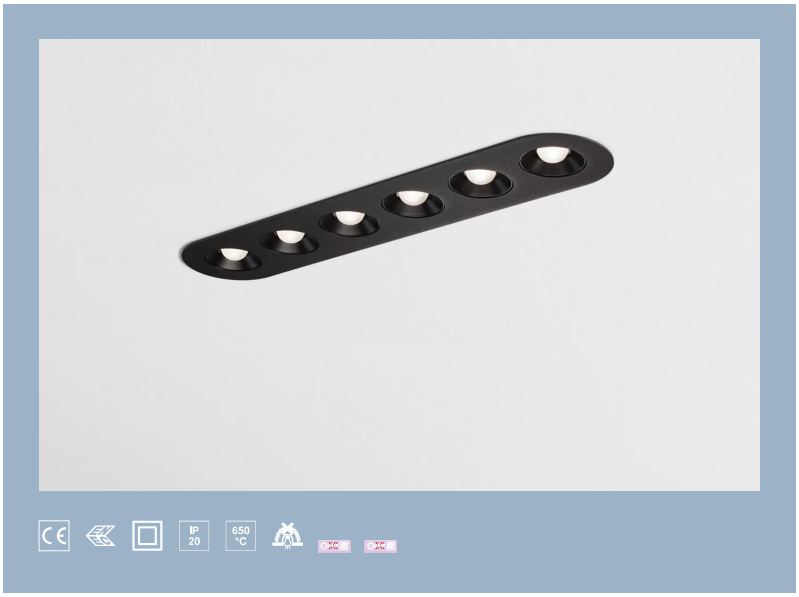
D7R6RBB/N2CHD



recessed luminaire • linear, round edges

Application : General office area’s, Auditoria, General education area’s, General healthcare area’s, Patient rooms

light source : LED • 4000 K

optics : LED+LENS™ • black cups, polycarbonate • wide-angle

UGR classification : <=22

luminous flux: 2200 lm

luminous efficacy : 100 lm/W

LLMF: 94% @ 50khrs (Tq=25°C)

Product information

Mechanical properties

dimensions : 445 mm x 95 mm x 40 mm

cut-out size : 433 mm x 83 mm x 40 mm

colour: RAL9005 - jetblack (textured)

type : individual luminaire

IP: IP20

Electrical properties

driver: DALI dimmable

power : 22 W

voltage : 220-240V

frequency : 50-60Hz AC/DC

photobiological safety : EN 62471: RISK GROUP 1 UNLIMITED

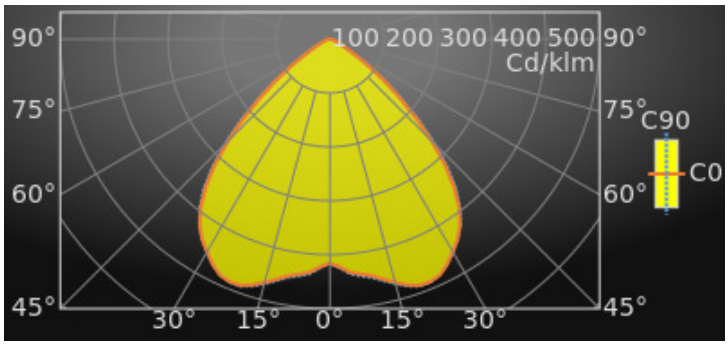
Luminance

luminous flux : 2200 lm

luminous efficacy : 100 lm/W

UGR classification =: <=22

luminous area : 0.03 m²



Average Luminances (Cd/m²) for 2200lm

Gamma	C0	C30	C45	C60	C90
45°	28200	29593	30605	29127	29153
50°	19597	20485	21735	20783	20249
55°	11559	12287	13574	12568	12074
60°	5869	6236	6672	6336	6082
65°	3703	3823	4108	3899	3764
70°	2736	2904	3039	2849	2795
75°	2134	2254	2373	2263	2293
80°	1918	1780	1950	1820	1738
85°	1168	1158	1400	1189	1221

Classifications

CIE: 690 / 964 / 995 / 1000 / 1000

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

BZ: BZ2

CAE: Symmetrical

DIN: A50 (Nach Arbeitsblatt 7)

DIN_U: Phi u = 1.00

DIN_SU: Phi su = 0.69

UTE: 1.00 C + 0.00 T

Lifetime Data (Tq=25.0°C)

Time(hrs)	LLMF(%)	Cx(%)
10000	98	2
20000	97	4
30000	96	6
40000	95	8
50000	94	9
60000	93	11
70000	92*	13
80000	91*	15
90000	90*	17
100000	89*	18

Luminous intensities in cd

Intensity for 2200lm

Gamma	C0	C45	C90
0°	913.9	913.9	913.9
5°	955.5	956.1	960.6
10°	980.6	979.7	986.8
15°	1028.1	1023.9	1032.5
20°	1069.2	1062.2	1072.0
25°	1061.6	1061.6	1059.1
30°	1002.1	1008.9	1001.8
35°	926.2	935.4	925.5
40°	788.8	820.7	800.1
45°	586.2	636.2	606.1
50°	370.3	410.7	382.7
55°	194.9	228.9	203.6
60°	86.3	98.1	89.4
65°	46.0	51.0	46.8
70°	27.5	30.6	28.1
75°	16.2	18.1	17.4
80°	9.8	10.0	8.9
85°	3.0	3.6	3.1
90°	0.6	0.9	0.5

UGR classification =

Corrected Glare Ratings for a Total Lamp Flux of 2200lm (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	21.2	22.8	21.5	23.1	23.3	21.2	22.9	21.6	23.1	23.4
Y = 3H	21.1	22.5	21.4	22.8	23.1	21.2	22.6	21.5	22.9	23.2
Y = 4H	21.0	22.4	21.4	22.7	23.0	21.1	22.5	21.5	22.8	23.1
Y = 6H	21.0	22.2	21.3	22.5	22.9	21.1	22.3	21.4	22.6	22.9
Y = 8H	21.0	22.2	21.3	22.5	22.8	21.0	22.2	21.4	22.6	22.9
Y = 12H	20.9	22.1	21.3	22.4	22.7	21.0	22.1	21.4	22.5	22.8
X = 4H Y = 2H	21.1	22.4	21.4	22.7	23.0	21.1	22.5	21.5	22.8	23.1
Y = 3H	21.0	22.2	21.4	22.5	22.9	21.1	22.2	21.5	22.6	22.9
Y = 4H	21.0	22.0	21.4	22.4	22.7	21.1	22.1	21.5	22.4	22.8
Y = 6H	21.0	21.9	21.4	22.3	22.7	21.1	21.9	21.5	22.3	22.7
Y = 8H	21.0	21.8	21.4	22.2	22.6	21.1	21.9	21.5	22.3	22.7
Y = 12H	21.0	21.7	21.4	22.1	22.5	21.0	21.8	21.5	22.2	22.6
X = 8H Y = 4H	20.9	21.8	21.4	22.2	22.6	21.0	21.8	21.5	22.2	22.7
Y = 6H	20.9	21.6	21.4	22.0	22.5	21.0	21.7	21.5	22.1	22.6
Y = 8H	20.9	21.5	21.4	22.0	22.5	21.0	21.6	21.5	22.0	22.5
Y = 12H	20.9	21.4	21.4	21.9	22.4	21.0	21.5	21.5	22.0	22.5
X = 12H Y = 4H	20.9	21.7	21.4	22.1	22.5	21.0	21.7	21.4	22.1	22.6
Y = 6H	20.9	21.5	21.4	22.0	22.4	21.0	21.6	21.5	22.0	22.5
Y = 8H	20.9	21.4	21.4	21.9	22.4	21.0	21.5	21.5	22.0	22.5
	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		

Colour properties

Correlated Colour Temperature : 4000

Ra: CRI (Ra) 80

Efficiency

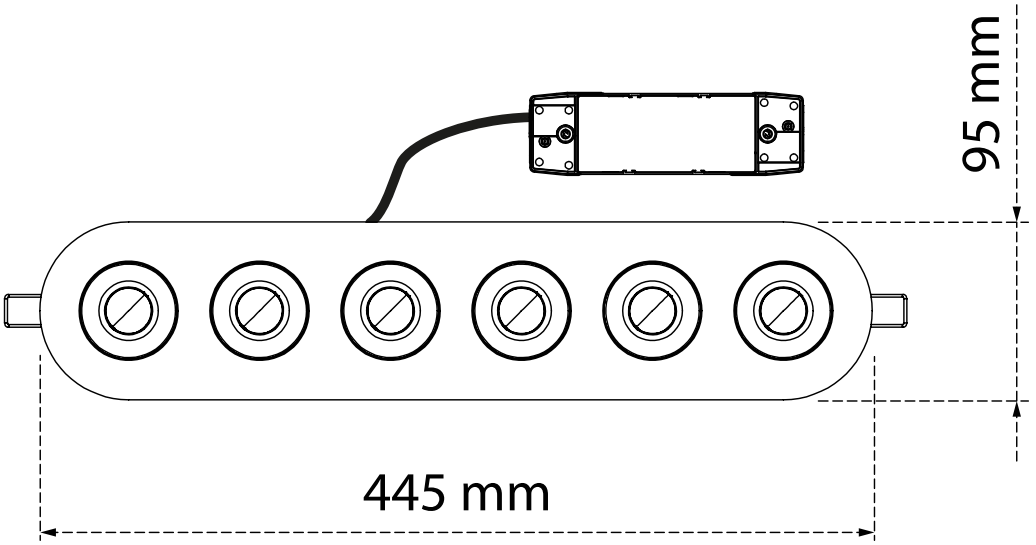
Utilisation Factors according to IES (%)

