

Project _____

Type _____

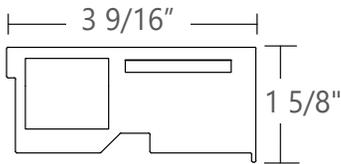
Notes _____

IMPORTANT! - All cove opening patterns and length must be submitted with drawings indicating dimensions and light direction.

PERFORMANCE/ LINEAR FT AT 3000K AND 3500K

NOMINAL LUMEN OUTPUT	INPUT WATTS*	EFFICACY*
300 lm/ft	3.6 W/ft	84 lm/W
400 lm/ft	4.8 W/ft	84 lm/W
500 lm/ft	6.0 W/ft	84 lm/W

REFER TO PHOTOMETRIC DATA SECTION FOR EXACT VALUES
 *for 2700K use 0.94 multiplier on watts and efficacy
 *for 4000K use 1.02 multiplier on watts and efficacy



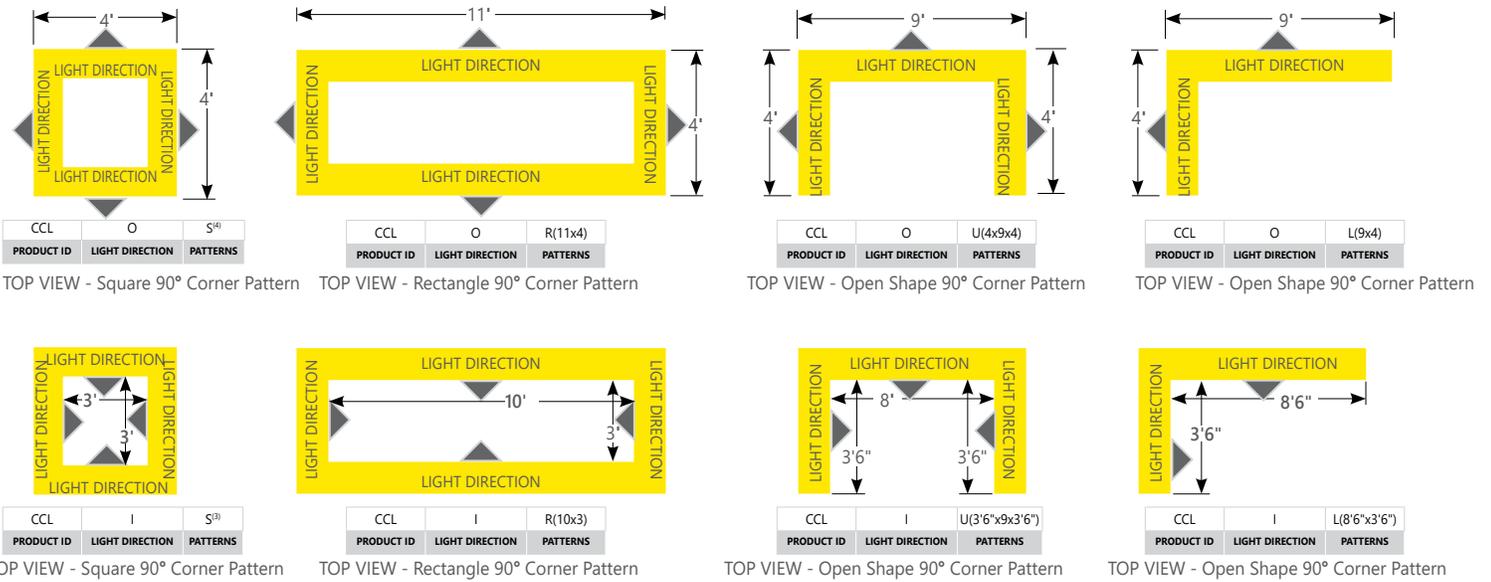
Ordering Guide

CCL	PRODUCT ID	LIGHT DIRECTION	COVE OPENING PATTERNS AND LENGTH	NOMINAL LUMENS/FT	CRI
CCL	Ceiling Cove for LO-output	I inside lit O outside lit	CL(L) Cove linear (length) S(L) square shape (length) R(LxL) rectangular shape (length) U(LxLxL) U shape (length) L(LxL) L shape (length) FF(L) total pattern length	300 300 lm/ft - Minimum 500 500 lm/ft - Maximum	80 80 CRI 90 90 CRI*
		* For Cove Linear Length, please use Inside Lit option	Cove Perfekt standard lengths are 2-12 feet in increments of 1 foot.	Outputs between listed min and max are available. Consult factory for outputs outside of the listed range. 1000 lm/ft - Maximum for 90 CRI. Consult factory for max output with BIOS.	* Maximum 1000 lumens/ft; Not available with BIOS.

All cove opening patterns and length must be submitted with drawings indicating dimensions and light direction.

COLOR TEMP. (choose one)		W	FINISH	VOLTAGE	DRIVER	CIRCUITS					
27	2700 K	TW2750	2700-5000 K - Tunable White	W	white	120	120 V	DP	dimming (0-10V) 1%	1	1 circuit
30	3000 K	TW2765	2700-6500 K - Tunable White			277	277 V	LT(#)	Lutron*	2	2 circuits *
35	3500 K					347	347 V	BI	bi-level dimming	+E(#)	emergency section**
40	4000 K					UNV	universal	O(#)	other**	+NL(#)	night light section**
B30	3000 K - BIOS*					DC	low voltage*	DPB(#)	dimming (0-10V) 1% with BIOS*		
B35	3500 K - BIOS*							TW(#)	tunable white drivers*		
B40	4000 K - BIOS*							POE(#)	POE drivers*		
Consult Axitone technical sheet for more information of color technology. *Consult BIOS guide for more information on BIOS technology				* Only available with POE drivers.	*See page 4 to specify system **Please consult factory; see page 5 Not available with 347V Please consult factory	* Cannot combine with E or NL ** Specify quantity					

MOUNTING/SUSPENSION	BATTERY (OPTIONAL)	OTHER (OPTIONAL)	REMOTE IC CONTROLS (OPTIONAL)	CUSTOM (OPTIONAL)
AC Armstrong Axiom Cove* C Other Cove	B(#) battery pack	F fuse CP Chicago plenum*	DS(#) daylight sensor OS(#) occupancy sensor DOS(#) daylight & occupancy sensor ENR(#) Enlighted remote* WC(#) wireless control dimming	C custom
*Ordered separately from Armstrong.	For minimum 4' long fixture only Not available with 347V. Please consult factory	Not available with 347V * Luminaires with Chicago plenum option are shipped with 6' of FMT cable. See page 6 for more details.	*Please consult factory Specify quantity. Remote only. See integrated controls guide for more details. Consult factory for Tunable White. Not available with DPB (DYN) driver for BIOS with Dynamic Spectrum.	Please specify

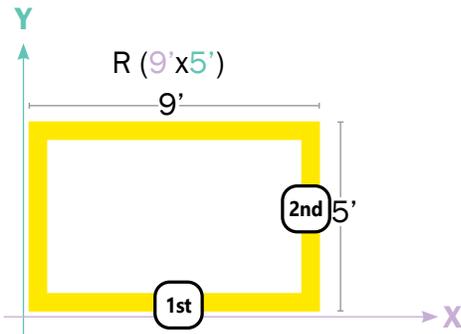


How to Specify 90 degree Corners and Patterns

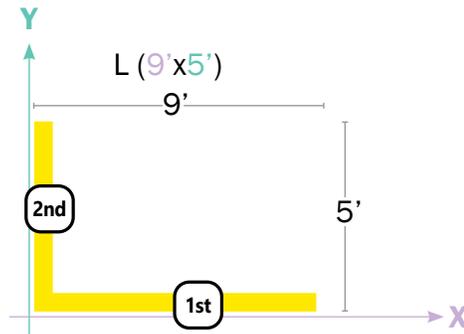
Example

! Measurements for Cove Perfekt should be made along the front side of the Cove opening.

Defining R - Rectangular shape

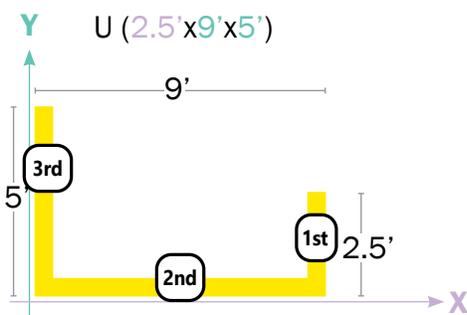


Defining L shape

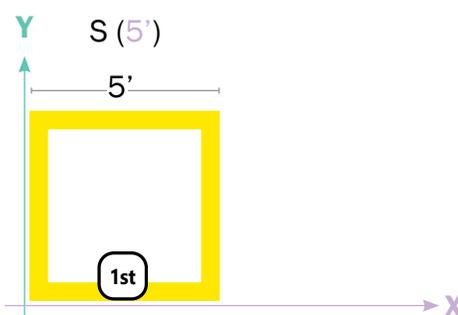


Note: The first number will always define the width, the second - the length.

Defining U shape



Defining S - Square shape



Note: The first number will always define the right arm length, the second - the width, and the third - the left arm length.

Note: The number will define the width. (All sides are the same length).

IMPORTANT! - Corner illumination is achieved by Surroundlite™ technology, NOT by corner segments. Luminaires are connected by Quick connect cables, so any corner degree is possible.

Cove Lighting Redefined



Few luminaires have been more in need of an upgrade than cove lights, long stifled by complicated details and inconsistent, time-consuming aiming.

So Armstrong and Axis joined forces to codevelop the best possible cove lighting solution from the ground up.

Introducing Axiom® Indirect Light Coves and CovePerfekt™... The new standard for cove lighting.

Up to twice the efficiency of other cove products.

Multiple features packed into only four luminaires.

Foolproof mounting. Aim-free lighting.

Cove lighting will never be the same...

For more information on Axiom® Indirect Light Coves, go to armstrong.com/axiomlightcoves

AESTHETICS

- No lamp images • No socket shadows
- No color shifting • No bright spots
- No dark ends • Just total visual comfort

PERFORMANCE

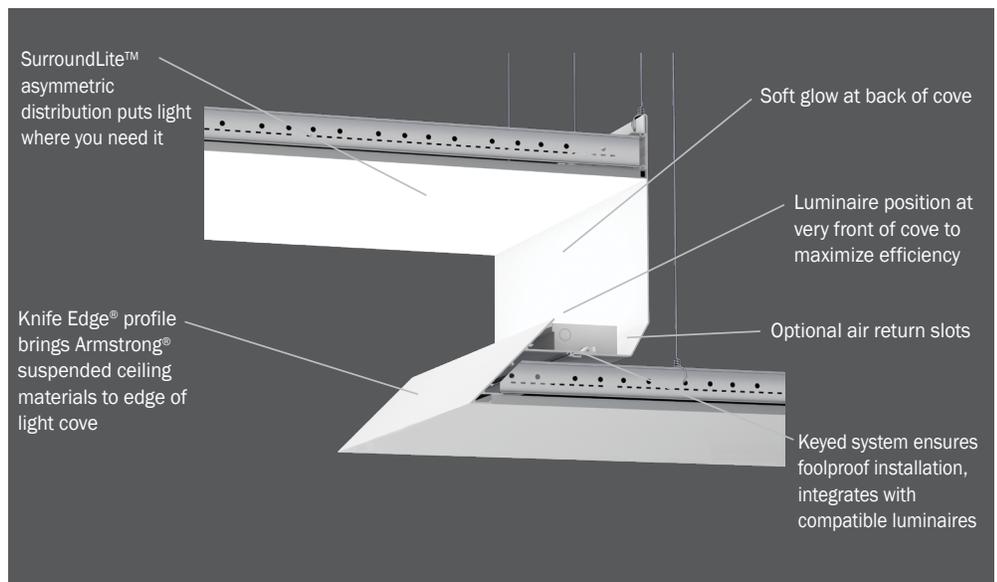
- SurroundLite™ optics with 180-degree distribution eliminates trapped light
- Improved LED lighting effectiveness – Same amount of ambient light using as little as half the watts.
- Integrated driver (Ceiling, Wall) and battery (Ceiling).

SPECIFICATION

- No need for complex cove details.
- No need to select beam angles, figure out cove dimensions and locate remote drivers.

INSTALLATION (in AXIOM® Light Coves).

- Tool-free installation of luminaires.
- Up to 90% less labor to install coves.
- Easy onsite trade coordination
- Long runs conveniently connected to a single line-voltage circuit (up to 100 feet)



**The ultimate cove lighting solution...
CovePerfekt in an Axiom® Indirect Light Cove.**

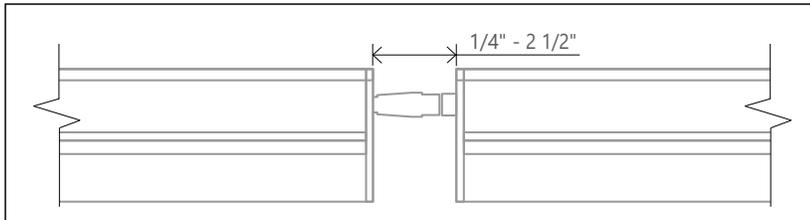
i Axiom® Indirect Light Coves ordered separately from Armstrong .

INDIRECT LIGHT COVE OPENING



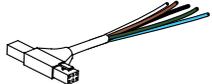
i Axis will determine the best fixture length combination to fill the Cove opening.

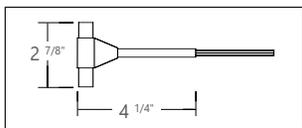
CABLE CONNECTION - LENGTH RANGE



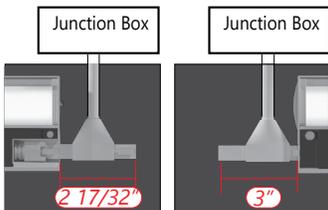
● ACCESSORIES

Straight or T power feeds available to feed power anywhere along run

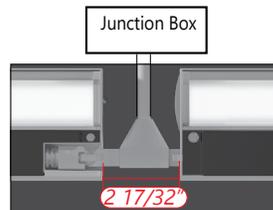
	Item Number	Item	Housing Color	Dimensions	Description		
STD	WR14443	T-connector	White	2 7/8" x 4 1/4"	End feed or middle feed connector from cove fixture to junction box located behind the cove		Feed up to 100' @ 120V 200' @ 277V
	WR14433	Panel mount female connector	White	22" (length)	End feed connector from cove fixture to connect next Cove fixture in the run		Feed up to 100' @ 120V 200' @ 277V
	WR14434	Straight male connector	White	7" (length)			
CCEA	EL18832	90° Connector		6' (length)	Chicago plenum approved 90° Connector		Feed up to 100' @ 120V 200' @ 277V
	PWHP-72-5W	FMT, Chicago Plenum Rated			Custom plenum flex whip		



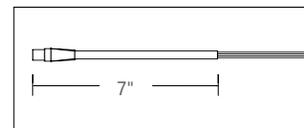
T-connector



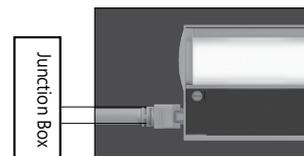
T - End Power Feed



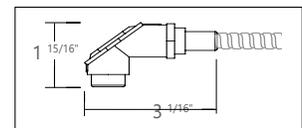
T - Middle Power Feed



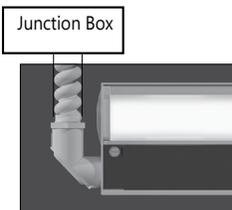
Straight connector



Straight End - Power Feed



90°-connector + FMT, CCEA



T - End Power Feed

i Connector types and locations to be indicated on the shop drawings.

● CONSTRUCTION

Housing	Extruded aluminum (0.060" nominal)
End Cap	Die cast aluminum (0.080" nominal)
Top Covers	Cold rolled sheet steel painted (22 gauge)

● ELECTRICAL

Lutron driver*	LDE1 - Hi-lume 1% EcoSystem with Soft-on, Fade-to-Black LTEA - Hi-lume 1% 2-wire (120V forward phase only) *Consult factory
Other drivers**	DALI - Digital Addressable Lighting Interface DMX - Digital Multiplex Xitanium SR - For wireless sensor
BIOS DPB drivers*	STC - BIOS control 0-10V with static spectrum and BIOS SkyBlue enabled from 100% to 1%. DYN- BIOS control 0-10V with dynamic spectrum and BI SkyBlue® with Bio-Dimming™ enabled 100% to 50%, light output dimming from 49% to 1%.
Tunable White TW drivers*	DALIDT6 - DALI Type 6 (Two DALI Addresses) DALIDT8 - DALI Type 8 (One DALI Address) LTTW - Lutron T-Series Tunable White
Power over Ethernet POE drivers*	MOLEX IGOR SMARTENGINE O - Other (Consult factory)
Emergency	Integral emergency battery pack or emergency circuit optional.
Input Voltage	120V, 277V, 347V, UNV, DC.

*Choose driver from available options.

i Incorporating these components may have limitations or affect the length of the luminaire. Please contact factory for more details.

● WEIGHT

COVE 4 ft	6 lbs / 2.7 kg
COVE 8 ft	12 lbs / 5.4 kg
COVE 12 ft	18 lbs / 8.2 kg

● FINISH

White paint.

● LED SYSTEM

CRI	Minimum 80 or 90 color rendering index.
CRI BIOS	Minimum 80 color rendering index with R9>75 for all CCTs.
CCT Single Color	Choice of 2700K, 3000K, 3500K and 4000K color temperature with a great color consistency (within 3-step MacAdam ellipse). Both within fixture and fixture to fixture.
CCT BIOS	BIOS Static (STC) Choice of 3000K, 3500K and 4000K. BIOS SkyBlue® Dynamic (DYN) Choice of 3000K, 3500K, and 4000K with Bio-Dimming™
CCT Axitune Systems	Consult BIOS guide for more information on BIOS technology. Consult Axitune technical sheet for more information on color technology.
LED life	Minimum 50,000h with 85% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.
Thermal Management	Aluminum housing acting as the heat sink to maximize life.
Environment	Dry and damp rated in operating ambient temperatures of 0-40°C (32-104F).

● WARRANTY

Axis Lighting will warrant defective LEDs, boards, and drivers for 5 years from date of purchase. Warranty is valid if luminaire is installed and used according to specifications. If defective, Axis will send replacement boards or drivers at no cost along with detailed replacement instructions and instructions on how to return defective components to Axis.

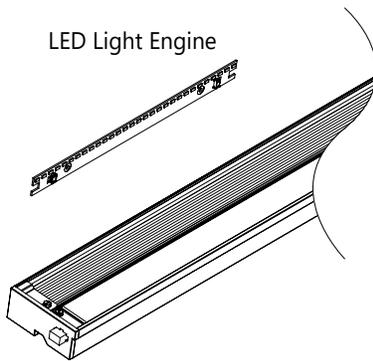
● LIGHT GUIDE

High precision light guide made of PMMA material, allows distribution of controlled light in all 3-dimensions to put light on both vertical and horizontal planes within the space. Patented lightguide design featuring molecular optics and precision-coupled optic components yield a high efficiency luminaire. In-plane mixing maximizes color uniformity while light emitting area is uniform and diffuse without 'head lighting' from the LED's.

● LED UPGRADE / REPLACEMENT

All LED light engines used are field replaceable and upgradable to ensure the lighting system will last for years. Future-proof design comes with easy access to LED light engines from above using quick connectors (included in luminaire) and a screwdriver.

- i** For more information on LED light engine upgrade and replacement, please refer to the COVE LED Light Engine Replacement sheet available at: www.axislighting.com under 'Downloads' tab.



● SYSTEMS (S(L))

Cove Perfekt standard lengths are 1-12 feet. For cove openings greater than 12 ft system runs are available, and would be a combination of standard lengths luminaires, layed out to fit any cove opening shape and interconnected using Axis Quick Connect system.

Fixture lengths will be decided by the factory based on cove opening drafts, specified by the project designer.

For more information on systems and joining, please refer to the COVE installation sheets available at www.axislighting.com under 'Downloads' tab.

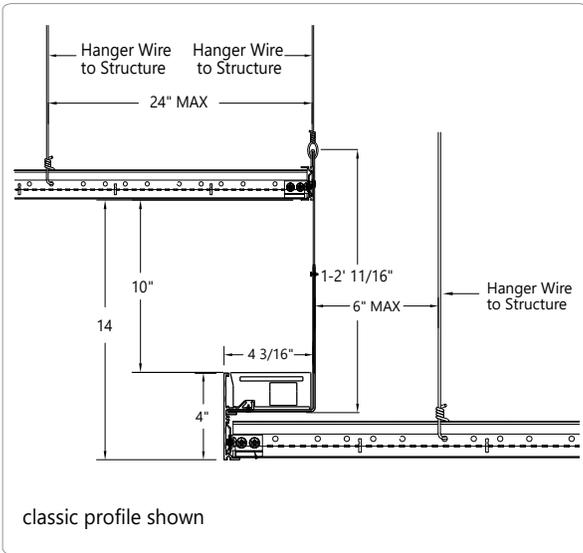
● APPROVALS

Certified to UL and CSA standards
Suitable for damp locations.

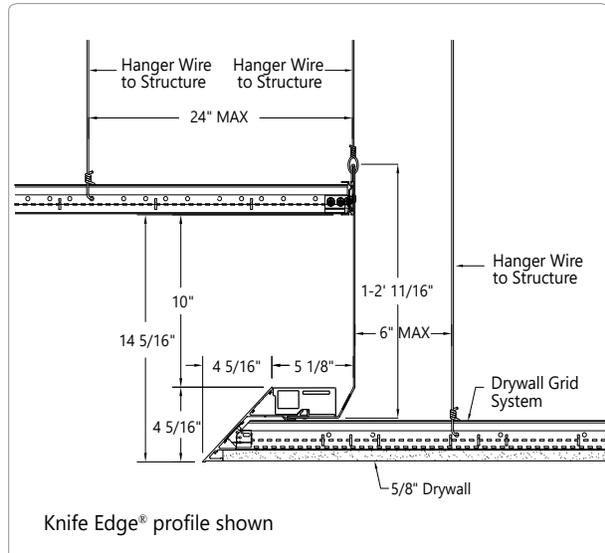


i Armstrong and other cove ceiling systems provided by others.

