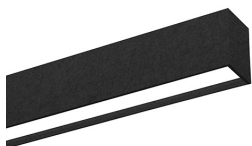


SL: SLATE



PW: PEWTER

<PREMIUM>



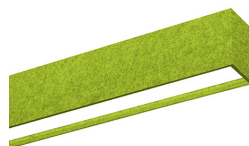
TR: TAR



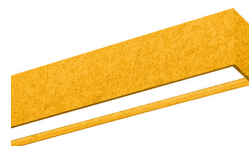
MD: MANDARIN



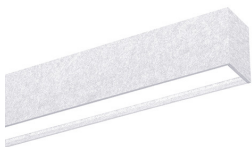
OC: OCHRE



GR: GRASS



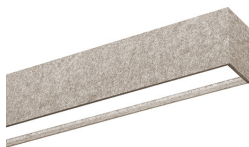
SS: SUNSHINE



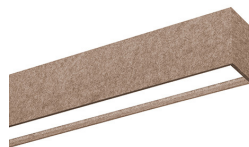
FR: FROST



IV: IVORY



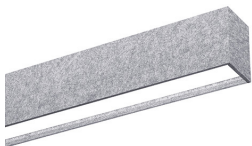
LN: LINEN



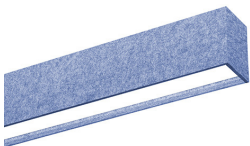
EC: ECRU



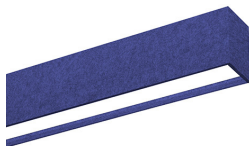
BR: BARK



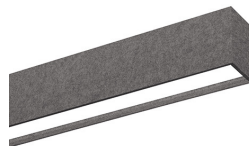
CH: CHAMBARY



SK: SKY



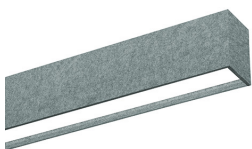
CB: COBALT



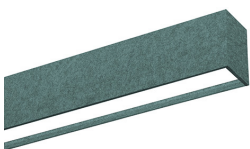
FO: FOSSIL



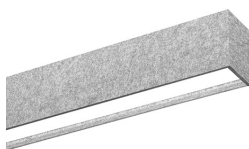
GE: GREIGE



CD: CADET



MC: MALACHITE



SM: SMOKE

1. Standard finish is free of charge.
2. Premium finish with extra charge. Please contact factory for more information.