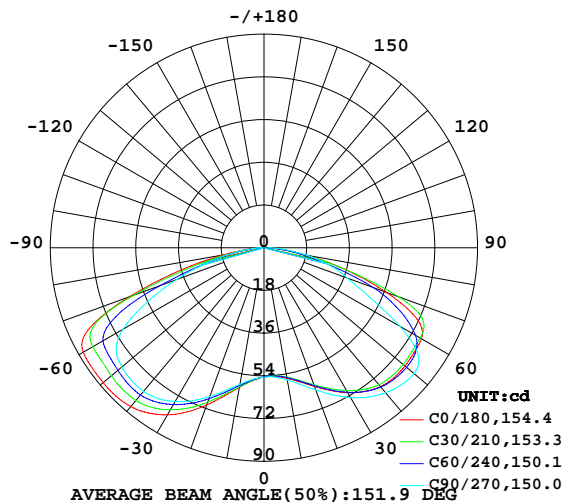


## LUMINAIRE PHOTOMETRIC TEST REPORT

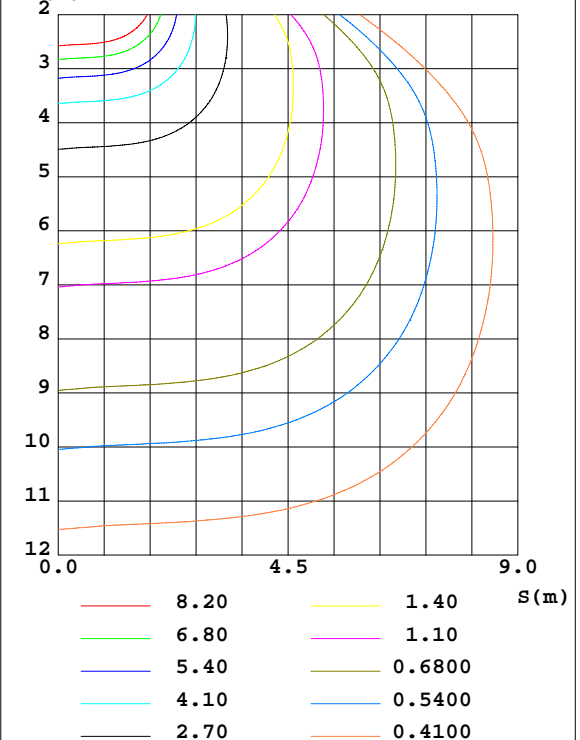
Test:U:0V I:0A P:0W PF:0.0000 Freq:0Hz Lamp Flux:346.254x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 155*50	SERIAL No.:
MFR.: A4673655A-01	SUR.:3.14*0.07*0.07	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL		Imax(cd)	89.85	S/MH(C0/180)	2.19
NOMINAL POWER(W)	/	LOR(%)	100.0	S/MH(C90/270)	2.04
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	346.24	$\eta$ UP,DN(C0-180)	0.0,50.4
NOMINAL FLUX(lm)	346.254	CIE CLASS	DIRECT	$\eta$ UP,DN(C180-360)	0.0,49.6
LAMPS INSIDE	1	$\eta$ up(%)	0.0	CIBSE SHR NOM	2.00
TEST VOLTAGE(V)	230.0	$\eta$ down(%)	100.0	CIBSE SHR MAX	2.00

