

# R810R1/LEDN25S

surface-mounted luminaire • linear

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

*light source* : LED LP • 4000 K

*optics* : Diffuser • wide-angle

*UGR classification* : <=25

*luminous flux*: 2550 lm

*luminous efficacy* : 121 lm/W

*LLMF*: 96% @ 50khrs (Tq=25°C)



## Mechanical properties

*dimensions* : 787 mm x 80 mm x 121 mm

*colour*: RAL9003-white (textured)

*type* : individual luminaire

*IP*: IP20

## Luminance

*luminous flux* : 2550 lm

*luminous efficacy* : 121 lm/W

*UGR classification*: <=25

*luminous area* : 0.06 m<sup>2</sup>

## Electrical properties

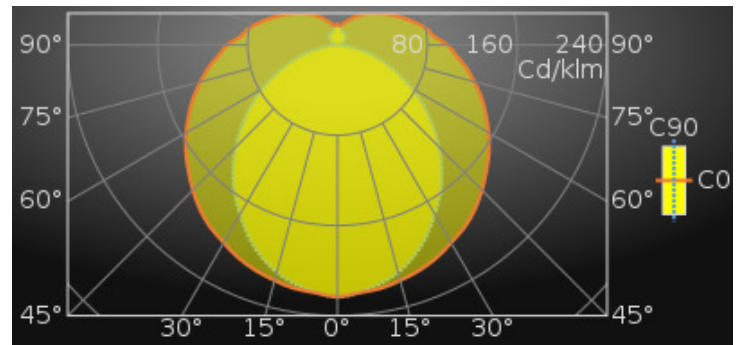
*driver*: not dimmable

*power* : 21 W

*voltage* : 220-240V

*frequency* : 50-60Hz AC

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



Average Luminances (Cd/m<sup>2</sup>) for 2550lm

Gamma	C0	C30	C45	C60	C90
45°	5337	5324	5352	5546	7397
50°	5106	5066	5064	5187	7052
55°	4916	4838	4777	4836	6684
60°	4732	4613	4520	4503	6255
65°	4575	4429	4293	4187	5794
70°	4442	4261	4104	3918	5281
75°	4303	4122	3945	3693	4636
80°	4211	4029	3821	3513	3884
85°	4104	3924	3716	3399	2726

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## Classifications

CIE: 300 / 522 / 679 / 788 / 1000

CIE FLUXCODE : 0.38 / 0.66 / 0.86 / 0.79 / 1.00

BZ: BZ10/1.25/BZ5/1.5/BZ10

CAE: CAE 4/5°/CAE 3/25°/CAE 2/75°/CAE 3

DIN: B30 (Nach Arbeitsblatt 7 und 8)

DIN\_U: Phi u = 0.79

DIN\_SU: Phi su = 0.45

UTE: 0.79 H + 0.21 T

## Luminous intensities in cd

Lifetime Data (Tq=25.0°C)

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

Intensity for 2550lm

Gamma	C0	C45	C90	Gamma	C0	C45	C90
0°	569.4	569.4	569.4	90°	250.1	162.7	3.1
5°	562.2	561.2	560.9	95°	219.8	140.5	2.8
10°	558.7	553.8	549.1	100°	207.4	130.9	4.6
15°	551.0	542.2	532.4	105°	187.3	118.0	7.1
20°	542.4	526.0	507.9	110°	169.8	106.5	10.4
25°	531.2	504.7	477.6	115°	152.3	96.6	14.0
30°	516.0	481.2	442.1	120°	137.3	88.1	17.4
35°	502.8	455.8	407.4	125°	123.7	80.8	20.1
40°	485.3	427.6	369.1	130°	111.7	74.3	23.6
45°	463.9	397.9	325.5	135°	101.0	68.0	26.9
50°	441.7	369.0	282.1	140°	90.8	62.8	28.8
55°	419.9	338.4	238.6	145°	80.2	58.3	30.2
60°	396.0	308.7	194.7	150°	71.2	53.5	29.7
65°	372.0	279.9	152.4	155°	62.6	49.4	30.4
70°	347.8	252.8	112.4	160°	55.3	45.3	29.5
75°	321.6	227.1	74.7	165°	49.3	41.8	35.0
80°	297.2	202.8	42.0	170°	44.2	41.3	40.7
85°	270.4	179.0	14.8	175°	44.2	43.9	44.3
90°	250.1	162.7	3.1	180°	46.4	46.4	46.4

## UGR classification

Corrected Glare Ratings for a Total Lamp Flux of 2550lm (S = 0.25H)

Room Dimensions	Room Reflection Factors (%)														
	Ceiling	Walls	Floor	70	70	50	50	30	70	70	50	50	30		
	70	70	50	50	30	70	70	50	50	30	70	70	50	50	30
	50	30	50	30	30	50	30	50	30	30	50	30	50	30	30
	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Room Dimensions	Viewed Crosswise					Viewed Endwise									
X = 2H Y = 2H	17.2	18.6	17.8	19.3	19.8	16.0	17.4	16.5	18.0	18.6					
Y = 3H	19.3	20.6	19.9	21.2	21.8	17.2	18.5	17.8	19.2	19.8					
Y = 4H	20.3	21.6	21.0	22.2	22.8	17.7	18.9	18.3	19.6	20.2					
Y = 6H	21.3	22.5	22.0	23.2	23.8	17.9	19.1	18.6	19.8	20.4					
Y = 8H	21.8	22.9	22.5	23.6	24.2	18.0	19.1	18.7	19.8	20.4					
Y = 12H	22.3	23.3	22.9	24.0	24.7	18.0	19.1	18.7	19.8	20.4					
X = 4H Y = 2H	17.7	19.0	18.3	19.6	20.2	16.7	18.0	17.4	18.6	19.2					
Y = 3H	20.0	21.1	20.7	21.8	22.4	18.2	19.3	18.9	20.0	20.6					
Y = 4H	21.2	22.2	21.9	22.9	23.6	18.8	19.8	19.5	20.5	21.2					
Y = 6H	22.4	23.3	23.1	24.0	24.7	19.3	20.2	20.0	20.9	21.6					
Y = 8H	23.0	23.8	23.7	24.6	25.3	19.4	20.2	20.1	21.0	21.7					
Y = 12H	23.6	24.3	24.3	25.1	25.8	19.4	20.2	20.2	21.0	21.7					
X = 8H Y = 4H	21.5	22.3	22.2	23.1	23.8	19.5	20.3	20.2	21.1	21.8					
Y = 6H	23.0	23.7	23.7	24.4	25.2	20.2	20.9	21.0	21.7	22.4					
Y = 8H	23.7	24.3	24.5	25.1	25.8	20.5	21.1	21.3	21.9	22.7					
Y = 12H	24.5	25.0	25.2	25.8	26.6	20.7	21.2	21.5	22.0	22.8					
X = 12H Y = 4H	21.5	22.3	22.2	23.0	23.7	19.6	20.4	20.4	21.2	21.9					
Y = 6H	23.0	23.7	23.8	24.4	25.2	20.5	21.1	21.3	21.9	22.7					
Y = 8H	23.9	24.4	24.6	25.2	26.0	20.9	21.5	21.7	22.3	23.0					
UGR Variations with Observer Position for Luminaire Spacings S															
S = 1.0H	+0.1		-0.1		+0.1		-0.1								
S = 1.5H	+0.2		-0.2		+0.1		-0.2								
S = 2.0H	+0.2		-0.3		+0.3		-0.4								

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## Colour properties

Correlated Colour Temperature : 4000

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	94	90	88	81	79	77	74	72	70	60
2	81	75	70	69	65	62	63	59	56	48
3	70	63	58	60	55	51	55	50	47	39
4	62	54	48	53	47	43	48	43	39	33
5	55	47	41	48	41	37	43	38	34	28
6	50	41	35	43	36	32	39	34	29	24
7	45	36	31	39	32	28	36	30	26	22
8	41	33	27	36	29	25	33	27	23	19
9	37	29	24	33	26	22	30	25	21	17
10	34	27	22	30	24	20	28	22	19	15

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	41	32	39	31	36	29	35	28	26	19
0.80	51	41	48	39	44	37	42	36	33	25
1.00	59	49	55	46	51	43	48	42	39	30
1.25	67	57	62	54	58	51	55	49	45	36
1.50	74	64	67	59	63	56	59	54	50	40
2.00	82	73	74	67	70	64	65	60	56	46
2.50	89	80	79	72	76	70	70	65	61	51
3.00	94	86	82	77	80	74	74	69	65	54
4.00	100	93	86	82	84	80	77	74	68	58
5.00	104	98	89	85	88	84	80	77	72	61

## Dimensional drawing

