



# LED SOLUTIONS

Cutting edge design

GA-016 Series

GA-017 Series

155  
GA-016  
CASA



15°, 21°, 32°, 46°

105  
GA-16  
STANDARD



15°, 20°, 30°, 50°

135  
GA-017  
CASA



15°, 21°, 32°, 46°

DRIVER PART  
HARDLY VISIBLE

SMALL FORM FACTOR  
GOOD LIGHT

153  
GA-016  
CAFETERIA



15°, 20°, 30°, 50°

107  
GA-016  
REFORM



COB 1206: 10°, 24°, 30°, 50°  
COB 1212: 20°, 40°, 60°

136  
GA-017  
STANDARD



15°, 20°, 30°, 50°

137  
GA-017  
CAFETERIA



15°, 20°, 30°, 50°

PRODUCT	LIGHTSOURCE				POWER			COLOURS
	LED module	mA	Colour temp.	CRI	Max. Luminous Flux	Module Wattage	System Wattage	
GA-016 Casa	CLU038-1206	750	3 000K	CRI 80+	3 625 Lm	27W	28W	 White  Silver  Black
GA-016 Casa	CLU038-1206	750	3 000K B.BBL	CRI 90+	2 850 Lm	27W	28W	
GA-016 Standard	CLU038-1206	850	3 000K	CRI 80+	4 100 Lm	31W	33W	
GA-016 Standard	CLU038-1206	850	3 000K B.BBL	CRI 90+	3 200 Lm	31W	33W	
GA-016 Cafeteria	CLU038-1206	850	3 000K	CRI 80+	4 200 Lm	31W	33W	
GA-016 Cafeteria	CLU038-1206	850	3 000K B.BBL	CRI 90+	3 300 Lm	31W	33W	
GA-016 Reform	CLU048-1212	850	3 000K	CRI 80+	4 625 Lm	29W	32W	
GA-016 Reform	CLU048-1212	850	3 000K B.BBL	CRI 90+	3 625 Lm	29W	32W	

\*Optical loss 3 - 9%

PRODUCT	LIGHTSOURCE				POWER			COLOURS
	LED module	mA	Colour temp.	CRI	Max. Luminous Flux	Module Wattage	System Wattage	
GA-017 Casa	CLU038-1206	650	3 000K	CRI 80+	3 300 Lm	23W	25W	 White  Silver  Black
GA-017 Casa	CLU038-1206	650	3 000K B.BBL	CRI 90+	2 600 Lm	23W	25W	
GA-017 Standard	CLU038-1206	650	3 000K	CRI 80+	3 325 Lm	23W	25W	
GA-017 Standard	CLU038-1206	650	3 000K B.BBL	CRI 90+	2 600 Lm	23W	25W	
GA-017 Cafeteria	CLU038-1206	650	3 000K	CRI 80+	3 350 Lm	23W	25W	
GA-017 Cafeteria	CLU038-1206	650	3 000K B.BBL	CRI 90+	2 625 Lm	23W	25W	

\*Optical loss 3 - 9%

# GA-2020 Series | AC LED Series

190  
GA-2020  
CASA



15°, 21°, 32°, 46°

CUTTING EDGE  
ALLOWS SMALL  
FORM FACTORS

176  
AC  
CASA



15°, 24°

178  
AC  
STANDARD



15°, 24°, 35°

GOOD RATIO  
BETWEEN COST  
AND PERFORMANCE

193  
GA-2020  
STANDARD



15°, 20°, 30°, 50°

17E  
AC  
CAFETERIA



15°, 24°, 35°

17I  
AC  
MINI LEAN DL



15°, 24°, 35°

OPTIMAL DESIGN  
GOOD LIGHT

PRODUCT	LIGHTSOURCE				POWER			COLOURS
	LED module	mA	Colour temp.	CRI	Max. Luminous Flux	Module Wattage	System Wattage	
GA-2020 Casa	CLU038-1206	450	3 000K	CRI 80+	2 400 Lm	15,5W	17W	 White
GA-2020 Casa	CLU038-1206	450	3 000K B.BBL	CRI 90+	1 900 Lm	15,5W	17W	
GA-2020 Standard	CLU038-1206	450	3 000K	CRI 80+	2 425 Lm	15,5W	17W	 Silver
GA-2020 Standard	CLU038-1206	450	3 000K B.BBL	CRI 90+	1 900 Lm	15,5W	17W	

\*Optical loss 3 - 9%



PRODUCT	LIGHTSOURCE			POWER			COLOURS
	LED module	Colour temp.	CRI	Max. Luminous Flux	Module Wattage	System Wattage	
AC Casa	CLC240-12120	4 000K	CRI 80+	1 200 Lm	12W	12W	 White
AC Casa	CLC240-13120	3 500K B.BBL	CRI 90+	1 200 Lm	13W	13W	
AC Standard	CLC240-12120	4 000K	CRI 80+	1 200 Lm	12W	12W	 Silver
AC Standard	CLC240-13120	3 500K B.BBL	CRI 90+	1 200 Lm	13W	13W	
AC Cafeteria	CLC250-18220	4 000K	CRI 80+	2 200 Lm	18W	18W	 Black
AC Cafeteria	CLC250-22220	3 500K B.BBL	CRI 90+	2 200 Lm	22W	22W	
AC Mini Lean DL	CLC240-12120	4 000K	CRI 80+	1 200 Lm	12W	12W	 Black
AC Mini Lean DL	CLC240-13120	3 500K B.BBL	CRI 90+	1 200 Lm	13W	13W	

\*Optical loss 3 - 9%

# TRIGGER Range \*Metal housing

# COLT Range \*Thermoplastic housing

**166**  
**TRIGGER**  
**MINI CASA**



165 x 63 mm

15°, 21°, 32°, 46°

**163**  
**TRIGGER**  
**MINI CYLINDER**



15°, 20°, 30°, 50°

**167**  
**COLT**  
**MINI CASA**

BLL compatible



15°, 21°, 32°, 46°

**145**  
**COLT**  
**MINI CYLINDER**

BLL compatible



15°, 20°, 30°, 50°

METAL - HOUSING  
PERFECT BALANCE BETWEEN  
PERFORMANCE AND COST

THERMOPLASTIC  
CONSTRUCTION  
STRONG COB ENGINES

**162**  
**TRIGGER**  
**CYLINDER**



165 x 87 mm

15°, 20°, 30°, 50°

**140**  
**TRIGGER**  
**LEAN**  
Up to 7000 Lm



COB 1206: 10°, 24°, 30°, 50°  
COB 1212: 20°, 40°, 60°

**144**  
**COLT**  
**CYLINDER**

BLL compatible



15°, 20°, 30°, 50°

**141**  
**COLT**  
**LEAN**  
Up to 7000 Lm



COB 1206: 10°, 24°, 30°, 50°  
COB 1212: 20°, 40°, 60°

PRODUCT	LIGHTSOURCE				POWER			COLOURS
	LED module	mA	Colour temp.	CRI	Max. Luminous Flux	Module Wattage	System Wattage	
Trigger Mini Casa	CLU038-1206	750	3 000K	CRI 80+	3 625 Lm	27W	28W	White
Trigger Mini Casa	CLU038-1206	750	3 000K B.BBL	CRI 90+	2 850 Lm	27W	28W	
Trigger Mini Cylinder	CLU038-1206	900	3 000K	CRI 80+	4 375 Lm	33W	35W	Silver
Trigger Mini Cylinder	CLU038-1206	900	3 000K B.BBL	CRI 90+	3 425 Lm	33W	35W	
Trigger Cylinder	CLU038-1206	1050	3 000K	CRI 80+	4 900 Lm	39W	43W	Black
Trigger Cylinder	CLU038-1206	1050	3 000K B.BBL	CRI 90+	3 850 Lm	39W	43W	
Trigger Lean	CLU048-1212	1400	3 000K	CRI 80+	7 000 Lm	50W	55W	Black
Trigger Lean	CLU048-1212	1400	3 000K B.BBL	CRI 90+	5 500 Lm	50W	55W	

\*Optical loss 3 - 9%

PRODUCT	LIGHTSOURCE				POWER			COLOURS
	LED module	mA	Colour temp.	CRI	Max. Luminous Flux	Module Wattage	System Wattage	
Colt Mini Casa	CLU038-1206	750	3 000K	CRI 80+	3 625 Lm	27W	28W	White
Colt Mini Casa	CLU038-1206	750	3 000K B.BBL	CRI 90+	2 850 Lm	27W	28W	
Colt Mini Cylinder	CLU038-1206	900	3 000K	CRI 80+	4 375 Lm	33W	35W	Black
Colt Mini Cylinder	CLU038-1206	900	3 000K B.BBL	CRI 90+	3 425 Lm	33W	35W	
Colt Cylinder	CLU038-1206	1050	3 000K	CRI 80+	4 900 Lm	39W	43W	Black
Colt Cylinder	CLU038-1206	1050	3 000K B.BBL	CRI 90+	3 850 Lm	39W	43W	
Colt Lean	CLU048-1212	1400	3 000K	CRI 80+	7 000 Lm	50W	55W	Black
Colt Lean	CLU048-1212	1400	3 000K B.BBL	CRI 90+	5 500 Lm	50W	55W	

\*Optical loss 3 - 9%

# GLIDER Series *\*Dali Compatible*

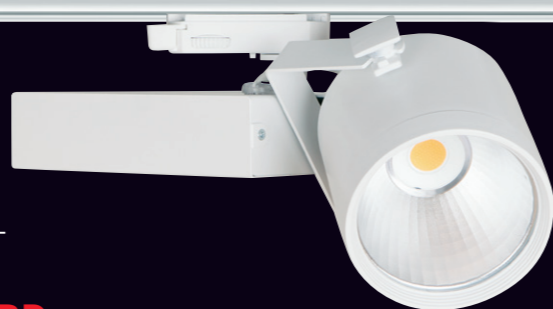
# PRIORITY Series *\*Dali Compatible*

**101**  
**GLIDER**  
**CASA**



15°, 21°, 32°, 46°

**100**  
**GLIDER**  
**STANDARD**



15°, 20°, 30°, 50°

**15L**  
**MINI**  
**PRIORITY**



15°, 20°, 30°, 50°

CORE PRODUCTION  
CLASSIC AND BEST ABILITY &  
PERFORMANCE  
STRONG COBS

CORE OF PRODUCTION -  
THE EXPERIENCE PROVES ITS  
BEST ABILITY AND PERFORMANCE  
STRONG COBS

**10L**  
**GLIDER**  
**MINI**



15°, 20°, 30°, 50°

**10J**  
**GLIDER**  
**TREND**  
Up to 7000 Lm



COB 1206: 10°, 24°, 30°, 50°  
COB 1212: 20°, 40°, 60°

**15J**  
**PRIORITY**  
Up to 7000 Lm



COB 1206: 10°, 24°, 30°, 50°  
COB 1212: 20°, 40°, 60°

PRODUCT	LIGHTSOURCE				POWER			COLOURS
	LED module	mA	Colour temp.	CRI	Max. Luminous Flux	Module Wattage	System Wattage	
Glider Casa	CLU038-1206	750	3 000K	CRI 80+	3 625 Lm	27W	28W	 White  Silver  Black
Glider Casa	CLU038-1206	750	3 000K B.BBL	CRI 90+	2 850 Lm	27W	28W	
Glider Standard	CLU038-1206	900	3 000K	CRI 80+	4 375 Lm	33W	35W	
Glider Standard	CLU038-1206	900	3 000K B.BBL	CRI 90+	3 425 Lm	33W	35W	
Glider Mini	CLU038-1206	900	3 000K	CRI 80+	4 375 Lm	33W	35W	
Glider Mini	CLU038-1206	900	3 000K B.BBL	CRI 90+	3 425 Lm	33W	35W	
Glider Trend	CLU048-1212	1400	3 000K	CRI 80+	7 000 Lm	50W	55W	
Glider Trend	CLU048-1212	1400	3 000K B.BBL	CRI 90+	5 500 Lm	50W	55W	

\*Optical loss 3 - 9%

PRODUCT	LIGHTSOURCE				POWER			COLOURS
	LED module	mA	Colour temp.	CRI	Max. Luminous Flux	Module Wattage	System Wattage	
Mini Priority	CLU038-1206	900	3 000K	CRI 80+	4 375 Lm	33W	35W	 White  Silver  Black
Mini Priority	CLU038-1206	900	3 000K B.BBL	CRI 90+	3 425 Lm	33W	35W	
Priority	CLU048-1212	1400	3 000K	CRI 80+	7 000 Lm	50W	55W	
Priority	CLU048-1212	1400	3 000K B.BBL	CRI 90+	5 500 Lm	50W	55W	

\*Optical loss 3 - 9%

# ALERT, ASPECT | BANDIT, HUB

**11A**  
**ALERT**  
DALI compatible



15°, 20°, 30°, 50°

CORE PRODUCT -  
ARCHITECTURAL

**11J**  
**BANDIT**  
DALI compatible  
Up to 7000 Lm



COB 1206: 10°, 24°, 30°, 50°  
COB 1212: 20°, 40°, 60°

CORE PRODUCT  
BEST ABILITY ON  
SEVERAL PROJECTS



15°, 28°, 35°

**151**  
**ASPECT**

GOOD QUALITY  
LIGHT FROM A DEEP  
REFLECTOR

**122**  
**HUB**  
DALI compatible



15°, 20°, 30°, 50°

COMPACT  
CORE DESIGN

PRODUCT	LIGHTSOURCE				POWER			COLOURS
	LED module	mA	Colour temp.	CRI	Max. Luminous Flux	Module Wattage	System Wattage	
Alert	CLU038-1206	900	3 000K	CRI 80+	4 375 Lm	33W	35W	 White  Silver  Black
Alert	CLU038-1206	900	3 000K B.BBL	CRI 90+	3 425 Lm	33W	35W	
Aspect	CLU038-1206	900	3 000K	CRI 80+	4 375 Lm	33W	35W	
Aspect	CLU038-1206	900	3 000K B.BBL	CRI 90+	3 425 Lm	33W	35W	

\*Optical loss 3 - 9%

PRODUCT	LIGHTSOURCE				POWER			COLOURS
	LED module	mA	Colour temp.	CRI	Max. Luminous Flux	Module Wattage	System Wattage	
Bandit	CLU048-1212	1400	3 000K	CRI 80+	7 000 Lm	50W	55W	 White  Silver  Black
Bandit	CLU048-1212	1400	3 000K B.BBL	CRI 90+	5 500 Lm	50W	55W	
Hub	CLU038-1206	900	3 000K	CRI 80+	4 375 Lm	33W	35W	
Hub	CLU038-1206	900	3 000K B.BBL	CRI 90+	3 425 Lm	33W	35W	

\*Optical loss 3 - 9%

# LEAN Track Series

# LEAN DL Series \*Dali Compatible

19L  
MINI LEAN



15°, 20°, 30°, 50°

19M  
MINI LEAN DL



15°, 20°, 30°, 50°

EXPERIENCE PROVES BEST ABILITY OF QUALITY LIGHT ON SEVERAL INSTALLATIONS

LIVAL'S EXPERIENCE IN RETAIL LIGHT GUARANTEES PERFECT BALANCE BETWEEN PERFORMANCE AND COST

19J  
LEAN  
Up to 7000 Lm



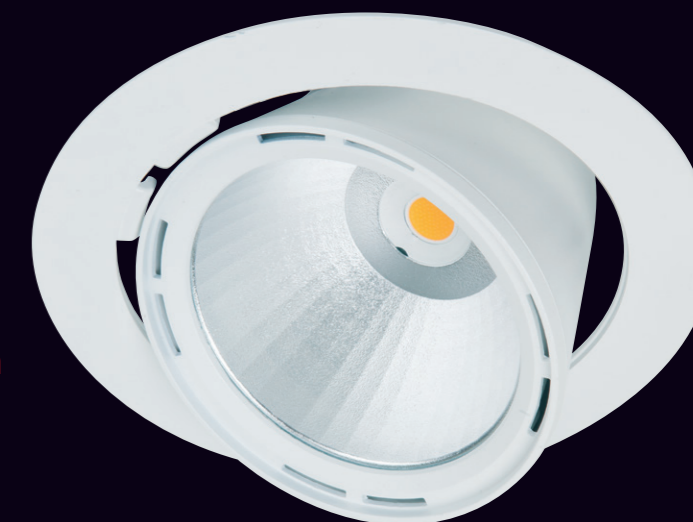
COB 1206: 10°, 24°, 30°, 50°  
COB 1212: 20°, 40°, 60°

19J  
LEAN PULSE  
DALI compatible  
Up to 7000 Lm



COB 1206: 10°, 24°, 30°, 50°  
COB 1212: 20°, 40°, 60°

19K  
LEAN DL  
Up to 7000 Lm



COB 1206: 10°, 24°, 30°, 50°  
COB 1212: 20°, 40°, 60°

PRODUCT	LIGHTSOURCE				POWER			COLOURS
	LED module	mA	Colour temp.	CRI	Max. Luminous Flux	Module Wattage	System Wattage	
Mini Lean	CLU038-1206	900	3 000K	CRI 80+	4 375 Lm	33W	35W	 White  Silver  Black
Mini Lean	CLU038-1206	900	3 000K B.BBL	CRI 90+	3 425 Lm	33W	35W	
Lean / Lean Pulse	CLU048-1212	1400	3 000K	CRI 80+	7 000 Lm	50W	55W	
Lean / Lean Pulse	CLU048-1212	1400	3 000K B.BBL	CRI 90+	5 500 Lm	50W	55W	

\*Optical loss 3 - 9%

PRODUCT	LIGHTSOURCE				POWER			COLOURS
	LED module	mA	Colour temp.	CRI	Max. Luminous Flux	Module Wattage	System Wattage	
Mini Lean DL	CLU038-1206	900	3 000K	CRI 80+	4 375 Lm	33W	35W	 White  Silver  Black
Mini Lean DL	CLU038-1206	900	3 000K B.BBL	CRI 90+	3 425 Lm	33W	35W	
Lean DL	CLU048-1212	1400	3 000K	CRI 80+	7 000 Lm	50W	55W	
Lean DL	CLU048-1212	1400	3 000K B.BBL	CRI 90+	5 500 Lm	50W	55W	

