

filename : MT360-LED-HO-10.LDT
 meas. number : 2899/C
 luminaire number : MT360-LED-HO-10
 date / operator : 13-03-2019

**default lamp type(s)**

no of lamps	lamp type	luminaire lumens	input wattage
1	LED MODULE	1825 lm	28.7 W

dimensions

luminaire		luminous area	
length	: 1025 mm	length	: 1005 mm
width	: 68 mm	width	: 68 mm
height	: 68 mm	height	: 68 mm

coordinate system

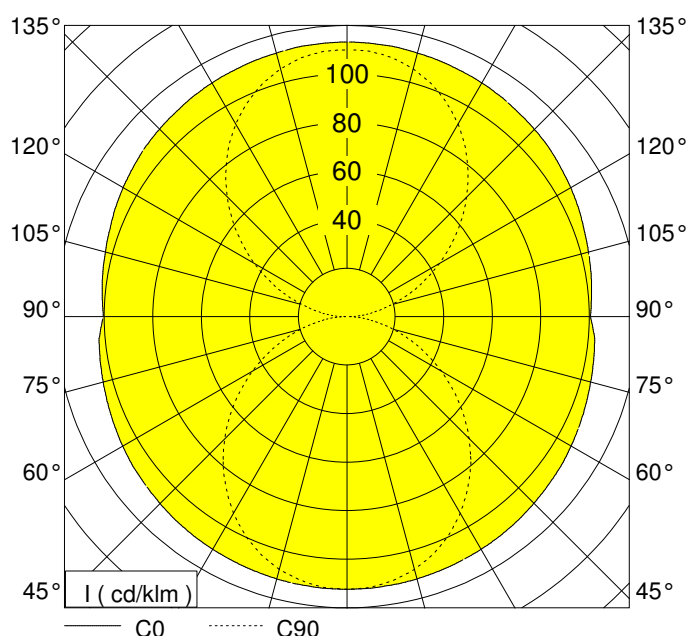
no of planes	: 7	samples / plane	: 37
first c-plane	: 0.0 °	first gamma-angle	: 0.0 °
step angle	: 15.0 °	step angle	: 5.0 °
last c-plane	: 90.0 °	last gamma-angle	: 180.0 °
symmetrics : symmetry to C0 / C90			

performance

light output ratio	: 100.0 %
DFF	: 50.1 %
UFF	: 49.9 %

classification

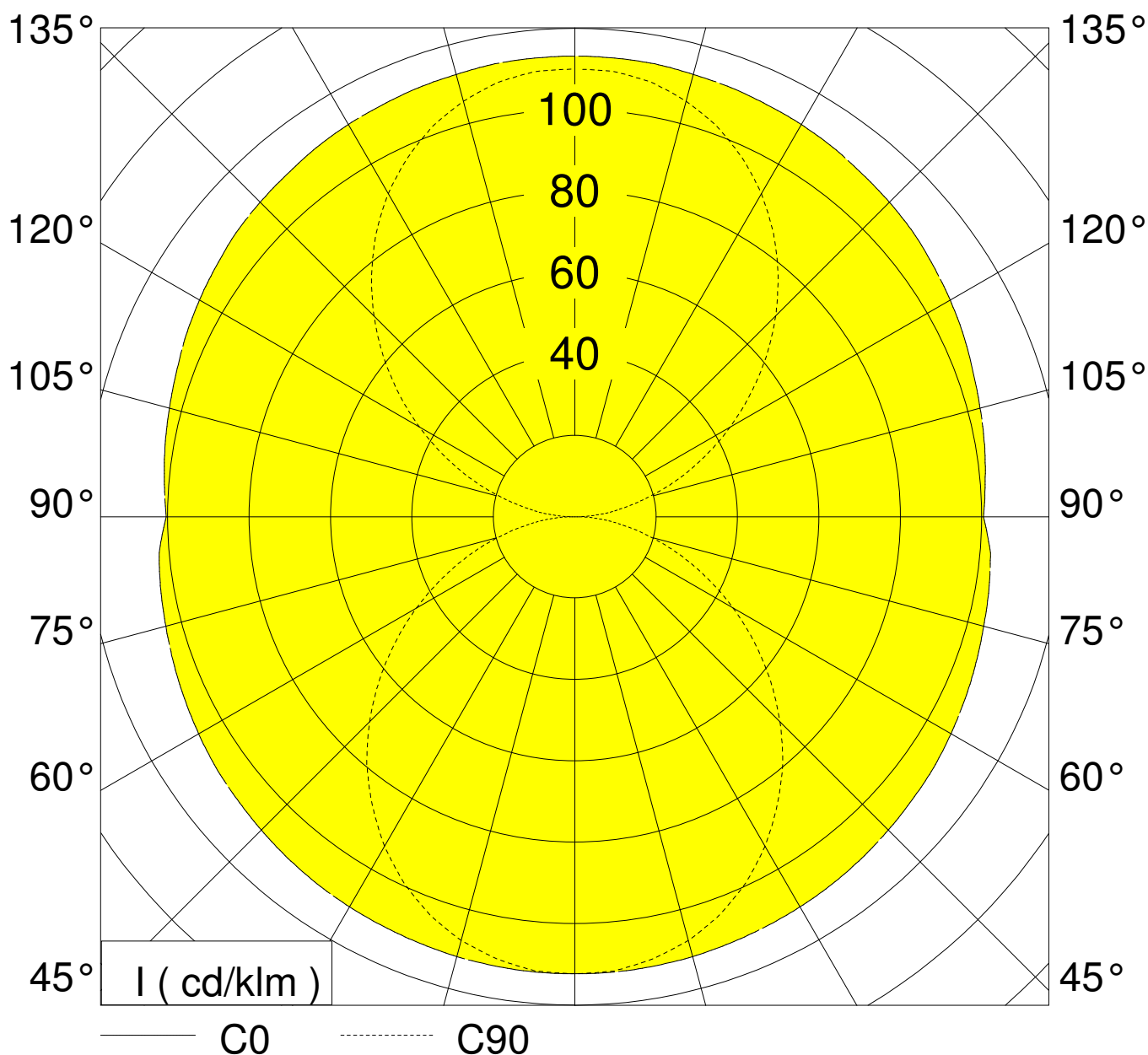
LiTG / DIN	: C22
UTE	: 0.50H+0.50T
CIE	: 32 59 81 50 100
BZ	: 1 6 6 6 6 6 6 6
Ambient Temperature	: 25 degC
Input Voltage	: 240 V
Circuit Watts	: 28.7W
Amps (running)	: 0.126A
V.A.	: 30.2VA
Power Factor	: 0.95
CCT	: 3174K (measured): 3200K (declared)
CRI (Ra)	: 90
S/P Ratio	: 1.5
Luminaire Lumens	: 1825 LLm
Luminaire Lm/circ.Watt	: 63.5 LLm/circ.Watt
Driver Details	: HELVAR



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°	112.20	112.20	112.20	112.20	112.20	112.20	112.20
5.0°	112.20	112.00	111.90	111.90	111.90	111.90	111.90
10.0°	112.00	111.60	111.20	110.90	110.50	110.40	110.20
15.0°	111.80	111.00	110.20	109.30	108.50	108.10	107.70
20.0°	111.40	110.10	108.80	107.20	105.50	104.70	104.00
25.0°	111.00	109.10	107.30	104.50	101.70	100.50	99.20
30.0°	110.60	108.20	105.60	101.50	97.40	95.40	93.40
35.0°	110.10	106.90	103.60	98.00	92.30	89.40	86.60
40.0°	109.50	105.60	101.60	94.20	86.80	83.10	79.40
45.0°	108.80	104.10	99.30	90.30	81.20	76.30	71.20
50.0°	108.10	102.60	97.20	86.10	75.10	68.90	62.70
55.0°	107.50	101.30	95.00	82.00	69.10	61.50	53.80
60.0°	106.60	99.70	92.80	77.90	63.20	54.00	44.90
65.0°	105.70	98.20	90.70	74.30	57.70	46.80	36.00
70.0°	104.80	96.80	88.70	70.70	52.50	40.10	27.50
75.0°	103.90	95.40	86.90	67.40	47.80	33.60	19.30
80.0°	103.20	94.30	85.40	64.70	44.00	28.00	12.00
85.0°	102.40	93.30	84.20	62.70	41.10	23.60	6.10
90.0°	100.30	91.10	81.90	60.60	39.20	21.00	0.00
95.0°	101.10	92.00	82.90	61.40	39.90	22.90	5.90
100.0°	102.10	93.20	84.30	63.60	42.90	27.30	11.70
105.0°	103.00	94.50	86.00	66.50	47.00	32.90	18.70
110.0°	104.00	96.00	88.00	69.90	51.70	39.40	27.00
115.0°	105.30	97.80	90.30	73.60	56.90	46.10	35.30
120.0°	106.40	99.50	92.70	77.60	62.60	53.30	44.00
125.0°	107.40	101.20	94.90	81.70	68.60	60.60	52.70
130.0°	108.50	102.90	97.30	86.00	74.90	68.10	61.40
135.0°	109.20	104.50	99.70	90.30	80.80	75.30	69.70
140.0°	109.80	106.00	102.00	94.40	86.70	82.10	77.60
145.0°	110.60	107.50	104.20	98.20	92.30	88.70	85.00
150.0°	111.20	108.70	106.20	101.80	97.50	94.50	91.60
155.0°	111.60	109.80	108.10	105.10	102.00	99.60	97.20
160.0°	112.10	110.90	109.60	107.80	105.80	103.90	102.00
165.0°	112.40	111.70	111.00	109.80	108.70	107.20	105.60
170.0°	112.90	112.40	112.00	111.50	111.10	109.60	108.30
175.0°	113.00	112.90	112.80	112.60	112.30	111.00	109.70
180.0°	113.10	113.10	113.10	113.00	112.90	111.40	109.90
	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	12.5	13.6	13.4	14.4	15.5	10.8	11.8	11.6	12.7	13.8
	3H	15.6	16.8	16.7	18.0	19.8	12.9	14.0	14.0	15.2	17.0
	4H	17.0	18.1	18.1	19.4	21.3	13.5	14.6	14.7	15.9	17.8
	6H	18.3	19.4	19.5	20.7	22.8	14.0	15.0	15.2	16.4	18.5
	8H	19.1	20.1	20.3	21.5	23.6	14.2	15.2	15.4	16.6	18.8
	12H	19.8	20.8	21.0	22.2	24.5	14.4	15.4	15.6	16.8	19.0
4H	2H	13.7	14.8	14.8	16.1	18.0	12.3	13.5	13.5	14.7	16.7
	3H	16.5	17.6	17.8	19.0	21.2	14.2	15.2	15.5	16.6	18.9
	4H	18.2	19.2	19.5	20.6	23.1	15.1	16.1	16.4	17.6	20.1
	6H	19.5	20.4	20.9	21.8	24.2	15.6	16.5	17.0	17.9	20.3
	8H	20.3	21.1	21.7	22.6	25.2	15.9	16.7	17.3	18.2	20.8
	12H	21.2	22.0	22.7	23.6	26.6	16.2	16.9	17.7	18.6	21.6
8H	4H	18.3	19.1	19.7	20.6	23.2	15.8	16.6	17.2	18.1	20.7
	6H	20.3	21.0	21.9	22.8	25.9	17.0	17.7	18.5	19.4	22.6
	8H	21.4	22.1	23.0	23.9	27.3	17.5	18.2	19.1	20.0	23.5
	12H	22.3	22.8	23.9	24.6	28.0	17.8	18.4	19.4	20.2	23.6
12H	4H	18.4	19.2	19.9	20.8	23.8	16.2	16.9	17.7	18.6	21.5
	6H	20.5	21.2	22.1	23.0	26.5	17.5	18.2	19.1	20.0	23.5
	8H	21.5	22.0	23.1	23.8	27.2	18.0	18.5	19.6	20.3	23.7
variation of observer position											
S =	1.0H	+0.1/ -0.1				+0.1/ -0.1					
	1.5H	+0.2/ -0.2				+0.2/ -0.2					
	2.0H	+0.2/ -0.2				+0.2/ -0.4					
standard-table		BK12					BKFF				
correction for luminaire		5.9					0.6				
correct glare indices for a total flux of 1825lm											

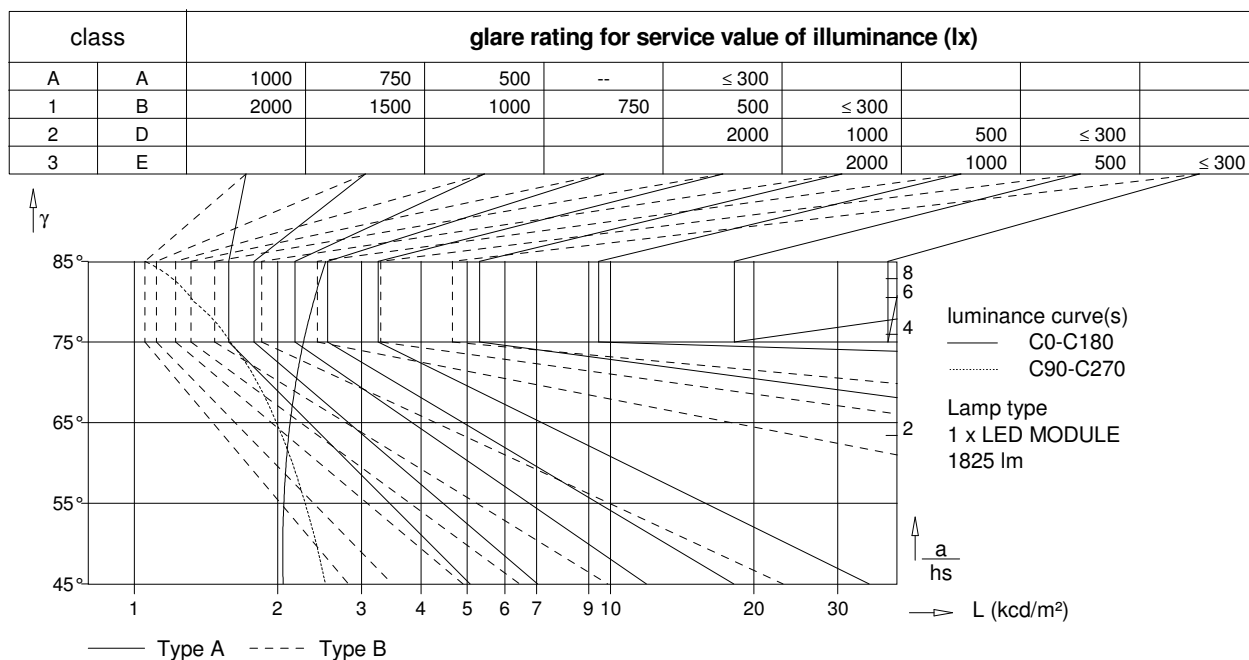


Table of intensities

gamma	C 0	C 90	C 180	C 270
45°	2054.5	2518.5	2054.5	2518.5
50°	2049.1	2410.5	2049.1	2410.5
55°	2061.2	2284.1	2061.2	2284.1
60°	2083.9	2146.5	2083.9	2146.5
65°	2124.0	1986.5	2124.0	1986.5
70°	2183.5	1810.6	2183.5	1810.6
75°	2265.5	1589.9	2265.5	1589.9
80°	2379.0	1333.7	2379.0	1333.7
85°	2524.2	1054.0	2524.2	1054.0

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	N/A	50	56	61	67	72	75	80	83
70	30	20	N/A	43	49	54	61	66	70	75	79
70	10	20	N/A	37	43	48	55	61	65	71	75
50	50	20	N/A	42	47	51	57	60	63	67	69
50	30	20	N/A	37	42	46	52	56	59	63	66
50	10	20	N/A	32	37	41	47	52	55	60	63
30	50	20	N/A	35	39	42	47	50	52	55	57
30	30	20	N/A	31	35	38	43	46	49	52	55
30	10	20	N/A	27	31	35	40	43	46	50	53
0	0	0	N/A	19	22	24	28	30	32	35	37
BZ-class			1	6	6	6	6	6	6	6	6
SHRnom : 1.75						SHRmax : 1.827					

