



Project: _____

Fixture Type: _____

Location: _____

Contact/Phone: _____

2" IC 600 LUMENS LED SQUARE DOWNLIGHT

2SQ Series



PRODUCT DESCRIPTION

2 inch square aperture recessed downlight is IC rated for insulated or non-insulated applications • Luminaire produces up to 600 lumens and is available with optical distributions approximating that of 50W 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 50W 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 [JUNO2INCH-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.

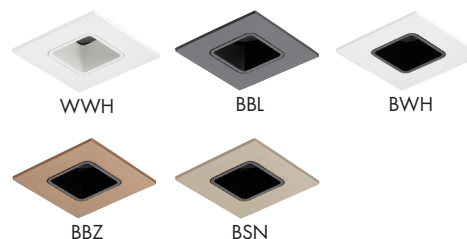
Junction Box Includes (2) ½" knock-outs equipped with pryout slots • Push-in electrical connectors for field connections.

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 Real Nail 3® telescoping bar hangers to position fixture and locate wiring prior to ceiling installation.

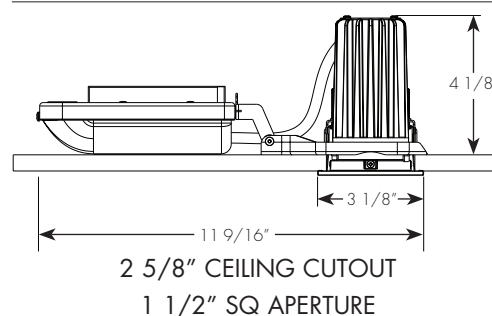
Product specifications subject to change without notice.



Downlight Baffle Finishes



DIMENSIONS



ENGINEERING DATA

	Dedicated 120V (-1)	Universal Voltage (-U)
Voltage	120	120 277
Input Power	10.1 (±5%)	9.7 9.8 (±5%)
Input Current	.09	.08 .04
Frequency	50/60Hz	50/60Hz
Power Factor	.94	.98 .98

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ORDERING INFORMATION:

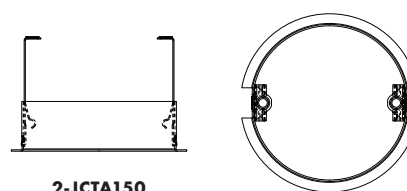
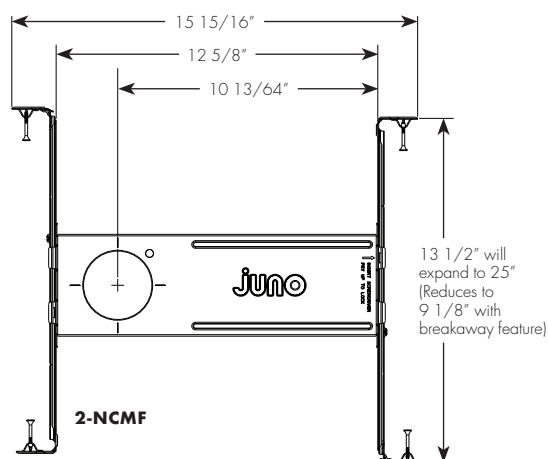
Example: **2SQ-927N1-WWH**

Series	CRI/Color Temperature		Beam Optics		Drivers	Finish
2SQ Square Downlight	827 2700K, 80CRI	927 2700K, 90CRI	S 18° Spot	N 24° Narrow Flood	I Dedicated 120V Only (Forward Phase + ELV Dimmable)	Downlight Reflector
	830 3000K, 80CRI	930 3000K, 90CRI	F 40° Flood		U Universal Voltage 120-277V (0-10V Dimmable)	WWH White, White Trim Ring
	835 3500K, 80CRI	935 3500K, 90CRI				BBL* Black, Black Trim Ring
	841 4100K, 80CRI	941 4100K, 90CRI				BWH* Black, White Trim Ring
						BBZ* Black, Bronze Trim Ring
						BSN* Black, Satin Nickel Trim Ring

*Not T24 Certified

ACCESSORIES

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



2" IC 600 LUMENS LED SQUARE DOWNLIGHT

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PHOTOMETRIC REPORT

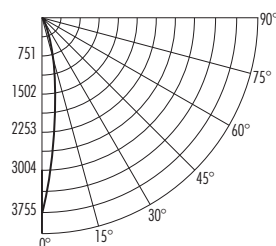
Test Report#: PT01142104R

Catalog No: 2SQ-835S1-WWH

80 CRI, 3500K LED, White
Reflector with Spot Optic

Luminaire Spacing Criteria: 0.32

Luminaire LPW: 62



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	3755
5	2969
15	862
25	98
35	30
45	14
55	11
65	8
75	5
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'	44	40	37
5'	28	26	24
6'	20	18	16
7'	16	14	13
8'	13	11	11
9'	10	9	8
10'	7	6	6

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	569	N/A	90.5
0-40°	591	N/A	94.0
0-60°	613	N/A	97.5
0-90°	629	N/A	100.0

INITIAL FOOTCANDLES

(One Unit, 10.1W, 17.7° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4'	235.9	1.2
6'	104.9	1.9
8'	59.0	2.5
10'	37.8	3.1
12'	26.2	3.7

LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45°	14448
55°	13749
65°	13995
75°	14542
85°	15423

PHOTOMETRIC REPORT

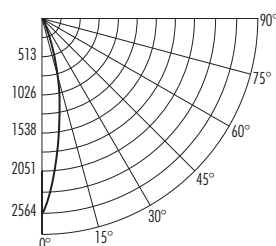
Test Report#: PT01142202R

Catalog No: 2SQ-835N1-WWH

80 CRI, 3500K LED, White
Reflector with Narrow Flood Optic

Luminaire Spacing Criteria: 0.40

Luminaire LPW: 57



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	2564
5	2235
15	848
25	141
35	29
45	15
55	11
65	8
75	5
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'	41	37	33
5'	26	23	21
6'	18	16	15
7'	15	13	12
8'	12	10	10
9'	9	8	7
10'	7	6	5

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	520	N/A	89.6
0-40°	543	N/A	93.6
0-60°	565	N/A	97.4
0-90°	581	N/A	100.0

INITIAL FOOTCANDLES

(One Unit, 10.1W, 23.4° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4'	160.3	1.7
6'	71.2	2.5
8'	40.1	3.3
10'	25.6	4.1
12'	17.8	5.0

LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45°	15462
55°	14062
65°	13995
75°	14542
85°	14395

PHOTOMETRIC REPORT

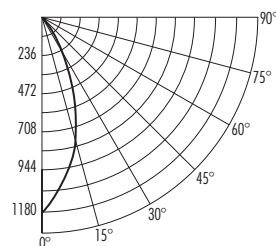
Test Report#: PT01142105R

Catalog No: 2SQ-835F1-WWH

80 CRI, 3500K LED, White
Reflector with Flood Optic

Luminaire Spacing Criteria: 0.66

Luminaire LPW: 60



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	1180
5	1126
15	811
25	343
35	66
45	24
55	10
65	9
75	5
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'	42	37	33
5'	27	24	21
6'	19	16	15
7'	15	13	12
8'	12	10	9
9'	9	8	7
10'	7	6	5

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	498	N/A	82.7
0-40°	554	N/A	92.0
0-60°	585	N/A	97.2
0-90°	602	N/A	100.0

INITIAL FOOTCANDLES

(One Unit, 10.1W, 39.8° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4'	73.8	2.9
6'	32.8	4.3
8'	18.4	5.8
10'	11.8	7.2
12'	8.2	8.7

LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45°	25854
55°	13437
65°	15267
75°	15235
85°	14395

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