

**3" SQUARE FLANGED**  
REMODEL / RETROFIT SERIES



NOMINAL LUMENS / WATTAGE DATA				
MODEL NUMBER	SOURCE LUMENS <sup>1</sup>	DELIVERED LUMENS <sup>2</sup>	SYSTEM WATTS	LPW
ES03SMF007	700	356	8.8	40
ES03SMF013	1300	723	14.5	50

1 Nominal Source Lumens 2 Nominal Delivered Lumens at 930 DL NF GP MW

**FEATURES**

3" downlight and wall wash remodeling series with regress for visual comfort. Optional downlight lens for wet location applications. Zhaga international standard LED module for ease of maintenance and future replacement. Quick connect LED module and trim attachment.

**TRIM FINISH**

Variety of powdercoat and anodized finishes available. Specify finish and flange finish.

**ELECTRONICS**

120V-277V universal input with standard 0-10V 1% Dimming. LED system features high efficacy LEDs backed by standard softening lens. Standard CRI is 90. Drivers are overload and short circuit protected as well as thermally regulated. Sound rating A. Auto dim thermal protector for long term reliability.

**CONSTRUCTION**

Housing/frame constructed of #22 GA galvanized steel. Self-flanged one piece die cast aluminum. Passive internal aluminum heatsink.

**CODE COMPLIANCE**

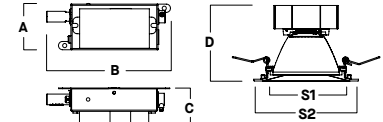
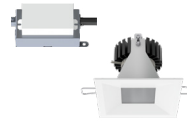
ENERGY STAR® pending and BAA Compliant. Non-IC rated. ETL certified to meet US and Canadian standards. Manufactured and tested to UL standards No. 1598/8750.

**RATED LIFE**

Rated for 50,000 Hours at 70% lumen maintenance. (L70)

**HOUSING DIMENSIONS**

ES03SMF RT - 3" RETROFIT / REMODELER

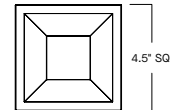
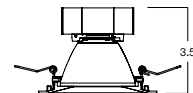


A	B	C	D	S1	S2
2.8	7.5	2.4	3.5	3.7	4.5
71.1 mm	190.5 mm	61.0 mm	88.9 mm	94.0 mm	114.3 mm

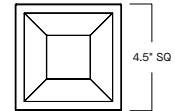
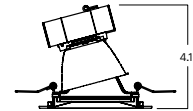
Ceiling Cutout: 4.1 SQ

**TRIM OPTIONS**

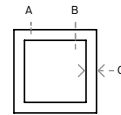
DL - 3" DOWNLIGHT



WW - 3" WALL WASH



GRES03S - 3" SQUARE GOOF RING



A	B	C
5.3	3.9	0.7
134.6 mm	99.1 mm	17.8 mm

**PRODUCT SELECTOR GUIDE**

HOUSING				HOUSING OPTIONS		TRIM OPTIONS					SEPARATE		
SERIES	TYPE	CRI / CCT	LUMENS	DIMMING	MOUNTING	TRIM TYPE	BEAM	LENS	FINISH	FLANGE FINISH	OPTIONS	ADDITIONAL ACCESSORIES	
ES03SMF	RT												
<b>EXAMPLE</b>	ES03SMF	RT	927	007	<b>D11</b>	BO	DL	NF	GP	MW	MF		

HOUSING				HOUSING OPTIONS			
SERIES	TYPE	CRI/CCT	LUMENS	DIMMING		MOUNTING	
ES03SMF	RT	Remodel / Retrofit	927 2700K 930 3000K	007 356 Lm 013 723 Lm	D1 1%, 0-10V D3 1%, ELV/MLV Phase-Cut	1 120V 2 277V 1 120V	RT
			Nominal Delivered Lumens at 930 DL NF GP MW	BO No Bar Hangers			

TRIM OPTIONS						
TRIM TYPE	BEAM <sup>1</sup>	LENS	FINISH	FLANGE FINISH	OPTION	
DL	Downlight	SP Spot (24°) NF Narrow Flood (30°) FL Flood (36°) WF Wide Flood (51°)	GP Solite™ Micro Prism Lens	MW Matte White MB Matte Black PT Platinum Silver CC Custom Color	MF Matching Flange WF White Flange For Use with Non-White Trim Finish	WL Wet Location
	WW	Wall Wash	WF Wide Flood	LW Wall Wash Lens		

SEPARATE	
ADDITIONAL ACCESSORIES	
GOOF RING	
GRES03S	MW Matte White MB Matte Black PT Platinum Silver CC Custom Color



# PHOTOMETRIC DATA - 3" SQUARE DOWNLIGHT

ES03SMFxx 930 013 xxx DL SP GP MW

CANDLEPOWER CURVE TEST SP-00874	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°																
	0.00°	2,045	0° - 10°	151	20%	5.5'	68 fc	2.4'	34 fc	9'	2'	181	3.74	131	3.09		
	5.00°	1,771	0° - 20°	376	51%	6.5'	48 fc	2.8'	24 fc	12'	4'	45	0.93	43	1.00		
	10.00°	1,221	0° - 30°	528	71%	7.5'	36 fc	3.2'	18 fc	16'	6'	22	0.46	21	0.50		
	15.00°	787	0° - 40°	606	82%	8.5'	28 fc	3.7'	14 fc	Delivered Illuminance Rating: (DIR)		48 FC per W/Sq. Ft.		43 FC per W/Sq. Ft.			
	20.00°	498	0° - 60°	695	94%	10.0'	20 fc	4.3'	10 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							
	30.00°	179	0° - 80°	739	100%	12.0'	14 fc	5.2'	7 fc								
	40.00°	81	0° - 90°	742	100%	14.0'	10 fc	6.0'	5 fc								
	50.00°	50	Total	742	100%	16.0'	8 fc	6.9'	4 fc								
	60.00°	36															
	70.00°	22															
	80.00°	6															
90.00°	0																

Delivered Lumens: 742  
Luminaire Watts: 14.5  
LER: 51.17

CP at 0deg (Nadir): 2,045  
CRI: 90

Beam Angle: 24.07  
Spacing Ratio: 0.4

Lumen Multiplier: 7L x 0.49  
CCT Multiplier: 27HK x 0.97

ES03SMFxx 930 013 xxx DL NF GP MW

CANDLEPOWER CURVE TEST SP-00873	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°																
	0.00°	1,586	0° - 10°	129	18%	5.5'	52 fc	3.0'	26 fc	9'	2'	175	3.74	127	3.09		
	5.00°	1,442	0° - 20°	349	48%	6.5'	38 fc	3.5'	19 fc	12'	4'	43	0.93	41	1.00		
	10.00°	1,125	0° - 30°	505	70%	7.5'	28 fc	4.0'	14 fc	16'	6'	16	0.35	13	0.32		
	15.00°	788	0° - 40°	587	81%	8.5'	22 fc	4.6'	11 fc	Delivered Illuminance Rating: (DIR)		47 FC per W/Sq. Ft.		41 FC per W/Sq. Ft.			
	20.00°	511	0° - 60°	676	93%	10.0'	16 fc	5.4'	8 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							
	30.00°	184	0° - 80°	720	100%	12.0'	11 fc	6.4'	6 fc								
	40.00°	77	0° - 90°	723	100%	14.0'	8 fc	7.5'	4 fc								
	50.00°	48	Total	723	100%	16.0'	6 fc	8.6'	3 fc								
	60.00°	32															
	70.00°	21															
	80.00°	7															
90.00°	0																

Delivered Lumens: 723  
Luminaire Watts: 14.5  
LER: 49.86

CP at 0deg (Nadir): 1,586  
CRI: 90

Beam Angle: 29.85  
Spacing Ratio: 0.49

Lumen Multiplier: 7L x 0.49  
CCT Multiplier: 27HK x 0.97

ES03SMFxx 930 013 xxx DL FL GP MW

CANDLEPOWER CURVE TEST SP-00872	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°																
	0.00°	1,316	0° - 10°	114	15%	5.5'	43 fc	3.6'	22 fc	9'	2'	147	3.09	128	3.09		
	5.00°	1,240	0° - 20°	336	45%	6.5'	31 fc	4.2'	16 fc	12'	4'	44	0.93	42	1.00		
	10.00°	1,050	0° - 30°	508	69%	7.5'	23 fc	4.9'	12 fc	16'	6'	17	0.35	13	0.32		
	15.00°	804	0° - 40°	599	81%	8.5'	18 fc	5.5'	9 fc	Delivered Illuminance Rating: (DIR)		48 FC per W/Sq. Ft.		42 FC per W/Sq. Ft.			
	20.00°	557	0° - 60°	693	94%	10.0'	13 fc	6.5'	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 + Average Footcandles at 2.5' Above Floor							
	30.00°	212	0° - 80°	737	100%	12.0'	9 fc	7.8'	5 fc								
	40.00°	92	0° - 90°	740	100%	14.0'	7 fc	9.1'	3 fc								
	50.00°	53	Total	740	100%	16.0'	5 fc	10.4'	3 fc								
	60.00°	35															
	70.00°	21															
	80.00°	6															
90.00°	0																

Delivered Lumens: 740  
Luminaire Watts: 14.5  
LER: 51.03

CP at 0deg (Nadir): 1,316  
CRI: 90

Beam Angle: 35.67  
Spacing Ratio: 0.57

Lumen Multiplier: 7L x 0.49  
CCT Multiplier: 27HK x 0.97



# PHOTOMETRIC DATA - 3" SQUARE DOWNLIGHT

ES03SMFxx 930 013 xxx DL WF GP MW

CANDLEPOWER CURVE TEST SP-00875	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° - 10°	67	10%	5.5'	23 fc	5.4'	12 fc	9'	4'	42	0.88	36	0.88	
	0.00°	704	0° - 20°	237	34%	6.5'	17 fc	6.3'	8 fc	12'	6'	20	0.41	17	0.41	
	5.00°	700	0° - 30°	419	60%	7.5'	13 fc	7.3'	6 fc	16'	8'	10	0.20	8	0.20	
	10.00°	679	0° - 40°	542	77%	8.5'	10 fc	8.3'	5 fc	Delivered Illuminance Rating: (DIR)		48 FC per W/Sq. Ft.		41 FC per W/Sq. Ft.		
	15.00°	616	0° - 60°	663	95%	10.0'	7 fc	9.8'	4 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						
	20.00°	508	0° - 80°	698	100%	12.0'	5 fc	11.7'	2 fc							
	30.00°	258	0° - 90°	700	100%	14.0'	4 fc	13.7'	2 fc							
	40.00°	130	Total	700	100%	16.0'	3 fc	15.6'	1 fc							
	45.00°	450														
	50.00°	65														
	55.00°	33														
	60.00°	15														
	65.00°	4														
70.00°	0															
75.00°	0															
80.00°	0															
85.00°	0															
90.00°	0															

Delivered Lumens: 700  
 Luminaire Watts: 14.5  
 LER: 48.28

CP at 0deg (Nadir): 704  
 CRI: 90

Beam Angle: 51.35  
 Spacing Ratio: 0.82

Lumen Multiplier: 7L x 0.49  
 CCT Multiplier: 27HK x 0.97

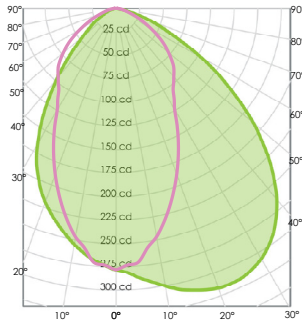


# PHOTOMETRIC DATA - 3" SQUARE WALL WASH

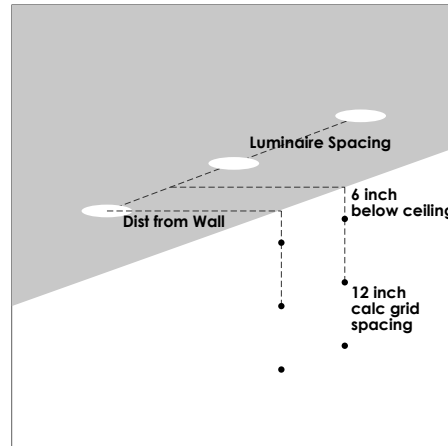
ESO3SMFxx 930 013 xxx WW WF LW MW

PERFORMANCE DATA - REFERENCE DIAGRAM

## CANDLEPOWER CURVE TEST SP-00876

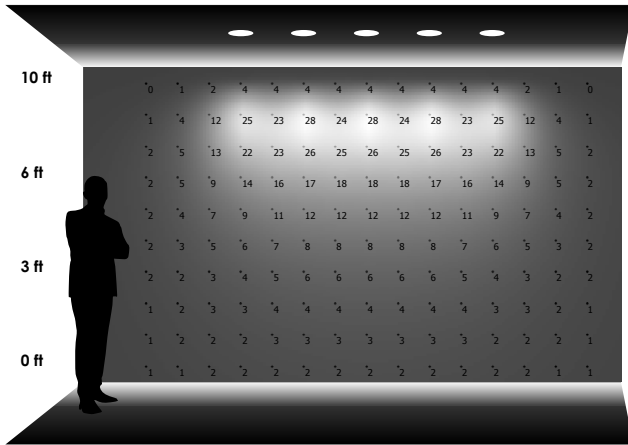


Delivered Lumens: 480  
 Luminaire Watts: 14.5  
 LER: 33.10  
 CP at 0deg (Nadir): 278  
 CRI: 90  
 Lumen Multiplier: 7L x 0.49  
 CCT Multiplier: 27HK x 0.97

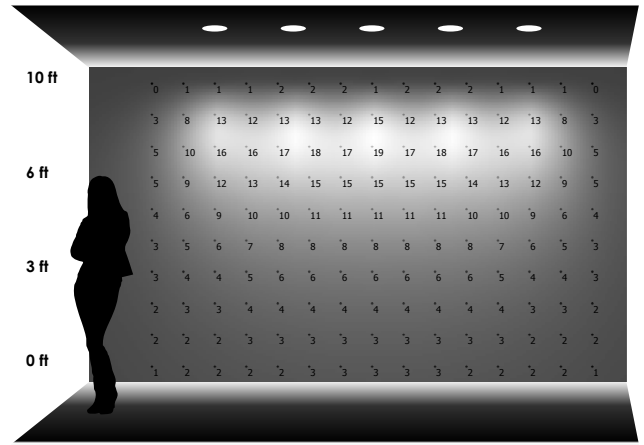


## PERFORMANCE DATA - INITIAL ILLUMINATION (FOOTCANDLES) ON WALL - DIRECT LIGHT ONLY

Performance Data calculated using AGI32, consult factory for details.



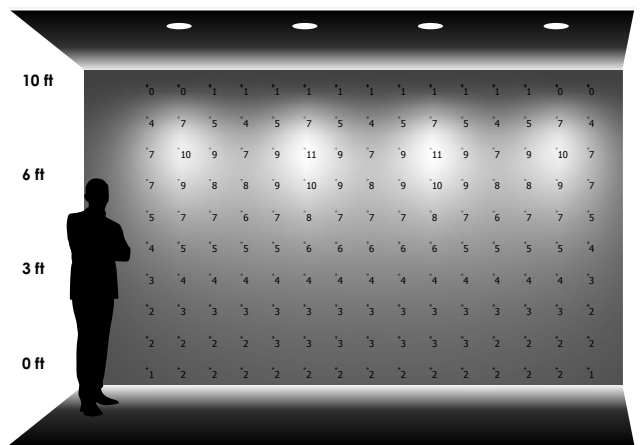
(5) ESO3SMF-930 013-D1-WW-MW  
 A 2' AWAY FROM WALL  
 B 2' BETWEEN LUMINAIRE



(5) ESO3SMF-930 013-D1-WW-MW  
 A 2'-6" AWAY FROM WALL  
 B 2'-6" BETWEEN LUMINAIRE



(5) ESO3SMF-930 013-D1-WW-MW  
 A 3' AWAY FROM WALL  
 B 3' BETWEEN LUMINAIRE



(5) ESO3SMF-930 013-D1-WW-MW  
 A 3' AWAY FROM WALL  
 B 4' BETWEEN LUMINAIRE

