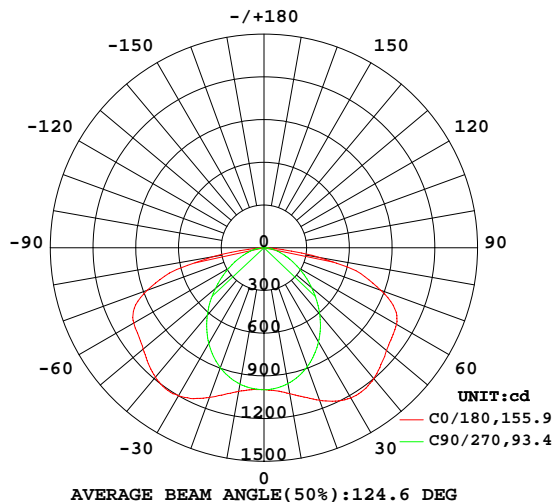


LUMINAIRE PHOTOMETRIC TEST REPORT

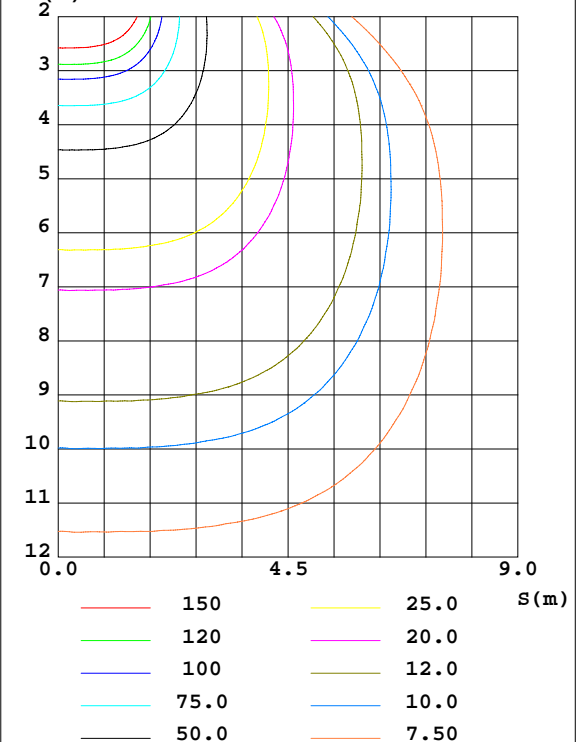
Test:U:229.64V I:0.2091A P:47.729W PF:0.9941 Freq:49.99Hz Lamp Flux:4191.09x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1285*48*77	SERIAL No.:
MFR.:	SUR.:1.00*0.021	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 87.81 lm/W			
MODEL		Imax(cd)	1223	S/MH(C0/180)	1.76
NOMINAL POWER(W)	50	LOR(%)	100.0	S/MH(C90/270)	1.17
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	4191.1	η UP,DN(C0-180)	0.0,49.8
NOMINAL FLUX(lm)	4191.09	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.2
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	230.0	η down(%)	100.0	CIBSE SHR MAX	1.55

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-08-20

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:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

