

JUNO

2" IC 600 AND 1000 LUMENS LED SQUARE DOWNLIGHT GEN2

Project: _____

Fixture Type: _____

Location: _____

Contact/Phone: _____

**PRODUCT DESCRIPTION**

2 inch square aperture recessed downlight is IC rated for insulated or non-insulated applications • Luminaire produces up to 1000 lumens and is available with optical distributions approximating that of 75W MR16 halogen lamps • Low profile form factor allows luminaire to fit in 2 x 6 construction • Designed to provide 50,000 hours of life • 5 year limited warranty on LED Components.

ENVIRONMENTALLY FRIENDLY, ENERGY EFFICIENT

- No harmful ultraviolet or infrared wavelengths
- No lead or mercury, RoHS compliant
- Comparable light output to a 75W MR16 halogen lamp

PRODUCT SPECIFICATIONS

LED Light Engine Exceptional fixture to fixture color consistency within a 3-step MacAdam ellipse • 2700K, 3000K, 3500K, and 4100K color temperatures are available with 80 CRI or 90 CRI minimum.

Modular Optics Available with field interchangeable optics in 18° Spot, 24° Narrow Flood, or 40° Flood distributions.

Aesthetic Trim Die cast trim ring is available in white, black, satin nickel, and brushed bronze • Die cast reflectors are available in white and black.

LED Driver Choice of dedicated 120 volt driver or universal voltage driver that accommodates input voltages from 120-277 volts AC at 50/60Hz. Power factor > 0.9. Dedicated 120 volt driver (-1) is dimmable with the use of most incandescent, magnetic low voltage and electronic low voltage dimmers • Universal voltage driver (-U) is dimmable with the use of most 0-10V protocol dimmers • For a list of compatible dimmers, see [JUNO2ING2-DIM](#).

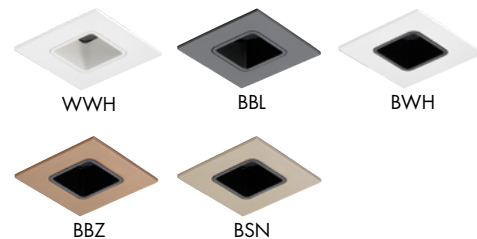
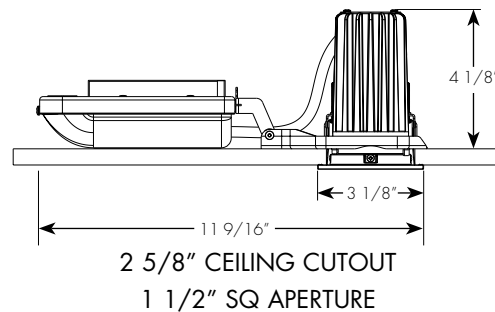
Life Rated for 50,000 hours at 70% lumen maintenance.

Labels ENERGY STAR® Qualified • 90CRI fixtures with white reflector are certified to the high efficacy requirements of California T24 with select trims • Meets energy code Air Leakage requirements per ASTM E283 • UL and cUL listed for wet locations.

Junction Box Includes (2) ½" knock-outs equipped with pryout slots • Push-in electrical connectors for field connections.

Mounting Remodel style plaster frame installs from below the ceiling and accommodates ceiling thicknesses from ½" to 1" • For thicker ceilings up to 1 ½", order 2-JCTA150 • New Construction mounting frame, 2-NCMF, is also available with Patented (US Patent D552,969) Real Nail 3® telescoping bar hangers to position fixture and locate wiring prior to ceiling installation • Recommend a minimum of 5.5" cavity depth to install properly • Flexible supply is recommended and non-flexible supply requires top access.

Product specifications subject to change without notice.

**Downlight Reflector Finishes****DIMENSIONS****ENGINEERING DATA (600L)**

	Dedicated 120V (-1)	Universal Voltage (MVOLT)	
Voltage	120	120	277
Input Power	7.5 (±5%)	7.2	7.5 (±5%)
Input Current	.06	.06	.03
Frequency	50/60Hz	50/60Hz	
Power Factor	>0.9	>0.9	>0.9

ENGINEERING DATA (1000L)

	Dedicated 120V (-1)	Universal Voltage (-U)	
Voltage	120	120	277
Input Power	11.5 (±5%)	10.9	11.4 (±5%)
Input Current	.10	.09	.04
Frequency	50/60Hz	50/60Hz	
Power Factor	>0.9	>0.9	>0.9

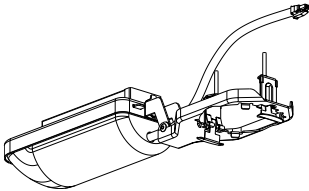
2" IC 600 AND 1000 LUMENS LED SQUARE DOWNLIGHT GEN2

ORDERING INFORMATION: DRIVER AND TRIM EACH ORDERED SEPARATELY

DRIVER:

Example: **2LEDDRVG2-10-120**

Series	Gen	Lumens	Drivers
2LEDDRV	G2	6 600 Lumens 10 1000 Lumens	120 Dedicated 120V Only (Forward Phase + ELVDimmable) MVOLT Universal Voltage 120-277V (0-10V Dimmable)



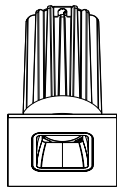
MOUNTING FRAME/DRIVER ASSEMBLY

Note: Driver assembly only intended for use with Gen2 LED trim modules. Not backward compatible with previous generation.

TRIM:

Example: **2LEDTG2SQ-827S-WWH**

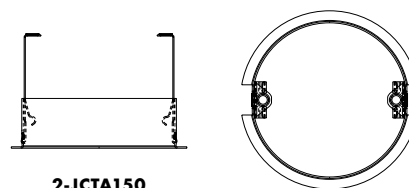
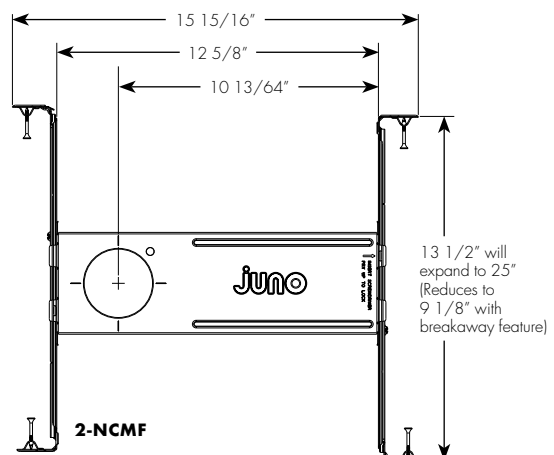
Series	Gen	Trim Type	CRI	CCT	Beam Optics	Finish
2LEDT	G2	SQ Square Downlight	8 80CRI 9 90CRI	27 2700K 30 3000K 35 3500K 41 4100K	S 18° Spot N 24° Narrow Flood F 40° Flood	WWH White, White Trim Ring BBL Black, Black Trim Ring BWH Black, White Trim Ring BBZ Black, Bronze Trim Ring BSN Black, Satin Nickle Trim Ring



TRIM/LED ASSEMBLY

ACCESSORIES

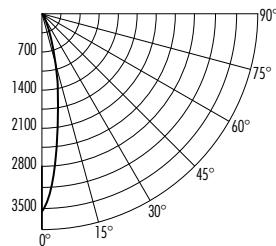
Catalog No.	Description
2-NCMF	New Construction Mounting Frame with Real Nail® 3 bar hangers
2-JCTA150	Thick Ceiling adapter for 1" - 1½" thick ceiling
LEDOPTIC2-S	18° Spot Optic
LEDOPTIC2-N	24° Narrow Flood Optic
LEDOPTIC2-F	40° Flood Optic



2" IC 600 AND 1000 LUMENS LED SQUARE DOWNLIGHT GEN2

PHOTOMETRIC REPORT

Test Report#: PTO7162007
Catalog No: 2LEDTG2SQ-835S-WWH (600L)
80CRI, 3500K LED, Downlight
with Spot Optic
Luminaire Spacing Criteria: 0.34
Luminaire LPW: 92



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	3575
5	3068
15	929
25	134
35	33
45	17
55	15
65	11
75	6
85	2
90	0

AVERAGE INITIAL FOOTCANDLES Multiple Units (Square Array, 60'x60' room)

Reflectances: Ceiling 80%, Wall 50%, Floor 20%

Spacing	RCR1	RCR3	RCR5
4'	48	43	40
5'	31	28	26
6'	21	19	18
7'	17	16	14
8'	14	12	11
9'	11	9	9
10'	8	7	6

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	618	N/A	89.6
0-40°	643	N/A	93.3
0-60°	670	N/A	97.2
0-90°	689	N/A	100.0

INITIAL FOOTCANDLES (One Unit, 7.5W, 19.7° Beam)

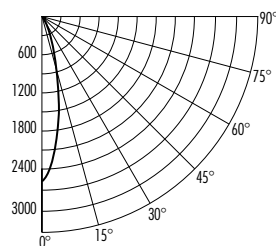
Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4'	223.4	1.4
6'	99.3	2.1
8'	55.9	2.8
10'	35.8	3.5
12'	24.8	4.2

LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45°	17637
55°	18879
65°	18731
75°	18466
85°	13710

PHOTOMETRIC REPORT

Test Report#: PTO7162008
Catalog No: 2LEDTG2SQ-835N-WWH (600L)
80CRI, 3500K LED, Downlight
with Narrow Flood Optic
Luminaire Spacing Criteria: 0.42
Luminaire LPW: 86



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	2601
5	2309
15	961
25	174
35	31
45	17
55	14
65	10
75	6
85	1
90	0

AVERAGE INITIAL FOOTCANDLES Multiple Units (Square Array, 60'x60' room)

Reflectances: Ceiling 80%, Wall 50%, Floor 20%

Spacing	RCR1	RCR3	RCR5
4'	45	40	37
5'	29	26	24
6'	20	18	16
7'	16	15	13
8'	13	11	11
9'	10	9	8
10'	7	6	6

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	575	N/A	88.9
0-40°	600	N/A	93.1
0-60°	627	N/A	97.2
0-90°	645	N/A	100.0

INITIAL FOOTCANDLES (One Unit, 7.5W, 24.7° Beam)

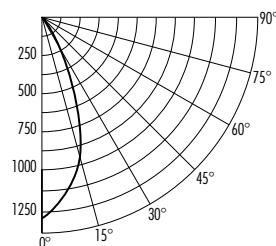
Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4'	162.5	1.8
6'	72.2	2.6
8'	40.6	3.5
10'	26.0	4.4
12'	18.1	5.3

LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45°	18060
55°	18098
65°	17847
75°	17312
85°	11996

PHOTOMETRIC REPORT

Test Report#: PTO7162009
Catalog No: 2LEDTG2SQ-835F-WWH (600L)
80CRI, 3500K LED, Downlight
with Flood Optic
Luminaire Spacing Criteria: 0.68
Luminaire LPW: 93



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	1268
5	1220
15	929
25	400
35	76
45	28
55	15
65	12
75	7
85	2
90	0

AVERAGE INITIAL FOOTCANDLES Multiple Units (Square Array, 60'x60' room)

Reflectances: Ceiling 80%, Wall 50%, Floor 20%

Spacing	RCR1	RCR3	RCR5
4'	49	42	38
5'	31	27	24
6'	22	19	17
7'	17	15	14
8'	14	12	11
9'	11	9	8
10'	8	7	6

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	572	N/A	81.8
0-40°	639	N/A	91.4
0-60°	677	N/A	96.8
0-90°	700	N/A	100.0

INITIAL FOOTCANDLES (One Unit, 7.5W, 41.6° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4'	79.3	3.0
6'	35.2	4.6
8'	19.8	6.1
10'	12.7	7.6
12'	8.8	9.1

LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45°	29572
55°	18879
65°	21205
75°	21352
85°	16280

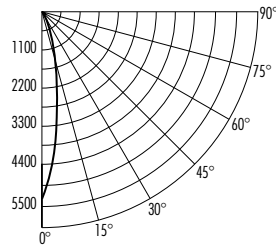
Fixtures tested to IES recommended standard for solid state lighting per LM-79-08. Photometric performance on a single unit represents a baseline of performance for the fixture. Results may vary in the field.

Multiplier:	80 CRI	90 CRI
	827 = .94	927 = .83
	830 = .97	930 = .86
	835 = 1.00	935 = .88
	841 = 1.03	940 = .90

2" IC 600 AND 1000 LUMENS LED SQUARE DOWNLIGHT GEN2

PHOTOMETRIC REPORT

Test Report#: PT07162007R
Catalog No: 2LEDTG2SQ-835S-WWH (1000L)
80CRI, 3500K LED, Downlight
with Spot Optic
Luminaire Spacing Criteria: 0.34
Luminaire LPW: 91



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	5398
5	4633
15	1403
25	203
35	50
45	25
55	22
65	16
75	10
85	2
90	0

AVERAGE INITIAL FOOTCANDLES Multiple Units (Square Array, 60'x60' room)

Reflectances: Ceiling 80%, Wall 50%, Floor 20%

Spacing	RCR1	RCR3	RCR5
4'	73	66	61
5'	47	42	39
6'	32	29	27
7'	26	24	22
8'	21	19	17
9'	16	14	13
10'	12	11	10

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	933	N/A	89.6
0-40°	971	N/A	93.3
0-60°	1012	N/A	97.2
0-90°	1041	N/A	100.0

INITIAL FOOTCANDLES (One Unit, 11.5W, 19.7° Beam)

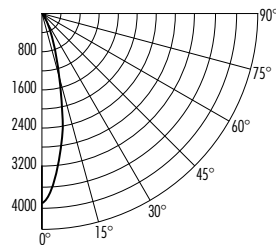
Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4'	337.4	1.4
6'	149.9	2.1
8'	84.3	2.8
10'	54.0	3.5
12'	37.5	4.2

LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45°	26632
55°	28507
65°	28284
75°	27884
85°	20701

PHOTOMETRIC REPORT

Test Report#: PT07162008R
Catalog No: 2LEDTG2SQ-835N-WWH (1000L)
80CRI, 3500K LED, Downlight
with Narrow Flood Optic
Luminaire Spacing Criteria: 0.42
Luminaire LPW: 86



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	3979
5	3532
15	1469
25	267
35	48
45	26
55	21
65	15
75	9
85	2
90	0

AVERAGE INITIAL FOOTCANDLES Multiple Units (Square Array, 60'x60' room)

Reflectances: Ceiling 80%, Wall 50%, Floor 20%

Spacing	RCR1	RCR3	RCR5
4'	69	62	57
5'	44	39	36
6'	31	27	25
7'	25	22	20
8'	20	18	16
9'	15	13	12
10'	11	10	9

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	878	N/A	88.9
0-40°	919	N/A	93.1
0-60°	959	N/A	97.2
0-90°	987	N/A	100.0

INITIAL FOOTCANDLES (One Unit, 11.5W, 24.7° Beam)

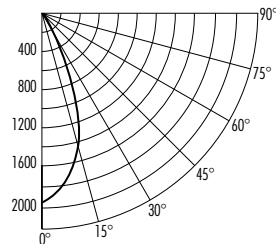
Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4'	248.7	1.8
6'	110.5	2.6
8'	62.2	3.5
10'	39.8	4.4
12'	27.6	5.3

LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45°	27631
55°	27690
65°	27306
75°	26488
85°	18354

PHOTOMETRIC REPORT

Test Report#: PT07162009R
Catalog No: 2LEDTG2SQ-835F-WWH (1000L)
80CRI, 3500K LED, Downlight
with Flood Optic
Luminaire Spacing Criteria: 0.68
Luminaire LPW: 94



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	1953
5	1879
15	1430
25	615
35	118
45	43
55	22
65	18
75	11
85	3
90	0

AVERAGE INITIAL FOOTCANDLES Multiple Units (Square Array, 60'x60' room)

Reflectances: Ceiling 80%, Wall 50%, Floor 20%

Spacing	RCR1	RCR3	RCR5
4'	75	65	59
5'	48	42	37
6'	33	29	26
7'	27	24	21
8'	21	19	17
9'	16	14	13
10'	12	10	9

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	881	N/A	81.8
0-40°	985	N/A	91.4
0-60°	1043	N/A	96.8
0-90°	1077	N/A	100.0

INITIAL FOOTCANDLES (One Unit, 11.5W, 41.6° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4'	122.1	3.0
6'	54.3	4.6
8'	30.5	6.1
10'	19.5	7.6
12'	13.6	9.1

LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45°	45540
55°	29074
65°	32655
75°	32882
85°	25071

Fixtures tested to IES recommended standard for solid state lighting per LM-79-08. Photometric performance on a single unit represents a baseline of performance for the fixture. Results may vary in the field.

Multiplier:	80 CRI	90 CRI
	827 = .94	927 = .83
	830 = .97	930 = .86
	835 = 1.00	935 = .88
	841 = 1.03	940 = .90