eW Cove MX Powercore

Precision Dimming

DMX-dimmable premium linear interior LED cove and accent fixture with solid white light

PHILIPS

COLOR KINETICS

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DMX-dimmable premium linear interior LED cove and accent fixture with solid white light

eW Cove MX Powercore delivers the highest light output in the line of solid white linear cove lights from Philips Color Kinetics. eW Cove MX Powercore can be used for accent lighting and indirect general illumination, as well as the full range of wall and ceiling cove applications. eW Cove MX Powercore with Precision Dimming features precise dimming from 0 to 100% via the full range of DMX and Ethernet lighting controllers. eW Cove MX Powercore offers environmentally-conscious buyers a green, energy-efficient cove and accent fixture with industry-leading quality and quantity of light.

- Precise dimming control via DMX — Dim fixtures smoothly and accurately from 0% to 100% with the full range of Philips Color Kinetics lighting controllers. including iPlayer 3, and third-party controllers.
- Lower cost than comparable fluorescent strip lighting — With long useful life and low-maintenance operation, eW Cove MX Powercore represents a cost-effective alternative to traditional cove lights, offering lower first and total cost than dimmable T5 and 2-lamp T8 strip lights in typical cove applications.
- High-performance illumination and beam quality — eW Cove MX Powercore is available in 1 ft (305 mm) and 4 ft (1.2 m) die-cast aluminum housings with a medium 50° x 70° or wide 110° x 110° beam angle. Superior beam quality delivers striation-free light as close as 6 in (152 mm) from fixture placement. Interlocking connectors accommodate end-to-end connection without visible light scalloping between fixtures.
- Multiple color temperature options for design and application flexibility — Available in 2700 K, 3000 K, 3500 K, and 4000 K color temperatures for applications calling for warm, neutral, or cool white light.
- Integrates patented Powercore technology — Powercore rapidly, efficiently, and accurately controls power directly from line voltage, eliminating the need for an external power supply. Contractor-friendly installation dramatically simplifies installation and lowers total system cost.
- Support for multiple voltages — Accepts power input of 100 – 240 VAC for consistent installation and operation from line voltage in a variety of locations.
- Simple installation — Powercore integrated power management technology simplifies installation and allows long product runs. Easy-to-install 4 ft (1.2 m) mounting tracks allow quick project setup in linear applications.
- Easy mounting and positioning — With end-to-end locking power connectors that can make 180° turns, eW Cove MX Powercore fixtures are easy to position in even the most challenging mounting circumstances. Fixtures rotate in 10° increments through 180° for precise aiming and color mixing. Optional mounting tracks support vertical and overhead positioning. 1 ft (305 mm) and 5 ft (1.5 m) jumper cables can add extra space between fixtures.

Superior Binning Algorithm sets new standard for color consistency

eW Cove MX Powercore exceeds the recognized standards for color quality to guarantee uniformity and consistency of hue and color temperature across LEDs, fixtures, and manufacturing runs.

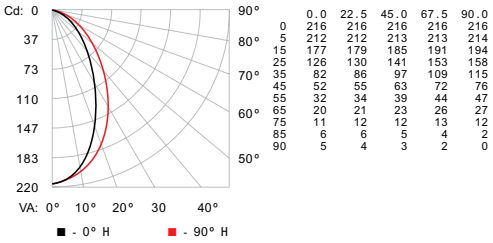
Photometrics

Photometric data is based on test results from an independent NIST traceable testing lab. IES data is available at www.philipscolorkinetics.com/support/ies.

eW Cove MX Powercore with Precision Dimming 1 ft , 2700 K, 50° x 70° beam angle

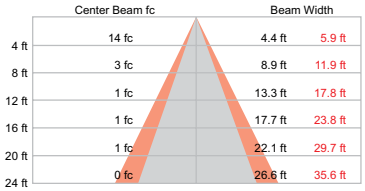
Lumens	333
Efficacy	21.3 lm / W

Polar Candela Distribution



	0.0	22.5	45.0	67.5	90.0
0	216	216	216	216	216
5	212	212	213	213	214
15	177	179	185	191	194
25	126	130	141	153	158
35	82	86	97	109	115
45	52	55	63	72	76
55	32	34	39	44	47
65	20	21	23	26	27
75	11	12	12	13	12
85	6	6	5	4	2
90	5	4	3	2	0

Illuminance at Distance



14.7 ft (4.5 m)
1 fc maximum distance

Vert. Spread: 57.9°
Horiz. Spread: 73.2°

Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	137	41.1
0- 40	198	59.5
0- 60	282	84.9
0- 90	324	97.4
90-120	6	1.7
90-130	7	2.1
90-150	9	2.6
90-180	9	2.6
0-180	333	100.0

Coefficients Of Utilization - Zonal Cavity Method

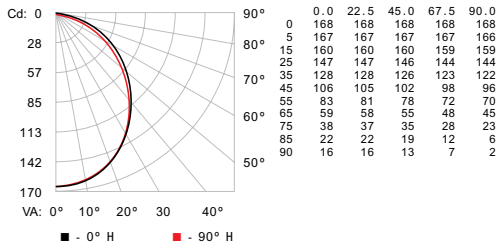
Effective Floor Cavity Reflectance: 20%

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	118	118	118	118	115	115	115	115	110	110	110	104	104	104	100	100	100	97
1	110	106	102	99	107	103	100	97	99	96	93	94	92	90	90	89	87	85
2	102	94	89	84	99	92	87	83	89	84	80	85	81	78	82	79	76	74
3	94	85	78	72	91	83	77	72	80	74	70	77	72	68	74	70	67	65
4	87	77	69	63	85	75	68	63	73	67	62	70	65	61	68	63	60	58
5	81	70	62	56	79	69	61	56	66	60	55	64	59	54	62	57	54	52
6	76	64	56	50	74	63	56	50	61	54	50	59	53	49	57	52	48	47
7	71	59	51	46	69	58	51	45	56	50	45	55	49	45	53	48	44	42
8	67	55	47	42	65	54	47	41	52	46	41	51	45	41	50	44	40	39
9	63	51	43	38	61	50	43	38	49	42	38	47	42	37	46	41	37	36
10	59	47	40	35	58	47	40	35	46	39	35	44	39	35	43	38	34	33

eW Cove MX Powercore with Precision Dimming 1 ft, 2700 K, 110° x 110° beam angle

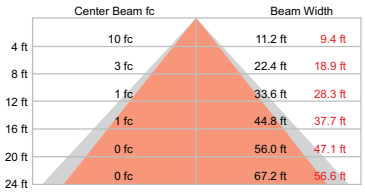
Lumens	475
Efficacy	30.4 lm / W

Polar Candela Distribution



	0.0	22.5	45.0	67.5	90.0
0	168	168	168	168	168
5	167	167	167	167	166
15	160	160	160	159	159
25	147	147	146	144	144
35	128	128	126	123	122
45	106	105	102	98	96
55	83	81	78	72	70
65	59	58	55	48	45
75	38	37	35	28	23
85	22	22	19	12	6
90	16	16	13	7	2

Illuminance at Distance



12.9 ft (3.9 m)
1 fc maximum distance

Vert. Spread: 108.9°
Horiz. Spread: 99.4°

Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	128	26.9
0- 40	206	43.4
0- 60	353	74.4
0- 90	460	96.8
90-120	14	3.0
90-130	15	3.2
90-150	15	3.2
90-180	15	3.2
0-180	475	100.0

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

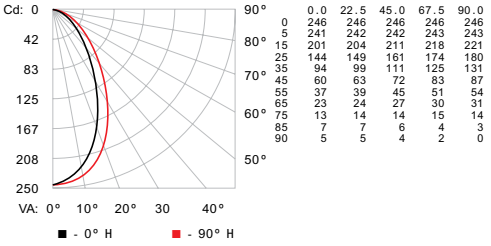
RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	97
1	107	102	98	93	104	100	95	92	95	91	88	90	87	85	86	84	82	79
2	97	89	82	76	94	87	80	75	83	77	72	79	74	70	75	72	68	66
3	89	78	70	63	86	76	69	62	73	66	61	70	64	59	67	62	58	56
4	81	69	60	54	79	68	59	53	65	58	52	62	56	51	59	54	50	48
5	75	62	53	46	73	61	52	46	58	51	45	56	49	44	54	48	43	41
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	49	43	38	36
7	64	51	42	36	62	50	41	36	48	40	35	46	40	35	45	39	34	32
8	60	46	38	32	58	45	37	32	44	37	31	42	36	31	41	35	31	29
9	56	43	34	29	54	42	34	29	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	31	26	36	30	25	35	29	25	23

For lux multiply fc by 10.7

eW Cove MX Powercore with Precision Dimming 1 ft, 3000 K, 50° x 70° beam angle

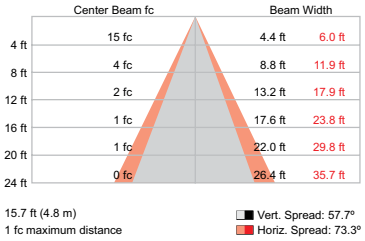
Lumens	381
Efficacy	24.4 lm / W

Polar Candela Distribution



	0.0	22.5	45.0	67.5	90.0
0	246	246	246	246	246
5	241	242	242	243	243
15	201	204	211	218	221
25	144	149	161	174	180
35	94	99	111	125	131
45	60	63	72	83	87
55	37	39	45	51	54
65	23	24	27	30	31
75	13	14	14	15	14
85	7	7	6	4	3
90	5	5	4	2	0

Illuminance at Distance



Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	156	40.8
0- 40	226	59.2
0- 60	323	84.7
0- 90	371	97.3
90-120	7	1.7
90-130	8	2.1
90-150	10	2.6
90-180	10	2.7
0-180	381	100.0

Coefficients Of Utilization - Zonal Cavity Method

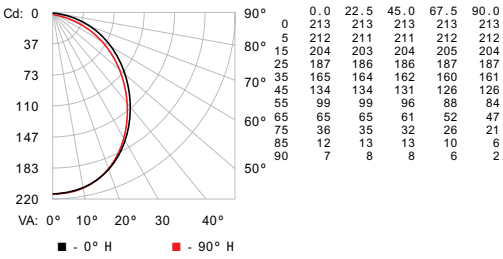
Effective Floor Cavity Reflectance: 20%

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	118	118	118	118	115	115	115	115	110	110	110	104	104	104	100	100	100	97
1	110	106	102	99	107	103	100	97	98	96	93	94	92	90	90	88	87	85
2	101	94	89	84	99	92	87	82	88	84	80	85	81	78	82	79	76	74
3	94	85	78	72	91	83	77	71	80	74	70	77	72	68	74	70	67	65
4	87	77	69	63	85	75	68	63	73	66	62	70	65	60	68	63	59	57
5	81	70	62	56	79	69	61	56	66	60	55	64	59	54	62	57	53	51
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	57	52	48	46
7	71	59	51	46	69	58	51	45	56	50	45	55	49	44	53	48	44	42
8	66	54	47	41	65	54	46	41	52	46	41	51	45	41	49	44	40	38
9	63	50	43	38	61	50	43	38	49	42	38	47	41	37	46	41	37	35
10	59	47	40	35	58	46	40	35	45	39	35	44	39	35	43	38	34	33

eW Cove MX Powercore with Precision Dimming 1 ft, 3000 K, 110° x 110° beam angle

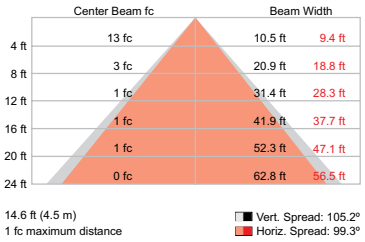
Lumens	563
Efficacy	36.1 lm / W

Polar Candela Distribution



	0.0	22.5	45.0	67.5	90.0
0	213	213	213	213	213
5	212	211	211	212	212
15	204	203	204	205	204
25	187	186	186	187	187
35	165	164	162	160	161
45	134	134	131	126	126
55	99	99	96	88	84
65	65	65	61	52	47
75	36	35	32	26	21
85	12	13	13	10	6
90	7	8	8	6	2

Illuminance at Distance



Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	164	29.1
0- 40	265	47.1
0- 60	449	79.8
0- 90	553	98.3
90-120	9	1.6
90-130	9	1.7
90-150	10	1.7
90-180	10	1.7
0-180	563	100.0

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

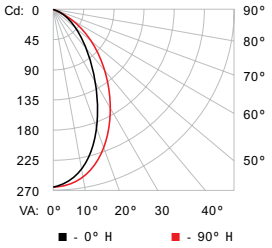
RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105	100	100	100	98
1	109	104	100	96	106	101	98	94	97	94	91	93	90	88	89	87	85	83
2	99	91	84	79	96	89	83	78	85	80	76	82	77	74	78	75	72	70
3	91	80	72	66	88	79	71	65	75	69	64	72	67	63	70	65	61	59
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	62	57	53	51
5	77	64	55	49	74	63	55	48	61	53	48	58	52	47	56	51	46	44
6	71	58	49	43	69	57	48	42	55	47	42	53	46	41	51	45	41	39
7	66	53	44	38	64	52	43	38	50	43	37	48	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	33	44	38	33	43	37	33	31
9	57	44	36	31	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

For lux multiply fc by 10.7

eW Cove MX Powercore with Precision Dimming 1 ft, 3500 K, 50° x 70° beam angle

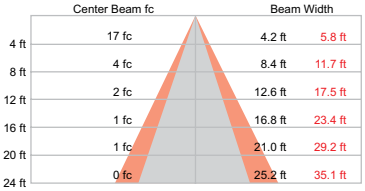
Lumens	388
Efficacy	24.9 lm / W

Polar Candela Distribution



	0.0	22.5	45.0	67.5	90.0
0	264	264	264	264	264
5	258	258	260	261	261
15	212	215	224	233	237
25	147	153	169	185	193
35	94	99	114	131	138
45	58	62	72	84	89
55	35	38	44	51	54
65	21	22	26	29	30
75	12	13	13	14	14
85	7	6	6	4	3
90	5	5	4	2	0

Illuminance at Distance



16.2 ft (4.9 m)
1 fc maximum distance

■ Vert. Spread: 55.3°
■ Horiz. Spread: 72.3°

Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	164	42.4
0- 40	236	60.9
0- 60	333	85.8
0- 90	379	97.6
90-120	6	1.5
90-130	7	1.9
90-150	9	2.3
90-180	9	2.4
0-180	388	100.0

Coefficients Of Utilization - Zonal Cavity Method

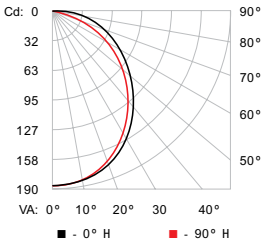
Effective Floor Cavity Reflectance: 20%

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	118	118	118	118	115	115	115	115	110	110	110	105	105	105	100	100	100	98
1	110	106	102	99	107	104	100	97	99	96	94	95	93	91	91	89	88	85
2	102	95	89	84	99	93	88	83	89	85	81	86	82	79	82	79	77	75
3	94	85	79	73	92	84	77	72	81	75	71	78	73	69	75	71	68	66
4	88	77	70	64	85	76	69	64	73	67	63	71	66	62	69	64	61	59
5	82	71	63	57	80	69	62	57	67	61	56	65	60	55	63	58	54	52
6	76	65	57	51	74	64	56	51	62	55	50	60	54	50	58	53	49	47
7	72	60	52	47	70	59	51	46	57	51	46	56	50	45	54	49	45	43
8	67	55	48	42	66	54	47	42	53	47	42	52	46	42	50	45	41	40
9	63	51	44	39	62	51	44	39	49	43	39	48	42	38	47	42	38	36
10	60	48	41	36	58	47	41	36	46	40	36	45	40	35	44	39	35	34

eW Cove MX Powercore with Precision Dimming 1 ft, 3500 K, 110° x 110° beam angle

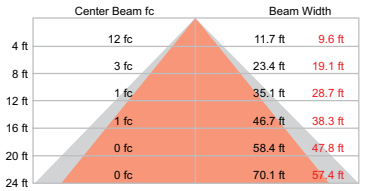
Lumens	544
Efficacy	35.1 lm / W

Polar Candela Distribution



	0.0	22.5	45.0	67.5	90.0
0	186	186	186	186	186
5	186	185	185	185	185
15	178	178	177	177	176
25	164	164	162	160	160
35	144	143	140	137	136
45	120	119	115	110	108
55	95	93	88	82	79
65	69	68	63	55	52
75	47	46	41	33	27
85	30	29	24	15	7
90	23	22	17	9	2
95	17	16	12	5	2

Illuminance at Distance



13.6 ft (4.1 m)
1 fc maximum distance

■ Vert. Spread: 111.2°
■ Horiz. Spread: 100.2°

Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	142	26.1
0- 40	230	42.2
0- 60	396	72.8
0- 90	522	96.1
90-120	20	3.7
90-130	21	3.9
90-150	21	3.9
90-180	21	3.9
0-180	544	100.0

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

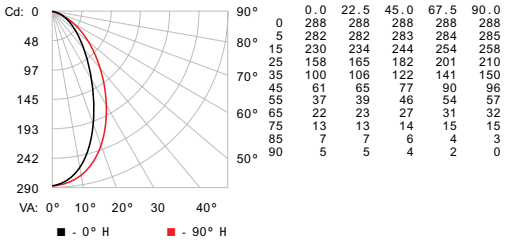
RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	96
1	107	102	97	93	104	99	95	91	94	90	87	89	86	84	85	83	81	78
2	97	88	81	75	94	86	79	74	82	76	72	78	73	69	74	71	67	65
3	88	77	69	62	85	76	68	62	72	65	60	69	63	58	66	61	57	54
4	81	69	60	53	78	67	59	52	64	57	51	61	55	50	59	53	49	47
5	74	61	52	46	72	60	51	45	57	50	44	55	48	43	53	47	43	40
6	69	55	46	40	67	54	46	39	52	44	39	50	43	38	48	42	37	35
7	64	50	41	35	62	49	41	35	47	40	34	45	39	34	44	38	33	31
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30	40	34	30	28
9	56	42	34	28	54	41	33	28	40	33	28	38	32	27	37	31	27	25
10	52	39	31	26	51	38	31	25	37	30	25	36	29	25	35	29	25	23

For lux multiply fc by 10.7

eW Cove MX Powercore with Precision Dimming 1 ft, 4000 K, 50° x 70° beam angle

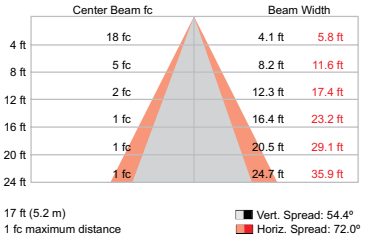
Lumens	416
Efficacy	26.7 lm / W

Polar Candela Distribution



	0.0	22.5	45.0	67.5	90.0
0	288	288	288	288	288
5	282	282	283	284	285
15	230	234	244	254	258
25	158	165	182	201	210
35	100	106	122	141	150
45	61	65	77	90	96
55	37	39	46	54	57
65	22	23	27	31	32
75	13	13	14	15	15
85	7	7	6	4	3
90	5	5	4	2	0

Illuminance at Distance



17 ft (5.2 m)
1 fc maximum distance

■ Vert. Spread: 54.4°
■ Horiz. Spread: 72.0°

Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	179	42.9
0- 40	256	61.5
0- 60	358	86.1
0- 90	407	97.7
90-120	6	1.5
90-130	8	1.8
90-150	9	2.2
90-180	10	2.3
0-180	416	100.0

Coefficients Of Utilization - Zonal Cavity Method

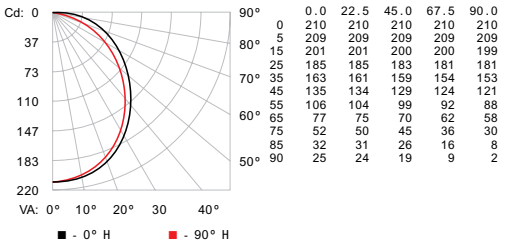
Effective Floor Cavity Reflectance: 20%

RC	80				70				50			30			10		0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	118	118	118	118	115	115	115	115	110	110	110	105	105	105	100	100	100	98
1	110	106	102	99	107	104	100	97	99	96	94	95	93	91	91	89	88	86
2	102	95	89	85	99	93	88	83	89	85	81	86	82	79	83	80	77	75
3	95	86	79	73	92	84	78	73	81	75	71	78	73	70	75	71	68	66
4	88	78	70	65	86	76	69	64	74	68	63	71	66	62	69	64	61	59
5	82	71	63	57	80	70	62	57	67	61	56	65	60	56	63	59	55	53
6	77	65	57	52	75	64	57	51	62	56	51	60	55	50	59	54	50	48
7	72	60	52	47	70	59	52	47	57	51	46	56	50	46	54	49	45	44
8	67	55	48	43	66	55	48	43	53	47	42	52	46	42	51	46	42	40
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	47	42	38	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	39	36	34

eW Cove MX Powercore with Precision Dimming 1 ft, 4000 K, 110° x 110° beam angle

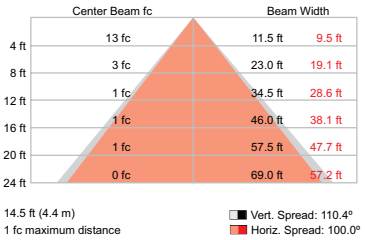
Lumens	609
Efficacy	38.5 lm / W

Polar Candela Distribution



	0.0	22.5	45.0	67.5	90.0
0	210	210	210	210	210
5	209	209	209	209	209
15	201	201	200	200	199
25	185	185	183	181	181
35	163	161	159	154	153
45	135	134	129	124	121
55	106	104	99	92	88
65	77	75	70	62	58
75	52	50	45	36	30
85	32	31	26	16	8
90	25	24	19	9	2

Illuminance at Distance



14.5 ft (4.4 m)
1 fc maximum distance

■ Vert. Spread: 110.4°
■ Horiz. Spread: 100.0°

Zonal Lumen

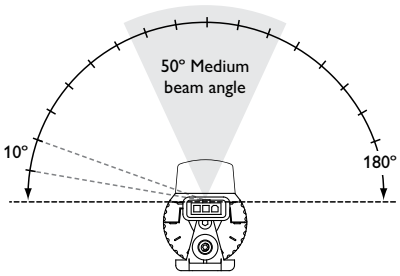
ZONE	LUMENS	%FIXT
0- 30	161	26.4
0- 40	259	42.6
0- 60	447	73.3
0- 90	586	96.2
90-120	22	3.6
90-130	23	3.7
90-150	23	3.8
90-180	23	3.8
0-180	609	100.0

Coefficients Of Utilization - Zonal Cavity Method

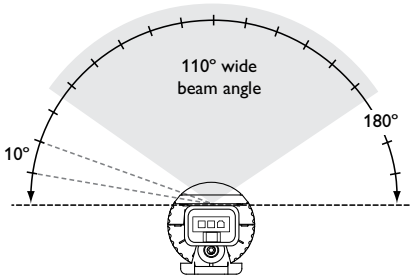
Effective Floor Cavity Reflectance: 20%

RC	80				70				50			30			10		0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	96
1	107	102	97	93	104	99	95	91	94	91	87	89	87	84	85	83	81	79
2	97	88	81	75	94	86	80	74	82	77	72	78	74	70	75	71	67	65
3	88	78	69	63	86	76	68	62	72	66	60	69	63	59	66	61	57	55
4	81	69	60	53	78	67	59	52	64	57	51	61	55	50	59	54	49	47
5	75	62	52	46	72	60	52	45	58	50	44	55	49	44	53	47	43	41
6	69	55	46	40	67	54	46	40	52	45	39	50	43	38	48	42	38	36
7	64	50	42	35	62	49	41	35	47	40	35	46	39	34	44	38	34	31
8	60	46	37	32	58	45	37	31	43	36	31	42	35	30	40	35	30	28
9	56	42	34	28	54	41	34	28	40	33	28	39	32	28	37	32	27	25
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	29	25	23

For lux multiply fc by 10.7



Medium beam angle (50° x 70°)



Wide beam angle (110° x 110°)

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Specifications

Due to continuous improvements and innovations, specifications may change without notice.

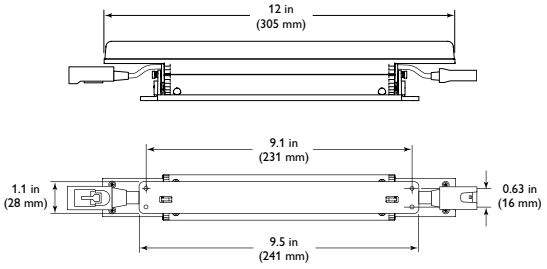
CCT*	Beam Angle	Lumens†		Efficacy (lm / W)	CRI
		1 ft (305 mm)	4 ft (1.2 m)		
2700 K	50° x 70°	333	1332	21.3	82
	110° x 110°	475	1900	30.4	81
3000 K	50° x 70°	381	1524	24.4	84
	110° x 110°	563	2252	36.1	83
3500 K	50° x 70°	388	1552	24.9	85
	110° x 110°	544	2176	35.1	86
4000 K	50° x 70°	416	1664	26.7	82
	110° x 110°	609	2436	38.5	81

Item	Specification		1 ft (305 mm)	4 ft (1.2 m)
Output	Lumen Maintenance‡		50,000 hours L_{70} @ 25° C 50,000 hours L_{50} @ 25° C	50,000 hours L_{70} @ 50° C 50,000 hours L_{50} @ 50° C
Electrical	Input Voltage		100 – 240 VAC, auto-switching, 50 / 60 Hz	
	Power Consumption		13 W maximum at full output, steady state	50 W maximum at full output, steady state
Control	Interface		Data Enabler Pro (DMX or Ethernet)	
	Control System		Philips Color Kinetics full range of controllers, including Light System Manager, iPlayer 3, and ColorDial Pro, or third-party controllers	
Physical	Dimensions *(Height x Width x Depth)*	50° x 70°	2.00 x 12 x 1.5 in (51 x 305 x 39 mm)	2.00 x 48 x 1.5 in (51 x 1219 x 38 mm)
		110° x 110°	1.64 x 12 x 1.5 in (42 x 305 x 39 mm)	1.64 x 48 x 1.5 in (42 x 1219 x 38 mm)
	Weight	50° x 70°	1 lb (454 g)	4.6 lb (2.1 kg)
		110° x 110°	0.82 lb (372 g)	4.1 lb (1.85 kg)
	Housing		Die-cast aluminium, white powder-coated finish	
	Lens		Polycarbonate	
	Fixture Connections		Integral male / female connectors	
	Temperature		-40° – 122° F (-40° – 50° C) Operating -4° – 122° F (-20° – 50° C) Startup -40° – 176° F (-40° – 80° C) Storage	
	Humidity		0 – 95%, non-condensing	
	Fixture Run Lengths		To calculate fixture run lengths and total power consumption for your specific installation, download the Configuration Calculator from www.philipscolorkinetics.com/support/install_tool/	
Certification and Safety	Certification		UL / cUL, CE, C-Tick, SAA, CCC, PSE	
	Environment		Dry / Damp Location, IP20	

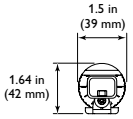
* Color temperatures conform to nominal CCTs as defined in ANSI Chromaticity Standard C78.377A.

† 1 ft (305 mm) lumen output measurements comply with IES LM-79-08 testing procedures. 4 ft (1.2 m) measurements are estimated based on the 1 ft (305 mm) measurements.

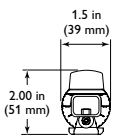
‡ L_{70} = 70% lumen maintenance (when light output drops below 70% of initial output). L_{50} = 50% lumen maintenance (when light output drops below 50% of initial output). Ambient luminaire temperatures specified. Lumen maintenance calculations are based on lifetime prediction graphs supplied by LED source manufacturers. Calculations for white-light LED fixtures are based on measurements that comply with IES LM-80-08 testing procedures. Refer to www.philipscolorkinetics.com/support/appnotes/lm-80-08.pdf for more information.

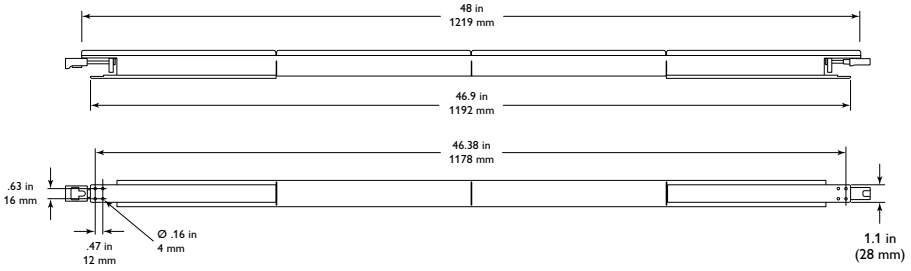


Wide beam angle



Medium beam angle

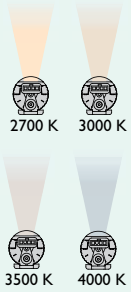




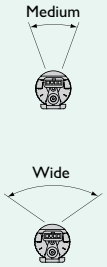
Product Selection

To order eW Cove MX Powercore with Precision Dimming, choose a color temperature, a beam angle, a fixture length, and any extra options you may need.

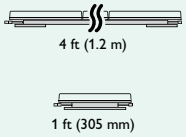
1 Choose color temperature



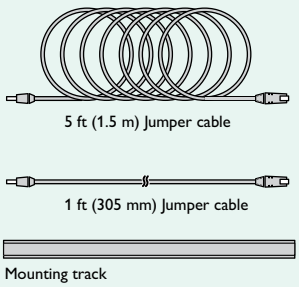
2 Choose beam angle



3 Choose fixture length



4 Choose extra options



Fixtures

Type	Color Temperature	Beam Angle	Item Number	Philips 12NC
eW Cove MX Powercore with Precision Dimming 1 ft (305 mm)	2700 K	50° x 70°	523-000075-04	910503702704
		110° x 110°	523-000075-00	910503702699
	3000 K	50° x 70°	523-000075-05	910503702705
		110° x 110°	523-000075-01	910503702701
	3500 K	50° x 70°	523-000075-06	910503702706
		110° x 110°	523-000075-02	910503702702
	4000 K	50° x 70°	523-000075-07	910503702707
		110° x 110°	523-000075-03	910503702703
eW Cove MX Powercore with Precision Dimming 4 ft (1.2 m)	2700 K	50° x 70°	523-000075-12	910503702712
		110° x 110°	523-000075-08	910503702708
	3000 K	50° x 70°	523-000075-13	910503702713
		110° x 110°	523-000075-09	910503702709
	3500 K	50° x 70°	523-000075-14	910503702714
		110° x 110°	523-000075-10	910503702710
	4000 K	50° x 70°	523-000075-15	910503702715
		110° x 110°	523-000075-11	910503702711

Accessories

Item	Type		Item Number	Philips 12NC
Mounting Track, White	1 @ 4 ft (1219 mm)		120-000124-00	910503701787
Leader Cable with Terminator	10 ft (3.1 m)	UL / cUL	108-000050-00	910503701686
		CE / CCC	108-000050-01	910503701687
Jumper Cable	1 ft (305 mm)	UL / cUL	108-000049-01	910503701683
		CE / CCC	108-000049-03	910503701685
	5 ft (1.5 m)	UL / cUL	108-000049-00	910503701682
		CE / CCC	108-000049-02	910503701684
Wiring Compartment with Terminator		UL / cUL	120-000077-02	910503701740
Terminator, Quantity 10			120-000099-01	910503704251
Data Enabler Pro	3/4 in / 1/2 in NPT (U.S. trade size conduit)		106-000004-00	910503701210
	PG21 / PG13 (metric size conduit)		106-000004-01	910503701211

Use Item Number when ordering in North America.

Installation

eW Cove MX Powercore with Precision Dimming is a high-intensity cove and accent lighting fixture that can be dimmed from 0% – 100% using DMX or Ethernet lighting controllers. Powercore technology integrates LED power and data management within the fixture, easing installation by eliminating the need for external power supplies.

Owner / User Responsibilities

It is the responsibility of the contractor, installer, purchaser, owner, and user to install, maintain, and operate eW Cove MX Powercore with Precision Dimming fixtures in such a manner as to comply with all applicable codes, state and local laws, ordinances, and regulations. Consult with the appropriate electrical inspector to ensure compliance.

Refer to the eW Cove MX Powercore with Precision Dimming Installation Instructions for specific warning and caution statements.

Prepare for the Installation

Determine the appropriate location of each Data Enabler Pro in relation to the fixtures, and of the fixtures in relation to each other. The Data Enabler Pro and first fixture must be separated by no more than the 10 ft (3.1 m) length of the Leader Cable.

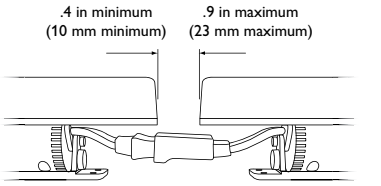
Refer to the Data Enabler Pro Installation Instructions or Product Guide for guidelines on configuring and positioning the Data Enabler Pro in relation to the controller.

eW Cove MX Powercore with Precision Dimming fixtures are installed in series. The in-line connectors allow end-to-end fixture connections for the best visual effects. Joined directly together, the connectors on the 1 ft (305 mm) fixtures allow for spacing of .4 in (10 mm) to .9 in (23 mm) without a jumper cable, while the connectors on the 4 ft (1.2 m) fixtures allow for spacing of .9 in (23 mm) to 2 in (51 mm) without a jumper cable. When you need to separate fixtures by more than these minimums, use the 1 ft (305 mm) or 5 ft (1.5 m) jumper cables.

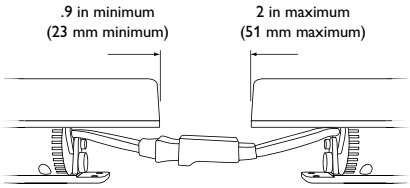
The maximum number of fixtures each Data Enabler Pro can support depends on specific configuration details such as fixture length, fixture spacing, circuit size, line voltage, and cable lengths. For help calculating the number of fixtures your specific installation can support, download the Configuration Calculator from www.philipscolorkinetics.com/support/install_tool/, or consult Application Engineering Services at support@colorkinetics.com.

In addition to maximum fixture run lengths determined by the electrical configuration, each Data Enabler Pro imposes maximum run lengths based on data integrity. To ensure data integrity, maximum individual run lengths should not exceed 175 ft (53.3 m), and the total cable length per Data Enabler Pro should not exceed 400 ft (122 m).

Distance between fixtures joined end-to-end



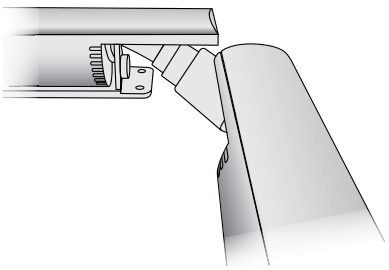
1 ft (305 mm) fixtures

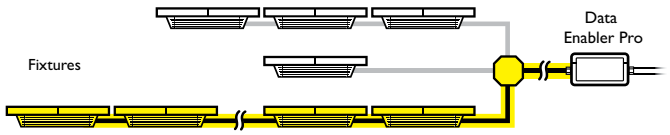


4 ft (1.2 m) fixtures

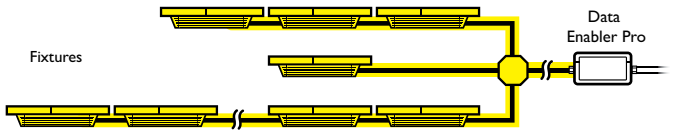
Easy turns

End-to-end locking power connectors can make turns of up to 180° without jumper cables.





