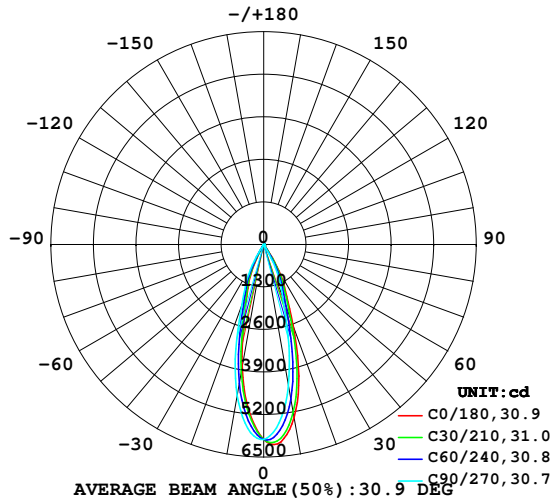


LUMINAIRE PHOTOMETRIC TEST REPORT

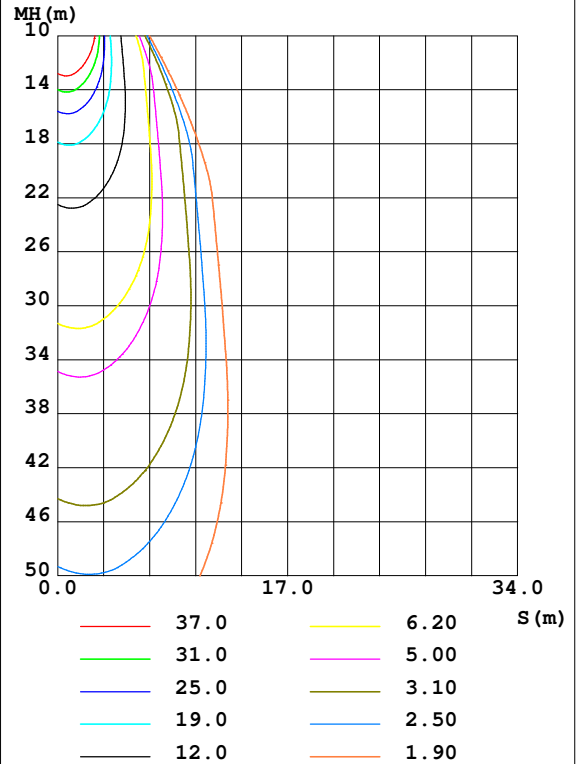
Test:U:230.63V I:0.1109A P:24.087W PF:0.9421 Freq:50.01Hz Lamp Flux:2022.74x1 lm					
NAME: RLP		TYPE:LED		WEIGHT:1 kg	
SPEC.:25W		DIM.: Ø:70 , H:267mm		SERIAL No.:	
MFR.: LITPA AYDINLATMA		SUR.:		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 83.98 lm/W
MODEL	RLP	Imax (cd)	6124	S/MH (C0/180)	0.43	
NOMINAL POWER (W)	25	LOR (%)	100.0	S/MH (C90/270)	0.54	
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	2022.7	η UP, DN (C0-180)	0.0, 49.0	
NOMINAL FLUX (lm)	2022.74	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 51.0	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50	
TEST VOLTAGE (V)	220	η down (%)	100.0	CIBSE SHR MAX	0.50	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 20DEG
 Operators: LITPA
 Test Date: 18/05/2021

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.400
 Humidity: 65.0%
 Test Distance: 7.200m [K=1.0000]
 Remarks: RLP-25W

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	5369	5015	4385	3960	3799	4119	4690	5125	0- 10	499.1	499.1	24.7,24.7
20	2637	2223	1708	1495	1414	1592	1969	2379	10- 20	862.6	1362	67.3,67.3
30	946.3	699.7	348.9	180.0	136.3	266.2	582.6	846.5	20- 30	528.2	1890	93.4,93.4
40	51.69	39.27	35.93	26.20	31.10	28.44	37.22	43.96	30- 40	95.31	1985	98.1,98.1
50	25.03	22.10	20.52	16.81	17.03	18.46	23.03	22.12	40- 50	20.07	2005	99.1,99.1
60	11.11	8.937	6.394	4.691	4.542	5.307	8.157	9.638	50- 60	12.22	2018	99.7,99.7
70	3.217	2.703	1.925	1.286	1.317	1.650	2.588	2.780	60- 70	4.057	2022	99.9,99.9
80	0.5513	0.4020	0.2178	0.1352	0.1203	0.1910	0.3423	0.4469	70- 80	1.049	2023	100,100
90	0.0142	0	0	0	0	0	0	0	80- 90	0.1136	2023	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): 1996.1 lm

