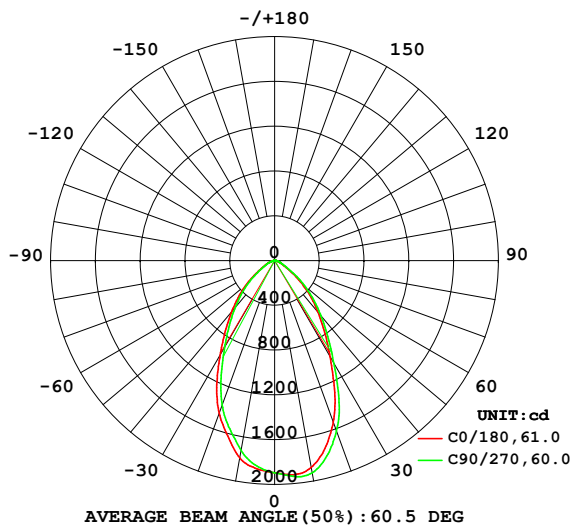


LUMINAIRE PHOTOMETRIC TEST REPORT

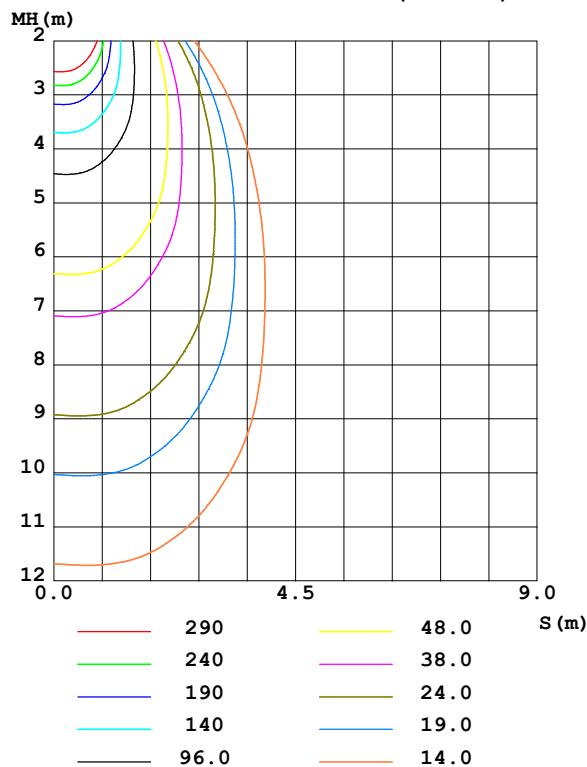
NAME: TL45-28W-940-B-60-L	TYPE:	WEIGHT:
SPEC.: 36V&700mA	DIM.: D110*H45	SERIAL No.:
MFR.: EVERFINE	SUR.: D100	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 88.57 lm/W
MODEL	4000K CRI90	I _{max} (cd)	1960	S/MH (C0/180)	0.91	
NOMINAL POWER (W)	27	LOR (%)	100.0	S/MH (C90/270)	0.86	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	2356.0	η UP, DN (C0-180)	0.0, 52.6	
NOMINAL FLUX (lm)	2356.04	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 47.4	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75	
TEST VOLTAGE (V)	225.6	η down (%)	100.0	CIBSE SHR MAX	0.95	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT: lx)



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2021-11-10

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.454
 Humidity: 65.0%
 Test Distance: 8.402m [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	1877	1942	1926	1855	1792	1723	1724	1776	0- 10	178.5	178.5	7.58,7.58
20	1535	1634	1618	1527	1450	1374	1372	1427	10- 20	469.0	647.5	27.5,27.5
30	992.1	1079	1062	1018	975.7	900.2	893.4	929.2	20- 30	567.5	1215	51.6,51.6
40	605.4	659.9	646.9	617.7	596.5	552.0	548.7	569.1	30- 40	484.7	1700	72.1,72.1
50	317.1	350.4	352.1	333.5	324.4	299.0	294.1	303.6	40- 50	350.9	2051	87,87
60	111.3	125.3	128.8	125.1	125.9	117.5	115.5	116.7	50- 60	185.1	2236	94.9,94.9
70	43.85	48.69	50.56	49.24	54.96	51.72	50.53	50.97	60- 70	78.83	2314	98.2,98.2
80	10.33	12.45	13.48	13.28	18.37	16.34	15.48	15.86	70- 80	32.86	2347	99.6,99.6
90	4.838	4.701	4.736	4.812	8.093	7.971	7.941	8.042	80- 90	8.708	2356	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		

Conical surface Flux(90deg): 1894.1 lm

%lum = 80.4%

%lamp = 80.4%

Conical surface Flux(120deg): 2235.6 lm

%lum = 94.9%

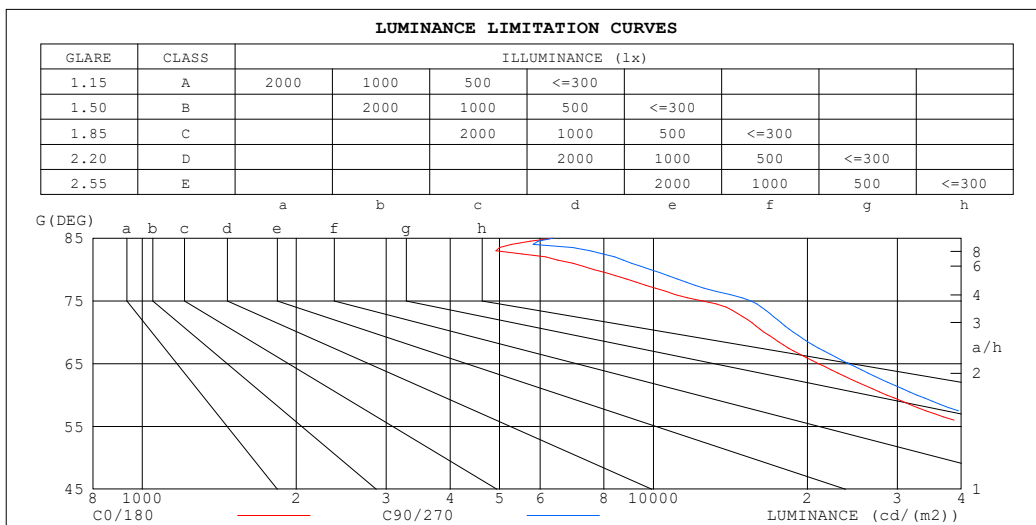
%lamp = 94.9%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-11-10

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.454
 Humidity:65.0%
 Test Distance:8.402m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

NAME: TL45-28W-940-B-60-L	TYPE:	WEIGHT:
SPEC.: 36V&700mA	DIM.: D110*H45	SERIAL No.:
MFR.: EVERFINE	SUR.: D100	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	6346	6344
80	7645	9874
75	12485	15516
70	16474	18796
65	21044	24085
60	28597	32754
55	42190	49143
50	63378	69656
45	83080	88469

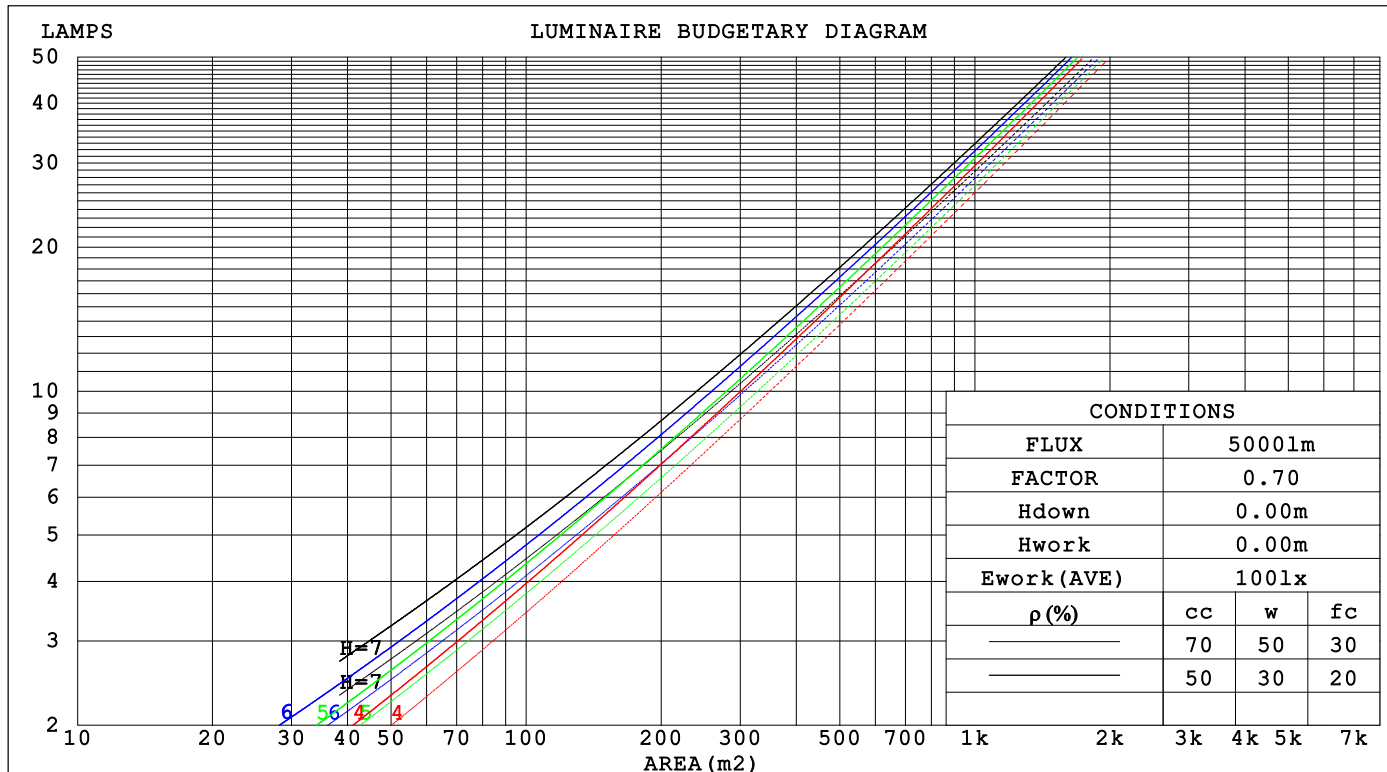
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2021-11-10

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.454
Humidity: 65.0%
Test Distance: 8.402m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: TL45-28W-940-B-60-L	TYPE:	WEIGHT:
SPEC.: 36V&700mA	DIM.: D110*H45	SERIAL No.:
MFR.: EVERFINE	SUR.: D100	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															



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-11-10

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.454
Humidity:65.0%
Test Distance:8.402m [K=1.0000]
Remarks:

WEC AND CCEC

NAME: TL45-28W-940-B-60-L	TYPE:	WEIGHT:
SPEC.: 36V&700mA	DIM.: D110*H45	SERIAL No.:
MFR.: EVERFINE	SUR.: D100	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	.218	.124	.039	.212	.121	.038	.199	.114	.036	.187	.108	.035	.176	.102	.033		
2.0	.211	.115	.035	.205	.113	.035	.194	.108	.033	.184	.103	.032	.174	.099	.031		
3.0	.200	.107	.032	.195	.105	.031	.186	.101	.031	.177	.097	.030	.169	.093	.029		
4.0	.189	.098	.029	.185	.097	.029	.177	.094	.028	.169	.091	.027	.162	.088	.027		
5.0	.179	.091	.026	.175	.090	.026	.168	.087	.026	.161	.085	.025	.155	.083	.025		
6.0	.169	.085	.024	.166	.084	.024	.159	.082	.024	.153	.080	.023	.148	.078	.023		
7.0	.160	.079	.022	.157	.078	.022	.152	.077	.022	.146	.075	.022	.141	.073	.022		
8.0	.152	.074	.021	.149	.074	.021	.144	.072	.021	.139	.071	.020	.135	.069	.020		
9.0	.144	.070	.020	.142	.069	.019	.137	.068	.019	.133	.067	.019	.129	.065	.019		
10.0	.137	.066	.018	.135	.065	.018	.131	.064	.018	.127	.063	.018	.123	.062	.018		

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020		
1.0	.174	.157	.142	.149	.135	.122	.102	.093	.084	.059	.054	.049	.019	.017	.016		
2.0	.161	.132	.108	.138	.114	.093	.095	.079	.065	.055	.046	.038	.018	.015	.012		
3.0	.151	.114	.084	.129	.098	.073	.089	.068	.051	.051	.040	.030	.016	.013	.010		
4.0	.142	.100	.067	.122	.086	.058	.084	.060	.041	.049	.035	.024	.016	.011	.008		
5.0	.134	.089	.055	.115	.077	.048	.079	.054	.034	.046	.031	.020	.015	.010	.007		
6.0	.127	.080	.046	.109	.069	.040	.075	.048	.028	.044	.028	.017	.014	.009	.006		
7.0	.121	.072	.038	.104	.063	.034	.072	.044	.024	.042	.026	.014	.013	.008	.005		
8.0	.115	.066	.033	.099	.058	.029	.069	.040	.020	.040	.024	.012	.013	.008	.004		
9.0	.110	.061	.029	.095	.053	.025	.066	.037	.018	.038	.022	.011	.012	.007	.004		
10.0	.105	.057	.025	.090	.050	.022	.063	.035	.016	.037	.021	.009	.012	.007	.003		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-11-10

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.454
Humidity:65.0%
Test Distance:8.402m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

NAME: TL45-28W-940-B-60-L					TYPE:					WEIGHT:				
SPEC.: 36V&700mA					DIM.: D110*H45					SERIAL No.:				
MFR.: EVERFINE					SUR.: D100					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	22.1	23.2	22.3	23.4	23.6	22.4	23.5	22.6	23.7	23.9				
3H	22.2	23.2	22.4	23.5	23.7	22.5	23.6	22.8	23.8	24.0				
4H	22.2	23.2	22.5	23.4	23.7	22.5	23.6	22.8	23.8	24.0				
6H	22.1	23.1	22.4	23.3	23.6	22.5	23.5	22.8	23.7	24.0				
8H	22.1	23.0	22.4	23.3	23.6	22.5	23.4	22.8	23.7	23.9				
12H	22.1	22.9	22.4	23.2	23.5	22.4	23.3	22.8	23.6	23.9				
4H 2H	22.1	23.1	22.4	23.3	23.6	22.4	23.4	22.6	23.6	23.8				
3H	22.3	23.2	22.6	23.4	23.7	22.6	23.5	22.9	23.7	24.0				
4H	22.3	23.1	22.7	23.4	23.8	22.7	23.5	23.0	23.8	24.1				
6H	22.3	23.0	22.7	23.4	23.7	22.7	23.4	23.1	23.7	24.1				
8H	22.3	22.9	22.7	23.3	23.7	22.7	23.3	23.1	23.7	24.0				
12H	22.3	22.9	22.7	23.2	23.6	22.6	23.2	23.0	23.6	24.0				
8H 4H	22.3	22.9	22.7	23.3	23.7	22.6	23.3	23.0	23.6	24.0				
6H	22.3	22.8	22.7	23.2	23.7	22.7	23.2	23.1	23.6	24.0				
8H	22.3	22.8	22.7	23.2	23.6	22.6	23.1	23.1	23.5	24.0				
12H	22.3	22.7	22.7	23.1	23.6	22.6	23.0	23.1	23.5	23.9				
12H 4H	22.3	22.8	22.7	23.2	23.6	22.6	23.2	23.0	23.5	23.9				
6H	22.3	22.7	22.7	23.2	23.6	22.6	23.1	23.1	23.5	23.9				
8H	22.3	22.7	22.7	23.1	23.6	22.6	23.0	23.1	23.5	23.9				
Variations with the observer position at spacings(CIE Pub.117):														
S = 1.0H	+ 1.3 / - 2.1					+ 1.2 / - 1.8								
1.5H	+ 1.0 / - 1.4					+ 0.9 / - 1.3								
2.0H	+ 2.8 / - 2.8					+ 2.6 / - 2.7								

CIE Pub.117, 2356 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.0)
Area: 0.00785 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-11-10

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.454
Humidity:65.0%
Test Distance:8.402m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

NAME: TL45-28W-940-B-60-L	TYPE:	WEIGHT:
SPEC.: 36V&700mA	DIM.: D110*H45	SERIAL No.:
MFR.: EVERFINE	SUR.: D100	Shielding Angle:

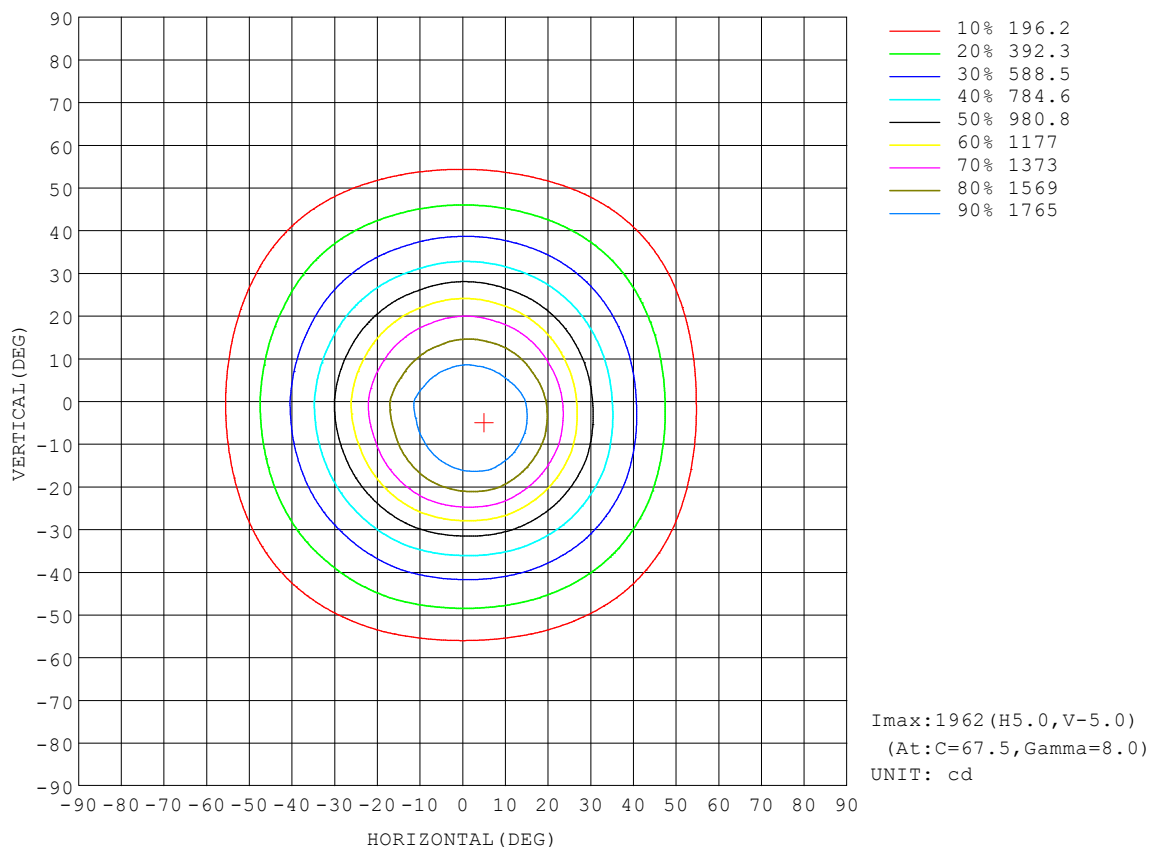
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	74	65	60	73	65	60	72	64	60	55
0.80	83	75	69	82	74	69	81	74	69	64
1.00	90	82	77	89	82	77	87	82	76	71
1.25	96	88	83	94	88	83	92	86	82	77
1.50	99	93	88	98	92	87	95	90	86	81
2.00	104	98	94	102	97	93	99	95	91	85
2.50	106	101	97	104	100	96	101	97	94	87
3.00	108	104	100	107	102	99	103	100	97	90
4.00	111	107	104	109	106	103	105	102	100	92
5.00	113	109	107	110	108	105	106	104	102	94
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: MEDIUM
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2021-11-10

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.454
Humidity: 65.0%
Test Distance: 8.402m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

NAME: TL45-28W-940-B-60-L	TYPE:	WEIGHT:
SPEC.: 36V&700mA	DIM.: D110*H45	SERIAL No.:
MFR.: EVERFINE	SUR.: D100	Shielding Angle:

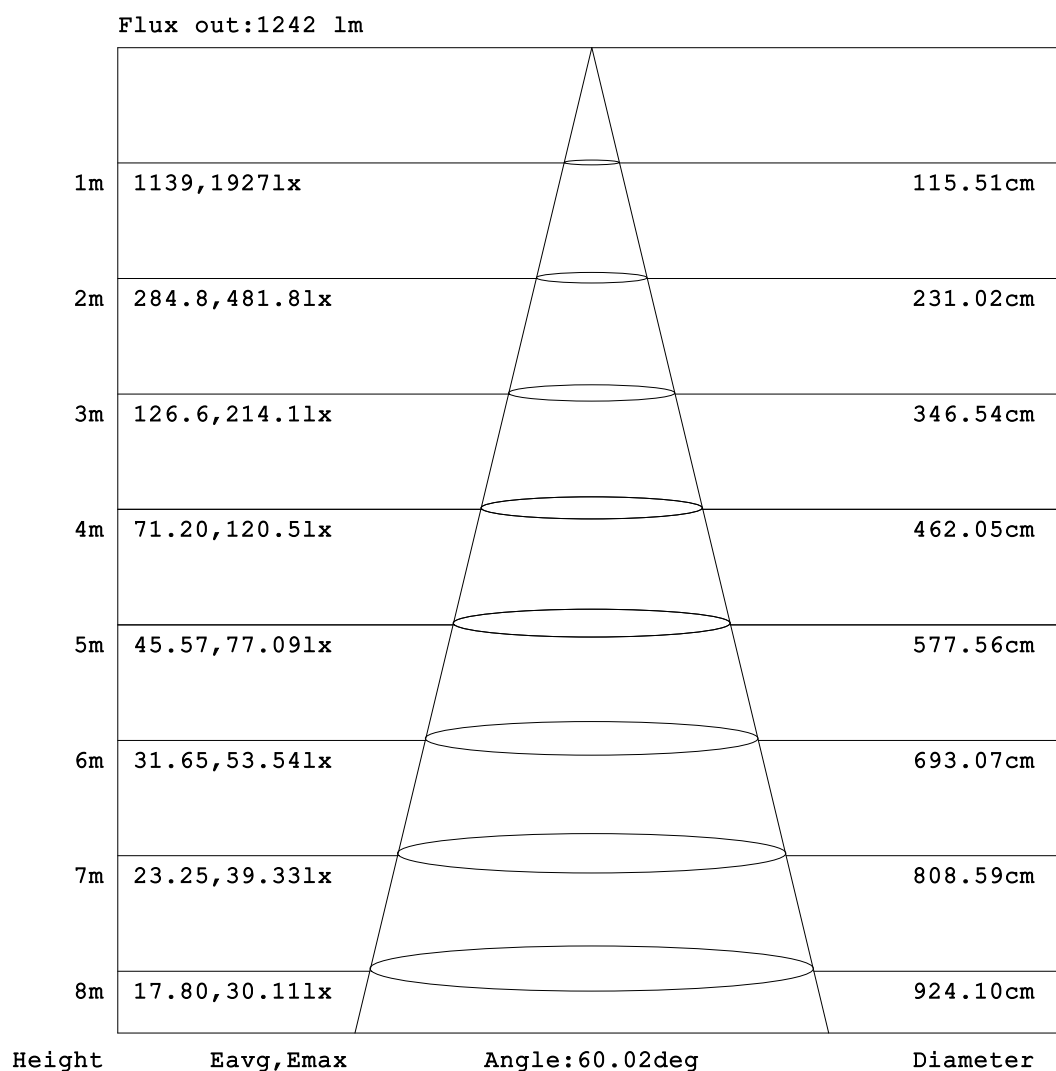


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-11-10

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.454
Humidity:65.0%
Test Distance:8.402m [K=1.0000]
Remarks:

AAI Figure

NAME: TL45-28W-940-B-60-L	TYPE:	WEIGHT:
SPEC.: 36V&700mA	DIM.: D110*H45	SERIAL No.:
MFR.: EVERFINE	SUR.: D100	Shielding Angle:

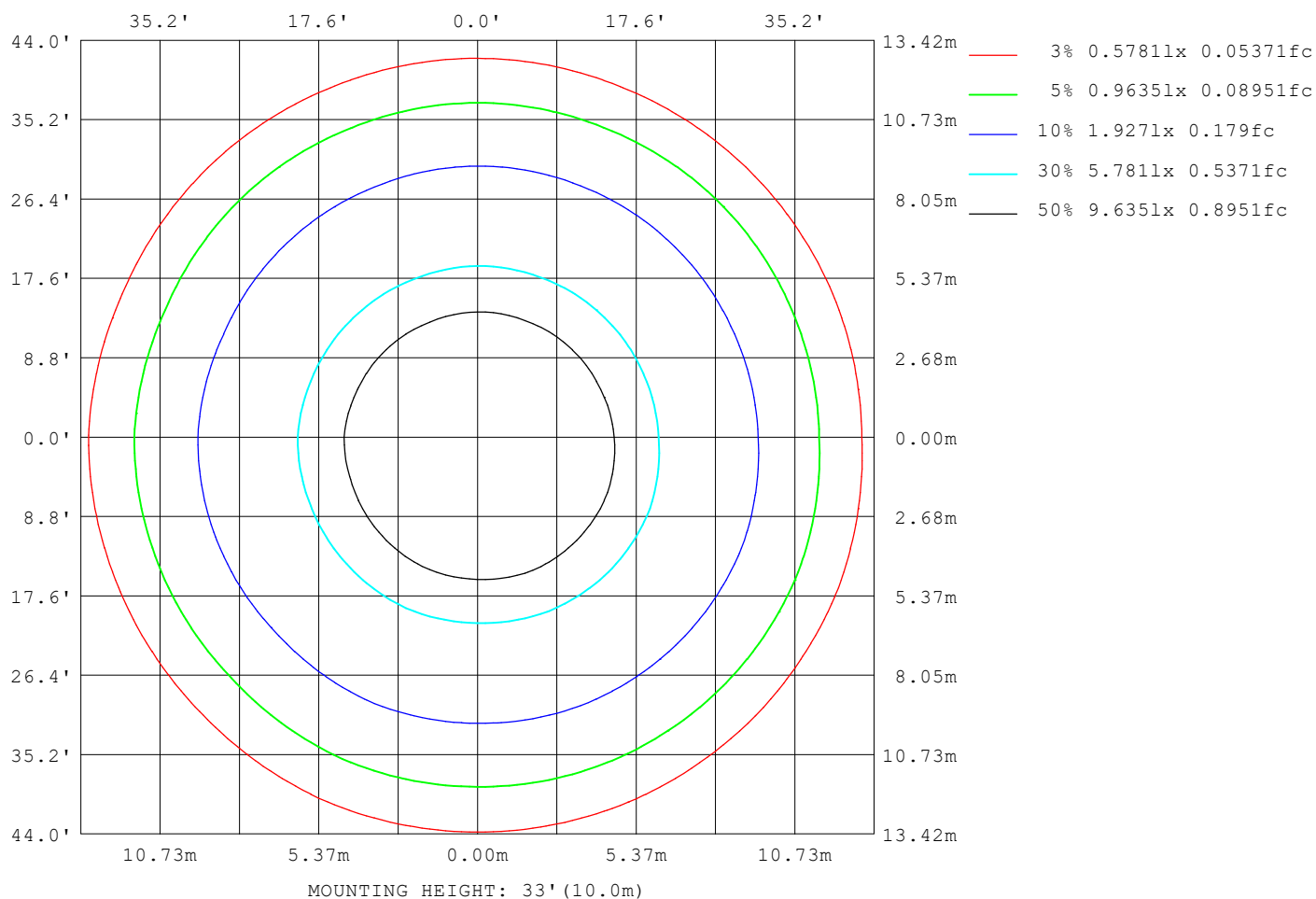


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2021-11-10

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.454
 Humidity: 65.0%
 Test Distance: 8.402m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

NAME: TL45-28W-940-B-60-L	TYPE:	WEIGHT:
SPEC.: 36V&700mA	DIM.: D110*H45	SERIAL No.:
MFR.: EVERFINE	SUR.: D100	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2021-11-10

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.454
 Humidity: 65.0%
 Test Distance: 8.402m [K=1.0000]
 Remarks:

LED Avg.L Report

NAME: TL45-28W-940-B-60-L	TYPE:	WEIGHT:
SPEC.: 36V&700mA	DIM.: D110*H45	SERIAL No.:
MFR.: EVERFINE	SUR.: D100	Shielding Angle:

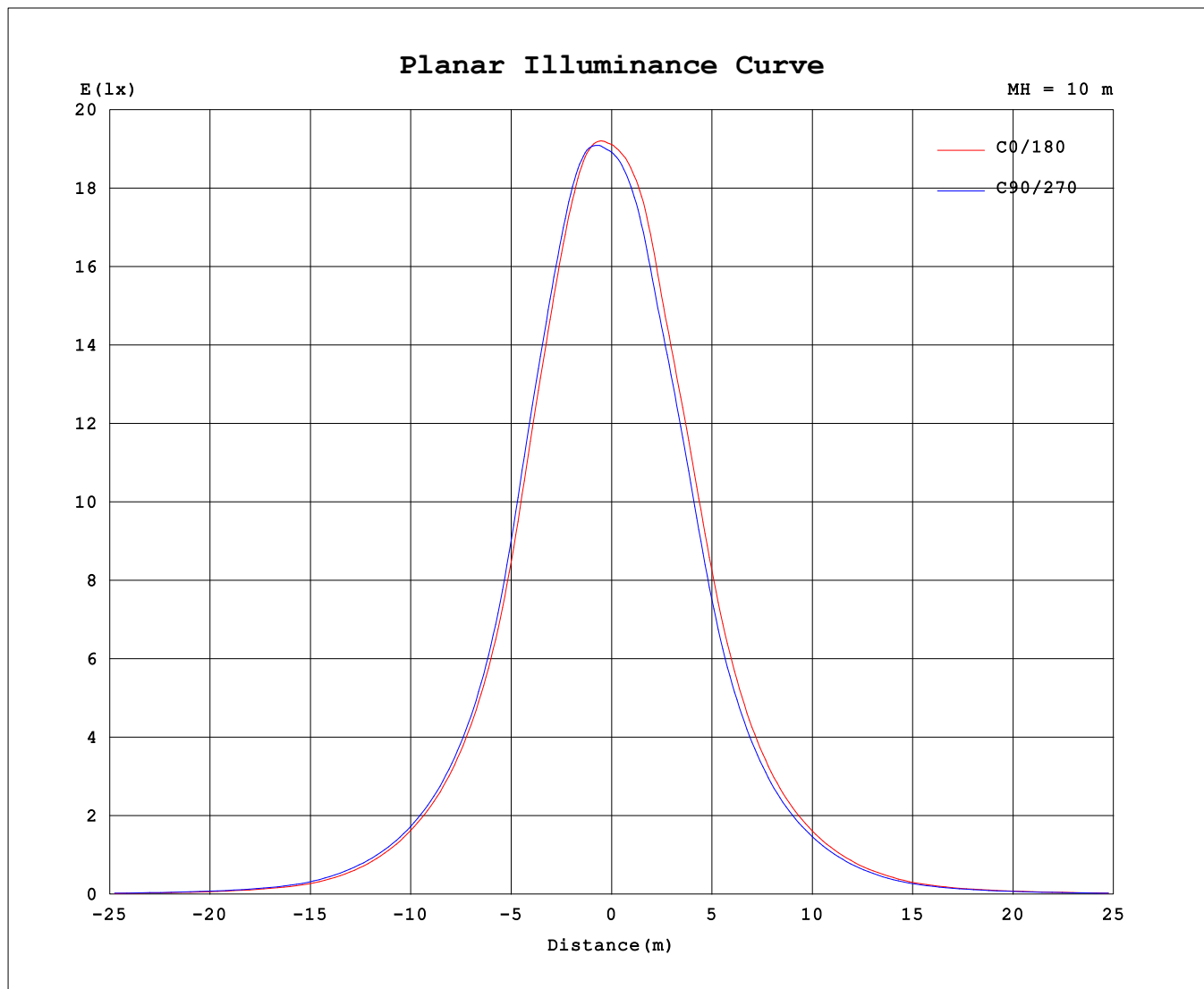
AvgL	cd/m2
L_0~180 (65) av	22806
L_0~180 (75) av	15131
L_0~180 (85) av	9533
L_90~270 (65) av	23465
L_90~270 (75) av	15369
L_90~270 (85) av	9408
L_45 (65) av	23293
L_45 (75) av	15469
L_45 (85) av	9447

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2021-11-10

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.454
Humidity: 65.0%
Test Distance: 8.402m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2021-11-10

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.454
Humidity: 65.0%
Test Distance: 8.402m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.454
Humidity:65.0%
Test Distance:8.402m [K=1.0000]
Remarks:

```