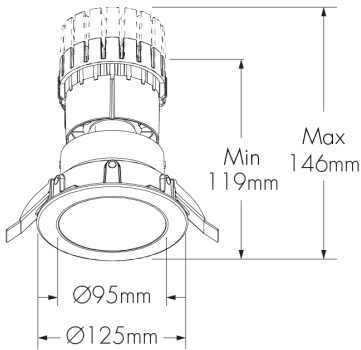


Project Name

Qty

Type

Catalog / Part Number



Round trim
(Deep decorative bezel shown with 25 mm in ceiling springs)
Round trim ceiling cutout: Ø114 mm

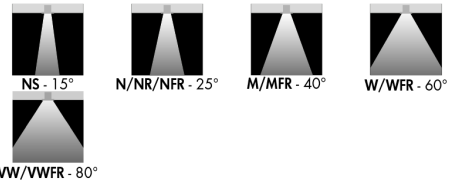
Photometric Summary

Based on Medium Faceted Reflector Optic (Nominal 40°), MRGBWP in Optidrive™ (White 3000K 96 CRI)

Nominal Output [lm]	Delivered Output [lm] ^[1]	Power (120V) [W]	Efficacy [lm/W]
700	491	11	45
1000	793	16	50
1300	1,092	23	47
2000	1,441	32	45

[1] Consult website for latest LTD files.

Optics



Colour and Colour Temperature



Colour Rendering

CRI
90+

Control

DMX/RDM

Description

The Lumencore Recessed Opticolor+ Small Shower Rated is a high-performance, colour-changing interior LED luminaire. This versatile three-in-one fixture offers Dynamic RGBW Colours, Dynamic White with Dim-to-Warm, and Premium Static White, all while upholding Lumenpulse's renowned quality of light and precision. Available in an array of trims and finishes, optics, accessories, and with a Shower Rated IP55 Dead Front.

Physical

Cutout	R: Round
Decorative Bezel	Deep Rollover, Polycarbonate bezel for Dead Front protection
Ceiling Thickness	1: 1 mm to 25 mm Ceiling Thickness 2: 27 mm to 51 mm Ceiling Thickness
Housing Material	Aluminium
Lens Seal Material	Silicone
Gasket Material	Urethane foam
TIR Optics Material	Clear polycarbonate
Reflector Material	Aluminium
Bezel Material	Polycarbonate
Weight	1.72 kg with external re-model box wired to luminaire (DMX/RDM control) (weights are approximate based on the heaviest fixture configuration) Please consult factory if exact fixture weight is needed
Ceiling Space Requirements (Length x Width x Height)	Up to 305 mm x 305 mm x 210 mm for external re-model box wired to luminaire Dimensions will vary by output, refer to Ceiling Requirements table for details

Features

Output (Nominal Lumens)	L05: 500 lm, L07: 700 lm, L10: 1000 lm, L13: 1300 lm, L20: 2000 lm
Colour and Colour Temperature	MRGBWP: MRGBW With Opticolor+ (Red, Green, Blue, Plus White Settable Range 22K to 65K CRI 90+)

