PROJECT	Job Name	Catalog Number	
INFORMATION	Fixture Type	 Approved by	

Luminaires for Wet Location/Shower Applications

#### **DFDL SERIES**

#### **PRODUCT FEATURES:**

- » 6" sealed, recessed downlight with regressed or flush lens trim
- » Insulated trim section withstands 1000VAC dielectric breakdown
- » 900-2,100 delivered lumens with multiple distribution, reflector finish and lens options
- » Wet Location and IP64/IP65 ingress protection rating

#### **SPECIFICATIONS**

**HEAT SINK:** Die-cast aluminum with external radial fins for natural convection.

**ROUGH-IN FRAME:** 18-gauge die-formed, corrosion-resistant steel and aluminum. Enclosed housing prevents accidental contact of trim section with potential electrical conductors within the ceiling space. Vertically adjustable collar accommodates ceiling thicknesses up to 2", adjustable post-installation. Universal mounting brackets accept 3/4" and 1-1/2" lathers channel, 1/2" EMT conduit and hanger bars. Quick-access junction box accessible post-installation from above and below ceiling. Includes (4) 1/2" and (2) 3/4" knock-outs to allow straight conduit runs. Listed for (8) 12AWG, 90°C conductors and feed-thru branch wiring.

**TRIM SECTION:** IP-rated trim section incorporates the heat sink, LED module, optics and lower trim. All components with potential contact to rough-in section are insulated to withstand a minimum 1000VAC dielectric breakdown. Configurable with an IP64-rated Regressed or Flush lens trim that is secured to the Rough-In frame with hidden torsion springs, or an IP65 Flush lens trim secured with four (4) Phillips-head, captive fasteners. Anti-microbial finish standard on all exposed painted surfaces. See trim ordering information for available options.

**OPTICAL:** Diffused tempered glass upper lens. Available with various reflector distribution patterns and finishes. Flush lens trim options include a clear lens. See distribution and reflector finish ordering information for available options.

**ELECTRICAL:** LED source available in multiple CCT and CRI combinations with a maximum 3-step MacAdam variation allowance. See Trim Ordering Information for available options. 120-277VAC or 347VAC, 50/60Hz electrical input with serviceable constant current driver (<20% THD, >0.90 PF). Minimum 85% driver efficiency. Standard 0-10V dimming with 1-100% range and dim-to-dark capabilities (non dim-to-dark with 347V); 165µA maximum source current. Optional eldoLED ECOdrive DALI driver with 1-100% range.

PHOTOMETRICS: Photometry tested to the IESNA LM-79-08 standard by an ILAC/ISO17025 accredited laboratory. For photometric information, go to www.kenall.com.

WARRANTY: Limited five (5) year LED warranty.

LISTINGS: Luminaire is certified to UL standards by Intertek Testing Laboratory for non-IC and Wet Location installations. IP64 and IP65 rating per IEC60598. NSF2 Splash/Non-Food Zone. Optional CCEA compliance.













## ORDERING INFORMATION (EX: DFDL6-NF-5FW-9L-35K9-W-CSS-T-RID6-DV-DIM1-FS)

TRIM	M							ROUGH-IN					
Model	Trim Style Trim Finish Lamp Power	Lamp	Color Distribution	Reflector Finish	Flush Lens Type	Rough-	·In	Input Voltage	Driver Type	Options			
DFDI	<u> </u>					RIE	<b>)</b> 6		_				
rim St	tyle	Lamp	Color			Rough	ı-In						
R	Regressed Lens (IP64)	30K8				RID6	6" De	ead-Front Rough	-In				
٧F	Flush Lens (Without Fasteners - IP64)	35K8											
FF	Flush Lens (With Fasteners - IP65)	<b>35K9</b> 3500K / 90 CRI min.					Voltage	e					
		<b>40K8</b> 4000K / 80 CRI min.					<b>DV</b> 120-277V, 50/60Hz						
Trim Fi		<b>40K9</b> 4000K / 90 CRI min.			<b>120</b> 120VAC, 60Hz								
DCFW	Die-Cast Aluminum in Flat White	<b>50K8</b> 5000K / 80 CRI min.				<b>277</b> 277VAC, 60Hz							
	(R and NF Trim Style)						<b>347†</b> 347VAC, 60Hz						
5BR	Type 304 Stainless Steel with 4B Brushed Finish	Distr	bution										
5FW	Type 304 Stainless Steel in Flat White	M	Medium			Driver Type							
KBR	Type 316 Stainless Steel with 4B Brushed Finish	W	Wide			<b>DIM1</b> 0-10V Dimming to 1% with Dim-to-Dark							
(FW	Type 316 Stainless Steel in Flat White					DALI							
	**	Refle	ctor Finish					3					
Lamp F	Power	FW	Flat White			Option	ns						
9L '	9 Watt White LED	CS	Clear Specular			FŚ		& Holder					
18L	18 Watt White LED	CSS	Clear Semi-Specular			CCEA	CCEA	Approved (spec	ified voltage requ	uired)			
		Eluch	Long Type (n/a Pear	occod Trim Stylo)									
		Flush Lens Type (n/a Regressed Trim Style) T 1/8" Clear High-Impact Acrylic				+ N/A	with D/	ALL Driver Type N	I/A with CCEA or	tion			
		Ġ				I IV/A	WILLI DE	ALI DIIVEI Type. IV	I/A WILLI CCEA OF	ILIUII			
		u	1/8" Clear Polycarbon	ale									



