STARCLEAN™ RECESSED SERIES

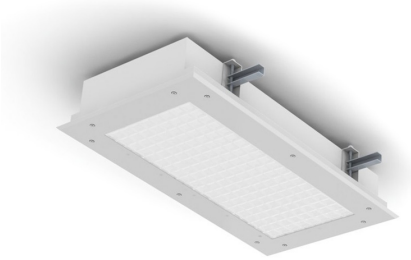
NewStarLighting

PROJECT: _____

TYPE: _____

PRODUCT: _____

APPROVED BY: _____



SCR Series

PRODUCT FEATURES

- Intended for Cleanrooms, BSL Labs, Hi-Tech Manufacturing, Laboratory, Food Processing Facilities, Commercial Kitchens, and more
- Cleanroom troffer available in a 1x2, 1x4, 2x2, 2x4
- 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
- Buy American Act (BAA)

ORDERING INFORMATION

Example: SCR14-HC/OC-L440-1C-A-UN

SC	R					
Series	**Mounting** **R** = Recessed (Grid/Flange)	**Nominal Size** **12** = 1x2 **14** = 1x4 **22** = 2x2 **24** = 2x4 *Nominal size. Dimensional data on Page 2.	**Housing** **HC** = 20Ga. CRS Painted **HS** = 20Ga. SS Brushed **HP** = 20Ga. SS Painted **HA** = 16Ga. Alum. Painted	**Frame*** INSET (I)* or OVERLAP (O) **OC** = 18Ga. CRS Painted **OS** = 18Ga. SS Brushed **OP** = 18Ga. SS Painted **OA** = 16Ga. Alum. Painted **IE** = Extruded Alum.** **IP** = Extuded Alum Painted** **IC** = 20Ga. CRS Painted* **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.	**Lumen Output*** **SCR12-14:** **L2** =Low **L3** = Standard **L4** = High **CL** = Custom Lumen Output** **SCR22-24:** **L2** =Low **L4** = Standard **L6** = Medium **L8** = High **CL** = Custom Lumen Output** *Subject to change. Performance Data on page 3. **Must be specified at time of quote. Must not exceed fixture maximum output.	**Color Temp.** **35** = 3500K **40** = 4000K **50** = 5000K **BIOS Options:*** **BIOS Color Temp.**** **B30** = 3000K **B35** = 3500K **B40** = 4000K **BIOS Tunable CCT**** **BTW1** = 2700K-3500K **BTW2** = 2700K-4000K *Choosing this, you must also pick a BIOS driver under the Driver column. **Please choose corresponding BIOS driver.

Circuits **1C** = 1 Circuit **2C** = 2 Circuits* *Allows for Inboard/ Outboard control.	**Normal Driver:** **Leave blank** = Standard 0-10V driver **BIOS Driver:*** **STC** = Static BIOS** **DMB** = Dynamic BIOS Dimming*** *BIOS drivers only work with BIOS LEDs. Must select STC or DMB option, otherwise leave field blank and standard 0-10V driver will be provided. **0-10V with Dimming from 1%-100%. ***0-10V Intensity Dimming to 1% and Dim-to-Dark capabilities.	**Lens** **A** = .125 Prismatic Acrylic+ **B** = .125 Prismatic Poly.+ **C** = .156 Prismatic Poly.+ **D** = .187 Prismatic Poly.*+ **E** = .125 White Frost Poly. **G** = .140 Prismatic DR Acrylic **H** = .125 White Frost Acrylic +Not recommended for BIOS. *Cannot be used with IE/IP.	**Voltage** **12** = 120V **27** = 277V **UN** = Universal (120V-277V)	**Options** **FZ1** = Fuse (120V) **FZ2** = Fuse (277V) **SD2** = Step Dim. Module (50-100%)* **SD3** = Step Dim. Module (30-70-100%)* **EL1** = Emerg. Batt. LED Low (10W)** **EL2** = Emerg. Batt. LED High (20W)** **RF** = (RIF) Radio Interference Filter **TH** = Torx® Head screws (with center pin) **RM** = Row Mount*** **90** = 90 CRI* **TGG** = Triple Gasketing (Grid) **TGF** = Triple Gasketing (Flange) **IP66** = IP66 Rated (Overlapping frame only) **P442** = NSF P442 Certified (Required for BSL 1-4)**** **MS** = MIL-STD-461G *Not available with BIOS, **SCR12 Remote Battery. Consult factory for CA Title 24 options. If stored, batteries should be fully recharged every six months and kept between 0°C-25°C to maintain optimal battery capacity. ***Joiner bracket supplied. Fixture dimensions subject to change. Consult factory for custom wiring or knockouts. ****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.

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 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 an ambient environment 25ºC temperature, compliant with IES LM-80 testing data.

Optional BIOS® SkyBlue® circadian solutions to produce the healthy "blue sky" light signal with blue spectrum peak at 490nm+ for circadian entrainment. Bio-Dimming™ reduces CCT by 2700K.

ELECTRICAL: 120-277Vac 50/60Hz, constant current driver (<20% THD, >0.9 PF). Standard 0-10V Dimming with 1-100% range. Optional BIOS driver options:
STC - BIOS control 0-10V with Dimming from 1%-100% and Dynamic Bios Dimming with 0-10V Intensity Dimming to 1% and Dim-to-Dark capabilities.

DMB - Dynamic BIOS control 0-10V with dynamic spectrum and BIOS SkyBlue® with Bio-Dimming™, which changes a spectral qualities by removing the SkyBlue component when dimming from 100%-51%, while light output remains relatively constant; CCT will decrease approximately 500K through bio-dimming; dimming from 50% to 1% will then reduce light output.

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

FINISH: White antimicrobial 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 contaminations from entering the fixture. Gasketing seals lens to doorframe and doorframe to housing. Optional triple gasketing, must specify Grid or Flange installation.

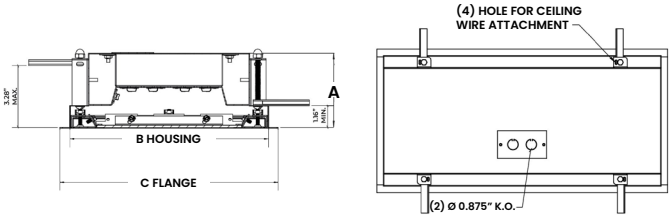
INSTALLATION: Universal recessed mounting accommodates Grid and Flange installations. Luminaires will be supplied with adjustable swing arms that can be used for Flange applications or secured to the side of housing for Grid applications. Compatible with 1-1/2" and 15/16" Grid systems. Mounting for custom ceilings available, consult factory.

WARRANTY: 5 Year Warranty.

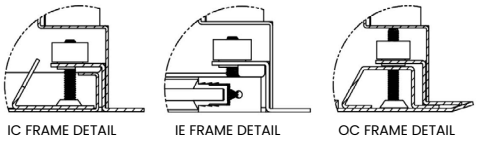
LABEL: Fixture is certified to UL standards for Wet Location. Meets standards for ISO3/Class 1 Cleanrooms. IP65 rating per IEC60598, and NSF2 Splash/ Non-Food Zone listed. Suitable for Biosafety Labs rated BSL 1 to 4. BSL Levels 3 & 4 require optional NSF P442 rating under options. Optional MIL-STD-461G.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

DIMENSIONAL DATA

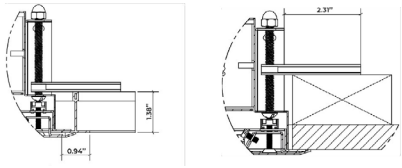
Fixture weight varies and is dependent upon chosen specifications. Consult factory for additional information. Average weight of the SCR14 is 27lb. Average weight of the SCR24 is 48lb.



	A	B	C	REC. CEILING CUT-OUT	WEIGHT
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"	27
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"	48

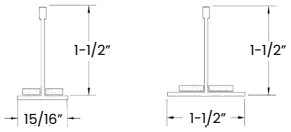


IC FRAME DETAIL | IE FRAME DETAIL | OC FRAME DETAIL



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



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PERFORMANCE DATA

*Data is with 80 CRI chip. LEDs are frequently updated therefore values may change without notice.

MODEL	OUTPUT	COLOR TEMP.	LUMENS DELIVERED	EFFICACY (lm/W)	INPUT POWER (W)
SCR12	L2 = Low	3500K	2875	115	25
		4000K	3000	120	25
		5000K	3125	125	25
	L3 = Standard	3500K	4180	110	38
		4000K	4370	115	38
		5000K	4560	120	38
	L4 = High	3500K	5500	110	50
		4000K	5750	115	50
		5000K	6000	120	50
SCR14	L2 = Low	3500K	5750	115	50
		4000K	6000	120	50
		5000K	6250	125	50
	L3 = Standard	3500K	8250	110	75
		4000K	8625	115	75
		5000K	9000	120	75
	L4 = High	3500K	11000	110	100
		4000K	11500	115	100
		5000K	12000	120	100
SCR22	L2 = Low	3500K	3000	120	25
		4000K	3125	125	25
		5000K	3250	130	25
	L4 = Standard	3500K	6000	120	50
		4000K	6250	125	50
		5000K	6500	130	50
	L6 = Medium	3500K	8625	115	75
		4000K	9000	120	75
		5000K	9375	125	75
	L8 = High	3500K	11500	115	100
		4000K	12000	120	100
		5000K	12500	125	100

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PERFORMANCE DATA CONTINUED

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MODEL	OUTPUT	COLOR TEMP.	LUMENS DELIVERED	EFFICACY (lm/W)	INPUT POWER (W)
SCR24	L2 = Low	3500K	6000	120	50
		4000K	6250	125	50
		5000K	6500	130	50
	L4 = Standard	3500K	12000	120	100
		4000K	12500	125	100
		5000K	13000	130	100
	L6 = Medium	3500K	17250	115	150
		4000K	18000	120	150
		5000K	18750	125	150
	L8 = High	3500K	23000	115	200
		4000K	24000	120	200
		5000K	25000	125	200

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MODEL	OUTPUT	COLOR TEMP.	LUMENS DELIVERED	EFFICACY (lm/W)	INPUT POWER (W)
bios ILLUMINATED SCR12	L2 = Low	3000K	2565	95	27
		3500K	2673	99	27
		4000K	2781	103	27
	L3 = Standard	3000K	3800	95	40
		3500K	3960	99	40
		4000K	4120	103	40
	L4 = High	3000K	5035	95	53
		3500K	5247	99	53
		4000K	5459	103	53
bios ILLUMINATED SCR14	L2 = Low	3000K	5035	95	53
		3500K	5247	99	53
		4000K	5459	103	53
	L3 = Standard	3000K	7600	95	80
		3500K	7920	99	80
		4000K	8240	103	80
	L4 = High	3000K	10070	95	106
		3500K	10494	99	106
		4000K	10918	103	106
bios ILLUMINATED SCR22	L2 = Low	3000K	2565	95	27
		3500K	2673	99	27
		4000K	2781	103	27
	L4 = Standard	3000K	5035	95	53
		3500K	5247	99	53
		4000K	5459	103	53
	L6 = Medium	3000K	7600	95	80
		3500K	7920	99	80
		4000K	8240	103	80
	L8 = High	3000K	10070	95	106
		3500K	10494	99	106
		4000K	10918	103	106

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MODEL	OUTPUT	COLOR TEMP.	LUMENS DELIVERED	EFFICACY (lm/W)	INPUT POWER (W)
bios ILLUMINATED SCR24	L2 = Low	3000K	5035	95	53
		3500K	5247	99	53
		4000K	5459	103	53
	L4 = Standard	3000K	10070	95	106
		3500K	10494	99	106
		4000K	10918	103	106
	L6 = Medium	3000K	15200	95	160
		3500K	15840	99	160
		4000K	16480	103	160
	L8 = High	3000K	20140	95	212
		3500K	20988	99	212
		4000K	21836	103	212

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