Ceiling Cutout Shape



R - Round

Decorative Bezel



DR - Deep
rolled over

Standard Finishes for Decorative Bezel



MWH - Matte white



MBK - Matte black

Trim Shape



RD - Round

Ratings

IP55

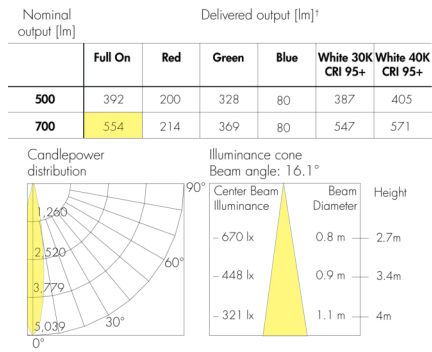
Certifications



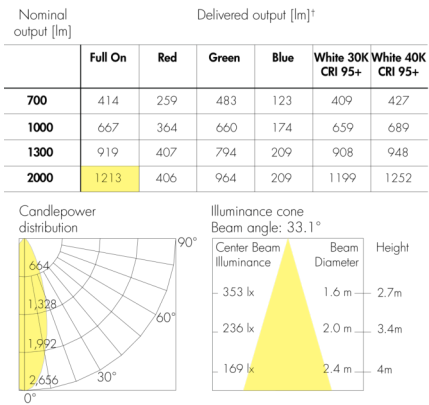
Optics (Nominal Distribution)	NS: Narrow Spot Distribution 15° N: Narrow Distribution 25° NR: Narrow Reflector 25° NFR: Narrow Facetted Reflector 25° M: Medium Reflector 40° MFR: Medium Facetted Reflector 40° W: Wide Reflector 60° WFR: Wide Facetted Reflector 60° VW: Very Wide Reflector 80° VWFR: Very Wide Facetted Reflector 80°
Decorative Bezel Finish	MWH: Matte White MBK: Matte Black
Certifications	CE compliant, RoHS
Warranty	5-year limited warranty
Performance	
Delivered Output	Up to 1,459 lm Wide Facetted Reflector Optic 60°, MRGBWP Optidrive™ Enabled (White 3000K CRI 95+, DMX/RDM) Up to 1,524 lm Wide Facetted Reflector Optic 60°, MRGBWP Optidrive™ Enabled (White 4000K CRI 95+, DMX/RDM)
Delivered Intensity	Up to 4,979 cd Narrow Spot Optic 15°, MRGBWP Optidrive™ Enabled (White 3000K CRI 95+, DMX/RDM) Up to 5,198 cd Narrow Spot Optic 15°, MRGBWP Optidrive™ Enabled (White 4000K CRI 95+, DMX/RDM)
Colour Consistency	3 SDCM (in white light colour temperatures)
Colour Rendering	90: CRI 90+ (White Light Only)
Lumen Maintenance	L95 55,000 hrs (Ta 25 °C)
Electrical and Control	
Voltage	220/240: 220-240 volts
Wattage Range	11W to 32W (wattage will vary based on voltage, output and optic, refer to Power Consumption table for details)
Control	DMX/RDM: DMX/RDM (Configurable to 3, 4, or 5 channel control via RDM in the field)
Environmental	
Ingress Protection Rating	IP55 (suitable for "Dead Front" shower rated locations)
Operating Temperature (Ceiling Cavity Ambient Temperature)	-20 °C to 40 °C

Photometric Information

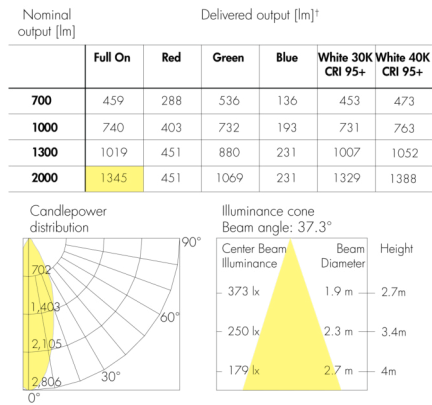
NS - Narrow Spot (Nominal 15°), 4000K



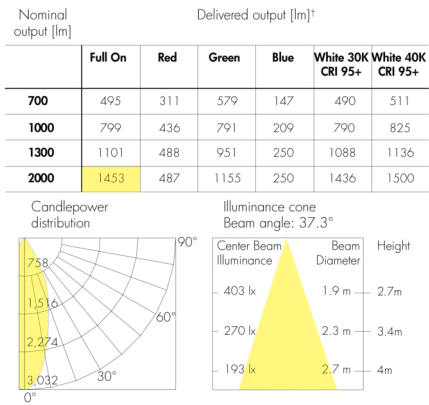
N - Narrow (Nominal 25°), 4000K



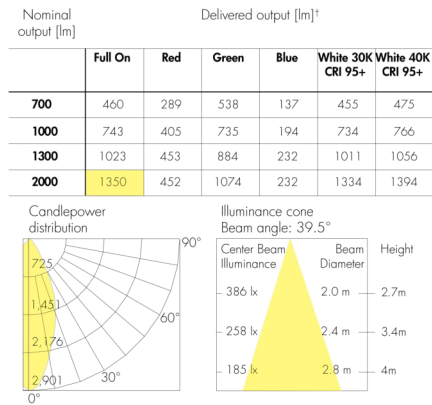
NR - Narrow Reflector (Nominal 25°), 4000K



