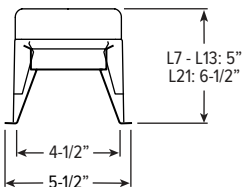


4DS dim to WARM

4.5" Downlight – Square



CATALOG #: _____

TYPE: _____

PROJECT: _____

NEW CONSTRUCTION AND REMODEL

FEATURES

- Dim to warm from 1800K to 3000K CCT, minimum 95 CRI
- 4 inch aperture is unobtrusive in small scale spaces
- Square shape accentuates architectural styles
- Open reflector with 7 finishes to complement any interior style
- Die cast trim choices include flush, regressed or angled lens
- Spring clip retention system eliminates trim sag
- Contemporary design provides glare-free illumination for a soft ceiling appearance
- Fully room-side accessible

SPECIFICATIONS

- HOUSING – Die-cast aluminum trim housing with forged aluminum heat sink. Galvanized steel splice compartment with driver mounting plate/enclosure. Swing-out mounting arms adjust for ceiling thickness from 1/2" - 1-7/16" (see options for additional ceiling thicknesses).
- OPEN REFLECTOR – Low-iridescent anodized aluminum.
- LENSED TRIM – Die-cast aluminum frame with micro-prismatic, tempered glass lens.
- ELECTRICAL – Five color, mid-power LED modules. On board thermal and optical feedback ensure color consistency of <2 step MacAdam ellipse (SDCM). In-line spectral capture and storage results in consistent CRI and CCT across all arrays. Reported L70>55,000 hours. Reported L90>55,000 hours. Estimated L70 = 200,000 hours.
- MOUNTING – Recessed. 20 ga. galvanized steel mounting pan for new construction or IC-rated enclosure. Remodel kit option includes receiver bracket hardware.
- LISTINGS –
 - cCSAus conforms to UL STD 1598; Certified to CAN/CSA STD C22.2 No. 250.0 for damp locations. LED light assembly conforms to UL 2108 for remote installation.
 - Suitable for wet location under covered ceiling when specified with WET/CC option.
 - IC-rated for direct contact with insulation when specified with I Mounting Type.
 - City of Chicago Environmental Air approved when specified with CP option.
 - Complies with ASTM-E283 when specified with ATH option.
 - RoHS compliant.
- WARRANTY – 5-year limited warranty, see hew.com/warranty.

ORDERING EXAMPLE:⁽¹⁾ **4DS - L21/9DW - OPTIONS - DIM - UNV - LW - OF - WH - TRIM OPTIONS - N - F1**

HOUSING

SERIES	LUMENS ⁽²⁾	COLOR	OPTIONS	CONTROL	VOLTAGE
4DS	L7 700lm	9DW Dim to warm (95 CRI, 1800K – 3000K)	EM/10W 10-watt emergency battery ⁽³⁾	DIM Dimming driver (0-10V signal to control dimming and CCT)	UNV 120-277V 347 347V ⁽⁶⁾
	L13 1,300lm		ATH Airtight construction		
	L21 2,100lm		CP Chicago plenum (CCEA) ⁽⁴⁾		
			F Fuse kit	LUT Lutron Ecosystem enabled	
			SDT Stepdown transformer ⁽⁵⁾		
			TC Adjustable mounting arms for 1-1/2" – 2-1/4" thick ceilings		

TRIM

TRIM TYPE	DISTRIBUTION ⁽⁷⁾	FLANGE TYPE	REFLECTOR FINISH	TRIM OPTIONS
L Flush lens	W Wide	OF 1/2" standard flange	Open trim types	MWT Textured white trim flange ⁽¹¹⁾
O Open reflector				CS Clear semi-specular anodize
R Regressed lens	55° Open	SF 1/4" mud-in flange ⁽¹⁰⁾	SG Satin-glow anodize	MB Regressed lens trim with texture black splay and white flange ⁽¹²⁾
A Angled lens ⁽⁸⁾	60° Flush			GD Gold anodize
	M Medium		CG Champagne gold anodize	IP IP65 rated trim ⁽¹³⁾
	45° Open		PW Pewter anodize	AD Diffuse acrylic lens ⁽¹⁴⁾
	60° Regressed		SPC Clear specular anodize	PD Diffuse 1/8" polycarbonate lens ⁽¹⁵⁾
	N Narrow		RG Rose gold anodize	WET/CC Wet location, covered ceiling listed ⁽¹⁶⁾
	40° Open		Lens trim types	
	35° Flush		CS Clear semi-specular powder coat	
	35° Regressed		WH White texture powder coat	
	N Narrow		BL Black texture powder coat	
	40° Open			
	25° Flush			
	25° Regressed			
	WW Wall wash ⁽⁹⁾			

MOUNTING

MOUNTING TYPE⁽¹⁷⁾

- N Open pan for new construction
- I IC-rated enclosure for new construction⁽¹⁹⁾
- R Remodel kit⁽²⁰⁾

MOUNTING HARDWARE⁽¹⁸⁾

- F1 2-Position fixed pan bracket, universal bar hanger included
- F2 2-Position fixed pan bracket, t-bar bar hanger included
- BA1 Adjustable butterfly pan bracket, bar hanger not included⁽²¹⁾
- BA2 Adjustable butterfly pan bracket, heavy-duty universal bar hanger included⁽²²⁾
- CA1 Adjustable caterpillar pan bracket, universal bar hanger included
- CA2 Adjustable caterpillar pan bracket, t-bar hanger included

NOTES

- Housing, trim, and mounting ship separately.
- Lumen output based on full light output, L trim type, M distribution and WH finish, 3000K/95CRI. Actual lumens may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
- N Mounting Type only.
- I Mounting Type required.
- May be required for 347V, see product builder at hew.com
- Not available with EM batteries.
- Beam angle based on CS or WH reflector finish.
- Available with WW Distribution only.
- O and A Trim Types only.
- For use with mud-in plaster construction only, supplied with mud flange installation kit, see page 4 for FLANGE TYPE DETAILS, not available with CP, ATH or IP options.
- O Trim Type and OF Flange Type only. Not available with WH Reflector Finish.
- R trim type only.
- L and R trim types only.
- L and R Trim Types only. Wide distribution only.
- L and R Trim Types only. Wide distribution only.
- Not available with O Trim Type. Reduces lumen output, use .85 multiplier.
- Mounting hardware required (N and I only), ordered separately, see MOUNTING HARDWARE ordering info. See page 4 for MOUNTING TYPE DETAILS.
- Specify for N and I Mounting Types only. See page 5 for MOUNTING HARDWARE DETAILS.
- L13 lumen package max.
- Also used in new construction sheetrock ceilings.
- N Mounting Type only.
- N Mounting Type only.



4DS dim to WARM

4.5" Downlight – Square

FIXTURE PERFORMANCE DATA

OPEN REFLECTOR TRIM TYPE

LED PACKAGE	DISTRIBUTION	DELIVERED LUMENS	CCT AT 100% (FULL OUTPUT)	CCT AT 1% (FULL DIM)	WATTAGE	EFFICACY (lm/W)
L7	W	629	3000K	1800K	14.0	44.9
	M	694			14.0	49.6
	N	709			14.0	50.6
L13	W	1102			23.4	47.2
	M	1216			23.4	52.0
	N	1243			23.4	53.2
L21	W	1805			37.7	47.9
	M	1991			37.7	52.8
	N	2035			37.7	54.0

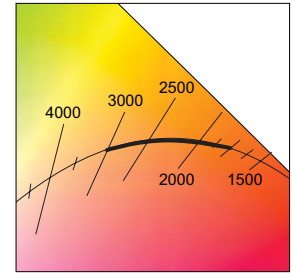
FLUSH LENS TRIM TYPE

LED PACKAGE	DISTRIBUTION	DELIVERED LUMENS	CCT AT 100% (FULL OUTPUT)	CCT AT 1% (FULL DIM)	WATTAGE	EFFICACY (lm/W)
L7	W	681	3000K	1800K	14.0	48.6
	M	751			14.0	53.6
	N	759			14.0	54.2
L13	W	1193			23.4	51.1
	M	1316			23.4	56.3
	N	1330			23.4	56.9
L21	W	1956			37.7	51.9
	M	2147			37.7	56.9
	N	2180			37.7	57.8

REGRESSED LENS TRIM TYPE

LED PACKAGE	DISTRIBUTION	DELIVERED LUMENS	CCT AT 100% (FULL OUTPUT)	CCT AT 1% (FULL DIM)	WATTAGE	EFFICACY (lm/W)
L7	W	654	3000K	1800K	14.0	46.7
	M	738			14.0	52.7
	N	751			14.0	53.6
L13	W	1147			23.4	49.1
	M	1293			23.4	55.3
	N	1316			23.4	56.3
L21	W	1878			37.7	49.8
	M	2116			37.7	56.1
	N	2155			37.7	57.2

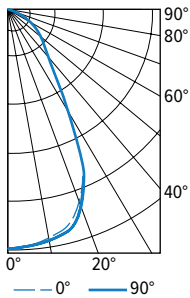
OPEN REFLECTOR FINISH		
CATALOG NUMBER	REFLECTOR FINISH	CONVERSION FACTOR
CS	Clear semi-specular	1.00
SG	Satin-glow	0.92
GD	Gold	0.93
CG	Champagne Gold	0.96
PW	Pewter	0.86
SPC	Specular	1.02
RG	Rose Gold	0.88
WH	White, textured	0.89
BL	Black, textured	0.79



- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
- Wattage shown is based on 120V input.
- Results based on 3000K, 95 CRI, full output, actual lumens may vary +/-5%
- Use multiplier table to calculate additional options.

PHOTOMETRY

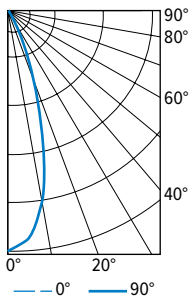
4DS-L21/9DW-DIM-UNV-LW-OF-WH Total Luminaire Output: 1956 lumens; 37.7 Watts | Efficacy: 51.9 lm/W | 95.0 CRI; 3000K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	1454	1454	1454	
5	1441	1441	1442	137
15	1359	1379	1388	386
25	1055	1194	1058	502
35	477	726	468	368
45	302	328	299	246
55	183	188	182	169
65	96	93	94	97
75	40	39	40	43
85	5	4	6	8
90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1025	52
	0 - 40	1393	71
	0 - 60	1807	92
	0 - 90	1956	100
	0 - 180	1956	100

4DS-L21/9DW-DIM-UNV-LM-OF-WH Total Luminaire Output: 2147 lumens; 37.7 Watts | Efficacy: 56.9 lm/W | 95.0 CRI; 3000K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	5763	5763	5763	
5	5553	5518	5492	501
15	3328	3348	3267	907
25	903	941	816	457
35	204	234	181	149
45	73	80	69	61
55	38	40	38	36
65	24	23	24	23
75	10	10	9	10
85	2	1	2	3
90	0	0	0	

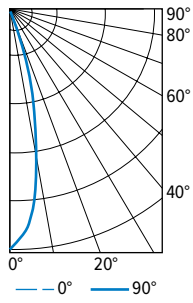
LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1865	87
	0 - 40	2014	94
	0 - 60	2111	98
	0 - 90	2147	100
	0 - 180	2147	100



4DS dim to WARM

4.5" Downlight – Square

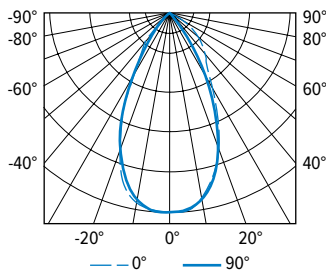
4DS-L21/9DW-DIM-UNV-LN-OF-WH Total Luminaire Output: 2180 lumens; 37.7 Watts | Efficacy: 57.8 lm/W | 95.0 CRI; 3000K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	9117	9117	9117	
5	8263	8125	8188	710
15	3429	3196	3064	934
25	720	631	557	341
35	151	142	116	97
45	56	59	51	45
55	30	30	29	28
65	17	16	16	17
75	9	8	8	8
85	0	0	0	1
90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1985	91
	0 - 40	2082	96
	0 - 60	2155	99
	0 - 90	2180	100
	0 - 180	2180	100

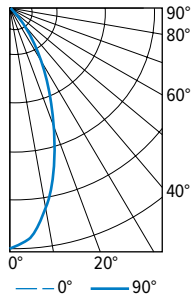
4DS-L21/9DW-DIM-UNV-OWW-OF-CS Total Luminaire Output: 1677 lumens; 37.7 Watts | Efficacy: 44.5 lm/W | 95.0 CRI; 3000K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
	0°	45°	90°	135°	180°	
0	1775	1775	1775	1775	1775	
5	1774	1765	1766	1768	1767	166
15	1512	1528	1521	1595	1585	430
25	1033	1081	989	1127	999	477
35	591	553	390	537	457	323
45	433	254	128	184	171	173
55	261	80	18	30	20	71
65	158	17	0	0	0	28
75	53	0	0	0	0	9
85	0	0	0	0	0	0
90	0	0	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1073	64
	0 - 40	1396	83
	0 - 60	1641	98
	0 - 90	1677	100
	0 - 180	1677	100

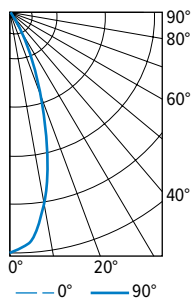
4DS-L21/9DW-DIM-UNV-OM-OF-CS Total Luminaire Output: 1991 lumens; 37.7 Watts | Efficacy: 52.8 lm/W | 95.0 CRI; 3000K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	3551	3551	3551	
5	3411	3376	3376	311
15	2464	2440	2436	677
25	1313	1300	1305	606
35	425	531	413	308
45	60	124	57	79
55	6	10	6	9
65	0	0	0	0
75	0	0	0	0
85	0	0	0	0
90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1595	80
	0 - 40	1902	96
	0 - 60	1991	100
	0 - 90	1991	100
	0 - 180	1991	100

4DS-L21/9DW-DIM-UNV-RM-OF-WH Total Luminaire Output: 2116 lumens; 37.7 Watts | Efficacy: 56.1 lm/W | 95.0 CRI; 3000K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	5655	5655	5655	
5	5454	5390	5360	490
15	3323	3305	3238	897
25	899	961	918	472
35	179	243	199	152
45	58	75	60	55
55	32	33	30	29
65	16	15	16	15
75	4	3	3	5
85	0	0	0	1
90	0	0	0	

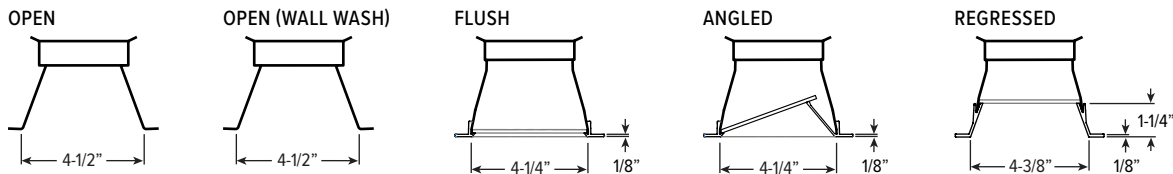
LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1859	88
	0 - 40	2012	95
	0 - 60	2096	99
	0 - 90	2116	100
	0 - 180	2116	100



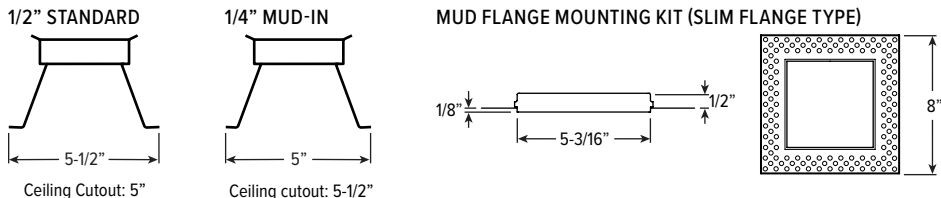
4DS dim to WARM

4.5" Downlight – Square

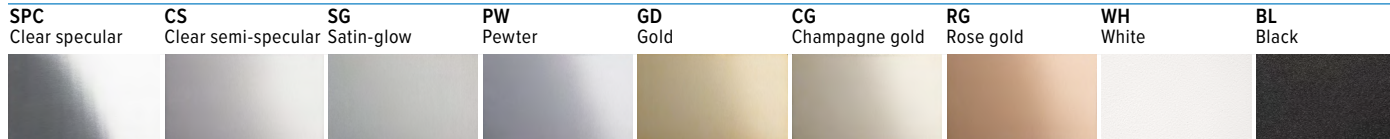
TRIM TYPE DETAILS



FLANGE TYPE DETAILS

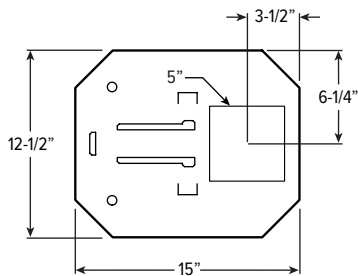


REFLECTOR FINISH DETAILS

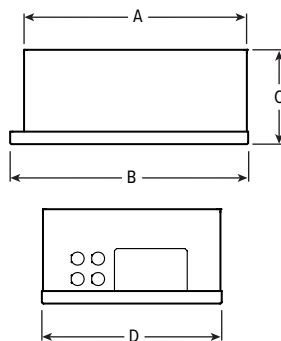


MOUNTING TYPE DETAILS

NEW CONSTRUCTION

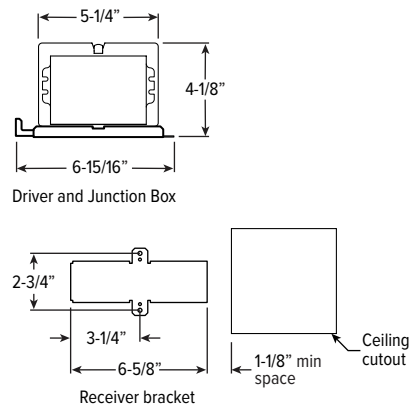


IC-RATED



LUMENS	LENGTH			
	A	B	C	D
L7 - L13	15-3/16"	16"	6-3/8"	12-1/8"

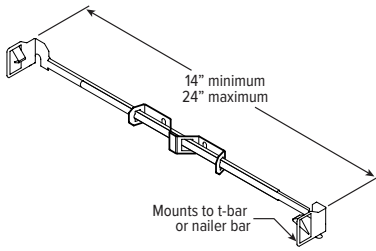
REMODEL



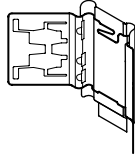
4DS dim to WARM 4.5" Downlight – Square

MOUNTING HARDWARE DETAILS

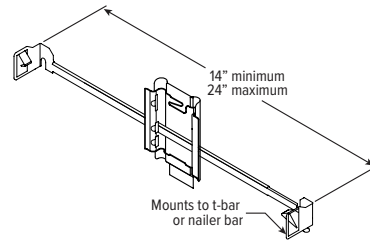
F1 2-Position fixed pan bracket, universal bar hanger included



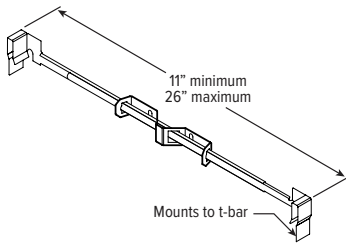
BA1 Adjustable butterfly pan bracket, bar hanger not included



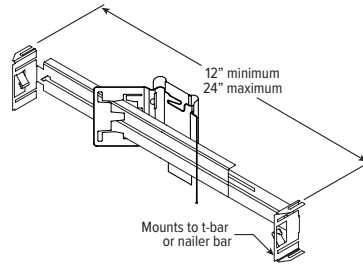
CA1 Adjustable caterpillar pan bracket, universal bar hanger included



F2 2-Position fixed pan bracket, t-bar bar hanger included



BA2 Adjustable butterfly pan bracket, heavy-duty universal bar hanger included



CA2 Adjustable caterpillar pan bracket, t-bar hanger included

