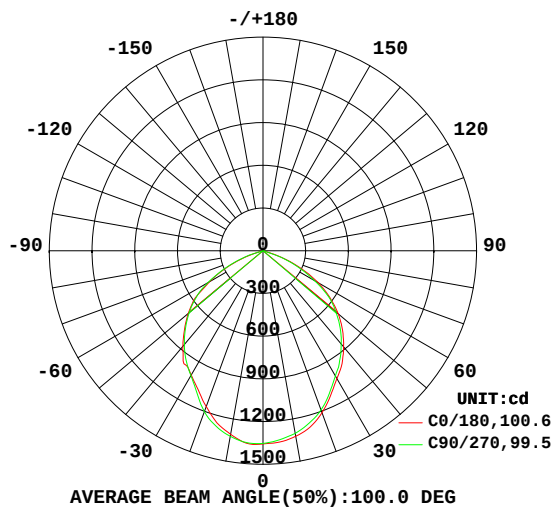


LUMINAIRE PHOTOMETRIC TEST REPORT

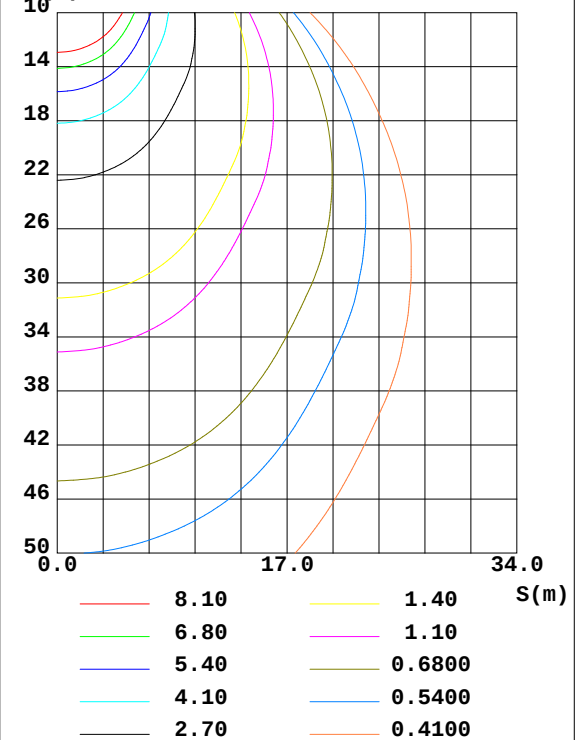
Test:U:220.49V I:0.1388A P:30.252W PF:0.9884 Freq:50.01Hz Lamp Flux:3009.64x1 lm					
NAME: DL3005-WHTC30C02			TYPE:		WEIGHT:
SPEC.: white RA90 3000K+5700K			DIM.:		SERIAL No.:
MFR.:			SUR.: 185mm		Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 99.49 lm/W
MODEL	TB25141209 5700K	I _{max} (cd)	1363	S/MH(C0/180)	1.12	
NOMINAL POWER(W)	30	LOR(%)	100.0	S/MH(C90/270)	1.13	
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	3009.6	η UP, DN(C0-180)	0.0, 49.8	
NOMINAL FLUX(lm)	3009.64	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 50.2	
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	1.30	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2023-10-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
 Humidity: 65.0%
 Test Distance: 7.450m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

