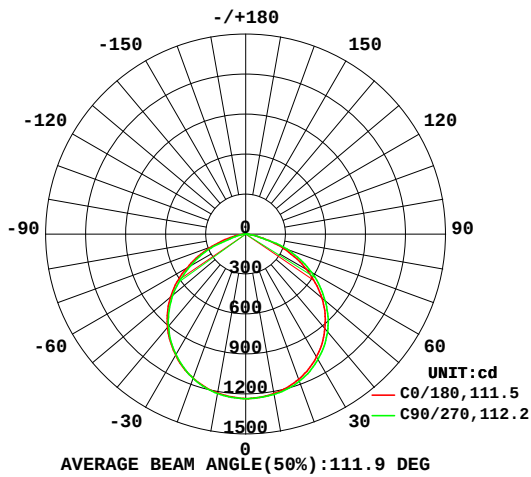


LUMINAIRE PHOTOMETRIC TEST REPORT

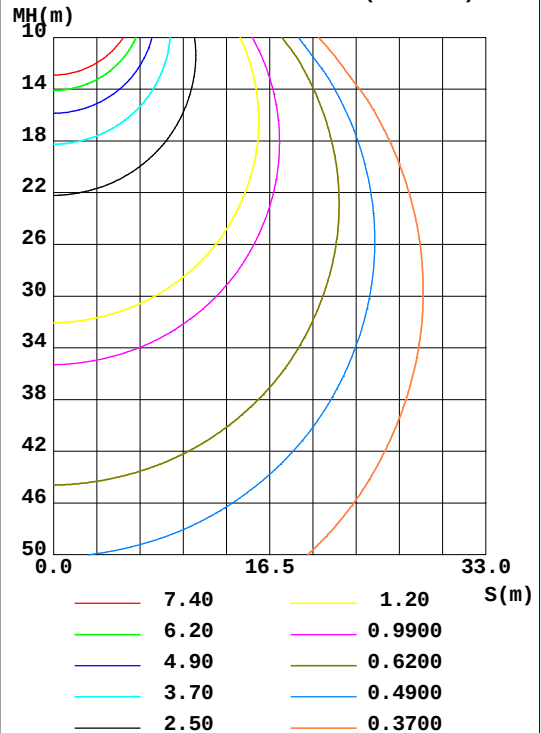
Test:U:220.7V I:0.1870A P:40.30W PF:0.9960 Lamp Flux:3383.85x1 lm		
NAME: LAFA壁灯 上 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 83.97 lm/W			
MODEL		I _{max} (cd)	1235	S/MH(C0/180)	1.28
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.31
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	3383.8	η UP, DN(C0-180)	0.0,48.5
NOMINAL FLUX(lm)	3383.85	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,51.5
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT: lx)



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date:

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
Humidity: 65.0%
Test Distance: 9.526m [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	1211	1215	1215	1217	1216	1219	1221	1216	0- 10	116.9	116.9	3.46, 3.46
20	1152	1154	1153	1159	1160	1170	1176	1165	10- 20	337.1	454.0	13.4, 13.4
30	1051	1051	1046	1058	1064	1081	1086	1075	20- 30	515.2	969.2	28.6, 28.6
40	913.7	905.9	902.7	913.7	925.6	946.1	956.3	938.8	30- 40	625.2	1594	47.1, 47.1
50	736.3	720.9	714.6	724.8	746.8	766.9	779.6	761.2	40- 50	647.2	2242	66.2, 66.2
60	506.6	494.8	478.5	493.7	524.0	538.5	568.9	537.6	50- 60	567.1	2809	83, 83
70	268.8	255.0	199.5	249.7	286.3	295.2	333.2	294.9	60- 70	392.8	3201	94.6, 94.6
80	67.87	41.78	35.01	41.34	66.10	65.08	68.71	64.33	70- 80	161.6	3363	99.4, 99.4
90	2.580	4.906	3.178	5.961	2.511	4.917	3.572	4.865	80- 90	20.88	3384	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		

Conical surface Flux(90deg): 1921.4 lm

%lum = 56.8%
 %lamp = 56.8%

Conical surface Flux(120deg): 2808.7 lm

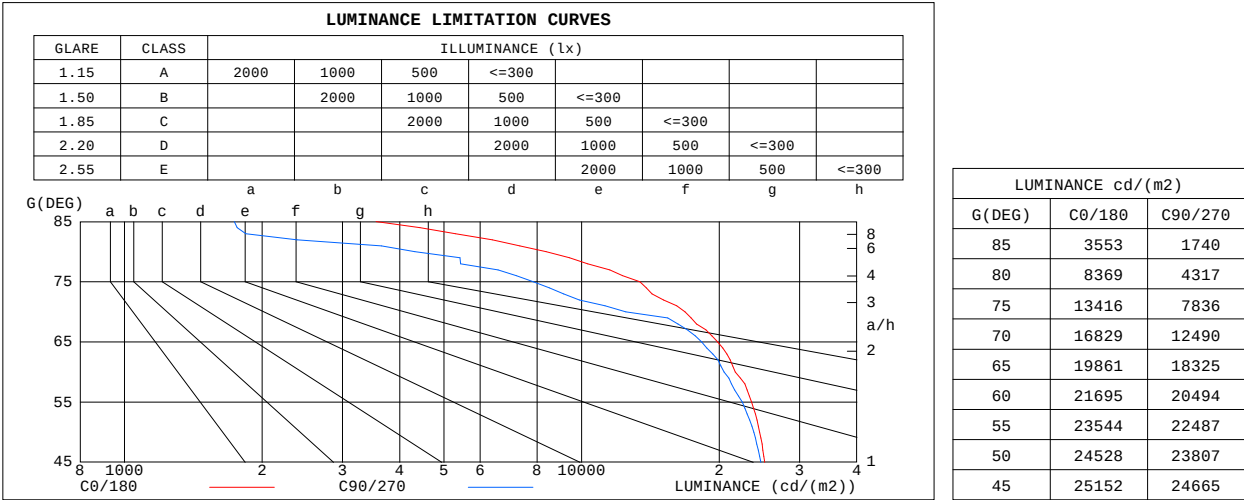
%lum = 83.0%
 %lamp = 83.0%

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date:

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
 Humidity: 65.0%
 Test Distance: 9.526m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.7V I:0.1870A P:40.30W PF:0.9960 Lamp Flux:3383.85x1 lm		
NAME: LAFA壁灯 上 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



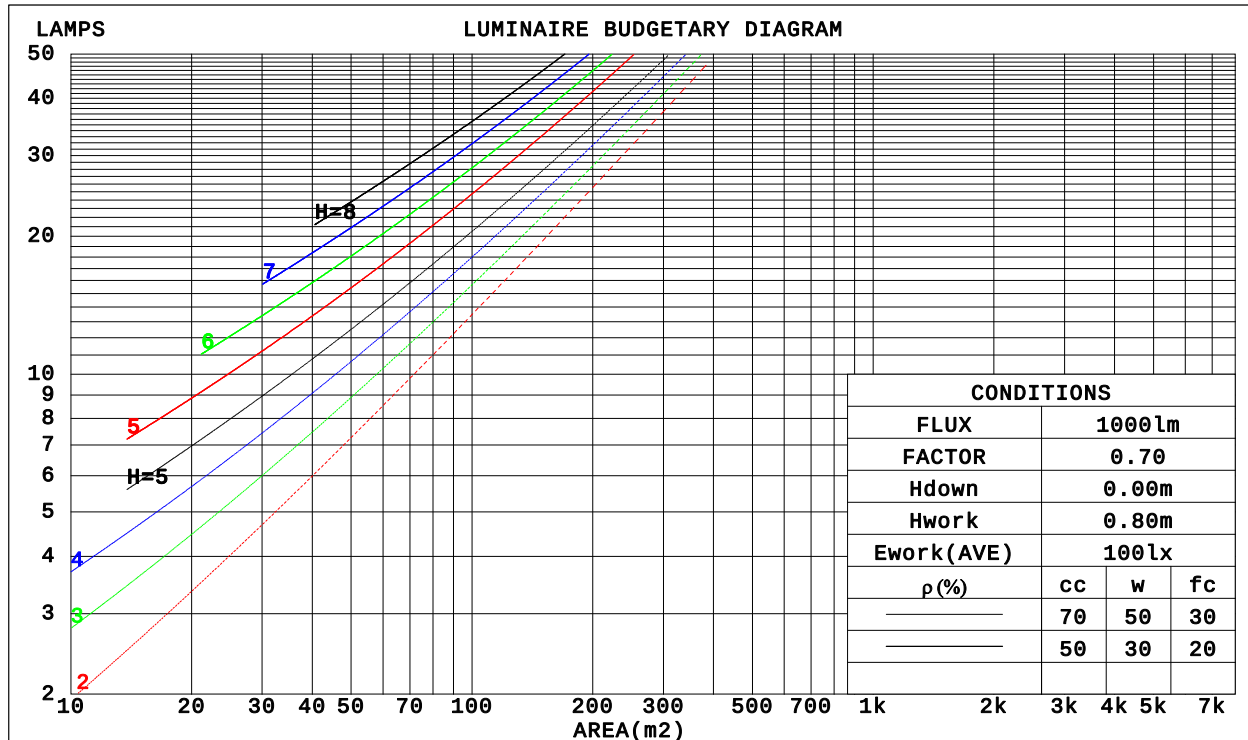
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.526m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.7V I:0.1870A P:40.30W PF:0.9960 Lamp Flux:3383.85x1 lm		
NAME: LAFA壁灯 上 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	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	1.05	1.01	.98	1.03	.99	.96	.99	.96	.93	.95	.92	.90	.91	.89	.88	.86
2.0	.92	.86	.80	.90	.84	.79	.87	.82	.78	.84	.79	.76	.81	.77	.74	.72
3.0	.81	.73	.67	.80	.72	.67	.77	.71	.65	.74	.69	.64	.71	.67	.63	.61
4.0	.72	.64	.57	.71	.63	.57	.68	.61	.56	.66	.60	.55	.64	.59	.54	.52
5.0	.64	.56	.49	.63	.55	.49	.61	.54	.48	.59	.53	.48	.57	.52	.47	.45
6.0	.58	.49	.43	.57	.49	.43	.55	.48	.42	.54	.47	.42	.52	.46	.42	.40
7.0	.53	.44	.38	.52	.44	.38	.50	.43	.37	.49	.42	.37	.47	.42	.37	.35
8.0	.48	.40	.34	.47	.39	.34	.46	.39	.33	.45	.38	.33	.44	.38	.33	.31
9.0	.44	.36	.30	.43	.36	.30	.42	.35	.30	.41	.35	.30	.40	.34	.30	.28
10.0	.41	.33	.28	.40	.33	.27	.39	.32	.27	.38	.32	.27	.37	.31	.27	.25



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date:

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295T
 Humidity: 65.0%
 Test Distance: 9.526m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:220.7V I:0.1870A P:40.30W PF:0.9960 Lamp Flux:3383.85x1 lm					
NAME: LAFA壁灯 上 3000K			TYPE:		WEIGHT:
SPEC.:			DIM.:		SERIAL No.:
MFR.:			SUR.:		Shielding Angle:

ρ_{CC}	80%			70%			50%			30%			10%			0	
ρ_W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.284	.162	.051	.277	.158	.050	.264	.151	.048	.252	.145	.047	.241	.139	.045		
2.0	.274	.150	.046	.268	.148	.046	.257	.143	.044	.246	.138	.043	.236	.134	.042		
3.0	.258	.137	.041	.252	.135	.041	.242	.131	.040	.233	.128	.039	.224	.124	.038		
4.0	.240	.125	.037	.236	.123	.036	.227	.120	.036	.218	.117	.035	.210	.114	.035		
5.0	.224	.114	.033	.220	.113	.033	.211	.110	.032	.204	.108	.032	.197	.105	.032		
6.0	.209	.105	.030	.205	.103	.030	.198	.101	.029	.191	.099	.029	.185	.097	.029		
7.0	.195	.096	.027	.192	.095	.027	.185	.094	.027	.179	.092	.027	.173	.090	.026		
8.0	.183	.089	.025	.180	.088	.025	.174	.087	.025	.168	.085	.025	.163	.084	.024		
9.0	.171	.083	.023	.169	.082	.023	.164	.081	.023	.159	.080	.023	.154	.078	.023		
10.0	.162	.077	.022	.159	.077	.021	.154	.076	.021	.150	.075	.021	.146	.073	.021		

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	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	.179	.156	.136	.153	.134	.117	.104	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.170	.132	.100	.146	.114	.087	.100	.079	.060	.058	.046	.035	.018	.015	.012	
3.0	.162	.114	.076	.139	.099	.066	.095	.068	.046	.055	.040	.027	.018	.013	.009	
4.0	.155	.101	.060	.133	.087	.052	.091	.061	.036	.053	.036	.022	.017	.012	.007	
5.0	.147	.090	.048	.127	.078	.042	.087	.055	.030	.051	.032	.018	.016	.010	.006	
6.0	.141	.082	.040	.121	.071	.035	.083	.050	.025	.048	.029	.015	.016	.010	.005	
7.0	.134	.075	.034	.115	.065	.029	.080	.046	.021	.046	.027	.012	.015	.009	.004	
8.0	.128	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.122	.064	.025	.105	.056	.022	.073	.039	.016	.042	.023	.009	.014	.008	.003	
10.0	.116	.060	.023	.100	.052	.020	.069	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295T
 Humidity:65.0%
 Test Distance:9.526m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.7V I:0.1870A P:40.30W PF:0.9960 Lamp Flux:3383.85x1 lm											
NAME: LAFA壁灯 上 3000K						TYPE:			WEIGHT:		
SPEC.:						DIM.:			SERIAL No.:		
MFR.:						SUR.:			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	2H	23.8	25.2	24.0	25.4	25.6	23.6	25.0	23.8	25.2	25.5
	3H	24.9	26.2	25.2	26.5	26.7	24.5	25.9	24.8	26.1	26.3
	4H	25.2	26.5	25.5	26.7	27.0	24.6	25.9	24.9	26.1	26.4
	6H	25.3	26.5	25.6	26.8	27.1	24.6	25.8	24.9	26.1	26.3
	8H	25.3	26.5	25.6	26.7	27.0	24.5	25.7	24.9	26.0	26.3
	12H	25.2	26.4	25.6	26.7	27.0	24.5	25.6	24.8	25.9	26.2
4H	2H	24.2	25.5	24.5	25.8	26.0	24.1	25.4	24.4	25.6	25.9
	3H	25.5	26.6	25.8	26.9	27.2	25.1	26.3	25.5	26.5	26.8
	4H	25.9	26.9	26.2	27.2	27.5	25.3	26.3	25.7	26.6	27.0
	6H	26.0	26.9	26.4	27.3	27.6	25.3	26.2	25.7	26.6	26.9
	8H	26.0	26.9	26.4	27.2	27.6	25.3	26.1	25.7	26.5	26.9
	12H	26.0	26.8	26.4	27.1	27.5	25.2	26.0	25.7	26.4	26.8
8H	4H	25.9	26.7	26.3	27.1	27.5	25.4	26.2	25.8	26.6	27.0
	6H	26.1	26.8	26.5	27.2	27.6	25.4	26.1	25.9	26.5	26.9
	8H	26.1	26.7	26.6	27.2	27.6	25.4	26.0	25.9	26.4	26.9
	12H	26.1	26.6	26.6	27.1	27.6	25.4	25.9	25.9	26.4	26.8
12H	4H	25.9	26.6	26.3	27.0	27.4	25.3	26.1	25.8	26.5	26.9
	6H	26.1	26.7	26.5	27.1	27.5	25.4	26.0	25.9	26.4	26.9
	8H	26.1	26.6	26.6	27.1	27.5	25.4	25.9	25.9	26.4	26.8
Variations with the observer position at spacings:											
S = 1.0H		+ 0.2 / - 0.3					+ 0.3 / - 0.3				
1.5H		+ 0.3 / - 0.4					+ 0.2 / - 0.5				
2.0H		+ 0.5 / - 0.5					+ 0.5 / - 0.5				

CIE Pub.117 Corrected 3384 lm Total Lamp Luminous Flux.(8log(F/F0) = 4.2)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295T
 Humidity:65.0%
 Test Distance:9.526m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.7V I:0.1870A P:40.30W PF:0.9960 Lamp Flux:3383.85x1 lm		
NAME: LAFA壁灯 上 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

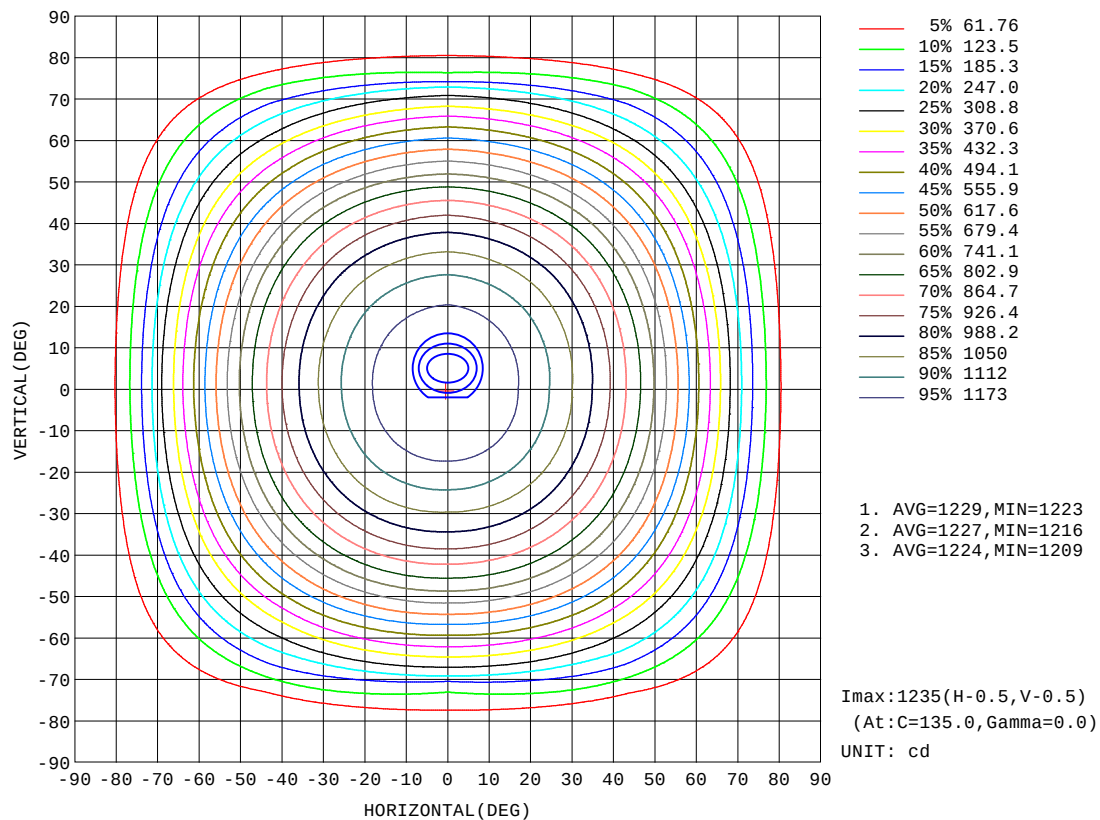
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	61	48	40	60	48	40	57	46	39	32
0.80	71	59	50	70	58	50	66	56	49	41
1.00	79	67	59	77	66	58	73	64	57	49
1.25	86	75	67	84	74	66	80	71	65	56
1.50	91	81	74	89	80	73	85	77	71	62
2.00	98	90	83	96	88	82	91	85	80	71
2.50	102	95	89	99	93	87	95	89	85	75
3.00	105	98	93	102	96	91	97	93	89	79
4.00	108	103	99	105	101	97	101	97	94	84
5.00	110	106	102	108	104	100	103	100	97	87
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Ceiling Mounted					SHRNOM = 1.00		

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
 Humidity:65.0%
 Test Distance:9.526m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.7V I:0.1870A P:40.30W PF:0.9960 Lamp Flux:3383.85x1 lm		
NAME: LAFA壁灯 上 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

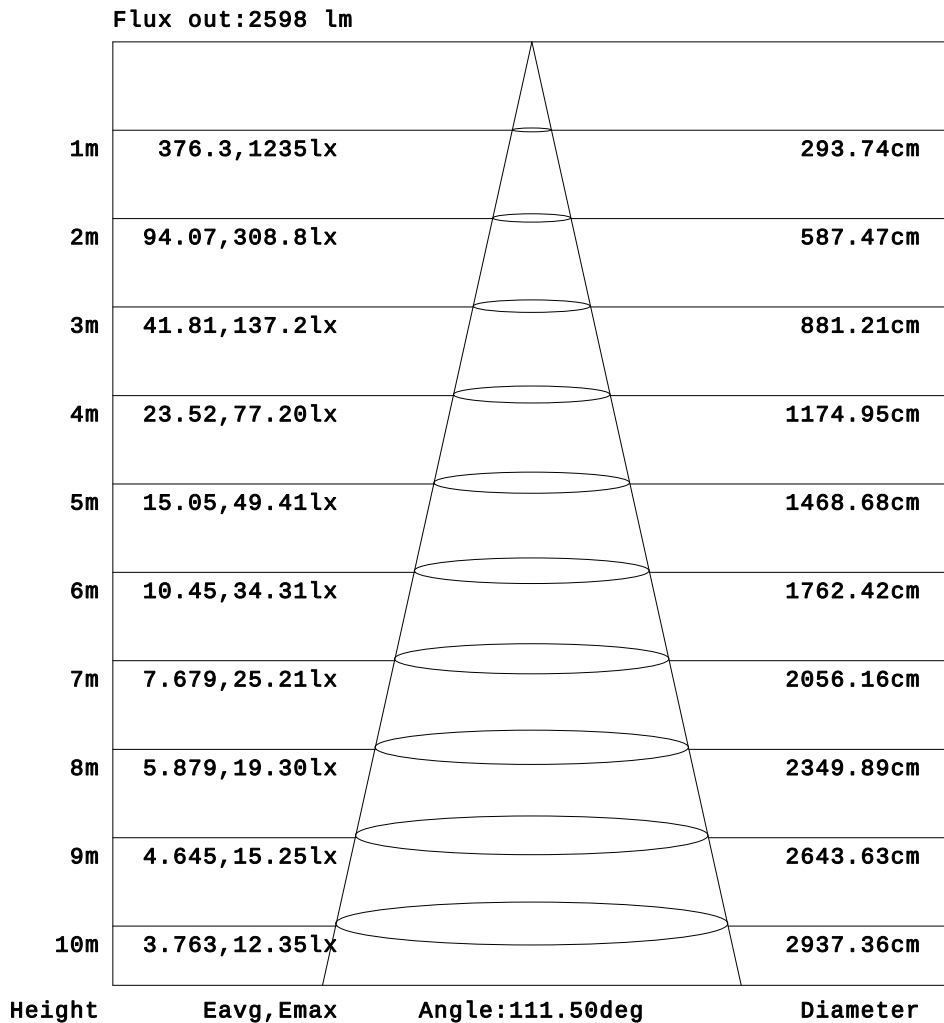


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.526m [K=1.0000]
Remarks:

AAI Figure

Test:U:220.7V I:0.1870A P:40.30W PF:0.9960 Lamp Flux:3383.85x1 lm		
NAME: LAFA壁灯 上 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



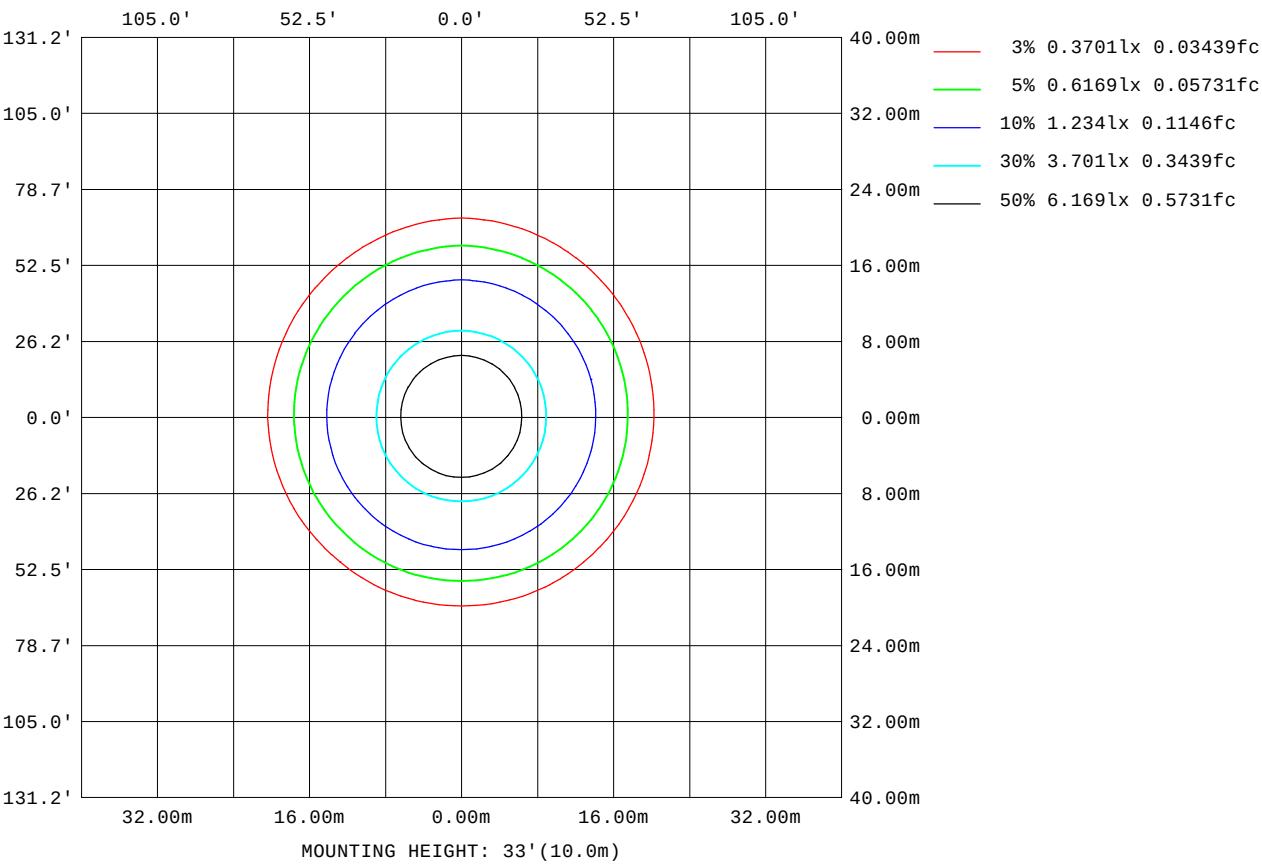
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
 Humidity:65.0%
 Test Distance:9.526m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:220.7V I:0.1870A P:40.30W PF:0.9960 Lamp Flux:3383.85x1 lm		
NAME: LAFA壁灯 上 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.526m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:220.7V I:0.1870A P:40.30W PF:0.9960 Lamp Flux:3383.85x1 lm		
NAME: LAFA壁灯 上 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

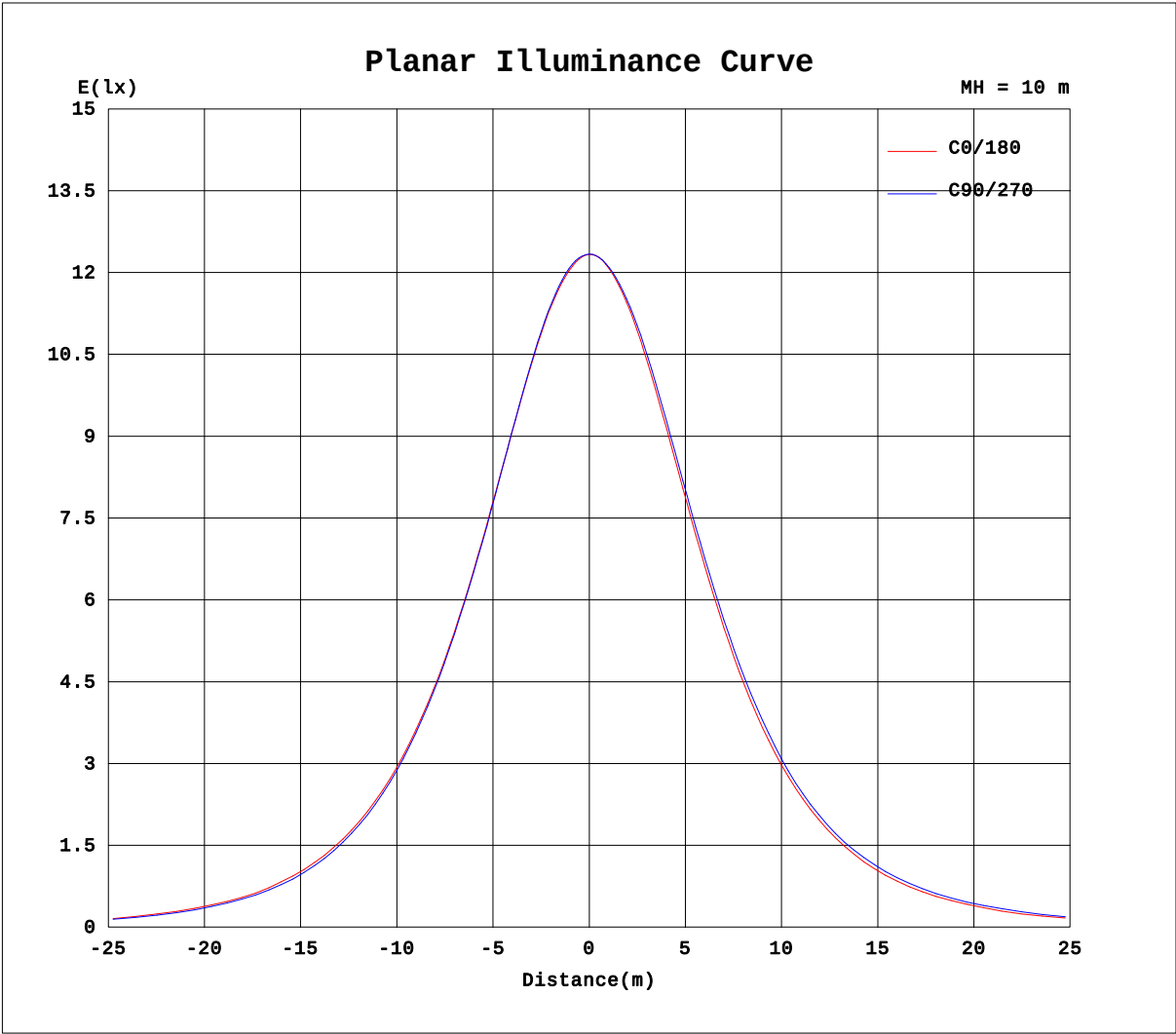
AvgL	cd/m2
L_0~180(65)av	20082
L_0~180(75)av	13238
L_0~180(85)av	3481
L_90~270(65)av	20686
L_90~270(75)av	9957
L_90~270(85)av	3328
L_45(65)av	19908
L_45(75)av	13028
L_45(85)av	3489

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.526m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.526m [K=1.0000]
Remarks: