

**ECO16 BACK-LIT FLAT PANELS**  
 4 LUMEN BOOST® | 4 CCT COLOR PREFERENCE®  
 2499 – 6980 Delivered Lumens | Efficacy up to 146.3

**KEY FEATURES**

Each back-lit luminaire is ultra thin with an overall height of 1.38" to fit shallow plenums and are IC rated for direct contact with insulation.

**CCT & Light Quality**

- 4 Selectable CCTs (3000K, 3500K, 4000K, 5000K)
- 80+ CRI (up to 86) with high R13 values

**Light Output & Efficacy**

- 4 Lumen Options: 4375/5000/5625/6250 lumens (2x4)  
 2500/3125/3750/4375 lumens (2x2 and 1x4)
- Efficacy Rating Range @4000K:  
**2X4:** 140.7 – 146.3 | **2X2:** 136.4 – 142.6 | **1X4:** 133 – 144.4
- 87.8% lumen maintenance @ 54,000 hours and projected L70 @ 149,000 hours.

**Dimming, Voltage, Controls**

- 1-10V dimming to 10%
- Universal voltage (120-277V)
- BBU & OC Sensor Options Available on 2-PKs

**SPECIFICATIONS**

**Construction**

- Aluminum lens frame with mitered corners in a matte white finish
- Luminaire backplate is die formed steel and post painted

**Optics**

- Non-yellowing PPMA lens material provides high light transmittance
- Frosted textured diffuser delivers even illumination and diminished glare

**Installation**

- Comes with guide clips to install into recessed grid
- Additional mounting kits available as accessories:

- Drywall recessed mounting kit
- Surface mounting kit
- 0-3 ft cable suspension mounting kit

- 4 LUMEN BOOST® / 4 CCT COLOR PREFERENCE® for easy field-adjustable lumen / CCT selection with switch located on back panel. Factory set to highest wattage and 4000K.

**Electrical**

- 149,000 hour LEDs at L70 for reduced maintenance
- Operates at 120-277V 50/60Hz, Dimming capability at 120V only
- 1-10V dimmable driver, down to 10%
- Ships at the highest lumen output

**Warranty**

5-Year Standard Warranty. See terms at: [ETISSL.com/warranty/](https://ETISSL.com/warranty/)

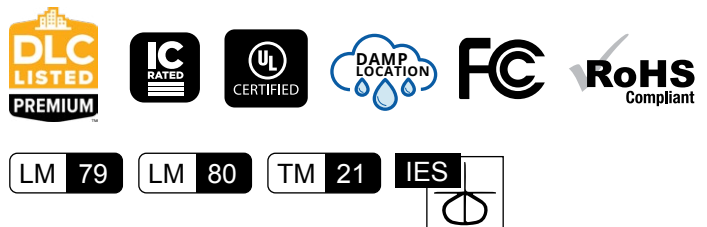
KEY DATA	
Lumen Range	2499 – 6980
Wattage Range	20 – 50
Efficacy Range (LPW)	133 – 146.3 (based on 4000K)
Reported Life (Hours)	L70 / 143,000

DATE:	PROJECT:
TYPE:	NOTES:
CATALOG #:	

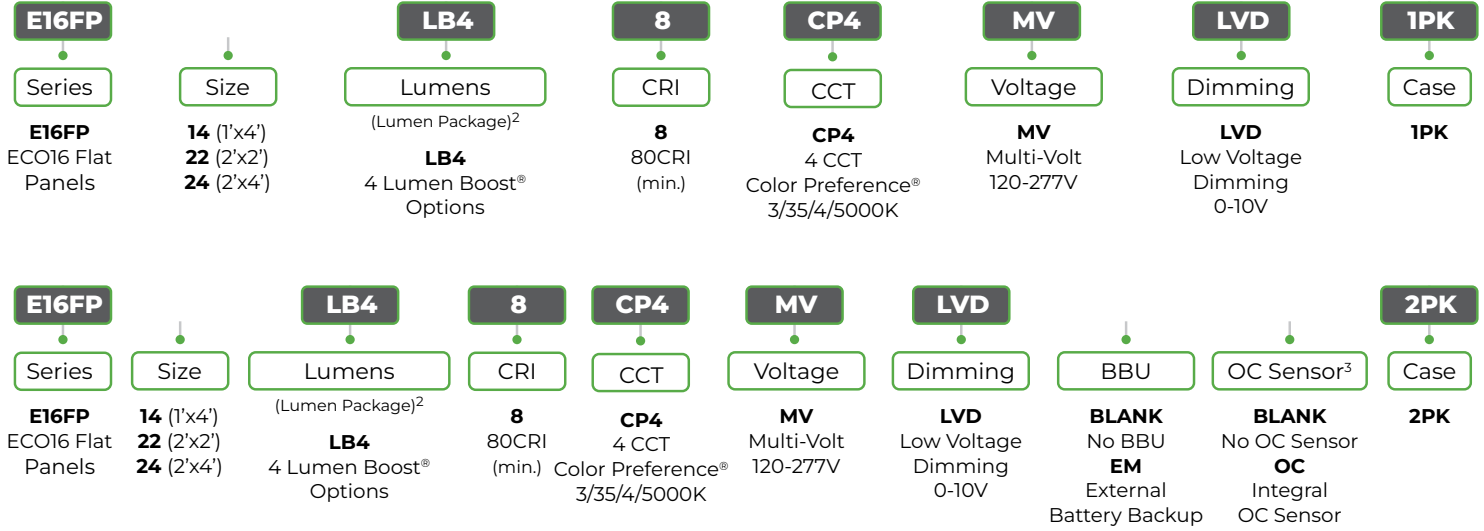


**Certifications & Test Data**

- All luminaires are built to UL 1598 standards and have the appropriate UL labels and information on product
- Damp location label standard
- Adheres to LM79, LM80, and TM21 industry standards for photometric, lumen maintenance and lifetime calculations
- DLC® (DesignLights Consortium) Premium. Please refer to DLC for specific product qualifications at [www.designlights.org](http://www.designlights.org) (See Page 2-3 for search info.)
- IC Rated for direct contact with insulation
- Driver rated for FCC part 15 Class B for use in residential or commercial applications



**ORDERING GUIDE** (typical 2-3 day shipment lead time)<sup>1</sup>



**Notes:**

1. Stock SKUs typically ship in 24-48 hours upon receipt of an approved released order—EM and OS options available on 2-packs only.
2. Lumen data is listed below and on following page. See page 5 for IES samples and links.
3. OC Sensor Remote Control Accessory (HD03R 70206101) must be purchased in order to control and to program the OC sensor (See page 2)

**ORDER INFORMATION / SPEC DETAILS**

Catalog Part Number	Order Number	Pack Size	Description	DLC	CCT	Nominal Watts	LB4 Lumen Range	Delivered Lumens	Efficacy		
2' x 4'	E16FP-24-LB4-8-CP4-MV-LVD-1PK	64224301	1	2'x4' Flat Panel	DLC 5.1 Search: 642243##	3000K	35	4375	4537	132.4	
							40	5000	5174	129.6	
							45	5625	5803	126.8	
							50	6250	6330	124.3	
		E16FP-24-LB4-8-CP4-MV-LVD-2PK	64224302	2		2'x4' Flat Panel	3500K	35	4375	4877	142.5
						40		5000	5642	140.2	
						45		5625	6225	138.3	
		E16FP-24-LB4-8-CP4-MV-LVD-OS-2PK*	64224302-I	2		2'x4' Flat Panel with OC Sensor	4000K	50	6250	6834	136.2
		E16FP-24-LB4-8-CP4-MV-LVD-EM-2PK	64224302-EM	2		2'x4' Flat Panel with BBU		35	4375	4953	146.3
						40		5000	5779	144.4	
						45	5625	6381	142.4		
						50	6250	6980	140.7		
						5000K	35	4375	4984	145.9	
							40	5000	5704	143.3	
							45	5625	6437	140.7	
				50	6250		6967	138.6			
2' x 2'	E16FP-22-LB4-8-CP4-MV-LVD-1PK	64222401	1	2'x2' Flat Panel	DLC 5.1 Search: 642224##	3000K	20	2500	2554	129.3	
							25	3125	3174	125.8	
							30	3750	3681	123	
							35	4375	4247	118.9	
		E16FP-22-LB4-8-CP4-MV-LVD-2PK	64222402	2		2'x2' Flat Panel	3500K	20	2500	2736	140.3
						25		3125	3477	136.8	
						30		3750	4116	134.6	
		E16FP-22-LB4-8-CP4-MV-LVD-OS-2PK*	64222402-I	2		2'x2' Flat Panel with OC Sensor	4000K	35	4375	4696	131.9
						20		2500	2875	142.6	
						25		3125	3558	140.2	
						5000K	30	3750	4177	137.7	
		E16FP-22-LB4-8-CP4-MV-LVD-EM-2PK	64222402-EM	2			2'x2' Flat Panel with BBU	35	4375	4776	136.4
							20	2500	2967	145.9	
						5000K	25	3125	3636	138.8	
							30	3750	4189	135.8	
				35	4375		4811	133.5			



Note:  
\* For items with OC Sensor: OC Sensor Remote Control Accessory (HD03R 70206101) must be purchased in order to control and program the OC sensor (See page 2)

**ORDER INFORMATION / SPEC DETAILS**

Catalog Part Number	Order Number	Pack Size	Description	DLC	CCT	Nominal Watts	LB4 Lumen Range	Delivered Lumens	Efficacy	
1' x 4'	E16FP-14-LB4-8-CP4-MV-LVD-1PK	64214101	1'x4' Flat Panel	DLC 5.1 Search: 642141##	3000K	20	2500	2499	126.1	
						25	3125	3106	122.7	
						30	3750	3588	119.3	
						35	4375	4149	115.4	
	E16FP-14-LB4-8-CP4-MV-LVD-2PK	64214102	2		1'x4' Flat Panel	3500K	20	2500	2701	137.2
					25		3125	3427	133.7	
					30		3750	4145	135.5	
					35		4375	4704	133	
	E16FP-14-LB4-8-CP4-MV-LVD-OS-2PK*	64214102-I	2		1'x4' Flat Panel with OC Sensor	4000K	20	2500	2839	139.7
					25		3125	3524	144.4	
					30		3750	4145	135.5	
					35		4375	4704	133	
	E16FP-14-LB4-8-CP4-MV-LVD-EM-2PK	64214102-EM	2		1'x4' Flat Panel with BBU	5000K	20	2500	2938	145.9
					25		3125	3618	137.67	
					30		3750	4167	134.8	
			35	4375	4763		131.6			
E16FP-14-LB4-8-CP4-MV-LVD-EMOS-2PK*	64214102-I-EM	2	1'x4' Flat Panel with BBU & OC Sensor							

Note:  
 \* **For items with OC Sensor:** OC Sensor Remote Control Accessory (HD03R 70206101) must be purchased in order to control and program the OC sensor (See below)


**OC/BBU SPEC INFORMATION** (Information as needed for pre-installed order options only. See below links for spec sheets)

Ordering Logic	Description	Details
OC	Integral Microwave OC Sensor (Factory Installed)	 <a href="#">SPEC SHEET DOWNLOAD</a> (located on ETISSL.com)
EM	External Battery Backup (Factory Installed)	 <a href="#">SPEC SHEET DOWNLOAD</a> (located on ETISSL.com)

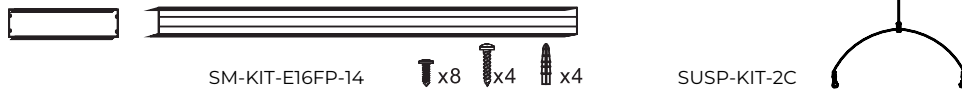
Note:  
 For specification info only—not for individual order.

**OC SENSOR REMOTE CONTROL ACCESSORY for use with factory installed OC Sensor**

(Necessary in order to control OC Sensor. Must order Separately)

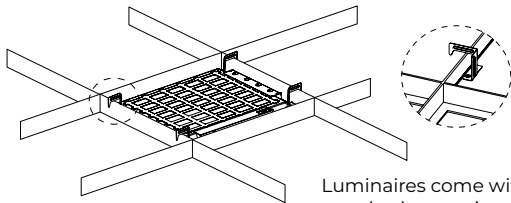
Catalog Part Number	Order Number	Description	
HD03R	70206101	OC sensor handheld remote programmer <b>* Must purchase for models with installed OC Sensor in order to control and program the OC sensor</b>	 <a href="#">SPEC SHEET DOWNLOAD</a> (located on ETISSL.com)

**OPTIONAL MOUNTING ACCESSORIES** (must be ordered separately)



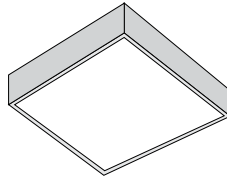
Catalog Part Number	Order Number	Description
SM-KIT-E16FP-24	70317102	ECO16 2x4 Flat Panel Surface Mount Kit (White)
SM-KIT-E16FP-22	70317101	ECO16 2x2 Flat Panel Surface Mount Kit (White)
SM-KIT-E16FP-14	70317103	ECO16 1x4 Flat Panel Surface Mount Kit (White)
SUSP-KIT-3C	70317202	3-Cable Suspension Mount Kit (max length 3'-0") for 2x4 panel
SUSP-KIT-2C	70317201	2-Cable Suspension Mount Kit (max length 3'-0") for 2x2 & 1x4 panels
RDM-KIT-E16FP-24	70319202	ECO16 2x4 Flat Panel Recessed Drywall Mount Kit (White), 38mm
RDM-KIT-E16FP-22	70319201	ECO16 2x2 Flat Panel Recessed Drywall Mount Kit (White), 38mm
RDM-KIT-E16FP-14	70319203	ECO16 1x4 Flat Panel Recessed Drywall Mount Kit (White), 38mm

**MOUNTING**

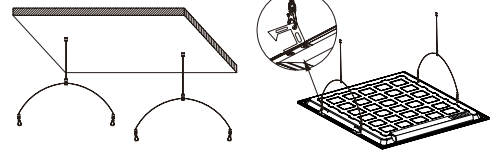


Luminaires come with attached mounting clips for easy positioning.

Surface Mount Kit Accessory

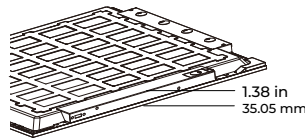
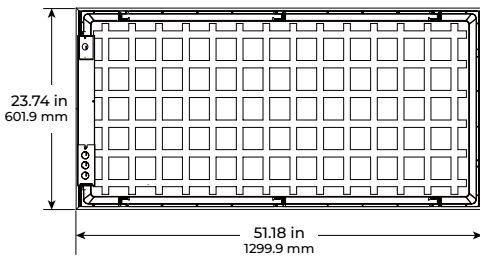


Suspension Kit Accessory



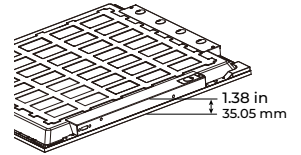
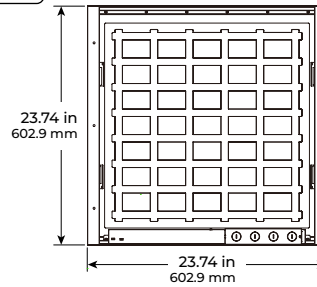
**DIMENSIONS / DETAILS**

2'x4'



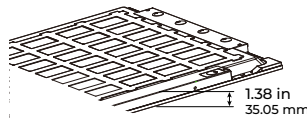
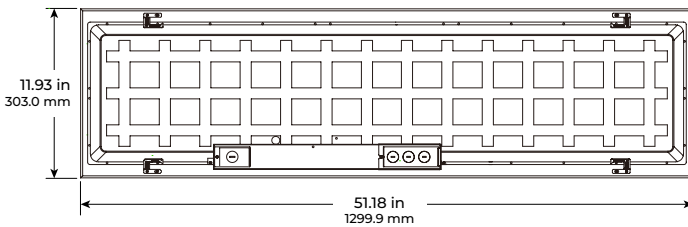
**Unit Weight**  
5.50 lbs

2'x2'



**Unit Weight**  
5.06 lbs

1'x4'



**Unit Weight**  
9.24 lbs

50W	45W	40W	35W	Factory settings: 3000K   50W
6250 lm	5625 lm	5000 lm	4375 lm	

P	CCT
50 / 45 / 40 / 35W	5000 / 4000 / 3500 / 3000K

**PERFORMANCE / Data**

**Lumen Maintenance**

<b>Ambient Temp.</b>	<b>TM-21 Lumen Maintenance (54,000 hours)</b>
25° C (77° F)	> 87.8%
<b>Ambient Temp.</b>	<b>TM-21 Theoretical L70 (hours)</b>
25° C (77° F)	149,000

**Load Information**

<b>Power Factor</b>	> 0.90
<b>THD</b>	< 20%
<b>Frequency</b>	50/60 Hz
<b>Sound Rating</b>	< 20 Dba
<b>Low Temp Start / Max Temp</b>	-20° C (-4° F) / 45° C (113° F)

**PHOTOMETRIC SAMPLES**

2x4'

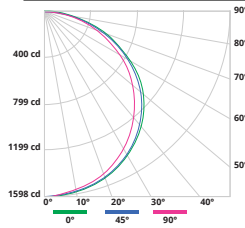


**Luminaire Data: 2x4 at 35W 4000K**

CCT & CRI	<b>4000K, 85 CRI</b>
Initial Delivered Lumens	<b>4,953</b>
Wattage	<b>33.84W</b>
Efficacy	<b>146.3</b>
Spacing	<b>0° = 1.36 90° = 1.28</b>

Photometric values based on tests performed in compliance with LM-63 & LM-79

**Indoor Candela Plot**

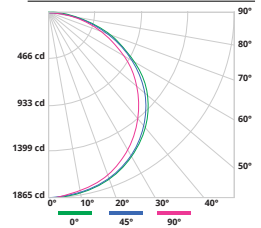


**Luminaire Data: 2x4 at 40W 4000K**

CCT & CRI	<b>4000K, 85 CRI</b>
Initial Delivered Lumens	<b>5,779</b>
Wattage	<b>40.06W</b>
Efficacy	<b>144.4</b>
Spacing	<b>0° = 1.36 90° = 1.28</b>

Photometric values based on tests performed in compliance with LM-63 & LM-79

**Indoor Candela Plot**

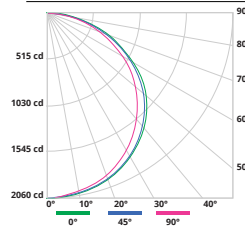


**Luminaire Data: 2x4 at 45W 4000K**

CCT & CRI	<b>4000K, 85 CRI</b>
Initial Delivered Lumens	<b>6,381</b>
Wattage	<b>44.78W</b>
Efficacy	<b>142.4</b>
Spacing	<b>0° = 1.36 90° = 1.28</b>

Photometric values based on tests performed in compliance with LM-63 & LM-79

**Indoor Candela Plot**

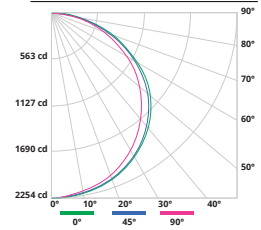


**Luminaire Data: 2x4 at 50W 4000K**

CCT & CRI	<b>4000K, 85 CRI</b>
Initial Delivered Lumens	<b>6,980</b>
Wattage	<b>49.59W</b>
Efficacy	<b>140.7</b>
Spacing	<b>0° = 1.36 90° = 1.28</b>

Photometric values based on tests performed in compliance with LM-63 & LM-79

**Indoor Candela Plot**



2x2'

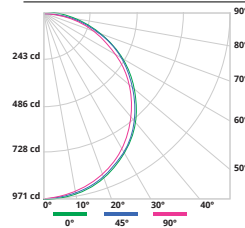


**Luminaire Data: 2x2 at 20W 4000K**

CCT & CRI	<b>4000K, 85 CRI</b>
Initial Delivered Lumens	<b>2,875</b>
Wattage	<b>20.16W</b>
Efficacy	<b>142.6</b>
Spacing	<b>0° = 1.30 90° = 1.26</b>

Photometric values based on tests performed in compliance with LM-63 & LM-79

**Indoor Candela Plot**

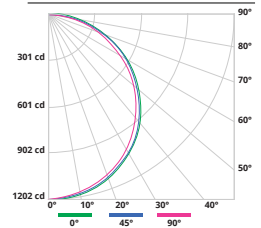


**Luminaire Data: 2x2 at 25W 4000K**

CCT & CRI	<b>4000K, 85 CRI</b>
Initial Delivered Lumens	<b>3,558</b>
Wattage	<b>25.36W</b>
Efficacy	<b>140.2</b>
Spacing	<b>0° = 1.30 90° = 1.26</b>

Photometric values based on tests performed in compliance with LM-63 & LM-79

**Indoor Candela Plot**

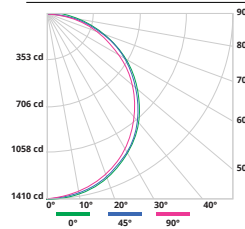


**Luminaire Data: 2x2 at 30W 4000K**

CCT & CRI	<b>4000K, 85 CRI</b>
Initial Delivered Lumens	<b>4,177</b>
Wattage	<b>30.33W</b>
Efficacy	<b>137.7</b>
Spacing	<b>0° = 1.30 90° = 1.26</b>

Photometric values based on tests performed in compliance with LM-63 & LM-79

**Indoor Candela Plot**

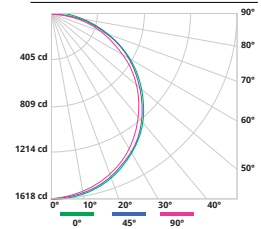


**Luminaire Data: 2x2 at 35W 4000K**

CCT & CRI	<b>4000K, 85 CRI</b>
Initial Delivered Lumens	<b>4,776</b>
Wattage	<b>35.00W</b>
Efficacy	<b>136.4</b>
Spacing	<b>0° = 1.30 90° = 1.26</b>

Photometric values based on tests performed in compliance with LM-63 & LM-79

**Indoor Candela Plot**



1x4'

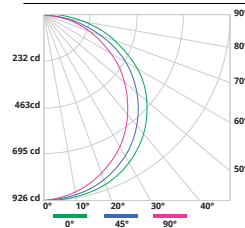


**Luminaire Data: 1x4 at 20W 4000K**

CCT & CRI	<b>4000K, 86 CRI</b>
Initial Delivered Lumens	<b>2,839</b>
Wattage	<b>20.31W</b>
Efficacy	<b>139.7</b>
Spacing	<b>0° = 1.38 90° = 1.22</b>

Photometric values based on tests performed in compliance with LM-63 & LM-79

**Indoor Candela Plot**

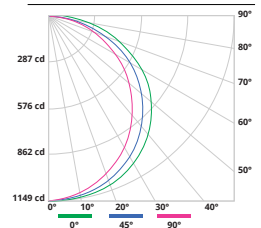


**Luminaire Data: 1x4 at 25W 4000K**

CCT & CRI	<b>4000K, 86 CRI</b>
Initial Delivered Lumens	<b>3,524</b>
Wattage	<b>25.57W</b>
Efficacy	<b>144.4</b>
Spacing	<b>0° = 1.38 90° = 1.22</b>

Photometric values based on tests performed in compliance with LM-63 & LM-79

**Indoor Candela Plot**

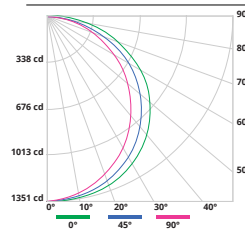


**Luminaire Data: 1x4 at 30W 4000K**

CCT & CRI	<b>4000K, 86 CRI</b>
Initial Delivered Lumens	<b>4,145</b>
Wattage	<b>30.59W</b>
Efficacy	<b>135.5</b>
Spacing	<b>0° = 1.38 90° = 1.22</b>

Photometric values based on tests performed in compliance with LM-63 & LM-79

**Indoor Candela Plot**



**Luminaire Data: 1x4 at 35W 4000K**

CCT & CRI	<b>4000K, 86 CRI</b>
Initial Delivered Lumens	<b>4,704</b>
Wattage	<b>35.35W</b>
Efficacy	<b>133.0</b>
Spacing	<b>0° = 1.38 90° = 1.22</b>

Photometric values based on tests performed in compliance with LM-63 & LM-79

**Indoor Candela Plot**

