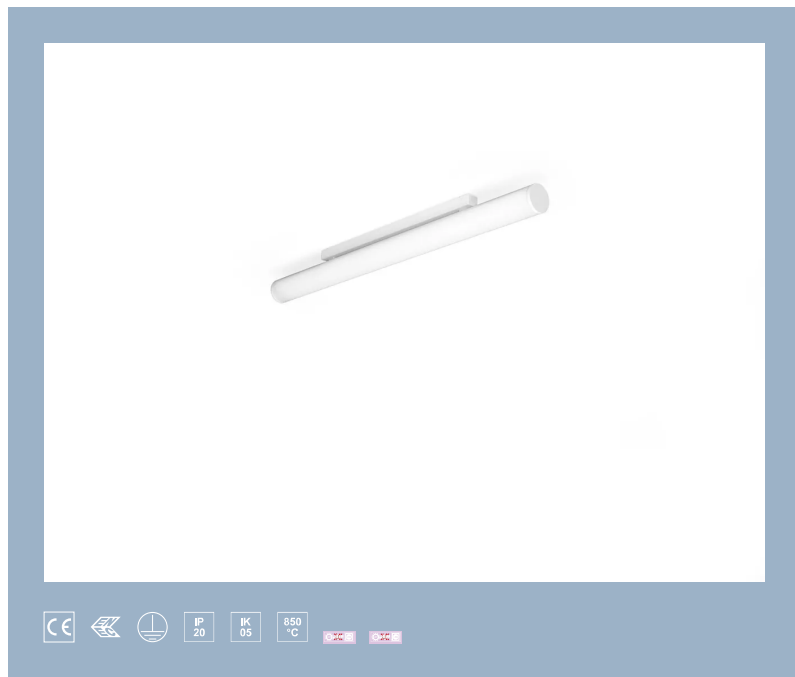


R820R1/LEDN45S



opbouwarmatuur • langwerpig

Toepassing : Algemene kantoorruimten, Algemene onderwijsruimten, Ruimten voor algemene gezondheidszorg

lichtbron : led • 4000 K

optiek : HaloOptics diffusor • Polycarbonaat (PC)
HaloOptics® • breedstralend

UGR classificatie : <=25

lichtstroom: 4500 lm

efficiëntie : 115 lm/W

LLMF: 94% @ 50khrs (Tq=25°C)

Product information

Mechanische eigenschappen

afmetingen : 1162 mm x 80 mm x 121 mm

kleur: RAL9003 - signaalwit (structuurlak)

type : individueel armatuur

IP: IP20

IK: IK05

Elektrische uitrusting

driver: niet-dimbaar

opgenomen vermogen : 39 W

spanning : 220-240V

frequentie : 50-60Hz AC

fotobiologische veiligheid : EN 62471: RISK GROUP 0
UNLIMITED

Luminantie

lichtstroom : 4500 lm

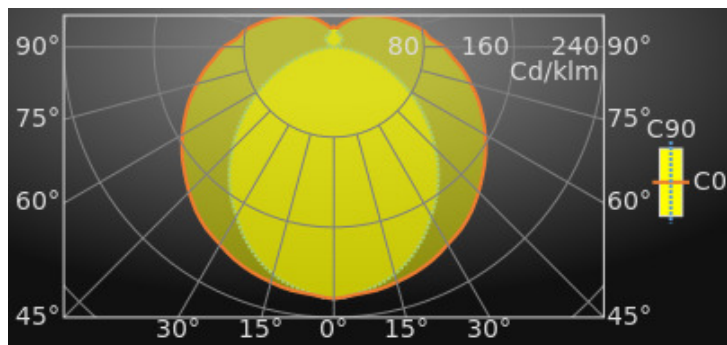
efficiëntie : 115 lm/W

UGR classificatie =: <=25

lichtgevende oppervlakte : 0.09 m²

Average Luminances (Cd/m²) for 4500lm

Gamma	C0	C30	C45	C60	C90
45°	6360	6345	6378	6609	8816
50°	6086	6037	6035	6182	8405
55°	5859	5765	5693	5764	7965
60°	5640	5497	5387	5367	7455
65°	5453	5279	5116	4990	6906
70°	5293	5078	4891	4670	6293
75°	5128	4913	4702	4402	5525
80°	5019	4802	4554	4186	4628
85°	4891	4677	4429	4051	3249



Classificaties

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

Lifetime Data (Tq=25.0°C)

Time(khrs)	LLMF(%)	Cx(%)
10	99	2
20	98	4
30	97	6
40	95	8
50	94	10
60	93	12

Lichtsterkten in cd

Intensity for 4500lm

Gamma	C0	C45	C90	Gamma	C0	C45	C90
0°	1004.9	1004.9	1004.9	90°	441.4	287.2	5.4
5°	992.2	990.4	989.8	95°	387.8	247.9	4.9
10°	986.0	977.3	969.1	100°	365.9	231.1	8.0
15°	972.4	956.8	939.4	105°	330.5	208.2	12.6
20°	957.2	928.3	896.3	110°	299.6	188.0	18.4
25°	937.4	890.6	842.8	115°	268.8	170.5	24.7
30°	910.7	849.2	780.2	120°	242.3	155.5	30.6
35°	887.3	804.3	719.0	125°	218.3	142.5	35.5
40°	856.4	754.6	651.3	130°	197.2	131.1	41.6
45°	818.6	702.2	574.5	135°	178.2	120.0	47.4
50°	779.4	651.2	497.9	140°	160.3	110.8	50.8
55°	740.9	597.2	421.1	145°	141.6	102.8	53.2
60°	698.8	544.7	343.5	150°	125.6	94.4	52.4
65°	656.4	493.9	269.0	155°	110.4	87.2	53.6
70°	613.8	446.2	198.4	160°	97.6	80.0	52.1
75°	567.5	400.7	131.8	165°	87.1	73.7	61.8
80°	524.5	357.8	74.1	170°	78.0	72.9	71.8
85°	477.1	315.9	26.1	175°	77.9	77.5	78.2
90°	441.4	287.2	5.4	180°	81.9	81.9	81.9

UGR classificatie =

Corrected Glare Ratings for a Total Lamp Flux of 4500lm (S = 0.25H)

	Room Reflection Factors (%)									
Ceiling	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor	20	20	20	20	20	20	20	20	20	20
Room Dimensions	Viewed Crosswise					Viewed Endwise				
X = 2H Y = 2H	17.8	19.3	18.4	19.9	20.4	16.6	18.0	17.2	18.6	19.2
Y = 3H	19.9	21.2	20.5	21.8	22.4	17.8	19.1	18.4	19.8	20.4
Y = 4H	20.9	22.2	21.6	22.8	23.4	18.3	19.5	18.9	20.2	20.8
Y = 6H	21.9	23.1	22.6	23.8	24.4	18.5	19.7	19.2	20.4	21.0
Y = 8H	22.4	23.5	23.1	24.2	24.8	18.6	19.7	19.3	20.4	21.0
Y = 12H	22.9	24.0	23.5	24.6	25.3	18.6	19.7	19.3	20.4	21.0
X = 4H Y = 2H	18.3	19.6	19.0	20.2	20.8	17.3	18.6	18.0	19.2	19.8
Y = 3H	20.6	21.7	21.3	22.4	23.0	18.8	19.9	19.5	20.6	21.3
Y = 4H	21.8	22.8	22.5	23.5	24.2	19.5	20.4	20.1	21.1	21.8
Y = 6H	23.0	23.9	23.8	24.7	25.3	19.9	20.8	20.6	21.5	22.2
Y = 8H	23.6	24.5	24.3	25.2	25.9	20.0	20.8	20.7	21.6	22.3
Y = 12H	24.2	25.0	24.9	25.7	26.4	20.1	20.8	20.8	21.6	22.3
X = 8H Y = 4H	22.1	22.9	22.8	23.7	24.4	20.1	20.9	20.8	21.7	22.4
Y = 6H	23.6	24.3	24.3	25.0	25.8	20.8	21.5	21.6	22.3	23.0
Y = 8H	24.3	24.9	25.1	25.7	26.5	21.1	21.7	21.9	22.5	23.3
Y = 12H	25.1	25.6	25.8	26.4	27.2	21.3	21.8	22.1	22.6	23.4
X = 12H Y = 4H	22.1	22.9	22.8	23.6	24.3	20.3	21.0	21.0	21.8	22.5
Y = 6H	23.6	24.3	24.4	25.0	25.8	21.1	21.8	21.9	22.5	23.3
Y = 8H	24.5	25.0	25.2	25.8	26.6	21.5	22.1	22.3	22.9	23.6
	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		

Kleureigenschappen

Correlated Colour Temperature : 4000

Ra: CRI (Ra) 80

Rendement

Utilisation Factors according to IES (%)										
	Room Reflection Factors (%)									
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 (%)									
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

Maatschets

