

R721R1/LEDN2445SX1



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 • wide-angle

UGR classification : <=16

luminous flux: 4750 lm

luminous efficacy : 134 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 : 35.5 W

voltage : 220-240V

frequency : 50/60Hz AC

photobiological safety : EN 62471: RISK GROUP 1
UNLIMITED

Luminance

luminous flux : 4750 lm

luminous efficacy : 134 lm/W

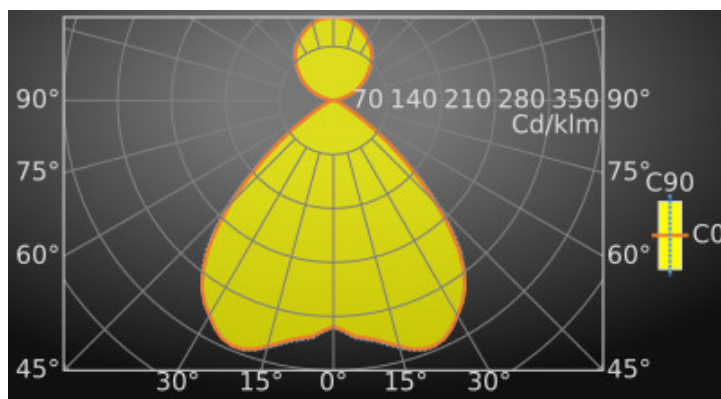
luminance @ 65° = : 3000 cd/m²

UGR classification =: <=16

luminous area : 0.12 m²

Average Luminances (Cd/m²) for 4750lm

Gamma	C0	C30	C45	C60	C90
45°	10751	11282	11668	11104	11114
50°	7471	7810	8286	7923	7720
55°	4407	4684	5175	4792	4603
60°	2238	2377	2544	2416	2319
65°	1412	1457	1566	1486	1435
70°	1043	1107	1159	1086	1066
75°	813	859	905	863	874
80°	731	679	743	694	663
85°	445	442	534	454	466



Classifications

CIE: 487 / 681 / 703 / 706 / 1000

CIE FLUXCODE : 0.69 / 0.96 / 0.99 / 0.71 / 1.00

BZ: BZ2

CAE: Symmetrical

DIN: B52 (Nach Arbeitsblatt 7 und 8)

DIN_U: Phi u = 0.71

DIN_SU: Phi su = 0.69

UTE: 0.71 C + 0.29 T

Lifetime Data (Tq=25.0°C)

Time(hrs)	LLMF(%)	Cx(%)
10000	99	1
20000	99	2
30000	98	3
40000	98	4
50000	98	5
60000	97	6
70000	97*	7
80000	97*	8
90000	96*	9
100000	96*	9

Luminous intensities in cd

Intensity for 4750lm

Gamma	C0	C45	C90	Gamma	C0	C45	C90
0°	1393.6	1393.6	1393.6	90°	1.0	1.3	0.8
5°	1457.0	1457.9	1464.9	95°	13.5	10.3	6.5
10°	1495.4	1494.0	1504.8	100°	12.8	37.6	36.0
15°	1567.8	1561.4	1574.4	105°	60.2	81.5	76.3
20°	1630.4	1619.8	1634.7	110°	115.5	122.8	118.9
25°	1618.9	1618.9	1615.1	115°	159.8	167.4	163.7
30°	1528.2	1538.6	1527.8	120°	203.3	212.1	209.3
35°	1412.5	1426.4	1411.4	125°	246.0	257.3	256.6
40°	1202.8	1251.6	1220.1	130°	286.1	299.8	298.7
45°	894.0	970.2	924.2	135°	328.8	340.6	341.1
50°	564.8	626.4	583.5	140°	365.4	375.4	376.7
55°	297.2	349.1	310.5	145°	398.2	407.8	411.1
60°	131.6	149.6	136.3	150°	426.4	436.7	436.4
65°	70.2	77.8	71.3	155°	450.6	461.6	460.2
70°	42.0	46.6	42.9	160°	473.9	480.9	479.9
75°	24.8	27.5	26.6	165°	492.4	496.5	494.8
80°	14.9	15.2	13.5	170°	504.8	505.7	505.2
85°	4.6	5.5	4.8	175°	511.0	512.0	511.7
90°	1.0	1.3	0.8	180°	513.2	513.2	513.2