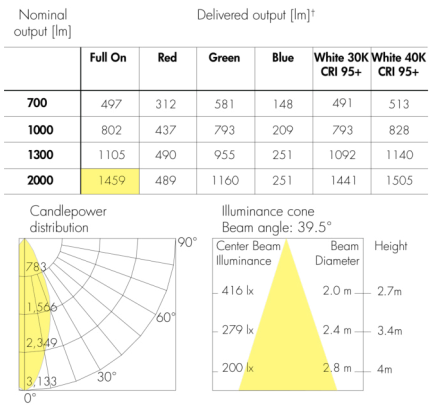
NFR - Narrow Facetted Reflector (Nominal 25°), 4000K



M - Medium Reflector (Nominal 40°), 4000K



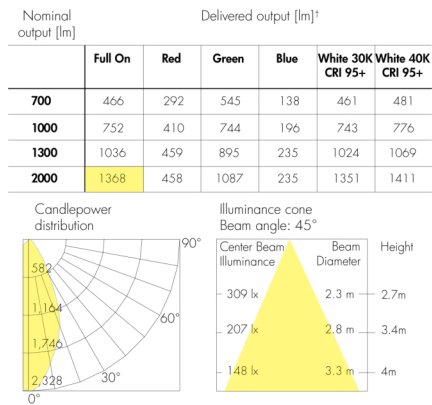
MFR - Medium Facetted Reflector (Nominal 40°), 4000K



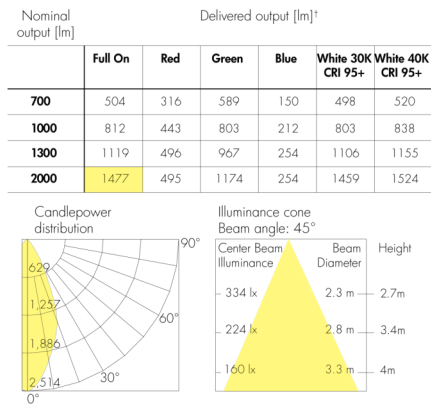
Photometric information is based on a factory-set Optidrive™ mode configuration.

† Consult website for LDT files. Delivered output: +/- 10% tolerance.
Consult Power Consumption section for wattage information.

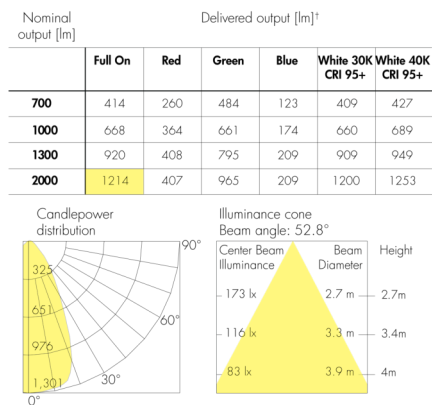
W - Wide Reflector (Nominal 60°), 4000K



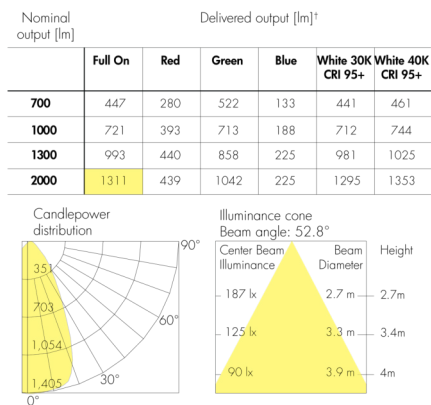
WFR - Wide Facetted Reflector (Nominal 60°), 4000K



VW - Very Wide Reflector (Nominal 80°), 4000K



VWFR - Very Wide Facetted Reflector (Nominal 80°), 4000K



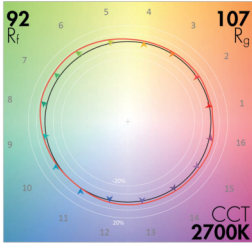
Photometric information is based on a factory-set Optidrive™ mode configuration.

