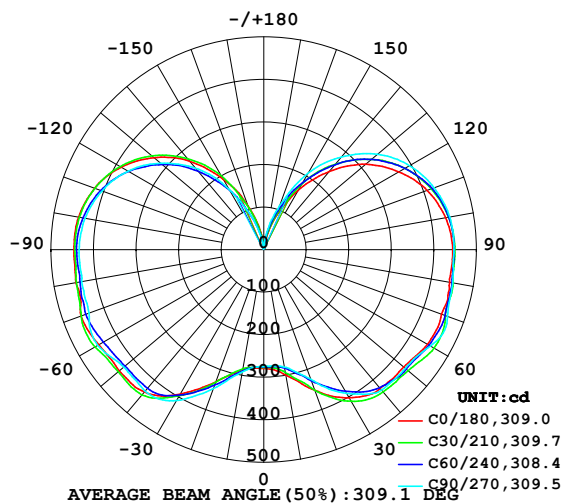


LUMINAIRE PHOTOMETRIC TEST REPORT

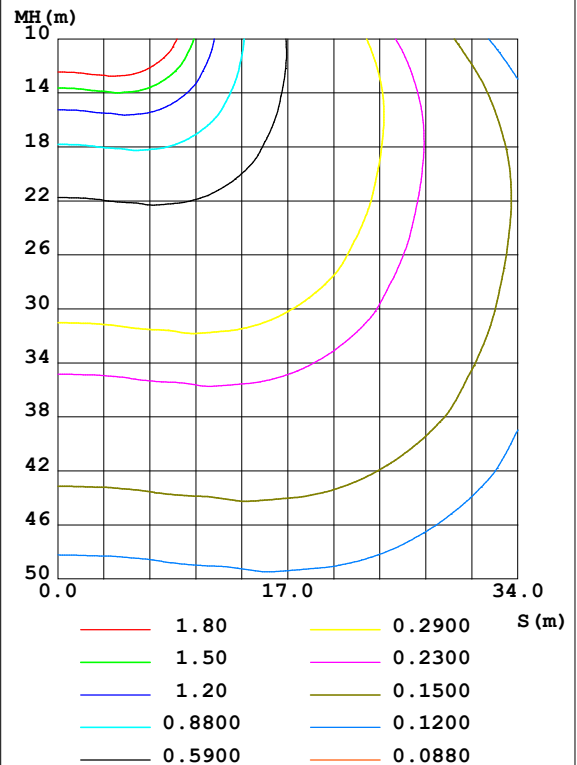
Test:U:119.7V I:0.3006A P:35.57W PF:0.9884 Freq:59.98Hz Lamp Flux:4776.24x1 lm		
NAME: LOC-CL-MW(18/27/36)MCCT(30/40/50)D	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.:	SUR.:21cm*16cm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 134.28 lm/W			
MODEL	LOC-CL-MW(18/27/36)MCCT(30/40/50)D	Imax(cd)	465.3	S/MH(C0/180)	2.16
NOMINAL POWER(W)	36	LOR(%)	100.0	S/MH(C90/270)	2.14
RATED VOLTAGE(V)	100-277	TOTAL FLUX(lm)	4776.2	η UP,DN(C0-180)	22.1,28.1
NOMINAL FLUX(lm)	4776.24	CIE CLASS	DIFFUSE	η UP,DN(C180-360)	21.8,28.0
LAMPS INSIDE	1	η up(%)	43.9	CIBSE SHR NOM	2.00
TEST VOLTAGE(V)	120	η down(%)	56.1	CIBSE SHR MAX	2.00

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-11-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.361
 Humidity:65.0%
 Test Distance:8.800m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	299.5	288.0	280.3	285.4	286.0	287.1	291.9	283.5	0- 10	26.74	26.74	0.56,0.56
20	351.6	340.1	324.3	337.2	330.7	335.4	347.4	331.1	10- 20	88.40	115.1	2.41,2.41
30	402.1	397.8	390.4	395.9	391.8	395.4	409.8	389.6	20- 30	170.9	286.1	5.99,5.99
40	425.8	429.9	430.8	424.2	436.7	435.7	434.1	432.0	30- 40	262.4	548.5	11.5,11.5
50	429.5	440.0	434.2	423.2	443.6	436.2	429.8	434.5	40- 50	335.1	883.6	18.5,18.5
60	444.6	455.5	452.7	443.0	447.8	446.8	450.8	442.2	50- 60	394.3	1278	26.8,26.8
70	444.9	453.8	460.1	448.2	457.7	451.2	436.9	443.4	60- 70	447.7	1726	36.1,36.1
80	443.8	450.3	450.9	443.2	448.7	443.0	434.5	435.6	70- 80	471.2	2197	46,46
90	444.0	448.5	446.9	441.1	446.2	442.1	434.0	434.6	80- 90	482.0	2679	56.1,56.1
100	434.0	441.4	443.7	434.8	442.0	435.6	426.5	428.7	90-100	480.1	3159	66.1,66.1
110	408.7	420.0	426.3	414.0	423.0	415.2	404.5	408.7	100-110	451.1	3610	75.6,75.6
120	366.1	383.0	395.3	377.8	387.6	379.3	368.9	373.4	110-120	395.4	4005	83.9,83.9
130	312.3	330.5	349.2	327.4	336.6	327.6	316.2	322.7	120-130	318.3	4324	90.5,90.5
140	239.8	261.8	284.2	260.1	271.6	260.2	250.2	256.0	130-140	229.3	4553	95.3,95.3
150	160.4	178.9	206.7	179.6	191.6	181.5	163.4	179.2	140-150	140.0	4693	98.3,98.3
160	80.58	91.94	109.7	92.90	109.0	92.67	80.51	93.13	150-160	63.84	4757	99.6,99.6
170	18.38	26.97	36.77	28.50	41.55	27.71	16.63	28.64	160-170	17.82	4775	100,100
180	5.109	5.082	5.064	5.039	5.139	5.079	5.049	5.039	170-180	1.575	4776	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 708.52 lm

%lum = 14.8%

%lamp = 14.8%

Conical surface Flux(120deg): 1277.8 lm

%lum = 26.8%

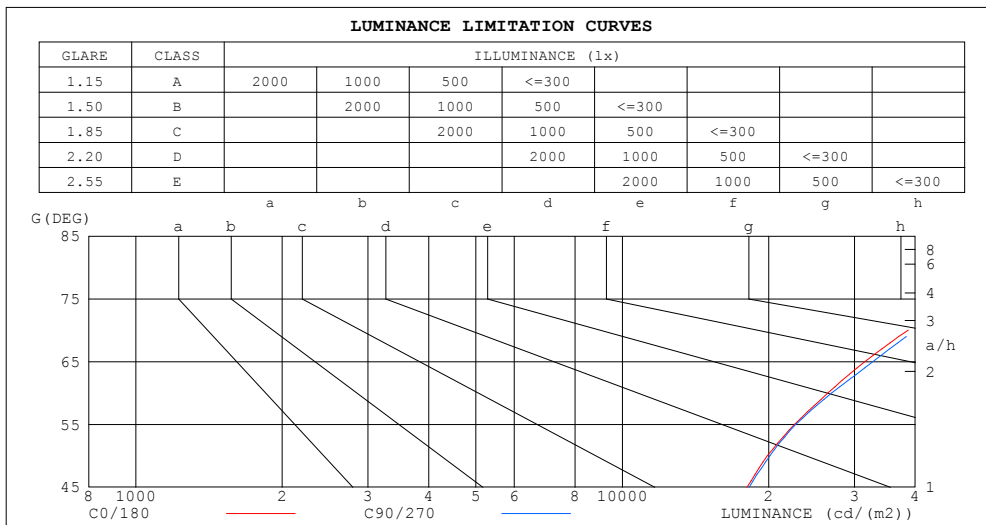
%lamp = 26.8%

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-11-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.361
 Humidity:65.0%
 Test Distance:8.800m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:119.7V I:0.3006A P:35.57W PF:0.9884 Freq:59.98Hz Lamp Flux:4776.24x1 lm		
NAME: LOC-CL-MW(18/27/36)MCCT(30/40/50)D	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.:	SUR.:21cm*16cm	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	151533	152428
80	76056	77272
75	51493	52014
70	38711	40034
65	31542	32759
60	26465	26946
55	22625	22757
50	19886	20106
45	18043	18236

