

CHALICE RECESSED LED DOWNLIGHT

70 Watt LED

The Chalice 70 recessed LED downlight follows the Altman Lighting tradition of lighting quality. Designed specifically for the demands of theaters, churches and public venues, the Chalice 70 is a 70 Watt White LED recessed fixture that is an energy-efficient solution to general lighting needs.

The Chalice 70 addresses and alleviates the typical maintenance routines of changing lamps and ballasts in difficult-to-access locations. The Chalice 70 uses a single-point source for optimal beam control, and offers a variety of reflector options for ceiling heights from 15 to 50 feet. Its powerful and clean non-pixelated and non-granulated output blends to seamless coverage in the most elegant setting.

Extremely smooth dimming reproduces the comfortable feel of traditional incandescent sources, at a fraction of the power consumption. Available in either Mains Dimming or DMX control allows each fixture to be controlled independently or in groups, from an architectural control system and/or directly from a theatrical control console.

Product Features:

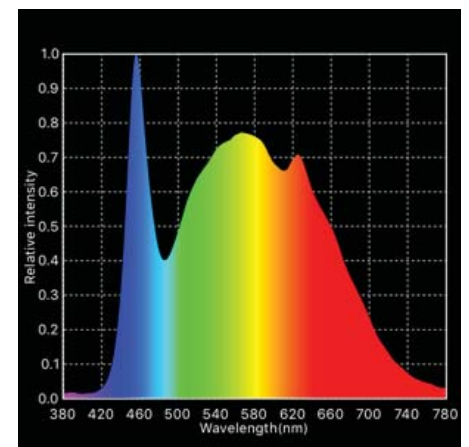
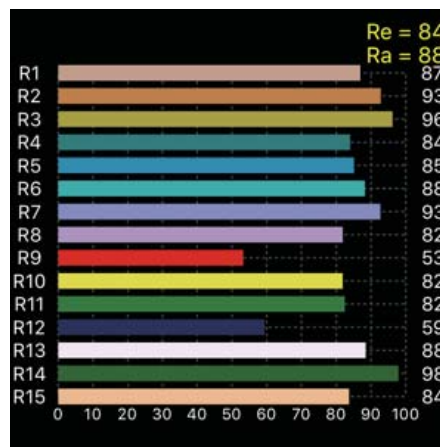
- 70W LED driver
- 7 interchangeable reflectors
- CCT options 2700K, 3000K, 4000K, or 5000K
- Available in both new construction, remodeler, and sloped ceiling versions
- DMX or Mains Dimmable
- Push Button DMX Addressing and RDM compatibility
- DMX Pass through
- Single channel high resolution DMX
- Selectable actions on loss of control signal (for DMX models only)
- Available in white, black or custom colors
- cETLus listed and CE marked for indoor applications
- Proudly made in the USA



DMX Version

Photometric Performance

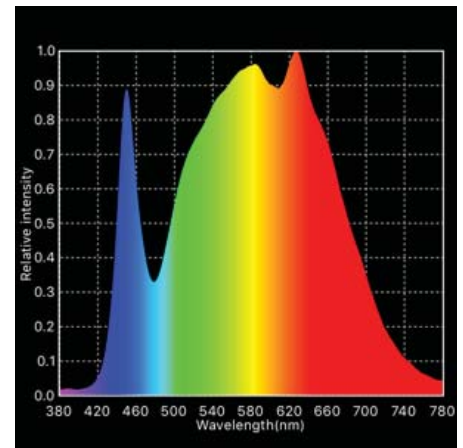
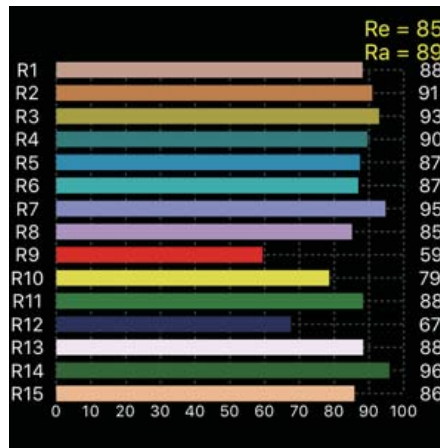
CHALICE CDR70 PHOTOMETRIC SCORE CARD – 5000K	
CCT	4692
DUV	.0056
CRI	90
CQS	87
RE(R1-15)	84
TLCI Qa)	89.8
TM-30-15 rf	85
TM-30-15 rg	94



