

### INTENDED USE

The MRI-rated recessed downlight comes in sizes 4", 6", and 8". Made with non-ferrous metals to ensure safe and reliable operation in medical imaging suites. Separate light module and fixture housings enable easy installation of the remote power supply. With antimicrobial trim finishes to help mitigate infection risks throughout medical facilities. IC-Rated housing available, wall wash for 6" and 8", and lensed in all sizes providing the sharpest cutoff to reduce glare and eye shock potential for patients and technicians.

### FEATURES

**Construction:** Non-Ferrous metals.

**Frame & Mounting:** Frame with integrated junction box featuring hinged access covers with spring retaining latches. Vertically adjustable rigid formed mounting brackets that accept a variety of mounting bars with auxiliary nail holes and T-bar slots. T-Bars included, suitable for joist spacing from 12" to 24".

Supports straight conduit runs - (3) 3/4" knockouts.

Through branch wiring - (8) #12 AWG (4 in, 4 out), 90°C conductors. Accessibility to all LED components from below ceiling Flush to the ceiling reflectors, secured by high quality friction clips.

**Cable Length:** 15 Feet of conduit.

**Driver:** 0-10V is standard, other dimming drivers are available (See pg. 2)

**Voltage:** 120-277V

**CRI:** 80+ is standard, 90+ available as an option.

**Life:** L70 50,000 hours

**Warranty:** 5 years carefree for LED module and driver (Labor Not Included)

**Operating Temperature:** -4°F (-20°C) to 86 (30°C)

**Listings:** ETL certified to UL 1598 and UL8750 requirements, Suitable for damp locations, Wet location for lensed models under covered ceiling, Buy American Act (BAA) Compliant.

### Antimicrobial Reflector Finishes



CLA Specular Clear

SGA Soft Glow Clear

WMA White Matte



Open (Non-IC)



Lensed (Non-IC)



Open (IC-Rated)



Lensed (IC-Rated)



**ORDERING INFORMATION** Example: (14135-4-O-11-27-WMA-NIC-VEMI2)

<b>MODEL</b>	<b>14135-4-O</b> 4-inch round Open <b>14135-6-O</b> 6-inch round Open <b>14135-8-O</b> 8-inch round Open	<b>14135-4-L<sup>1</sup></b> 4-inch round Lensed <b>14135-6-L<sup>1</sup></b> 6-inch round Lensed <b>14135-8-L<sup>1</sup></b> 8-inch round Lensed
<b>LUMENS</b>	<b>07</b> 750 <b>11</b> 1100 <b>15</b> 1500 <b>20</b> 2000 <b>30</b> 3000	<b>40</b> 4000 <b>50</b> 5000 <b>60<sup>2</sup></b> 6000 <b>70<sup>2</sup></b> 7000
<b>COLOR TEMPERATURE</b>	<b>27</b> 2700K <b>30</b> 3000K <b>35</b> 3500K	<b>40</b> 4000K <b>50</b> 5000K
<b>CRI</b>	<b>Blank</b> 80+ <i>Standard</i> <b>9</b> 90+ (Not available in 5000K)	
<b>REFLECTOR/LENS</b> <small>*Required for Lensed models.</small>	<b>Blank</b> Medium 60° Open <i>Standard</i> <b>FP</b> Medium 60° Lensed Frosted Polycarbonate <b>CP</b> Medium 60° Lensed Clear Polycarbonate <b>CG</b> Medium 60° Lensed Clear Glass <b>FG</b> Medium 60° Lensed Frosted Glass	<b>PG</b> Medium 60° Lensed Prismatic Glass <b>SG</b> Medium 60° Lensed Fresnel Glass <b>PA</b> Medium 60° Lensed Prismatic Acrylic <b>BS20</b> BeamShaper® Lens, 20° Beam Angle <b>BS40</b> BeamShaper® Lens, 40° Beam Angle <b>BS60</b> BeamShaper® Lens, 60° Beam Angle <b>BS80</b> BeamShaper® Lens, 80° Beam Angle
<b>FINISH</b> <small>*All trims supplied standard with white painted flange.</small>	<b>WMA</b> White Matte Antimicrobial <i>Standard</i> <b>SGA</b> Specular Clear Antimicrobial Soft Glow <b>CLA</b> Clear Antimicrobial	
<b>HOUSING</b>	<b>NIC</b> Non-IC <b>IC</b> IC-Rated	
<b>DRIVER</b>	<b>Blank</b> 0-10V 1% dimming driver <i>Standard</i> <b>TRI</b> Triac (Forward Phase, 120V only) dimming driver (Not available above 5000 lumens). <b>DL2<sup>2</sup></b> Lutron 2-Wire Hi-lume dimming driver (Not available above 3000 lumens). <b>DL3<sup>2</sup></b> Lutron 3 wire Hi-Lume dimming driver (Not available above 3000 lumens). <b>LDE1<sup>2</sup></b> Lutron Hi-lume 1% with Soft-On, Fade-to-Black dimming driver (Not available above 4000 lumens). <b>LDE5<sup>2</sup></b> Lutron 5-Series 5% dimming driver (Not available above 4000 lumens). <b>PEQO<sup>2</sup></b> Lutron Hi-lume Premier 0.1% with Soft-On, Fade-to-Black dimming driver (Not available above 4000 lumens).	
<b>OPTIONS</b>	<b>VEMI2</b> 2-Port EMI Filter <b>VEMI4</b> 4-Port EMI Filter <b>EM7</b> External Emergency Battery, test button & indicator light. For 750-5000 lumen luminaires <b>EM20<sup>2</sup></b> External External Emergency Battery, test button & indicator light. For 6000 & 7000 lumen luminaires.	



Fixture depth = 3.6" at 4000L and 5000L outputs

<sup>1</sup> Surgical applications require lensed (IP65 option)  
<sup>2</sup> Not available with IC-Rated housing.

OPEN

Lumens	Delivered Lumens	Wattage
750lms	685lms	8W
1100lms	1176lms	15W
1500lms	1604lms	20W
2000lms	2253lms	25W
3000lms	3087lms	32W
4000lms	4126lms	45W
5000lms	5158lms	58W
6000lms	6189lms	60W
7000lms	7221lms	84W



Open (Non-IC)



Open (IC-Rated)

LENSED

Lumens	Delivered Lumens	Wattage
750lms	465lms	8W
1100lms	682lms	15W
1500lms	929lms	21W
2000lms	1239lms	27W
3000lms	1859lms	33W
4000lms	2478lms	45W
5000lms	3098lms	58W
6000lms	3718lms	60W
7000lms	4337lms	85W



Lensed (Non-IC)



Lensed (IC-Rated)

## 4-INCH DIMENSIONAL DATA

### 14135-4

Above Ceiling Height with

5/8" Ceiling

- 3.43" < 3000L

- 3.63" 4000L & 5000L

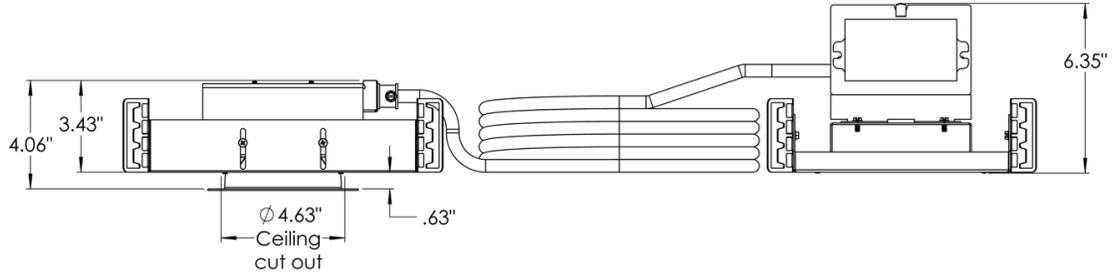
Above Ceiling Height

- Max Ceiling Thickness

1.24" - 2.82"

- Min Ceiling Thickness

0.20" - 3.85"



Not available for IC-Rated housing:

Above Ceiling Height with

5/8" Ceiling

- 6.07" 6000L & 7000L

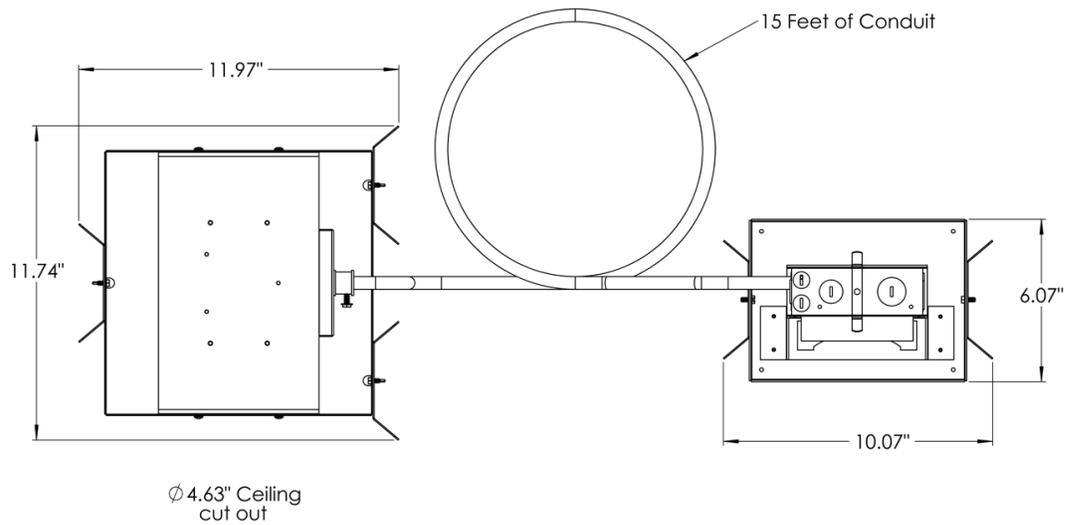
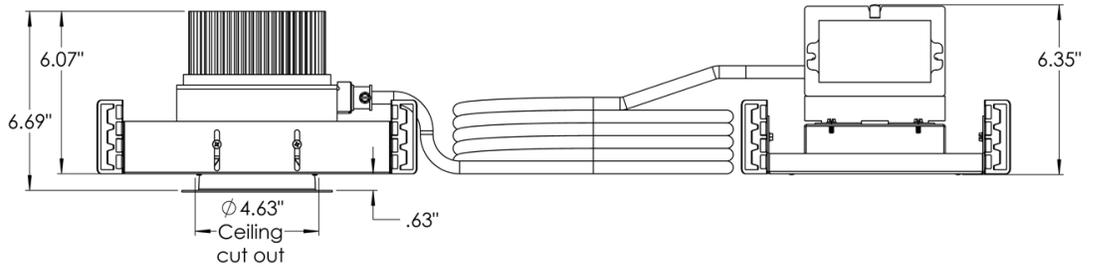
Above Ceiling Height

- Max Ceiling Thickness

1.24" - 5.45"

- Min Ceiling Thickness

0.20" - 6.49"



