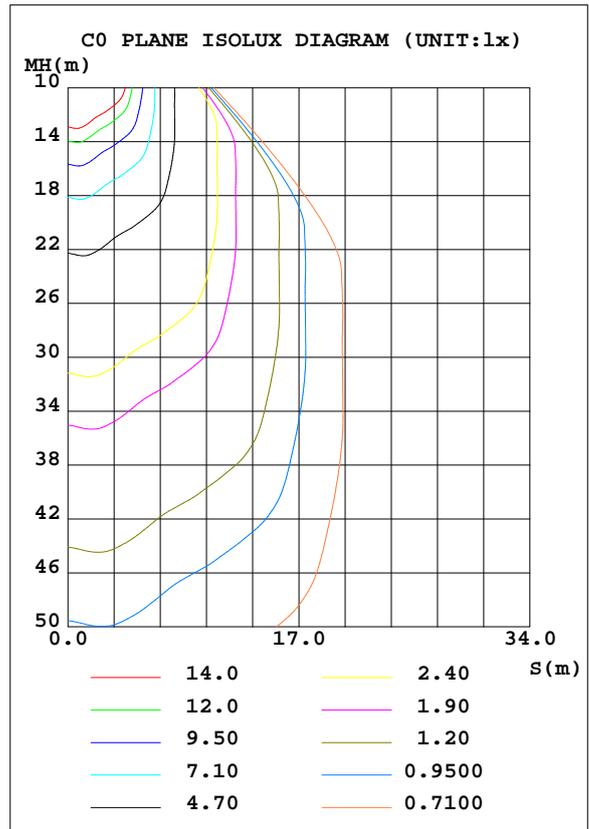
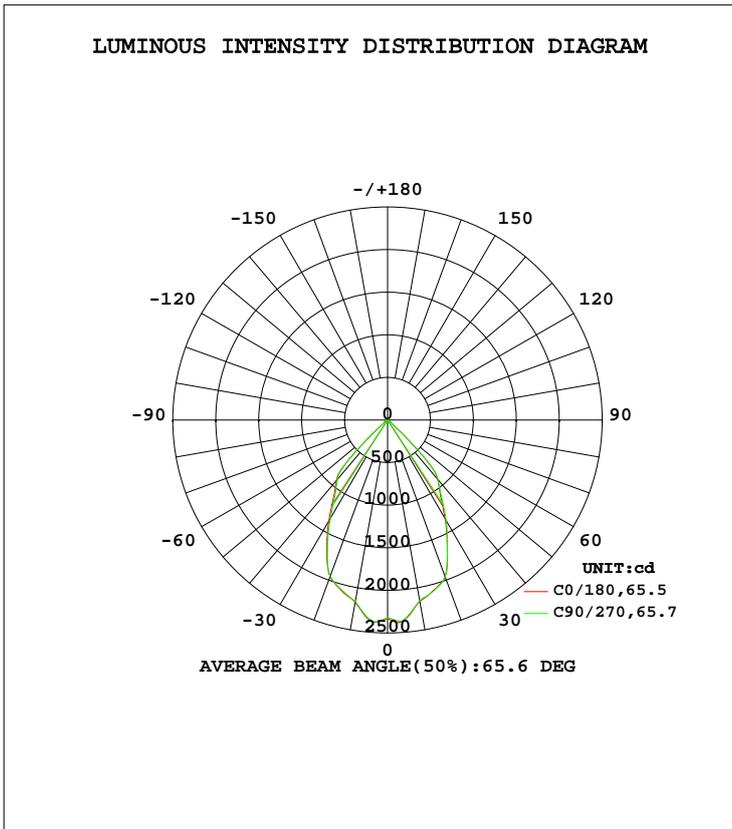


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.44V I:0.1425A P:31.010W PF:0.9875 Freq:50.01Hz Lamp Flux:2722.39x1 lm		
NAME: DL3082-WHTC30C01	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 100mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 87.79 lm/W			
MODEL	TB25141209 5700K	I <sub>max</sub> (cd)	2382	S/MH(C0/180)	0.98
NOMINAL POWER(W)	30	LOR(%)	100.0	S/MH(C90/270)	0.98
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	2722.4	η UP, DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	2722.39	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,50.0
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	1.10



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25DEG  
 Operators:  
 Test Date:2023-12-07

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.428  
 Humidity:65.0%  
 Test Distance:7.450m [K=1.0000]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

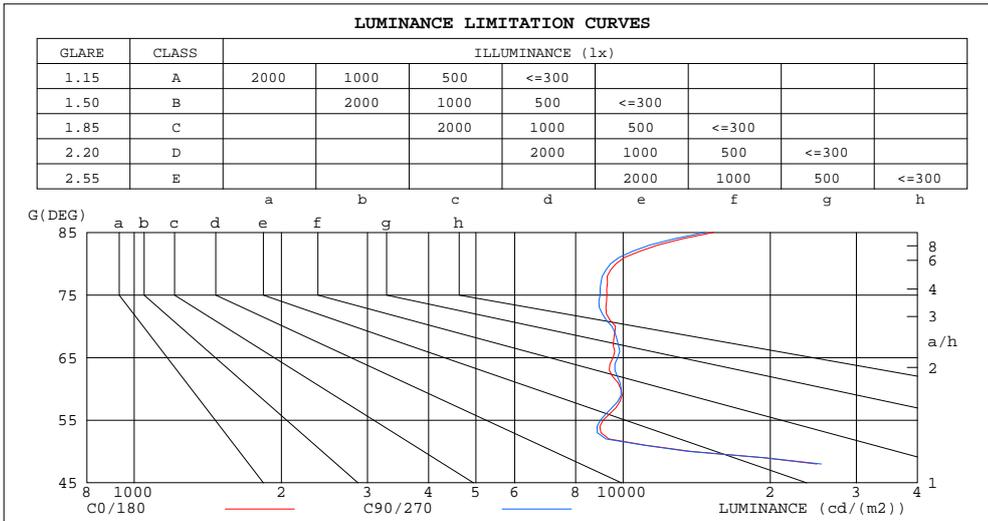
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum,lamp
10	2162	2160	2157	2153	2174	2176	2165	2157	0- 10	217.1	217.1	7.97,7.97
20	1956	1958	1958	1945	1956	1942	1950	1953	10- 20	582.3	799.3	29.4,29.4
30	1343	1364	1367	1362	1370	1348	1332	1339	20- 30	759.4	1559	57.3,57.3
40	910.0	914.9	909.1	907.0	921.0	909.7	908.1	895.3	30- 40	685.5	2244	82.4,82.4
50	69.56	69.64	68.52	67.40	73.59	79.25	76.11	76.34	40- 50	377.0	2621	96.3,96.3
60	38.80	37.99	38.89	38.66	39.11	38.69	38.99	39.17	50- 60	40.29	2662	97.8,97.8
70	25.90	25.45	25.46	25.85	25.92	25.76	25.45	25.92	60- 70	31.13	2693	98.9,98.9
80	13.19	13.10	12.85	12.82	13.08	13.25	13.45	13.42	70- 80	20.02	2713	99.6,99.6
90	0.4748	0.4825	0.4864	0.4787	0.1197	0.1120	0.1081	0.1081	80- 90	9.680	2722	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		

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25DEG  
 Operators:  
 Test Date:2023-12-07

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.428  
 Humidity:65.0%  
 Test Distance:7.450m [K=1.0000]  
 Remarks:

**LUMINANCE LIMITATION CURVES**

Test:U:220.44V I:0.1425A P:31.010W PF:0.9875 Freq:50.01Hz Lamp Flux:2722.39x1 lm		
NAME: DL3082-WHTC30C01	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 100mm	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	15298	14711
80	9673	9427
75	9266	8976
70	9648	9482
65	9543	9746
60	9885	9909
55	9106	8985
50	13786	13578
45	89404	89464

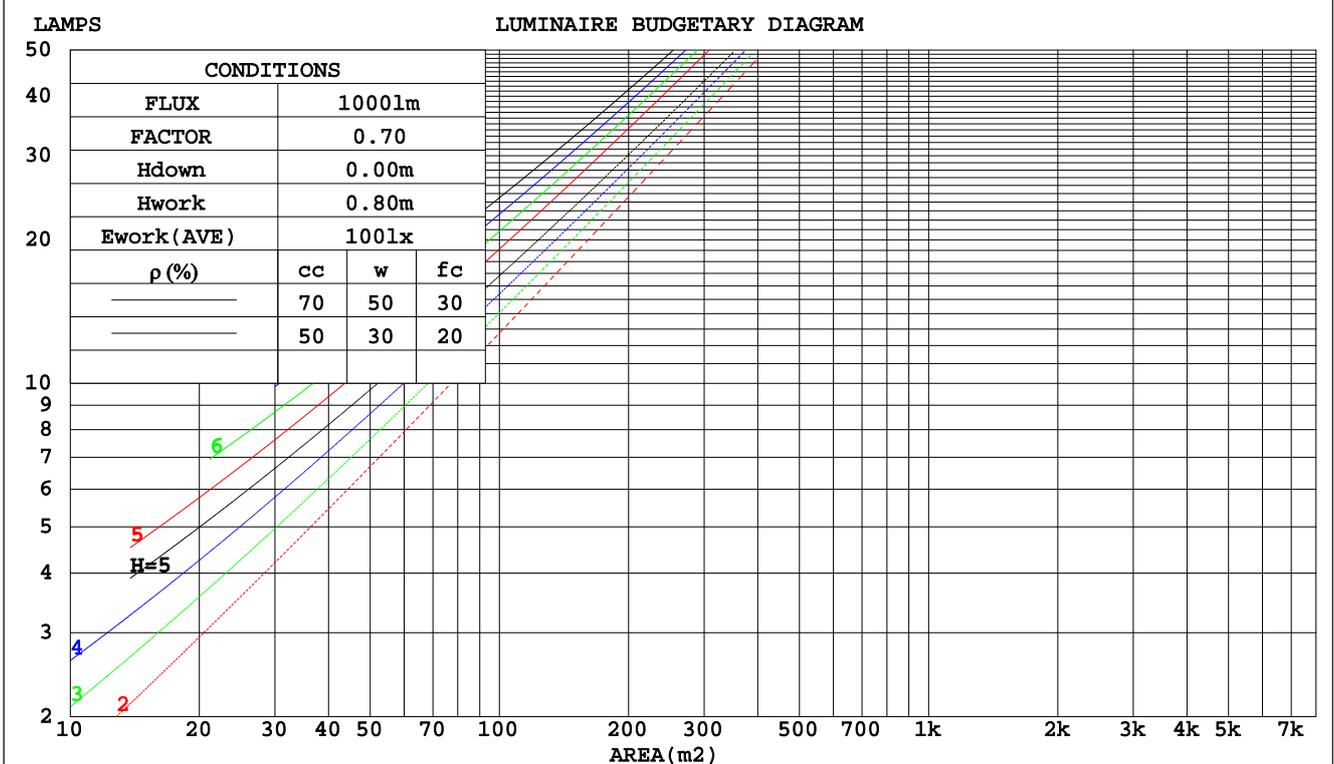
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators:  
 Test Date: 2023-12-07

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 7.450m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.44V I:0.1425A P:31.010W PF:0.9875 Freq:50.01Hz Lamp Flux:2722.39x1 lm		
NAME: DL3082-WHTC30C01	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 100mm	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																
pfc	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	1.10	1.07	1.04	1.07	1.05	1.03	1.03	1.01	.99	.00	.98	.97	.96	.95	.94	.92
2.0	1.01	.96	.93	.99	.95	.92	.96	.92	.89	.93	.90	.88	.90	.88	.86	.84
3.0	.93	.87	.83	.92	.86	.82	.89	.85	.81	.86	.83	.80	.84	.81	.78	.77
4.0	.86	.80	.75	.85	.79	.75	.83	.78	.74	.80	.76	.73	.79	.75	.72	.70
5.0	.80	.73	.68	.79	.73	.68	.77	.71	.67	.75	.70	.67	.73	.69	.66	.65
6.0	.74	.67	.63	.73	.67	.62	.72	.66	.62	.70	.65	.61	.69	.64	.61	.59
7.0	.69	.62	.58	.68	.62	.57	.67	.61	.57	.66	.60	.57	.64	.60	.56	.55
8.0	.64	.58	.53	.64	.57	.53	.62	.57	.53	.61	.56	.52	.60	.56	.52	.51
9.0	.60	.54	.49	.60	.53	.49	.59	.53	.49	.58	.52	.49	.57	.52	.49	.47
10.0	.56	.50	.46	.56	.50	.46	.55	.49	.46	.54	.49	.45	.53	.49	.45	.44



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators:  
 Test Date: 2023-12-07

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 7.450m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:220.44V I:0.1425A P:31.010W PF:0.9875 Freq:50.01Hz Lamp Flux:2722.39x1 lm		
NAME: DL3082-WHTC30C01	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 100mm	Shielding Angle:

ρcc	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						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.200	.114	.036	.193	.110	.035	.180	.103	.033	.169	.097	.031	.158	.092	.030	
2.0	.192	.105	.032	.186	.102	.032	.175	.097	.030	.165	.093	.029	.156	.088	.028	
3.0	.183	.097	.029	.178	.095	.029	.168	.091	.028	.160	.088	.027	.152	.084	.026	
4.0	.174	.090	.027	.169	.089	.026	.161	.086	.026	.154	.083	.025	.147	.080	.024	
5.0	.165	.084	.024	.162	.083	.024	.154	.080	.024	.148	.078	.023	.142	.076	.023	
6.0	.157	.079	.023	.154	.078	.022	.148	.076	.022	.142	.074	.022	.136	.072	.021	
7.0	.150	.074	.021	.147	.073	.021	.142	.072	.021	.136	.070	.020	.131	.068	.020	
8.0	.143	.070	.020	.141	.069	.020	.136	.068	.019	.131	.066	.019	.126	.065	.019	
9.0	.137	.066	.018	.134	.066	.018	.130	.064	.018	.126	.063	.018	.122	.062	.018	
10.0	.131	.063	.017	.129	.062	.017	.125	.061	.017	.121	.060	.017	.117	.059	.017	

ρcc	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						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.173	.157	.143	.148	.135	.123	.101	.093	.085	.058	.054	.050	.019	.017	.016	
2.0	.159	.132	.110	.136	.114	.095	.093	.079	.066	.054	.046	.039	.017	.015	.013	
3.0	.148	.114	.087	.127	.098	.075	.087	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.138	.099	.070	.119	.086	.060	.082	.060	.043	.047	.035	.025	.015	.011	.008	
5.0	.130	.088	.057	.112	.076	.049	.077	.053	.035	.045	.031	.021	.014	.010	.007	
6.0	.123	.079	.047	.106	.068	.041	.073	.048	.029	.042	.028	.017	.014	.009	.006	
7.0	.117	.072	.040	.101	.062	.035	.070	.044	.025	.040	.026	.015	.013	.008	.005	
8.0	.111	.066	.034	.096	.057	.030	.066	.040	.021	.039	.024	.013	.012	.008	.004	
9.0	.106	.061	.030	.092	.053	.026	.063	.037	.018	.037	.022	.011	.012	.007	.004	
10.0	.102	.056	.026	.088	.049	.023	.061	.034	.016	.035	.020	.010	.012	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25DEG  
 Operators:  
 Test Date:2023-12-07

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.428  
 Humidity:65.0%  
 Test Distance:7.450m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.44V I:0.1425A P:31.010W PF:0.9875 Freq:50.01Hz Lamp Flux:2722.39x1 lm		
NAME: DL3082-WHTC30C01	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 100mm	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	20.5	21.6	20.8	21.8	22.0	20.6	21.7	20.8	21.8	22.0
3H	20.5	21.4	20.7	21.7	21.9	20.5	21.5	20.8	21.7	21.9
4H	20.4	21.4	20.7	21.6	21.8	20.5	21.4	20.7	21.6	21.8
6H	20.4	21.3	20.7	21.5	21.8	20.4	21.3	20.7	21.5	21.8
8H	20.4	21.2	20.7	21.5	21.7	20.4	21.2	20.7	21.5	21.8
12H	20.4	21.2	20.7	21.5	21.7	20.4	21.2	20.7	21.5	21.8
4H 2H	20.3	21.2	20.6	21.5	21.7	20.3	21.3	20.6	21.5	21.7
3H	20.3	21.1	20.6	21.3	21.6	20.3	21.1	20.6	21.4	21.7
4H	20.3	21.0	20.6	21.3	21.6	20.3	21.0	20.6	21.3	21.6
6H	20.3	20.9	20.7	21.2	21.6	20.3	20.9	20.7	21.3	21.6
8H	20.3	20.9	20.7	21.2	21.6	20.3	20.9	20.7	21.3	21.6
12H	20.3	20.9	20.7	21.2	21.6	20.4	20.9	20.8	21.3	21.7
8H 4H	20.2	20.8	20.6	21.1	21.5	20.2	20.8	20.6	21.1	21.5
6H	20.2	20.7	20.7	21.1	21.5	20.3	20.7	20.7	21.1	21.5
8H	20.3	20.7	20.7	21.1	21.6	20.3	20.7	20.8	21.1	21.6
12H	20.4	20.8	20.9	21.2	21.7	20.4	20.8	20.9	21.2	21.7
12H 4H	20.1	20.7	20.5	21.0	21.4	20.2	20.7	20.6	21.1	21.5
6H	20.2	20.6	20.7	21.0	21.5	20.2	20.7	20.7	21.1	21.5
8H	20.3	20.6	20.7	21.1	21.6	20.3	20.7	20.8	21.1	21.6
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 3.0 / - 6.2					+ 3.0 / - 6.3				
1.5H	+ 3.6 / - 6.8					+ 3.6 / - 6.9				
2.0H	+ 6.9 / - 2.9					+ 7.0 / - 2.9				

CIE Pub.117, 2722 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.5)  
 Area: 0.00785 m2

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25DEG  
 Operators:  
 Test Date:2023-12-07

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.428  
 Humidity:65.0%  
 Test Distance:7.450m [K=1.0000]  
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.44V I:0.1425A P:31.010W PF:0.9875 Freq:50.01Hz Lamp Flux:2722.39x1 lm		
NAME: DL3082-WHTC30C01	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 100mm	Shielding Angle:

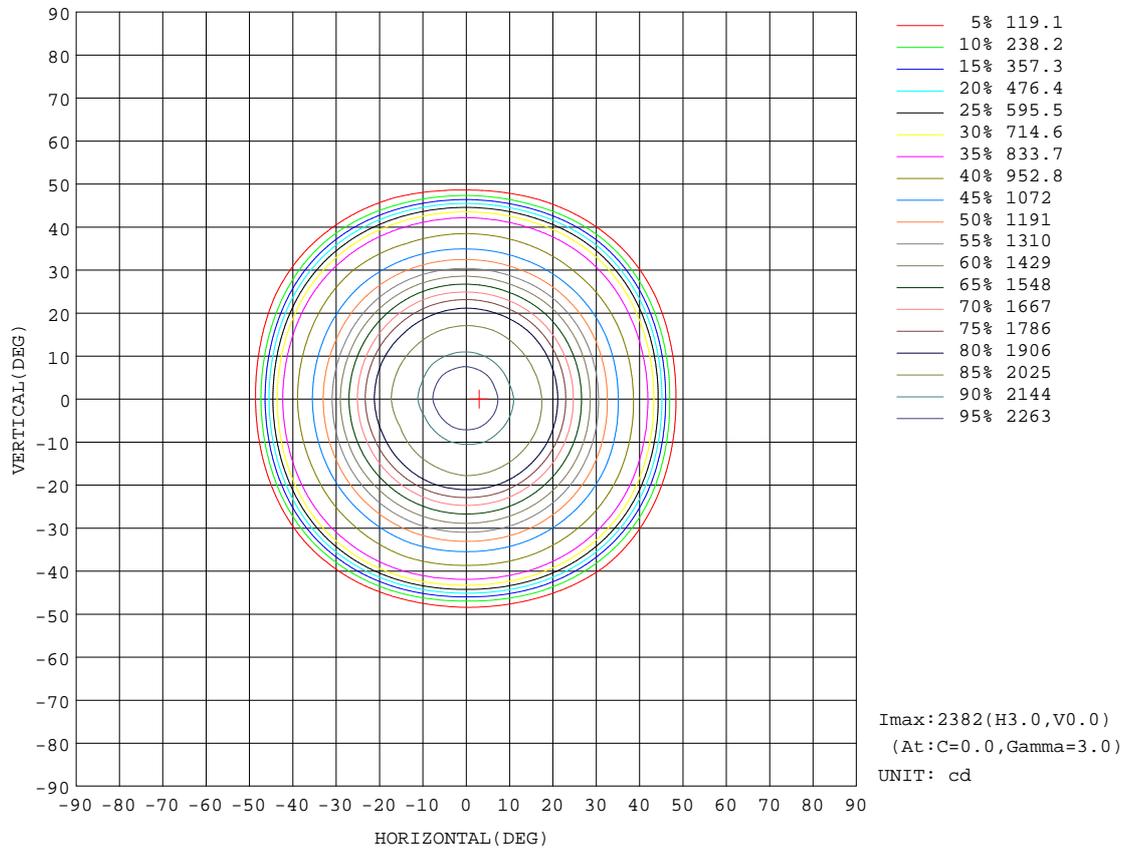
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	81	73	69	80	73	68	79	72	68	64
0.80	89	82	77	88	82	77	87	81	77	73
1.00	95	88	84	94	88	84	92	88	83	79
1.25	100	93	89	98	93	89	96	92	88	83
1.50	103	97	93	102	96	93	99	95	92	87
2.00	106	101	98	105	100	97	102	98	96	90
2.50	108	104	100	107	103	100	103	100	98	91
3.00	110	106	103	108	105	102	105	102	100	93
4.00	112	109	107	110	108	105	107	104	102	95
5.00	114	111	109	112	109	107	108	106	104	96
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25DEG  
 Operators:  
 Test Date:2023-12-07

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.428  
 Humidity:65.0%  
 Test Distance:7.450m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

Test:U:220.44V I:0.1425A P:31.010W PF:0.9875 Freq:50.01Hz Lamp Flux:2722.39x1 lm		
NAME: DL3082-WHTC30C01	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 100mm	Shielding Angle:



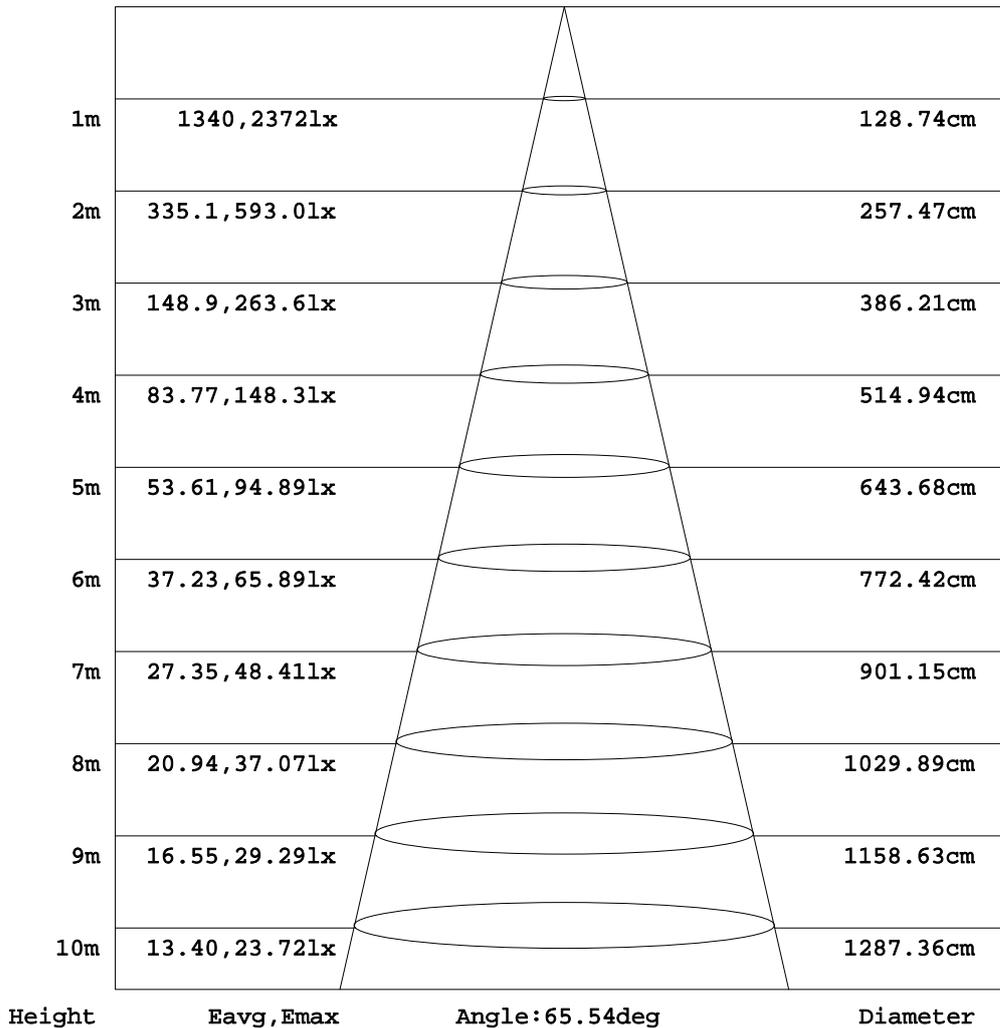
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators:  
 Test Date: 2023-12-07

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 7.450m [K=1.0000]  
 Remarks:

**AAI Figure**

Test:U:220.44V I:0.1425A P:31.010W PF:0.9875 Freq:50.01Hz Lamp Flux:2722.39x1 lm		
NAME: DL3082-WHTC30C01	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 100mm	Shielding Angle:

Flux out:1776 lm



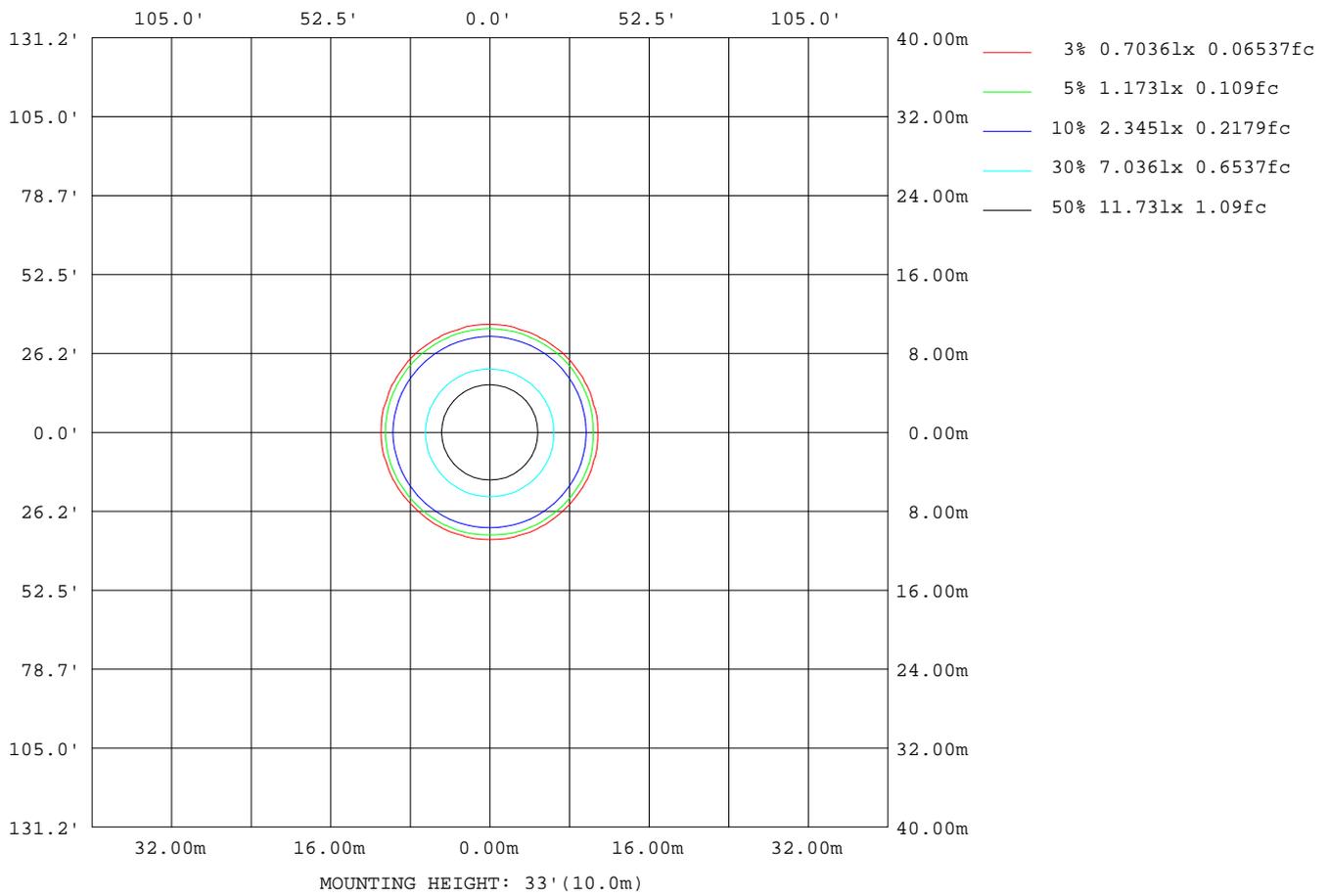
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25DEG  
 Operators:  
 Test Date:2023-12-07

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.428  
 Humidity:65.0%  
 Test Distance:7.450m [K=1.0000]  
 Remarks:

**ISOLUX DIAGRAM**

Test:U:220.44V I:0.1425A P:31.010W PF:0.9875 Freq:50.01Hz Lamp Flux:2722.39x1 lm		
NAME: DL3082-WHTC30C01	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 100mm	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators:  
 Test Date: 2023-12-07

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 7.450m [K=1.0000]  
 Remarks:

LED Avg.L Report

Test:U:220.44V I:0.1425A P:31.010W PF:0.9875 Freq:50.01Hz Lamp Flux:2722.39x1 lm		
NAME: DL3082-WHTC30C01	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 100mm	Shielding Angle:

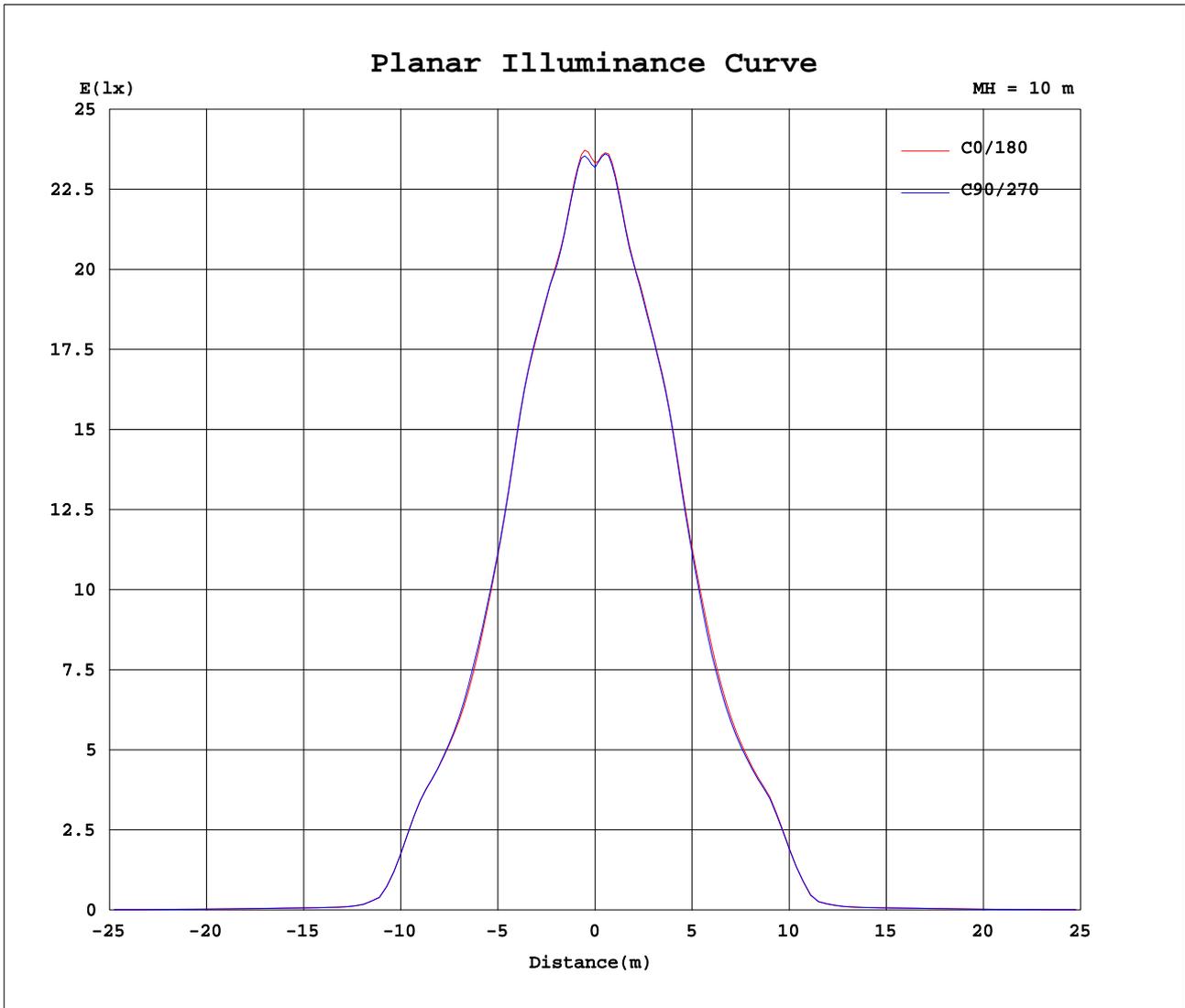
AvgL	cd/m2
L_0~180(65)av	9480
L_0~180(75)av	9353
L_0~180(85)av	14830
L_90~270(65)av	9412
L_90~270(75)av	9348
L_90~270(85)av	14751
L_45(65)av	9406
L_45(75)av	9267
L_45(85)av	14765

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25DEG  
 Operators:  
 Test Date:2023-12-07

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.428  
 Humidity:65.0%  
 Test Distance:7.450m [K=1.0000]  
 Remarks:

**Planar Illuminance Curve**



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators:  
 Test Date: 2023-12-07

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 7.450m [K=1.0000]  
 Remarks:

