

# VIDEO CONFERENCING

## IN THE OFFICE



# VIDEO CONFERENCING

## LIGHTING CONSIDERATIONS



*Lateralo Plus used in a conference room, Netherlands*

### LIGHTING STANDARDS FOR VC

The AS 1680, Australian Lighting Standard focuses primarily on illuminance levels on the table, rear wall and glare rating. The EN 12464 standards for video conferencing rooms are more detailed for calculation purposes and account for cylindrical illuminance, illuminance uniformities and cylindrical to horizontal illuminance ratio. Compliance to these factors allow for more visual comfort for the occupants in a video conferencing scenario than just lighting surfaces, and as such we have included designs compliment to both.

## LIGHTING CONSIDERATIONS

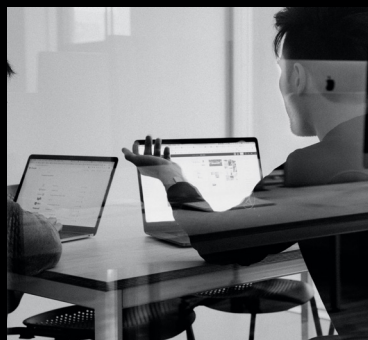
### LIGHT ON FACES

Sufficient brightness on faces is important when the focus of the space is communication, whether in person or through a screen.



### MINIMISE GLARE

Good glare control and the correct luminaire layouts prevent disturbing reflections on digital devices and paper documents which will cause visual discomfort.



### LIGHTING THE WALLS

Vertical lighting significantly increases visual comfort by balancing the contrasts between a bright screen and the rest of the room.



# RECOMMENDED PRODUCTS



lightculture  
INSPIRED LIGHT

## CULTURA VC BEYOND VISION



LUMINAIRE LUMINOUS FLUX	2080lm - 3690lm
MOUNTING TYPE	Recessed   T-bar
MATERIAL	Sheet Steel body   Frosted Prismatic Diffuser
DIMMING	DALI   Bluetooth
FINISH	White Powder-coated
WARRANTY	10 years



TRILUX

## LATERALO PLUS



LUMINAIRE LUMINOUS FLUX	5800lm - 9600lm
MOUNTING TYPE	Suspended
MATERIAL	Double fine-prismatic PMMA cover   Extruded aluminium profile
DIMMING	DALI
FINISH	Traffic White
WARRANTY	7 years



## centauri CENTAURI MINOR SUSPENDED



LUMINAIRE LUMINOUS FLUX	1000lm - 4000lm
MOUNTING TYPE	Suspended
MATERIAL	Low Glare diffuser   Extruded aluminium profile
DIMMING	DALI
FINISH	Black, White or custom powder coat
WARRANTY	10 years

# TYPICAL DESIGN

## RECESSED LUMINAIRES

ROOM: 6.0M X 4.0M X 3.0M

# LUMINAIRE SELECTION

CULTURA VC BEYOND VISION  
600 - 600 - 3040 - 840 - ETD-BV

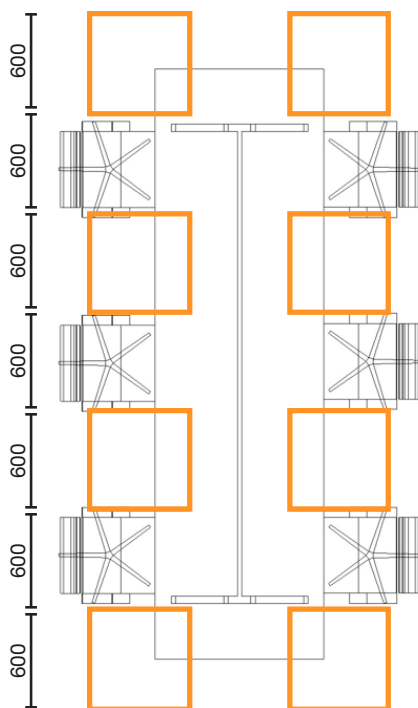


LUMINAIRE CONNECTED WATTAGE	28.5W
LUMINAIRE LUMINOUS FLUX	3040lm
LUMINOUS EFFICIENCY	107lm/W
COLOUR TEMPERATURE	Beyond Vision 4000K
CRI	≥ 80
SIZE	600mm x 600mm

### ROOM CALCULATIONS

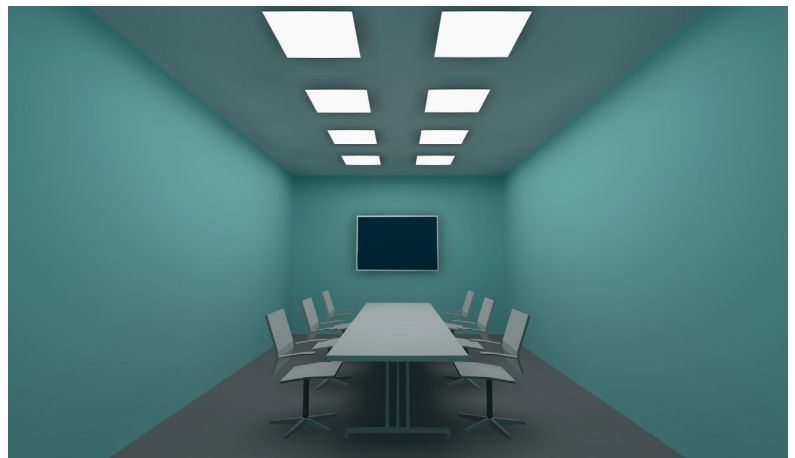
	STANDARD REFERENCED	STANDARD REQUIREMENTS	TABLE (3.5m x 1.0m x 0.7m)	FACES	WALLS	CEILING
AVERAGE ILLUMINANCE	prEN 12464-1:2009	Table ≥ 500 lx Ceiling ≥ 50 lx Walls ≥ 75 lx	660 lx	-	310.25 lx	136 lx
UNIFORMITY	AS 1680	Table ≥ 0.7	0.86	0.42	0.44	0.001
FACIAL VERTICAL ILLUMINANCE		300lx <i>recommended</i>	-	406 lx	-	-
MEAN CYLINDRICAL ILLUMINANCE	prEN 12464-1:2009	≥ 150 lx	-	284 lx	-	-
MAX UGR @ 1.2M HT	AS 1680	≤ 19			13	
LIGHT POWER DENSITY	NCC Section J6	10			9.5W/m <sup>2</sup>	
CYL. TO HOZ. ILLUMINANCE RATIO	prEN 12464-1:2009	0.3 - 0.6			0.39	
CRI	AS 1680	80 ≤ Ra ≤ 90			80	

Lux values are designed for end of life (50,000 hrs)



### ROOM CALCULATIONS

REFLECTANCE	Ceiling 70/ Wall 50/ Floor 20
MAINTENANCE FACTOR	0.8
CEILING HEIGHT	3.0m
LUMINAIRE MOUNTING HEIGHT	3.0m



# TYPICAL DESIGN

**SUSPENDED LUMINAIRES**  
**ROOM: 6.0M X 4.0M X 3.0M**

## LUMINAIRE SELECTION

TRILUX LATERALO PLUS  
 H2 BLGS 7500-840 ETDD 01, 6348951

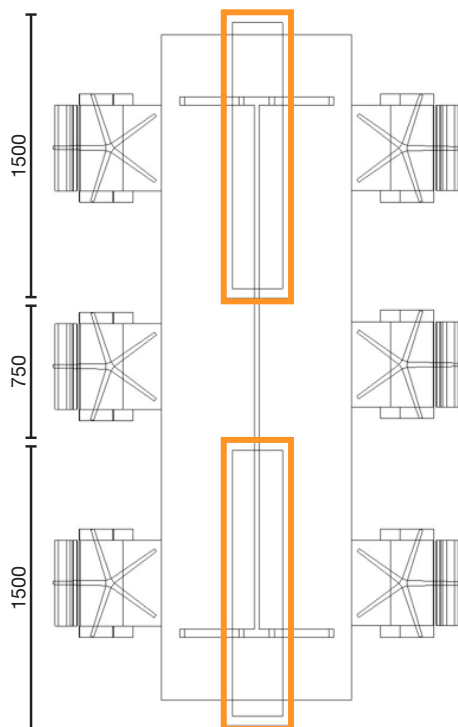


LUMINAIRE CONNECTED WATTAGE	63W
LUMINAIRE LUMINOUS FLUX	8000lm
LUMINOUS EFFICIENCY	126lm/W
COLOUR TEMPERATURE	4000K
CRI	≥ 80
SIZE	1455mm x 338mm

### ROOM CALCULATIONS

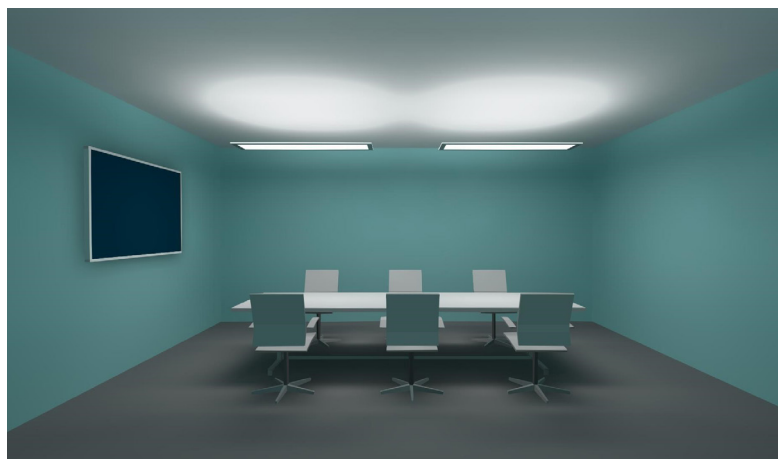
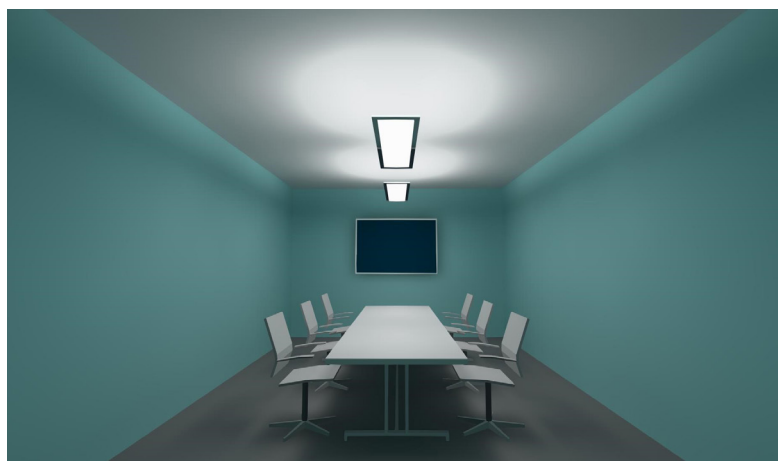
	STANDARD REFERENCED	STANDARD REQUIREMENTS	TABLE (3.5m x 1.0m)	FACES	WALLS	CEILING
AVERAGE ILLUMINANCE	<i>prEN 12464-1:2009</i>	Table ≥ 500 lx Ceiling ≥ 50 lx Walls ≥ 75 lx	583 lx	-	164 lx	326 lx
UNIFORMITY	<i>AS 1680</i>	Table ≥ 0.7	0.82	0.35	0.4	0.24
FACIAL VERTICAL ILLUMINANCE		300lx <i>recommended</i>	-	351 lx	-	-
MEAN CYLINDRICAL ILLUMINANCE	<i>prEN 12464-1:2009</i>	≥ 150 lx	-	206 lx	-	-
MAX UGR @ 1.2M HT	<i>AS 1680</i>	≤ 19			11	
LIGHT POWER DENSITY	<i>NCC Section J6</i>	10			5.25 W/m <sup>2</sup>	
CYL. TO HOZ. ILLUMINANCE RATIO	<i>prEN 12464-1:2009</i>	0.3 - 0.6			0.44	
CRI	<i>AS 1680</i>	80 ≤ Ra ≤ 90			80	

Lux values are designed for end of life (50,000 hrs)



### ROOM CALCULATIONS

REFLECTANCE	<i>Ceiling 70/ Wall 50/ Floor 20</i>
MAINTENANCE FACTOR	0.8
CEILING HEIGHT	3.0m
LUMINAIRE MOUNTING HEIGHT	2.4m



# TYPICAL DESIGN

## SUSPENDED LUMINAIRE ROOM: 6.0M X 4.0M X 3.0M

## LUMINAIRE SELECTION

### CENTAURI MINOR SUSPENDED

CENTMI-SP-WH-  
3000-ID-LG-1000-  
940-IP20-DA-1000-  
940



WATTAGE	24.2W/m
LUMINOUS FLUX	1000lm/m Direct 1000lm/m Indirect
COLOUR TEMP	4000K
CRI	≥ 90
SIZE	3000mm x 62mm

### RECESSED TRILUX SONNOS

9002019672

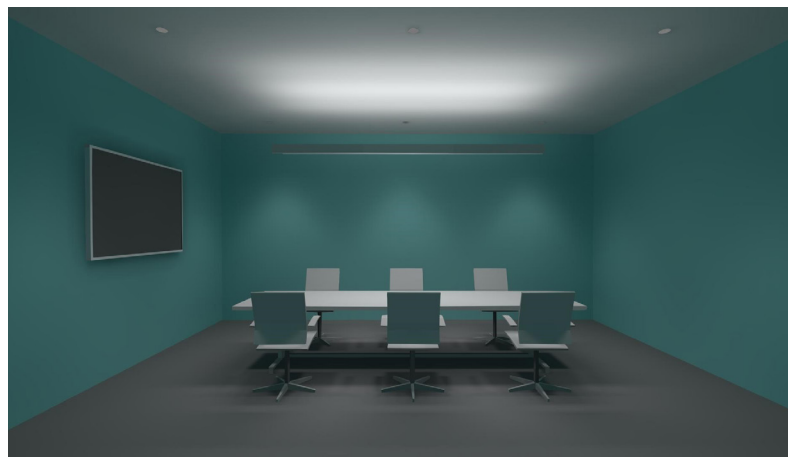
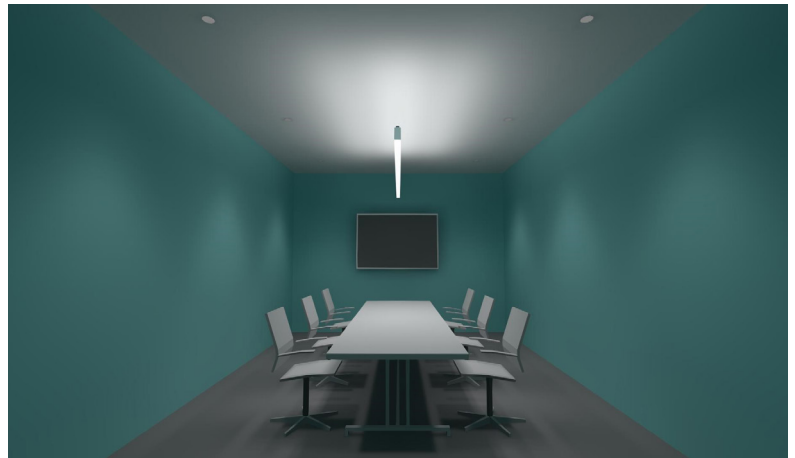
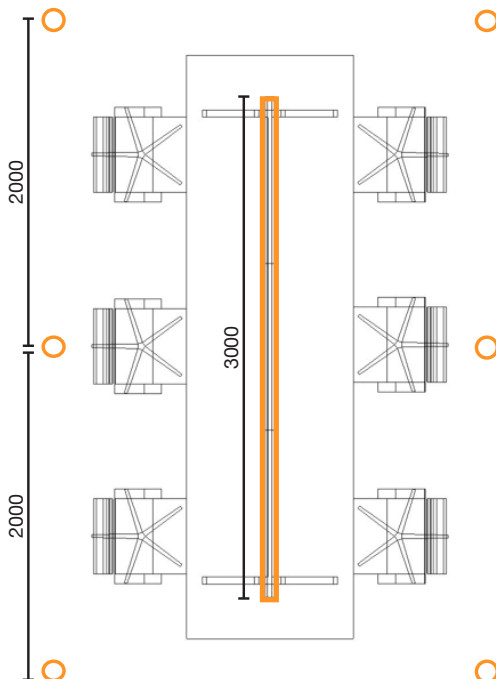


WATTAGE	8W
LUMINOUS FLUX	800lm
COLOUR TEMP	4000K
CRI	≥ 90
SIZE	∅ 100mm

### ROOM CALCULATIONS

	STANDARD REFERENCED	STANDARD REQUIREMENTS	TABLE (3.5m x 1.0m)	FACES	WALLS	CEILING
AVERAGE ILLUMINANCE	prEN 12464-1:2009	Table ≥ 500 lx Ceiling ≥ 50 lx Walls ≥ 75 lx	603 lx	-	117.9 lx	224 lx
UNIFORMITY	AS 1680	Table ≥ 0.7	0.71	0.59	0.37	0.23
FACIAL VERTICAL ILLUMINANCE		300lx <i>recommended</i>	-	322.5 lx	-	-
MEAN CYLINDRICAL ILLUMINANCE	prEN 12464-1:2009	≥ 150 lx	-	195.5 lx	-	-
MAX UGR @ 1.2M HT	AS 1680	≤ 19			18.8	
LIGHT POWER DENSITY	NCC Section J6	10			6.63 W/m <sup>2</sup>	
CYL. TO HOZ. ILLUMINANCE RATIO	prEN 12464-1:2009	0.3 - 0.6			0.32	
CRI	AS 1680	80 ≤ Ra ≤ 90			90	

Lux values are designed for end of life (50,000 hrs)



### ROOM CALCULATIONS

REFLECTANCE	Ceiling 70/ Wall 50/ Floor 20
MAINTENANCE FACTOR	0.8
CEILING HEIGHT	3.0m
LUMINAIRE MOUNTING HEIGHT	2.4m