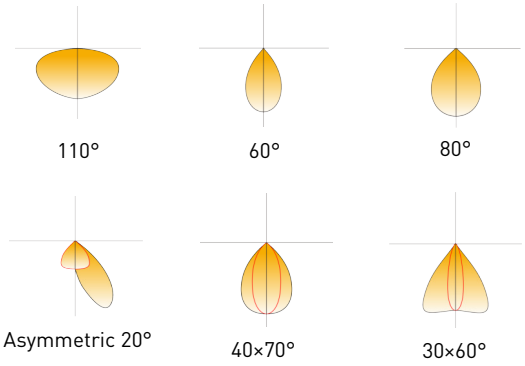
VCOVE **G1** INTERIOR COVE LIGHT

PRODUCT FEATURES

- 120-277 VAC
- Continuous runs as standard
- Luminaire equipped with an integrated driver designed for wall washing and grazing lighting applications,modular design
- 6 highly accurate bi-directional optical distributions provide optimal effectiveness, with standard optics including 60°, 80°, 110°,30x60°, 40x70°, and Asymmetric20°
- 90+ CRI, 3- CCT Select Standard, superior color consistency , Standard Color Tolerance： ⩽ 3SDCM (Single CCT) , ⩽ 5SDCM （Mixed CCT)
- 3-Field ajustable lument output (600lumen/foot, 900lumen/foot and 1200 lumen / foot)
- 0-10V ,1%-100% dimming

DISTRIBUTION



Model	Dimension	Watt select	Max Lumen	Nominal Efficacy	CCT	Beam angle	Voltage	Dimming	CRI	UGR
V1COV1FT 10WB2D1UV-90-110-YY(XXK-XXK-XXK)	1FT 305x56x37.6mm	5W/7.5W/10W	1200lm	120lm/W	3000K 3500K 4000K Select	110°	AC120-277V	0-10V (1-100%)	Ra>90	<28
V1COV4FT 40WB2D1UV-90-110-YY(XXK-XXK-XXK)	4FT 1220x56x37.6mm	20W/30W/40W	4800lm							
V1COV1FT 10WB2D1UV-90-VVV-YY(XXK-XXK-XXK)	1FT 288x71x48.9mm	5W/7.5W/10W	1100lm	110lm/W	3000K 3500K 4000K Select	60° 80° 30x60° 40x70° Asymmetric 20°				<19
V1COV4FT 40WB2D1UV-90-VVV-YY(XXK-XXK-XXK)	4FT 1128x71x48.9mm	20W/30W/40W	4400lm							
V1COV1FT 10WA1D1UV-90-VVV-YY(XXK)	1FT 288x71x48.9mm	5W/7.5W/10W	900lm	90lm/W	3000K 3500K 4000K Single					<19
V1COV4FT 10WA1D1UV-90-VVV-YY(XXK)	4FT 1128x71x48.9mm	20W/30W/40W	3600lm							

Remark:Standard Color accuracy≤ 3SDCM (Single CCT), ⩽ 5SDCM (Mixed CCT); ⩽ 2SDCM(Single CCT) is available.

ORDERING GUIDE

Sample Model#: V1COV1FT10WB2D1UV-90-VVV-YY(XXK-XXK-XXK)

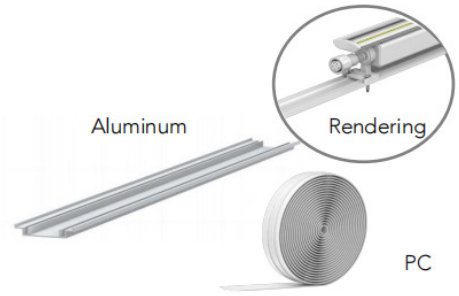
Series	Length	Wattage	Dip-switch	Dimming	Voltage	CRI	Beam angle	Surface color	CCT
V1COV	1FT 4FT	10W= 5W/7.5W/10W 40W= 20W/30W/40W	A1= Single CCT, 3Watt Select B2= 3CCT Select, 3Watt Select	D1= 0-10V (1%-100%)	UV=120-277V	90=Ra>90	110=110° VVV= 60=60° 80=80° 3060=30X60° 4070=40X70° ASY= Asymmetric 20°	YY= WH=White CUS=Custom	(XXK-XXK-XXK)= (30K-35K-40K)= 3000K/3500K/ 4000K CCT Select Single CCT 30K=3000K 40K=4000K 50K=5000K

ACCESSORIES

JUMPER	OTHER
JUM1FT=Jumper 1FT Cable	PH= POWER HARNESS
JUM3FT=Jumper 3FT Cable	SPT1= Splicing Positioning Trunking, Aluminum (2.4M/ROLL)
JUM12FT=Jumper 12FT Cable	SPT2 = Splicing Positioning Trunking, PC (25M/ROLL)

JUMPER 1′ /3′ /12′

L=305mm(UL/SJT/18AWG)
L=920mm(UL/SJT/18AWG)
L=3660mm(UL/SJT/18AWG)



