

# US3140/LEDW20D



**recessed luminaire • linear**

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

**housing:** lacquered sheet steel

**light source :** LED LP • 3000 K

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

**UGR classification :** <=22

**luminous flux:** 2250 lm

**luminous efficacy :** 113 lm/W

**LLMF:** 98% @ 50khrs (Tq=25°C)

## Product information

### Mechanical properties

**dimensions :** 1195 mm x 295 mm x 95 mm

**cut-out size :** 1180 mm x 280 mm

**ceiling modulation :** M300

**colour:** specular white

**type :** individual luminaire

**IP:** IP20

**IK:** IK03

### Electrical properties

**driver:** DALI dimmable

**power :** 20 W

**voltage :** 220-240V

**frequency :** 50-60Hz AC

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

## Luminance

luminous flux : 2250 lm

luminous efficacy : 113 lm/W

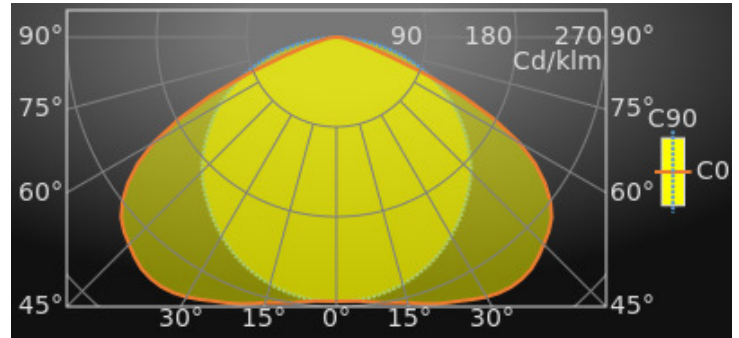
luminance @ 65° : 3000 cd/m<sup>2</sup>

UGR classification <=22

luminous area : 0.32 m<sup>2</sup>

Average Luminances (Cd/m<sup>2</sup>) for 2250lm

Gamma	C0	C30	C45	C60	C90
45°	2889	2762	2583	2286	1876
50°	3046	2887	2716	2433	1870
55°	3096	3014	2848	2579	1873
60°	2939	3022	2942	2696	1874
65°	2295	2691	2886	2784	1851
70°	1176	1727	2408	2744	1824
75°	633	798	1220	2216	1758
80°	439	482	587	929	1624
85°	390	394	406	427	1244



## Classifications

CIE: 416 / 781 / 969 / 1000 / 1000

CIE FLUXCODE : 0.42 / 0.78 / 0.97 / 1.00 / 1.00

BZ: BZ10/1.25/BZ4/1.5/BZ10/2.5/BZ5

CAE: CAE 1/75°/CAE 2

DIN: A40 (Nach Arbeitsblatt 7)

DIN\_U: Phi u = 1.00

DIN\_SU: Phi su = 0.52

UTE: 1.00 E + 0.00 T



## Luminous intensities in cd

Lifetime Data (Tq=25.0°C)

Time(khrs)	LLMF(%)	Cx(%)
10	100	2
20	99	4
30	99	6
40	99	8
50	99	10
60	98	12

Intensity for 2250lm

Gamma	C0	C45	C90
0°	595.3	595.3	595.3
5°	597.4	596.6	594.4
10°	607.7	597.7	587.8
15°	619.6	598.0	576.4
20°	640.2	598.0	561.2
25°	656.7	604.7	541.5
30°	676.2	604.7	517.2
35°	687.2	604.2	489.7
40°	682.3	601.1	460.3
45°	660.2	590.1	428.7
50°	632.6	564.2	388.5
55°	573.7	527.9	347.1
60°	474.9	475.4	302.8
65°	313.4	394.0	252.7
70°	130.0	266.1	201.6
75°	52.9	102.0	147.0
80°	24.6	32.9	91.1
85°	11.0	11.4	35.0
90°	0.0	0.0	0.0