Luminaires for Wet Location/Shower Applications

## **DFDL SERIES**

#### **PERFORMANCE - REGRESSED LENS**

Optic		Laman		Initial De	livered Lun	nens, By La	mp Color		rff:	Input	TM-21	TM-21
Distribution	Reflector Finish	Lamp Power	30K8	35K8	35K9	40K8	40K9	50K8	Efficacy (lm/W)	Power (W)	Reported L90 (hrs)	Reported L70 (hrs)
	66	9L	1,162	1,189	978	1,196	998	1,210	80 - 103	12	>55,000	>55,000
	CS	18L	2,032	2,080	1,710	2,092	1,745	2,116	81 - 104	20	>55,000	>55,000
	CCC	9L	1,028	1,052	865	1,059	883	1,071	71 - 91	12	>55,000	>55,000
M	CSS	18L	1,799	1,841	1,513	1,851	1,544	1,873	72 - 92	20	>55,000	>55,000
	FW	9L	1,056	1,081	888	1,087	907	1,099	73 - 94	12	>55,000	>55,000
		18L	1,847	1,890	1,554	1,901	1,586	1,923	74 - 95	20	>55,000	>55,000
	CS	9L	1,139	1,166	958	1,173	978	1,186	79 - 101	12	>55,000	>55,000
	CS	18L	1,993	2,039	1,676	2,051	1,711	2,075	80 - 102	20	>55,000	>55,000
10/	CSS	9L	1,099	1,125	924	1,131	944	1,144	76 - 98	12	>55,000	>55,000
W	CSS	18L	1,922	1,967	1,617	1,979	1,651	2,001	77 - 99	20	>55,000	>55,000
	E)A/	9L	989	1,012	832	1,018	849	1,029	68 - 88	12	>55,000	>55,000
	FW	18L	1,729	1,770	1,455	1,780	1,485	1,800	69 - 89	20	>55,000	>55,000

Subject to change without notice. Visit www.kenall.com for ies files and additional information.



Luminaires for Wet Location/Shower Applications

# **DFDL SERIES**

#### **PERFORMANCE - REGRESSED LENS**

	DFDL6-R-18L	-40K8-W-CS		DFDL6-R-18L	-40K8-M-CS		
Wide Distribution Candela Curve	Initial center beam foot-candles	Beam diameter (ft)	Distance to illuminated plane (ft)	Initial center beam foot-candles	Beam diameter (ft)	Medium Distribution Candela Curve	
563	57.7	6.8	5'	83.7	4.9	730	
1126	40.1	8.2	6'	58.1	5.9	1459	
1689	29.5	9.6	7'	42.7	6.9	2189 /	
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	22.6	10.9	8'	32.7	7.8	2918	
	17.8	12.3	9'	25.8	8.8	$HT \setminus Y \mid$	
	14.4	13.7	10'	20.9	9.8		
Spacing Criteria: 1.33	foot-	Spacing Criteria: 0.98					
Beam Angle: 69°		Beam diameter is where foot-candles drop to 50% of maximum					

	DFDL6-R-18L	-40K8-W-CSS		DFDL6-R-18L	-40K8-M-CSS	Medium Distribution Candela Curve			
Wide Distribution Candela Curve	Initial center beam foot-candles	Beam diameter (ft)	Distance to illuminated plane (ft)	Initial center beam foot-candles	Beam diameter (ft)				
472	58.9	4.1	5'	117.1	4.5	732			
944	40.9	4.9	6'	81.3	5.4	1463			
1416	30.1	5.7	7'	59.7	6.3	2195 /			
100/	23.0	6.5	8'	45.7	7.2	2921			
	18.2	7.3	9'	36.1	8.1	$HY \setminus Y$			
	14.7	8.1	10'	29.3	9.0				
Spacing Criteria: 1.31	foot-	foot-candle multipliers for 30K8(.97), 35K8(.99), 35K9(.82), 40K9(.83), 50K8(1.01)							
Beam Angle: 69°		Beam diameter is where foot-candles drop to 50% of maximum							

	DFDL6-R-18L-40K8-W-FW			DFDL6-R-18L	-40K8-M-FW					
Wide Distribution Candela Curve	Initial center beam foot-candles	Beam diameter (ft)	Distance to illuminated plane (ft)	Initial center beam foot-candles	Beam diameter (ft)	Medium Distribution Candela Curve				
379	60.6	6.4	5'	66.3	6.5	451				
758	42.1	7.7	6'	46.0	7.9	901				
1516	30.9	9.0	7'	33.8	9.2	1352				
13.6	23.7	10.3	8'	25.9	10.5	1803				
1 X/X+	18.7	11.5	9'	20.5	11.8	HM > 1				
	15.2	12.8	10'	16.6	13.1					
Spacing Criteria: 1.11	foot-	foot-candle multipliers for 30K8(.97), 35K8(.99), 35K9(.82), 40K9(.83), 50K8(1.01)								
Beam Angle: 65°		Beam diame	eter is where foot-candles drop to 50%	Beam Angle: 66°						

Luminaires for Wet Location/Shower Applications

## **DFDL SERIES**

#### **PERFORMANCE - FLUSH LENS**

	Optic		1		Initial Del	ivered Lun	nens, By La	amp Color		F.46:	Input	TM-21	TM-21 Reported L70 (hrs)
Distribution	Reflector Finish	Lens Type	Lamp Power	30K8	35K8	35K9	40K8	40K9	50K8	Efficacy (lm/W)	Power (W)	Reported L90 (hrs)	
		т	9L	1,119	1,145	941	1,152	961	1,165	77 - 99	12	>55,000	>55,000
	CS	'	18L	1,957	2,002	1,646	2,014	1,680	2,037	78 - 100	20	>55,000	>55,000
	(3	G	9L	1,079	1,104	908	1,111	926	1,123	75 - 96	12	>55,000	>55,000
		G	18L	1,887	1,931	1,587	1,942	1,620	1,965	75 - 97	20	>55,000	>55,000
		Т	9L	983	1,006	827	1,012	844	1,024	68 - 87	12	>55,000	>55,000
M	CSS		18L	1,720	1,760	1,447	1,771	1,477	1,791	69 - 88	20	>55,000	>55,000
IVI	CSS	G	9L	948	971	798	976	814	987	66 - 84	12	>55,000	>55,000
		G	18L	1,659	1,697	1,395	1,707	1,424	1,727	66 - 85	20	>55,000	>55,000
		Т	9L	1,016	1,040	855	1,046	873	1,058	70 - 90	12	>55,000	>55,000
	FW	'	18L	1,777	1,819	1,495	1,830	1,526	1,851	71 - 91	20	>55,000	>55,000
	FVV	G	9L	980	1,003	824	1,009	842	1,020	68 - 87	12	>55,000	>55,000
		G	18L	1,714	1,754	1,442	1,764	1,472	1,785	69 - 88	20	>55,000	>55,000
	66	T CS	9L	1,103	1,129	928	1,135	947	1,148	76 - 98	12	>55,000	>55,000
			18L	1,929	1,974	1,623	1,986	1,656	2,008	77 - 99	20	>55,000	>55,000
	CS	G	9L	1,063	1,088	895	1,095	913	1,107	74 - 94	12	>55,000	>55,000
		G	18L	1,860	1,904	1,565	1,915	1,597	1,937	74 - 95	20	>55,000	>55,000
		Т	9L	1,045	1,070	879	1,076	898	1,088	72 - 93	12	>55,000	>55,000
W	CSS	'	18L	1,828	1,871	1,538	1,882	1,570	1,903	73 - 94	20	>55,000	>55,000
VV	C33	G	9L	1,008	1,032	848	1,038	866	1,049	70 - 90	12	>55,000	>55,000
		١	18L	1,763	1,804	1,483	1,815	1,514	1,836	71 - 90	20	>55,000	>55,000
		Т	9L	932	954	784	959	800	970	65 - 83	12	>55,000	>55,000
	FW		18L	1,630	1,668	1,371	1,678	1,400	1,697	65 - 84	20	>55,000	>55,000
	FVV	G	9L	899	920	756	925	772	936	62 - 80	12	>55,000	>55,000
		G	18L	1,572	1,609	1,323	1,618	1,350	1,637	63 - 81	20	>55,000	>55,000

Subject to change without notice. Visit www.kenall.com for ies files and additional information.



Luminaires for Wet Location/Shower Applications

# **DFDL SERIES**

#### **PERFORMANCE - FLUSH LENS**

	DFDL6-xF-18L	-40K8-W-CS-T		DFDL6-xF-18L	-40K8-M-CS-T	
Wide Distribution Candela Curve	Initial center beam foot-candles	Beam diameter (ft)	Distance to illuminated plane (ft)	Initial center beam foot-candles	Beam diameter (ft)	Medium Distribution Candela Curve
543	56.5	5.3	5'	80.0	5.0	664
1086	39.3	6.4	6'	55.6	6.0	1328
1629	28.8	7.5	7'	40.8	7.0	1992 /
	22.1	8.5	8'	31.3	8.0	2030
	17.5	9.6	9'	24.7	9.0	$HT \setminus Y \mid$
	14.1	10.7	10'	20.0	10.0	
Spacing Criteria: 1.35	foo	Spacing Criteria: 0.97				
Beam Angle: 56°		Beam diame	eter is where foot-candles drop to 50%	of maximum		Beam Angle: 53°

	DFDL6-xF-18L-	40K8-W-CSS-T		DFDL6-xF-18L-	40K8-M-CSS-T	
Wide Distribution Candela Curve	Initial center beam foot-candles	Beam diameter (ft)	Distance to illuminated plane (ft)	Initial center beam foot-candles	Beam diameter (ft)	Medium Distribution Candela Curve
433	59.0	3.9	5'	108.9	4.5	681
866	41.0	4.6	6'	75.6	5.4	1361
1299	30.1	5.4	7'	55.6	6.3	2042 / 2722
''32 /	23.1	6.2	8'	42.5	7.2	
	18.2	7.0	9'	33.6	8.1	$HT \setminus Y \mid$
	14.8	7.7	10'	27.2	9.0	
Spacing Criteria: 1.28	foo	Spacing Criteria: 0.72				
Beam Angle: 42°		Beam Angle: 49°				

	DFDL6-xF-18L-	40K8-W-FW-T		DFDL6-xF-18L-	-40K8-M-FW-T					
Wide Distribution Candela Curve	Initial center beam foot-candles	Beam diameter (ft)	Distance to illuminated plane (ft)	Initial center beam foot-candles	Beam diameter (ft)	Medium Distribution Candela Curve				
361	57.7	6.3	5'	63.9	6.4	429				
721	40.1	7.6	6'	44.3	7.7	859				
1082	29.4	8.8	7'	32.6	9.0	1288 / 1710				
	22.5	10.1	8'	24.9	10.3					
1 X/X+	17.8	11.4	9'	19.7	11.6	$HH \setminus Y \mid$				
	14.4	12.6	10'	16.0	12.9					
Spacing Criteria: 1.1	foo	foot-candle multipliers for 30K8(.97), 35K8(.99), 35K9(.82), 40K9(.83), 50K8(1.01)								
Beam Angle: 64.6°		Beam diame	eter is where foot-candles drop to 50%	of maximum		Beam Angle: 65.6°				

Luminaires for Wet Location/Shower Applications

**CROSS SECTION** 

## **DFDL SERIES**

#### **DIMENSIONAL DATA**

# — 21.20" — — 16.16" — 11.03" — (1) (1)

-6.00" DIA. APERTURE

 7.50" (DCFW) or 7.75" (5BR, 5FW, XBR, XFW)

#### **BOTTOM VIEW**

