

R731R1/LEDN3650SX1



suspended luminaire • linear

Application : Education ? Classrooms, Offices ? Reception, Offices ? Desk, Offices ? Meeting room

housing: lacquered sheet steel

light source : LED • 4000 K

optics : LED+LENS™ • polycarbonate (PC) lens and cup • very wide-angle

UGR classification : <=16

luminous flux: 5100 lm

luminous efficacy : 142 lm/W

LLMF: 98% @ 50khrs (Tq=25°C)

Product information

Mechanical properties

dimensions : 1500 mm x 150 mm x 50 mm

shape : individual linear, rectangular

colour: RAL9003 - white

type : individual luminaire

IP: IP20

Electrical properties

driver: not dimmable

power : 36 W

voltage : 220-240V

frequency : 50/60Hz AC

photobiological safety : EN 62471: RISK GROUP 1
UNLIMITED

Luminance

luminous flux : 5100 lm

luminous efficacy : 142 lm/W

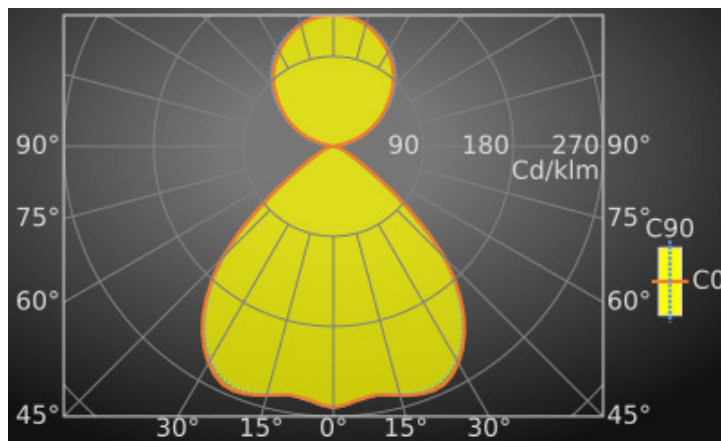
luminance @ 65° = : 1500 cd/m²

UGR classification =: <=16

luminous area : 0.18 m²

Average Luminances (Cd/m²) for 5100lm

Gamma	C0	C30	C45	C60	C90
45°	6430	9612	10883	9436	6299
50°	4519	8178	9505	8038	4517
55°	2657	4889	5770	4826	2479
60°	1569	2180	2447	2118	1432
65°	1076	1260	1287	1209	1014
70°	853	873	873	813	743
75°	740	700	639	590	559
80°	558	525	427	368	335
85°	301	196	170	183	183



Classifications

CIE: 407 / 617 / 640 / 643 / 1000

CIE FLUXCODE : 0.63 / 0.96 / 0.99 / 0.64 / 1.00

BZ: BZ2

CAE: Symmetrical

DIN: B52 (Nach Arbeitsblatt 7 und 8)

DIN_U: Phi u = 0.64

DIN_SU: Phi su = 0.67

UTE: 0.64 C + 0.36 T

Lifetime Data (Tq=25.0°C)

Time(hrs)	LLMF(%)	Cx(%)
10000	99	1
20000	99	2
30000	99	3
40000	98	4
50000	98	5
60000	98	6
70000	98*	7
80000	97*	8
90000	97*	9
100000	97*	9

Luminous intensities in cd

Intensity for 5100lm

Gamma	C0	C45	C90	Gamma	C0	C45	C90
0°	1330.7	1330.7	1330.7	90°	0.0	0.0	0.0
5°	1302.5	1300.3	1302.1	95°	17.6	13.5	8.4
10°	1286.8	1288.4	1286.8	100°	16.7	49.1	46.9
15°	1313.8	1325.9	1303.9	105°	78.5	106.4	99.5
20°	1341.7	1387.6	1328.1	110°	150.7	160.3	155.2
25°	1338.9	1452.7	1313.6	115°	208.6	218.5	213.6
30°	1275.2	1502.4	1252.2	120°	265.2	276.7	273.0
35°	1164.4	1519.5	1142.2	125°	321.0	335.7	334.8
40°	1008.7	1478.3	984.4	130°	373.3	391.2	389.8
45°	802.0	1357.4	785.7	135°	429.0	444.5	445.1
50°	512.4	1077.7	512.2	140°	476.8	489.9	491.5
55°	268.9	583.8	250.8	145°	519.6	532.1	536.4
60°	138.4	215.8	126.3	150°	556.3	569.7	569.4
65°	80.2	95.9	75.6	155°	587.9	602.3	600.4
70°	51.5	52.7	44.8	160°	618.3	627.5	626.2
75°	33.8	29.2	25.5	165°	642.5	647.8	645.6
80°	17.1	13.1	10.3	170°	658.7	659.9	659.1
85°	4.6	2.6	2.8	175°	666.8	668.0	667.7
90°	0.0	0.0	0.0	180°	669.6	669.6	669.6

Colour properties

Correlated Colour Temperature : 4000

Ra: CRI (Ra) 80

UGR classification =

Corrected Glare Ratings for a Total Lamp Flux of 5100lm (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	15.1	16.2	15.9	17.0	17.7	15.0	16.1	15.7	16.9	17.6
Y = 3H	15.0	15.9	15.7	16.7	17.5	14.8	15.8	15.6	16.6	17.3
Y = 4H	14.9	15.8	15.7	16.6	17.3	14.7	15.6	15.5	16.4	17.2
Y = 6H	14.8	15.6	15.6	16.4	17.2	14.6	15.4	15.4	16.2	17.0
Y = 8H	14.7	15.5	15.5	16.3	17.1	14.5	15.3	15.4	16.2	16.9
Y = 12H	14.7	15.4	15.5	16.2	17.0	14.5	15.2	15.3	16.1	16.8
X = 4H Y = 2H	15.0	15.9	15.8	16.7	17.4	14.9	15.8	15.6	16.6	17.3
Y = 3H	14.9	15.6	15.7	16.4	17.2	14.7	15.5	15.5	16.3	17.1
Y = 4H	14.8	15.4	15.6	16.3	17.1	14.6	15.3	15.5	16.1	16.9
Y = 6H	14.7	15.3	15.6	16.1	16.9	14.5	15.1	15.4	15.9	16.8
Y = 8H	14.7	15.2	15.5	16.0	16.9	14.5	15.0	15.3	15.8	16.7
Y = 12H	14.6	15.1	15.5	15.9	16.8	14.4	14.9	15.3	15.7	16.6
X = 8H Y = 4H	14.6	15.1	15.5	16.0	16.8	14.5	15.0	15.3	15.8	16.7
Y = 6H	14.6	15.0	15.4	15.9	16.7	14.4	14.8	15.3	15.7	16.5
Y = 8H	14.5	14.9	15.4	15.8	16.6	14.3	14.7	15.2	15.6	16.4
Y = 12H	14.4	14.8	15.4	15.7	16.6	14.2	14.5	15.2	15.5	16.4
X = 12H Y = 4H	14.6	15.0	15.4	15.9	16.7	14.4	14.9	15.3	15.7	16.6
Y = 6H	14.5	14.8	15.4	15.8	16.6	14.3	14.7	15.2	15.6	16.4
Y = 8H	14.4	14.7	15.4	15.7	16.6	14.2	14.5	15.2	15.5	16.4
	UGR Variations with Observer Position for Luminaire Spacings S									
S = 1.0H	+1.8		-3.3			+1.9		-3.5		
S = 1.5H	+3.6		-6.4			+3.7		-7.1		
S = 2.0H	+4.1		-7.6			+4.2		-8.4		

Efficiency

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	100	98	96	83	81	80	73	72	71	57
2	89	85	82	74	72	70	65	63	62	50
3	80	75	71	67	63	60	59	56	54	44
4	71	65	61	60	56	53	53	50	47	39
5	64	58	53	54	49	46	48	44	42	34
6	58	51	46	49	44	40	44	40	37	30
7	52	45	41	45	39	36	40	36	33	27
8	48	41	36	41	36	32	37	32	29	24
9	44	37	32	37	32	28	34	29	26	22
10	40	33	29	35	29	26	31	27	24	20

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	48	40	45	38	41	35	40	34	32	24
0.80	59	51	56	49	51	45	49	44	40	32
1.00	68	59	63	56	58	52	55	50	46	37
1.25	77	69	70	64	65	59	61	57	52	43
1.50	83	75	75	70	70	65	65	61	56	46
2.00	90	83	81	76	75	71	70	67	61	50
2.50	96	90	85	81	79	75	73	71	64	53
3.00	100	95	88	85	83	79	76	74	67	56
4.00	105	100	91	88	85	83	78	76	69	57
5.00	108	104	93	90	88	85	80	78	71	59

Available accessories

ACC-HI00-X00 Ceiling cap for suspended luminaires (R7/R3/Ley) - 5 poles terminal block - RAL9005 Jet black

ACC-HI00-X01 Ceiling cap for suspended luminaires (R7/R3/Ley) - 5 poles terminal block - RAL9003 Signal white

ACC-HI00-X02 Ceiling cap for suspended luminaires (R7/R3/Ley) - 5 poles terminal block - RAL9006 Aluminium white

ACC-HI01-3P-1500 Suspension cables set for R7/R3 - to combine with ceiling cap - 3 poles power cable - 2 steel cords - 1 cable holder - max. 1,5m

ACC-HI01-5P-1500 Suspension cables set for R7/R3 - to combine with ceiling cap - 5 poles power cable - 2 steel cords - 1 cable holder - max. 1,5m

ACC-HI02-3P-1500 Suspension cables set for R7/R3 - minimalist : no ceiling cap - 3 poles power cable - 2 steel cords - 2 cable holders - max. 1,5m

ACC-HI02-5P-1500 Suspension cables set for R7/R3 - minimalist : no ceiling cap - 5 poles power cable - 2 steel cords - 2 cable holders - max. 1,5m

Dimensional drawing