SPT1 = Splicing Positioning Trunking,Aluminum (2.4M/ROLL)
SPT2 = Splicing Positioning Trunking, PC (25M/ROLL)

POWER HARNESS

Metal box with 50cm harness (internal connector)

PRODUCT SPECIFIC ATIONS

Construction

- Housing is powder coated, extruded aluminum
- PC end-caps ensure a robust and clean construction
- Available in 1F (12")and 4F (48") length

LED Drivers

- Class II UL certified driver
- Traditional electronic drivers are available for 120- 277V applications

LED & Optics

- Fixture equipped with p roprietary 90+ CRI LED module available in 3-CCT Select 3000, 3500, 4000K or 3000,4000,5000K
- Standard Color accuracy: ⩽ 3SDCM (Single CCT) , ⩽ 5SDCM (Mixed CCT) ;⩽ 2SDCM(Single CCT) is available.
- Designers can choose from various optical controls for optimal installation results, covering both perpendicular and parallel orientations. The 110° option uses a transparent PC cover, while others feature optical lenses. Available angles include60°, 80°, 30x60°, 40x70°, and Asymmetric20°, allowing for customized lighting effects like washes or grazes.

Mounting

- Extruded adjustable mounting bracket is made of anodized aluminum. This versatile bracket permits aiming within a range of +/- 90 degrees and can be installed in any orientation surface, ceiling, or vertically. It features a set screw for securing the aiming position, and for enhanced security, additional brackets can be added.

Electrical

- 0-10V 1% -100% Dimming provided as standard

Weight

- 1FT= 1.25lb (PC) or 1.55lb (Lens)
- 4FT=4.8lb (PC) or 5.5lb (lens)

Environment

- Suited for damp location
- Operating temperature range: -25° C to 50° C

Approvals

- ETL - listed for damp locations
- Tested to IESNA LM-79 and LM-80

Warranty

Five year warranty standard.

RUN LENGTH LIMITS

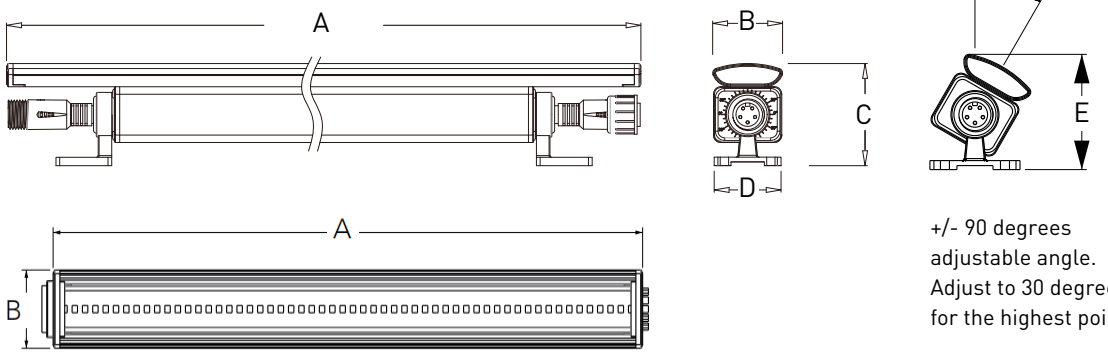
Run Length Limits (ft)	1FT			4FT		
Fixture Input Wattage	5W	7.5W	10W	20W	30W	40W
Maximum Run Length (ft) @ 120V	144'	96'	72'	144'	96'	72'
Maximum Run Length (ft) @ 277V	330'	220'	165'	332'	220'	165'

Notes:

1.When 1FT and 4FT a re used on a line, all lamps must use the same power level, such as high-end, mid-range, and low-end,otherwise the brightness will be inconsistent.
2. When using high power, Run must be limited to 72 ft when using both 1FT and 4FT fixtures in a single run at 120V Run must be limited to 165 ft when using both 1F and 4F fixtures in a single run at 277V
3. When using the medium power range, Run must be limited to 96 ft when using both 1FT and 4FT fixtures in a single run at 120V Run must be limited to 220 ft when using both 1F and 4F fixtures in a single run at 277V
4. When using low power range, Run must be limited to 144 ft when using both 1FT and 4FT fixtures in a single run at 120V Run must be limited to 330 ft when using both 1F and 4F fixtures in a single run at 277V
5. Run length is limited based on common 30mA dimmer limit, Run length could be extended To 200ft for dimmers with 50mA current rating.
6.When to Use Grounding: Grounding is required when installing fixtures in high-power or long-run setups to ensure safety. The ground wire should be connected to the bracket, and every three fixtures in a continuous run should be grounded to prevent electrical hazards.

