



COMMERCIAL DOWNLIGHT SERIES BY SPECTRUM

### 3" ROUND FLANGED

NON-IC & IC NEW CONSTRUCTION / REMODEL

Spectrum's Infinium 3" recessed round downlight series features a shallow plenum housing and variety of trims for accent and general illumination.

NOMINAL LUMENS / WATTAGE DATA				
CURRENT PART NUMBER EXAMPLE	PREVIOUS PART NUMBER EXAMPLE	DELIVERED LUMENS <sup>1</sup>	SYSTEM WATTS	LPW
IF03RMF 030	RDFO3OC 30L	2012	20.4	99

<sup>1</sup> Nominal Delivered Lumens at 835 DL FL GP MW

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



#### AVAILABLE HOUSING TYPES

<b>IF03RMF NC - New Construction</b> 	<b>IF03RMF IC - IC New Construction</b> 	<b>IF03RMF RT - Remodel Construction</b> 
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HOUSING						HOUSING OPTIONS					
SERIES	TYPE	EMITTER	CRI/CCT	LUMENS	OPTIONS	DIMMING		MOUNTING		BATTERY	
IF03RMF	NC	New Construction	PC	90 Minimum	PR 1.25" Ceiling Extension	030	2012 Lm	N1 Non-Dimming Electronic Driver	1 120V	NC/IC	EI 7W Integral Battery Not Available in IC New Construction
				927 2700K							
	930 3000K	80 Minimum	D3 1%, ELV/MLV Phase-Cut (120V)	1 120V	RT						
	827 2700K								Nominal Delivered Lumens at 835 DL FL GP MW	B0 No Bar Hangers	
830 3000K	835 3500K	840 4000K									
835 3500K			840 4000K								
RT	Remodel Construction										

#### AVAILABLE TRIM / MODULE TYPES



TRIM OPTIONS					
TRIM TYPE	BEAM <sup>1</sup>	LENS	FINISH	FLANGE FINISH	OPTION
DL	Downlight	SP Spot (24°)	GN No Lens Not Available in Wet Location	MW Matte White	MF Matching Flange
PH	Pinhole Downlight	NF Narrow Flood (28°)	GP Solite™ Micro Prism Lens	MB Matte Black	WF White Flange For Use with Non-White Trim Finish
		FL Flood (38°)		PT Platinum Silver	WL Wet Location Requires GP or GC Lens
		WF Wide Flood (61°)		CC Custom Color	
AA	Adjustable Accent	NF Narrow Flood (35°)	GC Clear Glass Lens		
		FL Flood (43°)			
		WF Wide Flood (48°)			
WW	Wall Wash	WF Wide Flood	LW Wall Wash Lens		

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

SEPARATE ADDITIONAL ACCESSORIES	
ORDER SEPARATELY	
GOOF RING	
GRIF03R	MW Matte White
	MB Matte Black
	PT Platinum Silver
	CC Custom Color
BAR HANGERS	
B2	27" Solid Bar Hangers
B4	24" C-Channel Bar Hangers

EXAMPLE: IF03RMFNCPC927030/D12B1/DLNFPMWFWL

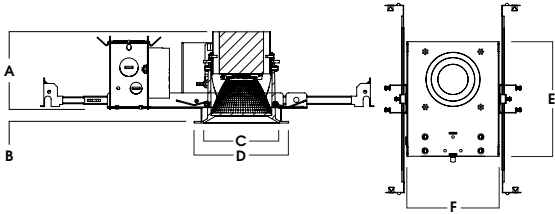
Dimensions and values shown are nominal. Spectrum Lighting continually works to improve products and reserves the right to make changes which may alter the performance or appearance of products.



## 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.



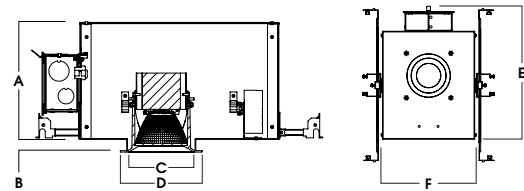
A	B	C	D	E	F
4.5	.625	3.6	4.5	9.5	7.6
114.3 mm	15.9 mm	91.4 mm	114.3 mm	241.3 mm	193.0 mm

Fixture Weight: 4.0 lbs

Ceiling Cutout:  $\varnothing 3\frac{3}{8}$ "

### IF03RMF IC - IC NEW CONSTRUCTION

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



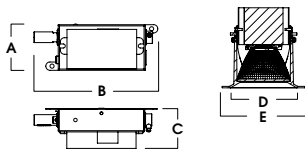
A	B	C	D	E	F
6.5	.625	3.6	4.5	13.2	9.5
165.1 mm	15.9 mm	91.4 mm	114.3 mm	335.3 mm	241.3 mm

Fixture Weight: 5.0 lbs

Ceiling Cutout:  $\varnothing 3\frac{3}{8}$ "

### 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.



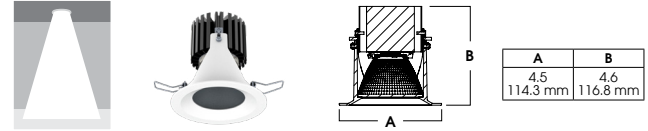
A	B	C	D	E
2.8	7.5	2.4	3.6	4.5
71.1 mm	190.5 mm	61.0 mm	91.4 mm	114.3 mm

Fixture Weight: 2.0 lbs

Ceiling Cutout:  $\varnothing 3\frac{3}{8}$ "

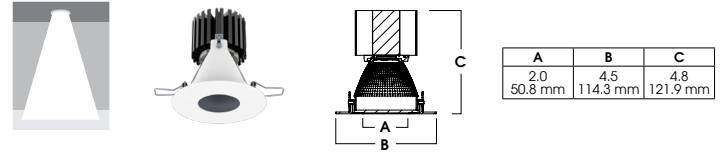
## TRIM / MODULE DATA

### DL - DOWNLIGHT MODULE



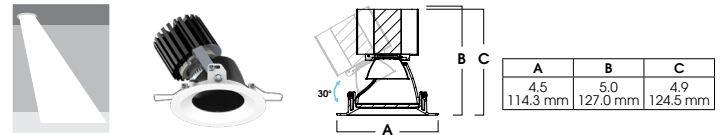
A	B
4.5	4.6
114.3 mm	116.8 mm

### PH - PINHOLE DOWNLIGHT MODULE



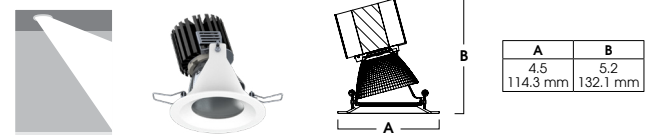
A	B	C
2.0	4.5	4.8
50.8 mm	114.3 mm	121.9 mm

### AA - ADJUSTABLE MODULE (30°)



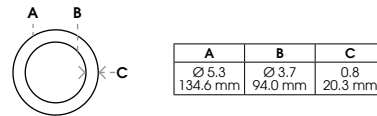
A	B	C
4.5	5.0	4.9
114.3 mm	127.0 mm	124.5 mm

### WW - WALL WASH MODULE



A	B
4.5	5.2
114.3 mm	132.1 mm

### GRIF03R - 3" ROUND GOOF RING



A	B	C
$\varnothing 5.3$	$\varnothing 3.7$	0.8
134.6 mm	94.0 mm	20.3 mm

## FEATURES

### APPLICATIONS

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. Posi-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

LED module features high brightness Philips LEDs. 3-step MacAdam Ellipse binning and 80 and 90 CRI available. 0-10V or phase-cut dimming to 1%, standard. Variety of 120V/277V drivers available, consult factory.

### CONSTRUCTION

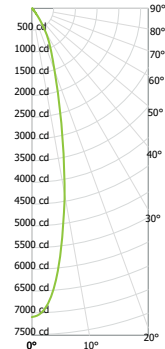
Housing/frame constructed of #20 ga. galvanized steel to resist corrosion. Self-flanged one piece die-cast aluminum trim is finished to specification. Passive machined aluminum heatsink.

### CODE COMPLIANCE

BAA Compliant. ETL certified to meet US and Canadian standards. Suitable for dry or damp locations. Optional Wet Location. Manufactured and tested to UL standards No. 1598/8750. City of Chicago Environmental Air (CCEA), and Insulated Ceiling (IC) options available.

# PHOTOMETRIC DATA - 3" ROUND DOWNLIGHT

IF03RMx xx PC 835 030 DLSPGP MW

CANDLEPOWER CURVE TEST SP-00760_2_M-30L	INTENSITY CANDELA 0° AZIMUTH	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE DIRECT FOOTCANDLES BASED ON DOWNLIGHT ONLY				MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT							
	0°	0° - 10°	534	26%	Mounting Height AFF	FC at Center on Floor	Beam Diameter	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 4		RCR 6	
	0° 7100	0° - 20°	1248	61%	10'	71 fc	4.2'	33 fc	18'	4'	103	1.10	94	1.11
	5° 6292	0° - 30°	1717	84%	12'	49 fc	5.1'	23 fc	22'	6'	51	0.55	41	0.49
	15° 2560	0° - 40°	1928	94%	14'	36 fc	5.9'	17 fc	26'	8'	27	0.29	28	0.34
	25° 1012	0° - 60°	2011	98%	16'	28 fc	6.8'	13 fc	Delivered Illuminance Rating: (DIR)					
	35° 317	0° - 80°	2044	100%	20'	18 fc	8.4'	8 fc	93 FC per W/Sq. Ft.      85 FC per W/Sq. Ft.					
	45° 54	0° - 90°	2047	100%	24'	12 fc	10.1'	6 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					
	55° 37	Total	2047	100%	28'	9 fc	11.8'	4 fc	* Average Footcandles at 2.5' Above Floor					
	90° 1				32'	7 fc	13.5'	3 fc						

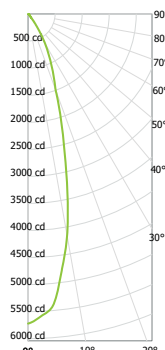
Delivered Lumens: 2047  
Luminaire Watts: 20.4  
LER: 100.34

CP at 0° (Nadir): 7100  
CRI: 80

Beam Angle: 24°  
Spacing Ratio: 0.40

Lumen Multiplier: N/A, 30L only  
CCT Multiplier: 27K x 0.96, 30K x 0.98, 40K x 1.04  
27HK x 0.87, 30HK x 0.81

IF03RMx xx PC 835 030 DLNFGP MW

CANDLEPOWER CURVE TEST SP-00759_2_M-30L	INTENSITY CANDELA 0° AZIMUTH	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE DIRECT FOOTCANDLES BASED ON DOWNLIGHT ONLY				MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT							
	0°	0° - 10°	472	23%	Mounting Height AFF	FC at Center on Floor	Beam Diameter	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 3		RCR 5	
	0° 5723	0° - 20°	1202	59%	8'	89 fc	4.1'	41 fc	14'	6'	48	0.50	54	0.62
	5° 5392	0° - 30°	1685	83%	10'	57 fc	5.1'	26 fc	18'	8"	27	0.28	30	0.34
	15° 2587	0° - 40°	1907	94%	12'	40 fc	6.1'	18 fc	22'	10"	23	0.24	19	0.21
	25° 1004	0° - 60°	1986	98%	14'	29 fc	7.1'	13 fc	Delivered Illuminance Rating: (DIR)					
	35° 288	0° - 80°	2017	100%	16'	22 fc	8.1'	10 fc	96 FC per W/Sq. Ft.      87 FC per W/Sq. Ft.					
	45° 52	0° - 90°	2020	100%	20'	14 fc	10.2'	7 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					
	55° 29	Total	2020	100%	24'	10 fc	12.2'	5 fc	* Average Footcandles at 2.5' Above Floor					
	90° 2				28'	7 fc	14.2'	3 fc	** Exceeds Spacing Ratio by 11% *** Exceeds Spacing Ratio by 10%					

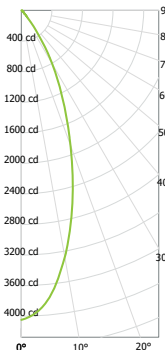
Delivered Lumens: 2020  
Luminaire Watts: 20.4  
LER: 99.02

CP at 0° (Nadir): 5723  
CRI: 80

Beam Angle: 28°  
Spacing Ratio: 0.47

Lumen Multiplier: N/A, 30L only  
CCT Multiplier: 27K x 0.96, 30K x 0.98, 40K x 1.04  
27HK x 0.87, 30HK x 0.81

IF03RMx xx PC 835 030 DLFLGP MW

CANDLEPOWER CURVE TEST SP-00758_2_M-30L	INTENSITY CANDELA 0° AZIMUTH	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE DIRECT FOOTCANDLES BASED ON DOWNLIGHT ONLY				MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT							
	0°	0° - 10°	353	18%	Mounting Height AFF	FC at Center on Floor	Beam Diameter	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 3		RCR 5	
	0° 4047	0° - 20°	1067	53%	8'	63 fc	5.5'	27 fc	14'	6'	48	0.50	53	0.62
	5° 3826	0° - 30°	1652	82%	10'	40 fc	6.9'	17 fc	18'	8'	26	0.28	29	0.34
	15° 2584	0° - 40°	1901	94%	12'	28 fc	8.3'	12 fc	22'	10'	17	0.17	18	0.21
	25° 1278	0° - 60°	1981	98%	14'	21 fc	9.7'	9 fc	Delivered Illuminance Rating: (DIR)					
	35° 392	0° - 80°	2009	100%	16'	16 fc	11.0'	7 fc	95 FC per W/Sq. Ft.      85 FC per W/Sq. Ft.					
	45° 57	0° - 90°	2012	100%	20'	10 fc	13.8'	4 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					
	55° 24	Total	2012	100%	24'	7 fc	16.6'	3 fc	* Average Footcandles at 2.5' Above Floor					
	90° 2				28'	5 fc	19.3'	2 fc						

Delivered Lumens: 2012  
Luminaire Watts: 20.4  
LER: 98.63

CP at 0° (Nadir): 4047  
CRI: 80

Beam Angle: 38°  
Spacing Ratio: 0.60

Lumen Multiplier: N/A, 30L only  
CCT Multiplier: 27K x 0.96, 30K x 0.98, 40K x 1.04  
27HK x 0.87, 30HK x 0.81



# PHOTOMETRIC DATA - 3" ROUND DOWNLIGHT

CANDLEPOWER CURVE TEST SP-00761_2_M-30L	INTENSITY CANDELA 0° AZIMUTH	ZONAL LUMENS		SINGLE UNIT: PERFORMANCE DIRECT FOOTCANDLES BASED ON DOWNLIGHT ONLY				MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT							
	0°	0° - 10°	172	9%	Mounting Height AFF	FC at Center on Floor	Beam Diameter	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 2		RCR 4		
	0°	1827	0° - 20°	627	34%	8'	29 fc	9.4'	9 fc	10'	6'	47	0.52	40	0.52
	5°	1800	0° - 30°	1199	65%	10'	18 fc	11.8'	6 fc	14'	8'	27	0.30	17	0.22
	15°	1614	0° - 40°	1566	85%	12'	13 fc	14.1'	4 fc	18'	10'	19	0.22	17	0.22
	25°	1287	0° - 60°	1801	98%	14'	9 fc	16.5'	3 fc	Delivered Illuminance Rating: (DIR)		90 FC per W/Sq. Ft.		77 FC per W/Sq. Ft.	
	35°	563	0° - 80°	1840	100%	16'	7 fc	18.9'	2 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					
	45°	192	0° - 90°	1842	100%	20'	5 fc	23.6'	1 fc						
	55°	84	Total	1842	100%	24'	3 fc	28.3'	1 fc						
	90°	1				28'	2 fc	33.0'	1 fc						

Delivered Lumens: 1842  
Luminaire Watts: 20.4  
LER: 90.29

CP at 0° (Nadir): 1827  
CRI: 80

Beam Angle: 61°  
Spacing Ratio: 0.95

Lumen Multiplier: N/A. 30L only  
CCT Multiplier: 27K x 0.96, 30K x 0.98, 40K x 1.04  
27HK x 0.87, 30HK x 0.81

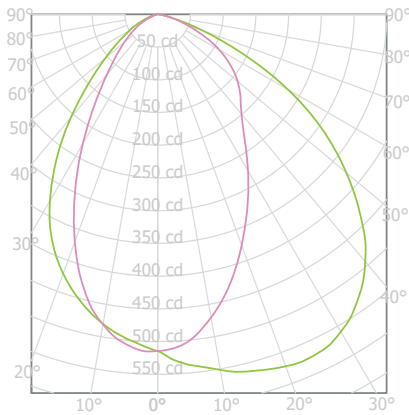
See Page 1 for System Watts for all outputs



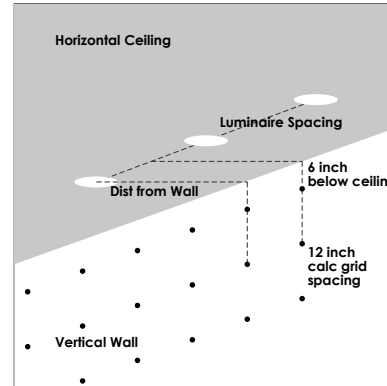
# PHOTOMETRIC DATA - 3" ROUND WALL WASH

IF03RMx xx PC 835 030 WW WF LW MW

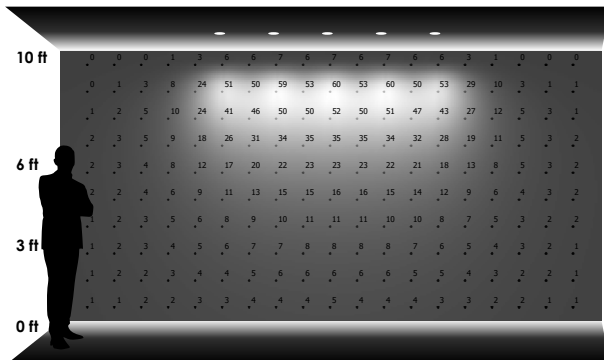
CANDLEPOWER CURVE TEST SP-00849_M-30L	PERFORMANCE SUMMARY	REFERENCE DIAGRAM
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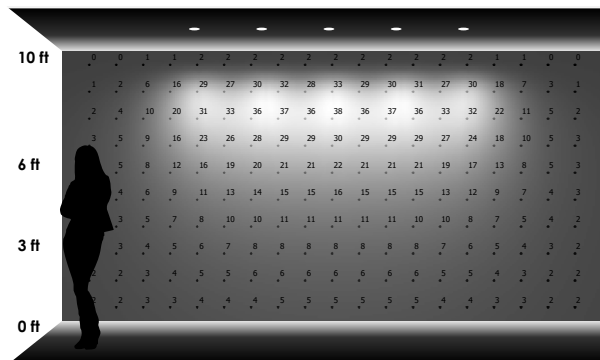
Delivered Lumens: 898  
 Luminaire Watts: 20.4  
 LER: 44.02  
 CP at 0deg (Nadir): 514  
 CRI: 80  
 Lumen Multiplier: N/A. 30L only  
 CCT Multiplier: 27K x 0.96, 30K x 0.98, 40K x 1.04  
 27HK x 0.87, 30HK x 0.81



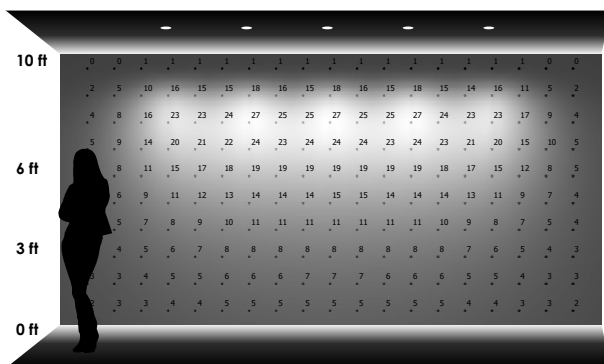
## PERFORMANCE DATA - INITIAL ILLUMINATION (FOOTCANDLES) ON WALL - DIRECT LIGHT ONLY



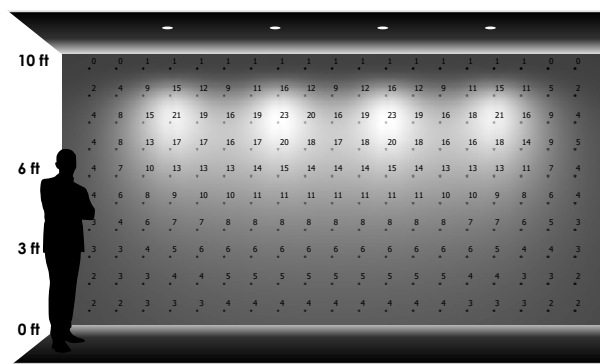
**5 LUMINAIRES**  
 2' away from wall  
 2' between luminaires



**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

