Voilà
4" Cuboid Surface

LUMENWERX

Project: _____
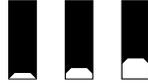
_____

Type: _____

_____

Aperture Size
3.55" (Square)

Baffle Position
Flush, ½" & 1" regress baffles

Height
4.5", 6", 9"

Mounting Types
Surface

Cylinder & Cuboid Finishes
Textured matte white ⚪
Textured matte black ⚫
Custom RAL 🔴

Color Temperatures
2700K	🟡
3000K	🟡
3500K	🔵
4000K	🔵
SOLA	🟡
DUO	🔵

Delivered 1152-1849 lm
14-20 Watts, up to 99 lm/W

Integral Drivers
0-10V, TRIAC & ELV

Remote Drivers
0-10V, TRIAC & ELV
eldoLED
Lutron
DMX
Remote emergency battery pack

CHROMAWERX

Voila 4" Cylinders feature innovative Hyflex™ optics for precise beam control. Voila Cylinders are offered in square form factor in three height options, all with on-board and remote driver options. The Voila COB source matches other Lumenwerx luminaires, with 90 CRI and 2-step color consistency, and is available with Chromawerx SOLA and DUO. Complete Voila offering includes 2" and 4" apertures; downlights, adjustables, and wall washers; round and square trim; and cylinders.

Performance

LUMEN OUTPUT [1]	WATTS	EFFICACY lm/W
1336 lm	14 W	95 lm/W
1813 lm	20 W	91 lm/W

[1] Lumens packages are assuming 3500K, 80 CRI, 30° beam, square white baffle

Delivered Lumens for Round White Flush (1P) Baffles at 35K

CRI	90 CRI							
BEAM	10	20	30	40	50	60	75	90
Low - 13.8 W	1257	1203	1410	1424	1379	1363	1333	1302
Medium - 19.7 W	1576	1508	1912	1933	1871	1849	1808	1766

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Voilà
4" Cuboid Surface

LUMENWERX

Project: _____

Type: _____

Cuboid

LUMINAIRE ID	CUBOID			BAFFLE		LENS
VO4CUS						

VO4CUS - Voila 4" Cuboid Surface	HEIGHT	FINISH	POSITION		FINISH	SDL - Soft diffused lens
	4.5 [1] - 4.5" **6** [1] - 6" **9** - 9" [1] Available with remote dimming options only.	**TMW** - Textured matte white **TMB** - Textured matte black **CF#** - Custom finish, specify RAL# (e.g. **CF1028**)	**1P** - Flush **2P** [2][3] - ½" **3P** [2][4] - 1" [2] Only available with 50° beam or lower. [3] Not available with 4.5" length. [4] Not available with 4.5" and 6" lengths.		**TMW** - Textured matte white **TMB** - Textured matte black **CF#** - Custom finish, specify RAL# (e.g. **CF1028**)	**FDL** - Frosted diffused lens **NOL** - No lens

Light Element

LIGHT SOURCE	BEAM	COLOR QUALITY	CRI	COLOR TEMP	OPTION
SW - Static white	**10** - 10° Narrow spot **20** - 20° Spot **30** - 30° Narrow flood **40** - 40° Flood **50** - 50° Wide flood **60** - 60° Very wide flood **75** - 75° Very wide flood **90** - 90° Open flood	**2** - 2 Step MacAdam Ellipse	**80** - 80 CRI **90** - 90 CRI **97** [7] - 97 CRI [7] Not available with 3500K.	**27** - 2700K **30** - 3000K **35** - 3500K **40** - 4000K	**HEX** - Hex louver **NA** - None
SOLA - Dim-to-warm **DUO** - Tunable white	**20** [5] - 20° Spot **40** [6] - 40° Flood **50** [6] - 50° Wide flood **60** [6] - 60° Very wide flood **75** [6] - 75° Very wide flood **90** [6] - 90° Open flood [5] Available with low output only. [6] Available with high output only.	**3** - 3 Step MacAdam Ellipse	**90** - 90 CRI (**SOLA** and **DUO**)	**SOLA** - Dim-to-warm 35K-22K **DUO** - Tunable white 27K-65K	

