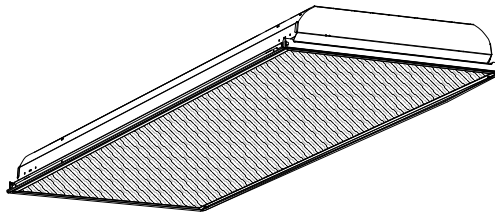


# PHILIPS Day-Brite CFI

Recessed

SpecPlus 2x4

T8, T5, or T5HO



Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat.No: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

The Philips Day-Brite / CFI SpecPlus recessed offers specification grade quality and features. Built-in grid clips with positive clamping by screws, easy re-lamping, and 1000 sq. inch lens area puts this luminaire in the lead on performance, safety and ease of maintenance.

## Ordering guide

example: SPS2GFSVA232UNV-1/2-EB

Family	Air Function	Width	Ceiling Type	Lens Frame	Lens Shielding	Lamp Quantity	Lamp Type	Voltage	Options
<input type="checkbox"/> SP	<input type="checkbox"/> S	<input type="checkbox"/> 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> -	<input type="checkbox"/>
SP SpecPlus Lensed Troffer	S Static	2 2'	G Grid (lay-in T bar) F Flanged (over lap) Z spline and plaster frame	FS Flat steel RA Regressed aluminum FA Flat aluminum	VA Pattern 12 prismatic acrylic, .095" nominal VI Pattern 12, .125" nominal VY K-12, .125" nominal KA Pattern 19, .156" nominal BP 1/2"x1/2"x1/2" silver plastic louver, polystyrene AP 1/2"x1/2"x1/2" silver plastic louver, acrylic MC 1.5"x1.5"x1" silver plastic louver, polystyrene ML 1.5"x1.5"x1" silver plastic louver, acrylic SE 3/4"x3/4"x3/8" silver plastic louver, polystyrene SF 3/4"x3/4"x3/8" silver plastic louver, acrylic	2 2 lamp 3 3 lamp 4 4 lamp 6 6 lamp (28W or 32W only)	28 28WT5 32 32WT8 54 54WT5HO	UNV Universal voltage, 120-277V 120 120V 277 277V 347 347V	1/2 One 2-lamp ballast 1/3 One 3-lamp ballast 1/21 2-lamp & 1-lamp ballasts 1/4 One 4-lamp ballast 2/2 Two 2-lamp ballasts 1/42 4-lamp & 2-lamp ballasts EB Electronic ballast, < 10% THD std. ballast factor EB10R T8 electronic ballast, <10% THD, program rapid start EBHE T8 electronic ballast, high efficiency std. ballast factor EBLHE T8 electronic ballast, high efficiency low ballast factor EBHHE T8 electronic ballast, high efficiency high ballast factor EBD7 Advance Mark 7 dimming ballast, 0-10V (low voltage) control EBDX Advance Mark 10 dimming ballast, phase control EBSD T8 electronic step dimming ballast, .88 ballast factor EBD Electronic dimming ballast, customer specified E1 B100 emerg. ballast, T8, 350-450 lumens, 120/277V E1CAN B100-CAN emerg. ballast, Canada market, T8, 350-450 lumens, 120/347V E7 B60 emerg. ballast, T8, 600-700 lumens, 120/277V E5 B50 emerg. ballast, U.S. or Canada market, T8, 1100-1400 lumens, UNV ESCAN B50-CAN emerg. ballast, Canada market, T8, 1100-1400 lumens, 120/347V ES5T B50ST emerg. ballast w/self test, U.S. or Canada market, T8, 1100-1400 lumens, UNV E7LP LP550 emerg. ballast, T5/T5HO, 430-700 lumens, 120/277V E6LP LP600 emerg. ballast U.S. or Canada market, T5/T5HO, 750-1325 lumens, 120/277V F1 3/8" flex, 3 wire 18 gauge 6' F2 3/8" flex, 4 wire 18 gauge 6' F2/5W 3/8" flex, 5 wire 18 gauge 6' GLR Fusing, fast blow LPT830 Installed T8/T5/T5HO lamps, 80+ CRI, 3000K LPT835 Installed T8/T5/T5HO lamps, 80+ CRI, 3500K LPT841 Installed T8/T5/T5HO lamps, 80+ CRI, 4100K LPT830HL Installed T8/T5 hi lumen lamps, 80+ CRI, 3000K LPT835HL Installed T8/T5 hi lumen lamps, 80+ CRI, 3500K LPT841HL Installed T8/T5 hi lumen lamps, 80+ CRI, 4100K 1W 1-way gasketing, between lens & door frame 2W 2-way gasketing, 1W + gasketing between door frame & housing 3W 3-way gasketing, 2W + gasketing for field installation between housing & ceiling SI Specular Insert (reflector) ICSI Individual cavity specular insert (reflector) PAF Housing painted after fabrication CHIC Chicago plenum rated

## Accessories (order separately)

- FMA24 – 2"x4" "F" mounting frame for NEMA "F" installations
- Electrical wiring options – consult factory

# SPS SpecPlus 2x4

T8, T5, or T5HO

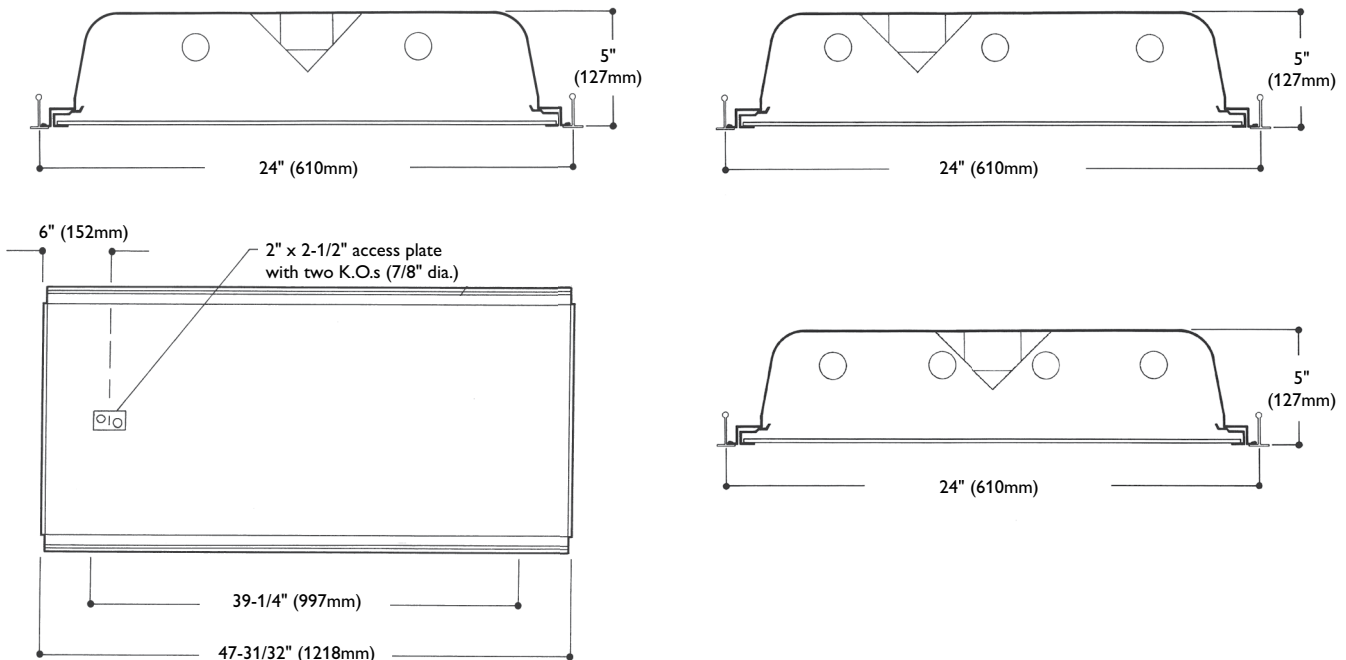
## Features

- 5" deep body.
- 3-1/16" lamp to lens for better lamp obscuration.
- 83.2% efficient (2 lamp T8), 80.1% efficient (3 lamp T8), 81.2% efficient (4 lamp T8).
- Clean contoured interior.
- One-piece housing has ribbed construction for added strength.
- Hemmed over side rails for maximum safety.
- Fixture ends turned-in for safe handling.
- Built-in earthquake clips.
- Slimline door frame with 1000 square inch lens opening.
- Door jamb finished black on four sides for positive light stop.
- True mitered corner steel lens frame.
- Spring loaded rooster head latches.
- 18 gauge steel hinges.
- Flat and regressed aluminum doors available.

## Specifications

- **Performance:** In an installation of 2 lamp 32WT8 luminaires in a room cavity ratio of 1, with reflectance 80% ceiling, 50% wall, 20% floor, the C.U. shall not be less than .88. To prevent glare the VCP shall not be less than 59 either lengthwise or crosswise (at 100fc level) and the average brightness at 65° shall not exceed 1640 candelas per square meter. To control veiling reflections, luminaire output in the 30°-90° zone shall not be less than 69.4%.  
In an installation of 3 lamp 32WT8 luminaires in a room cavity ratio of 1, with reflectance 80% ceiling, 50% wall, 20% floor, the C.U. shall not be less than .84. To prevent glare the VCP shall not be less than 50 either lengthwise or crosswise (at 100fc level) and the average brightness at 65° shall not exceed 2299 candelas per square meter. To control veiling reflections, luminaire output in the 30°-90° zone shall not be less than 68.8%.  
In an installation of 4 lamp 32WT8 luminaires in a room cavity ratio of 1, with reflectance 80% ceiling, 50% wall, 20% floor, the C.U. shall not be less than .85. To prevent glare the VCP shall not be less than 43 either lengthwise or crosswise (at 100fc level) and the average brightness at 65° shall not exceed 3108 candelas per square meter. To control veiling reflections, luminaire output in the 30°-90° zone shall not be less than 68.6%.
- **Materials:** Chassis parts – die-formed code gauge cold rolled steel. Housing with side rails hemmed over and housing ends turned-in for safe handling.
- **Finish:** Chassis exterior – White baked polyester enamel. Cavity – white baked polyester enamel minimum 86% reflectance. Phosphate undercoating.
- **Electrical:** Thermally protected class "P" ballast, non PCB. If K.O. is within 3" of ballast, use wire suitable for at least 90°.
- **Labels:** cULus listed. Suitable for damp locations. Models with emergency ballasts suitable for dry locations.

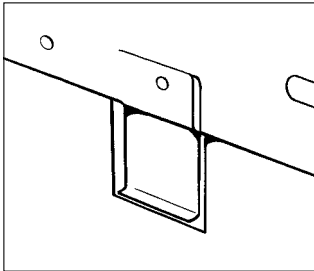
## Dimensions



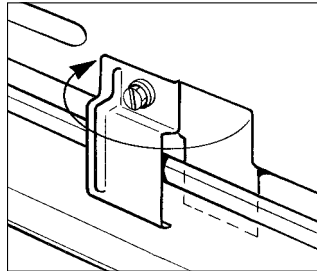
# SPS SpecPlus 2x4

T8, T5, or T5HO

## Features

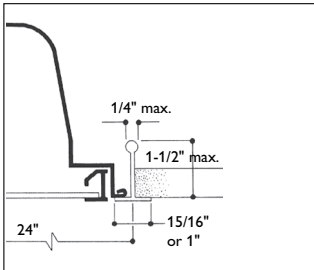


earthquake clip before installation

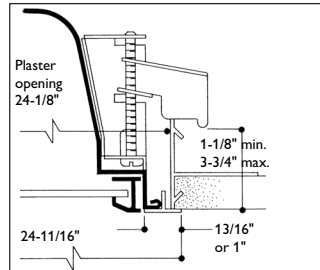


earthquake clip installed (lay-in grid)

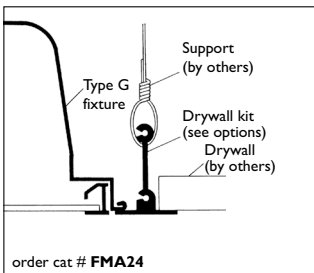
## Mounting methods



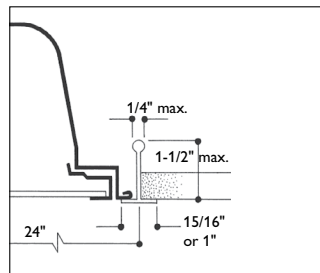
exposed t-grid ceiling (with flat aluminum frame)



plaster ceiling/flanged (with regressed aluminum frame)



drywall kit (see options)



exposed T-grid ceiling (with flat steel frame)



Some luminaires use fluorescent or high intensity discharge (HID) lamps that contain small amounts of mercury. Such lamps are labeled, "Contain Mercury" and/or the symbol "HG". Lamps that contain mercury must be disposed of in accordance with local requirements. Information regarding lamp recycling and disposal can be found at [www.lamprecycle.org](http://www.lamprecycle.org)

# SPS SpecPlus 2x4

T8, T5, or T5HO

## Photometry

### Model No. SPS2GFSVA232120-1/2-EB

LER = 67.4 IW - 61.2 BF - 0.87  
Comparative yearly lighting energy cost per 1000 lumens = \$3.56

**Report Number:** ITL49784  
**Catalog Number:** SPS2GFSVA232120-1/2-EB  
**Lamps:** (2) F32T8  
**Luminaire:** 2' x 4' SpecPlus with regressed aluminum door frame and extruded virgin acrylic shielding .095" nominal thickness (similar to pattern I2).  
**Ballast:** M2-RN-T8-ILL-D-120  
Report is based on 2850 Lumens per lamp.  
**Efficiency:** 83.1%  
**CIE Type:** Direct  
**Plane:** 0-Deg 90-Deg  
**Spacing Criteria:** 1.2 1.4  
**Shielding Angles:** 90 90  
**Plane:** 0-Deg 90-Deg  
**Luminous Length:** 46.000 21.875

#### CANDELA DISTRIBUTION

	0.0	45.0	90.0	FLUX
0	1817	1817	1817	
5	1811	1812	1815	173
15	1751	1773	1798	502
25	1613	1680	1748	775
35	1388	1512	1622	943
45	1083	1220	1325	932
55	699	803	859	707
65	388	406	450	414
75	218	181	202	214
85	86	76	68	83
90	0	0	0	

#### LUMINANCE DATA IN CANDELA/SQ. METER

AVERAGE IN DEG.	AVERAGE 0-DEG.	AVERAGE 45-DEG.	AVERAGE 90-DEG.
45	2358.	2657.	2885.
55	1877.	2156.	2306.
65	1414.	1479.	1640.
75	1297.	1077.	1202.
85	1519.	1343.	1201.

#### ZONAL LUMEN SUMMARY

ZONE	LUMENS	% LAMP	% FIXT
0- 30	1149	25.4	30.6
0- 40	2392	42.0	50.4
0- 60	4032	70.7	85.0
0- 90	4743	83.2	100.0

#### COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD. EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC	80	50	30	10	50	30	10		
RW 70	50	30	50	30	10	50	30	10	
1	91	88	84	82	80	77	79	77	75
2	84	77	72	73	69	65	70	67	64
3	77	68	62	65	60	55	62	58	54
4	70	61	54	58	52	48	56	51	47
5	65	55	48	52	46	42	50	45	41
6	60	49	42	47	41	37	46	40	36
7	56	45	38	43	37	33	42	36	32
8	52	41	34	39	33	29	38	33	29
9	49	38	31	36	30	26	35	30	26
10	46	35	28	34	28	24	33	28	24

### Model No. SPS2GFSVA332120-1/3-EB

LER = 70.6 IW - 84.4 BF - 0.87  
Comparative yearly lighting energy cost per 1000 lumens = \$3.40

**Report Number:** ITL49785  
**Catalog Number:** SPS2GFSVA332120-1/3-EB  
**Lamps:** (3) F32T8  
**Luminaire:** 2' x 4' SpecPlus with regressed aluminum door frame and extruded virgin acrylic shielding .095" nominal thickness (similar to pattern I2).  
**Ballast:** M3-RN-T8-ILL-120  
Report is based on 2850 Lumens per lamp.  
**Efficiency:** 80.0%  
**CIE Type:** Direct  
**Plane:** 0-Deg 90-Deg  
**Spacing Criteria:** 1.2 1.3  
**Shielding Angles:** 90 90  
**Plane:** 0-Deg 90-Deg  
**Luminous Length:** 46.000 21.875

#### CANDELA DISTRIBUTION

	0.0	45.0	90.0	FLUX
0	2694	2694	2694	
5	2683	2687	2692	256
15	2592	2627	2658	742
25	2391	2479	2549	1141
35	2059	2194	2292	1365
45	1609	1733	1814	1323
55	1034	1120	1217	1004
65	571	570	631	587
75	317	260	294	309
85	126	108	98	121
90	0	0	0	

#### LUMINANCE DATA IN CANDELA/SQ. METER

AVERAGE IN DEG.	AVERAGE 0-DEG.	AVERAGE 45-DEG.	AVERAGE 90-DEG.
45	3504.	3774.	3950.
55	2776.	3007.	3267.
65	2080.	2077.	2299.
75	1886.	1547.	1749.
85	2226.	1908.	1731.

#### COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD. EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC	80	50	30	10	50	30	10		
RW 70	50	30	50	30	10	50	30	10	
1	88	84	81	79	77	75	76	74	72
2	81	74	69	70	66	63	67	64	61
3	74	66	60	62	58	54	60	56	53
4	68	59	52	56	50	46	54	49	46
5	63	53	46	50	45	40	49	44	40
6	58	48	41	46	40	36	44	39	35
7	54	44	37	42	36	32	41	35	31
8	50	40	33	38	33	28	37	32	28
9	47	37	30	35	30	26	34	29	26
10	44	34	28	33	27	23	32	27	23

#### ZONAL LUMEN SUMMARY

ZONE	LUMENS	% LAMP	% FIXT
0- 30	2139	25.0	31.2
0- 40	3504	41.0	51.2
0- 60	5832	68.2	85.2
0- 90	6848	80.1	100.0

### Model No. SPS2GFSVA432120-1/4-EB

LER = 73.2 IW - 108.7 BF - 0.86  
Comparative yearly lighting energy cost per 1000 lumens = \$3.28

**Report Number:** ITL49786  
**Catalog Number:** SPS2GFSVA432120-1/4-EB  
**Lamps:** (4) F32T8  
**Luminaire:** 2' x 4' SpecPlus with regressed aluminum door frame and extruded virgin acrylic shielding .095" nominal thickness (similar to pattern I2).  
**Ballast:** E423PII20G11  
Report is based on 2850 Lumens per lamp.  
**Efficiency:** 81.1%  
**CIE Type:** Direct  
**Plane:** 0-Deg 90-Deg  
**Spacing Criteria:** 1.2 1.3  
**Shielding Angles:** 90 90  
**Plane:** 0-Deg 90-Deg  
**Luminous Length:** 46.000 21.875

#### CANDELA DISTRIBUTION

	0.0	45.0	90.0	FLUX
0	3690	3690	3690	
5	3673	3678	3685	350
15	3546	3580	3612	1012
25	3270	3353	3430	1545
35	2814	2948	3056	1839
45	2192	2316	2457	1784
55	1410	1515	1613	1349
65	770	765	853	790
75	440	335	390	420
85	178	152	139	168
90	0	0	0	

#### COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD. EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC	80	50	30	10	50	30	10		
RW 70	50	30	50	30	10	50	30	10	
1	89	85	82	80	78	76	77	75	73
2	82	75	70	71	67	64	68	65	62
3	75	67	61	63	58	54	61	57	53
4	69	60	53	57	51	47	55	50	46
5	64	54	47	51	45	41	50	44	41
6	59	49	42	46	41	36	45	40	36
7	55	44	37	42	36	32	41	36	32
8	51	40	34	39	33	29	38	33	29
9	48	37	31	36	30	26	35	30	26
10	45	34	28	33	28	24	32	27	24

#### ZONAL LUMEN SUMMARY

ZONE	LUMENS	% LAMP	% FIXT
0- 30	2906	25.5	31.4
0- 40	4745	41.6	51.3
0- 60	7878	69.1	85.1
0- 90	9257	81.2	100.0

#### LUMINANCE DATA IN CANDELA/SQ. METER

AVERAGE IN DEG.	AVERAGE 0-DEG.	AVERAGE 45-DEG.	AVERAGE 90-DEG.
45	4773.	5043.	5351.
55	3785.	4067.	4330.
65	2806.	2787.	3108.
75	2618.	2112.	2320.
85	3145.	2685.	2456.

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Philips Lighting, North America Corporation  
200 Franklin Square Drive, Somerset, NJ 08873  
Tel. 855-486-2216

Philips Lighting Canada Ltd.  
281 Hillmount Rd, Markham, ON, Canada L6C 2S3  
Tel. 800-668-9008