

**Los Angeles Lakers Headquarters**

2275 East Mariposa Avenue  
El Segundo, California 90245

RA Rec'd 030116  
Returned 031416  
RFI Code A1

**Request for Information****RFI 184 - Light Fixture F29.B Mounting Detail**

Date Submitted 3/1/2016

To Fred Hofmann

From Robert Bowman

Date Required 3/8/2016

Rossetti

Morley Construction Company

Discipline Electrical

Tel: (313) 463-5151

Tel: 310-399-1600

Author RFI Ref. None

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rbowman@morleybuilders.com

Document Ref. Number  
**SL-102**

Title  
LEVEL 1 - SOUTH LIGHTING RCP

Revision  
Jan 15, 2016 - No: 3

**Question**

Attachments None

Sheet SL-102 calls for a cove light fixture, F29.B, at Restrooms 1056 and 1057. These rooms, however, open ceilings. Please provide a mounting detail for these fixtures. If a soffit is to be constructed, please provide construction details.

**Answer**

Date Answered \_\_\_\_\_ Answered By \_\_\_\_\_

**KGM RFI 184 ANSWER:**

F29.B fixtures at restrooms 1056 and 1057 to be replaced with wall mounted linear fixtures, F28.A (18 ft) and F28.B (19.5 ft) as indicated on the drawing shown below. Cutsheet for F28 fixture is attached.

This clarification is interpreted to be within the scope of referenced contracts issued in accordance with the Contract Documents, and without change in Contract Sum or Contract Time, and, as such, is not an authorization for work beyond the scope of the contract.

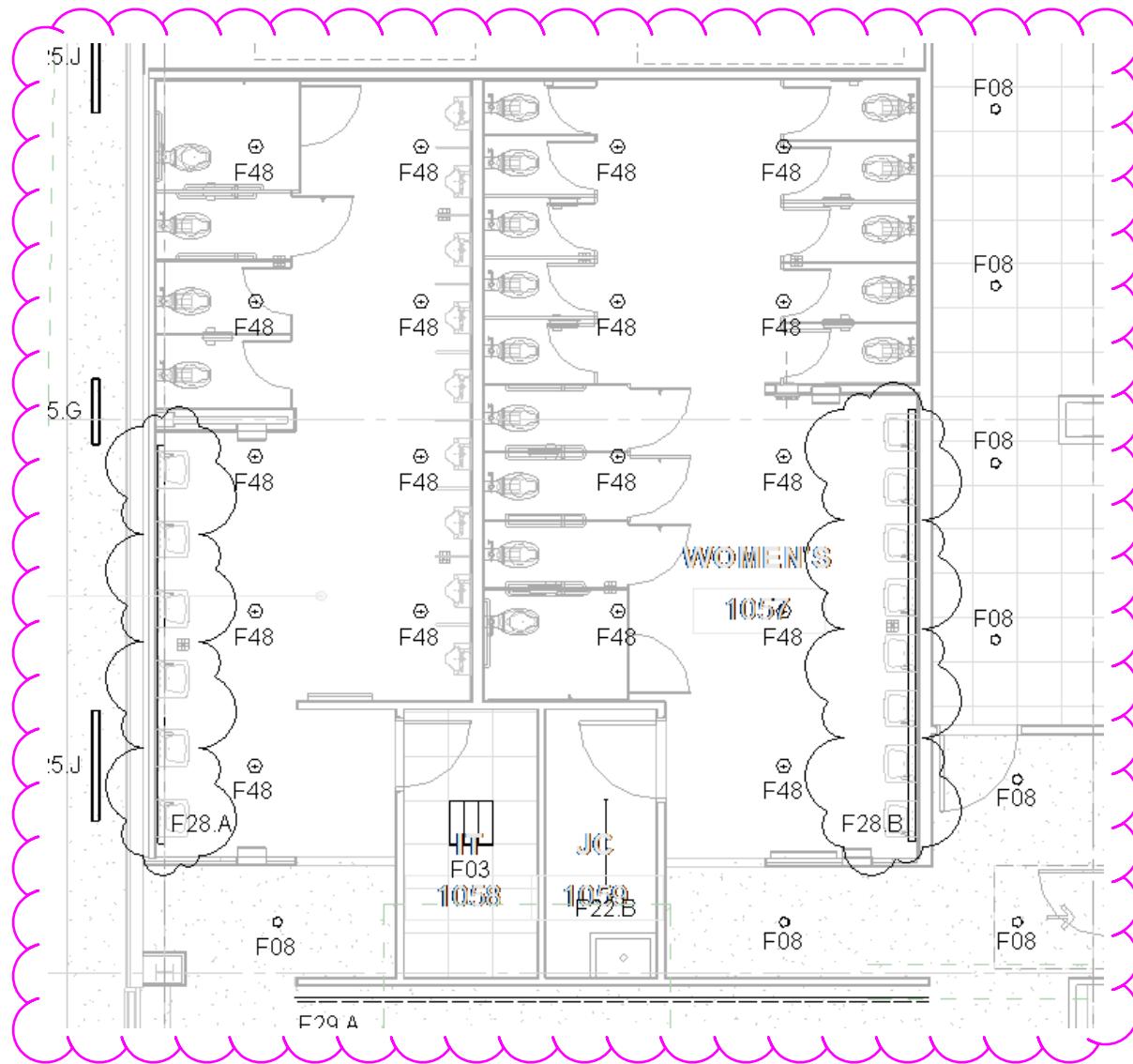
**Project:**  
**RFI Number:**  
**RFI Subject:**  
**RFI Question:**