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2023-12-04

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

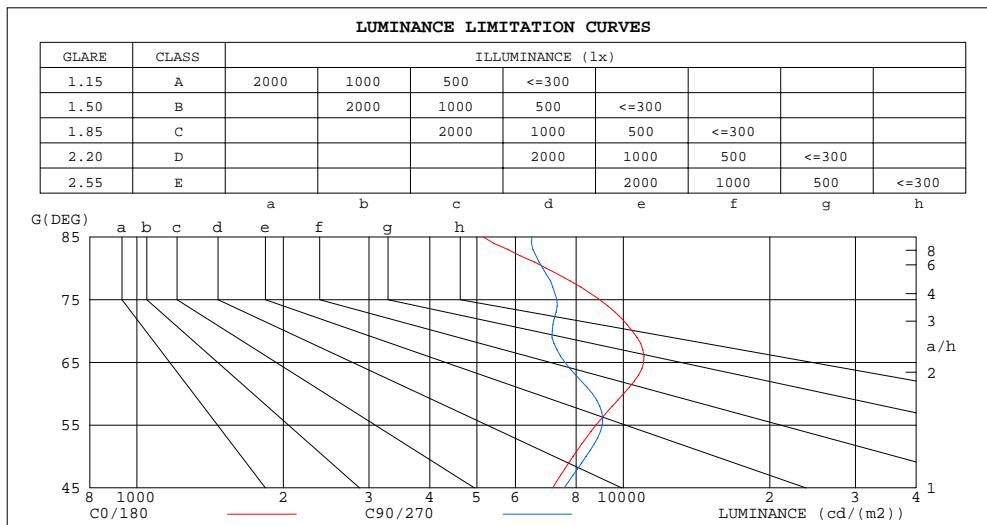
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\%lum, lamp$
10	55.85	55.39	56.54	58.48	59.71	59.33	58.39	57.20	0- 10	5.350	5.350	1.55,1.54
20	62.18	61.31	63.73	68.06	70.45	68.41	66.70	64.44	10- 20	17.51	22.86	6.6,6.6
30	70.49	69.59	72.88	78.69	81.26	77.59	74.80	72.47	20- 30	32.65	55.51	16,16
40	76.38	75.71	79.73	86.17	87.34	82.39	78.99	77.09	30- 40	49.01	104.5	30.2,30.2
50	77.55	77.10	82.47	88.89	88.44	81.95	78.16	76.70	40- 50	62.88	167.4	48.3,48.3
60	76.61	76.30	66.08	87.34	87.96	81.19	68.56	75.27	50- 60	71.84	239.2	69.1,69.1
70	54.57	60.32	37.38	59.55	60.25	56.13	39.24	55.40	60- 70	67.22	306.5	88.5,88.5
80	18.43	15.01	18.15	14.41	17.45	11.92	13.67	11.88	70- 80	33.00	339.5	98,98
90	0.7990	0.9966	1.813	0.8677	0.4467	0.4124	0.3512	0.4381	80- 90	6.778	346.2	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2023-12-04

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
 Humidity:65.0%  
 Test Distance:11.700m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

Test:U:0V I:0A P:0W PF:0.0000 Freq:0Hz Lamp Flux:346.254x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 155*50	SERIAL No.:
MFR.: A4673655A-01	SUR.:3.14*0.07*0.07	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	5154	6490
80	6938	6833
75	8937	7304
70	10429	7143
65	11014	7585
60	10014	8637
55	8788	9046
50	7886	8385
45	7159	7556

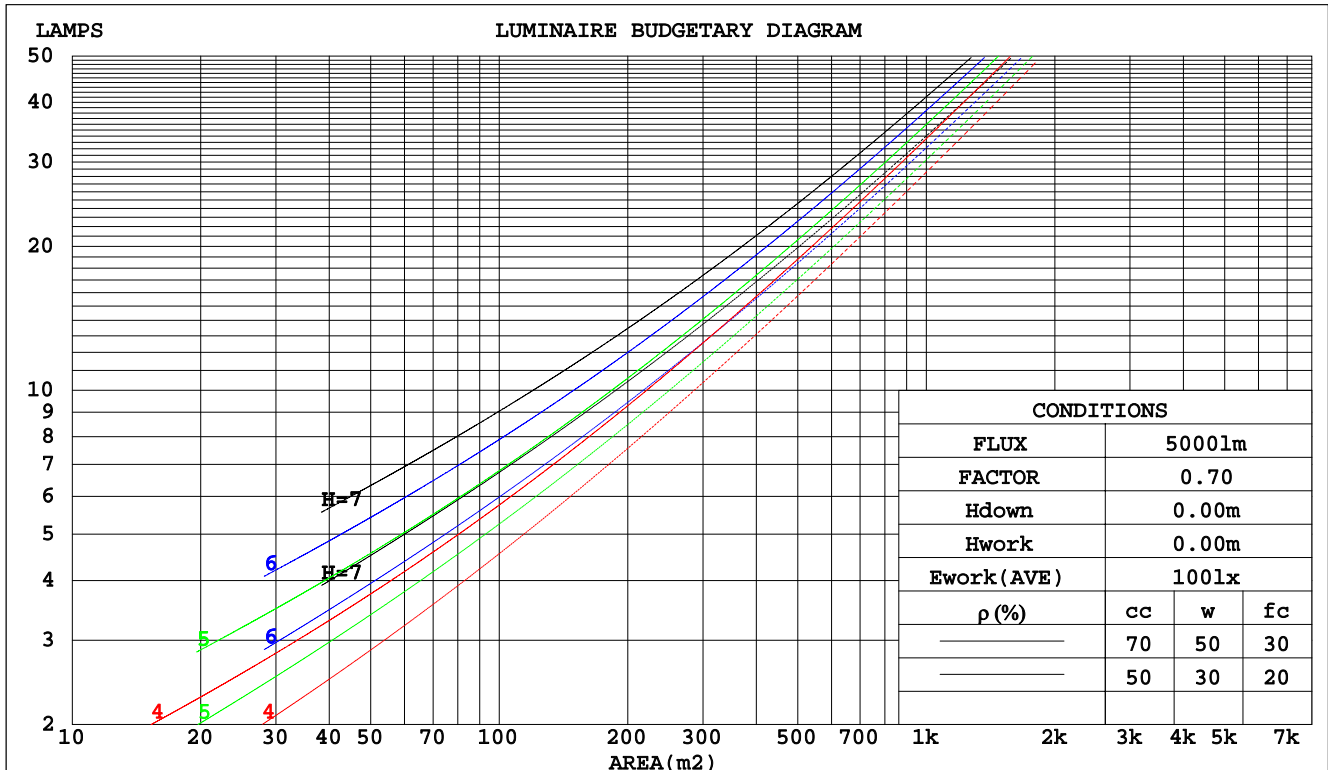
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2023-12-04

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=1.0000]  
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:0V I:0A P:0W PF:0.0000 Freq:0Hz Lamp Flux:346.254x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 155*50	SERIAL No.:
MFR.: A4673655A-01	SUR.:3.14*0.07*0.07	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						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1.0	1.02	.97	.92	.99	.95	.91	.95	.91	.88	.91	.88	.85	.87	.85	.83	.80
2.0	.86	.78	.72	.84	.77	.71	.81	.74	.69	.77	.72	.68	.74	.70	.66	.64
3.0	.74	.64	.57	.72	.63	.56	.69	.62	.55	.66	.60	.54	.63	.58	.53	.51
4.0	.64	.54	.46	.62	.53	.46	.60	.52	.45	.57	.50	.45	.55	.49	.44	.41
5.0	.56	.46	.38	.55	.45	.38	.52	.44	.38	.50	.43	.37	.48	.42	.37	.34
6.0	.49	.39	.32	.48	.39	.32	.46	.38	.32	.45	.37	.31	.43	.36	.31	.29
7.0	.44	.34	.28	.43	.34	.28	.42	.33	.27	.40	.33	.27	.39	.32	.27	.25
8.0	.40	.30	.24	.39	.30	.24	.38	.29	.24	.36	.29	.24	.35	.28	.23	.21
9.0	.36	.27	.21	.35	.27	.21	.34	.26	.21	.33	.26	.21	.32	.25	.21	.19
10.0	.33	.24	.19	.32	.24	.19	.31	.24	.18	.30	.23	.18	.29	.23	.18	.16



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2023-12-04

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
 Humidity:65.0%  
 Test Distance:11.700m [K=1.0000]  
 Remarks:

## WEC AND CCEC

Test:U:0V I:0A P:0W PF:0.0000 Freq:0Hz Lamp Flux:346.254x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 155*50	SERIAL No.:
MFR.: A4673655A-01	SUR.:3.14*0.07*0.07	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	.352	.200	.063	.345	.197	.062	.331	.190	.061	.319	.184	.059	.307	.178	.057		
2.0	.332	.182	.056	.326	.179	.055	.314	.174	.054	.303	.170	.053	.292	.165	.052		
3.0	.306	.163	.049	.300	.161	.048	.289	.157	.048	.279	.153	.047	.270	.150	.046		
4.0	.280	.146	.043	.275	.144	.043	.265	.141	.042	.256	.138	.042	.248	.135	.041		
5.0	.257	.131	.038	.252	.130	.038	.244	.127	.037	.236	.124	.037	.228	.122	.037		
6.0	.236	.118	.034	.232	.117	.034	.225	.115	.033	.217	.113	.033	.211	.111	.033		
7.0	.218	.108	.031	.215	.107	.030	.208	.105	.030	.202	.103	.030	.195	.102	.030		
8.0	.203	.099	.028	.199	.098	.028	.193	.097	.028	.187	.095	.027	.182	.093	.027		
9.0	.189	.091	.025	.186	.091	.025	.180	.089	.025	.175	.088	.025	.170	.086	.025		
10.0	.176	.085	.023	.174	.084	.023	.169	.083	.023	.164	.082	.023	.160	.080	.023		