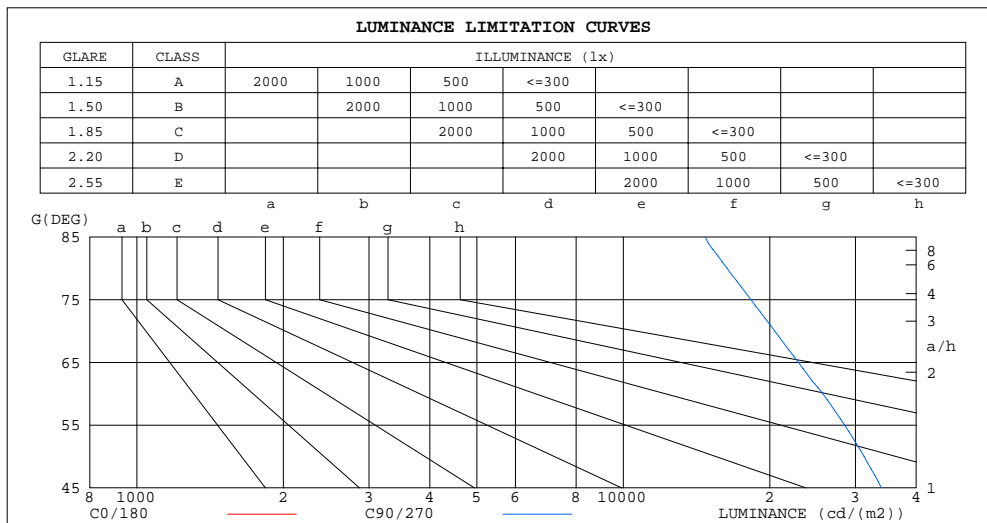
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1040	1007	968.6	995.0	1024	996.2	972.2	1010	0- 10	95.38	95.38	2.28,2.28
20	1139	1023	889.2	1005	1119	1006	896.9	1032	10- 20	285.8	381.2	9.09,9.09
30	1219	1037	765.4	1021	1200	1022	775.5	1054	20- 30	469.5	850.7	20.3,20.3
40	1200	1029	608.4	1017	1187	1018	620.2	1050	30- 40	620.4	1471	35.1,35.1
50	1124	962.9	438.0	954.5	1108	958.1	445.8	986.8	40- 50	703.7	2175	51.9,51.9
60	1075	828.7	280.2	820.8	1056	830.7	284.5	857.3	50- 60	713.8	2889	68.9,68.9
70	874.1	667.3	152.6	656.6	871.9	667.6	155.8	702.0	60- 70	661.8	3550	84.7,84.7
80	397.6	467.6	61.84	467.3	362.1	464.2	64.03	480.8	70- 80	492.2	4043	96.5,96.5
90	5.790	8.350	4.158	4.536	6.529	6.203	5.962	9.708	80- 90	148.6	4191	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: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-08-20

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:

LUMINANCE LIMITATION CURVES

Test:U:229.64V I:0.2091A P:47.729W PF:0.9941 Freq:49.99Hz Lamp Flux:4191.09x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1285*48*77	SERIAL No.:
MFR.:	SUR.:1.00*0.021	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	45861	14744
80	105043	16335
75	124539	18290
70	117228	20463
65	109933	22906
60	98579	25707
55	87736	28507
50	80177	31255
45	75308	33921

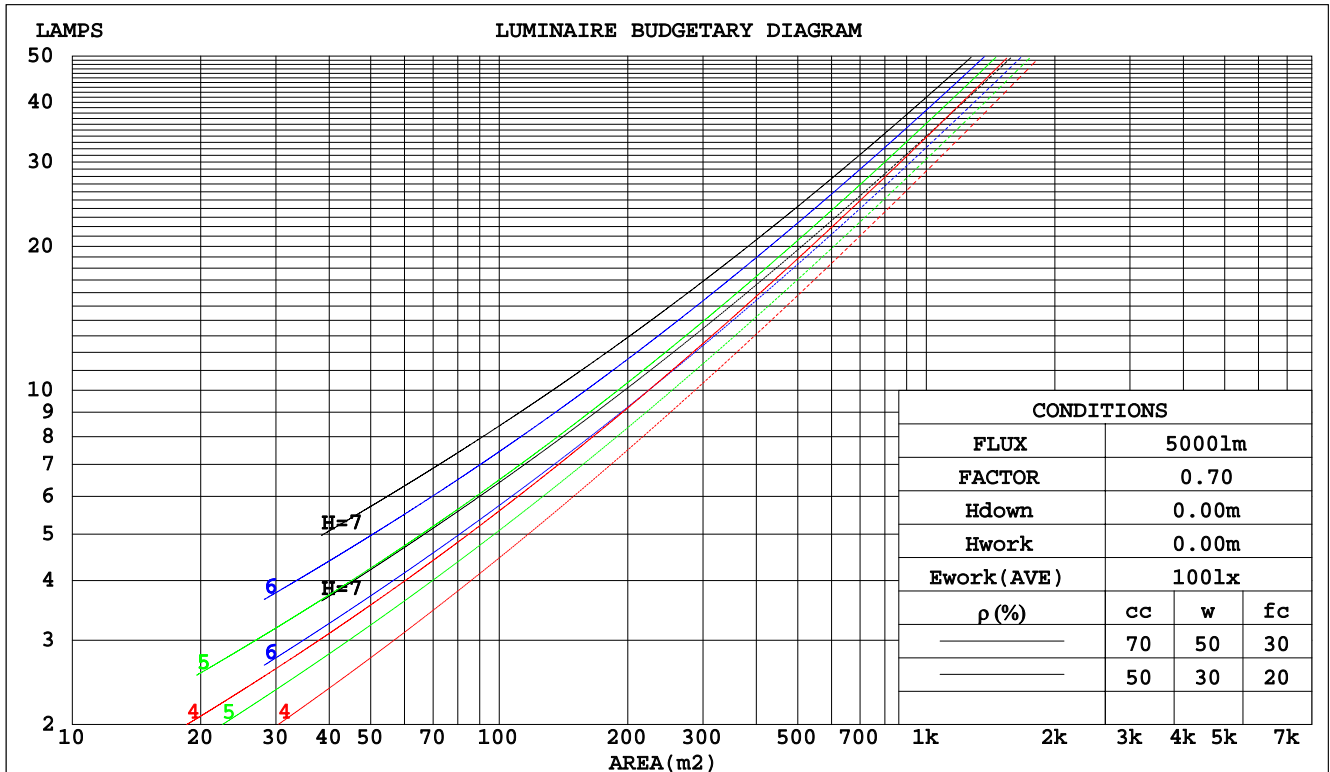
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-08-20