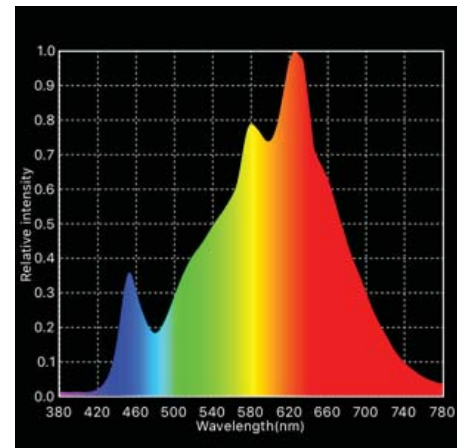
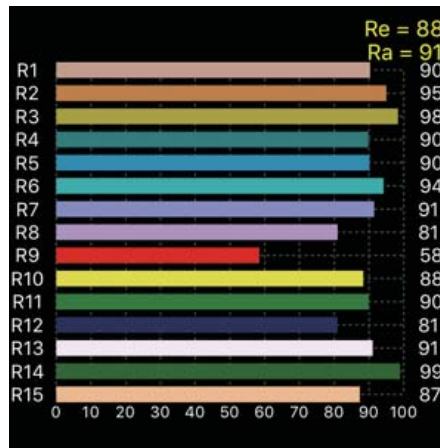
Note: Other CCT values continued on next page.

Photometric Performance (continued)

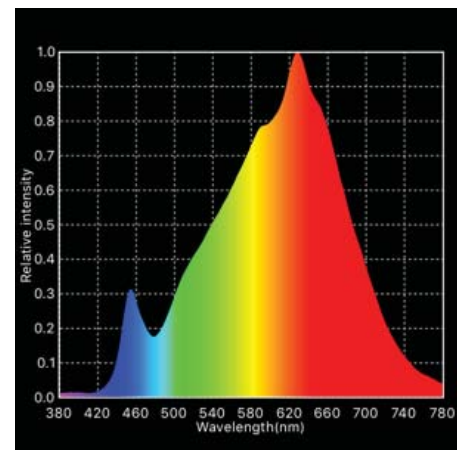
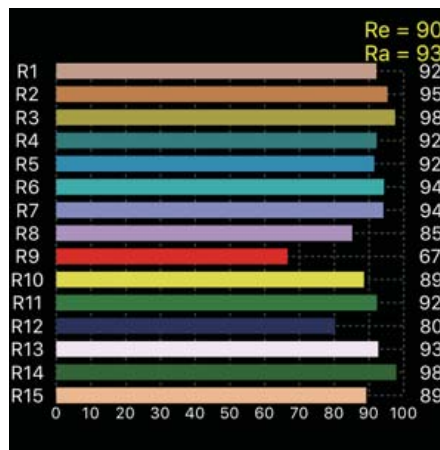
CHALICE CDR70 PHOTOMETRIC SCORE CARD – 4000K	
CCT	3927
DUV	.0039
CRI	90
CQS	89
RE(R1-15)	85
TLCI Qa)	91.6
TM-30-15 rf	89
TM-30-15 rg	98



CHALICE CDR70 PHOTOMETRIC SCORE CARD – 3000K	
CCT	2826
DUV	-.0033
CRI	91
CQS	91
RE(R1-15)	88
TLCI Qa)	89.3
TM-30-15 rf	90
TM-30-15 rg	99



CHALICE CDR70 PHOTOMETRIC SCORE CARD – 2700K	
CCT	2750
DUV	.0018
CRI	93
CQS	93
RE(R1-15)	90
TLCI Qa)	94.2
TM-30-15 rf	91
TM-30-15 rg	98



Note: Complete TM-30 information can be found in the CDR70 Photometrics information sheet. This document is found on the Altman Lighting web site in the CDR70 pendant luminaire Support section.

Photometric Performance

Photometric data taken with CDR70 fixture at the shown CCT values. Some Clipping of the beam will occur with the use of the 91 degree Extra Wide Flood Reflector please see Chalice 70 IES files on the Altman Lighting web site for additional beam characteristics.

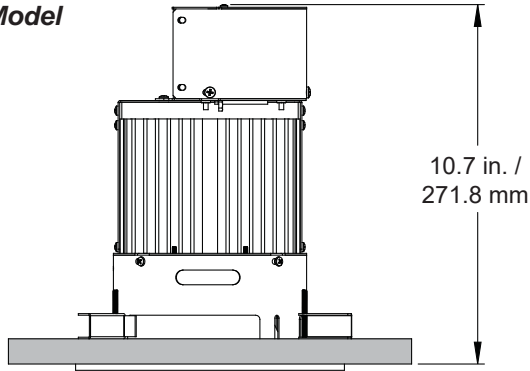
CCT	Reflector Type	Lumen Output	10'-0" (3.048m)	20'-0" (6.096m)	30'-0" (9.144m)	40'-0" (12.192m)	50'-0" (15.240m)	
5000K	20 Degree Narrow Spot	7016.0	554.3	138.6	61.6	8.7	3.8	fc
			5964.3	1491.1	662.7	93.2	41.4	lux
	29 Degree Spot	6204.0	198.2	49.6	22.0	3.1	1.4	fc
			2132.6	533.2	237.0	33.3	14.8	lux
	39 Degree Narrow Flood	6526.0	116.6	29.2	13.0	1.8	0.8	fc
			1254.6	313.7	139.4	19.6	8.7	lux
	46 Degree Medium Flood	6193.0	100.2	25.1	11.1	1.6	0.7	fc
			1078.2	269.5	119.8	16.8	7.5	lux
51 Degree Wide Flood	6382.0	76.4	19.1	8.5	1.2	0.5	fc	
		822.1	205.5	91.3	12.8	5.7	lux	
64 Degree Very Wide Flood	6429.0	58.3	14.6	6.5	0.9	0.4	fc	
		627.1	156.8	69.7	9.8	4.4	lux	
91 Degree Extra Wide Flood	6079.0	36.5	9.1	4.1	0.6	0.3	fc	
		393.2	98.3	43.7	6.1	2.7	lux	
4000K	20 Degree Narrow Spot	7076.0	559.0	139.8	62.1	8.7	3.9	fc
			6014.8	1503.7	668.3	94.0	41.8	lux
	29 Degree Spot	6257.0	199.0	49.8	22.1	3.1	1.4	fc
			2141.2	535.3	237.9	33.5	14.9	lux
	39 Degree Narrow Flood	6582.0	117.6	29.4	13.1	1.8	0.8	fc
			1265.4	316.3	140.6	19.8	8.8	lux
	46 Degree Medium Flood	6246.0	99.2	24.8	11.0	1.6	0.7	fc
			1067.4	266.8	118.6	16.7	7.4	lux
51 Degree Wide Flood	6436.0	77.1	19.3	8.6	1.2	0.5	fc	
		829.6	207.4	92.2	13.0	5.8	lux	
64 Degree Very Wide Flood	6484.0	58.8	14.7	6.5	0.9	0.4	fc	
		632.2	158.0	70.2	9.9	4.4	lux	
91 Degree Extra Wide Flood	6131.0	36.8	9.2	4.1	0.6	0.3	fc	
		396.1	99.0	44.0	6.2	2.8	lux	
3000K	20 Degree Narrow Spot	6032.0	476.6	119.2	53.0	7.4	3.3	fc
			5128.2	1282.1	569.8	80.1	35.6	lux
	29 Degree Spot	5334.0	170.4	42.6	18.9	2.7	1.2	fc
			1833.5	458.4	203.7	28.6	12.7	lux
	39 Degree Narrow Flood	5611.0	100.2	25.1	11.1	1.6	0.7	fc
			1078.2	269.5	119.8	16.8	7.5	lux
	46 Degree Medium Flood	5325.0	86.2	21.6	9.6	1.3	0.6	fc
			927.5	231.9	103.1	14.5	6.4	lux
51 Degree Wide Flood	5486.0	65.7	16.4	7.3	1.0	0.5	fc	
		706.9	176.7	78.5	11.0	4.9	lux	
64 Degree Very Wide Flood	5527.0	50.1	12.5	5.6	0.8	0.3	fc	
		539.1	134.8	59.9	8.4	3.7	lux	
91 Degree Extra Wide Flood	5226.0	31.4	7.9	3.5	0.5	0.2	fc	
		338.0	84.5	37.6	5.3	2.3	lux	
2700K	20 Degree Narrow Spot	6084.0	480.7	120.2	53.4	7.5	3.3	fc
			5172.3	1293.1	574.7	80.8	35.9	lux
	29 Degree Spot	5380.0	171.9	43.0	19.1	2.7	1.2	fc
			1849.6	462.4	205.5	28.9	12.8	lux
	39 Degree Narrow Flood	5659.0	101.1	25.3	11.2	1.6	0.7	fc
			1087.8	272.0	120.9	17.0	7.6	lux
	46 Degree Medium Flood	5371.0	86.9	21.7	9.7	1.4	0.6	fc
			935.0	233.8	103.9	14.6	6.5	lux
51 Degree Wide Flood	5534.0	66.3	16.6	7.4	1.0	0.5	fc	
		713.4	178.3	79.3	11.1	5.0	lux	
64 Degree Very Wide Flood	5575.0	50.5	12.6	5.6	0.8	0.4	fc	
		543.1	135.8	60.3	8.5	3.8	lux	
91 Degree Extra Wide Flood	5271.0	31.7	7.9	3.5	0.5	0.2	fc	
		340.9	85.2	37.9	5.3	2.4	lux	

Note: all photometrics above including published IES files have been taken with the DMX version of this product. The output on the mains dim version may vary depending upon the connected dimming systems efficiency.

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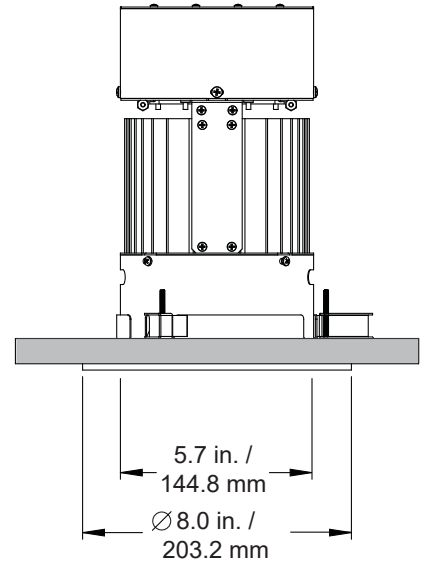
Product Dimensions - Remodeler Versions

DMX Model

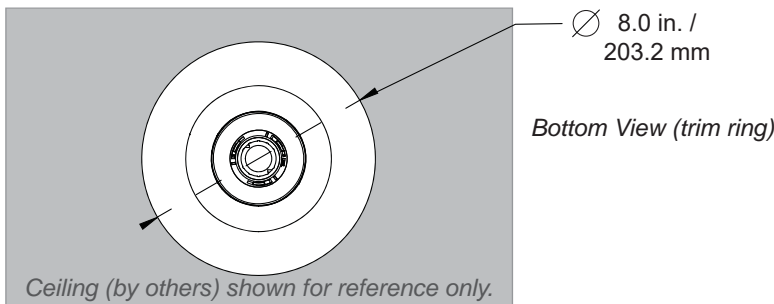
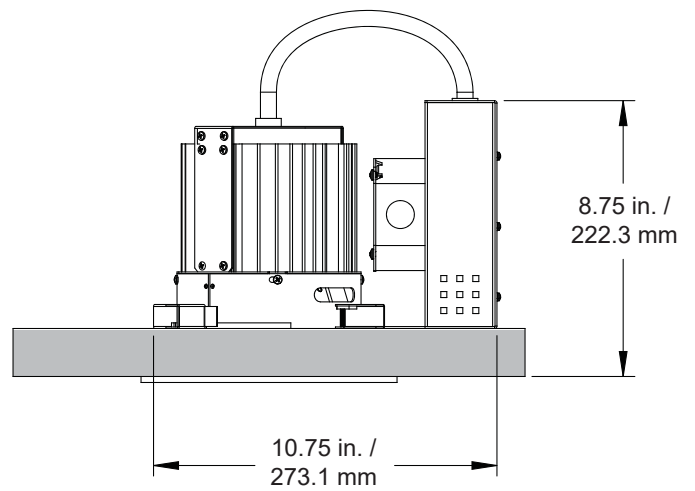
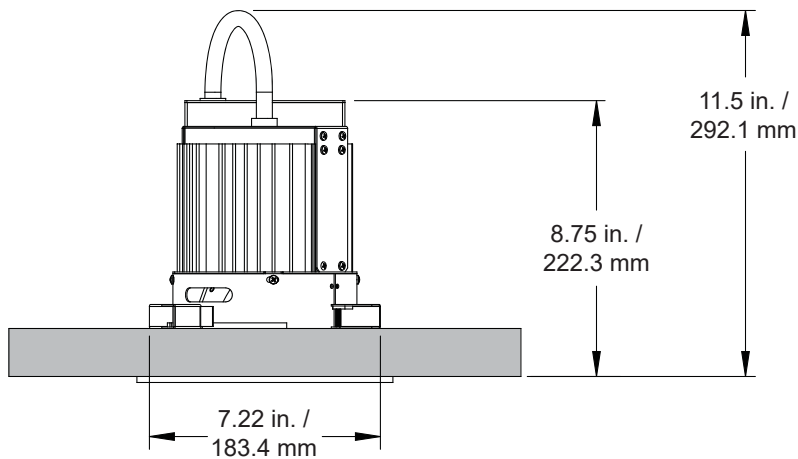


NOTE: Ceiling (by others) shown for reference only. Ceiling thickness range 0.50 to 1.5-inches. Ceiling material and framework must be sturdy enough to support weight of luminaires.

For drop ceiling applications, you must use the new construction or sloped ceiling type luminaires.



Mains Dim Model



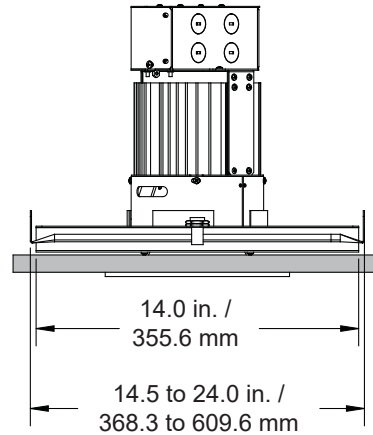
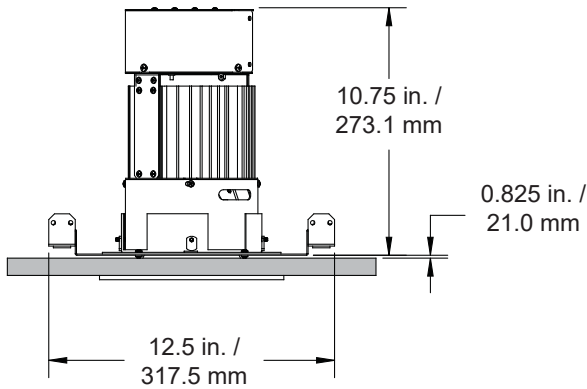
Note: Installation hole opening needs to be a minimum of 7-inches but no larger than 7.75-inches in diameter.

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For drop ceiling applications, you must use the new construction or sloped ceiling type luminaires.

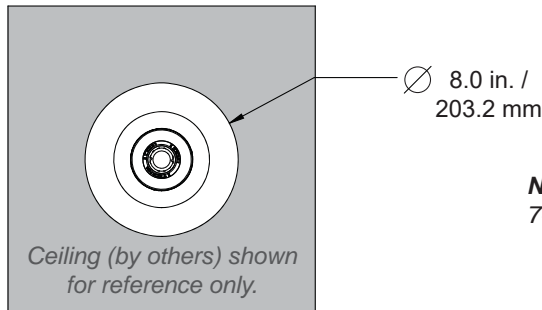
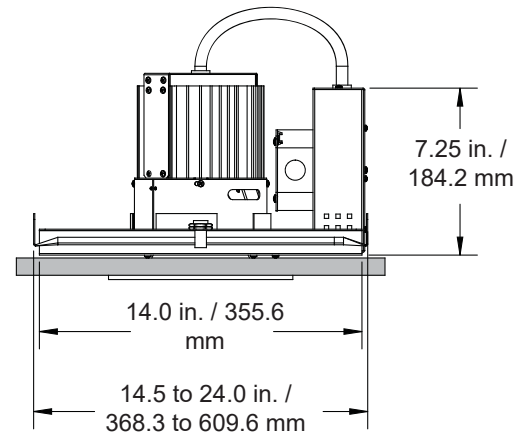
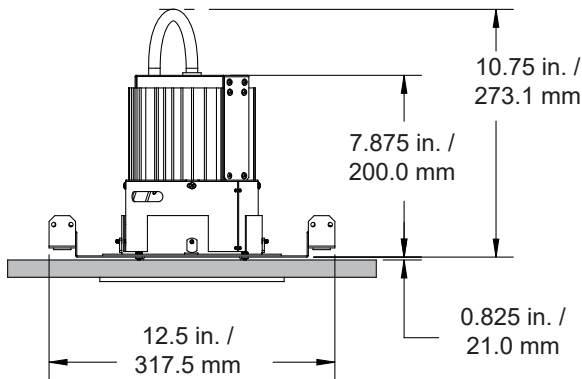
Product Dimensions - New Construction Versions

DMX Model



NOTE: Ceiling (by others) shown for reference only. Ceiling thickness range 0.50 to 1.5-inches. Ceiling material and framework must be sturdy enough to support weight of luminaires.

Mains Dim Model



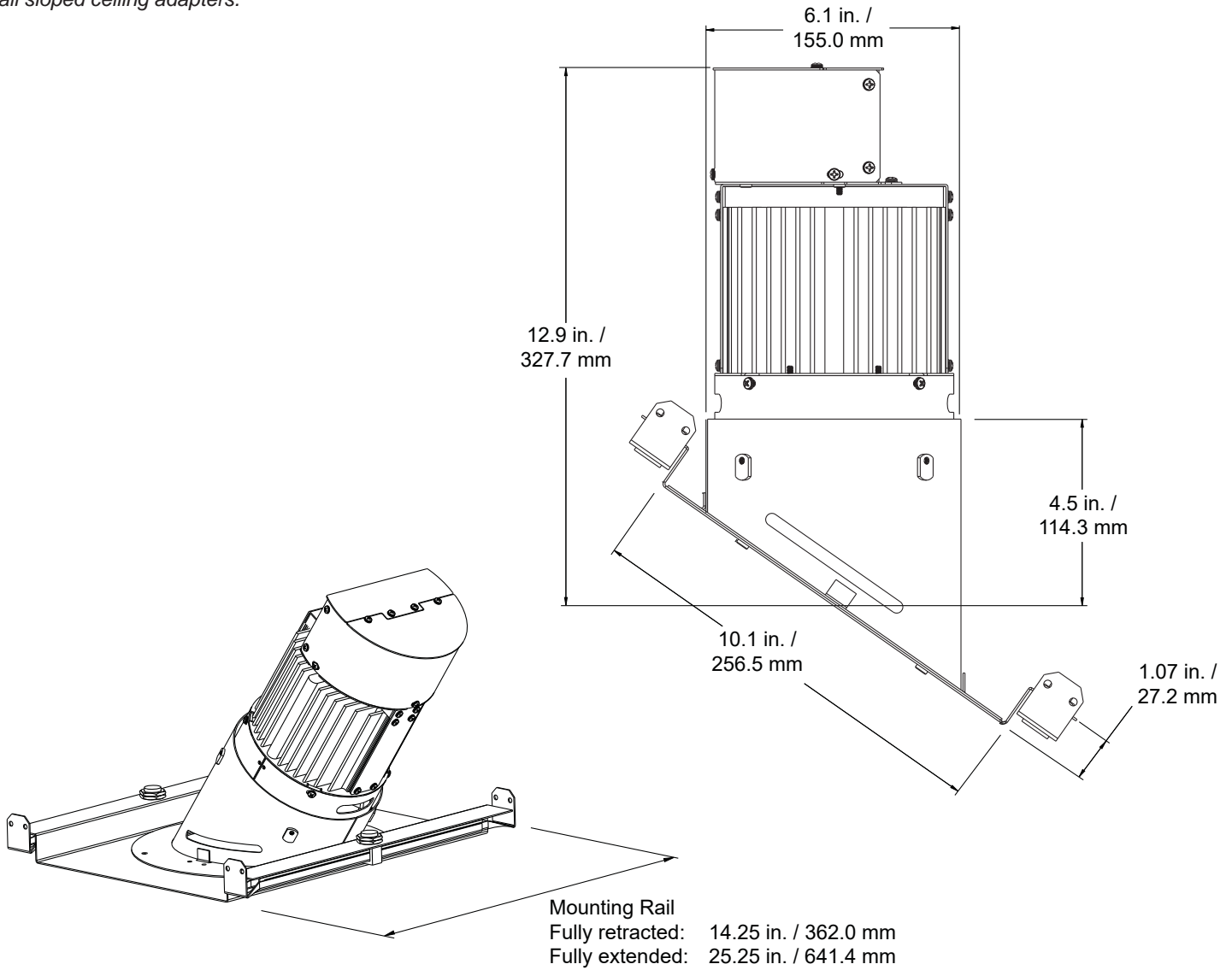
Note: Installation hole opening needs to be a minimum of 7-inches but no larger than 7.75-inches in diameter.

Sloped Ceiling Adapters

Product Dimensions

Note: 35-degree sloped ceiling adapter shown with luminaire installed. Typical for all sloped ceiling adapters.

For drop ceiling applications, you must use the new construction or sloped ceiling type luminaires.



For best performance in sloped ceiling applications and masking of beam, one of the following reflectors should be used:

Part Number	Description
19-F13379	20 Degree Narrow Spot Reflector, 3 in. / 76.2 mm (high) x 4.68 in. / 118.9 mm (diameter)
19-F13380	29 Degree Spot Reflector, 3 in. / 76.2 mm (high) x 4.68 in. / 118.9 mm (diameter)
19-F13381	46 Degree Medium Flood Reflector, 3 in. / 76.2 mm (high) x 4.68 in. / 119.5 mm (diameter)

Specifications

Materials: Construction employs all corrosion-resistant materials and hardware.

Control: Mains Dimmable or DMX / RDM

Light Engines: 70W LED Array - Available in 2700K, 3000K, 4000K or 5000K White / CRI > 90

Light Output: See Page 3 of this Document

Lumens/Watt: 100 (dependent on reflector)

LED Rated Life: LED arrays are rated for >50,000 hours of operation.

Input Voltage: DMX Models: 100-277 VAC 50/60 Hz
Mains Dimmable Models: 100-240 VAC 50/60 Hz

Current Draw: DMX Models: 0.58A @ 120VAC / 0.32A @ 220VAC / 0.25A @ 277VAC
Mains Dimmable Models: 0.58A @120VAC / 0.29A @ 240VAC

Power Factor: > 0.92 @ Full Load (Mains Dimmable Models)

Current Inrush: 15Apk Max 1/2 cycle @ 230VAC (Mains Dimmable Models)

Quiescent Load: 3.1 Watts (DMX Models Only)

Light Engine

Cooling: DMX Models: Natural Convection
Mains Dim Models: Active Cooling

Environment: 0 to 40 degrees C (32 to 104 degrees F) / 5%-95% Non condensing

Weight: 9.0 lbs. (4.1 Kg.)

Compliance: cETLus Listed, CE marked

Please note that the noise levels on the mains dim luminaries are subject to the dimming/switching systems in which they are wired. Electrical Systems displaying harmonics may increase the dB Noise output of the luminaire.

Notes:

For sloped ceiling models, one (1) sloped ceiling adapter is included with each unit ordered. Specify sloped ceiling adapter at time of ordering.

Up to 25% beam clipping will occur, with the use of medium 51°, 64°, and 90°. angle reflectors on the long axis of a sloped ceiling adapter. Please allow for standard 20% to 30% beam overlap when using the Sloped Ceiling Adapter accessory and these reflectors.

For best performance in sloped ceiling applications and masking of beam, one of the following reflectors should be used: 20, 29, or 46 degree reflectors.

Ordering Information

CDR70-(Mounting)-(LED Array)-(Trim Ring)-(Control)-(Voltage)

Model: CDR70 Chalice Recessed LED Luminaire

Mounting: RM (Remodeler) or NC (New Construction) or SSA (Sloped Ceiling Adapter)***

LED Array: 2K (2700K), 3K (3000K), 4K (4000K) or 5K (5000K)

Trim Ring Color: Black (B) or White (W) or Custom (C)*

Control: DMX Control (D) or Mains Dimmable (M)**

Voltage: 120 (120VAC), 220 (220VAC), or 277 (277VAC)

Notes:

*Consult factory before ordering.
**Mains Dimmable models are only available in 120VAC or 220VAC.
***At time of ordering, you must specify the angle of the sloped ceiling adapter. See below for available versions.

Each luminaire ordered, remodeler, new construction or sloped ceiling adapter, includes the luminaire, its fixture mount, and one reflector. For example, a CDR70NC-2K-W-D-120 includes: the CDR70 DMX controlled 2700K light engine, White Trim Ring, New Construction Tray and one reflector. Specify reflector type at time of ordering.

For drop ceiling applications, you must use the new construction or sloped ceiling type luminaires.

Optional Accessories

- 19-F13379** 20 Degree Narrow Spot Reflector, 3 in. / 76.2 mm (high) x 4.68 in. / 118.9 mm (diameter)
- 19-F13380** 29 Degree Spot Reflector, 3 in. / 76.2 mm (high) x 4.68 in. / 118.9 mm (diameter)
- 19-F13325** 39 Degree Medium Flood Reflector, 1.25 in. / 31.8 mm (high) x 3.22 in. / 81.8 mm (diameter)
- 19-F13381** 46 Degree Medium Flood Reflector, 3 in. / 76.2 mm (high) x 4.68 in. / 119.5 mm (diameter)
- 19-F13401** 51 Degree Wide Flood Reflector, 1.25 in. / 31.8 mm (high) x 3.22 in. / 81.8 mm (diameter)
- 19-F13402** 64 Degree Very Wide Flood Reflector, , 1.25 in. / 31.8 mm (high) x 3.22 in. / 81.8 mm (diameter)
- 19-F13838** 91 Degree Extra Wide Flood Reflector, 1.25 in. / 31.8 mm (high) x 3.22 in. / 81.8 mm (diameter)

Note: One (1) reflector included with each luminaire ordered. Specify reflector type at time of ordering.

- CDR70-150RMR** Remodeler Ring Mount CDR70.150
- CDR70-150NCT** New Construction Tray Mount CDR70.150
- CDR70-150SSA-5** CDR 70 & 150 5 Degree Sloped Ceiling Adapter
- CDR70-150SSA-10** CDR 70 & 150 10 Degree Sloped Ceiling Adapter
- CDR70-150SSA-15** CDR 70 & 150 15 Degree Sloped Ceiling Adapter
- CDR70-150SSA-20** CDR 70 & 150 20 Degree Sloped Ceiling Adapter
- CDR70-150SSA-25** CDR 70 & 150 25 Degree Sloped Ceiling Adapter
- CDR70-150SSA-30** CDR 70 & 150 30 Degree Sloped Ceiling Adapter
- CDR70-150SSA-35** CDR 70 & 150 35 Degree Sloped Ceiling Adapter



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All specifications, descriptions, information, design, etc. contained in this document are subject to change without prior notice.
13 June 2018
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