

PHILIPS Day-Brite CFI

Healthcare

DuoCare Patient Room Luminaire

DCEA Series
Exam/Ambient Functions



Project: _____
Location: _____
Cat.No: _____
Type: _____
Lamps: _____ Qty: _____
Notes: _____

The Philips Day-Brite / Philips CFI DuoCare Patient Room Luminaire provides ambient and examination illumination for the patient room. The two luminaire system is positioned parallel to the sides of the patient bed. Each luminaire has two T5 or T5HO lamps. The indirect lamp compartment provides glare-free ambient lighting. The direct lamp compartment introduces a crossing asymmetrical distribution that minimizes shadows during the examination. A hinged door with a dual function lens presents a smooth aperture surface for easy cleaning.

Ordering guide

Example: DCEAT5HOM12G120FR1SBF

Model no.	Master Satellite	Finish	Voltage ²	Door Frame	Options
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
4' nominal lengths DCEAT5 (2) F28T5 DCEAT5HO (2) F54 T5HO	M6' Master with 6' whip M9' Master with 9' whip M12' Master with 12' whip M15' Master with 15' whip S' Satellite SA Individual (stand alone) fixture	G Grid mounting F Recessed with flange	120 277	FR1 Painted steel frame with hinge and stainless steel screws FR2 Painted extruded aluminum frame with hinge and stainless steel screws FR3 Clear anodized extruded aluminum frame with hinge and stainless steel screws	LVC^{3,4} Low voltage controller EM1^{4,5} Emergency ballast GMF Slow blow fuse EQC Earthquake clips

Footnotes

- Each patient bed application requires two (2) luminaires - a master and a satellite.
- 347V not available
- The LVC and EM1 are only available on a master luminaire or an individual (stand alone) luminaire.
- The LVC is wired to control the ambient compartment only. Consult factory if the exam compartment is to be operated with the LVC also.
- The emergency ballast operates the ambient lighting compartment in the master fixture.

DCEA DuoCare Patient Room Luminaire

Exam/Ambient Functions

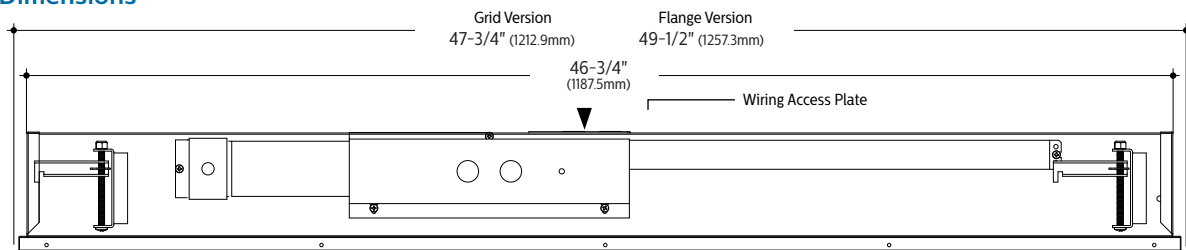
Features

- The indirect reflector assembly rotates for easy relamping.
- A low voltage controller (LVC) can be accommodated to provide pillow switch control of the ambient lighting function.
- The housing and door frame have an antimicrobial paint finish that inhibits microbe growth for the life of the product.

Specifications

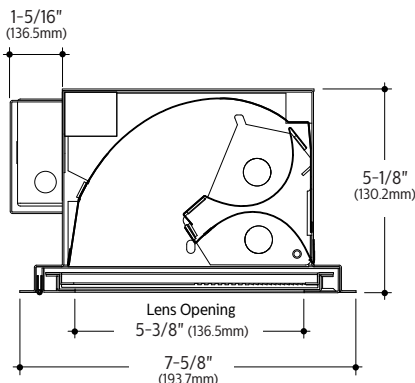
- **Construction:** 20 gauge cold rolled steel housing painted after fabrication. The housing is gasketed where it meets the door frame. The flange is formed from 18 gauge cold rolled steel.
- **Door Frame:** The door is available in cold rolled steel or extruded aluminum. The one-piece, cold rolled steel version is fabricated from 20 gauge material and painted. The extruded aluminum door has mitered corners and can be selected either in a clear or painted finish. All door options have a full length stainless steel hinge and stainless steel screws to secure the door to the housing.
- **Reflectors:** DuoCare Exam/Ambient utilizes a satin and specular aluminum reflector assembly that snaps down for simple access to the lamp compartments during lamp replacement.
- **Lens:** A custom, dual function acrylic lens (nominal .065" thickness) with linear prisms for asymmetric control of the exam lamp compartment. The remainder of the lens is clear. A smooth surface faces the room for easy wipe down
- **Finish:** The housing, painted door frames and flange are painted after fabrication with white polyester powder coat paint. The finish has an antimicrobial additive to inhibit the growth of microbes.
- **Lamps:** Two T5 or T5HO fluorescent lamps are supplied with each luminaire. 3500K is the standard color temperature. Alternative color temperatures can be specified. Consult factory.
- **Switching:** DuoCare Exam/Ambient is wired for independent switching of the lamp compartments. It is recommended that the exam lighting compartment (direct reflector) be switched at the wall where it can be controlled by the healthcare staff. The ambient lighting compartment can be switched at the wall or specified with a low voltage controller (LVC) installed on the luminaire. The LVC is compatible with industry standard bed control systems (by others).
- **Electrical:** Electronic, high power factor ballasts. One ballast is provided for each lamp compartment.
- **Installation:** DuoCare can be specified for either grid or flange applications. A pair of luminaires are required for each patient bed – a master and a satellite. The master luminaire contains the ballasts and is shipped with an interconnect whip to connect the satellite luminaire. The interconnect whip is pre-wired and has plugs to further simplify the installation. The individual (stand alone) model is identical to a master model but without the interconnect whip.
- **Listing:** cULus listed for damp locations.
- **Warranty:** 5 year limited warranty.

Dimensions

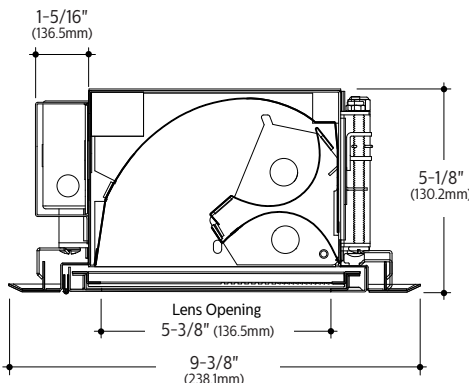


Sideview (Grid Version)

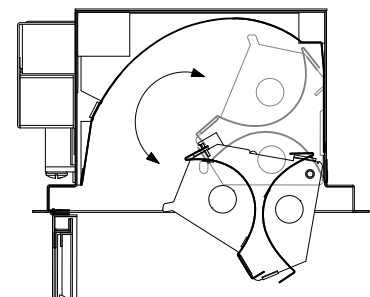
Recommended Ceiling Opening for 8-1/4" x 48-5/8"



Cross Section (Grid Version)



Cross Section (Flange Version)



Cross Section - Reflector Rotation
Reflector rotates for easy re-lamping



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

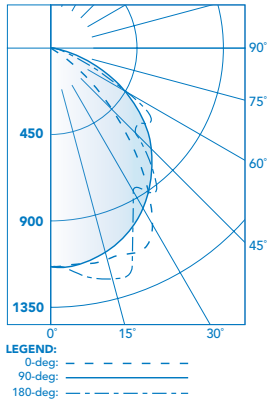
DCEA DuoCare Patient Room Luminaire

Exam/Ambient Functions

Photometrics

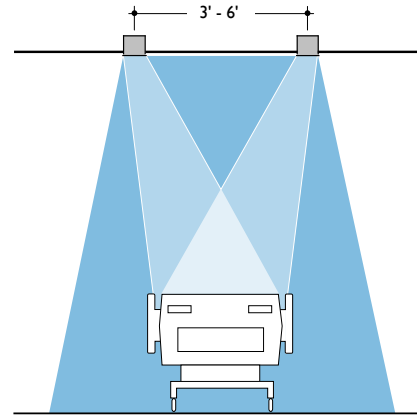
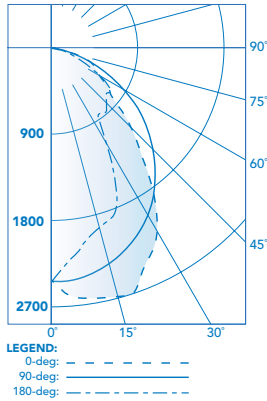
DCEAT5HO - Ambient

(1) 54W T5HO Fluorescent -
4450 lumens per lamp
Report No.: ITL61900
Efficiency: 62.0%



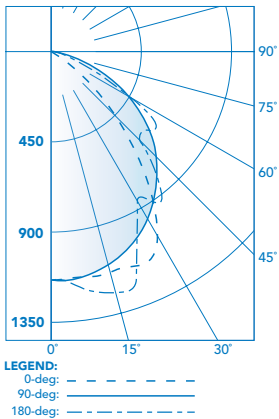
DCEAT5HO - Exam

(2) 54W T5HO Fluorescent -
4450 lumens per lamp
Report No.: ITL61901
Efficiency: 59.9%



DCEAT5HO - Ambient

(1) 54W T5HO Fluorescent -
4450 lumens per lamp
Report No.: ITL61900
Efficiency: 62.0%



CO-EFFICIENTS OF UTILIZATION | Effective floor cavity reflectance=20%

rc rw	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR 0	74	74	74	74	72	72	72	72	69	69	69	66	66	66	63	63	63	62
1	69	66	64	62	67	65	63	61	62	61	59	60	58	57	58	57	56	54
2	63	59	55	52	62	58	54	51	56	53	50	54	51	49	52	50	48	47
3	58	52	48	44	57	51	47	44	50	46	43	48	45	42	46	44	42	41
4	54	47	42	38	52	46	42	38	45	41	37	43	40	37	42	39	37	35
5	50	42	37	33	48	42	37	33	40	36	33	39	35	33	38	35	32	31
6	46	38	33	29	45	38	33	29	37	32	29	36	32	29	35	31	29	27
7	43	35	30	26	42	34	30	26	33	29	26	33	29	26	32	28	26	24
8	40	32	27	24	39	32	27	23	31	26	23	30	26	23	29	26	23	22
9	37	29	25	21	36	29	24	21	28	24	21	28	24	21	27	24	21	20
10	35	27	23	19	34	27	22	19	26	22	19	26	22	19	25	22	19	18

CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0°	45°	90°	135°	180°
0°	1140	1140	1140	1140	1140
5°	1133	1141	1143	1155	1162
15°	1141	1125	1101	1210	1244
25°	1153	1078	1019	1195	1015
35°	875	1015	894	864	924
45°	457	709	741	747	630
55°	123	332	551	463	638
65°	38	65	331	366	248
75°	15	17	121	78	79
85°	3	3	10	10	9
90°	0	0	0	0	0

ZONAL LUMEN SUMMARY

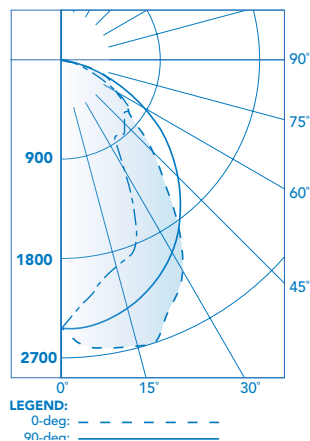
Zone	Lumens	% Lamp	% Fixt.
0-30	941	21.2	34.1
0-40	1519	34.1	55.0
0-60	2454	55.1	88.9
0-90	2761	62.0	100.0
90-180	0.0	0.0	0.0
0-180	2761	62.0	100.0

DCEA DuoCare Patient Room Luminaire

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DCEAT5HO - Exam

(2) 54W T5HO Fluorescent -
4450 lumens per lamp
Report No.: ITL61901
Efficiency: 59.9%



CO-EFFICIENTS OF UTILIZATION

Effective floor cavity reflectance=20%

rc rw	80					70				50			30			10			0
	70	50	30	10		70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	0	71	71	71	71	70	70	70	70	67	67	67	64	64	64	61	61	61	60
1	66	64	61	59		64	62	60	58	60	58	57	57	56	55	55	54	53	52
2	61	56	53	50		59	55	52	49	53	50	48	51	49	47	49	47	46	45
3	56	50	46	42		54	49	45	42	47	44	41	46	43	40	44	42	40	38
4	51	45	40	36		50	44	40	36	43	39	36	41	38	35	40	37	35	33
5	48	40	35	32		46	40	35	32	39	34	31	37	34	31	36	33	32	29
6	44	37	32	28		43	36	31	28	35	31	28	34	30	28	33	30	27	26
7	41	33	29	25		40	33	28	25	32	28	25	31	27	25	30	27	25	23
8	38	31	26	23		37	30	26	23	30	25	22	29	25	22	28	25	22	21
9	36	28	24	21		35	28	24	20	27	23	20	27	23	20	26	23	20	19
10	34	26	22	19		33	26	22	19	25	21	19	25	21	19	24	21	18	17

CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0°	45°	90°	135°	180°
0°	2429	2429	2429	2429	2429
5°	2609	2576	2428	2284	2217
15°	2682	2609	2327	1996	1931
25°	2409	2545	2135	1809	1593
35°	1847	2121	1851	1282	845
45°	1157	1546	1487	704	815
55°	717	903	1082	603	737
65°	504	521	620	448	375
75°	231	278	216	148	132
85°	12	20	17	16	14
90°	0	0	0	0	0

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1859	20.9	34.9
0-40	2896	32.5	54.3
0-60	4586	51.5	86.0
0-90	5330	59.9	100.0
90-180	0.0	0.0	0.0
0-180	5330	59.9	100.0