\*Optical loss 3 - 9%

# CASA DL Series \*Dali Compatible

# FIRST DL Series



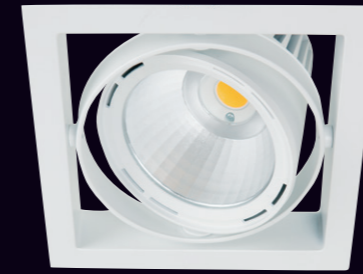
**110**  
**CASA**  
**SINGLE DL**

15°, 21°, 32°, 46°



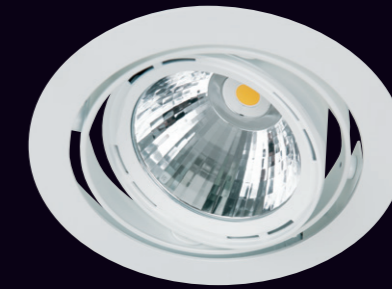
**108**  
**CASA**  
**CIRCLE DL**

15°, 21°, 32°, 46°



**10A**  
**FIRST**  
**SINGLE DL**

COB 1206: 10°, 24°, 30°, 50°  
COB 1212: 20°, 40°, 60°



**10P**  
**FIRST**  
**CIRCLE DL**

COB 1206: 10°, 24°, 30°, 50°  
COB 1212: 20°, 40°, 60°

RETAIL LIGHTING IS OUR BUSINESS  
COST - EFFICIENT - SMALL FORM FACTORS  
QUALITY IN LIGHT

RETAIL LIGHTING - OUR BUSINESS  
QUALITY OF LIGHT  
CIRCLE & RECTANGULAR DL

**111**  
**CASA**  
**DUO DL**



15°, 21°, 32°, 46°

**10B**  
**FIRST**  
**DUO DL**



COB 1206: 10°, 24°, 30°, 50° COB 1212: 20°, 40°, 60°

**112**  
**CASA**  
**TRIO DL**



15°, 21°, 32°, 46°

**10C**  
**FIRST**  
**TRIO DL**



COB 1206: 10°, 24°, 30°, 50° COB 1212: 20°, 40°, 60°

PRODUCT	LIGHTSOURCE				POWER			COLOURS
	LED module	mA	Colour temp.	CRI	Max. Luminous Flux	Module Wattage	System Wattage	
Casa Circle DL	CLU038-1206	750	3 000K	CRI 80+	3 625 Lm	27W	28W	 White  Silver  Black
Casa Circle DL	CLU038-1206	750	3 000K B.BBL	CRI 90+	2 850 Lm	27W	28W	
Casa Single DL	CLU038-1206	750	3 000K	CRI 80+	3 625 Lm	27W	28W	
Casa Single DL	CLU038-1206	750	3 000K B.BBL	CRI 90+	2 850 Lm	27W	28W	
Casa Duo DL	CLU038-1206	750	3 000K	CRI 80+	2x 3 625 Lm	2x 27W	2x 28W	
Casa Duo DL	CLU038-1206	750	3 000K B.BBL	CRI 90+	2x 2 850 Lm	2x 27W	2x 28W	
Casa Trio DL	CLU038-1206	750	3 000K	CRI 80+	3x 3 625 Lm	3x 27W	3x 28W	
Casa Trio DL	CLU038-1206	750	3 000K B.BBL	CRI 90+	3x 2 850 Lm	3x 27W	3x 28W	

\*Optical loss 3 - 9%

PRODUCT	LIGHTSOURCE				POWER			COLOURS
	LED module	mA	Colour temp.	CRI	Max. Luminous Flux	Module Wattage	System Wattage	
FIRST Circle DL	CLU038-1206	1200	3 000K	CRI 80+	5 500 Lm	45W	50W	 White  Silver  Black
FIRST Circle DL	CLU038-1206	1200	3 000K B.BBL	CRI 90+	4 300 Lm	45W	50W	
FIRST Single DL	CLU048-1212	1400	3 000K	CRI 80+	7 000 Lm	50W	55W	
FIRST Single DL	CLU048-1212	1400	3 000K B.BBL	CRI 90+	5 500 Lm	50W	55W	
FIRST Duo DL	CLU038-1206	1200	3 000K	CRI 80+	2x 5 500 Lm	2x 45W	2x 50W	
FIRST Duo DL	CLU038-1206	1200	3 000K B.BBL	CRI 90+	2x 4 300 Lm	2x 45W	2x 50W	
FIRST Trio DL	CLU038-1206	1200	3 000K	CRI 80+	3x 5 500 Lm	3x 45W	3x 50W	
FIRST Trio DL	CLU038-1206	1200	3 000K B.BBL	CRI 90+	3x 4 300 Lm	3x 45W	3x 50W	

\*Optical loss 3 - 9%



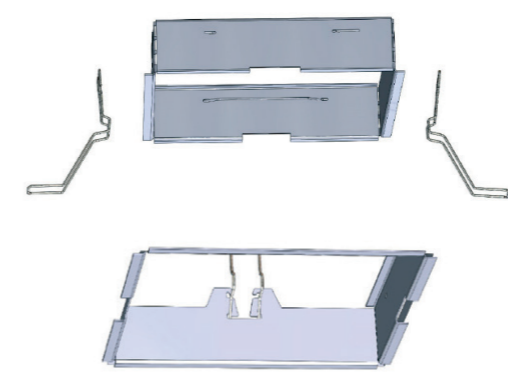
# QUICK STEP *Series DC,AC*

# QS *Frame installation*

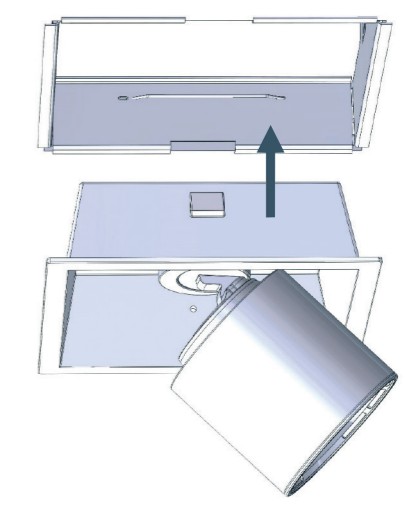


ARCHITECTURAL  
MULTIPLE FUNCTIONS  
OPTIMAL PERFORMANCE

**Step 1.**  
Frame is springloaded to ceiling



**Step 2.**  
Snap-on light house to the frame



PRODUCT	LIGHTSOURCE				POWER			COLOURS
	LED module	mA	Colour temp.	CRI	Max. Luminous Flux	Module Wattage	System Wattage	
QS Casa	CLU038-1206	750	3 000K	CRI 80+	3 625 Lm	27W	28W	White
QS Casa	CLU038-1206	750	3 000K B.BBL	CRI 90+	2 750 Lm	27W	28W	
QS Standard	CLU038-1206	900	3 000K	CRI 80+	4 375 Lm	33W	35W	Silver
QS Standard	CLU038-1206	900	3 000K B.BBL	CRI 90+	3 425 Lm	33W	35W	
QS Cafeteria	CLU038-1206	1050	3 000K	CRI 80+	4 900 Lm	39W	43W	Black
QS Cafeteria	CLU038-1206	1050	3 000K B.BBL	CRI 90+	3 850 Lm	39W	43W	
QS Reform	CLU048-1212	1400	3 000K	CRI 80+	7 000 Lm	50W	55W	Black
QS Reform	CLU048-1212	1400	3 000K B.BBL	CRI 90+	5 500 Lm	50W	55W	

\*Optical loss 3 - 9%

# RESPECT *Series* | SCOPE

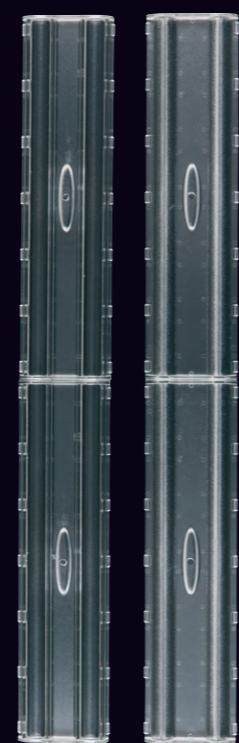


**123**  
**RESPECT SINGLE**  
Direct lens  
Opal diffuser



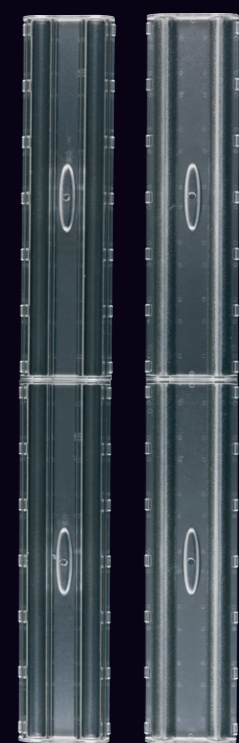
**124**  
**RESPECT DOUBLE**  
Double Asymmetric lens  
Direct lens  
Opal diffuser

Direct lens    Double Asymmetric lens




**125**  
**SCOPE**  
Double Asymmetric lens  
Direct lens  
Opal diffuser

Direct lens    Double Asymmetric lens





*PERFECT LIGHT PRODUCER FOR GLOBAL TRAC E.T.C. MULTIPLE OF APPLICATIONS IN RETAIL E.T.C.*

*ADAPTER EQUIPPED FOR QUICK CONNECTION TO GLOBAL TRAC E.T.C. SEVERAL APPLICATIONS*

PRODUCT	LIGHTSOURCE				POWER			COLOURS
	LED module	mA	Colour temp.	CRI	Max. Luminous Flux	Module Wattage	System Wattage	
Respect Single	LM400/22R48	500	3 000K	CRI 80+	1 800 Lm	12W	15W	 White
Respect Double	LM415/44R96	500	3 000K	CRI 80+	3 500 Lm	23W	27W	

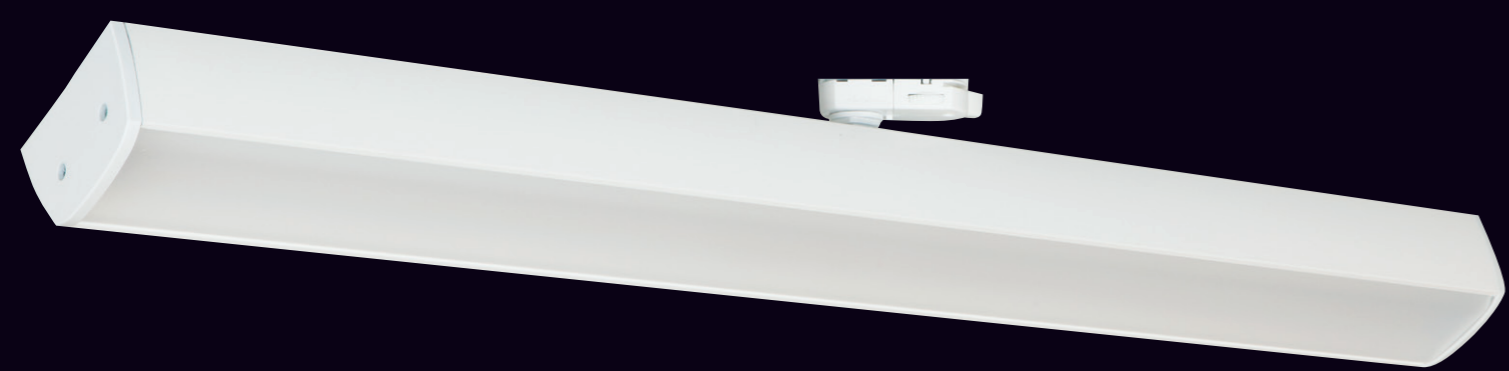
\*Optical loss 3 - 9%

PRODUCT	LIGHTSOURCE				POWER			COLOURS
	LED module	mA	Colour temp.	CRI	Max. Luminous Flux	Module Wattage	System Wattage	
Scope	LM415/44R96	500	3 000K	CRI 80+	3 500 Lm	23W	27W	 White   Black

\*Optical loss 3 - 9%

# NANO

# BLL BLUE LIGHT LINK



129 \_\_\_\_\_  
**NANO**

Double Asymmetric  
 Nano lens or Opal  
 diffuser

*NANO - STRONG LIGHT PRODUCER  
 ADAPTER EQUIPPED FOR QUICK TRACK  
 CONNECTION*



### LIVAL INNOVATION – COLT BLL - SERIES:

Wireless control for IOS & Android – dimming from 0,5% - 100%  
 Creation of 16 groups / 16 dynamic scenarios


### CONTROLLABLE LIGHTING – WHAT IS IT?

Wireless dimming of light points via Bluetooth  
 Fixture driver fitted with integrated Bluetooth module  
 Modules in fixtures can talk amongst themselves – thus creating a network

### HOW TO BOOST BUSINESS BY COLT BLL?

Key display inside the store with dynamic moving light attracts the eye  
 Store windows with dynamic moving light attracts passers by



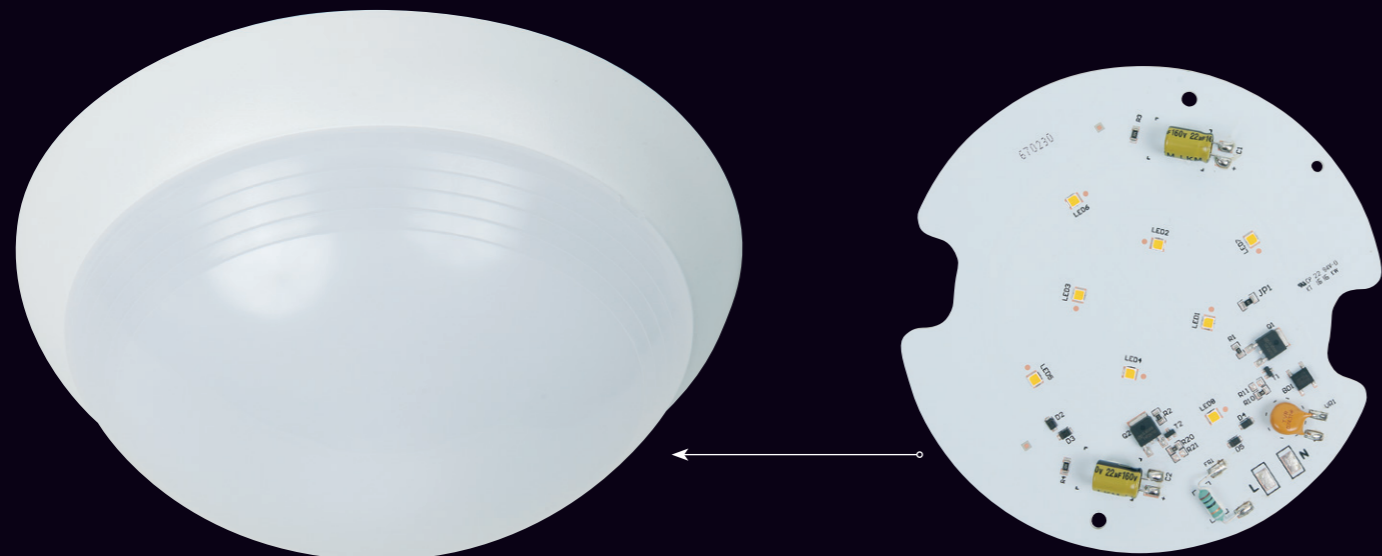
PRODUCT	LIGHTSOURCE				POWER			COLOURS
	LED module	mA	Colour temp.	CRI	Max. Luminous Flux	Module Wattage	System Wattage	
NaNo	Samsung		3 000K	CRI 80+	6 850 Lm	52W	56W	 White
NaNo	Samsung		4 000K	CRI 80+	7 000 Lm	52W	56W	

\*Optical loss with Opal diffuser 5 - 9%

*BLUETOOTH TECHNOLOGY NOW AVAILABLE  
 MAKES CONTROLLING & COMMUNICATION  
 OF LIGHT POINTS EASY*

# CALOT LED, HONY AC

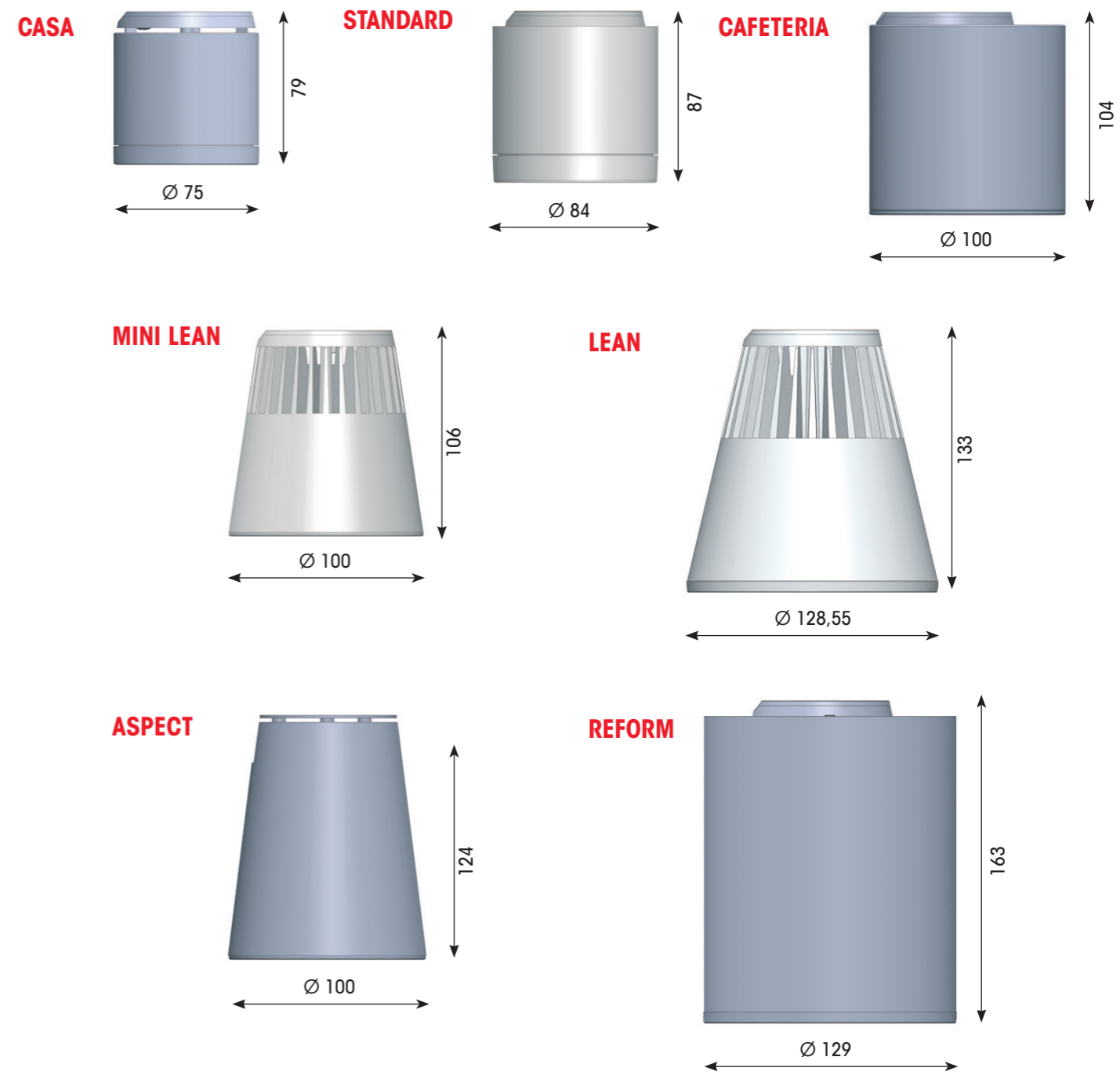
# HEAD DIMENSIONS



134  
CALOT LED IP44



17N  
HONY AC COB



PRODUCT	LIGHTSOURCE			POWER			COLOURS
	LED module	Colour temp.	CRI	Max. Luminous Flux	Module Wattage	System Wattage	
Calot LED AC	Citizen LML-003	3 000K	CRI 80+	570 Lm	8W	8W	White
Calot LED AC	Citizen LML-003	4 000K	CRI 80+	600 Lm	8W	8W	
Hony AC	CLC250-18220	4 000K	CRI 80+	2 200 Lm	18W	18W	White
Hony AC	CLC250-22220	3 500K B.BBL	CRI 90+	2 200 Lm	22W	22W	

\*Optical loss 3 - 9%

LIVAL'S STRONG COB ENGINE ALLOWS  
DESIGNS WITH SMALLER FORM FACTORS

# LIVAL SHOWING THE WAY

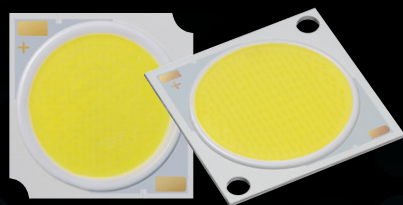
CITIZEN

**830, 840**

**930 B.BBL**

**935 B.BBL**

WITH EXTREME  
COLOR RENDERING



NEW CITIZEN VIVID  
HIGH CHROMATIC  
WITH EXTREME HIGH SATURATION  
ENHANCED BRILLIANCE  
HIGH COLOR SEPARATION

**LIVAL**

DIALux  
PARTNER

[www.lival.com](http://www.lival.com)