

CATALOG #	TYPE	
JOB NAME	WATTAGE	VOLTAGE

20,000 Lumen Recessed Square LED Downlight

LRS-21600-20000L
LRS-21600-15000L
LRS-21600-10000L

Sport Court • Gym • High Ceilings

Wet Location • 1% Dimming • WFL • 5 CCT • 3-Step Binning •

LM-80 Qualified • LM-79 Certified Photometry



Specifications

Delivered System Performance

- Lumen Series: MUST SPECIFY:
 - 20,000L (216W)
 - 15,000L (167W)
 - 10,000L (110W)
- Distribution: WFL.
- Color temperature: 3500°K standard. Optional: -27K, -30K, -41K or -50K.
- CRI: 80+ standard. Optional: -HC (90+).
- 60,000 hour life (L70).

Thermal Protection: Voltage Specific

- Thermal protector for insulation detection per UL/NEC. **Must specify input voltage.**

Thermal Management System

- All aluminum heat sink, components and housing maximize cool operation and long life while minimizing maintenance.

LED Power Supply - INTERNAL

- Suitable for outdoor / indoor use:
 - 30°C (-22°F) to 60°C (140°F).
- 120-277V / 50-60Hz standard. Load insensitive.
- 0-10V CCR dimming standard (100-1%).**

Trim and Lens Assembly

- Extruded seamless, fastener-free smooth white flat frame (trim). Rustproof and corrosion-resistant aluminum.
- Impact-resistant clear poly below prismatic high strength acrylic diffuser.
- Lens assembly internally secured to extruded trim. No visible hardware.

Acrylic Enameled Aluminum Housing

- Rustproof and corrosion-resistant: Exceeds 1000 hour ASTM 5% salt spray test.
- Shallow 9" depth fits restricted plenums.
- Cool operation: Extends life of all components.
- Entire luminaire, including LED light engine, is modular, easily visible and serviced through aperture.

Outlet Box

- UL listed J-box with insulated removable cover. Prewired 14 GA (NEC) with 1/2" and 3/4" knockouts.

Installation

- Recesses indoor or outdoor in covered locations.
- Accommodates ceilings up to 1-1/8" thick.
- 27" galvanized hanger bars (2) with adjustable mounting brackets (4) supplied.

UL, C-UL (Canada) Listings

- Wet, damp or dry locations, covered ceilings.
- Through-branch conductors (4 #12 AWG 90°C).

FCC Compliance

- FCC Part 15 certified for EMI/RFI emissions.

FIVE YEAR Limited Warranty

- Complete standard fixture.

MUST SPECIFY		OPTIONAL	Ordering Example: LRS-21600-20000L-277-30K
Product Number	Voltage	Options	
LRS-21600-20000L LRS-21600-15000L LRS-21600-10000L	-120 (120 volts) -277 (277 volts)	See "Options" below	

Options

Input Power: SPECIFY

- 120 120V (50-60Hz) input for thermal protector.
- 277 277V (50-60Hz) input for thermal protector.

Color Temperature (CCT)

- 27K Color temperature 2700°K instead.
- 30K Color temperature 3000°K instead.
- 41K Color temperature 4100°K instead.
- 50K Color temperature 5000°K instead.
- HC 90+ CRI instead. Consult factory.

Lens and Trim

- 32 White oversize trim ring. Specify outer dimension.
- 35T Silver enamel (complete trim).
- 37T Dark bronze enamel (complete trim).
- 38T Black enamel (complete trim).
- 45 Gasket between trim flange and ceiling.
- 46 Gasket between trim and lens.
- 85 With 2 x 2 white (aluminum) pre-cut lay-in ceiling pan.
- 94 Custom color trim. Specify. Consult factory.

Other

- 99 Special modification. Consult factory.
- EI5 Remote emergency inverter for 25% of rated lumens. Runtime: 90+ minutes. 120 or 277V, 60 Hz input only. 50W. Specify voltage. Not for use with -FS. (Alternatively, see EMI-21220 for 100% of rated lumens.)
- FS Single in-line fuse. Not for use with Option -EI5.
- NAT Modified for natatorium use.

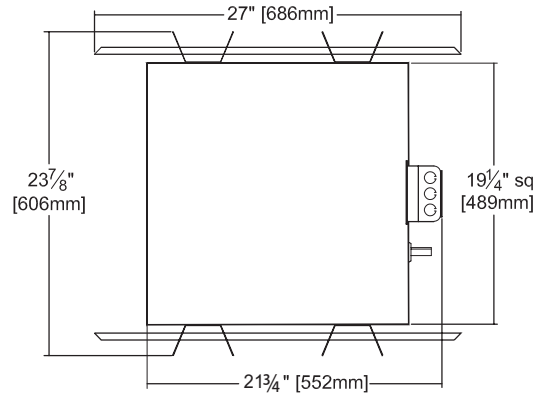
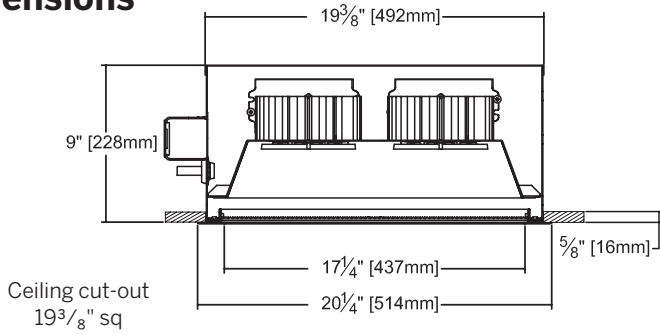
Kirlin Lighting | 3401 E. Jefferson Ave., Detroit, MI 48207-4232, USA | P: 313.259.6400 | www.kirlinlighting.com

LRS-21600-20000L

PERFORMANCE



Dimensions



Detailed Photometry* - Installed Fixture

Photometric testing done in accordance with IESNA LM-79

-20000L STANDARD (WFL)

Lumens: 19693
Beam: ~48°
SC: 0.9
LPW: 91.1
ITL Test: 93340



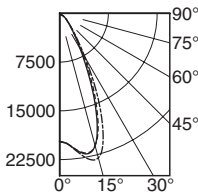
Total System Watts 216.2

CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	19557	19557	19557	19557	19557
5	20367	20373	20411	20409	20437
15	20970	20780	20978	22059	22878
25	11902	11250	10939	12382	13710
35	4426	4254	4214	4540	4823
45	2008	1997	1993	2076	2089
55	1122	1132	1135	1140	1137
65	626	642	630	625	623
75	252	259	250	252	248
85	27	28	27	28	28
90	0	0	0	0	0

LUMEN SERIES	LUMEN FACTOR	WATTAGE FACTOR	LPW FACTOR
-15000L	0.771	0.744	1.04
-10000L	0.506	0.465	1.08

Cone of Light

Dist.	FC	Dia.
6	543.3	5.4
8	305.6	7.2
10	195.6	9.0
12	135.8	10.8
14	99.8	12.5
16	76.4	14.3



Photometry from I.T.L., Boulder, CO

▲ Cone of Light Key

Dist. (in ft.) shown is where FC value is half the FC at nadir.

Dist. Distance (Ft.) from fixture
FC Footcandles at nadir (0°)
Dia. Circle of light at 50% of FC

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* LED manufacturers maintain a tolerance of ±7% on flux (lumens) and power (electrical) measurements. Kirlin photometrics are actual test data from an Independent Testing Laboratories (ITL) where photometry was measured from 20000 lumen light engines (within the established tolerance).

SUBMITTAL DATA

JOB NAME _____
TYPE _____
WATTAGE _____ VOLTAGE _____
CATALOG NUMBER _____

APPROVAL STAMP



LIMITED WARRANTY: CATALOGED KIRLIN LED FIXTURES ARE WARRANTED FREE OF DEFECTS, IN WORKMANSHIP OR MATERIAL FOR FIVE YEARS FROM DATE OF PURCHASE. INSTALLED TO N.E.C. IN NORMAL USE. Manufacturer at the option will replace or repair such fixture or refund the purchase price on presentation of proof of purchase and defective fixture at the office of manufacturer within five years of original shipment. Liability of manufacturer is limited to the foregoing, and manufacturer shall not be liable for any other damages, direct or indirect, sustained or suffered by purchaser or any person. This warranty is supplied to the buyer in place of all other warranties, expressed or implied. Seller does not warrant as to merchantability or fitness for a particular use, nor will any oral statement constitute a warranty or amend the specific warranty. Abnormal use, abuse of the fixture, improper installation, or repair, or modification of the fixture without prior written authorization from the manufacturer will render the warranty void.