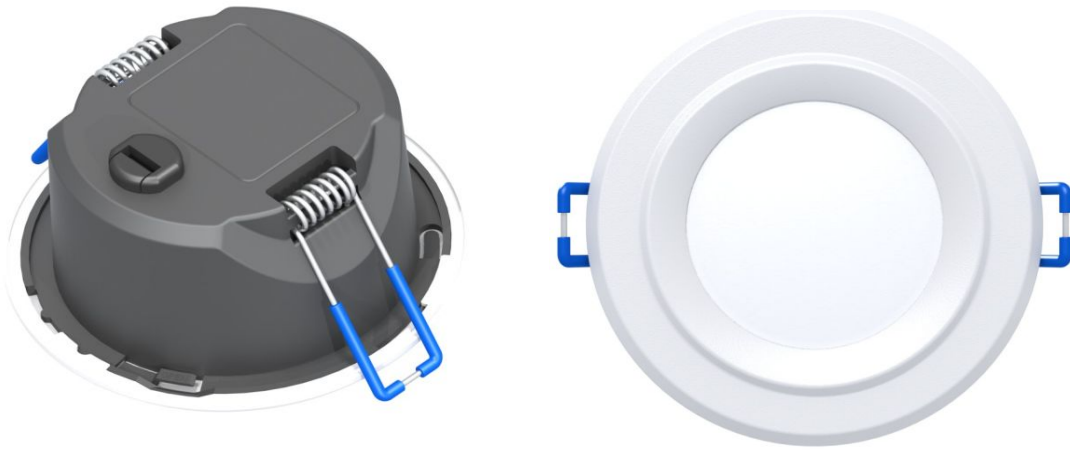




SPECIFICATION FOR APPROVAL



Customer : _____
Products Name : recessed downlight
Our Model : LUM-CLH03-9WDIM
Customer model : _____

Approved by : _____

ECR history

version	issue date	Description of amendment/additional
A		

1. Specification

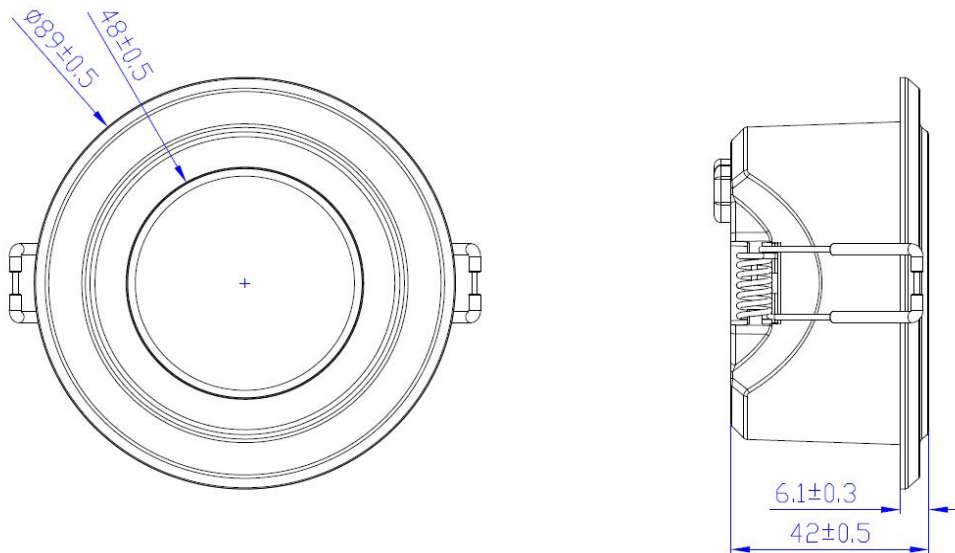
1-1. Environment

	Spec.			
	unit	Typical	min	max
Storage temp.	(degC)	25	-20	60
Operating temp.	(degC)	25	-20	40
Storage humidity	(%RH)	65%	10%	90%
Operating humidity	(%RH)	65%	10%	90%

1-2. Geometry Property

Dimension & Drawing of products

	Spec.			
	unit	Typical	min	max
Diameter	(mm)	89	88.5	89.5
Cut-Out	(mm)	75	70	80
MOL	(mm)	42	41.5	42.5
Weight	(g)	110	100	120
Base				



1-3. Electrical Performance

	spec			
	unit	Typical	min	max
Consumption Power	(w)	9	8.1	9.9
Input Voltage	(v)	230	220	240
Input Current	(mA)	44	40	48
Power Factor		0.9		
Frequency	(Hz)	50/60		
Starting time * for EU	(sec)	0.5		

1-4. LED Chip/Package information LED

LED Vender	LIGHTNING/CEC
model no.	3030
Number of LED per board	10

1-5. Photometric Performance

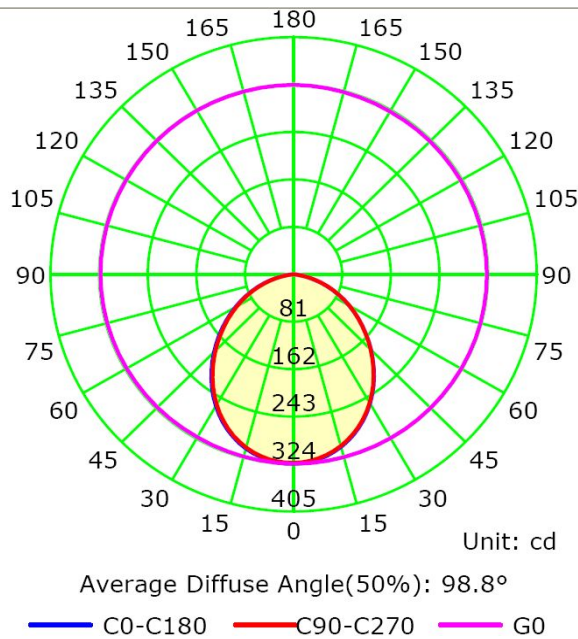
	unit	Spec.			
		Typical			
Color Temp.	(k)	3000	4000	5000	6500
luminous flux (90deg cone) * for EU directional lamp	(lm)				
total Luminus flux	(lm)	720	750	750	750
CBCP	(cd)	320	350	350	350
CRI(Ra)	700	≥80			
Beam Angle	(deg)	100			
Efficiency	(lm/w)	80	83	83	83
Dimming		YES			

Tolerance ± 6 %

1-6. Lifespan

Lifetime(L70) at 25deg	(hours)	40000	@25°C
Switching Cycle	(times)	20000	30s on / 60s off

1-7. Light Distribution data / LED's Spectrum wave form



1-8. work in special fixture

enclosed (sealed) fixtures	(OK or N/A)	N/A
thermal-insulation fixtures	(OK or N/A)	N/A

1-9. compatibility for switch with indicator (Firefly switch)

compatible	(OK or N/A)	OK
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(330kΩ) for ~120V, (750kΩ) for ~230V, Pana_FireFlySW x 2-parallel, work properly ~ for JPN. * N/A- lamp w/transformer

2. Regulation Certification

On the way.

3.Pallatizing (drawing)

	Length (mm)	Width (mm)	Height (mm)	Weight (g)
giftbox	110	125	55	
Outer carton	575	300	275	
Unit weight with lamp				
Carton weight with full lamps inside				

(For example) Package configuration

