

ELEMENT Merge 3.0 represents the marriage of a recessed linear LED system with a low-voltage track lighting system. Whether being used to highlight architectural elements, or deliver well-controlled general illumination, ELEMENT Merge 3.0 puts the focus on the room. Whether static white, programmable white, or RGB mixed colors, recessed lines of uniform, glare-free LED light can be designed to make 90° turns in the same plane or perpendicular transitions from ceiling to wall for enhanced architectural interest. Further, spot heads or pendants can be added directly into the channel at any point along its concealed low-voltage bus system for simultaneous accent or task illumination.

All ELEMENT Merge 3.0 components feature a beveled aperture to integrate seamlessly with architecture for sleek ceiling to fixture transitions. Available in 2', 4', 6' and 8' lengths (with a number of connector options) for flanged, flangeless, or lay-in installation.

- Low profile design for use in 2x6 construction
- Custom linear lengths available (between 2' to 6'). Consult Quotes department.
- 3-Step or better color binning on all non-RGB options
- Internal reflector finished with high reflectance matte, white paint for even light distribution & optimal efficiency
- Continuous linear runs require a start unit, intermediate fixtures and end unit
- IC airtight rated (EM housing Non-IC)

## SPECIFICATIONS

DELIVERED LUMENS	1000 lms/ft or 700 lms/ft
WATTS	14 watts/ft or 9 watts/ft
EFFICACY	71 l/w or 78 l/w (80CRI, 3500K)
CRI	80+, 90+ & RGB
CCT OPTIONS	2700K, 3000K, 3500K, or Programmable White (2700K-4000K), RGB
VOLTAGE	120V or 277V (Concealed 10 gauge, low-voltage bus bar, order 12-volt remote transformer sold separately)
DIMMING	ELV, 0-10V, DMX, Lutron Hi-Lume
CEILING APPEARANCE	Lay-In T-Grid optimized 9/16" or 15/16"
CEILING APERTURE	3" beveled
HOUSING	IC Airtight available in 2', 4', 6' and 8'. IC suitable up to R60 spray foam insulation (Consult factory for Chicago Plenum). EM units available Non-IC only.
POWER SUPPLY**	Constant Current (Each linear channel includes a self-contained ELV, 0-10V, Lutron Hi-Lume 2 Wire PWM (120V only) or Lutron Hi-Lume, Eco System Fade-to-Black Driver, DMX driver for RGB), 0-10V 1%, 0-10V 0.1%
CONSTRUCTION	Housing: 20 gauge sheet metal Extrusion: Aluminum
FINISH	White Powder Coat
GENERAL LISTING	ETL
CALIFORNIA TITLE 24	Registered CEC Appliance Database. Can be used to comply with CEC 2016 Title 24 Part 6 (Static White, 90 CRI versions).
LED LIFETIME	L70; 50,000 hours
WARRANTY*	5 years

\*Visit ELEMENT-lighting.com for specific warranty limitations and details.  
\*\*Consult Quotes Department for additional driver options.

Notes: Typical max run length is 80' for the channel; typical max run length is 40' for the low-voltage bus which can be powered from both sides for a total of 80'; system wattage will impact max run length



MERGE  
shown lay-in

## PERFORMANCE

(700 LPF)			(1000 LPF)		
LINEAR CHANNEL	FIXTURE OUTPUT (LMS)*	WATTAGE	LINEAR CHANNEL	FIXTURE OUTPUT (LMS)*	WATTAGE
2 FT	1400	18	2 FT	2000	28
4 FT	2800	36	4 FT	4000	56
6 FT	4200	54	6 FT	6000	84
8 FT	5600	72	8 FT	8000	112

\*REPRESENTS 3500K/80CRI

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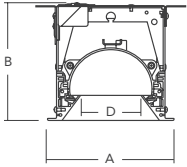
### Optional

- **EM:** integrated emergency battery back-up to provide illumination when main power is lost. EM battery is integrated in the Merge linear channel housing and provides 90 minutes of egress illumination. Each EM fixture ships with a test switch/indicator light for remote mounting.

