



# KILLARK®



**NEW with EXCLUSIVE FEATURES**

Egress Lighting for Class I, Division 1 Explosion-proof Environments

# LED EMERGENCY

# HUBBELL



**EBS Battery Unit Only**



The EBS23 System Requires EXACTLY 2 Heads for operation (total attached or remote); each Head is approximately 30VDC, 10Watts.

**Class I, Div. 1&2, Groups B<sup>Ⓢ</sup>, C, D**  
**Class I, Zone 1&2, Groups IIB+H2<sup>Ⓢ</sup>, IIA**  
**Class II, Div. 1&2, Groups EFG**  
**Class III**  
**Enclosure Type 4 (NEMA 4, 7B<sup>Ⓢ</sup> CD, 9EFG)**

File LR11713

**FEATURES-SPECIFICATIONS**

**HOSTILE/TE<sup>®</sup> EBS**  
EMERGENCY

**Applications**

Where required by the NEC (or local "Life Safety" code) for safe egress (over doors, aiseways, stairs, walkways, exit paths, and outer perimeter walls) to provide illumination during interruption of normal power to area lighting.

In indoor or outdoor locations made hazardous by the presence of flammable gas, vapors, or dusts. Includes refinery/chemical production and storage, grain processing, waste water treatment facilities and any area requiring heavy-duty dependable emergency lighting.

**Exclusive Features**

- LED Heads provide clear crisp illumination at 5000° Kelvin<sup>Ⓢ</sup>
- LED Head L70 value 100,000 hours for minimal maintenance
- Up to 500% brighter than competitive conventional units<sup>Ⓢ</sup>
- Enclosure Type 4 (NEMA 4) for wet and harsh locations
- Group B is standard when using EBSHK type heads
- Automatic Safety Disconnect - Removing main cover disconnects battery power
- Ambient Suitability 0°C to 45°C Battery Unit; Heads to 55°
- Compact unit requires only two mounting points
- World Voltage 120-277 VAC 50/60Hz input

**Other Features**

- High % of lumens maintained during 90 minute egress cycle

- EBSHK type heads are fully adjustable on unit or remote when ordered with RFSL Factory Sealed mounting kits
- EBSEL type heads are factory sealed on their EZ type mounting boxes
- Heads can be remote mounted over 300' from battery unit
- Ni-Cad sealed batteries provide 90 minutes of illumination
- Integral base unit LED pilot light indicates AC power is present
- Choice of Integral or Remote Push-To-Test station to verify system operation
- Vapor Capsule to inhibit corrosion is standard with main enclosure unit
- Terminal Blocks identified for incoming and outgoing connections

**Compliances**

- UL 1598 Standard for Luminaires
- UL 8750 for LED Lighting
- UL 844 Luminaires for Hazardous Locations
- UL 1203 Explosion-Proof/Dust-Ignition-Proof Electrical Enclosures
- UL 924 Emergency Lighting
- CSA C22.2 no. 137-M1981 Luminaires for Hazardous Locations
- CSA C22.2 no. 30-M1986 C1D1 Enclosures
- CSA 22.2 no. 25-1066 C2D1 EFG Enclosures
- Enclosure Type 4
- NEMA 4, 7B<sup>Ⓢ</sup>CD, 9EFG

**Materials**

- Main Enclosure and Heads Copper Free Aluminum alloy with Baked Powder epoxy/polyester finish, electro statically applied for complete, uniform corrosion protection
- Attachment fittings copper-free aluminum
- External hardware 316 Stainless Steel
- EBSEL reflectors EXIT accessory aluminum with white paint

**Notes**

- Ⓢ Main EBS unit is CID1 Grp B (Suitable Zone 1 IIB+H2) with attached EBSHK heads or no heads; with attached EBSEL heads unit is CID1 Groups CD (Suitable Zone 1 IIB, IIA)
- Ⓢ See VSL Series Photometry Color Graphs; 5000° Kelvin is typical ("sunlight")
- Ⓢ Based on published tungsten/incandescent data EBSEL Heads 300% brighter; EBSHK Heads 500% brighter



**EBS Unit with HK Type Heads and Integral Push-To-Test**

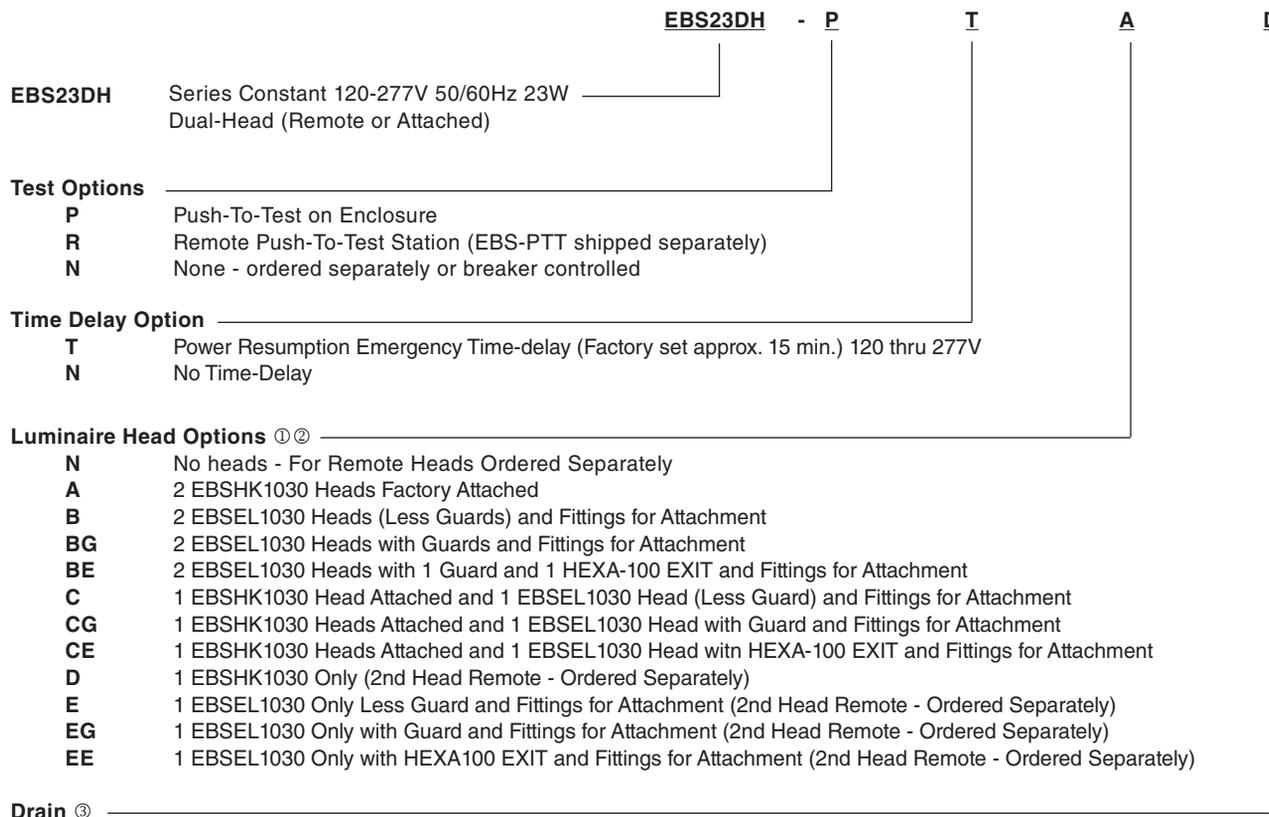


**EBS Unit with EL Type Heads and Integral Push-To-Test**



**EBS Unit with EL Type Head and Exit plus HK Head with remote Push-To-Test**

**Catalog Number Logic**



① Main Enclosure nameplate does not reflect heads ordered; unit is Dual Marked with ratings dependent on heads attached. E.g. if No heads or EBSHK only head(s) attached then unit is C1D1 Groups BCD; if an EBSEL head is attached then unit is Groups CD.

② Units ordered with EBSHK heads are shipped with heads attached; EBSEL heads are shipped separately.

③ Drain packed in enclosure with vapor capsule.

**EBS Unit - Bottom Detail**



**Factory Sealed Remote LED Spot Light - Bottom Feed**



**Factory Sealed Remote LED Spot Light - Side Feed**



**Remote Push-To-Test Station**



**Remote LED Luminaire**



- ① **Optional Push-To-Test**
- ② **Optional Group B Drain**
- ③ **Standard Pilot Light**
- ④ **Entry for Remote P-T-T Station**
- ⑤ **Power Entry (also on top)**

The EBS23 System Requires EXACTLY 2 Heads for operation (total attached or remote); each Head is approximately 30VDC, 10Watts.



**Class I, Div. 1&2, Groups BⓁ,C,D**  
**Class I, Zone 1&2, Groups IIB+H2Ⓛ, IIA**  
**Class II, Div. 1&2, Groups EFG**  
**Class III**  
**Enclosure Type 4 (NEMA 4, 7BⓁ CD, 9EFG)**

File LR11713

**ORDERING INFORMATION**



Integral Push-To-Test		Remote Push-To-Test		
<b>EBS System with Two EBSHK Heads ②③</b>				<b>CID1BCD</b>
Integral PTT, Two EBSHK	Integral PTT, <b>TDR</b> Two EBSHK	Remote PTT, Two EBSHK	Remote PTT, <b>TDR</b> Two EBSHK	
<b>EBS23DH-PNA</b>	<b>EBS23DH-PTA</b>	<b>EBS23DH-RNA</b>	<b>EBS23DH-RTA</b>	



<b>EBS System with Two EBSEL Heads with Guards ②③</b>				<b>CID1CD</b>
Integral PTT, Two EBSEL Heads w/Guards	Integral PTT, <b>TDR</b> , Two EBSEL Heads w/Guards	Remote PTT, Two EBSEL Heads w/Guards	Remote PTT, <b>TDR</b> , Two EBSEL Heads w/Guards	
<b>EBS23DH-PNBG</b>	<b>EBS23DH-PTBG</b>	<b>EBS23DH-RNBG</b>	<b>EBS23DH-RTBG</b>	



<b>EBS System with One EBSHK Head &amp; 1 EBSEL Head with Guard ②③</b>				<b>CID1CD</b>
Integral PTT, One EBSHK & One EBSEL Head w/Guard	Integral PTT, <b>TDR</b> , One EBSHK & One EBSEL Head w/Guard	Remote PTT, One EBSHK & One EBSEL Head w/Guard	Remote PTT, <b>TDR</b> , One EBSHK & One EBSEL Head w/Guard	
<b>EBS23DH-PNCG</b>	<b>EBS23DH-PTCG</b>	<b>EBS23DH-RNCG</b>	<b>EBS23DH-RTCG</b>	



<b>EBS System with Two EBSEL Heads One with EXIT ②③</b>				<b>CID1CD</b>
Integral PTT, Two EBSEL Heads, One w/EXIT, One w/Guard	Integral PTT, <b>TDR</b> , Two EBSEL Heads One w/EXIT, One w/Guard	Remote PTT, Two EBSEL Heads, One w/EXIT, One w/Guard	Remote PTT, Two EBSEL Heads, One w/EXIT, One w/Guard	
<b>EBS23DH-PNBE</b>	<b>EBS23DH-PTBE</b>	<b>EBS23DH-RNBE</b>	<b>EBS23DH-RTBE</b>	



<b>EBS System with One EBSHK Head &amp; One EBSEL Head with EXIT ②③</b>				<b>CID1CD</b>
Integral PTT, One EBSHK Head, One EBSEL w/EXIT	Integral PTT, <b>TDR</b> , One EBSHK Head, One EBSEL w/EXIT	Remote PTT, One EBSHK Head, One EBSEL w/EXIT	Remote PTT, <b>TDR</b> , One EBSHK Head, One EBSEL w/EXIT	
<b>EBS23DH-PNCE</b>	<b>EBS23DH-PTCE</b>	<b>EBS23DH-RNCE</b>	<b>EBS23DH-RTCE</b>	



<b>EBS System Only for Remote Heads (order two separately) ②③</b>				<b>CID1BCD</b>
Integral PTT, No Heads	Integral PTT, <b>TDR</b> , No Heads	Remote PTT, No Heads	Remote PTT, <b>TDR</b> , No Heads	
<b>EBS23DH-PNN</b>	<b>EBS23DH-PTN</b>	<b>EBS23DH-RNN</b>	<b>EBS23DH-RTN</b>	



① Main EBS unit is CID1 Grp B (Suitable Zone 1 IIB+H2) with attached EBSHK heads or no heads; with attached EBSEL heads unit is CID1 Groups CD (Suitable Zone 1 IIB, IIA)  
 ② Use catalog logic for single attached head models and order required remote 2nd head separately. Note, for EXIT applications EBSEL heads must be ordered without guards.  
 ③ PTT = Push-To-Test; **TDR = Time Delay Relay** (prox 15 minutes after power resumption).



EBSSEL Shown with Exit Accessory

EBSSEL1030 Remote Heads with Mount (Factory Sealed)				CID1CD; CIID1EFG	
10W 30VDC	Pendant 3/4" ①	Ceiling 3/4" ①	Wall 3/4" ①	Stanchion 1-1/2" ②	
With Guard	EBSSEL1030A2G	EBSSEL1030X2G	EBSSEL1030B2G	EBSSEL1030D4G	
Without Guard③	EBSSEL1030A2	EBSSEL1030X2	EBSSEL1030B2	EBSSEL1030D4	



EBSSEL1030

EMG1  
EMG1-R

EBSSEL1030 Components & Accessories - Description	Catalog Number
EBSSEL 10W 30V Head Only with LED's, Less Mount and Guard	EBSSEL1030
Guard	EMG1
Red Guard - used to signify remote fixture is for Emergency	EMG1-R③
EXIT Accessory - 3-sided white painted aluminum	HEXA-100③
Dome Reflector	ERSD15
Angle Reflector	ERA15
Sealed Fittings Set for attachment of Pendant EBSSEL to EBS23HD-xxx	EBS-AHFS
Replacement Globe and Support Assembly	EMGS1



ERSD15  
ERA15  
EMGS1



Mounting Boxes				
Pendant	Ceiling	Catalog Number		Hub Size
		Bracket	Stanchion	
EZA2	EZX2	EZB2	-	3/4"
EZA3	EZX3	EZB3	-	1"
-	-	-	EZD4②	1-1/4" / 1-1/2"

- ① For 1" pendant, ceiling and wall hubs, substitute "3" for "2" in catalog number; example: EBSSEL1030A3G.
- ② Stanchion conduit hub size supplied is 1-1/2" with 1-1/2" to 1-1/4" reducer for 1-1/4" mounting.
- ③ Order without guard for use with HEXA-100 EXIT Accessory, or to order EMG1-R Red Guard.
- ④ For EBSSEL with Mount Dimensions, see EMI15 series in lighting section.

EBSHK1030 10W 30V Heads, Components & Accessories		CID1BCD; CIID1EFG
Description	Catalog Number	
EBSHK Head Only with LED's - Requires Field Seal ①	EBSHK1030	
EBSHK Head with ADJUSTABLE FACTORY SEALED "C" fittings set	EBSHK1030-RFSC	
EBSHK Head with ADJUSTABLE FACTORY SEALED "L" fittings set	EBSHK1030-RFSL	
Sealed Fittings Set for attachment of EBSHK to EBS23DH-xxx	EBS-AHFS	

- ① Seal purchased separately appropriate of area of use



EBSHK1030

EBSHK1030-RFSL

EBSHK1030-RFSC

EBS23DH Series Accessories - Description	Catalog Number
Remote Push-To-Test Station Group B 3/4" Feed-Thru w/Close Up Plug ①	EBS-PTT
Remote Push-To-Test Station with Lock Off, Group B 3/4" Feed-Thru ①	EBS-PTT-LO
Lock-Off for Integral Push-To-Test	GO10502
Sealed Fittings Set for attachment of EBSHK to GEBC-2 or GEBL-2	EBS-AHFS
Replacement Battery Pack and Electronics	KLBP01
Replacement Vapor Capsule for corrosion protection	EBS-VC

- ① EBS23DH requires conduit seals (purchased separately) exiting enclosure within 18"; EBS-PTT contains a N.C. contact and is Factory Sealed for C&D and up to 5' for Group B.



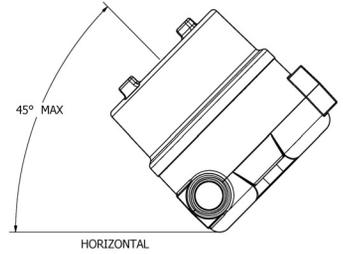
EBS-PTT



EBS23DH Electrical Data						
Catalog Number	Input**			Output**		
	Voltage	Watts	Current	Voltage	Watts	Current
EBS23DH	120-277VAC	7.5	.1 A	33VDC	23	700mA

\*\* Figures nominal. Current is 350mA to each of 2 heads (2 heads are required for proper operation, remote or attached).

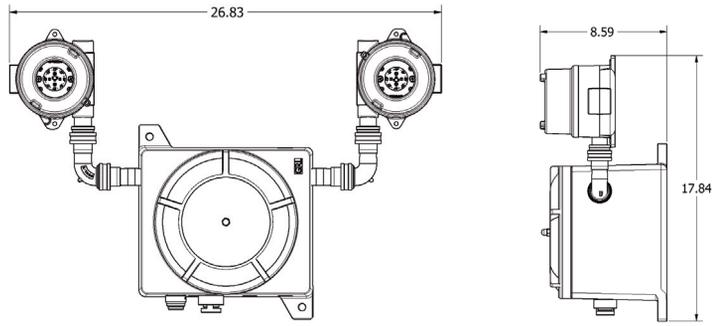
Thermal Performance Data					
Catalog Number	Ambient	CID1	CIID1	Suitability	Supply Wire
EBS23DH	45°C	T6	EFG	0-45°C	75°C
EBSEL1030	55°C	T6	EFG	-40 to 40°C	75°C
EBSHK1030	55°C	T6	EFG	-40 to 40°C	75°C



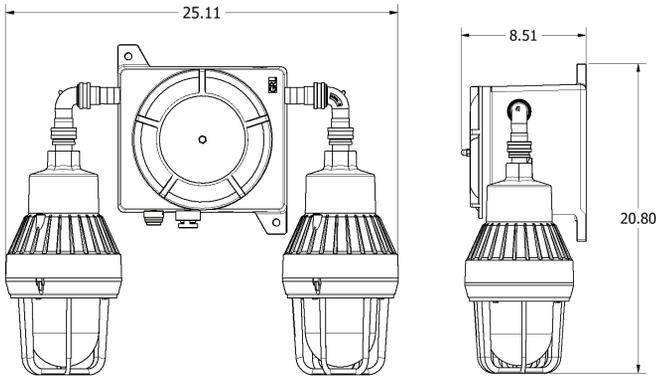
EBSHK Heads can be aimed up to 45 above horizontal - if flush on wall will require spacing out.

Weights (shipping) Individual and Combinations ①	Lbs.
EGS23DH Main Unit Only	36.6
EBSEL1030 Pendant Head Only w/Fittings Set	12.3
EBSHK1030 Head Only w/Fittings Set	5.0
EBSHK1030-RFSC (or RFSL)	11.0
EBS-PTT	3.0
EBS-AHFS Factory Sealed Fittings Set	0.6
EBS23DH & 1 EBSHK w/Fittings	41.6
EBS23DH & 2 EBSHK w/Fittings	46.6
EBS23DH & 1 EBSEL w/Fittings	48.9
EBS23DH & 2 EBSEL w/Fittings	61.2
EBS23DH & 1 EBSEL & 1 EBSHK w/Fittings	53.9

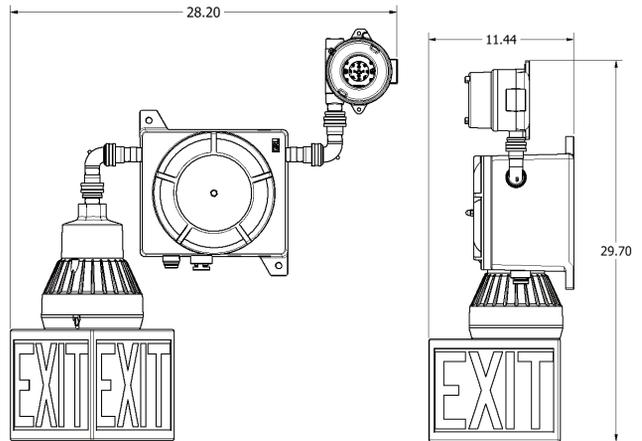
① EBSEL Heads ship separately



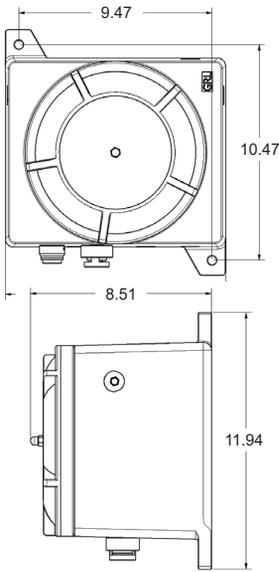
Dimensions - EBS with HK Heads



Dimensions - EBS with EL Heads

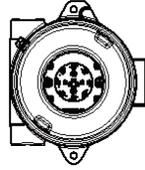


Dimensions - EBS with EL-EXIT & HK Heads



**Dimensions - EBS Main Unit**

**LED 10W EBSHK1030**



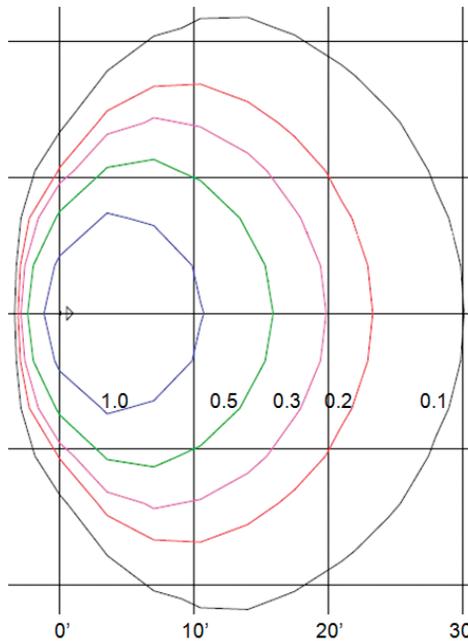
Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0-30	254	N.A.	27.9%
0-40	423	N.A.	46.3%
0-60	781	N.A.	85.5%
0-90	913	N.A.	100.0%
90-120	0	N.A.	0.0%
90-130	0	N.A.	0.0%
90-150	0	N.A.	0.0%
90-180	0	N.A.	0.0%
0-180	<b>913</b>	N.A.	100%

Absolute Photometry  
 Total Luminaire Efficiency = N.A.%  
 Spacing to Mounting Height Ratio 2.1

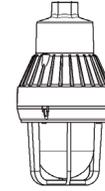
Emergency Mode Lumens			
05 Min.	99.1%	905	Lumens
45 Min.	99.4%	871	Lumens
90 Min.	95.3%	871	Lumens

**Certified Test Report BAL16354.0**



10' MH, 60° Tilt, NEMA 7X7 Pattern  
 Chromaticity Prox 5000°K (CCT)  
 Reference VSL1330 w/Globe Test

**LED 10W EBSEL1030**



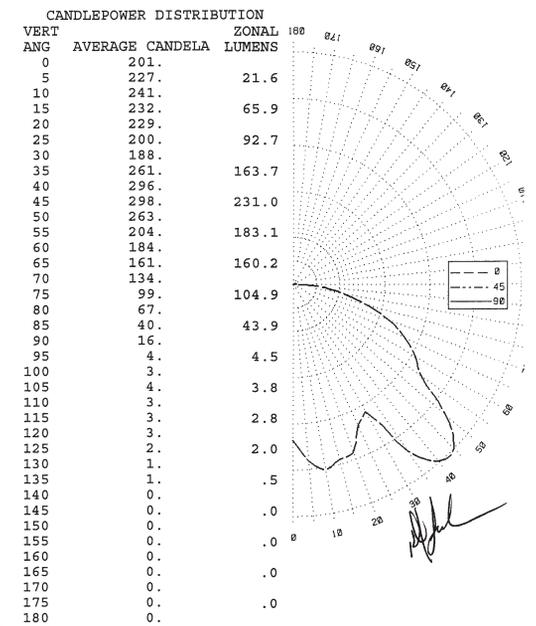
Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0-30	180	N.A.	16.7%
0-40	344	N.A.	31.8%
0-60	758	N.A.	70.1%
0-90	1067	N.A.	98.7%
90-120	11	N.A.	1.0%
90-130	13	N.A.	1.2%
90-150	14	N.A.	1.3%
90-180	14	N.A.	1.3%
0-180	<b>1081</b>	N.A.	100%

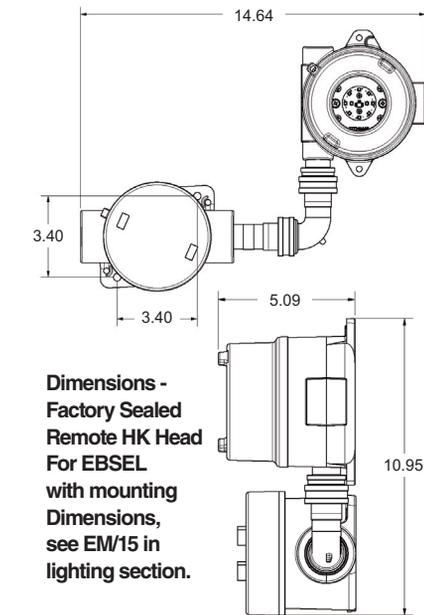
Absolute Photometry  
 Total Luminaire Efficiency = N.A.%  
 Spacing to Mounting Height Ratio 2.1

Emergency Mode Lumens			
05 Min.	94.4%	1021	Lumens
45 Min.	91.3%	987	Lumens
90 Min.	89.3%	966	Lumens

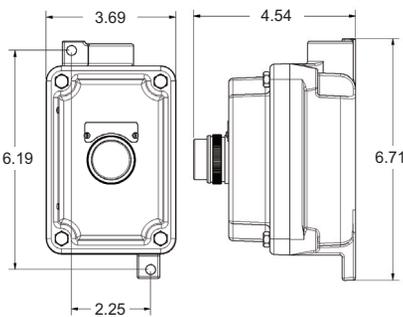
**Certified Test Report BAL16355.0**



Chromaticity Prox 5000°K (CCT)  
 Reference VSL1330 w/Globe Test



**Dimensions - Factory Sealed Remote HK Head For EBSEL with mounting Dimensions, see EM/15 in lighting section.**



**Dimensions - Remote Test Station**



# EMERGENCY LIGHTING FROM KILLARK®

	SERIES	HIGHLIGHTS	SUITABILITY*
	<p><b>EBS</b></p> <p><b>HOSTILE<sup>Lite</sup>® EBS</b></p> <p>EMERGENCY</p>	<ul style="list-style-type: none"> <li>• LED 10W 5000°K Color</li> <li>• Up to 5X's Brighter than comparable units.</li> <li>• EXIT Sign</li> <li>• Remote Mount Options</li> </ul>	<p>Class I, Div. 1&amp;2, Groups B,C,D*                      Class I, Zones 1&amp;2, Groups IIB+H2, IIA                      Class II, Div. 1&amp;2, Groups E,F,G                      Class III                      Enclosure Type 4 (NEMA 4)                      NEMA 7BCD, 9EFG</p>
	<p><b>EBB</b></p> <p><b>HOSTILE<sup>Lite</sup>® EBB</b></p> <p>EMERGENCY</p>	<ul style="list-style-type: none"> <li>• 3 20W MR16 Heads</li> <li>• Individually Aimable</li> <li>• Wall, Ceiling, or Pendant Mounting Options</li> <li>• EXIT Sign Option</li> </ul>	<p>Class I, Div. 1&amp;2, Groups C,D                      Class I, Zones 1&amp;2, Groups IIB, IIA                      Class II, Div. 1&amp;2, Groups E,F,G                      Class III, Div. 1&amp;2                      NEMA 7CD, 9EFG</p>
	<p><b>EEQ</b></p> <p><b>HOSTILE<sup>Lite</sup>® E</b></p> <p>EMERGENCY</p>	<ul style="list-style-type: none"> <li>• 26, 32, 42W CFL</li> <li>• EXIT Sign Option</li> <li>• Wall, Ceiling, or Pendant Mounting Options</li> <li>• 120-277VAC Input</li> </ul>	<p>Class I, Div. 1&amp;2, Groups C,D                      Class I, Zones 1&amp;2, Groups IIB, IIA                      Class II, Div. 1&amp;2, Groups E,F,G                      Class III                      NEMA 3</p>
	<p><b>HFXE</b></p>	<ul style="list-style-type: none"> <li>• 2' and 4' Models</li> <li>• Linear or Biaxial Type</li> <li>• 32W - 60W</li> </ul>	<p>Class I, Div. 1&amp;2, Groups C,D                      Class I, Zones 1&amp;2, Groups IIB, IIA                      Class II, Div. 1&amp;2, Groups E,F,G                      Class III, Div. 1&amp;2                      NEMA 3, 7(C,D) 9(E,F,G)                      Suitable for wet locations</p>
	<p><b>VE3B/VE3Q/DE3B</b></p> <p><b>CERTIF<sup>Lite</sup>® E</b></p> <p>EMERGENCY</p>	<ul style="list-style-type: none"> <li>• 13 - 84W CFL Models</li> <li>• Two battery models</li> <li>• EXIT Sign Option</li> <li>• Many Mounting Options</li> <li>• Competitive adapters</li> </ul>	<p>Class I, Div. 2, Groups A,B,C,D*                      Class I, Zone 2, Groups IIC, IIB, IIA                      Class II, Div. 1&amp;2, Groups E,F,G                      Class III                      NEMA 3, 4, 4X; IP66                      *DE3B Class II wet locations only</p>
	<p><b>NWP</b></p> <p><b>ENVIRO<sup>Rite</sup>® E</b></p> <p>EMERGENCY</p>	<ul style="list-style-type: none"> <li>• Non-Glass Class II rated</li> <li>• Non-metallic corrosion resistant Housing</li> <li>• EXIT Sign Option</li> <li>• 13W-26W CFL</li> </ul>	<p>Class I, Div. 2, Groups A,B,C,D                      Class I, Zone 2, Groups IIC, IIB, IIA                      Class II, Div. 1, Groups F,G                      Class III                      Marine                      NEMA 3, 4, 4X; IP66</p>
	<p><b>LZ2SE</b></p> <p><b>LINEAR<sup>Lite</sup>® E</b></p> <p>*marca registrada MEXICO EMERGENCY</p>	<ul style="list-style-type: none"> <li>• Non-Glass Class II rated</li> <li>• 316 Stainless Housing</li> <li>• 2' and 4' Models</li> <li>• Linear or Biaxial Type</li> <li>• 17W - 60W</li> </ul>	<p>Class I, Div. 2, Groups A,B,C,D                      Class I, Zone 2, Groups IIC, IIB, IIA                      Class II, Div. 1&amp;2, Groups E,F,G                      AEx nAll, Ex nAll                      Wet Locations                      NEMA 4X; IP66, ABS</p>
	<p><b>LZ2NE</b></p> <p><b>LINEAR<sup>Lite</sup>® E</b></p> <p>*marca registrada MEXICO EMERGENCY</p>	<ul style="list-style-type: none"> <li>• Non-Glass Class II rated</li> <li>• Heavy Duty FRP Housing</li> <li>• 2' and 4' Models</li> <li>• Linear or Biaxial Type</li> <li>• 17W - 60W</li> </ul>	<p>Class I, Div. 2, Groups A,B,C,D                      Class I, Zone 2, Groups IIC, IIB, IIA                      Class II, Div. 1&amp;2, Groups F,G                      AEx nAll, Ex nAll                      Wet Locations                      NEMA 4X; IP66, ABS NSF</p>
	<p><b>DBFE</b></p> <p><b>LINEAR<sup>Lite</sup>® E</b></p> <p>*marca registrada MEXICO EMERGENCY</p>	<ul style="list-style-type: none"> <li>• Heavy Duty High Reflectance Painted Steel Housing</li> <li>• Designed to Shed Dust</li> <li>• 32W to 60W</li> </ul>	<p>Class I, Div. 2, Groups A,B,C,D                      Class I, Zone 2, Groups IIC, IIB, IIA                      Class II, Div. 1, Groups F,G                      NEMA 3, 4</p>

\*See catalog data for complete ratings, certifications and series features



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SBES 09-12  
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