

4DS LED 4.5" Downlight – Square

FIXTURE PERFORMANCE DATA

OPEN REFLECTOR TRIM TYPE

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	947	12.0	78.6
	M	1045	12.0	86.7
	N	1067	12.0	88.6
L15	W	1395	17.4	80.1
	M	1540	17.4	88.4
	N	1573	17.4	90.3
L20	W	1893	25.0	75.7
	M	2089	25.0	83.6
	N	2134	25.0	85.4
L30	W	2839	36.0	78.9
	M	3090	36.0	85.8
	N	2999	36.0	83.3
L40	W	3739	45.0	83.1
	M	-	-	-
	N	-	-	-

FLUSH LENS TRIM TYPE

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	1026	12.0	85.2
	M	1127	12.0	93.5
	N	1144	12.0	94.9
L15	W	1511	17.4	86.7
	M	1666	17.4	95.6
	N	1684	17.4	96.6
L20	W	2050	25.0	82.1
	M	2261	25.0	90.5
	N	2285	25.0	91.5
L30	W	3077	36.0	85.5
	M	3333	36.0	92.6
	N	3214	36.0	89.3
L40	W	4053	45.0	90.1
	M	-	-	-
	N	-	-	-

REGRESSED LENS TRIM TYPE

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	986	12.0	81.8
	M	1111	12.0	92.2
	N	1127	12.0	93.5
L15	W	1453	17.4	83.4
	M	1637	17.4	93.9
	N	1660	17.4	95.3
L20	W	1972	25.0	78.9
	M	2221	25.0	88.9
	N	2253	25.0	90.1
L30	W	2957	36.0	82.2
	M	3285	36.0	91.3
	N	3166	36.0	88.0
L40	W	3895	45.0	86.6
	M	-	-	-
	N	-	-	-

MULTIPLIER TABLES

	COLOR TEMPERATURE	
	CCT	CONVERSION FACTOR
80 CRI	2700K	0.92
	3000K	0.98
	3500K	1.00
	4000K	1.01
	5000K	1.02
90 CRI	2700K	0.76
	3000K	0.79
	3500K	0.82
	4000K	0.84
	5000K	0.88

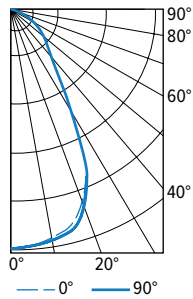
OPEN REFLECTOR FINISH		
CATALOG NUMBER	REFLECTOR FINISH	CONVERSION FACTOR
CS	Clear semi-specular	1.00
SG	Satin-glow	0.83
GD	Gold	0.93
CG	Champagne Gold	0.96
PW	Pewter	0.86
SPC	Specular	1.02
RG	Rose Gold	0.88
WH	White, textured	0.99
BL	Black, textured	0.79

TRIM	
CATALOG NUMBER	CONVERSION FACTOR
AD	0.85
PD	0.85

- 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 3500K, 80 CRI, actual lumens may vary +/-5%
- Use multiplier table to calculate additional options.

PHOTOMETRY

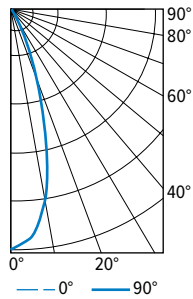
4DS-L20/835-DIM-UNV-LW-OF-WH Report #: 20316; 04/16/18 | Total Luminaire Output: 2050 lumens; 25.0 Watts | Efficacy: 82.1 lm/W | 83.8 CRI; 3478K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
		0°	45°	90°	
	0	1526	1526	1526	
	5	1512	1512	1513	144
	15	1426	1447	1456	410
	25	1107	1253	1110	546
	35	501	762	491	372
	45	317	344	314	254
	55	192	197	191	175
	65	101	98	99	100
	75	42	41	42	44
	85	5	4	6	5
	90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1100	54
	0 - 40	1472	72
	0 - 60	1902	93
	0 - 90	2050	100
	0 - 180	2050	100

4DS-L20/835-DIM-UNV-LM-OF-WH Report #: 20318; 04/20/18 | Total Luminaire Output: 2261 lumens; 25.0 Watts | Efficacy: 90.5 lm/W | 83.8 CRI; 3478K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
		0°	45°	90°	
	0	6047	6047	6047	
	5	5827	5790	5763	553
	15	3492	3513	3428	994
	25	948	987	856	438
	35	214	246	190	142
	45	77	84	72	61
	55	40	42	40	37
	65	25	24	25	24
	75	10	10	9	11
	85	2	1	2	2
	90	0	0	0	

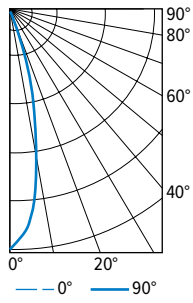
LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1985	88
	0 - 40	2126	94
	0 - 60	2224	98
	0 - 90	2261	100
	0 - 180	2261	100



4DS LED

4.5" Downlight – Square

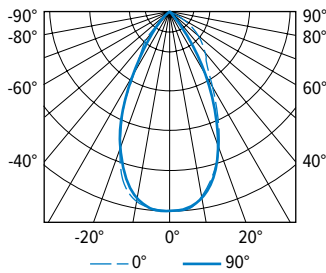
4DS-L20/835-DIM-UNV-LN-OF-WH Report #: 20319; 04/20/18 | Total Luminaire Output: 2285 lumens; 25 Watts | Efficacy: 91.5 lm/W | 83.8 CRI; 3478K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	9567	9567	9567	
5	8671	8526	8592	820
15	3598	3354	3215	966
25	755	662	584	310
35	158	149	122	90
45	59	62	53	45
55	32	32	30	28
65	18	17	17	17
75	9	8	8	8
85	0	0	0	0
90	0	0	0	0

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	2096	92
	0 - 40	2186	96
	0 - 60	2259	99
	0 - 90	2285	100
	0 - 180	2285	100

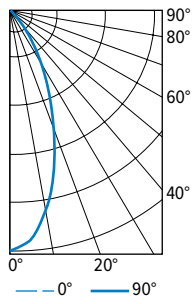
4DS-L20/835-DIM-UNV-OWW-OF-CS Report #: 20314; 04/16/18 | Total Luminaire Output: 1770 lumens; 25 Watts | Efficacy: 70.9 lm/W | 83.8 CRI; 3478K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
	0°	45°	90°	135°	180°	
0	1863	1863	1863	1863	1863	
5	1861	1852	1853	1855	1854	177
15	1587	1603	1596	1674	1663	462
25	1084	1134	1038	1183	1048	507
35	620	580	409	563	480	332
45	454	267	134	193	179	178
55	274	84	19	31	21	73
65	166	18	0	0	0	33
75	56	0	0	0	0	10
85	0	0	0	0	0	0
90	0	0	0	0	0	0

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1145	65
	0 - 40	1478	84
	0 - 60	1728	98
	0 - 90	1770	100
	0 - 180	1770	100

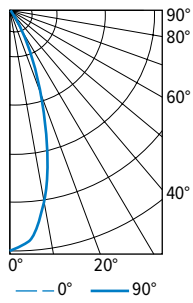
4DS-L20/835-DIM-UNV-OM-OF-CS Report #: 20312; 04/20/18 | Total Luminaire Output: 2089 lumens; 25 Watts | Efficacy: 83.6 lm/W | 83.8 CRI; 3478K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	3726	3726	3726	
5	3579	3542	3543	339
15	2585	2560	2556	726
25	1378	1364	1369	638
35	446	557	433	309
45	63	130	60	69
55	6	10	6	7
65	0	0	0	0
75	0	0	0	0
85	0	0	0	0
90	0	0	0	0

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1703	82
	0 - 40	2013	96
	0 - 60	2089	100
	0 - 90	2089	100
	0 - 180	2089	100

4DS-L20/835-DIM-UNV-RM-OF-WH Report #: 20323; 04/23/18 | Total Luminaire Output: 2221 lumens; 25 Watts | Efficacy: 88.9 lm/W | 83.8 CRI; 3478K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	5934	5934	5934	
5	5723	5656	5624	540
15	3487	3468	3398	981
25	943	1008	963	453
35	188	255	209	142
45	61	79	63	54
55	34	35	32	30
65	17	16	17	17
75	4	3	3	4
85	0	0	0	0
90	0	0	0	0

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1974	89
	0 - 40	2116	95
	0 - 60	2200	99
	0 - 90	2221	100
	0 - 180	2221	100



4DS LED

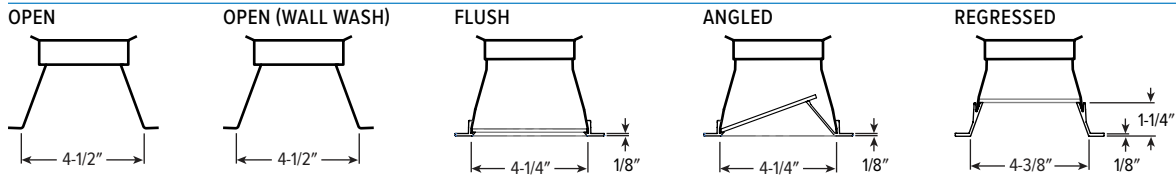
4.5" Downlight – Square

ADDITIONAL CONTROL OPTIONS

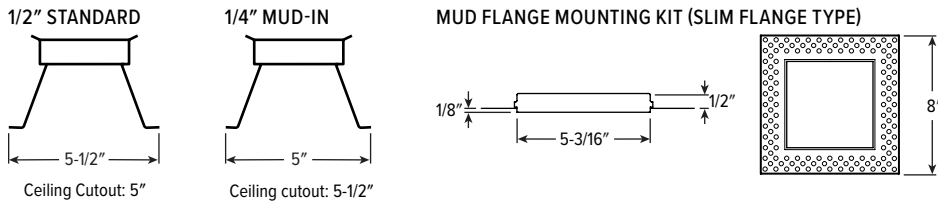
Lumen restrictions apply: L30 max for DMX driver, L30 max for Lutron drivers, L40 max for DIM LINE driver. 347V may require stepdown transformer, see product builder at hew.com/product-builder.

CATALOG NUMBER	DESCRIPTION
DIM	Dimming driver prewired for 0-10V low voltage applications
DIM1	1% dimming driver prewired for 0-10V low voltage applications
DIM LINE	Line voltage dimming driver (TRIAC and ELV compatible at 120V only)
DMX	0.1% dimming driver for DMX controls
LTE LINE	Lutron Hi-lume 1% 2-wire dimming driver forward phase line voltage controls (120V only)
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver
LDE5	Lutron 5-Series 5% EcoSystem dimming LED driver
VRF/DSR	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF) and sensor-ready driver
VRF/DBI/LDE1	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF), Lutron Hi-lume 1% EcoSystem dimming LED driver, and digital link interface
VRF/DBI/LDE5	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF), Lutron 5-Series 5% EcoSystem dimming LED driver, and digital link interface
FCJS/DIM	Lutron Vive PowPak wireless fixture control with dimming driver
FCJS/DIM1	Lutron Vive PowPak wireless fixture control with 1% dimming driver
ELDO SOLOB	EldoLED Solodrive, 0.1% dimming driver for 0-10V controls
ELDO SOLOB DALI	EldoLED Solodrive, 0.1% dimming driver for DALI controls
ELDO ECO1	EldoLED Ecodrive, 1% dimming driver for 0-10V controls
ELDO ECO1 DALI	EldoLED Ecodrive, 1% dimming driver for DALI controls

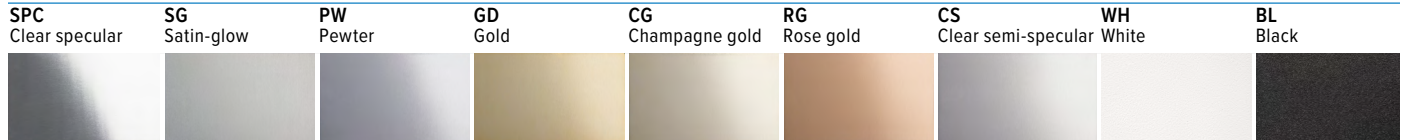
TRIM TYPE DETAILS



FLANGE TYPE DETAILS



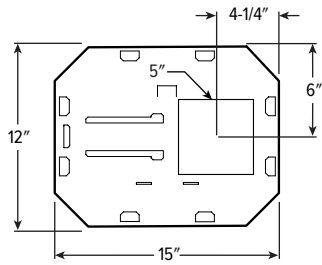
REFLECTOR FINISH DETAILS



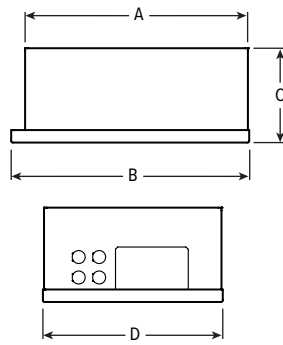
4DS LED 4.5" Downlight – Square

MOUNTING TYPE DETAILS

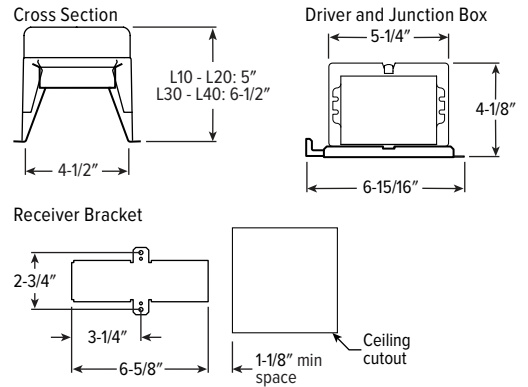
NEW CONSTRUCTION



IC-RATED

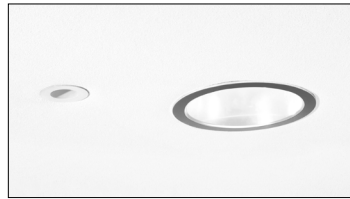


REMODEL

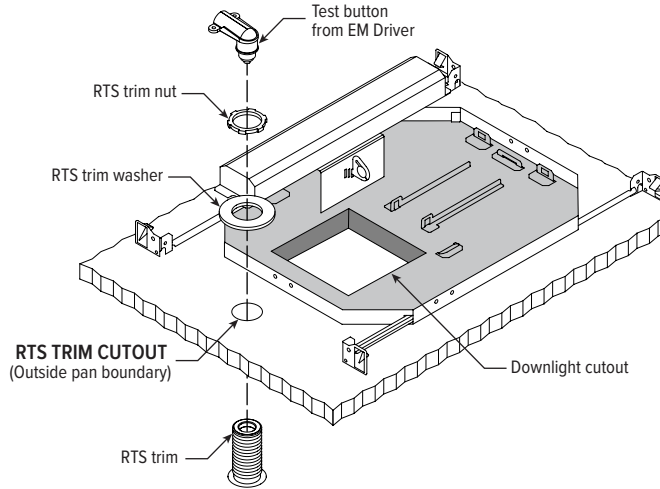


LUMENS	LENGTH			
	A	B	C	D
L10 - L20	15-3/16"	16"	6-3/8"	12-1/8"

EM/10W/RTS DETAILS



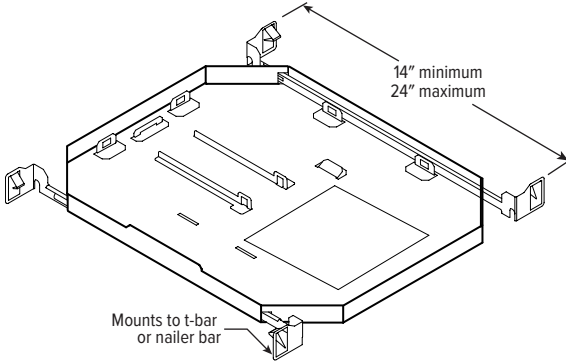
Shown Installed



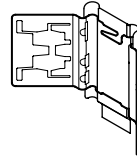
4DS^{LED} 4.5" Downlight – Square

MOUNTING HARDWARE DETAILS

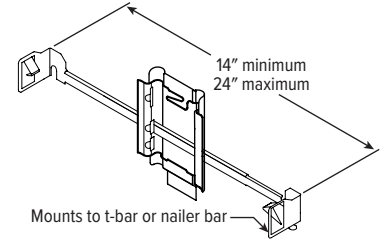
F1 Integral 2-position fixed pan bracket, universal bar hanger included



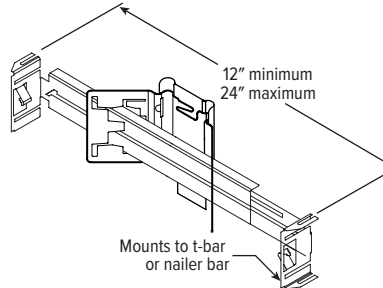
BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



CA1 Adjustable caterpillar pan bracket, universal bar hanger included (N Mounting Type only)



BA2 Adjustable butterfly pan bracket, heavy-duty universal bar hanger included (N Mounting Type only)



CA2 Adjustable caterpillar pan bracket, t-bar hanger included (N Mounting Type only)

