PHILIPS

CoreLine
Wall mounted

WL140V

4x
ST3.9 x 25

protective ringx1

0.5Nm P1

0.5Nm 3mm

Ø6
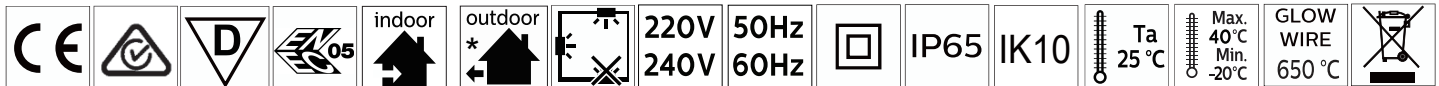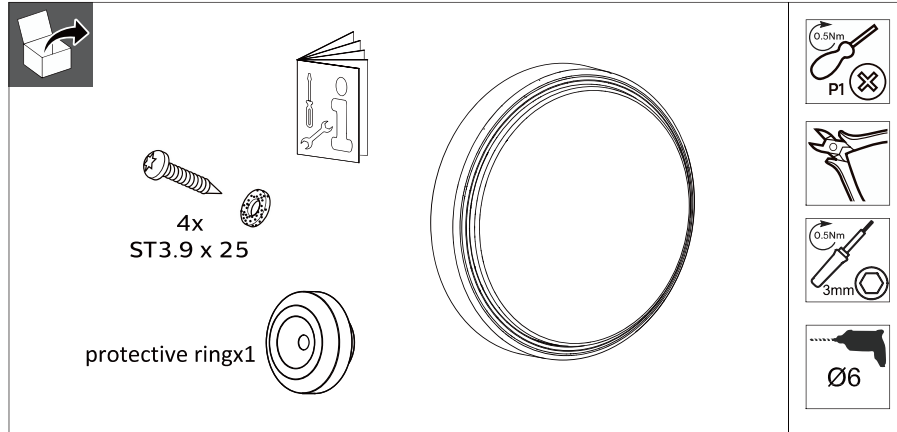
| CE | ⊚ | ▽ D | ✓05 | indoor | outdoor * | ☀ | 220V 240V | 50Hz 60Hz | ⊡ | IP65 | IK10 | Ta 25 ℃ | Max. 40℃ Min. -20℃ | GLOW WIRE 650 ℃ | ✕ |

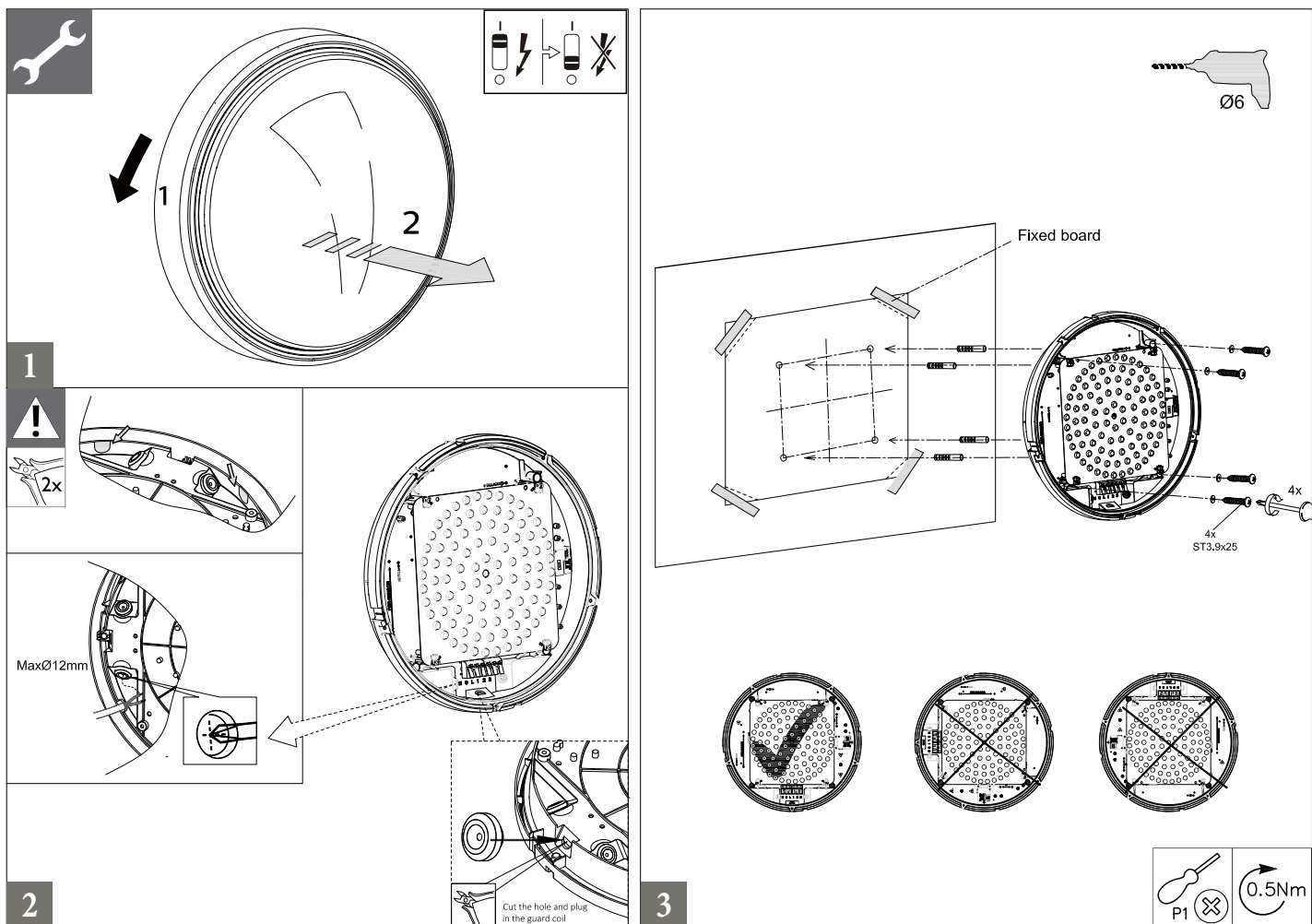|	Lumen output(lm)	CCT (K)	Power(W)	Energy efficacy class	Driver	Options	kg
WL140V 14_24_40S/827_830_840 PSU WH	1400/2300/3600 1450/2400/4050 1500/2400/3900*	2700/3000/4000*	11/18/29*	E	PSU	NA	1.35
WL140V 14_24_40S/827_830_840 PSU MDU WH		2700/3000/4000*	12/19/30*	E	PSU	MDU	1.4
WL140V 14_24_40S/827_830_840 PSR MDU WH		2700/3000/4000*	12/19/30*	E	PSR	MDU	1.4
WL140V 40S/827_830_840 PSED WH	3600/4050/3900*	2700/3000/4000*	29	E	PSED	NA	1.4
WL140V 40S/827_830_840 WIA WH		2700/3000/4000*	29	E	WIA	NA	1.3

*defaut setting

⚠
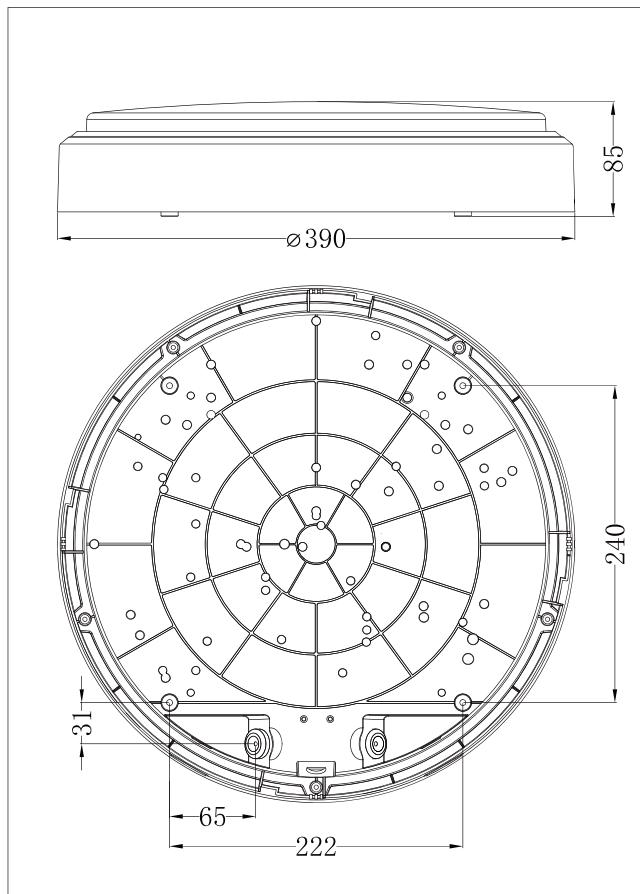
ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
SENSITIVE
DEVICES

- For use in environments where an accumulation of conductivedust on theluminaire may be expected .
- For outdoor operation at a building, vertical wall- mounted only: all its cables shall run indoor, with a maximum distance of 10 meter.*
- For outdoor operation the luminairecan only be used in the aisle or semi-shaded environment or the environment blocked by glass, and it is not recommended to use it directly exposed to direct sunlight!

85
ø390

240
31
65
222

Inrush current
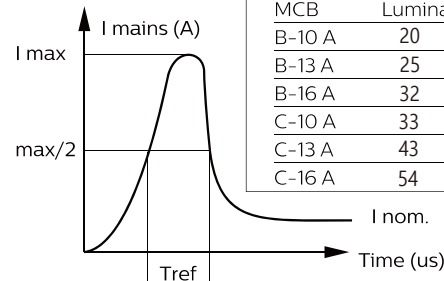
	PSU	PSR	PSED	WIA
	Electrical characteristics			
Imax (A)	14	10	9	5
Tref (μs)	7	66	22	50
MCB	Luminaires Max.			
B–10 A	20	25	20	18
B–13 A	25	32	25	20
B–16 A	32	42	32	24
C–10 A	33	42	33	24
C–13 A	43	58	43	31
C–16 A	54	65	54	40

I mains (A)
I max
max/2
I nom.
Time (us)
Tref

1

Ø6

2x

MaxØ12mm

Fixed board

4x
4x
ST3.9x25

Cut the hole and plug
in the guard coil

2

3

P1   0.5Nm

Power switch and Color temperature switch

4

PSU
PSU+MDU

⚠ WARNING

OFF

WL140V 14_24_40S/827_830_840 PSU WH

11W 18W 29W

LO ME HI
* defaut setting

WL140V 14_24_40S/827_830_840 PSU MDU WH

12W 19W 30W

LO ME HI
* defaut setting

Power

CCT

* 4000K 3000K 2700K

CW NW WW
* defaut setting

PSR+MDU:
WL140V 14_24_40S/827_830_840 PSR MDU WH

switch   Power switch

Po(w)	1	2
30W	ON	ON	*
19W	1	ON
12W	–	–

* defaut setting

2700K 3000K 4000K

* defaut setting

PSED:
WL140V 40S/827_830_840 PSED WH
WIA:
WL140V 40S/827_830_840 WIA WH

switch

4000K 3000K 2700K

* defaut setting

5
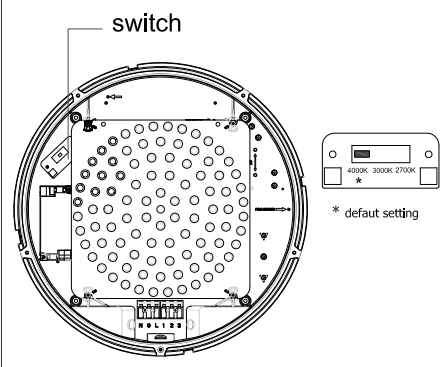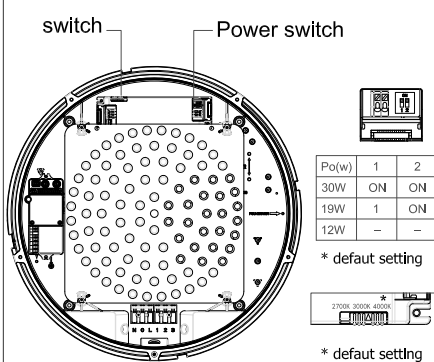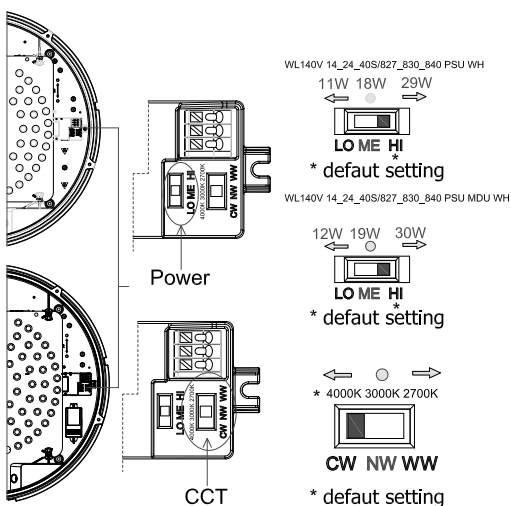
Max.10 luminaires.

Min 1.00mm²
Max 1.50mm² Ø6-Ø12mm

		7 30	
PSU PSU+MDU PSR PSED WIA	N L		
1~10V	Yellow 1-10V + Green 1-10V - Blue N Brown L		
DALI	Black DA/N Red DA/Ls Blue N Brown L		

6

CLICK

3mm 0.5Nm

7

N O L 1 2 3

Type	N	0	L	1	2	3
PSU	N		L			
PSU+MDU	N		L			
PSR+MDU	N		L	1-10V+	1-10V-	
PSED	N		L	DA/LS		DA/N
WIA	N		L			

8

Optional grop control:PSR+MDU

Lum1 Lum2 Lum3

N 0 L 1 2 3   N 0 L 1 2 3   N 0 L 1 2 3

N
L
1-10V+
1-10V-

Optional grop control:PSED

Lum1 Lum2 Lum3

N 0 L 1 2 3   N 0 L 1 2 3   N 0 L 1 2 3

N
L
DA/LS
DA/N

PSU Motion Detection Unit (MDU)

PSU MDU is suitable for all applications where individual luminaire sensing is sufficient. Sensor has on/off, dimming, timing and daylight sensing functionalities. Below tables explain how to set switches depending on your preferences.
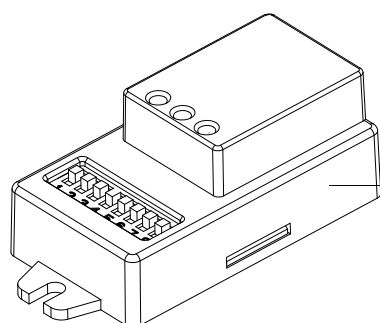
Detection Area	Hold· Time		Daylight Sensor		Stand-by Period		Stand-by DIM Level
1	2	3	4	5	6	7	8

HF Motion Sensor

1 2 3 4 5 6 7 8
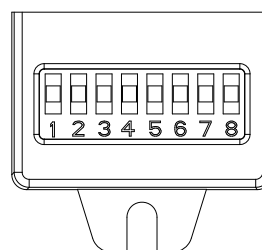
	1	
I	ON	100%
II	-	50%

Detection area. (default 100%) show patterns.

Detection area can be reduced to 50% by selecting the combination on the DIP switches to fit precise applications.

	2	3	
I	ON	ON	5S
II	ON	-	1min
III	-	ON	5min
IV	-	-	10min

Hold time. (default 5 min.)

Refers to the time period where the luminaire remains at 100% illumination after no motion is detected.

	4	5	
	ON	ON	5Lux
II	ON	-	25Lux
III	-	ON	50Lux
IV	-	-	Disable*

Daylight sensor. (default 25 lux.)

The sensor can be set to switch on the luminaire below certain light levels (5/25/50 lux). When it is set to Disable mode, sensor will switch on the luminaire when motion is detected regardless the ambient light level.

	6	7	
I	ON	ON	0S
II	ON	-	1min
III	-	ON	10min
IV	-	-	+∞

Stand-by period. (default 10 min.)

Time period of keeping dimmed levels before the luminaire is completely switched off when there is no motion.
When it is set to '∞' mode, dimmed light level is maintained until motion is detected.

	8	
I	ON	10%
II	-	25%

Stand-by dimming level. (default 25%)

Dimming % level when there is no motion (after the hold time) to save energy.
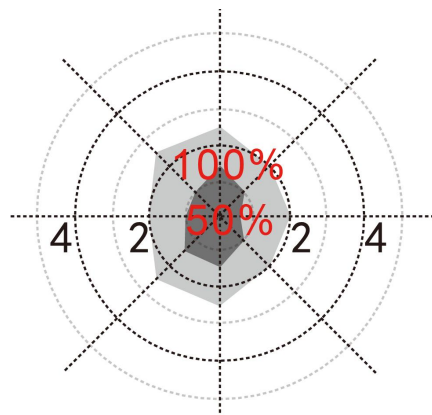
Detection area (Radiation Pattern) PSU MDU

Below diagrams show the sensor coverage with different detection area settings, ceiling heights and moving speeds.

Light grey pattern shows 100% detection area selection and dark grey area shows 50% detection area selection.
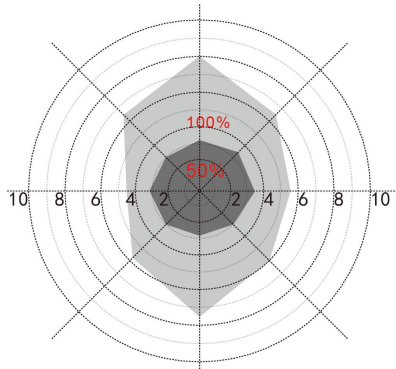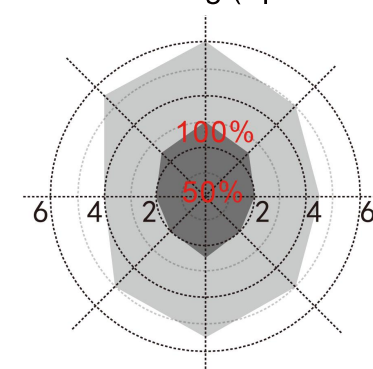
Ceiling mounted height: 3m
Sensitivity: 100%/50%
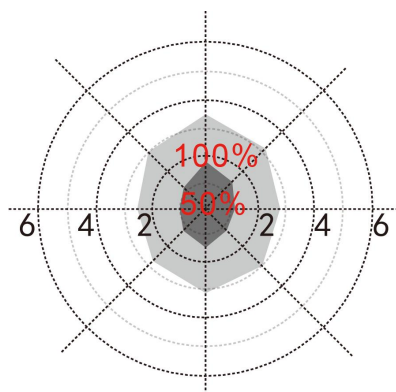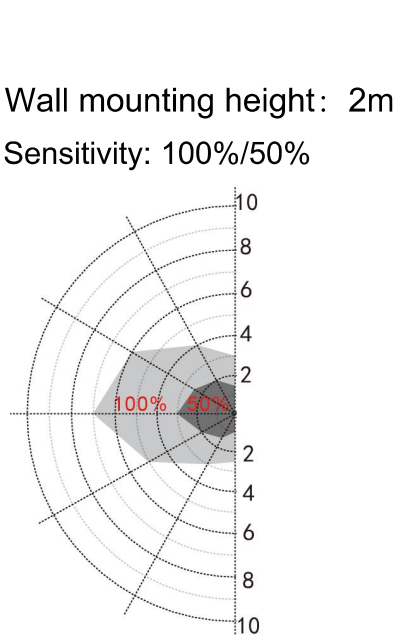
Ceiling mounted height: 6m
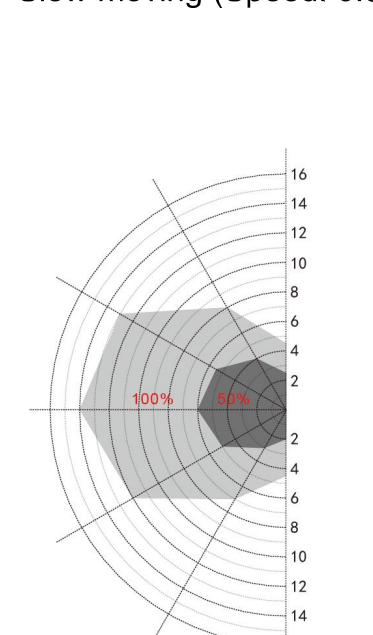Sensitivity:100%/50%

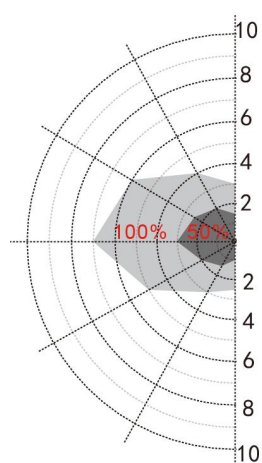Normal moving (Speed:1m/s)

Normal moving (Speed:1m/s)

Slow moving (Speed 0.3m/s)

Slow moving (Speed: 0.3m/s)

Wall mounting height：2m
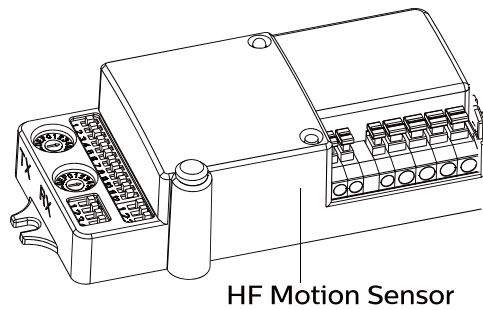Sensitivity: 100%/50%
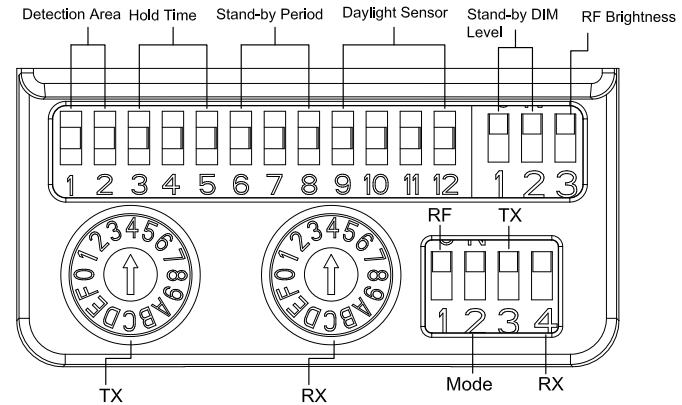
Normal moving (Speed: 1m/s)

Slow moving (Speed 0.3m/s)

PSR Motion Detection Unit (MDU)

PSR MDU is suitable for all applications where grouping functionality is required. Products communicate each other by receiving/transmitting signals.

HF Motion Sensor

Dipswitch settings
Sensor functions support below applications:

1. Single use (individual sensing as same as PSR MDU)
2. Corridor (grouping luminaires up to 10 pieces and 50 meters for max. 31 floors)
3. Staircase (grouping luminaires up to 10 pieces and 25 meters for max. 31 floors)

Dipswitch settings

ON	1	2	%
I	on	on	100
II	on	–	75
III	–	on	50
IV	–	–	25

Detection area
can be reduced to 25% by selecting the combination on the DIP switches to fit precise applications.

ON	3	4	5	Time
I	on	on	on	5 s
II	on	on	–	30 s
III	on	–	on	90 s
IV	on	–	–	3 min
V	–	on	on	20 min
VI	–	on	–	30 min
VII	–	–	–	+∞

Hold time
Refers to the time period where the luminaire remains at 100% illumination after no motion is detected.

ON	6	7	8	Time
I	on	on	on	0 s
II	on	on	–	5 s
III	on	–	on	5 min
IV	on	–	–	10 min
	–	on	on	30 min
VI	–	on	–	60 min
VII	–	–	–	+∞

Stand-by period
Time period of keeping dimmed levels before the luminaire is completely switched off when there is no motion.
When it is set to '∞' mode, dimmed light level is maintained until motion is detected.

ON	9	10	11	12	Lux
I	on	on	on	on	5
II	–	on	on	on	15
III	on	–	on	on	30
IV	–	–	on	on	50
	on	on	–	on	100
VI	on	on	on	–	150
VII	–	–	–	–	Disable

Daylight sensor
The sensor can be set to switch on the luminaire below certain light levels (5-150 lux). When it is set to Disable mode, sensor will switch on the luminaire when motion is detected regardless the ambient light level.

ON	1	2	%
I	on	on	10
II	on	–	20
III	–	on	30
IV	–	–	50

Stand-by dimming level
Dimming % level when there is no motion (after the hold time) to save energy.

ON	3	%
I	on	100
II	–	10~50

Brightness level of the luminaire when it detects motion.

ON	1	RF	2	Mode	3	TX	4	RX
	ON	Open	ON	corridor	ON	A	ON	A
	–	Close	–	staircase	–	B	–	B

Mode switch:
RF switch is controlling the transmit of the signal. When it is closed, sensor can only receive signal but can't transmit. So, the luminaire supports only single use functionality (stand-alone sensor).
**Mode** determines the application whether it is corridor or staircase.
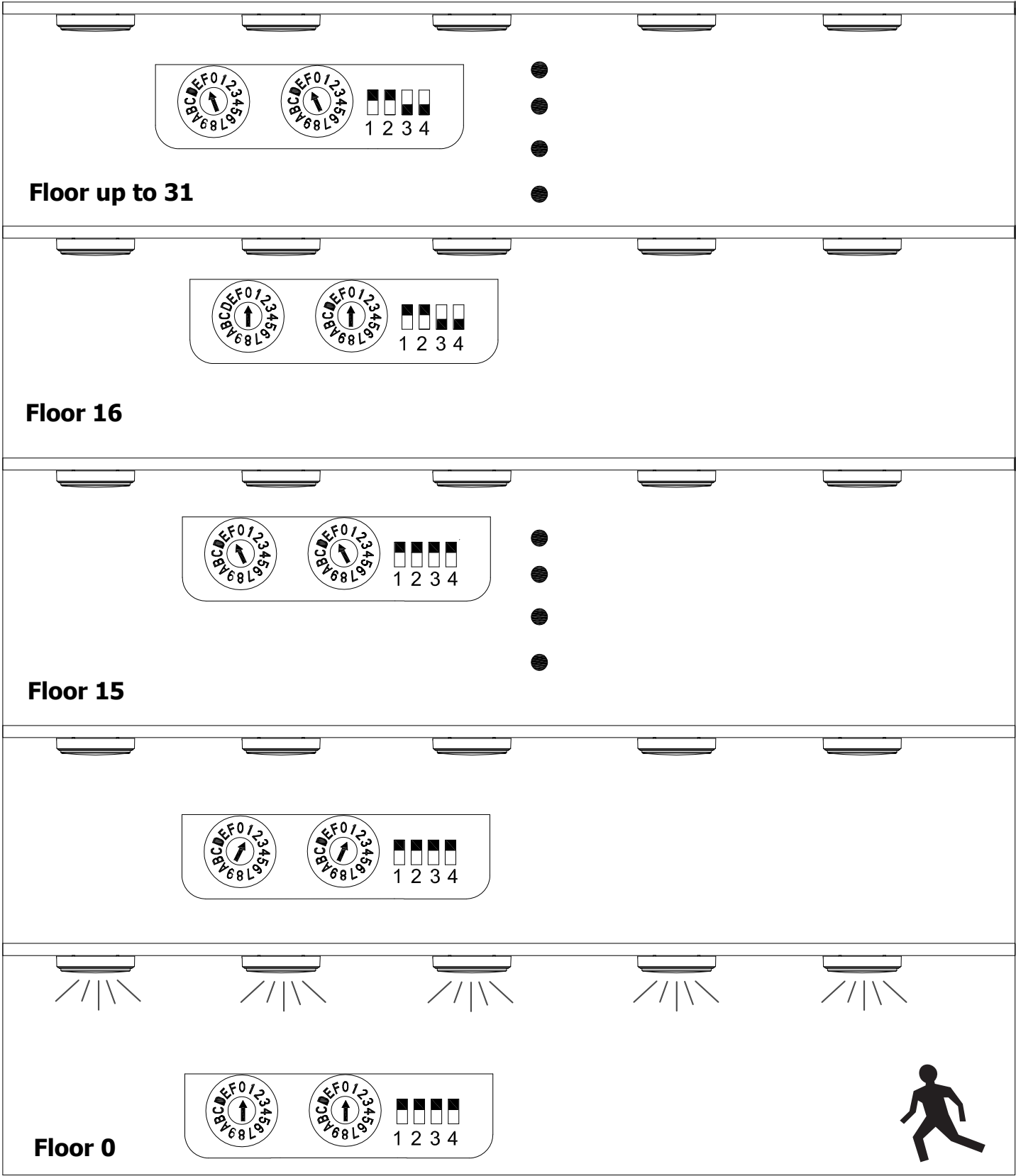**TX** and **RX** are set to ON for the floors between 0-15 of the building.
TX and **RX** are set to OFF for the floors between 16-31 floor of the building.

3 and 4 are used to set a different channel for grouping

## Transmission Channels (16x2 combinations)

A0 - A1 - A2 - A3 - A4 - A5 - A6 - A7 - A8 - A9 - AA - AB - AC - AD - AE - AF

BF - BE - BD - BC - BB - BA - B9 - B8 - B7 - B6 - B5 - B4 - B3 - B2 - B1 - B0

Tx-Transmission Nodes
0-F(total 16)

Rx-T Receiver Nodes
0-F(total 16)
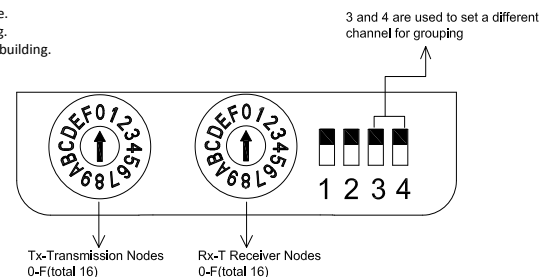
Radio Frequency (RF) wireless grouping:
1. Corridor

Floor up to 31

Floor 16

Floor 15

Floor 0

Radio Frequency (RF) wireless grouping:
2. Corridor + Staircase

Floor 31

Floor 16

Floor 15

Floor 0
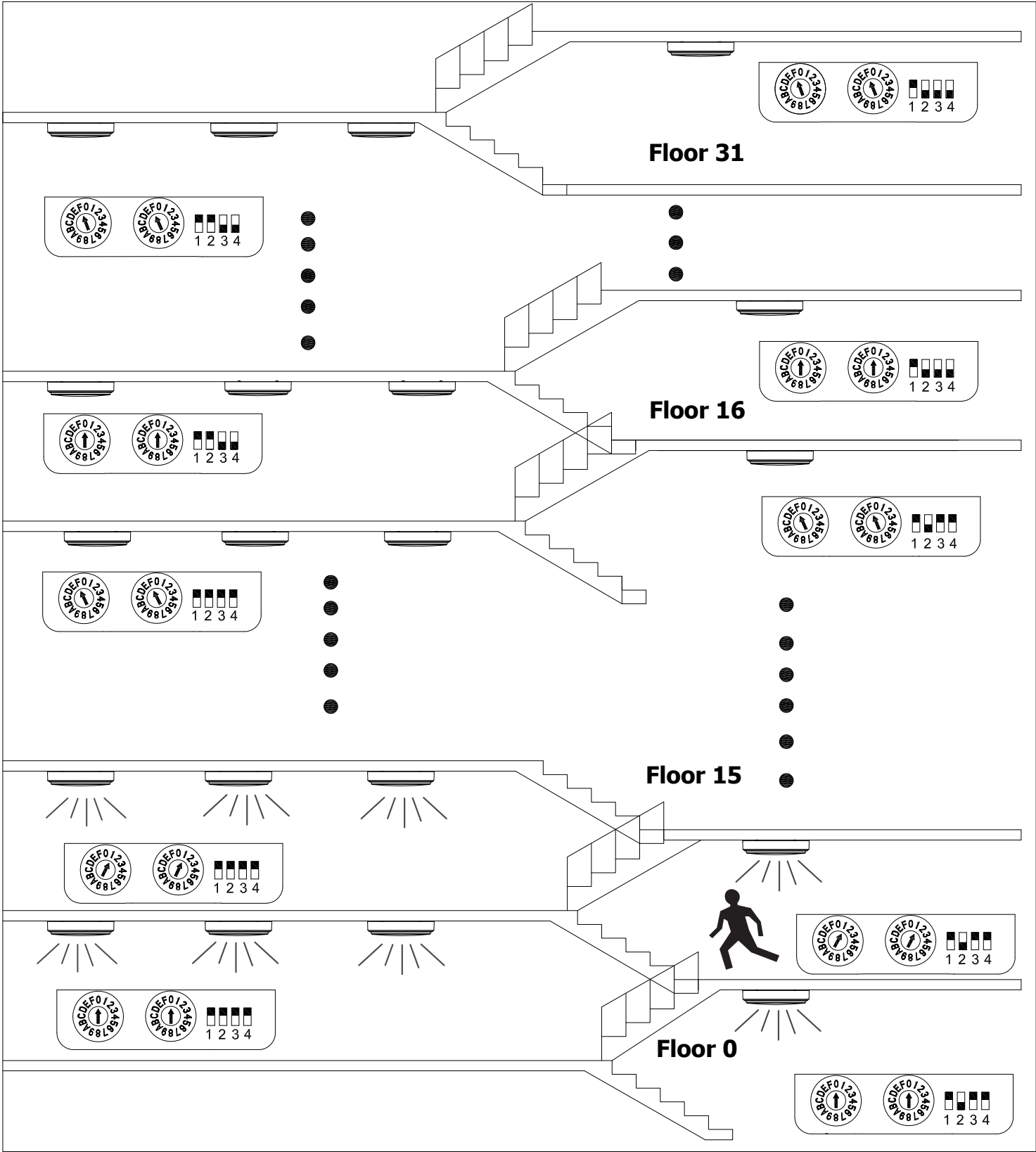
Detection area (Radiation pattern)PSR MDU

1. Ceiling mounting
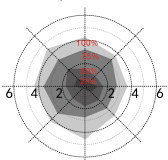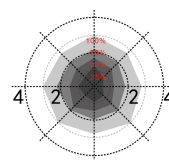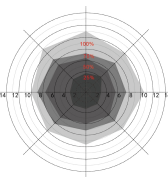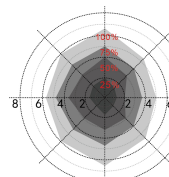
Ceiling mounted height：3m Sensitity：100%/75%/50%/25%	Ceiling mounted height：6m Sensitity：100%/75%/50%/25%	Ceiling mounted height：8m Sensitity：100%/75%/50%
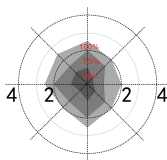
Normal moving (Speed:1m/s) Normal moving (Speed:1m/s) Normal moving(Speed:1m/s)
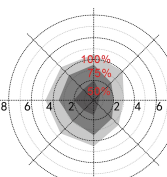
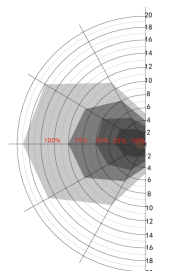Slow moving (Speed 0.3m/s) Slow moving (Speed 0.3m/s) Slow moving (Speed 0.3m/s)

2. Wall mounting

Wall mounting height：2m
Sensitity：
100%/75%/50%/25%/10%
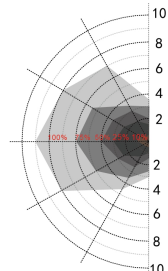
Normal moving (Speed：1m/s)   Slow moving (Speed 0.3m/s)

Initialization

The light will turn on 100% brightness in the initial energizing sensor, and turn off after 10 seconds.Duringinitialization, no external motion sensing signal will be detected.

Default settings

Detection Area: 100% / Hold Time: 5S , Stand-by period:0s, Daylight Sensor: Disable,Stand-by DIM level: 10% , RF Brightness: 10%-50% , RF:Open , Mode: Broadcast ,TX:A , RX:

PSR MDU Note:

1：Work mode：Corridor & Staircase

2：TX: is for signal Transmitting, with 0-F 16 different channels. 1 DIP to set Group A or group B. Group A with16 channels, Group B also with 16 groups, total can set 32 groups .

3：RX: is for signal Receiving, with 0-F 16 different channels. 1 DIP to set Group A or group B . Group A with16 channels, Group B also with 16 groups ,total can set 32 groups.

4：When Master and Master set under corridor work mode, that means ,all sensors set the same channel,Any Master sensor is triggered, it will transmit the RF signal to all the lamps in the group

5：When Master and Master set under staircase work mode, that means ,when any master is triggered, it will send RF signal to 3 channels (the adjacent channel before and after the TX channel and the channel set by master itself. For example, when the master set the TX channel for "1", it will launch "0" "1" "2" three different channel signal, if other different RX channel set with"0" "1" "2", at this time will receive the corresponding channel signals, this kind of work mode is mainly applied to corridor application , note: TX "F" to launch the channel group A and B group "0" RX receives channels can connect network.

6：Master to Satellite only work as corridor mode, that means the satellite only receive the signal from master , not affect by the master work mode.

7：Satellite receive RF signal from Master, the "hold time" is determined by Master, keep the same with master's "hold time" .

8：Sensor will not transmit or receive RF signal during the Initialization time. only can transmit RF signal after the Initialization period.

9：Group A and group B of RX require the corresponding Master group A and group B of TX .

10：Indoor wireless distance without wall shielding 50 meters .

11：Indoor wireless distance with wall shielding 25 meters .

12：Work mode：Corridor application is shown in the following figure
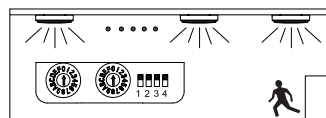
13:Work mode：Staircase application is shown in the following figure

---
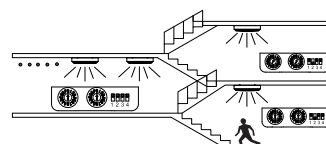
Note:

1, The CoreLine wall-mounted needs to be installed side-by-side in the same direction. Thedistance between each of the luminaires should be kept at least 3m to avoid mutual interference.

2. Please pay attention to the installation environment:

2.1. Avoid high-density objects such as: metal, glass, concrete walls, etc, with in the sensordetection area.

2,2, Avoid moving signals within the sensor detection area such as: fan, DC motor, sewerpipe, air outlet,heavy rainfall, motion behind a thin wall etc , This is to avoid false triggers ofthe sensor,

2.3.This sensor is outdoor wind and rain, and surrounding moving objects will cause falsetriggering

3, In order to reach the common sensor distance, the object move speed should be less than1m/s, If an object moves with speed higher than 1m/s, the detection distance will decrease.

4, It is advised not to install a luminaire on a wooden surface, in case it must be installed ona wooden surface, and the wood thickness must be more than 15cm .

5, To avoid smaller detection range or abnormal operation, the CoreLine wall-mountedshould not be installed in close distance to large areas of metal and glass (separationdistance at least 1 m). Please reduce detection area setting or contact Signify to confirm the situation once the CoreLine wall-mounted works fails.

PHILIPS