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:229.64V I:0.2091A P:47.729W PF:0.9941 Freq:49.99Hz Lamp Flux:4191.09x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1285*48*77	SERIAL No.:
MFR.:	SUR.:1.00*0.021	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	1.01	.96	.91	.99	.94	.90	.94	.91	.87	.90	.87	.84	.87	.84	.82	.80
2.0	.86	.78	.72	.84	.77	.71	.80	.74	.69	.77	.72	.67	.74	.70	.66	.64
3.0	.74	.65	.58	.73	.64	.57	.70	.62	.56	.67	.60	.55	.64	.59	.54	.52
4.0	.65	.55	.48	.64	.54	.47	.61	.53	.47	.58	.52	.46	.56	.50	.45	.43
5.0	.57	.48	.40	.56	.47	.40	.54	.46	.40	.52	.45	.39	.50	.44	.39	.36
6.0	.51	.42	.35	.50	.41	.34	.48	.40	.34	.47	.39	.34	.45	.38	.33	.31
7.0	.46	.37	.30	.45	.36	.30	.44	.36	.30	.42	.35	.29	.41	.34	.29	.27
8.0	.42	.33	.27	.41	.32	.26	.40	.32	.26	.38	.31	.26	.37	.31	.26	.24
9.0	.38	.30	.24	.38	.29	.24	.36	.29	.23	.35	.28	.23	.34	.28	.23	.21
10.0	.35	.27	.21	.35	.27	.21	.34	.26	.21	.33	.26	.21	.32	.25	.21	.19



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-08-20

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:229.64V I:0.2091A P:47.729W PF:0.9941 Freq:49.99Hz Lamp Flux:4191.09x1 lm								
NAME:			TYPE:			WEIGHT:		
SPEC.:			DIM.: 1285*48*77			SERIAL No.:		
MFR.:			SUR.:1.00*0.021			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	.364	.207	.066	.357	.203	.065	.343	.197	.063	.331	.191	.061	.319	.185	.060	
2.0	.333	.183	.056	.327	.180	.055	.315	.175	.054	.304	.170	.053	.293	.166	.052	
3.0	.302	.161	.048	.297	.159	.048	.286	.155	.047	.276	.151	.046	.267	.148	.046	
4.0	.275	.143	.042	.270	.141	.042	.260	.138	.041	.251	.135	.041	.243	.132	.040	
5.0	.251	.128	.037	.246	.127	.037	.238	.124	.036	.230	.121	.036	.223	.119	.036	
6.0	.230	.116	.033	.226	.114	.033	.219	.112	.033	.212	.110	.032	.205	.108	.032	
7.0	.213	.105	.030	.209	.104	.030	.202	.102	.029	.196	.101	.029	.190	.099	.029	
8.0	.197	.096	.027	.194	.096	.027	.188	.094	.027	.183	.092	.027	.177	.091	.027	
9.0	.184	.089	.025	.181	.088	.025	.176	.087	.025	.171	.086	.024	.166	.084	.024	
10.0	.172	.083	.023	.170	.082	.023	.165	.081	.023	.160	.080	.023	.156	.078	.022	

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	.184	.156	.130	.157	.134	.112	.108	.092	.077	.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	.070	.146	.099	.060	.100	.069	.042	.058	.040	.025	.019	.013	.008	
4.0	.163	.102	.054	.140	.088	.047	.096	.061	.033	.056	.036	.020	.018	.012	.006	
5.0	.155	.091	.044	.134	.079	.038	.092	.055	.027	.053	.032	.016	.017	.011	.005	
6.0	.148	.083	.037	.127	.072	.032	.088	.050	.023	.051	.030	.013	.016	.010	.004	
7.0	.141	.076	.031	.121	.066	.027	.084	.046	.019	.049	.027	.012	.016	.009	.004	
8.0	.134	.071	.027	.115	.061	.024	.080	.043	.017	.046	.025	.010	.015	.008	.003	
9.0	.127	.066	.024	.110	.057	.021	.076	.040	.015	.044	.024	.009	.014	.008	.003	
10.0	.121	.061	.021	.104	.053	.019	.072	.037	.013	.042	.022	.008	.014	.007	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-08-20

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:229.64V I:0.2091A P:47.729W PF:0.9941 Freq:49.99Hz Lamp Flux:4191.09x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:					DIM.: 1285*48*77			SERIAL No.:			
MFR.:					SUR.:1.00*0.021			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	29.6	31.3	29.9	31.5	31.7	24.7	26.3	24.9	26.5	26.8	
	3H	32.4	33.9	32.7	34.2	34.4	25.6	27.1	25.9	27.4	27.6
	4H	33.6	35.0	33.9	35.3	35.6	25.9	27.4	26.2	27.7	27.9
	6H	34.4	35.8	34.7	36.0	36.3	26.1	27.5	26.5	27.8	28.1
	8H	34.5	35.9	34.9	36.2	36.5	26.2	27.6	26.6	27.8	28.1
	12H	34.6	35.9	34.9	36.2	36.5	26.2	27.5	26.6	27.8	28.2
4H	2H	30.2	31.7	30.5	31.9	32.2	26.9	28.4	27.2	28.6	28.9
	3H	33.2	34.5	33.5	34.8	35.1	28.2	29.5	28.5	29.8	30.1
	4H	34.6	35.8	35.0	36.1	36.5	28.6	29.8	29.0	30.1	30.5
	6H	35.6	36.7	36.0	37.0	37.4	28.9	29.9	29.3	30.3	30.7
	8H	35.8	36.8	36.2	37.2	37.6	28.9	29.9	29.4	30.3	30.7
	12H	35.9	36.8	36.3	37.2	37.6	29.0	29.9	29.4	30.3	30.7
8H	4H	34.9	35.9	35.3	36.3	36.7	30.4	31.4	30.8	31.8	32.2
	6H	36.1	37.0	36.6	37.4	37.8	31.1	31.9	31.5	32.3	32.8
	8H	36.5	37.2	37.0	37.7	38.1	31.2	32.0	31.7	32.4	32.9
	12H	36.6	37.3	37.1	37.7	38.2	31.3	32.0	31.8	32.4	32.9
12H	4H	34.9	35.8	35.3	36.2	36.6	30.8	31.7	31.2	32.1	32.5
	6H	36.2	37.0	36.7	37.4	37.9	31.7	32.5	32.2	32.9	33.4
	8H	36.7	37.3	37.1	37.8	38.2	32.0	32.7	32.5	33.1	33.6
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.2					
1.5H	+ 0.1 / - 0.2					+ 0.2 / - 0.4					
2.0H	+ 0.2 / - 0.4					+ 0.4 / - 0.5					