† Consult website for LDT files. Delivered output: +/- 10% tolerance.
Consult Power Consumption section for wattage information.

TM-30

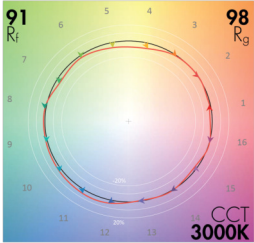
2700K - CRI 90+

CRI 90+				
CCT	CIE		TM-30	
2700K	R _a	90	92	R _f
	R ₉	76	107	R _g



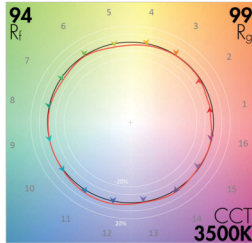
3000K - CRI 90+

CRI 90+				
CCT	CIE		TM-30	
3000K	R _a	96	91	R _f
	R ₉	94	98	R _g



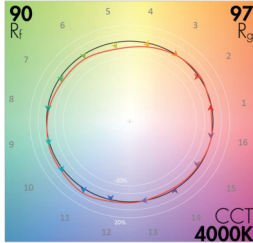
3500K - CRI 90+

CRI 90+				
CCT	CIE		TM-30	
3500K	R _a	97	94	R _f
	R ₉	83	99	R _g



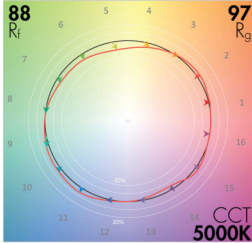
4000K - CRI 90+

CRI 90+				
CCT	CIE		TM-30	
4000K	R _a	95	90	R _f
	R ₉	97	97	R _g



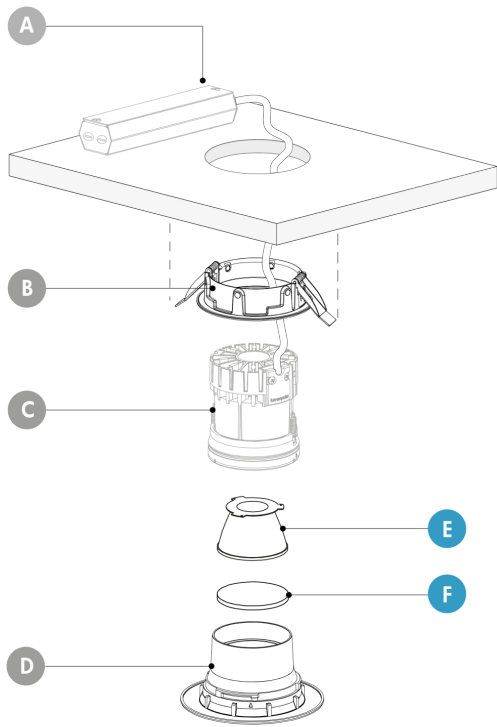
5000K - CRI 90+

CRI 90+				
CCT	CIE		TM-30	
5000K	R _a	91	88	R _f
	R ₉	78	97	R _g



Refer to TM-30 Reference Guide for details.

Exploded Overview - Part Selection



Standard Parts

- A - Ceiling driver box
- B - Ceiling mounting ring, complete with a urethane foam gasket
- C - Lumencore body (heatsink, universal fixing ring, LED module)
- D - Deep rolled over decorative bezel (plastic material for "Dead Front" shower applications complete with silicone-sealed glass lens)

Customizable Parts

- E - Optic*
- F - Optical accessory**

*Field changeable. Consult Interchangeable Optics section of the specification sheet for details. Consult factory for ordering details.
**Field changeable, consult installation instructions for details. Consult factory for ordering details.

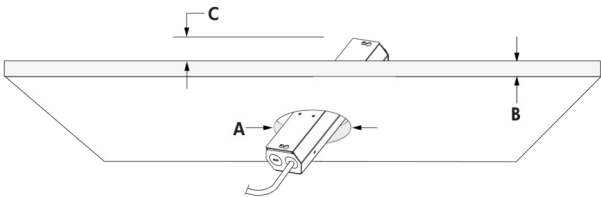
Ceiling Requirements

Ceiling Cavity Space Requirements (Length x Width x Height)

Installation type	Control	Output/Colour Rendering				
		L05	L07	L10	L13	L20
		CR90				
External re-model box wired to luminaire	DMX/RDM	305mm x 305mm x 210mm				

Above dimensions include any keep out requirements for proper airflow and thermal cooling.

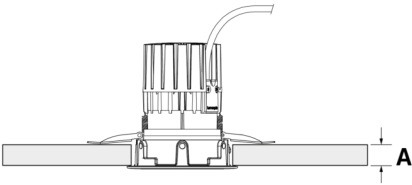
Ceiling Cutout



- A - Ceiling cutout: Ø114 mm
- B - Maximum ceiling thickness: 51 mm
- C - Minimum ceiling height: refer to Ceiling Cavity Space Requirements table

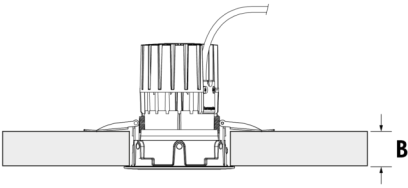
Ceiling Thickness Options

Ceiling Thickness 1



A - Ceiling thickness range: 1 mm to 25 mm

Ceiling Thickness 2



B - Ceiling thickness range: 27 mm to 51 mm

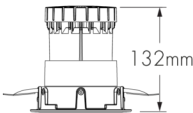
Ceiling springs are field changeable, consult installation instructions and factory for details.

Lumen Output and Heatsink Height

Optic	Short Heatsink	Tall Heatsink
	Lumen Output	
NS, NSR, NSFR	L05	L07
N, NR, NFR, M, MFR, W, WFR, VV, VVFR	L07, L10, L13	L20

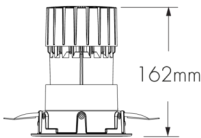
Dimensions

Short Heatsink



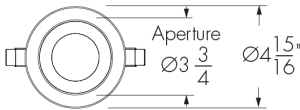
Front view

Tall Heatsink



Front view

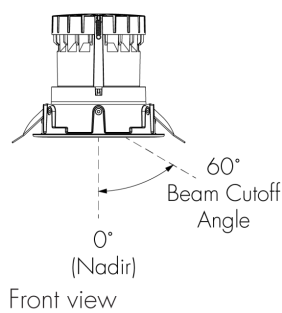
RD - Round Shape, Round Trim



Bottom view

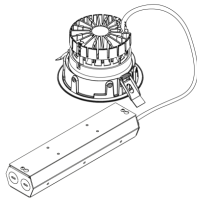
Beam Cutoff Angle

DR - Deep Rolled Over



Configurations

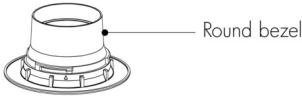
MRGBWP



External re-model box wired to luminaire.

Ceiling Cutout Shape Options

RD - Round Ceiling Cutout



Standard Finishes - Decorative Bezels

SH - Shower



MWH - Matte white



MBK - Matte black

Decorative Bezel Options

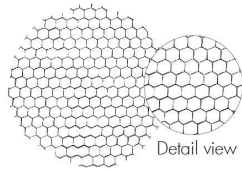
RD - Compatible Round Decorative Bezels



DR - Deep rolled over
(plastic material for "Dead Front"
shower applications)

Optical Accessories

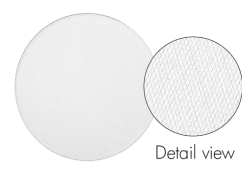
HL - Honeycomb Louver



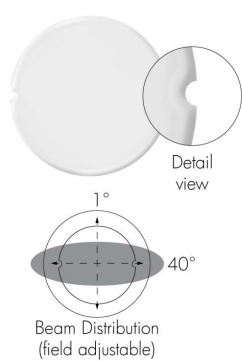
SL - Softening Glass Lens



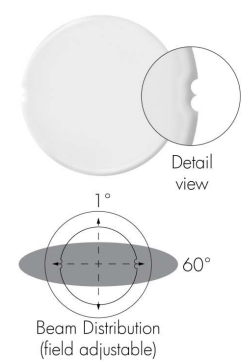
PD - Prismatic Diffuser



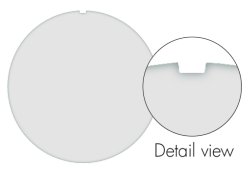
LSN - Linear Spread Lens Narrow (1° x 40°)



