

US3141/LEDW20S



recessed luminaire • square

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 : <=19

luminous flux: 2250 lm

luminous efficacy : 107 lm/W

LLMF: 98% @ 50khrs (Tq=25°C)

Product information

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

IK: IK03

Electrical properties

driver: not dimmable

power : 21 W

voltage : 220-240V

frequency : 50-60Hz AC

photobiological safety : EN 62471: RISK GROUP 0
UNLIMITED

Luminance

luminous flux : 2250 lm

luminous efficacy : 107 lm/W

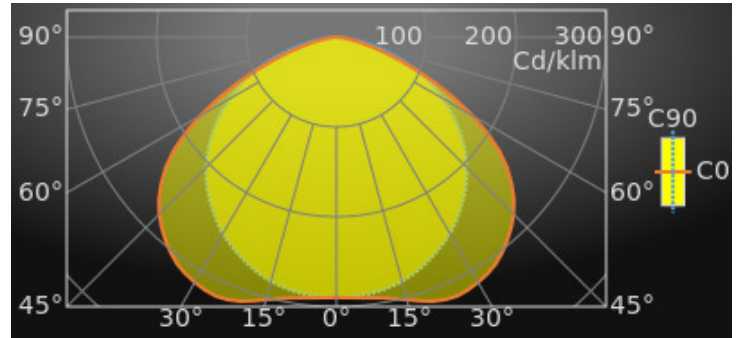
luminance @ 65° : 3000 cd/m²

UGR classification <=19

luminous area : 0.33 m²

Average Luminances (Cd/m²) for 2250lm

Gamma	C0	C30	C45	C60	C90
45°	2682	2635	2541	2372	1968
50°	2695	2673	2581	2426	1952
55°	2628	2648	2593	2461	1915
60°	2380	2526	2541	2450	1865
65°	1962	2174	2341	2358	1795
70°	1477	1678	1905	2129	1664
75°	1009	1158	1348	1627	1465
80°	655	794	875	1024	1150
85°	294	386	480	631	858



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	100	2
20	99	4
30	99	6
40	99	8
50	98	10
60	98	12

Intensity for 2250lm

Gamma	C0	C45	C90
0°	652.0	652.0	652.0
5°	655.5	652.3	649.9
10°	663.4	652.9	644.2
15°	680.4	654.8	632.9
20°	703.8	660.5	615.6
25°	715.3	665.5	592.8
30°	708.8	661.6	568.0
35°	694.4	651.6	535.8
40°	664.7	628.4	501.5
45°	627.1	594.2	460.2
50°	572.7	548.4	414.8
55°	498.4	491.8	363.2
60°	393.5	420.1	308.3
65°	274.2	327.1	250.9
70°	167.0	215.5	188.2
75°	86.4	115.3	125.3
80°	37.6	50.3	66.0
85°	8.5	13.8	24.7
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	16.3	18.1	16.6	18.4	18.6	15.4	17.2	15.7	17.5	17.8
Y = 3H	17.1	18.8	17.5	19.1	19.4	16.9	18.5	17.2	18.8	19.1
Y = 4H	17.3	18.9	17.7	19.2	19.5	17.3	18.9	17.7	19.2	19.6
Y = 6H	17.3	18.8	17.7	19.1	19.5	17.6	19.1	18.0	19.4	19.7
Y = 8H	17.3	18.7	17.7	19.1	19.4	17.6	19.1	18.0	19.4	19.8
Y = 12H	17.3	18.6	17.7	19.0	19.3	17.7	19.0	18.1	19.4	19.7
X = 4H Y = 2H	16.9	18.5	17.2	18.8	19.1	16.3	17.8	16.6	18.2	18.5
Y = 3H	17.9	19.2	18.3	19.6	19.9	17.9	19.3	18.3	19.6	20.0
Y = 4H	18.1	19.3	18.5	19.7	20.1	18.5	19.7	18.9	20.1	20.5
Y = 6H	18.2	19.3	18.6	19.7	20.1	18.8	19.9	19.3	20.3	20.7
Y = 8H	18.2	19.2	18.6	19.6	20.0	18.9	19.9	19.3	20.3	20.7
Y = 12H	18.2	19.1	18.6	19.5	20.0	18.9	19.9	19.4	20.3	20.7
X = 8H Y = 4H	18.3	19.3	18.7	19.7	20.1	18.6	19.6	19.1	20.0	20.5
Y = 6H	18.4	19.3	18.9	19.7	20.2	19.0	19.9	19.5	20.3	20.8
Y = 8H	18.5	19.2	18.9	19.6	20.1	19.2	19.9	19.7	20.4	20.8
Y = 12H	18.5	19.1	19.0	19.6	20.1	19.3	19.9	19.7	20.3	20.9
X = 12H Y = 4H	18.3	19.2	18.7	19.6	20.1	18.6	19.5	19.1	19.9	20.4
Y = 6H	18.5	19.2	18.9	19.6	20.1	19.0	19.8	19.5	20.2	20.7
Y = 8H	18.5	19.1	19.0	19.6	20.1	19.2	19.8	19.7	20.3	20.8
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			



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

Available accessories

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



Dimensional drawing

