PROJECT	Job Name	Ca	Catalog Number	
INFORMATION	Fixture Type	A	Approved by	

## Luminaires for Transportation Applications

### **TDL SERIES**

**SPECIFICATIONS** 

#### PRODUCT FEATURES:

- » 6" sealed, recessed downlight with flush lens trim
- » Corrosion-resistant frame and trim construction
- » Peace of Mind Guarantee® against breakage
- » Native 590nm Amber LED for spectrally sensitive applications requiring robust construction such as coastal or skyglow restricted areas
- » Blue light option for public safety applications



HEAT SINK: Die-cast aluminum with external radial fins for natural convection.

**ROUGH-IN FRAME:** 18-gauge die-formed, type 304 stainless steel construction. Vertically adjustable collar accommodates ceiling thicknesses up to 2", adjustable post-installation. Universal mounting brackets accept 3/4" and 1-1/2" lathers channel, 1/2" EMT conduit and hanger bars. Quick-access junction box accessible post-installation from above and below ceiling. Includes (4) 1/2" and (2) 3/4" knock-outs to allow straight conduit runs. Listed for (8) 12AWG, 90°C conductors and feed-thru branch wiring. Provided with FMC with electrical quick-connect to Trim Section.

470nm (Blue)

TRIM/HOUSING SECTION: IP-rated housing section incorporates the heat sink, LED module, optics and stainless steel lower trim. Lens trim secured with four (4) Torx® tamper-resistant, captive fasteners. See trim ordering information for available options.

**OPTICAL:** Diffused tempered glass upper lens. No light filtering elements.. Available with various reflector distribution patterns and finishes. Flush lens trim options include a clear lens. See distribution and reflector finish ordering information for available options.

**ELECTRICAL:** Native 590nm Amber or 470nm Blue LED source. Narrow bandwidth native sources provide optimal control over spectral emissions. 120-277VAC or 347VAC, 50/60Hz electrical input with serviceable constant current driver (<20% THD, >0.90 PF). Minimum 85% driver efficiency. Standard 0-10V dimming with 1-100% range and dim-to-dark capabilities (non dim-to-dark with 347V); 165µA maximum source current.

PHOTOMETRICS: Photometry tested to the IESNA LM-79-08 standard by an ILAC/ISO17025 accredited laboratory. For photometric information, go to www.kenall.com.

WARRANTY: Limited three (3) year LED warranty. Peace of Mind Guarantee against breakage.

INSTALLATION: Suitable for ambient temperature temperatures of -30°C to +40°C, unless otherwise noted.

LISTINGS: Luminaire is certified to UL standards by Intertek Testing Laboratory for non-IC and Wet Location installations. IP65 rating per IEC60598.







## ORDERING INFORMATION (EX: TDL6-FF-5BR-12NA-W-CSS-G-RIT6-DV-DIM1)

TRIM							ROUG	GH-IN						
Model	Trim Style	Trim Finish	Lamp Power	Distribution	Reflector Finish	Flush Lens Type	Rough	ı-In Input	Voltage	Driver Type	Options			
TDL6	<u> </u>				_		_RI	T6		DIM1				
Trim St FF	<b>tyle</b> Flush Lens (With Faste	eners - IP65)		Distribution M W	on Medium Wide		Roug RIT6	<b>h-In</b> 6" Transporta	tion Rough	-In				
Trim Fi 5BR XBR 5FW	nish Type 304 Stainless S Type 316 Stainless S Type 304 Stainless S	Steel with 4B	Brushed Finish	Reflector FW Flat			Input DV 347	t <b>Voltage</b> 120-277V, 50 347VAC, 60H						
XFW					r Semi-Specular		Driver Type DIM1 0-10V Dimming to 1%							
Lamp F	Power / Color			Flush Lens	Туре				9 /-					
12NA	12 Watt 590nm Nat				Clear High-Impact A		Optio		D - ++ D	a aloona oo dala Dana	and Take Constants			
18BL	18 Watt 470nm Nat	tive Blue LED		<b>G</b> 1/8"	Clear Polycarbonate		LEL FS	/W Emergenc (0°C min. amb Fuse & Holder	oient, n/a w	ackup with Rem rith 347V)	ote lest Switch			



590nm (Native Amber)

Luminaires for Transportation Applications

## **TDL SERIES**

### **PERFORMANCE**

Tribu Chala		Optic		Lamp	Lawar Calan	Initial Dallaced Lawrence	Input Power	Estd. L70 LED Life		
Trim Style	Distribution	Reflector Finish	Lens Type	Code	Lamp Color	Initial Delivered Lumens	. (W)	(hrs)		
			т	12NA	590nm Native Amber	235	15	36,000		
			Т	18BL	470nm Blue	283	21	60,000		
		CS	_	12NA	590nm Native Amber	228	15	36,000		
			G	18BL	470nm Blue	275	21	60,000		
			-	12NA	590nm Native Amber	220	15	36,000		
	M	666	Т	18BL	470nm Blue	266	21	60,000		
	IVI	CSS	-	12NA	590nm Native Amber	214	15	36,000		
			G	18BL	470nm Blue	258	21	60,000		
			_	12NA	590nm Native Amber	218	15	36,000		
		FW	Т	18BL	470nm Blue	262	21	60,000		
		FVV	G	12NA	590nm Native Amber	212	15	36,000		
FF			G	18BL	470nm Blue	255	21	60,000		
FF			Т	12NA	590nm Native Amber	264	15	36,000		
			I	18BL	470nm Blue	318	21	60,000		
		CS		12NA	590nm Native Amber	257	15	36,000		
			G	18BL	470nm Blue	310	21	60,000		
			_	12NA	590nm Native Amber	224	15	36,000		
	W	CSS	Т	18BL	470nm Blue	270	21	60,000		
	.,,	C33	G	12NA	590nm Native Amber	218	15	36,000		
			G G	18BL	470nm Blue	263	21	60,000		
			Т	12NA	590nm Native Amber	248	15	36,000		
		FW		18BL	470nm Blue	299	21	60,000		
		FVV	G	12NA	590nm Native Amber	242	15	36,000		
			٥	18BL	470nm Blue	291	21	60,000		

Subject to change without notice. Visit www.kenall.com for ies files and additional information.



Luminaires for Transportation Applications

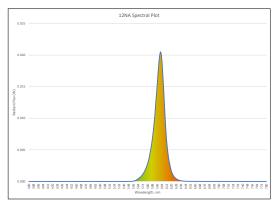
## **TDL SERIES**

### PHOTOMETRIC PERFORMANCE

	TDL6-FF-12	NA-W-CS-G		TDL6-FF-12	NA-M-CS-G								
Wide Distribution Candela Curve	Initial center beam footcandles	Beam diameter (ft)	Distance to illuminated plane (ft)	Initial center beam footcandles	Beam diameter (ft)	Medium Distribution Candela Curve							
54	5.7	7.3	5'	18.2	2.8	127							
108	3.9	8.8	6'	12.6	3.4	253							
215	2.9	10.2	7'	9.3	3.9	380 /							
	2.2	11.7	8'	7.1	4.5								
	1.8	13.2	9'	5.6	5.0	$HT \setminus Y \mid$							
	1.4	14.6	10'	4.5	5.6								
Spacing Criteria: 1.38		Footcandle multipliers for 12NA (1.00); 18BL (1.20)											
Beam Angle: 72°		Beam Angle: 31°											

	TDL6-FF-12	NA-W-CSS-G		TDL6-FF-12	NA-M-CSS-G									
Wide Distribution Candela Curve	Initial center beam footcandles	Beam diameter (ft)	Distance to illuminated plane (ft)	Initial center beam footcandles	Beam diameter (ft)	Medium Distribution Candela Curve								
39	6.18	5.7	5'	11.5	4.6	74								
78	4.29	6.8	6'	8.0	5.5	148								
156	3.15	7.9	7'	5.9	6.5	223 /								
130	2.42	9.1	8'	4.5	7.4									
	1.91	10.2	9'	3.6	8.3	$HH \setminus Y \mid$								
	1.55	11.3	10'	2.9	9.2									
Spacing Criteria: 1.13	.13 Footcandle multipliers for 12NA (1.00); 18BL (1.20) S													
Beam Angle: 59°		Beam diameter is where foot-candles drop to 50% of maximum												

## SPECTROPHOTOMETRIC PERFORMANCE



12NA	
Purity	1.0006
UV (<400nm)	0.000%
Radiant Flux ( ≤560nm)	0.000%
Bandwidth	17.8 nm
Peak Wavelength	590 nm

	0.100	-							_																														-
	0.090								-	1																													
	0.080								1	ŀ																													
	0.070								-																														
	0.060																																						
Radiant Flux (M)	0.050										ŀ																												
Rad	0.040										ŀ																												
	0.030							-			١																												
	0.020							I				ŀ																											
	0.010											١																											
	0.000	380	388	404	412	428	435	452	400	4 2	484	2005	208	92 19	528	240	5.48						612	620	636	6.44	652	889	29	634	200	708	7.15	7.24	732	18.	736	2 22	780
																		W	'a vel	engt	h, ni	n																	

18BL	
Purity	0.9583
Bandwidth	24.4 nm
Peak Wavelength	470 nm

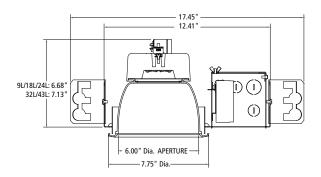


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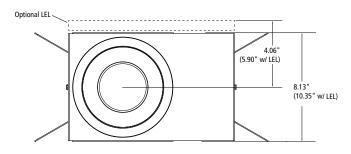
## **TDL SERIES**

**DIMENSIONAL DATA** 

#### **CROSS SECTION**



#### **BOTTOM VIEW**



RECOMMENDED CEILING CUT-OUT: 7.38" Dia.