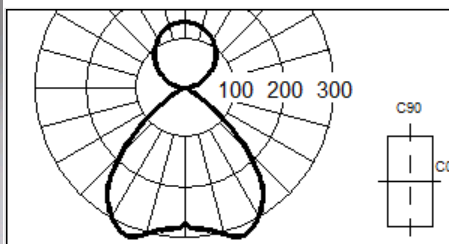




► Budynek Urzędu Miasta Stołecznego Warszawy



R721/LEDW3650SX2

suspended luminaire - lens -
rectangular - grey
lacquered sheet steel housing
design: EER design
individual luminaire

Mechanical characteristics

dimensions: (LxWxH) 1500 mm x 150 mm x 50 mm

weight: 6.1 kg

Optic

lens - LED+LENS

Luminous area: 0.1764 m²

Lamp

lamp type: LED HP

colour temperature: 3000K / warm white

Electrical equipment

S: driver fixed output

voltage: 220-240V

frequency: 50-60Hz

power consumption: 50.4 W

power factor >= 0.9

photobiological safety: EN 62471: risk group 1
unlimited

Luminance

luminous flux luminaire: 5050 lm

luminous efficacy luminaire: 100 lm/W

Classifications

UTE: 0.64 B + 0.36 T

F1 = 449 F*1 = 449

F2 = 171 F*2 = 171

F3 = 19 F*3 = 19

F4 = 3 F*4 = 3

F5 = 357 F*5 = 357

CIE: 446 / 621 / 640 / 643 /

1000

CIE_FLUXCODE: 0.69 / 0.97 /

0.99 / 0.64 / 1.00

BZ: B22

CAE: sym

DIN: B53 (Nach Arbeitsblatt 7
und 8)

DIN_U: Phi u = 0.64

DIN_SU: Phi su = 0.69

SO: Phi so = 0.71

UTE: B

Luminous intensities in cd/kim

gamma	C 0	C 45	C 90	gamma	C 0	C 45	C 90
0°	268	268	268	90°	0	0	0
5°	280	280	281	95°	3	3	2
10°	287	287	289	100°	3	10	9
15°	301	300	302	105°	15	21	20
20°	313	311	314	110°	30	31	30
25°	311	311	310	115°	41	43	42
30°	294	296	293	120°	52	54	54
35°	271	274	271	125°	63	66	66
40°	231	240	234	130°	73	77	77
45°	172	186	178	135°	84	87	87
50°	108	120	112	140°	94	96	96
55°	57	67	60	145°	102	104	105
60°	25	29	26	150°	109	112	112
65°	13	15	14	155°	115	118	118
70°	8	9	8	160°	121	123	123
75°	5	5	5	165°	126	127	127
80°	3	3	3	170°	129	130	129
85°	1	1	1	175°	131	131	131
90°	0	0	0	180°	131	131	131

Corrected glare indices referring to a total lamp flux of 5050lm

Rho Ceiling	70% 70% 50% 50% 30%	70% 70% 50% 50% 30%
Rho Walls	50% 30% 50% 30% 30%	50% 30% 50% 30% 30%
Rho Floor	20% 20% 20% 20% 20%	20% 20% 20% 20% 20%
Dimensions	Viewing direction at right angles to lamp axis	Viewing direction parallel angles to lamp axis
X Y		
2H 2H	14.2 14.9 14.9 15.6 16.2	14.3 15.0 15.0 15.7 16.3
3H	14.1 14.7 14.8 15.4 16.1	14.2 14.8 14.9 15.5 16.2
4H	14.0 14.5 14.8 15.3 16.0	14.1 14.6 14.9 15.4 16.1
6H	13.9 14.4 14.7 15.1 15.9	14.0 14.5 14.8 15.2 15.9
8H	13.8 14.3 14.6 15.1 15.8	13.9 14.4 14.7 15.2 15.9
12H	13.8 14.2 14.6 15.0 15.7	13.9 14.3 14.7 15.1 15.8
4H 2H	14.0 14.6 14.8 15.3 16.0	14.1 14.7 14.9 15.4 16.1
3H	13.9 14.3 14.7 15.1 15.8	14.0 14.4 14.8 15.2 15.9
4H	13.8 14.2 14.7 15.0 15.7	13.9 14.3 14.7 15.1 15.8
6H	13.7 14.0 14.6 14.9 15.6	13.8 14.1 14.7 14.9 15.7
8H	13.7 13.9 14.6 14.8 15.6	13.8 14.0 14.6 14.9 15.7
12H	13.6 13.8 14.5 14.7 15.5	13.7 13.9 14.6 14.8 15.6
8H 4H	13.7 13.9 14.5 14.8 15.6	13.8 14.0 14.6 14.8 15.7
6H	13.6 13.8 14.5 14.6 15.5	13.7 13.9 14.6 14.7 15.6
8H	13.5 13.7 14.4 14.6 15.4	13.6 13.8 14.5 14.7 15.5
12H	13.5 13.6 14.4 14.5 15.4	13.6 13.7 14.5 14.6 15.5
12H 4H	13.6 13.8 14.5 14.7 15.5	13.7 13.9 14.6 14.8 15.6
6H	13.5 13.7 14.4 14.5 15.4	13.6 13.8 14.5 14.6 15.5
8H	13.5 13.6 14.4 14.5 15.4	13.6 13.7 14.5 14.6 15.5
S = 1.0H	+1.3 / -2.7	+1.3 / -2.8
1.5H	+2.8 / -6.1	+2.8 / -6.1
2.0H	+4.6 / -7.4	+4.6 / -7.5

Average luminances in cd/m²/5050lm

gamma	C 0	C 30	C 45	C 60	C 90
45°	6952	7296	7545	7181	7187
50°	4831	5050	5359	5124	4992
55°	2850	3029	3347	3099	2977
60°	1447	1537	1645	1562	1500
65°	913	942	1013	961	928
70°	675	716	749	702	689
75°	526	556	585	558	565

Average luminances in cd/m²/1000lm

gamma	C 0	C 30	C 45	C 60	C 90
45°	1377	1445	1494	1422	1423
50°	957	1000	1061	1015	989
55°	564	600	663	614	589
60°	287	304	326	309	297
65°	181	187	201	190	184
70°	134	142	148	139	136
75°	104	110	116	110	112

Utilisation factors according to IES in %

Rho Ceiling	80%	80%	80%	50%	50%	50%	30%	30%	30%	0%
Rho Walls	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
Rho Floor	20%	20%	20%	20%	20%	20%	20%	20%	20%	0%
R.C.R. = 1	100	98	96	83	82	81	73	72	71	58
2	90	86	83	75	72	71	66	64	63	51
3	81	76	72	68	64	62	60	57	55	45
4	73	67	62	61	57	54	54	51	49	40
5	65	59	55	56	51	48	50	46	43	36
6	59	53	48	51	46	42	45	41	39	32
7	54	47	42	46	41	38	42	37	34	29
8	49	42	38	42	37	34	38	34	31	26
9	45	38	34	39	34	30	35	31	28	24
10	41	35	30	36	31	27	33	28	25	22

Utilisation factors according to LITG in %

Rho Ceiling	80%	80%	80%	80%	50%	50%	50%	50%	30%	0%
Rho Walls	50%	30%	50%	30%	50%	30%	50%	30%	30%	0%
Rho Floor	30%	30%	10%	10%	30%	30%	10%	10%	10%	0%
k=0.60	47	39	44	37	42	36	40	35	33	27
0.80	58	49	54	47	52	45	49	44	41	34
1.00	66	57	61	55	58	52	55	50	47	39
1.25	75	67	69	63	65	59	62	57	53	45
1.50	81	73	74	68	70	64	65	61	57	48
2.00	89	82	80	74	75	70	70	66	61	51
2.50	95	88	84	79	79	75	73	70	65	54
3.00	100	94	87	83	83	79	76	74	67	57
4.00	104	99	90	87	85	82	78	76	69	58
5.00	107	103	92	89	88	85	80	78	71	59

