

**Product Information**

Project Name	Type
Catalog Number	Date

**SPECIFICATIONS**

**Features**

- Retrofits prismatic & parabolic troffers with fixture depth greater than 3-1/8".
- Fully integrated reversible hinged optical assembly allows for rapid troffer conversion.
- Upgrade to modern full distribution architectural aesthetics providing controlled soft, uniform light distribution without pixilation.
- Choice of four lumen packages and three dimming options available.
- Long-life, 60,000 hour LEDs at L80 (80% lumen maintenance) reduces life cycle maintenance costs.
- Up to 101 lumens per watt.
- Low W/ft<sup>2</sup> to meet the most restrictive lighting power density codes.
- Reduces job site waste by reusing existing fixture housing.
- Color Rendering Index (CRI) > 80.
- Available in both 2x4 and 2x2 configurations.
- Made In USA. Meets ARRA & Buy American requirements.

**Construction**

- Conversion kit includes pre-wired LED door frame assembly, mounting rails and screws.
- Luminaire retrofit is die formed, pre-painted white aluminum.
- Acrylic lens features linear prisms sculpted into the surface for a distinct ribbed texture.
- Hinges from either side for easy access to LED module and electrical components
- Weight: 2x4 - 10 lbs. & 2x2 - 7 lbs.

**Electrical**

- Input Voltage Range: 100-277 Vac Nom. (90-305 V Min/Max)
- Frequency: 50/60 Hz Nom. (47-63 Hz Min/Max)
- Active Power Factor Correction
- Power Factor: >0.90 @ full load, 100V through 277V
- Inrush Current: 70 Amps max @ 220 Vac, cold start 25°C
- Harmonic Distortion: THD < 20% @ full load
- Protection: Over-Voltage, Over-Temperature (110°) & Short Circuit with self-recovery
- Compliant to FCC Part 15 requirements for EMI/RFI emissions
- NEC/CEC compliant ballast disconnect is standard.
- Standard Surge Protection: ANSI Std. C62.41-2002 Category A (2.5 kV)
- Optional surge protection: ANSI Std. C62.41-2002 Category C High (10kA and 10kV)
- Optional emergency battery pack



**Certifications**

- UL listed 1598 and cUL for Canada.
- Luminaires bear appropriate listing labels.
- Emergency-equipped fixtures labeled UL 924.
- Adheres to LM79, LM80 and TM21 industry standards.
- Maintains insulation contact (IC) rating of existing fixture.
- DesignLights Consortium® (DLC) qualified.
- Please refer to the DLC website for specific product qualifications at [www.designlights.org](http://www.designlights.org).

**Application**

- Ideal for Commercial Offices, Educational Facilities, Retail, and Health Care Facilities.
- Suitable for use with most wired or wireless lighting control systems.
- Suitable for Dry or Damp Locations.

**Warranty**

- Five-year warranty. (Terms and Conditions Apply)

**CERTIFICATION**



**ORDERING INFORMATION**

**EXAMPLE TKD-2X4-LW-F-UL-40K-FRL**

TKD	MODEL	SIZE	LUMEN OUTPUT	DRIVER OUTPUT	DRIVER VOLTAGE	COLOR TEMP	LENS	OTHER
TKD	Full Distribution LED Conversion Kit	2x2 2x2 Nominal 2x4 2x4 Nominal	XL Extra Low LW Low ML Medium HL High	F Fixed DM 0-10v Dimming <sup>1</sup> BL BL-Level <sup>1</sup>	UL Universal 120-277 Volt	35K 3500 40K 4000 50K 5000	FRL Frosted Ribbed Lens	EB Emergency Battery Backup JP Job Pack LSP Lighting Surge Protector

<sup>1</sup>Must be used in conjunction with lighting controls. Contact factory for assistance.

\*U.S. & Canada Patents Pending.

### PHOTOMETRIC DATA

Test: L0813316R01  
Test Date: 08/14/13

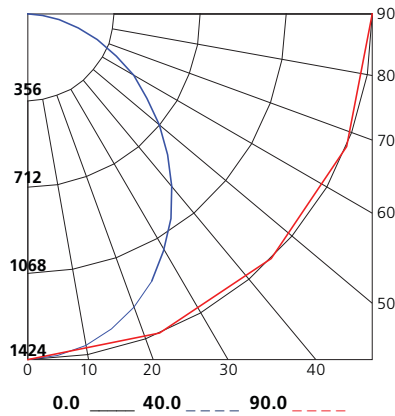
#### PHOTOMETRIC DATA: TKD-2X4-LW-F-UL-40K-FRL

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP certified lab.

#### LUMINAIRE DATA

Luminaire	TKD-2X4-LW-F-UL-40K-FRL, LED Troffer Conversion Kit
Ballast	D255CQ42UNV-A
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	4019
Watts	41
Mounting	Recessed
Shielding Angle	N/A
Spacing Criterion	0° = 1.20 90° = 1.20
Luminous Opening in feet	Length: 3.71 Width: 0.88 Height: 0.00

#### INDOOR CANDELA PLOT



#### ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	510	N.A.	12
0-30	1067	N.A.	26
0-40	1724	N.A.	42
0-60	3021	N.A.	75
0-80	3887	N.A.	96
0-90	4019	N.A.	100

#### COEFFICIENTS OF UTILIZATION (%)

RCR	RC	80			70			50			0	
		70	50	30	10	70	50	30	10	50	30	10
0	119	119	119	119	116	116	116	116	111	111	111	100
1	108	103	98	94	105	100	96	92	96	93	89	82
2	98	89	82	76	95	87	80	75	83	78	73	67
3	89	78	69	62	86	76	68	62	73	66	61	56
4	81	69	60	53	79	67	59	52	65	58	52	48
5	75	61	52	45	73	60	52	45	58	50	45	41
6	69	55	46	40	67	54	46	39	53	45	39	36
7	64	50	41	35	62	49	41	35	48	40	35	32
8	60	46	37	31	58	45	37	31	44	36	31	29
9	56	42	34	28	54	41	33	28	40	33	28	26

RCR = Room Cavity Ratio RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

#### AVG. LUMINANCE (Candela/Sq. M.)

Average Lumina nce Angle	0.0					22.5					45.0					67.5					90.0				
	0	1424	1424	1424	1424	1424	1424	1424	1424	1424	1424	1424	1424	1424	1424	1424	1424	1424	1424	1424	1424	1424	1424		
5	1412	1413	1413	1415	1413	1411	1411	1411	1411	1411	1411	1411	1411	1411	1411	1411	1411	1411	1411	1411	1411	1411	1411		
10	1386	1385	1385	1385	1380	1377	1377	1377	1377	1377	1377	1377	1377	1377	1377	1377	1377	1377	1377	1377	1377	1377	1377		
15	1343	1342	1339	1332	1328	1328	1328	1328	1328	1328	1328	1328	1328	1328	1328	1328	1328	1328	1328	1328	1328	1328	1328		
20	1285	1282	1279	1271	1269	1269	1269	1269	1269	1269	1269	1269	1269	1269	1269	1269	1269	1269	1269	1269	1269	1269	1269		
25	1212	1210	1209	1205	1203	1203	1203	1203	1203	1203	1203	1203	1203	1203	1203	1203	1203	1203	1203	1203	1203	1203	1203		
30	1126	1128	1132	1134	1134	1134	1134	1134	1134	1134	1134	1134	1134	1134	1134	1134	1134	1134	1134	1134	1134	1134	1134		
35	1031	1037	1051	1061	1064	1064	1064	1064	1064	1064	1064	1064	1064	1064	1064	1064	1064	1064	1064	1064	1064	1064	1064		
40	927	940	966	986	992	992	992	992	992	992	992	992	992	992	992	992	992	992	992	992	992	992	992		
45	820	839	878	909	920	920	920	920	920	920	920	920	920	920	920	920	920	920	920	920	920	920	920		
50	711	736	788	831	847	847	847	847	847	847	847	847	847	847	847	847	847	847	847	847	847	847	847		
55	603	633	699	755	775	775	775	775	775	775	775	775	775	775	775	775	775	775	775	775	775	775	775		
60	506	538	615	682	707	707	707	707	707	707	707	707	707	707	707	707	707	707	707	707	707	707	707		
65	406	436	528	604	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630		
70	307	342	437	508	535	535	535	535	535	535	535	535	535	535	535	535	535	535	535	535	535	535	535		
75	217	252	338	408	439	439	439	439	439	439	439	439	439	439	439	439	439	439	439	439	439	439	439		
80	133	166	235	304	332	332	332	332	332	332	332	332	332	332	332	332	332	332	332	332	332	332	332		
85	63	85	123	170	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192		

### LUMEN PACKAGE OPTIONS

Proposed System	Light Source Quantity & Type	CRI	CCT	3500K DETAILS			4000K DETAILS			
				Lumens Per Fixture	Input Watts	Lumens Per Watt	CCT	Lumens Per Fixture	Input Watts	Lumens Per Watt
TKD-2X2-XL-40K	1 TKD XL Engine	>80	3500K	2,091	21	99	4000K	2,082	21	98
TKD-2X2-LW-40K	1 TKD LW Engine	>80	3500K	2,544	27	94	4000K	2,589	28	91
TKD-2X2-ML-40K	1 TKD ML Engine	>80	3500K	3,237	36	90	4000K	3,421	36	95
TKD-2X2-HL-40K	1 TKD HL Engine	>80	3500K	4,632	52	89	4000K	4,851	52	93
TKD-2X4-XL-40K	1 TKD XL Engine	>80	3500K	3,076	30	101	4000K	3,137	32	99
TKD-2X4-LW-40K	1 TKD LW Engine	>80	3500K	3,989	41	98	4000K	4,020	41	97
TKD-2X4-ML-40K	1 TKD ML Engine	>80	3500K	4,702	51	93	4000K	4,747	51	94
TKD-2X4-HL-40K	1 TKD HL Engine	>80	3500K	6,573	72	91	4000K	6,863	72	95

**MINIMUM DIMENSIONS OF EXISTING FIXTURE OPENING**