DIMENSION

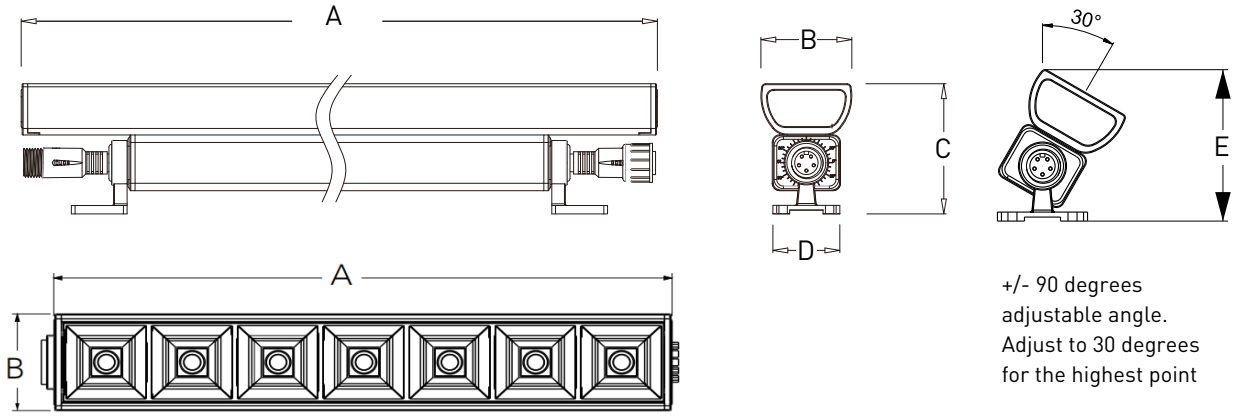
PC Version :110°



+/- 90 degrees
adjustable angle.
Adjust to 30 degrees
for the highest point

MODEL	A	B	C	D	E
WL-1COV1FT10WB2D1UV(XXK-XXK-XXK)-MCC-110-YY	12"(305mm)	1.48"(37.6mm)	2.17"(55mm)	1.42"(36mm)	2.27"(57.6mm)
WL-1COV4FT40WB2D1UV(XXK-XXK-XXK)-MCC-110-YY	48"(1220mm)	1.48"(37.6mm)	2.17"(55mm)	1.42"(36mm)	2.27"(57.6mm)

Optic Version



+/- 90 degrees
adjustable angle.
Adjust to 30 degrees
for the highest point

MODEL	A	B	C	D	E
WL-1COV1FT10WB2D1UV(XXK- XXK-XXK)-MCC -60°/80°/30x60°/40x70°/Asymmetric20°-YY	11.34"(288mm)	1.93"(48.9mm)	2.76"(70mm)	1.42"(36mm)	2.98"(75.6mm)
WL-1COV4FT40WB2D1UV(XXK-XXK-XXK)-MCC-60°/80°/30x60°/40x70°/Asymmetric20°-YY Produc	44.41"(1128mm)	1.93"(48.9mm)	2.76"(70mm)	1.42"(36mm)	2.98"(75.6mm)

Features

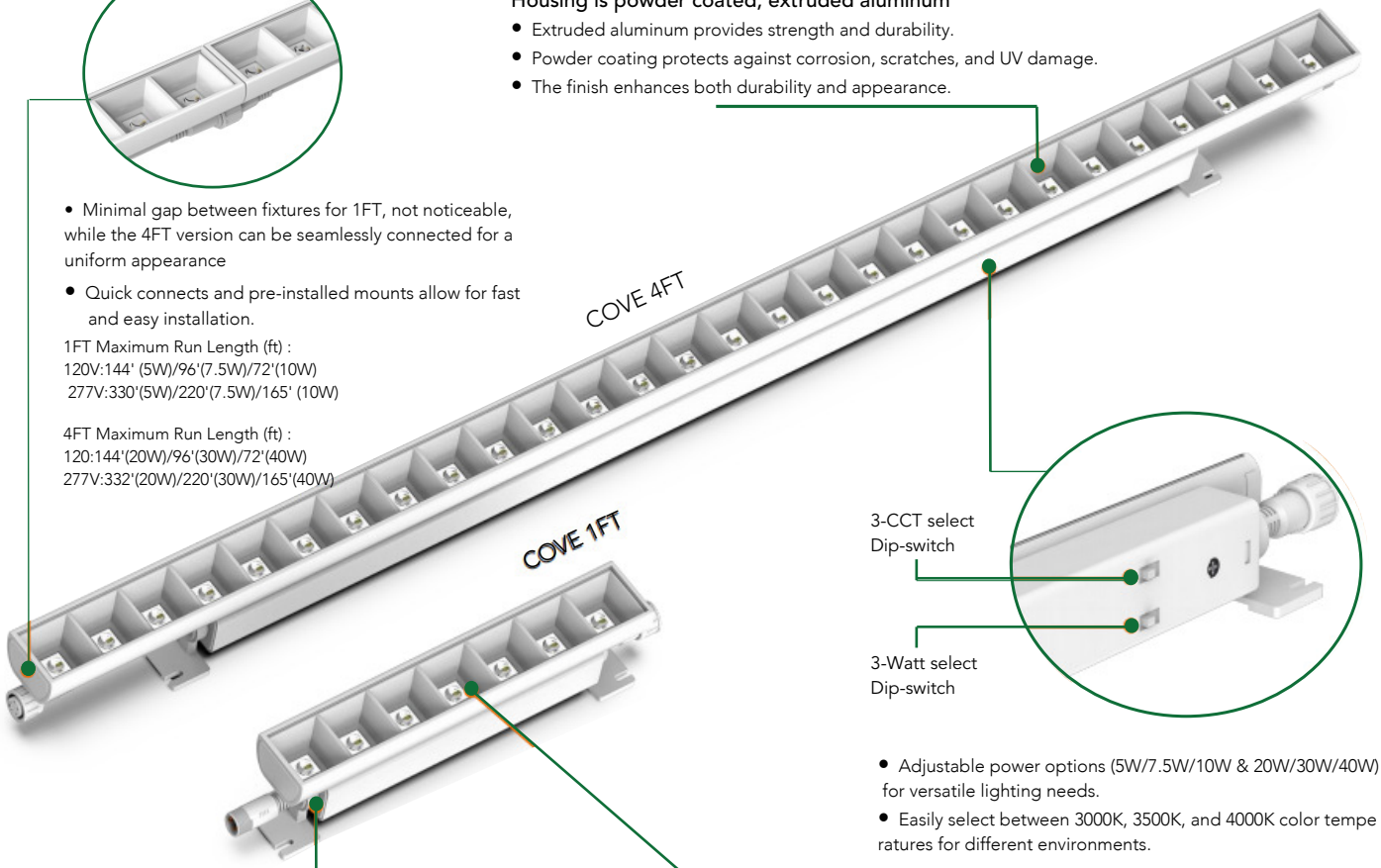
- Minimal gap between fixtures for 1FT, not noticeable, while the 4FT version can be seamlessly connected for a uniform appearance
- Quick connects and pre-installed mounts allow for fast and easy installation.

1FT Maximum Run Length (ft) :
120V:144' (5W)/96'(7.5W)/72'(10W)
277V:330'(5W)/220'(7.5W)/165' (10W)

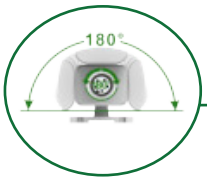
4FT Maximum Run Length (ft) :
120:144'(20W)/96'(30W)/72'(40W)
277V:332'(20W)/220'(30W)/165'(40W)

Housing is powder coated, extruded aluminum

- Extruded aluminum provides strength and durability.
- Powder coating protects against corrosion, scratches, and UV damage.
- The finish enhances both durability and appearance.



- Adjustable power options (5W/7.5W/10W & 20W/30W/40W) for versatile lighting needs.
- Easily select between 3000K, 3500K, and 4000K color tempe ratures for different environments.



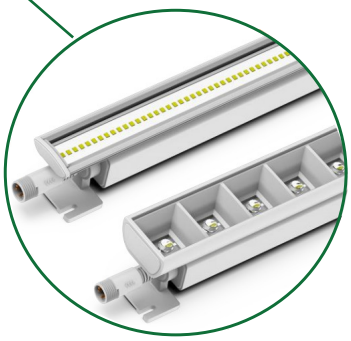
- **Extruded Adjustable Mounting Bracket Made of Die-Cast Aluminum**
The bracket is made from die-cast aluminum for enhanced durability and corrosion resistance

- **Flexible Adjustment**
It allows aiming within a +/- 90-degree range for versatile lighting angles.

- **Multiple Mounting Options**
Can be mounted on any surface, ceiling, or vertical direction for flexible installation.

- **Fixed Screw for Secure Positioning**
Includes a fixing screw to lock the aiming position for stability.

- **Optional Additional Brackets for Enhanced Security**
Additional brackets can be added for extra safety and stability.