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.183	.156	.131	.157	.134	.113	.107	.092	.078	.062	.053	.045	.020	.017	.015	
2.0	.178	.132	.093	.152	.113	.080	.104	.078	.056	.060	.046	.033	.019	.015	.011	
3.0	.171	.115	.069	.147	.099	.060	.101	.069	.042	.058	.040	.025	.019	.013	.008	
4.0	.164	.102	.054	.141	.088	.047	.097	.061	.033	.056	.036	.019	.018	.012	.006	
5.0	.157	.092	.043	.135	.079	.038	.093	.055	.027	.054	.033	.016	.017	.011	.005	
6.0	.150	.084	.036	.129	.072	.031	.089	.051	.022	.052	.030	.013	.017	.010	.004	
7.0	.143	.077	.031	.123	.067	.027	.085	.047	.019	.049	.027	.011	.016	.009	.004	
8.0	.136	.071	.027	.117	.062	.023	.081	.043	.016	.047	.026	.010	.015	.008	.003	
9.0	.129	.066	.023	.111	.057	.020	.077	.040	.015	.045	.024	.009	.015	.008	.003	
10.0	.123	.062	.021	.106	.054	.018	.074	.038	.013	.043	.022	.008	.014	.007	.003	

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2023-12-04

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=1.0000]  
Remarks:

## UGR(Unified Glare Rating) Table

Test:U:0V I:0A P:0W PF:0.0000 Freq:0Hz Lamp Flux:346.254x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:					DIM.: 155*50			SERIAL No.:			
MFR.: A4673655A-01					SUR.:3.14*0.07*0.07			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		21.5	23.2	21.7	23.4	23.6	21.0	22.7	21.2	22.9	23.1
3H		23.8	25.4	24.2	25.7	25.9	22.5	24.1	22.8	24.3	24.6
4H		24.5	26.1	24.9	26.3	26.6	23.1	24.6	23.4	24.9	25.1
6H		24.9	26.3	25.3	26.6	26.9	23.5	24.9	23.9	25.2	25.5
8H		25.0	26.4	25.4	26.7	27.0	23.7	25.0	24.0	25.3	25.6
12H		25.0	26.4	25.4	26.7	27.0	23.8	25.1	24.1	25.4	25.7
4H 2H		22.5	24.0	22.8	24.2	24.5	22.1	23.6	22.4	23.8	24.1
3H		24.9	26.2	25.3	26.5	26.9	23.8	25.1	24.1	25.4	25.7
4H		25.7	26.9	26.1	27.2	27.6	24.4	25.6	24.8	25.9	26.3
6H		26.1	27.2	26.5	27.6	27.9	24.8	25.9	25.2	26.3	26.7
8H		26.3	27.3	26.7	27.6	28.0	25.0	26.0	25.4	26.4	26.8
12H		26.3	27.2	26.8	27.6	28.0	25.1	26.1	25.6	26.5	26.9
8H 4H		25.9	26.9	26.3	27.2	27.6	24.7	25.8	25.2	26.1	26.5
6H		26.4	27.3	26.9	27.7	28.1	25.3	26.1	25.7	26.5	27.0
8H		26.6	27.4	27.1	27.8	28.3	25.5	26.3	26.0	26.7	27.1
12H		26.8	27.4	27.2	27.8	28.3	25.7	26.3	26.2	26.8	27.3
12H 4H		25.9	26.8	26.3	27.2	27.6	24.8	25.7	25.2	26.1	26.5
6H		26.5	27.2	26.9	27.6	28.1	25.3	26.1	25.8	26.5	27.0
8H		26.7	27.3	27.1	27.8	28.2	25.6	26.2	26.1	26.7	27.2
Variations with the observer position at spacings:											
S = 1.0H		+ 0.1 / - 0.1					+ 0.0 / - 0.1				
1.5H		+ 0.1 / - 0.2					+ 0.3 / - 0.3				
2.0H		+ 0.5 / - 0.7					+ 0.3 / - 0.7				

CIE Pub.117, 346.3 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = -3.7)

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2023-12-04

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:0V I:0A P:0W PF:0.0000 Freq:0Hz Lamp Flux:346.254x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 155*50	SERIAL No.:
MFR.: A4673655A-01	SUR.:3.14*0.07*0.07	Shielding Angle:

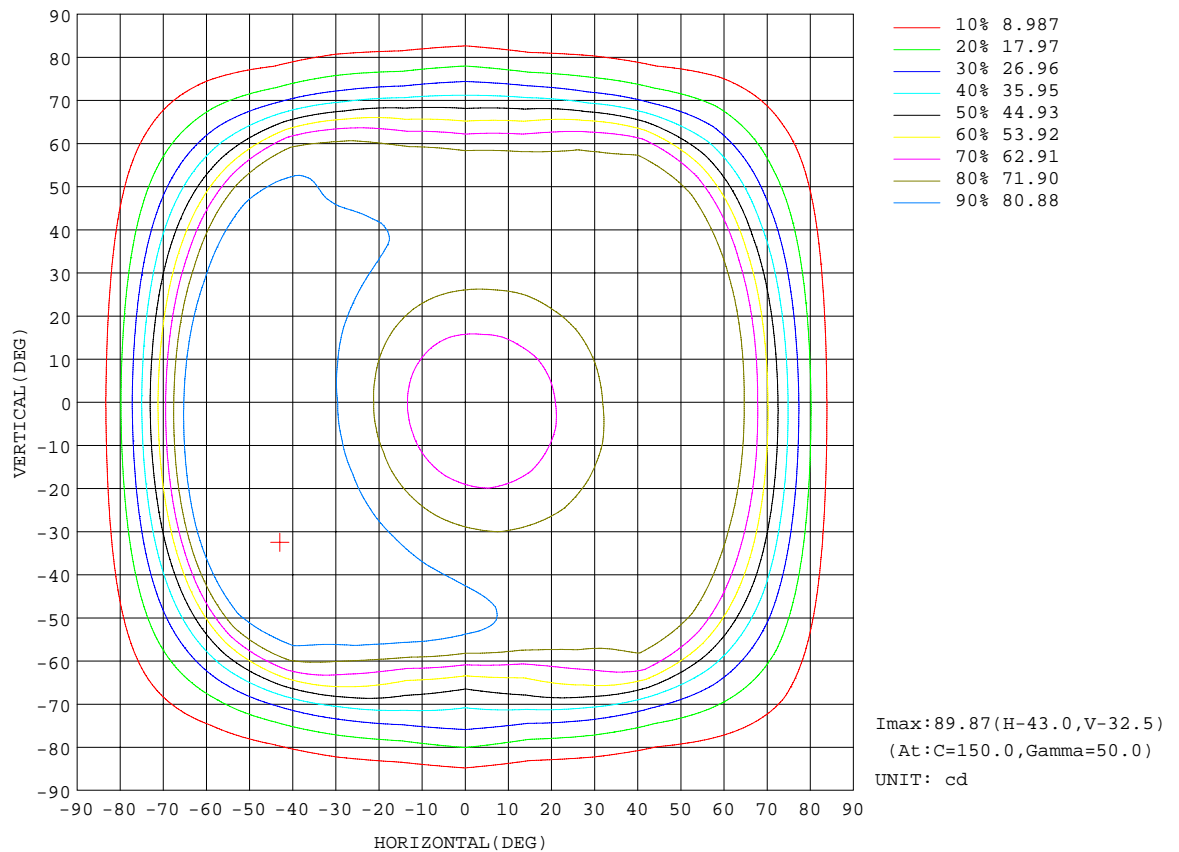
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	49	36	28	48	36	28	47	35	28	21
0.80	59	46	38	58	46	37	56	45	37	29
1.00	68	56	47	67	55	47	65	57	46	38
1.25	76	64	56	75	63	55	72	62	54	46
1.50	82	70	62	80	69	62	77	68	61	52
2.00	90	80	73	88	79	72	84	77	70	62
2.50	95	86	79	93	85	78	89	82	76	67
3.00	99	91	85	97	90	84	93	87	81	72
4.00	104	97	92	102	96	91	97	92	88	79
5.00	107	101	97	104	99	95	100	96	92	83
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2023-12-04

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=1.0000]  
Remarks:

## ISOCANDELA DIAGRAM

Test:U:0V I:0A P:0W PF:0.0000 Freq:0Hz Lamp Flux:346.254x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 155*50	SERIAL No.:
MFR.: A4673655A-01	SUR.:3.14*0.07*0.07	Shielding Angle:



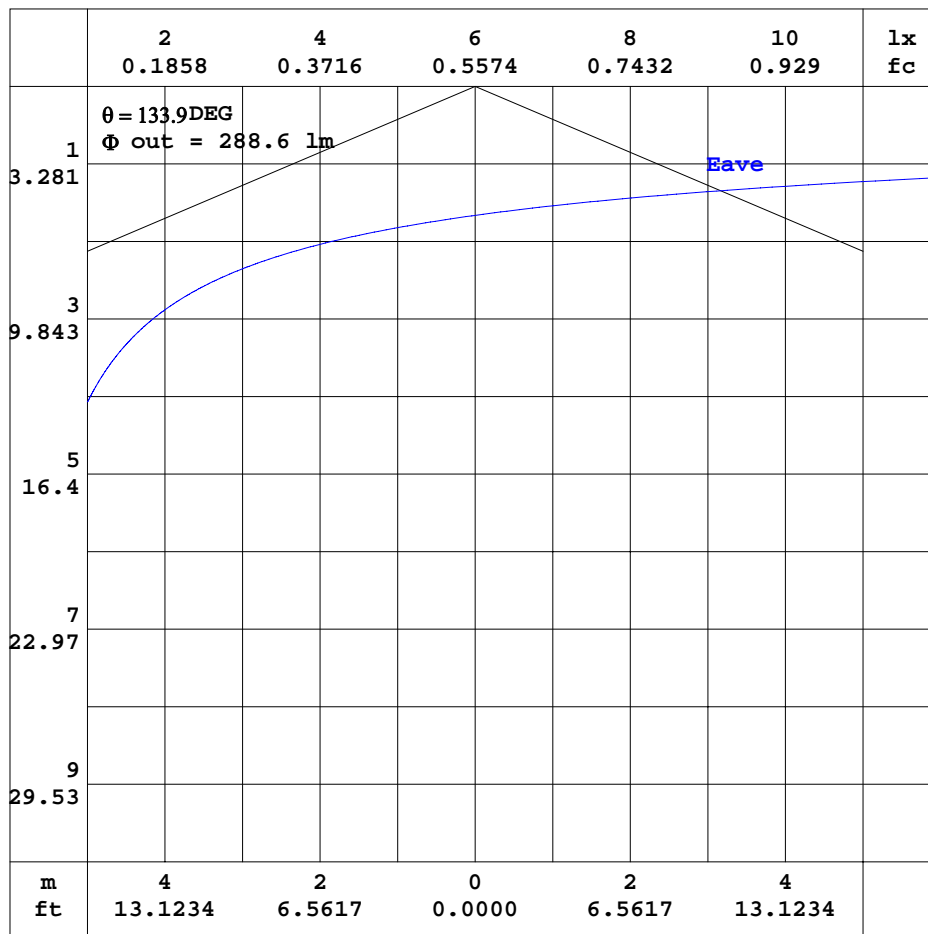
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2023-12-04

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=1.0000]  
Remarks:



AAI CURVES

Test:U:0V I:0A P:0W PF:0.0000 Freq:0Hz Lamp Flux:346.254x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 155*50	SERIAL No.:
MFR.: A4673655A-01	SUR.:3.14*0.07*0.07	Shielding Angle:



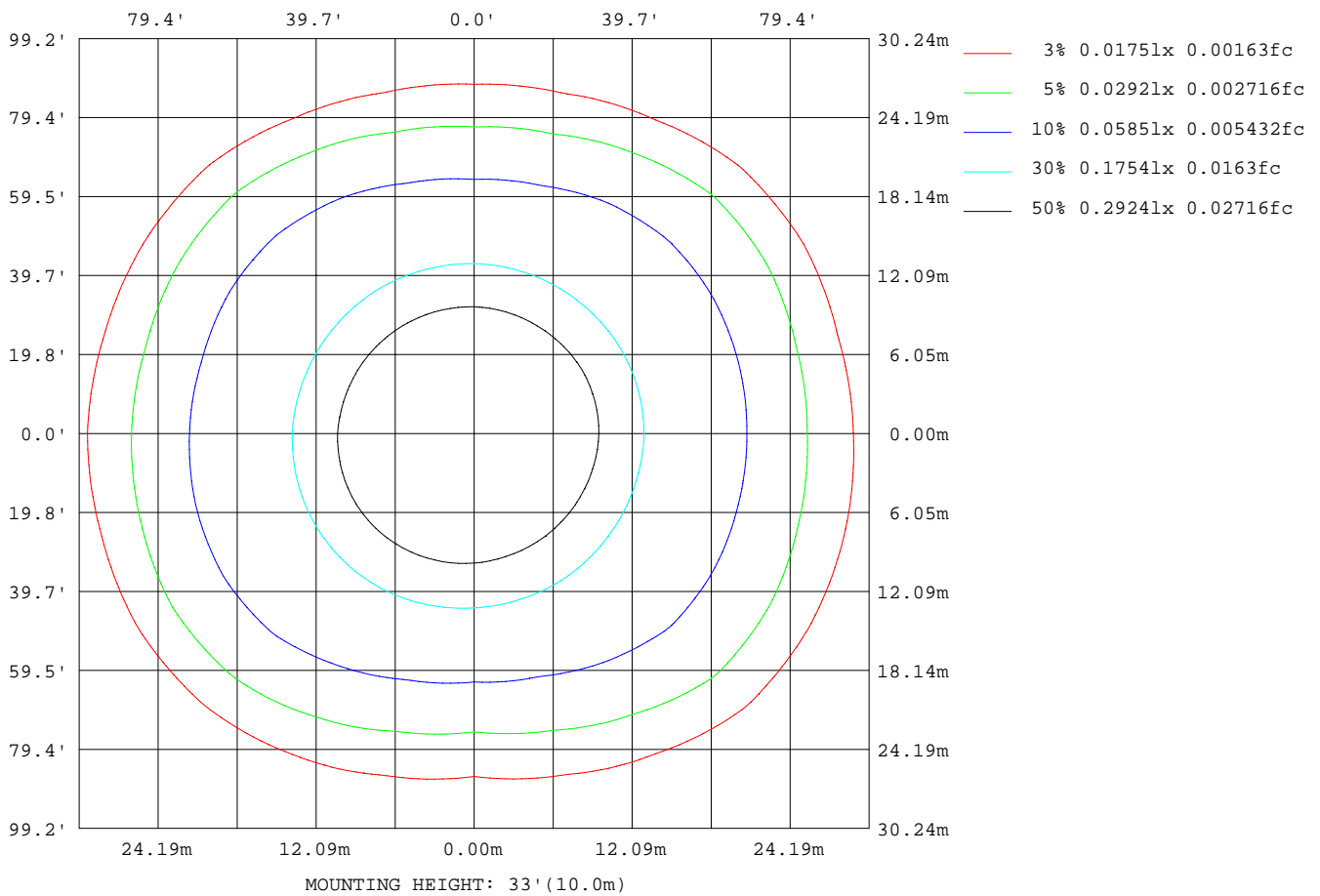
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2023-12-04

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
 Humidity:65.0%  
 Test Distance:11.700m [K=1.0000]  
 Remarks:

# ISOLUX DIAGRAM

Test:U:0V I:0A P:0W PF:0.0000 Freq:0Hz Lamp Flux:346.254x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 155*50	SERIAL No.:
MFR.: A4673655A-01	SUR.:3.14*0.07*0.07	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2023-12-04

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=1.0000]  
Remarks:

## LED Avg.L Report

Test:U:0V I:0A P:0W PF:0.0000 Freq:0Hz Lamp Flux:346.254x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 155*50	SERIAL No.:
MFR.: A4673655A-01	SUR.:3.14*0.07*0.07	Shielding Angle:

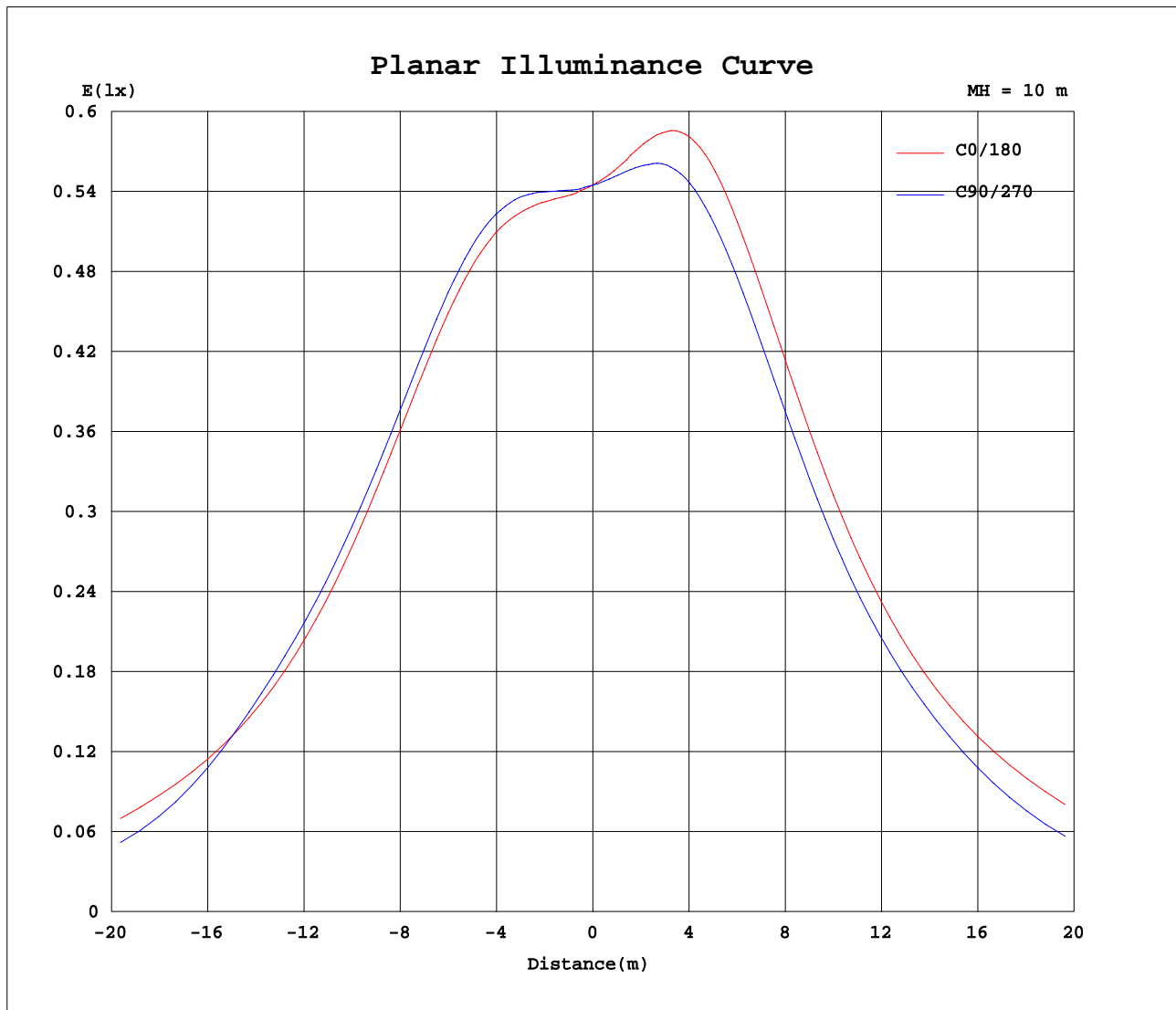
AvgL	cd/m2
L_0~180(65)av	11823
L_0~180(75)av	9017
L_0~180(85)av	4810
L_90~270(65)av	8005
L_90~270(75)av	6833
L_90~270(85)av	5198
L_45(65)av	11784
L_45(75)av	7475
L_45(85)av	3236

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2023-12-04

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2023-12-04

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
Humidity: 65.0%  
Test Distance: 11.700m [K=1.0000]  
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

```