

CTL93 SERIES | Gallery M Track Luminaire



	CTL931	CTL932	CTL933	CTL934	CTL935
WATTAGE	10W	14W	19W	28W	35W
LUMEN OUTPUT ¹ BY BEAM SPREAD					
Narrow Spot (12°)	1058 Lm	1424 Lm	N/A	N/A	N/A
Spot (15°)	1110 Lm	1536 Lm	2108 Lm	2768 Lm	N/A
Narrow Flood (22°)	981 lm	1374 Lm	1914 Lm	2587 lm	3260 Lm
Medium Flood (35°)	1118 Lm	1566 Lm	2182 Lm	2949 Lm	3716 Lm
Flood (52°)	1124 Lm	1574 Lm	2193 lm	2964 Lm	3735 Lm
Wide Flood (79°)	1046 Lm	1464 Lm	2040 Lm	2758 Lm	3475 Lm
COLOR TEMPERATURE	2700K / 3000K / 3500K / 4000K				
CRI	83 (80min) / 90+				
FINISHES	Matte Black / Matte White / Matte Silver				
DRIVER INPUT VOLTAGE	120V, 50/60Hz				
DIMMING TYPE	120V Forward/Reverse Phase Dimming				
COMPATIBILITY	CTL Units are compatible with ConTech Lighting LT/LT2 Single Circuit/Two Circuit and Luxbeam Track Systems, as well as Juno®² Lighting Trac-Master™ Systems HTL Units are compatible with Halo³ Power-Trac and Lazer Track Systems LTL Units are compatible with Lightolier⁴ Lytespan® Systems				
LISTINGS	cCSAus Certified for use in the U.S. and Canada; Suitable for Dry Locations				
WARRANTY	Five (5) year replacement after date of purchase				
SYSTEM RATING	50,000 Hours @ 70% Lumen Maintenance				

^{1.} Approximate lumen output based on 3000K performance; see photometric test results for additional information 2. Juno is a registered trademark of Juno Lighting

^{3.} Halo is a registered trademark of Cooper Lighting
4. Lightolier is a registered trademark of Philips Lighting



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ORDERING INFORMATION

Example Order: CTL932SP3KD-P

T. 10.1	150 G :		COTION	Driver	_	Finish
Track System CTL ConTech HTL Halo LTL Lightolier	931 10W 932 14W 933 19W 934 28W	Ream Option NS ⁵ Narrow Spot: 12° Beam/21° Field SP ⁶ Spot: 15° Beam/31° Field NF Narrow Flood: 22° Beam/45° Field MF Medium Flood: 35° Beam/56° Field	CCT/CRI 80+CRI 90+CRI 27K 2700K 27KC 2700K 3K 3000K 3KC 3000K 35K 3500K 35KC 3500K	D 120V Forward/Reverse Phase Dimming		B Matte Black P Matte White S Matte Silver
	935 35W	FL Flood: 52° Beam/62° Field WF Wide Flood: 79° Beam/101° Field	4K 4000K 4KC 4000K			

^{5.} Narrow Spot (NS) Beam is only available for Series 1 (10W) and Series 2 (14W)

ACCESSORY & REPLACEMENT OPTIC ORDERING INFORMATION

Each Gallery M Luminaire may hold up to two (2) pieces of Media OR one (1) Snoot or Barn Door Assembly plus one (1) piece of Media



Snoot with Optional Cross Blades Exterior painted per finish selection: Black (B), White (P) or Silver (S). Interior and Cross Blades are always Black.



Barn Doors
Black finish. Barn
Doors may hold one
LF18 Lens or LA-35
Honeycomb Louver.



Honeycomb Louver
Black finish

Access	sory	_	Finish
FA-93	Snoot with optional Cross Blades		B Matte BlackP Matte WhiteS Matte Silver





Accessory	
FA-16-60MM	2-3/8-In. Black Honeycomb Louver
LA-35	3-1/16-In. Black Honeycomb Louver
	for use within Barn Doors only



Tempered Glass Filters and Lenses

1/8-Inch Thick, typ.