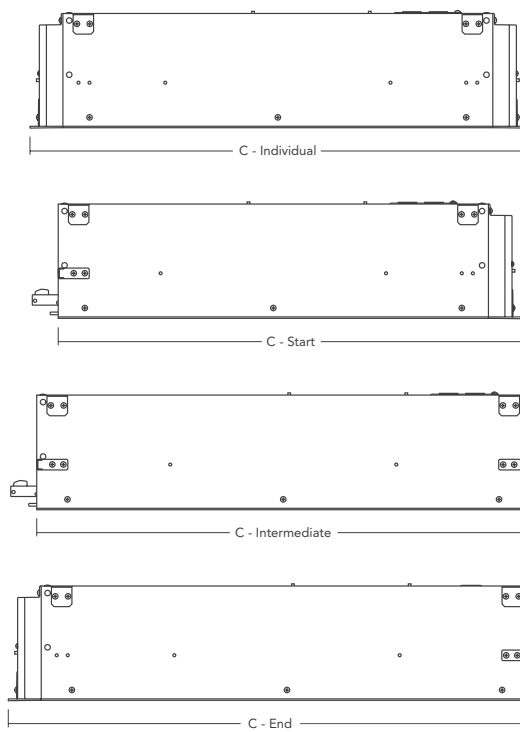
- 2' EM linear channel: 1063 total lumens

- 4', 6', & 8' EM linear channel: 1107 total lumens (illuminates 4' section of the 8' channel)

## HOUSING



D=3.0"



## DIMENSIONS

	LAY-IN (T-GRID)		
	A	B	C
2' INDIVIDUAL	5.75	5.64	23.73
2' START	5.75	5.64	22.36
2' INTERMEDIATE	5.75	5.64	24.00
2' END	5.75	5.64	25.36
4' INDIVIDUAL	5.75	5.64	47.73
4' START	5.75	5.64	46.36
4' INTERMEDIATE	5.75	5.64	48.00
4' END	5.75	5.64	49.36
6' INDIVIDUAL	5.75	5.64	71.73
6' START	5.75	5.64	70.63
6' INTERMEDIATE	5.75	5.64	72.00
6' END	5.75	5.64	73.36
8' INDIVIDUAL	5.75	5.64	95.73
8' START	5.75	5.64	94.36
8' INTERMEDIATE	5.75	5.64	96.00
8' END	5.75	5.64	97.36

All dimensions given in inches.

## GRIDS

SYSTEM	NOMINAL LENGTH	TYPE	OUTPUT	CEILING APPEARANCE	CRI / COLOR TEMPERATURE	FINISH	CONTROLS	VOLTAGE	OPTIONAL
RLS3	2 2 FT	S START	7 700 LUMENS/FT	RF RECESSED FLANGED	827 80 CRI, 2700K	W MATTE WHITE	ELV STANDARD ELV	1 120 VOLT	-EM EMERGENCY BATTERY BACK-UP W/ REMOTE TEST SWITCH† (NON-IC ONLY)
	4 4 FT	M INTERMEDIATE	1 1000 LUMENS/FT†	RL RECESSED FLANGELESS	830 80 CRI, 3000K		010 0-10V DIMMING		
	6 6 FT	E END		LI LAY-IN (T-GRID)	835 80 CRI, 3500K		ELDO ELDOLED 0.1% 0-10V LINEAR		
	8 8 FT	I INDIVIDUAL			927 90 CRI, 2700K		ELDOA ELDOLED 0.1% 0-10V LOGARITHMIC		
					930 90 CRI, 3000K		ELD1 ELDOLED 1% 0-10V LINEAR		
					935 90 CRI, 3500K		ELD1A ELDOLED 1% 0-10V LOGARITHMIC		
					82740 80 CRI, PROGRAMMABLE WHITE		HL2W LUTRON HI-LUME 2 WIRE/PWM***		
					RGB RGB**		HLECO LUTRON HI-LUME ECO-SYSTEM FADE-TO-BLACK		
							DMX DMX CONTROL		

### RLS3

### W

\*0-10 VOLT DIMMING ONLY. \*\*DMX CONTROL ONLY. \*\*\*HL2W – TWO WIRE LOW-VOLTAGE ELECTRONIC DIMMING, 120 VOLT ONLY. †1000 LMS/FT ONLY AVAILABLE IN STATIC WHITE AND ONLY WITH STANDARD ELV AND 0-10V DRIVERS. †EM OPTION ONLY AVAILABLE ON STATIC WHITE (NO RGB OR PROGRAMMABLE WHITE).

## TRANSFORMERS\*

(ORDERED SEPARATELY, WHEN POWERING LOW-VOLTAGE TRACK)

ITEM	DESCRIPTION	DIMMING
700AT060EL	ELECTRONIC, 60W, 120V	ELV
700AT152EL	ELECTRONIC, 150W, 120V	ELV
700AT152ELD010	ELECTRONIC, 150W, 120V	0-10V
700AT150T	MAGNETIC, 150W, 120V	MAGNETIC
700AT150T277	MAGNETIC, 150W, 277V	MAGNETIC
700AT302EL	ELECTRONIC, 300W, 120V	ELV
700AT300T	MAGNETIC, 300W, 120V	MAGNETIC
700AT300T277	MAGNETIC, 300W, 277V	MAGNETIC

DO NOT LOAD TRANSFORMER ABOVE 70% OF RATED LOAD DUE TO IN-RUSH CURRENT. \*CONSULT SPEC SHEETS FOR DIMENSIONS.

## PROJECT INFO

FIXTURE TYPE & QUANTITY	JOB NAME & INFO	NOTES

**ELEMENT**  
by Tech Lighting®

GENERATION BRANDS  
7400 Linder Avenue, Skokie, Illinois 60077  
T 847.410.4400 F 847.410.4500



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## PHOTOMETRICS: MERGE

DESCRIPTION: Merge LED 4" Linear Channel  
80 CRI, 3500K

MODEL: RLS34I7RL835WELV1

INPUT POWER (WATTS): 35.5  
 INPUT POWER FACTOR: 0.99  
 ABSOLUTE LUMINOUS FLUX (LUMENS): 2750  
 LUMEN EFFICACY (LUMENS PER WATT): 78

DESCRIPTION: Merge LED 4" Linear Channel  
80 CRI, 3500K

MODEL: RLS34I1RL835WELV1 High Output

INPUT POWER (WATTS): 57.2  
 INPUT POWER FACTOR: 0.98  
 ABSOLUTE LUMINOUS FLUX (LUMENS): 4020  
 LUMEN EFFICACY (LUMENS PER WATT): 70

ANGLE	0°	45°	90°
0°	960	960	960
5°	944	953	976
10°	935	940	958
15°	920	918	933
20°	898	890	899
25°	869	855	859
30°	834	814	811
35°	793	766	756
40°	744	711	678
45°	689	648	589
50°	630	567	496
55°	566	475	404
60°	496	382	338
65°	419	292	268
70°	337	226	170
75°	249	139	48
80°	163	33	29
85°	78	15	13
90°	0	0	0

ANGLE	0°	45°	90°
0°	1338	1338	1338
5°	1313	1330	1363
10°	1302	1316	1348
15°	1281	1292	1322
20°	1251	1260	1286
25°	1213	1218	1240
30°	1165	1166	1184
35°	1110	1105	1114
40°	1044	1033	1014
45°	969	950	902
50°	887	840	778
55°	795	722	636
60°	695	590	516
65°	588	452	398
70°	468	334	255
75°	347	193	72
80°	226	47	44
85°	104	21	21
90°	4	2	2