Power Supply & Dimming

Mounting

VOLTAGE	WATTAGE (80 CRI) [9]	DIMMING				MOUNTING TYPE	JBOX PLATE COVER/CONDUIT
120 - 120V **UNV** - 120V-277V **347** [8] - 347V [8] Available with remote 0-10V dimming options RD1 and RSD1 only. Consult factory for details.	**14W** - Low output 1152-1363 lm **20W** - Medium output 1444-1849 lm [9] For delivered lumens, see multiplier tables on page 3.	**INTEGRAL** [10] **D1** - 1% 0-10V **ELV** [11] - ELV 120V **TRI** [11] - TRIAC 120V [10] Not available with 4.5" and 6" lengths. [11] Available with 120V only.	**REMOTE** **RD1** - 1% 0-10V **RELV** [12] - ELV 120V **RTRI** [12] - TRIAC 120V **RLTEA2W** [12] - Lutron 1% - 2 wire FP 120V **RLDE1** - Lutron Hi-lume 1% Eco **RLDE5** - Lutron 5% EcoSystem **RDA** - DALI **RELD0** - eldoLED 0.1% **RELD1** - eldoLED 1% [12] Available with 120V only.	**+EB** [13] - Emergency battery [13] Specify with remote dimming only. The code will be like the following example: **RD1 + EB**.	**DM** - Direct mount **JB** - Junction box, square cover plate **CD** - Conduit feed, square canopy	FINISH **TMW** - Textured matte white **TMB** - Textured matte black **CF#** - Custom finish, specify RAL# (e.g. **CF1028**) **NA** [14] - None [14] Specify with direct (DM) mounting type option only.
	SOLA **13W** - Low output 920 lm (20° only) **20W** - High output 1500-1660 lm (40° and up) **DUO** **10W** - Low output 700 lm (20° only) **20W** - High output 1100-1200 lm (40° and up)	**SOLA** **SD1** - Single 0-10V input	**SOLA** **RSD1** - Single 0-10V input **DUO** **RDMX** - DMX, to specify, see pages 6 to 8 **RDDA** - DALI **RDD1** - Dual 0-10V input for CCT/intensity **RPSQ0** - Lutron T-Series 1% tunable white			

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Voilà
4" Cuboid Surface

LUMENWERX

Project: _____

_____

Type: _____

_____

Photometrics

Please follow the multiplier tables to ensure correct lumen value. Beams, baffle color, lensing, CCT, CRI, baffle shape and accessories will change the lumen value.
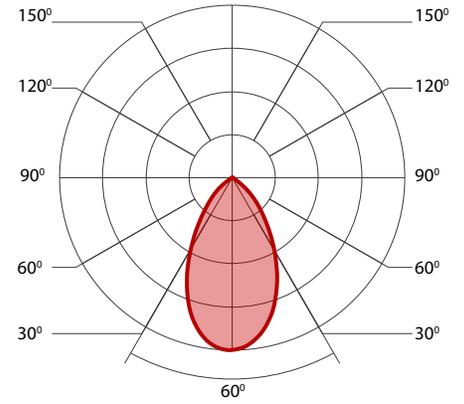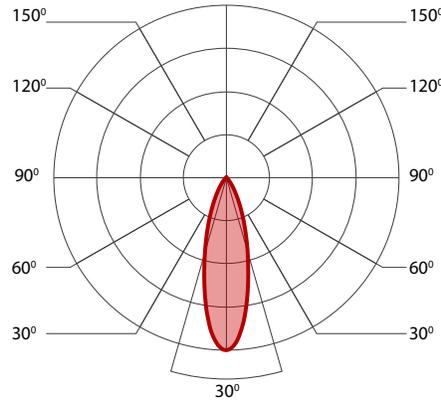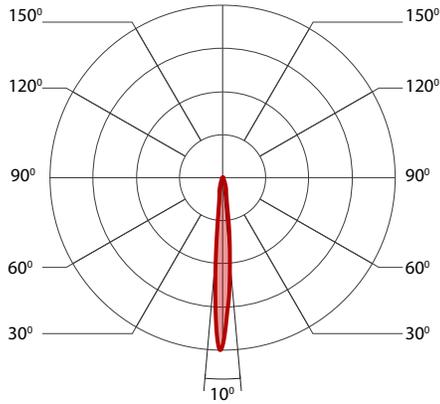
Delivered Lumens for Round White Flush (1P) Baffles - At 35K

CRI	80 CRI								90 CRI							
BEAM	10	20	30	40	50	60	75	90	10	20	30	40	50	60	75	90
Low - 13.8 W	1348	1294	1501	1532	1475	1455	1424	1394	1257	1203	1410	1424	1379	1363	1333	1302
Medium - 19.7 W	1692	1623	2037	2078	1995	1975	1933	1892	1576	1508	1912	1933	1871	1849	1808	1766

Delivered Lumens - At 30K

CRI	97 CRI							
BEAM	10	20	30	40	50	60	75	90
Low - 13.8 W	1080	1053	1213	1225	1186	1172	1146	1120
Medium - 19.7 W	1355	1297	1644	1663	1609	1590	1555	1519

Beam Angle

	ACTUAL BEAM ANGLE							
BAFFLE POSITION	10	20	30	40	50	60	75	90
4" Cuboid Flush	11.4	16.8	29.0	39.1	47.2	58.2	75.1	90.5
4" Cuboid Regressed 1/2"	11.4	16.8	28.8	38.7	46.3	56.6	72.1	86.3
4" Cuboid Regressed 1"	11.4	16.7	28.3	37.5	44.5	54.0	68.8	81.2

Efficacy Based on Delivered Lumens - High 19.7 W

	LPW							
BEAM	10	20	30	40	50	60	75	90
80 CRI	86	82	103	105	101	100	98	96
90 CRI	80	77	97	98	95	94	92	90
97 CRI	69	66	83	84	82	81	79	77

SOLA and DUO Max Wattage

	90 CRI							
BEAM	10	20	30	40	50	60	75	90
DUO	NA	10	NA	19	19	19	19	19
SOLA	NA	13	NA	20	20	20	20	20

Multiplier - Optical Options

LENS AND LOUVERS	
No lens	1
Soft diffused lens	0.94
Frosted lens	0.78
Hex louver	0.82

Multiplier - Efficacy

BAFFLE POSITION	10	20	30	40	50	60	75	90
Flush	1	1	1	1	1	1	1	1
Regressed 1/2"	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.97
Regressed 1"	0.98	0.98	0.98	0.97	0.97	0.96	0.96	0.95

Multiplier - CCT

CCT	
2700K	0.9
3000K	0.95
3500K	1
4000K	1.05

For SOLA and DUO, please consult factory.

Multiplier - Baffle Color and Shape

BAFFLE VARIABLES		
White	Square	0.89
Black	Square	0.87

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Voilà
4" Cuboid Surface

LUMENWERX

Project: _____

_____

Type: _____

Technical Specification

DESCRIPTION 3.55" cuboid with multiple height, output, color, and dimming options in a variety of standard or custom finishes.

CUBOID
Die-cast and extruded aluminum.
Mounting Type: Direct mount, junction box and conduit
Canopy: Junction box cover plate for junction box mounting type. (Conduit, when recessed wiring is not possible).
Finish: Powder coated paint, textured white & black matte. Custom colors also available (provide RAL #).

FIELD REPLACEABLE LIGHT ELEMENT
LED Module: Integral COB module. 90 CRI and 2 SDCM, Standard with options of 80 CRI, or 97 CRI. L80 > 60,000 hours.
Light Output: From 1152-1849 lumens
Hyflex™ Optics: Proprietary TIR/reflector with field interchangeable beam smoothing lenses
Thermal Management: Cold-forged aluminum heat sink to maximize thermal dissipation.

