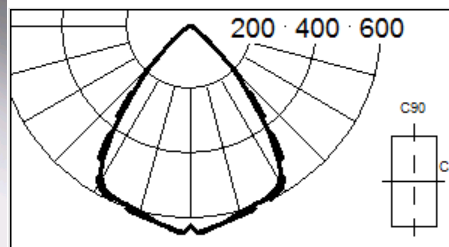




## ► Budynek Urzędu Miasta Stołecznego Warszawy



### R710/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 = 826 F\*1 = 826  
F2 = 153 F\*2 = 153  
F3 = 16 F\*3 = 16  
F4 = 3 F\*4 = 3  
F5 = 0 F\*5 = 0  
CIE: 824 / 980 / 997 / 1000 / 1000  
CIE\_FLUXCODE: 0.82 / 0.98 / 1.00 / 1.00 / 1.00  
BZ: BZ1  
CAE: sym  
DIN: A60 (Nach Arbeitsblatt 7)  
DIN\_U: Phi u = 1.00  
DIN\_SU: Phi su = 0.75  
UTE: B

### Luminous intensities in cd/klm

gamma	C 0	C 45	C 90
0°	618	618	618
5°	634	634	637
10°	616	619	622
15°	601	606	611
20°	591	595	604
25°	584	589	596
30°	559	575	575
35°	462	485	498
40°	310	321	338
45°	185	184	198
50°	83	82	96
55°	40	37	43
60°	20	20	22
65°	12	12	13
70°	8	8	8
75°	5	5	5
80°	3	3	3
85°	1	1	1
90°	0	0	0

### Average luminances in cd/m²/3050lm

gamma	C 0	C 30	C 45	C 60	C 90
45°	6784	7189	6752	7269	7276
50°	3336	3543	3316	3643	3881
55°	1793	1768	1694	1855	1954
60°	1047	1093	1034	1118	1119
65°	738	773	722	772	801
70°	585	605	578	607	632
75°	496	512	490	530	533

### 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	109	107	106	103	101	100	99	98	97	91
2	100	96	94	94	92	90	91	89	87	83
3	91	87	83	87	83	80	84	81	79	75
4	84	78	74	80	76	72	78	74	71	68
5	77	71	67	74	69	65	72	68	65	62
6	71	65	60	68	63	59	67	62	59	56
7	66	59	55	64	58	54	62	57	54	51
8	61	54	50	59	53	49	58	53	49	47
9	57	50	46	55	49	45	54	49	45	43
10	53	46	42	51	46	42	51	45	42	40

### 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	15.7	16.3	15.9	16.5	16.7	15.7	16.3	15.9	16.5	16.8
3H	15.6	16.2	15.9	16.4	16.6	15.6	16.2	15.9	16.4	16.7
4H	15.6	16.1	15.9	16.3	16.6	15.6	16.1	15.9	16.3	16.6
6H	15.6	16.0	15.9	16.2	16.5	15.6	16.0	15.9	16.3	16.5
8H	15.6	15.9	15.9	16.2	16.5	15.6	15.9	15.9	16.2	16.5
12H	15.5	15.8	15.9	16.1	16.5	15.6	15.9	15.9	16.2	16.5
4H 2H	15.6	16.0	15.9	16.3	16.6	15.6	16.1	15.9	16.3	16.6
3H	15.6	15.9	15.9	16.2	16.5	15.6	15.9	15.9	16.2	16.5
4H	15.6	15.8	15.9	16.1	16.4	15.6	15.8	15.9	16.1	16.5
6H	15.5	15.7	15.9	16.0	16.4	15.6	15.7	15.9	16.0	16.4
8H	15.5	15.6	15.9	16.0	16.4	15.6	15.6	15.9	16.0	16.4
12H	15.5	15.5	15.9	15.9	16.4	15.5	15.6	15.9	15.9	16.4
8H 4H	15.5	15.6	15.9	15.9	16.3	15.5	15.6	15.9	16.0	16.4
6H	15.5	15.5	15.9	15.9	16.3	15.5	15.5	15.9	15.9	16.4
8H	15.5	15.4	15.9	15.8	16.3	15.5	15.4	15.9	15.9	16.3
12H	15.5	15.3	15.9	15.8	16.3	15.5	15.3	16.0	15.8	16.3
12H 4H	15.5	15.5	15.9	15.9	16.3	15.5	15.5	15.9	15.9	16.3
6H	15.5	15.4	15.9	15.8	16.3	15.5	15.4	15.9	15.8	16.3
8H	15.5	15.3	15.9	15.8	16.3	15.5	15.3	15.9	15.8	16.3
S = 1.0H	+2.5 / -5.6					+2.5 / -5.7				
1.5H	+4.7 / -7.5					+4.8 / -7.5				
2.0H	+6.7 / -8.4					+6.7 / -8.4				

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

gamma	C 0	C 30	C 45	C 60	C 90
45°	2224	2357	2214	2383	2386
50°	1094	1161	1087	1195	1273
55°	588	580	555	608	641
60°	343	358	339	367	367
65°	242	254	237	253	263
70°	192	198	189	199	207
75°	162	168	161	174	175

### 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	65	58	62	56	63	57	61	56	55	50
0.80	77	69	72	67	74	68	71	66	65	61
1.00	85	77	79	73	81	75	77	72	72	67
1.25	94	87	86	82	89	84	84	81	80	76
1.50	99	93	90	86	94	89	88	85	84	80
2.00	106	100	95	91	99	95	92	89	88	84
2.50	111	106	98	95	103	99	95	93	92	88
3.00	115	110	100	98	106	103	98	96	95	91
4.00	118	114	102	100	108	105	99	97	96	92
5.00	120	117	103	102	110	108	100	99	98	94

