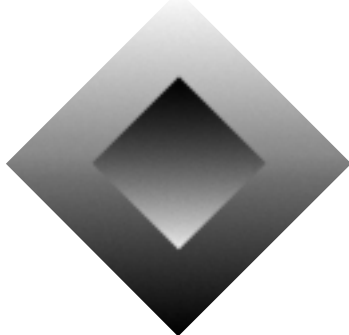
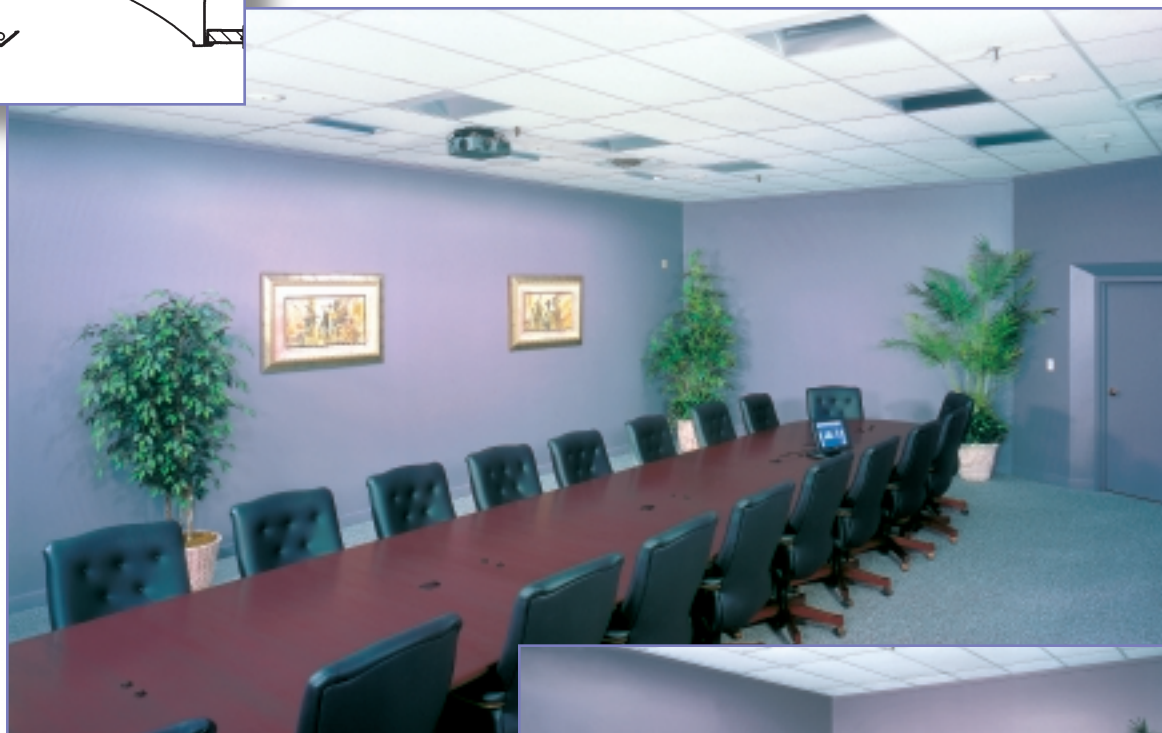
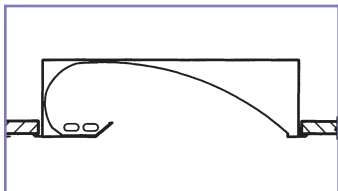


**ENGINEERED  
LIGHTING PRODUCTS**



# ***VT & VTTB SERIES***

*Recessed 2'x 2' Indirect Video/Tele Conference Fixtures  
for Drywall and T-Bar*



**Project**

Econolite Control Products, Inc.  
Anaheim, California

**Specifier**

Leelite Design  
Tustin, California

**Photographer**

Dell'Aquila Photography & Video  
Long Beach, California

**Lighting**

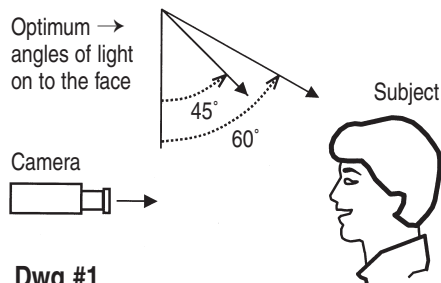
250BXVT-TB, 110 watts  
150BXWW-AKTB, 50 watts

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

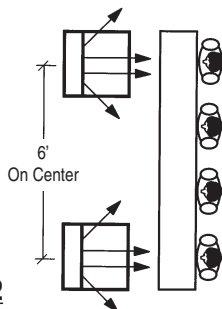


The task of providing proper lighting for a Video conference space is very simple – Ask us to do it for you! But if you would rather do it yourself, here are the problems and some suggested solutions.

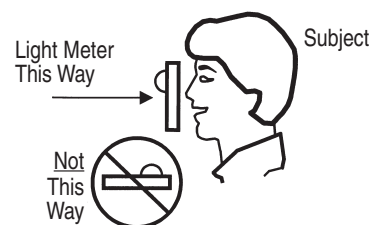
1) **Provide lighting for the camera in the proper quantity, quality and angle.** The light should come from an angle between 45° and 60° vertical (Dwg #1). Horizontally, light should also be cast on the face from an angle in addition to front (Dwg #2). This will assure that minimum shadows are created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



**Dwg #1**



**Dwg #2**



**Dwg #3**

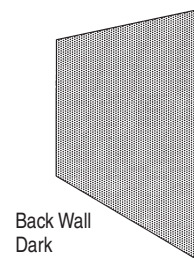
The amount of light falling on the face of the subject measured vertically should be 50-75 F.C. (Dwg #3). The quality of light can be assured by using fluorescent lamps of 3000° K or 3200° K (Color Temperature) with a CRI (Color Rendering Index) of 82+. The use of high color temperature lamps (5700° K 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 iris-ing\* 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 levels ratios from the participant to the back wall should be within 3 to 1 while the side walls can be 5 to 1.

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

**Dwg #4**

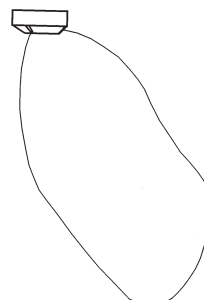


**Solutions** – To accomplish the above requires light fixtures that provide a wide horizontal component. The VT Series fixture ENGINEERED LIGHTING PRODUCTS has designed for this use is a recessed, indirect 2' x 2' with two 40, 50 or 55 watt

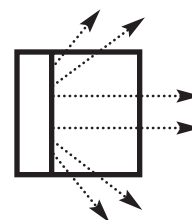
Biax lamps (Dwg #5). This fixture produces an asymmetric distribution (Dwg #6) that provides a large horizontal throw in three directions (Dwg #7). The tri-directional performance of this product often eliminates the need for additional lighting on back and side walls, so the second consideration is 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.

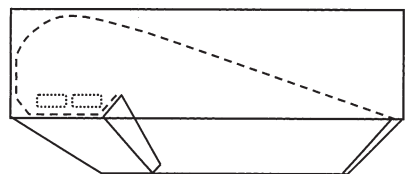


**Dwg #6**



**Dwg #7**

**Dwg #5**



**Dual Function and Participant Comfort** – The VT Series is provided standard with a dimming ballast 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 fluorescent lamps with an indirect optical system, the participants in the room will have optimum comfort visually and environmentally.



TYPE:  
CATALOG #:  
JOB:

# VT & VTTB SERIES

Recessed 2' x 2' Indirect Video/Tele Conference Fixtures  
for Drywall and T-Bar

## SYSTEM

Recessed, compact fluorescent unit for Video/Tele Conferencing multi use spaces. The unique 2' x 2' indirect fixture provides even vertical illumination in three directions, forward and to the sides. It comfortably illuminates the participants involved in video conferencing while providing low level lighting at the front of the space for good contrast at the monitor, and keeps direct light off of the camera.

UL/CUL Damp Location listed.

U.S. Patent #5,142,459

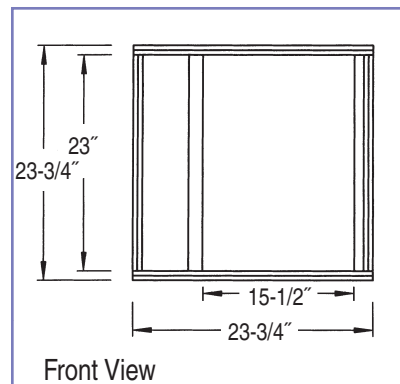
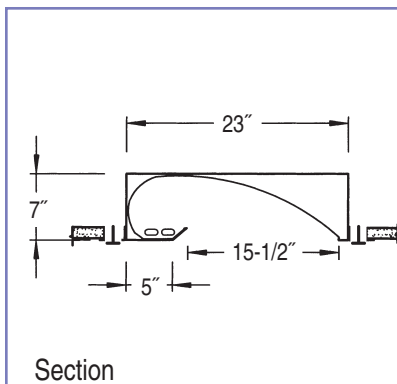
## SPECIFICATION

Recessed, indirect 2' x 2' compact fluorescent fixture for Drywall and T-Bar ceiling installations. Unit utilizes two 40, 50, or 55 watt Biax lamps. The formed reflector combines white diffuse with high purity aluminum (99.9%) reflector material with 95% reflectance. The optical design allows energy efficient lighting layouts with excellent visual comfort for the speaker, the camera and the audience.

The spot weld construction housing is 22 gauge CRS and post painted with a white TGIC polyester powder coat. Cover and knock-outs provided for through wiring. Drywall fixture has extruded aluminum trim.

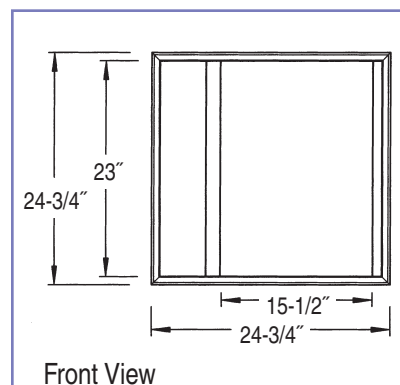
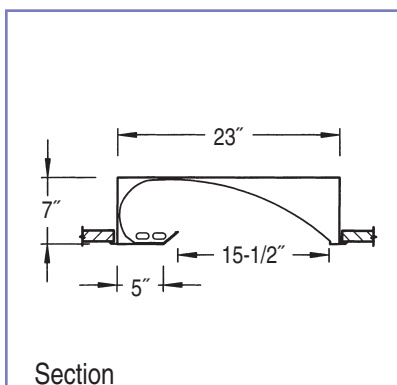
## LAMPS

Ballast	120 Electronic Dimming (Standard)
	277 Electronic Dimming (Standard)
	Alternate Dimming Ballasts
	Electronic -Non Dim
Finish	White (Standard)
	Custom -Custom
Reflector	Combo White/Diffuse (Standard)
	White -W
Louver	Parallel Blade Louver -LV
	(Not Recommended)



### VTTB SERIES for T-Bar Installations

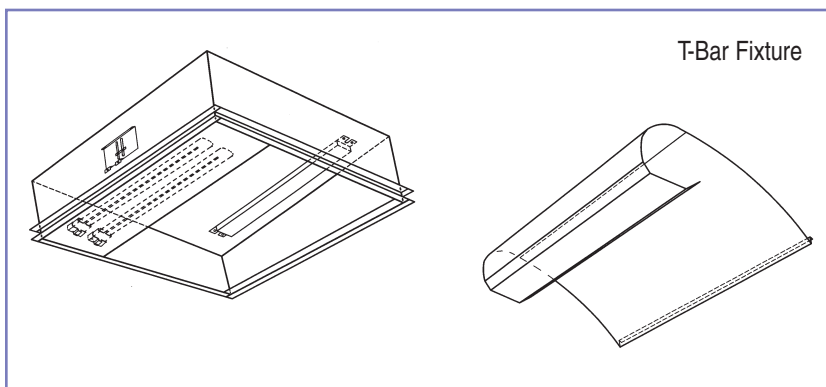
Model No.	Standard Dimming Ballast	Lamp
240BXVT-TB	Lutron Eco (3-Wire)	(2) 40 watt Biax
250BXVT-TB	Lutron Eco (3-Wire)	(2) 50 watt Biax
255BXVT-TB	Mark X (2-Wire)	(2) 55 watt Biax



### VT SERIES for Drywall Installations

Model No.	Standard Dimming Ballast	Lamp
240BXVT	Lutron Eco (3-Wire)	(2) 40 watt Biax
250BXVT	Lutron Eco (3-Wire)	(2) 50 watt Biax
255BXVT	Mark X (2-Wire)	(2) 55 watt Biax

Rough-In Dimensions are 23-3/4" x 23-3/4"

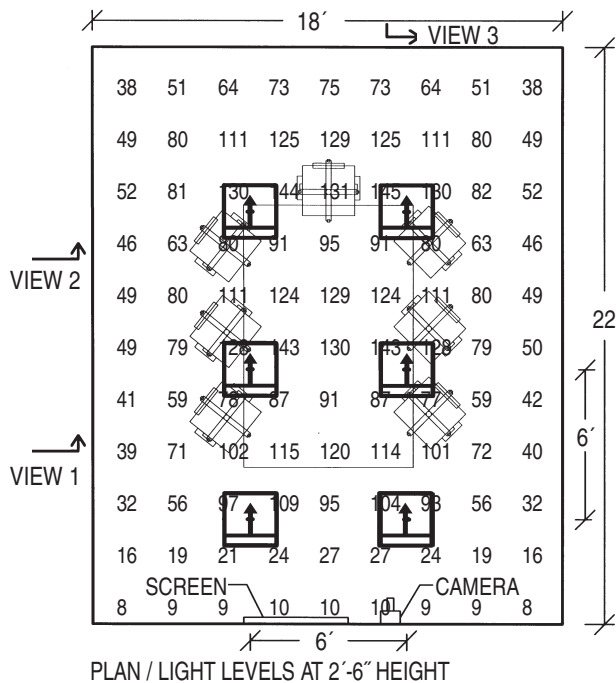




## PHOTOMETRICS

### MODEL 255BXVT

Vertical light levels on participants should be a minimum of 50 to 75 fc for successful Video Conferencing. Light readings are shown in footcandles and were calculated with Lighting Analysts' AGI 32 utilizing independent test lab photometric file #1015A.IES. Readings are initial levels and the reflectances of the room for calculation purposes were Ceiling: .80, Walls: .50 and 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.



9	11	12	12	14	13	13	11	9
10	12	12	14	15	14	13	12	10
10	12	13	14	14	14	13	12	10
10	12	13	13	13	14	13	11	9
9	11	12	12	12	12	12	11	9
8	10	11	11	11	11	11	10	8
8	9	10	10	10	10	10	9	8

SECTION / LIGHT LEVELS ON SCREEN WALL

13	17	20	21	21	21	20	17	15
19	26	30	32	32	32	29	24	19
28	36	44	49	49	49	44	35	26
35	44	54	60	61	60	53	44	33
38	48	57	63	64	63	57	48	37
40	50	59	64	66	64	59	50	39
40	50	52	63	64	63	58	50	40

SECTION / LIGHT LEVELS ON BACK WALL

15	19	21	21	21	21	20	18	16	11	8
21	27	29	28	29	29	26	24	19	13	9
29	36	38	36	37	38	33	31	26	16	9
34	41	43	40	41	41	36	33	27	16	9
38	44	45	43	42	42	37	34	27	16	9
39	45	46	43	42	41	36	32	26	15	9
38	44	44	42	40	38	34	30	23	14	8
36	42	41	40	38	36	32	29	22	14	7

SECTION / LIGHT LEVELS ON THE SIDE WALL

13	28	66	70	50	70	66	29	13
20	49	107	116	90	115	106	50	21
24	50	101	111	91	109	99	51	25
25	48	86	97	87	94	83	48	25
23	42	66	86	86	85	65	42	24
22	36	48	48	48	48	47	35	22
19	29	29	29	29	29	29	19	19

SECTION / LIGHT LEVELS AT VIEW 1

19	27	145	30	34	149	30	31	216	14	10
27	39	105	38	47	110	38	45	135	16	10
34	45	71	46	55	78	46	49	66	17	9
37	46	56	51	59	67	51	51	44	16	9
38	45	48	54	62	66	51	53	33	15	8
38	42	38	38	38	38	38	38	25	14	7
37	38	25	25	25	25	25	25	21	12	7

SECTION / LIGHT LEVELS AT VIEW 3

18	27	39	45	44	45	39	27	18
28	47	76	86	81	87	74	47	28
36	57	85	100	100	100	85	57	36
40	59	87	105	106	105	87	59	40
40	57	80	104	108	104	80	57	40
40	51	72	72	72	72	70	54	36
37	45	45	45	45	45	45	37	38

SECTION / LIGHT LEVELS AT VIEW 2