## 6-INCH DIMENSIONAL DATA OPEN

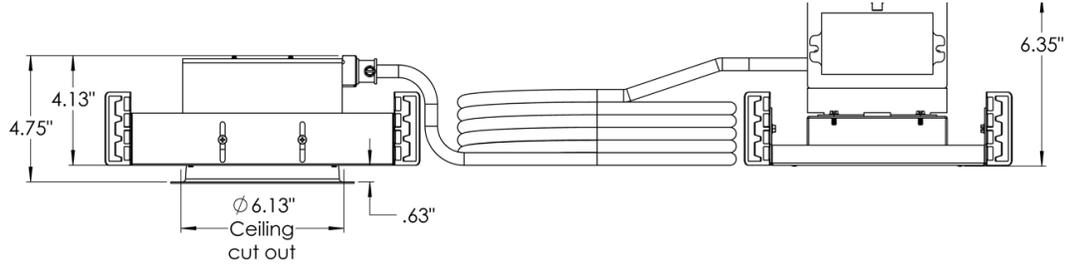
### 14135-6

Above Ceiling Height with  
5/8" Ceiling

- 4.13" ≤ 3000L
- 4.33" 4000L & 5000L

Above Ceiling Height

- Max Ceiling Thickness  
1.18" - 3.57"
- Min Ceiling Thickness  
0.20" - 4.55"



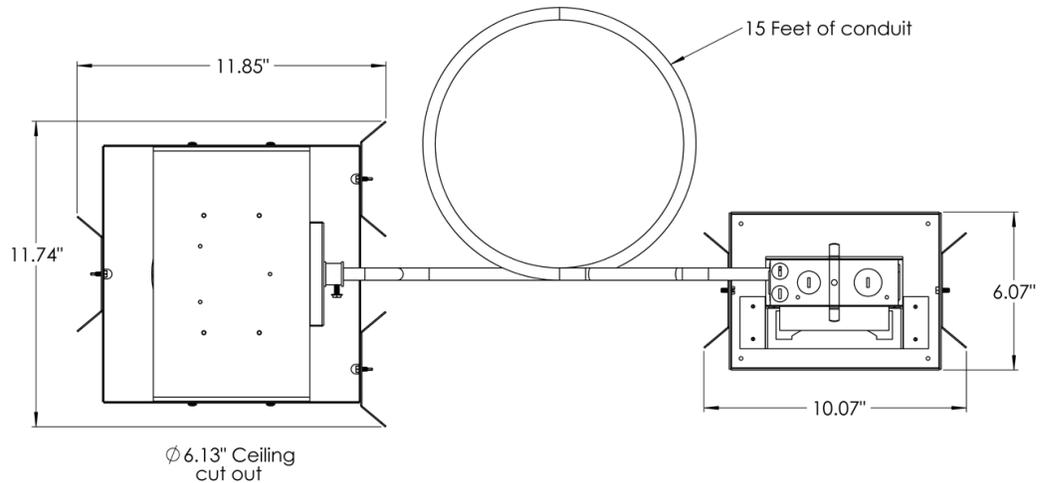
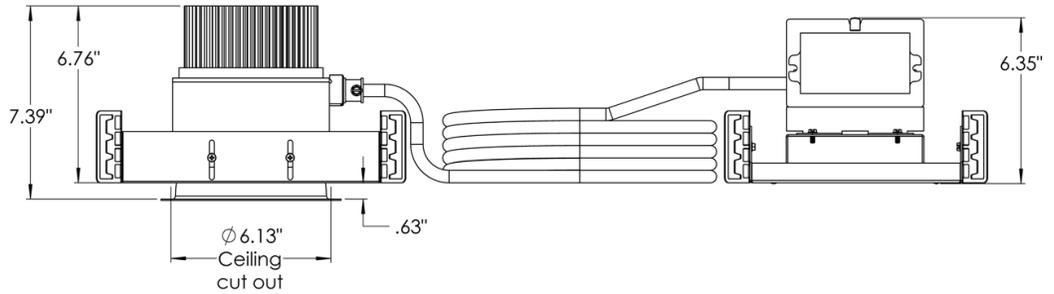
### IC-Rated housing:

Above Ceiling Height with  
5/8" Ceiling

- 6.76" 6000L & 7000L

Above Ceiling Height

- Max Ceiling Thickness  
1.18" - 6.20"
- Min Ceiling Thickness  
0.20" - 7.19"



## 6-INCH DIMENSIONAL DATA LENSED

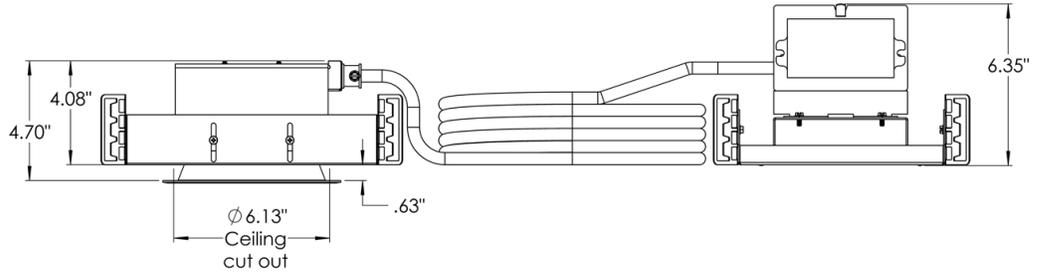
### 14135-6-L

Above Ceiling Height with 5/8" Ceiling

- 4.08" ≤ 3000L
- 4.28" 4000L & 5000L

Above Ceiling Height

- Max Ceiling Thickness 1.14" - 3.57"
- Min Ceiling Thickness 0.17" - 4.54"



