

HBC-20

LED Low Bay / High Bay

Product Description

The HBC-20 LED Low Bay/High Bay is a high-performance fixture perfect for replacing 250W and 400W metal halide luminaires at an affordable price. This high bay fixture supplies an output greater than 130 lumens per watt and excellent color rendering at >80CRI. The forged aluminum heatsink design allows for a lightweight unit. For continued improvements the HBC-20 offers flat optics that are good in low clearance areas. Improved reflector installation with only three keyholes. The driver comes with a 12V output for low voltage sensors and other control systems. With consistent even light distribution this fixture is perfect for environments such as grocery stores, gymnasiums, hangers, industrial, retail, and warehouse spaces.

Construction

- Forged aluminum heatsink provides superior cooling while reducing fixture weight
- IP65 fully sealed construction and suitable for wet locations

Optical System

- High efficiency LEDs with tempered glass protective cover
- 120° No Reflector for overall general illumination
- 70° Polycarbonate Reflector
- 60° & 90° Aluminum Reflector
- 60° & 90° Flat Optic
- Polycarbonate glare shields to minimize glare

Electrical

- Industrial-grade high efficiency driver
- 120-277VAC Standard
- Utilizes advanced high-powered LED technology with CCT of 4000K and 5000K with >80 CRI
- High power factor: >0.9
- 4kV Surge Suppression
- Operating temperature range: - 40° to 122°F (-40° to 50°C)
- Dimming: 0-10V standard
- 6ft power cord
- 3ft dimming wires with additional 12V output for low voltage sensors and other control devices
- TM-21 Reported L70(10k) hours >60,000

Finish

- Black anodized heatsink for optimal heat management

Mounting and Installation

- Preinstalled hook with locking bolt allows for rapid installation
- For installations where power surge may be possible, NICOR recommends installing additional surge protection at the fixture or electrical distribution panel

Warranty

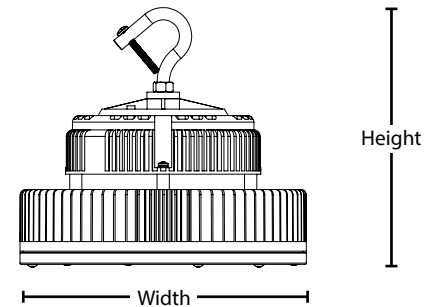
- 5-year limited system warranty standard
- Warranty does not cover product failure due to an overvoltage event (power surge)
- For installations where power surge may be possible, NICOR recommends installing additional surge protection at the electrical distribution panel

Project _____

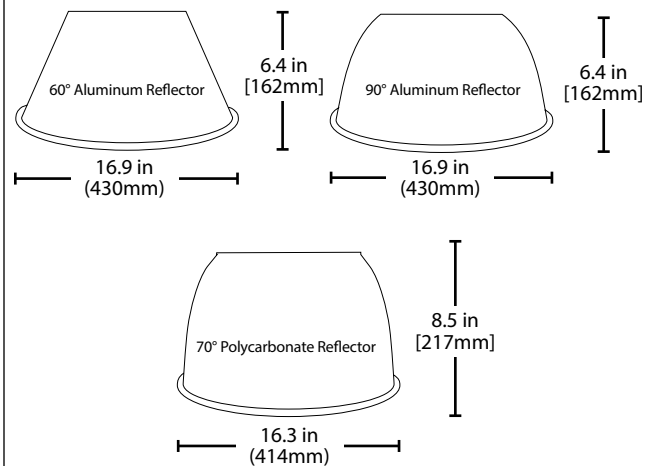
Catalog _____

Type _____

Date _____



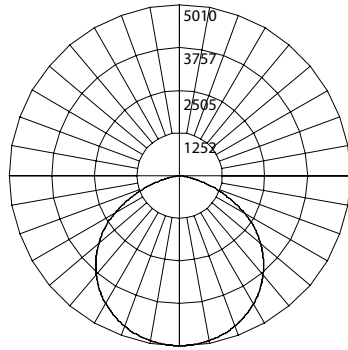
	HBC-20-100W-UNV	HBC-20-150W-UNV	HBC-20-240W-UNV
Width:	11.0 in. (280mm)	11.0 in. (280mm)	11.0 in. (280mm)
Height:	8.3 in. (212mm)	8.3 in. (212mm)	9.5 in. (242mm)



Photometric Data

HBC 100W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	102.8
Delivered Lumens (Lm)	14131
System Efficacy (Lm/W)	137.5
Correlated Color Temp (K)	5016
Color Rendering Index (CRI)	83
Beam Angle	114.3°
Spacing Criteria	1.30



Intensity Summary (Candle Power)

Angle	Mean CP
0	4983
5	4967
15	4826
25	4537
35	4090
45	3482
55	2708
65	1697
75	686
85	52
90	1

Data Multiplier

HBC-20-100W-UNV-40K 0.985

Cone of Light Tabulation

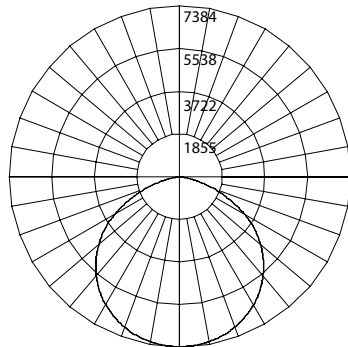
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	22	19.4
17	17.1	22.0
20	12.4	25.7
23	9.4	30.0
25	7.9	32.1
28	6.3	36.1
30	5.5	39.0

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	3928	27.8%
0-40	6486	45.9%
0-60	11583	82.0%
0-90	14105	99.8%
90-180	26	0.2%
0-180	14131	100.0%

HBC 150W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	152.7
Delivered Lumens (Lm)	20695
System Efficacy (Lm/W)	135.5
Correlated Color Temp (K)	5000
Color Rendering Index (CRI)	83
Beam Angle	114.0°
Spacing Criteria	1.30



Intensity Summary (Candle Power)

Angle	Mean CP
0	7329
5	7308
15	7100
25	6671
35	6010
45	5109
55	3964
65	2480
75	998
85	70
90	3

Data Multiplier

HBC-20-150W-UNV-40K 0.985

Cone of Light Tabulation

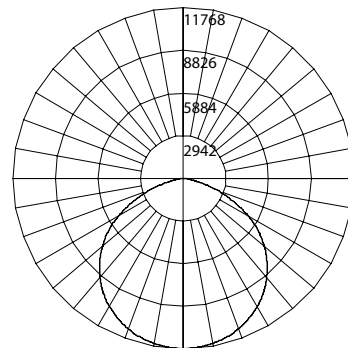
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	34.2	19.3
17	26.6	21.9
20	19.2	24.0
23	14.5	29.5
25	12.3	32.2
28	9.8	35.7
30	8.5	38.7

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	5775	27.9%
0-40	9533	46.1%
0-60	16995	82.1%
0-90	20655	99.8%
90-180	41	0.2%
0-180	20695	100.0%

HBC 240W 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	245.0
Delivered Lumens (Lm)	31467
System Efficacy (Lm/W)	130.3
Correlated Color Temp (K)	5000
Color Rendering Index (CRI)	83
Beam Angle	113.8°
Spacing Criteria	1.30



Intensity Summary (Candle Power)

Angle	Mean CP
0	11309
5	11267
15	10947
25	10282
35	9258
45	7873
55	6107
65	3806
75	1524
85	114
90	4

Data Multiplier

HBC-20-240W-UNV-40K 0.985

Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	45.8	19.4
17	35.7	21.9
20	25.8	25.8
23	19.5	29.8
25	16.5	32.2
28	13.2	36.0
30	11.5	38.8

Zonal Lumen Summary

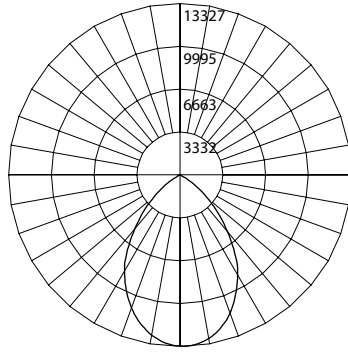
Zone	Lumens	% of Luminaire
0-30	8904	27.9%
0-40	14696	46.1%
0-60	26211	82.1%
0-90	31845	99.8%
90-180	67	0.2%
0-180	31913	100.0%

Fixture tested per LM-79-08. Photometric data is of the performance of a representative fixture. Results may vary in the field.

Photometric Data

HBC 150W 5000K AL60°

Input Voltage (VAC)	120-277
System Level Power (W)	151.1
Delivered Lumens (Lm)	18412
System Efficacy (Lm/W)	121.9
Correlated Color Temp (K)	5064
Color Rendering Index (CRI)	83
Beam Angle	73.6°
Spacing Criteria	1.04



Intensity Summary (Candle Power)

Angle	Mean CP
0	13276
5	13137
15	12068
25	10016
35	7217
45	4039
55	1444
65	143
75	62
85	16
90	1

Data Multiplier

HBC-20-100W-UNV-50K	0.659
HBC-20-240W-UNV-50K	1.585

Cone of Light Tabulation

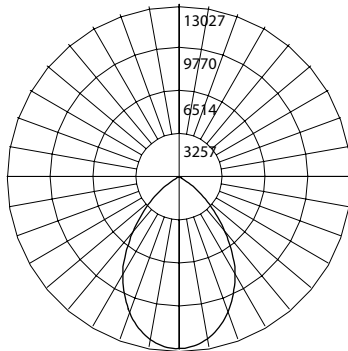
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	59.0	15.3
17	45.9	17.4
20	33.2	20.4
23	25.1	23.5
25	21.2	25.6
28	16.9	28.7
30	14.8	30.7

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	9230	50.1%
0-40	13724	74.5%
0-60	18155	98.6%
0-90	18412	100.0%
90-180	0	0.0%
0-180	18412	100.0%

HBC 150W 5000K AL60° +Glare Shield

Input Voltage (VAC)	120-277
System Level Power (W)	152.9
Delivered Lumens (Lm)	18077
System Efficacy (Lm/W)	118.2
Correlated Color Temp (K)	5096
Color Rendering Index (CRI)	83
Beam Angle	73.3°
Spacing Criteria	1.04



Intensity Summary (Candle Power)

Angle	Mean CP
0	12995
5	12865
15	11820
25	9803
35	7052
45	3967
55	1447
65	204
75	81
85	16
90	5

Data Multiplier

HBC-20-100W-UNV-50K	0.666
HBC-20-240W-UNV-50K	1.600

Cone of Light Tabulation

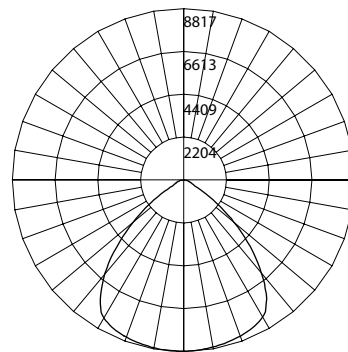
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	57.8	15.5
17	45.0	17.5
20	32.5	20.7
23	24.6	23.7
25	20.8	25.8
28	16.6	28.9
30	14.4	31.0

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	9023	49.9%
0-40	13396	74.1%
0-60	17745	98.2%
0-90	18077	100.0%
90-180	0	0.0%
0-180	18077	100.0%

HBC 150W 5000K AL90°

Input Voltage (VAC)	120-277
System Level Power (W)	149.8
Delivered Lumens (Lm)	18271
System Efficacy (Lm/W)	122.0
Correlated Color Temp (K)	5036
Color Rendering Index (CRI)	83
Beam Angle	93.0°
Spacing Criteria	1.34



Intensity Summary (Candle Power)

Angle	Mean CP
0	8791
5	8773
15	8652
25	8401
35	7439
45	4834
55	2056
65	511
75	269
85	70
90	2

Data Multiplier

HBC-20-100W-UNV-50K	0.665
HBC-20-240W-UNV-50K	1.592

Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	39.1	19.9
17	30.4	22.6
20	22.0	26.6
23	16.6	30.5
25	14.1	33.2
28	11.2	37.2
30	9.8	39.8

Zonal Lumen Summary

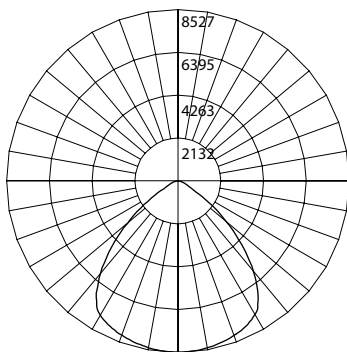
Zone	Lumens	% of Luminaire
0-30	7158	39.2%
0-40	11762	64.4%
0-60	17357	95.0%
0-90	18271	100.0%
90-180	0	0.0%
0-180	18271	100.0%

Fixture tested per LM-79-08. Photometric data is of the performance of a representative fixture. Results may vary in the field.

Photometric Data

HBC 150W 5000K AL90° +Glare Shield

Input Voltage (VAC)	120-277
System Level Power (W)	151.2
Delivered Lumens (Lm)	17263
System Efficacy (Lm/W)	114.2
Correlated Color Temp (K)	5021
Color Rendering Index (CRI)	83
Beam Angle	92.3°
Spacing Criteria	1.32



Intensity Summary (Candle Power)

Angle	Mean CP
0	8500
5	8472
15	8297
25	7973
35	7003
45	4564
55	1972
65	544
75	226
85	27
90	2

Data Multiplier

HBC-20-100W-UNV-50K	0.658
HBC-20-240W-UNV-50K	1.535

Cone of Light Tabulation

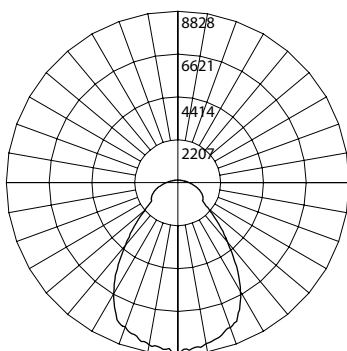
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	37.8	19.8
17	29.4	22.4
20	21.2	26.5
23	16.1	30.4
25	13.6	33.0
28	10.8	37.0
30	9.4	39.5

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	6827	39.5%
0-40	11156	64.6%
0-60	16420	95.1%
0-90	17263	100.0%
90-180	0	0.0%
0-180	17263	100.0%

HBC 150W 5000K PC70°

Input Voltage (VAC)	120-277
System Level Power (W)	151.1
Delivered Lumens (Lm)	18643
System Efficacy (Lm/W)	123.4
Correlated Color Temp (K)	5032
Color Rendering Index (CRI)	83
Beam Angle	77.3°
Spacing Criteria	1.14



Intensity Summary (Candle Power)

Angle	Mean CP
0	8733
5	8491
15	8103
25	7377
35	5337
45	3068
55	1584
65	1391
75	1064
85	726
90	588

Data Multiplier

HBC-20-100W-UNV-50K	0.659
HBC-20-240W-UNV-50K	1.602

Cone of Light Tabulation

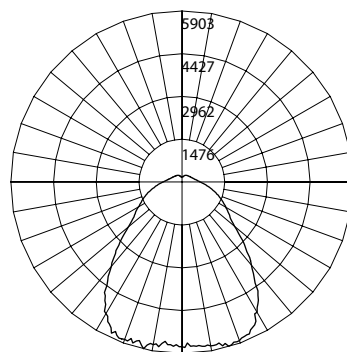
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	38.8	17.0
17	30.2	19.3
20	21.8	22.7
23	16.5	26.1
25	14.0	28.3
28	11.1	31.8
30	9.7	33.8

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	6465	34.7%
0-40	9766	52.4%
0-60	13630	73.1%
0-90	16923	90.8%
90-180	1720	9.2%
0-180	18643	100.0%

HBC 150W 5000K PC70° +Glare Shield

Input Voltage (VAC)	120-277
System Level Power (W)	150.0
Delivered Lumens (Lm)	17494
System Efficacy (Lm/W)	116.6
Correlated Color Temp (K)	5056
Color Rendering Index (CRI)	83
Beam Angle	89.5°
Spacing Criteria	1.28



Intensity Summary (Candle Power)

Angle	Mean CP
0	5683
5	5649
15	5731
25	5606
35	4521
45	3051
55	1999
65	1536
75	1123
85	776
90	646

Data Multiplier

HBC-20-100W-UNV-50K	0.668
HBC-20-240W-UNV-50K	1.592

Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	25.3	19.2
17	19.7	21.7
20	14.2	25.6
23	10.7	29.5
25	9.0	31.8
28	7.2	35.7
30	6.3	38.3

Zonal Lumen Summary

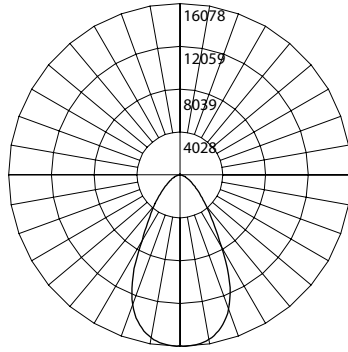
Zone	Lumens	% of Luminaire
0-30	4737	26.9%
0-40	7550	42.8%
0-60	11722	66.5%
0-90	15294	86.7%
90-180	2339	13.3%
0-180	17632	100.0%

Fixture tested per LM-79-08. Photometric data is of the performance of a representative fixture. Results may vary in the field.

Photometric Data

HBC 150W 5000K OP60°

Input Voltage (VAC)	120-277
System Level Power (W)	150.9
Delivered Lumens (Lm)	18482
System Efficacy (Lm/W)	122.5
Correlated Color Temp (K)	5023
Color Rendering Index (CRI)	83
Beam Angle	58.3°
Spacing Criteria	0.98



Intensity Summary (Candle Power)

Angle	Mean CP
0	16002
5	15920
15	14727
25	10961
35	5275
45	2747
55	1442
65	734
75	318
85	50
90	1

Data Multiplier

HBC-20-100W-UNV-50K	0.650
HBC-20-240W-UNV-50K	1.579

Cone of Light Tabulation

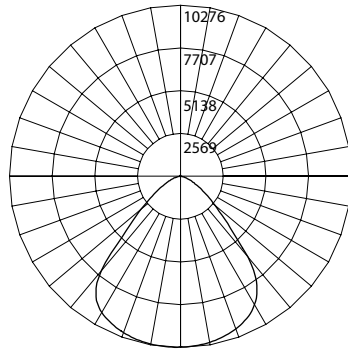
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	71.1	14.7
17	55.4	16.7
20	40.0	19.7
23	30.2	22.6
25	25.6	24.5
28	20.4	27.6
30	17.8	29.5

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	10433	56.4%
0-40	13766	74.5%
0-60	17222	93.2%
0-90	18376	99.4%
90-180	106	0.6%
0-180	18482	100.0%

HBC 150W 5000K OP90°

Input Voltage (VAC)	120-277
System Level Power (W)	150.3
Delivered Lumens (Lm)	19919
System Efficacy (Lm/W)	132.5
Correlated Color Temp (K)	5014
Color Rendering Index (CRI)	83
Beam Angle	86.3°
Spacing Criteria	1.28



Intensity Summary (Candle Power)

Angle	Mean CP
0	10228
5	10204
15	10005
25	9532
35	8312
45	4264
55	1969
65	860
75	319
85	34
90	2

Data Multiplier

HBC-20-100W-UNV-50K	0.649
HBC-20-240W-UNV-50K	1.563

Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
15	45.5	19.1
17	35.4	21.7
20	25.6	25.4
23	19.3	29.3
25	16.4	31.7
28	13.0	35.6
30	11.4	37.8

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	8202	41.2%
0-40	13333	66.9%
0-60	18535	93.1%
0-90	19805	99.4%
90-180	113	0.6%
0-180	19919	100.0%

Performance Data

Model Number	Lumens	Watts	Lumens/Watt
HBC-20-100W-UNV-40K	13925	102.8	135.5
HBC-20-100W-UNV-50K	14131	102.8	137.5
HBC-20-150W-UNV-40K	20399	152.7	133.6
HBC-20-150W-UNV-50K	20696	152.7	135.5
HBC-20-240W-UNV-50K	31913	242.5	131.6

Recommended Dimmers*

- Lutron NTSTV
- Lutron DVSTV
- Cooper SF10P
- Legrand RH4FBL3PW

*Not a complete list. Check compatibility before installation.

Optical Performance Data

Model Number	Lumens	Watts	Lumens/Watt
HBC-20-100W-UNV-50K + AL60°	12135	101.0	120.1
HBC-20-150W-UNV-50K + AL60°	18412	151.1	121.9
HBC-20-240W-UNV-50K + AL60°	29174	243.5	119.8
HBC-20-100W-UNV-50K + AL60° + GS	12035	102.5	117.4
HBC-20-150W-UNV-50K + AL60° + GS	18077	152.9	118.2
HBC-20-240W-UNV-50K + AL60° + GS	28931	243.0	119.1
HBC-20-100W-UNV-50K + AL90°	12156	101.0	120.4
HBC-20-150W-UNV-50K + AL90°	18271	149.8	122.0
HBC-20-240W-UNV-50K + AL90°	29079	240.7	120.8
HBC-20-100W-UNV-50K + AL90° + GS	11357	101.0	112.4
HBC-20-150W-UNV-50K + AL90° + GS	17263	151.2	114.2
HBC-20-240W-UNV-50K + AL90° + GS	26502	238.9	110.9

Optical Performance Data

Model Number	Lumens	Watts	Lumens/Watt
HBC-20-100W-UNV-50K + PC70°	12295	101.0	121.7
HBC-20-150W-UNV-50K + PC70°	18643	151.1	123.4
HBC-20-240W-UNV-50K + PC70°	29875	243.5	122.7
HBC-20-100W-UNV-50K + PC70° + GS	11685	101.0	115.7
HBC-20-150W-UNV-50K + PC70° + GS	17494	150.0	116.6
HBC-20-240W-UNV-50K + PC70° + GS	27842	243.5	114.3
HBC-20-100W-UNV-50K + OP60°	12006	100.6	119.3
HBC-20-150W-UNV-50K + OP60°	18482	150.9	122.5
HBC-20-240W-UNV-50K + OP60°	29174	241.1	121.0
HBC-20-100W-UNV-50K + OP90°	12932	101.0	128.0
HBC-20-150W-UNV-50K + OP90°	19919	150.3	132.5
HBC-20-240W-UNV-50K + OP90°	31134	240.5	129.6

Ordering Information

Example: HBC-20-100W-UNV-50K

Series	Version	Wattage	Voltage	CCT's
HBC	20	100W	UNV (120-277)	40K (4000 K)**
		150W	HV (347-480)*	50K (5000 K)
		240W		

Specifications and dimensions subject to change without notice.

* Consult factory for availability

** Not available for 240W

Optic Accessories*accessories sold separately*

60° Aluminum Reflector	HBC-20-RFL-AL-60
90° Aluminum Reflector	HBC-20-RFL-AL-90
Glare Shield for Aluminum Reflector	HBC-20-GS-AL
70° Polycarbonate Reflector	HBC-20-RFL-PC-70
Glare Shield for Polycarbonate Reflector	HBC-20-GS-PC
60° Flat Optic	HBC-20-OPTIC-60
90° Flat Optic	HBC-20-OPTIC-90

Motion Sensor Accessories*accessories sold separately*

Microwave Motion Sensor	HBC-MWOSR
Mounting Bracket for HBC-MWOSR***	HBC-20-MSBRACKET
Remote Control for HBC-MWOSR	MWOS-REMOTE

*** Not required for mounting to reflector with or without glare shield.

Plug Accessories*Plug options are field install only.**accessories sold separately*

15 amp 120V Straight Blade Plug	S15P
15 amp 120V Twist Lock Plug	L515P
15 amp 240V Twist Lock Plug	L615P
15 amp 277V Twist Lock Plug	L715P
20 amp 277V Twist Lock Plug	L720P

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.