## UGR classification

Corrected Glare Ratings for a Total Lamp Flux of 2250lm (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	17.2	19.1	17.5	19.3	19.6	15.5	17.4	15.8	17.6	17.9
Y = 3H	17.8	19.5	18.2	19.8	20.2	17.3	19.0	17.7	19.3	19.6
Y = 4H	17.8	19.4	18.2	19.8	20.1	18.0	19.6	18.4	19.9	20.3
Y = 6H	17.8	19.3	18.2	19.6	20.0	18.5	20.0	18.9	20.3	20.7
Y = 8H	17.7	19.2	18.1	19.5	19.9	18.6	20.1	19.0	20.4	20.7
Y = 12H	17.7	19.1	18.1	19.5	19.8	18.6	20.0	19.0	20.4	20.7
X = 4H Y = 2H	17.8	19.5	18.2	19.8	20.1	16.7	18.3	17.1	18.6	18.9
Y = 3H	18.6	20.0	19.0	20.3	20.7	18.7	20.1	19.1	20.4	20.8
Y = 4H	18.6	19.9	19.0	20.2	20.6	19.5	20.7	19.9	21.1	21.5
Y = 6H	18.6	19.7	19.0	20.1	20.5	20.1	21.2	20.5	21.6	22.0
Y = 8H	18.6	19.6	19.0	20.0	20.5	20.2	21.3	20.7	21.7	22.1
Y = 12H	18.6	19.5	19.0	19.9	20.4	20.3	21.2	20.7	21.7	22.1
X = 8H Y = 4H	18.8	19.8	19.2	20.2	20.7	19.6	20.6	20.0	21.0	21.4
Y = 6H	18.8	19.7	19.3	20.1	20.6	20.2	21.1	20.7	21.5	22.0
Y = 8H	18.8	19.6	19.3	20.0	20.5	20.4	21.2	20.9	21.6	22.1
Y = 12H	18.8	19.5	19.3	19.9	20.5	20.5	21.2	21.0	21.6	22.2
X = 12H Y = 4H	18.8	19.7	19.2	20.1	20.6	19.6	20.5	20.0	20.9	21.4
Y = 6H	18.8	19.6	19.3	20.0	20.5	20.2	21.0	20.7	21.4	21.9
Y = 8H	18.8	19.5	19.3	19.9	20.5	20.4	21.1	20.9	21.5	22.1
<b>UGR Variations with Observer Position for Luminaire Spacings S</b>										
S = 1.0H	+0.1		-0.1		+0.1		-0.1			
S = 1.5H	+0.6		-0.7		+0.4		-0.5			
S = 2.0H	+1.5		-2.4		+1.0		-1.4			



## 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	97	96	94	92	92	90	89	84
2	88	83	78	83	78	75	80	76	73	69
3	76	69	64	72	66	62	69	64	61	57
4	67	59	53	63	57	52	61	55	51	48
5	59	51	45	56	49	44	54	48	43	40
6	53	45	39	50	43	38	49	42	37	35
7	48	39	33	45	38	33	44	37	33	30
8	44	35	29	41	34	29	40	34	29	27
9	40	32	26	38	31	26	37	30	26	24
10	37	29	23	35	28	23	34	28	23	21

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	44	35	42	34	42	34	40	33	32	26
0.80	56	46	52	44	52	44	50	43	42	35
1.00	65	55	60	52	61	53	58	51	50	43
1.25	75	65	69	61	70	62	66	60	59	52
1.50	82	73	75	68	76	69	72	66	65	58
2.00	92	83	82	76	85	78	79	74	72	66
2.50	99	91	87	82	91	85	84	80	78	73
3.00	104	98	91	87	96	91	88	85	83	78
4.00	110	104	95	91	100	96	92	89	87	82
5.00	114	109	98	95	104	100	94	92	90	86

## Available accessories

US01H010/1200 *Mountingframe for plaster-board, wooden,... ceiling*



## Dimensional drawing