BAFFLE
Die-cast aluminum.
Baffle position: Flush, ½" and 1" regress

CHROMAWERX SOLA (dim-to-warm) and DUO (tunable white). See page 5 for more information.

ELECTRICAL
Integral: 0-10, ELV, TRIAC
Remote: 0-10, ELV, TRIAC
Lutron Eco-System, Lutron Hi-lume, DALI, eldoLED 0.1%, eldoLED 1%, DMX, Lutron T-Series (tunable white).
Emergency Options: Emergency battery back-up option available as remote (Fulham, Bodine, or IOTA). The battery provides 10W of power.

ENVIRONMENT Ambient temperature at fixture location shall be within 0°C/32°F - 25°C/77°F, indoor dry or damp as well as outdoor damp use (canopies or marquees).
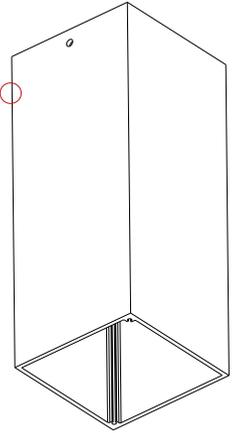
LISTING cETLus listed to UL 1598 and CAN/CSA Standard C22.2 No. 250.0.

WARRANTY 5 year limited warranty on LED module and power supply. Guaranteed to maintain 70% lumen maintenance.

Light

Cuboid Housing
4.5", 6", 9" Height
Textured Matte White Finish
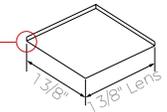Textured Matte Black Finish
Custom Finish Specify RAL#

Light Element
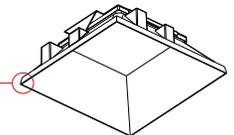Heat Sink
LED Module
Hyflex™ Optics

Lens
Frosted
Soft Diffused
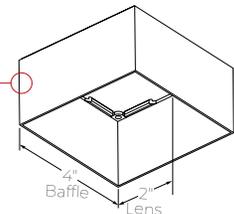
1 3/8" 1 3/8" Lens

Baffle
3 Baffle Positions - Flush, ½", and 1"
Textured Matte White Finish
Textured Matte Black Finish
Custom Finish Specify RAL#

Baffle Cover
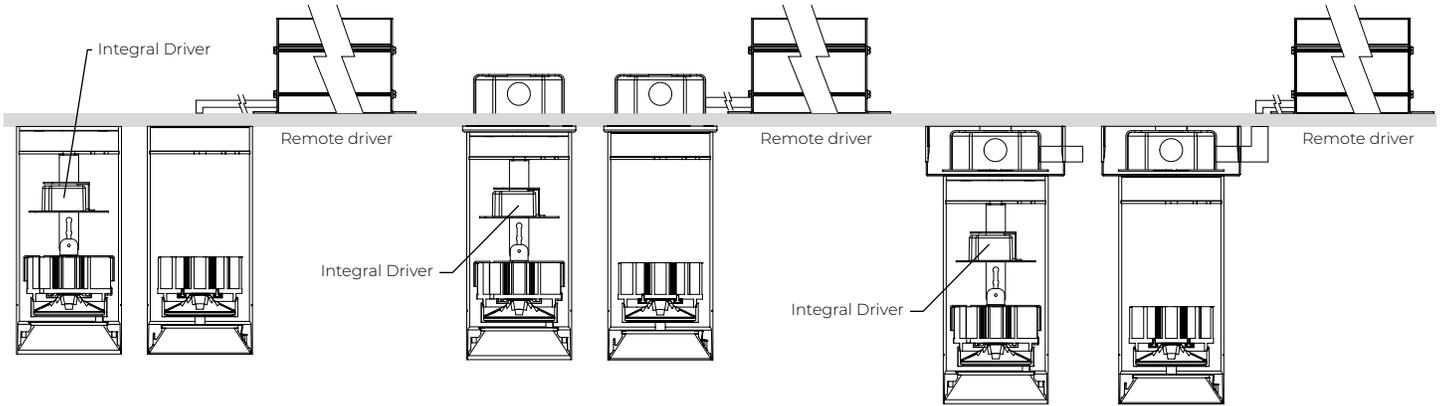Textured Matte White Finish
Textured Matte Black Finish
Custom Finish Specify RAL#

4" Baffle   2" Lens

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Intertek

Voilà
4" Cuboid Surface

LUMENWERX

Project: _____

_____

Type: _____

_____

Mounting

DM - Direct Mount
Integral or remote driver

JB - Junction Box Cover Plate
Integral or remote driver
Square canopy 4 ½" x 4 ½"
Height 0.275""

CD - Conduit Feed Canopy
Integral or remote driver
For surface mounted J-box
Square canopy 5 ½" x 5 ½"
Height 2"

Optics

Hyflex™ optics provide precise optical control in a remarkably compact form.
The core of this four-tier system is compound reflector with a central TIR element, just 1.06" deep.
Beam-smoothing discs perfect beam angles up to 90°. Beam angles are easily interchanged in the field.

Light Source - LED

Compact COB (Chip-On-Board) LED module, available in 2700K, 3000K, 3500K and 4000K with a choice of 80 CRI or 90 CRI with elevated R9 value (for 97 CRI, consult factory). Color consistency is maintained to within 2 SDCM. 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.
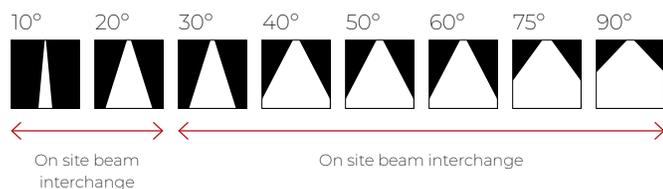
CHROMAWERX

Chromawerx Sola is single-channel control that dims output while warming the color temperature in a pre-determined relationship. A simple or analog control adjusts a specially populated LED array to emulate the effect of dimming a filament source.

CHROMAWERX

Chromawerx Duo offers a two-channel control system which uses analog or digital protocols for synchronous control of both warm (2700K) to cool (6500K) LED arrays - maintaining a CRI above 90. The range of color DUO offers is useful for entraining circadian rhythms, stimulating alertness, and compensating for jet lag among other applications. The Chromawerx drivers are programmed to limit maximum light output and power usage across all color temperatures.

Beam Angles

| 10° | 20° | 30° | 40° | 50° | 60° | 75° | 90° |

On site beam interchange

On site beam interchange

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Voilà
4" Cuboid Surface

LUMENWERX

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.

DMX controller

Network & control by others
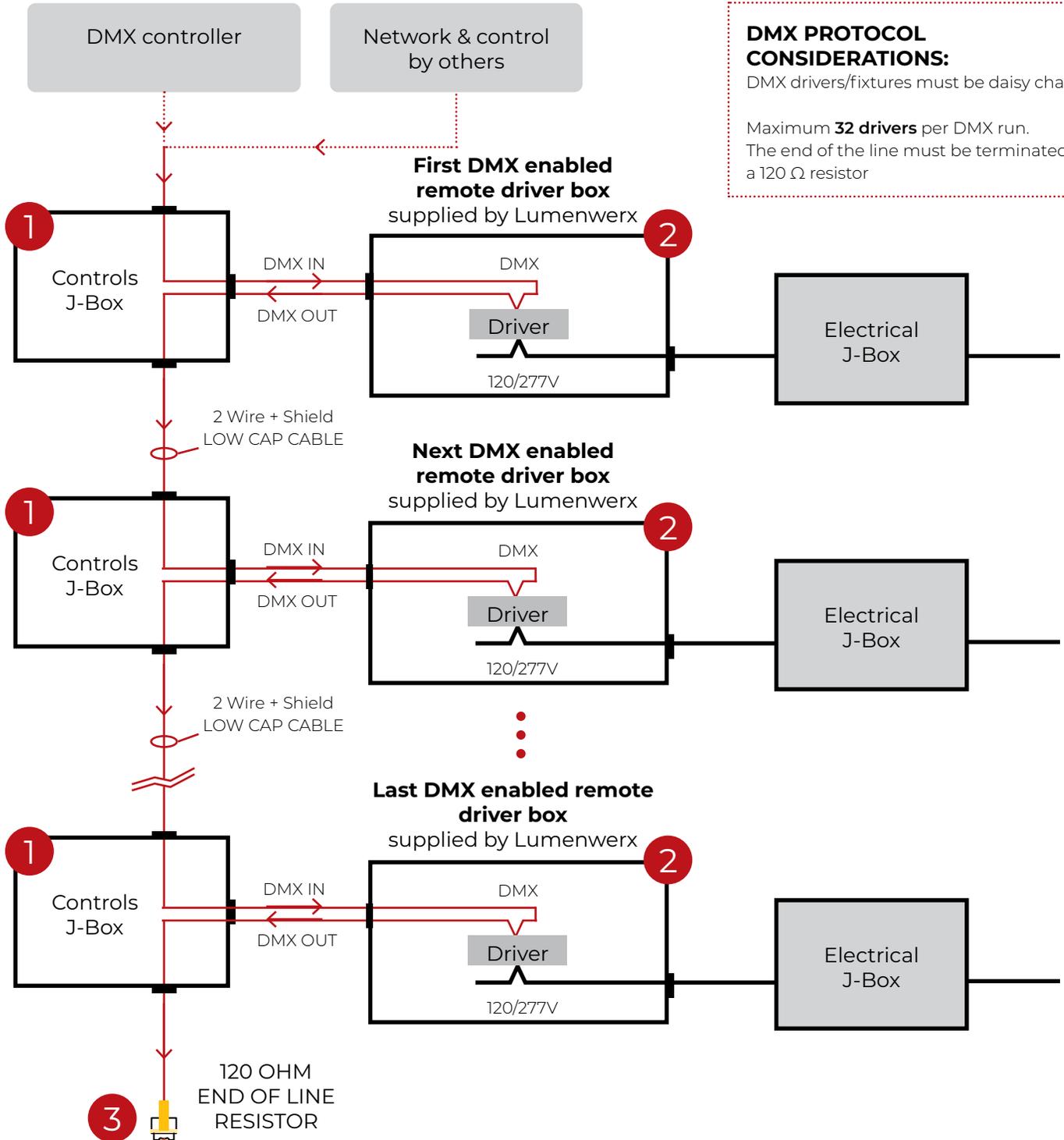
DMX PROTOCOL CONSIDÉRATIONS:
DMX drivers/fixtures must be daisy chained.

Maximum **32 drivers** per DMX run.
The end of the line must be terminated by a 120 Ω resistor

First DMX enabled remote driver box supplied by Lumenwerx

1 Controls J-Box

DMX IN

DMX OUT

2 DMX

Driver

120/277V

Electrical J-Box

2 Wire + Shield LOW CAP CABLE

Next DMX enabled remote driver box supplied by Lumenwerx

1 Controls J-Box

DMX IN

DMX OUT

2 DMX

Driver

120/277V

Electrical J-Box

2 Wire + Shield LOW CAP CABLE

Last DMX enabled remote driver box supplied by Lumenwerx

1 Controls J-Box

DMX IN

DMX OUT

2 DMX

Driver

120/277V

Electrical J-Box

3 120 OHM END OF LINE RESISTOR

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Voilà
4" Cuboid Surface

LUMENWERX

Project: _____

Type: _____

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1   J-BOX DMX DAISY CHAIN DETAIL

Low capacitance DMX cable from previous fixture

Shielding foil touches the bare metal drain wire inside

IN

Bare metal drain wire (shield)
MUST **NOT** TOUCH J-BOX

Controls J-Box

DMX IN

DMX ENABLED REMOTE DRIVER BOX

DMX OUT

Ground

Bare metal drain wire (shield)
MUST **NOT** TOUCH J-BOX

OUT

Low capacitance DMX cable to next fixture

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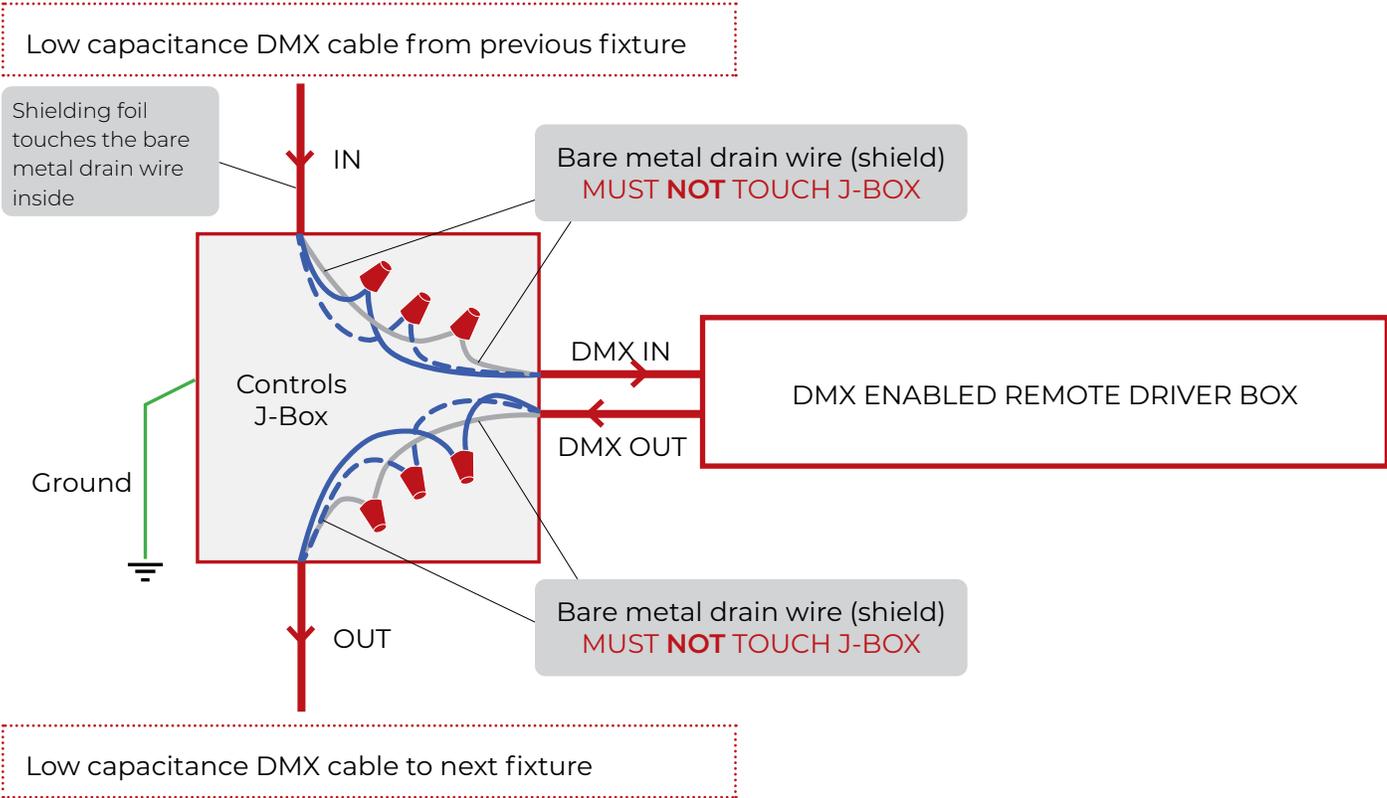
2   DMX CONNECTION REMOTE DRIVER

DMX

POWER

IN   OUT

Shield / DMX - / DMX +   Shield / DMX - / DMX +

DMX + = Blue
DMX - = White-Blue
Shield = Bare metal

LINE VOLTAGE

white   black   green

N   L   G

PWR

DMX ENABLED REMOTE DRIVER BOX

LOW VOLTAGE
LED OUTPUT

DMX

Voilà
4" Cuboid Surface

LUMENWERX

Project: _____

Type: _____

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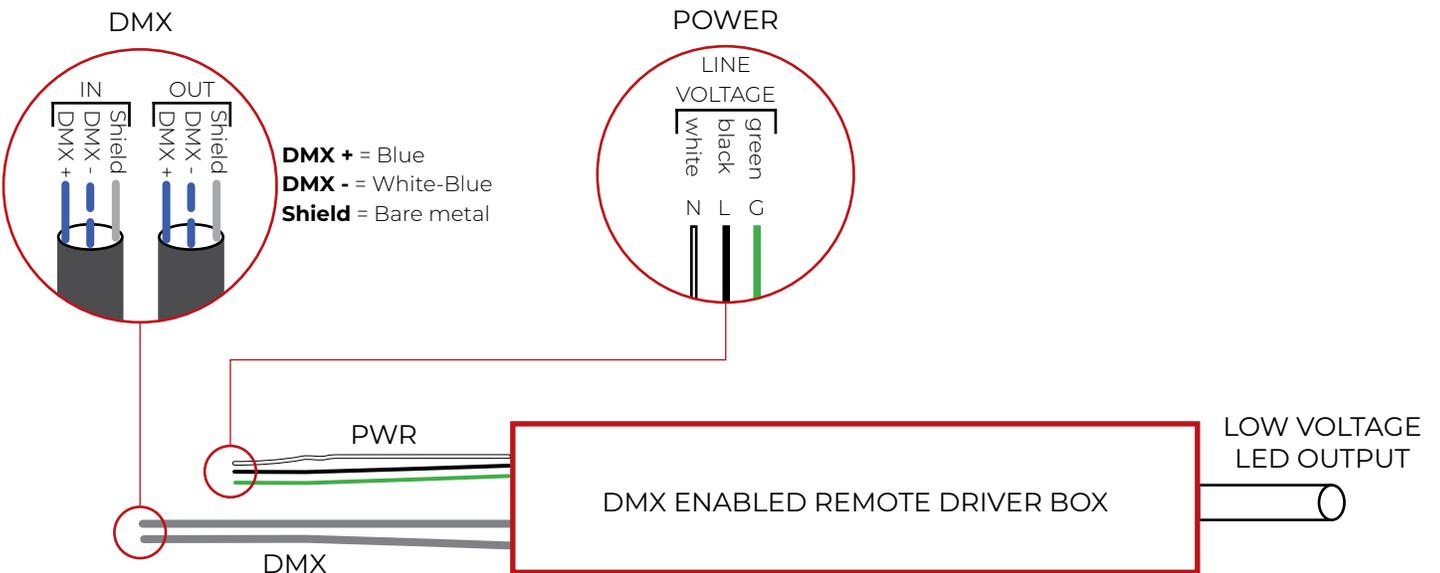
3 LAST DMX CONNECTION DETAIL

120 OHM
END OF LINE
RESISTOR

+

−

CAP
OFF SHIELD

S

Last DMX OUT

DMX IN
From other fixtures

+ − S

DMX + = Blue
DMX − = White-Blue
Shield = Bare metal

DMX
Driver

DMX +
DMX −
SHIELD

LAST FIXTURE OF THE DMX NETWORK
MAX 32 DRIVERS PER DMX RUN

LED output

DMX ENABLED FIXTURE

c ETL US
LISTED
Intertek