Data Integrity — maximum individual length 175 ft (53.3 m)



Data Integrity — total length 400 ft (122 m)

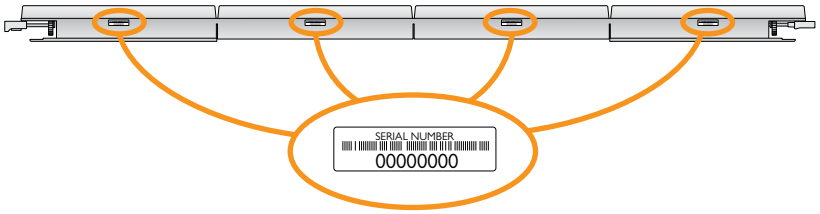
Start the Installation

1. Install all Data Enabler Pro devices, including any interfaces with controllers. One Leader Cable is required to connect each run or series of fixtures to a Data Enabler Pro. The Data Enabler Pro sends power and control signals to the fixtures over the Leader Cable.
2. Verify that all additional supporting equipment (switches, controllers) is in place.
3. If your installation calls for Jumper Cables to add space between fixtures, make sure they are available.
4. Ensure that all additional parts (optional mounting tracks, mounting hardware, terminators) and tools are available.

Unpack and Prepare Fixtures

1. Carefully inspect the box containing eW Cove MX Powercore with Precision Dimming and the contents for any damage that may have occurred in transit.
2. On an architectural diagram or other diagram that shows the physical layout of the installation, identify the locations of all switches, controllers, power supplies, fixtures, Leader Cables, and Jumper Cables.
3. eW Cove MX Powercore with Precision Dimming fixtures are addressable in 1 ft (305 mm) segments, or nodes. Each fixture node comes pre-programmed with a unique serial number and a default start DMX address of 1. For lighting designs in which all eW Cove MX Powercore with Precision Dimming fixtures work in unison, you do not need to change the fixtures' default DMX addresses.

   You can create dynamic black and white effects by giving each fixture node a unique DMX address, so that playback controllers can send unique light output data to each segment of each fixture within your installation. Fixtures have one or four serial numbers depending on fixture length. As you unpack the fixtures, record the serial numbers in a layout grid (typically a spreadsheet or list) for easy reference and light addressing.

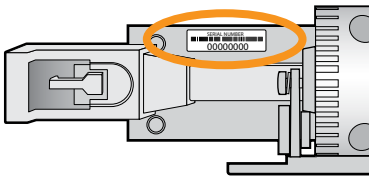


Location of serial numbers on 4 ft (1.2 m) eW Cove MX Powercore with Precision Dimming fixtures

4. Assign each fixture to a position in the lighting design plan.
5. To streamline installation and aid in light show programming, you can affix a weatherproof label identifying the order or placement in the installation to an inconspicuous location on each fixture's housing.

Included in the box

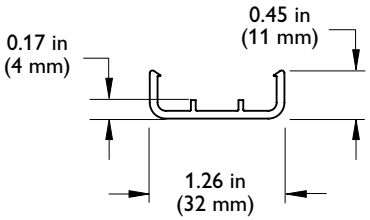
eW Cove MX Powercore with Precision Dimming fixture
Installation Instructions



Location of serial number on 1 ft (305 mm) eW Cove MX Powercore with Precision Dimming fixtures

Install the Fixtures

You can mount eW Cove MX Powercore with Precision Dimming fixtures directly to a wall, ceiling, cabinet, or other secure surface. For linear applications, you can install several eW Cove MX Powercore with Precision Dimming fixtures in optional 4 ft (1.2 m) lengths of mounting track to ensure straight runs.

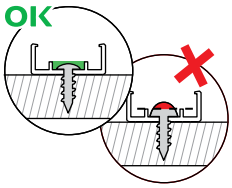


You can use the fixture base as a template when pre-drilled holes are required. Hold the fixture in place and mark the four screw holes.

(Optional) Install Mounting Tracks

1. Field-cut the mounting tracks to the desired length with hacksaws or tin snips.
2. Install the mounting tracks using hardware suitable for the mounting surface.

   To ensure proper fixture fit, hardware must not extend above the track standoffs after installation. The recommended maximum spacing between screws is 12 in (305 mm).



Mount and Connect the Fixtures

Make sure the power is OFF before mounting and connecting fixtures.

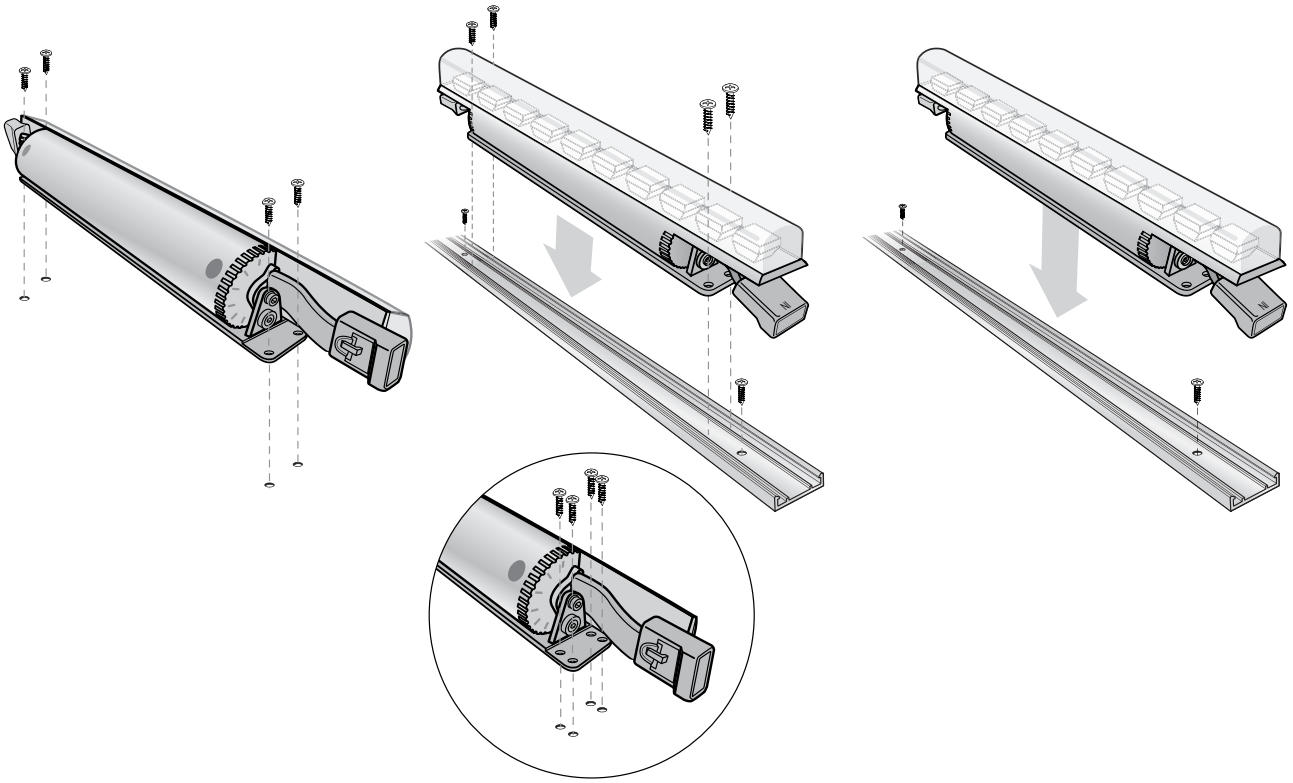
1. Rotate an eW Cove MX Powercore with Precision Dimming fixture as necessary to provide unobstructed access to the mounting holes.
2. Position the first fixture in a series.

   If using mounting tracks on a horizontal surface, snap the fixture into the track.

   If using mounting tracks on vertical or overhead surfaces, or if not using mounting tracks, attach 1 ft (305 mm) fixtures with four #6 (3.5 mm) mounting screws each (not included) suitable for the mounting surface. Attach 4 ft (1.2 m) fixtures with eight #6 (3.5 mm) mounting screws suitable for the mounting surface, four at each end of the fixture,

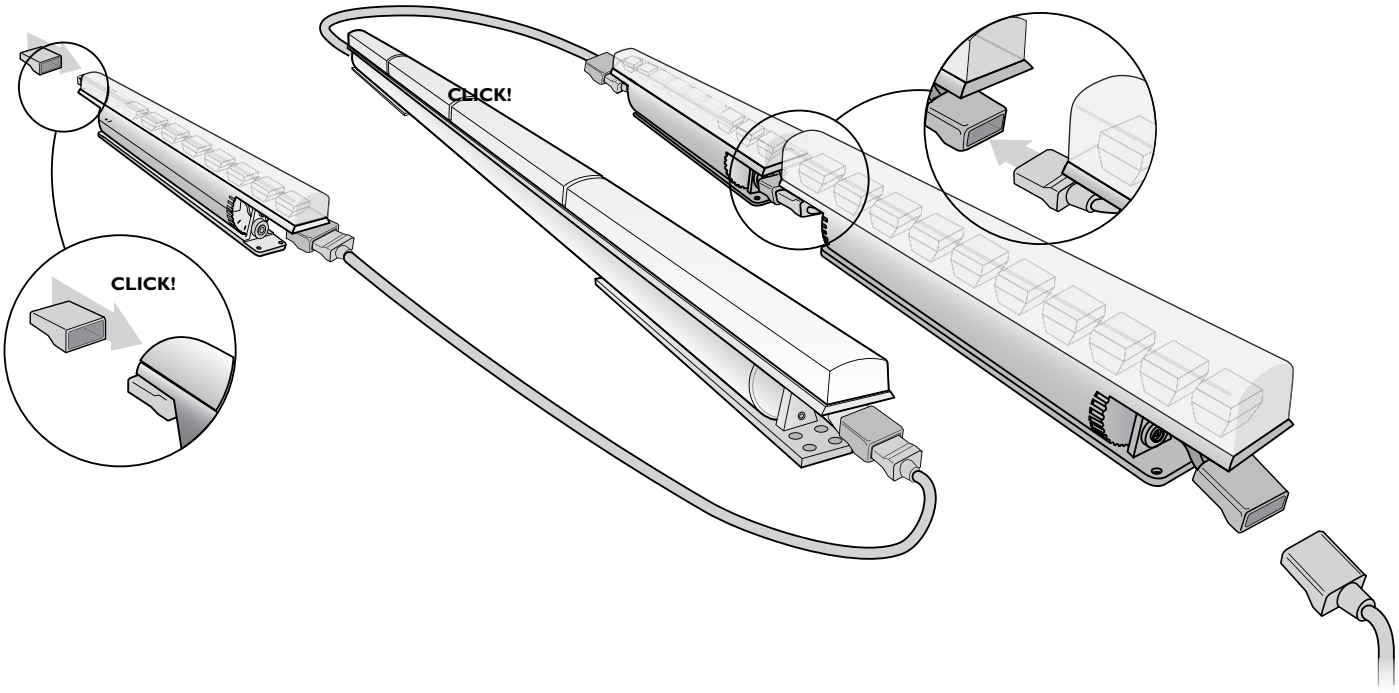
   Ensure that the male connector is in position to receive data and power from the leader cable's female connector.

If using the Wiring Compartment to run conduit from Data Enabler Pro to the first fixture in a run, make sure you leave enough space at the beginning of the run to accommodate the Wiring Compartment.



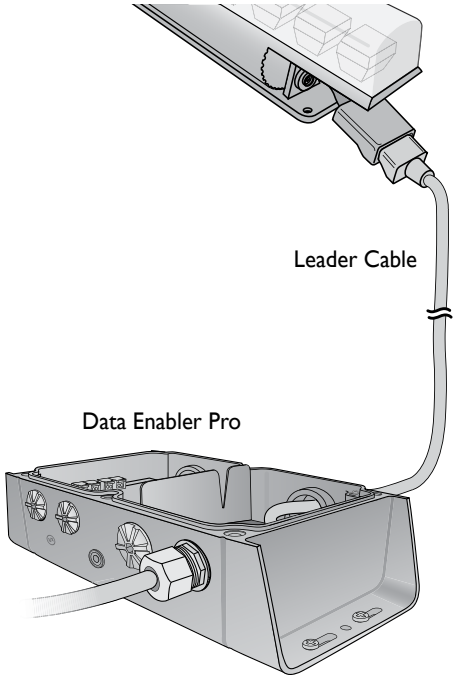
Mounting 4 ft (1.2 m) fixtures

3. Position the next fixture in the series, matching the male connector end to the female connector of the previously mounted fixture. Attach the fixture to the surface or snap it into the track.
4. Continue mounting the fixtures, making power / data connections as you go, until all lights in the series are mounted.
5. Insert the provided terminator into the last fixture in the series.

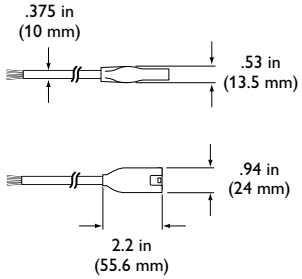


Make Power Connections

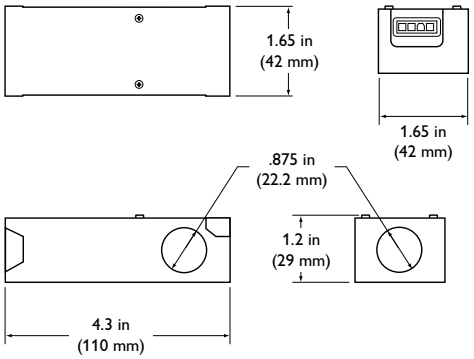
1. If using a Leader Cable, connect the Leader Cable to the first fixture in the series. Run the Leader Cable to the Data Enabler Pro.



Leader Cable connector dimensions

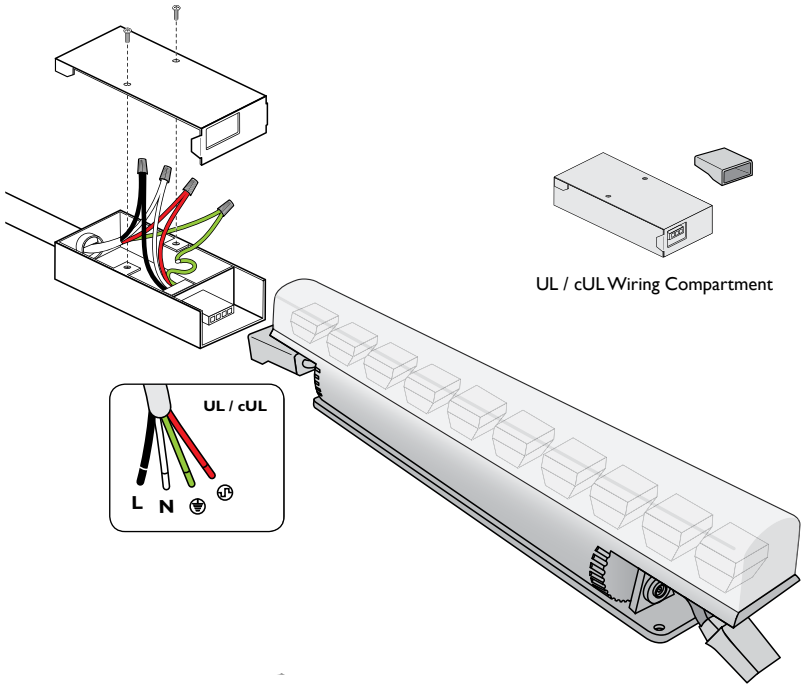


Wiring Compartment dimensions

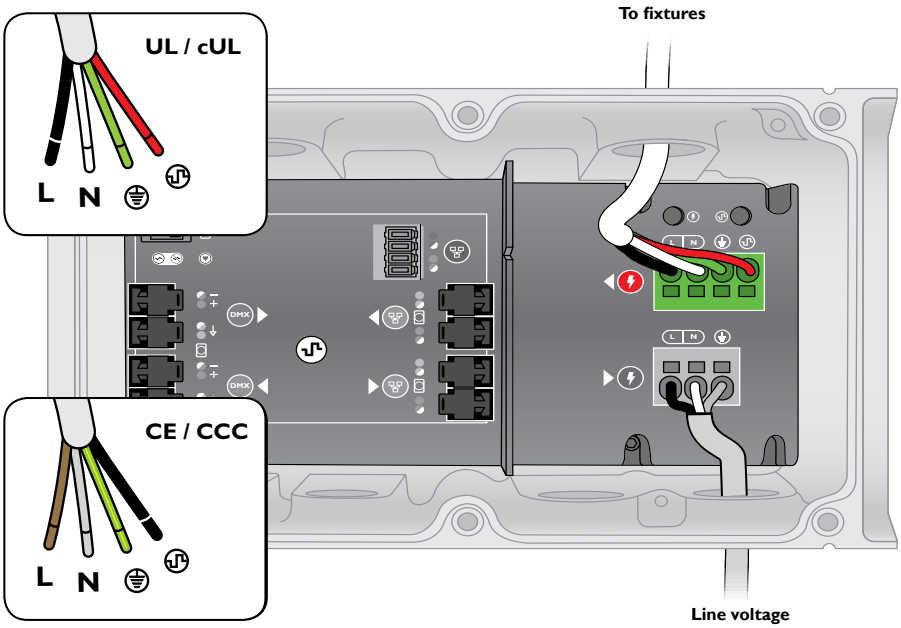


2. If using the Wiring Compartment to run conduit from the Data Enabler Pro to the first fixture in a series, pull cable through conduit. (We recommend standard 4-conductor 12 AWG copper wire.)

   Remove the cover from the Wiring Compartment. Using wire nuts, make wire connections inside the Wiring Compartment housing, then replace the cover. Connect the Wiring Compartment to the first fixture in the series.



3. Secure connections within the Data Enabler Pro housing.



4. Repeat steps 1 – 3 for each Data Enabler Pro in the installation.

Address and Configure the Fixtures

Make sure the power is ON before addressing and configuring fixtures.

eW Cove MX Powercore with Precision Dimming fixtures are addressable in 1 ft (305 mm) segments, or nodes. eW Cove MX Powercore with Precision Dimming fixtures have one or four nodes, depending on fixture length. Each node is identified by a unique serial number.

Switching Between 8-Bit and 16-Bit Mode

eW Cove MX Powercore with Precision Dimming fixtures operate in 8-bit mode by default. You can configure eW Cove MX Powercore with Precision Dimming to operate in 16-bit mode, which increases fixture resolution for smoother dimming.

In 8-bit mode, each fixture node uses one DMX address. In 16-bit mode, each fixture node uses two DMX addresses. The first DMX address corresponds to the "coarse" data for that channel, and the second corresponds to the "fine" data. By using double the number of DMX addresses, 16-bit mode increases fixture resolution from 256 dimming steps to 65,536 (256 x 256) dimming steps.

You can switch between 8-bit mode and 16-bit mode using QuickPlay Pro addressing and configuration software.

You can download QuickPlay Pro from www.philipscolorkinetics.com/support/addressing.

Changing Default Starting DMX Addresses

Each eW Cove MX Powercore with Precision Dimming node comes factory-addressed with a starting DMX address of 1. For lighting designs where fixtures work in unison, all nodes can be assigned the same starting DMX address.

For monochrome effects that show different intensities on different fixture nodes simultaneously, you must assign unique DMX addresses to nodes and sort them in a useful order.

- In Ethernet installations, you can address and configure your fixtures using QuickPlay Pro with a computer connected to your lighting installation's network. QuickPlay Pro can automatically discover all of your fixtures, controllers, and Data Enabler Pro devices for quick configuration.
- In DMX installations, you can address and configure your fixtures using QuickPlay Pro with iPlayer 3 or SmartJack Pro. You can manually enter fixture serial numbers, or you can import a spreadsheet listing each fixture's serial number and starting DMX address.

Some Notes on Controlling eW Cove MX Powercore with Precision Dimming Fixtures

Keep in mind that you must use a 16-bit lighting controller to operate eW Cove MX Powercore with Precision Dimming fixtures in 16-bit mode. To use 8-bit controllers, such as iColor Keypad, ColorDial Pro, and iPlayer 3, you must make sure that fixtures are in 8-bit mode.

To control eW Cove MX Powercore with Precision Dimming with iColor Keypad, select the Fixed Color effect in iColor Keypad Effect Manager, set the R channel to 100%, the G channel to 0%, and the B channel to 0%. When you run the Fixed Color effect, you can use the Increase Brightness and Decrease Brightness buttons on the iColor Keypad to control the fixtures.

When creating a light map in ColorPlay 3 to create a monochromatic light show for iPlayer 3 or iColor Player, use the generic single-channel fixture type to represent eW Cove MX Powercore with Precision Dimming fixtures. When creating a light map using the LSC Management Tool for Light System Manager, you can add RGB lights to your light interface and modify the starting DMX channel of each fixture to create a consecutive sequence of lights.

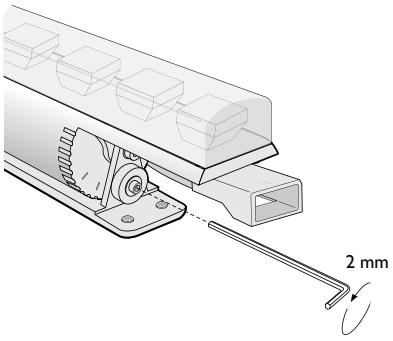
Aim and Lock the Fixtures

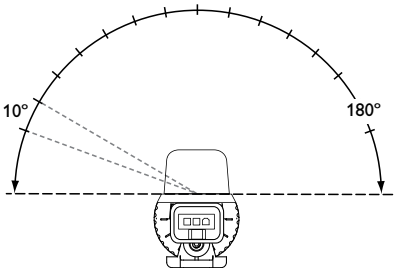
Do not look directly into the fixture when aiming and locking.

Make sure the power is ON before aiming and locking fixtures.

Aim the fixtures by rotating each fixture to the correct angle. There are detents every 10° in the bracket that hold it in position.

(Optional) Using a 2 mm hex key wrench, tighten the set screw located on each end of the fixture to lock the fixture in place.





Philips Color Kinetics
3 Burlington Woods Drive
Burlington, Massachusetts 01803 USA
Tel 888.385.5742
Tel 617.423.9999
Fax 617.423.9998
www.philipscolorkinetics.com

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