ELP

ENGINEERED LIGHTING
PRODUCTS

SURFACE/Pendent Mount 2´ x 2´ Indirect
Video/Tele Conference Fixtures

*Comfortably illuminates the
participants while rendering
an excellent video image.*

System

Video/Tele Conference fixtures. Unique, indirect 2´ x 2´ LED fixtures provide even vertical illumination in three directions. They comfortably illuminate participants with minimal facial shadowing while keeping direct light/glare off of the monitor and camera.
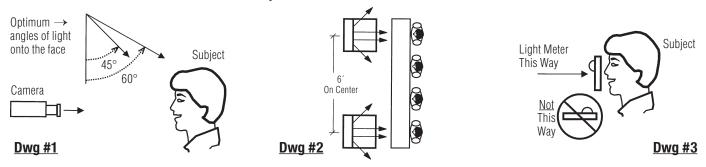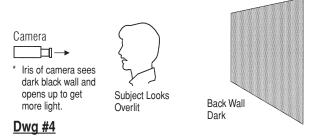
The task of providing proper lighting for a Video conference space is very simple – Ask us to do it for you! But if you would rather do it yourself, here are the problems and some suggested solutions.

1) **Provide lighting for the camera in the proper quantity, quality and angle**. The light should come from an angle between 45° and 60° vertical (Dwg #1). Horizontally, light should also be cast on the face from an angle in addition to front (Dwg #2). This will assure that minimum shadows are created in the eye sockets and under the nose and chin.

Optimum → angles of light onto the face

45°
60°

Subject

Camera

Dwg #1

6′ On Center

Dwg #2

Light Meter This Way
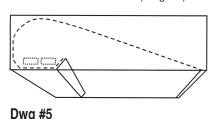
Subject

Not This Way

Dwg #3

The amount of light falling on the face of the subject measured vertically should be 30-60 F.C. (Dwg #3), depending on flesh tone and clothing. The quality of light can be assured by using lamps of 3000K or 3500K (Color Temperature) with a CRI (Color Rendering Index) of 80+. The use of high color temperature lamps (5700K and higher) is not necessary for video cameras and the strong blue component makes most skin tones look bad (blue). [Note: Daylight film requires the high color temperature light.]
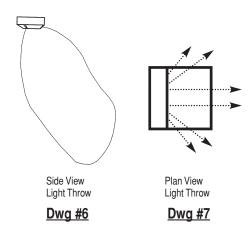
2) **Provide minimal lighting for the screen or monitor for good screen contrast and image sharpness.** The wall where the screen or monitor is located should have as little illumination as possible. No reflected glare should appear on the screen or monitor to inhibit viewing.

3) **Provide lighting for the back wall and to a lesser extent, the side walls to balance the brightness with the rest of the room.** Doing this will prevent the camera from irising* on the back or side walls that are too dark or too bright and then allowing too much or too little light in the camera resulting in the appearance of over or under lighting the subject (Dwg #4). Generally the wall finishes and furniture should be very neutral. The reflectance value of these colors and surfaces should be around 30-40%. Light level ratios from the participant to the back wall should be within 3 to 1 while the side walls can be 5 to 1.

Camera

* Iris of camera sees dark black wall and opens up to get more light.

Subject Looks Overlit

Back Wall Dark

Dwg #4

Solutions – To accomplish the above requires light fixtures that provide a wide horizontal component. The VT Series fixture ENGINEERED LIGHTING PRODUCTS has designed for this use is a recessed, indirect 2′ x 2′ with a 44 watt LED (Dwg #5). This fixture produces an asymmetric distribution (Dwg #6) that provides a large horizontal throw in three directions (Dwg #7). The tri-directional performance of this product often eliminates the need for additional lighting on back and side walls, so the second consideration is handled also. Very little light is directed behind the VT Series fixtures so they do not wash out the viewing screen or glare into the camera. A lighting layout has been provided on the back of this cut for your perusal.

Dwg #5

Side View Light Throw

Dwg #6

Plan View Light Throw

Dwg #7

Dual Function and Participant Comfort – The VT Series is provided standard with a dimming driver so you may adjust the light levels for good picture quality and have low light level illumination for standard conferencing functions. Combining the low heat of LED lamps with an indirect optical system, the participants in the room will have optimum comfort visually and environmentally.

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10768 Lower Azusa Rd., El Monte, CA 91731 • TEL: 626-579-0943 • FAX: 626-579-6803
E-MAIL: contact@elplighting.com • WEB: www.elplighting.com

Specifications

Indirect 2′ x 2′ LED fixture for surface or pendent mount installations. Unit utilizes four high efficacy Osram PrevaLED® array, LED modules at 80+ CRI totaling 44 watts and are rated greater than 60,000 hours. The unique 2′ x 2′ indirect fixture provides even, vertical illumination in three directions, forward and to the sides. The one piece, formed reflector is high purity aluminum (99.9%) with 97% reflectance. The optical design allows energy efficient lighting layouts with excellent visual comfort for the speaker, camera and audience. It provides low level lighting at the front of the space for good contrast at the monitor, and keeps direct light off of the camera.

The spot weld construction housing is 22 gauge CRS and is post painted with a TGIC polyester powder coat. Cover and knock-outs provide quick wire access to the side or back of the fixture for through wiring. All fixtures are supplied standard with Luminaire Disconnect.

c/CSA/us Damp Location Listed, IC Rated – Made in the USA

U.S. Patent #9,726,337

Section

Front View

Model No.	Lamp	Fixture Lumens
444W1VTS-(*K)	(4) 10.8 w LEDs	5982

Options

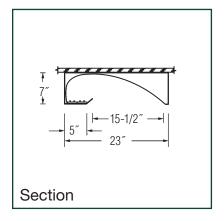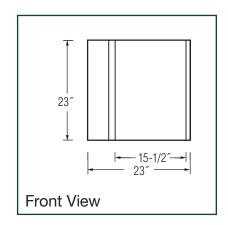|	
Driver	120/277 0-10 volt, Osram OT True 1% Dim (Standard)
	With End Of Life Indicator -EOL
	With Soft Start -SFT
	With Dim To Off -DTO
	For Alternate Dimming:
	3-wire/Digital, Lutron ECO Systems L3D 1% -DM6
	2-wire, Lutron LTE 1% (120 only) -DM7
	Digital, Lutron LDE 1% -DM8
	LDE Standard Features include Soft-On,
	Fade to Black and Guaranteed 1% Dimming
	Lower Lumen Output (All Driver Options) -LL***
Finish	White (Standard)
	Custom -Custom
Wireless	Osram Sylvania Connected Lighting Module -WLMS***
LED	**Must Specify ***
	3000K -30K
	3500K -35K
	4000K -40K
	5000K -50K***
Louver	Diffuse Silver Parallel Blade -LV (Not Recommended)
Mounting	Surface J-Box (Standard)
	Canopy w/Stem -CS (FT of Stem)
	Ex. 444W1VTS-CS2

*** Consult Factory.

Note: These LED luminaires are provided standard with dimming and have a 5 year warranty.

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Photometrics

Vertical light levels on participants should be a minimum of 30 to 60 fc for successful Video Conferencing depending on flesh tone and clothing. Light readings are shown in footcandles and were calculated with Lighting Analysts' AGI 32 utilizing the independent test lab reports listed. The reflectances of the room for calculation purposes were Ceiling: .80; Walls: .50; Floor: .20. To convert levels to Lux use the conversion factor of 1 fc = 10.765 Lux. Original photometric data on file at the factory. Specifications subject to change without notice or obligation.

MODELS: (A) 444W1VTS; (B) 222W1WW-AKS; (C) 222W1IW-S

TYPE	IES File	Purpose	Dimming Level
A	444W1VT-35	Indirect 2 x 2 Lights Conferees	50%
B	222W1WW-AK-35	Wall Wash	20%
C	222W1IW-35	Indirect Wash Lights Speaker	65%

Combined, these three luminaires can provide all necessary lighting for Video Conferencing and other meeting usage without a secondary lighting system.

PLAN/LIGHT LEVELS AT 2-6˝ HEIGHT

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50 62 72 78 83 83 78 72 63 51
49 54 62 71 75 75 71 62 55 50
52 47 49 59 61 61 59 49 47 52
58 47 42 46 53 53 46 42 48 59
59 48 44 53 55 55 53 45 49 60
59 48 45 55 57 57 55 46 49 60
60 45 38 41 48 48 42 40 48 62
56 43 38 46 48 48 46 40 47 59
51 38 35 43 44 44 44 39 46 57
44 29 17 19 20 21 21 27 48 56
31 19 9 9 10 13 19 39 61 62
20 13 8 9 10 14 22 47 67 59
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SECTION / LIGHT LEVELS ON SCREEN WALL

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9 16 51 34 9 8 7 7 6 7
17 28 49 25 11 9 8 7 7 8
22 32 41 20 12 9 8 7 7 9
23 30 31 18 12 9 8 7 7 9
21 25 24 16 11 9 7 7 7 8
19 21 19 14 10 8 7 6 6 7
16 17 15 11 9 7 6 6 6 7
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SECTION / LIGHT LEVELS ON SPEAKER

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88 59 76
43 41 36
26 26 21
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SECTION / LIGHT LEVELS ON THE BACK WALL

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10 16 21 21 22 22 20 21 16 10
14 22 29 32 35 35 32 29 22 14
18 26 33 37 40 40 37 33 27 18
21 28 33 37 41 41 37 33 28 21
22 28 33 38 41 41 38 33 29 22
23 28 32 37 40 41 37 32 28 23
22 26 30 34 36 36 34 30 27 22
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SECTION / LIGHT LEVELS AT VIEW 3

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78 22 32 77 20 27
43 25 37 42 22 31
33 28 33 32 24 27
28 26 27 26 23 22
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SECTION / LIGHT LEVELS AT VIEW 1

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24 47 52 43 53 49 29
29 55 60 52 62 57 35
26 44 50 48 51 46 32
20 29 38 38 39 31 25
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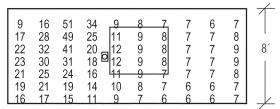
SECTION / LIGHT LEVELS ON THE EAST WALL

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11 15 16 19 19 18 19 18 16 16 21 22
17 22 23 25 25 24 24 23 22 21 26 34
21 26 26 27 27 28 26 25 24 23 26 35
23 27 28 27 28 28 26 25 25 22 24 31
23 27 27 26 27 26 25 24 23 20 21 26
23 26 26 25 25 24 23 23 21 19 19 22
22 24 24 23 23 22 21 20 18 16 16 18
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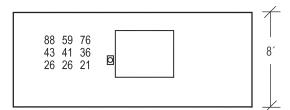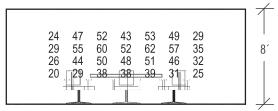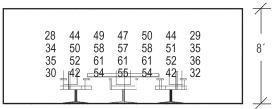
SECTION / LIGHT LEVELS AT VIEW 2

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28 44 49 47 50 44 29
34 50 58 57 58 51 35
35 52 61 61 61 52 36
30 42 54 55 54 42 32
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