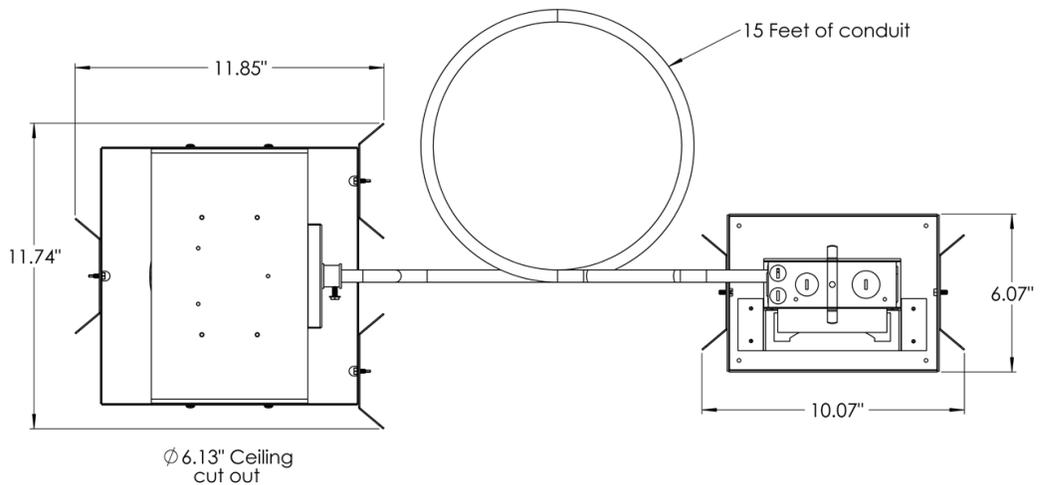
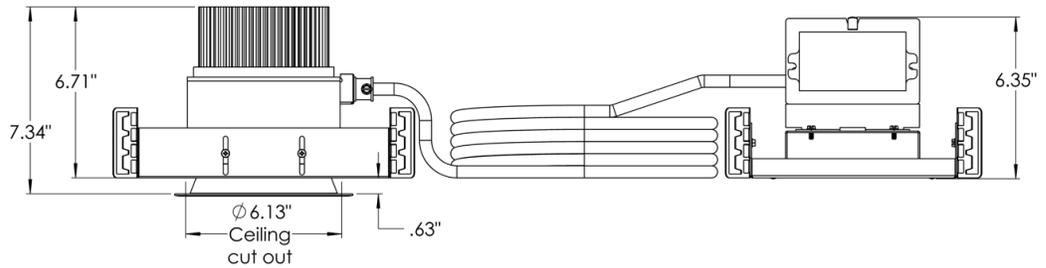
### IC-Rated housing:

Above Ceiling Height with 5/8" Ceiling

- 6.71" 6000L & 7000L

Above Ceiling Height

- Max Ceiling Thickness 1.14" - 6.20"
- Min Ceiling Thickness 0.17" - 7.17"

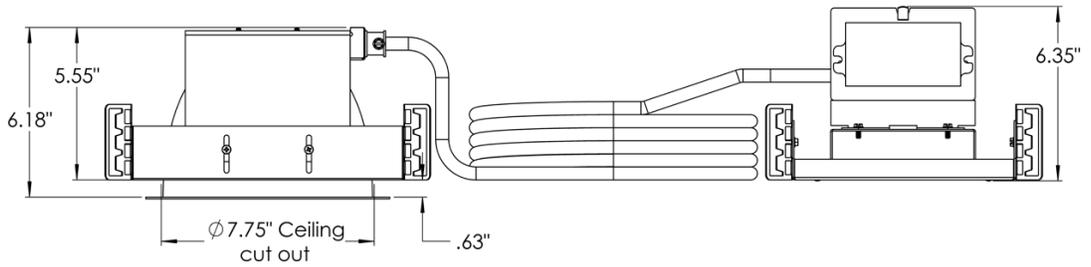


## 8-INCH DIMENSIONAL DATA | NON IC-RATED HOUSING

### 14135-8

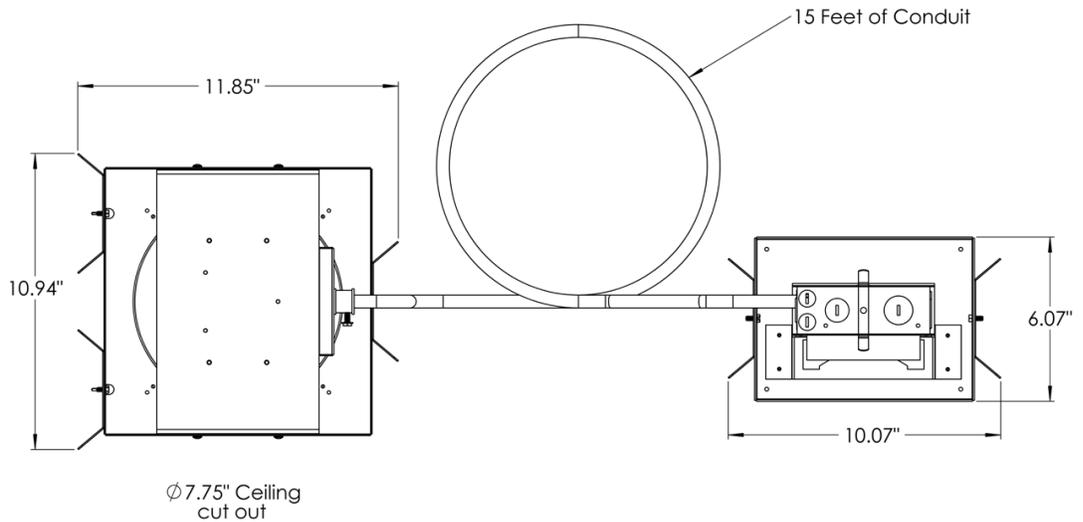
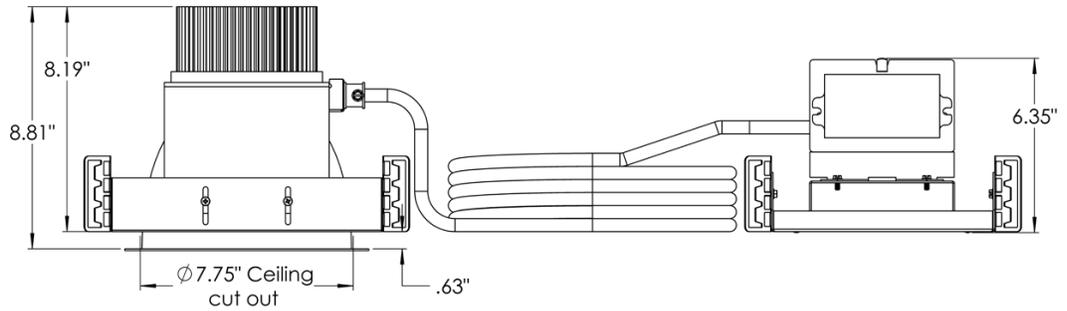
Above Ceiling Height  
with 5/8" Ceiling  
• 5.55" < 3000L  
• 5.75" 4000L & 5000L

Above Ceiling Height  
• Max Ceiling Thickness  
1.25" - 4.93"  
Min Ceiling Thickness  
0.20" - 5.98"



Above Ceiling Height  
with 5/8" Ceiling  
.819" 6000L & 7000L

Above Ceiling Height •  
Max Ceiling Thickness  
1.25" - 7.56"  
• Min Ceiling Thickness  
0.20" - 8.61"

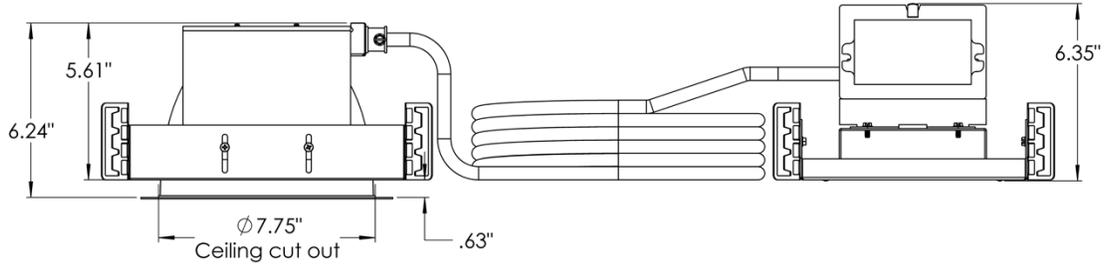


## 8-INCH DIMENSIONAL DATA | IC-RATED HOUSING

### 14135-8

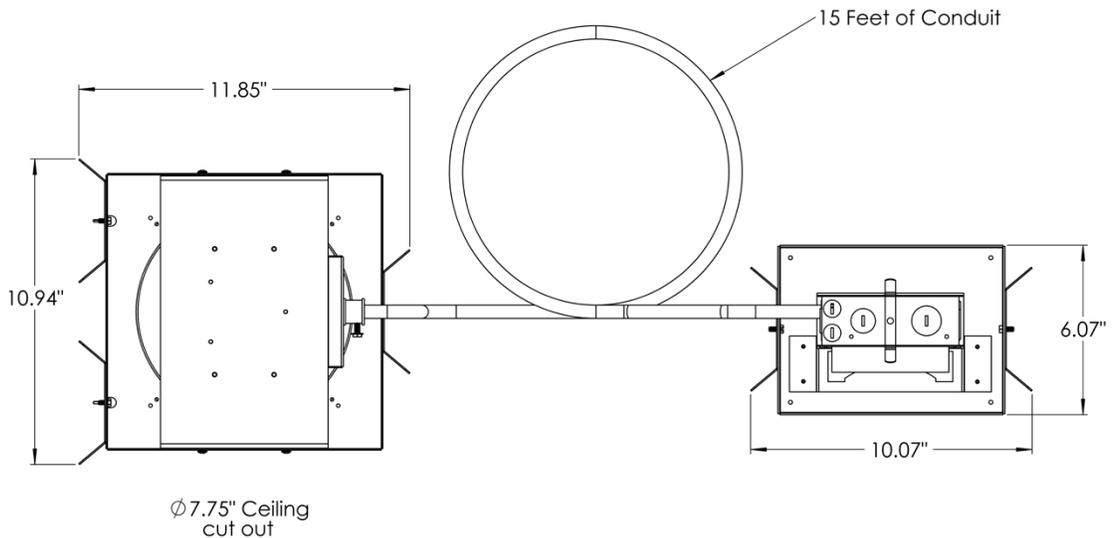
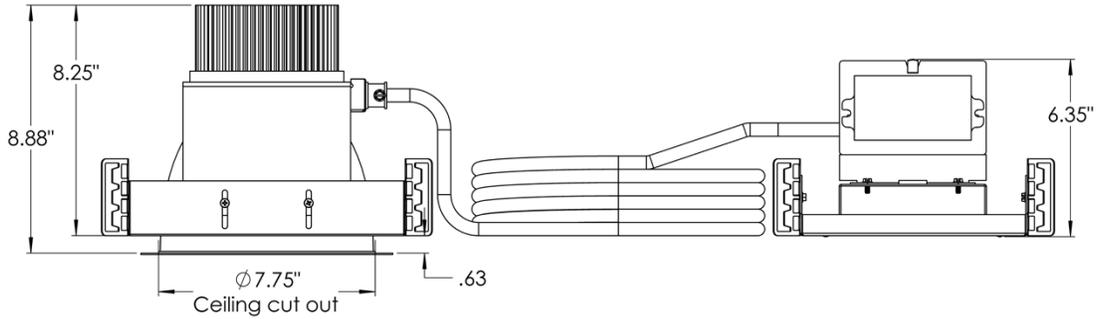
- Above Ceiling Height with 5/8" Ceiling
- 5.61"  $\leq$  3000L
  - 5.81" 4000L & 5000L

- Above Ceiling Height
- Max Ceiling Thickness 1.31" - 4.93"
  - Min Ceiling Thickness 0.26" - 5.98"