%lum = 98.7%

%lamp = 98.7%

Conical surface Flux(120deg): 2017.5 lm

%lum = 99.7%

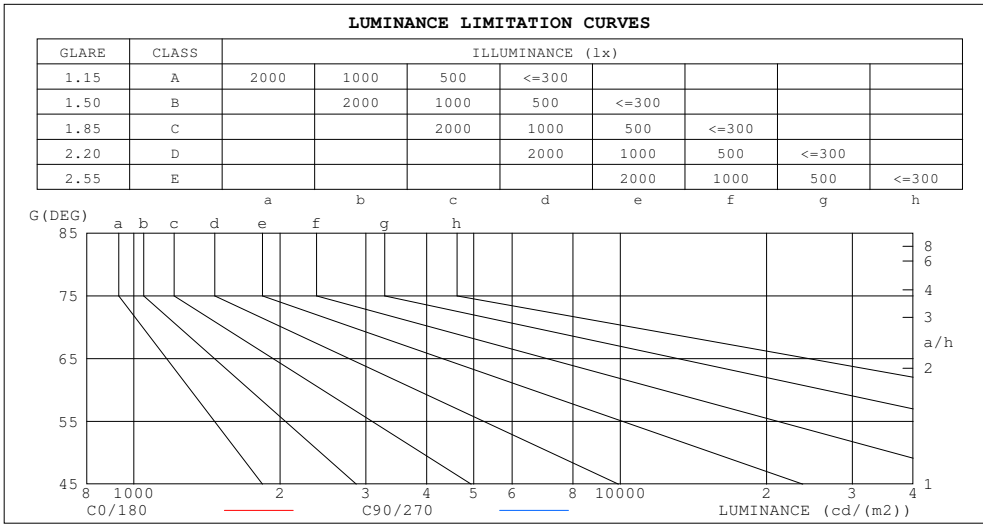
%lamp = 99.7%

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:20DEG
 Operators:LITPA
 Test Date:18/05/2021

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
 Humidity:65.0%
 Test Distance:7.200m [K=1.0000]
 Remarks: RLP-25W

LUMINANCE LIMITATION CURVES

Test:U:230.63V I:0.1109A P:24.087W PF:0.9421 Freq:50.01Hz Lamp Flux:2022.74x1 lm		
NAME: RLP	TYPE:LED	WEIGHT:1 kg
SPEC.:25W	DIM.: Ø:70 , H:267mm	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	Shielding Angle:



LUMINANCE cd/(m²)		
G (DEG)	C0/180	C90/270
85	28	0
80	32	12
75	70	20
70	96	56
65	135	80
60	227	127
55	337	223
50	397	318
45	460	371

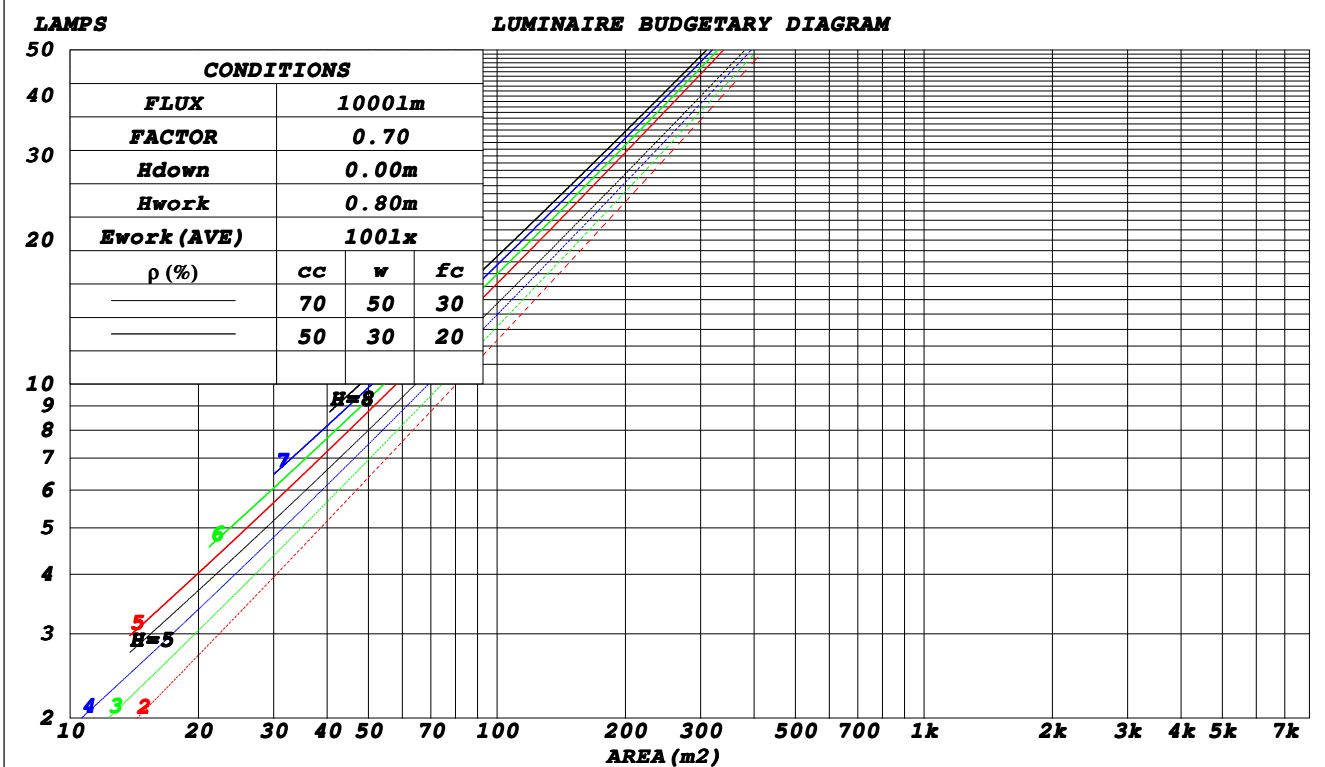
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 20DEG
Operators: LITPA
Test Date: 18/05/2021

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity: 65.0%
Test Distance: 7.200m [K=1.0000]
Remarks: RLP-25W

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.63V I:0.1109A P:24.087W PF:0.9421 Freq:50.01Hz Lamp Flux:2022.74x1 lm		
NAME: RLP	TYPE:LED	WEIGHT:1 kg
SPEC.:25W	DIM.: Ø:70 , H:267mm	SERIAL No.:
MFR.: LITPA AYDINLATMA	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	1.00
1.0	1.12	1.10	1.08	1.10	1.08	1.07	1.06	1.05	1.03	1.03	1.01	1.00	.99	.98	.97	.96
2.0	1.06	1.03	1.00	1.05	1.02	.99	1.02	.99	.97	.99	.97	.95	.96	.94	.93	.92
3.0	1.01	.97	.94	.90	.96	.93	.97	.94	.92	.95	.93	.90	.93	.91	.89	.88
4.0	.96	.92	.89	.95	.91	.88	.93	.90	.87	.92	.89	.86	.90	.87	.85	.84
5.0	.92	.88	.84	.91	.87	.84	.90	.86	.83	.88	.85	.83	.87	.84	.82	.81
6.0	.88	.84	.80	.88	.83	.80	.86	.83	.80	.85	.82	.79	.84	.81	.79	.77
7.0	.85	.80	.77	.84	.80	.77	.83	.79	.76	.82	.79	.76	.81	.78	.76	.75
8.0	.82	.77	.74	.81	.77	.74	.80	.76	.73	.79	.76	.73	.78	.75	.73	.72
9.0	.79	.74	.71	.78	.74	.71	.77	.73	.71	.77	.73	.70	.76	.73	.70	.69
10.0	.76	.71	.68	.76	.71	.68	.75	.71	.68	.74	.71	.68	.74	.70	.68	.67



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 20DEG
Operators: LITPA
Test Date: 18/05/2021

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity: 65.0%
Test Distance: 7.200m [K=1.0000]
Remarks: RLP-25W

WEC AND CCEC

Test:U:230.63V I:0.1109A P:24.087W PF:0.9421 Freq:50.01Hz Lamp Flux:2022.74x1 lm		
NAME: RLP	TYPE:LED	WEIGHT:1 kg
SPEC.:25W	DIM.: Ø:70 , H:267mm	SERIAL No.:
MFR.: LITPA AYDINLATMA	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	.148	.084	.027	.141	.081	.026	.129	.074	.024	.118	.068	.022	.107	.062	.020		
2.0	.139	.076	.023	.133	.073	.023	.123	.068	.021	.113	.064	.020	.105	.059	.019		
3.0	.130	.069	.021	.126	.067	.020	.117	.063	.019	.109	.060	.018	.102	.056	.017		
4.0	.123	.064	.019	.119	.062	.018	.112	.059	.018	.105	.056	.017	.098	.054	.016		
5.0	.116	.059	.017	.113	.058	.017	.107	.056	.016	.101	.053	.016	.095	.051	.015		
6.0	.111	.055	.016	.108	.054	.016	.102	.052	.015	.097	.051	.015	.092	.049	.014		
7.0	.106	.052	.015	.103	.051	.015	.098	.050	.014	.094	.048	.014	.090	.047	.014		
8.0	.101	.049	.014	.099	.049	.014	.094	.047	.013	.090	.046	.013	.087	.045	.013		
9.0	.097	.047	.013	.095	.046	.013	.091	.045	.013	.087	.044	.013	.084	.043	.012		
10.0	.093	.045	.012	.091	.044	.012	.088	.043	.012	.085	.042	.012	.082	.041	.012		

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	.169	.158	.147	.145	.135	.127	.099	.093	.088	.057	.054	.051	.018	.017	.016	
2.0	.152	.133	.117	.130	.114	.101	.089	.079	.070	.051	.046	.041	.016	.015	.013	
3.0	.138	.113	.094	.118	.098	.082	.081	.068	.057	.047	.040	.034	.015	.013	.011	
4.0	.126	.098	.077	.108	.085	.067	.074	.059	.047	.043	.035	.028	.014	.011	.009	
5.0	.116	.086	.064	.099	.074	.056	.068	.052	.039	.040	.031	.023	.013	.010	.008	
6.0	.107	.076	.054	.092	.066	.047	.064	.046	.033	.037	.027	.020	.012	.009	.007	
7.0	.100	.068	.046	.086	.059	.040	.060	.042	.028	.035	.024	.017	.011	.008	.006	
8.0	.094	.062	.040	.081	.054	.034	.056	.038	.024	.033	.022	.015	.011	.007	.005	
9.0	.089	.056	.034	.076	.049	.030	.053	.034	.021	.031	.020	.013	.010	.007	.004	
10.0	.084	.052	.030	.072	.045	.026	.050	.032	.019	.029	.019	.011	.009	.006	.004	

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 20DEG
Operators: LITPA
Test Date: 18/05/2021

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity: 65.0%
Test Distance: 7.200m [K=1.0000]
Remarks: RLP-25W

UGR(Unified Glare Rating) Table

Test:U:230.63V I:0.1109A P:24.087W PF:0.9421 Freq:50.01Hz Lamp Flux:2022.74x1 lm										
NAME: RLP					TYPE:LED			WEIGHT:1 kg		
SPEC.:25W					DIM.: Ø:70 , H:267mm			SERIAL No.:		
MFR.: LITPA AYDINLATMA					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	5.7	6.4	5.9	6.5	6.7	-0.9	-0.1	-0.7	0.0	0.2
3H	5.5	6.2	5.8	6.4	6.6	-0.9	-0.2	-0.7	-0.1	0.1
4H	5.5	6.1	5.7	6.3	6.5	-1.0	-0.3	-0.7	-0.1	0.1
6H	5.4	6.0	5.7	6.2	6.5	-1.1	-0.5	-0.8	-0.2	0.0
8H	5.4	5.9	5.6	6.2	6.4	-1.1	-0.5	-0.8	-0.3	-0.0
12H	5.3	5.9	5.6	6.1	6.4	-1.2	-0.6	-0.9	-0.3	-0.1
4H 2H	5.5	6.1	5.7	6.3	6.5	-0.9	-0.2	-0.6	-0.0	0.2
3H	5.3	5.9	5.6	6.2	6.4	-0.9	-0.3	-0.6	-0.1	0.2
4H	5.3	5.8	5.6	6.1	6.4	-1.0	-0.5	-0.6	-0.2	0.1
6H	5.2	5.6	5.5	5.9	6.3	-1.1	-0.6	-0.7	-0.3	0.0
8H	5.1	5.5	5.5	5.9	6.2	-1.1	-0.7	-0.7	-0.4	0.0
12H	5.1	5.4	5.5	5.8	6.2	-1.2	-0.8	-0.8	-0.4	-0.0
8H 4H	5.1	5.5	5.5	5.9	6.2	-1.1	-0.7	-0.7	-0.3	0.0
6H	5.0	5.4	5.4	5.7	6.2	-1.2	-0.9	-0.8	-0.5	-0.0
8H	4.9	5.3	5.4	5.7	6.1	-1.3	-0.9	-0.8	-0.5	-0.1
12H	4.9	5.2	5.4	5.6	6.1	-1.3	-1.1	-0.9	-0.6	-0.1
12H 4H	5.1	5.4	5.5	5.8	6.2	-1.2	-0.8	-0.8	-0.4	-0.0
6H	4.9	5.3	5.4	5.7	6.1	-1.3	-0.9	-0.8	-0.5	-0.1
8H	4.9	5.2	5.4	5.6	6.1	-1.3	-1.0	-0.8	-0.6	-0.1
Variations with the observer position at spacings:										
S = 1.0H	+ 3.4 / - 2.4					+ 1.6 / - 2.1				
1.5H	+ 4.8 / - 2.3					+ 1.4 / - 0.8				
2.0H	+ 1.9 / - 3.7					+ 2.0 / - 4.0				

CIE Pub.117, 2023 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 2.4$)

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 20DEG
 Operators: LITPA
 Test Date: 18/05/2021

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.400
 Humidity: 65.0%
 Test Distance: 7.200m [K=1.0000]
 Remarks: RLP-25W

UTILIZATION FACTORS TABLE

Test:U:230.63V I:0.1109A P:24.087W PF:0.9421 Freq:50.01Hz Lamp Flux:2022.74x1 lm		
NAME: RLP	TYPE:LED	WEIGHT:1 kg
SPEC.:25W	DIM.: Ø:70 , H:267mm	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	Shielding Angle:

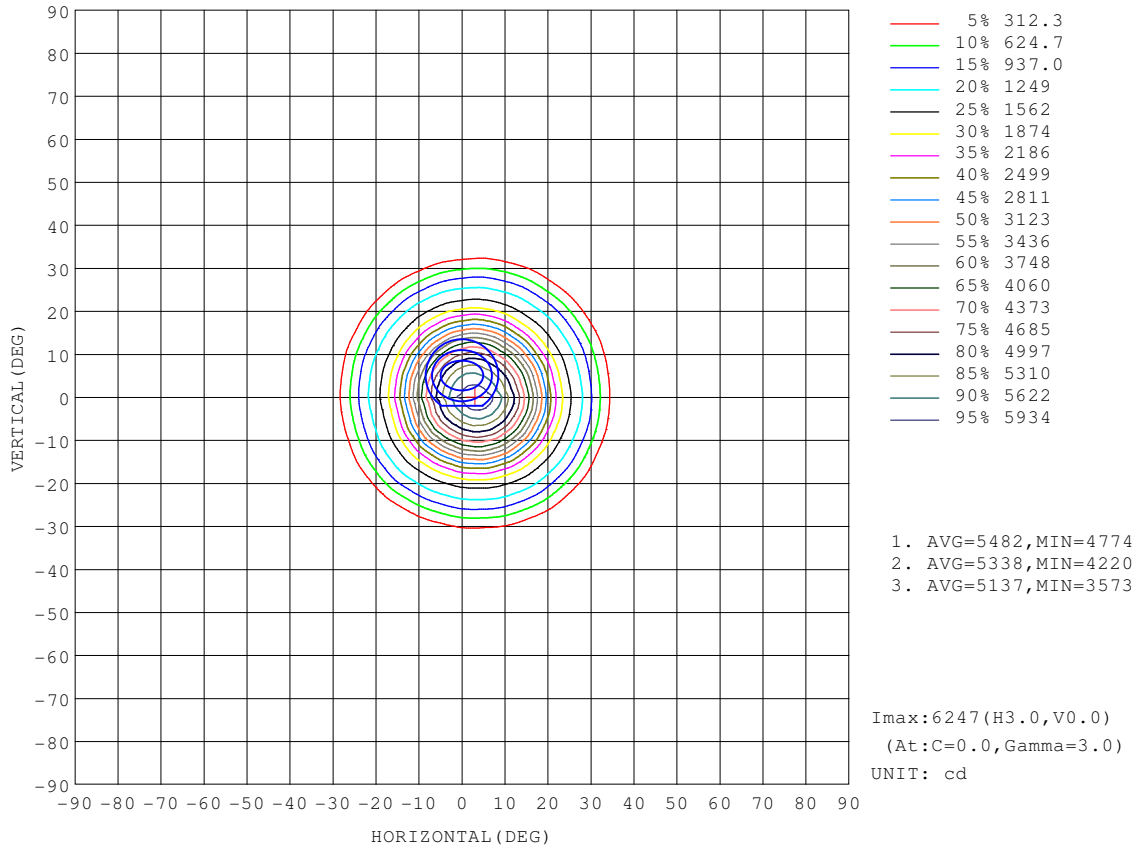
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	90	85	81	90	84	81	89	84	81	78
0.80	97	92	89	97	92	89	96	91	88	85
1.00	101	96	93	100	96	93	99	95	92	88
1.25	105	100	97	104	100	97	102	98	96	92
1.50	107	103	100	106	102	100	104	101	98	94
2.00	110	106	103	108	105	102	106	103	101	96
2.50	111	108	105	110	106	104	107	104	102	96
3.00	113	109	107	111	108	106	107	105	104	97
4.00	114	112	110	112	110	109	109	107	106	99
5.00	116	114	112	113	112	110	110	108	107	100
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 20DEG
 Operators: LITPA
 Test Date: 18/05/2021

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.400
 Humidity: 65.0%
 Test Distance: 7.200m [K=1.0000]
 Remarks: RLP-25W

ISOCANDELA DIAGRAM

Test:U:230.63V I:0.1109A P:24.087W PF:0.9421 Freq:50.01Hz Lamp Flux:2022.74x1 lm		
NAME: RLP	TYPE:LED	WEIGHT:1 kg
SPEC.:25W	DIM.: Ø:70 , H:267mm	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	Shielding Angle:

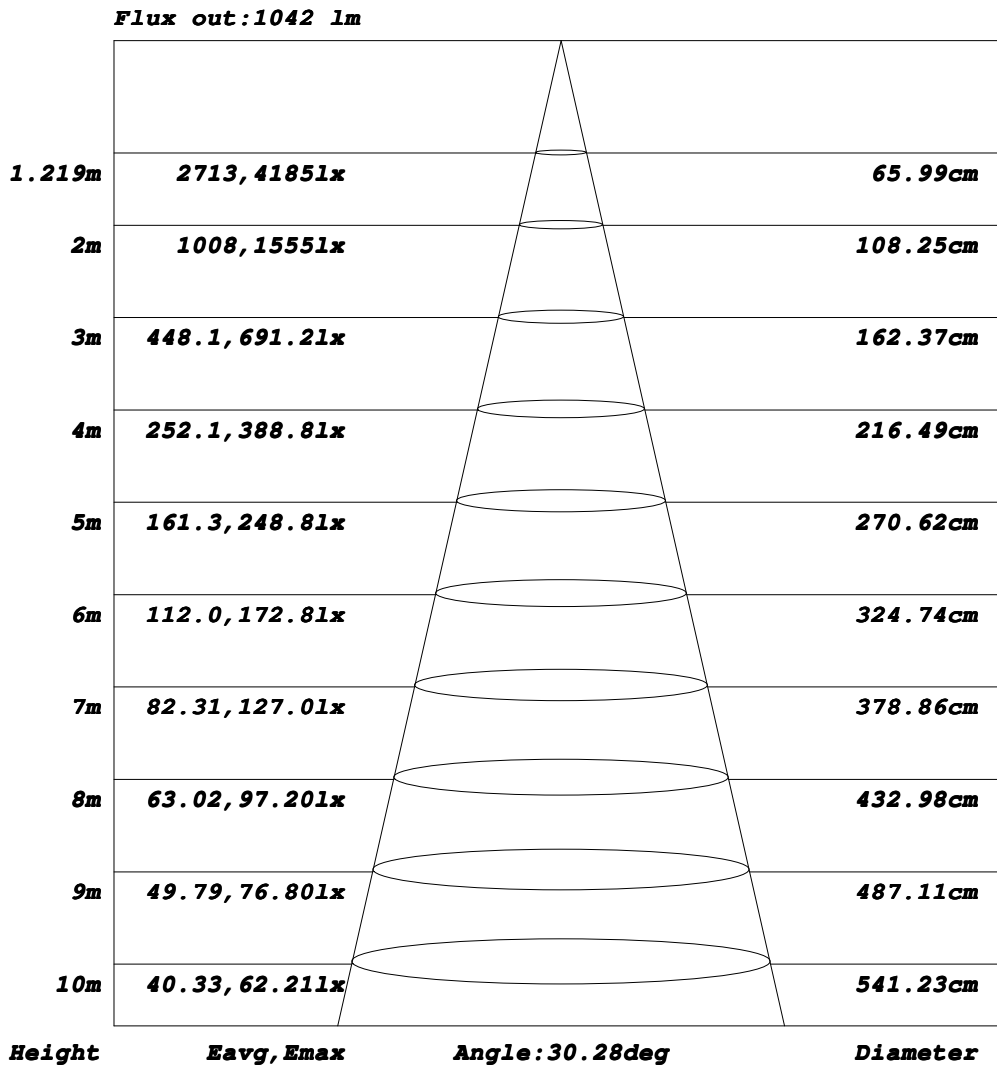


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:LITPA
Test Date:18/05/2021

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:7.200m [K=1.0000]
Remarks: RLP-25W

AAI Figure

Test:U:230.63V I:0.1109A P:24.087W PF:0.9421 Freq:50.01Hz Lamp Flux:2022.74x1 lm		
NAME: RLP	TYPE:LED	WEIGHT:1 kg
SPEC.:25W	DIM.: Ø:70 , H:267mm	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	Shielding Angle:



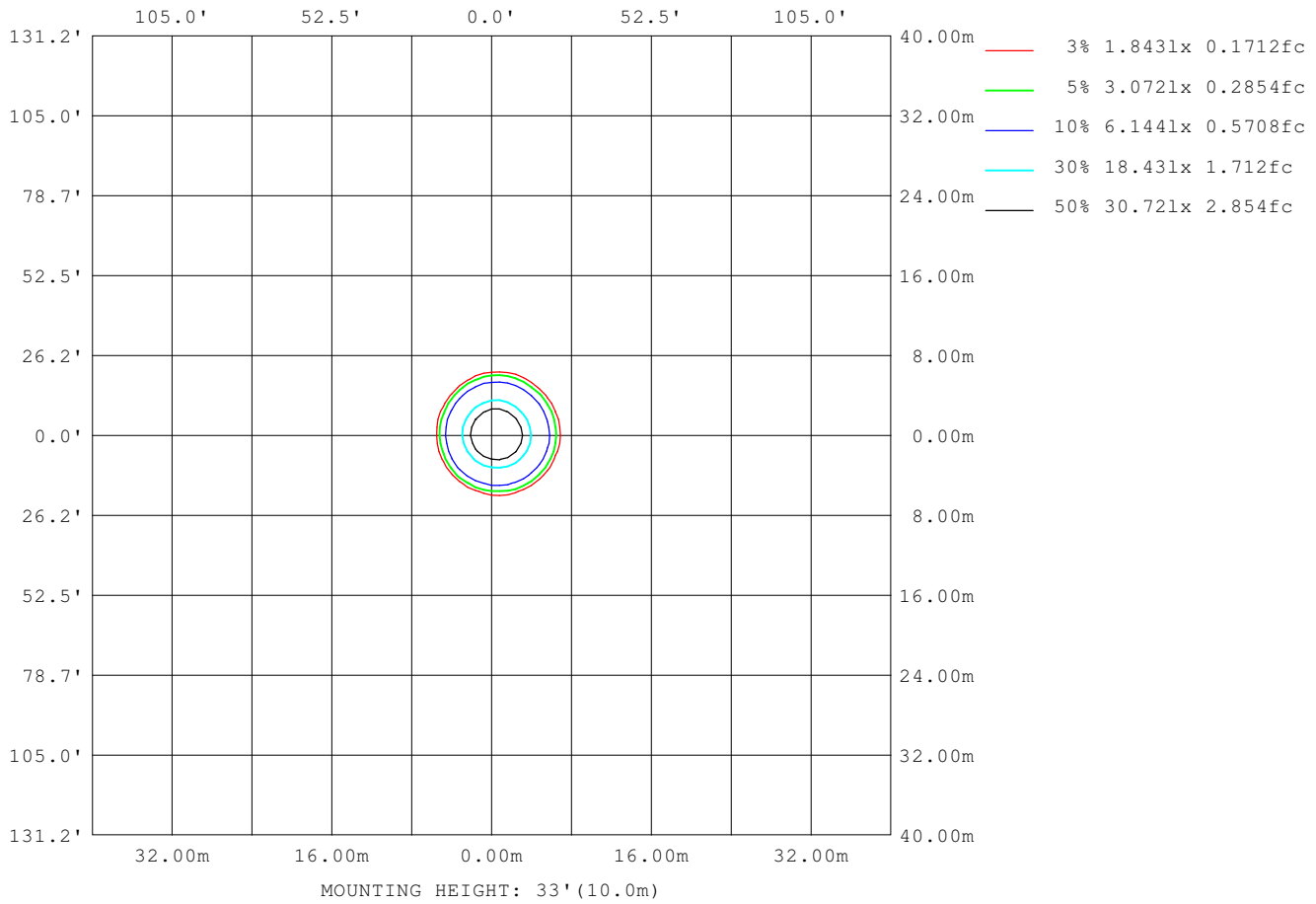
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:LITPA
Test Date:18/05/2021

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:7.200m [K=1.0000]
Remarks: RLP-25W

ISOLUX DIAGRAM

Test:U:230.63V I:0.1109A P:24.087W PF:0.9421 Freq:50.01Hz Lamp Flux:2022.74x1 lm		
NAME: RLP	TYPE:LED	WEIGHT:1 kg
SPEC.:25W	DIM.: Ø:70 , H:267mm	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 20DEG
Operators: LITPA
Test Date: 18/05/2021

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity: 65.0%
Test Distance: 7.200m [K=1.0000]
Remarks: RLP-25W

LED Avg.L Report

Test:U:230.63V I:0.1109A P:24.087W PF:0.9421 Freq:50.01Hz Lamp Flux:2022.74x1 lm		
NAME: RLP	TYPE:LED	WEIGHT:1 kg
SPEC.:25W	DIM.: Ø:70 , H:267mm	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	Shielding Angle:

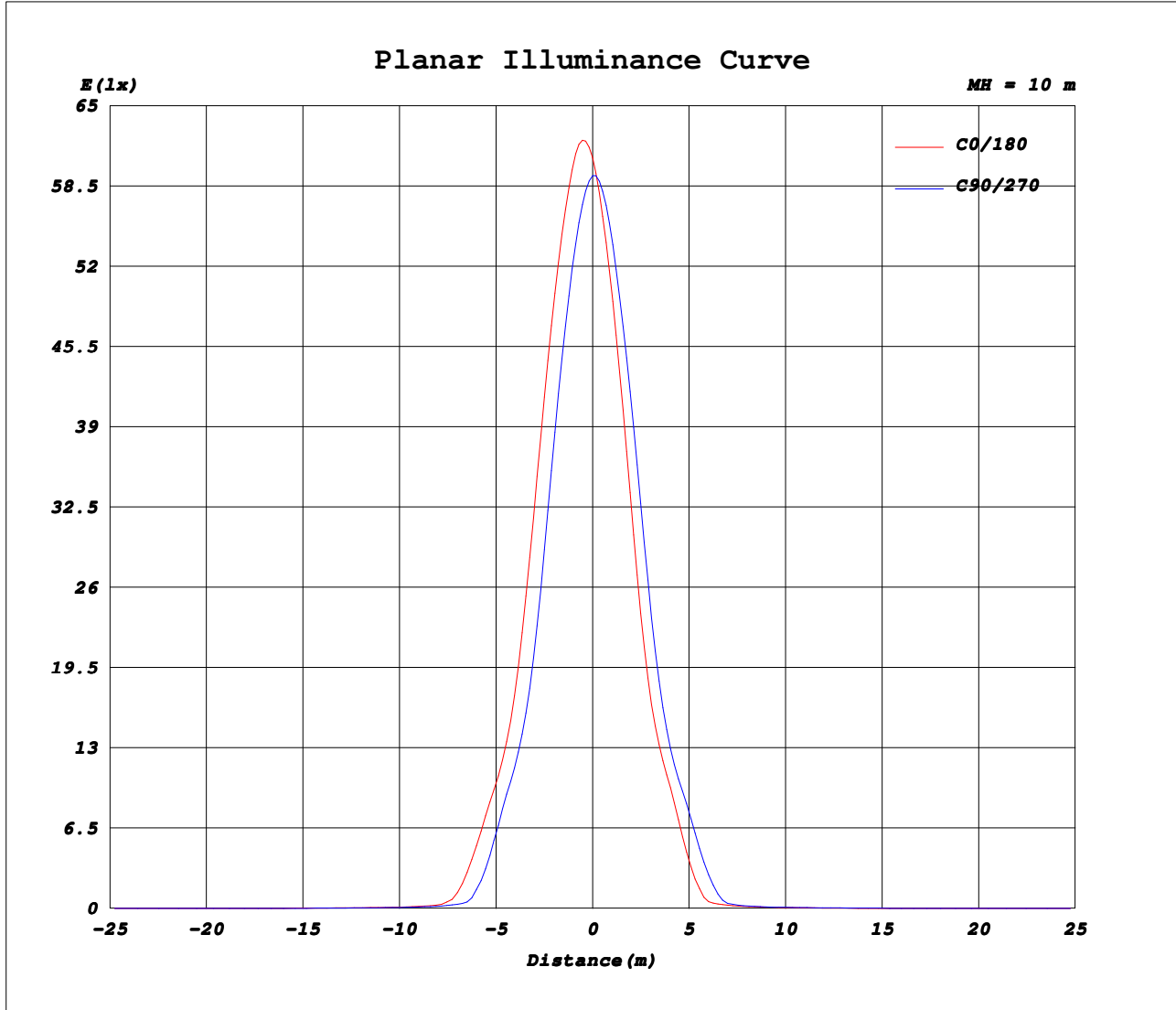
AvgL	cd/m2
L_0~180 (65) av	98
L_0~180 (75) av	42
L_0~180 (85) av	14
L_90~270 (65) av	90
L_90~270 (75) av	30
L_90~270 (85) av	6
L_45 (65) av	88
L_45 (75) av	34
L_45 (85) av	9

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:LITPA
Test Date:18/05/2021

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:7.200m [K=1.0000]
Remarks: RLP-25W

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 20DEG
Operators: LITPA
Test Date: 18/05/2021

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity: 65.0%
Test Distance: 7.200m [K=1.0000]
Remarks: RLP-25W

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.63V I:0.1109A P:24.087W PF:0.9421 Freq:50.01Hz Lamp Flux:2022.74x1 lm		
NAME: RLP	TYPE:LED	WEIGHT:1 kg
SPEC.:25W	DIM.: Ø:70 , H:267mm	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	Shielding Angle:

Table--1

UNIT: cd

[illegible]

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 20DEG
Operators: LITPA
Test Date: 18/05/2021

```

Range: 0 - 90DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:7.200m [K=1.0000]
Remarks: RLP-25W

```

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.63V I:0.1109A P:24.087W PF:0.9421 Freq:50.01Hz Lamp Flux:2022.74x1 lm		
NAME: RLP	TYPE:LED	WEIGHT:1 kg
SPEC.:25W	DIM.: Ø:70 , H:267mm	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	Shielding Angle:

Table--2

UNIT: cd

[illegible]

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 20DEG
Operators: LITPA
Test Date: 18/05/2021

```

Range: 0 - 90DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:7.200m [K=1.0000]
Remarks: RLP-25W

```