

UBIK CUBE

RECESSED

CHROMAWERX - SOLA AND DUO

LUMENWERX



Project: _____

Type: _____

DESCRIPTION

Sleek square form meets superb function in Ubik, a lighting family designed to provide a multitude of creative options. The Ubik Cube Recessed linear downlight is available in three lengths to address anything from minor accent lighting to a major wall wash. These compact 2" wide recessed fixtures are offered with HLO and parabolic louver and wall wash optics for direct illumination.



Up to 137 lm/W performance

OPTICS

Parabolic Louver



Matte White

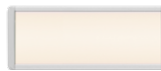


Matte Silver



Matte Black

High-Efficiency Lambertian Optic



Wall Wash Optic



Matte White



Matte Silver



Matte Black

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MOUNTING

Consult pages 4-5 for details before specifying

Mounting and light engine can be ordered separately.

LUMINAIRE ID	INSTALLATION TYPE	MOUNTING OPTION	TRIM TYPE
UBICUBR6 - Ubik Cube Recessed 6" UBICUBR12 - Ubik Cube Recessed 12" UBICUBR18 - Ubik Cube Recessed 18"	OF - Open frame new construction IC - IC rated new construction CP - Chicago Plenum (CCEA) MW - Millwork RM - Remodel	ACB ¹ - Adjustable commercial bar hangers (grid and drywall) ASB ¹ - Adjustable standard bar hangers (grid and drywall) FMB ¹ - Flush mount bars (drywall only) AHC ¹ - Adjustable hat channel bars MWF ² - Millwork frame (direct mount plate without bars) ¹ Not available with millwork installation type. ² Only available with millwork installation type. NA - Not applicable	TRM - Trim TRL ³ - Trimless DMF - Drywall mud flange ³ Not available for remodel or grid ceiling.

LIGHT SOURCE ⁴	OPTIC	CRI
SOLA - Dim-to-warm single channel control 35K to 22K DUO - Tunable white 2-channel control 65K to 27K ⁴ Static white and BIOS also available. Consult other spec sheet.	MWPL - Matte White Parabolic Louver MSPL - Matte Silver Parabolic Louver MBPL - Matte Black Parabolic Louver HLO - High-Efficiency Lambertian Optic WWW - Wall Wash White Optic WWS - Wall Wash Silver Optic WWB - Wall Wash Black Optic	80 - 80CRI 90 - 90CRI

LIGHT ENGINE

Consult pages 4-5 for details before specifying

Mounting and light engine can be ordered separately.

LUMINAIRE ID	LIGHT SOURCE ⁴	OPTIC	CRI
UBICUBRL6 - Ubik Cube Recessed 6" UBICUBRL12 - Ubik Cube Recessed 12" UBICUBRL18 - Ubik Cube Recessed 18"	SOLA - Dim-to-warm single channel control 35K to 22K DUO - Tunable white 2-channel control 65K to 27K ⁴ Static white and BIOS also available. Consult other spec sheet.	MWPL - Matte White Parabolic Louver MSPL - Matte Silver Parabolic Louver MBPL - Matte Black Parabolic Louver HLO - High-Efficiency Lambertian Optic WWW - Wall Wash White Optic WWS - Wall Wash Silver Optic WWB - Wall Wash Black Optic	80 - 80CRI 90 - 90CRI

TRIM TYPE	TRIM FINISH
TRM - Trim TRL ³ - Trimless DMF - Drywall mud flange ³ Not available for remodel or grid ceiling.	W - Matte white AL - Aluminum B - Matte black CF# - Custom finish, specify RAL#

ORDERING CODE

Ubik Cube components can be ordered and shipped separately. Use these codes when specifying as separate lines.

<u>MOUNTING CODE</u>	_____	_____
<u>LIGHT ENGINE CODE</u>	_____	_____
<u>REMOTE DRIVER CODE</u>	_____	_____

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Project: _____

Type: _____

REMOTE DRIVER SPECIFICATION

Consult page 6 for details before specifying

Continue here for full remote driver specifications. Remote driver can be ordered separately.

REMOTE DRIVER ID	LUMINAIRE QTY	LUMINAIRE ID	VOLTAGE	LUMEN PACKAGE			REMOTE DRIVER ^{5, 6, 7}	
RDB# - Remote driver box If multiple driver boxes are needed, please specify a line number for each driver type used.	#X - Number of luminaires Please specify number of luminaires per remote driver. (e.g. 3X) For the minimum and maximum number of lighting units per driver, refer to the tables on page 6.	UBICUBR6 - Ubik Cube Recessed 6" UBICUBR12 - Ubik Cube Recessed 12" UBICUBR18 - Ubik Cube Recessed 18"	120 - 120V 277 - 277V	Eco Low Medium	6" E250 lm L375 lm M500 lm	12" E500 lm L750 lm M1000 lm	18" E750 lm L1125 lm M1500 lm	SOLA RSD1 - 1% 0-10V DUO RDMX ⁷ - DMX, to specify see pages 11 to 13 RDDA ⁷ - DALI DT6 RDDA8 ⁷ - DALI DT8 RDD1 - 1% 0-10V RPSQO ⁷ - Lutron T-series 1% Tunable White ⁵ PoE (Power-over-Ethernet) compatible. Consult factory for details. ⁶ For configurations with different Ubik Cube sizes on a remote driver, please consult factory. ⁷ On-site commissioning is required.

ORDERING CODE

Ubik Cube components can be ordered and shipped separately. Use these codes when specifying as separate lines.

<u>MOUNTING CODE</u>	_____	_____
<u>LIGHT ENGINE CODE</u>	_____	_____
<u>REMOTE DRIVER CODE</u>	_____	_____

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LUMENWERX

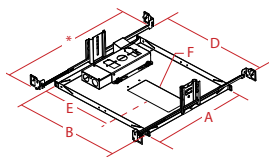
MOUNTING

Ubik Cube can be installed in a wide range of ceiling conditions and with various ceiling trim options. Spring clips clamp the lighting engine to the mounting frame (or directly to the ceiling for remodel). Maximum ceiling thickness is 1.25".

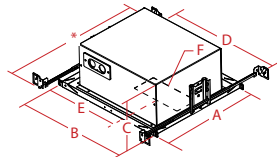
INSTALLATION TYPE

	A HOUSING WIDTH	B HOUSING LENGTH	C HOUSING HEIGHT	D SPACING BETWEEN BARS	E DISTANCE FROM CUT-OUT	F CUT-OUT DIMENSIONS		G MUDPLATE DIMENSIONS
						TRIM / DRYWALL MUD FLANGE	TRIMLESS	
UBICUBR6	13"	14"	5 3/8"	14 13/16"	9 13/64"	2 29/32" x 6 19/32"	2 3/4" x 6 1/2"	5 5/16" x 9 3/32"
UBICUBR12	13"	15 1/2"	5 3/8"	16 1/4"	7 3/4"	2 29/32" x 12 19/32"	2 3/4" x 12 1/2"	5 5/16" x 15 1/16"
UBICUBR18	11 13/32"	21 19/32"	5 3/8"	22 5/16"	10 25/32"	2 29/32" x 18 19/32"	2 3/4" x 18 1/2"	5 5/16" x 21 1/16"

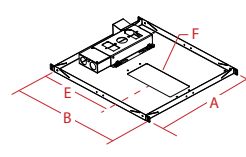
* For detailed mounting option dimensions, see page 5. Drawings shown with adjustable standard bar hangers.



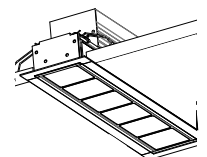
OF
Open Frame



IC or CP
Type-IC/ Chicago Plenum

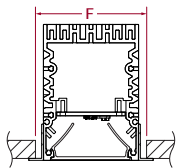


MW
Millwork

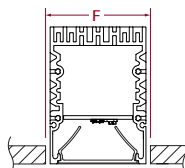


RM
Remodel

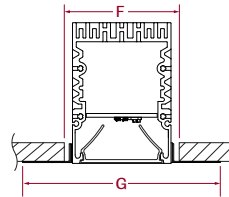
TRIM TYPE



TRM
Trim



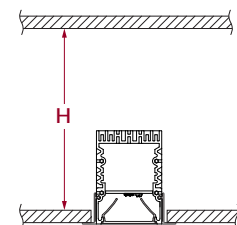
TRL
Trimless



DMF
Drywall Mud Flange

PLENUM CLEARANCE DIMENSIONS

	H PLENUM CLEARANCE HEIGHT	
	OPEN FRAME / MILLWORK / REMODEL	TYPE IC / CHICAGO PLENUM
UBICUBR6	6"	5 1/2"
UBICUBR12	4"	5 1/2"
UBICUBR18	4"	5 1/2"



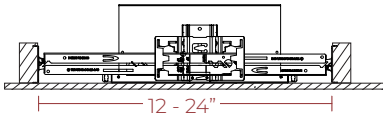
UBIK CUBE

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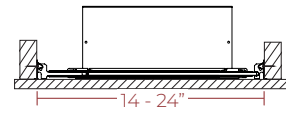
CHROMAWERX - SOLA AND DUO

LUMENWERX

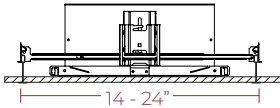
MOUNTING OPTIONS



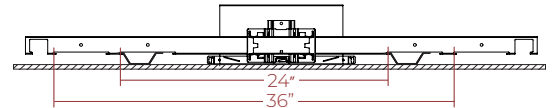
ACB - Adjustable commercial bar hangers
Grid ceiling, drywall, metal, wood, frame mounting
(also openings for multiple hanging options such as hat channel, IC channel and metal tubing, supplied by others)



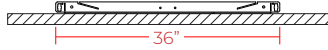
FMB - Flush mount bracket
Drywall/metal/wood frame mounting
(residential applications)



ASB - Adjustable standard bar hangers
Grid ceiling or drywall with variable height (commercial applications)



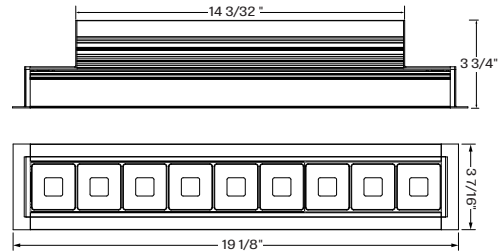
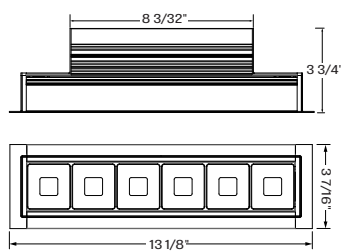
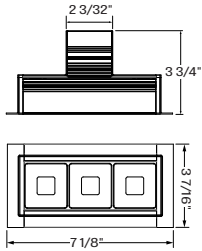
AHC - Adjustable hat channel bars
With adjustable height



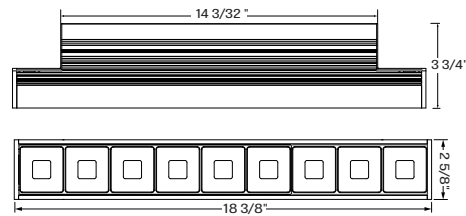
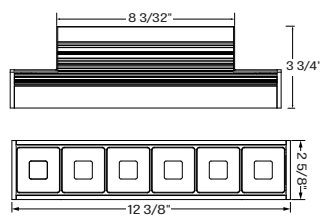
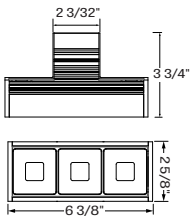
MWF - Direct mount plate without bars for millwork ceilings

FIXTURE DIMENSIONS

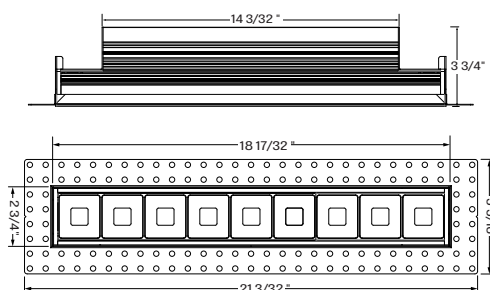
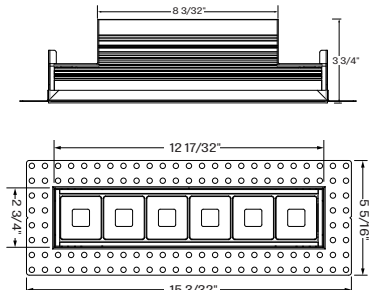
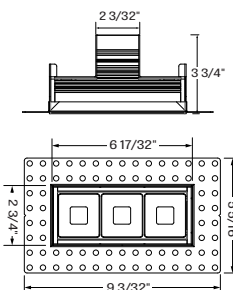
TRM - TRIM



TRL - TRIMLESS



DMF - DRYWALL MUD FLANGE



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DRIVER

REMOTE DRIVER

The remote driver can power several lighting units, depending on their total power. The minimum and maximum number of lighting units and driver type are shown in the table below and must be observed. The remote driver and lighting units are wired together through connection boxes, which are furnished pre-wired to the driver enclosure. All wiring is Class 2 with quick-splice connectors. The remote driver requires access from above the ceiling (or an access panel).

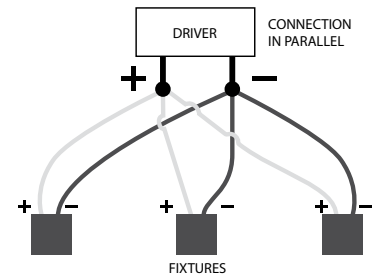
REMOTE DRIVER ID	LUMINAIRE QTY	LUMINAIRE ID	VOLTAGE	LUMEN PACKAGE			REMOTE DRIVER ^{1,2}	
RDB# - Remote driver box If multiple driver boxes are needed, please specify a line number for each driver type used.	#X - Number of luminaires Please specify number of luminaires per remote driver. (e.g. 3X) For the minimum and maximum number of lighting units per driver, refer to the tables on page 6.	UBICUBR6 - Ubik Cube Recessed 6" UBICUBR12 - Ubik Cube Recessed 12" UBICUBR18 - Ubik Cube Recessed 18"	120 - 120V 277 - 277V	Eco	6" E250 lm	12" E500 lm	18" E750 lm	SOLA RSD1 - 1% 0-10V DUO RDMX ³ - DMX, to specify see pages 11 to 13 RDDA ³ - DALI DT6 RDDA8 ³ - DALI DT8 RDD1 - 1% 0-10V RPSQO ³ - Lutron T-series 1% Tunable White ¹ PoE (Power-over-Ethernet) compatible. Consult factory for details. ² For configurations with different Ubik Cube sizes on a remote driver, please consult factory. ³ On-site commissioning is required.
				Low	L375 lm	L750 lm	L1125 lm	
				Medium	M500 lm	M1000 lm	M1500 lm	

NUMBER OF LIGHTING UNITS PER DRIVER - MINIMUM AND MAXIMUM

Based on 750lm/ft, matte white finish for wall wash optic and parabolic louvers. Range may differ based on lumen package and louver finish.

SOLA

DRIVER TYPE	UBICUBR6			UBICUBR12			UBICUBR18		
	WW	PAR	HLO	WW	PAR	HLO	WW	PAR	HLO
RSD1 - Single 0-10V input	2-11	2-11	2-16	1-5	1-8	1-8	1-3	1-5	1-5



DUO

DRIVER TYPE	UBICUBR6			UBICUBR12			UBICUBR18		
	WW	PAR	HLO	WW	PAR	HLO	WW	PAR	HLO
RDMX - DMX	2-11	2-11	2-12	1-5	2-7	1-8	1-3	1-5	1-5
RDDA / RDDA8 - DALI	2-11	2-11	2-12	1-5	1-8	1-8	1-3	1-5	1-5
RDD1 - Dual 0-10V input for CCT/intensity	2-11	2-11	2-12	1-5	1-7	1-8	1-3	1-3	1-5
RPSQO - Lutron T-Series 1% Tunable White	2-11	2-11	3-12	1-5	2-7	2-6	1-3	1-5	1-5

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CHROMAWERX - SOLA AND DUO

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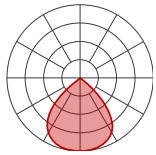


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Type: _____

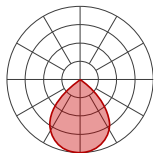
Photometrics

Watts and lumens per watt may vary based on the type of driver selected, as well as on the number of lighting units per driver for the remote driver option.



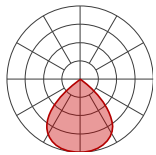
MWPL - Delivered Lumens at 35K at 80 CRI

LUMINAIRE ID	LUMEN OUTPUT	INPUT WATTAGE	LPW
UBICUB6	800	5.8	137
UBICUB12	1600	11.7	137
UBICUB18	2400	17.5	137



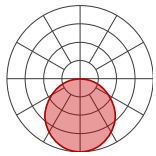
MSPL - Delivered Lumens at 35K at 80 CRI

LUMINAIRE ID	LUMEN OUTPUT	INPUT WATTAGE	LPW
UBICUB6	800	6.4	125
UBICUB12	1600	12.8	125
UBICUB18	2400	19.2	125



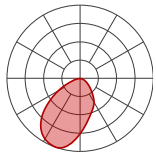
MBPL - Delivered Lumens at 35K at 80 CRI

LUMINAIRE ID	LUMEN OUTPUT	INPUT WATTAGE	LPW
UBICUB6	800	7.3	109
UBICUB12	1600	14.7	109
UBICUB18	2400	22.0	109



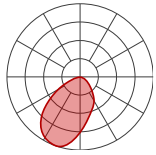
HLO - Delivered Lumens at 35K at 80 CRI

LUMINAIRE ID	LUMEN OUTPUT	INPUT WATTAGE	LPW
UBICUB6	600	6.9	86.6
UBICUB12	1200	10.8	110.7
UBICUB18	1800	15.5	116.2



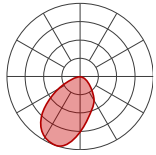
WWW - Delivered Lumens at 35K at 80 CRI

LUMINAIRE ID	LUMEN OUTPUT	INPUT WATTAGE	LPW
UBICUB6	600	7.7	78.4
UBICUB12	1200	14.3	83.7
UBICUB18	1800	20.5	87.8



WWS - Delivered Lumens at 35K at 80 CRI

LUMINAIRE ID	LUMEN OUTPUT	INPUT WATTAGE	LPW
UBICUB6	600	8.0	74.6
UBICUB12	1200	15.1	79.6
UBICUB18	1800	21.5	83.6



WWB - Delivered Lumens at 35K at 80 CRI

LUMINAIRE ID	LUMEN OUTPUT	INPUT WATTAGE	LPW
UBICUB6	600	9.1	65.9
UBICUB12	1200	17.1	70.3
UBICUB18	1800	24.4	73.8

Multiplier - CCT/CRI - MWPL/MSPL/MBPL

CCT (K)	Watts Multiplier		LPW Multiplier	
	CRI80	CRI90	CRI80	CRI90
2700	1.04	1.19	0.96	0.84
3000	1	1.15	1	0.87
3500	1	1.12	1	0.89
4000	0.99	1.10	1.01	0.91

Multiplier - CCT/CRI - HLO/WWW/WWS/WWB

CCT (K)	Watts Multiplier		LPW Multiplier	
	CRI80	CRI90	CRI80	CRI90
2700	1.05	1.27	0.95	0.79
3000	1.02	1.23	0.98	0.81
3500	1	1.19	1	0.84
4000	1	1.19	1	0.84

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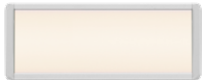
Type: _____

Technical Specifications

OPTICS

High-Efficiency Lambertian Optic (HLO)

The High-Efficiency Lambertian Optic (HLO) shielding of diffusing 0.075" thick acrylic with up to 88% transmission and good source obscuration is combined with matte white side reflectors to create an efficient optical chamber with uniform luminosity. Luminaire brightness is controlled by the flux-to-shielding area ratio. For visual comfort, avoid high lumen output unless Ubik is installed in a high ceiling application.



Wall Wash Optics

Ubik wall wash is an offset horizontal linear LED array that reflects from a matte white internal side kicking reflector. It then transmits through the beam-forming lens and then softened by a 2" asymmetric louver. The lens is fully illuminated, and the wall wash is only slightly angled to complement the direct optic.



Parabolic Louvers

Parabolic louvers provide excellent shielding and a pleasing crisp visual texture. The precisely molded louvers consist of 1" deep blades and is 2"x2" in size. The LED array is secured in the direct position, with the light transmitting through a beam-forming lens creating a conical distribution. Three matte (MPL) finishes are available in black, white and silver, offering a soft appearance, a wide beam spread of up 85-91 degrees, gentle brightness transition at cut-off, and exceptional UGR.



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WELL for Light - The WELL building standard focuses on light quality in several features. There are three categories that are fully attributed to the construction and features of a luminaire. In WELL V1, it's Feature 54 Circadian Lighting, Feature 55 Glare Control, and Feature 58 Color Quality. In WELL V2, it's Feature L03 Circadian Lighting, Feature L04 Glare Control, and Feature L07 Electric Light Quality.

This fixture meets Features:

- Feature 54 or L03 when DUO is selected
- Feature 55 or L04 meets WELL glare category (b-c-d)
- Feature 58 or L07 when 90CRI is selected

All LED drivers used at Lumenwerx are deemed to have a low risk level of flicker, of 5 % or less below 90Hz operational as defined by IEEE standard 1789-2015 LED.



WELL for Mind - This luminaire meets WELL for mind as it is a human centric luminaire offering quality light, excellent color, and smooth optics. If any of these features are incorporated in a luminaire, it can improve the ability to focus, concentrate, and persist longer on a given task. This fixture harmoniously operates in a space to assist the mind.

For more information please contact well@lumenwerx.com.

LIGHT SOURCE

Custom linear array of alternating color temperature mid-flux LEDs are mounted directly to the housing for optimal thermal performance. For the Duo products, a color temperature range from 6500K-2700K is achievable with color points on or below the black body curve. For the Sola products, a color temperature range from 3500K-2200K is controlled synchronously with intensity. Color consistency between fixtures is maintained to within 3 SDCM. LEDs are operated at reduced drive current to optimize efficacy and lumen maintenance.

All LEDs have been tested in accordance with IESNA LM-80-08 and the results have shown L80 lumen maintenance greater than 60,000 hours. Absolute product photometry is measured and presented in accordance with IESNA LM-79, unless otherwise indicated.

CHROMAWERX - TUNABLE WHITE

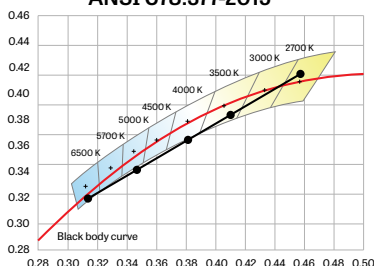
Chromawerx SOLA

It is a single-channel control that dims output while warming the color temperature in a pre-determined relationship. A simple analog control sends a common signal to dual output digital drivers, which are programmed to adjust a specially populated LED array to emulate the effect of dimming a filament source. Dimming range is programmable but the default option runs from 3500K at 100% of full power to 2200K at 5% of full power. CRI is maintained above 80 throughout the dimming range.

Chromawerx DUO

It is a two-channel control. It uses an analog (0-10V) protocol for separate control of luminaire CCT and intensity or a digital (DMX, DALI and PSQ0) protocol for synchronous control of both warm and cool LED arrays to enable the user to set color temperature and light output. Commonly called "tunable white", Chromawerx two-channel control provides the range of warm (2700K) to cool (6500K) color that can be useful for helping to entrain circadian rhythms, stimulate alertness for improved educational and work productivity, and compensate for jet lag, among other applications. The Chromawerx drivers are programmed to limit maximum light output and power usage across all color temperatures. CRI is maintained above 80.

ANSI C78.377-2015



ELECTRICAL

DMX (DUO only)

Factory-set adjustable output current electronic driver with 120-277V AC line input. Using DMX wall controls (optionally supplied by Lumenwerx) or an existing DMX control system, both channels of LEDs are independently adjustable. Each DMX driver can be independently addressed using the built-in RDM (Remote Device Management) in the field. Dimming down to 1% is attainable. Rated life (90% survivorship) of 50,000 hours at 50°C maximum ambient temperature. At maximum driver load, efficiency < 84%, PF > 0.9, THD < 20%.

UBIK CUBE

RECESSED

CHROMAWERX - SOLA AND DUO

LUMENWERX



Project: _____

Type: _____

DALI (DUO only)

Factory-set adjustable output current electronic driver with 120-277V AC line input. Using an existing DALI control system (supplied by others), one control channel adjusts the fixture color temperature, and the other control channel adjusts fixture brightness. With DALI Type 6, two DALI addresses are required to control both channels. With DALI Type 8, one DALI address is required to control both channels. Dimming down to 1% is attainable. Rated life (90% survivorship) of 50,000 hours at 50°C maximum ambient temperature. At maximum driver load, efficiency<84%, PF>0.9, THD<20%.

SD1 (SOLA)

Factory-set, adjustable output current LED driver with 120 or 277V AC input. Using a single 0-10V control signal, the light output warms in color temperature as it dims down to 1% and 2200K. At maximum driver load, efficiency<86%, PF>0.9, THD<20%.

DD1 (DUO)

Factory-set adjustable output current LED driver with 120 or 277V AC input. Controlled via two individual 0-10V signals, one for setting light output down to a minimum of 1% and the other for adjusting the CCT (default range of 2700K-6500K). Rated life of 50,000 hours at 70°C maximum driver case temperature and 100% load conditions. Typical efficiency of 86%, PF>0.9, THD<20% at 100% load conditions.

PSQ0 (DUO only)

Lutron T-Series 2-Channel tunable white drivers enable high-performance human centric lighting (HCL) applications. Digital control of color temperature (CCT) and intensity are achieved when used with the ESN T-Series tunable white controller as a part of a Lutron Quantum System.

PoE

Depending on the PoE manufacturer selected, Lumenwerx will install the node in factory as either integral to the luminaire, or as a remote module. Factory programming of the PoE node may or may not enable the following functionalities: lumen package, Duo (tunable white), emergency battery backup, and sensor integration. These must be addressed and evaluated on a case-by-case basis.

FINISH

Interior - 95%, reflective matte powder coated white paint

Exterior - Powder-coat paint in standard white, aluminum, or black. Custom colors are also available.

CONSTRUCTION

Housing - Extruded aluminum (0.070" nominal) up to 90% recycled content

Housing cover - Cold rolled steel 18 gauge thick

Louvers - Injection molded optical grade polycarbonate up to 95% reflective

HLO lens - Coextruded PMMA

Parabolic heatsink - Extruded aluminum (0.10" nominal) up to 90% recycled content

HLO/WW heatsink - Aluminum sheet 10 gauge thick

End plate - Aluminum sheet 0.19" thick

Mounting clips - Ø 1.0-1.4mm spring clips

Driver housing - 18 gauge galvanized sheet

Mounting frame - 22 gauge galvanized sheet metal

WEIGHT

		BODY		OPEN FRAME / MILLWORK		TYPE IC / CHICAGO PLENUM	
		LBS	KG	LBS	KG	LBS	KG
UBICUBR6	TRL/DMF	1.39	0.63	3.26	1.48	7.66	3.47
	TRM	1.63	0.74				
UBICUBR12	TRL/DMF	2.82	1.28	3.3	1.5	8.04	3.65
	TRM	3.15	1.43				
UBICUBR18	TRL/DMF	4.23	1.92	3.63	1.65	9.24	4.19
	TRM	4.64	2.10				

CERTIFICATIONS

ETL - Rated for Indoor Dry/Damp locations. Conforms to UL Standard 1598 and certified to CAN/CSA Standard C22.2 No. 250.0.

Chicago Plenum - City of Chicago approved (CCEA)

IC rated - Suitable for direct contact with insulation

WARRANTY

Lumenwerx provides a five-year limited warranty of electrical and mechanical performance of the luminaires, including the LED boards, drivers, and auxiliary electronics. Lumenwerx will repair or replace defective luminaires or components at our discretion, provided they have been installed and operated in accordance with our specifications. Other limitations apply, please refer to the full warranty on our website.

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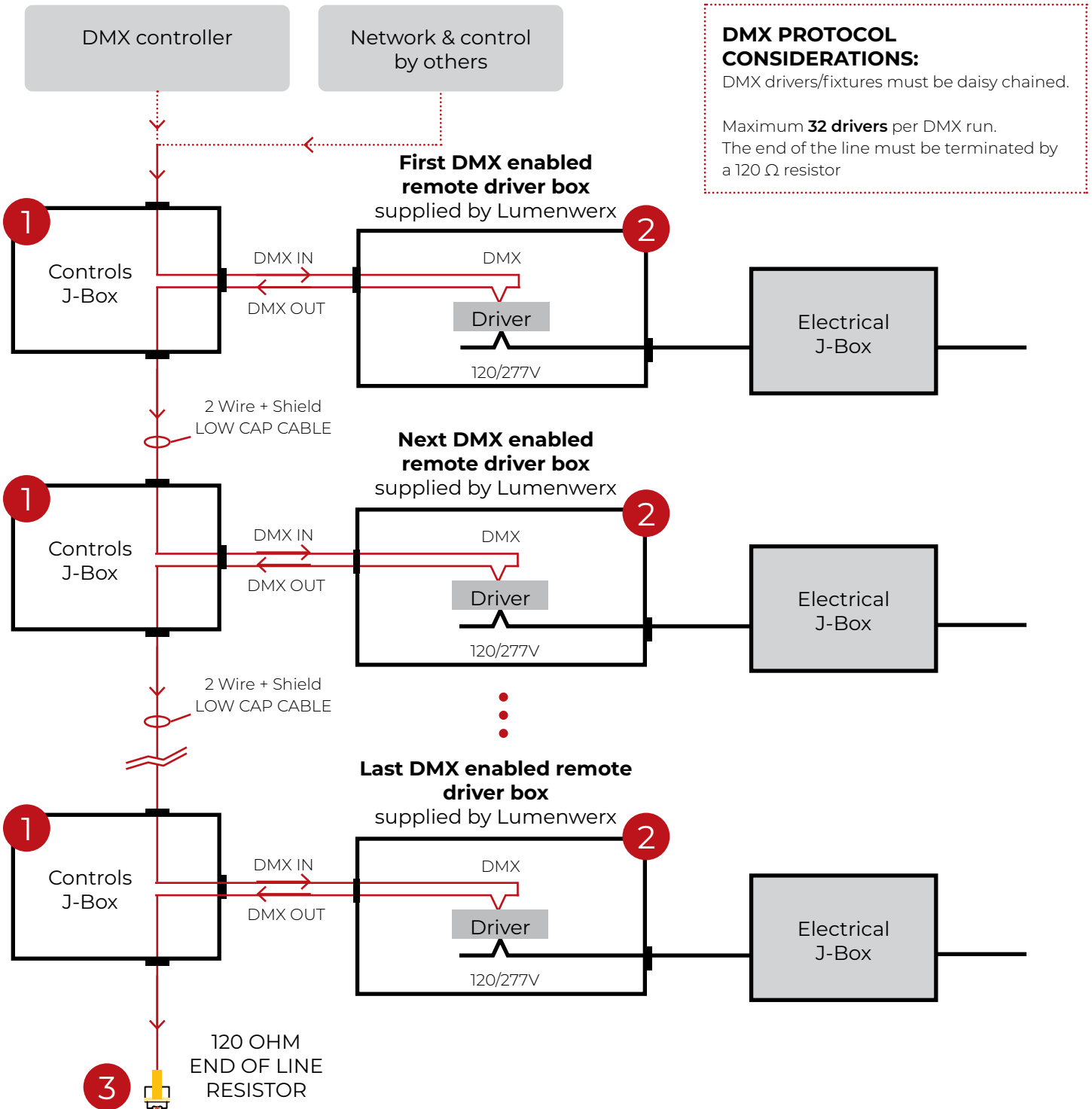


Project: _____

Type: _____

DUO GENERIC DMX NETWORK ARCHITECTURE

A qualified DMX integrator is required to assure proper installation and commissioning of the DMX network. **When placing the PO, please provide the contact information of your DMX integrator.**



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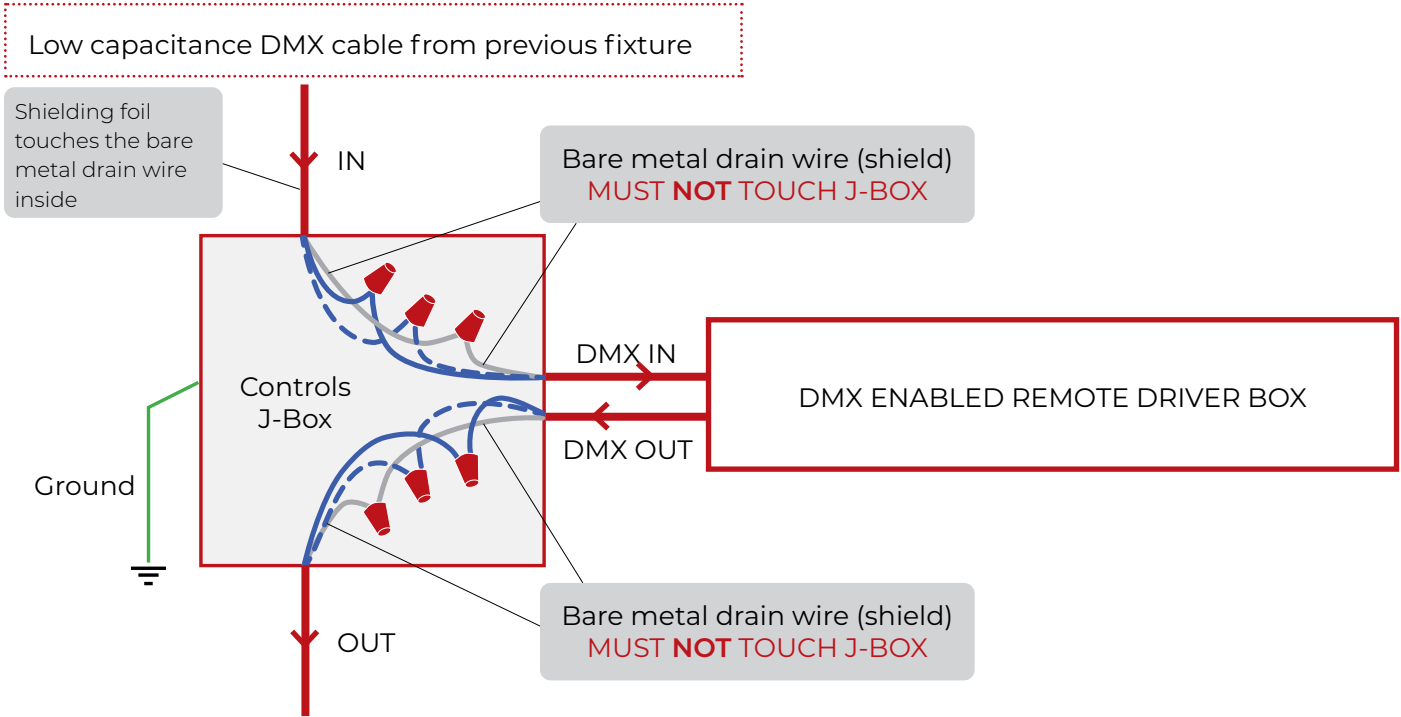
LUMENWERX



Project: _____

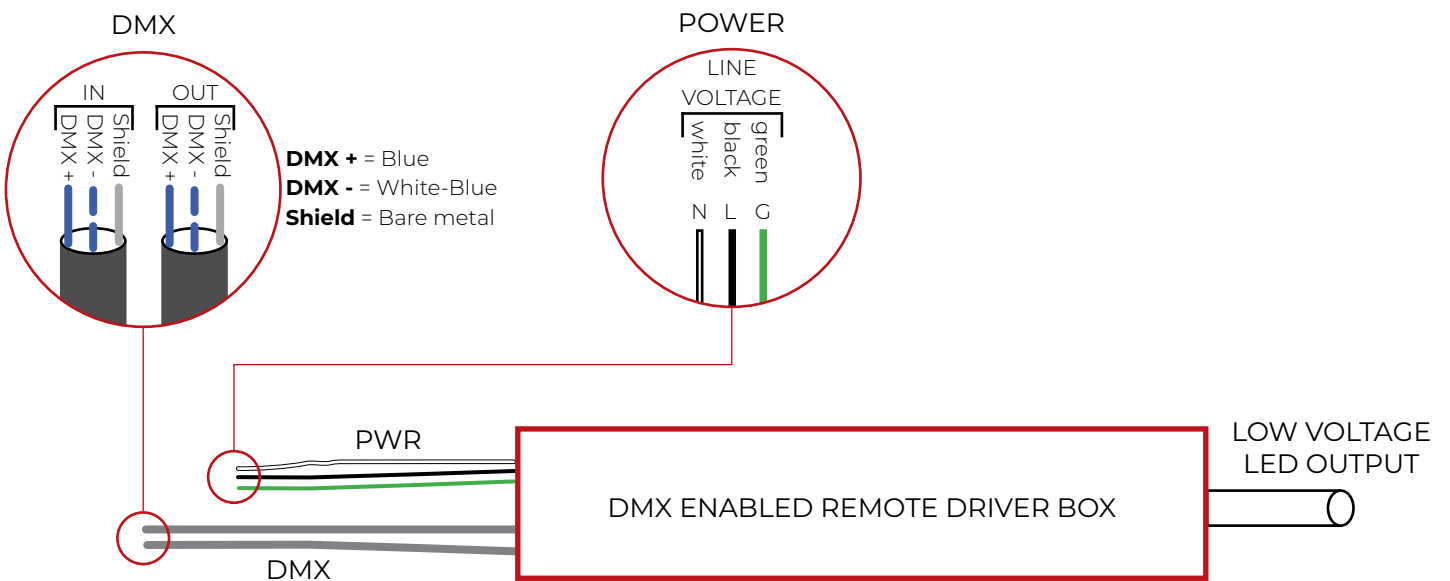
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1 J-BOX DMX DAISY CHAIN DETAIL



Low capacitance DMX cable to next fixture

2 DMX CONNECTION REMOTE DRIVER



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Project: _____

Type: _____

3 LAST DMX CONNECTION DETAIL