- Above Ceiling Height with 5/8" Ceiling
- 8.25" 6000L & 7000L

- Above Ceiling Height
- Max Ceiling Thickness 1.31" - 7.56"
  - Min Ceiling Thickness 0.26" - 8.61"

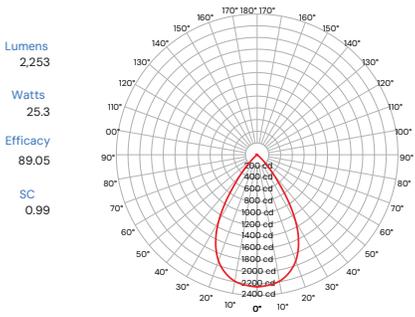


## 4-INCH PHOTOMETRY

14135-4

OPEN

Candel Curve



Cone light

Mounting Height AFF	FC at Center on Floor	Beam Diameter
8.0'	35 fc	10.0'
10.0'	23 fc	12.5'
12.0'	16 fc	15.0'
14.0'	12 fc	17.5'
16.0'	9 fc	20.0'
20.0'	6 fc	24.9'
24.0'	4 fc	29.9'
30.0'	3 fc	37.4'

Candela Table

0.00°	2254
5.00°	2233
11.00°	2175
15.00°	2088
19.50°	1944
33.00°	1033
42.50°	288
55.00°	9
65.00°	6
75.00°	5
85.00°	4
90.00°	0

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0° - 30°	1,556	69%
0° - 40°	2,084	93%
0° - 60°	2,238	99%
60° - 90°	22	1%
0° - 20°	800	36%
20° - 50°	1,477	66%
50° - 70°	45	2%
70° - 90°	9	0%
0° - 90°	2,253	100%
90° - 180°	0	0%
<b>Total</b>	<b>2,253</b>	<b>100%</b>

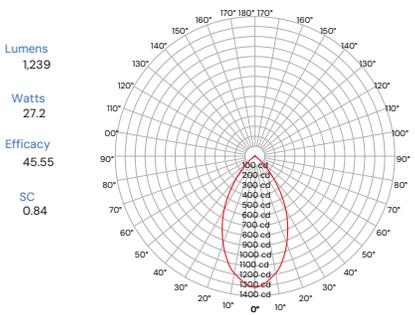
Spacing Criterion

Height	Spacing	Light Level*
8 ft	7.9 ft	~ 35 fc
10 ft	9.9 ft	~ 23 fc
12 ft	11.9 ft	~ 16 fc
8 ft	5.9 ft	~ 63 fc
10 ft	7.4 ft	~ 40 fc
12 ft	8.9 ft	~ 28 fc
8 ft	4.0 ft	~ 141 fc
10 ft	5.0 ft	~ 90 fc
12 ft	5.9 ft	~ 63 fc

\* approximate direct light level at floor based on spacing criterion overlap

LENSED

Candel Curve



Cone light

Mounting Height AFF	FC at Center on Floor	Beam Diameter
8.0'	21 fc	8.8'
10.0'	12 fc	11.0'
12.0'	9 fc	13.2'
14.0'	7 fc	15.4'
16.0'	5 fc	17.6'
20.0'	3 fc	21.9'
24.0'	2 fc	26.3'
30.0'	1 fc	32.9'

Candela Table

0.00°	1314
5.00°	1270.5
11.00°	1175
15.00°	1075.5
19.50°	946
33.00°	511.5
42.50°	224
55.00°	29.5
65.00°	15
75.00°	2
85.00°	0
90.00°	0

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0° - 30°	774	62%
0° - 40°	1,054	85%
0° - 60°	1,222	99%
60° - 90°	40	3%
0° - 20°	420	34%
20° - 50°	793	64%
50° - 70°	87	7%
70° - 90°	2	0%
0° - 90°	1,239	100%
90° - 180°	0	0%
<b>Total</b>	<b>1,239</b>	<b>100%</b>

Spacing Criterion

Height	Spacing	Light Level*
8 ft	6.7 ft	~ 21 fc
10 ft	8.4 ft	~ 13 fc
12 ft	10.1 ft	~ 16 fc
8 ft	5.0 ft	~ 9 fc
10 ft	6.3 ft	~ 37 fc
12 ft	7.6 ft	~ 16 fc
8 ft	3.4 ft	~ 82 fc
10 ft	4.2 ft	~ 53 fc
12 ft	5.0 ft	~ 37 fc

\* approximate direct light level at floor based on spacing criterion overlap

## Multiplier

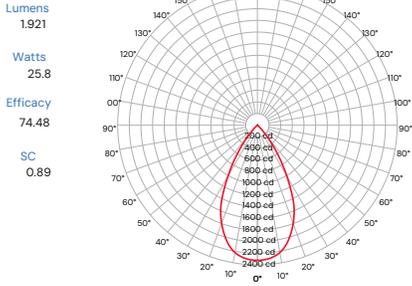
CRI	Multiplier	Kelvin	Multiplier	Reflector Finish	Multiplier
80	1	2700K	0.939	SCL	1
90	0.8	3000K	0.975	SGC	0.95
		3500K	1	WHT	0.87
		4000K	10.35		
		5000K	1.098		

## 6-INCH PHOTOMETRY

14135-6

OPEN

Candel Curve



Cone light

Mounting Height AFF	FC at Center on Floor	Beam Diameter
8.0'	36 fc	8.6'
10.0'	23 fc	10.8'
12.0'	16 fc	12.9'
14.0'	12 fc	15.1'
16.0'	9 fc	17.2'
20.0'	6 fc	21.5'
24.0'	4 fc	25.8'
30.0'	3 fc	32.3'

Candela Table

Beam Angle	Candela
0.00°	2,322
5.00°	2,302
10.00°	2,223
15.00°	2,050
20.00°	1,796
30.00°	1,010
40.00°	275
50.00°	25
60.00°	10
70.00°	5
80.00°	2
90.00°	0

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0° - 30°	1,442	75%
0° - 40°	1,819	95%
0° - 60°	1,910	99%
60° - 90°	11	1%
0° - 20°	788	41%
20° - 50°	1,107	58%
50° - 70°	22	1%
70° - 90°	4	0%
0° - 90°	1,921	100%
90° - 180°	0	0%
<b>Total</b>	<b>1,921</b>	<b>100%</b>

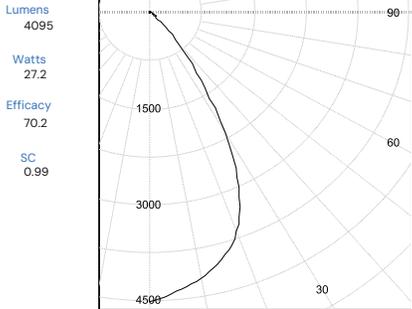
Spacing Criterion

Height	Spacing	Light Level*
8 ft	7.1 ft	~ 36 fc
10 ft	8.9 ft	~ 23 fc
12 ft	10.7 ft	~ 16 fc
8 ft	5.3 ft	~ 65 fc
10 ft	6.7 ft	~ 41 fc
12 ft	8.0 ft	~ 29 fc
8 ft	3.6 ft	~ 145 fc
10 ft	4.5 ft	~ 93 fc
12 ft	5.3 ft	~ 65 fc

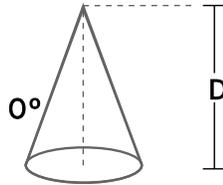
\* approximate direct light level at floor based on spacing criterion overlap

## LENSED

Curve



Cone of light



Candela Table

Degree Vertical	Candela	
0.0	4504	82
2.5	4465	74
5.0	4378	69
7.5	4303	65
10.0	4221	64
12.5	4124	63
15.0	4002	59
20.0	3646	55
22.5	3371	53
25.0	3019	47
27.5	2631	28
30.0	2158	1
32.5	1670	0
35.0	1279	0
37.5	950	0
40.0	658	0
42.5	428	0
45.0	253	0
47.5	139	0
50.0	96	0

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0 - 30	2693	70.6%
0 - 40	3704	90.5%
0 - 60	3993	97.5%
0 - 90	4095	100%
40 - 90	391	9.5%
60 - 90	102	2.5%
90 - 180	0	0%
0 - 180	4095	100%

## Multiplier

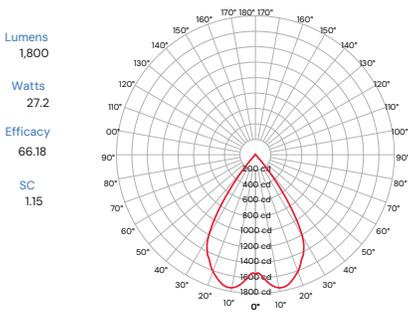
CRI	Multiplier	Kelvin	Multiplier	Reflector Finish	Multiplier
80	1	2700K	0.939	SCL	1
90	0.8	3000K	0.975	SGC	0.95
		3500K	1	WHT	0.87
		4000K	10.35		
		5000K	10.98		

## 8-INCH PHOTOMETRY

14135-8

OPEN

Candela Curve



Cone light

Mounting Height AFF	FC at Center on Floor	Beam Diameter
8.0'	24 fc	10.6'
10.0'	15 fc	13.2'
12.0'	11 fc	15.8'
14.0'	8 fc	18.5'
16.0'	6 fc	21.1'
20.0'	4 fc	26.4'
24.0'	3 fc	31.7'
30.0'	2 fc	39.6'

Candela Table

0.00°	1,545
5.00°	1,644
10.00°	1,751
15.00°	1,723
20.00°	1,609
30.00°	1,207
40.00°	212
50.00°	19
60.00°	9
70.00°	5
80.00°	2
90.00°	0

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0° - 30°	1,303	72%
0° - 40°	1,732	96%
0° - 60°	1,789	99%
60° - 90°	11	1%
0° - 20°	643	36%
20° - 50°	1,135	63%
50° - 70°	19	1%
70° - 90°	4	0%
0° - 90°	1,800	100%
90° - 180°	0	0%
<b>Total</b>	<b>1,800</b>	<b>100%</b>

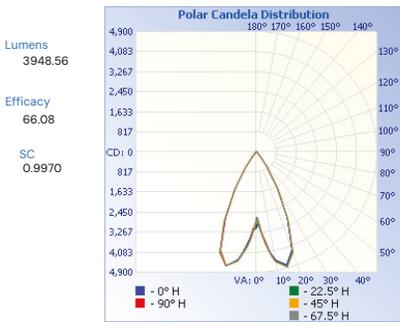
Spacing Criterion

Height	Spacing	Light Level*
8 ft	9.2 ft	~ 24 fc
10 ft	11.5 ft	~ 15 fc
12 ft	13.8 ft	~ 11 fc
8 ft	6.9 ft	~ 43 fc
10 ft	8.6 ft	~ 27 fc
12 ft	10.3 ft	~ 19 fc
8 ft	4.6 ft	~ 97 fc
10 ft	5.8 ft	~ 62 fc
12 ft	6.9 ft	~ 43 fc

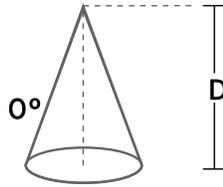
\* approximate direct light level at floor based on spacing criterion overlap

## LENSED

Curve



Cone of light



Center Beam fc

1.7	1,010	1.5	1.7
3.3	268	3.0	3.3
5.0	117	4.6	4.9
6.7	65.0	6.1	6.6
8.3	65.0	7.6	8.2
10.0	29.2	9.1	9.9

Candela Table

0.00°	2,919
1.00°	2,995
3.00°	3,204
5.00°	3,597
7.00°	3,989
9.00°	4,336
10.00°	4,474
15.00°	4,760
20.00°	4,231
25.00°	2,978
30.00°	1,728
35.00°	830
40.00°	297
45.00°	105
50.00°	72
55.00°	65
60.00°	61
65.00°	60
70.00°	39
75.00°	32
80.00°	14
85.00°	14
90.00°	15

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0 - 30	3,028.6	76.7%
0 - 40	3,576.8	90.6%
0 - 60	3,743.3	94.8%
60 - 90	104.6	2.6%
70 - 100	66.7	1.7%
90 - 120	48.6	1.2%
0 - 90	3,847.9	97.4%
90 - 180	0	2.6%
0 - 180	4,095	100%

## Multiplier

CRI	Multiplier	Kelvin	Multiplier	Reflector Finish	Multiplier
80	1	2700K	0.939	SCL	1
90	0.8	3000K	0.975	SGC	0.95
		3500K	1	WHT	0.87
		4000K	10.35		
		5000K	10.98		

## OPTIONS



VEMI2 - 2-Port EMI Filter



VEMI4 - 4-Port EMI Filter

### APPLICATIONS

- MRI Rooms

### MATERIALS

- Steel Enclosure
- Steel Threaded Pipe
- Easy Connect Terminal Blocks

### ELECTRICAL

- Class II output 100W
- 3A / up to 40VDC

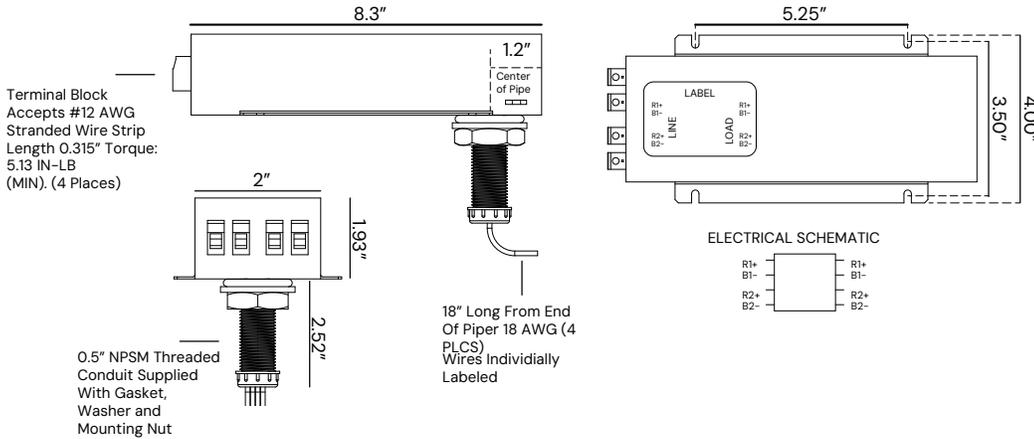
### SPECIFICATIONS

- Filter provides >100dB attenuation between 10Khz - 1Ghz on 0-10V dimming circuits
- Operating temperature rating: -10°C to +60°C

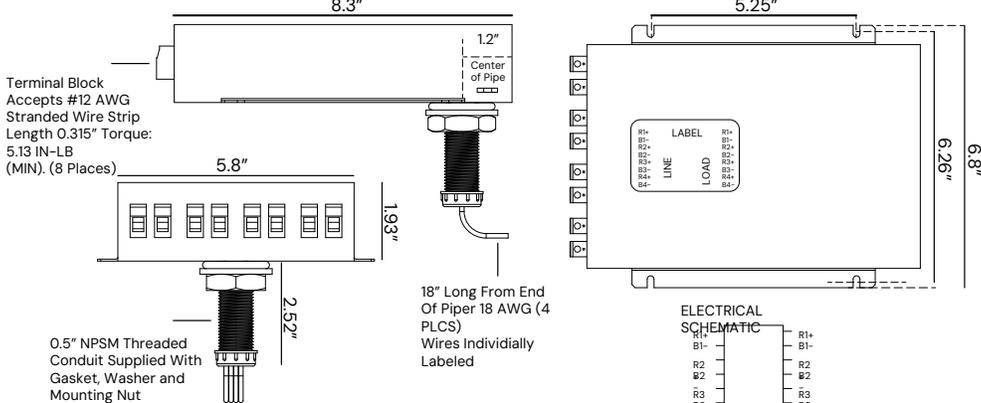
### MECHANICAL (DIMENSIONS - INCHES)

PART NUMBER	DESCRIPTION	LENGTH	WIDTH	DEPTH
VEMI2	2-Port EMI Filter	8.70"	3.98"	1.93"
VEMI4	4-Port EMI Filter	8.70"	6.73"	1.93"

### VEMI2 - 2-Port EMI Filter



### VEMI4 - 4-Port EMI Filter



# COLOR TEMPERATURE GUIDE

<p><b>2700K</b> WARM WHITE</p> <p>friendly personal intimate</p> <p>HOMES LIBRARIES RESTAURANTS</p> <p>✓</p>	<p><b>3000K</b> SOFT WHITE GLOW</p> <p>soft warm pleasing</p> <p>HOMES HOTEL ROOMS LOBBIES RETAIL STORES</p> <p>✓</p>	<p><b>3500K</b> NEUTRAL GLOW</p> <p>sociable inviting non-threatening</p> <p>EXECUTIVE OFFICES RECEPTION AREAS SUPERMARKETS</p> <p>✓</p>	<p><b>4000K</b> COOL WHITE GLOW</p> <p>neat clean efficient</p> <p>OFFICES CLASSROOMS MASS MERCHANTISERS SHOWROOMS</p> <p>✓</p>	<p><b>5000K</b> DAYLIGHT GLOW</p> <p>bright cool alert</p> <p>GRAPHICS INDUSTRY HOSPITALS GALLERIES BEAUTY SALONS</p> <p>✓</p>
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