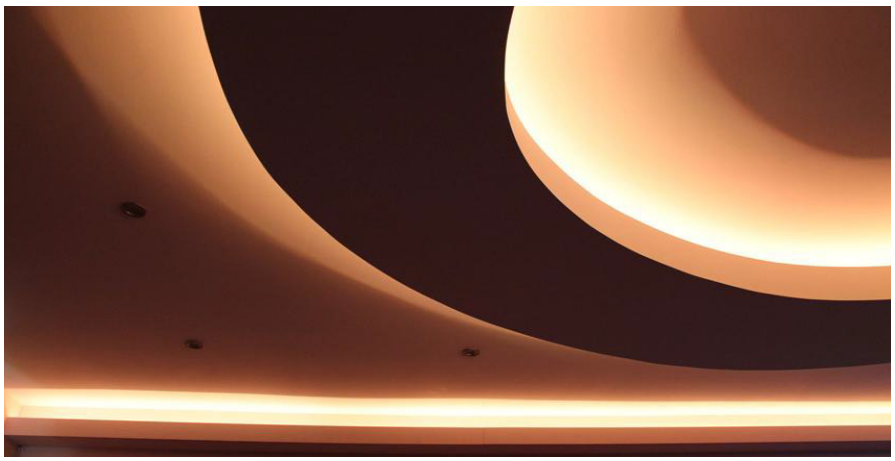


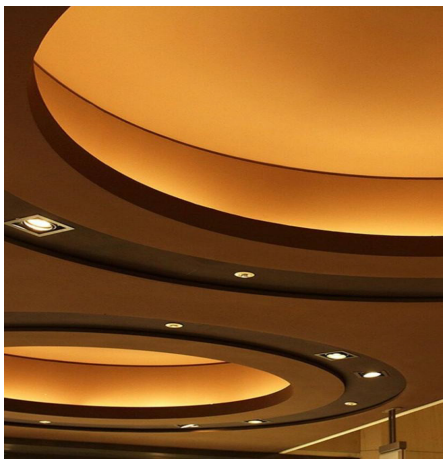
Standard 3 Optics (110° & Asymmetric & 30x60°)

- 110° Optic: Provides broad, uniform light, ideal for general lighting.
- Asymmetric Optic: Delivers a directed beam, perfect for highlighting areas with minimal spill light.
- 30x60° Optic: Offers a focused beam, suitable for long-distance or sp ot lighting.

Applications

Cove

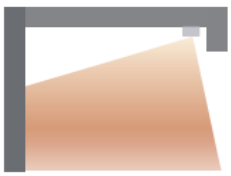




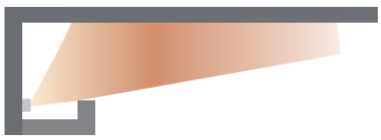
Clearver G1 adapts to any environment giving designers more freedom and greater control over their projects

Cove Architectural ledge or recess on the upper part of a wall.
Beam angle : 80°,40°x70°,60°

Graze Light that is close to and parallel to a surface and creates strong contrast.
Beam angle: 30 °x60°,40°x70°

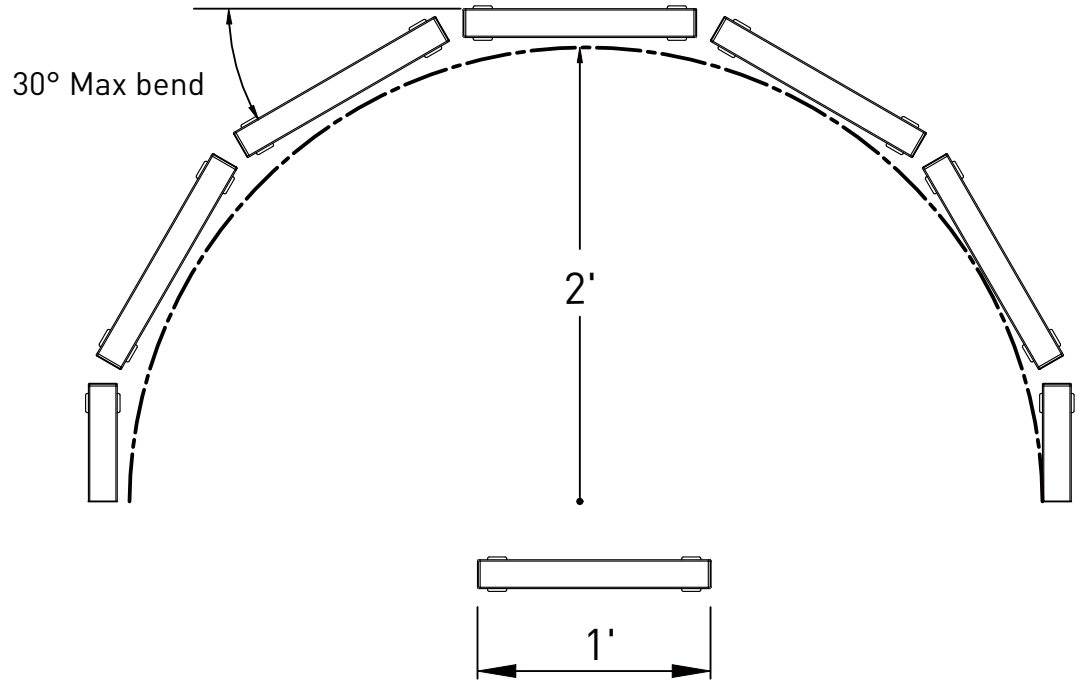


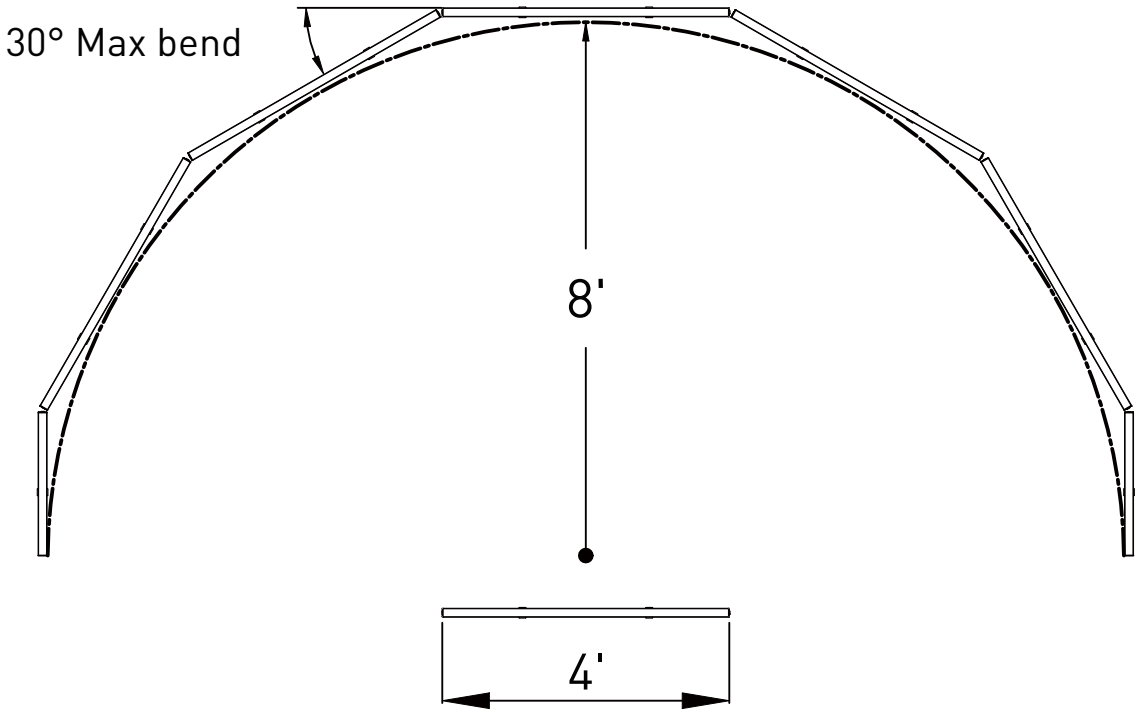
Wash Light striking a surface from a distance that reduces or eliminates contrast.
Beam angle:110° ,60°,80°



Asymmetric Light that uniformly illuminates a ceiling or wall without dark shadows in the cove.
Beam angle:Asymmetric 20°

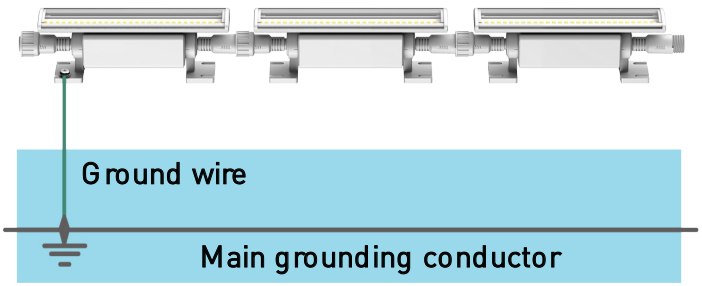
Radius Bend





WIRING NOTICE FOR CONNECTED FIXTURES

To ensure safe operation in wet or corrosive environments, a corrosion-resistant ground wire must be installed every three fixtures. This prevents leakage current buildup and complies with international safety standards.

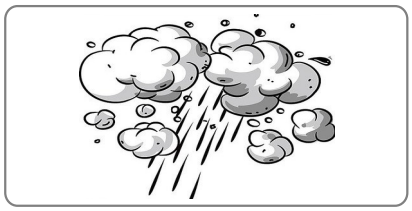


Leakage current from multiple fixtures may accumulate

Risk of touch voltage under fault or wet conditions

Additional ground every 3 fixtures lowers impedance

Especially important for wet /conductive surfaces

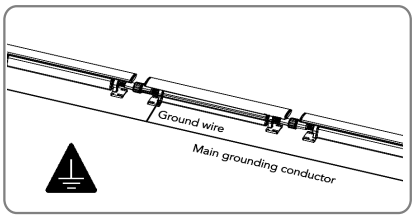


WHY IS GROUNDING CRITICAL IN HARSH ENVIRONMENTS?

- Fixtures are exposed to rain, irrigation, and melting snow salt.
- Metal housings may accumulate water and become conductive.
- Moisture lowers human body resistance significantly.
- Extra grounding provides a low resistance path for leakage current.
- This prevents hazardous voltage on exposed metal parts.

WHY IS GROUNDING NEEDED?

- Tiny leakage currents from each light can add up.
- Long ground wires = higher resistance, more voltage.
- Wet ground = greater shock risk to people.
- Low resistance grounding path prevents touch voltage.
- Without proper grounding, protective devices may not trip.
- Required by international electrical safety codes.



HOW DOES EXTRA GROUNDING HELP?

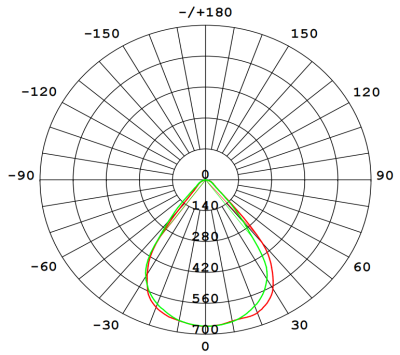
- One ground every 3 lights limits current build-up
- Shorter return paths reduce voltage on housing.
- Redundancy prevents one bad wire from failing all.
- Protects against wire damage or loose connections.
- Also helps reduce EMI in complex wiring systems.

**** All grounding connections must be properly installed and tested according to international standards and manufacturer instructions. This is a critical safety requirement to ensure reliable operation and protect both people and equipment.**

Cove V1COV

NOMINALFLUX(lm):949.945,NOMINAL POWER(W):10W,Imax(cd):663.9,Efficay:97.57lm/W

Cove G1-WL-1COV/1FT/10W/RA90/3000K/80°



AVERAGE BEAM ANGLE(50%):75.8 DEG

Zonal Flux Diagram

γ	C0	C45	C90	C135	C180
10	649.9	650.2	653.0	653.3	648.3
20	641.1	620.4	608.0	617.5	614.2
30	569.7	562.9	518.3	544.7	494.8
40	370.6	420.0	247.3	378.1	179.8
50	70.62	160.5	70.89	116.7	50.04
60	38.21	43.20	36.01	37.52	30.73
70	20.72	19.70	18.10	16.37	12.35
80	6.191	5.428	4.667	3.801	2.342
90	0.4914	0.2188	0.0106	0.0121	0.0049
DEG	LUMINOUSINTENSITY:cd/klm				

Zonal Lumens

γ	Φ zone	Φ total
00-10	62.60	62.60
10-20	179.0	241.6
20-30	267.6	509.2
30-40	275.3	784.5
40-50	149.2	933.7
50-60	51.41	985.1
60-70	26.20	1011
70-80	10.37	1022
80-90	1.780	1023
UNIT:lm/klm		

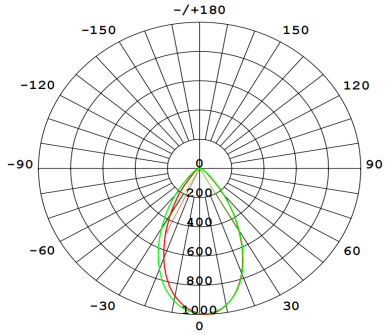
LUMINANCE cd/(m2)

G(DEG)	C0/180	C90/270
85	2389	1358
80	3188	2398
75	4184	3471
70	5418	4724
65	6347	5774
60	6833	6427
55	7561	7084
50	9825	9843
45	19835	17209

Cove V1COV

NOMINALFLUX(lm):1024.52,NOMINAL POWER(W):10W,Imax(cd):998.7,Efficay:95.24lm/W

Cove V1COV/1FT/10W/RA90/3000K/ 60°



AVERAGE BEAM ANGLE(50%):56.9 DEG

Zonal Flux Diagram

γ	C0	C45	C90	C135	C180
10	949.8	961.7	948.2	929.2	886.2
20	763.7	781.3	768.3	735.3	652.8
30	486.2	511.0	491.7	459.5	364.2
40	229.0	266.1	231.1	228.4	139.3
50	74.28	111.9	84.08	92.54	50.30
60	34.23	42.31	32.63	35.86	24.25
70	15.94	15.42	13.53	12.40	9.632
80	4.933	4.154	3.481	2.845	1.901
90	0.4671	0.125	0.0075	0.0049	0.0096
DEG	LUMINOUSINTENSITY:cd/klm				

Zonal Lumens

γ	Φ zone	Φ total
00-10	91.63	91.63
10-20	234.5	326.1
20-30	271.7	597.8
30-40	206.9	804.7
40-50	111.1	915.7
50-60	50.18	965.9
60-70	23.02	988.9
70-80	8.474	997.4
80-90	1.517	998.9
UNIT:lm/klm		

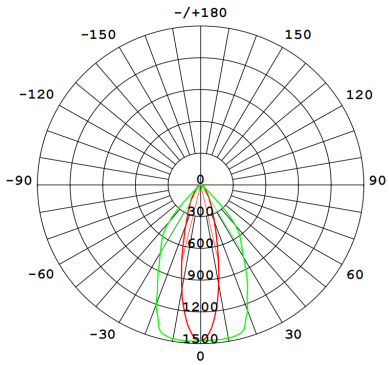
LUMINANCE cd/(m2)

G(DEG)	C0/180	C90/270
85	1978	994
80	2539	1789
75	3278	2630
70	4166	3533
65	5008	4450
60	6120	5826
55	7627	8030
50	10330	11678
45	16001	17930

Cove V1COV

NOMINALFLUX(lm):507.951,NOMINAL POWER(W):10W,Imax(cd):1493,Efficay:89.5lm/W

Cove V1COV/1FT/10W/RA90/3000K/30*60°



AVERAGE BEAM ANGLE(50%):44.1 DEG

Zonal Flux Diagram

γ	C0	C45	C90	C135	C180
10	953.6	1181	1468	1334	1010
20	363.4	621.3	1262	794.3	406.7
30	163.4	234.6	788.5	303.2	190.8
40	75.94	99.52	496.3	127.3	88.89
50	46.29	46.72	68.26	60.18	52.20
60	26.10	24.20	22.56	31.79	31.70
70	10.05	9.974	7.428	14.55	12.58
80	2.443	2.644	0.4456	4.354	3.119
90	0.0271	0.2216	0.0025	0.5548	0.1336
DEG	LUMINOUSINTENSITY:cd/klm				

Zonal Lumens

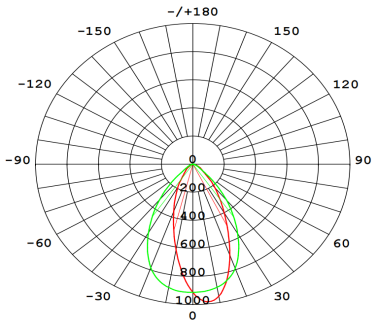
γ	Φ zone	Φ total
00-10	127.4	127.4
10-20	268.2	395.7
20-30	235.4	631.1
30-40	167.9	799.0
40-50	82.14	881.1
50-60	33.09	914.2
60-70	17.11	931.3
70-80	6.026	937.3
80-90	1.119	938.4
UNIT:lm/klm		

LUMINANCE cd/(m2)

G(DEG)	C0/180	C90/270
85	901	187
80	1264	229
75	1845	1119
70	2640	1940
65	3677	2847
60	4689	4029
55	5960	5431
50	6470	9484
45	7296	27255

V1COV

Cove V1COV/1FT/10W/RA90/3000K/40*70°



AVERAGE BEAM ANGLE(50%):55.0 DEG

NOMINALFLUX(lm):939.788,NOMINAL POWER(W):10W,Imax(cd):983.8,Efficay:90.47lm/W

Zonal Flux Diagram

γ	C0	C45	C90	C135	C180
10	954.2	974.1	889.5	726.3	619.1
20	688.8	818.7	788.7	492.3	357.5
30	399.3	539.4	571.2	296.8	194.8
40	218.6	300.2	333.0	160.8	86.93
50	94.83	143.9	117.4	70.99	48.84
60	54.07	58.36	39.95	31.63	21.62
70	25.10	24.03	17.19	10.72	6.442
80	8.507	7.455	4.651	1.824	0.7167
90	1.538	0.9367	0.0062	0.0024	0.0025
DEG	LUMINOUSINTENSITY:cd/klm				

Zonal Lumens

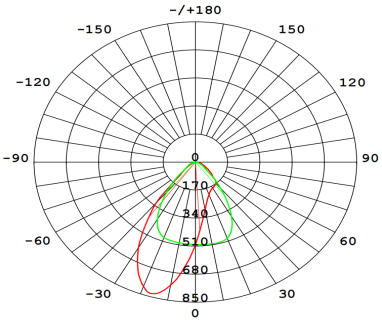
γ	Φ zone	Φ total
00-10	83.45	83.45
10-20	208.7	292.1
20-30	241.4	533.6
30-40	197.9	731.5
40-50	121.7	853.2
50-60	56.63	909.9
60-70	26.72	936.6
70-80	10.16	946.8
80-90	2.099	948.9
UNIT:lm/klm		

LUMINANCE cd/(m2)

G(DEG)	C0/180	C90/270
85	4192	1333
80	4330	2396
75	5242	3441
70	6485	4497
65	7956	5547
60	9556	7147
55	10792	9624
50	13038	16332
45	18272	27314

Cove V1COV

Cove V1COV/1FT/10W/RA90/3000K/
Asymmetric 20°



AVERAGE BEAM ANGLE(50%):58.0 DEG

NOMINALFLUX(lm):999.984,NOMINAL POWER(W):10W,Imax(cd):960.2,Efficay:90.74lm/W

Zonal Flux Diagram

γ	C0	C45	C90	C135	C180
10	294.1	340.1	503.3	716.6	758.7
20	210.2	246.6	491.0	914.7	802.2
30	182.2	191.1	380.9	909.0	602.2
40	169.7	155.5	205.7	600.6	321.3
50	111.1	110.4	77.34	234.2	81.51
60	62.96	58.60	44.53	47.00	30.82
70	38.04	30.09	20.05	14.82	8.923
80	13.22	9.257	4.805	2.615	1.232
90	1.848	0.910	0.0050	0.0077	0.0071
DEG	LUMINOUSINTENSITY:cd/klm				

Zonal Lumens

γ	Φ zone	Φ total
00-10	48.59	48.59
10-20	149.8	198.4
20-30	232.5	430.9
30-40	239.3	670.2
40-50	157.9	828.1
50-60	72.18	900.3
60-70	34.30	934.6
70-80	14.17	948.7
80-90	2.866	951.6
UNIT:lm/klm		

LUMINANCE cd/(m2)

G(DEG)	C0/180	C90/270
85	6211	1272
80	6978	2459
75	8631	3757
70	10197	5210
65	10924	6637
60	11544	7913
55	13651	8868
50	15846	10691
45	17925	16684