

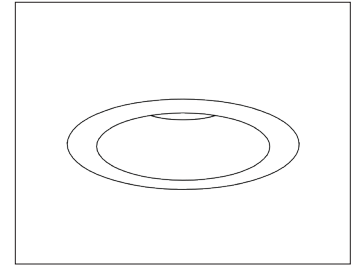
CATALOG #	TYPE	
JOB NAME	WATTAGE	VOLTAGE

4" 4 LED 20 SYSTEM WATTS

LRR-04012

Lensed Downlight • LED • Type IC

50,000+ Hour Life • 84 CRI • 4 Distributions • Air Tight Optional



Specifications

LED Light Engine

- 20 watt LED array. 3500°K standard (or see Options -30K or -41K).
- 1050* lumens, 50 lumens per watt (total system).
- 84 CRI, 50,000+ hour life.**
- Fully sustainable: removable for servicing.

Optics

- 0.5 SC Standard (NFL). Optional: 0.4 SC (SPT), 0.7 SC (MFL) or 1.0 SC (WFL).
- Self-aligns with trim for optimal performance.

Thermal Management System

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

LED Power Supply

- Suitable for outdoor / indoor use. -40°C (-40°F) to 90°C (194°F).

- 120-277V / 50-60Hz standard. Load insensitive.
- Dimming available, see Option -39.
- Kirlin remote SmartSupply™ driver instead, see Option -SS.

Electrically Isolated Trim

- Specular clear aluminum self-flanged and gasketed downlight cone with lens on top.
- Non-conductive vinyl coated trim spring clips minimize risk of electric shock.
- Colors and specular finishes available.

Acrylic Enameled Aluminum Housing

- Rustproof and corrosion resistant. Exceeds 1000 hour ASTM 5% salt spray test.
- Shallow depth fits restricted plenums.
- Cool operation. Extends life of all components.
- Fully sustainable. Entire luminaire, including LED light engine, easily visible and serviced through aperture.
- Built-in plaster flange.
- Air Tight design available, see Option -AT.

Outlet Box

- UL listed J-box with insulated removable

cover. Prewired 14 GA (NEC) with 1/2" and 3/4" knockouts.

Installation

- Recesses indoor/outdoor in covered locations.
- Accommodates ceilings up to 1-1/8" thick or see Option -79.
- 27" galvanized hanger bars with adjustable mounting brackets (2) supplied.
- For residential mounting hardware for wood joist ceilings, see Option -RH.

UL C-UL (Canada) Listings

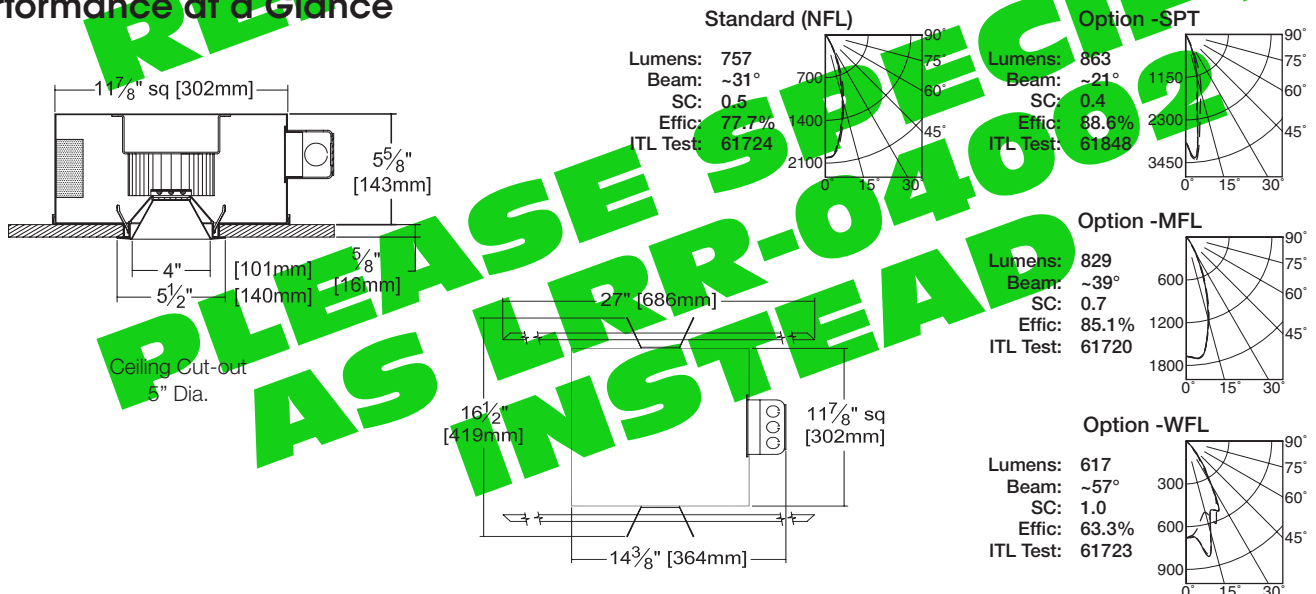
- Wet, damp or dry locations, covered ceilings.
- Type IC: for direct contact with insulation.
- Through-branch conductors (4 #12 AWG 90°C) for Type IC Listing.



**FIVE YEAR
Limited Warranty**

- Complete standard fixture.

Performance at a Glance



THE KIRLIN COMPANY

3401 EAST JEFFERSON AVENUE • DETROIT, MICHIGAN 48207-4232
(313) 259-6400 • Fax: (313) 259-9409 OR (313) 259-3121 • www.kirlinlighting.com

Detailed Photometry - Installed Fixture

Photometric testing done in accordance with IESNA LM-79-08

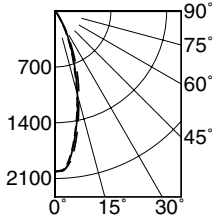
Photometry from I.T.L., Boulder, CO

LRR-04012 (NFL)

Lumens: 757
Beam: ~31°
SC: 0.5
Effic: 77.7%
ITL Test: 61724

Cone of Light*

Dist.	FC	Dia.
6	55.9	3.2
8	31.5	4.3
10	20.1	5.4
12	14.0	6.4
14	10.3	7.5
16	7.9	8.6



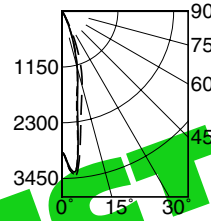
CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	2014	2014	2014	2014	2014
5	1894	1911	1934	1929	1918
10	1486	1529	1572	1546	1509
15	1054	1114	1150	1133	1080
20	665	732	803	754	701
25	386	423	483	454	422
30	180	200	245	228	209
35	84	81	81	85	93
40	33	35	36	36	34
45	16	15	16	15	16
90	0	0	0	0	0

LRR-04012 (Option -SPT)

Lumens: 863
Beam: ~21°
SC: 0.4
Effic: 88.6%
ITL Test: 61848

Cone of Light*

Dist.	FC	Dia.
6	81.1	2.9
8	45.6	3.9
10	29.2	4.8
12	20.3	5.8
14	14.9	6.7
16	11.4	7.7



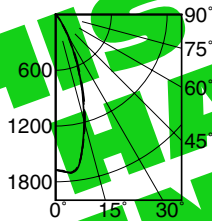
CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	2918	2918	2918	2918	2918
5	3291	3309	3385	3335	3297
10	1745	2012	2234	2086	1825
15	1195	1470	1593	1504	1186
20	682	867	1050	900	665
25	274	325	472	339	282
30	79	86	118	90	85
35	31	34	38	35	31
40	18	20	18	20	17
45	9	11	11	10	7
90	0	0	0	0	0

LRR-04012 (Option -MFL)

Lumens: 829
Beam: ~39°
SC: 0.7
Effic: 85.1%
ITL Test: 61720

Cone of Light*

Dist.	FC	Dia.
6	42.3	3.3
8	24.2	5.2
10	16.1	6.5
12	11.6	7.8
14	8.5	9.2
16	6.5	10.5



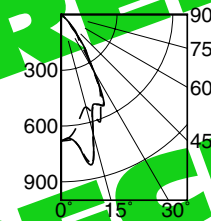
CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	1672	1672	1672	1672	1672
5	1713	1713	1708	1702	1707
10	1563	1556	1562	1560	1564
15	1205	1199	1220	1199	1184
20	812	823	852	845	818
25	479	496	528	517	490
30	253	261	292	287	265
35	115	123	121	132	123
40	58	54	53	54	58
45	20	21	20	23	18
90	0	0	0	0	0

LRR-04012 (Option -WFL)

Lumens: 617
Beam: ~57°
SC: 1.0
Effic: 68.3%
ITL Test: 61723

Cone of Light*

Dist.	FC	Dia.
6	10.6	6.0
8	6.8	8.0
10	4.7	12.0
12	3.5	14.0
14	2.7	16.1



CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	680	680	680	680	680
5	676	661	650	662	675
10	790	609	569	610	806
15	656	598	516	597	663
20	519	450	344	540	513
25	337	314	201	325	341
30	212	210	136	211	222
35	113	113	123	113	84
40	54	40	22	37	53
45	0	0	0	0	0

THIS PRODUCT HAS BEEN RENEWED SPECIALLY FOR LRR-04002

* LED manufacturers maintain a tolerance of ±7% on flux (lumens) and power (electrical) measurements. Kirlin photometrics are actual test data from Independent Testing Laboratories (ITL) where photometry was measured from 975 lumen light engines (within the established tolerance).
** LED Operating Characteristics: 50,000 hours at 70% lumen maintenance.

Cone of Light Key
Dist. Distance from fixture
FC Footcandles at nadir (0°)
Dia. Circle of light at 50% of FC
* Dia. (in ft.) shown is where FC value is half the FC at nadir.

Options

LED Power Supply

- 39 Dimmable power supply. 0-10V analog standard. Specify voltage. Consult factory for brand availability and pricing. Lutron Hi-lume approved.
- 97 Specify other voltage. Consult factory.
- SS Remote mounted Kirlin SmartSupply™ driver, sold separately. Drives up to 12 fixtures at 20 watts each. Order LPS-1220A (0-10V analog dimming) or LPS-1220D (DMX dimming). See kirlinlighting.com or CF for more information.

Optics

- MFL Medium flood 0.7 SC. (~39° distribution)
- SPT Spot 0.4 SC. (~21° distribution)
- WFL Wide flood 1.0 SC. (~57° distribution)

Trims

- 30 All white acrylic enameled cone. (CP x .95)
- 31 White acrylic enameled cone flange.
- 32 White oversize trim ring. Specify C.D.
- 46 Gasket between trim and lens.
- 59 Dark Bronze specular self-flanged cone. (CP x .80)
- 60 SofTex Dark Bronze self-flanged cone. (CP x .75)
- 63 Dune specular self-flanged cone. (CP x .93)
- 68 Matte black self-flanged cone. (CP x .70)
- 69 Wheat specular self-flanged cone. (CP x .92)
- 70 SofTex Clear self-flanged cone. (CP x .93)
- 71 SofTex Dune self-flanged cone. (CP x .89)
- 72 Black specular self-flanged cone. (CP x .80)
- 77 SofTex Pewter self-flanged cone. (CP x .85)
- 91 SofTex Wheat self-flanged cone. (CP x .88)
- 93 Pewter specular self-flanged cone. (CP x .88)
- 94 Custom color/finish. Specify. Consult factory.

Filter

- AM Amber filter.
- DP Dichroic Peach filter.
- GE Green / Botanical filter.
- HX Hexcel louver.
- MB Medium Blue filter.
- PK Pink / Rose filter.
- XF Custom filter other than shown. Specify.

Other

- 79 Extension collar for up to 2" thick ceilings.
- 99 Special modification. Consult factory.
- AT Air tight version. Meets ASTM E283 restricted airflow of 2 CFM maximum.
- 30K Color temperature 3000°K instead.
- 41K Color temperature 4100°K. Consult factory.
- RH Residential mounting hardware instead. Suitable for wood joist ceilings with spacing from 14 1/8" to 25 1/8" with 1/8" vertical adjustability.

SUBMITTAL DATA

APPROVAL STAMP

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

LIMITED WARRANTY: CATALOGED KIRLIN FIXTURES ARE WARRANTED FREE OF DEFECTS IN WORKMANSHIP OR MATERIAL FOR THREE YEARS FROM DATE OF PURCHASE. INSTALL TO N.E.C. IN NORMAL USE. Manufacturer of 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 three 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 subject 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 this 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.