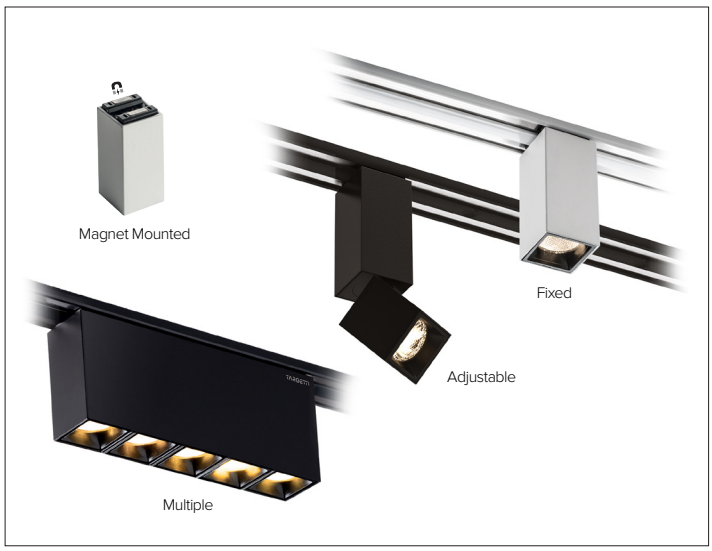
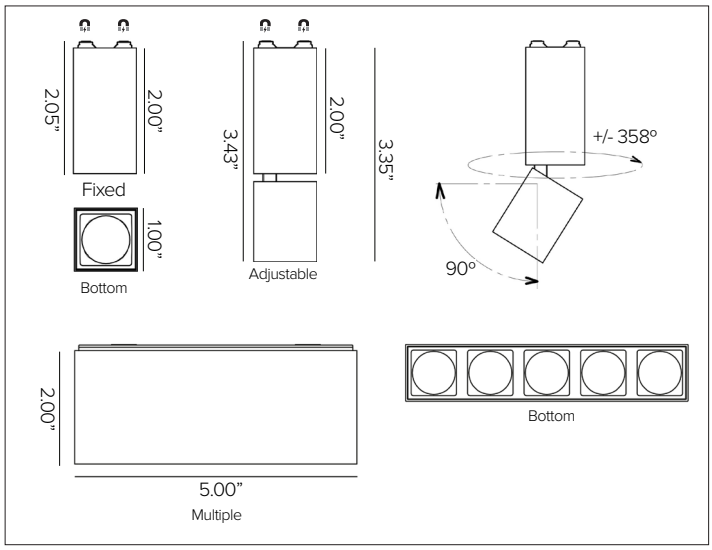
OZ 48V SMALL

Magnet Mounted Modular Light System





RoHS3 COMPLIANT · IP20 · cULus Class2

CONCEPT

Professional magnet mounted low voltage modular light system allowing for maximum application flexibility.

MECHANICAL CHARACTERISTICS

Dimensions	1"W nominal luminaire profile range.
Materials	Die cast aluminum finished body. Front internal reflector in black finish polycarbonate.
Finish	Plaster White Deep Black
Power Connection	Magnetized electrical non-polarized coupling system.
Functionality	The adjustable luminaire version utilizes a mechanical aim lock friction system and is tiltable +/-90° vertically and rotatable +/- 358° horizontally.
Mounting	Simple magnetized coupling system that mounts directly to *OZ 48V TRACK*. Provides an easy installation for fixture field mounting and reconfigurations. This modular system meets seismic requirements; no extra security is required.
Weight	Fixed: 0.11lbs / Adjustable: 0.16lbs / Multiple: 0.28lbs
Protection	IP20

CERTIFICATIONS

cULus Class 2 Listed E528452
Tested in accordance with LM-79-08.
Compliant with California energy regulations.
RoHS3 EU 215/863

WARRANTY

5 year limited warranty.

SUSTAINABILITY

Luminaire designed for disposal/recycling at end-of-life. Replaceable LED light source and control gear by a Targetti technician.

ELECTRICAL CHARACTERISTICS

Power Supply	Remote power supply options available.
Wattage	Fixed and Adjustable: 3W nominal / Multiple: 10W nominal
Voltage	48V
Control	0-10V dimmable through remote power / digital dimming interface for group fixture control OR wireless bluetooth control through Casambi app interface for individual fixture and/or optical DBS beam control. Refer to Targetti LMS (Light Management System) for detailed information.

SOURCE

High efficiency LED emitter.

TM30	CCT (Nominal)	CRI	Rf	Rg	SDCM
	2700K	90	87.6	103.9	2
	3000K	90	89.3	104.3	2
	3500K	90	91.4	103.9	2
	4000K	90	90.9	101.1	2

OPTIC

Optical system dependent on beam angle. SP version comprised of acrylic collimating lens with integrated holographic filter. FL and MWFL versions comprised of acrylic lens. DBS optic comprised of a specular anodized aluminum reflector, a Lens Vector liquid crystal glass lenses that are electronically controlled to regulate light diffusion and the beam opening from SP to MWFL with holographic filter.

Beam		SP 11°	FL 28°	MWFL 41°	DBS 16°–35°
Delivered Lumens	**2700K**	146Lm	140Lm	135Lm	148-166Lm
Data represents Fixed and Adjustable luminaire options only. Refer to photometry section for all fixture variations.	**3000K**	154Lm	148Lm	142Lm	156-175Lm
	3500K	158Lm	152Lm	147Lm	161-180Lm
	4000K	165Lm	159Lm	153Lm	169-189Lm

Efficacy	68 Lm/W max. Refer to photometric graphs for specific values.
Lifetime	L80/B10 >60,000hrs at max TA +25°C
Photobiological Classification	Low risk photobiological safety RG1

OZ 48V SMALL

SPECIFICATION INFORMATION

OZ							/	/
1	2	3	4	5	6	7	8 REQUIRED	9 OPTIONAL

Ex: OZ11FPWL4FL30

1 - PRODUCT CODE	2 - TYPE	3 - CONTROL	4 - FINISH	5 - WATTAGE	6 - OPTICS	7 - KELVIN
OZ — OZ 48V	**11F**[A] — Small 1" X 1" Fixed **11A**[A] — Small 1" X 1" Adjustable **15M**[B] — Small 1" X 5" Fixed Multiple	__ — 0-10V Digital Dim	**PW** — Plaster White **DB** — Deep Black **RAL** — Custom RAL	**L1** — 3W **L3** — 10W	**SP** — SP 11° **FL** — FL 28° **MW** — MWFL 41°	**27** — 2700K **30** — 3000K **35** — 3500K **40** — 4000K
OZ — OZ 48V	**11FC**[A] — Small 1" X 1" Fixed Wireless **11AC**[A] — Small 1" X 1" Adjustable Wireless **15MC**[B] — Small 1" X 5" Fixed Multiple Wireless	**C** — Casambi Wireless Bluetooth	**PW** — Plaster White **DB** — Deep Black **RAL** — Custom RAL	**L4** — 3W **L5** — 10W	**SP** — SP 11° **FL** — FL 28° **MW** — MWFL 41° **DBS**[C] — DBS	**27** — 2700K **30** — 3000K **35** — 3500K **40** — 4000K

8 - RAIL & DRIVER	9 - PROFILE
REQUIRED See *OZ 48V POWER RAIL* spec sheet for specification information.	***OPTIONAL*** See *OZ 48V PROFILE* spec sheets for specification information. *SURFACE/SUSPENSION* or *RECESSED*.

[A] Fixed and Adjustable versions available in 3W only.
[B] Multiple version available in 10W only.
[C] DBS optic available in Fixed and Adjustable fixtures with Casambi Wireless Bluetooth control, 3W only.

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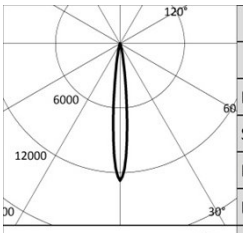
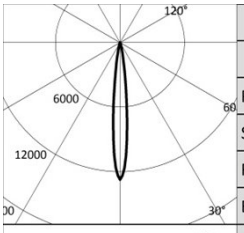
PHOTOMETRY

SPOT



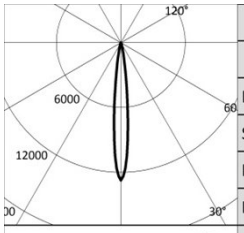
2700K		H(m)	D(m)	Emax(lx)
Ra90			11°	
Fixture Power	3W	1	0.20	2377
Source Flux	187lm	2	0.40	594
Fixture Flux	146lm	3	0.60	264
Efficacy	52lm/W	4	0.79	149
TS 1122 Imax=12713cd/klm	Imax 2377cd	5	0.99	95

Maximum UGR = 1.0 *(based on actual lumens)*



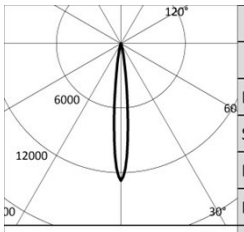
3500K		H(m)	D(m)	Emax(lx)
Ra90			11°	
Fixture Power	3W	1	0.20	2581
Source Flux	203lm	2	0.40	645
Fixture Flux	158lm	3	0.60	287
Efficacy	57lm/W	4	0.79	161
TS 1122 Imax=12713cd/klm	Imax 2581cd	5	0.99	103

Maximum UGR = 1.3 *(based on actual lumens)*



3000K		H(m)	D(m)	Emax(lx)
Ra90			11°	
Fixture Power	3W	1	0.20	2505
Source Flux	197lm	2	0.40	626
Fixture Flux	154lm	3	0.60	278
Efficacy	55lm/W	4	0.79	157
TS 1122 Imax=12713cd/klm	Imax 2505cd	5	0.99	100

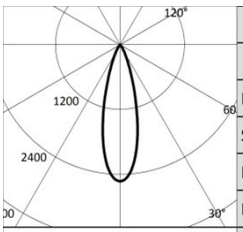
Maximum UGR = 1.2 *(based on actual lumens)*



4000K		H(m)	D(m)	Emax(lx)
Ra90			11°	
Fixture Power	3W	1	0.20	2695
Source Flux	212lm	2	0.40	674
Fixture Flux	165lm	3	0.60	299
Efficacy	59lm/W	4	0.79	168
TS 1122 Imax=12713cd/klm	Imax 2695cd	5	0.99	108

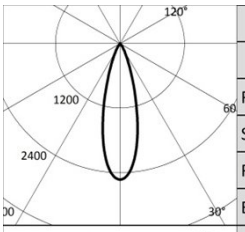
Maximum UGR = 1.4 *(based on actual lumens)*

FLOOD



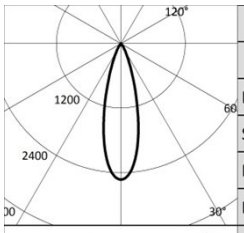
2700K		H(m)	D(m)	Emax(lx)
Ra90			28°	
Fixture Power	3W	1	0.51	472
Source Flux	187lm	2	1.01	118
Fixture Flux	140lm	3	1.52	52
Efficacy	50lm/W	4	2.02	30
TS 1123 Imax=2525cd/klm	Imax 472cd	5	2.53	19

Maximum UGR = 7.4 *(based on actual lumens)*



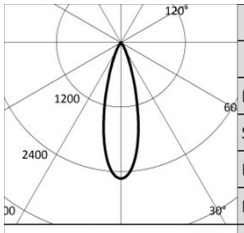
3500K		H(m)	D(m)	Emax(lx)
Ra90			28°	
Fixture Power	3W	1	0.51	513
Source Flux	203lm	2	1.01	128
Fixture Flux	152lm	3	1.52	57
Efficacy	54lm/W	4	2.02	32
TS 1123 Imax=2525cd/klm	Imax 513cd	5	2.53	21

Maximum UGR = 7.7 *(based on actual lumens)*



3000K		H(m)	D(m)	Emax(lx)
Ra90			28°	
Fixture Power	3W	1	0.51	497
Source Flux	197lm	2	1.01	124
Fixture Flux	148lm	3	1.52	55
Efficacy	53lm/W	4	2.02	31
TS 1123 Imax=2525cd/klm	Imax 497cd	5	2.53	20

Maximum UGR = 7.6 *(based on actual lumens)*



4000K		H(m)	D(m)	Emax(lx)
Ra90			28°	
Fixture Power	3W	1	0.51	535
Source Flux	212lm	2	1.01	134
Fixture Flux	159lm	3	1.52	59
Efficacy	57lm/W	4	2.02	33
TS 1123 Imax=2525cd/klm	Imax 535cd	5	2.53	21

Maximum UGR = 7.8 *(based on actual lumens)*

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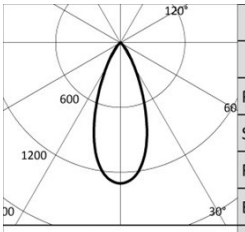
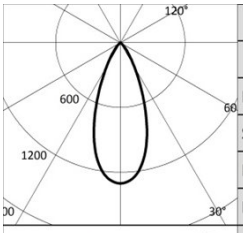
PHOTOMETRY

MEDIUM WIDE FLOOD



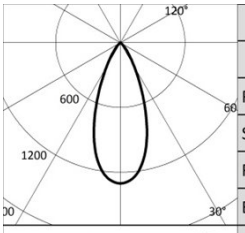
2700K		H(m)	D(m)	Emax(lx)
Ra90			41°	
Fixture Power	3W	1	0.75	243
Source Flux	187lm	2	1.50	61
Fixture Flux	135lm	3	2.26	27
Efficacy	48lm/W	4	3.01	15
TS 1124 Imax=1300cd/klm	Imax	243cd	5	3.76	10

Maximum UGR = 11.7 *(based on actual lumens)*



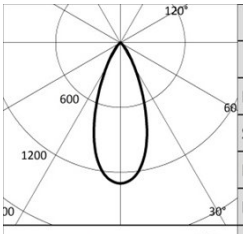
3000K		H(m)	D(m)	Emax(lx)
Ra90			41°	
Fixture Power	3W	1	0.75	256
Source Flux	197lm	2	1.50	64
Fixture Flux	142lm	3	2.26	28
Efficacy	51lm/W	4	3.01	16
TS 1124 Imax=1300cd/klm	Imax	256cd	5	3.76	10

Maximum UGR = 11.9 *(based on actual lumens)*



3500K		H(m)	D(m)	Emax(lx)
Ra90			41°	
Fixture Power	3W	1	0.75	264
Source Flux	203lm	2	1.50	66
Fixture Flux	147lm	3	2.26	29
Efficacy	52lm/W	4	3.01	16
TS 1124 Imax=1300cd/klm	Imax	264cd	5	3.76	11

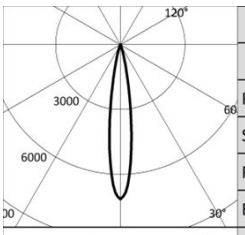
Maximum UGR = 12.0 *(based on actual lumens)*



4000K		H(m)	D(m)	Emax(lx)
Ra90			41°	
Fixture Power	3W	1	0.75	276
Source Flux	212lm	2	1.50	69
Fixture Flux	153lm	3	2.26	31
Efficacy	55lm/W	4	3.01	17
TS 1124 Imax=1300cd/klm	Imax	276cd	5	3.76	11

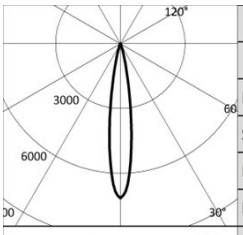
Maximum UGR = 12.1 *(based on actual lumens)*

DBS - SPOT



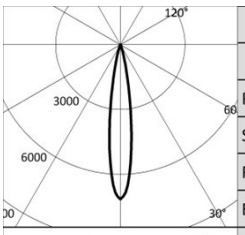
2700K		H(m)	D(m)	Emax(lx)
Ra90			16°	
Fixture Power	3W	1	0.28	1598
Source Flux	224lm	2	0.56	400
Fixture Flux	166lm	3	0.84	178
Efficacy	59lm/W	4	1.12	100
TS1283 Imax=7134cd/klm	Imax	1598cd	5	1.40	64

Maximum UGR = 18.6 *(based on actual lumens)*



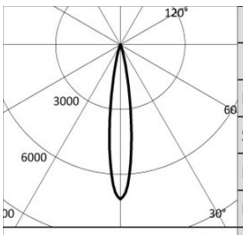
3000K		H(m)	D(m)	Emax(lx)
Ra90			16°	
Fixture Power	3W	1	0.28	1684
Source Flux	236lm	2	0.56	421
Fixture Flux	175lm	3	0.84	187
Efficacy	63lm/W	4	1.12	105
TS1283 Imax=7134cd/klm	Imax	1684cd	5	1.40	67

Maximum UGR = 18.8 *(based on actual lumens)*



3500K		H(m)	D(m)	Emax(lx)
Ra90			16°	
Fixture Power	3W	1	0.28	1734
Source Flux	243lm	2	0.56	433
Fixture Flux	180lm	3	0.84	193
Efficacy	64lm/W	4	1.12	108
TS1283 Imax=7134cd/klm	Imax	1734cd	5	1.40	69

Maximum UGR = 18.9 *(based on actual lumens)*



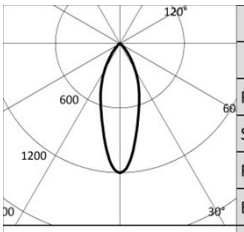
4000K		H(m)	D(m)	Emax(lx)
Ra90			16°	
Fixture Power	3W	1	0.28	1819
Source Flux	255lm	2	0.56	455
Fixture Flux	189lm	3	0.84	202
Efficacy	68lm/W	4	1.12	114
TS1283 Imax=7134cd/klm	Imax	1819cd	5	1.40	73

Maximum UGR = 19.1 *(based on actual lumens)*

OZ 48V SMALL

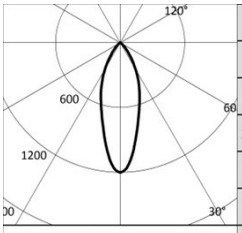
PHOTOMETRY

DBS - MEDIUM WIDE FLOOD



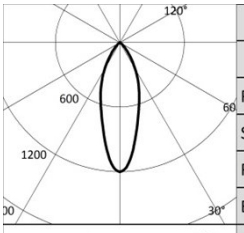
2700K		H(m)	D(m)	Emax(lx)
Ra90			35°	
Fixture Power	3W	1	0.62	268
Source Flux	224lm	2	1.24	67
Fixture Flux	148lm	3	1.86	30
Efficacy	53lm/W	4	2.49	17
TS1284 Imax=1198cd/klm	Imax 268cd	5	3.11	11

Maximum UGR = 19.7 *(based on actual lumens)*



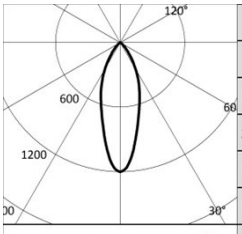
3000K		H(m)	D(m)	Emax(lx)
Ra90			35°	
Fixture Power	3W	1	0.62	283
Source Flux	236lm	2	1.24	71
Fixture Flux	156lm	3	1.86	31
Efficacy	56lm/W	4	2.49	18
TS1284 Imax=1198cd/klm	Imax 283cd	5	3.11	11

Maximum UGR = 19.9 *(based on actual lumens)*



3500K		H(m)	D(m)	Emax(lx)
Ra90			35°	
Fixture Power	3W	1	0.62	291
Source Flux	243lm	2	1.24	73
Fixture Flux	161lm	3	1.86	32
Efficacy	57lm/W	4	2.49	18
TS1284 Imax=1198cd/klm	Imax 291cd	5	3.11	12

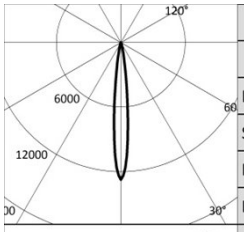
Maximum UGR = 20.0 *(based on actual lumens)*



4000K		H(m)	D(m)	Emax(lx)
Ra90			35°	
Fixture Power	3W	1	0.62	306
Source Flux	255lm	2	1.24	76
Fixture Flux	169lm	3	1.86	34
Efficacy	60lm/W	4	2.49	19
TS1284 Imax=1198cd/klm	Imax 306cd	5	3.11	12

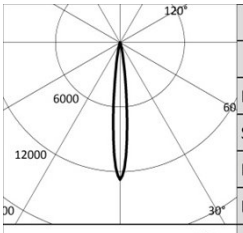
Maximum UGR = 20.2 *(based on actual lumens)*

SPOT (MULTIPLE)



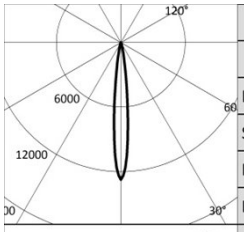
2700K		H(m)	D(m)	Emax(lx)
Ra90			11°	
Fixture Power	10W	1	0.20	9510
Source Flux	748lm	2	0.40	2377
Fixture Flux	584lm	3	0.60	1057
Efficacy	60lm/W	4	0.79	594
TS1122 Imax=12713cd/klm	Imax 9510cd	5	0.99	380

Maximum UGR = 0.2 *(based on actual lumens)*



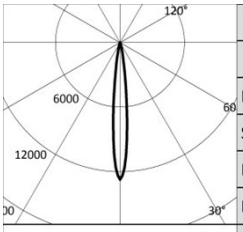
3000K		H(m)	D(m)	Emax(lx)
Ra90			11°	
Fixture Power	10W	1	0.20	10018
Source Flux	788lm	2	0.40	2505
Fixture Flux	615lm	3	0.60	1113
Efficacy	63lm/W	4	0.79	626
TS1122 Imax=12713cd/klm	Imax 10018cd	5	0.99	401

Maximum UGR = 0.4 *(based on actual lumens)*



3500K		H(m)	D(m)	Emax(lx)
Ra90			11°	
Fixture Power	10W	1	0.20	10323
Source Flux	812lm	2	0.40	2581
Fixture Flux	633lm	3	0.60	1147
Efficacy	65lm/W	4	0.79	645
TS1122 Imax=12713cd/klm	Imax 10323cd	5	0.99	413

Maximum UGR = 0.5 *(based on actual lumens)*



4000K		H(m)	D(m)	Emax(lx)
Ra90			11°	
Fixture Power	10W	1	0.20	10781
Source Flux	848lm	2	0.40	2695
Fixture Flux	662lm	3	0.60	1198
Efficacy	68lm/W	4	0.79	674
TS1122 Imax=12713cd/klm	Imax 10781cd	5	0.99	431

Maximum UGR = 0.6 *(based on actual lumens)*

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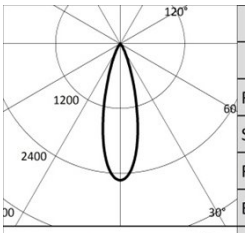
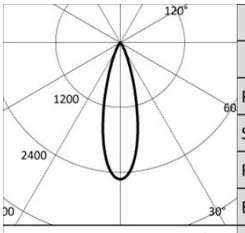
PHOTOMETRY

FLOOD (MULTIPLE)



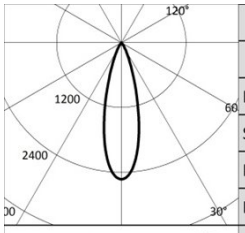
2700K		H(m)	D(m)	Emax(lx)
Ra90			28°	
Fixture Power	10W	1	0.51	1889
Source Flux	748lm	2	1.01	472
Fixture Flux	560lm	3	1.52	210
Efficacy	58lm/W	4	2.02	118
TS1123 Imax=2525cd/klm	Imax 1889cd	5	2.53	76

Maximum UGR = 6.6 *(based on actual lumens)*



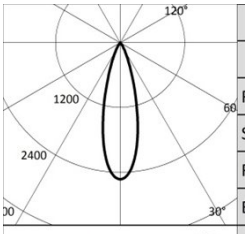
3000K		H(m)	D(m)	Emax(lx)
Ra90			28°	
Fixture Power	10W	1	0.51	1990
Source Flux	788lm	2	1.01	497
Fixture Flux	590lm	3	1.52	221
Efficacy	61lm/W	4	2.02	124
TS1123 Imax=2525cd/klm	Imax 1990cd	5	2.53	80

Maximum UGR = 6.8 *(based on actual lumens)*



3500K		H(m)	D(m)	Emax(lx)
Ra90			28°	
Fixture Power	10W	1	0.51	2051
Source Flux	812lm	2	1.01	513
Fixture Flux	608lm	3	1.52	228
Efficacy	63lm/W	4	2.02	128
TS1123 Imax=2525cd/klm	Imax 2051cd	5	2.53	82

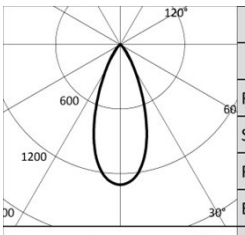
Maximum UGR = 6.9 *(based on actual lumens)*



4000K		H(m)	D(m)	Emax(lx)
Ra90			28°	
Fixture Power	10W	1	0.51	2141
Source Flux	848lm	2	1.01	535
Fixture Flux	635lm	3	1.52	238
Efficacy	65lm/W	4	2.02	134
TS1123 Imax=2525cd/klm	Imax 2141cd	5	2.53	86

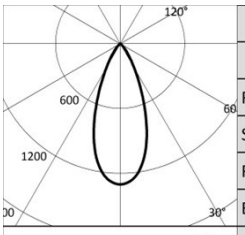
Maximum UGR = 7.0 *(based on actual lumens)*

MEDIUM WIDE FLOOD (MULTIPLE)



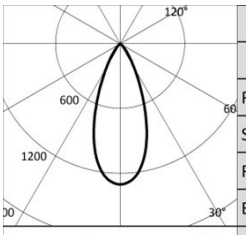
2700K		H(m)	D(m)	Emax(lx)
Ra90			41°	
Fixture Power	10W	1	0.75	972
Source Flux	748lm	2	1.50	243
Fixture Flux	540lm	3	2.26	108
Efficacy	56lm/W	4	3.01	61
TS1124 Imax=1300cd/klm	Imax 972cd	5	3.76	39

Maximum UGR = 10.9 *(based on actual lumens)*



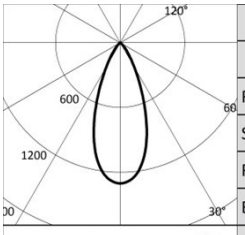
3000K		H(m)	D(m)	Emax(lx)
Ra90			41°	
Fixture Power	10W	1	0.75	1024
Source Flux	788lm	2	1.50	256
Fixture Flux	569lm	3	2.26	114
Efficacy	59lm/W	4	3.01	64
TS1124 Imax=1300cd/klm	Imax 1024cd	5	3.76	41

Maximum UGR = 11.1 *(based on actual lumens)*



3500K		H(m)	D(m)	Emax(lx)
Ra90			41°	
Fixture Power	10W	1	0.75	1055
Source Flux	812lm	2	1.50	264
Fixture Flux	586lm	3	2.26	117
Efficacy	60lm/W	4	3.01	66
TS1124 Imax=1300cd/klm	Imax 1055cd	5	3.76	42

Maximum UGR = 11.2 *(based on actual lumens)*



4000K		H(m)	D(m)	Emax(lx)
Ra90			41°	
Fixture Power	10W	1	0.75	1102
Source Flux	848lm	2	1.50	276
Fixture Flux	612lm	3	2.26	122
Efficacy	63lm/W	4	3.01	69
TS1124 Imax=1300cd/klm	Imax 1102cd	5	3.76	44

Maximum UGR = 11.3 *(based on actual lumens)*

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CONTROL SYSTEM

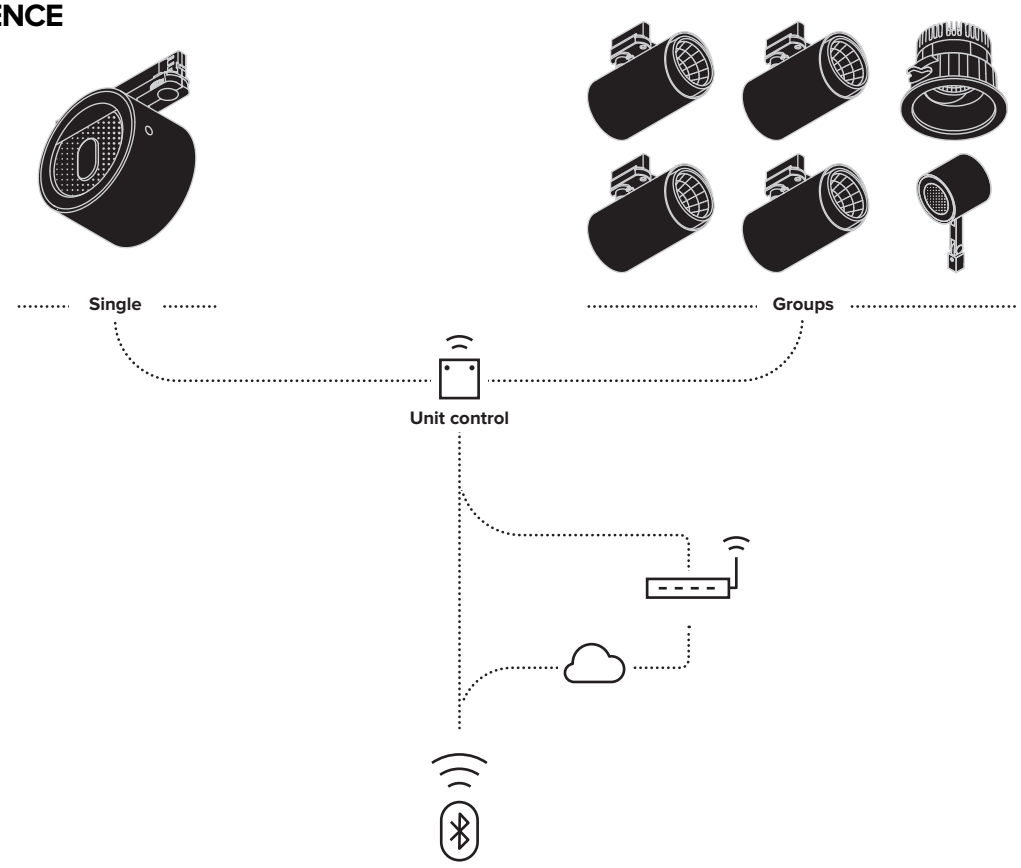
Controlling light has never been easier. Targetti LMS (Light Management System) with Control by Casambi was created to make it possible to control light via Bluetooth Low Energy without the use of any special cables, ensuring system operational readiness. This wireless technology is compatible with all modern smart devices: smartphones, tablets and even smartwatches. Targetti fixtures are equipped with a special interface that allows them to communicate with each other to create a remotely controllable "smart" network.

The advantages are boundless. The possibility for users to interact with lighting – varying intensity, tone and shape in complete freedom and autonomy according to their needs. The design approach known as Human Centric Lighting that places people at the center of lighting projects.

Flexible and easy to use, suitable for managing all types of simple to more complex systems, LMS is a future-oriented system that can be constantly updated because it can be used with a simple application that can be downloaded onto a mobile device to manage the entire system in wireless mode.

INSTALLATION SEQUENCE

1. Choose Targetti fixtures by opting for the Targetti Casambi Ready package or Casambi accessory components
2. Download the Casambi iOS or Android App depending on the device used
3. Launch the App: the fixtures in operation will be detected automatically
4. Create one or two networks depending on the characteristics of the environment
5. Create groups of devices as needed
6. Program scenes and/or sequences.
7. Set the level of network sharing



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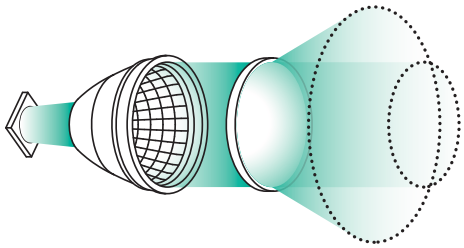
DBS – DYNAMIC BEAM SHAPING

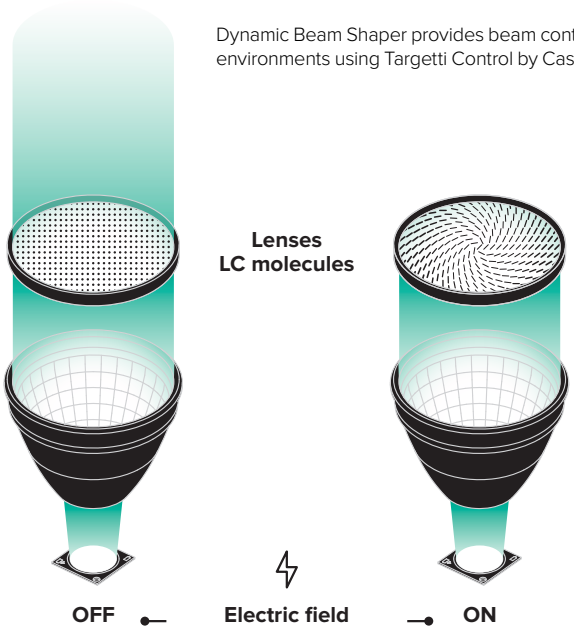
Uniform light and contemporary atmosphere.

Dynamic Beam Shaping (DBS) optical technology was created from the desire to give designers a sophisticated yet simple to use tool. Technology that we were the first to develop in the lighting sector together with Lens Vector – a leading American company in lens design - that makes it possible to vary the beam opening of fixtures via digital input without any mechanical system. With DBS we combined LED sources, collimated optics and lenses equipped with liquid crystal molecules that can be activated and oriented using an electric field thus creating a light diffusion process.



HOW IT WORKS Liquid crystal materials are widely used in projectors and LC (LCD) displays. They are elongated molecules that are naturally aligned in the same direction. The DBS lens is composed of two glass substrates separated by spacers that are sealed to contain the liquid crystal materials in a kind of "sandwich". When an electric field is applied to the lens the molecules change direction and refocus the light that passes through the lens. Managing the electric field and the direction of the molecules it is possible to shape the light beam.

Dynamic Beam Shaper provides beam control from 15° to 55°, allowing designers to create scenes and manage lighting in different environments using Targetti Control by Casambi, without the use of mechanical systems, scales or replacement optics.



HOW IT'S CONTROLLED Using the Casambi app, available for IOS and Android, it is possible to dim the sources, set the desired beam opening and create dynamic scenes. The same fixture controlled from any smart device provides infinite possibilities.