

Metalux AP Series

DESCRIPTION

FM series is a versatile LED ceiling or wall mount series which can be used in a broad range of residential and commercial applications. This series provides customers with a high quality luminaire utilizing the latest LED, solid state lighting and electronic driver technology for optimal performance and maximized energy efficiency. With a traditional opal white lens, the FM series produces even, uniform light distribution and is an ideal choice for offices, corridors, stairways, bedroom, closet and foyers applications and T8 replacing incandescent, circline or compact fluorescent lamps.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

Housing consists of die formed steel which is post painted to offer the ideal aesthetics. Diffuser are white opal injection molded acrylic blends offering the ideal light distribution. These lens are offered in three different sizes: 11, 15, 19 inch models. Lens are attached with easy mount tabs.

Controls

Equipped standard with non-dimmable electronic drivers which provides extensive energy savings over existing fluorescent lamp options. All drivers are suitable for 120V applications. Dimmable to 10% compatible with most Triac dimmers.

Electrical

Long-Life LED system coupled with electrical driver to deliver optimal performance. LEDs are 4000K with a typical CRI 80. Projected life is 50,000 hours at 70% lumen output.

Shielding

Specially developed LED lens blend allows this product series to offer optimal light out and providing smooth even illumination with no pixilation. Lenses are designed from smooth opal white acrylic and provide 360° uniform light distribution. Lens is easily removed for installation and maintenance.

Installation

Fixture may be surface (wall or ceiling) mounted.

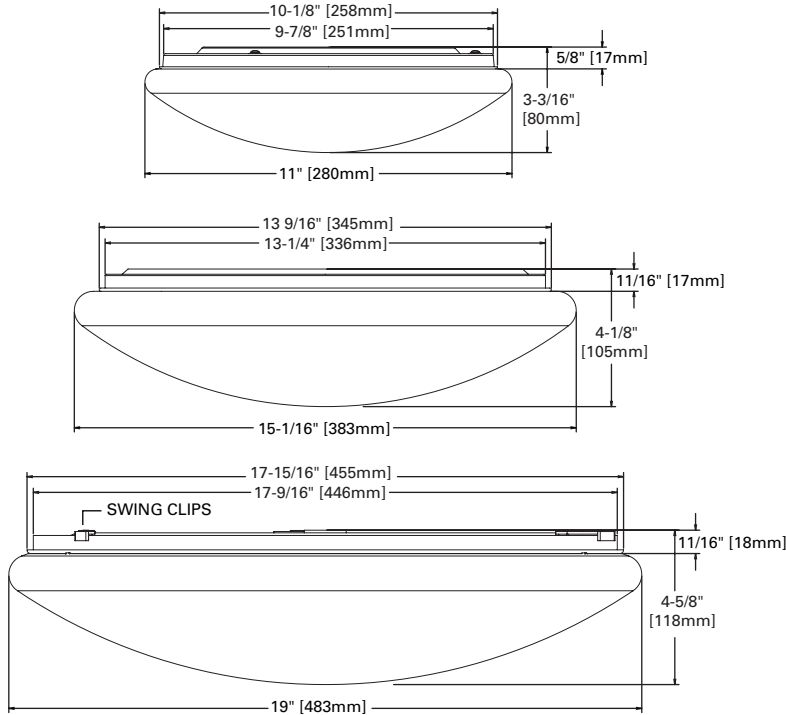
Compliance

UL/CUL Listed. Energy Star Qualified. Lighting Facts Approved. Suitable for Damp locations. Models less than 4 inches are ADA Compliant.



FM LED Flushmount

Wall or Ceiling Mount



ORDERING INFORMATION

Catalog No.	UPC	I2of5
FM11WR40R	080083770083	10080083770080
FM15WR40R	080083760466	10080083760463
FM19WR40R	080083760473	10080083760470

WATTAGE

Size	4000K	Watts
11"	1100	13.5
15"	1700	21.3
19"	2450	30.5

SHIPPING DATA

Catalog No.	Individual Wt.	Master Pack
FM11	1.8 lbs.	4
FM15	3.5 lbs.	4
FM19	5.55 lbs.	2

4000K LIGHTING FACTS

PRODUCT SPECIFICATIONS

Lumens (Light Output) 1100

Watts 13.3

Lumens Per Watt (Efficacy) 83

Color Accuracy (CRI) 80

Light Color (CCT) 4000K
Correlated Color Temperature (CCT)

FM11WR40

PRODUCT SPECIFICATIONS

Lumens (Light Output) 1700

Watts 20.2

Lumens Per Watt (Efficacy) 83

Color Accuracy (CRI) 80

Light Color (CCT) 4000K
Correlated Color Temperature (CCT)

FM15WR40

PRODUCT SPECIFICATIONS

Lumens (Light Output) 2450

Watts 30.5

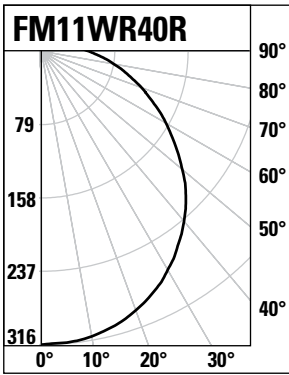
Lumens Per Watt (Efficacy) 80

Color Accuracy (CRI) 80

Light Color (CCT) 4000K
Correlated Color Temperature (CCT)

FM19WR40

PHOTOMETRICS - 4000K



Description
11" Circular LED flush mount luminaire

CCT = 4000K
Lumens = 1162.7
Input Watts = 13.3
Efficacy = 87.4
Test Report = P27996

Zonal Lumen Summary

Zone	Lumens	% Fixture
0°-30°	248.2	21.3
0°-40°	408.7	35.2
0°-60°	736	63.3
0°-90°	1041.5	89.6
0°-180°	1162.7	100

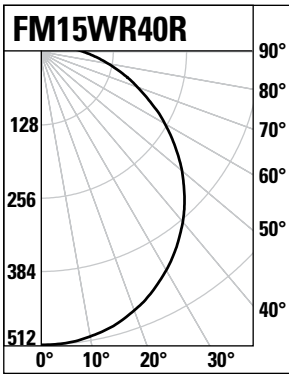
Coefficients of Utilization

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	60	10	50	30	10	50	30	10	0			
RCR																								
0	117	117	117	117	113	113	113	113	105	105	105	99	99	99	92	92	92	90						
1	104	99	94	89	100	95	91	87	89	85	82	83	80	77	78	76	73	70						
2	94	85	77	71	90	82	75	69	77	71	66	72	67	63	67	63	60	57						
3	85	74	65	58	82	72	64	57	67	60	55	63	57	52	59	54	50	47						
4	78	65	56	49	75	63	54	48	59	52	46	56	49	44	52	47	43	40						
5	71	58	49	42	69	56	48	41	53	45	40	50	43	38	47	41	37	34						
6	66	52	43	36	63	51	42	36	48	40	35	45	38	33	43	37	32	30						
7	61	47	38	32	59	46	37	31	43	36	30	41	34	30	39	33	29	26						
8	57	43	34	28	55	42	34	28	40	32	27	38	31	26	36	30	26	23						
9	53	39	31	25	51	38	30	25	36	29	24	35	28	24	33	27	23	21						
10	50	36	28	23	48	35	28	23	34	27	22	32	26	21	30	25	21	19						

Candlepower

0°	Flux
0°	316
5°	315 30
15°	306 86
25°	286 132
35°	256 160
45°	220 170
55°	176 158
65°	134 133
75°	96 102
85°	64 56
90°	51 28



Description
15" Circular LED flush mount luminaire

CCT = 4000K
Lumens = 1880.8
Input Watts = 20.3
Efficacy = 92.7
Test Report = P27998

Zonal Lumen Summary

Zone	Lumens	% Fixture
0°-30°	401.9	21.4
0°-40°	662.2	35.2
0°-60°	1195.4	63.6
0°-90°	1673.9	89
0°-180°	1880.8	100

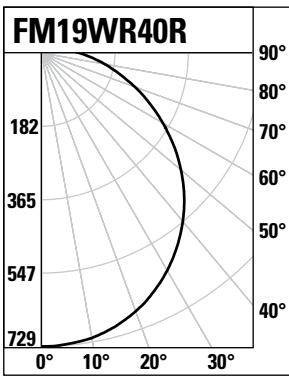
Coefficients of Utilization

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	60	10	50	30	10	50	30	10	0			
RCR																								
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89						
1	104	99	94	89	100	95	91	87	89	85	82	83	80	78	78	76	73	70						
2	94	85	78	71	90	82	75	70	77	71	66	72	67	63	67	64	60	57						
3	85	74	66	59	82	72	64	57	67	60	55	63	57	53	59	54	50	48						
4	78	65	56	49	75	63	55	48	59	52	46	56	50	45	52	47	43	40						
5	72	58	49	42	69	56	48	41	53	46	40	50	43	38	47	41	37	35						
6	66	52	43	37	63	51	42	36	48	40	35	45	39	34	43	37	32	30						
7	61	47	38	32	59	46	38	32	43	36	31	41	34	30	39	33	29	26						
8	57	43	34	28	55	42	34	28	40	32	27	38	31	26	36	30	26	24						
9	53	39	31	25	51	38	31	25	36	29	24	35	28	24	33	27	23	21						
10	50	36	28	23	48	35	28	23	34	27	22	32	26	21	30	25	21	19						

Candlepower

0°	Flux
0°	512
5°	511 49
15°	496 140
25°	463 213
35°	416 260
45°	357 275
55°	288 258
65°	215 214
75°	150 159
85°	96 84
90°	75 41



Description
19" Circular LED flush mount luminaire

CCT = 4000K
Lumens = 2552.5
Input Watts = 30.6
Efficacy = 83.4
Test Report = P28000

Zonal Lumen Summary

Zone	Lumens	% Fixture
0°-30°	570.3	22.3
0°-40°	937.7	36.7
0°-60°	1682.5	65.9
0°-90°	2325.3	91.1
0°-180°	2552.5	100

Coefficients 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	60	10	50	30	10	50	30	10	0			
RCR																								
0	117	117	117	117	113	113	113	113	106	106	106	100	100	100	94	94	94	91						
1	105	99	95	90	101	96	92	88	90	87	83	85	82	79	80	77	75	73						
2	95	86	78	72	91	83	76	71	78	72	68	73	69	65	69	65	62	59						
3	86	75	66	59	83	73	65	58	68	62	56	64	59	54	61	56	52	49						
4	79	66	57	50	76	64	56	49	61	53	47	57	51	46	54	49	44	42						
5	72	59	50	43	69	57	49	42	54	47	41	51	45	40	48	43	38	36						
6	67	53	44	37	64	51	43	37	49	41	36	46	40	35	44	38	34	31						
7	62	48	39	33	59	47	38	32	44	37	31	42	35	31	40	34	30	28						
8	57	44	35	29	55	43	34	29	40	33	28	39	32	27	37	31	27	24						
9	54	40	32	26	52	39	31	26	37	30	25	35	29	24	34	28	24	22						
10	50	37	29	23	48	36	28	23	34	27	23	33	27	22	31	26	22	20						

Candlepower

0°	Flux
0°	729
5°	726 69
15°	704 199
25°	656 303
35°	587 367
45°	501 386
55°	401 358
65°	296 294
75°	200 212
85°	124 109
90°	94 52