

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.



Open (Non-IC)

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

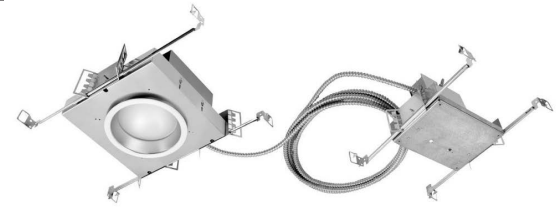
CRI: 80+ is standard, 90+ available as an option.

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.



Lensed (Non-IC)



Open (IC-Rated)



Lensed (IC-Rated)

Antimicrobial Reflector Finishes



CLA Specular Clear

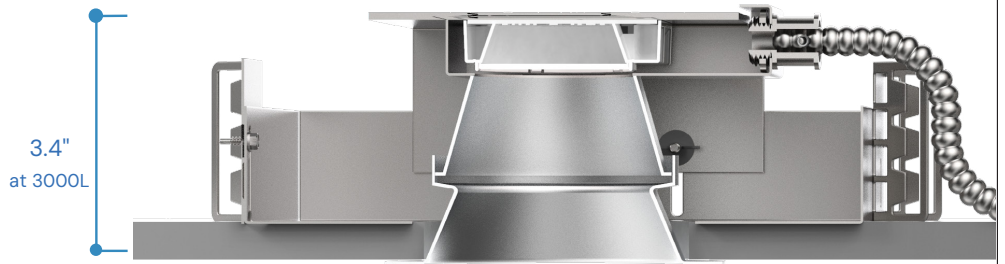
SGA Soft Glow Clear

WMA White Matte



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

MODEL	14135-4-O 4-inch round Open 14135-6-O 6-inch round Open 14135-8-O 8-inch round Open	14135-4-L¹ 4-inch round Lensed 14135-6-L¹ 6-inch round Lensed 14135-8-L¹ 8-inch round Lensed
LUMENS	07 750 11 1100 15 1500 20 2000 30 3000	40 4000 50 5000 60² 6000 70² 7000
COLOR TEMPERATURE	27 2700K 30 3000K 35 3500K	40 4000K 50 5000K
CRI	Blank 80+ <i>Standard</i> 9 90+ (Not available in 5000K)	
REFLECTOR/LENS <small>*Required for Lensed models.</small>	Blank Medium 60° Open FP Medium 60° Lensed Frosted Polycarbonate <i>Standard</i> CP Medium 60° Lensed Clear Polycarbonate CG Medium 60° Lensed Clear Glass FG Medium 60° Lensed Frosted Glass	PG Medium 60° Lensed Prismatic Glass SG Medium 60° Lensed Fresnel Glass PA Medium 60° Lensed Prismatic Acrylic BS20 BeamShaper® Lens, 20° Beam Angle BS40 BeamShaper® Lens, 40° Beam Angle BS60 BeamShaper® Lens, 60° Beam Angle BS80 BeamShaper® Lens, 80° Beam Angle
FINISH <small>*All trims supplied standard with white painted flange.</small>	WMA White Matte Antimicrobial <i>Standard</i> SGA Specular Clear Antimicrobial Soft Glow CLA Clear Antimicrobial	
HOUSING	NIC Non-IC IC IC-Rated	
DRIVER	Blank 0-10V 1% dimming driver <i>Standard</i> TRI Triac (Forward Phase, 120V only) dimming driver (Not available above 5000 lumens). DL2² Lutron 2-Wire Hi-lume dimming driver (Not available above 3000 lumens). DL3² Lutron 3 wire Hi-Lume dimming driver (Not available above 3000 lumens). LDE1² Lutron Hi-lume 1% with Soft-On, Fade-to-Black dimming driver (Not available above 4000 lumens). LDE5² Lutron 5-Series 5% dimming driver (Not available above 4000 lumens). PEQO² Lutron Hi-lume Premier 0.1% with Soft-On, Fade-to-Black dimming driver (Not available above 4000 lumens).	
OPTIONS	VEMI2 2-Port EMI Filter VEMI4 4-Port EMI Filter EM7 External Emergency Battery, test button & indicator light. For 750-5000 lumen luminaires EM20² External External Emergency Battery, test button & indicator light. For 6000 & 7000 lumen luminaires.	



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

¹ Surgical applications require lensed (IP65 option)
² 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



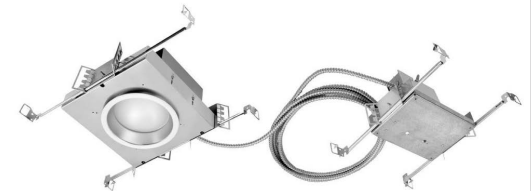
Open (Non-IC)



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

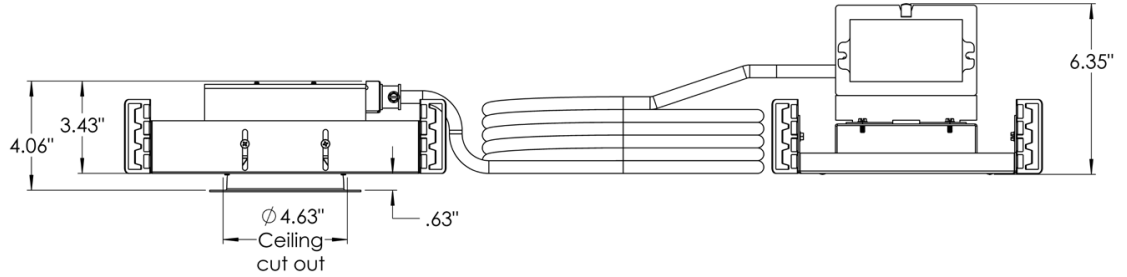
14135-4

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"



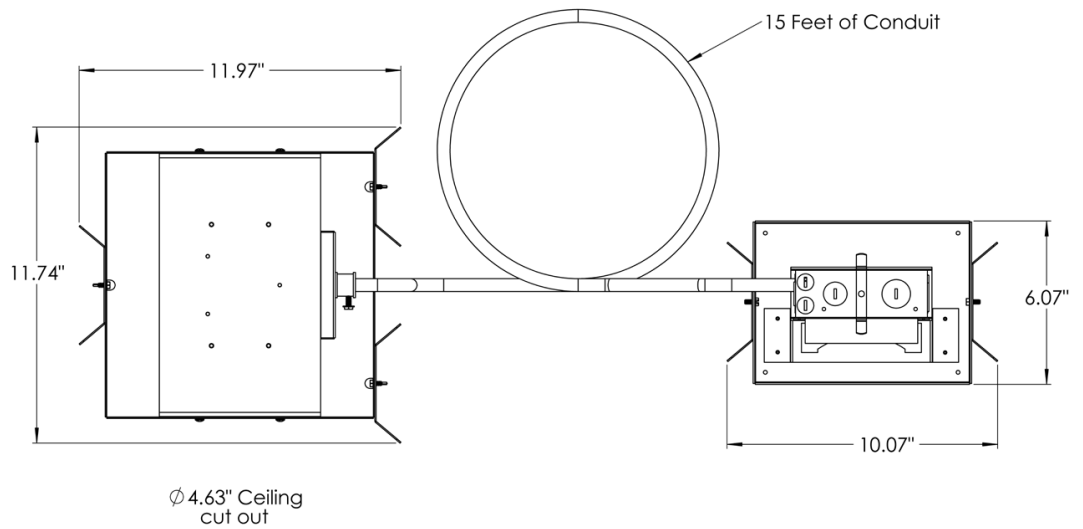
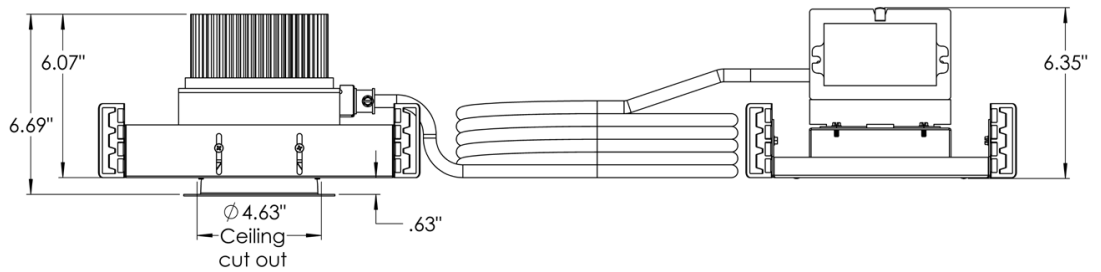
Not available for IC-Rated housing:

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

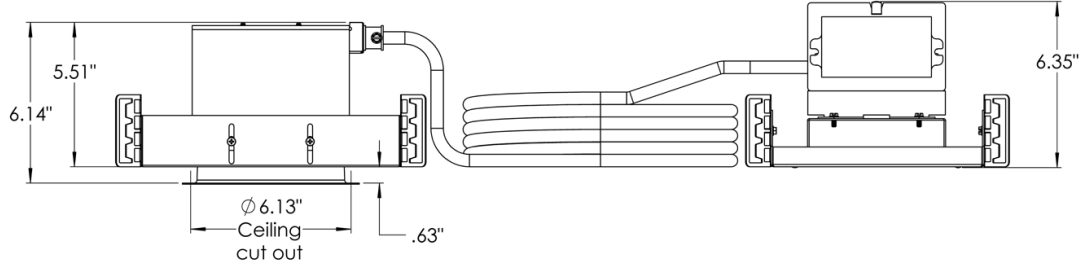
14135-6 14135-6-WW

Above Ceiling Height with
5/8" Ceiling

- 5.51" \leq 3000L
- 5.71" 4000L & 5000L

Above Ceiling Height

- Max Ceiling Thickness 1.21" - 4.93"
- Min Ceiling Thickness 0.20" - 5.94"

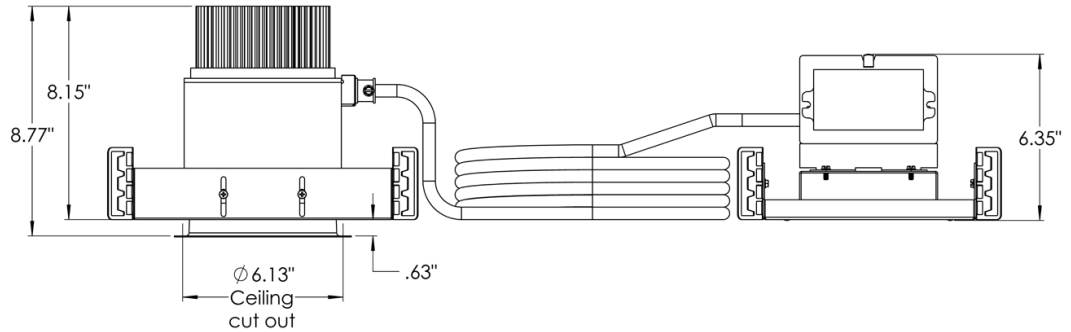


Above Ceiling Height with
5/8" Ceiling

- 8.15" 6000L & 7000L

Above Ceiling Height

- Max Ceiling Thickness 1.21" - 7.56"
- Min Ceiling Thickness 0.20" - 8.57"



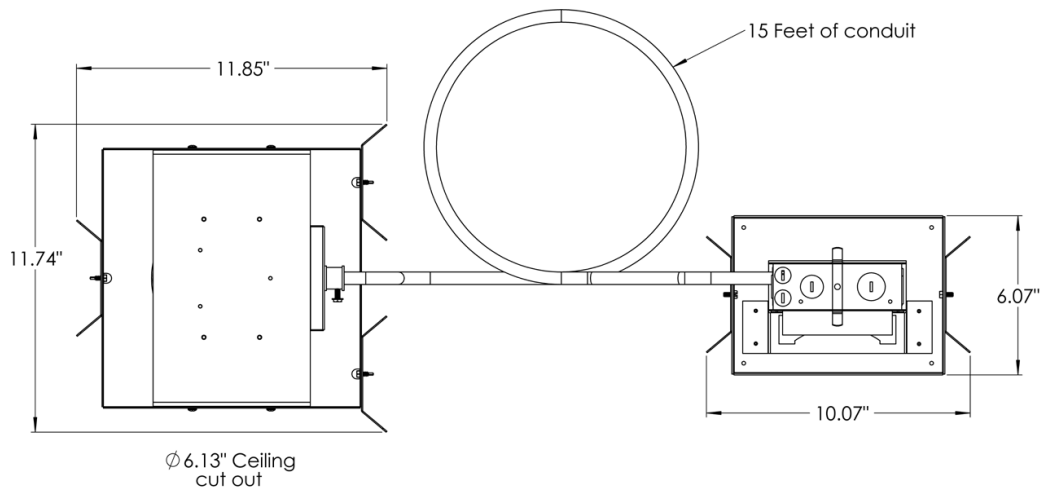
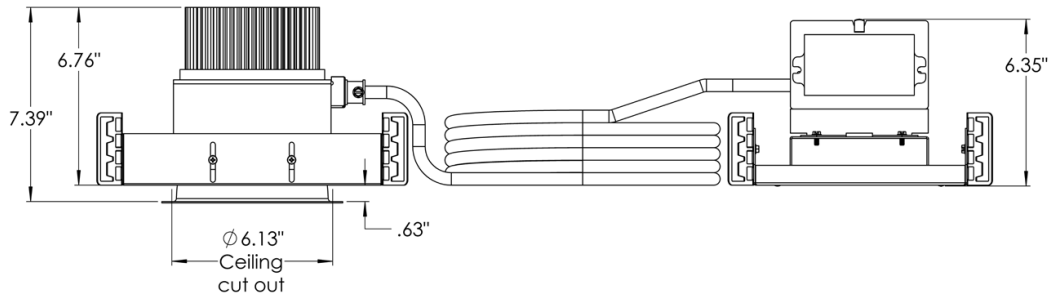
IC-Rated housing:

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"

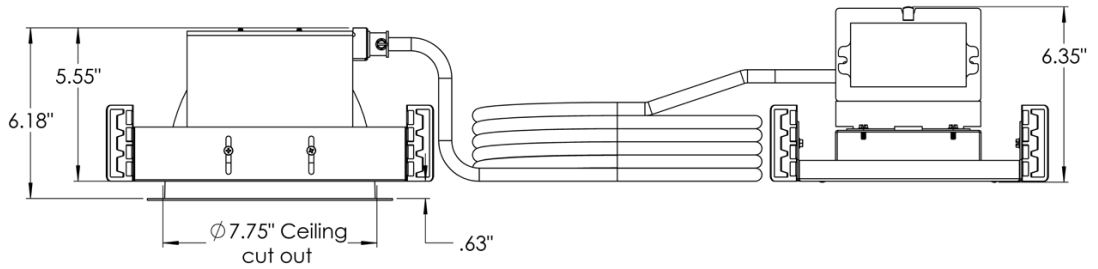


8-INCH DIMENSIONAL DATA | NON IC-RATED HOUSING

14135-8

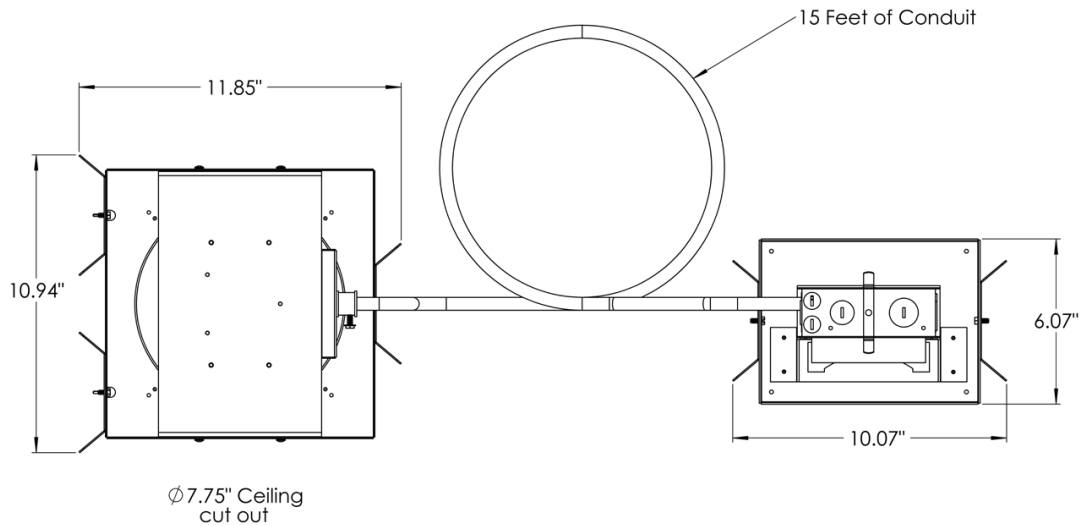
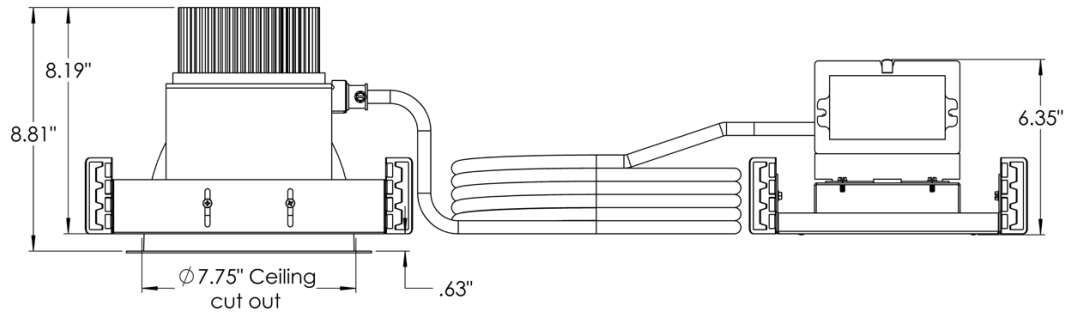
Above Ceiling Height with 5/8" Ceiling
 • 5.55" < 3000L
 • 5.75" 4000L & 5000L

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



Above Ceiling Height with 5/8" Ceiling
 • 8.19" 6000L & 7000L

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

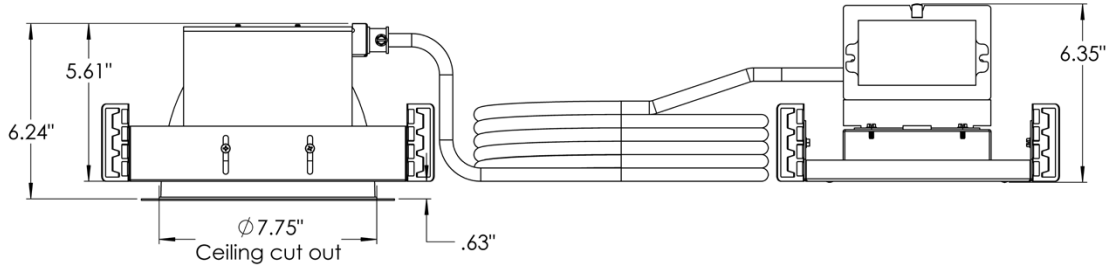


8-INCH DIMENSIONAL DATA | IC-RATED HOUSING

14135-8

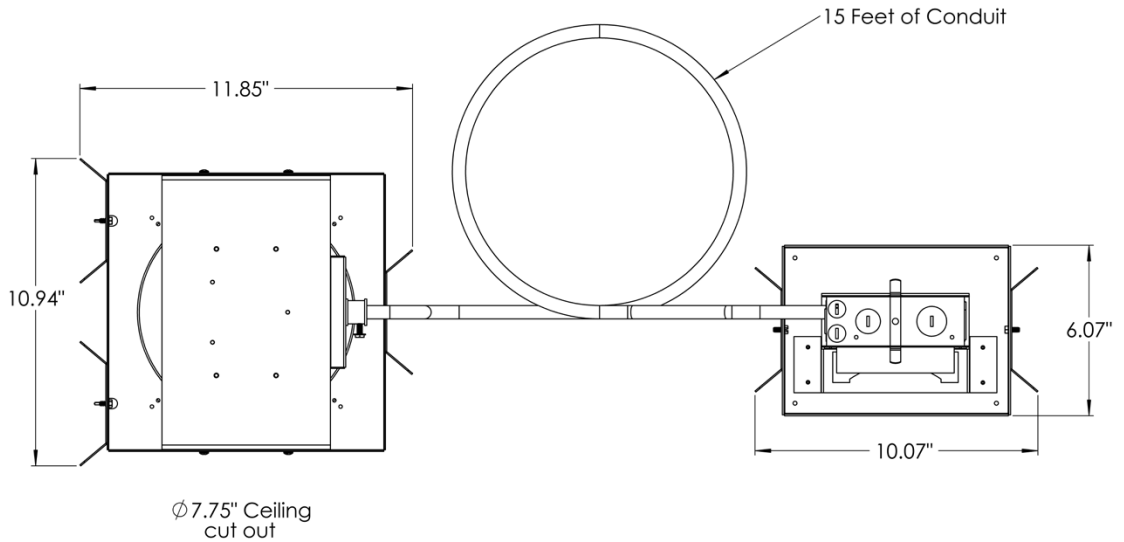
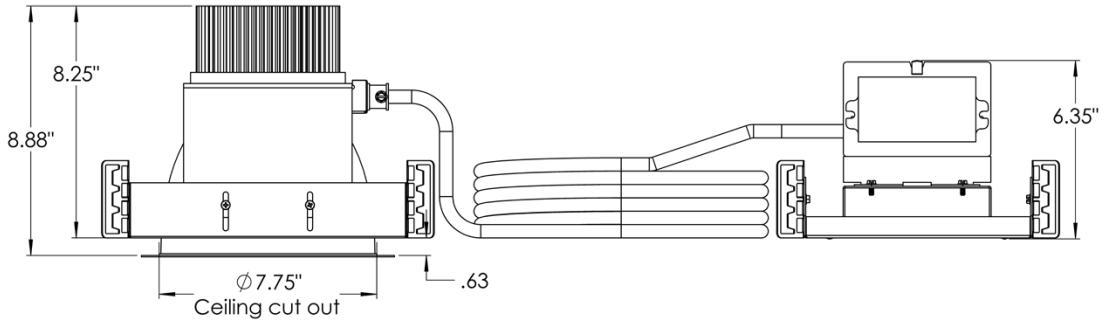
- Above Ceiling Height with 5/8" Ceiling
- 5.61" \leq 3000L
 - 5.81" 4000L & 5000L

- 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"

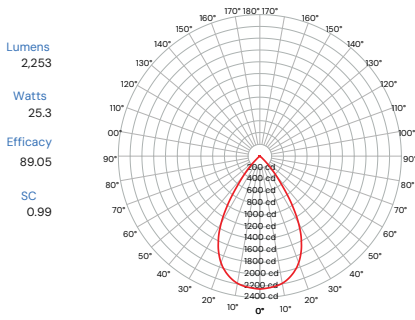


4-INCH PHOTOMETRY

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°	0
0.00°	2,254
0.00°	2,233
5.00°	2,088
15.00°	0
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%
Total	2,253	100%

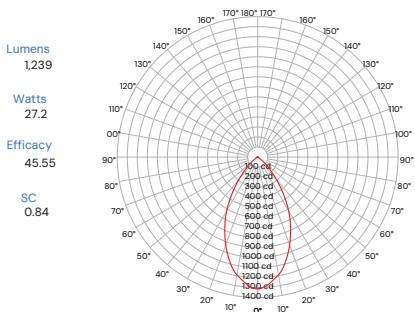
Spacing Criterion

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°	0
0.00°	1,314
0.00°	1,271
5.00°	1,076
15.00°	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%
Total	1,239	100%

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

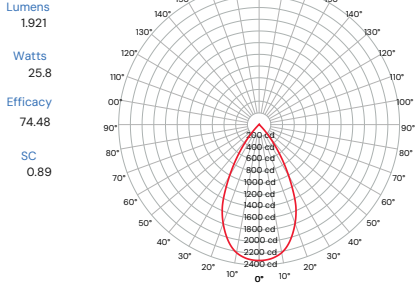
CRI	Multiplier	Kelvin	Multiplier	Reflector Finish	Multiplier
80	1	2700K	0.939	SCL	1
90	0.8	3000K	0.975	SGC	0.95
		3500K	1	WHT	0.87
		4000K	10.35		
		5000K	1.098		

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

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%
Total	1,921	100%

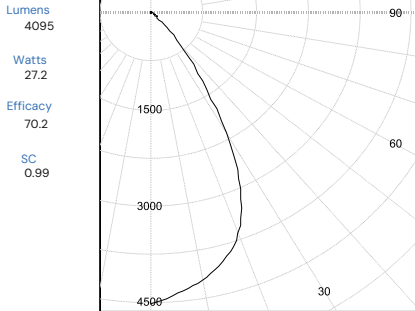
Spacing Criterion

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

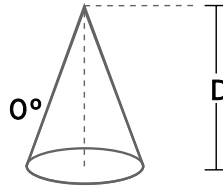
* approximate direct light level at floor based on spacing criterion overlap

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

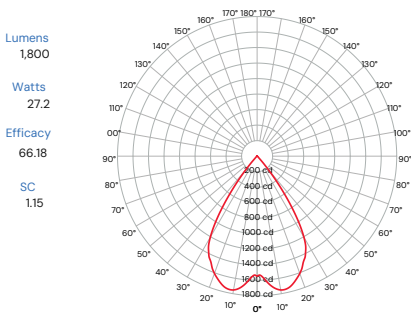
CRI	Multiplier	Kelvin	Multiplier	Reflector Finish	Multiplier
80	1	2700K	0.939	SCL	1
90	0.8	3000K	0.975	SGC	0.95
		3500K	1	WHT	0.87
		4000K	10.35		
		5000K	10.98		

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%
Total	1,800	100%

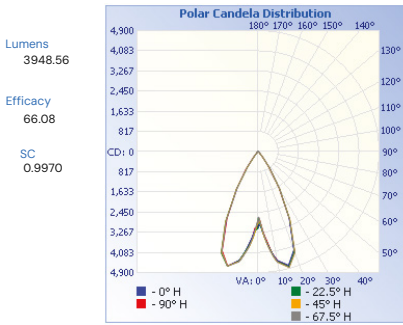
Spacing Criterion

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

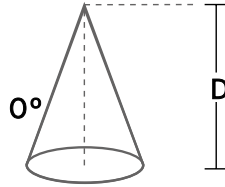
* approximate direct light level at floor based on spacing criterion overlap

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°	2919
1.00°	2995
3.00°	3204
5.00°	3597
7.00°	3989
9.00°	4336
10.00°	4474
15.00°	4760
20.00°	4231
25.00°	2978
30.00°	1728
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

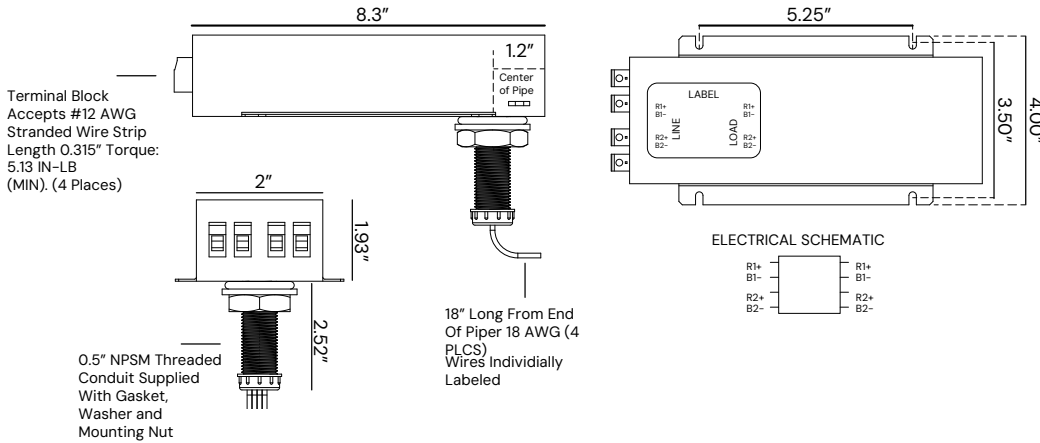
SPECIFICATIONS

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

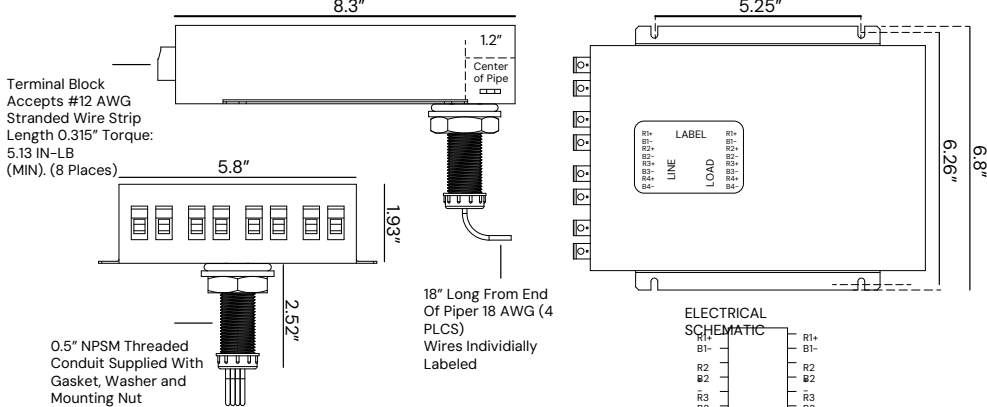
MECHANICAL (DIMENSIONS - INCHES)

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