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-11-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.361
Humidity:65.0%
Test Distance:8.800m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:119.7V I:0.3006A P:35.57W PF:0.9884 Freq:59.98Hz Lamp Flux:4776.24x1 lm		
NAME: LOC-CL-MW(18/27/36)MCCT(30/40/50)D	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.:	SUR.:21cm*16cm	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.420	.239	.076	.399	.228	.072	.361	.207	.066	.325	.188	.060	.292	.170	.055		
2.0	.350	.192	.059	.331	.182	.056	.296	.165	.051	.263	.148	.046	.233	.132	.042		
3.0	.305	.162	.049	.288	.154	.046	.255	.138	.042	.226	.124	.038	.198	.110	.034		
4.0	.271	.141	.041	.255	.134	.040	.226	.120	.036	.198	.107	.032	.173	.094	.029		
5.0	.244	.124	.036	.230	.118	.034	.203	.106	.031	.178	.094	.028	.154	.082	.025		
6.0	.222	.112	.032	.209	.106	.030	.184	.094	.027	.161	.084	.025	.139	.073	.022		
7.0	.204	.101	.029	.192	.096	.027	.169	.085	.025	.147	.075	.022	.127	.066	.019		
8.0	.189	.092	.026	.177	.087	.025	.156	.078	.022	.136	.069	.020	.117	.060	.017		
9.0	.175	.085	.024	.165	.080	.023	.145	.072	.020	.126	.063	.018	.108	.055	.016		
10.0	.164	.078	.022	.154	.074	.021	.135	.066	.019	.118	.058	.017	.101	.051	.015		

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.525	.525	.525	.449	.449	.449	.306	.306	.306	.176	.176	.176	.056	.056	.056	
1.0	.525	.493	.463	.449	.423	.398	.307	.291	.276	.177	.168	.160	.057	.054	.052	
2.0	.520	.471	.431	.445	.406	.372	.305	.281	.260	.176	.163	.152	.056	.053	.050	
3.0	.513	.456	.411	.440	.393	.356	.302	.273	.250	.174	.160	.147	.056	.052	.048	
4.0	.505	.444	.398	.433	.384	.346	.298	.268	.243	.172	.157	.144	.055	.051	.047	
5.0	.498	.435	.389	.427	.377	.339	.294	.263	.239	.171	.154	.142	.055	.050	.047	
6.0	.490	.428	.383	.422	.371	.334	.291	.259	.236	.169	.153	.140	.054	.050	.046	
7.0	.483	.422	.378	.416	.366	.330	.287	.256	.234	.167	.151	.139	.054	.049	.046	
8.0	.477	.417	.375	.411	.361	.327	.284	.254	.232	.165	.150	.138	.053	.049	.046	
9.0	.471	.412	.372	.406	.358	.325	.281	.251	.231	.164	.148	.138	.053	.049	.046	
10.0	.465	.408	.370	.401	.354	.323	.278	.249	.230	.162	.147	.137	.053	.048	.045	

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-11-18

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.361
Humidity:65.0%
Test Distance:8.800m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:119.7V I:0.3006A P:35.57W PF:0.9884 Freq:59.98Hz Lamp Flux:4776.24x1 lm										
NAME: LOC-CL-MW(18/27/36)MCCT(30/40/50)D					TYPE:			WEIGHT:		
SPEC.:5000K					DIM.:			SERIAL No.:		
MFR.:					SUR.:21cm*16cm			Shielding Angle:		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	15.8	16.9	16.6	17.8	18.8	15.7	16.9	16.5	17.7	18.8
3H	18.9	20.0	19.8	20.8	21.9	19.0	20.1	19.8	20.9	22.0
4H	20.7	21.7	21.6	22.6	23.7	20.8	21.8	21.6	22.7	23.8
6H	22.7	23.7	23.6	24.5	25.7	22.8	23.7	23.7	24.6	25.7
8H	23.8	24.7	24.7	25.6	26.8	23.9	24.8	24.8	25.7	26.8
12H	25.1	26.0	26.0	26.9	28.0	25.2	26.1	26.1	27.0	28.1
4H 2H	16.8	17.8	17.6	18.7	19.8	16.8	17.7	17.6	18.6	19.7
3H	20.1	20.9	20.9	21.8	23.0	20.1	21.0	21.0	21.9	23.0
4H	22.0	22.8	22.9	23.7	24.9	22.0	22.8	22.9	23.7	24.9
6H	24.1	24.9	25.1	25.8	27.0	24.2	24.9	25.1	25.8	27.0
8H	25.3	26.0	26.3	26.9	28.2	25.4	26.1	26.3	27.0	28.2
12H	26.7	27.3	27.7	28.3	29.5	26.8	27.4	27.7	28.3	29.6
8H 4H	22.7	23.4	23.6	24.3	25.5	22.7	23.4	23.7	24.3	25.6
6H	25.1	25.7	26.1	26.7	27.9	25.2	25.7	26.1	26.7	27.9
8H	26.5	27.0	27.5	28.0	29.3	26.5	27.1	27.5	28.0	29.3
12H	28.1	28.6	29.1	29.5	30.8	28.1	28.6	29.1	29.6	30.9
12H 4H	22.9	23.5	23.8	24.5	25.7	22.9	23.6	23.9	24.5	25.7
6H	25.4	26.0	26.4	26.9	28.2	25.5	26.0	26.4	27.0	28.2
8H	26.9	27.4	27.9	28.4	29.7	27.0	27.4	27.9	28.4	29.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.4				

