luminaire documentation

filename	: MT50-LED-T3-CL-HO.LDT
meas. number	: 2889
luminaire number	: MT50-LED-T3-CL-HO
date / operator	: 07-03-2019

default lamp type(s))

no of lamps	lamp type	luminaire lumens	input wattage
1	LED MODULE	3690 lm	26.4 W

dimensions

luminaire			luminous area		
length	:	945 mm	length	:	885 mm
width	:	50 mm	width	:	50 mm
height	:	50 mm	height	:	25 mm

coordinate system

no of planes	:	7	samples / plane	:	37
first c-plane	:	0.0 °	first gamma-angle	:	0.0 °
step angle	:	15.0 °	step angle	:	5.0 °
last c-plane	:	90.0 °	last gamma-angle	:	180.0 °

symmetrics : symmetry to C0 / C90

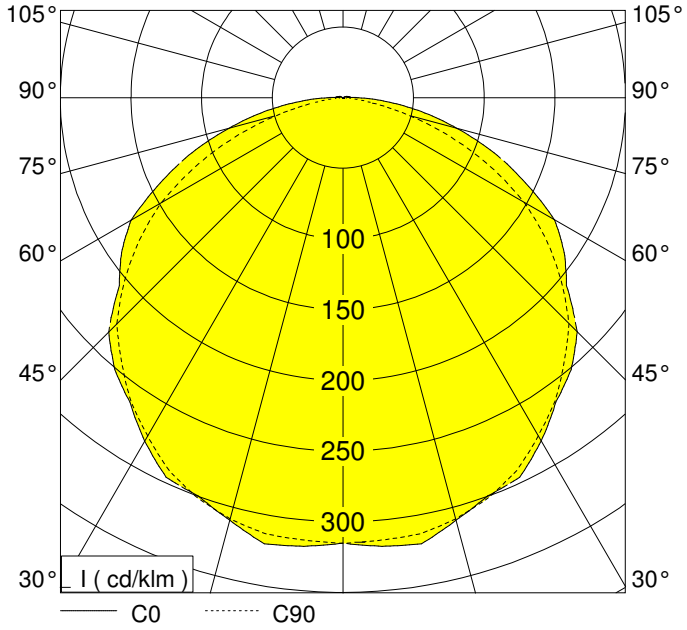
performance

light output ratio	:	100.0 %
DFF	:	99.1 %
UFF	:	0.9 %

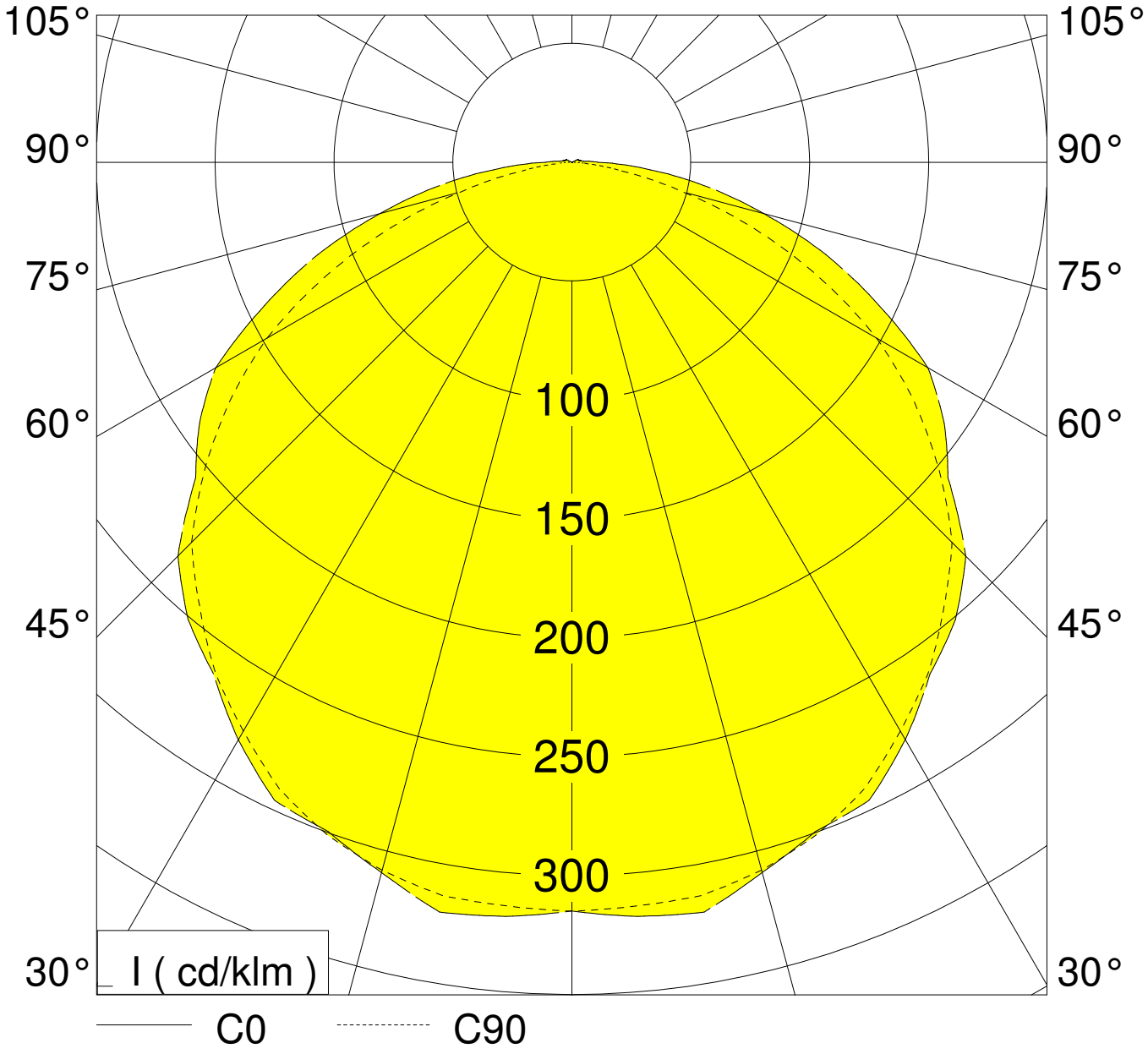
classification

LiTG / DIN	: A40
UTE	: 0.99E+0.01T
CIE	: 45 77 95 99 100
BZ	: 5 5 5 5 5 5 5 5 5

Ambient Temperature	: 25 degC
Input Voltage	: 240 V
Circuit Watts	: 26.4W
Amps (running)	: 0.119A
V.A.	: 28.70VA
Power Factor	: 0.92
CCT	: 4057K (measured): 4000K (declared)
CRI (Ra)	: 86
S/P Ratio	: 1.7
Luminaire Lumens	: 3690 LLm
Output Current DC	: 350 mA
Output Voltage DC	: 66.7 V
Output Power	: 23.35W
Luminaire Lm/circ.Watt	: 140 LLm/circ.Watt
Driver Efficiency	: 88.4 %
Driver Details	: TRIDONIC LC 50W 100-400A FLEX C EXC 280000680



Measurements made are in absolute units. The luminaire is treated as if it was a lamp as it is not possible to measure each LED separately - hence an LOR of 100%
The Light output ratio in real terms would be less than 100%. If it was possible to compare real LED lumens with the total output from the luminaire we could obtain an actual LOR
This also means that the total lumens emitted from the LED's would be greater than the Luminaire Lumens measured. In reality the LED lumens would approximate to this value divided by the actual Light Output.



	C 0.0	C 15.0	C 30.0	C 45.0	C 60.0	C 75.0	C 90.0
0.0°	314.70	314.70	314.70	314.70	314.70	314.70	314.70
5.0°	318.10	317.50	317.00	316.30	315.70	314.70	313.70
10.0°	320.00	320.60	321.20	318.90	316.50	314.70	312.90
15.0°	309.00	311.70	314.40	315.30	316.30	312.10	308.00
20.0°	299.30	300.30	301.30	305.50	309.80	305.30	300.70
25.0°	295.80	294.10	292.40	294.70	296.90	293.80	290.60
30.0°	280.20	283.10	286.00	283.10	280.10	278.10	276.00
35.0°	262.50	265.30	268.00	265.00	261.90	261.70	261.40
40.0°	250.80	249.70	248.70	247.10	245.50	244.50	243.40
45.0°	234.10	234.10	234.10	231.30	228.50	227.20	225.90
50.0°	206.30	210.10	213.90	210.30	206.70	204.10	201.50
55.0°	191.00	188.10	185.10	180.90	176.80	176.20	175.70
60.0°	172.80	171.10	169.40	160.10	150.80	149.40	147.90
65.0°	142.40	140.70	138.90	131.60	124.20	119.60	115.00
70.0°	113.60	110.70	107.80	101.10	94.50	88.00	81.40
75.0°	83.40	81.90	80.40	74.20	68.00	58.40	48.70
80.0°	56.40	55.60	54.90	48.30	41.80	31.50	21.30
85.0°	30.70	29.10	27.40	23.90	20.50	13.00	5.40
90.0°	11.20	10.80	10.50	8.80	7.20	3.60	0.00
95.0°	5.20	5.10	5.10	4.60	4.10	2.00	0.00
100.0°	3.70	3.70	3.60	3.40	3.10	1.60	0.00
105.0°	3.10	3.10	3.10	2.90	2.60	1.30	0.00
110.0°	2.80	2.80	2.80	2.50	2.10	1.10	0.00
115.0°	2.60	2.60	2.60	1.30	0.00	0.00	0.00
120.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00
							cd / klm

glare rating according to UGR

ρ-ceiling		70	70	50	50	30	70	70	50	50	30
ρ-walls		50	30	50	30	30	50	30	50	30	30
ρ-workplane		20	20	20	20	20	20	20	20	20	20
room dimensions X	Y	viewed crosswise					viewed endwise				
2H	2H	22.8	24.3	23.1	24.5	24.8	23.3	24.8	23.5	25.0	25.2
	3H	23.6	24.8	23.9	25.0	25.2	24.0	25.2	24.3	25.4	25.6
	4H	24.2	25.3	24.5	25.6	25.8	24.5	25.7	24.8	25.9	26.1
	6H	24.6	25.7	24.9	25.9	26.2	24.7	25.8	25.1	26.1	26.3
	8H	24.8	25.8	25.1	26.1	26.3	24.8	25.9	25.2	26.2	26.4
	12H	24.9	25.9	25.2	26.2	26.5	24.9	25.9	25.2	26.2	26.5
4H	2H	22.9	24.0	23.2	24.2	24.5	23.3	24.4	23.5	24.6	24.8
	3H	24.6	25.7	24.9	25.9	26.2	24.9	26.0	25.2	26.2	26.5
	4H	25.4	26.4	25.7	26.7	27.0	25.6	26.6	25.9	26.9	27.2
	6H	25.7	26.5	26.0	26.8	27.2	25.7	26.6	26.1	26.9	27.2
	8H	25.9	26.7	26.3	27.0	27.4	25.8	26.6	26.2	27.0	27.3
	12H	26.2	26.9	26.6	27.3	27.8	26.0	26.8	26.5	27.2	27.6
8H	4H	25.5	26.3	25.9	26.6	27.0	25.7	26.5	26.1	26.8	27.2
	6H	26.4	27.1	26.8	27.6	28.0	26.4	27.1	26.8	27.5	28.0
	8H	26.7	27.5	27.2	27.9	28.4	26.6	27.3	27.1	27.8	28.3
	12H	26.8	27.4	27.3	27.9	28.4	26.6	27.2	27.1	27.7	28.2
12H	4H	25.7	26.4	26.1	26.8	27.3	25.8	26.6	26.3	27.0	27.4
	6H	26.5	27.3	27.0	27.7	28.2	26.5	27.3	27.0	27.7	28.2
	8H	26.7	27.3	27.2	27.8	28.3	26.6	27.2	27.1	27.7	28.2
variation of observer position											
S =	1.0H			+0.1/	-0.1			+0.1/	-0.1		
	1.5H			+0.2/	-0.3			+0.2/	-0.3		
	2.0H			+0.4/	-0.7			+0.6/	-0.7		
standard-table				BK05				BK04			
correction for luminaire				9.1				8.6			
correct glare indices for a total flux of 3690lm											

class		glare rating for service value of illuminance (lx)								
A	A	1000	750	500	--	≤ 300				
1	B	2000	1500	1000	750	500	≤ 300			
2	D					2000	1000	500	≤ 300	
3	E						2000	1000	500	≤ 300

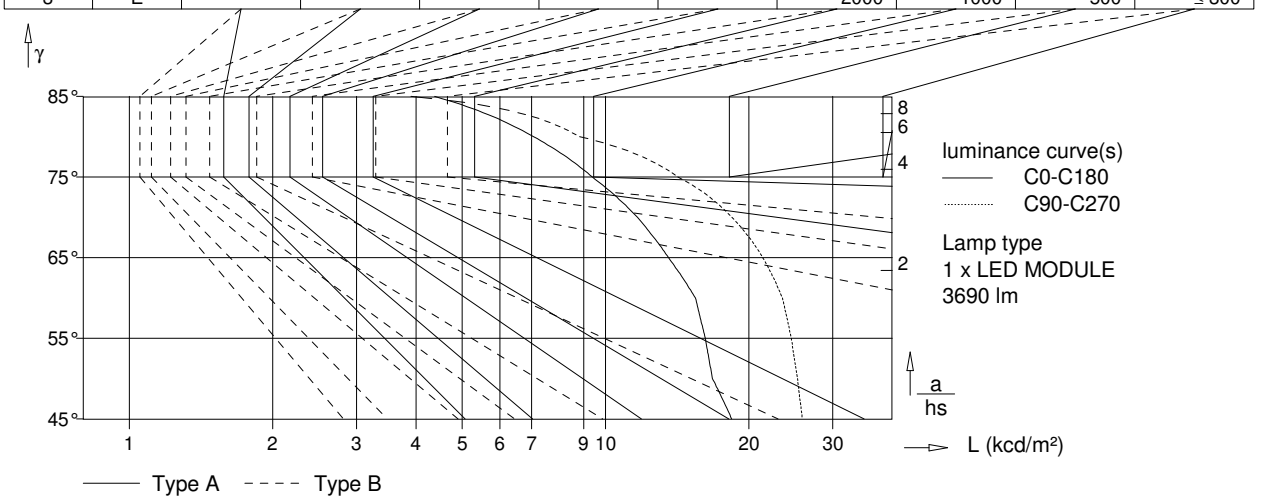


Table of intensities

gamma	C 0	C 90	C 180	C 270
45°	18405.1	25908.7	18405.1	25908.7
50°	16770.5	25289.5	16770.5	25289.5
55°	16200.4	24553.7	16200.4	24553.7
60°	15444.3	23516.1	15444.3	23516.1
65°	13559.1	21395.4	13559.1	21395.4
70°	11668.3	18417.2	11668.3	18417.2
75°	9375.7	14194.4	9375.7	14194.4
80°	7061.3	8816.3	7061.3	8816.3
85°	4374.3	3905.6	4374.3	3905.6

all values in cd/m²

utilization factors / TM5

reflection			room index								
C	W	F	0.75	1.0	1.25	1.5	2.0	2.5	3.0	4.0	5.0
70	50	20	58	66	74	79	86	91	95	99	102
70	30	20	50	59	66	72	80	86	90	95	99
70	10	20	45	53	61	67	75	81	85	91	95
50	50	20	56	64	71	76	83	88	91	95	98
50	30	20	49	57	65	70	78	83	87	92	95
50	10	20	44	52	60	65	73	79	83	89	92
30	50	20	55	62	69	74	80	84	87	91	94
30	30	20	49	56	63	69	76	80	84	88	92
30	10	20	44	51	59	64	72	77	81	86	89
0	0	0	42	49	56	61	68	73	77	81	84
BZ-class			5	5	5	5	5	5	5	5	5
SHRnom : 1.50 SHRmax : 1.667											

isolux diagram