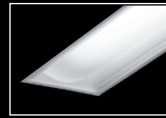
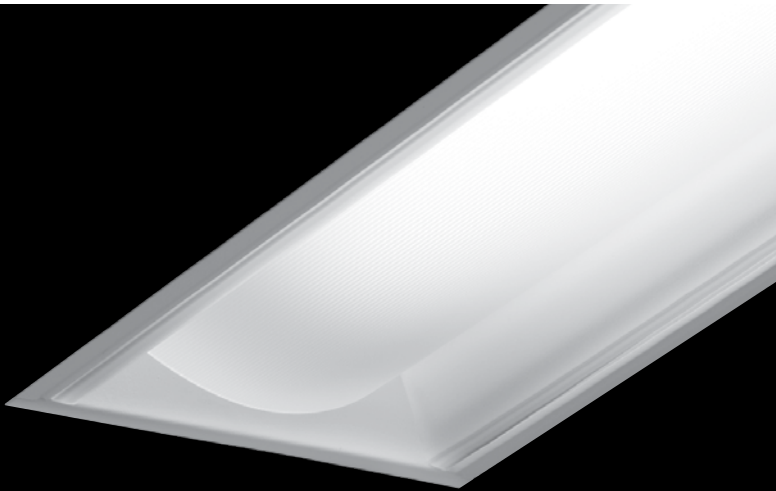


# Apollo 8

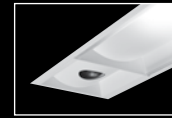
FLUORESCENT RECESSED PATIENT BED LIGHT SYSTEM



FOCAL POINT®



apollo 8  
ambient only

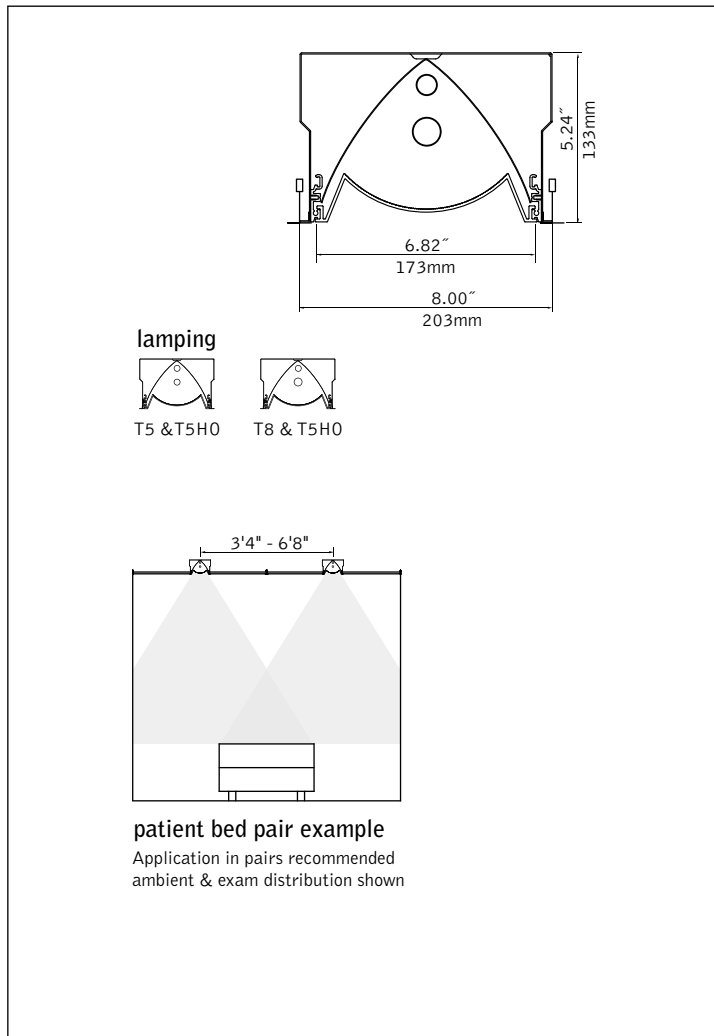


integral LED



apollo 1 & 2  
companion

## DIMENSIONAL DATA



## FEATURES

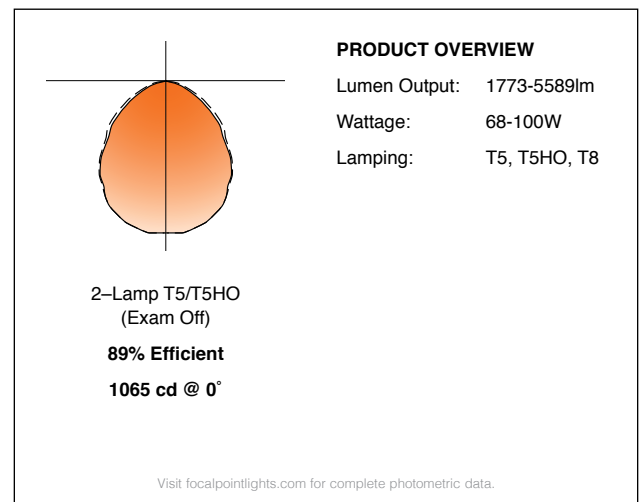
8" wide recessed patient bed light with exam function available in 2', 3' & 4' lengths.

T5 or T8 lamps provide reading and ambient illumination, additional T5HO lamps provide 80+ average footcandles for exam.

Symmetrical distribution accommodates a variety of patient room and equipment arrangements.

Radial extruded acrylic diffuser with internal ribs provides low brightness, even illumination and ease of cleaning.

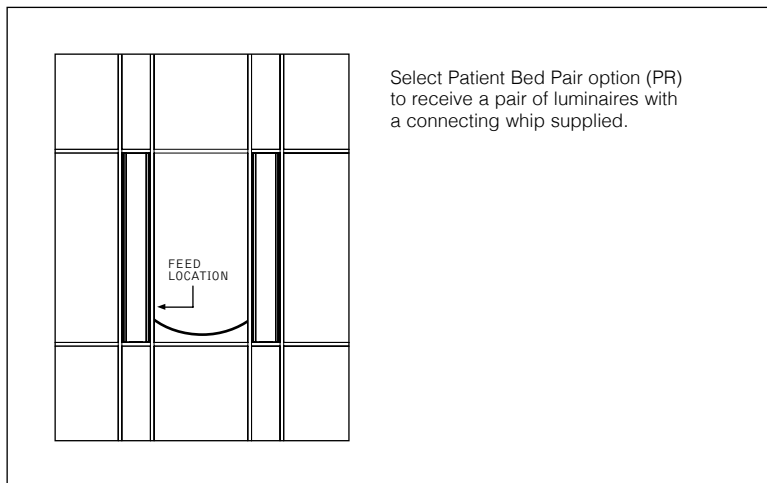
## PERFORMANCE



fixture:

project:

**SYSTEM DETAILS**



**SPECIFICATIONS**

**Construction**

20 Ga. steel housing. Lamp compartment is sealed and enclosed by detachable extruded acrylic diffuser. Bottom access 20 Ga. steel ballast compartment. Weight: 32 lbs.

**Optic**

One-piece 20 Ga. steel side reflectors finished in Matte Satin White powder coat. 20 Ga. steel center reflector finished in High reflectance White.

**Electrical**

Ballasts are thermally protected and have a Class "P" rating. Low Voltage Controller is designed to function seamlessly alongside delicate hospital electronics. It emits no electromagnetic noise that either patient or equipment will detect. Any number of momentary contact switches can access two circuit loads. Both circuits can be switched in a sequence by using one switch or independently using separate switches. This is achieved by using jumpers conveniently located on the Low Voltage side of the housing. Load capacity: Dual (2) 120-277V Circuits at 5 Amps each load. Switch voltage: <5V (<.5, micro amps), Switch types: sequential (load 1,2, 1&2, off); individual (each load independently). Consult factory for dimming specifications and availability.

**Labels**

UL and cUL listed.

**Finish**

Polyester powder coat applied over a 5-stage pre-treatment. Optional Anti-Microbial paint finish available.

**ORDERING**

<b>Luminaire Series</b>	<b>FMA8D</b>	<b>FMA8D</b>
Apollo 8 with exam function	FMA8D	
<b>Nominal Size</b>		
8" x 2'	82	
8" x 3'	83	
8" x 4'	84	
<b>Shielding</b>		<b>RA</b>
Radial Acrylic Lens	RA	
<b>Lamp Quantity</b>		<b>11</b>
1 Lamp Ambient/ 1 Lamp Exam	11	
<b>Lamp Type</b>		
T5 & T5HO	T5T5HO	
T8 & T5HO	T8T5HO	
<b>Circuit</b>		<b>2C</b>
Dual Circuit	2C	
<b>Voltage</b>		
120 Volt	120	
277 Volt	277	
UNV Volt	UNV	
<small>(Cannot be specified with EM option)</small>		
<b>Ballast</b>		
Electronic Program Start <10% THD	S	
0-10V	D7	
Lutron 1% 3-wire	DH	
Lutron 1% H-Series	DK	
<b>Mounting</b>		
Drywall Frame Kit	F	
Grid Mount	G	
Slot Tee	ST	
<b>Factory Options</b>		
Chicago Plenum	CP	
Emergency Battery Pack*	EM	
Positional Clips	EQ	
Single Fuse and Holder	FU	
6' New York City Flex Whip	FNY	
6' Flex Whip	FW	
Low Voltage Controller*	LVC	
Include 3000K Lamp*	L830	
Include 3500K Lamp*	L835	
Include 4100K Lamp*	L841	
Patient Bed Pair	PR	
<small>(Includes a pair of luminaires and a connecting whip. Pair is powered at a single feed location) (not recommended with dimming)</small>		
<b>Finish</b>		
Matte Satin White	WH	
Matte Satin White Anti-Microbial	WHA	

single unit example:

FMA8D-84-11-T5T5HO-2C-120-S-G-WH

patient bed pair example:

FMA8D-84-11-T8T5HO-2C-120-S-G-PR-WHA

# Apollo8

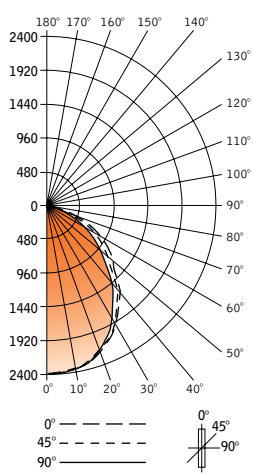
FLUORESCENT

## FMA8D-84-RA-1-T5T5HO-2C-120-S-G-WH

Filename: FMA8D84RA11T5T5H\_EXAM\_ON.IES  
 Test #: 16082.0

Lumens: 5503lm  
 Efficiency: 70%

### CANDLEPOWER DISTRIBUTION



Vertical Angle	Horizontal Angle				Zonal Lumens
	0°	22.5°	45°	67.5°	
0°	2399	2399	2399	2399	2399
5°	2380	2378	2377	2377	2375
15°	2305	2302	2293	2287	2284
25°	2098	2090	2072	2048	2036
35°	1759	1750	1707	1638	1608
45°	1351	1343	1271	1168	1129
55°	998	983	896	799	762
65°	613	593	526	456	435
75°	289	273	234	207	198
85°	70	61	52	46	44
90°	0	0	0	0	0
95°	0	0	0	0	0
105°	0	0	0	0	0
115°	0	0	0	0	0
125°	0	0	0	0	0
135°	0	0	0	0	0
145°	0	0	0	0	0
155°	0	0	0	0	0
165°	0	0	0	0	0
175°	0	0	0	0	0
180°	0	0	0	0	0

### LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0-30°	1835	23.2	33.3
0-40°	2900	36.7	52.7
0-60°	4670	59.1	84.9
0-90°	5503	69.7	100.0
<b>Total Luminaire 0-180°</b>	<b>5503</b>	<b>70</b>	<b>100.0</b>

### LUMINANCE DATA (CD/M²)

Vertical Angle	0°	45°	90°
45°	9645	9074	8060
55°	8784	7886	6707
65°	7322	6283	5196
75°	5637	4564	3862
85°	4054	3012	2549

### CO-EFFICIENTS OF UTILIZATION

Floor Ceiling Wall	80				70			20		30		10		00	
	70	50	30	10	70	50	10	50	10	50	10	50	10	50	10
RCR 0	83	83	83	83	81	81	81	77	77	74	74	71	71	70	70
1	77	74	72	69	75	73	68	70	66	67	64	65	62	61	61
2	71	66	62	59	69	65	58	63	57	60	55	58	54	53	53
3	66	59	54	50	64	58	50	56	49	54	48	53	48	46	46
4	61	53	48	44	59	52	43	51	43	49	42	48	42	40	40
5	56	48	42	38	54	47	37	45	37	44	37	43	36	35	35
6	52	43	37	33	50	42	33	41	33	40	32	39	32	31	31
7	48	39	33	29	46	38	29	37	29	36	29	35	28	27	27
8	44	35	29	25	43	34	25	34	25	33	25	32	25	24	24
9	41	31	26	22	40	31	22	30	22	30	22	29	22	21	21
10	38	29	23	20	37	28	20	28	20	27	20	26	19	18	18

Numbers indicate percentage values of reflectivity.

Go to [www.focalpointlights.com](http://www.focalpointlights.com) for additional photometric data.

# Apollo8

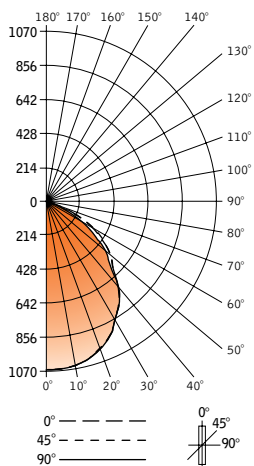
FLUORESCENT

## FMA8D-84-RA-1-T5T5HO-2C-120-S-G-WH (T5HO LAMPS OFF)

Filename: FMA8D84RA11T5T5H\_EXAM\_OFF.IES  
 Test #: 16081.0

Lumens: 2565lm  
 Efficiency: 89%

### CANDLEPOWER DISTRIBUTION



Vertical Angle	Horizontal Angle				Zonal Lumens
	0°	22.5°	45°	67.5°	
0°	1065	1065	1065	1065	1065
5°	1066	1066	1068	1068	1068
15°	1027	1027	1030	1030	1031
25°	944	947	950	952	953
35°	495	800	805	797	794
45°	589	596	595	575	563
55°	442	448	47	405	390
65°	274	275	258	226	214
75°	132	129	113	98	94
85°	32	27	23	20	19
90°	0	0	0	0	0
95°	0	0	0	0	0
105°	0	0	0	0	0
115°	0	0	0	0	0
125°	0	0	0	0	0
135°	0	0	0	0	0
145°	0	0	0	0	0
155°	0	0	0	0	0
165°	0	0	0	0	0
175°	0	0	0	0	0
180°	0	0	0	0	0

### LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0-30°	833	28.7	32.5
0-40°	1335	46.0	52.0
0-60°	2170	74.8	84.6
0-90°	2565	88.5	100.0
<b>Total Luminaire 0-180°</b>	<b>2565</b>	<b>89</b>	<b>100.0</b>

### LUMINANCE DATA (CD/M²)

Vertical Angle	0°	45°	90°
45°	4204	4246	4016
55°	3887	3844	3432
65°	3273	3086	2551
75°	2567	2206	1826
85°	864	1355	1073

### CO-EFFICIENTS OF UTILIZATION

Floor Ceiling Wall	80				70			20		30		10		00	
	70	50	30	10	70	50	10	50	10	50	10	50	10	50	10
RCR 0	100	100	100	100	100	100	100	98	98	94	94	90	90	88	88
1	98	94	91	88	95	92	87	89	84	85	81	82	79	77	77
2	90	84	79	74	88	82	73	79	72	77	70	74	69	67	67
3	83	75	69	64	81	74	63	71	62	69	61	67	60	58	58
4	77	67	60	55	75	66	55	64	54	62	53	60	53	51	51
5	71	60	53	47	69	59	47	57	47	56	46	54	46	44	44
6	65	54	47	41	64	53	41	52	41	50	41	49	40	39	39
7	60	49	42	36	59	48	36	47	36	46	36	44	36	34	34
8	56	44	37	32	54	43	32	43	32	41	31	40	31	30	30
9	51	40	32	28	50	39	28	38	27	37	27	36	27	26	26
10	48	36	29	25	46	36	25	35	24	34	24	33	24	23	23

Numbers indicate percentage values of reflectivity.

Go to [www.focalpointlights.com](http://www.focalpointlights.com) for additional photometric data.

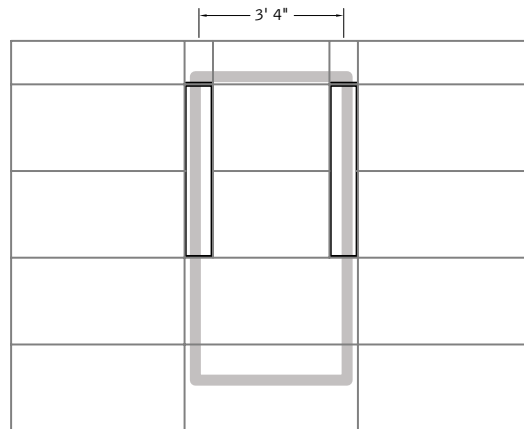
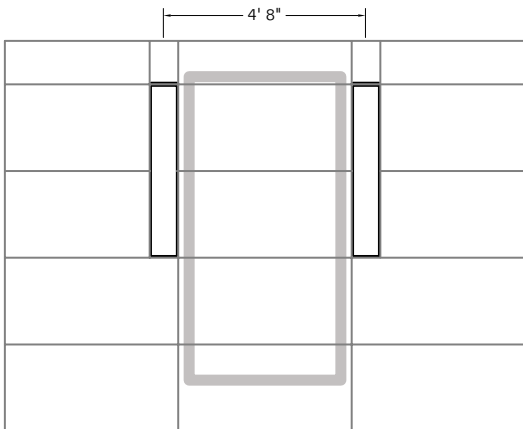
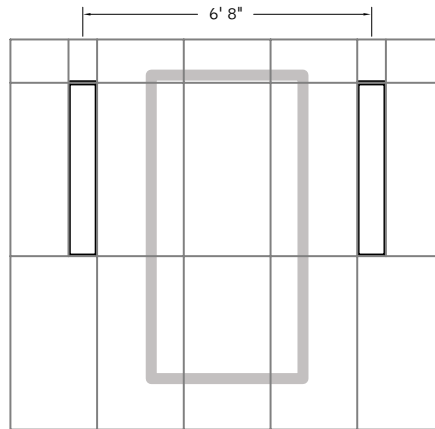
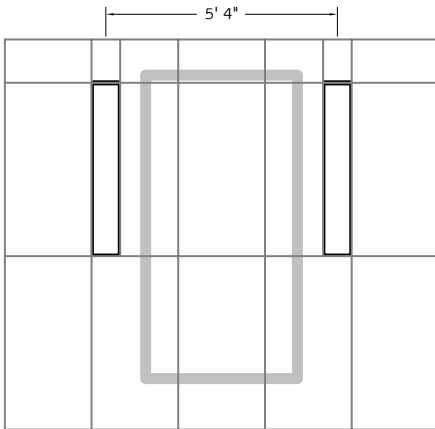
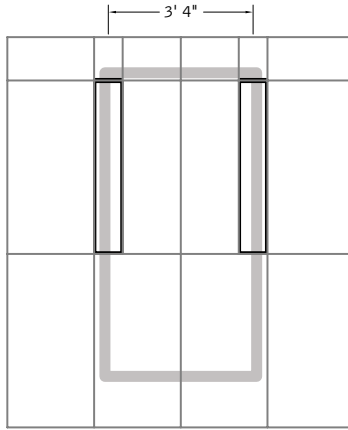
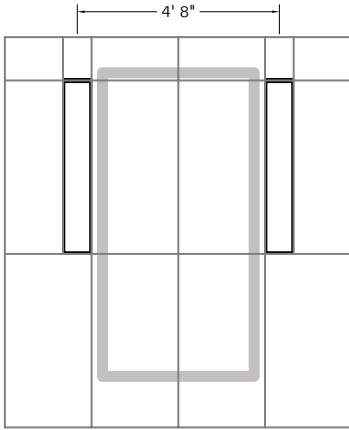
# Apollo 8

PATIENT BED LIGHT SYSTEM - EXAMPLE LAYOUTS



FOCAL POINT®

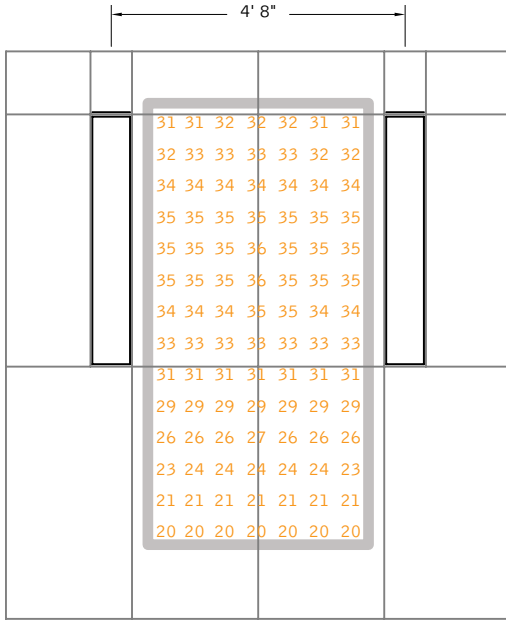
4' FLUORESCENT | 2'X4' CEILING TILES | 3' 5" X 7' BED



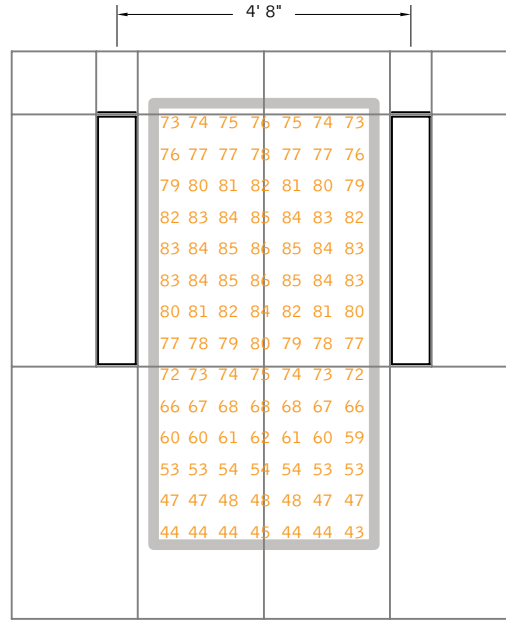
## 4' FLUORESCENT T8/T5HO

2'x4' ceiling tiles | 3' 5" x 7' bed

■ AVERAGE FOOTCANDLES  
■ UNIFORMITY



Ambient only



Exam

## 4' FLUORESCENT LAMPS

	Spacing	Ambient Only		Exam	
T5/T5HO	3' 4"	34.6	1.6:1	75.7	1.6:1
	4' 8"	32.2	1.5:1	70.4	1.6:1
	5' 4"	30.8	1.5:1	67.3	1.6:1
	6' 8"	27.7	1.5:1	60.6	1.5:1
T8/T5HO	3' 4"	32.4	1.6:1	70.5	1.6:1
	4' 8"	30.1	1.5:1	65.4	1.6:1
	5' 4"	28.8	1.5:1	62.6	1.6:1
	6' 8"	25.9	1.5:1	56.4	1.5:1

## 3' FLUORESCENT LAMPS

	Spacing	Ambient Only		Exam	
T5/T5HO	3' 4"	25.0	1.6:1	53.7	1.6:1
	4' 8"	23.3	1.5:1	49.9	1.6:1
	5' 4"	22.3	1.5:1	47.7	1.6:1
	6' 8"	20.1	1.5:1	43.0	1.5:1
T8/T5HO	3' 4"	23.6	1.6:1	50.1	1.6:1
	4' 8"	21.9	1.5:1	46.5	1.6:1
	5' 4"	20.9	1.5:1	44.5	1.6:1
	6' 8"	18.8	1.5:1	40.1	1.5:1

Room: 12'x12' | Ceiling Height: 9' | Reflectances: 80/50/20 | Light Loss Factor: 0.85  
Light levels calculated in AGI-32. Calculations do not include any furniture or partitions.