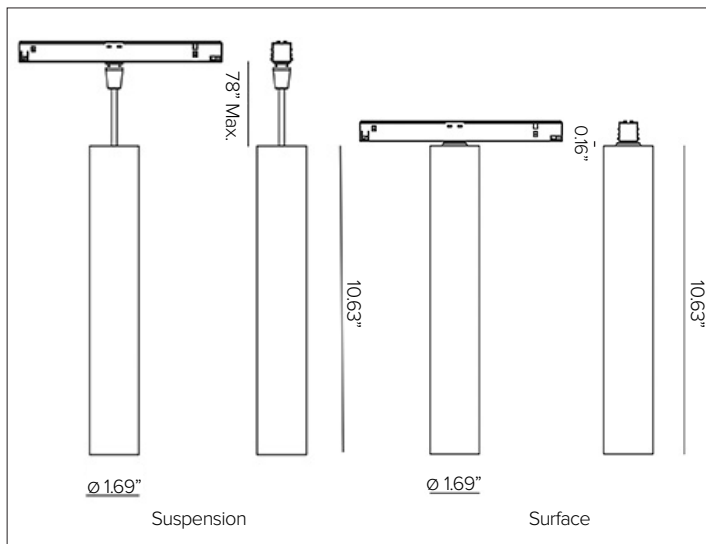


# FORTYEIGHT LABEL 4 TUBE

## Low Voltage LED Track Fixture



Surface version (left), Suspended version (right), Deep Black finish shown.



### CONCEPT

Professional Low voltage LED fixture for direct lighting.

### MECHANICAL CHARACTERISTICS

<b>Dimensions</b>	10.63"L x 1.69" Dia.
<b>Materials</b>	Powder coated cylindrical machined aluminum body.
<b>Finish</b>	● Plaster White ● Deep Black
<b>Power Connection</b>	To be completed with FORTYEIGHT MULTISYSTEM low voltage polarized track. Not 'Hot Swap' capable. Power to the track must be turned off for removal, replacement, or movement of the fixture.
<b>Functionality</b>	Tool-less installation, utilizing a mechanical fixture system that mounts to FORTYEIGHT MULTISYSTEM track system. <b>NOTE: Max of 4 connectors or 30ft of track per individual 96W power supply and/or 90W.</b> Can be used in combination with FORTYEIGHT fixture range to maximum of 90W per 96W, 48V driver.
<b>Mounting</b>	FORTYEIGHT MULTISYSTEM track system, sold separately. <b>Surface version NOT compatible with FORTYEIGHT RECESSED DEEP TRIMLESS track.</b> Suspension is complete with 78"L multicore cable with length adjustment system, colored fabric cable supplied to match fixture color.
<b>Weight</b>	0.66lbs
<b>Protection</b>	IP20

### CERTIFICATIONS

cULus Class 2 Listed  
 Tested in accordance with LM-79-08.  
 Compliant for California installations.  
 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

<b>Power Supply</b>	Remote 48V driver required, refer to FORTYEIGHT MULTISYSTEM track spec sheet.
<b>Wattage</b>	8W
<b>Voltage</b>	48V
<b>Control</b>	0-10V to 1% or DALI / Wireless Bluetooth Casambi to 0% <b>Note: Control cable wired directly to track from dimming interface, not through remote driver.</b> 0-10V group fixture control. For individual fixture control DALI or wireless DALI/Casambi. For wireless bluetooth control via Casambi, use DALI fixture in combination with APPI-M-C0-9519 wireless control interface, refer to FORTYEIGHT MULTISYSTEM track specification sheet for detailed information.

### SOURCE

High efficiency LED Chip on Board.

TM30	CCT (Nominal)	CRI	Rf	Rg	SDCM
	2700K	90	92	99	1.5
	3000K	90	92	101	1.5
	4000K	90	90	98	1.5

### OPTIC

Optical system is dependent on beam angle. SP / FL versions comprised of metalized polycarbonate precision optics with opaque black silicone cut off ring. MWFL version comprised of convex faceted highly reflective anodized aluminum precision optic with opaque black silicone cut off ring.

Beam	SP 18°	FL 27°	MWFL 42°
<b>Delivered Lumens</b>	<b>2700K</b> 500Lm	661Lm	684Lm
	<b>3000K</b> 539Lm	688Lm	712Lm
	<b>4000K</b> 699Lm	699Lm	723Lm
<i>For 3500K lumen values use multiplier of 1.02 from 3000K.</i>			
<b>Efficacy</b>	95 Lm/W max. Refer to photometric graphs for specific values.		
<b>Lifetime</b>	L90/B10 >50,000hrs at max TA +25°C		
<b>Photobiological Classification</b>	Low risk photobiological safety RG1		

# FORTYEIGHT LABEL 4 TUBE

## SPECIFICATION INFORMATION

48	LA	4							10
1	2	3	4	5	6	7	8	9	10

Ex: 48LA4SU10L1SP30PW

**REQUIRED**

1 - PRODUCT CODE	2 - TYPE	3 - SIZE	4 - VERSION	5 - CONTROL	6 - WATTAGE	7 - OPTIC	8 - KELVIN	9 - FINISH
48 — FORTYEIGHT	LA — LABEL	4 — 1.69" Dia.	SF <sup>B</sup> — Surface SU — Suspended	10 — 0-10V DA <sup>A</sup> — DALI/Wireless Casambi	L1 — 8W	SP — SP 18° FL — FL 27° MW — MWFL 42°	27 — 2700K 30 — 3000K 35 — 3500K 40 — 4000K	PW — Plaster White DB — Deep Black

### 10 - TRACK

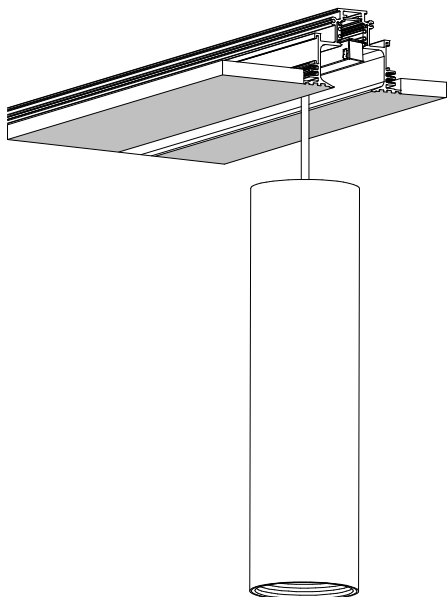
**REQUIRED**

To be completed with **FORTYEIGHT MULTISYSTEM TRACK RECESSED TRIMLESS DEEP** or **SURFACE / SUSPENSION**

<sup>A</sup> For wireless bluetooth control via Casambi, use DALI fixture in combination with APPI-M-CO-9519 wireless control interface.  
<sup>B</sup> Not compatible with Recessed Deep Trimless Track.

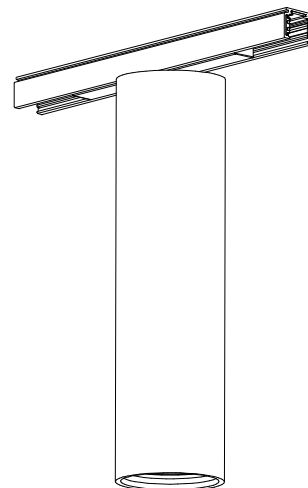
## MOUNTING COMPATIBILITY

**FORTYEIGHT RECESSED TRIMLESS DEEP TRACK** shown with FORTYEIGHT LABEL 4 TUBE (SU) SUSPENSION fixture version.



**FORTYEIGHT MULTISYSTEM SURFACE/SUSPENSION TRACK** shown with FORTYEIGHT LABEL 4 TUBE (SF) SURFACE fixture version.

**NOTE: (SF) Surface fixture version NOT compatible with FORTYEIGHT RECESSED TRIMLESS DEEP TRACK.**



# FORTYEIGHT LABEL 4 TUBE

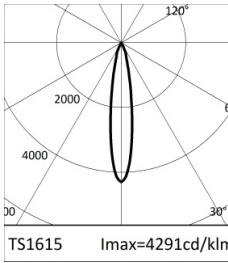
## PHOTOMETRY

### SURFACE – SPOT



2700K		H(m)	D(m)	Emax(lx)		
Ra90			18°			
Fixture Power	8W	1	0.31	3115		
Source Flux	726lm	2	0.62	779		
Fixture Flux	460lm	3	0.93	346		
Efficacy	60lm/W	4	1.24	195		
TS1615	I <sub>max</sub> =4291cd/klm	I <sub>max</sub>	3115cd	5	1.55	125

Maximum UGR = 6.3 (based on actual lumens)



3000K		H(m)	D(m)	Emax(lx)		
Ra90			18°			
Fixture Power	8W	1	0.31	3634		
Source Flux	847lm	2	0.62	909		
Fixture Flux	536lm	3	0.93	404		
Efficacy	71lm/W	4	1.24	227		
TS1615	I <sub>max</sub> =4291cd/klm	I <sub>max</sub>	3634cd	5	1.55	145

Maximum UGR = 6.8 (based on actual lumens)



4000K		H(m)	D(m)	Emax(lx)		
Ra90			18°			
Fixture Power	8W	1	0.31	3858		
Source Flux	899lm	2	0.62	964		
Fixture Flux	569lm	3	0.93	429		
Efficacy	75lm/W	4	1.24	241		
TS1615	I <sub>max</sub> =4291cd/klm	I <sub>max</sub>	3858cd	5	1.55	154

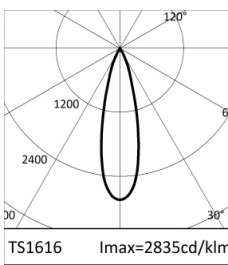
Maximum UGR = 7.0 (based on actual lumens)

### SURFACE – FLOOD



2700K		H(m)	D(m)	Emax(lx)		
Ra90			27°			
Fixture Power	8W	1	0.48	2616		
Source Flux	923lm	2	0.95	654		
Fixture Flux	659lm	3	1.43	291		
Efficacy	87lm/W	4	1.91	164		
TS1616	I <sub>max</sub> =2835cd/klm	I <sub>max</sub>	2616cd	5	2.38	105

Maximum UGR = 7.7 (based on actual lumens)



3000K		H(m)	D(m)	Emax(lx)		
Ra90			27°			
Fixture Power	8W	1	0.48	2721		
Source Flux	960lm	2	0.95	680		
Fixture Flux	685lm	3	1.43	302		
Efficacy	90lm/W	4	1.91	170		
TS1616	I <sub>max</sub> =2835cd/klm	I <sub>max</sub>	2721cd	5	2.38	109

Maximum UGR = 7.9 (based on actual lumens)



4000K		H(m)	D(m)	Emax(lx)		
Ra90			27°			
Fixture Power	8W	1	0.48	2764		
Source Flux	975lm	2	0.95	691		
Fixture Flux	696lm	3	1.43	307		
Efficacy	92lm/W	4	1.91	173		
TS1616	I <sub>max</sub> =2835cd/klm	I <sub>max</sub>	2764cd	5	2.38	111

Maximum UGR = 7.9 (based on actual lumens)

# FORTYEIGHT LABEL 4 TUBE

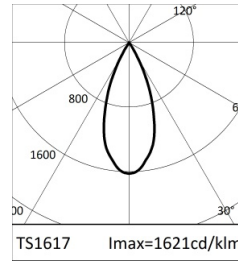
## PHOTOMETRY

### SURFACE – MEDIUM WIDE FLOOD



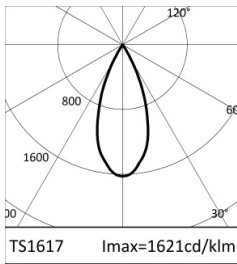
2700K		H(m)	D(m)	Emax(lx)
Ra90			42°	
Fixture Power	8W	1	0.76	1496
Source Flux	923lm	2	1.52	374
Fixture Flux	682lm	3	2.28	166
Efficacy	90lm/W	4	3.04	93
TS1617	Imax=1621cd/klm	Imax	1496cd	5
			3.80	60

Maximum UGR = 1.8 (based on actual lumens)



3000K		H(m)	D(m)	Emax(lx)
Ra90			42°	
Fixture Power	8W	1	0.76	1556
Source Flux	960lm	2	1.52	389
Fixture Flux	709lm	3	2.28	173
Efficacy	93lm/W	4	3.04	97
TS1617	Imax=1621cd/klm	Imax	1556cd	5
			3.80	62

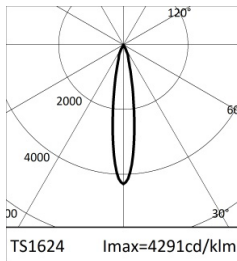
Maximum UGR = 2.0 (based on actual lumens)



4000K		H(m)	D(m)	Emax(lx)
Ra90			42°	
Fixture Power	8W	1	0.76	1580
Source Flux	975lm	2	1.52	395
Fixture Flux	720lm	3	2.28	176
Efficacy	95lm/W	4	3.04	99
TS1617	Imax=1621cd/klm	Imax	1580cd	5
			3.80	63

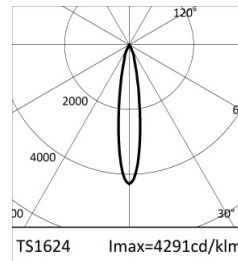
Maximum UGR = 2.0 (based on actual lumens)

### SUSPENSION – SPOT



2700K		H(m)	D(m)	Emax(lx)
Ra90			18°	
Fixture Power	8W	1	0.31	3390
Source Flux	790lm	2	0.62	847
Fixture Flux	500lm	3	0.93	377
Efficacy	66lm/W	4	1.24	212
TS1624	Imax=4291cd/klm	Imax	3390cd	5
			1.55	136

Maximum UGR = 6.6 (based on actual lumens)



3000K		H(m)	D(m)	Emax(lx)
Ra90			18°	
Fixture Power	8W	1	0.31	3652
Source Flux	851lm	2	0.62	913
Fixture Flux	539lm	3	0.93	406
Efficacy	71lm/W	4	1.24	228
TS1624	Imax=4291cd/klm	Imax	3652cd	5
			1.55	146

Maximum UGR = 6.8 (based on actual lumens)



4000K		H(m)	D(m)	Emax(lx)
Ra90			18°	
Fixture Power	8W	1	0.31	3875
Source Flux	903lm	2	0.62	969
Fixture Flux	572lm	3	0.93	431
Efficacy	75lm/W	4	1.24	242
TS1624	Imax=4291cd/klm	Imax	3875cd	5
			1.55	155

Maximum UGR = 7.9 (based on actual lumens)

# FORTYEIGHT LABEL 4 TUBE

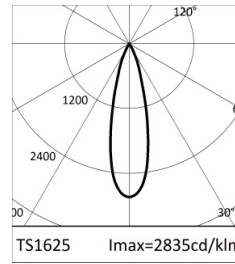
## PHOTOMETRY

### SUSPENSION – FLOOD



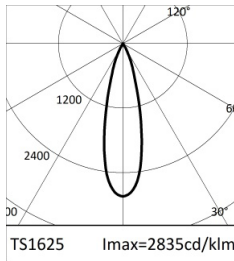
2700K		H(m)	D(m)	E <sub>max</sub> (lx)		
Ra90				27°		
Fixture Power	8W	1	0.48	2625		
Source Flux	926lm	2	0.95	656		
Fixture Flux	661lm	3	1.43	292		
Efficacy	87lm/W	4	1.91	164		
TS1625	I <sub>max</sub> =2835cd/klm	I <sub>max</sub>	2625cd	5	2.38	105

Maximum UGR = 7.7 (based on actual lumens)



3000K		H(m)	D(m)	E <sub>max</sub> (lx)		
Ra90				27°		
Fixture Power	8W	1	0.48	2732		
Source Flux	964lm	2	0.95	683		
Fixture Flux	688lm	3	1.43	304		
Efficacy	91lm/W	4	1.91	171		
TS1625	I <sub>max</sub> =2835cd/klm	I <sub>max</sub>	2732cd	5	2.38	109

Maximum UGR = 7.9 (based on actual lumens)



4000K		H(m)	D(m)	E <sub>max</sub> (lx)		
Ra90				27°		
Fixture Power	8W	1	0.48	2775		
Source Flux	979lm	2	0.95	694		
Fixture Flux	699lm	3	1.43	308		
Efficacy	92lm/W	4	1.91	173		
TS1625	I <sub>max</sub> =2835cd/klm	I <sub>max</sub>	2775cd	5	2.38	111

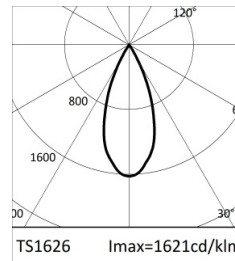
Maximum UGR = 7.9 (based on actual lumens)

### SUSPENSION – MEDIUM WIDE FLOOD



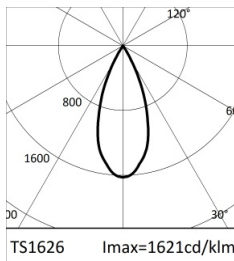
2700K		H(m)	D(m)	E <sub>max</sub> (lx)		
Ra90				42°		
Fixture Power	8W	1	0.76	1501		
Source Flux	926lm	2	1.52	375		
Fixture Flux	684lm	3	2.28	167		
Efficacy	90lm/W	4	3.04	94		
TS1626	I <sub>max</sub> =1621cd/klm	I <sub>max</sub>	1501cd	5	3.80	60

Maximum UGR = 1.8 (based on actual lumens)



3000K		H(m)	D(m)	E <sub>max</sub> (lx)		
Ra90				42°		
Fixture Power	8W	1	0.76	1562		
Source Flux	964lm	2	1.52	391		
Fixture Flux	712lm	3	2.28	174		
Efficacy	94lm/W	4	3.04	98		
TS1626	I <sub>max</sub> =1621cd/klm	I <sub>max</sub>	1562cd	5	3.80	62

Maximum UGR = 2.0 (based on actual lumens)



4000K		H(m)	D(m)	E <sub>max</sub> (lx)		
Ra90				42°		
Fixture Power	8W	1	0.76	1587		
Source Flux	979lm	2	1.52	397		
Fixture Flux	723lm	3	2.28	176		
Efficacy	95lm/W	4	3.04	99		
TS1626	I <sub>max</sub> =1621cd/klm	I <sub>max</sub>	1587cd	5	3.80	63

Maximum UGR = 2.0 (based on actual lumens)