Los Angeles Lakers Headquarters  
184  
Light Fixture F29.B Mounting Detail

Sheet SL-102 calls for a cove light fixture, F29.B, at Restrooms 1056 and 1057. These rooms, however, open ceilings. Please provide a mounting detail for these fixtures. If a soffit is to be constructed, please provide construction details.

**KGM RFI 184 ANSWER:**

F29.B fixtures at restrooms 1056 and 1057 to be replaced with wall mounted linear fixtures, F28.A (18 ft) and F28.B (19.5 ft) as indicated on the drawing shown below. Cutsheet for F28 fixture is attached.





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ARCHITECTURAL LIGHTING

**PRACTICE FACILITY - KGM #14098**

ISSUED FOR CONSTRUCTION

Mar 11, 2016

△ REV

**Fixture Type:**

**F28.A**

**18 FT WALL MOUNTED LINEAR LED FIXTURE**

*Manufacturer:* AXIS

*Fixture Wattage:* 98.64w

*Fixture Line:* BOX MINI LED

*Fixture Voltage:* 277

*Fixture:* SURFACE MOUNT LINEAR

*Load Type:* 0-10V

*Catalog #:* MBSLED-B3-MF-600-90-30-S-S18-FINISH-277-D-1

*Mounting:* WALL MOUNT

*Lamp Spec:* LED, 3000K, 600 lm/ft, 5.48 w/ft





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ARCHITECTURAL LIGHTING

## PRACTICE FACILITY - KGM #14098

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Fixture Type:

F28.A

### Box mini LED SURFACE MOUNT

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[F] 514.948.6271  
www.axislighting.com

#### ● PROJECT INFORMATION

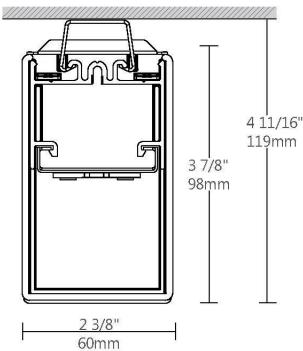
Project:

Type:

Notes:



#### ● DIMENSIONS - SECTION VIEWS



#### PERFORMANCE PER LINEAR FOOT AT 3500K

NOMINAL LUMEN OUTPUT	INPUT WATTS*	EFFICACY
600 lm/ft	5.48 W/ft	111 lm/W

Please consult factory for custom lumen output and wattage.



\*Check the latest update on the DLC website for complete information. Not all versions may be DLC qualified.



#### ● ORDERING CODE

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

#### ● PRODUCT SPECIFICATIONS

1 PRODUCT ID	2 VERSION	3 LIGHT ENGINE	4 NOM.LUMENS/FT	5 CRI	6 COLOUR TEMP.	7 SHIELDING	8 LENGTH/FT	9 FINISH
MBSLED	mini box surface led	B3 version 3	MF mid flex LED	500 500 lm/ft	80 80 CRI	30 3000 K	2 2'	AP aluminum paint
				600 600 lm/ft	90 90 CRI <sup>(1)</sup>	35 3500 K	3 3'	W white
				800 800 lm/ft		40 4000 K	4 4'	BLK black
				1000 1000 lm/ft			6 6'	C custom
							8 8'	
							12 12'	
							S# System Run	

