

DATE:	PROJECT:
TYPE:	NOTES:
CATALOG #:	

Plasma Air Disinfection 2'x2' and 2'x4' Flat Panel

KEY FEATURES

- Equipped with ETI's Color Preference® 4 selectable CCTs (3000K, 3500K, 4000K, 5000K), using Samsung LEDs, with 80+ CRI
- Featuring LumenBoost® 4 selectable lumen outputs
2x2: 2500, 3125, 3750, 4350LM
2x4: 4375, 5000, 5625, 6250LM
- Built in SilentAire Plasma Disinfection technology (Air Treatment)
- 99.9% kill rate for airborne viruses and bacteria, including SARS-CoV-2*
- Damp location rated
- Reusable dust filter to clean every 6 months, dependant on use
- Green indicator light on face panel shows disinfection is on and working

SPECIFICATIONS

Construction

- Durable Aluminum (AL) housing
- Matte white finish
- Easy removable dust filters to rinse and clean with water every 6 months

Optics

- High impact Polystyrene (PS) creating an achromatic diffuser lens for zero pixelation and chromatic aberration correction
- Uniform, even light distribution

Installation

- Comes with guide clips to install into recessed grid
- Recommended 10ft mounting height
- 4 LUMEN BOOST® / 4 CCT COLOR PREFERENCE® for easy field-adjustable lumen / CCT selection with switch located on back panel. Factory set to highest lumen and 3000K

Electrical

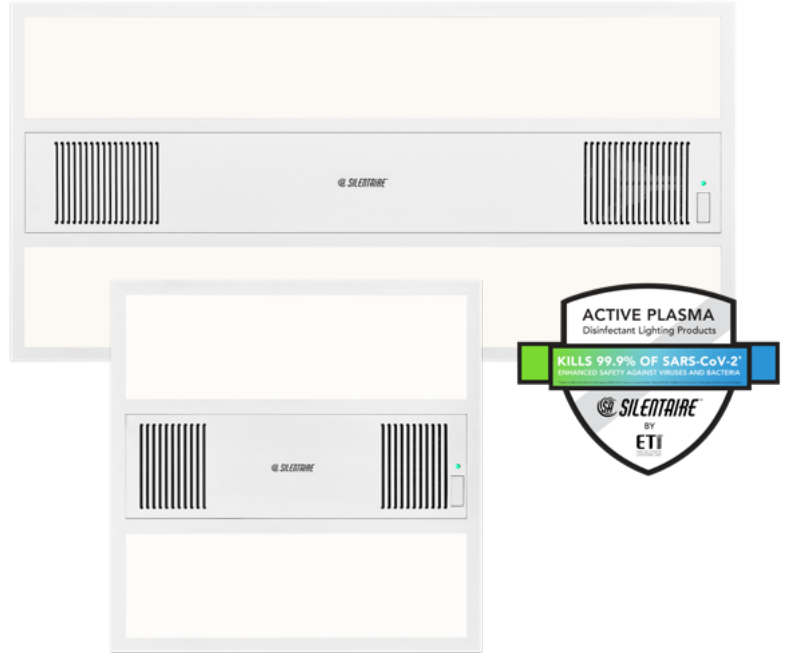
- 105,000 hour LEDs at L70 for reduced maintenance
- Operates at 120-277V, 50/60Hz
- 0-10V Dimming

Warranty

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

* Always consult dimmer manufacturer for proper use, installation and compatibility (some dimmers may require a neutral in the wall box).

KEY DATA (Based on 5000K)	
Delivered Lumens	Highest setting 4502-6815
Delivered LumenWattage	36-53
System Wattage	101-260
Efficacy Range (LPW)	123-128



Certifications & Test Data

- Tested by Innovative Bioanalysis in 8'x8'x10' Biosafety level 3 chamber with a UVC with Plasma Air Disinfection 2'x4' Flat Panel. Removes 8.49x10⁶ TCID50/mL of SARS-CoV-2 to 1.68x10² TCID50/mL after 2 hours of operation, 99.998% virus gross reduction achieved.
- 2'x4' & 2'x2' Tested by ILAC against Staphylococcus albus 8032 bacteria. Removed 99.9% of the bacteria from the air within 2 hours.



Kills 99.9% of viruses and bacteria including SARS-CoV-2* (the virus that causes COVID-19)

* (2'x2') Tested on Staphylococcus albus 8032 and Influenza A Virus H1N1 with two fixtures at high speed mode for 2 hours in a 20m³ (706 Cubic ft.) chamber. Removed 99.9% of Staphylococcus albus 8032 and Influenza A Virus H1N1 from the air. Not yet tested on SARS-CoV-2 (the virus that causes COVID-19).

* (2'x4') Tested on SARS-CoV-2 (the virus that causes COVID-19) with one fixture for 2 hours in a 640ft³ (10'x8'x8') chamber. Removed 99.99% of SARS-CoV-2 from the air. Tested on Staphylococcus albus 8032 with one fixture for 2 hours in a 30m³ (1059 Cubic ft.) chamber. Removed 99.9% of Staphylococcus albus 8032 from the air. Not proven to prevent the transmission of COVID-19. No air treatment device can guarantee the prevention of virus transmission. We recommend following CDC guidelines.

Meets California ozone emissions limit: CARB certified

CARB EO# G-22-392, G-22-393



LM 79

TM 21

IES

FEI# 3013851416



CATALOG LOGIC (SAFP-22-LB4-8-CP4-MV-LVD, SAFP-24-LB4-8-CP4-MV-LVD)

SAFP		LB4	8	CP5	MV	LVD
Series	Size	Lumens	CRI	CCT	Voltage	Dimming
SAFP SilentAire Flap Panel	22 (2'x2') 24 (2'x4')	LB4 (4 Lumen Boost® options)	8 80CRI (min.)	5CP 5 CCT Color Preference® 27/3/35/4/5000K	MV Multi-Volt 120-277V	LVD Low Volt Dimming 0-10V

- Notes:
1. This product is not configurable, only designated 'Stock' SKUs are available.
 2. Stock SKUs typically ship in 24-48 hours upon receipt of an approved released order.
 3. Factory set at 3000K and highest lumen option.

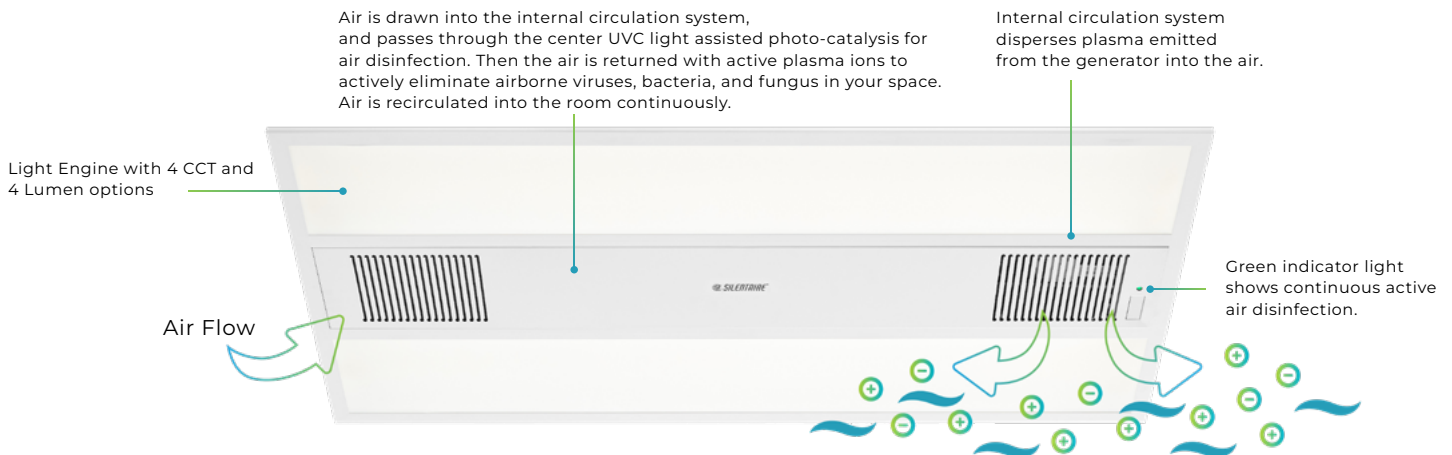
STOCK ORDERING INFORMATION (typical 2-3 day shipment lead time)

Catalog Logic (Model#)	Size	Case QTY	Nominal Lumens at highest setting and 5000K	Delivered Lumens at 5000K	System Wattage	Lumen Wattage	Efficacy at 5000K	CCT	CRI	Voltage	Dim	Rating
SAFP-22-LB4-8-CP4-MV-LVD (558101120)	2'x2'	2	4350	4502	101	36	123	3000K 3500K 4000K 5000K	80 (min)	120-277V	0-10V	DLC UL Damp
SAFP-24-LB4-8-CP4-MV-LVD (559041110)	2'x4'	1	6250	6815	260	53	128	3000K 3500K 4000K 5000K	80 (min)	120-277V	0-10V	DLC UL Damp

POWERED BY PLASMA

Plasma is created in the internal patent pending plasma generator inside of the light fixture. Airborne particles are charged by the ions released by the plasma generator, causing them to cluster, be drawn to the plasma and destroyed. The ionized air, that contains positively and negatively charged molecules, kills 99.98% of SARS-CoV-2 in the air*.

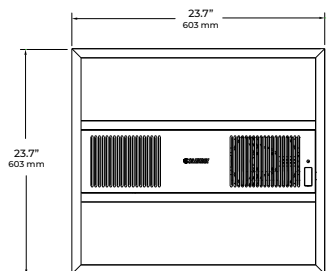
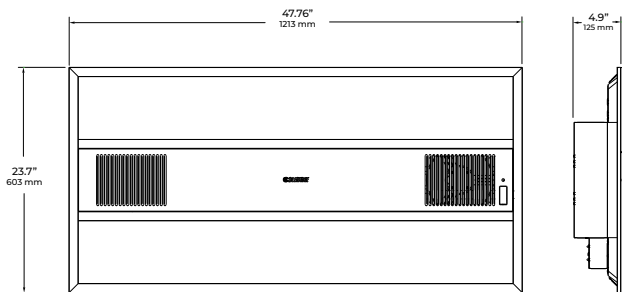
Test Content	Test Results
1. Staphylococcus aureus	1. 99.9%
2. SARS-CoV-2 (2'x4' only)	2. 99.99%
3. Influenza A Virus H1N1 (2'x2' only)	3. 99.9%



THREE WORKING MODES

Working modes controlled by standard wall switch.
Flip wall switch On/Off/On within 3 seconds to change mode.

DIMENSIONS / DETAILS



Unit Weight
(2'x2') 11.7 lbs - (2'x4') 25.3 lbs

Package Weight
(2'x2') 14.3 lbs - (2'x4') 27.5 lbs

Carton Weight
(2'x2') 30.1 lbs - (2'x4') 30.8 lbs

PERFORMANCE / DATA

Lumen Maintenance

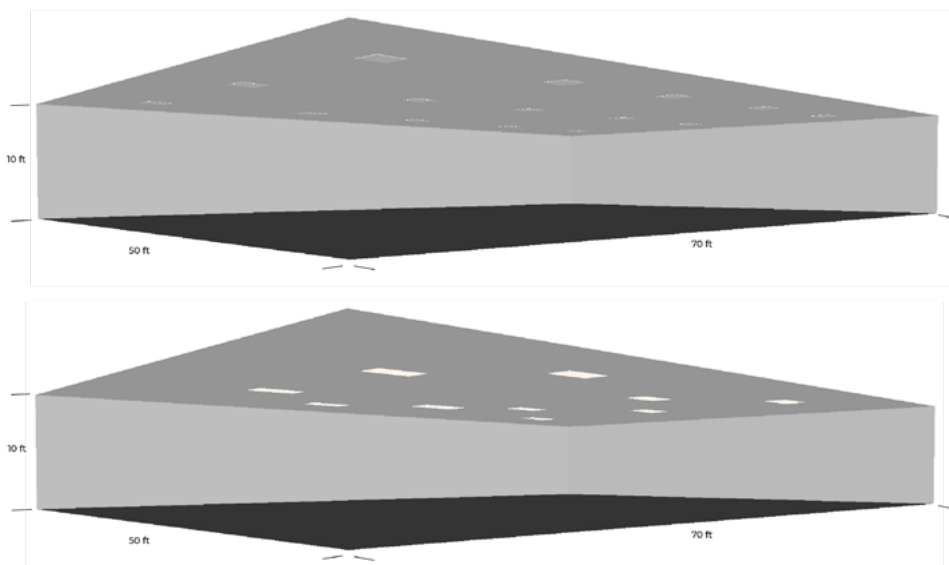
Ambient Temp.	TM-21 Lumen Maintenance (54,000 hours)
25° C (77° F)	84.65%
Ambient Temp.	TM-21 Theoretical L70 (hours)
25° C (77° F)	105,000 hrs

Load Information

Power Factor	> 0.90
THD	< 20%
Frequency	50/60 Hz
dB	(2'x2') 29 (2'x4') 34
CFM	(2'x2') 20 (2'x4') 28
Low Temp Start / Max Temp	-20° C (-4° F) / 45° C (113° F)

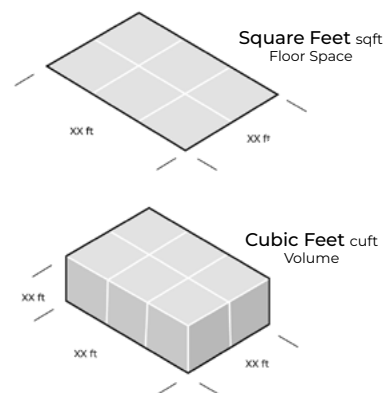
RECOMMENDED APPLICATION GUIDE / ROOM SIZE

Room recommendation of **15** 2'x2' and **10** 2'x4' per 3500sqft or roughly 70'x50' space at a 10' mounting height.



Recommended Disinfection Guide (per fixture)	2'x2'	2'x4'
Coverage - ft ³	1,200 cuft	1,680 cuft
Coverage - ft ²	120 sqft	168 sqft
Mounting Height	10 ft	10 ft

Square Feet to Cubic Feet



PHOTOMETRIC SAMPLES

2'x2' 3000K

IES LM-79

Luminaire Data:

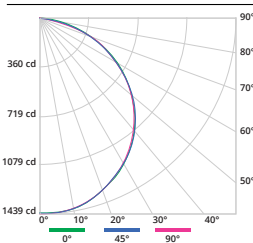
CCT & CRI	3000K, 83 CRI
Delivered Lumens	4,240
Wattage	36.9W
Efficacy	115
Spacing	0° = 1.28 90° = 1.28

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

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-40	1851.9	43.7%
0-60	3301.5	77.9%
0-90	4223.8	99.6%
0-180	4240.7	100.0%

Candela Plot



Candela Distribution

Angle	0°	90°
0	1438	1438
5	1433	1431
15	1389	1385
25	1300	1292
35	1165	1154
45	989	976
55	778	766
65	540	527
75	289	279
85	76	72
90	14	13

Ceiling Wall RCR	% Effective Ceiling Cavity Reflectance														
	80%			70%			50%			30%			10%	0%	
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	0
Zonal cavity method—Effective floor reflectance = 20%															
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	100
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	42
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	37
7	64	51	42	36	63	50	41	36	48	41	35	47	40	35	33
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	29
9	56	42	34	29	55	42	34	28	41	33	28	39	33	28	26
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	24

PHOTOMETRIC SAMPLES

2X2-3500K

IES LM-79

Luminaire Data:

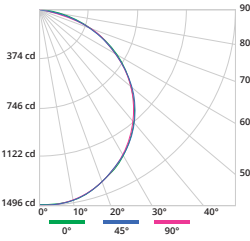
CCT & CRI	3500K, 86 CRI
Delivered Lumens	4,407
Wattage	36.7W
Efficacy	120
Spacing	0° = 1.28 90° = 1.28

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

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-40	1924.9	43.7%
0-60	3431.8	77.9%
0-90	4390.5	99.6%
0-180	4407.6	100.0%

Candela Plot



Candela Distribution

Angle	0°	90°
0	1438	1438
5	1433	1431
15	1389	1385
25	1300	1292
35	1165	1154
45	989	976
55	778	766
65	540	527
75	289	279
85	76	72
90	14	13

% Effective Ceiling Cavity Reflectance

Ceiling Wall	80%				70%				50%				30%				10%				0%	
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR	Zonal cavity method—Effective floor reflectance = 20%																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83				
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69				
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58				
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49				
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42				
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37				
7	64	51	42	36	63	50	41	36	48	41	35	47	40	35	45	39	35	33				
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	36	31	29				
9	56	42	34	29	55	42	34	28	41	33	28	39	33	28	38	32	28	26				
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2X2-4000K

IES LM-79

Luminaire Data:

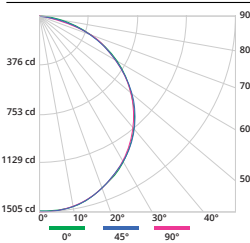
CCT & CRI	4000K, 87 CRI
Delivered Lumens	4,435
Wattage	36.2W
Efficacy	122
Spacing	0° = 1.28 90° = 1.28

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

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-40	1937.1	43.7%
0-60	3453.5	77.9%
0-90	4418.3	99.6%
0-180	4435.8	100.0%

Candela Plot



Candela Distribution

Angle	0°	90°
0	1505	1505
5	1498	1497
15	1452	1449
25	1359	1351
35	1219	1207
45	1034	1021
55	814	801
65	564	551
75	303	293
85	80	76
90	15	13

% Effective Ceiling Cavity Reflectance

Ceiling Wall	80%				70%				50%				30%				10%				0%	
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR	Zonal cavity method—Effective floor reflectance = 20%																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83				
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69				
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58				
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49				
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42				
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37				
7	64	51	42	36	63	50	41	36	48	41	35	47	40	35	45	39	35	33				
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	36	31	29				
9	56	42	34	29	55	42	34	28	41	33	28	39	33	28	38	32	28	26				
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2X2-5000K

IES LM-79

Luminaire Data:

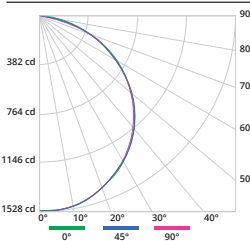
CCT & CRI	5000K, 87 CRI
Delivered Lumens	4,435
Wattage	36.2W
Efficacy	122
Spacing	0° = 1.28 90° = 1.28

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

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-40	1937.1	43.7%
0-60	3453.5	77.9%
0-90	4418.3	99.6%
0-180	4435.8	100.0%

Candela Plot



Candela Distribution

Angle	0°	90°
0	1505	1505
5	1498	1497
15	1452	1449
25	1359	1351
35	1219	1207
45	1034	1021
55	814	801
65	564	551
75	303	293
85	80	76
90	15	13

% Effective Ceiling Cavity Reflectance

Ceiling Wall	80%				70%				50%				30%				10%				0%	
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR	Zonal cavity method—Effective floor reflectance = 20%																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83				
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69				
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58				
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49				
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42				
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37				
7	64	51	42	36	63	50	41	36	48	41	35	47	40	35	45	39	35	33				
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	36	31	29				
9	56	42	34	29	55	42	34	28	41	33	28	39	33	28	38	32	28	26				
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2X4-3000K

IES LM-79

Luminaire Data:

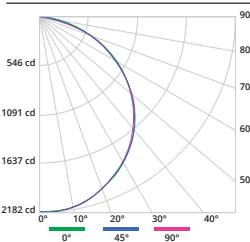
CCT & CRI	3000K, 83 CRI
Delivered Lumens	6,439
Wattage	54.9W
Efficacy	117
Spacing	0° = 1.28 90° = 1.28

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

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-40	2796.6	43.4%
0-60	4981.9	77.4%
0-90	6413.1	99.6%
0-180	6438.8	100.0%

Candela Plot



Candela Distribution

Angle	0°	90°
0	2182	2182
5	2173	2173
15	2100	2099
25	1957	1953
35	1750	1746
45	1485	1478
55	1164	1160
65	806	810
75	442	454
85	122	132
90	26	37

% Effective Ceiling Cavity Reflectance

Ceiling Wall	80%				70%				50%				30%				10%				0%	
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR	Zonal cavity method—Effective floor reflectance = 20%																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	108	103	99	95	106	101	97	93	97	93	90	93	90	87	89	87	85	83				
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69				
3	89	79	70	64	87	77	69	63	74	67												

PHOTOMETRIC SAMPLES

2'x4' 3500K

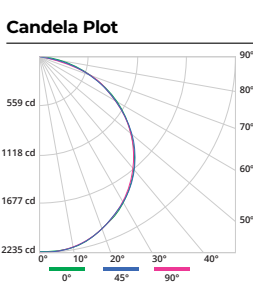
Luminaire Data:

CCT & CRI	3500K, 85 CRI
Delivered Lumens	6,595
Wattage	54.1W
Efficacy	122
Spacing	0° = 1.28 90° = 1.28

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

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-40	2864.4	43.4%
0-60	5102.7	77.4%
0-90	6568.6	99.6%
0-180	6595.0	100.0%



Candela Distribution

Angle	0°	90°
0	2235	2235
5	2226	2226
15	2151	2150
25	2005	2000
35	1793	1788
45	1520	1514
55	1192	1188
65	825	830
75	452	465
85	124	135
90	27	37

% Effective Ceiling Cavity Reflectance

Ceiling Wall	80%				70%				50%				30%				10%				0%
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
Zonal cavity method—Effective floor reflectance = 20%																					
RCR	0																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	87	89	87	85	83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	68			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	57			
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37			
7	64	51	42	35	62	50	41	35	48	41	35	47	40	35	45	39	34	32			
8	60	46	38	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29			
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26			
10	52	39	31	26	51	38	31	26	37	30	26	36	30	25	36	30	25	23			

2'x4' 4000K

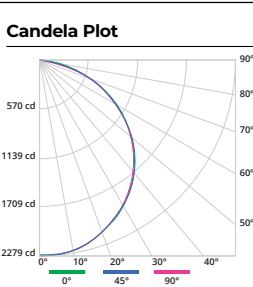
Luminaire Data:

CCT & CRI	4000K, 86 CRI
Delivered Lumens	6,723
Wattage	53.2W
Efficacy	126
Spacing	0° = 1.28 90° = 1.28

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

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-40	1937.1	43.4%
0-60	3453.5	77.4%
0-90	4418.3	99.6%
0-180	4435.8	100.0%



Candela Distribution

Angle	0°	90°
0	2278	2278
5	2269	2268
15	2193	2191
25	2044	2039
35	1828	1822
45	1550	1543
55	1216	1211
65	841	845
75	462	474
85	127	138
90	27	39

% Effective Ceiling Cavity Reflectance

Ceiling Wall	80%				70%				50%				30%				10%				0%
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
Zonal cavity method—Effective floor reflectance = 20%																					
RCR	0																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	87	89	87	85	83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	68			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	57			
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37			
7	64	51	42	35	62	50	41	35	48	41	35	47	40	35	45	39	34	32			
8	60	46	38	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29			
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26			
10	52	39	31	26	51	38	31	26	37	30	26	36	30	25	36	30	25	23			

2'x4' 5000K

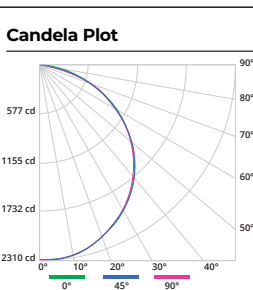
Luminaire Data:

CCT & CRI	5000K, 84 CRI
Delivered Lumens	6,815
Wattage	53.4W
Efficacy	128
Spacing	0° = 1.28 90° = 1.28

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

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-40	2960.0	43.4%
0-60	5273.0	77.4%
0-90	6787.7	99.6%
0-180	6814.8	100.0%



Candela Distribution

Angle	0°	90°
0	2309	2309
5	2300	2300
15	2223	2222
25	2072	2067
35	1853	1848
45	1571	1564
55	1232	1227
65	853	857
75	467	481
85	129	140
90	27	39

% Effective Ceiling Cavity Reflectance

Ceiling Wall	80%				70%				50%				30%				10%				0%
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
Zonal cavity method—Effective floor reflectance = 20%																					
RCR	0																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	87	89	87	85	83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	68			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	57			
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37			
7	64	51	42	35	62	50	41	35	48	41	35	47	40	35	45	39	34	32			
8	60	46	38	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29			
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26			
10	52	39	31	26	51	38	31	26	37	30	26	36	30	25	36	30	25	23			