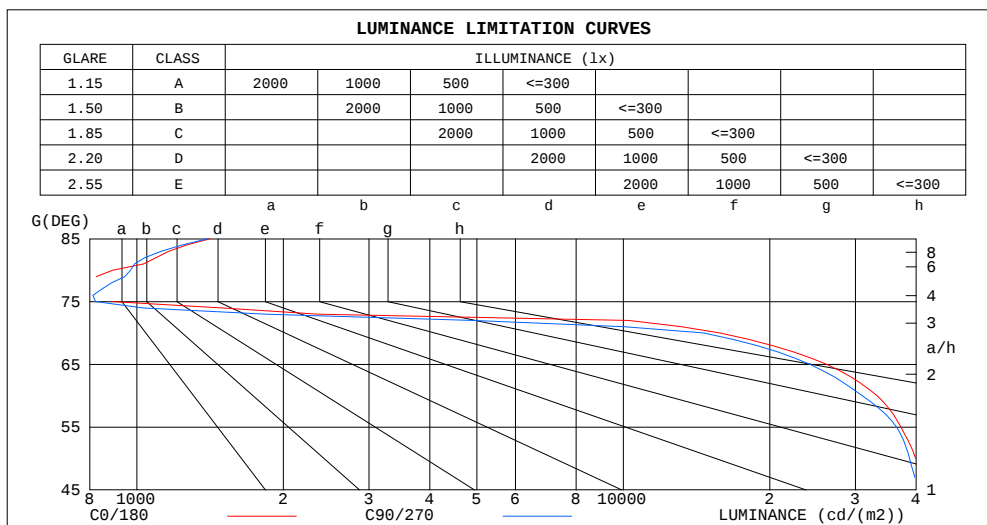
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1323	1317	1302	1294	1309	1323	1323	1327	0- 10	127.5	127.5	4.24, 4.24
20	1212	1211	1191	1157	1165	1179	1203	1210	10- 20	355.3	482.7	16, 16
30	1038	1030	1016	1010	1008	1013	1012	1027	20- 30	508.1	990.9	32.9, 32.9
40	880.5	872.3	854.6	861.7	875.6	868.6	859.9	868.5	30- 40	593.8	1585	52.7, 52.7
50	689.5	681.6	669.8	675.6	685.2	682.5	676.4	687.6	40- 50	598.3	2183	72.5, 72.5
60	446.8	436.3	416.2	415.1	430.9	434.6	445.6	452.7	50- 60	506.5	2689	89.4, 89.4
70	145.1	137.7	134.4	128.3	134.6	144.9	155.2	156.9	60- 70	284.4	2974	98.8, 98.8
80	4.166	4.445	4.532	4.557	3.906	4.186	4.428	4.094	70- 80	32.49	3006	99.9, 99.9
90	1.459	1.448	1.440	1.459	0.7489	0.7412	0.7914	0.8647	80- 90	3.217	3010	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: 2023-10-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
 Humidity: 65.0%
 Test Distance: 7.450m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.49V I:0.1388A P:30.252W PF:0.9884 Freq:50.01Hz Lamp Flux:3009.64x1 lm		
NAME: DL3005-WHTC30C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 185mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1412	1395
80	893	971
75	890	823
70	15787	14616
65	26169	24168
60	33242	30968
55	37211	36447
50	39908	38763
45	41564	40336

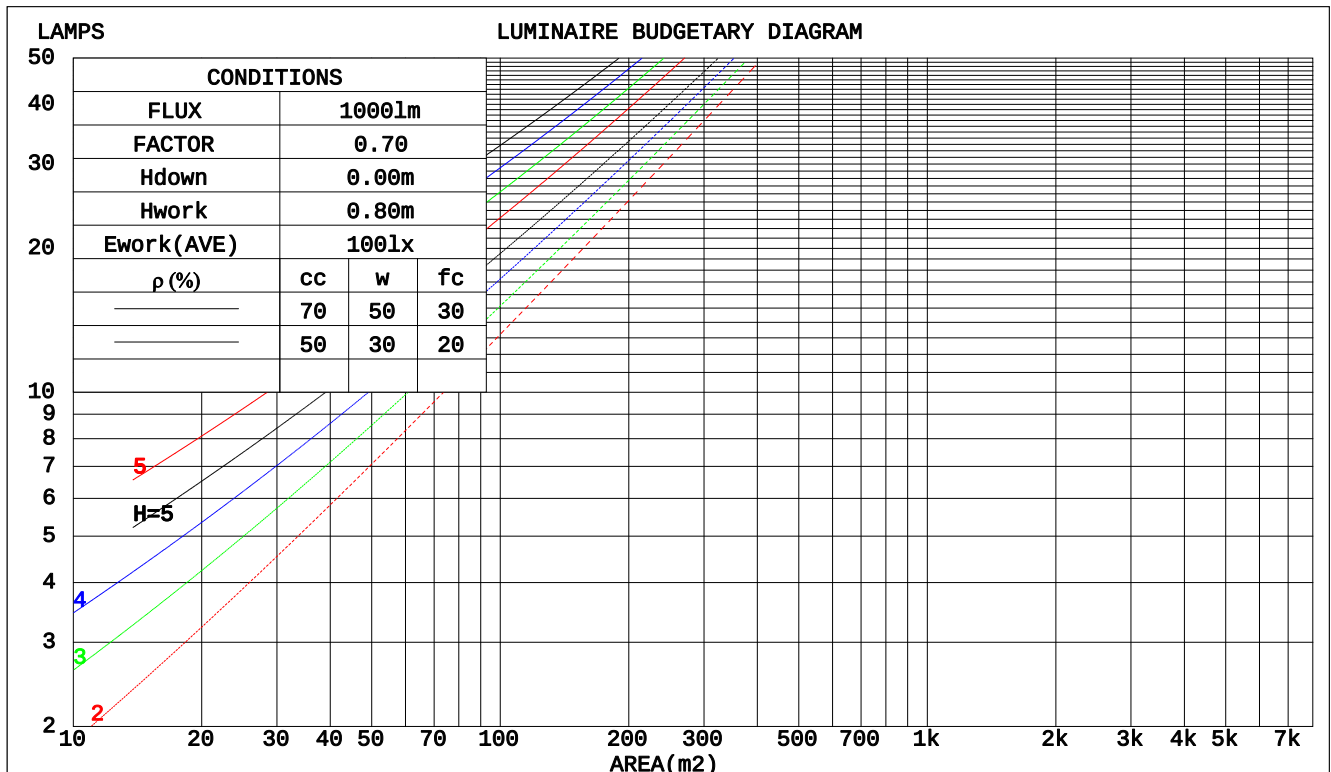
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2023-10-19