Colour properties

Correlated Colour Temperature : 4000

Ra: CRI (Ra) 80

UGR classification =

Corrected Glare Ratings for a Total Lamp Flux of 4750lm (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	16.0	17.2	16.7	17.9	18.5	16.1	17.3	16.8	18.0	18.6
Y = 3H	15.9	16.9	16.6	17.6	18.3	16.0	17.0	16.7	17.7	18.4
Y = 4H	15.8	16.7	16.5	17.5	18.1	15.9	16.8	16.6	17.5	18.2
Y = 6H	15.7	16.5	16.4	17.3	18.0	15.8	16.6	16.5	17.4	18.1
Y = 8H	15.6	16.5	16.4	17.2	17.9	15.7	16.5	16.5	17.3	18.0
Y = 12H	15.6	16.4	16.4	17.1	17.8	15.7	16.5	16.4	17.2	17.9
X = 4H Y = 2H	15.8	16.8	16.5	17.5	18.1	15.9	16.8	16.6	17.6	18.2
Y = 3H	15.7	16.5	16.5	17.2	17.9	15.8	16.6	16.5	17.3	18.0
Y = 4H	15.6	16.3	16.4	17.1	17.8	15.7	16.4	16.5	17.2	17.9
Y = 6H	15.6	16.1	16.3	16.9	17.7	15.6	16.2	16.4	17.0	17.8
Y = 8H	15.5	16.0	16.3	16.9	17.6	15.6	16.1	16.4	16.9	17.7
Y = 12H	15.5	15.9	16.3	16.8	17.5	15.5	16.0	16.3	16.8	17.6
X = 8H Y = 4H	15.5	16.0	16.3	16.8	17.6	15.6	16.1	16.4	16.9	17.7
Y = 6H	15.4	15.9	16.3	16.7	17.5	15.5	15.9	16.3	16.8	17.6
Y = 8H	15.4	15.8	16.2	16.6	17.4	15.4	15.8	16.3	16.7	17.5
Y = 12H	15.3	15.7	16.2	16.5	17.4	15.4	15.7	16.3	16.6	17.4
X = 12H Y = 4H	15.4	15.9	16.2	16.7	17.5	15.5	16.0	16.3	16.8	17.6
Y = 6H	15.4	15.7	16.2	16.6	17.4	15.4	15.8	16.3	16.7	17.5
Y = 8H	15.3	15.7	16.2	16.5	17.4	15.4	15.7	16.3	16.6	17.4
	UGR Variations with Observer Position for Luminaire Spacings S									
S = 1.0H	+1.4		-2.9			+1.3		-2.8		
S = 1.5H	+2.8		-6.3			+2.8		-6.3		
S = 2.0H	+4.7		-7.6			+4.7		-7.6		

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	101	99	98	86	85	84	77	76	75	63
2	91	87	84	78	75	73	70	68	67	56
3	82	77	73	70	67	64	64	61	59	50
4	74	68	64	64	59	56	58	54	52	44
5	67	60	56	58	53	50	53	49	46	39
6	60	54	49	53	48	44	48	44	41	35
7	55	48	43	48	43	39	44	40	37	32
8	50	43	39	44	39	35	41	36	33	29
9	46	39	35	41	35	32	38	33	30	26
10	42	36	31	38	32	29	35	30	27	24

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	51	43	49	42	45	39	44	38	36	29
0.80	63	55	59	52	55	49	53	48	45	37
1.00	71	63	66	60	62	56	59	54	51	43
1.25	80	72	73	68	69	64	65	61	57	49
1.50	86	78	78	73	74	69	69	66	61	52
2.00	93	86	83	79	80	75	74	71	66	56
2.50	99	93	87	83	84	80	77	75	69	60
3.00	103	98	90	87	87	84	80	78	72	62
4.00	107	102	93	90	89	87	82	80	74	64
5.00	110	106	95	92	92	89	84	82	75	65

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

