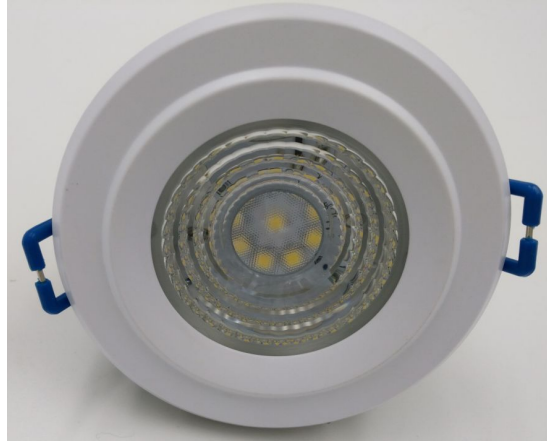




SPECIFICATION FOR APPROVAL



Customer : _____
Products Name : recessed downlight
Our Model : LUM-CLH05-9W
Customer model : _____

Approved by :

ECR history

version	issue date	Description of amendment/additional		
A				

1. Specification

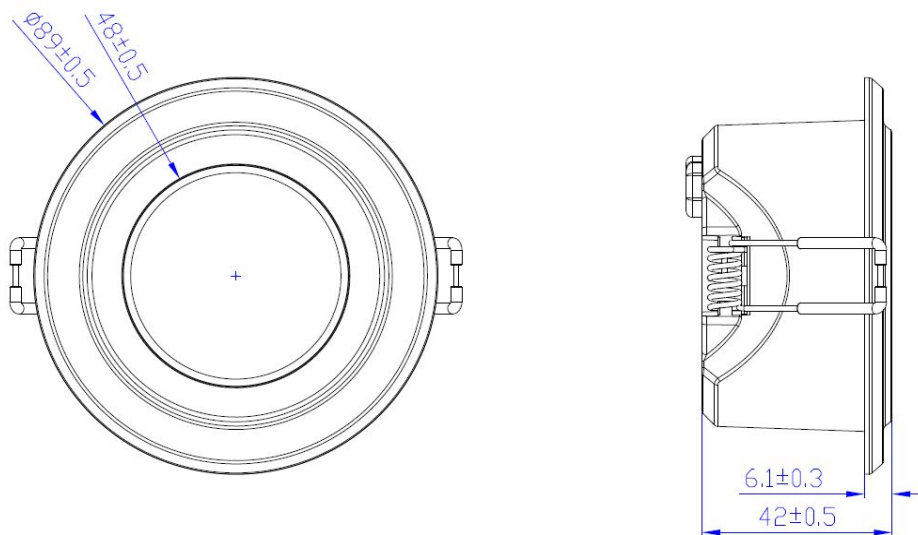
1-1. Environment

	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

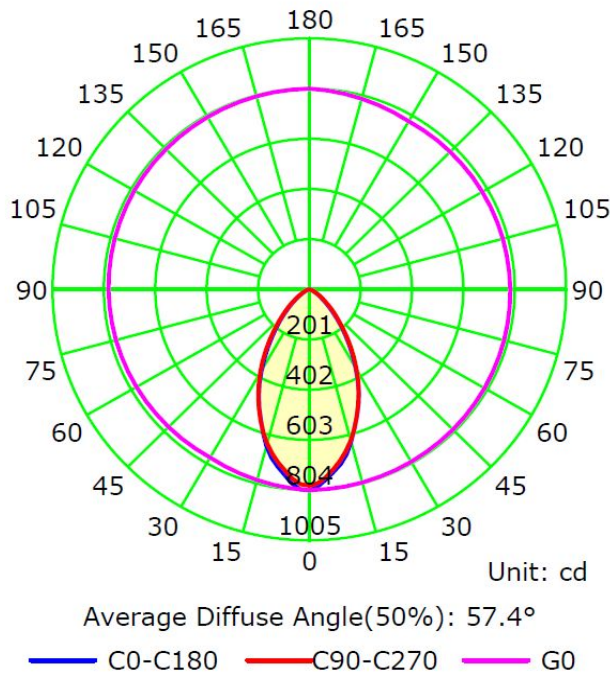
	unit	Spec.			
		Typical			
Color Temp.	(k)	3000	4000	5000	6500
luminous flux (90deg cone) * for EU directional lamp	(lm)	720	750	750	750
total Luminus flux	(lm)	720	750	750	750
CBCP	(cd)	820	850	850	850
CRI(Ra)	700	≥80			
Beam Angle	(deg)	60			
Efficiency	(lm/w)	80	83	83	83
Dimming		NO			

Tolerance ± 6 %

1-6. Lifespan

Lifetime(L70) at 25deg	(hours)	40000	@25℃
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



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

