

Приложение 1

**РЕЗУЛТАТИ ОТ СВЕЛТОТЕХНИЧЕСКИТЕ ВАРИАНТНИ ИЗЧИСЛЕНИЯ
КОЛИЧЕСТВЕНИ И КАЧЕСТВЕНИ ПОКАЗАТЕЛИ НА
ПРОЕКТИРАНАТА ОСВЕТИТЕЛНА УРЕДБА**

Читалище Напредък град Лясковец

Partner for Contact:
Order No.:
Company:
Customer No.:

Date: 15.09.2013
Operator: eng.Mladen Darakchiev

MD Project Ltd.
11B, Todor Balina
Veliko Tarnovo

Operator eng.Mladen Darakchiev
Telephone 0887 877 565
Fax
e-Mail mdprojectltd@gmail.com

Table of contents

Читалище Напредък град Лясковец

Project Cover	1
Table of contents	2
Репетиционна	
Photometric Results	3
Room Surfaces	
Workplane	
Isolines (E)	4
Компютърна зала	
Photometric Results	5
Room Surfaces	
Workplane	
Isolines (E)	6
Зала "Балет"	
Photometric Results	7
Room Surfaces	
Workplane	
Isolines (E)	8
Гримьорна	
Photometric Results	9
Room Surfaces	
Workplane	
Isolines (E)	10

MD Project Ltd.
11B, Todor Balina
Veliko Tarnovo

Operator eng.Mladen Darakchiev
Telephone 0887 877 565
Fax
e-Mail mdprojectltd@gmail.com

Репетиционна / Photometric Results

Total Luminous Flux: 26021 lm
Total Load: 469.6 W
Maintenance factor: 0.80
Boundary Zone: 0.500 m

Surface	Average illuminances [lx]			Reflection factor [%]	Average luminance [cd/m²]
	direct	indirect	total		
Workplane	316	44	360	/	/
Floor	247	53	300	20	19
Ceiling	0.10	58	58	70	13
Wall 1	67	52	118	50	19
Wall 2	70	52	122	50	19
Wall 3	67	51	118	50	19
Wall 4	70	52	122	50	19

Uniformity on the working plane

u0: 0.753 (1:1)

E_{min} / E_{max} : 0.643 (1:2)

UGR

Left Wall

Lower Wall

(CIE, SHR = 1.00.)

Lengthways-

<10

<10

Across

<10

<10

to luminaire axis

Illuminance Quotient (according to LG7): Walls / Working Plane: 0.282, Ceiling / Working Plane: 0.162.

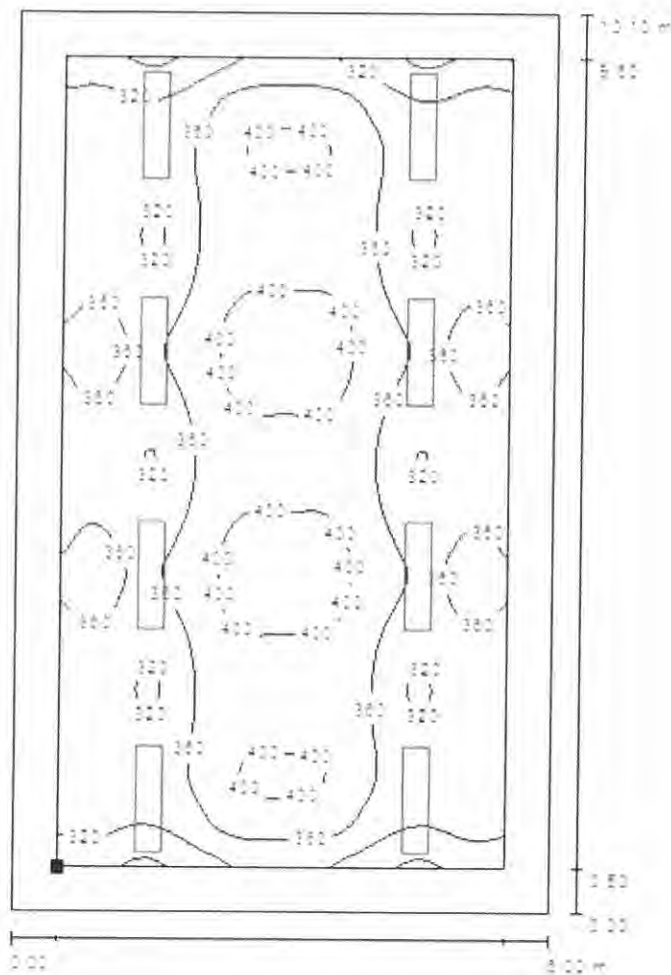
Specific connected load: $7.75 \text{ W/m}^2 = 2.15 \text{ W/m}^2/100 \text{ lx}$ (Ground area: 60.60 m^2)

MD Project Ltd.

11B, Todor Balina
Veliko Tarnovo

Operator eng.Mladen Darakchiev
Telephone 0887 877 565
Fax
e-Mail mdprojectltd@gmail.com

Репетиционна / Workplane / Isolines (E)



Position of surface in room:
Working plane with 0.500 m Boundary
Zone
Marked point:
(0.500 m, 0.500 m, 0.750 m)



Values in Lux, Scale 1 : 79

Grid: 128 x 64 Points

E_{av} [lx]
360

E_{min} [lx]
271

E_{max} [lx]
422

$u0$
0.753

E_{min} / E_{max}
0.643

MD Project Ltd.
11B, Todor Balina
Veliko Tarnovo

Operator eng.Mladen Darakchiev
Telephone 0887 877 565
Fax
e-Mail mdprojectltd@gmail.com

Компютърна зала / Photometric Results

Total Luminous Flux: 16263 lm
Total Load: 293.5 W
Maintenance factor: 0.80
Boundary Zone: 0.500 m

Surface	Average illuminances [lx]			Reflection factor [%]	Average luminance [cd/m²]
	direct	indirect	total		
Workplane	250	25	275	/	/
Floor	168	33	201	20	13
Ceiling	0.07	35	35	70	7.91
Wall 1	38	34	72	50	11
Wall 2	42	31	73	50	12
Wall 3	38	34	72	50	11
Wall 4	42	31	73	50	12

Uniformity on the working plane

u0: 0.630 (1:2)

E_{min} / E_{max} : 0.524 (1:2)

UGR

Left Wall

Lower Wall

(CIE, SHR = 1.00.)

Lengthways-

<10

<10

Across

<10

<10

to luminaire axis

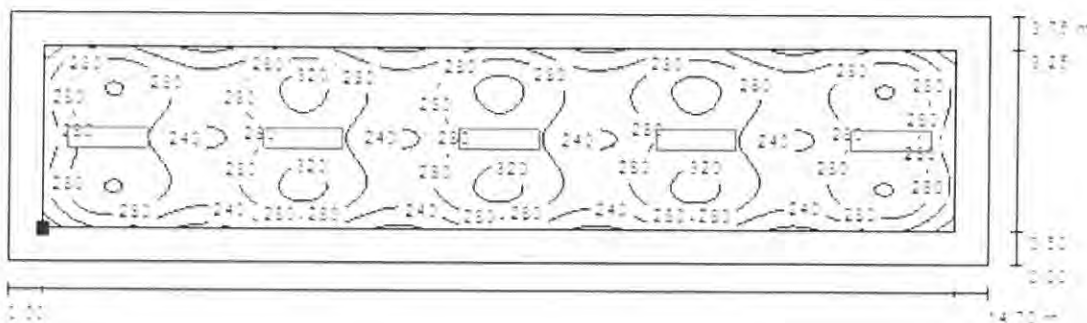
Illuminance Quotient (according to LG7): Walls / Working Plane: 0.190, Ceiling / Working Plane: 0.129.

Specific connected load: $5.32 \text{ W/m}^2 = 1.93 \text{ W/m}^2/100 \text{ lx}$ (Ground area: 55.12 m^2)

MD Project Ltd.
11B, Todor Balina
Veliko Tarnovo

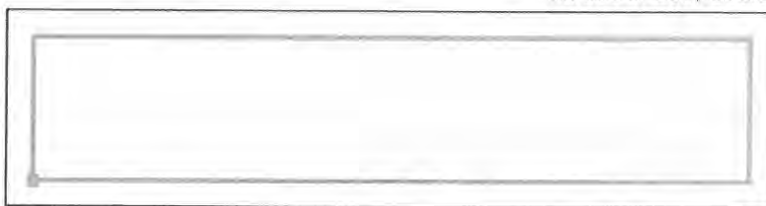
Operator eng.Mladen Darakchiev
Telephone 0887 877 565
Fax
e-Mail mdprojectltd@gmail.com

Компютърна зала / Workplane / Isolines (E)



Values in Lux, Scale 1 : 106

Position of surface in room:
Working plane with 0.500 m Boundary
Zone
Marked point:
(0.500 m, 0.500 m, 0.750 m)



Grid: 128 x 32 Points

E_{av} [lx]
275

E_{min} [lx]
173

E_{max} [lx]
331

u_0
0.630

E_{min} / E_{max}
0.524

MD Project Ltd.
11B, Todor Balina
Veliko Tarnovo

Operator eng.Mladen Darakchiev
Telephone 0887 877 565
Fax
e-Mail mdprojectltd@gmail.com

Зала "Балет" / Photometric Results

Total Luminous Flux: 19516 lm
Total Load: 352.2 W
Maintenance factor: 0.80
Boundary Zone: 0.500 m

Surface	Average illuminances [lx]			Reflection factor [%]	Average luminance [cd/m²]
	direct	indirect	total		
Workplane	244	25	268	/	/
Floor	166	33	199	20	13
Ceiling	0.07	35	35	70	7.84
Wall 1	38	33	71	50	11
Wall 2	41	32	72	50	12
Wall 3	38	33	71	50	11
Wall 4	41	31	71	50	11

Uniformity on the working plane

u0: 0.640 (1:2)

E_{min} / E_{max} : 0.530 (1:2)

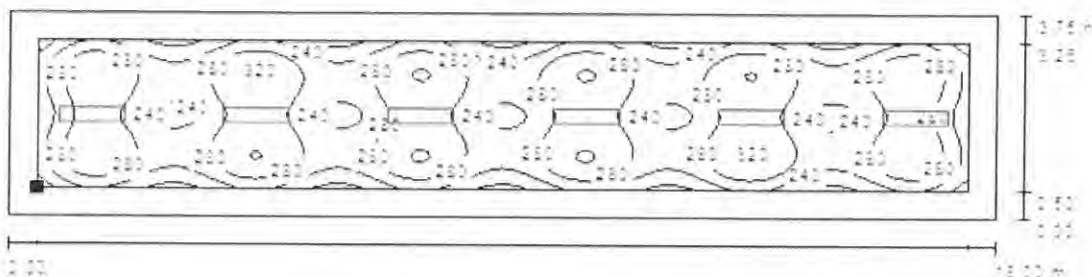
Illuminance Quotient (according to LG7): Walls / Working Plane: 0.193, Ceiling / Working Plane: 0.131.

Specific connected load: $5.22 \text{ W/m}^2 = 1.94 \text{ W/m}^2/100 \text{ lx}$ (Ground area: 67.50 m^2)

MD Project Ltd.
11B, Todor Balina
Veliko Tarnovo

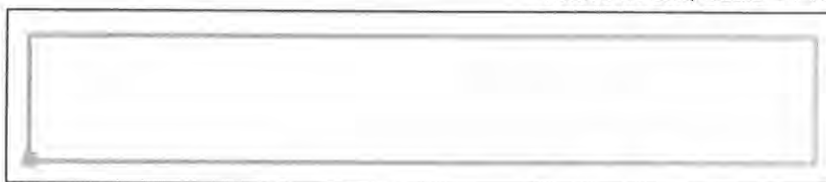
Operator eng.Mladen Darakchiev
Telephone 0887 877 565
Fax
e-Mail mdprojectltd@gmail.com

Зала "Балет" / Workplane / Isolines (E)



Values in Lux, Scale 1 : 129

Position of surface in room:
Working plane with 0.500 m Boundary
Zone
Marked point:
(0.500 m, 0.500 m, 0.750 m)



Grid: 128 x 32 Points

E_{av} [lx]
268

E_{min} [lx]
172

E_{max} [lx]
324

u_0
0.640

E_{min} / E_{max}
0.530

MD Project Ltd.
11B, Todor Balina
Veliko Tarnovo

Operator eng.Mladen Darakchiev
Telephone 0887 877 565
Fax
e-Mail mdprojectltd@gmail.com

Гримьорна / Photometric Results

Total Luminous Flux: 7517 lm
Total Load: 122.0 W
Maintenance factor: 0.80
Boundary Zone: 0.500 m

Surface	Average illuminances [lx]			Reflection factor [%]	Average luminance [cd/m²]
	direct	indirect	total		
Workplane	324	74	397	/	/
Floor	188	75	264	20	17
Ceiling	0.01	71	71	70	16
Wall 1	87	68	155	50	25
Wall 2	104	68	172	50	27
Wall 3	90	68	158	50	25
Wall 4	108	67	175	50	28

Uniformity on the working plane

u0: 0.745 (1:1)

E_{min} / E_{max} : 0.656 (1:2)

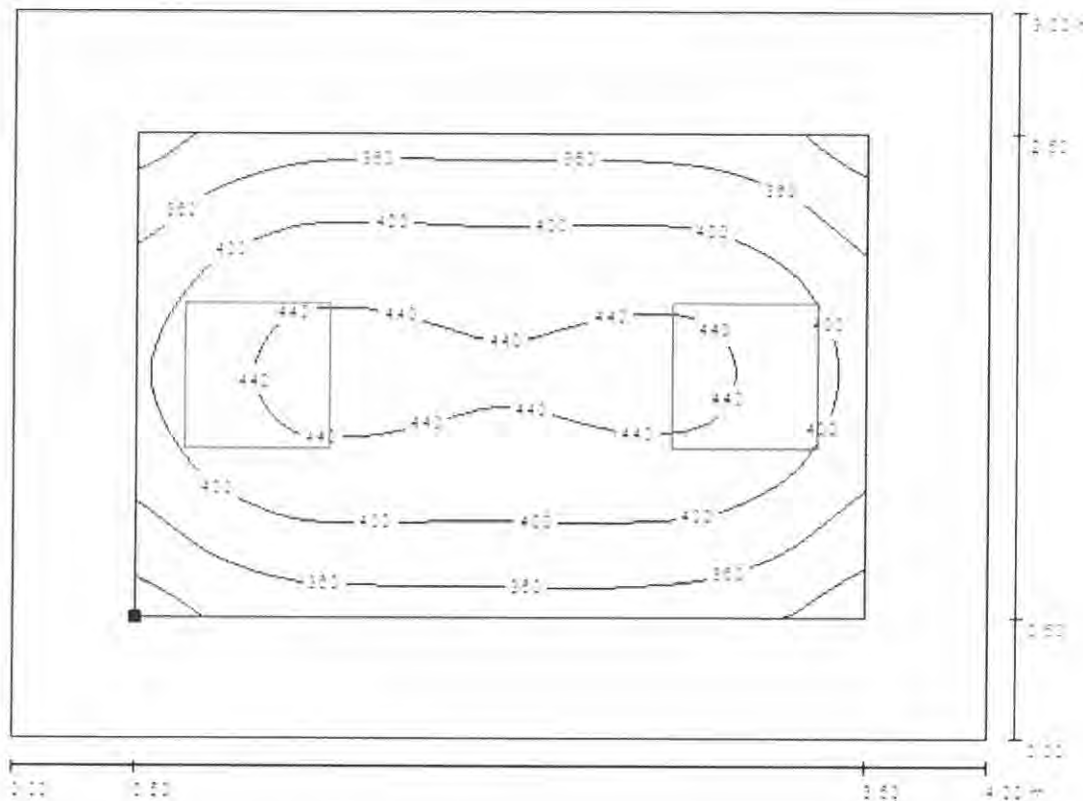
Illuminance Quotient (according to LG7): Walls / Working Plane: 0.427, Ceiling / Working Plane: 0.179.

Specific connected load: $10.17 \text{ W/m}^2 = 2.56 \text{ W/m}^2/100 \text{ lx}$ (Ground area: 12.00 m^2)

MD Project Ltd.
11B, Todor Balina
Veliko Tarnovo

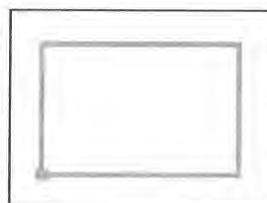
Operator eng.Mladen Darakchiev
Telephone 0887 877 565
Fax
e-Mail mdprojectltd@gmail.com

Гримьорна / Workplane / Isolines (E)



Values in Lux, Scale 1 : 29

Position of surface in room:
Working plane with 0.500 m Boundary
Zone
Marked point:
(0.500 m, 0.500 m, 0.750 m)



Grid: 32 x 32 Points

E_{av} [lx]
397

E_{min} [lx]
296

E_{max} [lx]
452

u_0
0.745

E_{min} / E_{max}
0.656