



FEATURES AND BENEFITS:

- ✓ Shallow (less than 4") fixture depth allows placement close to ceiling reducing chance of damage incurred from fork lift equipment.
- ✓ Consumes 1/2 the energy of standard 400 watt metal halide and delivers comparable light levels when replaced one-for-one.
- ✓ T5HO lamps last 20,000 hours and have a light loss factor of 95%. This means that the maintained light level will be higher than a 400W MH fixture.
- ✓ Occupancy sensor option instantly turns on the lights only when they are needed providing further energy savings.
- ✓ Better color rendering index (CRI) than metal halide.
- ✓ Tool-less ballast access without removing lamps.

HGR SERIES SPECIFICATIONS

APPLICATION: Energy saving solution ideal for warehouses, gymnasiums, distribution centers, airplane hangars, factories and retail spaces.

LAMPS: The HGR includes 54 watt 5000 lumen T5HO lamps. Available in two sizes: a 14" X 48" fixture for a (4) lamp configuration or a 20" X 48" fixture with a (6) lamp configuration. These high output lamps maintain 95% of their original light output, provide a color rendering index of 85 (CRI) and have a rated life of 20,000 hours. Standard supplied lamps have a color temperature is 4100°K. 3500°K and 3000°K lamps are also available.

SOCKETS: Miniature bi-pin (G5 base) lampholders feature anti-vibration locking design.

INSTALLATION: Can be surface or pendant mounted, chain hung or hung in continuous rows. Knockouts are provided for double pendant mount with 1/2" conduit. Stems and canopy kits for pendant mounting are available. For single 3/4" pendant mount an optional through outlet box (TOB) is available. Optional accessories for 3/4" pendant mounting include hook, loop, power-hook, cord and plug sets. Provisions for chain mounting are included with the standard unit. An optional chain mounting kit is available. Knockouts are provided on both ends to allow for ganging in continuous rows with 1/2" connectors.

BALLAST: High frequency electronic ballast with programmed rapid start lamp ignition delivers optimum lamp life even in frequent on/off switching applications. >98% power factor <10% THD microprocessor controlled universal voltage operates between 40kHz and 54kHz. 120 through 277 volt 50/60Hz input capability ensures correct supply voltage and reduces inventory SKU's. 347 volt and 480 volt also available. 90°C rated ballast allows fixture operation in ambients up to 40°C. 55°C high ambient temperature rating is available. 0°F cold starting capability. End of life protection safely removes power and prevents lamp overheating. Semi-independent lamp operation ensures that partial light remains when a lamp burns out.

HI-LOW SWITCHING: Switch from 6-4, 6-2, 6-0, 4-2 or 4-0 lamps. Can be used in conjunction with a switch, occupancy sensors, daylight harvestors etc. to obtain increased energy savings. Optional integral motion sensor is available. See accessories.

REFLECTOR: Highly specular anodized aluminum with die-formed segmented design for maximum light output. Hinged design allows for tool-less ballast and wiring access without removing the lamps.

EFFICIENCY: Wide spread, highly efficient photometric distribution pattern with an optical efficiency of over 90%.

FINISH: The T5HO housing is finished with a superior baked-on powder coating, allowing the fixture to withstand extreme temperature changes without cracking or peeling.

WIRE GUARD: 11 gage steel white powder coated mounts easily to the bottom of the fixture housing with supplied clips.

LENS: Optional .125" thick flat prismatic acrylic lens.

Listed by Underwriter's Laboratories for DAMP LOCATIONS. C-UL Listed for Canadian use. IBEW - AFL UNION LABEL.



ELECTRICAL CHARACTERISTICS

LAMPS TYPE	RATED LUMENS	TOTAL WATTS	AMPS (120V)	AMPS (230V)	AMPS (277V)	LUMENS PER WATT
(2) T5HO	10,000	118	0.99	0.52	0.40	84.7
(4) T5HO	20,000	240	2.00	1.03	0.86	83.3
(6) T5HO	30,000	358	2.99	1.55	1.26	82.4

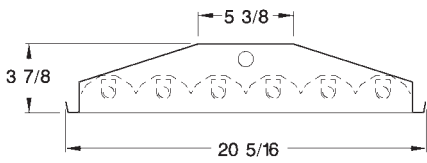
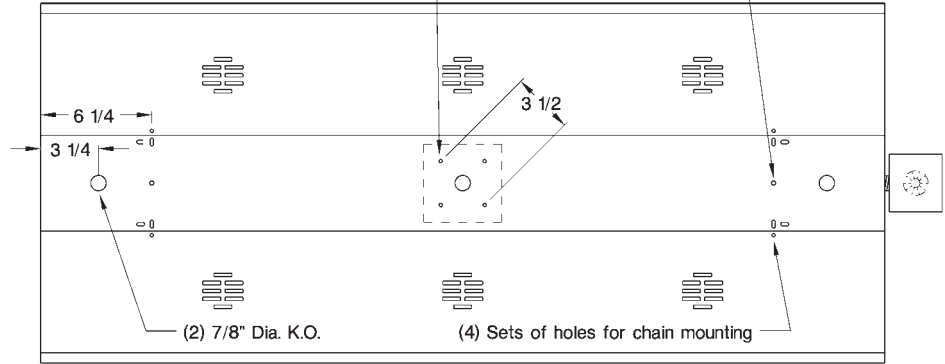


HGR SERIES DIMENSIONS

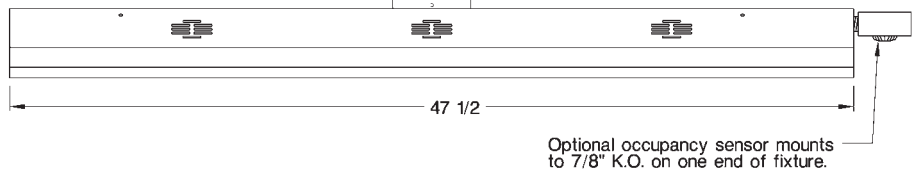
HGR20 6 LAMP UNIT

Optional through outlet box (TOB) includes holes for mounting to standard junction box with 3-1/2" bolt circle, center threaded hole or pendant mounting with 3/4" pipe, hook or loop and (2) 7/8" K.O.'s for 1/2" fittings

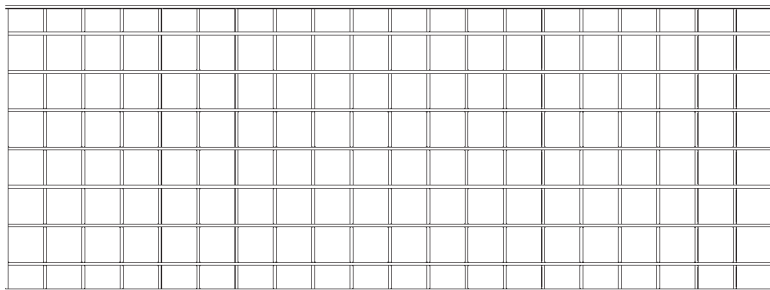
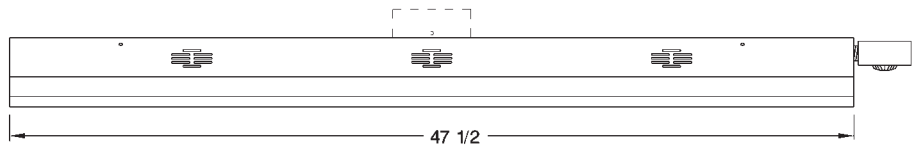
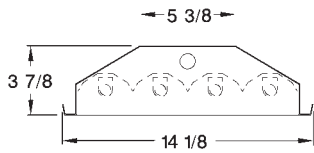
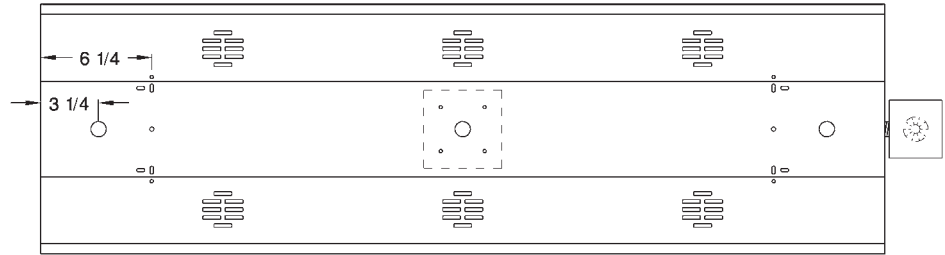
(2) 5/16" holes for direct surface mounting



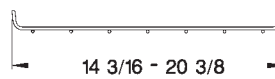
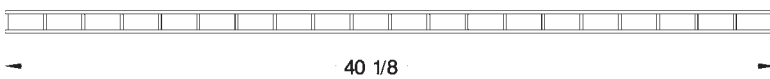
Optional through outlet box (TOB) for direct surface or 3/4" pendant mounting.



HGR14 4 LAMP UNIT



WIRE GUARD
11 gage white powder coated.



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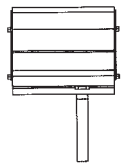
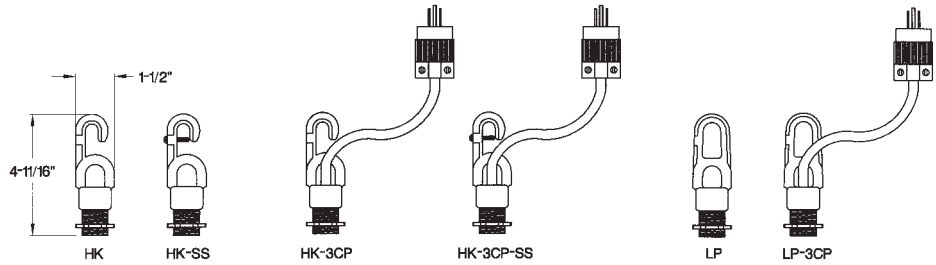


THE SPERO ELECTRIC CORPORATION 1705 NOBLE ROAD CLEVELAND, OHIO 44112
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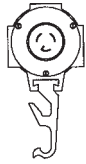
HGR SERIES MOUNTING AND WIRING ACCESSORIES

NEMA PLUG AND RECEPTACLE CONFIGURATIONS

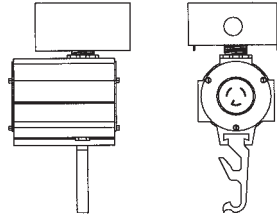
Spero Lighting uses only UL / CUL Listed NEMA type receptacles and plugs. The standard configurations are listed at the right. Other types may be specified - consult factory.



PH



PH-FT



RECEPTACLE

PLUG

L5-15R		L5-15P		Rated 125V, 15A Used with 120 Volt Systems.
L6-15R		L6-15P		Rated 250V, 15A Used with 208 and 240 Volt Systems
L7-15R		L7-15P		Rated 277V, 15A Used with 277 Volt Systems
L8-20R		L8-20P		Rated 480V, 20A Used with 377 and 480 Volt Systems

OCCUPANCY SENSOR

Line voltage switching motion passive infrared motion detector mounted on the end of the fixture. When ordered with a Single Circuit lamp option the sensor turns the fixture on when motion is detected. When used with a Bi-Level Circuit the sensor turns on the secondary lamps. Time delay is adjustable from 30 seconds to 20 minutes.



ORDERING GUIDE

FIXTURE SERIES	TOTAL LAMPS	VOLTAGE	OPTIONS	ACCESSORIES
HGR14	Single Circuits 4 (14" Only) 6 (20" Only)	UNV (120 Through 277 Volt)	1F-IL Single In-Line Fuse	WG-HGR14 White Powder Coat Wire Guard 14"
			2F-IL Double In-Line fuse	
HGR20	Bi-Level Circuits 4/2 (14" Only) 6/4 6/2 (20" Only)	347 480	TOB Through Outlet Box for 3/4" Pendant or Surface Mounting	CHK48 Chain Mounting Kit Includes 2 Chain / Hook Assemblies for 48" Total Hanging Length
			MCLM Low Bay Motion Sensor Switch for up to 15' Mounting Heights	CD120-BLK 10' Black Type SJT 105°C Cord 18Ga. 3 Conductor, No Plug
			MCHM High Bay Motion Sensor Switch for up to 45' Mounting Heights	HK 3/4" Male Fixture Hook
			EM700 Bodine LP550 Battery Emergency Ballast Operates 1 Lamp at 700 Lumens	HK-SS 3/4" Male Fixture Hook with Safety Screw
			EM1250 Bodine LP600 Battery Emergency Ballast Operates 1 Lamp at 1250 Lumens	LP 3/4" Male fixture Loop
			ACR-LENS High Temperature Acrylic Lens	3CP-120S 3' Cord and Nema S5-15P Strait Blade Plug
			HA55 55°C Ambient Temperature Rating	3CP-120 3' Cord and Nema L5-15P Twist-Lock Plug
				3CP-208-240 3' Cord and Nema L6-15P Twist-Lock Plug
	3CP-277 3' Cord and Nema L7-15P Twist-Lock Plug			
	PH-120 Power Hook Receptacle for Loop with Nema L5-15R Receptacle			
	PH-208-240 Power Hook Receptacle for Loop with Nema L6-15R Receptacle			
	PH-277 Power Hook Receptacle for Loop with Nema L7-15R Receptacle			
	FT Feed through wiring box for power Hook receptacle assembly.			

HGR-14 - 4/2 - UNV - TOB - HK

EXAMPLE OF A TYPICAL ORDER

SPERO LIGHTING



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PHOTOMETRIC DATA

Zonal Cavity Coefficients of Utilization

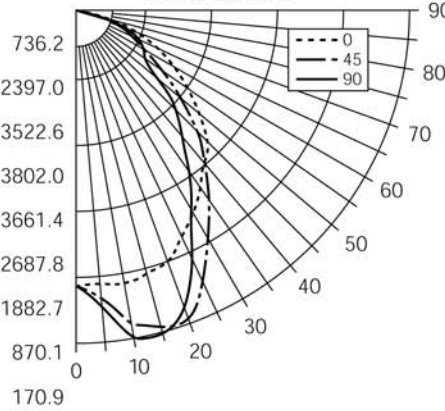
Ceiling	.80				.70				.50			.30			.10			.0
	Wall	.70	.50	.30	.10	.70	.50	.30	.10	.50	.30	.10	.50	.30	.10	.50	.30	
0	1.17	1.17	1.17	1.17	1.15	1.15	1.15	1.15	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	.99
1	1.09	1.05	1.02	.99	1.07	1.03	1.00	.97	.99	.96	.94	.95	.93	.91	.92	.90	.88	.87
2	1.01	.94	.88	.83	.99	.92	.87	.82	.89	.84	.81	.86	.82	.79	.83	.80	.77	.75
3	.93	.84	.77	.72	.91	.83	.76	.71	.80	.75	.70	.77	.73	.69	.75	.71	.68	.66
4	.86	.76	.68	.62	.84	.74	.67	.62	.72	.66	.61	.70	.64	.60	.68	.63	.59	.57
5	.79	.68	.60	.54	.77	.67	.59	.53	.65	.58	.53	.63	.57	.52	.61	.56	.52	.50
6	.73	.61	.53	.47	.71	.60	.52	.47	.58	.52	.46	.57	.51	.46	.55	.50	.46	.44
7	.68	.55	.47	.41	.66	.54	.47	.41	.53	.46	.41	.52	.45	.41	.50	.45	.40	.39
8	.62	.50	.42	.36	.61	.49	.41	.36	.48	.41	.36	.47	.40	.36	.45	.40	.35	.34
9	.58	.45	.37	.32	.56	.44	.37	.31	.43	.36	.31	.42	.36	.31	.41	.35	.31	.29
10	.53	.41	.33	.28	.52	.40	.33	.28	.39	.32	.28	.38	.32	.28	.37	.32	.28	.26

HGR-14-4 With Wire Guard
(4) 54 Watt 4100°K 5000 Lumen Lamps

Lumen Summary

Zone	Lumens	% Lamp	% Fixt
0-30	6656	33.3	33.7
0-40	10458	52.3	53.0
0-60	16807	84.0	85.2
0-90	19731	98.7	100.0
90-120	0	0.0	0.0
90-130	0	0.0	0.0
90-150	0	0.0	0.0
90-180	0	0.0	0.0
0-180	19731	98.7	100.0

Zonal Lumens



IES Spacing Criteria

End = 1.3 Diagonal = 1.3 Cross = 1.2

Zonal Cavity Coefficients of Utilization

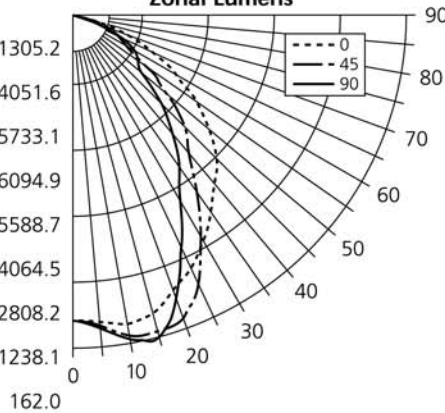
Ceiling	.80				.70				.50			.30			.10			.0
	Wall	.70	.50	.30	.10	.70	.50	.30	.10	.50	.30	.10	.50	.30	.10	.50	.30	
0	1.23	1.23	1.23	1.23	1.20	1.20	1.20	1.20	1.15	1.15	1.15	1.10	1.10	1.10	1.06	1.06	1.06	1.03
1	1.15	1.11	1.07	1.04	1.12	1.09	1.05	1.02	1.04	1.02	.99	1.00	.98	.96	.97	.95	.93	.91
2	1.06	.99	.94	.89	1.04	.98	.92	.88	.94	.90	.86	.91	.87	.84	.88	.85	.82	.80
3	.99	.89	.82	.77	.96	.88	.81	.76	.85	.79	.75	.82	.77	.73	.80	.76	.72	.70
4	.91	.80	.73	.67	.89	.79	.72	.66	.77	.70	.65	.74	.69	.64	.72	.68	.64	.62
5	.84	.72	.64	.58	.82	.71	.63	.57	.69	.62	.57	.67	.61	.56	.65	.60	.56	.54
6	.78	.65	.57	.51	.76	.64	.56	.51	.63	.56	.50	.61	.55	.50	.59	.54	.49	.48
7	.72	.59	.51	.45	.70	.58	.50	.45	.57	.50	.45	.55	.49	.44	.54	.48	.44	.42
8	.67	.53	.45	.40	.65	.53	.45	.39	.51	.44	.39	.50	.44	.39	.49	.43	.39	.37
9	.61	.48	.40	.35	.60	.48	.40	.35	.46	.39	.34	.45	.39	.34	.44	.38	.34	.32
10	.57	.44	.36	.31	.56	.43	.36	.31	.42	.35	.31	.41	.35	.31	.40	.35	.30	.29

HGR-14-4
(4) 54 Watt 4100°K 5000 Lumen Lamps

Lumen Summary

Zone	Lumens	% Lamp	% Fixt
0-30	11090	37.0	35.7
0-40	17185	57.3	55.4
0-60	26838	89.5	86.4
0-90	31046	103.5	100.0
90-120	0	0.0	0.0
90-130	0	0.0	0.0
90-150	0	0.0	0.0
90-180	0	0.0	0.0
0-180	31046	103.5	100.0

Zonal Lumens



IES Spacing Criteria

End = 1.3 Diagonal = 1.2 Cross = 1.1

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