

# US3141/LEDW40D

recessed luminaire • square

*application* : Office, Healthcare, Education, Horeca, Retail, Leisure

*housing* : lacquered sheet steel

*light source* : low power LED • 3000 K

*optics* : Softlight • Closed lamp shielding • wide-angle

*UGR classification* : <=22

*luminous flux* : 3850 lm

*luminous efficacy* : 99 lm/W

*LLMF* : 95% @ 50khrs (Tq=25°C)



## Mechanical properties

*dimensions* : 595 mm x 595 mm x 90 mm

*cut-out size* : 596 mm x 100 mm x 596 mm

*ceiling modulation* : M600

*colour* : specular white

*type* : individual luminaire

*IP* : IP20

## Luminance

*luminous flux* : 3850 lm

*luminous efficacy* : 99 lm/W

*UGR classification* : <=22

*luminous area* : 0.33 m<sup>2</sup>

## Electrical properties

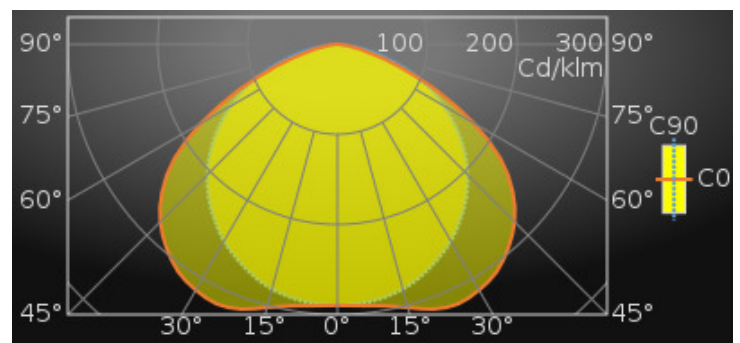
*driver* : DALI dimmable

*power* : 39 W

*voltage* : 220-240V

*frequency* : 50-60Hz AC

*photobiological safety* : EN 62471: RISK GROUP 0 UNLIMITED



Average Luminances (Cd/m<sup>2</sup>) for 3850lm

Gamma	C0	C30	C45	C60	C90
45°	4590	4509	4349	4059	3368
50°	4611	4573	4416	4152	3340
55°	4497	4530	4437	4210	3277
60°	4073	4322	4348	4192	3191
65°	3357	3719	4006	4034	3072
70°	2527	2871	3260	3642	2848
75°	1727	1982	2306	2785	2506
80°	1121	1359	1498	1753	1967
85°	503	661	822	1079	1467

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## Classifications

CIE: 447 / 801 / 970 / 1000 / 1000

CIE FLUXCODE : 0.45 / 0.80 / 0.97 / 1.00 / 1.00

BZ: BZ10/0.8/BZ5/1.25/BZ4

CAE: CAE 1/65°/CAE 2

DIN: A40 (Nach Arbeitsblatt 7)

DIN\_U: Phi u = 1.00

DIN\_SU: Phi su = 0.54

UTE: 1.00 F + 0.00 T

## Luminous intensities in cd

Lifetime Data (Tq=25.0°C)

Time(khrs)	LLMF(%)	Cx(%)
10	99	2
20	98	4
30	97	6
40	96	8
50	95	10
60	95	12

Intensity for 3850lm

Gamma	C0	C45	C90
0°	1115.6	1115.6	1115.6
5°	1121.7	1116.1	1112.0
10°	1135.2	1117.2	1102.3
15°	1164.3	1120.4	1083.0
20°	1204.4	1130.2	1053.3
25°	1223.9	1138.8	1014.3
30°	1212.9	1132.1	972.0
35°	1188.3	1115.0	916.9
40°	1137.5	1075.2	858.1
45°	1073.1	1016.7	787.4
50°	980.0	938.5	709.8
55°	852.9	841.5	621.5
60°	673.3	718.8	527.5
65°	469.1	559.8	429.2
70°	285.7	368.7	322.1
75°	147.8	197.3	214.5
80°	64.4	86.0	112.9
85°	14.5	23.7	42.3
90°	0.0	0.0	0.0

## UGR classification

Corrected Glare Ratings for a Total Lamp Flux of 3850lm (S = 0.25H)