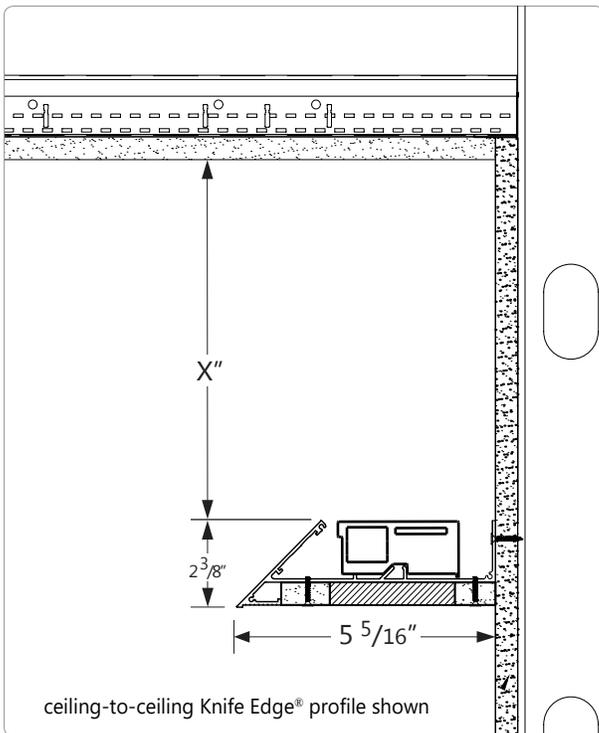
● CEILING MOUNTING OPTIONS



AC ARMSTRONG AXIOM COVE

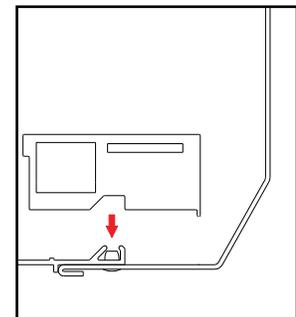


AC ARMSTRONG AXIOM COVE

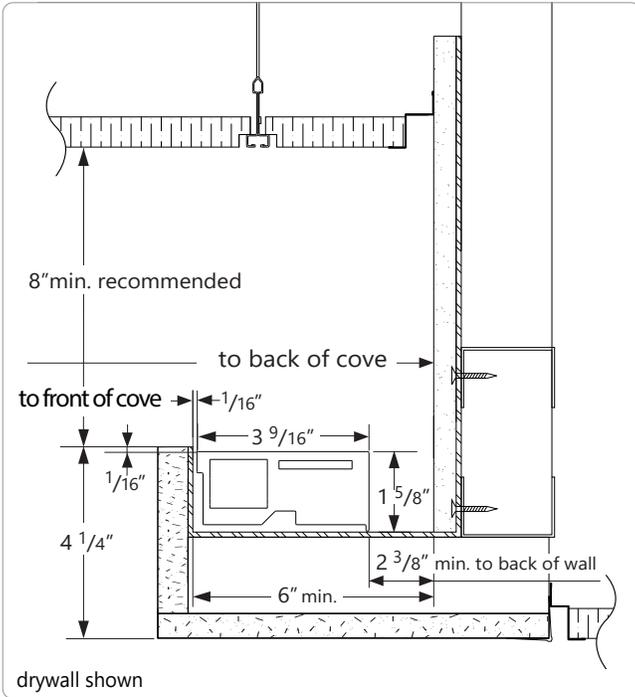


AC ARMSTRONG AXIOM INDIRECT LIGHT LEDGE

WITH ARMSTRONG CEILING



Axis Cove Perfekt - For use with Armstrong Axiom Indirect Light Coves and Ledges

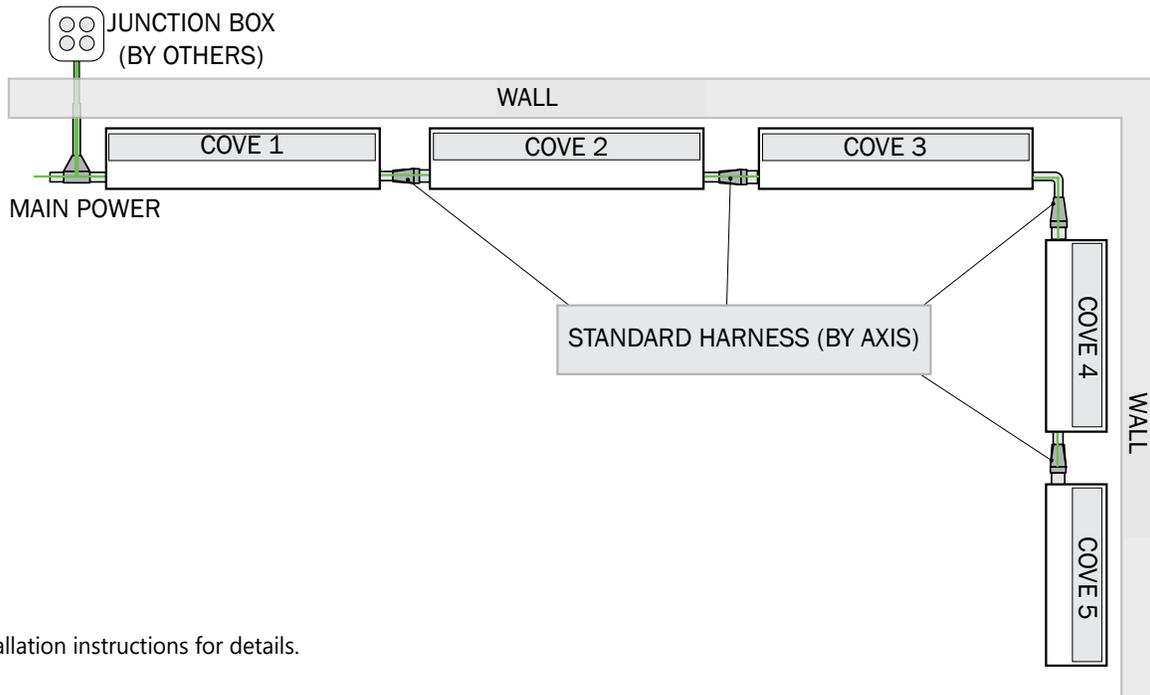


C OTHER COVE

● CHICAGO PLENUM OPTION

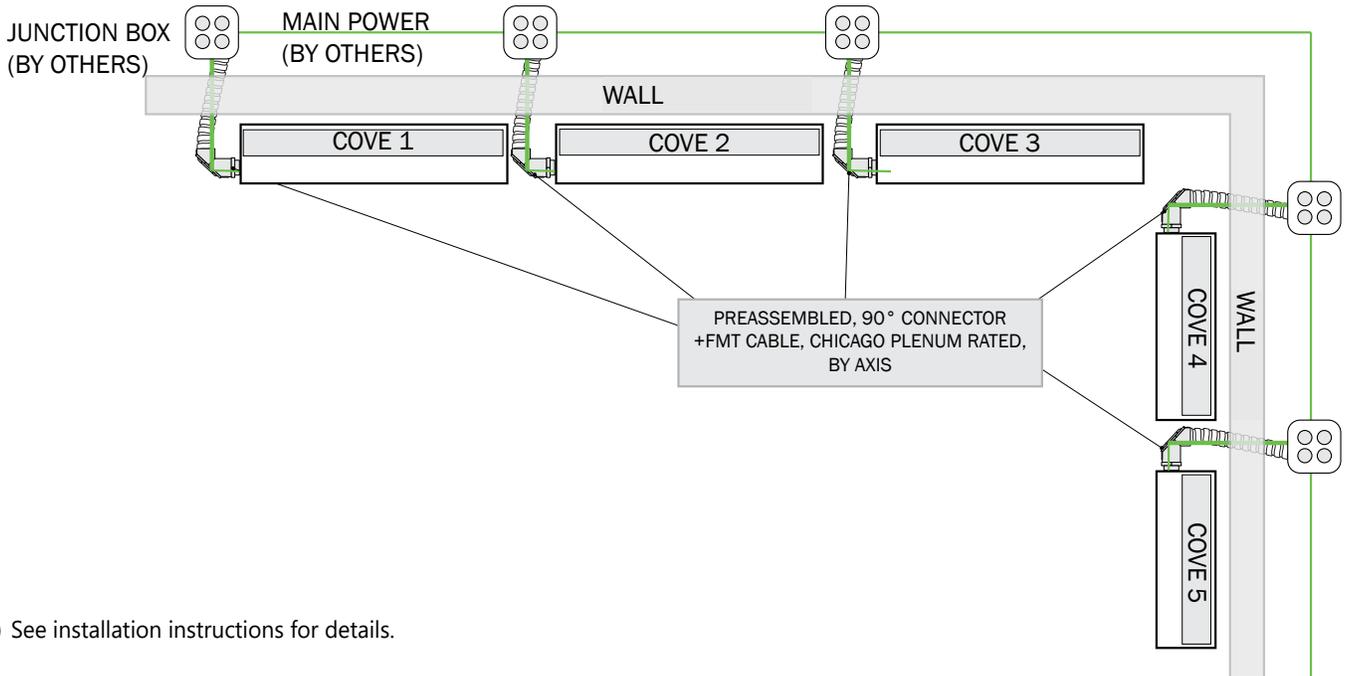


● STANDARD HARNESS OPTION



i See installation instructions for details.

● CHICAGO PLENUM OPTION



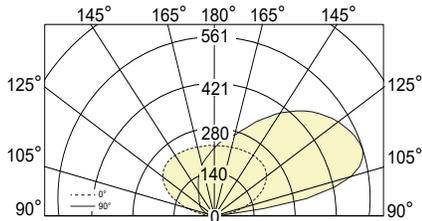
i See installation instructions for details.

● PHOTOMETRIC DATA

NO SHIELDING (NO)

CCL-SL-300-80-35-CL-4
100% up at 300 lm/ft

PHOTOMETRIC CURVE



CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles								
	0	22.5	45	67.5	90	112.5	135	157.5	180
90	1	1	0	0	0	0	0	0	1
95	24	49	59	33	20	24	39	41	19
105	105	145	242	410	495	410	243	141	98
115	180	226	321	468	559	472	322	224	174
125	224	273	359	469	530	472	360	272	220
135	239	286	359	437	477	440	360	286	238
145	239	274	332	384	409	386	333	278	239
155	234	257	291	323	337	324	293	263	235
165	230	243	258	271	276	272	262	250	230
175	228	230	238	244	246	245	241	236	228
180	226	226	226	226	226	226	226	226	226

ZONAL LUMENS

Zone	Lumens
90	
90-100	43
100-110	173
110-120	219
120-130	221
130-140	195
140-150	154
150-160	109
160-170	64
170-180	22
180	

Lumen/ft up: 300 lm/ft
Total Lumens: 1200 lm (for 4ft)
Input Watts: 14.3 W
Efficacy: 84 lm/W

80 CRI shown. For 90 CRI, divide wattage by 0.8 and multiply efficacy by 0.8.
3500K shown. For 2700K, divide wattage by 0.94 and multiply efficacy by 0.94.
For 4000K, divide wattage by 1.02 and multiply efficacy by 1.02.

IES FILE: CCL-SL-300-80-35-CL-4

TESTED ACCORDING TO IES LM-79-2008

CovePerfekt

LED lighting facts
A Program of the U.S. DOE

Light Output (Lumens)	1218
Watts	12.39
Lumens per Watt (Efficacy)	98.3

Color Accuracy Color Rendering Index (CRI)	81
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Light Color Correlated Color Temperature (CCT)	3479 (Bright White)
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2700K 3000K 4500K 6500K

LED Lumen Maintenance Projection at 50,000 Hours at 25°C Ambient*	84.7%
Warranty**	Yes

All results, except LED Lumen Maintenance, are according to IESNA LM-79-2008. Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

* Based on TM-21 projections for the light source.
** See www.lightingfacts.com/products for details.

Registration Number: AEYL-0X2NH2 (11/23/2015)
Model Number: CCL-B4-SL-300-80-35-4-W-UNV-LT-1-C
Type: Luminaire - Cove

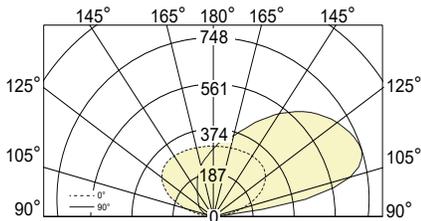
i All IES files are available for download at: www.axislighting.com

● PHOTOMETRIC DATA

NO SHIELDING (NO)

CCL-SL-400-80-35-CL-4
100% up at 400 lm/ft

PHOTOMETRIC CURVE



Lumen/ft up: 400 lm/ft
Total Lumens: 1600 lm (for 4ft)
Input Watts: 19 W
Efficacy: 84 lm/W

80 CRI shown. For 90 CRI, divide wattage by 0.8 and multiply efficacy by 0.8.
3500K shown. For 2700K, divide wattage by 0.94 and multiply efficacy by 0.94.
For 4000K, divide wattage by 1.02 and multiply efficacy by 1.02.

IES FILE: CCL-SL-400-80-35-CL-4.IES

TESTED ACCORDING TO IES LM-79-2008

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles								
	0	22.5	45	67.5	90	112.5	135	157.5	180
90	1	1	0	0	0	0	0	1	1
95	32	65	79	45	27	32	52	55	25
105	140	193	323	547	661	547	324	189	130
115	240	301	428	624	746	629	429	298	232
125	298	364	479	625	707	629	480	362	294
135	318	381	479	582	636	586	480	382	317
145	318	366	442	512	545	514	443	370	319
155	312	343	388	431	450	432	390	351	313
165	307	324	345	361	368	362	349	333	307
175	304	306	317	325	327	326	322	314	304
180	301	301	301	301	301	301	301	301	301

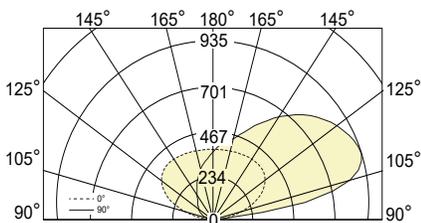
ZONAL LUMENS

Zone	Lumens
90	
90-100	58
100-110	230
110-120	293
120-130	295
130-140	260
140-150	205
150-160	145
160-170	86
170-180	29
180	

NO SHIELDING (NO)

CCL-SL-500-80-35-CL-4
100% up at 500 lm/ft

PHOTOMETRIC CURVE



Lumen/ft up: 500 lm/ft
Total Lumens: 2000 lm (for 4ft)
Input Watts: 23.8 W
Efficacy: 84 lm/W

80 CRI shown. For 90 CRI, divide wattage by 0.8 and multiply efficacy by 0.8.
3500K shown. For 2700K, divide wattage by 0.94 and multiply efficacy by 0.94.
For 4000K, divide wattage by 1.02 and multiply efficacy by 1.02.

IES FILE: CCL-SL-500-80-35-CL-4.IES

TESTED ACCORDING TO IES LM-79-2008

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles								
	0	22.5	45	67.5	90	112.5	135	157.5	180
90	2	1	1	0	0	0	1	1	1
95	40	81	98	56	33	40	65	68	31
105	175	242	404	684	826	684	405	236	163
115	300	377	535	780	932	786	536	373	290
125	373	456	599	781	884	787	600	453	367
135	398	477	598	728	795	733	599	477	396
145	398	457	553	640	681	643	554	463	398
155	390	429	484	539	562	540	488	439	391
165	383	405	431	451	460	453	437	416	384
175	380	383	396	406	409	408	402	393	380
180	376	376	376	376	376	376	376	376	376

ZONAL LUMENS

Zone	Lumens
90	
90-100	72
100-110	288
110-120	366
120-130	369
130-140	325
140-150	257
150-160	181
160-170	107
170-180	36
180	

i All IES files are available for download at: www.axislighting.com

IMPORTANT – All cove opening patterns and length must be submitted with drawings indicating dimensions and light direction.