CIE Pub.117, 4191 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 5.0$)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-08-20

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:229.64V I:0.2091A P:47.729W PF:0.9941 Freq:49.99Hz Lamp Flux:4191.09x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1285*48*77	SERIAL No.:
MFR.:	SUR.:1.00*0.021	Shielding Angle:

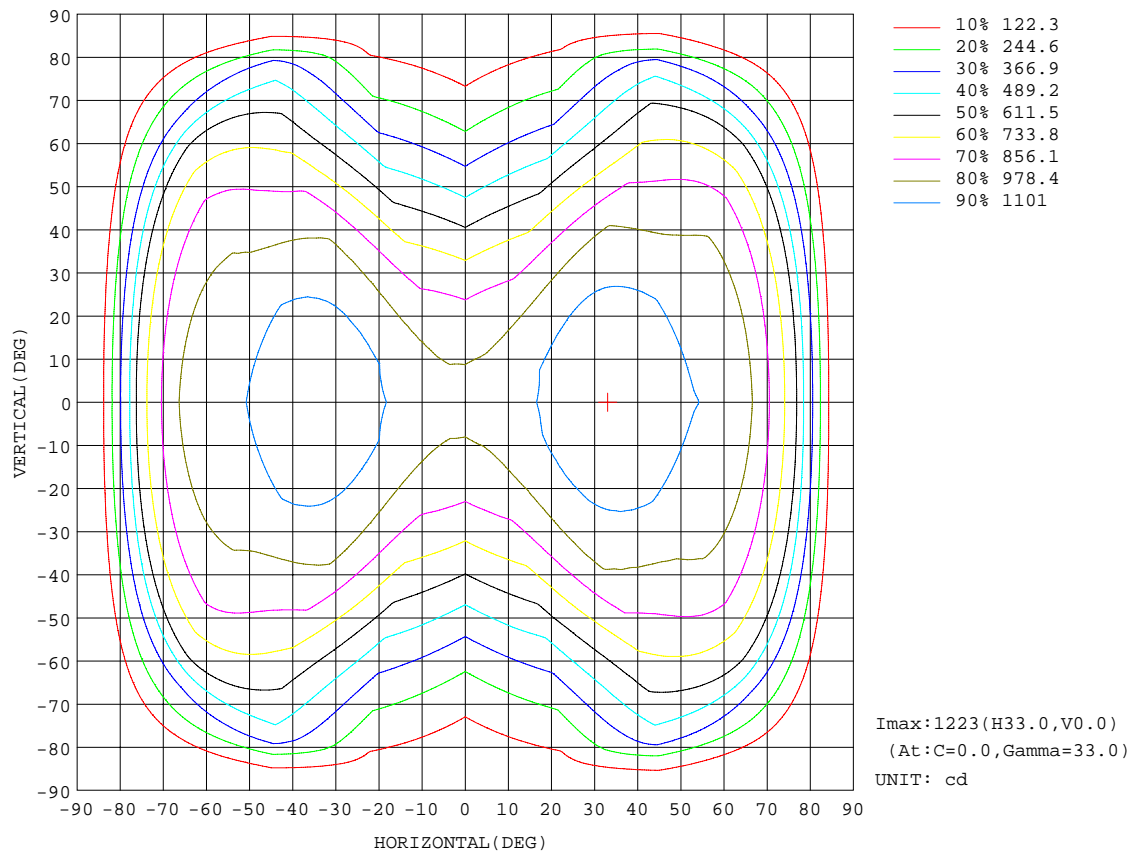
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	52	40	32	52	40	32	50	39	32	25
0.80	62	49	41	61	49	41	59	48	41	33
1.00	70	58	50	69	57	50	67	59	49	41
1.25	78	66	58	76	65	57	73	64	57	48
1.50	83	72	64	81	71	63	78	69	62	54
2.00	91	81	73	89	79	72	85	77	71	62
2.50	95	86	79	93	85	78	89	82	76	67
3.00	99	91	85	97	89	83	92	86	81	72
4.00	104	97	91	101	95	90	97	92	87	78
5.00	107	101	96	104	99	94	99	95	91	82
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-08-20

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:

ISOCANDELA DIAGRAM

Test:U:229.64V I:0.2091A P:47.729W PF:0.9941 Freq:49.99Hz Lamp Flux:4191.09x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1285*48*77	SERIAL No.:
MFR.:	SUR.:1.00*0.021	Shielding Angle:

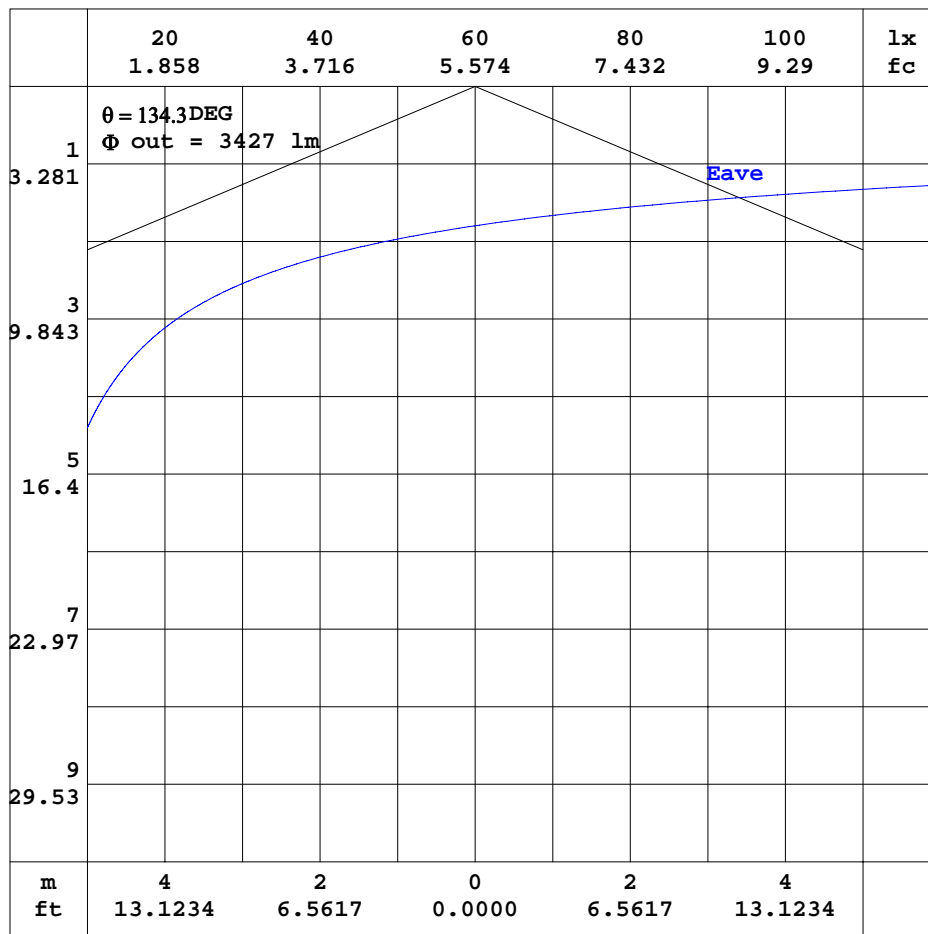


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-08-20

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:

AAI CURVES

Test:U:229.64V I:0.2091A P:47.729W PF:0.9941 Freq:49.99Hz Lamp Flux:4191.09x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1285*48*77	SERIAL No.:
MFR.:	SUR.:1.00*0.021	Shielding Angle:



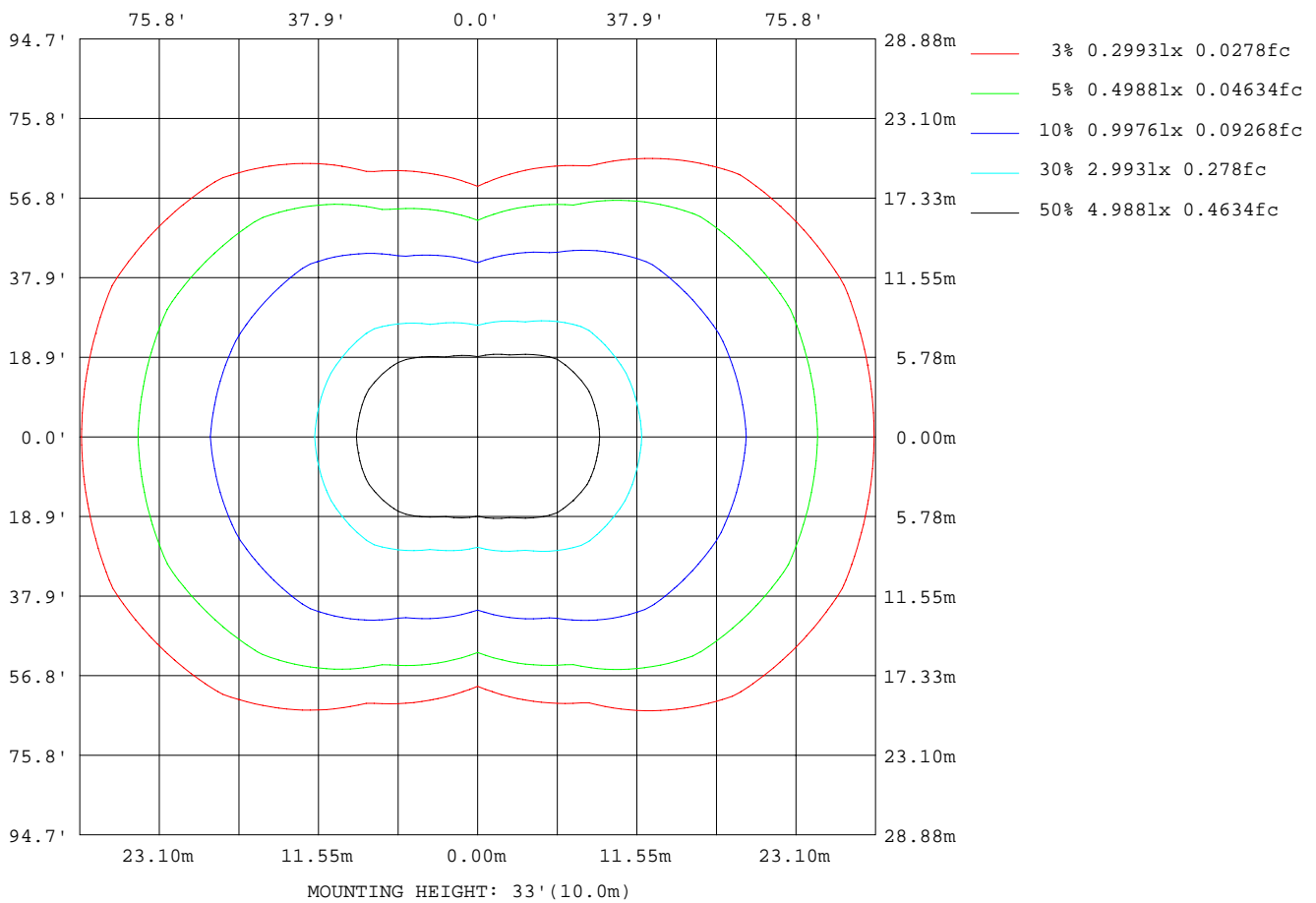
Note: The Curves indicate the illuminated area and the average illuminance when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2025-08-20

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:

ISOLUX DIAGRAM

Test:U:229.64V I:0.2091A P:47.729W PF:0.9941 Freq:49.99Hz Lamp Flux:4191.09x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1285*48*77	SERIAL No.:
MFR.:	SUR.:1.00*0.021	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2025-08-20

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:229.64V I:0.2091A P:47.729W PF:0.9941 Freq:49.99Hz Lamp Flux:4191.09x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1285*48*77	SERIAL No.:
MFR.:	SUR.:1.00*0.021	Shielding Angle:

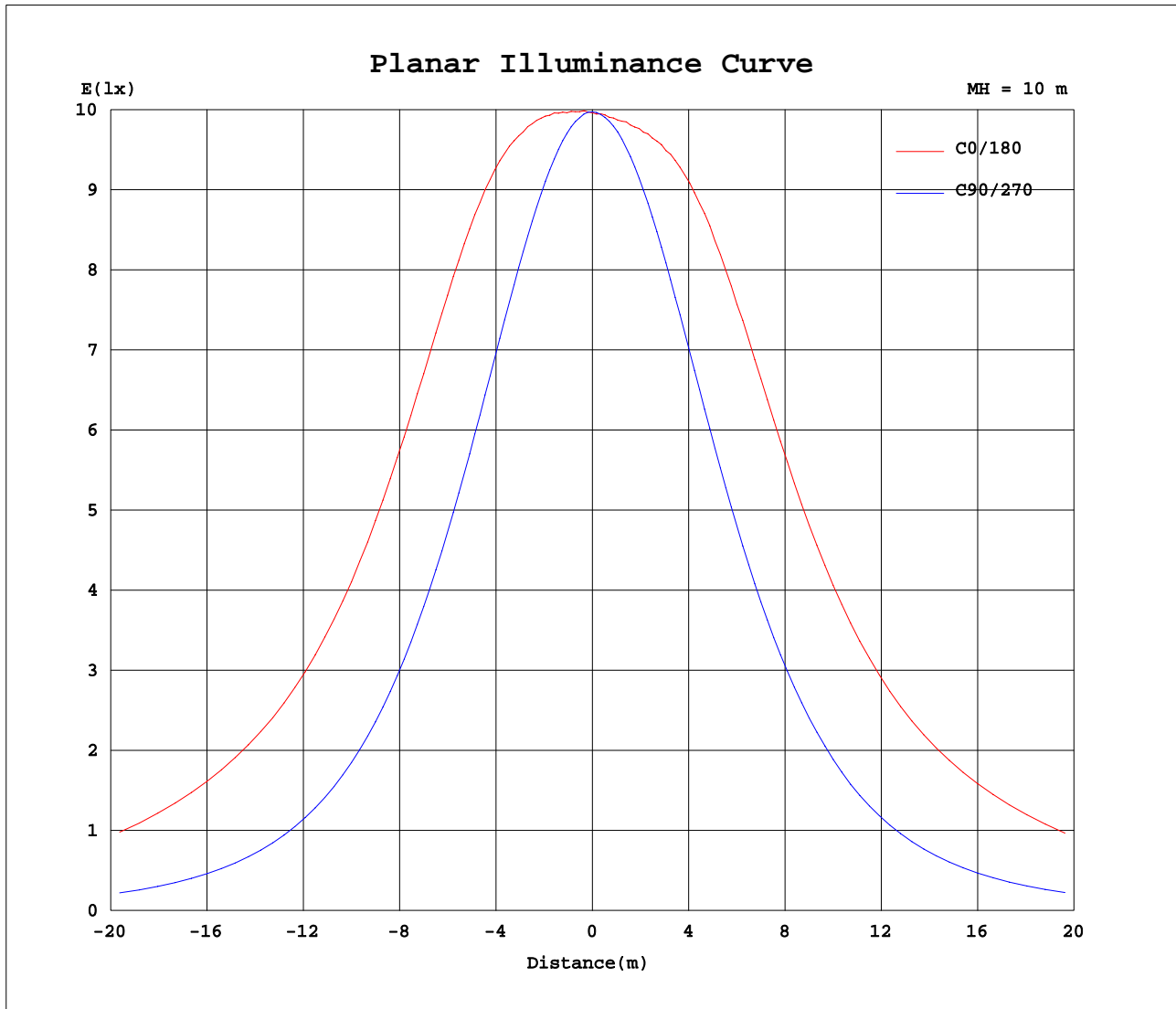
AvgL	cd/m2
L_0~180(65)av	109467
L_0~180(75)av	123273
L_0~180(85)av	40936
L_90~270(65)av	23123
L_90~270(75)av	18531
L_90~270(85)av	15219
L_45(65)av	81886
L_45(75)av	104117
L_45(85)av	101720

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-08-20

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: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2025-08-20

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:

```