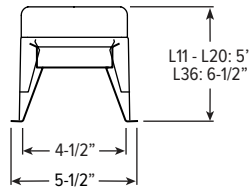


4DS tunable WHITE 4.5" Downlight – Square



CATALOG #: _____

TYPE: _____

PROJECT: _____

NEW CONSTRUCTION AND REMODEL

FEATURES

- Tunable white from 2700K to 5000K CCT, minimum 80 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** – High-performance Class 2 C.O.B. LED array. Modular quick-connect plug for easy field-connection of LED light assembly to driver. Reported L70>50,000 hours. Tunable White products use LEDs of multiple CCTs and may produce a perceptibly different shade of white from single-CCT products at the same CCT. All CCTs are within 3 MacAdam ellipses.
- MOUNTING** – Recessed. 20 ga. galvanized steel mounting pan for new construction or IC-rated enclosure. Remodel kit option includes receiver bracket hardware. Marked spacing required for L36 lumen package, consult factory.
- 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 - L20/8TW - OPTIONS - DIM - UNV - LW - OF - WH - TRIM OPTIONS - N - F1**

HOUSING

SERIES	LUMENS ⁽²⁾	COLOR	OPTIONS	CONTROL	VOLTAGE
4DS	L11 1,000lm	8TW Tunable white (80 CRI, 2700K-5000K)	EM/10W 10-watt emergency battery ⁽³⁾	DALI Driver prewired for DALI applications	UNV 120-277V 347 347V
	L20 2,000lm		ATH Airtight construction	DIM Dimming driver with (1) 0-10V signal to control dimming and (1) 0-10V signal to control CCT	
	L36 3,000lm		CP Chicago plenum (CCEA) ⁽⁴⁾	DMX Driver prewired for DMX applications	
			F Fuse kit		
			SDT Stepdown transformer ⁽⁵⁾		
			TC Adjustable mounting arms for 1-1/2" – 2-1/4" thick ceilings		

TRIM

TRIM TYPE	DISTRIBUTION ⁽⁶⁾	FLANGE TYPE	REFLECTOR FINISH	TRIM OPTIONS
L Flush lens	W Wide	OF 1/2" standard flange	Open trim types	MWT Textured white trim flange ⁽¹⁰⁾
O Open reflector	55° Open	SF 1/4" mud-in flange ⁽⁹⁾	CS Clear semi-specular anodize	MB Regressed lens trim with texture black splay and white flange ⁽¹¹⁾
R Regressed lens	60° Flush		SG Satin-glow anodize	IP IP65 rated trim ⁽¹²⁾
A Angled lens ⁽⁷⁾	60° Regressed		GD Gold anodize	AD Diffuse acrylic lens ⁽¹³⁾
	M Medium		CG Champagne gold anodize	WET/CC Wet location, covered ceiling listed ⁽¹⁴⁾
	45° Open		PW Pewter anodize	
	35° Flush		SPC Clear specular anodize	
	35° Regressed		RG Rose gold anodize	
	N Narrow		Lens trim types	
	40° Open		WH White texture powder coat	
	25° Flush		BL Black texture powder coat	
	25° Regressed			
	WW Wall wash ⁽⁸⁾			

MOUNTING

MOUNTING TYPE ⁽¹⁵⁾	MOUNTING HARDWARE ⁽¹⁶⁾
N Open pan for new construction	F1 2-Position fixed pan bracket, universal bar hanger included
I IC-rated enclosure for new construction ⁽¹⁷⁾	F2 2-Position fixed pan bracket, t-bar hanger included
R Remodel kit ⁽¹⁸⁾	BA1 Adjustable butterfly pan bracket, bar hanger not included ⁽¹⁹⁾
	BA2 Adjustable butterfly pan bracket, heavy-duty universal bar hanger included ⁽²⁰⁾
	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 L trim type, M distribution and WH finish, 4000K/80CRI. 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
- 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. Not available with O Trim Type.
- 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.
- L20 lumen package max.
- Also used in new construction sheetrock ceilings.
- N Mounting Type only.
- N Mounting Type only.



4DS tunable WHITE

4.5" Downlight – Square

FIXTURE PERFORMANCE DATA

OPEN REFLECTOR TRIM TYPE

LED PACKAGE	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L11	W	965	14.6	66.3
	M	1065	14.6	73.2
	N	1088	14.6	74.8
L20	W	1680	24.0	69.8
	M	1853	24.0	77.2
	N	1782	24.0	74.1
L36	W	3047	44.9	67.9
	M	3301	44.9	73.6
	N	3034	44.9	67.6

FLUSH LENS TRIM TYPE

LED PACKAGE	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L11	W	1045	14.6	71.8
	M	1152	14.6	79.2
	N	1165	14.6	80.0
L20	W	1820	24.0	75.8
	M	1973	24.0	82.2
	N	1908	24.0	79.5
L36	W	3300	44.9	73.6
	M	3573	44.9	79.7
	N	3247	44.9	72.4

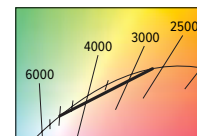
REGRESSED LENS TRIM TYPE

LED PACKAGE	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L11	W	1004	14.6	69.0
	M	1132	14.6	77.8
	N	1152	14.6	79.2
L20	W	1749	24.0	72.7
	M	1945	24.0	81.0
	N	1887	24.0	78.5
L36	W	3171	44.9	70.7
	M	3510	44.9	78.2
	N	3213	44.9	71.6

MULTIPLIER TABLE

COLOR TEMPERATURE		
CCT	LUMENS	WATTS
2700K	0.83	1.03
3000K	1.00	1.00
3500K	0.99	0.99
4000K	1.00	1.00
5000K	0.98	1.03

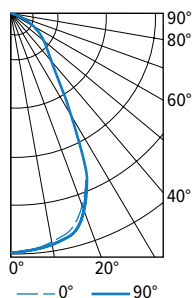
OPEN REFLECTOR FINISH		
CATALOG NUMBER	REFLECTOR FINISH	CONVERSION FACTOR
CS	Clear semi-specular	1.00
SG	Satin-glow	0.92
GD	Gold	0.93
CG	Champagne Gold	0.96
PW	Pewter	0.86
SPC	Specular	1.02
RG	Rose Gold	0.88
WH	White, textured	0.89
BL	Black, textured	0.79



- 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 4000K, 80 CRI, actual lumens may vary +/-5%
- Use multiplier tables to calculate additional options.

PHOTOMETRY

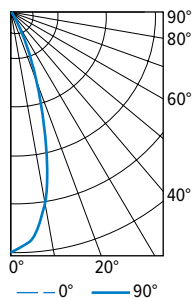
4DS-L20/8TW-DIM-UNV-LW-OF-WH Total Luminaire Output: 1820 lumens; 24 Watts | Efficacy: 75.8 lm/W | 80 CRI; 4051K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	1354	1354	1354	
5	1341	1341	1342	127
15	1265	1283	1291	359
25	982	1111	985	467
35	444	676	436	343
45	281	305	279	229
55	170	175	169	157
65	90	87	88	90
75	37	36	37	40
85	4	4	5	8
90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	954	52
	0 - 40	1296	71
	0 - 60	1682	92
	0 - 90	1820	100
	0 - 180	1820	100

4DS-L20/8TW-DIM-UNV-LM-OF-WH Total Luminaire Output: 1973 lumens; 24 Watts | Efficacy: 82.2 lm/W | 80 CRI; 4051K CCT



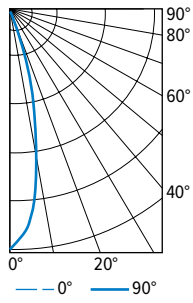
VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	5297	5297	5297	
5	5104	5072	5048	461
15	3059	3077	300	833
25	830	865	750	420
35	187	215	166	137
45	67	74	63	56
55	35	37	35	33
65	22	21	22	21
75	9	9	8	10
85	2	1	2	2
90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1714	87
	0 - 40	1851	94
	0 - 60	1941	98
	0 - 90	1973	100
	0 - 180	1973	100



4DS tunable WHITE 4.5" Downlight – Square

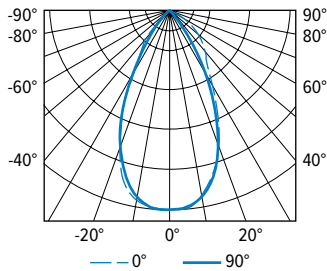
4DS-L20/8TW-DIM-UNV-LN-OF-WH Total Luminaire Output: 1908 lumens; 24 Watts | Efficacy: 79.5 lm/W | 80 CRI; 4051K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	7979	7979	7979	
5	7232	7111	7166	621
15	3001	2797	2681	818
25	630	552	487	299
35	132	124	102	85
45	49	52	44	39
55	27	27	25	24
65	15	14	14	15
75	8	7	7	7
85	0	0	0	1
90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1738	91
	0 - 40	1822	96
	0 - 60	1886	99
	0 - 90	1908	100
	0 - 180	1908	100

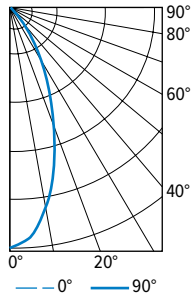
4DS-L20/8TW-DIM-UNV-OWW-OF-CS Total Luminaire Output: 1561 lumens; 24 Watts | Efficacy: 65.0 lm/W | 80 CRI; 4051K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
	0°	45°	90°	135°	180°	
0	1652	1652	1652	1652	1652	
5	1651	1643	1644	1645	1644	155
15	1408	1422	1416	1485	1475	400
25	962	1006	921	1049	930	444
35	550	514	363	499	426	301
45	403	237	119	171	159	161
55	243	75	17	27	19	66
65	147	16	0	0	0	26
75	50	0	0	0	0	8
85	0	0	0	0	0	0
90	0	0	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	999	64
	0 - 40	1300	83
	0 - 60	1527	98
	0 - 90	1561	100
	0 - 180	1561	100

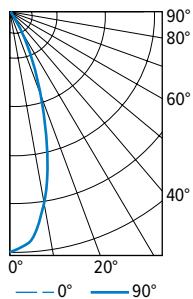
4DS-L20/8TW-DIM-UNV-OM-OF-CS Total Luminaire Output: 1853 lumens; 24 Watts | Efficacy: 77.2 lm/W | 80 CRI; 4051K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	3305	3305	3305	
5	3175	3142	3142	290
15	2293	2271	2267	630
25	1222	1210	1214	564
35	396	494	384	286
45	56	115	53	74
55	5	9	5	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	1484	80
	0 - 40	1771	96
	0 - 60	1853	100
	0 - 90	1853	100
	0 - 180	1853	100

4DS-L20/8TW-DIM-UNV-RM-OF-WH Total Luminaire Output: 1945 lumens; 24 Watts | Efficacy: 81 lm/W | 80 CRI; 4051K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	5198	5198	5198	
5	5013	4955	4927	450
15	3055	3038	2977	825
25	826	883	844	434
35	165	223	183	140
45	53	69	55	51
55	30	31	28	27
65	15	14	15	14
75	4	3	3	4
85	0	0	0	1
90	0	0	0	

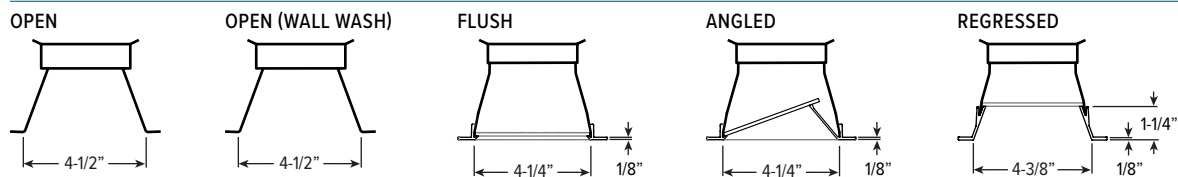
LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1709	88
	0 - 40	1849	95
	0 - 60	1927	99
	0 - 90	1945	100
	0 - 180	1945	100



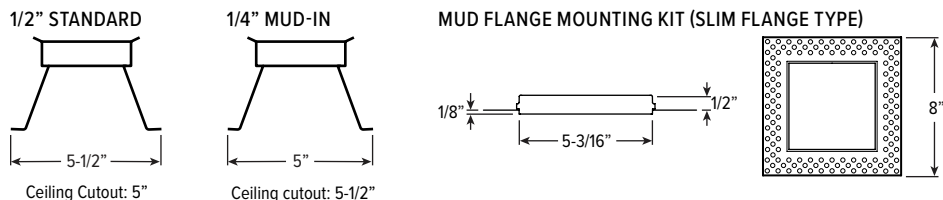
4DS tunable WHITE

4.5" Downlight – Square

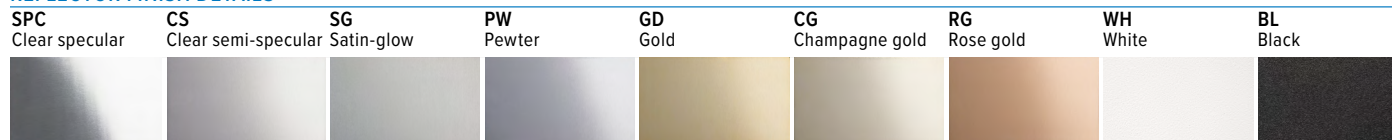
TRIM TYPE DETAILS



FLANGE TYPE DETAILS

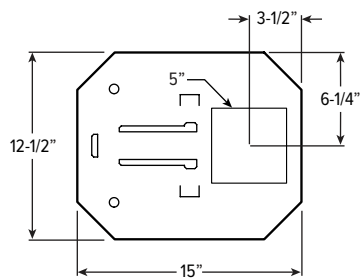


REFLECTOR FINISH DETAILS

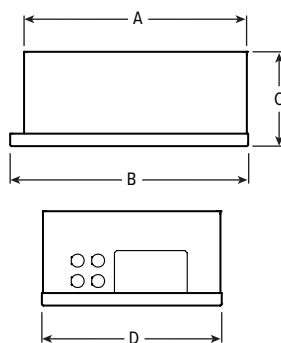


MOUNTING TYPE DETAILS

NEW CONSTRUCTION

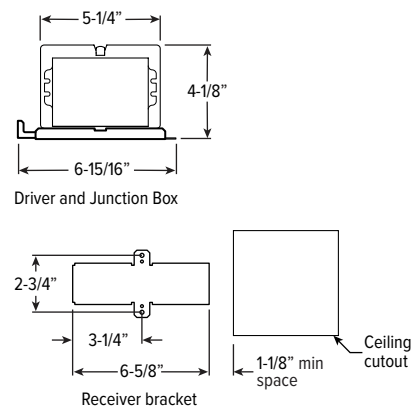


IC-RATED



LUMENS	LENGTH			
	A	B	C	D
L11 - L20	15-3/16"	16"	6-3/8"	12-1/8"

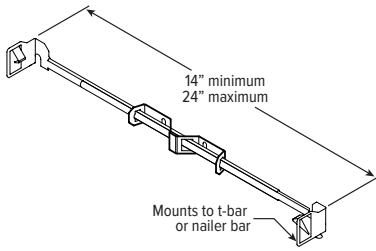
REMODEL



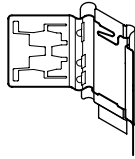
4DS tunable WHITE 4.5" Downlight – Square

MOUNTING HARDWARE DETAILS

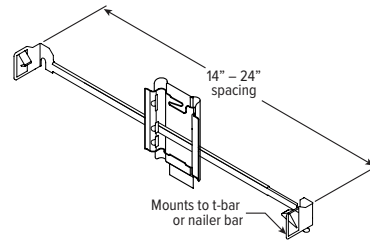
F1 2-Position fixed pan bracket, universal bar hanger included



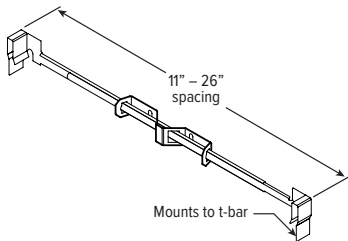
BA1 Adjustable butterfly pan bracket, bar hanger not included



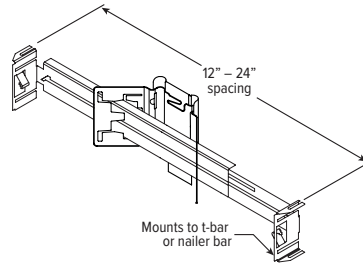
CA1 Adjustable caterpillar pan bracket, universal bar hanger included



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

