



COMMERCIAL DOWNLIGHT SERIES BY SPECTRUM

### 3" ROUND FLANGED

NON-IC & IC NEW CONSTRUCTION / REMODEL

### DIM TO WARM

Dimming from 3000K to 1600K, Spectrum's Infinium Dim To Warm series follows in the footsteps of older halogen lamps which turned warmer in color when dimmed.

NOMINAL LUMENS / WATTAGE DATA				
PART NUMBER	CCT RANGE	DELIVERED LUMENS <sup>1</sup>	SYSTEM WATTS	LPW
IF03RMF 007	27K-16K	502	9.3	54
IF03RMF 010	28K-16K	647	11.3	57
IF03RMF 015	30K-16K	1057	17.2	61
IF03RMF 020	30K-16K	1321	21.7	61

<sup>1</sup> Nominal Delivered Lumens at DD1 020 DL FL GP MW

PROJECT: \_\_\_\_\_  
TYPE: \_\_\_\_\_



#### AVAILABLE HOUSING TYPES

<b>IF03RMF NC</b> - New Construction 	<b>IF03RMF IC</b> - IC New Construction 	<b>IF03RMF RT</b> - Remodel Construction 
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HOUSING						HOUSING OPTIONS			
SERIES	TYPE	EMITTER	CRI/CCT	LUMENS	OPTIONS	DIMMING		MOUNTING	BATTERY
IF03RMF	NC	New Construction	DW	DIM TO WARM DD1 30-16K 007 502 Lm 010 647 Lm 015 1057 Lm 020 1321 Lm <small>Nominal Delivered Lumens at DD1 020 DL FL GP MW</small>	PR 1.25" Ceiling Extension	D1 1%, 0-10V	1 120V 2 277V	NC/IC B1 Expandable Bar Hangers	EI 7W Integral Battery <small>Not Available in IC New Construction</small>
	IC	IC New Construction							D3 1%, ELV/MLV Phase-Cut (120V)
	RT	Remodel Construction							

#### AVAILABLE TRIM / MODULE TYPES



TRIM OPTIONS						SEPARATE ADDITIONAL ACCESSORIES		
TRIM TYPE	BEAM <sup>1</sup>	LENS	FINISH	FLANGE FINISH	OPTION			
DL	Downlight	SP Spot (20°)	GN No Lens <small>Not Available in Wet Location</small>	MW Matte White	MF Matching Flange <small>Default Selection with PH Trim Type</small>	WL Wet Location <small>Requires GP or GC Lens</small>	GOOF RING	
PH	Pinhole Downlight	NF Narrow Flood (26°)	GP Solite™ Micro Prism Lens	MB Matte Black	WF White Flange <small>For Use with Non-White Trim Finish</small>		GRIF03R	MW Matte White
		FL Flood (35°)	GC Clear Glass Lens	PT Platinum Silver				MB Matte Black
		WF Wide Flood (56°)		CC Custom Color				PT Platinum Silver
AA	Adjustable Accent	NF Narrow Flood (29°)					BAR HANGERS	
		FL Flood (43°)					B2	27" Solid Bar Hangers
		WF Wide Flood (48°)					B4	24" C-Channel Bar Hangers
WW	Wall Wash	WF Wide Flood	LW Wall Wash Lens					

<sup>1</sup> Nominal Beam Angles Shown

EXAMPLE: IF03RMFNCDWDD1007/D12B1/DLNF GCMWMFWL

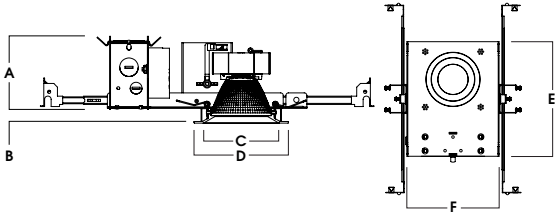
Dimensions and values shown are nominal. Spectrum Lighting continually works to improve products and reserves the right to make changes which may alter the performance or appearance of products.



## HOUSING DIMENSIONS

### IF03RMF NC - NEW CONSTRUCTION

Non-IC rated, thermally protected frame-in kit for new construction. Non-IC designation requires insulation must be minimum of 3" from housing.



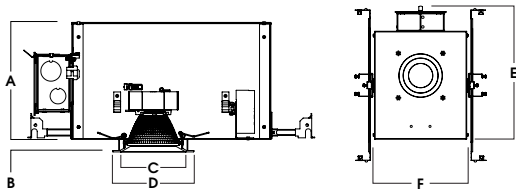
A	B	C	D	E	F
3.4	.625	3.6	4.5	9.5	7.6
86.4 mm	15.9 mm	91.4 mm	114.3 mm	241.3 mm	193.0 mm

Fixture Weight: 4.0 lbs

Ceiling Cutout: Ø 3<sup>7/8"</sup>

### IF03RMF IC - IC NEW CONSTRUCTION

IC rated frame-in kit for new construction with direct insulation contact and CCEA (Chicago Plenum) compatibility.



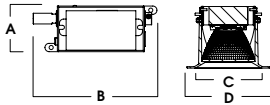
A	B	C	D	E	F
6.5	.625	3.6	4.5	13.2	9.5
165.1 mm	15.9 mm	91.4 mm	114.3 mm	335.3 mm	241.3 mm

Fixture Weight: 5.0 lbs

Ceiling Cutout: Ø 3<sup>7/8"</sup>

### IF03RMF RT - REMODEL CONSTRUCTION

Non-IC rated frame-in kit for existing construction. Non-IC designation requires insulation must be minimum of 3" from housing.



A	B	C	D
2.8	7.5	3.6	4.5
71.1 mm	190.5 mm	91.4 mm	114.3 mm

Fixture Weight: 2.0 lbs

Ceiling Cutout: Ø 3<sup>3/4"</sup>

## FEATURES

### APPLICATION

Versatile shallow plenum 3" round recessed LED luminaire features downlight, adjustable accent, wall wash and pinhole downlight trim options with new construction, insulated ceiling and retrofit housings.

### FEATURES

Two-stage optical system for smooth low glare light distribution. Zhaga International Standard LED module for ease of maintenance and replacement. Shallow plenum design. Tool-less LED module, driver, and J-Box access. Multi-Bar mounting brackets. Expandable bar hangers with horizontal range of 14.2"-26", and vertical adjustment of 1.75" for Non-IC housing and 2.325" for IC housings. Post-lock trim retention springs. Integral 0.625" collar, works with up to 1" ceiling. For thicker ceilings consult factory.

### TRIM FINISH

A variety of architectural powdercoat finishes are available. Trims available with and without lens. Specify trim finish and flange finish.

### ELECTRONICS

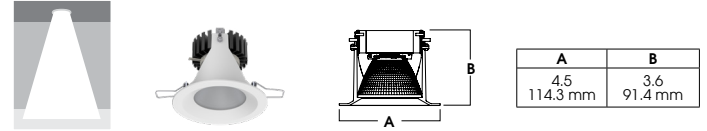
Dim to Warm offering a familiar dimming experience to traditional incandescent lamps (3000K-1600K). All options feature 3-step MacAdam Ellipse binning and 95 CRI 0-10V or phase-cut dimming to 1%, standard.

### CONSTRUCTION

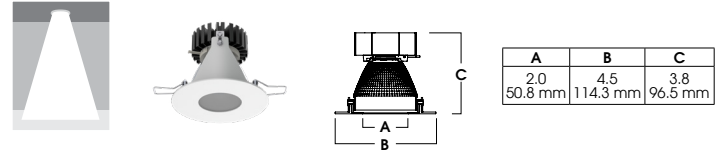
Housing/frame constructed of #20 ga. galvanized steel to resist corrosion. Self-flanged one piece die-cast aluminum trim is finished to specification. Passive machined aluminum heatsink.

## TRIM / MODULE DATA

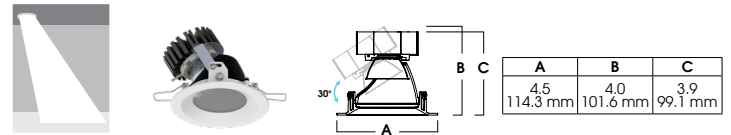
### DL - DOWNLIGHT MODULE



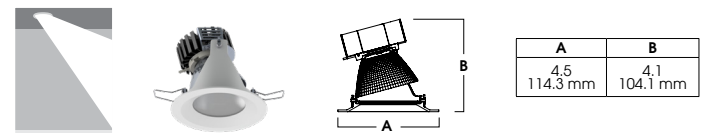
### PH - PINHOLE DOWNLIGHT MODULE



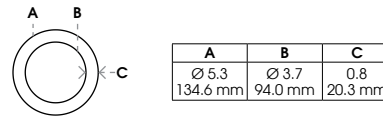
### AA - ADJUSTABLE MODULE (30°)



### WW - WALL WASH MODULE

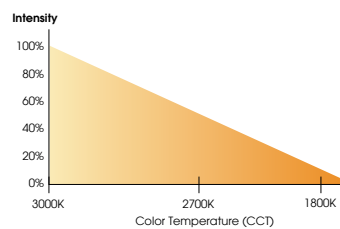


### GRIF03R - 3" ROUND GOOF RING

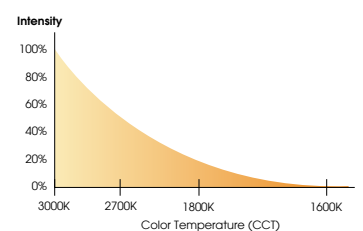


## DIMMING BEHAVIOR

### PHASE DIMMING (LINEAR)



### 0-10V DIMMING (LOGARITHMIC)



# PHOTOMETRIC DATA - 3" ROUND

IF03RMx xx DWDD1020 DLSGPMW

CANDLEPOWER CURVE TEST SP-00942_1	INTENSITY CANDELA 0° AZIMUTH	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE INITIAL FOOTCANDLES BASED ON IES BEAM ANGLE				MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT									
			Mounting Height AFF	FC at Center on Floor	Beam Diameter	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 4		RCR 6					
	0.00°		0° - 10°	393	31%	5.5'	192 fc	1.9'	92 fc	9'	2'	294	5.26	239	4.66	
	0.00°	5,802	0° - 20°	838	66%	6.5'	137 fc	2.3'	66 fc	12'	2'	310	5.54	287	5.58	
	5.00°	4,684	0° - 30°	1,109	87%	7.5'	103 fc	2.6'	49 fc	16'	4'	68	1.22	80	1.56	
	10.00°	2,854	0° - 40°	1,206	94%	8.5'	80 fc	3.0'	38 fc	Delivered Illuminance Rating: (DIR) 56 FC per W/Sq. Ft.   51 FC per W/Sq. Ft.						
	15.00°	1,552	0° - 60°	1,251	98%	10.0'	58 fc	3.5'	28 fc							
	20.00°	906	0° - 80°	1,276	100%	12.0'	40 fc	4.2'	19 fc	Recessed Mounting Square rooms used for multiple units: - RCR 4: Length & Width = Ceiling Ht. -2.5' x 2.50 - RCR 6: Length & Width = Ceiling Ht. -2.5' x 1.66 + Average Footcandles at 2.5' Above Floor						
	25.00°	300	0° - 90°	1,278	100%	14.0'	30 fc	4.9'	14 fc							
	30.00°	300	Total	1,278	100%	16.0'	23 fc	5.6'	11 fc							
	35.00°	300														
	40.00°	49														
	45.00°	23														
50.00°	23															
55.00°	19															
60.00°	19															
65.00°	9															
70.00°	9															
75.00°	2															
80.00°	2															
85.00°	0															
90.00°	0															

Delivered Lumens: 1,278  
Luminaire Watts: 21.7  
LER: 58.89

CP at 0deg (Nadir): 5,802  
CRI: 95

Beam Angle: 19.73  
Spacing Ratio: 0.33

Lumen Multiplier: 7L x 0.38, 10L x 0.49, 15L x 0.8  
CCT Multiplier: N/A, dim to warm emitter

IF03RMx xx DWDD1020 DLNFGPMW

CANDLEPOWER CURVE TEST SP-00942_2	INTENSITY CANDELA 0° AZIMUTH	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE INITIAL FOOTCANDLES BASED ON IES BEAM ANGLE				MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT									
			Mounting Height AFF	FC at Center on Floor	Beam Diameter	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 3		RCR 5					
	0.00°		0° - 10°	348	27%	5.5'	147 fc	2.5'	68 fc	9'	2'	331	5.60	248	4.62	
	0.00°	4,446	0° - 20°	831	64%	6.5'	105 fc	3.0'	49 fc	12'	4'	82	1.39	81	1.50	
	5.00°	4,026	0° - 30°	1,120	87%	7.5'	79 fc	3.4'	37 fc	16'	6'	41	0.69	40	0.74	
	10.00°	2,908	0° - 40°	1,221	95%	8.5'	62 fc	3.9'	28 fc	Delivered Illuminance Rating: (DIR) 59 FC per W/Sq. Ft.   54 FC per W/Sq. Ft.						
	15.00°	1,740	0° - 60°	1,263	98%	10.0'	44 fc	4.6'	21 fc							
	20.00°	1,008	0° - 80°	1,286	100%	12.0'	31 fc	5.5'	14 fc	Recessed Mounting Square rooms used for multiple units: - RCR 3: Length & Width = Ceiling Ht. -2.5' x 3.33 - RCR 5: Length & Width = Ceiling Ht. -2.5' x 2.00 + Average Footcandles at 2.5' Above Floor						
	25.00°	385	0° - 90°	1,288	100%	14.0'	23 fc	6.4'	10 fc							
	30.00°	385	Total	1,288	100%	16.0'	17 fc	7.4'	8 fc							
	35.00°	280														
	40.00°	57														
	45.00°	24														
50.00°	24															
55.00°	20															
60.00°	20															
65.00°	15															
70.00°	15															
75.00°	5															
80.00°	5															
85.00°	2															
90.00°	2															

Delivered Lumens: 1,288  
Luminaire Watts: 21.7  
LER: 59.35

CP at 0deg (Nadir): 4,446  
CRI: 95

Beam Angle: 25.9  
Spacing Ratio: 0.43

Lumen Multiplier: 7L x 0.38, 10L x 0.49, 15L x 0.8  
CCT Multiplier: N/A, dim to warm emitter

IF03RMx xx DWDD1020 DLFLGPMW

CANDLEPOWER CURVE TEST SP-00942_3	INTENSITY CANDELA 0° AZIMUTH	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE INITIAL FOOTCANDLES BASED ON IES BEAM ANGLE				MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT									
			Mounting Height AFF	FC at Center on Floor	Beam Diameter	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 3		RCR 5					
	0.00°		0° - 10°	263	20%	5.5'	102 fc	3.4'	45 fc	9'	2'	277	4.63	249	4.62	
	0.00°	3,094	0° - 20°	762	58%	6.5'	73 fc	4.1'	32 fc	12'	4'	83	1.39	81	1.50	
	5.00°	2,919	0° - 30°	1,134	86%	7.5'	55 fc	4.7'	24 fc	16'	6'	31	0.53	26	0.48	
	10.00°	2,407	0° - 40°	1,255	95%	8.5'	43 fc	5.3'	19 fc	Delivered Illuminance Rating: (DIR) 60 FC per W/Sq. Ft.   54 FC per W/Sq. Ft.						
	15.00°	1,798	0° - 60°	1,298	98%	10.0'	31 fc	6.2'	13 fc							
	20.00°	1,257	0° - 80°	1,319	100%	12.0'	21 fc	7.5'	9 fc	Recessed Mounting Square rooms used for multiple units: - RCR 3: Length & Width = Ceiling Ht. -2.5' x 3.33 - RCR 5: Length & Width = Ceiling Ht. -2.5' x 2.00 + Average Footcandles at 2.5' Above Floor						
	25.00°	421	0° - 90°	1,320	100%	14.0'	16 fc	8.7'	7 fc							
	30.00°	421	Total	1,321	100%	16.0'	12 fc	10.0'	5 fc							
	35.00°	210														
	40.00°	52														
	45.00°	20														
50.00°	20															
55.00°	17															
60.00°	17															
65.00°	11															
70.00°	11															
75.00°	3															
80.00°	3															
85.00°	1															
90.00°	1															

Delivered Lumens: 1,321  
Luminaire Watts: 21.7  
LER: 60.88

CP at 0deg (Nadir): 3,094  
CRI: 95

Beam Angle: 34.62  
Spacing Ratio: 0.55

Lumen Multiplier: 7L x 0.38, 10L x 0.49, 15L x 0.8  
CCT Multiplier: N/A, dim to warm emitter



# PHOTOMETRIC DATA - 3" ROUND

IF03RMx xx DWDD1020 DLWFGPMW

CANDLEPOWER CURVE TEST SP-00942	INTENSITY CANDELA 0° AZIMUTH	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE INITIAL FOOTCANDLES BASED ON IES BEAM ANGLE				MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT										
			Mounting Height AFF	FC at Center on Floor	Beam Diameter	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 2		RCR 4						
	0.00°																
	0.00°	1,383	0° - 10°	131	11%	5.5'	46 fc	5.9'	16 fc	9'	4'	73	1.31	64	1.31		
	5.00°	1,378	0° - 20°	473	40%	6.5'	33 fc	7.0'	11 fc	12'	6'	34	0.62	30	0.62		
	10.00°	1,317	0° - 30°	865	73%	7.5'	25 fc	8.0'	8 fc	16'	10'	13	0.23	8	0.17		
	15.00°	1,225	0° - 40°	1,064	90%	8.5'	19 fc	9.1'	7 fc	Delivered Illuminance Rating: (DIR)		56 FC per W/Sq. Ft.		49 FC per W/Sq. Ft.			
	20.00°	1,099	0° - 60°	1,164	98%	10.0'	14 fc	10.7'	5 fc	Recessed Mounting Square rooms used for multiple units: - RCR 2: Length & Width = Ceiling Ht. -2.5' x 5.00 - RCR 4: Length & Width = Ceiling Ht. -2.5' x 2.50 * Average Footcandles at 2.5' Above Floor							
	30.00°	580	0° - 80°	1,184	100%	12.0'	10 fc	12.9'	3 fc								
	40.00°	151	0° - 90°	1,186	100%	14.0'	7 fc	15.0'	2 fc								
	90.00°	1	Total	1,186	100%	16.0'	5 fc	17.2'	2 fc								

Delivered Lumens: **1,186**  
 Luminaire Watts: **21.7**  
 LER: **54.65**

CP at 0deg (Nadir): **1,383**  
 CRI: **95**

Beam Angle: **56.4**  
 Spacing Ratio: **0.9**

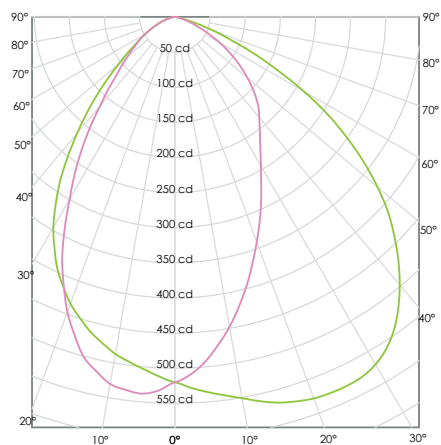
Lumen Multiplier: **7L x 0.38, 10L x 0.49, 15L x 0.8**  
 CCT Multiplier: **N/A, dim to warm emitter**



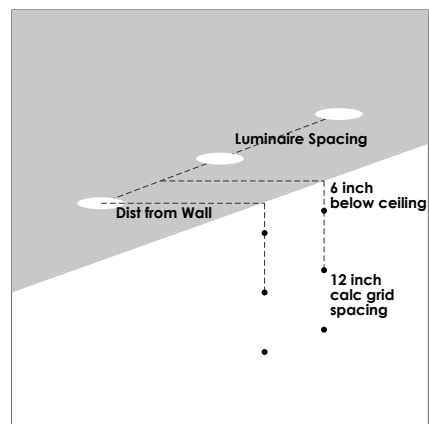
# PHOTOMETRIC DATA - 3" ROUND WALL WASH

IF03RMx xx DWDD1020 WWWFLWMW

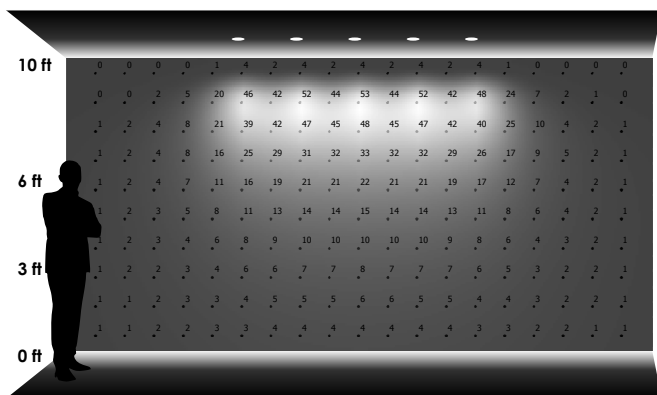
CANDLEPOWER CURVE TEST SP-00951	PERFORMANCE SUMMARY	REFERENCE DIAGRAM
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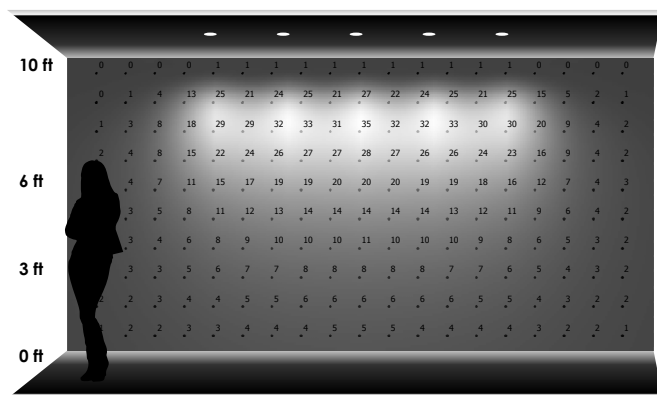
Delivered Lumens: 907  
 Luminaire Watts: 21.5  
 LER: 42.19  
 CP at 0deg (Nadir): 520  
 CRI: 95  
 Lumen Multiplier: 7L x 0.38, 10L x 0.49, 15L x 0.8  
 CCT Multiplier: N/A, dim to warm emitter



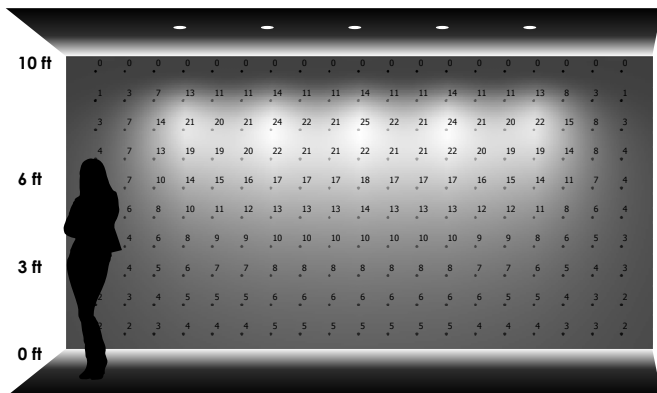
## PERFORMANCE DATA - INITIAL ILLUMINATION (FOOTCANDLES) ON WALL - DIRECT LIGHT ONLY



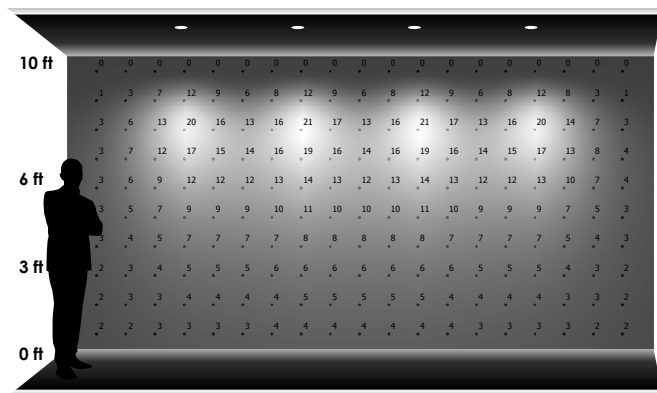
**5 LUMINAIRES**  
 2' away from wall  
 2' between luminaires



**5 LUMINAIRES**  
 2'-6" away from wall  
 2'-6" between luminaires



**5 LUMINAIRES**  
 3' away from wall  
 3' between luminaires



**4 LUMINAIRES**  
 3' away from wall  
 4' between luminaires