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.450m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.49V I:0.1388A P:30.252W PF:0.9884 Freq:50.01Hz Lamp Flux:3009.64x1 lm		
NAME: DL3005-WHTC30C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 185mm	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	1.07	1.03	1.00	1.05	1.01	.99	1.00	.98	.95	.97	.95	.93	.93	.91	.90	.88
2.0	.95	.89	.84	.93	.88	.83	.90	.85	.81	.86	.83	.79	.84	.80	.78	.76
3.0	.84	.77	.71	.83	.76	.71	.80	.74	.70	.77	.72	.68	.75	.71	.67	.65
4.0	.75	.67	.61	.74	.67	.61	.72	.65	.60	.69	.64	.59	.67	.63	.59	.57
5.0	.68	.59	.53	.67	.59	.53	.65	.58	.53	.63	.57	.52	.61	.56	.51	.49
6.0	.61	.53	.47	.60	.52	.47	.59	.52	.46	.57	.51	.46	.55	.50	.46	.44
7.0	.56	.47	.42	.55	.47	.42	.53	.46	.41	.52	.46	.41	.51	.45	.41	.39
8.0	.51	.43	.37	.50	.43	.37	.49	.42	.37	.48	.41	.37	.47	.41	.37	.35
9.0	.47	.39	.34	.46	.39	.34	.45	.38	.34	.44	.38	.33	.43	.37	.33	.31
10.0	.43	.36	.31	.43	.36	.31	.42	.35	.31	.41	.35	.30	.40	.34	.30	.29



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2023-10-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:220.49V I:0.1388A P:30.252W PF:0.9884 Freq:50.01Hz Lamp Flux:3009.64x1 lm					
NAME: DL3005-WHTC30C02			TYPE:		WEIGHT:
SPEC.: white RA90 3000K+5700K			DIM.:		SERIAL No.:
MFR.:			SUR.: 185mm		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	.253	.144	.045	.246	.140	.045	.233	.133	.043	.221	.127	.041	.210	.122	.039	
2.0	.249	.136	.042	.243	.134	.041	.232	.129	.040	.221	.124	.039	.212	.120	.038	
3.0	.238	.127	.038	.232	.124	.037	.222	.121	.037	.213	.117	.036	.205	.113	.035	
4.0	.224	.117	.034	.220	.115	.034	.211	.112	.033	.203	.109	.033	.195	.106	.032	
5.0	.211	.108	.031	.207	.106	.031	.199	.104	.031	.192	.101	.030	.185	.099	.030	
6.0	.198	.099	.028	.195	.098	.028	.188	.096	.028	.181	.094	.028	.175	.092	.027	
7.0	.186	.092	.026	.183	.091	.026	.177	.089	.026	.171	.088	.025	.165	.086	.025	
8.0	.175	.086	.024	.172	.085	.024	.167	.083	.024	.161	.082	.024	.157	.080	.023	
9.0	.165	.080	.022	.163	.079	.022	.158	.078	.022	.153	.077	.022	.148	.075	.022	
10.0	.156	.075	.021	.154	.074	.021	.149	.073	.021	.145	.072	.020	.141	.071	.020	

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	.176	.157	.139	.151	.134	.120	.103	.092	.083	.059	.054	.048	.019	.017	.016	
2.0	.167	.132	.103	.143	.114	.089	.098	.079	.062	.056	.046	.036	.018	.015	.012	
3.0	.158	.114	.079	.136	.098	.068	.093	.068	.048	.054	.040	.028	.017	.013	.009	
4.0	.151	.100	.062	.129	.087	.054	.089	.060	.038	.051	.035	.022	.017	.012	.007	
5.0	.144	.090	.050	.123	.078	.044	.085	.054	.031	.049	.032	.018	.016	.010	.006	
6.0	.137	.081	.041	.118	.070	.036	.081	.049	.025	.047	.029	.015	.015	.009	.005	
7.0	.131	.074	.035	.112	.064	.030	.078	.045	.022	.045	.027	.013	.015	.009	.004	
8.0	.125	.069	.030	.107	.059	.026	.074	.042	.019	.043	.025	.011	.014	.008	.004	
9.0	.119	.064	.026	.103	.055	.023	.071	.039	.016	.041	.023	.010	.013	.008	.003	
10.0	.114	.059	.023	.098	.052	.020	.068	.036	.014	.040	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2023-10-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.49V I:0.1388A P:30.252W PF:0.9884 Freq:50.01Hz Lamp Flux:3009.64x1 lm											
NAME: DL3005-WHTC30C02					TYPE:			WEIGHT:			
SPEC.: white RA90 3000K+5700K					DIM.:			SERIAL No.:			
MFR.:					SUR.: 185mm			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	21.6	23.0	21.9	23.2	23.4	21.4	22.8	21.7	23.0	23.2	
	3H	22.2	23.4	22.4	23.7	23.9	21.9	23.2	22.2	23.4	23.6
	4H	22.0	23.3	22.4	23.5	23.8	21.8	23.0	22.1	23.3	23.5
	6H	21.9	23.1	22.3	23.3	23.6	21.7	22.8	22.0	23.1	23.4
	8H	21.9	23.0	22.2	23.3	23.5	21.7	22.7	22.0	23.0	23.3
	12H	21.8	22.9	22.2	23.2	23.5	21.6	22.7	22.0	22.9	23.2
4H	2H	21.9	23.1	22.2	23.4	23.6	21.8	23.0	22.1	23.2	23.5
	3H	22.5	23.6	22.8	23.8	24.1	22.3	23.3	22.6	23.6	23.9
	4H	22.4	23.4	22.8	23.7	24.0	22.2	23.1	22.6	23.5	23.8
	6H	22.3	23.2	22.7	23.5	23.9	22.1	22.9	22.5	23.3	23.6
	8H	22.3	23.0	22.7	23.4	23.8	22.1	22.8	22.5	23.2	23.6
	12H	22.2	22.9	22.7	23.3	23.7	22.0	22.7	22.4	23.1	23.5
8H	4H	22.3	23.1	22.7	23.4	23.8	22.1	22.9	22.5	23.2	23.6
	6H	22.2	22.8	22.7	23.2	23.7	22.0	22.6	22.5	23.0	23.5
	8H	22.2	22.7	22.6	23.2	23.6	22.0	22.5	22.4	22.9	23.4
	12H	22.1	22.6	22.6	23.1	23.5	21.9	22.4	22.4	22.9	23.3
12H	4H	22.3	23.0	22.7	23.3	23.7	22.1	22.8	22.5	23.1	23.5
	6H	22.2	22.7	22.6	23.2	23.6	22.0	22.5	22.4	22.9	23.4
	8H	22.1	22.6	22.6	23.1	23.5	21.9	22.4	22.4	22.8	23.3
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H	+ 0.4 / - 0.6					+ 0.4 / - 0.6					
1.5H	+ 0.5 / - 0.6					+ 0.4 / - 0.7					
2.0H	+ 0.7 / - 1.0					+ 0.8 / - 0.9					

CIE Pub.117, 3010 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.8)
Area: 0.02688 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2023-10-19

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.49V I:0.1388A P:30.252W PF:0.9884 Freq:50.01Hz Lamp Flux:3009.64x1 lm		
NAME: DL3005-WHTC30C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 185mm	Shielding Angle:

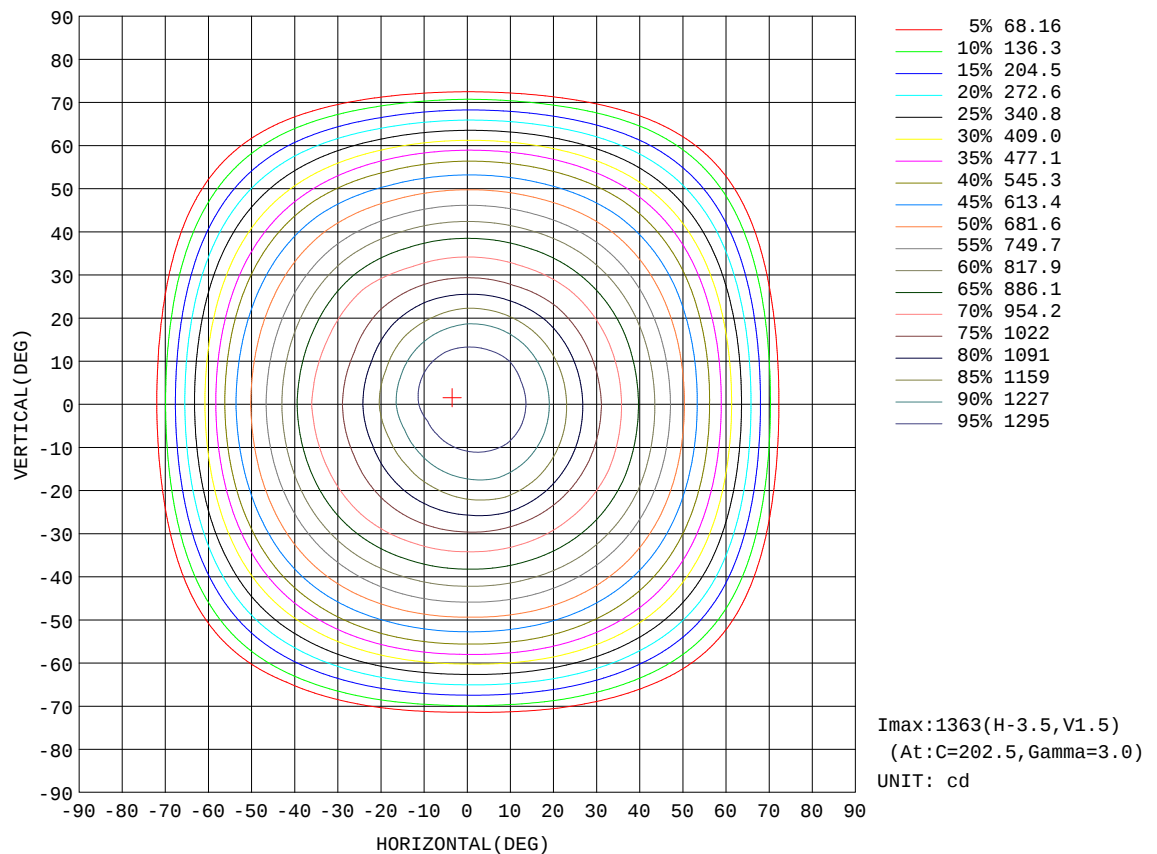
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	61	51	44	61	50	44	60	50	44	38
0.80	72	61	55	71	61	55	69	60	54	48
1.00	81	71	64	80	70	64	78	72	64	57
1.25	88	79	73	87	78	72	84	77	71	65
1.50	93	84	78	91	83	78	88	82	77	70
2.00	99	92	87	97	91	86	94	89	84	77
2.50	103	96	91	101	95	90	97	92	88	81
3.00	105	100	95	103	98	94	100	95	92	84
4.00	109	104	100	107	102	99	103	99	96	88
5.00	111	107	104	108	105	102	104	101	99	90
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:2023-10-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:220.49V I:0.1388A P:30.252W PF:0.9884 Freq:50.01Hz Lamp Flux:3009.64x1 lm		
NAME: DL3005-WHTC30C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 185mm	Shielding Angle:

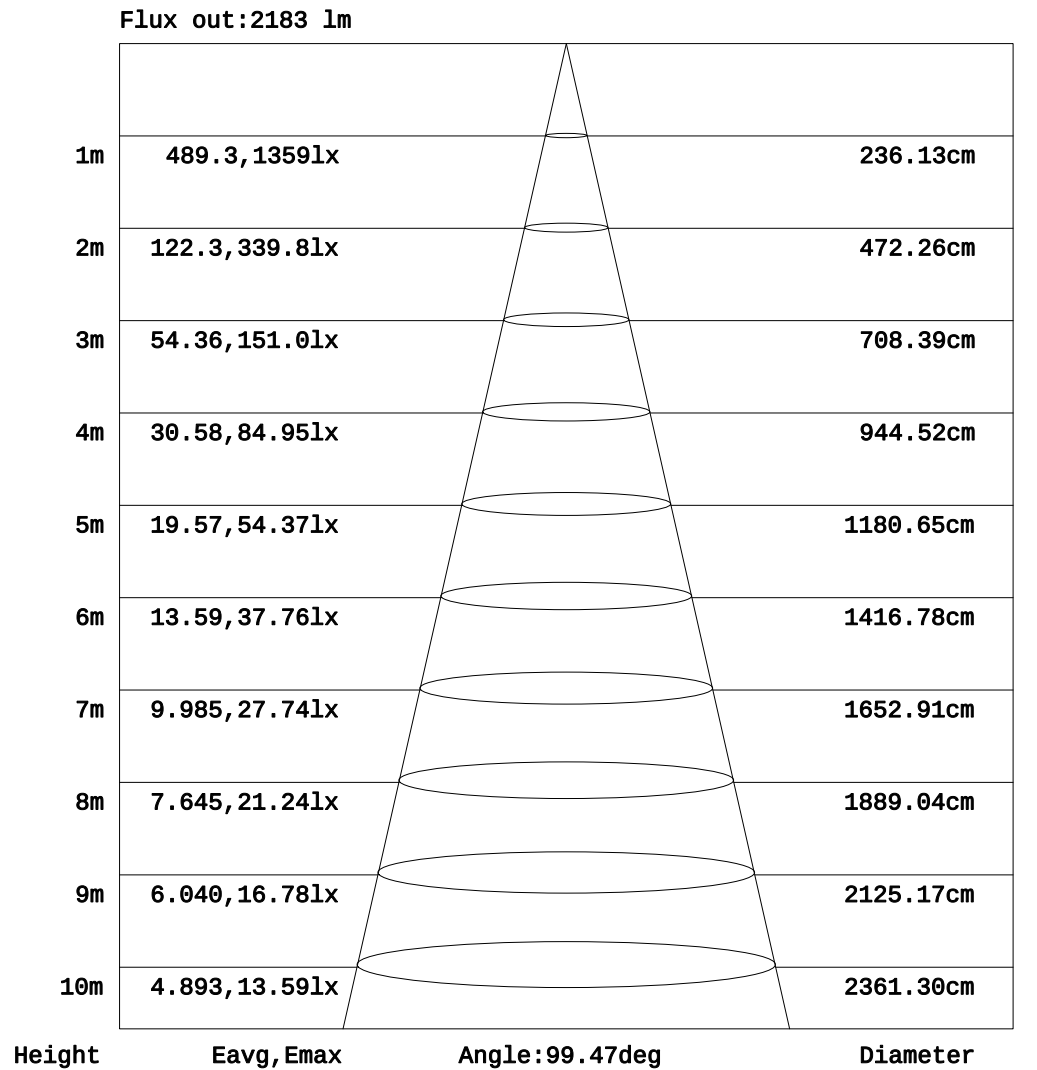


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2023-10-19

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

AAI Figure

Test:U:220.49V I:0.1388A P:30.252W PF:0.9884 Freq:50.01Hz Lamp Flux:3009.64x1 lm		
NAME: DL3005-WHTC30C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 185mm	Shielding Angle:



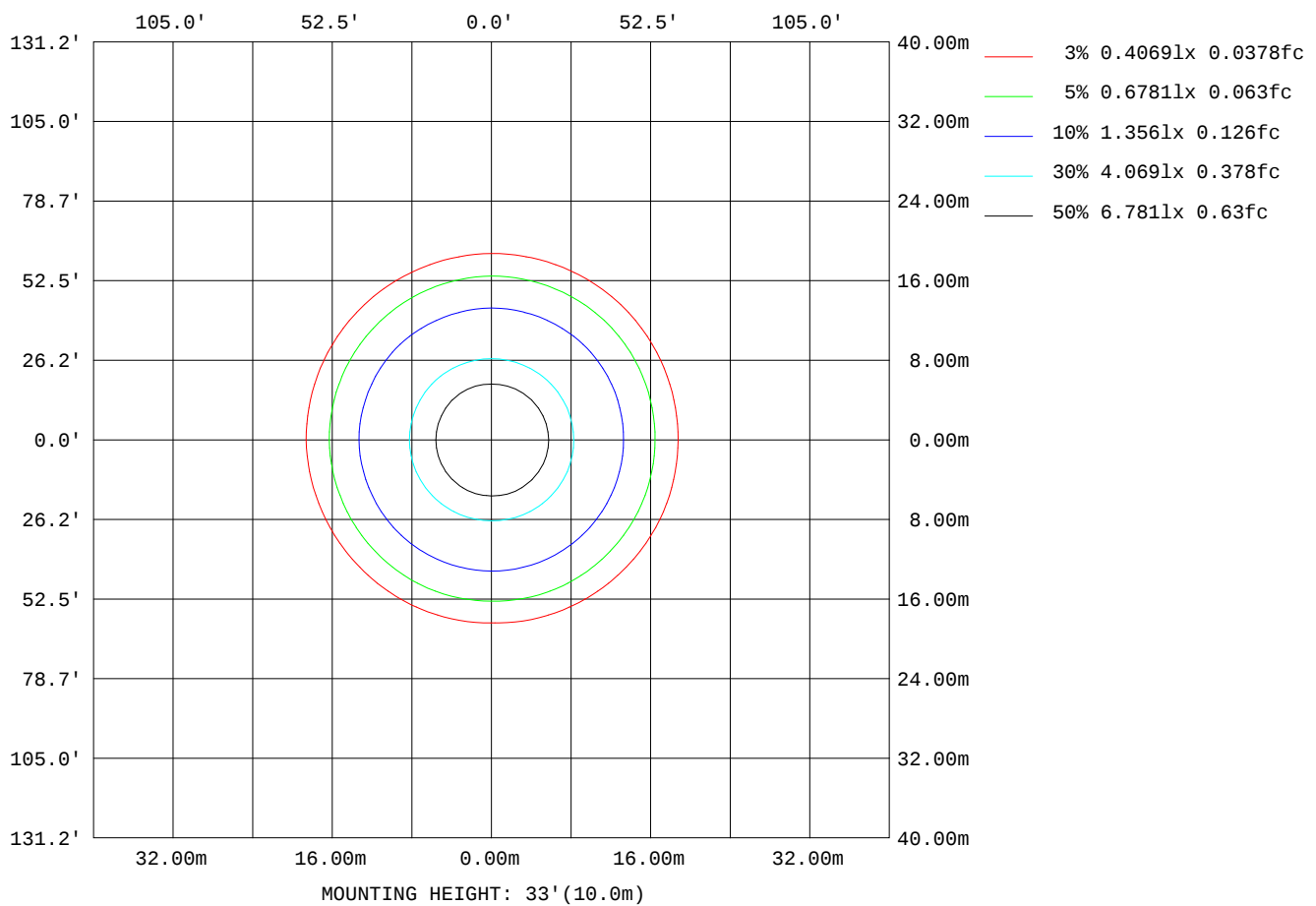
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2023-10-19

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:220.49V I:0.1388A P:30.252W PF:0.9884 Freq:50.01Hz Lamp Flux:3009.64x1 lm		
NAME: DL3005-WHTC30C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 185mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2023-10-19

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.450m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:220.49V I:0.1388A P:30.252W PF:0.9884 Freq:50.01Hz Lamp Flux:3009.64x1 lm		
NAME: DL3005-WHTC30C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 185mm	Shielding Angle:

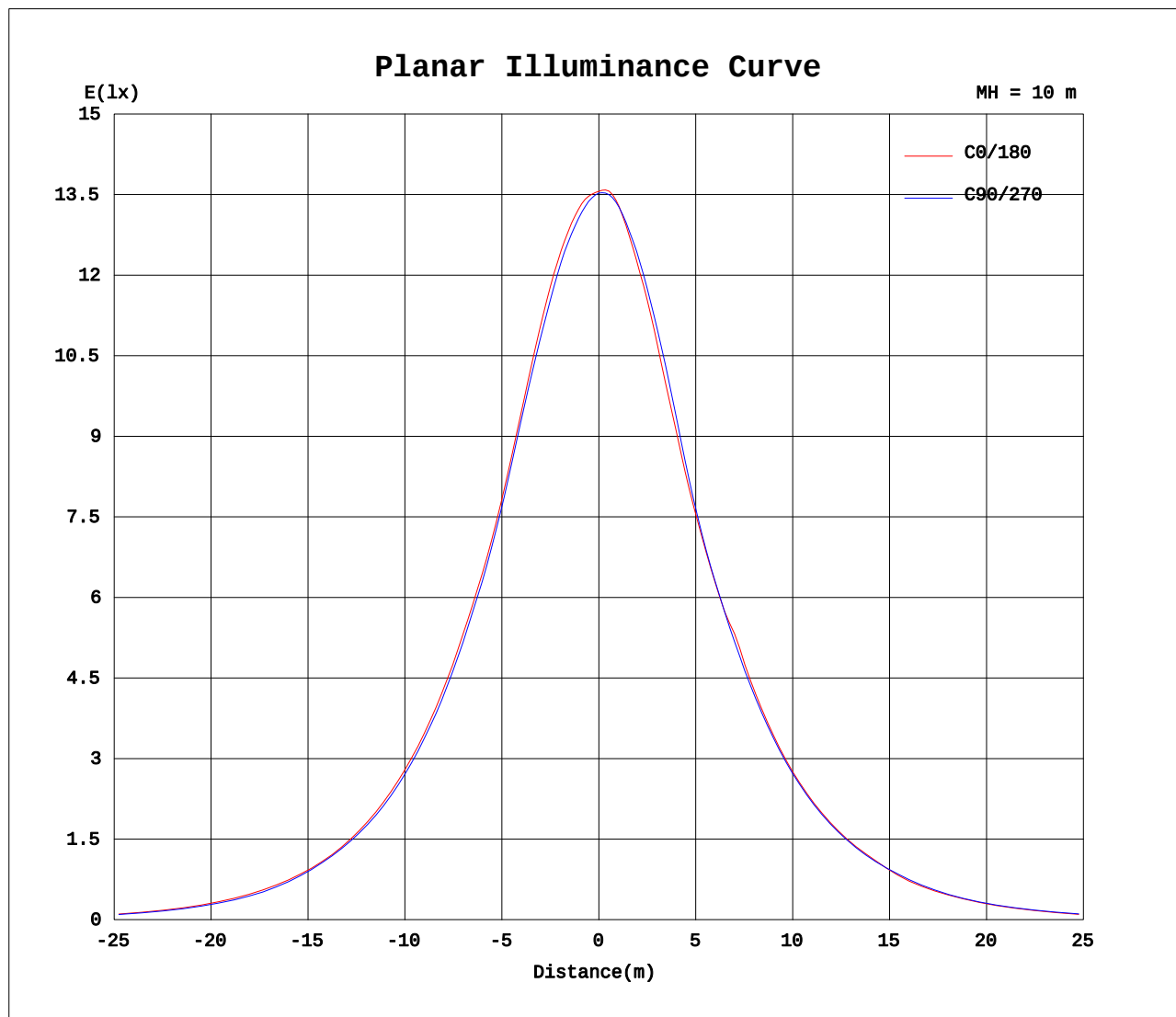
AvgL	cd/m2
L_0~180(65)av	25731
L_0~180(75)av	835
L_0~180(85)av	1269
L_90~270(65)av	25201
L_90~270(75)av	843
L_90~270(85)av	1312
L_45(65)av	25433
L_45(75)av	834
L_45(85)av	1293

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2023-10-19

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_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: 2023-10-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
 Humidity: 65.0%
 Test Distance: 7.450m [K=1.0000]
 Remarks:

```

Range: 0 - 90DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

```