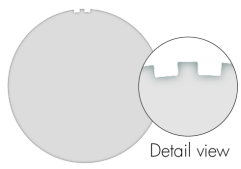
LSW - Linear Spread Lens Wide (1° x 60°)



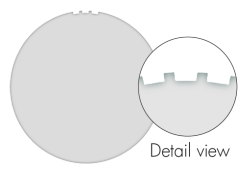
BW1 - Beam Widening Lens (+10°)



BW2 - Beam Widening Lens (+20°)



BW3 - Beam widening lens (+30°)



Refer to Beam Widening Lens table for beam distribution based on optic installed in the fixture.

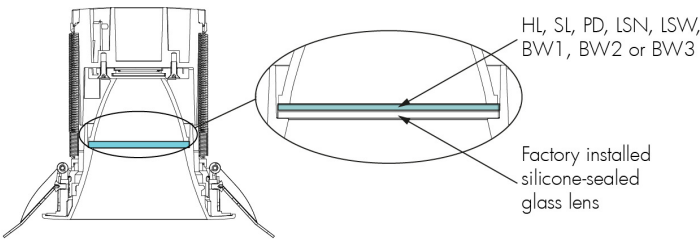
Refer to Beam Widening Lens table for beam distribution based on optic installed in the fixture.

Refer to Beam Widening Lens table for beam distribution based on optic installed in the fixture.

The accessory is mounted behind the silicone-sealed glass lens of the fixture. An additional accessory is factory installed and cannot be changed in the field.

Optical Accessory (Factory Installed, Not Field Changeable)

One Optical Accessory Installed



Optics

TIR Optic - Total Internal Reflection



Applicable to NS (15°) and N (25°) distributions.

Semi-Specular Reflector



Applicable to NR (25°), M (40°), W (60°) and VW (80°) distributions.

Facetted Reflector



Applicable to NFR (25°), MFR (40°), WFR (60°) and VWFR (80°) distributions.

Beam Widening Lenses

	Optic installed in fixture									
	NS 15°	N 25°	NR 25°	NFR 25°	M 40°	MFR 40°	W 60°	WFR 60°	VW 80°	VWFR 80°
BW1	17°	30°	30°	30°	41°	41°	61°	61°	81°	81°
BW2	24°	34°	34°	34°	45°	45°	63°	63°	82°	82°
BW3	33°	41°	41°	41°	50°	50°	67°	67°	85°	85°

The above beam angles are nominal beam angles.
Variations in beam angles can be seen due to different LES sizes. For exact beam calculations please consult factory.
Beam widening lenses should not be used with other accessories with the nominal results above.

Power Consumption

	Power consumption [W]	
Output [lm]	NS (15°)	N (25°) - NR (25°) - NFR (25°) - M (40°) - MFR (40°) W (60°) - WFR (60°) - VW (80°) - VWFR (80°)
500	14	N/A
700	21	11
1000	N/A	16
1300	N/A	23
2000	N/A	32

Power Consumption values are based on a MRGBWP Full On configuration.

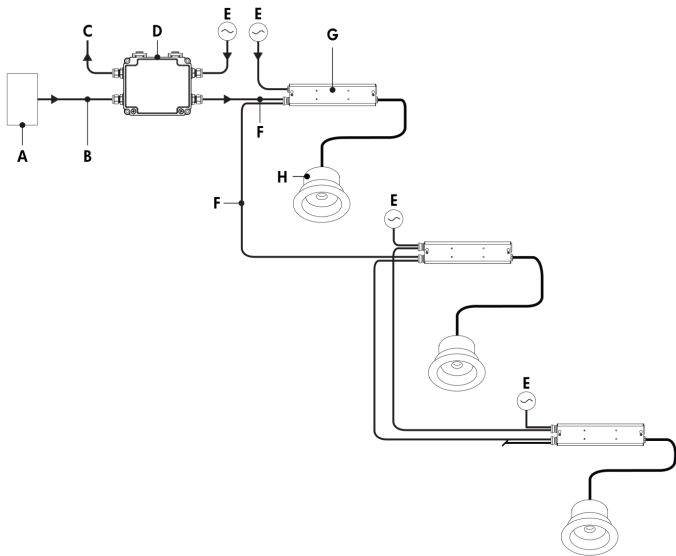
Interchangeable Optics

	Optic installed in fixture					
	NS 15°	N 25°	NR 25°	M 40°	W 60°	VW 80°
Interchangeable optics	N/A	NR	N	N	N	N
		NFR	NFR	NR	NR	NR
		M	M	NFR	NFR	NFR
		MFR	MFR	MFR	M	M
		W	W	W	MFR	MFR
		WFR	WFR	WFR	WFR	W
		VW	VW	VW	VW	WFR
		VWFR	VWFR	VWFR	VWFR	VWFR
			NFR 25°	MFR 40°	WFR 60°	VWFR 80°
			N	N	N	N
			NR	NR	NR	NR
			M	NFR	NFR	NFR
			MFR	M	M	M
			W	W	MFR	MFR
			WFR	WFR	W	W
			VW	VW	VW	WFR
			VWFR	VWFR	VWFR	VW

The optic options listed above are field changeable. Consult factory and installation instructions for details.

Typical Wiring Diagrams

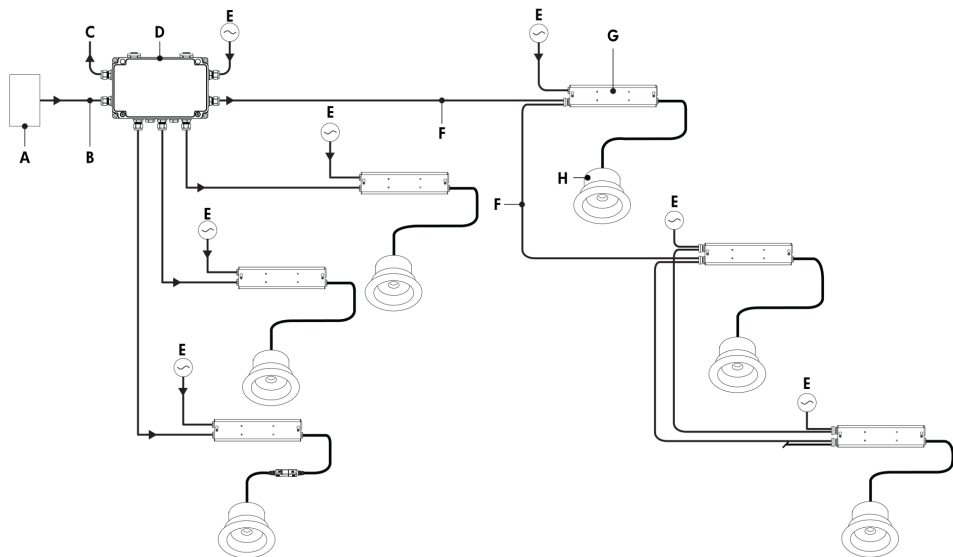
Daisy Chain Layout (DMX/RDM)



- A - DMX/RDM controller (to be ordered separately from Lumenpulse, or by others)
- B - Data input (Belden 9841 or equivalent, by others)
- C - Data output to next CBX (optional, non-isolated/non-boosted)
- D - CBX-DS
- E - Power input (220-240V AC, wiring by others)
- F - Data cable (Belden 9841 or equivalent, by others)
- G - Driver box (wired to fixture)
- H - Lumencore Recessed fixture

The DMX/RDM protocol states a maximum of 32 DMX/RDM enabled fixtures on any single run.
Maximum of 4 DMX/RDM repeaters/CBX cascading in line.
Maximum of 1 output per CBX-DS.
Each fixture requires 3, 4, or 5 DMX addresses depending on control mode selected onsite.
DMX terminator is required at the end of each run to maintain data integrity. Two (2x) DMX lumenterminators included per CBX-DS. See installation instructions for details.

Star Layout (DMX/RDM)



- A - DMX/RDM controller (to be ordered separately from Lumenpulse, or by others)
- B - Data input (Belden 9841 or equivalent, by others)
- C - Data output to next CBX (optional, non-isolated/non-boosted)
- D - CBX-ST
- E - Power input (220-240V AC, wiring by others)
- F - Data cable (Belden 9841 or equivalent, by others)
- G - Driver box (wired to fixture)
- H - Lumencore Recessed fixture

The DMX/RDM protocol states a maximum of 32 DMX/RDM enabled fixtures on any single run.
Maximum of 4 DMX/RDM repeaters/CBX cascading in line.
Maximum of 6 outputs per CBX-ST.
Each fixture requires 3, 4, or 5 DMX addresses depending on control mode selected onsite.
DMX terminator is required at the end of each run to maintain data integrity. Six (6x) DMX lumenterminators included per CBX-ST. See installation instructions for details.

How to Order								
Housing ⁽¹⁾	Certification	Type	Voltage	Cutout	Output (Nominal Lumens)	Colour and Colour Temperature	Colour Rendering	Optics (Nominal Distribution)
LCRS Lumencore Recessed Small - 102 mm	CE CE Compliant	SH Shower ⁽²⁾	220/240 220-240 volts	R Round	L05 500 lm ⁽³⁾ L07 700 lm L10 1000 lm ⁽⁴⁾ L13 1300 lm ⁽⁴⁾ L20 2000 lm ⁽⁴⁾	MRGBWP MRGBW With Opticolor+ ⁽⁵⁾	90 CRI 90+ (White Light Only) ⁽³⁾	NS Narrow Spot Distribution 15° ⁽⁶⁾ N Narrow Distribution 25° NR 25° Reflector NFR 25° Facetted Reflector M 40° Reflector MFR 40° Facetted Reflector W 60° Reflector WFR 60° Facetted Reflector VW 80° Reflector VWFR 80° Facetted Reflector

Notes:

1. Refer to website product configurator for all exceptions.

2. Also suitable for IP54 applications. IP55 rated product can be used for interior ceiling mounted or exterior canopy-mounted applications. Consult factory and check all local codes and thermal conditions for proper specification.

3. Available for NS optic only.
4. Available for N, NR, NFR, M, MFR, W, WFR, VW and VWFR optics only.

5. CRI 90 applies only to white light colour temperatures from 2700K to 5000K.

6. Available up to 700 lumens.

How to Order

Control	Decorative Bezel	Decorative Bezel Finish	Ceiling Thickness	Accessories ⁽¹⁰⁾
DMX/RDM DMX/RDM (Configurable to 3, 4, or 5 channel control via RDM in the field) ^{(7) (8) (9)}	DR Deep Rollover	MWH Matte White MBK Matte Black	1 1 mm to 25 mm Ceiling Thickness 2 27 mm to 51 mm Ceiling Thickness	NA No Accessory HL Honeycomb Louver SL Softening Glass Lens PD Prismatic Diffuser LSN Linear Spread Lens Narrow (1° x 40°) ⁽¹¹⁾ LSW Linear Spread Lens Wide (1° x 60°) ⁽¹²⁾ BW1 Beam Widening Lens (+10°) BW2 Beam Widening Lens (+20°) BW3 Beam Widening Lens (+30°)

Notes:

7. Configurable between 8 or 16-bit dimming control via RDM. DMX/RDM requires LumenID, LumenID software and onsite commissioning.

8. A Control Box (CBX-DS or CBX-ST) and lumenID (LID) must be specified.

9. Consult the Lumencore Recessed Opticolor+™ Brochure for details.

10. The silicone-sealed glass lens is always installed by the factory, not field changeable. Maximum one additional accessory per fixture.

11. Recommended for XN, VN, NS, N, NR and NFR optics when combined with 2200K, 2700K, 3000K, 3500K, 4000K colour temperature options. Nominal 10° x 40° distribution when used with the NS optic. Available for NFR optic when combined with DTWP, DWH, or DWWP colour options only.

12. Recommended for XN, VN, NS, N, NR and NFR optics when combined with 2200K, 2700K, 3000K, 3500K, 4000K colour temperature options. Nominal 10° x 60° distribution when used with the NS optic. Available for NFR optic when combined with DTWP, DWH, or DWWP colour options only.