Accessory		
LF16	Tempered Glass Filters and Lenses	
LF18	Tempered Glass Filters and Lenses for use within Barn Doors only	

Finis	h		
C SL SOL LS	Clear Soft Light Solite Linear Spread	A B LB G R RO Y	Amber Blue Light Blue Green Red Rose Yellow

Size	
60MM Leave E	2-3/8-Inch Blank 3-1/16-Inch LF18 Series for use within Barn Doors only

Replacement Op	otics
CTL930PT-NS ⁷	Narrow Spot Replacement 12° Beam/21° Field
CTL930PT-SP8	Spot Replacement 15° Beam/31° Field
CTL930PT-NF	Narrow Flood Replacement 22° Beam/45° Field
CTL930PT-MF	Medium Flood Replacement 35° Beam / 56° Field
CTL930PT-FL	Flood Replacement 52° Beam/62° Field
CTL930PT-WF	Wide Flood Replacement 79° Beam / 101° Field

^{6.} Spot (SP) Beam is only available for Series 1 (10W) through Series 4 (28W)

^{7.} Narrow Spot (CTL93OPT-NS) Optic is only for use on luminaires originally ordered with NS Optic 8. Spot (CTL93OPT-SP) Optic is only for use on luminaires originally ordered with SP Optic



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PRODUCT SPECIFICATIONS

PERFORMANCE SUMMARY

- 2700K, 3000K, 3500K and 4000K CCTs; 80 CRI min., 83 typical; high CRI of 90+ available
- Excellent fixture-to-fixture color consistency with a 2-step MacAdam Ellipse tolerance
- Precise beam control ensures that even at lower aiming angles the luminaire is glare free and quiet in the ceiling
- Full collection of accessories available to produce a myriad of filtering and framing effects
- 120V Forward or Reverse Dimming is standard for all wattage options.
 For dimmer compatibility and performance, refer to the Dimming Specifications below.

CONSTRUCTION

- A revolutionary track head with superior optics designed to bring theatre grade beam control to traditional gallery and commercial track heads
- Constructed of die-cast aluminum, the cylindrical body provides thermal management for the luminaire
- Locking mechanisms for Tilt (0° to 91°) and Rotation (365°)
- Six (6) Beam Distributions available: 12° Narrow Spot, 15° Spot, 22° Narrow Flood, 35° Medium Flood, 51° Flood, and 79° Wide Flood
- Narrow Spot and Spot Beam configurations utilize smaller LES LEDs to achieve beams and may not be used in higher wattage options (see Ordering Information for details)

- Optics are field interchangeable (with restrictions) and provide smooth, striation-free beams
- Luminaire may accept up to two (2) pieces of media (Lens or Louver), one
 (1) Snoot/Barn Door Assembly plus one (1) piece of media (Lens or Louver). Consult ordering information for proper combinations and sizes.

 NOTE: Luminaire may hold one (1) LF16 60MM Series Lens or

Barn Doors may hold one LF18 Series Lens or LA-35 Louver

- Integral ON/OFF switch and track polarity indicator are standard
- Fixture weight: 3 LBS

FIXTURE COMPATIBILITY

FA-16-60MM Louver:

- Standard ConTech "CTL" track luminaires are cCSAus certified as-is for use with ConTech Lighting's LT/LT2 Single Circuit/Two Circuit Track and Luxbeam Systems as well as Juno^{®1} Lighting Trac-Master™ Systems
- By changing the prefix of the part number, ConTech can install inserts which make our fixtures compatible with other manufacturers. Replace "CTL" with "HTL" for Halo^{®2} Power-Trac and Lazer-Track systems, and "LTL" for Lightolier³ Lytespan™ systems. For more information, please consult factory.

DIMMING SPECIFICATIONS

- Incandescent 120V AC Dimmers adjust the light with Forward Phase Control, where the Dimmer "chops" the forward part of the AC Wave to deliver less or more power to the light source. No Neutral Wire Connection required.
- Electronic Low Voltage 120V AC Dimmers adjust the light with Reverse Phase Control, where the Dimmer "chops" the back part of the AC Wave to deliver less or more power to the light source. Neutral Wire Connection required.

FORWARD/REVERSE PHASE COMPATIBLE DIMMERS			
MANUFACTURER	PRODUCT	MODEL	LIGHT OUTPUT
Leviton	Vizia	VPE06	4%-100%
Leviton	Decora	6673-10W	11%-100%
Lutron	Ariadni	TGCL-153P	0%-100%
Lutron	Diva	DVCL-153P	0%-100%
Lutron	Diva	DVELV303P	3%-100%
Lutron	Skylark	SELV300P	3%-100%
Lutron	Maestro	MAELV600	0%-100%
Lutron	Faedra	FAELV500	7%-100%
Lutron	Skylark C	SCL-153P	0%-100%
Lutron	Maestro C•L	MACL-153M	0%-99%
Lutron	RA2 Select	RRD-6CL	2%-98%

NOTES

- 1. If light is measured, then the dimming range is based on light output. If light is not measured, then the dimming range is based on the percentage of output current.
- 2. Testing was performed with a single fixture connected to dimmer.
- 3. Testing has been performed on these dimmers, but this does not imply any warranty of compatibility.
- 4. Dimming performance can be influenced by different loads, as well as variations in dimmer switches within the same model.
- 5. Dimmer maximum load rating with LED may differ from published traditional source dimmer ratings. Consult manufacturer for maximum dimmer information.
- 6. Consult factory for additional dimming information.



CTL93 SERIES | Gallery M Track Luminaire Standard Luminus Photometry

CTL932NS3KD: 14W, 3000K, 83 CRI, NARROW SPOT BEAM

Test No. G25072304

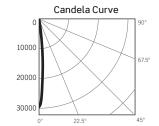
Total Watts@120V: 14.7 Lumens Per Watt: 96.84 Center Beam Candle Power: 29580 Beam Distribution: 11.6° Spacing Criterion: 0.19 Color Rendering Index (CRI)¹: 82.8 Color Temperature (CCT)²: 3004K

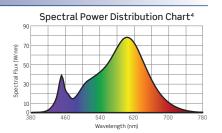
Designed for 50,000 Hour Lamp Life³

Fixture Delivered Lumens: 1423.61

Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIA. (FT.)
4 FT	1848.8	0.8
6 FT	821.7	1.2
8 FT	462.2	1.6
10 FT	295.8	2.0
12 FT	205.4	2.4
14/FT	150.9	2.9





NARROW SPOT BEAM OUTPUT MULTIPLIERS
10W
0.74

CTL934SP3KD: 28W, 3000K, 83 CRI, SPOT BEAM

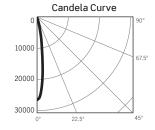
Test No. G25082504

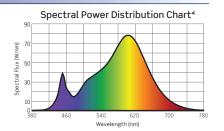
Fixture Delivered Lumens: 2767.5
Total Watts@120V: 28.7
Lumens Per Watt: 96.43
Center Beam Candle Power: 26608
Beam Distribution: 14.8°
Spacing Criterion: 0.27
Color Rendering Index (CRI)¹: 82.8
Color Temperature (CCT)²: 3004K

Designed for 50,000 Hour Lamp Life³

Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIA. (FT.)
4 FT	1663.0	1.0
6 FT	739.1	1.6
8 FT	415.8	2.1
10 FT	266.1	2.6
12 FT	184.8	3.1
14/FT	135.8	3.6





SPOT BEAM OUTPUT MULTIPLIERS								
10W	14W	19W						
0.40	0.56	0.76						

1. Accuracy of Rendering Colors 2. Color Appearance of Light Source 3. Dependent on Surrounding Temperatures 4. Colors Present within the Light Source

PHOTOMETRIC MULTIPLICATION FACTORS

Lumen output values fluctuate based on Color Temperature (CCT), Color Rendering Index (CRI), and Luminaire Wattage/Output. To estimate lumen output of the various options, multiply the 3000K standard CRI results by the following:

CCT MULTIPLIERS									
ССТ	STANDARD CRI	HIGH (90+) CRI							
2700K	0.98	0.81							
3000K	1.00	0.85							
3500K	1.01	0.86							
4000K	1.02	0.89							



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CTL935NF3KD: 35W, 3000K, 83 CRI, NARROW FLOOD BEAM

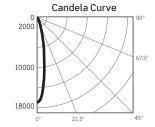
Test No. G25071703

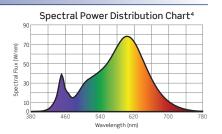
Fixture Delivered Lumens: 3259.7 Total Watts@120V: 35.4 Lumens Per Watt: 92.08 Center Beam Candle Power: 17020 Beam Distribution: 21.6°

Spacing Criterion: 0.37 Color Rendering Index (CRI)¹: 82.8 Color Temperature (CCT)²: 3004K Designed for 50,000 Hour Lamp Life³

Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIA. (FT.)
4 FT	1063.7	1.5
6 FT	472.8	2.3
8 FT	265.9	3.1
10 FT	170.2	3.8
12 FT	118.2	4.6
14/FT	86.8	5.4





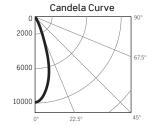
CTL935MF3KD: 35W, 3000K, 83 CRI, MEDIUM FLOOD BEAM

Test No. G2507170

Fixture Delivered Lumens: 3715.7 Total Watts@120V: 35.4 Lumens Per Watt: 104.96 Center Beam Candle Power: 9897 Beam Distribution: 35.2° Spacing Criterion: 0.55 Color Rendering Index (CRI)¹: 82.8 Color Temperature (CCT)²: 3004K Designed for 50,000 Hour Lamp Life³

Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIA. (FT.)
4 FT	618.6	2.5
6 FT	274.9	3.8
8 FT	154.6	5.1
10 FT	99.0	6.3
12 FT	68.7	7.6
14/FT	50.5	8,9





CTL935FL3KD: 35W, 3000K, 83 CRI, FLOOD BEAM

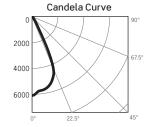
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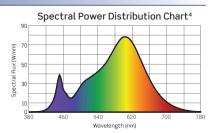
Fixture Delivered Lumens: 3735.1
Total Watts@120V: 35.4
Lumens Per Watt: 105.51
Center Beam Candle Power: 6137
Beam Distribution: 51.8°
Spacing Criterion: 0.71
Color Rendering Index (CRI)¹: 82.8
Color Temperature (CCT)²: 3004K

Designed for 50,000 Hour Lamp Life³

Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIA. (FT.)
4 FT	383.5	3.9
6 FT	170.5	5.8
8 FT	95.9	7.8
10 FT /	61.4	9.7
12 FT	42.6	11.6
14/FT	31.3	13.6





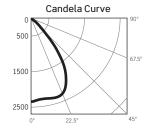
CTL934SP3KD: 35W, 3000K, 83 CRI, WIDE FLOOD BEAM

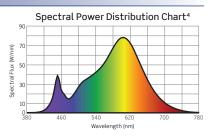
Test No. G25091601

Fixture Delivered Lumens: 3474.6
Total Watts@120V: 35.1
Lumens Per Watt: 99.00
Center Beam Candle Power: 2347
Beam Distribution: 79.4°
Spacing Criterion: 1.13
Color Rendering Index (CRI)¹: 82.8
Color Temperature (CCT)²: 3004K
Designed for 50,000 Hour Lamp Life³

Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIA. (FT.)
4 FT	146.7	6.7
6 FT	65.2	10.0
8 FT	36.7	13.3
10 FT /	23.5	16.6
12 FT	16.3	19.9
14/FT	12.0	23.3





1. Accuracy of Rendering Colors 2. Color Appearance of Light Source 3. Dependent on Surrounding Temperatures 4. Colors Present within the Light Source

PHOTOMETRIC MULTIPLICATION FACTORS

Lumen output values fluctuate based on Color Temperature (CCT), Color Rendering Index (CRI), and Luminaire Wattage/Output. To estimate lumen output of the various options, multiply the 3000K standard CRI results by the following:

	CCT MULTIPLIERS										
ССТ	HIGH (90+) CRI										
2700K	0.98	0.81									
3000K	1.00	0.85									
3500K	1.01	0.86									
4000K	1.02	0.89									

	OUTPUT MI	ULTIPLIERS	
10W	14W	19W	28W
0.30	0.42	0.59	0.79



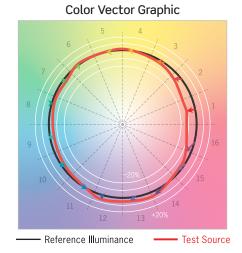
CTL93 SERIES | Gallery M Track Luminaire Standard Luminus Photometry

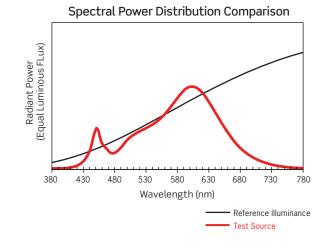
TM-30 DATA: CTL935MF3KD

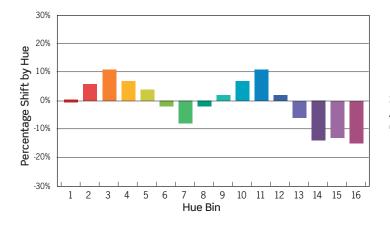
ANSI/IES TM-30-18 Color Rendition Report Test No. S21072001

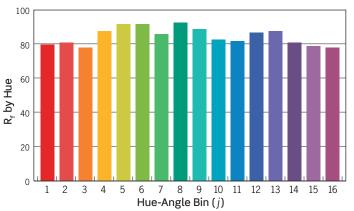
Colors are for visual orientation purposes only

R _f	86
R_{g}	95
CCT(K)	3004K
D _{uv}	0.0007
u¹	0.2502
VI	0.5222









HUE BIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
HUE SHIFT	0%	7%	10%	6%	3%	-2%	-6%	-1%	3%	8%	11%	2%	-8%	-16%	-13%	-14%
R _f VALUE	80	82	80	91	94	94	88	94	90	86	84	87	88	80	79	78