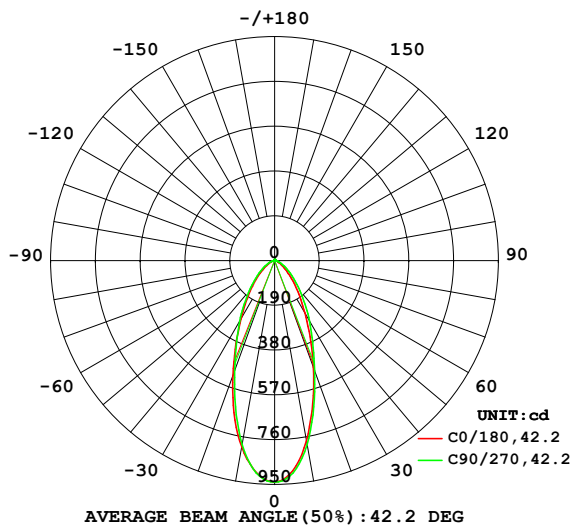


LUMINAIRE PHOTOMETRIC TEST REPORT

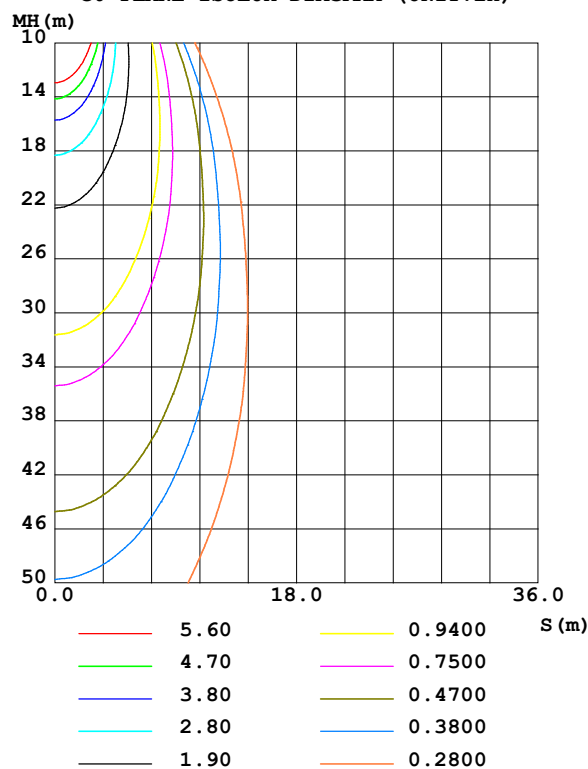
Test:U:120.02V I:0.0755A P:8.8319W PF:0.9751 Freq:60.60Hz Lamp Flux:768.508x1 lm		
NAME: DL04-148 9W 50K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 87.01 lm/W
MODEL	5000K	I _{max} (cd)	940.3	S/MH(C0/180)	0.68	
NOMINAL POWER(W)	9	LOR(%)	100.0	S/MH(C90/270)	0.66	
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	768.51	η UP,DN(C0-180)	1.2,47.7	
NOMINAL FLUX(lm)	768.508	CIE CLASS	DIRECT	η UP,DN(C180-360)	1.2,49.9	
LAMPS INSIDE	1	η up(%)	2.4	CIBSE SHR NOM	0.75	
TEST VOLTAGE(V)	120	η down(%)	97.6	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:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	777.3	794.7	804.3	794.7					0- 10	82.49	82.49	10.7,10.7
20	483.1	496.7	518.6	496.7					10- 20	178.4	260.9	34,34
30	258.1	297.4	286.2	297.4					20- 30	174.0	434.9	56.6,56.6
40	133.7	167.2	154.9	167.2					30- 40	133.4	568.3	74,74
50	63.97	91.34	76.28	91.34					40- 50	87.92	656.3	85.4,85.4
60	29.82	45.90	35.45	45.90					50- 60	51.51	707.8	92.1,92.1
70	14.03	20.91	16.91	20.91					60- 70	27.12	734.9	95.6,95.6
80	3.644	6.247	4.654	6.247					70- 80	12.02	746.9	97.2,97.2
90	1.607	1.718	1.566	1.718					80- 90	2.999	749.9	97.6,97.6
100	1.892	1.793	1.785	1.793					90-100	1.855	751.8	97.8,97.8
110	2.389	2.205	2.241	2.205					100-110	2.130	753.9	98.1,98.1
120	3.017	2.825	2.846	2.825					110-120	2.537	756.4	98.4,98.4
130	3.662	3.515	3.495	3.515					120-130	2.883	759.3	98.8,98.8
140	4.156	4.012	3.986	4.012					130-140	2.943	762.3	99.2,99.2
150	4.398	4.287	4.238	4.287					140-150	2.633	764.9	99.5,99.5
160	4.398	4.331	4.250	4.331					150-160	2.008	766.9	99.8,99.8
170	4.235	4.164	4.094	4.164					160-170	1.210	768.1	99.9,99.9
180	4.157	4.134	4.064	4.134					170-180	0.3942	768.5	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 617.59 lm

%lum = 80.4%

%lamp = 80.4%

Conical surface Flux(120deg): 707.77 lm

%lum = 92.1%

%lamp = 92.1%

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

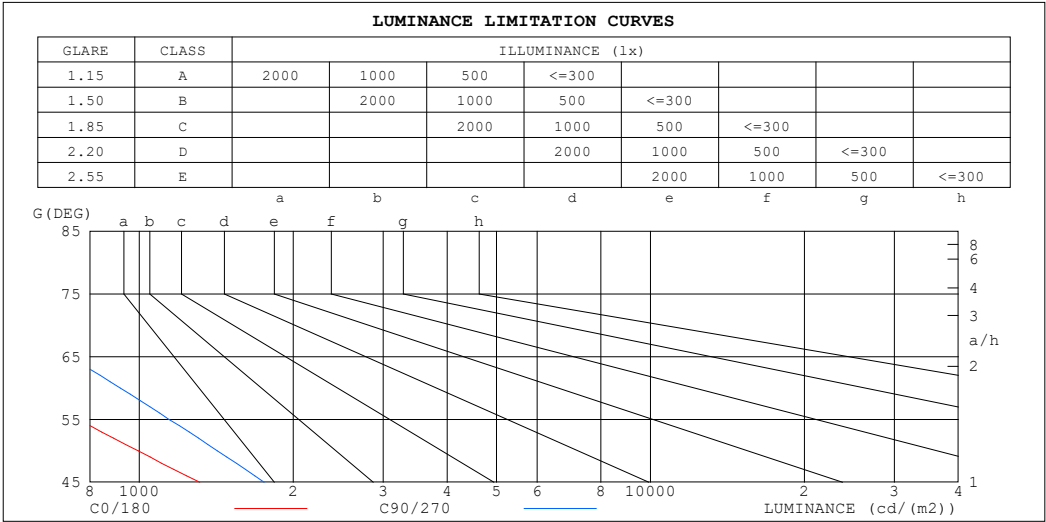
Humidity:65.0%

Test Distance:7.382m [K=1.0000]

Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.02V I:0.0755A P:8.8319W PF:0.9751 Freq:60.60Hz Lamp Flux:768.508x1 lm		
NAME: DL04-148 9W 50K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	265	210
80	210	360
75	305	535
70	410	611
65	484	738
60	596	918
55	761	1144
50	995	1421
45	1313	1755

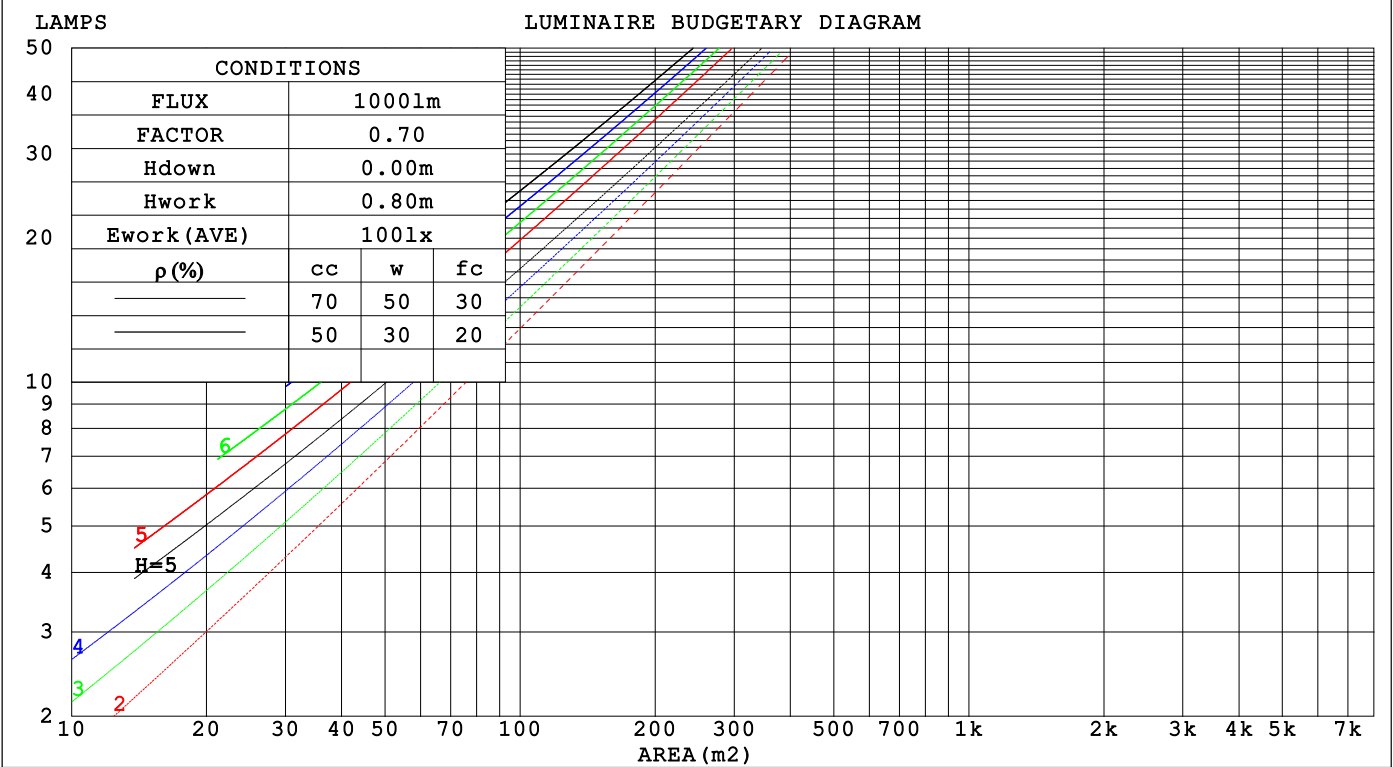
C Range: 0 - 180DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:22 April 2024

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:0.0755A P:8.8319W PF:0.9751 Freq:60.60Hz		
Lamp Flux:768.508x1 lm		
NAME: DL04-148 9W 50K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Coefficients of Utilization(CU)												
0.0	1.18	1.18	1.18	1.15	1.15	1.15	1.10	1.10	1.10	1.05	1.05	1.05	.00	.00	.00	.98
1.0	1.08	1.05	1.03	1.06	1.03	1.01	1.01	.99	.97	.97	.96	.94	.93	.92	.91	.89
2.0	.99	.94	.90	.97	.93	.89	.93	.90	.87	.90	.87	.84	.87	.84	.82	.80
3.0	.91	.85	.80	.89	.84	.80	.86	.82	.78	.83	.80	.76	.81	.78	.75	.73
4.0	.84	.77	.73	.83	.77	.72	.80	.75	.71	.78	.73	.70	.75	.72	.69	.67
5.0	.78	.71	.66	.77	.70	.66	.74	.69	.65	.72	.68	.64	.70	.66	.63	.61
6.0	.72	.65	.61	.71	.65	.60	.69	.64	.60	.68	.63	.59	.66	.62	.58	.57
7.0	.67	.61	.56	.67	.60	.56	.65	.59	.55	.64	.59	.55	.62	.58	.54	.53
8.0	.63	.57	.52	.63	.56	.52	.61	.55	.51	.60	.55	.51	.59	.54	.51	.49
9.0	.59	.53	.49	.59	.53	.48	.58	.52	.48	.57	.51	.48	.55	.51	.47	.46
10.0	.56	.50	.46	.56	.49	.45	.55	.49	.45	.54	.48	.45	.53	.48	.45	.43



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:0.0755A P:8.8319W PF:0.9751 Freq:60.60Hz Lamp Flux:768.508x1 lm		
NAME: DL04-148 9W 50K	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	.212	.121	.038	.205	.117	.037	.191	.109	.035	.178	.102	.033	.166	.096	.031															
2.0	.203	.111	.034	.197	.108	.033	.184	.103	.032	.173	.097	.030	.163	.092	.029															
3.0	.192	.102	.031	.186	.100	.030	.176	.095	.029	.166	.091	.028	.157	.087	.027															
4.0	.181	.094	.028	.176	.092	.027	.167	.088	.026	.158	.085	.026	.150	.081	.025															
5.0	.170	.087	.025	.166	.085	.025	.158	.082	.024	.150	.079	.024	.143	.076	.023															
6.0	.161	.081	.023	.157	.079	.023	.150	.077	.022	.143	.074	.022	.137	.072	.021															
7.0	.152	.075	.021	.149	.074	.021	.142	.072	.021	.136	.070	.020	.130	.068	.020															
8.0	.144	.070	.020	.141	.069	.020	.135	.068	.019	.130	.066	.019	.125	.064	.019															
9.0	.137	.066	.018	.134	.065	.018	.129	.064	.018	.124	.062	.018	.119	.060	.017															
10.0	.130	.062	.017	.128	.062	.017	.123	.060	.017	.118	.059	.017	.114	.057	.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	.209	.209	.209	.179	.179	.179	.122	.122	.122	.070	.070	.070	.022	.022	.022		
1.0	.192	.176	.161	.164	.151	.138	.112	.104	.096	.065	.060	.056	.021	.019	.018		
2.0	.179	.151	.127	.153	.130	.110	.105	.090	.077	.061	.052	.045	.019	.017	.015		
3.0	.168	.133	.104	.144	.114	.090	.099	.079	.063	.057	.046	.037	.018	.015	.012		
4.0	.159	.118	.087	.136	.102	.076	.094	.071	.053	.054	.042	.032	.017	.014	.010		
5.0	.151	.107	.075	.129	.093	.065	.089	.065	.046	.052	.038	.027	.017	.012	.009		
6.0	.143	.098	.066	.123	.085	.057	.085	.060	.041	.049	.035	.024	.016	.011	.008		
7.0	.137	.091	.059	.118	.079	.051	.081	.055	.036	.047	.033	.022	.015	.011	.007		
8.0	.131	.085	.053	.113	.074	.046	.078	.052	.033	.045	.030	.020	.015	.010	.006		
9.0	.126	.080	.049	.108	.069	.042	.075	.049	.030	.044	.029	.018	.014	.009	.006		
10.0	.121	.075	.045	.104	.065	.039	.072	.046	.028	.042	.027	.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

 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:

UGR(Unified Glare Rating) Table

Test:U:120.02V I:0.0755A P:8.8319W PF:0.9751 Freq:60.60Hz Lamp Flux:768.508x1 lm										
NAME: DL04-148 9W 50K					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	10.8	11.9	11.0	12.1	12.3	12.0	13.1	12.3	13.3	13.5
3H	11.1	12.1	11.4	12.4	12.6	12.5	13.5	12.8	13.8	14.0
4H	11.2	12.2	11.5	12.4	12.7	12.7	13.6	13.0	13.9	14.2
6H	11.2	12.1	11.6	12.4	12.7	12.8	13.7	13.1	13.9	14.3
8H	11.2	12.0	11.6	12.3	12.7	12.8	13.6	13.1	13.9	14.2
12H	11.2	12.0	11.5	12.3	12.6	12.7	13.6	13.1	13.9	14.2
4H 2H	11.0	11.9	11.3	12.2	12.5	12.1	13.0	12.4	13.3	13.6
3H	11.5	12.3	11.9	12.6	13.0	12.7	13.5	13.1	13.8	14.2
4H	11.7	12.4	12.0	12.7	13.1	13.0	13.7	13.4	14.1	14.4
6H	11.7	12.4	12.1	12.7	13.1	13.1	13.8	13.5	14.2	14.6
8H	11.7	12.3	12.1	12.7	13.1	13.1	13.7	13.6	14.1	14.6
12H	11.7	12.3	12.2	12.7	13.1	13.1	13.7	13.6	14.1	14.5
8H 4H	11.7	12.3	12.1	12.7	13.1	13.0	13.6	13.4	14.0	14.4
6H	11.8	12.3	12.3	12.7	13.2	13.2	13.7	13.6	14.1	14.6
8H	11.8	12.3	12.3	12.7	13.2	13.2	13.6	13.7	14.1	14.6
12H	11.9	12.2	12.4	12.7	13.2	13.2	13.6	13.7	14.1	14.6
12H 4H	11.7	12.2	12.1	12.6	13.1	12.9	13.5	13.4	13.9	14.3
6H	11.8	12.2	12.3	12.7	13.2	13.1	13.6	13.6	14.0	14.5
8H	11.8	12.2	12.3	12.7	13.2	13.2	13.6	13.7	14.0	14.6
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 1.0 / - 1.4					+ 0.7 / - 0.9				
1.5H	+ 1.0 / - 1.1					+ 1.0 / - 0.7				
2.0H	+ 1.7 / - 1.6					+ 1.7 / - 1.4				

CIE Pub.117, 768.5 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:0.0755A P:8.8319W PF:0.9751 Freq:60.60Hz Lamp Flux:768.508x1 lm		
NAME: DL04-148 9W 50K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

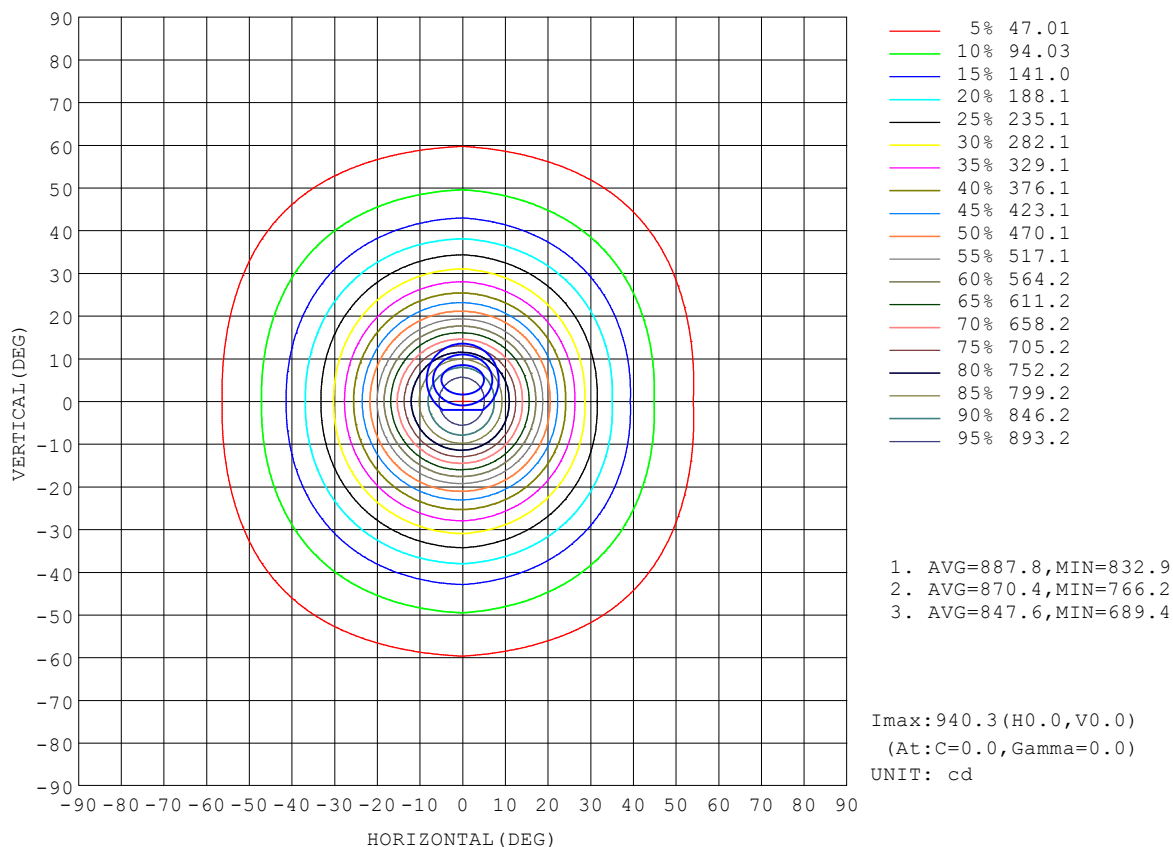
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	75	67	62	74	67	62	73	66	61	57
0.80	84	76	71	83	75	71	81	75	70	65
1.00	90	83	78	89	82	77	87	82	77	71
1.25	95	88	84	94	88	83	92	86	82	77
1.50	99	93	88	98	92	87	95	90	86	80
2.00	103	98	93	102	96	93	98	94	91	84
2.50	106	101	97	104	99	96	100	96	93	86
3.00	108	103	100	106	102	98	102	99	96	88
4.00	111	107	104	108	105	102	104	101	99	91
5.00	112	109	106	110	107	105	105	103	101	92
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

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:

ISOCANDELA DIAGRAM

Test:U:120.02V I:0.0755A P:8.8319W PF:0.9751 Freq:60.60Hz Lamp Flux:768.508x1 lm		
NAME: DL04-148 9W 50K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

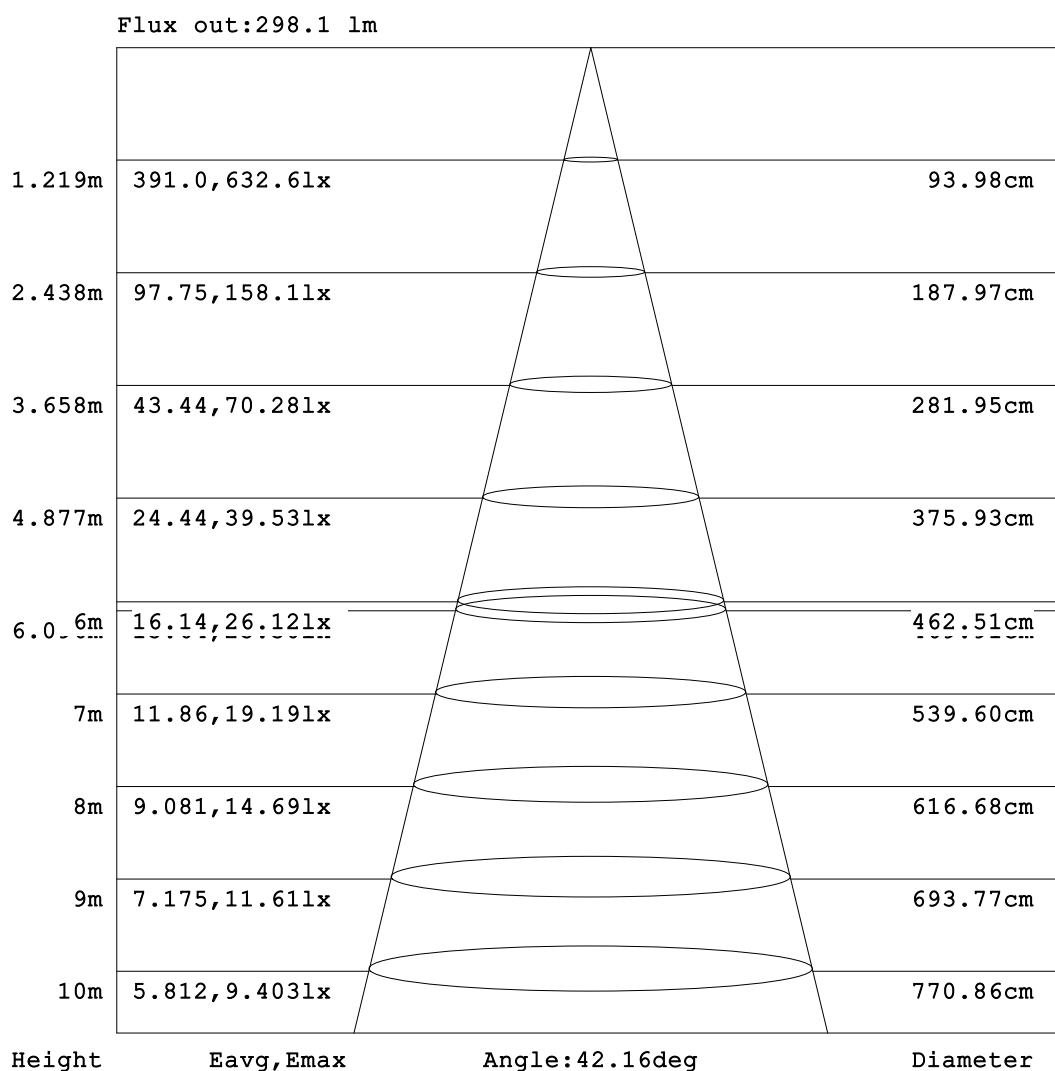


C Range: 0 - 180DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:22 April 2024

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:0.0755A P:8.8319W PF:0.9751 Freq:60.60Hz Lamp Flux:768.508x1 lm		
NAME: DL04-148 9W 50K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:



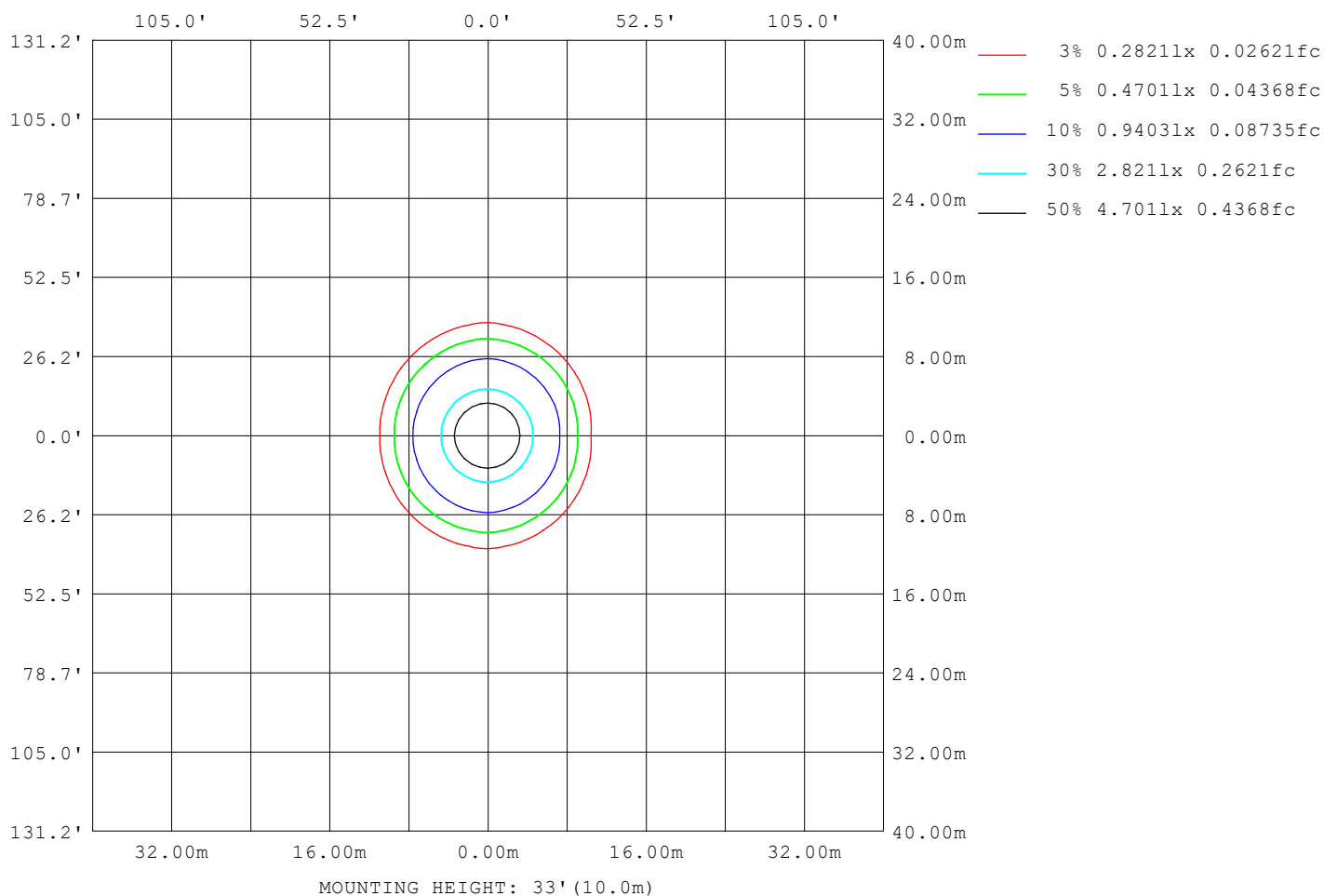
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.0755A P:8.8319W PF:0.9751 Freq:60.60Hz Lamp Flux:768.508x1 lm		
NAME: DL04-148 9W 50K	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°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:

LED Avg.L Report

Test:U:120.02V I:0.0755A P:8.8319W PF:0.9751 Freq:60.60Hz Lamp Flux:768.508x1 lm		
NAME: DL04-148 9W 50K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

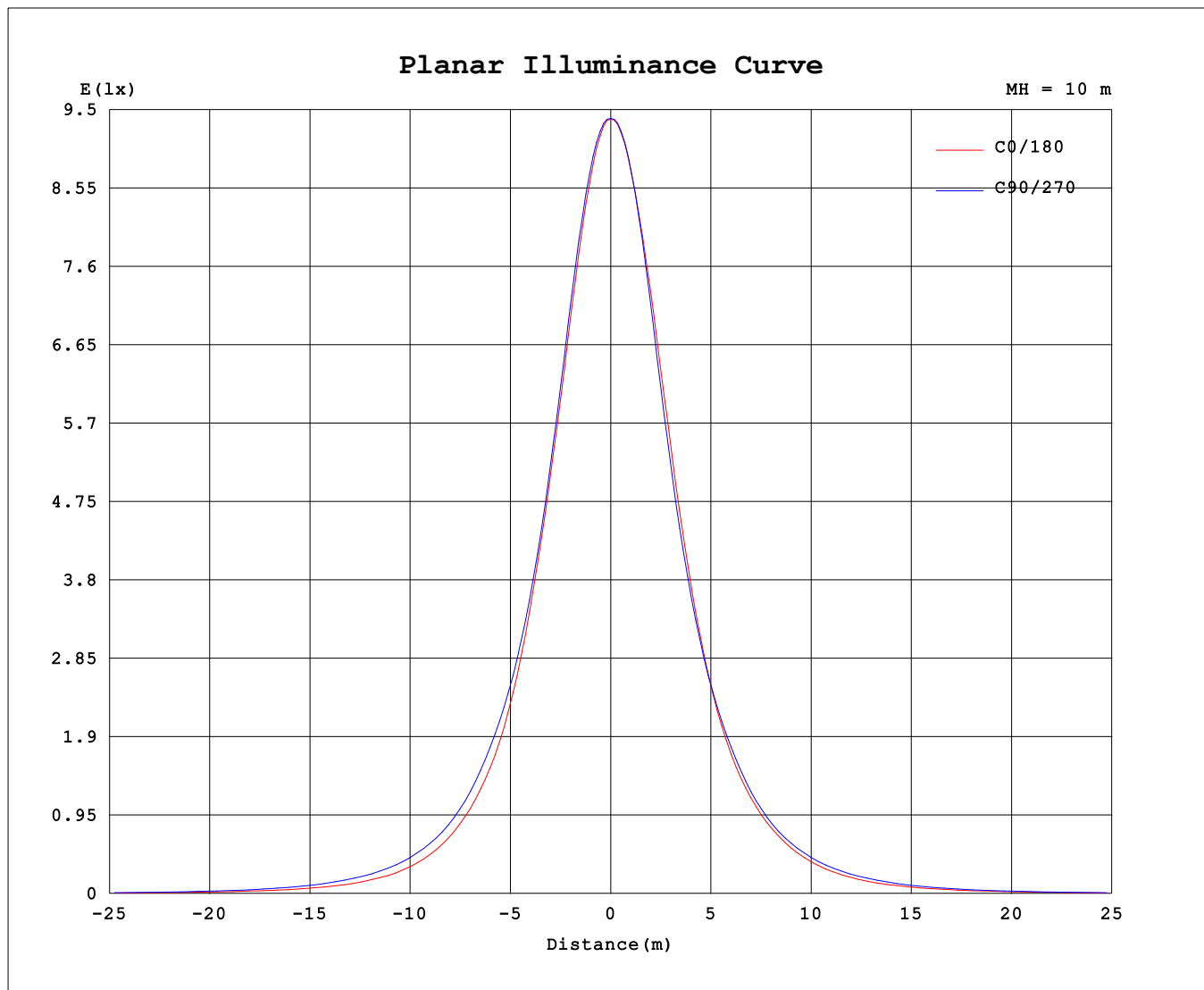
AvgL	cd/m2
L_0~180 (65) av	531
L_0~180 (75) av	332
L_0~180 (85) av	296
L_90~270 (65) av	738
L_90~270 (75) av	535
L_90~270 (85) av	210
L_45 (65) av	663
L_45 (75) av	460
L_45 (85) av	244

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

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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.02V I:0.0755A P:8.8319W PF:0.9751 Freq:60.60Hz Lamp Flux:768.508x1 lm		
NAME: DL04-148 9W 50K	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	940	939	939	939														
5	894	904	902	904														
10	777	795	804	795														
15	627	643	669	643														
20	483	497	519	497														
25	357	383	389	383														
30	258	297	286	297														
35	188	226	212	226														
40	134	167	155	167														
45	92.8	124	110	124														
50	64.0	91.3	76.3	91.3														
55	43.7	65.6	52.0	65.6														
60	29.8	45.9	35.5	45.9														
65	20.4	31.2	24.4	31.2														
70	14.0	20.9	16.9	20.9														
75	7.90	13.8	9.27	13.8														
80	3.64	6.25	4.65	6.25														
85	2.31	1.83	2.85	1.83														
90	1.61	1.72	1.57	1.72														
95	1.72	1.70	1.62	1.70														
100	1.89	1.79	1.78	1.79														
105	2.12	1.95	1.99	1.95														
110	2.39	2.20	2.24	2.20														
115	2.69	2.50	2.53	2.50														
120	3.02	2.82	2.85	2.82														
125	3.35	3.18	3.19	3.18														
130	3.66	3.52	3.50	3.52														
135	3.94	3.78	3.76	3.78														
140	4.16	4.01	3.99	4.01														
145	4.32	4.19	4.15	4.19														
150	4.40	4.29	4.24	4.29														
155	4.44	4.35	4.27	4.35														
160	4.40	4.33	4.25	4.33														
165	4.32	4.27	4.18	4.27														
170	4.23	4.16	4.09	4.16														
175	4.18	4.12	4.05	4.12														
180	4.16	4.13	4.06	4.13														

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: