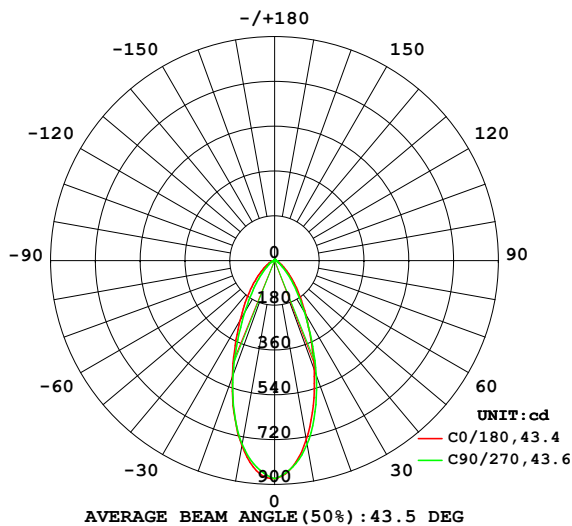


LUMINAIRE PHOTOMETRIC TEST REPORT

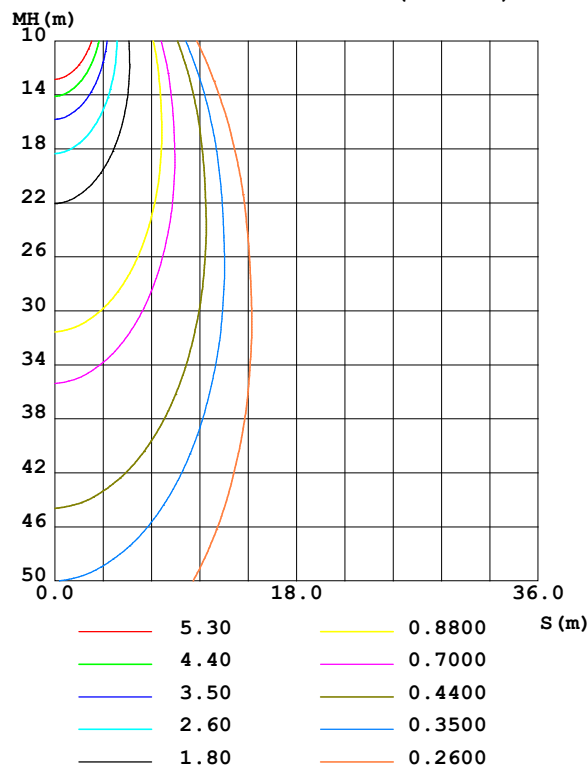
Test:U:120.02V I:0.0757A P:8.8668W PF:0.9753 Freq:60.60Hz Lamp Flux:674.415x1 lm		
NAME: DL04-148 9W 27K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 76.06 lm/W
MODEL	2700K	I _{max} (cd)	876.6	S/MH (C0/180)	0.70	
NOMINAL POWER (W)	9	LOR (%)	100.0	S/MH (C90/270)	0.69	
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	674.41	η UP, DN (C0-180)	1.4, 47.4	
NOMINAL FLUX (lm)	674.415	CIE CLASS	DIRECT	η UP, DN (C180-360)	1.4, 49.8	
LAMPS INSIDE	1	η up (%)	2.8	CIBSE SHR NOM	0.75	
TEST VOLTAGE (V)	120	η down (%)	97.2	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	732.5	750.3	755.6	750.3					0- 10	76.99	76.99	11.4,11.4
20	467.1	490.0	498.3	490.0					10- 20	172.1	249.1	36.9,36.9
30	250.3	242.4	278.7	242.4					20- 30	163.6	412.7	61.2,61.2
40	129.8	108.8	150.6	108.8					30- 40	112.7	525.4	77.9,77.9
50	62.35	45.06	73.66	45.06					40- 50	66.29	591.7	87.7,87.7
60	28.99	19.70	34.76	19.70					50- 60	34.66	626.4	92.9,92.9
70	13.62	10.53	16.66	10.53					60- 70	18.30	644.7	95.6,95.6
80	3.458	3.791	4.480	3.791					70- 80	8.536	653.2	96.9,96.9
90	1.562	1.652	1.543	1.652					80- 90	2.501	655.7	97.2,97.2
100	1.829	1.971	1.792	1.971					90-100	1.884	657.6	97.5,97.5
110	2.300	2.428	2.241	2.428					100-110	2.226	659.8	97.8,97.8
120	2.876	3.021	2.842	3.021					110-120	2.613	662.4	98.2,98.2
130	3.495	3.615	3.469	3.615					120-130	2.910	665.3	98.7,98.7
140	3.956	4.061	3.967	4.061					130-140	2.936	668.3	99.1,99.1
150	4.168	4.283	4.231	4.283					140-150	2.600	670.9	99.5,99.5
160	4.183	4.298	4.253	4.298					150-160	1.976	672.8	99.8,99.8
170	4.045	4.093	4.083	4.093					160-170	1.187	674.0	99.9,99.9
180	3.982	3.982	4.034	3.982					170-180	0.3856	674.4	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 563.61 lm

%lum = 83.6%

%lamp = 83.6%

Conical surface Flux(120deg): 626.36 lm

%lum = 92.9%

%lamp = 92.9%

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

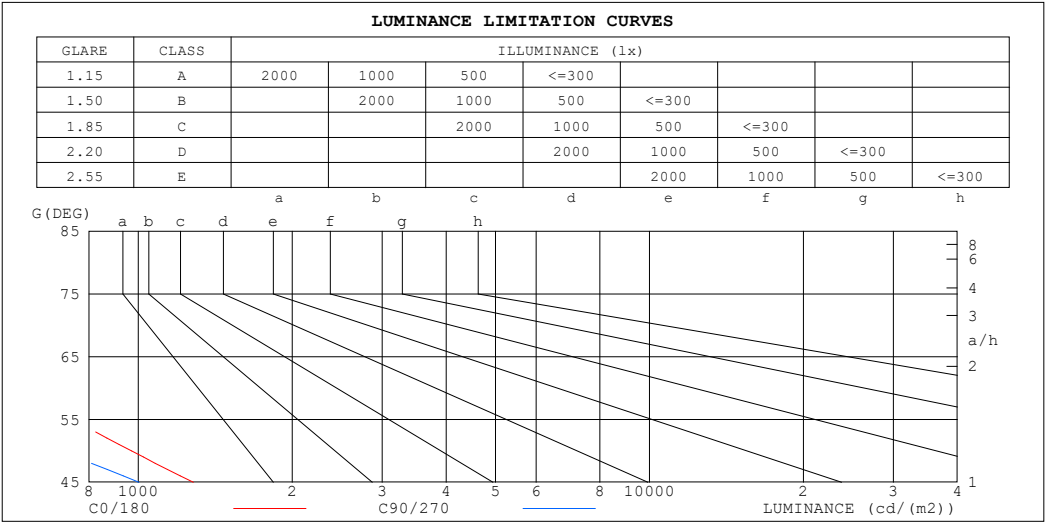
Humidity:65.0%

Test Distance:7.382m [K=1.0000]

Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.02V I:0.0757A P:8.8668W PF:0.9753 Freq:60.60Hz Lamp Flux:674.415x1 lm		
NAME: DL04-148 9W 27K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:



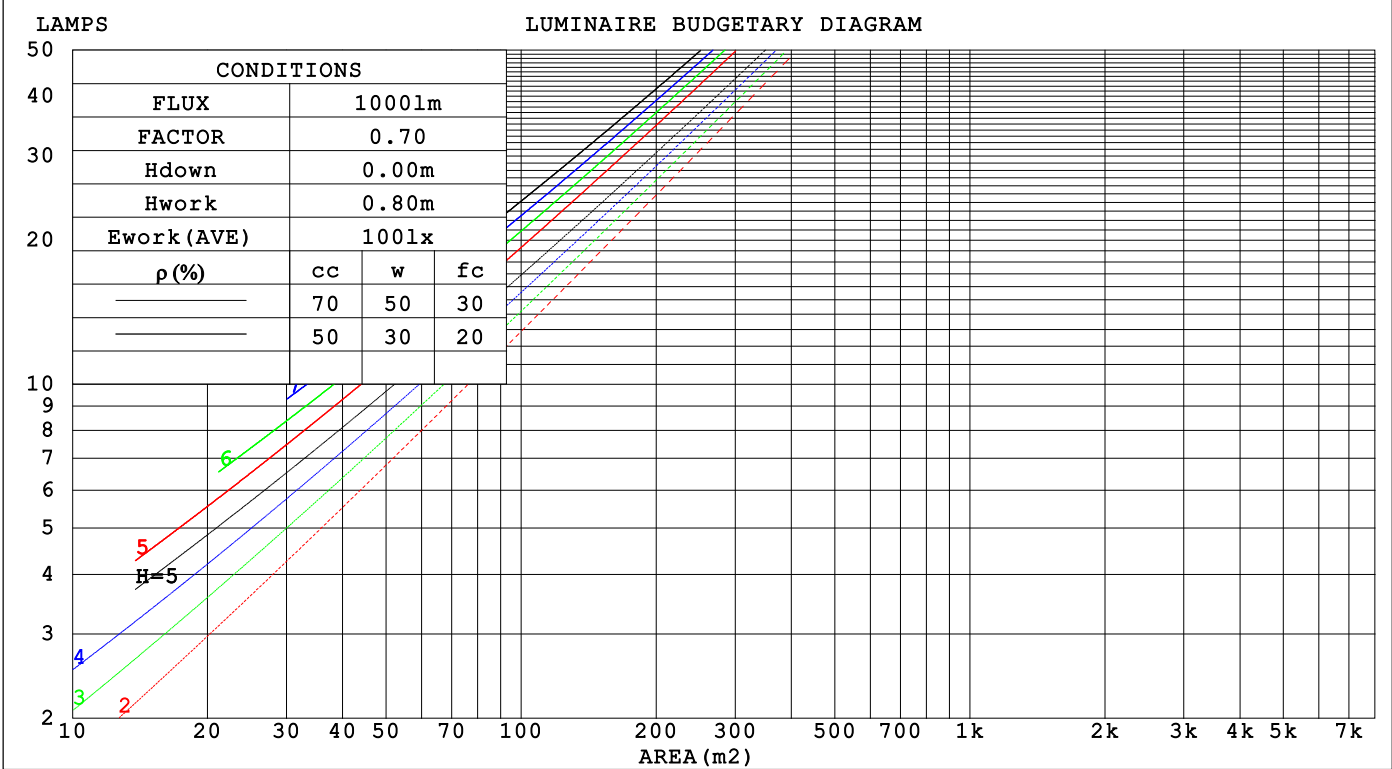
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	254	176
80	199	218
75	289	291
70	398	308
65	470	337
60	580	394
55	749	505
50	970	701
45	1280	1002

C Range: 0 - 180DEG	γ Range: 0 - 180DEG
C Interval: 90.0DEG	γ Interval: 1.0DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.471
Temperature:25.3℃	Humidity:65.0%
Operators:DAMIN	Test Distance:7.382m [K=1.0000]
Test Date:22 April 2024	Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.02V I:0.0757A P:8.8668W PF:0.9753 Freq:60.60Hz		
Lamp Flux:674.415x1 lm		
NAME: DL04-148 9W 27K	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															Coefficients of Utilization(CU)														
0.0	1.18	1.18	1.18	1.15	1.15	1.15	1.10	1.10	1.10	1.04	1.04	1.04	.99	.99	.99	.97														
1.0	1.09	1.06	1.03	1.06	1.04	1.01	1.02	.00	.98	.97	.96	.94	.94	.92	.91	.89														
2.0	.00	.95	.92	.98	.94	.90	.94	.91	.88	.91	.88	.86	.88	.85	.83	.81														
3.0	.92	.87	.82	.91	.85	.81	.88	.83	.80	.85	.81	.78	.82	.79	.77	.75														
4.0	.85	.79	.75	.84	.78	.74	.82	.77	.73	.79	.75	.72	.77	.73	.71	.69														
5.0	.79	.73	.68	.78	.72	.68	.76	.71	.67	.74	.70	.66	.72	.68	.65	.64														
6.0	.74	.68	.63	.73	.67	.63	.71	.66	.62	.70	.65	.61	.68	.64	.61	.59														
7.0	.70	.63	.58	.69	.63	.58	.67	.62	.58	.66	.61	.57	.64	.60	.57	.55														
8.0	.65	.59	.55	.65	.59	.54	.63	.58	.54	.62	.57	.54	.61	.56	.53	.52														
9.0	.62	.55	.51	.61	.55	.51	.60	.54	.51	.59	.54	.50	.58	.53	.50	.49														
10.0	.58	.52	.48	.58	.52	.48	.57	.51	.48	.56	.51	.47	.55	.50	.47	.46														



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:0.0757A P:8.8668W PF:0.9753 Freq:60.60Hz Lamp Flux:674.415x1 lm		
NAME: DL04-148 9W 27K	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	.203	.116	.037	.196	.112	.035	.181	.104	.033	.168	.097	.031	.156	.091	.029		
2.0	.194	.106	.033	.187	.103	.032	.175	.097	.030	.164	.092	.029	.153	.087	.027		
3.0	.183	.098	.029	.178	.095	.029	.167	.090	.027	.157	.086	.026	.148	.082	.025		
4.0	.173	.090	.026	.168	.088	.026	.159	.084	.025	.150	.080	.024	.142	.077	.023		
5.0	.163	.083	.024	.159	.082	.024	.151	.078	.023	.143	.075	.022	.136	.073	.022		
6.0	.154	.077	.022	.150	.076	.022	.143	.073	.021	.136	.071	.021	.130	.068	.020		
7.0	.146	.072	.020	.143	.071	.020	.136	.069	.020	.130	.067	.019	.124	.065	.019		
8.0	.139	.068	.019	.136	.067	.019	.130	.065	.019	.124	.063	.018	.119	.061	.018		
9.0	.132	.064	.018	.129	.063	.018	.124	.061	.017	.119	.060	.017	.114	.058	.017		
10.0	.126	.060	.017	.123	.060	.017	.118	.058	.016	.114	.057	.016	.110	.055	.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	.212	.212	.212	.181	.181	.181	.123	.123	.123	.071	.071	.071	.023	.023	.023		
1.0	.194	.178	.164	.166	.153	.141	.114	.105	.098	.065	.061	.057	.021	.020	.018		
2.0	.181	.154	.131	.155	.132	.114	.106	.092	.079	.061	.053	.046	.020	.017	.015		
3.0	.169	.135	.108	.145	.117	.094	.100	.081	.066	.058	.047	.039	.018	.015	.013		
4.0	.160	.121	.091	.137	.105	.079	.094	.073	.056	.055	.043	.033	.018	.014	.011		
5.0	.151	.110	.079	.130	.095	.069	.090	.066	.048	.052	.039	.029	.017	.013	.009		
6.0	.144	.101	.069	.124	.087	.061	.085	.061	.043	.050	.036	.025	.016	.012	.008		
7.0	.137	.093	.062	.118	.081	.054	.082	.057	.038	.047	.033	.023	.015	.011	.008		
8.0	.132	.087	.057	.113	.076	.049	.078	.053	.035	.046	.031	.021	.015	.010	.007		
9.0	.126	.082	.052	.109	.071	.045	.075	.050	.032	.044	.030	.019	.014	.010	.006		
10.0	.121	.078	.048	.105	.067	.042	.073	.047	.030	.042	.028	.018	.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:0.0757A P:8.8668W PF:0.9753 Freq:60.60Hz Lamp Flux:674.415x1 lm										
NAME: DL04-148 9W 27K					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	11.6	10.8	11.8	12.0	9.6	10.6	9.9	10.8	11.1
3H	11.0	11.9	11.3	12.2	12.4	9.9	10.9	10.2	11.1	11.4
4H	11.1	12.0	11.4	12.2	12.5	10.1	11.0	10.4	11.2	11.5
6H	11.1	11.9	11.4	12.2	12.5	10.1	11.0	10.5	11.3	11.6
8H	11.1	11.9	11.4	12.2	12.5	10.1	10.9	10.5	11.2	11.6
12H	11.1	11.8	11.4	12.2	12.5	10.1	10.9	10.5	11.2	11.5
4H 2H	10.6	11.5	10.9	11.8	12.0	9.7	10.6	10.0	10.9	11.2
3H	11.1	11.9	11.5	12.2	12.6	10.2	11.0	10.6	11.3	11.6
4H	11.3	12.0	11.7	12.4	12.7	10.4	11.1	10.8	11.5	11.8
6H	11.4	12.0	11.8	12.4	12.8	10.5	11.2	11.0	11.5	12.0
8H	11.4	11.9	11.8	12.3	12.8	10.6	11.1	11.0	11.5	12.0
12H	11.4	11.9	11.8	12.3	12.8	10.6	11.1	11.0	11.5	12.0
8H 4H	11.3	11.9	11.7	12.3	12.7	10.4	11.0	10.9	11.4	11.9
6H	11.4	11.9	11.9	12.3	12.8	10.6	11.1	11.1	11.5	12.0
8H	11.4	11.8	11.9	12.3	12.8	10.7	11.1	11.2	11.6	12.1
12H	11.5	11.8	12.0	12.3	12.8	10.7	11.1	11.2	11.6	12.1
12H 4H	11.2	11.8	11.7	12.2	12.6	10.4	10.9	10.9	11.4	11.8
6H	11.4	11.8	11.9	12.2	12.7	10.6	11.0	11.1	11.5	12.0
8H	11.4	11.8	11.9	12.3	12.8	10.7	11.0	11.2	11.5	12.1
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 1.0 / - 1.4					+ 1.1 / - 1.6				
1.5H	+ 1.5 / - 1.2					+ 1.5 / - 1.3				
2.0H	+ 2.3 / - 1.6					+ 2.0 / - 1.6				

CIE Pub.117, 674.4 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.4)
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:0.0757A P:8.8668W PF:0.9753 Freq:60.60Hz Lamp Flux:674.415x1 lm		
NAME: DL04-148 9W 27K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

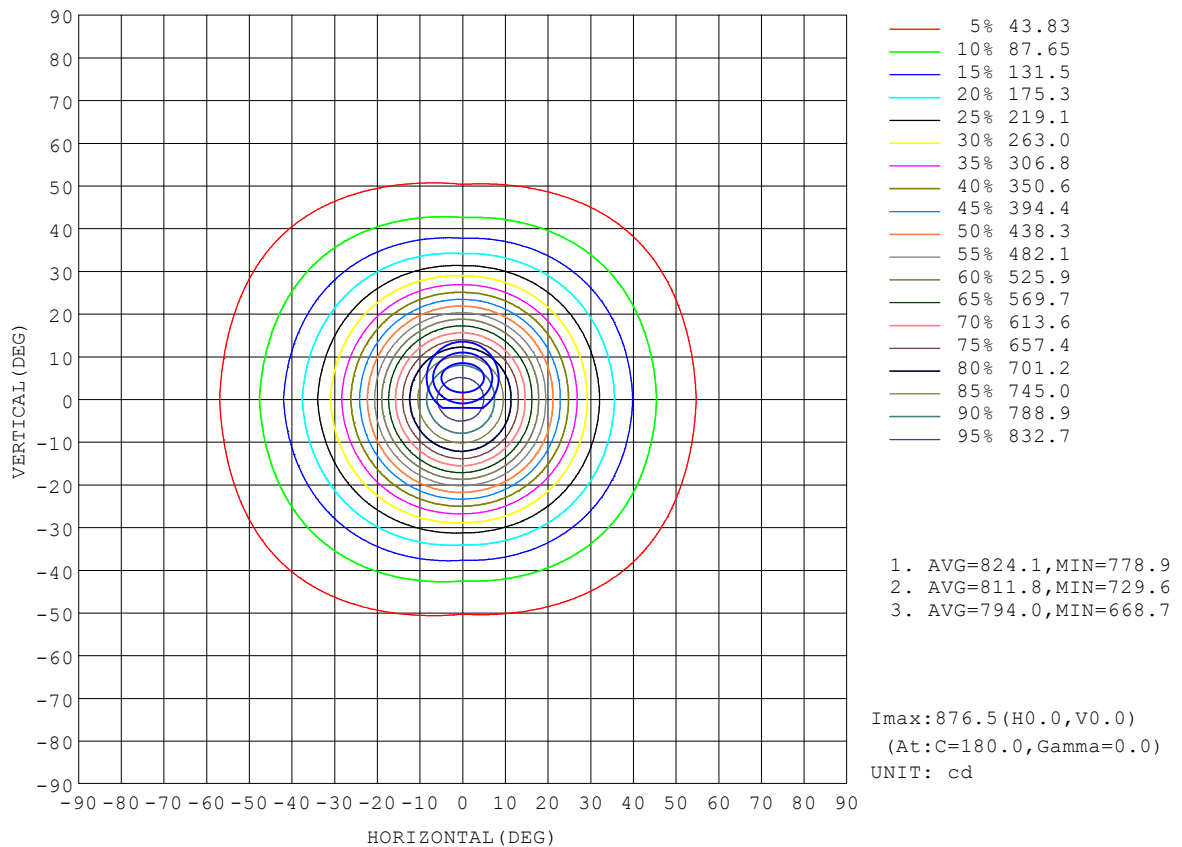
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	78	70	65	77	70	65	76	69	65	60
0.80	86	79	74	85	78	74	84	77	73	68
1.00	92	85	80	91	84	80	89	84	79	74
1.25	97	90	86	96	90	85	93	88	84	79
1.50	100	94	90	99	93	89	96	91	88	82
2.00	104	99	95	103	98	94	99	95	92	86
2.50	106	102	98	105	100	97	101	97	95	87
3.00	109	104	101	106	103	99	102	99	97	89
4.00	111	107	105	109	106	103	104	102	100	92
5.00	113	110	107	110	107	105	106	104	102	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

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:0.0757A P:8.8668W PF:0.9753 Freq:60.60Hz Lamp Flux:674.415x1 lm		
NAME: DL04-148 9W 27K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

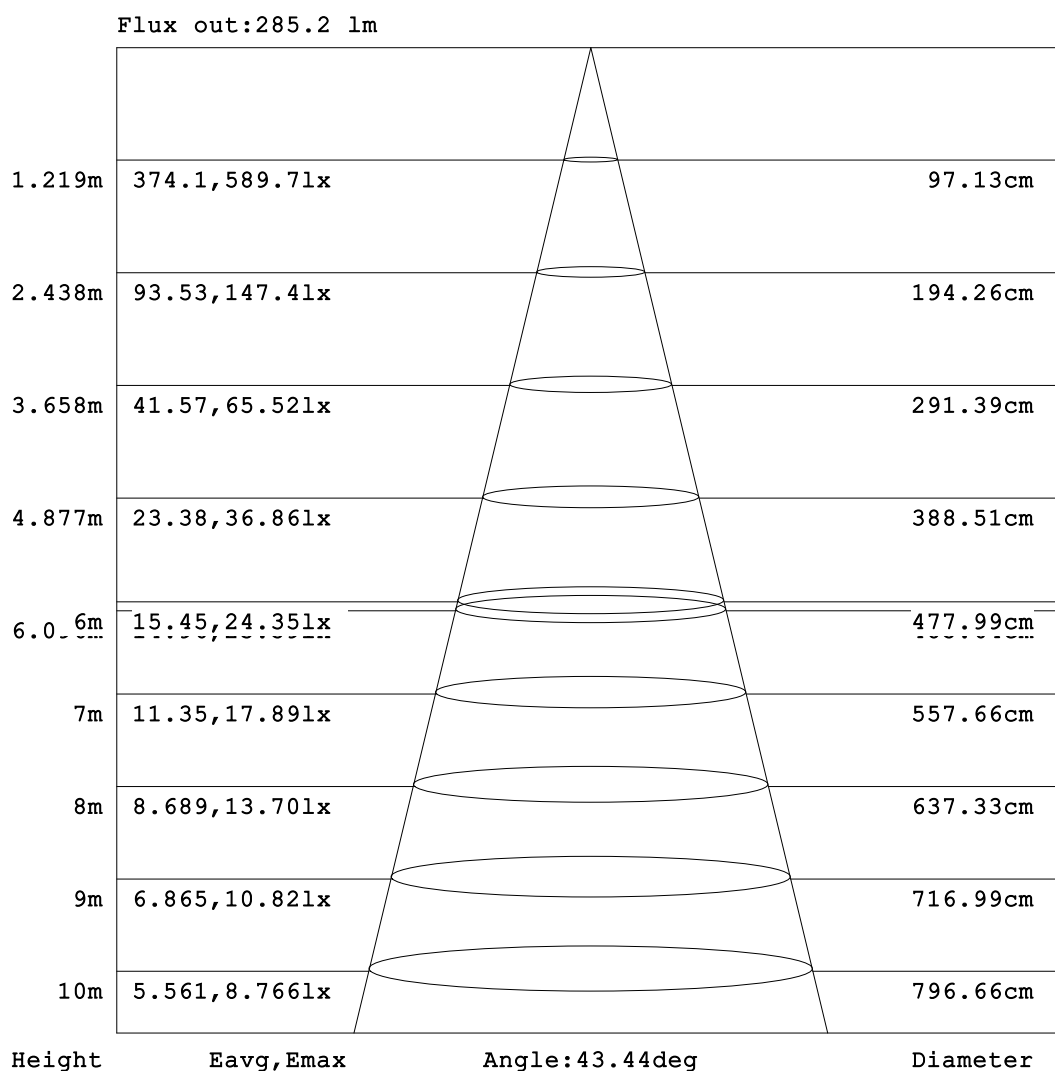


C Range: 0 - 180DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:22 April 2024

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:0.0757A P:8.8668W PF:0.9753 Freq:60.60Hz Lamp Flux:674.415x1 lm		
NAME: DL04-148 9W 27K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:



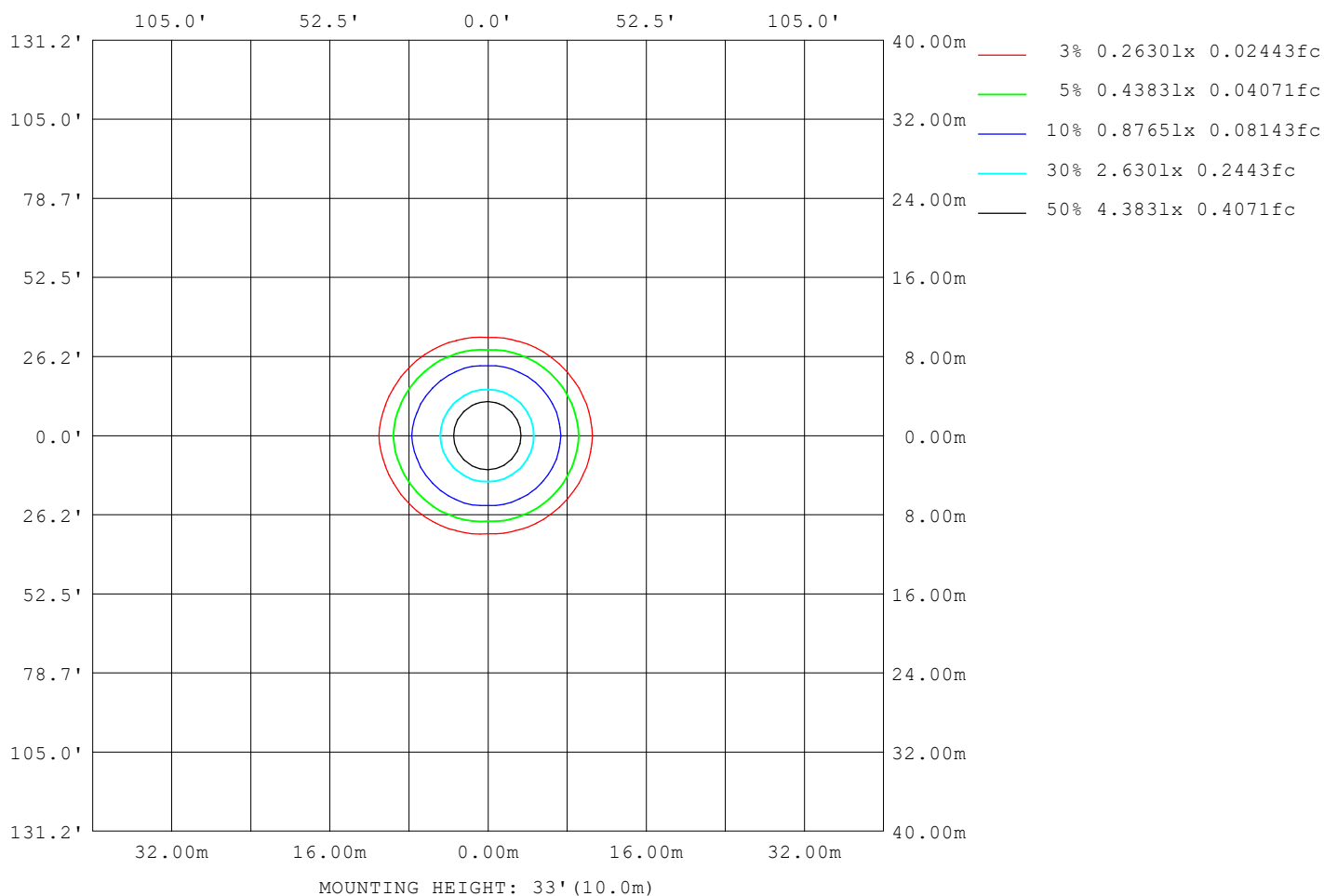
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.0757A P:8.8668W PF:0.9753 Freq:60.60Hz Lamp Flux:674.415x1 lm		
NAME: DL04-148 9W 27K	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:0.0757A P:8.8668W PF:0.9753 Freq:60.60Hz Lamp Flux:674.415x1 lm		
NAME: DL04-148 9W 27K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

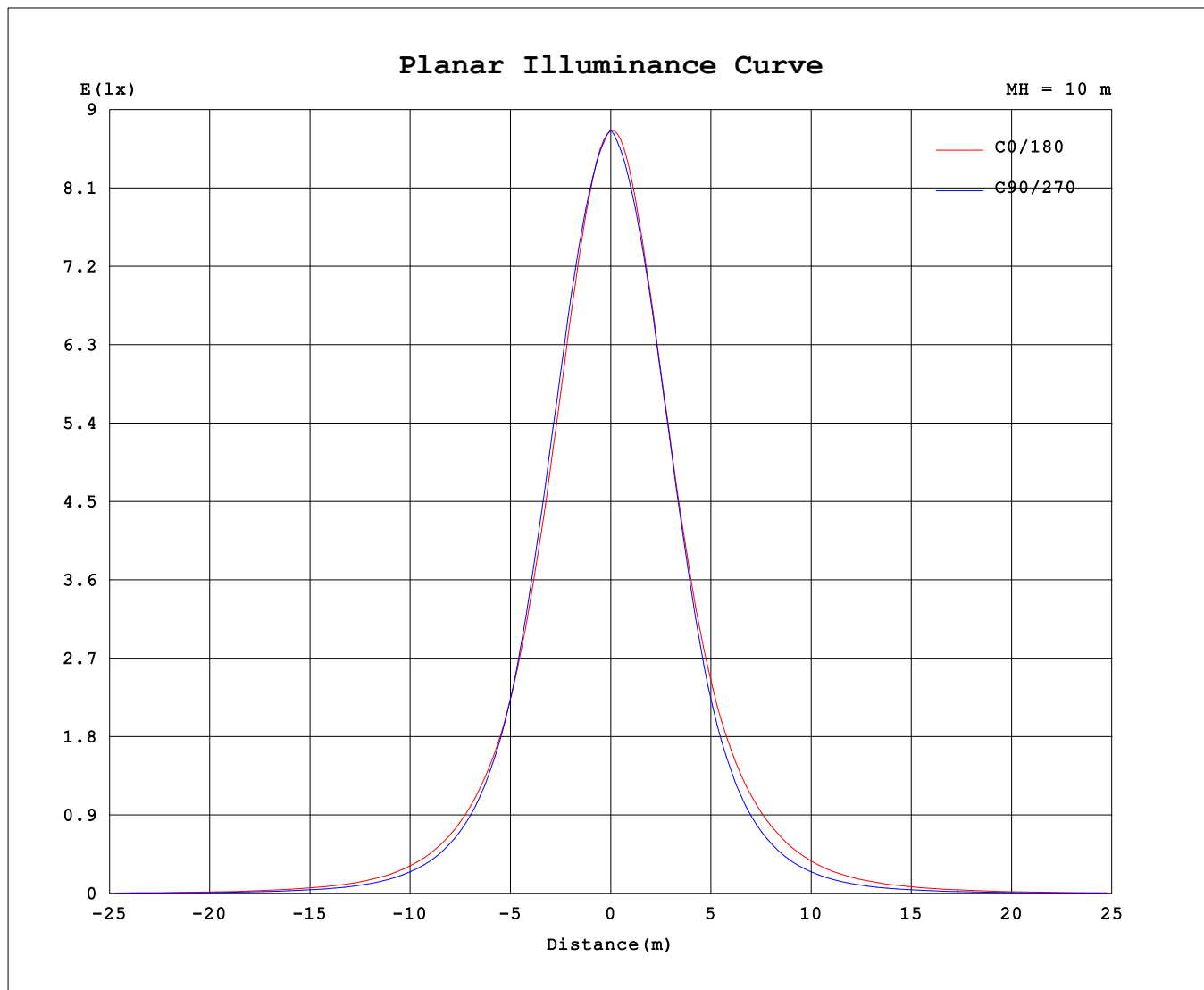
AvgL	cd/m2
L_0~180 (65) av	519
L_0~180 (75) av	324
L_0~180 (85) av	284
L_90~270 (65) av	337
L_90~270 (75) av	291
L_90~270 (85) av	176
L_45 (65) av	409
L_45 (75) av	305
L_45 (85) av	218

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:0.0757A P:8.8668W PF:0.9753 Freq:60.60Hz Lamp Flux:674.415x1 lm		
NAME: DL04-148 9W 27K	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	877	876	877	876														
5	832	833	848	833														
10	732	750	756	750														
15	603	629	633	629														
20	467	490	498	490														
25	346	351	376	351														
30	250	242	279	242														
35	182	164	207	164														
40	130	109	151	109														
45	90.5	70.9	107	70.9														
50	62.3	45.1	73.7	45.1														
55	42.9	28.9	50.7	28.9														
60	29.0	19.7	34.8	19.7														
65	19.9	14.3	24.0	14.3														
70	13.6	10.5	16.7	10.5														
75	7.49	7.53	9.29	7.53														
80	3.46	3.79	4.48	3.79														
85	2.22	1.54	2.73	1.54														
90	1.56	1.65	1.54	1.65														
95	1.66	1.80	1.63	1.80														
100	1.83	1.97	1.79	1.97														
105	2.03	2.18	2.00	2.18														
110	2.30	2.43	2.24	2.43														
115	2.56	2.71	2.53	2.71														
120	2.88	3.02	2.84	3.02														
125	3.21	3.33	3.16	3.33														
130	3.50	3.62	3.47	3.62														
135	3.76	3.87	3.74	3.87														
140	3.96	4.06	3.97	4.06														
145	4.10	4.20	4.12	4.20														
150	4.17	4.28	4.23	4.28														
155	4.20	4.32	4.26	4.32														
160	4.18	4.30	4.25	4.30														
165	4.13	4.22	4.18	4.22														
170	4.05	4.09	4.08	4.09														
175	4.01	4.02	4.04	4.02														
180	3.98	3.98	4.03	3.98														

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: