

SOLID STATE AREA LIGHTING

LINEAR EXT[®] SERIES-LED

PROJECT NAME: _____

PROJECT TYPE: _____

Optical Housing

Extruded aluminum (6063-T5 alloy) assembly with integral cooling fins. The Optical Panel mounting surface is extruded flat (surface variance $< \pm .003"$) to facilitate thermal transfer of heat to the housing and cooling fins. Cooling fins are tapered from bottom to top to promote thermal flow away from the Optical Panel mounting surface. Optical and Electrical Housings are mechanically bonded to form a continuous rigid assembly.

Mounting Arm/Electrical Housing

Heavy wall cast aluminum (A356 Alloy; 0.2% > copper) housing with hinged cast door. Closure uses two stainless steel captive hex head screws and silicone gasketing. Two mounting holes allow fixture to be bolted to the pole. The top mounting hole and wiring hole are slotted to allow the fixture to be tilted up to 5° along its long axis.

PLED™ Optics

Emitters (LED's) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED refractor. LED optics completely seal each individual emitter to meet an IP66 rating. In asymmetric distributions, a micro-reflector inside the refractor re-directs the house side emitter output towards the street side and functions as a house side shielding element. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. Any one Panel, or group of Panels in a luminaire, have the same optical pattern. LED refractors produce standard site/area distributions. Panels are field replaceable and field rotatable in 90° increments.

LED Driver(s)

Constant current electronic with a power factor of $> .90$ and a minimum operating temperature of $-40^{\circ}\text{F}/-40^{\circ}\text{C}$. Driver(s) is/are UL and cUL recognized and mounted directly against the Electrical Housing to facilitate thermal transfer, held down by universal clamps to facilitate easy removal. In-line terminal blocks facilitate wiring between the driver and optical arrays. Drivers accept an input of 120-277V, 50/60Hz or 347V-480V, 50,60Hz. (0 - 10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with 20KV surge protector for field accessible installation.)

LED Emitters

High output LED's are utilized with drive currents ranging from 350mA to 1050mA. 70CRI Minimum. LED's are available in standard Neutral White (4000K), Cool White (5000K) or Warm White (2700K and 3000K). Consult Factory for other LED options.

Amber LED's

PCA (Phosphor Converted Amber) LED's utilize phosphors to create color output similar to LPS lamps and have a slight output in the blue spectral bandwidth. **TRA** (True Amber) LED's utilize material that emits light in the amber spectral bandwidth only without the use of phosphors.

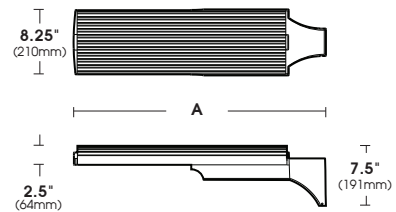
Finish

Super TGIC polyester powder coating is applied onto a metal substrate this has been pretreated with a four-stage process for maximum adhesion and color retention. The top coat is baked at 400°F for maximum hardness and exterior durability.



LINEAR EXT[®]

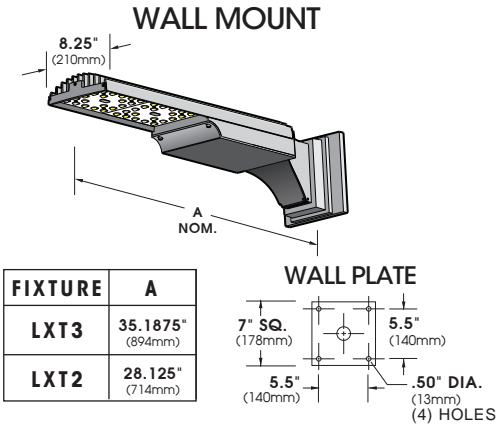
(MODELS: LXT6, LXT4, LXT2 2-180 & LXT2 2X2-180)



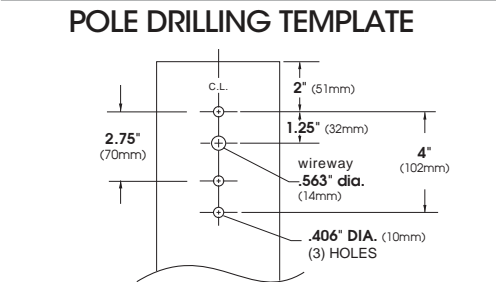
FIXTURE	A
LXT6	54.375" (1381mm)
LXT5	47.3125" (1202mm)
LXT4	40.25" (1022mm)
LXT3	33.1875" (843mm)
LXT2	26.125" (663mm)

LINEAR EXT® SERIES - LED

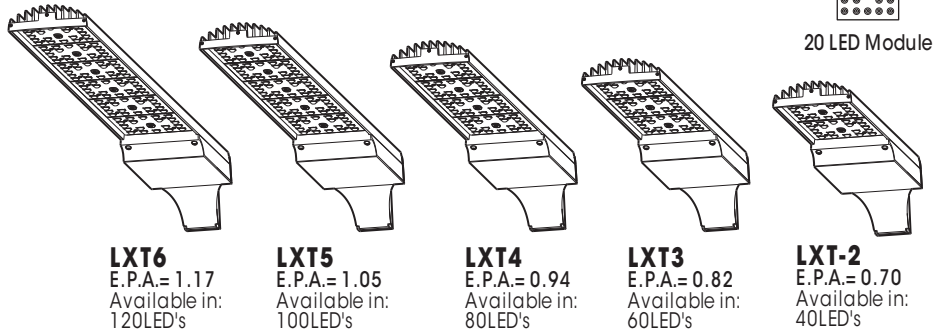
SPECIFICATIONS



Extruded aluminum Arm and cast aluminum Wall Bracket assembly provided with built in Gasketed Wire Access for Fixture/Supply Wire Connection.



PLED® MODULES



Approximate Average Lumens – 4000K
(Lumens median of all distributions)

	350mA			525mA			700mA			1050mA		
	Watts	Lumens	HID Eq.	Watts	Lumens	HID Eq.	Watts	Lumens	HID Eq.	Watts	Lumens	HID Eq.
40	45	5997	70-100	66	8653	100-150	87	10995	175	134	14647	200-250
60	65	8716	100-150	98	12522	175-200	131	15918	200-250	193	21142	250-350
80	87	11622	175-200	131	16736	200-250	174	21235	400	266	28190	450-575
100	109	14504	200-250	160	20717	350-400	217	26327	400-450	332	36103	750
120	127	17405	250	195	24860	450	260	31592	575-750	396	43323	750-1000

ORDERING INFORMATION

Spec/Order Example: LXT4/FRO/PLED-III-W/80LED-700mA/CW/277/RAL-8019-S

Model	Factory Rotated Optics	Optics	LED Mode	Mounting	Finish	Options
<input type="checkbox"/> LXT6 <input type="checkbox"/> LXT5 <input type="checkbox"/> LXT4 <input type="checkbox"/> LXT3 <input type="checkbox"/> LXT2	<input type="checkbox"/> FRO	<input type="checkbox"/> Type II PLED-II <input type="checkbox"/> Type II Front Row PLED-II-FR <input type="checkbox"/> Type III Med. PLED-III-M <input type="checkbox"/> Type III Wide PLED-III-W <input type="checkbox"/> Type IV PLED-IV <input type="checkbox"/> Type IV PLED-IV-FT <input type="checkbox"/> Type V Narrow PLED-VSQ-N <input type="checkbox"/> Type V Med. PLED-VSQ-M <input type="checkbox"/> Type V Wide PLED-VSQ-W	NO. LEDs Drive Current <input type="checkbox"/> 120LED (LXT6) <input type="checkbox"/> 350mA <input type="checkbox"/> 100LED (LXT5) <input type="checkbox"/> 525mA <input type="checkbox"/> 80LED (LXT4) <input type="checkbox"/> 700mA ¹ <input type="checkbox"/> 60LED (LXT3) <input type="checkbox"/> 1050mA ¹ <input type="checkbox"/> 40LED (LXT2) COLOR TEMP - CCT VOLTAGE <input type="checkbox"/> NW (4000K) <input type="checkbox"/> 120 *STANDARD <input type="checkbox"/> 208 <input type="checkbox"/> CW (5000K) <input type="checkbox"/> 240 <input type="checkbox"/> WW (3000K) <input type="checkbox"/> 277 <input type="checkbox"/> WW (2700K) <input type="checkbox"/> 347 <input type="checkbox"/> <input type="checkbox"/> 480 Consult Factory for other LED Colors AMBER ² <input type="checkbox"/> Phosphor Converted Amber PCA <input type="checkbox"/> True Amber ³ TRA Notes: 1 - Not for use with TRA LED'S 2 - Narrow Band Ambers have no definable CCT equivalent 3 - Available in 350mA & 525mA Drive Currents only	Arm Mount <input type="checkbox"/> 1 <input type="checkbox"/> 2-180 <input type="checkbox"/> 2-90 <input type="checkbox"/> 3-120 <input type="checkbox"/> 3-90 <input type="checkbox"/> 2X2-180 Internal Mounting Bracket supplied for 18" and 24" vertical separation. <input type="checkbox"/> 4-90 Wall Mount <input type="checkbox"/> WM-2 <input type="checkbox"/> WM-3	Standard Textured Finish <input type="checkbox"/> Black RAL-9005-T <input type="checkbox"/> White RAL-9003-T <input type="checkbox"/> Grey RAL-7004-T <input type="checkbox"/> Dark Bronze RAL-8019-T <input type="checkbox"/> Green RAL-6005-T Premium Finishes <input type="checkbox"/> Rust <input type="checkbox"/> Patina Copper PC For Smooth Finish, Replace Suffix "T" With Suffix "S" Example: RAL-9500-S Consult Factory for Custom Colors	<input type="checkbox"/> High-Low Dimming for Hardwired Switching or Nonintegrated Motion Sensor HLSW <input type="checkbox"/> Internal House Side Shield HS-PLED <input type="checkbox"/> Photo Cell + Voltage (EXAMPLE: PC120V) PC+V <input type="checkbox"/> tTist Lock Receptacle only TPR <input type="checkbox"/> 7-Pin Twist Lock Receptacle only TPR7 <input type="checkbox"/> Single Fuse (120V, 277V, 347V) SF <input type="checkbox"/> Double Fuse (208V, 240V, 480V) DF <input type="checkbox"/> Blue-Tooth Programmable Photo/Motion Sensor (Factory - Motion 50/100; Photo 75c) MS-F311

LINEAR EXT® SERIES - LED

LED COUNT	SOURCE TYPE	SOURCE	INITIAL LUMENS - 4000K CCT	INITIAL LUMENS - 3000K CCT	INITIAL LUMENS - 5000K CCT	L70 GREATER THAN (HR)	STARTING TEMP.	SYSTEM WATTS	VOLTS	MAX INPUT AMPS
20	LED	20 PLED® Optical Module - 350mA	2947 -	2800 -	3094 -	90,000+	-40°F	22	120	0.18
			3260	3097	3423				277	0.08
									347	0.06
20	LED	20 PLED® Optical Module - 525mA	4244 -	4032 -	4456 -	90,000+	-40°F	33	120	0.28
			4694	4459	4929				277	0.12
									347	0.10
20	LED	20 PLED® Optical Module - 700mA	5382 -	5113 -	5652 -	90,000+	-40°F	44	120	0.37
			5935	5655	6251				277	0.16
									347	0.13
20	LED	20 PLED® Optical Module - 875mA	6219 -	5908 -	6530 -	90,000+	-40°F	54	120	0.45
			6879	6535	7223				277	0.19
									347	0.16
20	LED	20 PLED® Optical Module - 1050mA	7149 -	6791 -	7506 -	90,000+	-40°F	64	120	0.53
			7907	7511	8302				277	0.23
									347	0.18
40	LED	40 PLED® Optical Module - 350mA	6083 -	5778 -	6387 -	90,000+	-40°F	43	120	0.36
			6979	6630	7328				277	0.16
									347	0.12
40	LED	40 PLED® Optical Module - 525mA	8777 -	8338 -	9216 -	90,000+	-40°F	65	120	0.54
			10070	9566	10574				277	0.23
									347	0.19
40	LED	40 PLED® Optical Module - 700mA	11153 -	10595 -	11710 -	90,000+	-40°F	87	120	0.73
			12796	12156	13435				277	0.31
									347	0.25
40	LED	40 PLED® Optical Module - 875mA	12926	12280 -	13573 -	90,000+	-40°F	108	120	0.90
			14830	14089	15572				277	0.39
									347	0.31
40	LED	40 PLED® Optical Module - 1050mA	14858	14115 -	15601 -	90,000+	-40°F	128	120	1.07
			17046	16194	17899				277	0.46
									347	0.37
60	LED	40 PLED® Optical Module - 350mA	8841 -	8399 -	9283 -	90,000+	-40°F	64	120	0.53
			10144	9637	10651				277	0.23
									347	0.18
60	LED	40 PLED® Optical Module - 525mA	12731	12095 -	13368 -	90,000+	-40°F	97	120	0.81
			14608	13878	15339				277	0.35
									347	0.28
60	LED	60 PLED® Optical Module - 700mA	16146	15339 -	16953 -	90,000+	-40°F	130	120	1.08
			18525	17599	19452				277	0.47
									347	0.37
60	LED	60 PLED® Optical Module - 875mA	18658	17725 -	16561 -	90,000+	-40°F	162	120	1.35
			21407	20337	22478				277	0.58
									347	0.47
60	LED	60 PLED® Optical Module - 1050mA	21446 -	20373 -	22518 -	90,000+	-40°F	192	120	1.60
			24606	23379	25836				277	0.69
									347	0.55
80	LED	80 PLED® Optical Module - 350mA	11788 -	11199 -	12377 -	90,000+	-40°F	86	120	0.72
			13525	12849	14202				277	0.31
									347	0.25
80	LED	80 PLED® Optical Module - 525mA	16976 -	16127 -	17824 -	90,000+	-40°F	130	120	1.08
			19477	18504	20541				277	0.47
									347	0.37
80	LED	80 PLED® Optical Module - 700mA	21528 -	20452 -	22607 -	90,000+	-40°F	174	120	1.45
			24701	23466	25936				277	0.63
									347	0.50
80	LED	80 PLED® Optical Module - 875mA	24878	23633 -	26121 -	90,000+	-40°F	216	120	1.80
			28543	27116	29970				277	0.78
									347	0.62
80	LED	80 PLED® Optical Module - 1050mA	28595 -	27165 -	30024 -	90,000+	-40°F	257	120	2.14
			32808	31168	34448				277	0.93
									347	0.74
100	LED	100 PLED® Optical Module - 350mA	14714 -	13977 -	15448 -	90,000+	-40°F	108	120	0.90
			16880	16036	17724				277	0.39
									347	0.31

LED COUNT	SOURCE TYPE	SOURCE	INITIAL LUMENS - 4000K CCT	INITIAL LUMENS - 3000K CCT	INITIAL LUMENS - 5000K CCT	L70 GREATER THAN (HR)	STARTING TEMP.	SYSTEM WATTS	VOLTS	MAX INPUT AMPS
100	LED	100 PLED® Optical Module - 525mA	21014 -	19963 -	22065 -	90,000+	-40°F	160	120	1.33
			24110	22905	25316				277	0.58
									347	0.46
100	LED	100 PLED® Optical Module - 700mA	26705 -	25369 -	28040 -	90,000+	-40°F	217	120	1.81
			30639	29108	32171				277	0.78
									347	0.63
100	LED	100 PLED® Optical Module - 875mA	31860 -	30267 -	33453 -	90,000+	-40°F	274	120	2.28
			36555	34727	38383				277	0.99
									347	0.79
100	LED	100 PLED® Optical Module - 1050mA	36621 -	34790 -	38452 -	90,000+	-40°F	332	120	2.77
			42017	39916	44118				277	1.20
									347	0.96
120	LED	120 PLED® Optical Module - 350mA	17655 -	16773 -	18538 -	90,000+	-40°F	130	120	1.08
			20256	19234	21269				277	0.47
									347	0.37
120	LED	120 PLED® Optical Module - 525mA	25217 -	23956 -	26478 -	90,000+	-40°F	192	120	1.60
			28933	27486	30380				277	0.69
									347	0.55
120	LED	120 PLED® Optical Module - 700mA	32046 -	30443 -	33648 -	90,000+	-40°F	260	120	2.17
			36768	34929	38606				277	0.94
									347	0.75
120	LED	120 PLED® Optical Module - 875mA	38232 -	36230 -	40144 -	90,000+	-40°F	329	120	2.74
			43866	41673	46059				277	1.19
									347	0.95
120	LED	120 PLED® Optical Module - 1050mA	43945 -	41747 -	46142 -	90,000+	-40°F	398	120	3.32
			50421	47899	52942				277	1.44
									347	1.15
Phosphor Converted Amber LED										
20	PCA - LED	20 PLED® Optical Module - 350mA	1533 -			51,000+	-40°F	24	120	0.20
			1695						277	0.09
									347	0.07
20	PCA - LED	20 PLED® Optical Module - 525mA	2207 -			51,000+	-40°F	37	120	0.31
			2441						277	0.13
									347	0.11
20	PCA - LED	20 PLED® Optical Module - 700mA	2799 -			51,000+	-40°F	49	120	0.41
			3096						277	0.18
									347	0.14
40	PCA - LED	40 PLED® Optical Module - 350mA	3163 -			51,000+	-40°F	48	120	0.40
			3629						277	0.17
									347	0.14
40	PCA - LED	40 PLED® Optical Module - 525mA	4564 -			51,000+	-40°F	73	120	0.61
			5236						277	0.26
									347	0.21
40	PCA - LED	40 PLED® Optical Module - 700mA	5799 -			51,000+	-40°F	97	120	0.81
			6654						277	0.35
									347	0.28
60	PCA - LED	60 PLED® Optical Module - 350mA	4597 -			51,000+	-40°F	72	120	0.60
			5275						277	0.26
									347	0.21
60	PCA - LED	60 PLED® Optical Module - 525mA	6620 -			51,000+	-40°F	109	120	0.91
			7596						277	0.39
									347	0.31
60	PCA - LED	60 PLED® Optical Module - 700mA	8396 -			51,000+	-40°F	146	120	1.22
			9633						277	0.53
									347	0.42
80	PCA - LED	80 PLED® Optical Module - 350mA	6130 -			51,000+	-40°F	96	120	0.80
			7033						277	0.35
									347	0.28
80	PCA - LED	80 PLED® Optical Module - 525mA	8827 -			51,000+	-40°F	145	120	1.21
			10128						277	0.52
									347	0.42

LED COUNT	SOURCE TYPE	SOURCE	INITIAL LUMENS - 4000K CCT	INITIAL LUMENS - 3000K CCT	INITIAL LUMENS - 5000K CCT	L70 GREATER THAN (HR)	STARTING TEMP.	SYSTEM WATTS	VOLTS	MAX INPUT AMPS
Phosphor Converted Amber LED										
80	PCA - LED	80 PLED® Optical Module - 700mA	11195 - 12844			51,000+	-40°F	194	120 277 347	1.62 0.70 0.56
100	PCA - LED	100 PLED® Optical Module - 350mA	7651 - 8777			51,000+	-40°F	121	120 277 347	1.01 0.44 0.35
100	PCA - LED	100 PLED® Optical Module - 525mA	10927 - 12537			51,000+	-40°F	179	120 277 347	1.49 0.65 0.52
100	PCA - LED	100 PLED® Optical Module - 700mA	13887 - 15933			51,000+	-40°F	243	120 277 347	2.03 0.88 0.70
120	PCA - LED	120 PLED® Optical Module - 350mA	9181 - 10533			51,000+	-40°F	146	120 277 347	1.22 0.53 0.42
120	PCA - LED	120 PLED® Optical Module - 525mA	13113 - 15045			51,000+	-40°F	215	120 277 347	1.79 0.78 0.62
120	PCA - LED	120 PLED® Optical Module - 700mA	16664 - 19119			51,000+	-40°F	291	120 277 347	2.43 1.05 0.84
True Amber LED - 590nm										
20	TRA - LED	20 PLED® Optical Module - 350mA	885 - 979			66,500+	-40°C	17	120 277 347	0.14 0.06 0.05
20	TRA - LED	20 PLED® Optical Module - 525mA	1072 - 1186			66,500+	-40°C	25	120 277 347	0.21 0.09 0.07
40	TRA - LED	40 PLED® Optical Module - 350mA	1826 - 2096			66,500+	-40°C	33	120 277 347	0.28 0.12 0.10
40	TRA - LED	40 PLED® Optical Module - 525mA	2218 - 2545			66,500+	-40°C	51	120 277 347	0.43 0.18 0.15
60	TRA - LED	60 PLED® Optical Module - 350mA	2655 - 3046			66,500+	-40°C	50	120 277 347	0.42 0.18 0.14
60	TRA - LED	60 PLED® Optical Module - 525mA	3217 - 3692			66,500+	-40°C	76	120 277 347	0.63 0.27 0.22
80	TRA - LED	80 PLED® Optical Module - 350mA	3540 - 4061			66,500+	-40°C	67	120 277 347	0.56 0.24 0.19
80	TRA - LED	80 PLED® Optical Module - 525mA	4290 - 4922			66,500+	-40°C	101	120 277 347	0.84 0.36 0.29
100	TRA - LED	100 PLED® Optical Module - 350mA	4418 - 5068			66,500+	-40°C	83	120 277 347	0.69 0.30 0.24
100	TRA - LED	100 PLED® Optical Module - 525mA	5311 - 6093			66,500+	-40°C	126	120 277 347	1.05 0.45 0.36
120	TRA - LED	120 PLED® Optical Module - 350mA	5301 - 6082			66,500+	-40°F	100	120 277 347	0.83 0.36 0.29
120	TRA - LED	120 PLED® Optical Module - 525mA	6373 - 7312			66,500+	-40°F	152	120 277 347	1.27 0.55 0.44

- NOTES:**
1. Max Input Amps is the highest of starting, operating, or open circuit currents.
 2. Lumen values for LED Modules vary according to the distribution type. 80LED array appears in both the RZR and RZR-G models.
 3. System Watts includes the source watts and all driver components.
 4. Fuse value should be sufficient to protect all wiring components. For electronic driver and LED component protection, use surge suppressor supplied with luminaire.
Note: Surge suppressors are considered a perishable device.
 5. L70(10k) – TM-21 6x rule applied.

WARNING: All fixtures must be installed in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.