

# 5L Luminaires with Induction Lighting System

## VMVIG and DMVIG Series

Cl. I, Div. 2, Groups A, B, C, D  
Cl. I, Zone 2, Group IIC  
Restricted Breathing Suffix  
S826 for Cl. I, Div. 2 & Zone 2

Enclosure Type 4X, IP66  
Wet Locations  
Marine Locations  
UL and cUL Listed

### Get uninterrupted light for up to 11 years, without changing a lamp.

Cooper Crouse-Hinds Champ Luminaire with Induction Light Source delivers up to 100,000 hours of white light in a hazardous location, corrosion-resistant watertight package. That's 5 to 8 times the typical life of conventional fluorescent or HID lamps. And, with no maintenance required for up to 11 years, you'll reduce your maintenance and lamp replacement costs.

#### Compelling reasons to choose the new Champ Induction luminaire as the light source for industrial and hazardous locations include:

- Crisp, white light (80+ color rendering index) provides increased safety by clearly illuminating signs, instrument panels, equipment and more with vibrant natural colors.
- Up to 100,000 hours of lamp life minimizes routine maintenance costs. If you operate this luminaire for 24 hours, 7 days a week, you will not need to change the lamp for up to 11 years!
- Instant illumination — no waiting for lamp warm-up time. Increases productivity and safety.
- Delivers the best possible luminaire temperature rating — T6 (85°C) when used with the Champ restricted breathing option. Ideal for hazardous areas where a low ignition temperature is required.
- Starts in low temperatures — as low as -40°C.

#### Additional Features and Benefits:

The Champ Induction Luminaire is suitable for Class I, Division 2 and Zone 2 areas with the assurance of Cooper Crouse-Hinds quality and reliability. They are ideal for use in hard-to-reach applications and where process requirements demand continuous luminaire operation.

#### Features:

- High lumens per watts (72 lpw for the 165W Champ) will save energy
- Retains strong light output (retains more than 70% output) throughout the life of the lamp
- Will not add electrical noise to the circuits — Total Harmonic Distortion is less than 10%
- Excellent power factor of .96 increases useable watts to an excellent level and reduces energy consumption
- Internal electronics are enclosed to ensure that there is no interference with external instrumentation



**165W Champ Induction provides as much light as a 175W Metal Halide but lasts 7 times longer!**

# Luminaires with Induction Lighting System

## VMVIG and DMVIG Series with Lamps Included

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 Wet Locations  
 Marine Locations  
 UL and cUL Listed

**5L**

### Applications:

Champ Induction Luminaires are ideal:

- Where an extra long life lamp source (up to 100,000 hours) is required.
- In areas that require lamps to reach full illumination immediately.
- Where cool temperature ratings on the luminaire globe are needed to ensure safe operation in hazardous areas.
- In hard-to-reach applications where relamping is costly.
- Where luminaire maintenance is difficult due to continuous process operation requirements that restrict or prohibit shut down except in emergency situations.
- To provide a cost-effective lighting system (low installed/life cost) by minimizing or even eliminating routine luminaire maintenance.
- In cold environment applications.

### Certifications and Compliances:

- NEC & CEC:
  - Class I, Division 2 and Zone 2
  - Class I, Division 2, Groups A, B, C, D
  - Class I, Zone 2, Group IIC
- Restricted Breathing Suffix S826 for Class I, Division 2 and Zone 2
- Marine Locations, Wet Locations, Enclosure Type 3, 3R, 4, 4X; IP66
- UL and cUL Listed / ETL
- UL Standards: 844, 60079-15, 1598, 1598A
- CSA Standards: C22.2 No.137, E79 Series

### Compliances and approvals for the lamp system

- |                          |                      |
|--------------------------|----------------------|
| • RFI < 30 MHz           | EN 55015             |
| • RFI > 30 MHz           | EN 55022             |
| • Harmonics              | EN 61000-3-2         |
| • Immunity               | EN 61547             |
| • Safety                 | EN 61347-2-3 & UL935 |
|                          | EN 60928             |
| • Performance            | EN 60929             |
| • Vibration & bump tests | IEC 68-2-6-Fc        |
|                          | IEC 68-2-29-Eb       |
| • Quality standards      | ISO 9001             |
| • Environmental standard | ISO 14001            |

### Standard Materials:

- Ballast housings and mountings – copper-free aluminum (less than 0.4 of 1%)
- Exterior hardware – stainless steel
- Reflectors (dome and angle) – Krydon fiberglass-reinforced polyester material
- Globes – heat and impact-resistant internally fluted glass
- Guards – copper-free aluminum (55W), stainless steel (85W)

### Standard Finishes:

- Copper-free aluminum – epoxy powder coat
- Krydon® material – high reflectance white
- Stainless steel – natural

### Options:

Description	Suffix
Restricted Breathing Construction Class I, Division 2 & Zone 2 suitability Cooler operating temperatures (T-Codes)	<b>S826</b>
Corrected color temperature lamp - 4000K	<b>S887</b>

### Accessories:

Mounting Modules	Cat. #
¼ NPT Pendant	<b>APM2</b>
1 NPT Pendant	<b>APM3</b>
¼ NPT Flexible Pendant	<b>HPM2</b>
¼ NPT Ceiling Mount	<b>CM2</b>
1 NPT Ceiling Mount	<b>CM3</b>
¼ NPT Wall Mount	<b>TWM2</b>
1 NPT Wall Mount	<b>TWM3</b>
¼ NPT Quad Mount	<b>QM25</b>
1½ NPT Stanchion Mount – 25 Degree Angle	<b>JM5</b>
1½ NPT Stanchion Mount – Straight	<b>PM5</b>

Wattage	Dome Reflector Cat. #	Angle Reflector Cat. #
55W	<b>RD70</b>	<b>RA70</b>
85W	<b>RD739</b>	<b>RA739</b>
165W	<b>RD739</b>	<b>RA739</b>

### Dimensions:

See Section 3L for dimensional information on VMV and DMV Series.

### Amperage:

#### Power consumption for specific voltages

##### 55W Luminaires

- a. 120VAC x .460mA = 55.70 watts
- b. 230VAC x .260mA = 59.80 watts

##### 85W Luminaires

- c. 120VAC x .710mA = 85.20 watts
- d. 230VAC x .400mA = 92.00 watts

##### 165W Luminaires

- e. 120VAC x 1.35 = 162.00 watts
- f. 230VAC x .700mA = 161.00 watts

5L

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### Lamp Data:

	System Power (W)	Lumen (LM)		Efficacy (LM/W)		Color Rendering Index*	Lumen Maintenance After 60,000 Hrs (%)
		Initial	Mean	Initial	Mean		
VMV	55	3500	2800	65	51	80	75
DMV	85	6000	4800	70	57	80	75
DMV	165	12000	9600	72	58	80	70

\*Lamp sources with 80+ CRI provide excellent color rendering. CRI scale is 0-100 with 100 considered as ideal.

### Temperature Performance Data:

Cat. #	Watts	Ambient Temp. °C	Supply Wire Temp. °C	Class I, Div. 2 Temp. Rating	Class II, Div. 1, Class III Temp. Rating	Simultaneous Presence Class I, Div. 2	Restricted Breathing (Suffix S826) Aex nR IIC, Ex nR IIC Class I, Div. 2/Zone 2
VMVIG055	55	40	60	T2C	-	-	T6
VMVIG055	55	55	75	T2C	-	-	T5
DMVIG085	85	40	60	T3	T5	T2D	T6
DMVIG085	85	55	75	T2D	T4A	-	T5
DMVIG165	165	40	75	T3	-	-	T5

Champ Induction DMV 85 watt is now Class II, Div. 1 – suitable for dust environments.

### Ordering Information:

To complete Catalog Number, add Voltage and Option suffix(es).

Mounting Style	Hub Size (Inches)	55W Induction Catalog Number (With G24 Globe & P21 Guard)	85W Induction Catalog Number (With G303 Globe & P33 Guard)	165W Induction Catalog Number (With G303 Globe & P33 Guard)
Pendant	3/4	VMVIG2A055GP	DMVIG2A085GP	DMVIG2A165GP
	1	VMVIG3A055GP	DMVIG3A085GP	DMVIG3A165GP
Flexible Pendant	3/4	VMVIG2HA055GP	DMVIG2HA085GP	DMVIG2HA165GP
Ceiling Mount	3/4	VMVIG2C055GP	DMVIG2C085GP	DMVIG2C165GP
	1	VMVIG3C055GP	DMVIG3C085GP	DMVIG3C165GP
Wall Mount	3/4	VMVIG2TW055GP	DMVIG2TW085GP	DMVIG2TW165GP
	1	VMVIG3TW055GP	DMVIG3TW085GP	DMVIG3TW165GP
Quad Mount	3/4	VMVIG25Q055GP	DMVIG25Q085GP	DMVIG25Q165GP
Stanchion Mount 25° Angle	1 1/2	VMVIGJ055GP	DMVIGJ085GP	DMVIGJ165GP
Stanchion Mount Straight	1 1/2	VMVIGP055GP	DMVIGP085GP	DMVIGP165GP
Luminaire with Globe and Guard less Mounting Module	-	VMVIG055GP	DMVIG085GP	DMVIG165GP

Add the voltage suffix to the above catalog number. Ex. - DMVIG2A085GP/120

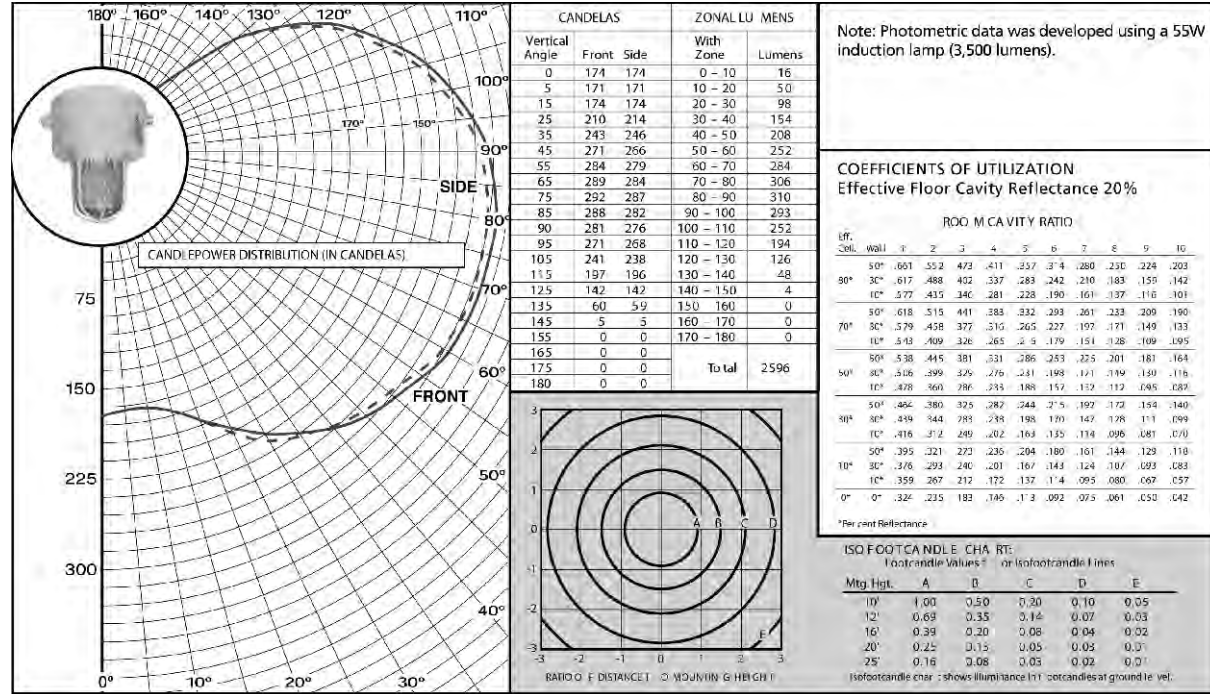
Standard Voltage	Suffix	Range
120V, 50 / 60 Hz	/120	Operative range of 108-132 VAC
200V-277V, 50 / 60 Hz	/200 277	Operates on 208, 220, 230, 240, 277 VAC

# Luminaires with Induction Lighting System

## VMVIG and DMVIG Series

### 55 Watt Induction

Luminaire With Globe And Guard  
**VMVIG055GP LAMP: 55W Induction**



Note: Photometric data was developed using a 55W induction lamp (3,500 lumens).

#### COEFFICIENTS OF UTILIZATION Effective Floor Cavity Reflectance 20%

ROOM CAVITY RATIO											
Eff. Ceff.	Wall	1	2	3	4	5	6	7	8	9	10
90°	50°	.601	.552	.473	.411	.357	.314	.280	.250	.224	.203
90°	30°	.617	.488	.402	.337	.283	.242	.210	.183	.155	.142
90°	10°	.577	.435	.346	.281	.238	.190	.161	.137	.116	.101
70°	50°	.618	.515	.411	.383	.332	.293	.261	.233	.209	.190
70°	30°	.579	.458	.377	.310	.265	.227	.197	.171	.149	.133
70°	10°	.543	.409	.326	.265	.225	.179	.151	.128	.109	.095
50°	50°	.538	.445	.381	.331	.286	.253	.225	.201	.181	.164
50°	30°	.506	.399	.325	.276	.231	.198	.171	.149	.130	.116
50°	10°	.478	.366	.296	.245	.198	.157	.132	.112	.095	.082
30°	50°	.456	.380	.325	.282	.244	.215	.192	.172	.154	.140
30°	30°	.439	.344	.285	.238	.198	.150	.127	.108	.091	.079
30°	10°	.416	.312	.249	.202	.163	.130	.114	.096	.081	.070
10°	50°	.395	.321	.273	.230	.204	.180	.161	.144	.129	.118
10°	30°	.376	.293	.246	.201	.169	.143	.124	.107	.093	.083
10°	10°	.359	.267	.212	.172	.137	.114	.095	.080	.067	.057
0°	0°	.324	.235	.183	.145	.113	.092	.075	.061	.050	.042

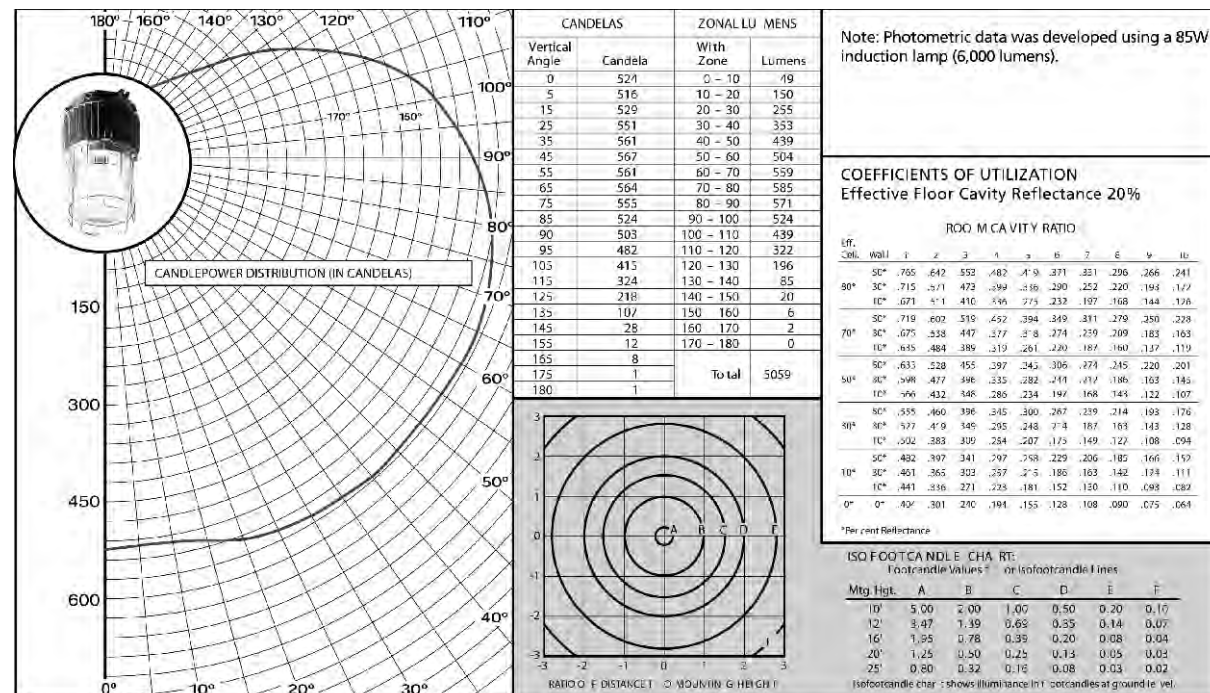
ISO FOOTCANDLE CHART:  
 Footcandle Values \* or Isofootcandle Lines

Mtg. Hgt.	A	B	C	D	E
10'	1.00	0.50	0.20	0.10	0.05
12'	0.69	0.35	0.14	0.07	0.03
16'	0.39	0.20	0.08	0.04	0.02
20'	0.25	0.15	0.05	0.03	0.01
25'	0.16	0.08	0.03	0.02	0.01

\* Isofootcandle char : shows illuminance (1' footcandles at ground level).

### 85 Watt Induction

Luminaire With Globe And Guard  
**DMVIG085GP LAMP: 85W Induction**



Note: Photometric data was developed using a 85W induction lamp (6,000 lumens).

#### COEFFICIENTS OF UTILIZATION Effective Floor Cavity Reflectance 20%

ROOM CAVITY RATIO											
Eff. Ceff.	Wall	1	2	3	4	5	6	7	8	9	10
90°	50°	.765	.642	.553	.482	.419	.371	.331	.296	.266	.241
90°	30°	.715	.571	.472	.399	.336	.290	.252	.220	.194	.172
90°	10°	.671	.511	.416	.346	.295	.233	.187	.168	.144	.128
70°	50°	.719	.602	.516	.452	.394	.349	.311	.279	.250	.228
70°	30°	.675	.538	.447	.377	.318	.274	.239	.209	.185	.165
70°	10°	.635	.484	.389	.319	.261	.220	.187	.160	.137	.119
50°	50°	.633	.528	.455	.397	.345	.305	.274	.245	.220	.201
50°	30°	.598	.477	.396	.335	.282	.241	.211	.186	.163	.145
50°	10°	.566	.432	.348	.285	.234	.192	.168	.145	.122	.107
30°	50°	.555	.460	.396	.345	.300	.267	.239	.214	.193	.176
30°	30°	.527	.419	.349	.295	.248	.214	.187	.163	.143	.128
30°	10°	.502	.383	.309	.254	.207	.173	.149	.127	.108	.094
10°	50°	.482	.397	.341	.297	.258	.229	.206	.185	.166	.152
10°	30°	.461	.365	.303	.257	.215	.185	.163	.142	.124	.111
10°	10°	.441	.336	.271	.223	.181	.152	.130	.110	.098	.082
0°	0°	.427	.301	.240	.194	.155	.128	.108	.090	.075	.064

ISO FOOTCANDLE CHART:  
 Footcandle Values \* or Isofootcandle Lines

Mtg. Hgt.	A	B	C	D	E	F
10'	5.00	2.00	1.00	0.50	0.20	0.10
12'	3.47	1.39	0.69	0.35	0.14	0.07
16'	1.95	0.78	0.39	0.20	0.08	0.04
20'	1.25	0.50	0.25	0.13	0.05	0.03
25'	0.80	0.32	0.16	0.08	0.03	0.02

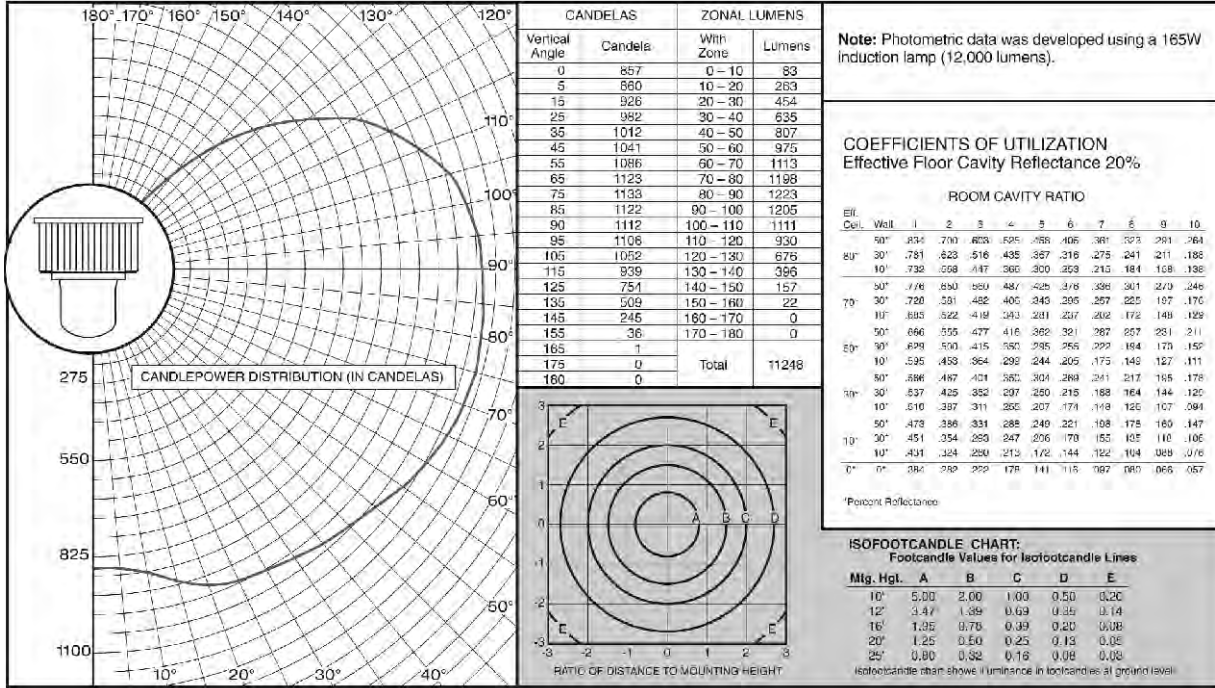
\* Isofootcandle char : shows illuminance (1' footcandles at ground level).

**Photometric Data:** For additional photometric information, see the Resources area of our website. Photometric .ies files for use with our Luxicon Lighting Layout Software are available to download.

### 165 Watt Induction

#### Luminaire With Globe

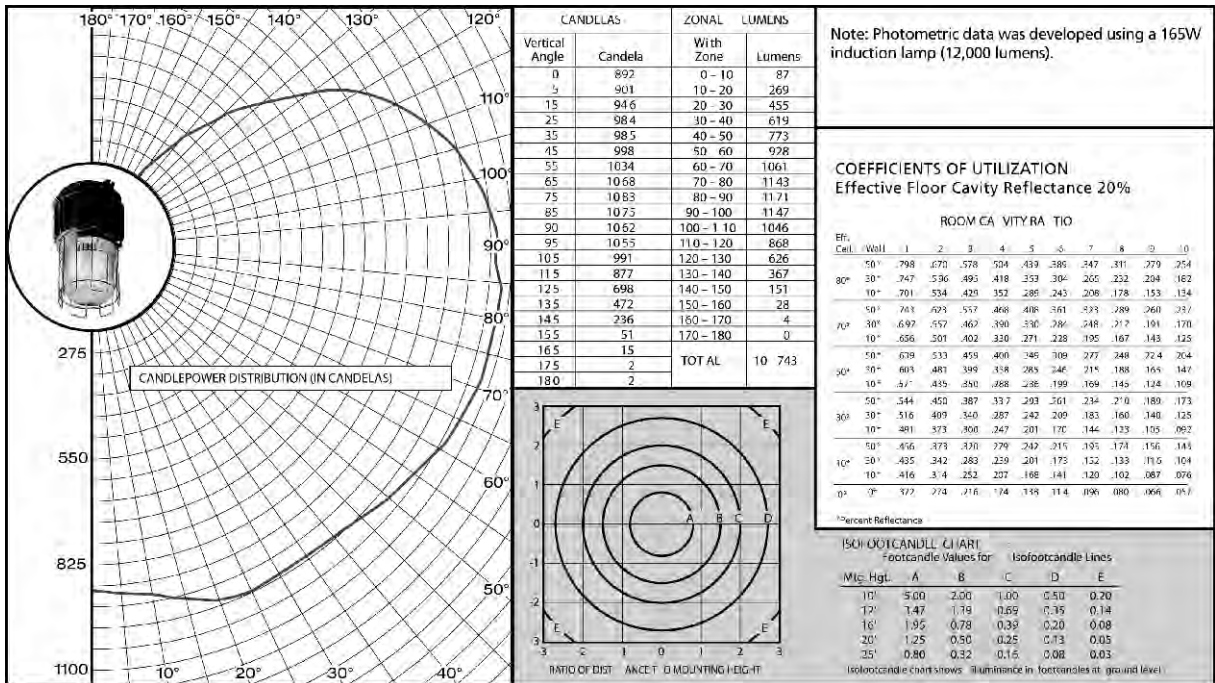
DMVIG165G Lamp: 165W Induction



### 165 Watt Induction

#### Luminaire With Globe And Guard

DMVIG165GP Lamp: 165W Induction



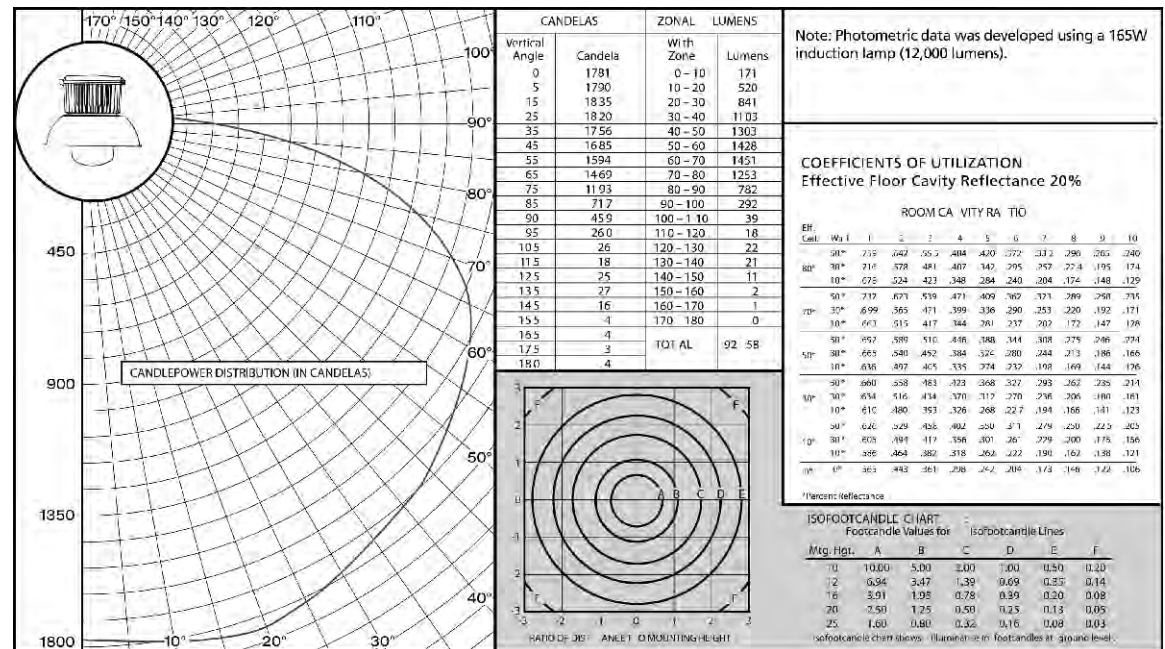
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## VMVIG and DMVIG Series

### 165 Watt Induction

#### Luminaire With Globe And RD739 Dome Reflector

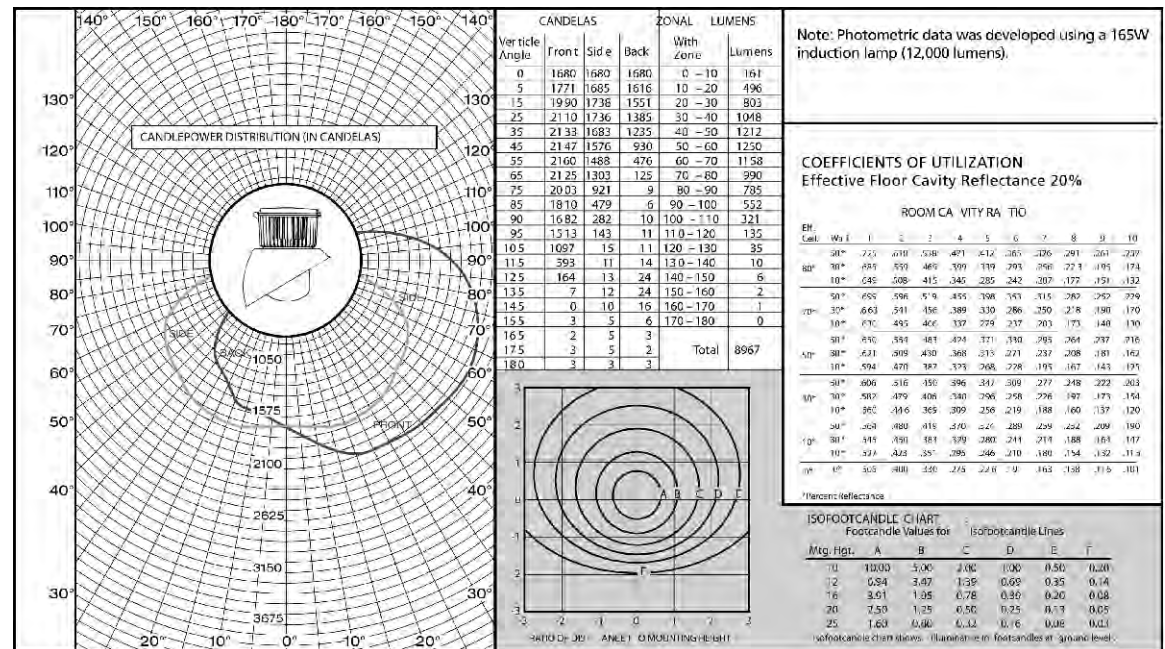
DMVIG165G Lamp: 165W Induction



### 165 Watt Induction

#### Luminaire With Globe And RA739 (30° Angle) Reflector

DMVIG165G Lamp: 165W Induction



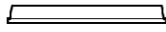
**Photometric Data:** For additional photometric information, see the Resources area of our website. Photometric .ies files for use with our Luxicon Lighting Layout Software are available to download.

## VMVIG and DMVIG Series

**COVERS:**

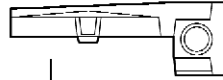
PENDANT

- APM2 3/4 IN.
- APM3 1 IN.
- HPM2 3/4 IN.



WALL

- TWM2 3/4 IN.
- TWM3 1 IN.



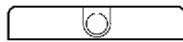
QUAD—MOUNT

- QM25 3/4 IN.



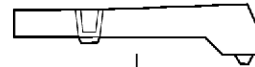
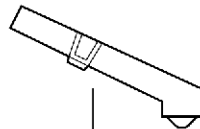
CEILING

- CM2 3/4 IN.
- CM3 1 IN.



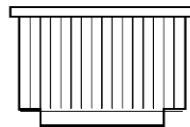
STANCHION

- JM5 1 1/2 IN.
- PM5 1 1/2 IN.



HOUSING

- DMV

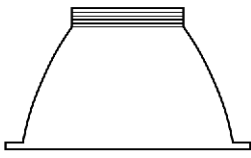


GLOBE

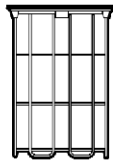
- G303
- G303 S808



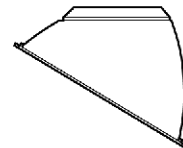
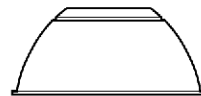
REFLECTOR/LENS  
GRD4



REFRACTOR  
GR302 GR303  
GR305  
PGR302  
PGR305  
PGR303  
GUARD  
P33



REFLECTOR  
RA79 RA739  
RD79 RD739



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### Get uninterrupted light for up to 11 years, without changing a lamp.

Cooper Crouse-Hinds Champ Luminaire with Induction Light Source delivers up to 100,000 hours of white light in a hazardous location, corrosion-resistant watertight package. That's 5 to 8 times the typical life of conventional fluorescent or HID lamps. And, with no maintenance required for up to 11 years, you'll reduce your maintenance and lamp replacement costs.

#### Compelling reasons to choose the new Champ Induction luminaire as the light source for industrial and hazardous locations include:

- Crisp, white light (80+ color rendering index) provides increased safety by clearly illuminating signs, instrument panels, equipment and more with vibrant natural colors.
- Up to 100,000 hours of lamp life minimizes routine maintenance costs. If you operate this luminaire for 24 hours, 7 days a week, you will not need to change the lamp for up to 11 years!
- Instant illumination — no waiting for lamp warm-up time. Increases productivity and safety.
- Delivers the best possible luminaire temperature rating — T6 (85°C) when used with the Champ restricted breathing option. Ideal for hazardous areas where a low ignition temperature is required.
- Starts in low temperatures — as low as -40°C.

#### Additional Features and Benefits:

The Champ Induction Luminaire is suitable for Class I, Division 2 and Zone 2 areas with the assurance of Cooper Crouse-Hinds quality and reliability. They are ideal for use in hard-to-reach applications and where process requirements demand continuous luminaire operation.

#### Features:

- High lumens per watts (72 lpw for the 165W Champ) will save energy
- Retains strong light output (retains more than 70% output) throughout the life of the lamp
- Will not add electrical noise to the circuits — Total Harmonic Distortion is less than 10%
- Excellent power factor of .96 increases useable watts to an excellent level and reduces energy consumption
- Internal electronics are enclosed to ensure that there is no interference with external instrumentation



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### Compliances and approvals for the lamp system

- |                          |                      |
|--------------------------|----------------------|
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| • Vibration & bump tests | IEC 68-2-6-Fc        |
|                          | IEC 68-2-29-Eb       |
| • Quality standards      | ISO 9001             |
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- Exterior hardware – stainless steel
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- Globes – heat and impact-resistant internally fluted glass
- Guards – copper-free aluminum (55W), stainless steel (85W)

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- Copper-free aluminum – epoxy powder coat
- Krydon® material – high reflectance white
- Stainless steel – natural

### Options:

Description	Suffix
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Corrected color temperature lamp - 4000K	<b>S887</b>

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¼ NPT Pendant	<b>APM2</b>
1 NPT Pendant	<b>APM3</b>
¼ NPT Flexible Pendant	<b>HPM2</b>
¼ NPT Ceiling Mount	<b>CM2</b>
1 NPT Ceiling Mount	<b>CM3</b>
¼ NPT Wall Mount	<b>TWM2</b>
1 NPT Wall Mount	<b>TWM3</b>
¼ NPT Quad Mount	<b>QM25</b>
1½ NPT Stanchion Mount – 25 Degree Angle	<b>JM5</b>
1½ NPT Stanchion Mount – Straight	<b>PM5</b>

Wattage	Dome Reflector Cat. #	Angle Reflector Cat. #
55W	<b>RD70</b>	<b>RA70</b>
85W	<b>RD739</b>	<b>RA739</b>
165W	<b>RD739</b>	<b>RA739</b>

### Dimensions:

See Section 3L for dimensional information on VMV and DMV Series.

### Amperage:

#### Power consumption for specific voltages

##### 55W Luminaires

- a. 120VAC x .460mA = 55.70 watts
- b. 230VAC x .260mA = 59.80 watts

##### 85W Luminaires

- c. 120VAC x .710mA = 85.20 watts
- d. 230VAC x .400mA = 92.00 watts

##### 165W Luminaires

- e. 120VAC x 1.35 = 162.00 watts
- f. 230VAC x .700mA = 161.00 watts

5L

# 5L Luminaires with Induction Lighting System

## VMVIG and DMVIG Series

Cl. I, Div. 2, Groups A, B, C, D  
Cl. I, Zone 2, Group IIC  
Restricted Breathing Suffix  
S826 for Cl. I, Div. 2 & Zone 2

Enclosure Type 4X, IP66  
Wet Locations  
Marine Locations  
UL and cUL Listed

### Lamp Data:

	System Power (W)	Lumen (LM)		Efficacy (LM/W)		Color Rendering Index*	Lumen Maintenance After 60,000 Hrs (%)
		Initial	Mean	Initial	Mean		
VMV	55	3500	2800	65	51	80	75
DMV	85	6000	4800	70	57	80	75
DMV	165	12000	9600	72	58	80	70

\*Lamp sources with 80+ CRI provide excellent color rendering. CRI scale is 0-100 with 100 considered as ideal.

### Temperature Performance Data:

Cat. #	Watts	Ambient Temp. °C	Supply Wire Temp. °C	Class I, Div. 2 Temp. Rating	Class II, Div. 1, Class III Temp. Rating	Simultaneous Presence Class I, Div. 2	Restricted Breathing (Suffix S826) Aex nR IIC, Ex nR IIC Class I, Div. 2/Zone 2
VMVIG055	55	40	60	T2C	-	-	T6
VMVIG055	55	55	75	T2C	-	-	T5
DMVIG085	85	40	60	T3	T5	T2D	T6
DMVIG085	85	55	75	T2D	T4A	-	T5
DMVIG165	165	40	75	T3	-	-	T5

Champ Induction DMV 85 watt is now Class II, Div. 1 – suitable for dust environments.

### Ordering Information:

To complete Catalog Number, add Voltage and Option suffix(es).

Mounting Style	Hub Size (Inches)	55W Induction Catalog Number (With G24 Globe & P21 Guard)	85W Induction Catalog Number (With G303 Globe & P33 Guard)	165W Induction Catalog Number (With G303 Globe & P33 Guard)
Pendant	3/4	VMVIG2A055GP	DMVIG2A085GP	DMVIG2A165GP
	1	VMVIG3A055GP	DMVIG3A085GP	DMVIG3A165GP
Flexible Pendant	3/4	VMVIG2HA055GP	DMVIG2HA085GP	DMVIG2HA165GP
Ceiling Mount	3/4	VMVIG2C055GP	DMVIG2C085GP	DMVIG2C165GP
	1	VMVIG3C055GP	DMVIG3C085GP	DMVIG3C165GP
Wall Mount	3/4	VMVIG2TW055GP	DMVIG2TW085GP	DMVIG2TW165GP
	1	VMVIG3TW055GP	DMVIG3TW085GP	DMVIG3TW165GP
Quad Mount	3/4	VMVIG25Q055GP	DMVIG25Q085GP	DMVIG25Q165GP
Stanchion Mount 25° Angle	1 1/2	VMVIGJ055GP	DMVIGJ085GP	DMVIGJ165GP
Stanchion Mount Straight	1 1/2	VMVIGP055GP	DMVIGP085GP	DMVIGP165GP
Luminaire with Globe and Guard less Mounting Module	-	VMVIG055GP	DMVIG085GP	DMVIG165GP

Add the voltage suffix to the above catalog number. Ex. - DMVIG2A085GP/120

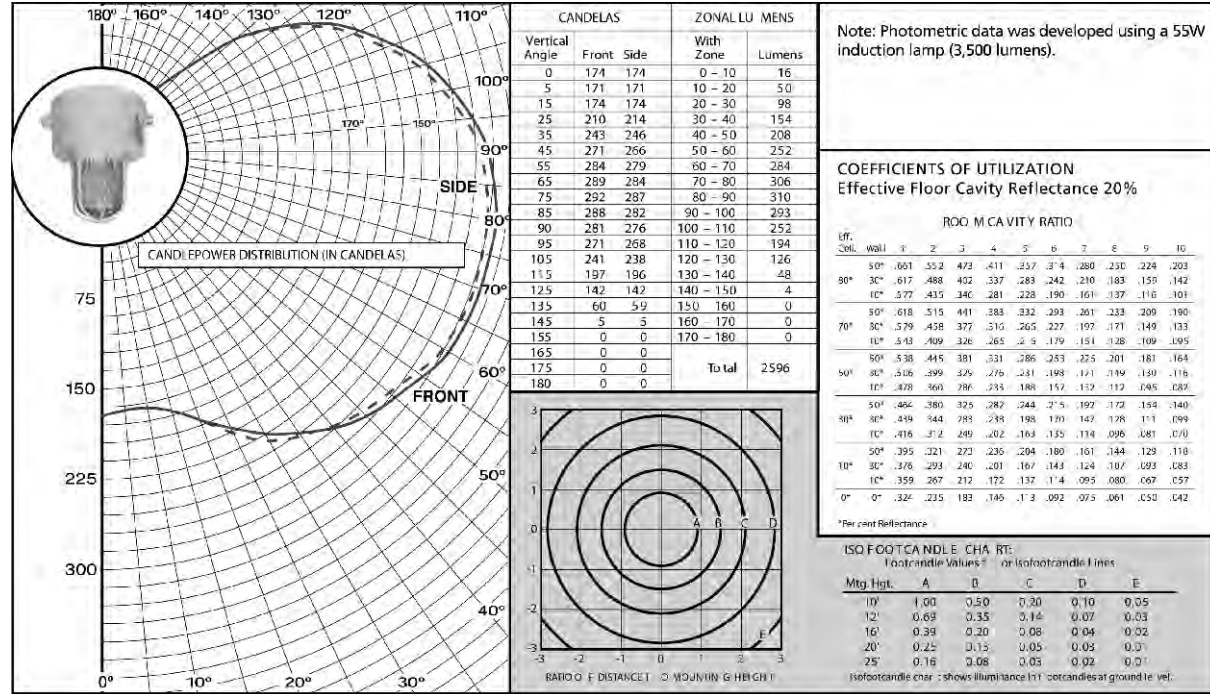
Standard Voltage	Suffix	Range
120V, 50 / 60 Hz	/120	Operative range of 108-132 VAC
200V-277V, 50 / 60 Hz	/200 277	Operates on 208, 220, 230, 240, 277 VAC

# Luminaires with Induction Lighting System

## VMVIG and DMVIG Series

### 55 Watt Induction

Luminaire With Globe And Guard  
**VMVIG055GP LAMP: 55W Induction**



Note: Photometric data was developed using a 55W induction lamp (3,500 lumens).

#### COEFFICIENTS OF UTILIZATION Effective Floor Cavity Reflectance 20%

ROOM CAVITY RATIO											
Eff. Ceff.	Wall	1	2	3	4	5	6	7	8	9	10
90°	50°	.601	.552	.473	.411	.357	.314	.280	.250	.224	.203
90°	30°	.617	.488	.402	.337	.283	.242	.210	.183	.155	.142
90°	10°	.577	.435	.346	.281	.238	.190	.161	.137	.116	.101
70°	50°	.618	.515	.411	.383	.332	.293	.261	.233	.209	.190
70°	30°	.579	.458	.377	.310	.265	.227	.197	.171	.149	.133
70°	10°	.543	.409	.326	.265	.225	.179	.151	.128	.109	.095
50°	50°	.538	.445	.381	.331	.286	.253	.225	.201	.181	.164
50°	30°	.506	.399	.325	.276	.231	.198	.171	.149	.130	.116
50°	10°	.478	.366	.296	.245	.198	.157	.132	.112	.095	.082
30°	50°	.456	.360	.325	.282	.244	.215	.192	.172	.154	.140
30°	30°	.439	.344	.285	.238	.198	.150	.127	.108	.091	.079
30°	10°	.416	.312	.249	.202	.163	.130	.114	.096	.081	.070
10°	50°	.395	.321	.273	.230	.204	.180	.161	.144	.129	.118
10°	30°	.376	.293	.246	.201	.169	.143	.124	.107	.093	.083
10°	10°	.359	.267	.212	.172	.137	.114	.095	.080	.067	.057
0°	0°	.324	.235	.183	.145	.113	.092	.075	.061	.050	.042

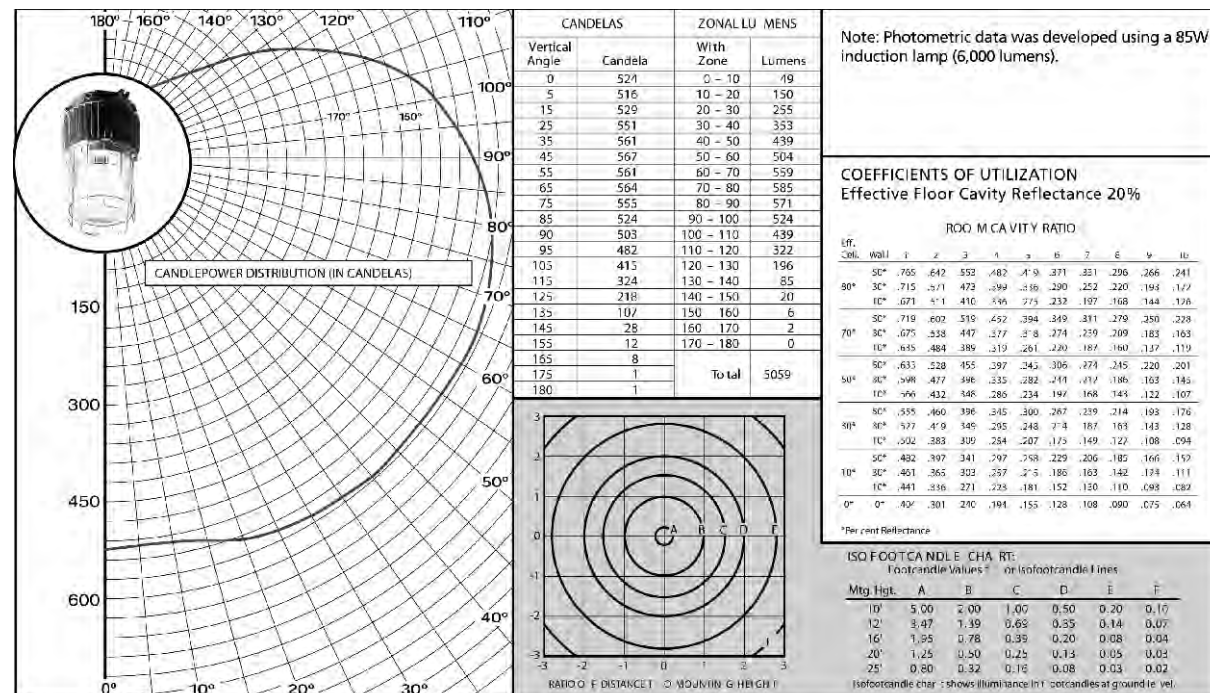
ISO FOOTCANDLE CHART:  
 Footcandle Values \* or Isofootcandle Lines

Mtg. Hgt.	A	B	C	D	E
10'	1.00	0.50	0.20	0.10	0.05
12'	0.69	0.35	0.14	0.07	0.03
16'	0.39	0.20	0.08	0.04	0.02
20'	0.25	0.15	0.05	0.03	0.01
25'	0.16	0.08	0.03	0.02	0.01

\* Isofootcandle char : shows illuminance (1") footcandles at ground level.

### 85 Watt Induction

Luminaire With Globe And Guard  
**DMVIG085GP LAMP: 85W Induction**



Note: Photometric data was developed using a 85W induction lamp (6,000 lumens).

#### COEFFICIENTS OF UTILIZATION Effective Floor Cavity Reflectance 20%

ROOM CAVITY RATIO											
Eff. Ceff.	Wall	1	2	3	4	5	6	7	8	9	10
90°	50°	.765	.642	.553	.482	.419	.371	.331	.296	.266	.241
90°	30°	.715	.571	.472	.399	.336	.290	.252	.220	.194	.172
90°	10°	.671	.511	.416	.346	.295	.253	.217	.188	.164	.144
70°	50°	.719	.602	.516	.452	.394	.349	.311	.279	.250	.228
70°	30°	.675	.538	.447	.377	.318	.274	.239	.209	.185	.165
70°	10°	.635	.484	.389	.319	.261	.220	.187	.160	.137	.119
50°	50°	.633	.528	.455	.397	.345	.305	.274	.245	.220	.201
50°	30°	.598	.477	.396	.335	.282	.241	.211	.186	.163	.145
50°	10°	.566	.432	.348	.285	.234	.192	.168	.145	.122	.107
30°	50°	.555	.460	.396	.345	.300	.267	.239	.214	.193	.176
30°	30°	.527	.419	.349	.295	.248	.214	.187	.163	.143	.128
30°	10°	.502	.383	.309	.254	.207	.173	.149	.127	.108	.094
10°	50°	.482	.397	.341	.297	.258	.229	.206	.185	.166	.152
10°	30°	.461	.365	.303	.257	.215	.185	.163	.142	.124	.111
10°	10°	.441	.336	.271	.223	.181	.152	.130	.110	.098	.082
0°	0°	.427	.301	.240	.194	.155	.128	.108	.090	.075	.064

ISO FOOTCANDLE CHART:  
 Footcandle Values \* or Isofootcandle Lines

Mtg. Hgt.	A	B	C	D	E	F
10'	5.00	2.00	1.00	0.50	0.20	0.10
12'	3.47	1.39	0.69	0.35	0.14	0.07
16'	1.95	0.78	0.39	0.20	0.08	0.04
20'	1.25	0.50	0.25	0.13	0.05	0.03
25'	0.80	0.32	0.16	0.08	0.03	0.02

\* Isofootcandle char : shows illuminance (1") footcandles at ground level.

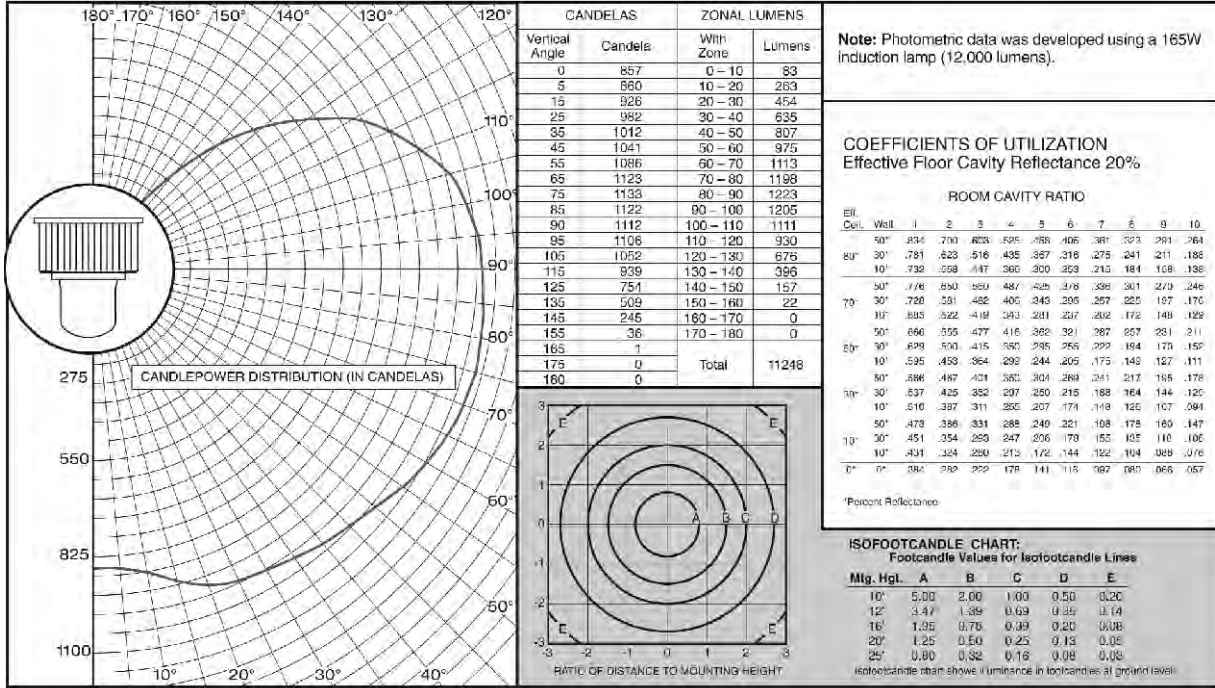
**Photometric Data:** For additional photometric information, see the Resources area of our website. Photometric .ies files for use with our Luxicon Lighting Layout Software are available to download.

## VMVIG and DMVIG Series

### 165 Watt Induction

#### Luminaire With Globe

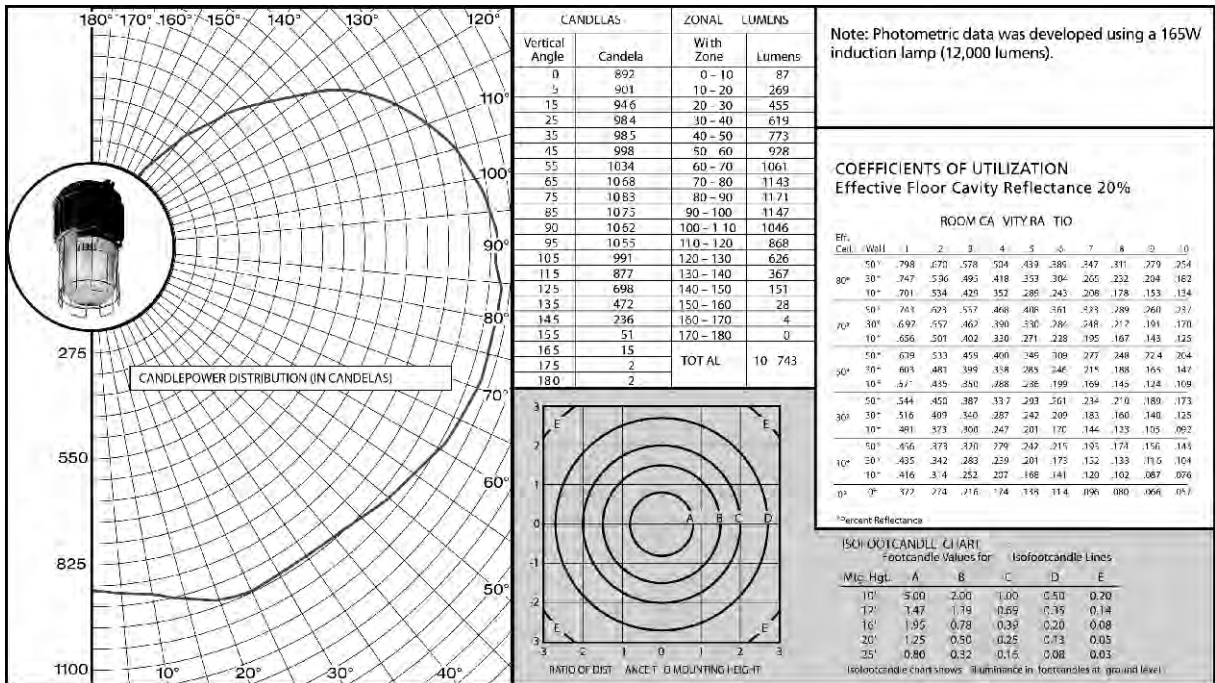
DMVIG165G Lamp: 165W Induction



### 165 Watt Induction

#### Luminaire With Globe And Guard

DMVIG165GP Lamp: 165W Induction



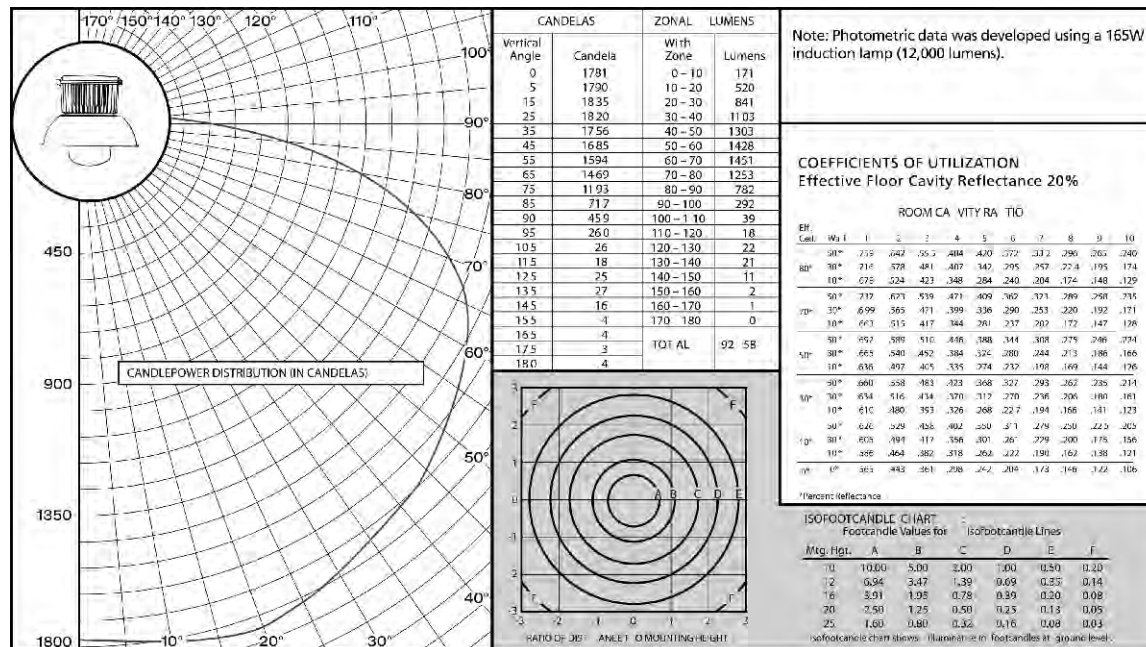
**Photometric Data:** For additional photometric information, see the Resources area of our website. Photometric .ies files for use with our Luxicon Lighting Layout Software are available to download.

## VMVIG and DMVIG Series

### 165 Watt Induction

#### Luminaire With Globe And RD739 Dome Reflector

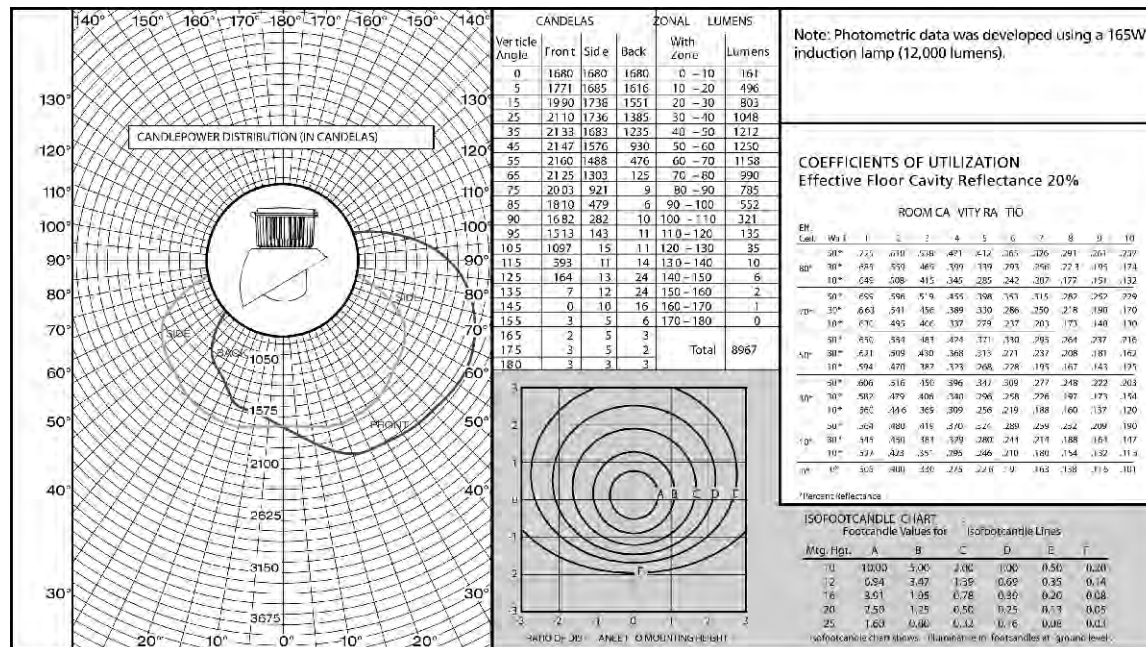
DMVIG165G Lamp: 165W Induction



### 165 Watt Induction

#### Luminaire With Globe And RA739 (30° Angle) Reflector

DMVIG165G Lamp: 165W Induction



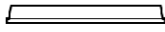
**Photometric Data:** For additional photometric information, see the Resources area of our website. Photometric .ies files for use with our Luxicon Lighting Layout Software are available to download.

## VMVIG and DMVIG Series

**COVERS:**

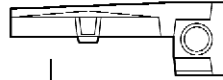
PENDANT

APM2 3/4 IN.  
APM3 1 IN.  
HPM2 3/4 IN.



WALL

TWM2 3/4 IN.  
TWM3 1 IN.



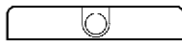
QUAD—MOUNT

QM25 3/4 IN.



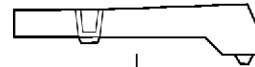
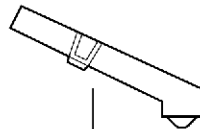
CEILING

CM2 3/4 IN.  
CM3 1 IN.



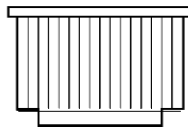
STANCHION

JM5 1 1/2 IN.      PM5 1 1/2 IN.



HOUSING

DMV

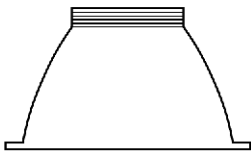


GLOBE

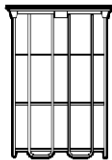
G303  
G303 S808



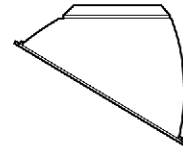
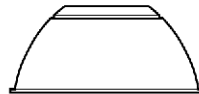
REFLECTOR/LENS  
GRD4



REFRACTOR  
GR302 GR303  
GR305  
PGR302  
PGR305  
PGR303  
GUARD  
P33



REFLECTOR  
RA79 RA739  
RD79 RD739



# 5L Luminaires with Induction Lighting System

## VMVIG and DMVIG Series

Cl. I, Div. 2, Groups A, B, C, D  
Cl. I, Zone 2, Group IIC  
Restricted Breathing Suffix  
S826 for Cl. I, Div. 2 & Zone 2

Enclosure Type 4X, IP66  
Wet Locations  
Marine Locations  
UL and cUL Listed

### Get uninterrupted light for up to 11 years, without changing a lamp.

Cooper Crouse-Hinds Champ Luminaire with Induction Light Source delivers up to 100,000 hours of white light in a hazardous location, corrosion-resistant watertight package. That's 5 to 8 times the typical life of conventional fluorescent or HID lamps. And, with no maintenance required for up to 11 years, you'll reduce your maintenance and lamp replacement costs.

#### Compelling reasons to choose the new Champ Induction luminaire as the light source for industrial and hazardous locations include:

- Crisp, white light (80+ color rendering index) provides increased safety by clearly illuminating signs, instrument panels, equipment and more with vibrant natural colors.
- Up to 100,000 hours of lamp life minimizes routine maintenance costs. If you operate this luminaire for 24 hours, 7 days a week, you will not need to change the lamp for up to 11 years!
- Instant illumination — no waiting for lamp warm-up time. Increases productivity and safety.
- Delivers the best possible luminaire temperature rating — T6 (85°C) when used with the Champ restricted breathing option. Ideal for hazardous areas where a low ignition temperature is required.
- Starts in low temperatures — as low as -40°C.

#### Additional Features and Benefits:

The Champ Induction Luminaire is suitable for Class I, Division 2 and Zone 2 areas with the assurance of Cooper Crouse-Hinds quality and reliability. They are ideal for use in hard-to-reach applications and where process requirements demand continuous luminaire operation.

#### Features:

- High lumens per watts (72 lpw for the 165W Champ) will save energy
- Retains strong light output (retains more than 70% output) throughout the life of the lamp
- Will not add electrical noise to the circuits — Total Harmonic Distortion is less than 10%
- Excellent power factor of .96 increases useable watts to an excellent level and reduces energy consumption
- Internal electronics are enclosed to ensure that there is no interference with external instrumentation



**165W Champ Induction provides as much light as a 175W Metal Halide but lasts 7 times longer!**

# Luminaires with Induction Lighting System

## VMVIG and DMVIG Series with Lamps Included

Cl. I, Div. 2, Groups A, B, C, D  
 Cl. I, Zone 2, Group IIC  
 Restricted Breathing Suffix  
 S826 for Cl. I, Div. 2 & Zone 2

Enclosure Type 4X, IP66  
 Wet Locations  
 Marine Locations  
 UL and cUL Listed

**5L**

### Applications:

Champ Induction Luminaires are ideal:

- Where an extra long life lamp source (up to 100,000 hours) is required.
- In areas that require lamps to reach full illumination immediately.
- Where cool temperature ratings on the luminaire globe are needed to ensure safe operation in hazardous areas.
- In hard-to-reach applications where relamping is costly.
- Where luminaire maintenance is difficult due to continuous process operation requirements that restrict or prohibit shut down except in emergency situations.
- To provide a cost-effective lighting system (low installed/life cost) by minimizing or even eliminating routine luminaire maintenance.
- In cold environment applications.

### Certifications and Compliances:

- NEC & CEC:
  - Class I, Division 2 and Zone 2
  - Class I, Division 2, Groups A, B, C, D
  - Class I, Zone 2, Group IIC
- Restricted Breathing Suffix S826 for Class I, Division 2 and Zone 2
- Marine Locations, Wet Locations, Enclosure Type 3, 3R, 4, 4X; IP66
- UL and cUL Listed / ETL
- UL Standards: 844, 60079-15, 1598, 1598A
- CSA Standards: C22.2 No.137, E79 Series

### Compliances and approvals for the lamp system

- |                          |                      |
|--------------------------|----------------------|
| • RFI < 30 MHz           | EN 55015             |
| • RFI > 30 MHz           | EN 55022             |
| • Harmonics              | EN 61000-3-2         |
| • Immunity               | EN 61547             |
| • Safety                 | EN 61347-2-3 & UL935 |
|                          | EN 60928             |
| • Performance            | EN 60929             |
| • Vibration & bump tests | IEC 68-2-6-Fc        |
|                          | IEC 68-2-29-Eb       |
| • Quality standards      | ISO 9001             |
| • Environmental standard | ISO 14001            |

### Standard Materials:

- Ballast housings and mountings – copper-free aluminum (less than 0.4 of 1%)
- Exterior hardware – stainless steel
- Reflectors (dome and angle) – Krydon fiberglass-reinforced polyester material
- Globes – heat and impact-resistant internally fluted glass
- Guards – copper-free aluminum (55W), stainless steel (85W)

### Standard Finishes:

- Copper-free aluminum – epoxy powder coat
- Krydon® material – high reflectance white
- Stainless steel – natural

### Options:

Description	Suffix
Restricted Breathing Construction Class I, Division 2 & Zone 2 suitability Cooler operating temperatures (T-Codes)	<b>S826</b>
Corrected color temperature lamp - 4000K	<b>S887</b>

### Accessories:

Mounting Modules	Cat. #
¼ NPT Pendant	<b>APM2</b>
1 NPT Pendant	<b>APM3</b>
¼ NPT Flexible Pendant	<b>HPM2</b>
¼ NPT Ceiling Mount	<b>CM2</b>
1 NPT Ceiling Mount	<b>CM3</b>
¼ NPT Wall Mount	<b>TWM2</b>
1 NPT Wall Mount	<b>TWM3</b>
¼ NPT Quad Mount	<b>QM25</b>
1½ NPT Stanchion Mount – 25 Degree Angle	<b>JM5</b>
1½ NPT Stanchion Mount – Straight	<b>PM5</b>

Wattage	Dome Reflector Cat. #	Angle Reflector Cat. #
55W	<b>RD70</b>	<b>RA70</b>
85W	<b>RD739</b>	<b>RA739</b>
165W	<b>RD739</b>	<b>RA739</b>

### Dimensions:

See Section 3L for dimensional information on VMV and DMV Series.

### Amperage:

#### Power consumption for specific voltages

#### 55W Luminaires

- a. 120VAC x .460mA = 55.70 watts
- b. 230VAC x .260mA = 59.80 watts

#### 85W Luminaires

- c. 120VAC x .710mA = 85.20 watts
- d. 230VAC x .400mA = 92.00 watts

#### 165W Luminaires

- e. 120VAC x 1.35 = 162.00 watts
- f. 230VAC x .700mA = 161.00 watts

5L



# 5L Luminaires with Induction Lighting System

## VMVIG and DMVIG Series

Cl. I, Div. 2, Groups A, B, C, D  
Cl. I, Zone 2, Group IIC  
Restricted Breathing Suffix  
S826 for Cl. I, Div. 2 & Zone 2

Enclosure Type 4X, IP66  
Wet Locations  
Marine Locations  
UL and cUL Listed

### Lamp Data:

	System Power (W)	Lumen (LM)		Efficacy (LM/W)		Color Rendering Index*	Lumen Maintenance After 60,000 Hrs (%)
		Initial	Mean	Initial	Mean		
VMV	55	3500	2800	65	51	80	75
DMV	85	6000	4800	70	57	80	75
DMV	165	12000	9600	72	58	80	70

\*Lamp sources with 80+ CRI provide excellent color rendering. CRI scale is 0-100 with 100 considered as ideal.

### Temperature Performance Data:

Cat. #	Watts	Ambient Temp. °C	Supply Wire Temp. °C	Class I, Div. 2 Temp. Rating	Class II, Div. 1, Class III Temp. Rating	Simultaneous Presence Class I, Div. 2	Restricted Breathing (Suffix S826) Aex nR IIC, Ex nR IIC Class I, Div. 2/Zone 2
VMVIG055	55	40	60	T2C	-	-	T6
VMVIG055	55	55	75	T2C	-	-	T5
DMVIG085	85	40	60	T3	T5	T2D	T6
DMVIG085	85	55	75	T2D	T4A	-	T5
DMVIG165	165	40	75	T3	-	-	T5

Champ Induction DMV 85 watt is now Class II, Div. 1 – suitable for dust environments.

### Ordering Information:

To complete Catalog Number, add Voltage and Option suffix(es).

Mounting Style	Hub Size (Inches)	55W Induction Catalog Number (With G24 Globe & P21 Guard)	85W Induction Catalog Number (With G303 Globe & P33 Guard)	165W Induction Catalog Number (With G303 Globe & P33 Guard)
Pendant	3/4	VMVIG2A055GP	DMVIG2A085GP	DMVIG2A165GP
	1	VMVIG3A055GP	DMVIG3A085GP	DMVIG3A165GP
Flexible Pendant	3/4	VMVIG2HA055GP	DMVIG2HA085GP	DMVIG2HA165GP
Ceiling Mount	3/4	VMVIG2C055GP	DMVIG2C085GP	DMVIG2C165GP
	1	VMVIG3C055GP	DMVIG3C085GP	DMVIG3C165GP
Wall Mount	3/4	VMVIG2TW055GP	DMVIG2TW085GP	DMVIG2TW165GP
	1	VMVIG3TW055GP	DMVIG3TW085GP	DMVIG3TW165GP
Quad Mount	3/4	VMVIG25Q055GP	DMVIG25Q085GP	DMVIG25Q165GP
Stanchion Mount 25° Angle	1 1/2	VMVIGJ055GP	DMVIGJ085GP	DMVIGJ165GP
Stanchion Mount Straight	1 1/2	VMVIGP055GP	DMVIGP085GP	DMVIGP165GP
Luminaire with Globe and Guard less Mounting Module	-	VMVIG055GP	DMVIG085GP	DMVIG165GP

Add the voltage suffix to the above catalog number. Ex. - DMVIG2A085GP/120

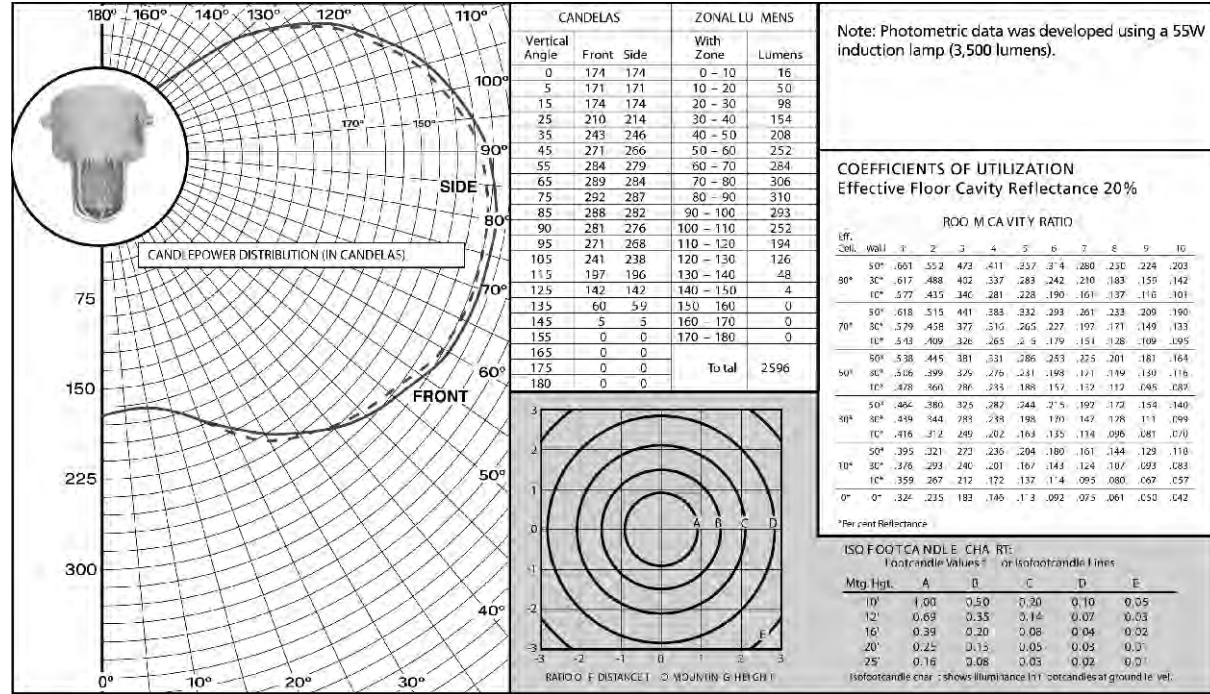
Standard Voltage	Suffix	Range
120V, 50 / 60 Hz	/120	Operative range of 108-132 VAC
200V-277V, 50 / 60 Hz	/200 277	Operates on 208, 220, 230, 240, 277 VAC

# Luminaires with Induction Lighting System

## VMVIG and DMVIG Series

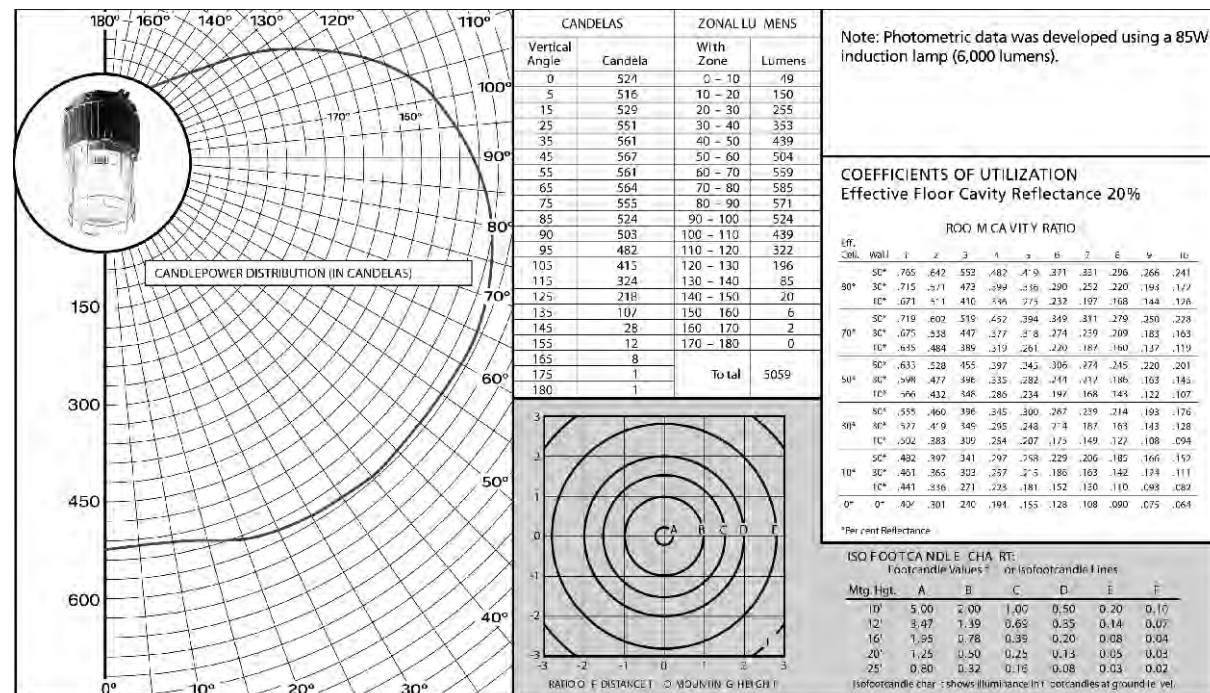
### 55 Watt Induction

Luminaire With Globe And Guard  
VMVIG055GP LAMP: 55W Induction



### 85 Watt Induction

Luminaire With Globe And Guard  
DMVIG085GP LAMP: 85W Induction

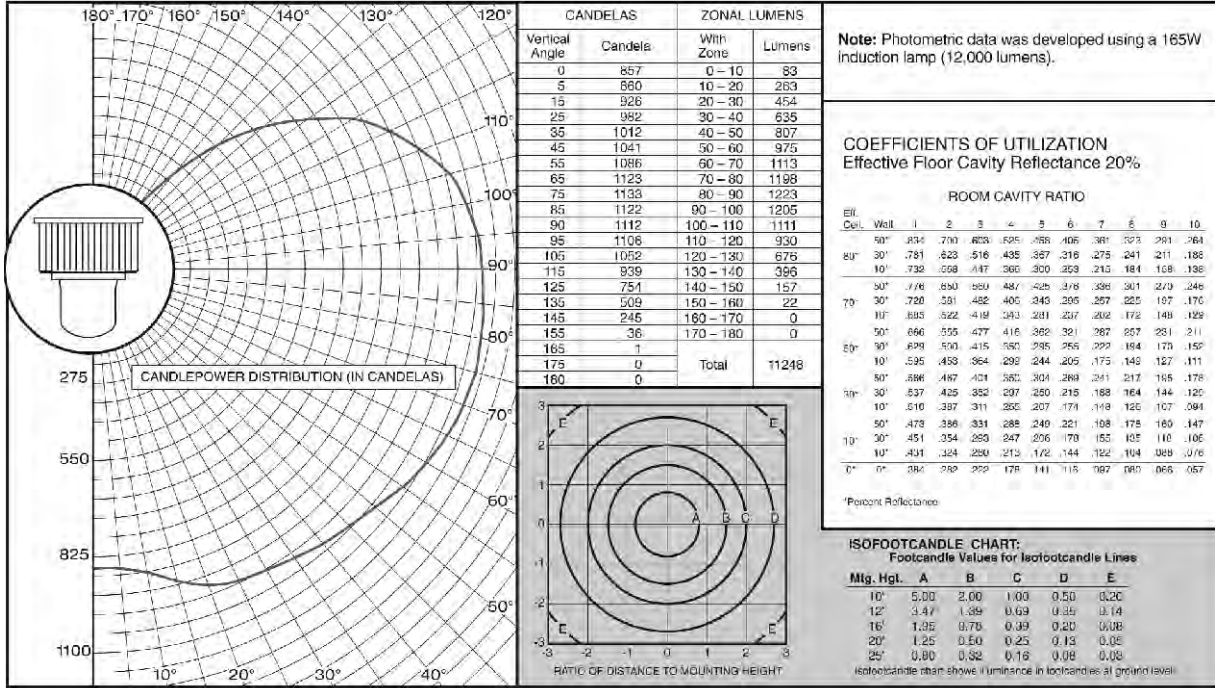


**Photometric Data:** For additional photometric information, see the Resources area of our website. Photometric .ies files for use with our Luxicon Lighting Layout Software are available to download.

### 165 Watt Induction

#### Luminaire With Globe

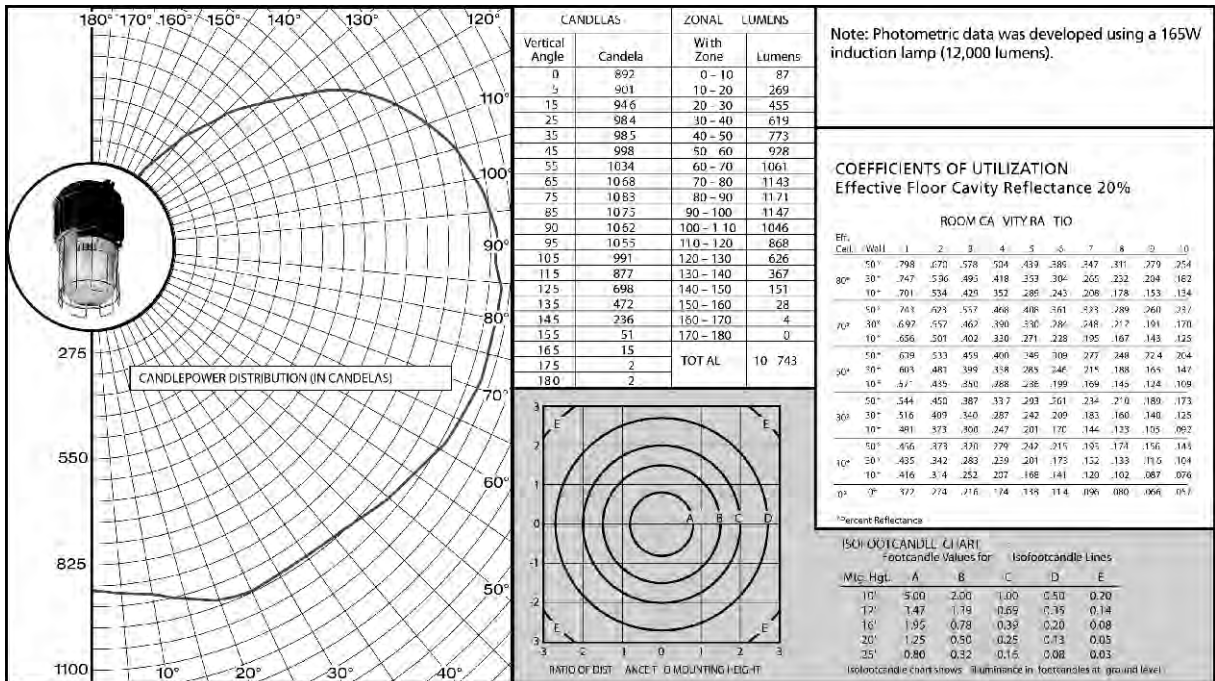
DMVIG165G Lamp: 165W Induction



### 165 Watt Induction

#### Luminaire With Globe And Guard

DMVIG165GP Lamp: 165W Induction



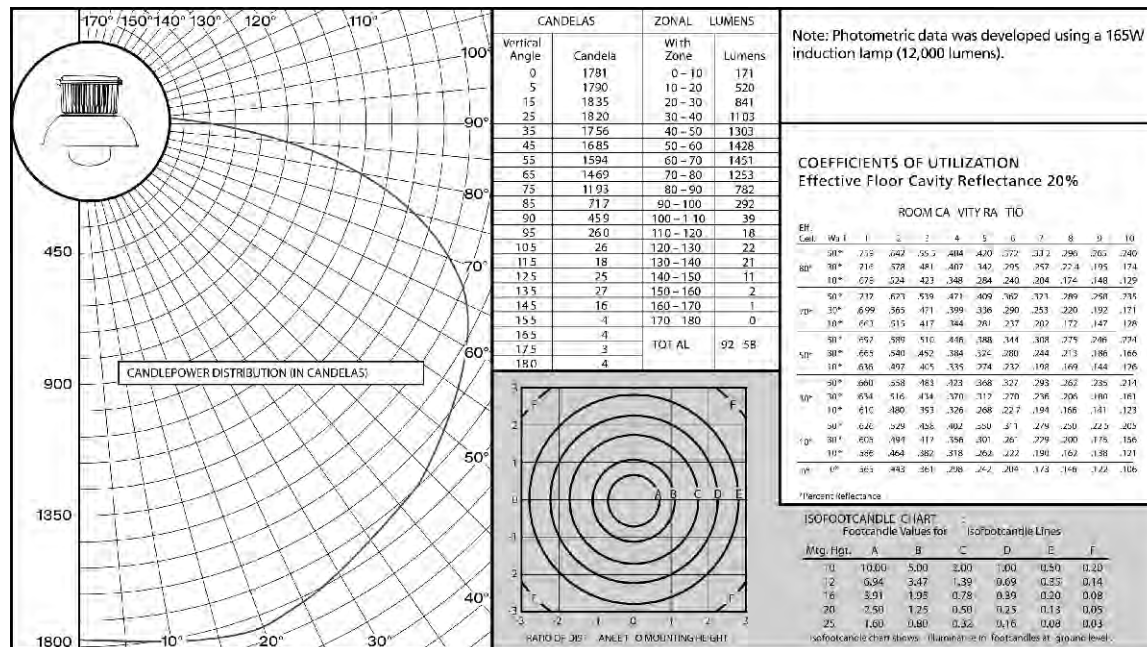
**Photometric Data:** For additional photometric information, see the Resources area of our website. Photometric .ies files for use with our Luxicon Lighting Layout Software are available to download.

## VMVIG and DMVIG Series

### 165 Watt Induction

#### Luminaire With Globe And RD739 Dome Reflector

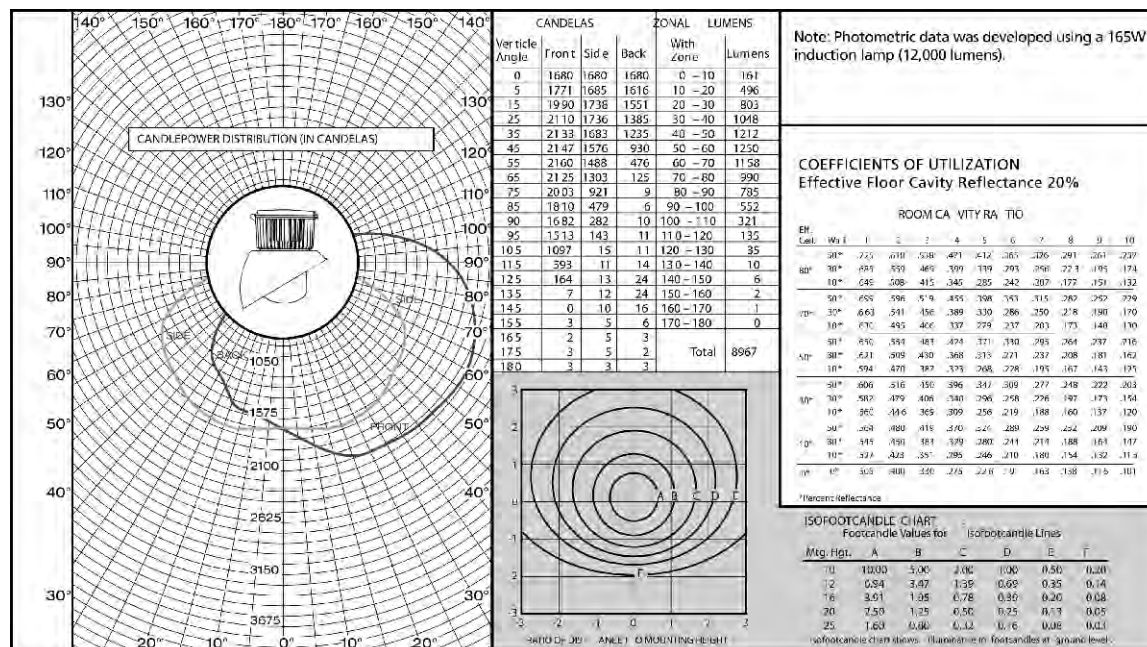
DMVIG165G Lamp: 165W Induction



### 165 Watt Induction

#### Luminaire With Globe And RA739 (30° Angle) Reflector

DMVIG165G Lamp: 165W Induction



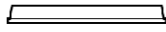
**Photometric Data:** For additional photometric information, see the Resources area of our website. Photometric .ies files for use with our Luxicon Lighting Layout Software are available to download.

## VMVIG and DMVIG Series

**COVERS:**

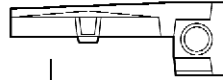
PENDANT

- APM2 3/4 IN.
- APM3 1 IN.
- HPM2 3/4 IN.



WALL

- TWM2 3/4 IN.
- TWM3 1 IN.



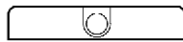
QUAD—MOUNT

- QM25 3/4 IN.



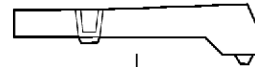
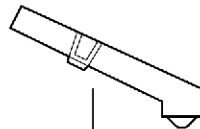
CEILING

- CM2 3/4 IN.
- CM3 1 IN.



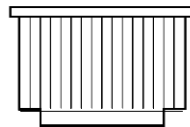
STANCHION

- JM5 1 1/2 IN.
- PM5 1 1/2 IN.



HOUSING

- DMV

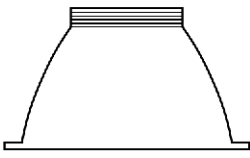


GLOBE

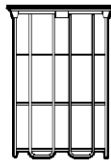
- G303
- G303 S808



REFLECTOR/LENS  
GRD4



REFRACTOR  
GR302 GR303  
GR305  
PGR302  
PGR305  
PGR303  
GUARD  
P33



REFLECTOR  
RA79 RA739  
RD79 RD739