CIE Pub.117, 4776 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 5.4$)

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-11-18

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.361
Humidity:65.0%
Test Distance:8.800m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:119.7V I:0.3006A P:35.57W PF:0.9884 Freq:59.98Hz Lamp Flux:4776.24x1 lm		
NAME: LOC-CL-MW(18/27/36)MCCT(30/40/50)D	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.:	SUR.:21cm*16cm	Shielding Angle:

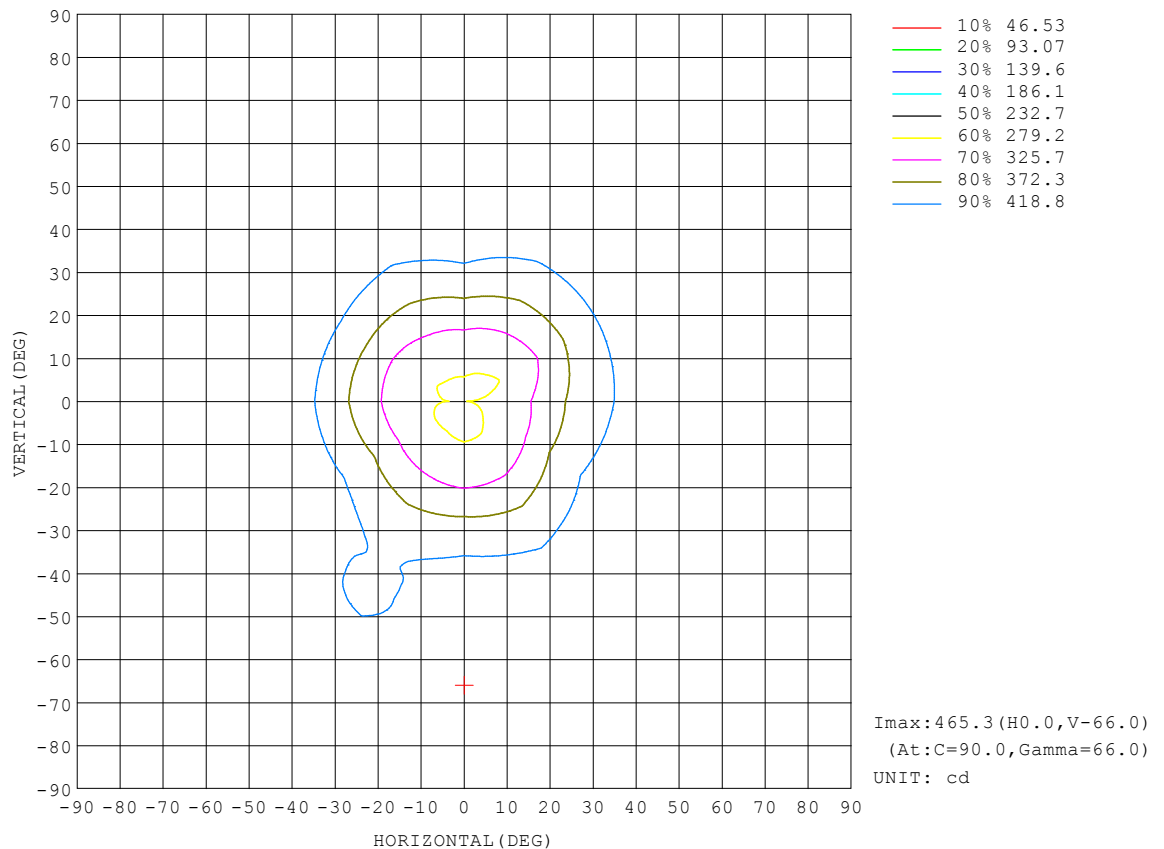
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	37	24	17	35	23	16	32	22	15	8
0.80	45	31	23	43	30	22	39	28	20	11
1.00	53	38	29	50	37	28	44	35	26	15
1.25	60	45	36	56	43	34	49	38	31	18
1.50	65	51	41	61	48	39	53	43	35	21
2.00	73	60	50	68	56	47	59	49	42	25
2.50	78	66	56	72	62	53	62	54	47	28
3.00	82	71	62	76	66	58	66	58	51	31
4.00	87	77	70	81	72	65	70	63	57	35
5.00	91	82	75	84	77	70	72	66	61	38
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-11-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.361
 Humidity:65.0%
 Test Distance:8.800m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:119.7V I:0.3006A P:35.57W PF:0.9884 Freq:59.98Hz Lamp Flux:4776.24x1 lm		
NAME: LOC-CL-MW(18/27/36)MCCT(30/40/50)D	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.:	SUR.:21cm*16cm	Shielding Angle:

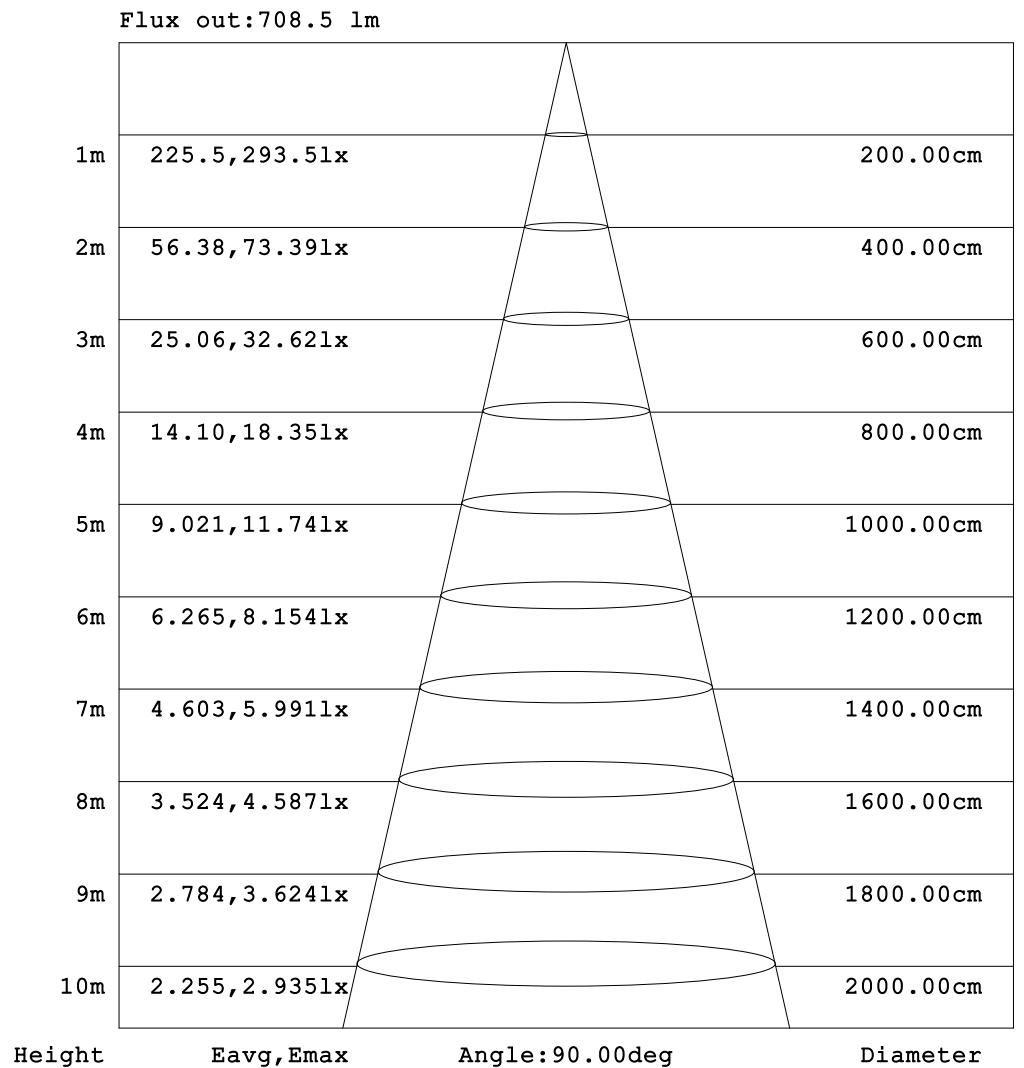


C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-11-18

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.361
Humidity:65.0%
Test Distance:8.800m [K=1.0000]
Remarks:

AAI Figure

Test:U:119.7V I:0.3006A P:35.57W PF:0.9884 Freq:59.98Hz Lamp Flux:4776.24x1 lm		
NAME: LOC-CL-MW(18/27/36)MCCT(30/40/50)D	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.:	SUR.:21cm*16cm	Shielding Angle:

