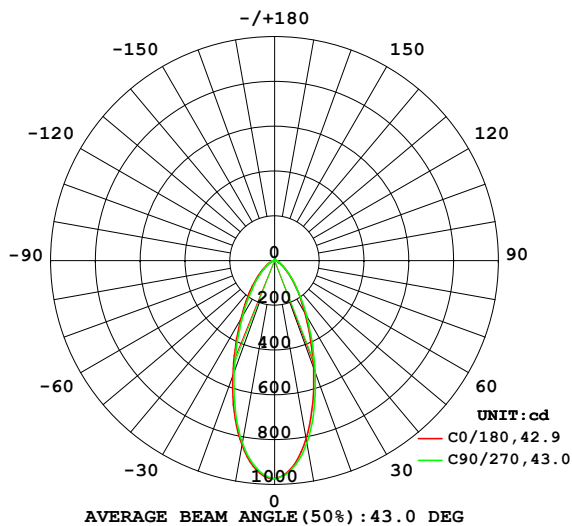


## LUMINAIRE PHOTOMETRIC TEST REPORT

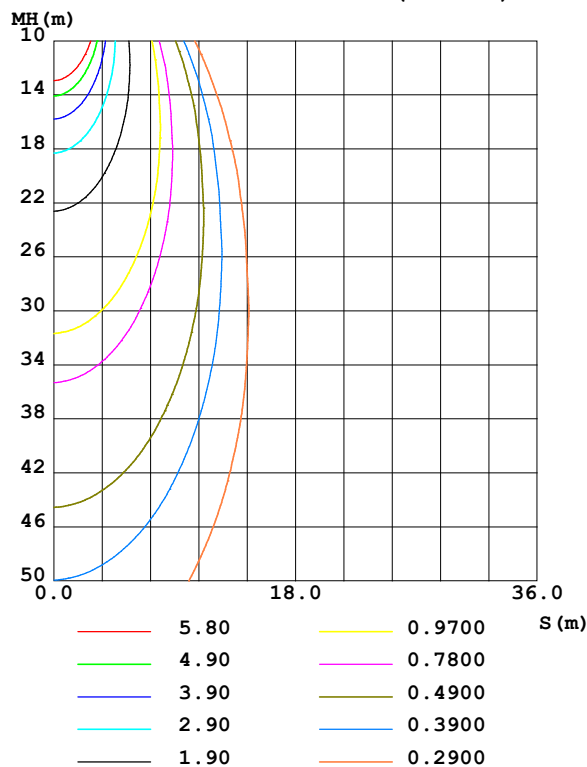
Test:U:120.02V I:0.0749A P:8.7597W PF:0.9747 Freq:60.60Hz Lamp Flux:771.849x1 lm		
NAME: DL04-148 9W 35K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 88.11 lm/W
MODEL	3500K	I <sub>max</sub> (cd)	974.1	S/MH (C0/180)	0.69	
NOMINAL POWER (W)	9	LOR (%)	100.0	S/MH (C90/270)	0.68	
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	771.85	η UP, DN (C0-180)	1.3, 47.5	
NOMINAL FLUX (lm)	771.849	CIE CLASS	DIRECT	η UP, DN (C180-360)	1.3, 49.9	
LAMPS INSIDE	1	η up (%)	2.6	CIBSE SHR NOM	0.75	
TEST VOLTAGE (V)	120	η down (%)	97.4	CIBSE SHR MAX	0.75	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 180DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3 °C  
Operators: DAMIN  
Test Date: 22 April 2024

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.471  
Humidity: 65.0%  
Test Distance: 7.382m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C90	C180	C270					$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	809.4	828.5	837.2	828.5					0- 10	85.50	85.50	11.1,11.1
20	510.0	530.7	546.6	530.7					10- 20	188.3	273.8	35.5,35.5
30	273.1	287.3	303.7	287.3					20- 30	181.0	454.8	58.9,58.9
40	141.8	145.1	164.3	145.1					30- 40	131.3	586.1	75.9,75.9
50	67.85	70.72	80.59	70.72					40- 50	81.75	667.8	86.5,86.5
60	31.50	33.80	37.79	33.80					50- 60	45.41	713.2	92.4,92.4
70	14.79	16.36	18.09	16.36					60- 70	23.94	737.2	95.5,95.5
80	3.800	6.491	4.903	6.491					70- 80	11.07	748.2	96.9,96.9
90	1.692	2.275	1.658	2.275					80- 90	3.443	751.7	97.4,97.4
100	1.989	2.075	1.915	2.075					90-100	2.117	753.8	97.7,97.7
110	2.501	2.480	2.412	2.480					100-110	2.339	756.1	98,98
120	3.161	3.137	3.057	3.137					110-120	2.761	758.9	98.3,98.3
130	3.840	3.901	3.740	3.901					120-130	3.121	762.0	98.7,98.7
140	4.342	4.361	4.286	4.361					130-140	3.165	765.2	99.1,99.1
150	4.598	4.598	4.554	4.598					140-150	2.815	768.0	99.5,99.5
160	4.587	4.639	4.558	4.639					150-160	2.137	770.1	99.8,99.8
170	4.420	4.431	4.387	4.431					160-170	1.285	771.4	99.9,99.9
180	4.361	4.357	4.346	4.357					170-180	0.4180	771.8	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 632.51 lm

%lum = 81.9%

%lamp = 81.9%

Conical surface Flux(120deg): 713.24 lm

%lum = 92.4%

%lamp = 92.4%

C Range: 0 - 180DEG

C Interval: 90.0DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:DAMIN

Test Date:22 April 2024

 $\gamma$  Range: 0 - 180DEG $\gamma$  Interval: 1.0DEG

Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.471

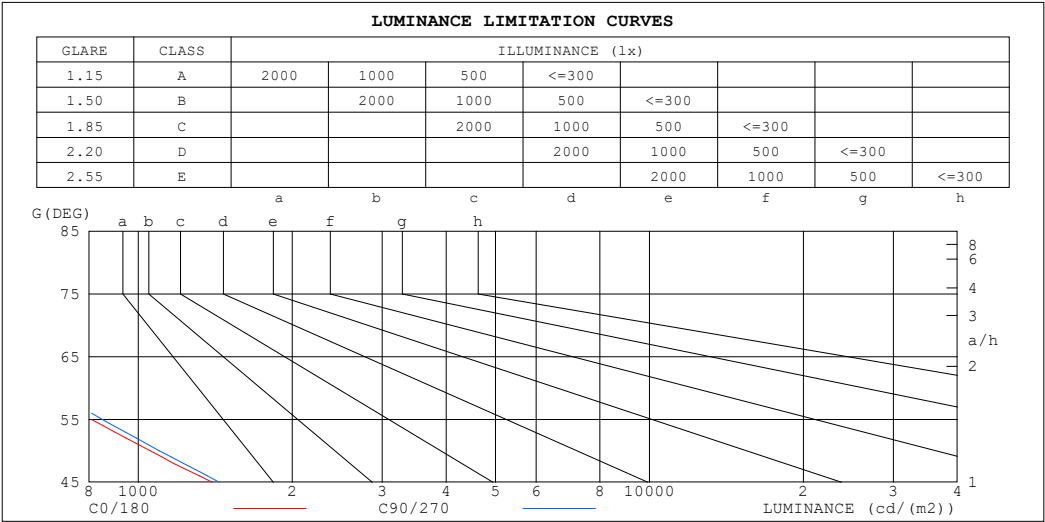
Humidity:65.0%

Test Distance:7.382m [K=1.0000]

Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.02V I:0.0749A P:8.7597W PF:0.9747 Freq:60.60Hz Lamp Flux:771.849x1 lm		
NAME: DL04-148 9W 35K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	271	322
80	219	374
75	319	440
70	433	478
65	510	556
60	630	676
55	810	850
50	1056	1100
45	1395	1440