(1) Not available with 4000K

109 VOLTAGE	11 DRIVER	12 CIRCUITS	13 MOUNTING/SUSPENSION	14 BATTERY (OPTIONAL)	15 OTHER (OPTIONAL)
120 120 V	D dimming (0-10V) DP dimming (0-10V) 1% LT lutron <sup>(2)</sup> BI bi-level dimming O other <sup>(3)</sup>	1 1 circuit 2 2 circuits +E# emergency circuit <sup>(4)</sup> +NL# night light circuit <sup>(4)</sup> +GTD# generator transfer device <sup>(4)</sup>	S surface drywall ceiling SB surface t bar ceiling SC surface solid ceiling	B# battery pack 4' sections <sup>(5)</sup>	F fuse <sup>(6)</sup> FW# flex whip (6' std) <sup>(7)</sup>
277 277 V					
347 347 V					
UNV universal					
	(2) Standard with LED (3) Please consult factory	(4) Specify quantity		(5) Specify quantity Please consult factory Requires 120V or 277V	(6) Requires 120V or 277V (7) Specify quantity

#### 16 CUSTOM (OPTIONAL)

C custom

Please specify

FILE NAME:MBS.LED-B3.SPEC March 8, 2016

Product design and development is an ongoing process at Axis Lighting. We reserve the right to change specifications. Contact Axis for the latest product information.



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## SURFACE MOUNT

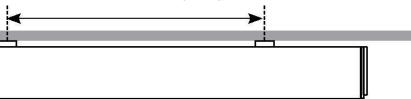
## ● LIGHT DISTRIBUTION



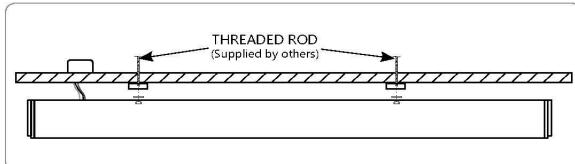
## ● MOUNTING SPACING

Between Mounting Points:

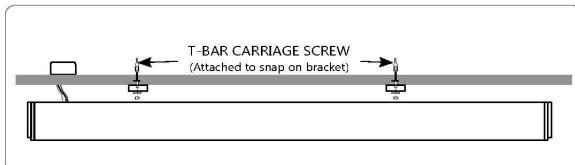
MINI BOX 4'	(32")
MINI BOX 8'	(80")
MINI BOX 12'	(128")



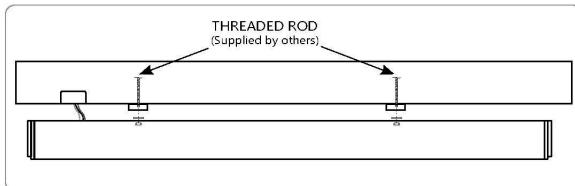
## ● MOUNTING DETAILS



## S SURFACE MOUNT DRYWALL CEILING



## SB SURFACE MOUNT T-BAR CEILING



## SC SURFACE MOUNT SOLID CEILING

● Installation sheets for all mounting options are available at:  
[www.axislighting.com](http://www.axislighting.com)

## ● WEIGHT

MINI BOX 4 ft	8.4 lbs / 3.9 Kg
MINI BOX 8 ft	16.8 lbs / 7.7 Kg
MINI BOX 12 ft	25.2 lbs / 11.6 Kg



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[www.axislighting.com](http://www.axislighting.com)

## ● SYSTEMS (#)

Runs of MINI BOX that are greater than 12ft in length are designated as systems (#). This means that the run is comprised of a combination of sections to be assembled on site using our joining system. For more information on systems and joining, please refer to the MINI BOX installation sheets available for download at [www.axislighting.com](http://www.axislighting.com)

## ● OTHER MOUNTING OPTIONS

MINI BOX is also available in pendant and wall mounted options.

● Specification sheets for all mounting options are available for download at [www.axislighting.com](http://www.axislighting.com)

## ● SPECIFICATIONS

## CONSTRUCTION

Housing	Extruded aluminium (0.070" nominal) up to 70% recycled content
End Cap	Die cast zinc (0.065" nominal)
Joiners	Die cast zinc (0.070" nominal)
Interior Brackets	Die formed Sheet Steel (20 gauge)
Reflectors	Die formed Sheet Steel (18 gauge)
Lens joiners	Die cast zinc (0.070" nominal)
Satin lens	Acrylic satin finish (0.060" nominal)

## ELECTRICAL

LED	Use of OptimaLED technology based on mid-flux LED
Input Voltage	120V, 277V, 347V, UNV.

Driver Dimming, HiLume, EcoSystem, DALI,

CRI Minimum 80 color rendering index

CCT Choice of 3000k, 3500k and 4000k color temperature with a great color consistency (within 3.5-step MacAdam ellipse).

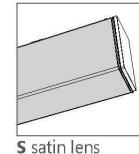
LED life Minimum 50,000h with 70% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.

## Thermal management

Aluminium housing acting as the heat spreader to maximize life.

Emergency Emergency battery pack or emergency circuit optional.

## ● OPTICS OPTIONS



## ● FINISH

Aluminium paint, Powder Coated and custom finishes are also available.

## ● APPROVALS

Certified to UL and CUL standards   
Suitable for damp locations.

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ARCHITECTURAL LIGHTING**PRACTICE FACILITY - KGM #14098**

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Mar 11, 2016

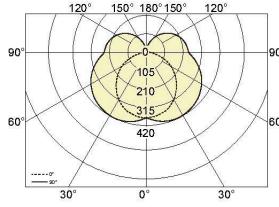
△ REV

**Fixture Type:****F28.A****Box mini LED SURFACE MOUNT**

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**axis** LIGHTING  
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 [F] 514.948.6271  
[www.axislighting.com](http://www.axislighting.com)

**● PHOTOMETRIC DATA**

600 lm/ft


**PHOTOMETRIC CURVE**

Luminaire Lumens: 600 lm/ft

Input Watts: 5.48 W/ft

Efficacy: 111 lm/w

IES FILE: MBSLED-B3-MF-600-80-35-S-4.IES

TESTED ACCORDING TO IES LM-79-2008

Vertical Angle	CANDELA DISTRIBUTION				
	0	22.5	45	67.5	90
0	378	378	378	378	378
5	375	381	385	389	392
15	361	380	395	407	412
25	333	363	392	412	420
35	293	335	376	405	415
45	245	298	351	389	402
55	191	253	318	364	379
65	131	202	277	331	348
75	72	150	231	288	306
85	20	100	183	241	260
90	1	80	163	222	240
95	1	79	160	218	236
105	1	75	153	208	225
115	0	69	141	191	207
125	0	60	124	168	182
135	0	47	100	140	152
145	0	34	72	109	118
155	0	24	48	68	82
165	0	11	26	34	45
175	0	2	5	7	3
180	0	0	0	0	0

Zone	ZONAL LUMENS		
	Lumens		
0			
0-10	37		
10-20	111		
20-30	178		
30-40	230		
40-50	263		
50-60	273		
60-70	260		
70-80	227		
80-90	182		
90-100	157		
100-110	145		
110-120	125		
120-130	99		
130-140	71		
140-150	43		
150-160	21		
160-170	7		
170-180	1		

Vertical Angle	LUMINANCE DATA (CD/M <sup>2</sup> )		
	0	45	90
45	5099	5609	5908
55	4859	5665	6067
65	4461	5772	6329
75	3884	6019	6675
85	2801	6629	7365

**i** All IES files for other lamping are available for download at: [www.axislighting.com](http://www.axislighting.com)



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**PRACTICE FACILITY - KGM #14098**

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**Fixture Type:**

**F28.B**

**19.5 FT WALL MOUNTED LINEAR LED FIXTURE**

*Manufacturer:* AXIS

*Fixture Wattage:* 106.86w

*Fixture Line:* BOX MINI LED

*Fixture Voltage:* 277

*Fixture:* SURFACE MOUNT LINEAR

*Load Type:* 0-10V

*Catalog #:* MBSLED-B3-MF-600-90-30-S-S19.5-FINISH-277-D-1

*Mounting:* WALL MOUNT

*Lamp Spec:* LED, 3000K, 600 lm/ft, 5.48 w/ft





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## PRACTICE FACILITY - KGM #14098

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Fixture Type:

F28.B

### Box mini LED SURFACE MOUNT

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#### ● PROJECT INFORMATION

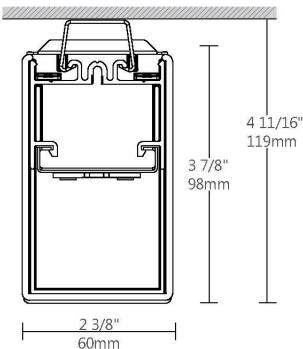
Project:

Type:

Notes:



#### ● DIMENSIONS - SECTION VIEWS



#### PERFORMANCE PER LINEAR FOOT AT 3500K

NOMINAL LUMEN OUTPUT	INPUT WATTS*	EFFICACY
600 lm/ft	5.48 W/ft	111 lm/W

Please consult factory for custom lumen output and wattage.



\*Check the latest update on the DLC website for complete information. Not all versions may be DLC qualified.



#### ● ORDERING CODE

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#### ● PRODUCT SPECIFICATIONS

1 PRODUCT ID	2 VERSION	3 LIGHT ENGINE	4 NOM.LUMENS/FT	5 CRI	6 COLOUR TEMP.	7 SHIELDING	8 LENGTH/FT	9 FINISH
MBSLED	mini box surface led	B3 version 3	MF mid flex LED	500 500 lm/ft	80 80 CRI	30 3000 K	2 2'	AP aluminum paint
				600 600 lm/ft	90 90 CRI <sup>(1)</sup>	35 3500 K	3 3'	W white
				800 800 lm/ft		40 4000 K	4 4'	BLK black
				1000 1000 lm/ft			6 6'	C custom
							8 8'	
							12 12'	
							S# System Run	

(1) Not available with 4000K

109 VOLTAGE	11 DRIVER	12 CIRCUITS	13 MOUNTING/SUSPENSION	14 BATTERY (OPTIONAL)	15 OTHER (OPTIONAL)
120 120 V	D dimming (0-10V) DP dimming (0-10V) 1% LT lutron <sup>(2)</sup> BI bi-level dimming O other <sup>(3)</sup>	1 1 circuit 2 2 circuits +E# emergency circuit <sup>(4)</sup> +NL# night light circuit <sup>(4)</sup> +GTD# generator transfer device <sup>(4)</sup>	S surface drywall ceiling SB surface t bar ceiling SC surface solid ceiling	B# battery pack 4' sections <sup>(5)</sup>	F fuse <sup>(6)</sup> FW# flex whip (6' std) <sup>(7)</sup>
277 277 V					
347 347 V					
UNV universal					
	(2) Standard with LED (3) Please consult factory	(4) Specify quantity		(5) Specify quantity Please consult factory Requires 120V or 277V	(6) Requires 120V or 277V (7) Specify quantity

#### 16 CUSTOM (OPTIONAL)

C custom

Please specify

FILE NAME:MBS.LED-B3.SPEC March 8, 2016

Product design and development is an ongoing process at Axis Lighting. We reserve the right to change specifications. Contact Axis for the latest product information.



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## SURFACE MOUNT

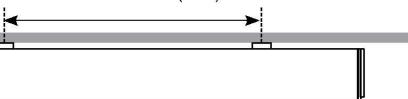
## ● LIGHT DISTRIBUTION



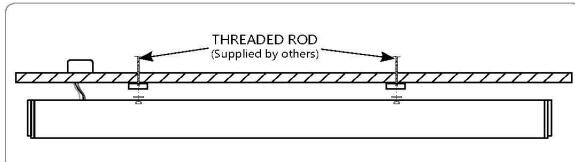
## ● MOUNTING SPACING

Between Mounting Points:

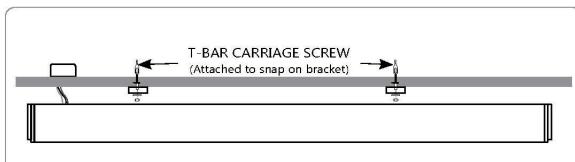
MINI BOX 4'	(32")
MINI BOX 8'	(80")
MINI BOX 12'	(128")



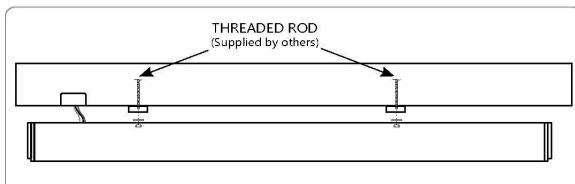
## ● MOUNTING DETAILS



## S SURFACE MOUNT DRYWALL CEILING



## SB SURFACE MOUNT T-BAR CEILING



## SC SURFACE MOUNT SOLID CEILING

● Installation sheets for all mounting options are available at:  
[www.axislighting.com](http://www.axislighting.com)

## ● WEIGHT

MINI BOX 4 ft	8.4 lbs / 3.9 Kg
MINI BOX 8 ft	16.8 lbs / 7.7 Kg
MINI BOX 12 ft	25.2 lbs / 11.6 Kg



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## ● SYSTEMS (#)

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## ● OTHER MOUNTING OPTIONS

MINI BOX is also available in pendant and wall mounted options.

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## ● SPECIFICATIONS

## CONSTRUCTION

Housing	Extruded aluminium (0.070" nominal) up to 70% recycled content
End Cap	Die cast zinc (0.065" nominal)
Joiners	Die cast zinc (0.070" nominal)
Interior Brackets	Die formed Sheet Steel (20 gauge)
Reflectors	Die formed Sheet Steel (18 gauge)
Lens joiners	Die cast zinc (0.070" nominal)
Satin lens	Acrylic satin finish (0.060" nominal)

## ELECTRICAL

LED	Use of OptimaLED technology based on mid-flux LED
Input Voltage	120V, 277V, 347V, UNV.
Driver	Dimming, HiLume, EcoSystem, DALI,
CRI	Minimum 80 color rendering index
CCT	Choice of 3000k, 3500k and 4000k color temperature with a great color consistency (within 3.5-step MacAdam ellipse).
LED life	Minimum 50,000h with 70% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.

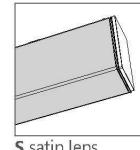
## Thermal management

Aluminium housing acting as the heat spreader to maximize life.

Emergency

Emergency battery pack or emergency circuit optional.

## ● OPTICS OPTIONS



## ● FINISH

Aluminium paint, Powder Coated and custom finishes are also available.

## ● APPROVALS

Certified to UL and CUL standards   
Suitable for damp locations.

**KGM**KAPLAN GEHRING MCCARROLL  
ARCHITECTURAL LIGHTING**PRACTICE FACILITY - KGM #14098**

ISSUED FOR CONSTRUCTION

Mar 11, 2016

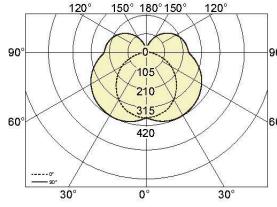
△ REV

**Fixture Type:****F28.B****Box mini LED SURFACE MOUNT**

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**● PHOTOMETRIC DATA**

600 lm/ft


**PHOTOMETRIC CURVE**

Luminaire Lumens: 600 lm/ft

Input Watts: 5.48 W/ft

Efficacy: 111 lm/w

IES FILE: MBSLED-B3-MF-600-80-35-S-4.IES

TESTED ACCORDING TO IES LM-79-2008

**CANDELA DISTRIBUTION**

Vertical Angle	Horizontal Angles				
	0	22.5	45	67.5	90
0	378	378	378	378	378
5	375	381	385	389	392
15	361	380	395	407	412
25	333	363	392	412	420
35	293	335	376	405	415
45	245	298	351	389	402
55	191	253	318	364	379
65	131	202	277	331	348
75	72	150	231	288	306
85	20	100	183	241	260
90	1	80	163	222	240
95	1	79	160	218	236
105	1	75	153	208	225
115	0	69	141	191	207
125	0	60	124	168	182
135	0	47	100	140	152
145	0	34	72	109	118
155	0	24	48	68	82
165	0	11	26	34	45
175	0	2	5	7	3
180	0	0	0	0	0

**ZONAL LUMENS**

Zone	Lumens
0	
0-10	37
10-20	111
20-30	178
30-40	230
40-50	263
50-60	273
60-70	260
70-80	227
80-90	182
90-100	157
100-110	145
110-120	125
120-130	99
130-140	71
140-150	43
150-160	21
160-170	7
170-180	1

**LUMINANCE DATA (CD/M<sup>2</sup>)**

Vertical Angle	Horizontal Angles		
	0	45	90
45	5099	5609	5908
55	4859	5665	6067
65	4461	5772	6329
75	3884	6019	6675
85	2801	6629	7365

**i** All IES files for other lamping are available for download at: [www.axislighting.com](http://www.axislighting.com)