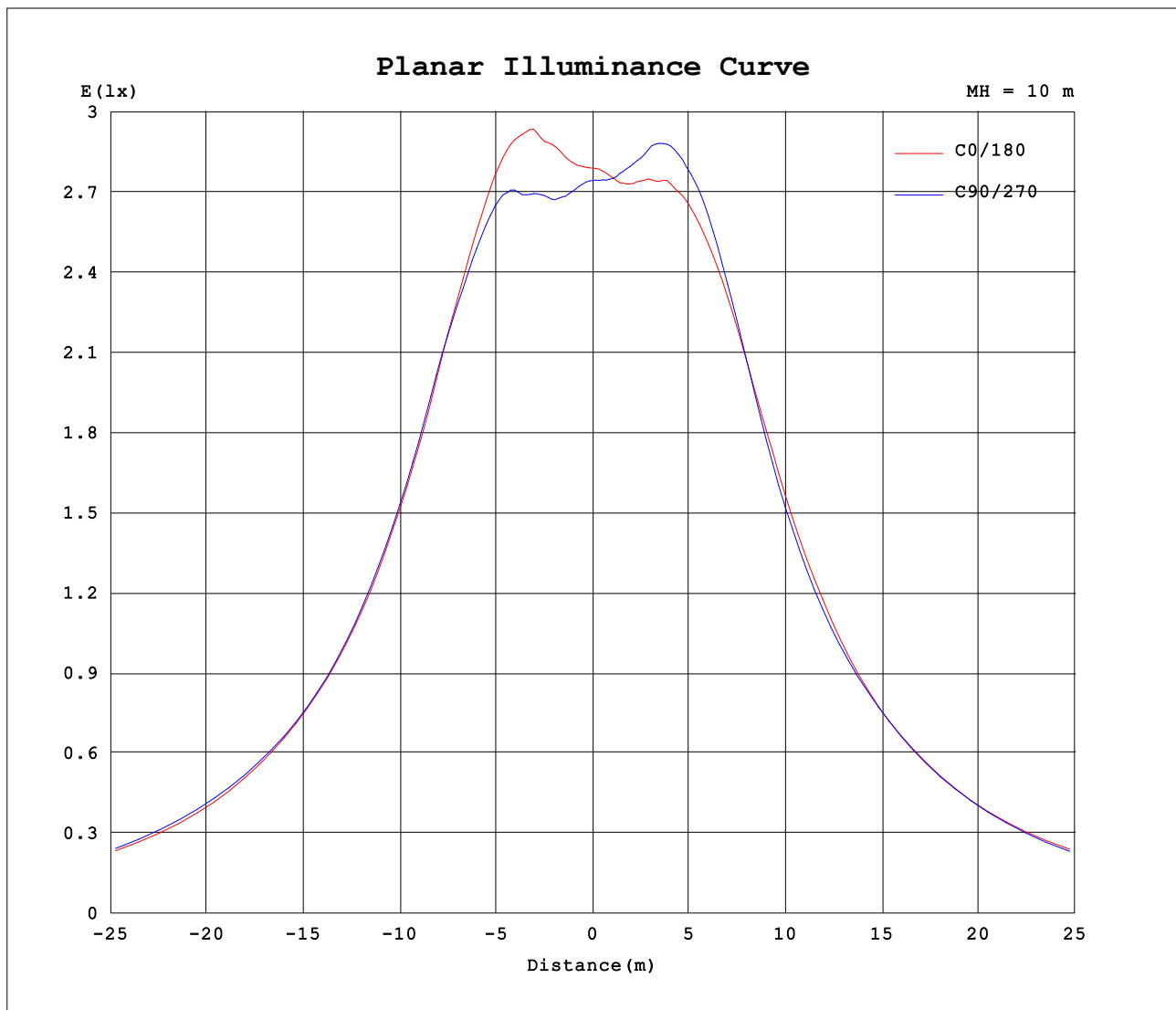


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-11-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.361
 Humidity:65.0%
 Test Distance:8.800m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2021-11-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.361
Humidity: 65.0%
Test Distance: 8.800m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:119.7V I:0.3006A P:35.57W PF:0.9884 Freq:59.98Hz Lamp Flux:4776.24x1 lm		
NAME: LOC-CL-MW(18/27/36)MCCT(30/40/50)D	TYPE:	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.:	SUR.:21cm*16cm	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330							
0	279	277	276	274	273	272	279	277	276	274	273	272							
5	284	279	276	274	275	274	280	277	278	278	275	273							
10	300	293	283	280	284	287	286	284	290	292	287	280							
15	322	318	301	299	303	310	305	304	310	315	307	299							
20	352	351	329	324	332	342	331	332	339	347	335	327							
25	380	385	357	361	361	376	361	366	367	379	364	360							
30	402	411	384	390	386	405	392	396	394	410	389	390							
35	419	429	408	415	405	428	420	426	418	429	414	416							
40	426	436	424	431	415	434	437	446	426	434	429	435							
45	429	439	432	433	413	432	442	449	425	430	432	437							
50	429	443	437	434	414	433	444	447	426	430	432	437							
55	436	453	441	439	421	440	443	449	430	439	433	438							
60	445	462	449	453	432	454	448	458	435	451	435	450							
65	448	463	453	465	441	459	454	462	442	449	439	452							
70	445	454	453	460	444	452	458	457	445	437	439	448							
75	448	452	450	452	443	447	446	449	442	436	434	439							
80	444	451	449	451	443	444	449	447	439	435	431	440							
85	444	449	447	446	439	442	446	443	439	434	432	435							
90	444	449	448	447	440	442	446	444	440	434	434	435							
95	441	447	446	447	439	440	446	443	438	432	433	435							
100	434	441	442	444	434	435	442	440	431	427	426	431							
105	423	432	433	437	426	427	434	433	421	417	417	424							
110	409	419	421	426	413	415	423	422	408	404	404	414							
115	390	403	404	413	395	400	408	408	390	389	386	400							
120	366	383	383	395	375	381	388	391	368	369	365	382							
125	341	359	358	374	349	358	364	369	341	345	339	360							
130	312	330	331	349	324	331	337	343	312	316	313	333							
135	278	298	298	318	293	299	307	313	280	284	281	302							
140	240	263	261	284	257	264	272	279	241	250	243	269							
145	201	224	221	248	218	226	232	242	201	212	204	234							
150	160	177	181	207	178	181	192	201	162	163	167	191							
155	116	127	142	157	138	131	154	149	118	117	125	140							
160	80.6	87.0	96.8	110	95.9	89.9	109	105	80.1	80.5	86.3	100.0							
165	47.2	51.2	62.7	72.6	61.9	54.2	73.3	69.0	48.1	45.5	53.8	64.7							
170	18.4	22.1	31.8	36.8	31.7	25.3	41.6	34.5	21.0	16.6	26.2	31.1							
175	7.54	7.98	12.5	15.3	12.2	9.19	15.9	13.0	7.55	6.65	9.04	11.4							
180	5.11	5.10	5.06	5.06	5.03	5.04	5.14	5.08	5.07	5.05	5.06	5.02							

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-11-18

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.361
Humidity:65.0%
Test Distance:8.800m [K=1.0000]
Remarks: