Columbia LIGHTING

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

CRN2 Fully Switchable
WET LOCATION HIGH BAY
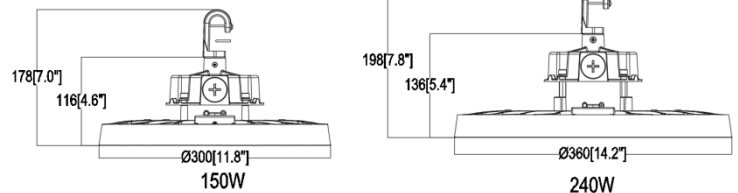### SWITCHABLE LUMEN, CCT AND DISTRIBUTION

tradeSELECT®

FEATURES

- Switchable Lumen, CCT and Distribution Technology to enable flexibility of inventory

- Lumen packages from 15,000 to 38,000 lumens, allowing for use in a variety of applications

- Efficacy up to 178 LPW

- Optional 'plug and play' occupancy sensor

- Reflector options to deliver glare reduction and aesthetic customization

IP65   UL CERTIFIED   IK10   NSF2   NEMA 4X   DLC LISTED PREMIUM

SWITCHABLE LUMEN & CCT   WET LOCATION   OCCUPANCY SENSING   SWITCHABLE DISTRIBUTION

DIMENSIOINS

178[7.0"]   116[4.6"]   Ø300[11.8"]   **150W**

198[7.8"]   136[5.4"]   Ø360[14.2"]   **240W**

SPECIFICATIONS

CONSTRUCTION
- Die cast aluminum housing with polycarbonate lens. Providing durability for tough environments.

- Thermally separated electronic and LED heat sink design allows for longevity in application.

- Pre-installed 6' wet location power and dimming cords for simplified installation

- Wire guard available as accessories for enhanced durability.

INSTALLATION
- Pendant mount from ½" NPT hook standard

- Loop, Snap hook and wall mount bracket available as accessories

- Weight: Size 1: 2.5kg. Size 2: 3.2kg

- 1/2" to 3/4" NPT converter adapter available.

ELECTRICAL
- Long-life +100,000hr LEDs at L70 at 25 °C

- Driver design life +50,000hr at 50 °C

- Total Input Wattage
  Size 1: 100W/ 120W/ 150W
  Size 2: 150W/ 200W/ 240W

- Standard: 120–347V

- System power factor is >0.9 and THD is <20%

- Standard 6kV surge protection for demanding environments

CONTROLS
- Standard 0-10V, 10% dimming

- Field installable passive infrared (PIR) occupancy sensor provides discrete integration into the fixture maximizing sensor coverage range

CERTIFICATIONS
- All luminaires are built to UL 1598 standards, and bear appropriate cULus labels for wet locations

- IP65 rated

- IK07 rated lens, IK10 rated housing

- NSF Splash Zone 2- food equipment standard for non-food zones rated

- NEMA 250 Type 4X rated

- EMI: Title 47 CFR 15 Class A

- Ambient Operating Temperature: -40°C to 50°C

- DLC® (DesignLights Consortium) Qualified. Please refer to the DLC website for specific product qualifications at http://www.designlights.org

WARRANTY
- 5 year warranty

KEY DATA	
Lumen Range	15200 - 38000
Wattage Range	100-240
Efficacy Range (LPW)	Up to 178
Reported Life (Hours)	L70 @ 100,000

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ORDERING GUIDE

Example: CRN2–40LX–EDU–FP

CATALOG #

CRN2			–	1			–	ED			–	FP	
Model				**Size**		**Lumen Output & CCT**		**Dimming**		**Voltage**		**Optics**	**Finish**
CRN2 Wet Location High Bay				**1** Size 1: 15/18/24 **2** Size 2: 27/30/36		**LSCS** Lumen Switchable / CCT Switchable		**ED** 0–10V Dimming		**MV** 120-347V		**SO** Selectable Optics 100/80/60	**W** White **B** Black

STOCK GUIDE
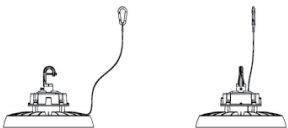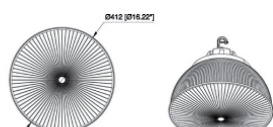
Cat-Logic	Wattage Setting	Lumen	LPW	CCT
CRN2-1 60 Degree Setting	150	21900	146	3500
		23200	162	4000
		22200	150	5000
	120	18100	155	3500
		18800	168	4000
		18400	158	5000
	100	15200	160	3500
		16000	170	4000
		15500	163	5000
CRN2-1 80 Degree Setting	150	23200	162	3500
		24200	175	4000
		23800	168	5000
	120	18700	168	3500
		19300	178	4000
		19000	170	5000
	100	15800	170	3500
		16300	178	4000
		16000	173	5000
CRN2-1 100 Degree Setting	150	21900	146	3500
		23200	162	4000
		22200	150	5000
	120	18100	155	3500
		18800	168	4000
		18400	158	5000
	100	15200	160	3500
		16000	170	4000
		15500	163	5000

Cat-Logic	Wattage Setting	Lumen	LPW	CCT
CRN2-2 60 Degree Setting	240	34600	145	3500
		36500	160	4000
		35200	149	5000
	200	30000	150	3500
		32000	165	4000
		30500	153	5000
	150	24000	160	3500
		25000	170	4000
		24500	163	5000
CRN2-2 80 Degree Setting	240	36200	162	3500
		38500	175	4000
		37800	167	5000
	200	32000	164	3500
		33000	175	4000
		32200	166	5000
	150	24800	170	3500
		25300	178	4000
		25000	172	5000
CRN2-2 100 Degree Setting	240	34200	145	3500
		36200	160	4000
		35600	149	5000
	200	30000	150	3500
		32000	165	4000
		30500	153	5000
	150	24000	160	3500
		25000	170	4000
		24500	163	5000

Columbia LIGHTING

CRN2 Fully Switchable

WET LOCATION HIGH BAY
SWITCHABLE LUMEN, CCT AND DISTRIBUTION
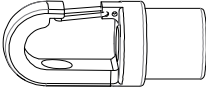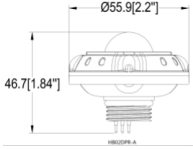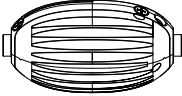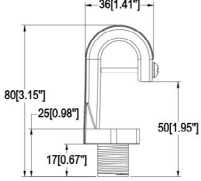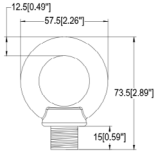
ACCESSORIES

Accessories (Optional)	Image	Description	Part #	Dimensions/Notes
Safety Tether		CRN2-TLR	93130251	Cable length: 6'
Wire Guard		**Size 1:** CRN2-1-WG	93318627	**Size 1:** H 1.89"; Dia 10.25" **Size 2:** H 2.09", Dia 12.4" **Min Order Qty** = 10
		Size 2: CRN2-2-WG	93318628	
Full Wire Guard		**Size 1:** CRN2-1-FWG	93318629	**Size 1:** H 7.86" Dia 17.88" **Size 2:** H 8.15" Dia 17.88"
		Size 2: CRN2-2-FWG	93318630	
Polycarbonate Refractor		**Size 1:** CRN2-1-PC16	93318621	**Size 1 & 2:** H 6.3" Dia 16" **Lumen Output Multiplier:** .98
		Size 2: CRN2-2-PC16	93318622	
Polycarbonate Drop Lens	Ø412 [Ø16.22"]	**Size 1:** CRN2-1-PCL	93318623	Drop lens adds: **100W:** H 3.6cm (1.4 in.) **150W:** H 3.6cm (1.4 in.) **200 –240W:** H 4.1cm (1.6 in.) **Lumen Output Multiplier:** .93
		Size 2: CRN2-2-PCL	93318624	
Aluminum Reflector		**Size 1:** CRN2-1-AL16	93318625	**Size 1:** H 6.45"; Dia 16" **Size 2:** H 7.15"; Dia 18" **Lumen Output Multiplier:** .90
		Size 2: CRN2-2-AL18	93318626	

Current ▣

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SWITCHABLE LUMEN, CCT AND DISTRIBUTION

ACCESSORIES

Accessories (Optional)	Image	Description	Part #	Dimensions/Notes
Wall Mount Bracket*		Size 1 Black: CRN2-1-YM-BLK	93159855G	Total Height of assembly from top of bracket to bottom of fixture: Size 1: H 6.3" **Size 2: H 7.1"** **200 –240W:** 22.8cm (9 in.) * Pendant mount slot on yoke is 1/2". Use CRN-YOKE-ADPT to convert to 3/4"
		Size 1 White: CRN2-1-YM-WHT	93161797	
		Size 2 Black: CRN2-2-YM-BLK	93159856G	
		Size 2 White: 8 CRN2-2-YM-WHT	9313024	
Snaphook		Sizes 1 & 2	93130250	Dimensions Notes: Snap Hook for 3/4" Conduit
PIR Occupancy Sensor	Ø55.9[2.2"] 46.7[1.84"] HB02DPR-A	Sensor: HB03DPR	93161798	Notes: 1. Easy plug-and-play install to center face of fixture; maintains IP65 rating 2. Sensor requires remote if programming is desired 3. HB03DPR sensor is not compatible with CRN2-ELL40 emergency battery
		Remote: HB03DPR-REMOTE	93161799	
Emergency Battery		CRN2-ELL40	93161800	H: 10.78"; W: 5.57" **Note:** CRN2-ELL40 emergency battery is not compatible with HBO3DPR sensor
Hook	36[1.41"] 80[3.15"] 25[0.98"] 50[1.95"] 17[0.67"]	Black: CRN2-HOOK-B	93318612	Hook for 1/2" NPT
		White: CRN2-HOOK-W	93318613	
Ring	12.5[0.49"] 57.5[2.26"] 73.5[2.89"] 15[0.59"]	Black: CRN2-RING-B	93318614	Ring for 1/2" NPT
		White: CRN2-RING-W	93318615	
NPT converter			93130249	1/2" to 3/4" NPT converter

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DIMENSIONS

150W

240W

150W

240W

Hook

Ring

150W

240W

Wall Bracket

150W

240W

PC Reflector

150W

240W
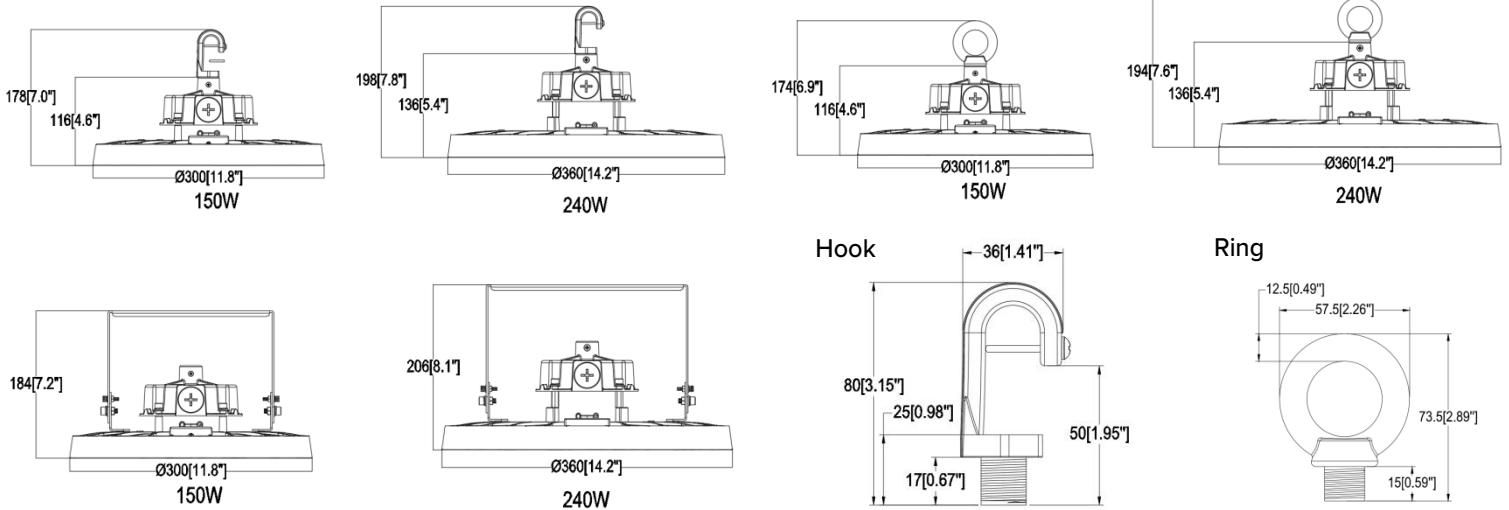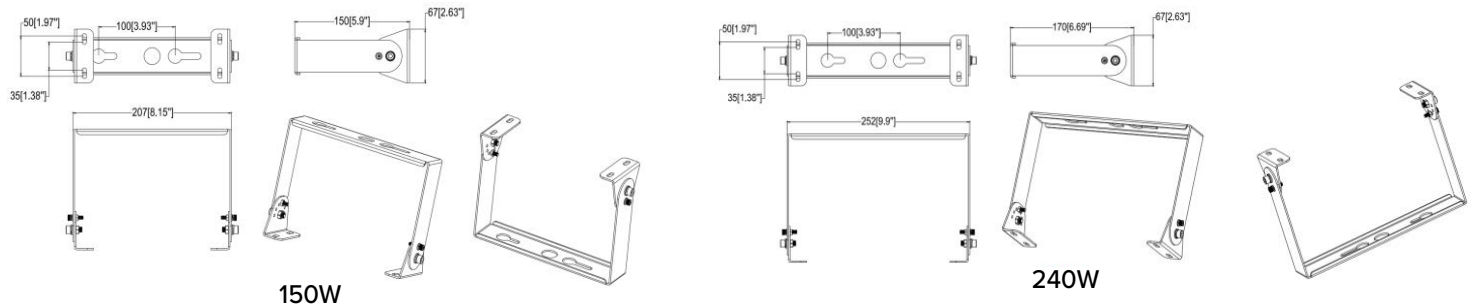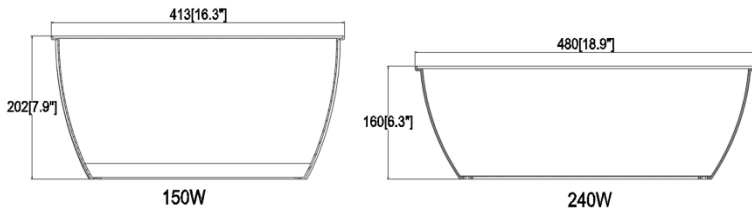
Wire guard – not available on reflector

150W

240W
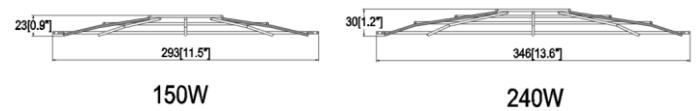
PC Reflector Cover
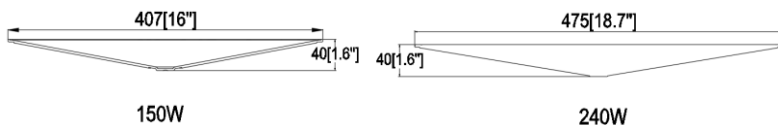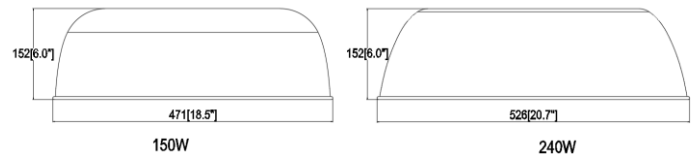
150W

240W

Aluminum Reflector

150W

240W

Current

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PHOTOMETRY

Distribution 100 Degree
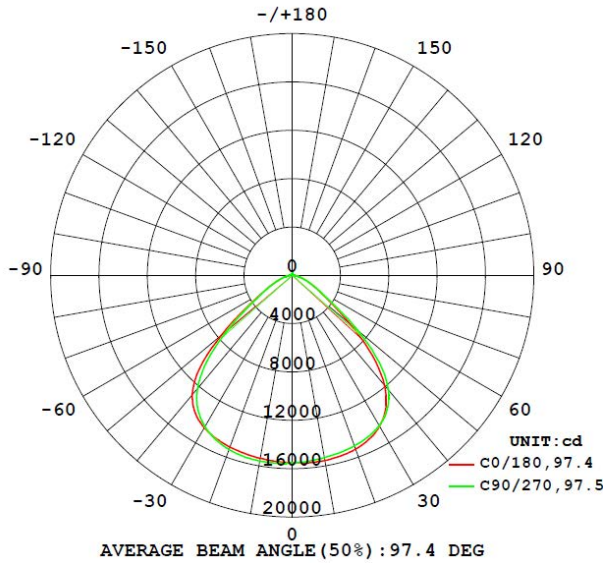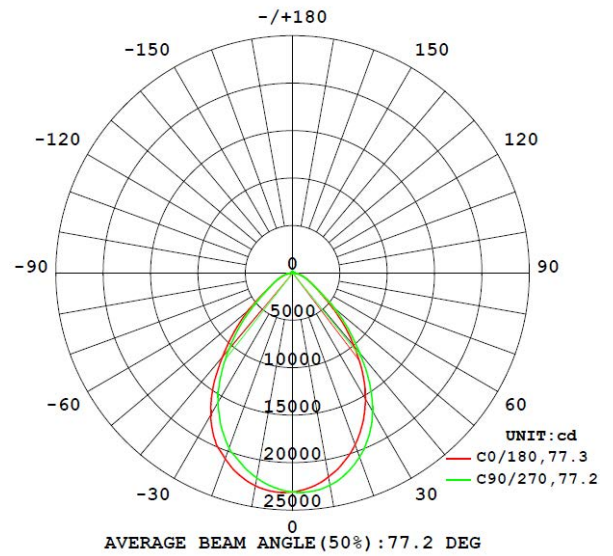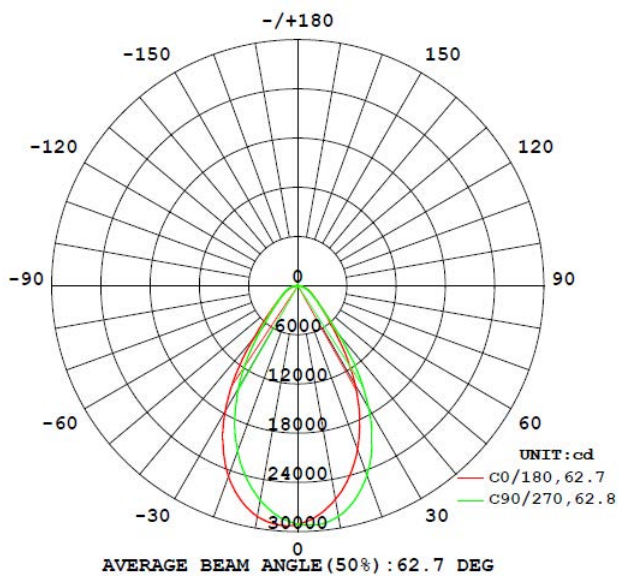
UNIT:cd
— C0/180,97.4
— C90/270,97.5

AVERAGE BEAM ANGLE(50%):97.4 DEG

Distribution 80 Degree

UNIT:cd
— C0/180,77.3
— C90/270,77.2

AVERAGE BEAM ANGLE(50%):77.2 DEG

Distribution 60 Degree

UNIT:cd
— C0/180,62.7
— C90/270,62.8

AVERAGE BEAM ANGLE(50%):62.7 DEG

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HB03DPR MOTION SENSOR ACCESSORY
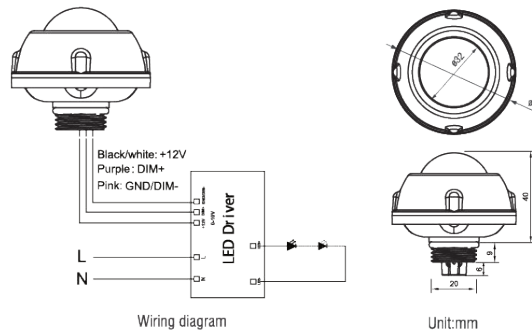
Black/white: +12V
Purple : DIM+
Pink: GND/DIM-

LED Driver

L
N

Wiring diagram

Unit:mm

RoHS COMPLIANT

TECHNICAL DATA	
Operating Voltage:	12±2V DC
Operating Current	30mA
Output:	DIM 0-10V
Stand-by Power:	<0.5W
Brightness:	0%-100% Quick Setting: 70%/80%/90%/100%
Hold Time:	10s/1min/10min/30min
Daylight Threshold:	10Lux/30Lux/50Lux/100Lux/Disable
Stand-by Time:	1min/30min/60min + ∞

TECHNICAL DATA	
Stand-by Dimming Level:	10%/20%/30%/50%
Detection Angle:	≤120º (wall mounted), 360º (Ceiling mounted)
Mounting Height:	≤12m/39.37ft (Ceiling mounted)
Detection Range:	Radius, 2-4m/6.58-13.12ft (Ceiling mounted)
Operating Temperature:	-30ºC~+60ºC
IP Rating:	IP65 (Mounted on the light fixture)
Warm-up Period	50S

Note: Default setting - Brightness: 100%, Hold time: 1min, Stand-by dimming level: 20%, Stand-by time: 1min, Sensitivity: 100% (non-adjustable) Daylight: Disable.

DETECTION COVERAGE

This figure indicates the maximum distance at the highest mounting height with 100% sensitivity.

Side View

0'

Mounting height

40'

12' 9' 6' 3' 0' 3' 6' 9' 12'

Top View

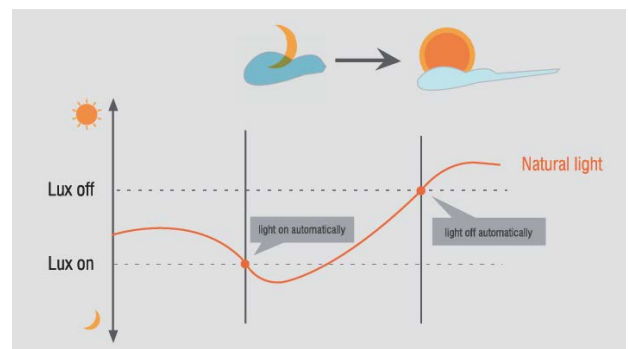12'
6'
0'
6'
12'

12' 6' 0' 6' 12'
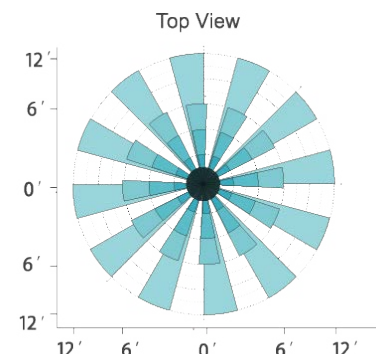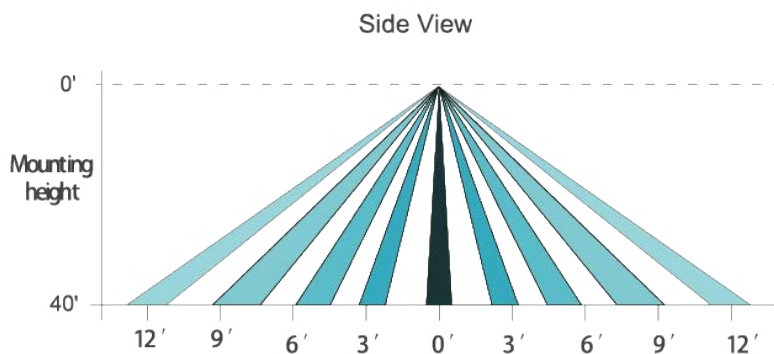
LUX ON/OFF

Adopted dual PD technology, PRC Motion Sensor is able to differentiate artificial light brightness from natural light after installed inside the fixture, and automatically turn off light when ambient brightness exceeds preset lux level.

Preconditions to use the Lux-off function:
1. **Stand-by time is + ∞**
2. **Stand-by dimming level is on 10%, 20%, 30%, or 50%**
3. **Daylight threshold is on 10Lux, 30Lux, 50Lux, or 100Lux (About 20% error between actual and reference values).**

Natural light
Lux off
Lux on
light on automatically
light off automatically

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HB03DPR-REMOTE

Display Area

Brightness (70%, 80%, 90%, 100%)

Daylight (10%, 30%, 50%, 100%)

Standby Dim (10%, 20%, 30%, 50%)

Hold Time (10s/1min/10min/30min)

Sensitivity (20%, 50%, 75%, 100%)

Standby Time (+ ∞ 1min/30min/60min)

Button Setting Area

On/Off (Long press the "On/Off" button until the brightness indicator light is on (First-row). Press to turn on or turn off the fixture.)

Brightness (Press to adjust dimming level 70%, 80%, 90%, 100%)

Standby Dim (10%, 20%, 30%, 50%)

Send (Press to save settings after each change. The indicator light confirms the save setting.)

Hold Time (Press to adjust hold time 10s/1min/10min/30min.)

Daylight (Long press the button until the daylight indicator light is on press to adjust daylight threshold 10%, 30%, 50%, 100%)

Sensitivity (Press to adjust sensitivity 20%, 50%, 75%, 100%) Note: PIR Motion Sensor have no sensitivity setting, the default 100%.)

Standby Dim (Press to adjust stand-by time + ∞ 1min/30min/60min). Note: "+ ∞" means unlimited stand-by time, and the light control mode is the light control priority mode, otherwise it's the light threshold mode.

Reset (Press "Reset" button, products with DIP switch will be controlled by DIP switches; Otherwise all the setting will change, which is Brightness 70%/Hold tim 10s/Sensitivity 20%/ Daylight threshold disable/Stand-by dimming level 10%/ Stand-by time + ∞

Test (The button "Test" is for testing purpose after debugging. Pressing this button, the sensor goes to test mode (Hold time is only 3S).

Press to increase brightness (0-100%)

Press to reduce brightness (100%-0%)

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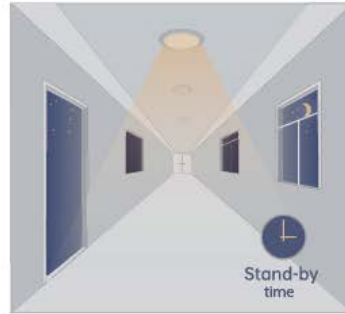## HB03DPR PERFORMANCE

1. Automatic On/Off Functoin

With sufficient daylight, even when motion is detected, light will remain OFF.

With insufficient daylight, the sensor turns light ON when motion gets detected.

Light dims to stand-by level if no motion detected after hold time.

Light OFF when ambient lux level is higher than preset lux amount.
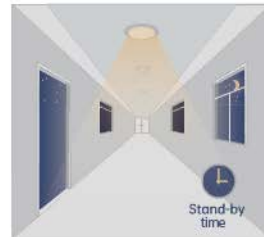
2. Corridor Function, Bi-level Dimmable

With sufficient daylight, the sensor keeps light OFF even motion gets detected, daylight function is on.

With insufficient daylight, the sensor turns light ON when motion gets detected.

After there's no motion detected, the sensor keeps light ON brightness setting for hold time.

After hold time, sensor dims light to stand-by dimming level for stand-by time.

The sensor turns OFF light automatically after the stand-by time when there's no motion detected.

3. Daylight Disable

The sensor turns light ON when motion gets detected.

The sensor keeps light ON for hold time after motion leaves

After hold time, sensor dims light to stand-by dimming level for stand-by time.

The sensor turns OFF light automatically after the stand-by time when there's no motion detected.

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