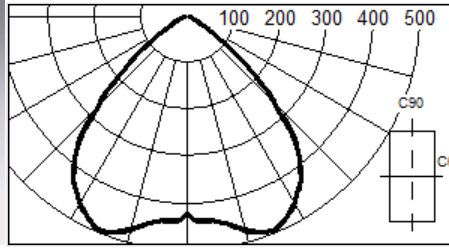


## ► Budynek Urzędu Miasta Stołecznego Warszawy



### R720/LEDW2430SX2

surface mounted 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: 5.8 kg

### Optic

lens - LED+LENS  
Luminous area: 0.1176 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: 31.7 W  
power factor >= 0.9  
photobiological safety: EN 62471: risk group 1  
unlimited

### Luminance

luminous flux luminaire: 3050 lm  
luminous efficacy luminaire: 96 lm/W

### Classifications

UTE: 1.00 B  
F1 = 698 F'1 = 698  
F2 = 266 F'2 = 266  
F3 = 29 F'3 = 29  
F4 = 4 F'4 = 4  
F5 = 0 F'5 = 0  
CIE: 693 / 965 / 995 / 1000 / 1000  
CIE\_FLUXCODE: 0.69 / 0.97 / 0.99 / 1.00 / 1.00  
BZ: BZ2  
CAE: sym  
DIN: A50 (Nach Arbeitsblatt 7)  
DIN\_U: Phi u = 1.00  
DIN\_SU: Phi su = 0.69  
UTE: B

### Luminous intensities in cd/klm

gamma	C 0	C 45	C 90
0°	416	416	416
5°	435	436	438
10°	447	446	450
15°	468	467	470
20°	487	484	488
25°	484	484	483
30°	457	460	456
35°	422	426	422
40°	359	374	365
45°	267	290	276
50°	169	187	174
55°	89	104	93
60°	39	45	41
65°	21	23	21
70°	13	14	13
75°	7	8	8
80°	4	5	4
85°	1	2	1
90°	0	0	0

### Corrected glare indices referring to a total lamp flux of 3050lm

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	X   Y	Viewing direction at right angles to lamp axis	Viewing direction parallel angles to lamp axis
2H 2H	17.7   18.6   18.0   18.8   19.0	17.8   18.7   18.1   18.9   19.1	
3H	17.7   18.4   18.0   18.7   18.9	17.8   18.5   18.1   18.8   19.0	
4H	17.7   18.3   18.0   18.6   18.9	17.7   18.4   18.1   18.7   19.0	
6H	17.6   18.2   17.9   18.5   18.8	17.7   18.3   18.0   18.6   18.9	
8H	17.6   18.2   17.9   18.4   18.8	17.7   18.3   18.0   18.5   18.9	
12H	17.6   18.1   17.9   18.4   18.7	17.7   18.2   18.0   18.5   18.8	
4H 2H	17.7   18.4   18.0   18.6   18.9	17.8   18.4   18.1   18.7   19.0	
3H	17.7   18.2   18.0   18.5   18.8	17.8   18.3   18.1   18.6   18.9	
4H	17.7   18.1   18.1   18.4   18.8	17.8   18.2   18.2   18.5   18.9	
6H	17.7   18.0   18.1   18.3   18.7	17.8   18.1   18.2   18.4   18.8	
8H	17.7   17.9   18.1   18.3   18.7	17.8   18.0   18.2   18.4   18.8	
12H	17.7   17.8   18.1   18.2   18.7	17.7   17.9   18.2   18.3   18.8	
8H 4H	17.6   17.9   18.1   18.3   18.7	17.7   18.0   18.1   18.4   18.8	
6H	17.7   17.8   18.1   18.2   18.7	17.7   17.9   18.2   18.3   18.8	
8H	17.6   17.7   18.1   18.1   18.6	17.7   17.8   18.2   18.2   18.7	
12H	17.6   17.6   18.1   18.1   18.6	17.7   17.7   18.2   18.2   18.7	
12H 4H	17.6   17.8   18.0   18.2   18.6	17.7   17.9   18.1   18.3   18.7	
6H	17.6   17.7   18.1   18.1   18.6	17.7   17.8   18.2   18.2   18.7	
8H	17.6   17.6   18.1   18.1   18.6	17.7   17.7   18.2   18.2   18.7	
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/m²/3050lm

gamma	C 0	C 30	C 45	C 60	C 90
45°	9798	10282	10633	10120	10129
50°	6809	7117	7551	7221	7035
55°	4016	4269	4716	4367	4195
60°	2039	2166	2318	2201	2113
65°	1287	1328	1427	1355	1308
70°	951	1009	1056	990	971
75°	741	783	824	786	797

### Average luminances in cd/m²/1000lm

gamma	C 0	C 30	C 45	C 60	C 90
45°	3212	3371	3486	3318	3321
50°	2232	2333	2476	2367	2307
55°	1317	1400	1546	1432	1375
60°	669	710	760	722	693
65°	422	435	468	444	429
70°	312	331	346	324	318
75°	243	257	270	258	261

### 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	108	106	104	102	100	99	98	96	95	90
2	97	93	90	92	89	87	89	86	84	80
3	88	82	79	83	79	76	81	77	75	71
4	79	73	69	76	71	67	74	69	66	63
5	72	66	61	69	64	60	67	62	59	56
6	66	59	54	63	57	53	62	56	53	50
7	60	53	48	58	52	48	57	51	47	45
8	56	48	44	54	47	43	52	47	43	41
9	51	44	39	50	43	39	48	43	39	37
10	47	40	36	46	40	36	45	39	35	34

### 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	58	50	55	49	56	49	54	48	48	42
0.80	71	63	66	60	68	61	65	59	59	53
1.00	79	71	74	68	76	69	72	67	66	61
1.25	89	82	82	77	84	79	80	75	74	70
1.50	95	88	86	82	90	84	84	80	79	75
2.00	102	96	91	87	96	91	89	86	84	80
2.50	108	102	95	92	100	96	93	90	89	85
3.00	112	107	98	96	104	100	96	94	92	88
4.00	116	112	100	98	106	103	97	96	94	90
5.00	119	115	102	100	109	106	99	98	96	92