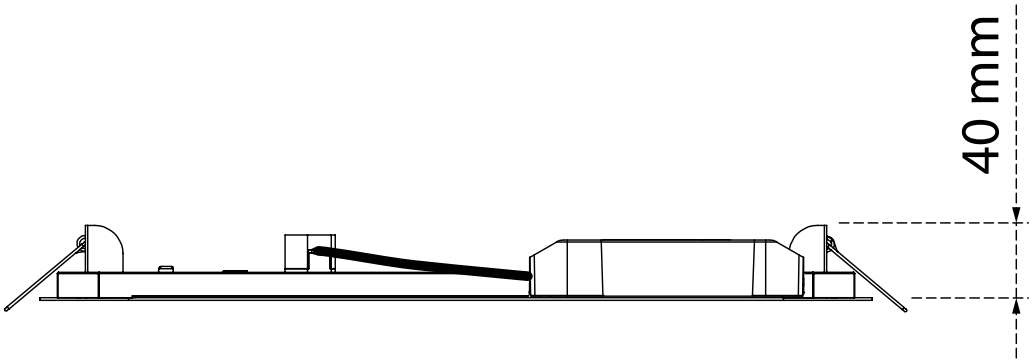
	Room Reflection Factors (%)									
Ceiling	80	80	80	50	50	50	30	30	30	0
Walls	50	30	10	50	30	10	50	30	10	0
Floor	20	20	20	20	20	20	20	20	20	0
RCR = 1	108	106	104	101	100	99	98	96	95	90
2	97	93	90	92	89	86	89	86	84	80
3	88	82	78	83	79	76	81	77	74	71
4	79	73	69	76	71	67	73	69	66	63
5	72	65	61	69	63	59	67	62	59	56
6	66	59	54	63	57	53	62	56	52	50
7	60	53	48	58	52	48	57	51	47	45
8	55	48	43	53	47	43	52	47	43	41
9	51	44	39	49	43	39	48	43	39	37
10	47	40	36	46	40	36	45	39	35	34

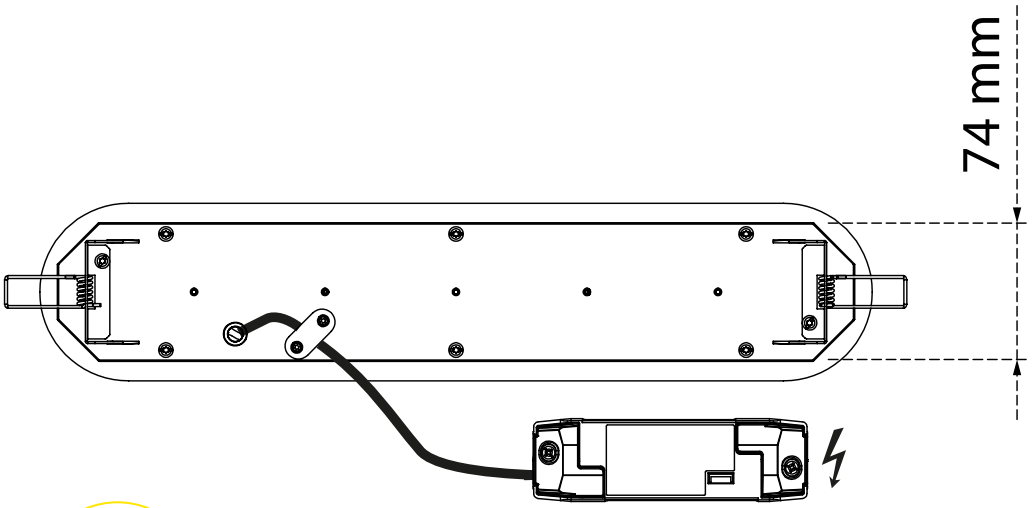
Utilisation Factors according to LiTG (%)

	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	58	50	55	48	56	49	53	48	47	42
0.80	70	62	66	60	67	61	64	59	58	53
1.00	79	71	73	67	75	69	71	66	66	60
1.25	89	81	82	76	84	78	79	75	74	69
1.50	95	88	86	81	89	84	84	80	79	74
2.00	102	96	91	87	95	91	89	86	84	80
2.50	108	102	95	92	100	96	93	90	89	84
3.00	112	107	98	96	104	100	96	93	92	88
4.00	116	111	100	98	106	103	97	95	94	90
5.00	119	115	102	100	109	106	99	98	96	92

Dimensional drawing







ETAP tomorrow's light