STARCLEAN™ RED LED SERIES

New Star Lighting

PROJECT: _____
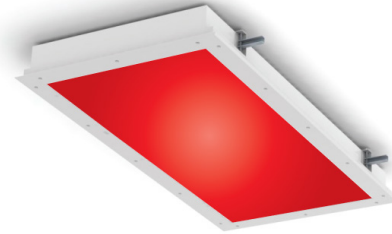
TYPE: _____

PRODUCT: _____

APPROVED BY: _____

PRODUCT FEATURES

- Intended for Vivariums, Cleanrooms, Laboratories, Research Facilities, and more
- Narrow-spectrum 630nm red LEDs. Troffer can have all red LEDs or have alternating rows of red and white LEDs
- Cleanroom troffer available in a 1x2, 1x4, 2x2, 2x4
- Surface installation or recessed ceiling mount; grid or flange. Compatible with 1.5" or 15/16" Grid Ceilings
- ISO Class 3 (Fed Std. 209E/ Class 1). Certified IP65 per IEC60598 and NSF2 Splash/Non-Food Zone ratings. Suitable for Biosafety Labs rated BSL 1 to 4. BSL Levels 3 & 4 require optional NSF P442 rating under options. Optional MIL-STD-461G
- This product is Made in America and complies with the Buy American Act (BAA), and the Build America, Buy America Act (BABAA)

SCR Red Series

Certifications: cULus, IP65, NSF®, ISO3, BSL 1-4, OPTIONAL MIL SPEC 461G, OPTIONAL P442, Made in USA, BAA, MADE IN AMERICA

ORDERING INFORMATION

Example: SCR14-HC/OC-RD2-35-1C-A-90C-UN

SC					/		
Series	**Mounting**	**Nominal Size**	**Housing**	**Frame***		**Red/White LED Configuration***	**SCR22-24:**
	S = Surface	12 = 1x2	HC = 20Ga. CRS Painted	INSET (I)* or OVERLAP (O)		**SCR12-14:**	R2W2 = 2 Red/2 White
	R = Recessed (Grid/Flange)	14 = 1x4	HS = 20Ga. SS Brushed	OC = 18Ga. CRS Painted		R1W2 = 1 Red/2 White	R2W4 = 2 Red/4 White
		22 = 2x2	HP = 20Ga. SS Painted	OS = 18Ga. SS Brushed		R2W1 = 2 Red/2 White	R2W6 = 2 Red/6 White
		24 = 2x4	HA = 16Ga. Alum. Painted	OP = 18Ga. SS Painted		RD2 = 2 Red LEDs	R4W2 = 4 Red/2 White
				OA = 16Ga. Alum. Painted		RD3 = 3 Red LEDs	R6W2 = 6 Red/2 White
		*Nominal size. Dimensional data on Page 2.		IE = Extruded Alum.**			RD2 = 2 Red LEDs
				IP = Extuded Alum Painted**		*Subject to change. Performance Data on page 3.	RD4 = 4 Red LEDs
				IC = 20Ga. CRS Painted*			RD6 = 6 Red LEDs
				IA = 16Ga. Alum. Painted*			
				IB = 20Ga. SS Brushed*			
				IS = 20Ga. SS Painted*			
				*Inset frames (I) suitable for Biosafety Labs (BSL) rated 1-2 only. **Not IP65. N/A with .187 Prismatic Poly. Lens. Inset frames (I) suitable for Biosafety Labs (BSL) rated 1-2 only.			

Color Temp.	**Circuits**	**Lens**	**CRI**	**Voltage**	**Driver**	**Options**
0 = No White LEDs	1C = 1 Circuit*	A = .125 Prismatic Acrylic	80C = 80 CRI	12 = 120V	**Blank =**	FZ1 = Fuse (120V)
35 = 3500K	2C = 2 Circuits**	B = .125 Prismatic Poly.	90C = 90 CRI	27 = 277V	DMI (0-10V Dimming with 1-100% range)	FZ2 = Fuse (277V)
40 = 4000K		C = .156 Prismatic Poly.		34 = 347V		EL1 = Emerg. Batt. LED Low (10W)*
50 = 5000K	*N/A with Red and White configuration.	D = .187 Prismatic Poly.*		UN = Universal (120V-277V)	SD2 = Step Dim. Driver (50-100%)	EL2 = Emerg. Batt. LED High (20W)*
	**If only red is specified, it allows for inboard/ outboard control. Red and White circuits will be independently powered.	E = .125 White Frost Poly.				RF = (RIF) Radio Interference Filter
		G = .140 Prismatic DR Acrylic**			SD3 = Step Dim. Driver (30-70-100%)	TH = Torx® Head screws (with center pin)
		H = .125 White Frost Acrylic				RM = Row Mount (N/A with Surface Mount)**
						TGG = Triple Gasketing (Grid) (N/A with P442 option and Surface Mount)
		*Cannot be used with IE/IP				TGF = Triple Gasketing (Flange) (N/A with P442 option and Surface Mount)
		**Not rated for wet locations				IP66 = IP66 Rated (Overlapping frame only)
						P442 = NSF P442 Certified (Required for BSL 1-4)****
						MS = MIL-STD-461G

*SCR12 Remote Battery. Consult factory for CA Title 24 options. If stored, batteries should be fully recharged every six months and kept between 0ºC-25ºC to maintain optimal battery capacity.
**Joiner bracket supplied. Fixture dimensions subject to change. Consult factory for custom wiring or knockouts.
****Recessed mount requires additional backbox, see dimensional data for details.

New Star Lighting
2225 W Pershing Rd, Chicago, IL 60609
(773) 847-1400
www.newstarlighting.com

Specifications and dimensions are subject to change without notice. For additional options and dimensional details, please consult your New Star Lighting representative.

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SPECIFICATIONS

HOUSING: 20-Gauge formed cold rolled steel housing with continuous seam welds. Aluminum and stainless steel options available.

FRAME: Inset or Overlapping doorframe available in aluminum, cold rolled steel, and stainless steel. Extruded inset door available in anodized aluminum or white painted aluminum. Frame held to housing via aircraft cable.

LENS: Acrylic or polycarbonate lens options - smooth side out.

LED: Available with 630nm red LEDs only or alternating rows of red and white LEDs. White LEDs available in three color temperatures 3500K, 4000K and 5000K with maximum 3-step MacAdam variation allowance. Other color temperatures available, consult factory. Minimum 80 CRI standard with optional minimum 90 CRI available.Minimum 50,000 hours with 70% lumen maintenance in a 25ºC ambient temperature environment, compliant with IES LM-80 testing standards. Note, red LED boards will be installed every other row unless otherwise specified.

ELECTRICAL: Red LEDs and White LEDs are separately circuited for individual control. 120-277VAC or 347VAC, 50/60HZ, constant current driver (<20% THD, >0.9 PF). Standard 0-10V Dimming with 1-100% range on red and white circuits.

FASTENERS: Stainless steel Phillips flat head screws with captive cage nuts. Finish to match doorframe.

FINISH: White antimicrobial polyester powder coat finish following multi-stage iron phosphate pretreatment. Stainless steel brushed fixtures are brushed on all exposed room-side surfaces.

GASKET: Closed cell EPDM and closed cell silicone gaskets prevent air contaminants from entering the fixture. Gasketing seals lens to doorframe and doorframe to housing. Optional triple gasketing, must specify Grid or Flange installation.
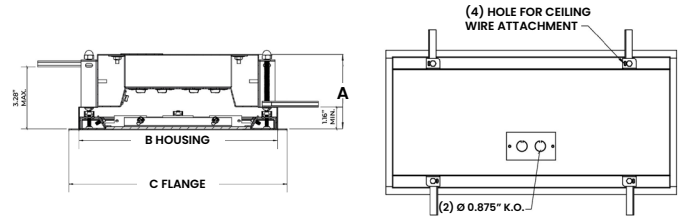
INSTALLATION: Surface installation or universal recessed mounting. Recessed luminaires will be supplied with adjustable swing arms that can be used for Flange applications or secured to the side of housing for Grid applications. Compatible with 1-1/2" and 15/16" Grid systems. Mounting for custom ceilings available, consult factory.
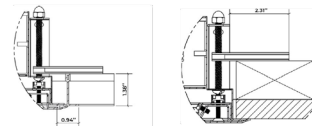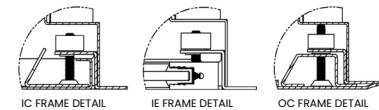
WARRANTY: 5 Year Warranty.

LABEL: Fixture is certified to UL standards for Wet Location. Meets standards for ISO3/Class 1 Cleanrooms. IP65 rating per IEC60598, and NSF2 Splash/Non-Food Zone listed. Suitable for Biosafety Labs rated BSL 1 to 4. BSL Levels 3 & 4 require optional NSF P442 rating under options. Optional MIL-STD-461G. This product is Made in America and complies with the Buy American Act (BAA) and the Build America, Buy America Act (BABAA).

RECESSED DIMENSIONAL DATA

Fixture weight varies and is dependent upon chosen specifications. Consult factory for additional information. Average weight of the SCR14 is 27lb. Average weight of the SCR24 is 48lb.
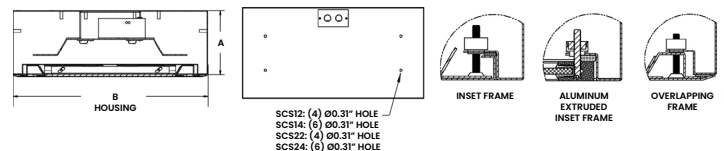

	A	B	C	REC. CEILING CUT-OUT
SCR12	4.00"	10.64" X 22.64"	11.69" X 23.69"	10.88" X 22.88"
SCR14	4.00"	10.64" X 46.64"	11.69" X 47.69"	10.88" X 46.88"
SCR22	4.00"	22.64" X 22.64"	23.69" X 23.69"	22.88" X 22.88"
SCR24	4.00"	22.64" X 46.64"	23.69" X 47.69"	22_–.88" X 46.88"

IC FRAME DETAIL   IE FRAME DETAIL   OC FRAME DETAIL

SCR (W/OC FRAME) RECESSED GRID   SCR (W/OC FRAME) RECESSED FLANGE

GRID COMPATIBILITY:
SCR12: Spaced at 12" x 24" Centers
SCR14: Spaced at 12" x 48" Centers
SCR22: Spaced at 24" x 24" Centers
SCR24: Spaced at 24" x 48" Centers

SURFACE DIMENSIONAL DATA

SCS12: (4) Ø0.31" HOLE
SCS14: (6) Ø0.31" HOLE
SCS22: (4) Ø0.31" HOLE
SCS24: (6) Ø0.31" HOLE

INSET FRAME   ALUMINUM EXTRUDED INSET FRAME   OVERLAPPING FRAME

	A	B
SCS12	3.94"	12.00" X 24.07"
SCS14	3.94"	12.00" X 48.07"
SCS22	3.94"	24.00" X 24.07"
SCS24	3.94"	24.00" X 48.07"

Specifications and dimensions are subject to change without notice. For additional options and dimensional details, please consult your New Star Lighting representative.

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PERFORMANCE DATA

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MODEL	OUTPUT	LUMENS DELIVERED	EFFICACY (lm/W)	INPUT POWER (W)
SC12	RD2 = 2 Red LEDs	700	35	20
SC12	RD3 = 3 Red LEDs	1050	35	30
SC14	RD2 = 2 Red LEDs	1400	36	40
SC14	RD3 = 3 Red LEDs	2100	36	60
SC22	RD2 = 2 Red LEDs	825	43	19
SC22	RD4 = 4 Red LEDs	1675	43	39
SC22	RD6 = 6 Red LEDs	2500	43	58
SC24	RD2 = 2 Red LEDs	1650	42	39
SC24	RD4 = 4 Red LEDs	3250	42	77
SC24	RD6 = 6 Red LEDs	4850	42	116

MODEL	OUTPUT	COLOR TEMP.	LUMENS DELIVERED	EFFICACY (lm/W)	INPUT POWER (W)
SCR12	R1W2 1 Red/2 White	3500K	2875	115	25
SCR12	R1W2 1 Red/2 White	4000K	3000	120	25
SCR12	R1W2 1 Red/2 White	5000K	3125	125	25
SCR12	R1W2 1 Red/2 White	RED	350	35	10
SCR12	R2W1 2 Red/1 White	3500K	1438	115	12.5
SCR12	R2W1 2 Red/1 White	4000K	1500	120	12.5
SCR12	R2W1 2 Red/1 White	5000K	1563	125	12.5
SCR12	R2W1 2 Red/1 White	RED	700	36	20
SCR14	R1W2 1 Red/2 White	3500K	5750	115	50
SCR14	R1W2 1 Red/2 White	4000K	6000	120	50
SCR14	R1W2 1 Red/2 White	5000K	6250	125	50
SCR14	R1W2 1 Red/2 White	RED	700	36	20
SCR14	R2W2 2 Red/2 White	3500K	2875	115	25
SCR14	R2W2 2 Red/2 White	4000K	3000	120	25
SCR14	R2W2 2 Red/2 White	5000K	3125	125	25
SCR14	R2W2 2 Red/2 White	RED	1400	36	40

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PERFORMANCE DATA CONT.

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MODEL	OUTPUT	COLOR TEMP.	LUMENS DELIVERED	EFFICACY (lm/W)	INPUT POWER (W)
SCR22	R2W2 2 Red/2 White	3500K	3000	120	25
		4000K	3125	125	25
		5000K	3250	130	25
		RED	825	43	19
	R2W4 2 Red/4 White	3500K	6000	120	50
		4000K	6250	125	50
		5000K	6500	130	50
		RED	825	43	19
	R2W6 2 Red/6 White	3500K	8625	115	75
		4000K	9000	120	75
		5000K	9375	125	75
		RED	825	43	19
	R4W2 4 Red/2 White	3500K	3000	120	25
		4000K	3125	125	25
		5000K	3250	130	25
		RED	1675	43	39
	R6W2 6 Red/2 White	3500K	3000	120	25
		4000K	3125	125	25
		5000K	3250	130	25
		RED	2500	43	58

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PERFORMANCE DATA CONT.

*LEDs are frequently updated therefore values may change without notice.

MODEL	OUTPUT	COLOR TEMP.	LUMENS DELIVERED	EFFICACY (lm/W)	INPUT POWER (W)
SCR24	R2W2 2 Red/2 White	3500K	6000	120	50
		4000K	6250	125	50
		5000K	6500	130	50
		RED	1650	42	39
	R2W4 2 Red/4 White	3500K	12000	120	100
		4000K	12500	125	100
		5000K	13000	130	100
		RED	1650	42	39
	R2W6 2 Red/6 White	3500K	17250	115	150
		4000K	18000	120	150
		5000K	18750	125	150
		RED	1650	42	39
	R4W2 4 Red/2 White	3500K	6000	120	50
		4000K	6250	125	50
		5000K	6500	130	50
		RED	3250	42	77
	R6W2 6 Red/2 White	3500K	6000	120	50
		4000K	6250	125	50
		5000K	6500	130	50
		RED	4850	42	116

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