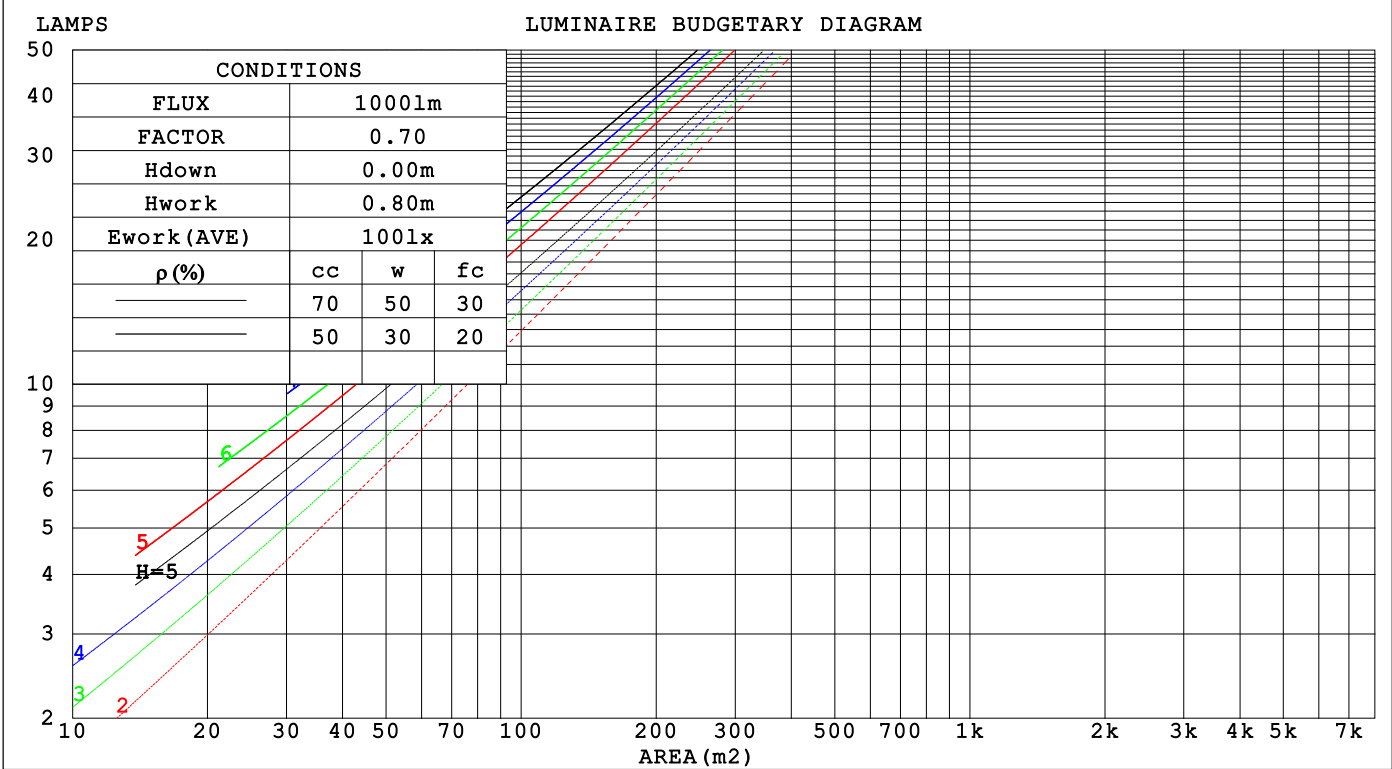
C Range: 0 - 180DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:DAMIN  
Test Date:22 April 2024

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.471  
Humidity:65.0%  
Test Distance:7.382m [K=1.0000]  
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.02V I:0.0749A P:8.7597W PF:0.9747 Freq:60.60Hz		
Lamp Flux:771.849x1 lm		
NAME: DL04-148 9W 35K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
p <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
p <sub>fc</sub>	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															



C Range: 0 - 180DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:DAMIN  
Test Date:22 April 2024

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.471  
Humidity:65.0%  
Test Distance:7.382m [K=1.0000]  
Remarks:

## WEC AND CCEC

Test:U:120.02V I:0.0749A P:8.7597W PF:0.9747 Freq:60.60Hz Lamp Flux:771.849x1 lm		
NAME: DL04-148 9W 35K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	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	.209	.119	.038	.201	.115	.036	.187	.107	.034	.174	.100	.032	.162	.094	.030		
2.0	.199	.109	.033	.192	.106	.033	.180	.100	.031	.169	.095	.030	.158	.090	.028		
3.0	.188	.100	.030	.182	.098	.029	.171	.093	.028	.162	.089	.027	.152	.084	.026		
4.0	.177	.092	.027	.172	.090	.027	.163	.086	.026	.154	.083	.025	.146	.079	.024		
5.0	.167	.085	.025	.163	.083	.024	.154	.080	.024	.147	.077	.023	.139	.075	.022		
6.0	.158	.079	.023	.154	.078	.022	.146	.075	.022	.140	.073	.021	.133	.070	.021		
7.0	.149	.074	.021	.146	.073	.021	.139	.070	.020	.133	.068	.020	.127	.066	.019		
8.0	.142	.069	.019	.138	.068	.019	.133	.066	.019	.127	.064	.019	.122	.063	.018		
9.0	.135	.065	.018	.132	.064	.018	.126	.062	.018	.121	.061	.017	.117	.059	.017		
10.0	.128	.061	.017	.126	.061	.017	.121	.059	.017	.116	.058	.016	.112	.056	.016		

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	.210	.210	.210	.180	.180	.180	.123	.123	.123	.070	.070	.070	.023	.023	.023		
1.0	.193	.177	.162	.165	.152	.140	.113	.105	.097	.065	.061	.056	.021	.019	.018		
2.0	.180	.153	.129	.154	.131	.112	.106	.091	.078	.061	.053	.046	.020	.017	.015		
3.0	.169	.134	.106	.145	.116	.092	.099	.080	.065	.057	.047	.038	.018	.015	.012		
4.0	.159	.120	.089	.137	.103	.078	.094	.072	.055	.054	.042	.032	.018	.014	.011		
5.0	.151	.109	.077	.130	.094	.067	.089	.066	.047	.052	.039	.028	.017	.013	.009		
6.0	.144	.100	.068	.124	.086	.059	.085	.060	.042	.049	.035	.025	.016	.012	.008		
7.0	.137	.092	.061	.118	.080	.053	.082	.056	.037	.047	.033	.022	.015	.011	.007		
8.0	.131	.086	.055	.113	.075	.048	.078	.052	.034	.046	.031	.020	.015	.010	.007		
9.0	.126	.081	.051	.109	.070	.044	.075	.049	.031	.044	.029	.019	.014	.010	.006		
10.0	.121	.077	.047	.104	.067	.041	.072	.047	.029	.042	.028	.017	.014	.009	.006		

C Range: 0 - 180DEG

C Interval: 90.0DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:DAMIN

Test Date:22 April 2024

 $\gamma$  Range: 0 - 180DEG $\gamma$  Interval: 1.0DEG

Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.471

Humidity:65.0%

Test Distance:7.382m [K=1.0000]

Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.02V I:0.0749A P:8.7597W PF:0.9747 Freq:60.60Hz Lamp Flux:771.849x1 lm										
NAME: DL04-148 9W 35K					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.: 1		
MFR.: EVERFINE					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	10.6	11.7	10.9	11.9	12.1	10.8	11.9	11.1	12.1	12.3
3H	11.0	12.0	11.3	12.2	12.5	11.2	12.2	11.5	12.5	12.7
4H	11.1	12.0	11.4	12.3	12.6	11.4	12.3	11.7	12.6	12.9
6H	11.1	12.0	11.5	12.3	12.6	11.5	12.4	11.9	12.7	13.0
8H	11.1	11.9	11.5	12.2	12.6	11.6	12.4	11.9	12.7	13.0
12H	11.1	11.9	11.5	12.2	12.5	11.6	12.4	11.9	12.7	13.0
4H 2H	10.7	11.7	11.1	11.9	12.2	10.9	11.8	11.2	12.1	12.4
3H	11.3	12.1	11.6	12.4	12.7	11.5	12.3	11.8	12.6	12.9
4H	11.4	12.2	11.8	12.5	12.9	11.7	12.5	12.1	12.8	13.2
6H	11.5	12.1	11.9	12.5	12.9	11.9	12.6	12.4	13.0	13.4
8H	11.5	12.1	11.9	12.5	12.9	12.0	12.6	12.4	13.0	13.4
12H	11.5	12.1	12.0	12.5	12.9	12.0	12.6	12.5	13.0	13.4
8H 4H	11.5	12.1	11.9	12.5	12.9	11.8	12.3	12.2	12.7	13.2
6H	11.6	12.1	12.0	12.5	13.0	12.0	12.5	12.5	12.9	13.4
8H	11.6	12.0	12.1	12.5	13.0	12.1	12.6	12.6	13.0	13.5
12H	11.7	12.0	12.2	12.5	13.0	12.2	12.6	12.7	13.1	13.6
12H 4H	11.4	12.0	11.9	12.4	12.8	11.7	12.3	12.2	12.7	13.1
6H	11.6	12.0	12.1	12.5	13.0	12.0	12.4	12.5	12.9	13.4
8H	11.6	12.0	12.1	12.5	13.0	12.1	12.5	12.6	13.0	13.5
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 1.0 / - 1.3					+ 0.8 / - 1.1				
1.5H	+ 1.1 / - 0.9					+ 1.1 / - 0.8				
2.0H	+ 1.9 / - 1.4					+ 1.7 / - 1.2				

CIE Pub.117, 771.8 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.9)  
Area: 0.1 m2

C Range: 0 - 180DEG

C Interval: 90.0DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:DAMIN

Test Date:22 April 2024

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.471

Humidity:65.0%

Test Distance:7.382m [K=1.0000]

Remarks:

## UTILIZATION FACTORS TABLE

Test:U:120.02V I:0.0749A P:8.7597W PF:0.9747 Freq:60.60Hz Lamp Flux:771.849x1 lm		
NAME: DL04-148 9W 35K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

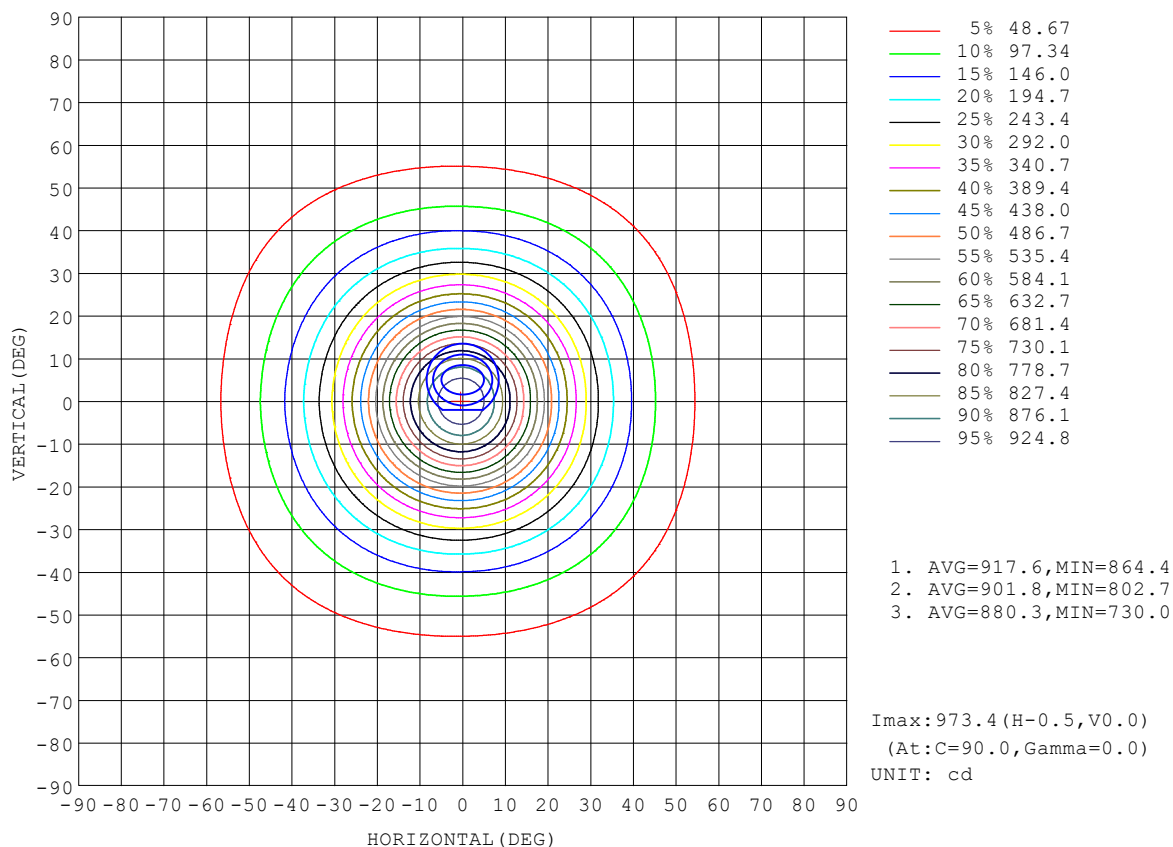
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	76	68	63	76	68	63	75	68	63	59
0.80	85	77	72	84	77	72	83	76	72	67
1.00	91	84	79	90	83	79	88	83	78	73
1.25	96	89	85	95	89	84	92	87	83	78
1.50	100	93	89	98	92	88	95	91	87	81
2.00	104	98	94	102	97	93	99	95	91	85
2.50	106	101	97	104	100	96	100	97	94	87
3.00	108	104	100	106	102	99	102	99	96	89
4.00	111	107	104	108	105	103	104	102	99	91
5.00	112	109	107	110	107	105	105	103	101	93
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 180DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3 °C  
Operators: DAMIN  
Test Date: 22 April 2024

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.471  
Humidity: 65.0%  
Test Distance: 7.382m [K=1.0000]  
Remarks:

## ISOCANDELA DIAGRAM

Test:U:120.02V I:0.0749A P:8.7597W PF:0.9747 Freq:60.60Hz Lamp Flux:771.849x1 lm		
NAME: DL04-148 9W 35K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:



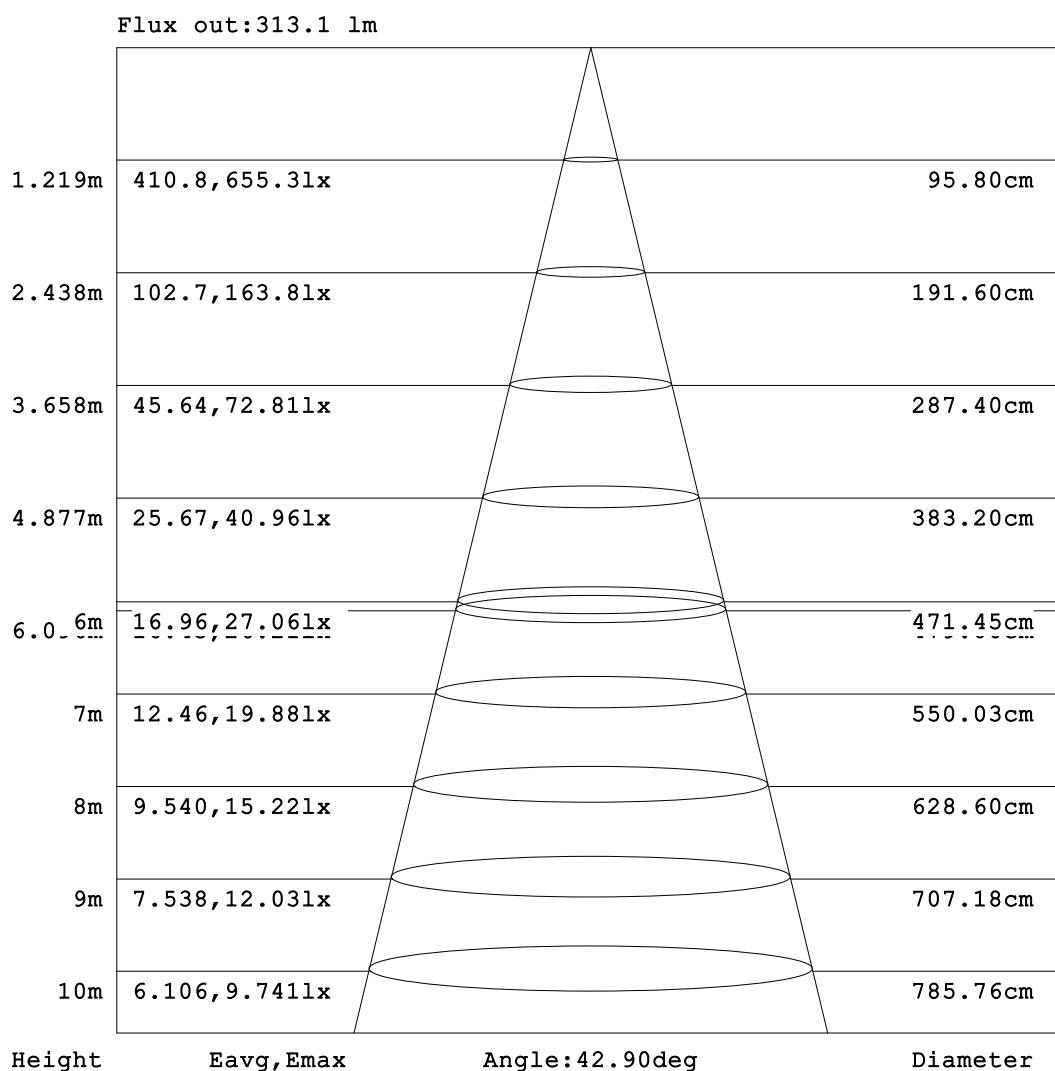
C Range: 0 - 180DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:DAMIN  
Test Date:22 April 2024

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.471  
Humidity:65.0%  
Test Distance:7.382m [K=1.0000]  
Remarks:



## AAI Figure

Test:U:120.02V I:0.0749A P:8.7597W PF:0.9747 Freq:60.60Hz Lamp Flux:771.849x1 lm		
NAME: DL04-148 9W 35K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:



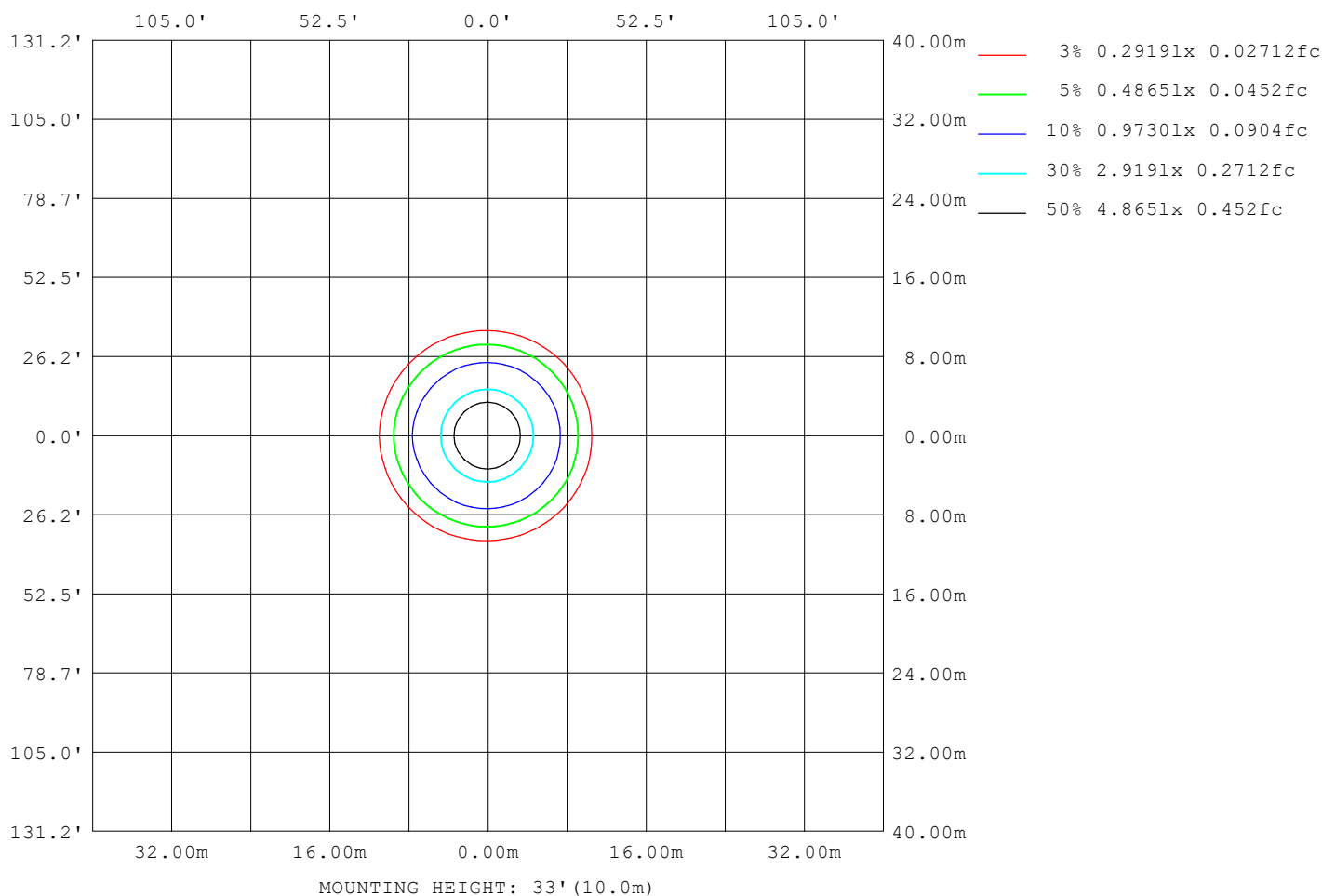
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 180DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:DAMIN  
Test Date:22 April 2024

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.471  
Humidity:65.0%  
Test Distance:7.382m [K=1.0000]  
Remarks:

## ISOLUX DIAGRAM

Test:U:120.02V I:0.0749A P:8.7597W PF:0.9747 Freq:60.60Hz Lamp Flux:771.849x1 lm		
NAME: DL04-148 9W 35K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:



C Range: 0 - 180DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:DAMIN  
Test Date:22 April 2024

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.471  
Humidity:65.0%  
Test Distance:7.382m [K=1.0000]  
Remarks:

## LED Avg.L Report

Test:U:120.02V I:0.0749A P:8.7597W PF:0.9747 Freq:60.60Hz Lamp Flux:771.849x1 lm		
NAME: DL04-148 9W 35K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

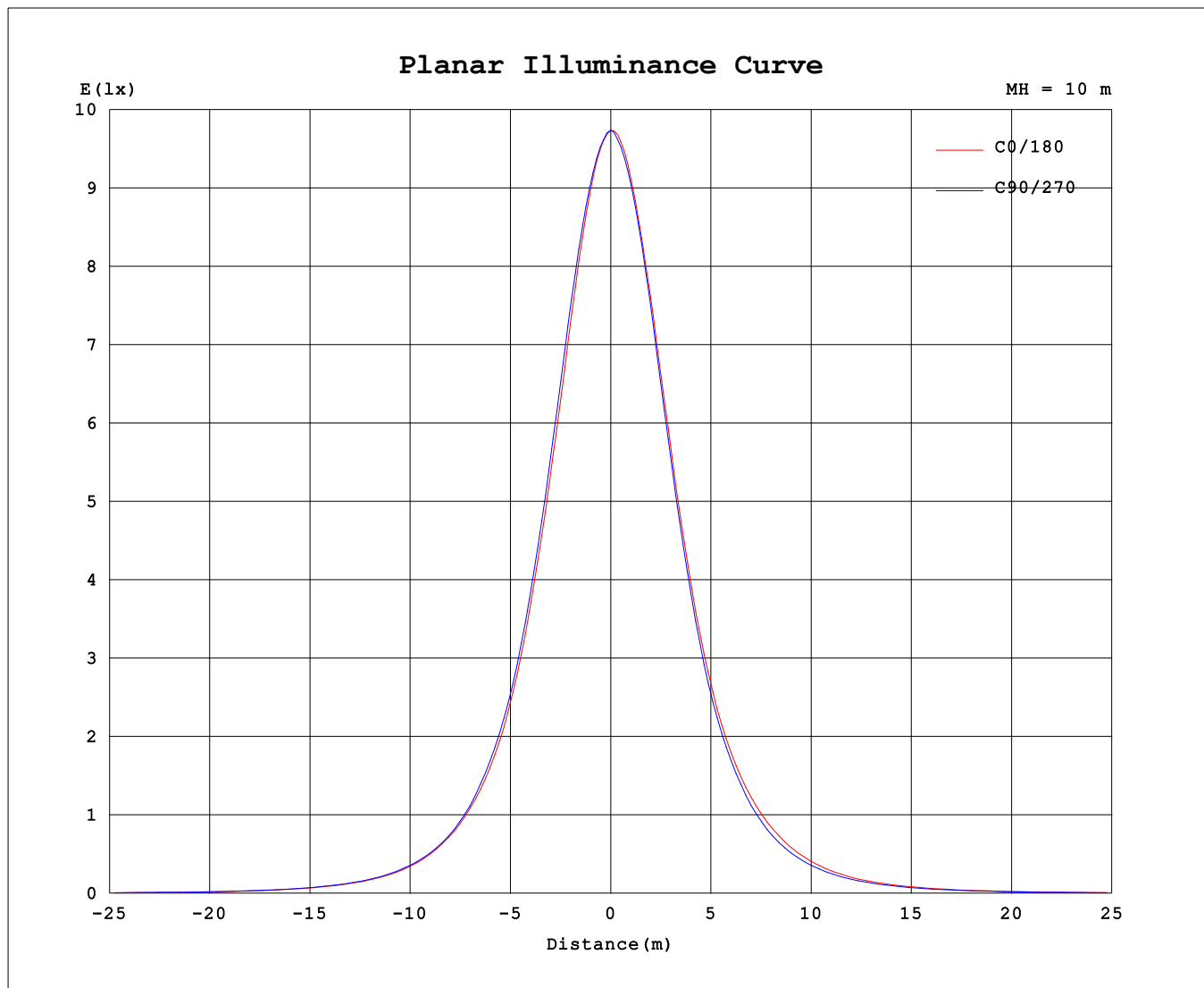
AvgL	cd/m2
L_0~180 (65) av	564
L_0~180 (75) av	353
L_0~180 (85) av	307
L_90~270 (65) av	556
L_90~270 (75) av	440
L_90~270 (85) av	322
L_45 (65) av	562
L_45 (75) av	409
L_45 (85) av	319

Standard: GB/T 29293-2012

C Range: 0 - 180DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:DAMIN  
Test Date:22 April 2024

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.471  
Humidity:65.0%  
Test Distance:7.382m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 180DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3 °C  
Operators: DAMIN  
Test Date: 22 April 2024

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.471  
Humidity: 65.0%  
Test Distance: 7.382m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.02V I:0.0749A P:8.7597W PF:0.9747 Freq:60.60Hz Lamp Flux:771.849x1 lm		
NAME: DL04-148 9W 35K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270														
0	973	974	974	974														
5	924	930	939	930														
10	809	828	837	828														
15	660	684	699	684														
20	510	531	547	531														
25	377	393	411	393														
30	273	287	304	287														
35	199	205	225	205														
40	142	145	164	145														
45	98.7	102	117	102														
50	67.8	70.7	80.6	70.7														
55	46.5	48.8	55.2	48.8														
60	31.5	33.8	37.8	33.8														
65	21.6	23.5	26.1	23.5														
70	14.8	16.4	18.1	16.4														
75	8.25	11.4	10.00	11.4														
80	3.80	6.49	4.90	6.49														
85	2.37	2.81	2.99	2.81														
90	1.69	2.27	1.66	2.27														
95	1.80	2.05	1.75	2.05														
100	1.99	2.08	1.91	2.08														
105	2.22	2.21	2.14	2.21														
110	2.50	2.48	2.41	2.48														
115	2.82	2.80	2.72	2.80														
120	3.16	3.14	3.06	3.14														
125	3.51	3.51	3.41	3.51														
130	3.84	3.90	3.74	3.90														
135	4.12	4.11	4.04	4.11														
140	4.34	4.36	4.29	4.36														
145	4.50	4.51	4.45	4.51														
150	4.60	4.60	4.55	4.60														
155	4.62	4.65	4.59	4.65														
160	4.59	4.64	4.56	4.64														
165	4.51	4.56	4.48	4.56														
170	4.42	4.43	4.39	4.43														
175	4.38	4.36	4.33	4.36														
180	4.36	4.36	4.35	4.36														

C Range: 0 - 180DEG

C Interval: 90.0DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:DAMIN

Test Date:22 April 2024

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.471

Humidity:65.0%

Test Distance:7.382m [K=1.0000]

Remarks: