

# TARGETTI

## CLOUD Mini

### Extractable 4" LED Downlight Projector

**Concept:** LED recessed extractable downlight.

**Housings:** Non IC plaster frame or IC/Air tight housing available.

**Materials:** Head, front ring and heat sink in die-cast aluminum painted in plaster white or deep black finish.

**Trim:** Die-cast aluminum frame in plaster white or deep black.

**Optics:** SP 15° / FL 30° versions fitted with hybrid methacrylate lenses.

MF 46° / WFL 60° versions equipped with precision optics with polished anodized aluminum convex facets.

**Mounting:** Removable front ring for the insertion of dedicated optical accessories.

Tool-free spring-clip mounting system into Targetti recessed housings. May be manually aimed from -20° to +75° in the vertical plane and 355° in the horizontal plane.

**Driver:** Driver available as 4/1 driver (Non-dimmable / 0-10V 1% / Reverse Phase 10% / Forward Phase 10%) or EldoLED Solo 0.1% dimmable drivers. Phase dimming 120V only.

**Wattage:** 9W / 15W / 20W nominal

**Color Temperature:** 2700K / 3000K / 3500K / 4000K

**CRI:** Ra+90

**Lumen Maintenance (L70):** 50,000hrs

Calculation for LED fixtures are based on measurements that comply with IES LM-80.

**Universal Voltage:** 120-277V AC 50/60 Hz, 120V or 277V must be specified for correct thermal protector

**IP Rating:** IP20, IP23

**Certifications:** cULus Damp Listed E477426

Tested in accordance with LM-79-08

IC/Air tight housing version is Chicago Plenum Rated

**Warranty:** 5 year limited warranty



#### Delivered Lumens:

	2700K	3000K	3500K	4000K
15° Spot =	864Lm	908Lm	800Lm	1089Lm
30° Flood =	974Lm	1017Lm	1169Lm	1171Lm
46° Medium Wide Flood =	1126Lm	1175Lm	1351Lm	1354Lm
60° Wide Flood =	1092Lm	1139Lm	1310Lm	1313Lm

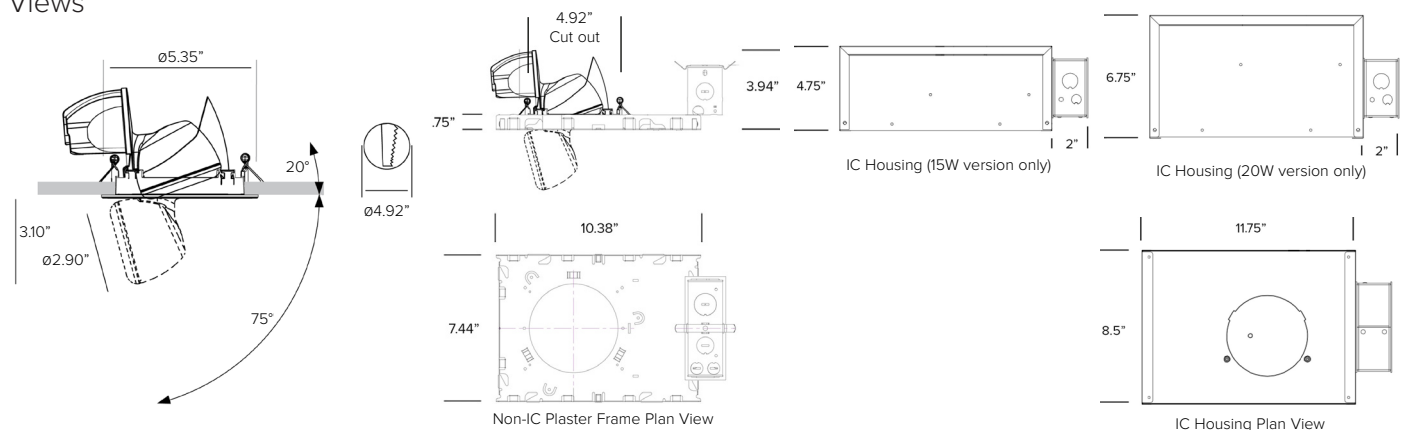
Refer to pages 3-5 for complete fixture data information.

PRODUCT CODE	FIXTURE COLOR	OPTICS <sup>2</sup>	WATTAGE	COLOR TEMP	HOUSING	DRIVER	VOLTAGE	
CLM – CLOUD Mini	PW – Plaster White	SP – Spot 15°	L0 – 9W	27 – 2700K	NC – Non-IC Plaster Frame	41 – 4/1 Dimming (Non-Dimming / 0-10V / Reverse Phase / Forward Phase)	1 – 120	
			L1 – 15W	30 – 3000K			2 – 277	
	DB – Deep Black	FL – Flood 30°	L0 – 9W	35 – 3500K	IC <sup>1</sup> – IC/Air Tight Housing	E0 – Eldo 0.1%		
			L1 – 15W	40 – 4000K				
				L2 – 20W				
				L1 – 15W				
				L2 – 20W				
				WF – Wide Flood 60°				

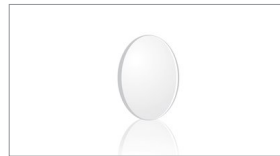
<sup>1</sup> IC/Air tight housing suitable for Chicago Plenum rated installation.



#### Views



Optical Accessories:	
Maximum of one optical accessory per fixture	
<b>1T6521</b>	Clear protective glass lens. Diameter 50mm.
<b>49881</b>	Chromatic filter Red. Glass made, with dichroic treatment. Diameter 50mm.
<b>49882</b>	Chromatic filter Green. Glass made, with dichroic treatment. Diameter 50mm.
<b>49886</b>	Chromatic filter Blue. Glass made, with dichroic treatment. Diameter 50mm.
<b>49887</b>	Chromatic filter Yellow. Glass made, with dichroic treatment. Diameter 50mm.
<b>49959</b>	Chromatic filter Magenta. Glass made, with dichroic treatment. Diameter 50mm.
<b>1T1745</b>	Chromatic filter Cold tone. Interference glass filter to vary the colour temperature of light. Diameter 50mm.
<b>1T1748</b>	Chromatic filter Gold tone. Interference glass filter to vary the colour temperature of light. Diameter 50mm.
<b>1T1751</b>	Chromatic filter Peach tone. Interference glass filter to vary the colour temperature of light. Diameter 50mm.
<b>1T4721</b>	Parallel ribbed glass light blade filter. This makes the beam take on an oval shape, more evident when combined with spot and flood optics. Diameter 50mm.
<b>1T4322</b>	Anti-glare grid. Black lacquered metal honeycomb structure. Diameter 50mm.
<b>1T4325</b>	Asymmetric screen in anodized diffusive aluminum, black painted outside. Complete with blade light filter. Ideal for a wall washer effect. <b>To be combined with spot and flood optics.</b> Diameter 50mm.
<b>1T4324</b>	Zoom optical system consists of flat convex lens in optical glass, specular reflector in anodized aluminium and diffusive holographic filter. To be used after removing the existing optic. It allows to obtain a variable beam from 15° to 60°. <b>Not to be used with hybrid optic version (SP or FL optics).</b> Diameter 50mm.



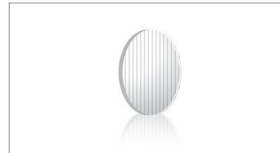
1T6521



Chromatic Filters



Tonal Filters



1T4721



1T4322



1T4325



1T4324

# TARGETTI

## CLOUD Mini

### Photometry

SPOT					POLAR GRAPH	CONE OF LIGHT					
Fixture Power	9W	9W	9W	9W		(Ft)	$\alpha=7.0^\circ \times 7.0^\circ$	$G=0.0^\circ$	$\beta=7.0^\circ \times 7.0^\circ$	Max	Med
Fixture Output	587Lm	616Lm	546Lm	739Lm		2.00				1860	1222
Kelvin Temp	2700K	3000K	3500K	4000K		4.00				465	306
Beam Spread	Spot 15°	Spot 15°	Spot 15°	Spot 15°		6.00				207	136
I <sub>Max</sub>	9472cd/klm	9472cd/klm	9472cd/klm	9472cd/klm		8.00				116	76
Efficacy	65 Lm/W	68 Lm/W	61 Lm/W	82 Lm/W		10.00				74	49

Maximum UGR = 7.9 (based on actual lumens)

SPOT					POLAR GRAPH	CONE OF LIGHT					
Fixture Power	15W	15W	15W	15W		(Ft)	$\alpha=7.0^\circ \times 7.0^\circ$	$G=0.0^\circ$	$\beta=7.0^\circ \times 7.0^\circ$	Max	Med
Fixture Output	864Lm	908Lm	800Lm	1089Lm		2.00				2738	1800
Kelvin Temp	2700K	3000K	3500K	4000K		4.00				685	450
Beam Spread	Spot 15°	Spot 15°	Spot 15°	Spot 15°		6.00				304	200
I <sub>Max</sub>	9472cd/klm	9472cd/klm	9472cd/klm	9472cd/klm		8.00				171	112
Efficacy	58 Lm/W	61 Lm/W	53 Lm/W	73 Lm/W		10.00				110	72

Maximum UGR = 9.2 (based on actual lumens)

FLOOD					POLAR GRAPH	CONE OF LIGHT					
Fixture Power	9W	9W	9W	9W		(Ft)	$\alpha=14.0^\circ \times 14.0^\circ$	$G=0.0^\circ$	$\beta=10.2^\circ \times 15.2^\circ$	Max	Med
Fixture Output	644Lm	672Lm	773Lm	775Lm		2.00				591	377
Kelvin Temp	2700K	3000K	3500K	4000K		4.00				148	94
Beam Spread	Flood 30°	Flood 30°	Flood 30°	Flood 30°		6.00				66	42
I <sub>Max</sub>	2627cd/klm	2627cd/klm	2627cd/klm	2627cd/klm		8.00				37	24
Efficacy	72 Lm/W	75 Lm/W	86 Lm/W	86 Lm/W		10.00				24	15

Maximum UGR = 10.5 (based on actual lumens)

# TARGETTI

## CLOUD Mini

### Photometry Cont.

FLOOD					POLAR GRAPH	CONE OF LIGHT					
Fixture Power	15W	15W	15W	15W		(Ft)	Alpha=14.9°+14.9°	G=0.0°	Beta=15.2°+15.2°	Max	Med
Fixture Output	974Lm	1017Lm	1169Lm	1171Lm						ftcd	ftcd
Kelvin Temp	2700K	3000K	3500K	4000K						894	571
Beam Spread	Flood 30°	Flood 30°	Flood 30°	Flood 30°						224	143
I <sub>Max</sub>	2627cd/klm	2627cd/klm	2627cd/klm	2627cd/klm						99	63
Efficacy	65 Lm/W	68 Lm/W	78 Lm/W	78 Lm/W						36	23

Maximum UGR = 11.9 (based on actual lumens)

FLOOD					POLAR GRAPH	CONE OF LIGHT					
Fixture Power	20W	20W	20W	20W		(Ft)	Alpha=14.9°+14.9°	G=0.0°	Beta=15.2°+15.2°	Max	Med
Fixture Output	1304Lm	1361Lm	1566Lm	1569Lm						ftcd	ftcd
Kelvin Temp	2700K	3000K	3500K	4000K						1196	763
Beam Spread	Flood 30°	Flood 30°	Flood 30°	Flood 30°						299	191
I <sub>Max</sub>	2627cd/klm	2627cd/klm	2627cd/klm	2627cd/klm						133	85
Efficacy	65 Lm/W	68 Lm/W	78 Lm/W	78 Lm/W						48	31

Maximum UGR = 12.9 (based on actual lumens)

MEDIUM WIDE FLOOD					POLAR GRAPH	CONE OF LIGHT					
Fixture Power	9W	9W	9W	9W		(Ft)	Alpha=24.2°+24.2°	G=0.0° Max not at G	Beta=24.2°+24.2°	Max	Med
Fixture Output	744Lm	777Lm	894Lm	895Lm						ftcd	ftcd
Kelvin Temp	2700K	3000K	3500K	4000K						303	182
Beam Spread	MF 46°	MF 46°	MF 46°	MF 46°						76	45
I <sub>Max</sub>	1372cd/klm	1372cd/klm	1372cd/klm	1372cd/klm						34	20
Efficacy	83 Lm/W	86 Lm/W	99 Lm/W	99 Lm/W						19	11
									12	7	

Maximum UGR = 10.5 (based on actual lumens)

# TARGETTI

## CLOUD Mini

### Photometry Cont.

MEDIUM WIDE FLOOD					POLAR GRAPH	CONE OF LIGHT
Fixture Power	15W	15W	15W	15W		
Fixture Output	1126Lm	1175Lm	1351Lm	1354Lm		
Kelvin Temp	2700K	3000K	3500K	4000K		
Beam Spread	MF 46°	MF 46°	MF 46°	MF 46°		
I <sub>Max</sub>	1372cd/klm	1372cd/klm	1372cd/klm	1372cd/klm		
Efficacy	75 Lm/W	78 Lm/W	90 Lm/W	90 Lm/W		

Maximum UGR = 11.9 (based on actual lumens)

MEDIUM WIDE FLOOD					POLAR GRAPH	CONE OF LIGHT
Fixture Power	20W	20W	20W	20W		
Fixture Output	1507Lm	1573Lm	1810Lm	1813Lm		
Kelvin Temp	2700K	3000K	3500K	4000K		
Beam Spread	MF 46°	MF 46°	MF 46°	MF 46°		
I <sub>Max</sub>	1372cd/klm	1372cd/klm	1372cd/klm	1372cd/klm		
Efficacy	75 Lm/W	79 Lm/W	91 Lm/W	91 Lm/W		

Maximum UGR = 12.9 (based on actual lumens)

WIDE FLOOD					POLAR GRAPH	CONE OF LIGHT
Fixture Power	9W	9W	9W	9W		
Fixture Output	721Lm	753Lm	867Lm	868Lm		
Kelvin Temp	2700K	3000K	3500K	4000K		
Beam Spread	WF 60°	WF 60°	WF 60°	WF 60°		
I <sub>Max</sub>	976cd/klm	976cd/klm	976cd/klm	976cd/klm		
Efficacy	80 Lm/W	84 Lm/W	96 Lm/W	96 Lm/W		

Maximum UGR = 9.4 (based on actual lumens)

# TARGETTI

## CLOUD Mini

### Photometry Cont.

WIDE FLOOD					POLAR GRAPH	CONE OF LIGHT					
Fixture Power	15W	15W	15W	15W			Max	Med			
Fixture Output	1092Lm	1139Lm	1310Lm	1313Lm					(Ft)		
Kelvin Temp	2700K	3000K	3500K	4000K					2.00		
Beam Spread	WF 60°	WF 60°	WF 60°	WF 60°					4.00		
I <sub>Max</sub>	976cd/klm	976cd/klm	976cd/klm	976cd/klm					6.00		
Efficacy	73 Lm/W	76 Lm/W	87 Lm/W	88 Lm/W					8.00		
					10.00						

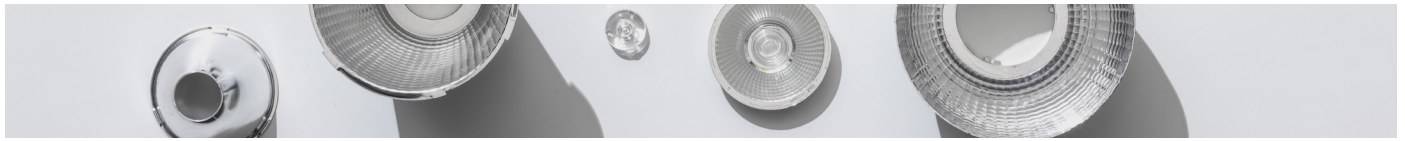
Maximum UGR = 10.8 (based on actual lumens)

WIDE FLOOD					POLAR GRAPH	CONE OF LIGHT					
Fixture Power	20W	20W	20W	20W			Max	Med			
Fixture Output	1461Lm	1525Lm	1755Lm	1758Lm					(Ft)		
Kelvin Temp	2700K	3000K	3500K	4000K					2.00		
Beam Spread	WF 60°	WF 60°	WF 60°	WF 60°					4.00		
I <sub>Max</sub>	976cd/klm	976cd/klm	976cd/klm	976cd/klm					6.00		
Efficacy	73 Lm/W	76 Lm/W	88 Lm/W	88 Lm/W					8.00		
					10.00						

Maximum UGR = 11.8 (based on actual lumens)

# TARGETTI

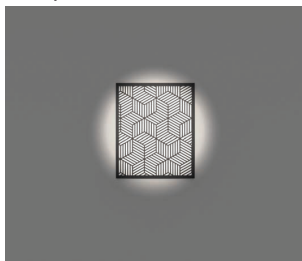
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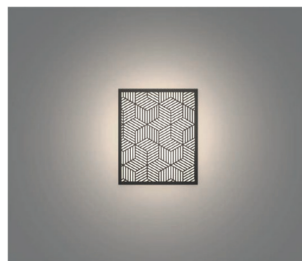
### OPTICAL SYSTEM

The optical system is the heart of every lighting fixture and its role is to adapt to the lamp, control emission and create the light beam. Every optical system is different, calibrated by a specific lamp to maximise performance and designed to interpret a lighting task to the full. Following rapid developments in LED lamps and new technology associated with them it is now more important than ever to look for new solutions, geometry and materials. Given the importance and specificity of this function Targetti has an internal design department dedicated to constantly creating and evolving its optical systems. Extremely innovative proprietary systems that are very different to each other, often protected by patents are developed with careful attention to the precision of the light beams and the best efficiency possible.

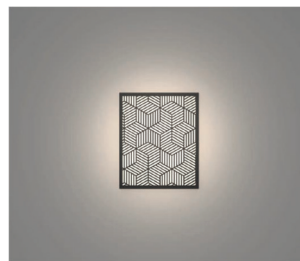
#### example



LENTICULAR OPTIC - SPOT



HYBRID OPTIC - SPOT



REFLECTOR OPTIC - SPOT

### HYBRID

They represent the best compromise between efficiency and beam definition. Based on the combined use of reflectors and lenses they combine the advantages of two light control methods. High efficiency and clean beams for well collimated beams that are completely free from fall-off halos, which is a normal effect of light that is not controlled in optics with a simple reflector. Inside a classic faceted reflector a frame is inserted which positions one or more optical glass lenses in front of the lamp: while the reflector controls the periphery of the beam, the lenses manage its central part separately, the part that normally escapes out of control. Cancelling "spurious" light is combined with flux recovery and an increase in intensity inside the beam.



### FACETED

They ensure the best performance in terms of energy saving and come in all beam openings – from the narrowest to the widest – and allow for perfect mixing with soft wide tones between light and shade. These characteristics make them more suitable for retail and hospitality environments. They are made from high vacuum metallized plastic protected with a Scratch Proof Formula or from polished anodized pure aluminum. Their high reflectance always ensures high optical efficiency. Profiles designed with the best simulation software with ellipsoidal convex facets generate various beam angles with an optimal light mix. A precise and enveloping light at the same time.

