LIGHTPLANE 1R

LP1R | RECESSED

SPECIFICATIONS

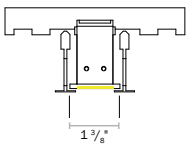
PROFILE	1" Aperture
SIZES	Configurable in linear shapes and straight run sections
LED OUTPUT	325 - 550 lm/ft
CCT/CRI	80/90 CRI - 2700K/3000K/3500K/4000K
DIMMING/ DRIVER	Remote Driver: 0-10V, DALI, DMX, eldoLED, Lutron®, PoE (Molex, Igor, NuLEDS). Dimming to 0% for select models.
POWER	4.7 – 8.1 w/ft
INPUT	120VAC, 277VAC, or 347VAC
OPTICS	Direct lambertian. Flush and regressed lens options available.
FINISHES	16 standard finishes available at no extra charge Custom finishes available
MATERIAL	6061 Extruded Aluminum
ENVIRONMENT	Dry or damp locations

*Safety and Performance information available on last page. Output and other specifications available on page 5.

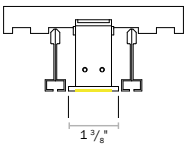
DISTRIBUTIONS & PROFILES

DIRECT LAMBERTIAN

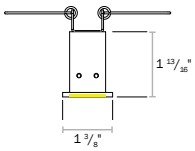
Straight Run (S) | **Square (SQ)** | **Rectangle (R)** | **L-Shaped Left (LL)** | **L-Shaped Right (LR)** | **U-Shaped (U)**



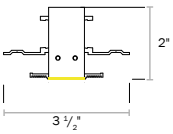
LP1RT
TGRID (EXT/F)



LP1RT
SLOT (EXT/F)



LP1RT
DRY (EXT/F)



LP1RMUD
DRY (EXT/F)

Not to scale. Dimensions are nominal. Consult factory for CAD drawing

Intertek enlighted nLIGHT molex igor COOPER PoE Ready NuLEDs

ALW

PRODUCT SUBMITTAL WORKSHEET

	–	–	–	/	/	–	–	–		–	–	–		–
1		2	3		4		5	6	7		8	9a	9b	9c

EXAMPLE: **LP1RT — DRY — S5 — LOW/80/3000K — V00 — EXT/F — AS — UNV — EMB/25 — N — CP**
1 2 3 4 5 6 7 8 9a 9b 9c

1. BASE MODEL (CHOOSE 1)

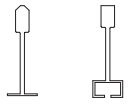
- ☐ **LP1RT** Recessed with Trim
- ☐ **LP1RMUD** Recessed, Trimless, Mud-In

[1]Only available with Aluminum (AL) finish.

2. CEILING TYPE (CHOOSE 1)

- ☐ **DRY**[2] Drywall
- ☐ **TGRID**[3] T-Grid
- ☐ **SLOT**[3] Slot

[2]Compatible with LP1RT and LP1RMUD
[3]Compatible only with LP1RT

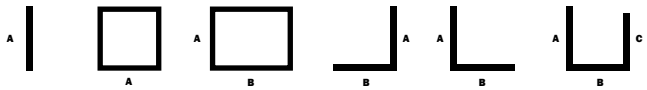


TGRID SLOT

3. SHAPE/LENGTH (CHOOSE 1 & ENTER LENGTH IN FEET) — FOR CUSTOM ANGLES, CONTACT ALW

- ☐ **S__** Individual/Straight Run Section *(enter length in product code above, ex. S5)*
- ☐ **SQ__** Square Configuration *(enter side length A, ex: SQ5)*
- ☐ **R__** Rectangular Configuration *(enter side lengths A and B, ex. R5-7)*
- ☐ **LL_-_** L-Shaped, Left Configuration *(enter side lengths A and B, ex. LL5-7)*
- ☐ **LR_-_** L-Shaped, Right Configuration *(enter side lengths A and B, ex. LR5-7)*
- ☐ **U_-_-_** U-Shaped Configuration *(enter side lengths A, B, and C, ex. U5-7-4)*

*Lengths are nominal and may vary based on lamping and other specification selections. Consult ALW when exact lengths are required.
*Shape orientation (Looking from the Ceiling down to the floor).



(S) (SQ) (R) (LL) (LR) (U)

4. LED LAMPING (CHOOSE 1 FOR EACH)

A. OUTPUT
- ☐ **LOW** (325 lm/ft)
- ☐ **MED** (450 lm/ft)
- ☐ **HI** (550 lm/ft)
- ☐ **CSTM____**[4] (Enter lumens in product code above. Ex. 0100=100lm/ft)

B. CRI
- ☐ **80**
- ☐ **90**

C. CCT
- ☐ **2700K**
- ☐ **3000K**
- ☐ **3500K**
- ☐ **4000K**

*For delivered lumens and watts, see 'Performance Details'
[4]Consult ALW for custom lumen packages.

5. REMOTE DRIVER (CHOOSE 1)

- ☐ **V00** (0-10V, dim to 0%)
- ☐ **V01** (0-10V, dim to 1%)
- ☐ **V05** (0-10V, dim to 5%)
- ☐ **LDE1** (Lutron ECOSYS1, 0-10V, dim to 1%)
- ☐ **DALI** (DALI, dim to 0%)
- ☐ **DMX** (DMX, dim to 0%)
- ☐ **POEM** (POE Molex)
- ☐ **POEI** (POE IGOR)
- ☐ **POEN** (POE Nuleds)
- ☐ **POE**[5] (POE Ready)

*See 'Driver', 'Sensor' and lamping charts for driver details and sensor compatibility. request to assist with control system integration.
[5]Choose desired PoE solution not listed. Contact customer service to review and confirm the PoE system of your choice.

6. LENS — PRIMARY

- ☐ **EXT/F** Extra diffuse, flush
- ☐ **EXT/R** Extra diffuse, reveal (Not available with LP1RMUD)

7. FINISH* (CHOOSE 1)

STANDARD FINISHES
- ☐ **SW** Satin White
- ☐ **SB** Satin Black
- ☐ **AS** Aluminum Silver Anodized Effect
- ☐ **TB** Textured Black

PREMIUM FINISHES
- ☐ **__** See chart on page 4 for premium finishes. Manually type in the finish code (Ex: OB = Oil-Rubbed Bronze)

SPECIAL ORDER FINISHES*
- ☐ **RAL____** Specify RAL Classic Color (Ex: RAL 3003)
- ☐ **CCM____** Custom Color Match

*Manually type in the finish code for special order finishes types

8. VOLTAGE (CHOOSE 1)

- ☐ **UNV** Universal Voltage (120VAC-277VAC)
- ☐ **347** 347 Volt *(Driver options may be limited. Not available with EMB)*

9a. ADDITIONAL OPTIONS (OPTIONAL, CH. 1)

- ☐ **EMB/__**[6] Emergency Battery *(indicate QTY — each battery powers 4ft. section @ 1492lm. Not available in 347 V)*
- ☐ **EMC/__**[6] Emergency Circuit *(indicate QTY of 4ft sections to be illuminated by emergency circuit)*

[6]Consult ALW for available options.

9b. SENSOR OPTIONS (OPTIONAL, CHOOSE 1)

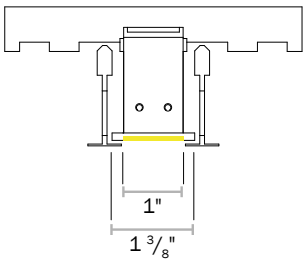
- ☐ **N** (None)
- ☐ **WLNX/__** (Cooper Wavelinx, remote)
- ☐ **ENLGHT/__** (Enlighted, remote)
- ☐ **FCJS/__** (Lutron, remote)
- ☐ **FCJS/S/__** (Lutron, remote + occ/daylight sensor)
- ☐ **MLX** (Molex POE, remote)
- ☐ **NLT** (nLight wired remote connection)
- ☐ **NLTAIR** (nLight AIR, remote connection)
- ☐ **OS/PH/HV/__**[7] (Hubbel WASP remote occ/daylight sensor)

*Default quantity is 1 sensor per 8ft, type alternate quantity into product code above if desired. Sensor descriptions available on page 12.
[7]Quickship availability on occupancy and photocell/daylight sensors may vary. Contact ALW for more information.

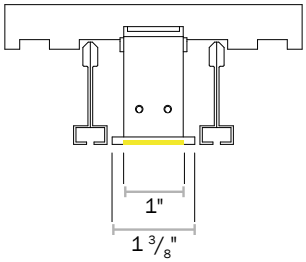
9c. CERTIFICATION OPTIONS

- ☐ **CP** Chicago Plenum Certification

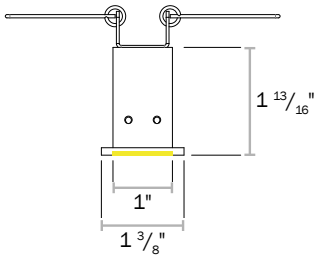
MECHANICAL DIAGRAMS — MOUNTING & DIMENSIONS



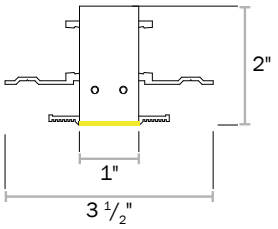
LP1RT
TGRID (EXT/F)



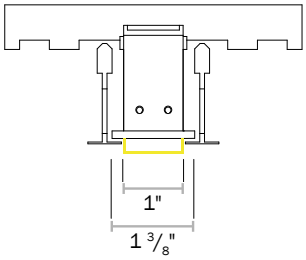
LP1RT
SLOT (EXT/F)



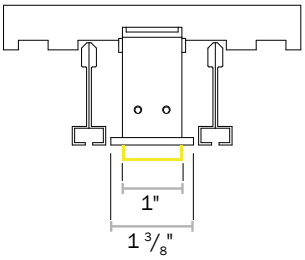
LP1RT
DRY (EXT/F)



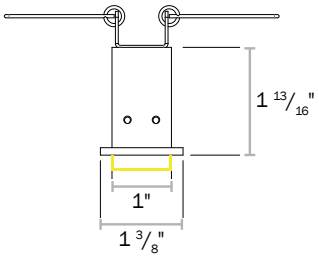
LP1RMUD
DRY (EXT/F)



LP1RT
TGRID (EXT/R)



LP1RT
SLOT (EXT/R)



LP1RT
DRY (EXT/R)

STANDARD FINISHES

Standard finishes are available at no additional charge.

STANDARD FINISHES - ELIGIBLE

SW	AS	SB	TB
Satin White	Aluminum Silver Anodized Effect	Satin Black	Textured Black

PREMIUM FINISHES

BASIC POWDER COAT

GW	AW	TW
Gloss White	Antimicrobial Gloss White	Textured Matte White

METALLIC POWDER COAT

CG	CU	BR
Charcoal Gray	Copper	Brass

SATIN ANODIZED EFFECT POWDER COAT

OB	DB
Oil-Rubbed Bronze	Dark Bronze

GLOSS POWDER COAT (80-95% GLOSS)

GO	GR	GM	GB
Orange RAL 2003	Red RAL 3020	Magenta RAL 4010	Blue RAL 5015

Contact ALW Quotes for sample paint finish swatches.

SPECIAL ORDER FINISHES*

RAL CLASSIC COLORS (80-95% GLOSS): RAL_ _ _ _

Most RAL Classic Colors are available for a minimum setup fee. On your specification submittal choose your RAL color by entering the 4-digit RAL code (Ex: RAL 3003).
See www.alw-inc.com/resources/finishes

CUSTOM COLOR MATCH: CCM_ _ _ _

Custom powder coat color matching is available for a premium setup fee. Consult ALW for additional information.

*An individual setup fee will apply to each unique Special Order Finish per purchase order.
(ex: RAL 5023 and RAL 2008 are specified for multiple line items on a purchase order. 2x setup fees will apply)

*Printed or on-screen colors are only approximations - consult actual Color Chip Set before specifying

PERFORMANCE DETAILS — LED LAMPING

OUTPUT	DELIVERED LUMENS (LM/FT)	WATTS (W/FT)	EFFICACY (LM/W)	CRI OPTIONS	CCT OPTIONS
LOW[8]	325	4.7	Up to ~69	80 90	2700K 3000K 3500K 4000K
MED[8]	450	6.4			
HI[8]	550	8.1			

[8]Performance calculations are based on the following LM-79 test: 4000K, 80CRI, HIGH output. MED and LOW values are extrapolated distributions.

LIGHTPLANE 1 VOLTAGE DROP CHART FOR REMOTE DRIVERS - WHITE LED, 28VDC

The below table should be used as a general guide to calculate the maximum run length between the canopy J-Box and the remote driver. See alw-inc.com/voltage-drop-calculator/ to calculate maximum recommended run length for specific configurations. Please note that the provided values are estimates only, and may vary depending on various factors such as temperature, wire/connector quality, etc.

WIRE GAUGE	20W 0.61A	30W 0.91A	40W 1.21A	50W 1.52A	60W 1.82A	70W 2.12A	80W 2.42A	90W 2.73A	100W 3.03A
18 AWG	84 ft.	53 ft.	38 ft.	28 ft.	22 ft.	18 ft.	15 ft.	12 ft.	10 ft.
16 AWG	138 ft.	89 ft.	65 ft.	50 ft.	40 ft.	33 ft.	28 ft.	24 ft.	21 ft.
14 AWG	224 ft.	147 ft.	108 ft.	85 ft.	69 ft.	58 ft.	50 ft.	43 ft.	38 ft.
12 AWG	362 ft.	238 ft.	177 ft.	140 ft.	115 ft.	97 ft.	84 ft.	74 ft.	66 ft.
10 AWG	580 ft.	384 ft.	286 ft.	227 ft.	188 ft.	160 ft.	139 ft.	122 ft.	109 ft.

DRIVERS

PRODUCT CODE	DESCRIPTION
V00	0-10V dimming down to 0% (dim to off).
V01	0-10V dimming down to 1%.
V05	0-10V dimming down to 5% (Down to 10% for TUNE lamping).
LDE1	ECOSYS1, (LDE1) Lutron Hi-lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology
DALI	DALI flicker-free dimming down to 0%.
DMX	DMX flicker-free dimming down to 0%.
POEM	Molex CoreSync PoE LED Driver. Contact ALW to assist with your project.
POEI	IGOR PoE LED Driver. Contact ALW to assist with your project.
POEN	NuLEDS PoE LED Driver. Contact ALW to assist with your project.
POE	PoE Ready LED Driver. Contact ALW to assist with your project.

*Most drivers can be programmed to specific dimming levels if desired. Contact ALW for specific dimming level requests. ALW lighting fixtures are intended for use with a wide range of sensors, lighting controls, LED drivers, and building management systems. If there are specific components required for your application that aren't listed on this spec sheet, please contact ALW customer support today to specify a compatible solution of your choice.

DRIVER/LED LAMPING COMPATIBILITY			
	STD	**CA TITLE 24 JA8/JA10**[9]	**IEEE P1789 & HD TV STUDIO**[10]
V00	●	●	
V01	●	●	
V05	●	●	
LDE1	●	●	●
DALI	●	●	
DMX	●	PER REQUEST	PER REQUEST
POEM	PER REQUEST	●	●
POEI	PER REQUEST	●	●
POEN	PER REQUEST	●	●

● - Indicates compatibility

*Standard lamping (STD) — LOW/MED/HI

[9]Fixtures specified with 90CRI, 3000K, 3500K, and 4000K lamping with applicable LED drivers have the ability to conform to California Title 24 JA8 and JA10 Appendices

[10]The following drivers conform to IEEE P1789 Flicker Standard: 'IEEE Recommended Practices for Modulating Current in High-Brightness LEDs for Mitigating Health Risks to Viewers'. These drivers may also be installed in HD TV Studio applications utilizing high frequency camera equipment.

SENSORS

	PRODUCT CODE	DESCRIPTION	Location
	N	None. Choose when sensors are not desired.	-
COOPER WAVELINX	**WLNX**	Fixture is built with 0/10V wiring to connect to Wavelinx Wireless sensors and power/relay packs (sensors and equipment not provided by ALW)	Remote
ENLIGHTED™	**ENLGHT**	Enlighted® remote connected lighting smart sensor — occ/daylight/networking (Enlighted Part: SU-5S-H-CL)	Remote
LUTRON VIVE	**FCJS**	Lutron® Vive remote RF wireless fixture control (Lutron Part: FCJS-ECO or FCJS-010)	Remote
	FCJS/S	Lutron® Vive remote RF wireless fixture control + daylight/occ sensor (Lutron Part: FCJS-ECO or FCJS-010, & FC-Sensor)	Remote
MOLEX POE CORESYNC	**MLX**	Molex PoE sensors for use with Molex/PoE drivers. Customer will need to determine who to purchase PoE equipment from	Remote
NLIGHT WIRED®	**NLT**	Fixture is built to connect to nLight Wired remote components specified by agency. Contact ALW to review project details.	Remote
NLIGHT WIRELESS®	**NLTAIR**	Fixture is built to connect to nLight Air (Wireless) remote components specified by agency. Contact ALW to review project details.	Remote
VALUE SENSORS	**OS/PH/HV**	*Hubbell WASP* ***High Voltage*** *0-10V remote surface mount occ/daylight sensor. 120/277/347VAC input (Hubbell Part: WSPDSMUNV)* *Automated Dimming Functionality: Connect fixture 0/10V wires to sensor in the field. Adjust occ/photocell settings as desired.* *On/Off or Manual Dimming Functionality: Turn photocell functionality OFF. Cap off 0/10V wires on sensor.* *Connect fixture 0/10V wires to wall dimmer in the field.*	Remote

*All connected lighting sensors/systems must be programmed in the field by an electrical commissioner familiar with the system. Refer to the 'Sensor Compatibility' and 'Driver/Sensor Compatibility' charts to specify compatible sensors, LED lamping, and LED driver systems.

SENSORS CONT'D

SENSOR COMPATIBILITY					
PRODUCT CODE		SENSOR TYPE	MAX MT HT	CA TITLE 24	STD*
COOPER WAVELINX	WLNX		15 ft	●	●
ENLIGHTED™	ENLGHT	OCCUPANCY/PHOTOCELL	40 ft	●	●
LUTRON VIVE	FCJS	WIRELESS CONTROL	12 ft	●	●
	FCJS/S/	OCCUPANCY/PHOTOCELL	12 ft	●	●
MOLEX POE CORESYNC	MLX		16 ft	●	●
NLIGHT WIRED®	NLT		15 ft	●	●
NLIGHT WIRELESS®	NLTAIR		15 ft (average)	●	●
VALUE SENSORS	OS/PH/HV	OCCUPANCY/PHOTOCELL	45 ft	●	●

● - Indicates compatibility ■ - On/off sensor functionality only

*Standard lamping (STD) — LOW/MED/HI

SENSORS (CONT'D)

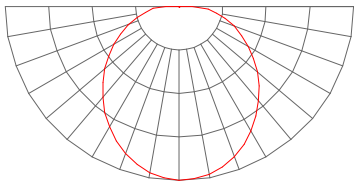
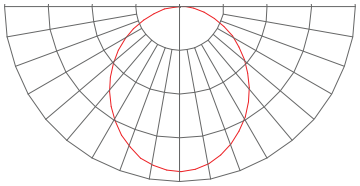
DRIVER/SENSOR COMPATIBILITY									
	WLNX	ENLGHT	FCJS	FCJS/S /	MLX	NLT	NLTAIR	OS/PH/HV	NO SENSOR
V00	●		●	●				▲	●
V01	●		●	●				▲	●
V05	●		●	●				▲	●
LDE1			●	●					●
DALI		●						■	●
DMX								■	●
POEM					●				●
POEI	Sensor types will depend on the PoE system configuration. Contact ALW for details.								
POEN	Sensor types will depend on the PoE system configuration. Contact ALW for details.								
POE	Sensor types will depend on the PoE system configuration. Contact ALW for details.								

● - Indicates compatibility

▲ - Fixture can have automated dimming via sensor OR on/off functionality and manual dimming

■ - On/off sensor functionality only

PHOTOMETRICS

OPTIC	POLAR PLOT (CD)	MTG HEIGHT	LIGHT LEVEL (FC)	SPACING CRITERION (SC)[11] (0°- 180°) (90°- 270°)	MAX INTENSITY (CD)	OUTPUT (LM/FT)
EXT/R		6 ft	9.7	1.32 1.26	347.4	550
		8 ft	5.4			
		10 ft	3.5			
		12 ft	2.4			
		14 ft	1.8			
		16 ft	1.4			
EXT/F		6 ft	10.6	1.26 1.26	383	550
		8 ft	6			
		10 ft	3.8			
		12 ft	2.7			
		14 ft	2			
		16 ft	1.5			

*Photometric calculations based on HI 4000K 80 CRI fixture combination. Actual results may vary in the field.
For footcandle and output multipliers refer to the ALW IES File Multipliers Chart

[11]Spacing criterion refers to maximum distance luminaires can be spaced to provide uniform illumination on the working plane or surface.
Luminaire spacing = Spacing Criterion (SC) x Mounting Height (MH) (ex. 1.14 (SC) x 10' (MH) = 11.4' Luminaire Spacing).

ADDITIONAL OPTIONS & SPECIFICATIONS

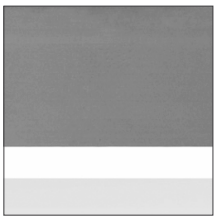
LED PERFORMANCE

Class 2 LED remote drivers are provided with 10' plenum-rated cable. L80 > 54,000 hours. 80+ CRI. Luminous flux +/- 5%.

LINEAR LENS

Extruded, twin-layered, high-impact acrylic. EXT is white and extra diffuse with minimal- to no-source visibility.

FLUSH LENS – EXT/F



REVEAL LENS – EXT/R

HOUSING

100% recyclable, extruded architectural grade 6061 aluminum with a 0.08" minimum wall thickness.

SAFETY & REGULATORY

Fixtures specified with 90CRI, 3000K, 3500K, and 4000K lamping with applicable LED drivers have the ability to conform to **California Title 24 JA8 and JA10** Appendices. EldoLED drivers can conform to IEEE P1789 Flicker Standard: 'IEEE Recommended Practices for Modulating Current in High-Brightness LEDs for Mitigating Health Risks to Viewers .

Contact ALW customer support today and we can help you with your project requirements.

ETL Listed (U.S. & Canada). Suitable for dry or damp locations.
Conforms to UL std. 2108, Low Voltage Luminaires / Low Voltage Lighting Systems.
Certified to CSA std. C22.2#250.0:2008 Ed. 3+G1;G2.
Recessed models are Type IC Rated and suitable for installation with direct contact to building insulation.

WARRANTY

Limited 11-year warranty. Details: alw-inc.com/warranty

OPERATING TEMPERATURE

Luminaire should be installed and operated ONLY in dry or damp locations where the ambient temperature ranges from -4°F to 122°F (-20°C to 50°C). Luminaire operation in environments outside the listed temperature range voids the warranty AND may damage the product or adversely impact lamp life, lumen output and color consistency.

CONTROLS, SENSORS, & LED DRIVER

ALW lighting fixtures are intended for use with a wide range of sensors, lighting controls, LED drivers, and building management systems. Our component portfolio is continually expanding to adopt to the latest technologies and specification needs. We currently support integration with Lutron, Enlighted, EldoLED, nLight, Osram, Philips, and more. If there's a component or system needed that you don't see on the spec sheet please contact ALW customer support today so we can review your requirements.

CHICAGO PLENUM

Recessed fixtures for this product family are available to meet Chicago Plenum certification

WEIGHT

Approximately 1.5 lbs. per linear foot (not including downlight option). Weight may vary depending on mounting, downlight, and additional options selected.