Ceiling Walls Floor	Room Reflection Factors (%)									
	70	70	50	50	30	70	70	50	50	30
	50	30	50	30	30	50	30	50	30	30
	20	20	20	20	20	20	20	20	20	20
Room Dimensions	Viewed Crosswise					Viewed Endwise				
X = 2H Y = 2H	18.1	20.0	18.5	20.2	20.5	17.3	19.1	17.6	19.4	19.6
Y = 3H	19.0	20.7	19.4	21.0	21.3	18.7	20.4	19.1	20.7	21.0
Y = 4H	19.2	20.7	19.5	21.1	21.4	19.2	20.8	19.6	21.1	21.4
Y = 6H	19.2	20.7	19.6	21.0	21.3	19.5	20.9	19.8	21.3	21.6
Y = 8H	19.2	20.6	19.6	20.9	21.3	19.5	20.9	19.9	21.3	21.6
Y = 12H	19.1	20.5	19.5	20.9	21.2	19.5	20.9	19.9	21.2	21.6
X = 4H Y = 2H	18.7	20.3	19.1	20.6	21.0	18.1	19.7	18.5	20.0	20.3
Y = 3H	19.7	21.1	20.1	21.5	21.8	19.8	21.1	20.2	21.5	21.8
Y = 4H	20.0	21.2	20.4	21.6	21.9	20.3	21.6	20.8	21.9	22.3
Y = 6H	20.1	21.1	20.5	21.5	21.9	20.7	21.8	21.1	22.2	22.6
Y = 8H	20.1	21.1	20.5	21.5	21.9	20.8	21.8	21.2	22.2	22.6
Y = 12H	20.0	21.0	20.5	21.4	21.8	20.8	21.7	21.3	22.2	22.6
X = 8H Y = 4H	20.1	21.1	20.6	21.6	22.0	20.5	21.5	20.9	21.9	22.3
Y = 6H	20.3	21.1	20.8	21.6	22.0	20.9	21.7	21.4	22.2	22.6
Y = 8H	20.3	21.1	20.8	21.5	22.0	21.0	21.8	21.5	22.2	22.7
Y = 12H	20.3	21.0	20.8	21.4	22.0	21.1	21.7	21.6	22.2	22.7
X = 12H Y = 4H	20.1	21.1	20.6	21.5	21.9	20.5	21.4	20.9	21.8	22.3
Y = 6H	20.3	21.0	20.8	21.5	22.0	20.9	21.6	21.4	22.1	22.6
Y = 8H	20.4	21.0	20.9	21.5	22.0	21.1	21.7	21.6	22.2	22.7
UGR Variations with Observer Position for Luminaire Spacings S										
S = 1.0H	+0.1		-0.1		+0.1		-0.2			
S = 1.5H	+0.6		-0.6		+0.5		-0.6			
S = 2.0H	+1.1		-1.6		+0.8		-1.3			

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## Colour properties

Correlated Colour Temperature : 3000

Ra: 80

## Efficiency

Utilisation Factors according to IES (%)

	Room Reflection Factors (%)									
	80	80	80	50	50	50	30	30	30	0
Ceiling	80	80	80	50	50	50	30	30	30	0
Walls	50	30	10	50	30	10	50	30	10	0
Floor	20	20	20	20	20	20	20	20	20	0
RCR = 1	103	100	98	97	94	93	93	91	90	84
2	89	84	80	84	80	76	80	77	74	70
3	78	71	66	73	68	63	70	66	62	58
4	68	61	55	65	58	54	62	57	53	49
5	61	53	47	58	51	46	56	50	45	42
6	55	46	40	52	45	40	50	44	39	37
7	49	41	35	47	40	35	45	39	34	32
8	45	37	31	43	36	31	42	35	30	28
9	41	33	28	39	32	27	38	32	27	25
10	38	30	25	36	29	25	35	29	25	23

Utilisation Factors according to LiTG (%)

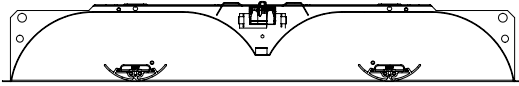
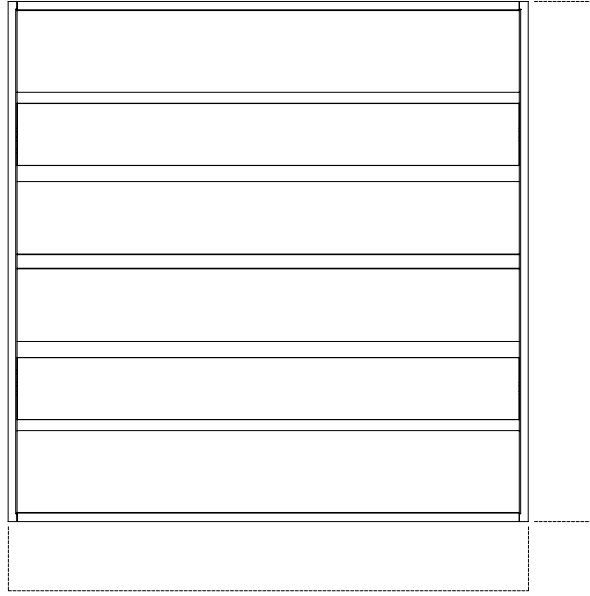
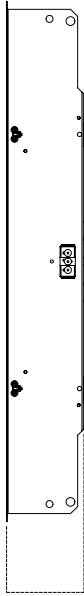
	Room Reflection Factors (%)									
	80	80	80	50	50	50	50	50	30	0
Ceiling	80	80	80	50	50	50	50	50	30	0
Walls	50	30	50	30	50	30	50	30	30	0
Floor	30	30	10	10	30	30	10	10	10	0
k = 0.60	46	36	43	35	43	35	42	35	34	27
0.80	57	48	54	46	54	46	52	45	44	37
1.00	66	57	62	54	62	54	59	52	52	45
1.25	77	67	70	63	72	64	67	61	60	54
1.50	84	75	76	69	78	71	73	67	66	60
2.00	93	84	83	77	86	80	80	75	74	68
2.50	100	92	88	83	92	86	85	81	79	74
3.00	105	99	92	88	97	92	89	85	84	79
4.00	111	105	96	92	101	97	92	89	88	83
5.00	115	110	98	95	104	101	95	93	91	86

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## Available accessories

US01H010/600 *Mounting frame for plaster-board, wooden, ... ceiling*

## Dimensional drawing



F-F

